Semivolatiles Raw QC Data

Method: EPA1633_NIS_CALC.qmethod
Calibration: 240813_1633_ICAL

ID: WG1971858-1
Name: SCI05_240917_15.wiff
Date & Time: 2024-09-17T08:01:06
Description: WG1972379,WG1971858,ICAL21391
Instrument: Triple Quad 5500+
User: LCMS05:AC

LC/MS-MS Method:EPA_1633.dam

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
1	PFBA	375-22-4	N/A	213.0 / 169.0	N/A		N/A	N/A	N/A	N/A	N/A
2	PFPeA	2706-90-3	N/A	263.0 / 219.0	N/A		N/A	N/A	0.007	N/A	N/A
3	PFPeA_2	2706-90-3	N/A	263.0 / 68.9	N/A		N/A	N/A	0.007	N/A	N/A
4	PFHxA	307-24-4	N/A	313.0 / 269.0	N/A		N/A	N/A	0.072	N/A	N/A
5	PFHxA_2	307-24-4	N/A	313.0 / 119.0	N/A		N/A	N/A	0.072	N/A	N/A
6	PFHpA	375-85-9	N/A	363.1 / 319.0	N/A		N/A	N/A	0.297	N/A	N/A
7	PFHpA_2	375-85-9	N/A	363.1 / 169.0	N/A		N/A	N/A	0.297	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
8	PFOA	335-67-1	N/A	413.1 / 369.1	N/A		N/A	N/A	0.586	N/A	N/A
9	PFOA_2	335-67-1	N/A	413.1 / 169.0	N/A		N/A	N/A	0.586	N/A	N/A
10	PFNA	375-95-1	N/A	462.8 / 418.9	N/A		N/A	N/A	0.313	N/A	N/A
11	PFNA_2	375-95-1	N/A	462.8 / 218.9	N/A		N/A	N/A	0.313	N/A	N/A
12	PFDA	335-76-2	N/A	513.1 / 469.1	N/A		N/A	N/A	0.142	N/A	N/A
13	PFDA_2	335-76-2	N/A	513.1 / 219.0	N/A		N/A	N/A	0.142	N/A	N/A
14	PFUnA	2058-94-8	N/A	563.1 / 519.1	N/A		N/A	N/A	0.194	N/A	N/A
15	PFUnA_2	2058-94-8	N/A	563.1 / 269.0	N/A		N/A	N/A	0.194	N/A	N/A
16	PFDoA	307-55-1	N/A	613.1 / 569.1	N/A		N/A	N/A	0.167	N/A	N/A
17	PFDoA_2	307-55-1	N/A	613.1 / 319.0	N/A		N/A	N/A	0.167	N/A	N/A
18	PFTrDA	72629-94-8	N/A	663.1 / 619.1	N/A		N/A	N/A	0.228	N/A	N/A
19	PFTrDA_2	72629-94-8	N/A	663.1 / 169.0	N/A		N/A	N/A	0.228	N/A	N/A
20	PFTeDA	376-06-7	N/A	713.1 / 669.1	N/A		N/A	N/A	0.137	N/A	N/A
21	PFTeDA_2	376-06-7	N/A	713.1 / 169.0	N/A		N/A	N/A	0.137	N/A	N/A
22	PFBS	375-73-5	N/A	299.1 / 80.1	N/A		N/A	N/A	0.396	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
23	PFBS_2	375-73-5	N/A	299.1 / 99.1	N/A		N/A	N/A	0.396	N/A	N/A
24	PFPeS	2706-91-4	N/A	349.1 / 80.1	N/A		N/A	N/A	0.299	N/A	N/A
25	PFPeS_2	2706-91-4	N/A	349.1 / 99.1	N/A		N/A	N/A	0.299	N/A	N/A
26	PFHxS	355-46-4	N/A	399.1 / 80.1	N/A		N/A	N/A	0.315	N/A	N/A
27	PFHxS_2	355-46-4	N/A	399.1 / 99.1	N/A		N/A	N/A	0.315	N/A	N/A
28	PFHpS	375-92-8	N/A	449.1 / 80.1	N/A		N/A	N/A	0.287	N/A	N/A
29	PFHpS_2	375-92-8	N/A	449.1 / 99.1	N/A		N/A	N/A	0.287	N/A	N/A
30	PFOS	1763-23-1	N/A	499.1 / 80.1	N/A		N/A	N/A	0.238	N/A	N/A
31	PFOS_2	1763-23-1	N/A	499.1 / 99.1	N/A		N/A	N/A	0.238	N/A	N/A
32	PFNS	68259-12-1	N/A	549.1 / 80.1	N/A		N/A	N/A	0.301	N/A	N/A
33	PFNS_2	68259-12-1	N/A	549.1 / 99.1	N/A		N/A	N/A	0.301	N/A	N/A
34	PFDS	335-77-3	N/A	599.1 / 80.1	N/A		N/A	N/A	0.275	N/A	N/A
35	PFDS_2	335-77-3	N/A	599.1 / 99.1	N/A		N/A	N/A	0.275	N/A	N/A
36	PFDoS	79780-39-5	N/A	699.2 / 80.1	N/A		N/A	N/A	0.274	N/A	N/A
37	PFDoS_2	79780-39-5	N/A	699.2 / 99.1	N/A		N/A	N/A	0.274	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
38	4:2FTS	757124-72-4	N/A	327.1 / 307.1	N/A		N/A	N/A	0.516	N/A	N/A
39	4:2FTS_2	757124-72-4	N/A	327.1 / 81.1	N/A		N/A	N/A	0.516	N/A	N/A
40	6:2FTS	27619-97-2	N/A	427.2 / 407.2	N/A		N/A	N/A	0.565	N/A	N/A
41	6:2FTS_2	27619-97-2	N/A	427.2 / 81.1	N/A		N/A	N/A	0.565	N/A	N/A
42	8:2FTS	39108-34-4	N/A	527.2 / 507.2	N/A		N/A	N/A	0.662	N/A	N/A
43	8:2FTS_2	39108-34-4	N/A	527.2 / 81.1	N/A		N/A	N/A	0.662	N/A	N/A
44	PFOSA	754-91-6	N/A	498.1 / 78.1	N/A		N/A	N/A	0.025	N/A	N/A
45	PFOSA_2	754-91-6	N/A	498.1 / 478.0	N/A		N/A	N/A	0.025	N/A	N/A
46	NMeFOSA	31506-32-8	N/A	512.2 / 219.0	N/A		N/A	N/A	1.551	N/A	N/A
47	NMeFOSA_2	31506-32-8	N/A	512.2 / 169.0	N/A		N/A	N/A	1.551	N/A	N/A
48	NEtFOSA	4151-50-2	N/A	526.2 / 219.0	N/A		N/A	N/A	1.285	N/A	N/A
49	NEtFOSA_2	4151-50-2	N/A	526.2 / 169.0	N/A		N/A	N/A	1.285	N/A	N/A
50	NMeFOSAA	2355-31-9	N/A	570.2 / 419.1	N/A		N/A	N/A	0.700	N/A	N/A
51	NMeFOSAA_2	2355-31-9	N/A	570.2 / 483.0	N/A		N/A	N/A	0.700	N/A	N/A
52	NEtFOSAA	2991-50-6	N/A	584.2 / 419.1	N/A		N/A	N/A	0.487	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
53	NEtFOSAA_2	2991-50-6	N/A	584.2 / 526.2	N/A		N/A	N/A	0.487	N/A	N/A
54	NMeFOSE	24448-09-7	N/A	616.1 / 58.9	N/A		N/A	N/A	N/A	N/A	N/A
55	NEtFOSE	1691-99-2	N/A	630.0 / 58.9	N/A		N/A	N/A	N/A	N/A	N/A
56	HFPO-DA	13252-13-6	N/A	285.0 / 169.0	N/A		N/A	N/A	0.464	N/A	N/A
57	HFPO-DA_2	13252-13-6	N/A	285.0 / 184.9	N/A		N/A	N/A	0.464	N/A	N/A
58	ADONA	919005-14-4	N/A	377.1 / 251.0	N/A		N/A	N/A	0.634	N/A	N/A
59	ADONA_2	919005-14-4	N/A	377.1 / 84.8	N/A		N/A	N/A	0.634	N/A	N/A
60	9Cl-PF3ONS	756426-58-1	N/A	530.8 / 351.1	N/A		N/A	N/A	0.322	N/A	N/A
61	9Cl-PF3ONS_2	756426-58-1	N/A	532.8 / 353.0	N/A		N/A	N/A	0.322	N/A	N/A
62	11Cl-PF3OUdS	763051-92-9	N/A	630.9 / 451.0	N/A		N/A	N/A	0.331	N/A	N/A
63	11Cl-PF3OUdS_2	763051-92-9	N/A	632.9 / 452.9	N/A		N/A	N/A	0.331	N/A	N/A
64	3:3FTCA	356-02-5	N/A	241.1 / 177.1	N/A		N/A	N/A	1.074	N/A	N/A
65	3:3FTCA_2	356-02-5	N/A	241.1 / 117.0	N/A		N/A	N/A	1.074	N/A	N/A
66	5:3FTCA	914637-49-3	N/A	341.1 / 237.1	N/A		N/A	N/A	0.953	N/A	N/A
67	5:3FTCA_2	914637-49-3	N/A	341.1 / 217.0	N/A		N/A	N/A	0.953	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
68	7:3FTCA	812-70-4	N/A	441.1 / 316.9	N/A		N/A	N/A	1.558	N/A	N/A
69	7:3FTCA_2	812-70-4	N/A	441.1 / 337.1	N/A		N/A	N/A	1.558	N/A	N/A
70	PFEESA	113507-82-7	N/A	315.1 / 135.0	N/A		N/A	N/A	0.087	N/A	N/A
71	PFEESA_2	113507-82-7	N/A	315.1 / 82.9	N/A		N/A	N/A	0.087	N/A	N/A
72	PFMPA	377-73-1	N/A	229.0 / 85.0	N/A		N/A	N/A	N/A	N/A	N/A
73	PFMBA	863090-89-5	N/A	279.0 / 85.0	N/A		N/A	N/A	N/A	N/A	N/A
74	NFDHA	151772-58-6	N/A	295.0 / 201.0	N/A		N/A	N/A	0.910	N/A	N/A
75	NFDHA_2	151772-58-6	N/A	295.0 / 84.9	N/A		N/A	N/A	0.910	N/A	N/A
76	TDCA	516-50-7	N/A	499.1 / 124.1	N/A		N/A	N/A	40.716	N/A	N/A
77	TDCA_2	516-50-7	N/A	499.1 / 79.9	N/A		N/A	N/A	40.716	N/A	N/A
78	13C2D4-4:2FTS	Surr	N/A	333.2 / 312.1	N/A		N/A	N/A	N/A	N/A	N/A
79	13C2-PFOA	Surr	N/A	415.0 / 370.0	N/A		N/A	N/A	N/A	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C4-PFBA	EIS	2.84	217.0 / 172.0	2375678		8.872	NA	NA	NA	88.7

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C5-PFPeA	EIS	4.67	268.0 / 223.0	1571682		4.928	NA	NA	NA	98.6
	13C5-PFHxA	EIS	5.36	318.0 / 273.0	865832		2.067	NA	NA	NA	82.7
	13C4-PFHpA	EIS	6.29	367.0 / 322.0	883594		2.107	NA	NA	NA	84.3
	13C8-PFOA	EIS	7.50	421.0 / 376.0	1357019		2.300	NA	NA	NA	92.0
	13C9-PFNA	EIS	7.93	472.0 / 427.0	628023		1.049	NA	NA	NA	83.9
	13C6-PFDA	EIS	8.15	519.0 / 474.0	613121		1.043	NA	NA	NA	83.5
	13C7-PFUnA	EIS	8.43	570.0 / 525.0	492527		1.036	NA	NA	NA	82.9

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C2-PFDoA	EIS	8.83	615.1 / 570.0	413538		1.337	NA	NA	NA	107.0
	13C2-PFTeDA	EIS	9.85	715.1 / 670.1	336414		1.002	NA	NA	NA	80.1
	13C3-PFBS	EIS	5.33	302.1 / 80.1	711535		1.913	NA	NA	NA	82.1
	13C3-PFHxS	EIS	7.61	402.1 / 80.1	546401		1.850	NA	NA	NA	78.1
	13C8-PFOS	EIS	8.24	507.1 / 80.1	611915		1.975	NA	NA	NA	82.5
	13C2-4:2FTS	EIS	5.15	329.1 / 81.1	271515		4.091	NA	NA	NA	87.2
	13C2-6:2FTS	EIS	7.12	429.2 / 81.1	169136		3.477	NA	NA	NA	73.1
	13C2-8:2FTS	EIS	8.05	529.2 / 81.1	283830		3.987	NA	NA	NA	83.1

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C8-PFOSA	EIS	9.52	506.1 / 78.1	852757		2.071	NA	NA	NA	82.8
	d3-NMeFOSA	EIS	10.14	515.2 / 219.0	107397		1.549	NA	NA	NA	62.0
	d5-NEtFOSA	EIS	10.35	531.2 / 219.0	96101		1.419	NA	NA	NA	56.8
	d3-NMeFOSAA	EIS	8.20	573.2 / 419.1	290829		1.856	NA	NA	NA	37.1
	d5-NEtFOSAA	EIS	8.33	589.3 / 419.1	280904		3.411	NA	NA	NA	68.2
	d7-NMeFOSE	EIS	10.05	623.2 / 58.9	1189656		22.222	NA	NA	NA	88.9
	d9-NEtFOSE	EIS	10.25	639.2 / 58.9	1729923		21.917	NA	NA	NA	87.7

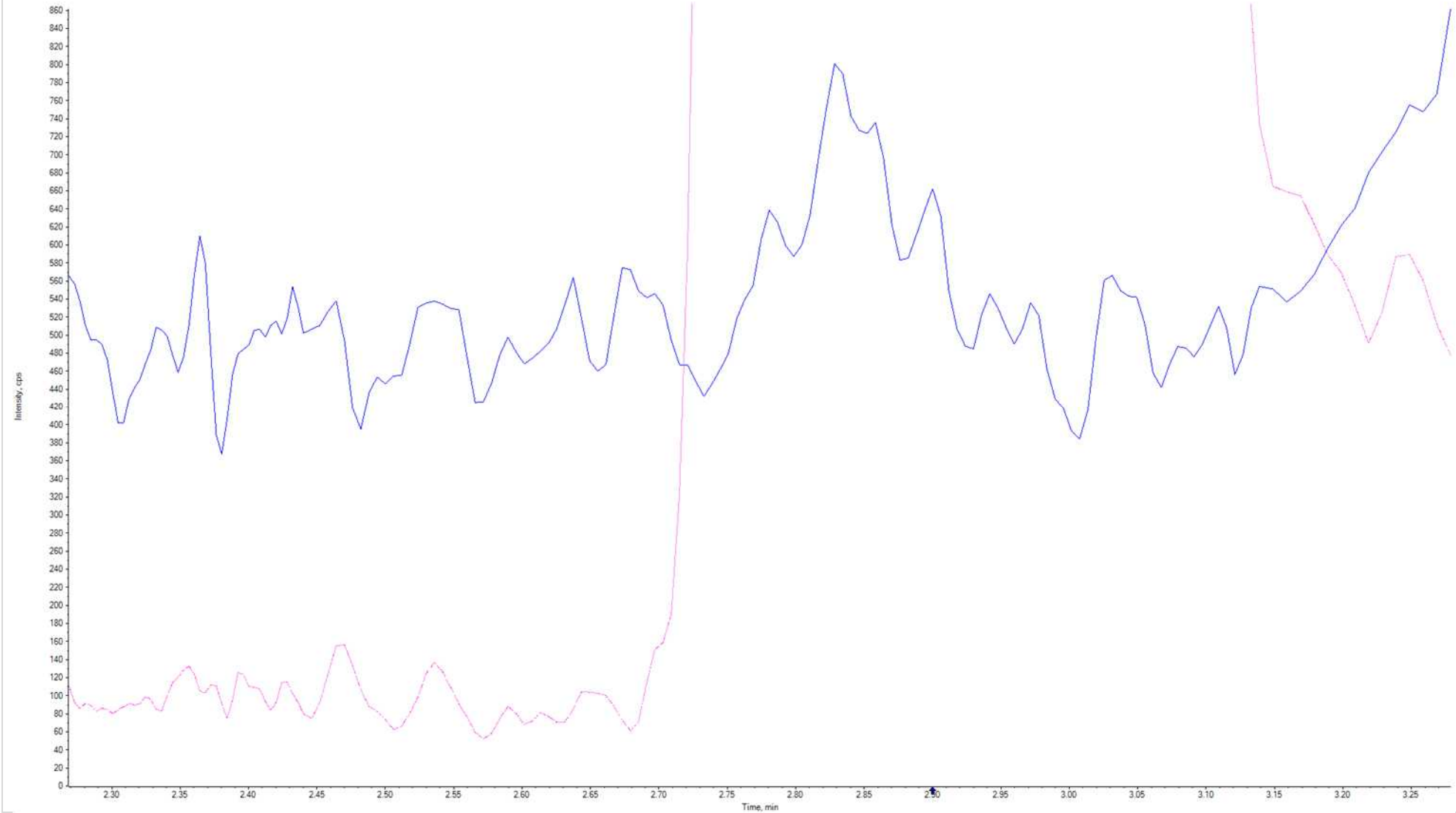
	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C3-HFPO-DA	EIS	5.62	287.0 / 169.0	2466479		8.883	NA	NA	NA	88.8
	13C3-PFBA	NIS	2.84	216.0 / 172.0	1171302		5.478	NA	NA	NA	109.6
	13C2-PFHxA	NIS	5.36	315.0 / 270.0	1243944		2.541	NA	NA	NA	101.6
	13C4-PFOA	NIS	7.50	417.0 / 372.0	771972		2.466	NA	NA	NA	98.6
	13C5-PFNA	NIS	7.93	468.0 / 423.0	729605		1.332	NA	NA	NA	106.6
	13C2-PFDA	NIS	8.15	515.1 / 470.1	690388		1.347	NA	NA	NA	107.8
	18O2-PFHxS	NIS	7.61	403.1 / 84.1	600402		2.563	NA	NA	NA	108.1
	13C4-PFOS	NIS	8.24	503.1 / 80.1	547935		2.602	NA	NA	NA	108.7

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	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec

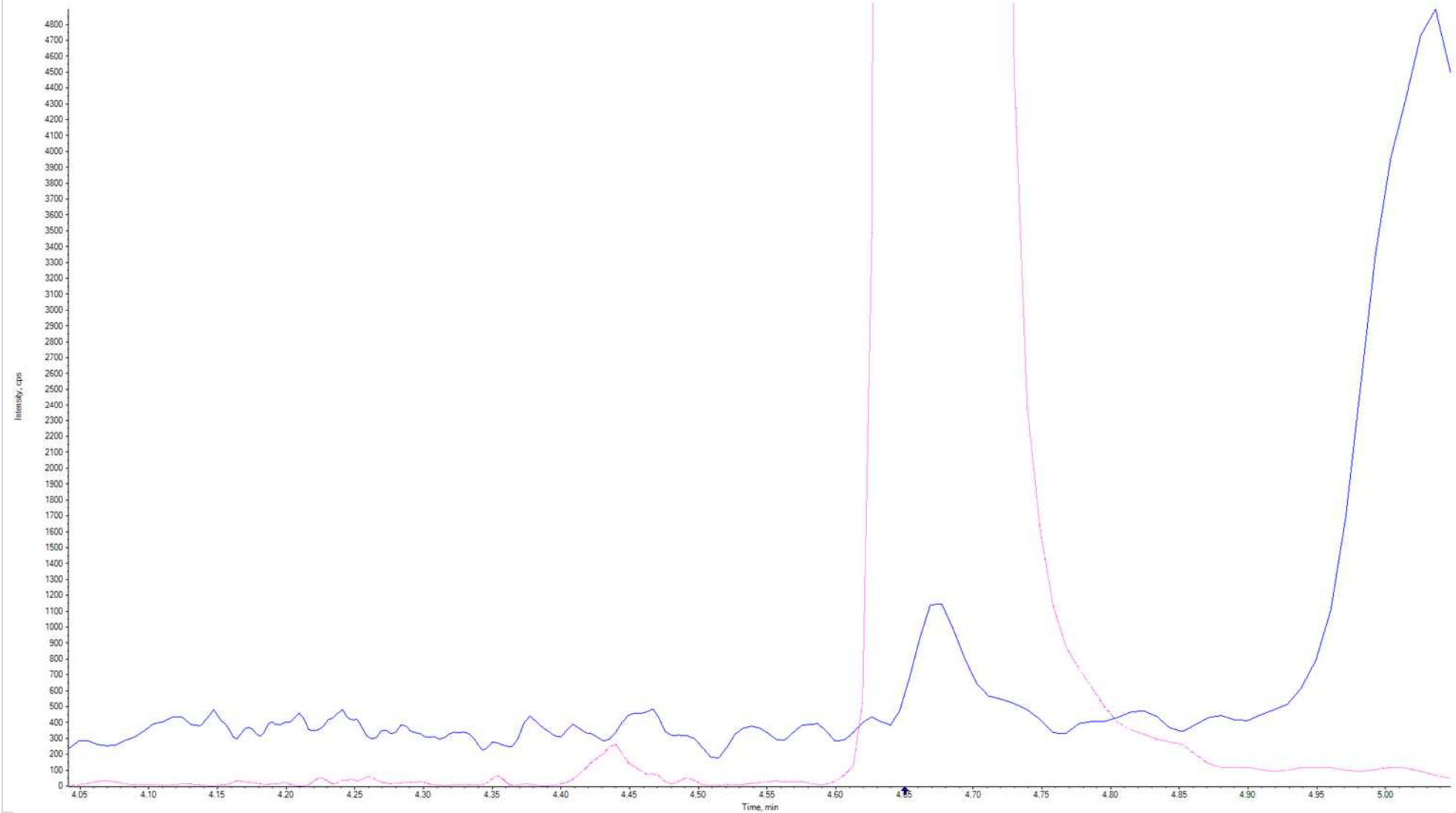
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PFBA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A

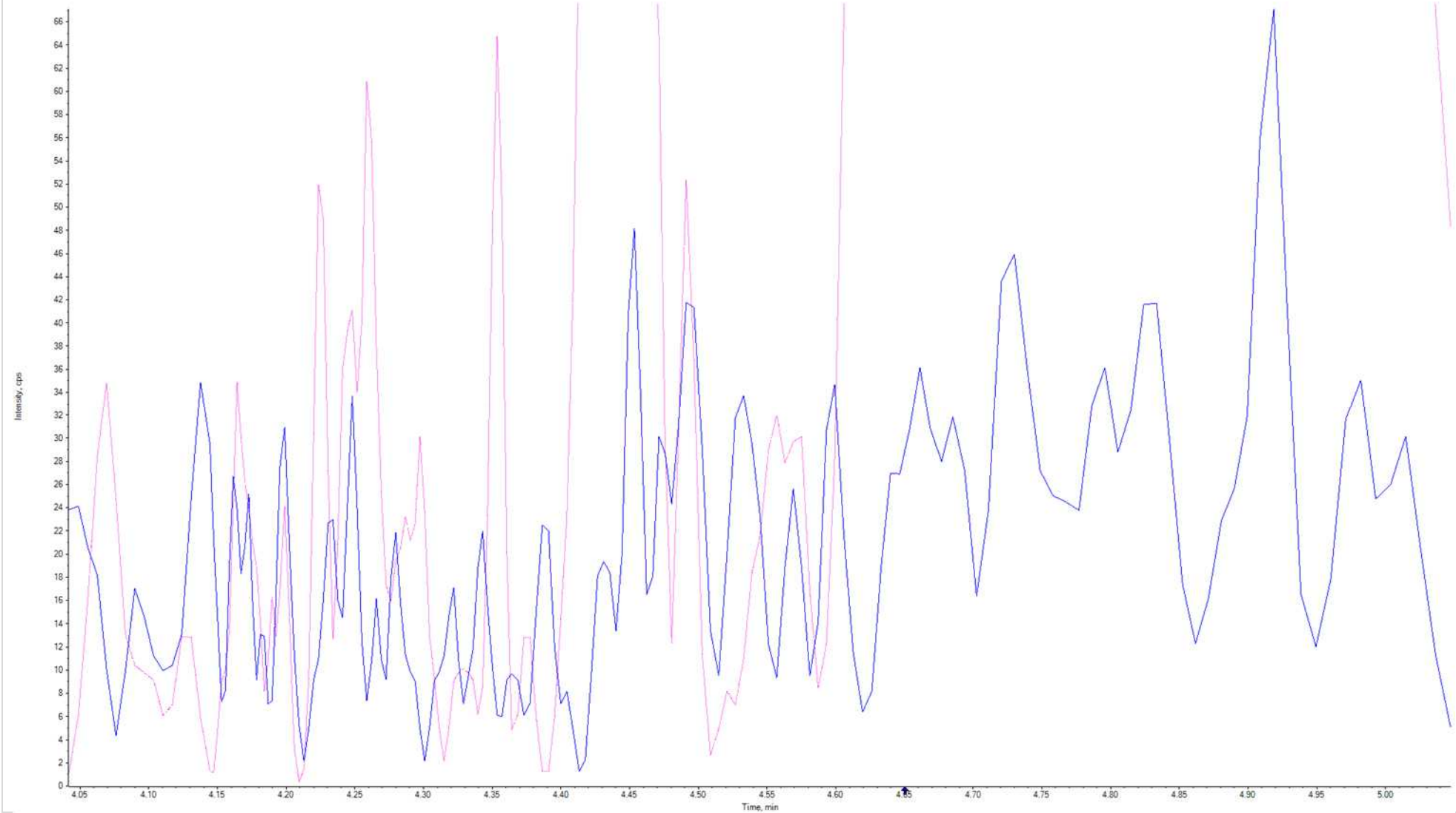


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PFPeA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A

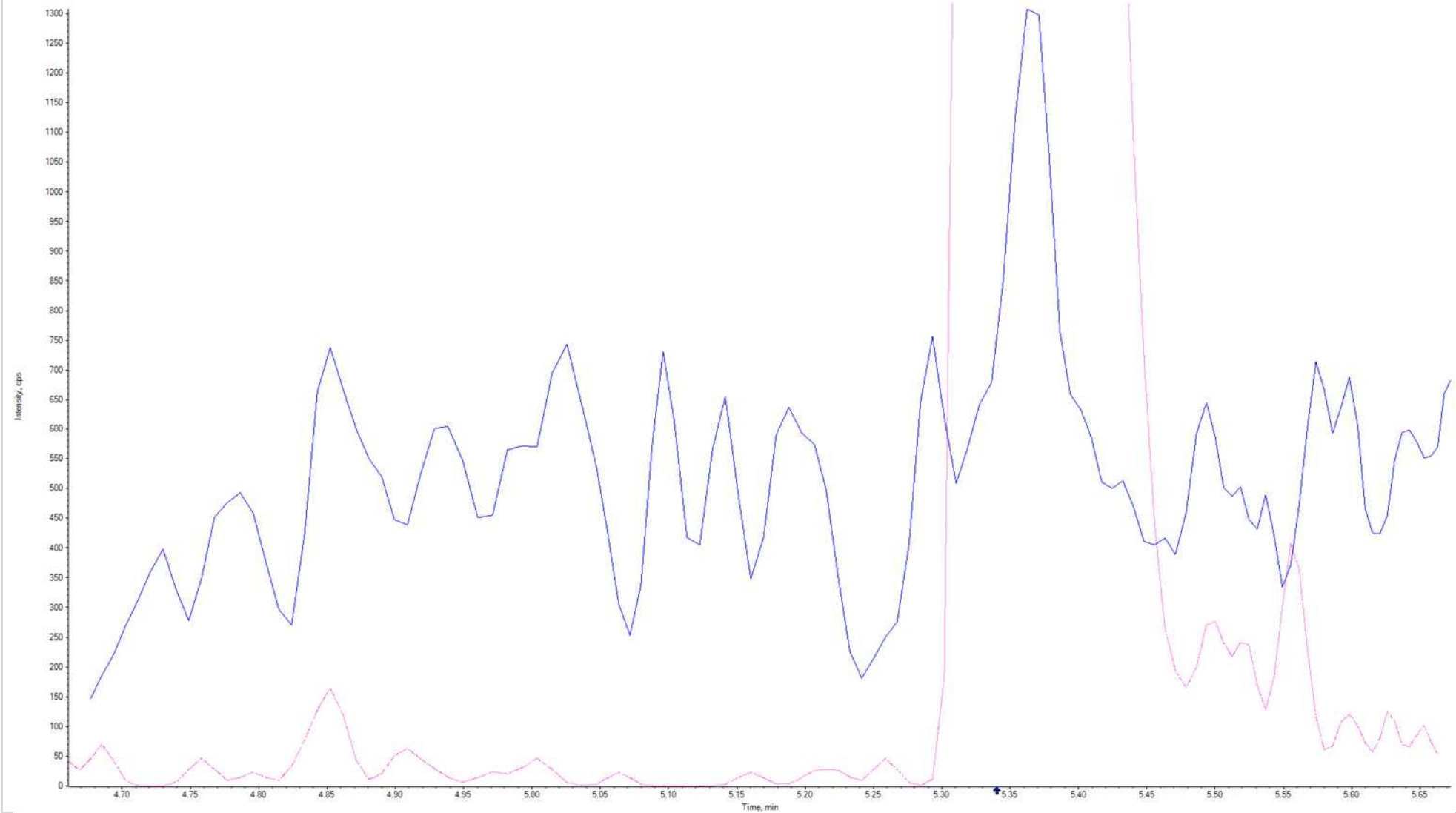


PFPeA_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



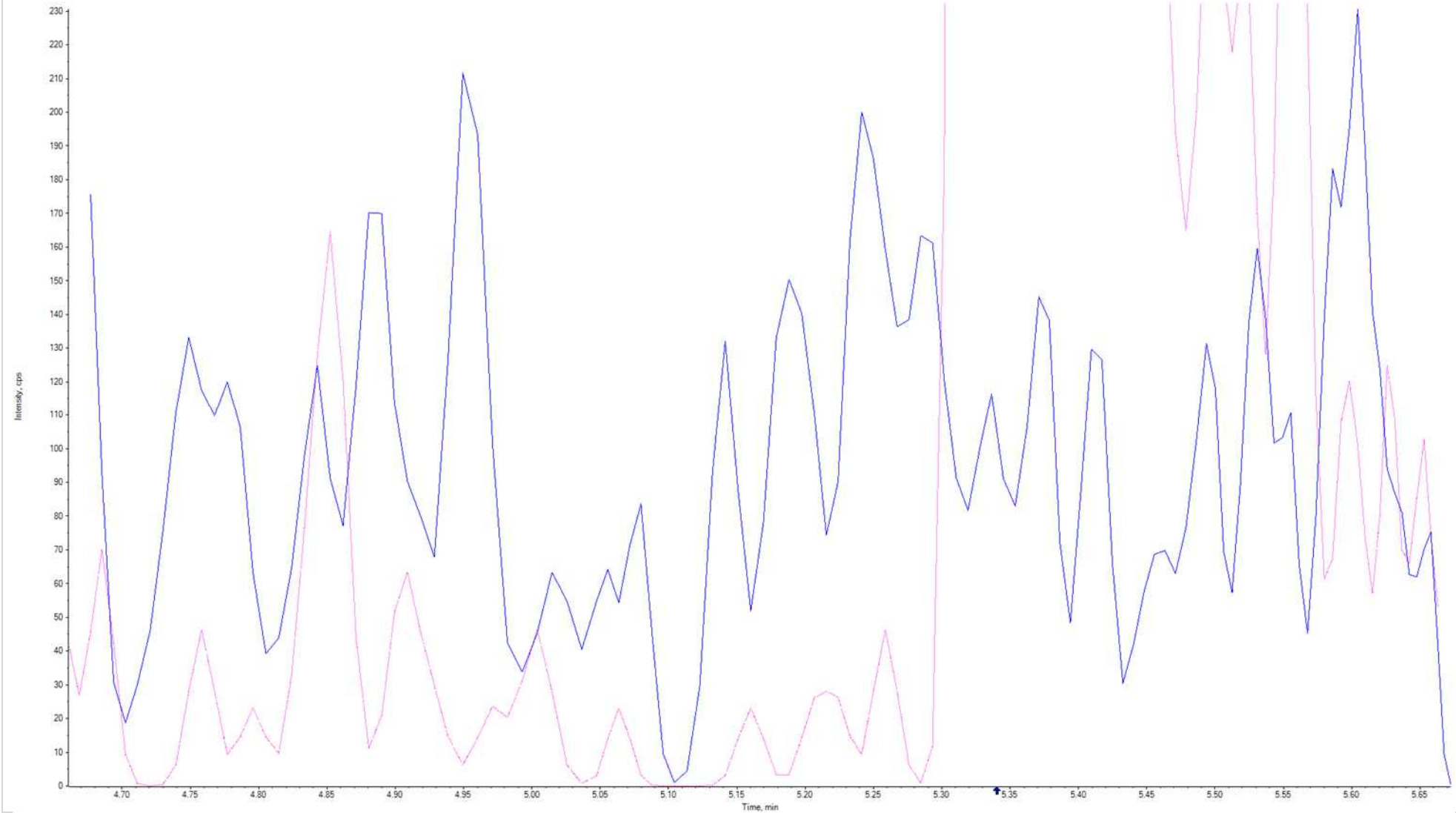
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Generated: 9/17/2024 6:15:27 AM

PFHxA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



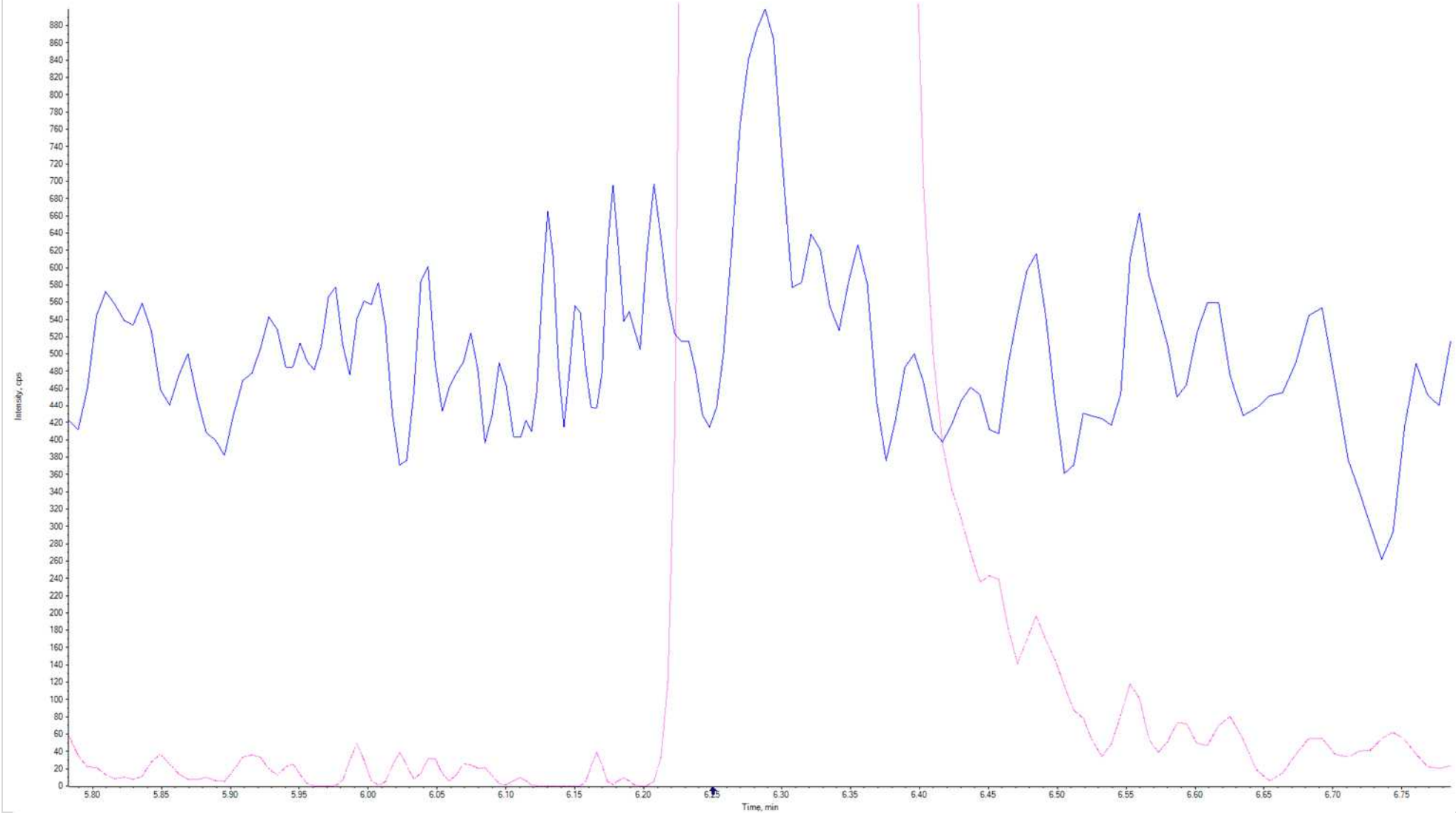
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PFHxA_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



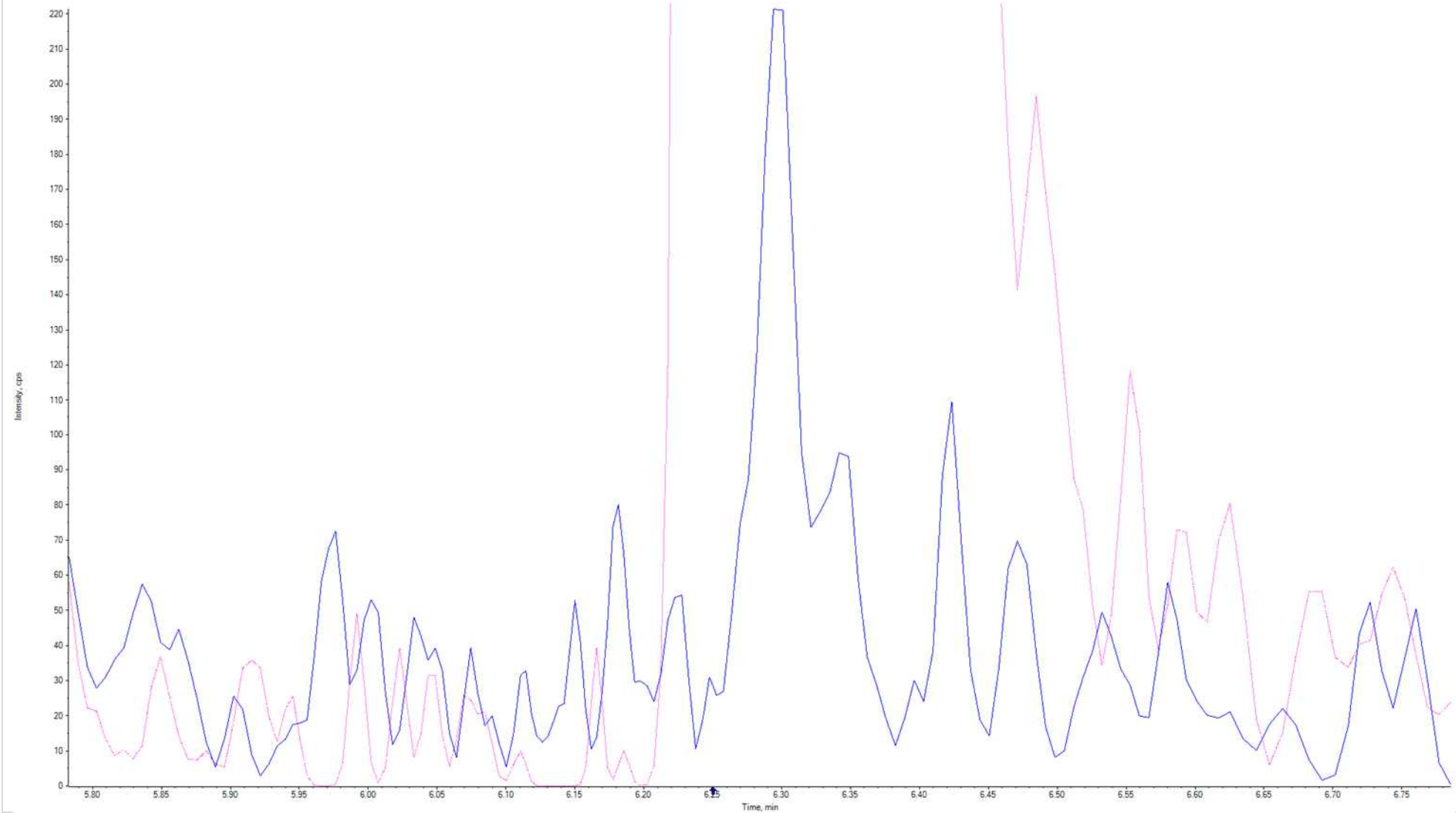
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PFHpA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



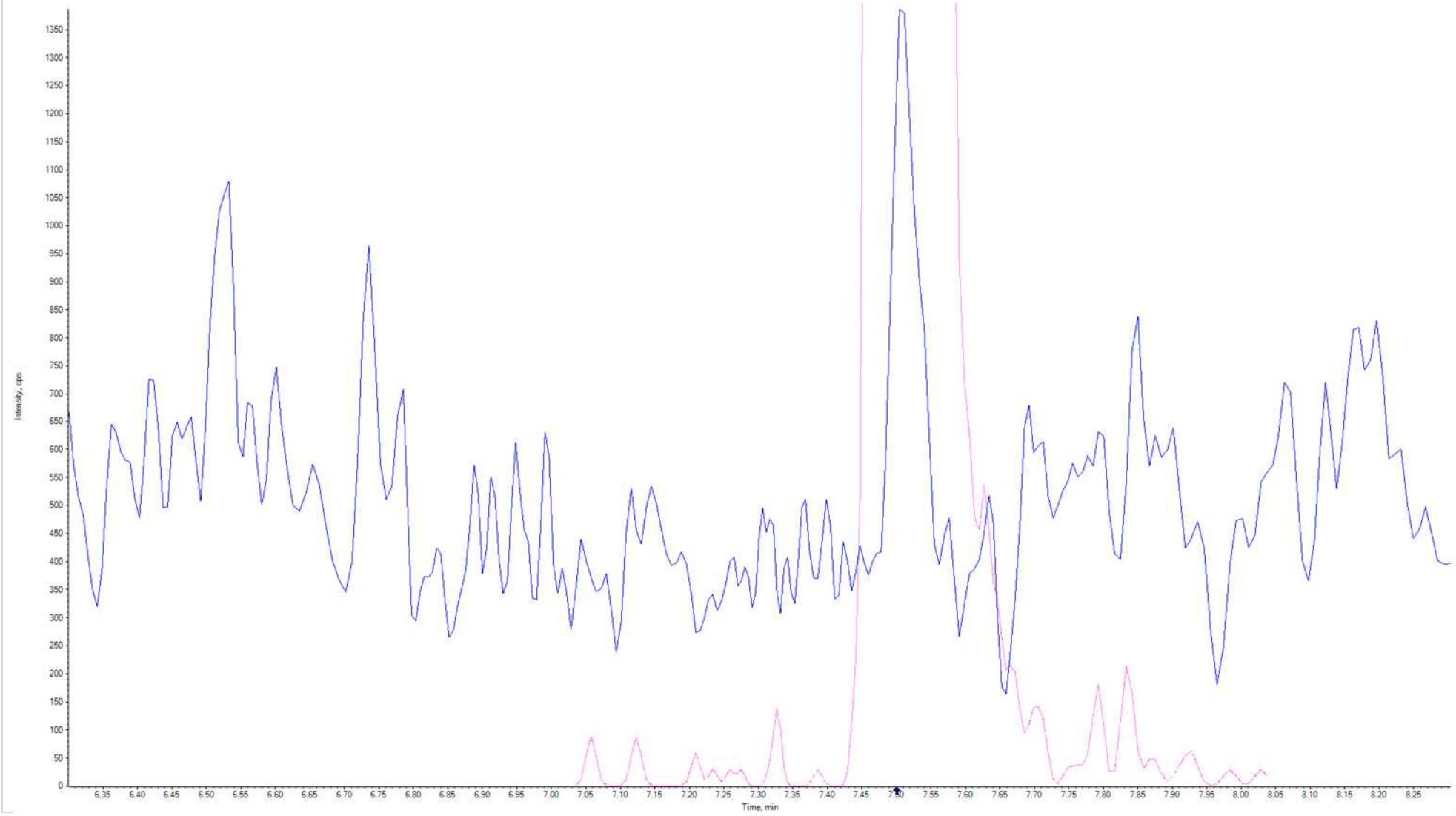
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Generated: 9/17/2024 6:15:27 AM

PFHpA_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



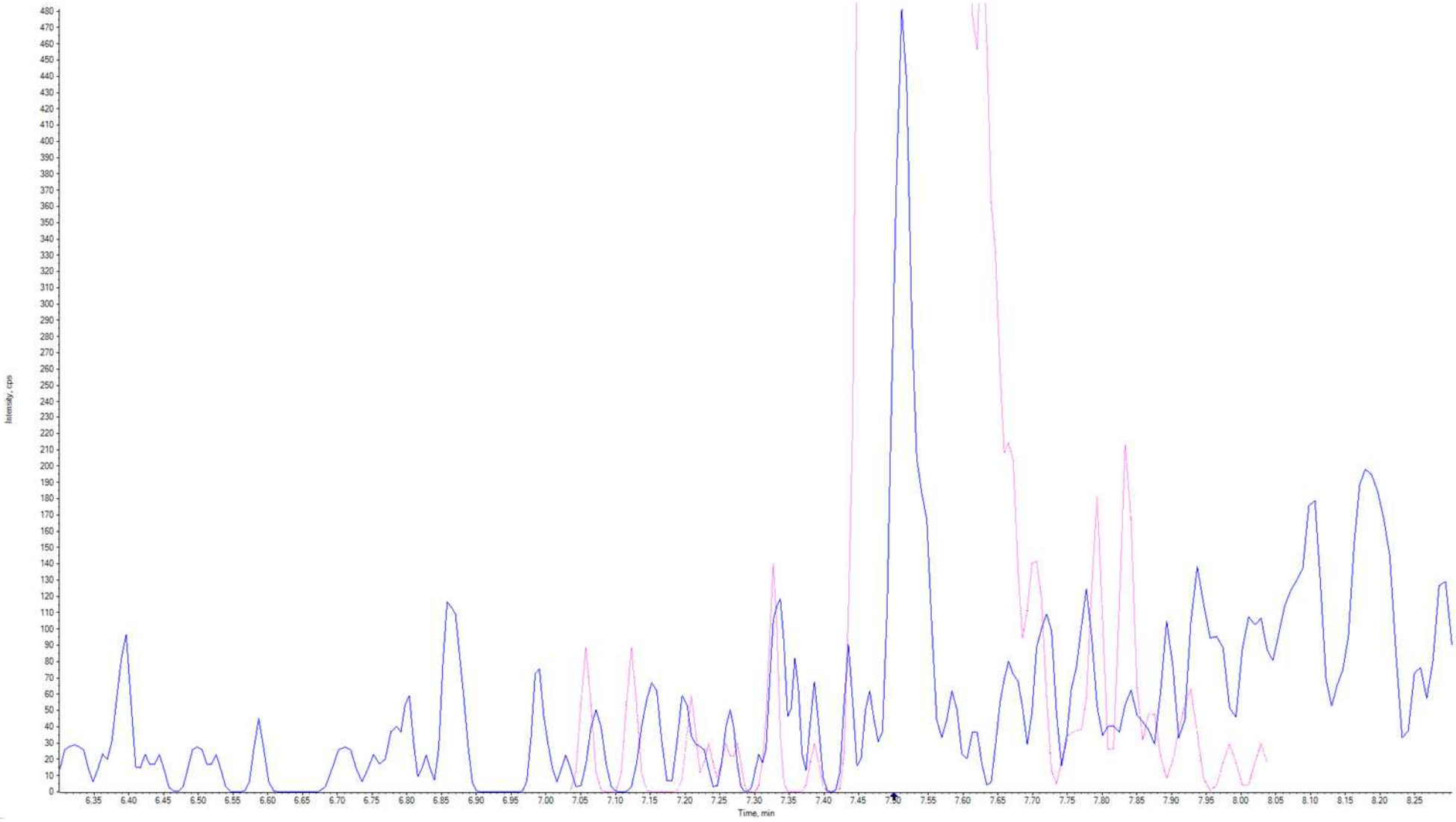
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PFOA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



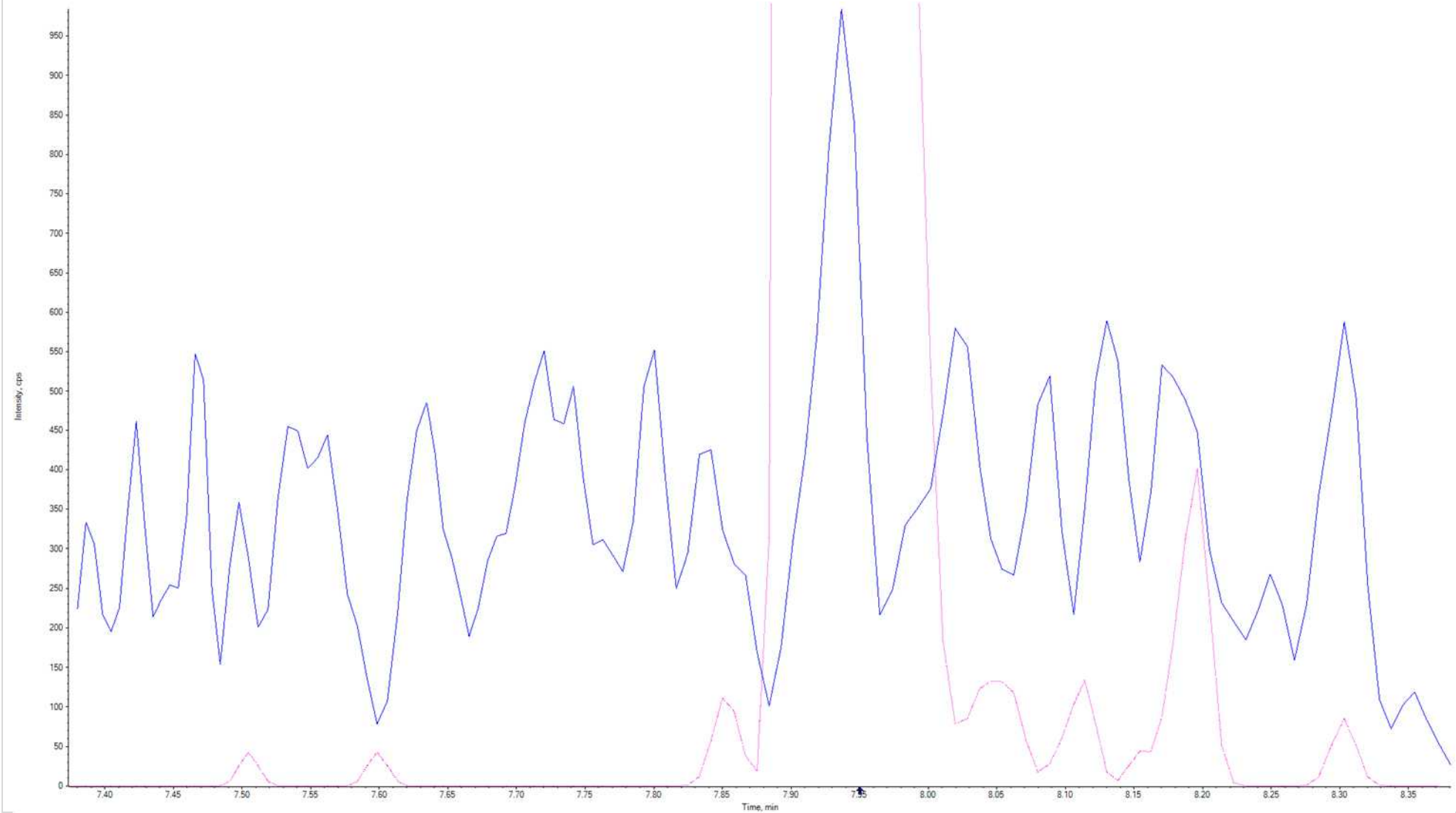
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PFOA_2
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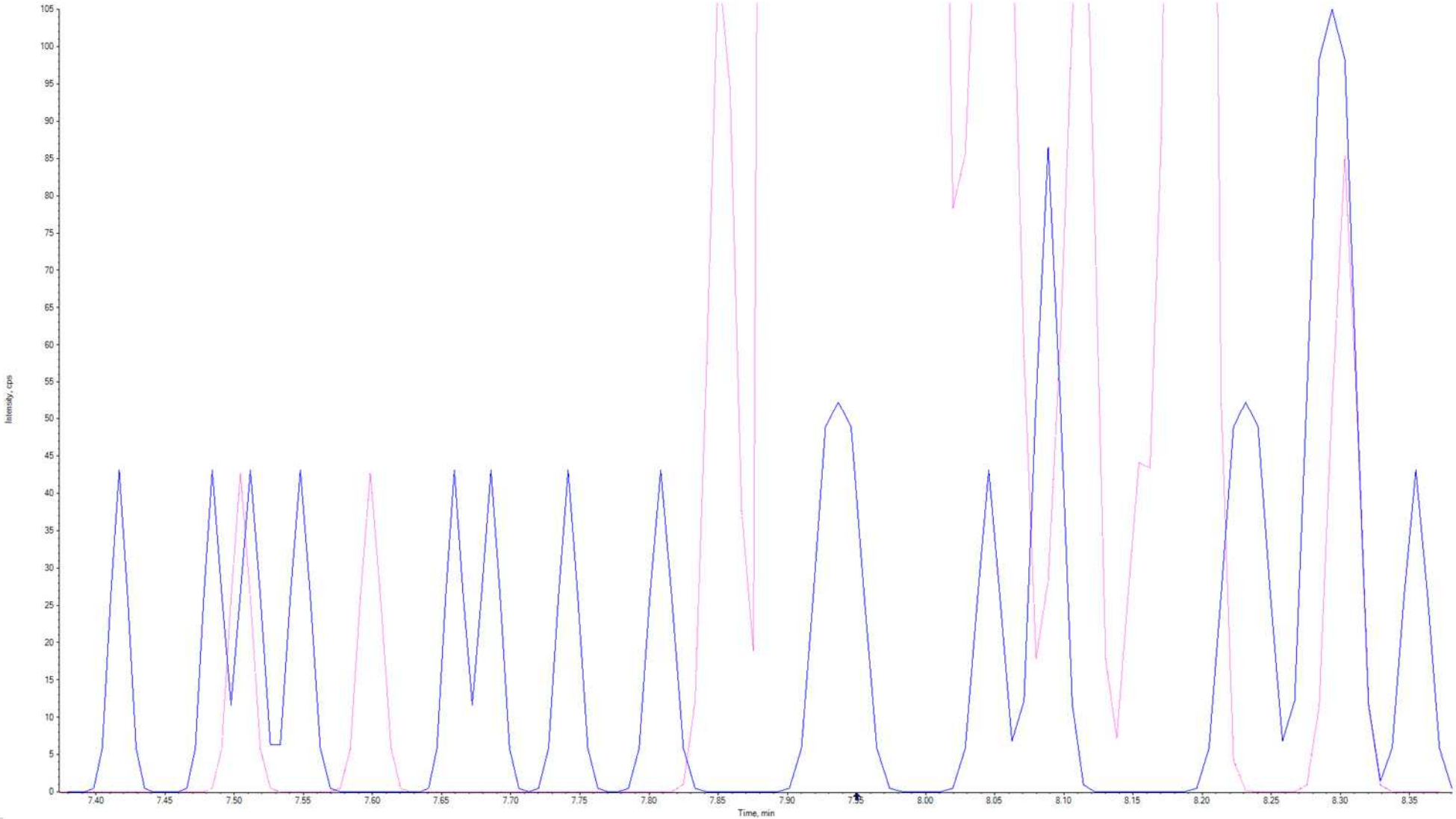
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PFNA
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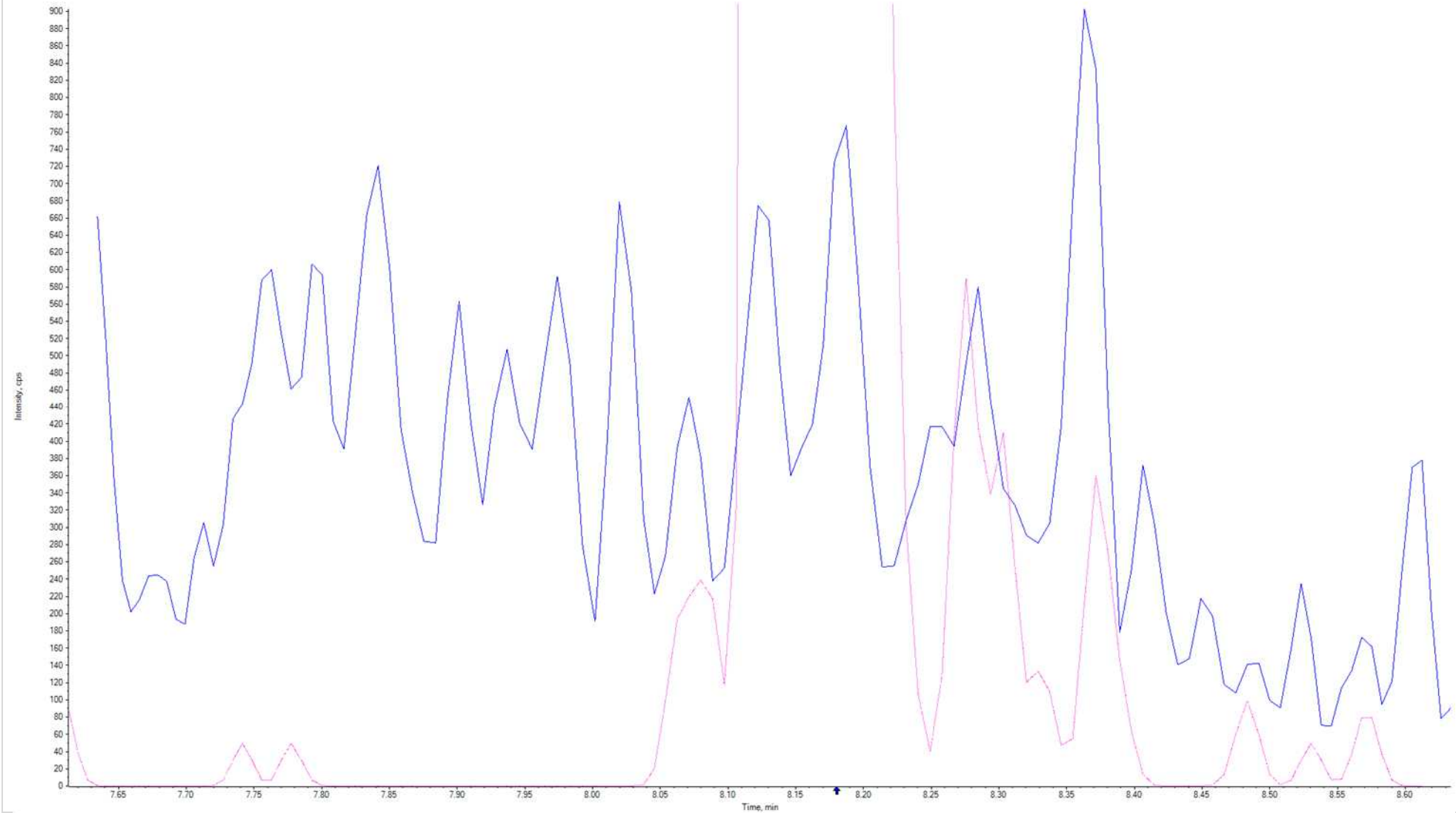
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PFNA_2
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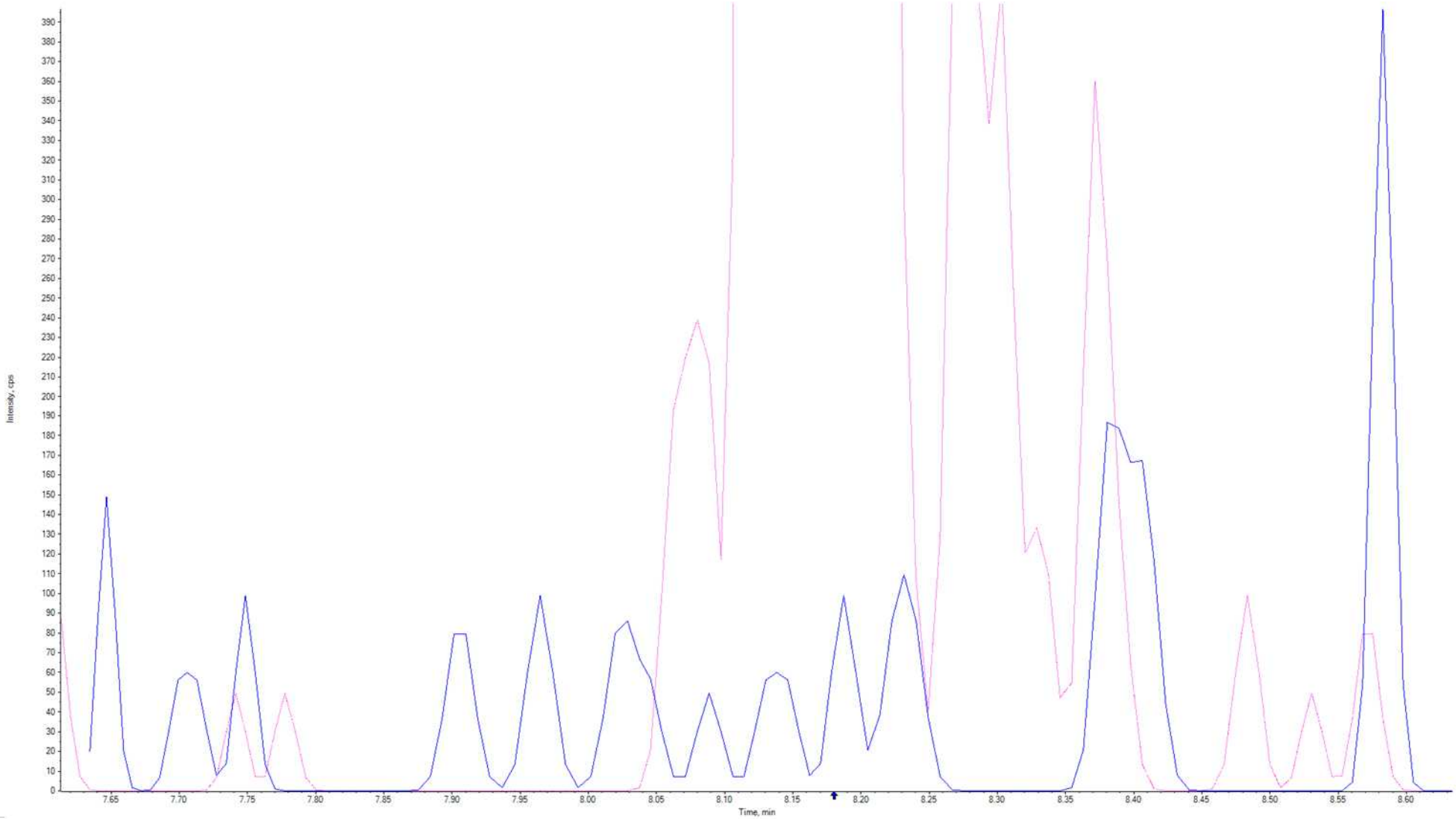
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PFDA
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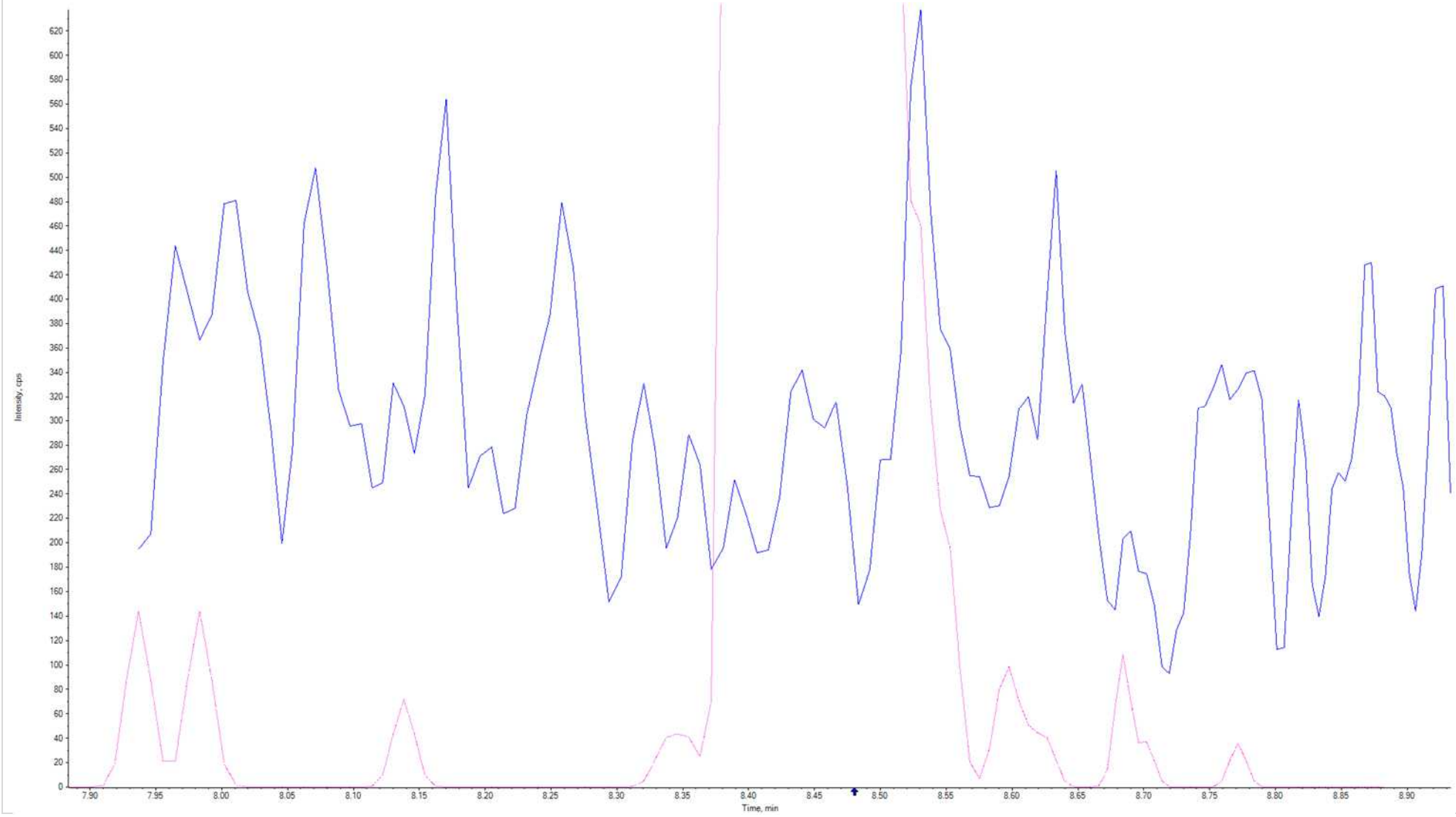
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PFDA_2
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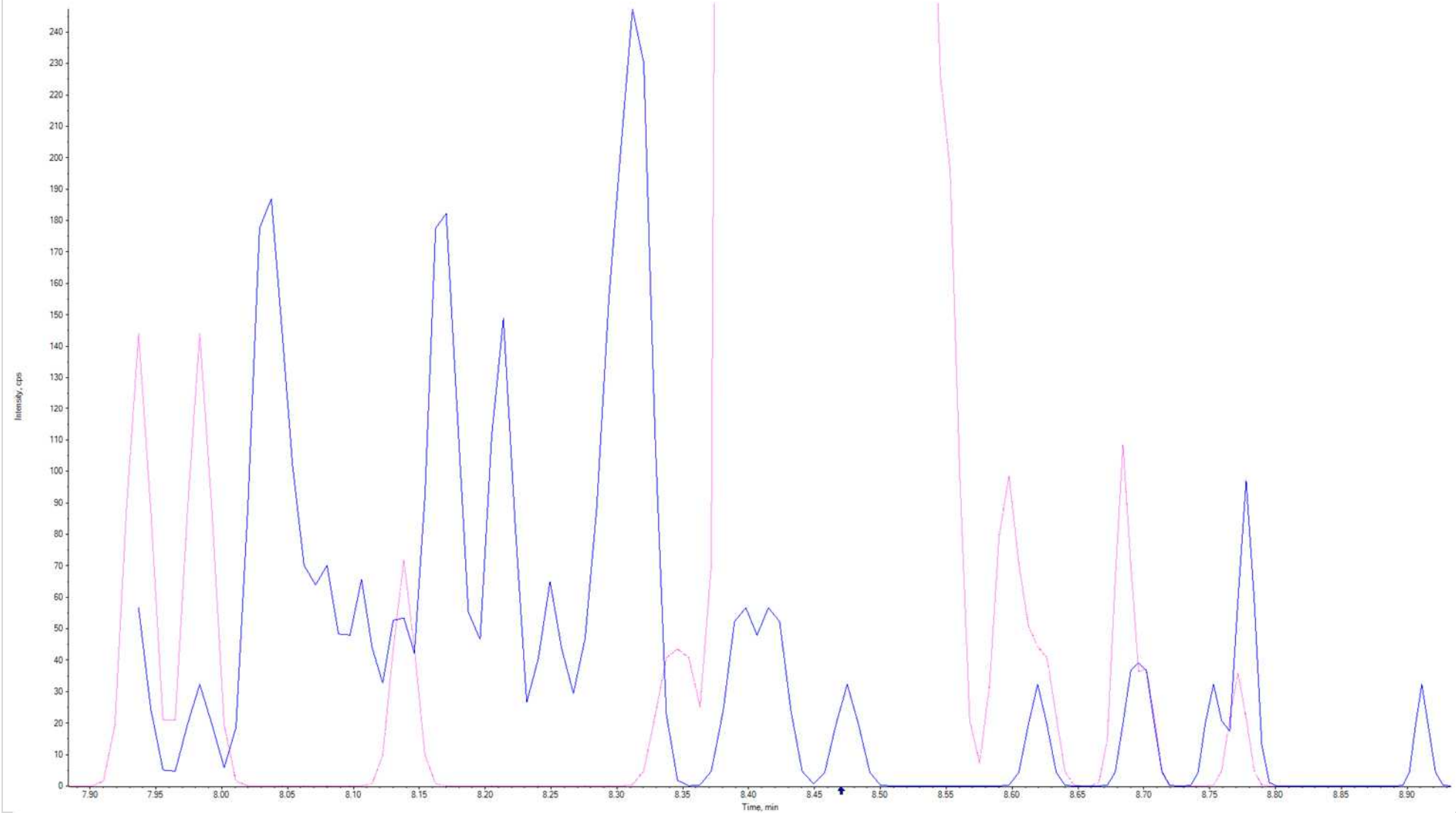
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PFUnA
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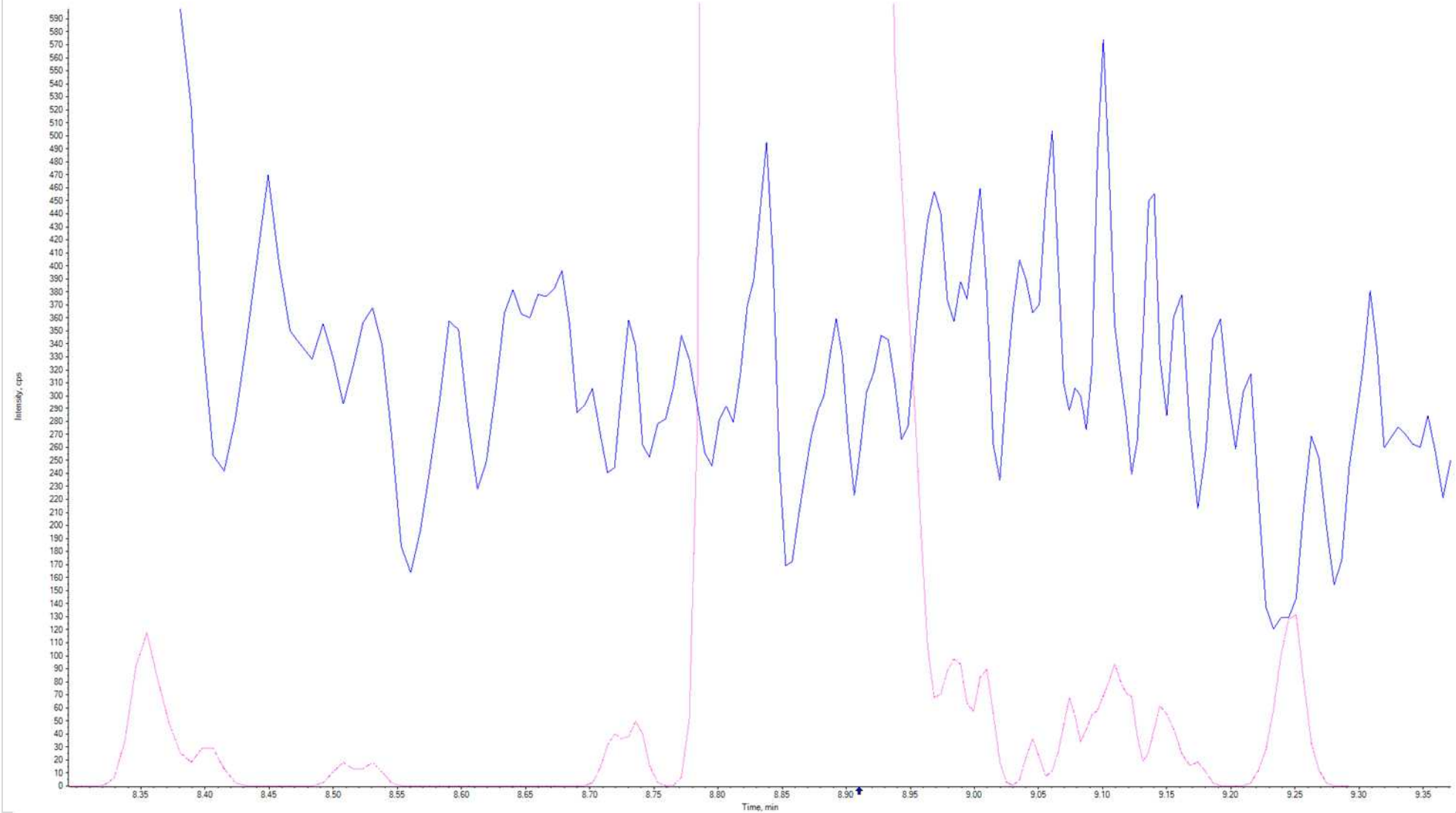
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PFUnA_2
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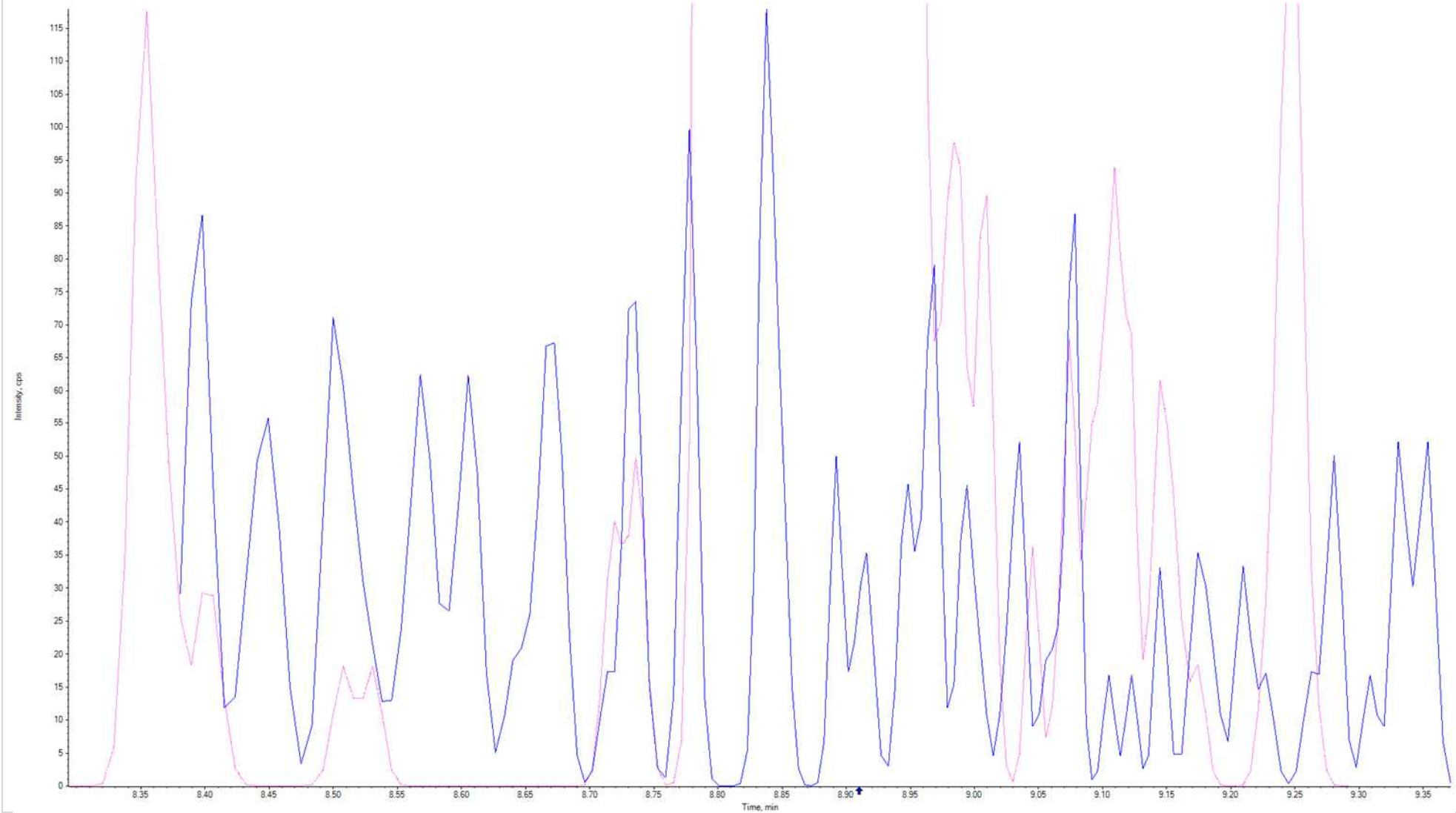
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PFDoA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



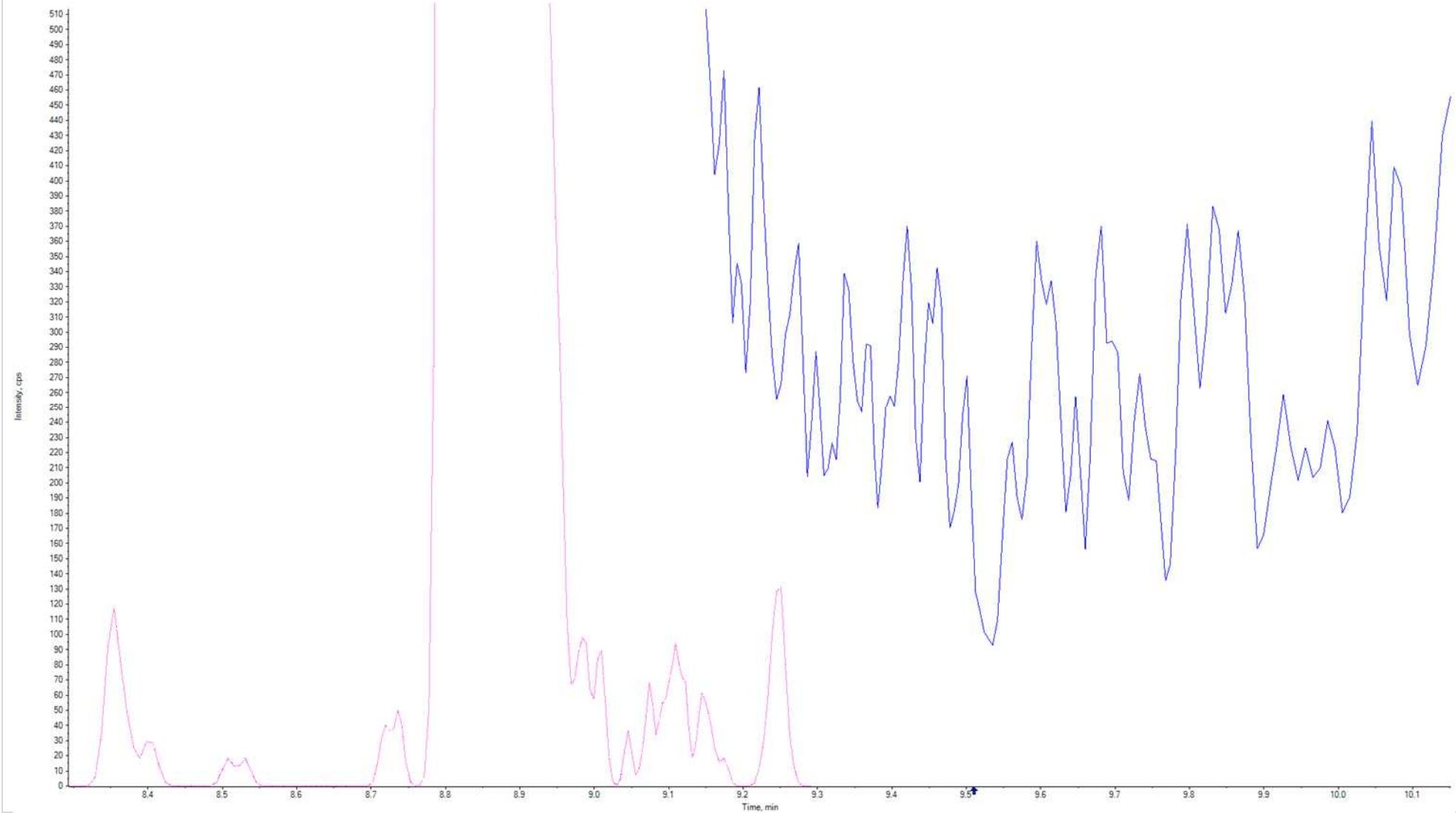
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PFDoA_2
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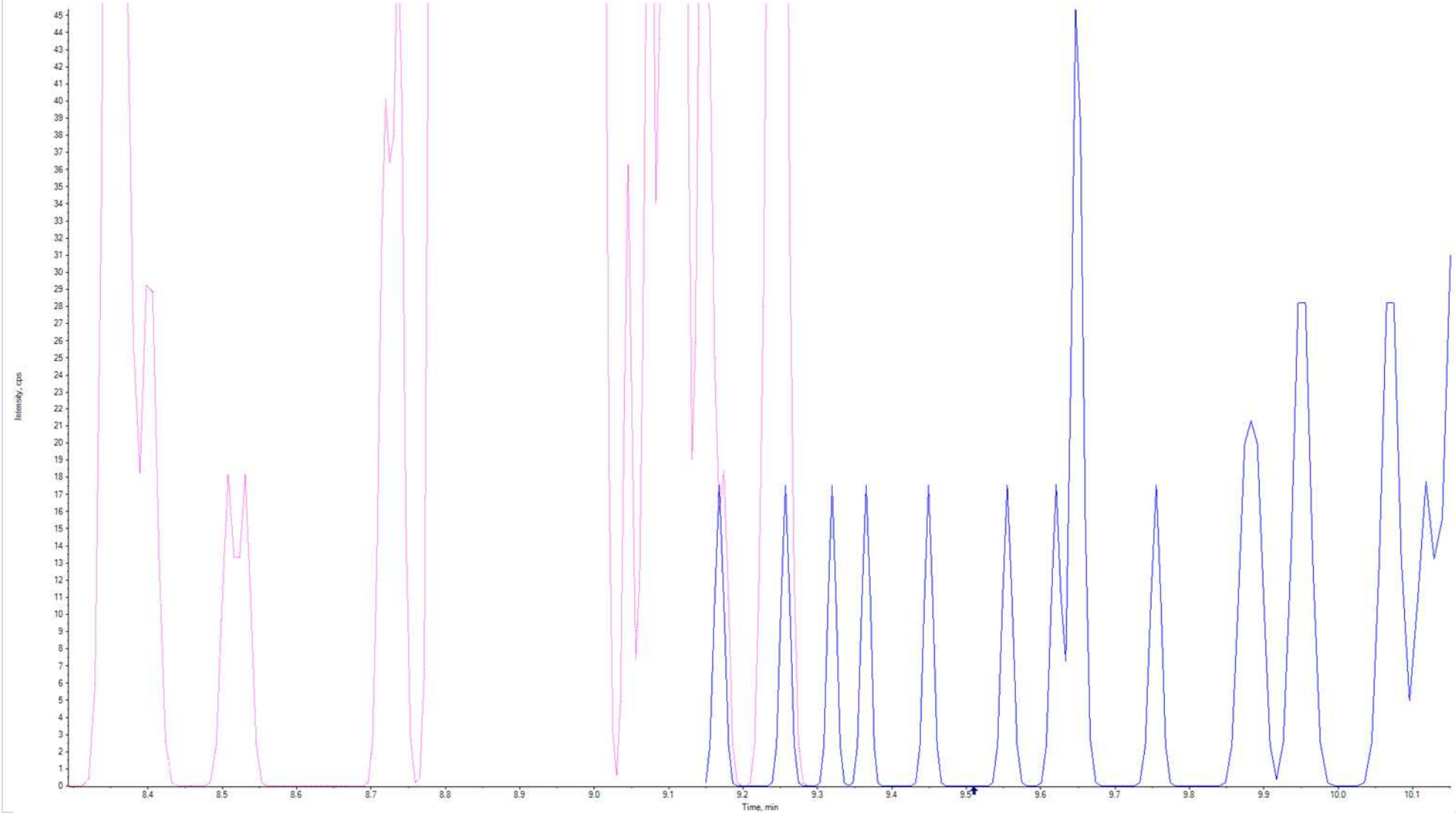
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PFTrDA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



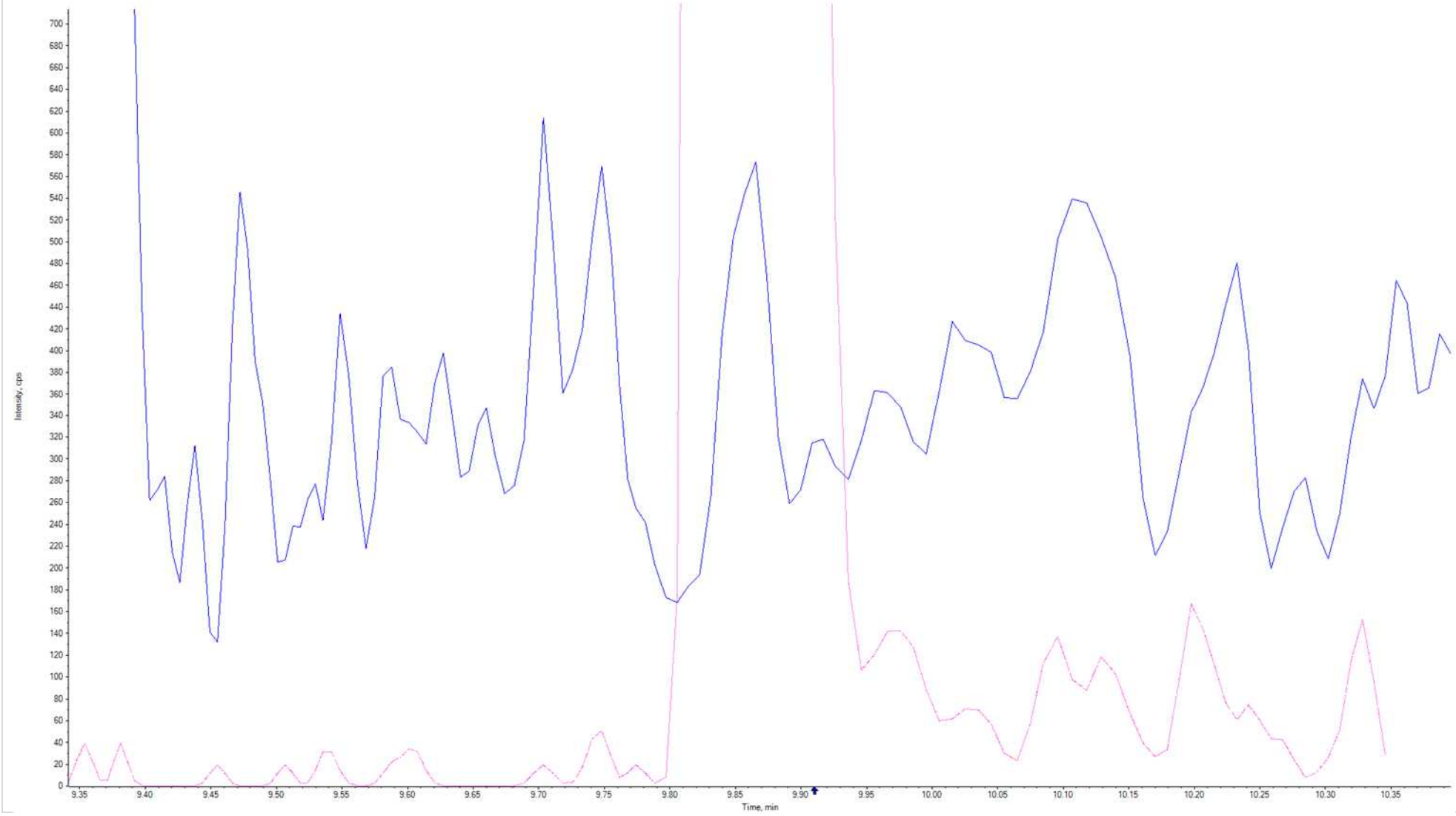
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PFTrDA_2
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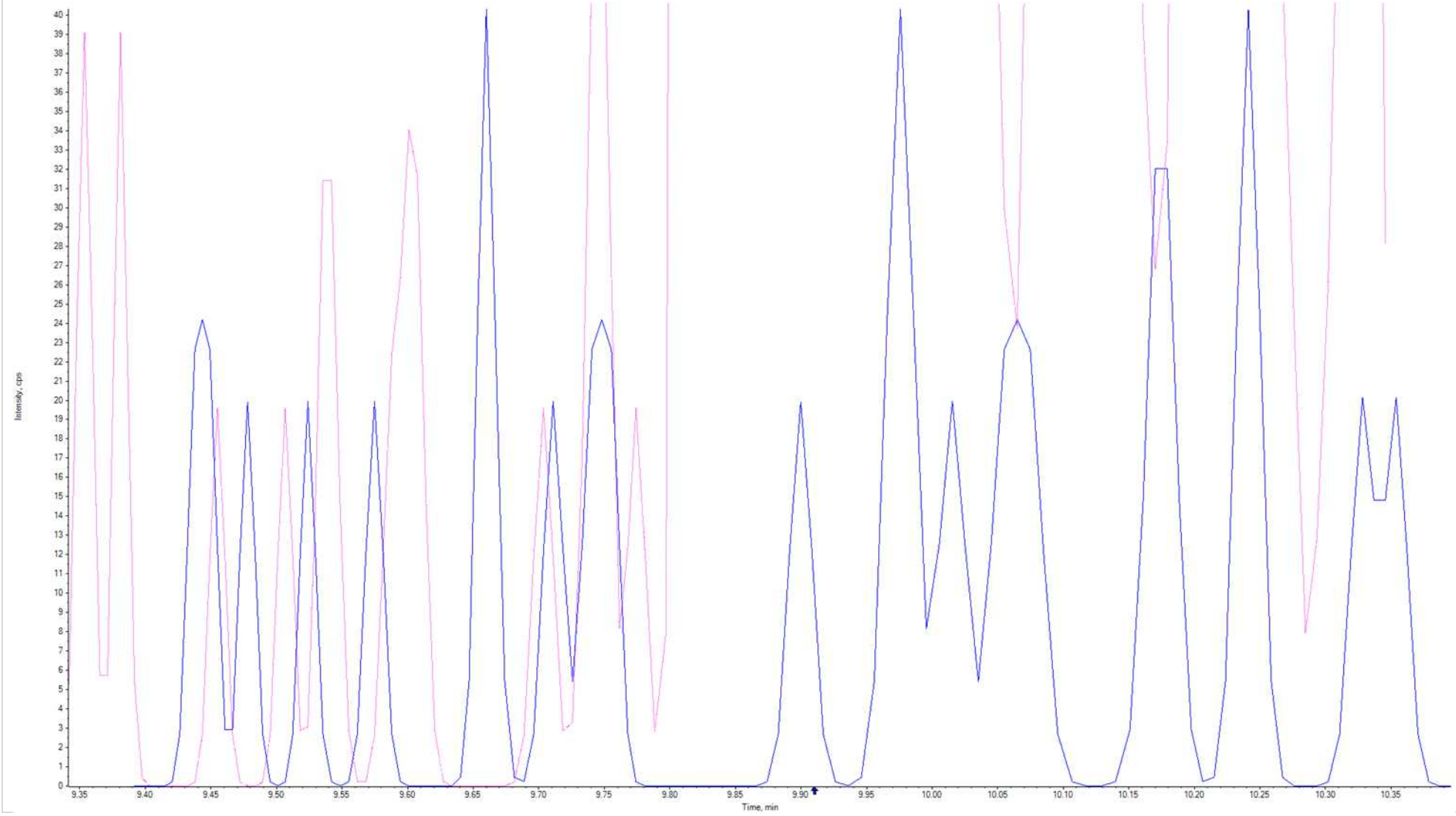
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PFTeDA
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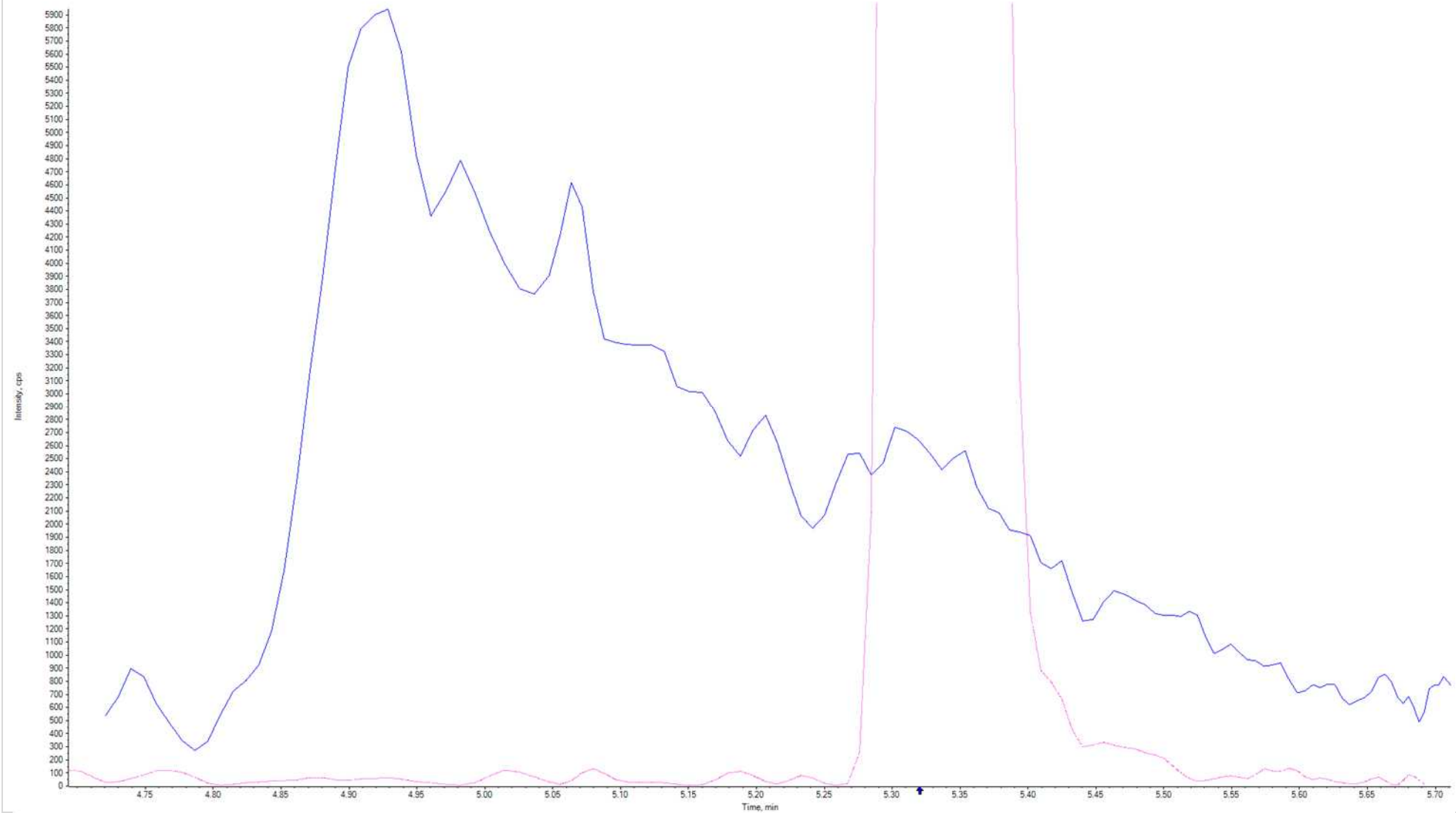
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PFTeDA_2
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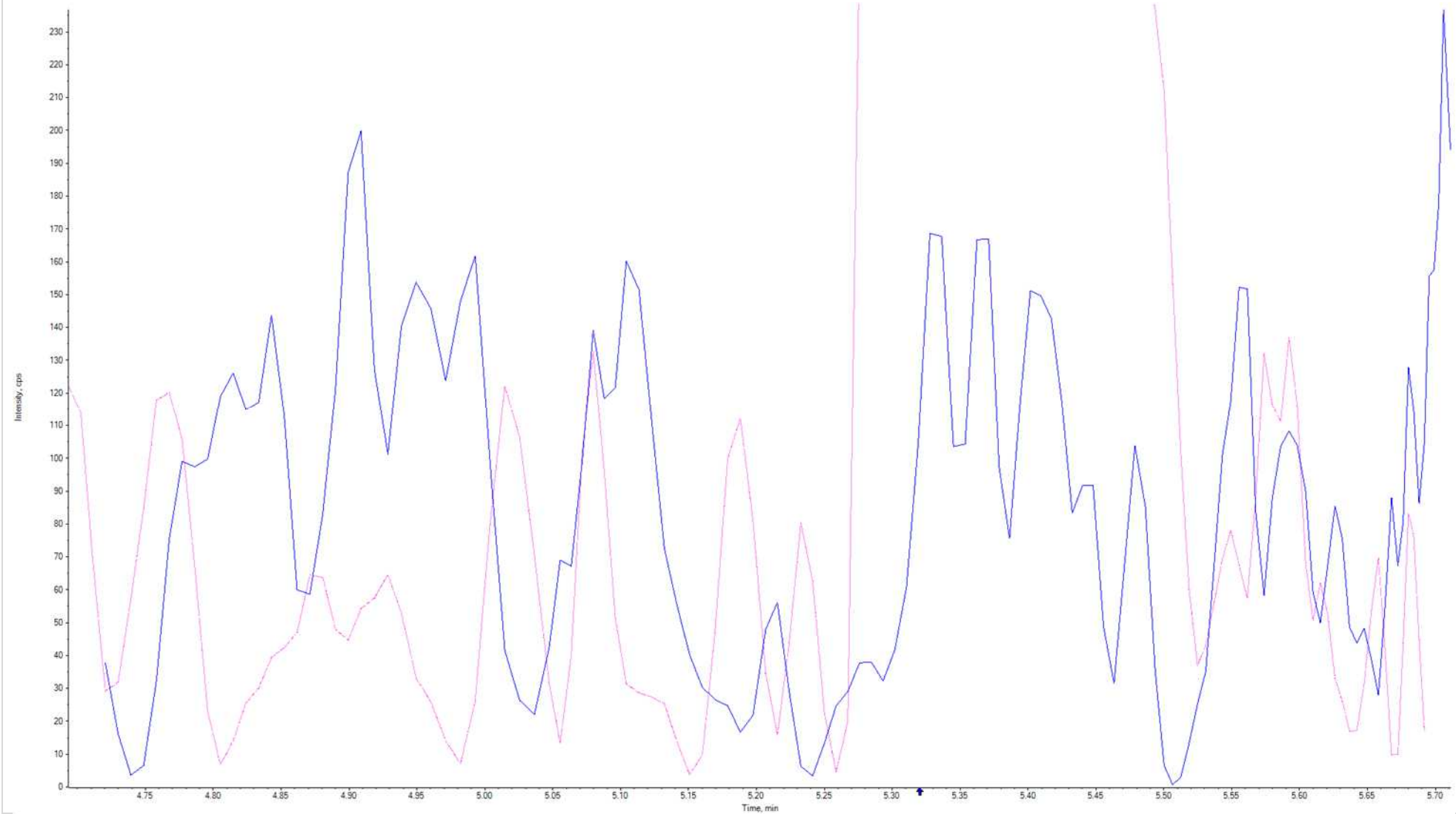
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PFBS
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



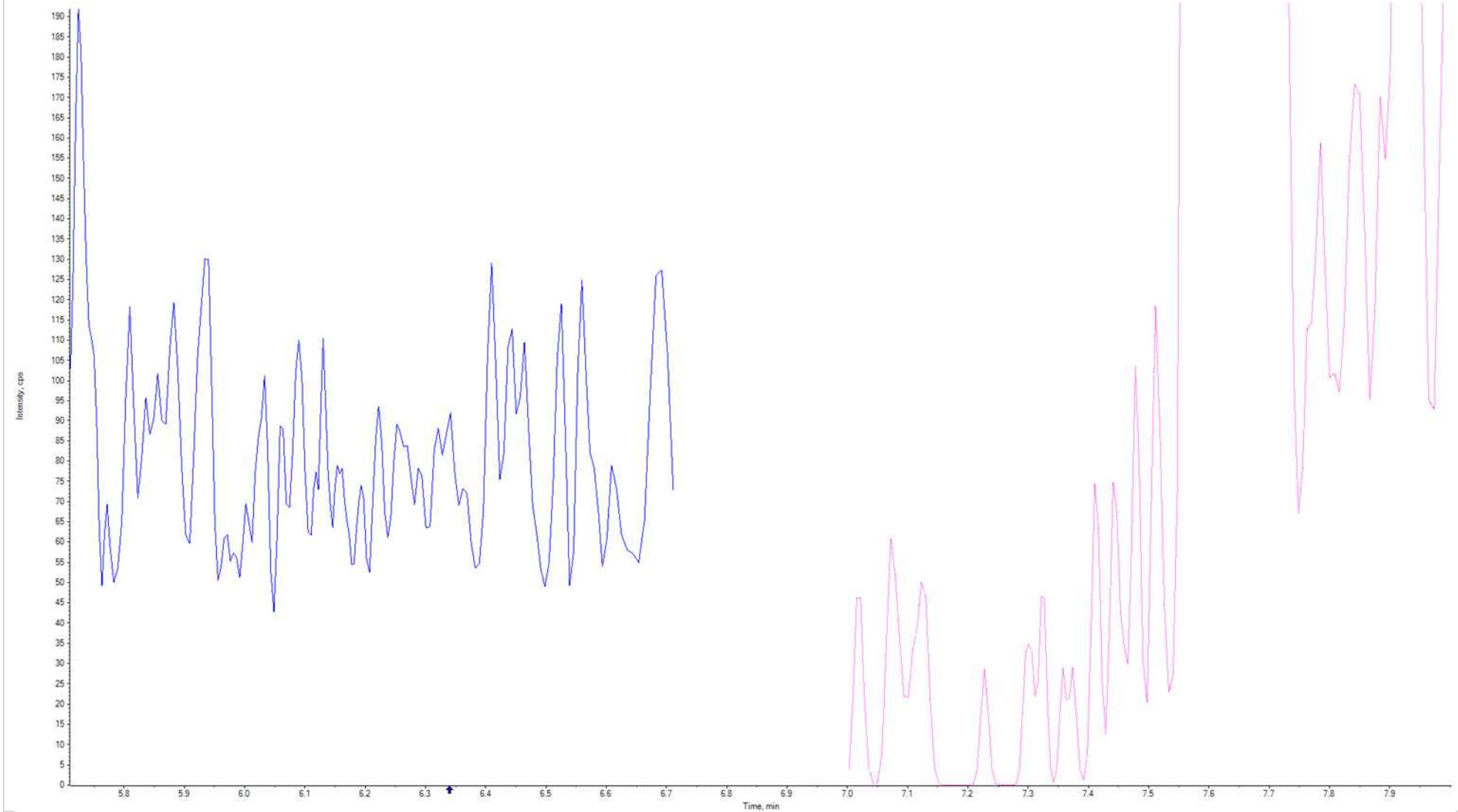
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PFBS_2
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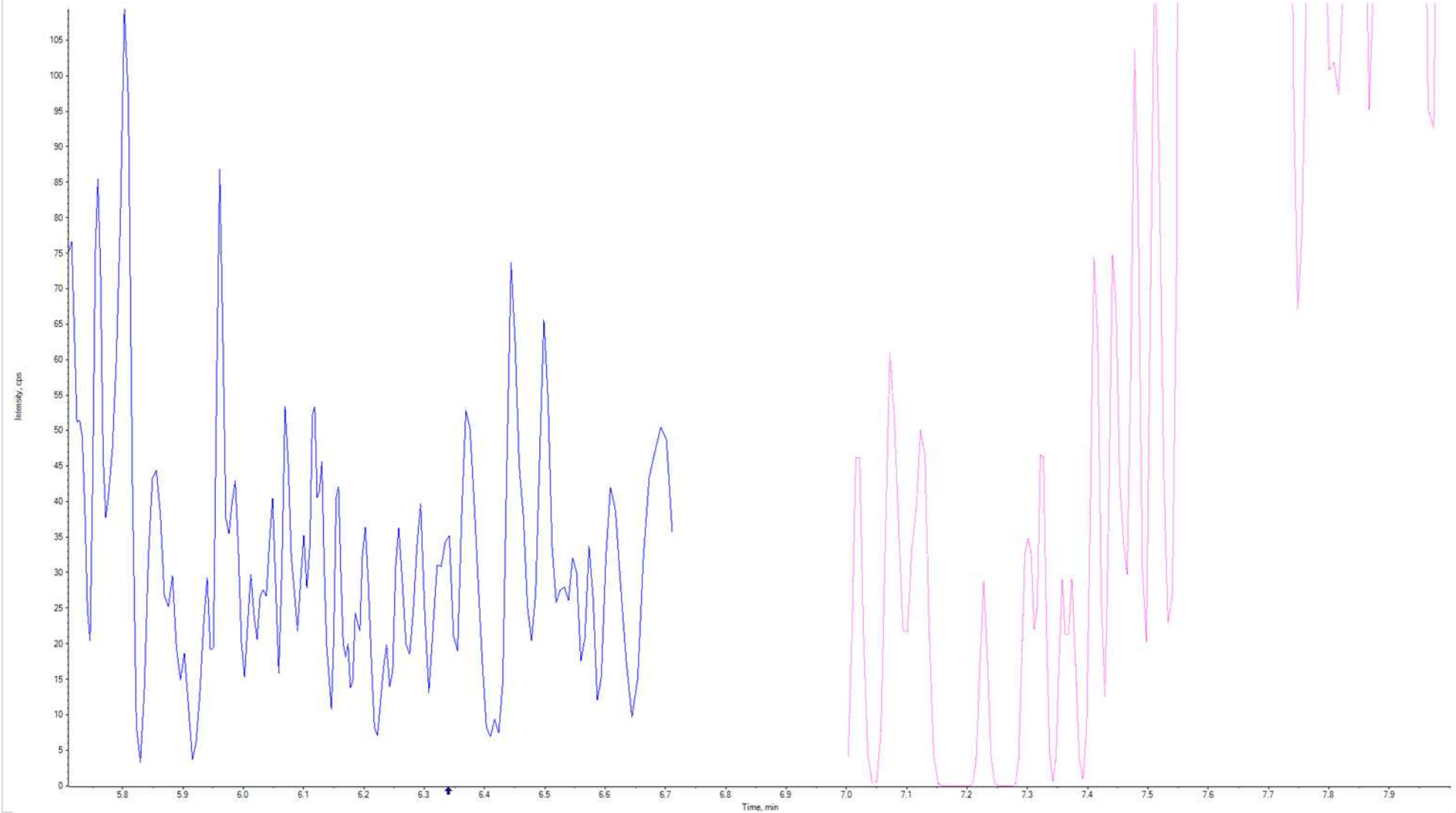
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PFPeS
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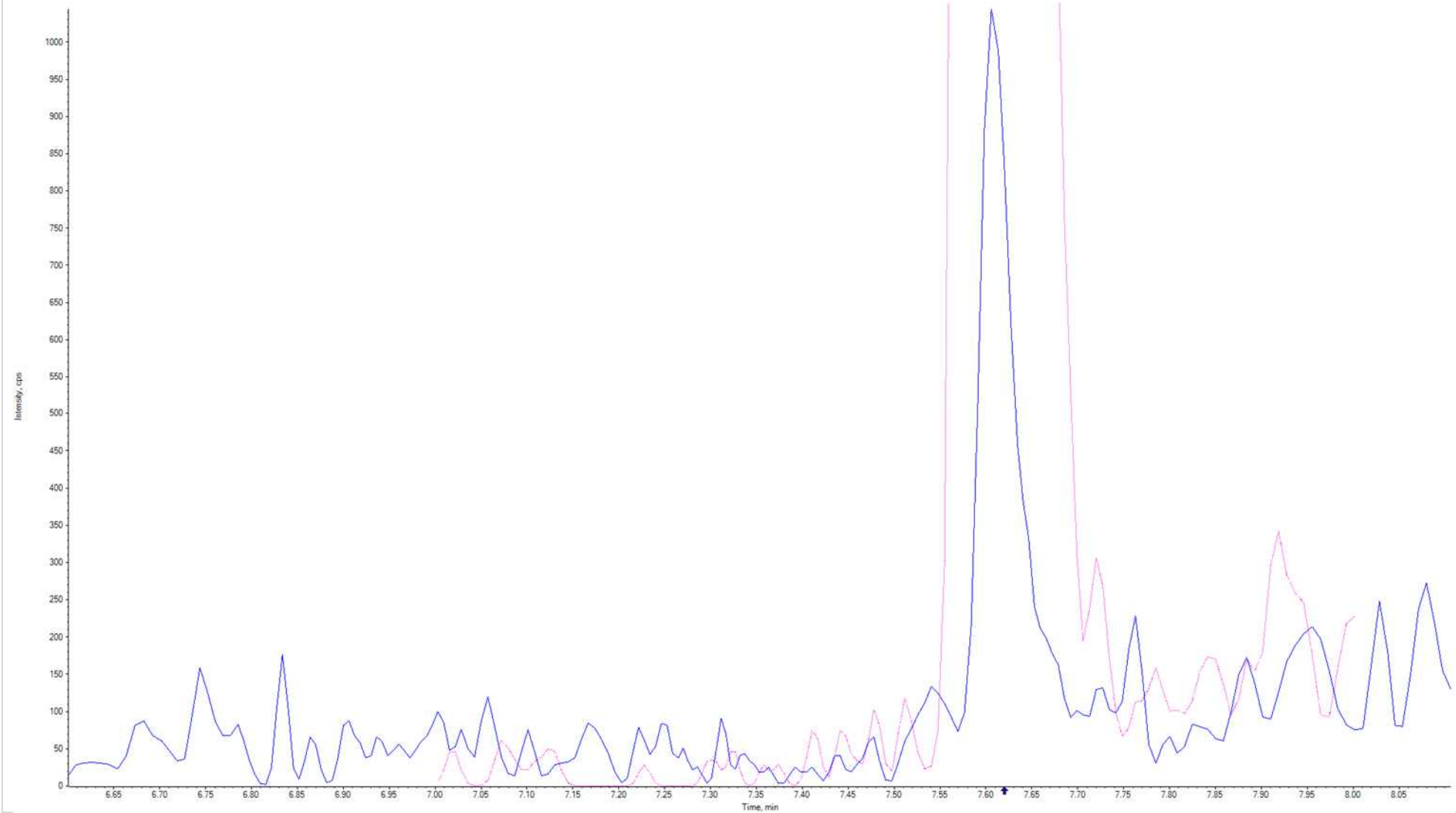
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PFPeS_2
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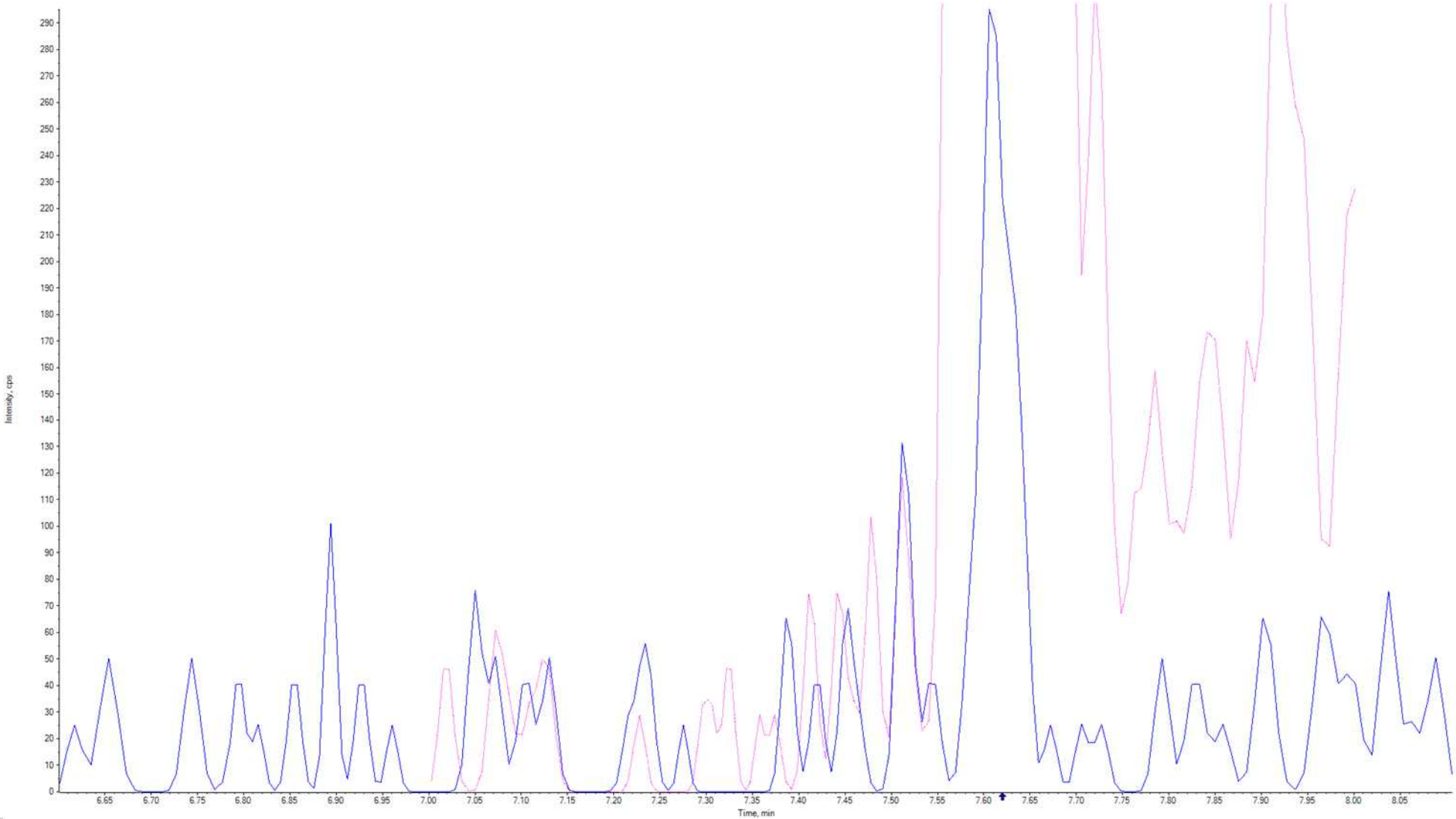
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PFHxS
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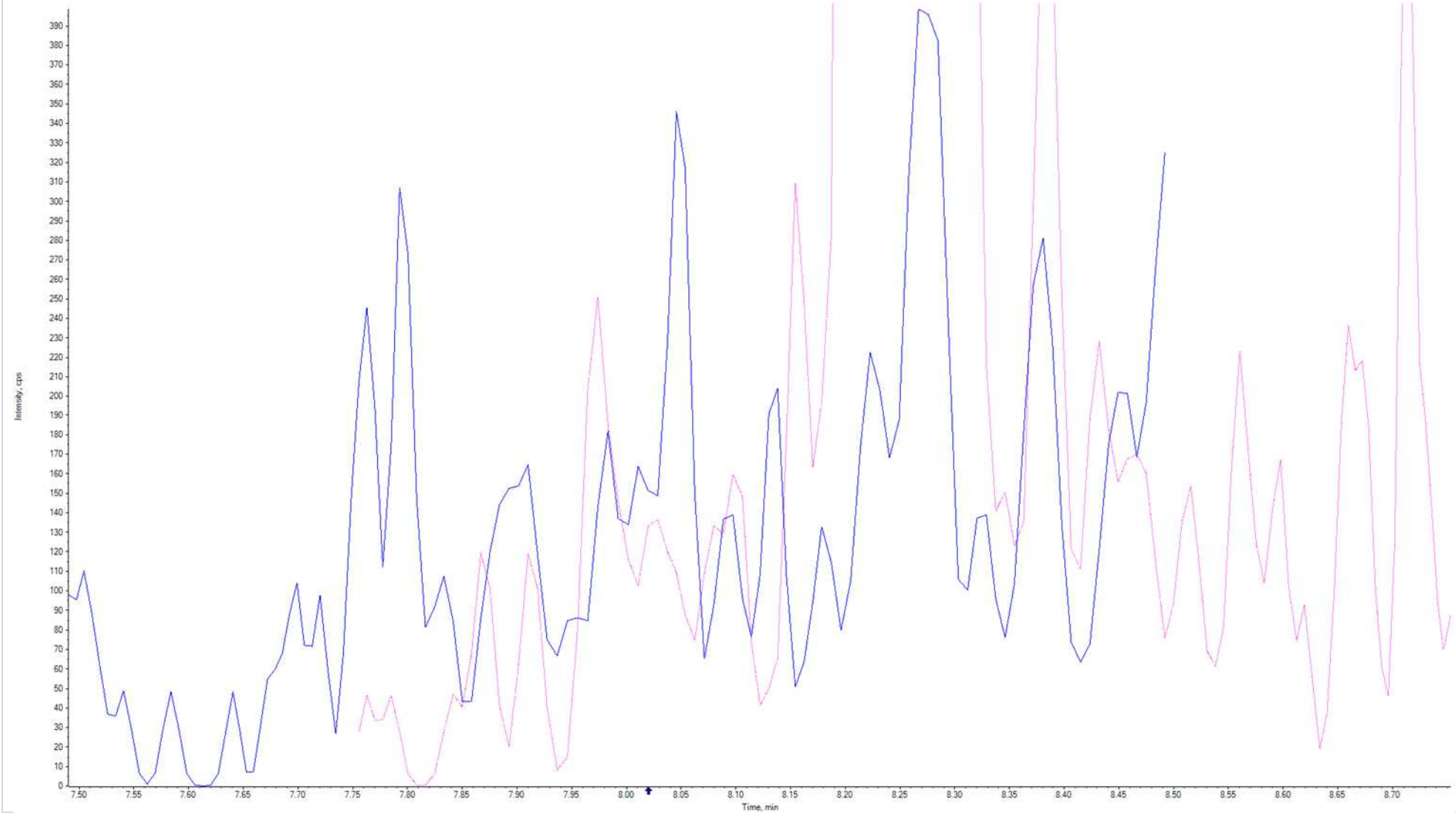
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PFHxS_2
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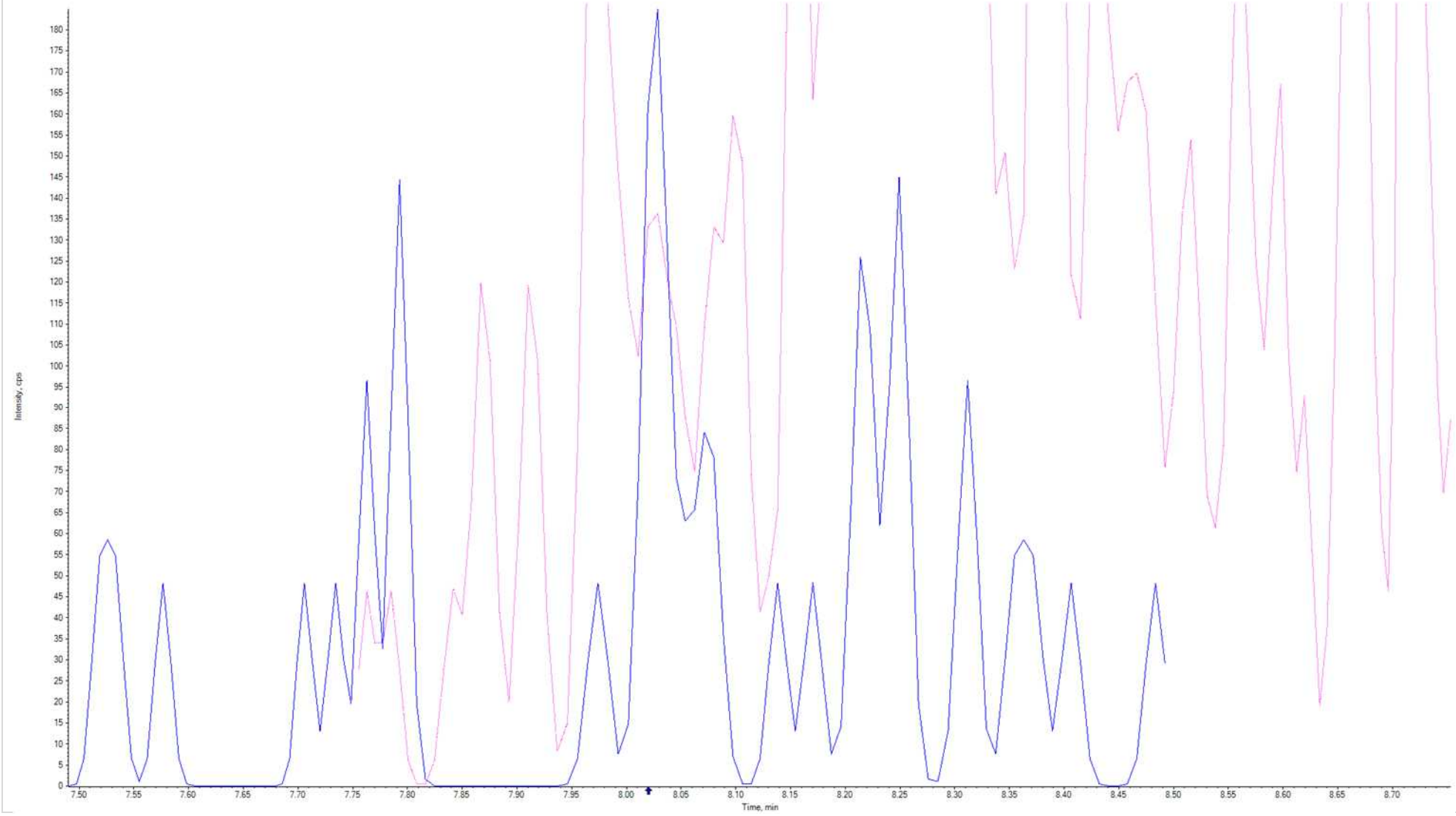
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PFHpS
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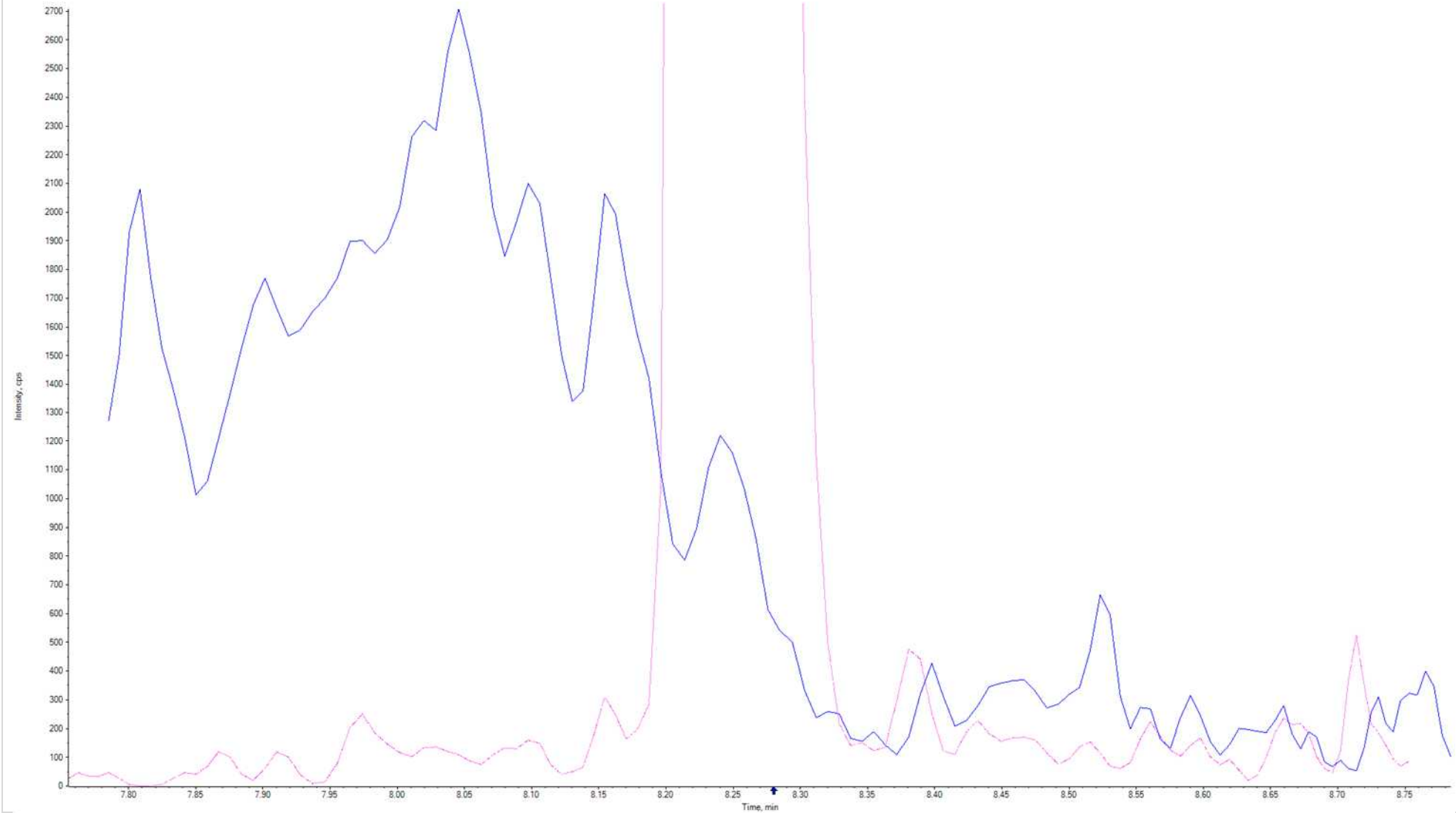
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PFHpS_2
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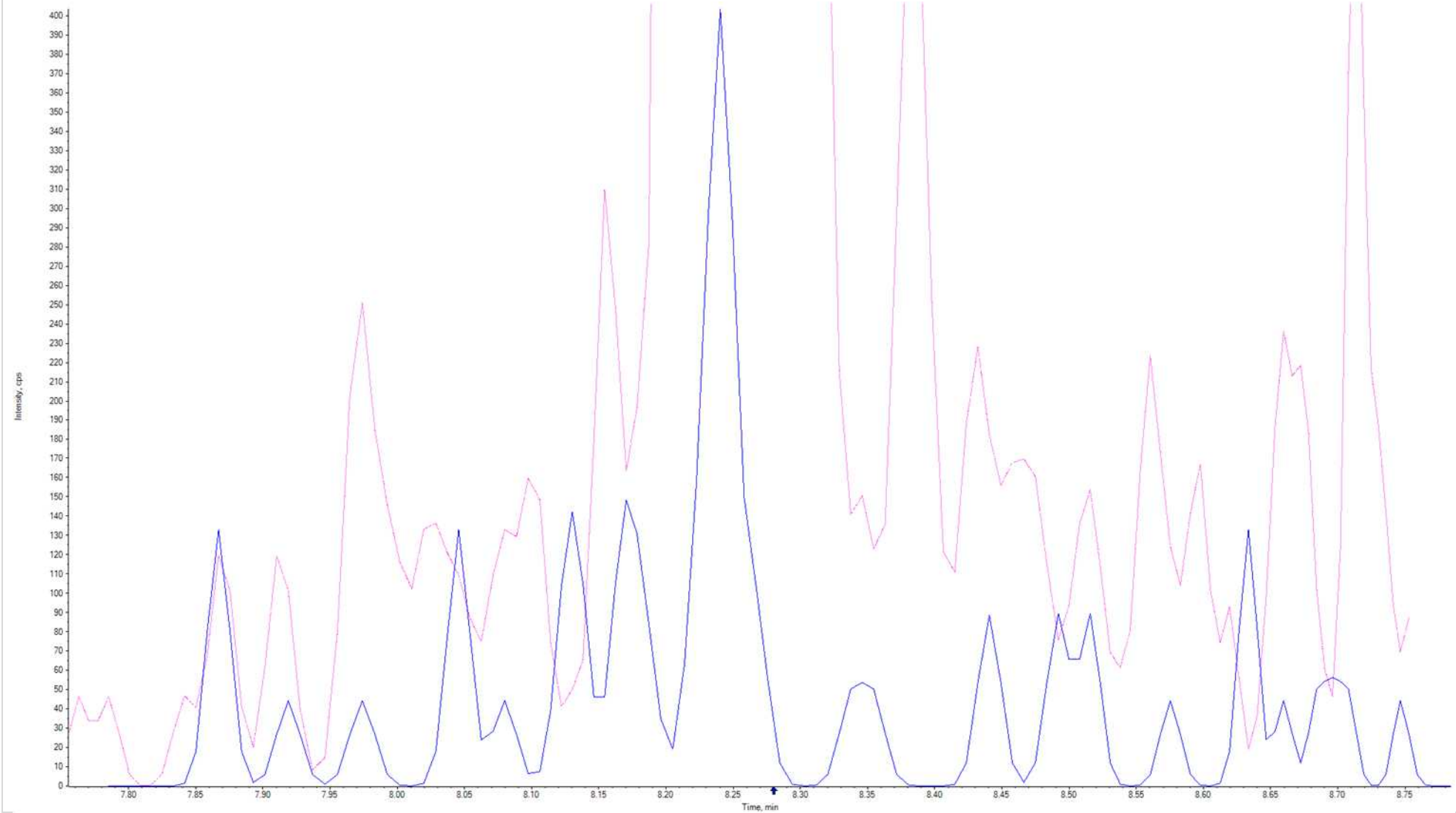
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PFOS
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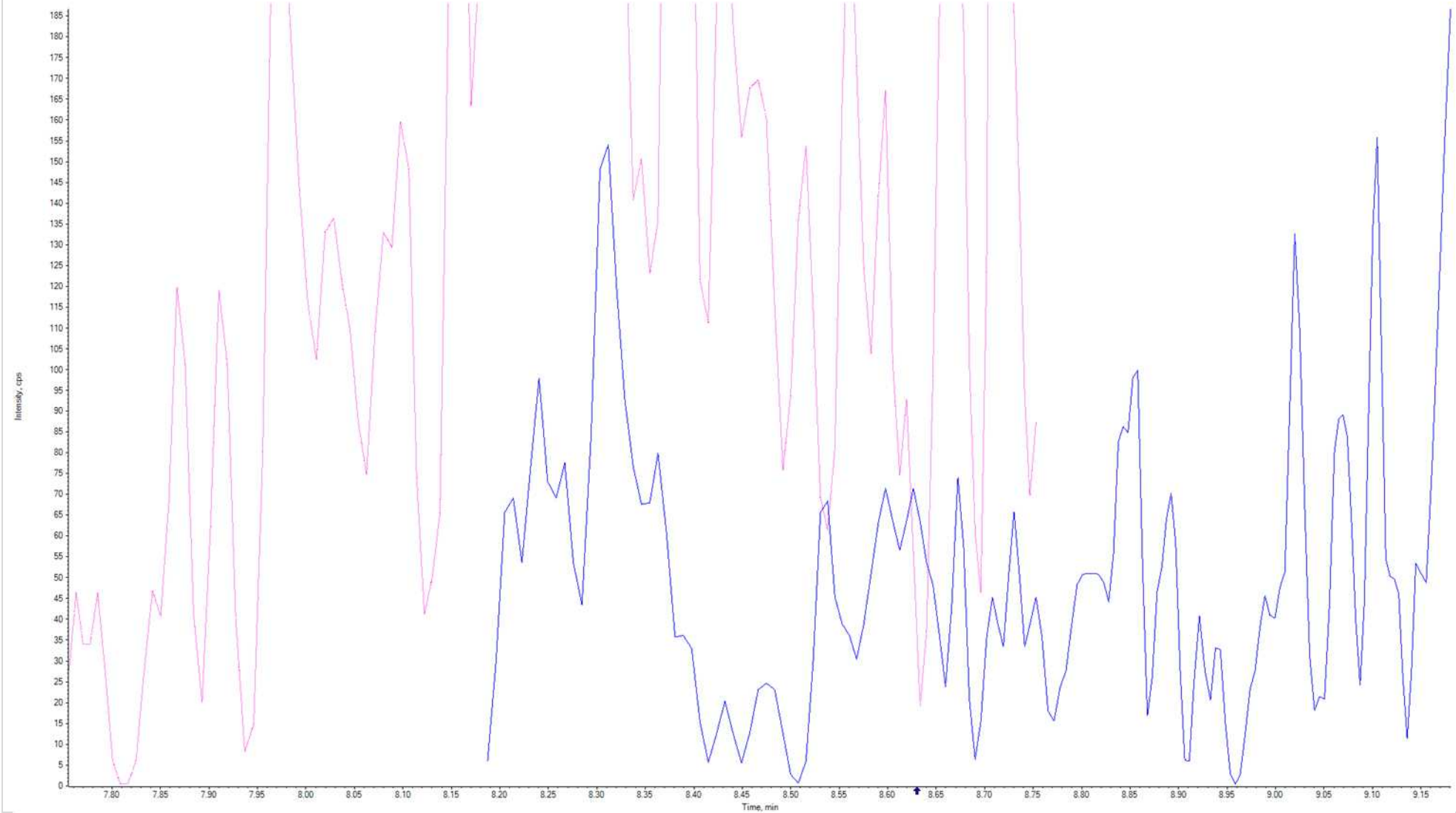
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PFOS_2
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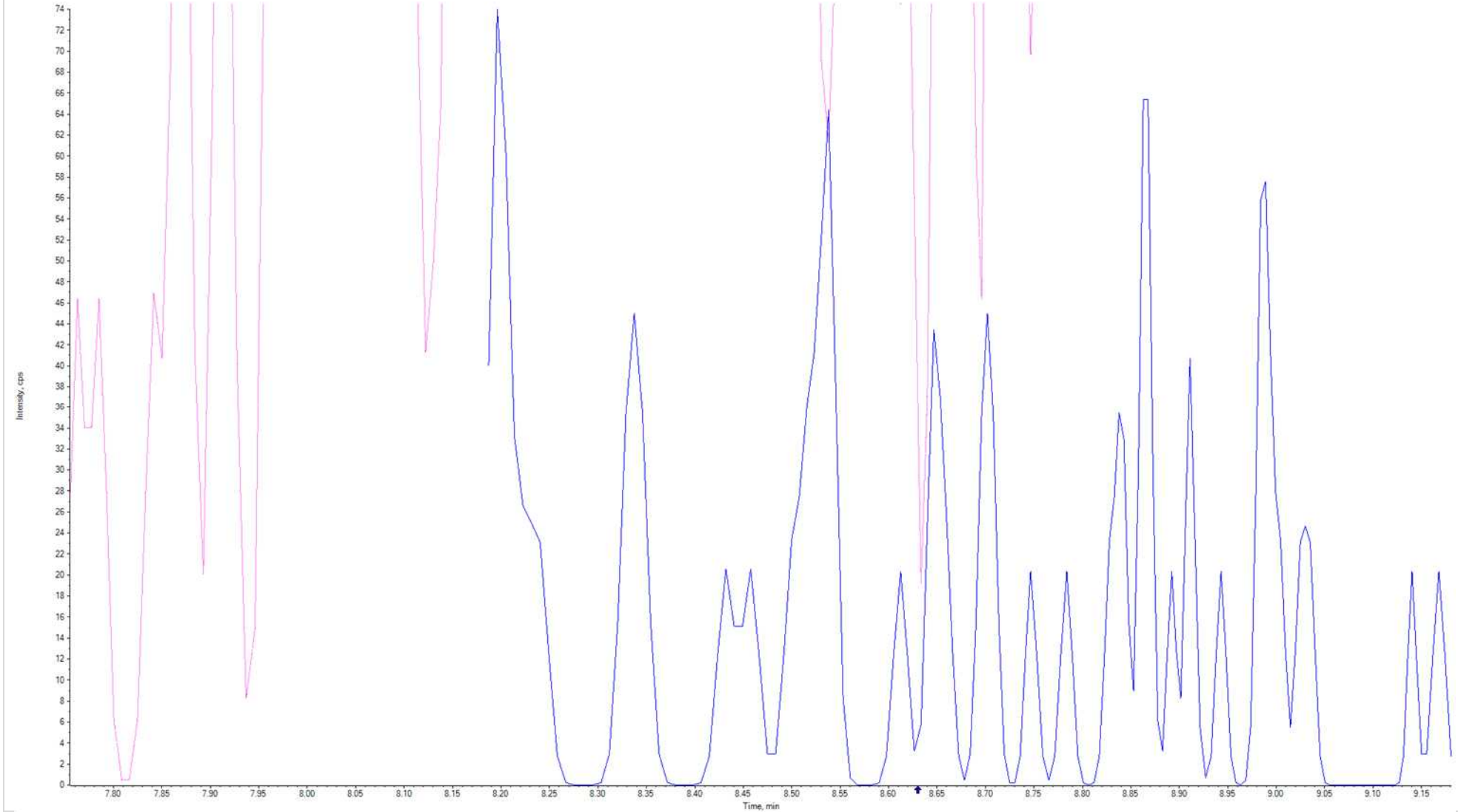
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Generated: 9/17/2024 6:15:27 AM

PFNS
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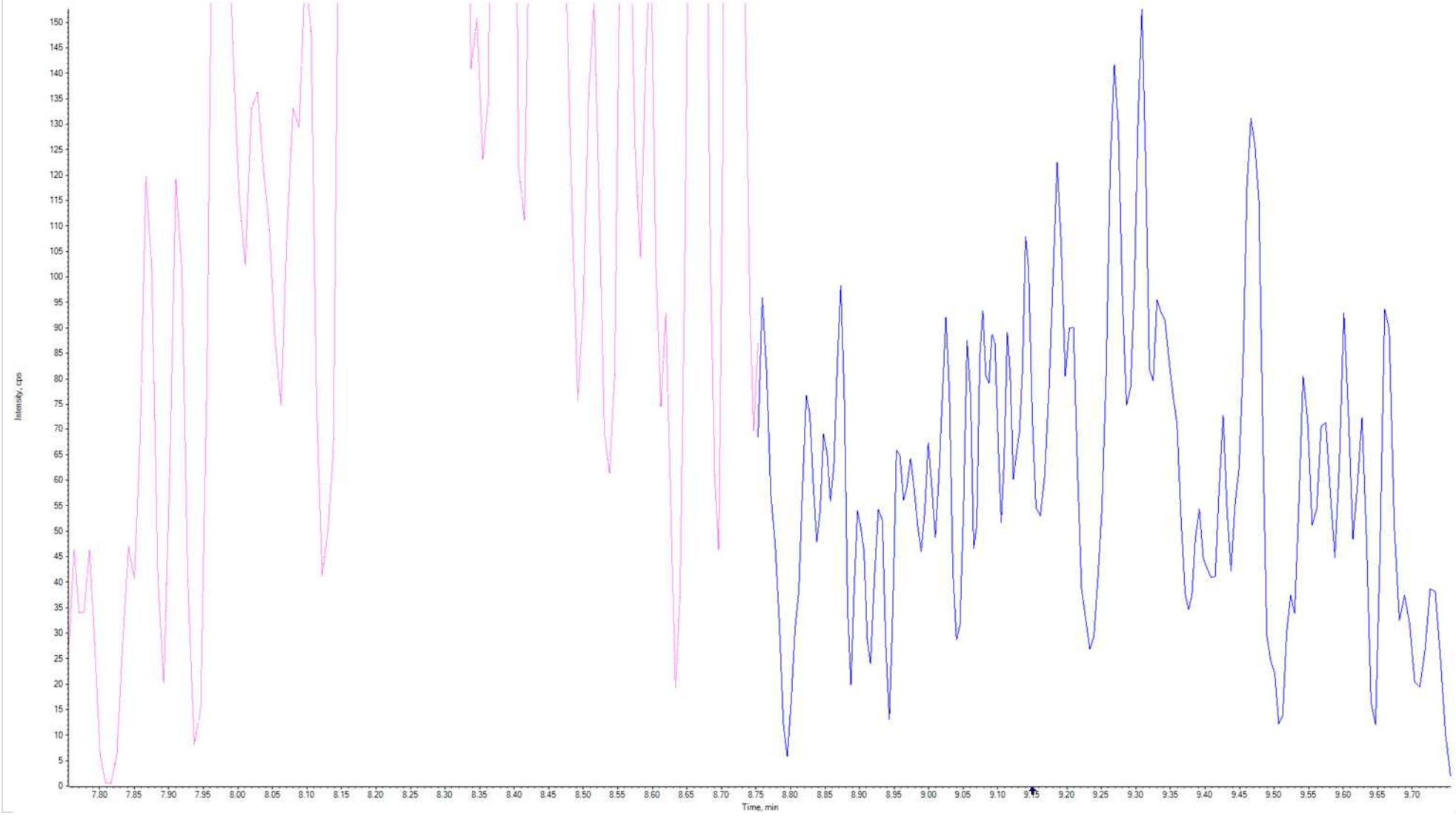
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PFNS_2
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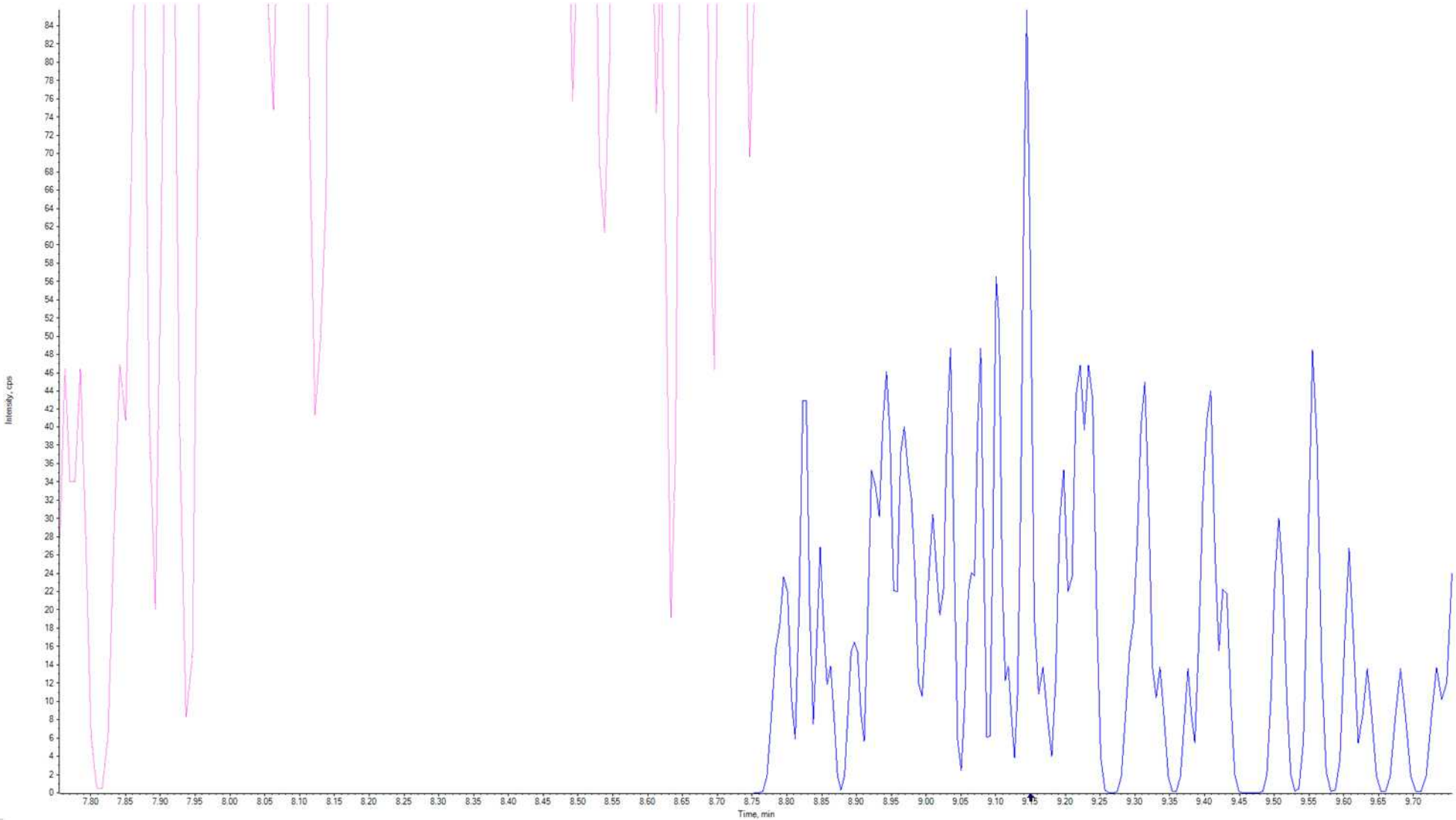
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Generated: 9/17/2024 6:15:27 AM

PFDS
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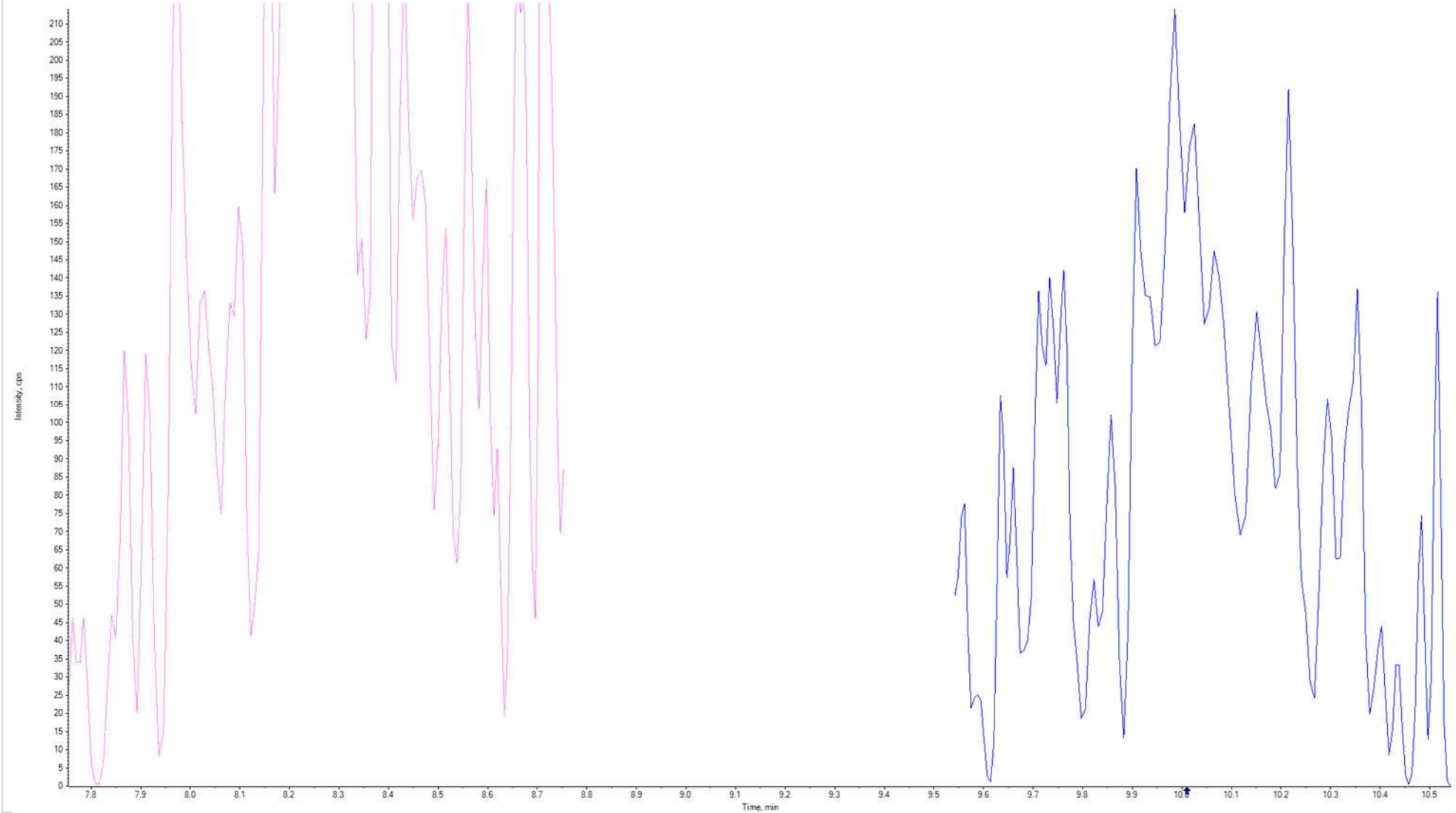
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Alpha Analytical Inc.
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PFDS_2
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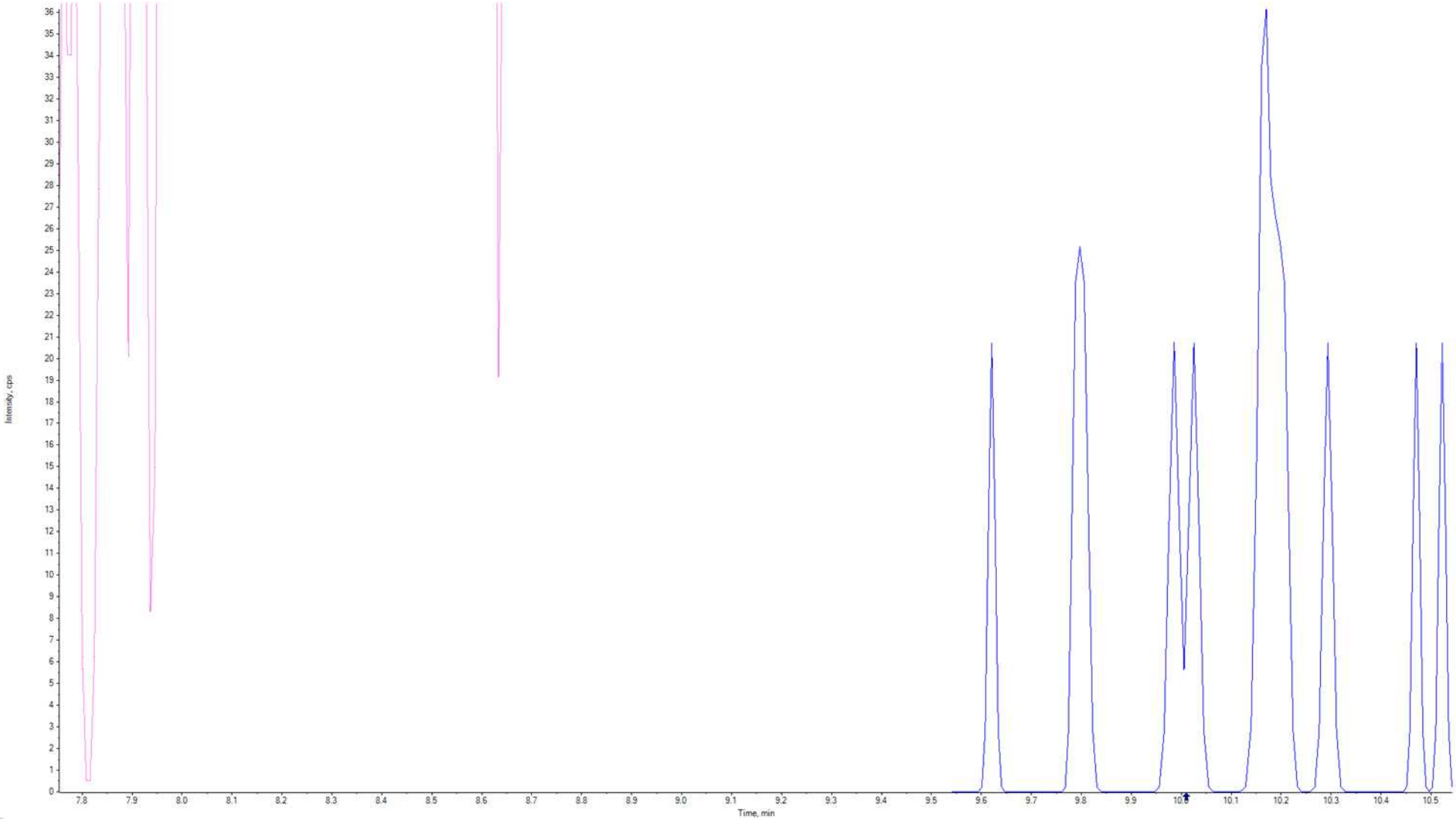
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



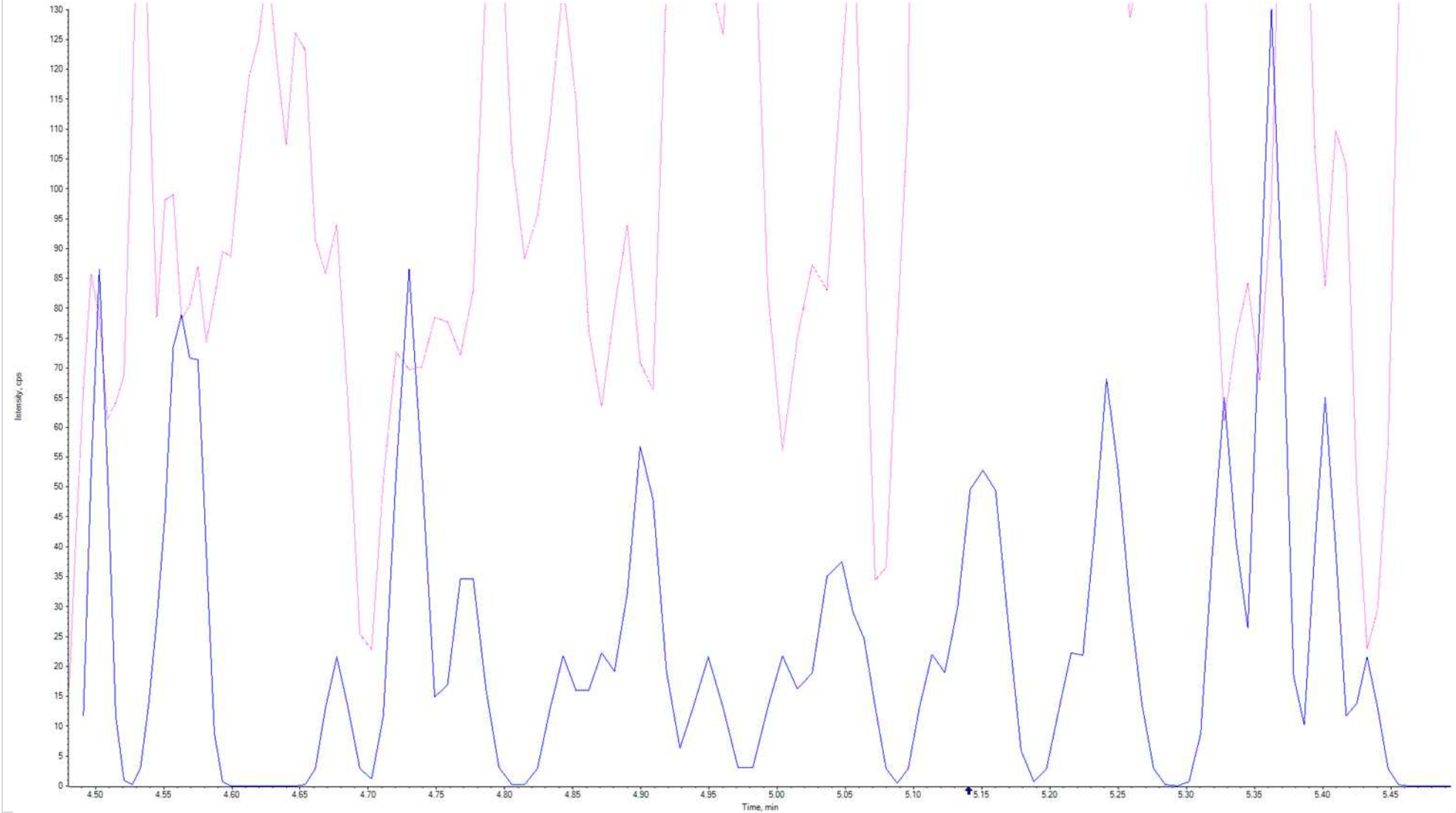
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PFDoS_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



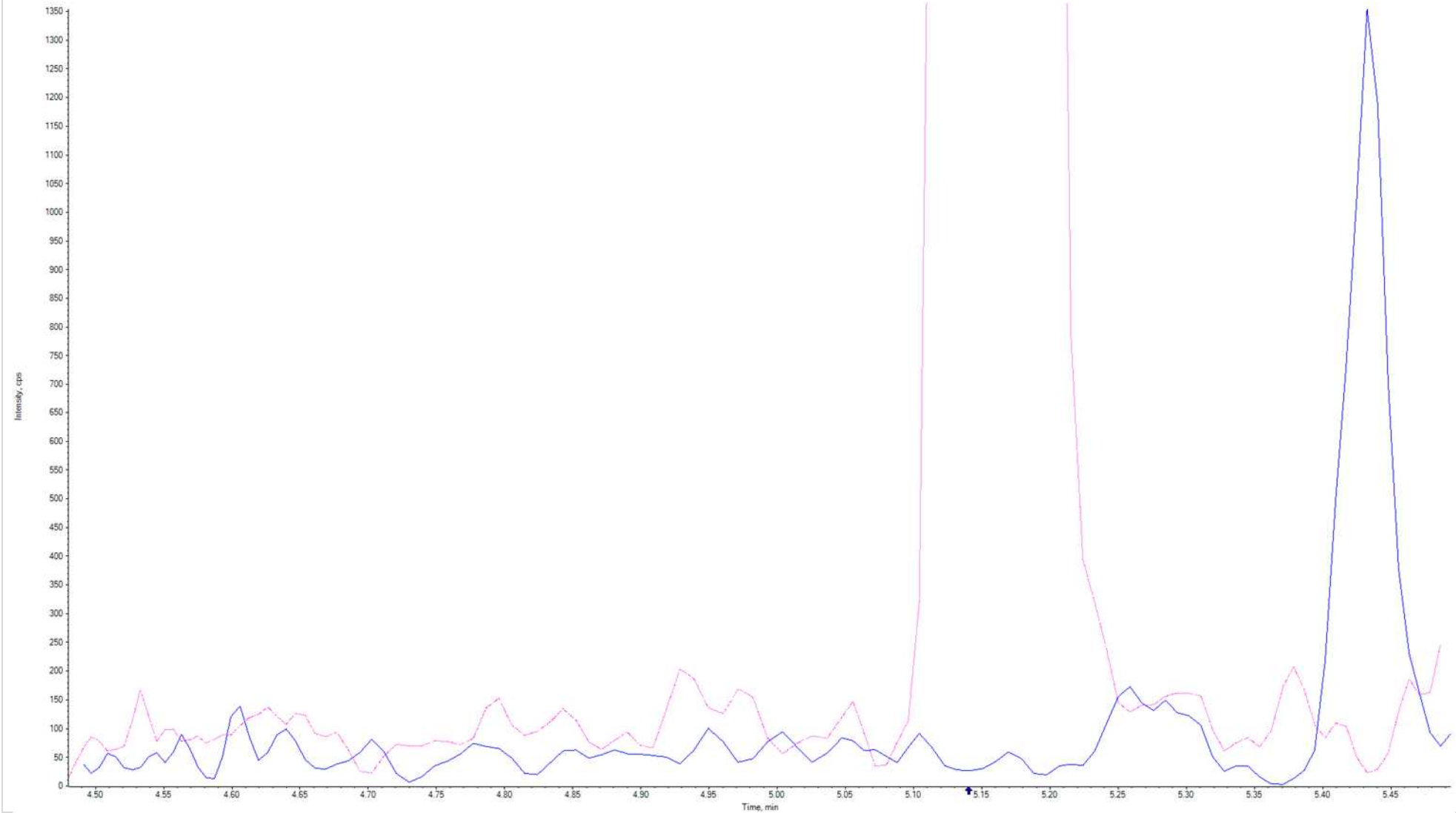
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



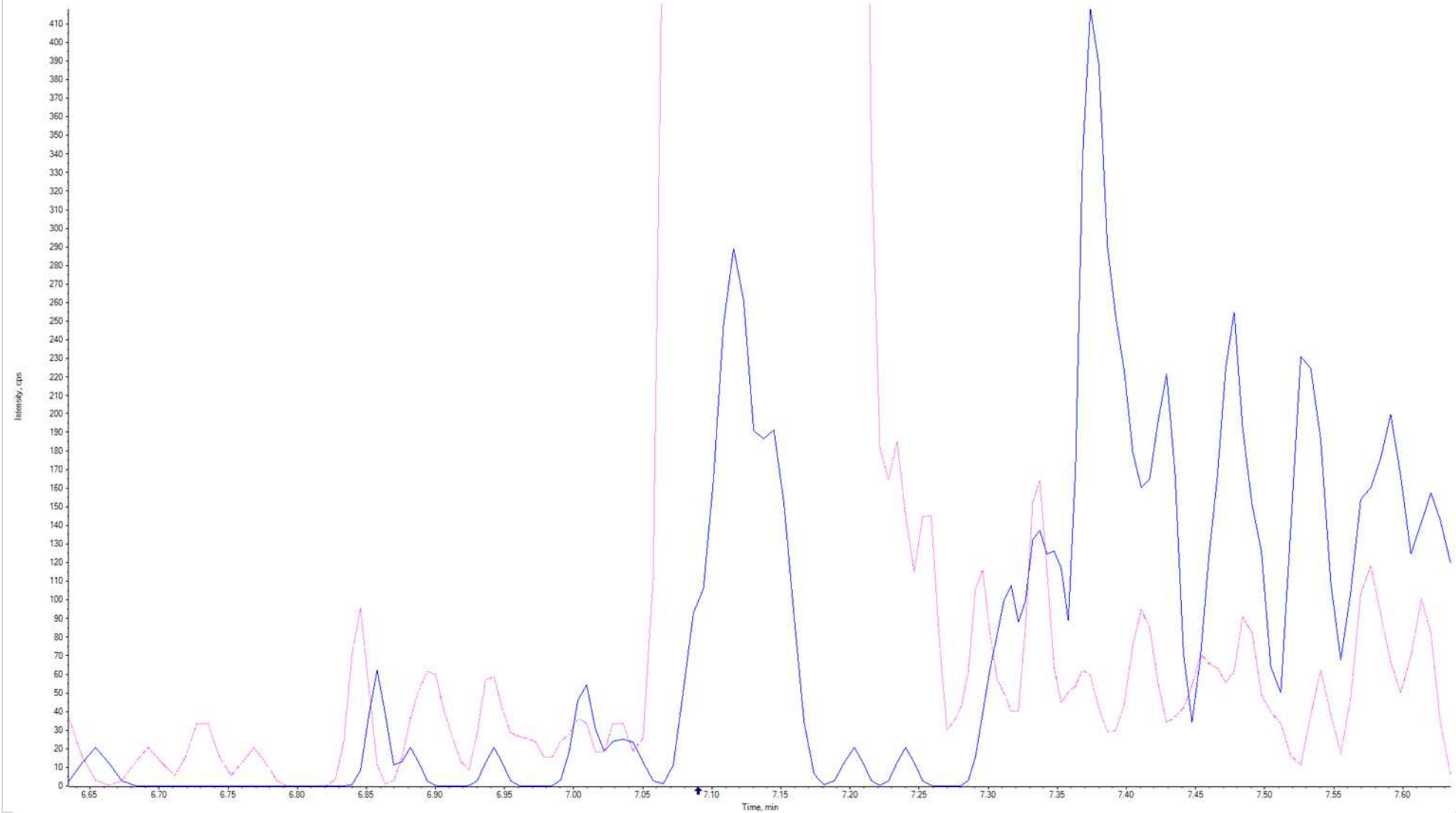
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Alpha Analytical Inc.
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4:2FTS_2
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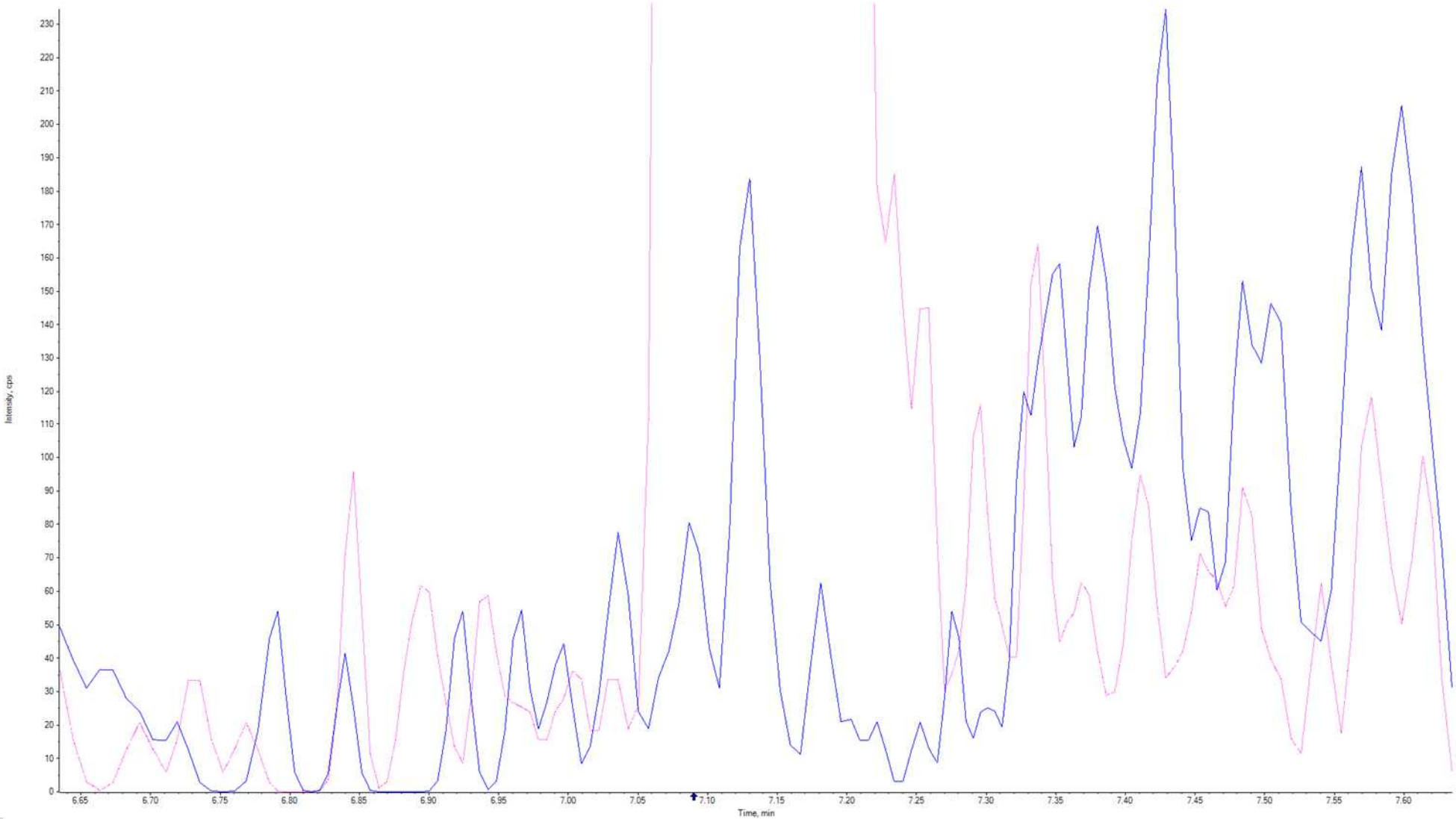


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6:2FTS
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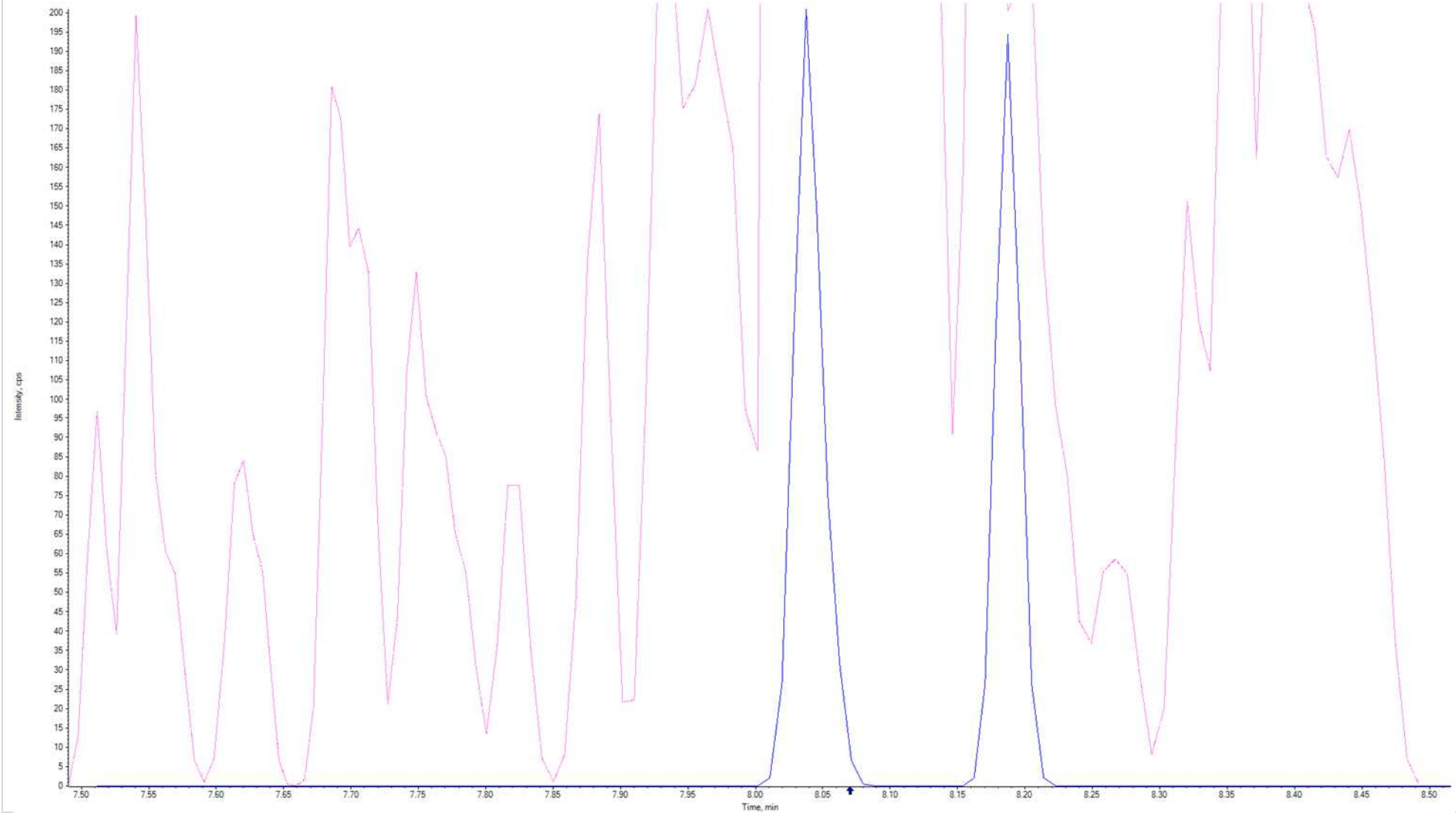


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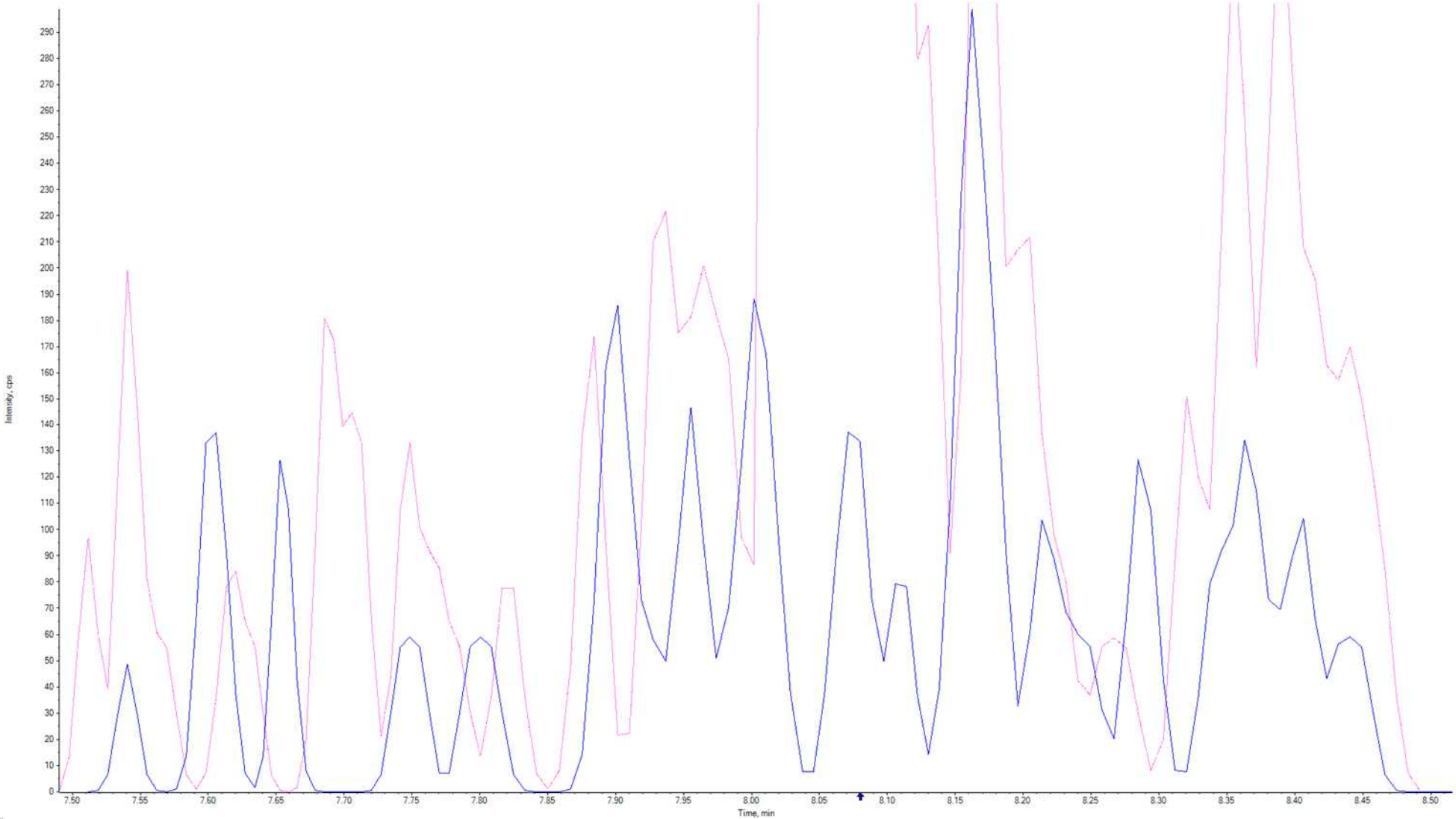


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8:2FTS
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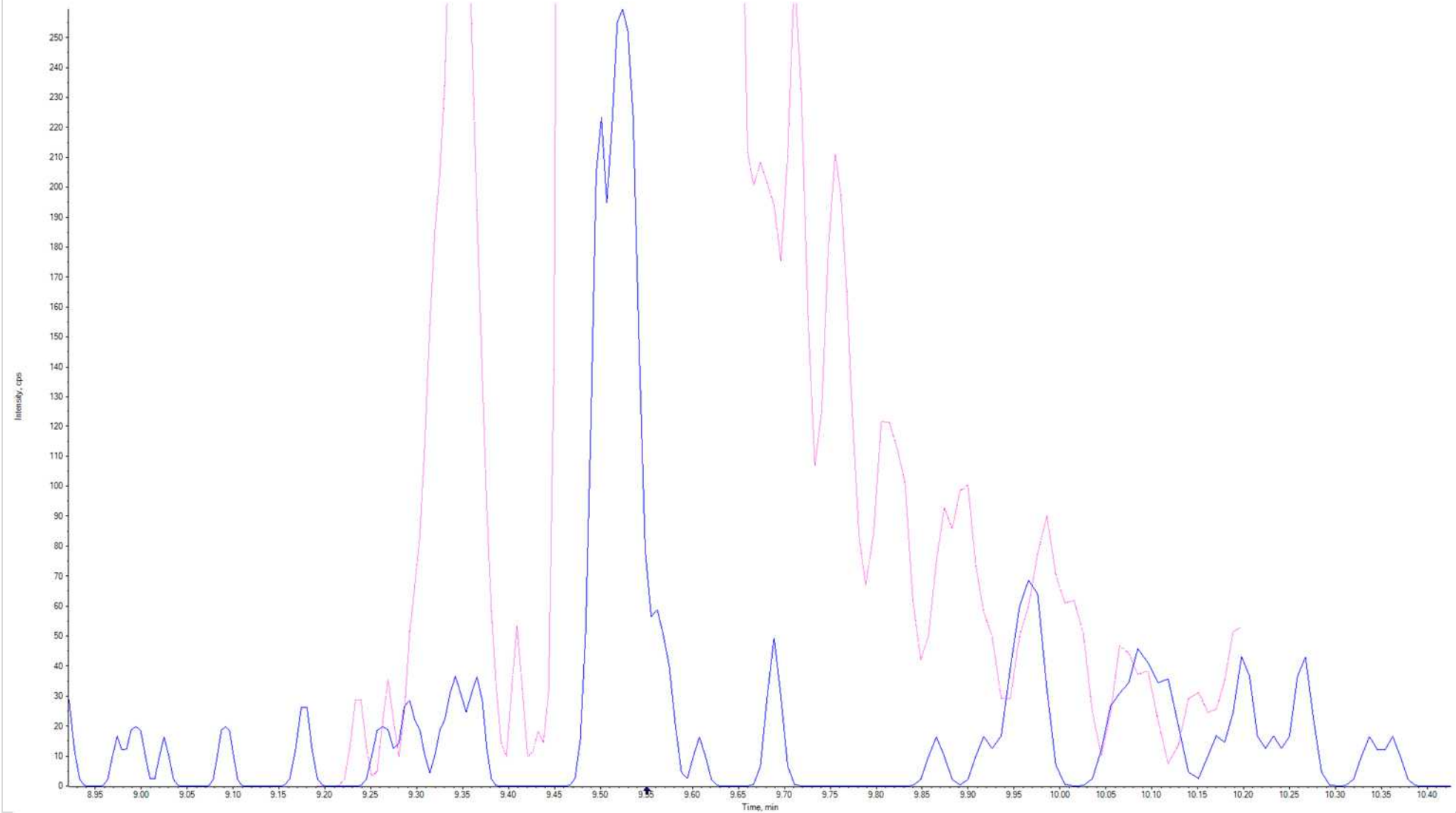


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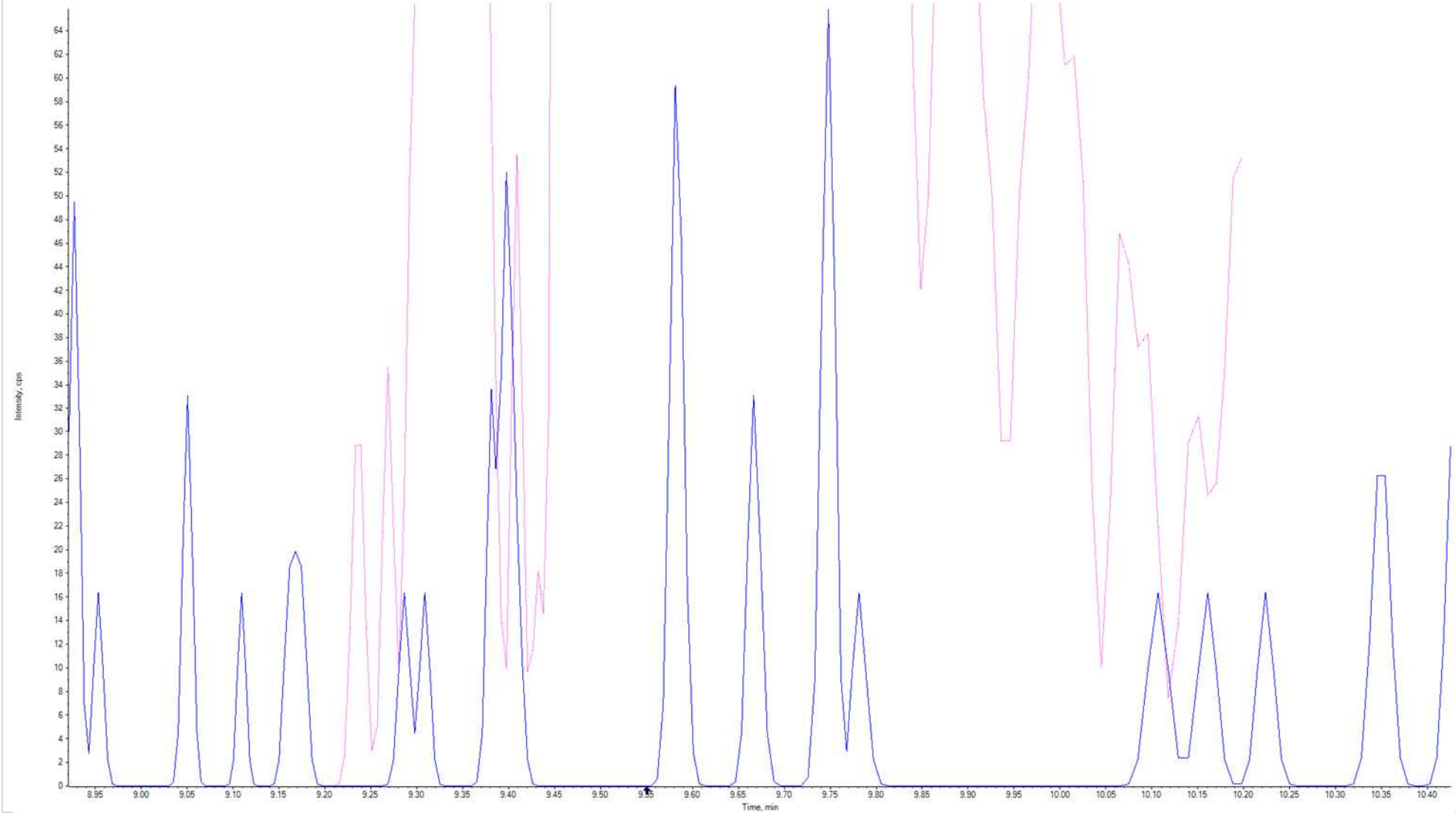
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PFOSA
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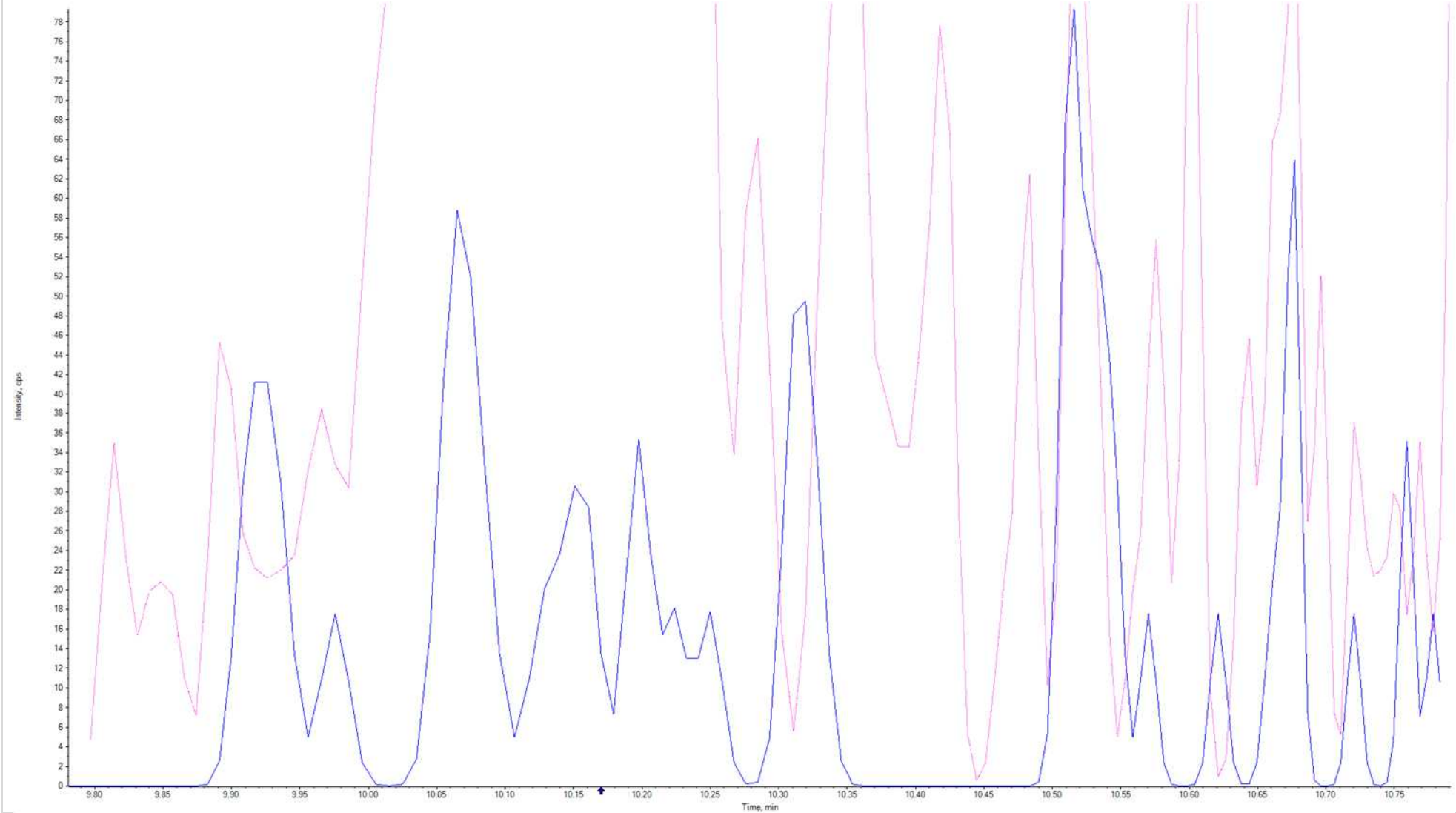
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PFOSA_2
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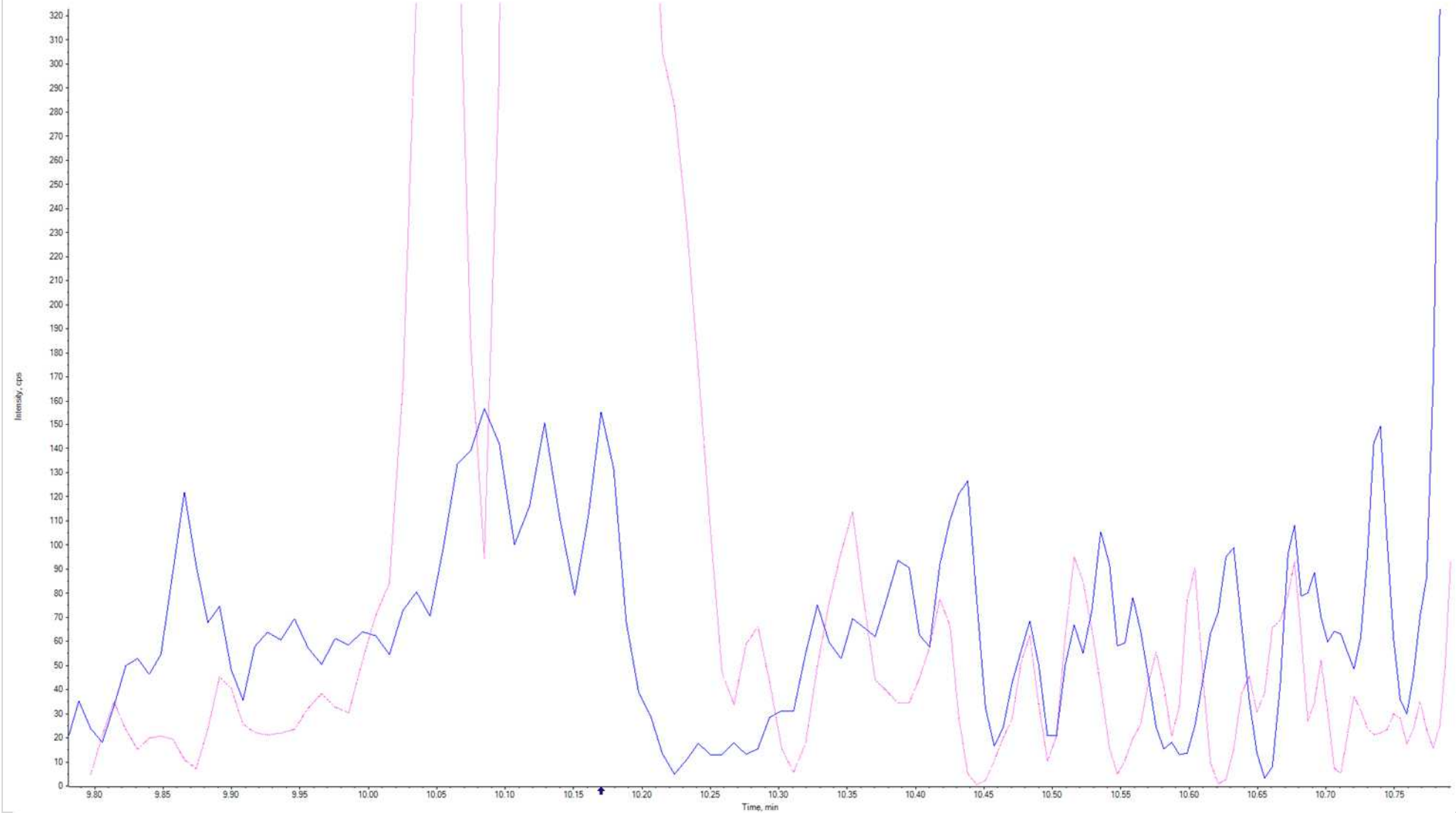
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NMeFOSA
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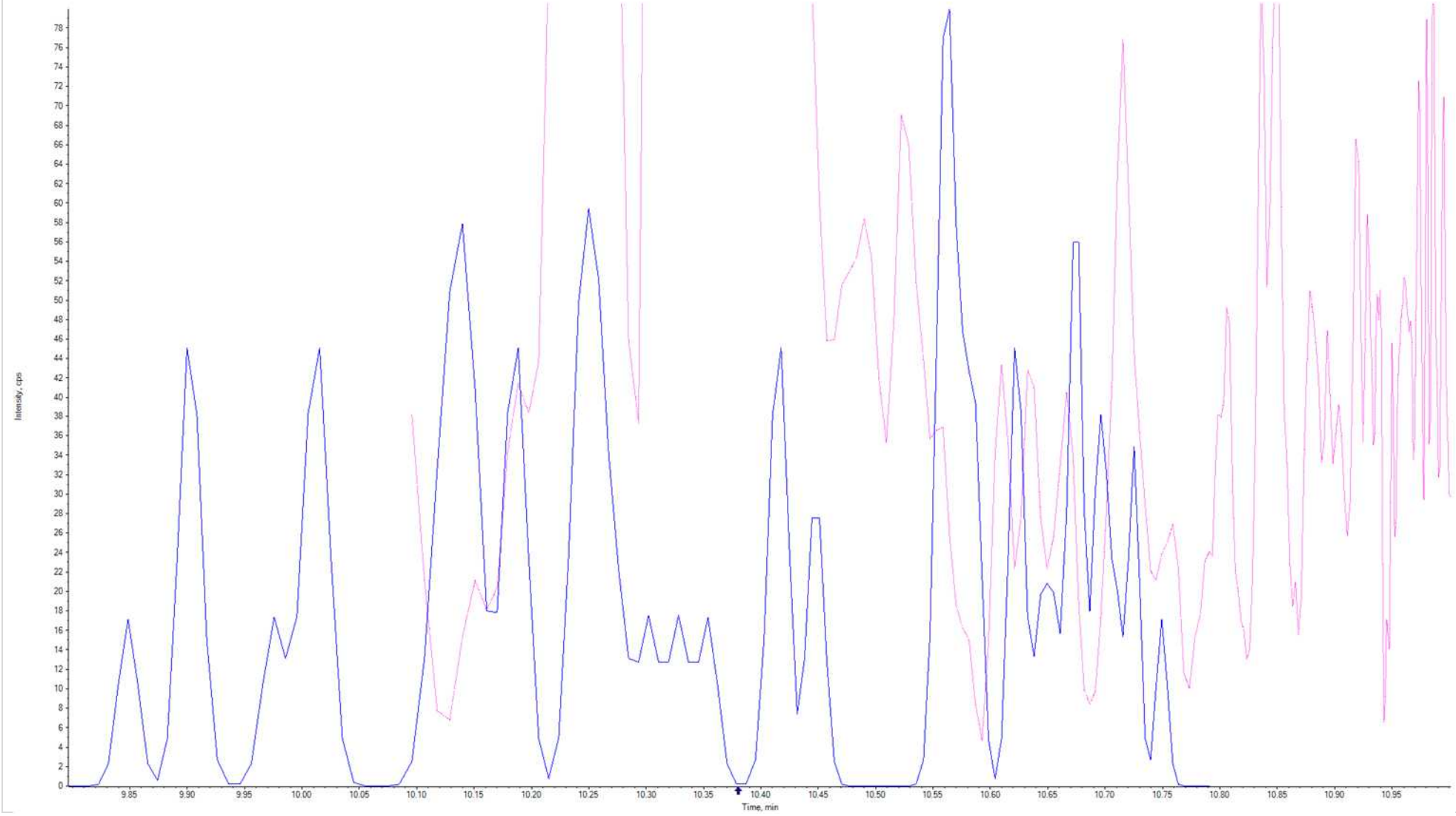
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NMeFOSA_2
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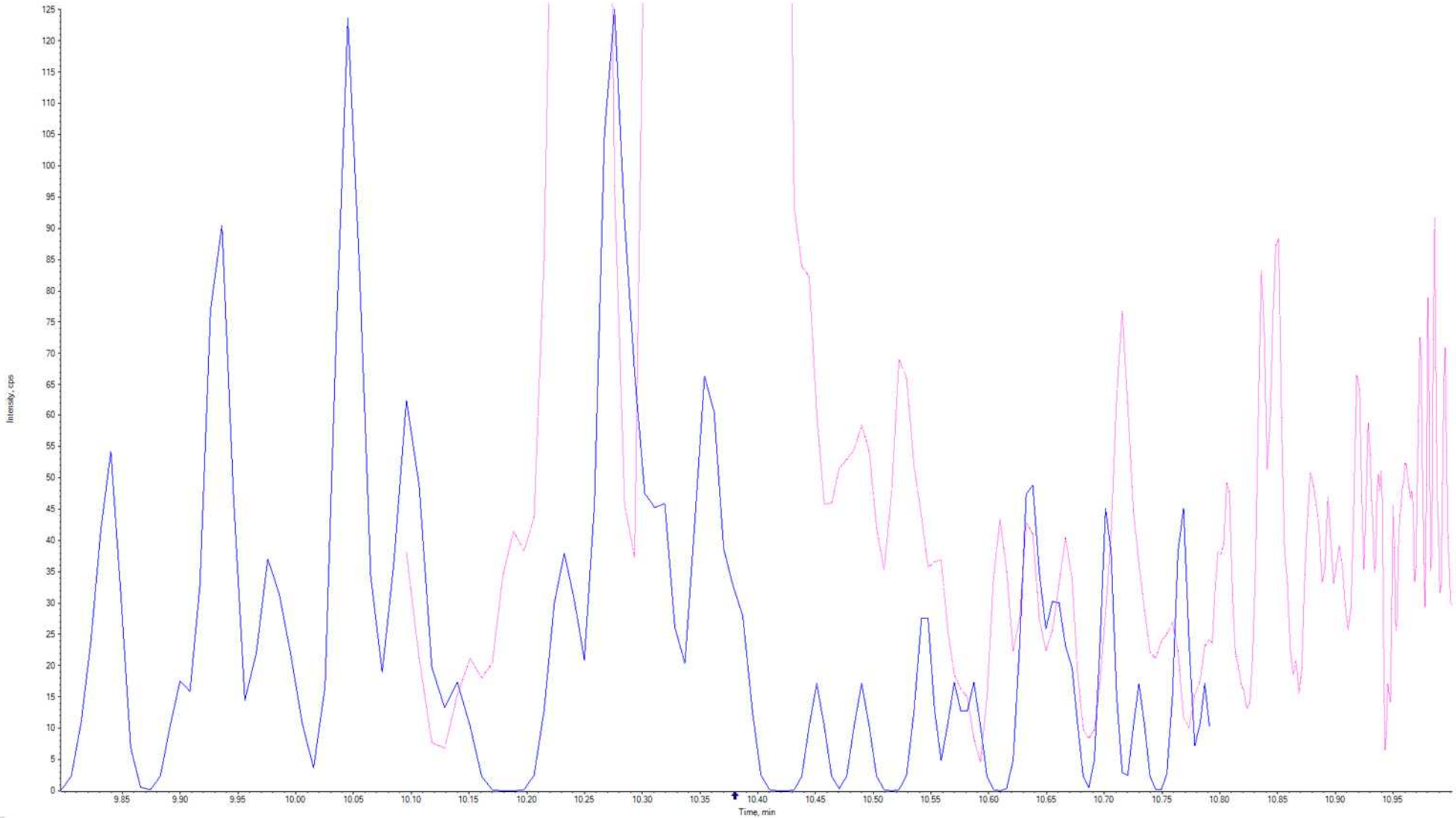
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NEtFOSA
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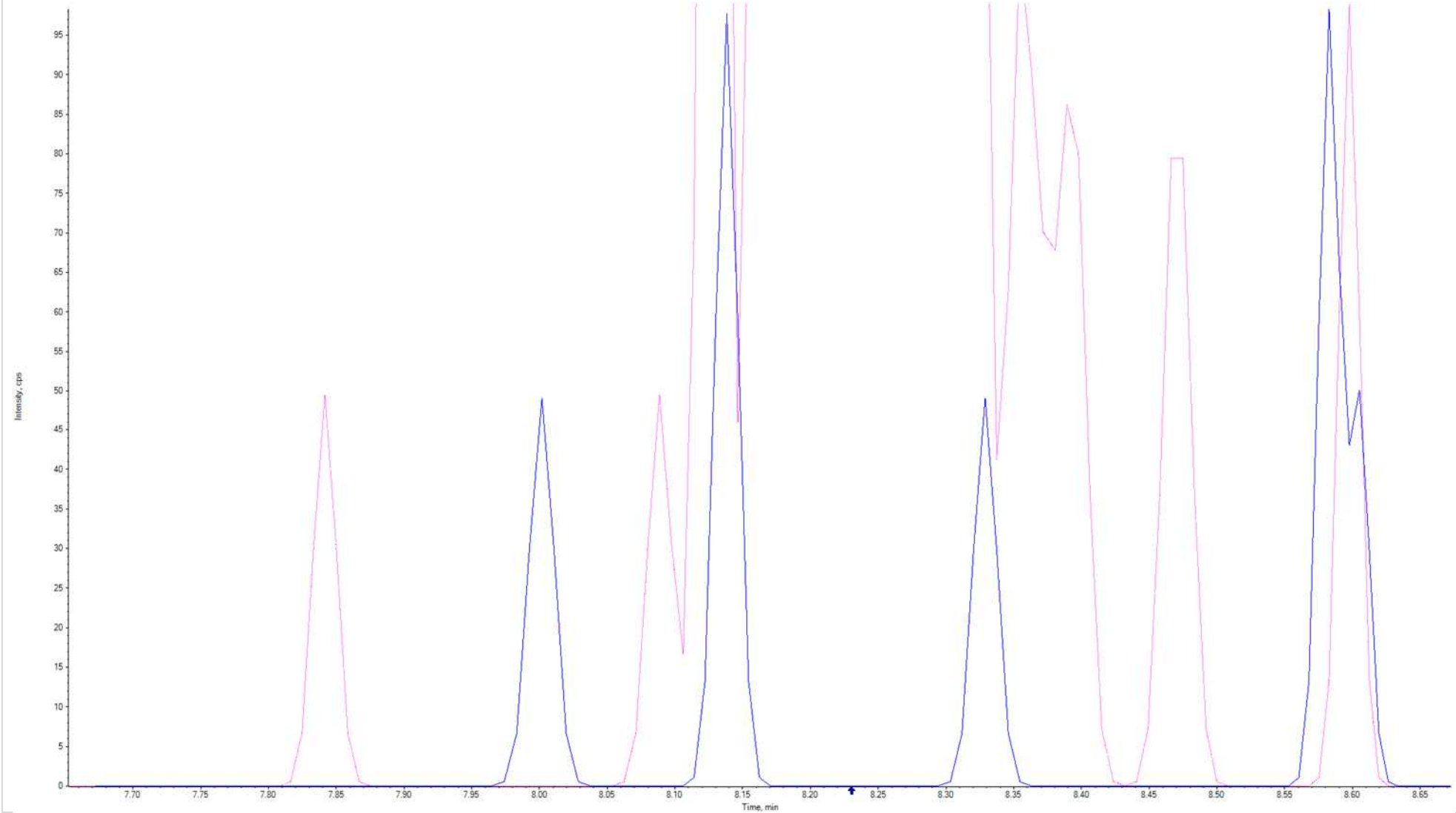
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NEtFOSA_2
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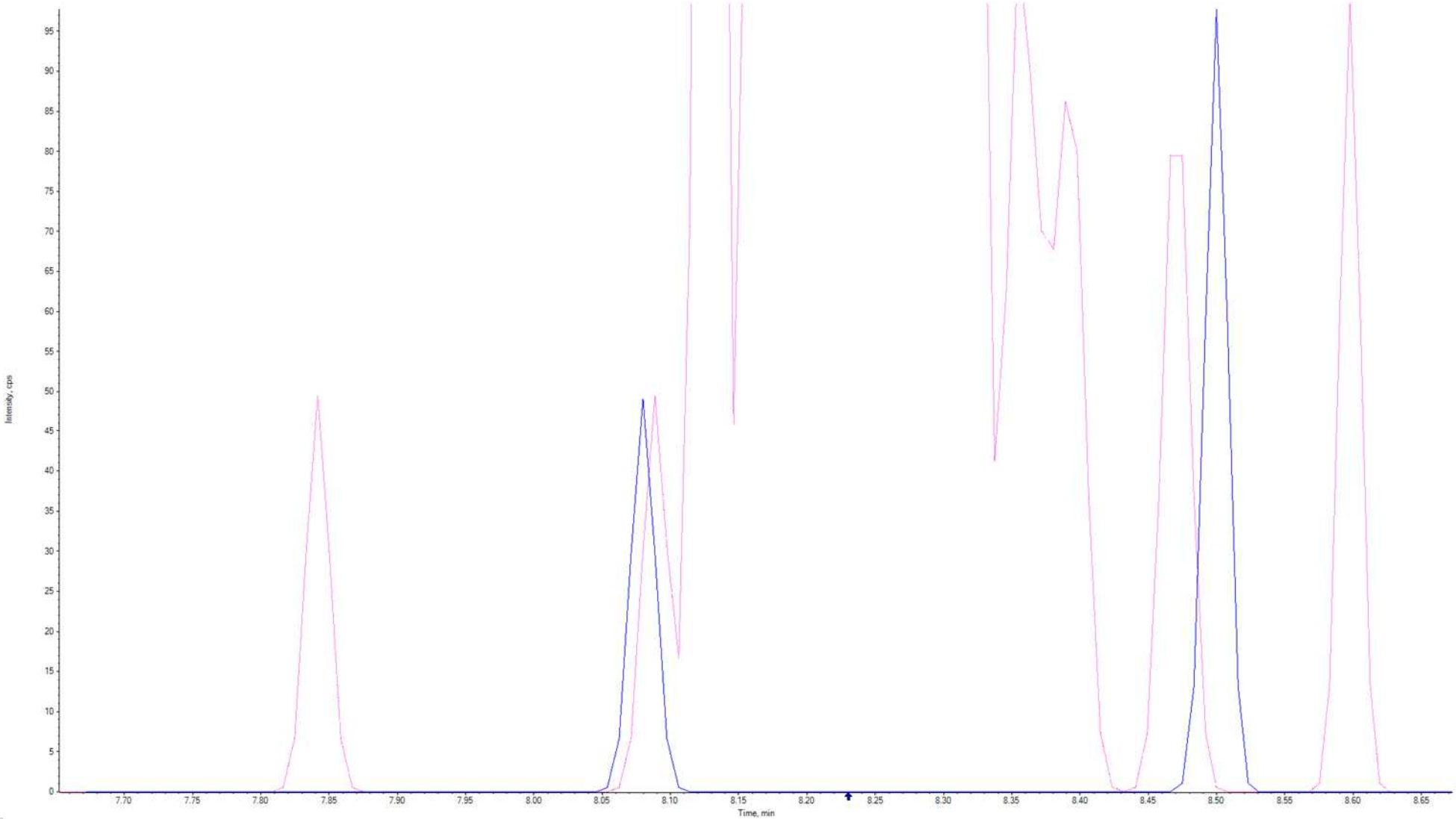
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NMeFOSAA
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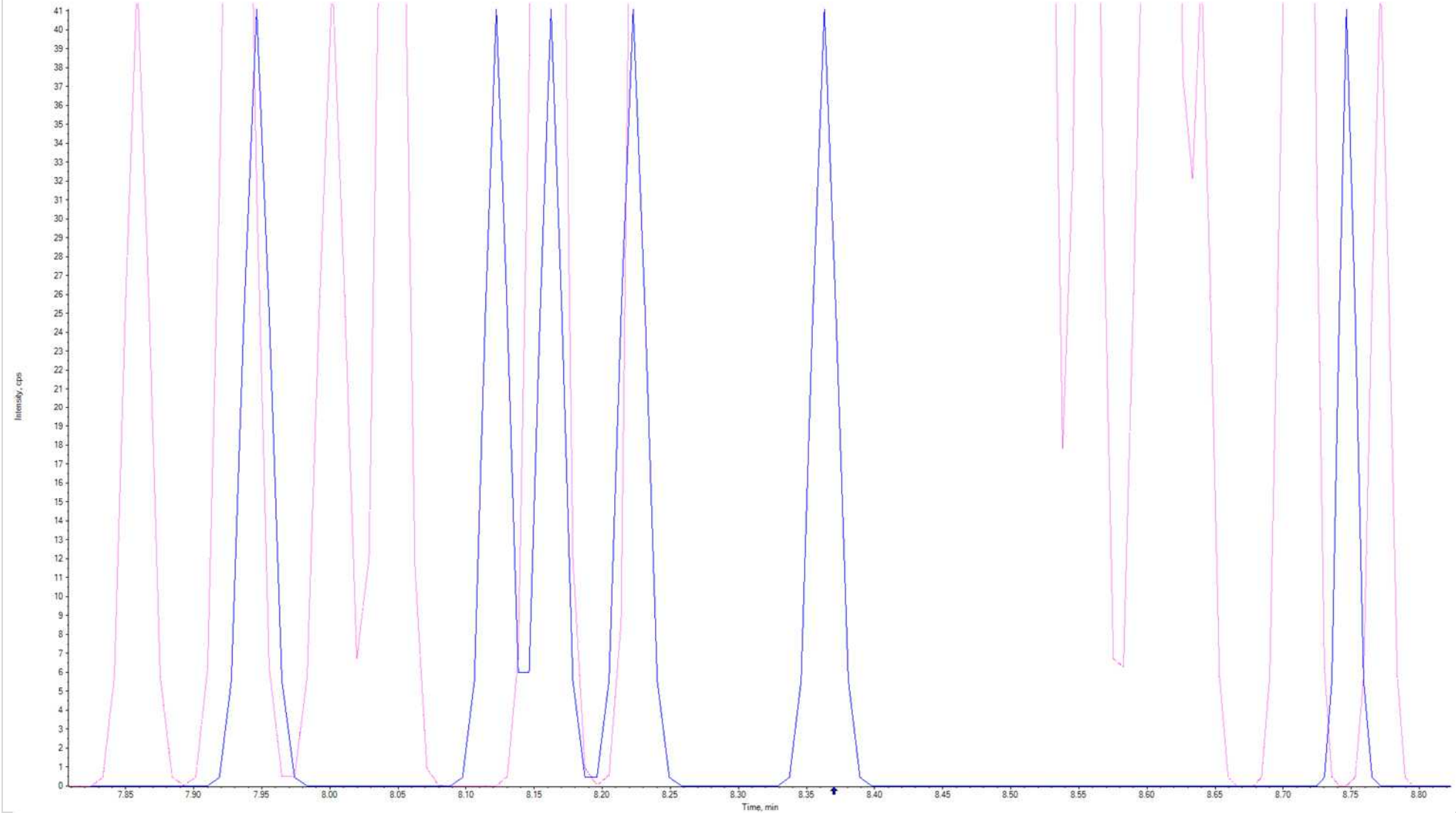
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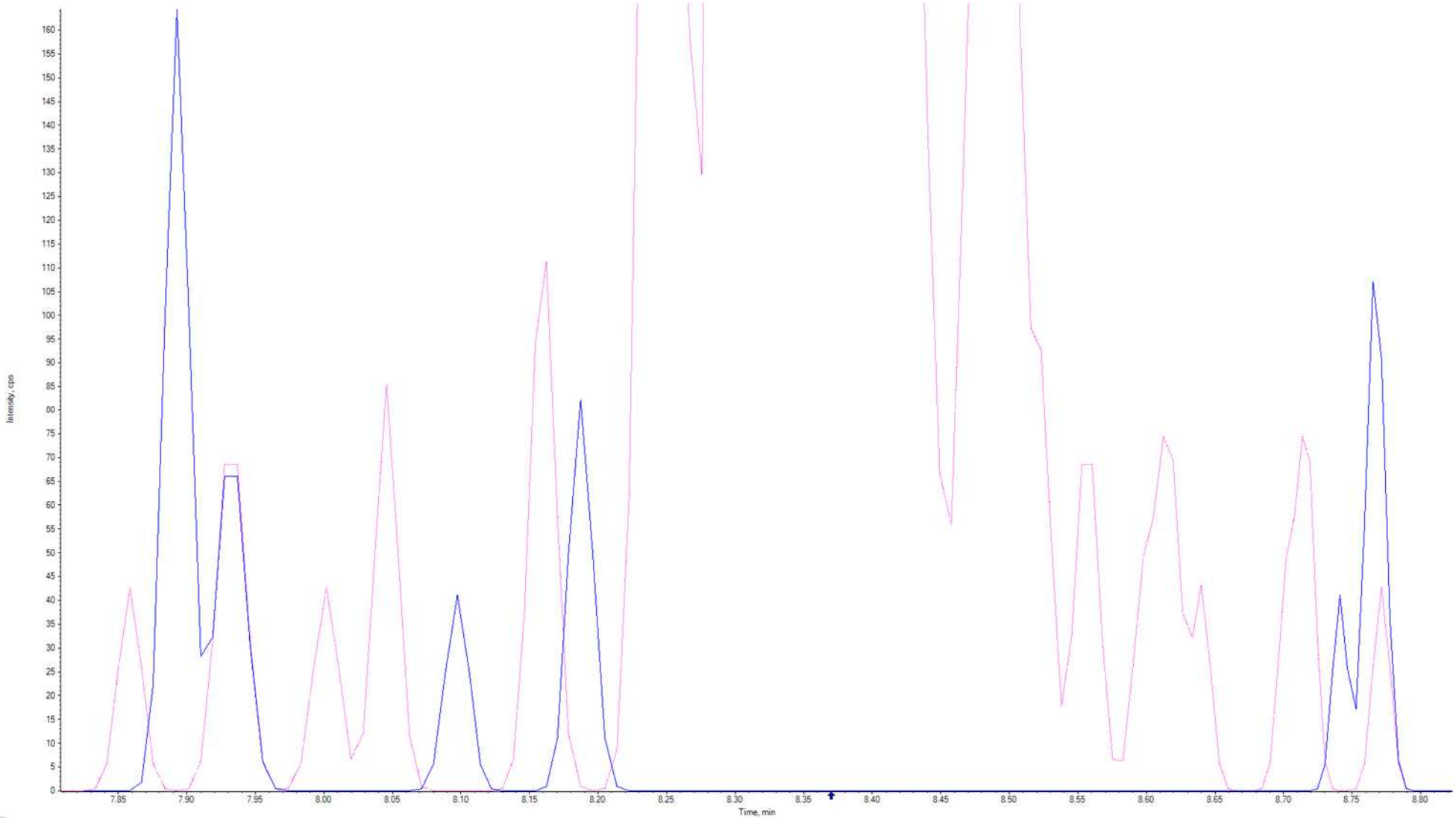
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NEtFOSAA
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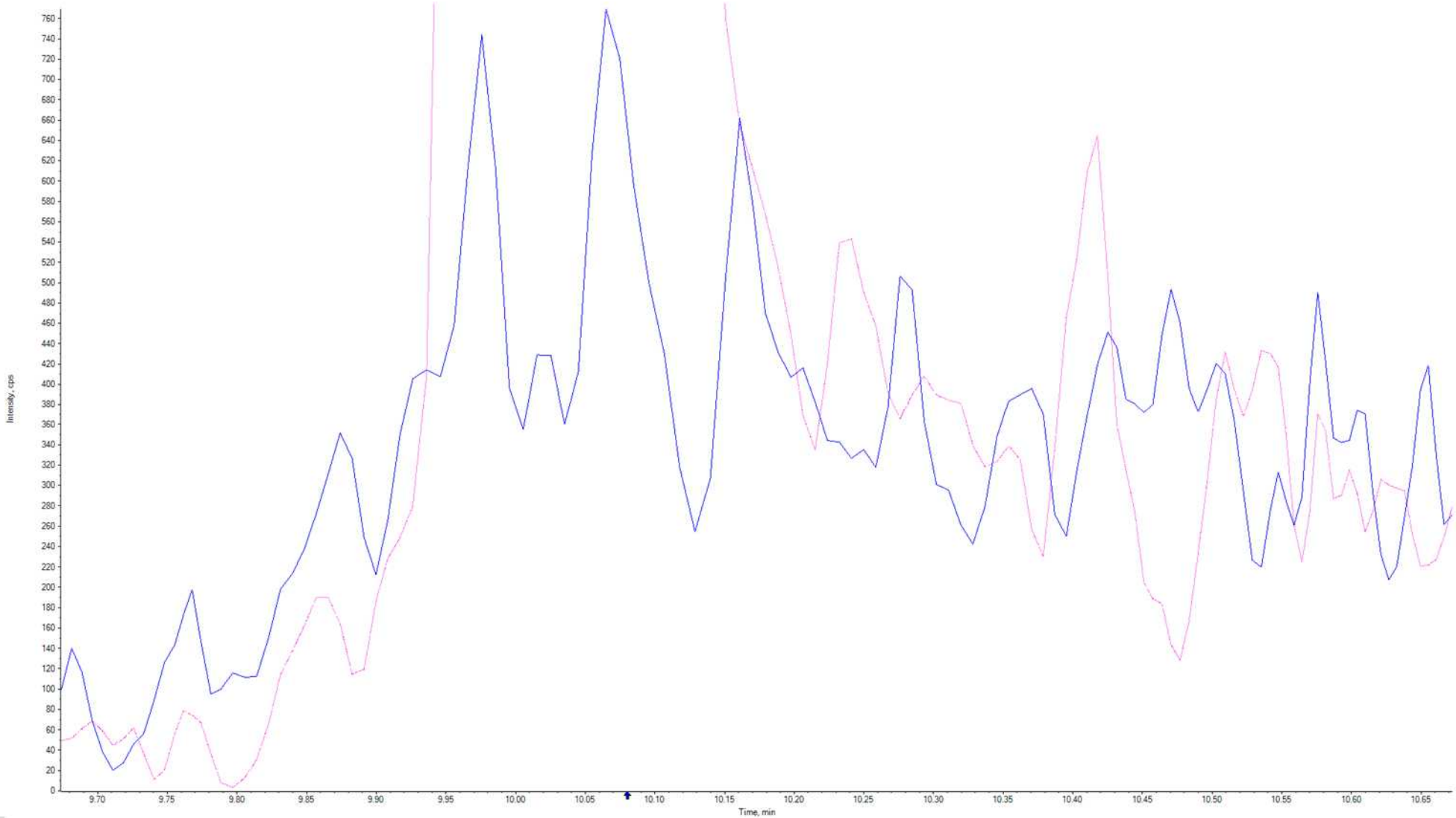
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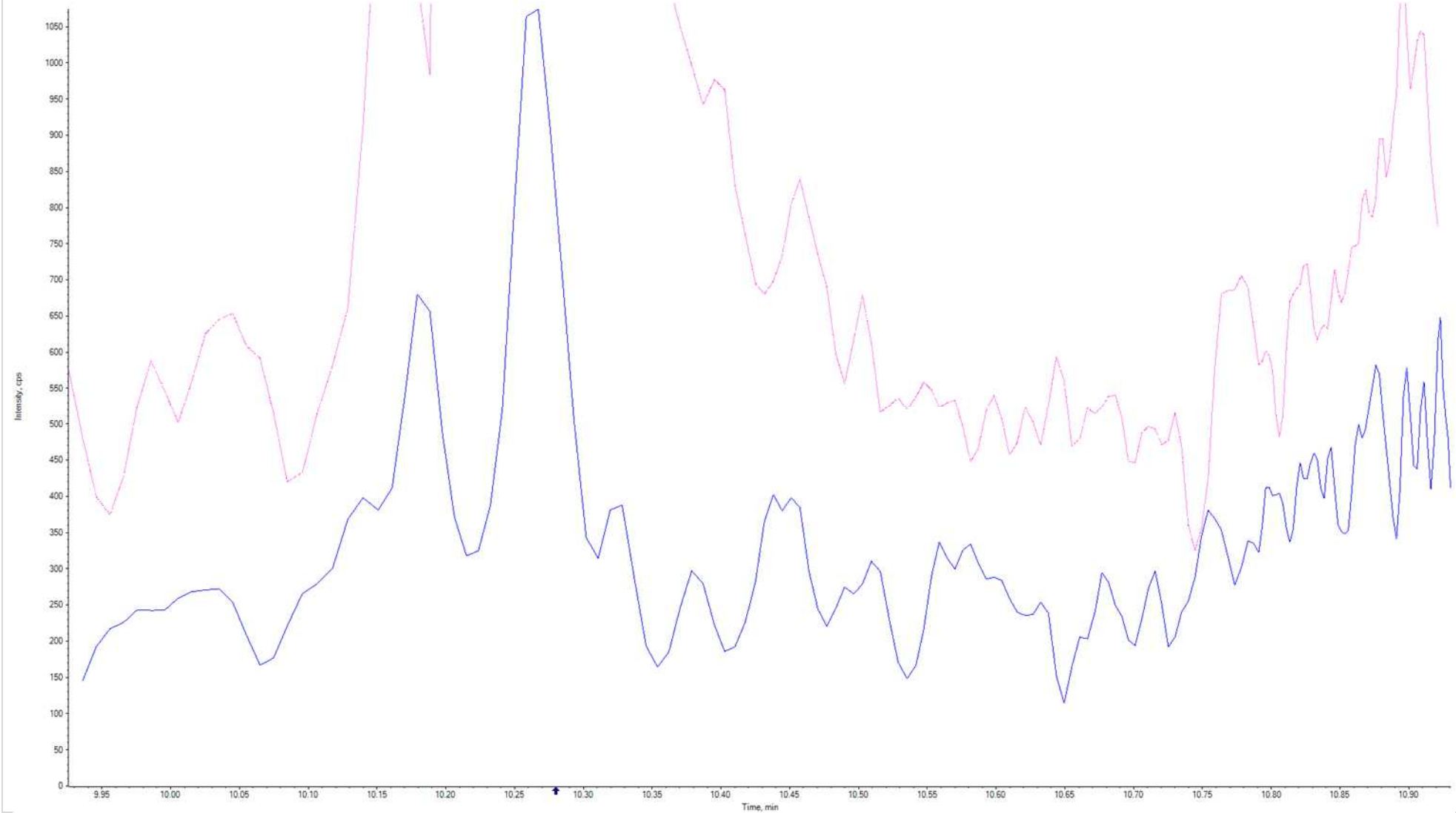
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NMeFOSE
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



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Alpha Analytical Inc.
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NEtFOSE
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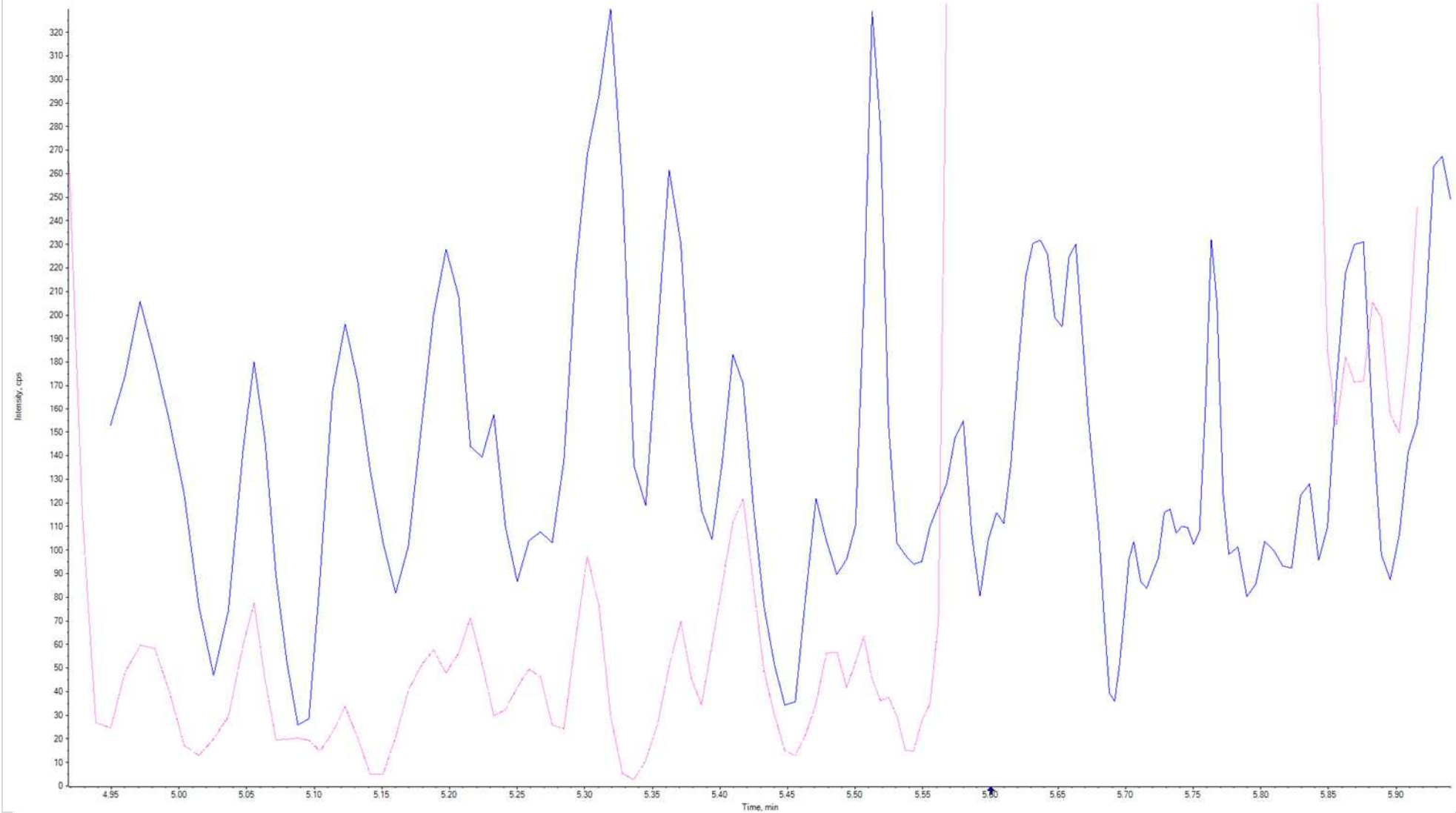
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HFPO-DA
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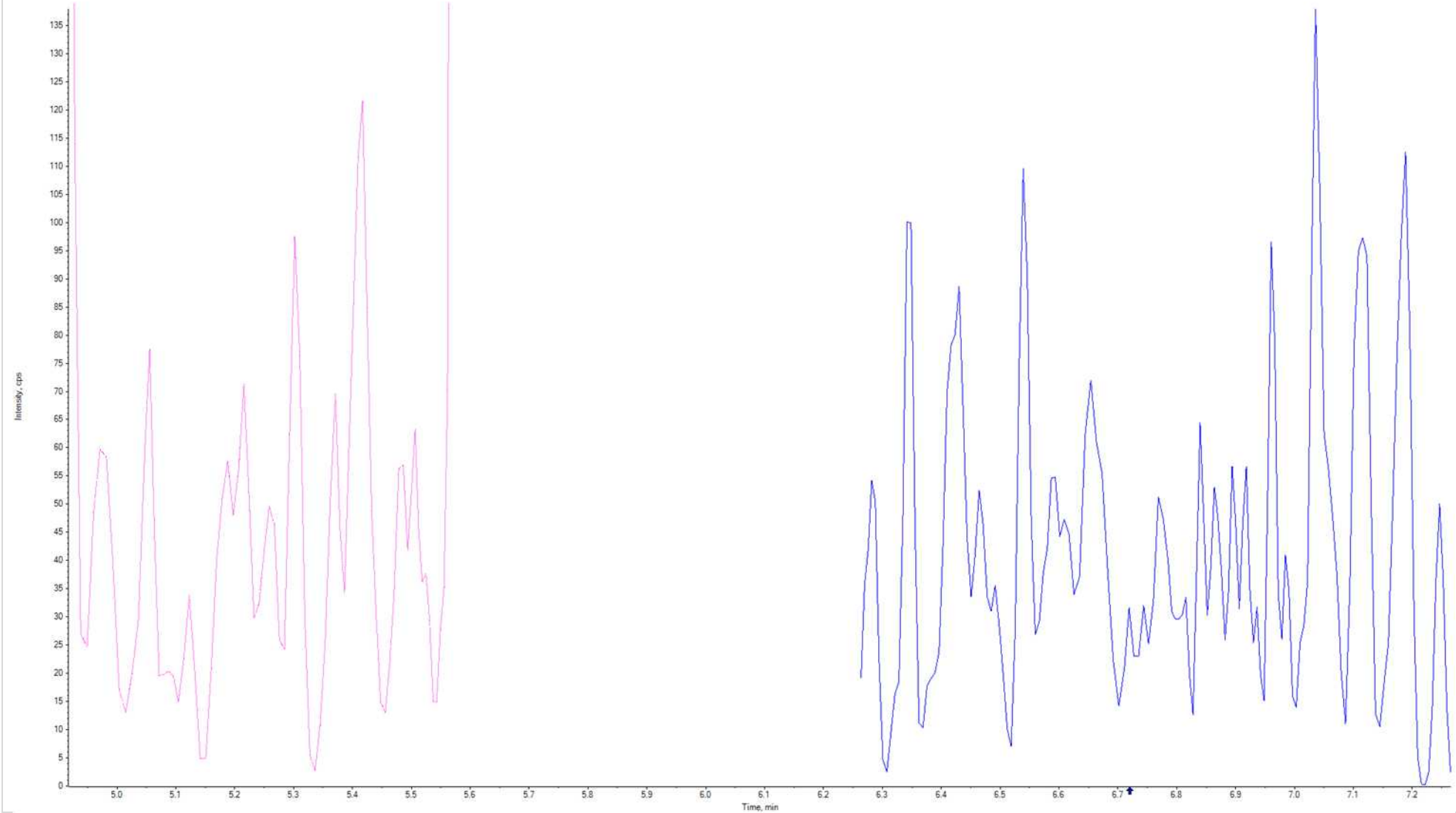
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HFPO-DA_2
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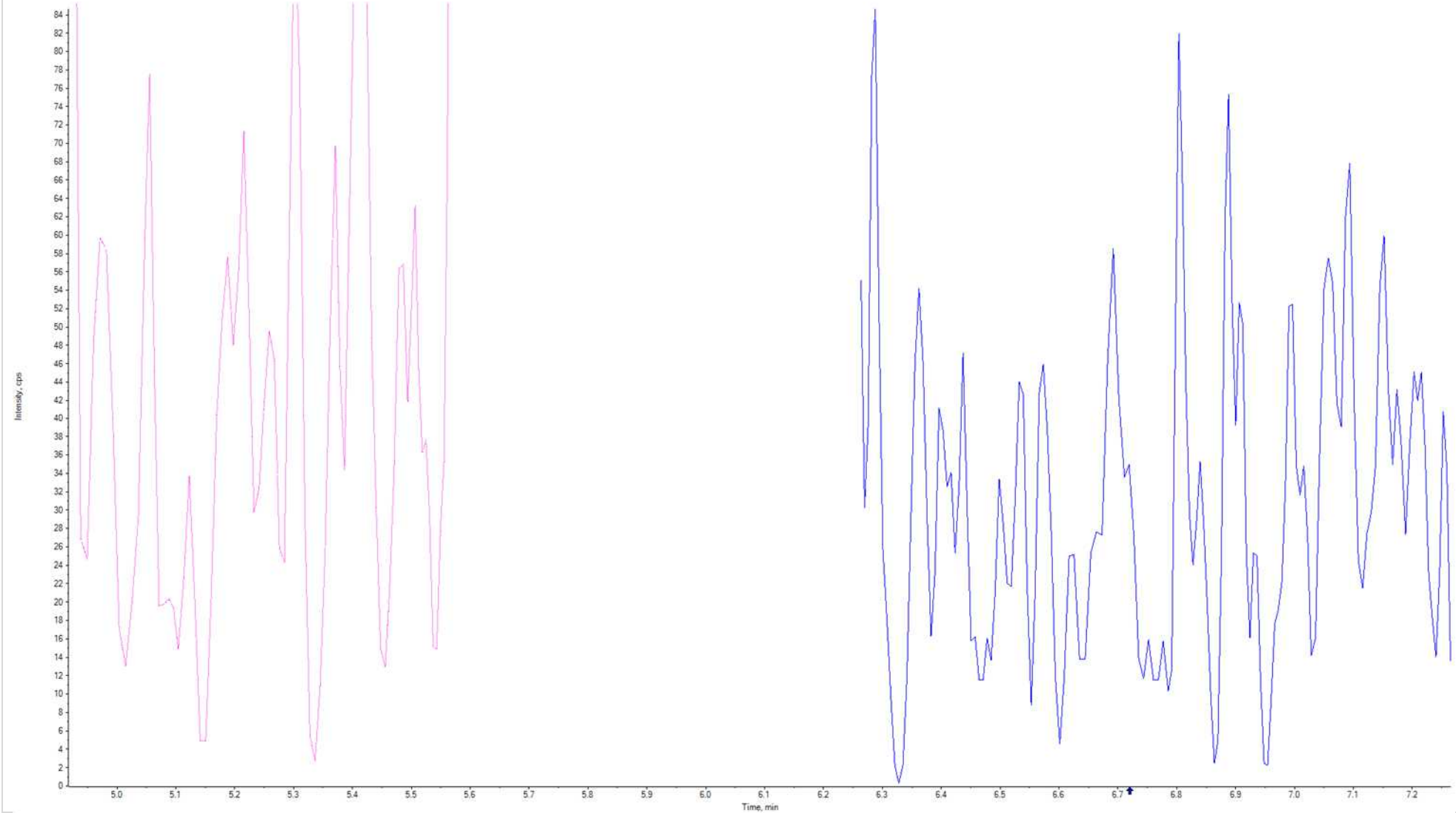
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ADONA
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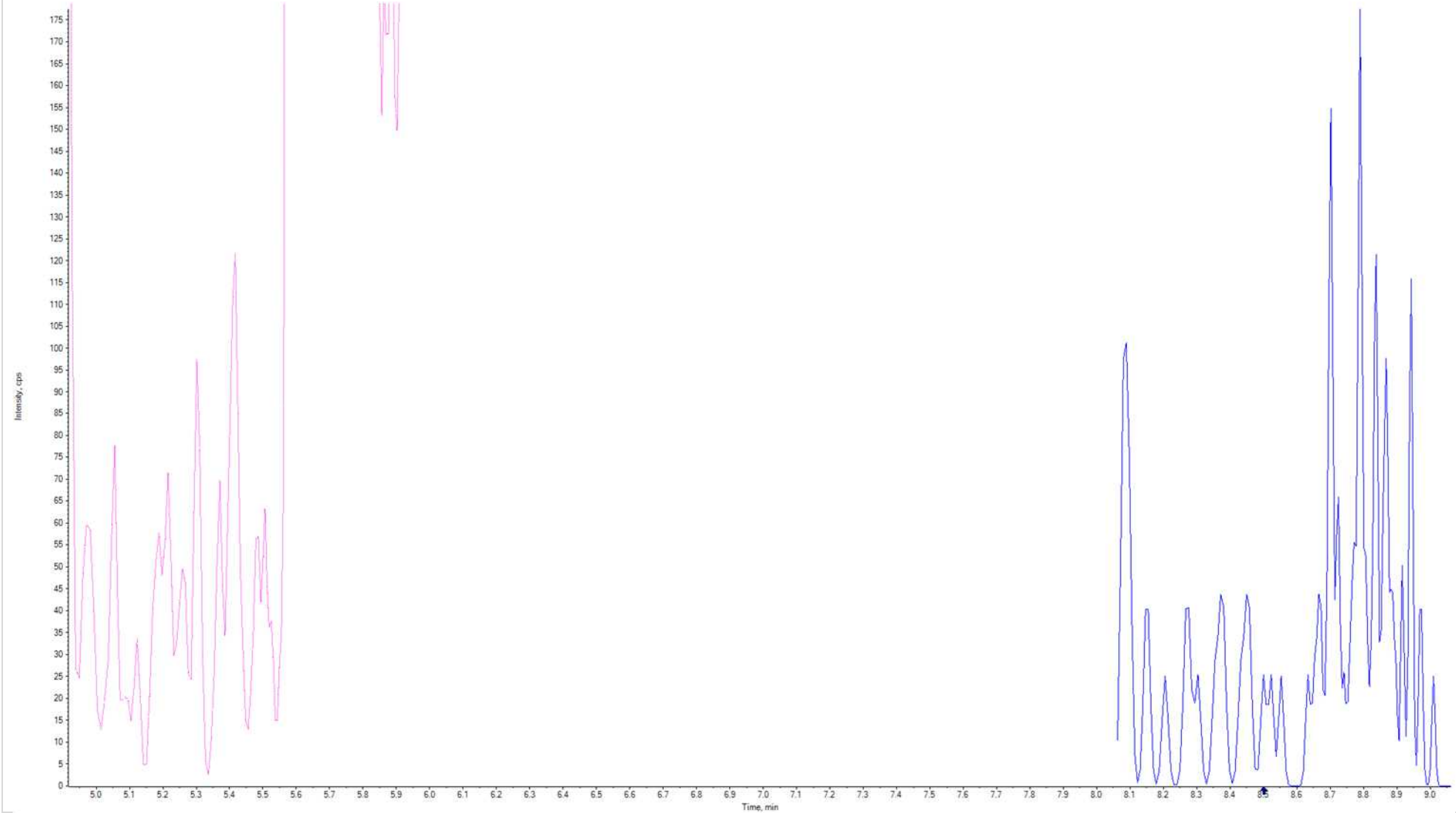
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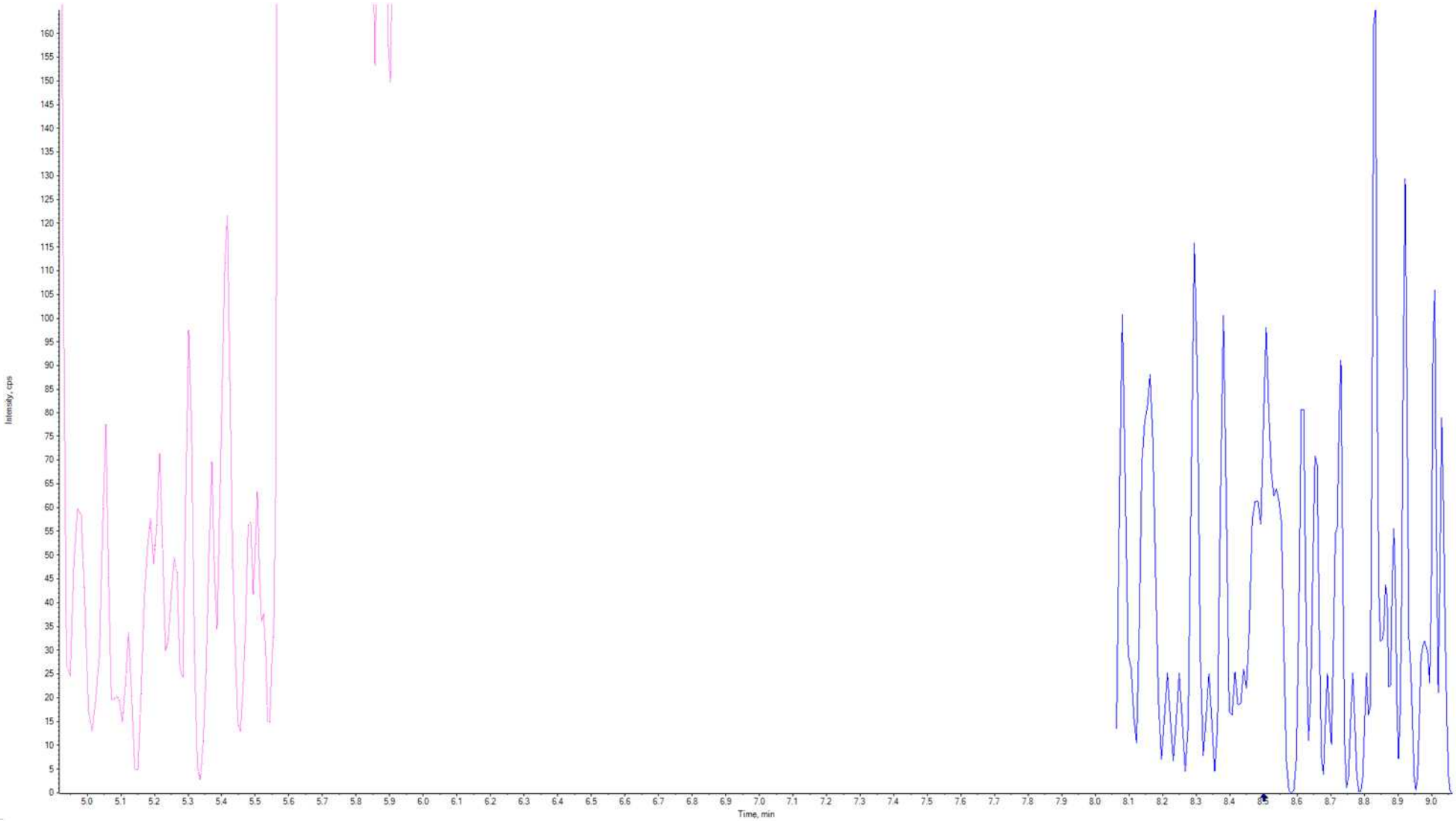
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9Cl-PF3ONS
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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9Cl-PF3ONS_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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11Cl-PF3OUdS
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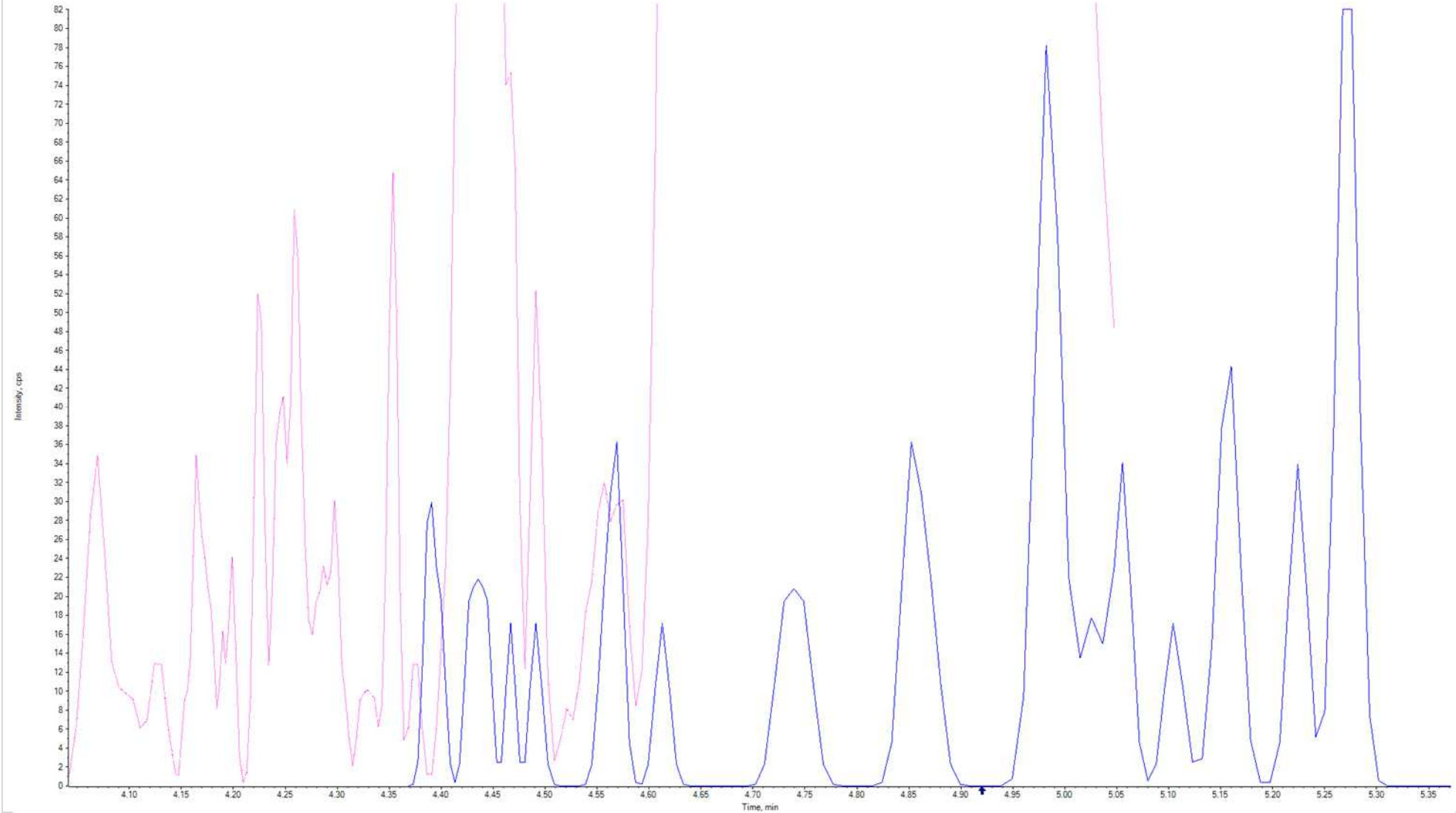
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11Cl-PF3OUdS_2
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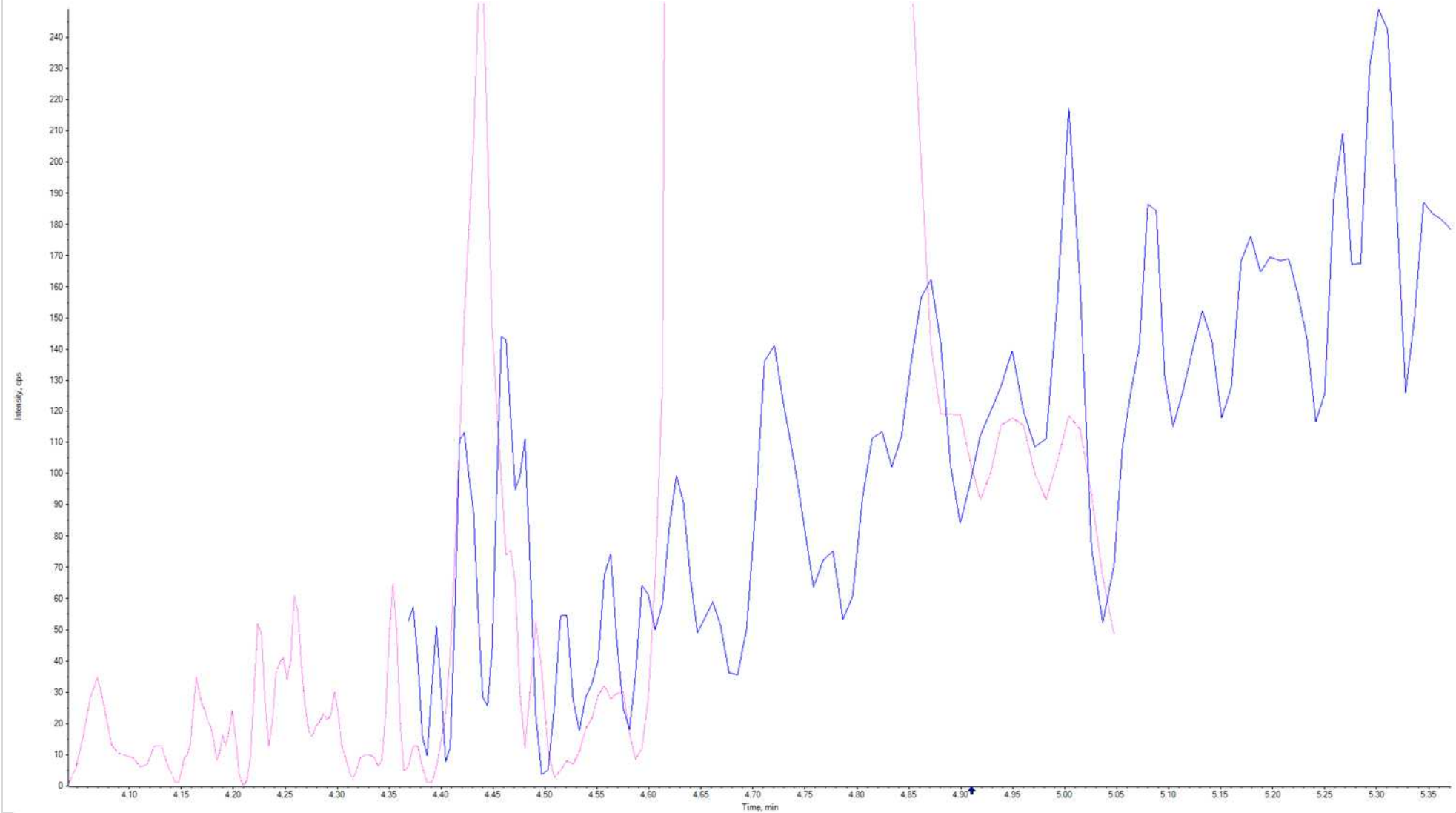
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Generated: 9/17/2024 6:15:27 AM

3:3FTCA
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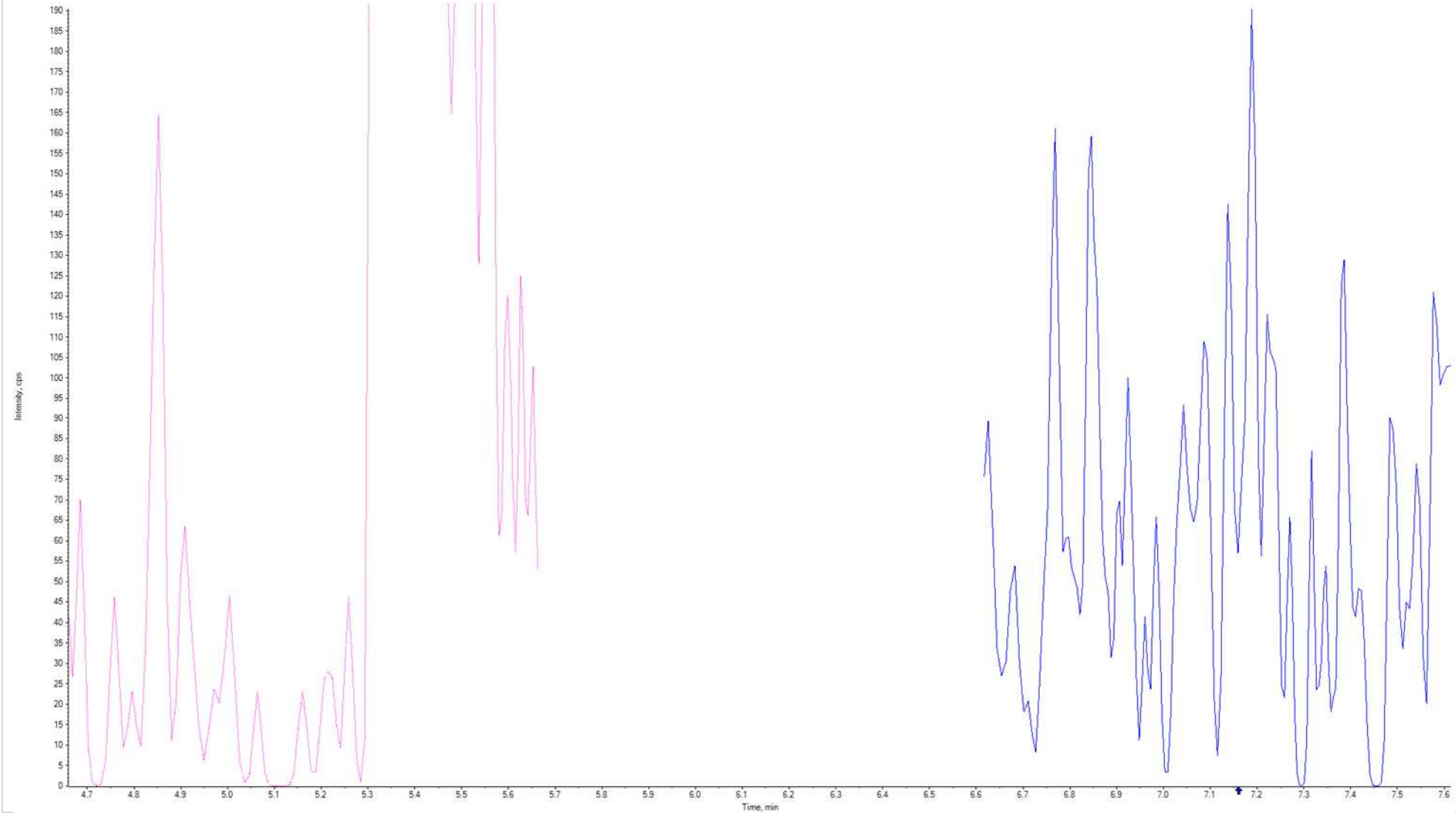
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3:3FTCA_2
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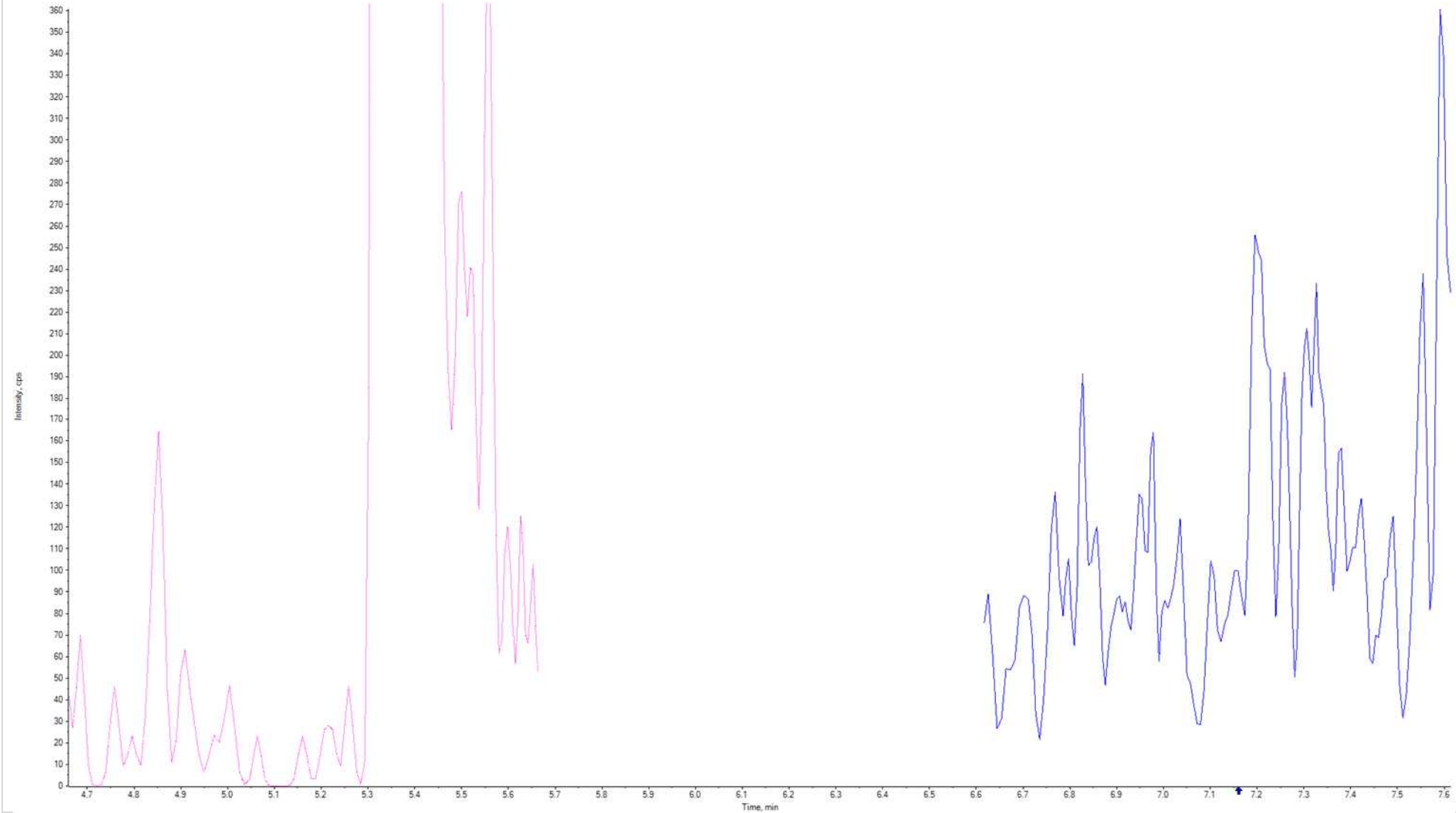
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



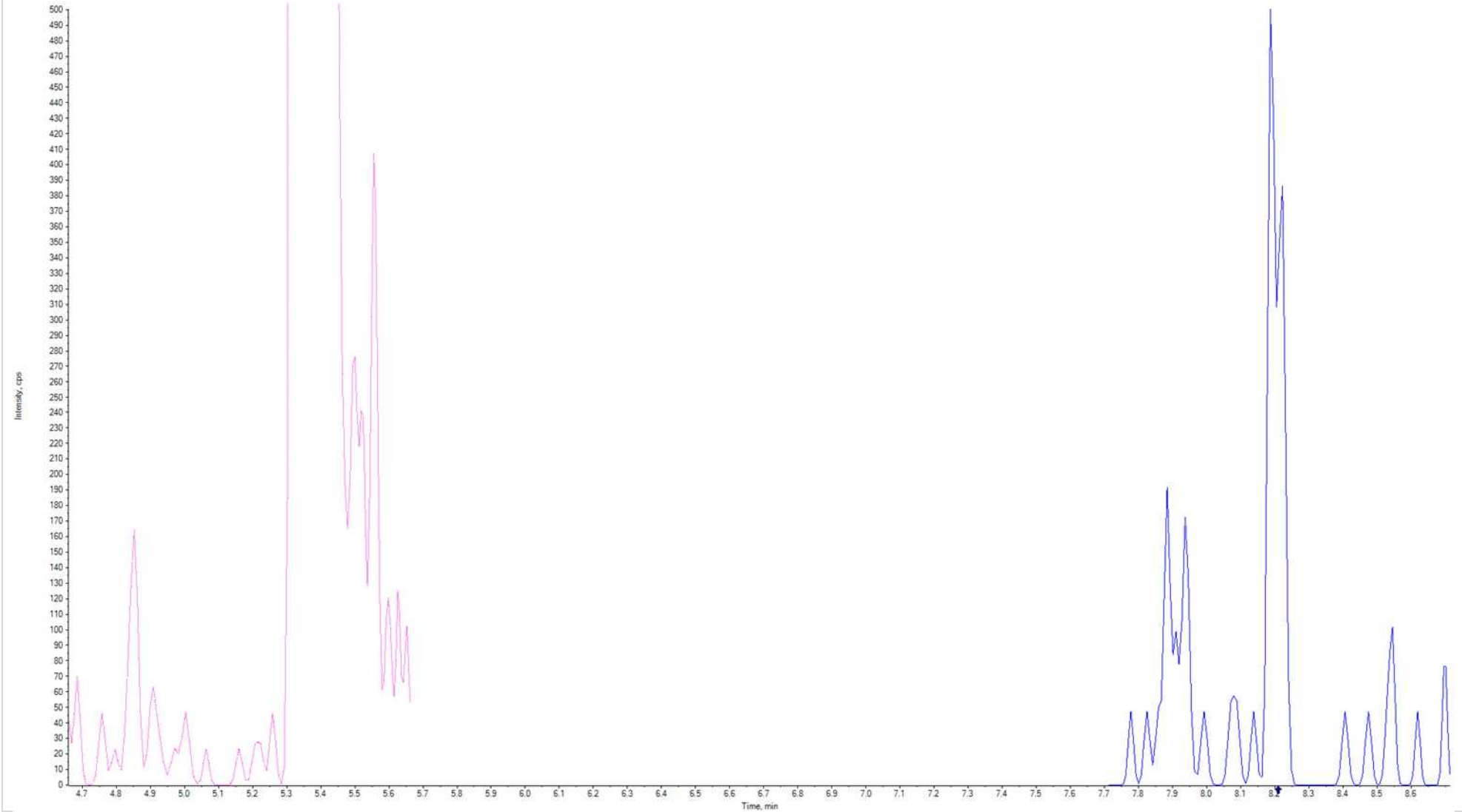
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Generated: 9/17/2024 6:15:27 AM

5:3FTCA_2
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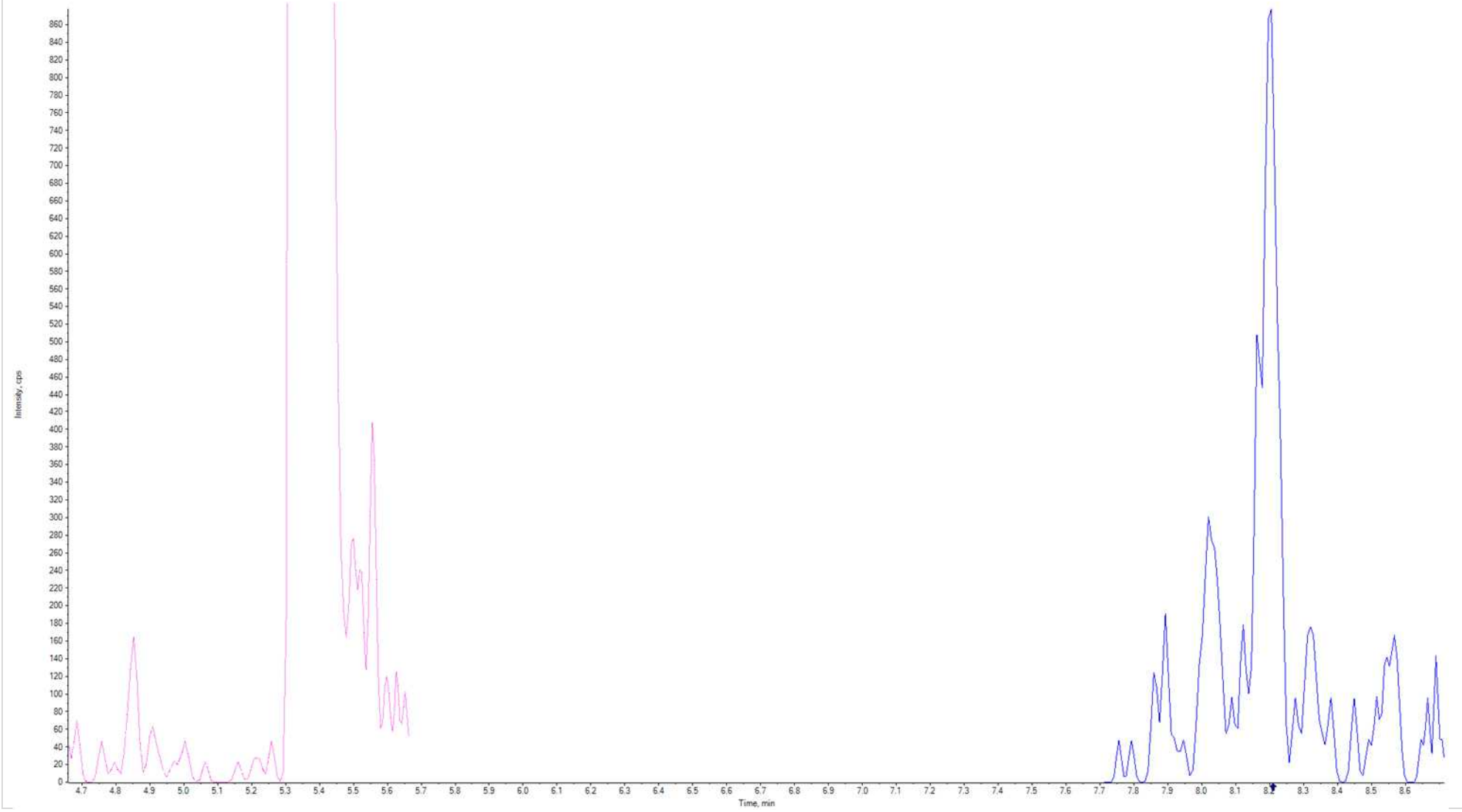
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Generated: 9/17/2024 6:15:27 AM

7:3FTCA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



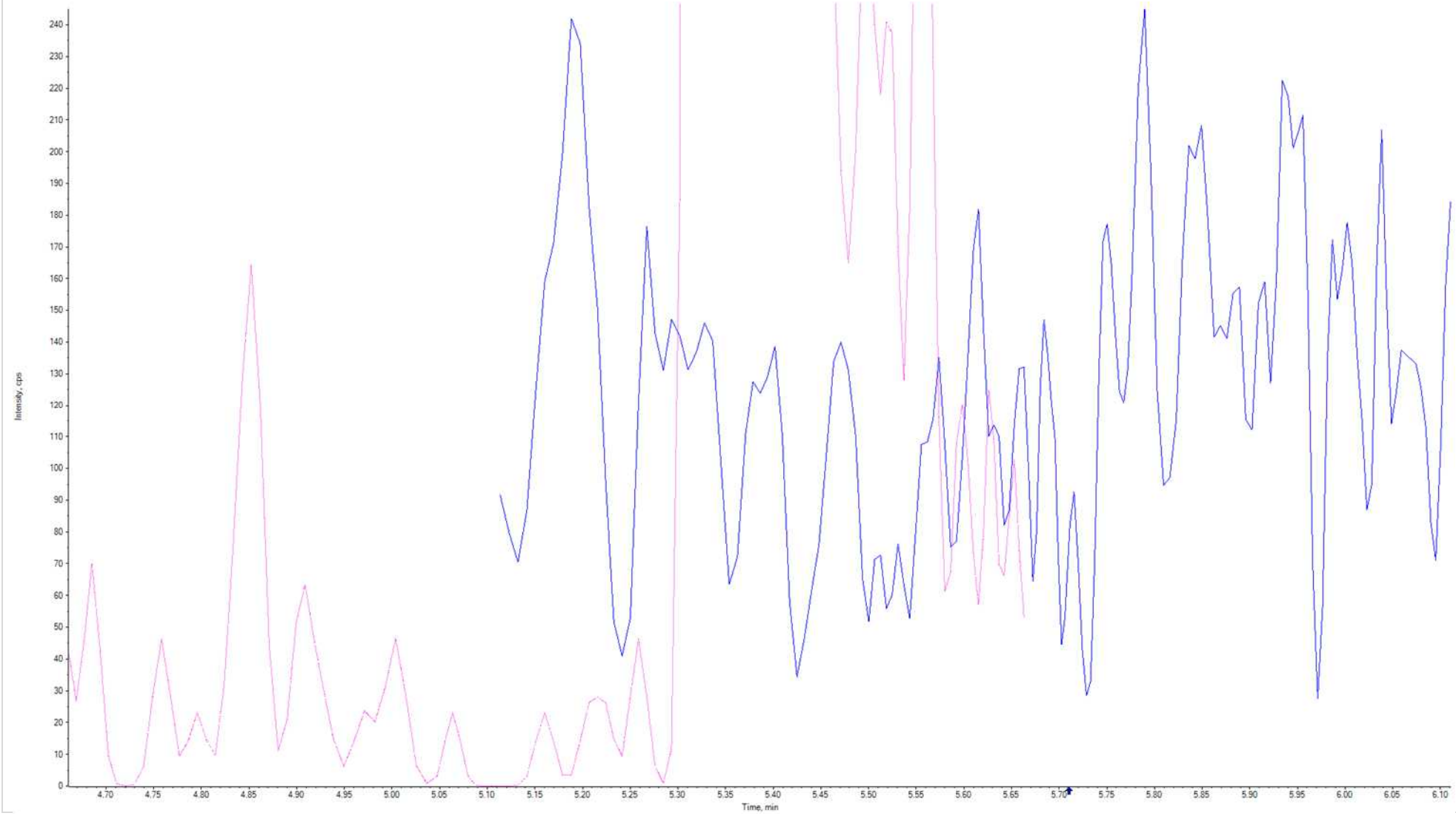
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



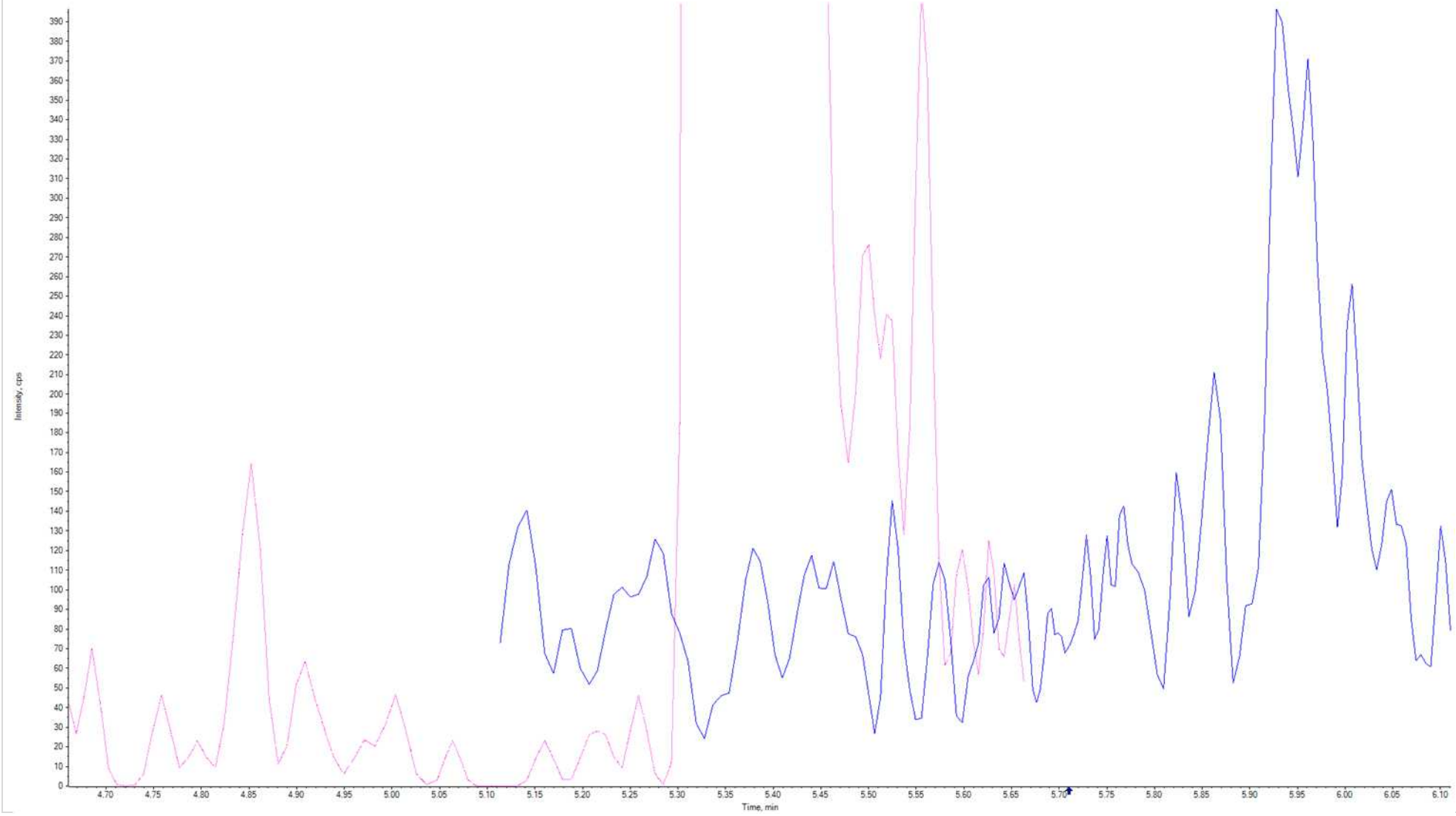
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_15.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFEESA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



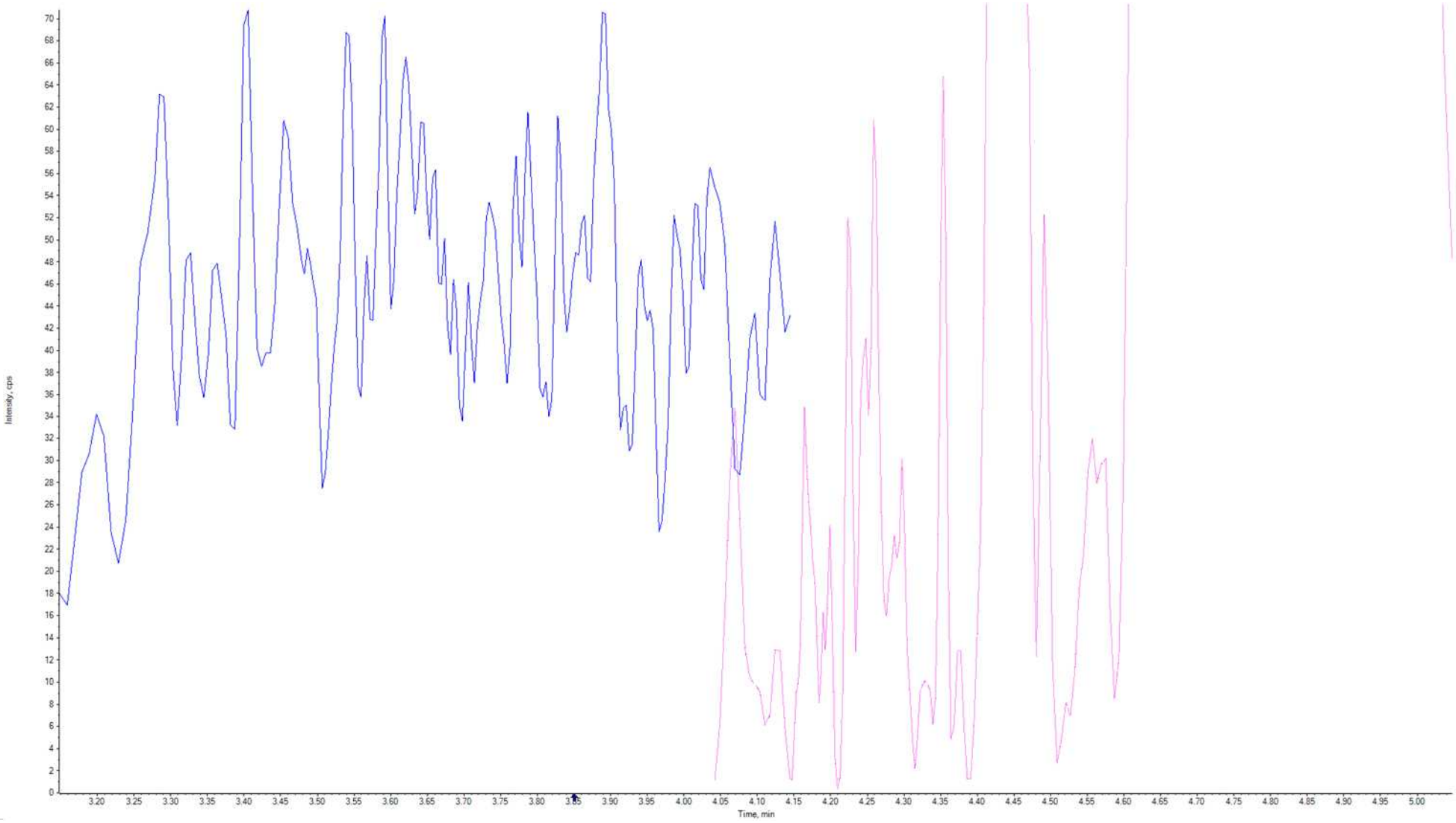
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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PFEESA_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



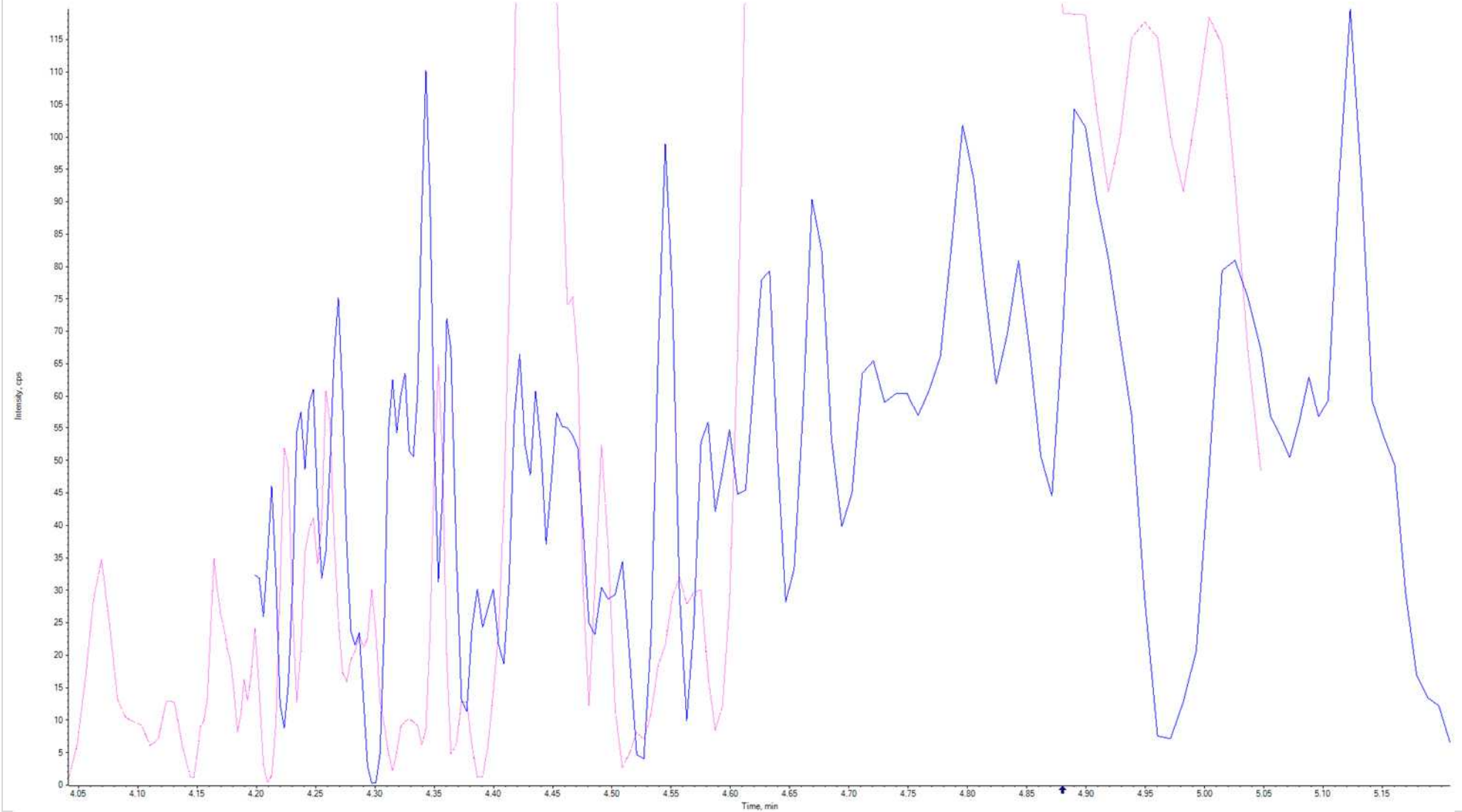
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Generated: 9/17/2024 6:15:27 AM

PFMPA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



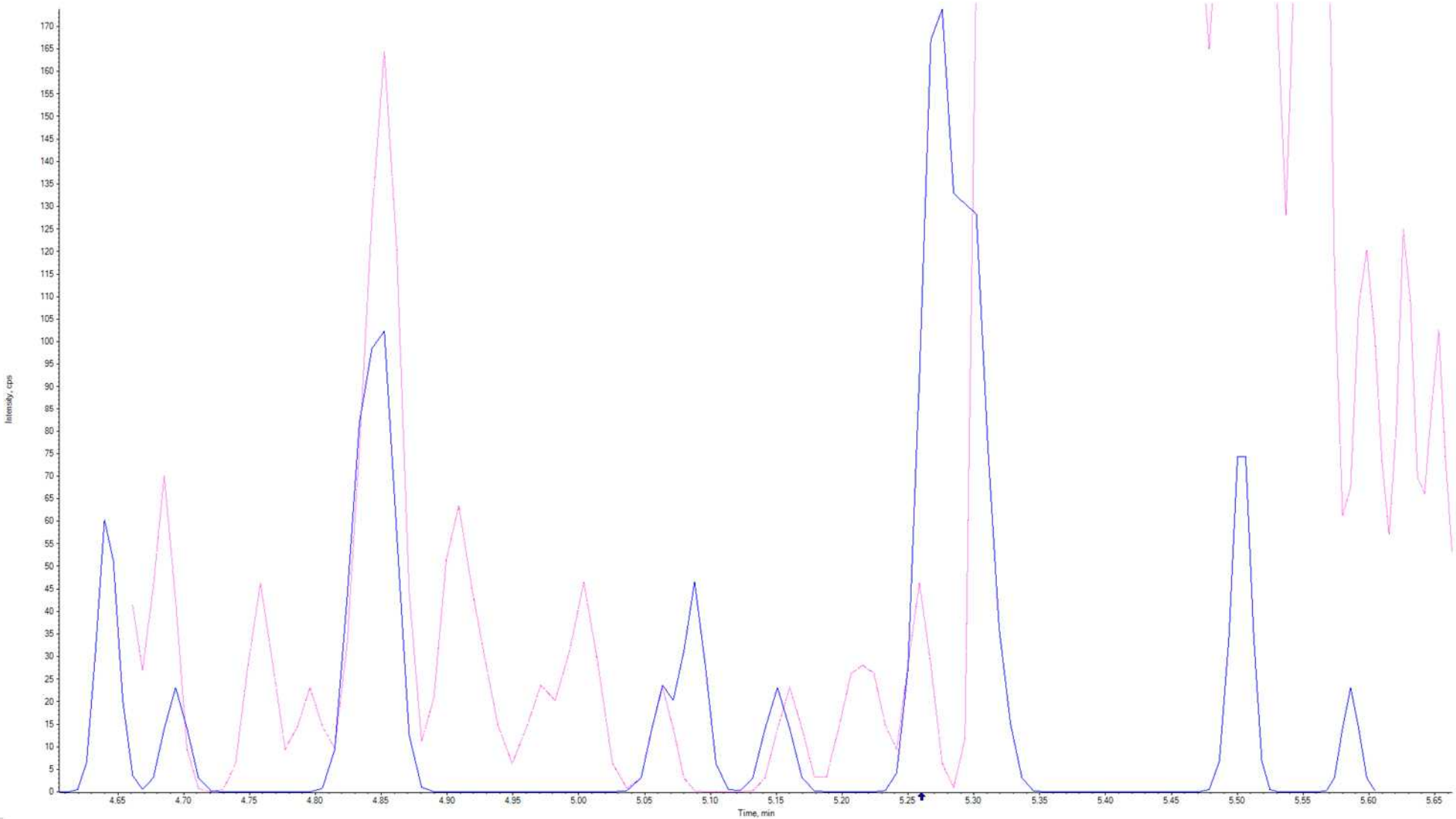
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

PFMBA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



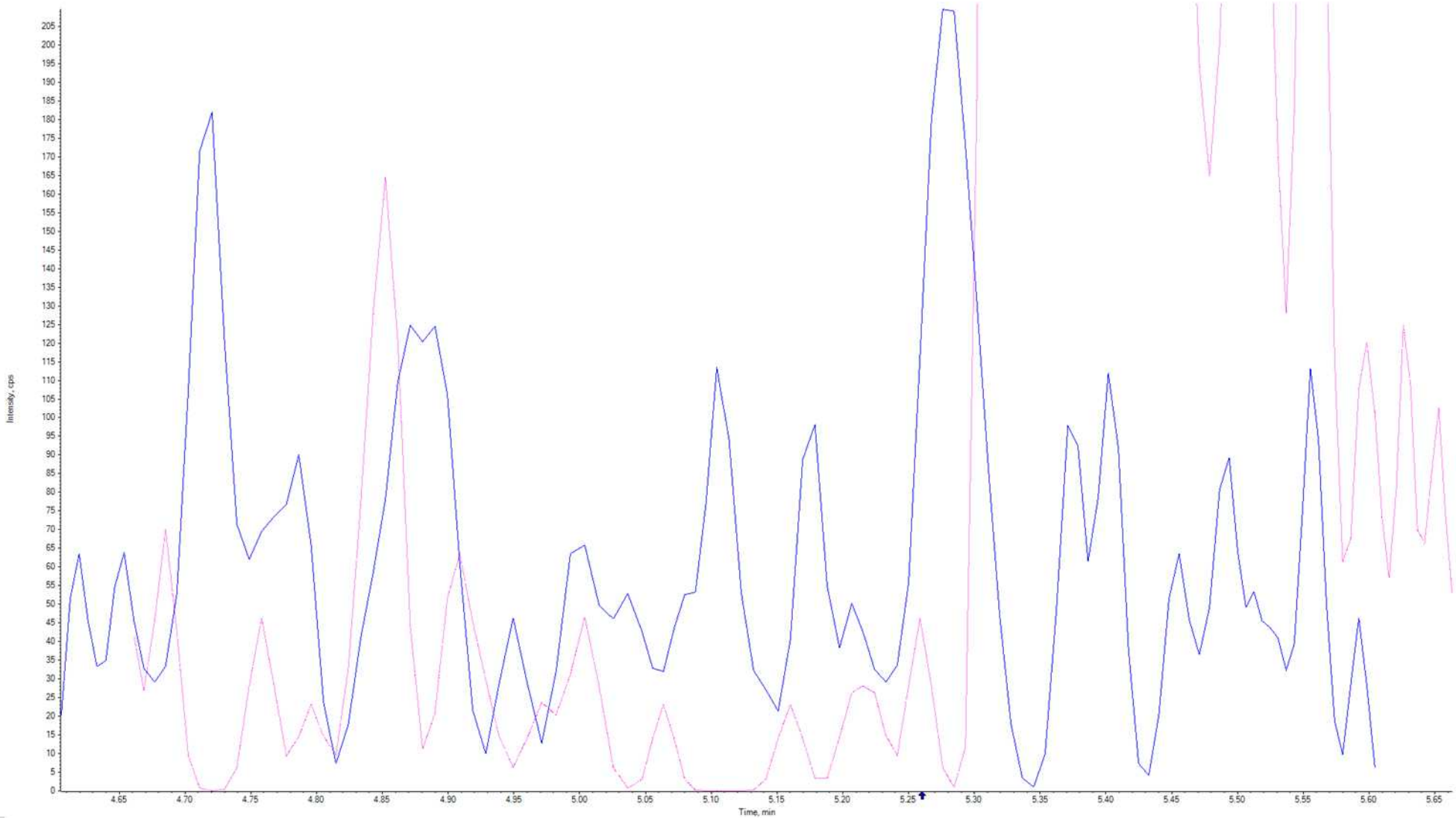
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NFDHA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



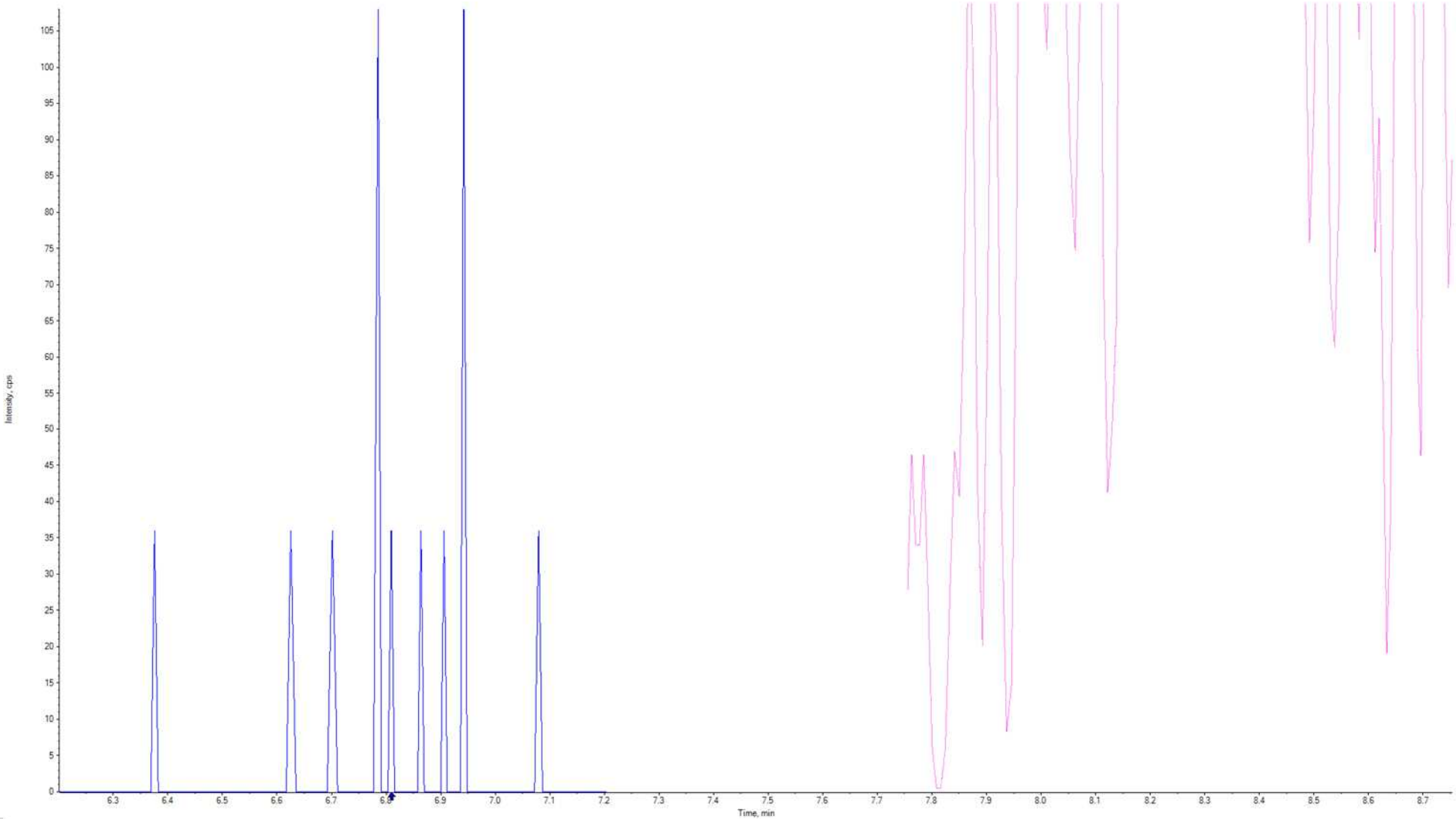
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
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NFDHA_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



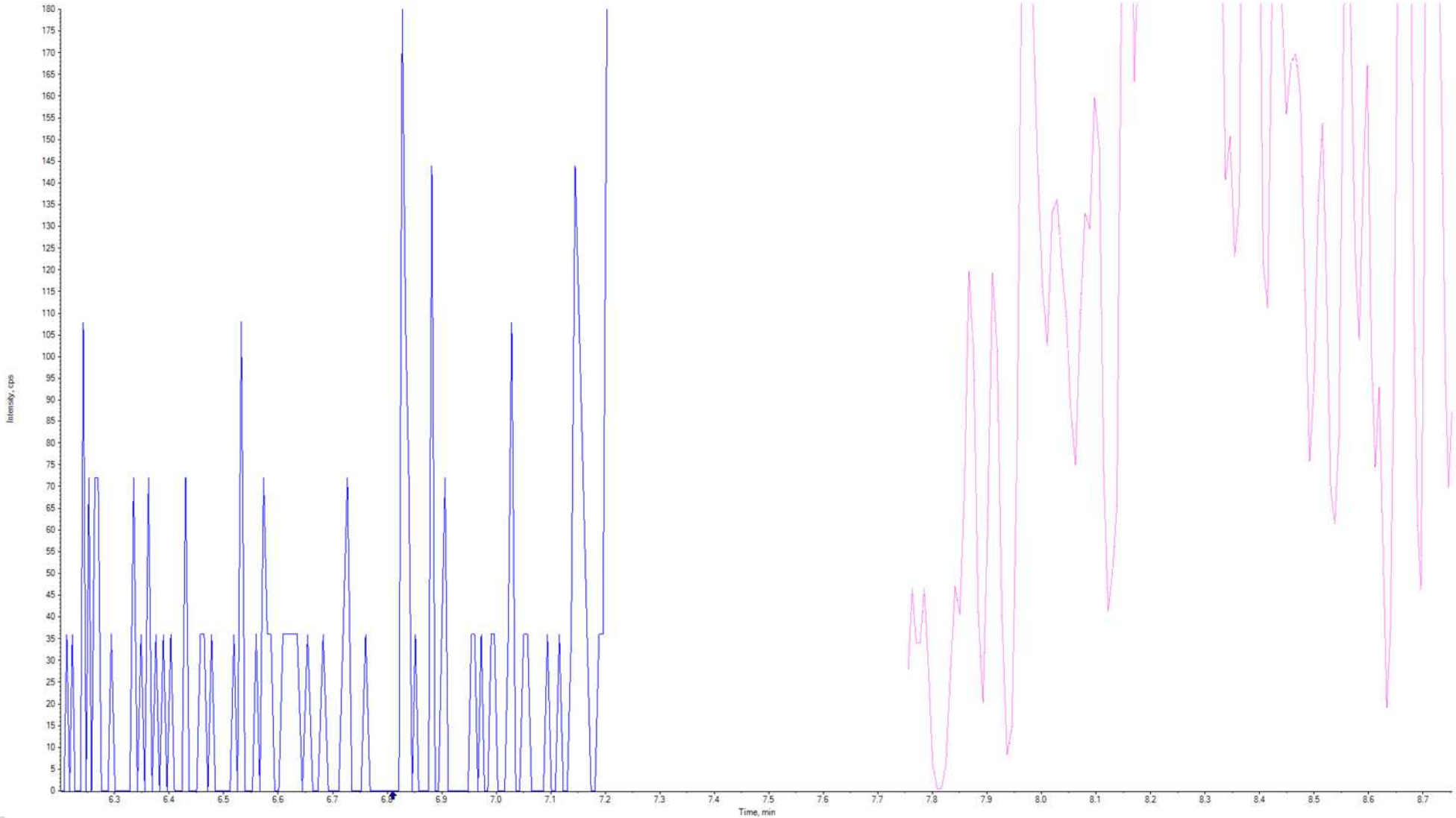
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Generated: 9/17/2024 6:15:27 AM

TDCA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



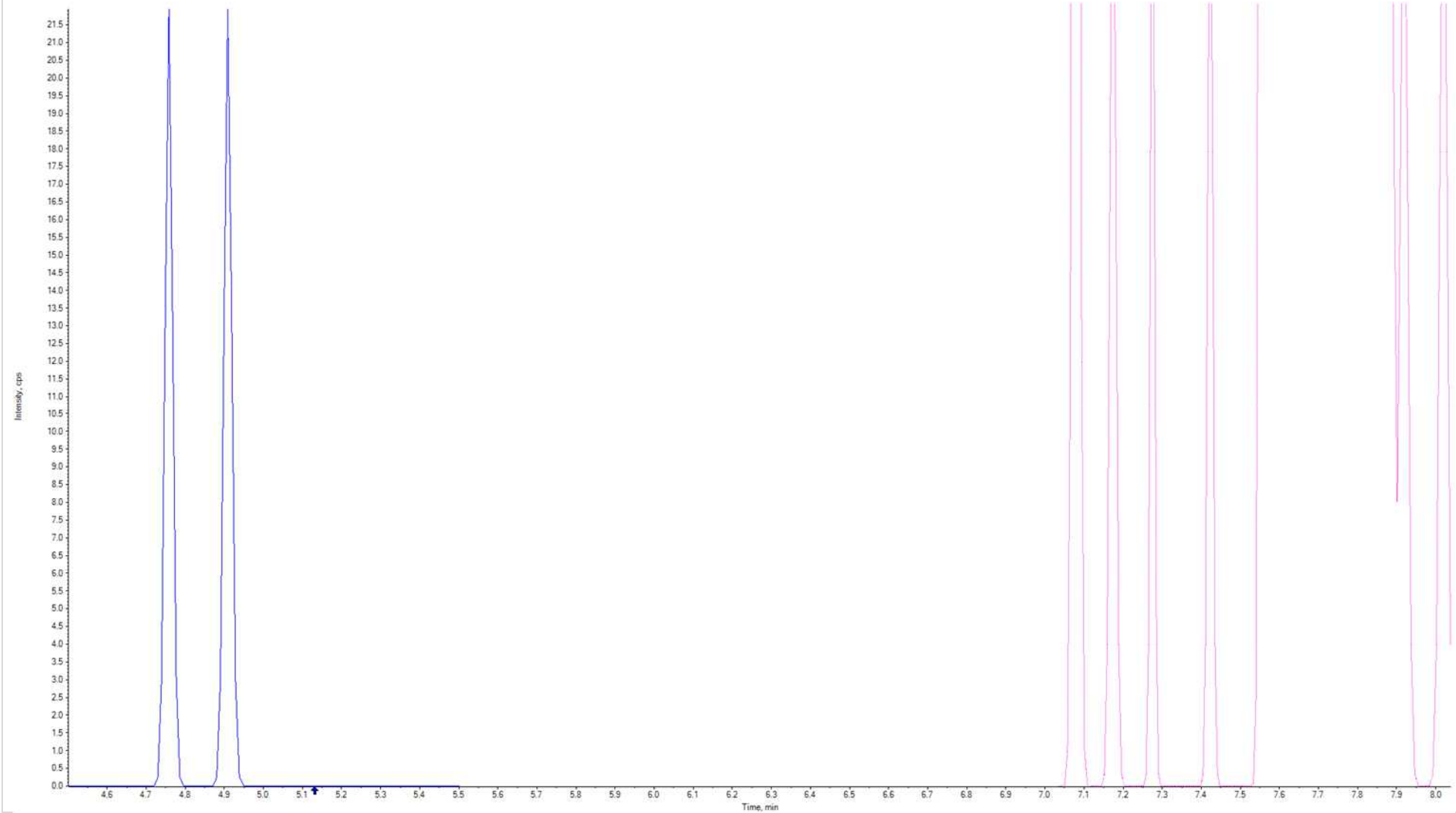
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

TDCA_2
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



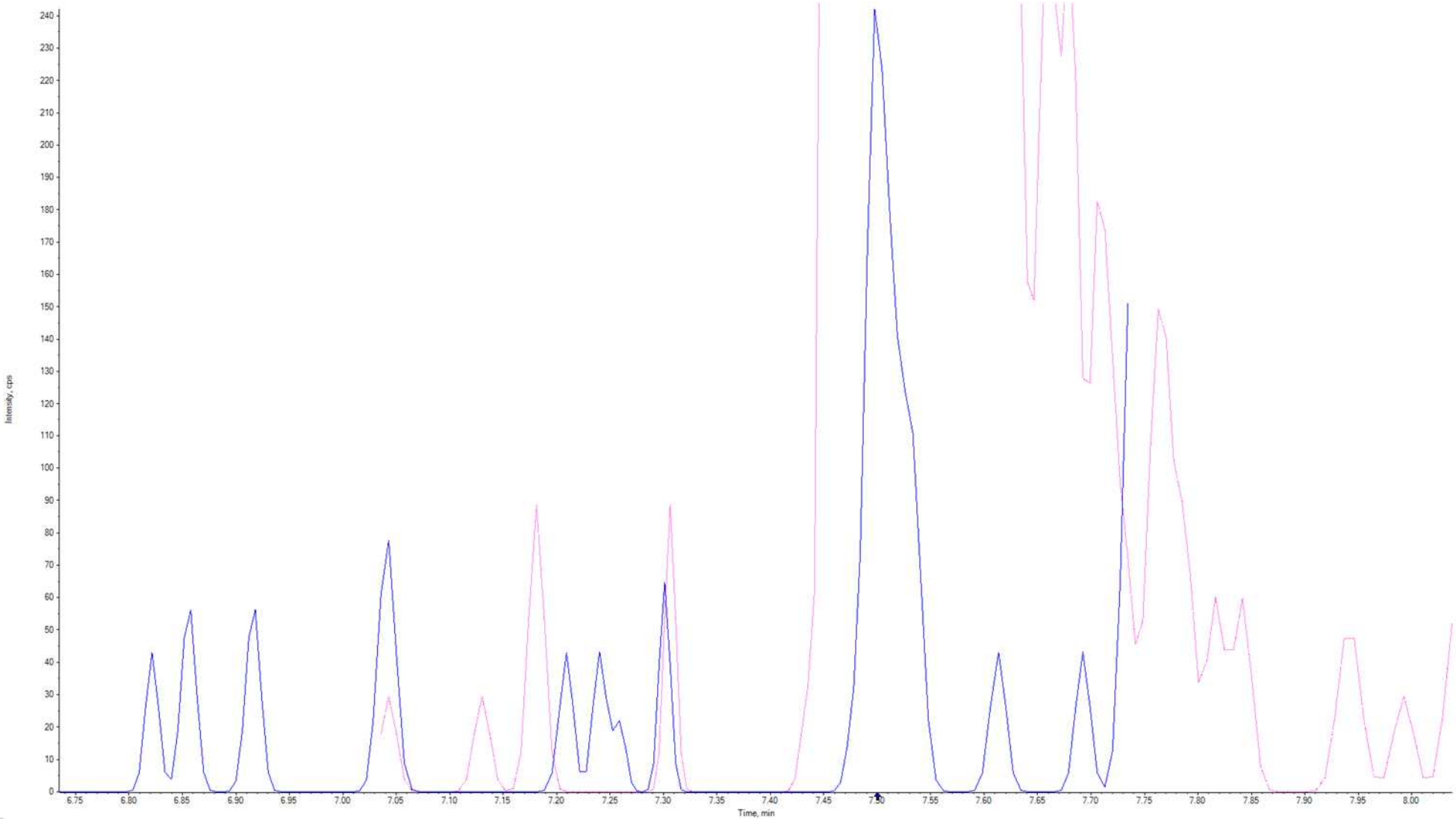
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C2D4-4:2FTS
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A

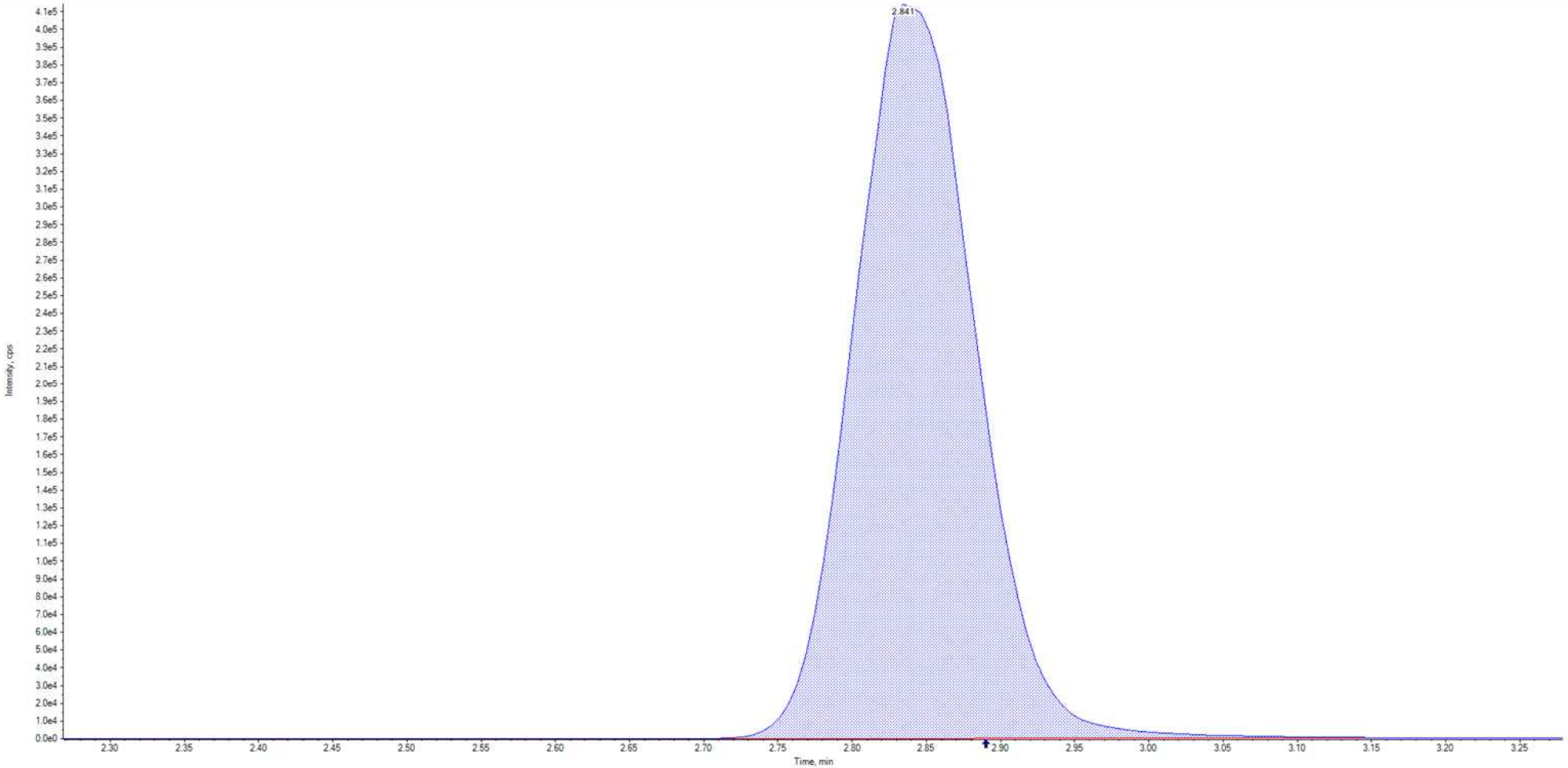


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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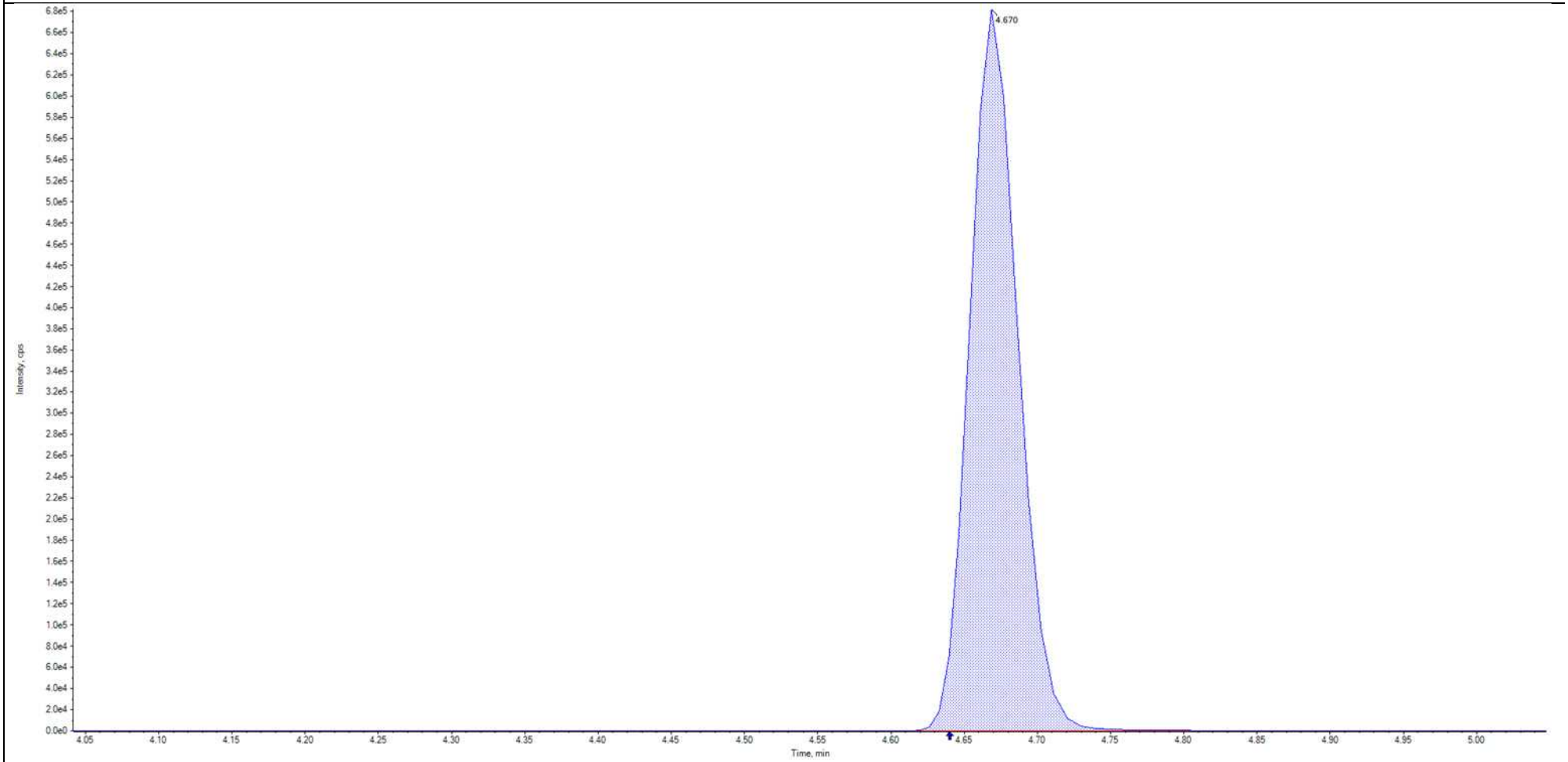
13C2-PFOA
Sample: WG1971858-1 S/N:N/A Points Across peak:N/A



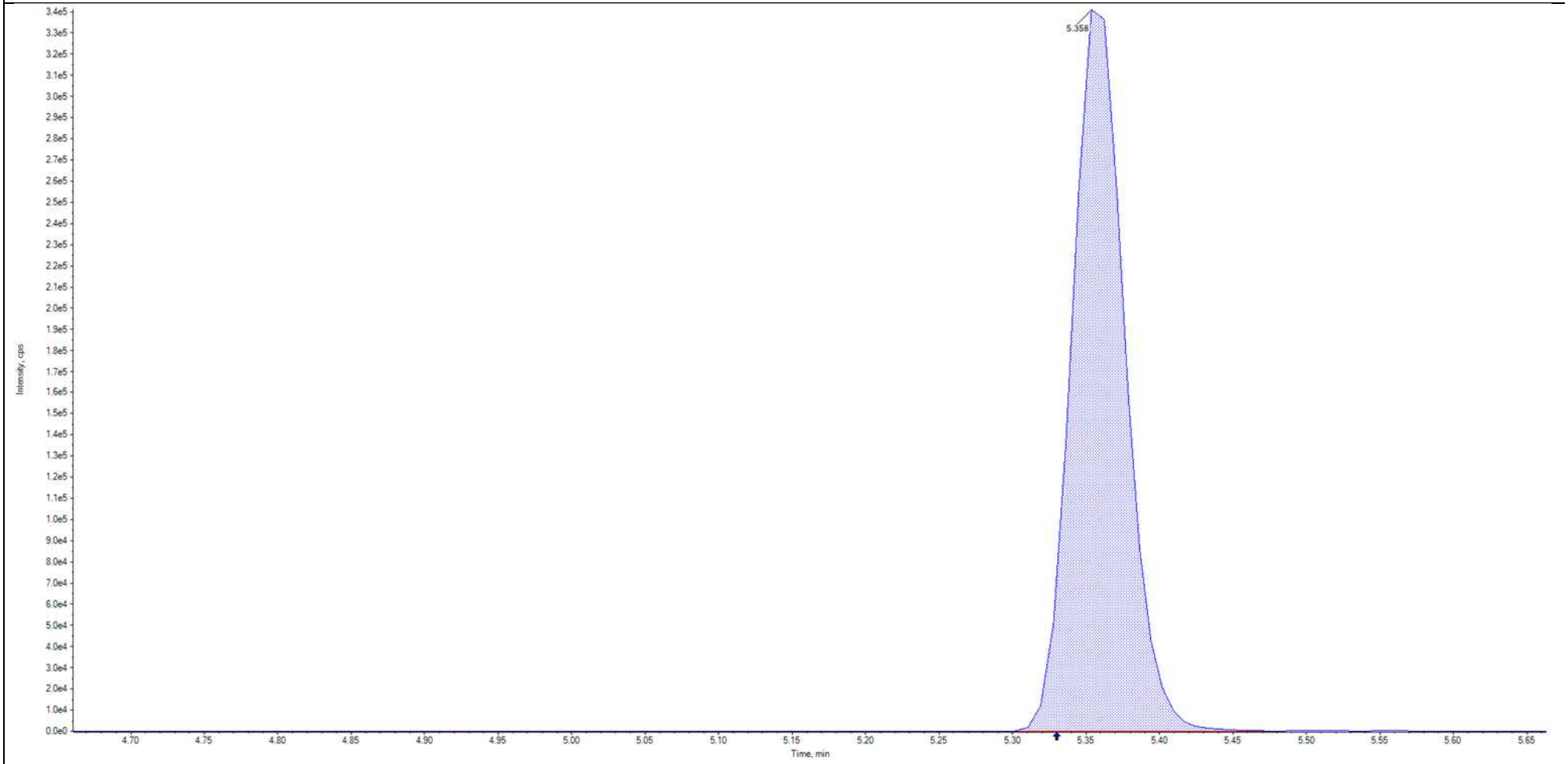
13C4-PFBA
Sample: WG1971858-1



13C5-PFPeA
Sample: WG1971858-1

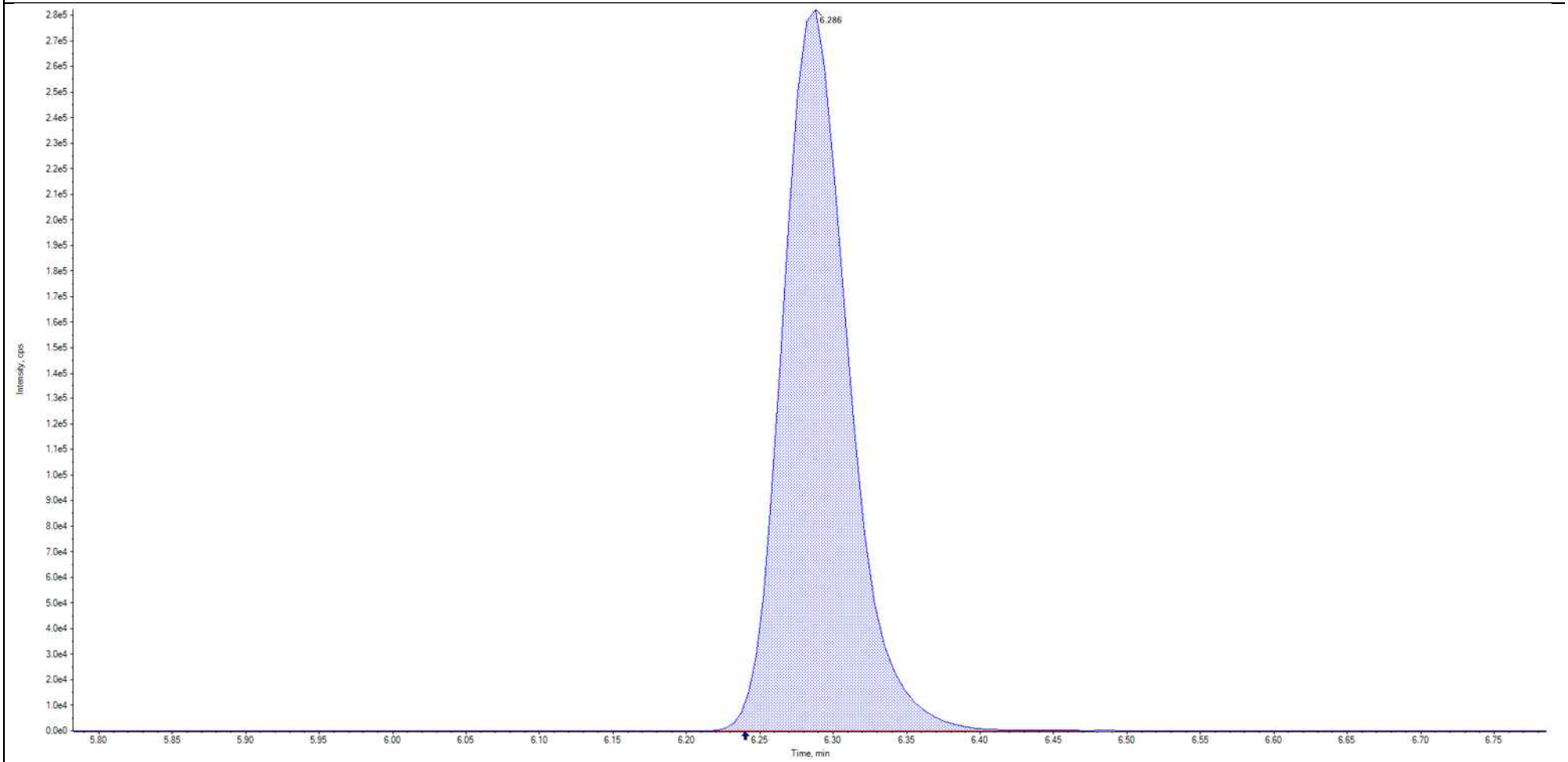


13C5-PFHxA
Sample: WG1971858-1

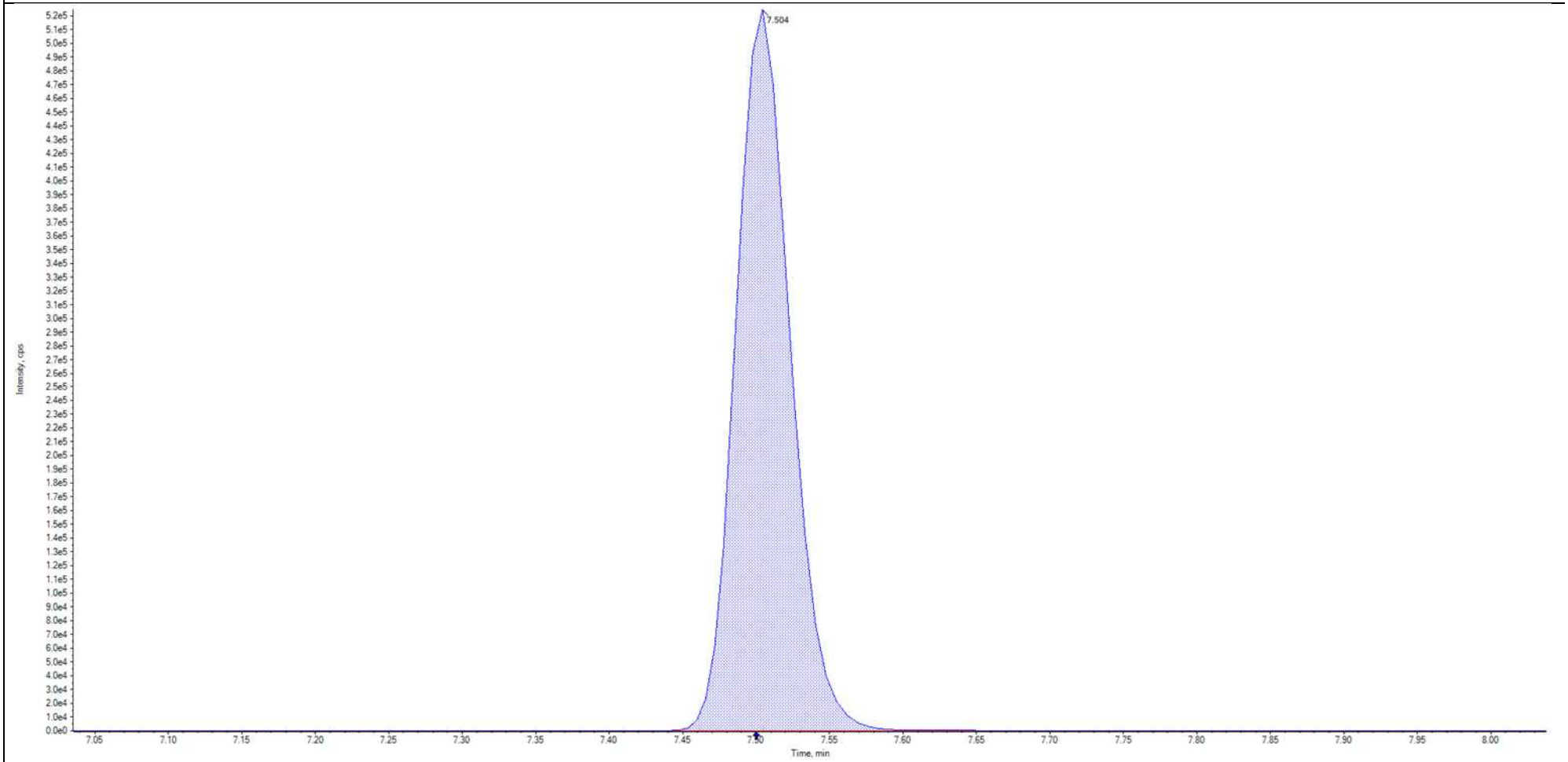


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C4-PFHpA
Sample: WG1971858-1

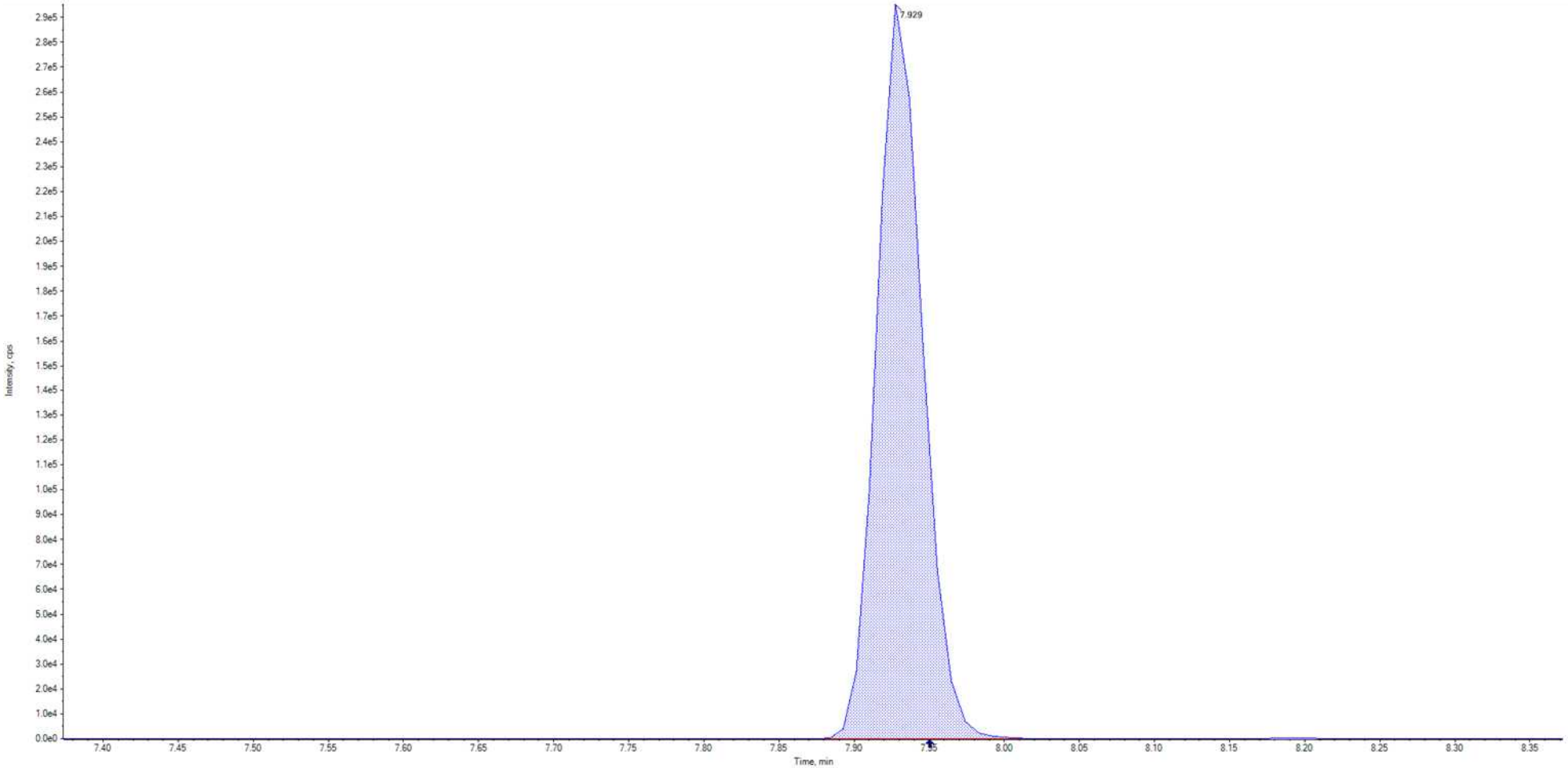


13C8-PFOA
Sample: WG1971858-1

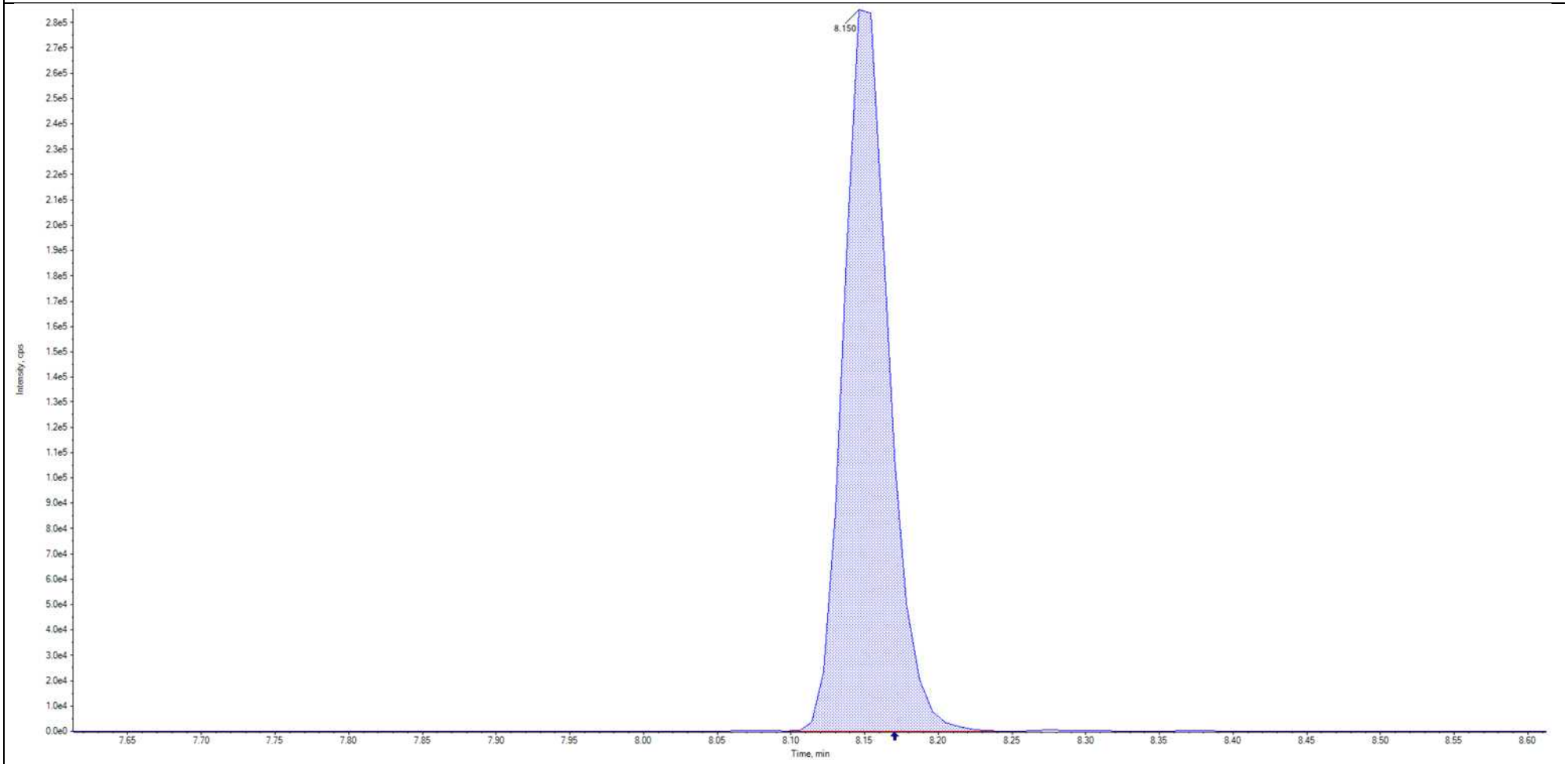


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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13C9-PFNA
Sample: WG1971858-1

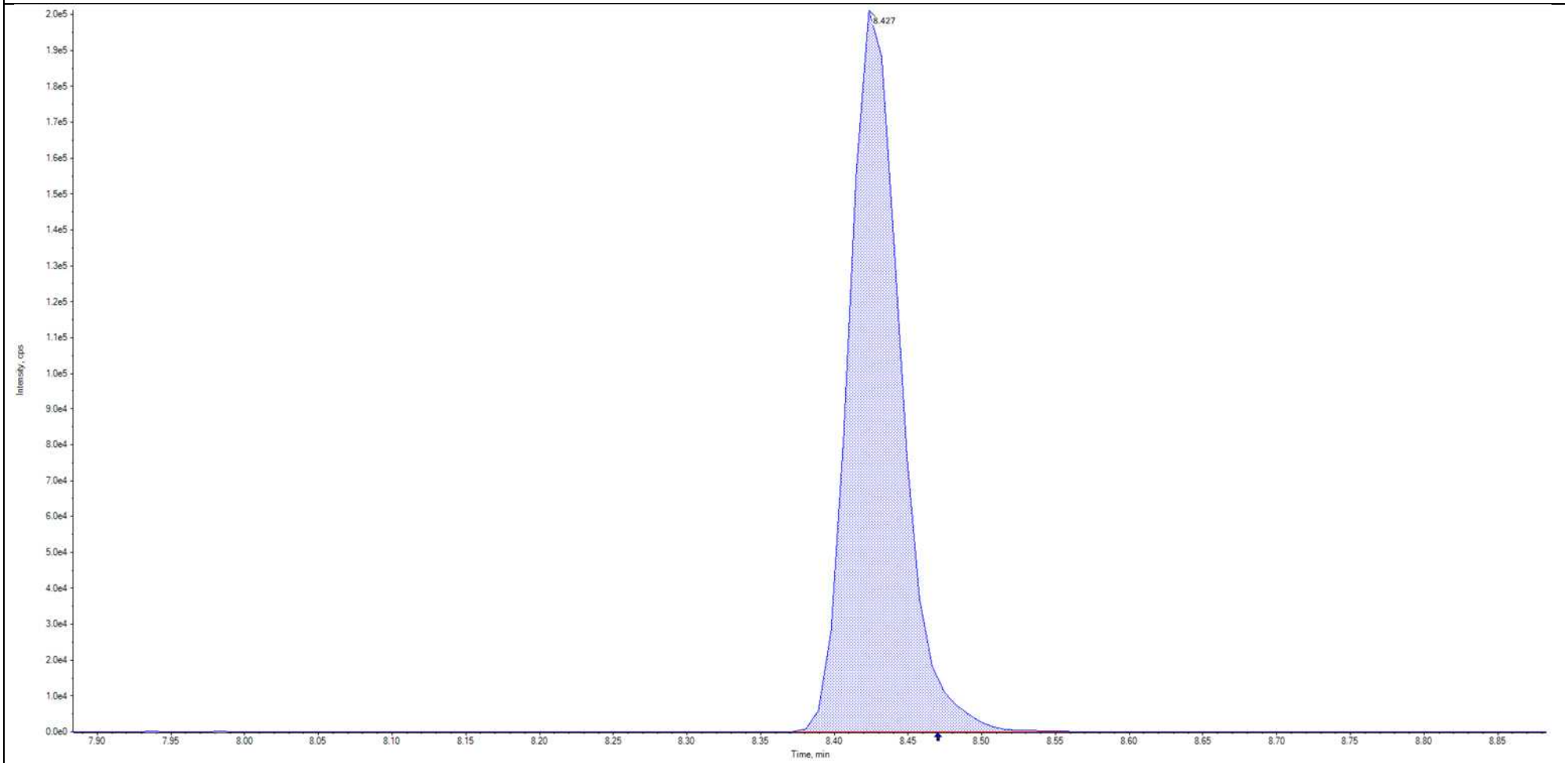


13C6-PFDA
Sample: WG1971858-1



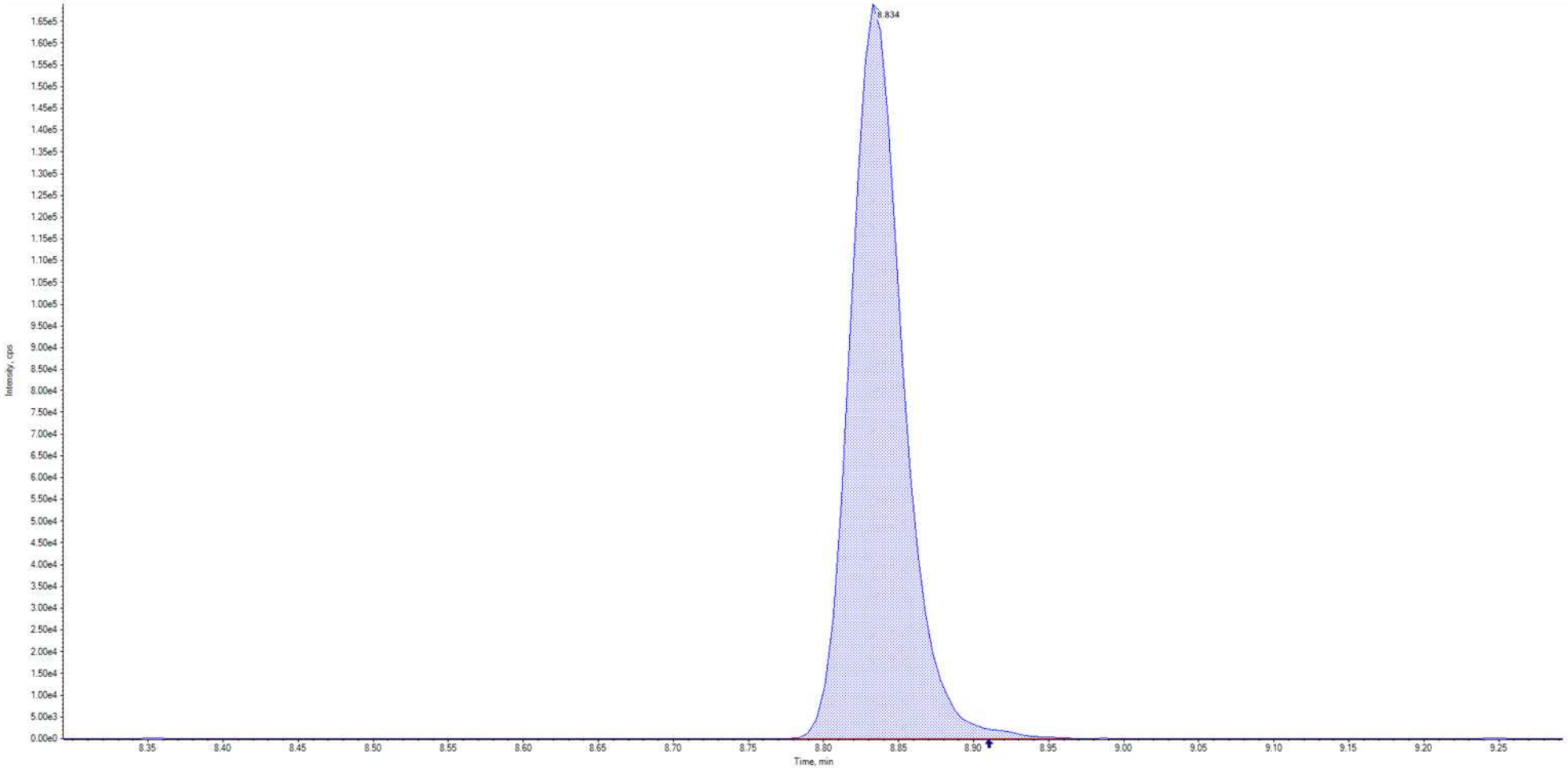
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C7-PFUnA
Sample: WG1971858-1



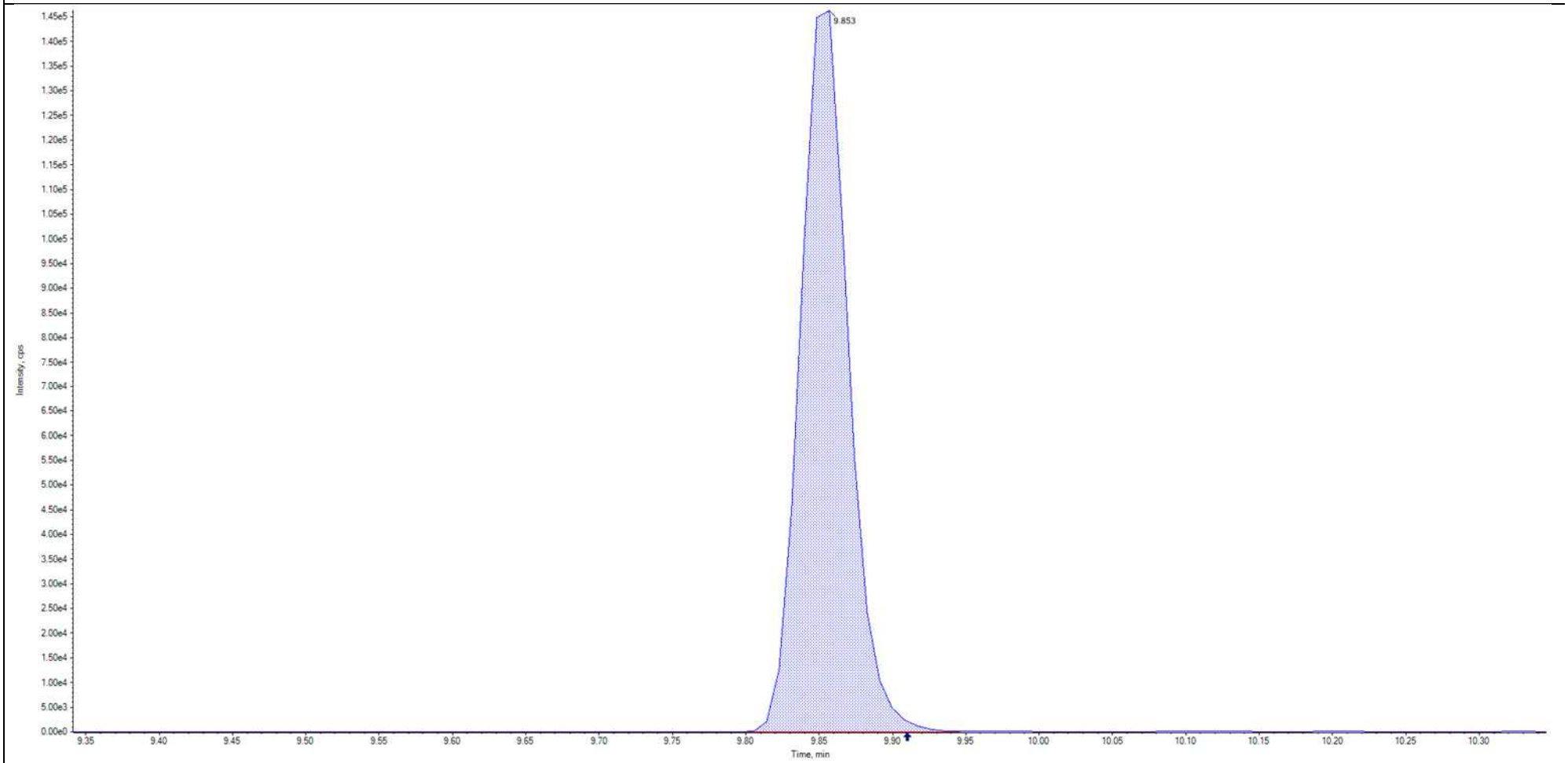
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Generated: 9/17/2024 6:15:27 AM

13C2-PFDoA
Sample: WG1971858-1

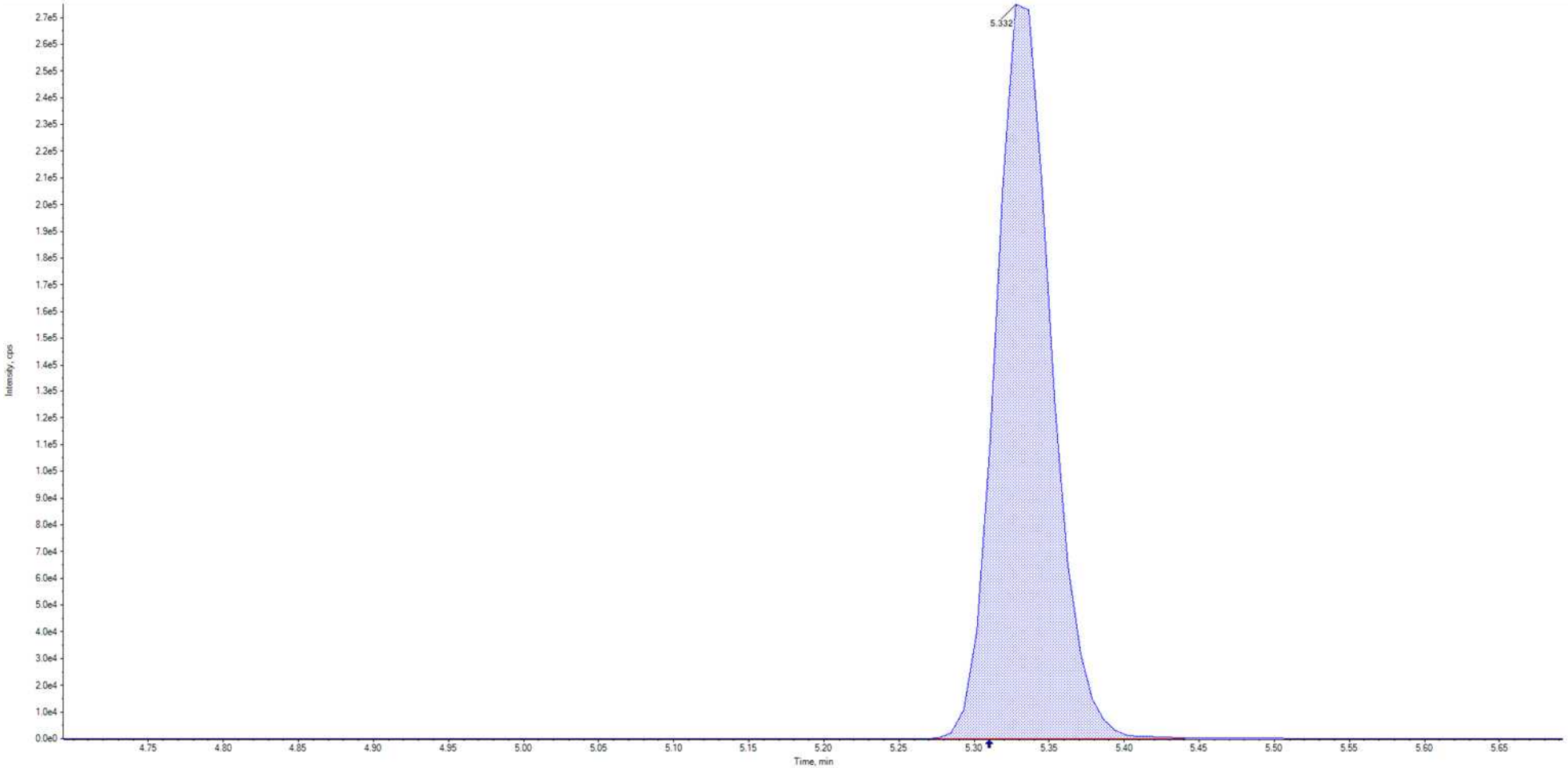


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-PFTeDA
Sample: WG1971858-1

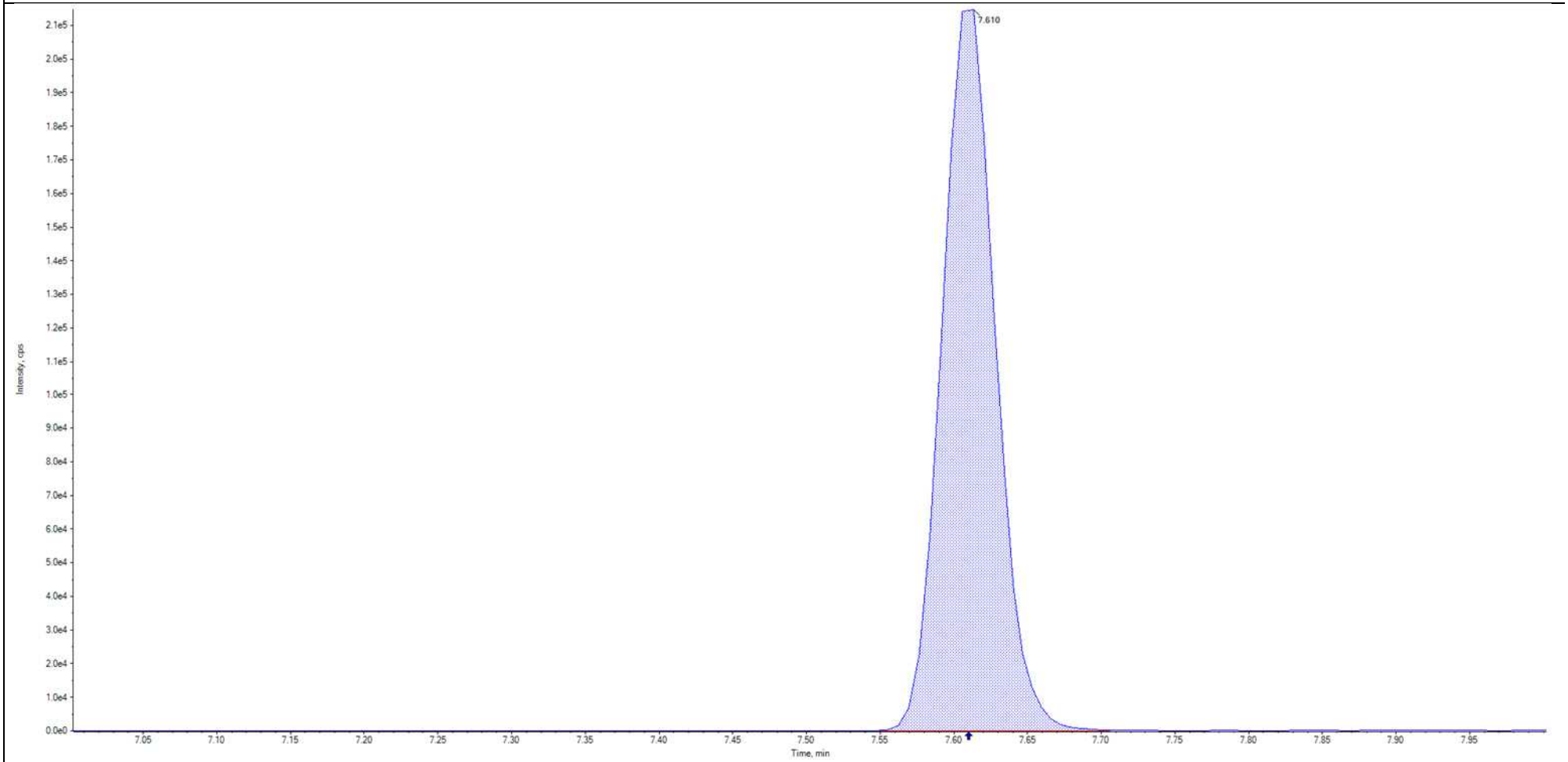


13C3-PFBS
Sample: WG1971858-1



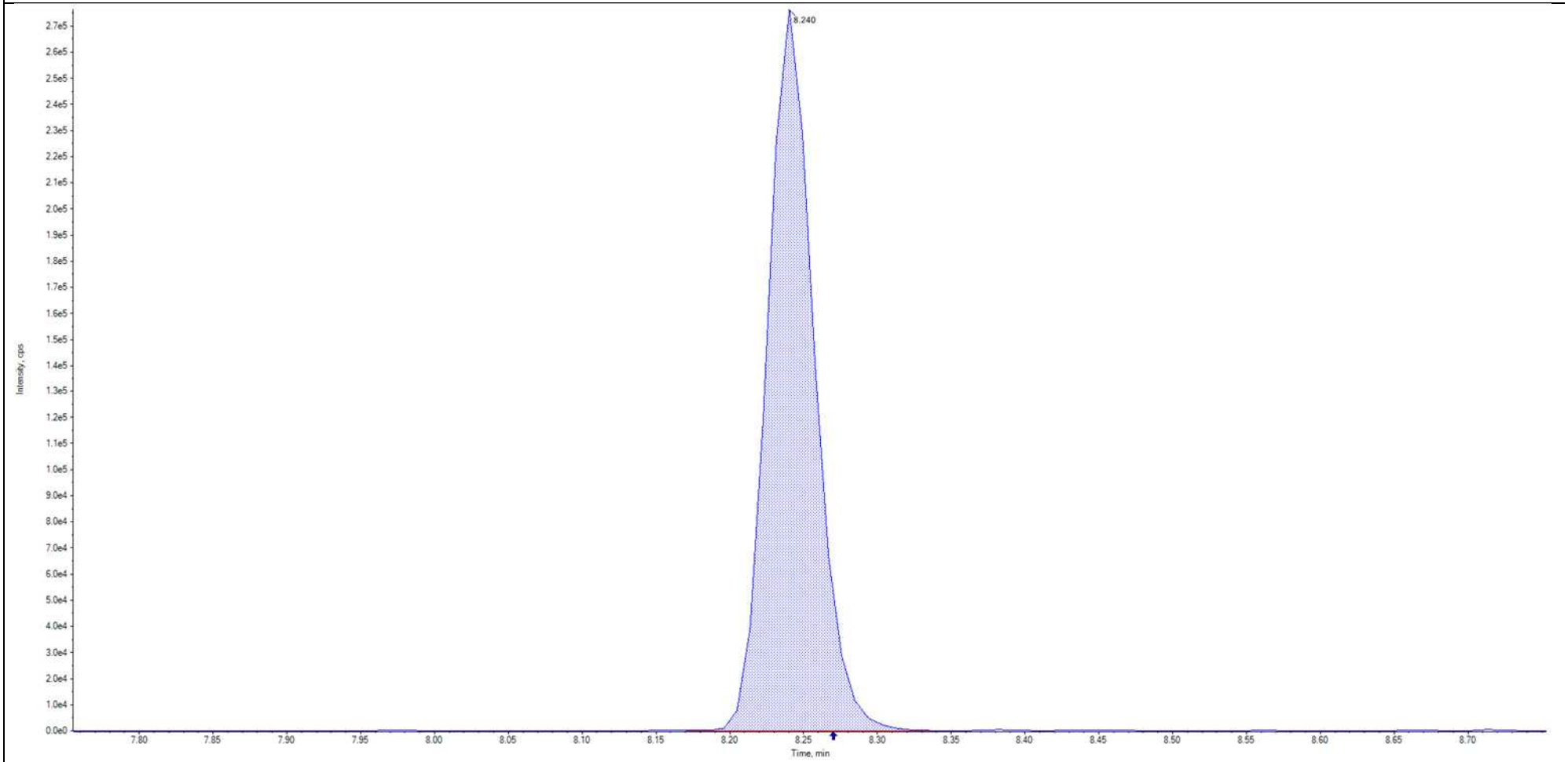
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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13C3-PFHxS
Sample: WG1971858-1



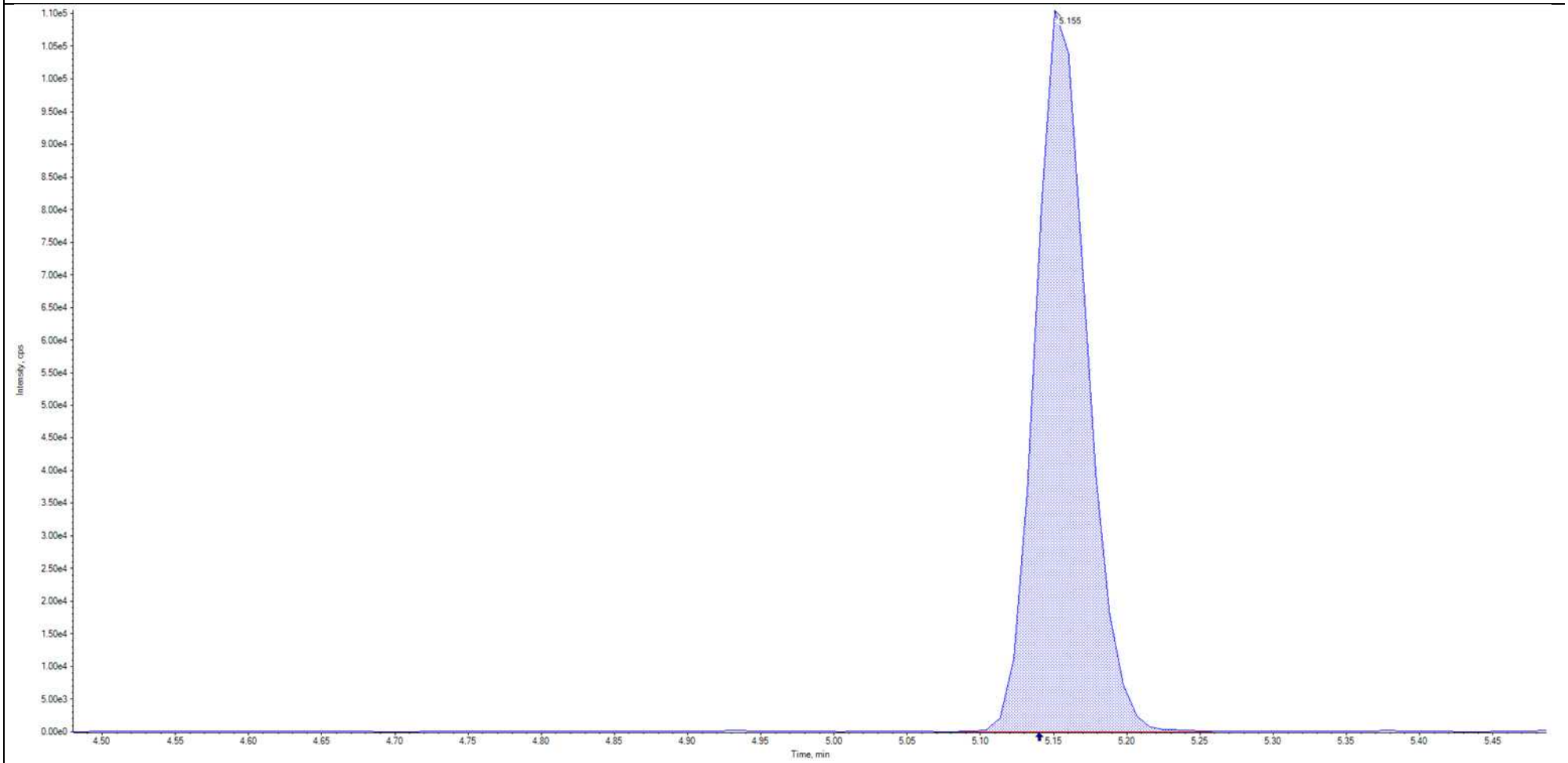
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Alpha Analytical Inc.
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13C8-PFOS
Sample: WG1971858-1



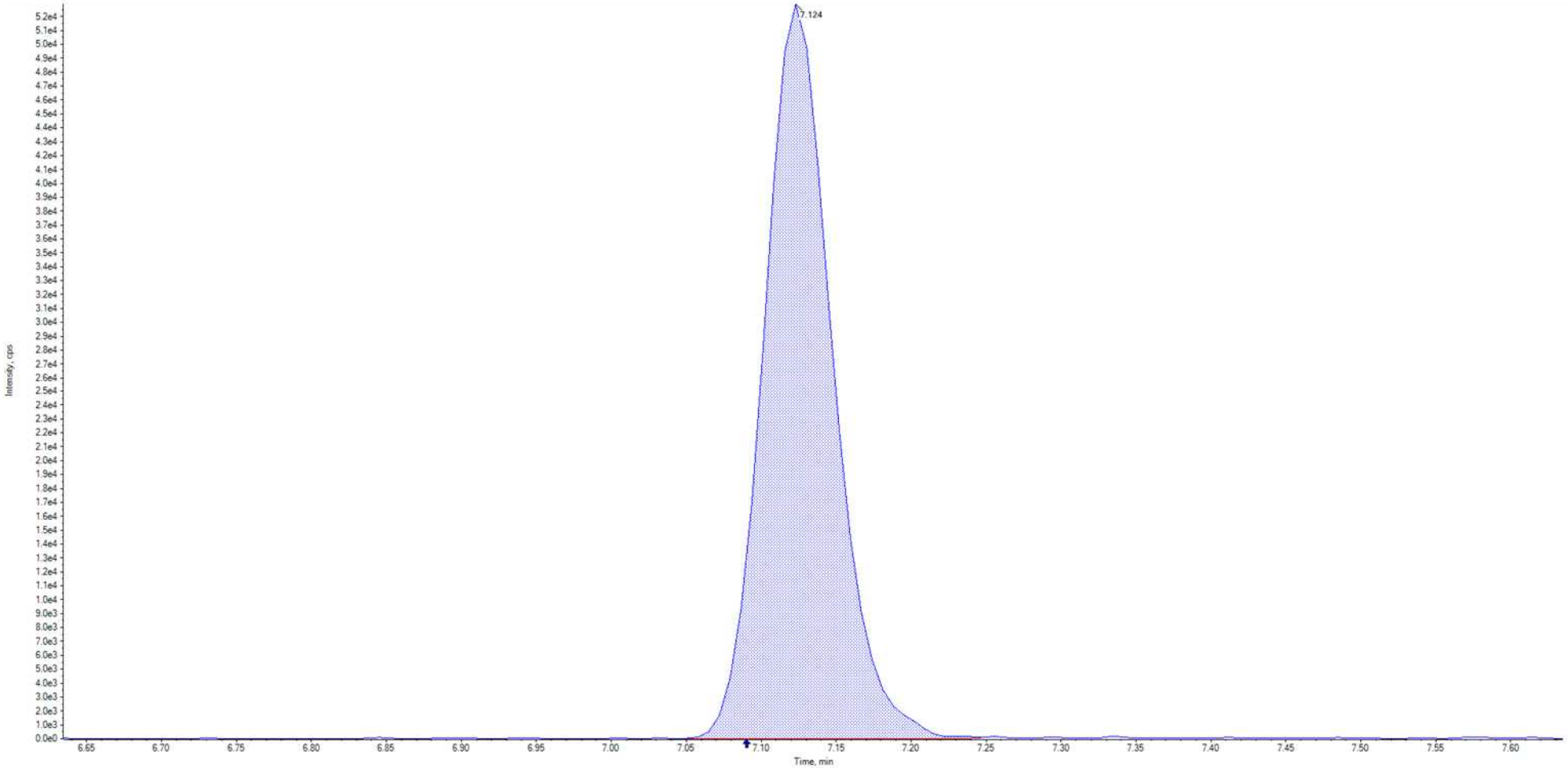
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-4:2FTS
Sample: WG1971858-1



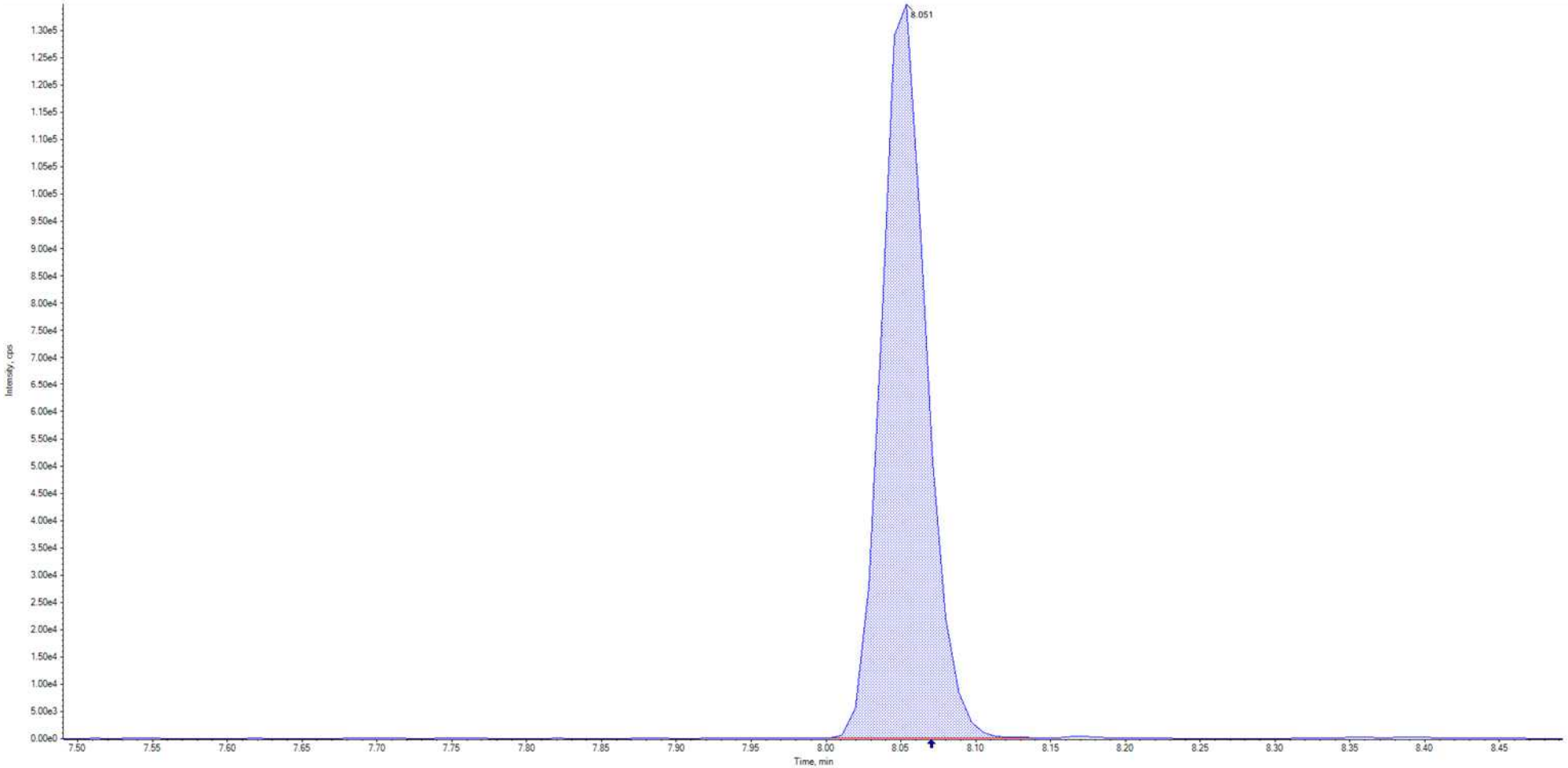
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-6:2FTS
Sample: WG1971858-1

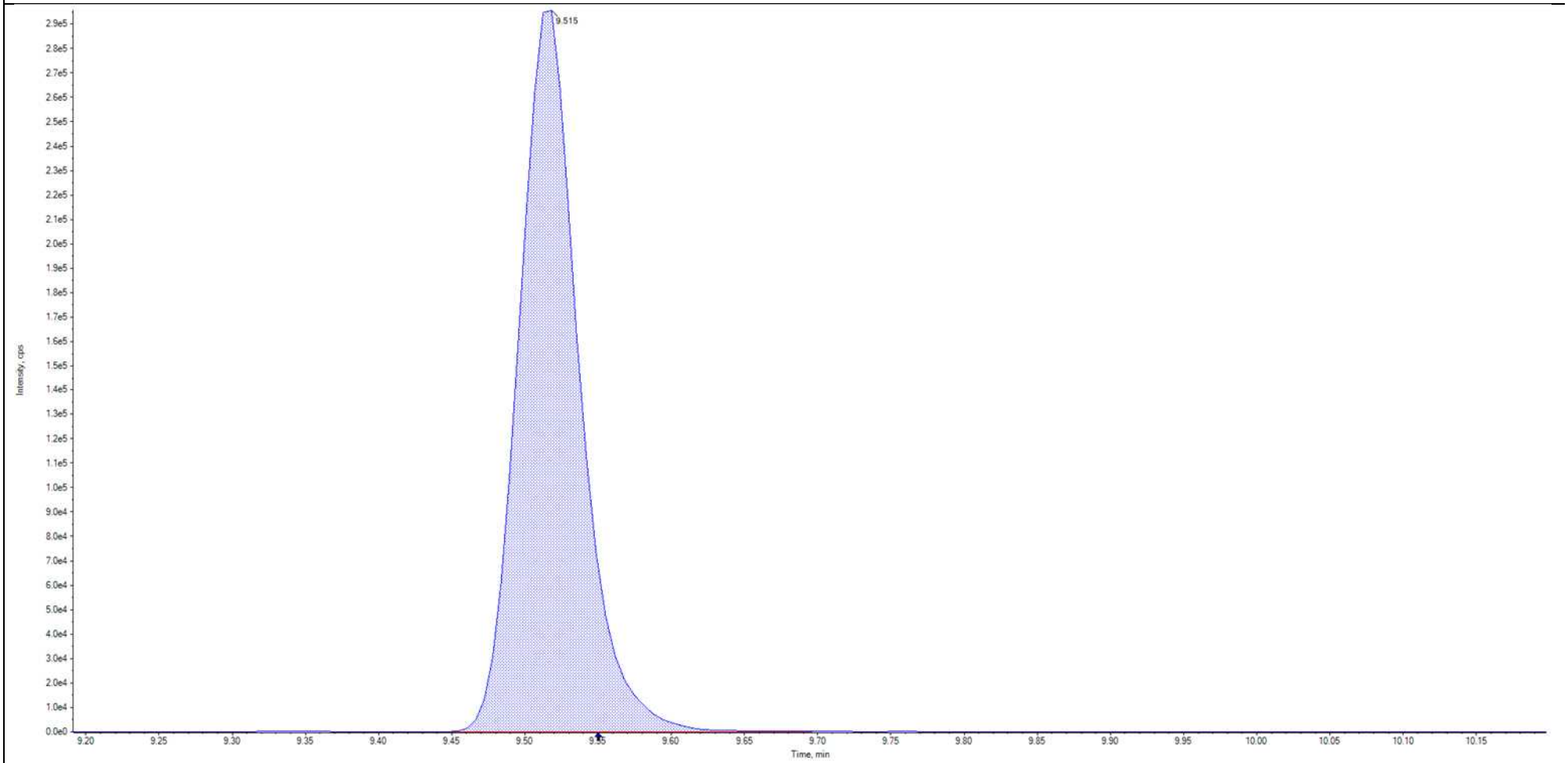


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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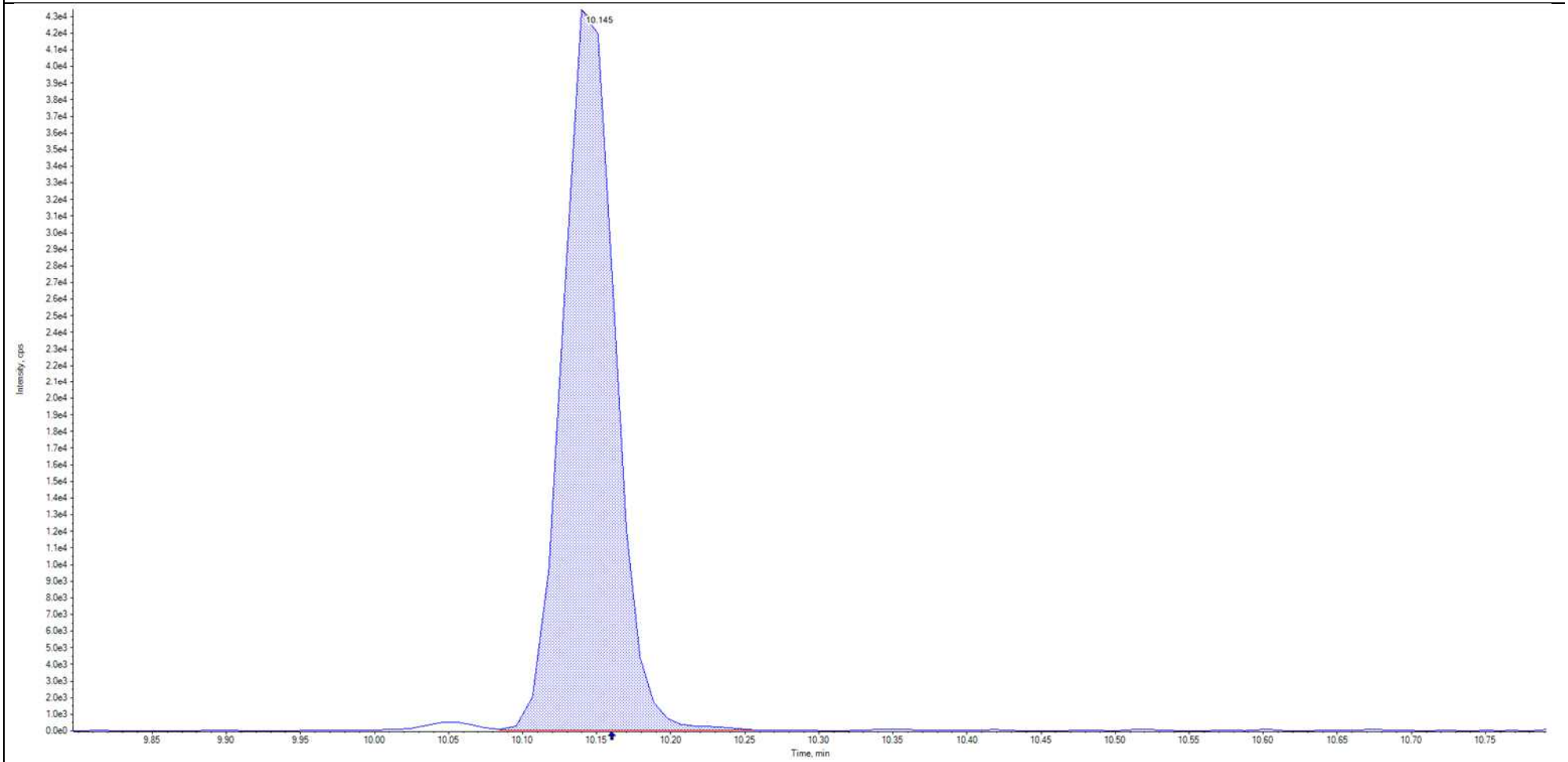
13C2-8:2FTS
Sample: WG1971858-1



13C8-PFOSA
Sample: WG1971858-1

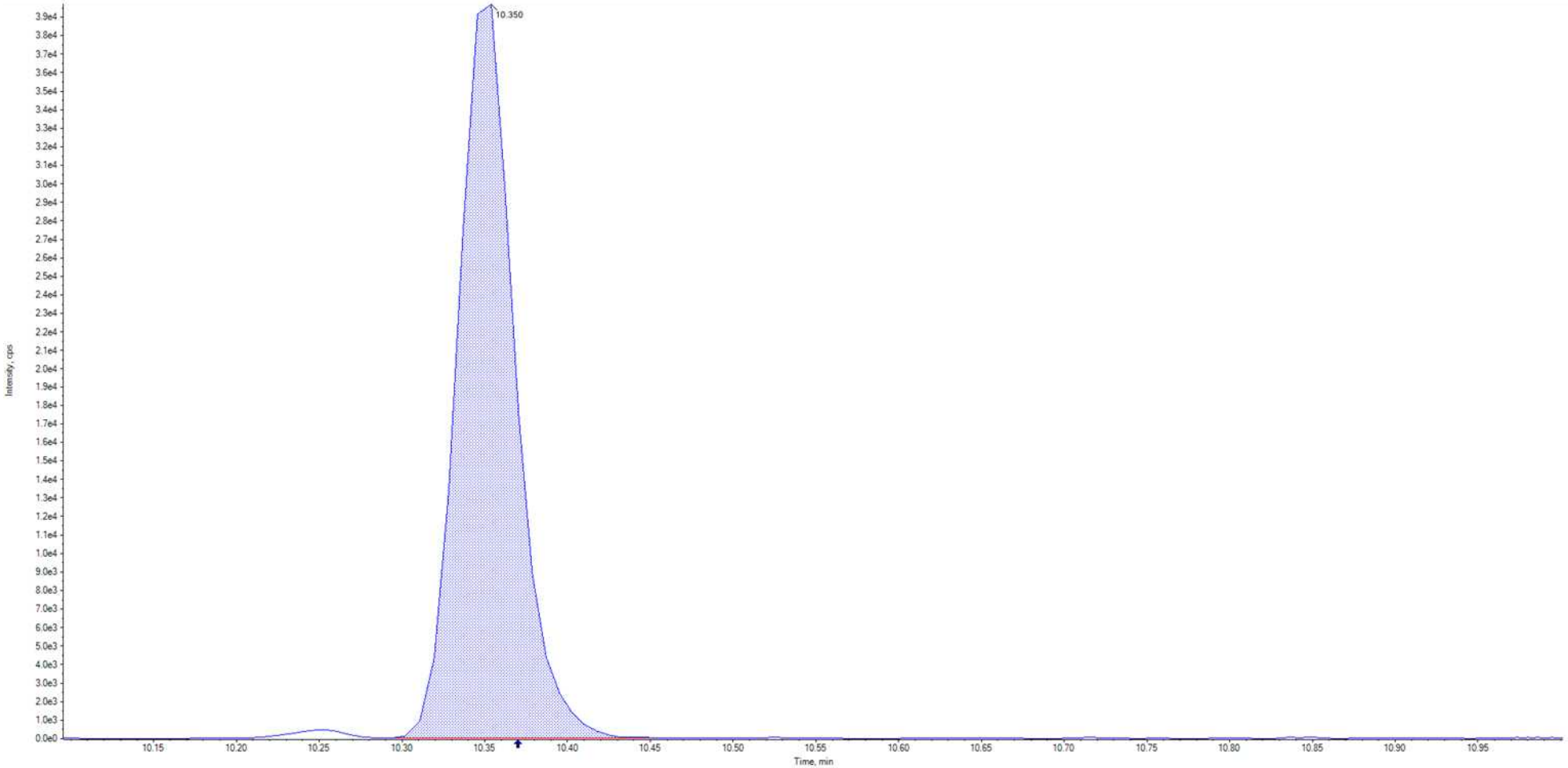


d3-NMeFOSA
Sample: WG1971858-1

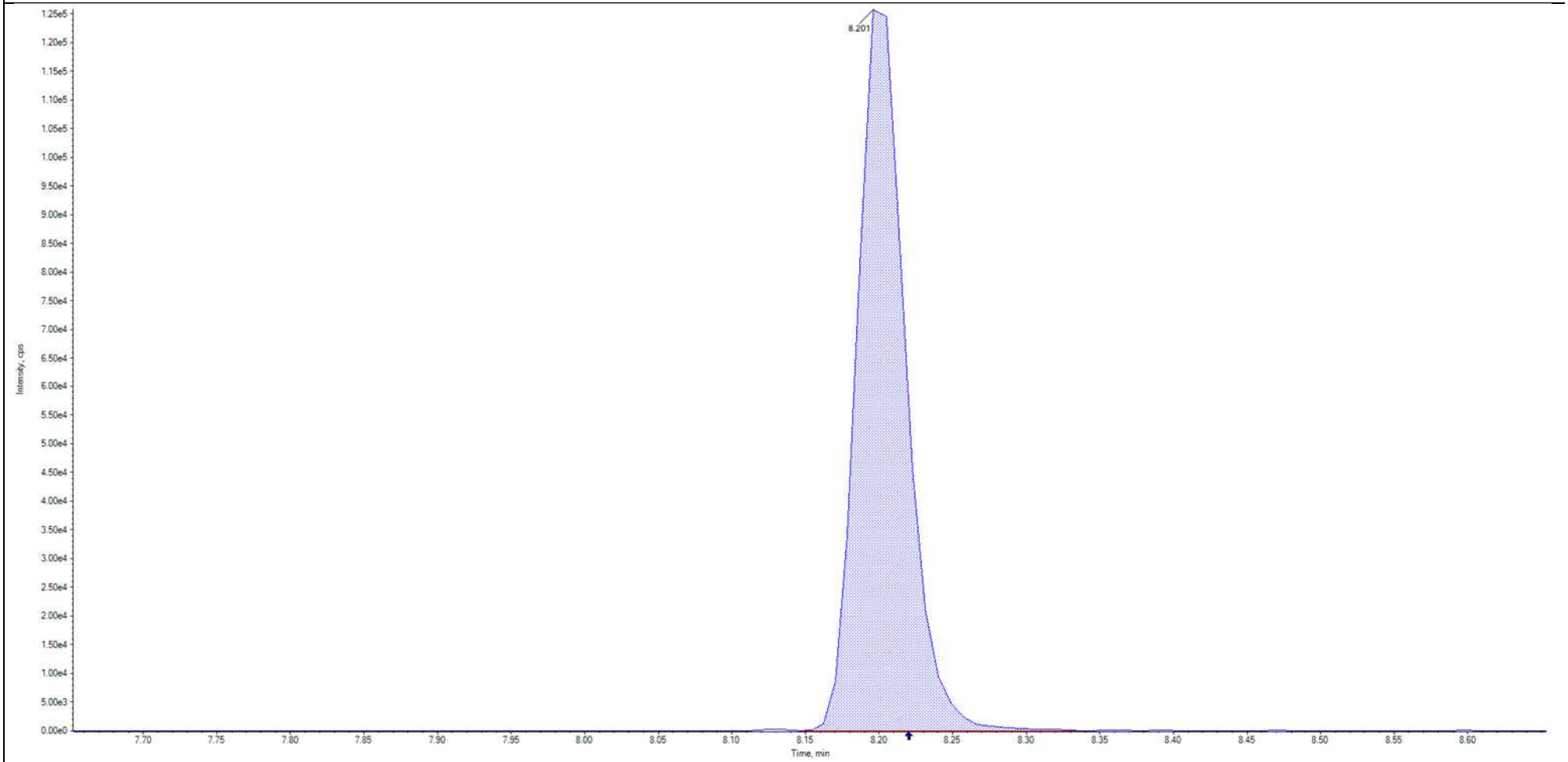


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

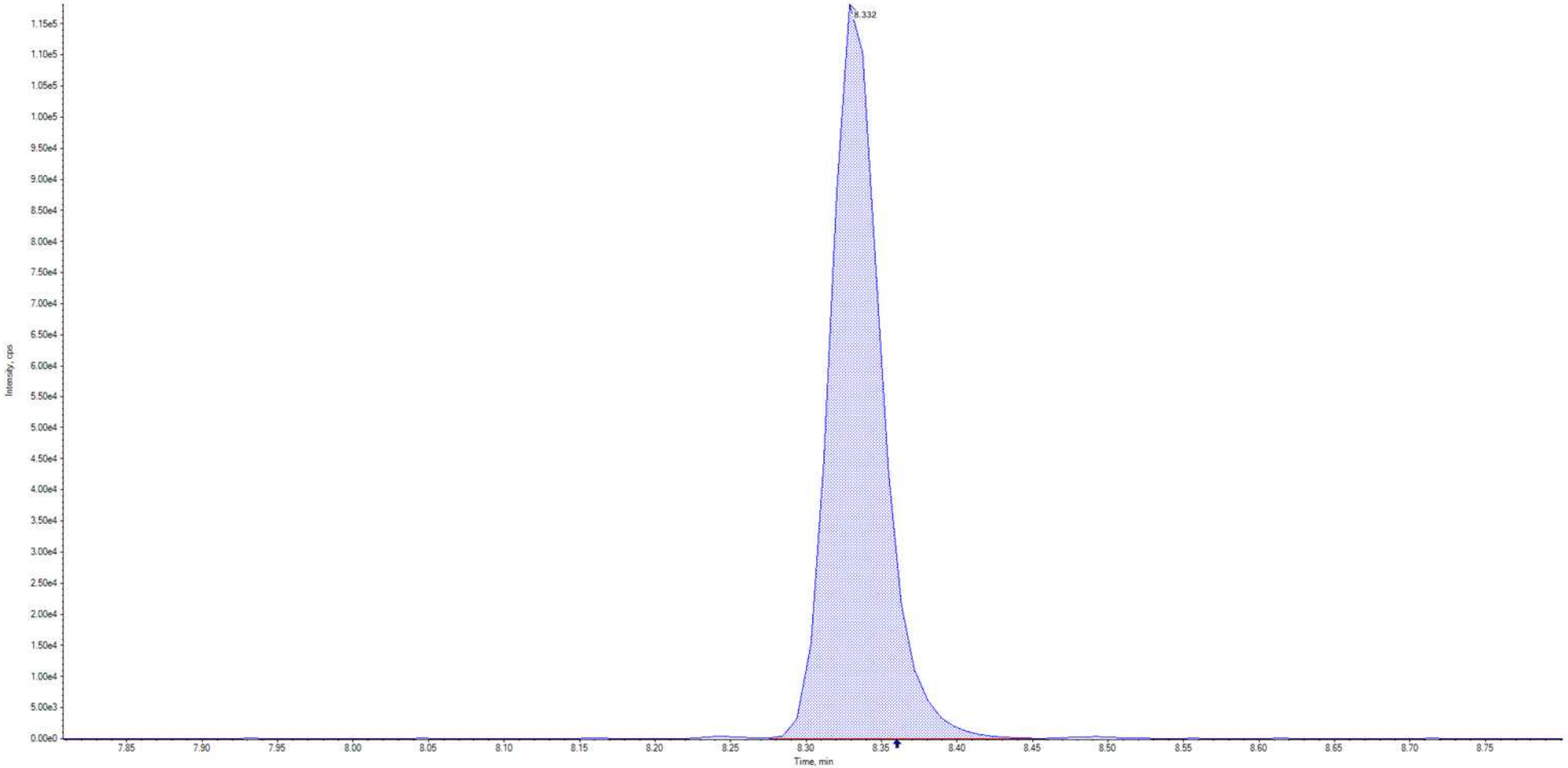
d5-NEtFOSA
Sample: WG1971858-1



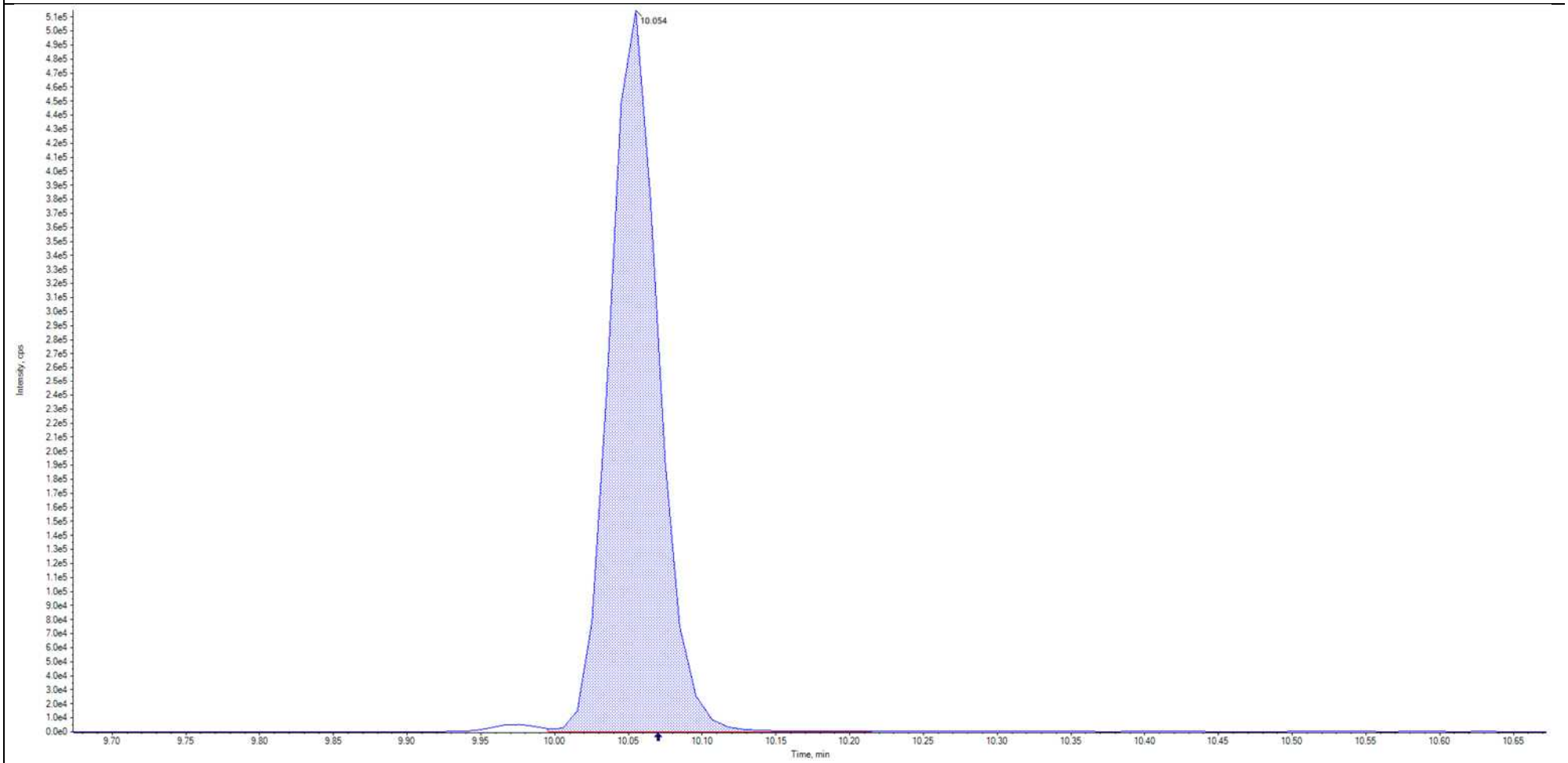
d3-NMeFOSAA
Sample: WG1971858-1



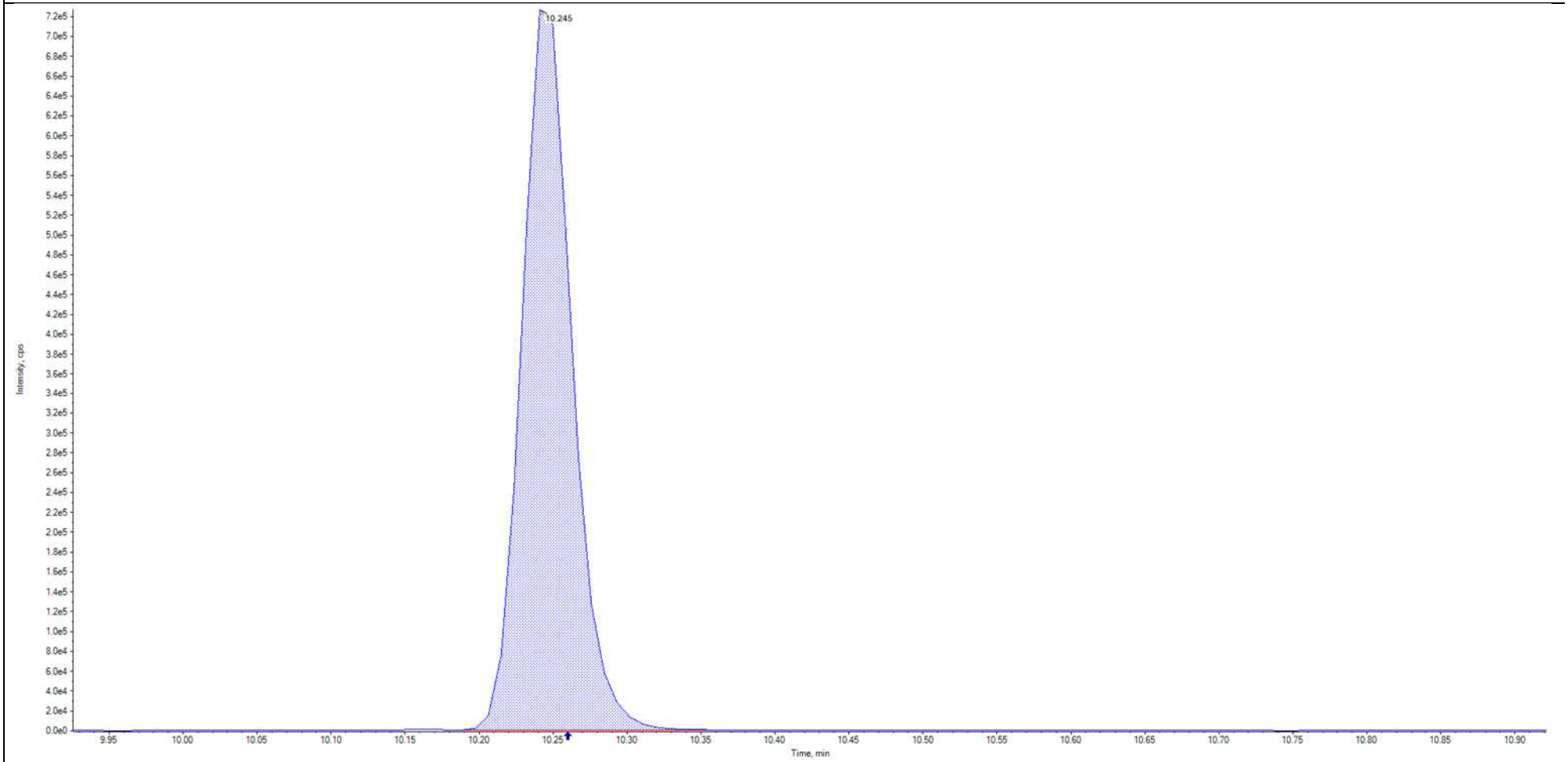
d5-NEtFOSAA
Sample: WG1971858-1



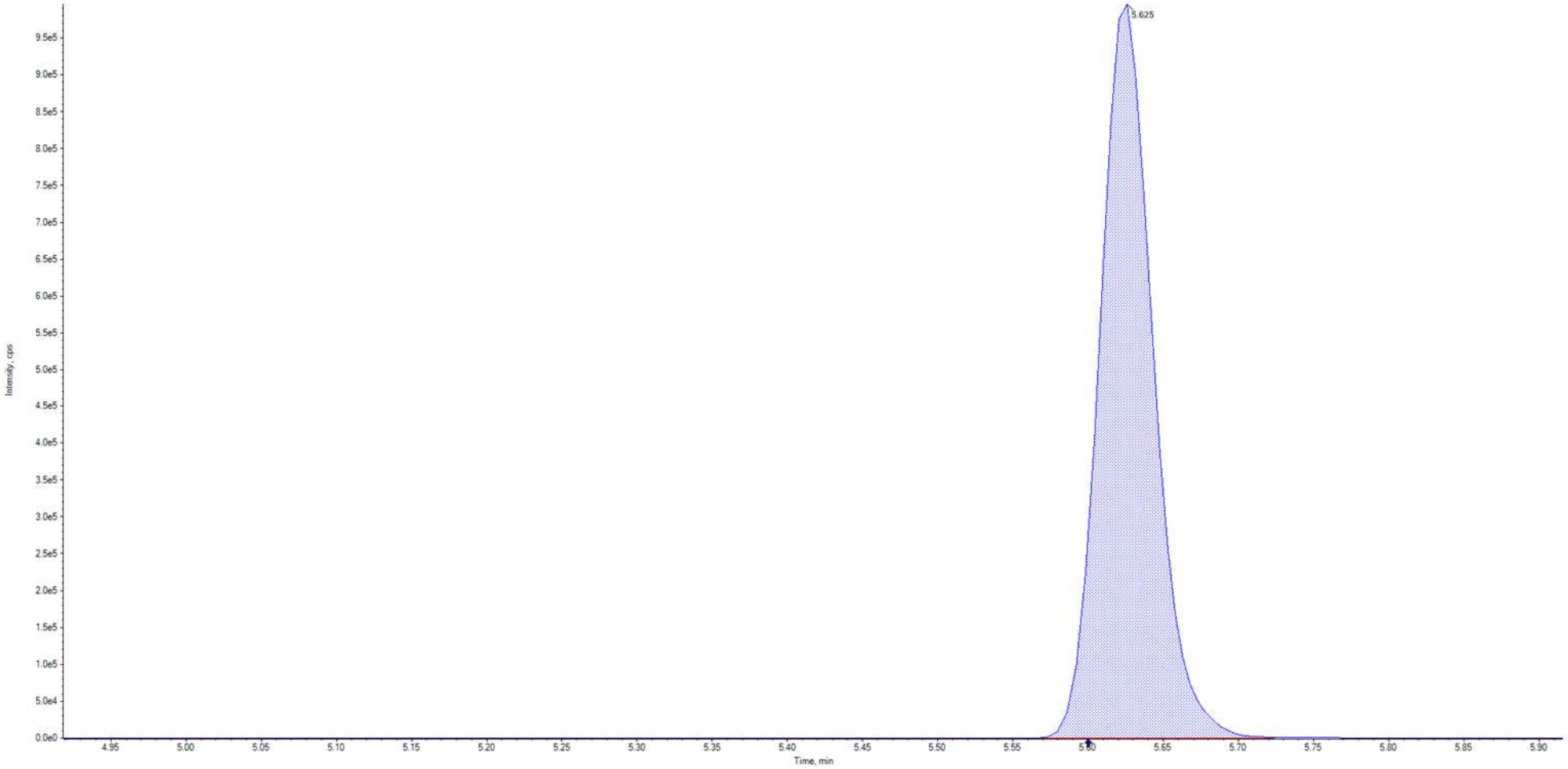
d7-NMeFOSE
Sample: WG1971858-1



d9-NEtFOSE
Sample: WG1971858-1

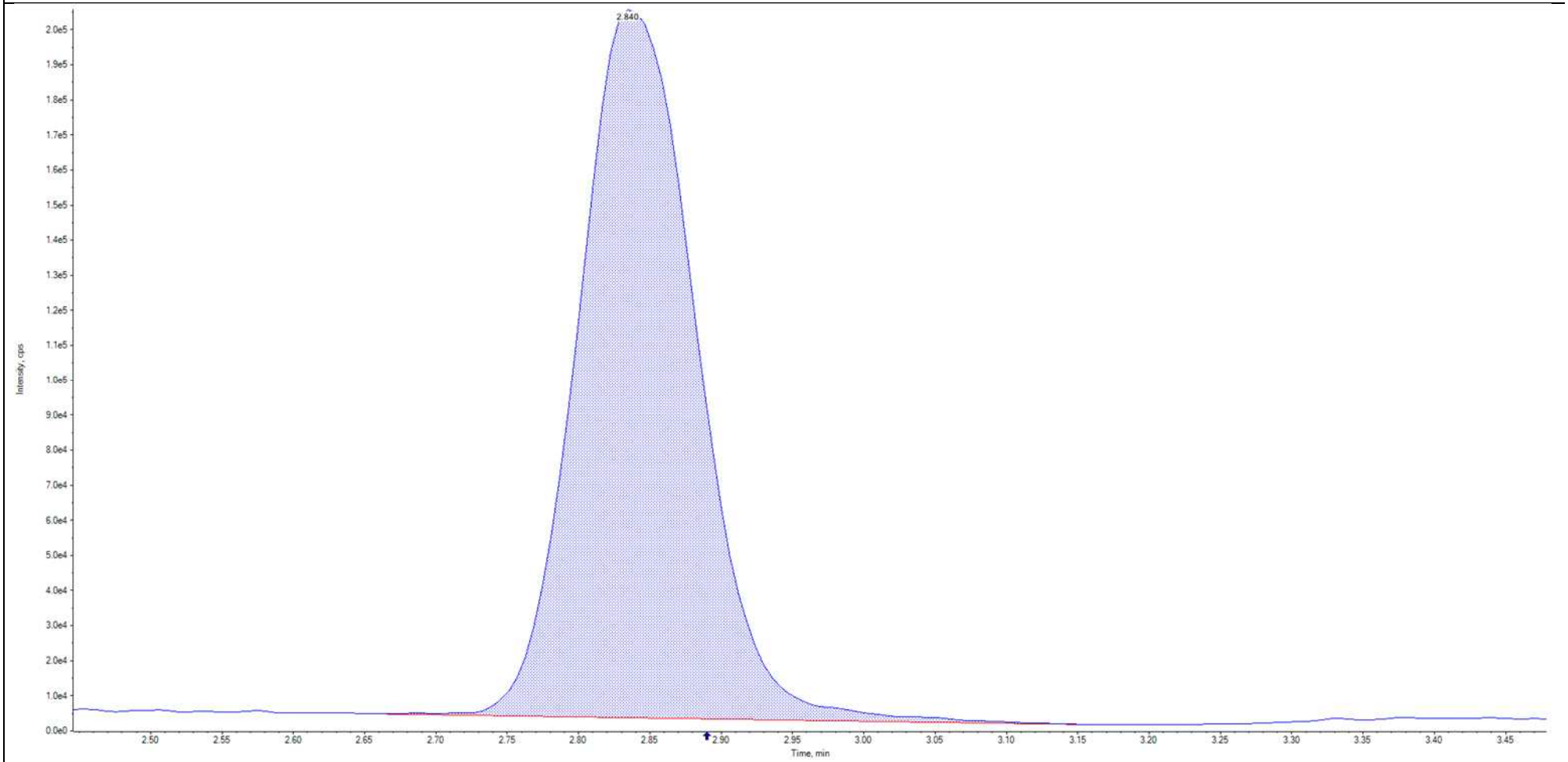


13C3-HFPO-DA
Sample: WG1971858-1

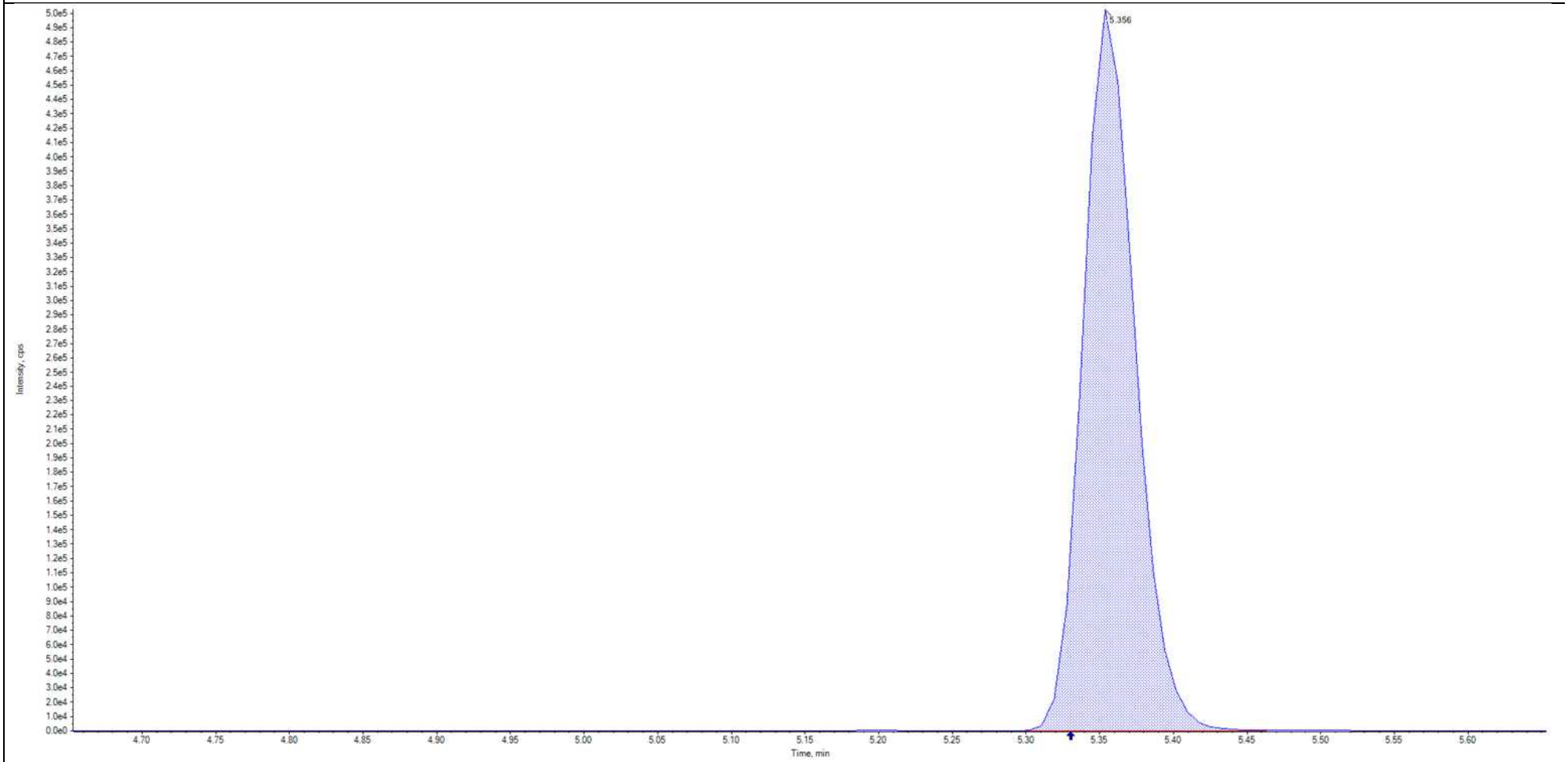


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_15.wiff
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Generated: 9/17/2024 6:15:27 AM

13C3-PFBA
Sample: WG1971858-1

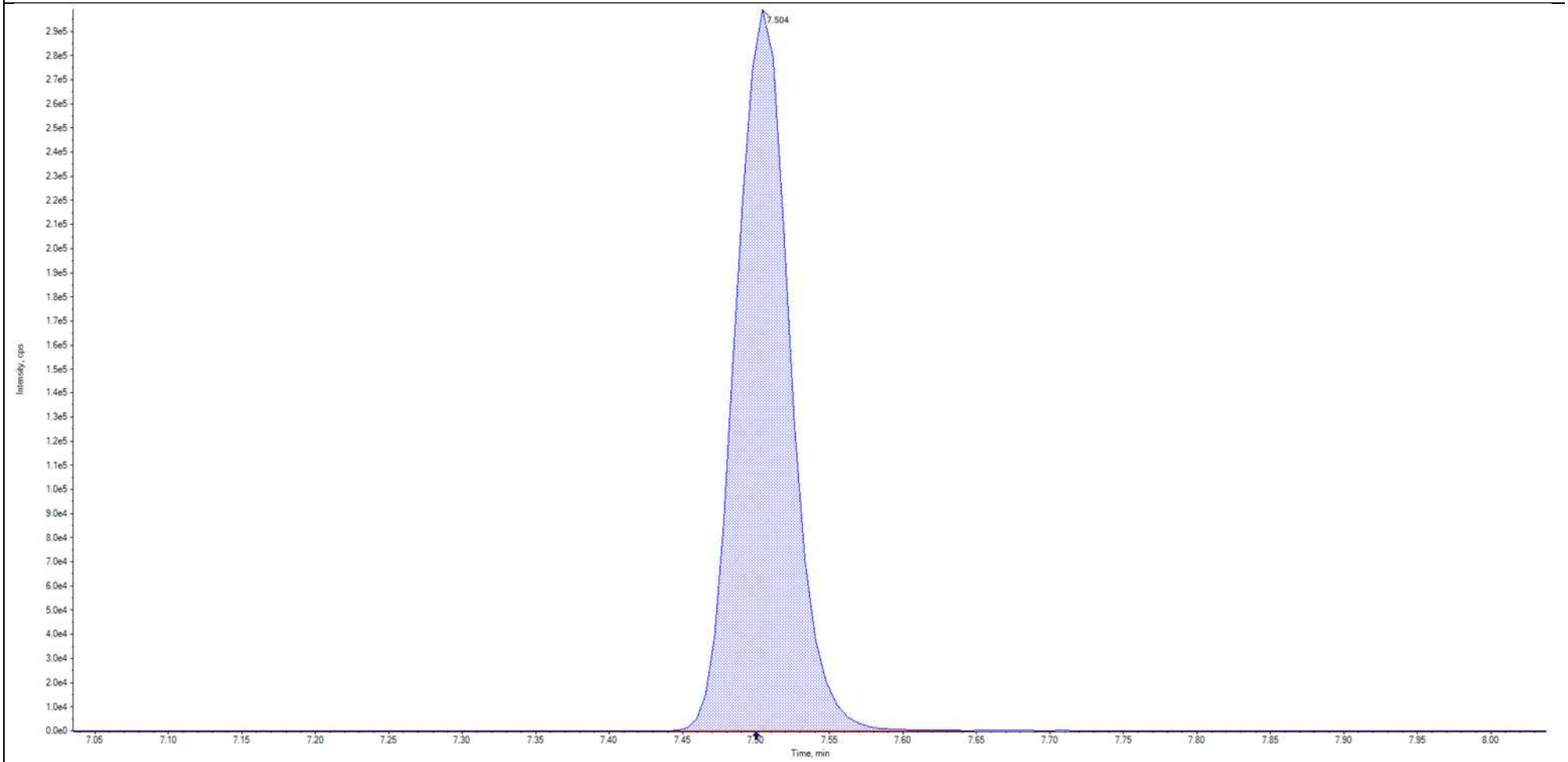


13C2-PFHxA
Sample: WG1971858-1

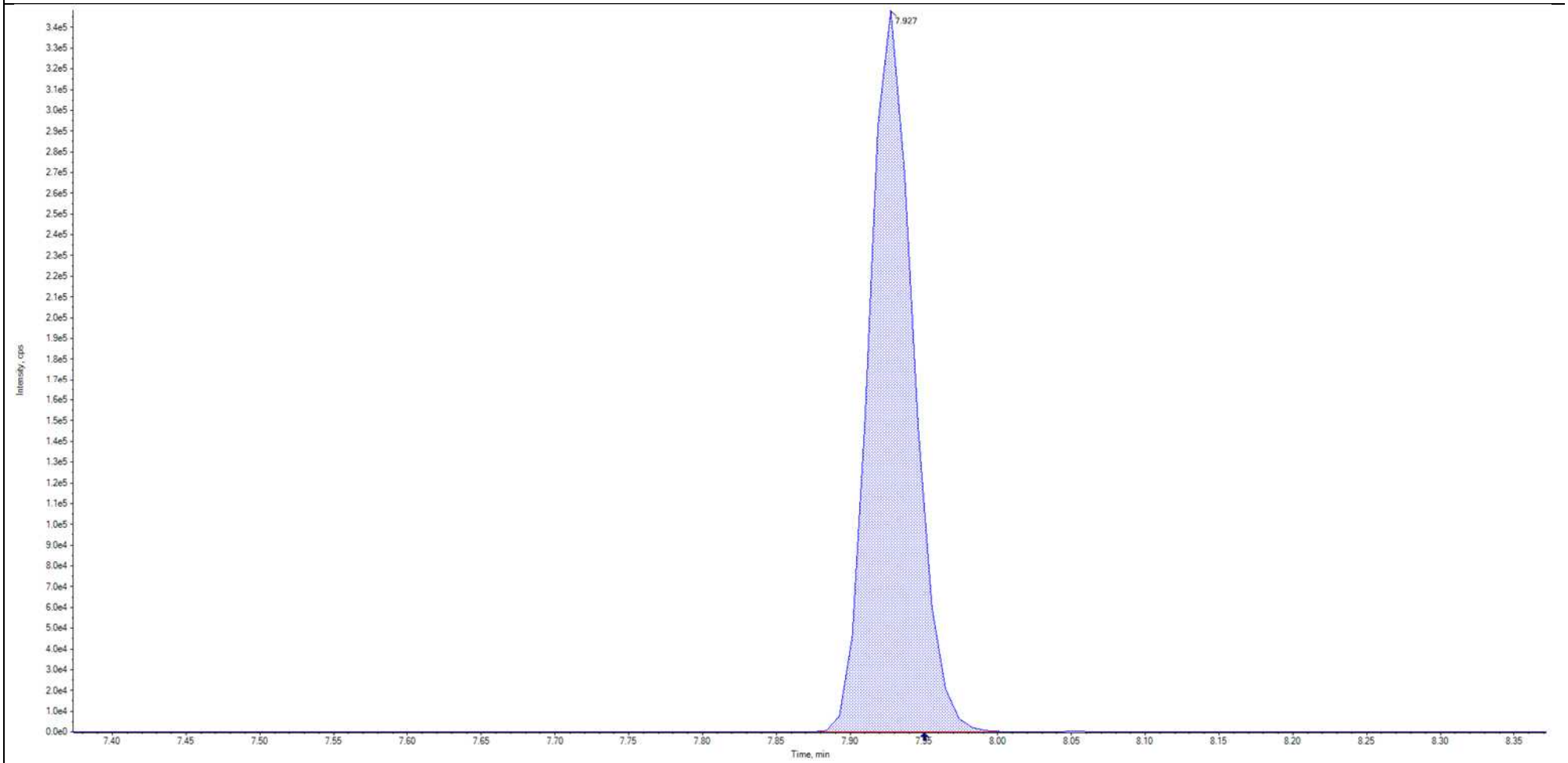


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13C4-PFOA
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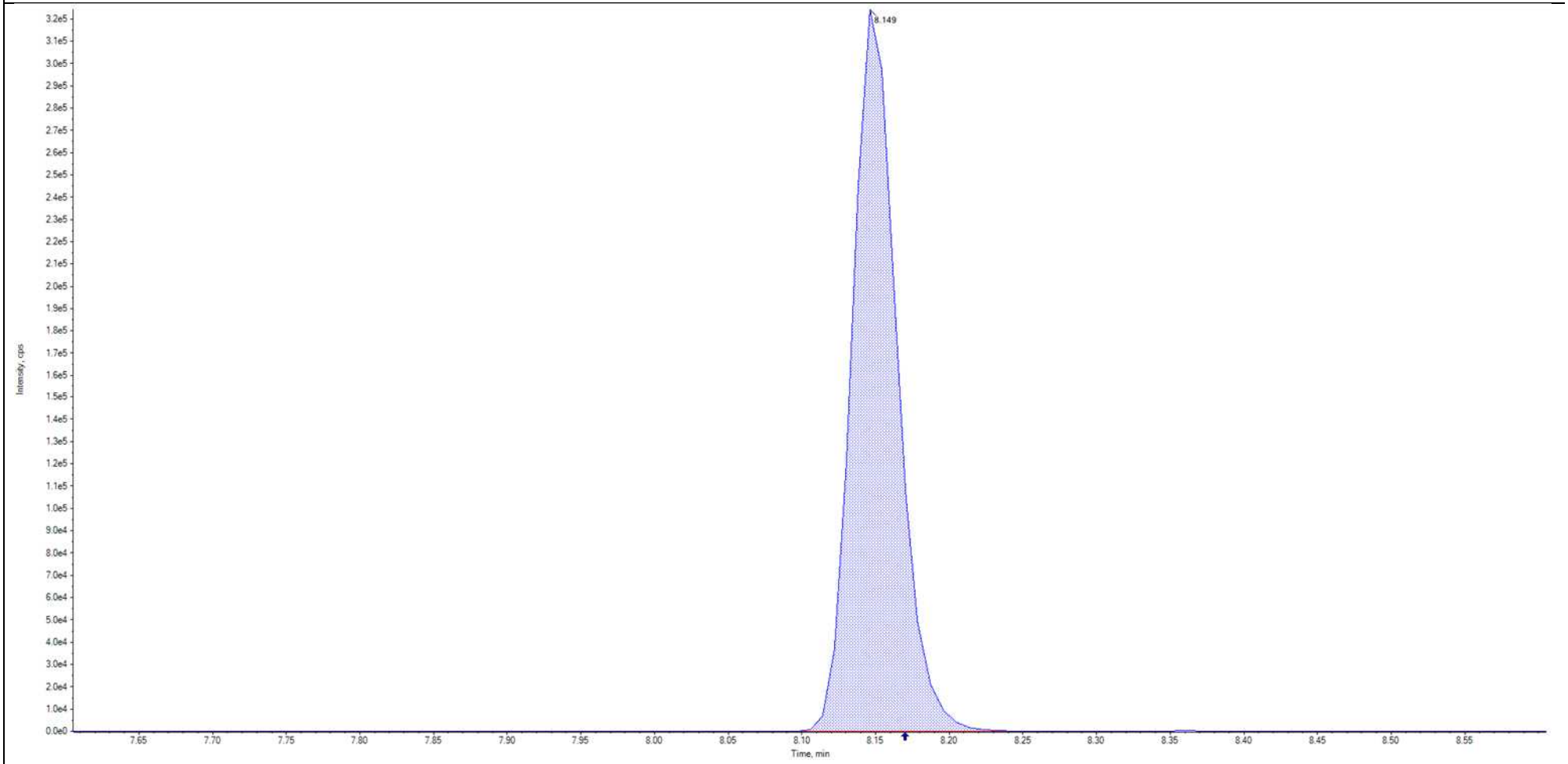


13C5-PFNA
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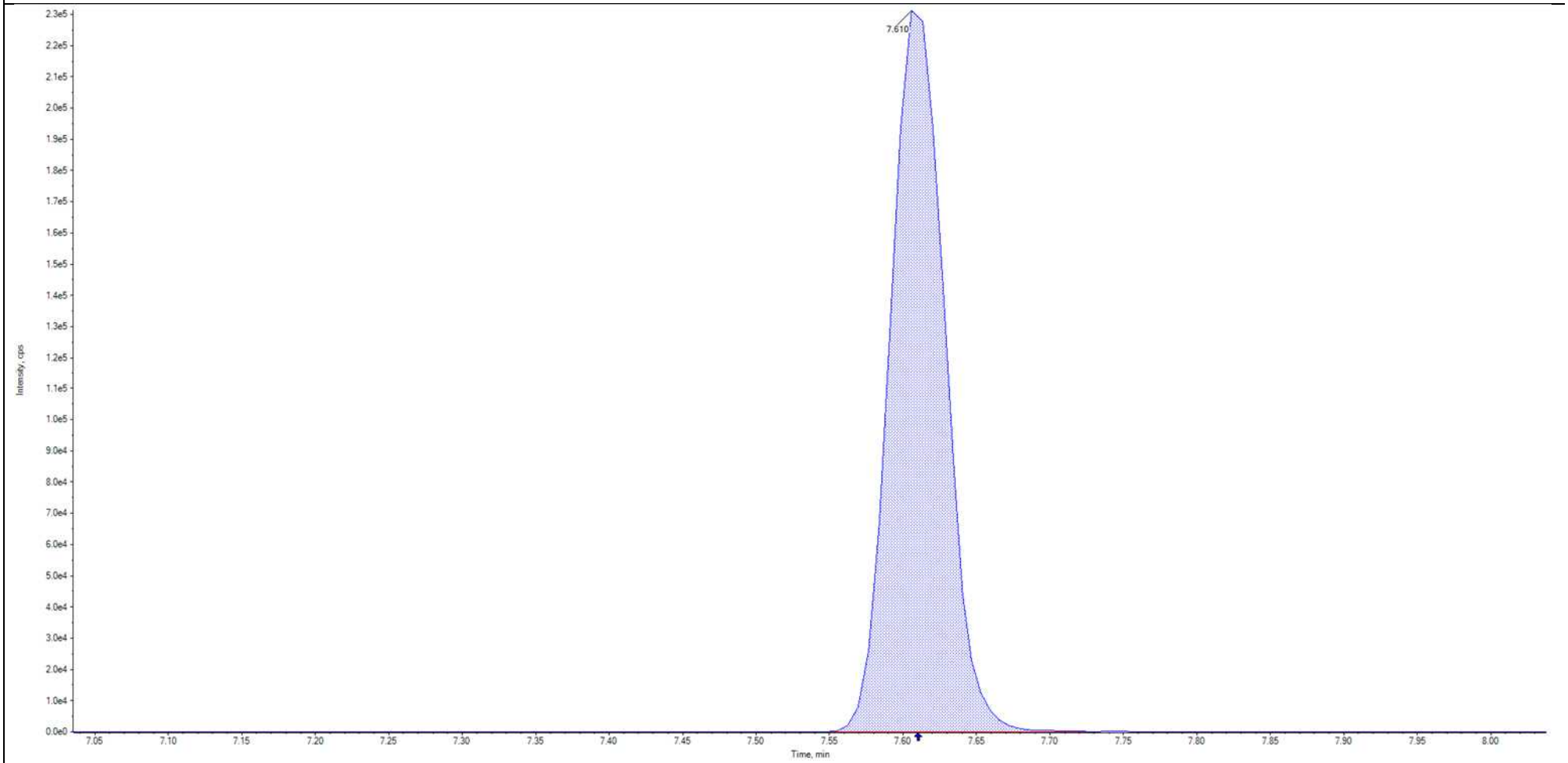
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13C2-PFDA
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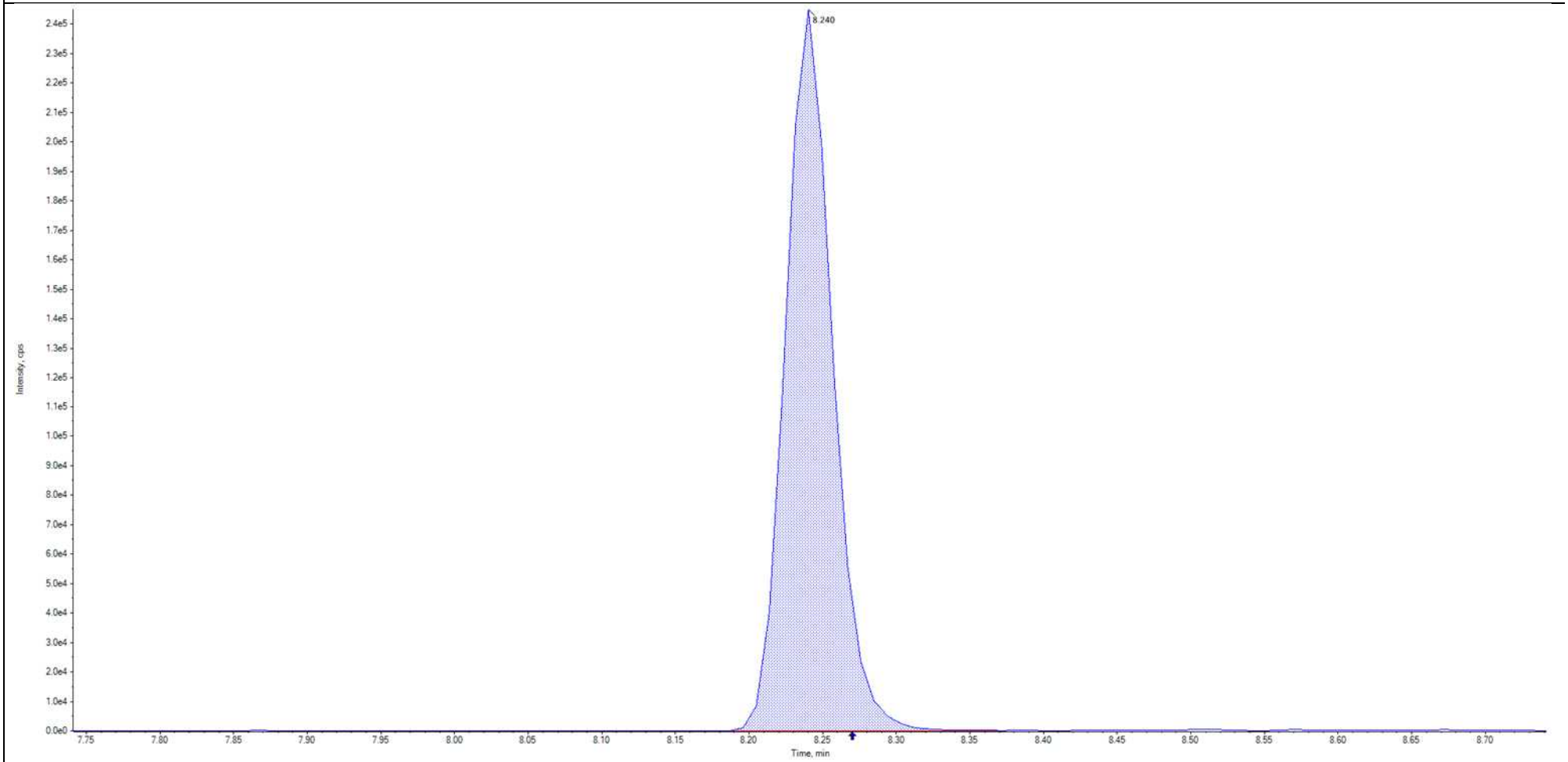
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18O2-PFHxS
Sample: WG1971858-1



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13C4-PFOS
Sample: WG1971858-1



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User: LCMS05:AC

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	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
1	PFBA	375-22-4	2.84	213.0 / 169.0	339269		1.876	N/A	N/A	N/A	117.3
2	PFPeA	2706-90-3	4.68	263.0 / 219.0	292499		1.070	0.007	0.007	N/A	133.7
3	PFPeA_2	2706-90-3	4.68	263.0 / 68.9	1917		0.993	0.007	0.007	N/A	124.1
4	PFHxA	307-24-4	5.37	313.0 / 269.0	193263		0.467	0.073	0.072	Pass	116.8
5	PFHxA_2	307-24-4	5.37	313.0 / 119.0	14087		0.461	0.073	0.072	Pass	115.2
6	PFHpA	375-85-9	6.30	363.1 / 319.0	187247		0.482	0.318	0.297	Pass	120.5
7	PFHpA_2	375-85-9	6.30	363.1 / 169.0	59577		0.501	0.318	0.297	Pass	125.3

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
8	PFOA	335-67-1	7.52	413.1 / 369.1	125876	M5	0.484	0.535	0.586	Pass	121.0
9	PFOA_2	335-67-1	7.52	413.1 / 169.0	67293	M7	0.472	0.535	0.586	Pass	118.1
10	PFNA	375-95-1	7.94	462.8 / 418.9	172421	M5	0.500	0.330	0.313	Pass	124.9
11	PFNA_2	375-95-1	7.94	462.8 / 218.9	56899	M7	0.539	0.330	0.313	Pass	134.9
12	PFDA	335-76-2	8.16	513.1 / 469.1	185059		0.488	0.171	0.142	Pass	122.0
13	PFDA_2	335-76-2	8.16	513.1 / 219.0	31619		0.556	0.171	0.142	Pass	139.0
14	PFUnA	2058-94-8	8.43	563.1 / 519.1	140630		0.497	0.200	0.194	Pass	124.3
15	PFUnA_2	2058-94-8	8.43	563.1 / 269.0	28061		0.512	0.200	0.194	Pass	128.1
16	PFDoA	307-55-1	8.84	613.1 / 569.1	138517		0.364	0.164	0.167	Pass	91.0
17	PFDoA_2	307-55-1	8.84	613.1 / 319.0	22652		0.352	0.164	0.167	Pass	88.1
18	PFTrDA	72629-94-8	9.41	663.1 / 619.1	82131		0.362	0.209	0.228	Pass	90.6
19	PFTrDA_2	72629-94-8	9.41	663.1 / 169.0	17143	M7	0.339	0.209	0.228	Pass	84.9
20	PFTeDA	376-06-7	9.86	713.1 / 669.1	142291		0.486	0.130	0.137	Pass	121.5
21	PFTeDA_2	376-06-7	9.86	713.1 / 169.0	18529		0.463	0.130	0.137	Pass	115.6
22	PFBS	375-73-5	5.35	299.1 / 80.1	113479		0.399	0.405	0.396	Pass	112.4

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
23	PFBS_2	375-73-5	5.35	299.1 / 99.1	45999		0.405	0.405	0.396	Pass	114.2
24	PFPeS	2706-91-4	6.39	349.1 / 80.1	98651		0.444	0.309	0.299	Pass	117.8
25	PFPeS_2	2706-91-4	6.38	349.1 / 99.1	30520		0.455	0.309	0.299	Pass	120.9
26	PFHxS	355-46-4	7.62	399.1 / 80.1	94736	M5	0.455	0.318	0.315	Pass	124.5
27	PFHxS_2	355-46-4	7.62	399.1 / 99.1	30108	M7	0.466	0.318	0.315	Pass	127.4
28	PFHpS	375-92-8	8.00	449.1 / 80.1	91299		0.443	0.292	0.287	Pass	116.2
29	PFHpS_2	375-92-8	8.00	449.1 / 99.1	26648	M7	0.441	0.292	0.287	Pass	115.7
30	PFOS	1763-23-1	8.25	499.1 / 80.1	98065	M5	0.447	0.261	0.238	Pass	120.4
31	PFOS_2	1763-23-1	8.25	499.1 / 99.1	25597	M7	0.476	0.261	0.238	Pass	128.2
32	PFNS	68259-12-1	8.58	549.1 / 80.1	66364		0.471	0.300	0.301	Pass	122.4
33	PFNS_2	68259-12-1	8.58	549.1 / 99.1	19890		0.466	0.300	0.301	Pass	121.1
34	PFDS	335-77-3	9.06	599.1 / 80.1	56449		0.407	0.292	0.275	Pass	105.4
35	PFDS_2	335-77-3	9.06	599.1 / 99.1	16460		0.430	0.292	0.275	Pass	111.4
36	PFDoS	79780-39-5	9.96	699.2 / 80.1	54426		0.428	0.262	0.274	Pass	110.3
37	PFDoS_2	79780-39-5	9.96	699.2 / 99.1	14234		0.407	0.262	0.274	Pass	105.0

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
38	4:2FTS	757124-72-4	5.17	327.1 / 307.1	163021		1.685	0.509	0.516	Pass	112.3
39	4:2FTS_2	757124-72-4	5.17	327.1 / 81.1	82921		1.602	0.509	0.516	Pass	106.8
40	6:2FTS	27619-97-2	7.14	427.2 / 407.2	98551		1.866	0.575	0.565	Pass	122.8
41	6:2FTS_2	27619-97-2	7.14	427.2 / 81.1	56687		1.984	0.575	0.565	Pass	130.5
42	8:2FTS	39108-34-4	8.06	527.2 / 507.2	136643		2.272	0.671	0.662	Pass	147.9
43	8:2FTS_2	39108-34-4	8.06	527.2 / 81.1	91662		2.247	0.671	0.662	Pass	146.3
44	PFOSA	754-91-6	9.52	498.1 / 78.1	96789	M5	0.472	0.022	0.025	Pass	118.0
45	PFOSA_2	754-91-6	9.52	498.1 / 478.0	2177	M7	0.404	0.022	0.025	Pass	101.1
46	NMeFOSA	31506-32-8	10.16	512.2 / 219.0	20243	M5	0.454	1.576	1.551	Pass	113.5
47	NMeFOSA_2	31506-32-8	10.12	512.2 / 169.0	31911	M7	0.462	1.576	1.551	Pass	115.4
48	NEtFOSA	4151-50-2	10.37	526.2 / 219.0	20343	M5	0.480	1.365	1.285	Pass	120.0
49	NEtFOSA_2	4151-50-2	10.33	526.2 / 169.0	27776	M7	0.490	1.365	1.285	Pass	122.4
50	NMeFOSAA	2355-31-9	8.21	570.2 / 419.1	17443	M4	0.519	0.885	0.700	Pass	129.8
51	NMeFOSAA_2	2355-31-9	8.20	570.2 / 483.0	15439	M7	0.723	0.885	0.700	Pass	180.7
52	NEtFOSAA	2991-50-6	8.34	584.2 / 419.1	24502		0.531	0.562	0.487	Pass	132.7

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
53	NEtFOSAA_2	2991-50-6	8.34	584.2 / 526.2	13764	M7	0.648	0.562	0.487	Pass	162.0
54	NMeFOSE	24448-09-7	10.07	616.1 / 58.9	476614	M5	4.405	N/A	N/A	N/A	110.1
55	NEtFOSE	1691-99-2	10.27	630.0 / 58.9	826368	M5	4.577	N/A	N/A	N/A	114.4
56	HFPO-DA	13252-13-6	5.64	285.0 / 169.0	423014		1.965	0.479	0.464	Pass	122.8
57	HFPO-DA_2	13252-13-6	5.64	285.0 / 184.9	202806		2.026	0.479	0.464	Pass	126.6
58	ADONA	919005-14-4	6.77	377.1 / 251.0	833238		1.702	0.694	0.634	Pass	112.6
59	ADONA_2	919005-14-4	6.77	377.1 / 84.8	578319		1.826	0.694	0.634	Pass	120.8
60	9Cl-PF3ONS	756426-58-1	8.46	530.8 / 351.1	874893		1.812	0.317	0.322	Pass	121.2
61	9Cl-PF3ONS_2	756426-58-1	8.46	532.8 / 353.0	276973		1.762	0.317	0.322	Pass	117.8
62	11Cl-PF3OUdS	763051-92-9	9.48	630.9 / 451.0	496686		1.629	0.328	0.331	Pass	107.7
63	11Cl-PF3OUdS_2	763051-92-9	9.48	632.9 / 452.9	163048		1.589	0.328	0.331	Pass	105.1
64	3:3FTCA	356-02-5	4.96	241.1 / 177.1	61460		2.591	0.767	1.074	Pass	129.6
65	3:3FTCA_2	356-02-5	4.96	241.1 / 117.0	47153		1.985	0.767	1.074	Pass	99.2
66	5:3FTCA	914637-49-3	7.23	341.1 / 237.1	761319		10.141	0.933	0.953	Pass	101.4
67	5:3FTCA_2	914637-49-3	7.22	341.1 / 217.0	710070		9.996	0.933	0.953	Pass	100.0

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
68	7:3FTCA	812-70-4	8.20	441.1 / 316.9	460270		5.507	2.028	1.558	Pass	55.1
69	7:3FTCA_2	812-70-4	8.20	441.1 / 337.1	933553		7.698	2.028	1.558	Pass	77.0
70	PFEESA	113507-82-7	5.75	315.1 / 135.0	633987		0.883	0.085	0.087	Pass	124.0
71	PFEESA_2	113507-82-7	5.75	315.1 / 82.9	53664		0.865	0.085	0.087	Pass	121.5
72	PFMPA	377-73-1	3.90	229.0 / 85.0	35700		1.079	N/A	N/A	N/A	134.8
73	PFMBA	863090-89-5	4.91	279.0 / 85.0	410119		0.919	N/A	N/A	N/A	114.9
74	NFDHA	151772-58-6	5.29	295.0 / 201.0	76119		1.007	0.952	0.910	Pass	125.9
75	NFDHA_2	151772-58-6	5.29	295.0 / 84.9	72452		1.046	0.952	0.910	Pass	130.7
76	TDCA	516-50-7	N/A	499.1 / 124.1	N/A		N/A	N/A	40.716	N/A	N/A
77	TDCA_2	516-50-7	N/A	499.1 / 79.9	N/A		N/A	N/A	40.716	N/A	N/A
78	13C2D4-4:2FTS	Surr	N/A	333.2 / 312.1	N/A		N/A	N/A	N/A	N/A	N/A
79	13C2-PFOA	Surr	N/A	415.0 / 370.0	N/A		N/A	N/A	N/A	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C4-PFBA	EIS	2.84	217.0 / 172.0	2229482		8.591	NA	NA	NA	85.9

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C5-PFPeA	EIS	4.67	268.0 / 223.0	1483008		4.674	NA	NA	NA	93.5
	13C5-PFHxA	EIS	5.36	318.0 / 273.0	849075		2.037	NA	NA	NA	81.5
	13C4-PFHpA	EIS	6.30	367.0 / 322.0	829028		1.987	NA	NA	NA	79.5
	13C8-PFOA	EIS	7.52	421.0 / 376.0	1249480		2.252	NA	NA	NA	90.1
	13C9-PFNA	EIS	7.93	472.0 / 427.0	589453		1.036	NA	NA	NA	82.9
	13C6-PFDA	EIS	8.15	519.0 / 474.0	550218		0.989	NA	NA	NA	79.1
	13C7-PFUnA	EIS	8.43	570.0 / 525.0	447322		0.994	NA	NA	NA	79.5

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C2-PFDoA	EIS	8.83	615.1 / 570.0	365793		1.249	NA	NA	NA	100.0
	13C2-PFTeDA	EIS	9.85	715.1 / 670.1	292198		0.919	NA	NA	NA	73.5
	13C3-PFBS	EIS	5.34	302.1 / 80.1	678520		1.962	NA	NA	NA	84.2
	13C3-PFHxS	EIS	7.62	402.1 / 80.1	521489		1.898	NA	NA	NA	80.1
	13C8-PFOS	EIS	8.24	507.1 / 80.1	534366		1.795	NA	NA	NA	74.9
	13C2-4:2FTS	EIS	5.16	329.1 / 81.1	231554		3.751	NA	NA	NA	80.0
	13C2-6:2FTS	EIS	7.14	429.2 / 81.1	153105		3.385	NA	NA	NA	71.2
	13C2-8:2FTS	EIS	8.05	529.2 / 81.1	227761		3.440	NA	NA	NA	71.7

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C8-PFOSA	EIS	9.51	506.1 / 78.1	767349		1.939	NA	NA	NA	77.6
	d3-NMeFOSA	EIS	10.15	515.2 / 219.0	104130		1.563	NA	NA	NA	62.5
	d5-NEtFOSA	EIS	10.36	531.2 / 219.0	96488		1.482	NA	NA	NA	59.3
	d3-NMeFOSAA	EIS	8.20	573.2 / 419.1	255280		1.695	NA	NA	NA	33.9
	d5-NEtFOSAA	EIS	8.33	589.3 / 419.1	247546		3.127	NA	NA	NA	62.5
	d7-NMeFOSE	EIS	10.06	623.2 / 58.9	1096465		21.310	NA	NA	NA	85.2
	d9-NEtFOSE	EIS	10.25	639.2 / 58.9	1538180		20.277	NA	NA	NA	81.1

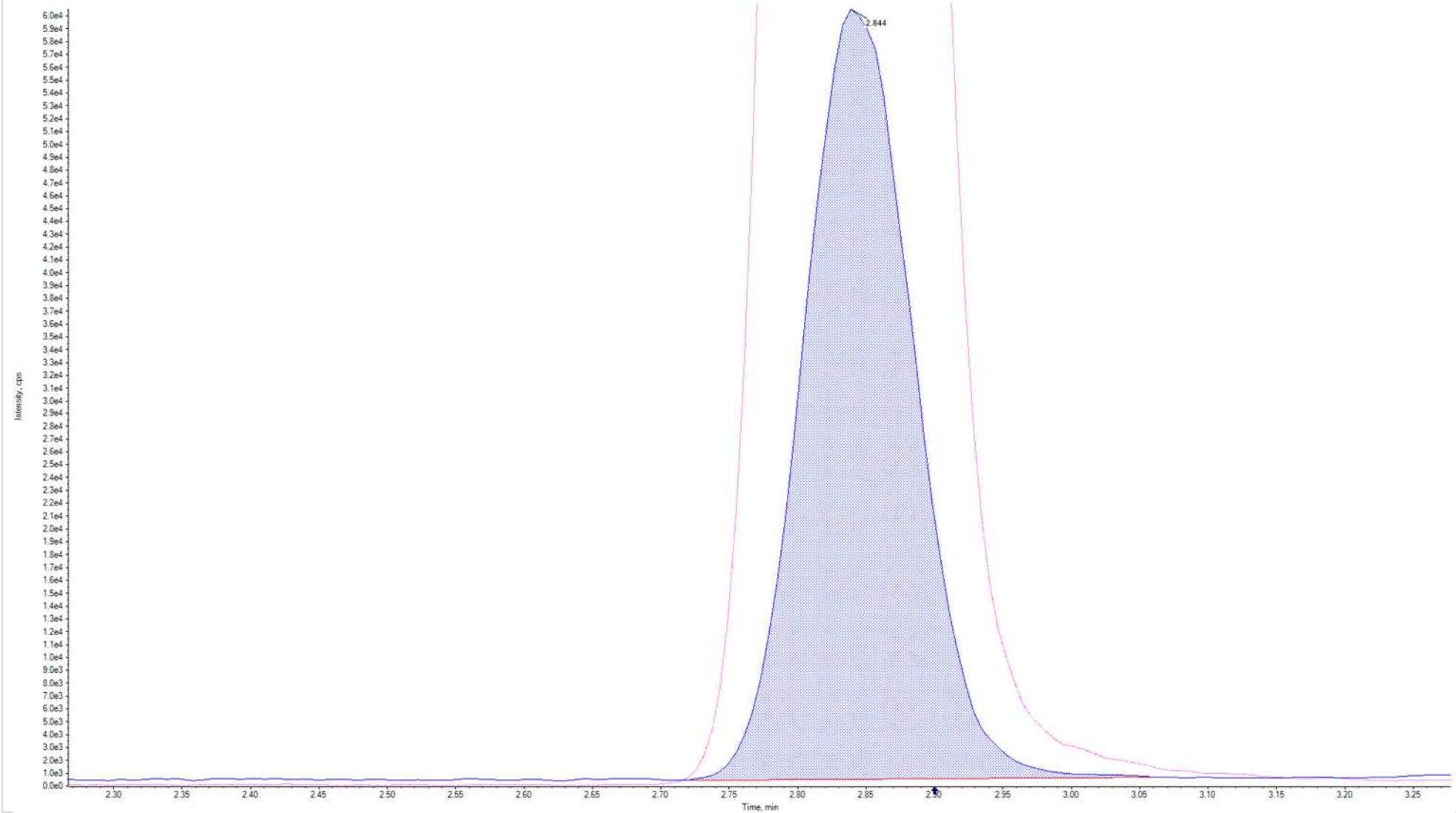
	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C3-HFPO-DA	EIS	5.63	287.0 / 169.0	2348180		8.501	NA	NA	NA	85.0
	13C3-PFBA	NIS	2.84	216.0 / 172.0	1135295		5.310	NA	NA	NA	106.2
	13C2-PFHxA	NIS	5.36	315.0 / 270.0	1237594		2.528	NA	NA	NA	101.1
	13C4-PFOA	NIS	7.52	417.0 / 372.0	725773		2.318	NA	NA	NA	92.7
	13C5-PFNA	NIS	7.93	468.0 / 423.0	693152		1.266	NA	NA	NA	101.2
	13C2-PFDA	NIS	8.15	515.1 / 470.1	653521		1.275	NA	NA	NA	102.0
	18O2-PFHxS	NIS	7.62	403.1 / 84.1	558386		2.383	NA	NA	NA	100.6
	13C4-PFOS	NIS	8.24	503.1 / 80.1	526616		2.501	NA	NA	NA	104.4

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	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec

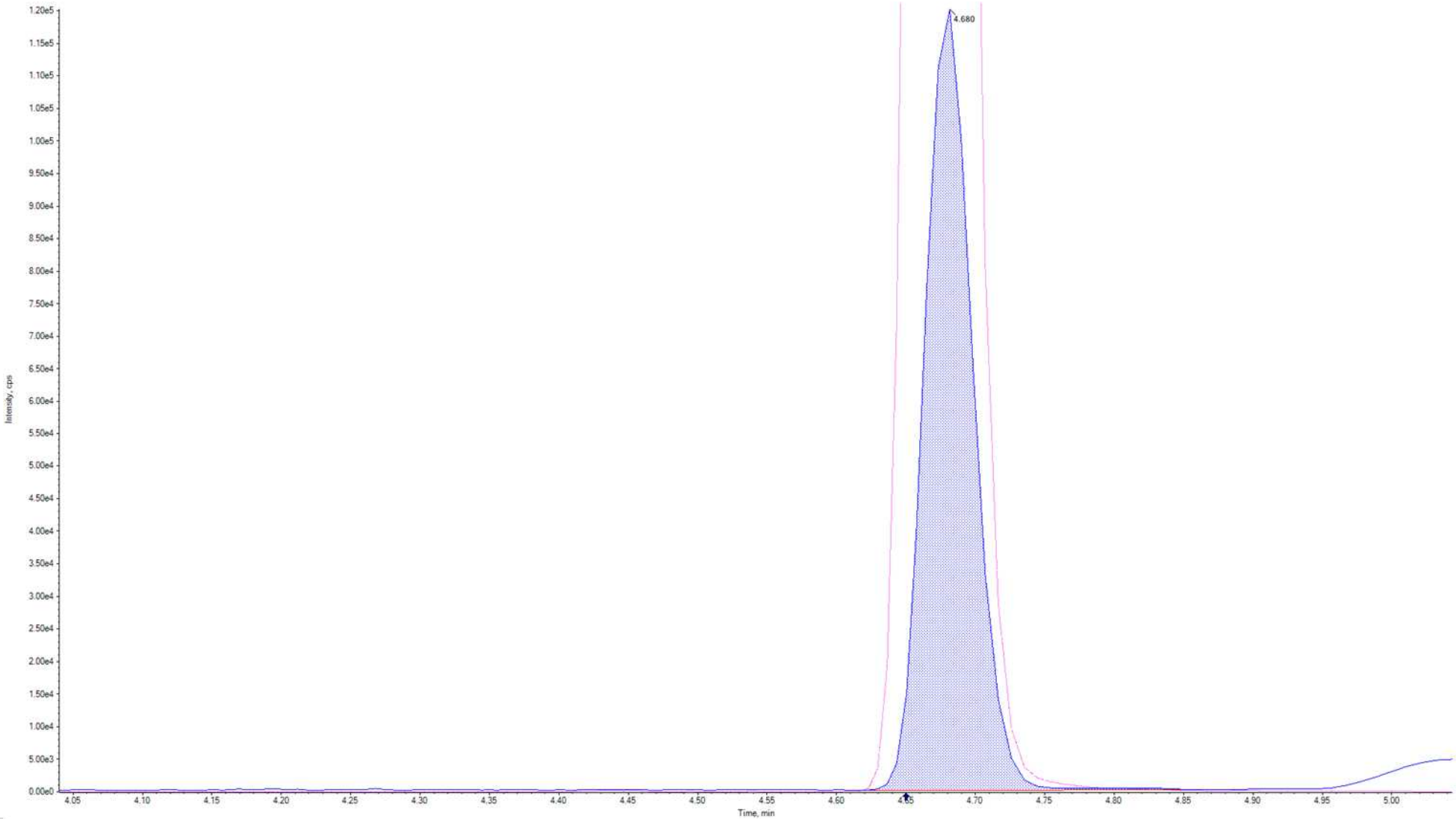
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PFBA
Sample: WG1971858-2 S/N:1144.8 Points Across peak:60



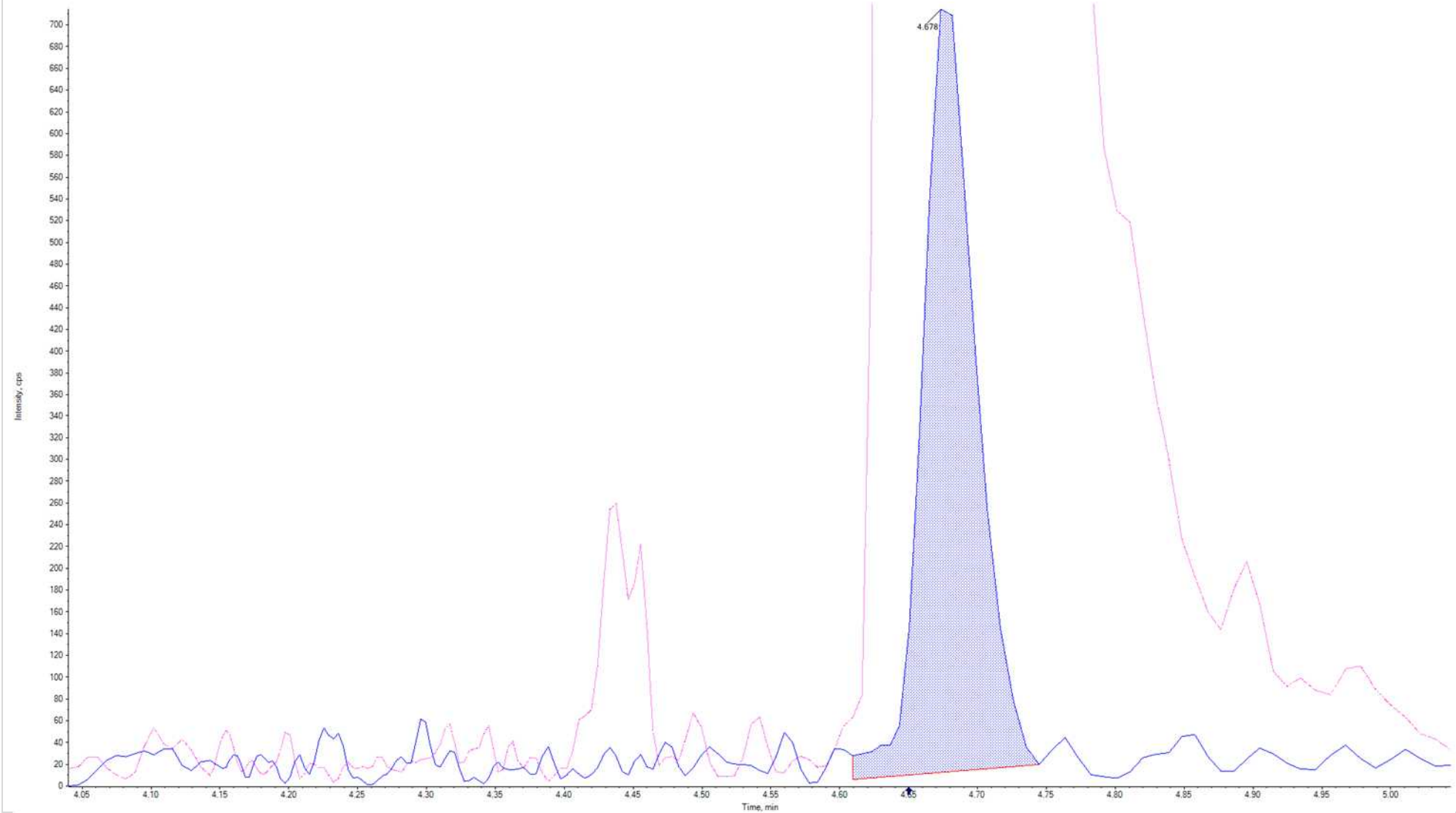
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PFPeA
Sample: WG1971858-2 S/N:1261.1 Points Across peak:31



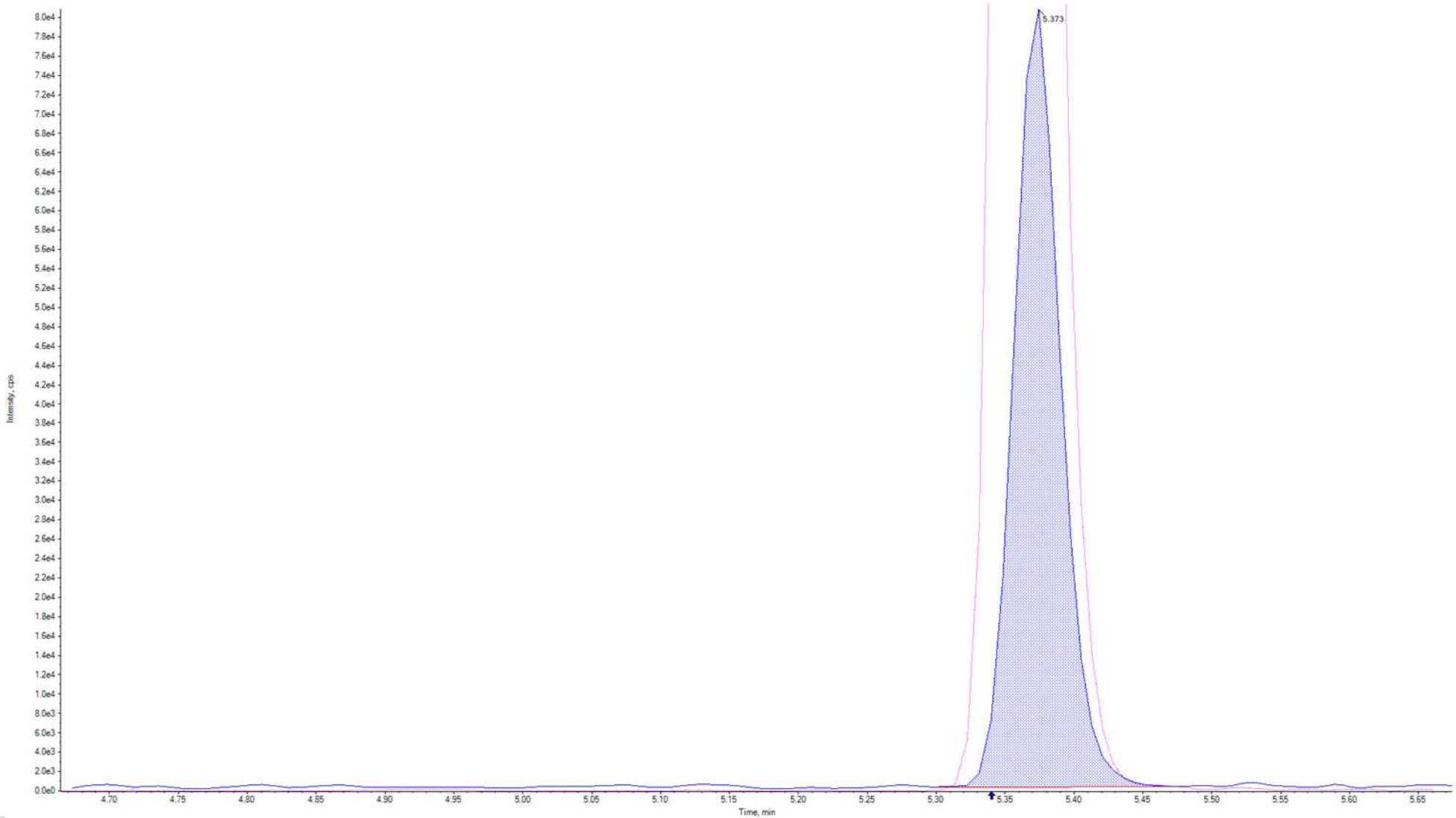
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFPeA_2
Sample: WG1971858-2 S/N:359.5 Points Across peak:18



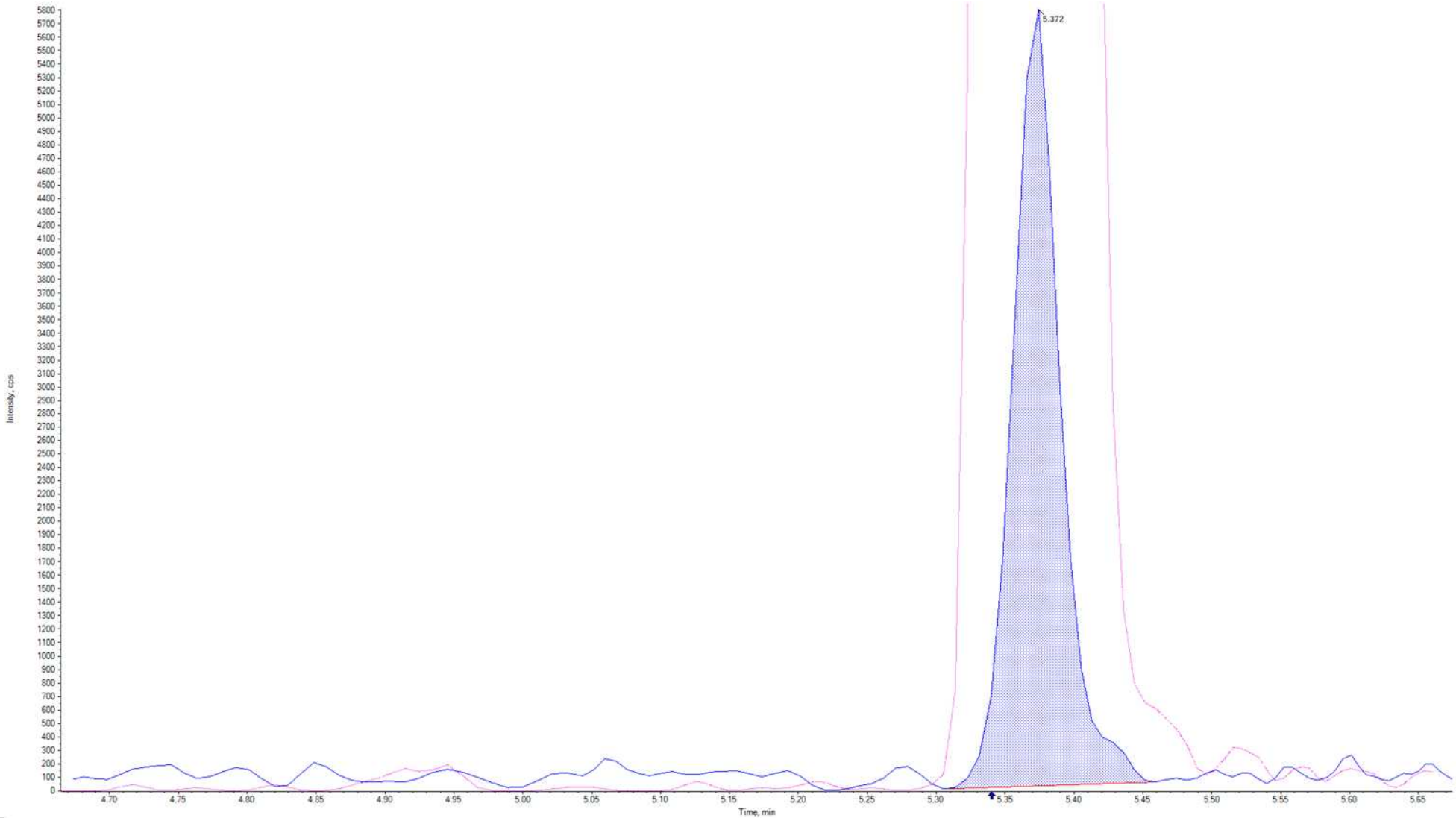
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHxA
Sample: WG1971858-2 S/N:718.6 Points Across peak:23



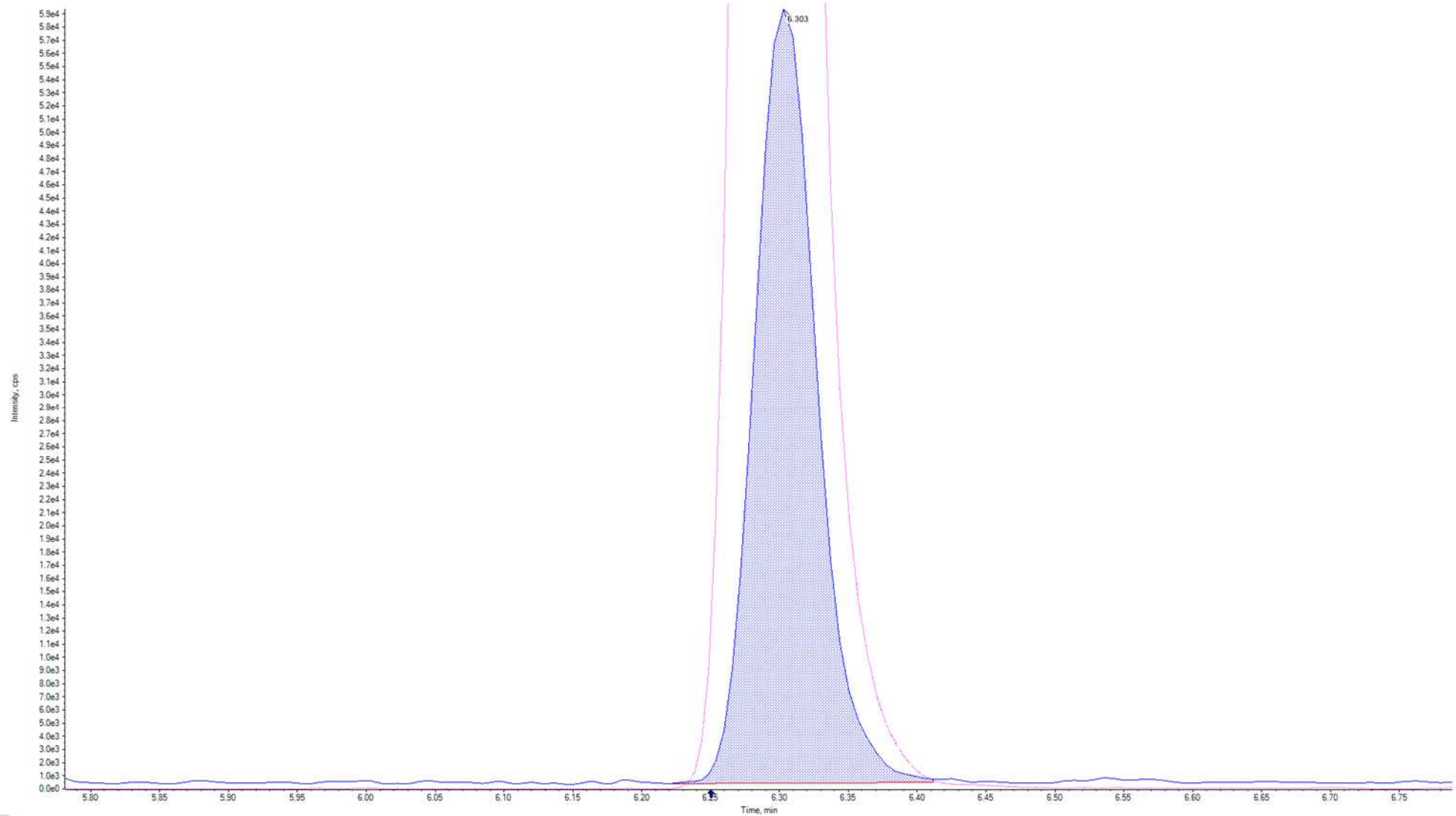
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHxA_2
Sample: WG1971858-2 S/N:569.6 Points Across peak:20



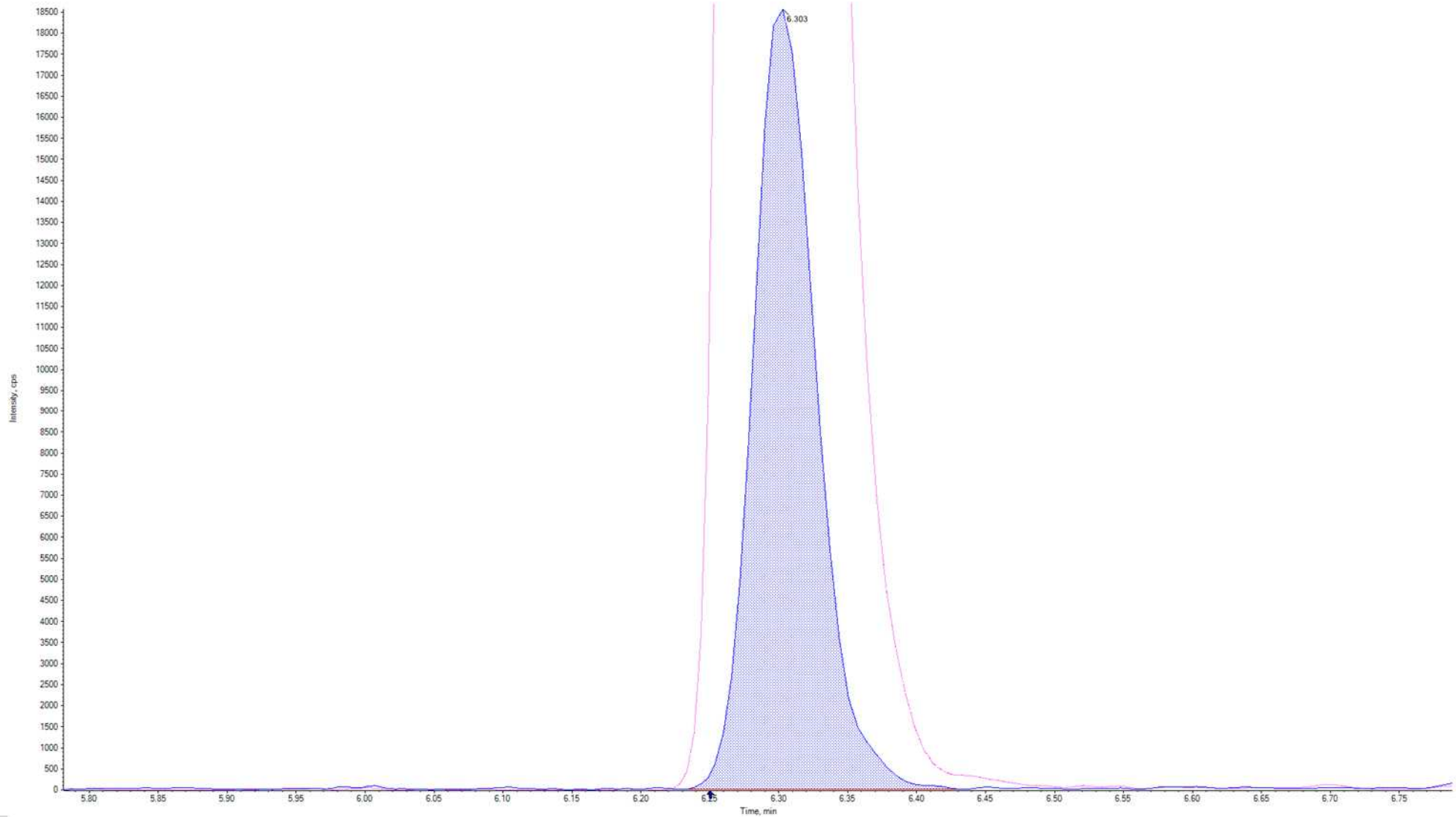
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHpA
Sample: WG1971858-2 S/N:799.9 Points Across peak:32



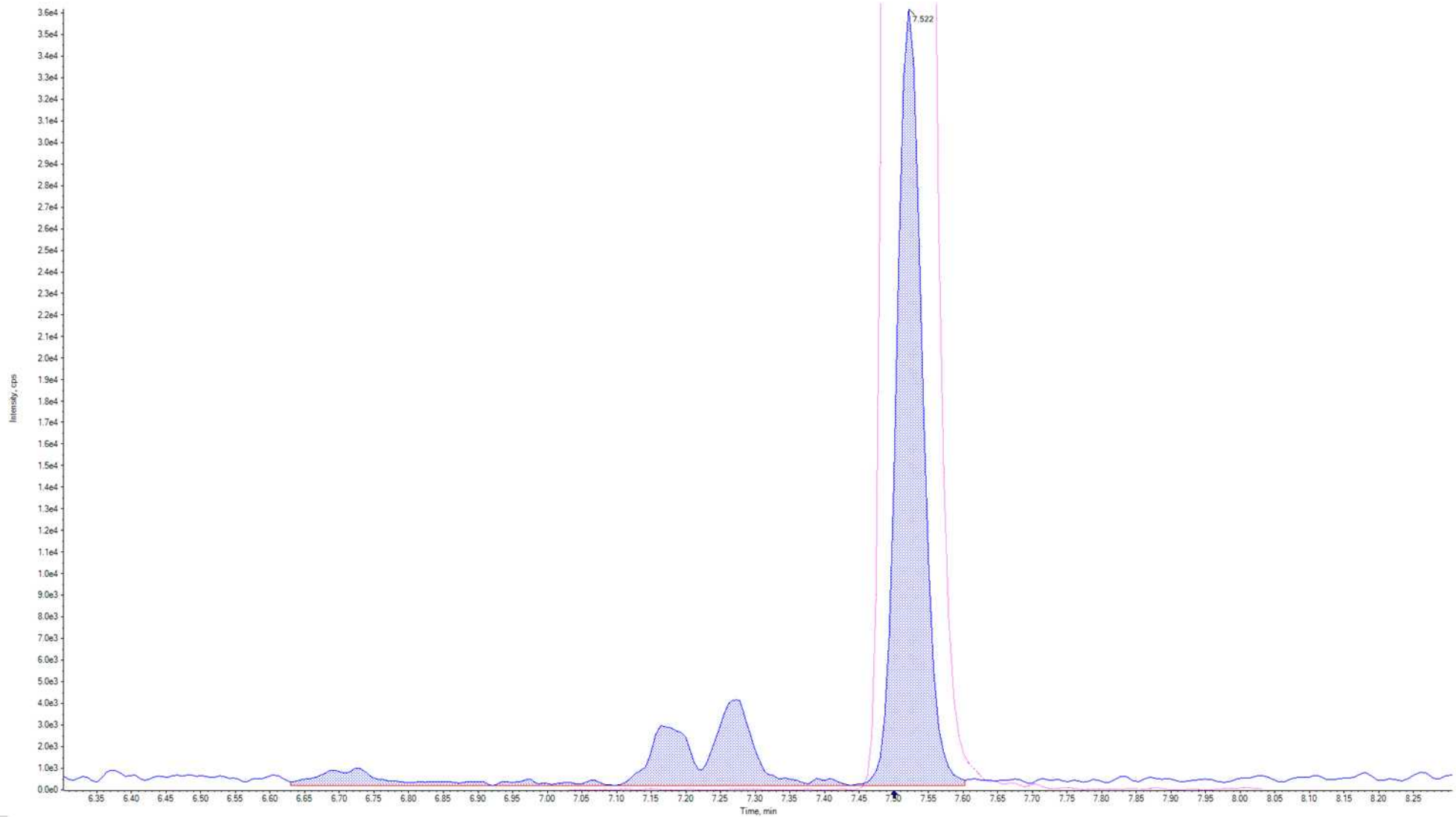
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHpA_2
Sample: WG1971858-2 S/N:2776.9 Points Across peak:32



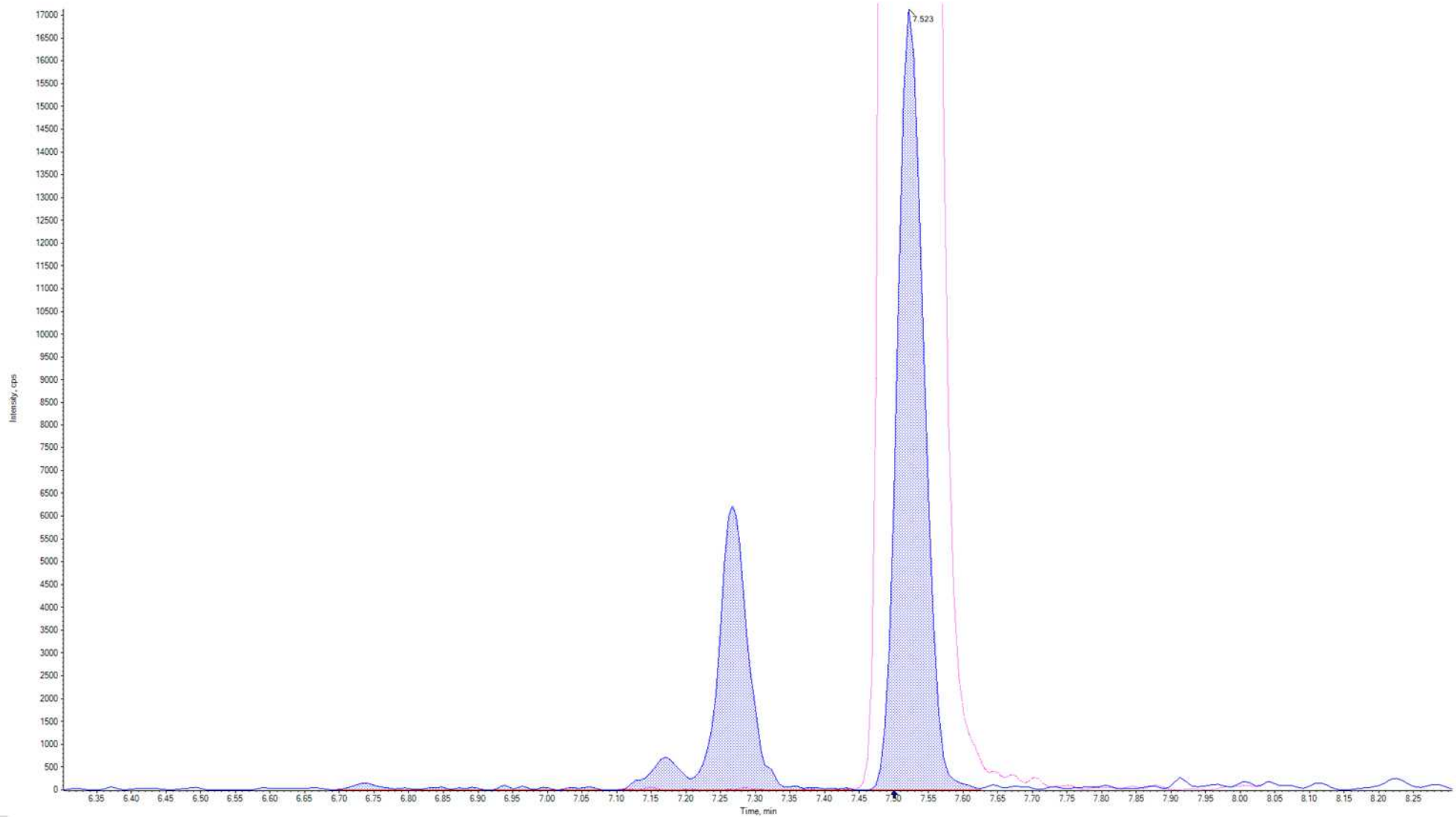
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOA
Sample: WG1971858-2 S/N:633.8 Points Across peak:149



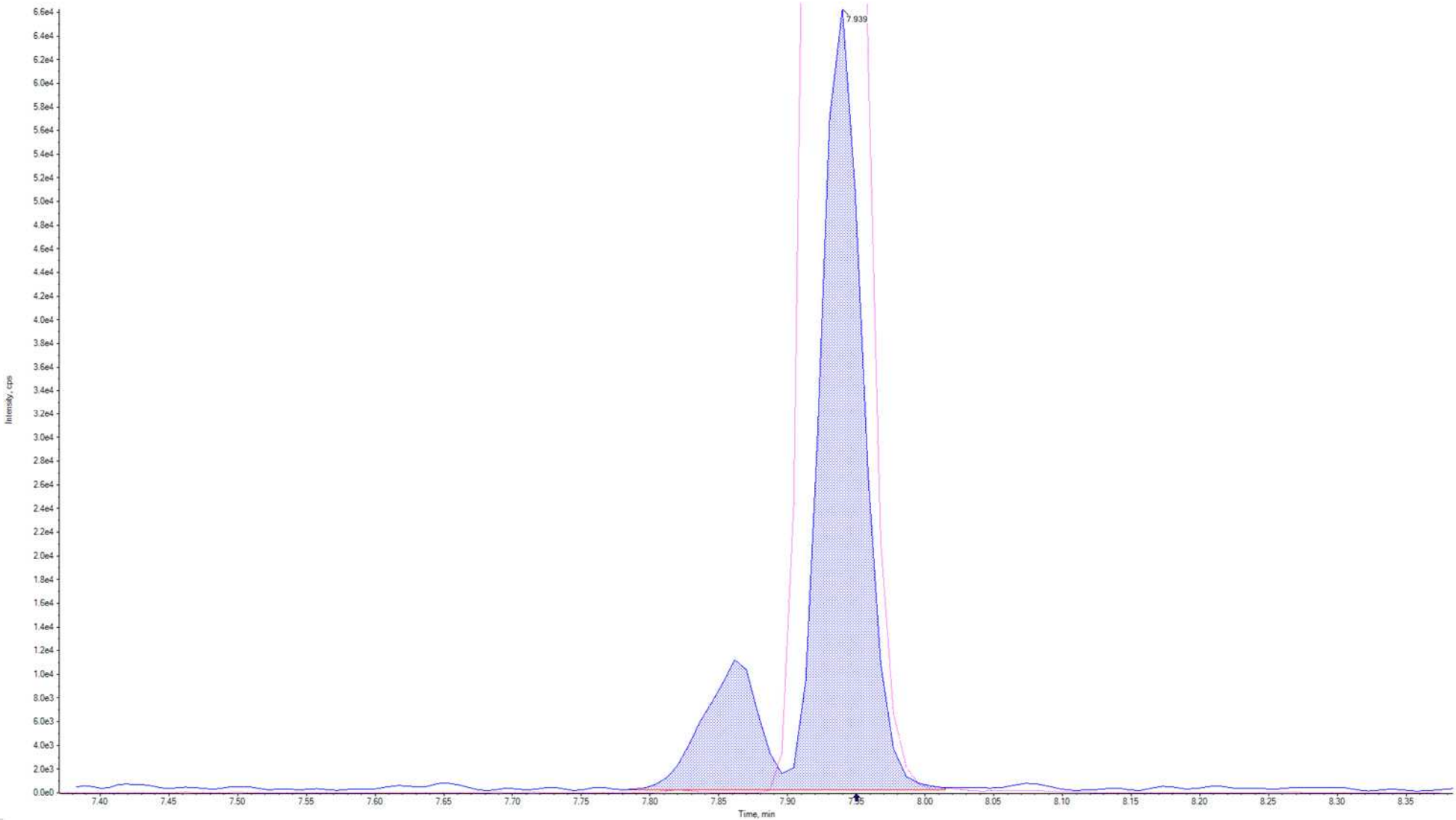
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOA_2
Sample: WG1971858-2 S/N:5424954.1 Points Across peak:146



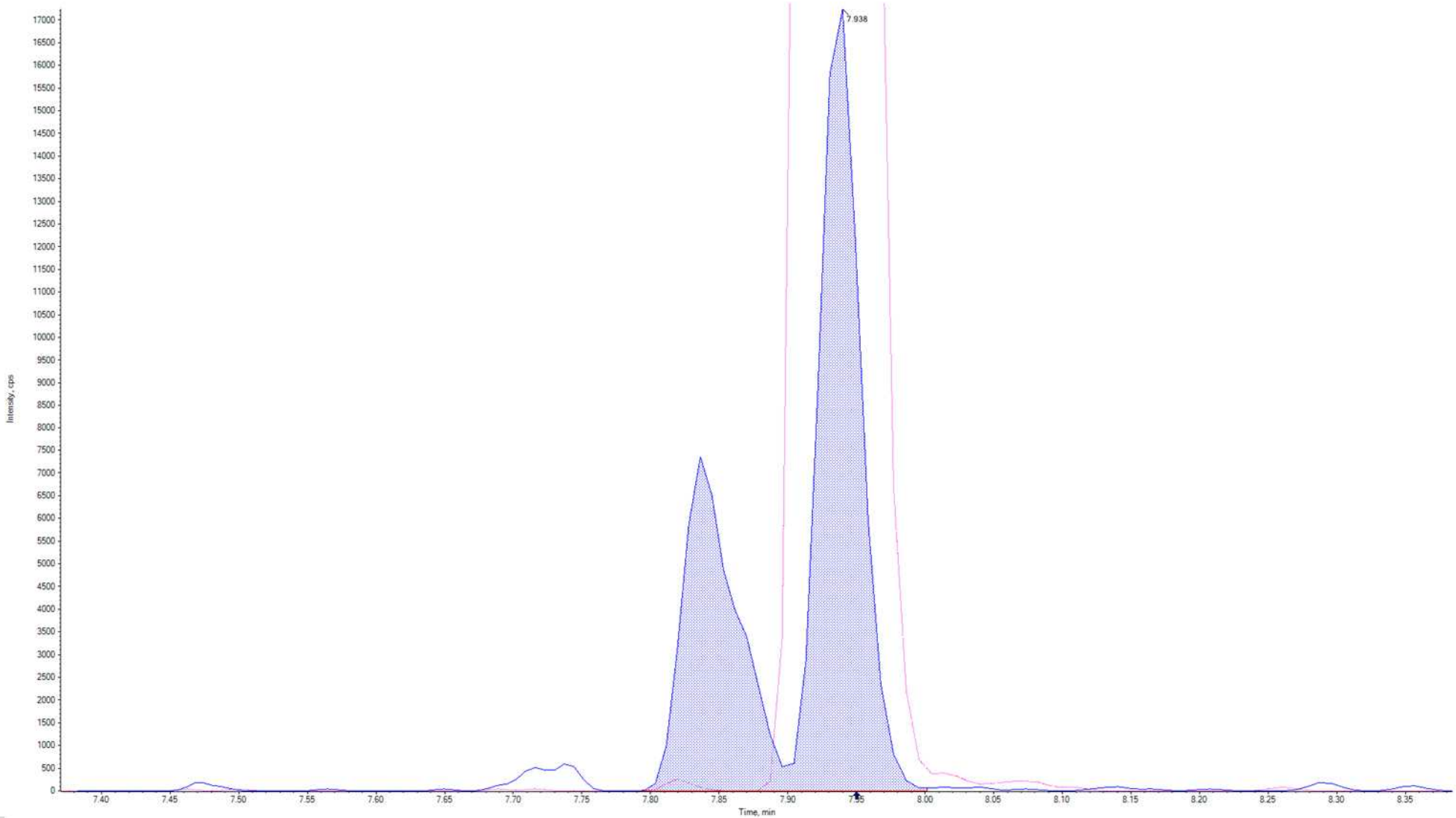
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFNA
Sample: WG1971858-2 S/N:612.2 Points Across peak:29



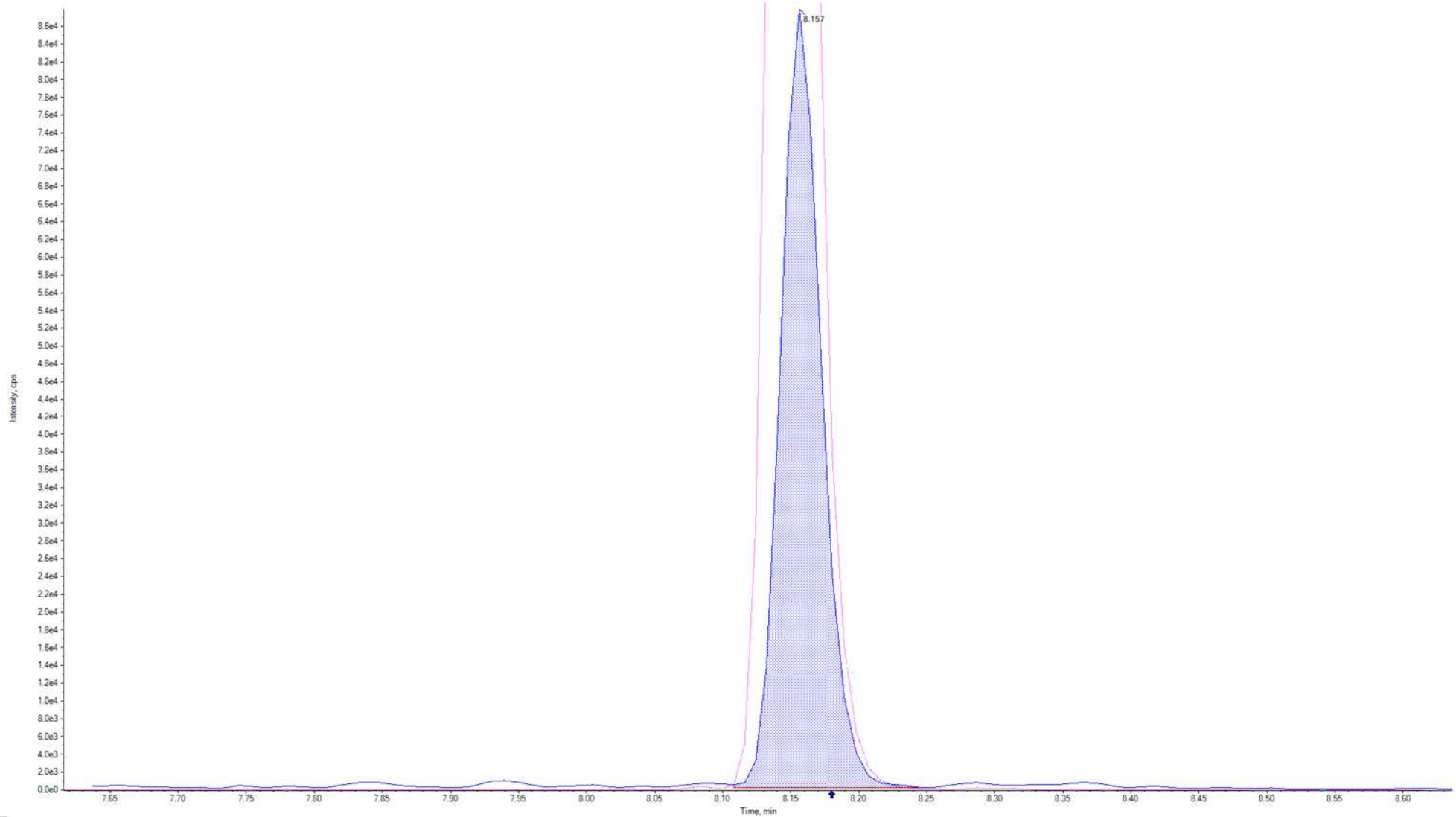
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFNA_2
Sample: WG1971858-2 S/N:423.5 Points Across peak:27



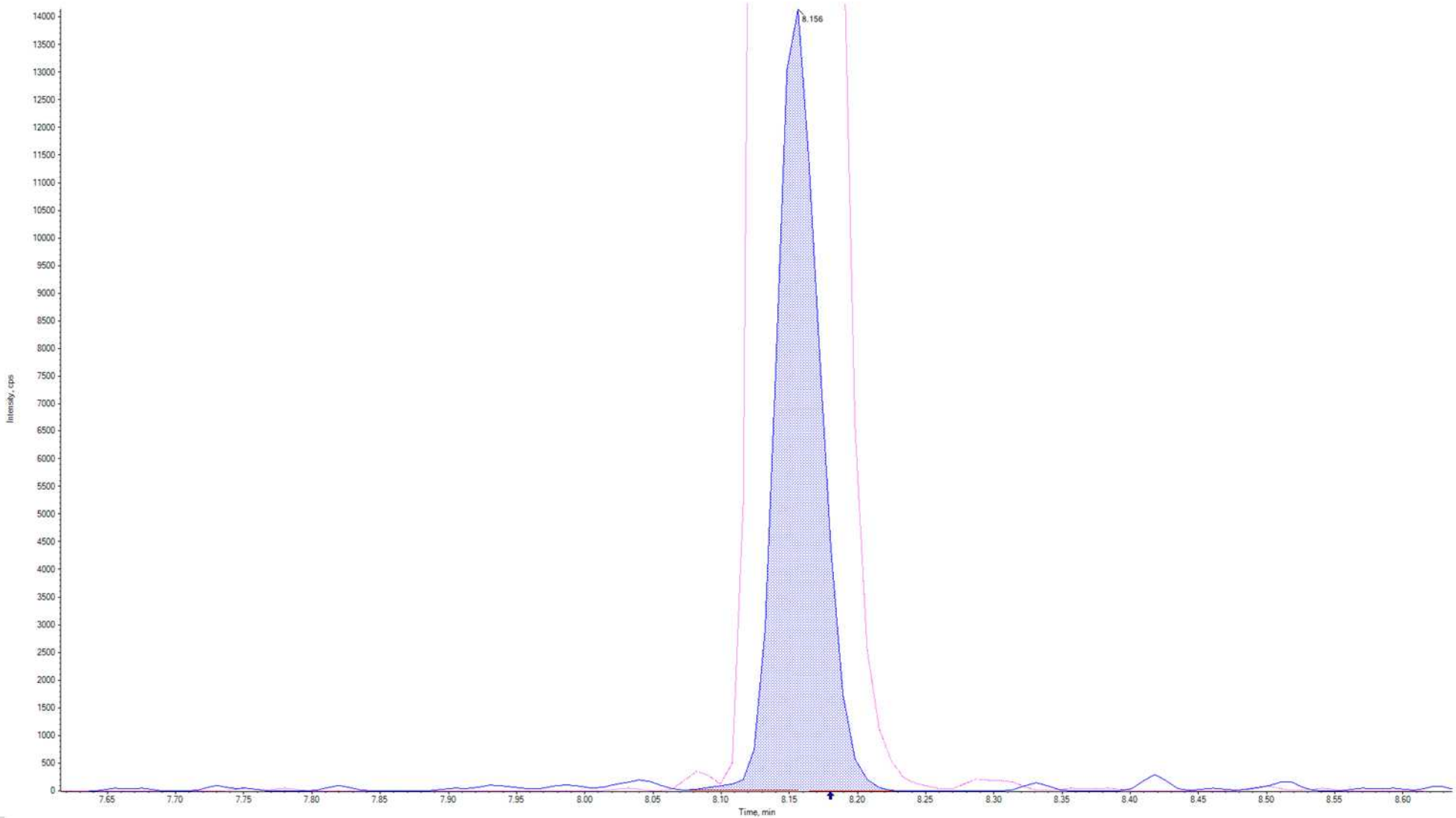
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDA
Sample: WG1971858-2 S/N:1186.0 Points Across peak:18



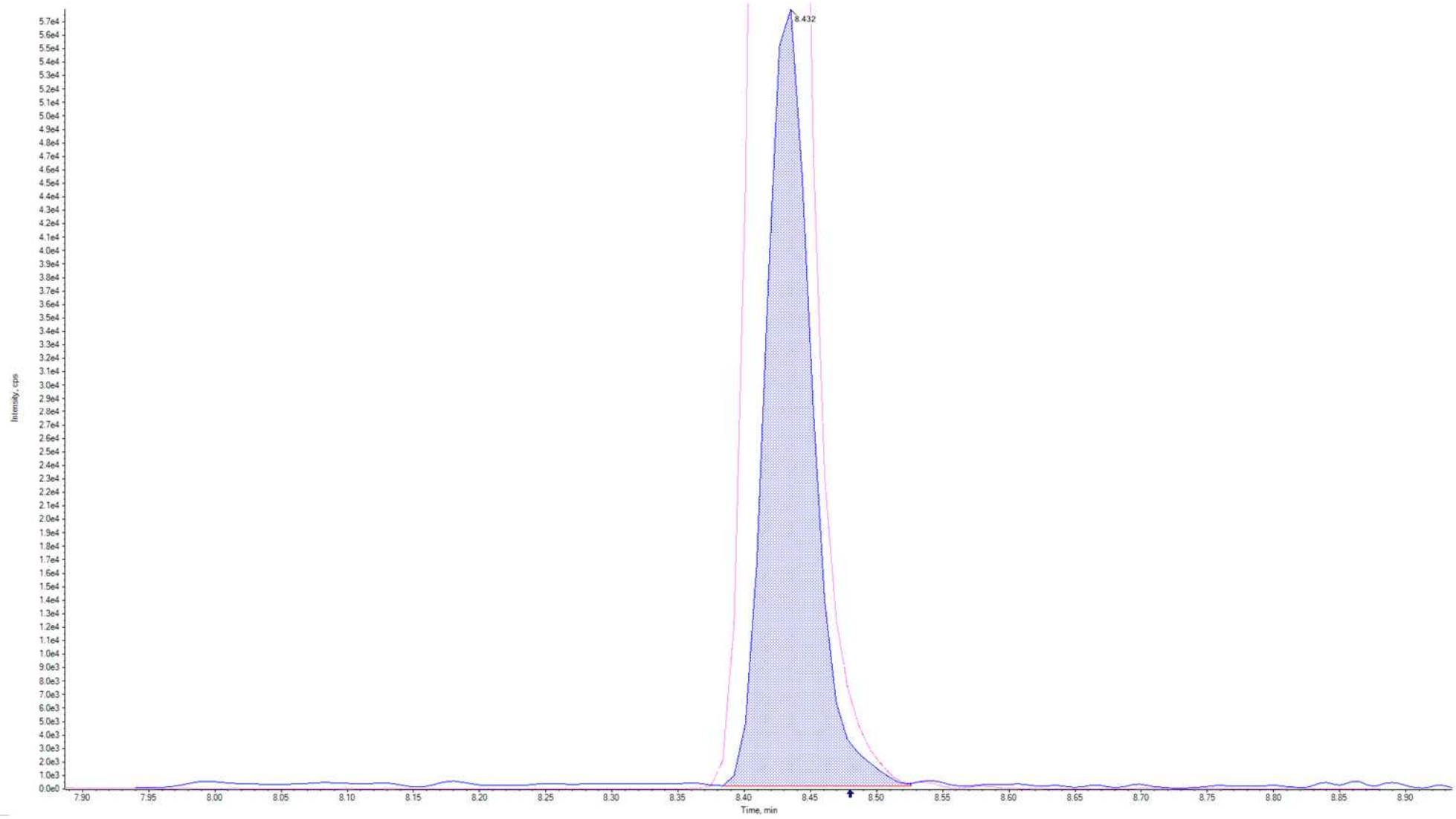
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDA_2
Sample: WG1971858-2 S/N:3189824.6 Points Across peak:20



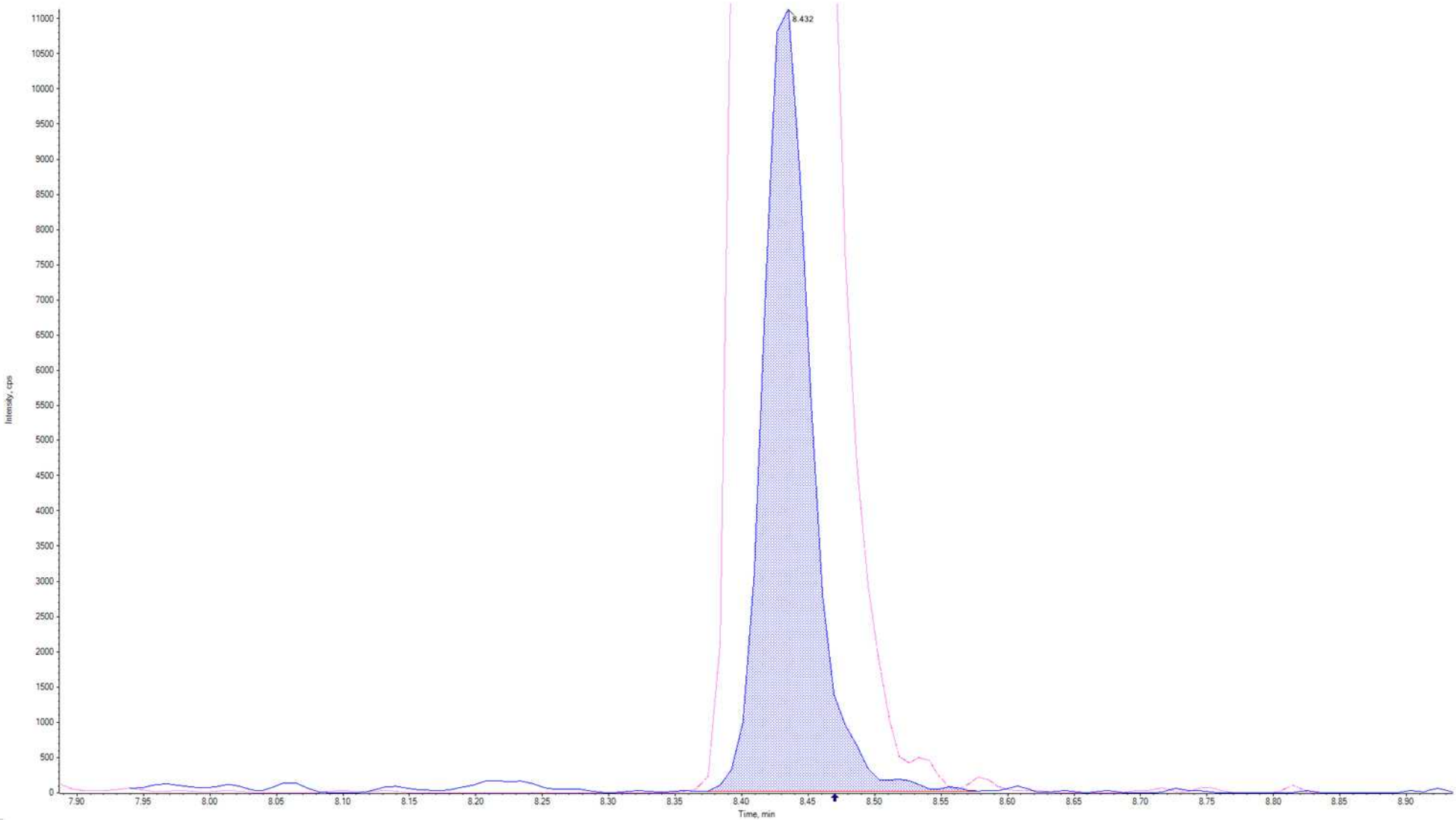
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFUnA
Sample: WG1971858-2 S/N:1061.9 Points Across peak:18



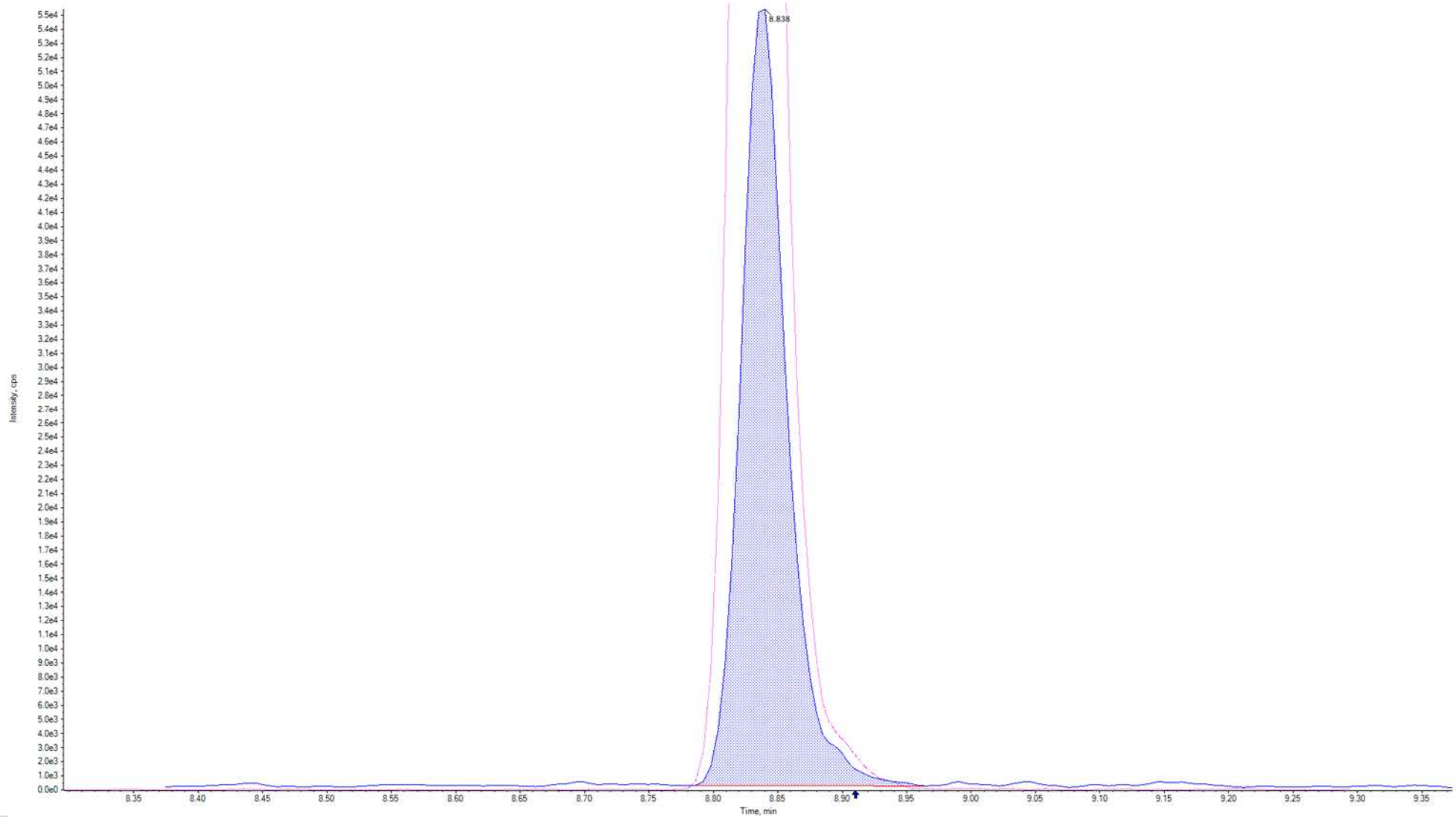
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFUnA_2
Sample: WG1971858-2 S/N:498.7 Points Across peak:27



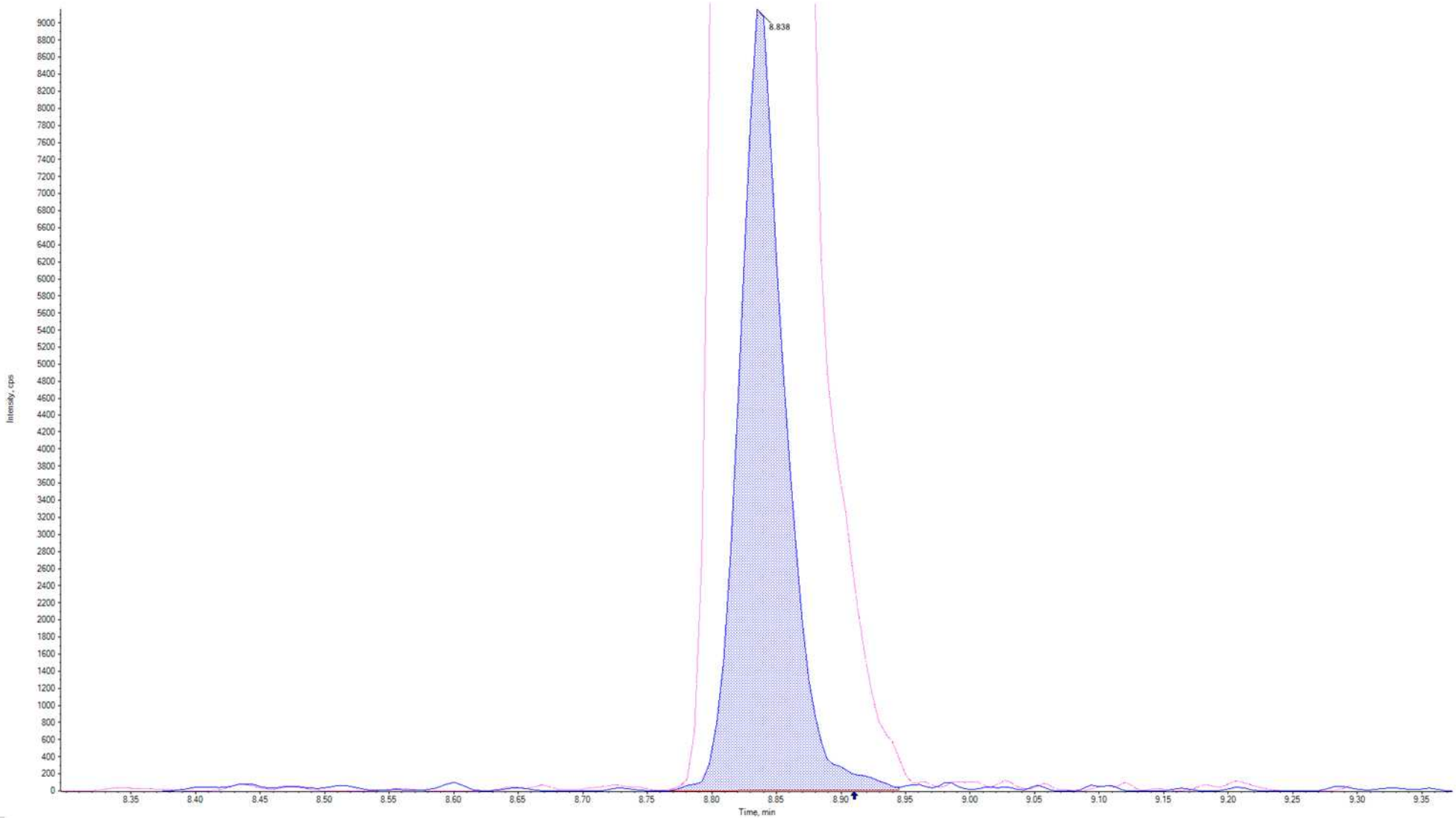
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDoA
Sample: WG1971858-2 S/N:1017.3 Points Across peak:37



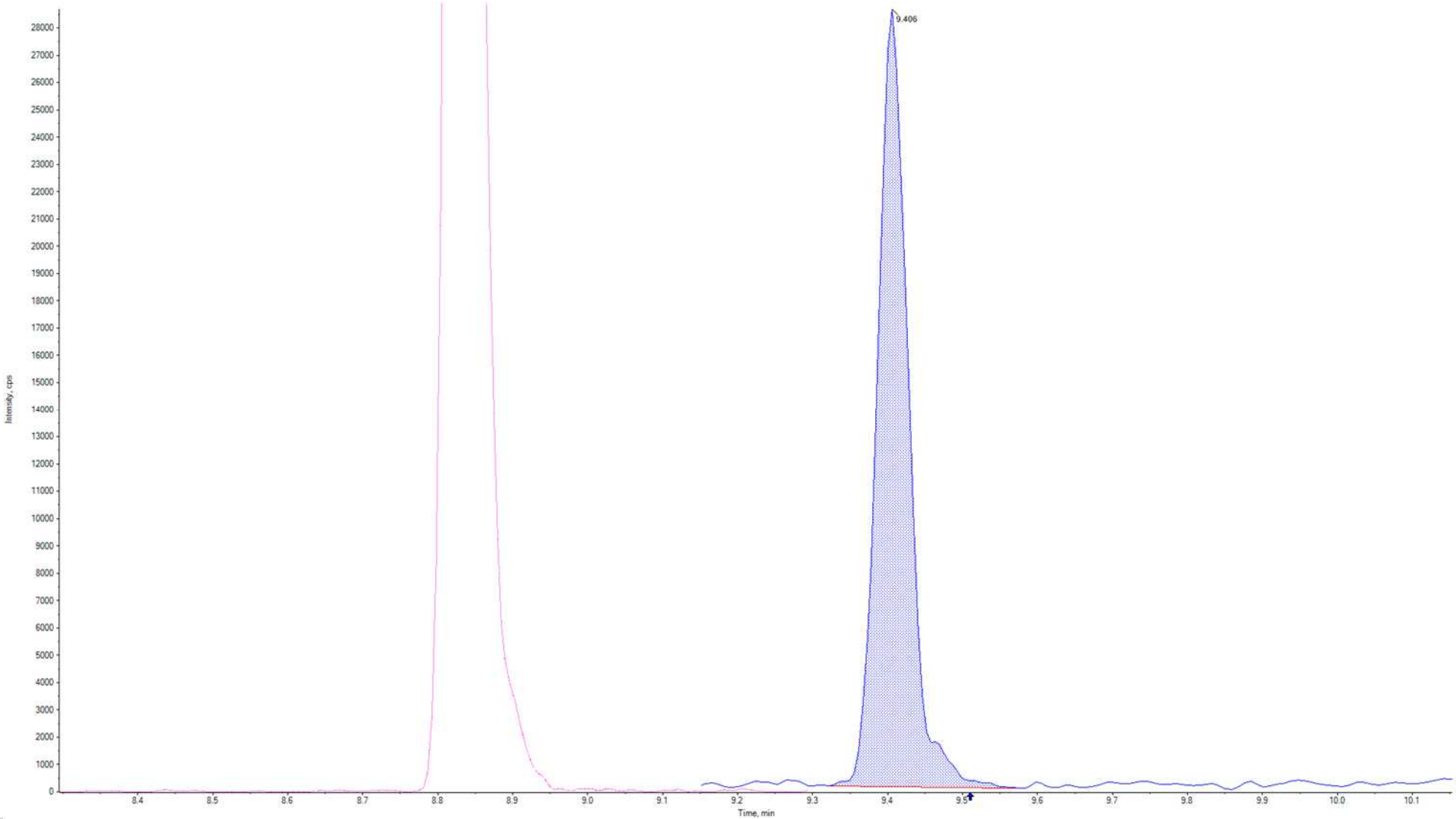
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDoA_2
Sample: WG1971858-2 S/N:3583248.7 Points Across peak:36



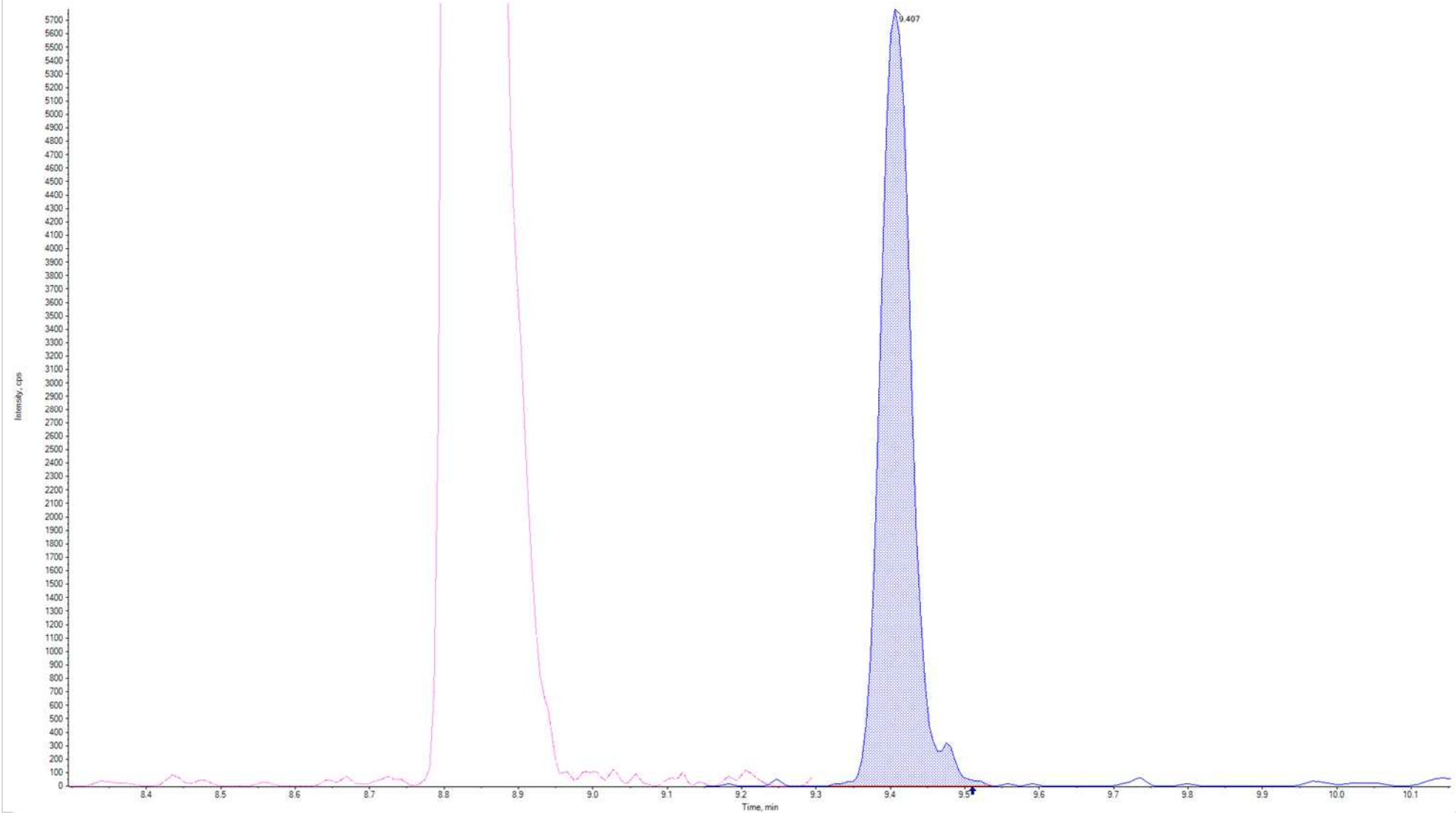
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFTrDA
Sample: WG1971858-2 S/N:843.6 Points Across peak:45



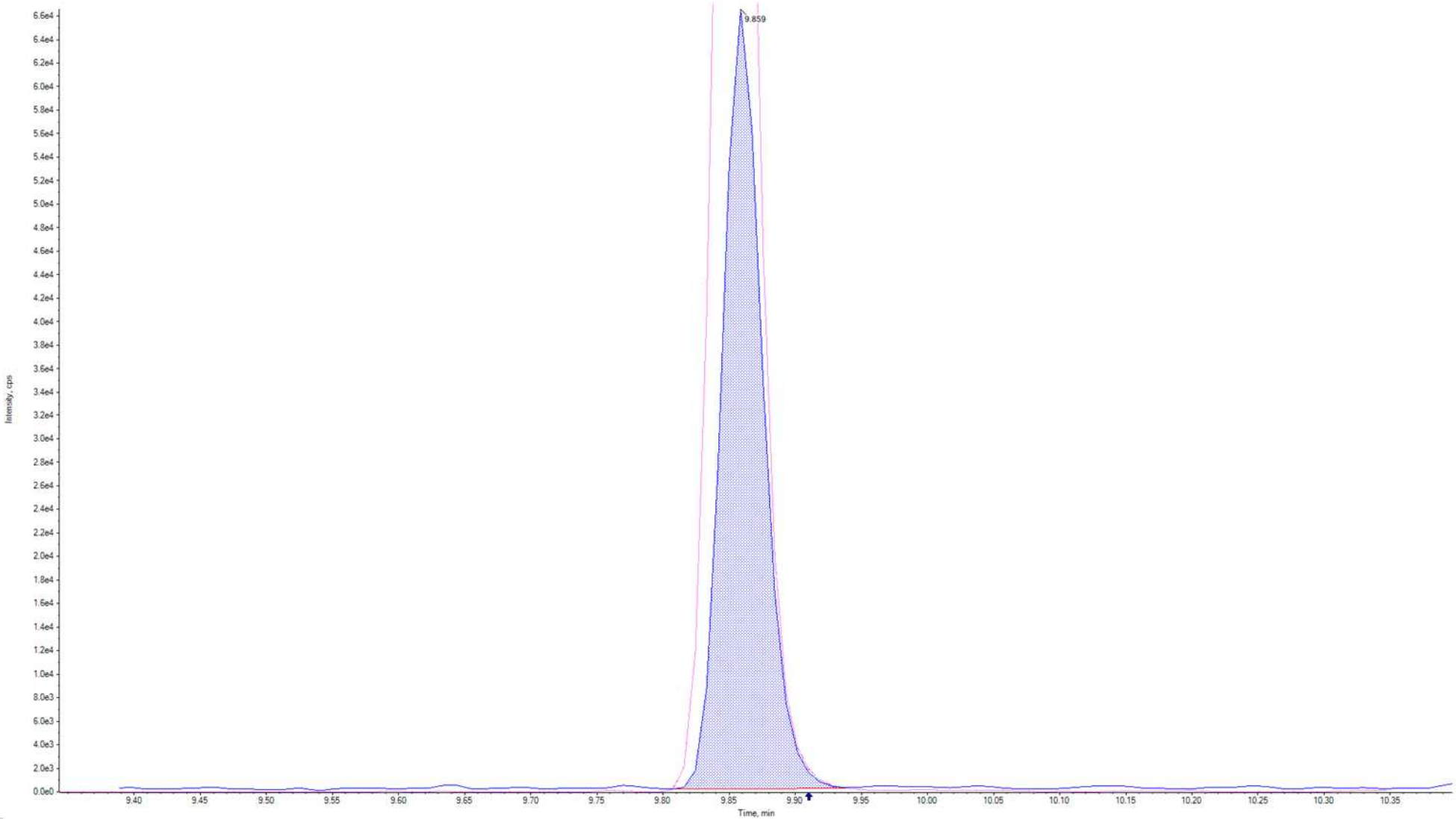
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFTrDA_2
Sample: WG1971858-2 S/N:759.0 Points Across peak:41



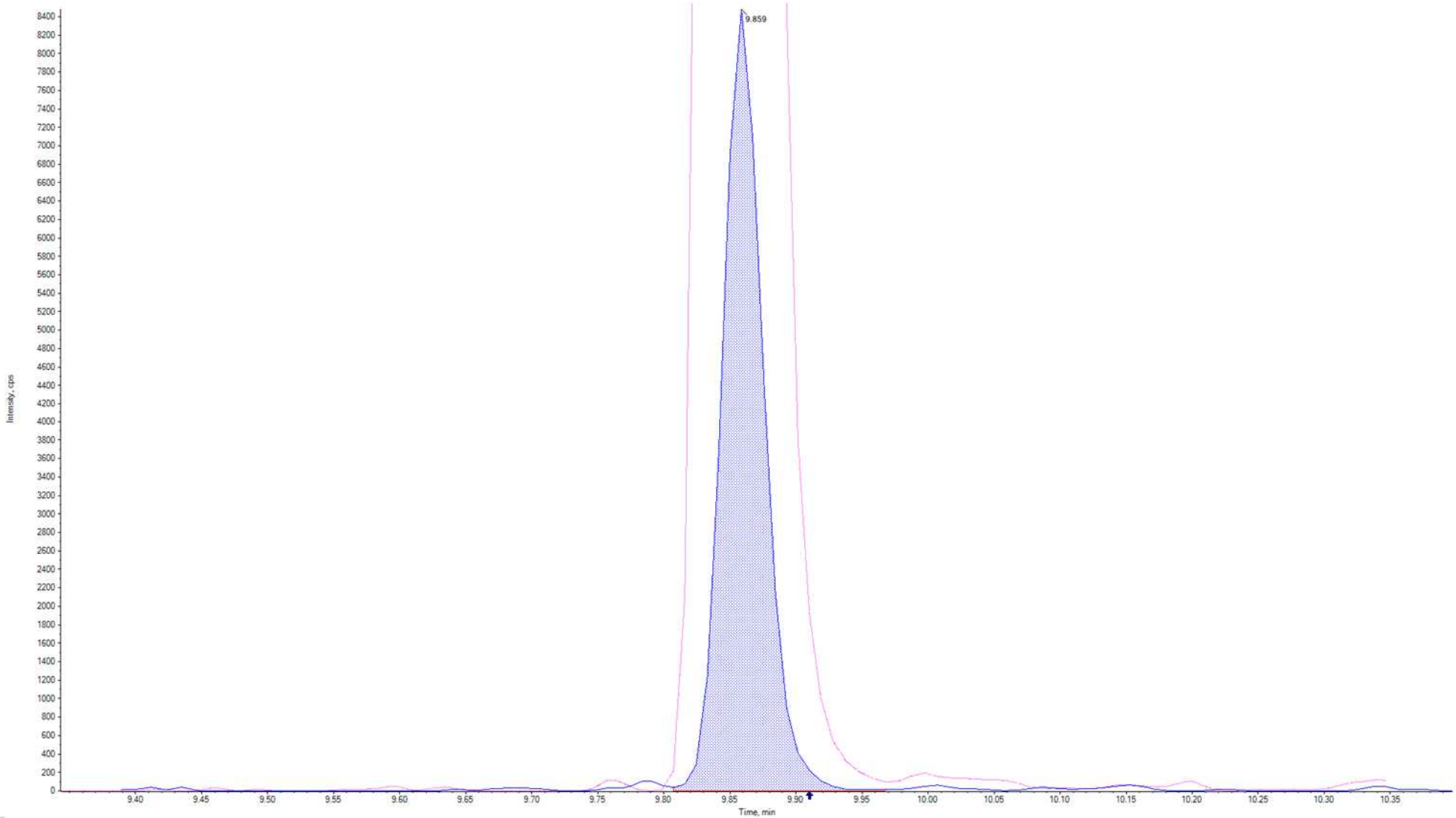
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFTeDA
Sample: WG1971858-2 S/N:604.5 Points Across peak:16



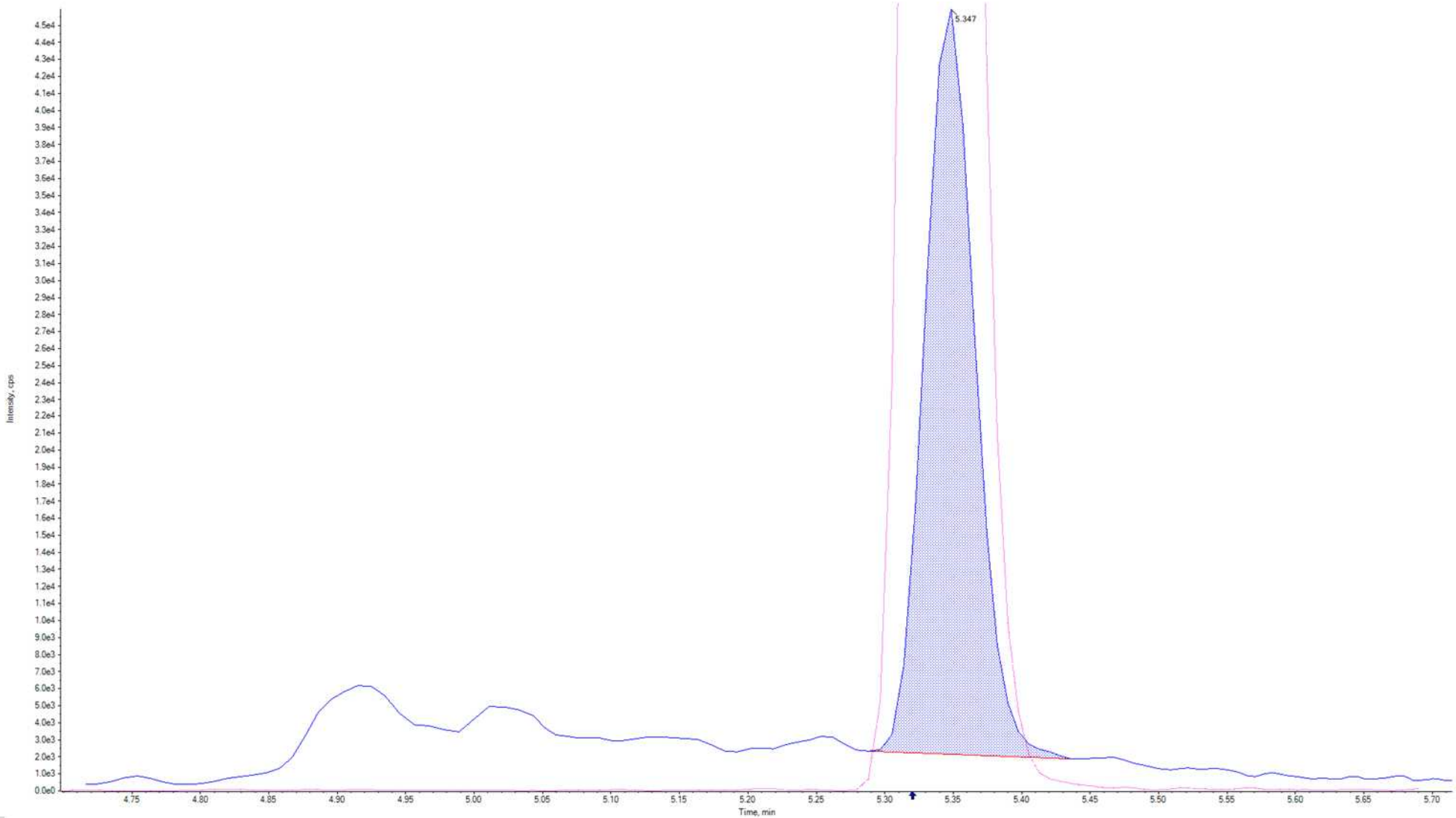
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFTeDA_2
Sample: WG1971858-2 S/N:663.1 Points Across peak:19



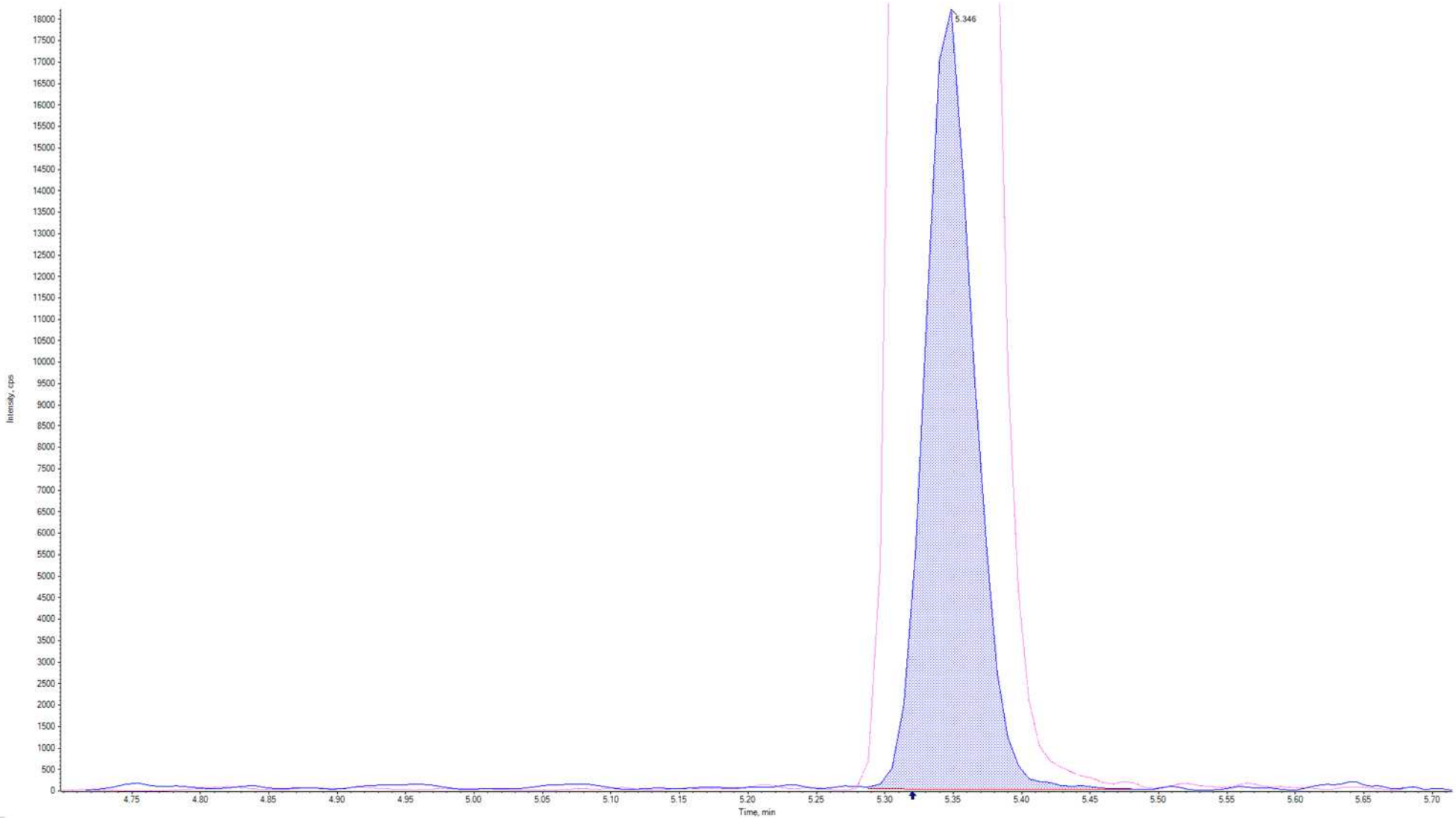
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFBS
Sample: WG1971858-2 S/N:51.6 Points Across peak:19



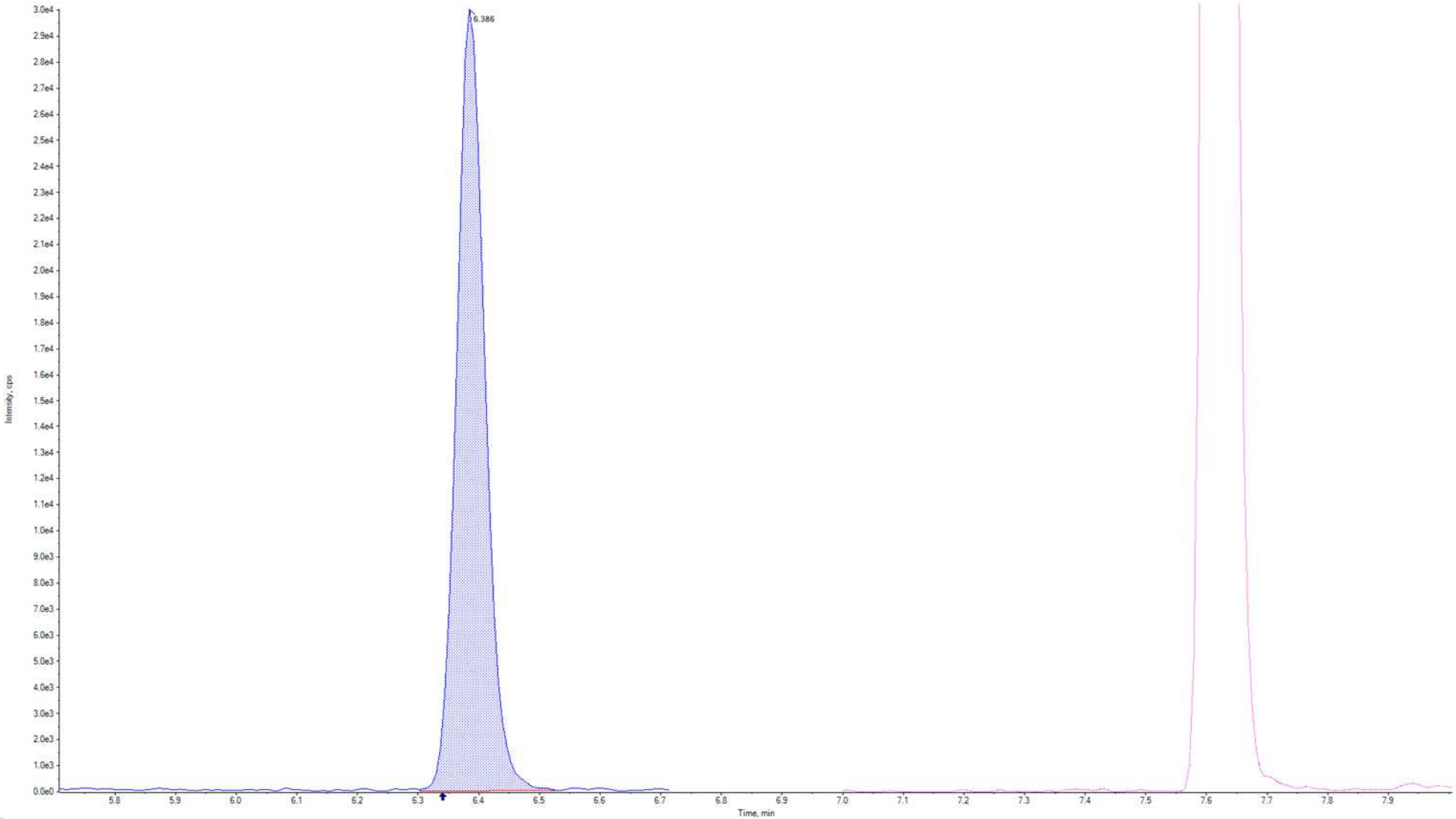
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFBS_2
Sample: WG1971858-2 S/N:1002.4 Points Across peak:26



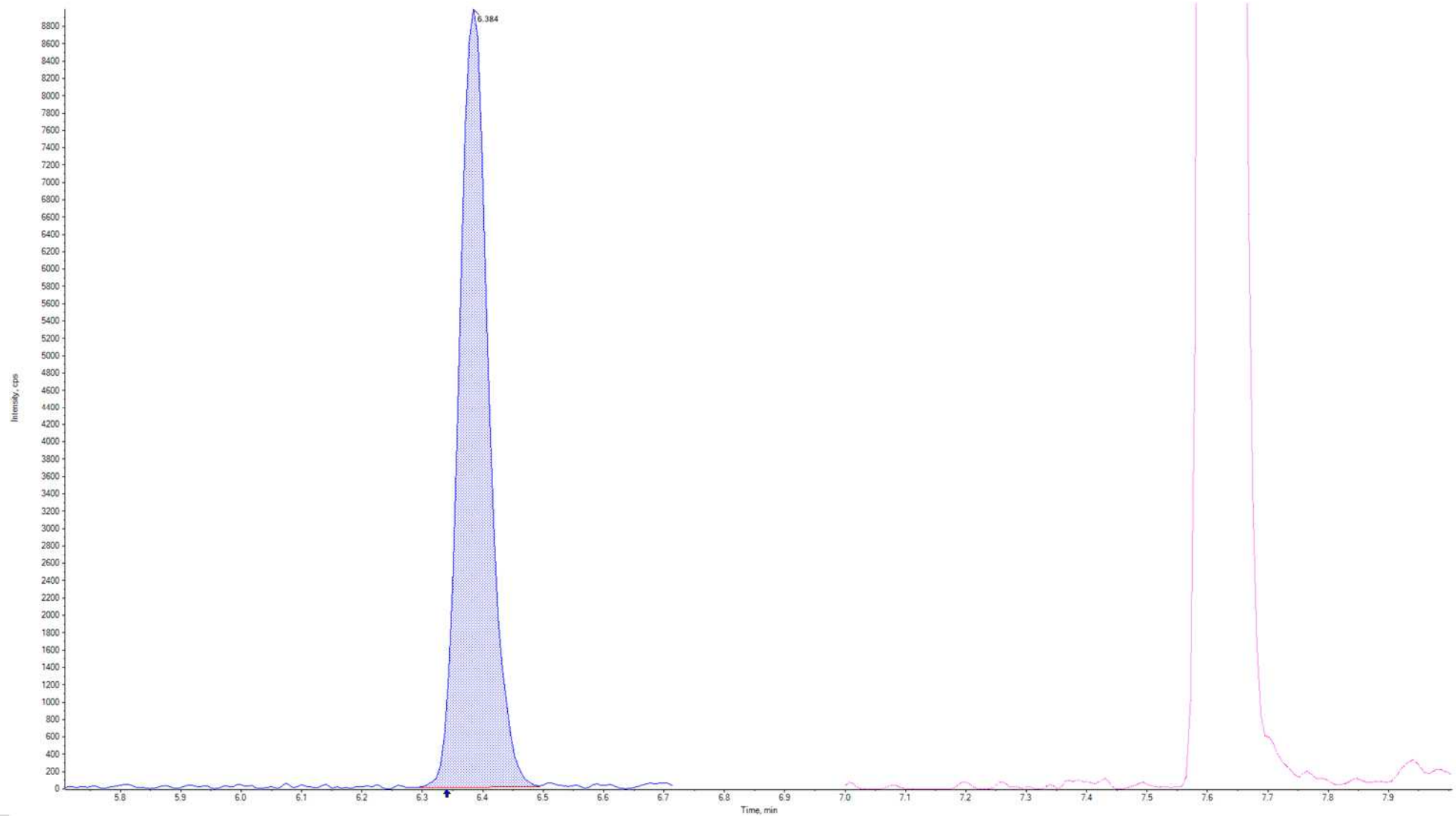
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFPeS
Sample: WG1971858-2 S/N:2011.2 Points Across peak:35



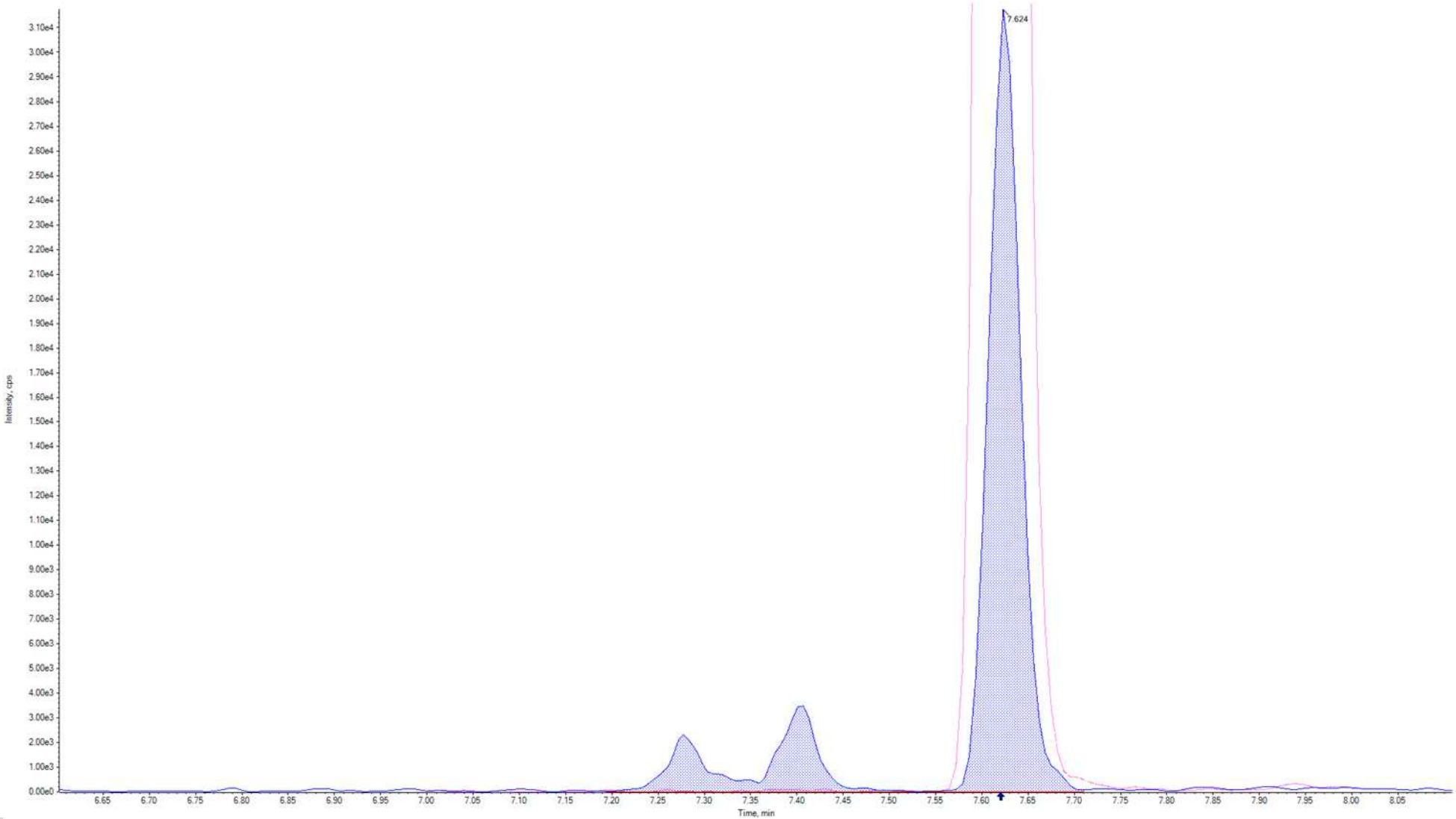
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFPeS_2
Sample: WG1971858-2 S/N:2164.1 Points Across peak:31



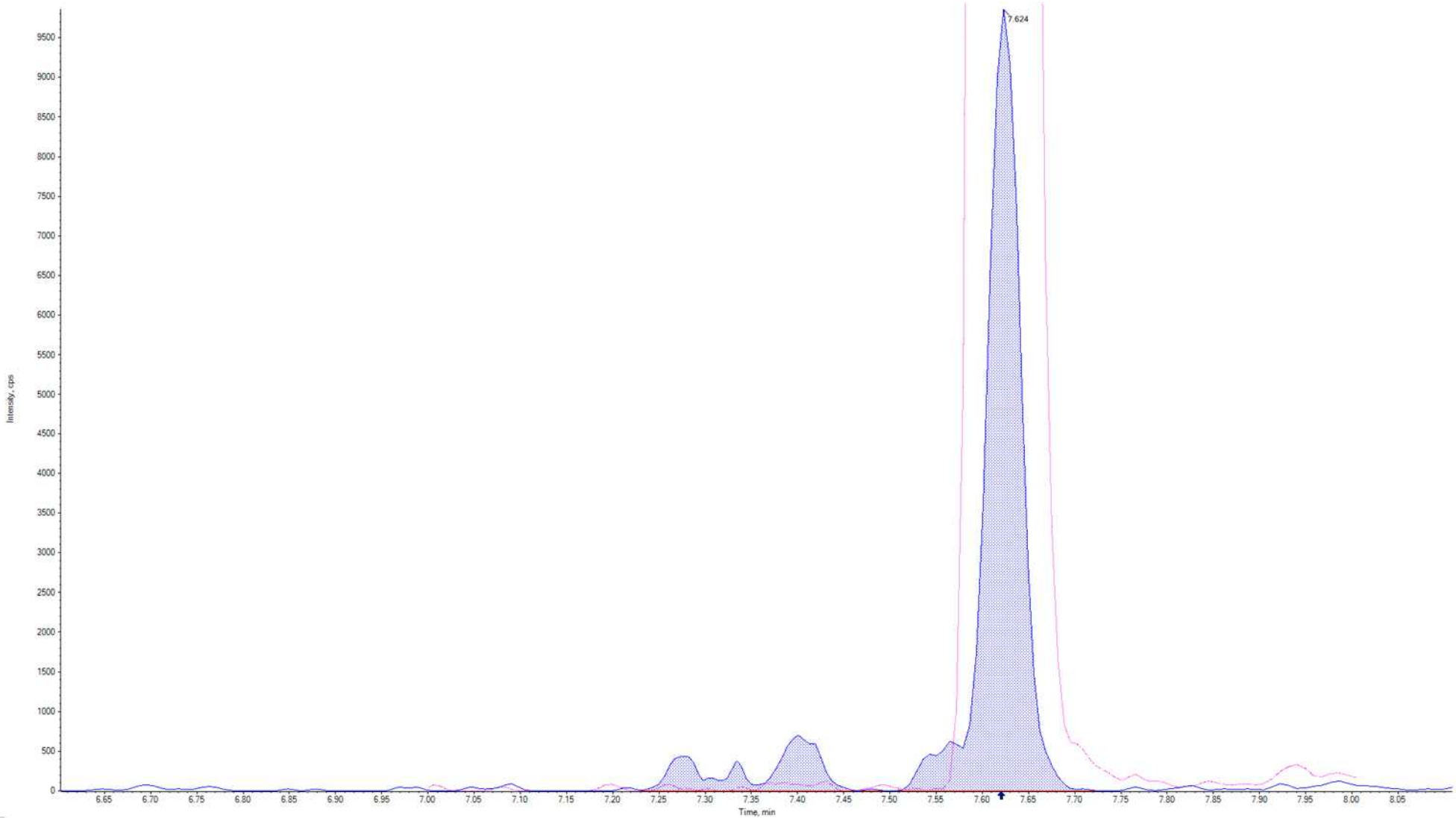
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHxS
Sample: WG1971858-2 S/N:3117.3 Points Across peak:85



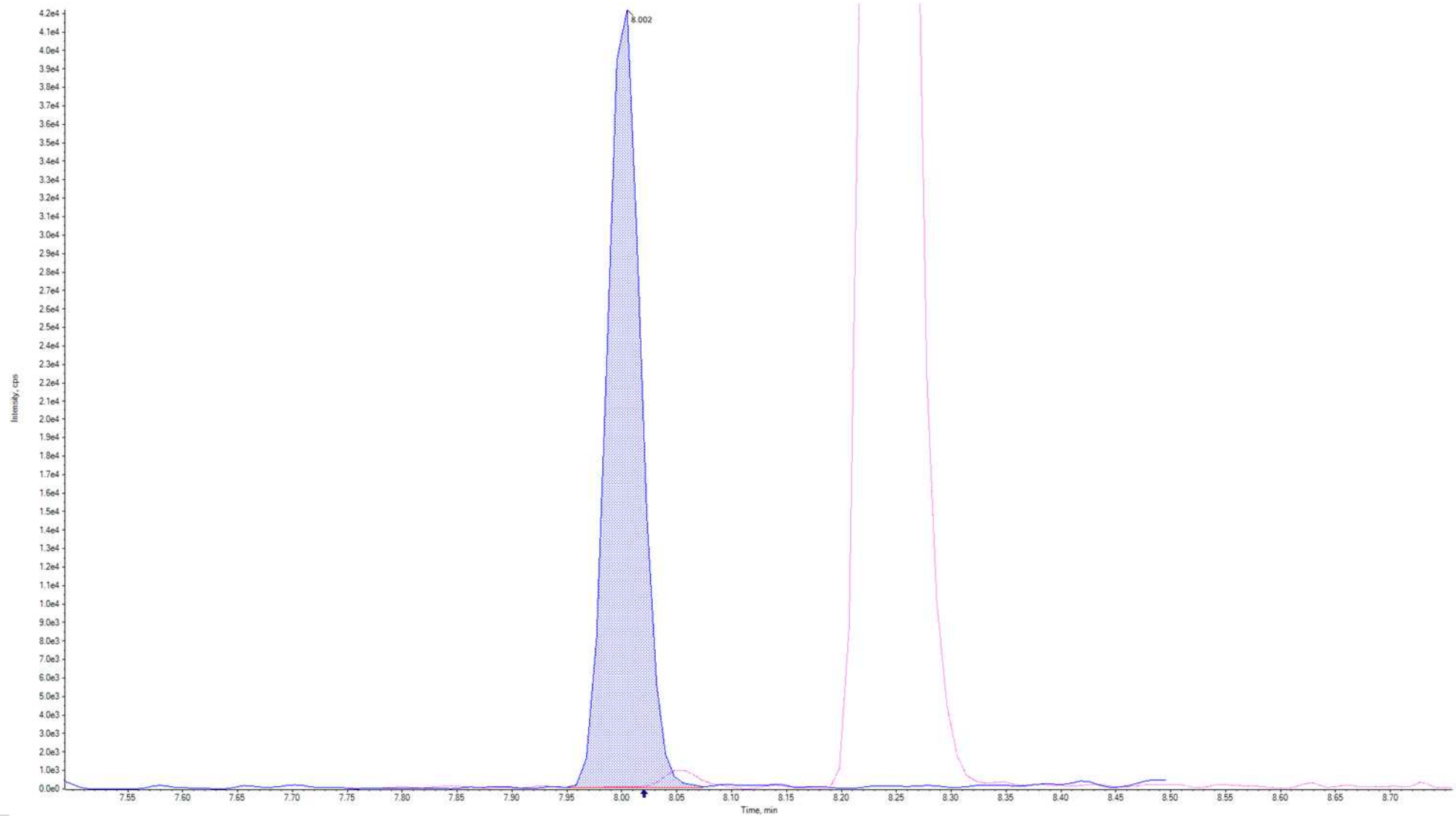
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHxS_2
Sample: WG1971858-2 S/N:569.1 Points Across peak:81



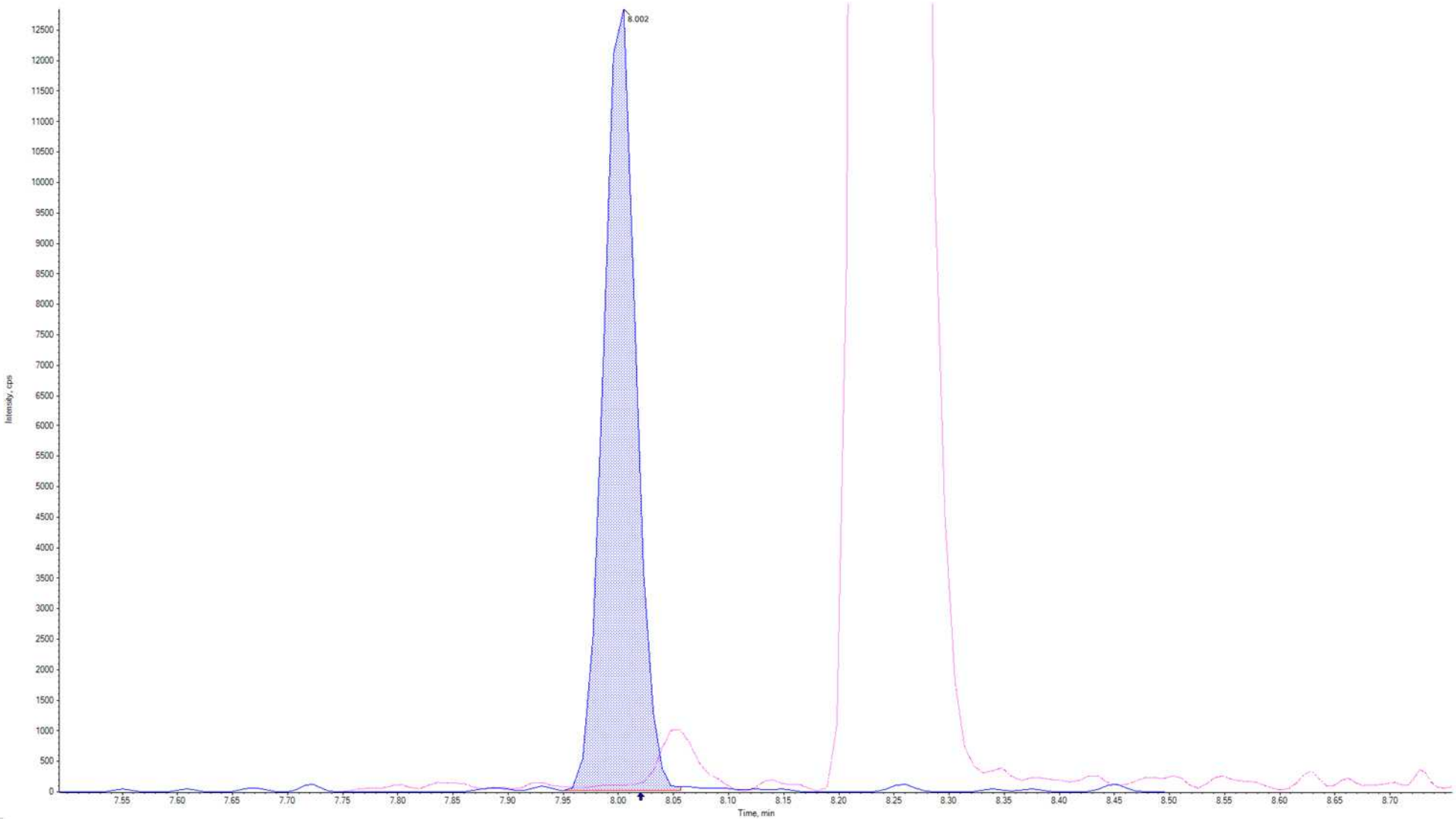
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS
Sample: WG1971858-2 S/N:53785.6 Points Across peak:15



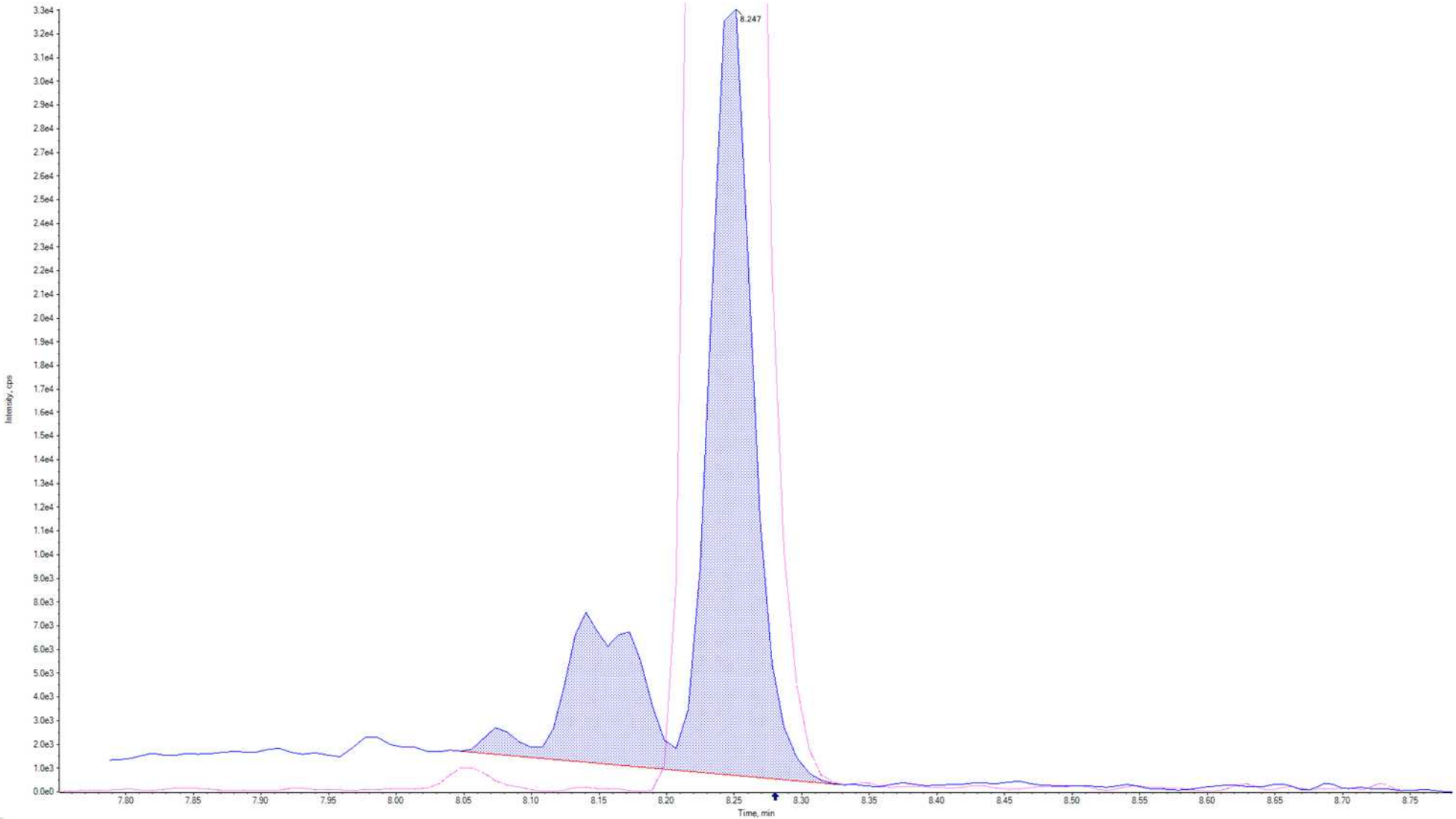
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS_2
Sample: WG1971858-2 S/N:585.1 Points Across peak:15



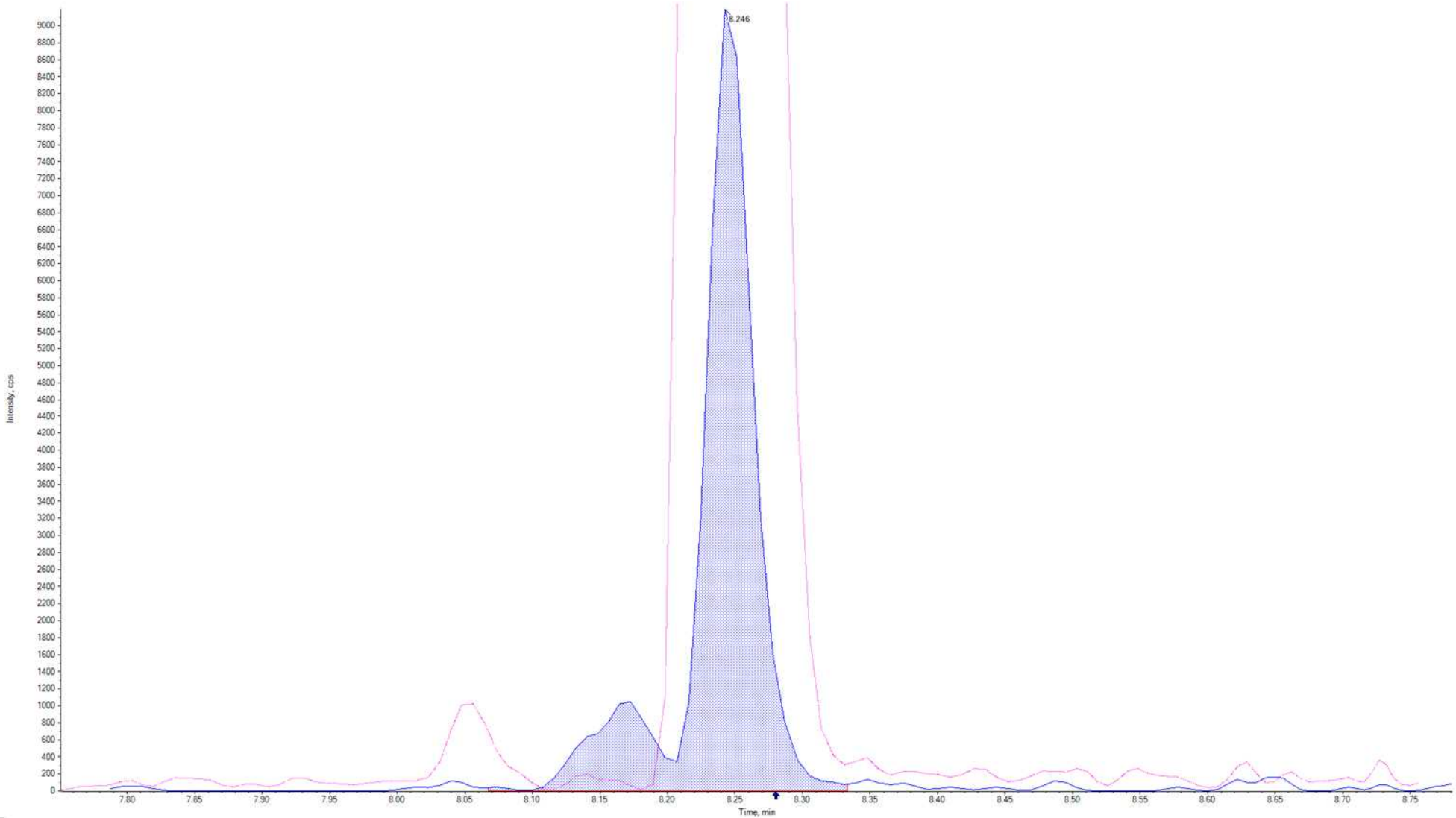
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOS
Sample: WG1971858-2 S/N:1218.9 Points Across peak:35



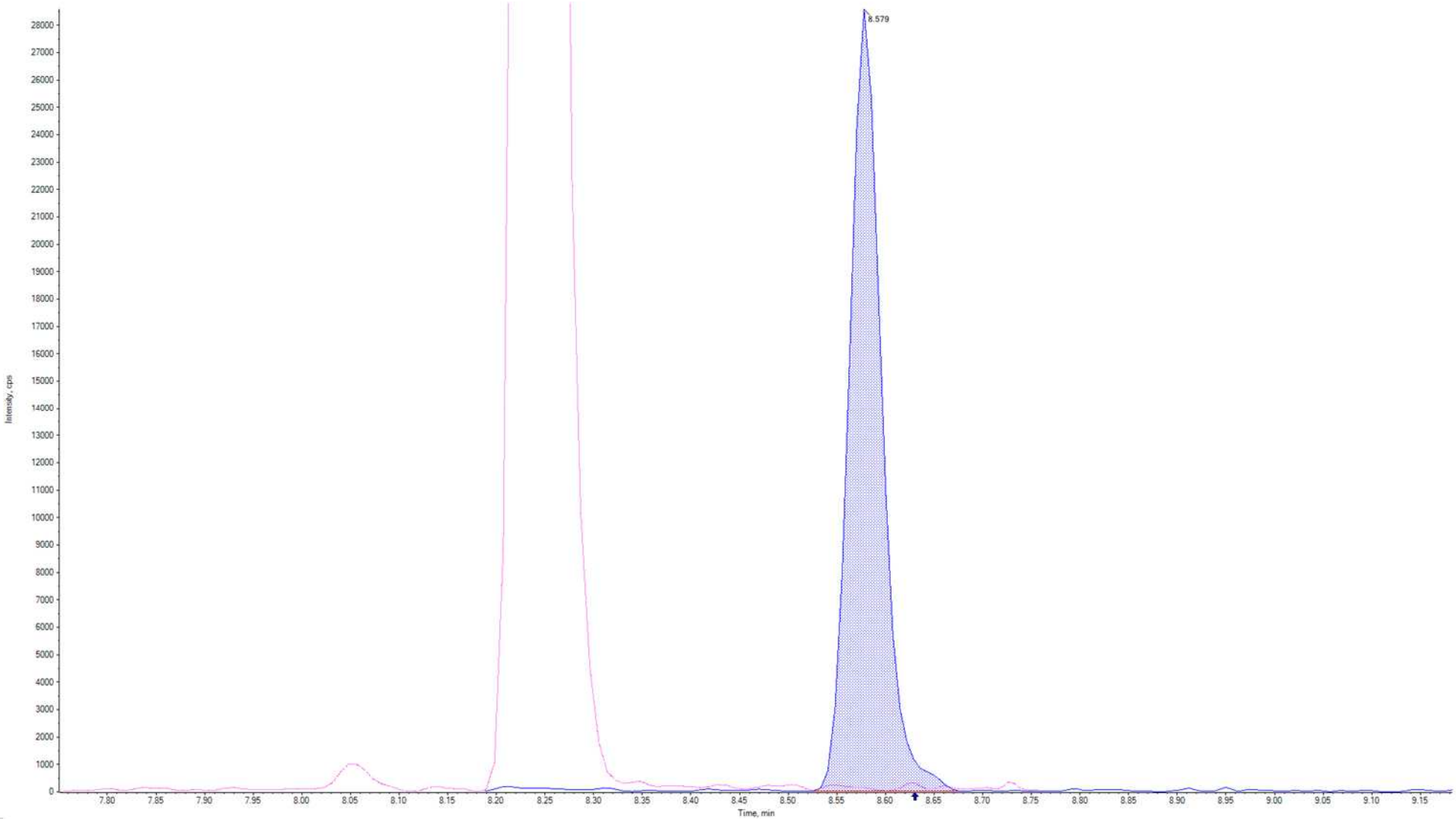
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOS_2
Sample: WG1971858-2 S/N:376.5 Points Across peak:33



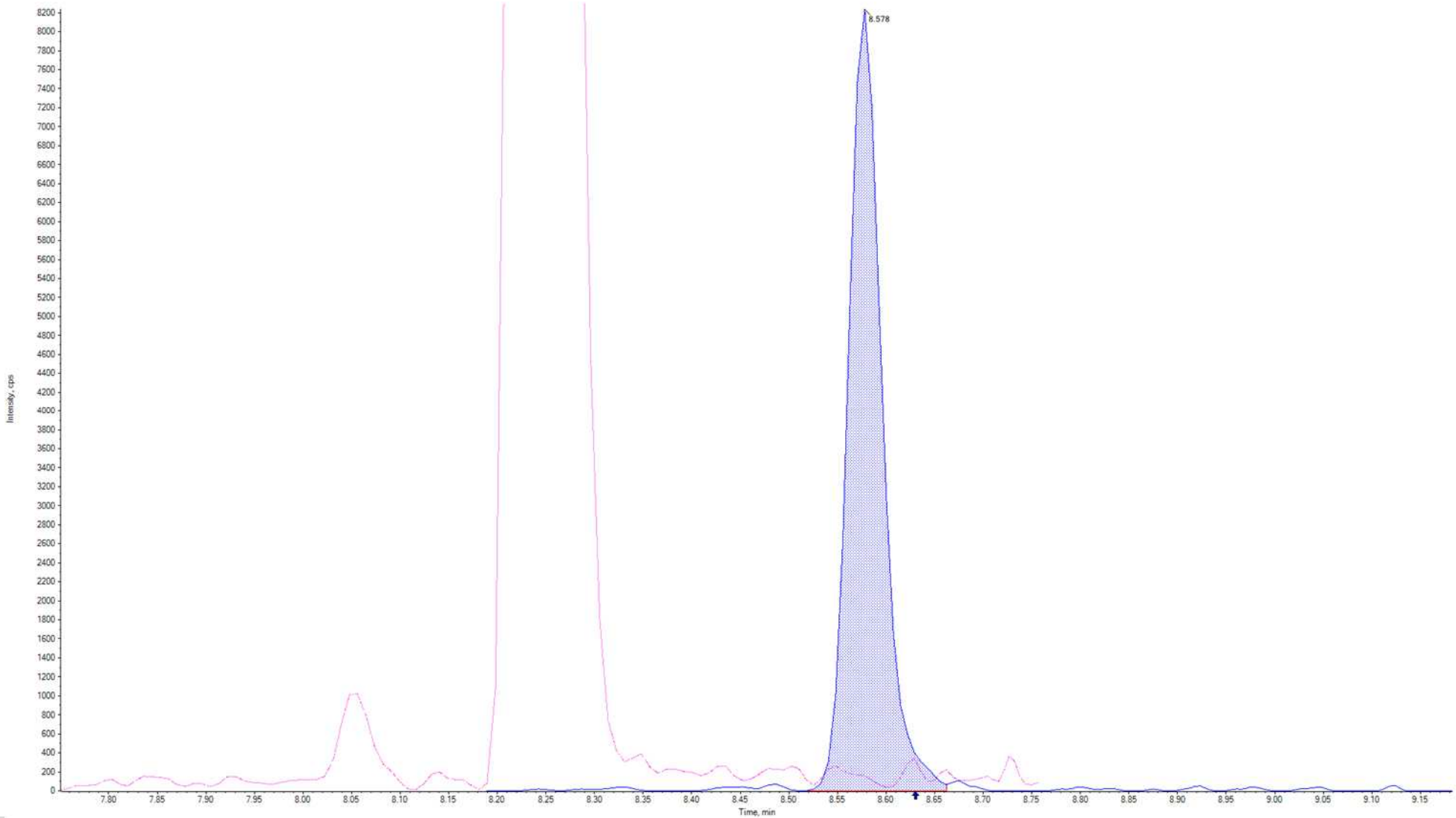
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFNS
Sample: WG1971858-2 S/N:14433.8 Points Across peak:24



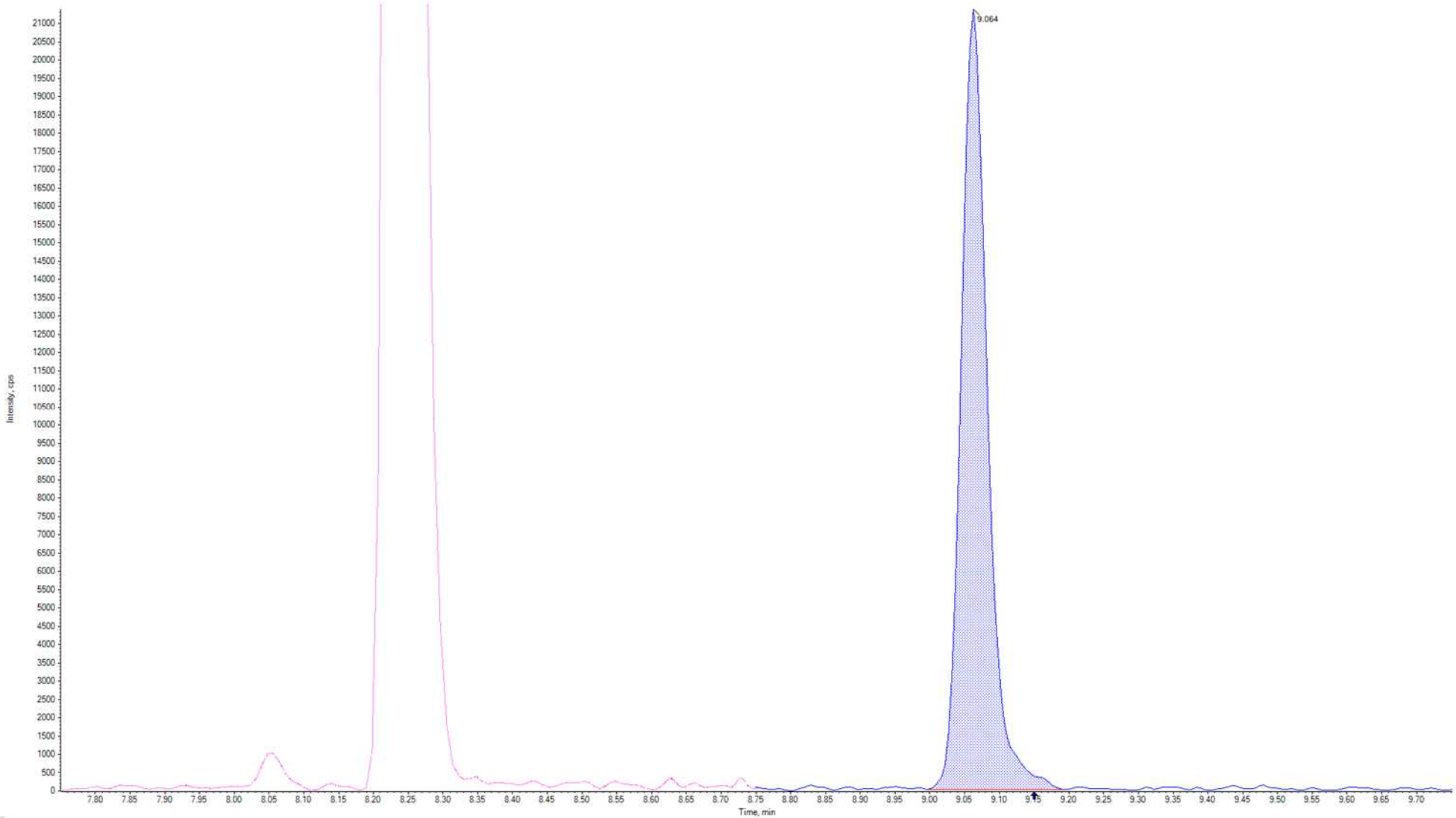
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFNS_2
Sample: WG1971858-2 S/N:854.7 Points Across peak:22



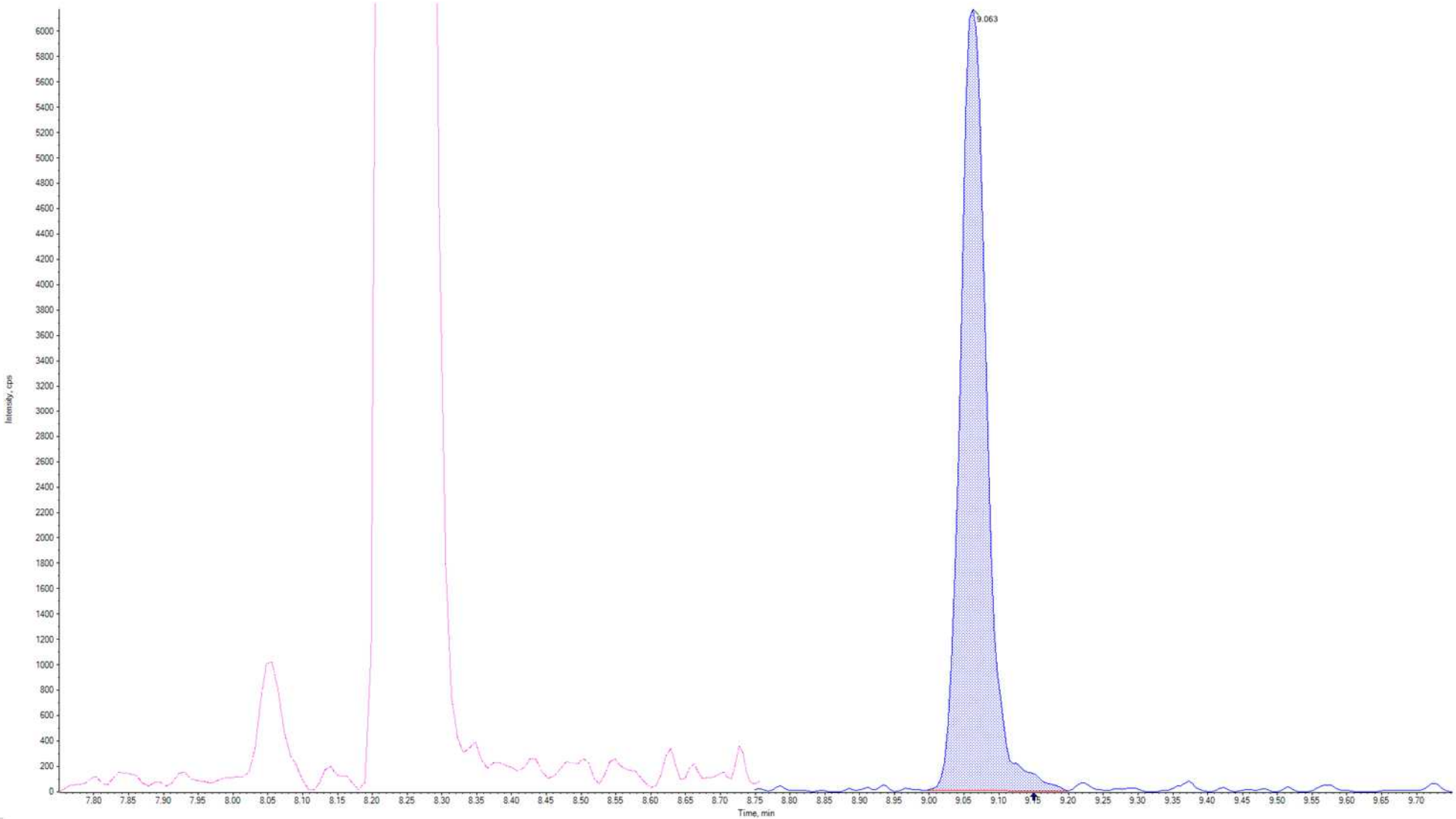
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDS
Sample: WG1971858-2 S/N:2213.9 Points Across peak:41



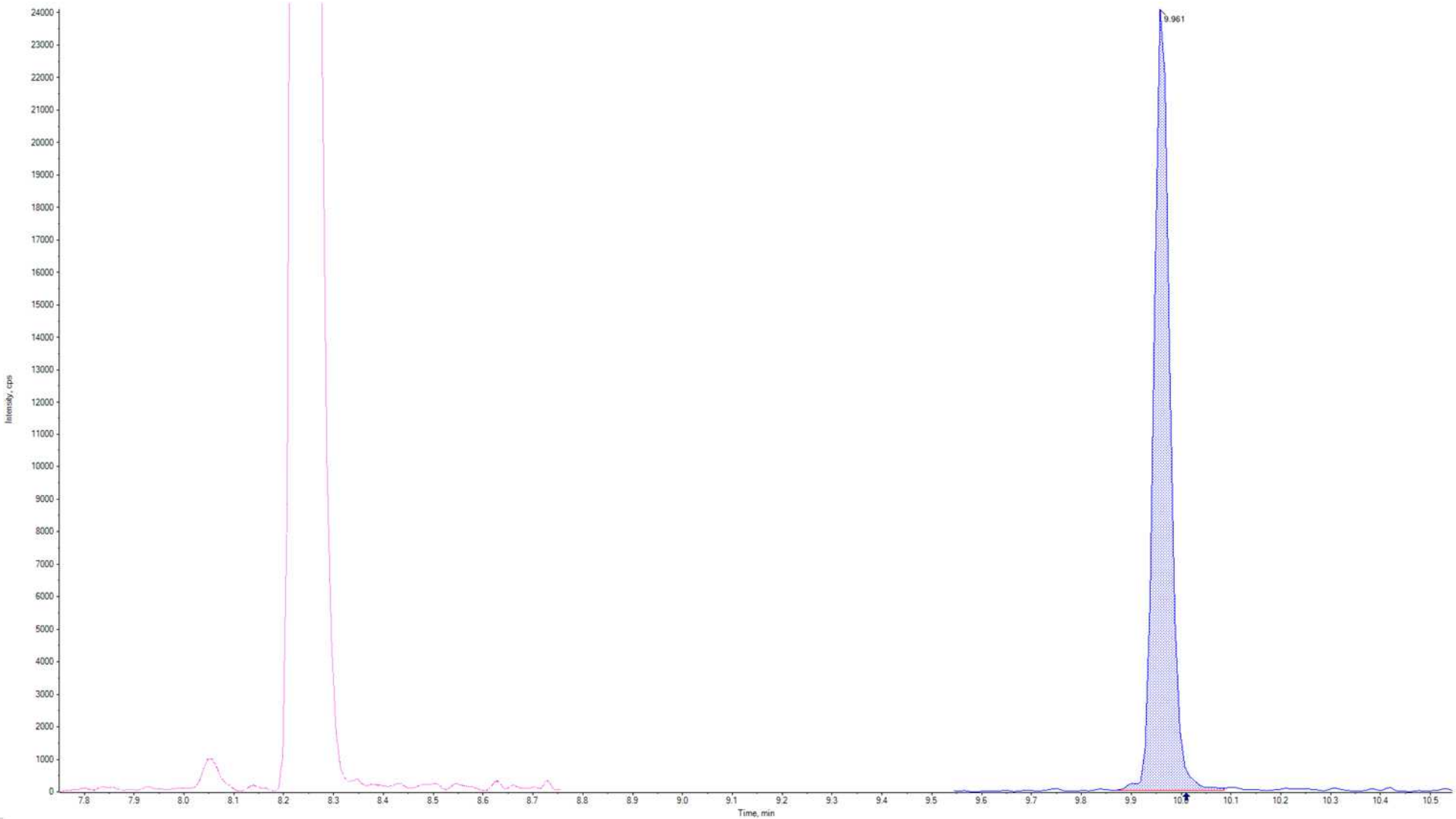
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDS_2
Sample: WG1971858-2 S/N:41033.0 Points Across peak:43



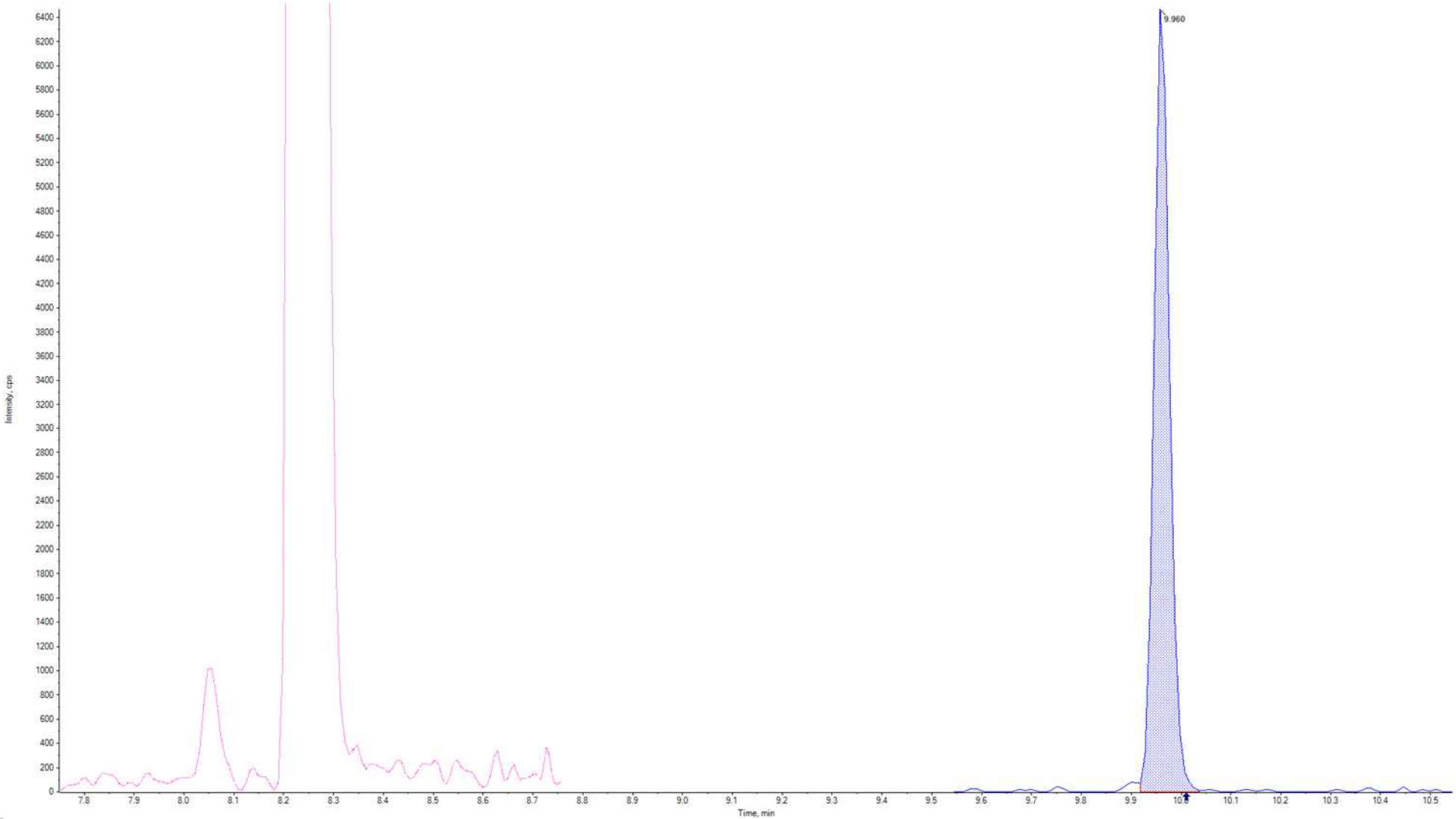
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS
Sample: WG1971858-2 S/N:3525.2 Points Across peak:24



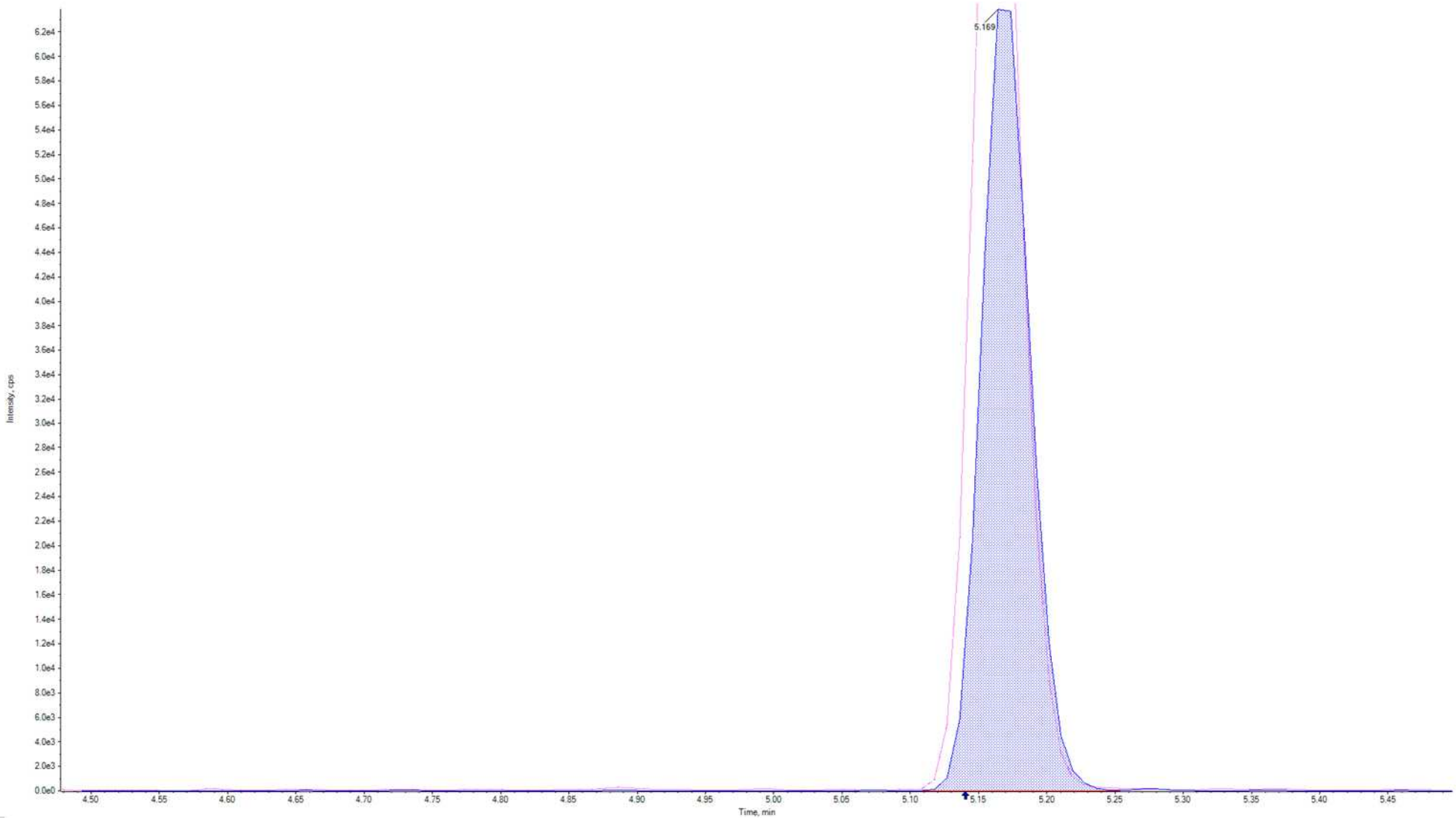
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS_2
Sample: WG1971858-2 S/N:920.9 Points Across peak:13



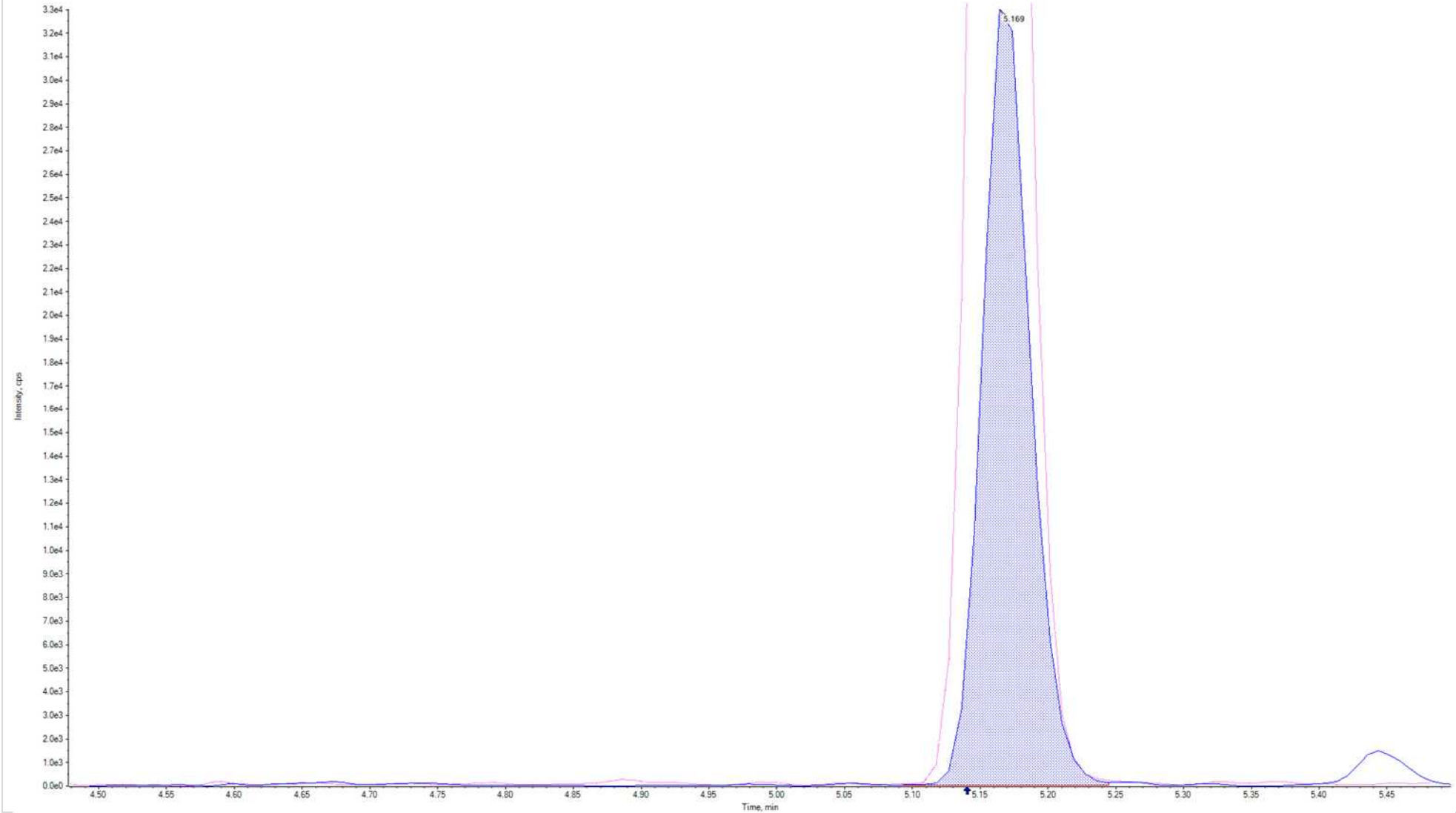
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS
Sample: WG1971858-2 S/N:13571928.1 Points Across peak:19



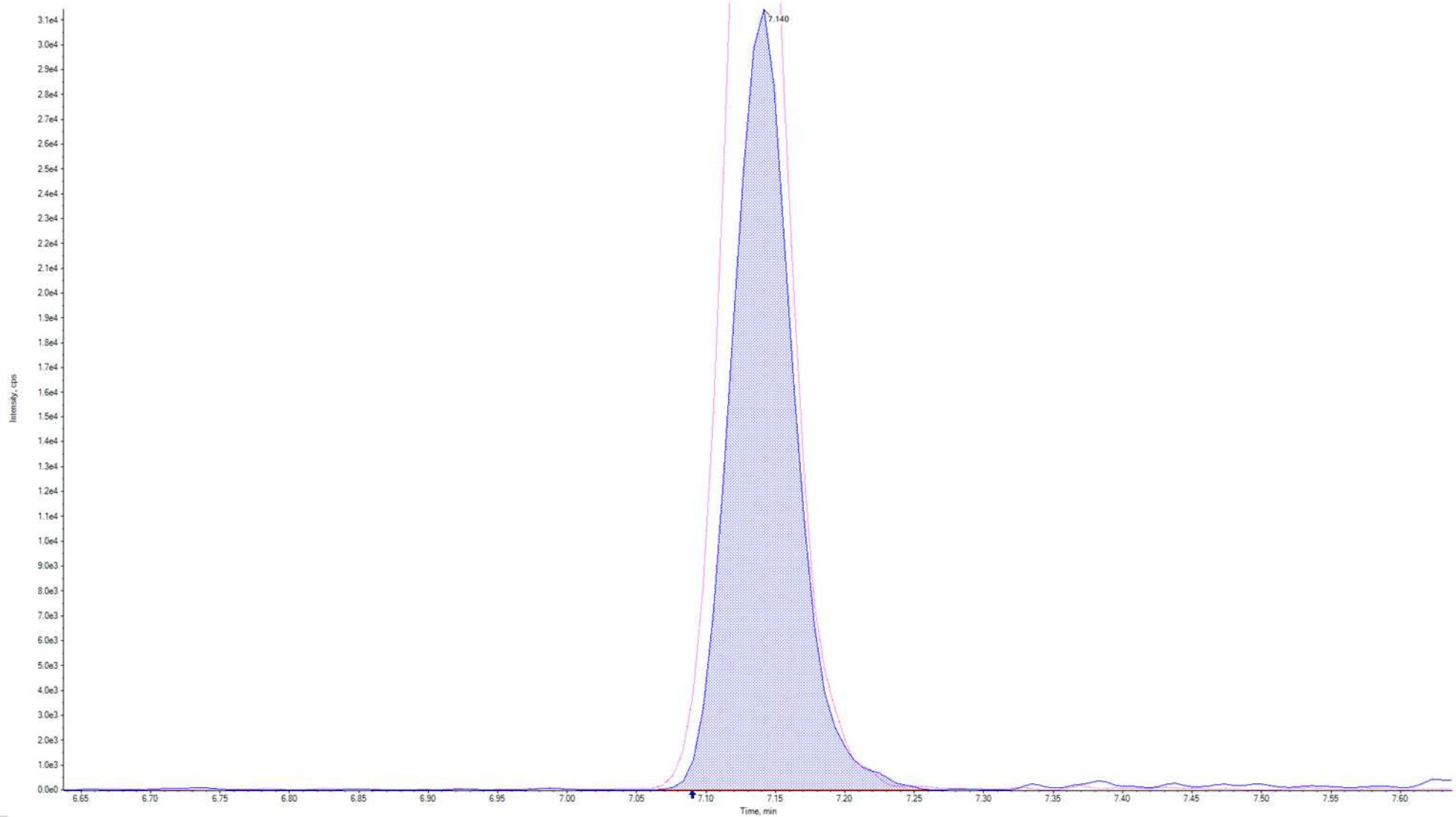
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS_2
Sample: WG1971858-2 S/N:9020.5 Points Across peak:19



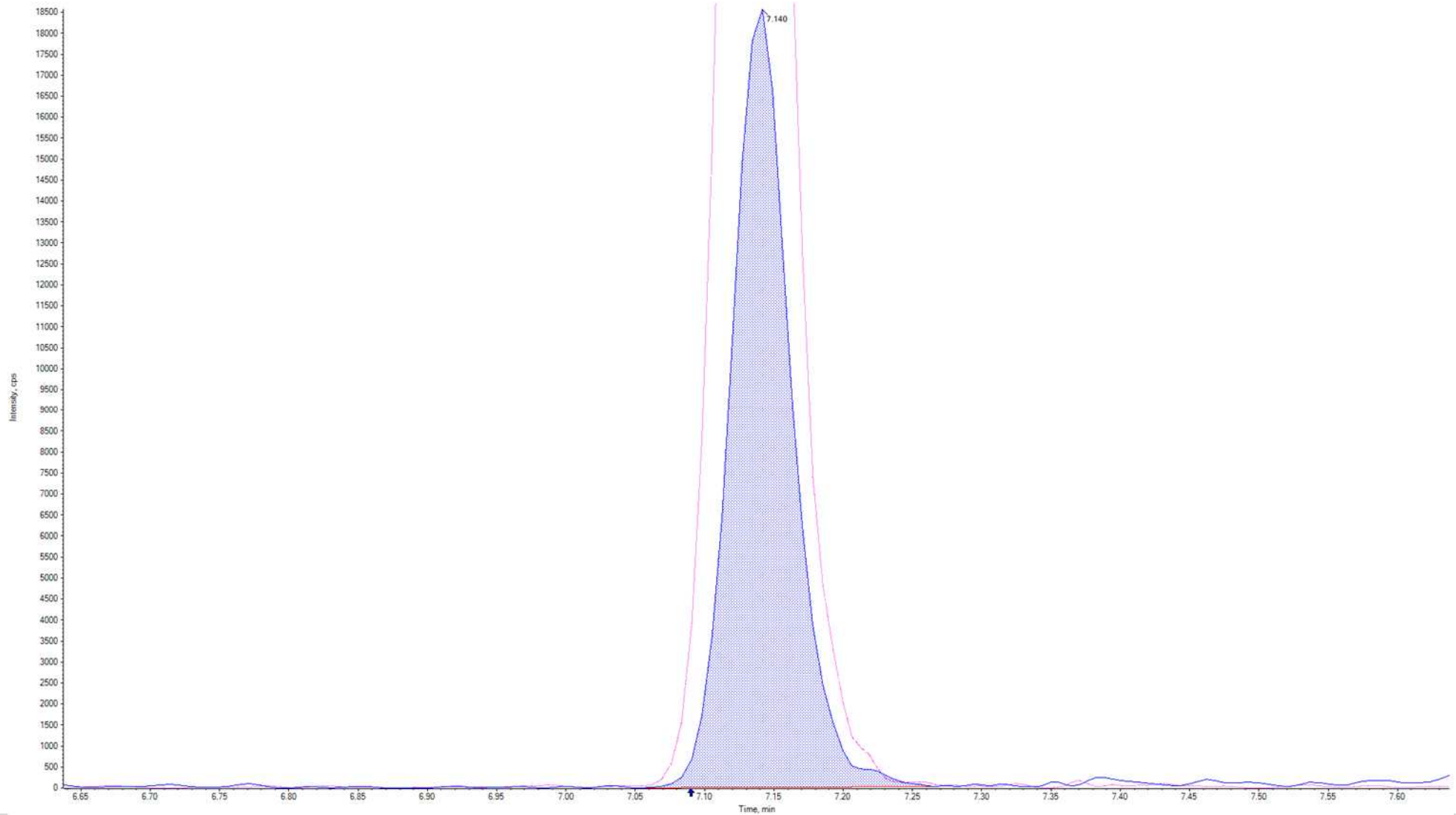
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS
Sample: WG1971858-2 S/N:842.6 Points Across peak:33



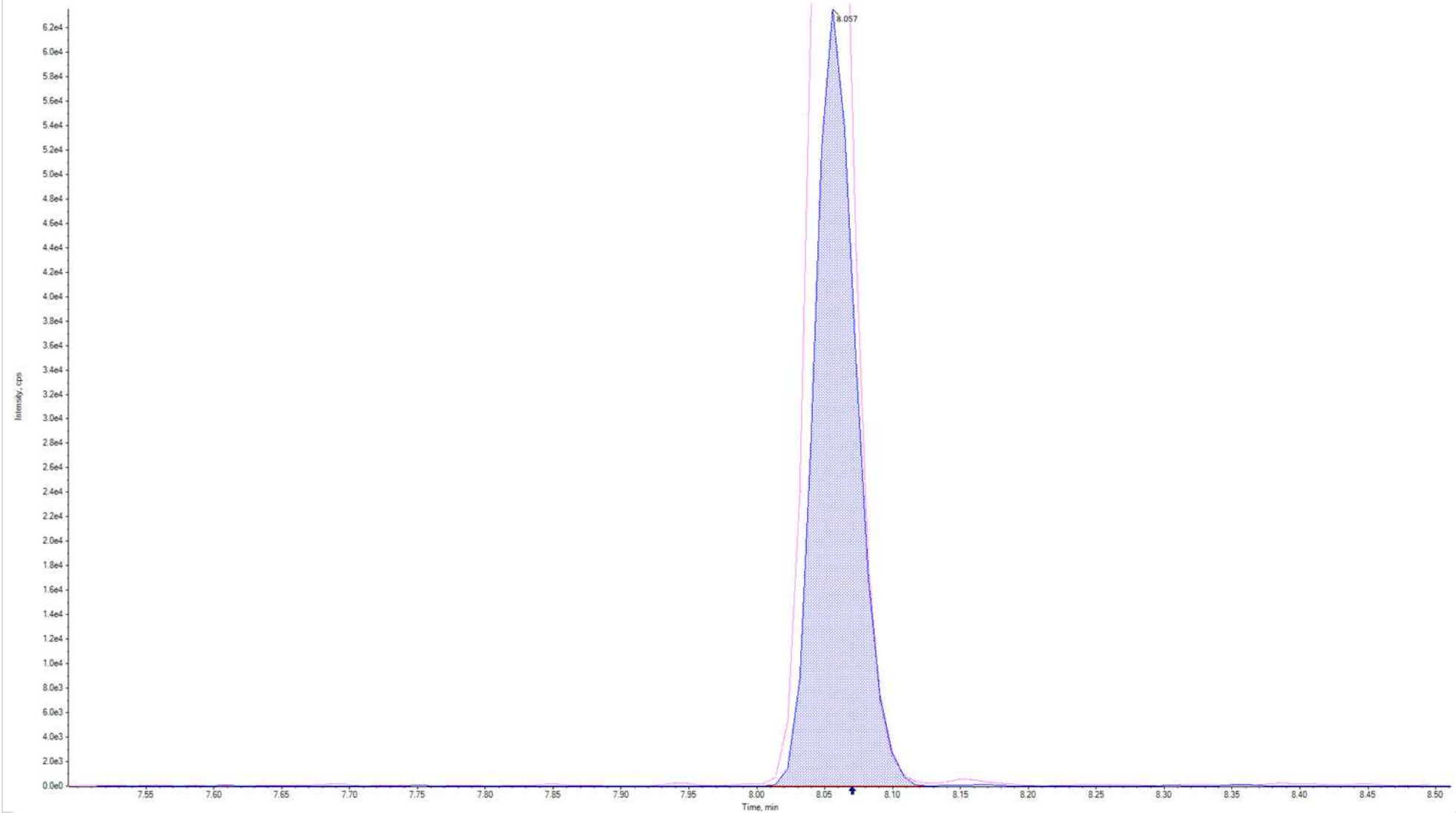
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS_2
Sample: WG1971858-2 S/N:39679.1 Points Across peak:32



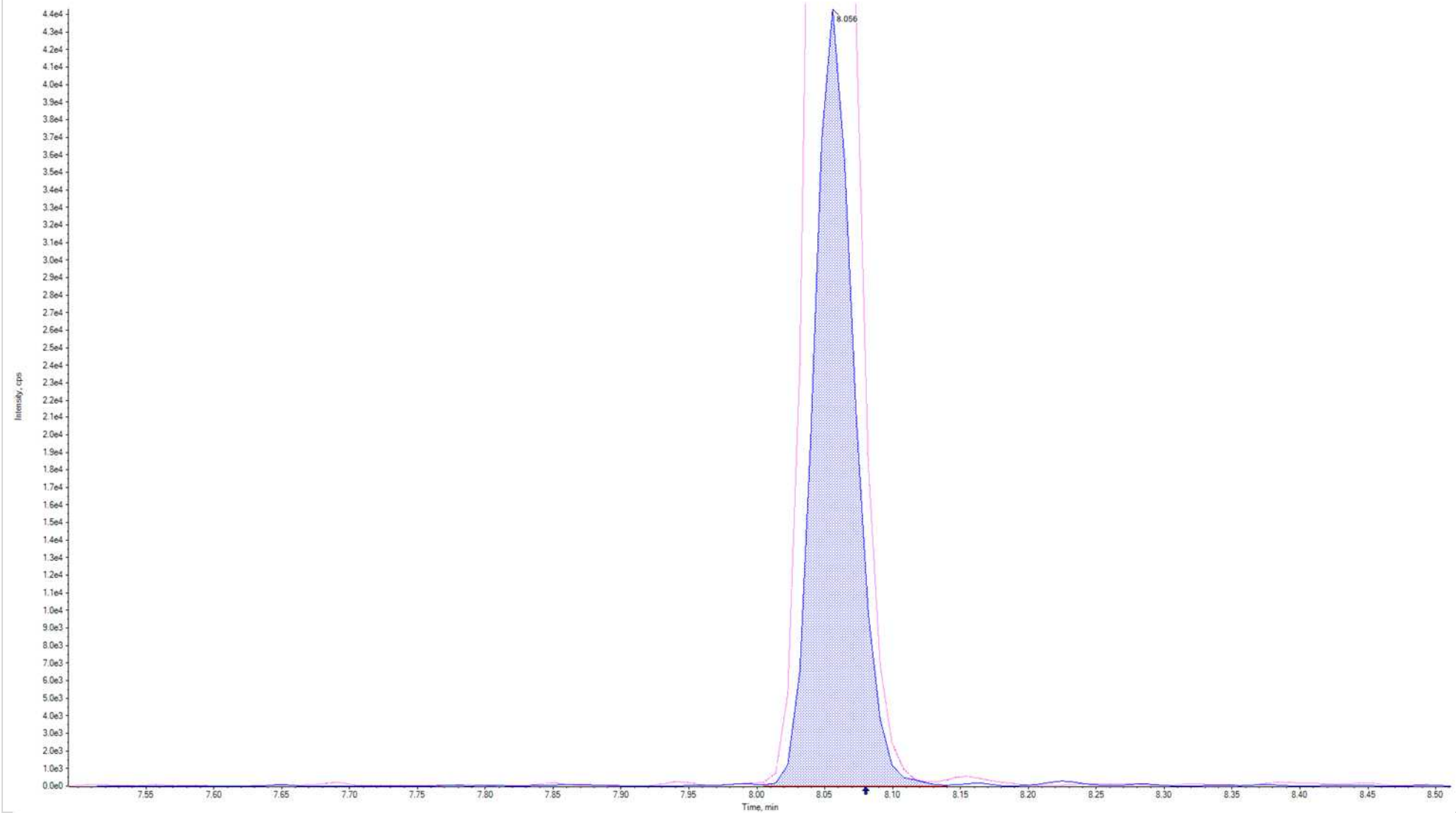
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

8:2FTS
Sample: WG1971858-2 S/N:573437.0 Points Across peak:20



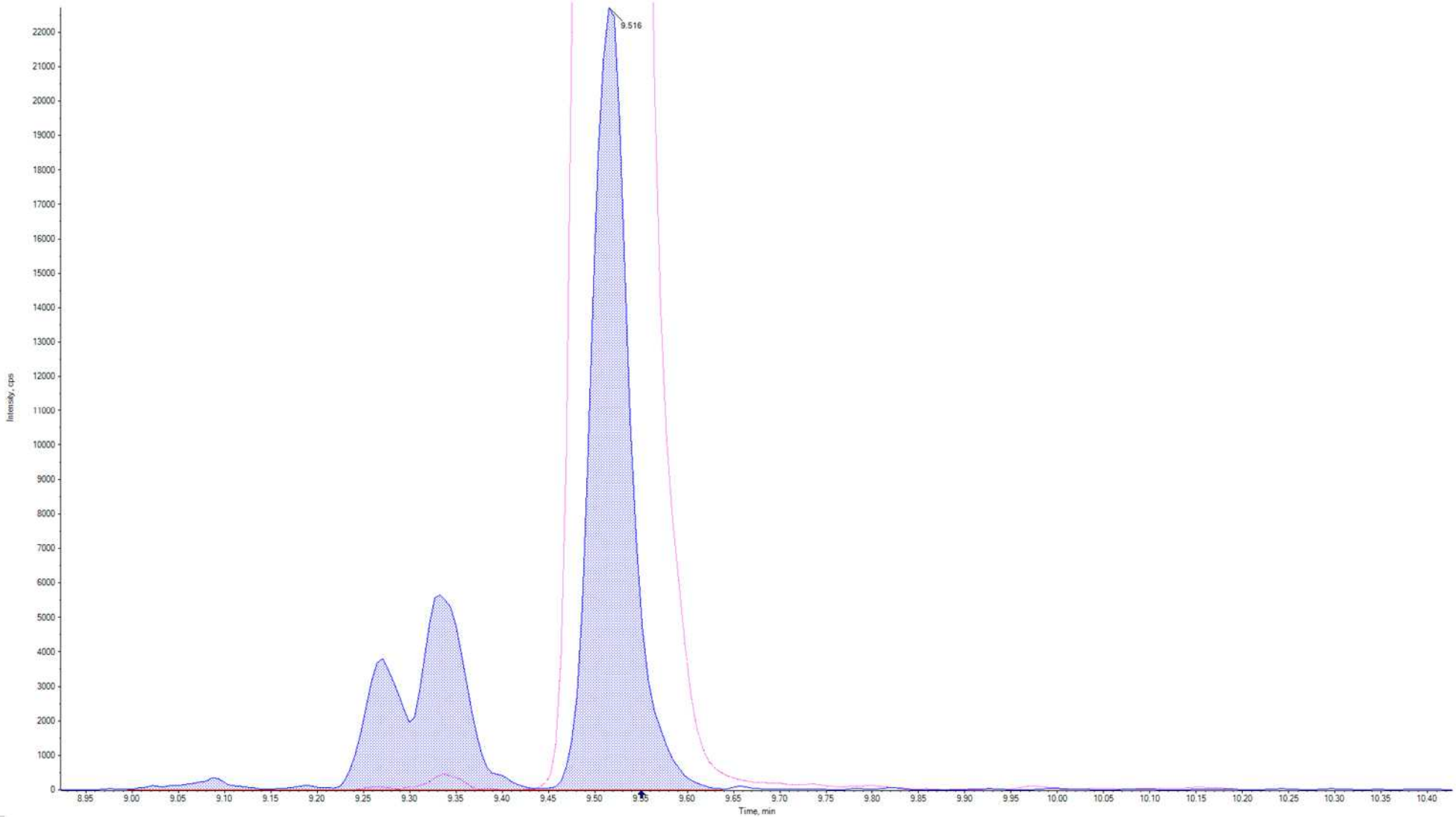
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

8:2FTS_2
Sample: WG1971858-2 S/N:1190.4 Points Across peak:17



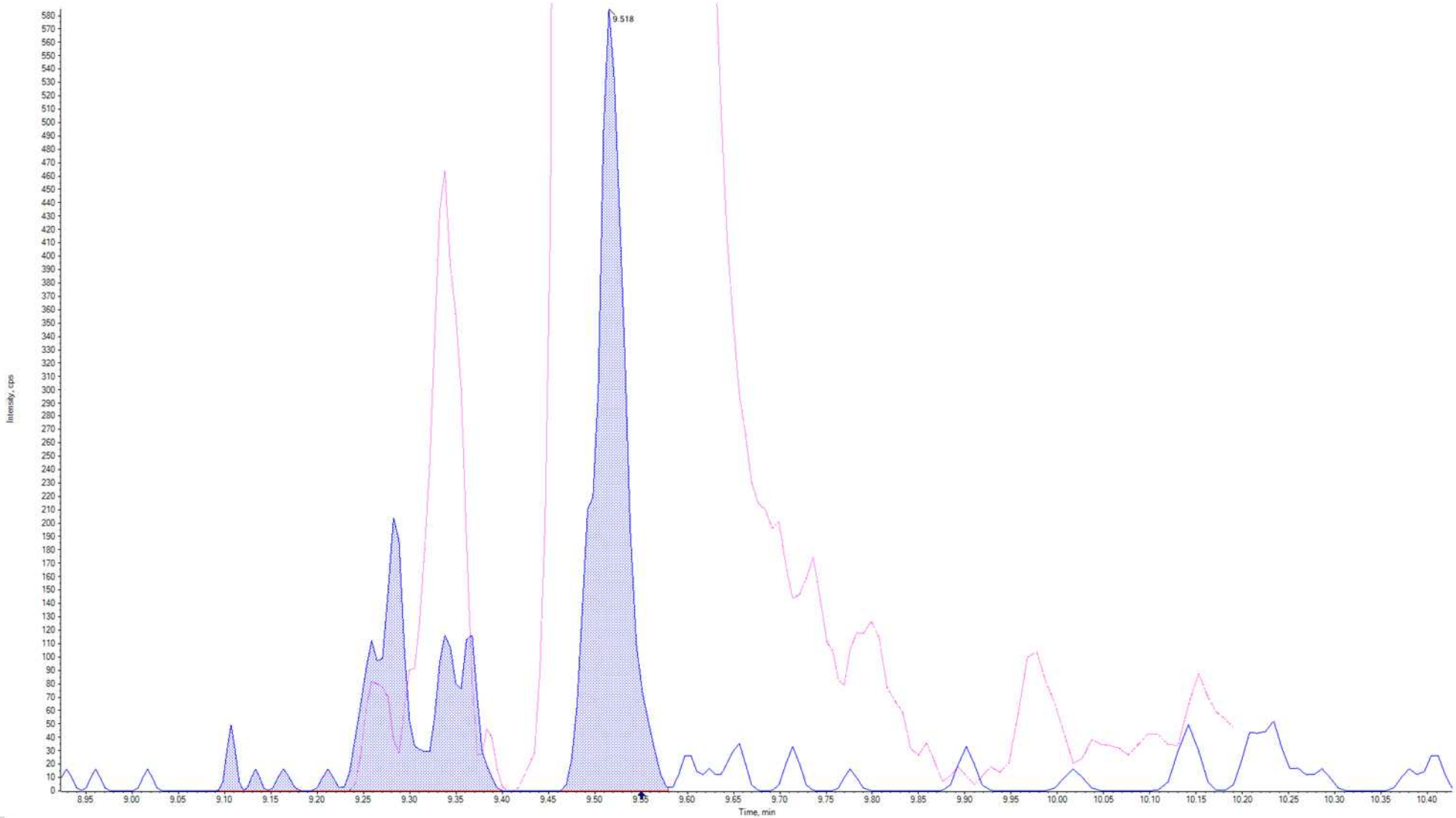
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOSA
Sample: WG1971858-2 S/N:825.4 Points Across peak:118



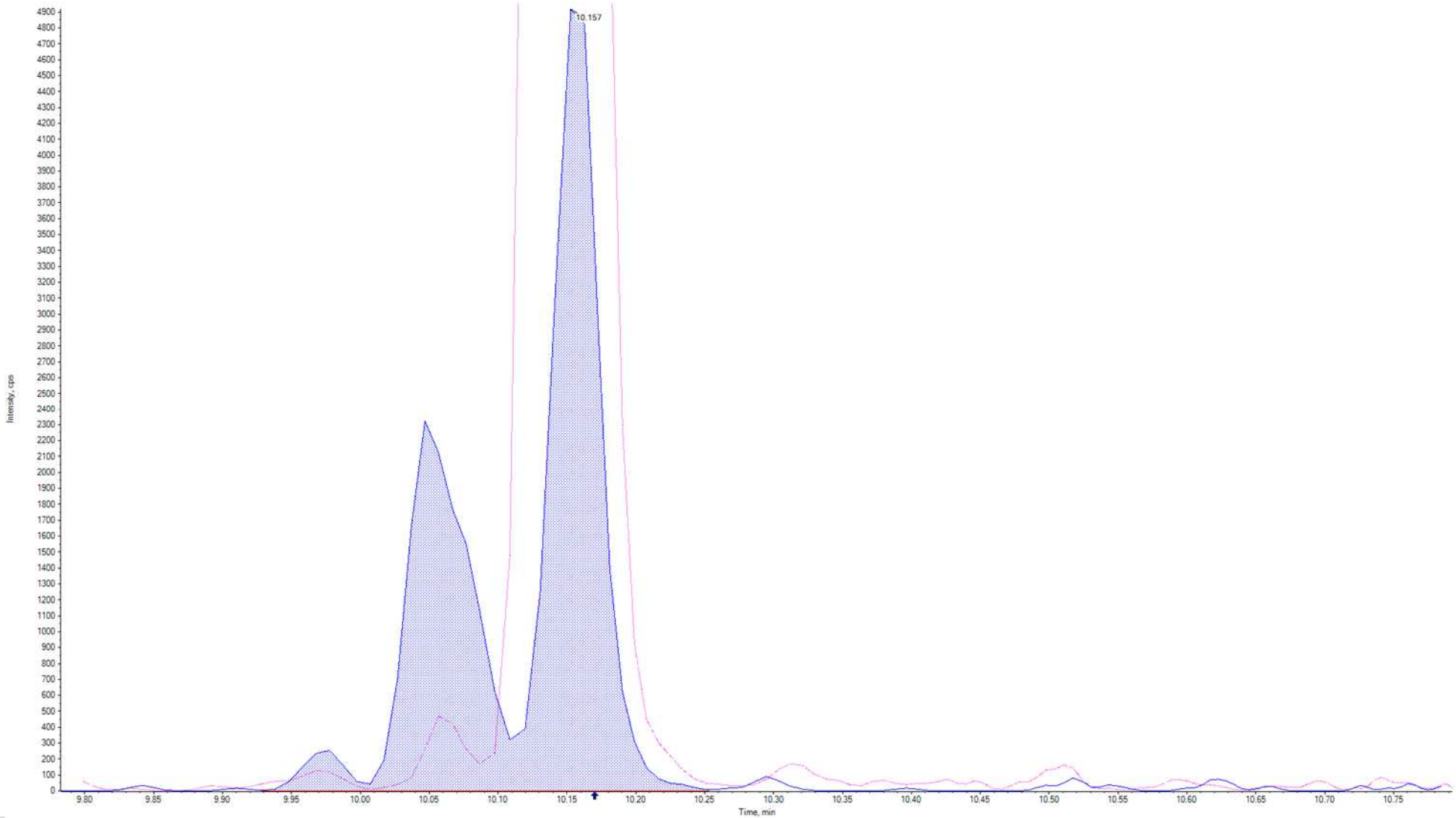
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOSA_2
Sample: WG1971858-2 S/N:104.0 Points Across peak:89



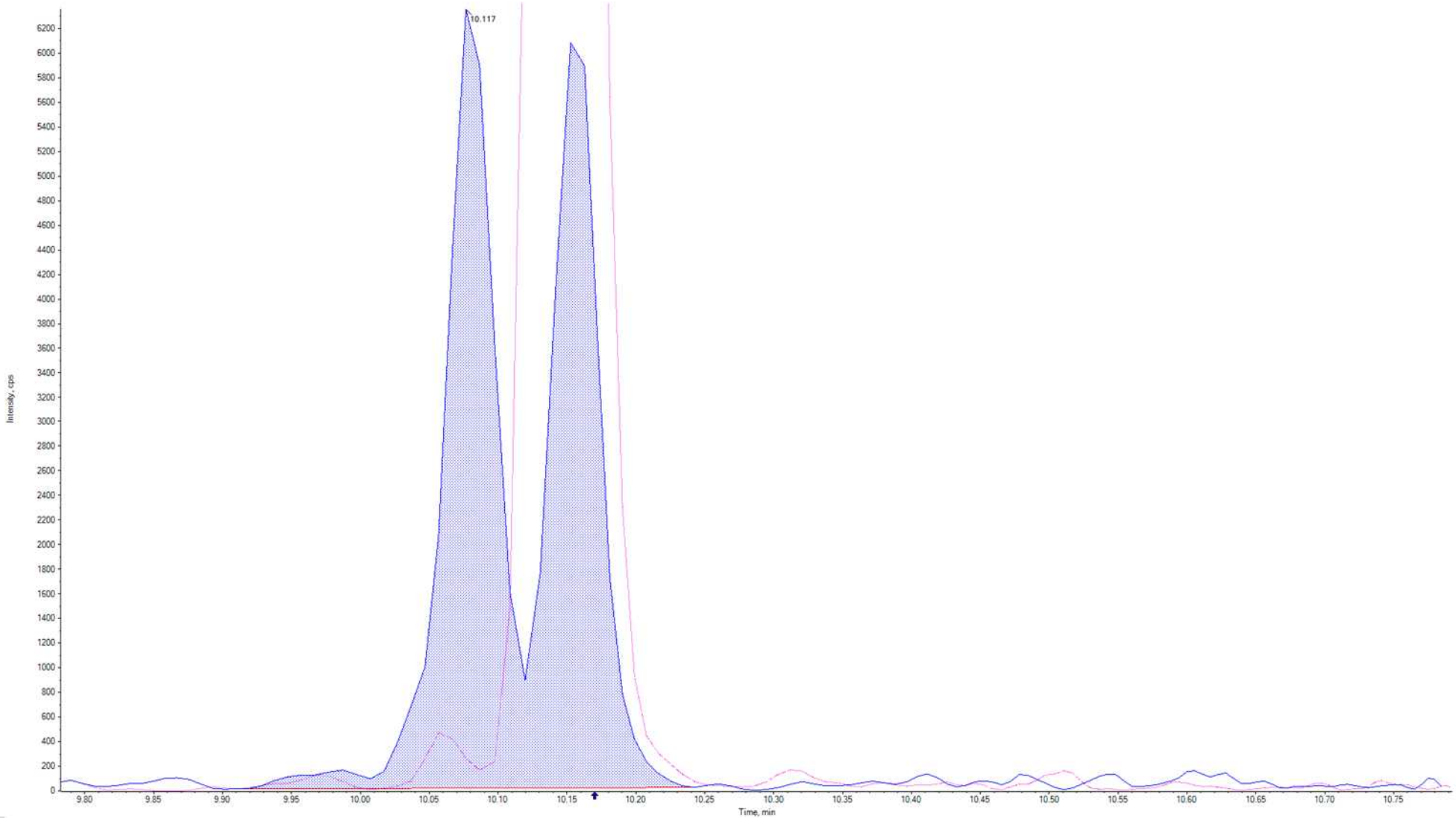
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSA
Sample: WG1971858-2 S/N:305.0 Points Across peak:35



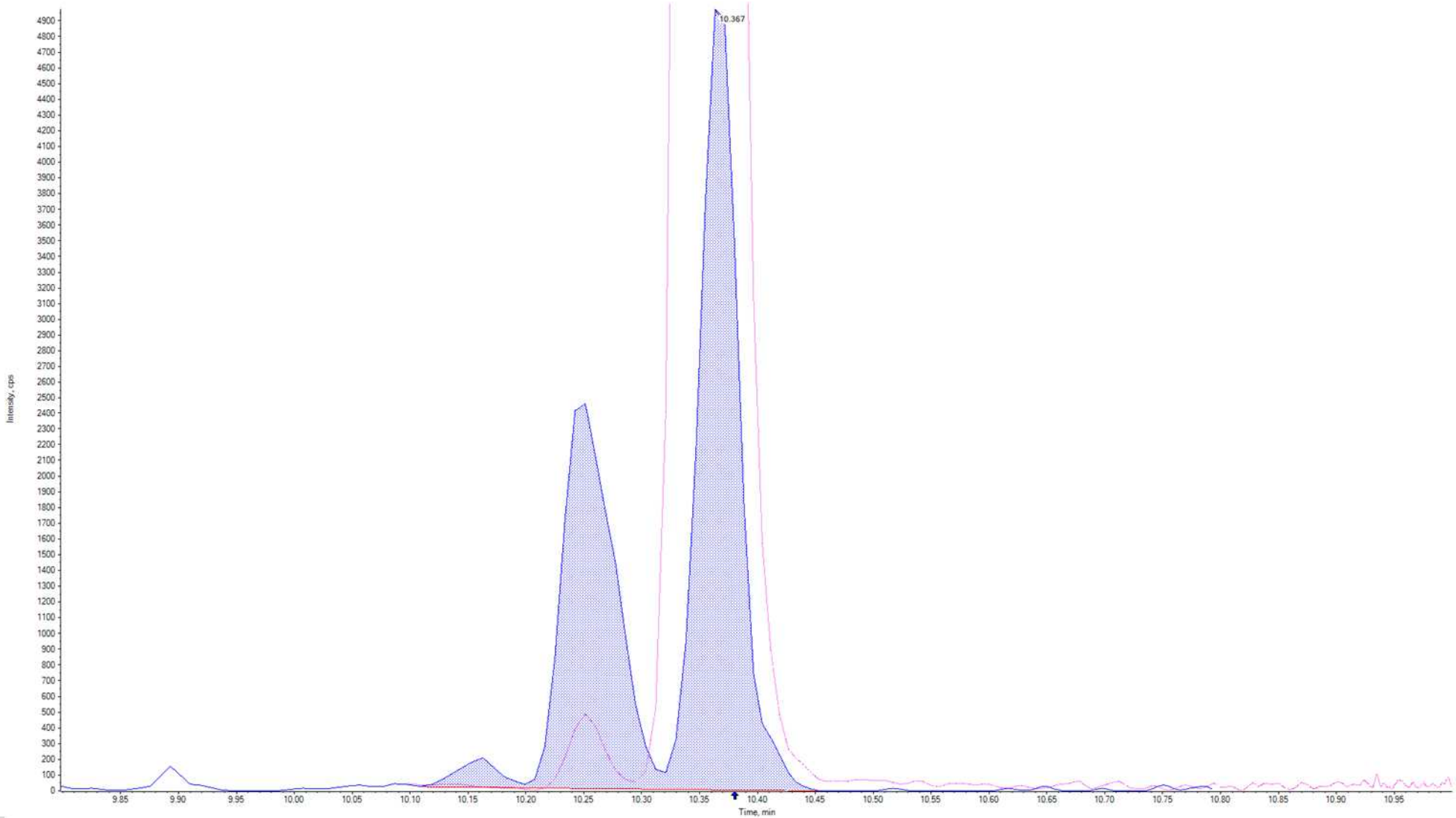
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSA_2
Sample: WG1971858-2 S/N:458.5 Points Across peak:36



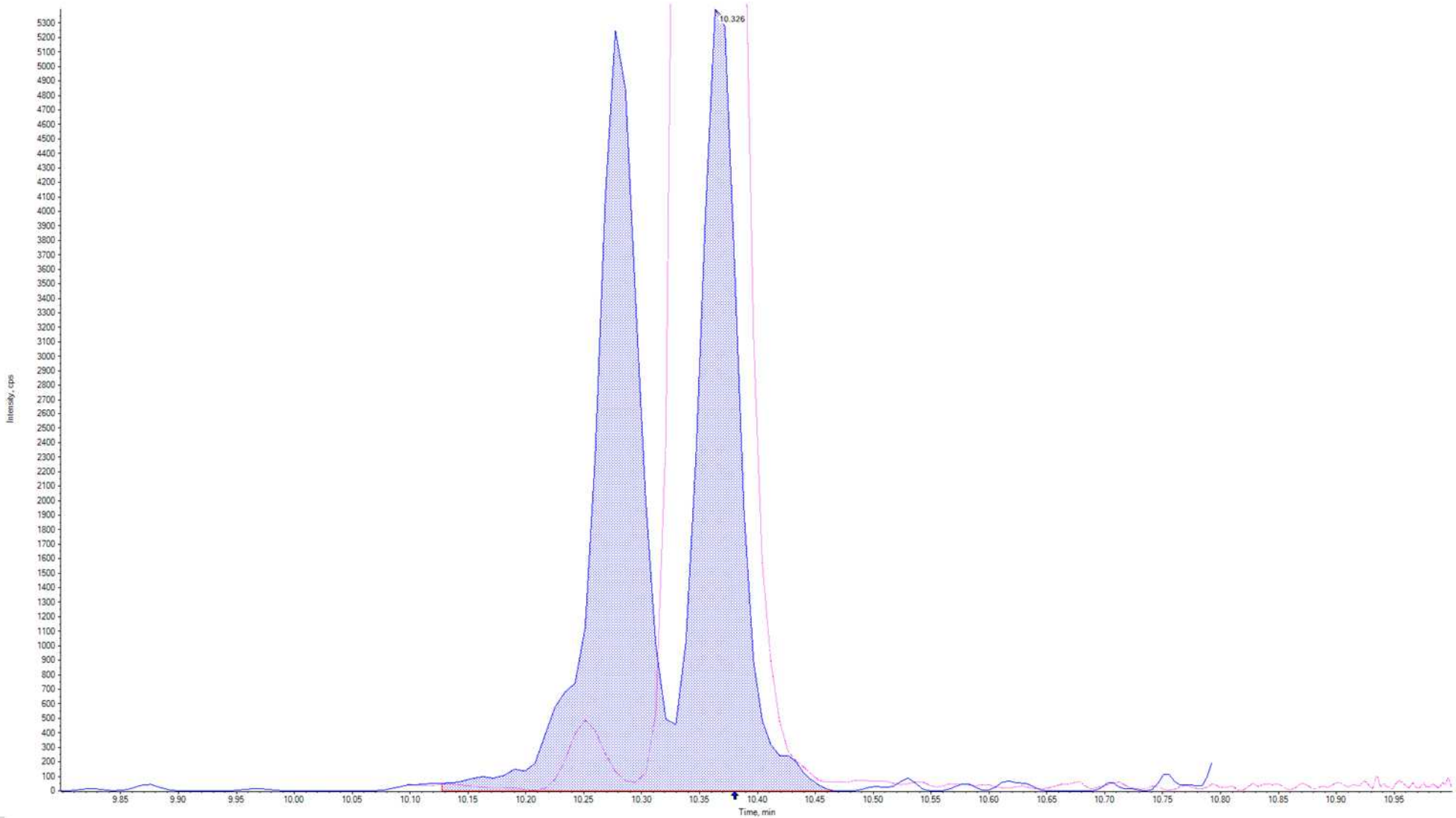
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA
Sample: WG1971858-2 S/N:363.1 Points Across peak:43



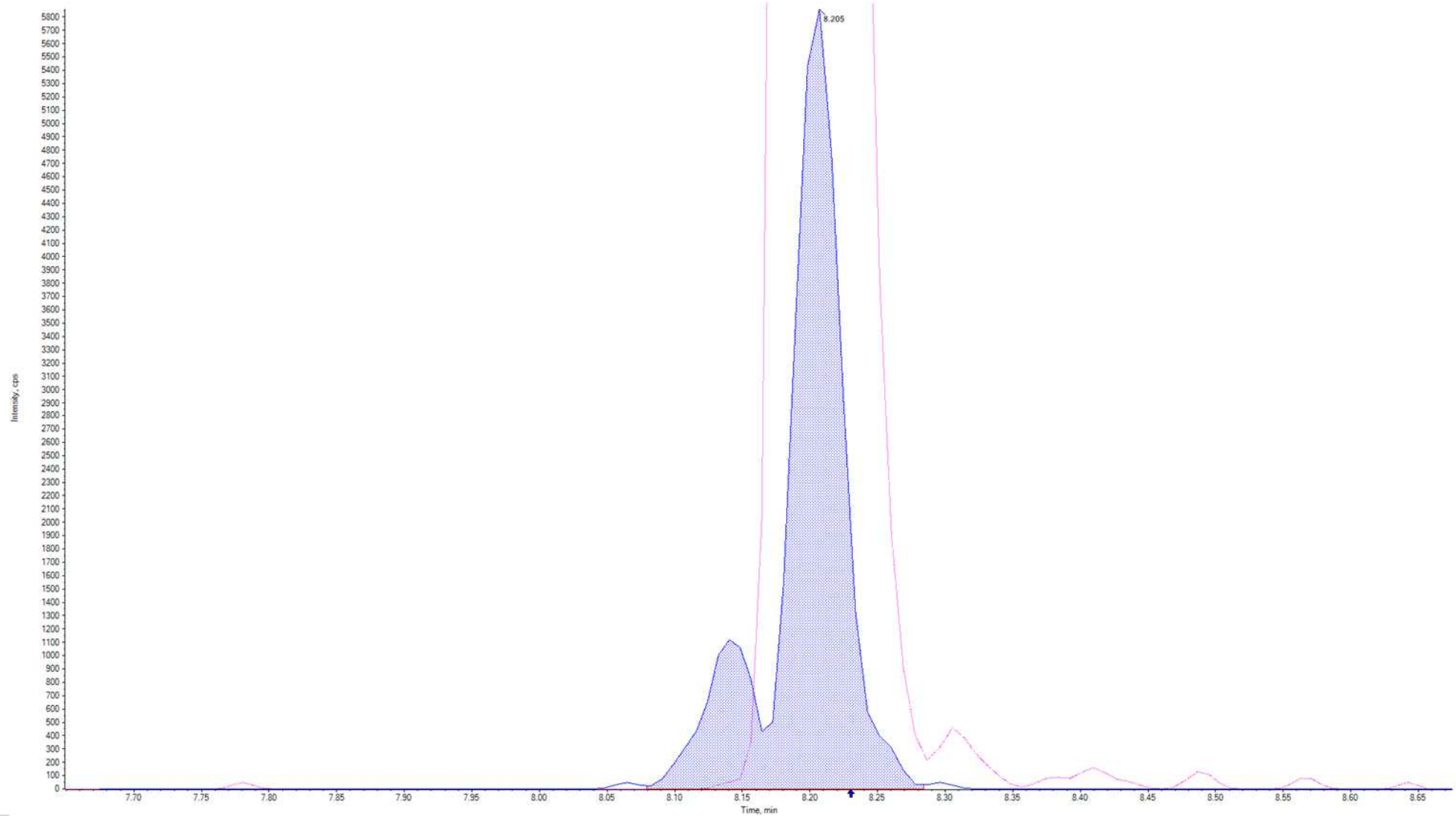
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA_2
Sample: WG1971858-2 S/N:2036739.1 Points Across peak:43



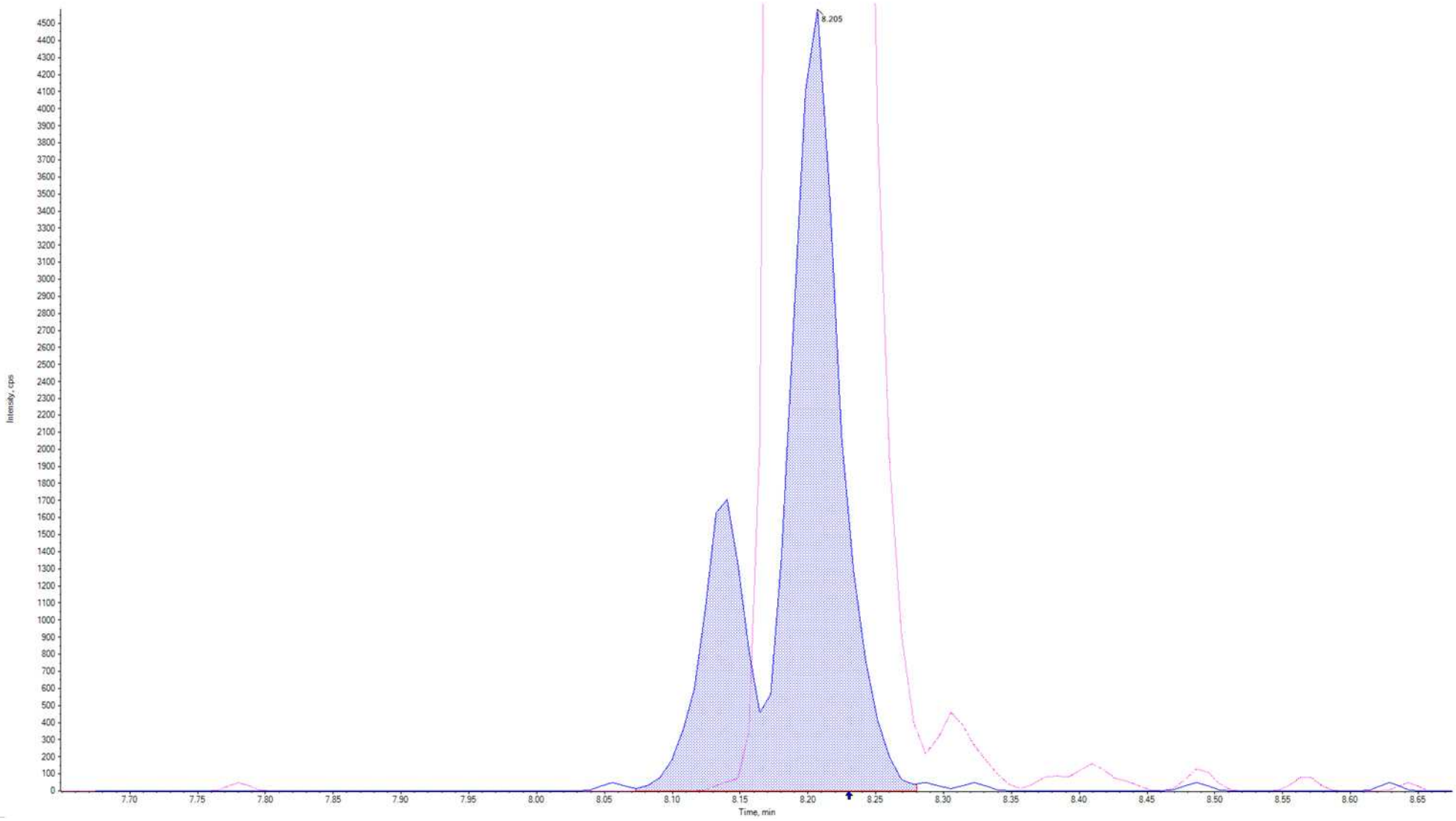
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA
Sample: WG1971858-2 S/N:98091.0 Points Across peak:26



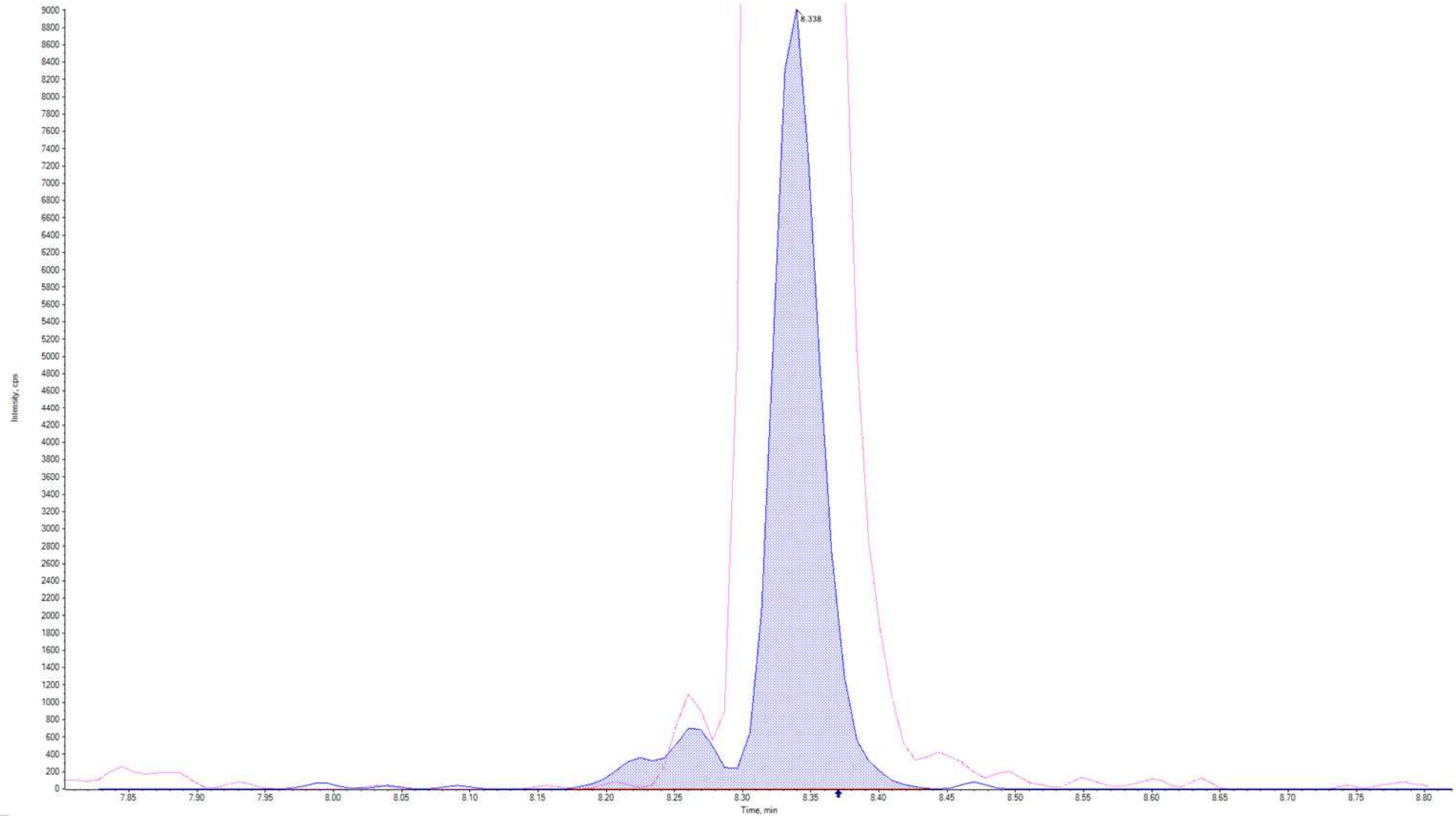
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA_2
Sample: WG1971858-2 S/N:228.6 Points Across peak:27



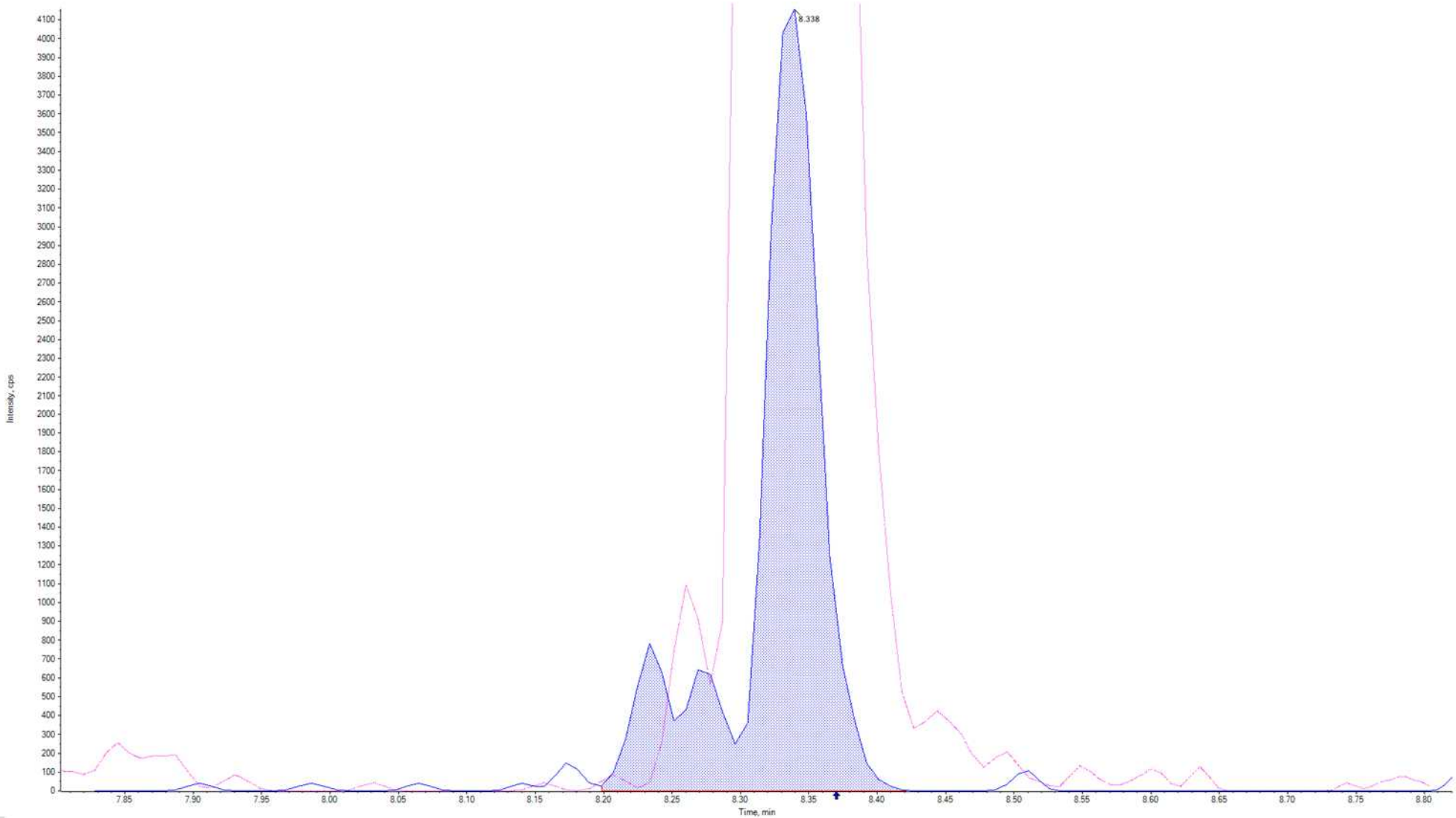
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA
Sample: WG1971858-2 S/N:432.7 Points Across peak:34



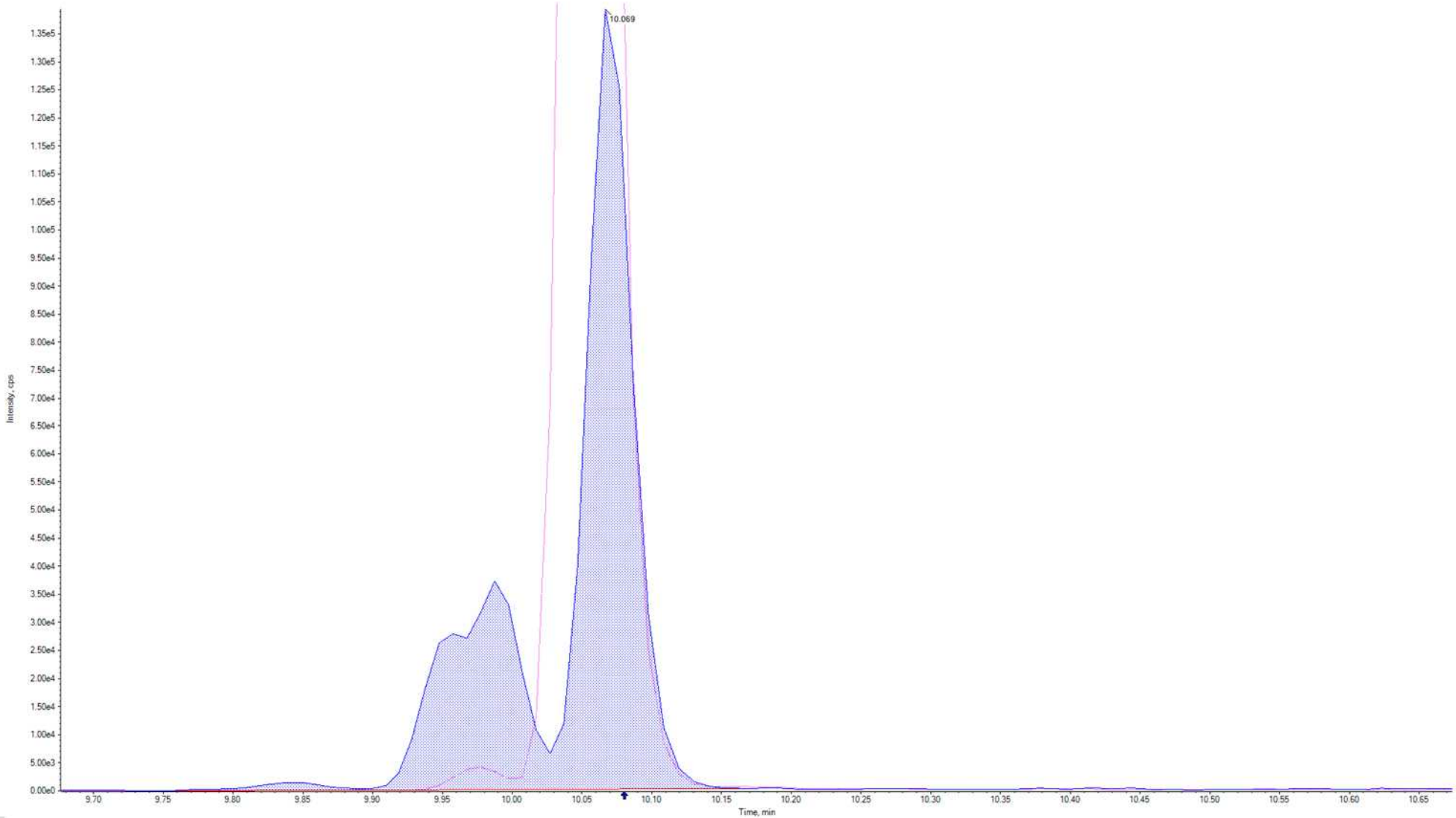
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA_2
Sample: WG1971858-2 S/N:220.7 Points Across peak:27



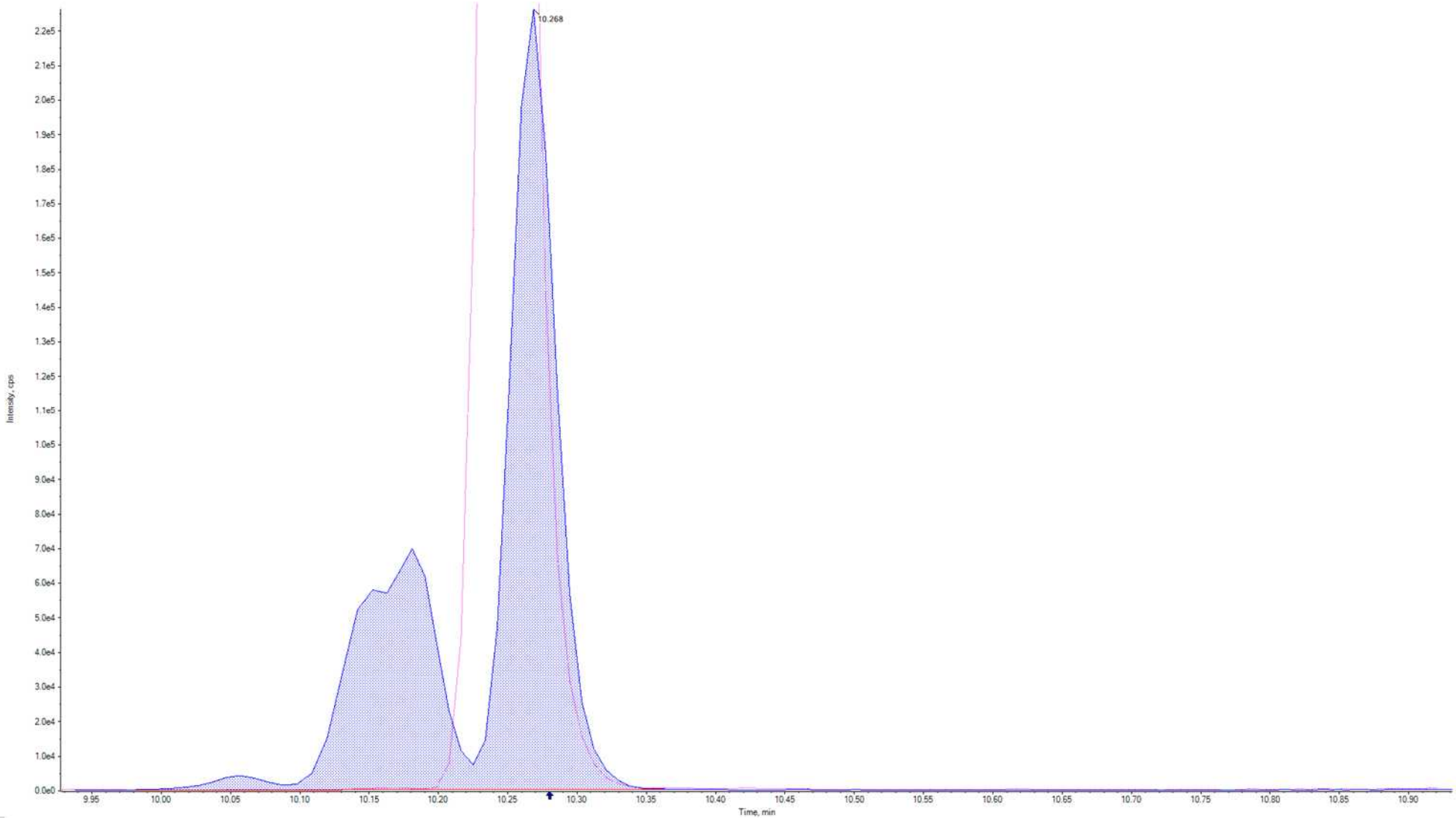
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSE
Sample: WG1971858-2 S/N:2220.8 Points Across peak:48



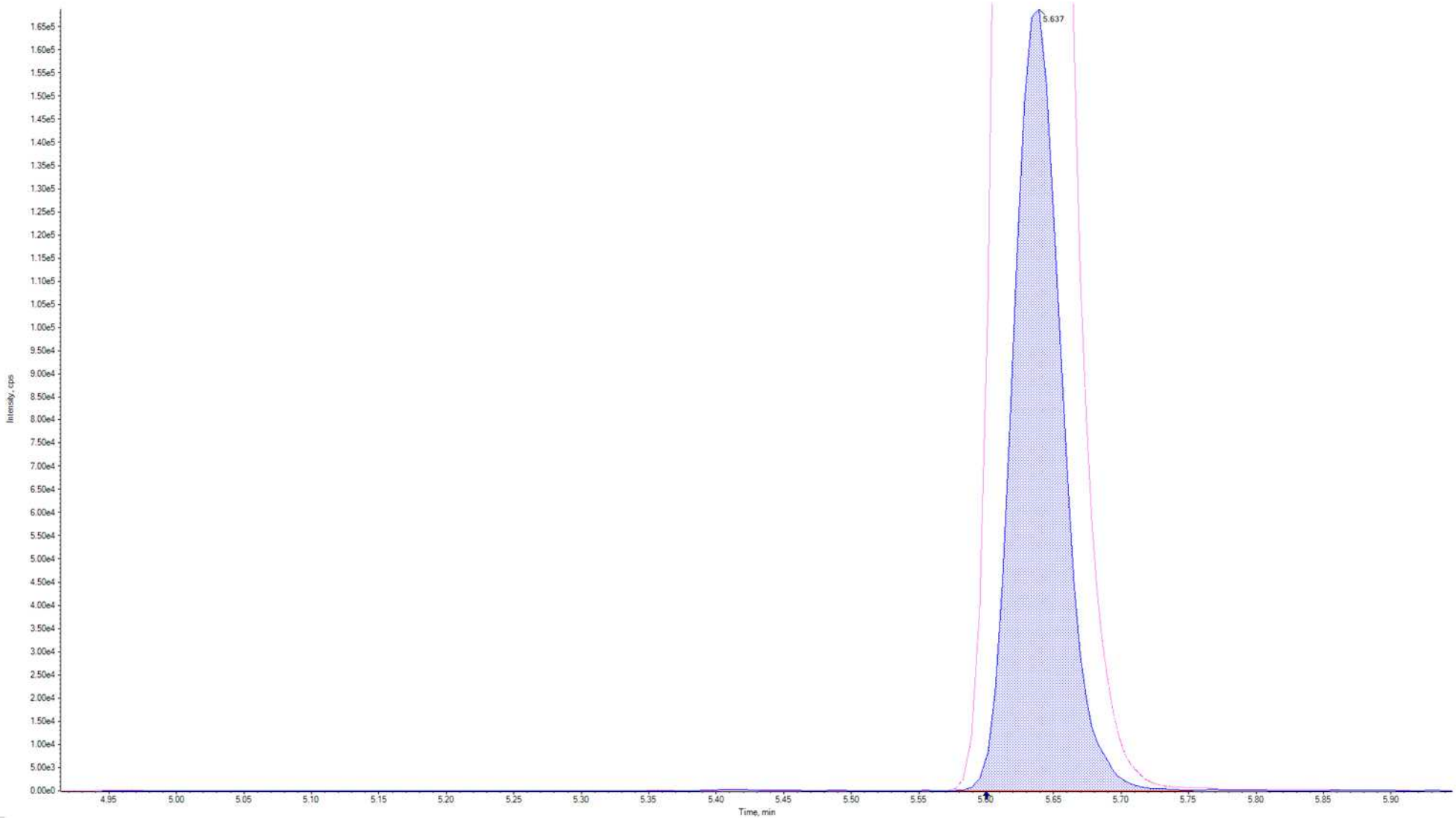
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSE
Sample: WG1971858-2 S/N:1334.3 Points Across peak:45



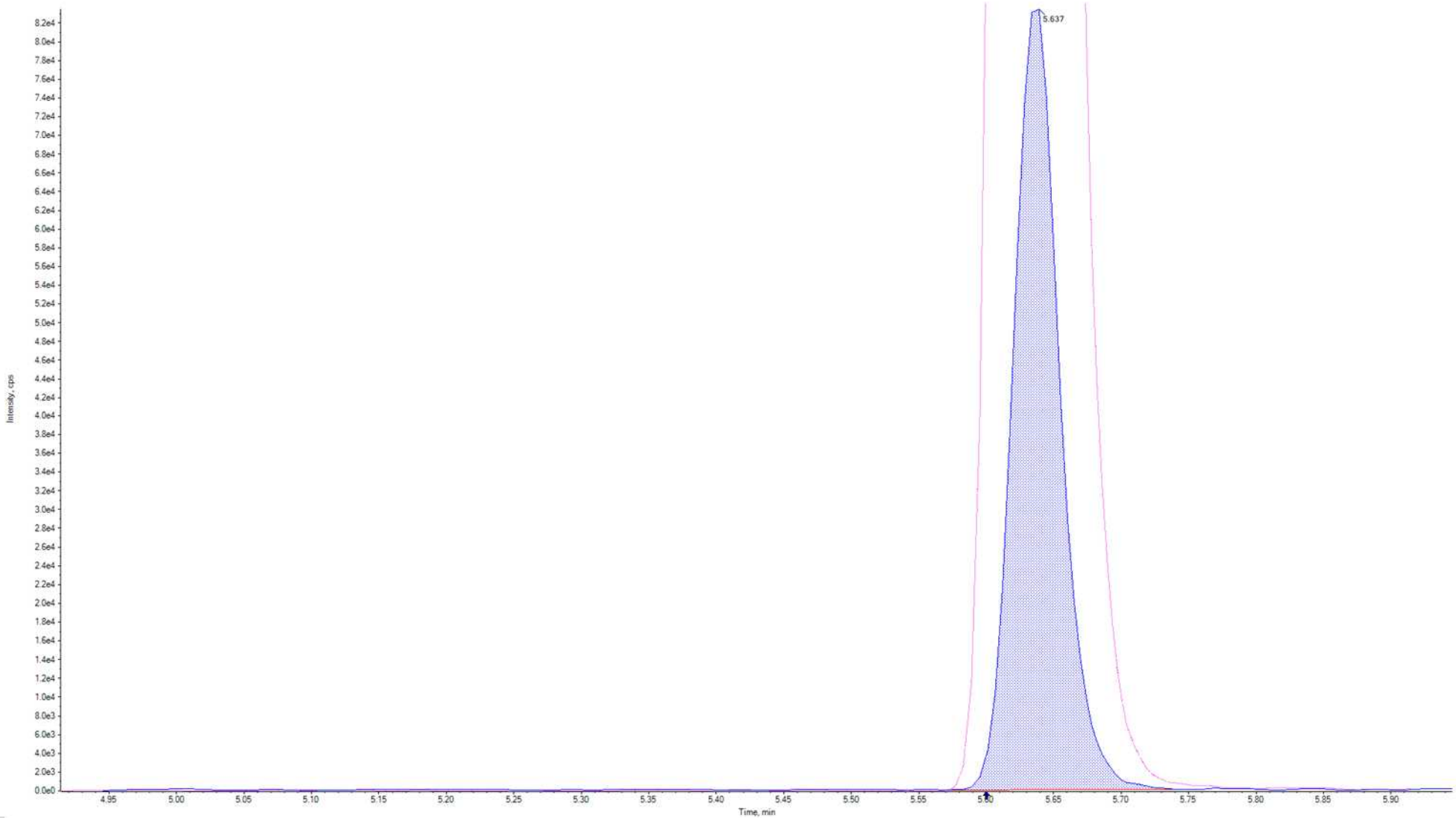
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA
Sample: WG1971858-2 S/N:14204.0 Points Across peak:39



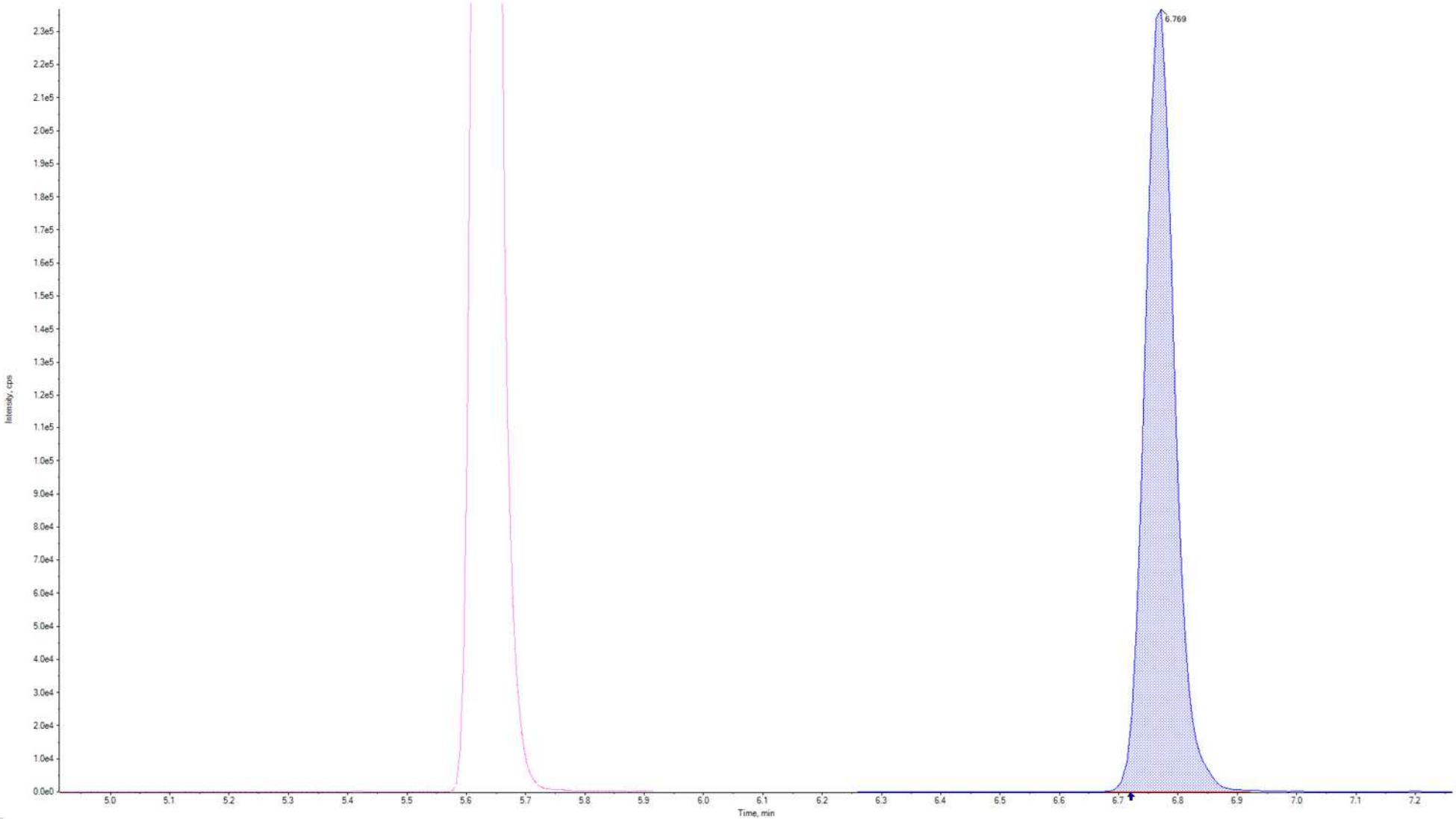
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA_2
Sample: WG1971858-2 S/N:1538.4 Points Across peak:36



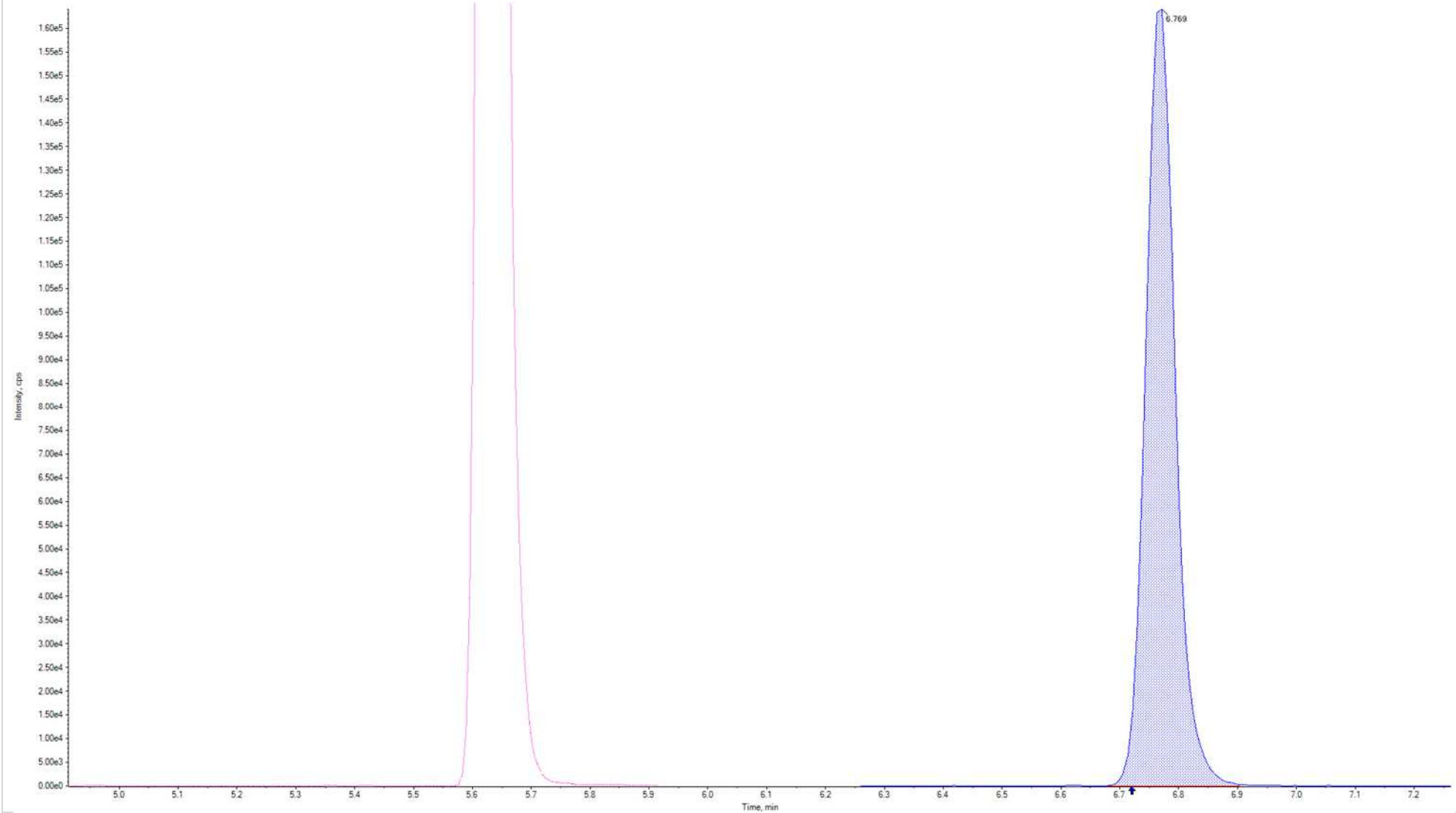
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

ADONA
Sample: WG1971858-2 S/N:51565.8 Points Across peak:39



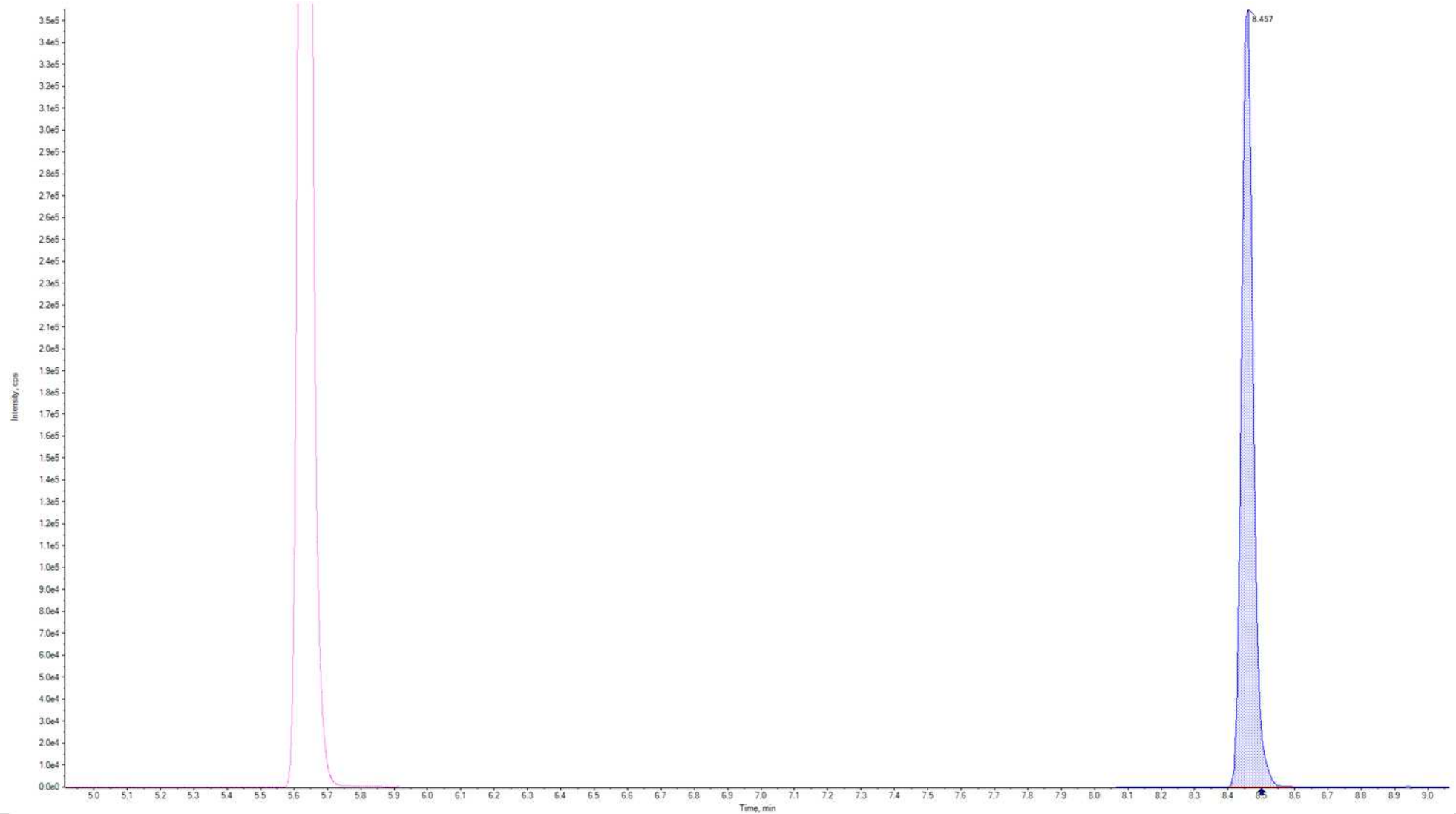
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

ADONA_2
Sample: WG1971858-2 S/N:8467.3 Points Across peak:34



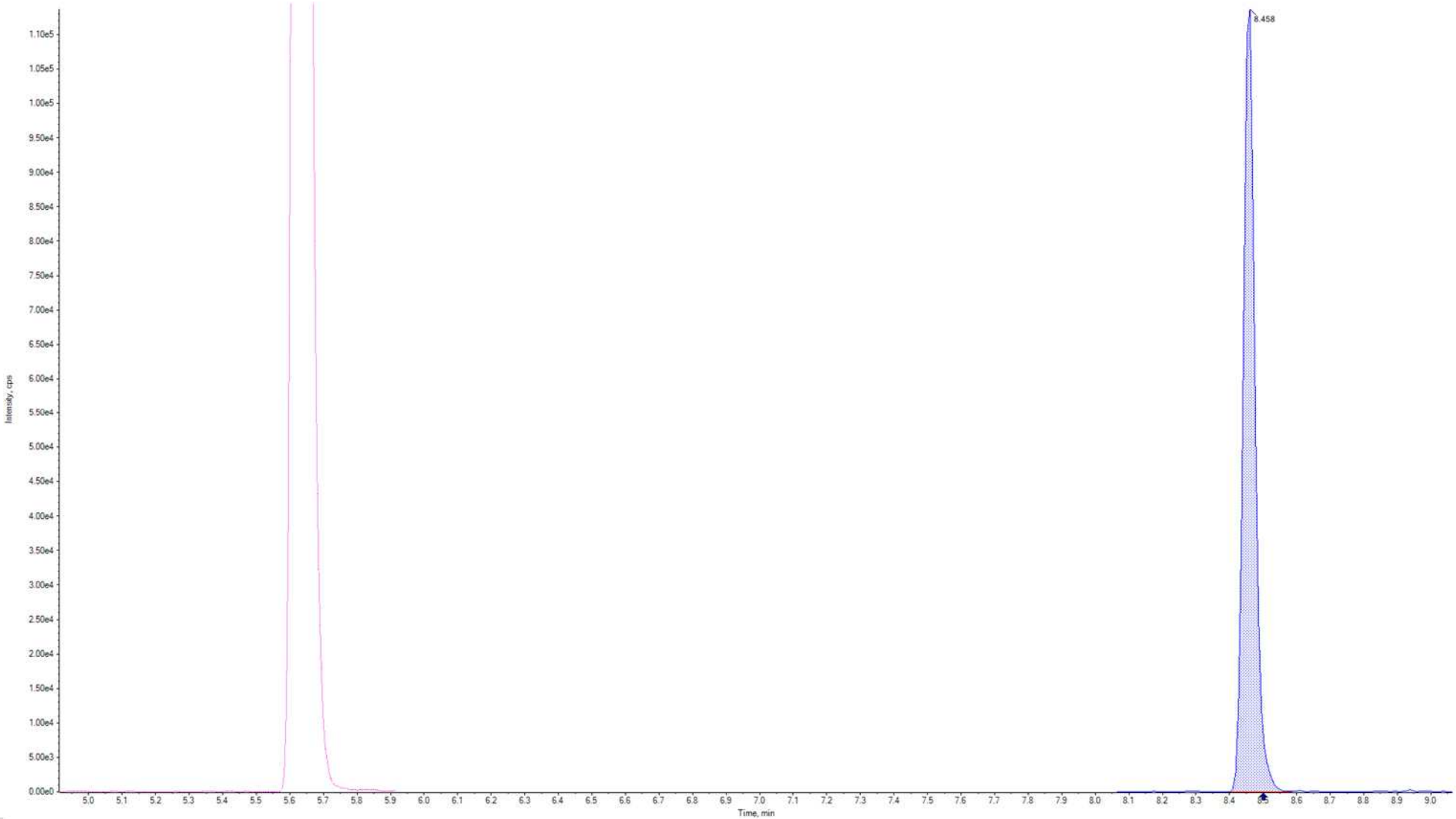
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS
Sample: WG1971858-2 S/N:50852.6 Points Across peak:32



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS_2
Sample: WG1971858-2 S/N:960231.4 Points Across peak:25



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

11Cl-PF3OUdS
Sample: WG1971858-2 S/N:2517415.1 Points Across peak:40



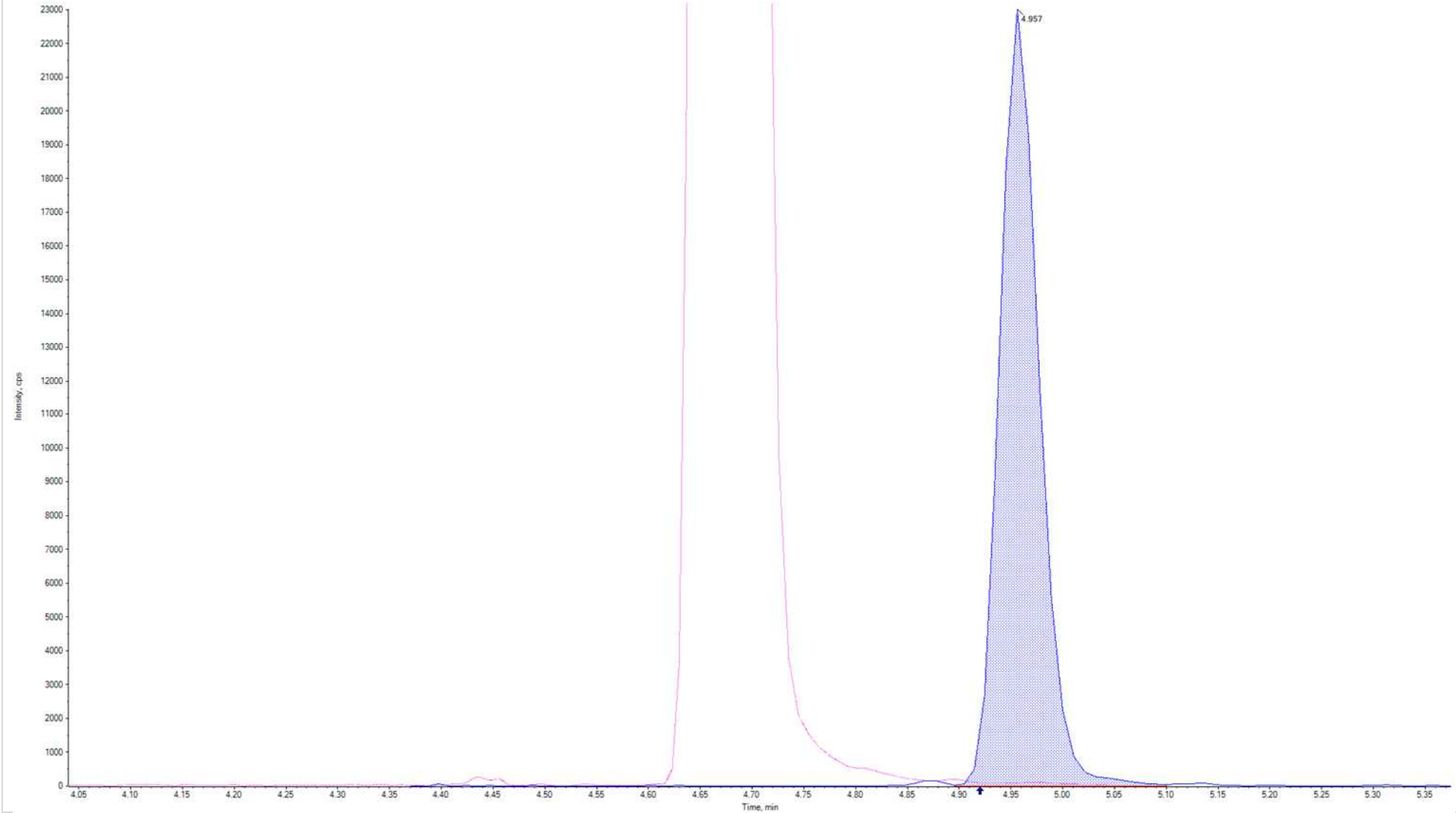
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

11Cl-PF3OUdS_2
Sample: WG1971858-2 S/N:1346030.6 Points Across peak:37



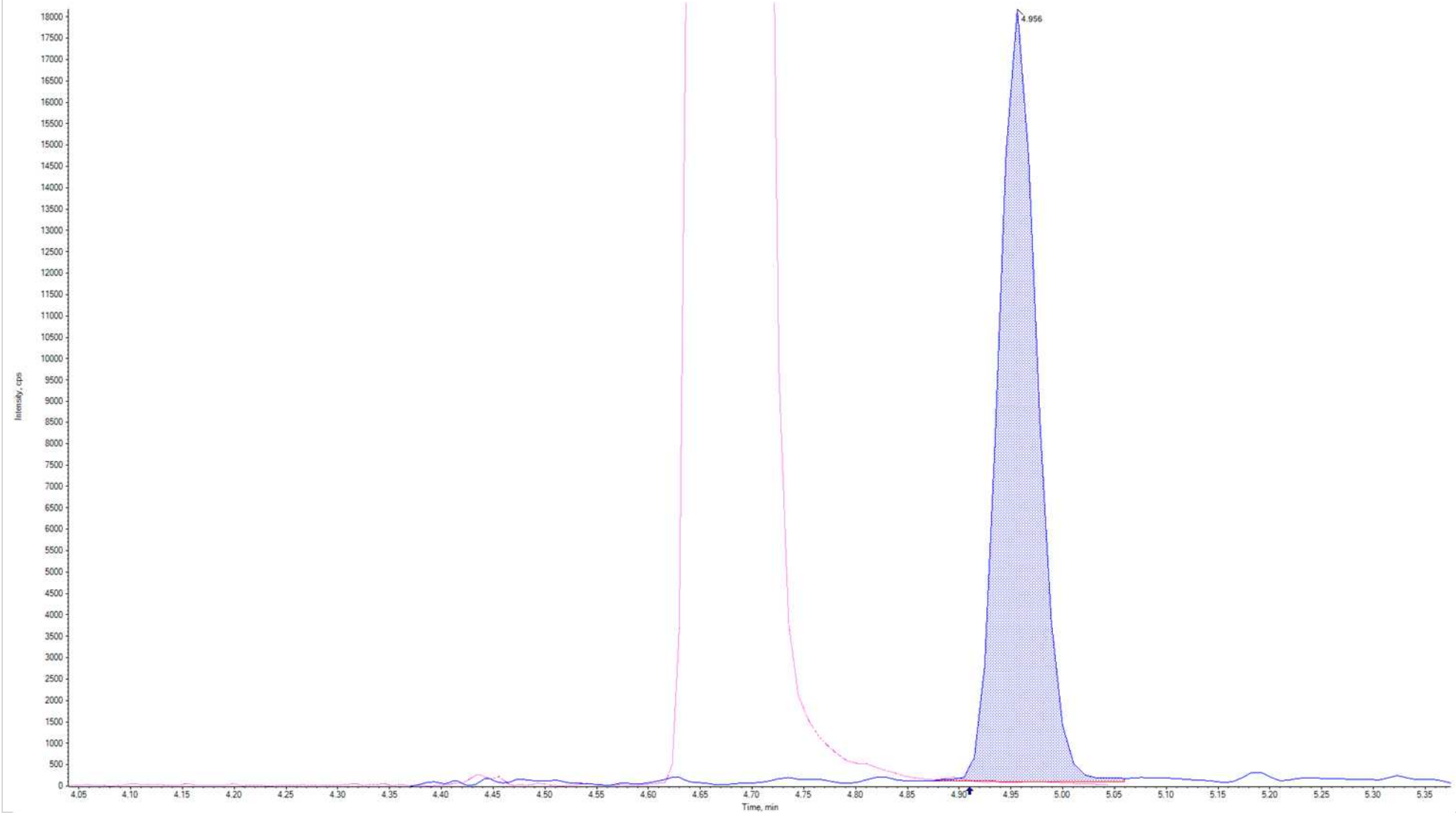
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

3:3FTCA
Sample: WG1971858-2 S/N:1615.2 Points Across peak:22



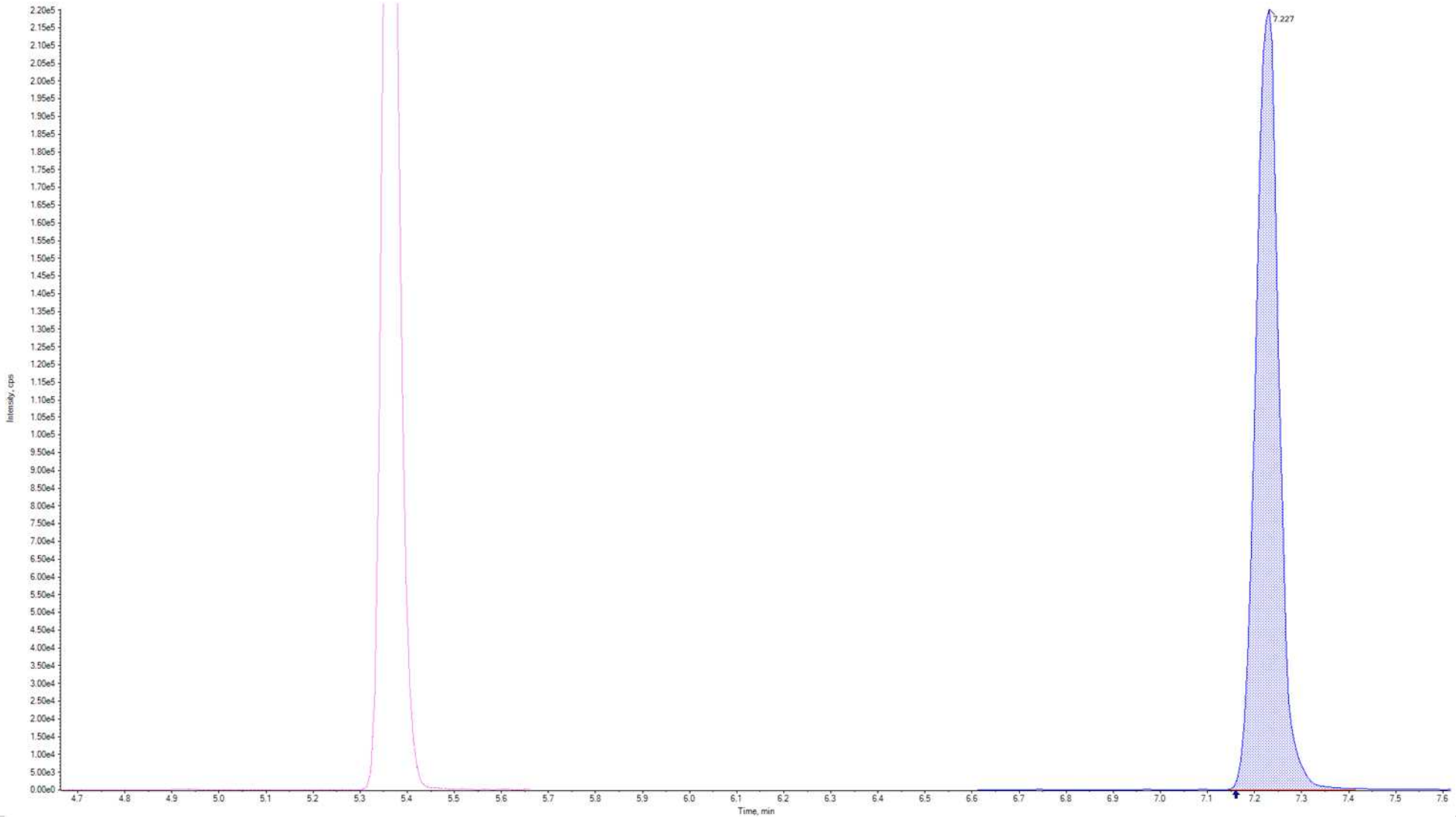
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

3:3FTCA_2
Sample: WG1971858-2 S/N:1104.5 Points Across peak:20



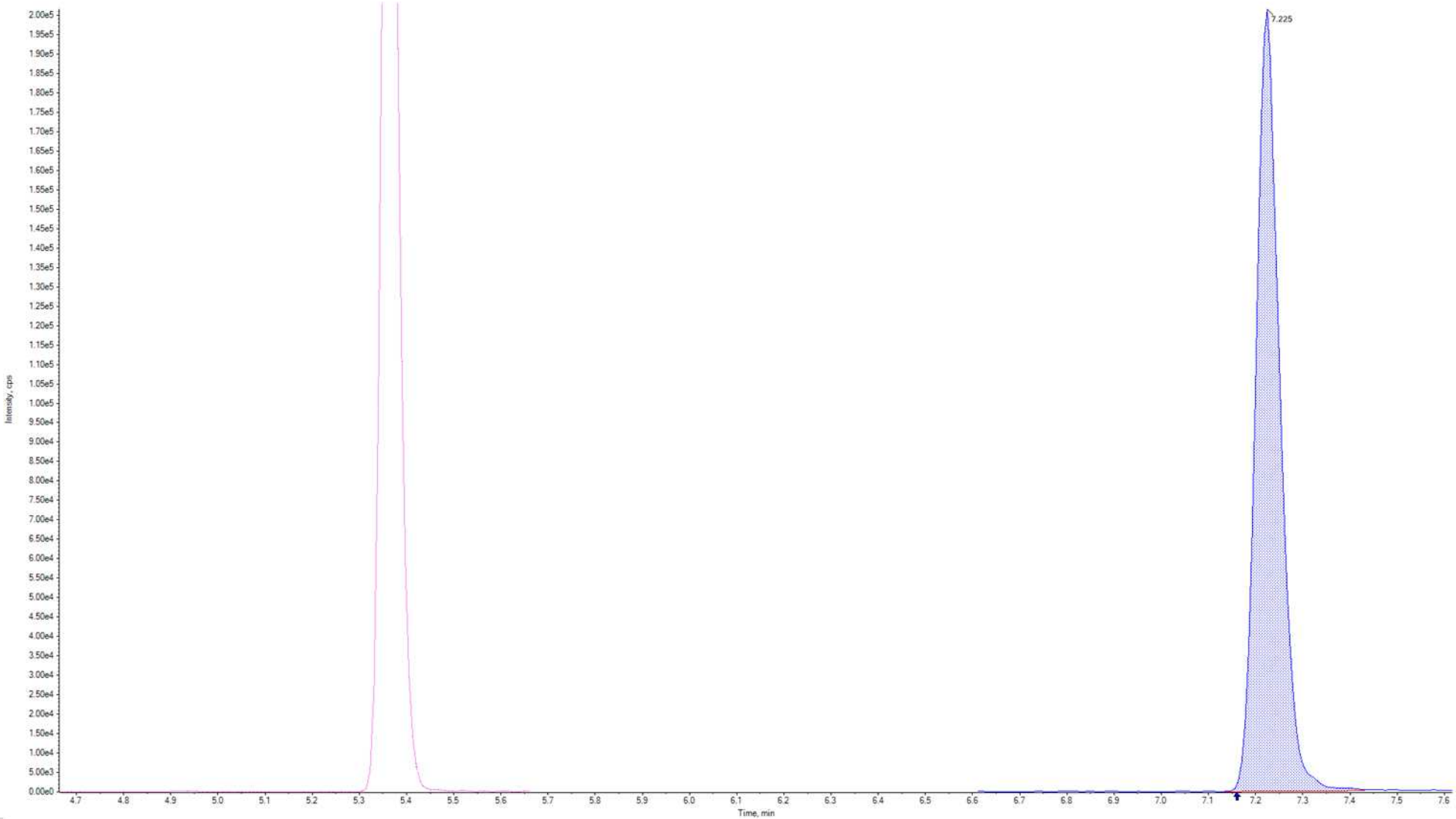
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA
Sample: WG1971858-2 S/N:14895.8 Points Across peak:49



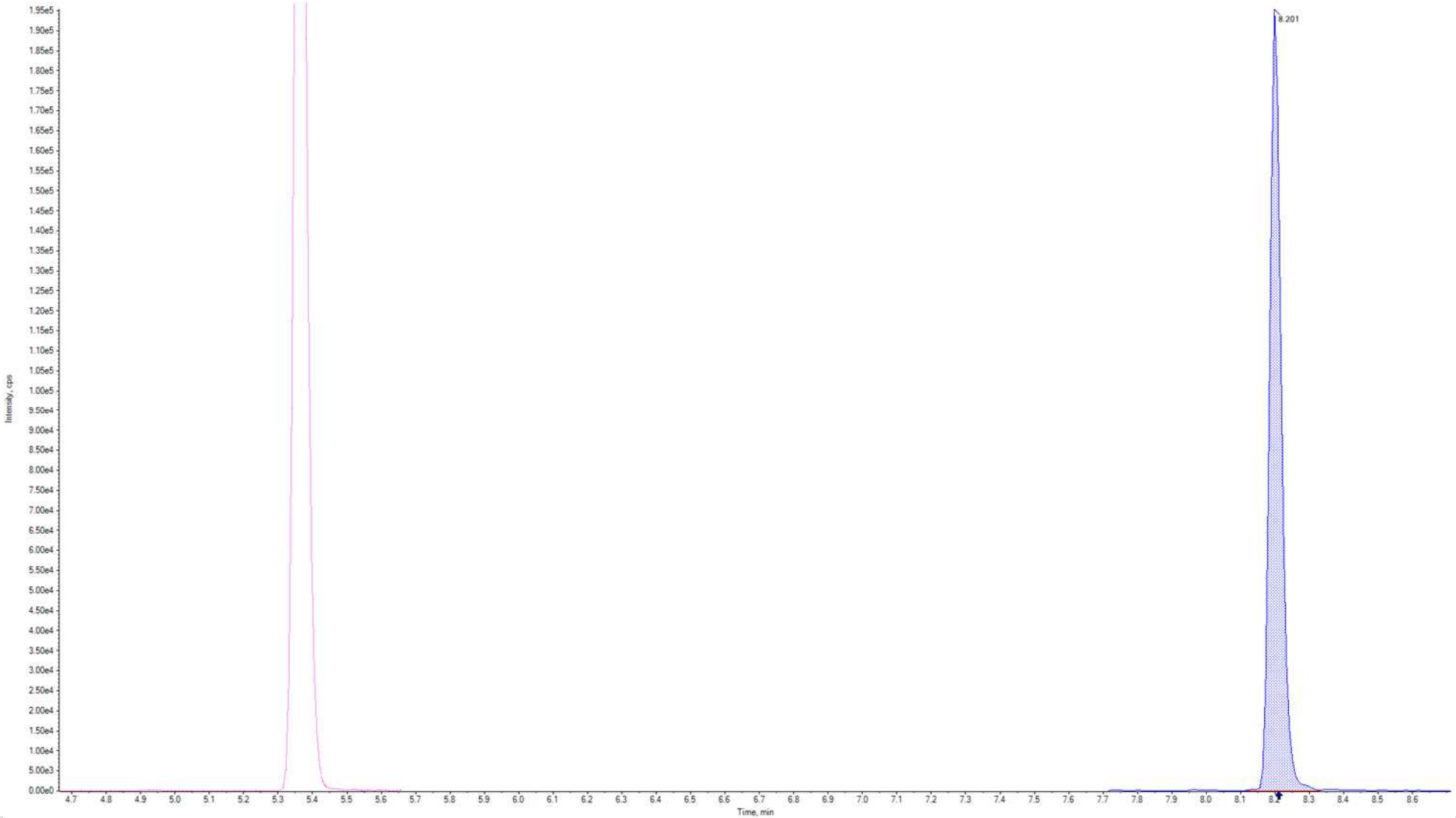
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA_2
Sample: WG1971858-2 S/N:12023.4 Points Across peak:52



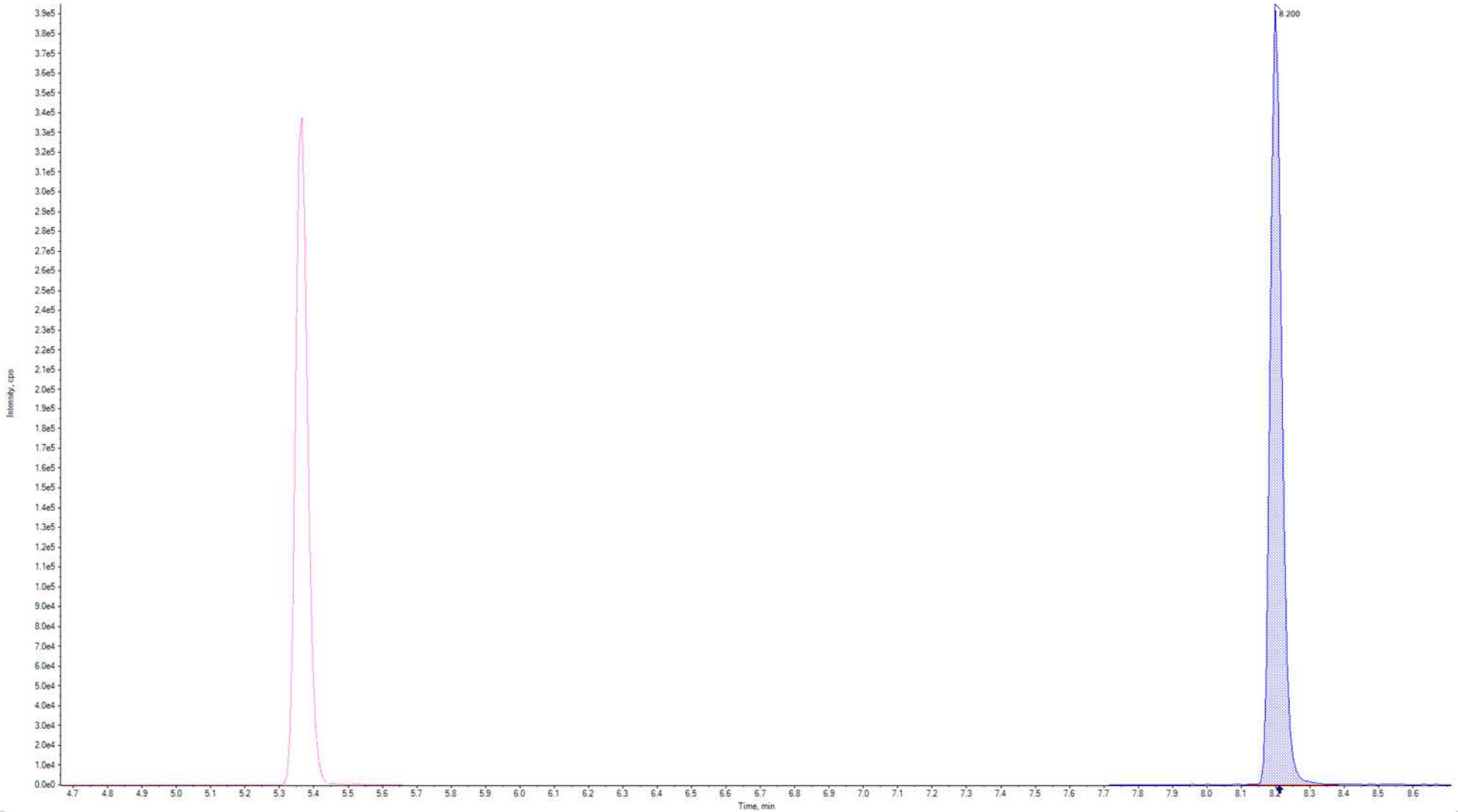
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA
Sample: WG1971858-2 S/N:1115592.3 Points Across peak:29



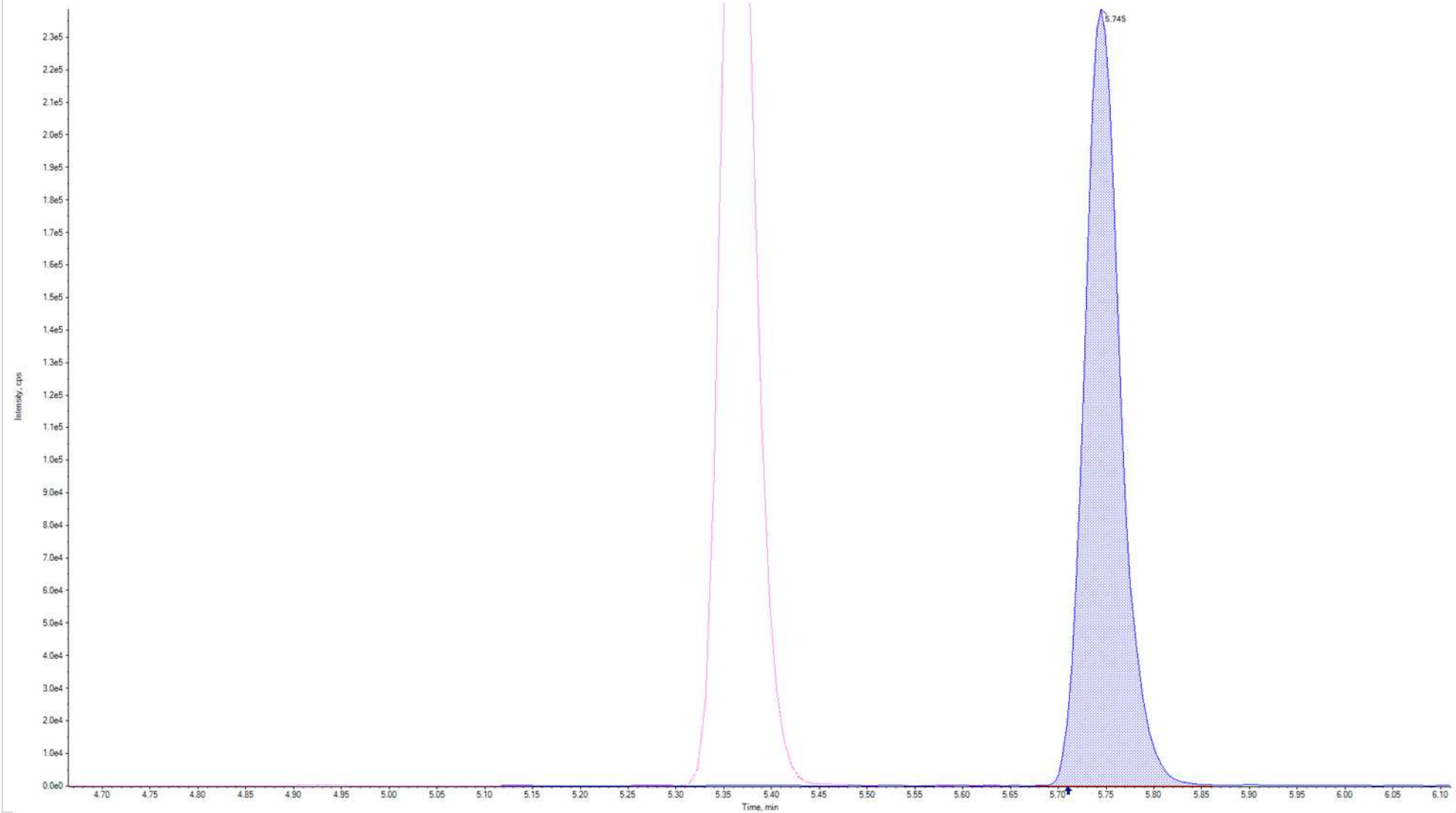
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA_2
Sample: WG1971858-2 S/N:119199.5 Points Across peak:33



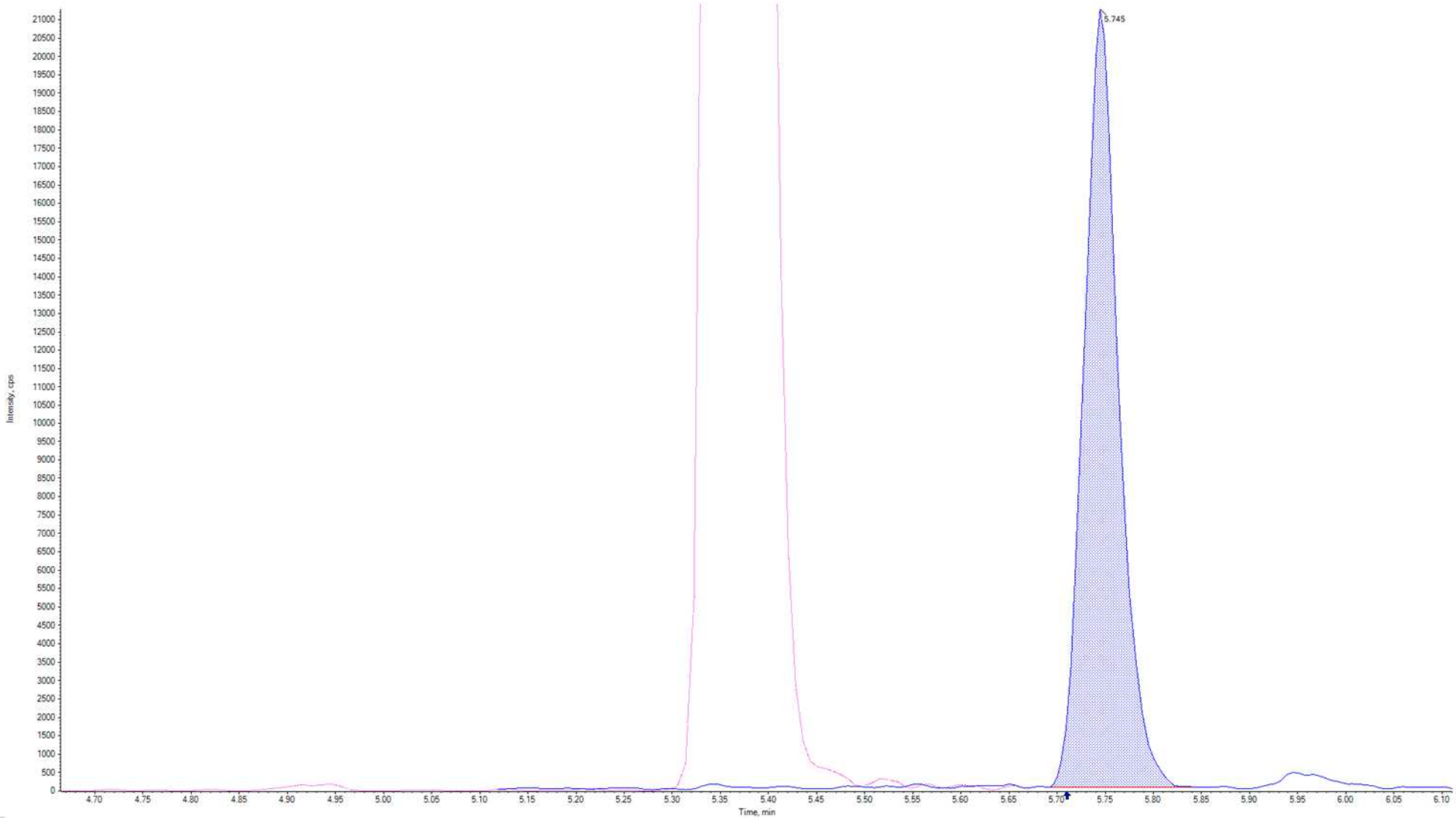
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFEESA
Sample: WG1971858-2 S/N:3341.1 Points Across peak:42



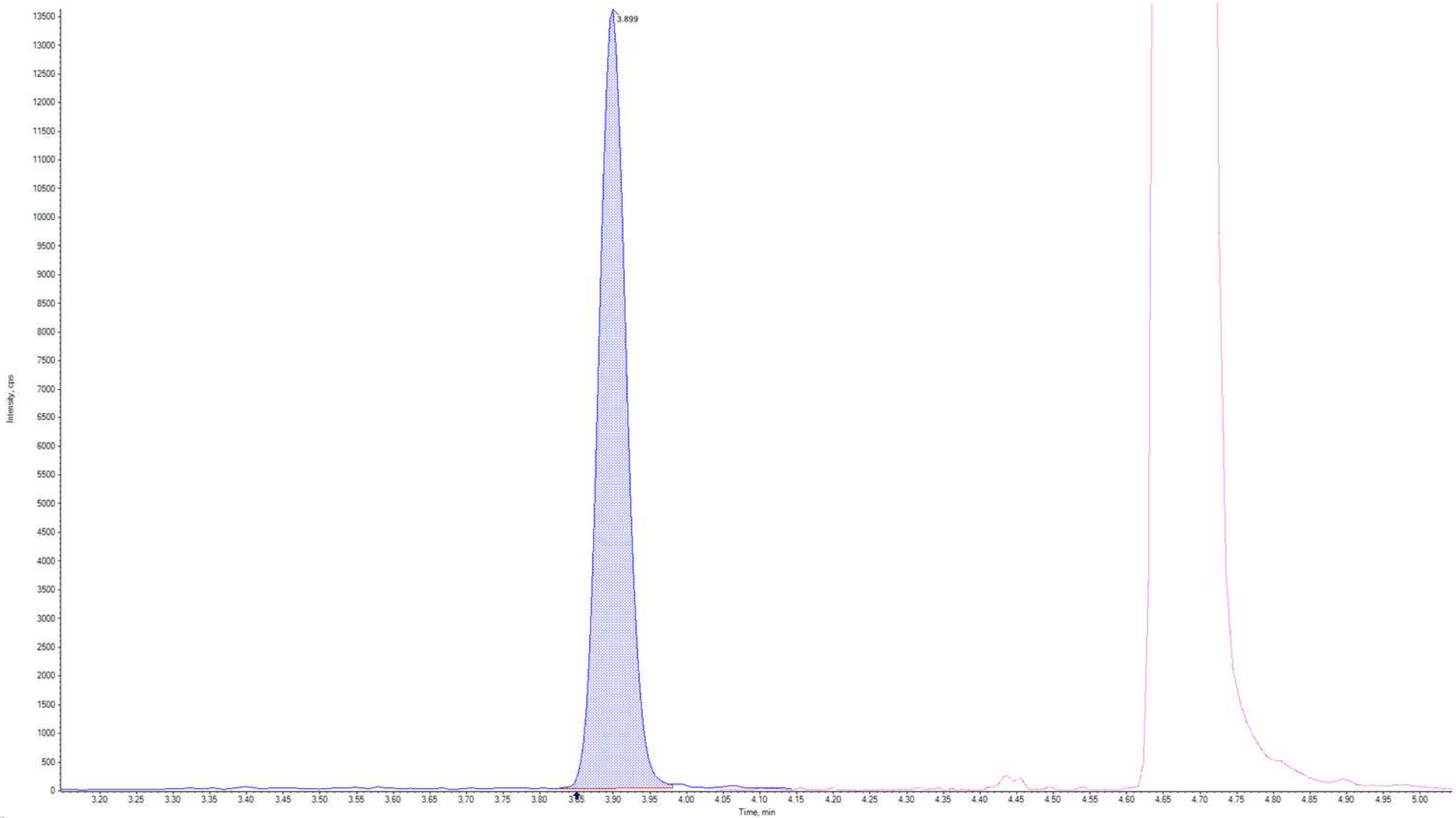
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFEESA_2
Sample: WG1971858-2 S/N:1334.9 Points Across peak:34



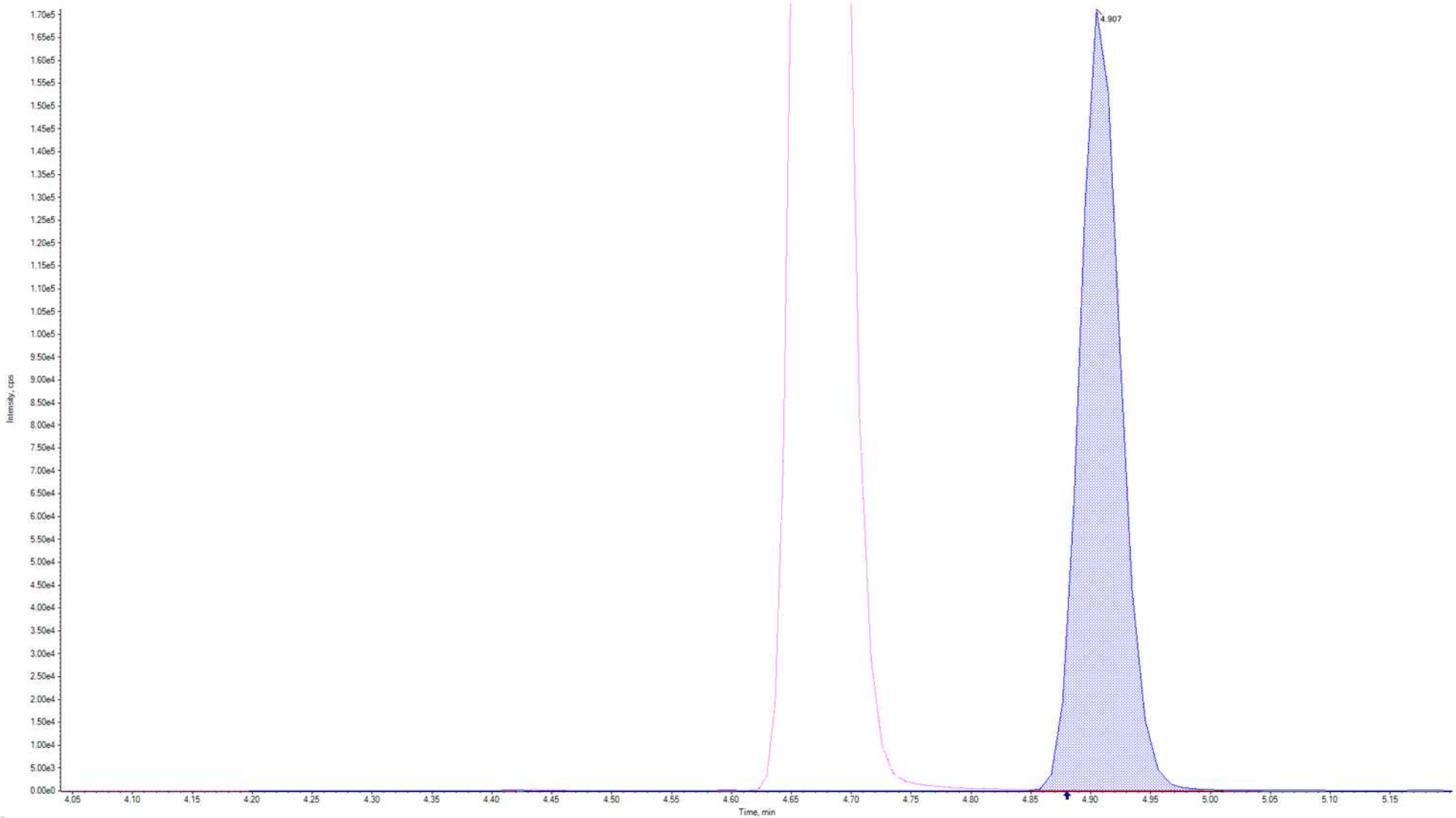
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
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PFMPA
Sample: WG1971858-2 S/N:2202.5 Points Across peak:42



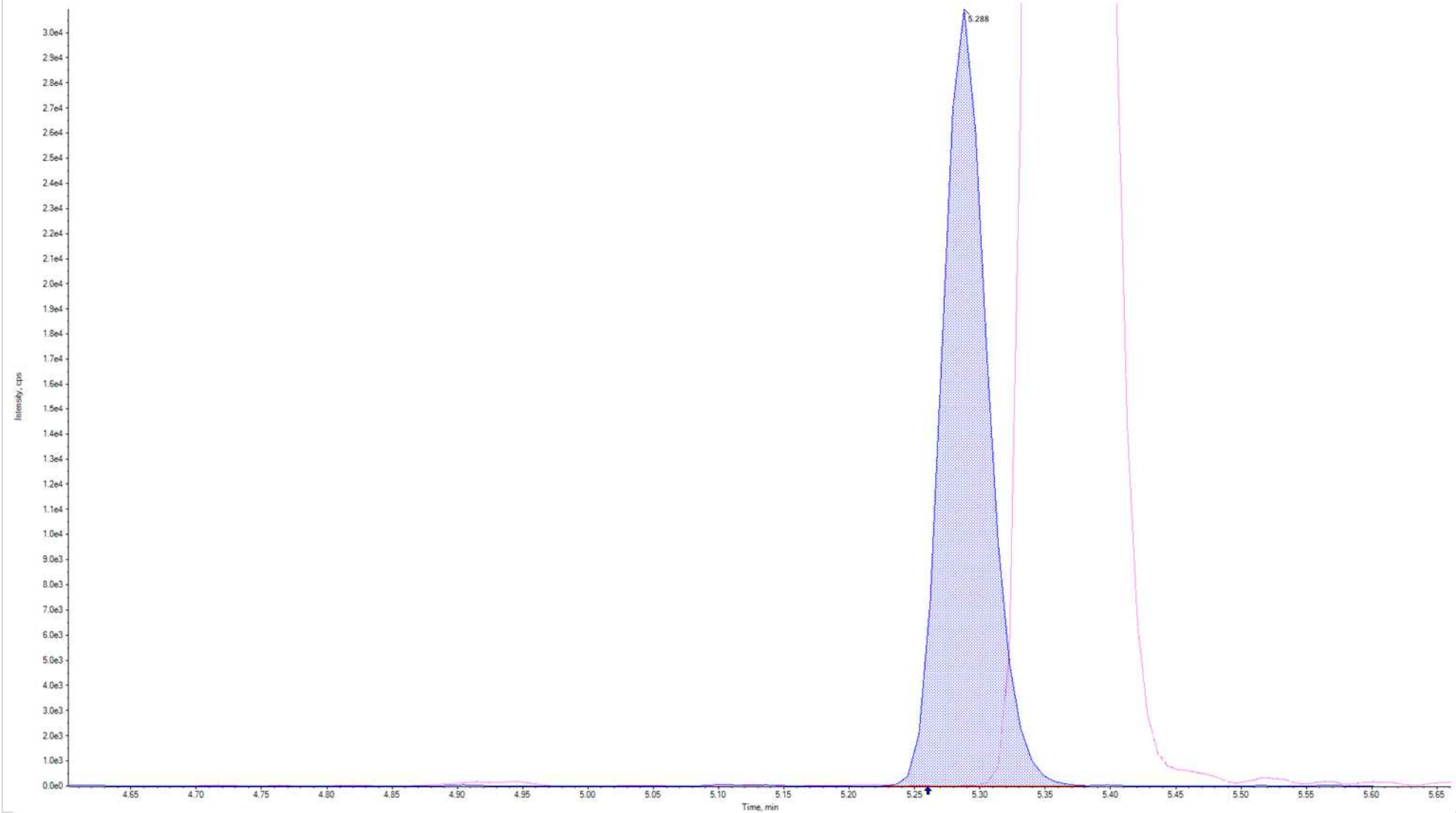
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFMBA
Sample: WG1971858-2 S/N:7993.9 Points Across peak:21



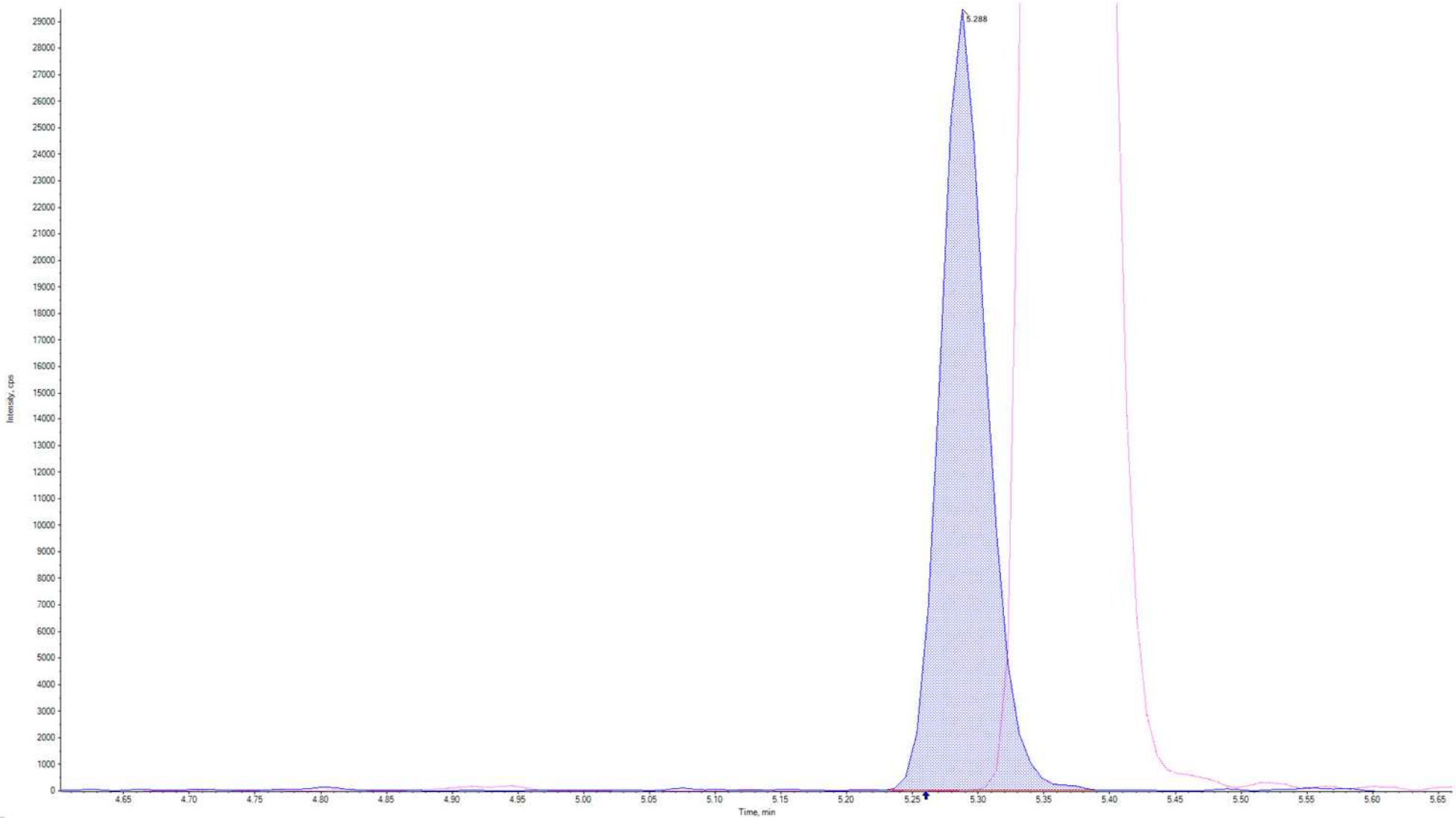
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NFDHA
Sample: WG1971858-2 S/N:8371.9 Points Across peak:23



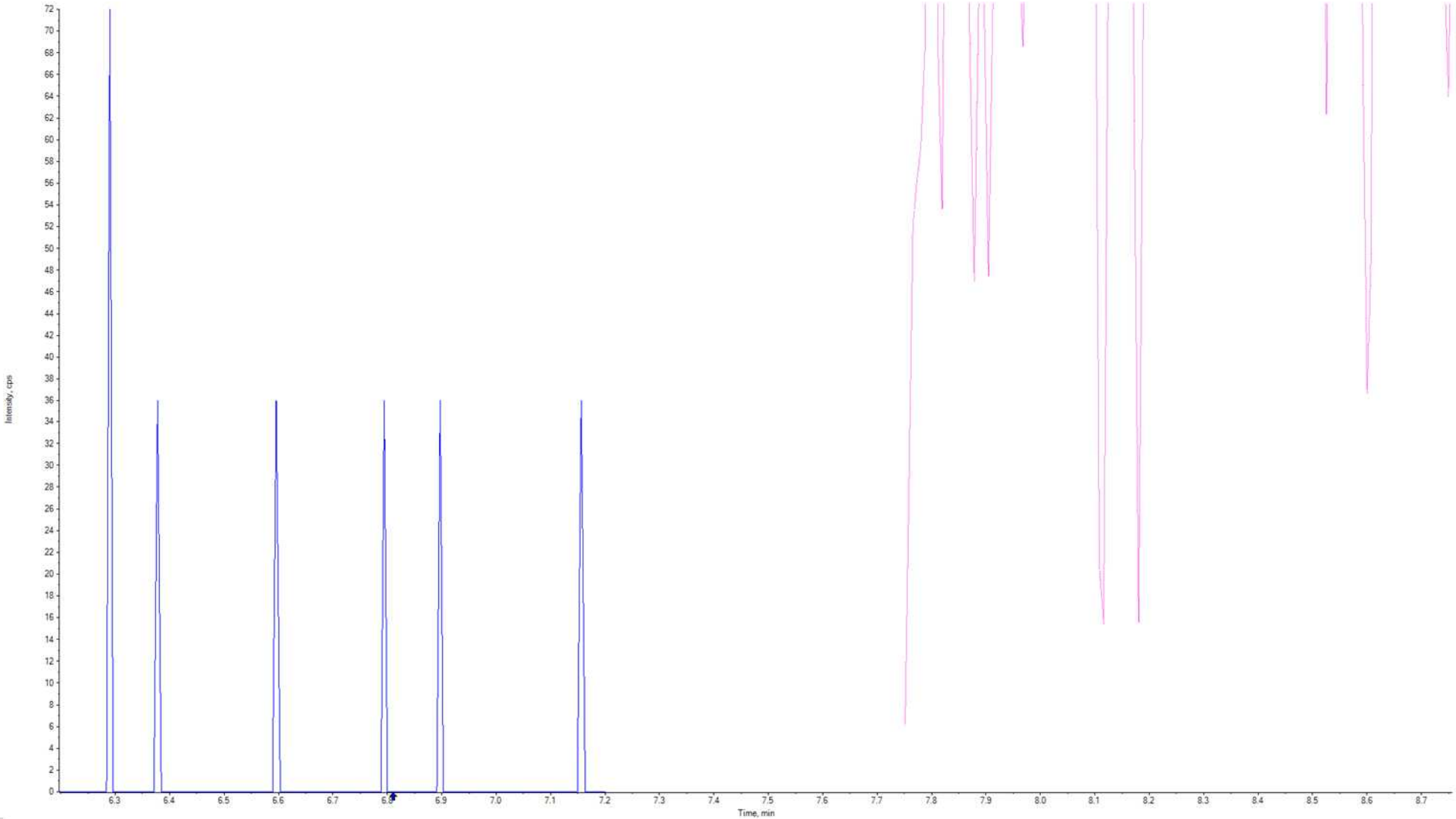
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NFDHA_2
Sample: WG1971858-2 S/N:11221.0 Points Across peak:20

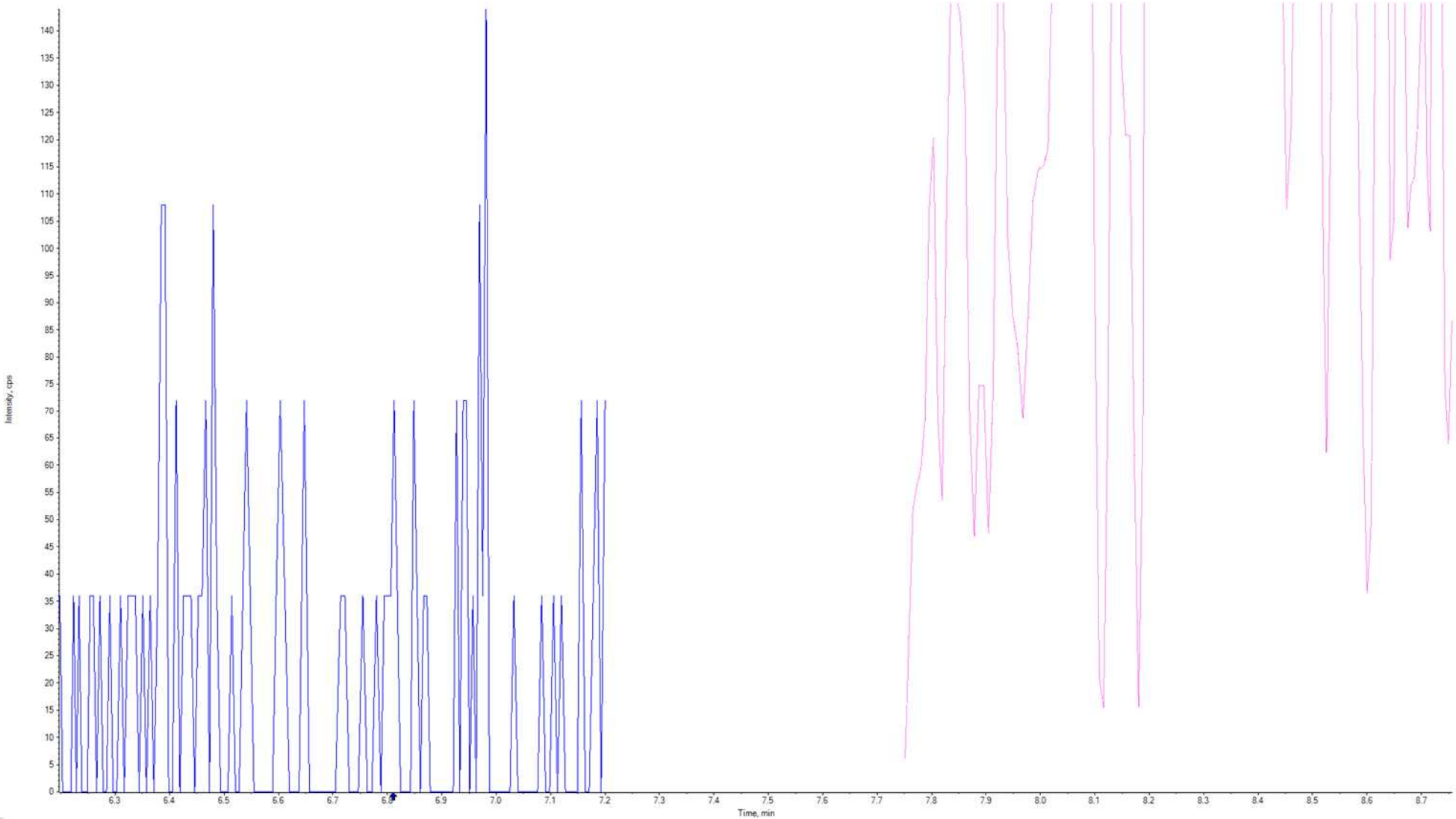


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

TDCA
Sample: WG1971858-2 S/N:N/A Points Across peak:N/A

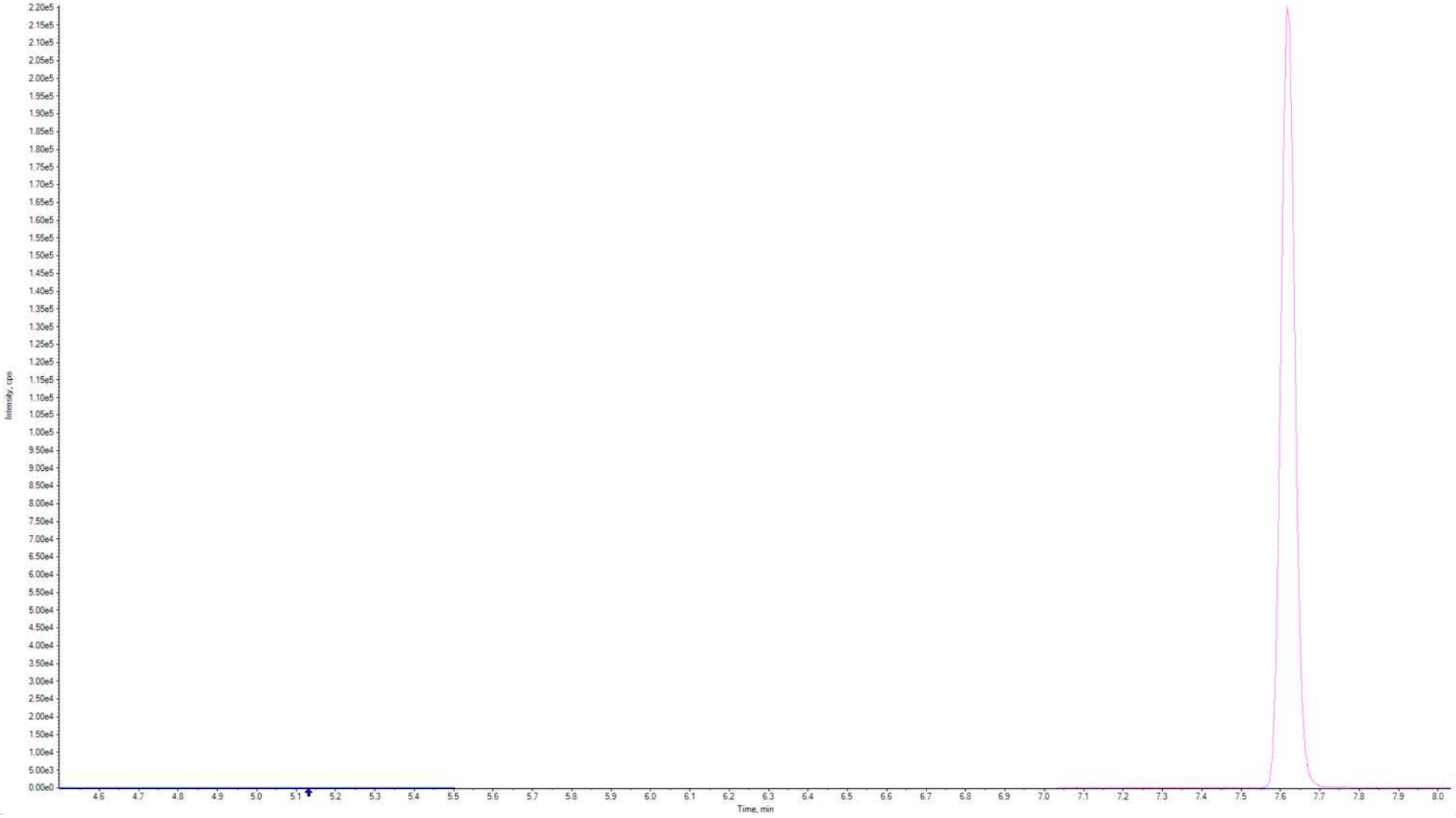


TDCA_2
Sample: WG1971858-2 S/N:N/A Points Across peak:N/A



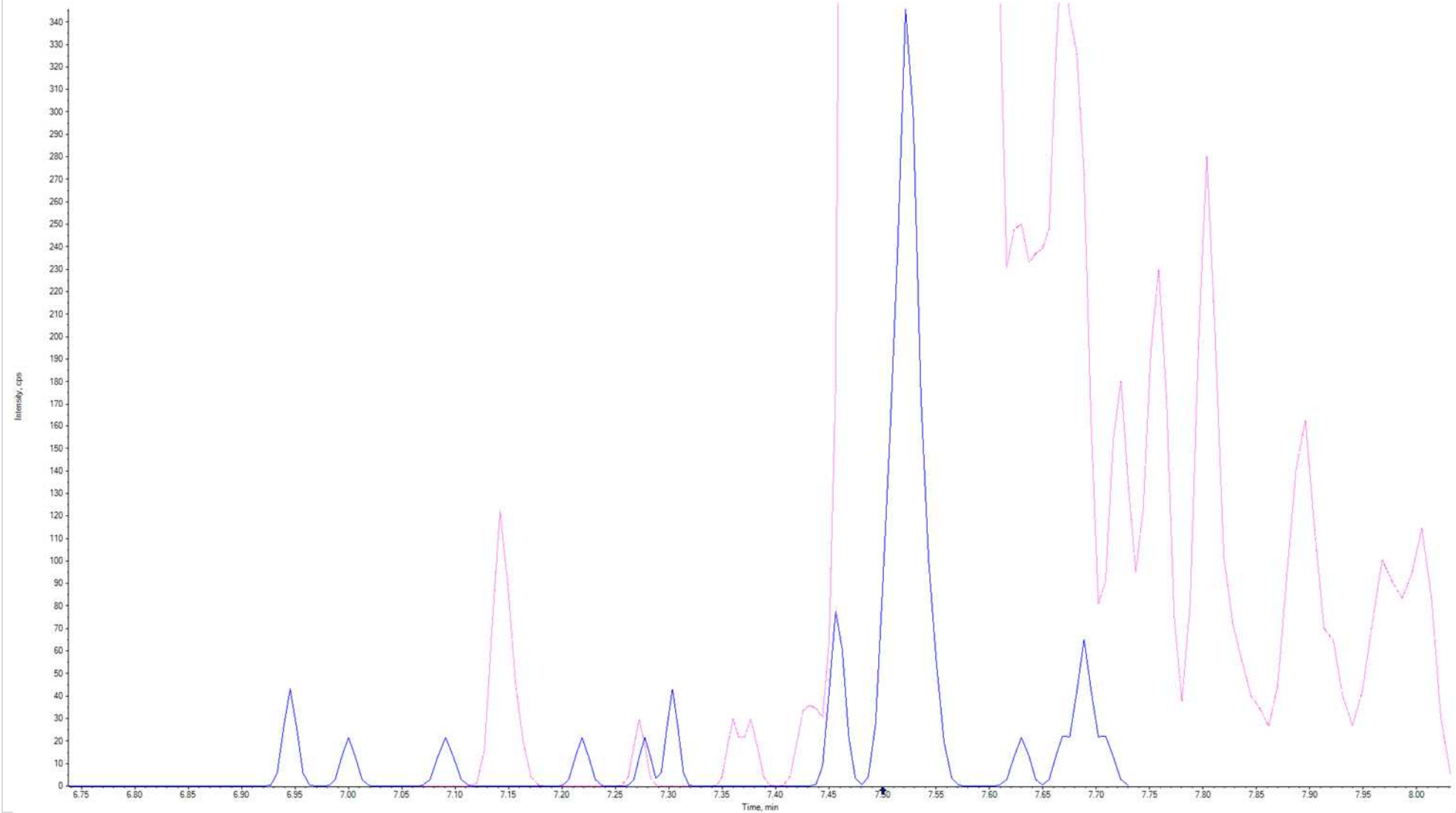
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C2D4-4:2FTS
Sample: WG1971858-2 S/N:N/A Points Across peak:N/A

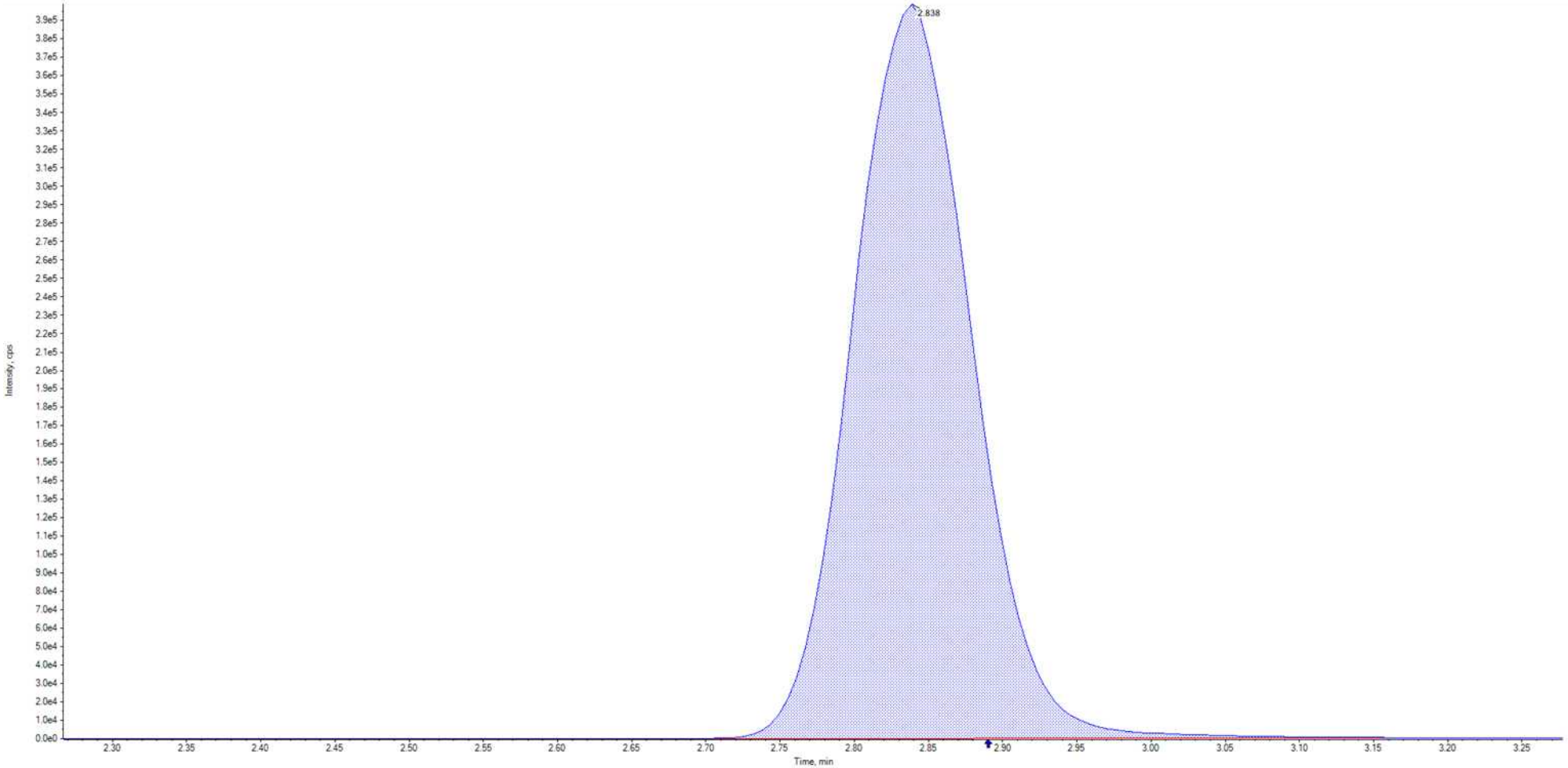


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C2-PFOA
Sample: WG1971858-2 S/N:N/A Points Across peak:N/A

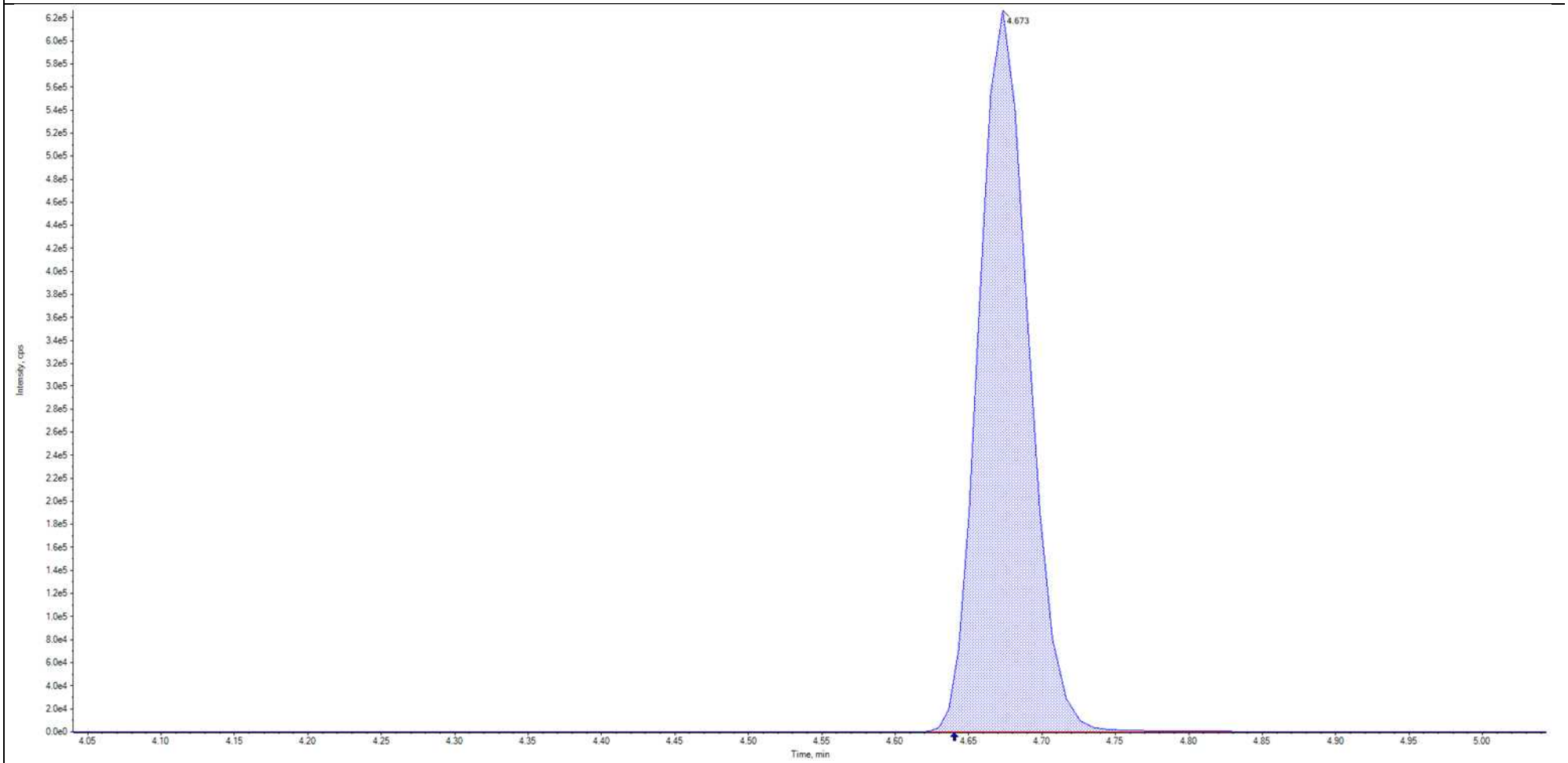


13C4-PFBA
Sample: WG1971858-2

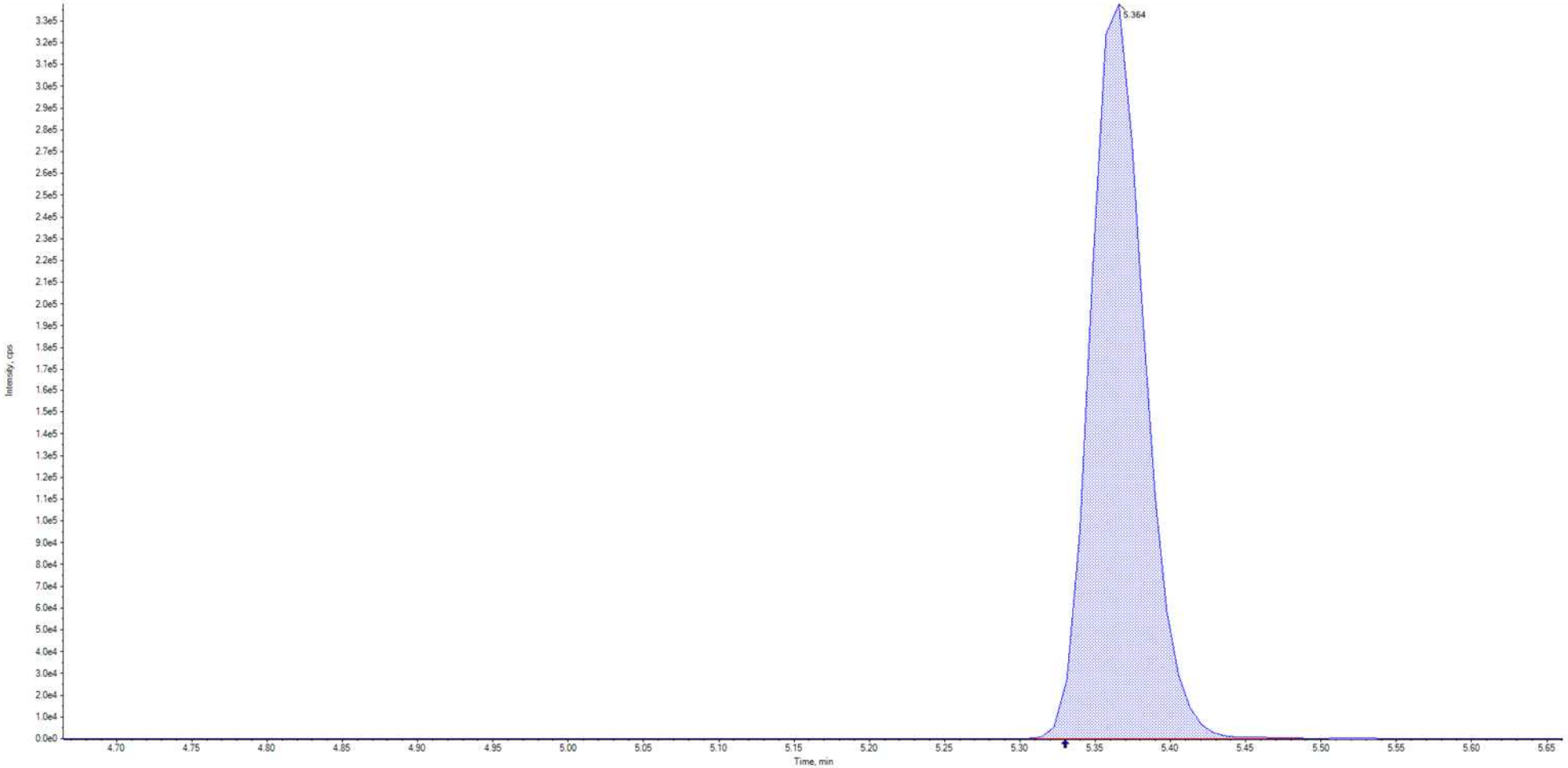


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
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Generated: 9/17/2024 6:15:27 AM

13C5-PFPeA
Sample: WG1971858-2

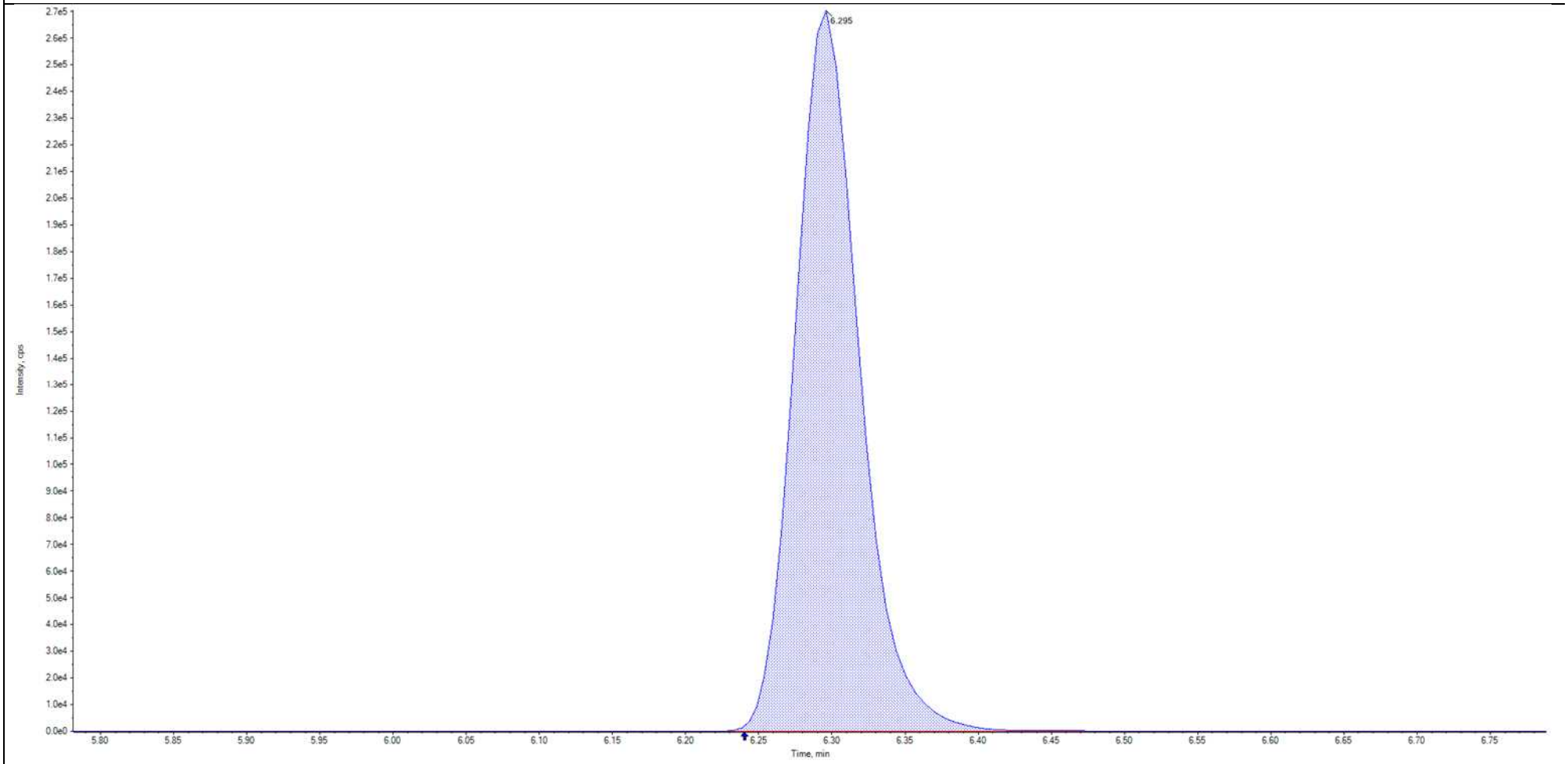


13C5-PFHxA
Sample: WG1971858-2



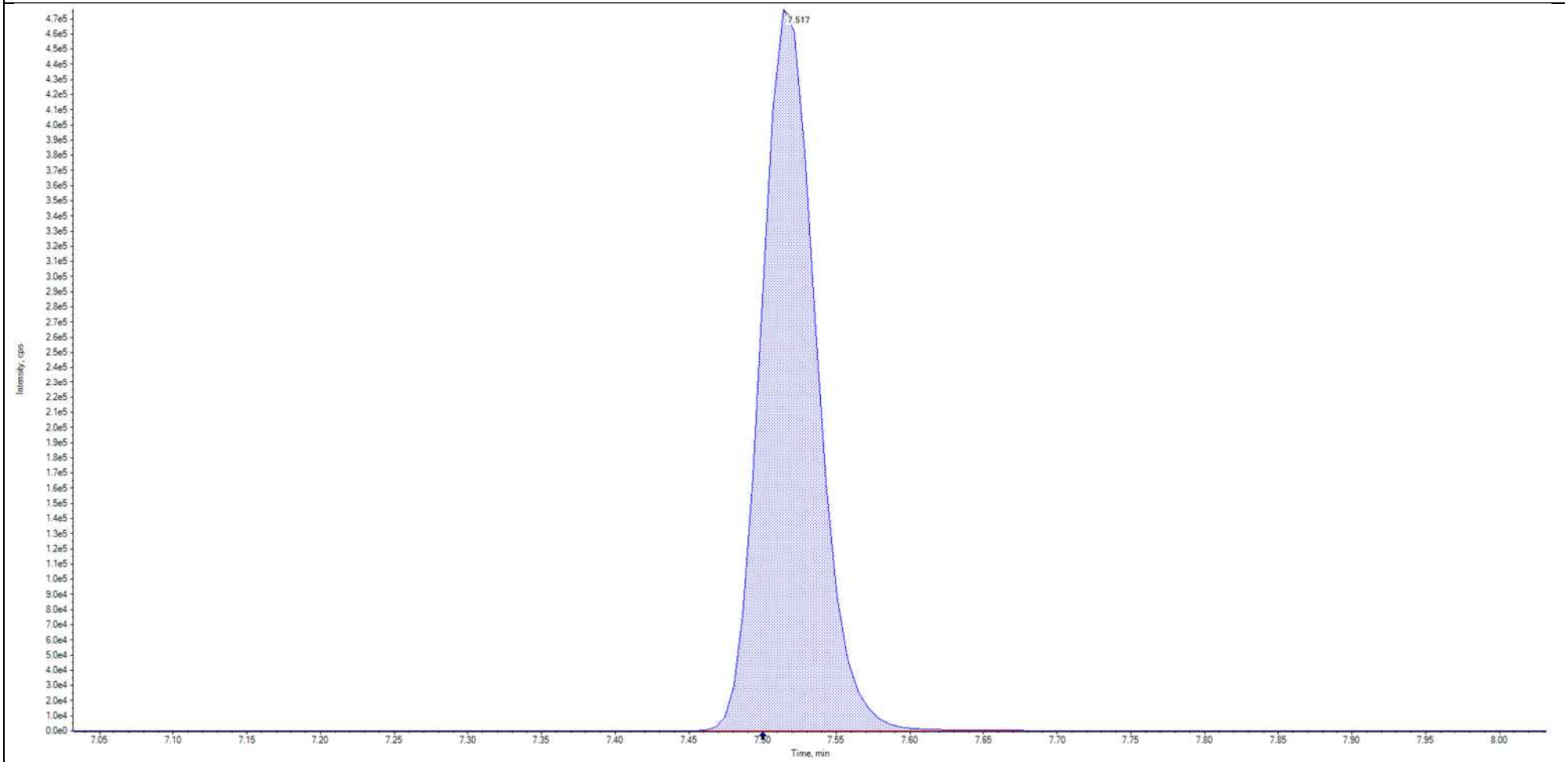
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C4-PFHpA
Sample: WG1971858-2



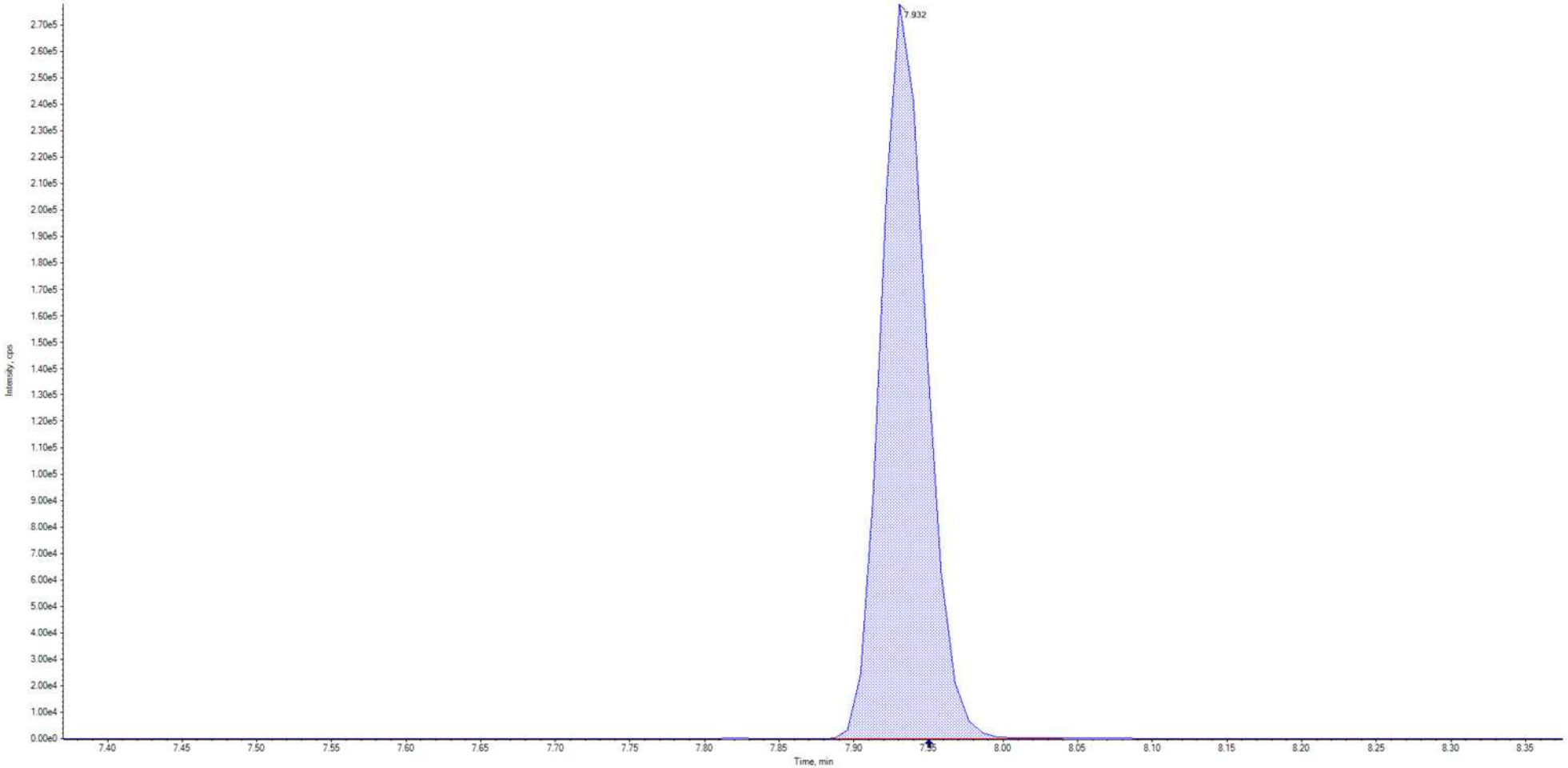
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C8-PFOA
Sample: WG1971858-2

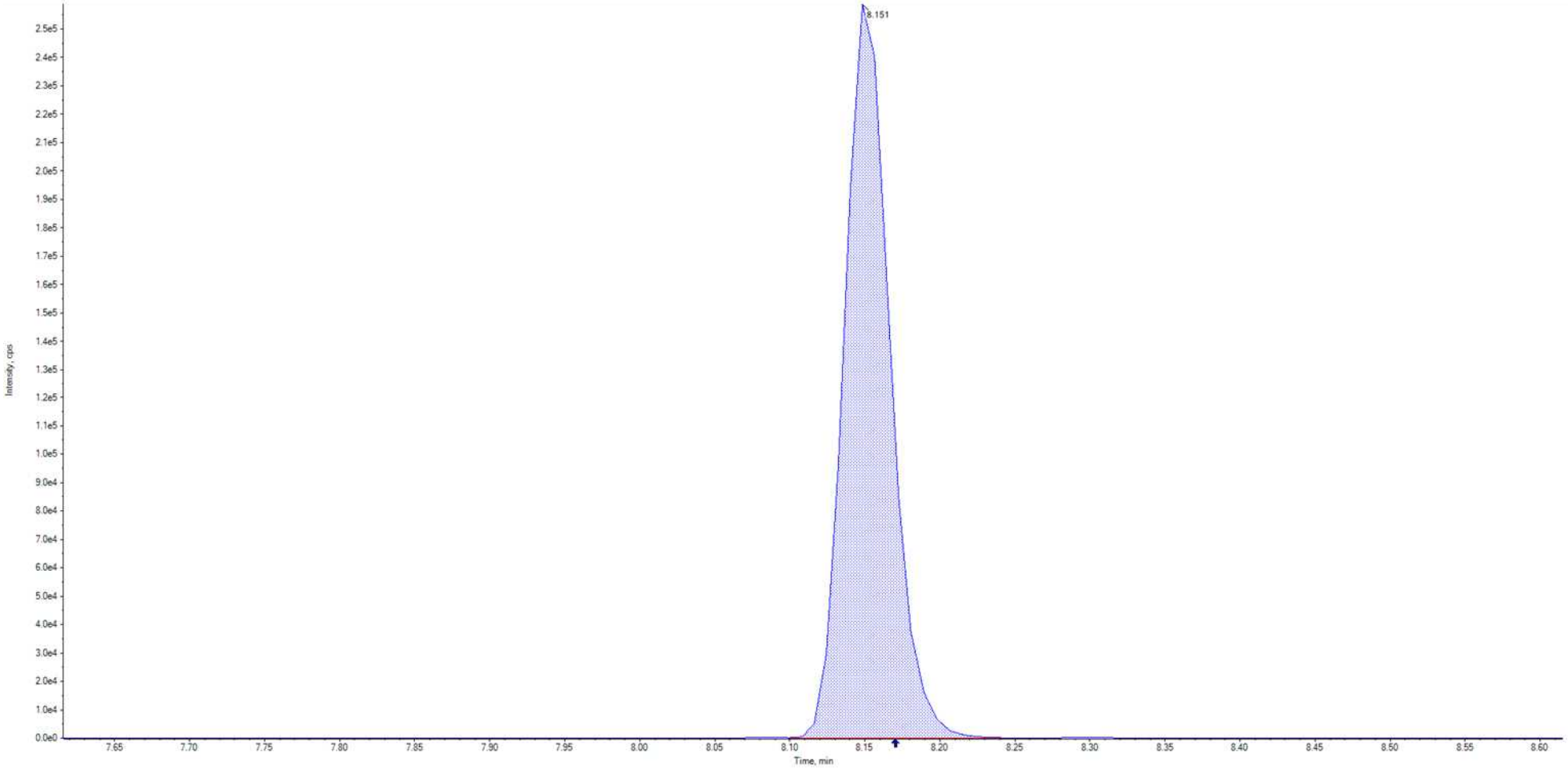


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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Generated: 9/17/2024 6:15:27 AM

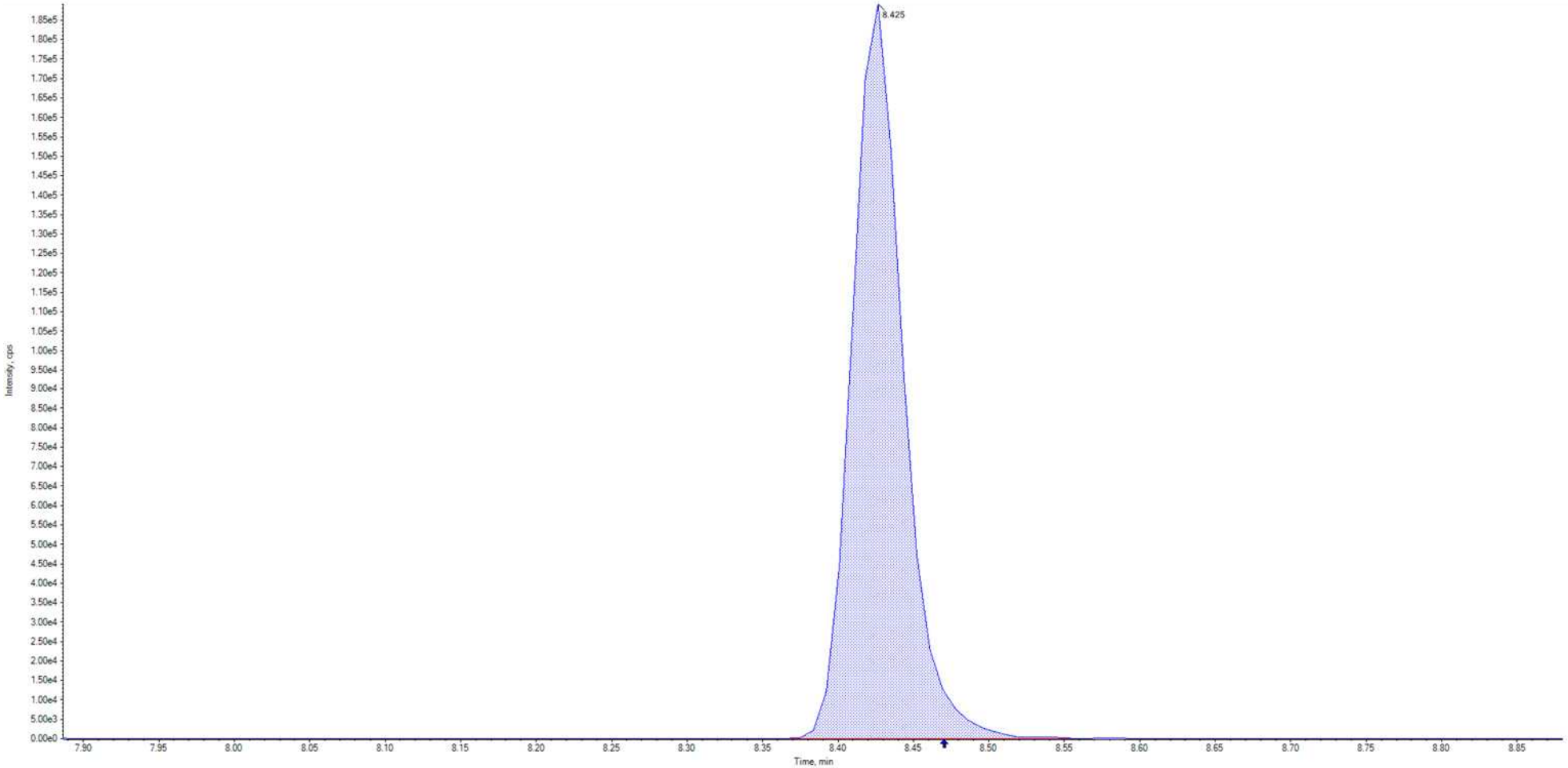
13C9-PFNA
Sample: WG1971858-2



13C6-PFDA
Sample: WG1971858-2

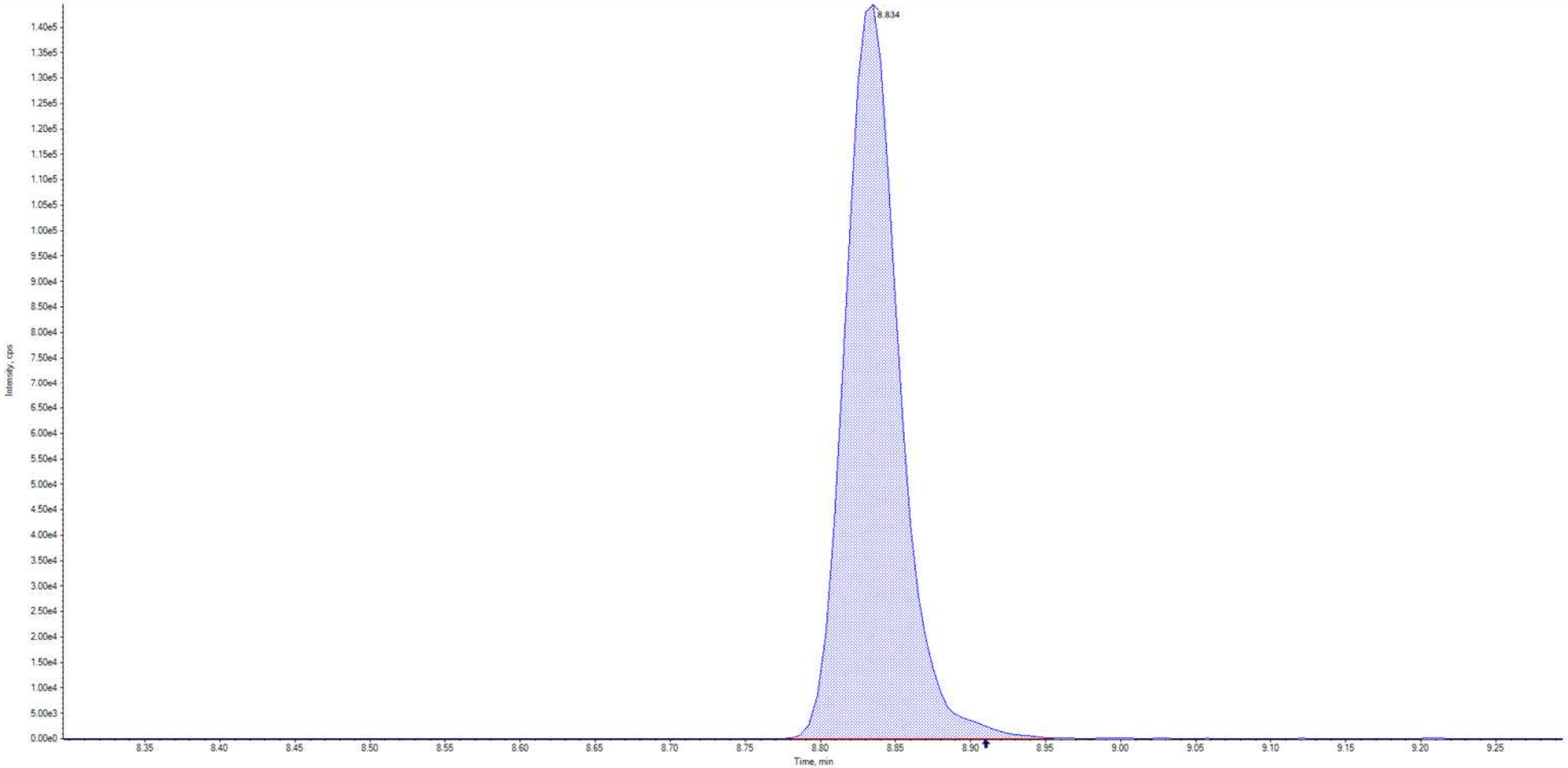


13C7-PFUnA
Sample: WG1971858-2



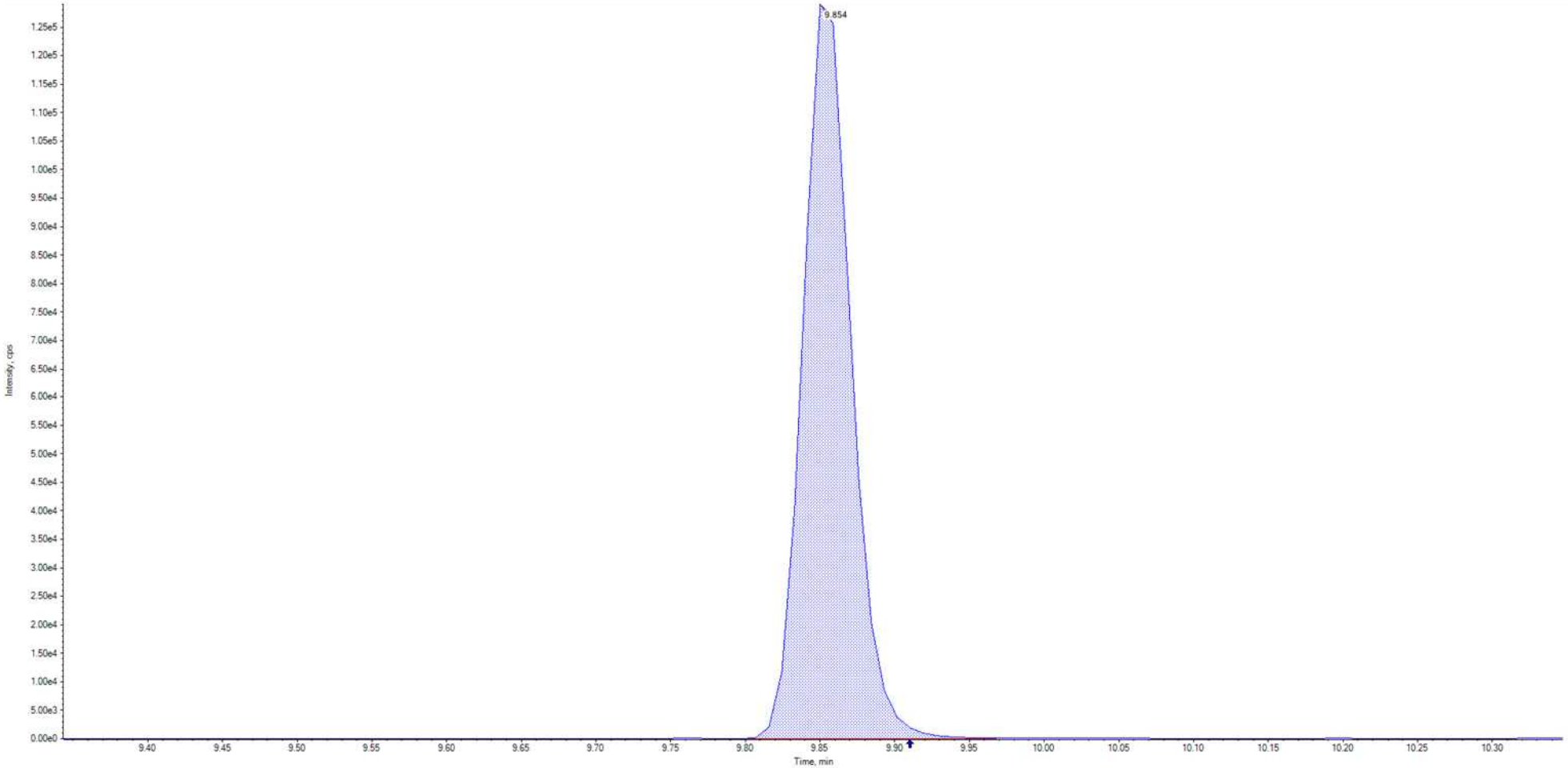
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-PFDoA
Sample: WG1971858-2

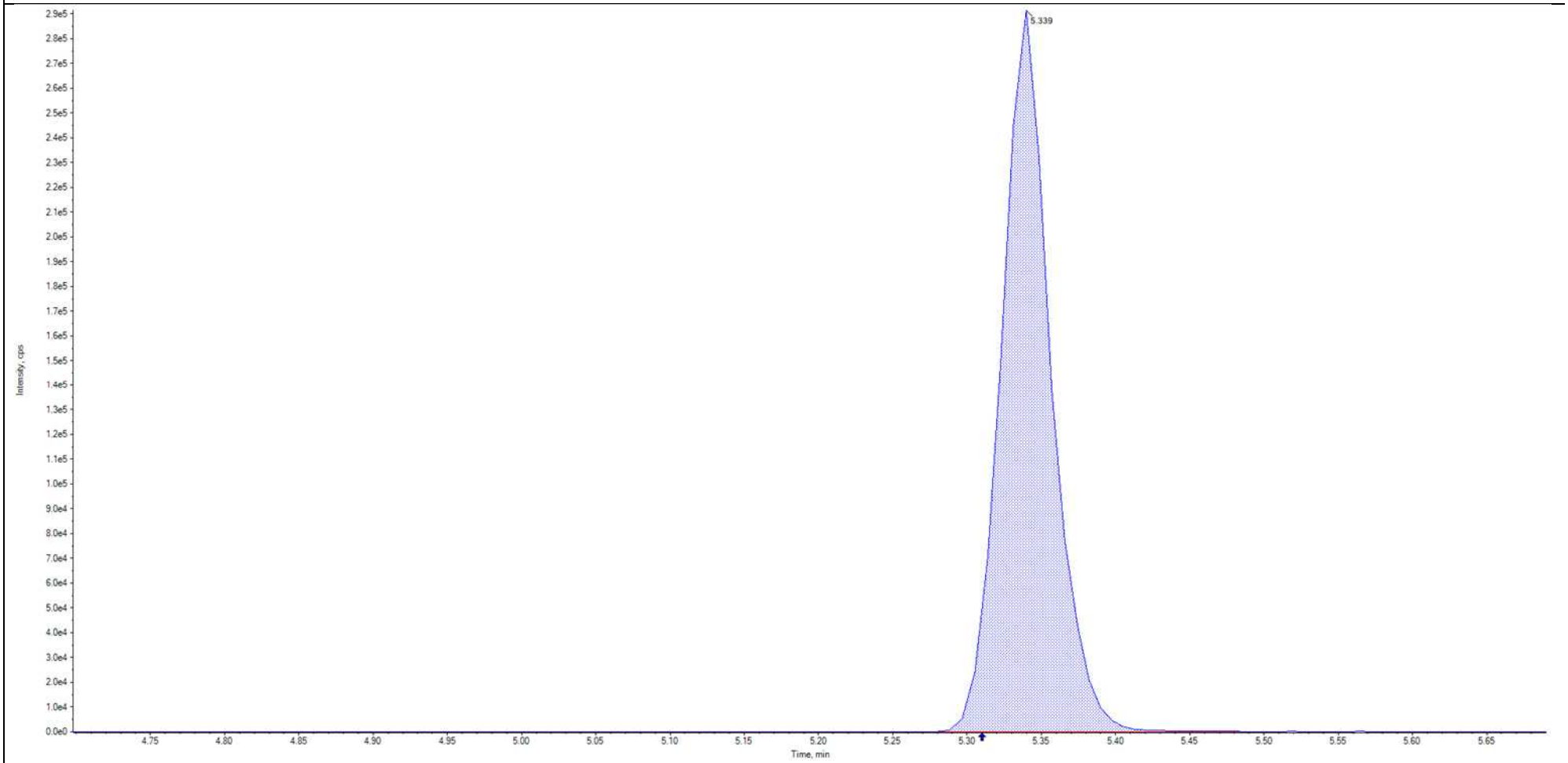


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

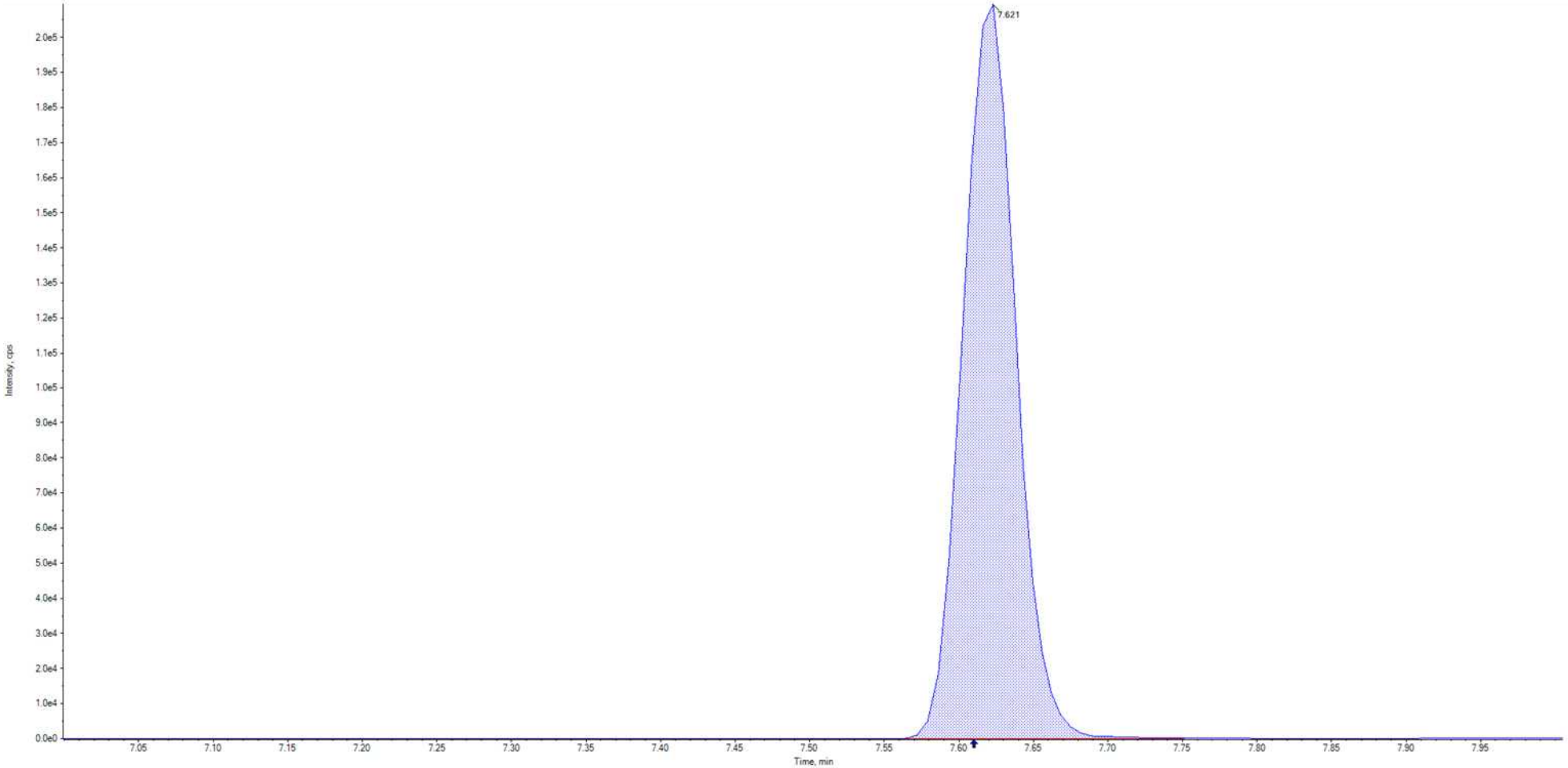
13C2-PFTeDA
Sample: WG1971858-2



13C3-PFBS
Sample: WG1971858-2

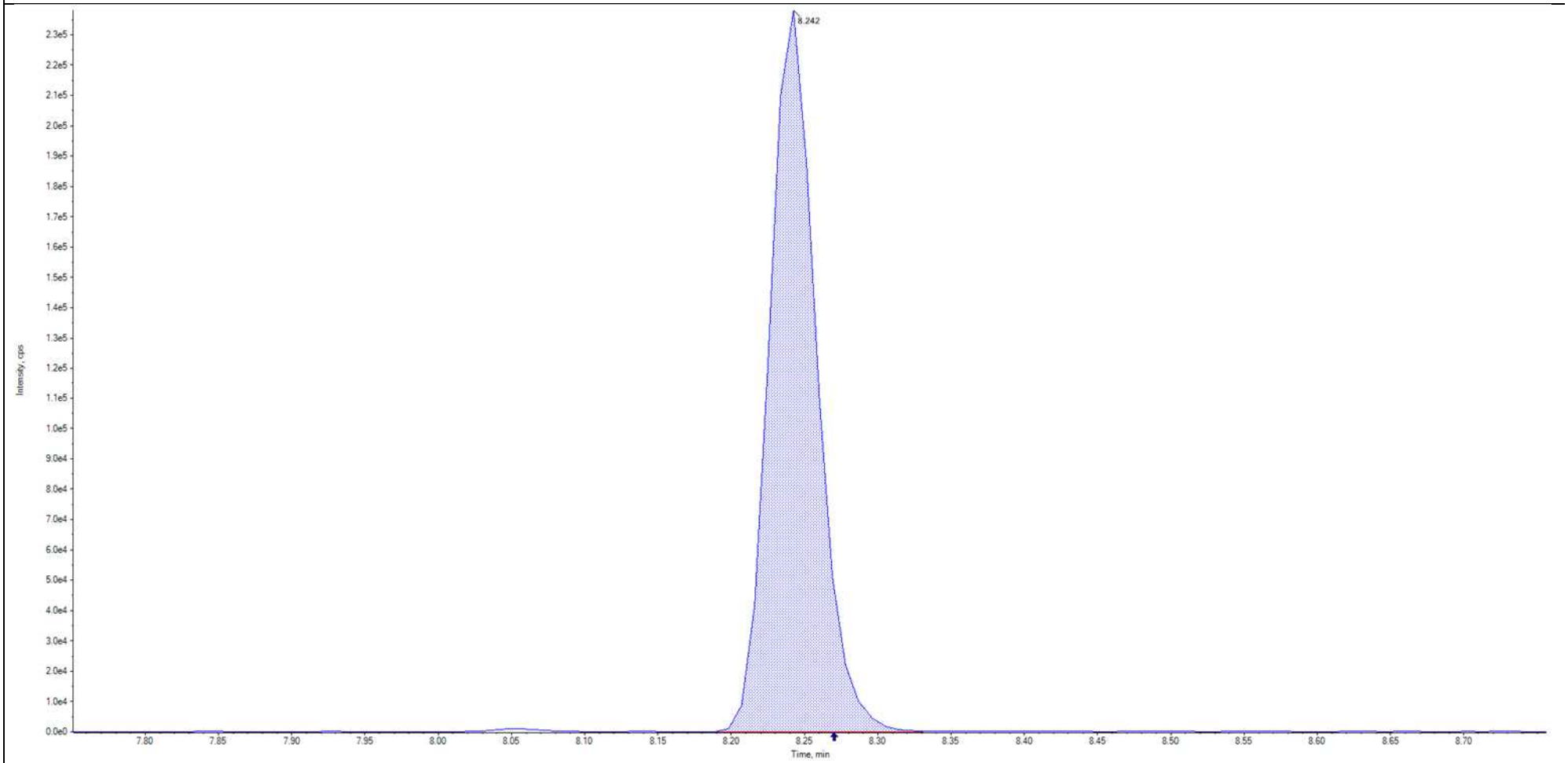


13C3-PFHxS
Sample: WG1971858-2

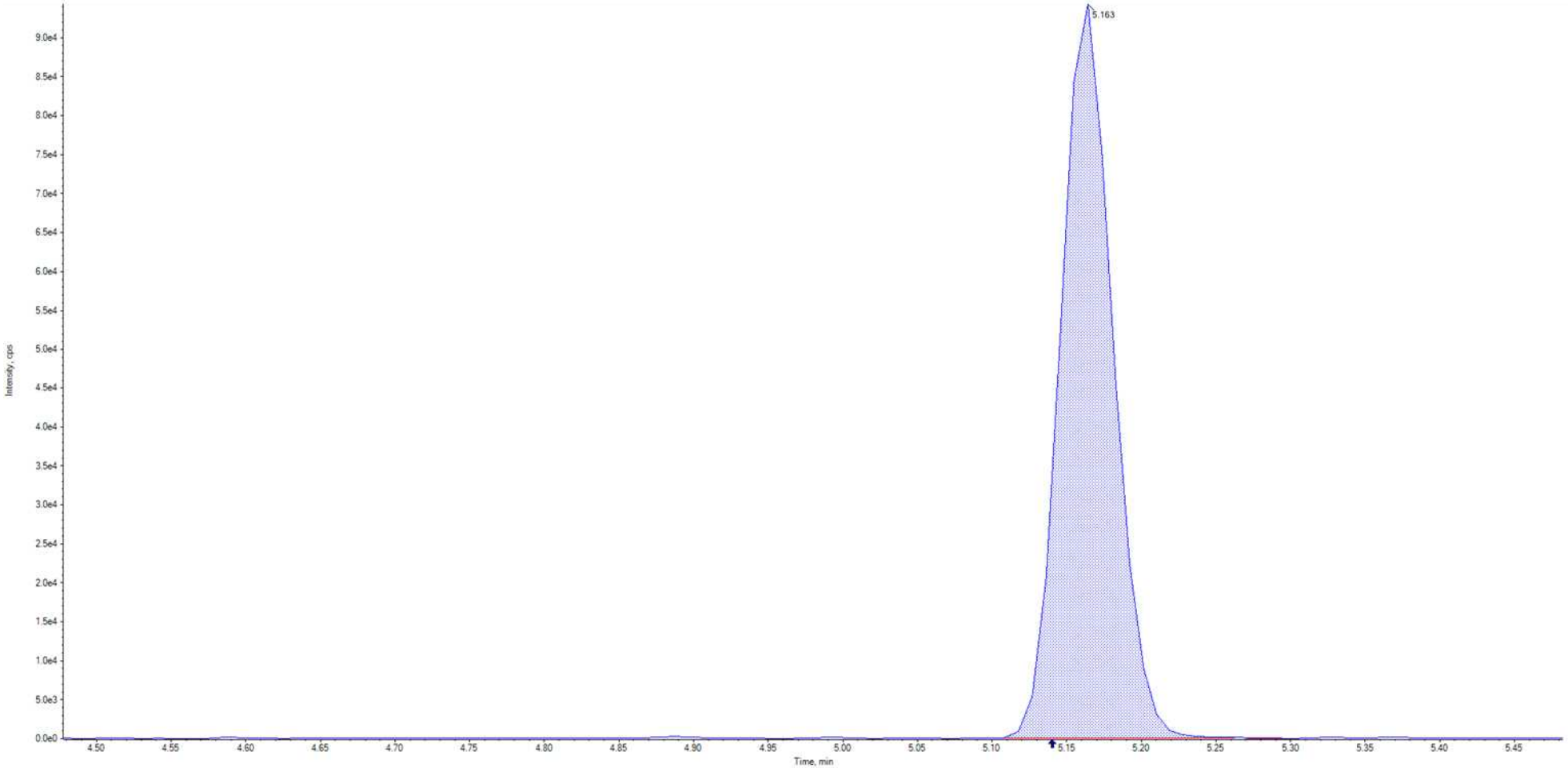


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C8-PFOS
Sample: WG1971858-2

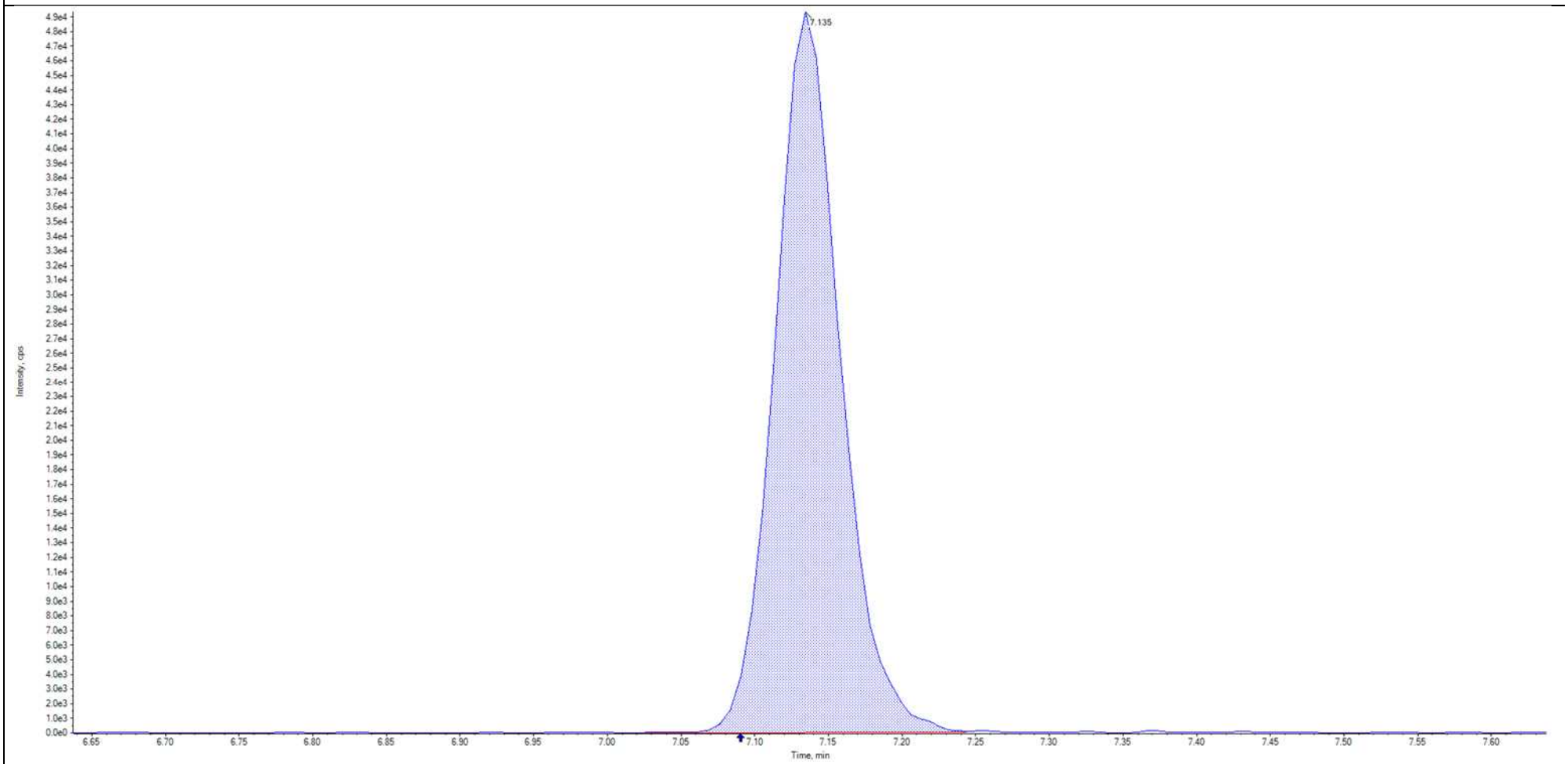


13C2-4:2FTS
Sample: WG1971858-2



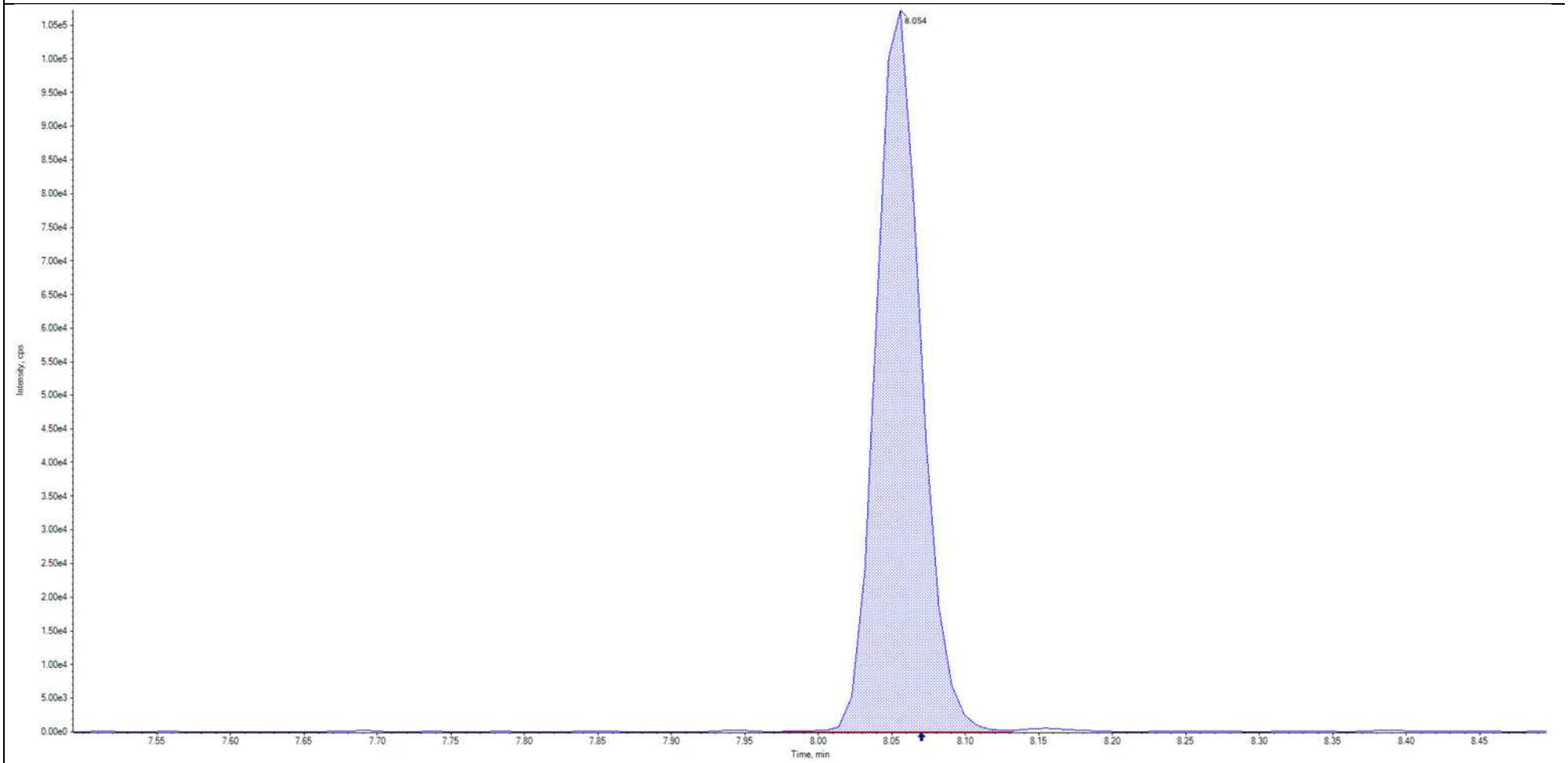
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_16.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C2-6:2FTS
Sample: WG1971858-2



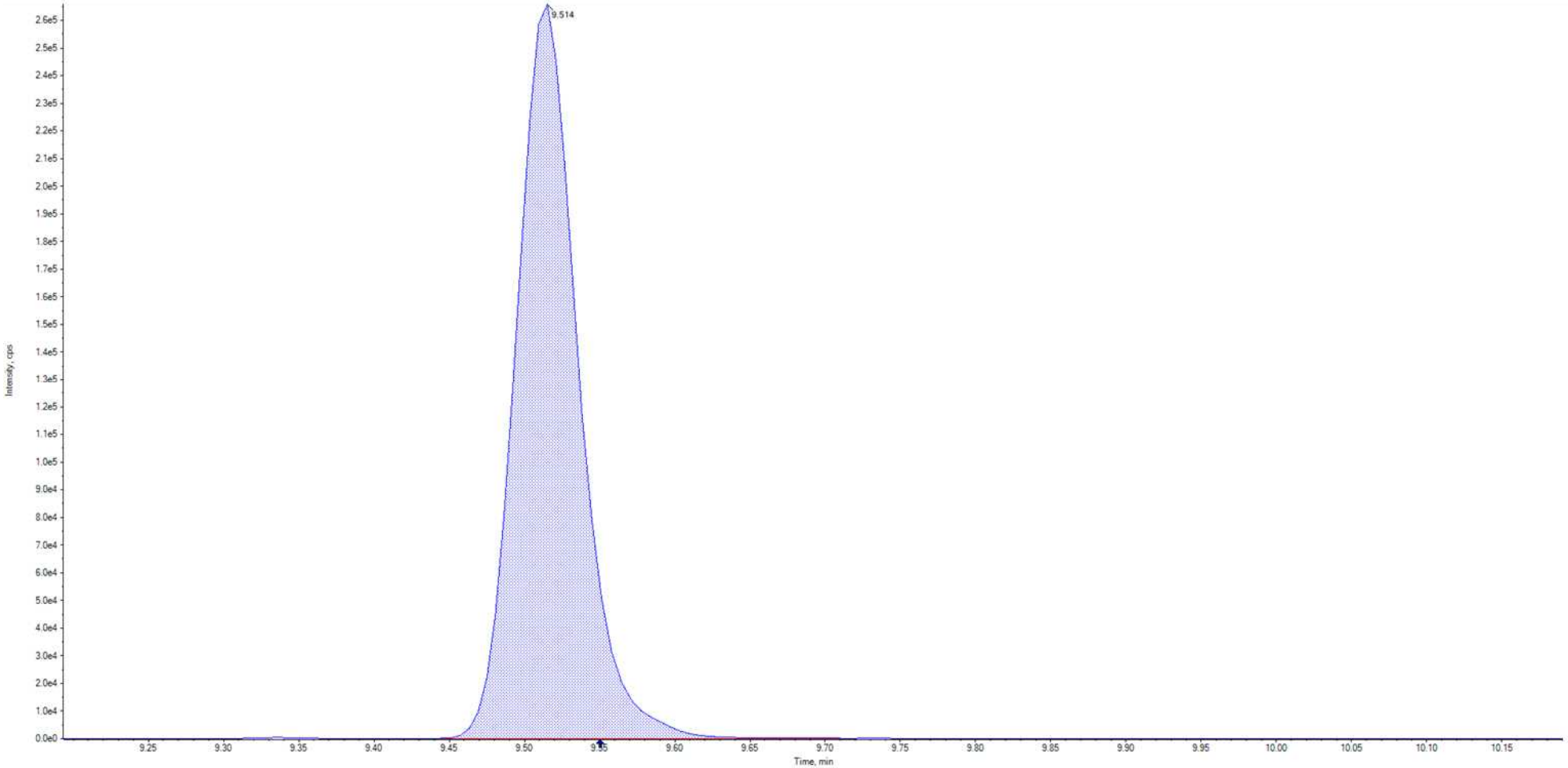
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C2-8:2FTS
Sample: WG1971858-2

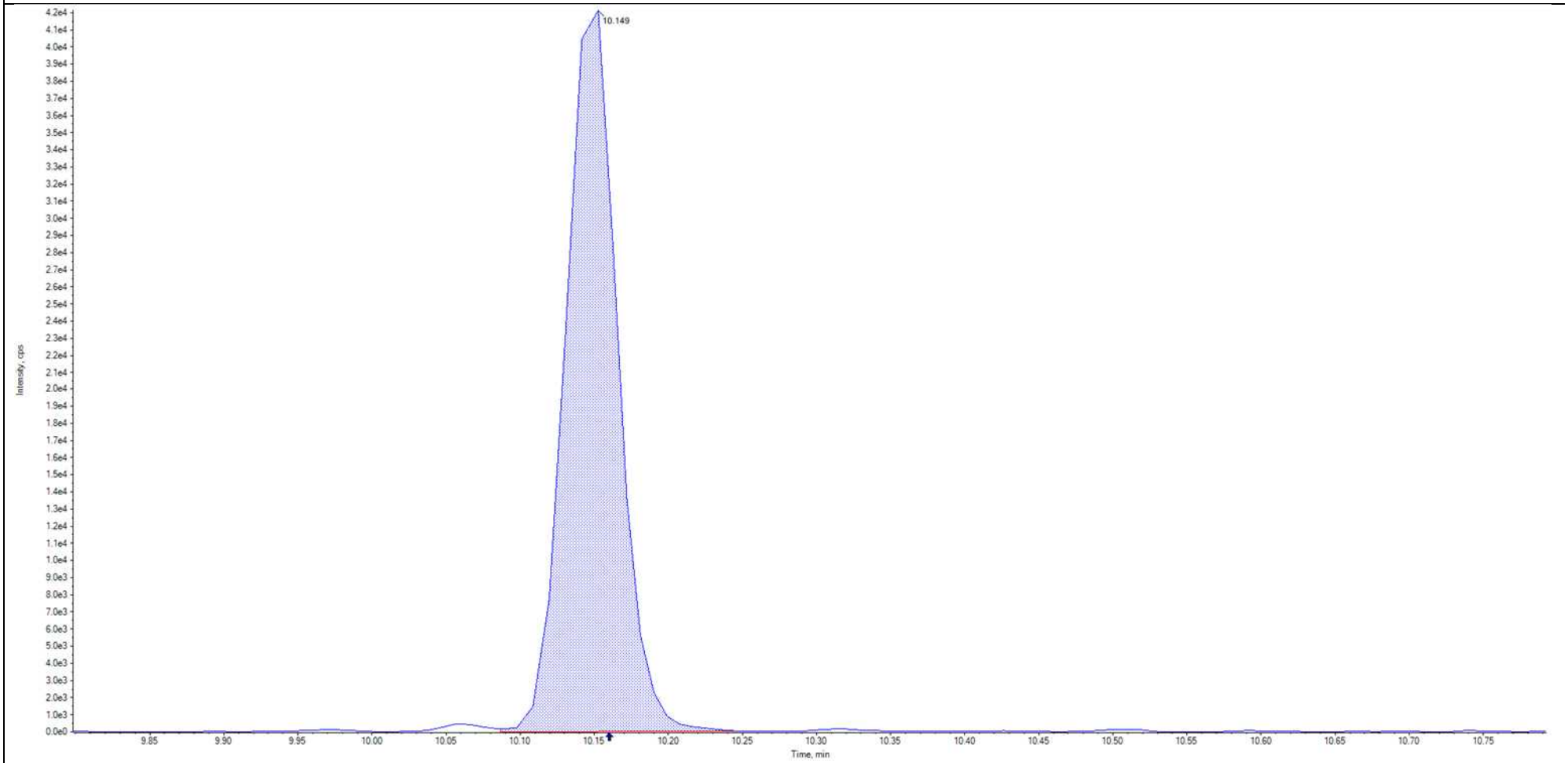


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C8-PFOSA
Sample: WG1971858-2

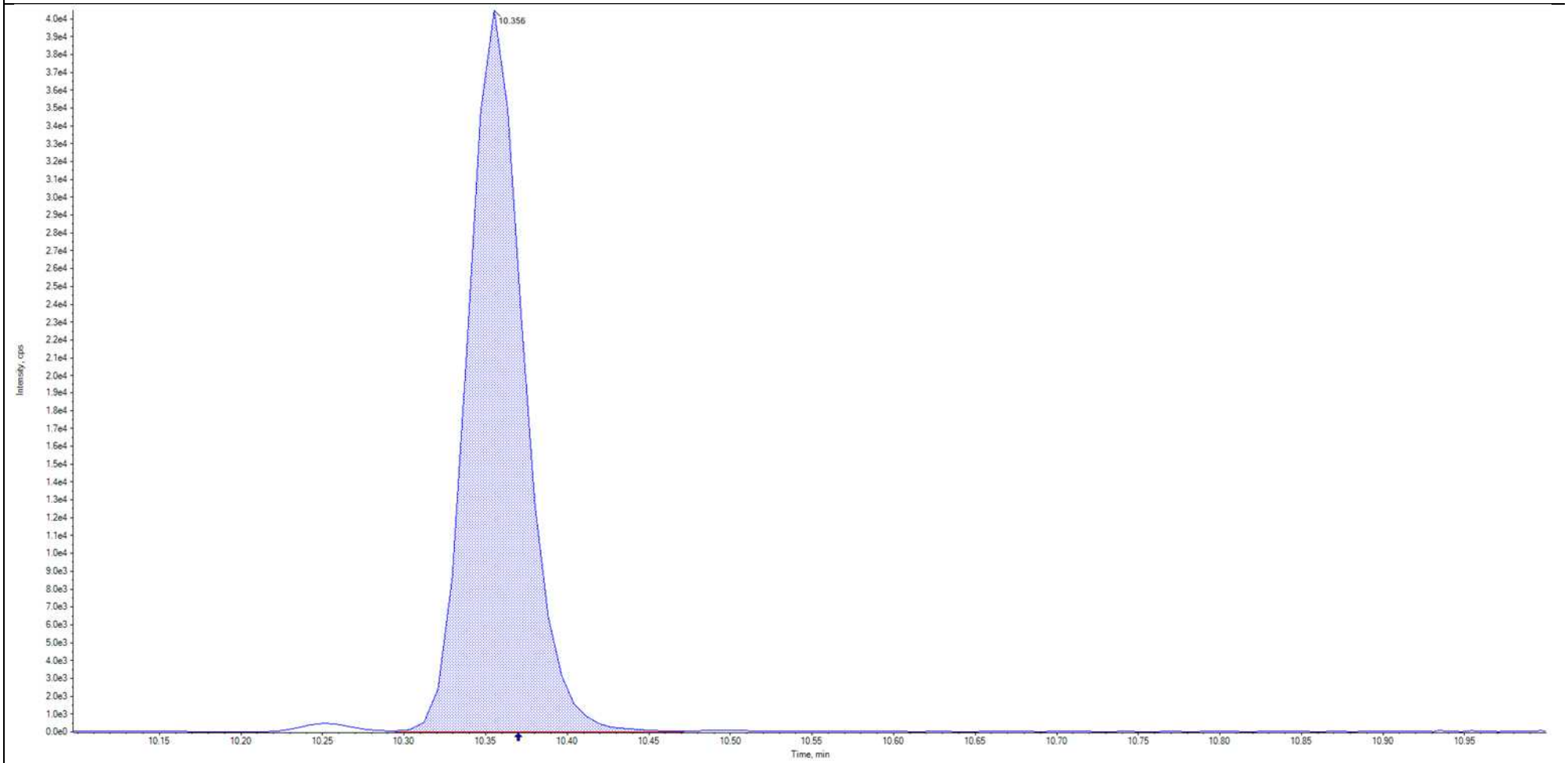


d3-NMeFOSA
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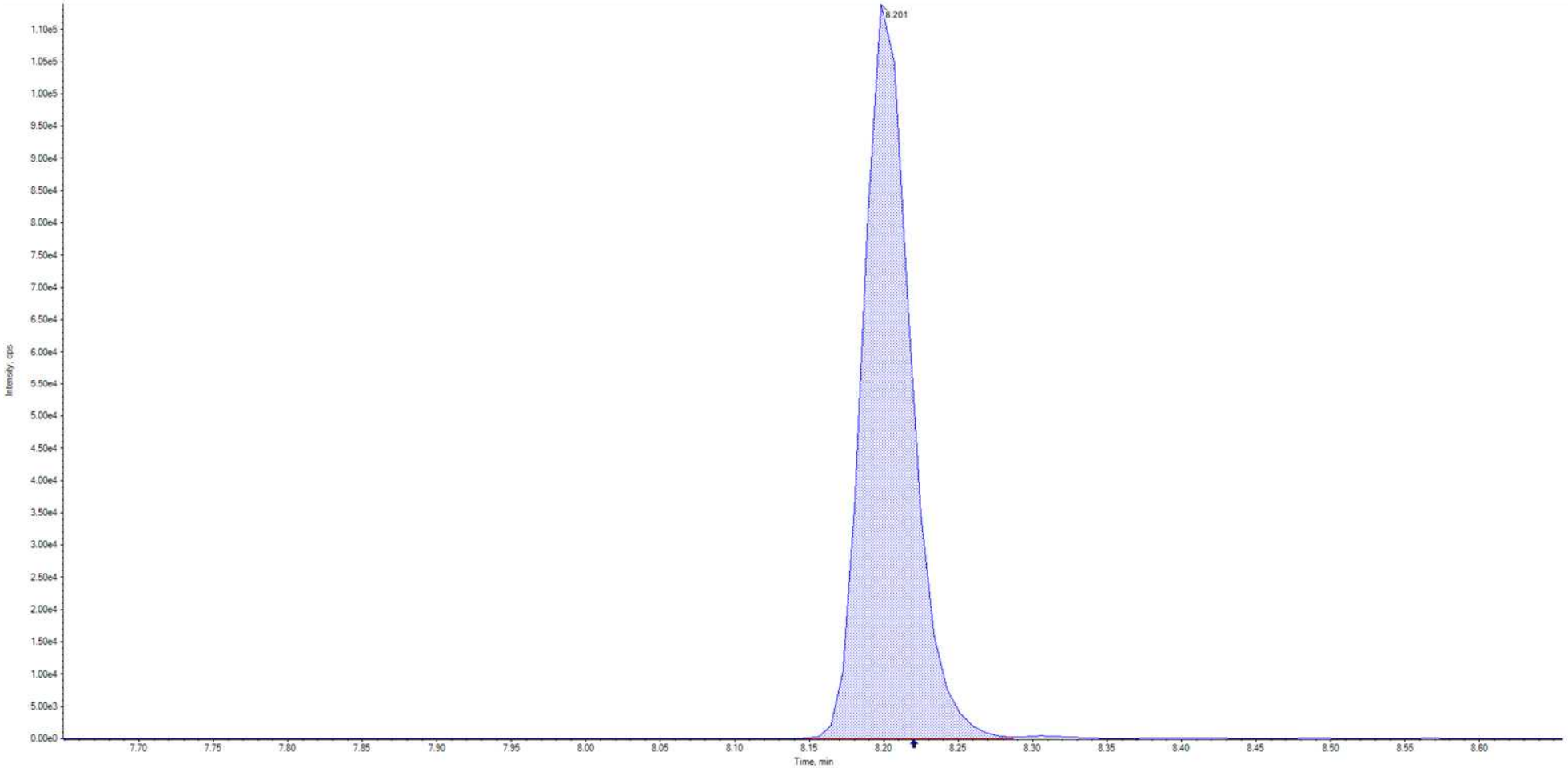


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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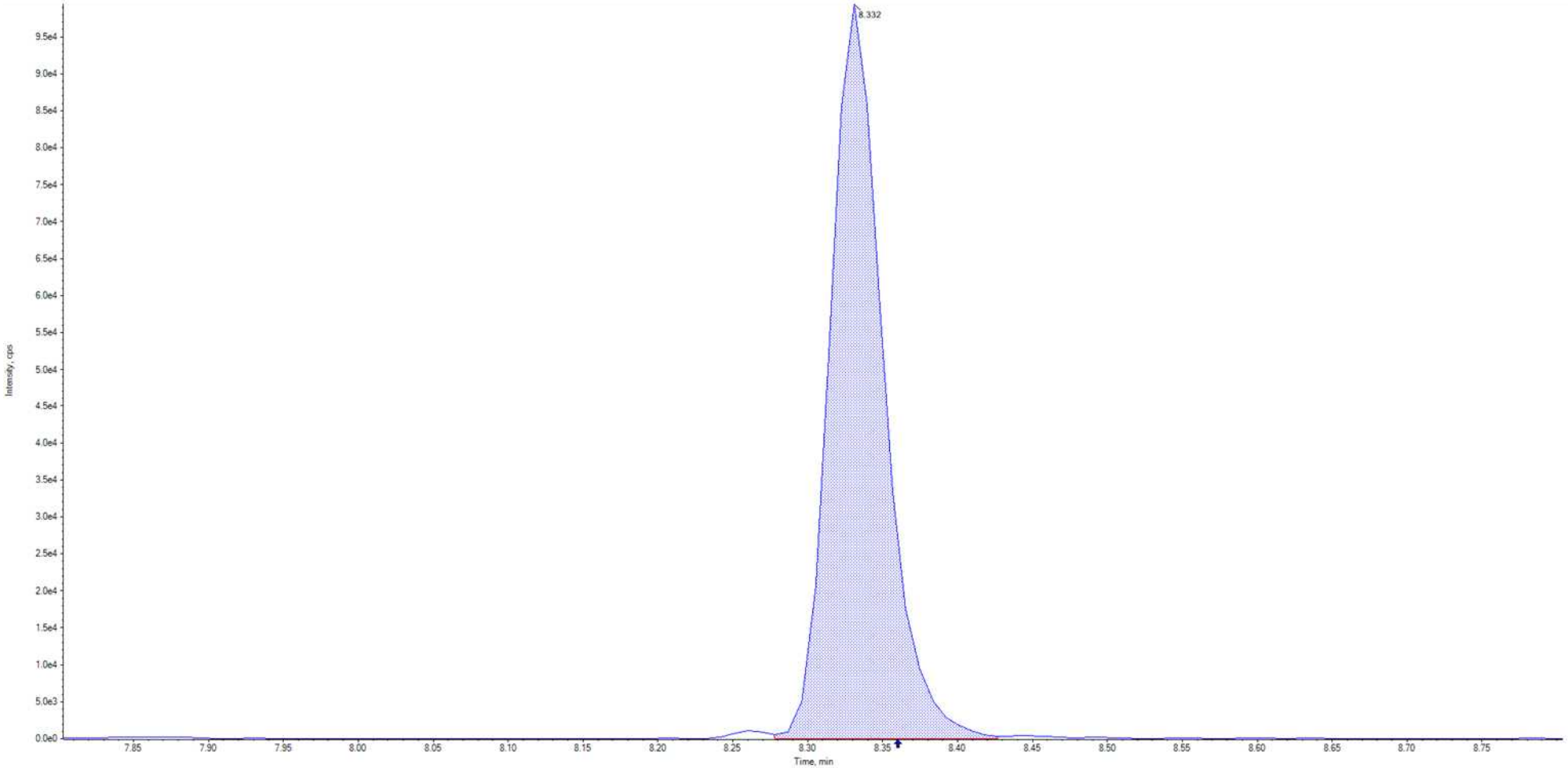
d5-NEtFOSA
Sample: WG1971858-2



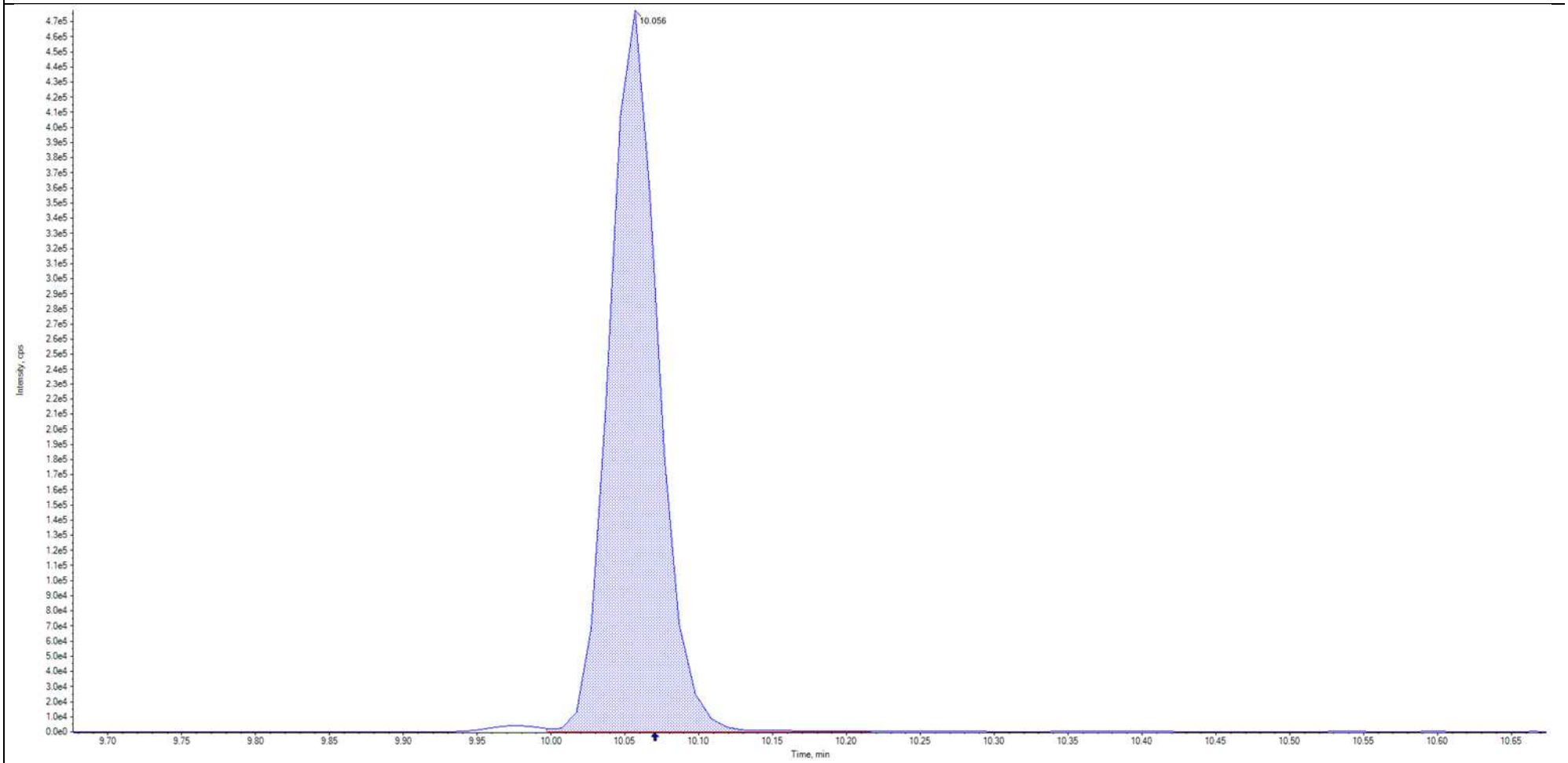
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d5-NEtFOSAA
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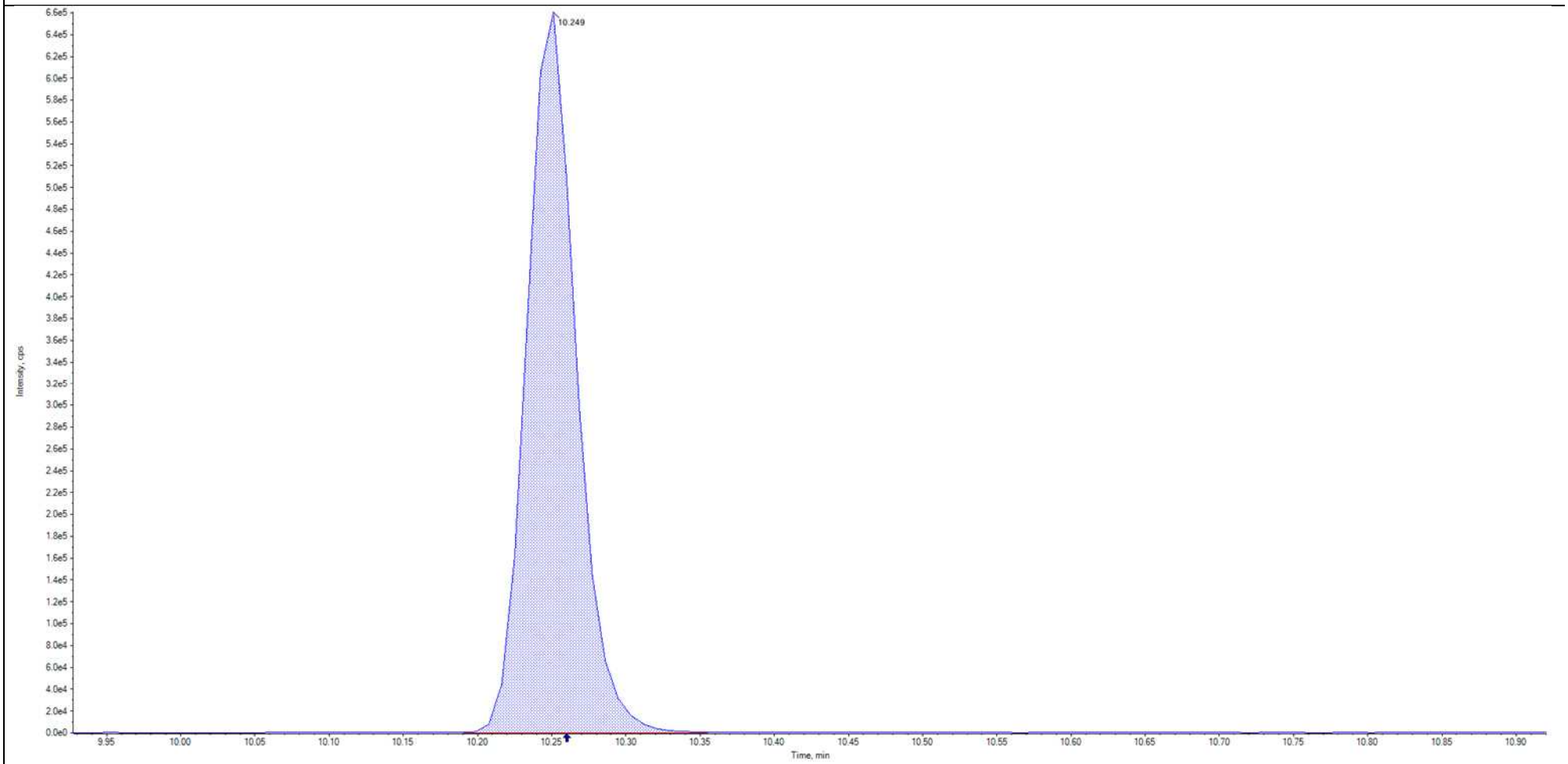


d7-NMeFOSE
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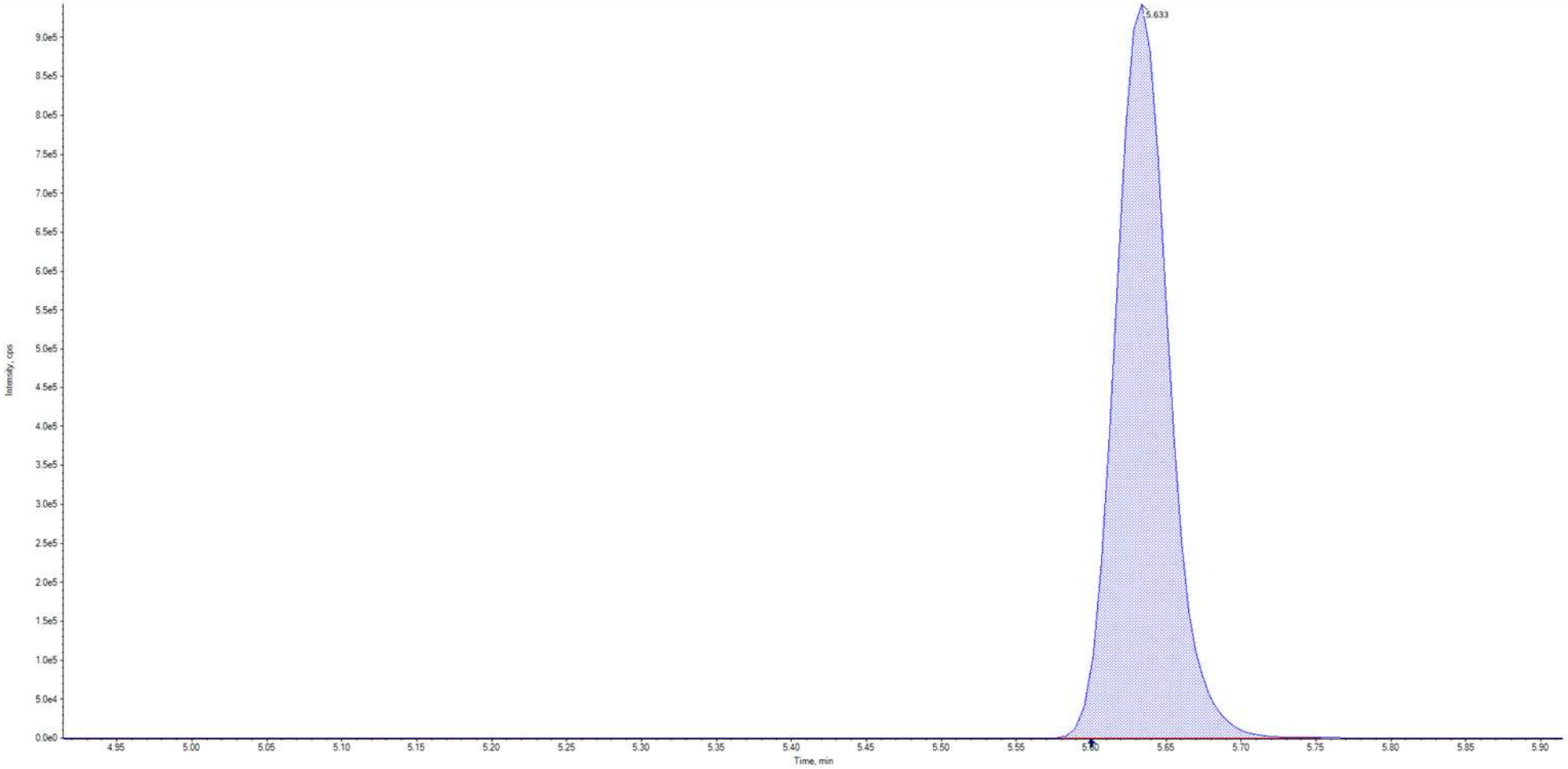
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d9-NEtFOSE
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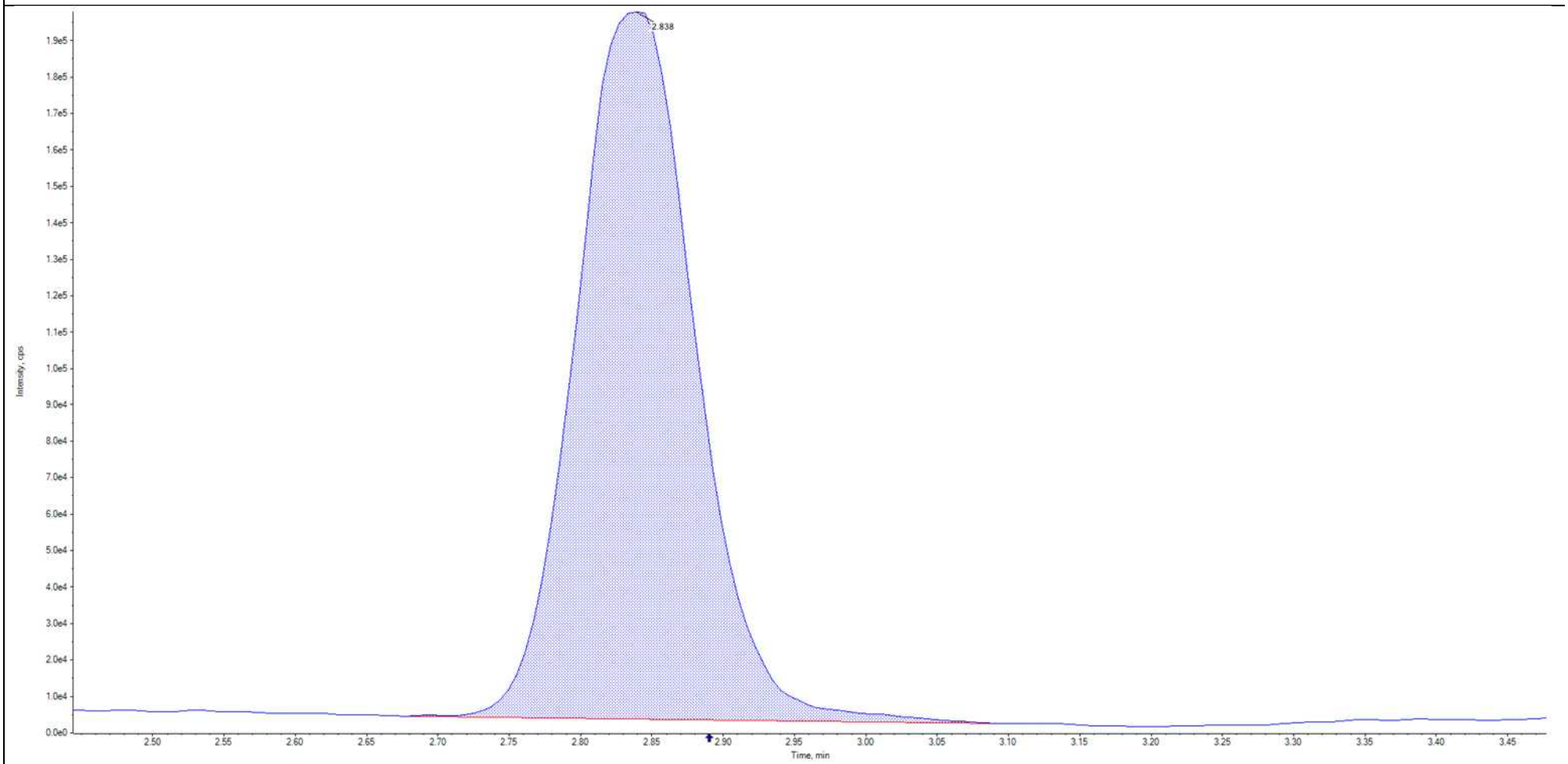
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13C3-HFPO-DA
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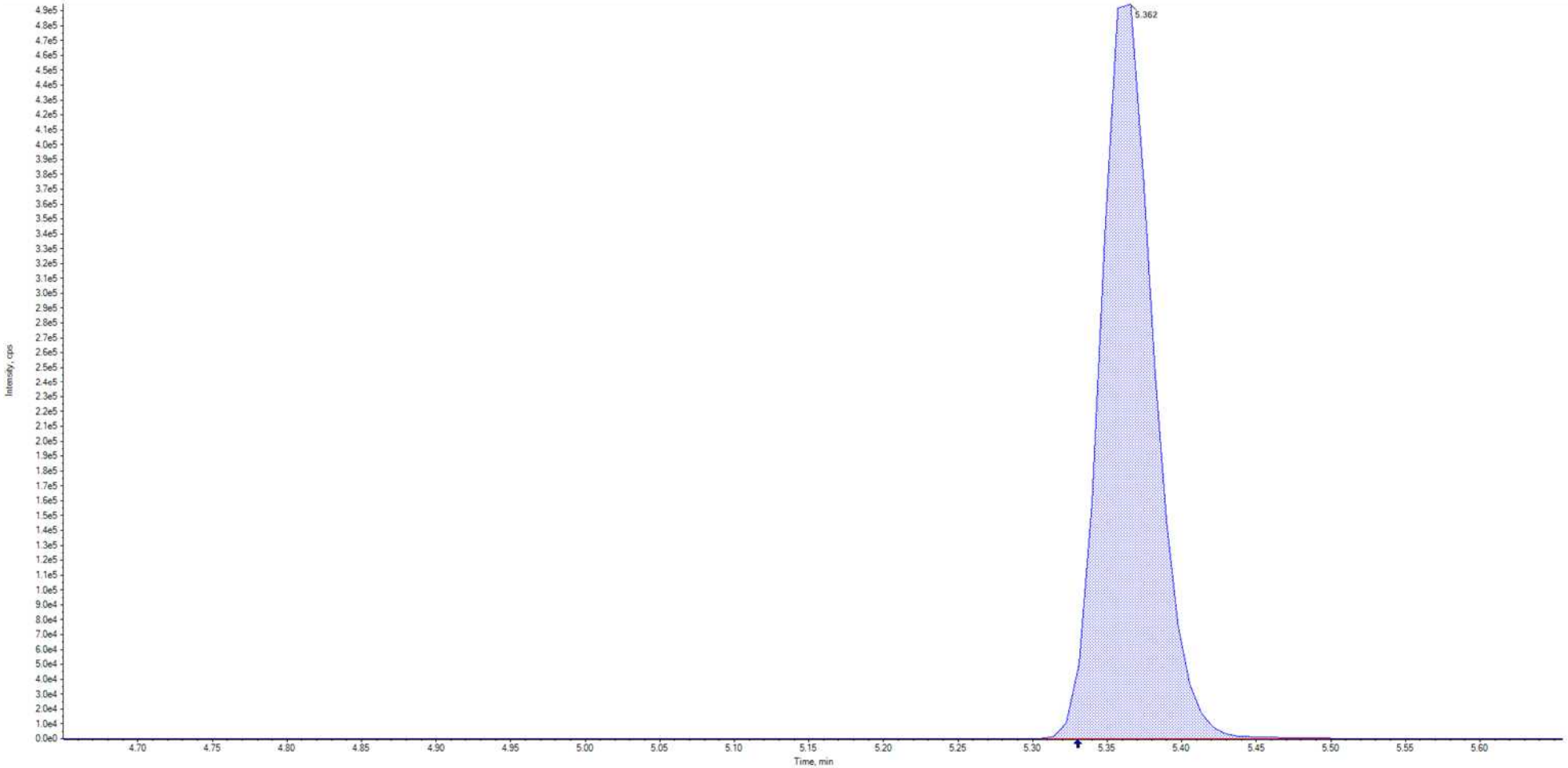


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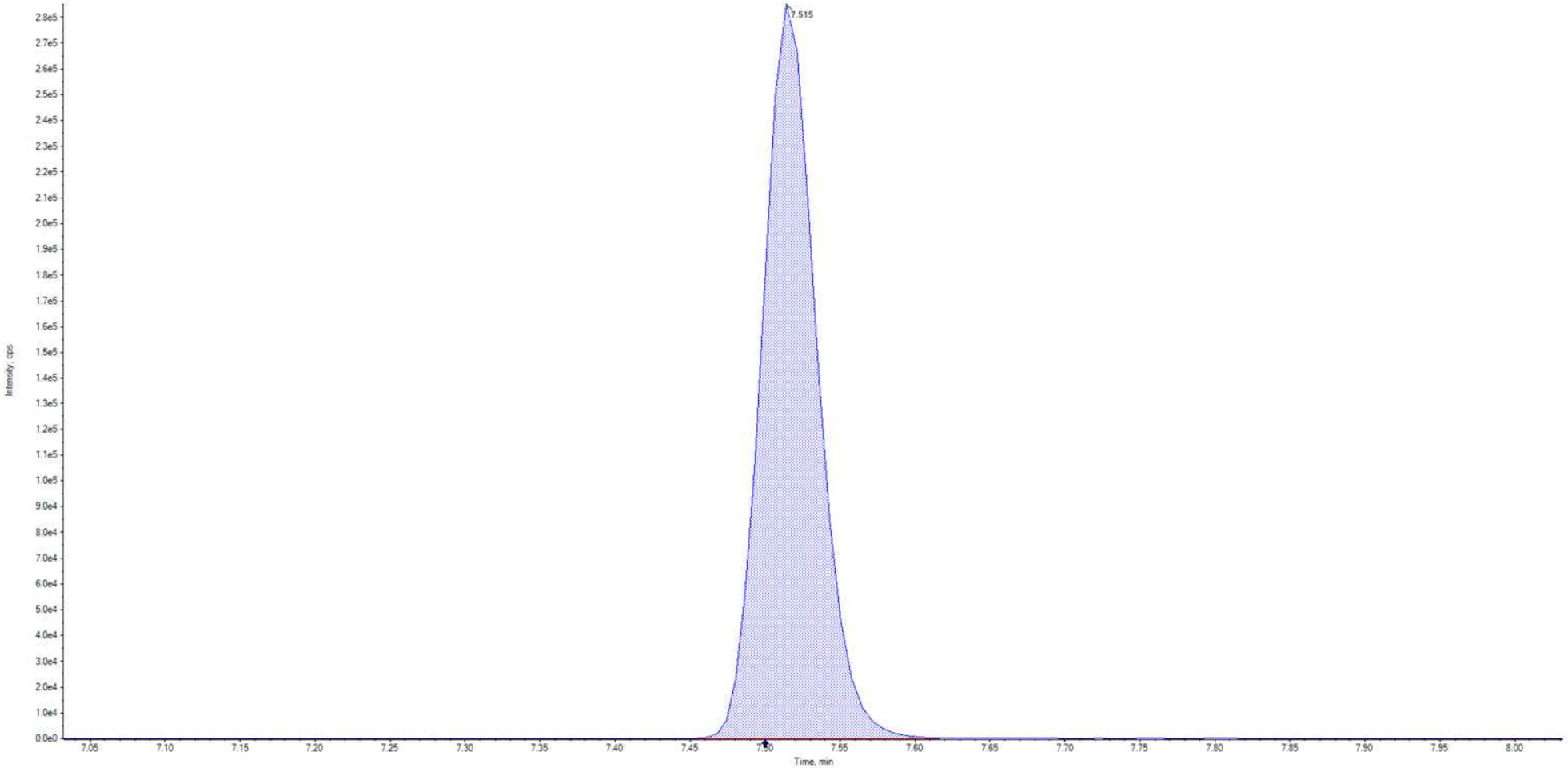
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13C2-PFHxA
Sample: WG1971858-2

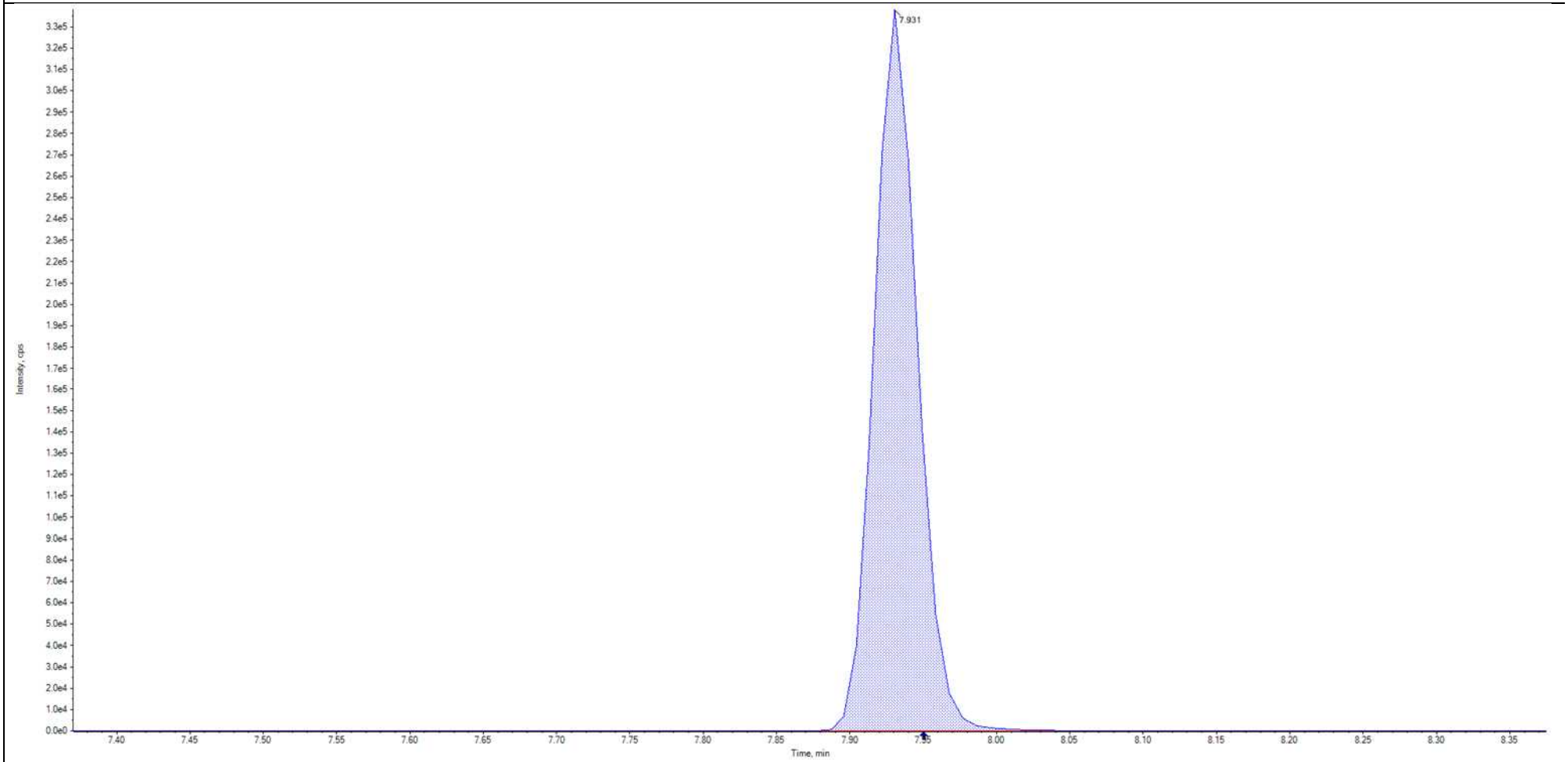


13C4-PFOA
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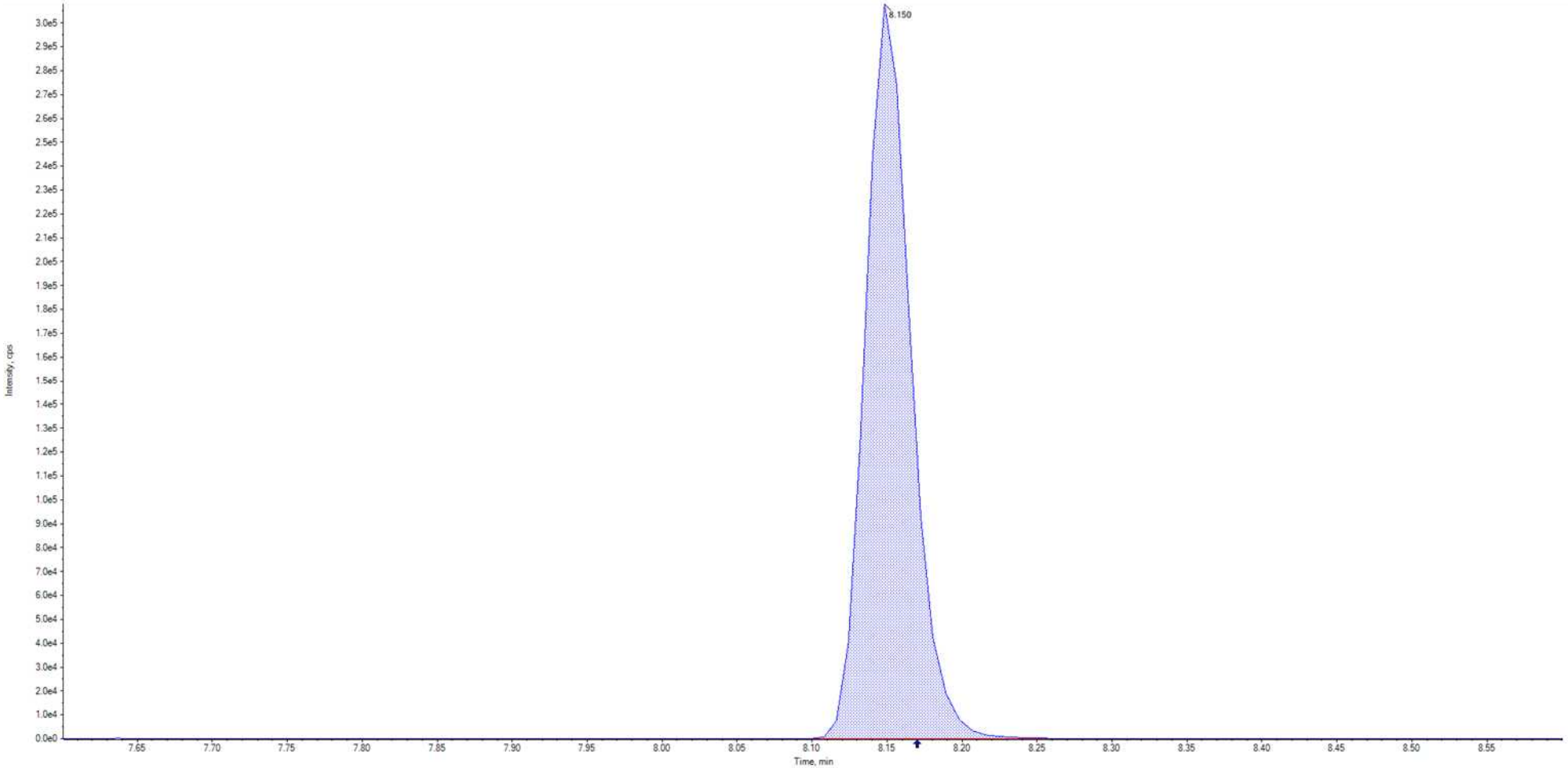


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13C5-PFNA
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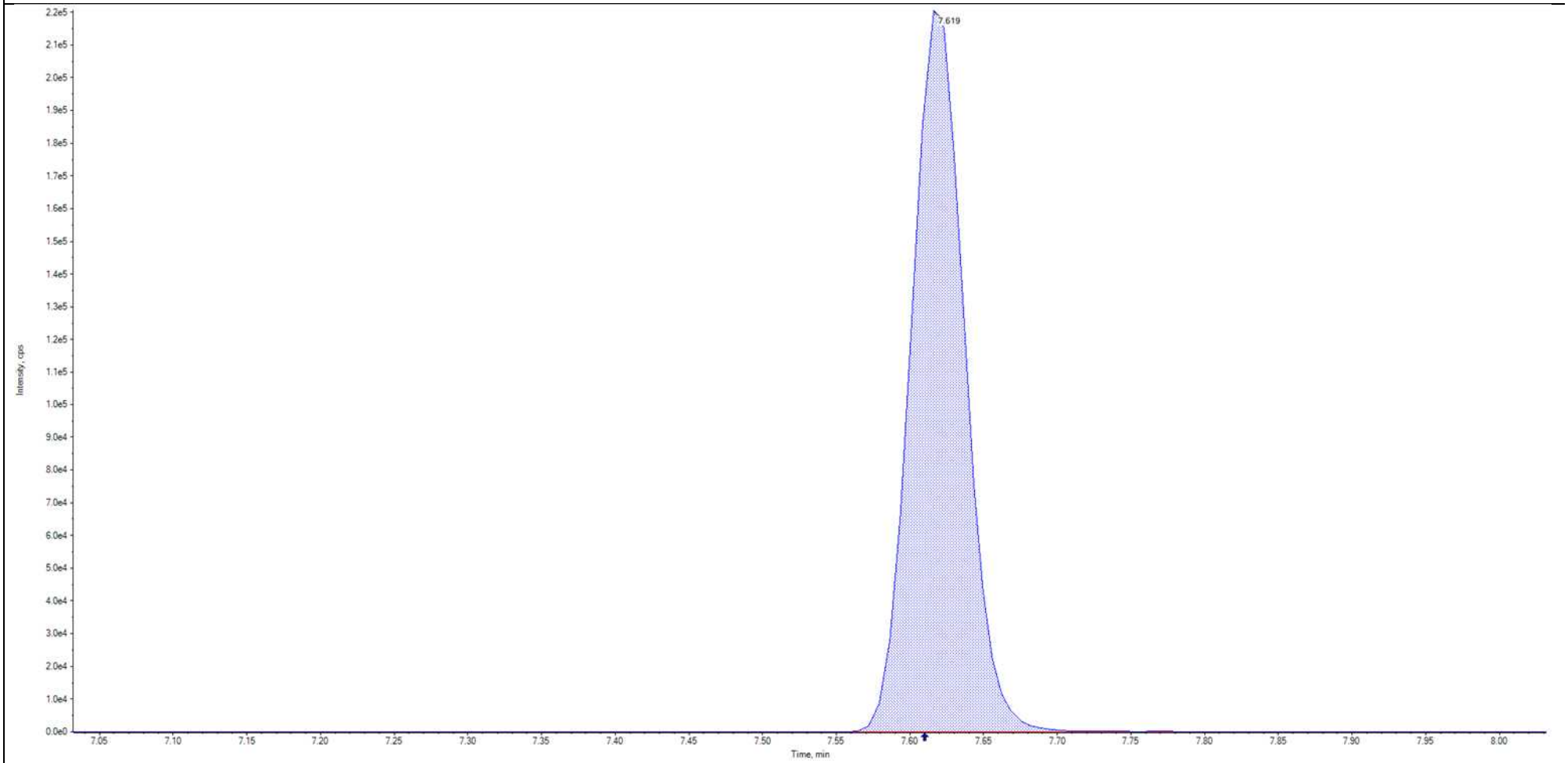


13C2-PFDA
Sample: WG1971858-2



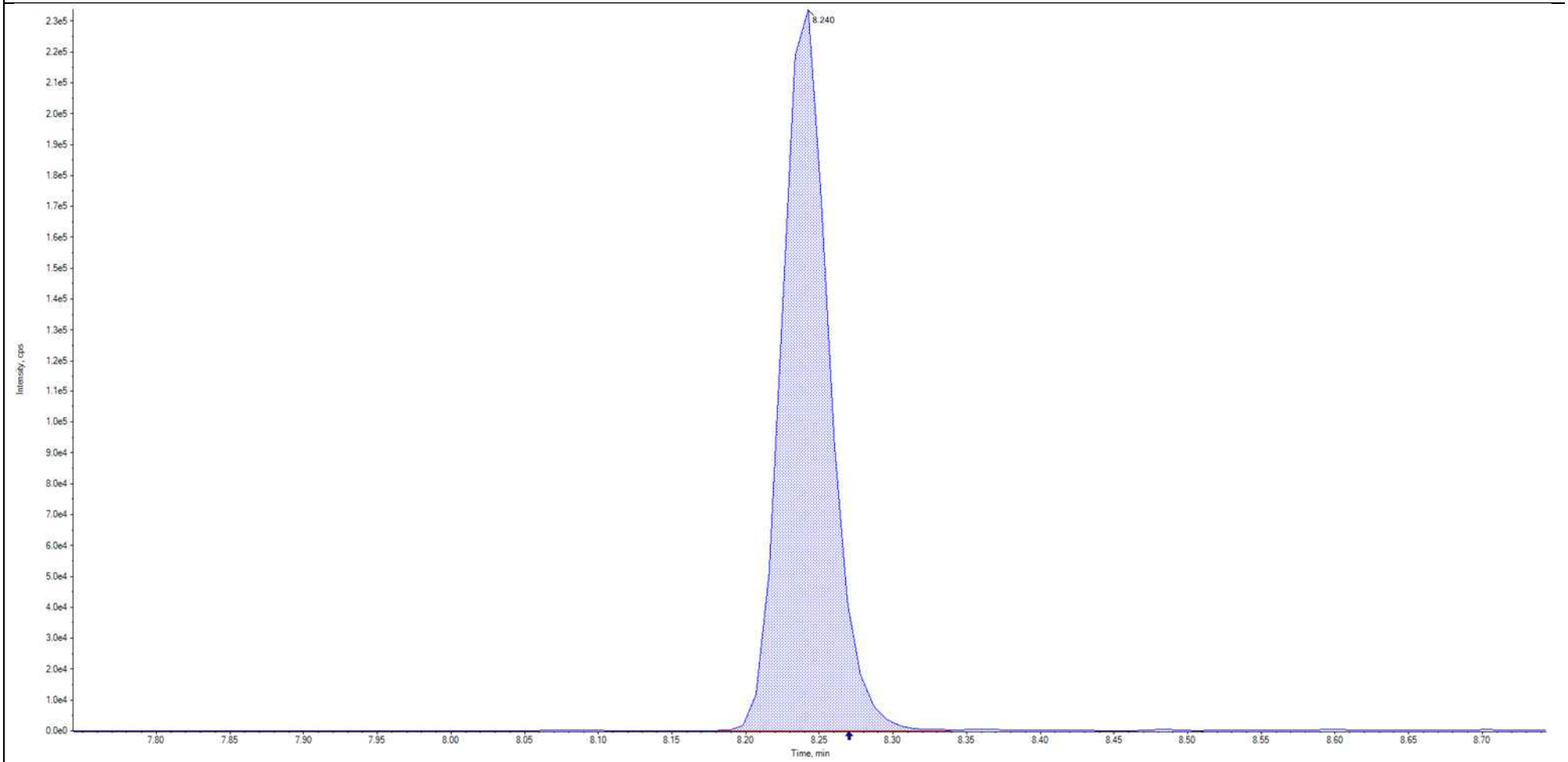
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

18O2-PFHxS
Sample: WG1971858-2



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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13C4-PFOS
Sample: WG1971858-2



Quantity Sample Summary Report SCIEX OS Version 3.0.0.3339
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LC/MS-MS Method:EPA_1633.dam

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
1	PFBA	375-22-4	2.84	213.0 / 169.0	2640099		12.836	N/A	N/A	N/A	128.4
2	PFPeA	2706-90-3	4.67	263.0 / 219.0	2228911		7.035	0.006	0.007	N/A	140.7
3	PFPeA_2	2706-90-3	4.67	263.0 / 68.9	14261		6.375	0.006	0.007	N/A	127.5
4	PFHxA	307-24-4	5.37	313.0 / 269.0	1480486		3.067	0.076	0.072	Pass	122.7
5	PFHxA_2	307-24-4	5.37	313.0 / 119.0	112835		3.164	0.076	0.072	Pass	126.6
6	PFHpA	375-85-9	6.30	363.1 / 319.0	1468648		3.148	0.315	0.297	Pass	125.9
7	PFHpA_2	375-85-9	6.30	363.1 / 169.0	462183		3.237	0.315	0.297	Pass	129.5

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
8	PFOA	335-67-1	7.51	413.1 / 369.1	919411	M5	2.960	0.566	0.586	Pass	118.4
9	PFOA_2	335-67-1	7.51	413.1 / 169.0	520307	M7	3.057	0.566	0.586	Pass	122.3
10	PFNA	375-95-1	7.94	462.8 / 418.9	1418210	M5	3.469	0.307	0.313	Pass	138.7
11	PFNA_2	375-95-1	7.94	462.8 / 218.9	435859	M7	3.488	0.307	0.313	Pass	139.5
12	PFDA	335-76-2	8.15	513.1 / 469.1	1511382		3.380	0.151	0.142	Pass	135.2
13	PFDA_2	335-76-2	8.15	513.1 / 219.0	228533		3.410	0.151	0.142	Pass	136.4
14	PFUnA	2058-94-8	8.43	563.1 / 519.1	1071383		3.113	0.186	0.194	Pass	124.5
15	PFUnA_2	2058-94-8	8.43	563.1 / 269.0	199293		2.989	0.186	0.194	Pass	119.6
16	PFDoA	307-55-1	8.83	613.1 / 569.1	1074190		2.348	0.166	0.167	Pass	93.9
17	PFDoA_2	307-55-1	8.83	613.1 / 319.0	177861		2.301	0.166	0.167	Pass	92.1
18	PFTrDA	72629-94-8	9.40	663.1 / 619.1	665324		2.441	0.213	0.228	Pass	97.6
19	PFTrDA_2	72629-94-8	9.40	663.1 / 169.0	141643		2.333	0.213	0.228	Pass	93.3
20	PFTeDA	376-06-7	9.86	713.1 / 669.1	1086808		3.118	0.140	0.137	Pass	124.7
21	PFTeDA_2	376-06-7	9.86	713.1 / 169.0	152080		3.190	0.140	0.137	Pass	127.6
22	PFBS	375-73-5	5.34	299.1 / 80.1	912323		2.814	0.396	0.396	Pass	126.9

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
23	PFBS_2	375-73-5	5.34	299.1 / 99.1	361457		2.796	0.396	0.396	Pass	126.1
24	PFPeS	2706-91-4	6.38	349.1 / 80.1	797200		2.970	0.296	0.299	Pass	126.3
25	PFPeS_2	2706-91-4	6.38	349.1 / 99.1	236241		2.918	0.296	0.299	Pass	124.0
26	PFHxS	355-46-4	7.62	399.1 / 80.1	722267	M5	2.875	0.316	0.315	Pass	125.8
27	PFHxS_2	355-46-4	7.62	399.1 / 99.1	228036	M7	2.923	0.316	0.315	Pass	127.9
28	PFHpS	375-92-8	8.00	449.1 / 80.1	796030		3.234	0.287	0.287	Pass	135.7
29	PFHpS_2	375-92-8	8.00	449.1 / 99.1	228150		3.162	0.287	0.287	Pass	132.7
30	PFOS	1763-23-1	8.24	499.1 / 80.1	773431	M5	2.951	0.241	0.238	Pass	127.2
31	PFOS_2	1763-23-1	8.24	499.1 / 99.1	186388		2.903	0.241	0.238	Pass	125.1
32	PFNS	68259-12-1	8.57	549.1 / 80.1	523573		3.112	0.304	0.301	Pass	129.4
33	PFNS_2	68259-12-1	8.57	549.1 / 99.1	159093		3.122	0.304	0.301	Pass	129.8
34	PFDS	335-77-3	9.06	599.1 / 80.1	458316		2.765	0.275	0.275	Pass	114.6
35	PFDS_2	335-77-3	9.06	599.1 / 99.1	125997		2.758	0.275	0.275	Pass	114.3
36	PFDoS	79780-39-5	9.96	699.2 / 80.1	425904		2.805	0.272	0.274	Pass	115.7
37	PFDoS_2	79780-39-5	9.96	699.2 / 99.1	115715		2.774	0.272	0.274	Pass	114.4

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
38	4:2FTS	757124-72-4	5.16	327.1 / 307.1	1251470		10.386	0.531	0.516	Pass	110.8
39	4:2FTS_2	757124-72-4	5.16	327.1 / 81.1	664504		10.309	0.531	0.516	Pass	110.0
40	6:2FTS	27619-97-2	7.13	427.2 / 407.2	828057		12.721	0.564	0.565	Pass	133.9
41	6:2FTS_2	27619-97-2	7.13	427.2 / 81.1	466906		13.262	0.564	0.565	Pass	139.6
42	8:2FTS	39108-34-4	8.05	527.2 / 507.2	1066070		14.176	0.682	0.662	Pass	147.7
43	8:2FTS_2	39108-34-4	8.05	527.2 / 81.1	727009		14.252	0.682	0.662	Pass	148.5
44	PFOSA	754-91-6	9.51	498.1 / 78.1	731327	M5	3.255	0.025	0.025	Pass	130.2
45	PFOSA_2	754-91-6	9.51	498.1 / 478.0	18433	M7	3.126	0.025	0.025	Pass	125.1
46	NMeFOSA	31506-32-8	10.15	512.2 / 219.0	182890	M5	3.403	1.482	1.551	Pass	136.1
47	NMeFOSA_2	31506-32-8	10.11	512.2 / 169.0	271112	M7	3.255	1.482	1.551	Pass	130.2
48	NEtFOSA	4151-50-2	10.36	526.2 / 219.0	167792	M5	3.361	1.286	1.285	Pass	134.5
49	NEtFOSA_2	4151-50-2	10.32	526.2 / 169.0	215790	M7	3.229	1.286	1.285	Pass	129.2
50	NMeFOSAA	2355-31-9	8.20	570.2 / 419.1	152084	M4	3.448	0.788	0.700	Pass	137.9
51	NMeFOSAA_2	2355-31-9	8.20	570.2 / 483.0	119835		4.272	0.788	0.700	Pass	170.9
52	NEtFOSAA	2991-50-6	8.34	584.2 / 419.1	177505		3.174	0.506	0.487	Pass	127.0

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
53	NEtFOSAA_2	2991-50-6	8.34	584.2 / 526.2	89797	M7	3.490	0.506	0.487	Pass	139.6
54	NMeFOSE	24448-09-7	10.07	616.1 / 58.9	3774914	M5	31.814	N/A	N/A	N/A	127.3
55	NEtFOSE	1691-99-2	10.27	630.0 / 58.9	6582201	M5	31.269	N/A	N/A	N/A	125.1
56	HFPO-DA	13252-13-6	5.63	285.0 / 169.0	3304172		13.572	0.459	0.464	Pass	135.7
57	HFPO-DA_2	13252-13-6	5.63	285.0 / 184.9	1517727		13.407	0.459	0.464	Pass	134.1
58	ADONA	919005-14-4	6.77	377.1 / 251.0	6602633		11.926	0.674	0.634	Pass	126.2
59	ADONA_2	919005-14-4	6.76	377.1 / 84.8	4450453		12.423	0.674	0.634	Pass	131.5
60	9Cl-PF3ONS	756426-58-1	8.45	530.8 / 351.1	7136256		13.072	0.317	0.322	Pass	139.8
61	9Cl-PF3ONS_2	756426-58-1	8.45	532.8 / 353.0	2262497		12.727	0.317	0.322	Pass	136.1
62	11Cl-PF3OUdS	763051-92-9	9.47	630.9 / 451.0	3947205		11.447	0.335	0.331	Pass	121.1
63	11Cl-PF3OUdS_2	763051-92-9	9.47	632.9 / 452.9	1323804		11.407	0.335	0.331	Pass	120.7
64	3:3FTCA	356-02-5	4.95	241.1 / 177.1	494571		17.996	0.796	1.074	Pass	144.0
65	3:3FTCA_2	356-02-5	4.95	241.1 / 117.0	393859		14.309	0.796	1.074	Pass	114.5
66	5:3FTCA	914637-49-3	7.22	341.1 / 237.1	6973215		79.637	0.966	0.953	Pass	127.4
67	5:3FTCA_2	914637-49-3	7.21	341.1 / 217.0	6737053		81.312	0.966	0.953	Pass	130.1

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
68	7:3FTCA	812-70-4	8.20	441.1 / 316.9	4937049		50.647	1.813	1.558	Pass	81.0
69	7:3FTCA_2	812-70-4	8.20	441.1 / 337.1	8949064		63.264	1.813	1.558	Pass	101.2
70	PFEESA	113507-82-7	5.74	315.1 / 135.0	4984422		5.952	0.085	0.087	Pass	133.8
71	PFEESA_2	113507-82-7	5.74	315.1 / 82.9	424465		5.867	0.085	0.087	Pass	131.9
72	PFMPA	377-73-1	3.90	229.0 / 85.0	275572		7.186	N/A	N/A	N/A	143.7
73	PFMBA	863090-89-5	4.90	279.0 / 85.0	3072410		5.942	N/A	N/A	N/A	118.8
74	NFDHA	151772-58-6	5.28	295.0 / 201.0	611800		6.940	0.877	0.910	Pass	138.8
75	NFDHA_2	151772-58-6	5.28	295.0 / 84.9	536329		6.636	0.877	0.910	Pass	132.7
76	TDCA	516-50-7	N/A	499.1 / 124.1	N/A		N/A	N/A	40.716	N/A	N/A
77	TDCA_2	516-50-7	N/A	499.1 / 79.9	N/A		N/A	N/A	40.716	N/A	N/A
78	13C2D4-4:2FTS	Surr	N/A	333.2 / 312.1	N/A		N/A	N/A	N/A	N/A	N/A
79	13C2-PFOA	Surr	N/A	415.0 / 370.0	N/A		N/A	N/A	N/A	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C4-PFBA	EIS	2.84	217.0 / 172.0	2536271		8.817	NA	NA	NA	88.2

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C5-PFPeA	EIS	4.67	268.0 / 223.0	1718236		5.210	NA	NA	NA	104.2
	13C5-PFHxA	EIS	5.36	318.0 / 273.0	990361		2.286	NA	NA	NA	91.4
	13C4-PFHpA	EIS	6.29	367.0 / 322.0	995992		2.296	NA	NA	NA	91.9
	13C8-PFOA	EIS	7.51	421.0 / 376.0	1492736		2.174	NA	NA	NA	86.9
	13C9-PFNA	EIS	7.93	472.0 / 427.0	698221		1.102	NA	NA	NA	88.2
	13C6-PFDA	EIS	8.15	519.0 / 474.0	648653		1.037	NA	NA	NA	83.0
	13C7-PFUnA	EIS	8.42	570.0 / 525.0	544446		1.075	NA	NA	NA	86.0

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C2-PFDoA	EIS	8.83	615.1 / 570.0	439750		1.336	NA	NA	NA	106.8
	13C2-PFTeDA	EIS	9.85	715.1 / 670.1	347680		0.973	NA	NA	NA	77.8
	13C3-PFBS	EIS	5.33	302.1 / 80.1	772795		1.985	NA	NA	NA	85.2
	13C3-PFHxS	EIS	7.61	402.1 / 80.1	629316		2.036	NA	NA	NA	85.9
	13C8-PFOS	EIS	8.24	507.1 / 80.1	638064		1.904	NA	NA	NA	79.5
	13C2-4:2FTS	EIS	5.16	329.1 / 81.1	288364		4.151	NA	NA	NA	88.5
	13C2-6:2FTS	EIS	7.12	429.2 / 81.1	188673		3.706	NA	NA	NA	77.9
	13C2-8:2FTS	EIS	8.05	529.2 / 81.1	284807		3.823	NA	NA	NA	79.6

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C8-PFOSA	EIS	9.51	506.1 / 78.1	840523		1.887	NA	NA	NA	75.5
	d3-NMeFOSA	EIS	10.15	515.2 / 219.0	125494		1.674	NA	NA	NA	66.9
	d5-NEtFOSA	EIS	10.35	531.2 / 219.0	113634		1.551	NA	NA	NA	62.1
	d3-NMeFOSAA	EIS	8.20	573.2 / 419.1	335165		1.977	NA	NA	NA	39.5
	d5-NEtFOSAA	EIS	8.33	589.3 / 419.1	299889		3.366	NA	NA	NA	67.3
	d7-NMeFOSE	EIS	10.05	623.2 / 58.9	1202447		20.765	NA	NA	NA	83.1
	d9-NEtFOSE	EIS	10.25	639.2 / 58.9	1793209		21.004	NA	NA	NA	84.0

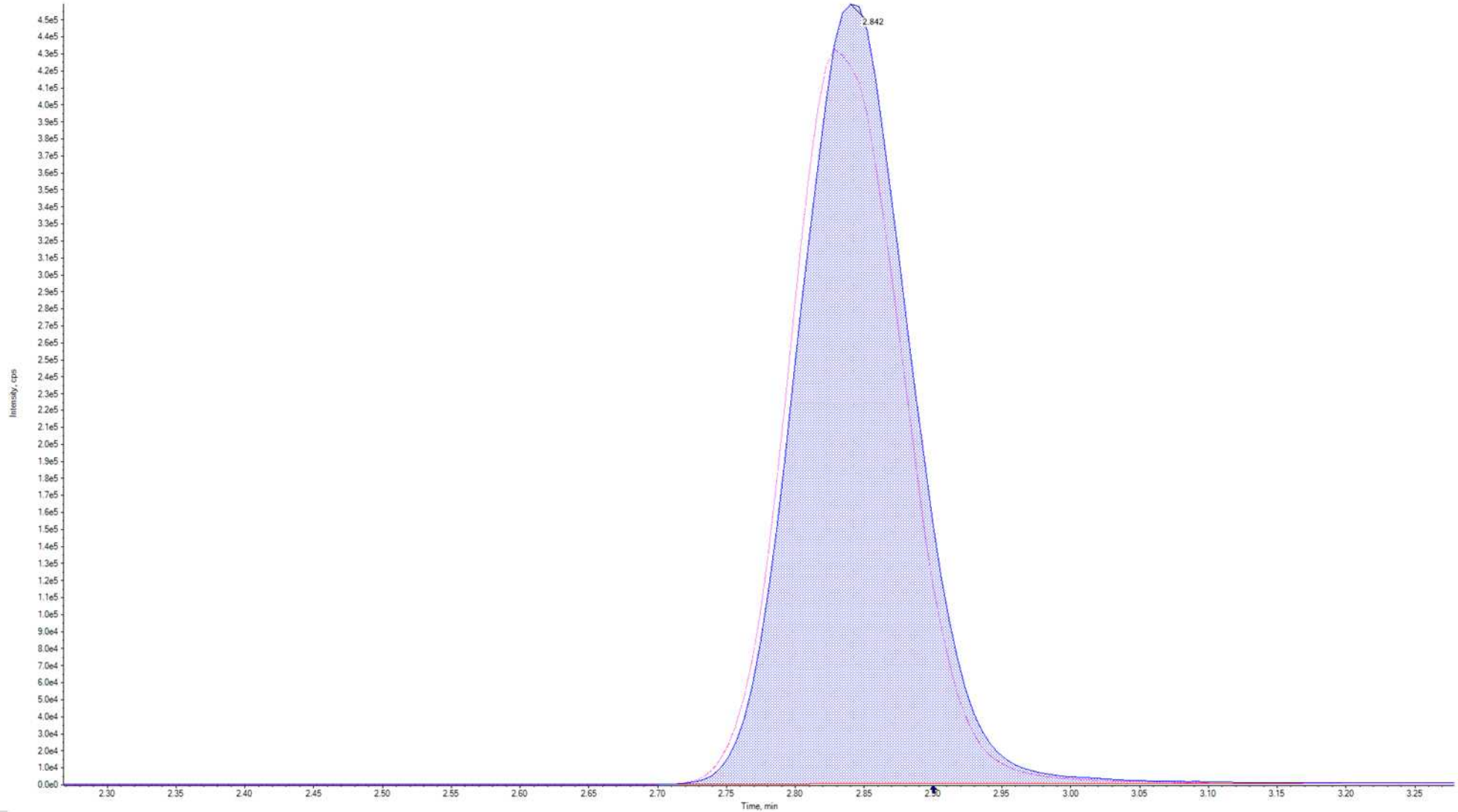
	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C3-HFPO-DA	EIS	5.63	287.0 / 169.0	2655658		9.251	NA	NA	NA	92.5
	13C3-PFBA	NIS	2.84	216.0 / 172.0	1258338		5.885	NA	NA	NA	117.7
	13C2-PFHxA	NIS	5.36	315.0 / 270.0	1286198		2.627	NA	NA	NA	105.1
	13C4-PFOA	NIS	7.51	417.0 / 372.0	898381		2.870	NA	NA	NA	114.8
	13C5-PFNA	NIS	7.93	468.0 / 423.0	771627		1.409	NA	NA	NA	112.7
	13C2-PFDA	NIS	8.15	515.1 / 470.1	734944		1.434	NA	NA	NA	114.7
	18O2-PFHxS	NIS	7.61	403.1 / 84.1	628389		2.682	NA	NA	NA	113.2
	13C4-PFOS	NIS	8.24	503.1 / 80.1	592673		2.815	NA	NA	NA	117.5

Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec

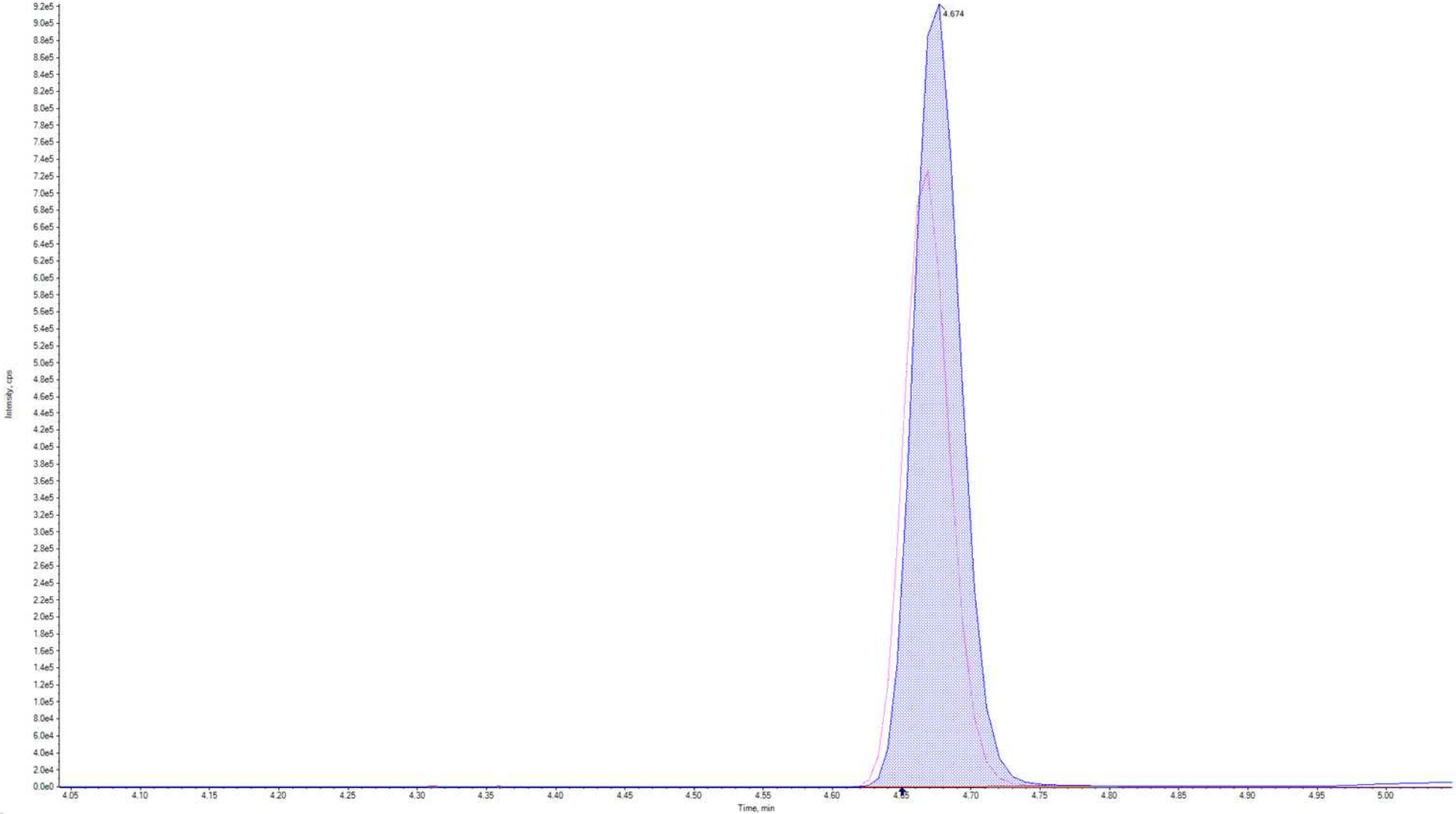
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Alpha Analytical Inc.
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PFBA
Sample: WG1971858-3 S/N:3165.2 Points Across peak:82



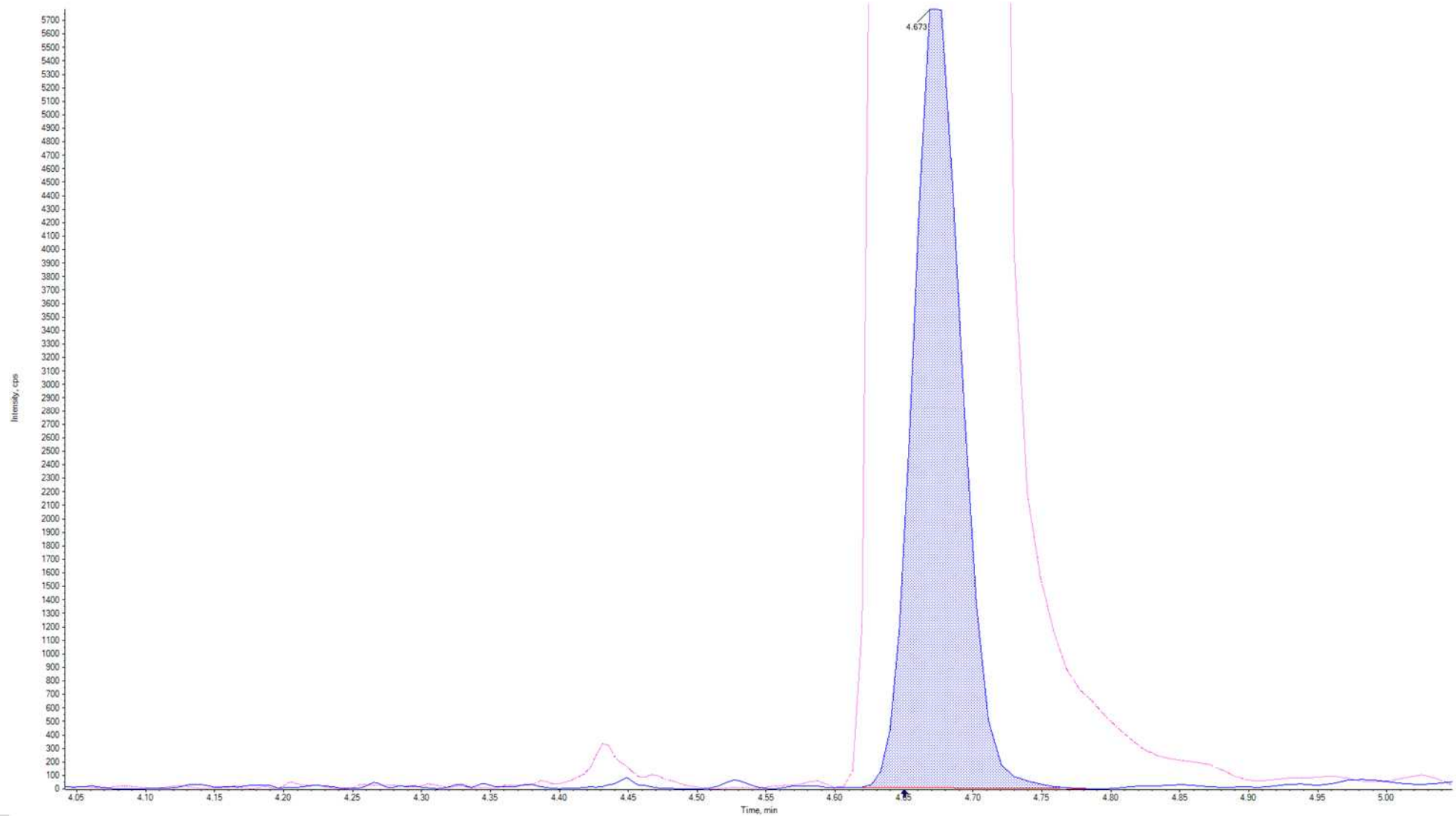
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PFPeA
Sample: WG1971858-3 S/N:3516.1 Points Across peak:30



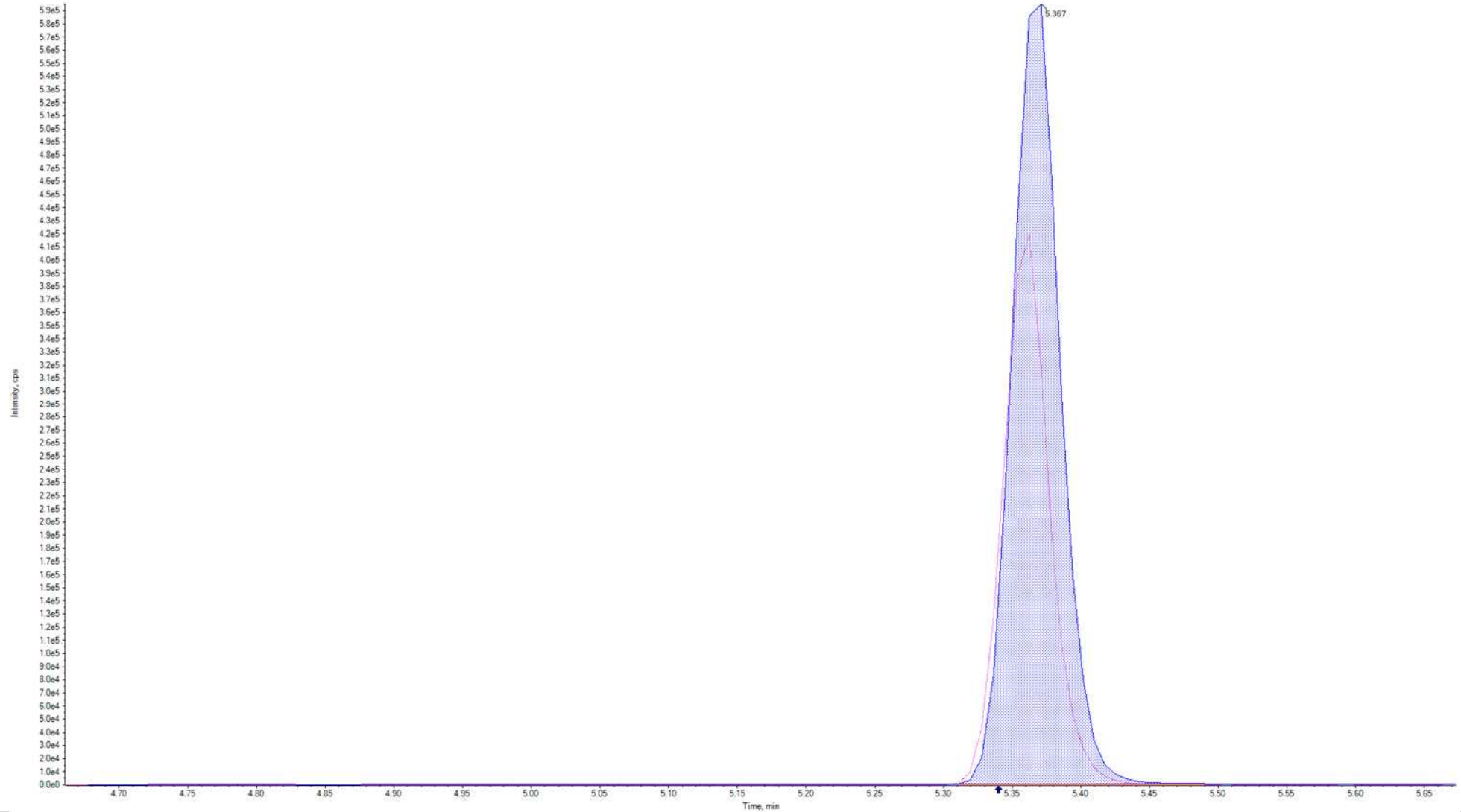
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Last Altered: 9/17/2024 9:07:16 AM
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PFPeA_2
Sample: WG1971858-3 S/N:9340.8 Points Across peak:21



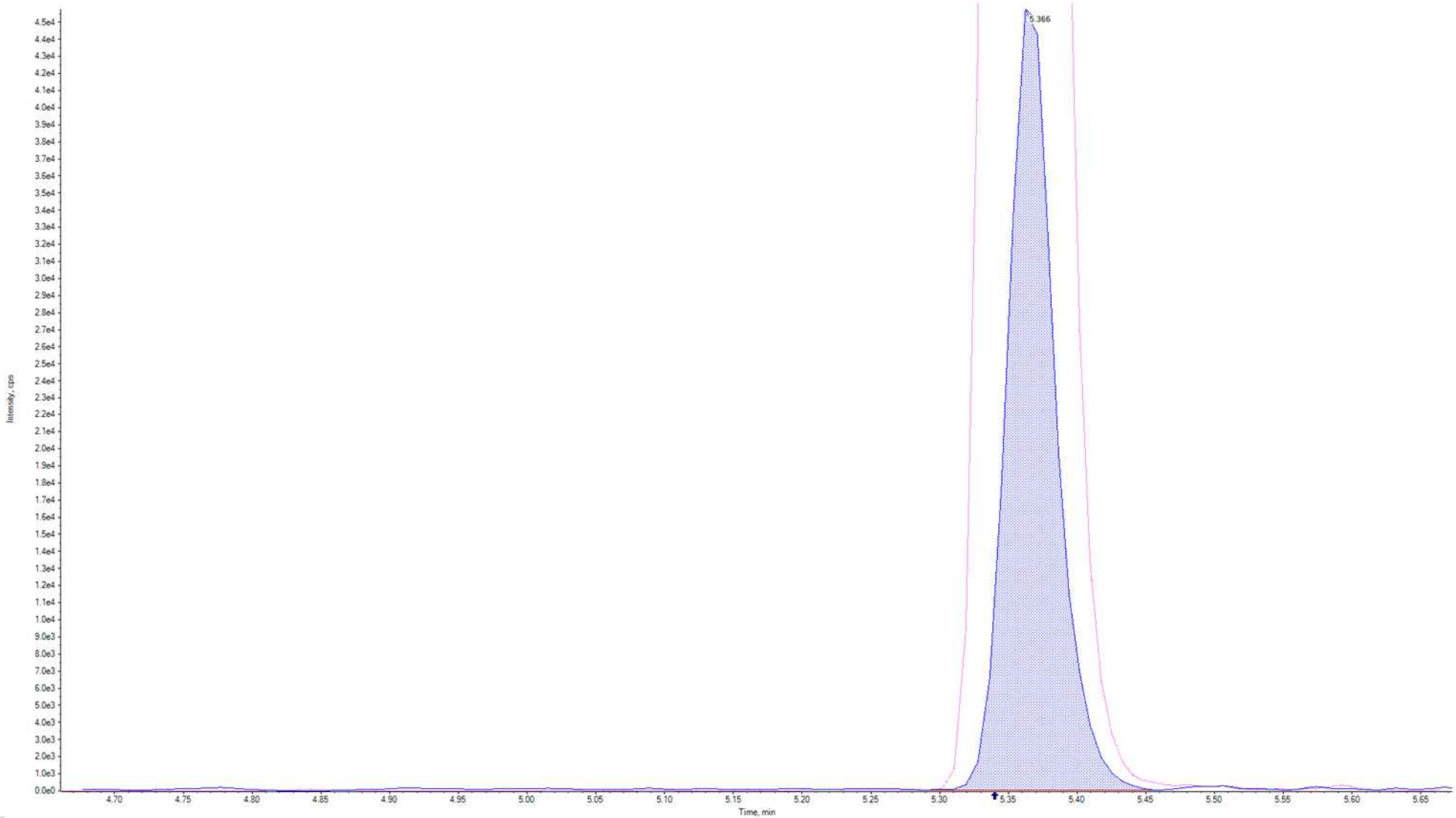
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PFHxA
Sample: WG1971858-3 S/N:2213.3 Points Across peak:30



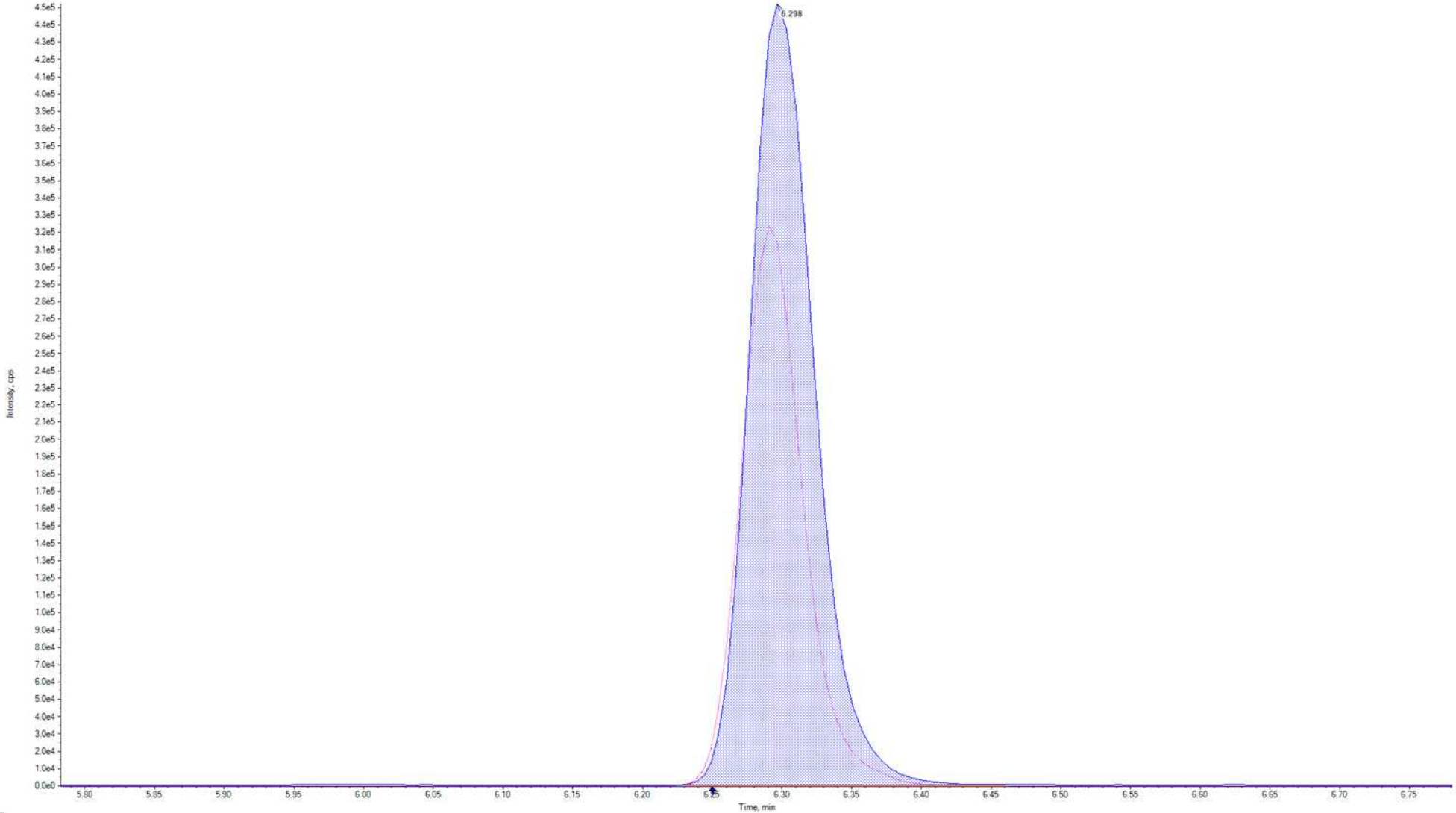
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHxA_2
Sample: WG1971858-3 S/N:3095.7 Points Across peak:22



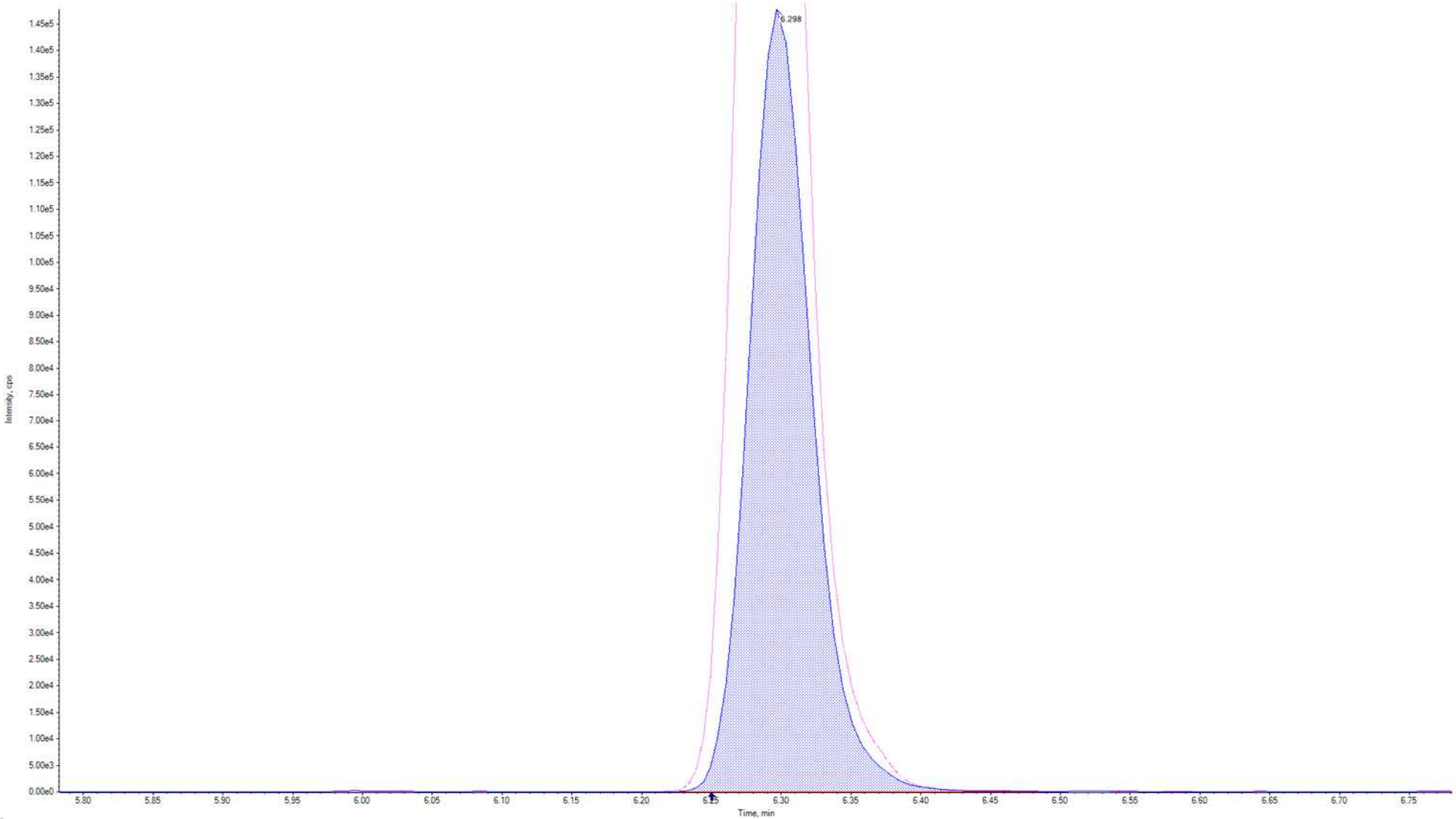
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PFHpA
Sample: WG1971858-3 S/N:2295.5 Points Across peak:41



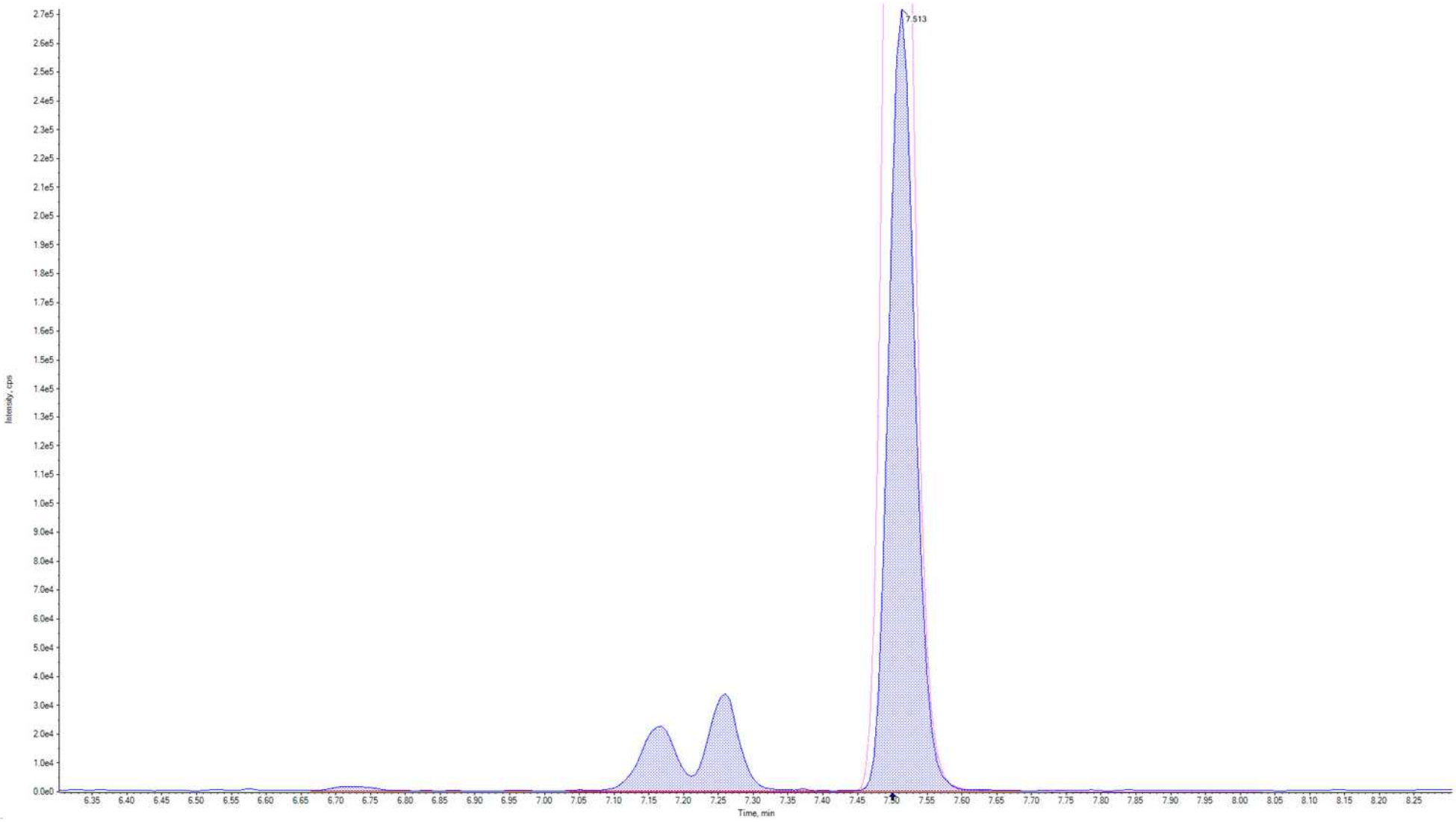
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Generated: 9/17/2024 6:15:27 AM

PFHpA_2
Sample: WG1971858-3 S/N:15265.4 Points Across peak:45



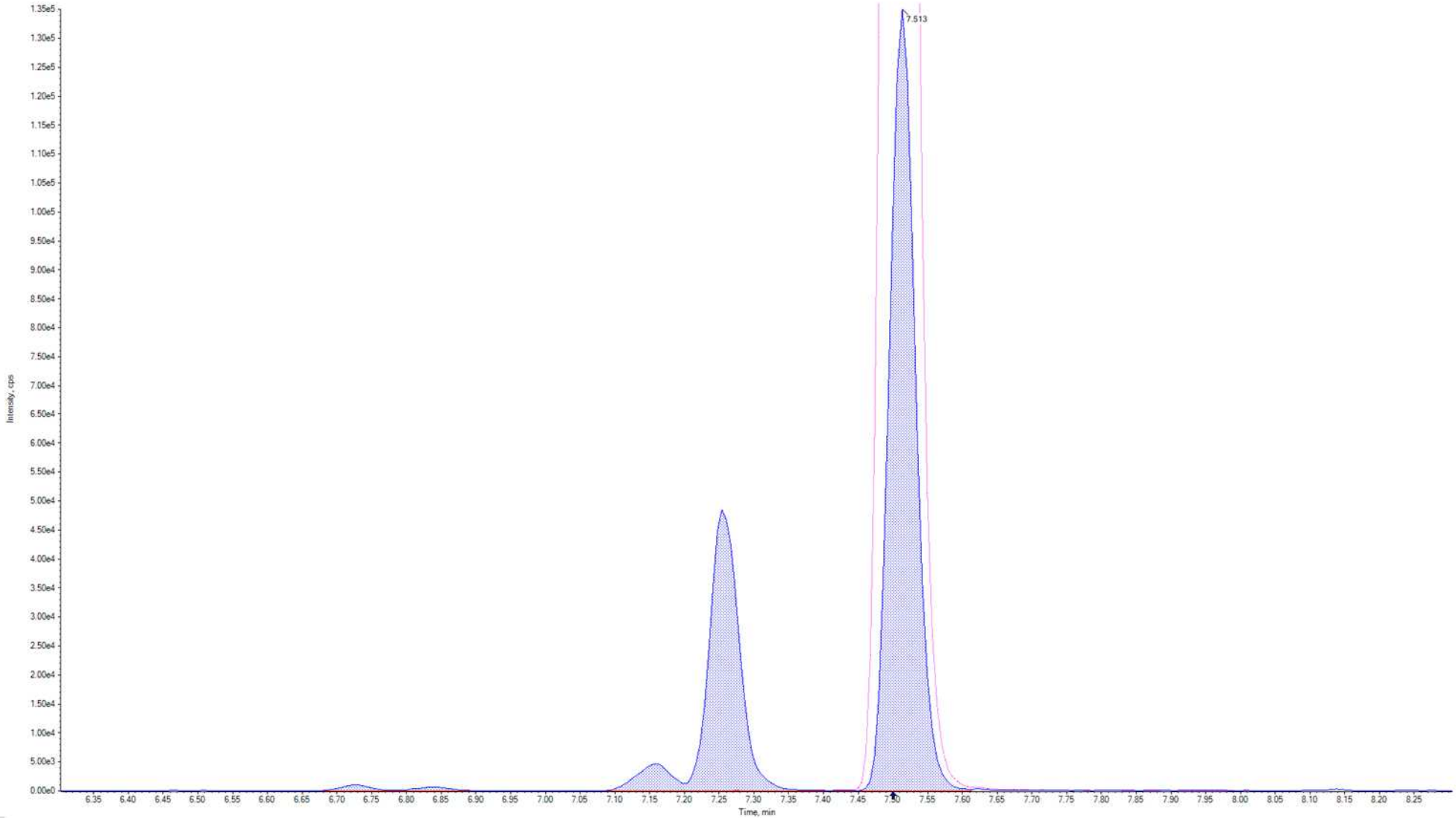
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Generated: 9/17/2024 6:15:27 AM

PFOA
Sample: WG1971858-3 S/N:2006.3 Points Across peak:159



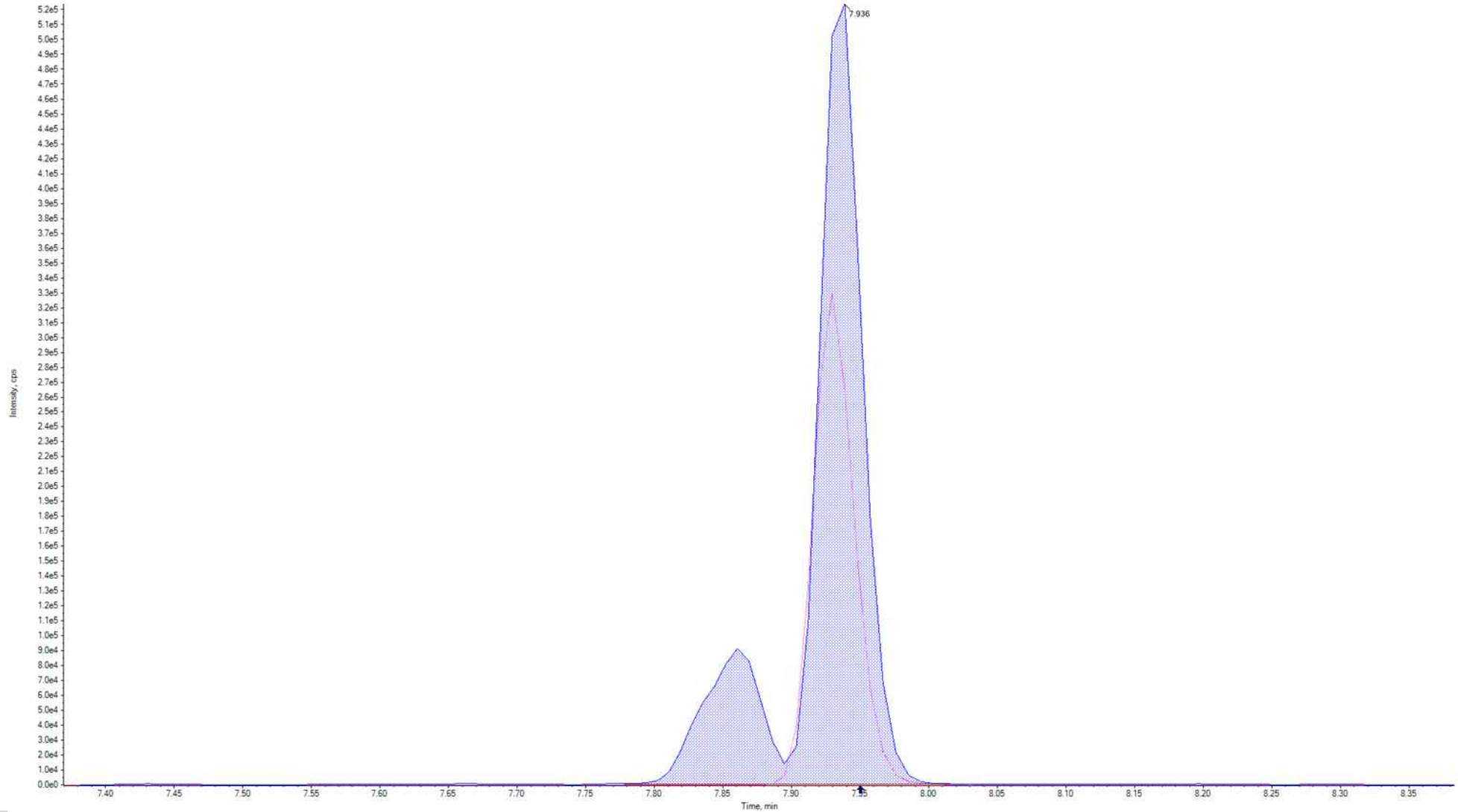
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Last Altered: 9/17/2024 9:07:16 AM
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PFOA_2
Sample: WG1971858-3 S/N:35204.2 Points Across peak:147



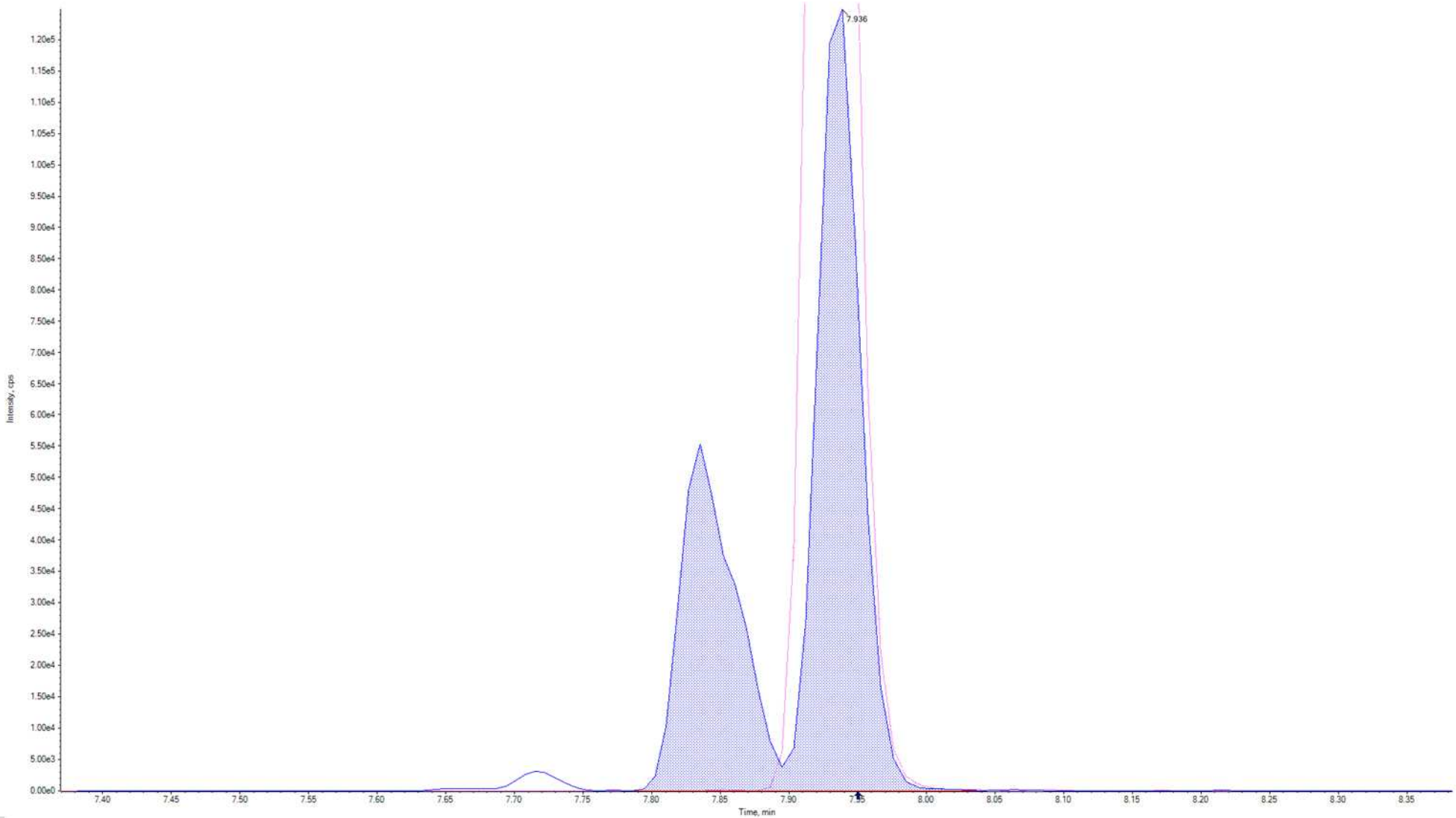
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PFNA
Sample: WG1971858-3 S/N:2042.0 Points Across peak:33



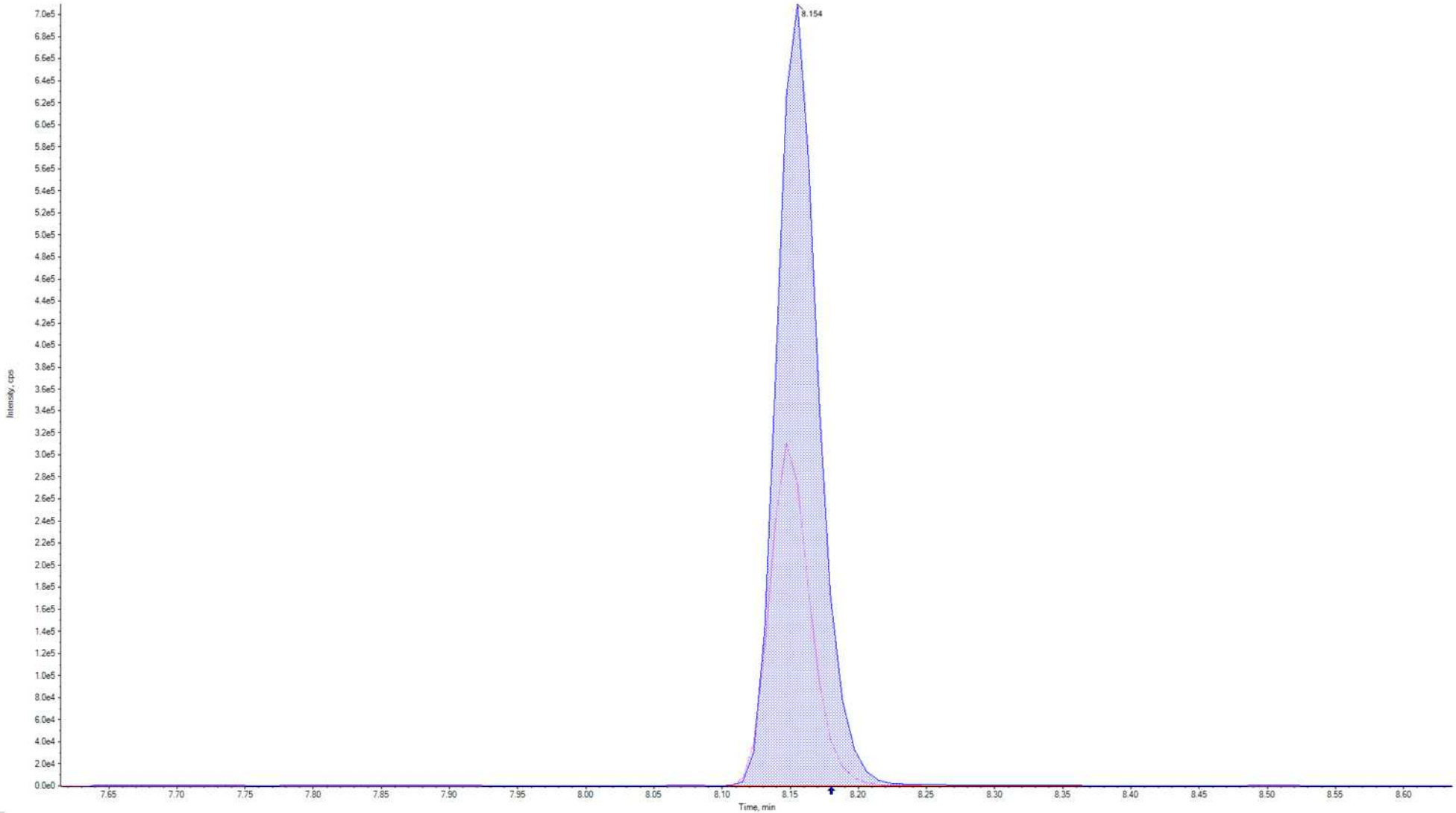
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PFNA_2
Sample: WG1971858-3 S/N:1225.7 Points Across peak:32



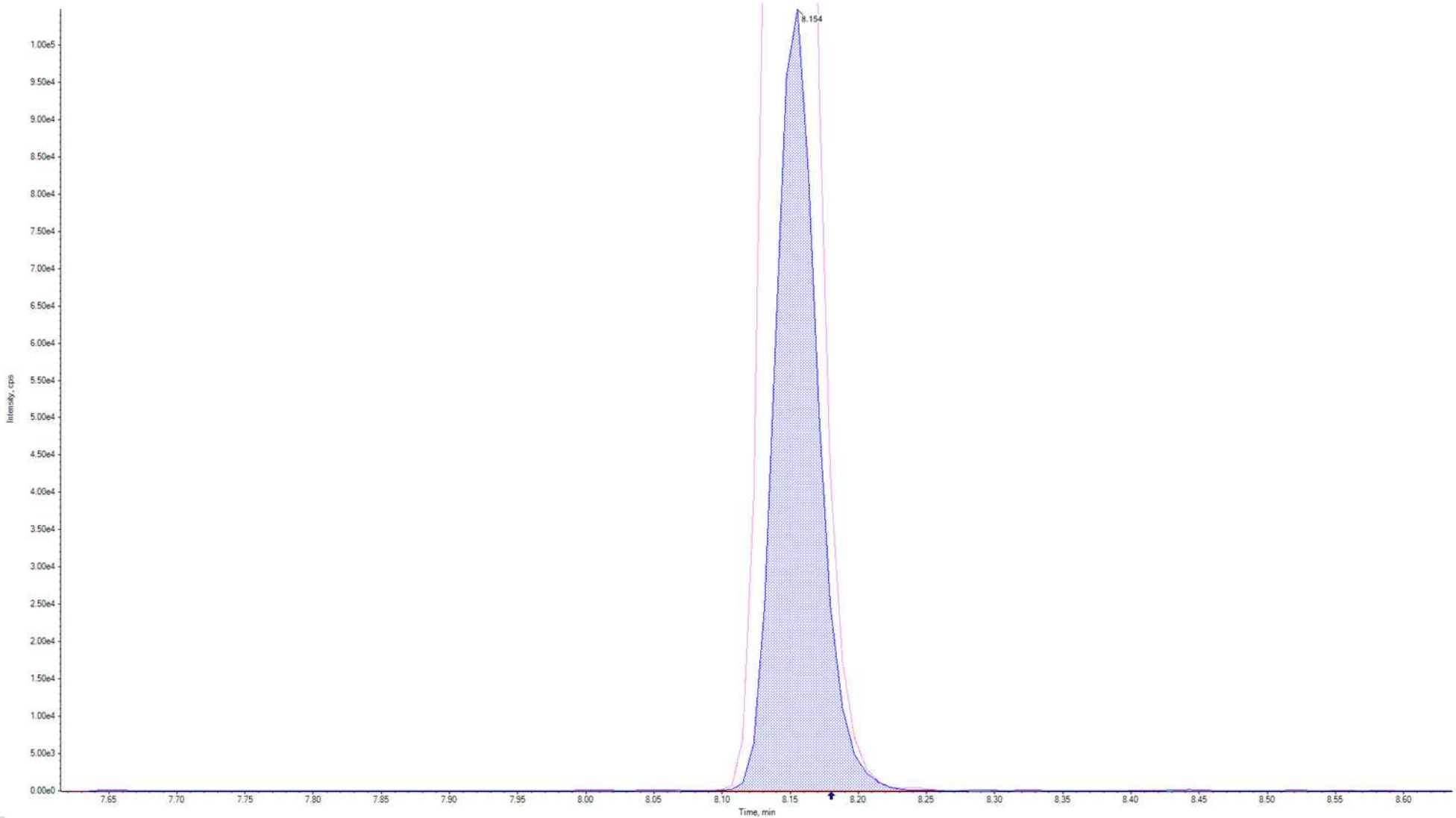
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PFDA
Sample: WG1971858-3 S/N:4905.5 Points Across peak:36



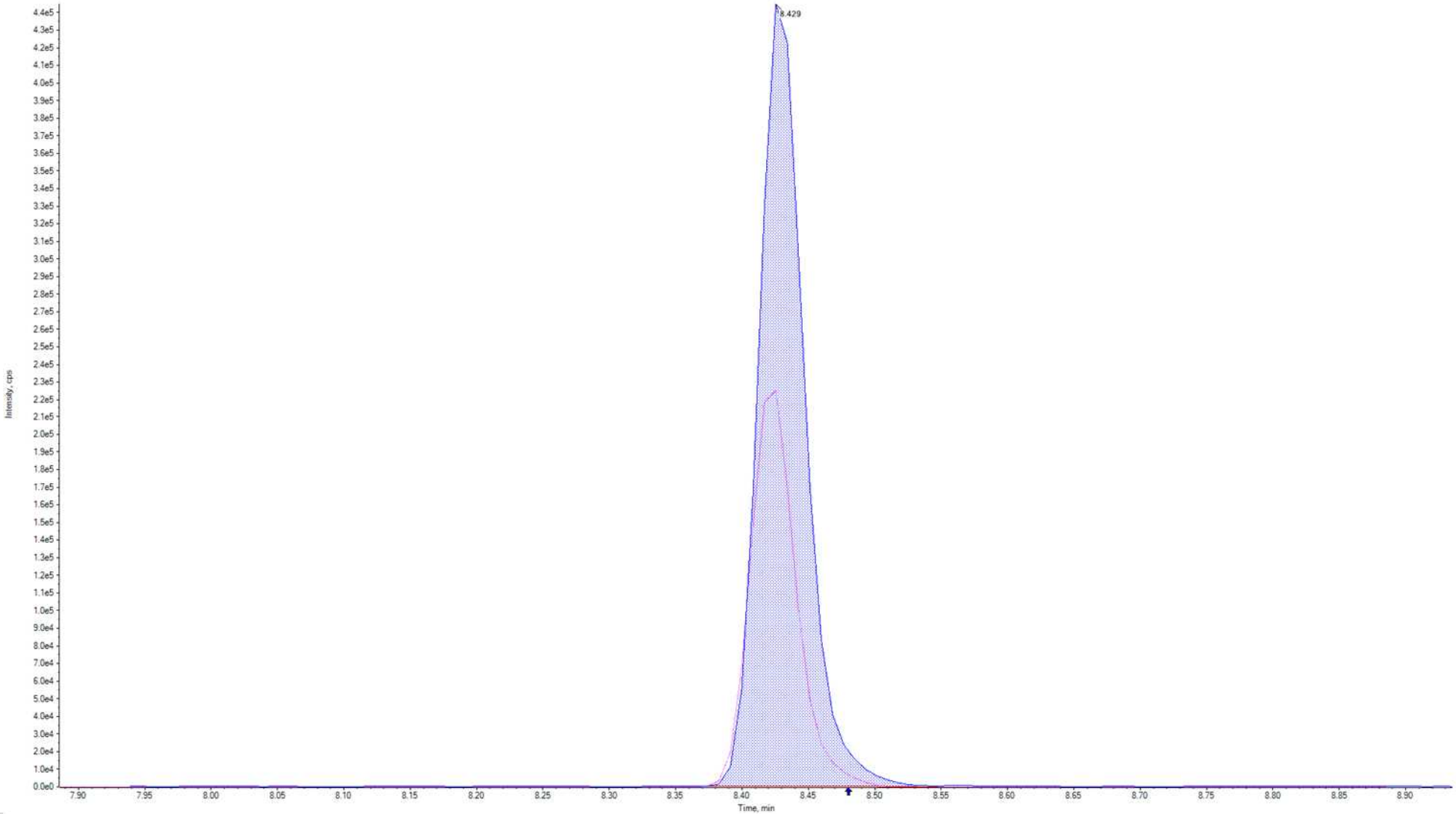
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PFDA_2
Sample: WG1971858-3 S/N:1991.7 Points Across peak:23



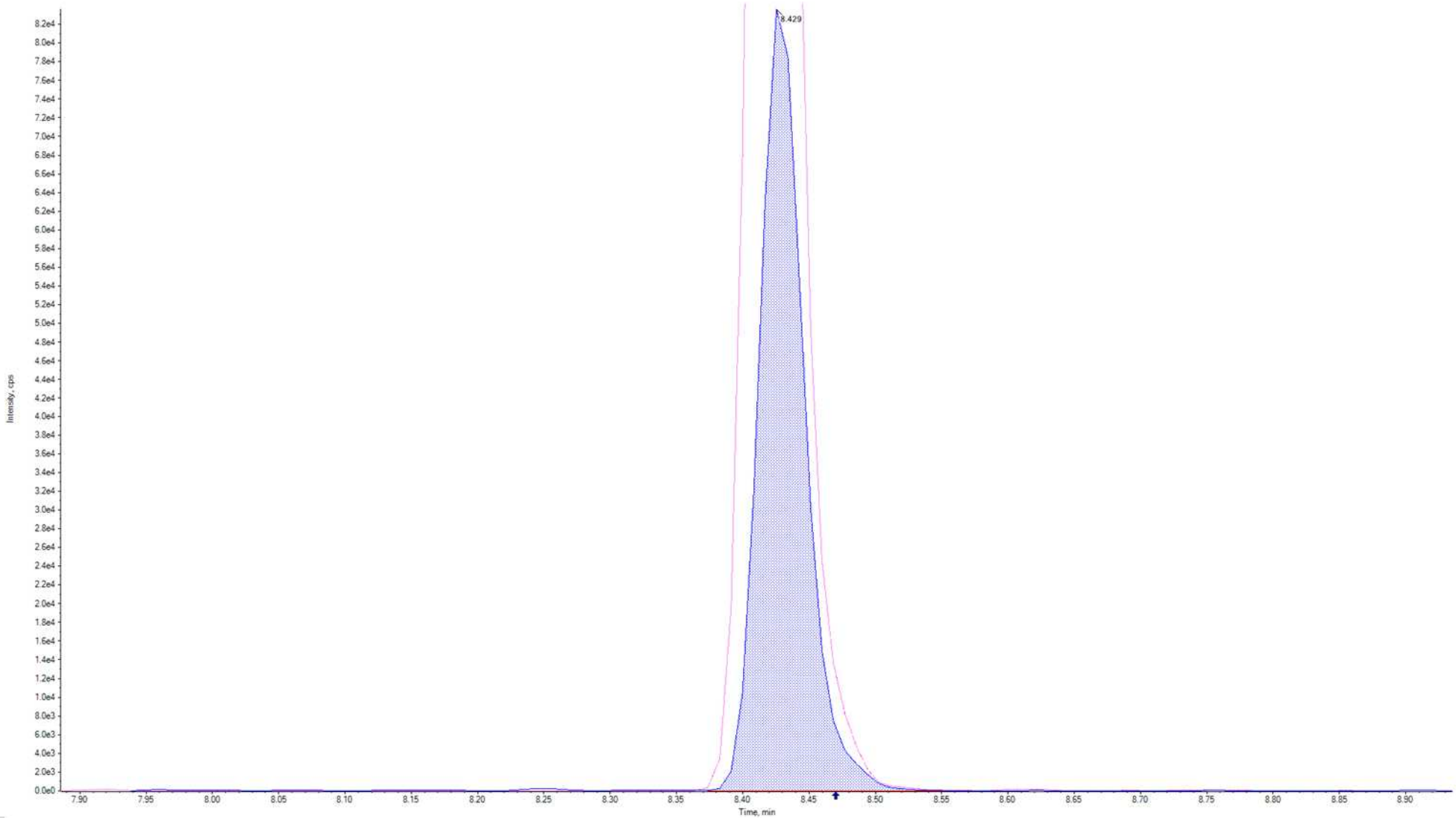
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PFUnA
Sample: WG1971858-3 S/N:2865.1 Points Across peak:23



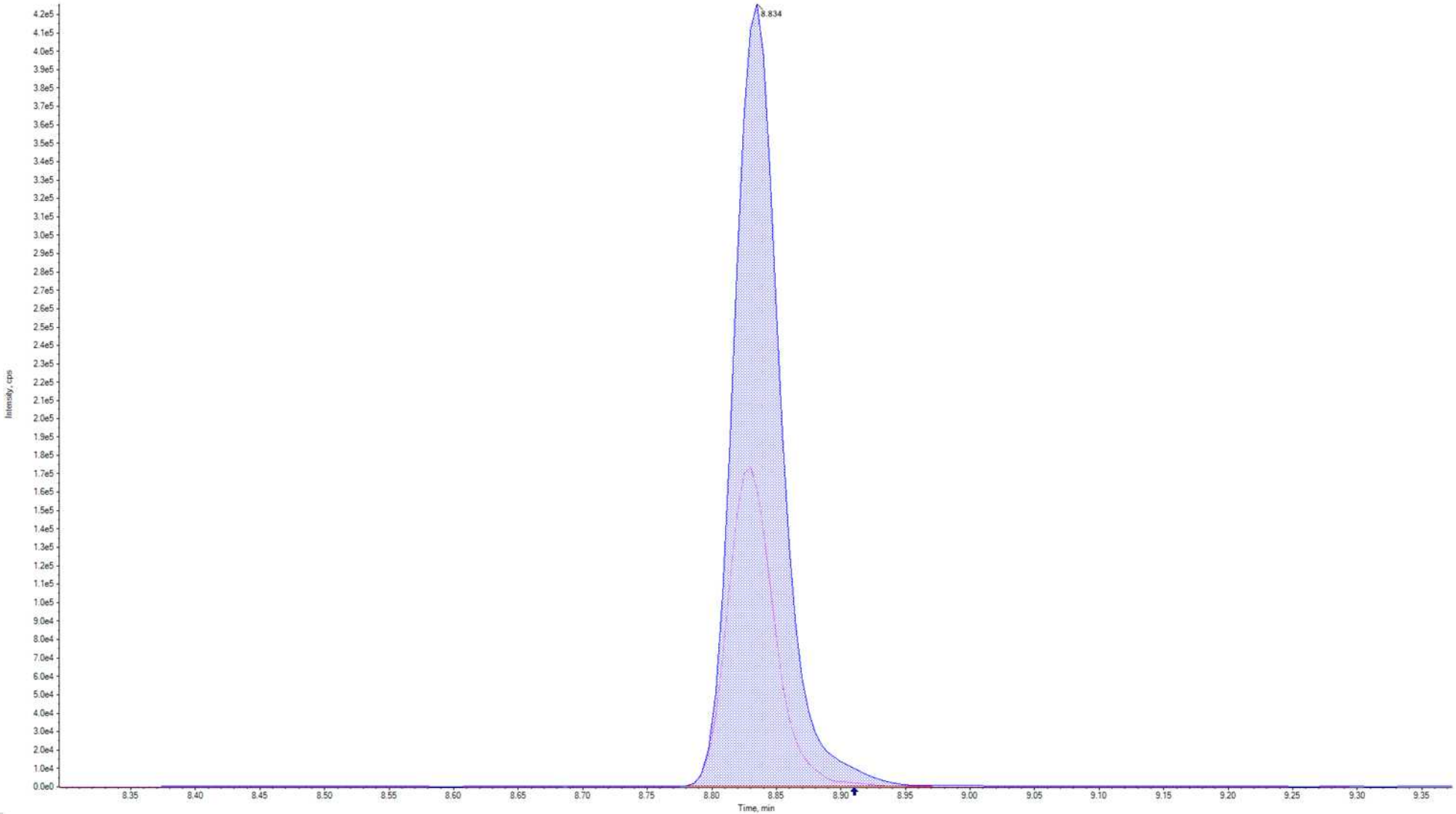
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PFUnA_2
Sample: WG1971858-3 S/N:1046201.3 Points Across peak:24



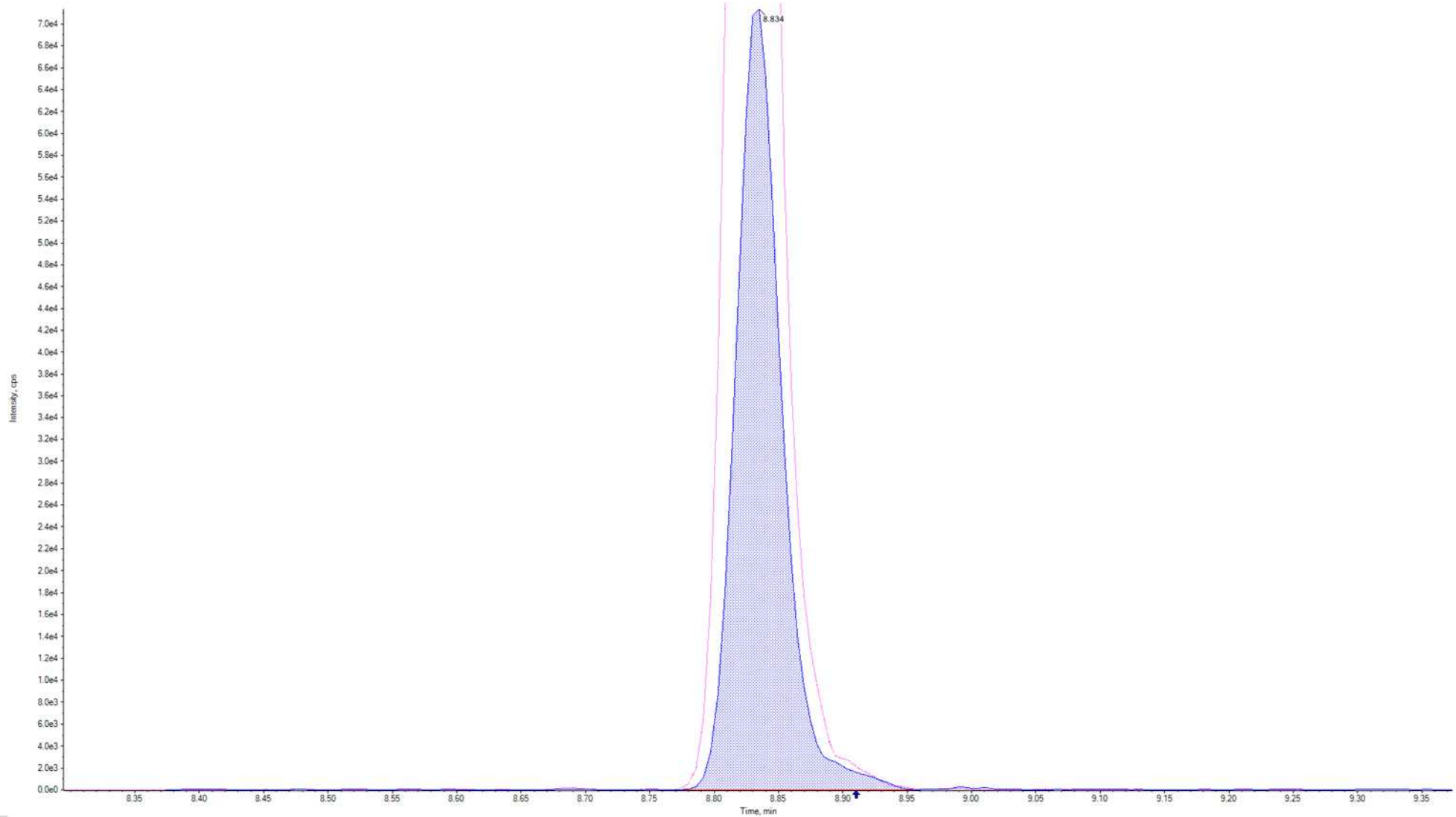
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PFDoA
Sample: WG1971858-3 S/N:3568.6 Points Across peak:42



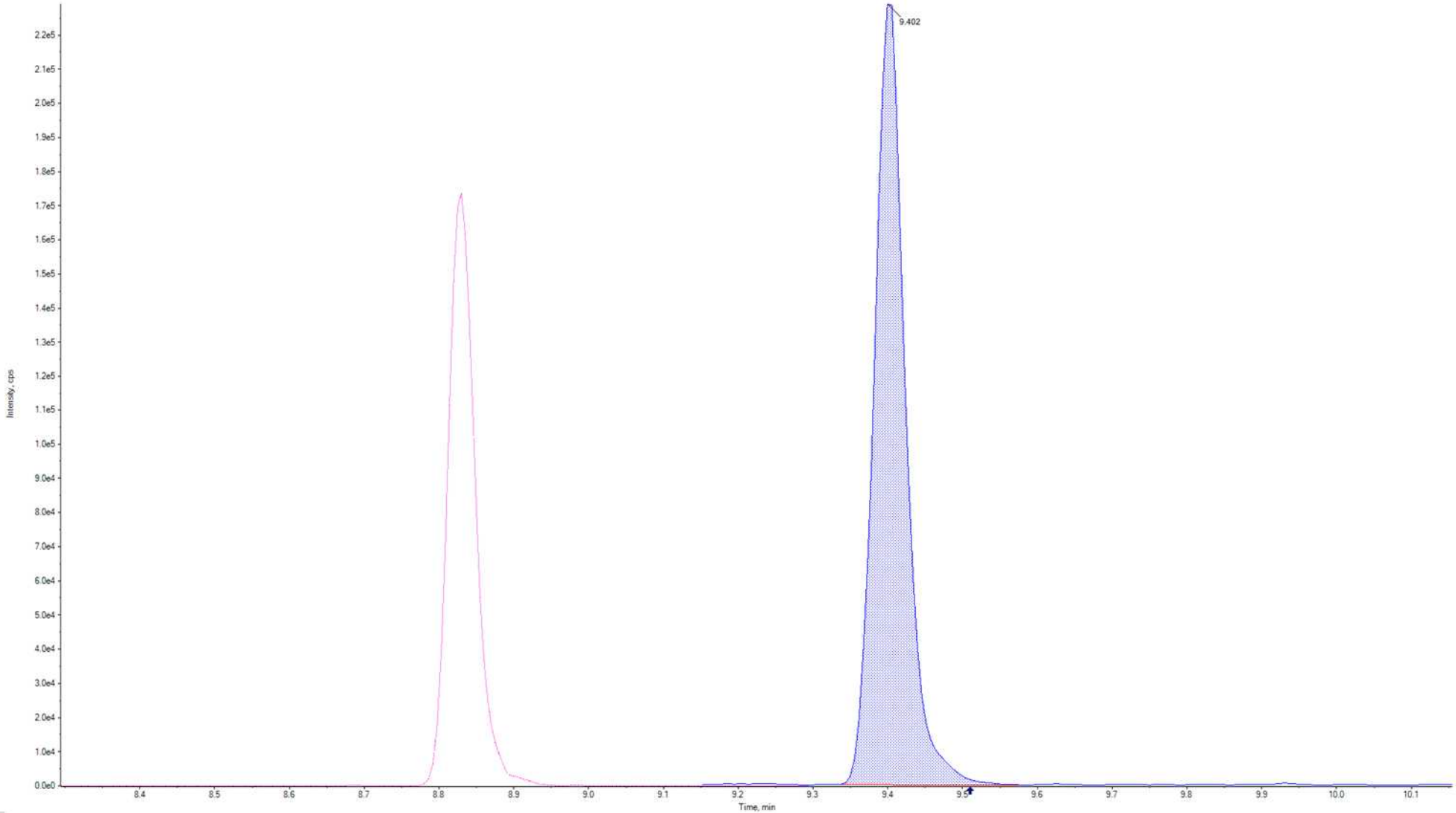
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PFDoA_2
Sample: WG1971858-3 S/N:30469.6 Points Across peak:36



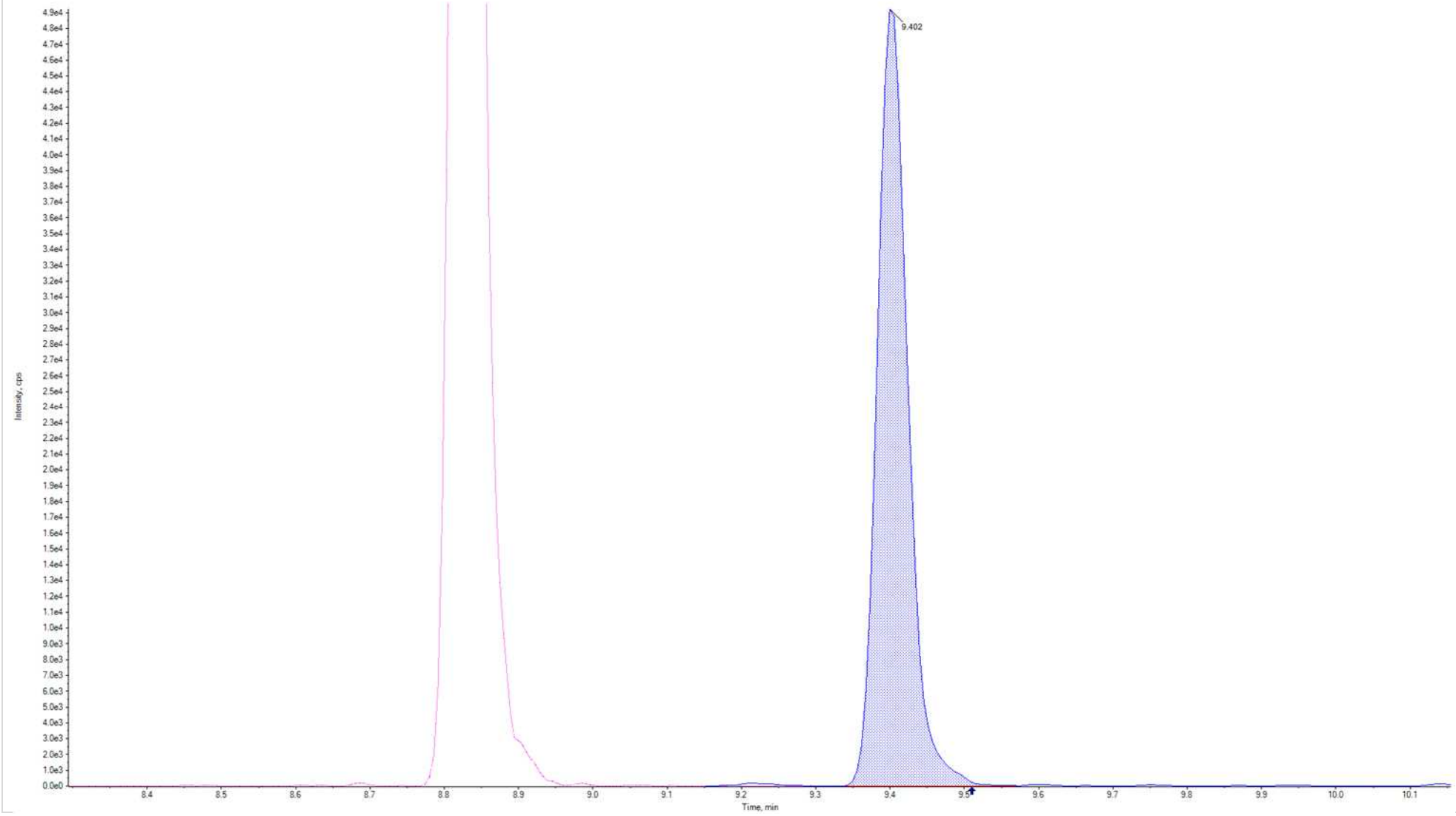
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PFTrDA
Sample: WG1971858-3 S/N:1935.0 Points Across peak:47



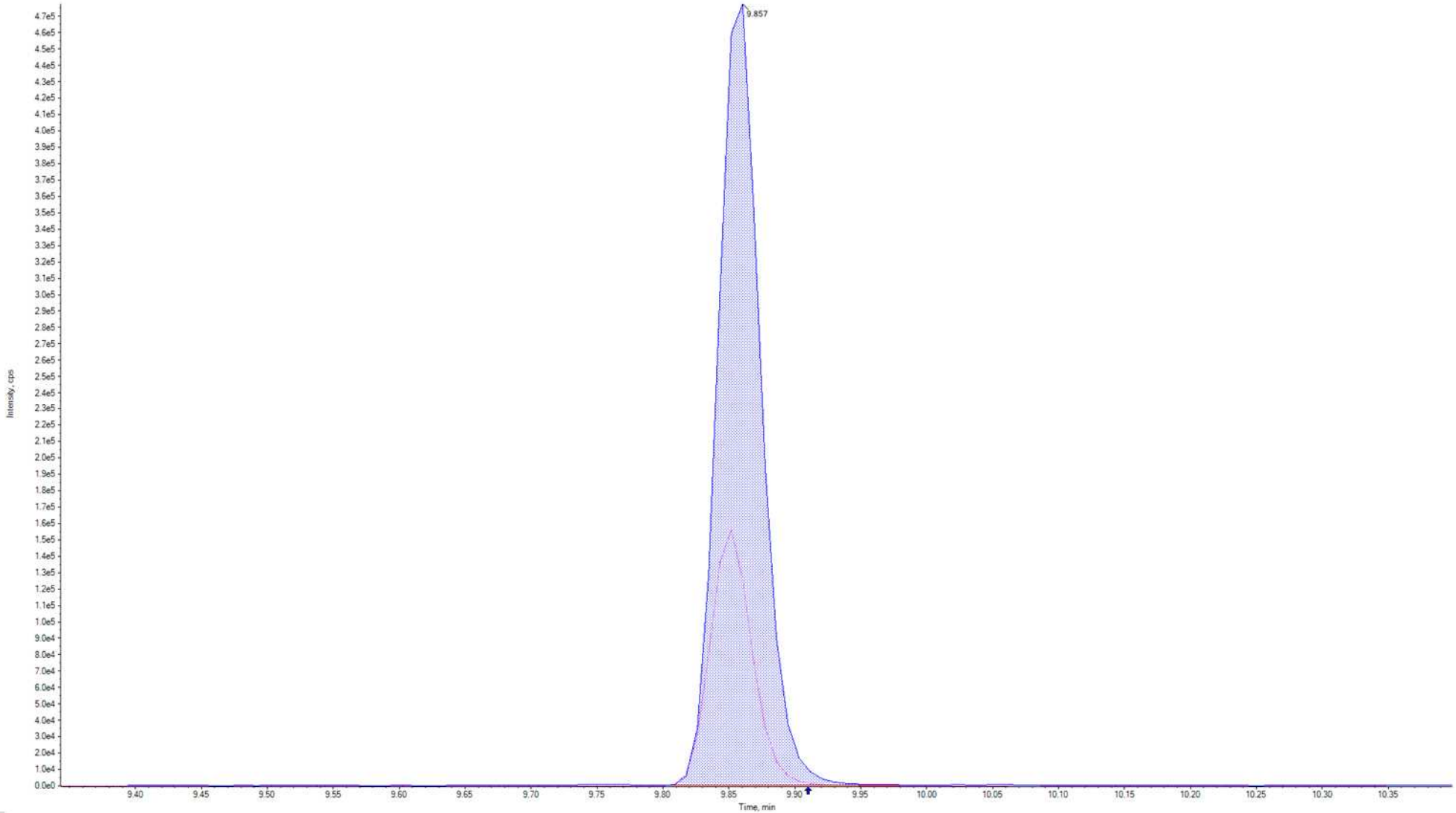
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PFTrDA_2
Sample: WG1971858-3 S/N:774196.8 Points Across peak:44



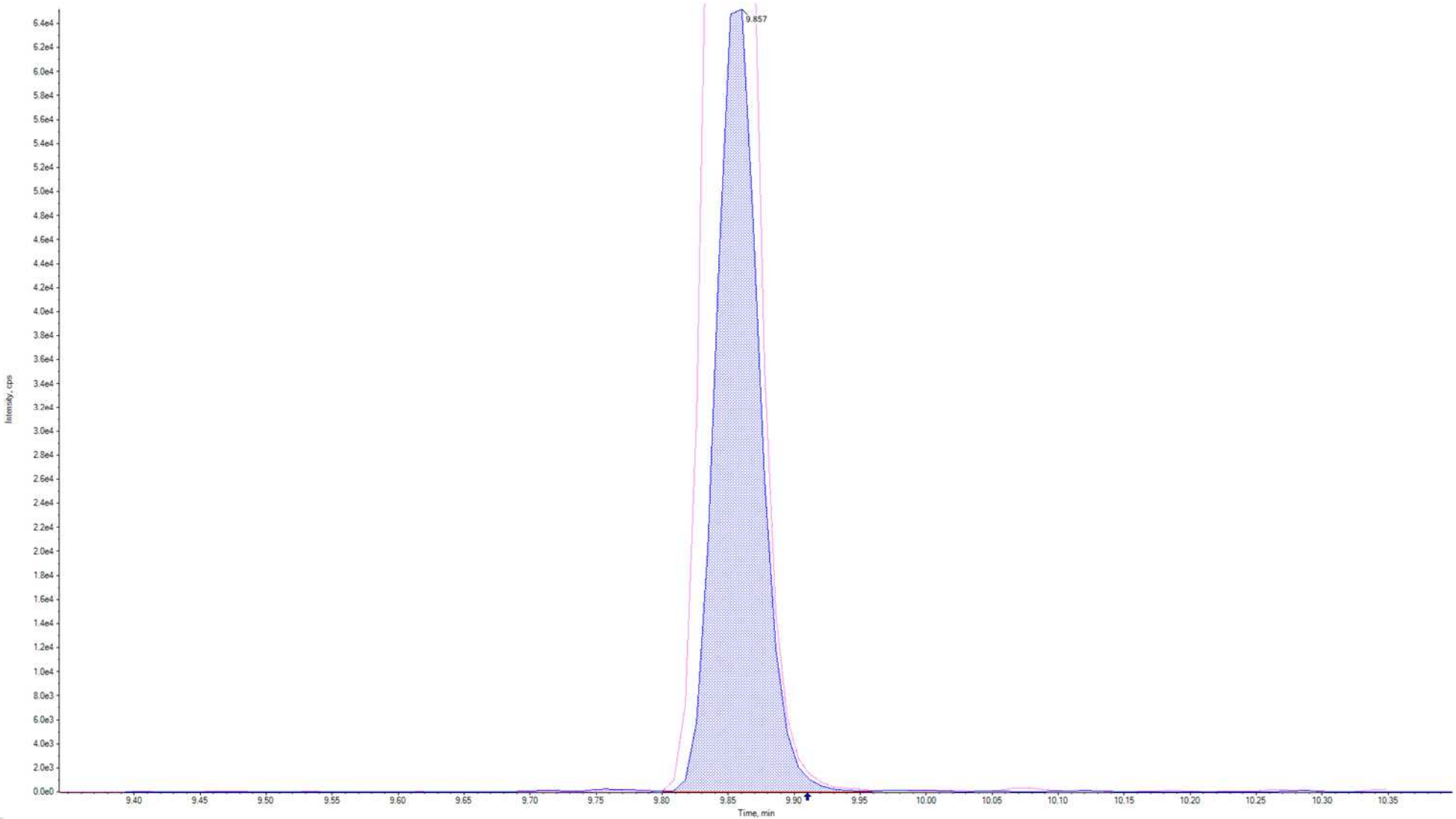
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PFTeDA
Sample: WG1971858-3 S/N:1959.8 Points Across peak:23



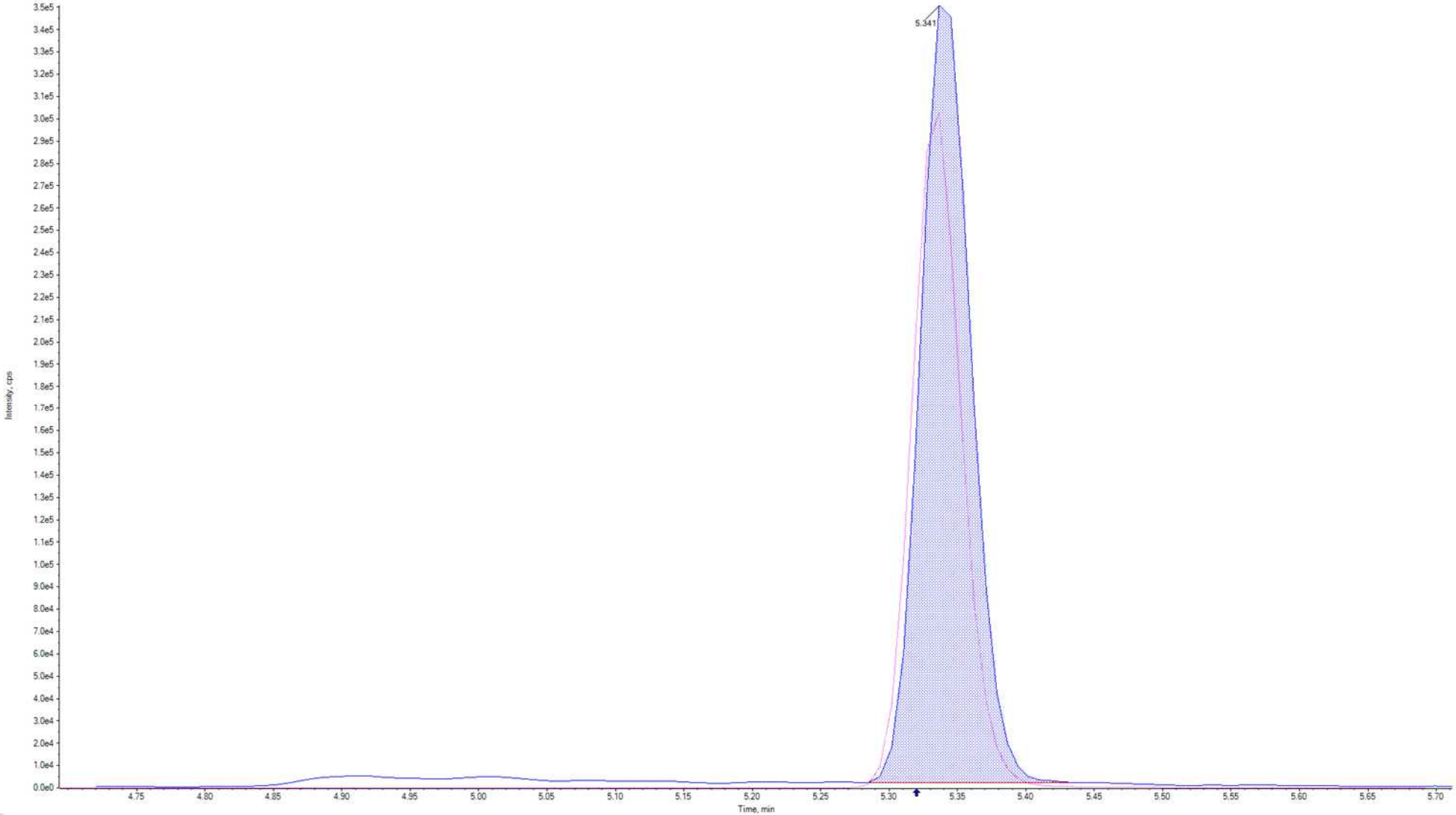
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PFTeDA_2
Sample: WG1971858-3 S/N:15374983.7 Points Across peak:19



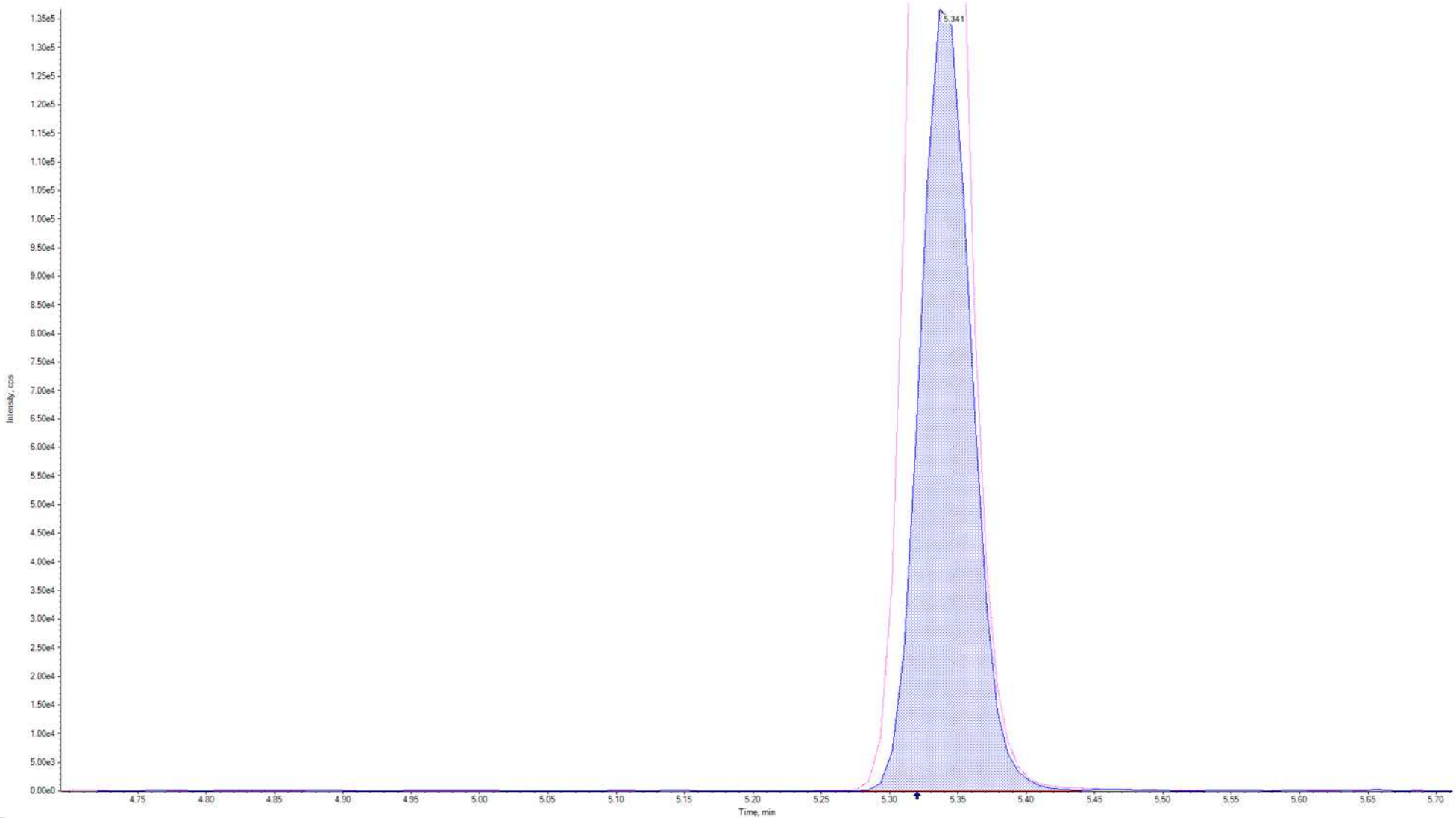
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PFBS
Sample: WG1971858-3 S/N:105.1 Points Across peak:21



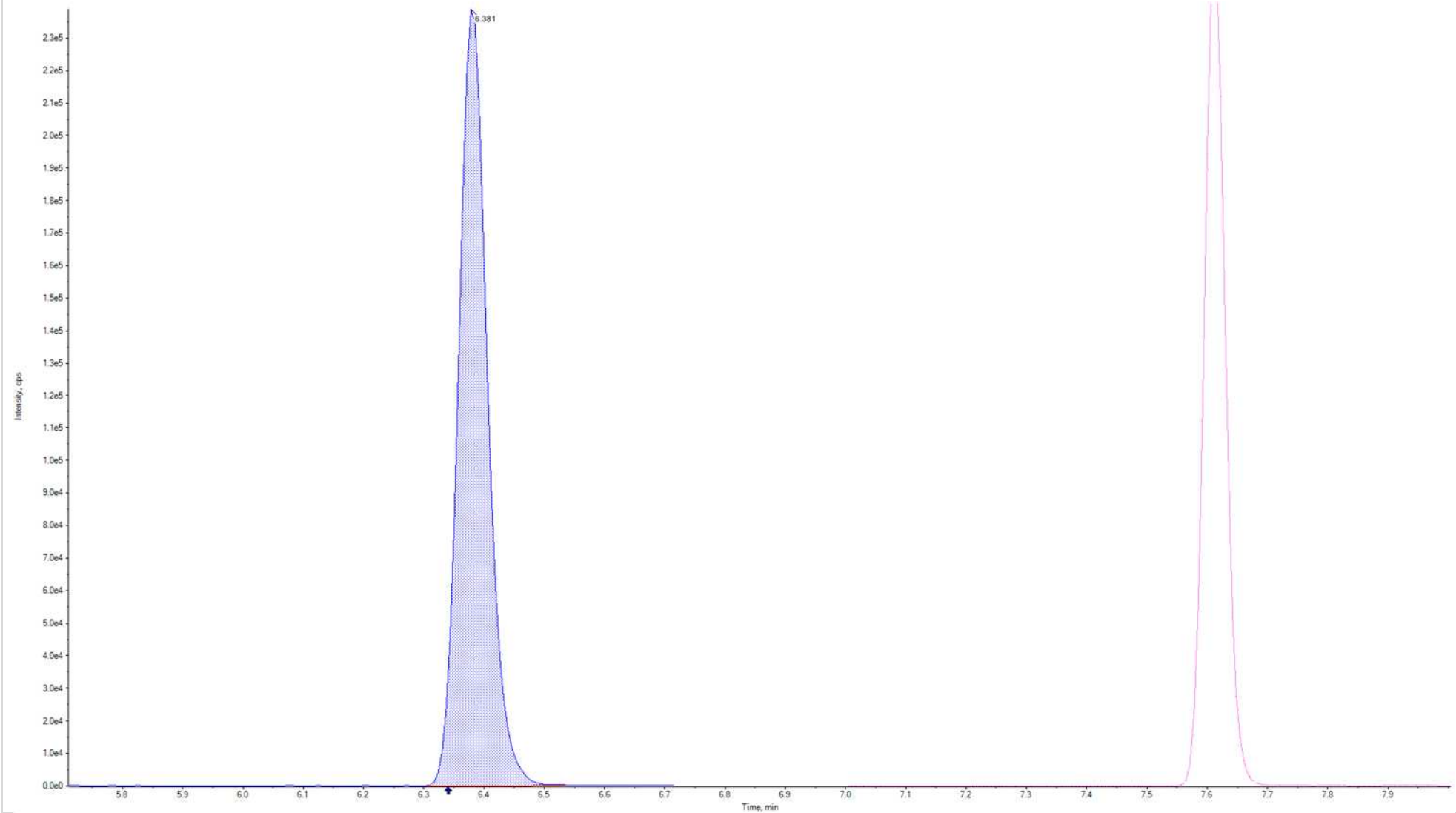
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PFBS_2
Sample: WG1971858-3 S/N:4193.3 Points Across peak:23



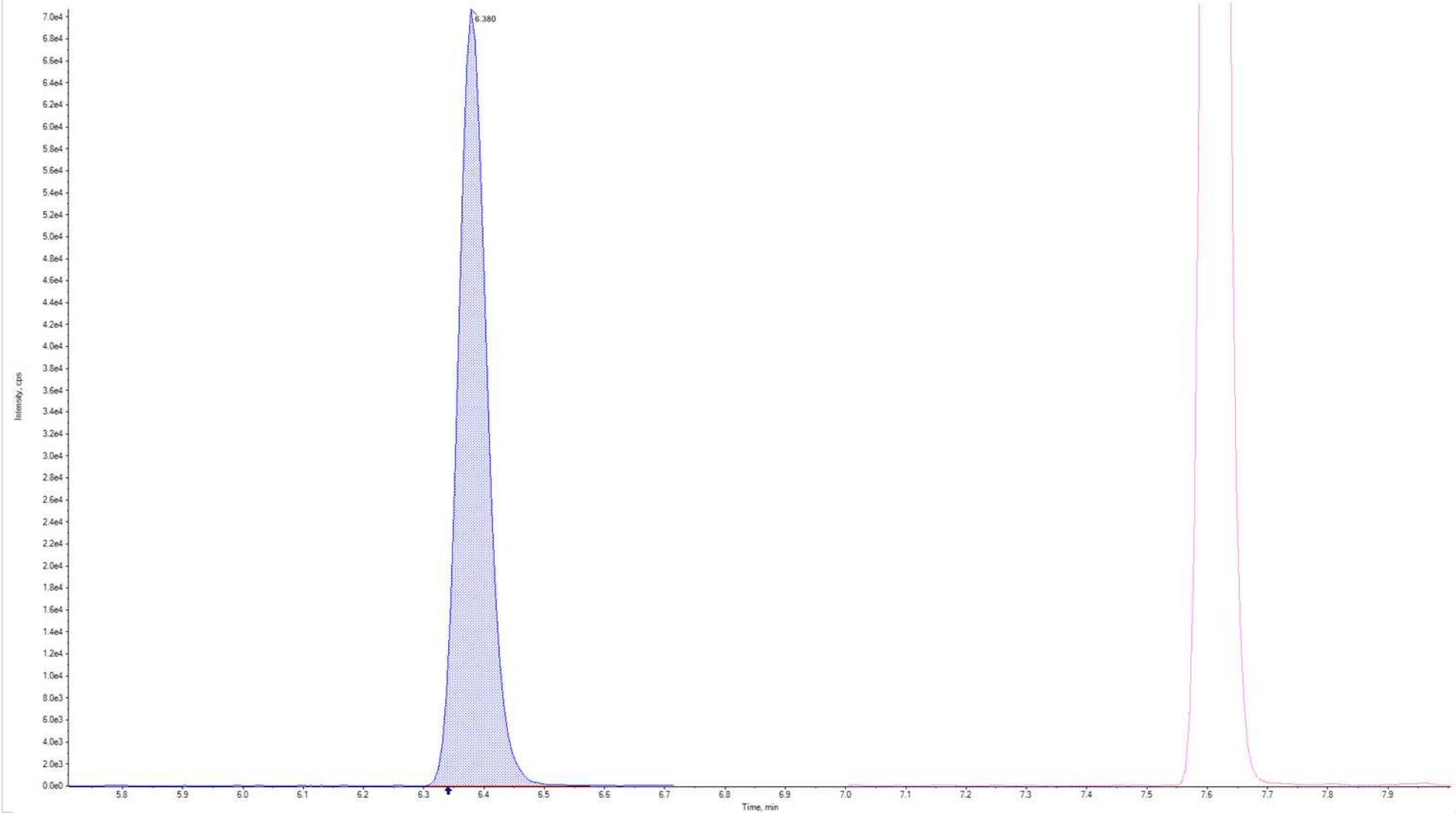
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Last Altered: 9/17/2024 9:07:16 AM
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PFPeS
Sample: WG1971858-3 S/N:4316.3 Points Across peak:45



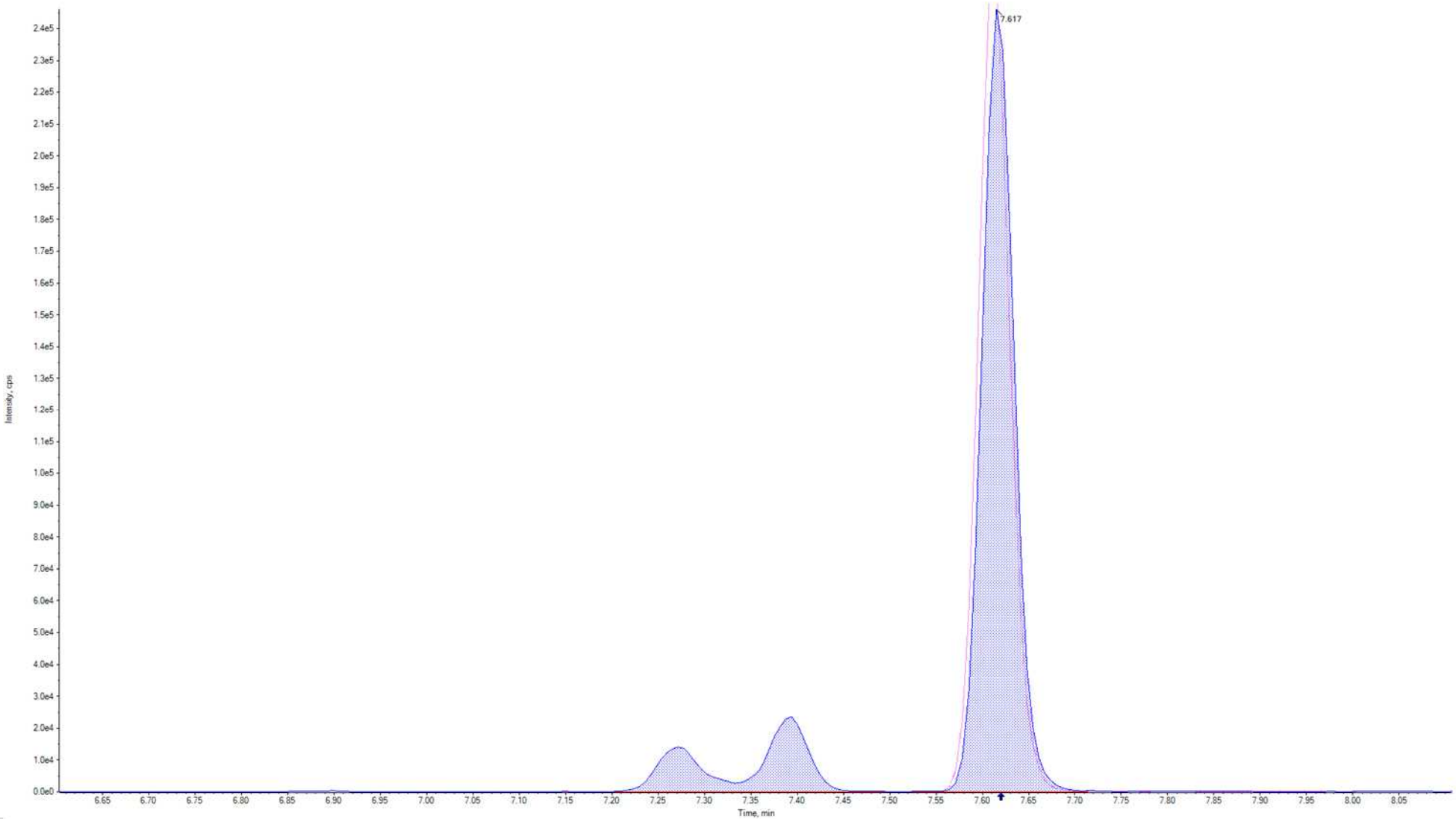
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PFPeS_2
Sample: WG1971858-3 S/N:9387.2 Points Across peak:42



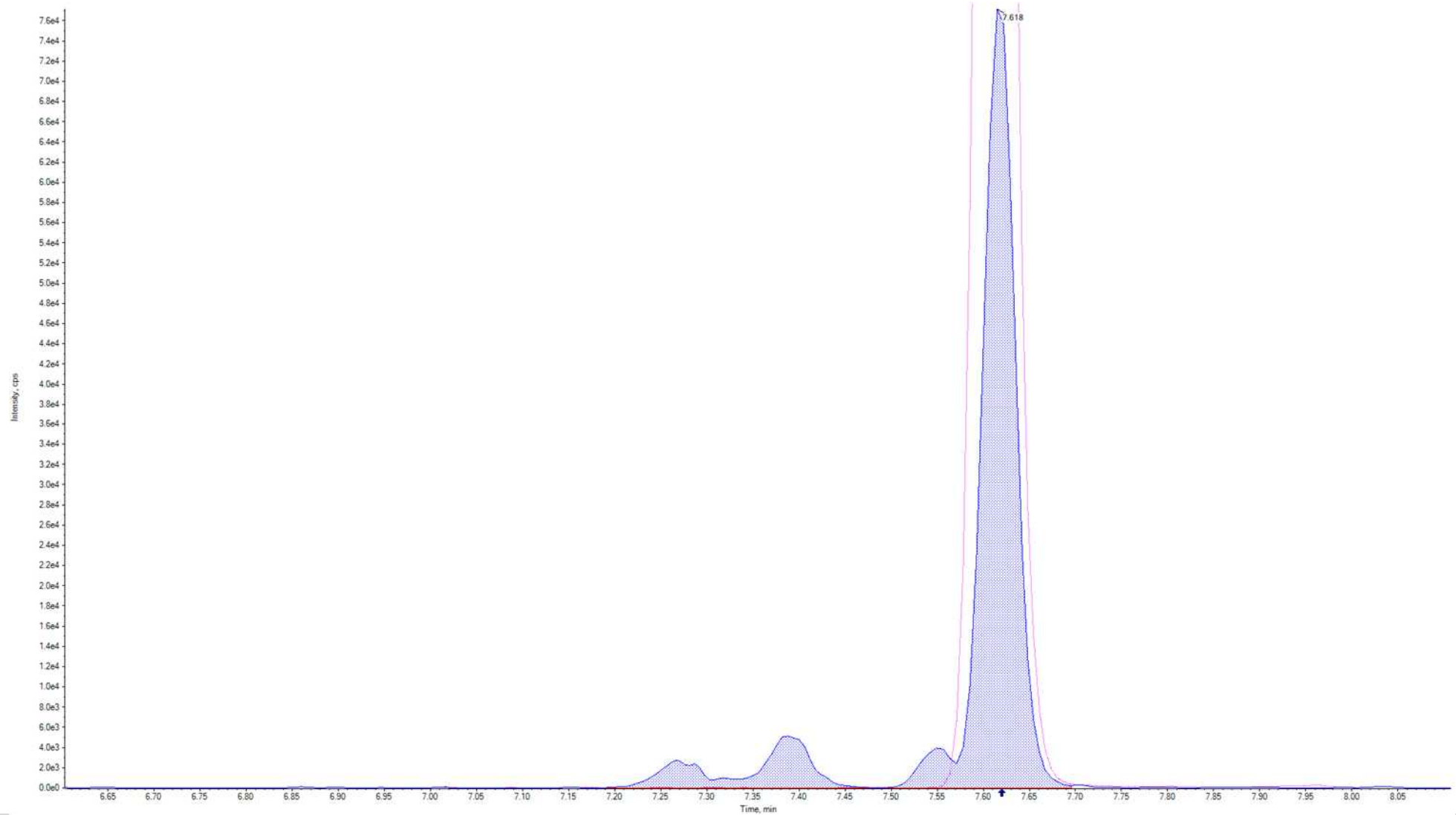
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHxS
Sample: WG1971858-3 S/N:10467.3 Points Across peak:85



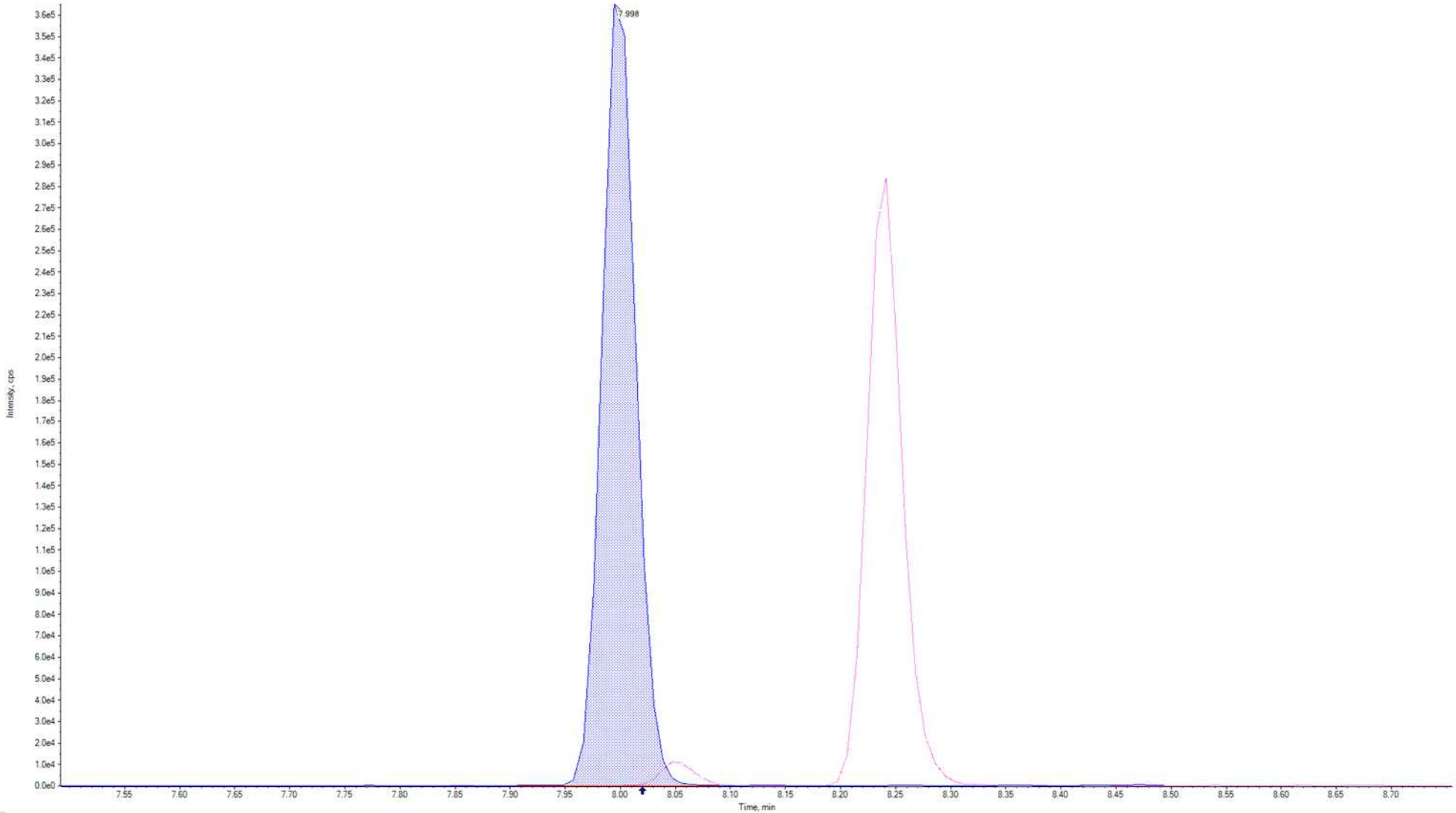
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
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PFHxS_2
Sample: WG1971858-3 S/N:1529211.5 Points Across peak:85



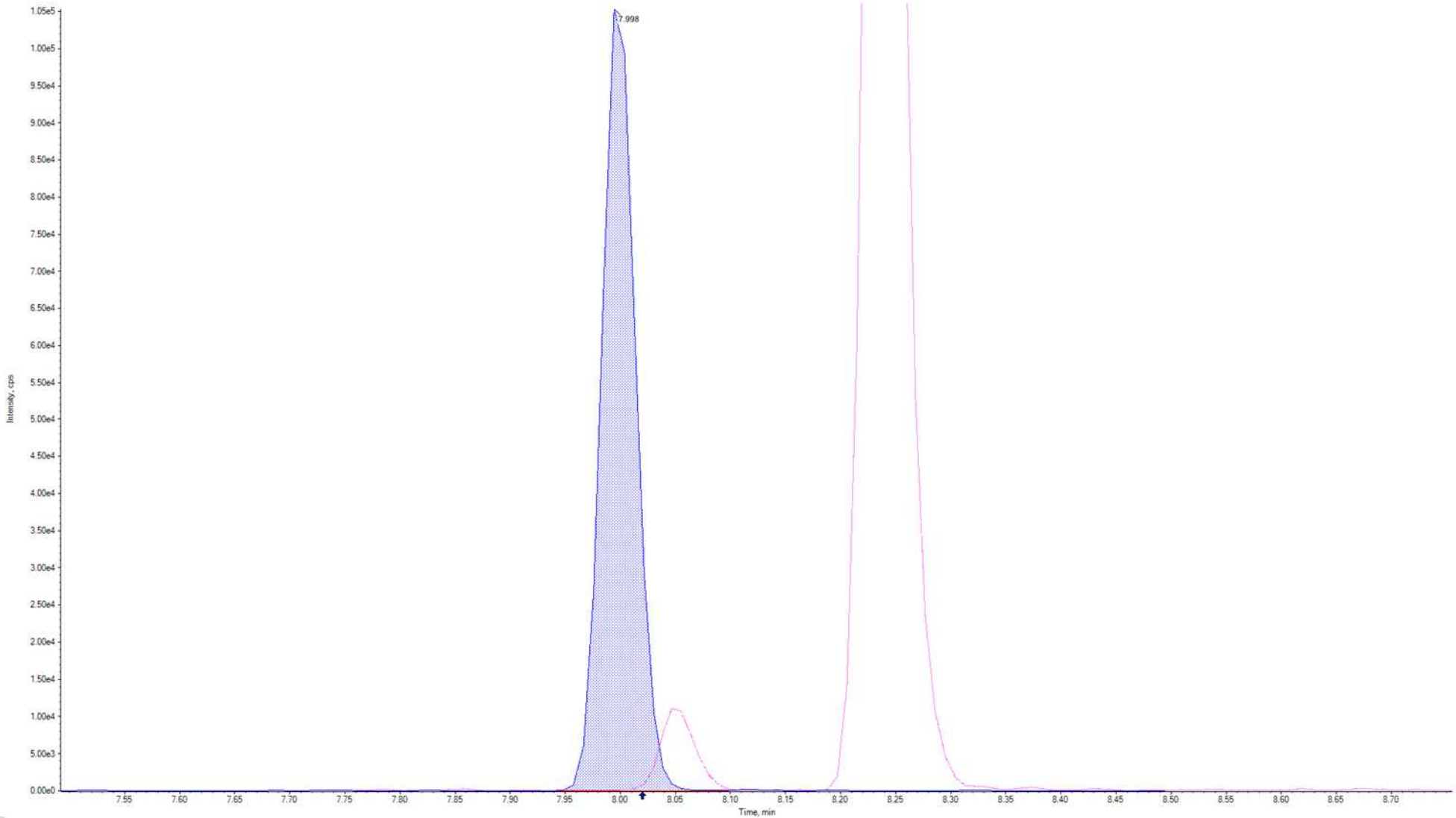
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS
Sample: WG1971858-3 S/N:158783.9 Points Across peak:27



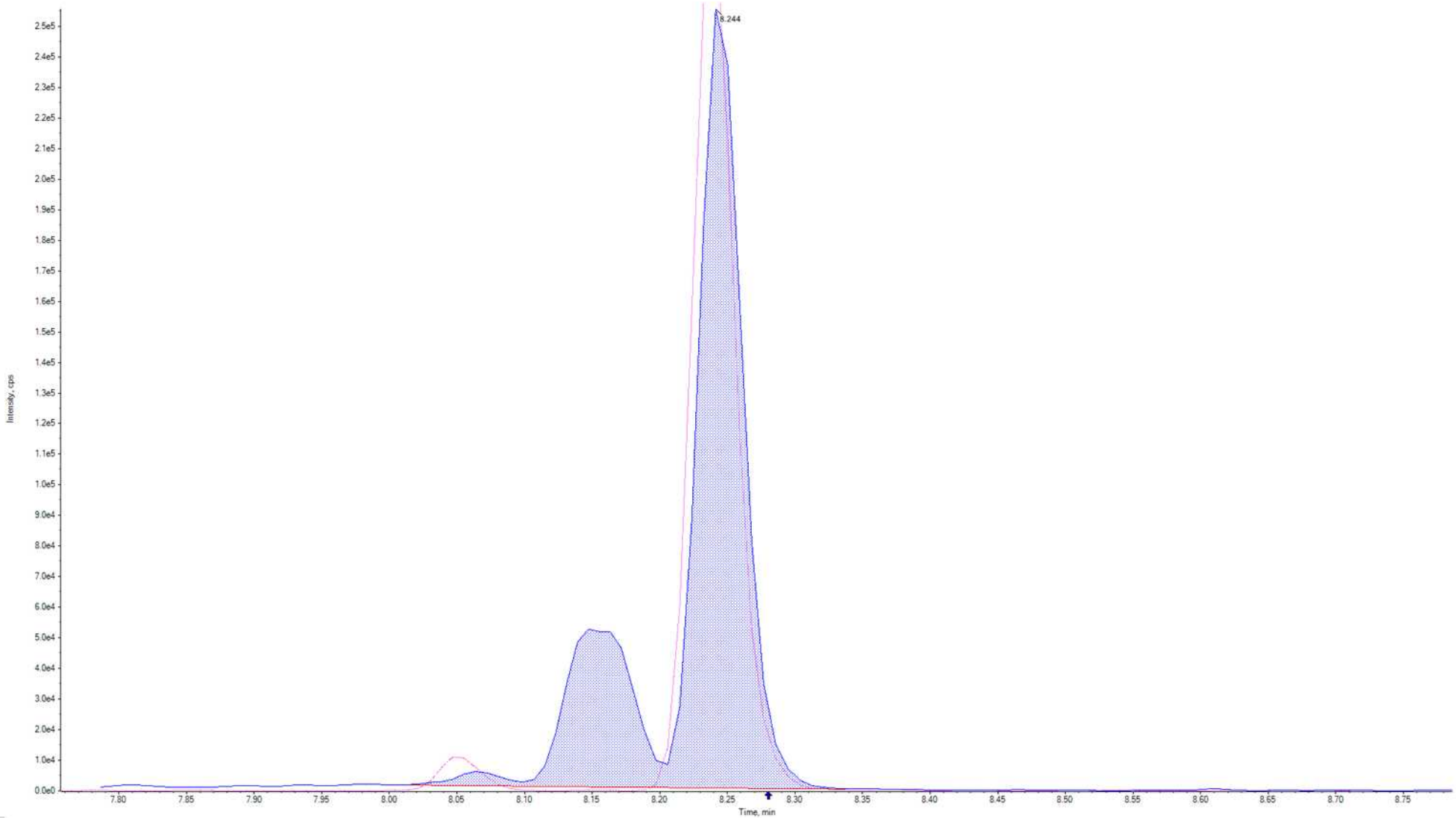
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS_2
Sample: WG1971858-3 S/N:1539.8 Points Across peak:22



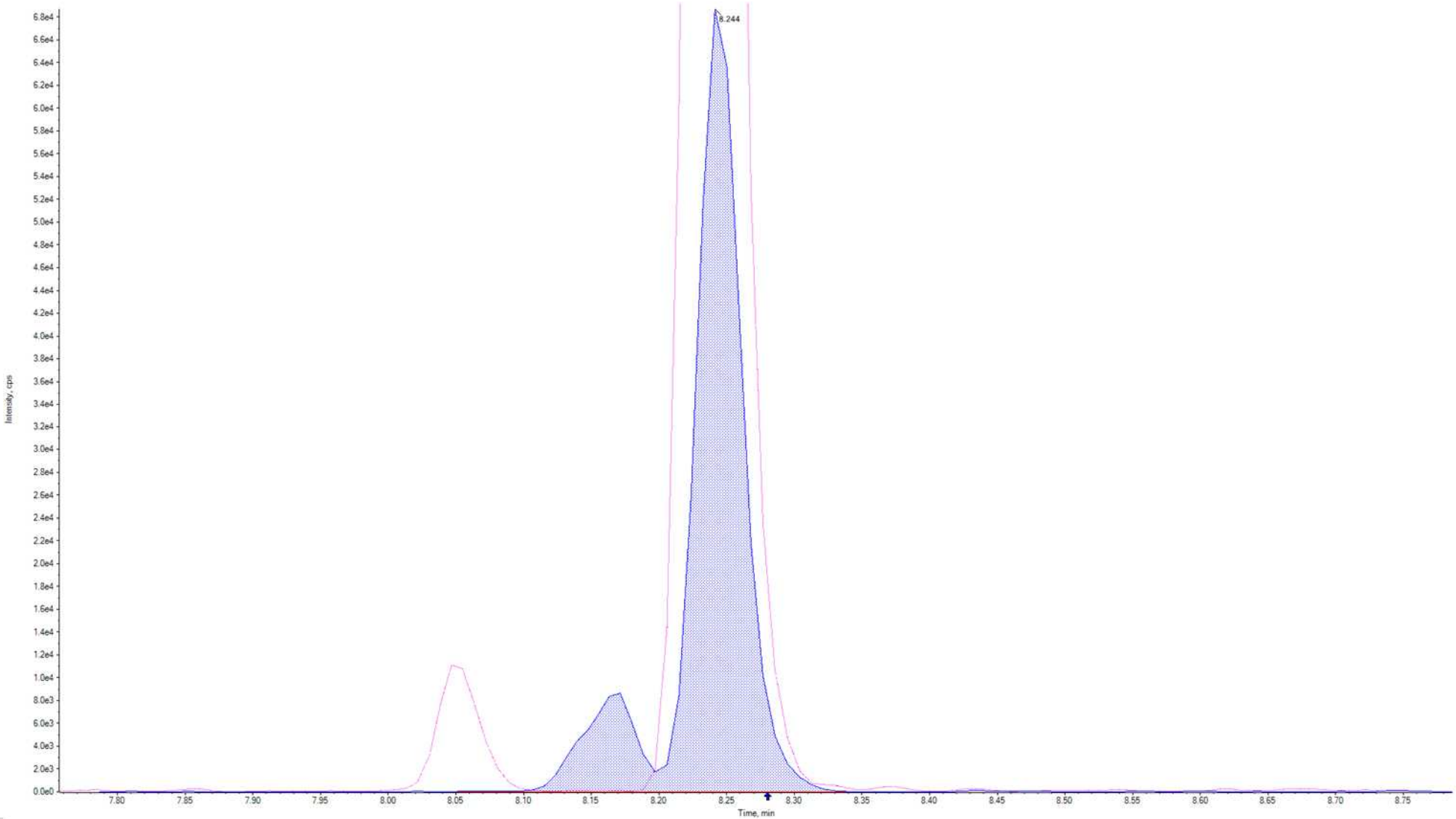
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOS
Sample: WG1971858-3 S/N:2442.3 Points Across peak:39



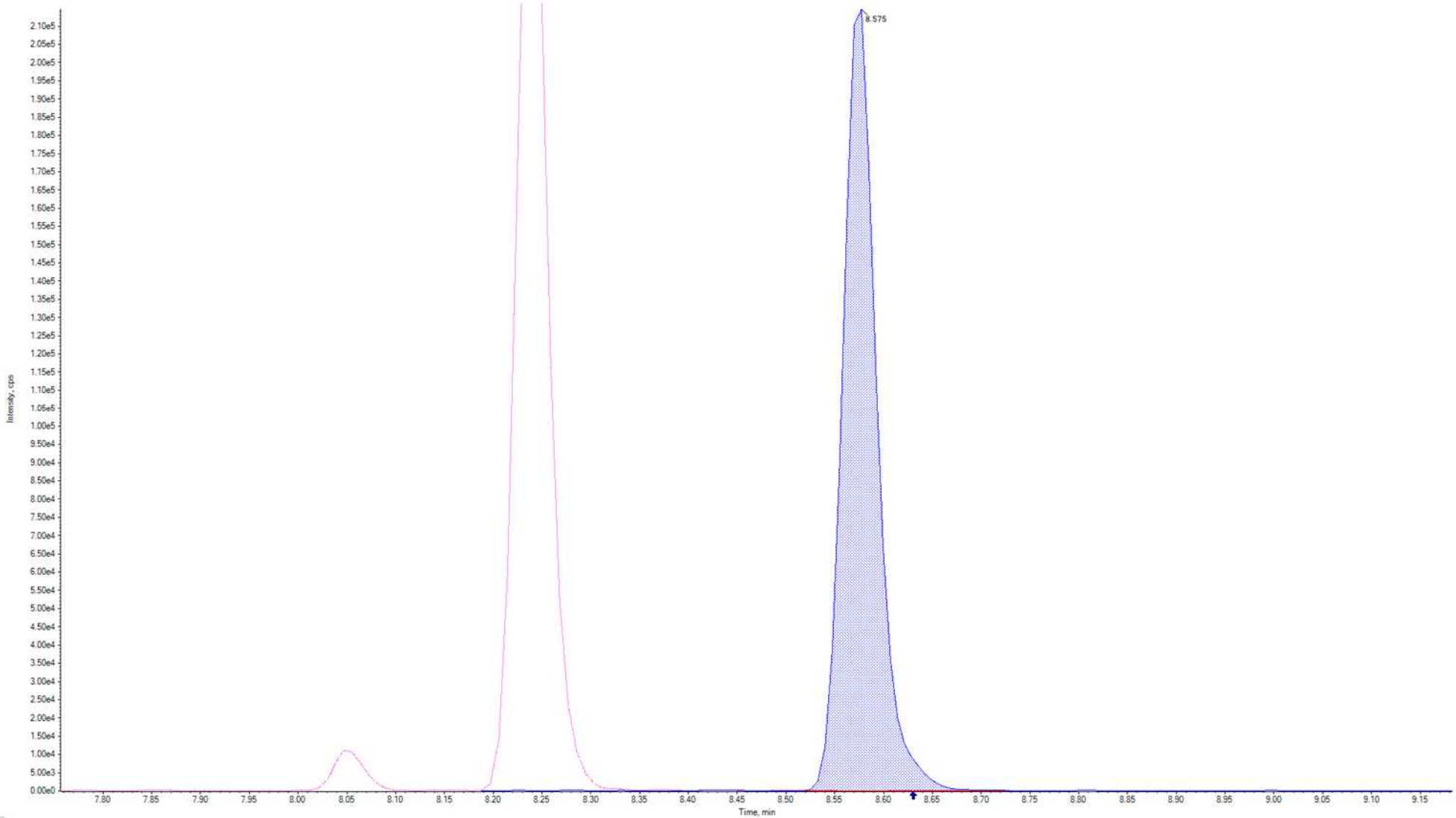
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOS_2
Sample: WG1971858-3 S/N:1331.3 Points Across peak:39



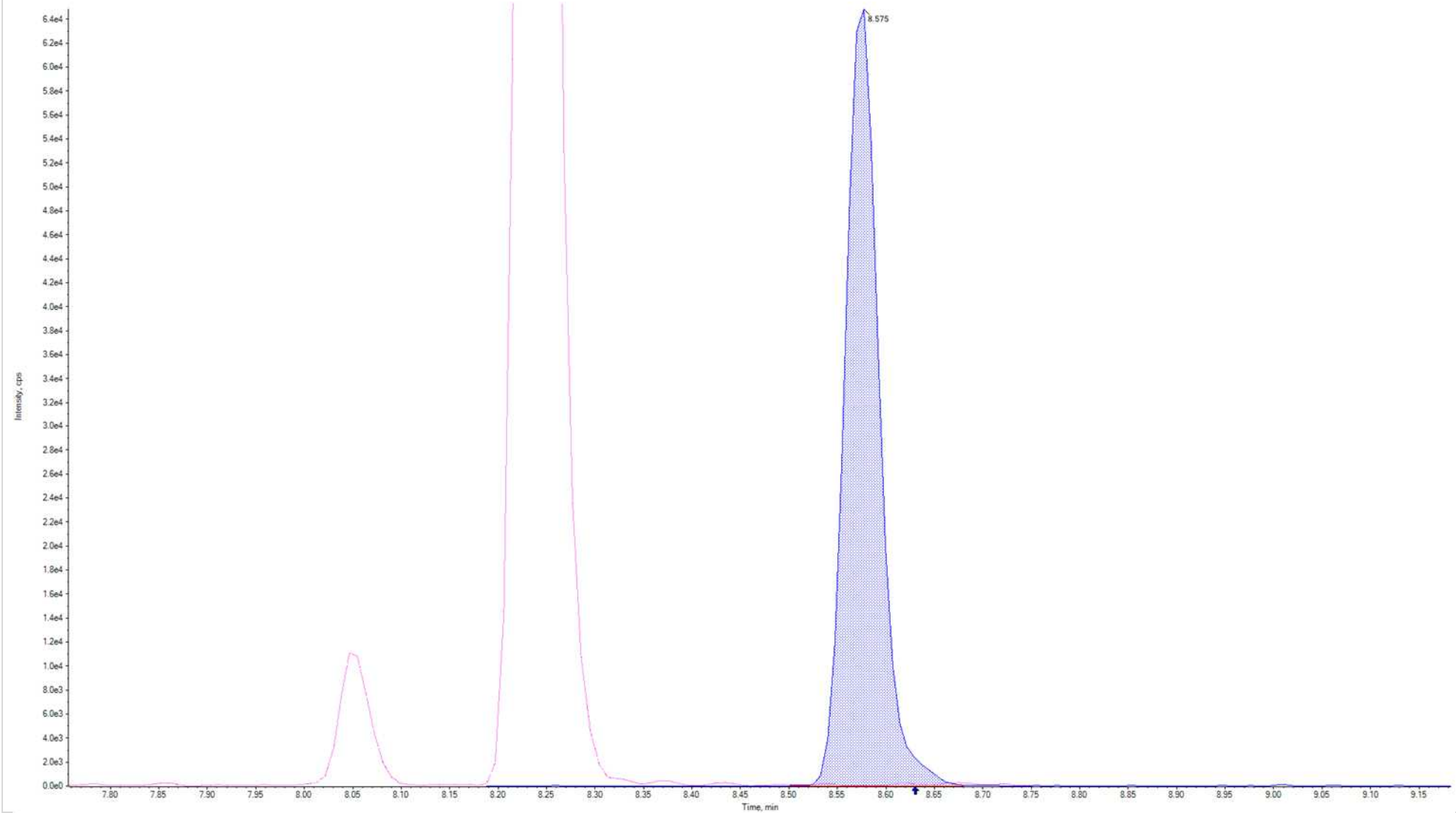
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFNS
Sample: WG1971858-3 S/N:10623.7 Points Across peak:35



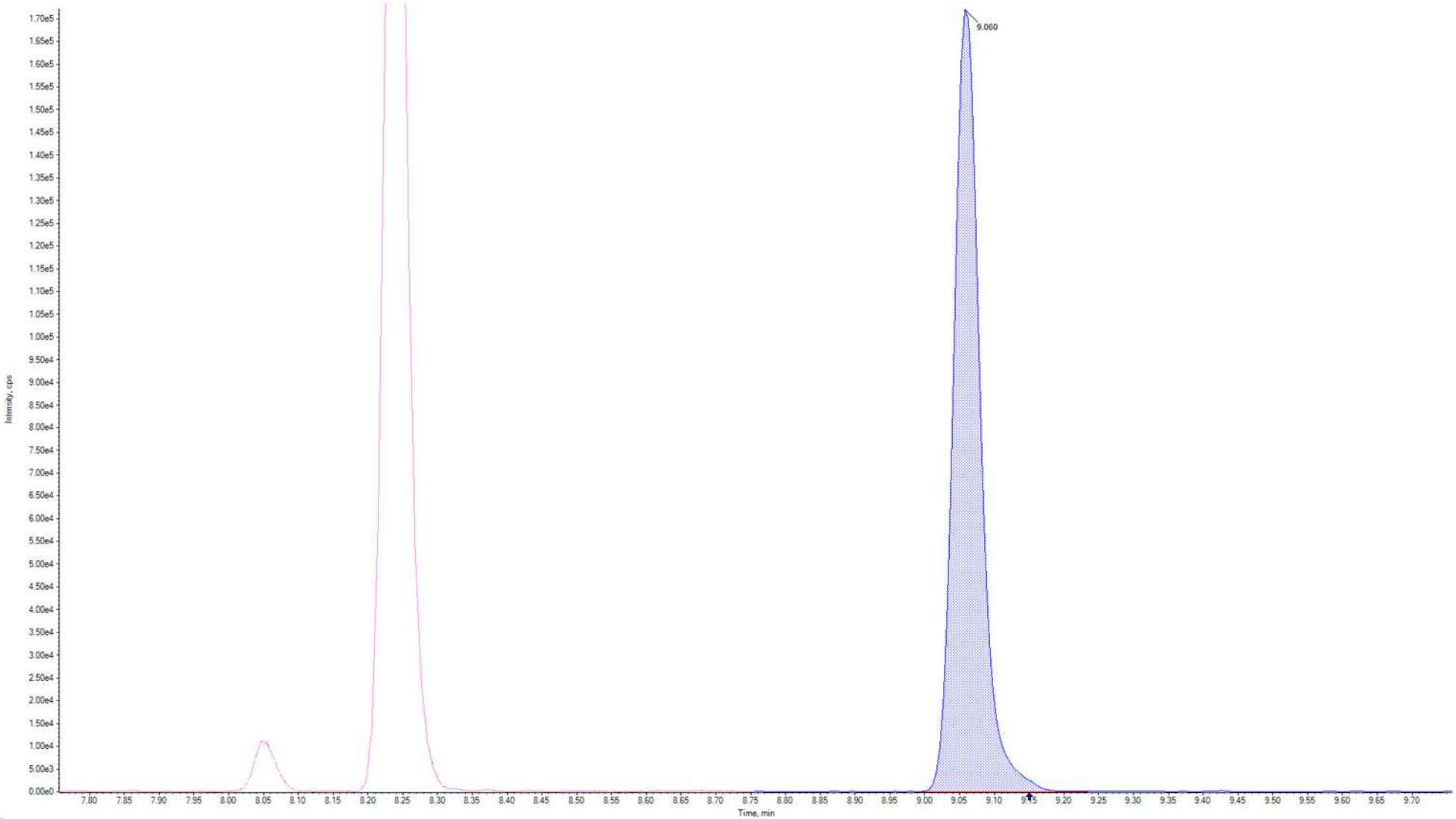
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFNS_2
Sample: WG1971858-3 S/N:3133.0 Points Across peak:28



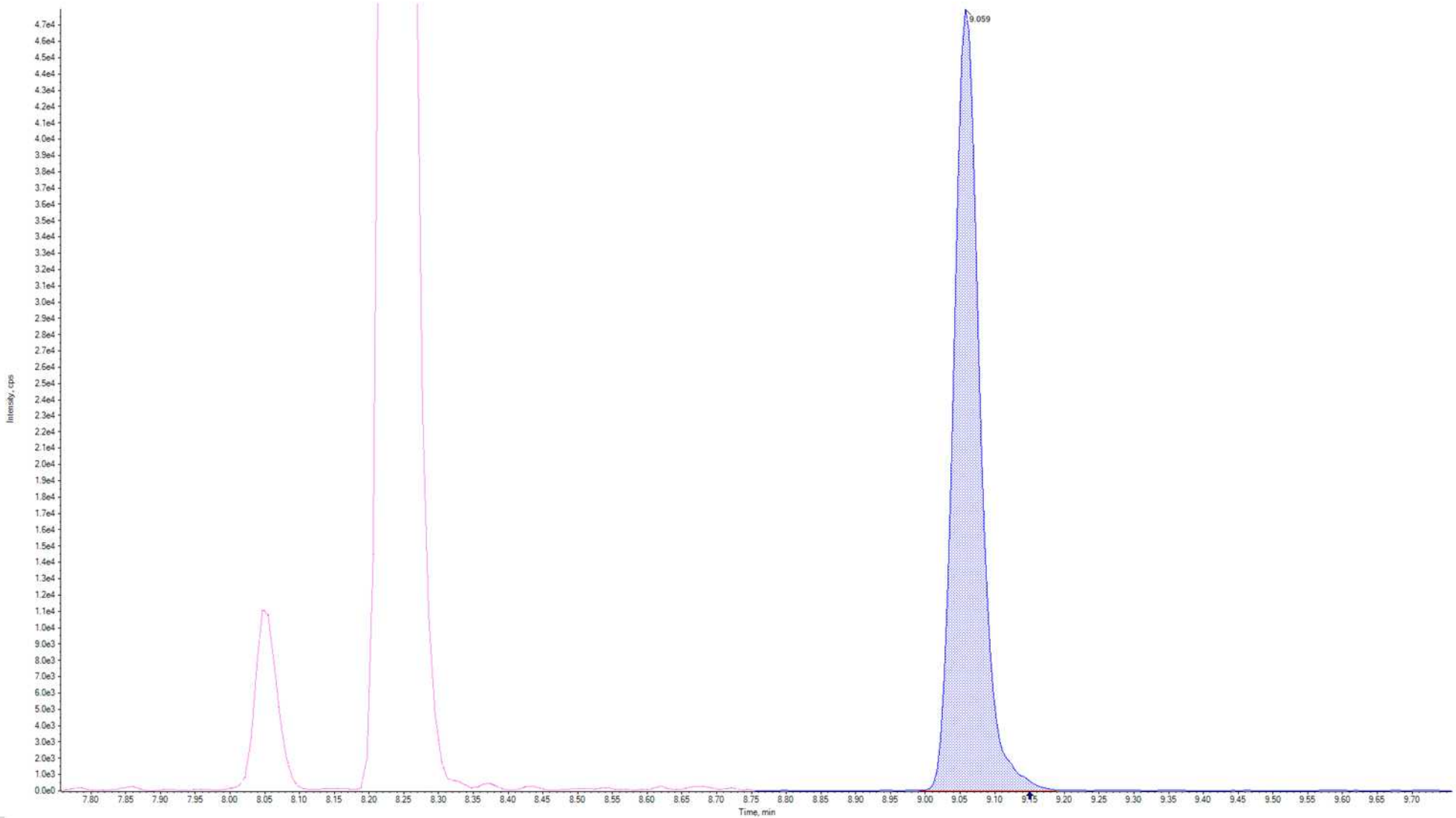
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDS
Sample: WG1971858-3 S/N:6094.3 Points Across peak:49



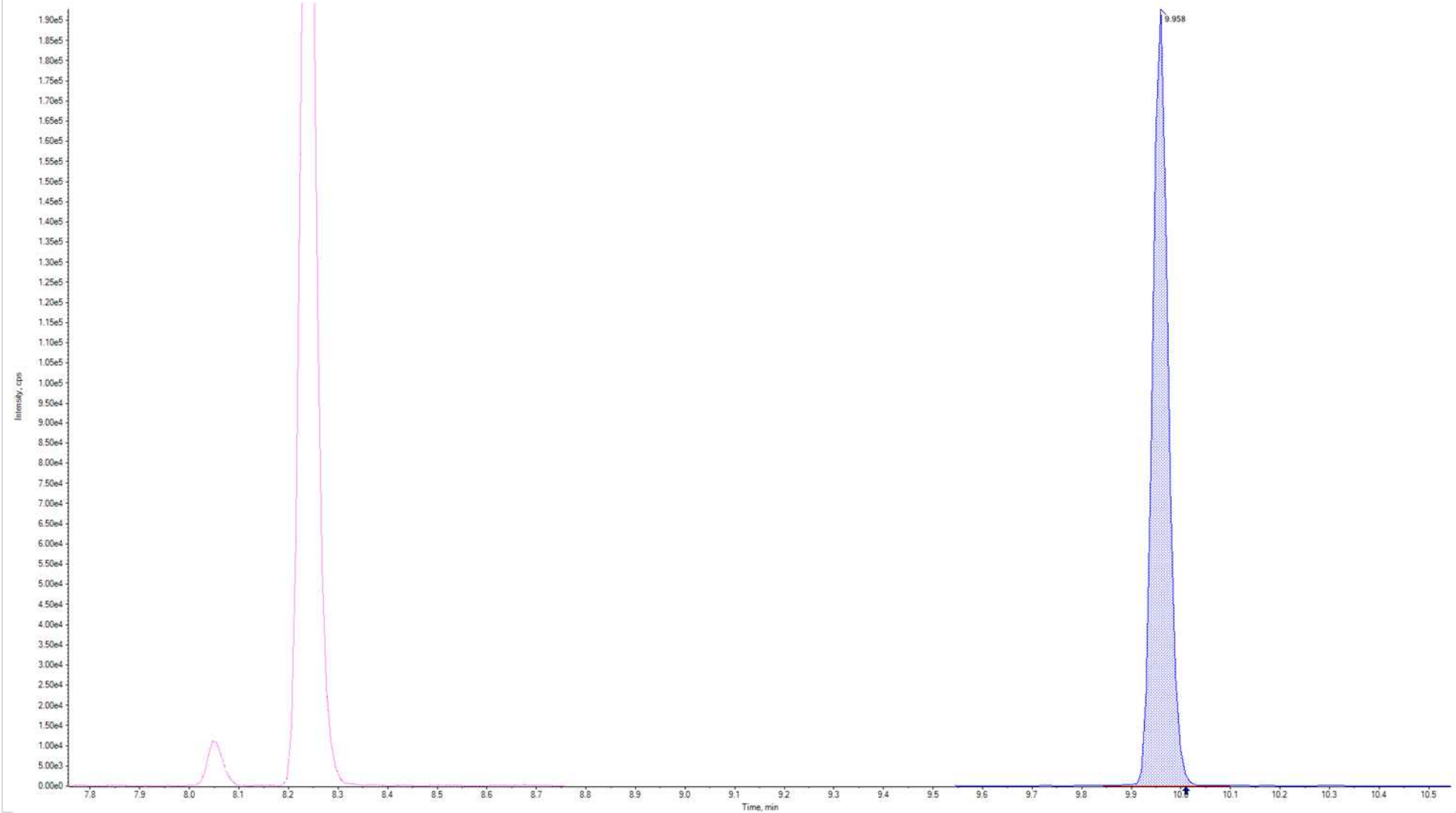
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDS_2
Sample: WG1971858-3 S/N:15530632.3 Points Across peak:41



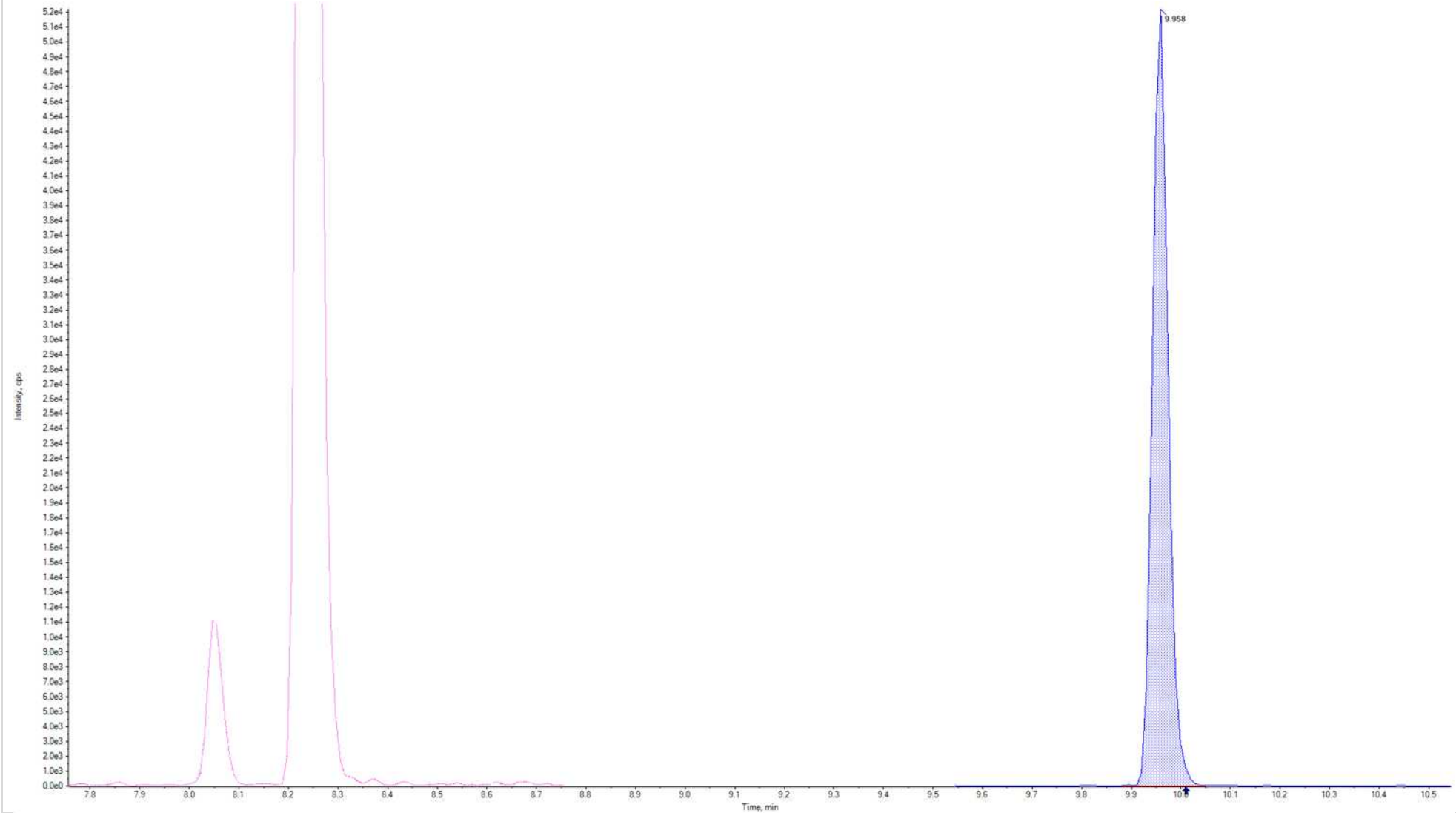
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS
Sample: WG1971858-3 S/N:22784.5 Points Across peak:28



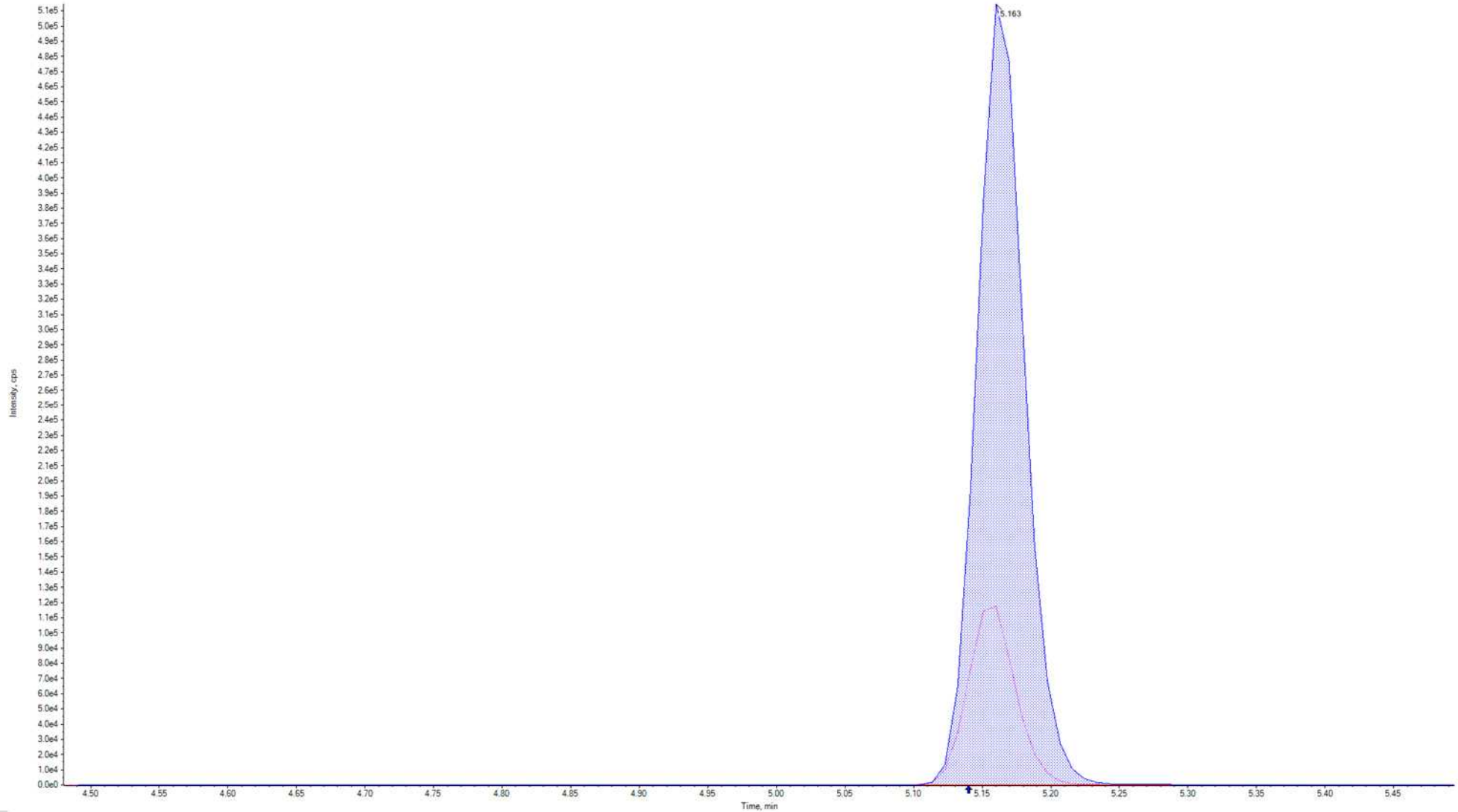
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS_2
Sample: WG1971858-3 S/N:3321.4 Points Across peak:21



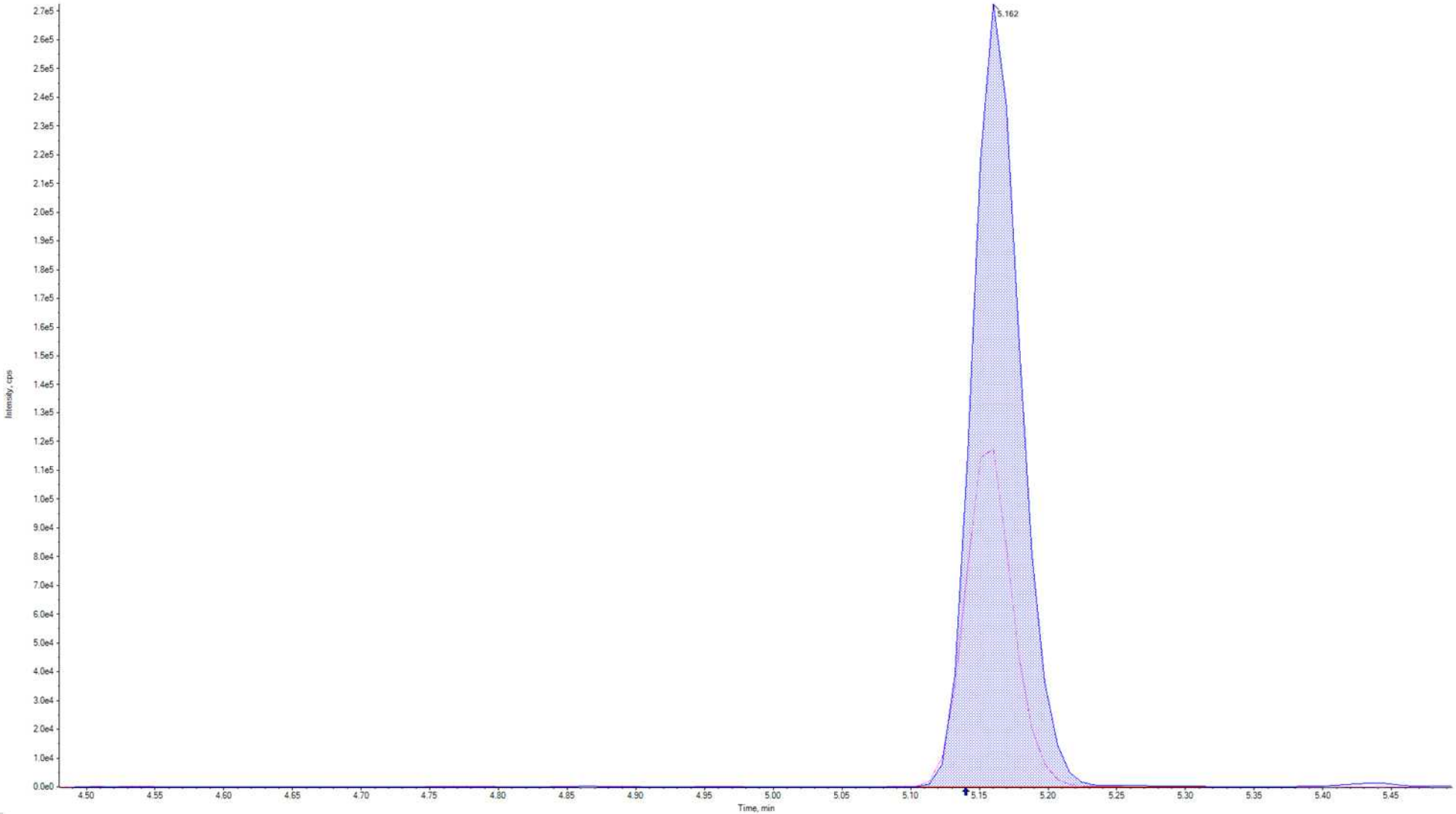
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS
Sample: WG1971858-3 S/N:38702663.2 Points Across peak:29



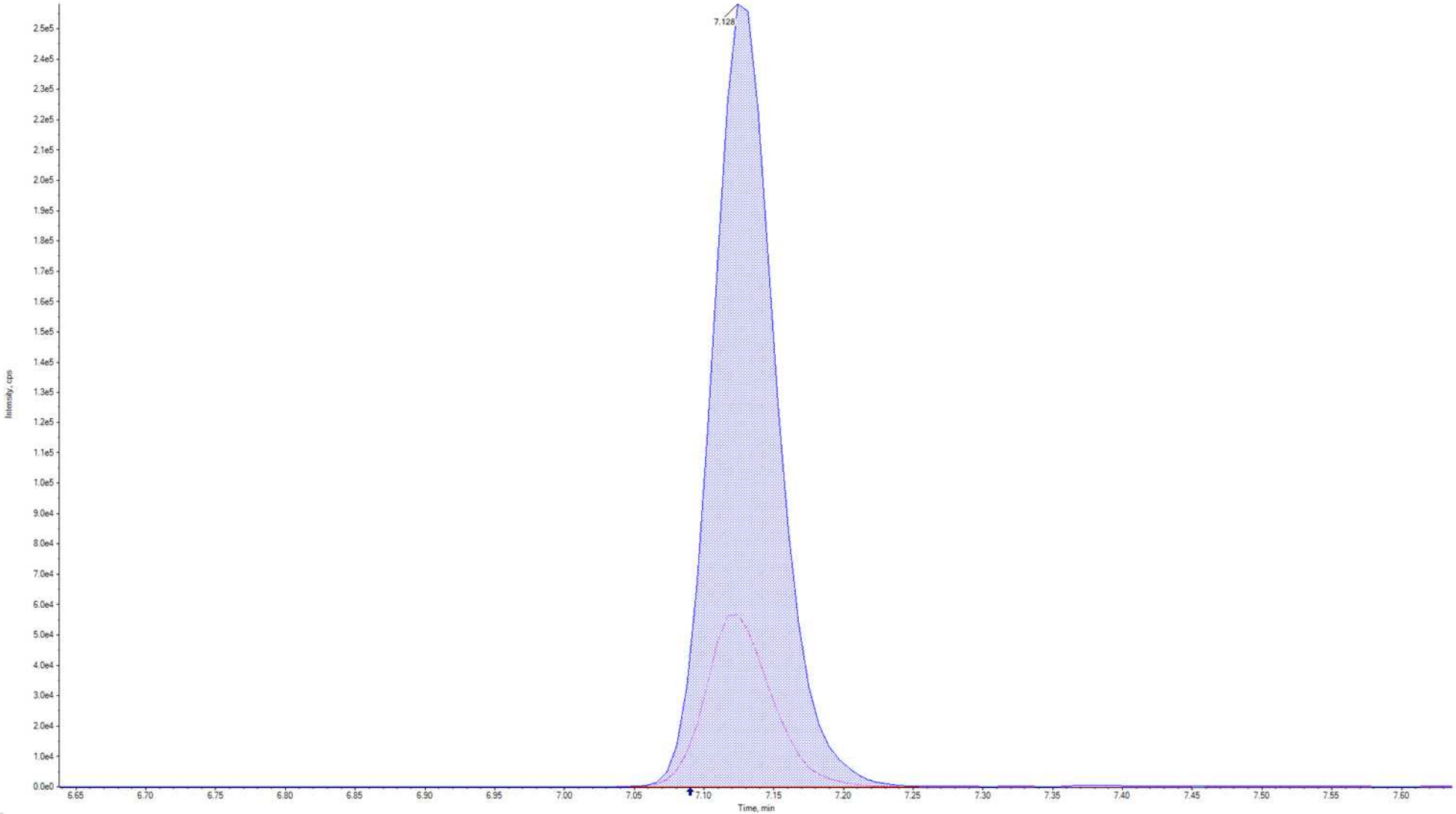
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS_2
Sample: WG1971858-3 S/N:8894.5 Points Across peak:27



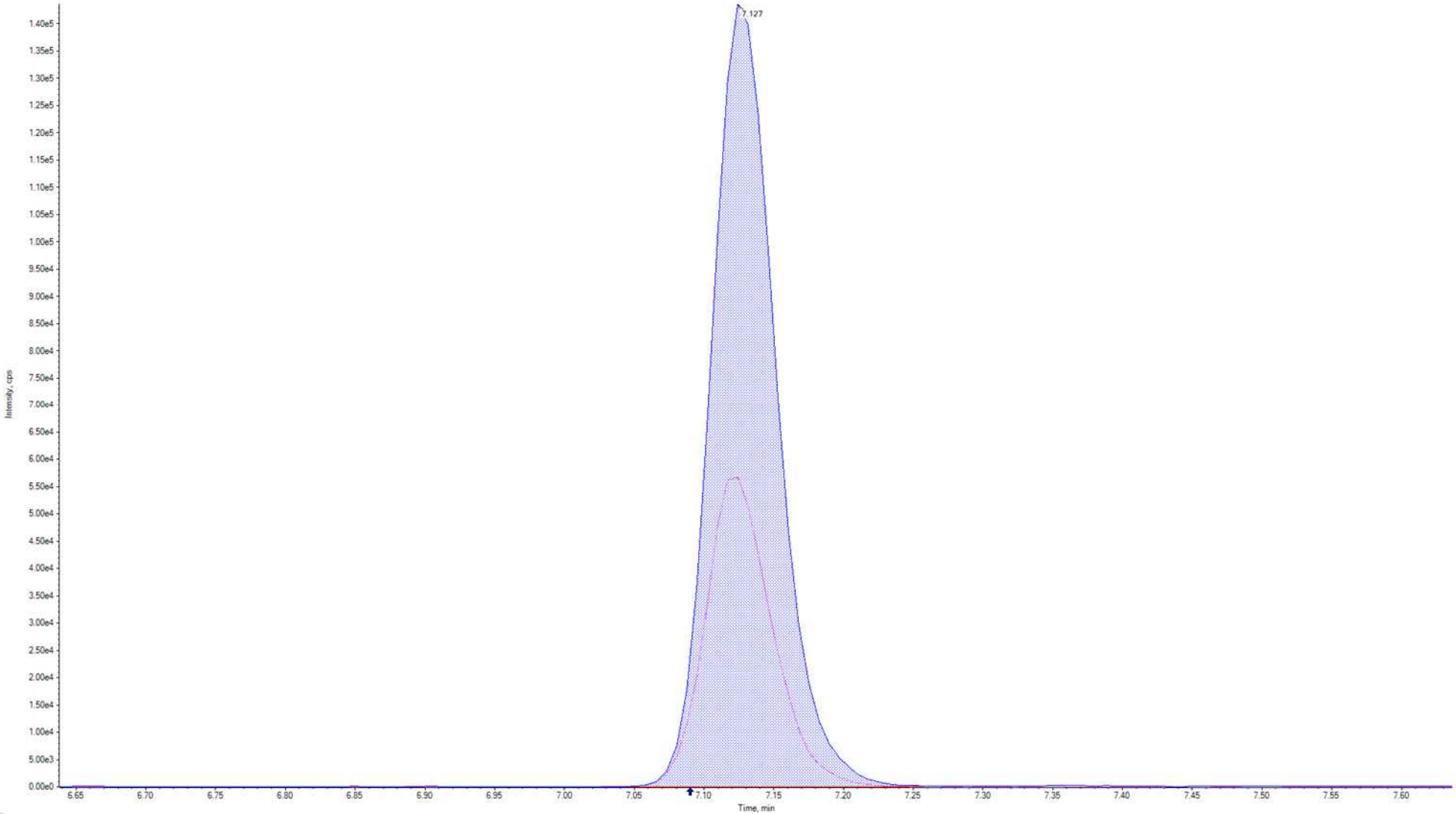
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS
Sample: WG1971858-3 S/N:1991.7 Points Across peak:33



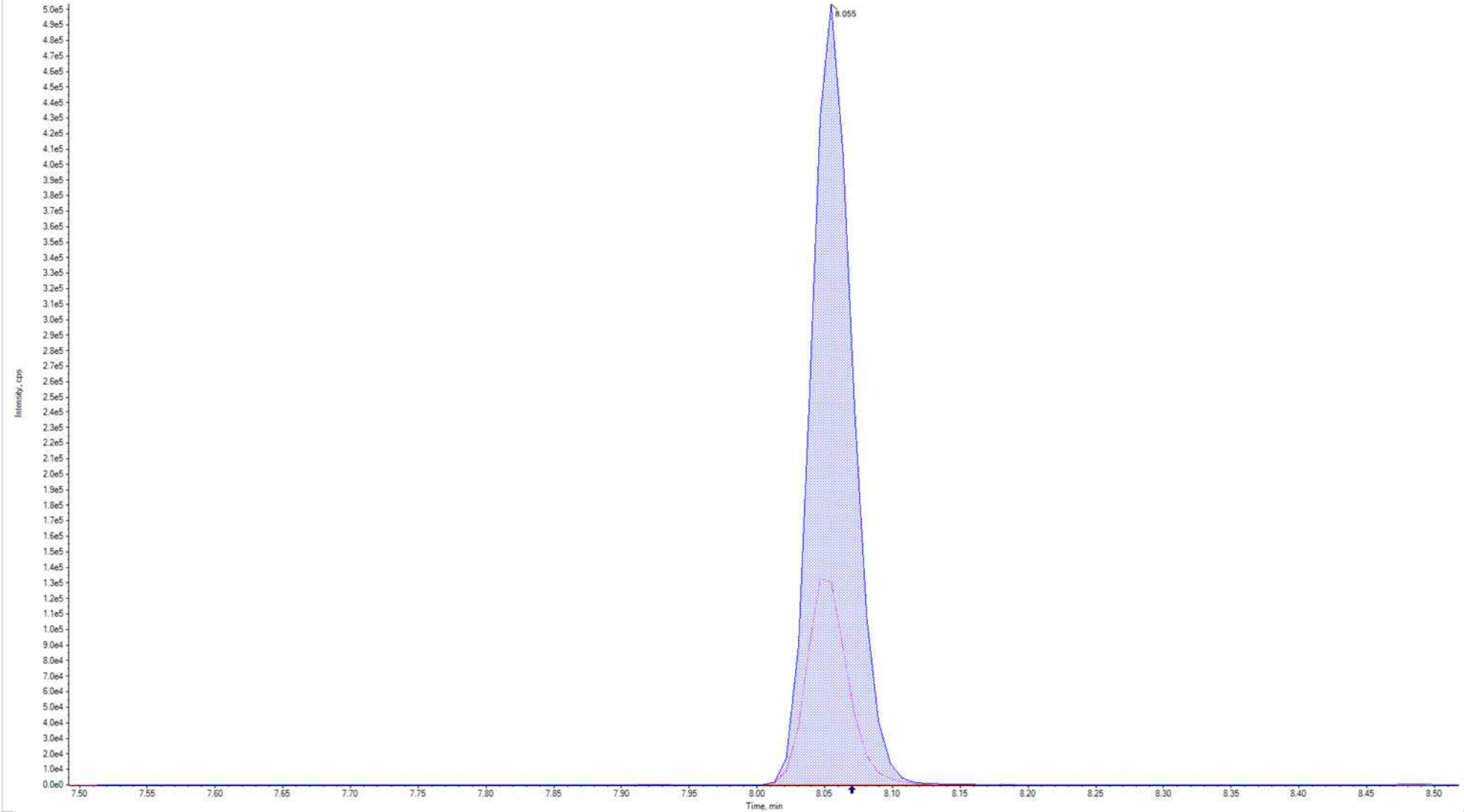
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS_2
Sample: WG1971858-3 S/N:215985.2 Points Across peak:45



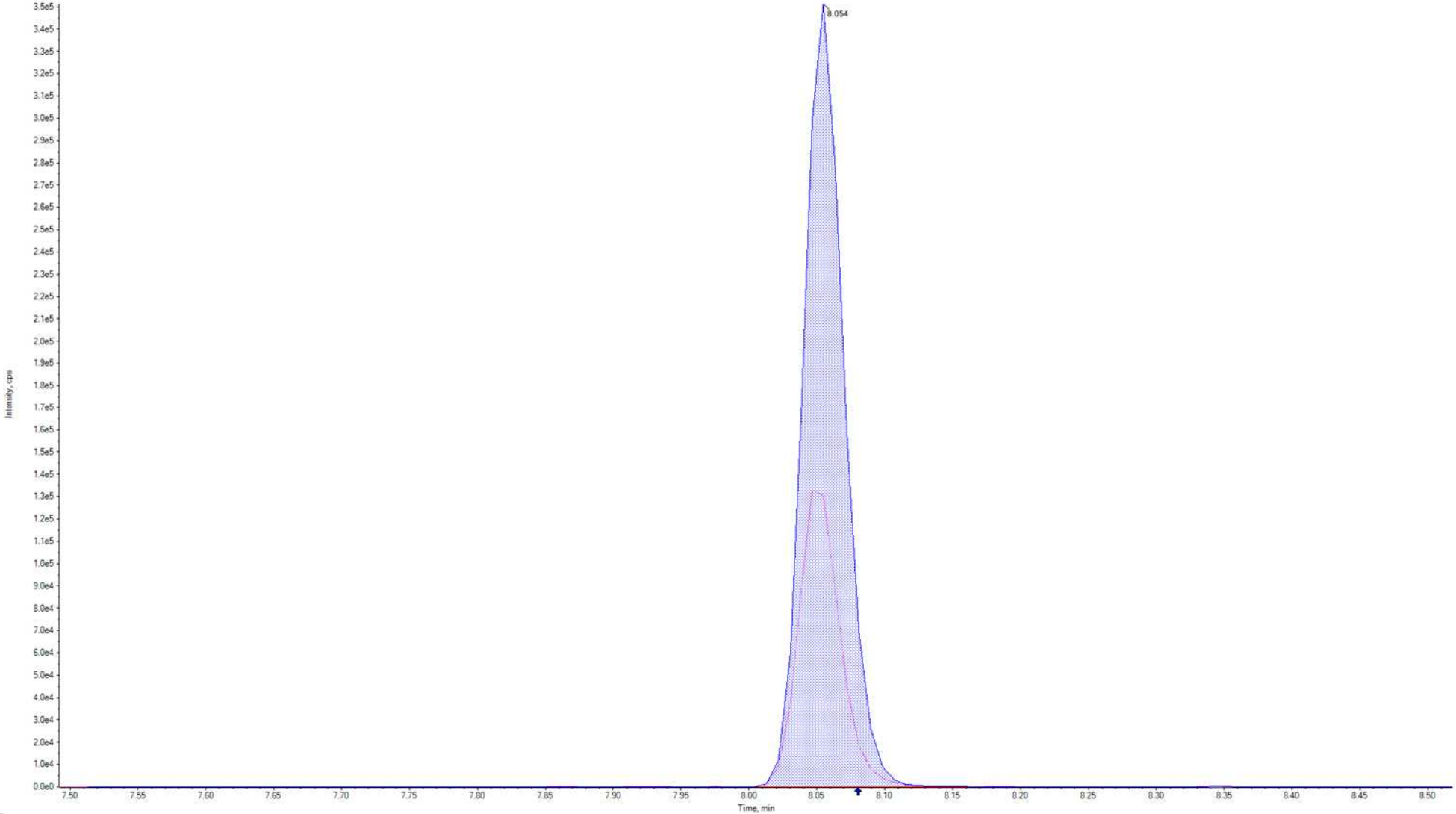
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

8:2FTS
Sample: WG1971858-3 S/N:7939.3 Points Across peak:37



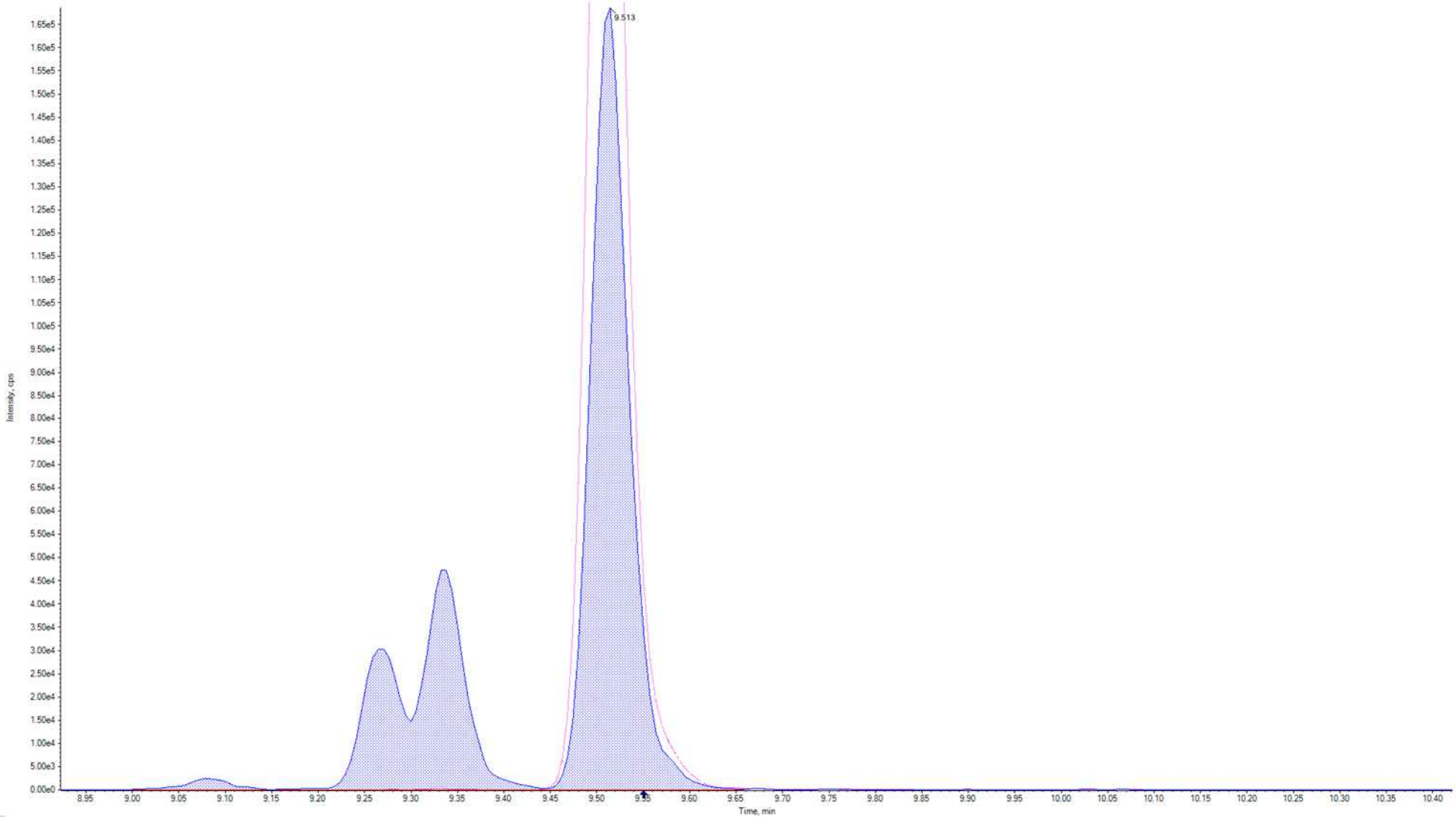
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

8:2FTS_2
Sample: WG1971858-3 S/N:3207.9 Points Across peak:25



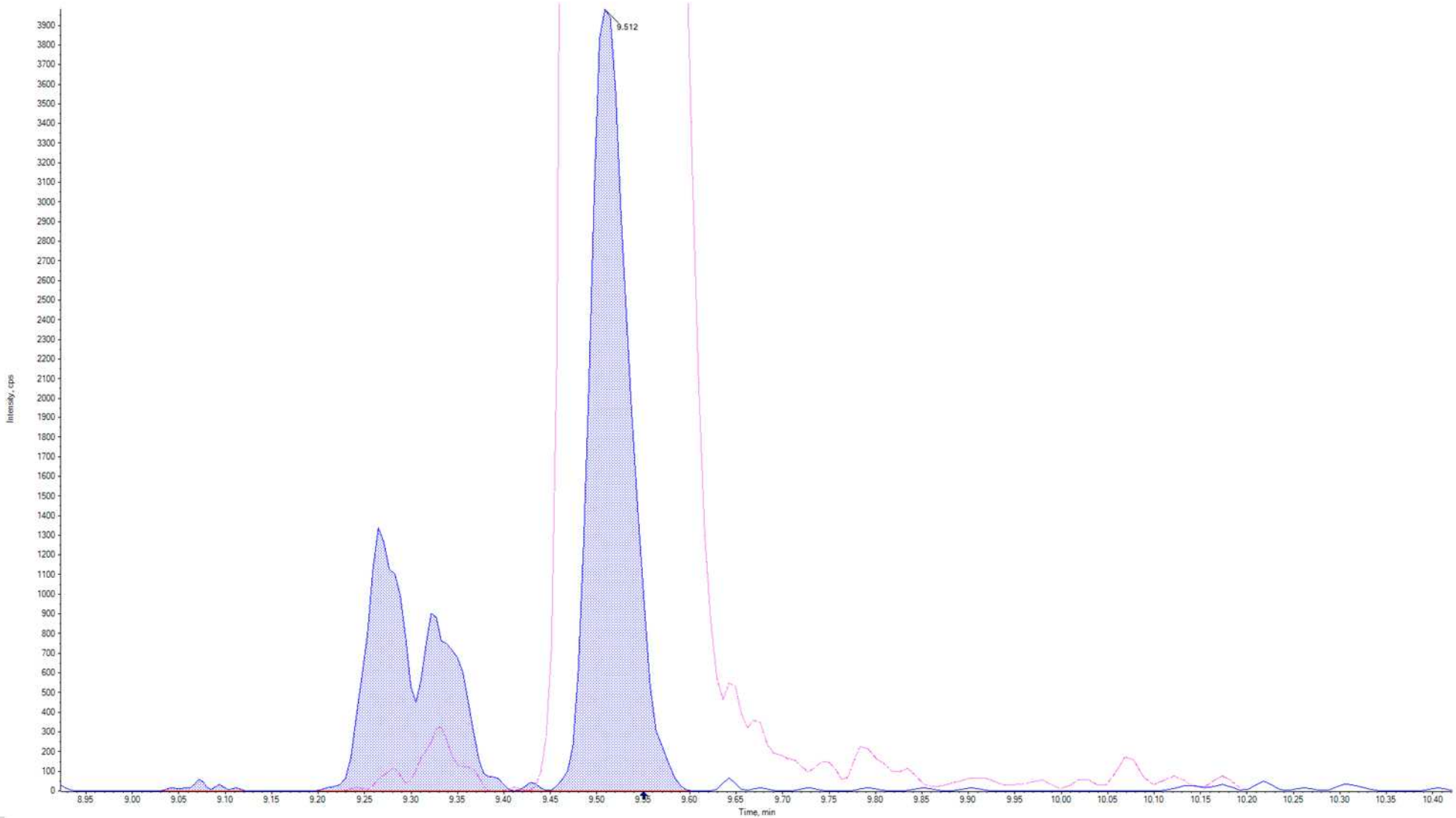
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOSA
Sample: WG1971858-3 S/N:1527247.9 Points Across peak:124



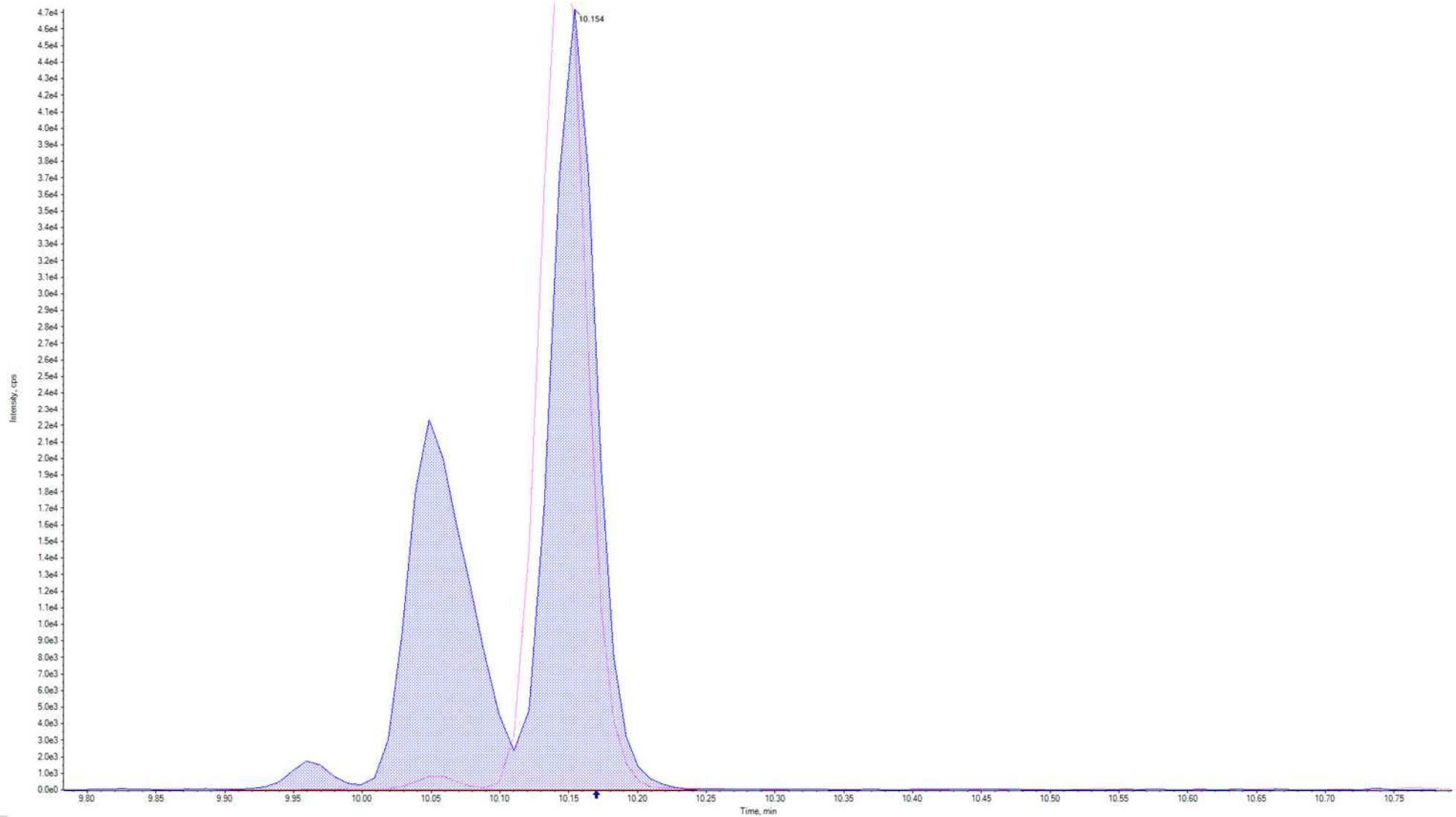
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

PFOSA_2
Sample: WG1971858-3 S/N:543.1 Points Across peak:105



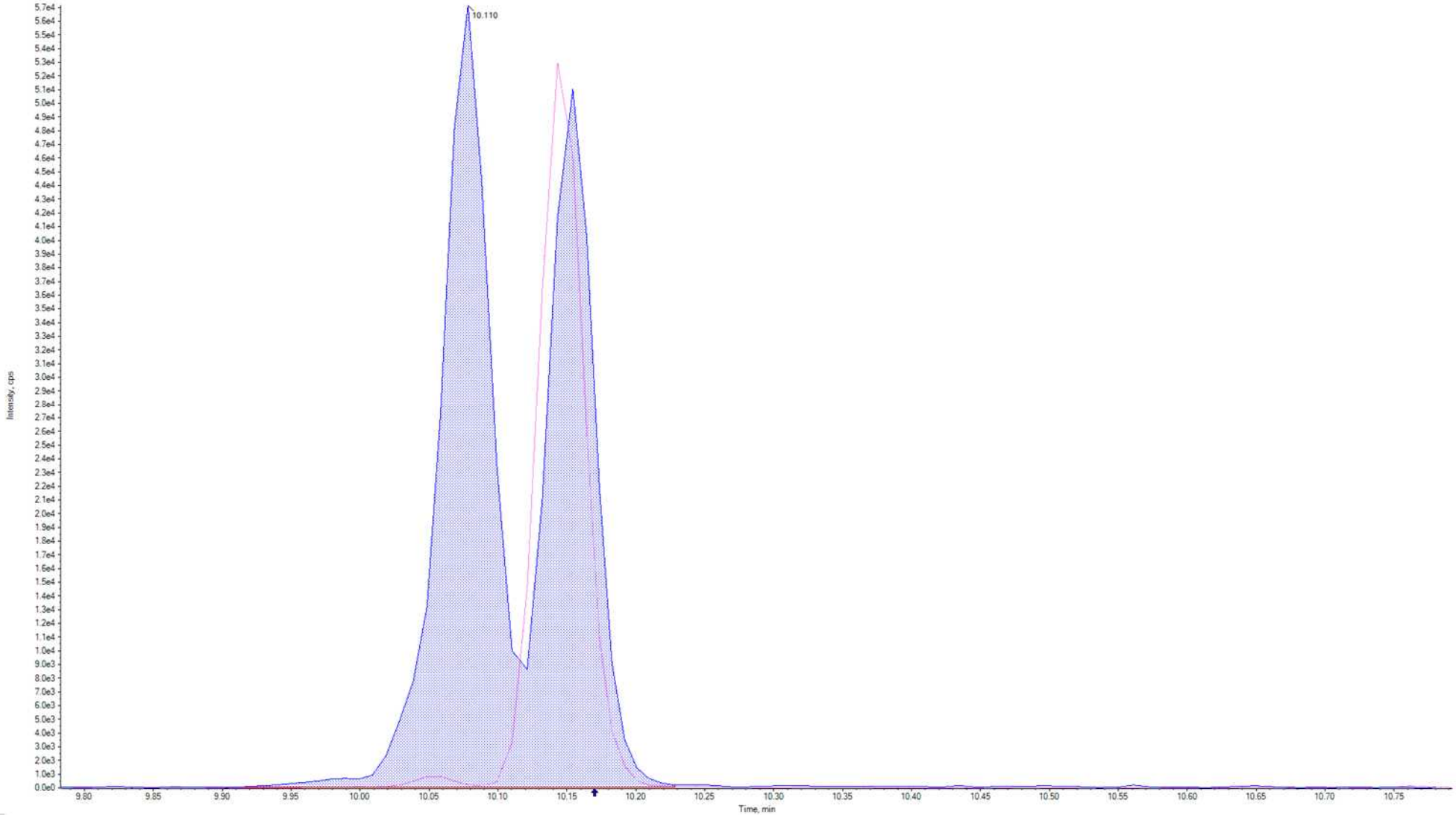
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSA
Sample: WG1971858-3 S/N:6630467.2 Points Across peak:36



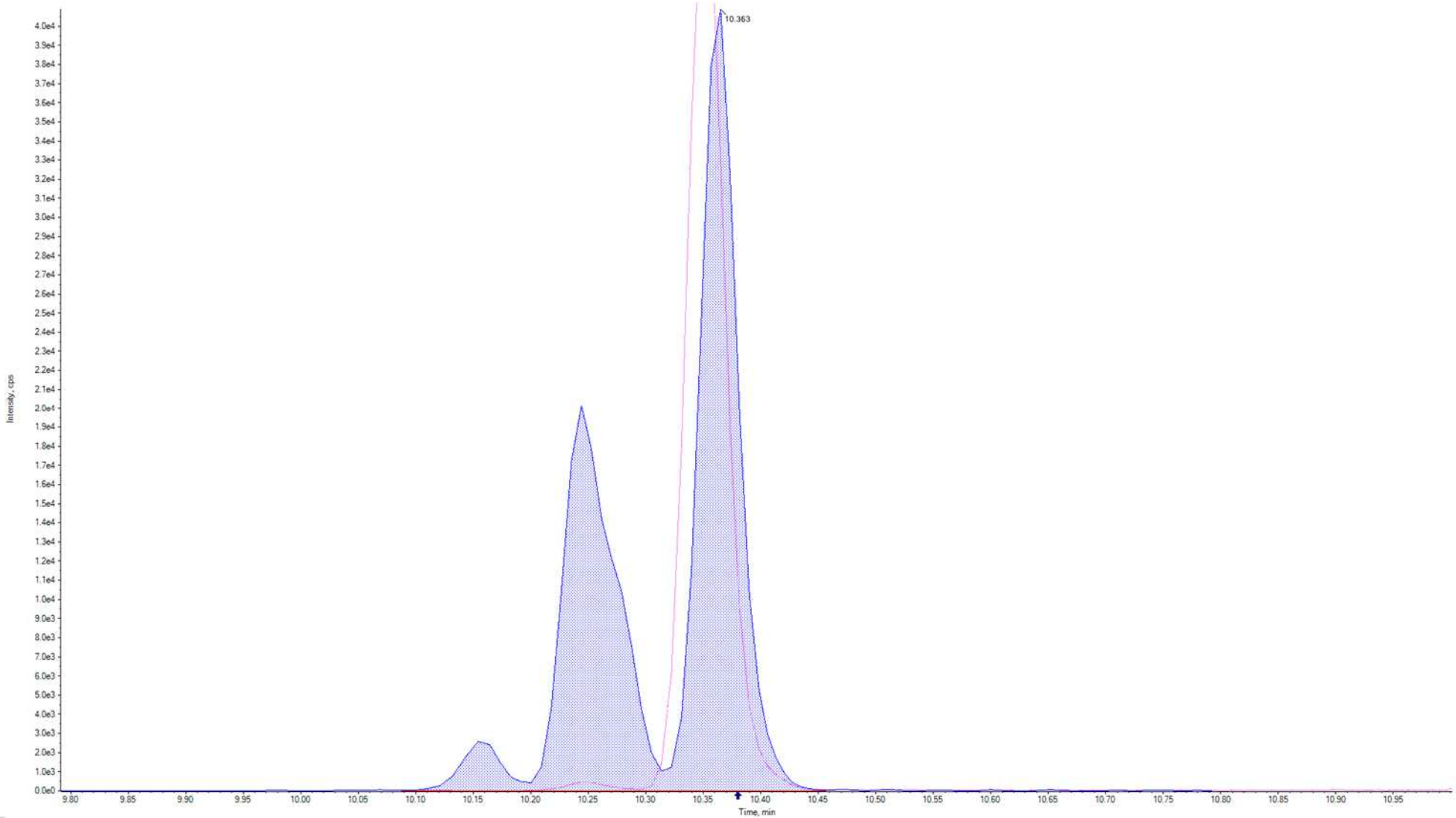
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSA_2
Sample: WG1971858-3 S/N:1122.0 Points Across peak:36



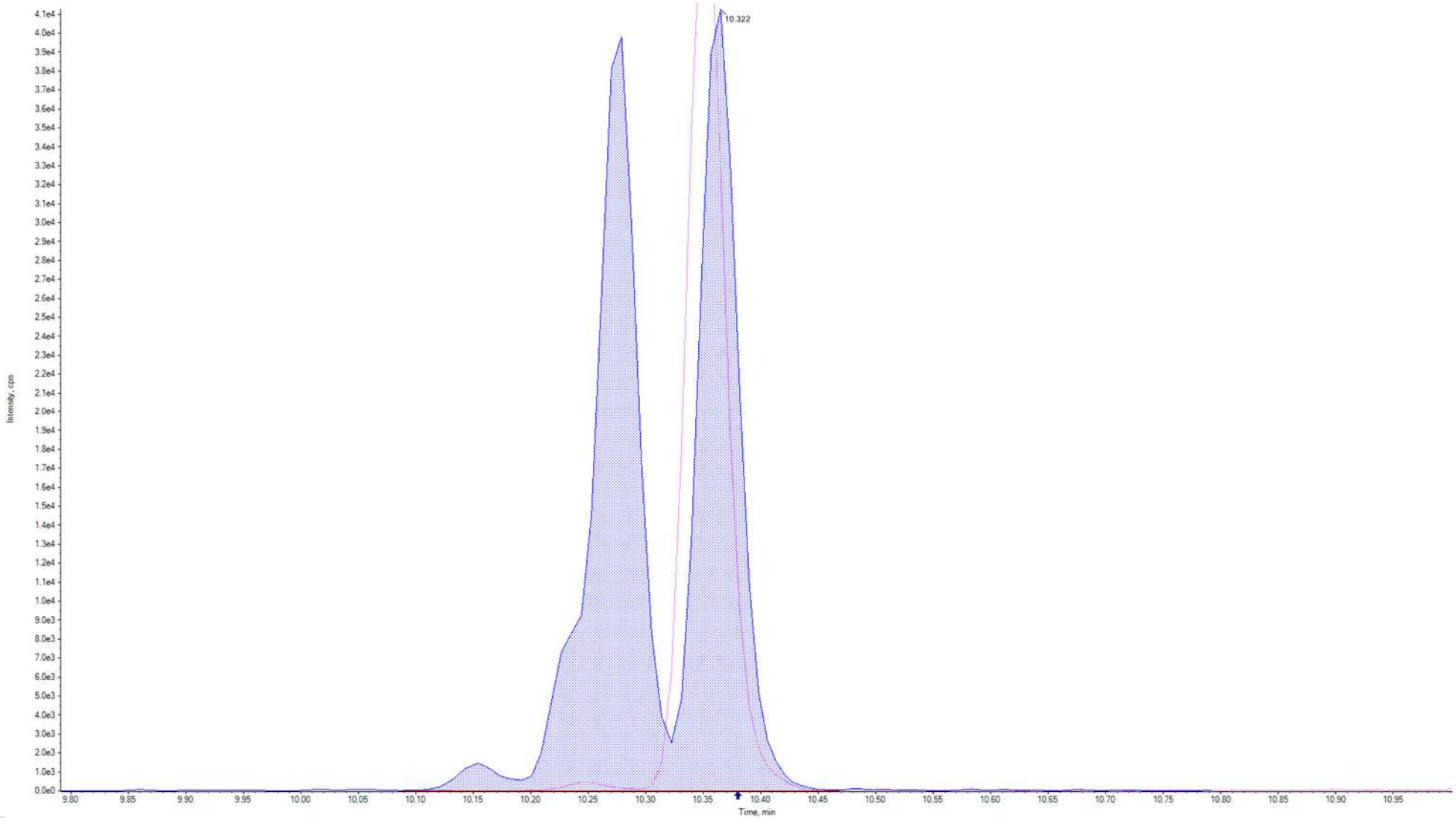
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA
Sample: WG1971858-3 S/N:735.4 Points Across peak:45



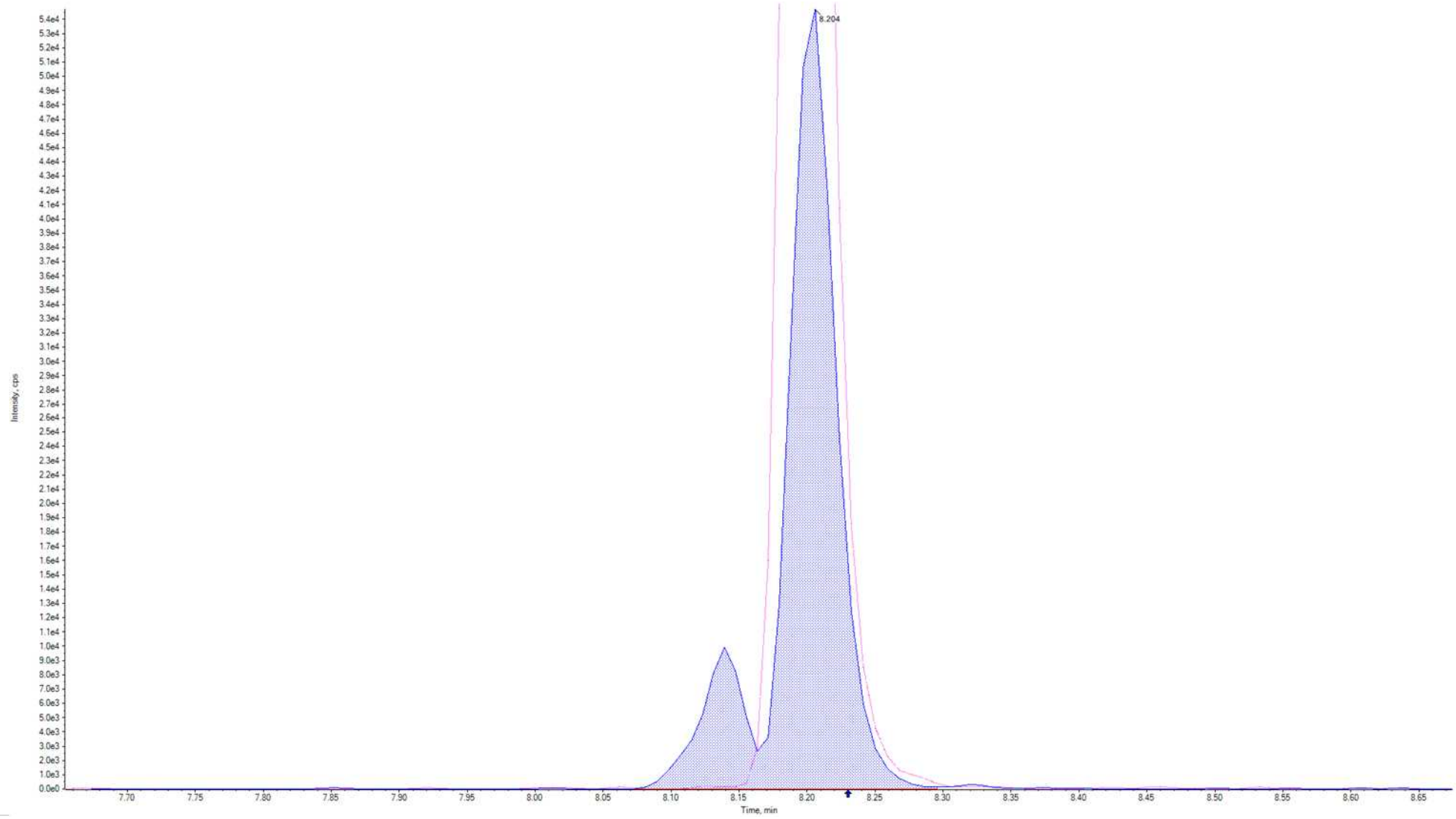
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA_2
Sample: WG1971858-3 S/N:548.0 Points Across peak:47



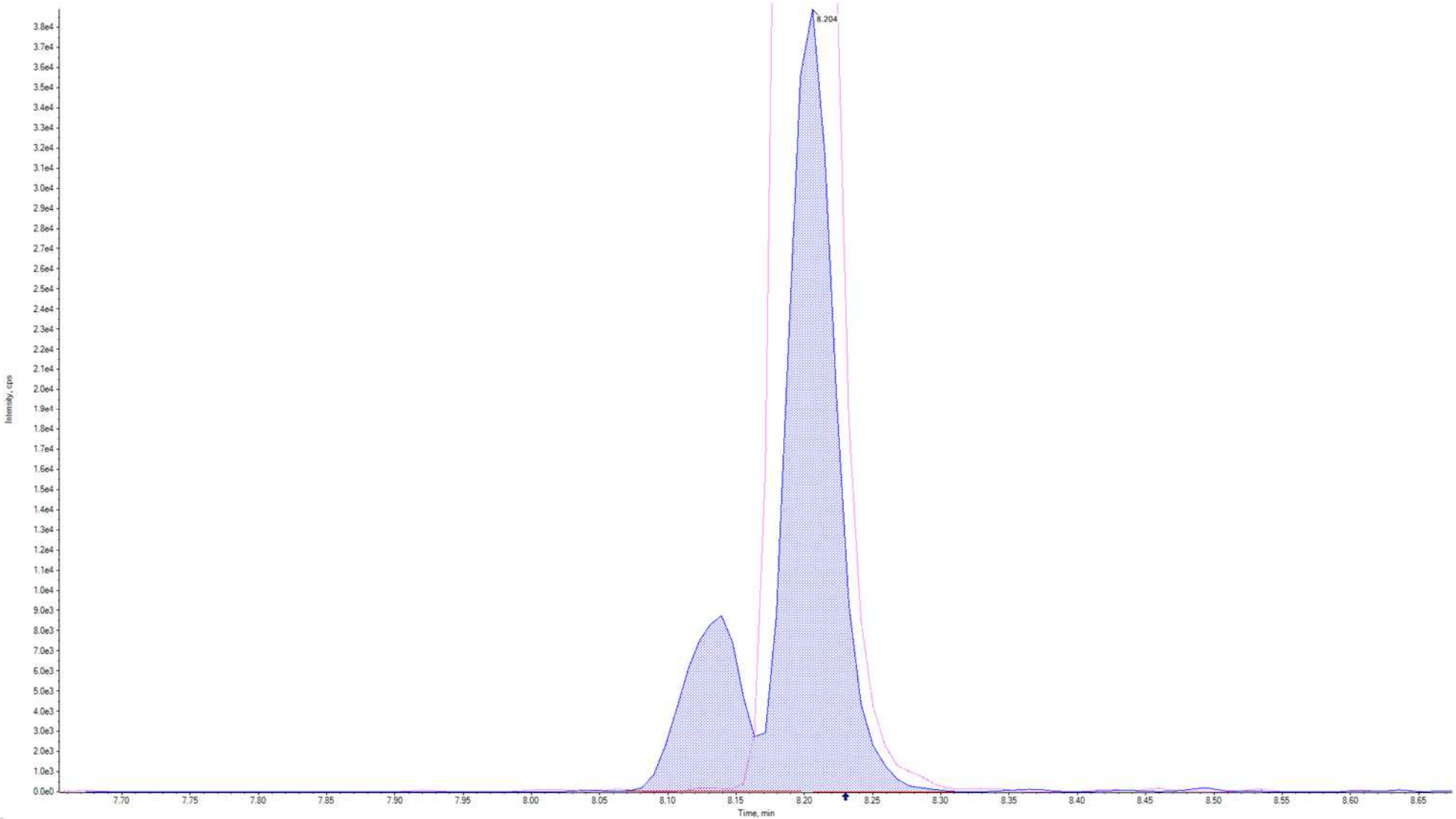
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA
Sample: WG1971858-3 S/N:835.9 Points Across peak:29



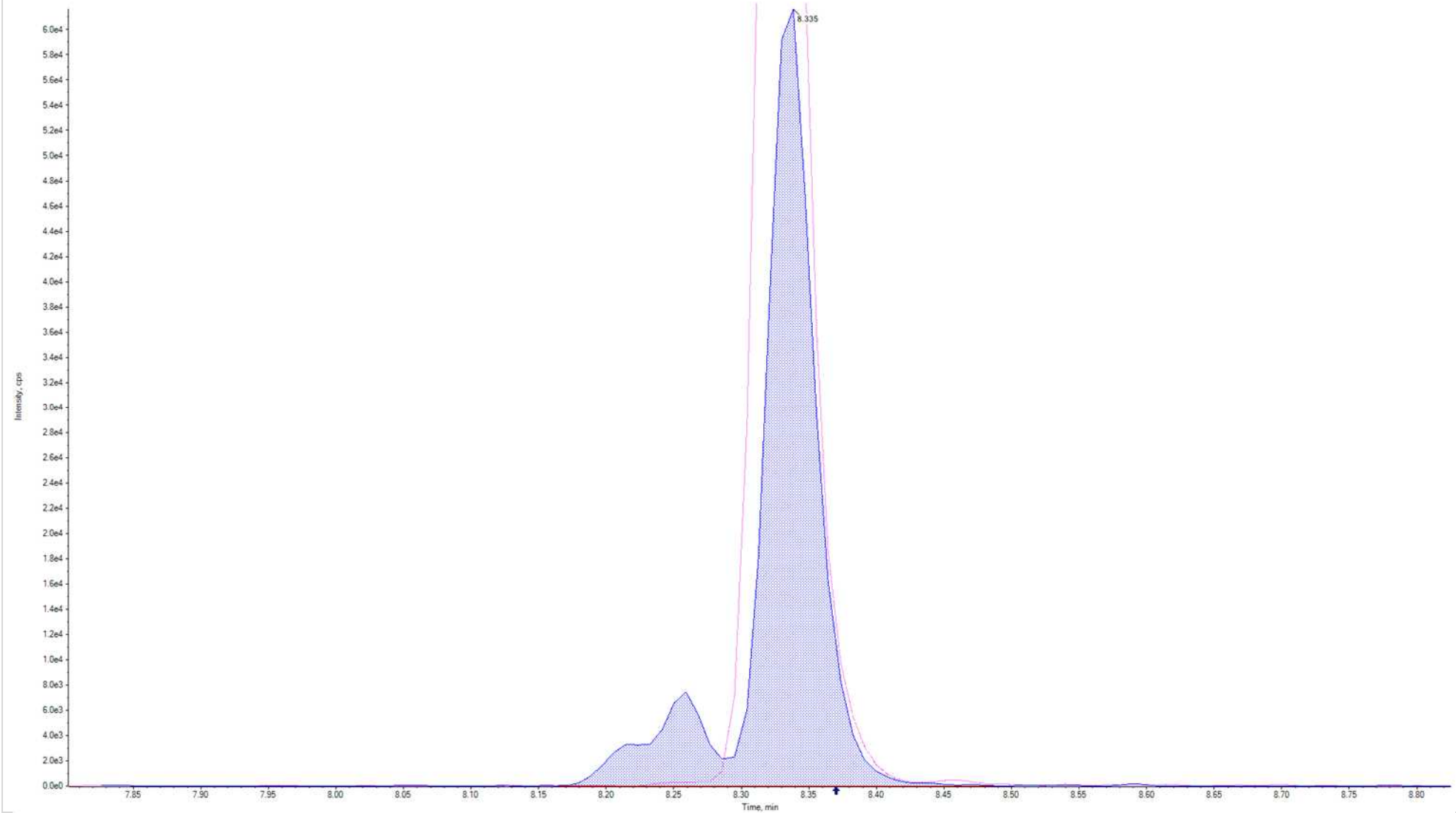
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA_2
Sample: WG1971858-3 S/N:502.1 Points Across peak:31



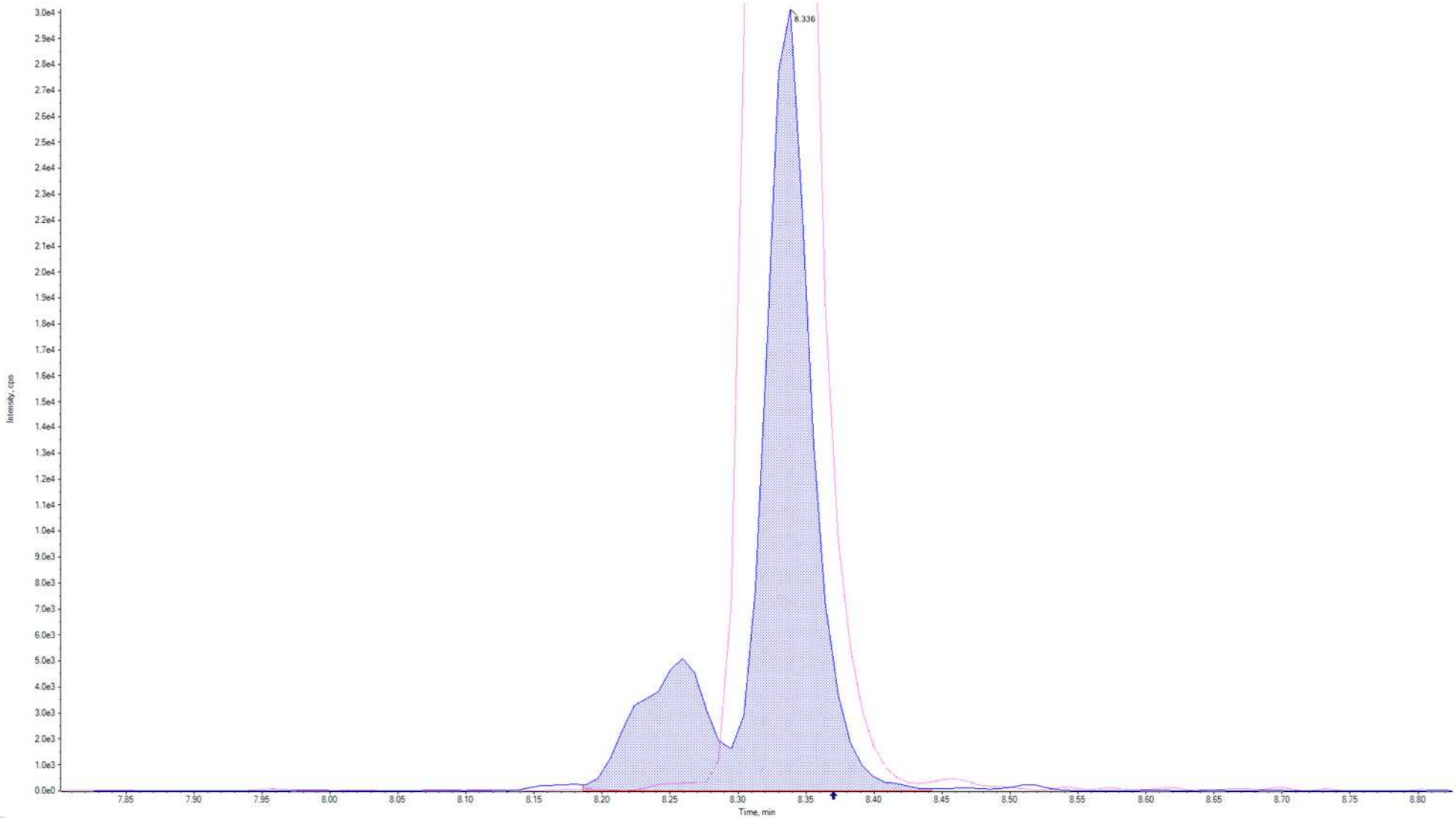
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA
Sample: WG1971858-3 S/N:708.3 Points Across peak:39



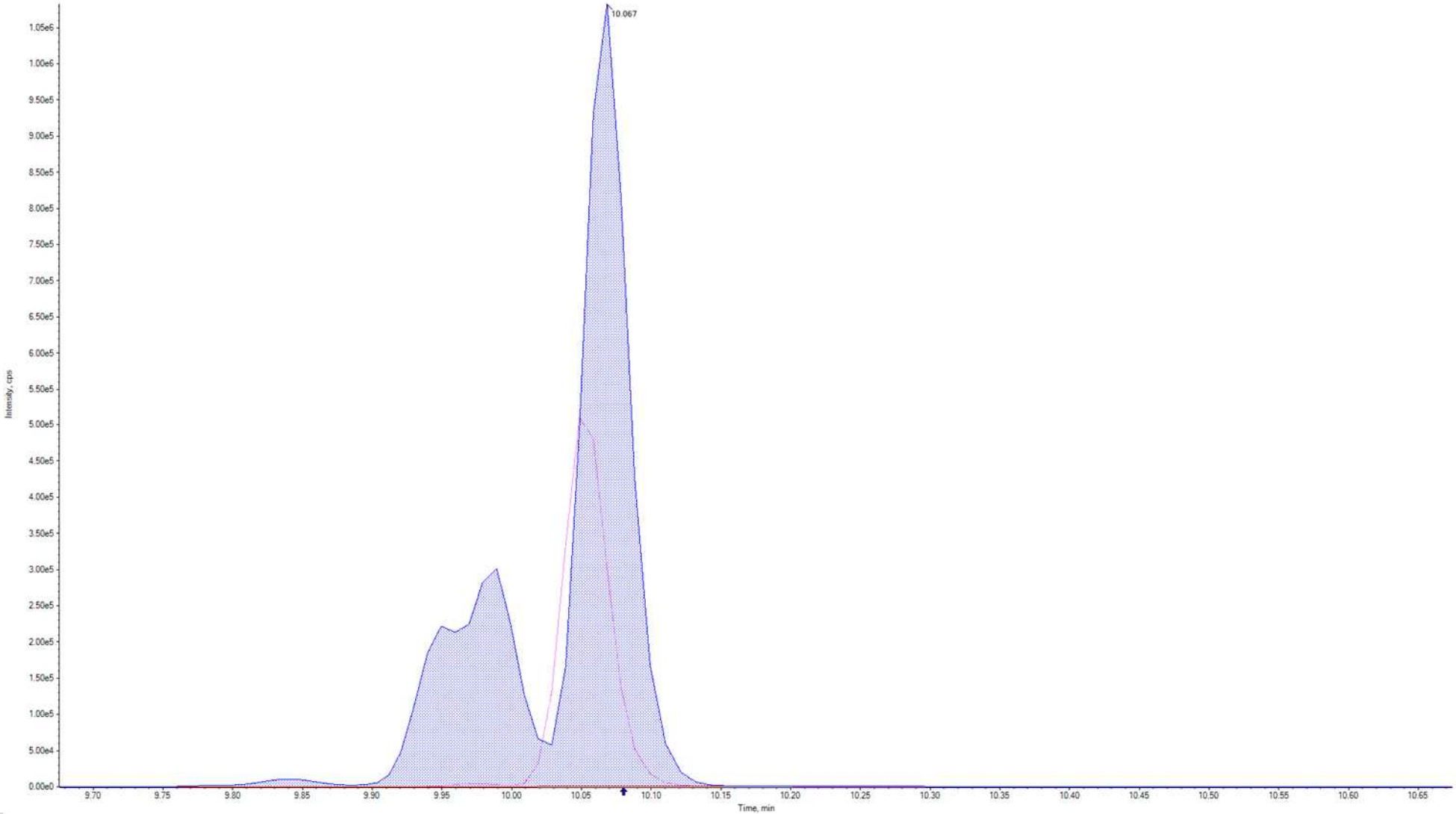
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA_2
Sample: WG1971858-3 S/N:540.7 Points Across peak:31



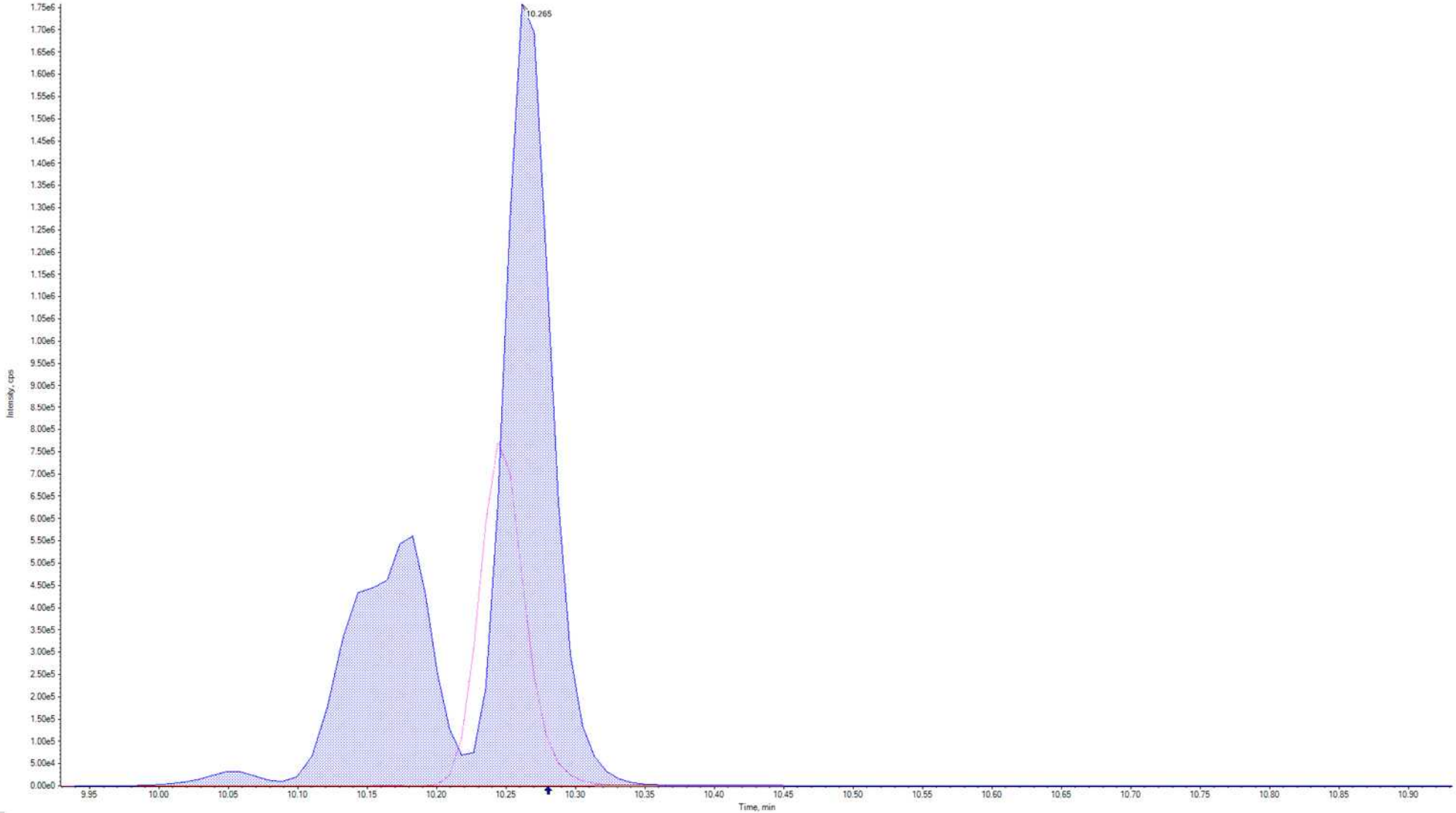
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSE
Sample: WG1971858-3 S/N:3102.7 Points Across peak:51



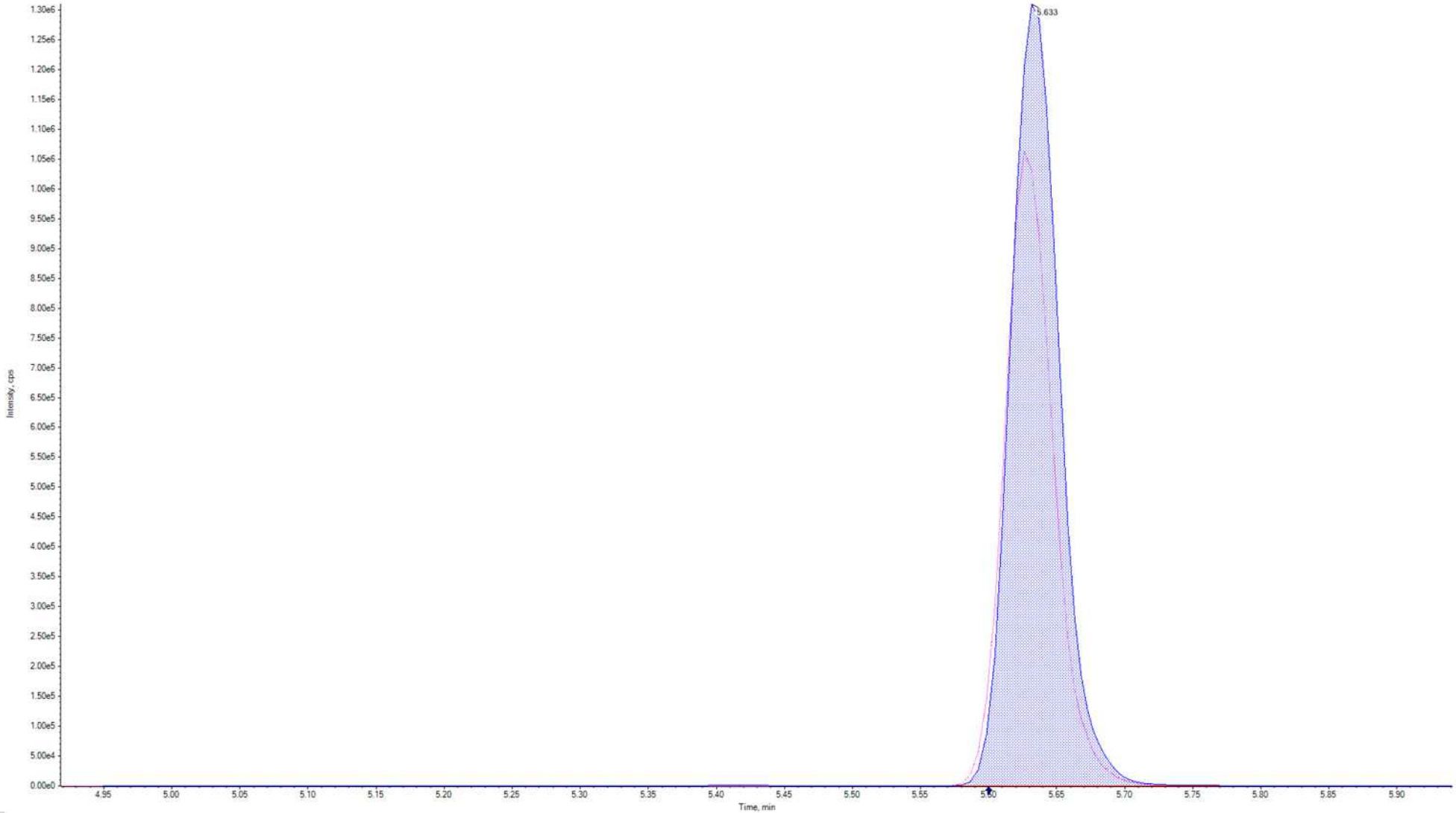
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSE
Sample: WG1971858-3 S/N:2654.9 Points Across peak:49



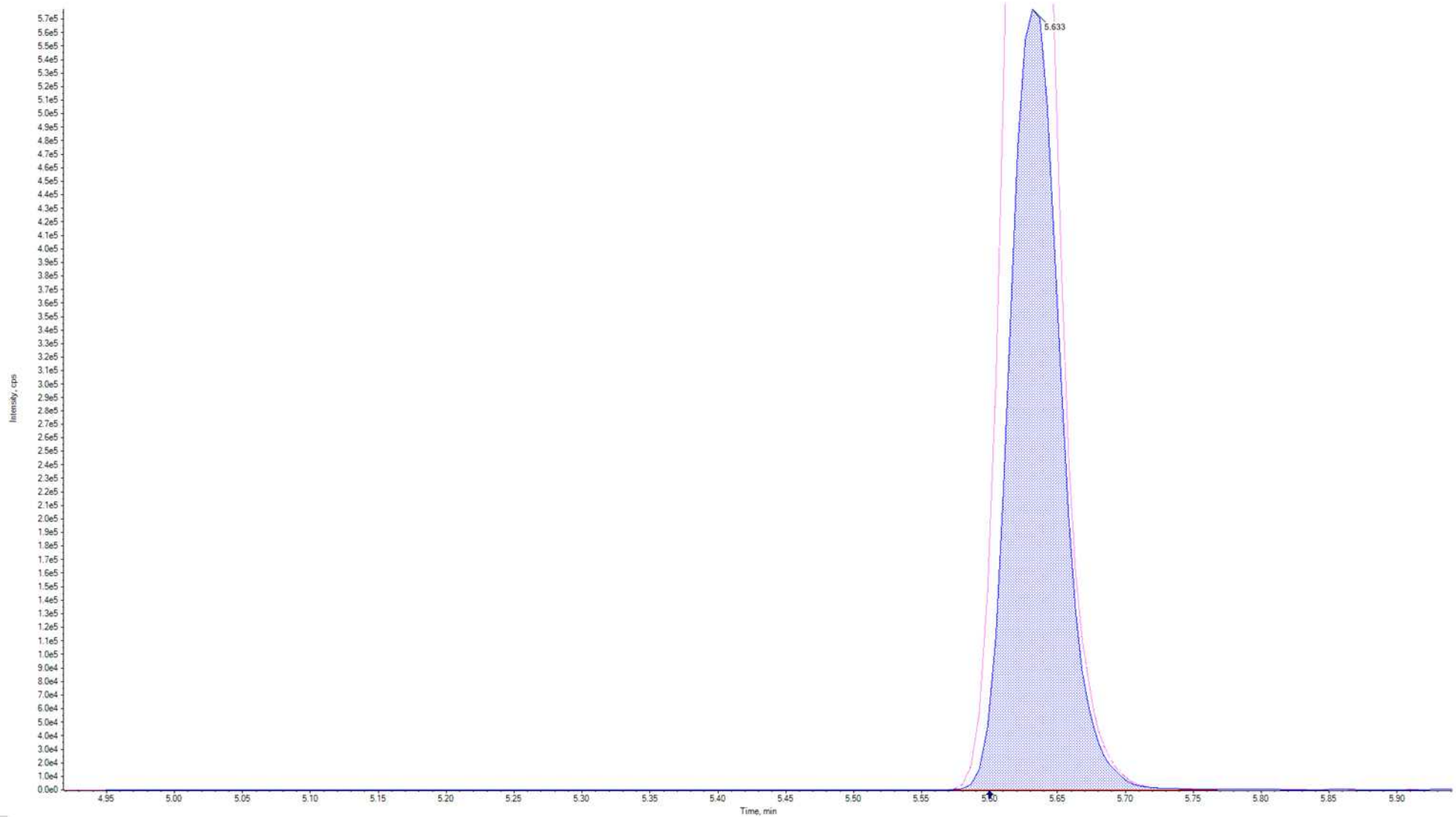
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA
Sample: WG1971858-3 S/N:27053.2 Points Across peak:46



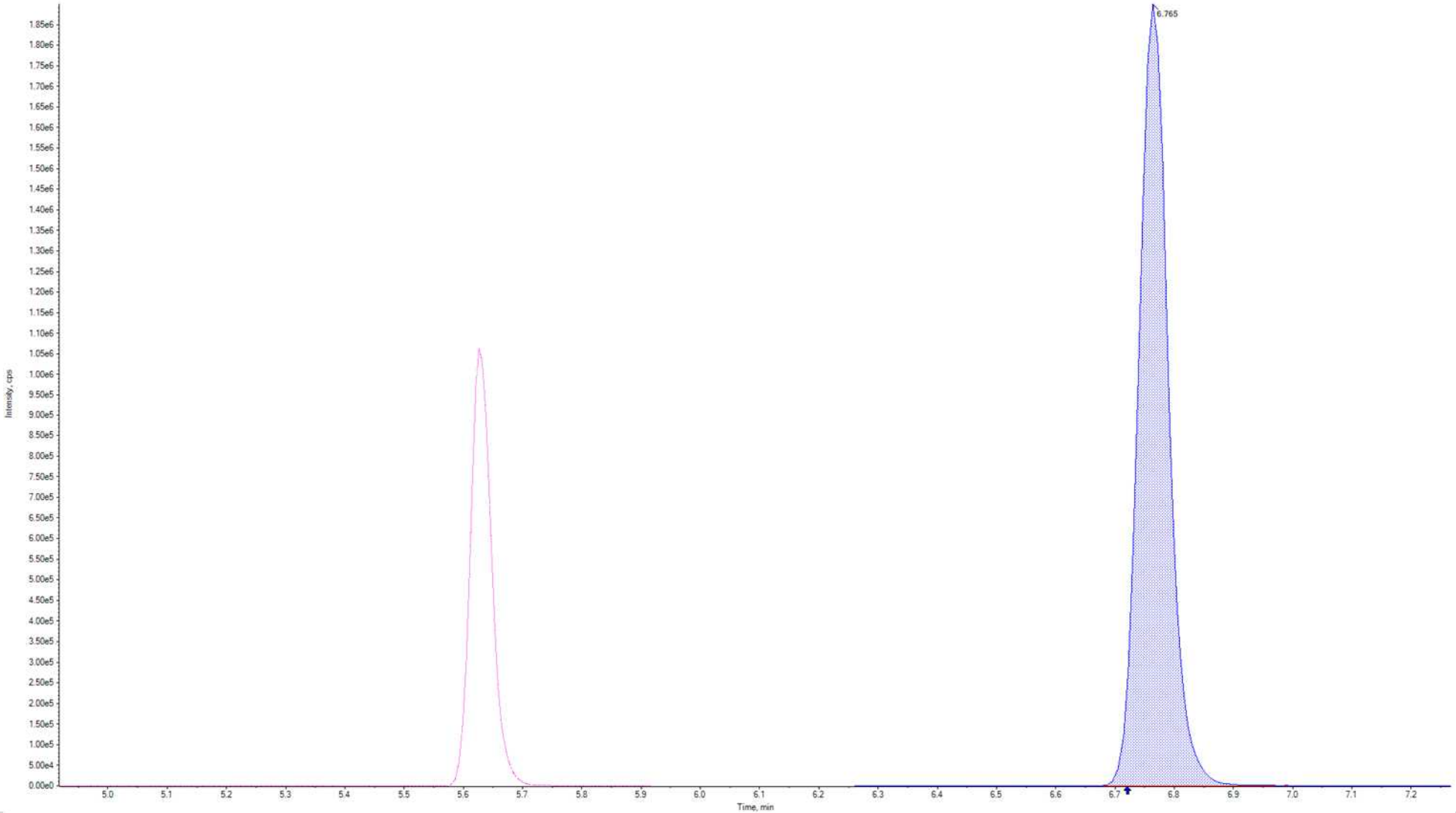
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA_2
Sample: WG1971858-3 S/N:6054.1 Points Across peak:44



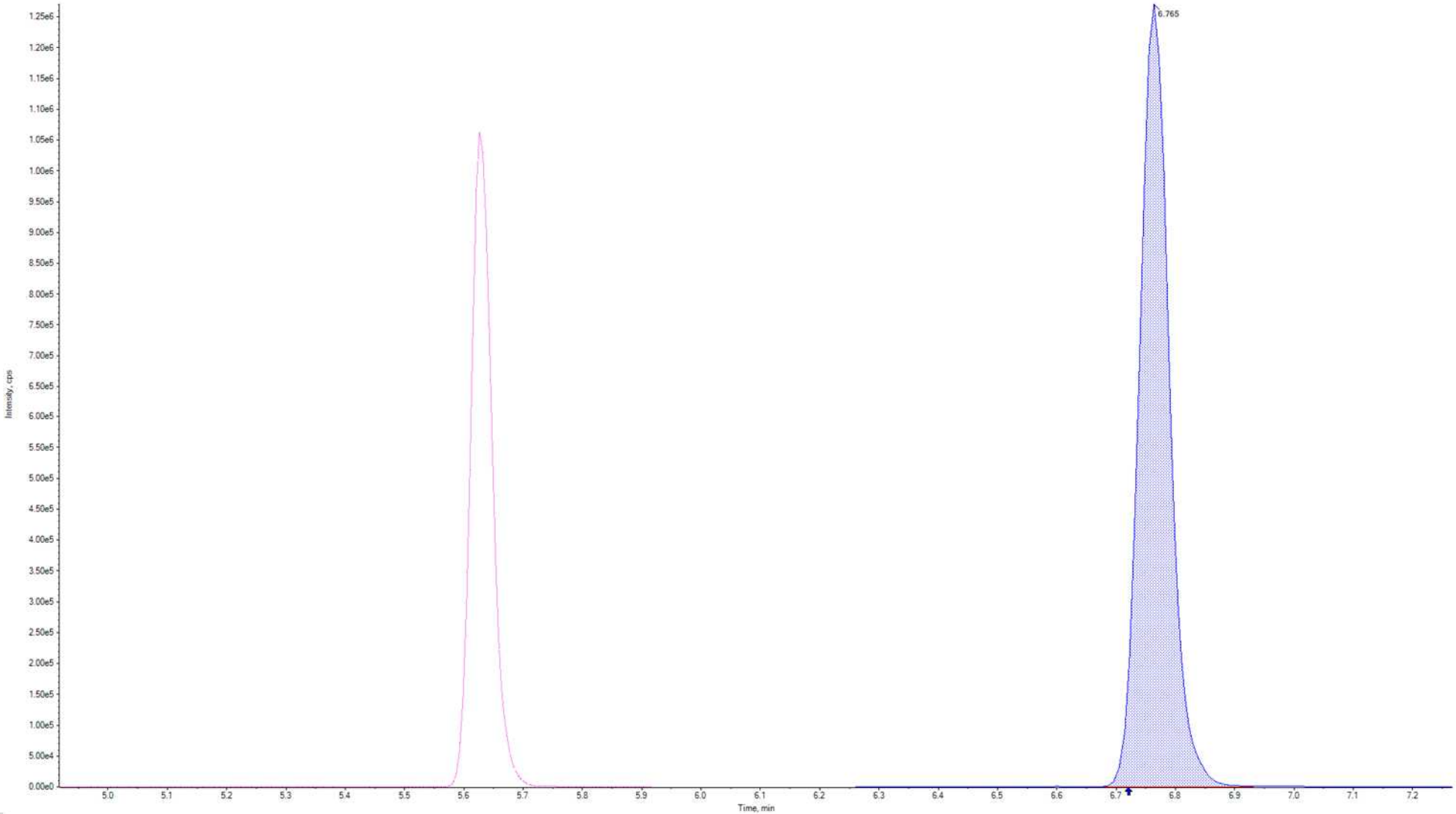
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

ADONA
Sample: WG1971858-3 S/N:18706.2 Points Across peak:55



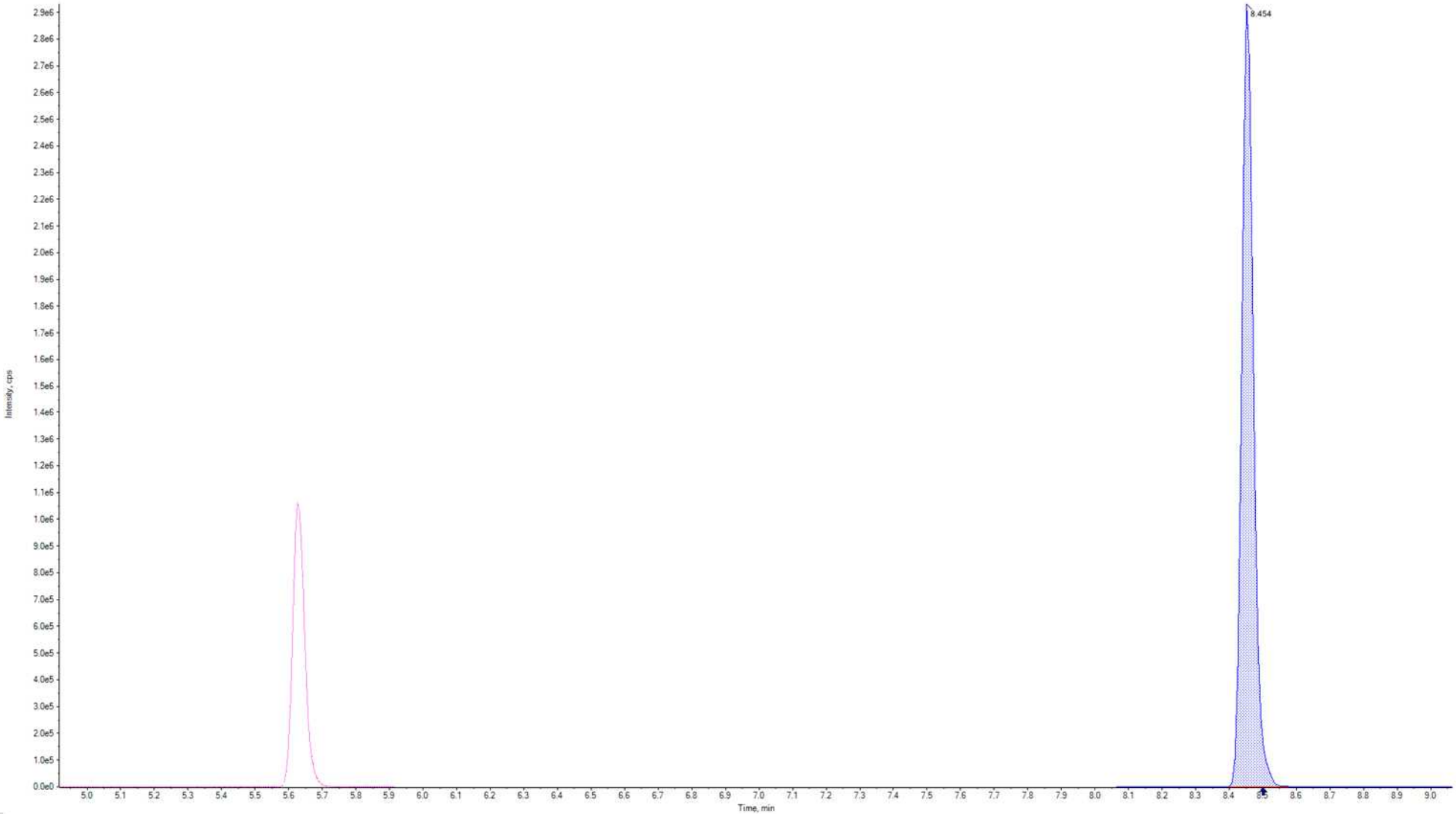
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

ADONA_2
Sample: WG1971858-3 S/N:24382.8 Points Across peak:40



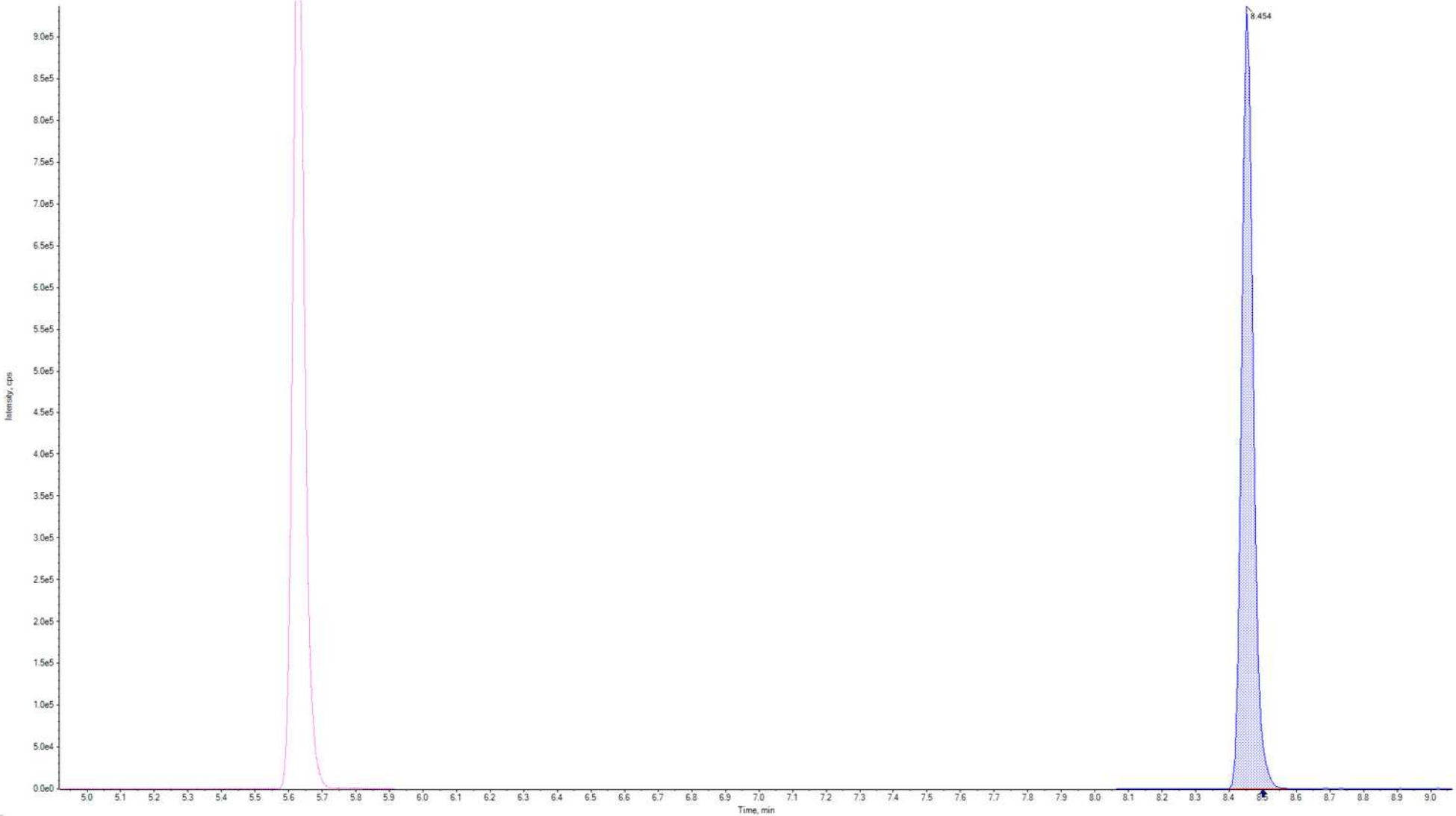
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS
Sample: WG1971858-3 S/N:143070.0 Points Across peak:34



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
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Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS_2
Sample: WG1971858-3 S/N:4417393.2 Points Across peak:35



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
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11Cl-PF3OUdS
Sample: WG1971858-3 S/N:4464.0 Points Across peak:43



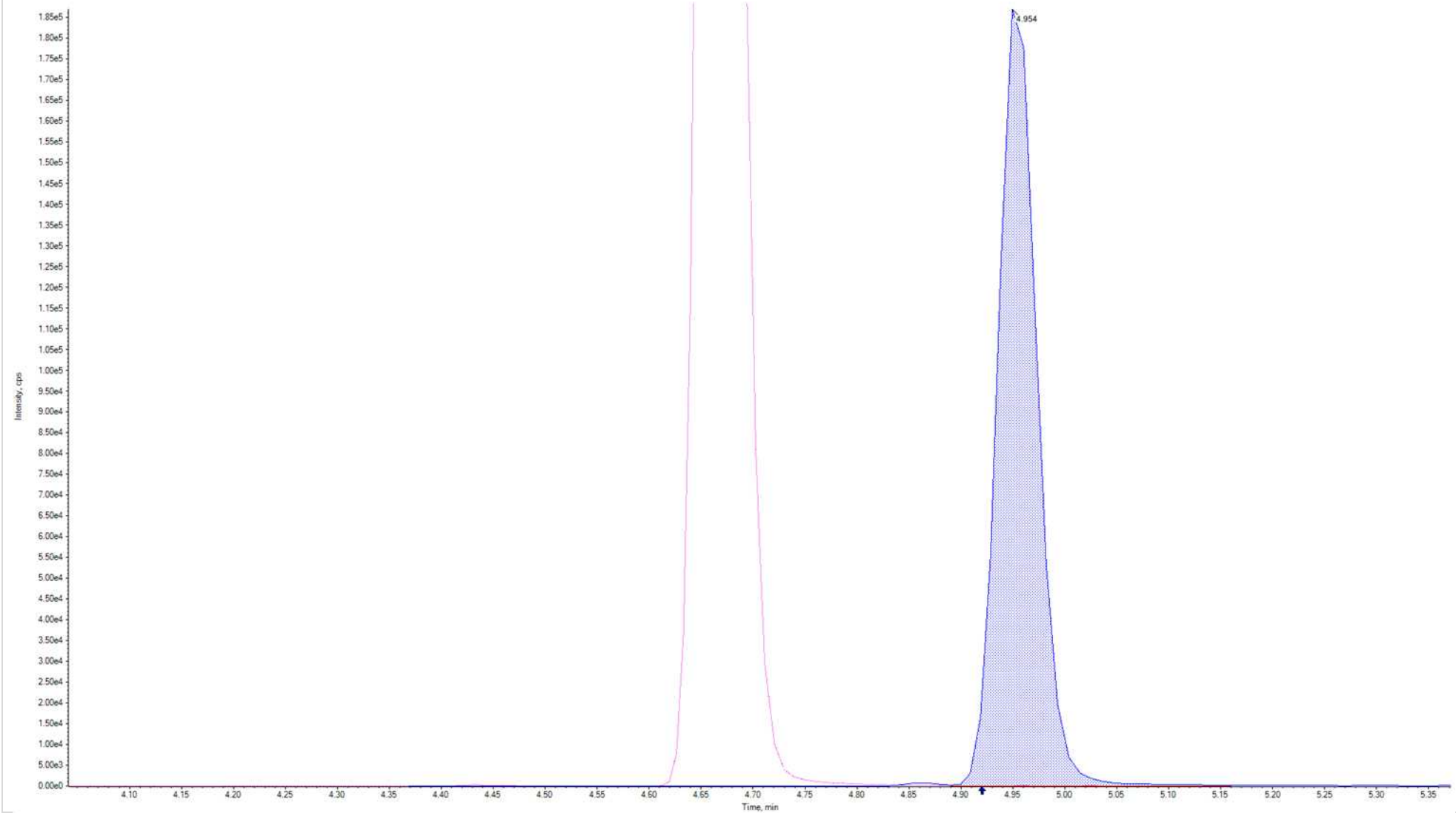
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

11Cl-PF3OUdS_2
Sample: WG1971858-3 S/N:26255.2 Points Across peak:37



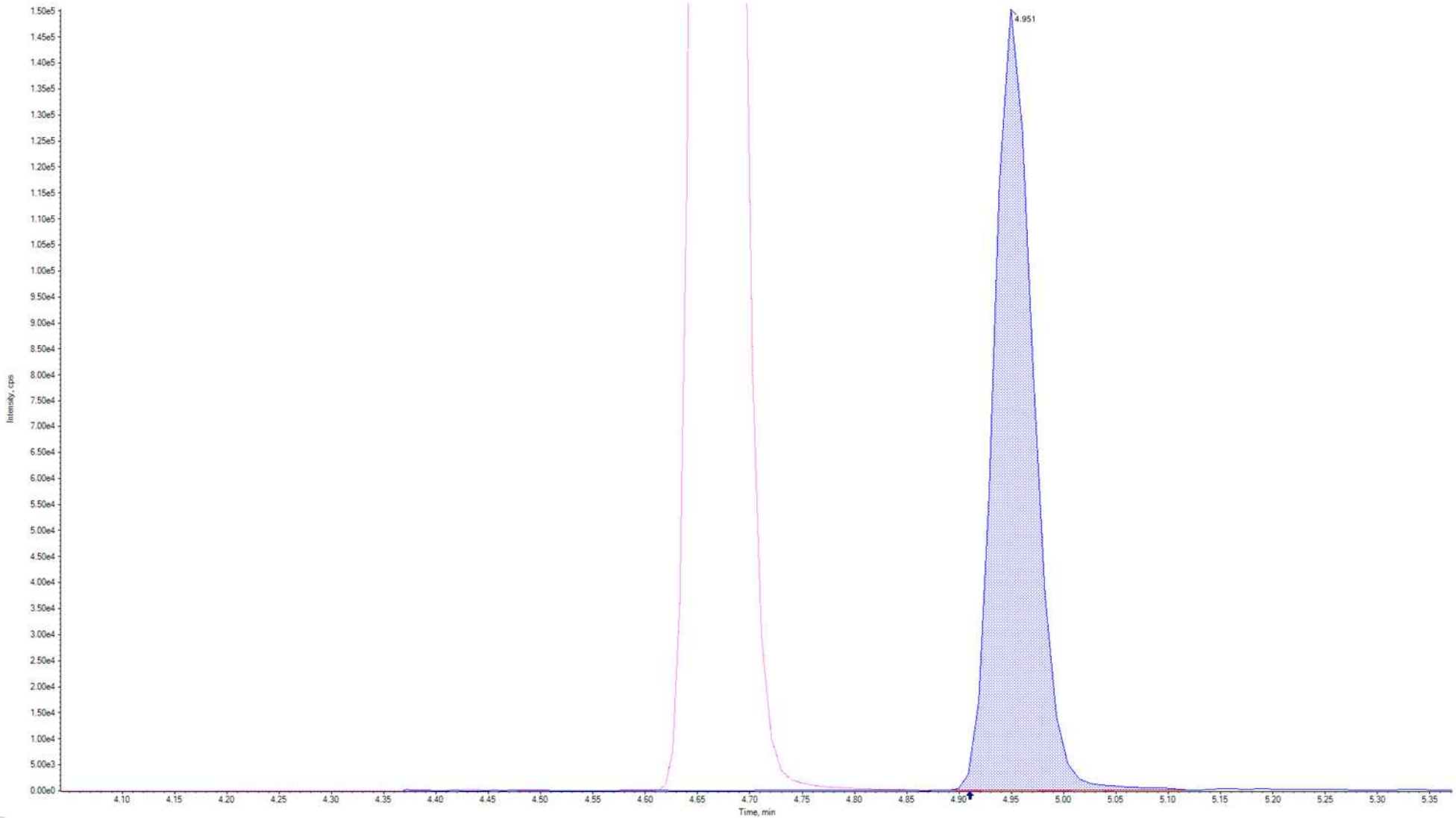
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

3:3FTCA
Sample: WG1971858-3 S/N:1711675.5 Points Across peak:29



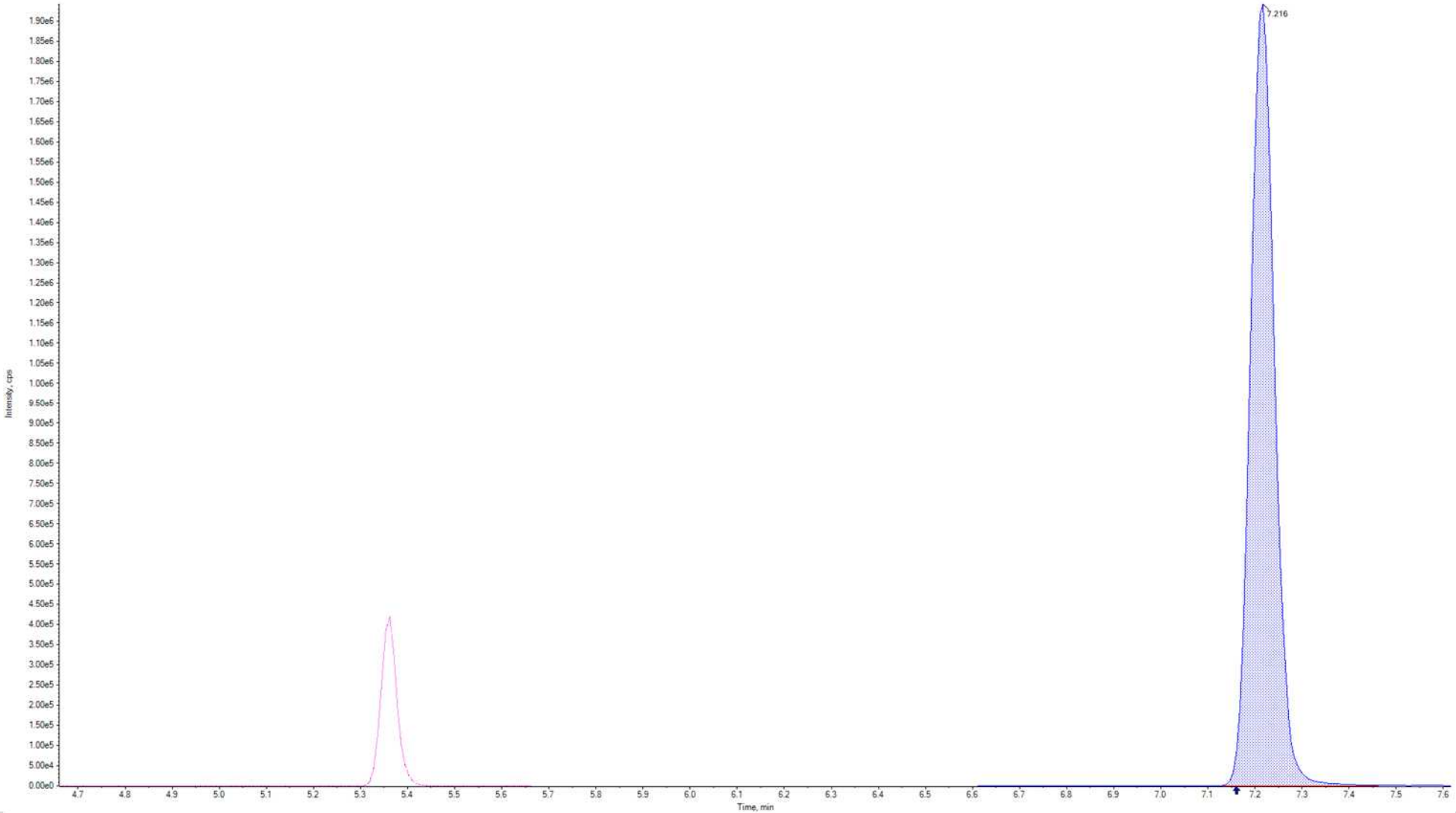
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
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3:3FTCA_2
Sample: WG1971858-3 S/N:4433.7 Points Across peak:27



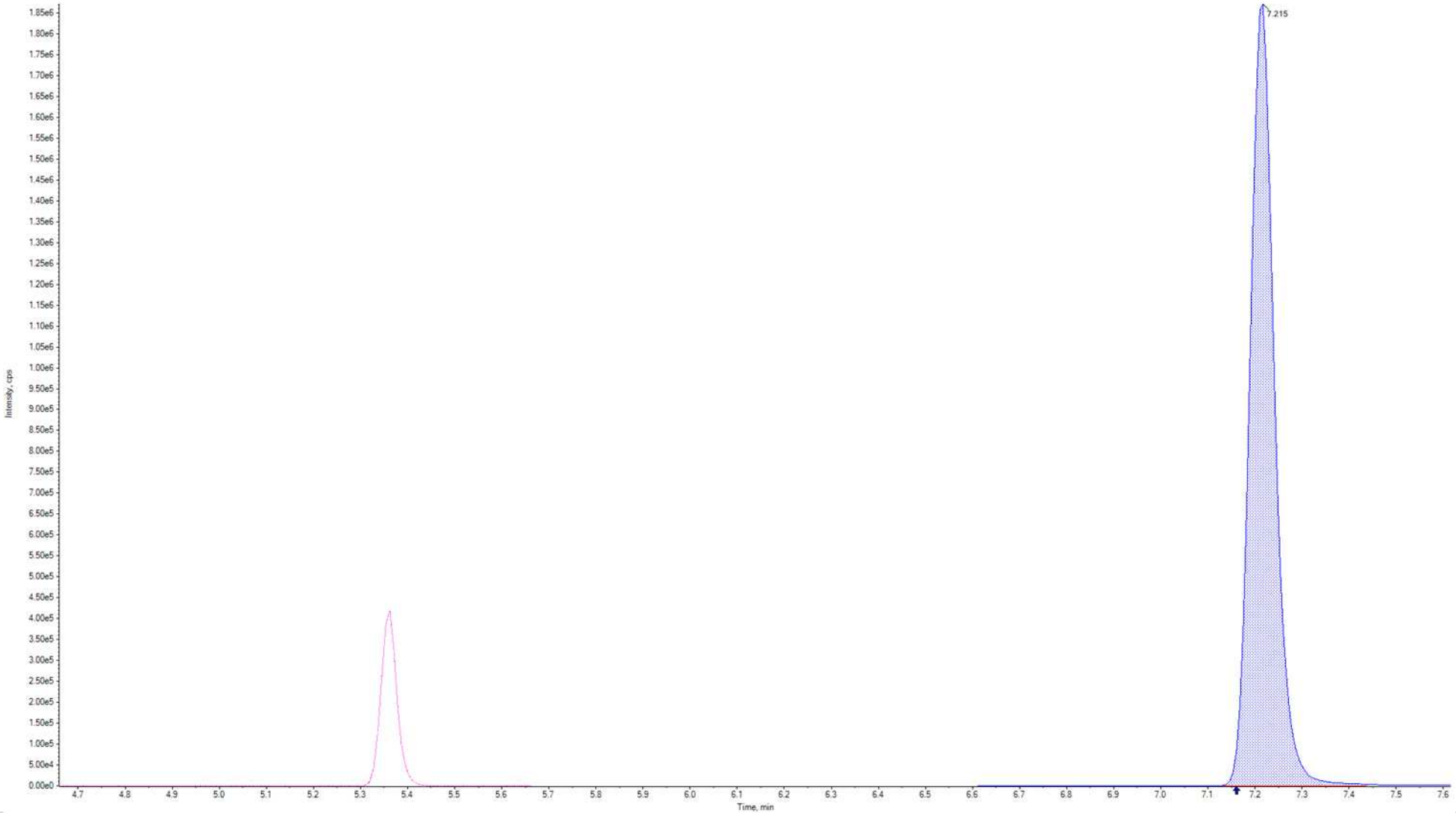
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Last Altered: 9/17/2024 9:07:16 AM
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5:3FTCA
Sample: WG1971858-3 S/N:142779.2 Points Across peak:59



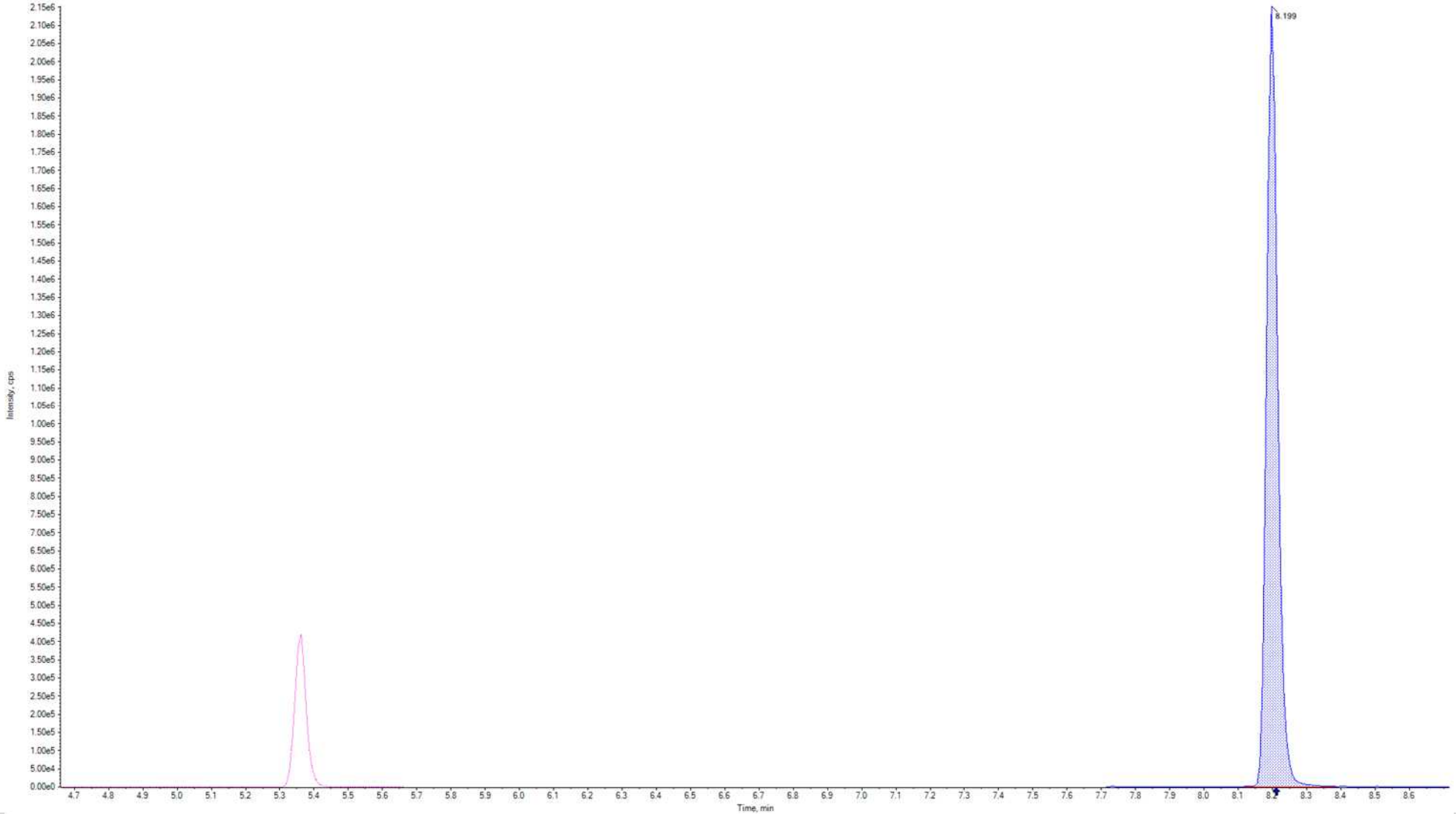
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA_2
Sample: WG1971858-3 S/N:20605.6 Points Across peak:58



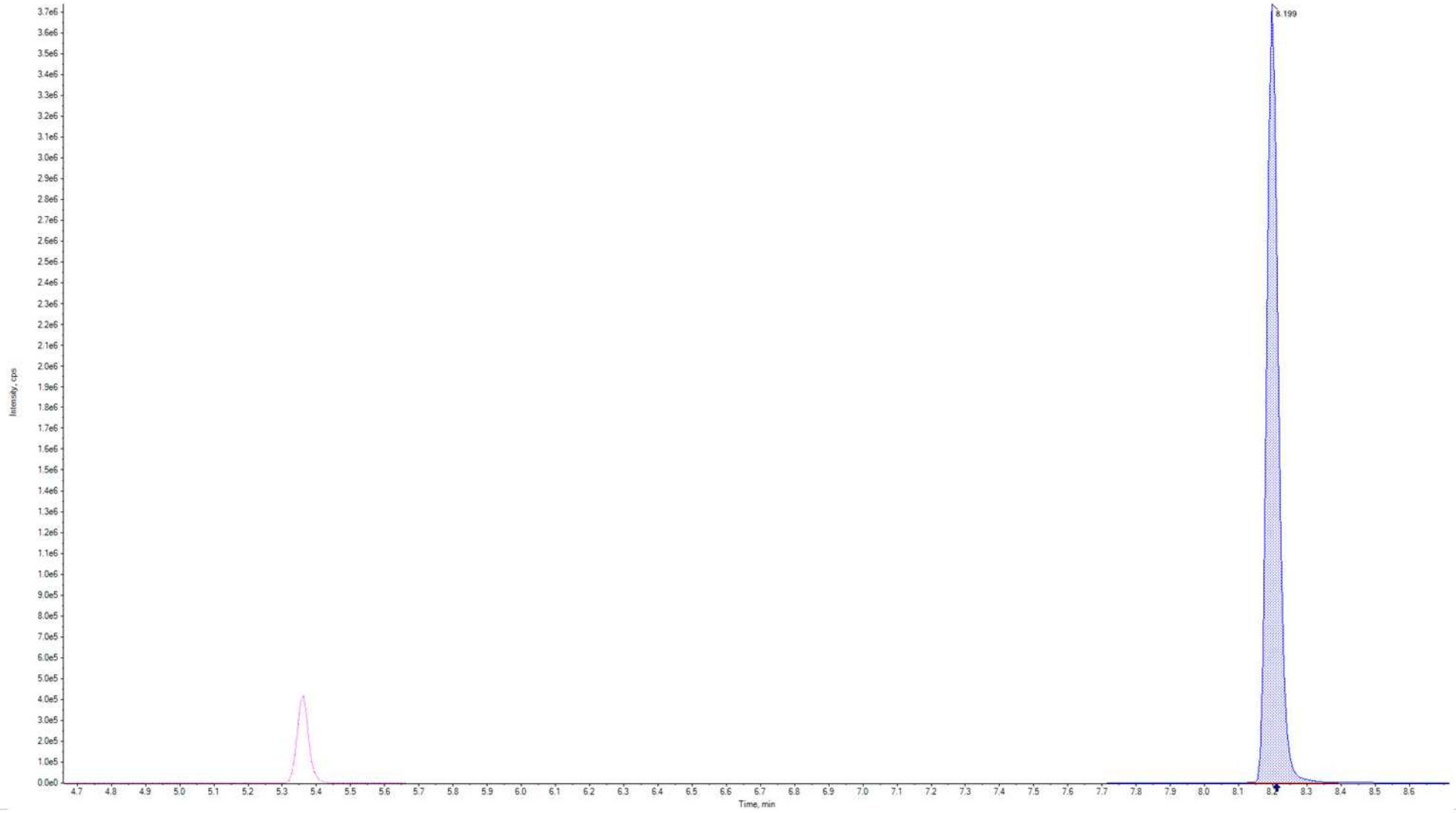
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA
Sample: WG1971858-3 S/N:41958.4 Points Across peak:38



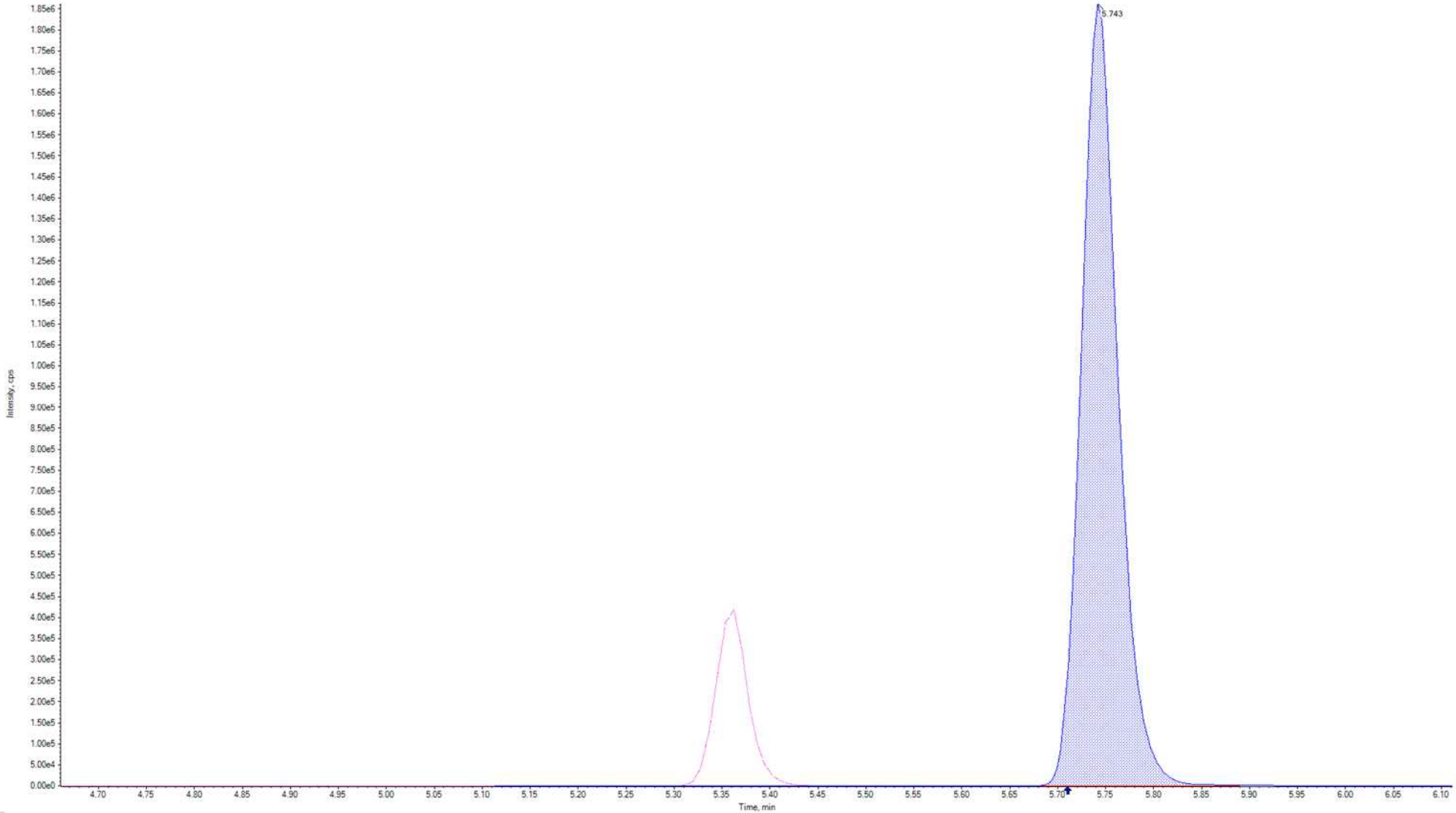
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA_2
Sample: WG1971858-3 S/N:260857.4 Points Across peak:36



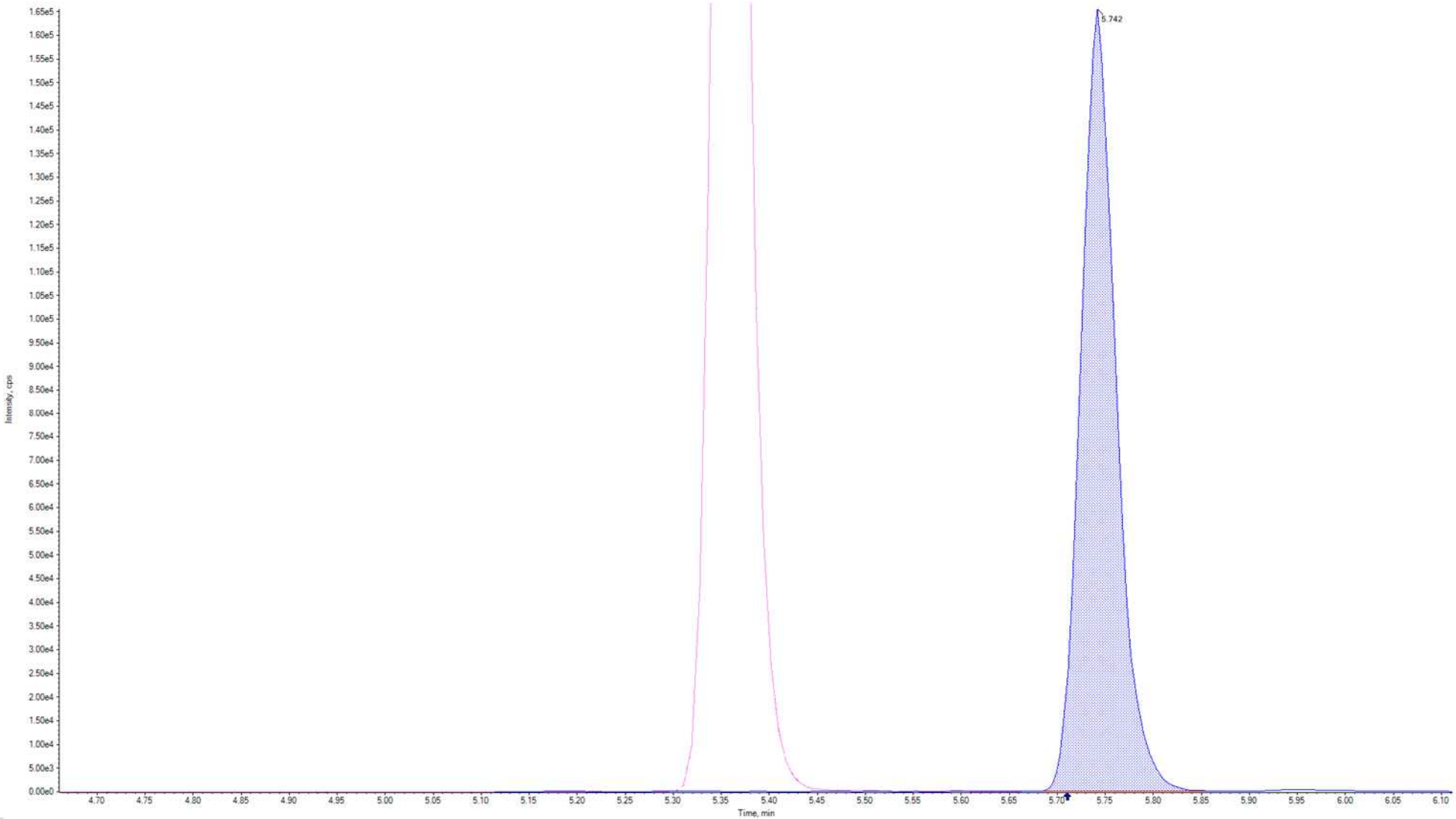
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Alpha Analytical Inc.
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PFEESA
Sample: WG1971858-3 S/N:11375.6 Points Across peak:45



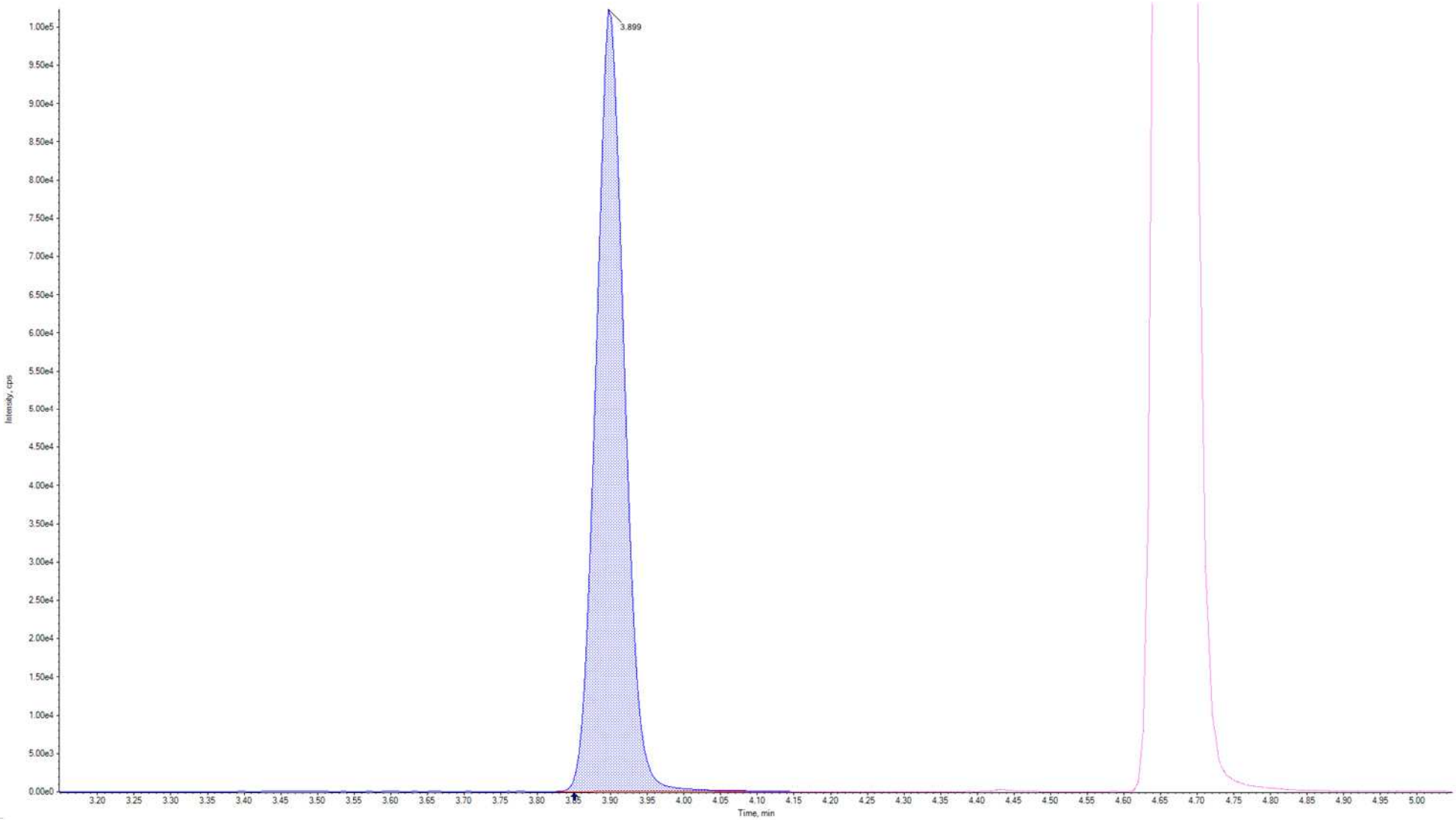
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Alpha Analytical Inc.
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PFEESA_2
Sample: WG1971858-3 S/N:4965.8 Points Across peak:37



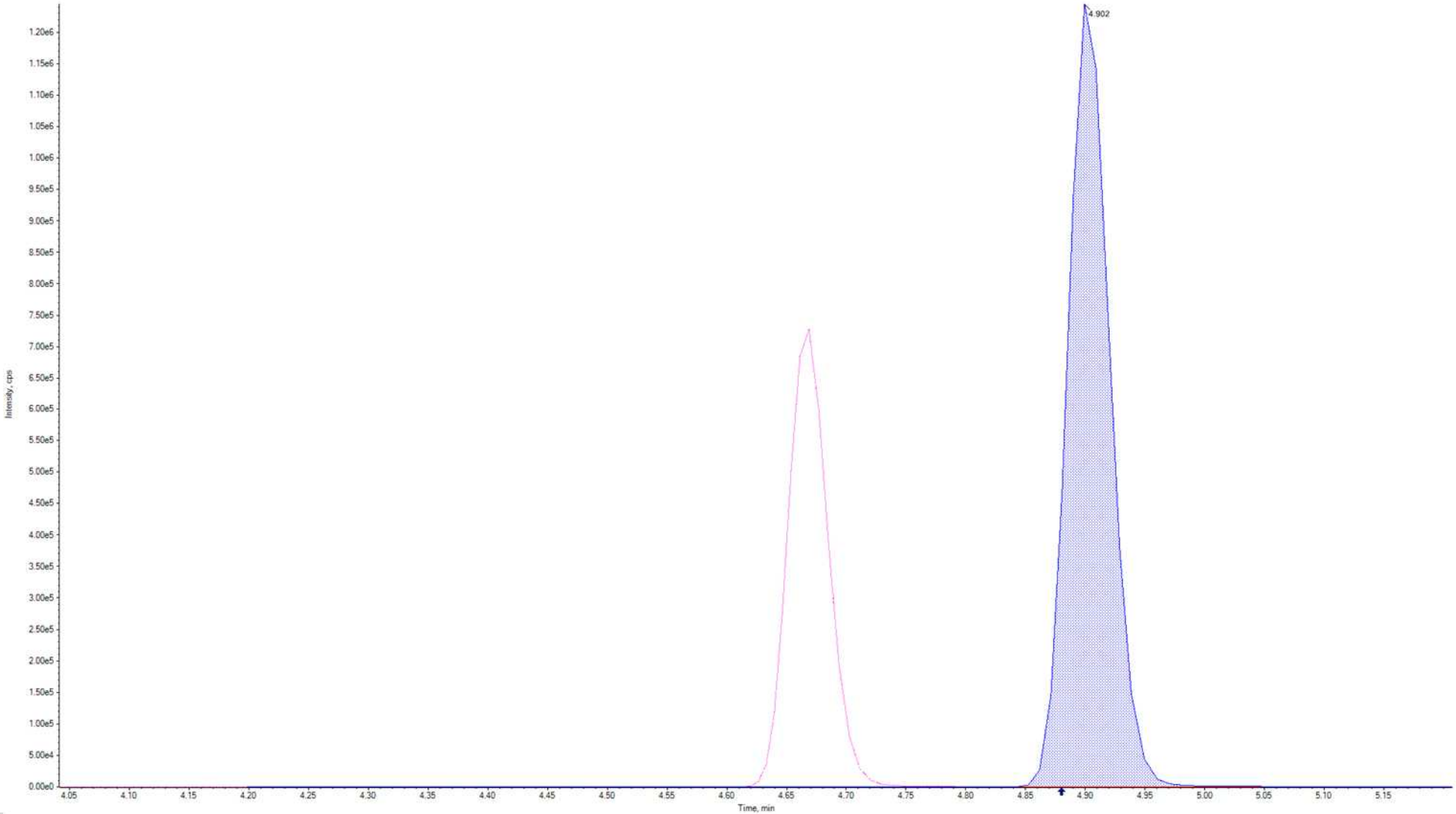
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Alpha Analytical Inc.
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PFMPA
Sample: WG1971858-3 S/N:5971.3 Points Across peak:71



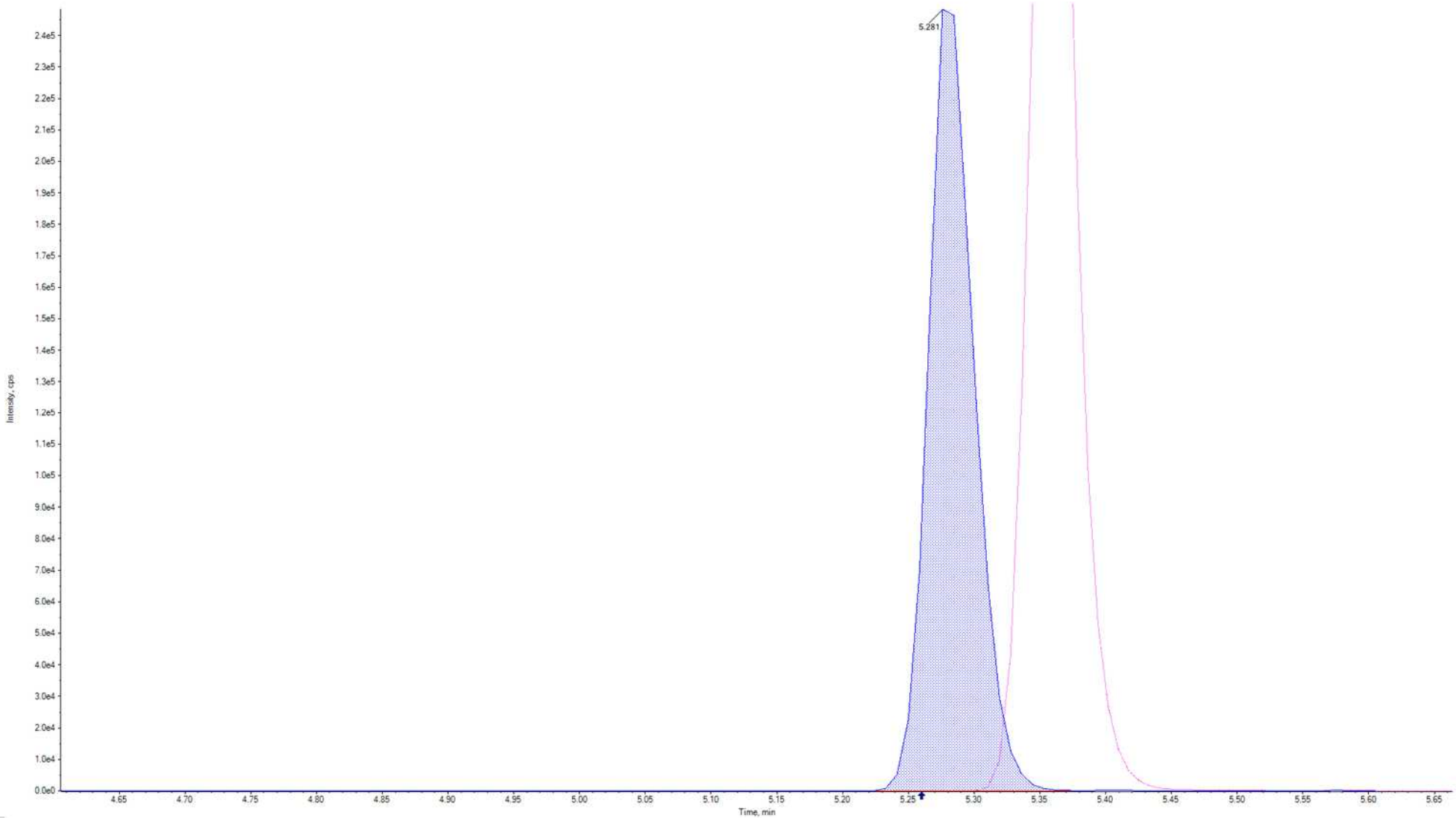
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Alpha Analytical Inc.
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PFMBA
Sample: WG1971858-3 S/N:35924.8 Points Across peak:29



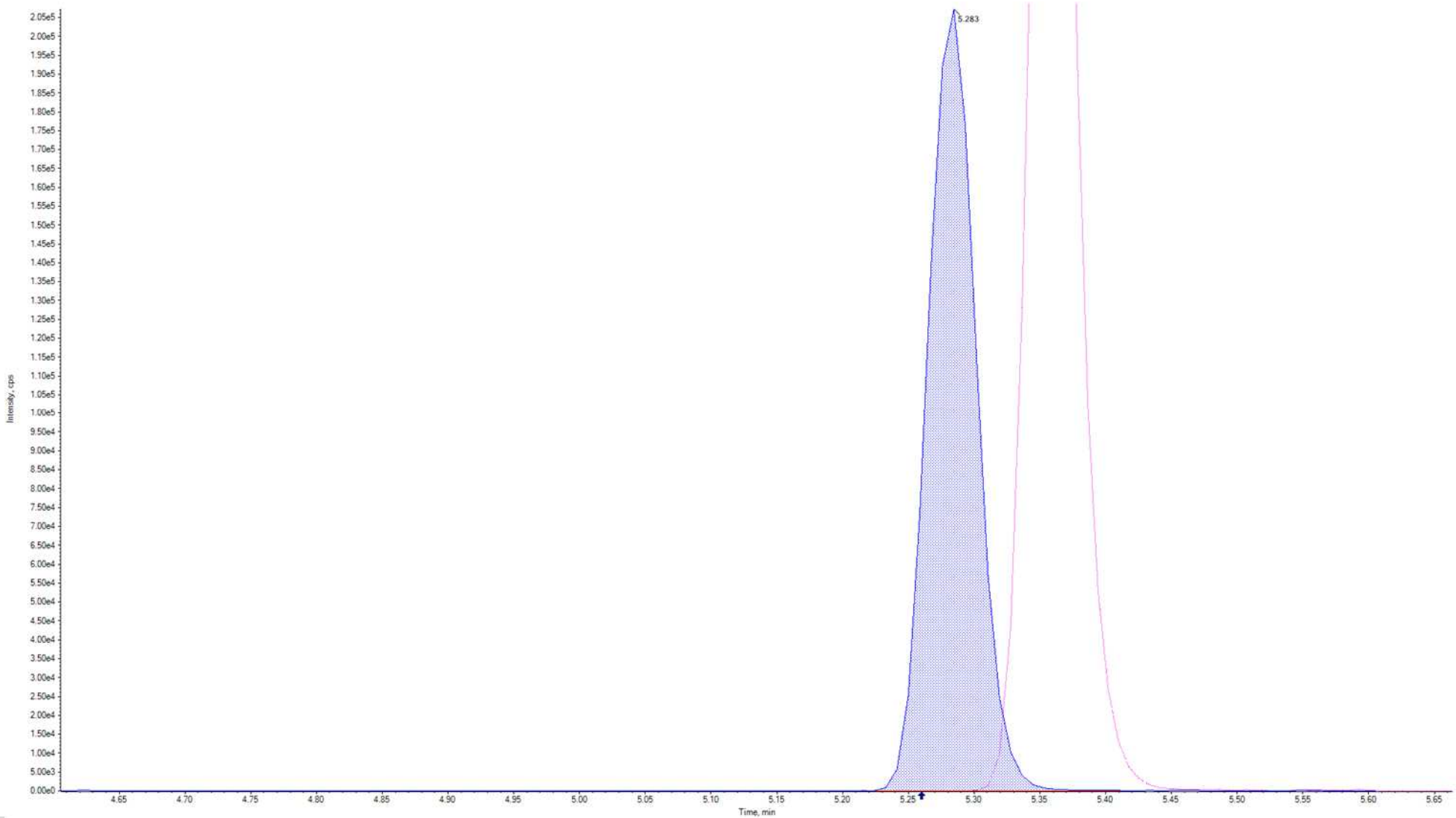
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NFDHA
Sample: WG1971858-3 S/N:4156.7 Points Across peak:21



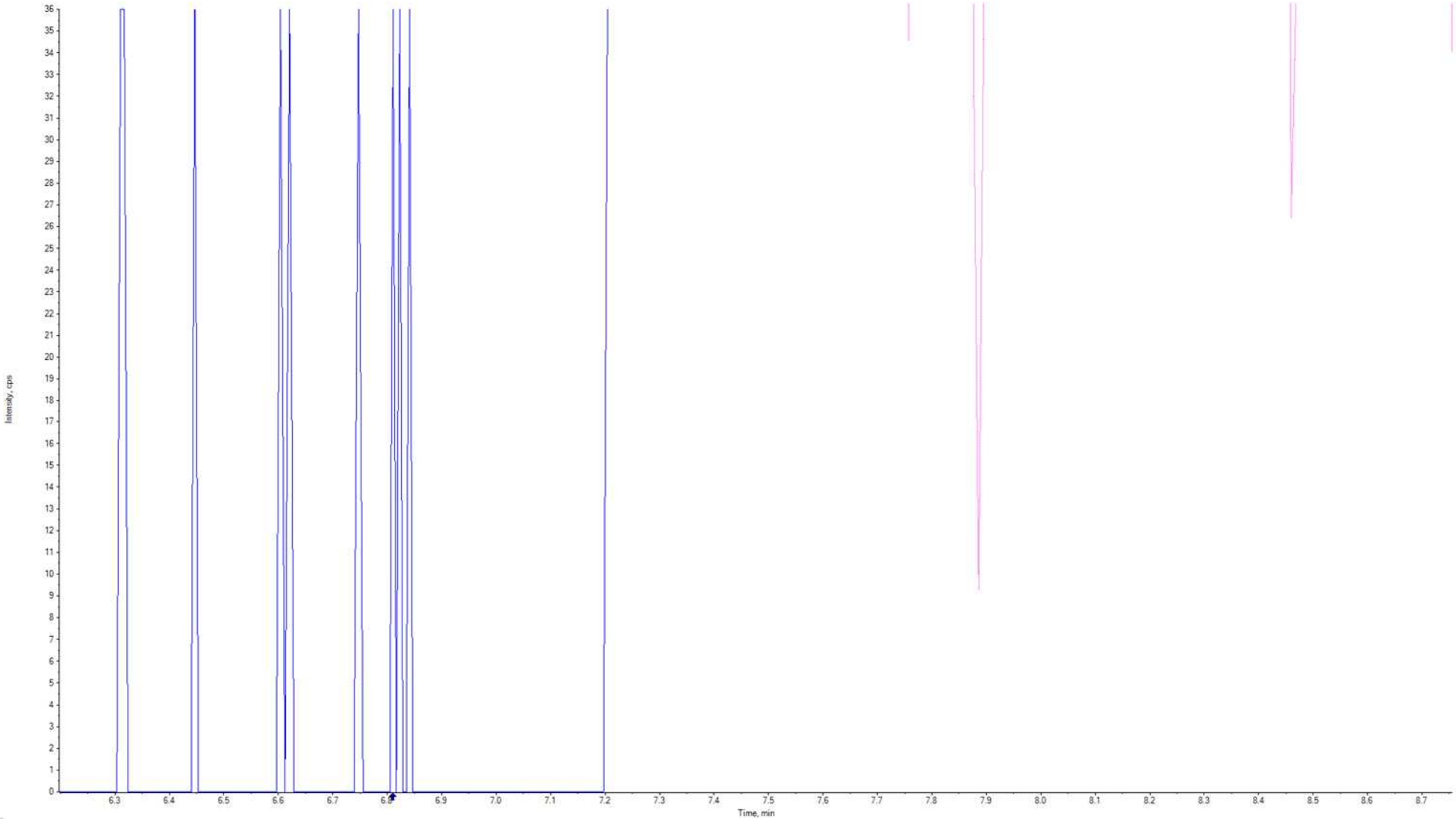
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NFDHA_2
Sample: WG1971858-3 S/N:12852.9 Points Across peak:25



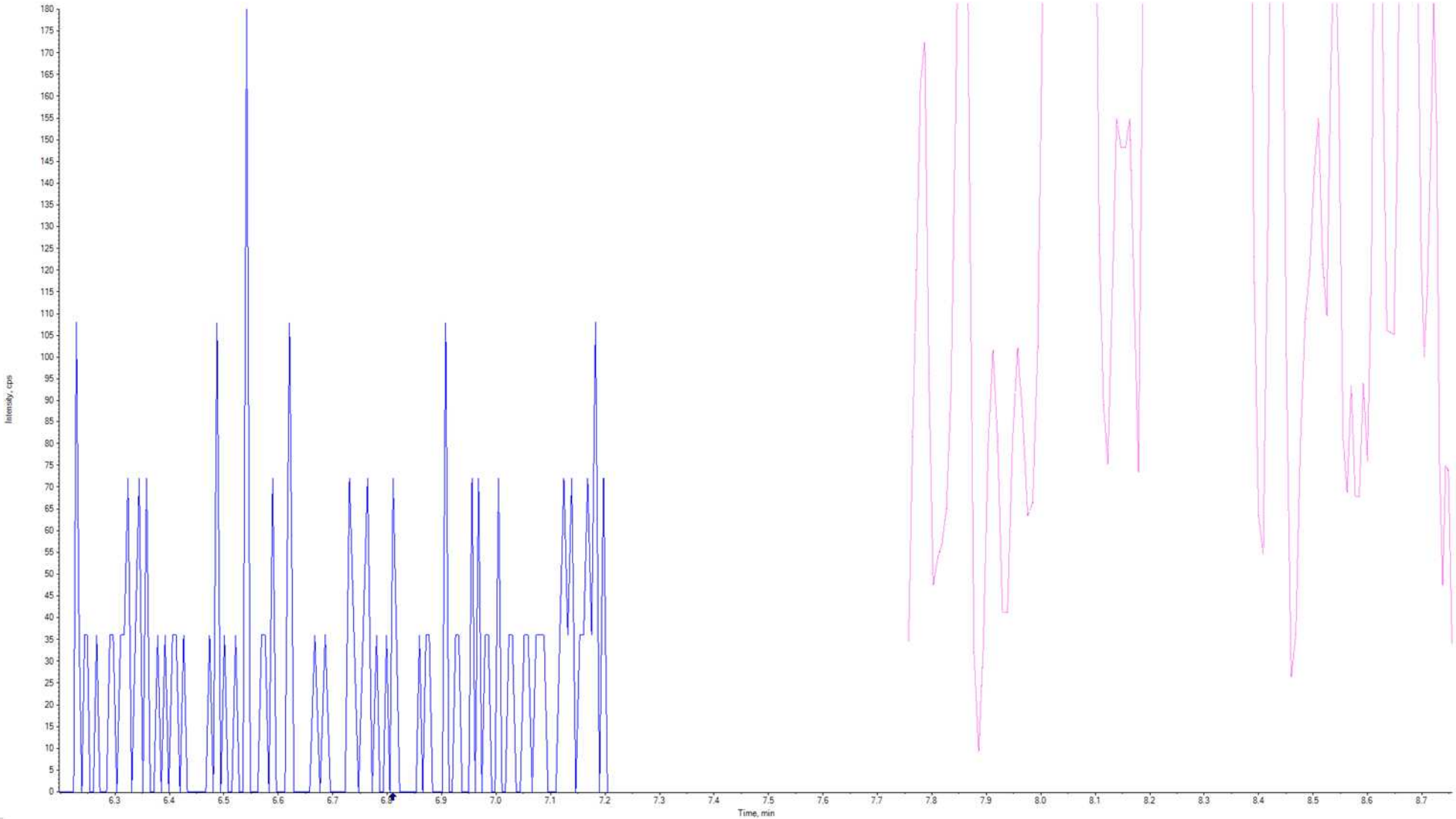
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

TDCA
Sample: WG1971858-3 S/N:N/A Points Across peak:N/A



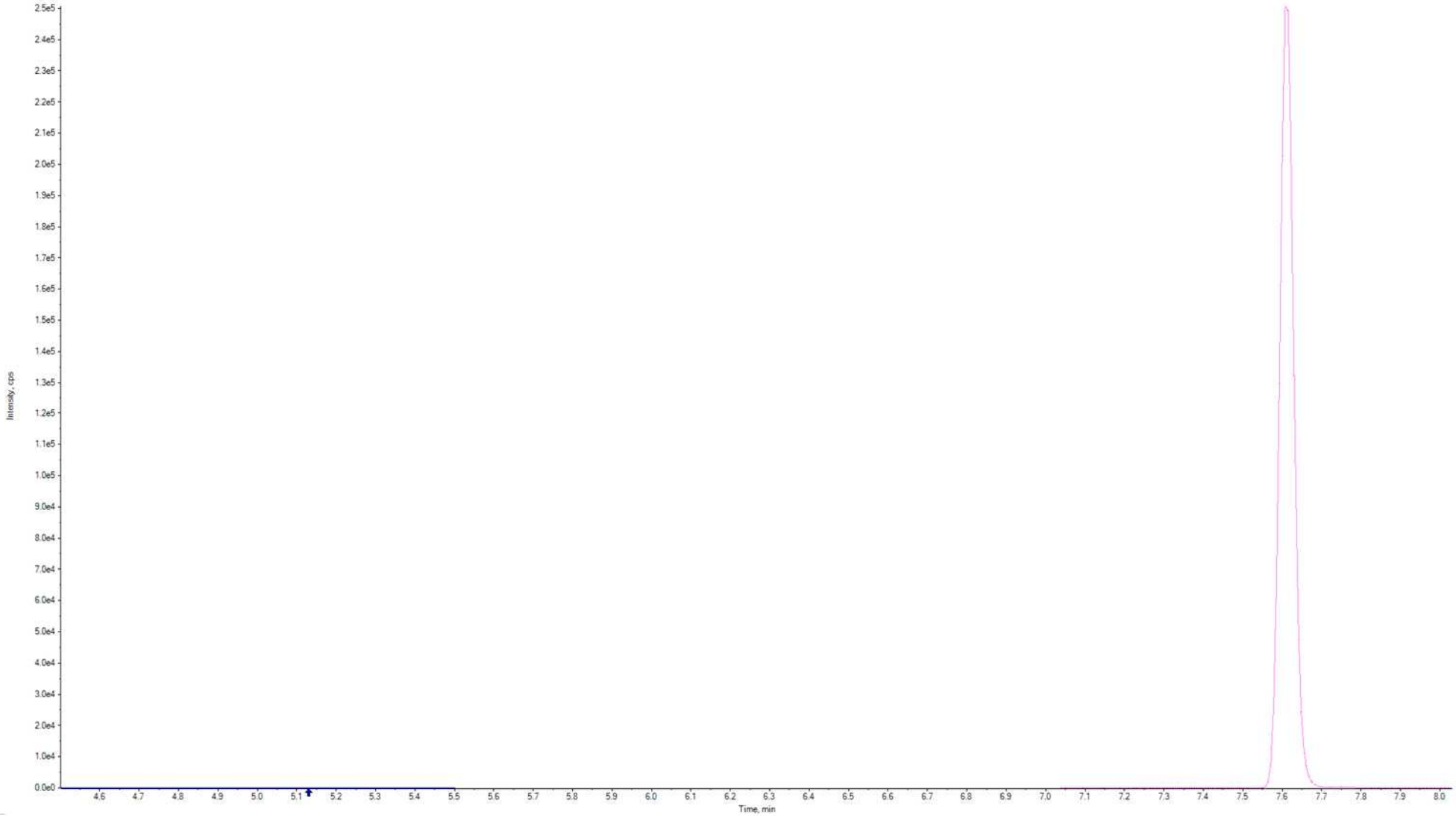
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

TDCA_2
Sample: WG1971858-3 S/N:N/A Points Across peak:N/A



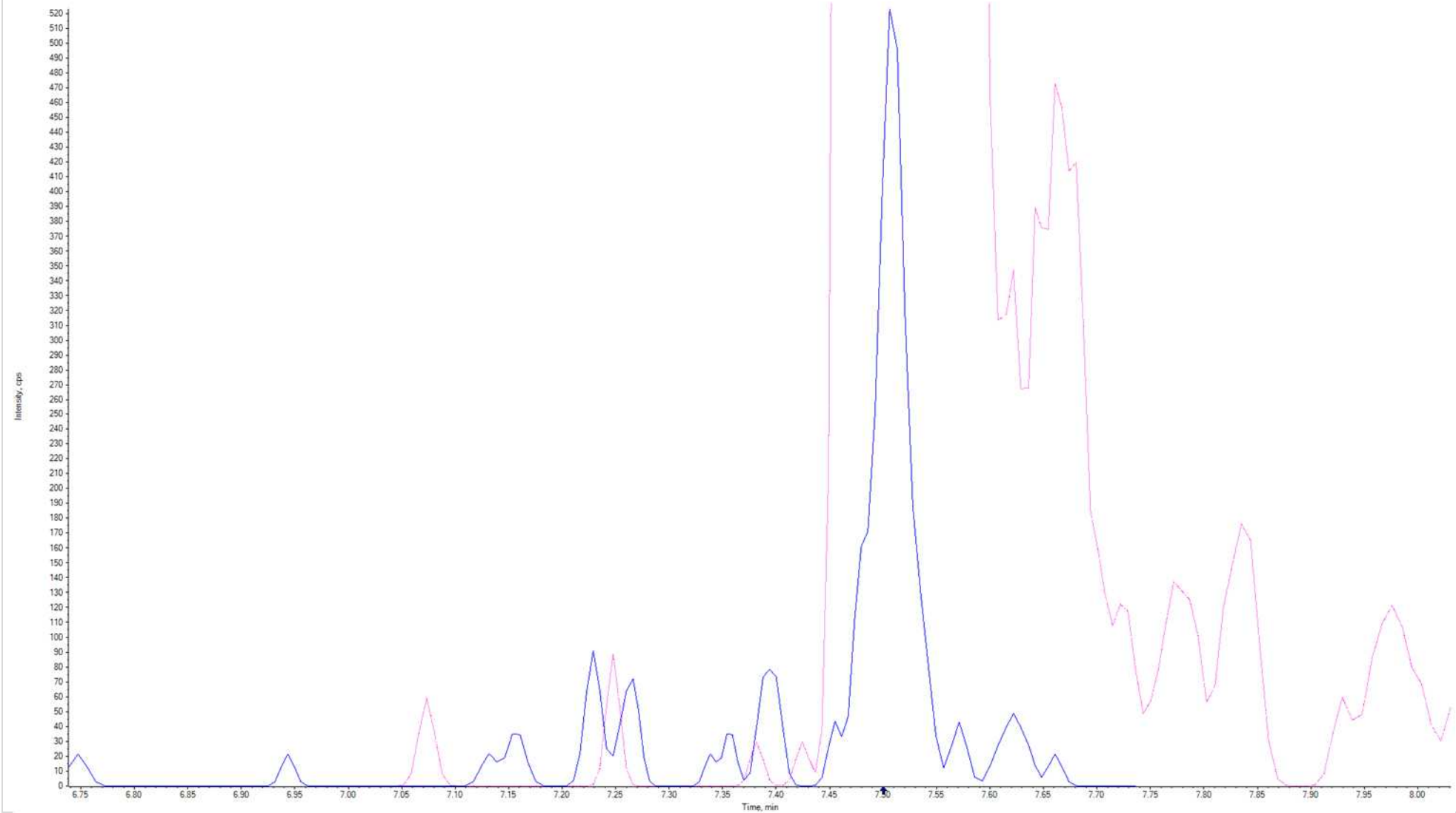
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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Generated: 9/17/2024 6:15:27 AM

13C2D4-4:2FTS
Sample: WG1971858-3 S/N:N/A Points Across peak:N/A

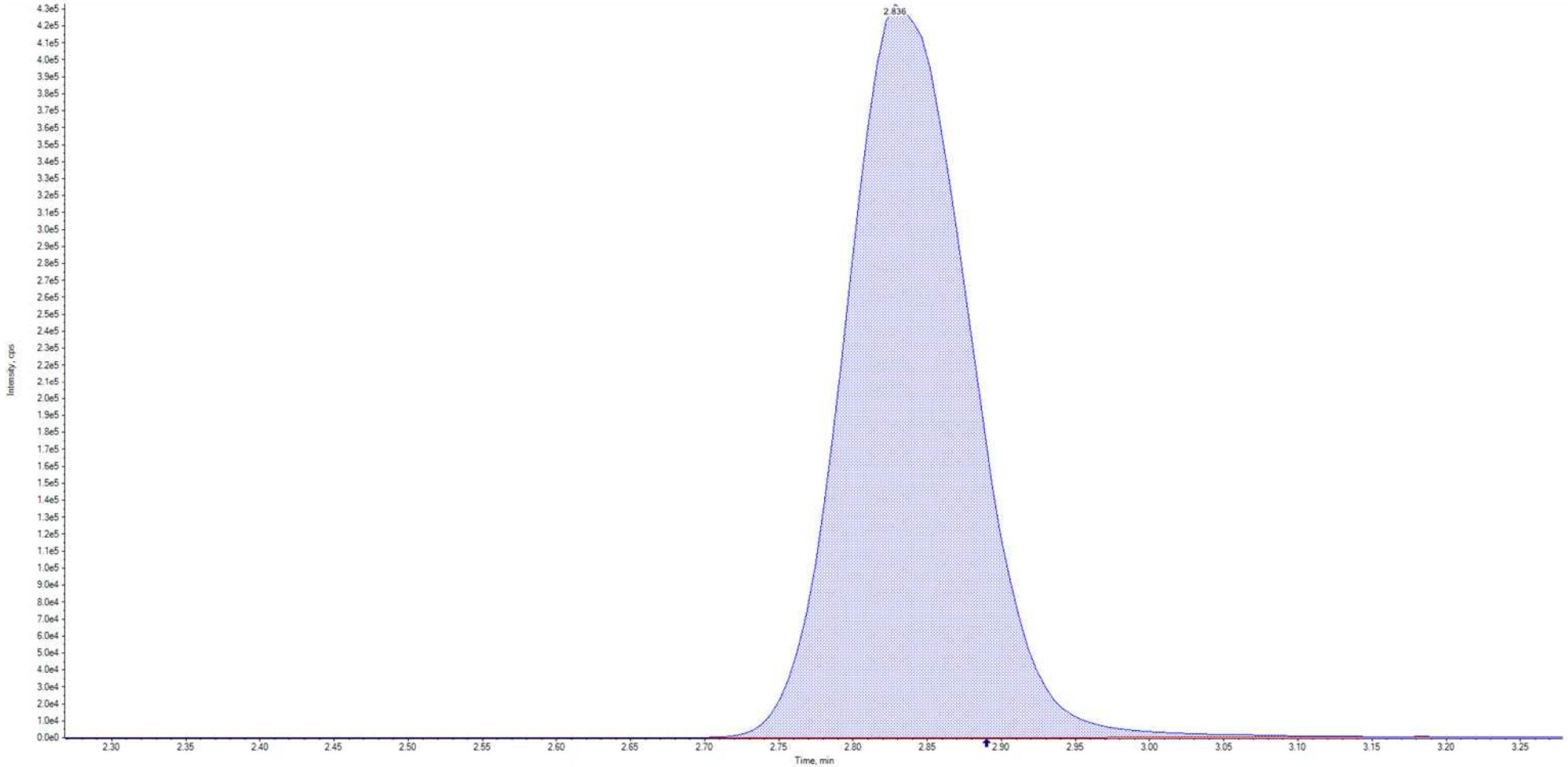


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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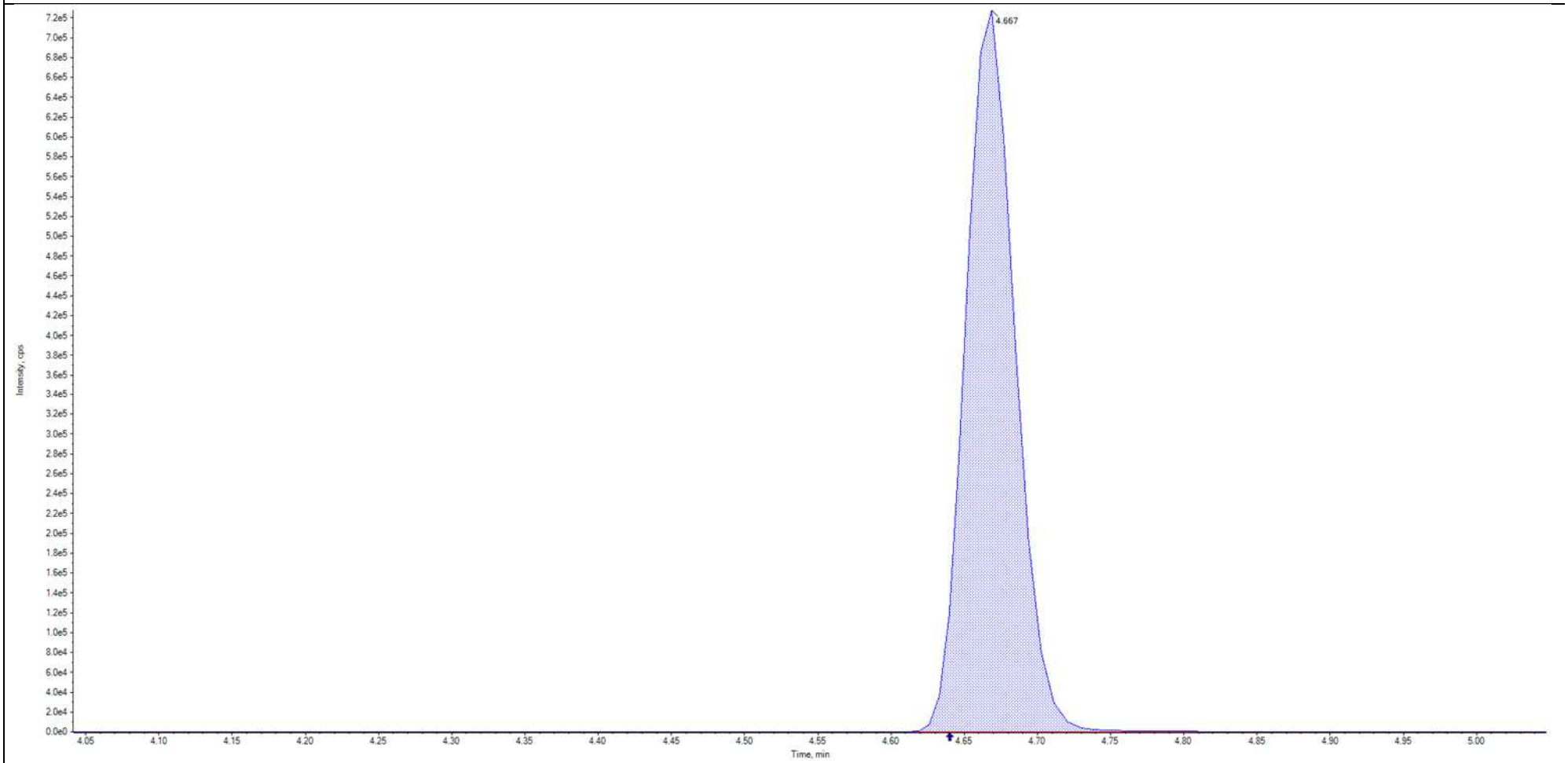
13C2-PFOA
Sample: WG1971858-3 S/N:N/A Points Across peak:N/A



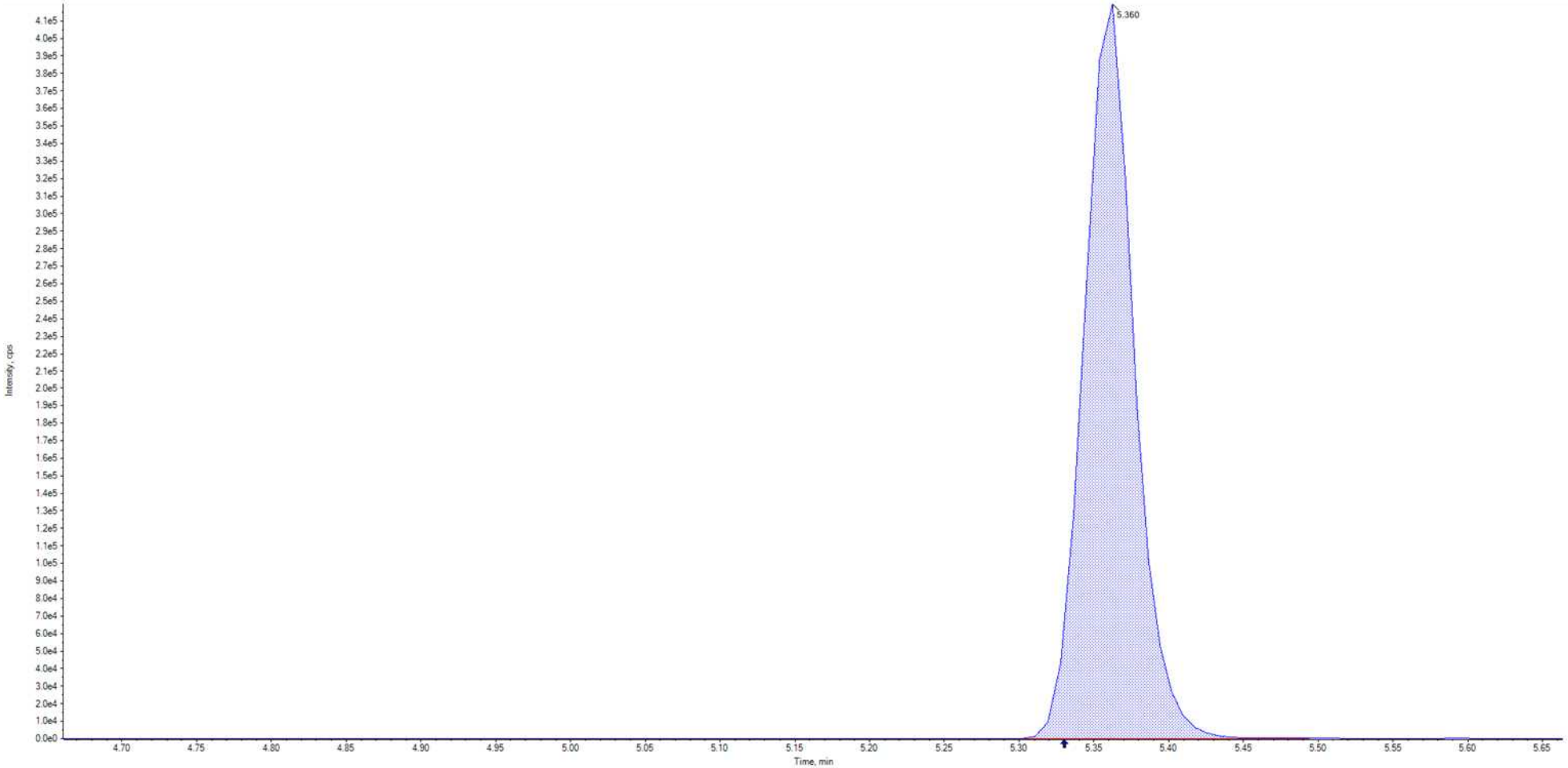
13C4-PFBA
Sample: WG1971858-3



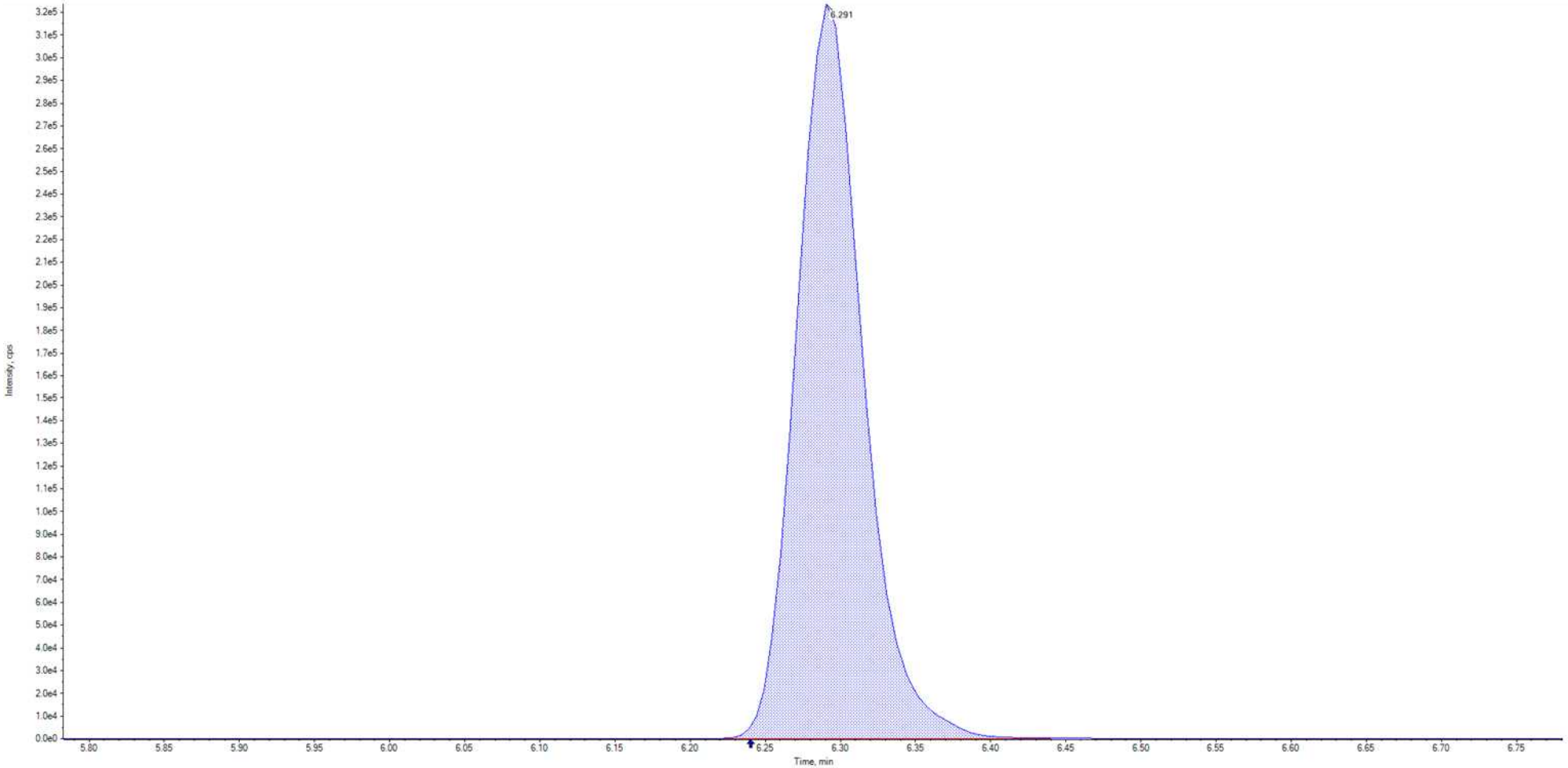
13C5-PFPeA
Sample: WG1971858-3



13C5-PFHxA
Sample: WG1971858-3

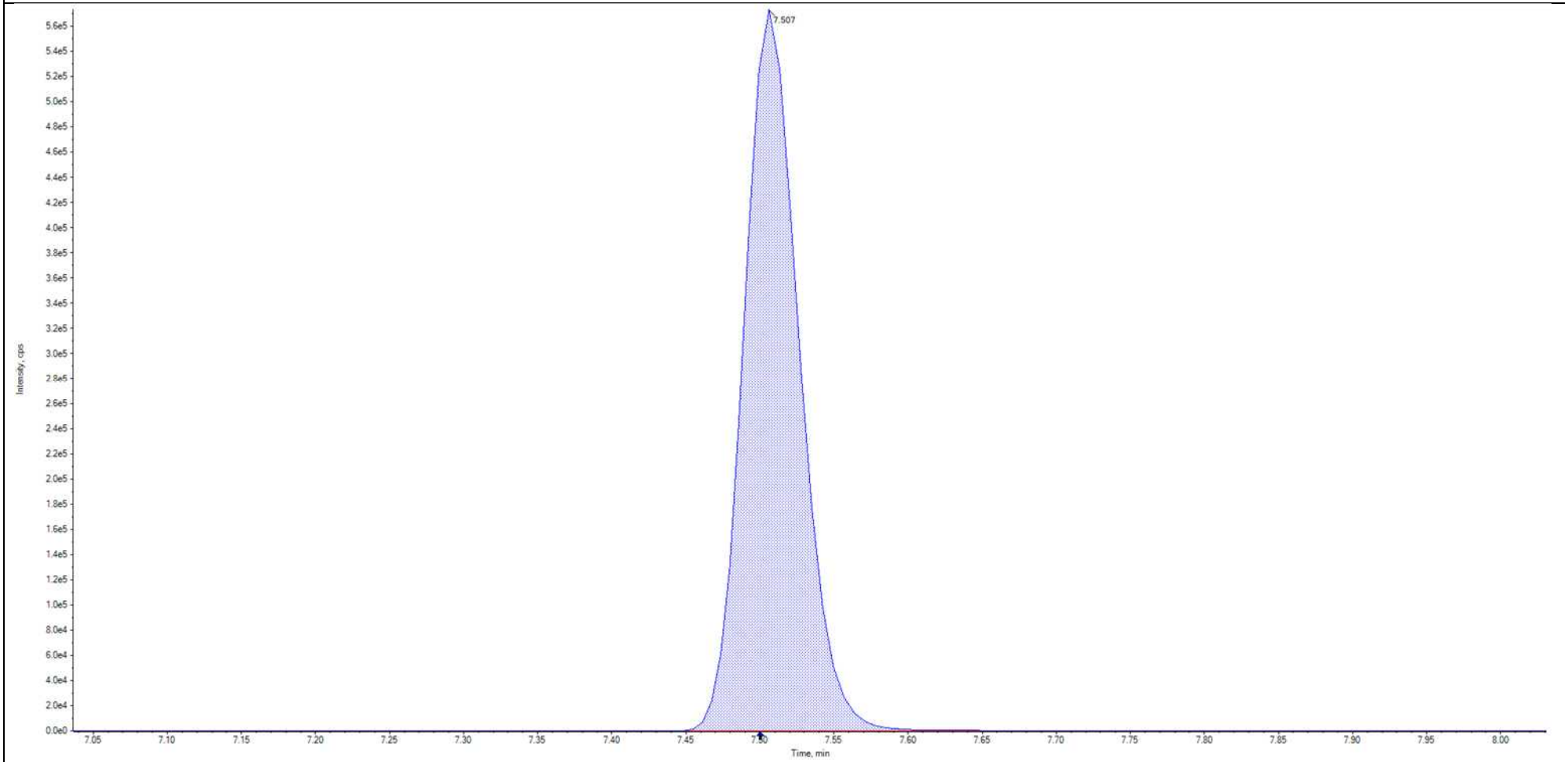


13C4-PFHpA
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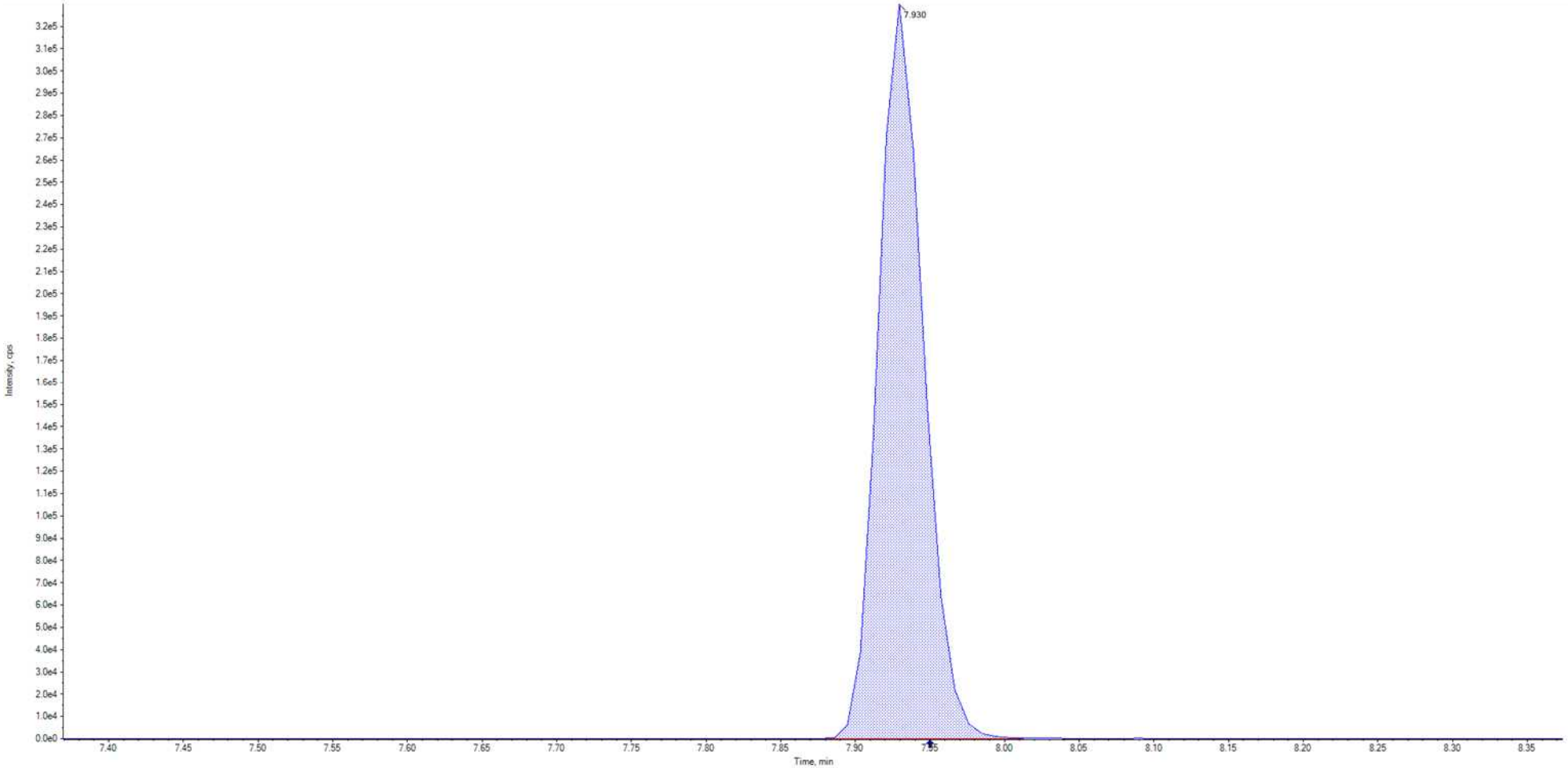


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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Generated: 9/17/2024 6:15:27 AM

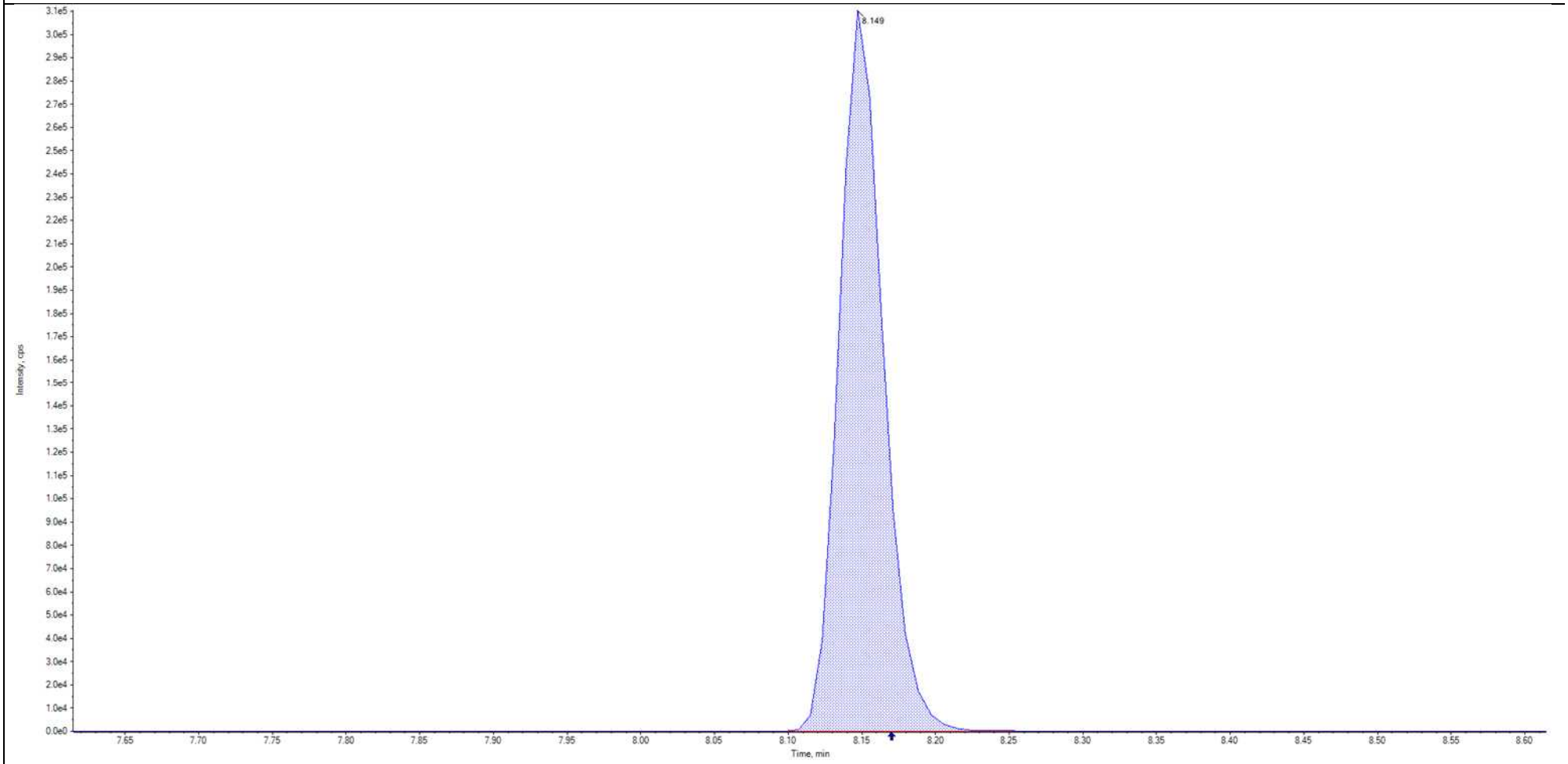
13C8-PFOA
Sample: WG1971858-3



13C9-PFNA
Sample: WG1971858-3

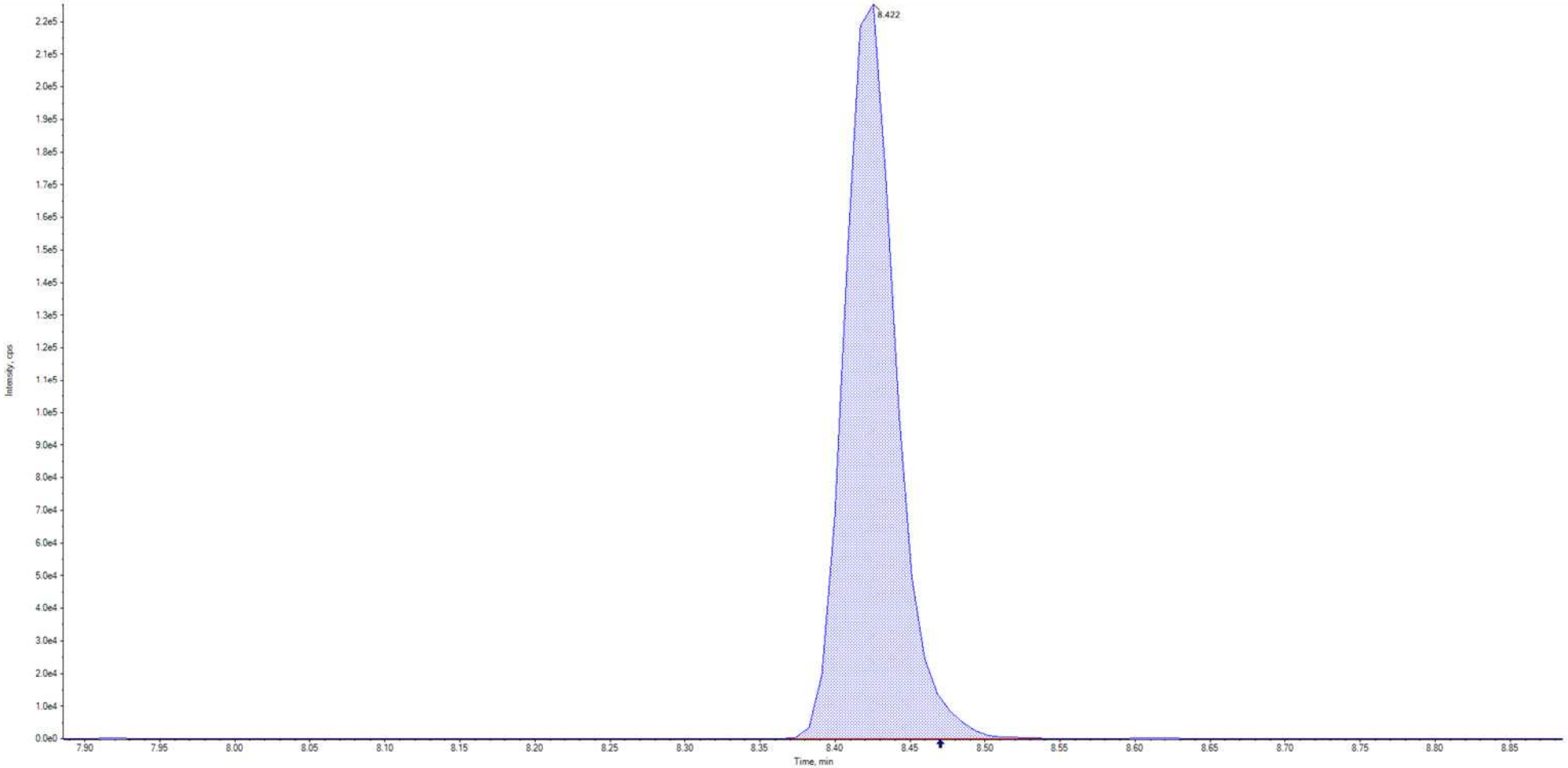


13C6-PFDA
Sample: WG1971858-3

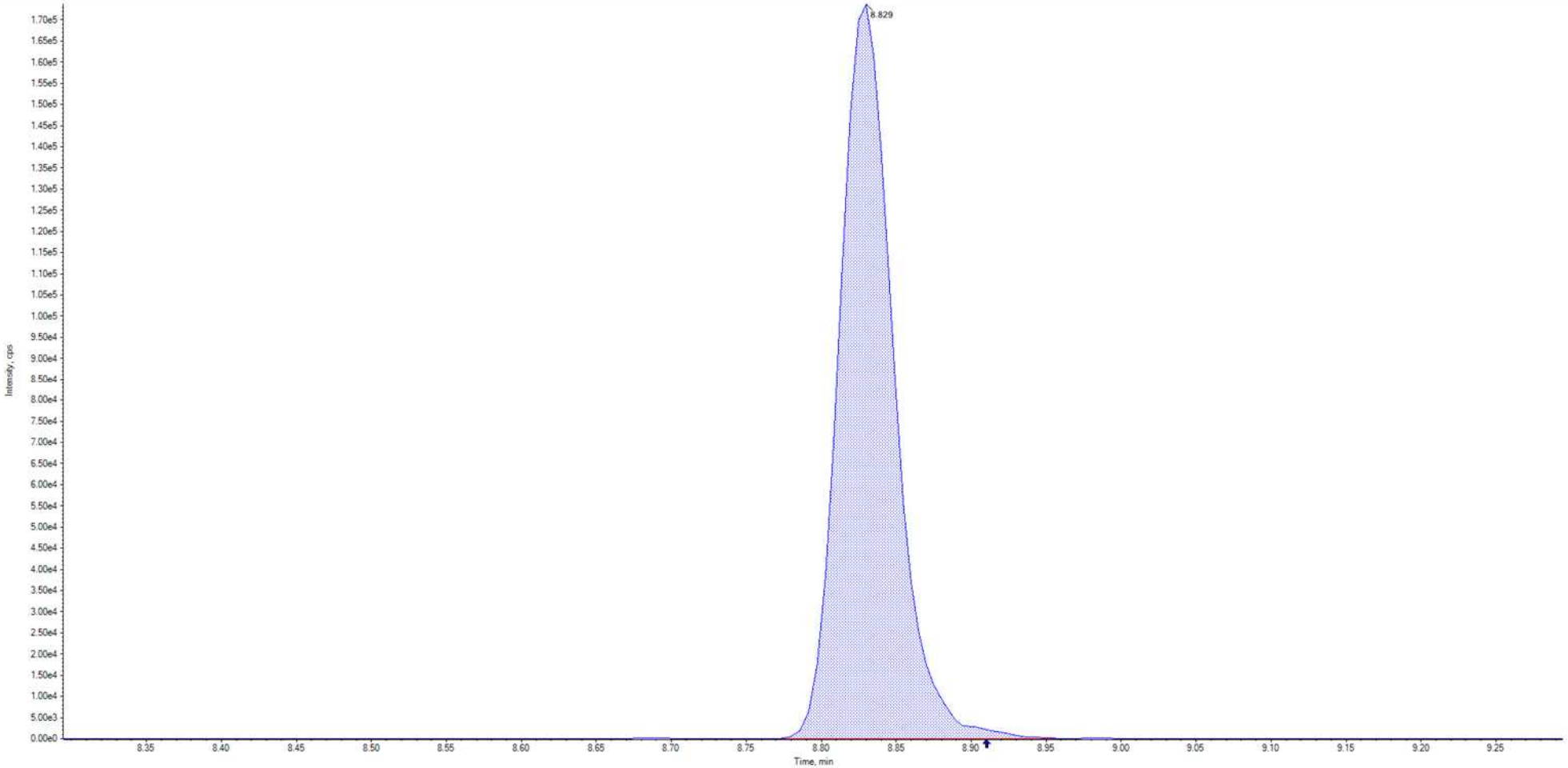


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

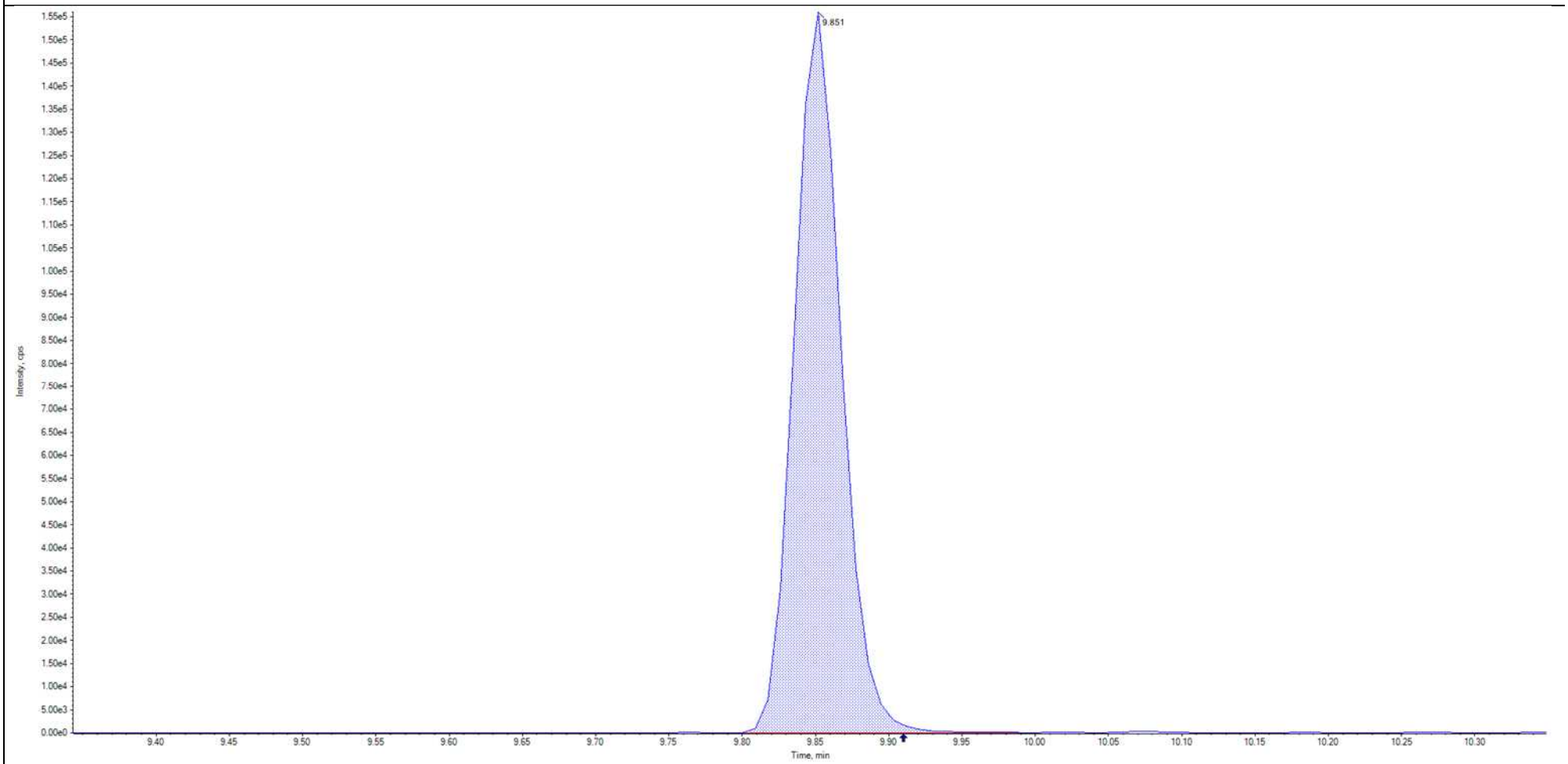
13C7-PFUnA
Sample: WG1971858-3



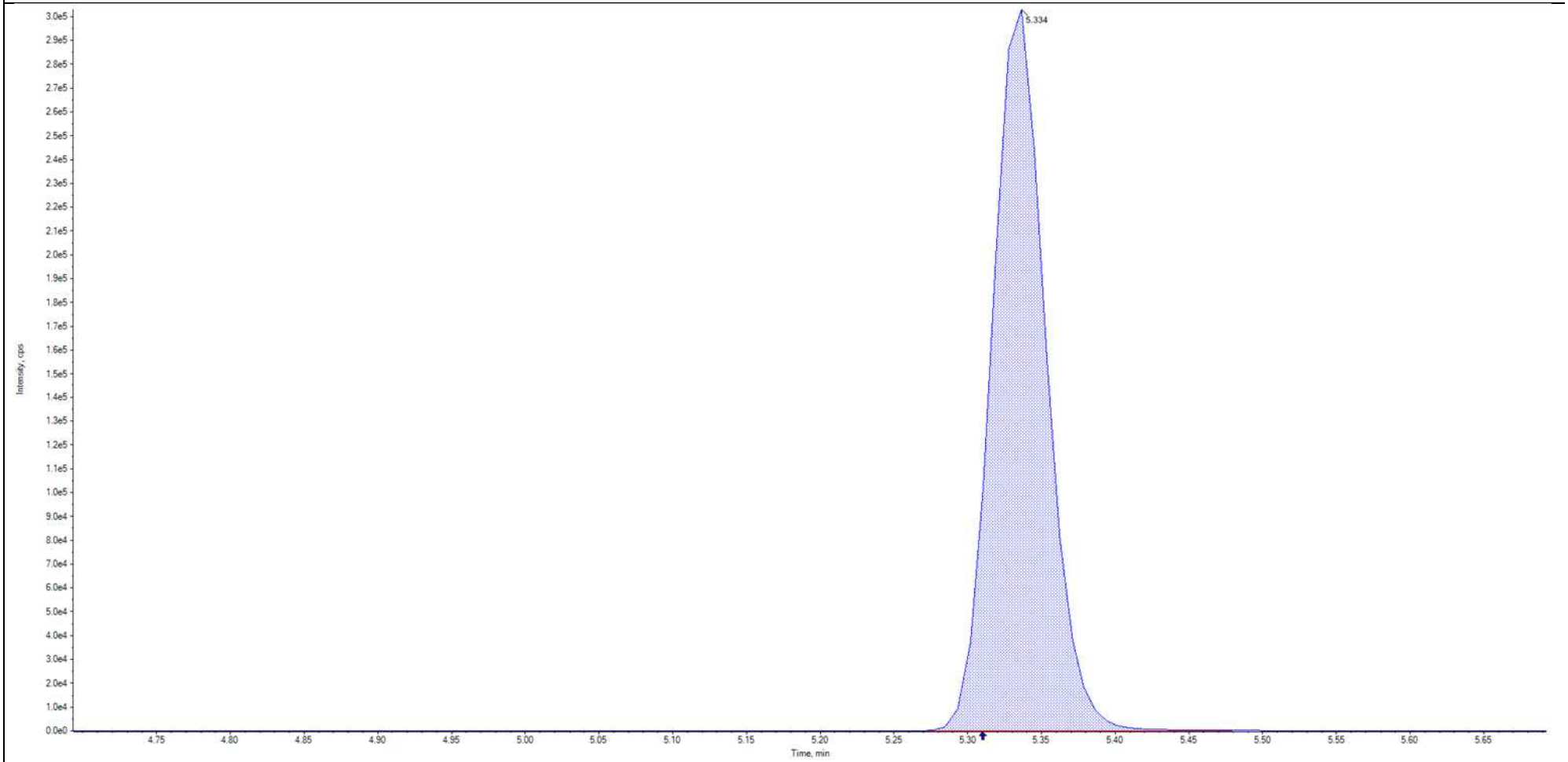
13C2-PFDoA
Sample: WG1971858-3



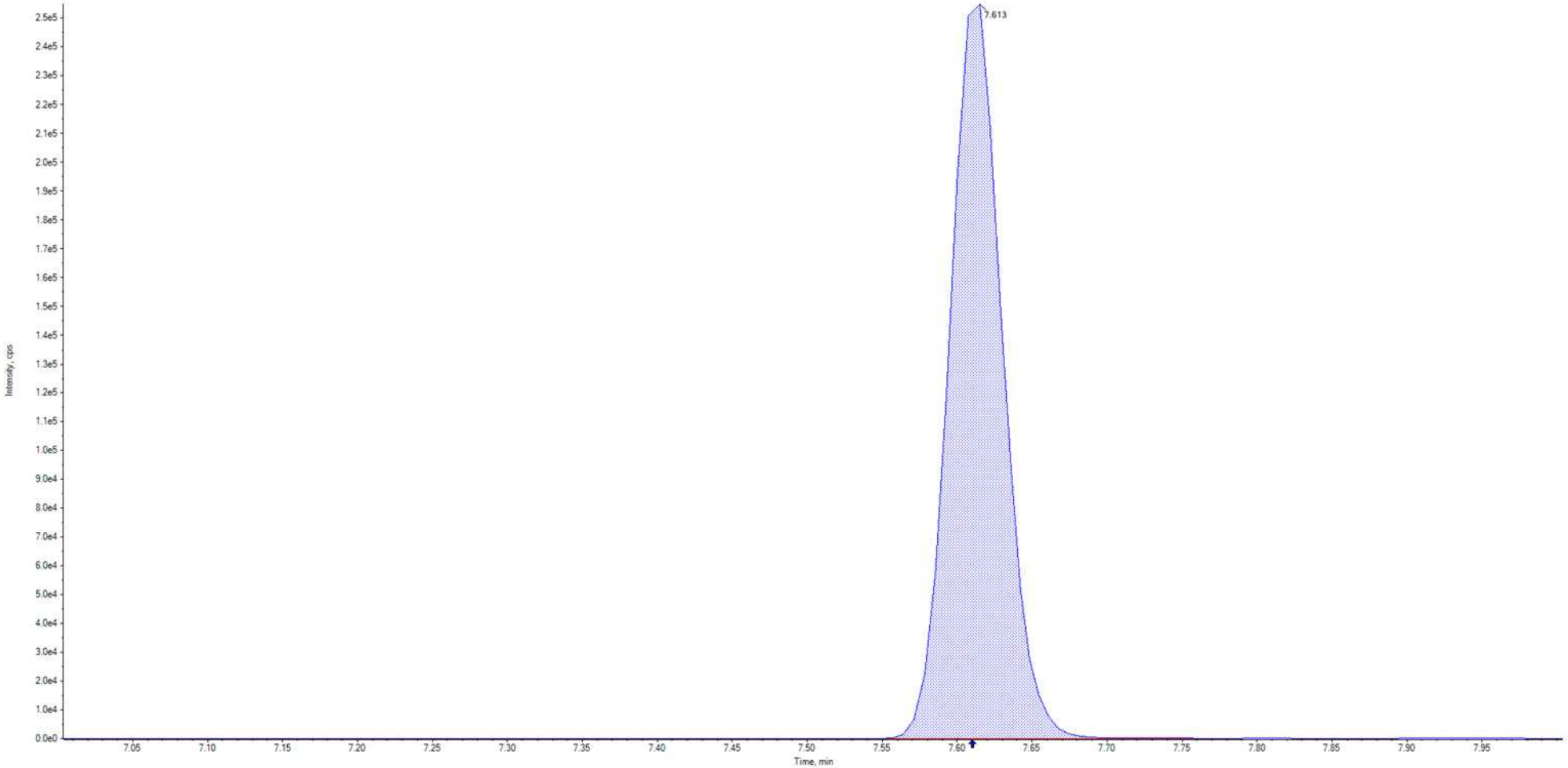
13C2-PFTeDA
Sample: WG1971858-3



13C3-PFBS
Sample: WG1971858-3

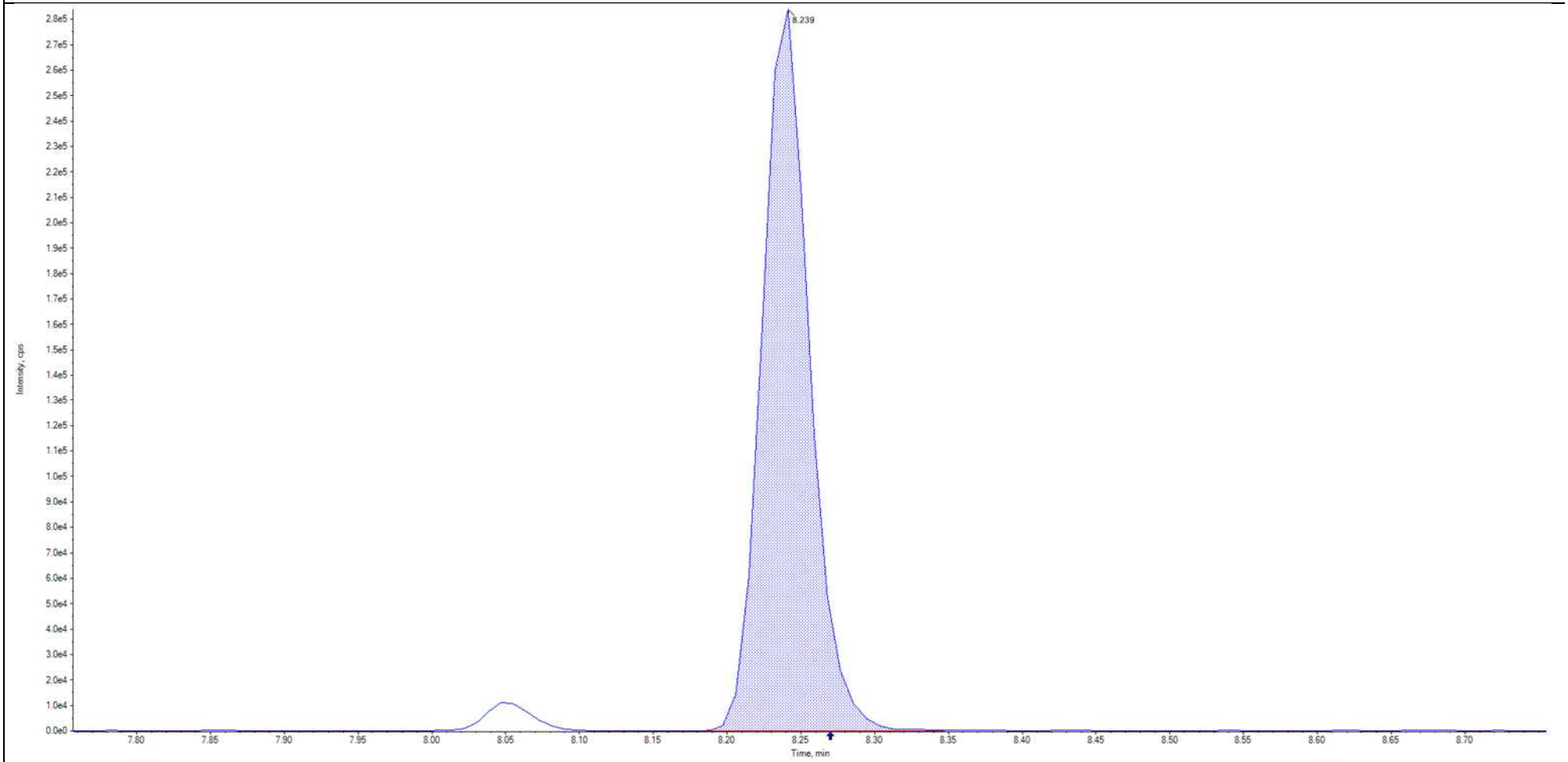


13C3-PFHxS
Sample: WG1971858-3



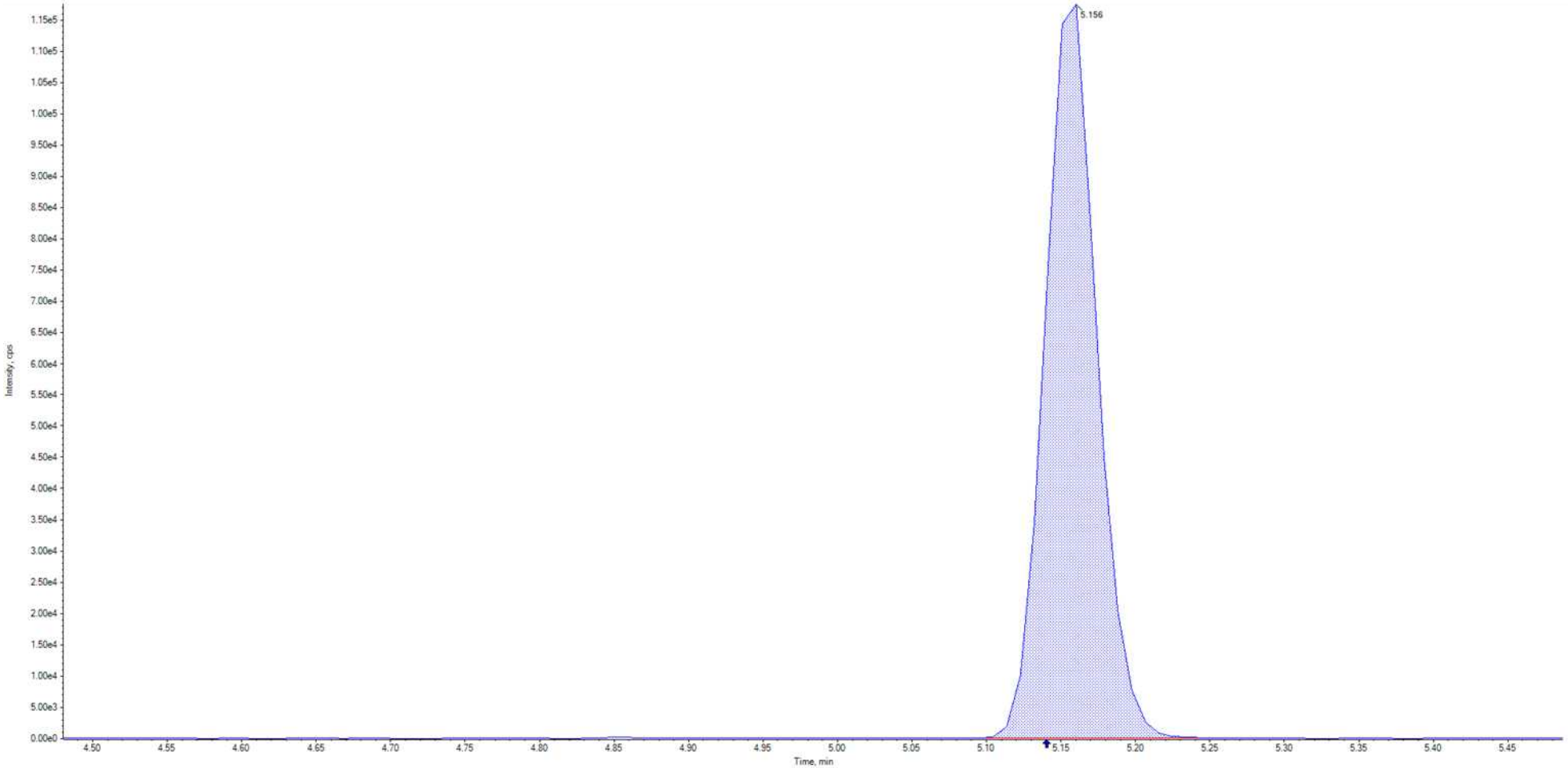
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_17.wiff
Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

13C8-PFOS
Sample: WG1971858-3



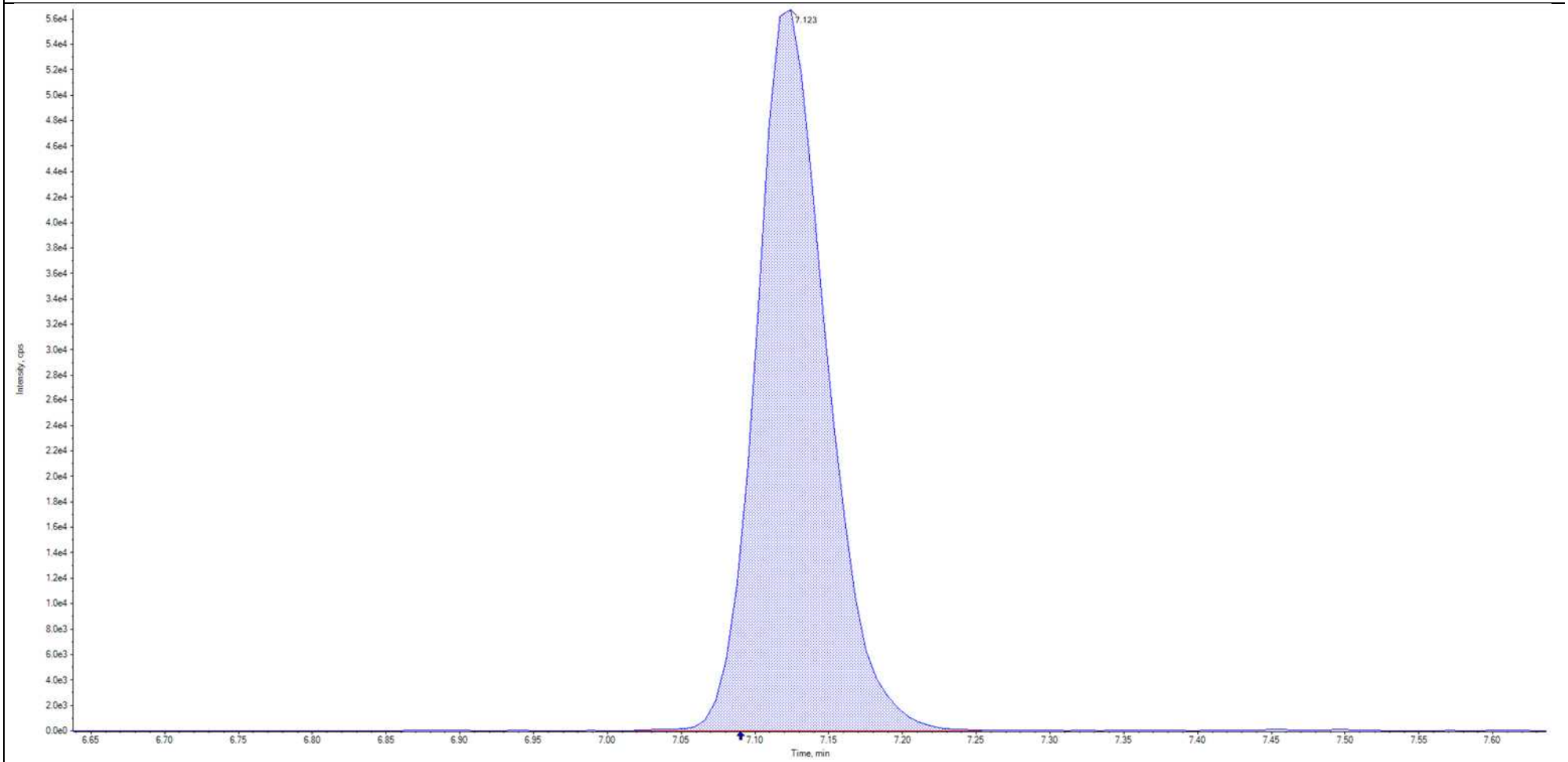
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-4:2FTS
Sample: WG1971858-3

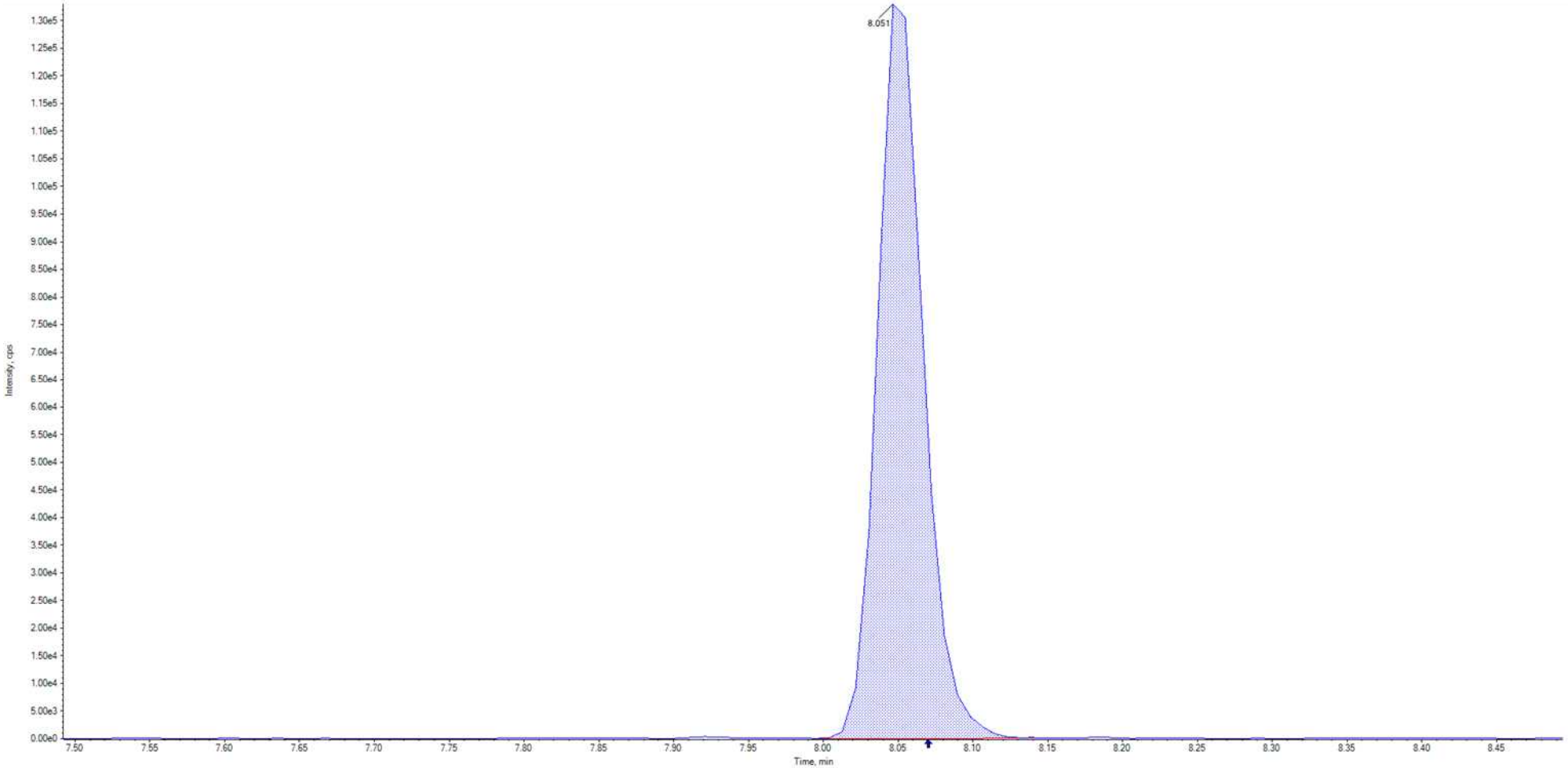


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

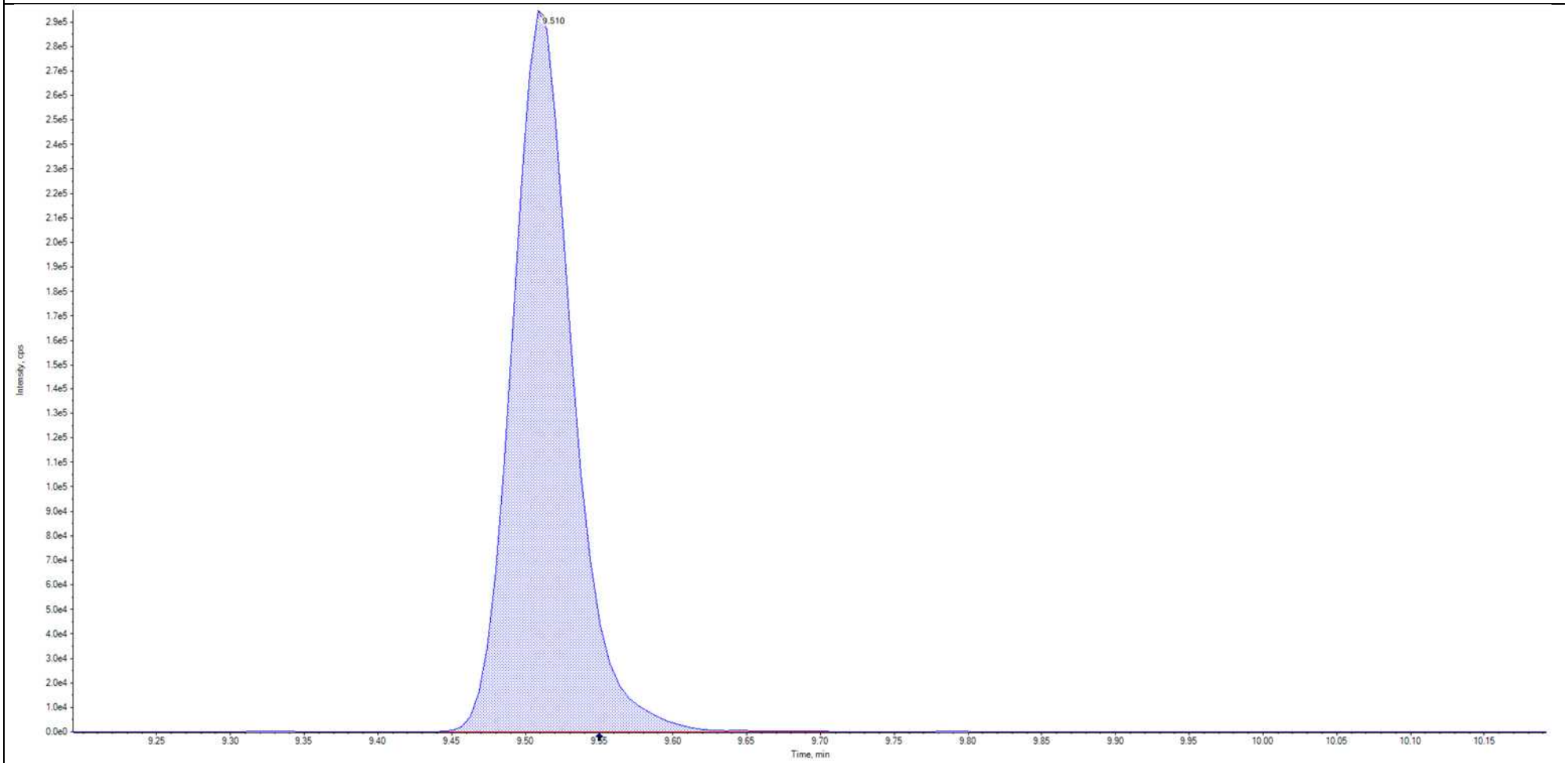
13C2-6:2FTS
Sample: WG1971858-3



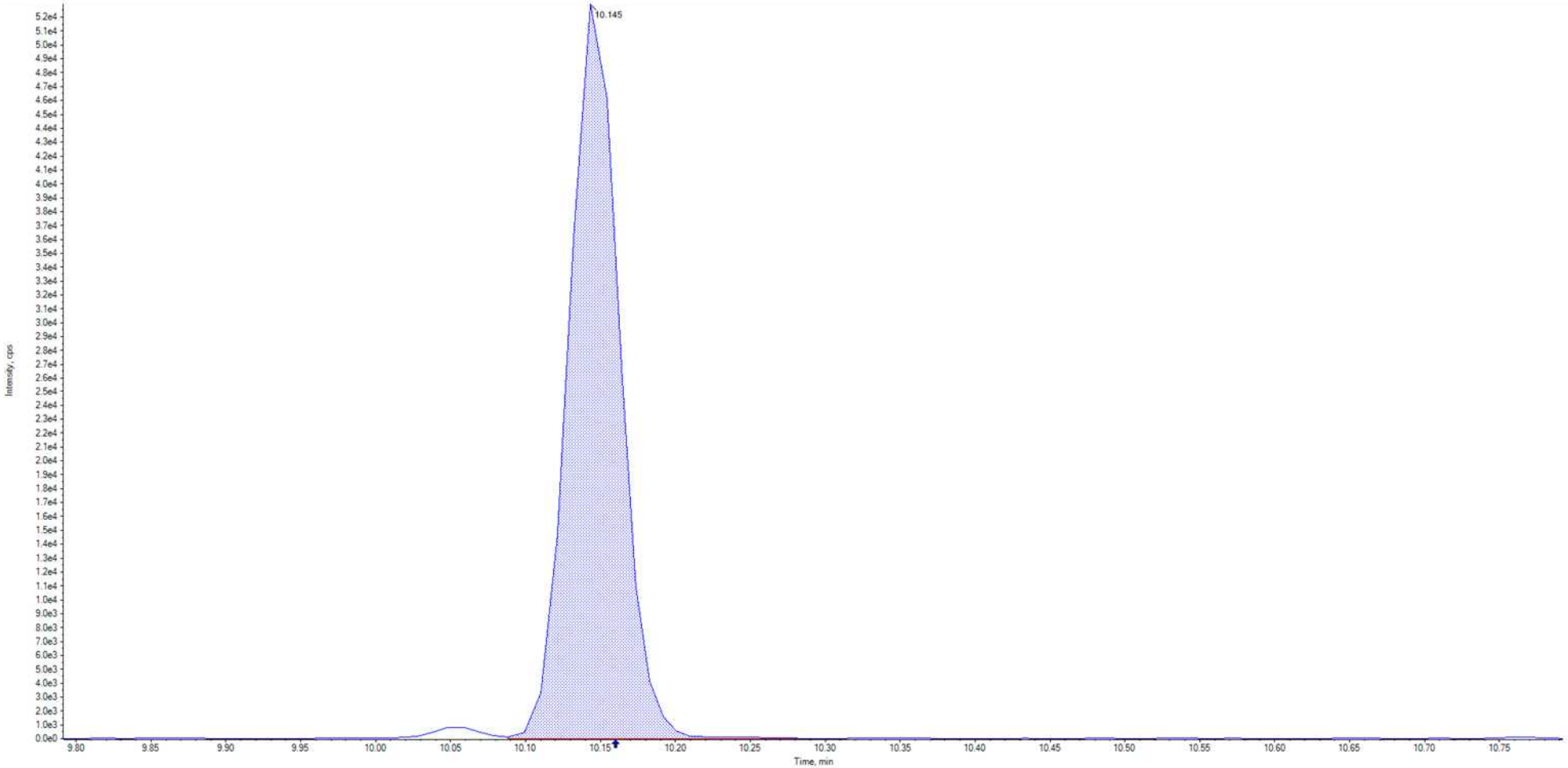
13C2-8:2FTS
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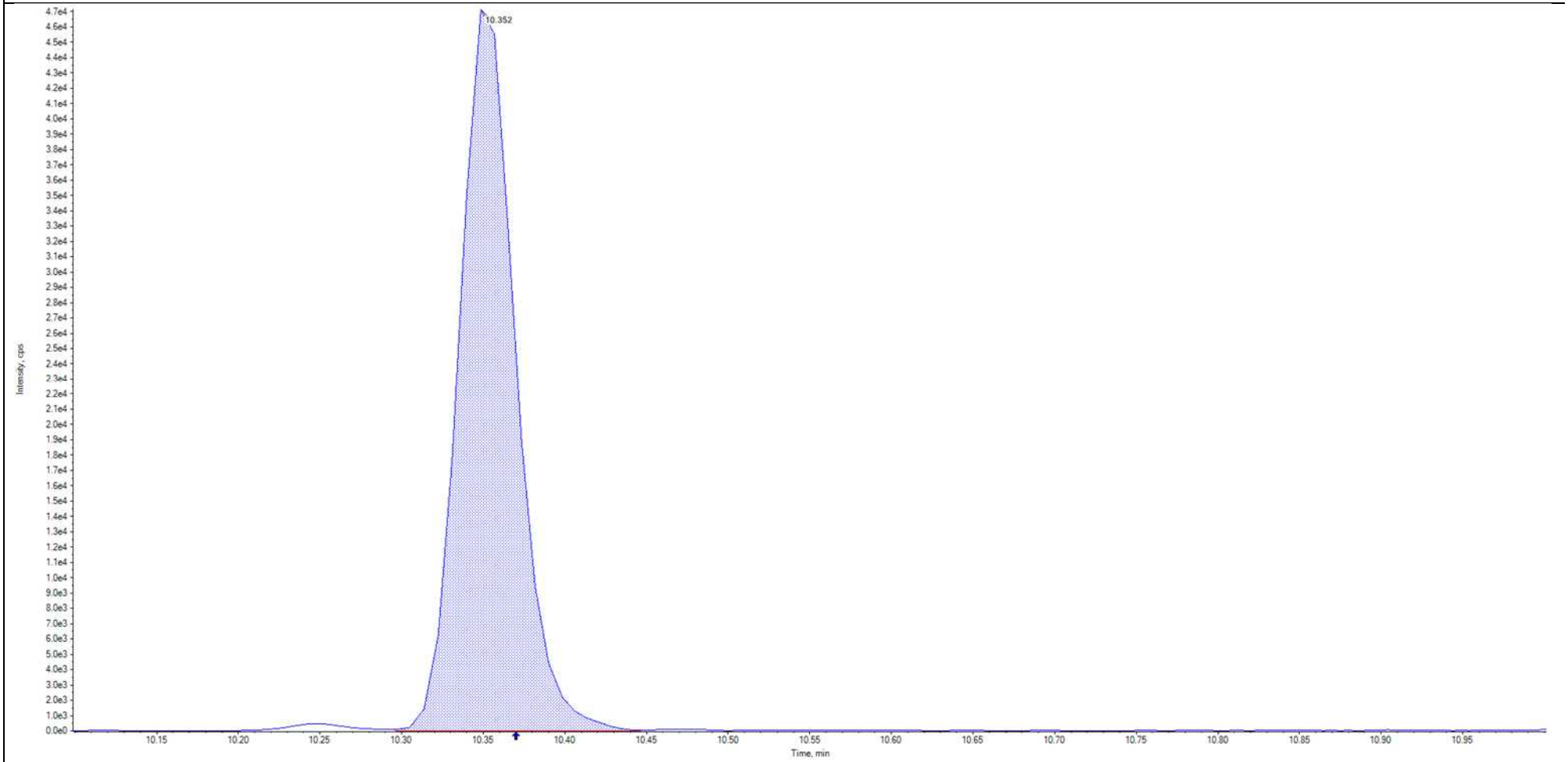
13C8-PFOSA
Sample: WG1971858-3



d3-NMeFOSA
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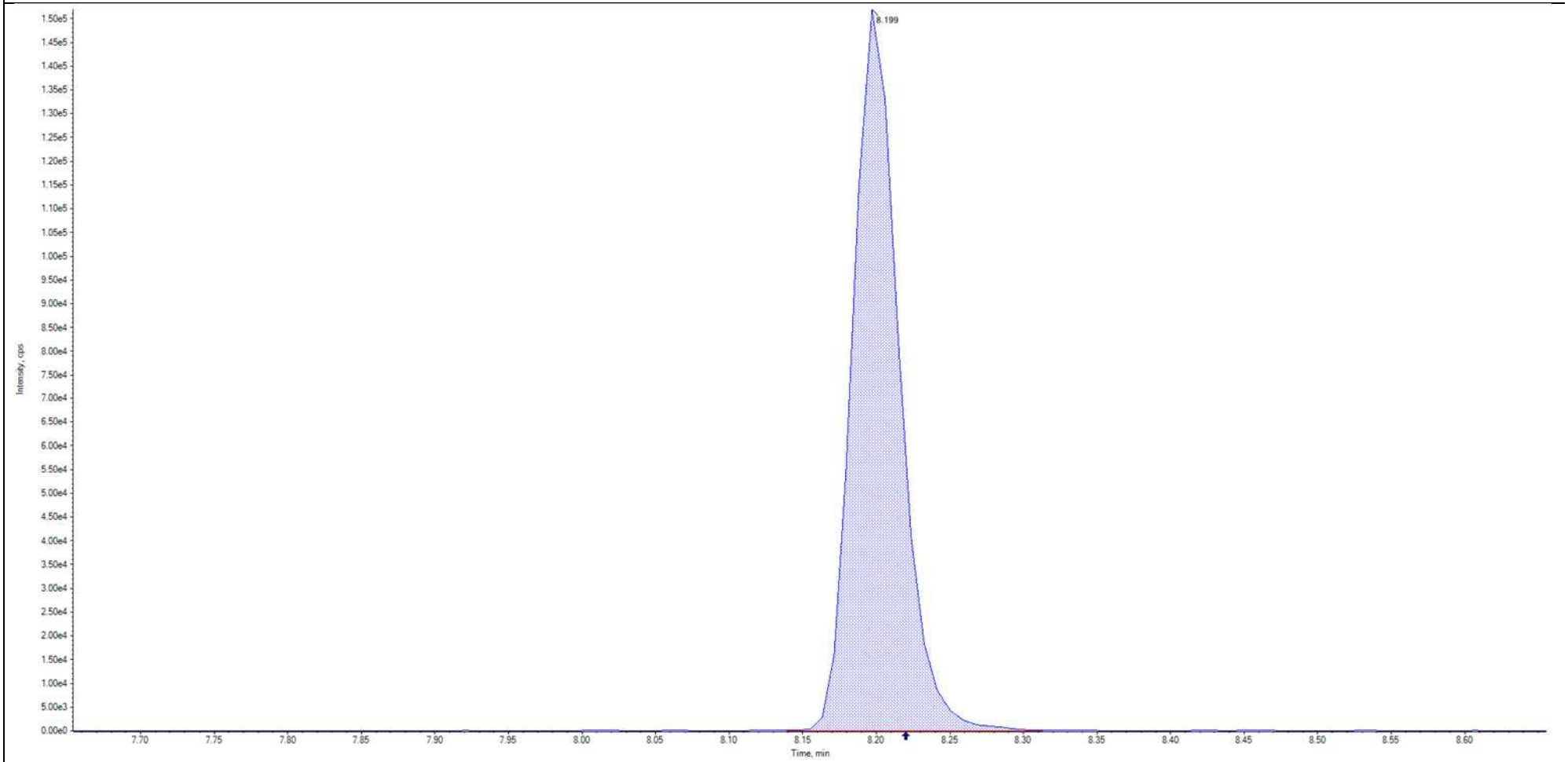


d5-NEtFOSA
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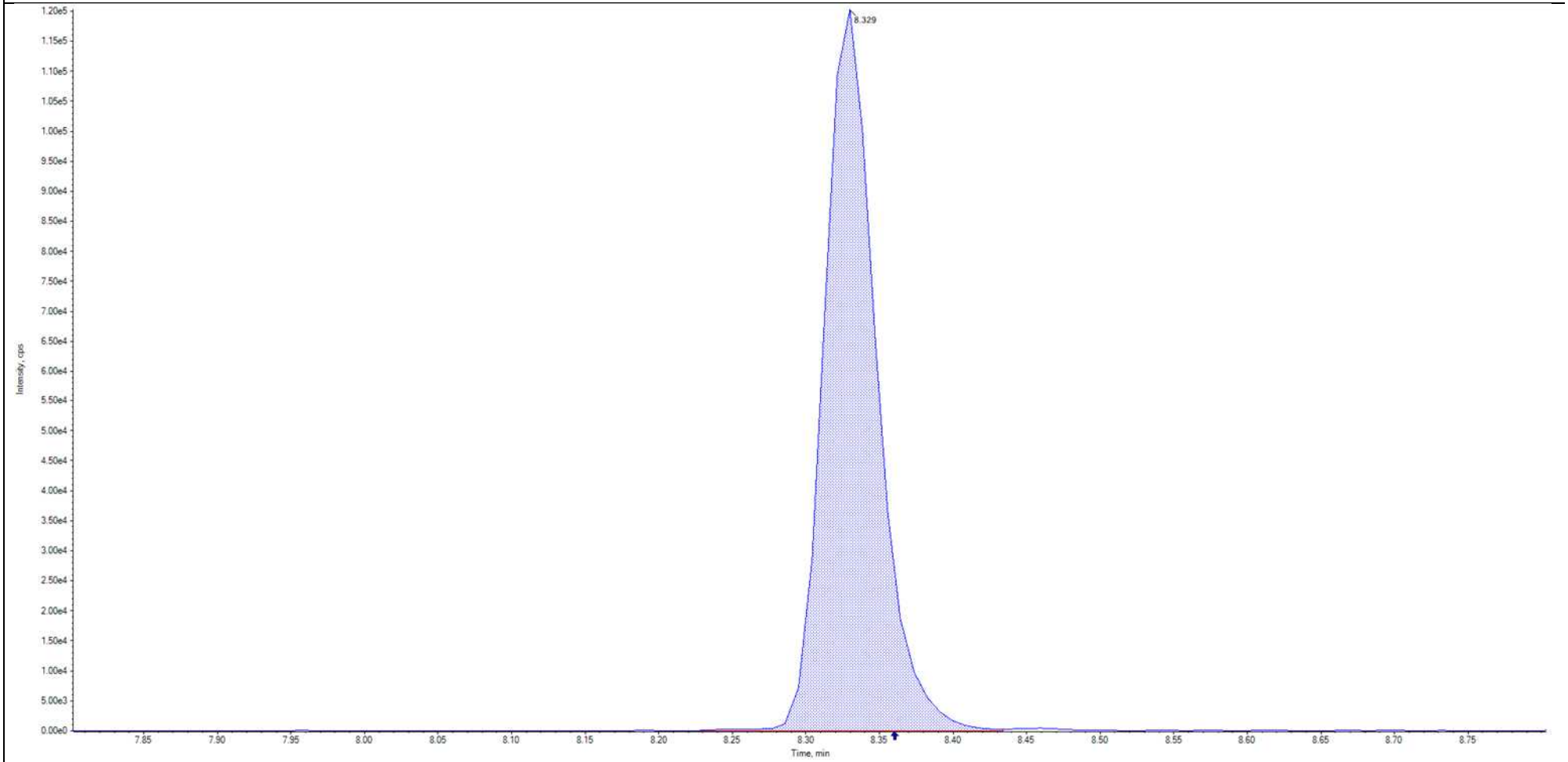


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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Last Altered: 9/17/2024 9:07:16 AM
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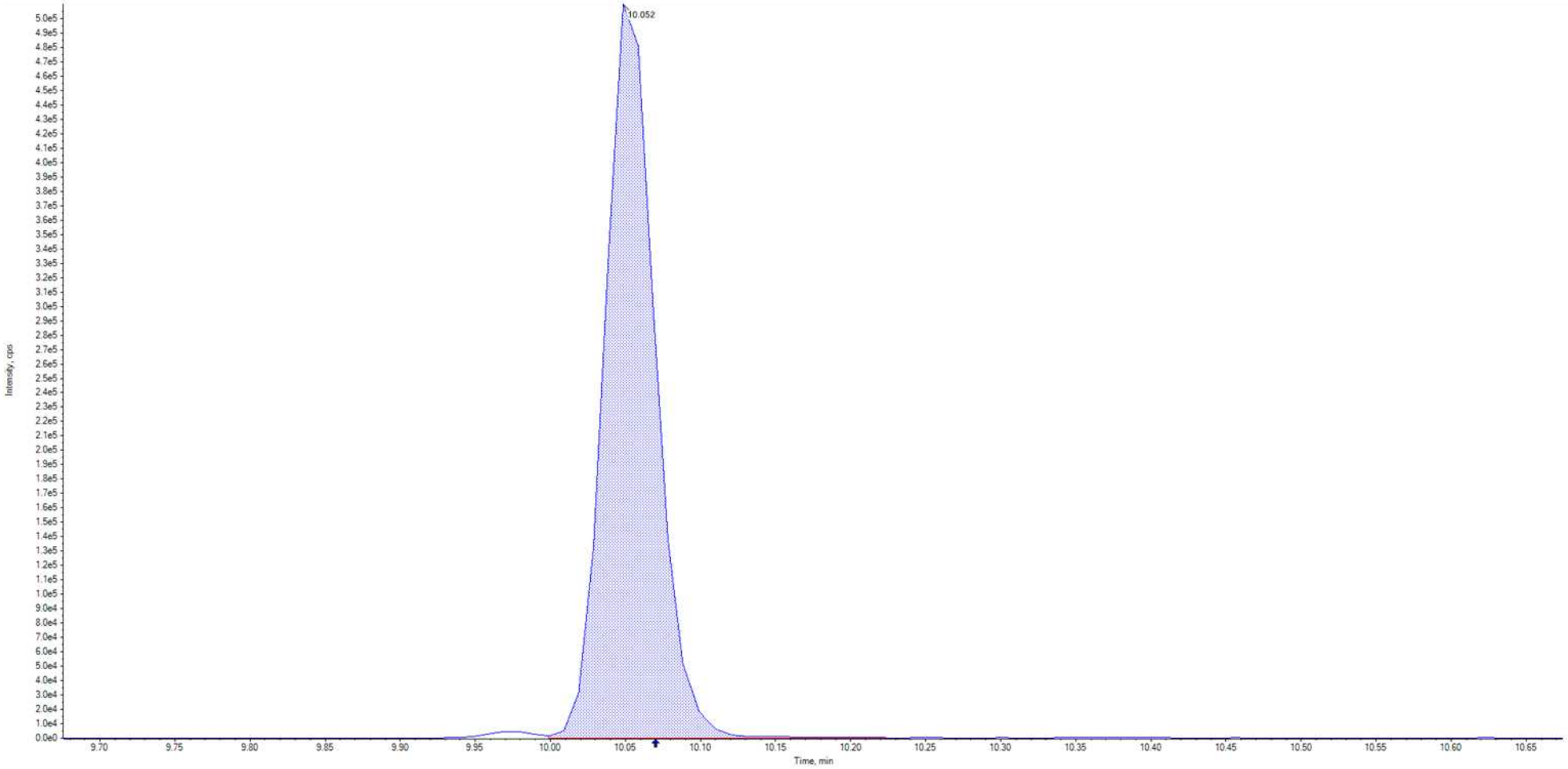
d3-NMeFOSAA
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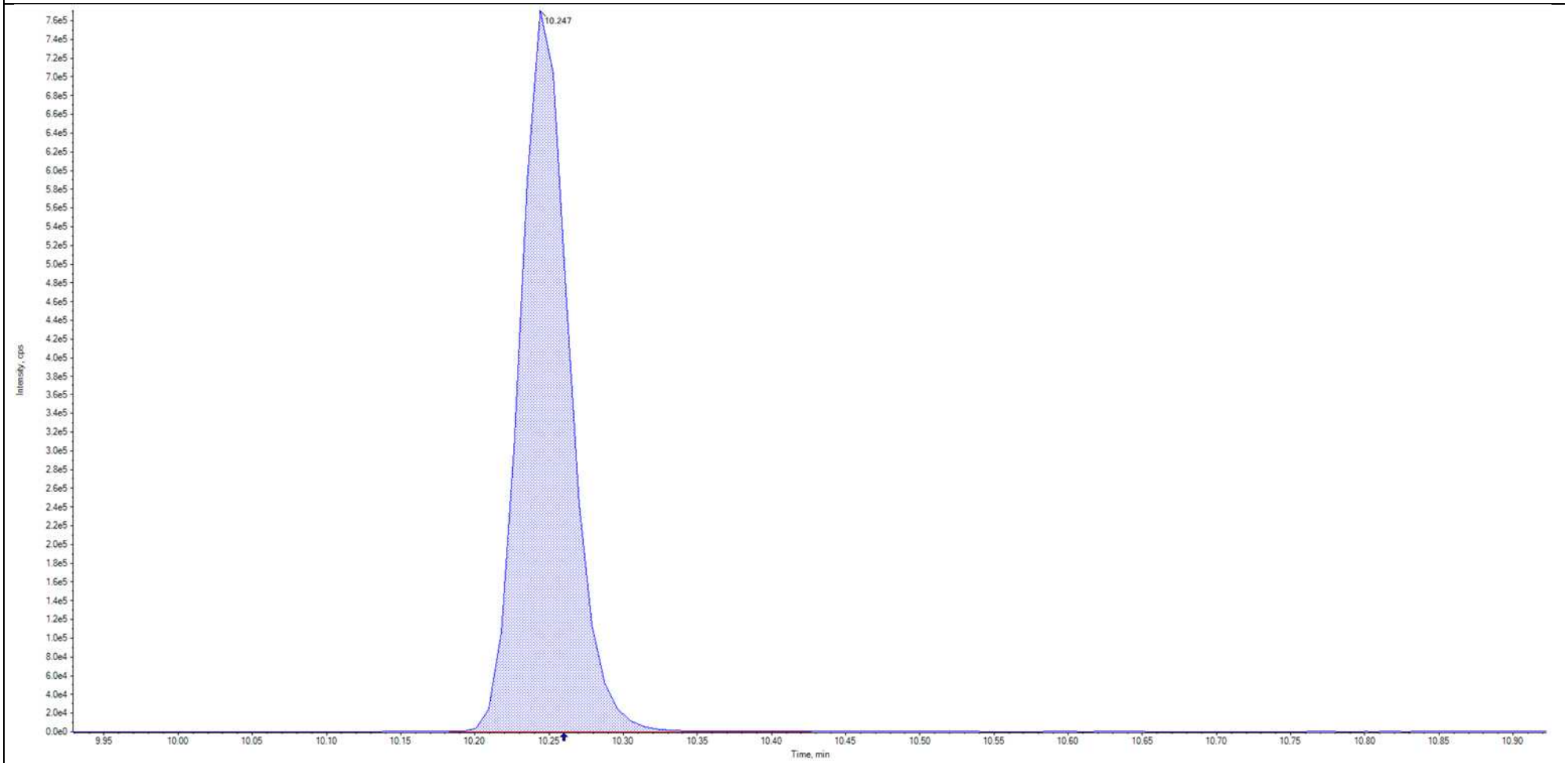


d7-NMeFOSE
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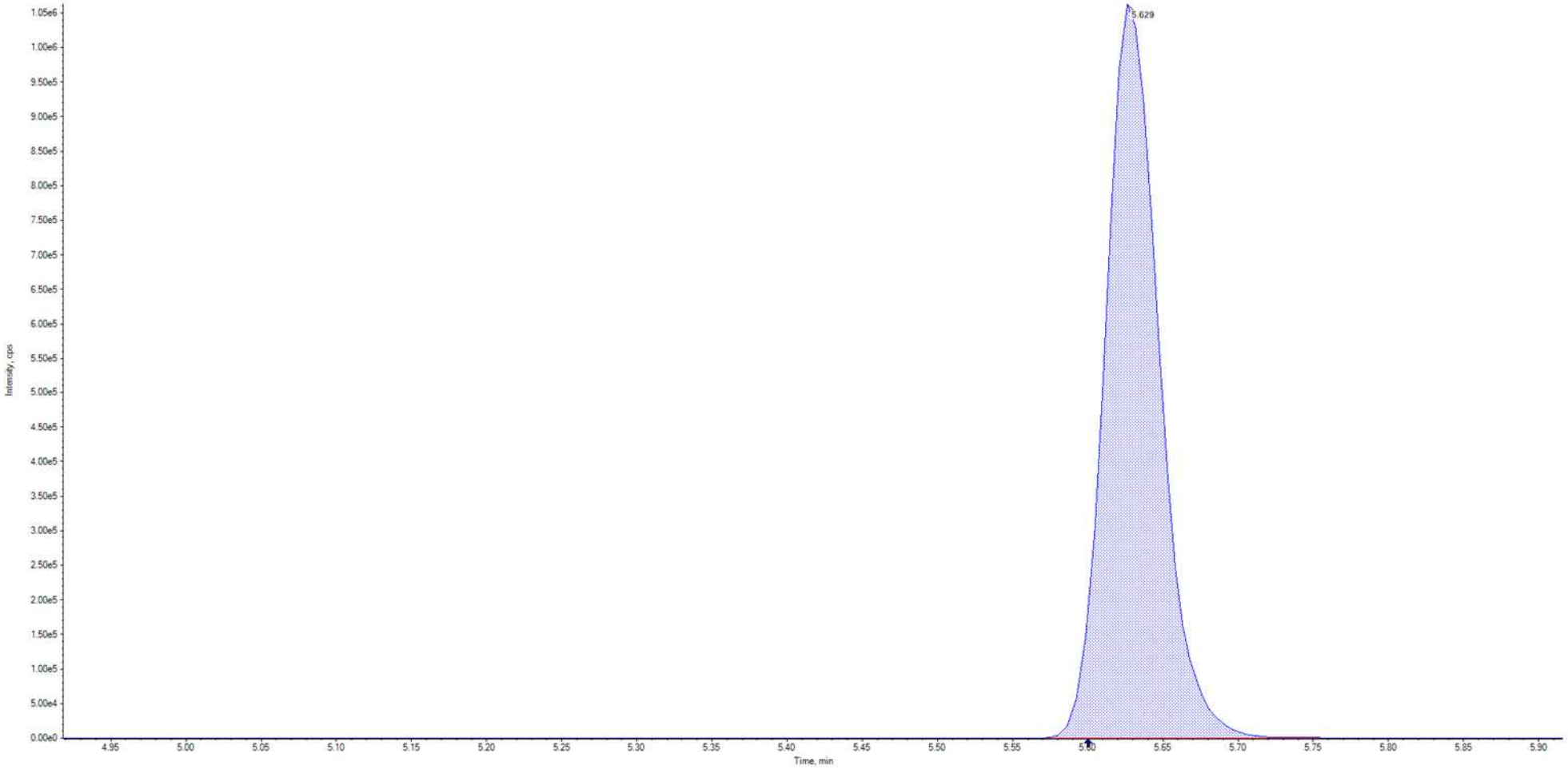


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 9:07:16 AM
Generated: 9/17/2024 6:15:27 AM

d9-NEtFOSE
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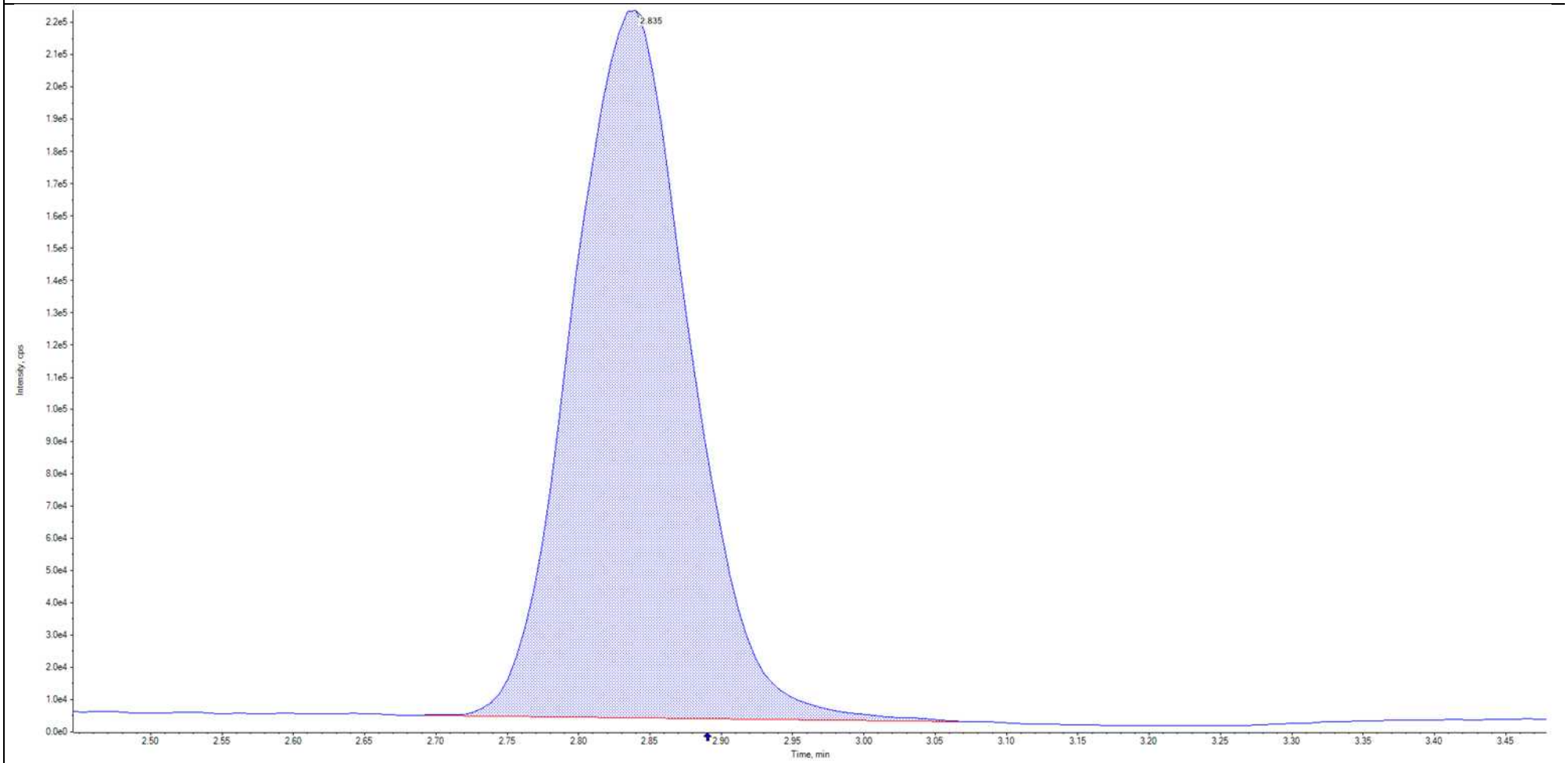


13C3-HFPO-DA
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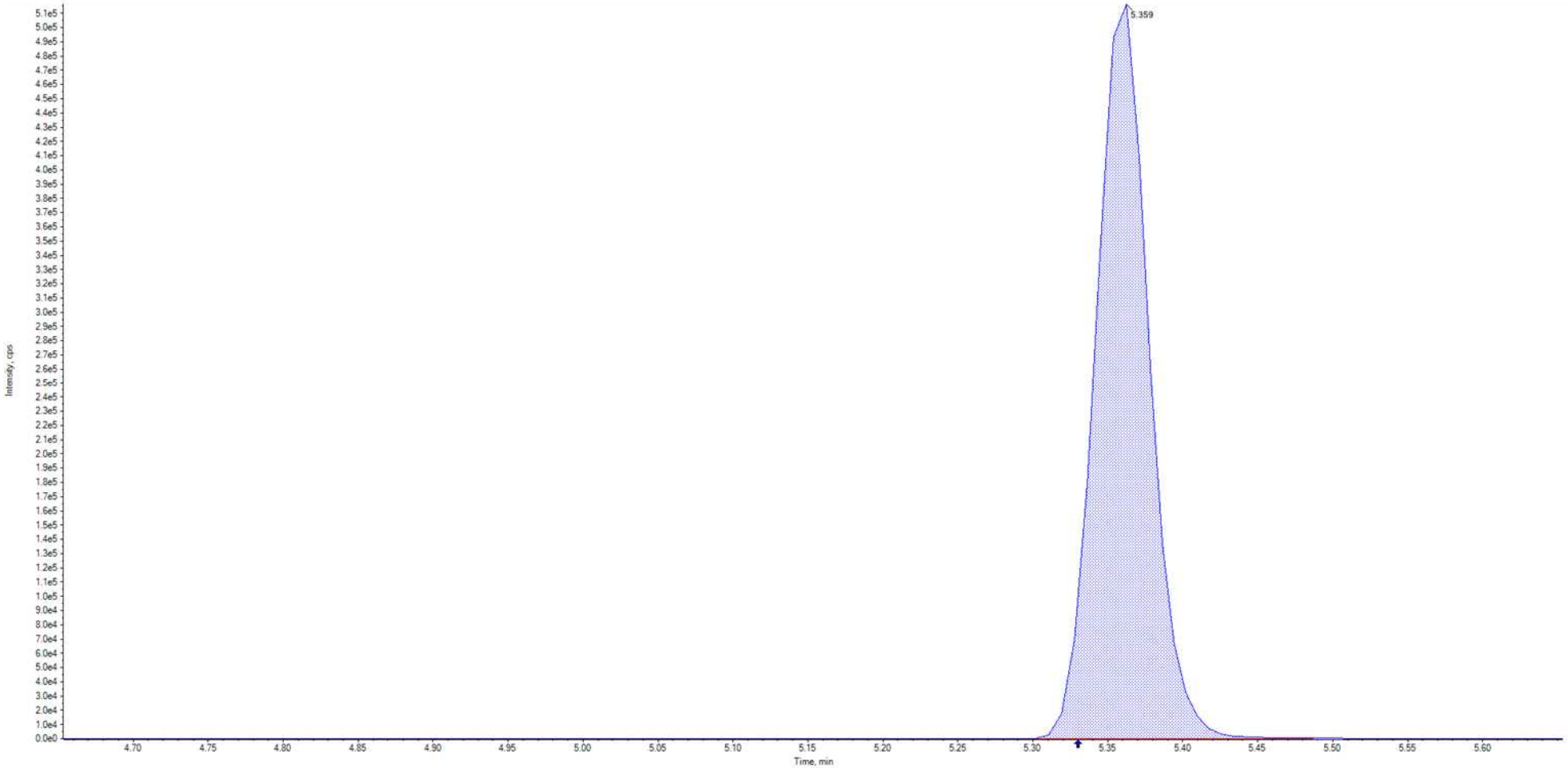


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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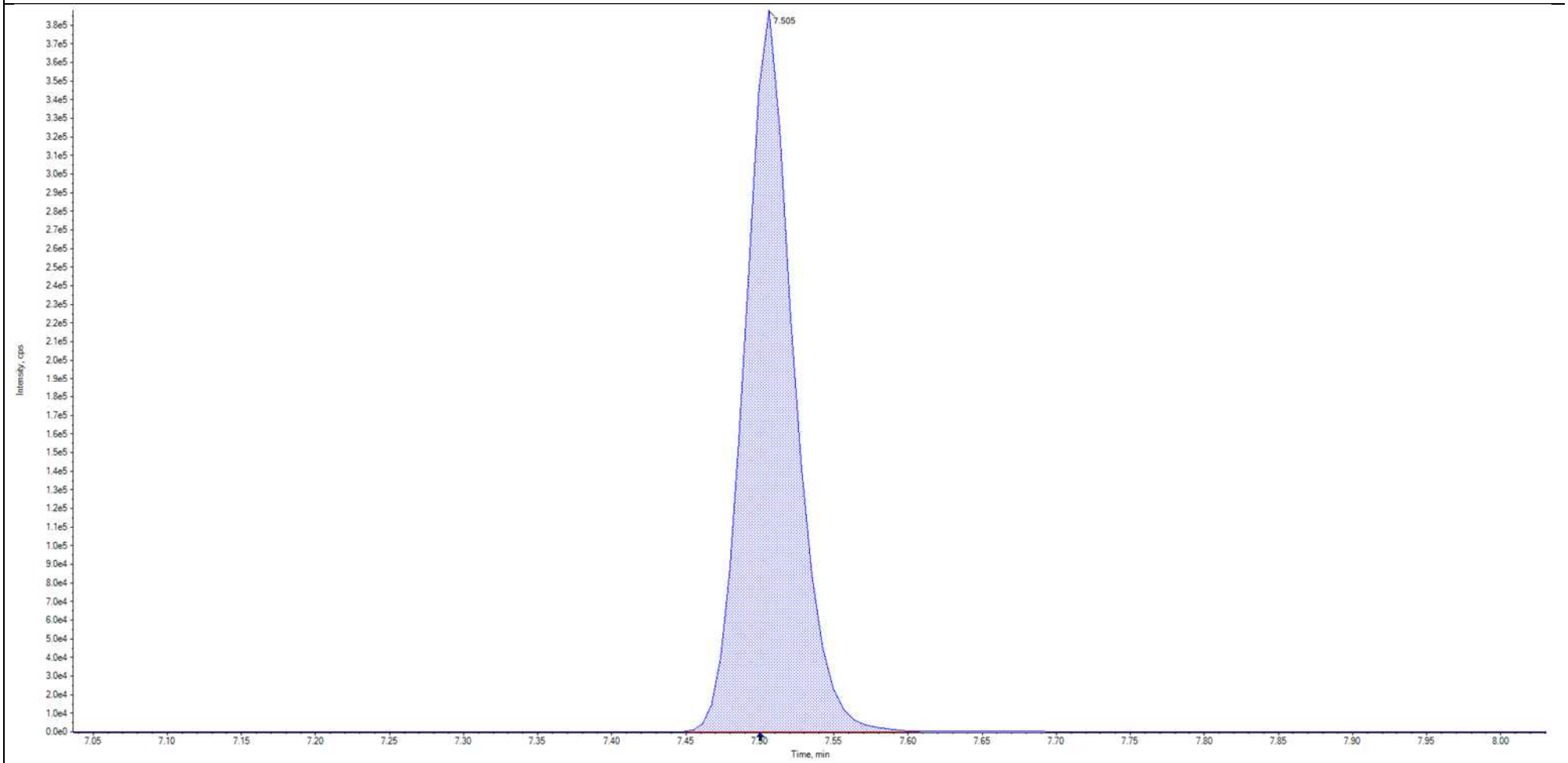
13C3-PFBA
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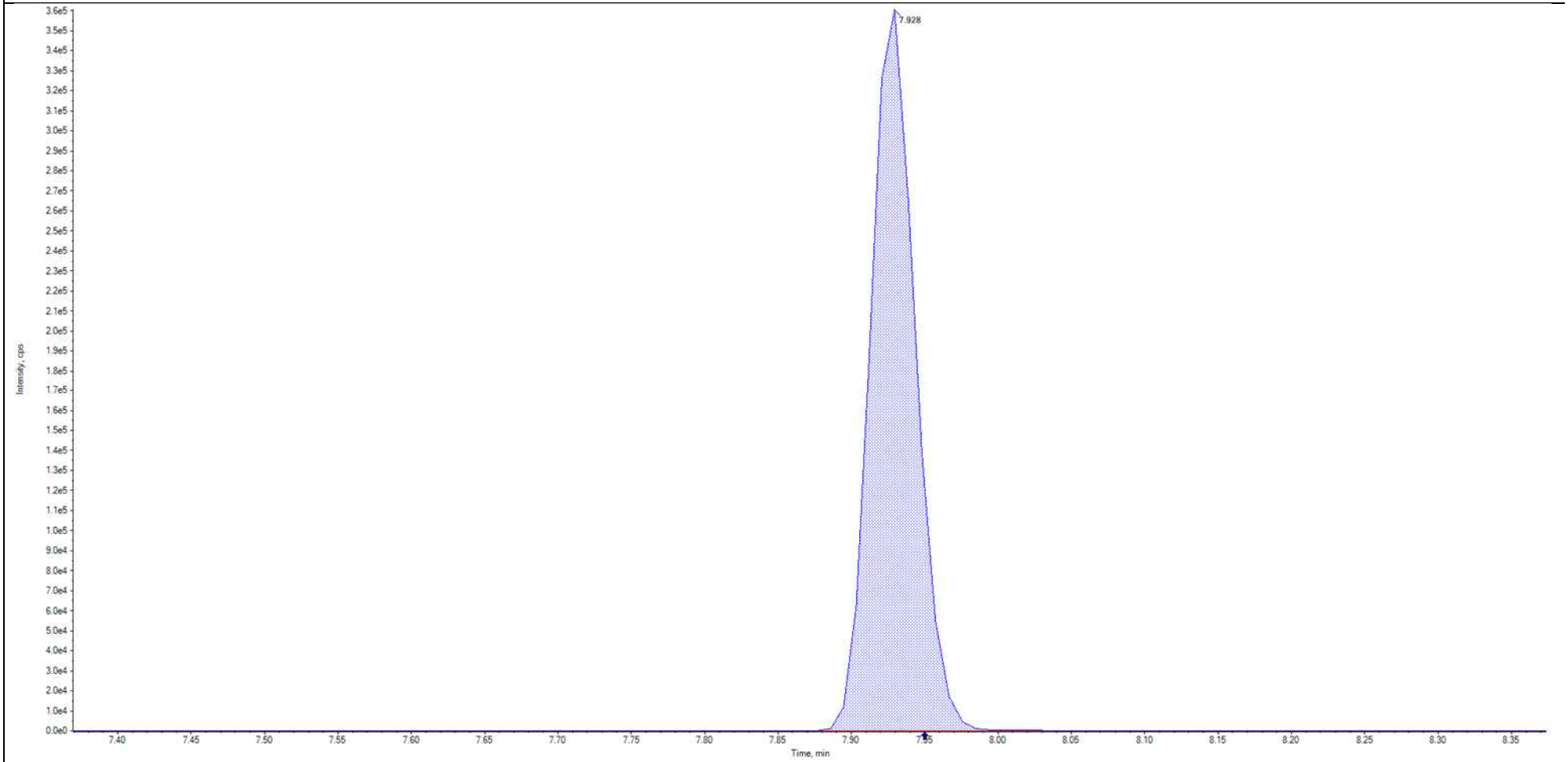
13C2-PFHxA
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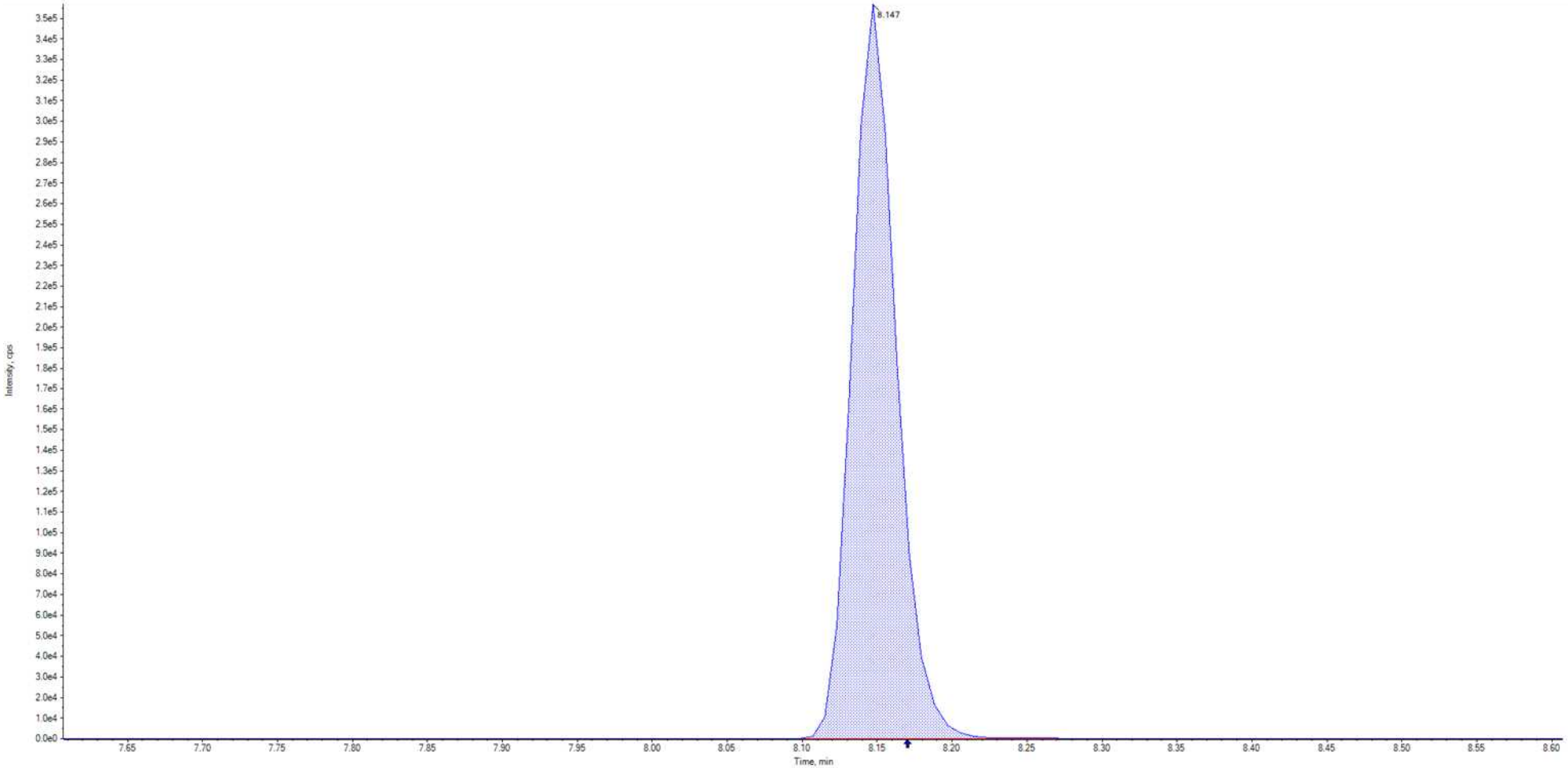
13C4-PFOA
Sample: WG1971858-3



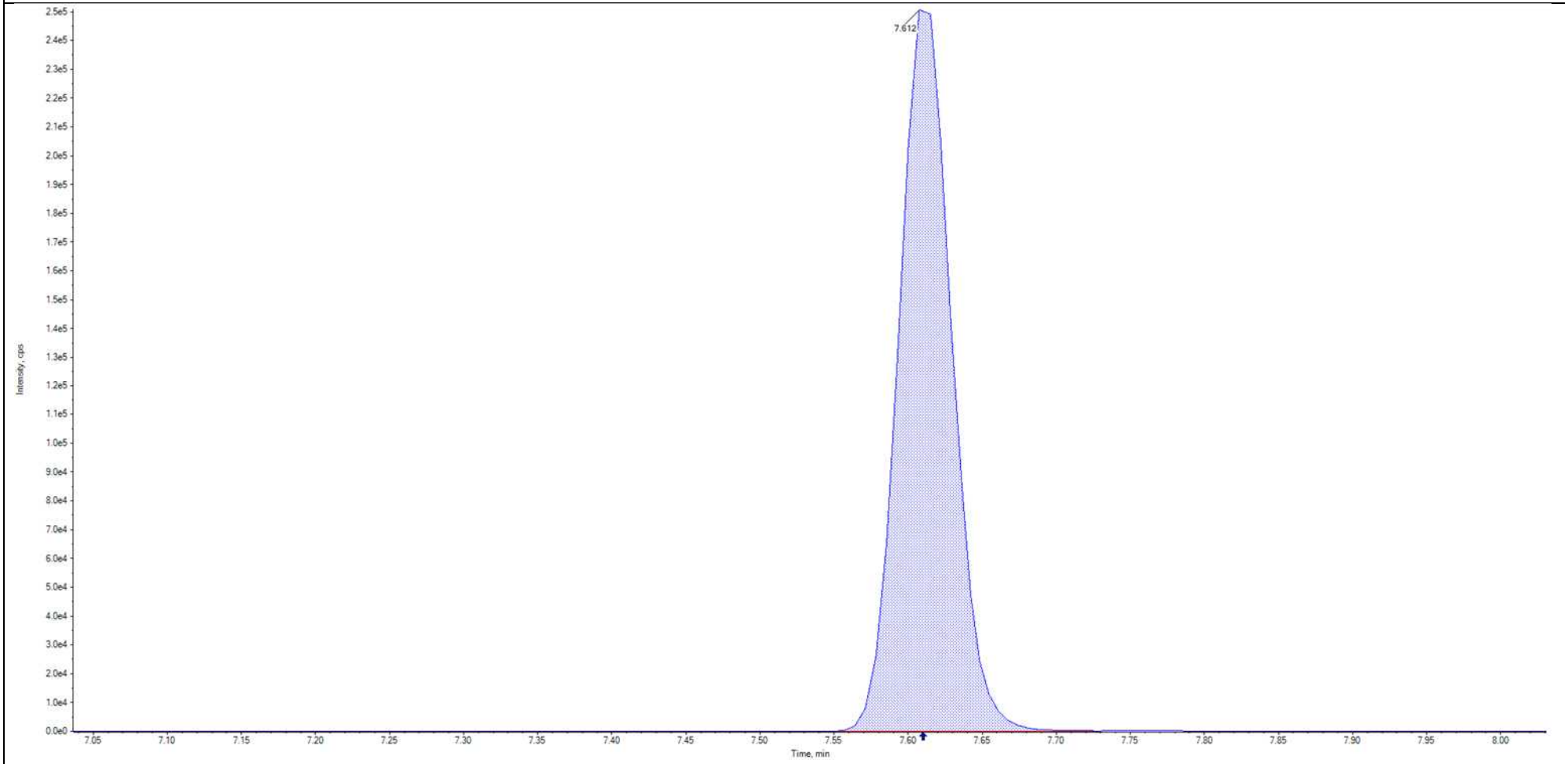
13C5-PFNA
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13C2-PFDA
Sample: WG1971858-3

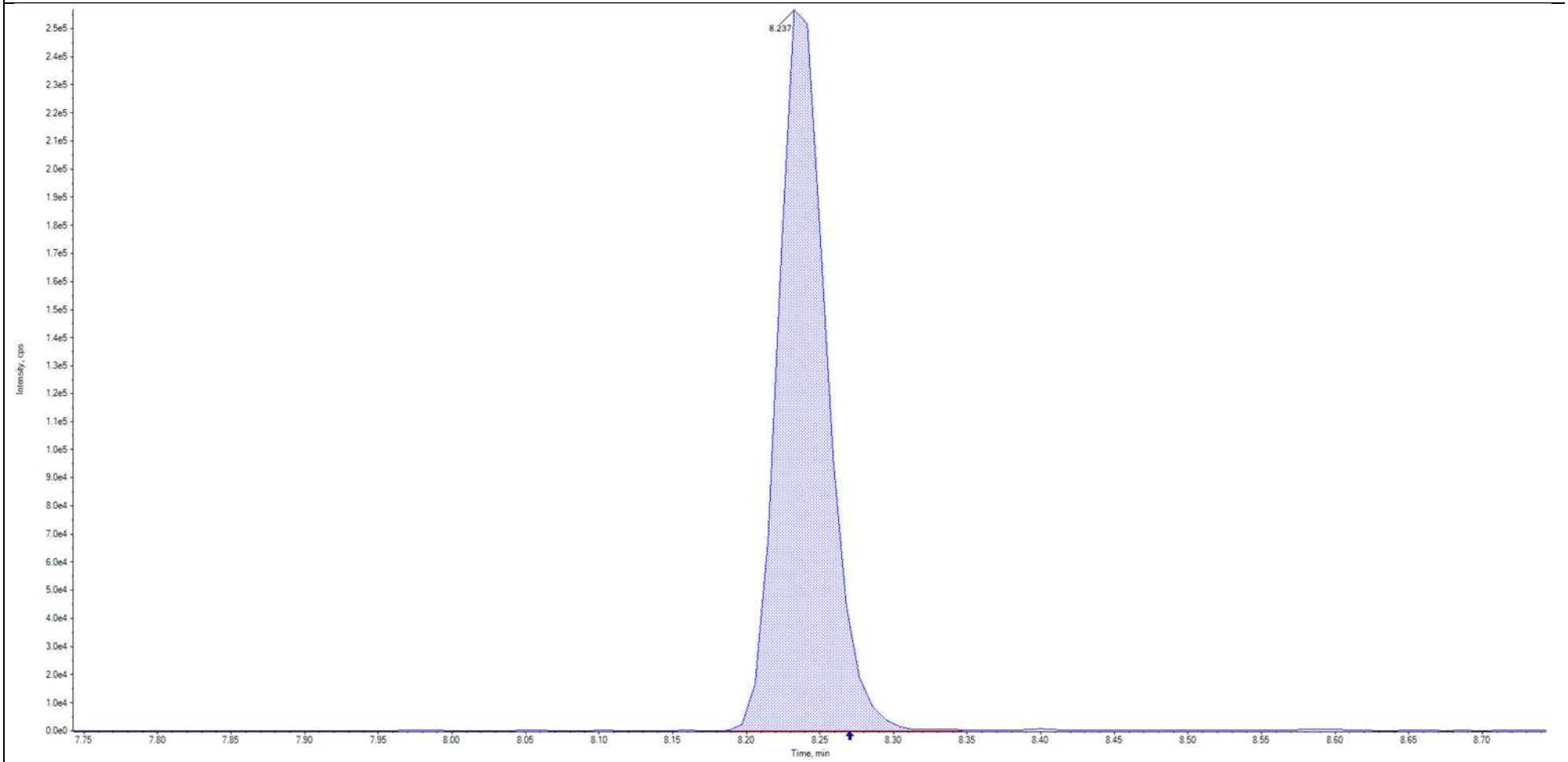


18O2-PFHxS
Sample: WG1971858-3



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C4-PFOS
Sample: WG1971858-3



Quantity Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Calibration: 240813_1633_ICAL

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Description: WG1972379,WG1971858,ICAL21391
Instrument: Triple Quad 5500+
User: LCMS05:AC

LC/MS-MS Method:EPA_1633.dam

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
1	PFBA	375-22-4	2.82	213.0 / 169.0	2001547		12.358	N/A	N/A	N/A	123.6
2	PFPeA	2706-90-3	4.66	263.0 / 219.0	1380919		7.130	0.006	0.007	N/A	142.6
3	PFPeA_2	2706-90-3	4.66	263.0 / 68.9	8727		6.382	0.006	0.007	N/A	127.6
4	PFHxA	307-24-4	5.35	313.0 / 269.0	1770097		3.745	0.073	0.072	Pass	149.8
5	PFHxA_2	307-24-4	5.35	313.0 / 119.0	128975		3.693	0.073	0.072	Pass	147.7
6	PFHpA	375-85-9	6.28	363.1 / 319.0	1810071		4.035	0.312	0.297	Pass	161.4
7	PFHpA_2	375-85-9	6.28	363.1 / 169.0	565329		4.118	0.312	0.297	Pass	164.7

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
8	PFOA	335-67-1	7.50	413.1 / 369.1	1652556	M5	6.276	0.522	0.586	Pass	251.0
9	PFOA_2	335-67-1	7.50	413.1 / 169.0	861865	M7	5.974	0.522	0.586	Pass	238.9
10	PFNA	375-95-1	7.93	462.8 / 418.9	1051999	M5	2.880	0.286	0.313	Pass	115.2
11	PFNA_2	375-95-1	7.93	462.8 / 218.9	300835	M7	2.695	0.286	0.313	Pass	107.8
12	PFDA	335-76-2	8.15	513.1 / 469.1	1003704		2.606	0.145	0.142	Pass	104.2
13	PFDA_2	335-76-2	8.15	513.1 / 219.0	145525		2.521	0.145	0.142	Pass	100.8
14	PFUnA	2058-94-8	8.42	563.1 / 519.1	731061		2.691	0.180	0.194	Pass	107.7
15	PFUnA_2	2058-94-8	8.42	563.1 / 269.0	131383		2.497	0.180	0.194	Pass	99.9
16	PFDoA	307-55-1	8.83	613.1 / 569.1	689167		1.773	0.165	0.167	Pass	70.9
17	PFDoA_2	307-55-1	8.83	613.1 / 319.0	113873		1.734	0.165	0.167	Pass	69.4
18	PFTrDA	72629-94-8	9.40	663.1 / 619.1	422551		1.825	0.220	0.228	Pass	73.0
19	PFTrDA_2	72629-94-8	9.40	663.1 / 169.0	93081		1.805	0.220	0.228	Pass	72.2
20	PFTeDA	376-06-7	9.85	713.1 / 669.1	721920		2.449	0.136	0.137	Pass	98.0
21	PFTeDA_2	376-06-7	9.85	713.1 / 169.0	97998		2.430	0.136	0.137	Pass	97.2
22	PFBS	375-73-5	5.33	299.1 / 80.1	827491		2.874	0.374	0.396	Pass	129.6

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
23	PFBS_2	375-73-5	5.33	299.1 / 99.1	309838		2.699	0.374	0.396	Pass	121.7
24	PFPeS	2706-91-4	6.36	349.1 / 80.1	654939		2.842	0.288	0.299	Pass	120.8
25	PFPeS_2	2706-91-4	6.36	349.1 / 99.1	188924		2.718	0.288	0.299	Pass	115.5
26	PFHxS	355-46-4	7.61	399.1 / 80.1	934199	M5	4.332	0.298	0.315	Pass	189.6
27	PFHxS_2	355-46-4	7.61	399.1 / 99.1	278638	M7	4.160	0.298	0.315	Pass	182.1
28	PFHpS	375-92-8	7.99	449.1 / 80.1	564831		2.757	0.279	0.287	Pass	115.7
29	PFHpS_2	375-92-8	7.99	449.1 / 99.1	157856		2.629	0.279	0.287	Pass	110.3
30	PFOS	1763-23-1	8.24	499.1 / 80.1	645251	M5	2.958	0.237	0.238	Pass	127.5
31	PFOS_2	1763-23-1	8.24	499.1 / 99.1	153018		2.863	0.237	0.238	Pass	123.4
32	PFNS	68259-12-1	8.57	549.1 / 80.1	313920		2.241	0.314	0.301	Pass	93.2
33	PFNS_2	68259-12-1	8.57	549.1 / 99.1	98427		2.320	0.314	0.301	Pass	96.5
34	PFDS	335-77-3	9.06	599.1 / 80.1	276672		2.005	0.285	0.275	Pass	83.1
35	PFDS_2	335-77-3	9.06	599.1 / 99.1	78890		2.074	0.285	0.275	Pass	86.0
36	PFDoS	79780-39-5	9.95	699.2 / 80.1	272519		2.157	0.274	0.274	Pass	88.9
37	PFDoS_2	79780-39-5	9.95	699.2 / 99.1	74799		2.154	0.274	0.274	Pass	88.8

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
38	4:2FTS	757124-72-4	5.15	327.1 / 307.1	1867157		8.896	0.547	0.516	Pass	94.9
39	4:2FTS_2	757124-72-4	5.15	327.1 / 81.1	1020878		9.092	0.547	0.516	Pass	97.0
40	6:2FTS	27619-97-2	7.11	427.2 / 407.2	903953		10.732	0.569	0.565	Pass	113.0
41	6:2FTS_2	27619-97-2	7.11	427.2 / 81.1	514793		11.299	0.569	0.565	Pass	118.9
42	8:2FTS	39108-34-4	8.05	527.2 / 507.2	1039817		10.707	0.674	0.662	Pass	111.5
43	8:2FTS_2	39108-34-4	8.05	527.2 / 81.1	700478		10.634	0.674	0.662	Pass	110.8
44	PFOSA	754-91-6	9.51	498.1 / 78.1	447067	M5	2.491	0.024	0.025	Pass	99.7
45	PFOSA_2	754-91-6	9.51	498.1 / 478.0	10663	M7	2.265	0.024	0.025	Pass	90.6
46	NMeFOSA	31506-32-8	10.15	512.2 / 219.0	124931	M5	2.543	1.452	1.551	Pass	101.7
47	NMeFOSA_2	31506-32-8	10.10	512.2 / 169.0	181417	M7	2.383	1.452	1.551	Pass	95.3
48	NEtFOSA	4151-50-2	10.35	526.2 / 219.0	120365	M5	2.522	1.311	1.285	Pass	100.9
49	NEtFOSA_2	4151-50-2	10.32	526.2 / 169.0	157743	M7	2.469	1.311	1.285	Pass	98.8
50	NMeFOSAA	2355-31-9	8.20	570.2 / 419.1	123960	M4	2.823	0.789	0.700	Pass	112.9
51	NMeFOSAA_2	2355-31-9	8.20	570.2 / 483.0	97803		3.503	0.789	0.700	Pass	140.1
52	NEtFOSAA	2991-50-6	8.33	584.2 / 419.1	131671	M4	2.338	0.512	0.487	Pass	93.5

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
53	NEtFOSAA_2	2991-50-6	8.33	584.2 / 526.2	67379	M7	2.599	0.512	0.487	Pass	104.0
54	NMeFOSE	24448-09-7	10.06	616.1 / 58.9	2269914	M5	24.027	N/A	N/A	N/A	96.1
55	NEtFOSE	1691-99-2	10.26	630.0 / 58.9	4124877	M5	23.706	N/A	N/A	N/A	94.8
56	HFPO-DA	13252-13-6	5.62	285.0 / 169.0	2453060		11.549	0.419	0.464	Pass	115.5
57	HFPO-DA_2	13252-13-6	5.62	285.0 / 184.9	1028125		10.410	0.419	0.464	Pass	104.1
58	ADONA	919005-14-4	6.74	377.1 / 251.0	5548162		11.486	0.610	0.634	Pass	121.5
59	ADONA_2	919005-14-4	6.74	377.1 / 84.8	3382293		10.822	0.610	0.634	Pass	114.5
60	9Cl-PF3ONS	756426-58-1	8.45	530.8 / 351.1	4747425		9.968	0.315	0.322	Pass	106.6
61	9Cl-PF3ONS_2	756426-58-1	8.45	532.8 / 353.0	1493352		9.628	0.315	0.322	Pass	103.0
62	11Cl-PF3OUdS	763051-92-9	9.47	630.9 / 451.0	2390400		7.946	0.336	0.331	Pass	84.1
63	11Cl-PF3OUdS_2	763051-92-9	9.47	632.9 / 452.9	802176		7.923	0.336	0.331	Pass	83.8
64	3:3FTCA	356-02-5	4.94	241.1 / 177.1	303073		18.042	0.803	1.074	Pass	144.3
65	3:3FTCA_2	356-02-5	4.94	241.1 / 117.0	243299		14.461	0.803	1.074	Pass	115.7
66	5:3FTCA	914637-49-3	7.20	341.1 / 237.1	5340212		62.276	0.945	0.953	Pass	99.6
67	5:3FTCA_2	914637-49-3	7.20	341.1 / 217.0	5044566		62.171	0.945	0.953	Pass	99.5

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
68	7:3FTCA	812-70-4	8.19	441.1 / 316.9	4458556		46.705	1.593	1.558	Pass	74.7
69	7:3FTCA_2	812-70-4	8.19	441.1 / 337.1	7101267		51.262	1.593	1.558	Pass	82.0
70	PFEESA	113507-82-7	5.73	315.1 / 135.0	3483289		4.247	0.085	0.087	Pass	95.5
71	PFEESA_2	113507-82-7	5.73	315.1 / 82.9	297215		4.195	0.085	0.087	Pass	94.3
72	PFMPA	377-73-1	3.88	229.0 / 85.0	147985		6.313	N/A	N/A	N/A	126.3
73	PFMBA	863090-89-5	4.89	279.0 / 85.0	1761713		5.574	N/A	N/A	N/A	111.5
74	NFDHA	151772-58-6	5.27	295.0 / 201.0	466089		5.399	0.717	0.910	Pass	108.0
75	NFDHA_2	151772-58-6	5.27	295.0 / 84.9	334078		4.221	0.717	0.910	Pass	84.4
76	TDCA	516-50-7	N/A	499.1 / 124.1	N/A		N/A	N/A	40.716	N/A	N/A
77	TDCA_2	516-50-7	N/A	499.1 / 79.9	N/A		N/A	N/A	40.716	N/A	N/A
78	13C2D4-4:2FTS	Surr	N/A	333.2 / 312.1	N/A		N/A	N/A	N/A	N/A	N/A
79	13C2-PFOA	Surr	N/A	415.0 / 370.0	N/A		N/A	N/A	N/A	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C4-PFBA	EIS	2.82	217.0 / 172.0	1997153		9.042	NA	NA	NA	90.4

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C5-PFPeA	EIS	4.65	268.0 / 223.0	1050247		3.764	NA	NA	NA	75.3
	13C5-PFHxA	EIS	5.35	318.0 / 273.0	969868		2.646	NA	NA	NA	105.8
	13C4-PFHpA	EIS	6.27	367.0 / 322.0	957635		2.610	NA	NA	NA	104.4
	13C8-PFOA	EIS	7.49	421.0 / 376.0	1265338		1.899	NA	NA	NA	76.0
	13C9-PFNA	EIS	7.92	472.0 / 427.0	623861		1.134	NA	NA	NA	90.7
	13C6-PFDA	EIS	8.14	519.0 / 474.0	558764		1.063	NA	NA	NA	85.0
	13C7-PFUnA	EIS	8.42	570.0 / 525.0	429694		1.010	NA	NA	NA	80.8

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C2-PFDoA	EIS	8.82	615.1 / 570.0	373594		1.350	NA	NA	NA	108.0
	13C2-PFTeDA	EIS	9.85	715.1 / 670.1	294112		0.979	NA	NA	NA	78.3
	13C3-PFBS	EIS	5.32	302.1 / 80.1	686248		2.076	NA	NA	NA	89.1
	13C3-PFHxS	EIS	7.60	402.1 / 80.1	540267		2.058	NA	NA	NA	86.8
	13C8-PFOS	EIS	8.23	507.1 / 80.1	531096		1.998	NA	NA	NA	83.4
	13C2-4:2FTS	EIS	5.14	329.1 / 81.1	502278		8.515	NA	NA	NA	181.6
	13C2-6:2FTS	EIS	7.11	429.2 / 81.1	244146		5.648	NA	NA	NA	118.8
	13C2-8:2FTS	EIS	8.04	529.2 / 81.1	367777		5.814	NA	NA	NA	121.1

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C8-PFOSA	EIS	9.51	506.1 / 78.1	671199		1.900	NA	NA	NA	76.0
	d3-NMeFOSA	EIS	10.14	515.2 / 219.0	114712		1.929	NA	NA	NA	77.2
	d5-NEtFOSA	EIS	10.35	531.2 / 219.0	108627		1.870	NA	NA	NA	74.8
	d3-NMeFOSAA	EIS	8.19	573.2 / 419.1	333633		2.482	NA	NA	NA	49.6
	d5-NEtFOSAA	EIS	8.32	589.3 / 419.1	302097		4.276	NA	NA	NA	85.5
	d7-NMeFOSE	EIS	10.05	623.2 / 58.9	957379		20.846	NA	NA	NA	83.4
	d9-NEtFOSE	EIS	10.24	639.2 / 58.9	1482261		21.890	NA	NA	NA	87.6

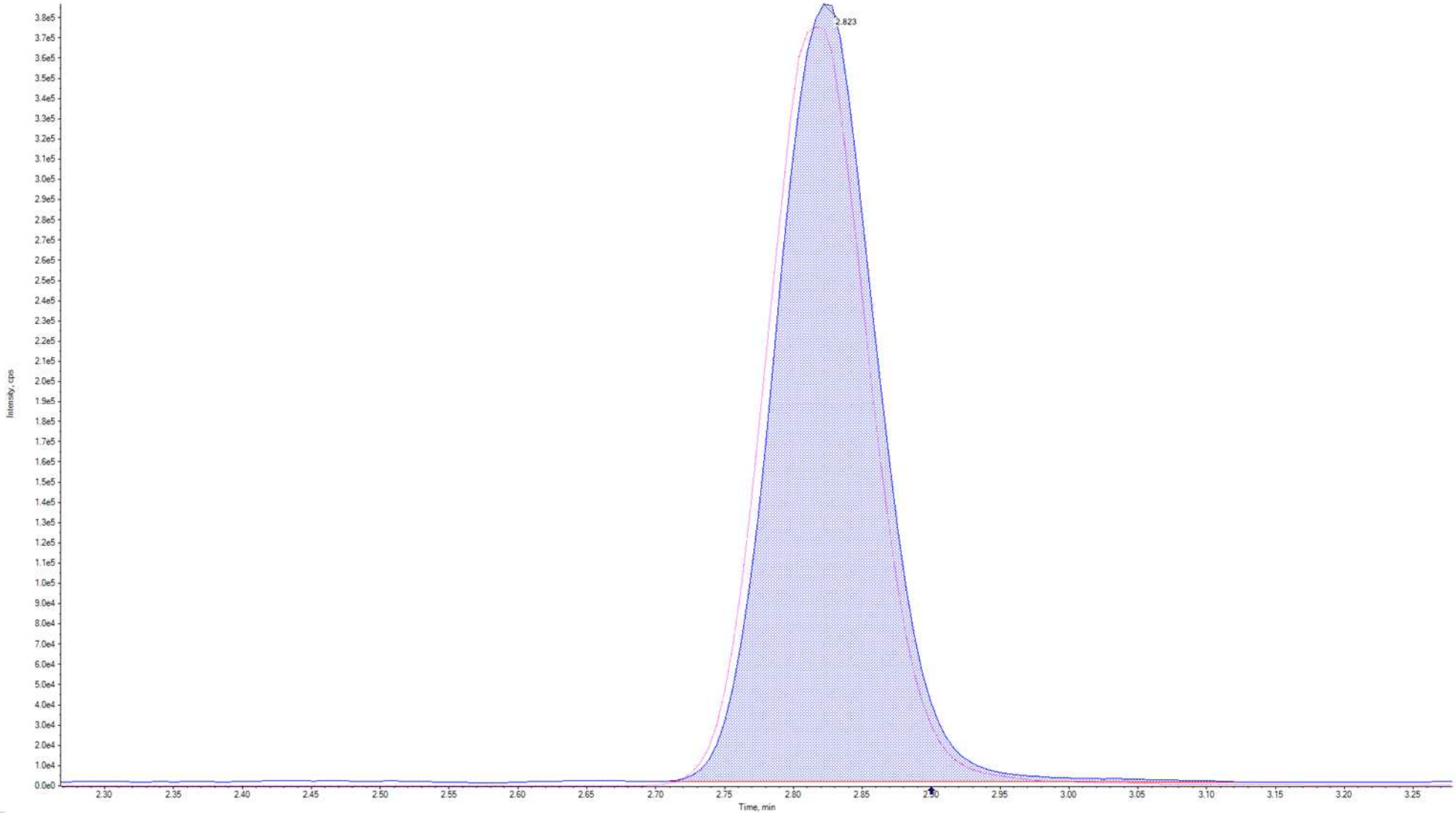
	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C3-HFPO-DA	EIS	5.61	287.0 / 169.0	2316948		9.539	NA	NA	NA	95.4
	13C3-PFBA	NIS	2.82	216.0 / 172.0	966242	M4	4.519	NA	NA	NA	90.4
	13C2-PFHxA	NIS	5.34	315.0 / 270.0	1088240		2.223	NA	NA	NA	88.9
	13C4-PFOA	NIS	7.49	417.0 / 372.0	871656		2.784	NA	NA	NA	111.4
	13C5-PFNA	NIS	7.92	468.0 / 423.0	670364		1.224	NA	NA	NA	97.9
	13C2-PFDA	NIS	8.14	515.1 / 470.1	617636		1.205	NA	NA	NA	96.4
	18O2-PFHxS	NIS	7.60	403.1 / 84.1	533565		2.277	NA	NA	NA	96.1
	13C4-PFOS	NIS	8.23	503.1 / 80.1	470065		2.233	NA	NA	NA	93.2

Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec

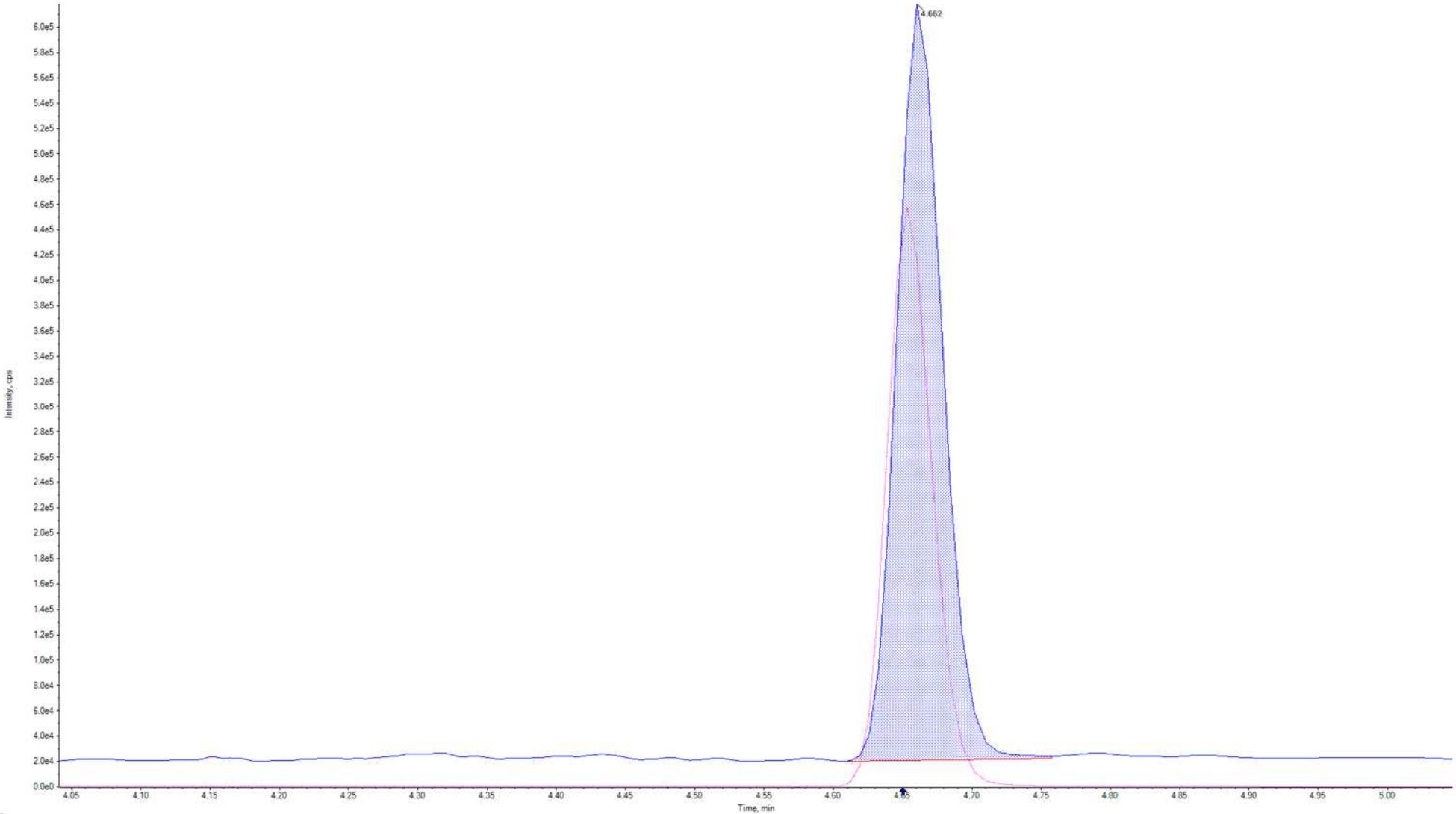
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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Generated: 9/17/2024 6:15:27 AM

PFBA
Sample: WG1971858-4 S/N:1505.1 Points Across peak:72



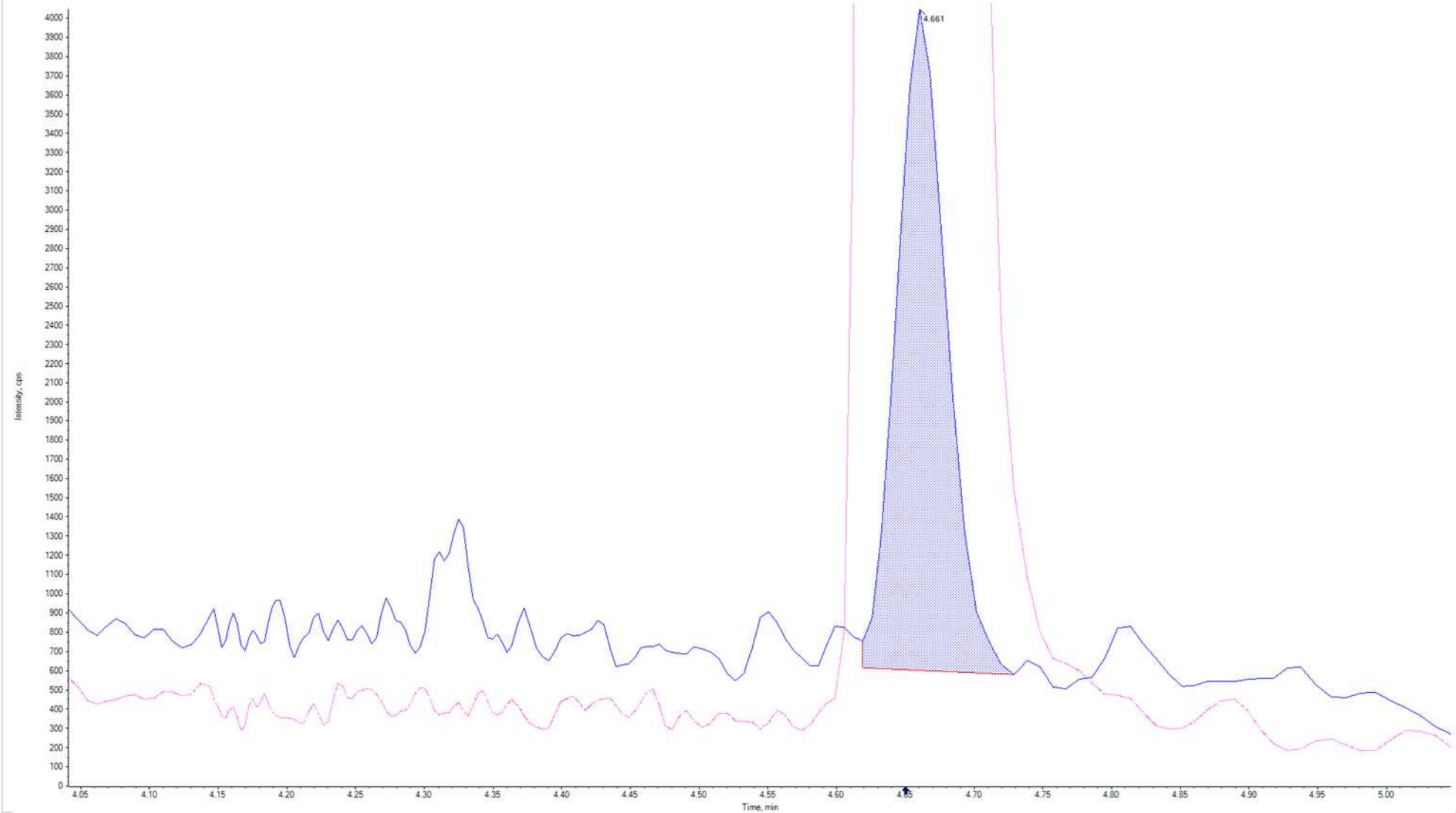
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Generated: 9/17/2024 6:15:27 AM

PFPeA
Sample: WG1971858-4 S/N:229.2 Points Across peak:20



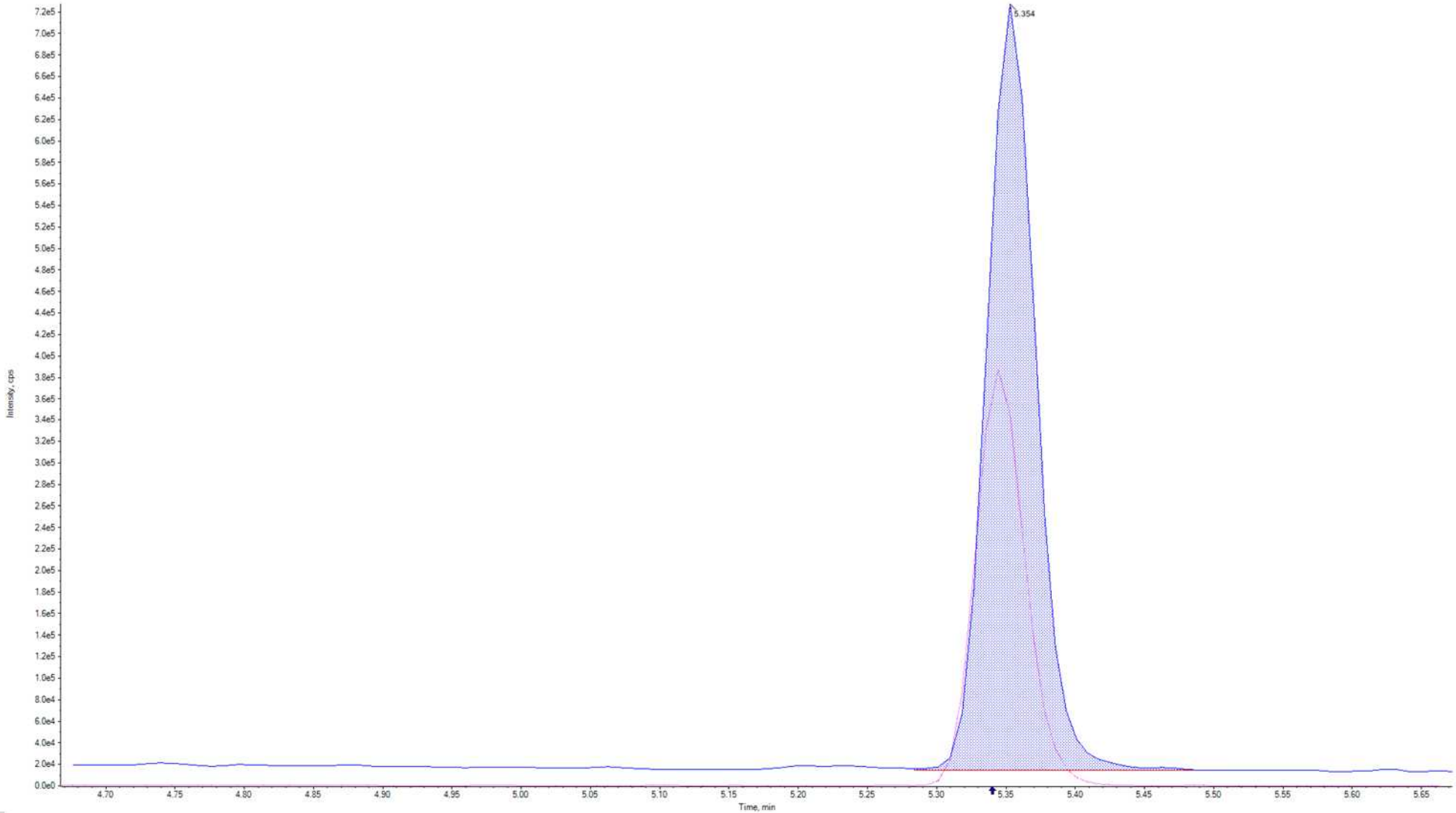
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Alpha Analytical Inc.
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PFPeA_2
Sample: WG1971858-4 S/N:88.7 Points Across peak:15



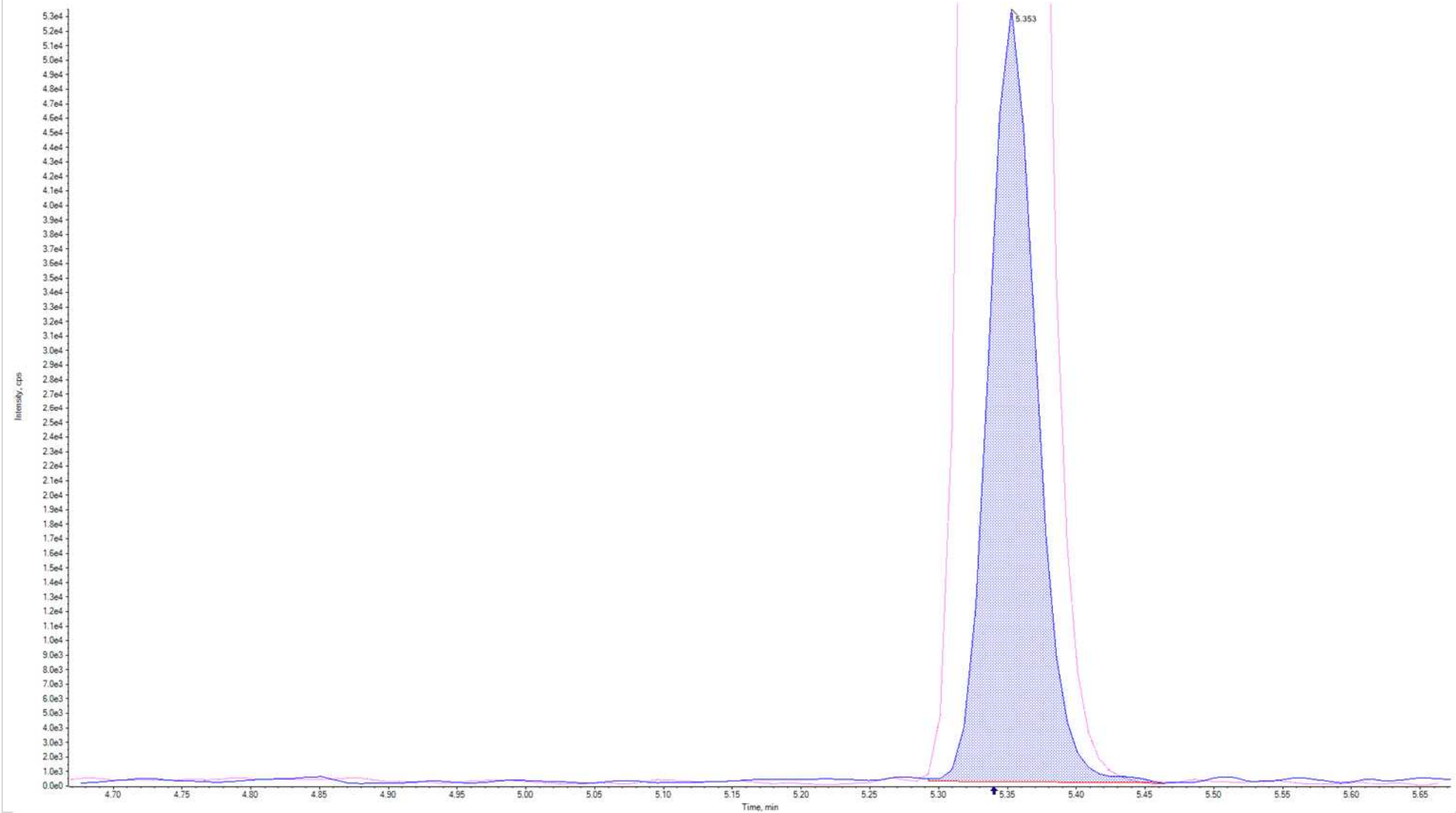
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PFHxA
Sample: WG1971858-4 S/N:346.6 Points Across peak:29



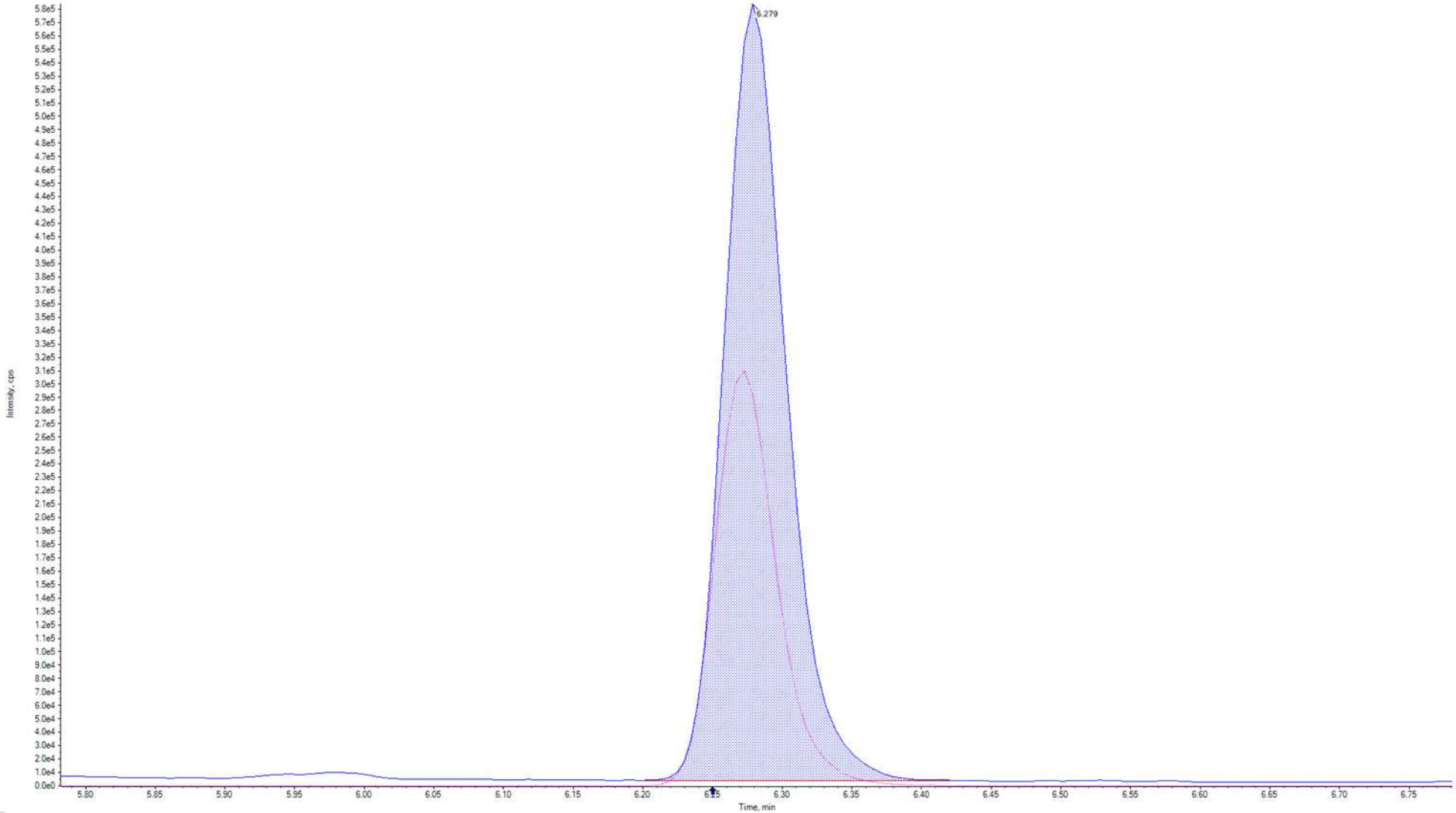
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PFHxA_2
Sample: WG1971858-4 S/N:633.6 Points Across peak:22



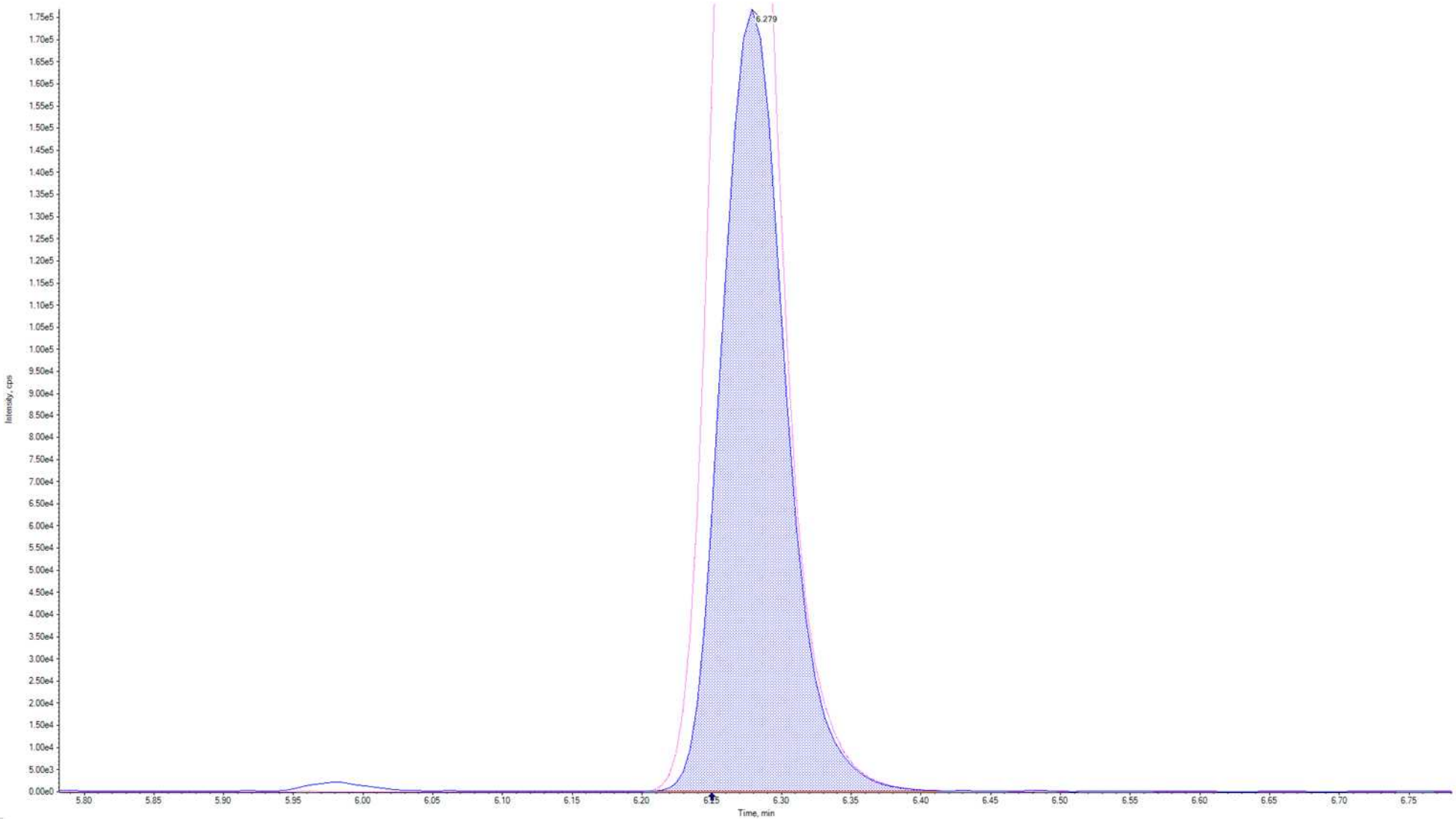
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
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PFHpA
Sample: WG1971858-4 S/N:1139.1 Points Across peak:39



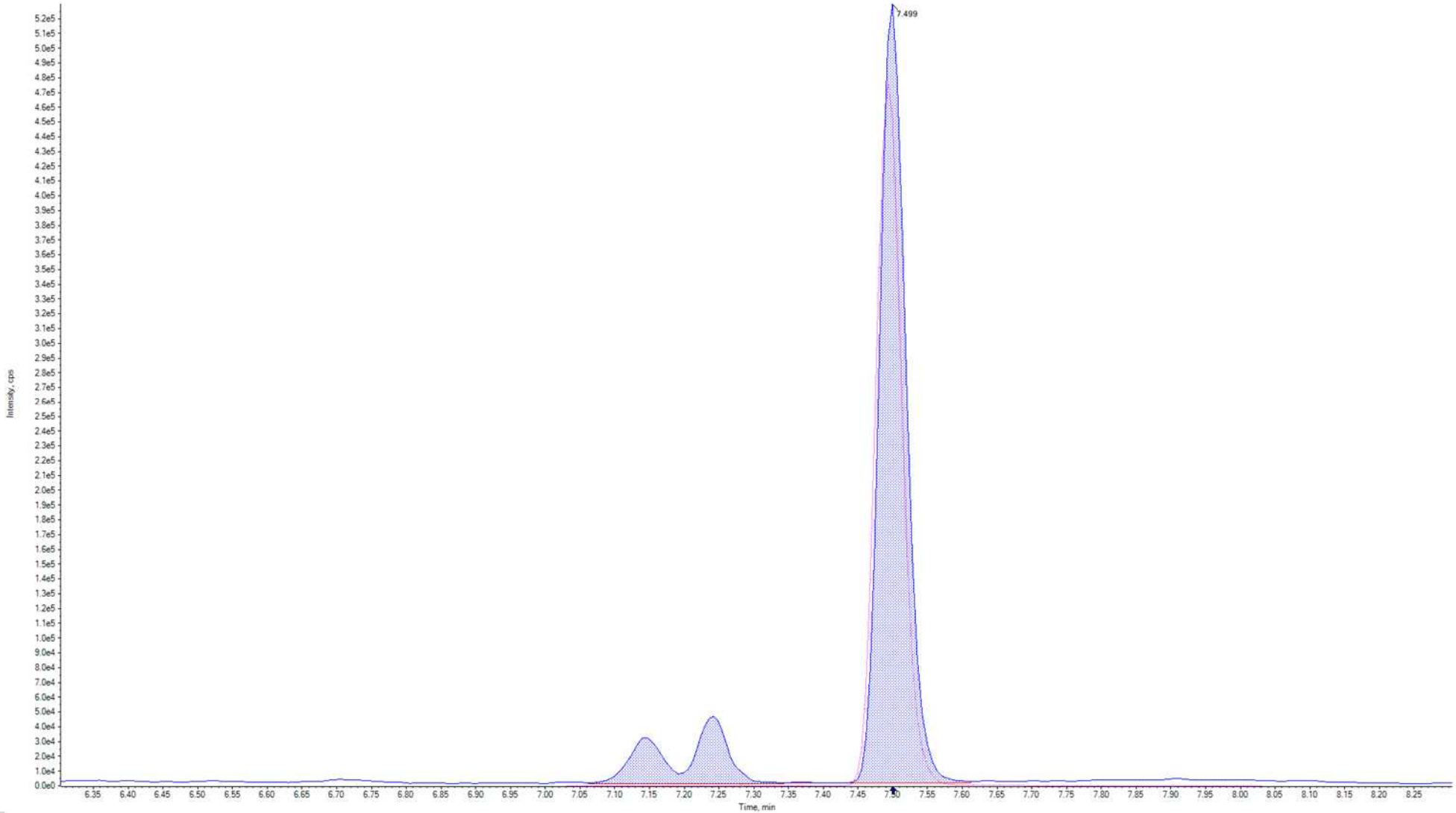
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PFHpA_2
Sample: WG1971858-4 S/N:3262.9 Points Across peak:36



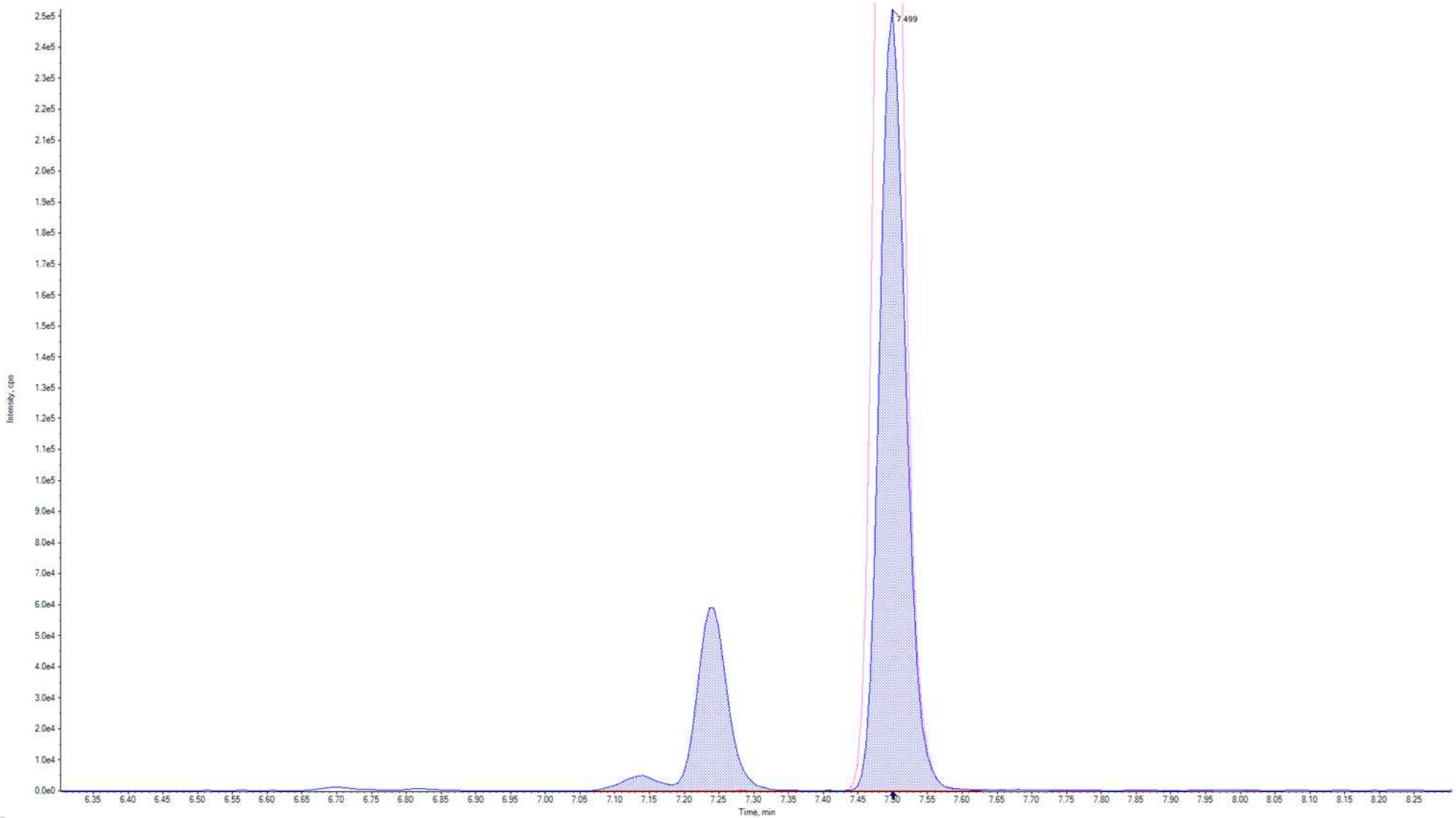
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PFOA
Sample: WG1971858-4 S/N:1314.8 Points Across peak:88



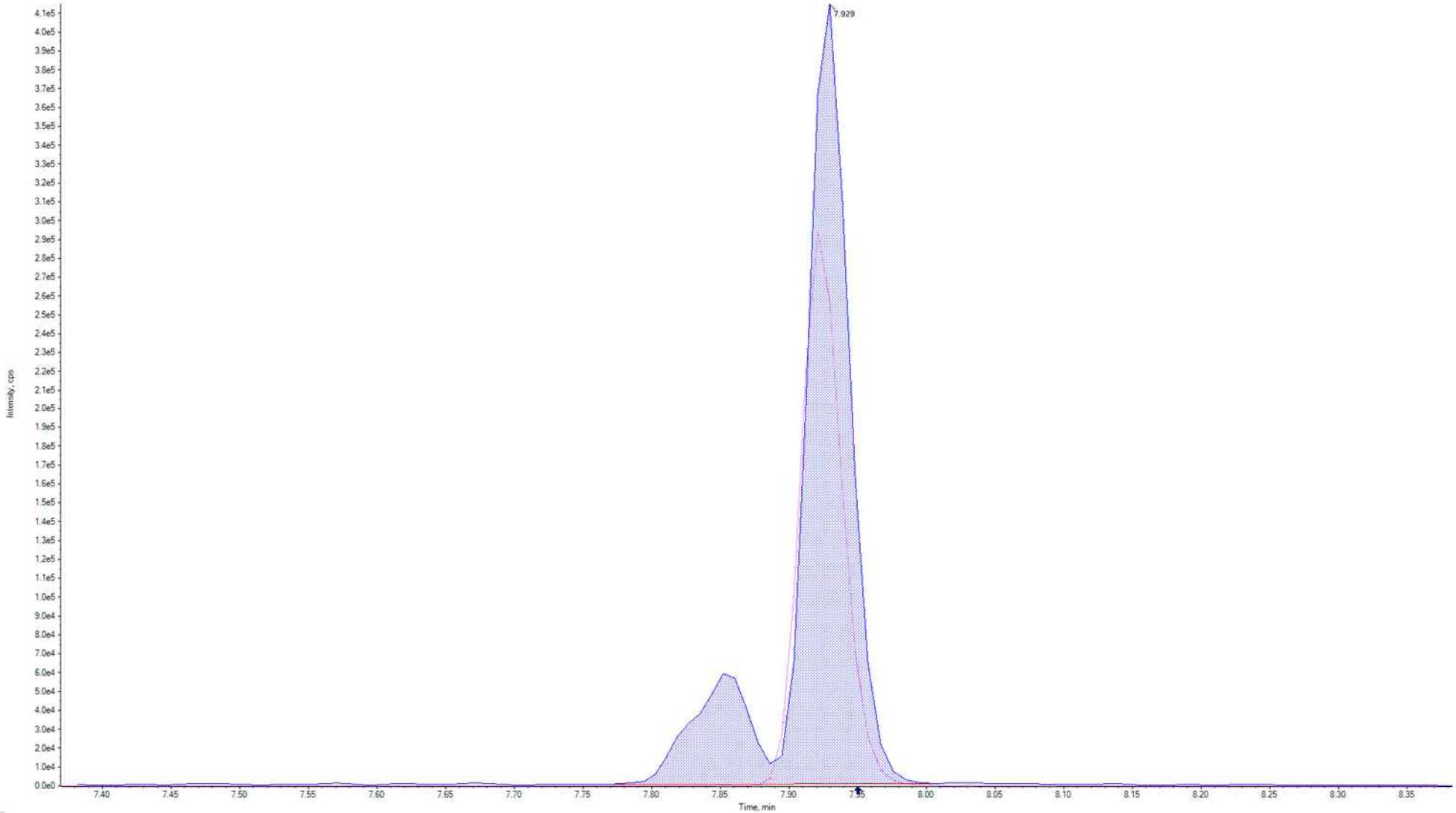
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOA_2
Sample: WG1971858-4 S/N:6472.9 Points Across peak:91



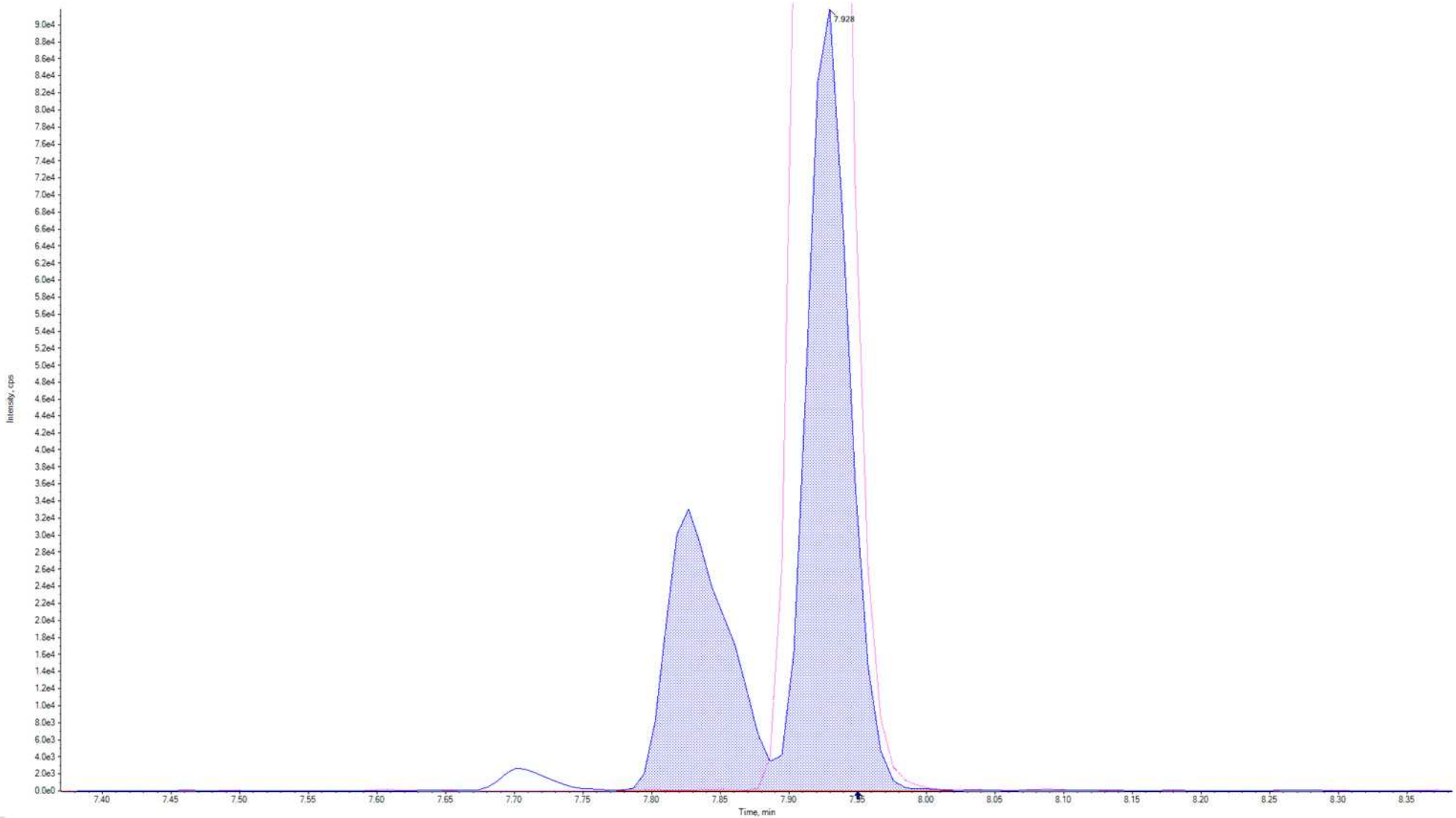
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PFNA
Sample: WG1971858-4 S/N:1522.2 Points Across peak:31



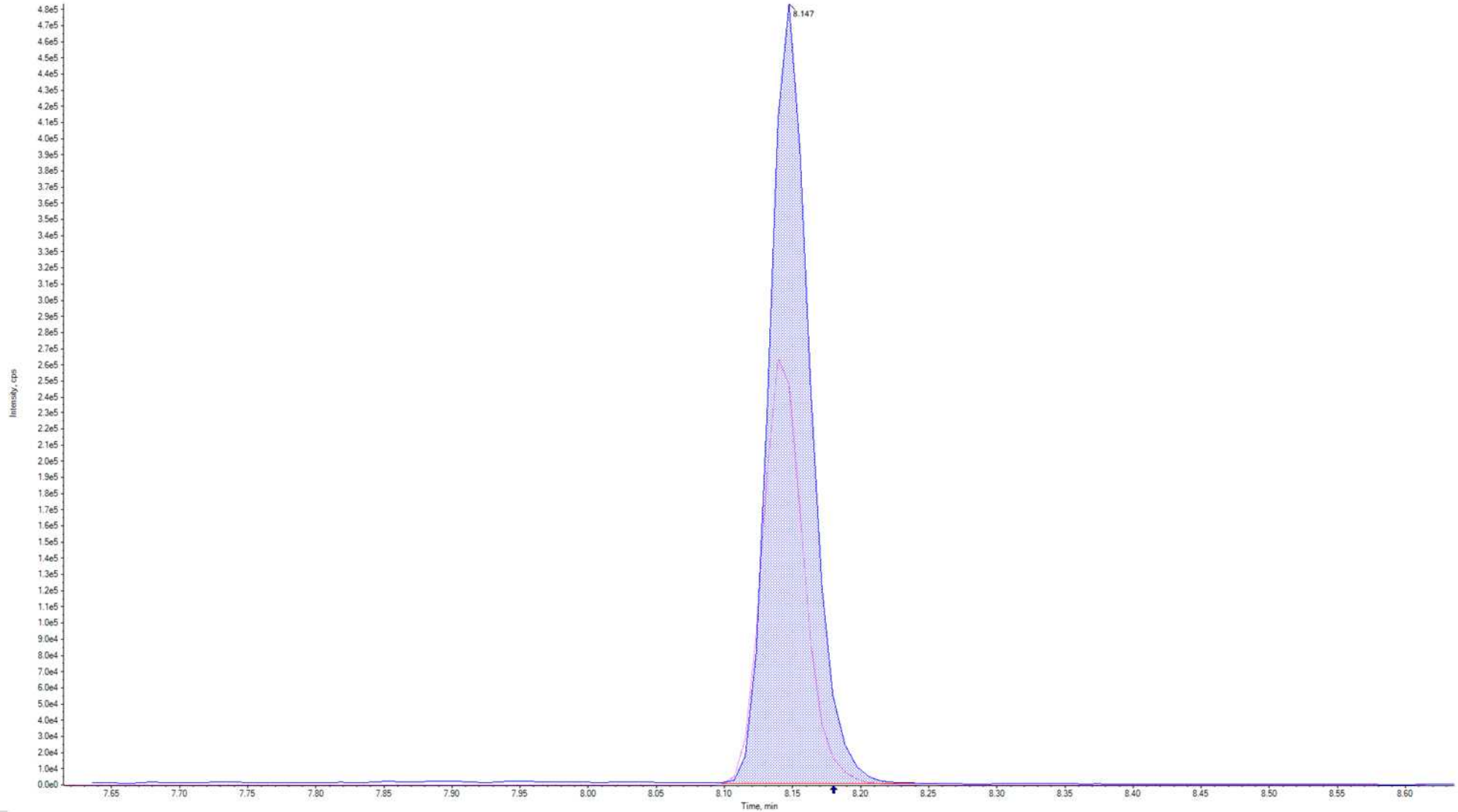
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PFNA_2
Sample: WG1971858-4 S/N:855.2 Points Across peak:31



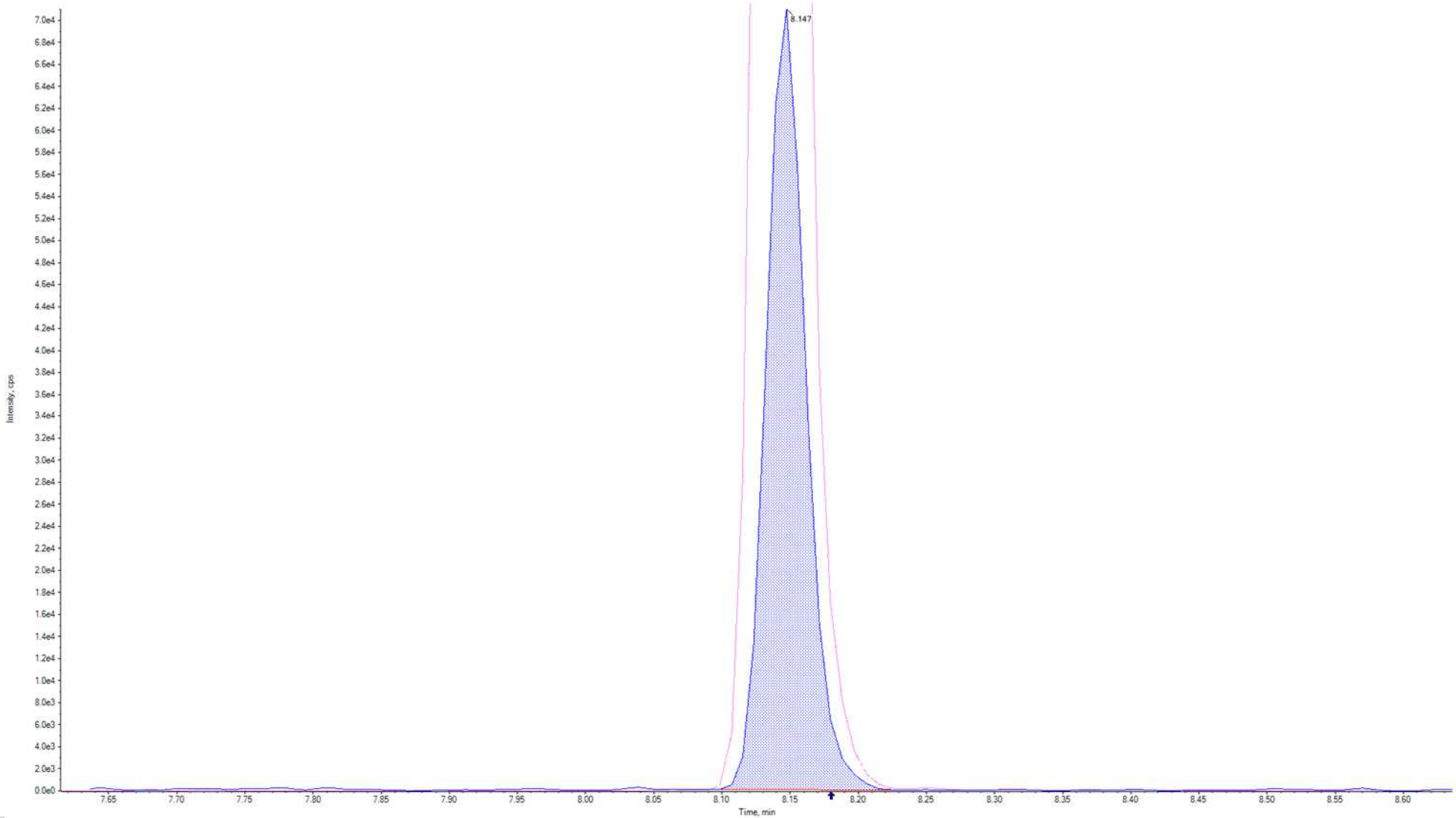
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PFDA
Sample: WG1971858-4 S/N:1675.4 Points Across peak:19



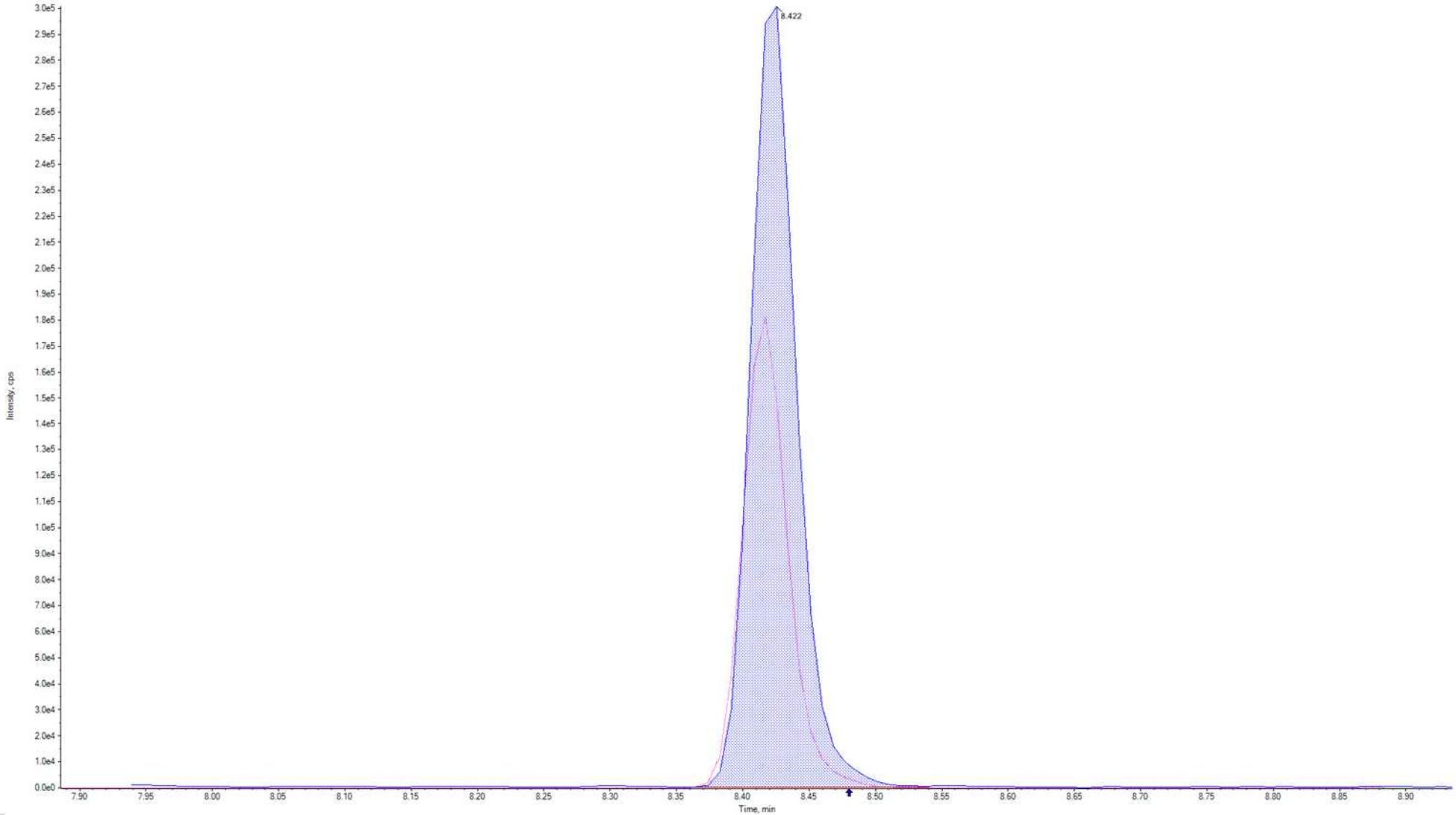
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PFDA_2
Sample: WG1971858-4 S/N:5736.7 Points Across peak:18



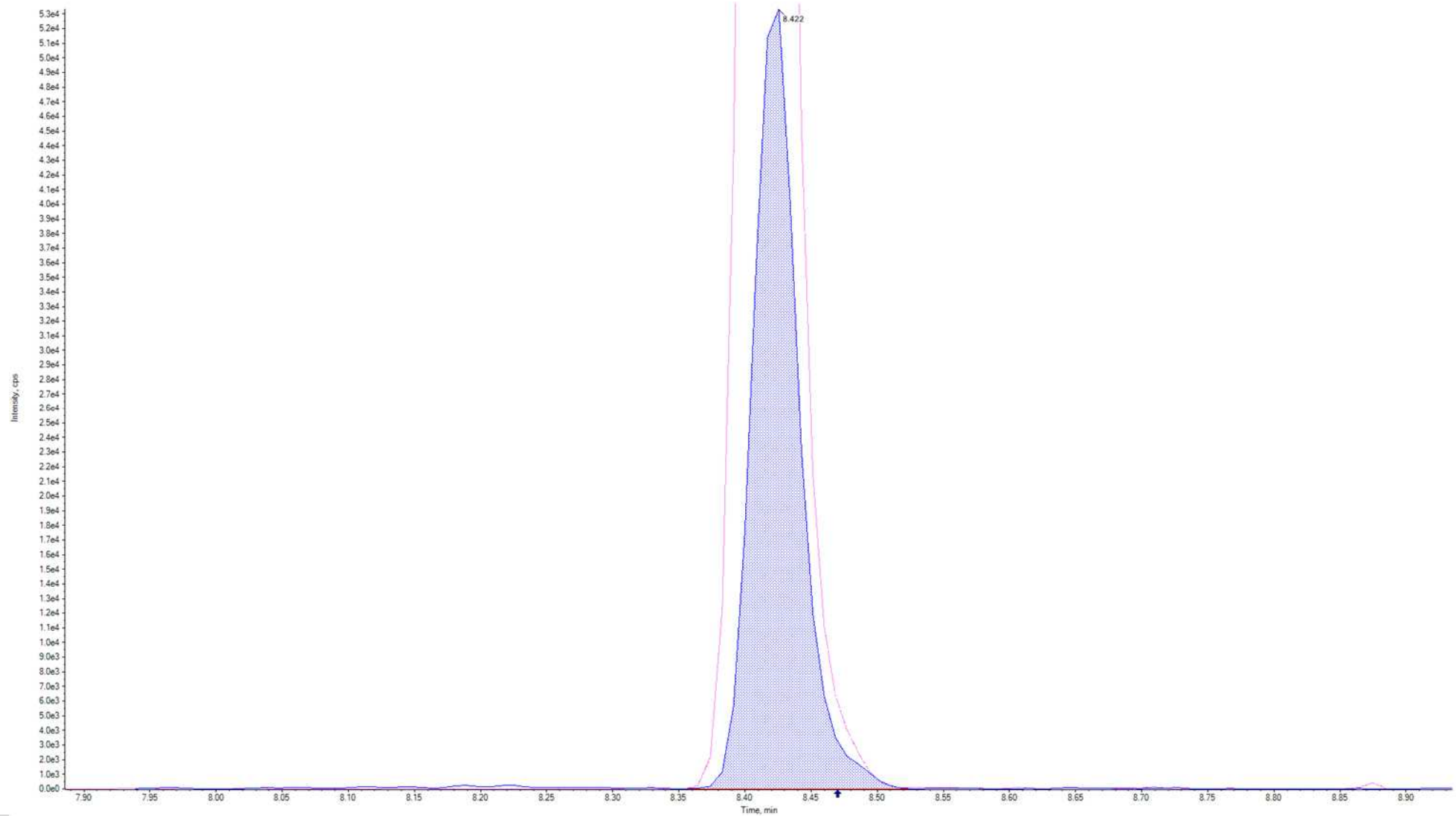
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PFUnA
Sample: WG1971858-4 S/N:1747.9 Points Across peak:23



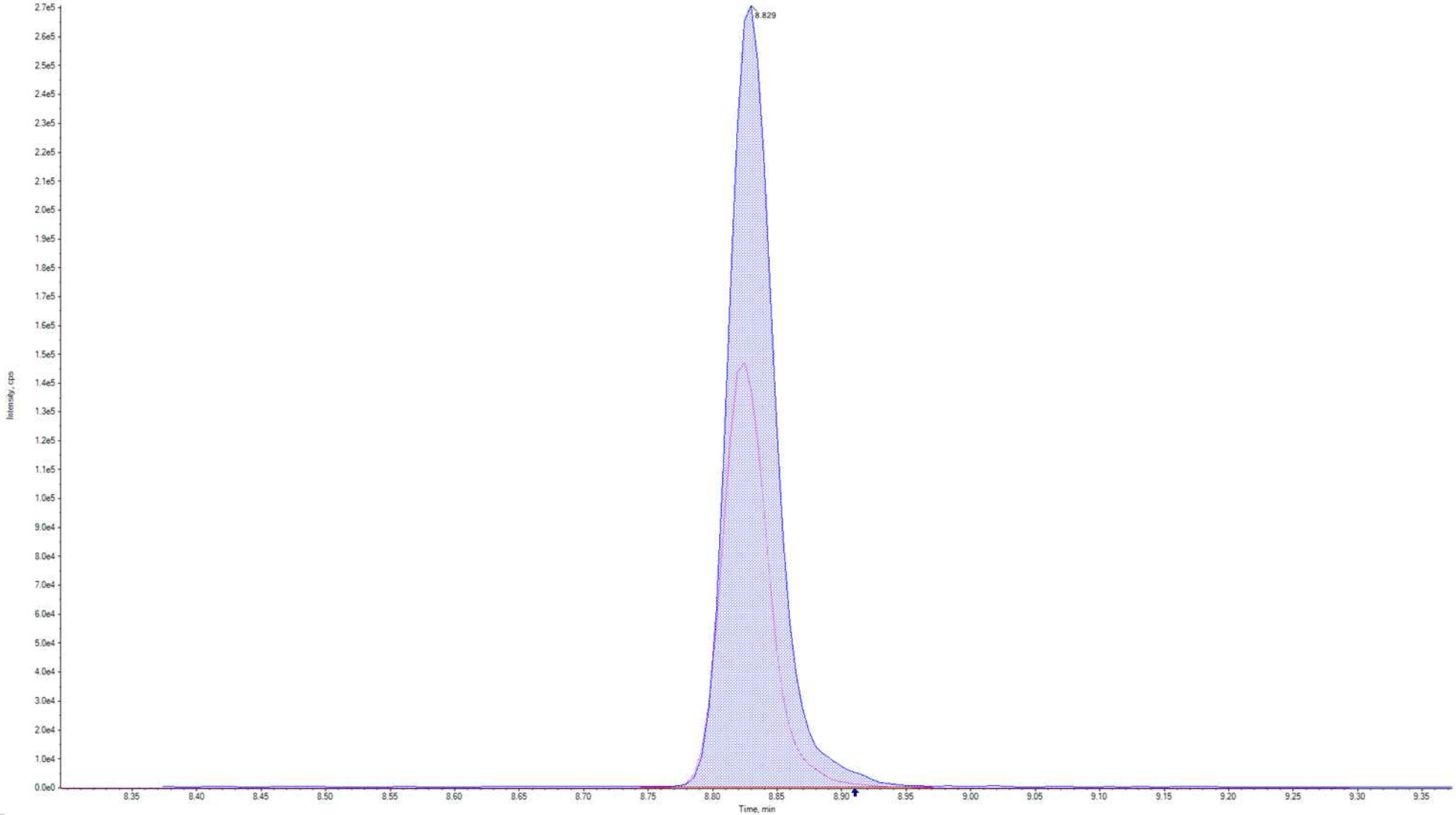
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PFUnA_2
Sample: WG1971858-4 S/N:1160.8 Points Across peak:22



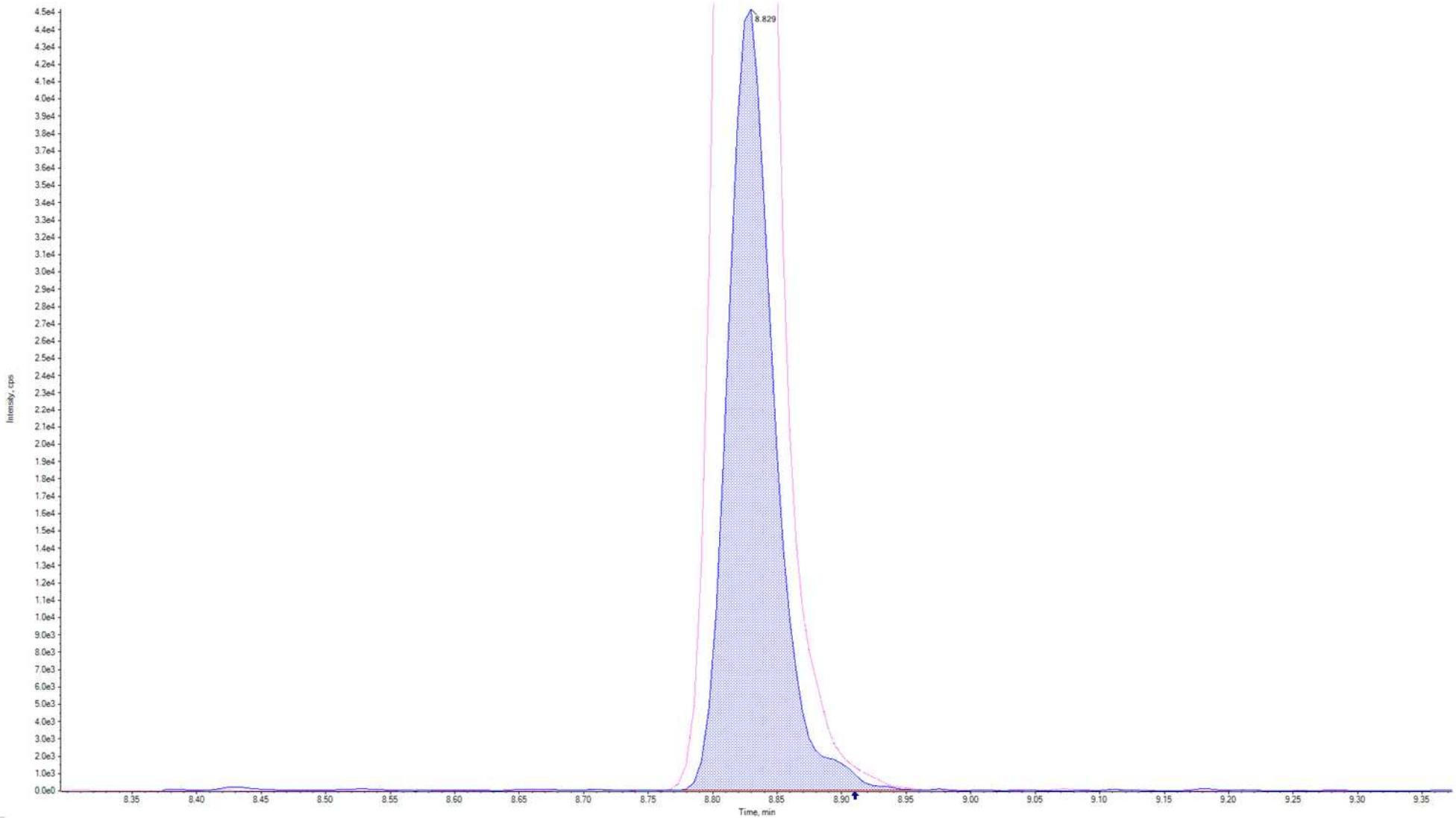
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PFDoA
Sample: WG1971858-4 S/N:2400.8 Points Across peak:46



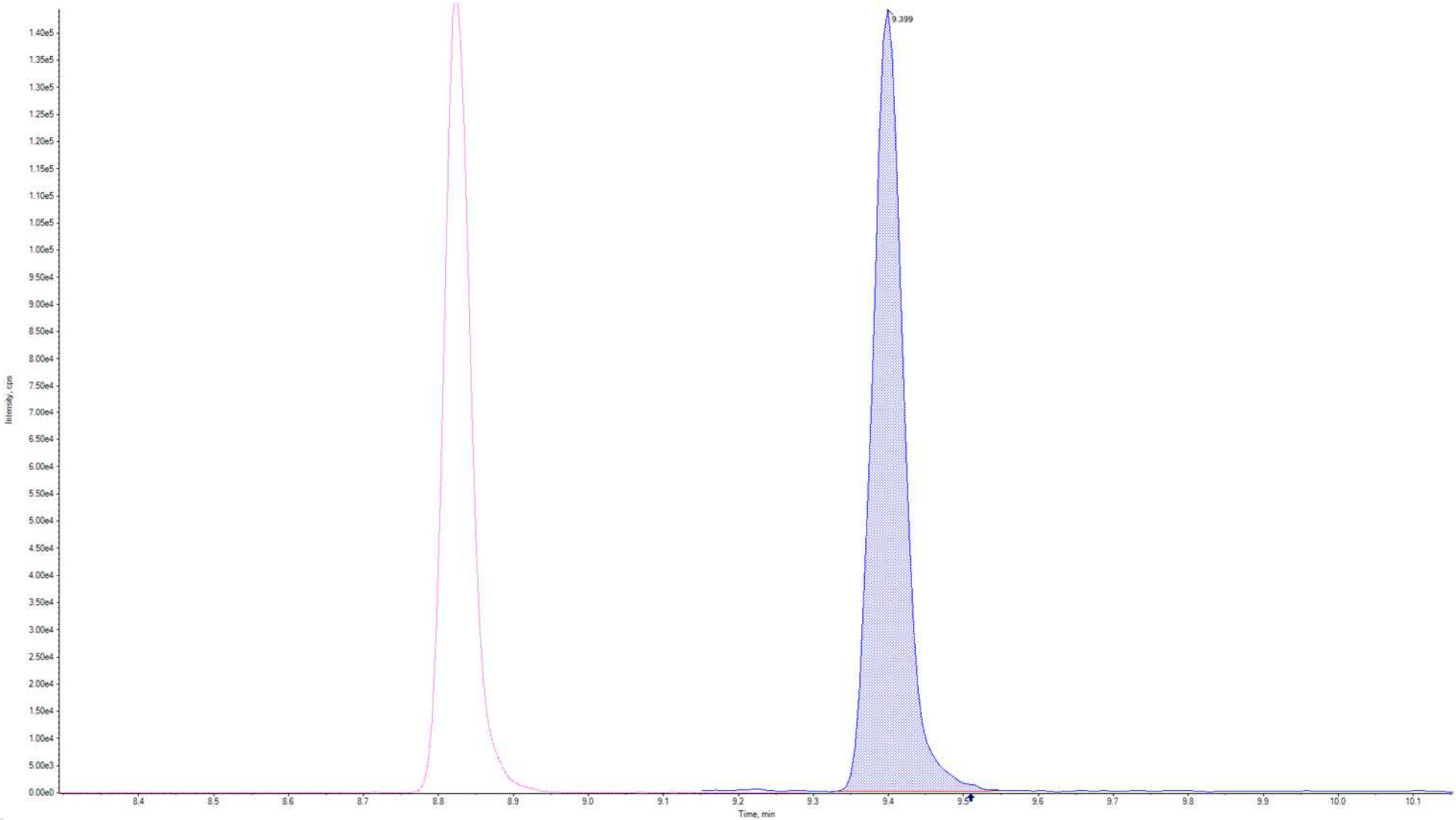
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PFDoA_2
Sample: WG1971858-4 S/N:14529.1 Points Across peak:37



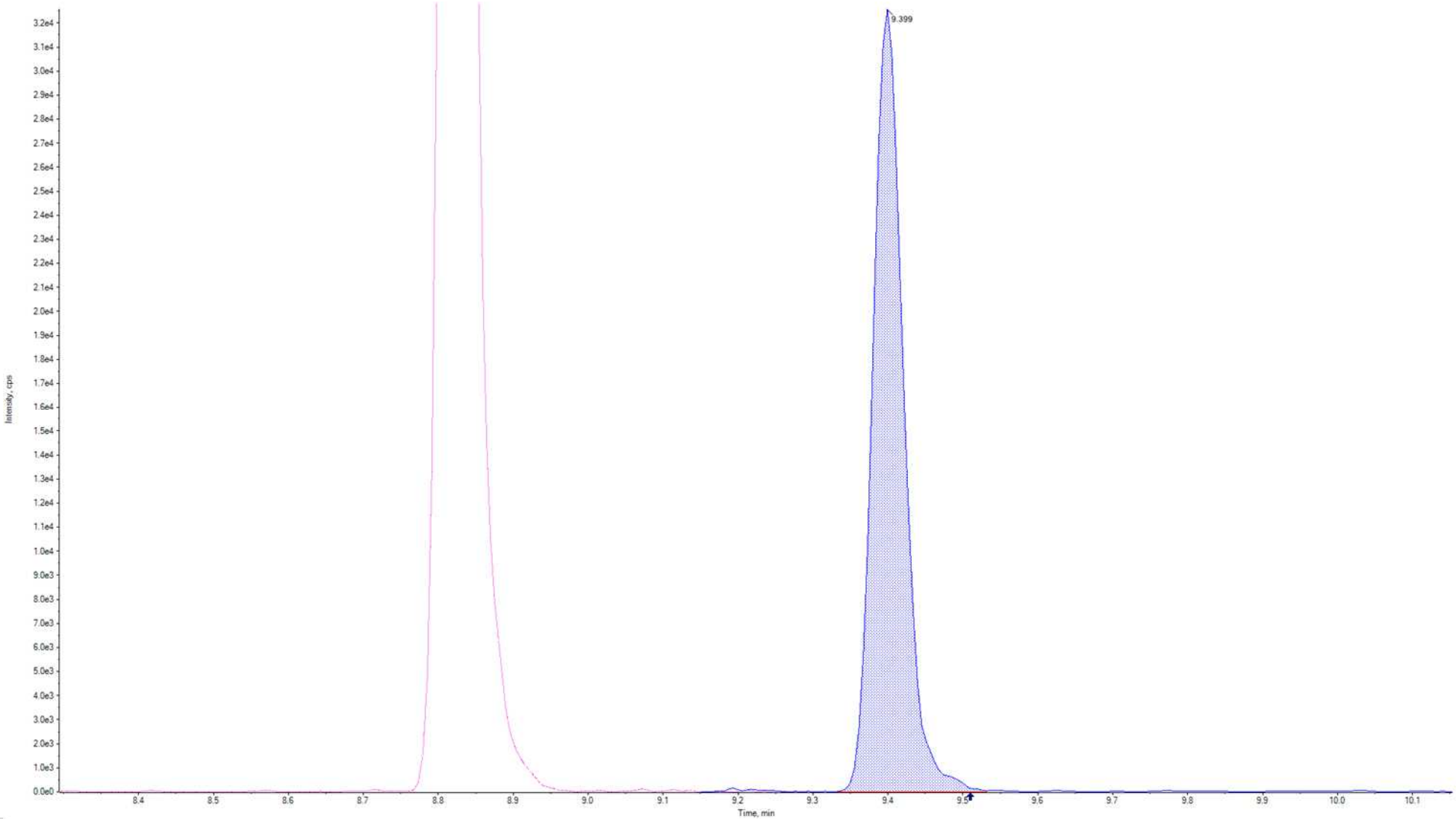
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PFTrDA
Sample: WG1971858-4 S/N:1689.5 Points Across peak:45



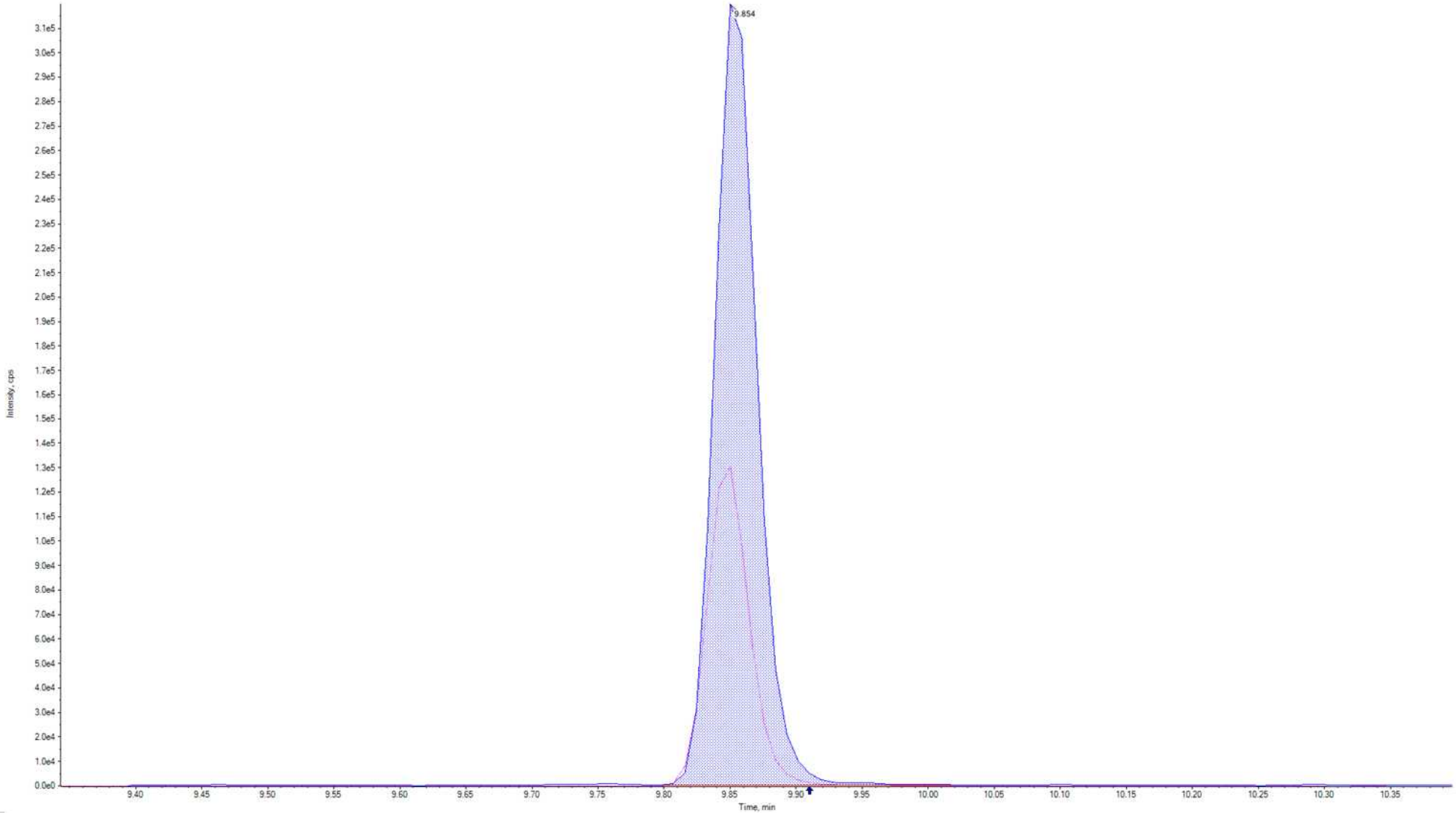
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PFTrDA_2
Sample: WG1971858-4 S/N:18250.1 Points Across peak:37



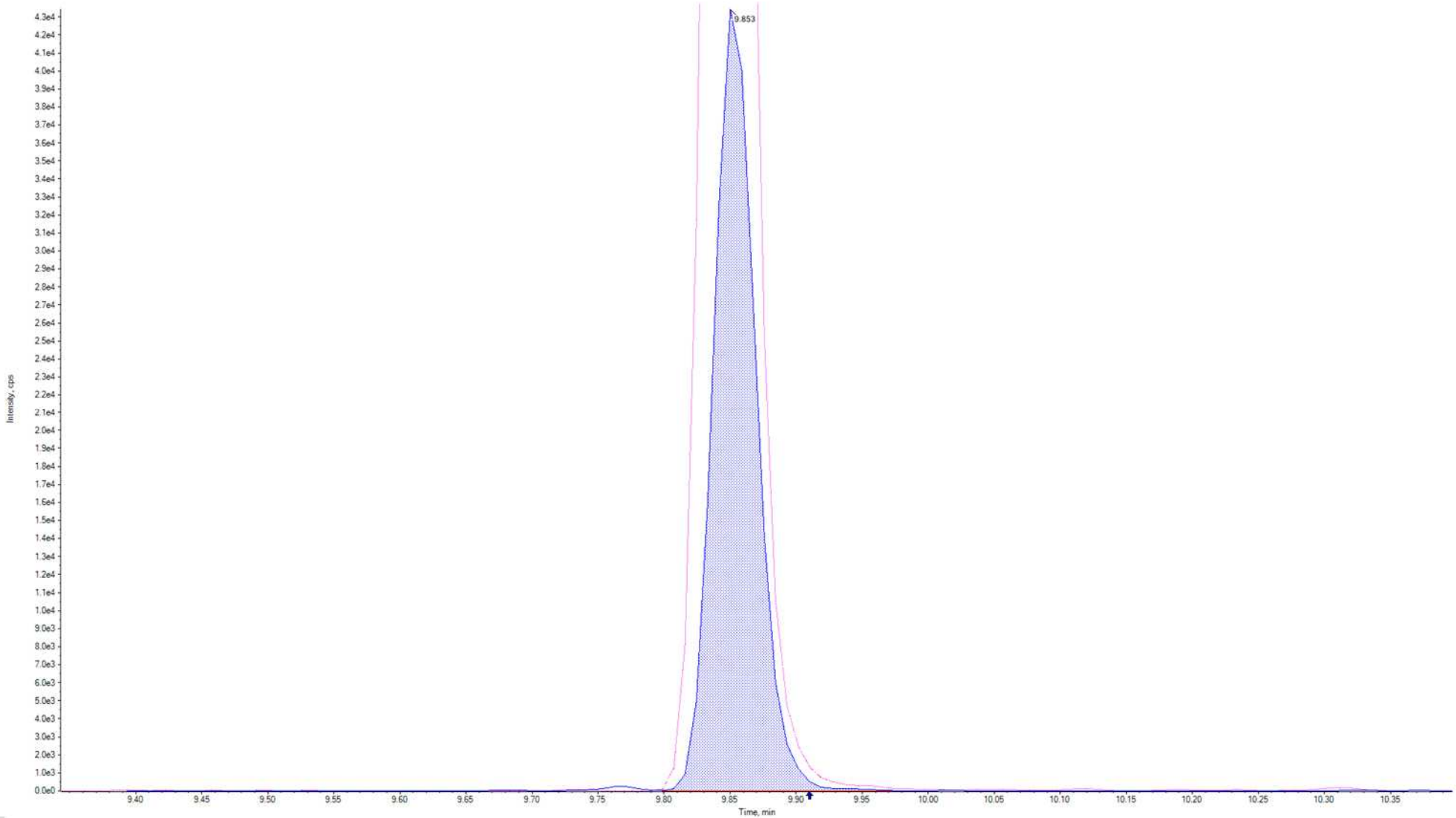
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PFTeDA
Sample: WG1971858-4 S/N:1527.4 Points Across peak:32



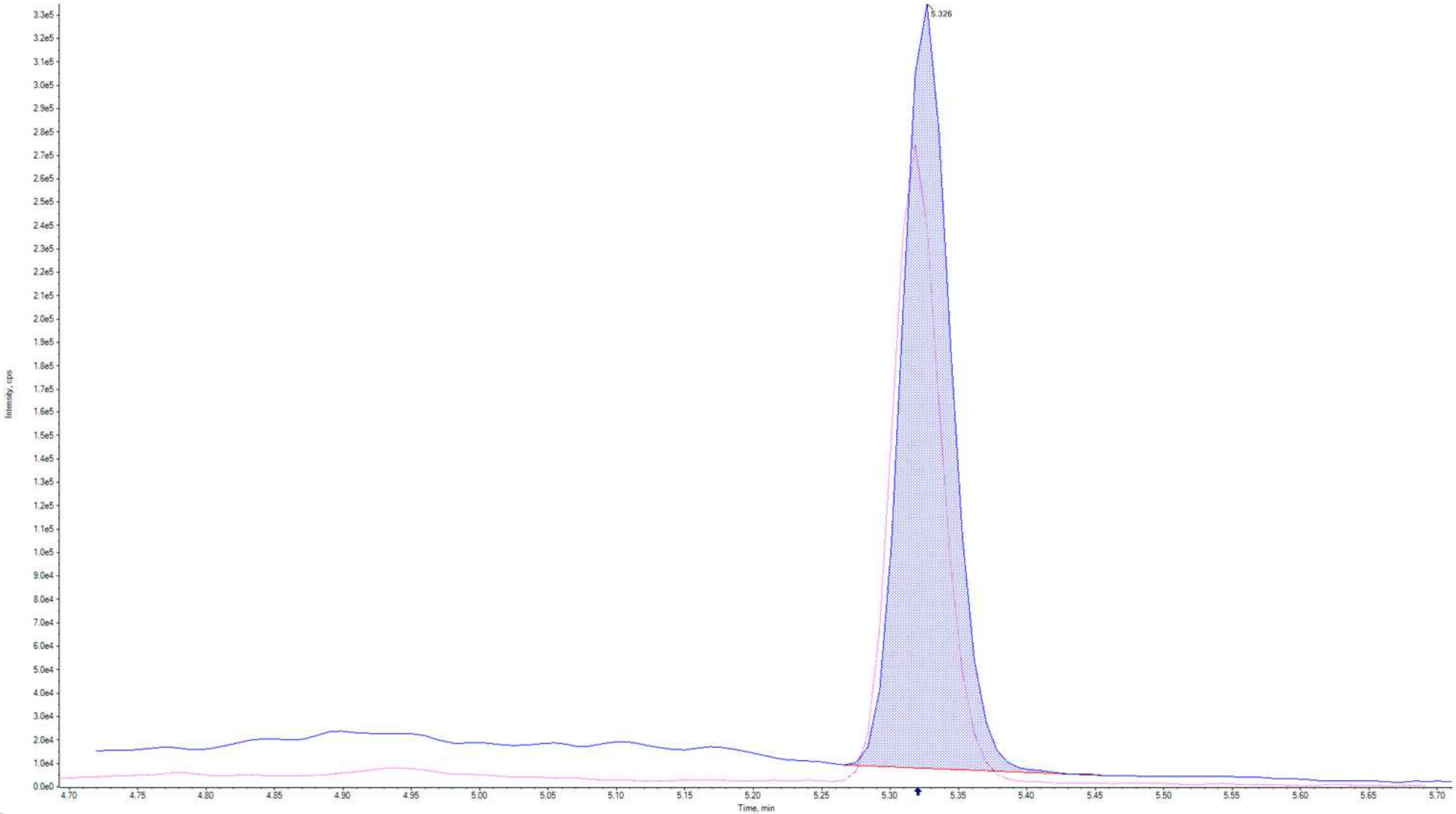
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PFTeDA_2
Sample: WG1971858-4 S/N:1904.7 Points Across peak:22



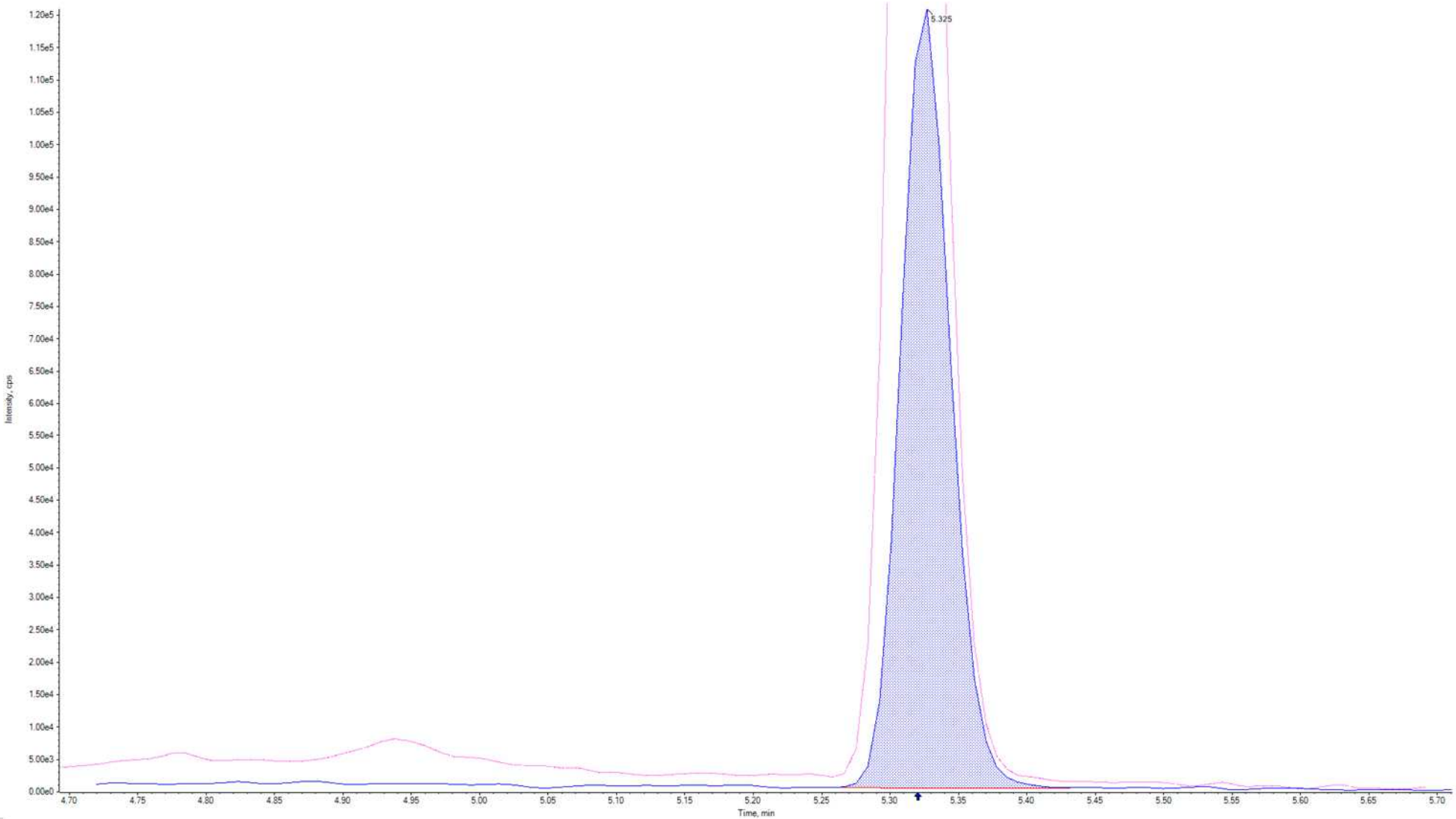
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PFBS
Sample: WG1971858-4 S/N:65.7 Points Across peak:25



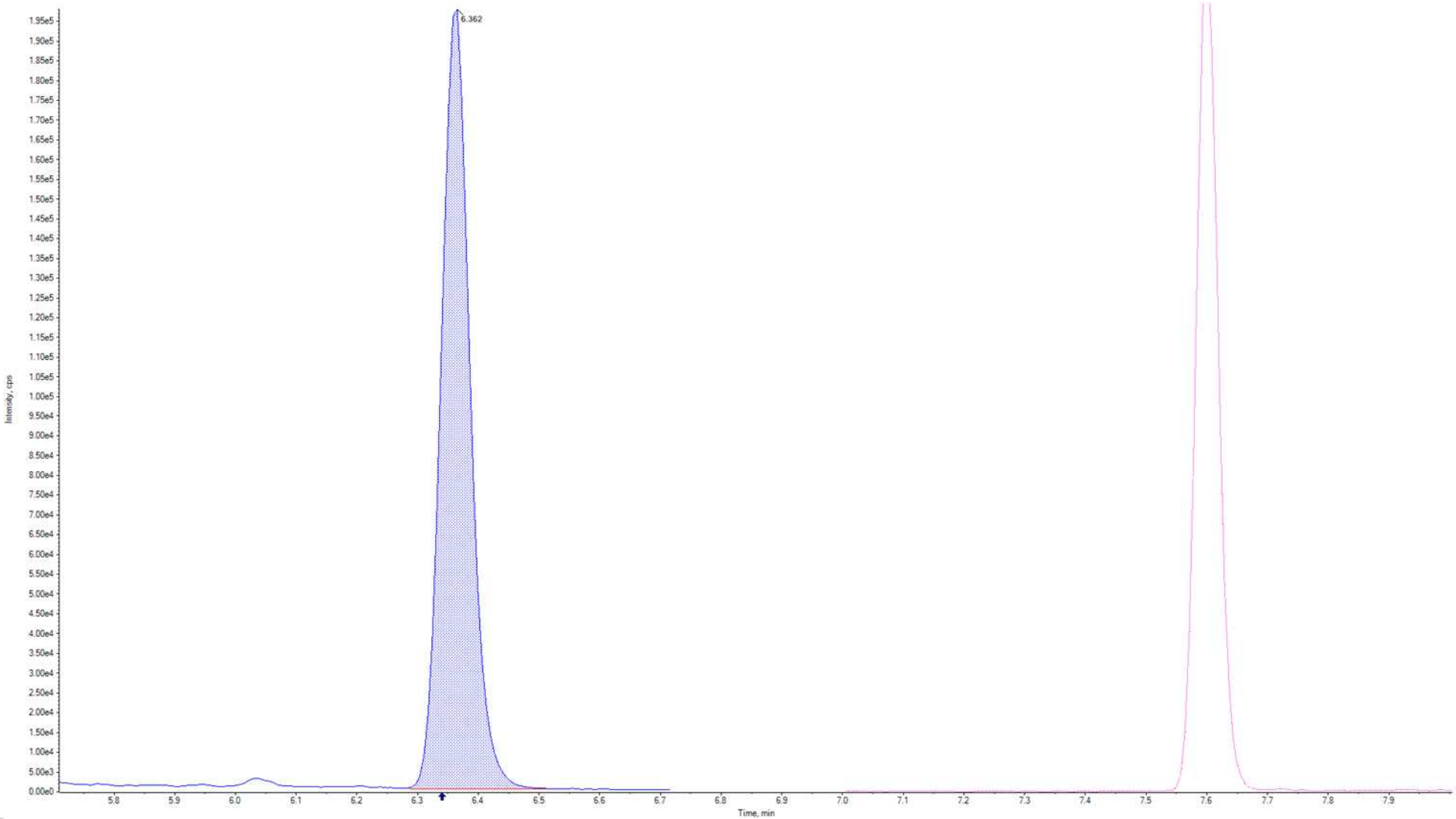
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PFBS_2
Sample: WG1971858-4 S/N:846.4 Points Across peak:22



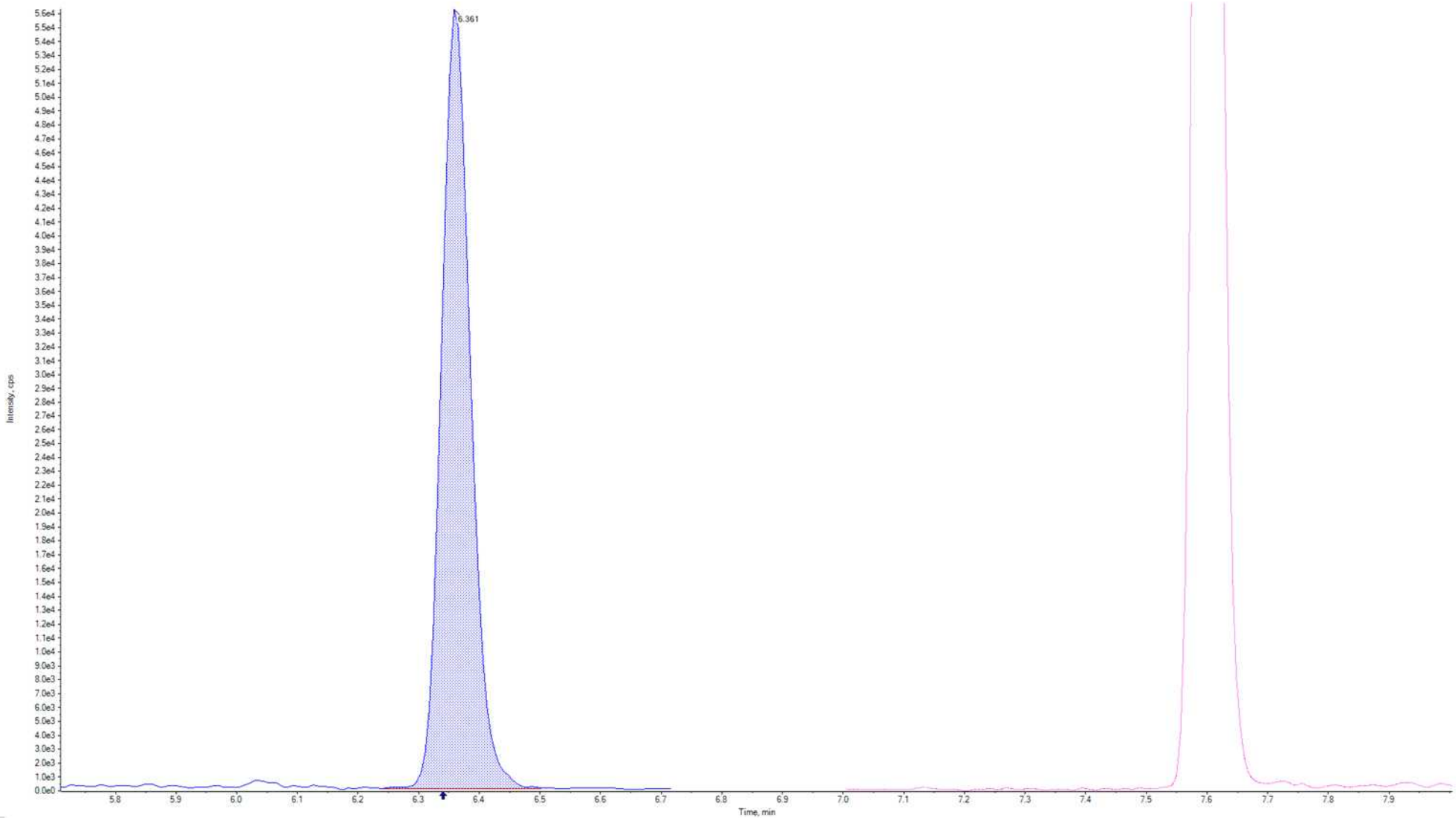
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

PFPeS
Sample: WG1971858-4 S/N:1204.8 Points Across peak:40



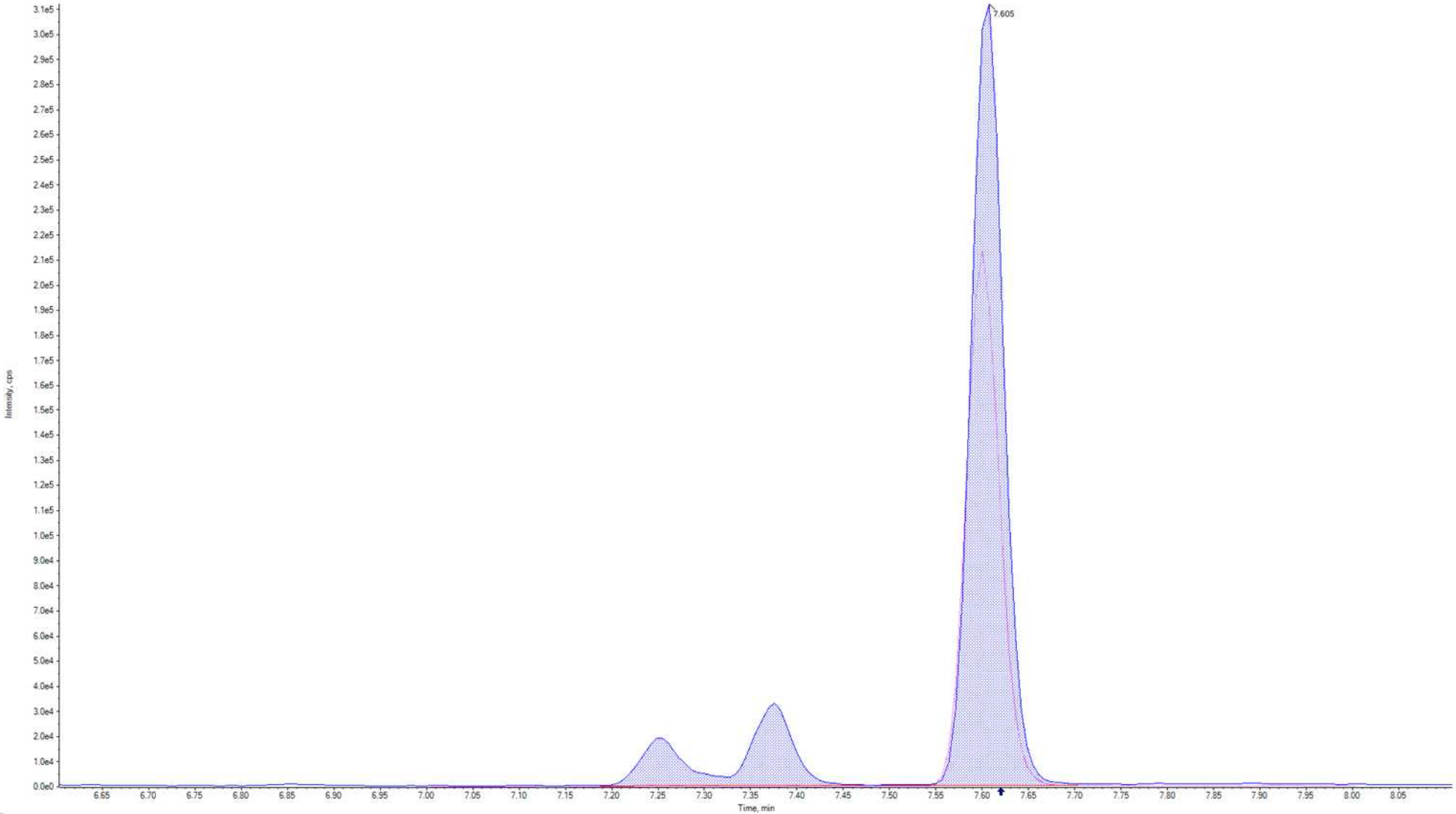
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PFPeS_2
Sample: WG1971858-4 S/N:1485.9 Points Across peak:42



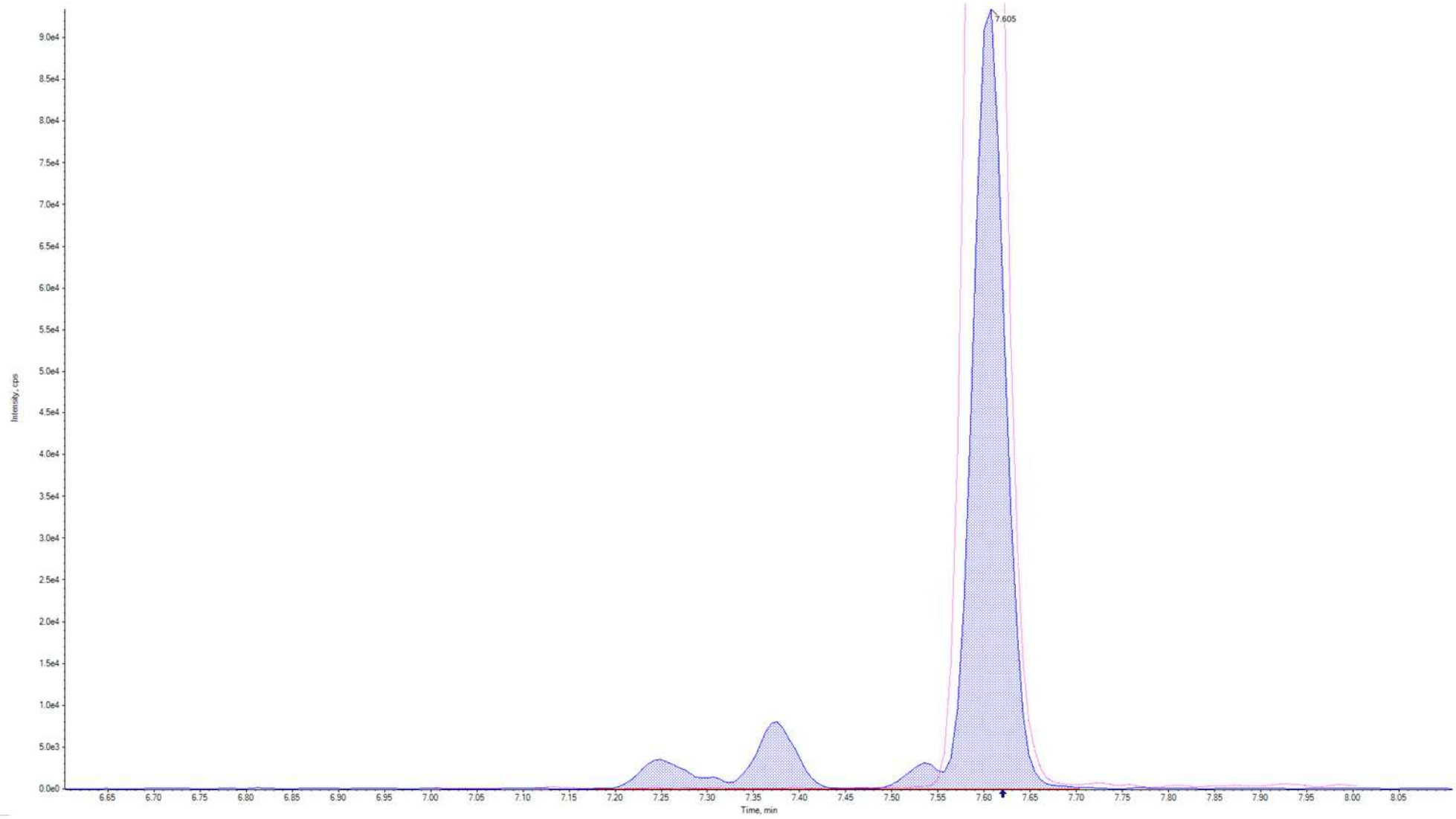
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHxS
Sample: WG1971858-4 S/N:1767.6 Points Across peak:85



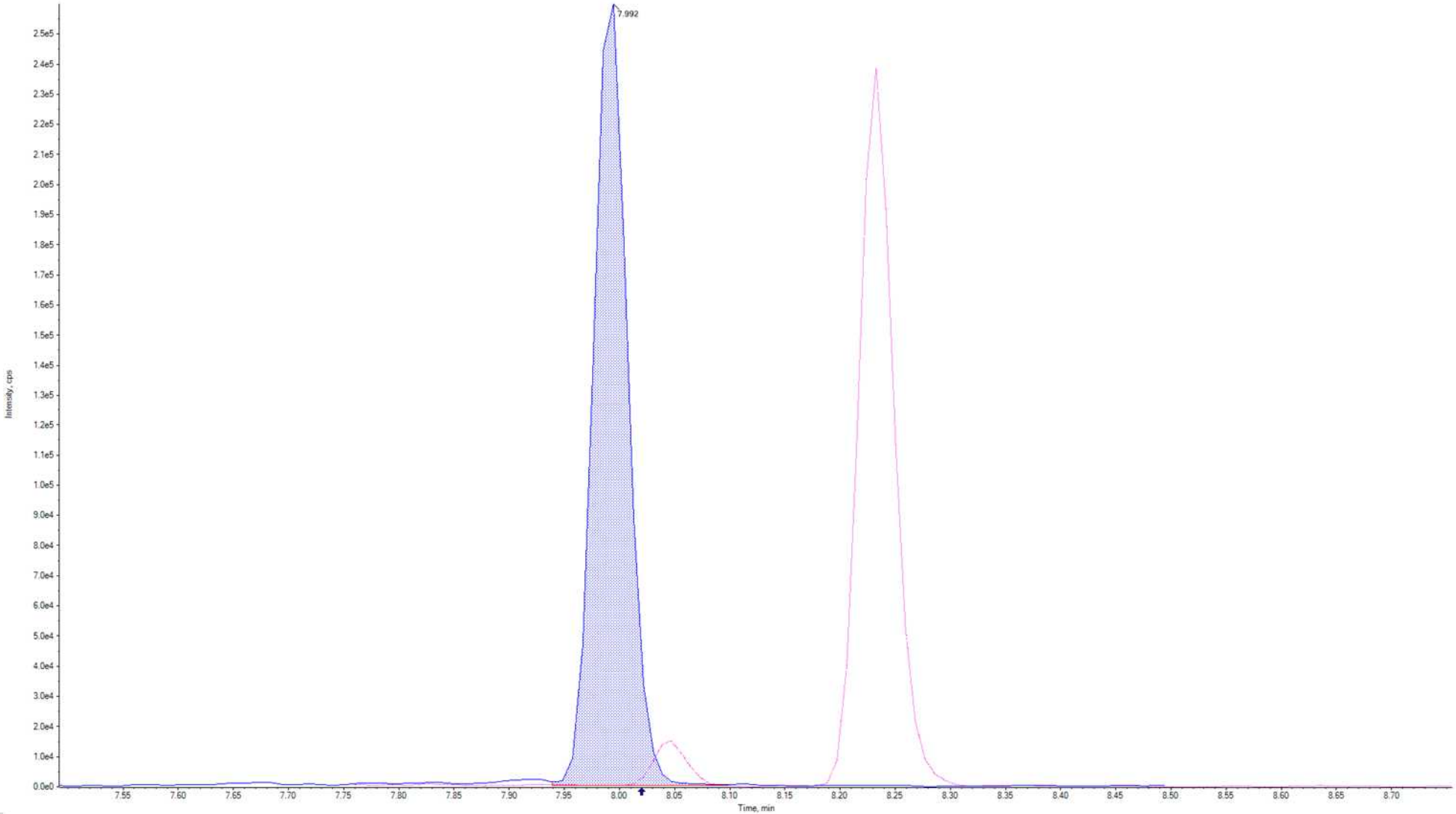
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHxS_2
Sample: WG1971858-4 S/N:20610.9 Points Across peak:89



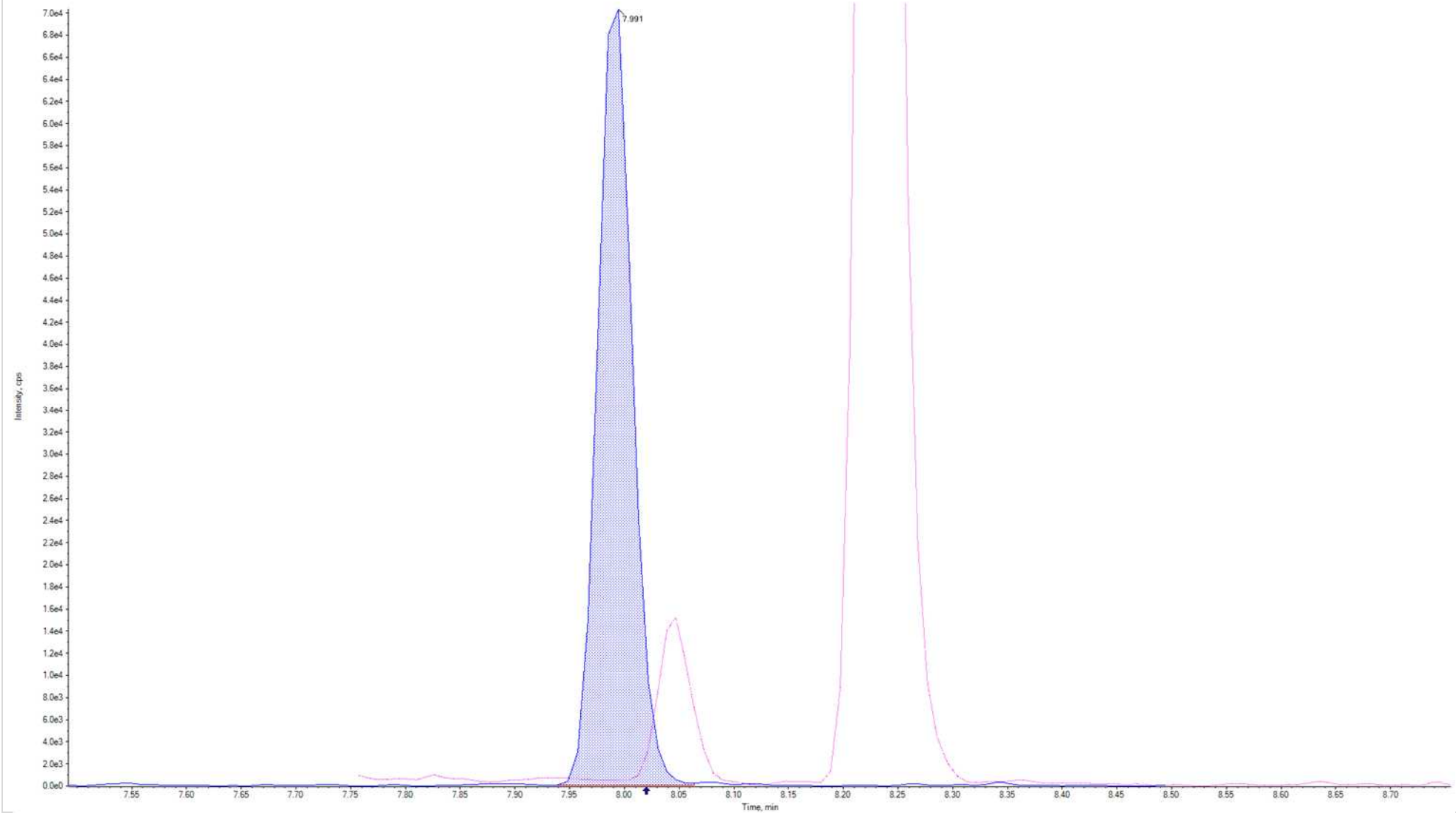
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS
Sample: WG1971858-4 S/N:1557.6 Points Across peak:19



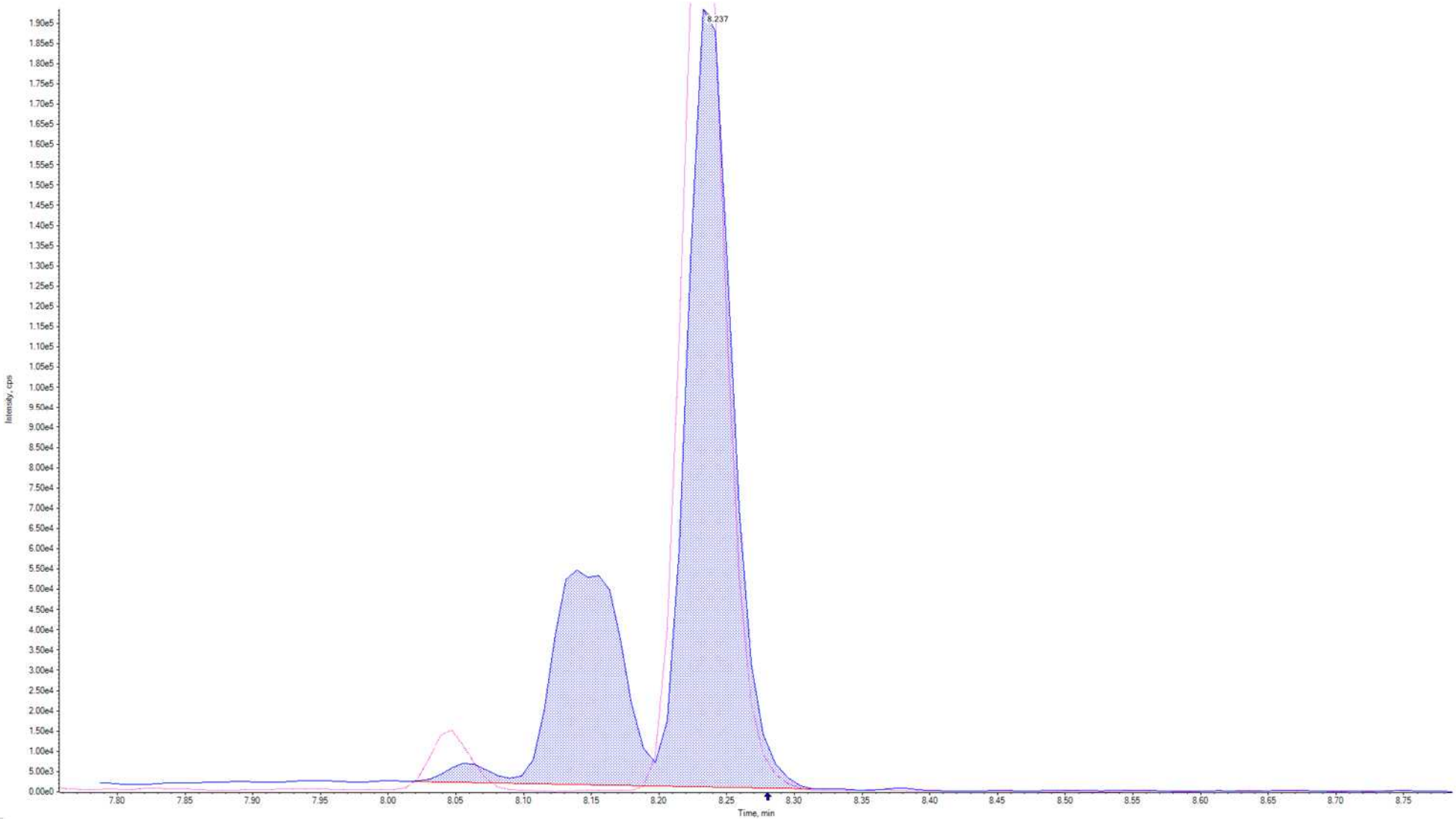
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS_2
Sample: WG1971858-4 S/N:11689.3 Points Across peak:16



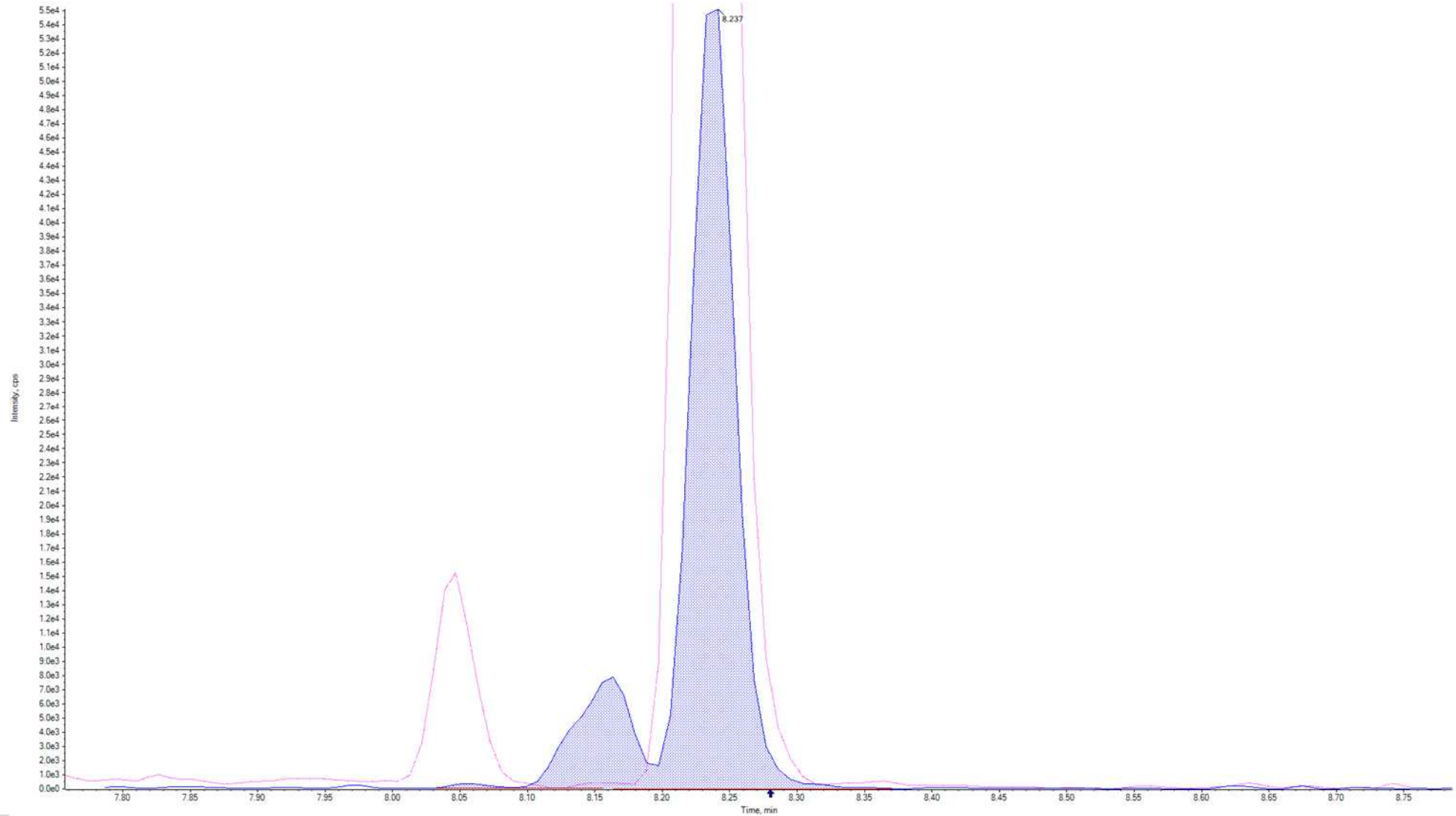
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOS
Sample: WG1971858-4 S/N:895.9 Points Across peak:37



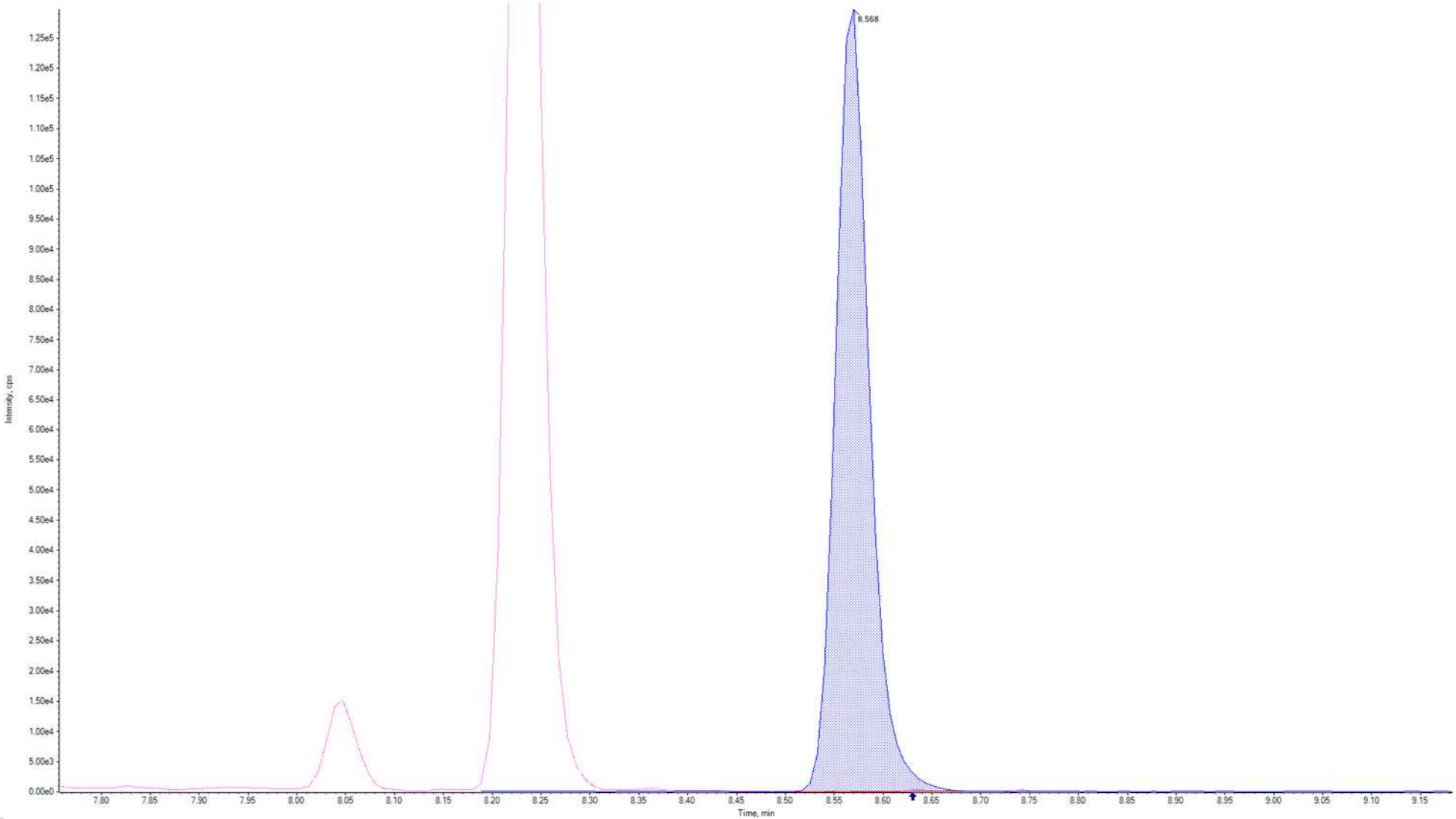
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOS_2
Sample: WG1971858-4 S/N:7909.7 Points Across peak:42



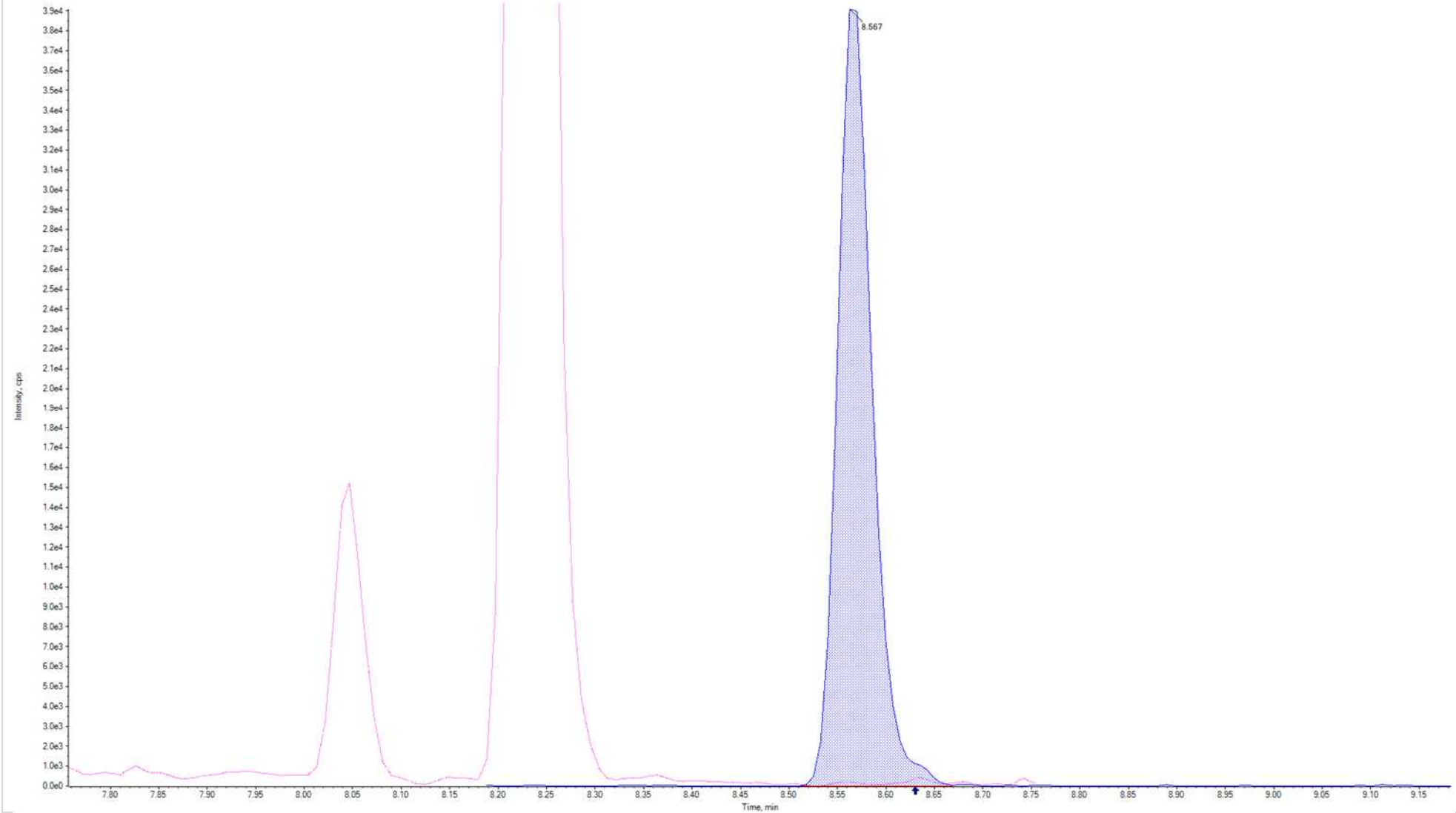
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFNS
Sample: WG1971858-4 S/N:4464.5 Points Across peak:27



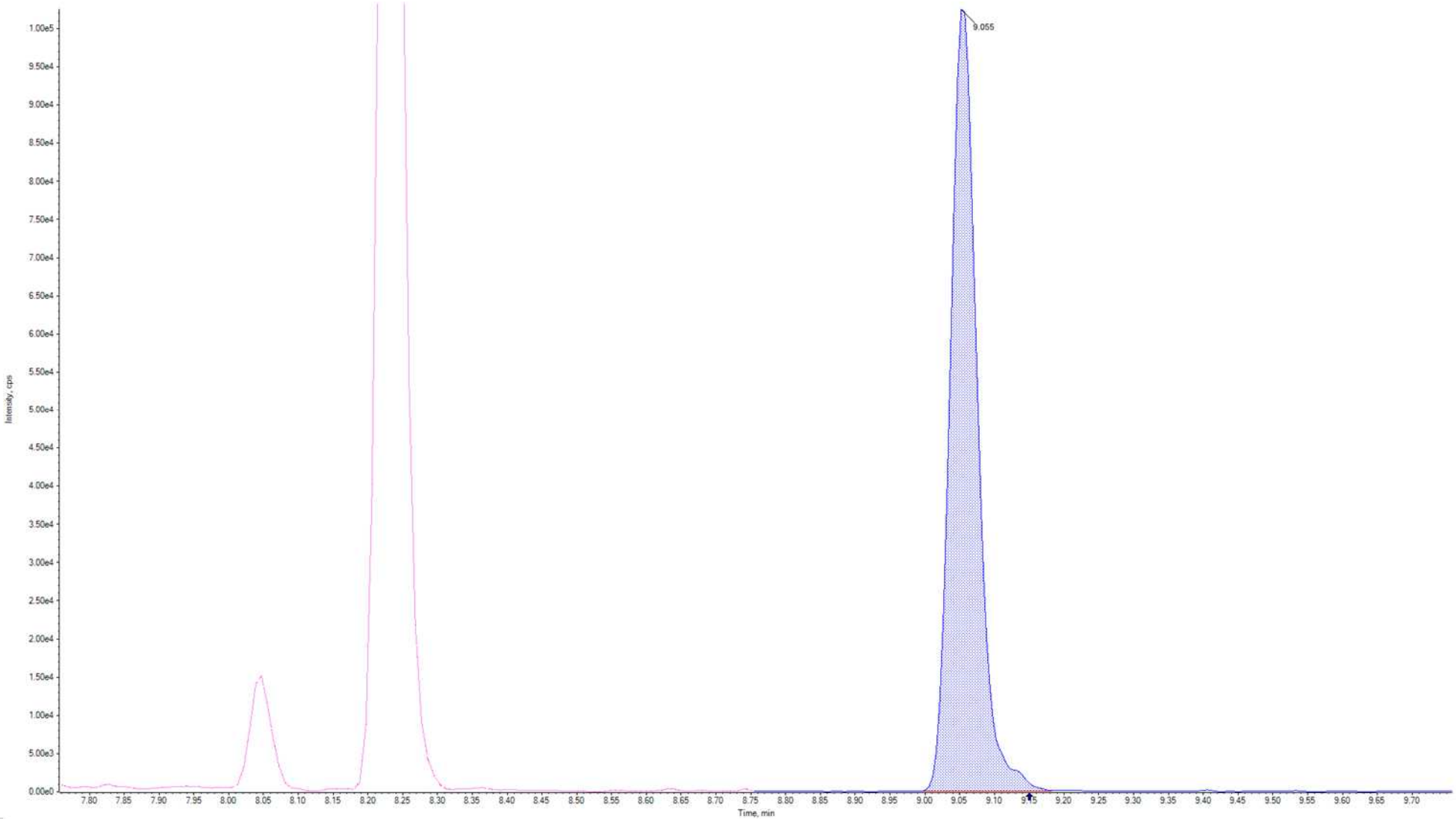
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFNS_2
Sample: WG1971858-4 S/N:2494.7 Points Across peak:25



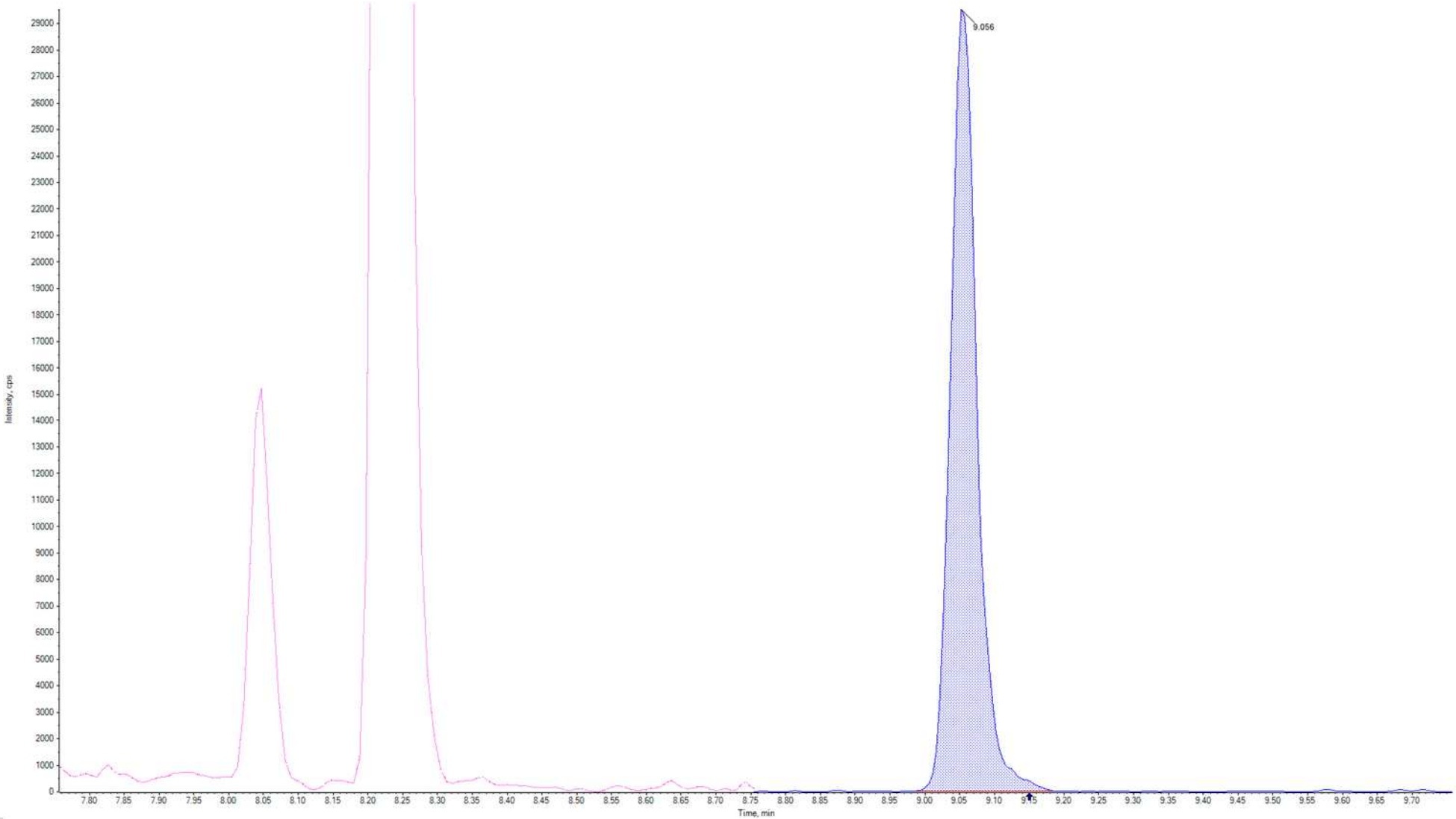
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFDS
Sample: WG1971858-4 S/N:4219.9 Points Across peak:43



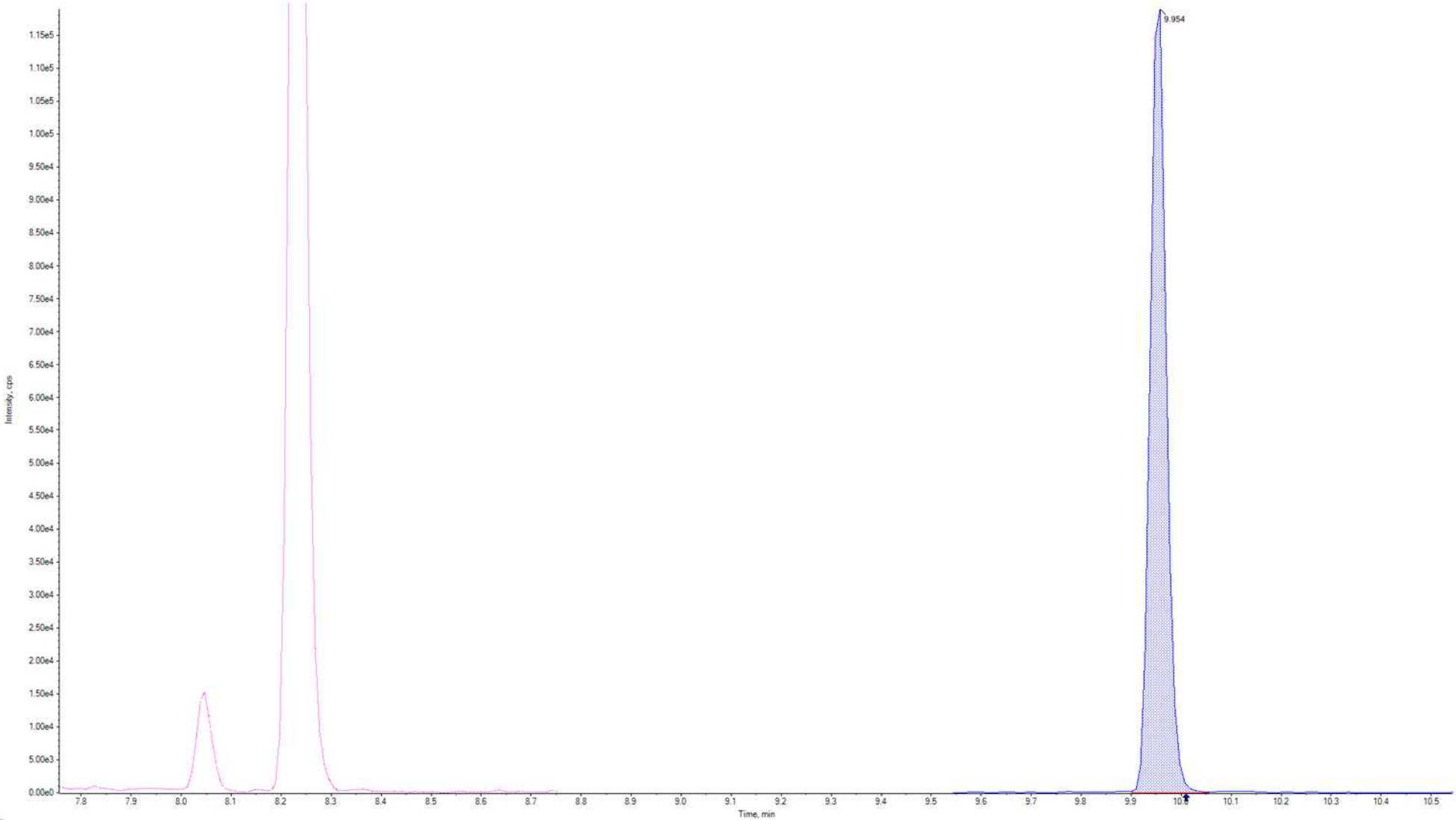
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFDS_2
Sample: WG1971858-4 S/N:643689.1 Points Across peak:45



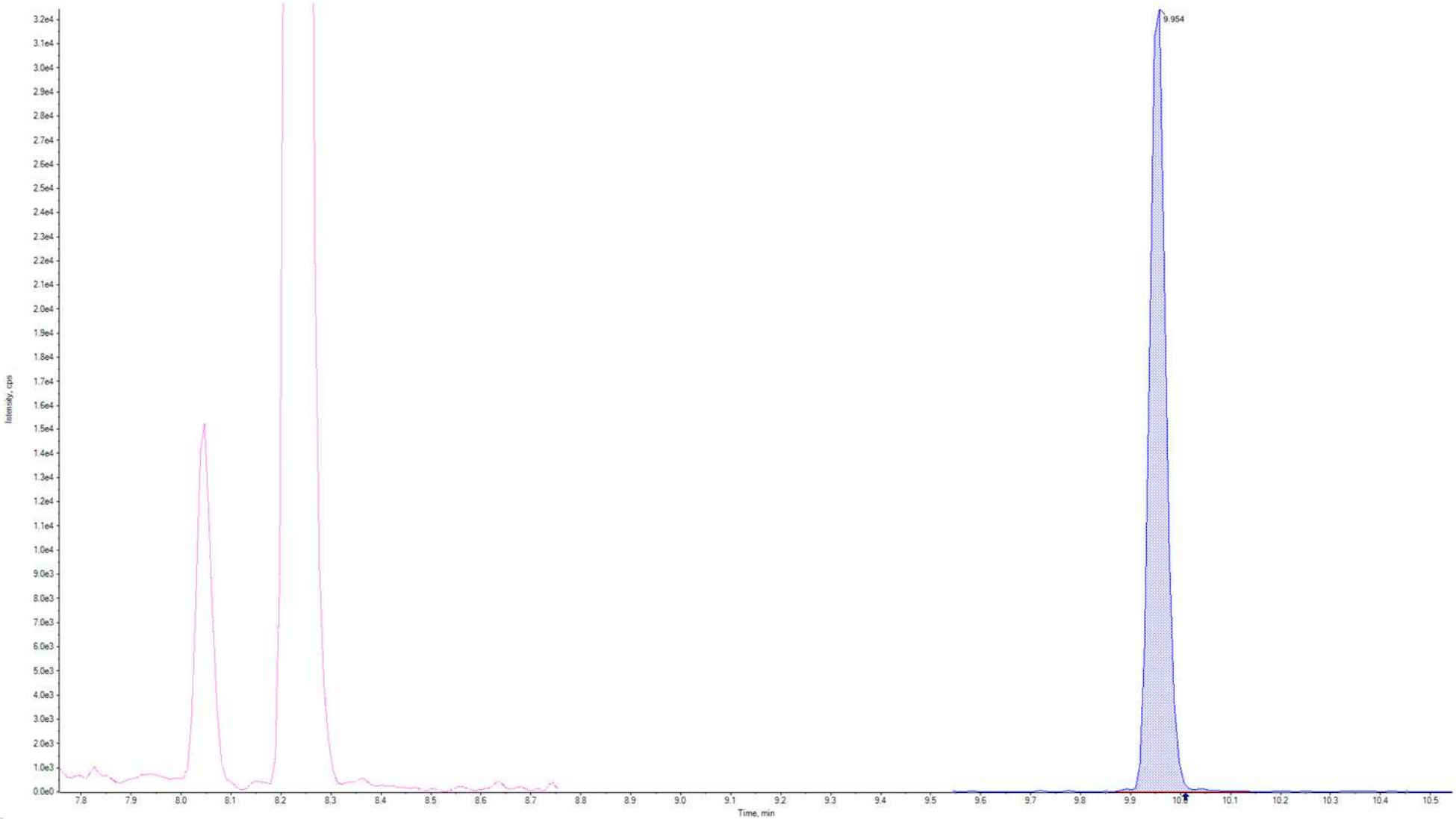
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS
Sample: WG1971858-4 S/N:5644.5 Points Across peak:17



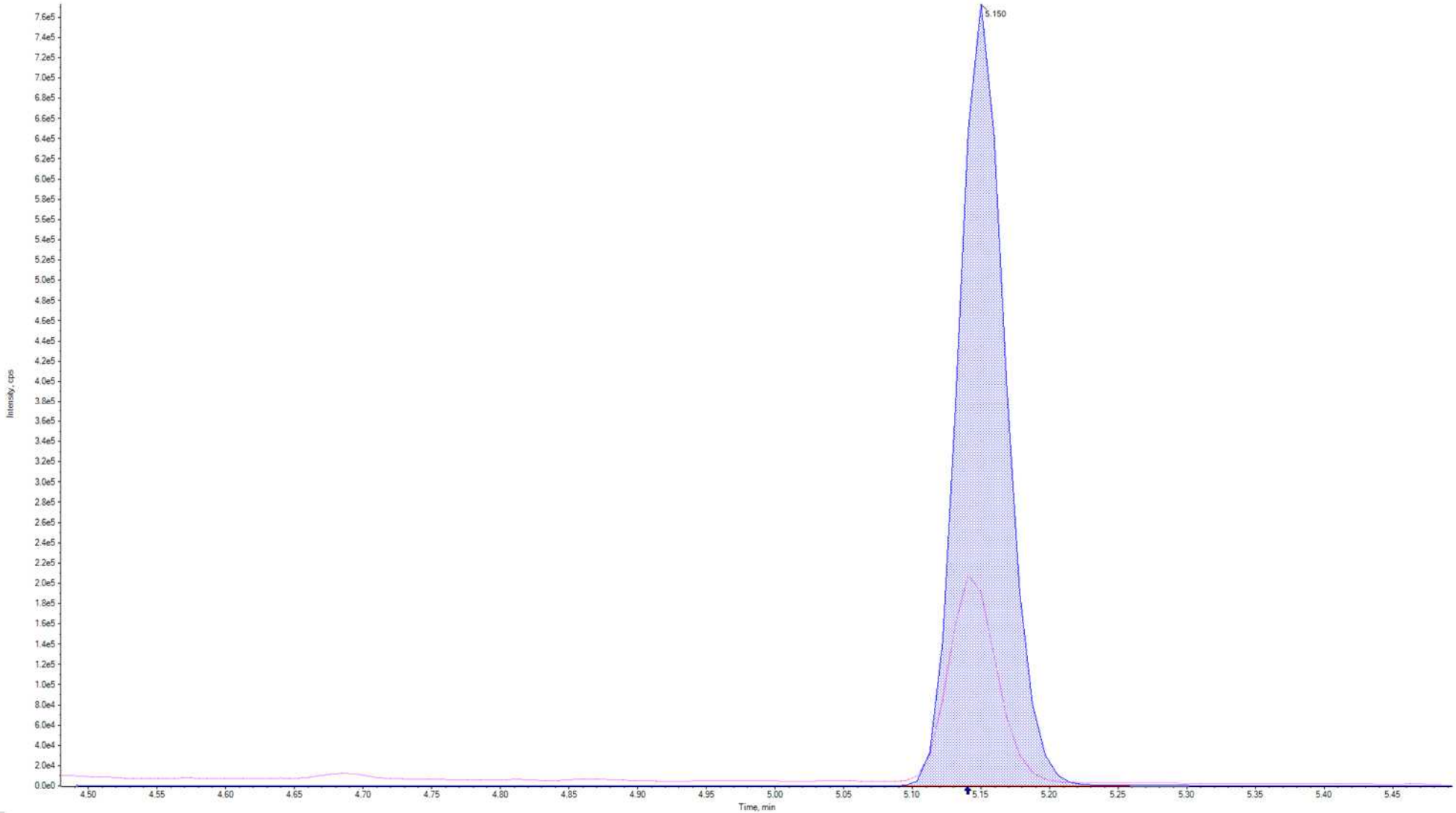
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS_2
Sample: WG1971858-4 S/N:1338.1 Points Across peak:31



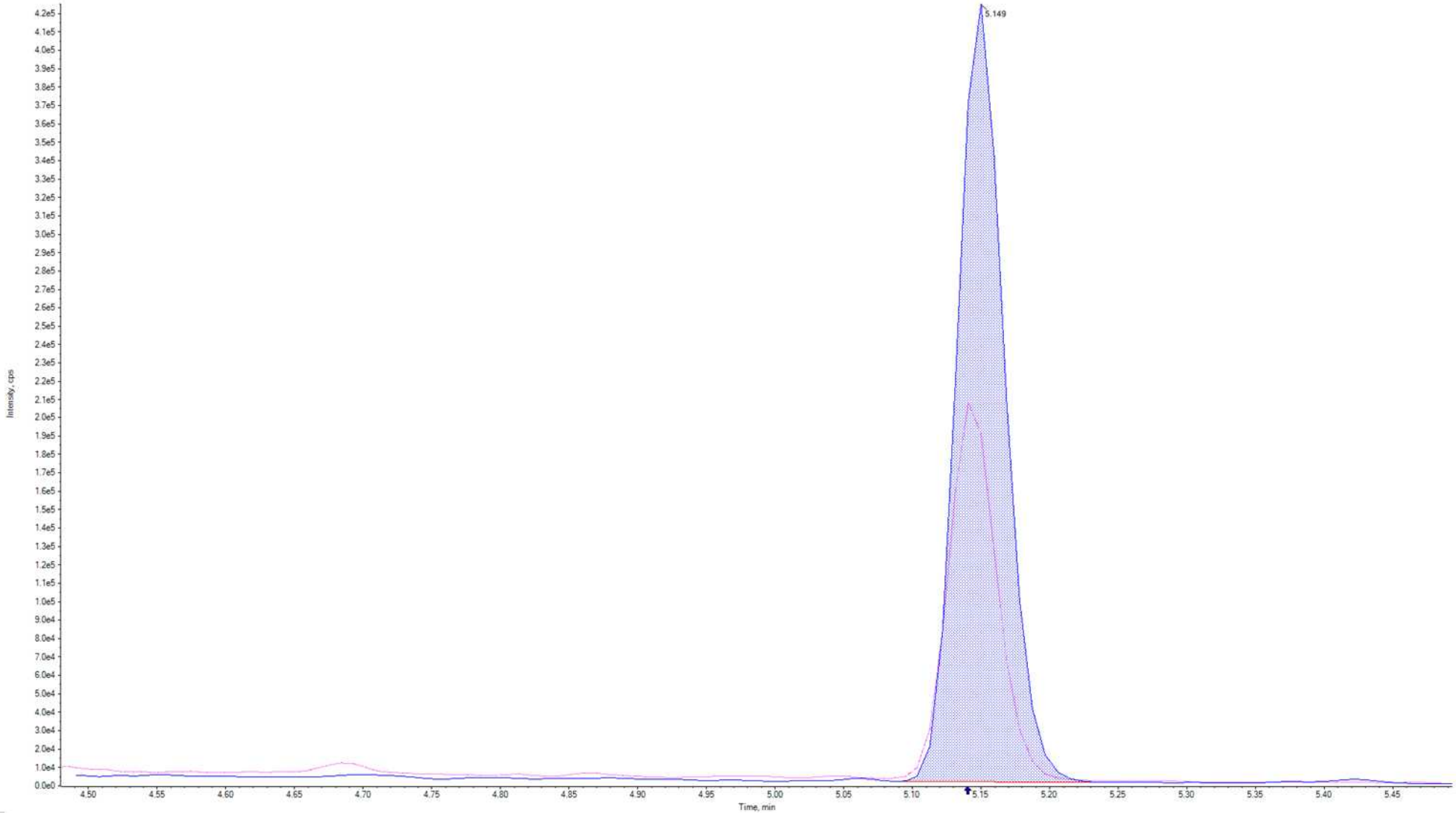
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS
Sample: WG1971858-4 S/N:6280.0 Points Across peak:24



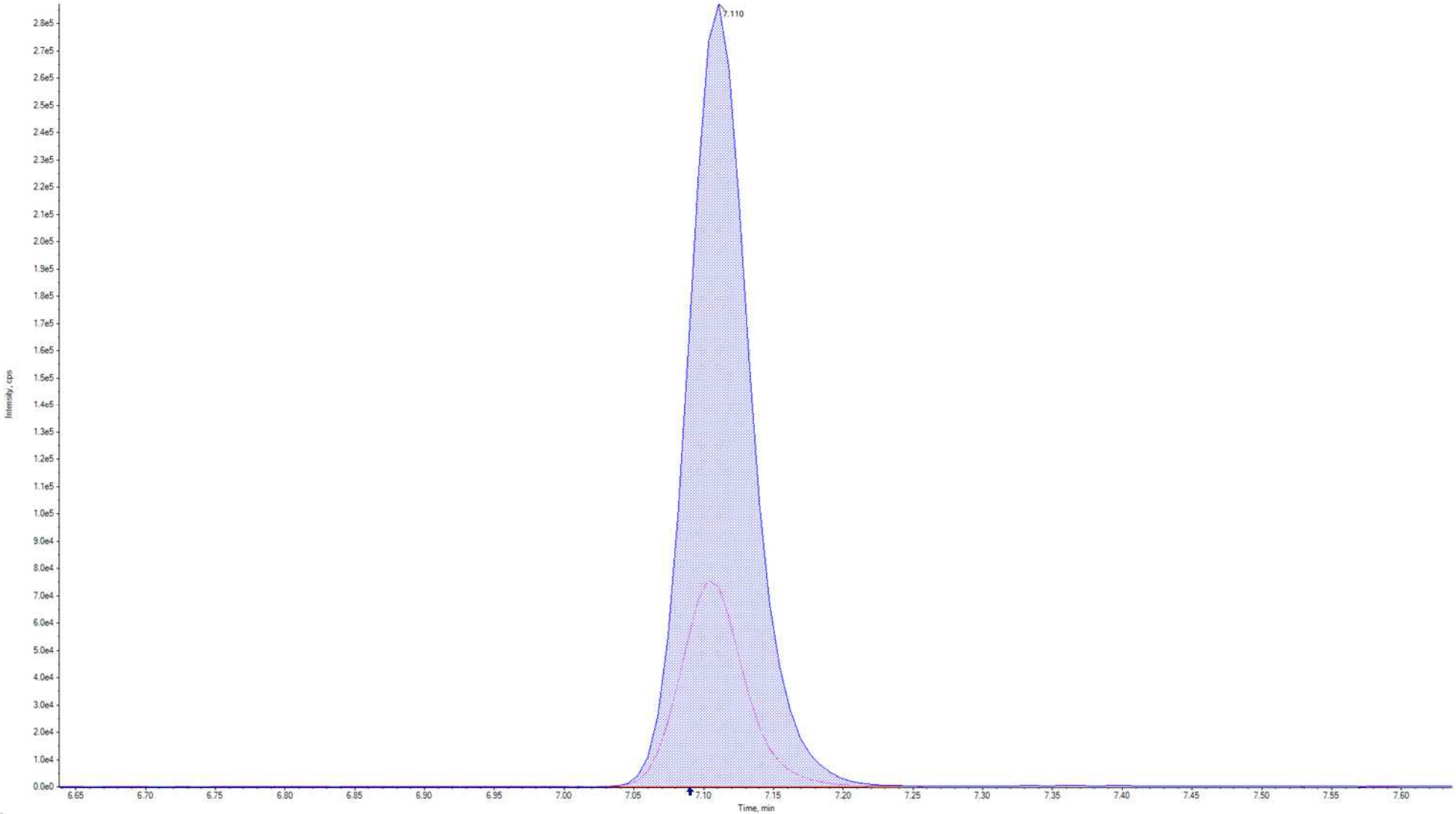
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS_2
Sample: WG1971858-4 S/N:968.6 Points Across peak:18



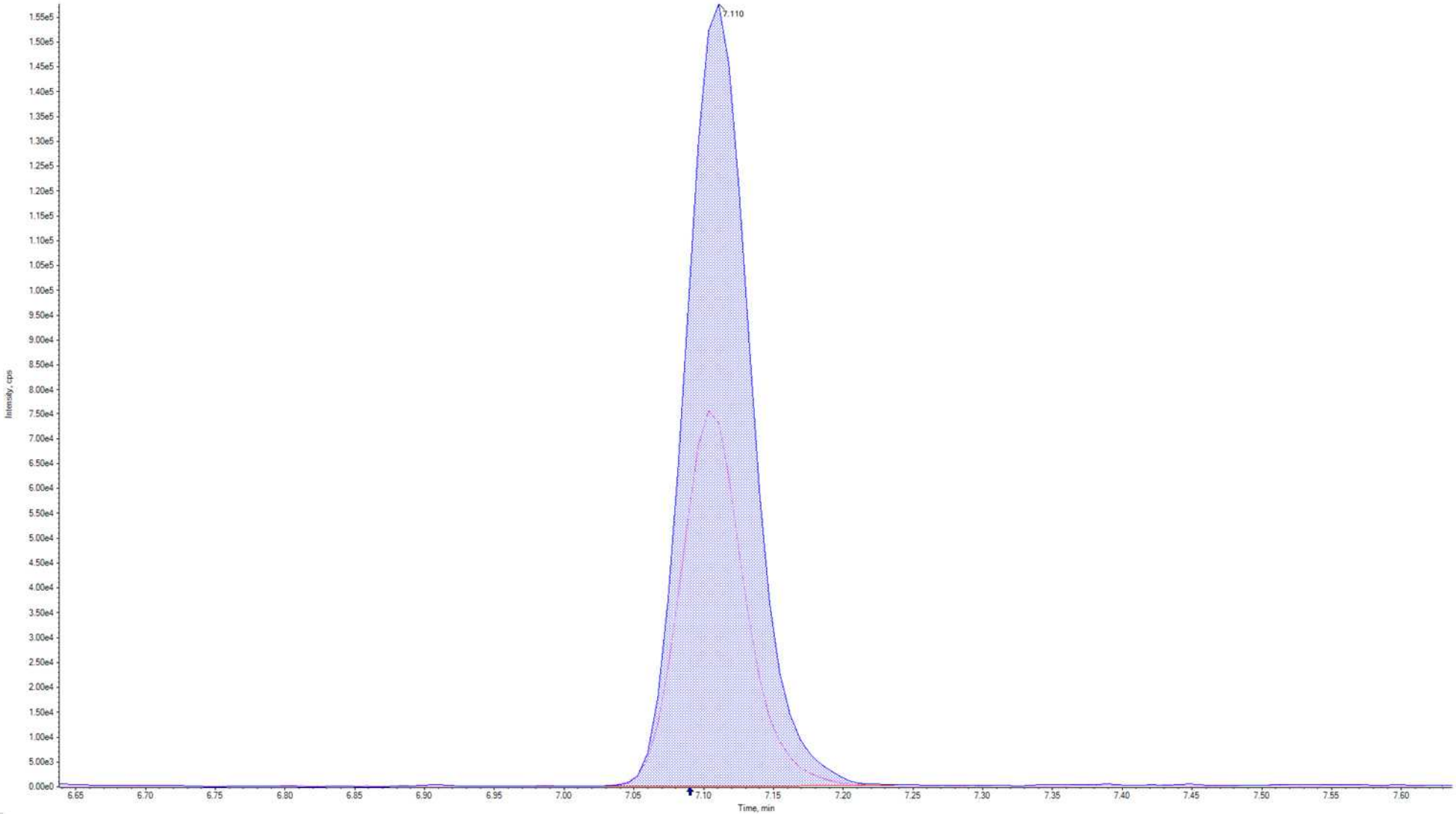
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS
Sample: WG1971858-4 S/N:2908044.4 Points Across peak:40



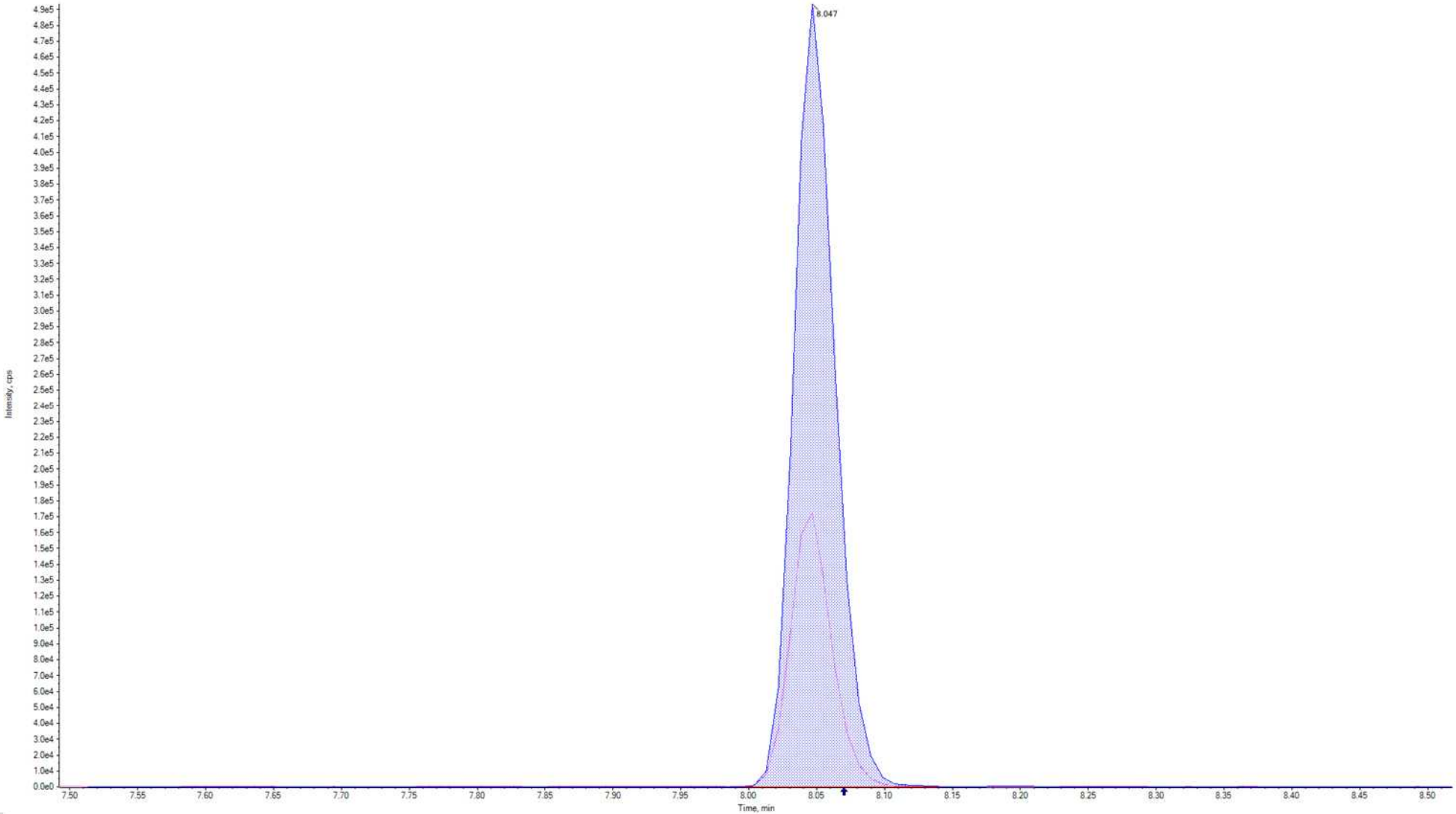
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS_2
Sample: WG1971858-4 S/N:3703.4 Points Across peak:33



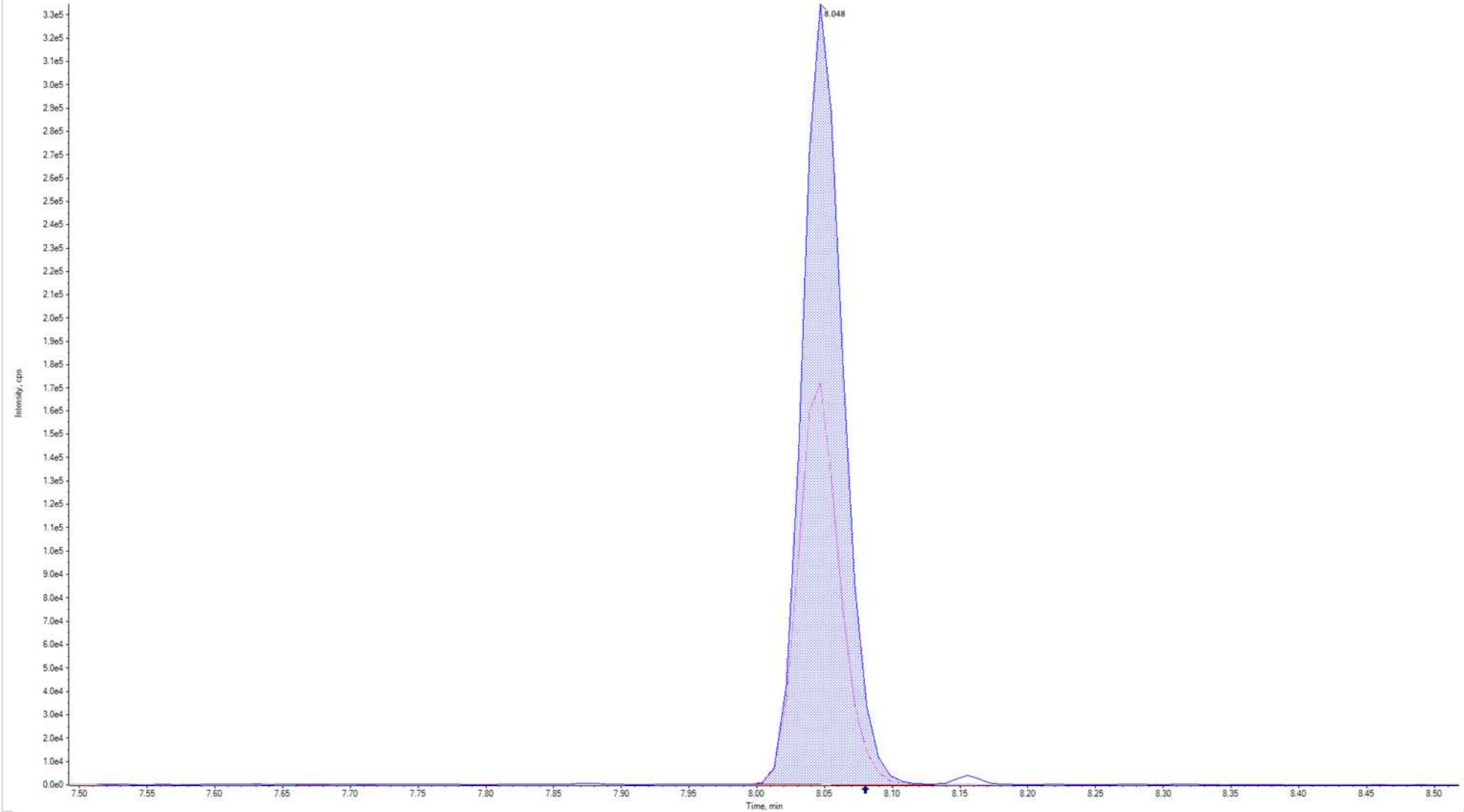
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

8:2FTS
Sample: WG1971858-4 S/N:4012.9 Points Across peak:20



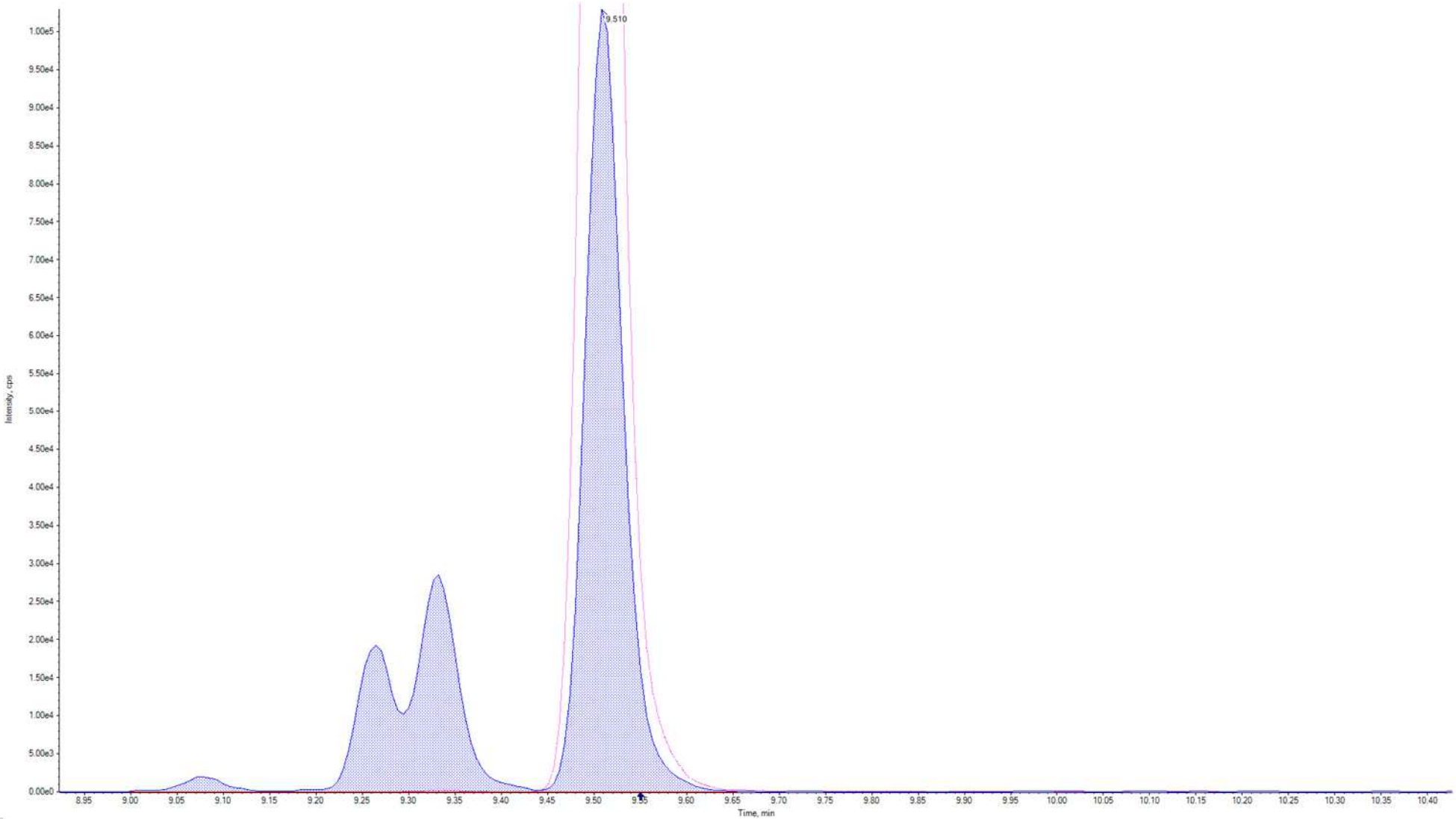
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

8:2FTS_2
Sample: WG1971858-4 S/N:3153.1 Points Across peak:17



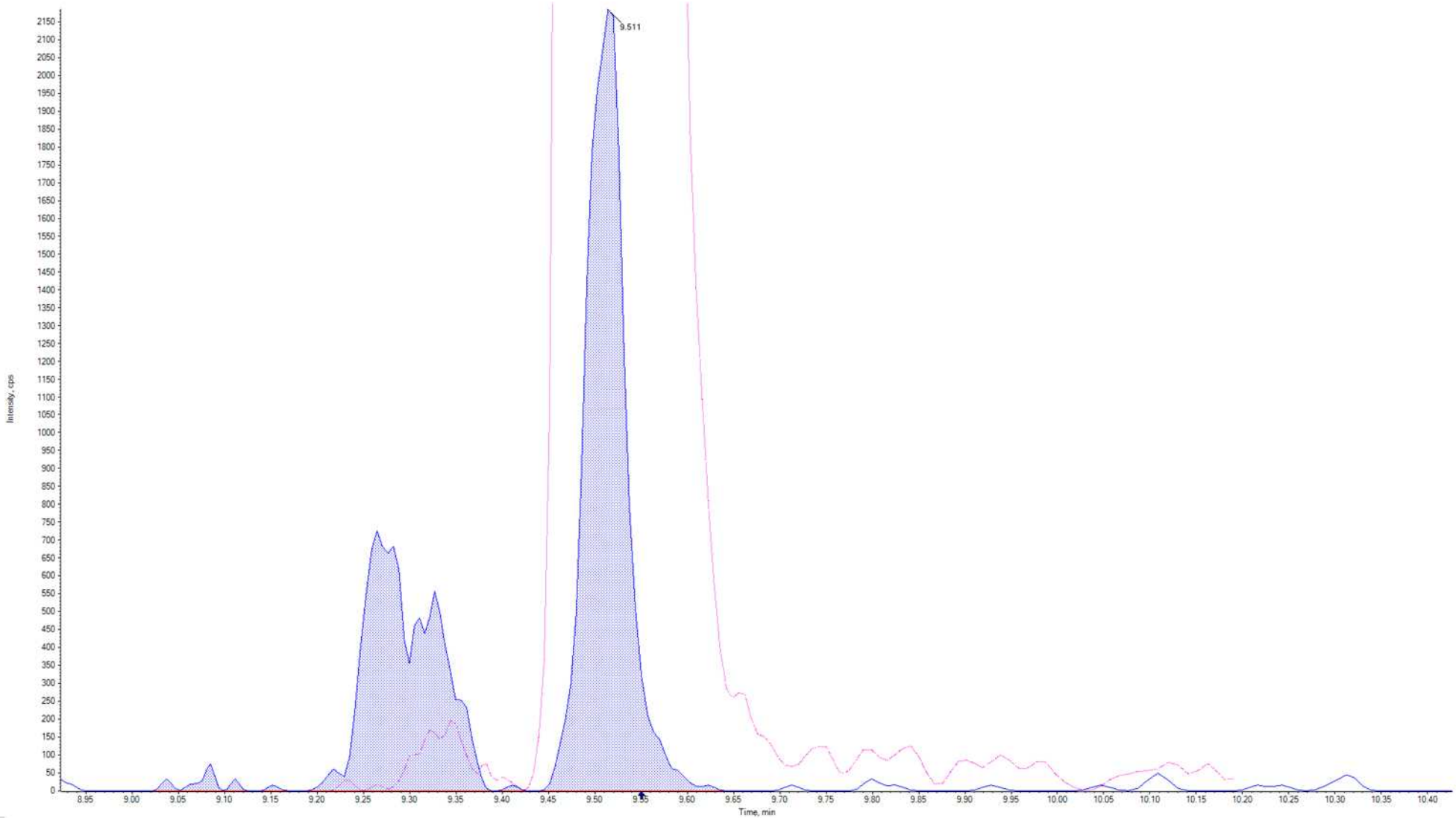
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOSA
Sample: WG1971858-4 S/N:1724173.7 Points Across peak:120



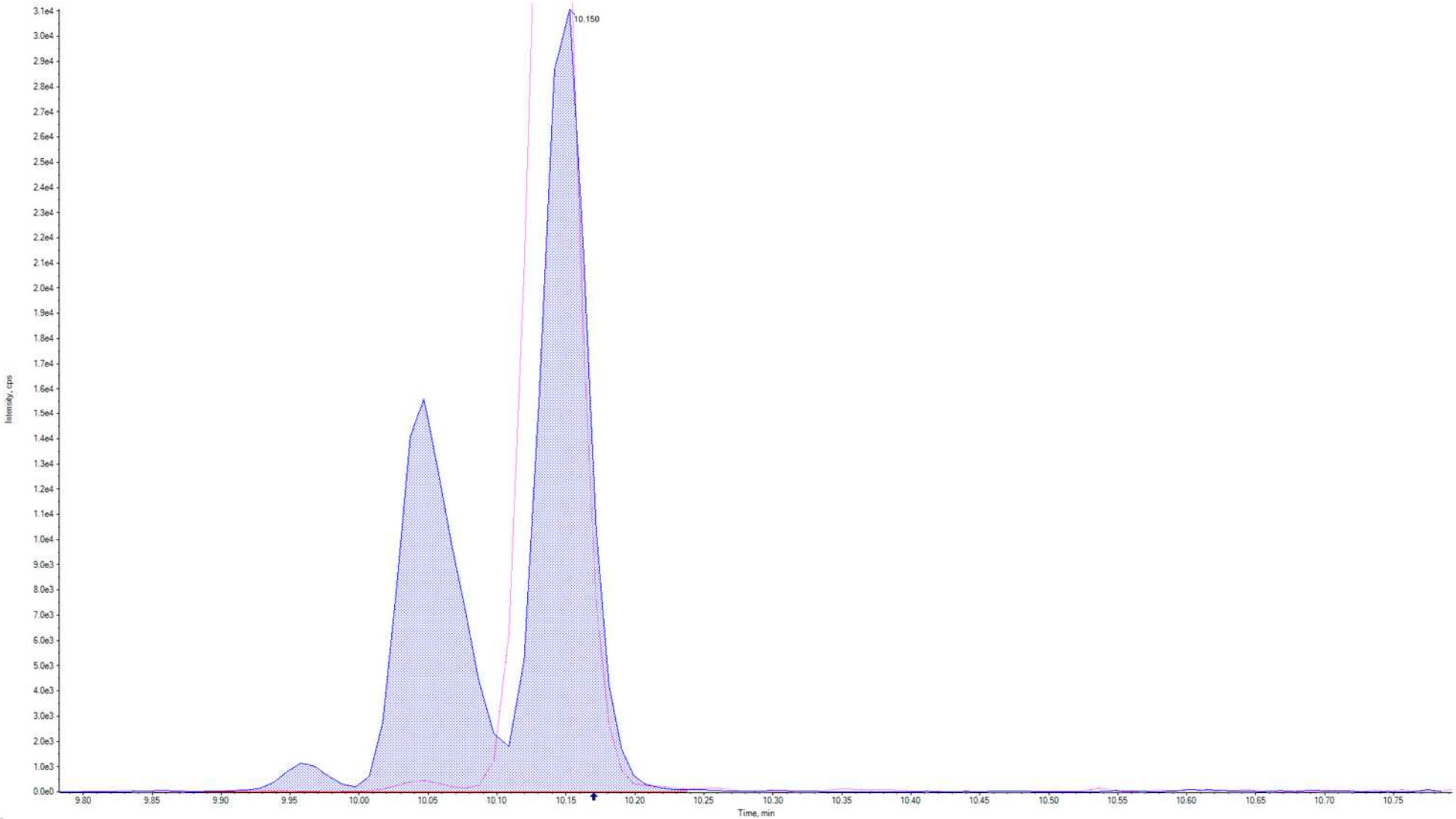
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOSA_2
Sample: WG1971858-4 S/N:341.3 Points Across peak:113



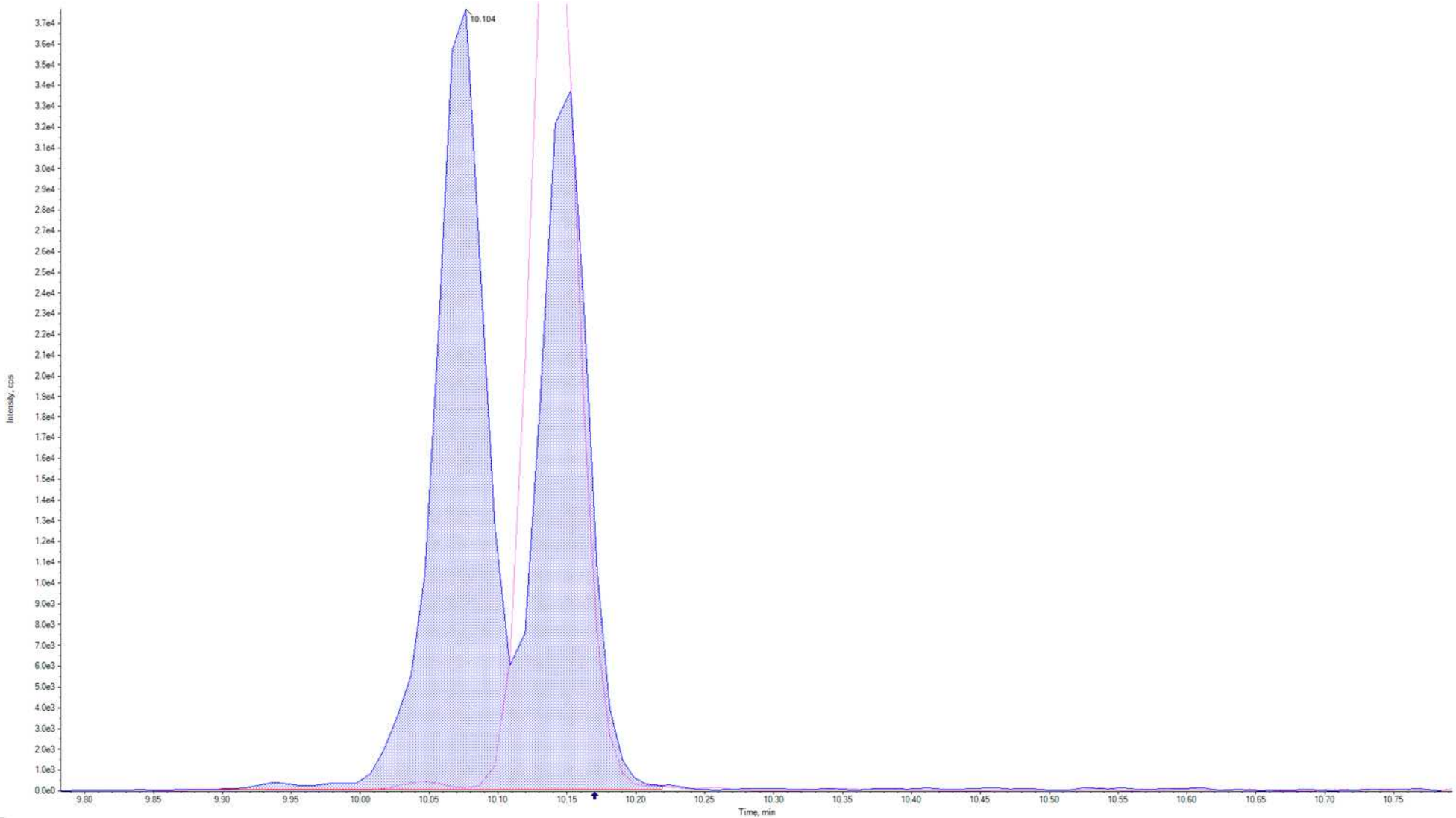
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSA
Sample: WG1971858-4 S/N:8089882.1 Points Across peak:39



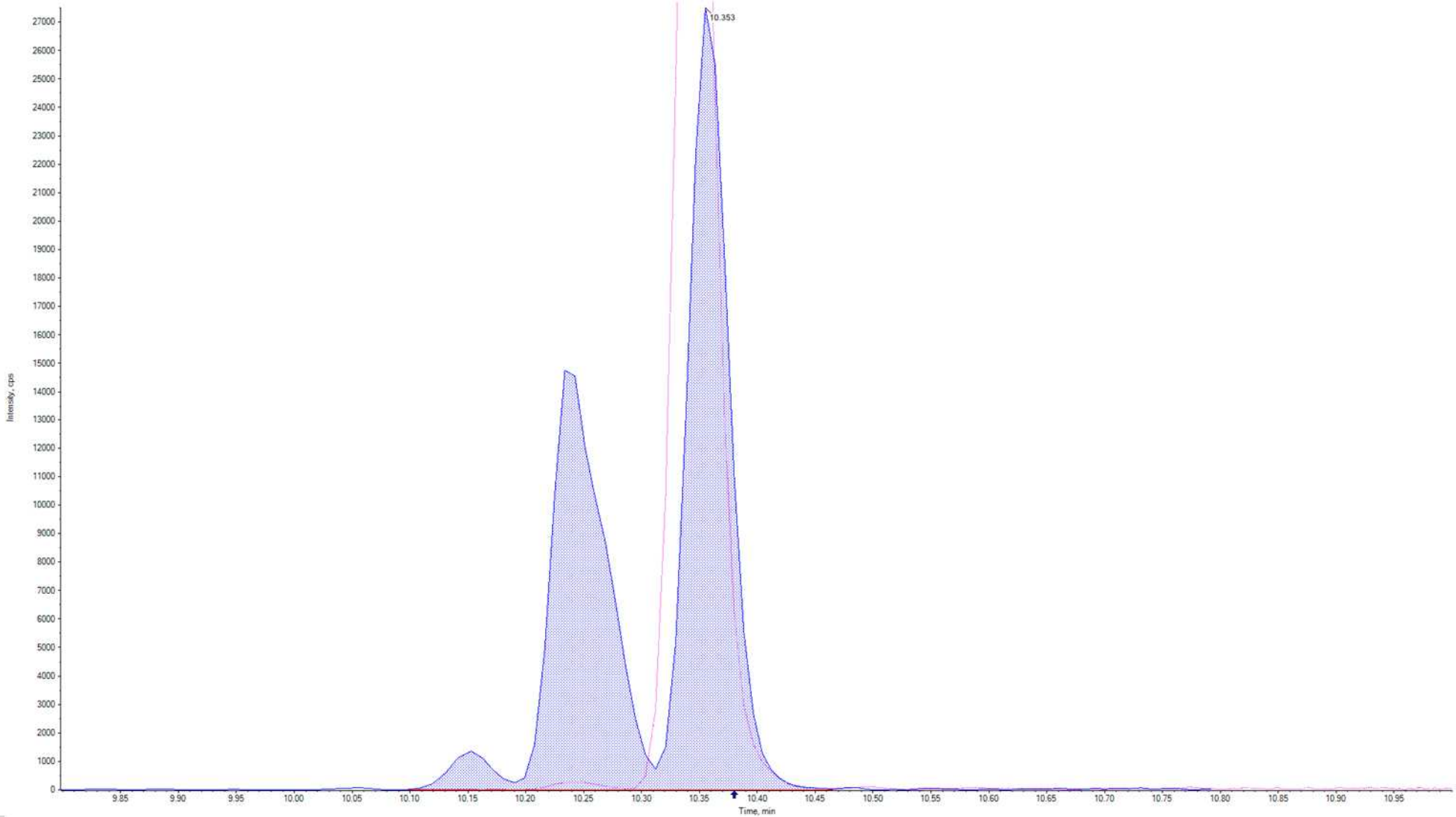
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSA_2
Sample: WG1971858-4 S/N:1278.8 Points Across peak:35



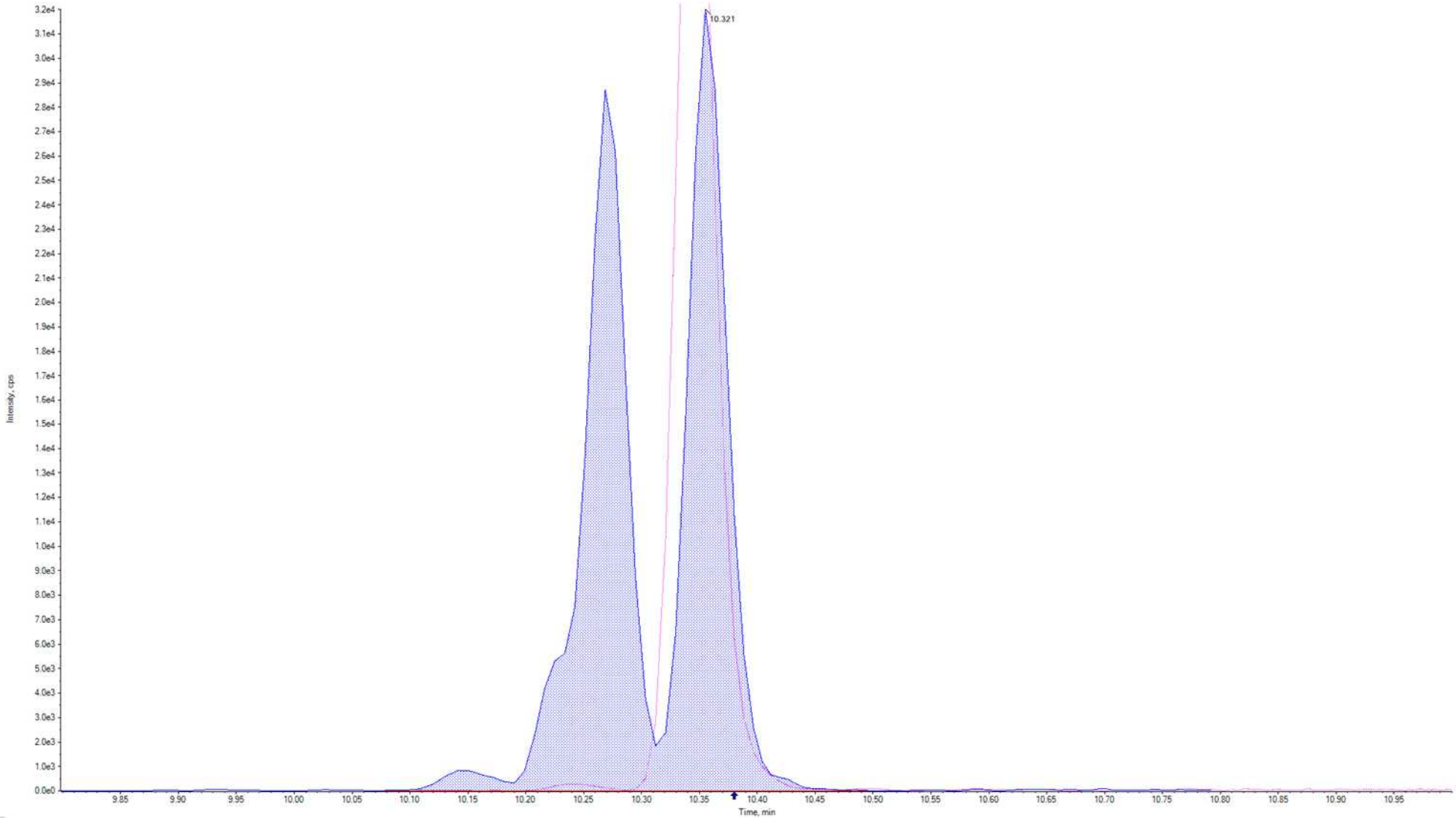
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA
Sample: WG1971858-4 S/N:35543.4 Points Across peak:45



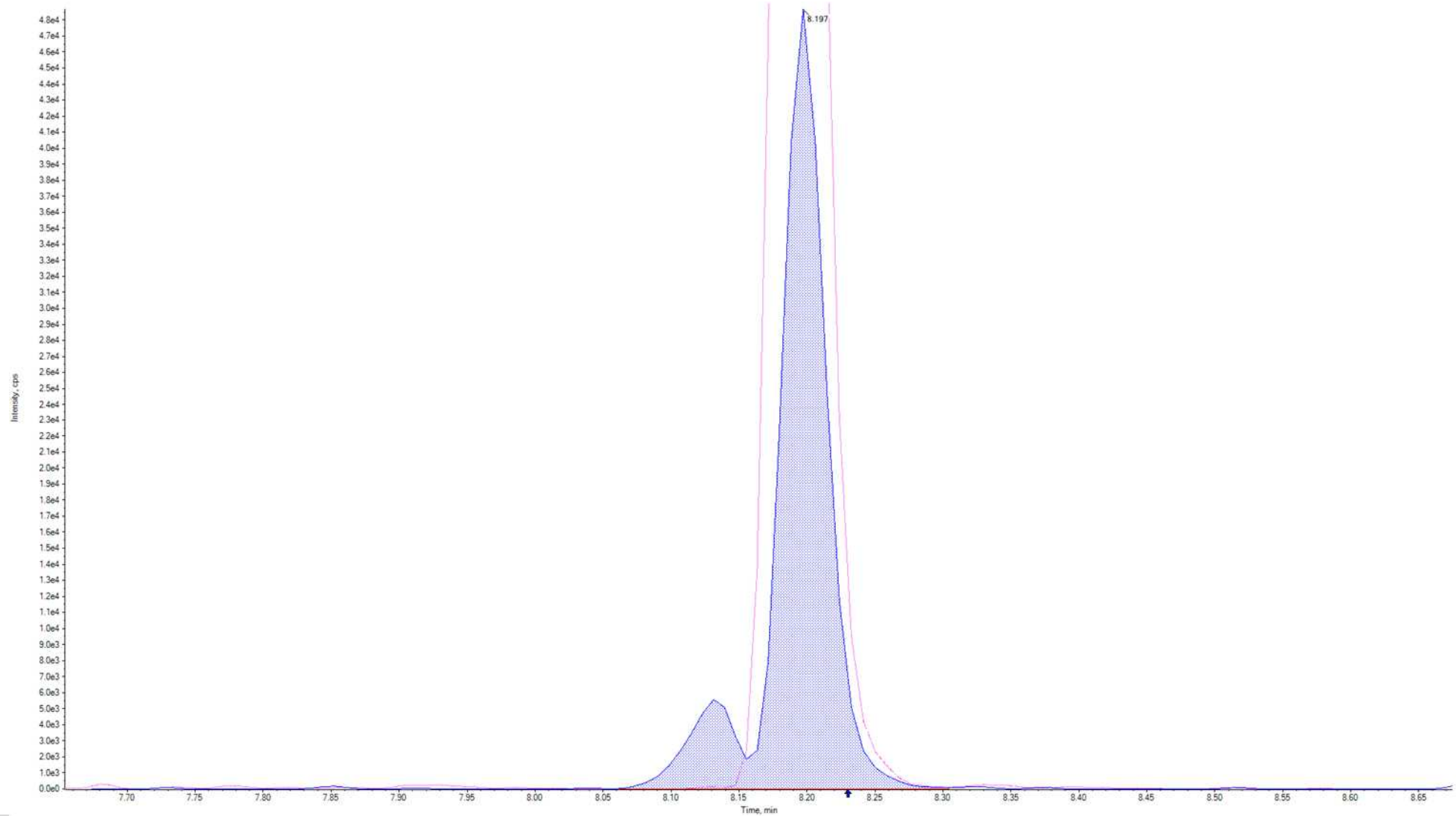
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA_2
Sample: WG1971858-4 S/N:591.3 Points Across peak:52



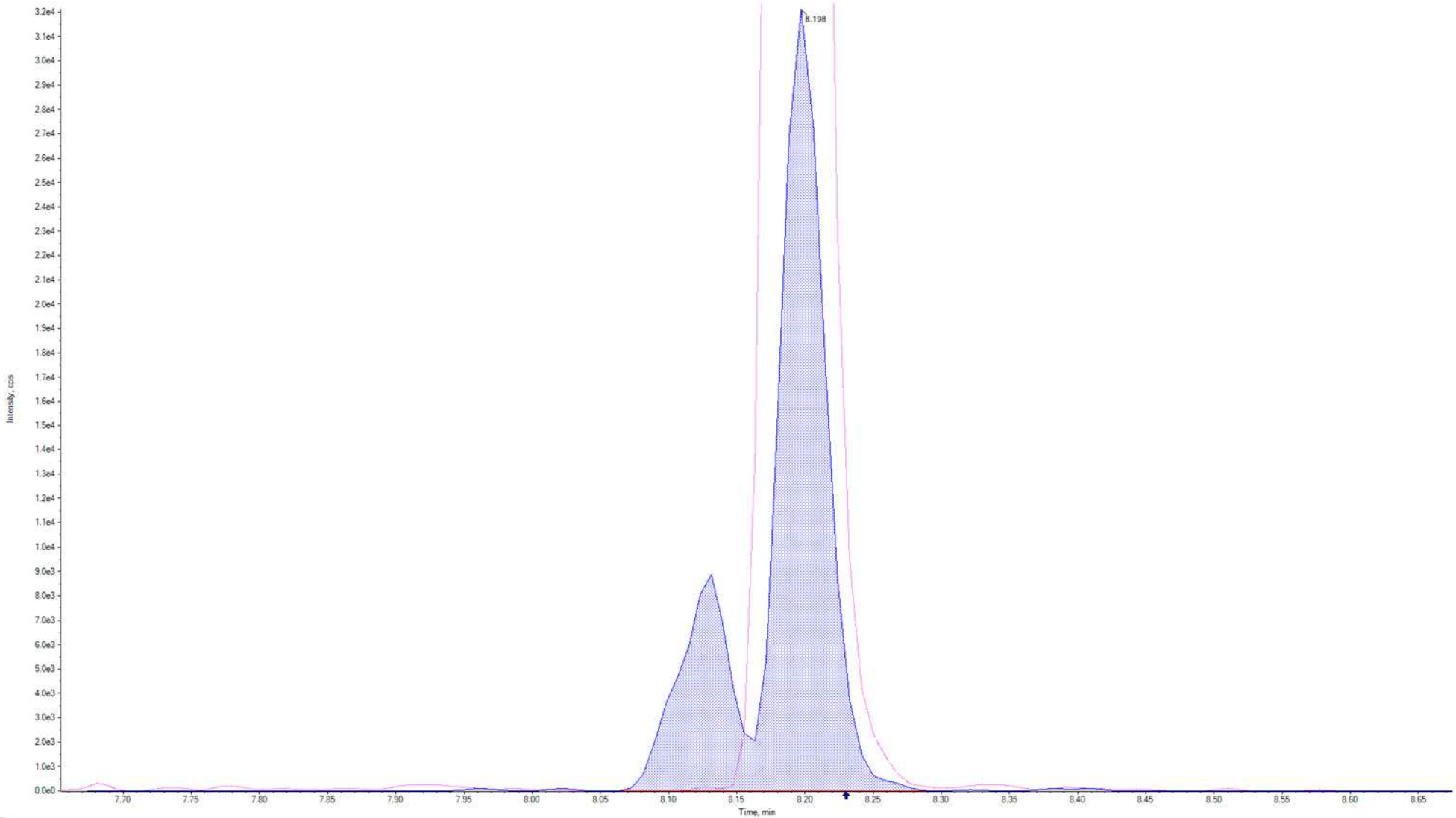
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA
Sample: WG1971858-4 S/N:748.5 Points Across peak:31



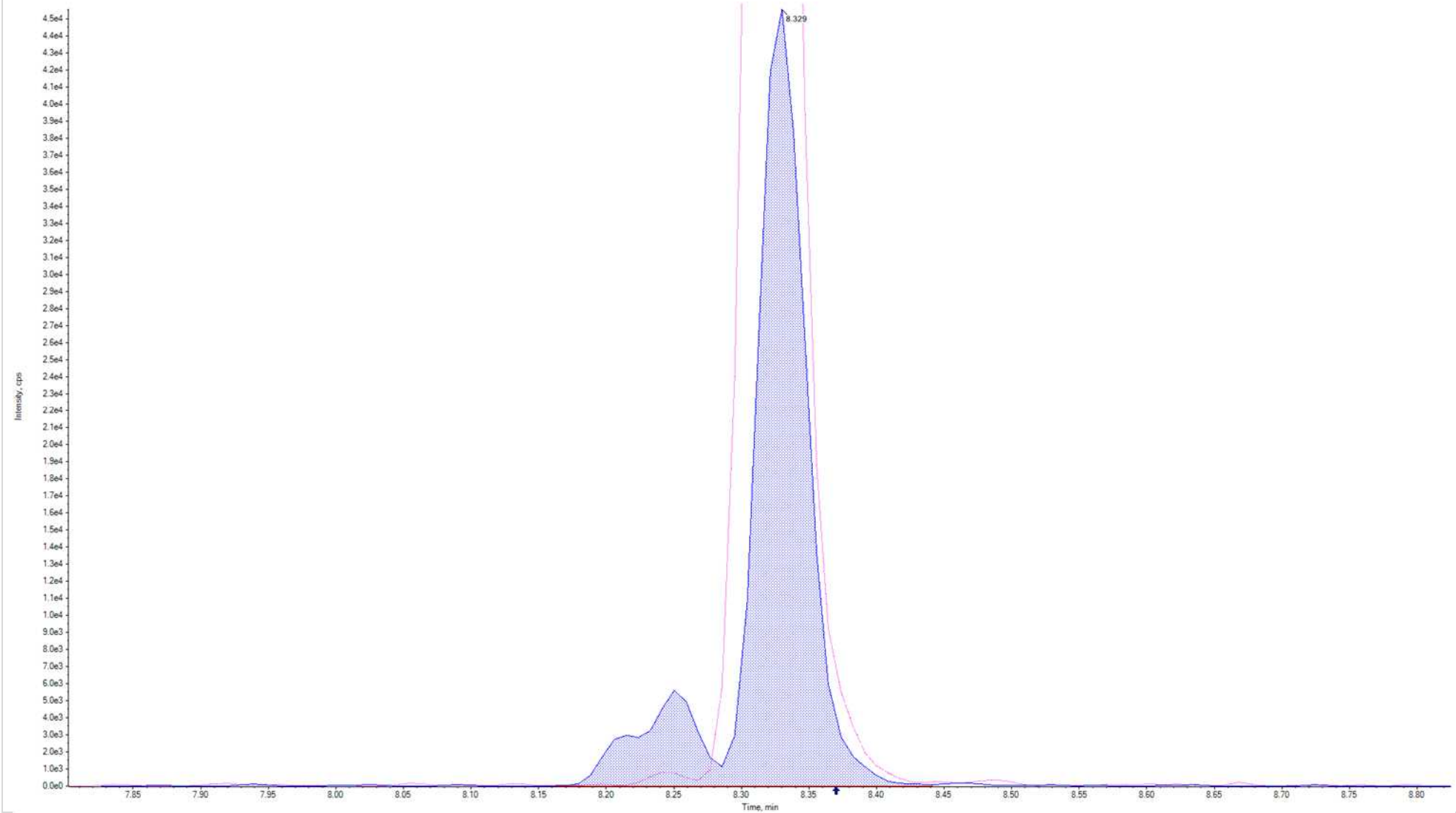
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA_2
Sample: WG1971858-4 S/N:595.3 Points Across peak:29



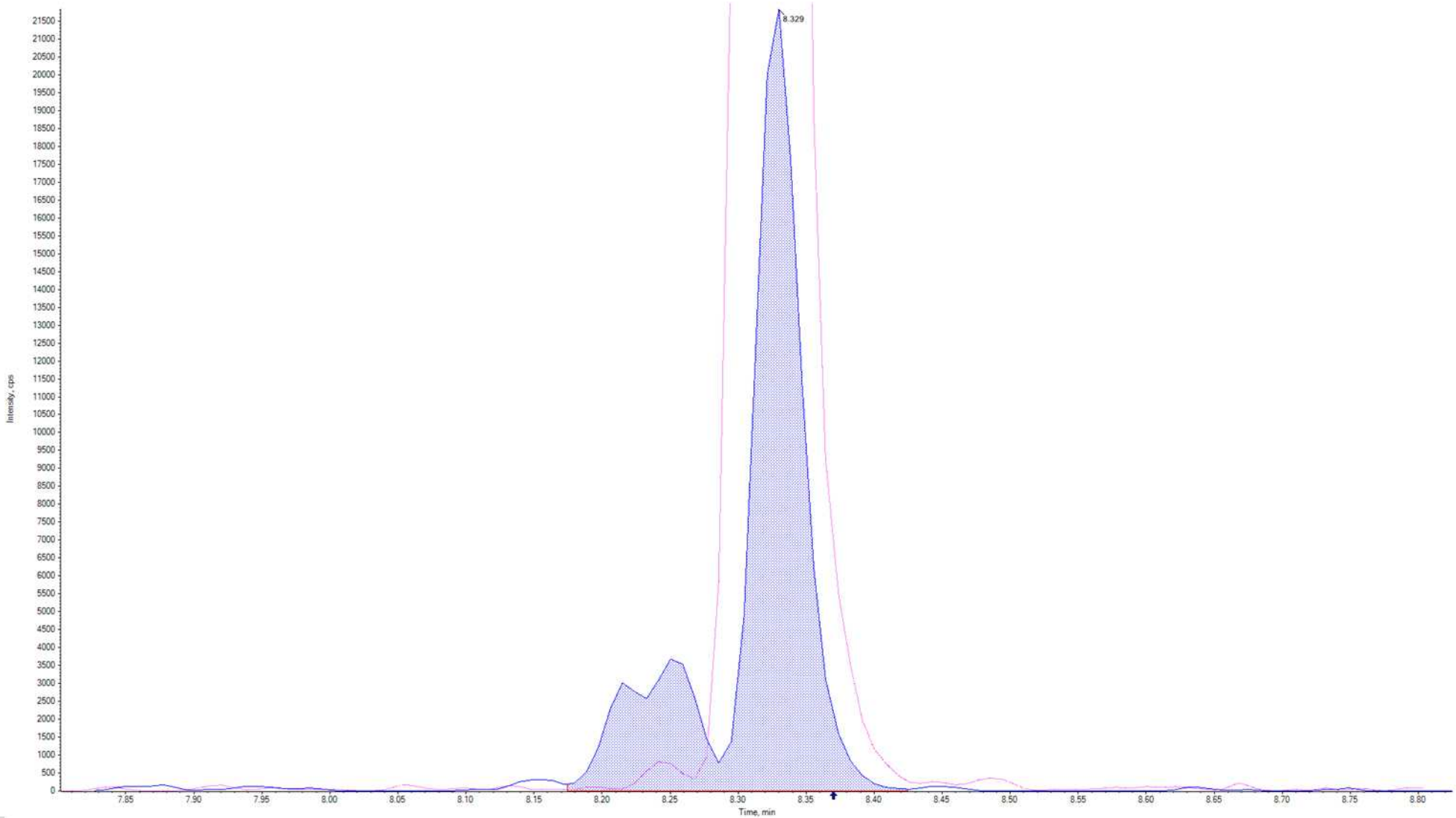
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA
Sample: WG1971858-4 S/N:705.7 Points Across peak:34



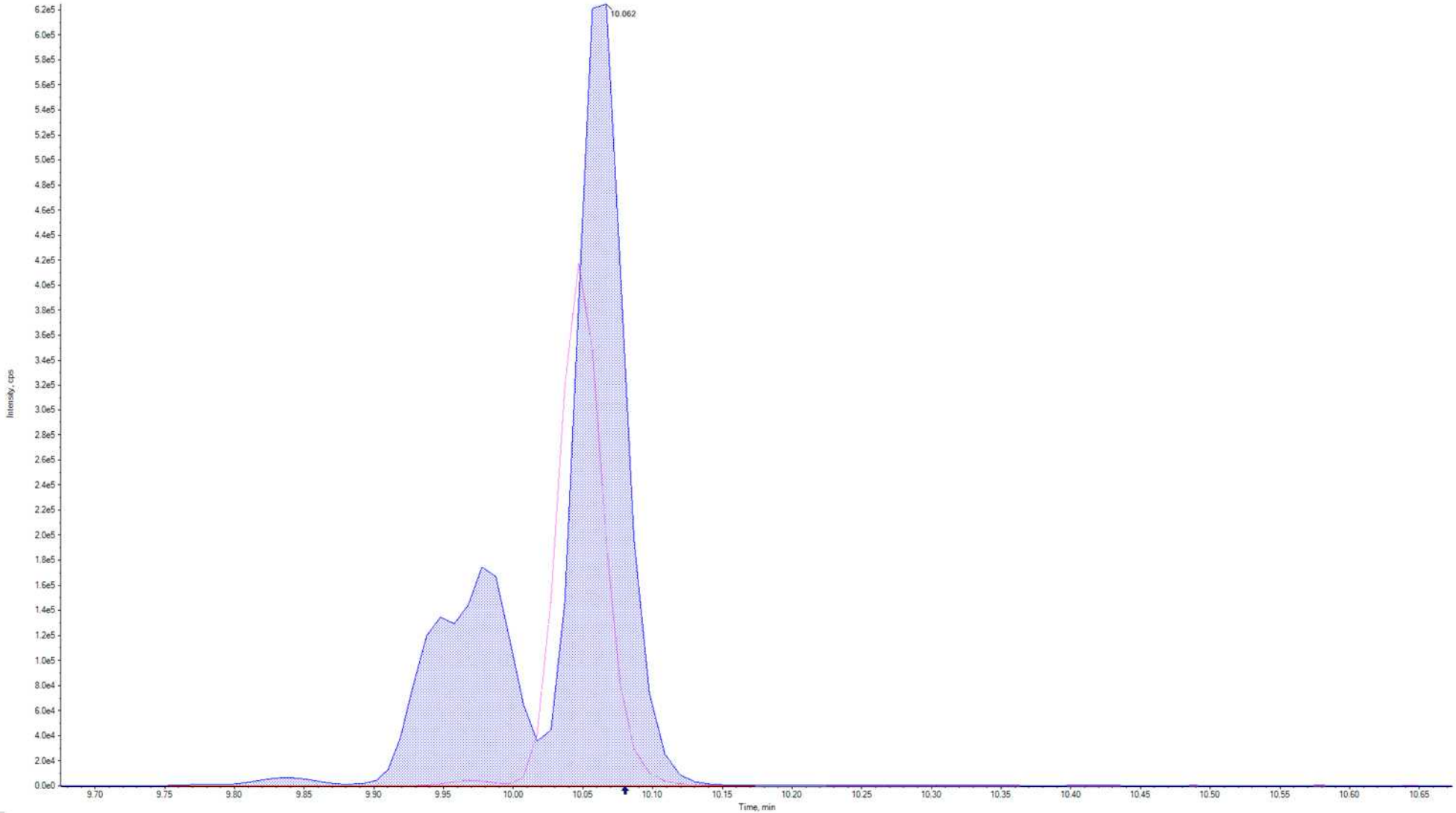
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA_2
Sample: WG1971858-4 S/N:326.2 Points Across peak:30



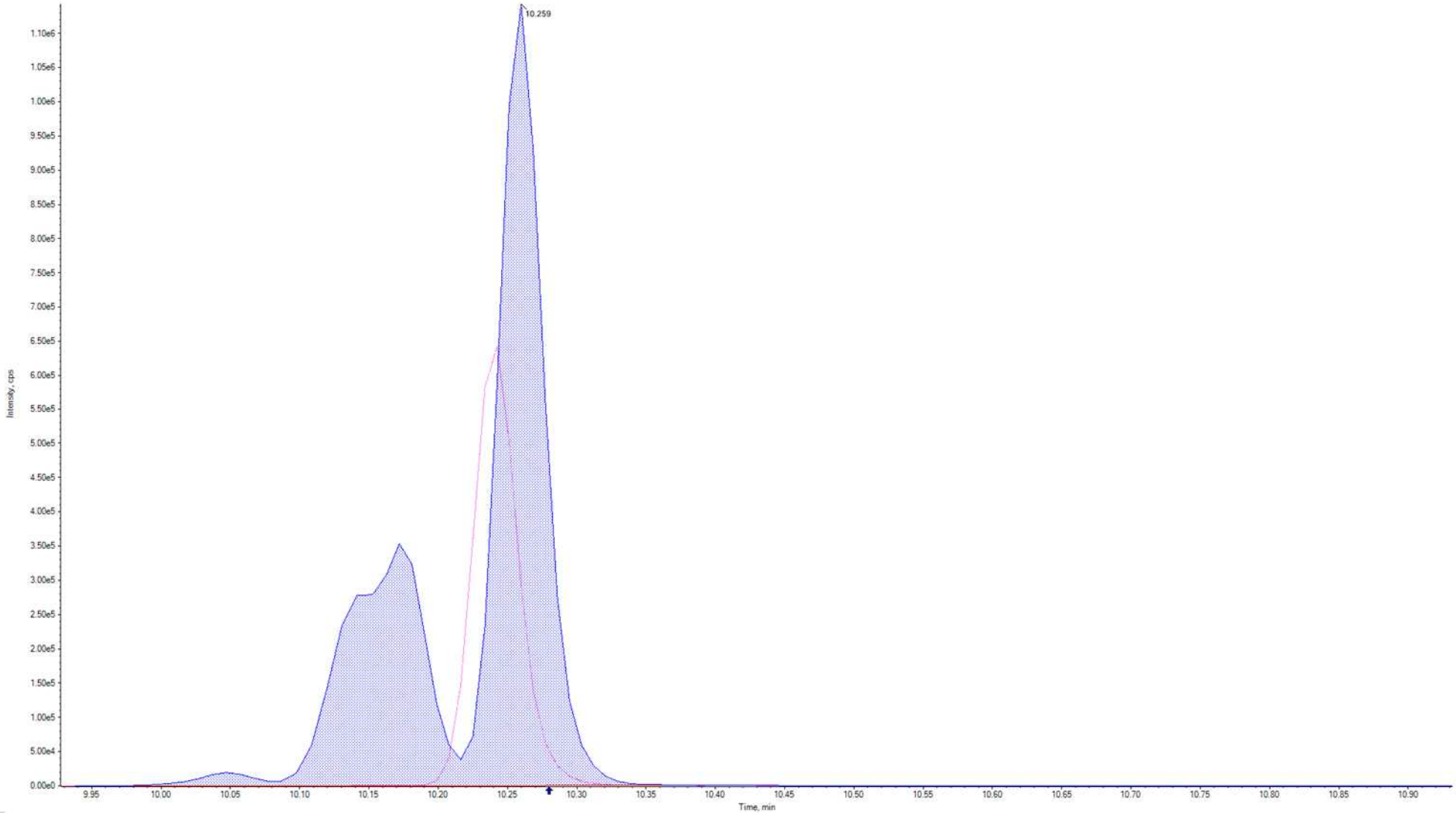
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSE
Sample: WG1971858-4 S/N:1979.7 Points Across peak:51



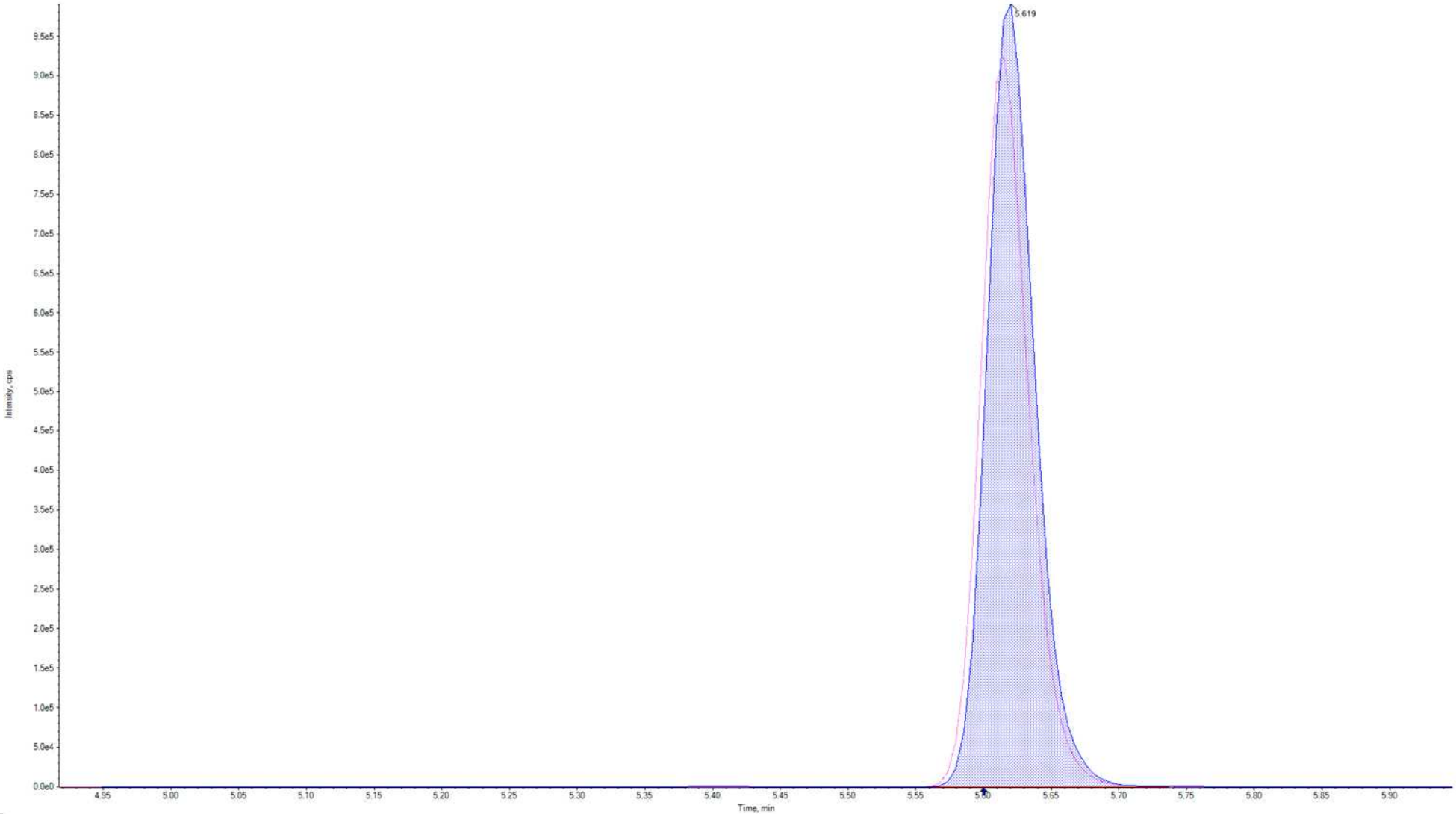
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSE
Sample: WG1971858-4 S/N:2522.7 Points Across peak:48



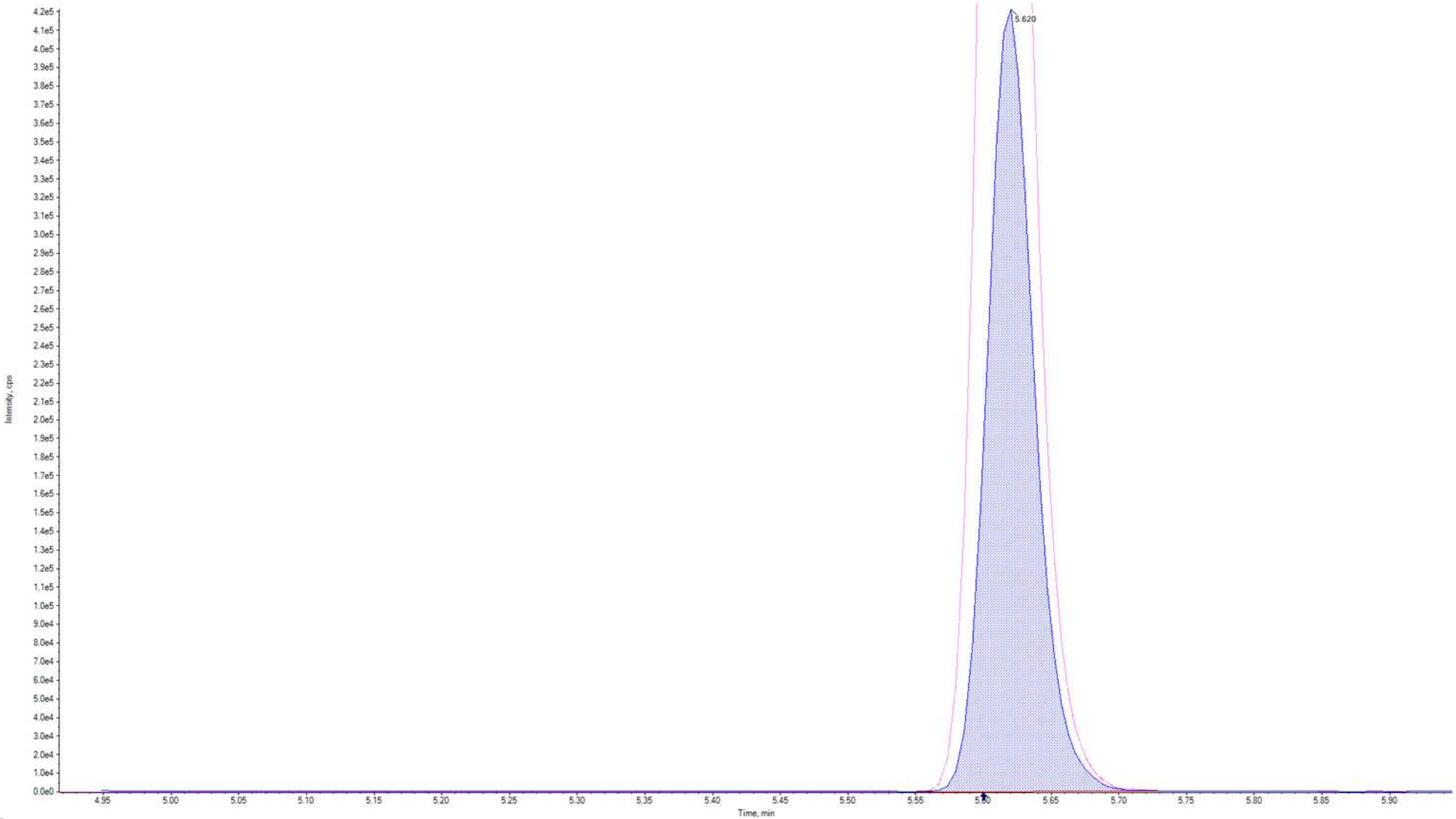
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA
Sample: WG1971858-4 S/N:8465.5 Points Across peak:41



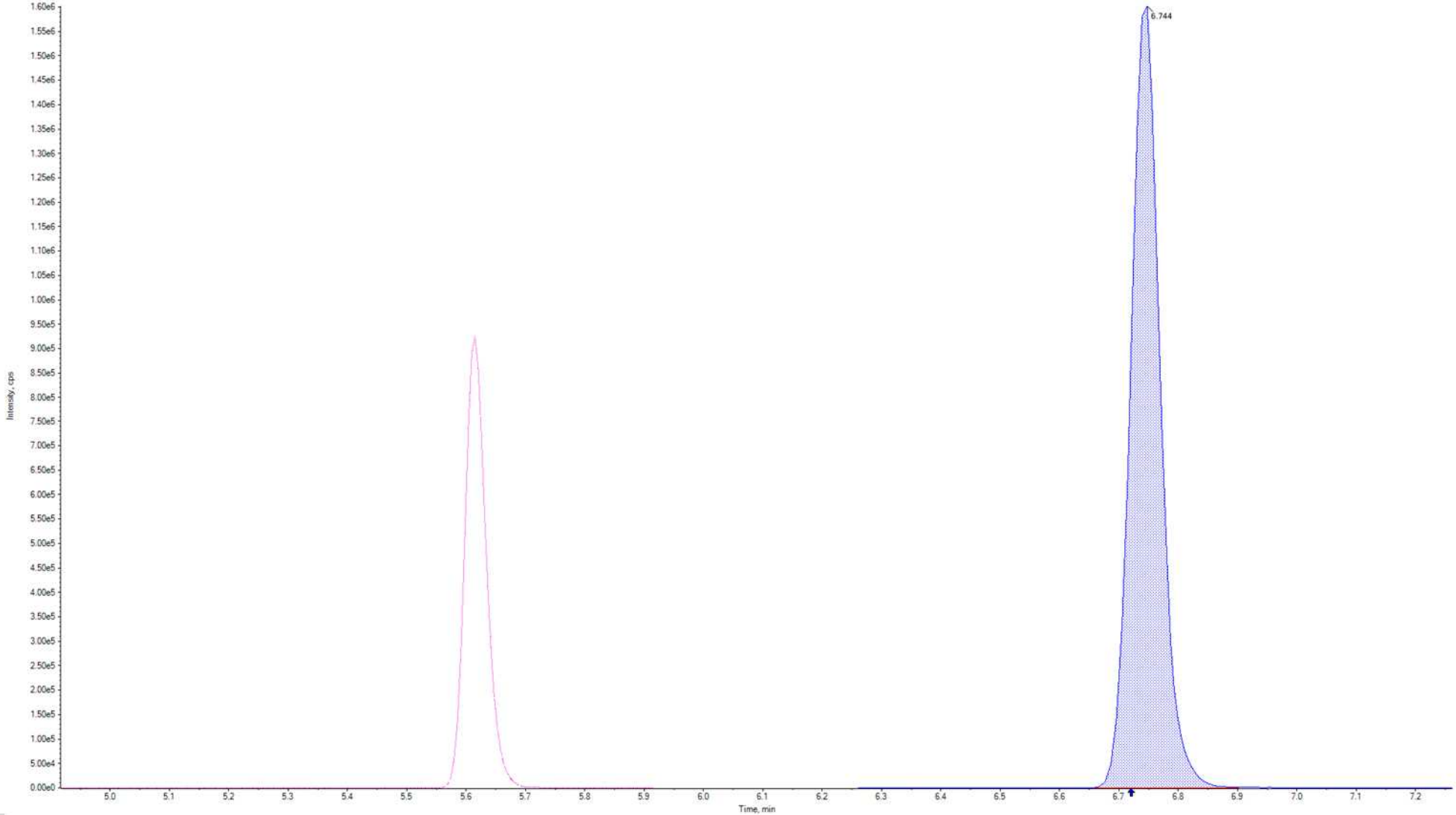
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA_2
Sample: WG1971858-4 S/N:2612.8 Points Across peak:40



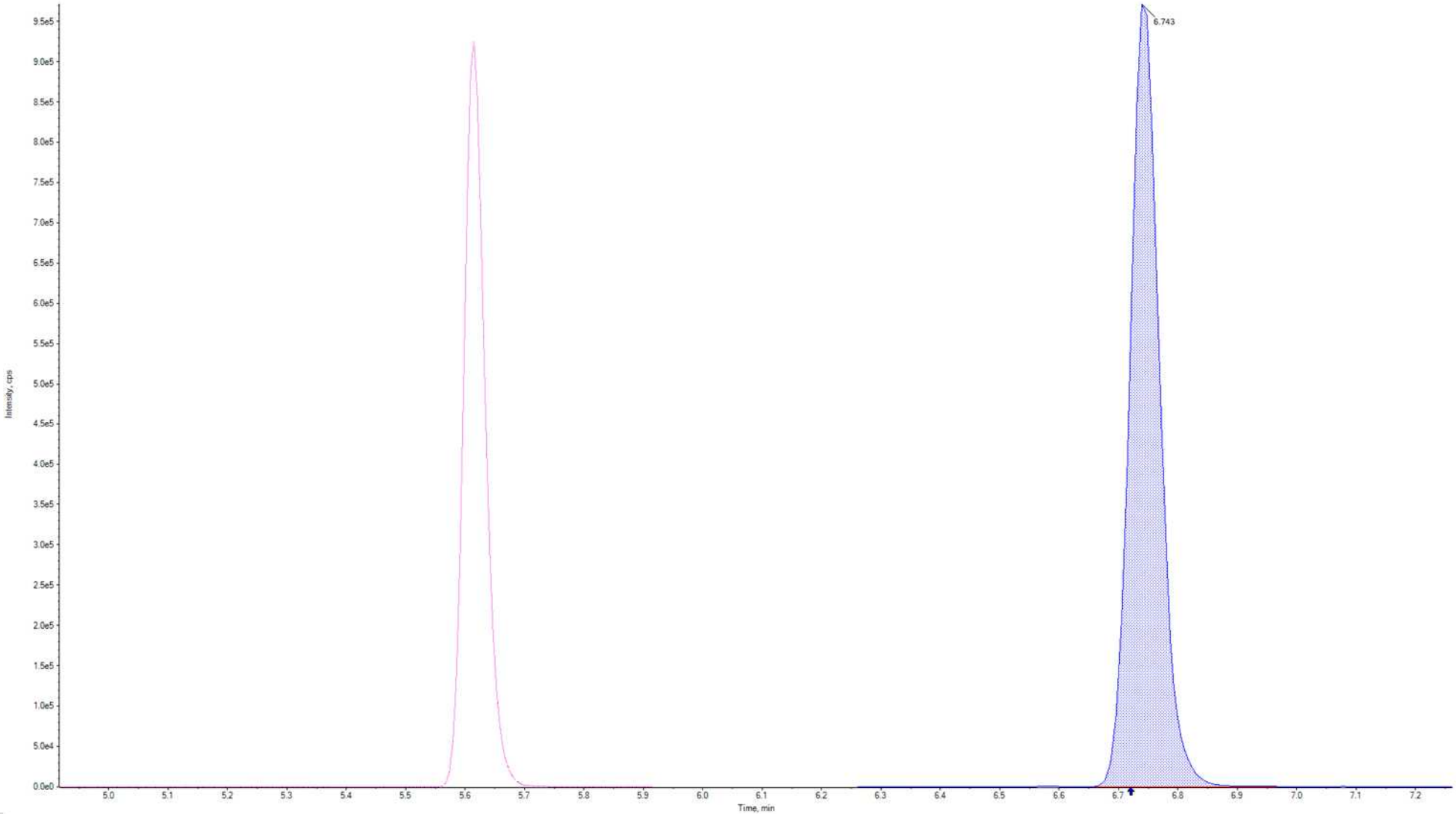
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

ADONA
Sample: WG1971858-4 S/N:9534.1 Points Across peak:36



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

ADONA_2
Sample: WG1971858-4 S/N:4506.5 Points Across peak:48



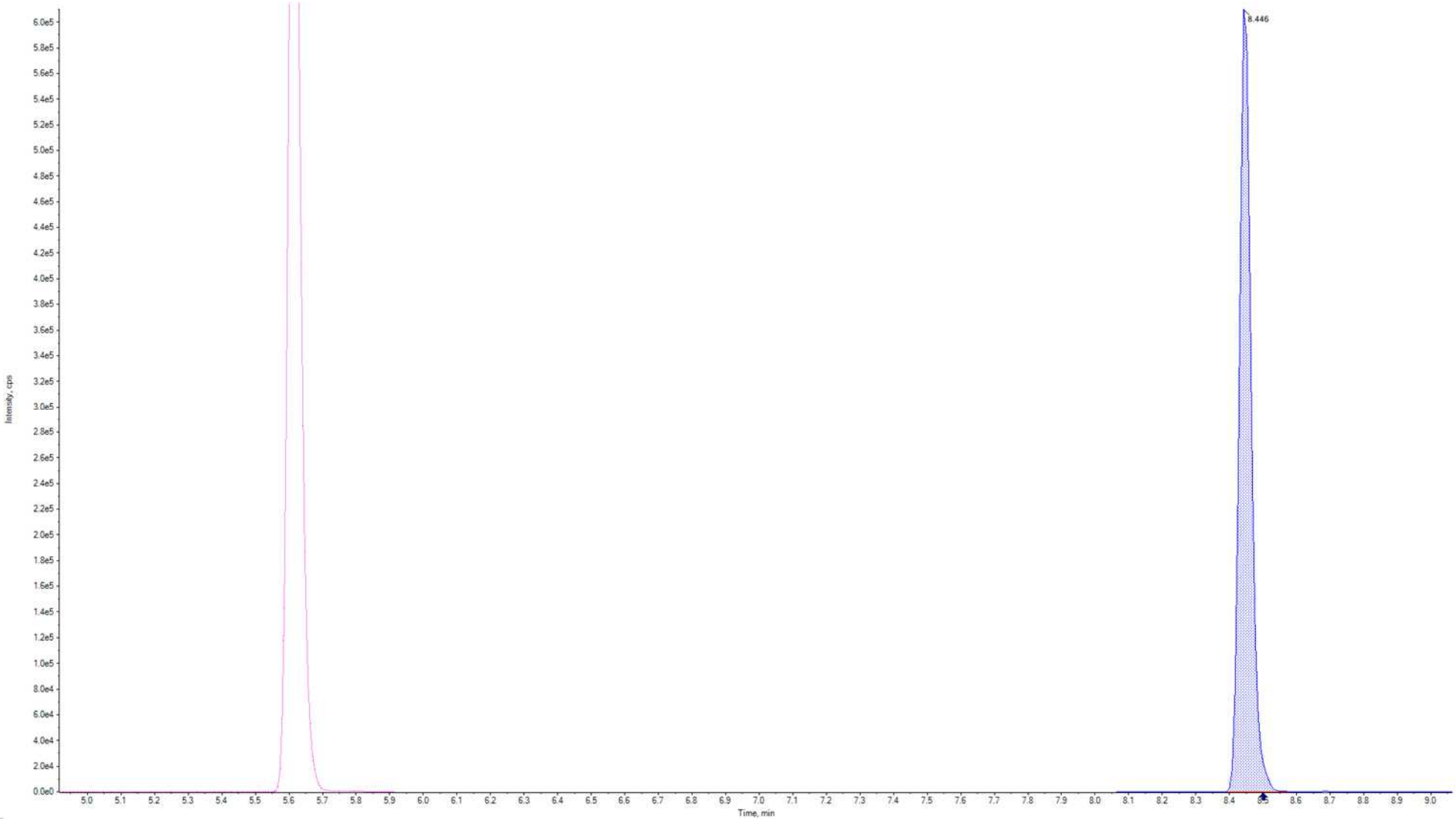
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS
Sample: WG1971858-4 S/N:86176.1 Points Across peak:39



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS_2
Sample: WG1971858-4 S/N:352177.4 Points Across peak:29



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

11Cl-PF3OUdS
Sample: WG1971858-4 S/N:62813361.0 Points Across peak:53



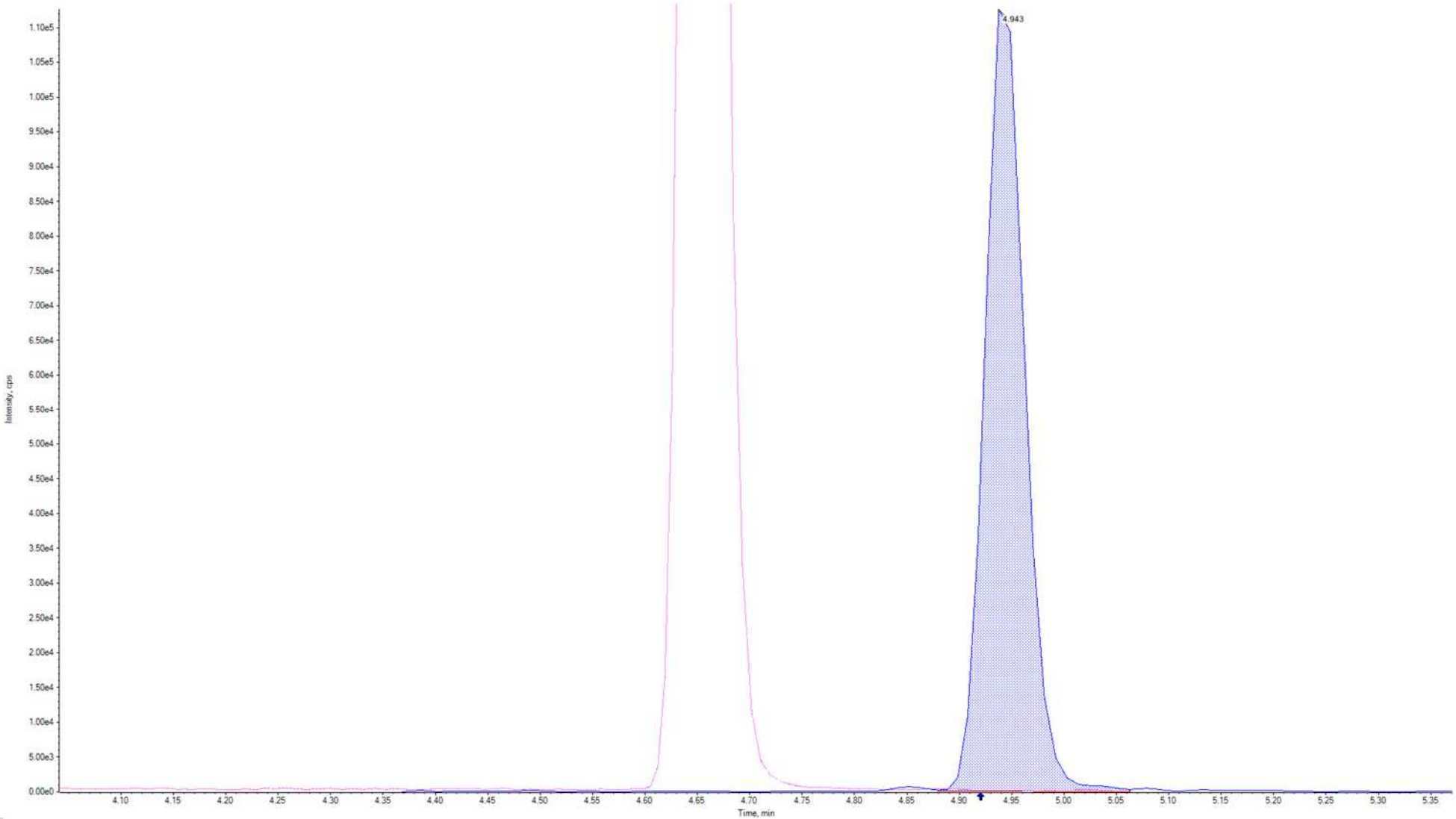
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

11Cl-PF3OUdS_2
Sample: WG1971858-4 S/N:173167.7 Points Across peak:40



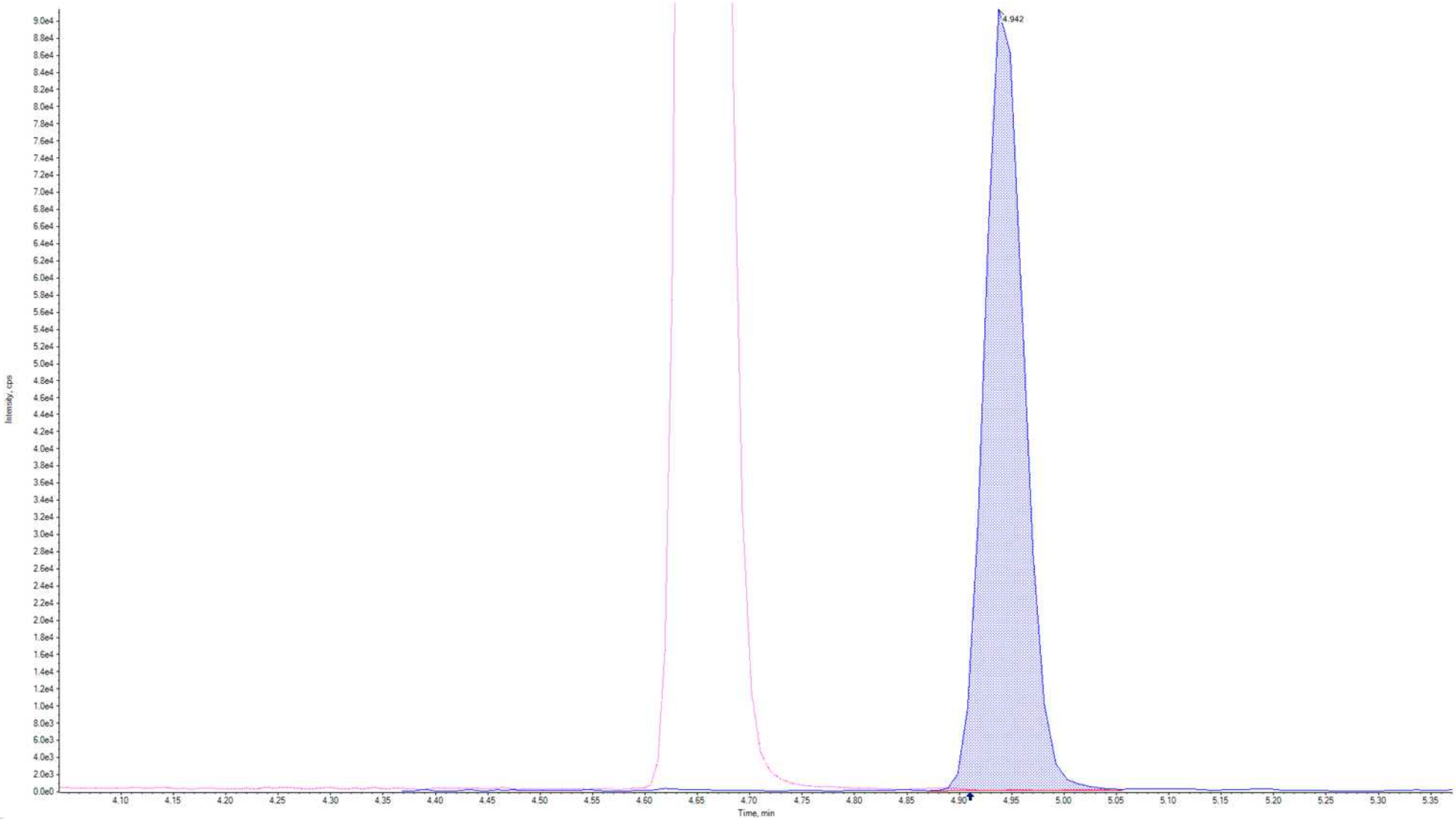
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Generated: 9/17/2024 6:15:27 AM

3:3FTCA
Sample: WG1971858-4 S/N:2452.2 Points Across peak:19



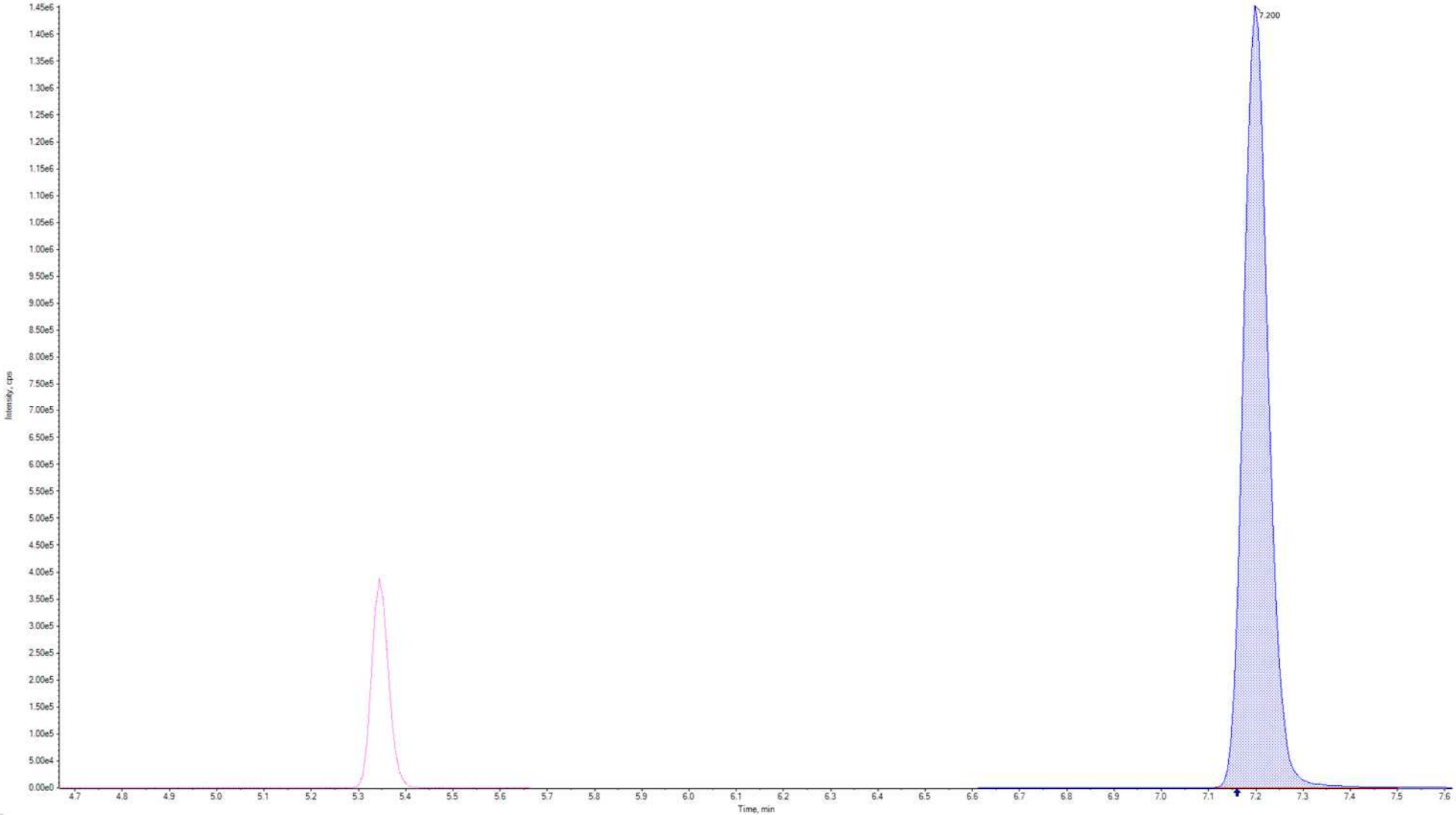
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

3:3FTCA_2
Sample: WG1971858-4 S/N:1134.4 Points Across peak:19



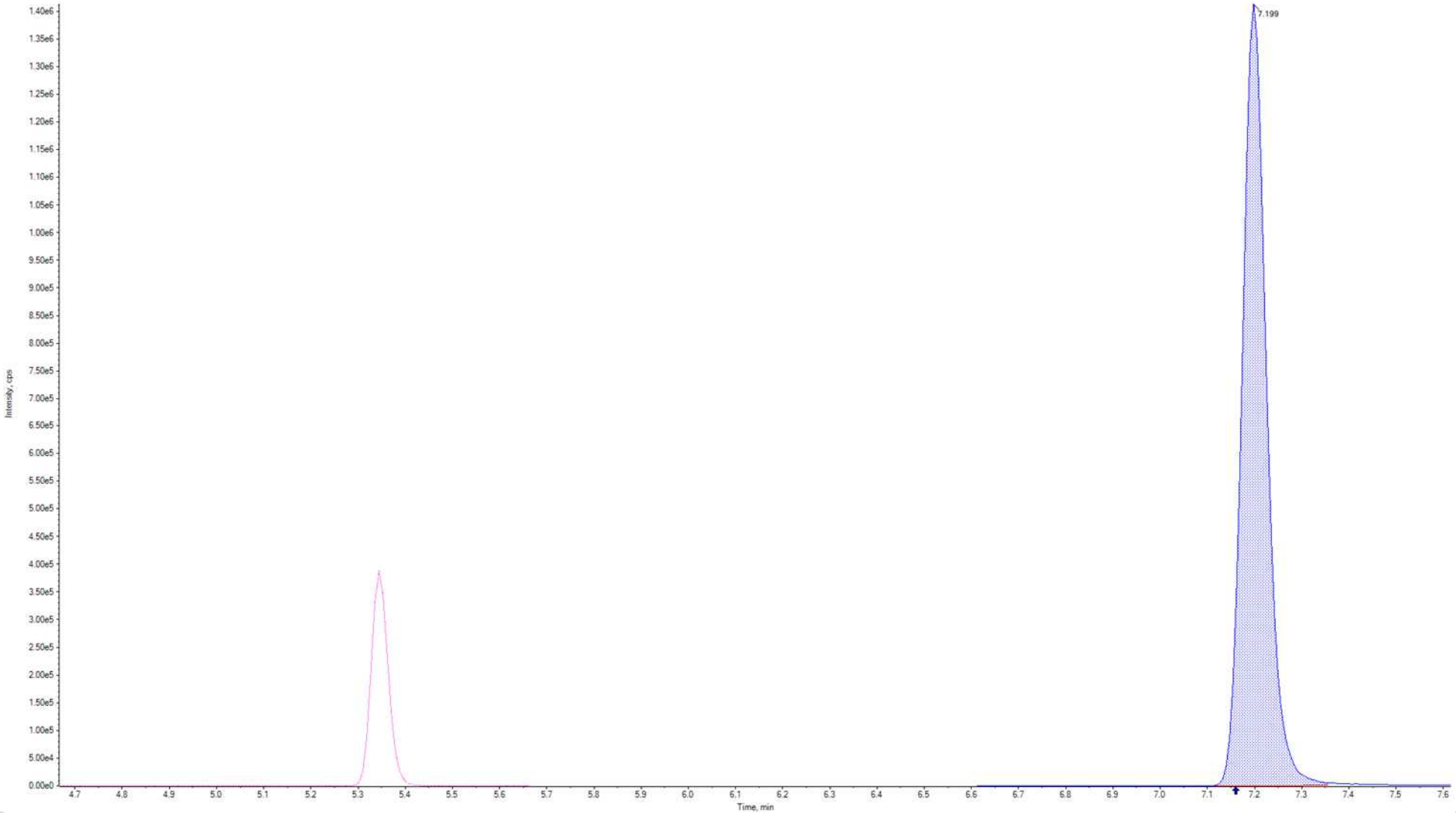
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA
Sample: WG1971858-4 S/N:8522.5 Points Across peak:68



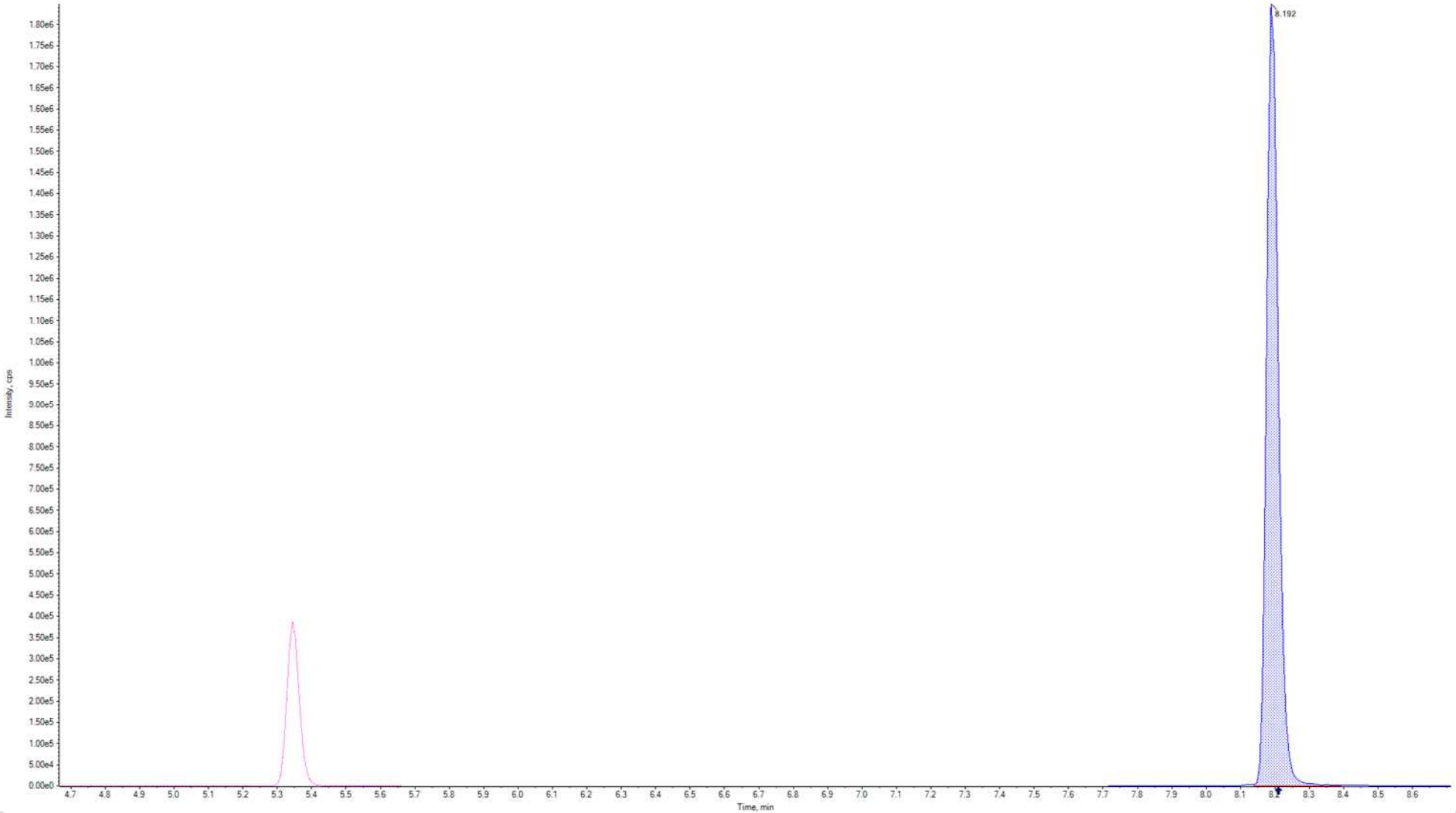
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA_2
Sample: WG1971858-4 S/N:5891.4 Points Across peak:46



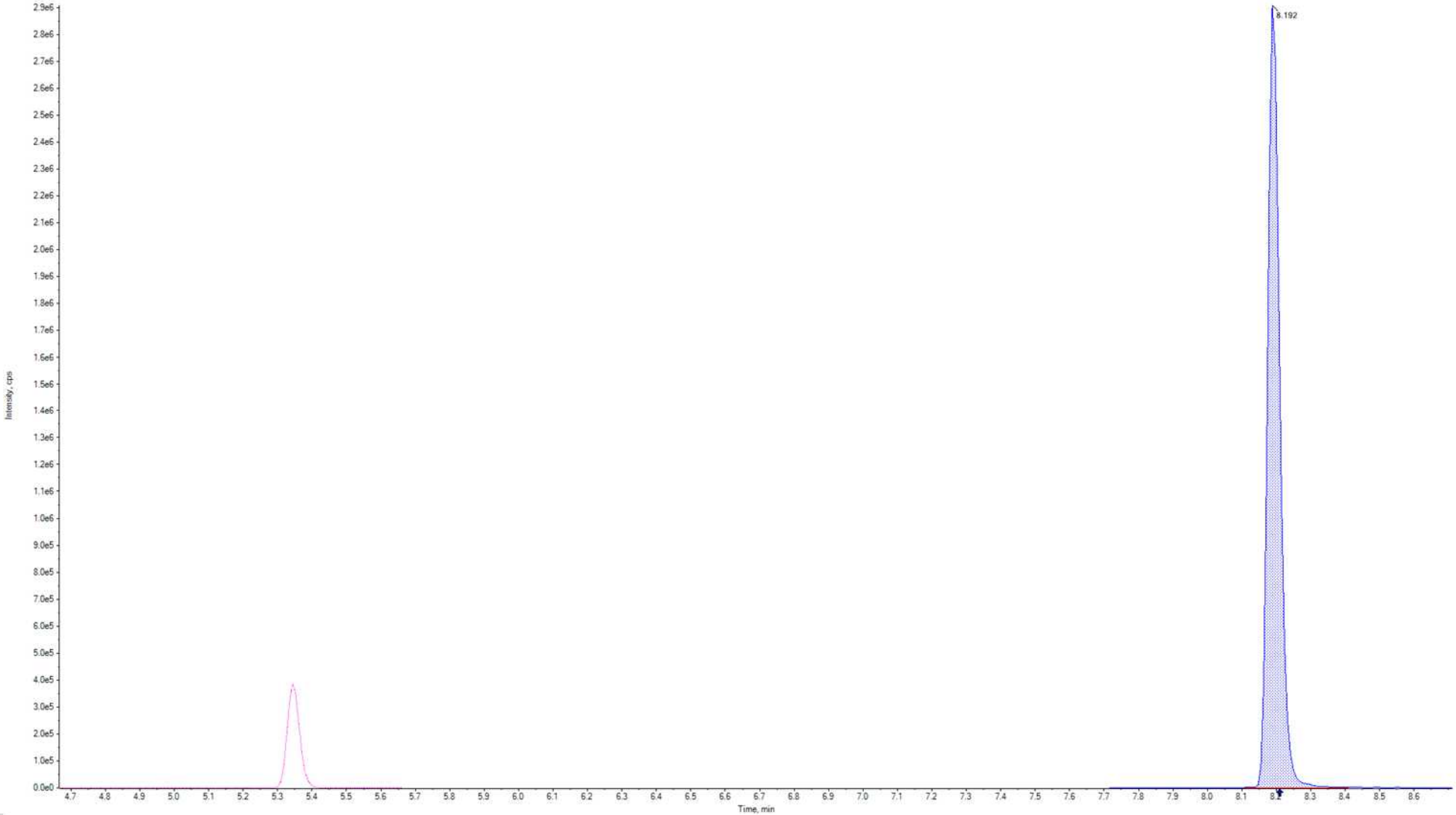
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA
Sample: WG1971858-4 S/N:6787.2 Points Across peak:30



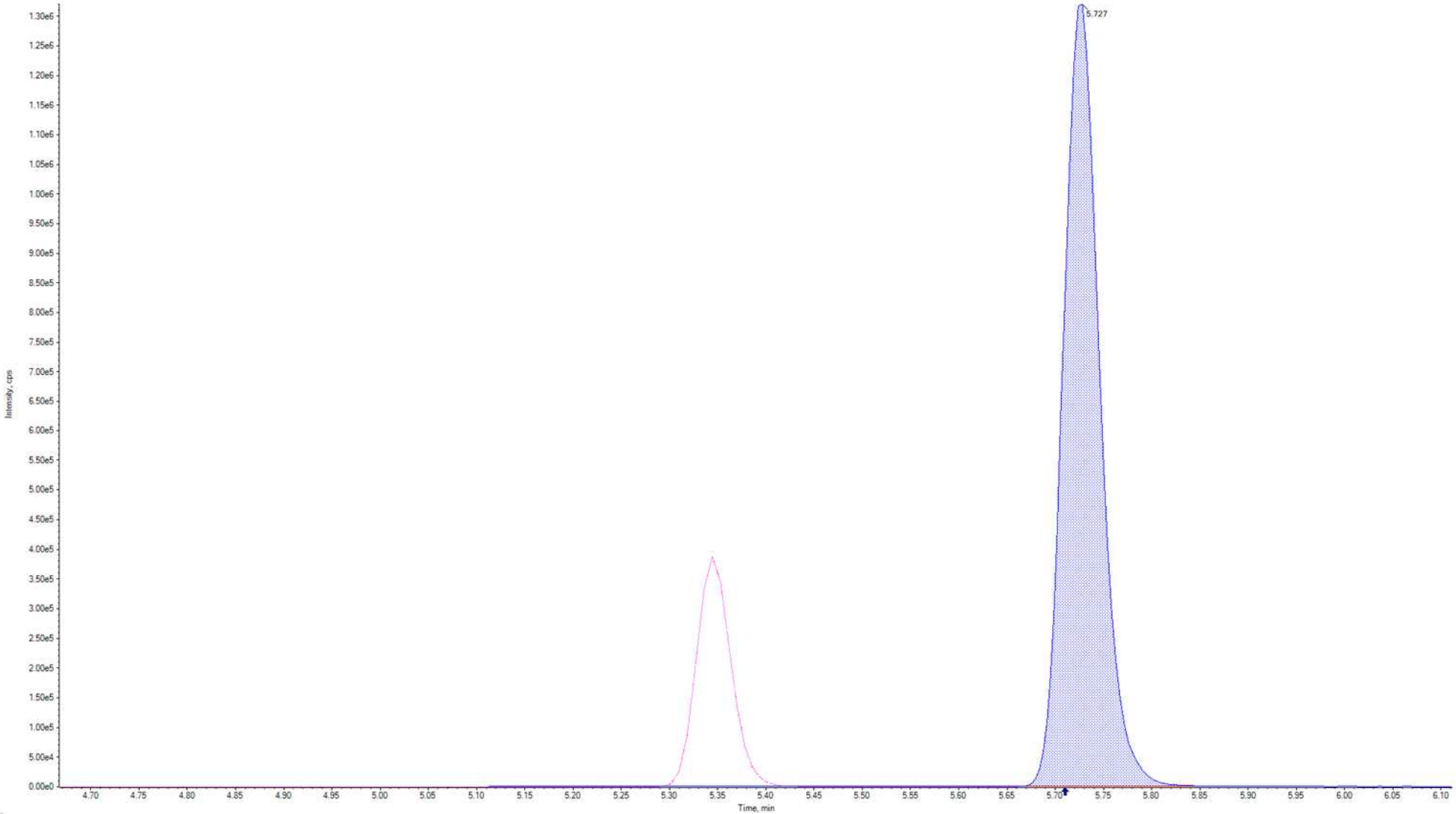
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA_2
Sample: WG1971858-4 S/N:3860.9 Points Across peak:38



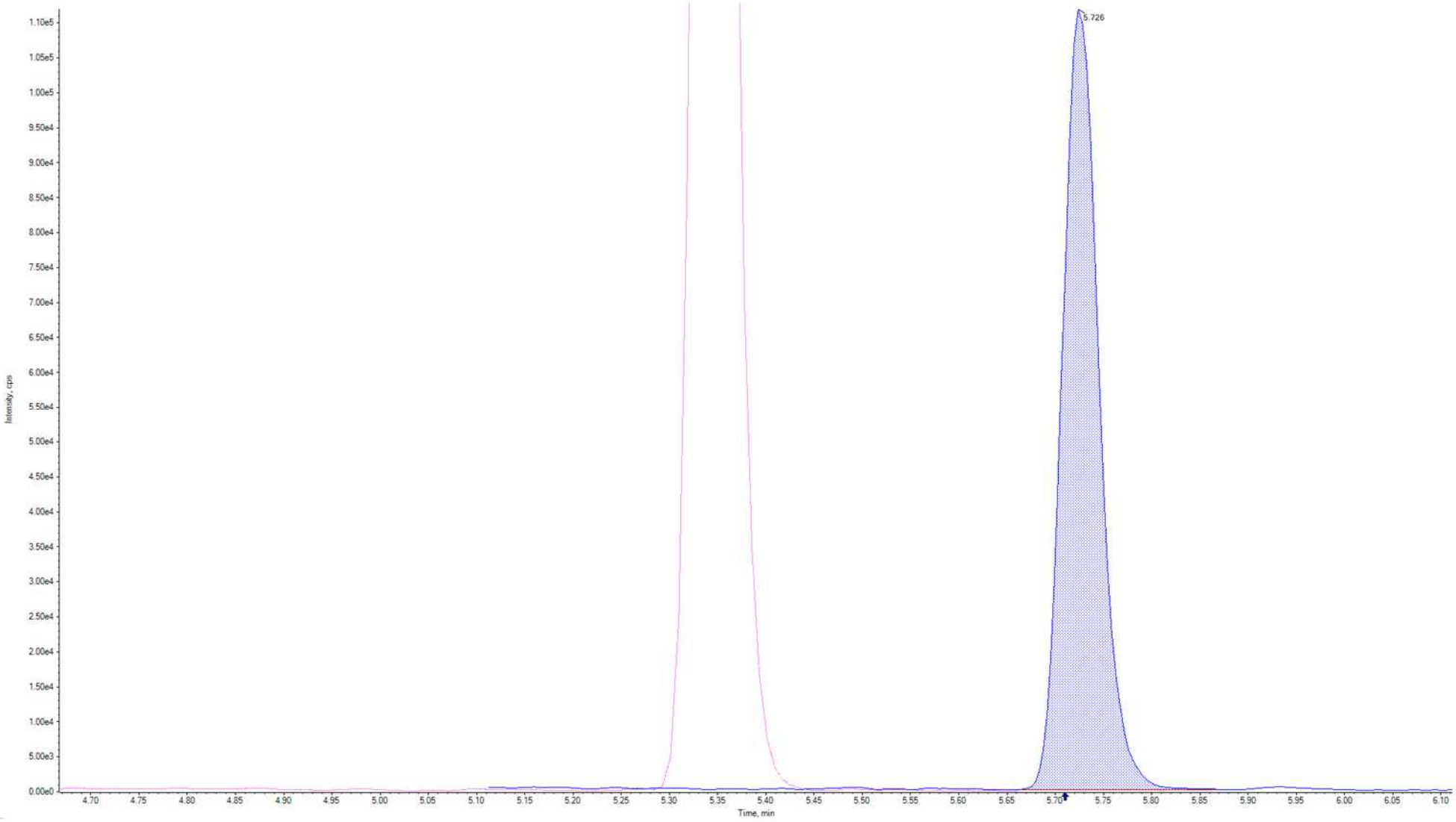
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFEESA
Sample: WG1971858-4 S/N:3296.5 Points Across peak:52



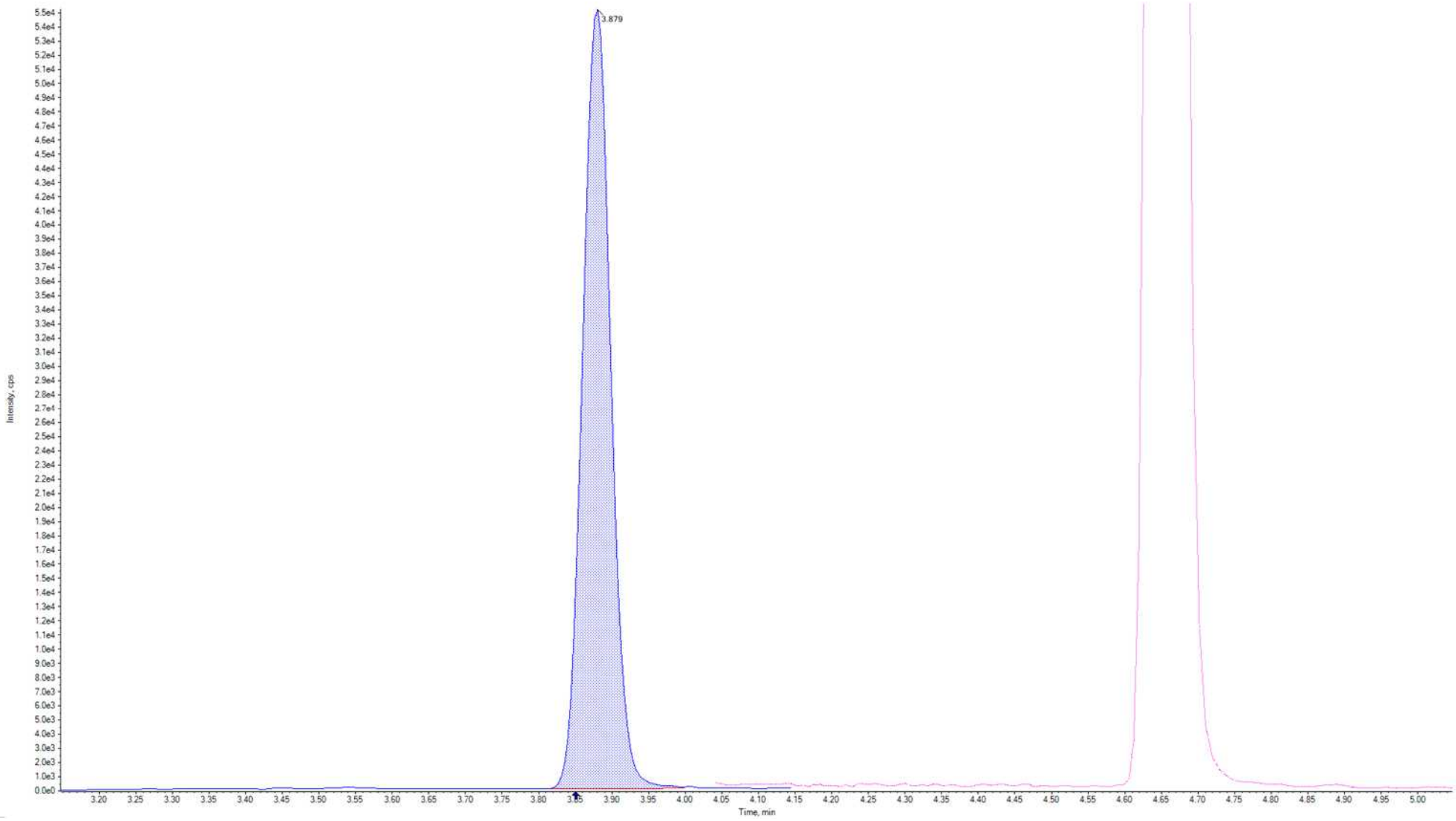
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFEESA_2
Sample: WG1971858-4 S/N:1508.2 Points Across peak:44



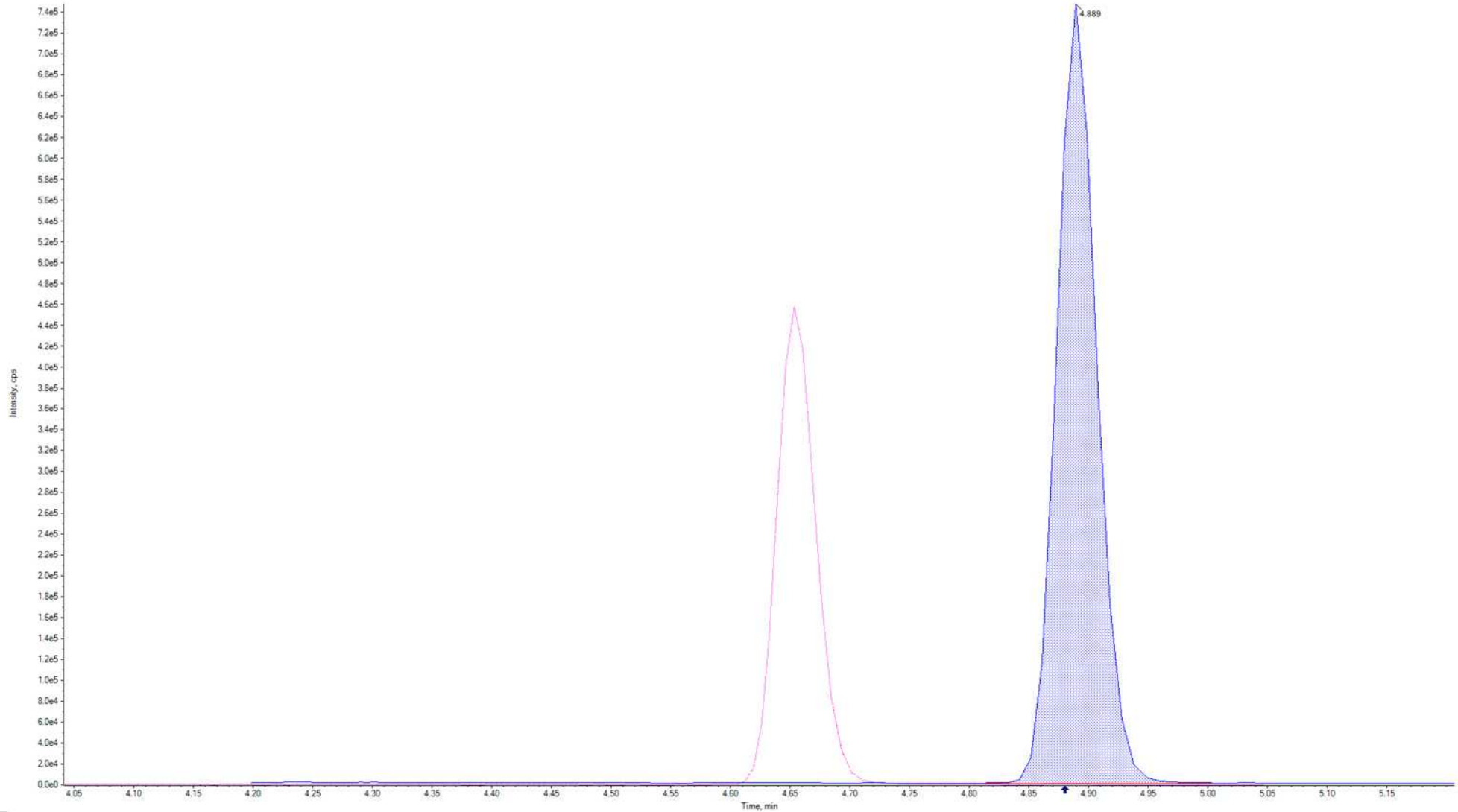
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFMPA
Sample: WG1971858-4 S/N:2478.8 Points Across peak:48



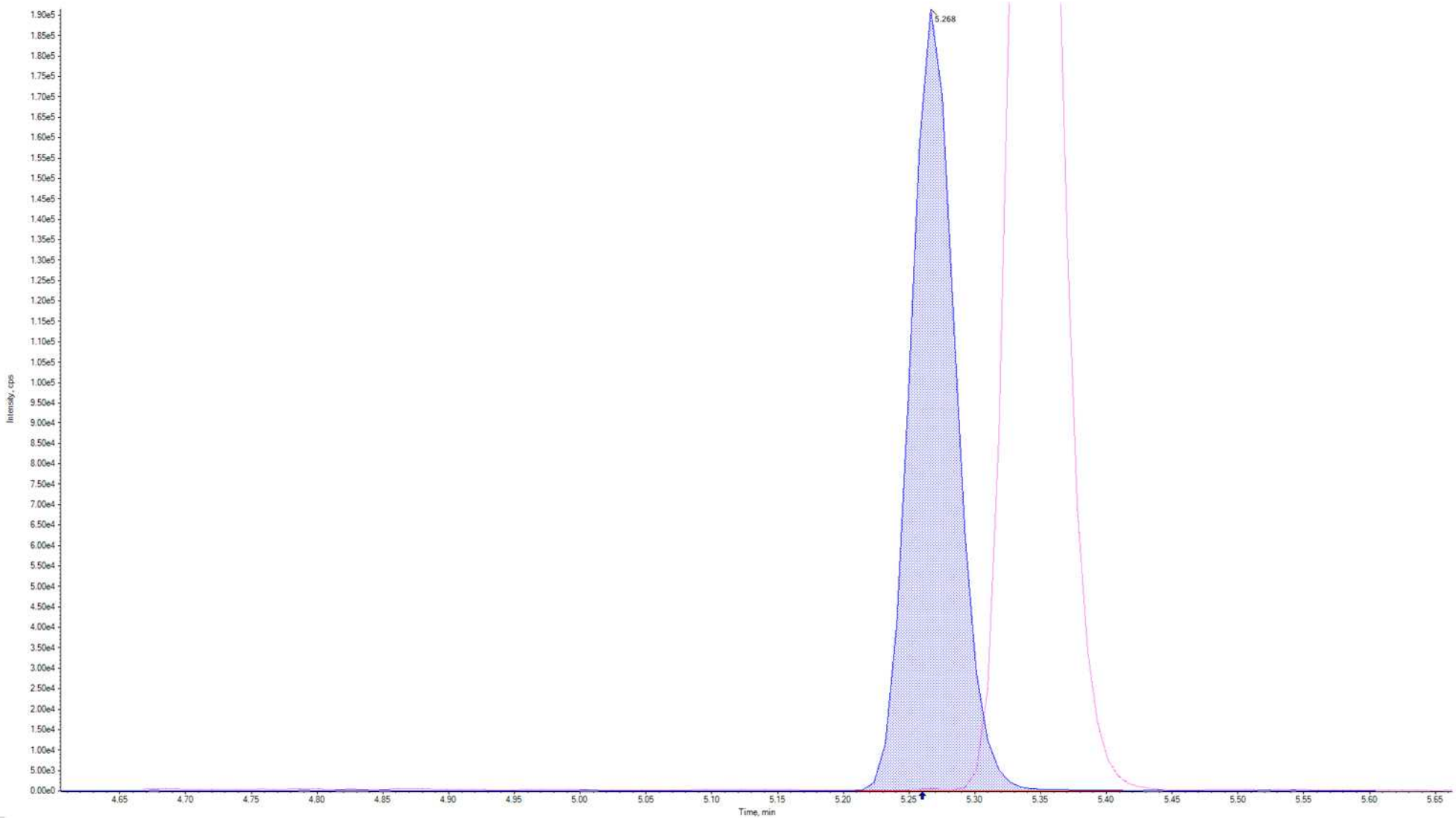
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

PFMBA
Sample: WG1971858-4 S/N:1604.4 Points Across peak:24



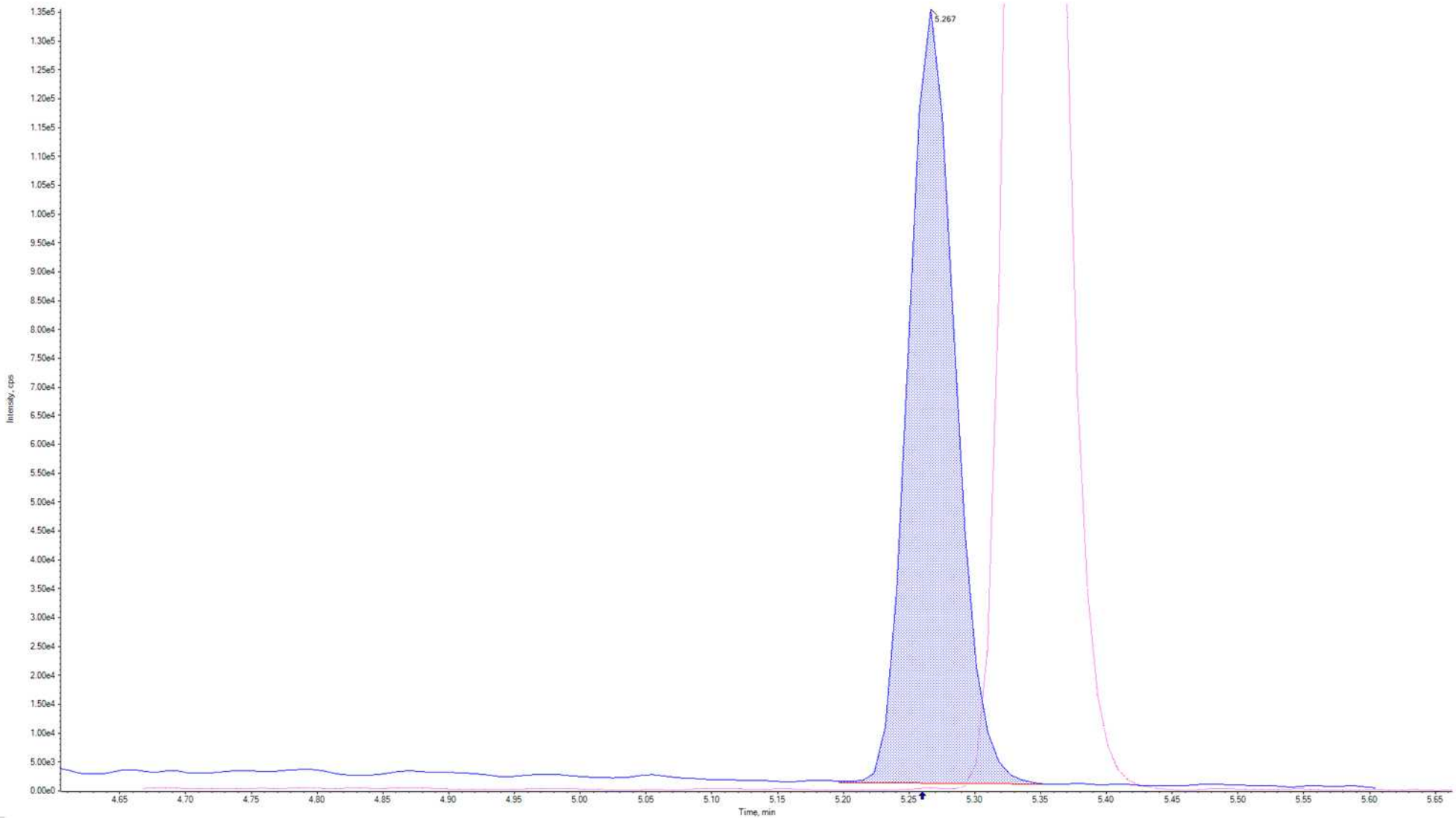
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

NFDHA
Sample: WG1971858-4 S/N:175608.8 Points Across peak:29



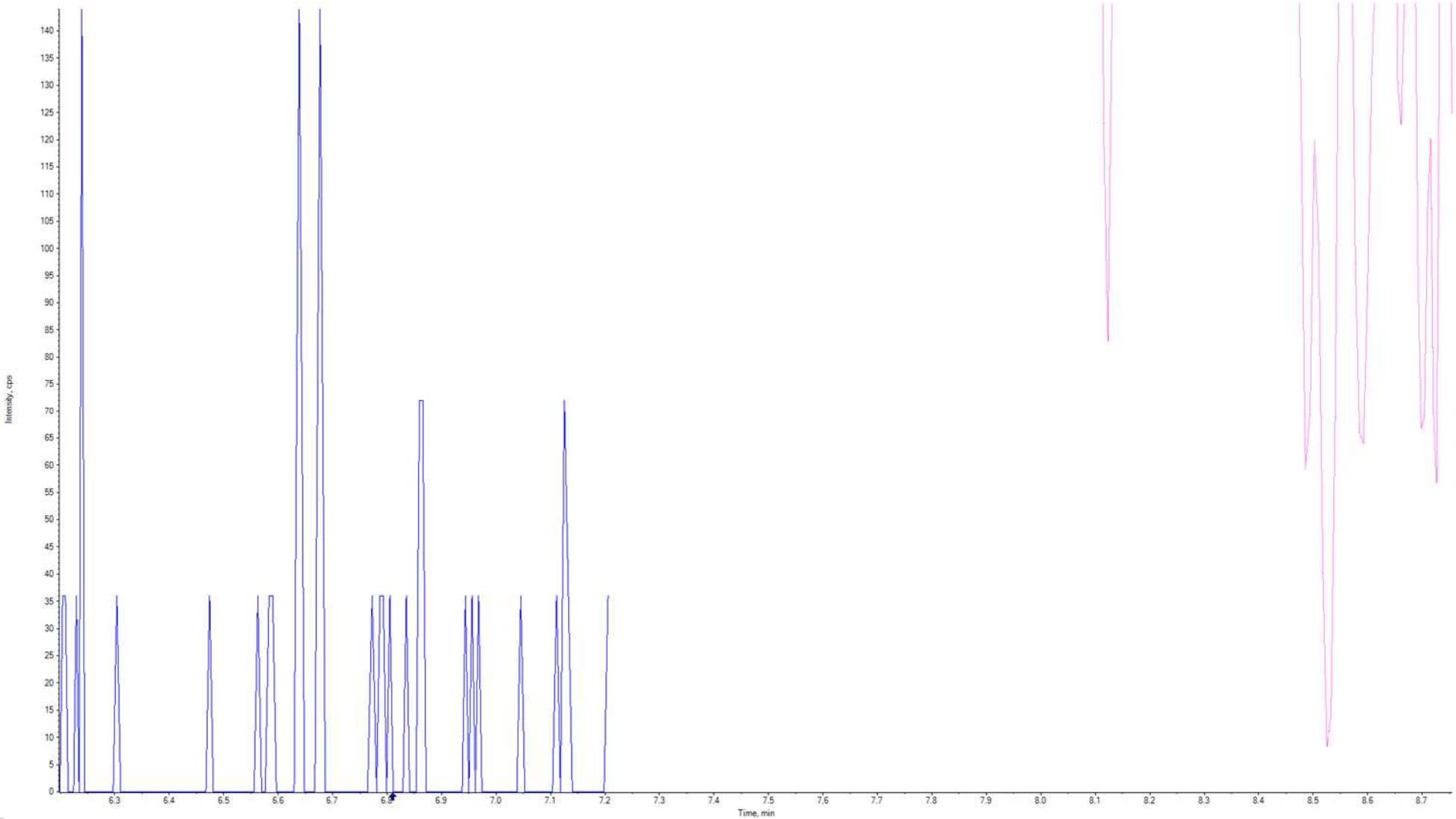
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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NFDHA_2
Sample: WG1971858-4 S/N:567.2 Points Across peak:19

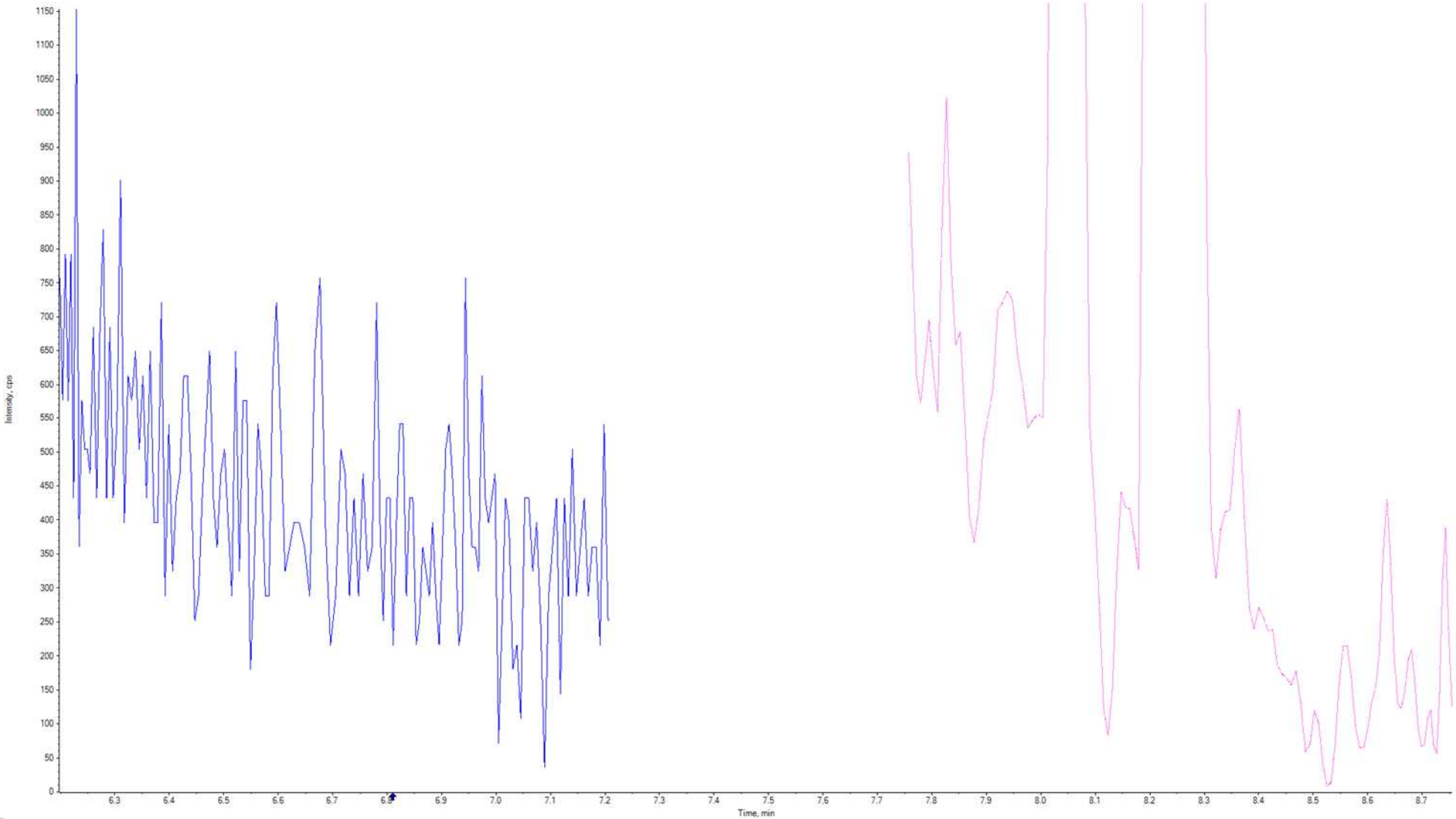


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

TDCA
Sample: WG1971858-4 S/N:N/A Points Across peak:N/A

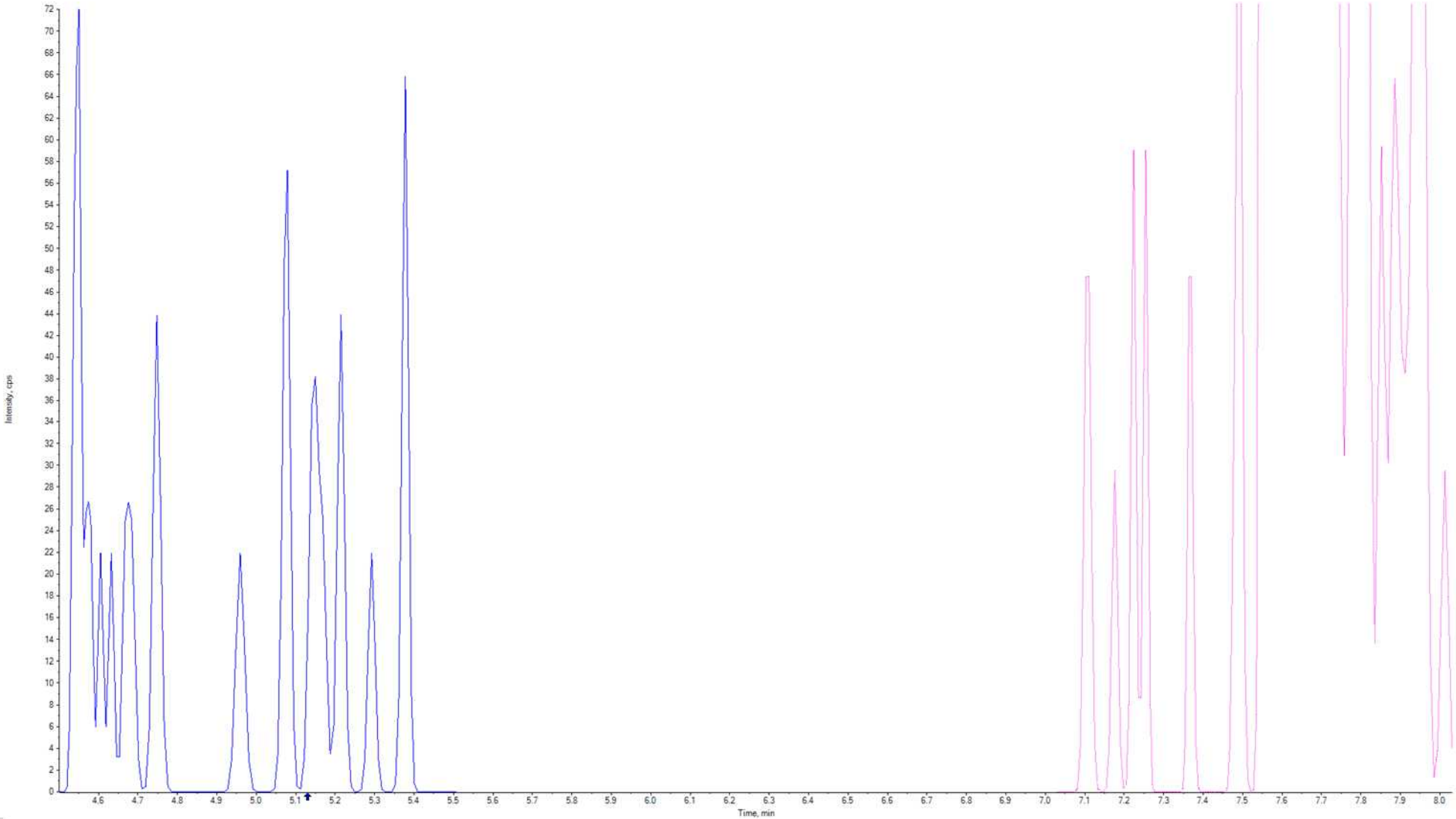


TDCA_2
Sample: WG1971858-4 S/N:N/A Points Across peak:N/A



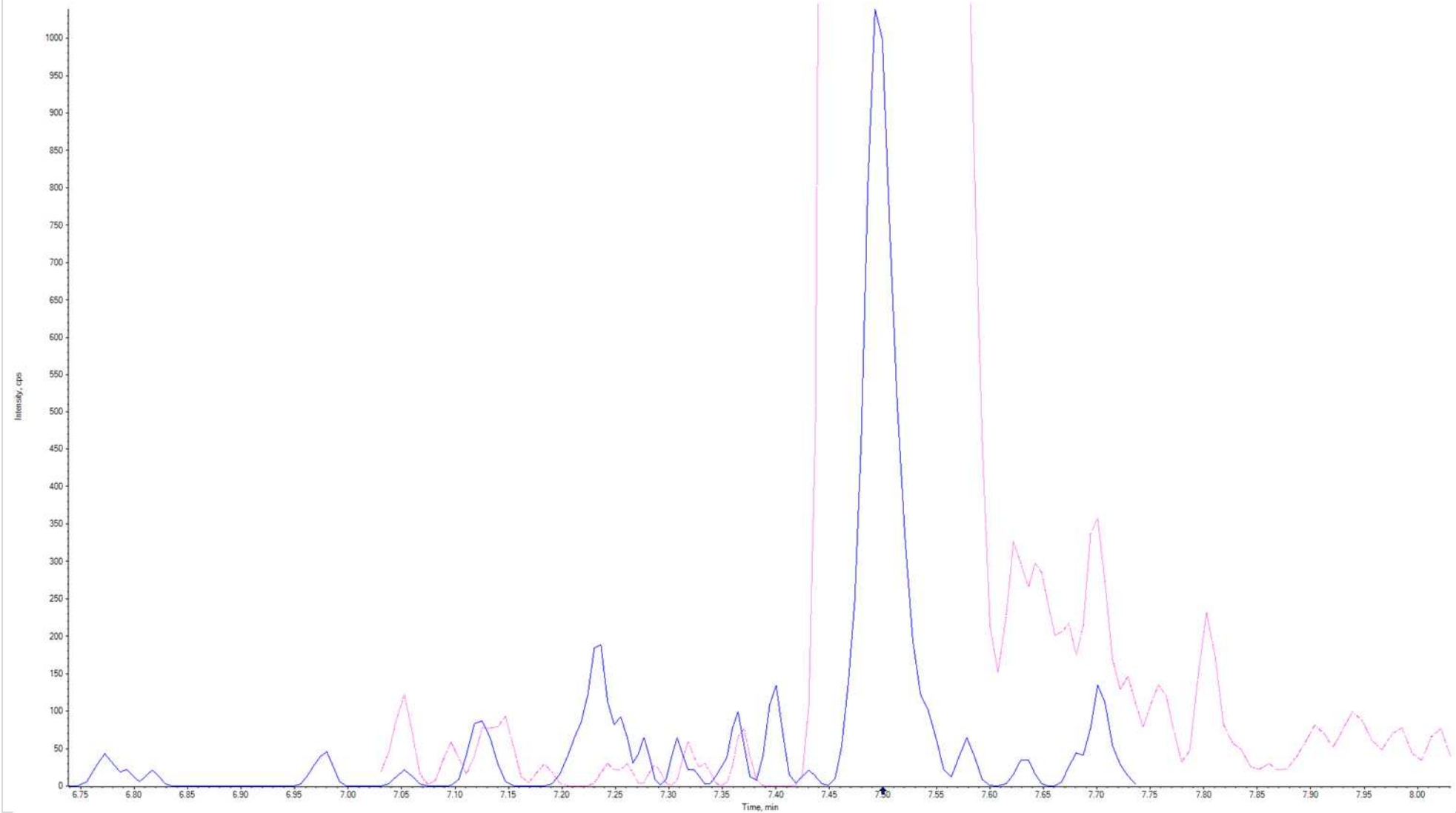
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Generated: 9/17/2024 6:15:27 AM

13C2D4-4:2FTS
Sample: WG1971858-4 S/N:N/A Points Across peak:N/A



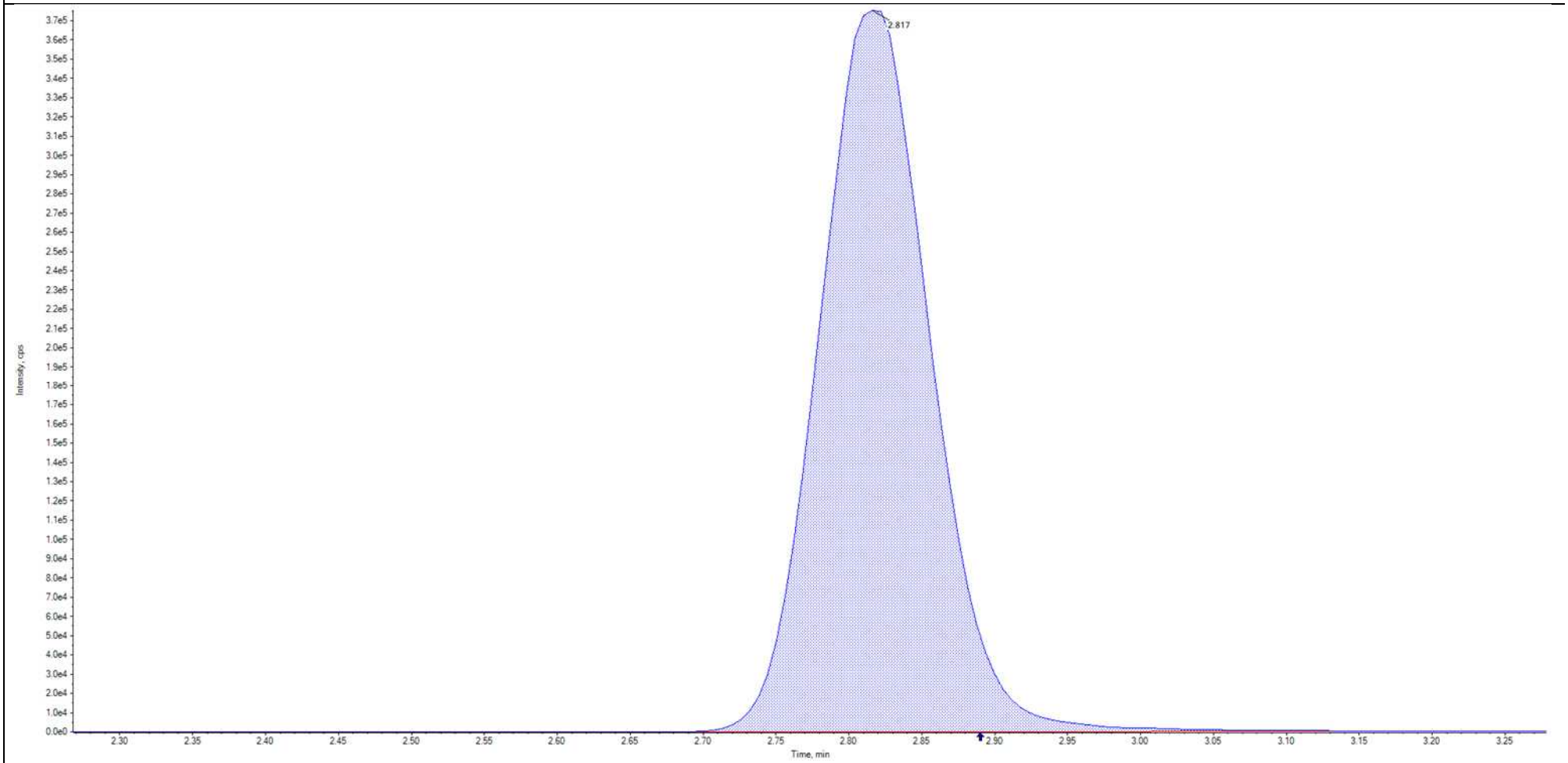
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-PFOA
Sample: WG1971858-4 S/N:N/A Points Across peak:N/A



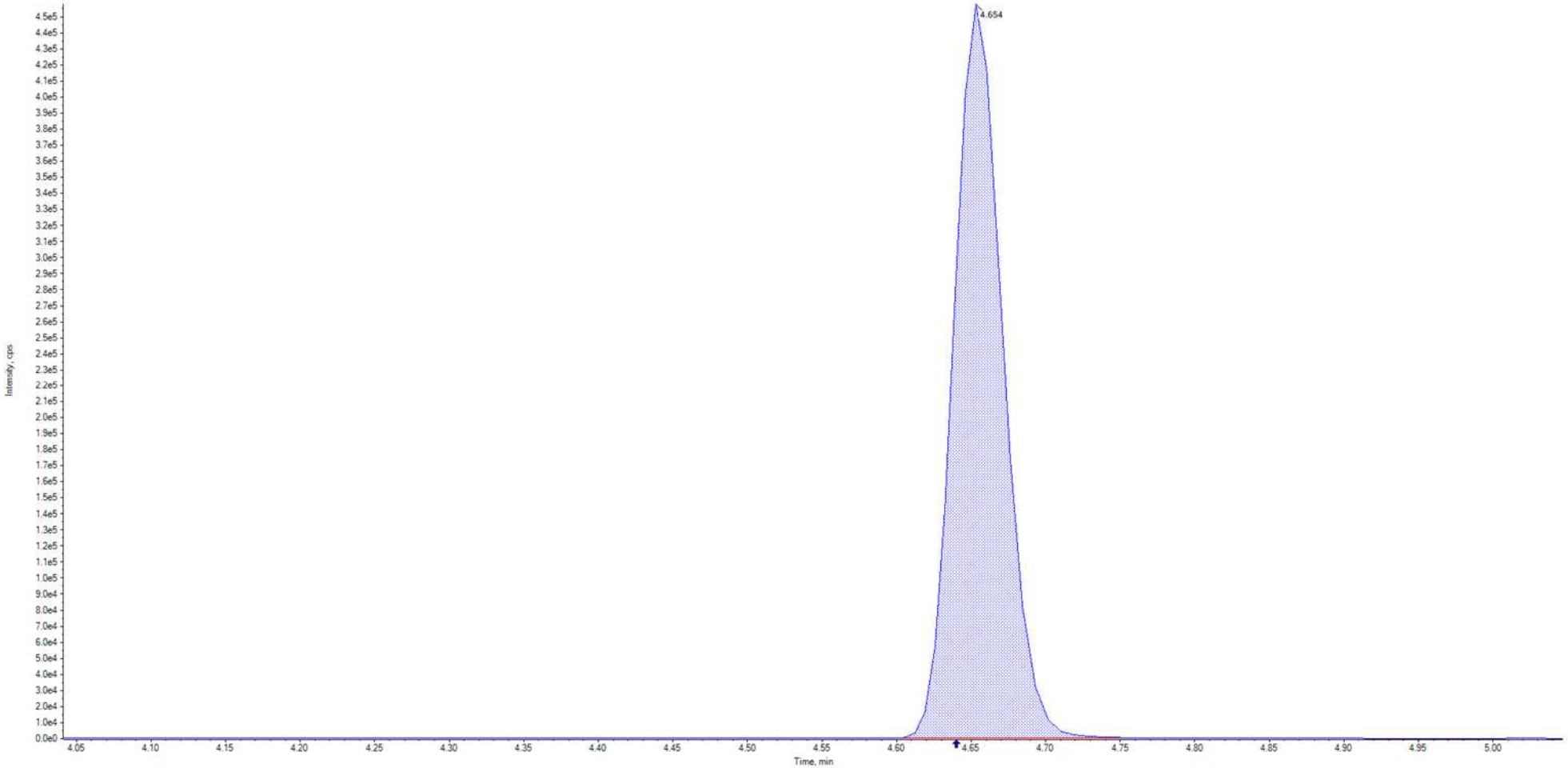
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C4-PFBA
Sample: WG1971858-4

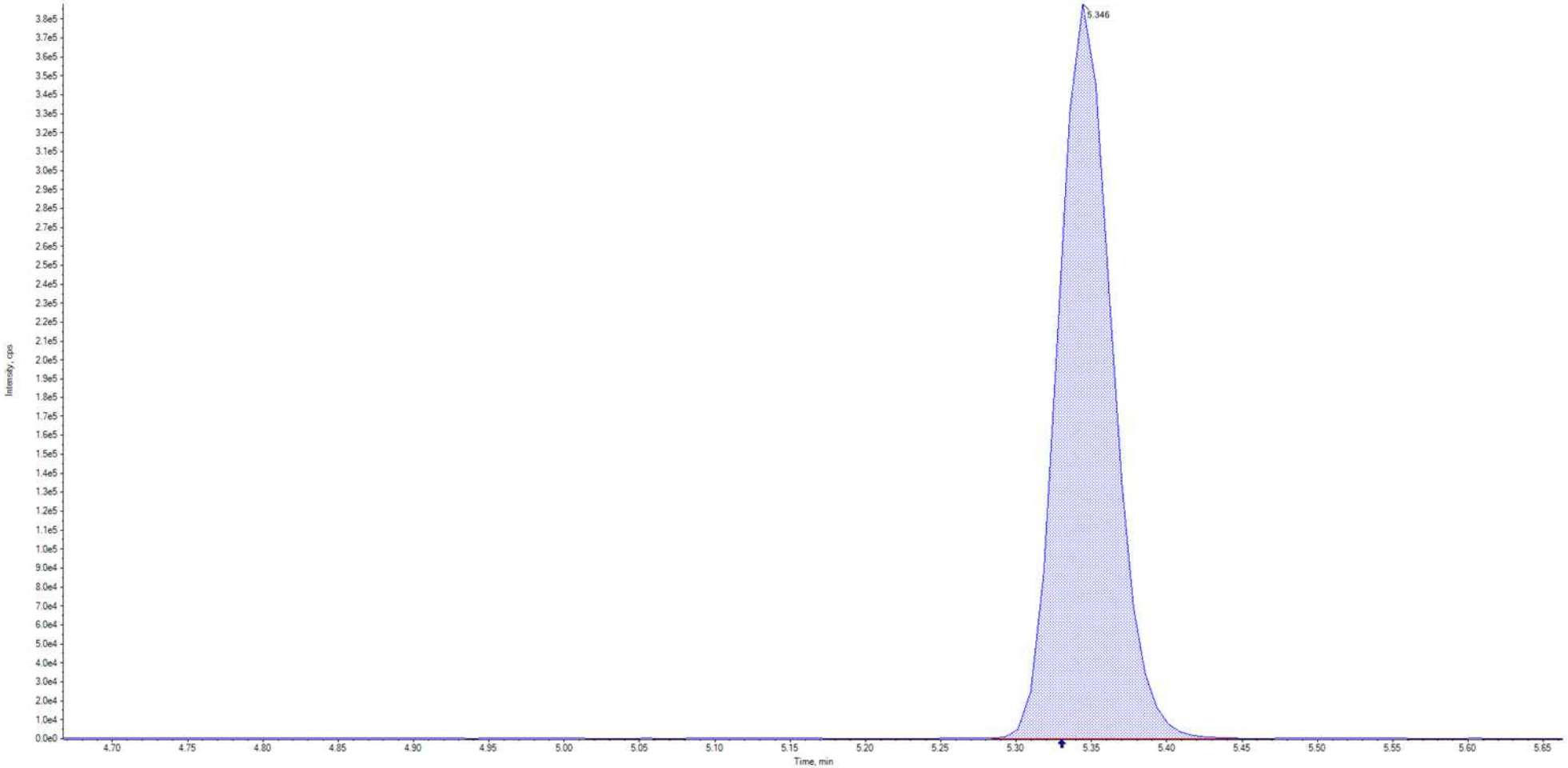


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C5-PFPeA
Sample: WG1971858-4

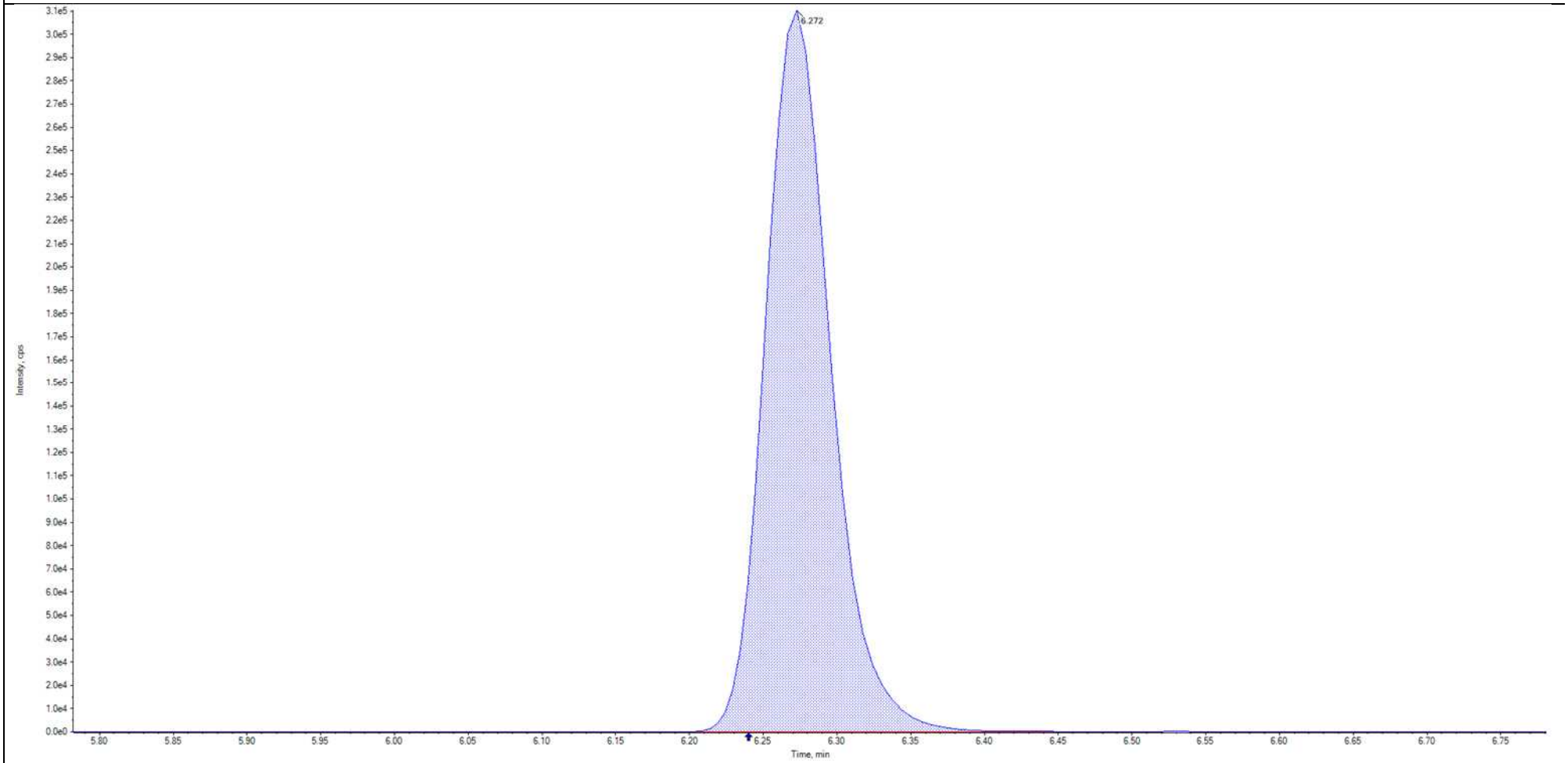


13C5-PFHxA
Sample: WG1971858-4

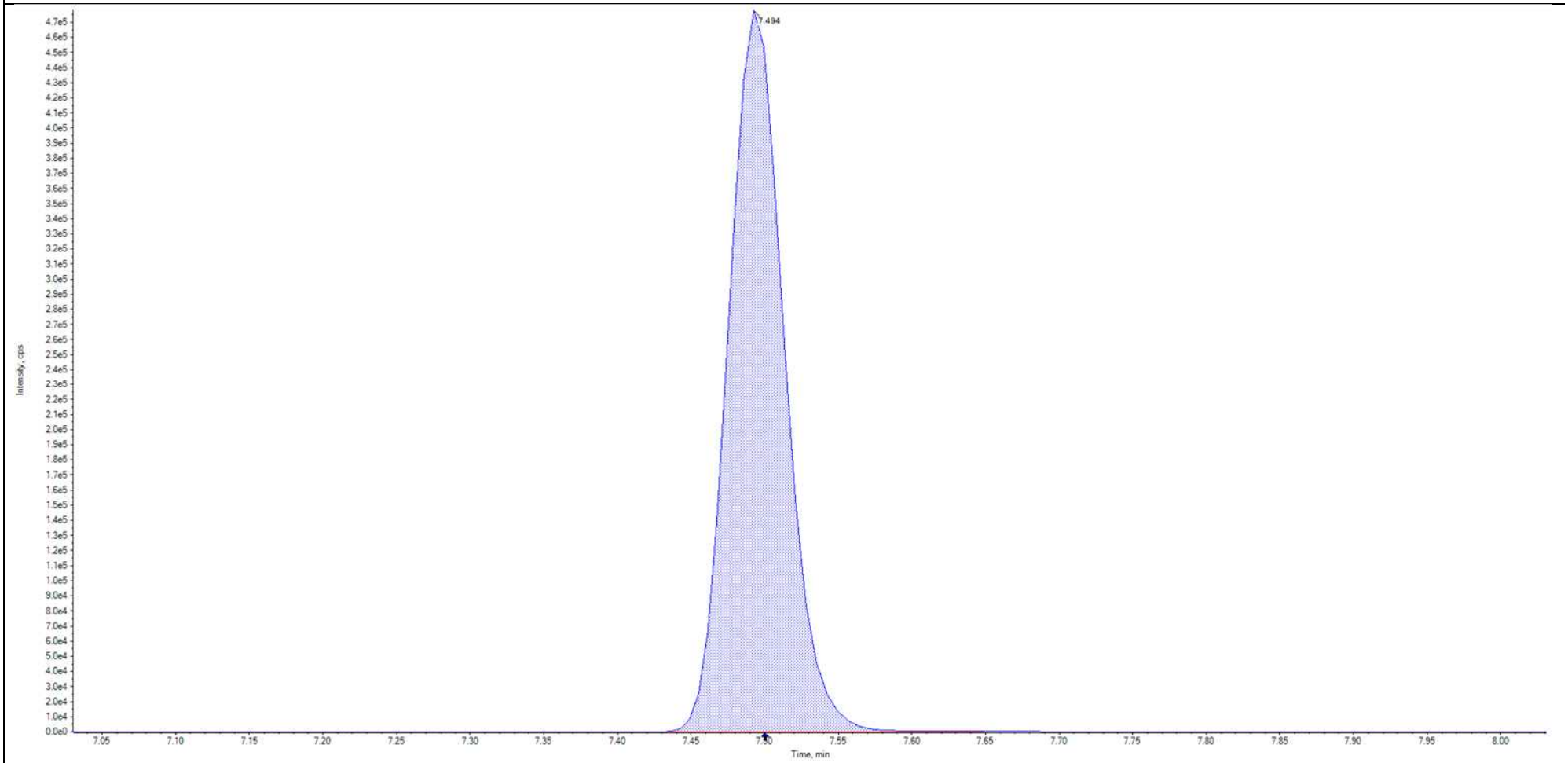


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

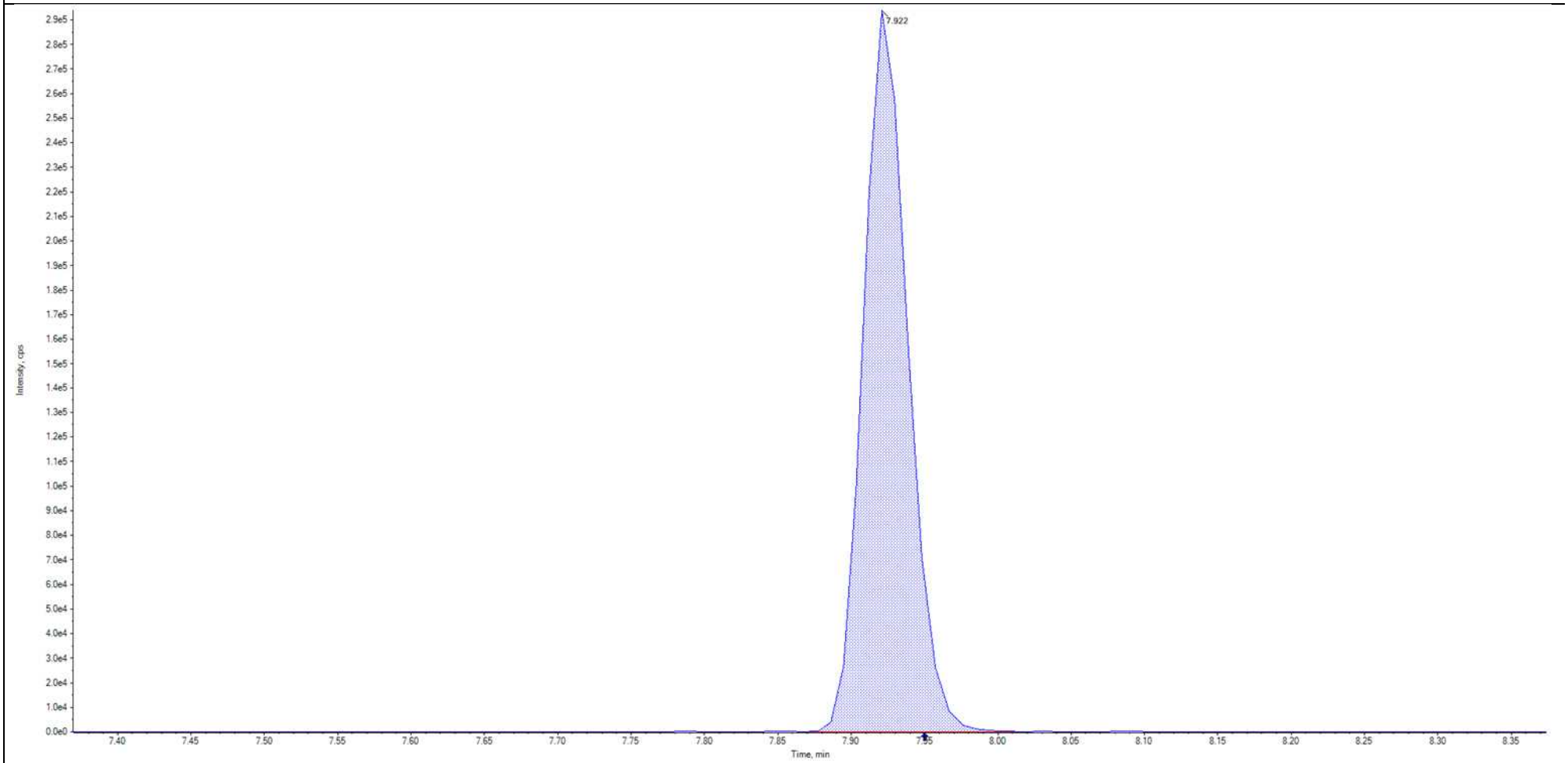
13C4-PFHpA
Sample: WG1971858-4



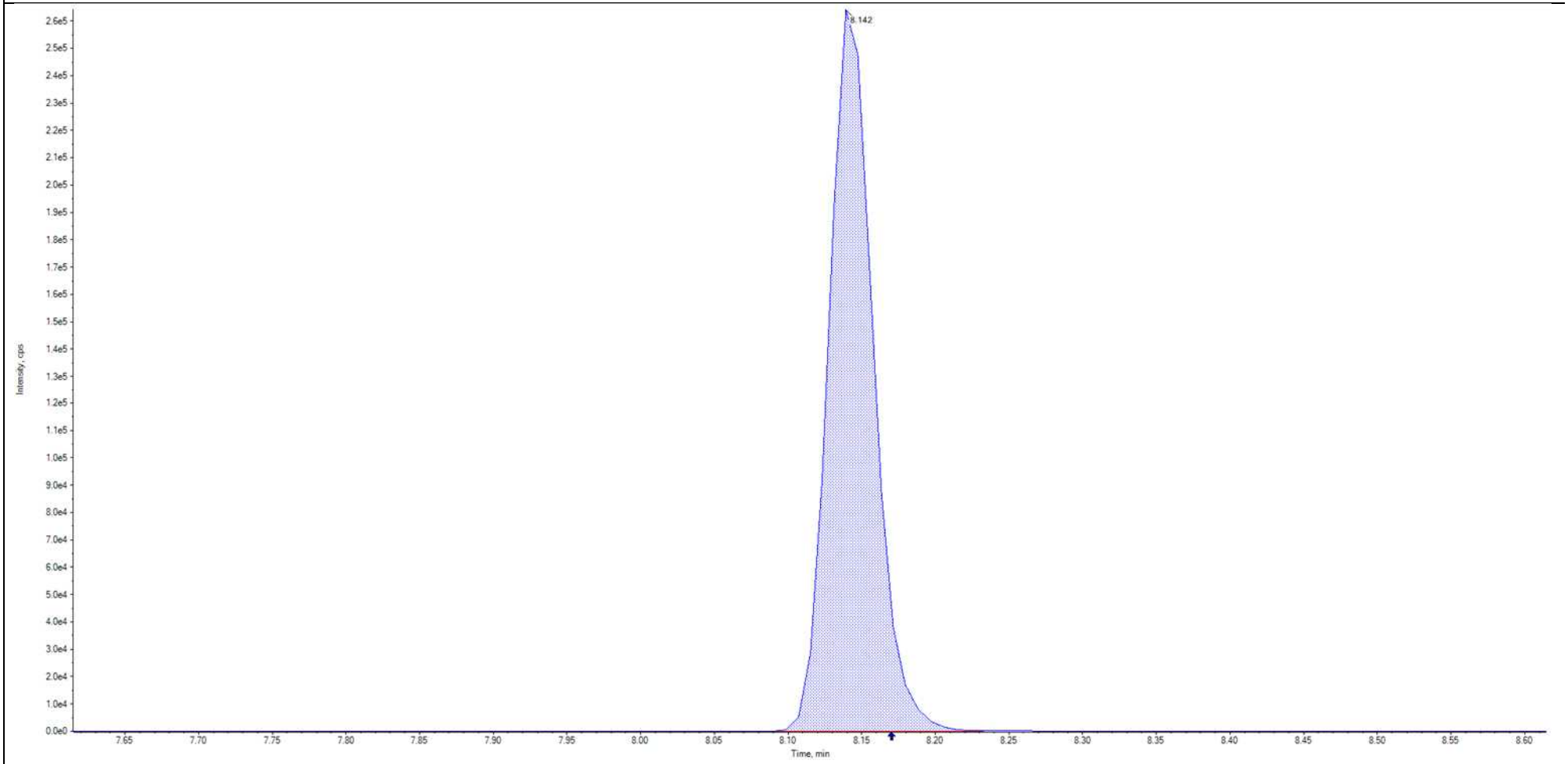
13C8-PFOA
Sample: WG1971858-4



13C9-PFNA
Sample: WG1971858-4

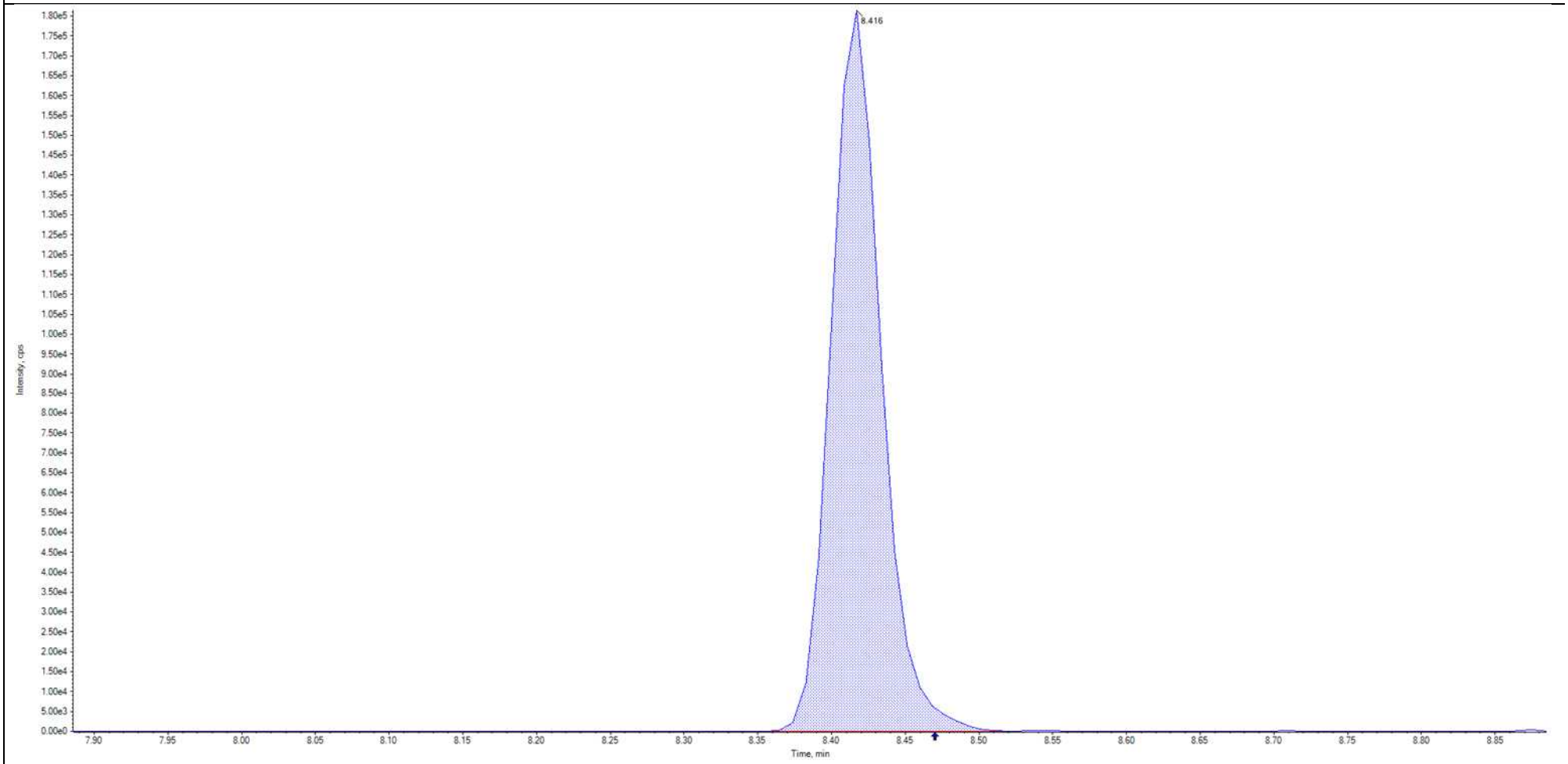


13C6-PFDA
Sample: WG1971858-4



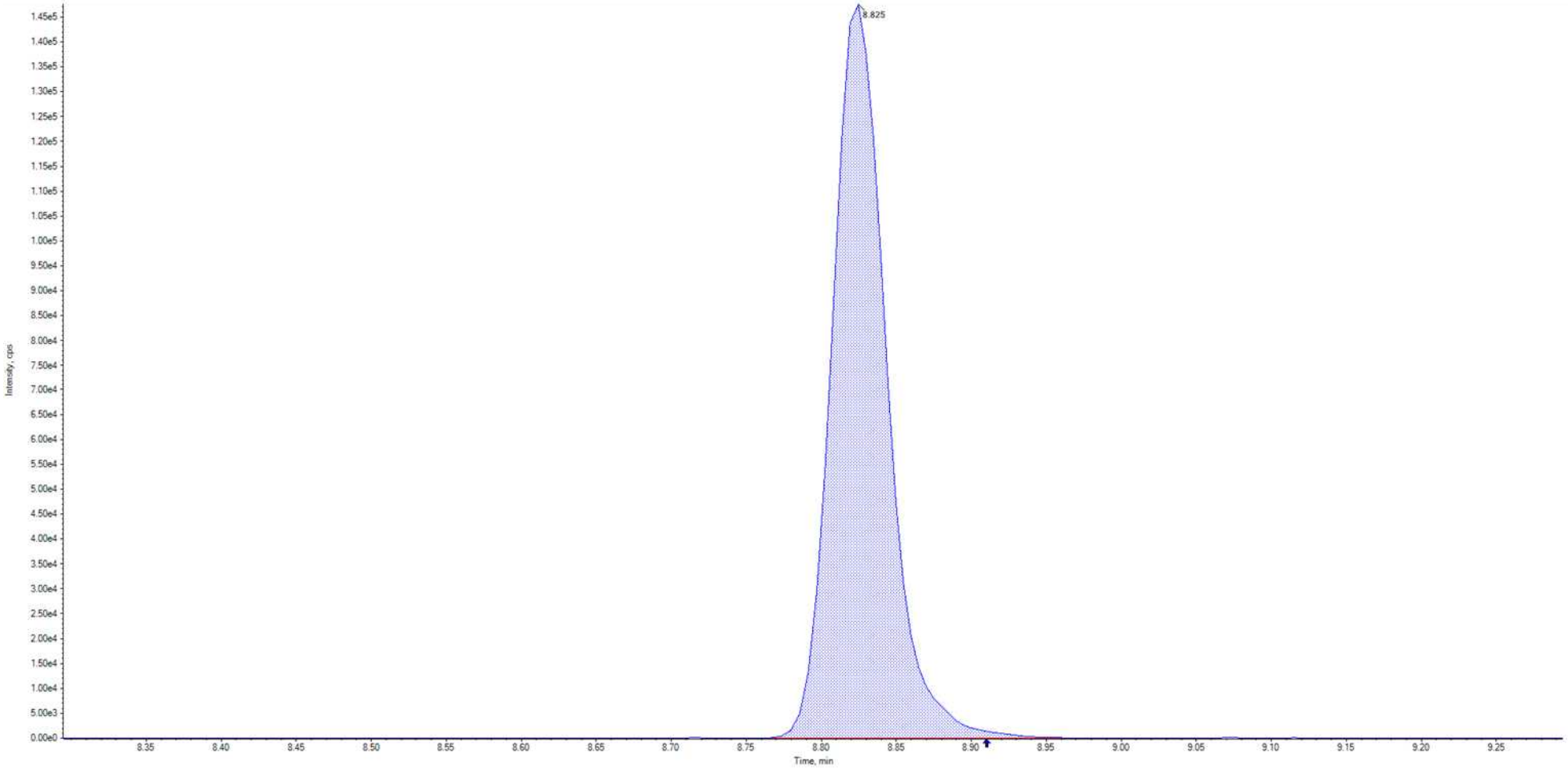
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C7-PFUnA
Sample: WG1971858-4



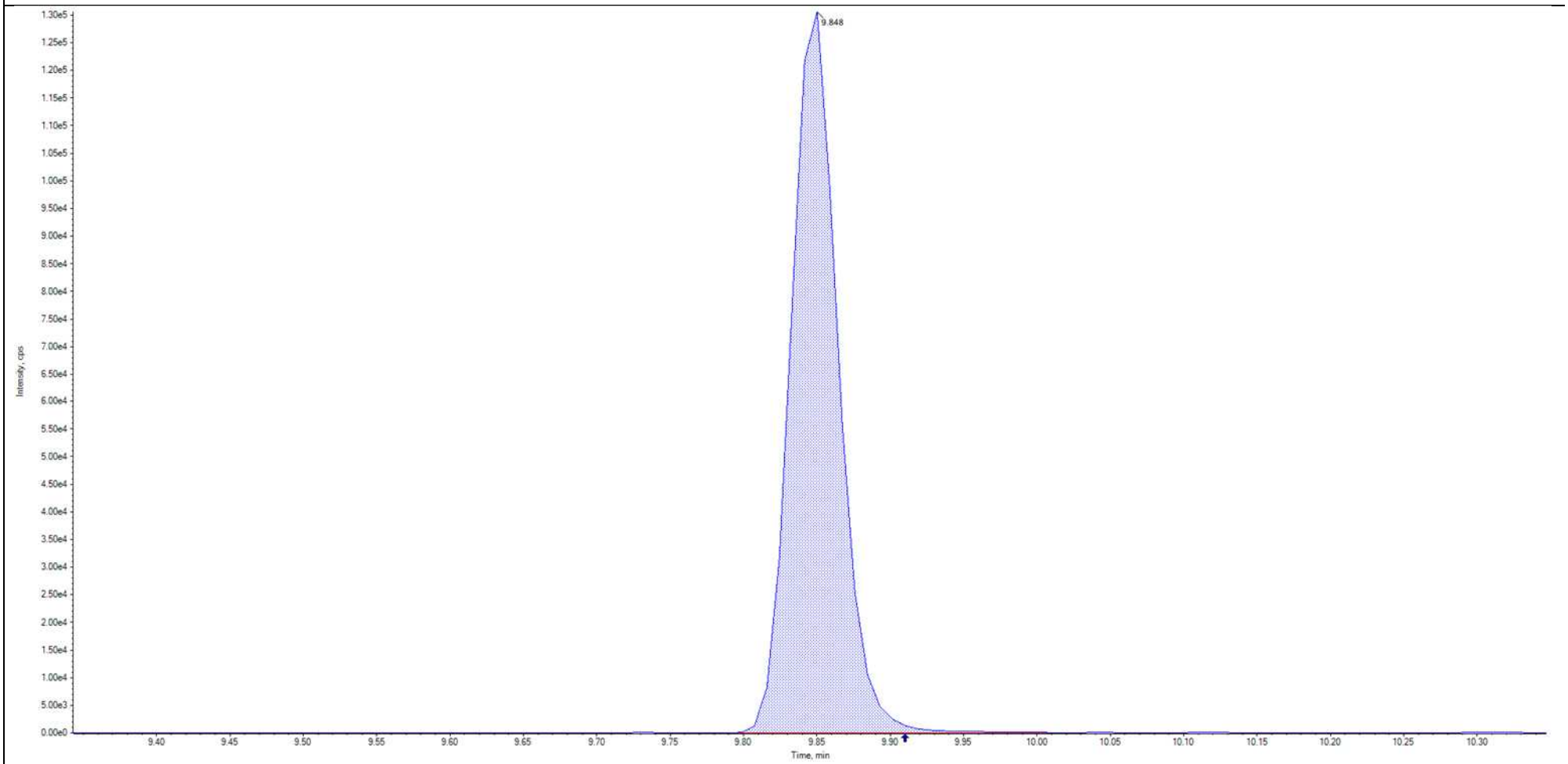
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-PFDoA
Sample: WG1971858-4



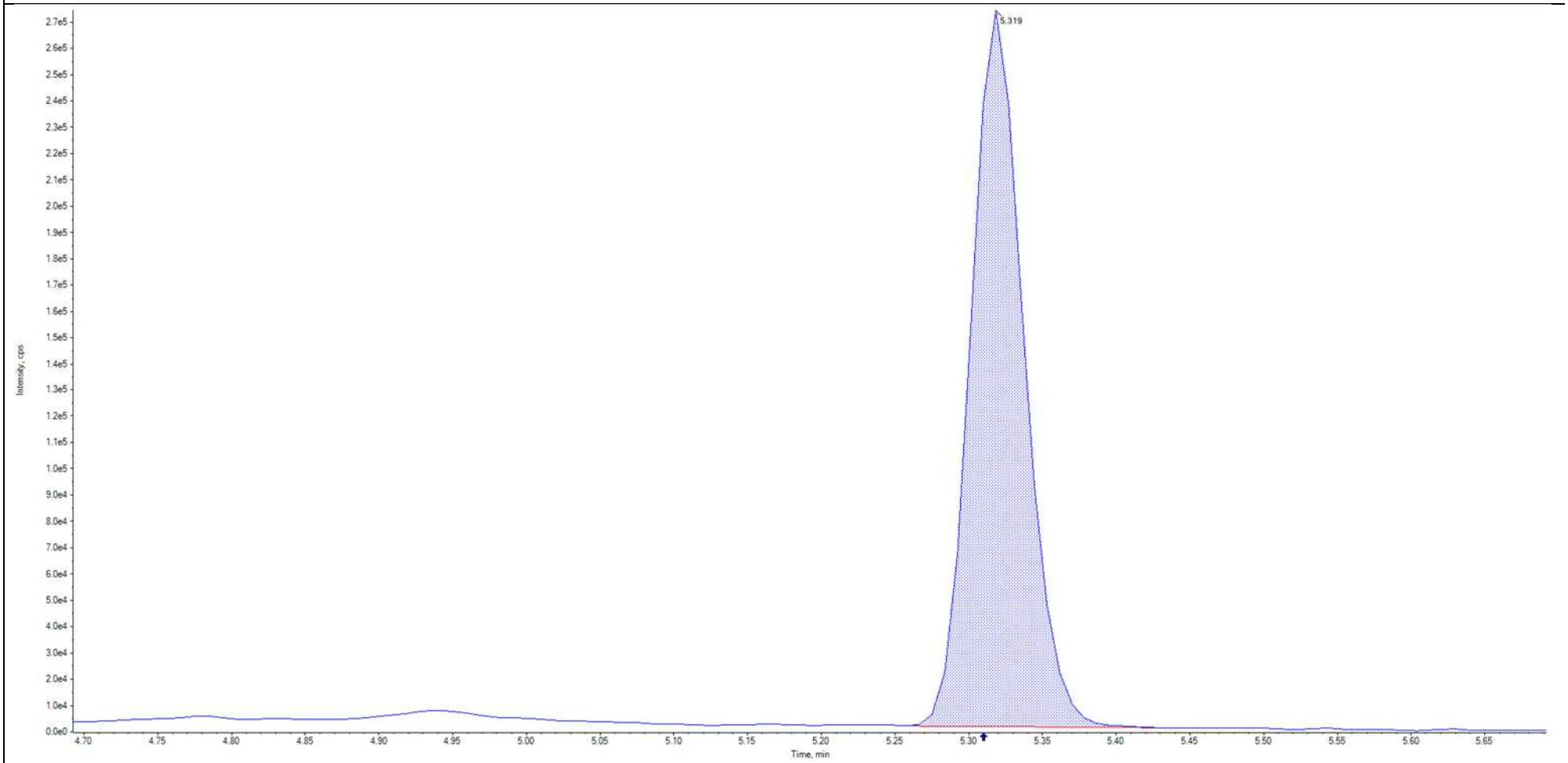
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C2-PFTeDA
Sample: WG1971858-4



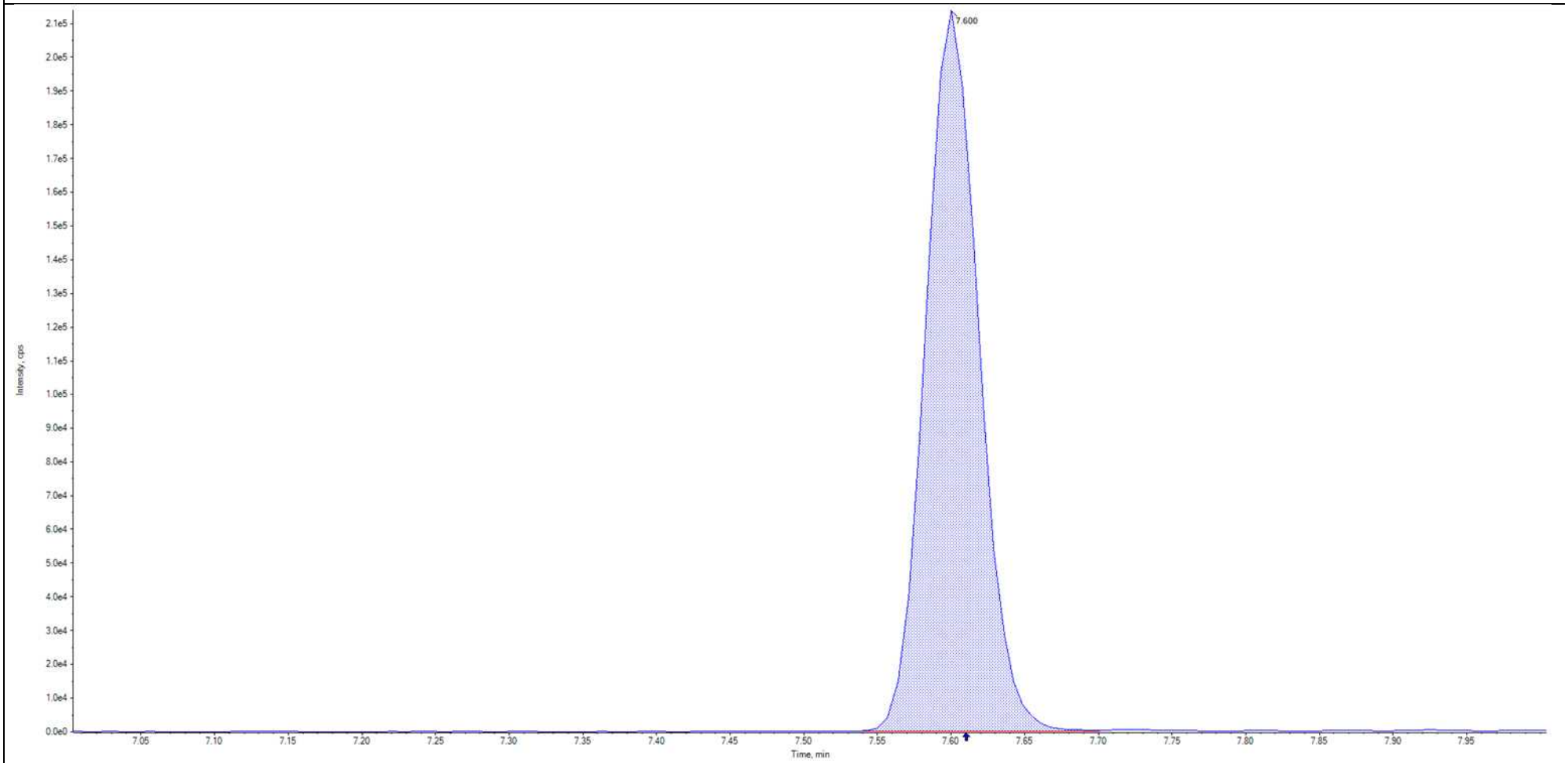
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_21.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C3-PFBS
Sample: WG1971858-4



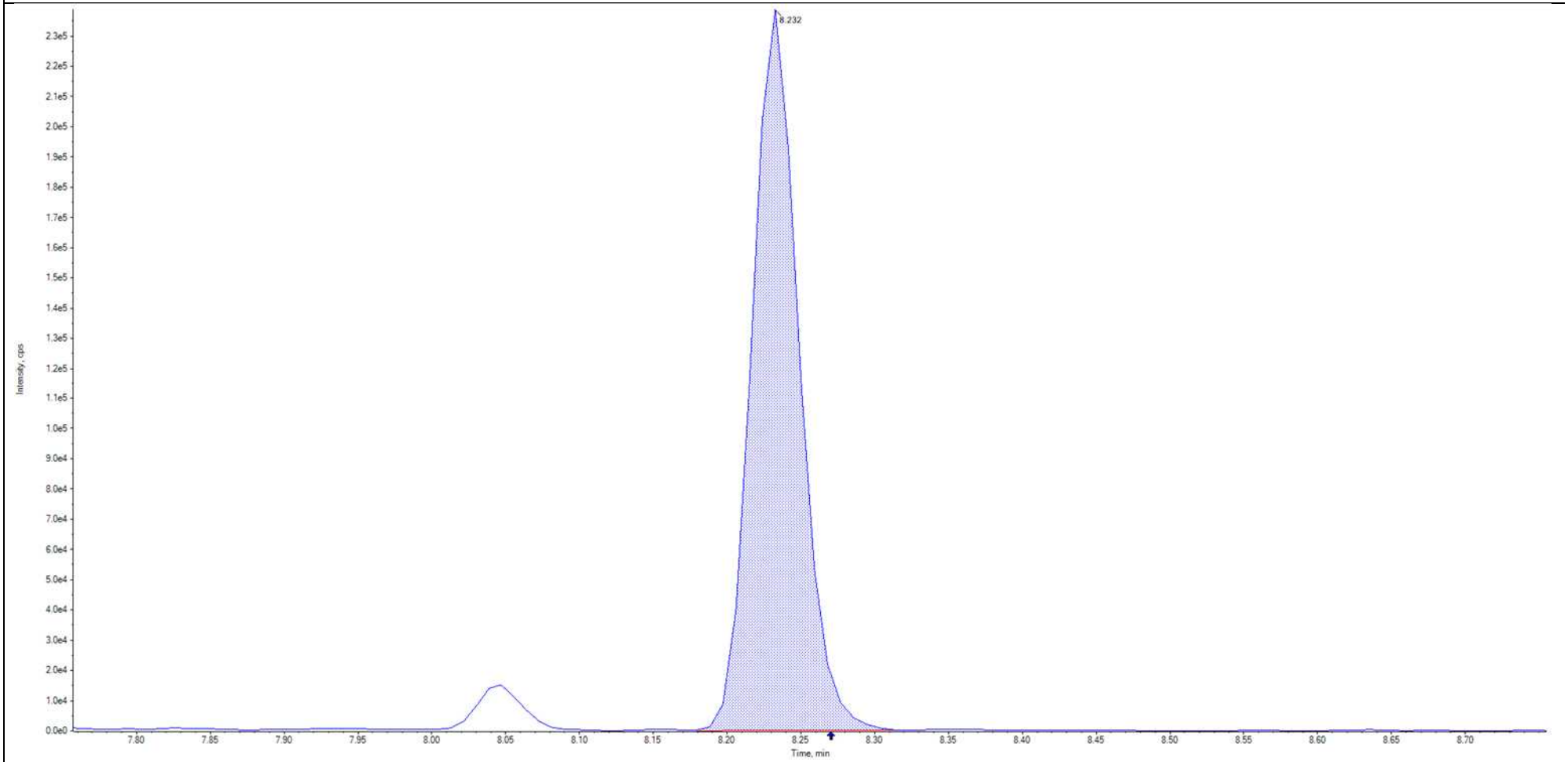
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13C3-PFHxS
Sample: WG1971858-4



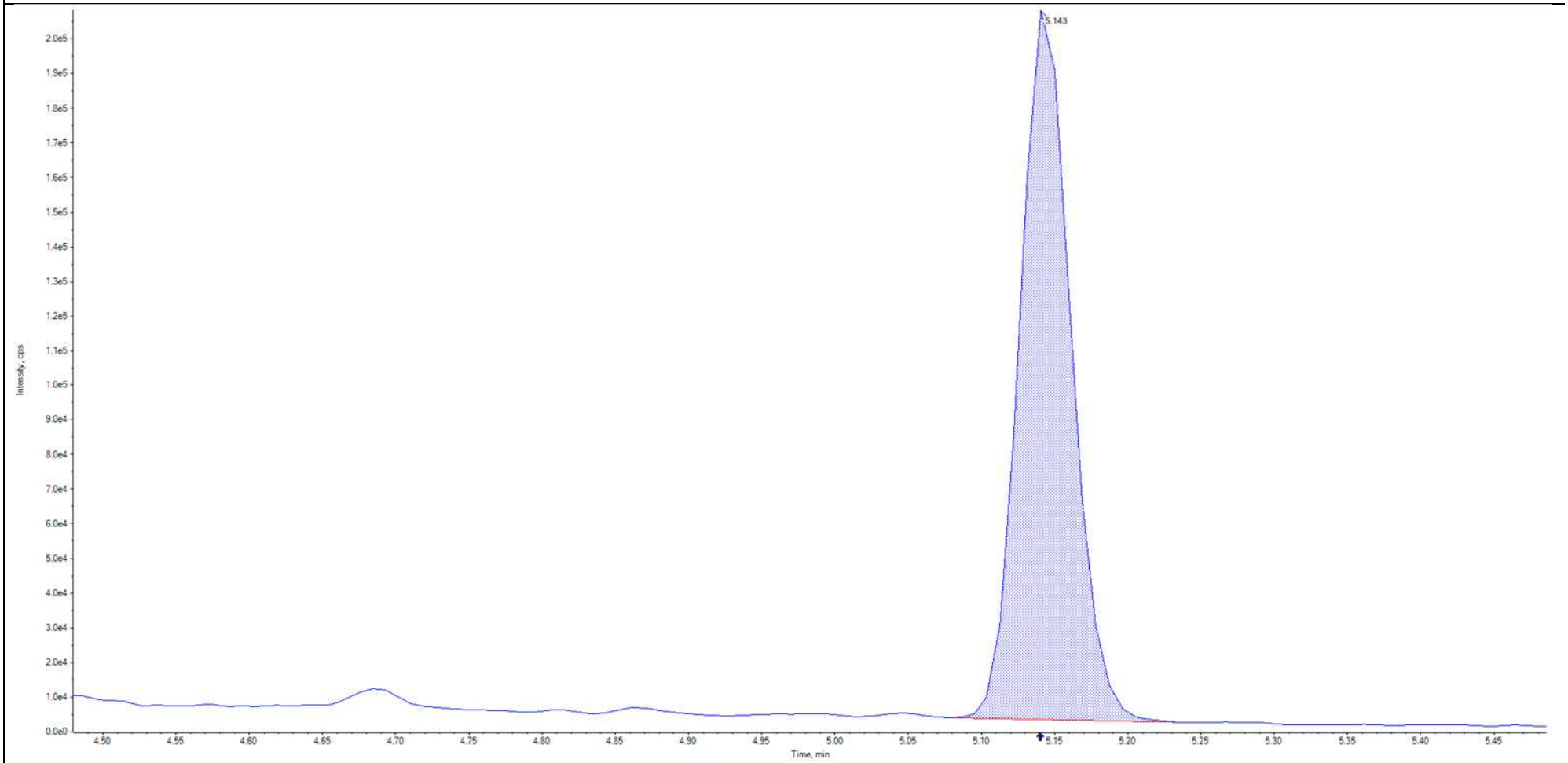
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13C8-PFOS
Sample: WG1971858-4



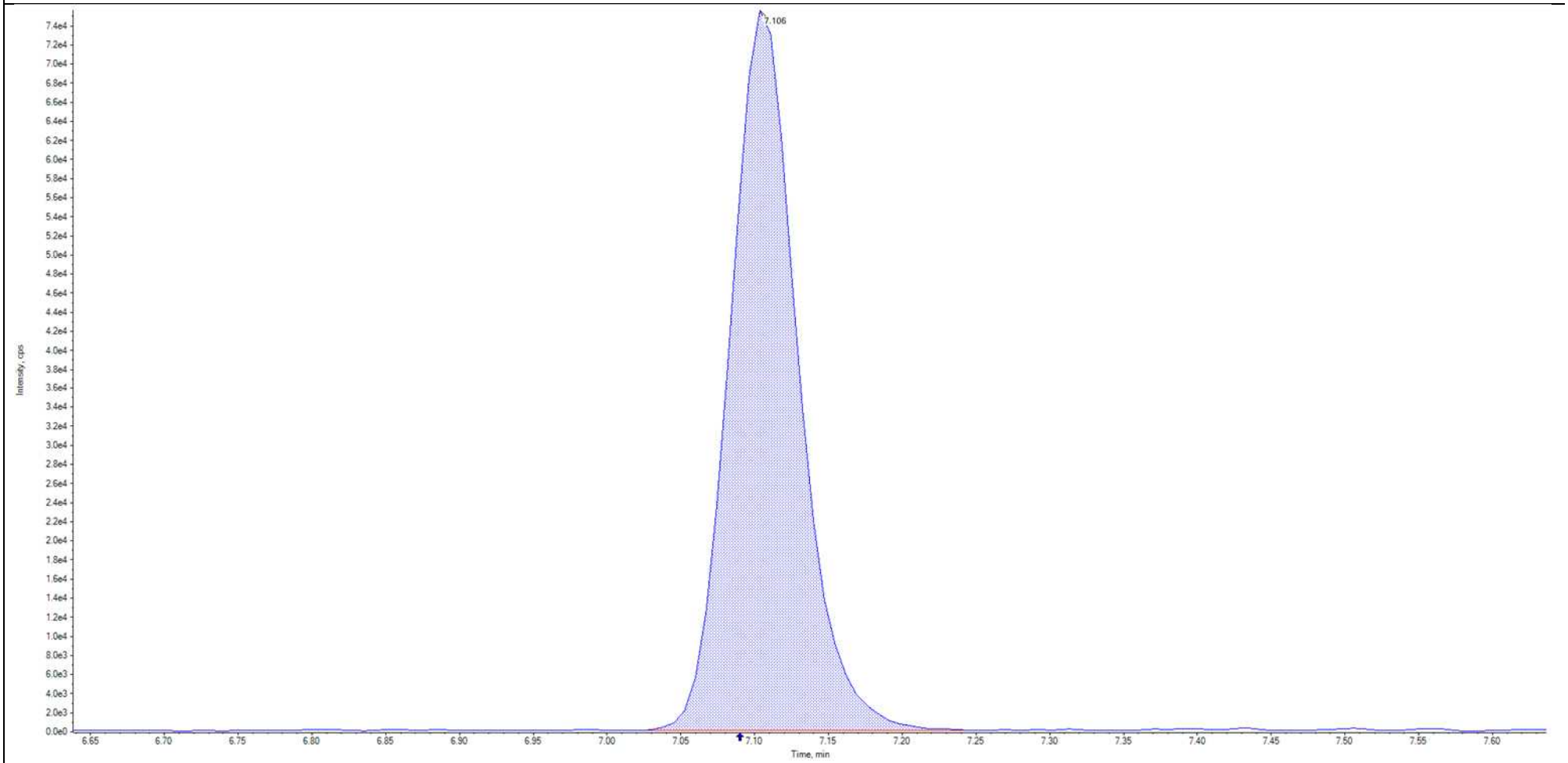
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13C2-4:2FTS
Sample: WG1971858-4



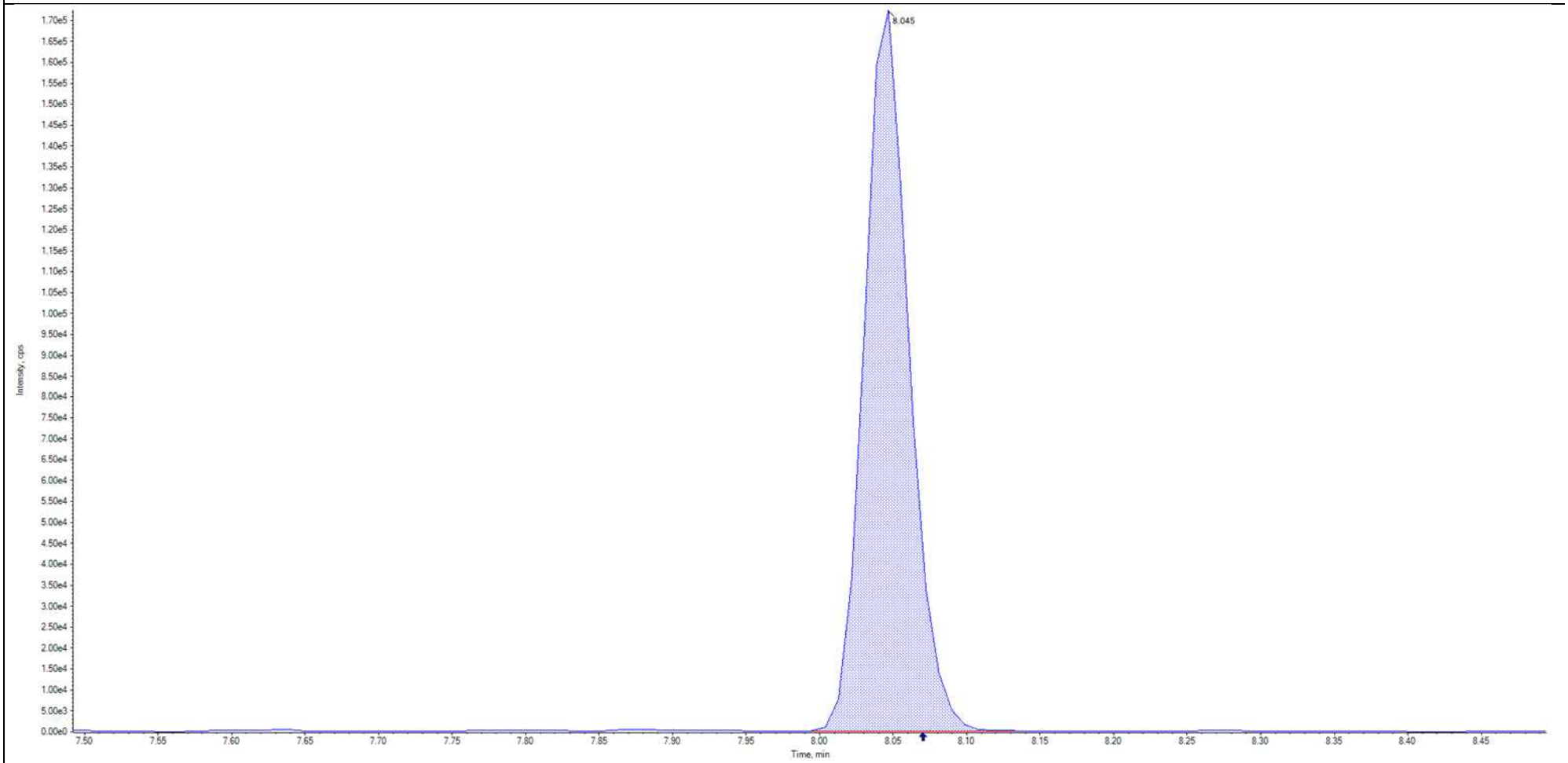
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13C2-6:2FTS
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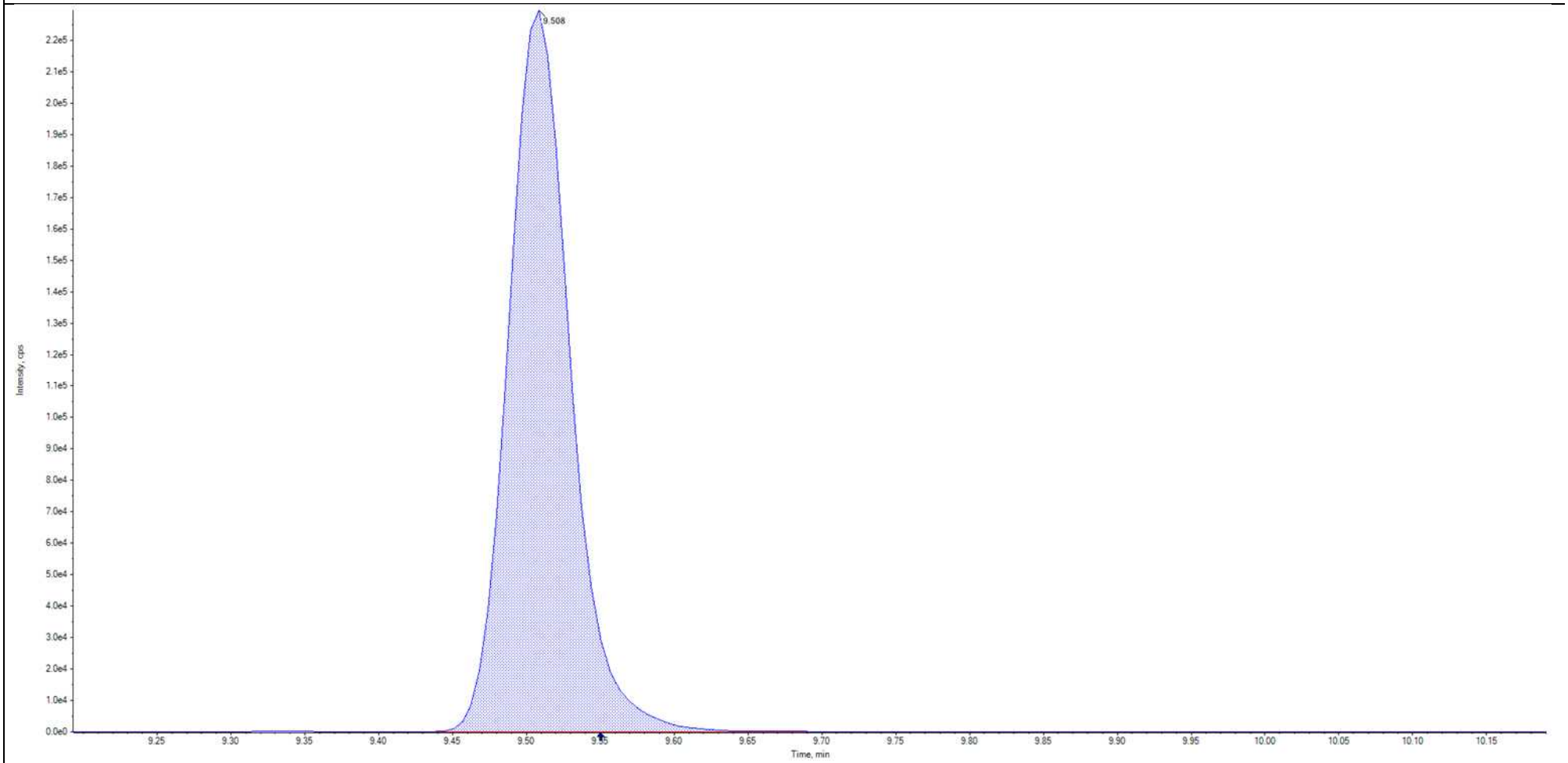
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13C2-8:2FTS
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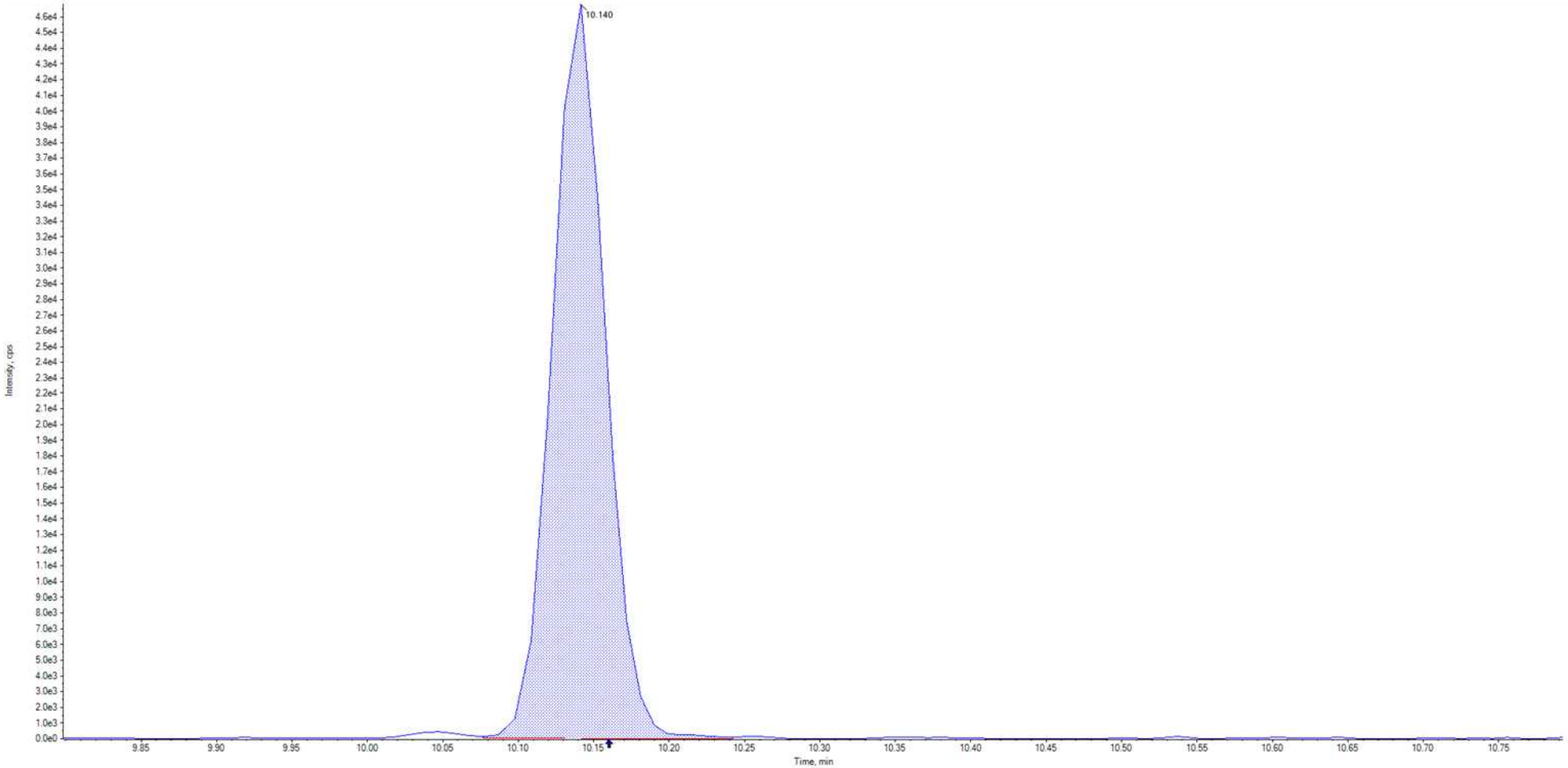


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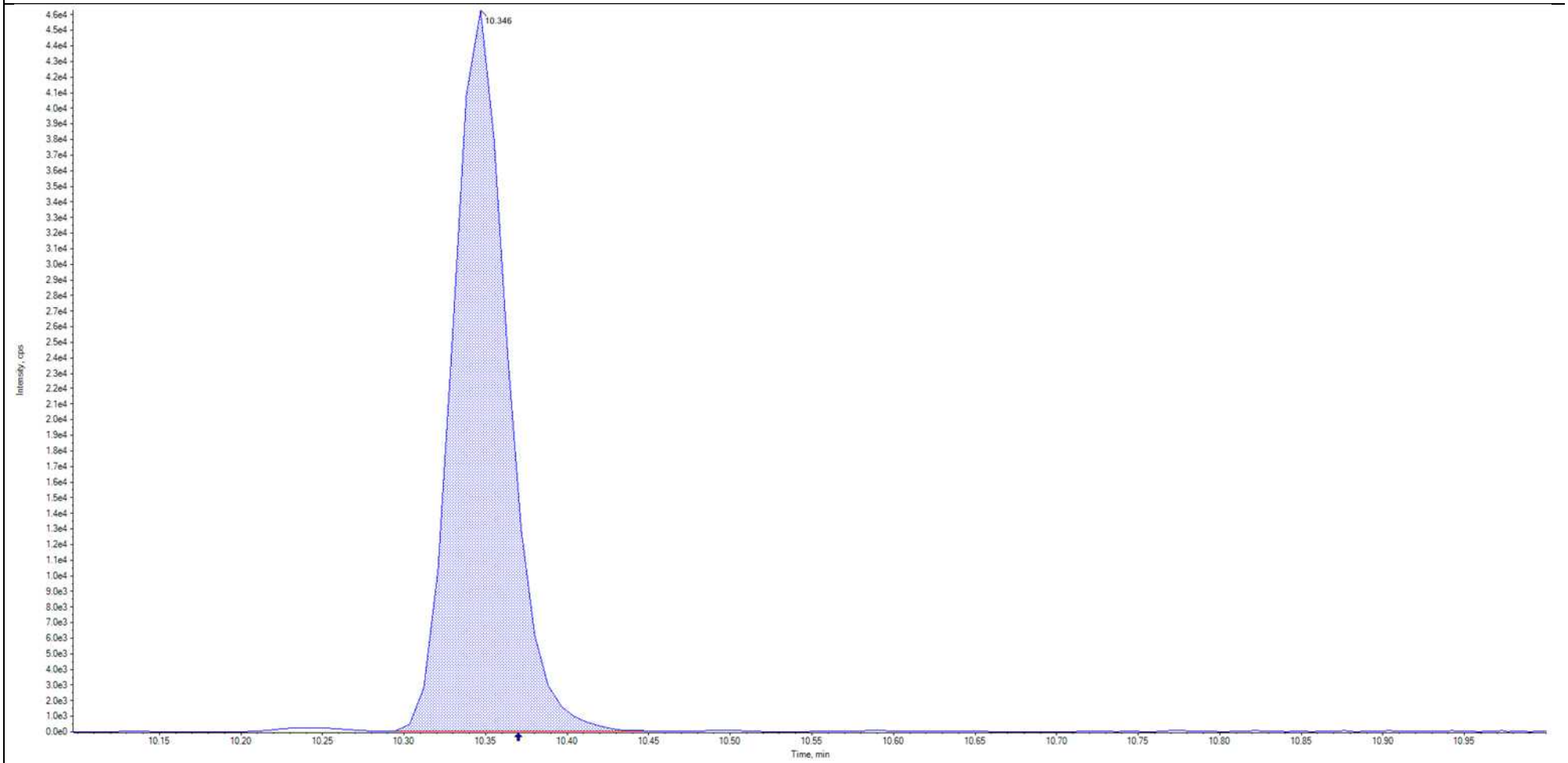
13C8-PFOSA
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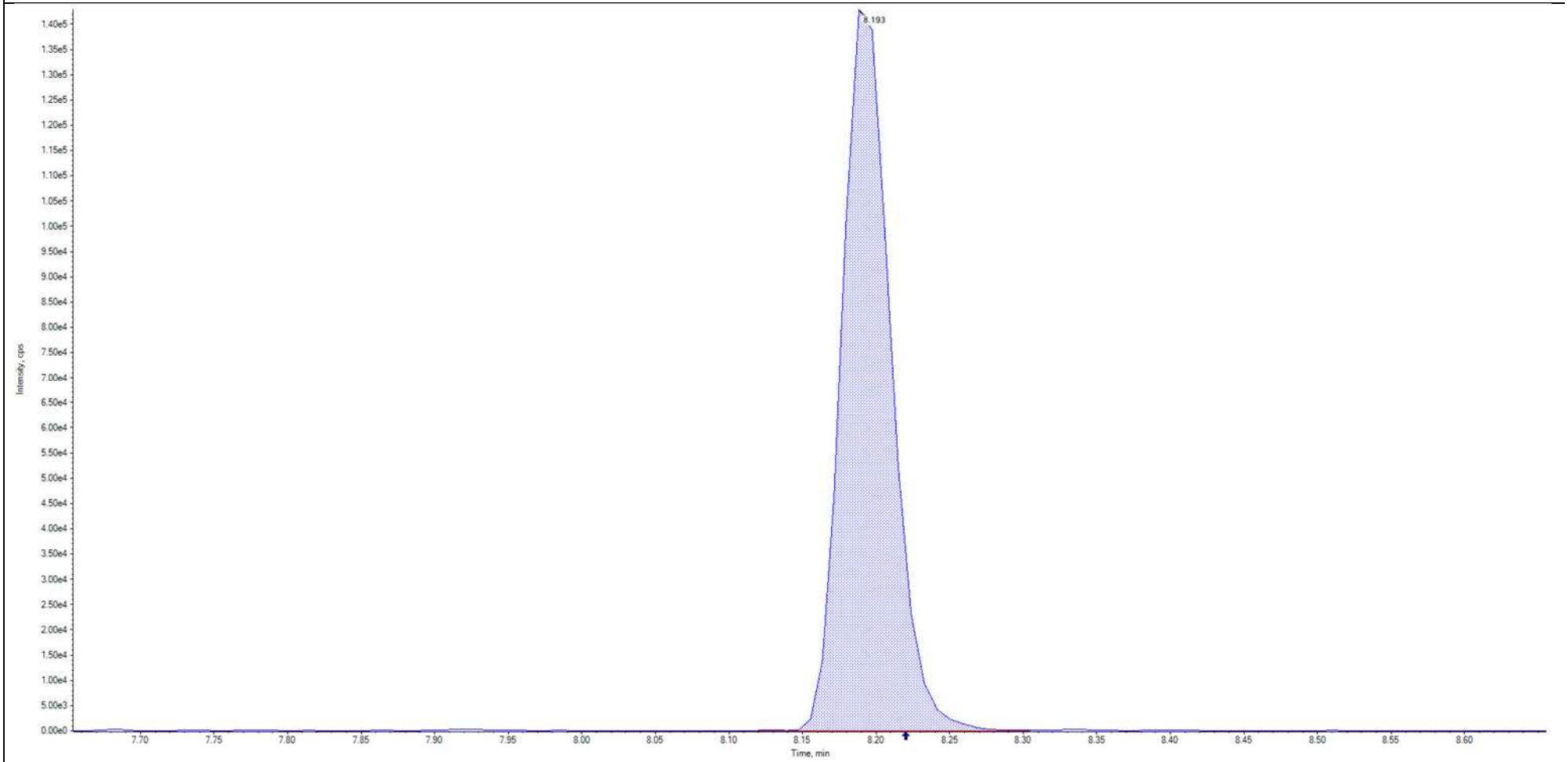
d3-NMeFOSA
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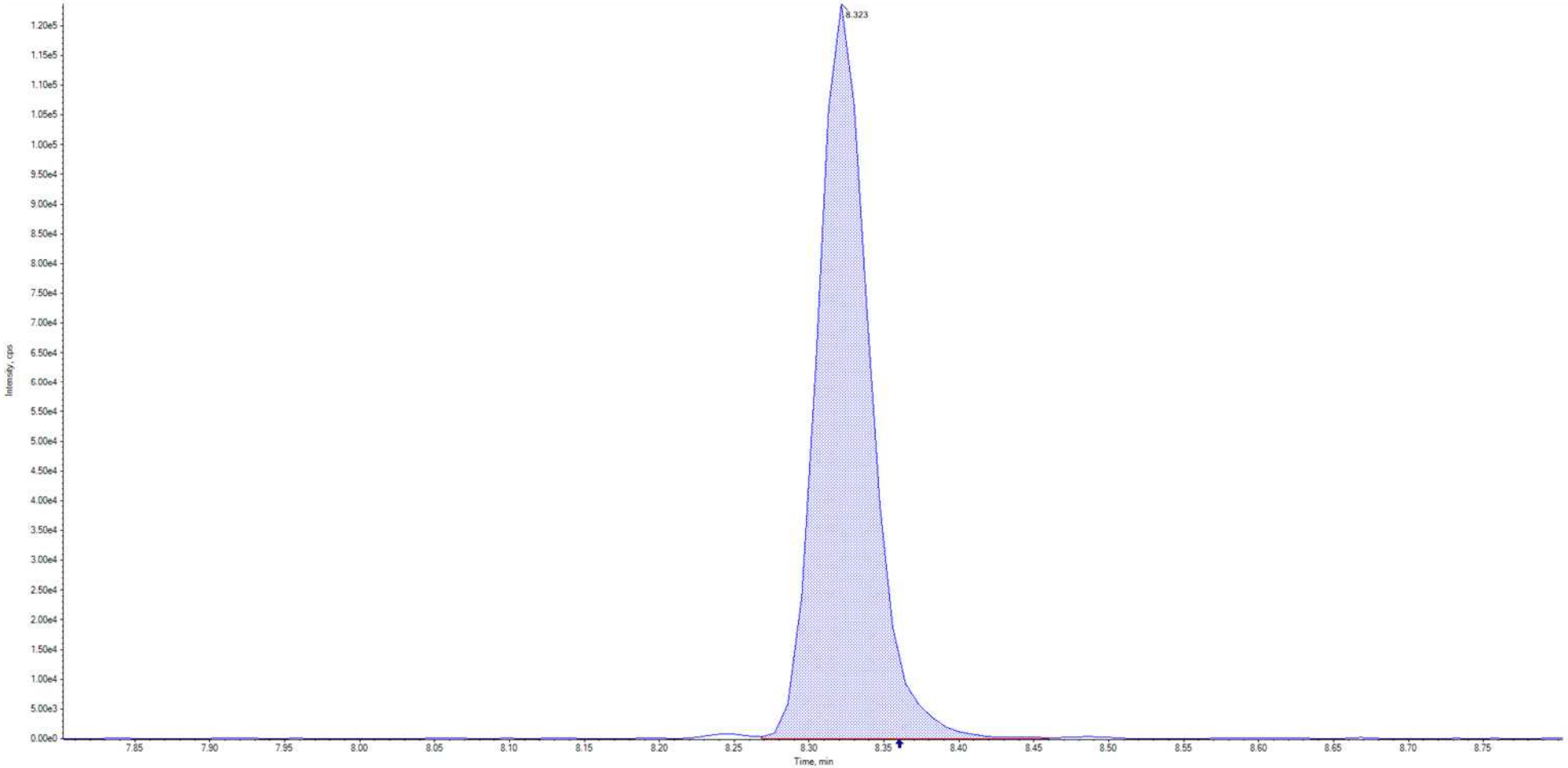
d5-NEtFOSA
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d3-NMeFOSAA
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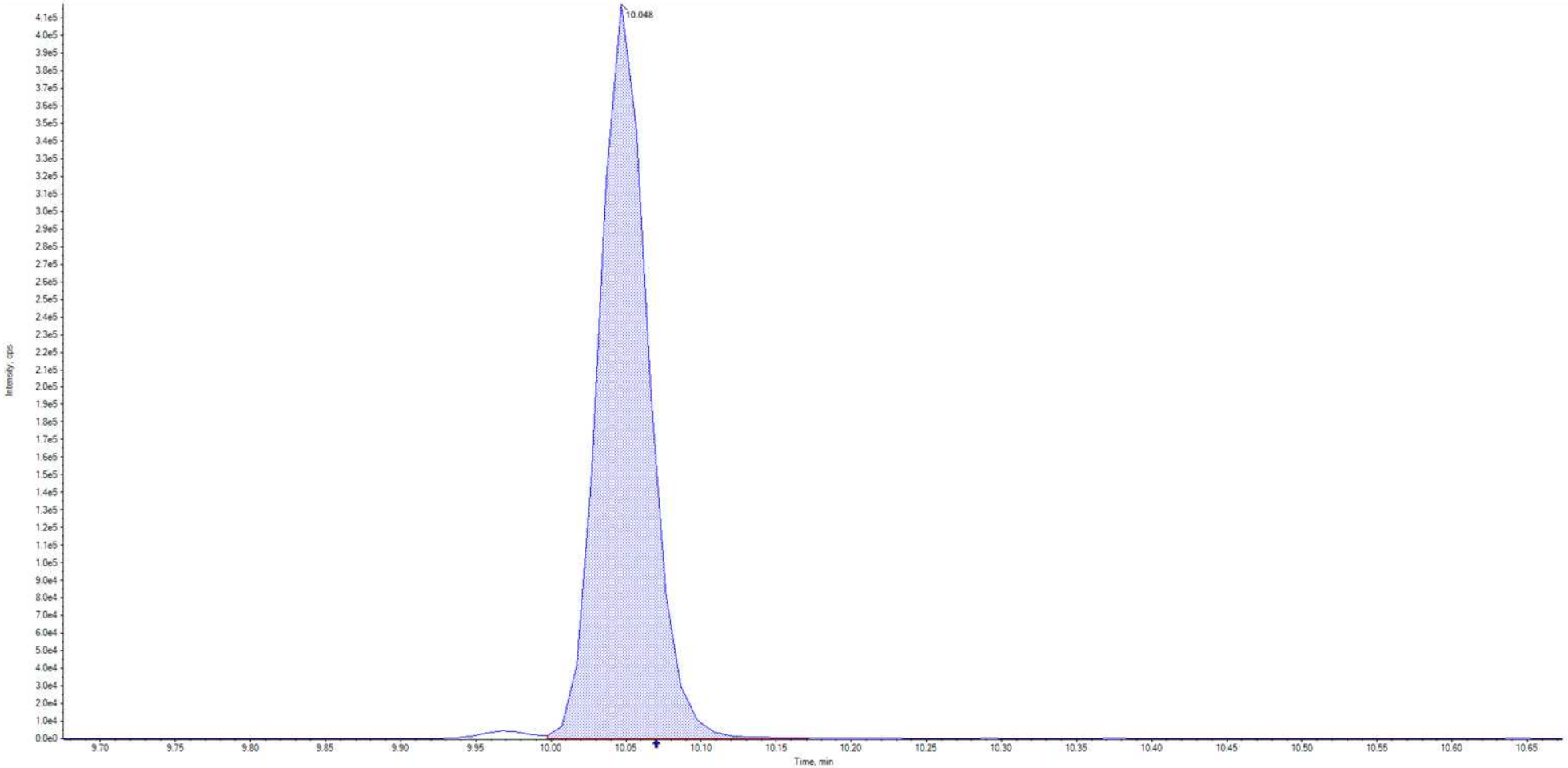


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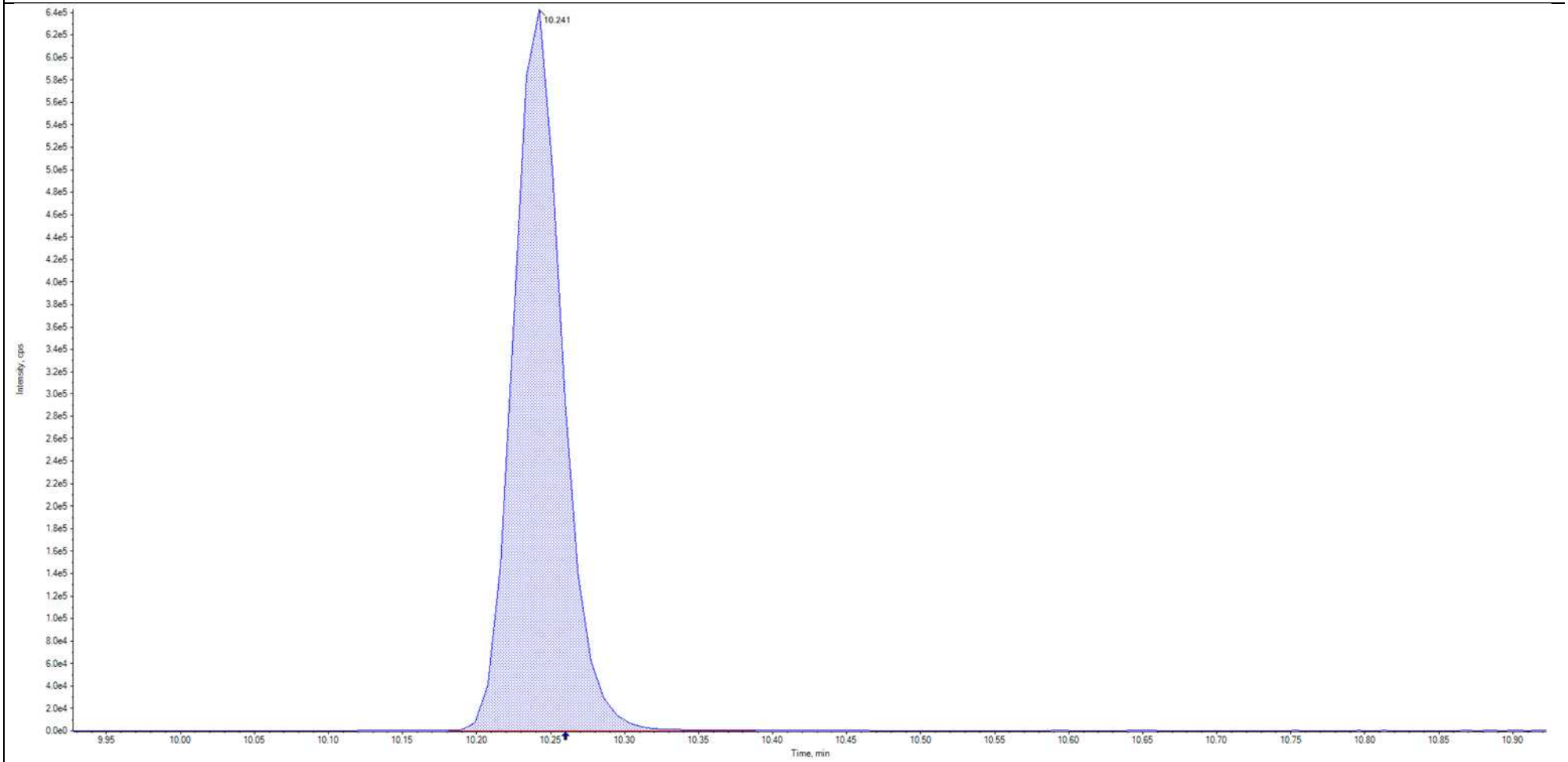


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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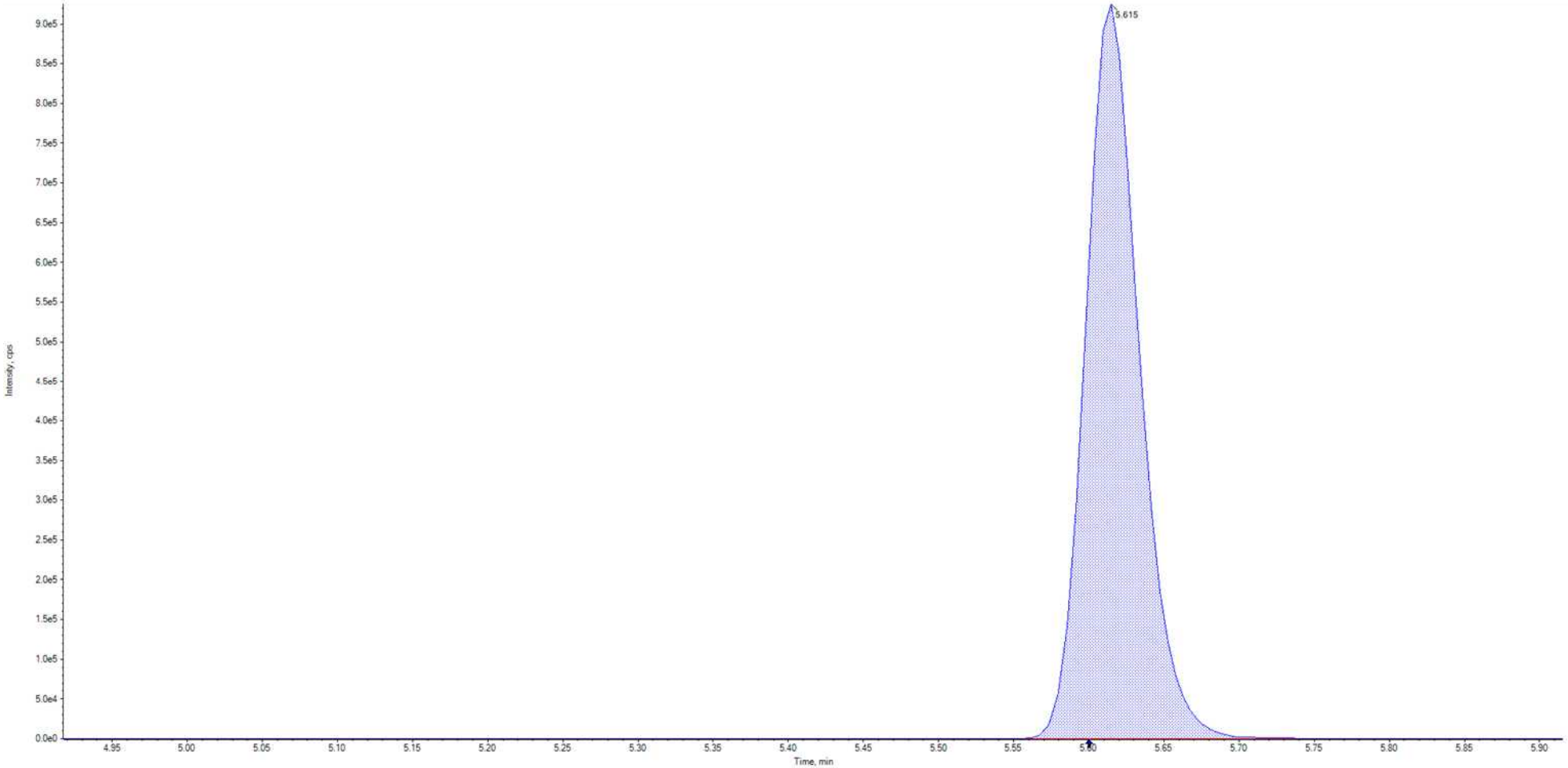
d7-NMeFOSE
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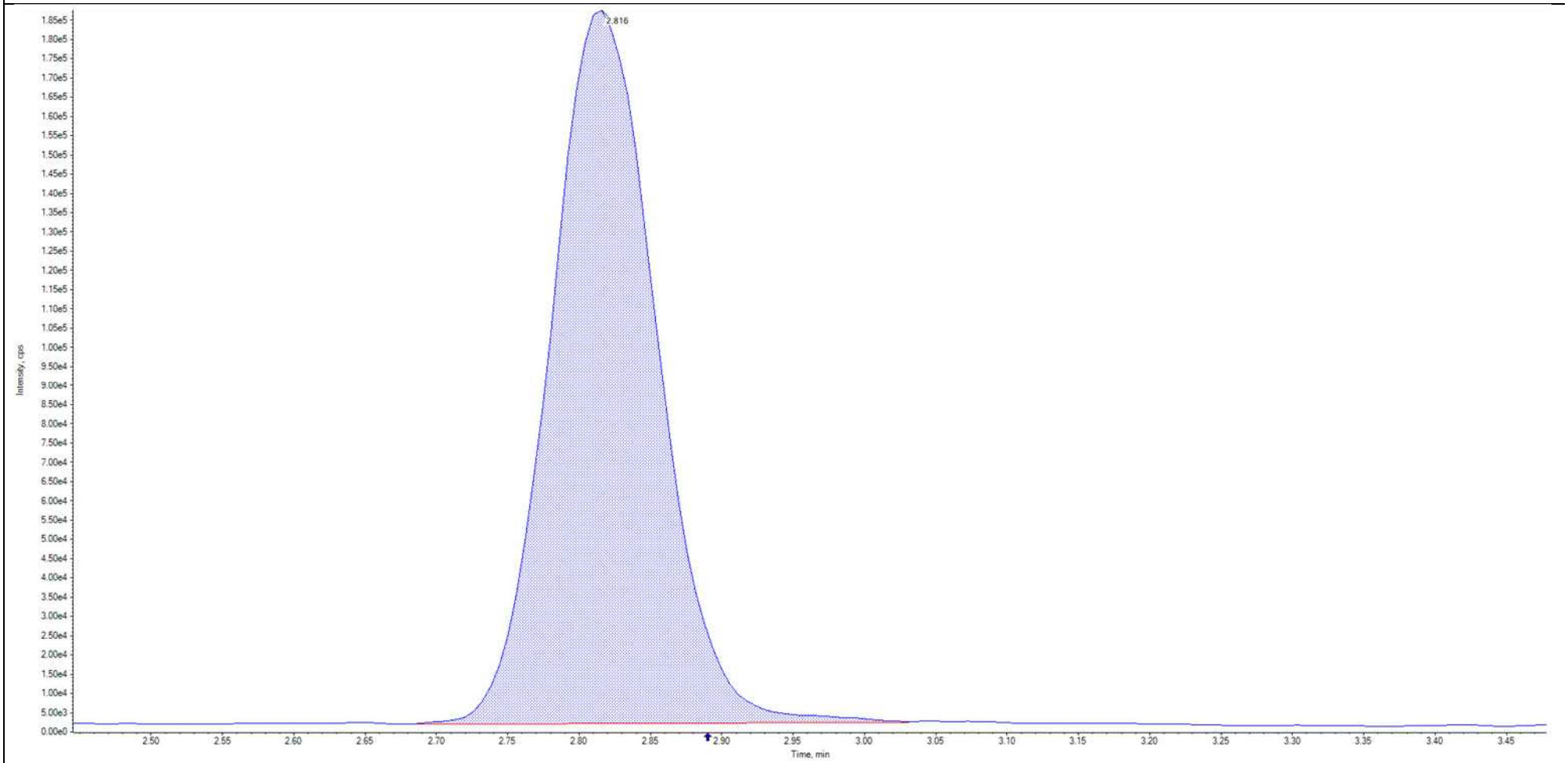
d9-NEtFOSE
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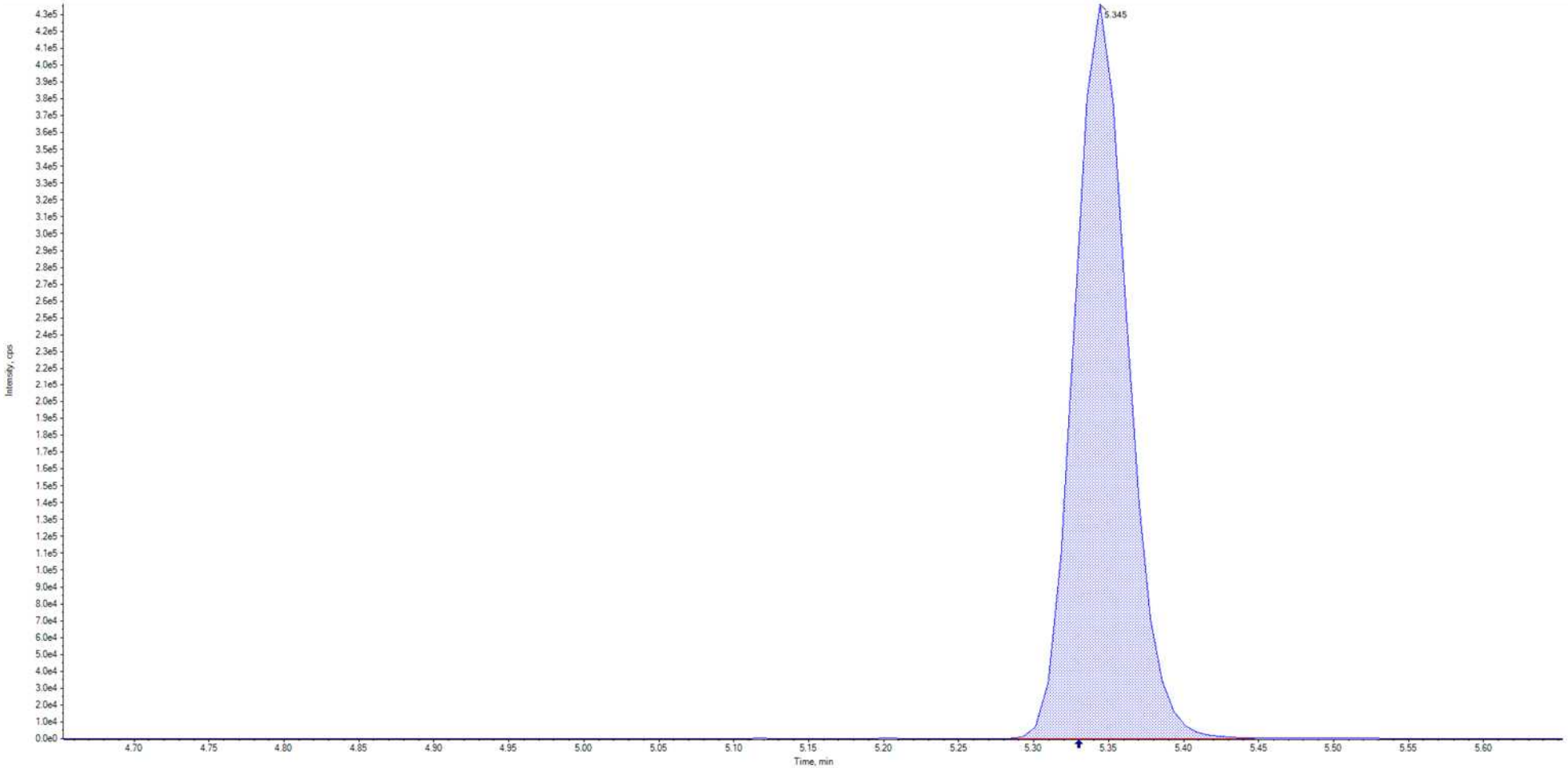
13C3-HFPO-DA
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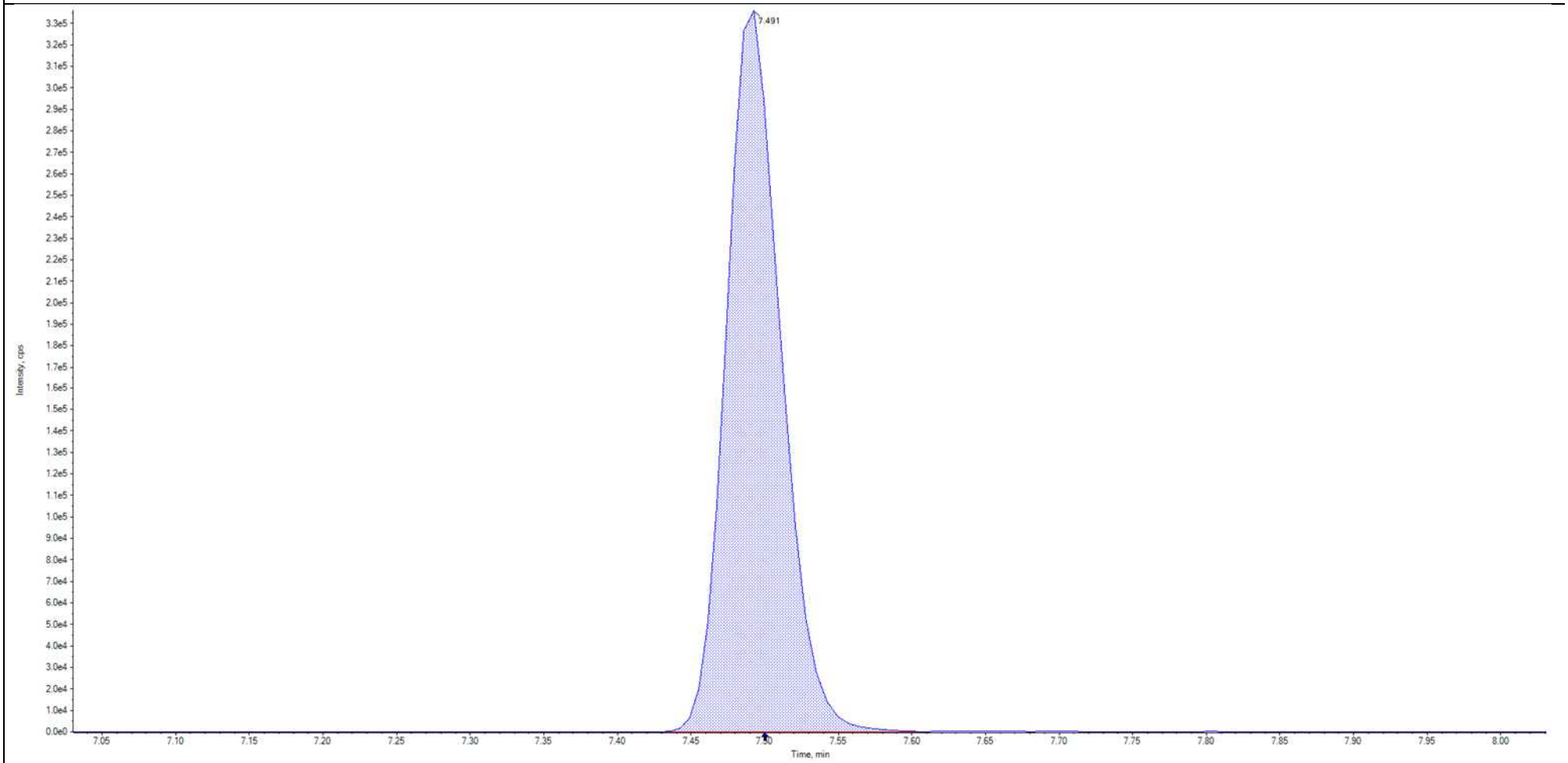
13C3-PFBA
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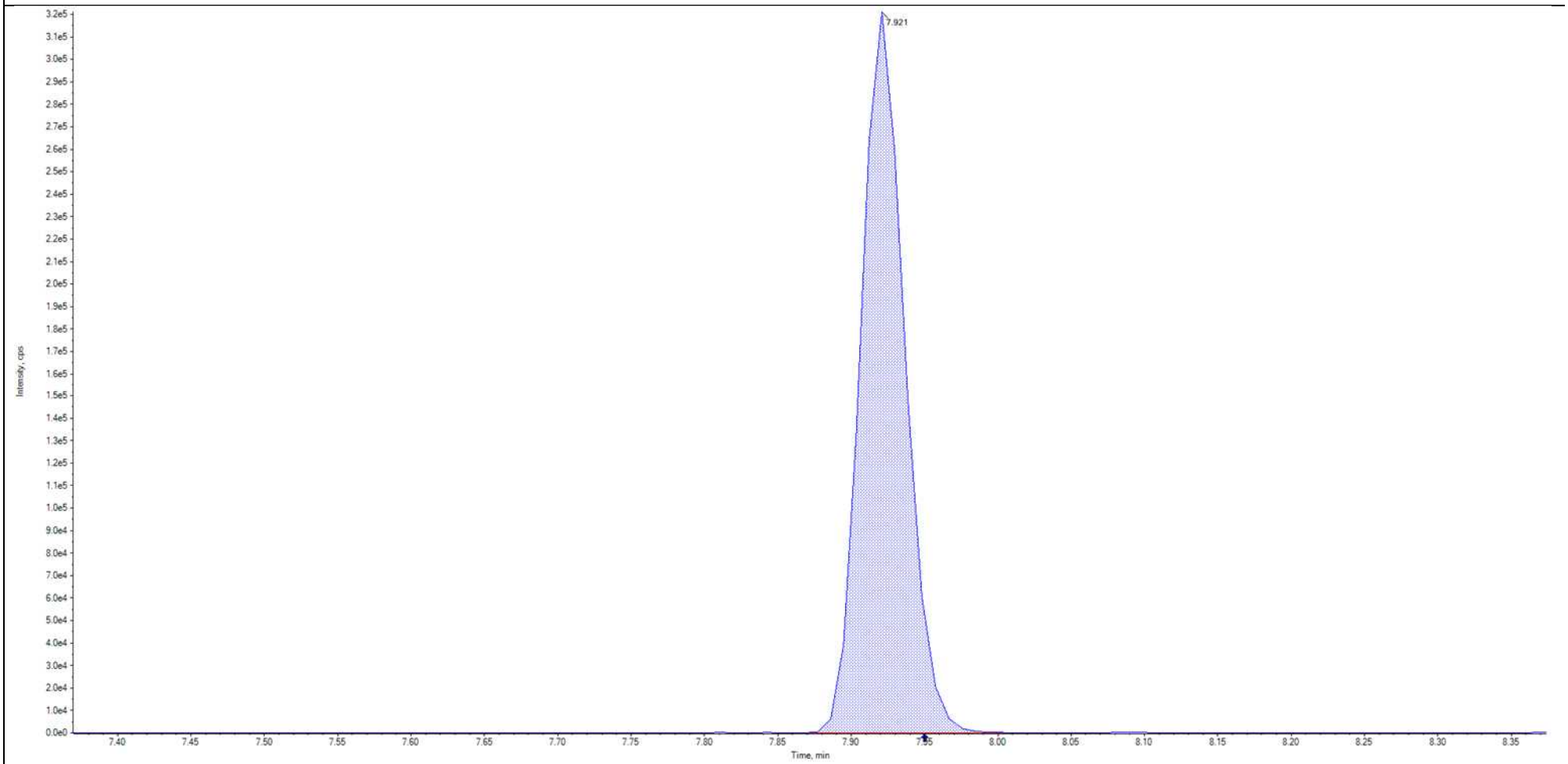
13C2-PFHxA
Sample: WG1971858-4



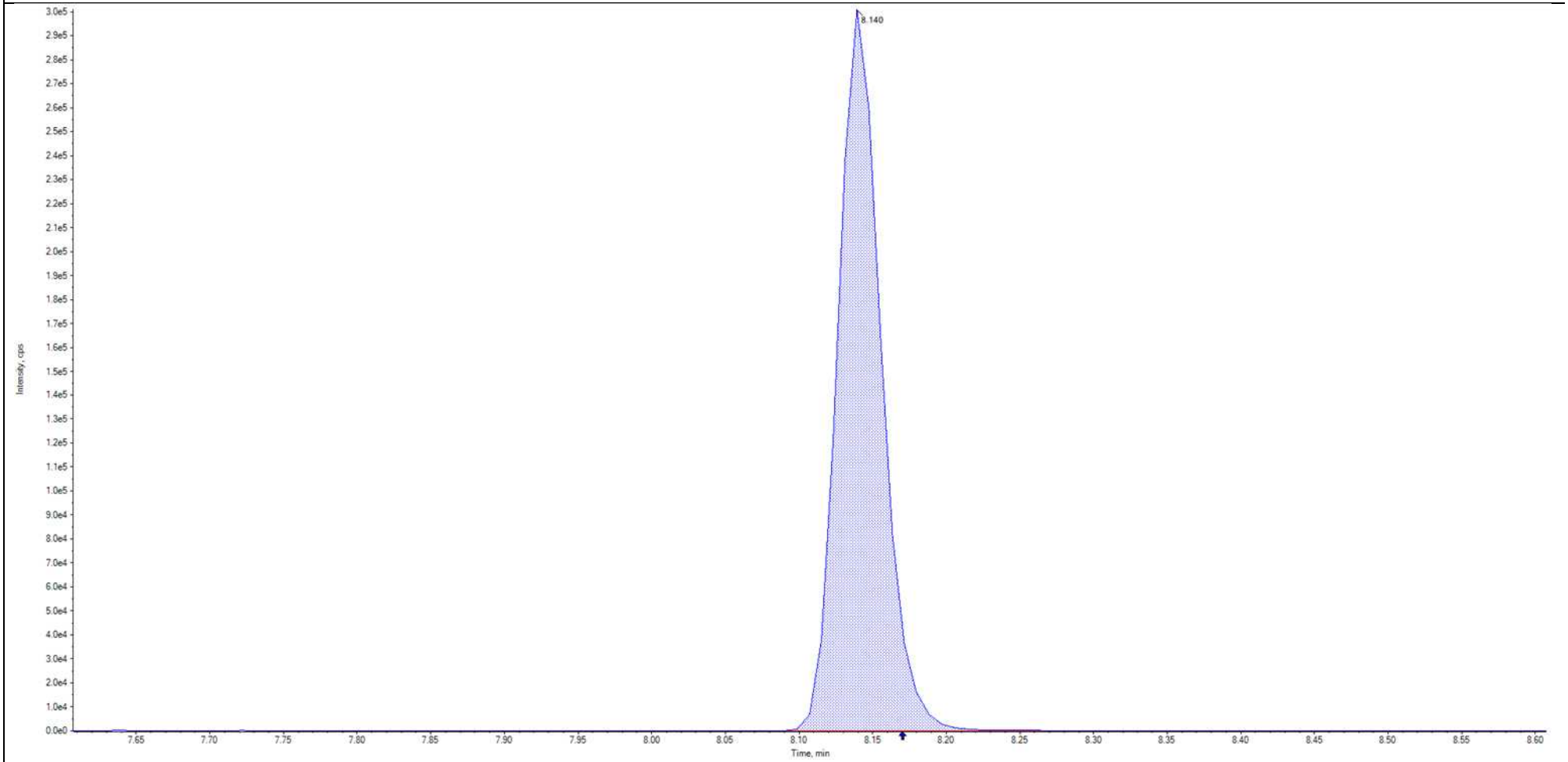
13C4-PFOA
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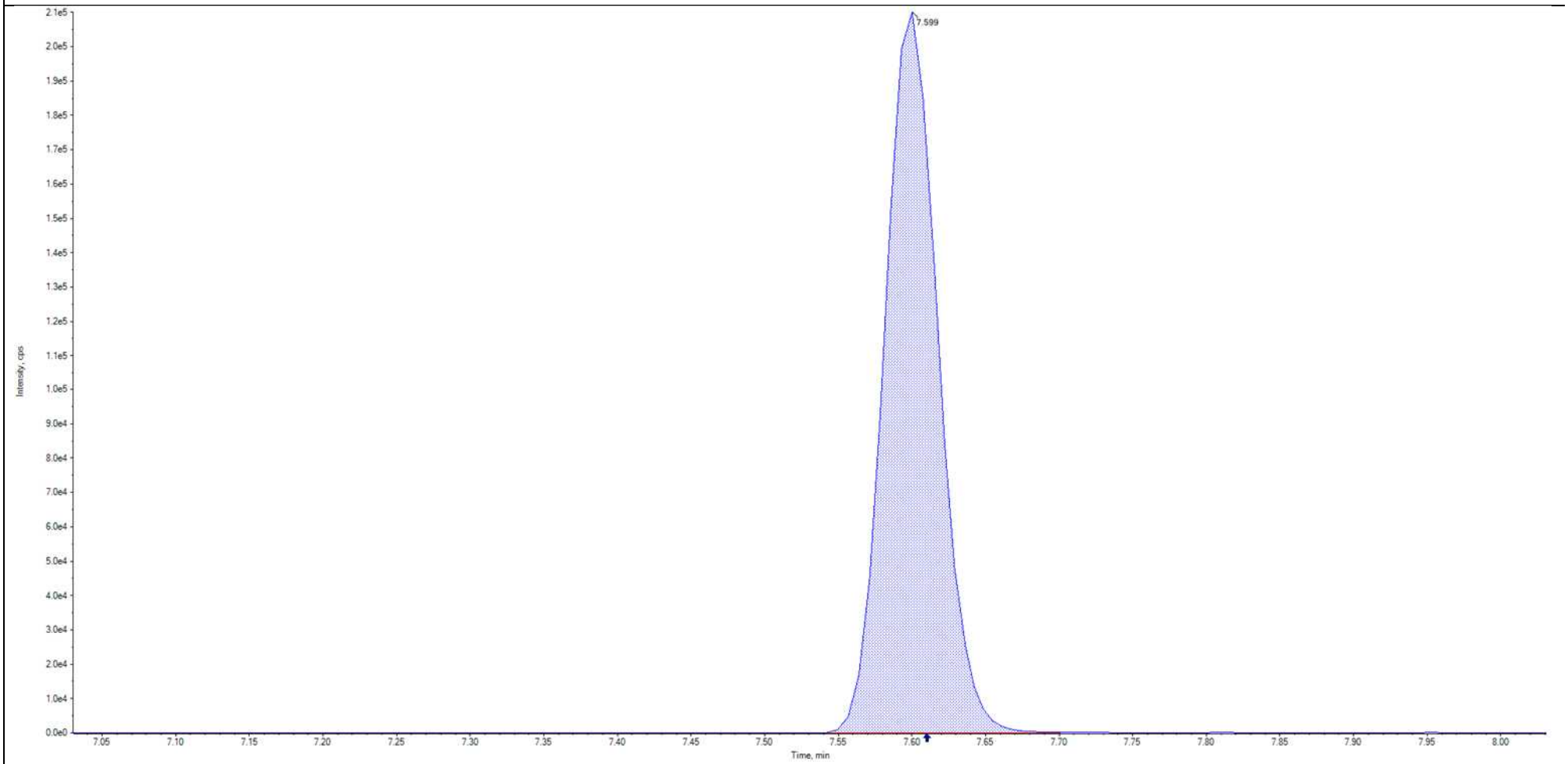
13C5-PFNA
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13C2-PFDA
Sample: WG1971858-4

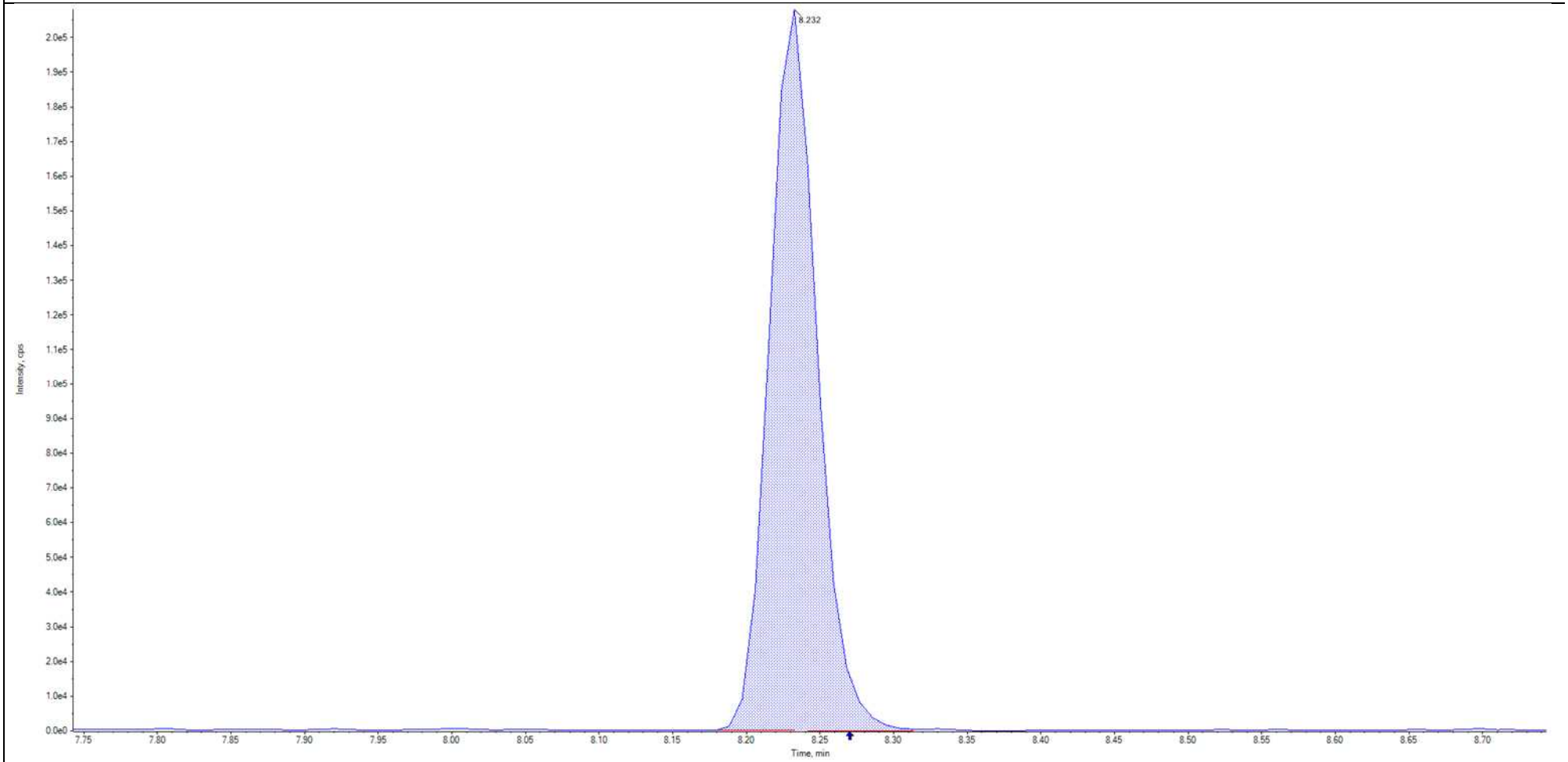


18O2-PFHxS
Sample: WG1971858-4



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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13C4-PFOS
Sample: WG1971858-4



Quantity Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
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Instrument: Triple Quad 5500+
User: LCMS05:AC

LC/MS-MS Method:EPA_1633.dam

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
1	PFBA	375-22-4	2.83	213.0 / 169.0	2225995		12.645	N/A	N/A	N/A	126.5
2	PFPeA	2706-90-3	4.67	263.0 / 219.0	1537150		7.309	0.006	0.007	N/A	146.2
3	PFPeA_2	2706-90-3	4.67	263.0 / 68.9	8995		6.058	0.006	0.007	N/A	121.2
4	PFHxA	307-24-4	5.36	313.0 / 269.0	1839539		3.693	0.071	0.072	Pass	147.7
5	PFHxA_2	307-24-4	5.36	313.0 / 119.0	130708		3.552	0.071	0.072	Pass	142.1
6	PFHpA	375-85-9	6.28	363.1 / 319.0	2008373		4.227	0.305	0.297	Pass	169.1
7	PFHpA_2	375-85-9	6.28	363.1 / 169.0	612984		4.216	0.305	0.297	Pass	168.6

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
8	PFOA	335-67-1	7.50	413.1 / 369.1	1913970	M5	6.713	0.502	0.586	Pass	268.5
9	PFOA_2	335-67-1	7.50	413.1 / 169.0	961127	M7	6.152	0.502	0.586	Pass	246.1
10	PFNA	375-95-1	7.93	462.8 / 418.9	1079079	M5	2.927	0.300	0.313	Pass	117.1
11	PFNA_2	375-95-1	7.93	462.8 / 218.9	323358	M7	2.870	0.300	0.313	Pass	114.8
12	PFDA	335-76-2	8.15	513.1 / 469.1	1075833		2.783	0.149	0.142	Pass	111.3
13	PFDA_2	335-76-2	8.15	513.1 / 219.0	160539		2.771	0.149	0.142	Pass	110.8
14	PFUnA	2058-94-8	8.42	563.1 / 519.1	789783		2.935	0.181	0.194	Pass	117.4
15	PFUnA_2	2058-94-8	8.43	563.1 / 269.0	142820		2.740	0.181	0.194	Pass	109.6
16	PFDoA	307-55-1	8.83	613.1 / 569.1	729327		2.022	0.166	0.167	Pass	80.9
17	PFDoA_2	307-55-1	8.83	613.1 / 319.0	120951		1.985	0.166	0.167	Pass	79.4
18	PFTrDA	72629-94-8	9.40	663.1 / 619.1	426804		1.986	0.222	0.228	Pass	79.5
19	PFTrDA_2	72629-94-8	9.40	663.1 / 169.0	94662		1.978	0.222	0.228	Pass	79.1
20	PFTeDA	376-06-7	9.85	713.1 / 669.1	743377		2.646	0.134	0.137	Pass	105.8
21	PFTeDA_2	376-06-7	9.85	713.1 / 169.0	99730		2.595	0.134	0.137	Pass	103.8
22	PFBS	375-73-5	5.33	299.1 / 80.1	915095		2.954	0.383	0.396	Pass	133.2

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
23	PFBS_2	375-73-5	5.33	299.1 / 99.1	350769		2.840	0.383	0.396	Pass	128.0
24	PFPeS	2706-91-4	6.36	349.1 / 80.1	717079		2.887	0.292	0.299	Pass	122.7
25	PFPeS_2	2706-91-4	6.36	349.1 / 99.1	209525		2.797	0.292	0.299	Pass	118.9
26	PFHxS	355-46-4	7.61	399.1 / 80.1	1046714	M5	4.503	0.301	0.315	Pass	197.1
27	PFHxS_2	355-46-4	7.61	399.1 / 99.1	314564	M7	4.358	0.301	0.315	Pass	190.7
28	PFHpS	375-92-8	7.99	449.1 / 80.1	595825		3.084	0.279	0.287	Pass	129.4
29	PFHpS_2	375-92-8	7.99	449.1 / 99.1	166291		2.937	0.279	0.287	Pass	123.3
30	PFOS	1763-23-1	8.24	499.1 / 80.1	679341	M5	3.303	0.228	0.238	Pass	142.4
31	PFOS_2	1763-23-1	8.24	499.1 / 99.1	154632	M7	3.069	0.228	0.238	Pass	132.3
32	PFNS	68259-12-1	8.57	549.1 / 80.1	347031		2.628	0.298	0.301	Pass	109.3
33	PFNS_2	68259-12-1	8.57	549.1 / 99.1	103430		2.586	0.298	0.301	Pass	107.5
34	PFDS	335-77-3	9.06	599.1 / 80.1	301539		2.318	0.275	0.275	Pass	96.1
35	PFDS_2	335-77-3	9.06	599.1 / 99.1	82776		2.308	0.275	0.275	Pass	95.7
36	PFDoS	79780-39-5	9.96	699.2 / 80.1	281905		2.366	0.276	0.274	Pass	97.6
37	PFDoS_2	79780-39-5	9.96	699.2 / 99.1	77911		2.380	0.276	0.274	Pass	98.1

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
38	4:2FTS	757124-72-4	5.16	327.1 / 307.1	2052115		9.381	0.535	0.516	Pass	100.1
39	4:2FTS_2	757124-72-4	5.16	327.1 / 81.1	1098213		9.384	0.535	0.516	Pass	100.1
40	6:2FTS	27619-97-2	7.11	427.2 / 407.2	953047		11.169	0.551	0.565	Pass	117.6
41	6:2FTS_2	27619-97-2	7.11	427.2 / 81.1	525414		11.384	0.551	0.565	Pass	119.8
42	8:2FTS	39108-34-4	8.05	527.2 / 507.2	1089319		12.518	0.648	0.662	Pass	130.4
43	8:2FTS_2	39108-34-4	8.05	527.2 / 81.1	706202		11.964	0.648	0.662	Pass	124.6
44	PFOSA	754-91-6	9.51	498.1 / 78.1	493133	M5	2.716	0.027	0.025	Pass	108.7
45	PFOSA_2	754-91-6	9.51	498.1 / 478.0	13334	M7	2.799	0.027	0.025	Pass	112.0
46	NMeFOSA	31506-32-8	10.15	512.2 / 219.0	146328	M5	2.770	1.463	1.551	Pass	110.8
47	NMeFOSA_2	31506-32-8	10.11	512.2 / 169.0	214117	M7	2.616	1.463	1.551	Pass	104.6
48	NEtFOSA	4151-50-2	10.36	526.2 / 219.0	149115	M5	3.010	1.275	1.285	Pass	120.4
49	NEtFOSA_2	4151-50-2	10.32	526.2 / 169.0	190113	M7	2.867	1.275	1.285	Pass	114.7
50	NMeFOSAA	2355-31-9	8.20	570.2 / 419.1	156293	M4	3.242	0.685	0.700	Pass	129.7
51	NMeFOSAA_2	2355-31-9	8.20	570.2 / 483.0	107115		3.494	0.685	0.700	Pass	139.7
52	NEtFOSAA	2991-50-6	8.33	584.2 / 419.1	142297		2.611	0.486	0.487	Pass	104.4

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
53	NEtFOSAA_2	2991-50-6	8.33	584.2 / 526.2	69151	M7	2.757	0.486	0.487	Pass	110.3
54	NMeFOSE	24448-09-7	10.06	616.1 / 58.9	2542671	M5	26.928	N/A	N/A	N/A	107.7
55	NEtFOSE	1691-99-2	10.26	630.0 / 58.9	4546024	M5	26.787	N/A	N/A	N/A	107.2
56	HFPO-DA	13252-13-6	5.63	285.0 / 169.0	2773391		11.908	0.424	0.464	Pass	119.1
57	HFPO-DA_2	13252-13-6	5.63	285.0 / 184.9	1175897		10.858	0.424	0.464	Pass	108.6
58	ADONA	919005-14-4	6.75	377.1 / 251.0	6160680		11.631	0.600	0.634	Pass	123.1
59	ADONA_2	919005-14-4	6.75	377.1 / 84.8	3695830		10.784	0.600	0.634	Pass	114.1
60	9Cl-PF3ONS	756426-58-1	8.45	530.8 / 351.1	4944314		9.467	0.331	0.322	Pass	101.3
61	9Cl-PF3ONS_2	756426-58-1	8.45	532.8 / 353.0	1637007		9.625	0.331	0.322	Pass	103.0
62	11Cl-PF3OUdS	763051-92-9	9.47	630.9 / 451.0	2549519		7.729	0.334	0.331	Pass	81.8
63	11Cl-PF3OUdS_2	763051-92-9	9.47	632.9 / 452.9	851981		7.674	0.334	0.331	Pass	81.2
64	3:3FTCA	356-02-5	4.95	241.1 / 177.1	345158		18.922	0.815	1.074	Pass	151.4
65	3:3FTCA_2	356-02-5	4.95	241.1 / 117.0	281281		15.396	0.815	1.074	Pass	123.2
66	5:3FTCA	914637-49-3	7.20	341.1 / 237.1	5984154		66.227	0.935	0.953	Pass	106.0
67	5:3FTCA_2	914637-49-3	7.20	341.1 / 217.0	5593867		65.425	0.935	0.953	Pass	104.7

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
68	7:3FTCA	812-70-4	8.19	441.1 / 316.9	5094073		50.641	1.556	1.558	Pass	81.0
69	7:3FTCA_2	812-70-4	8.19	441.1 / 337.1	7924899		54.290	1.556	1.558	Pass	86.9
70	PFEESA	113507-82-7	5.73	315.1 / 135.0	3932580		4.551	0.085	0.087	Pass	102.3
71	PFEESA_2	113507-82-7	5.73	315.1 / 82.9	334566		4.481	0.085	0.087	Pass	100.7
72	PFMPA	377-73-1	3.89	229.0 / 85.0	169990		6.678	N/A	N/A	N/A	133.6
73	PFMBA	863090-89-5	4.90	279.0 / 85.0	1999851		5.827	N/A	N/A	N/A	116.5
74	NFDHA	151772-58-6	5.27	295.0 / 201.0	535640		5.888	0.730	0.910	Pass	117.8
75	NFDHA_2	151772-58-6	5.27	295.0 / 84.9	391009		4.688	0.730	0.910	Pass	93.8
76	TDCA	516-50-7	N/A	499.1 / 124.1	N/A		N/A	N/A	40.716	N/A	N/A
77	TDCA_2	516-50-7	N/A	499.1 / 79.9	N/A		N/A	N/A	40.716	N/A	N/A
78	13C2D4-4:2FTS	Surr	N/A	333.2 / 312.1	N/A		N/A	N/A	N/A	N/A	N/A
79	13C2-PFOA	Surr	N/A	415.0 / 370.0	N/A		N/A	N/A	N/A	N/A	N/A

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C4-PFBA	EIS	2.82	217.0 / 172.0	2170720		8.406	NA	NA	NA	84.1

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C5-PFPeA	EIS	4.66	268.0 / 223.0	1140452		3.420	NA	NA	NA	68.4
	13C5-PFHxA	EIS	5.35	318.0 / 273.0	1021991		2.333	NA	NA	NA	93.3
	13C4-PFHpA	EIS	6.27	367.0 / 322.0	1014336		2.313	NA	NA	NA	92.5
	13C8-PFOA	EIS	7.49	421.0 / 376.0	1370087		1.744	NA	NA	NA	69.8
	13C9-PFNA	EIS	7.92	472.0 / 427.0	629535		1.048	NA	NA	NA	83.8
	13C6-PFDA	EIS	8.14	519.0 / 474.0	560804		0.909	NA	NA	NA	72.7
	13C7-PFUnA	EIS	8.42	570.0 / 525.0	425608		0.853	NA	NA	NA	68.2

	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
	13C2-PFDoA	EIS	8.83	615.1 / 570.0	346641		1.068	NA	NA	NA	85.4
	13C2-PFTeDA	EIS	9.85	715.1 / 670.1	280316		0.795	NA	NA	NA	63.6
	13C3-PFBS	EIS	5.33	302.1 / 80.1	738452		1.931	NA	NA	NA	82.9
	13C3-PFHxS	EIS	7.60	402.1 / 80.1	582289		1.917	NA	NA	NA	80.9
	13C8-PFOS	EIS	8.23	507.1 / 80.1	500736		1.619	NA	NA	NA	67.6
	13C2-4:2FTS	EIS	5.15	329.1 / 81.1	523529		7.669	NA	NA	NA	163.5
	13C2-6:2FTS	EIS	7.11	429.2 / 81.1	247336		4.944	NA	NA	NA	104.0
	13C2-8:2FTS	EIS	8.05	529.2 / 81.1	329559		4.501	NA	NA	NA	93.8

Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec
13C8-PFOSA	EIS	9.51	506.1 / 78.1	679038		1.651	NA	NA	NA	66.0
d3-NMeFOSA	EIS	10.14	515.2 / 219.0	123329		1.781	NA	NA	NA	71.3
d5-NEtFOSA	EIS	10.35	531.2 / 219.0	112761		1.667	NA	NA	NA	66.7
d3-NMeFOSAA	EIS	8.19	573.2 / 419.1	366359		2.341	NA	NA	NA	46.8
d5-NEtFOSAA	EIS	8.32	589.3 / 419.1	292311		3.554	NA	NA	NA	71.1
d7-NMeFOSE	EIS	10.05	623.2 / 58.9	956902		17.898	NA	NA	NA	71.6
d9-NEtFOSE	EIS	10.24	639.2 / 58.9	1445718		18.341	NA	NA	NA	73.4

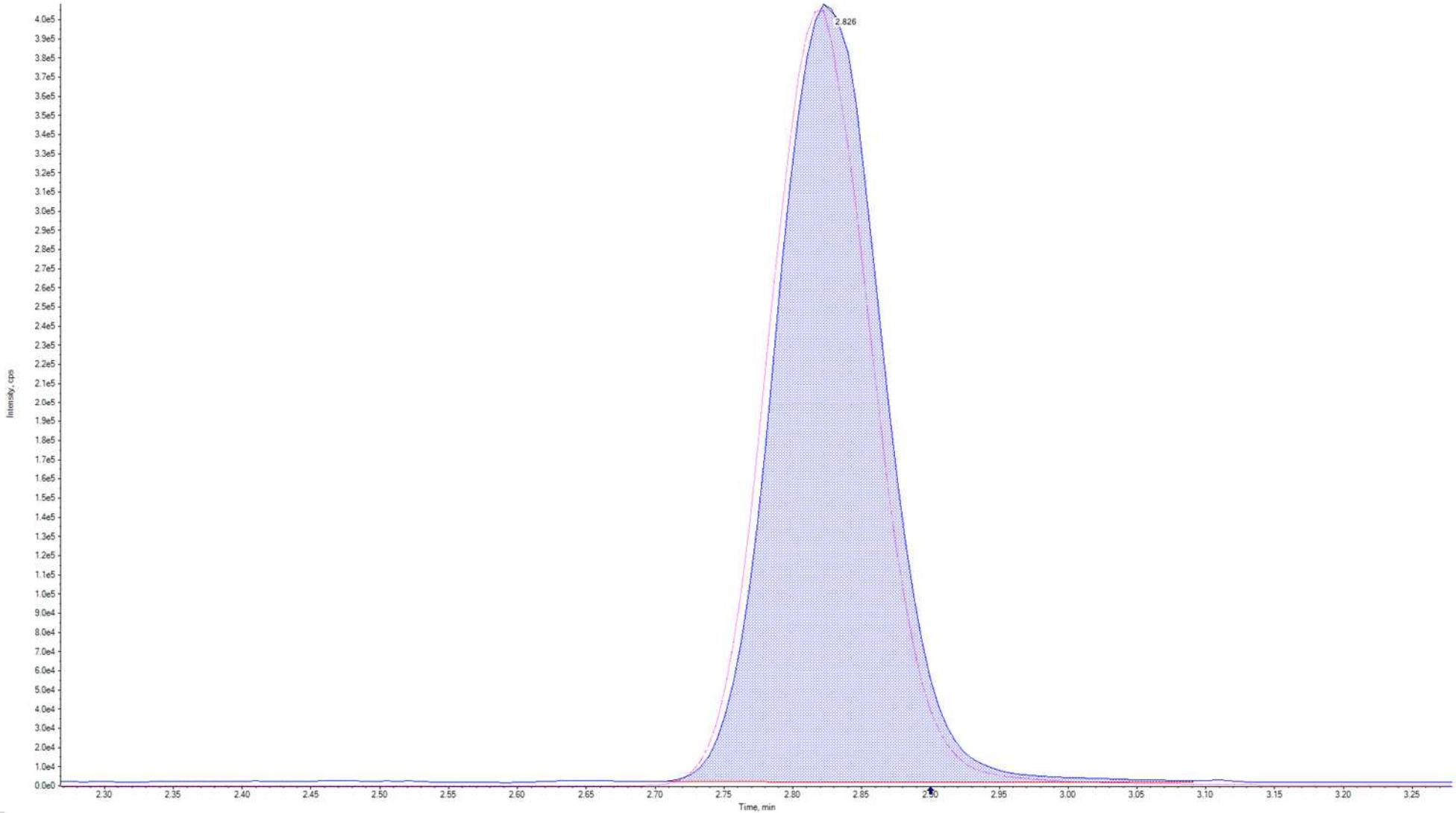
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	13C3-HFPO-DA	EIS	5.62	287.0 / 169.0	2540588		8.753	NA	NA	NA	87.5
	13C3-PFBA	NIS	2.82	216.0 / 172.0	1129570		5.283	NA	NA	NA	105.7
	13C2-PFHxA	NIS	5.35	315.0 / 270.0	1300385		2.656	NA	NA	NA	106.2
	13C4-PFOA	NIS	7.49	417.0 / 372.0	1027562		3.282	NA	NA	NA	131.3
	13C5-PFNA	NIS	7.92	468.0 / 423.0	731836		1.336	NA	NA	NA	106.9
	13C2-PFDA	NIS	8.14	515.1 / 470.1	724582		1.414	NA	NA	NA	113.1
	18O2-PFHxS	NIS	7.60	403.1 / 84.1	617501		2.636	NA	NA	NA	111.2
	13C4-PFOS	NIS	8.23	503.1 / 80.1	547211		2.599	NA	NA	NA	108.5

Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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	Analyte Name	CAS	RT	Trace	Area	M Flag	Conc (ng/mL)	Ion Ratio	Expected Ratio	Ion Q	%Rec

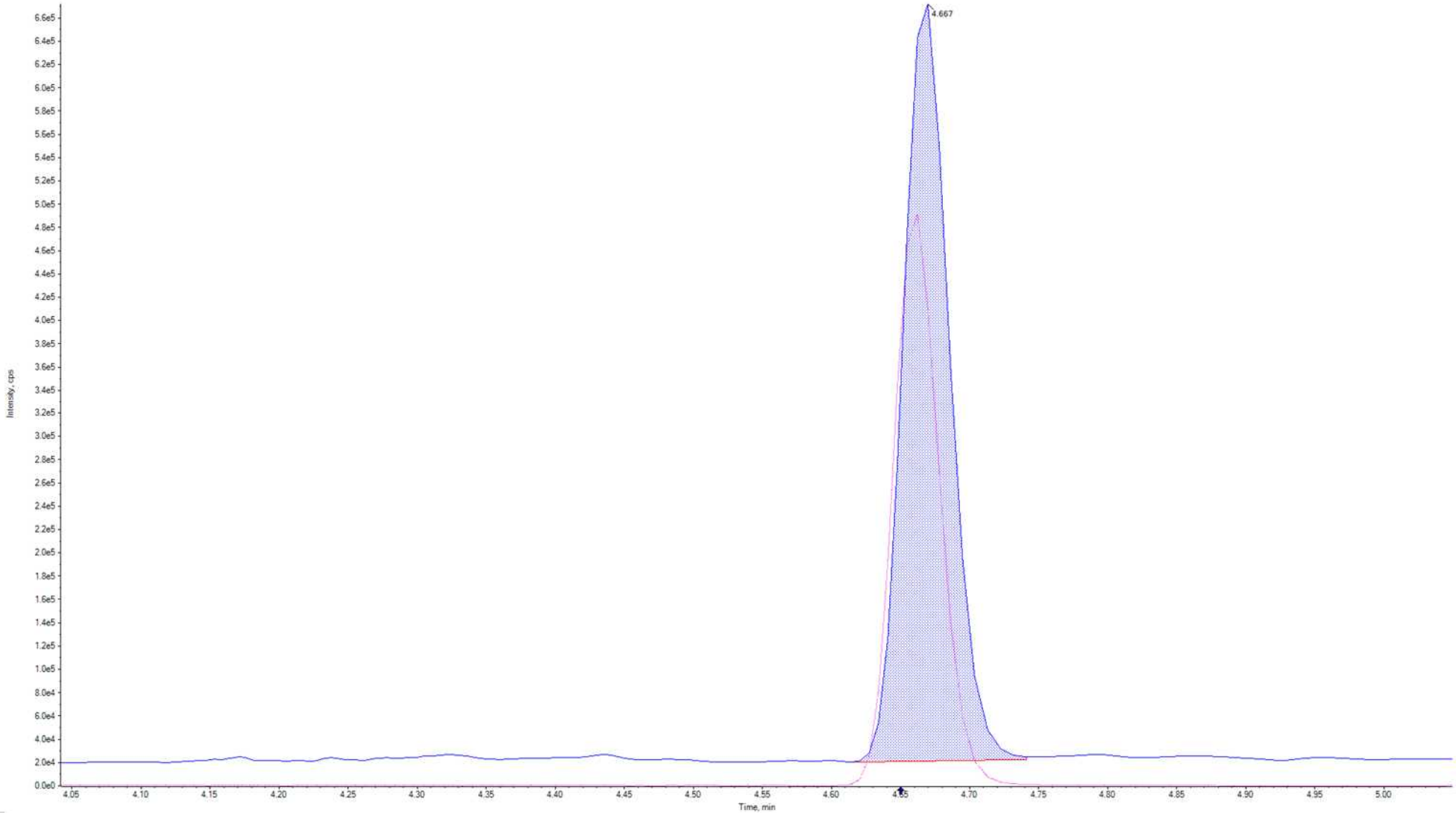
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PFBA
Sample: WG1971858-5 S/N:1513.2 Points Across peak:67



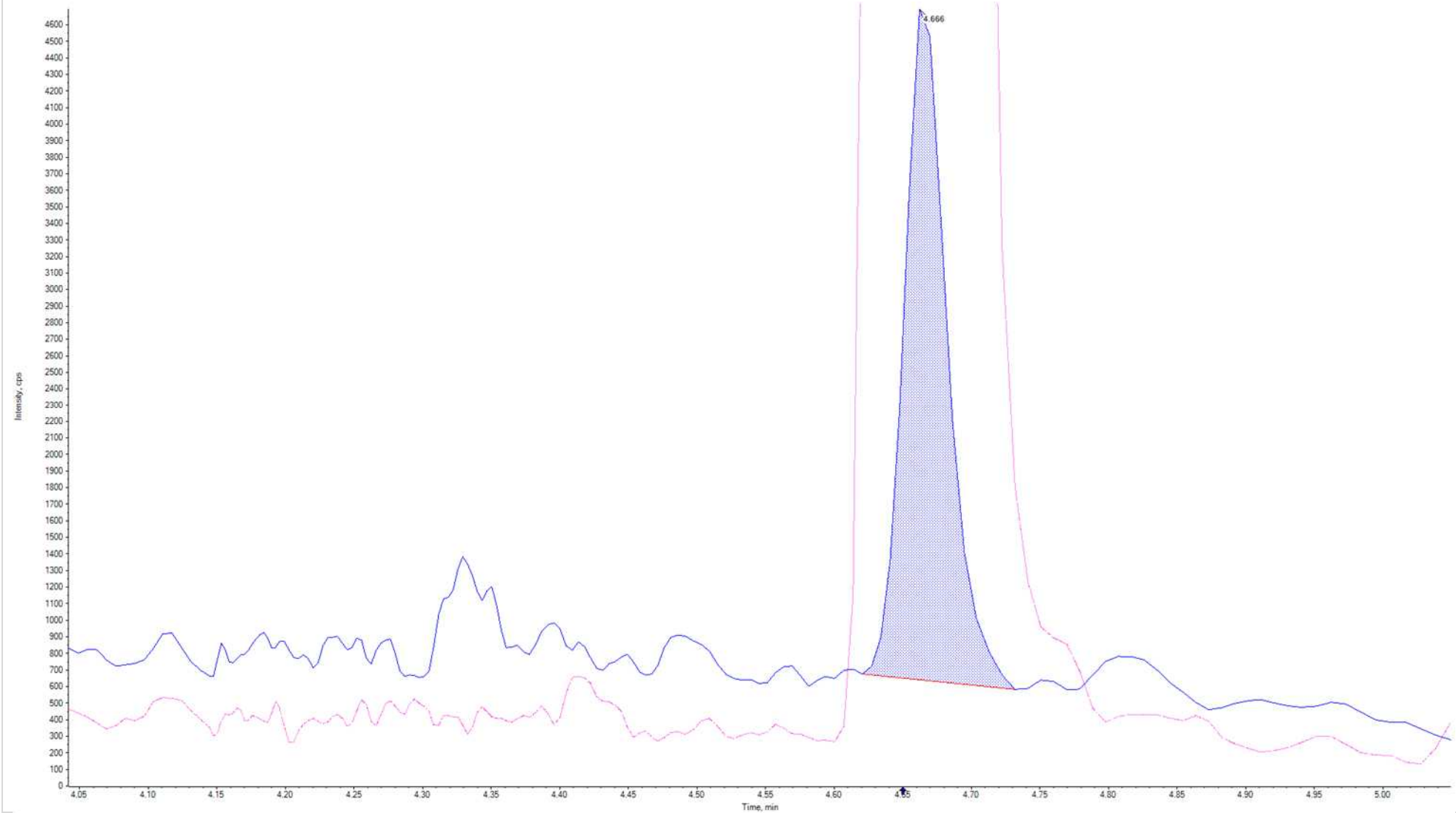
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PFPeA
Sample: WG1971858-5 S/N:291.5 Points Across peak:17



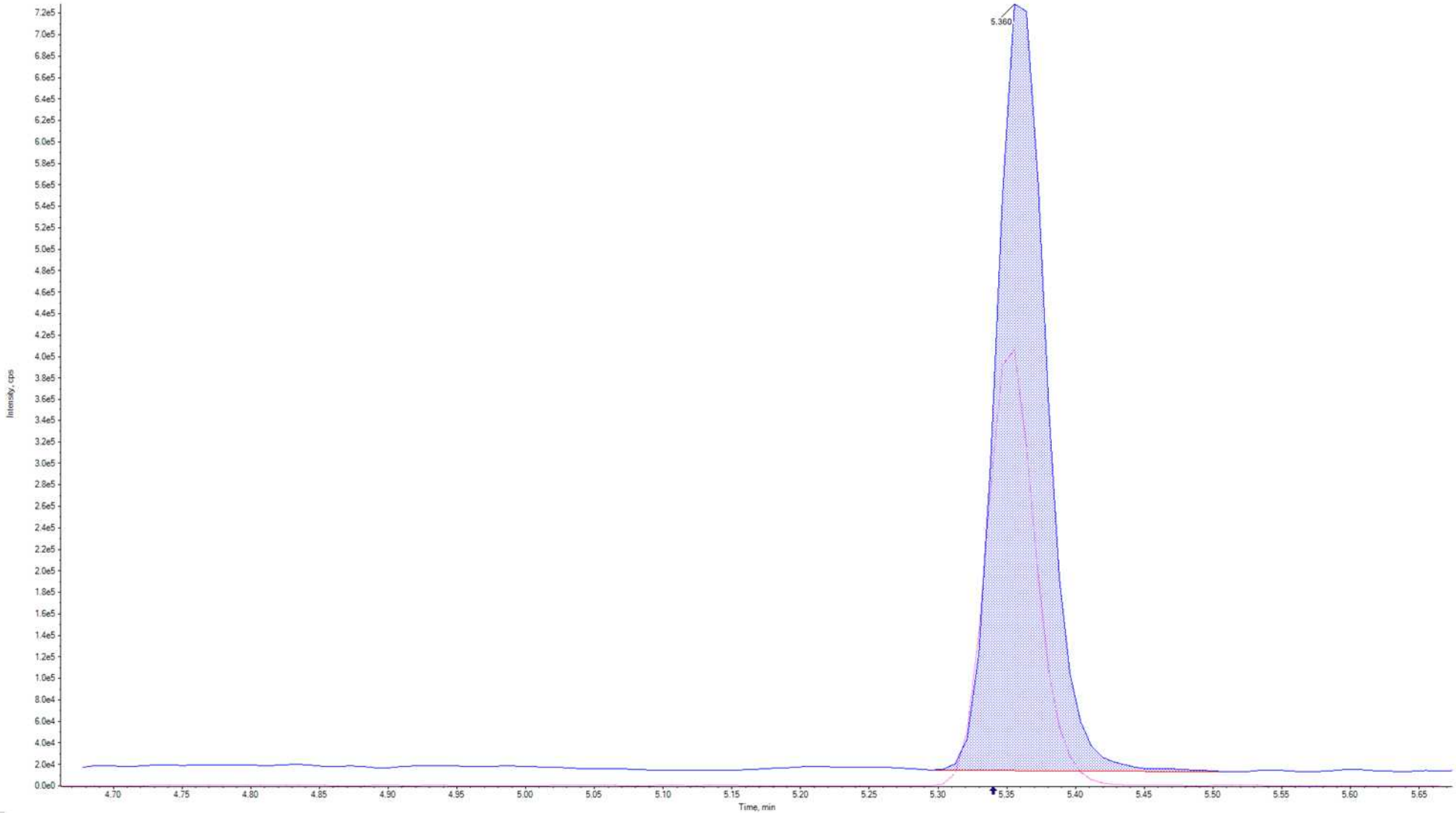
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PFPeA_2
Sample: WG1971858-5 S/N:114.6 Points Across peak:15



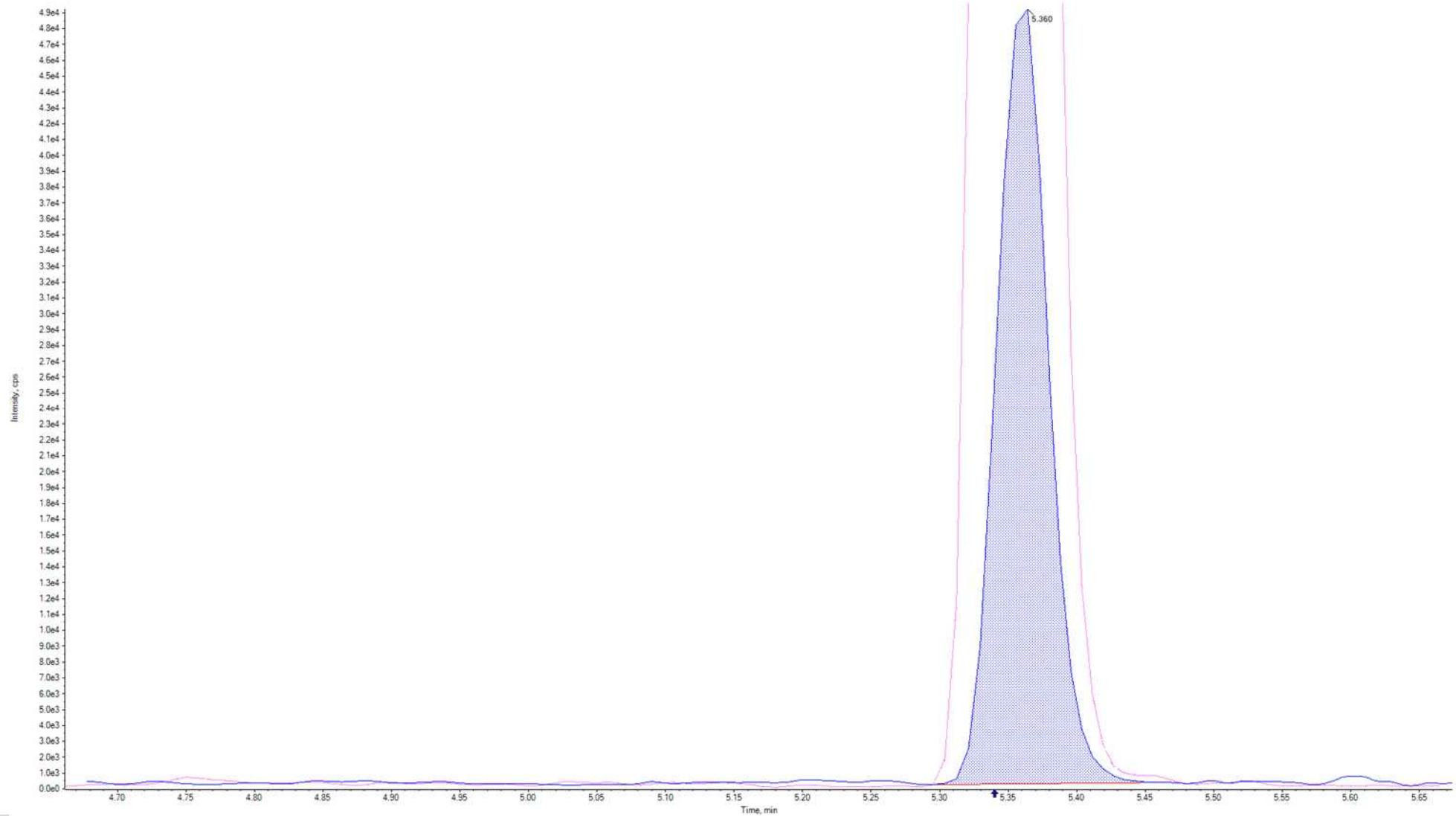
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PFHxA
Sample: WG1971858-5 S/N:303.7 Points Across peak:29



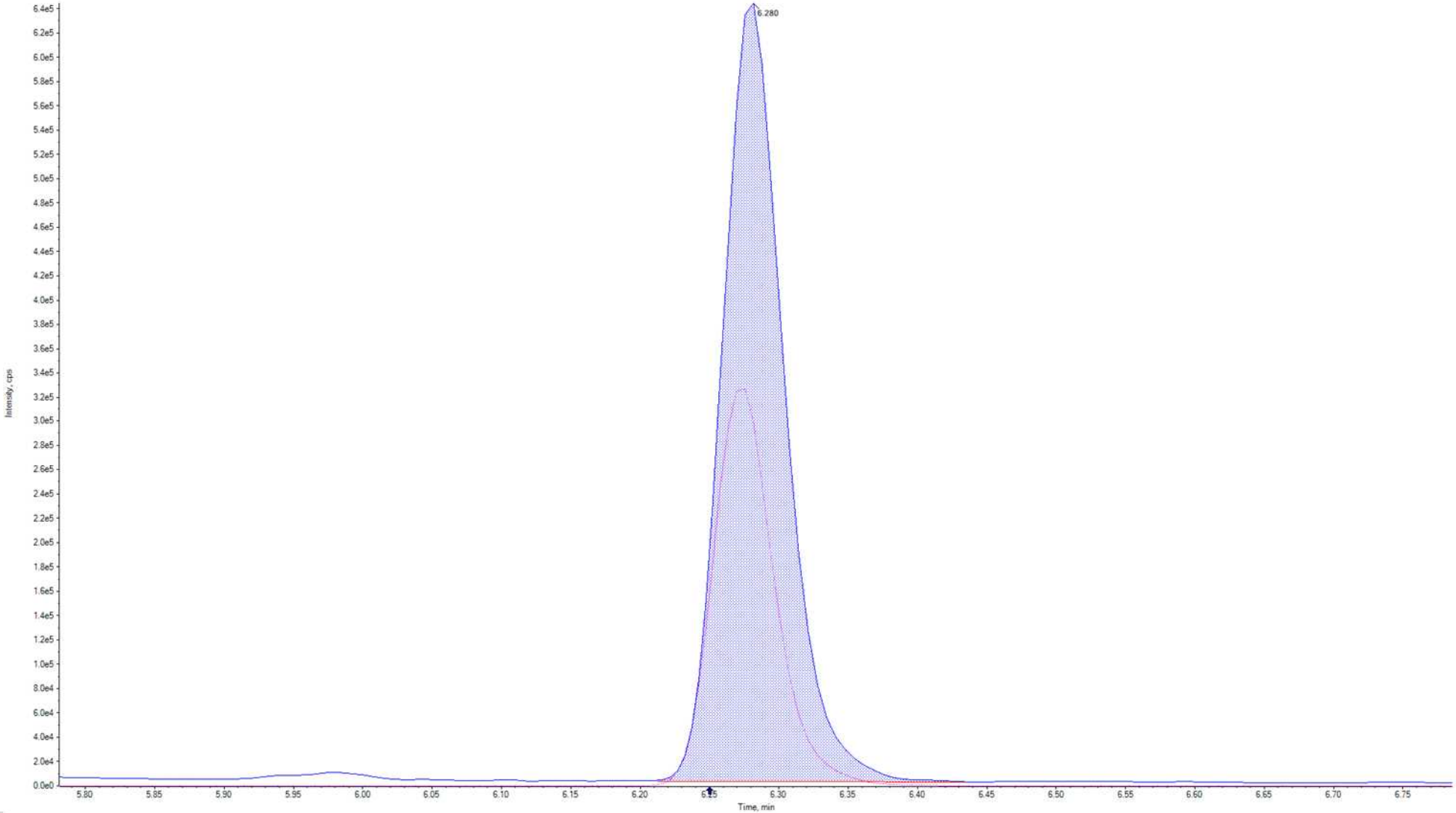
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PFHxA_2
Sample: WG1971858-5 S/N:485.9 Points Across peak:22



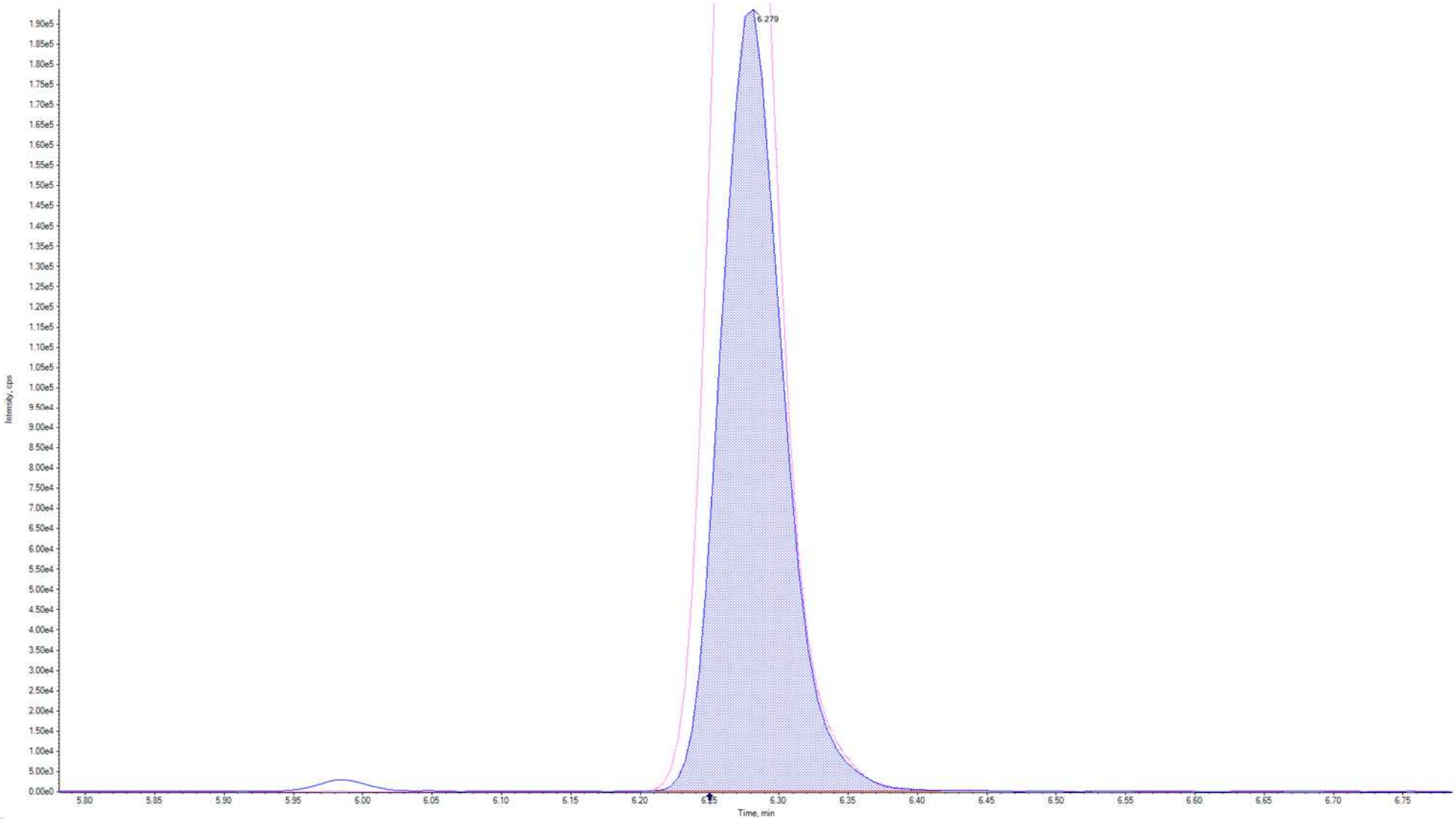
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PFHpA
Sample: WG1971858-5 S/N:1189.0 Points Across peak:41



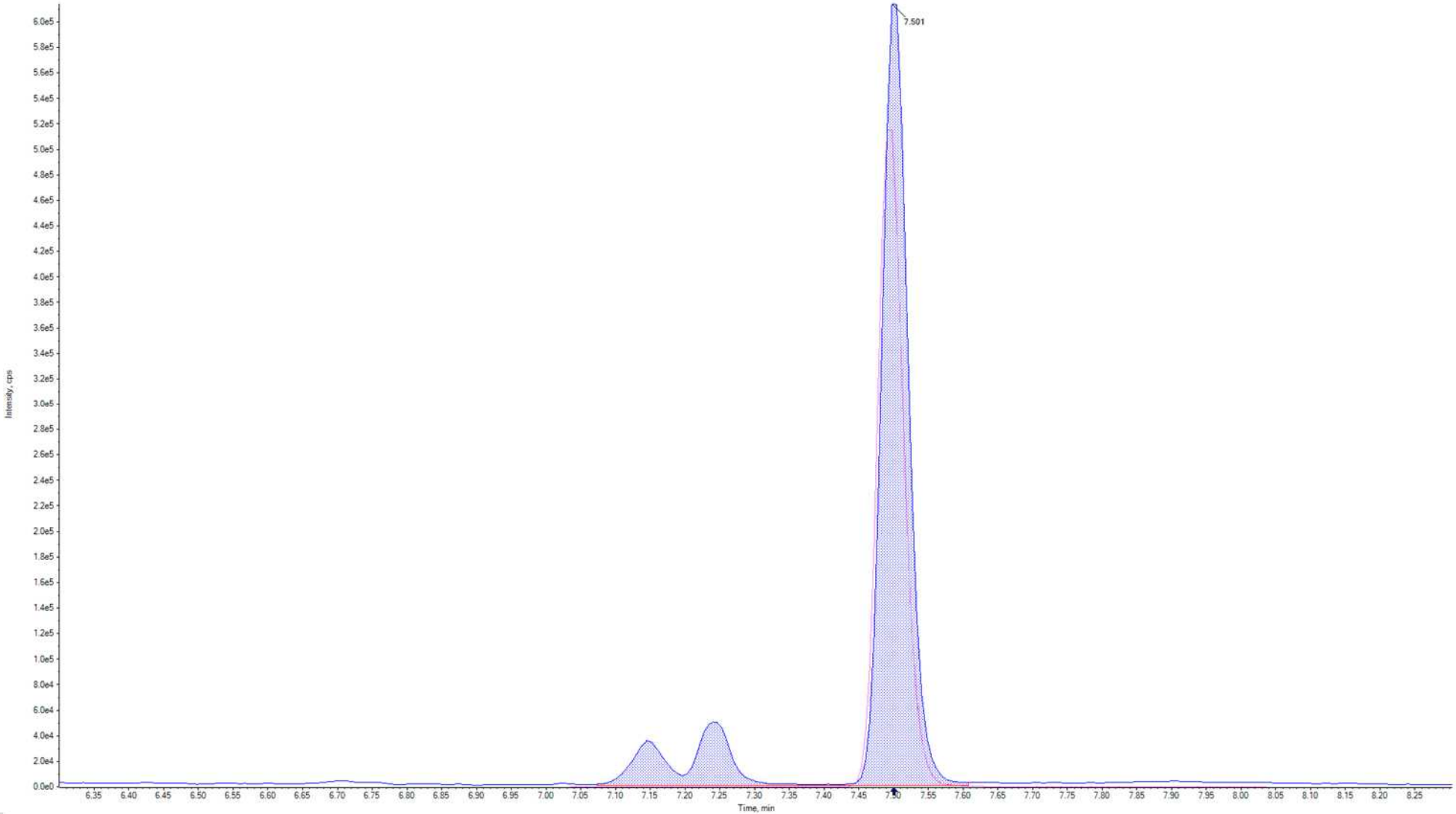
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PFHpA_2
Sample: WG1971858-5 S/N:3488.0 Points Across peak:37



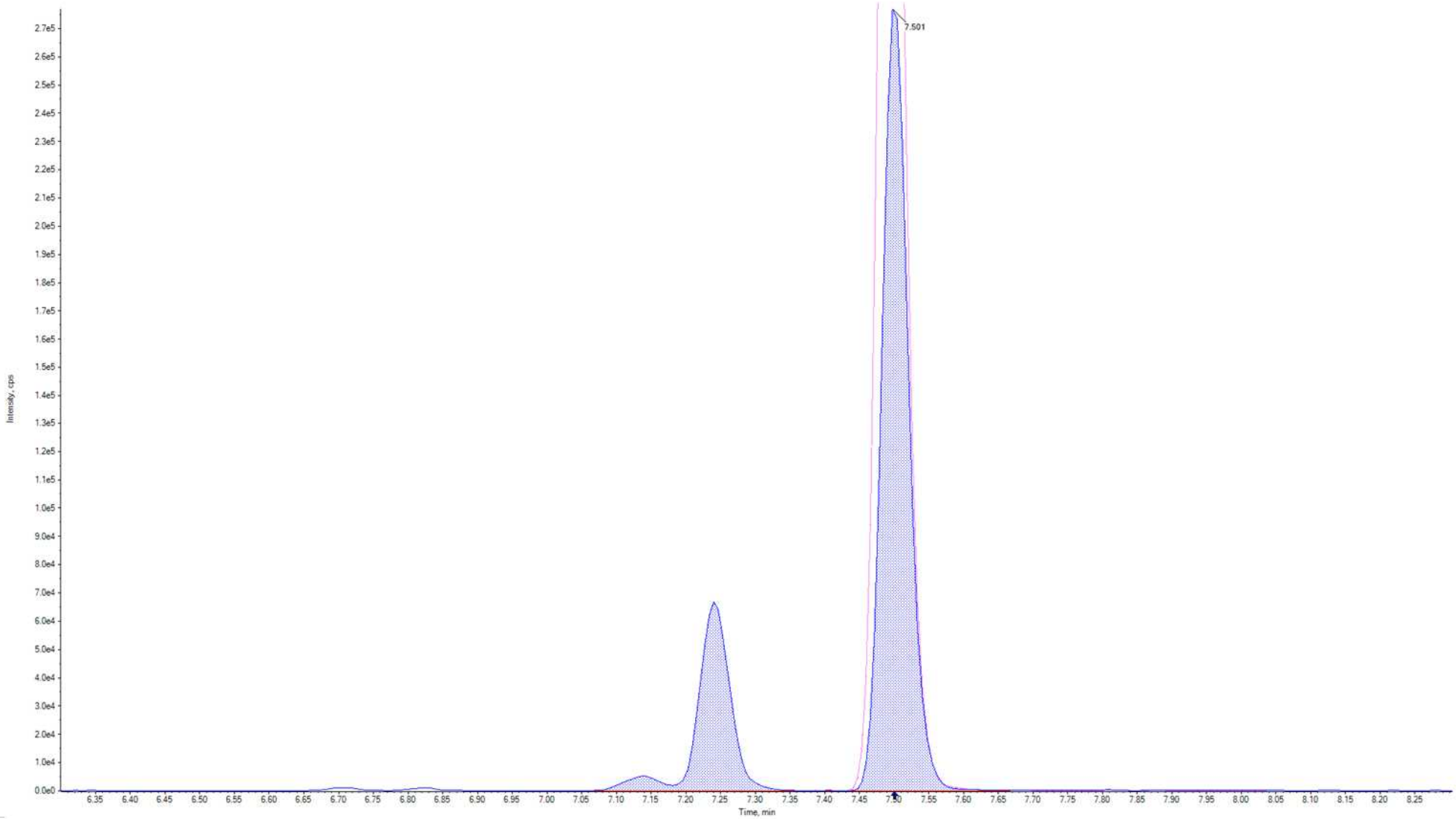
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PFOA
Sample: WG1971858-5 S/N:1291.0 Points Across peak:86



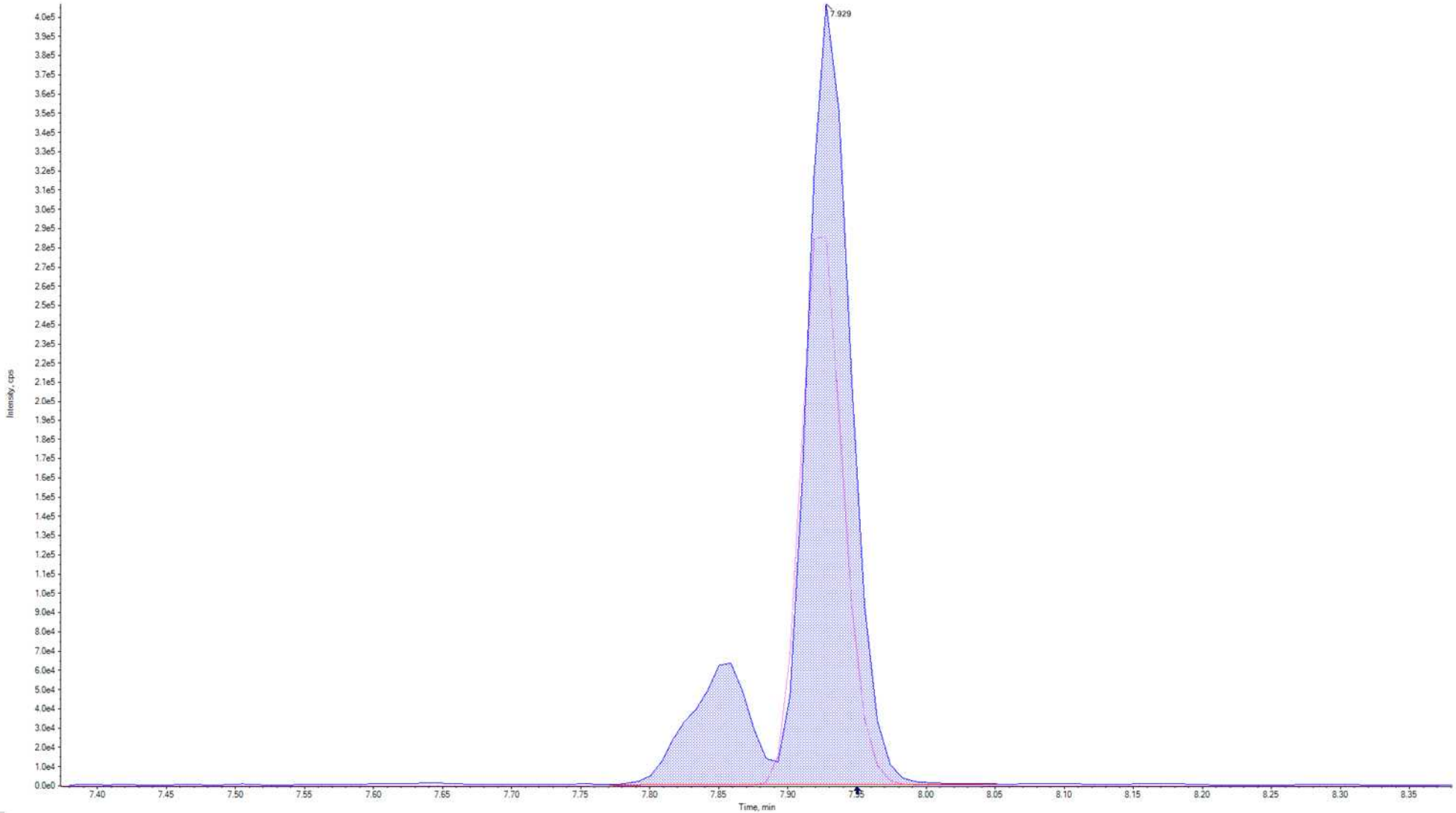
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PFOA_2
Sample: WG1971858-5 S/N:38570.3 Points Across peak:100



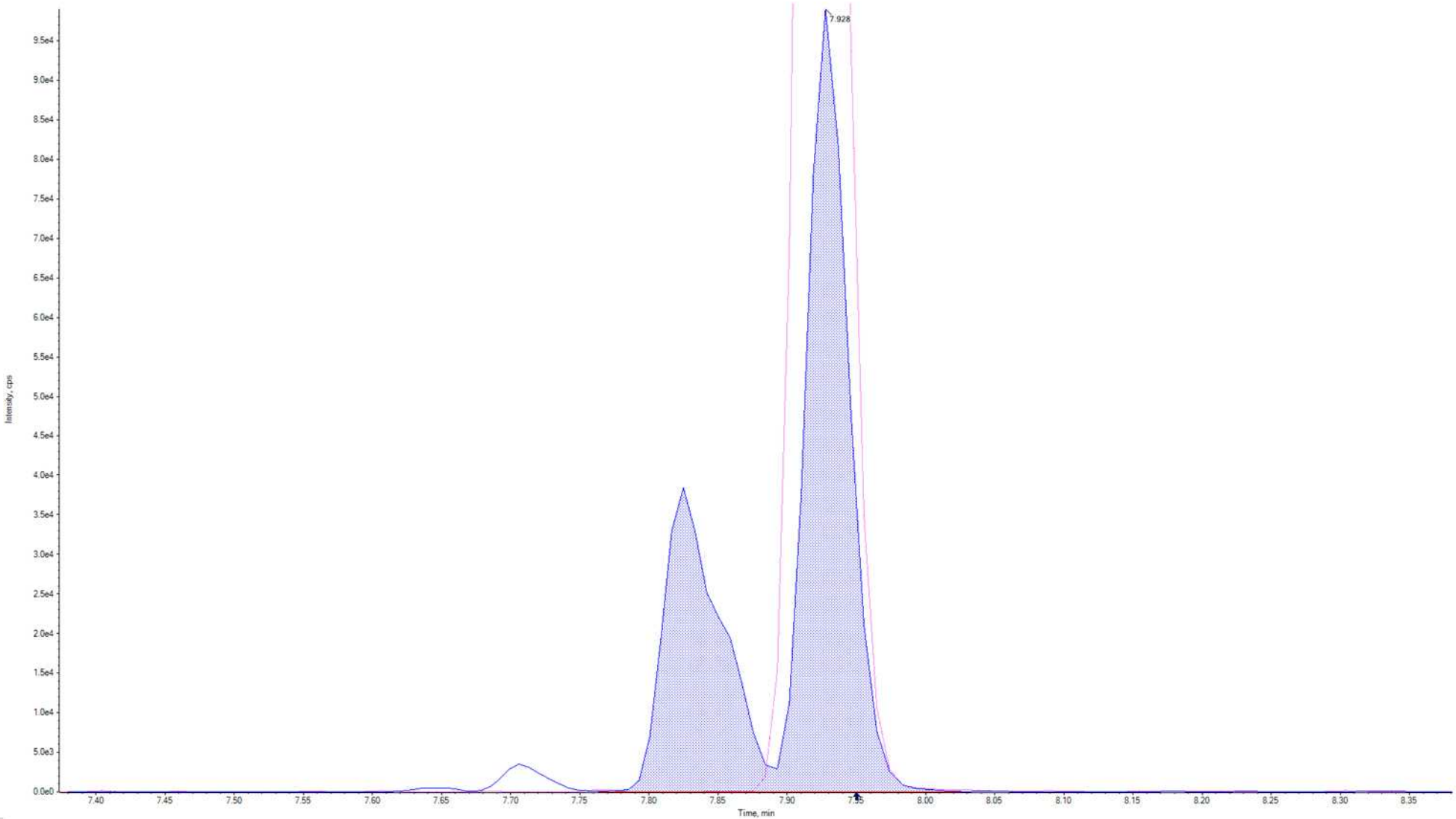
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PFNA
Sample: WG1971858-5 S/N:1541.2 Points Across peak:35



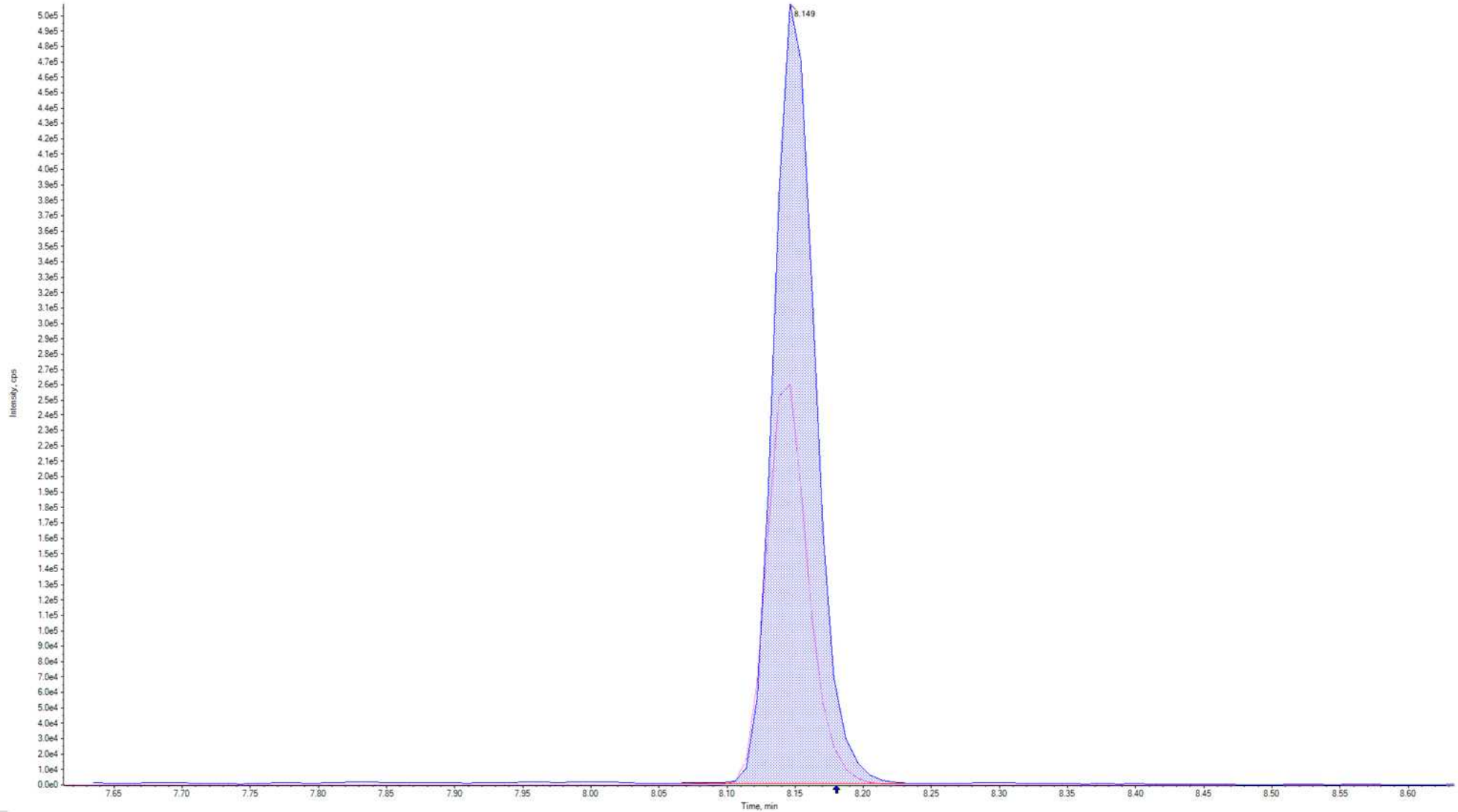
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PFNA_2
Sample: WG1971858-5 S/N:521759.5 Points Across peak:32



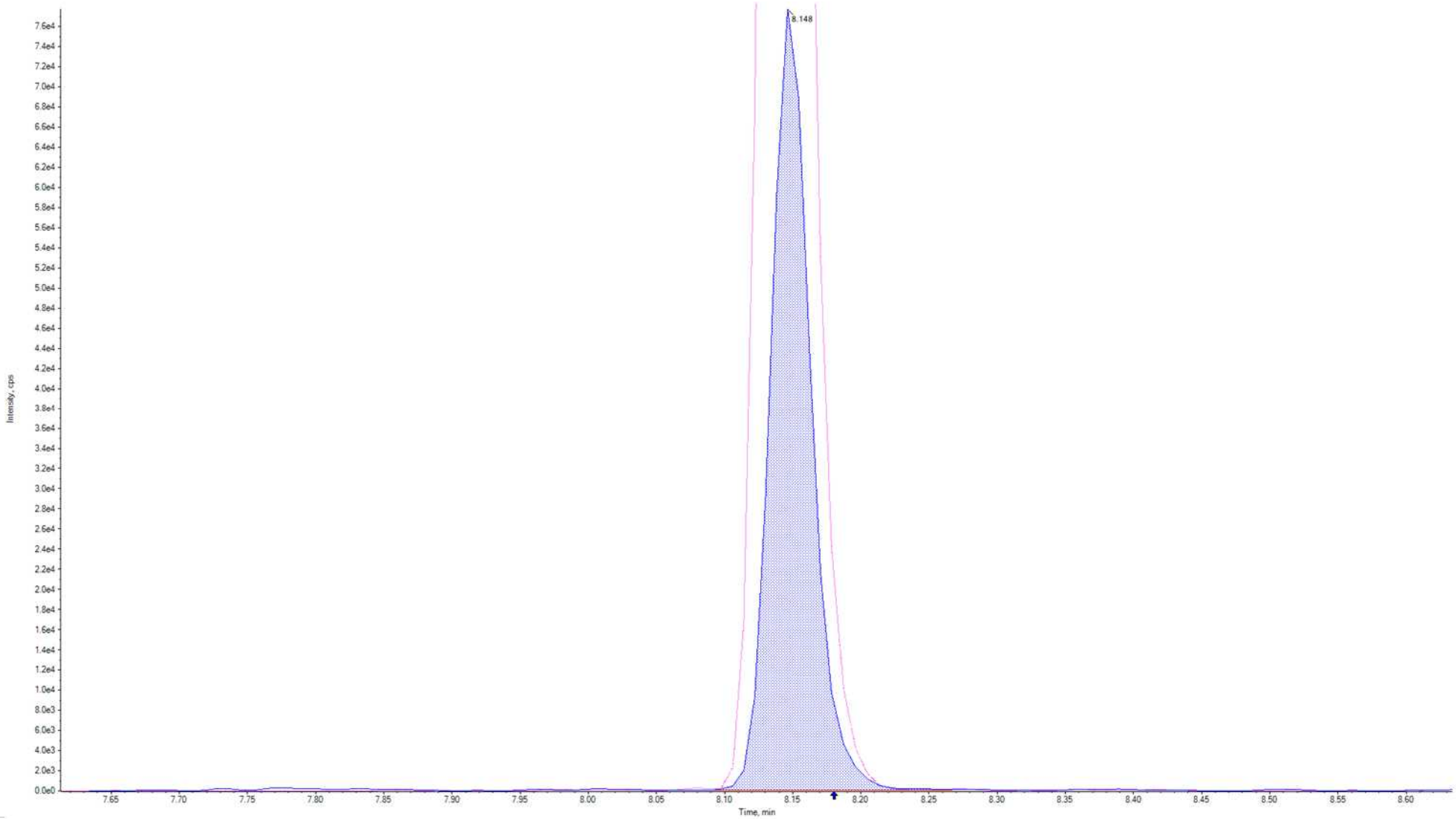
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PFDA
Sample: WG1971858-5 S/N:1824.1 Points Across peak:24



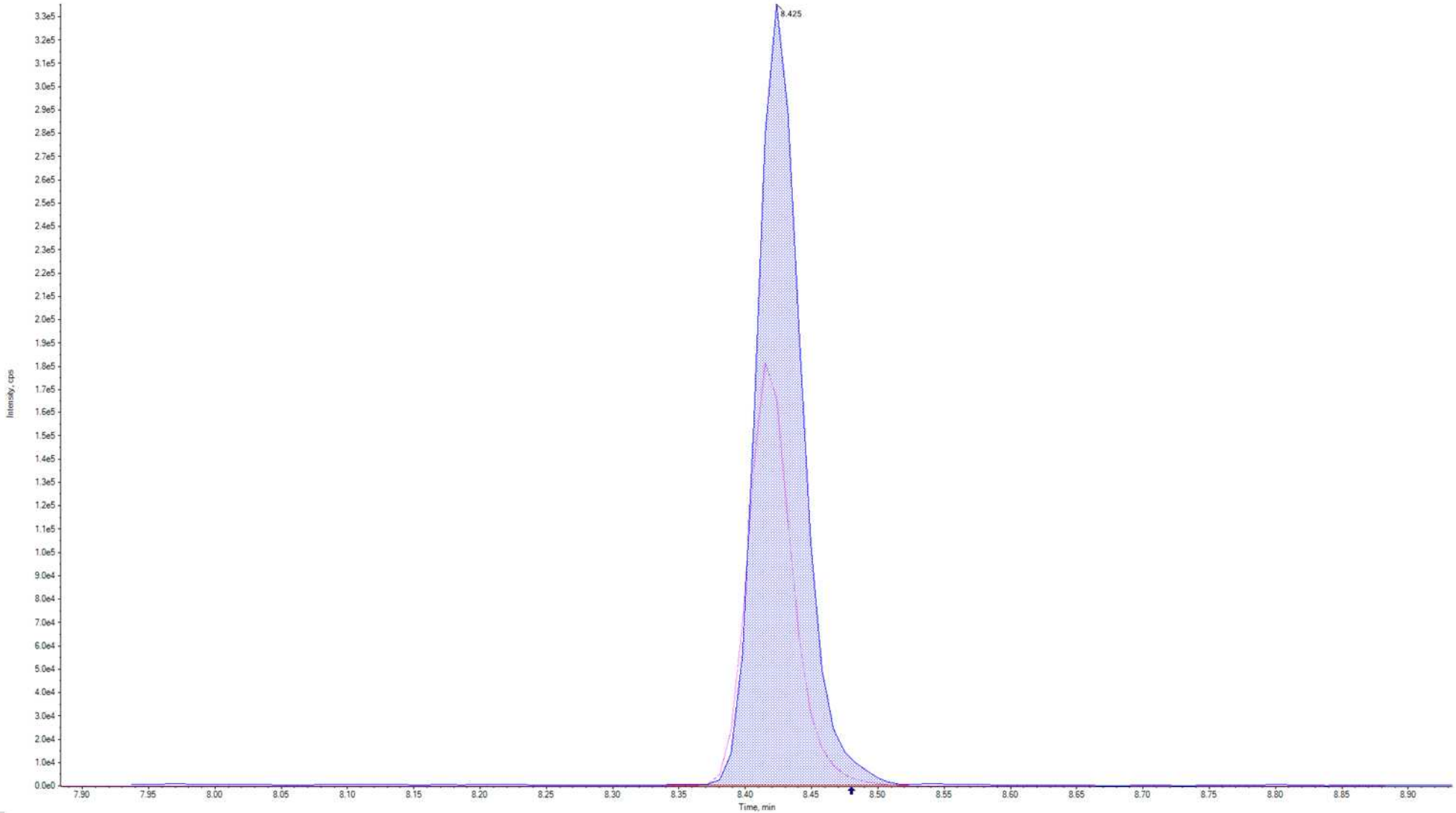
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PFDA_2
Sample: WG1971858-5 S/N:581002.1 Points Across peak:23



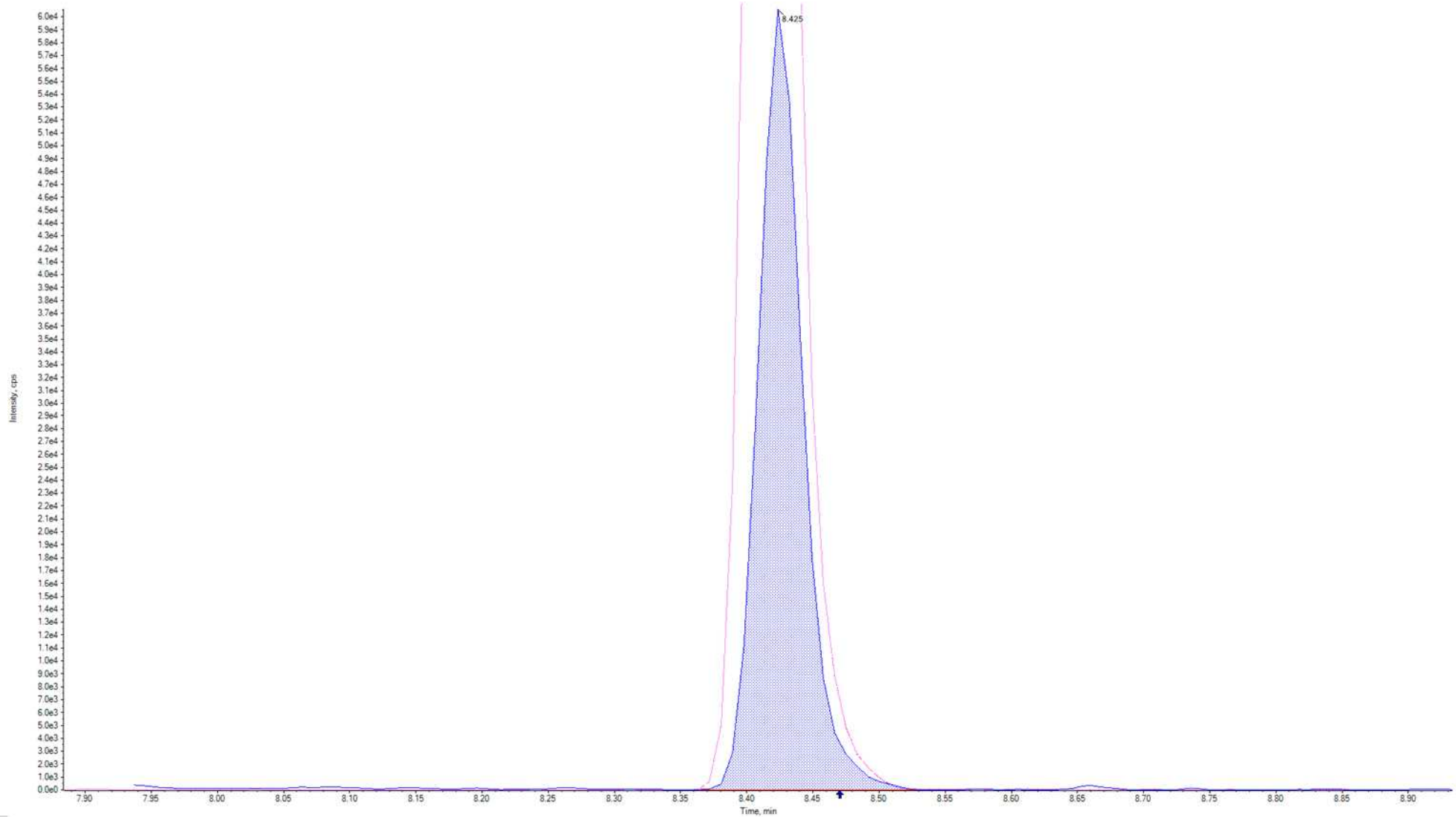
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PFUnA
Sample: WG1971858-5 S/N:2369.8 Points Across peak:28



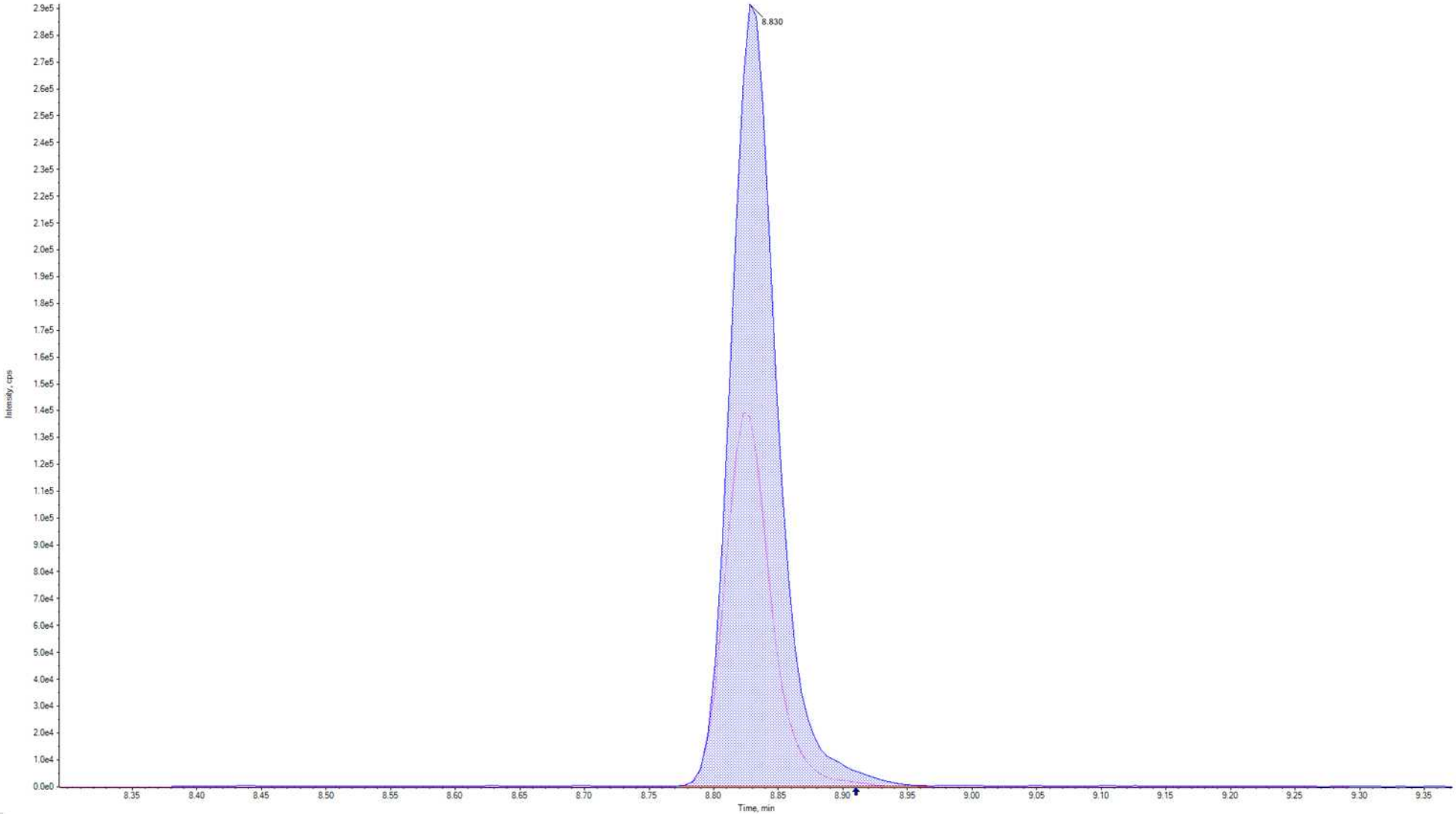
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PFUnA_2
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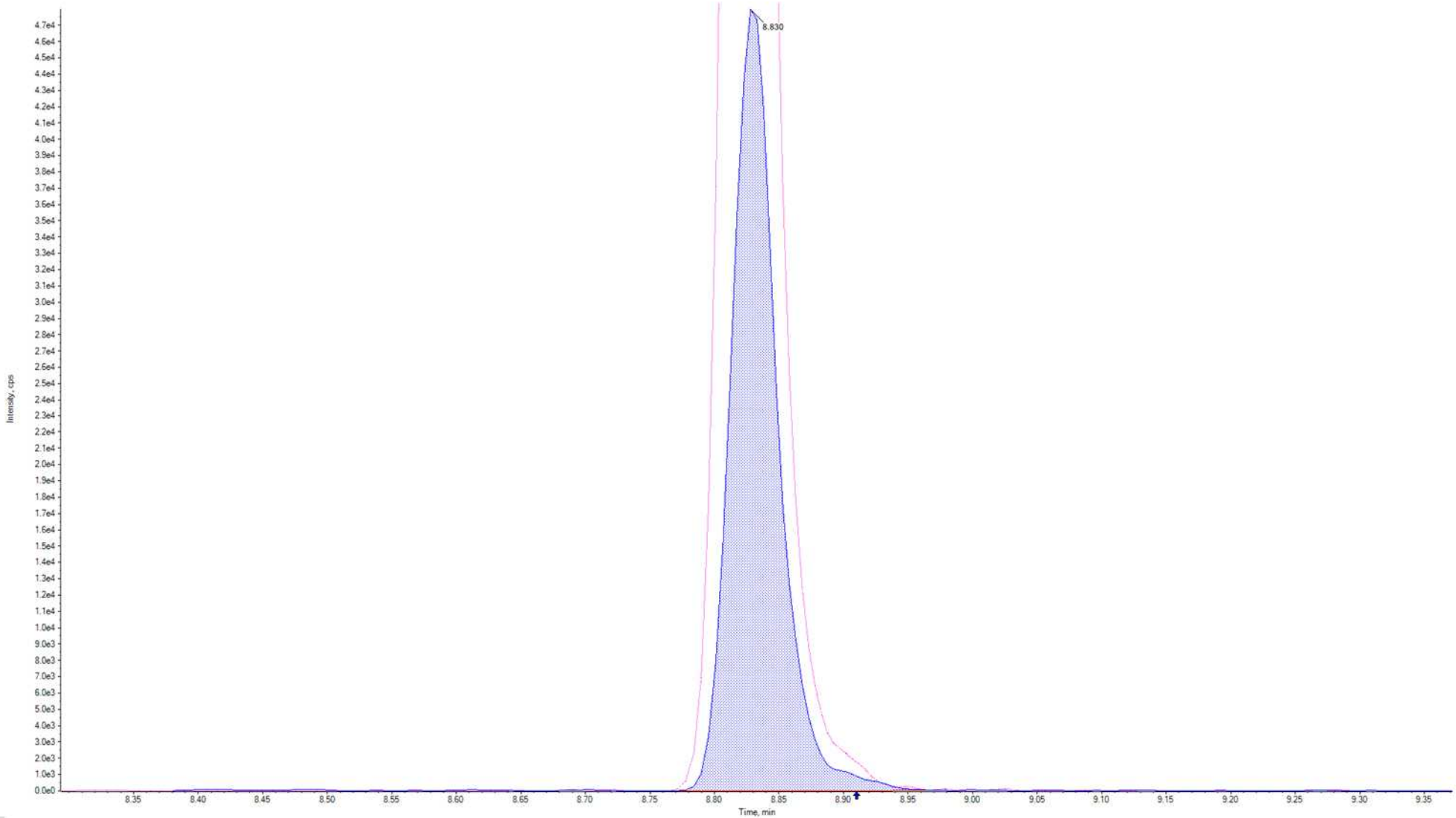
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PFDoA
Sample: WG1971858-5 S/N:2813.2 Points Across peak:40



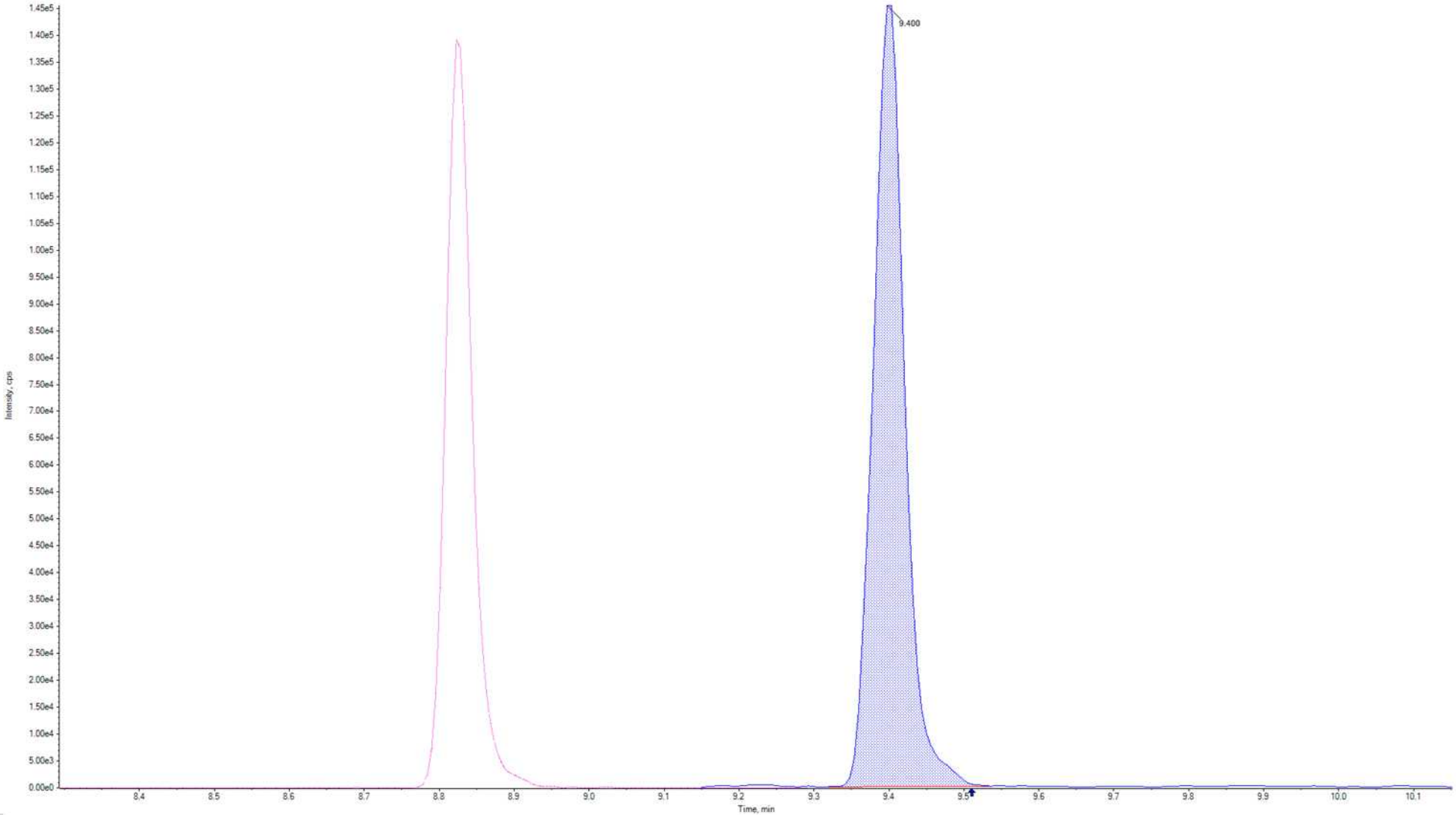
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PFDoA_2
Sample: WG1971858-5 S/N:140624.8 Points Across peak:41



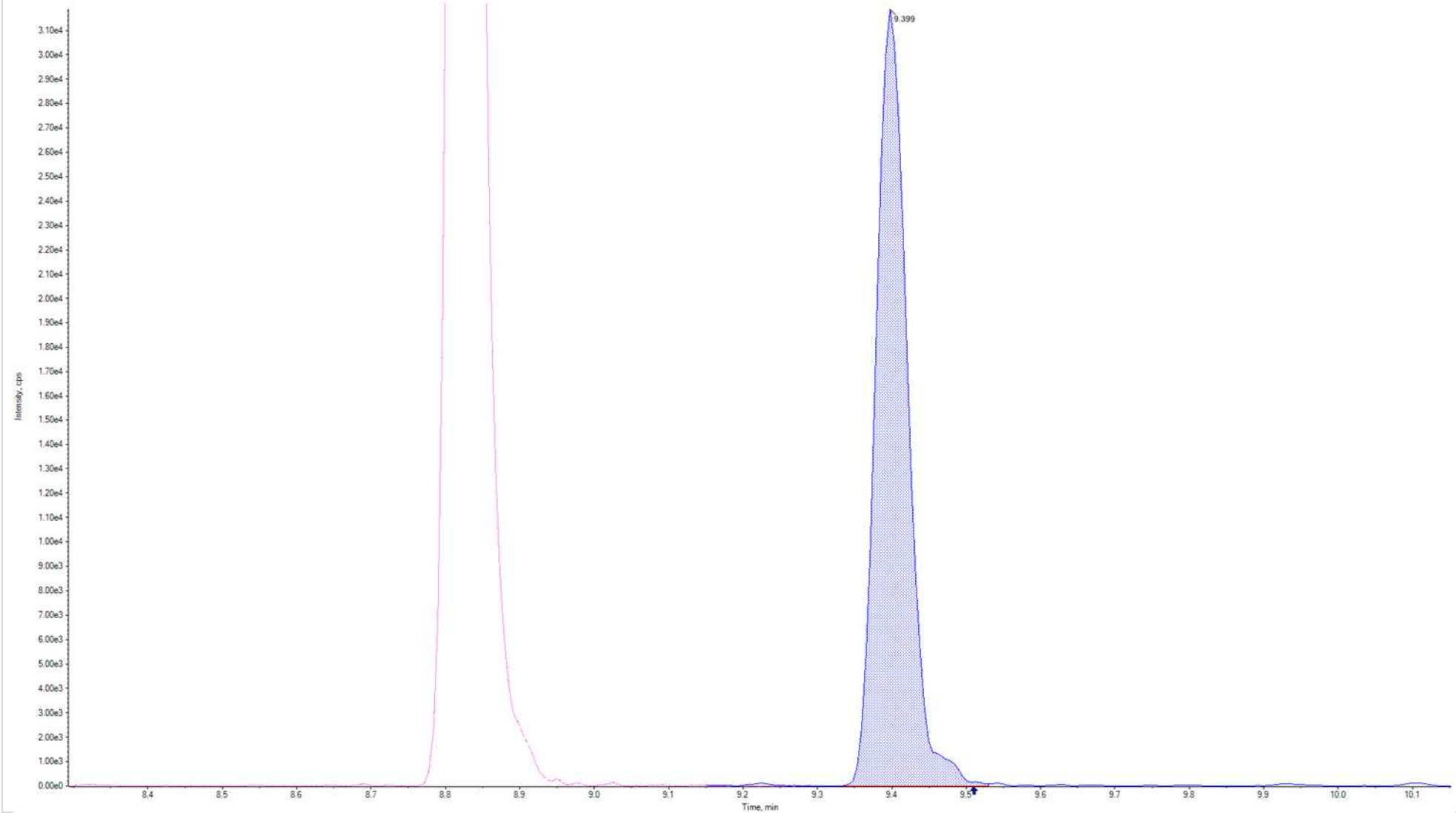
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PFTrDA
Sample: WG1971858-5 S/N:1637.7 Points Across peak:40



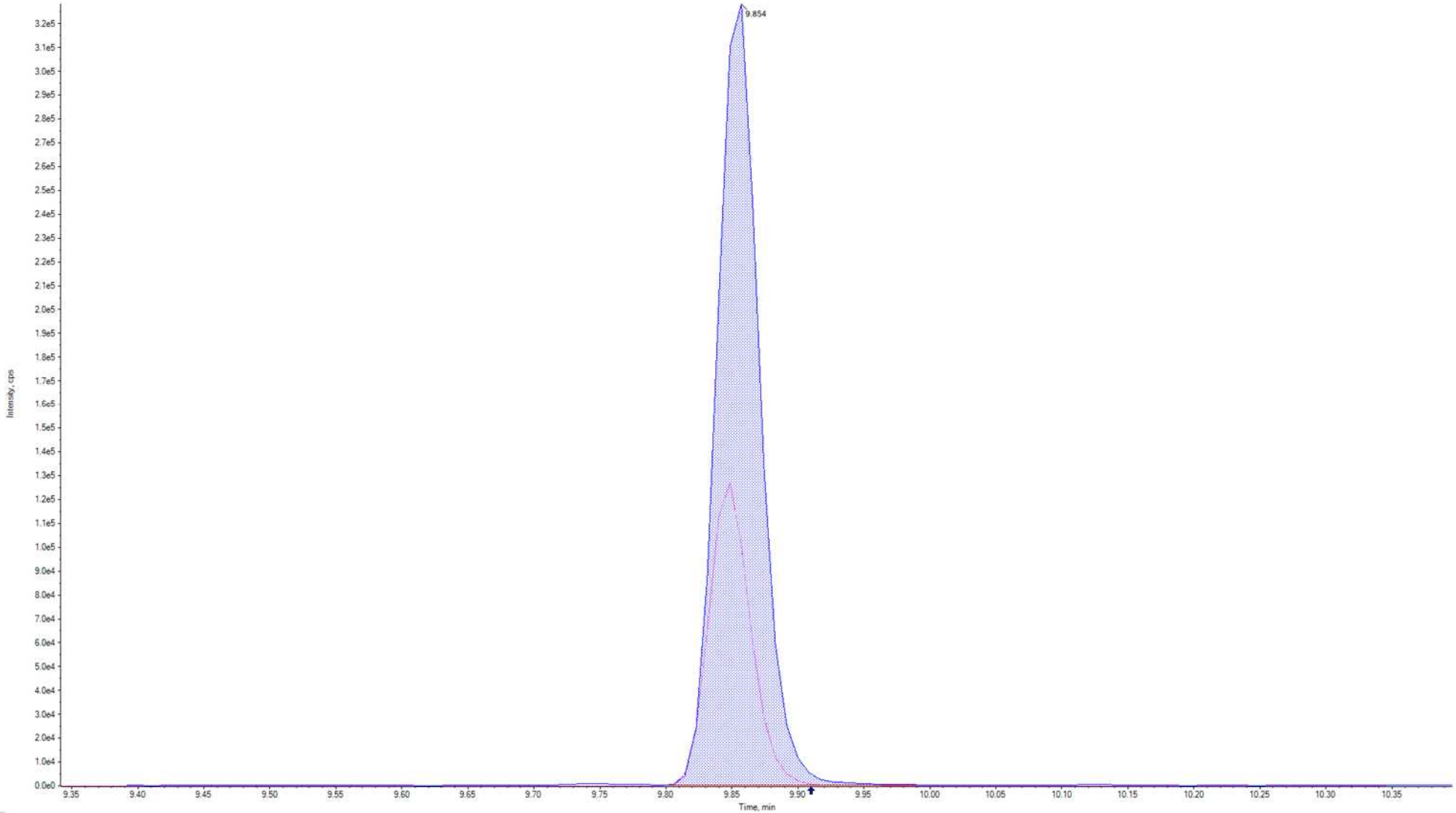
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PFTrDA_2
Sample: WG1971858-5 S/N:11124479.3 Points Across peak:38



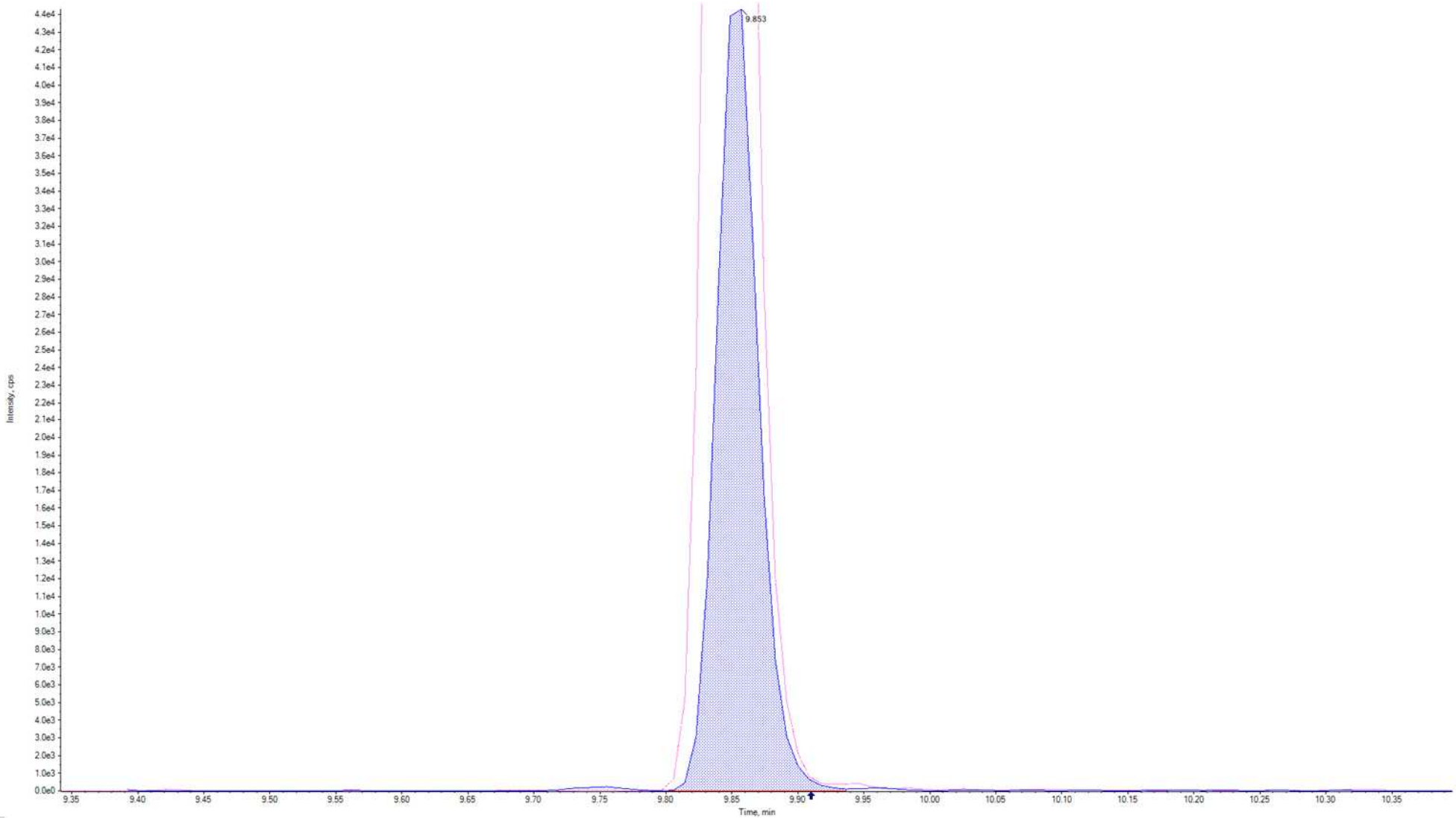
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PFTeDA
Sample: WG1971858-5 S/N:1676.7 Points Across peak:28



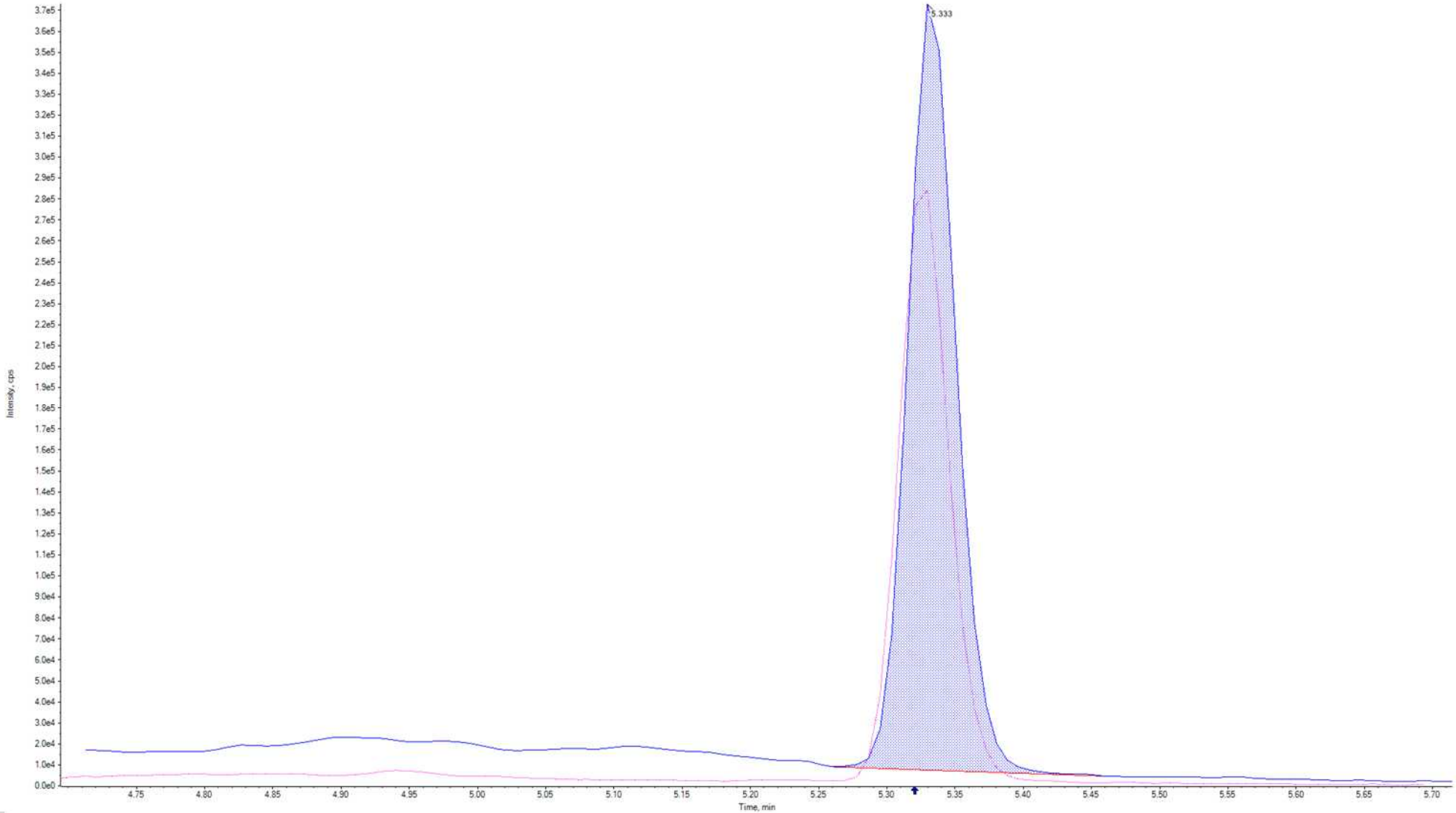
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PFTeDA_2
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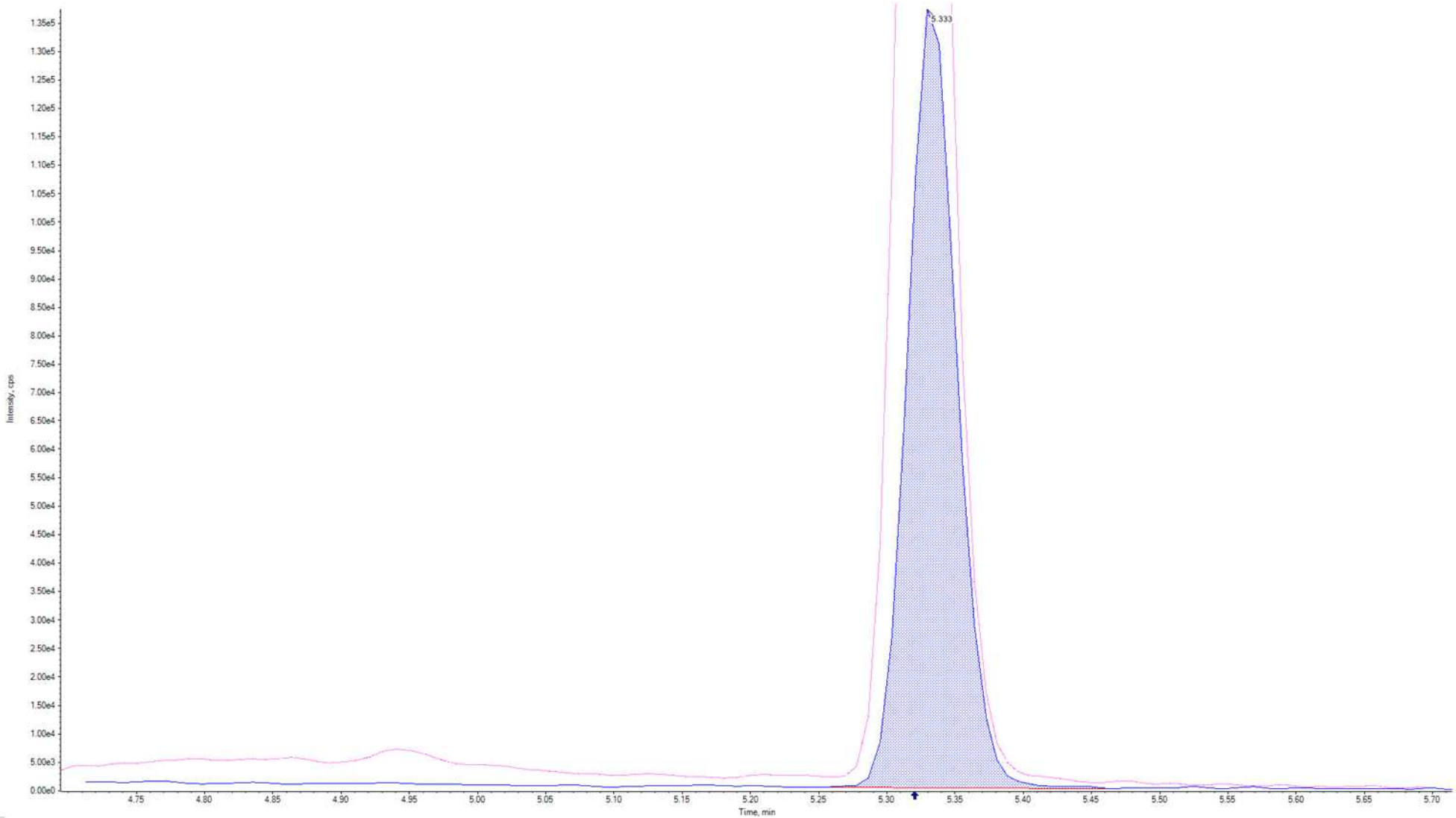
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Generated: 9/17/2024 6:15:27 AM

PFBS
Sample: WG1971858-5 S/N:82.4 Points Across peak:26



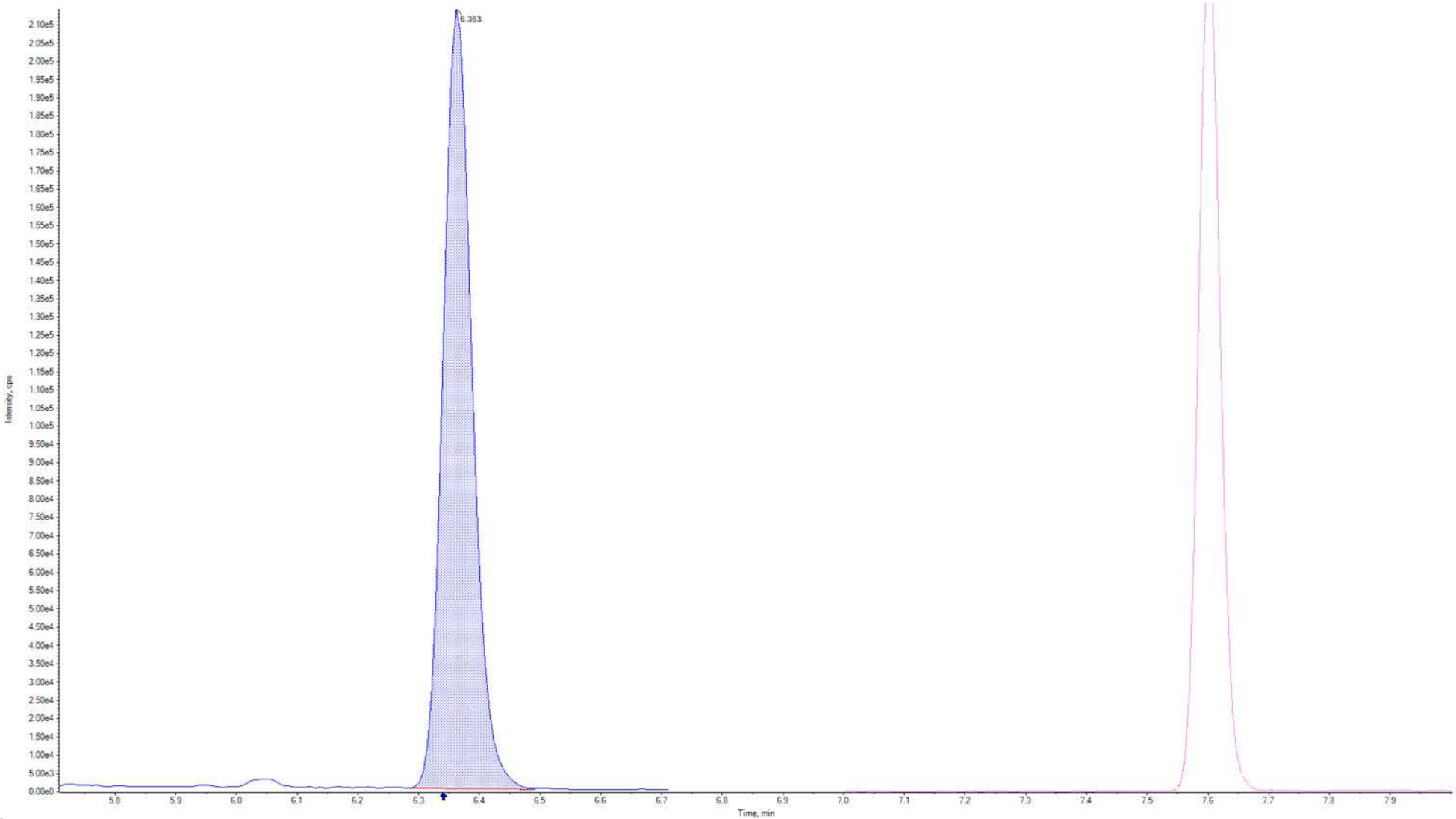
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFBS_2
Sample: WG1971858-5 S/N:940.5 Points Across peak:27



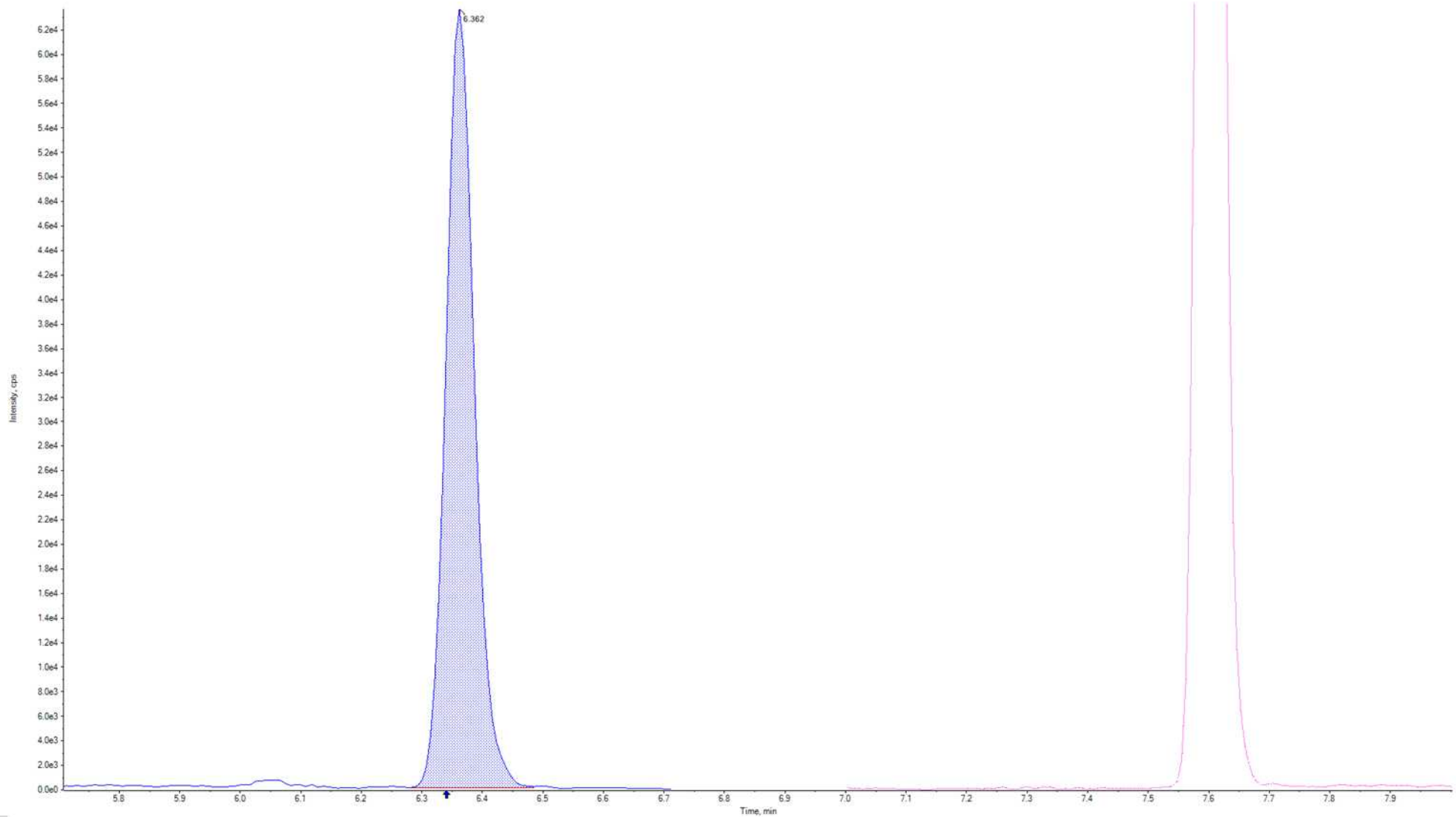
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Generated: 9/17/2024 6:15:27 AM

PFPeS
Sample: WG1971858-5 S/N:1400.2 Points Across peak:32



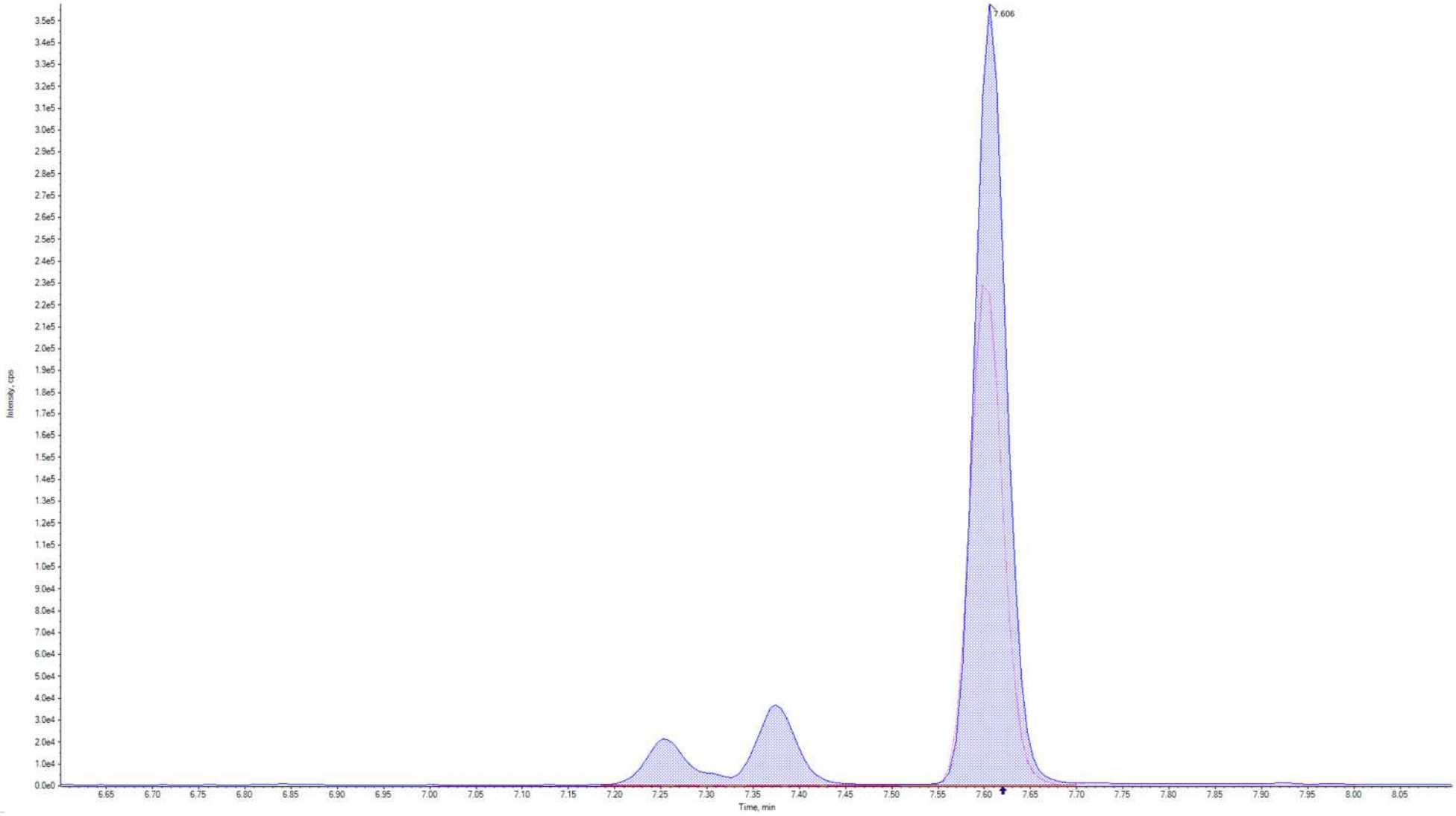
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFPeS_2
Sample: WG1971858-5 S/N:1833.4 Points Across peak:31



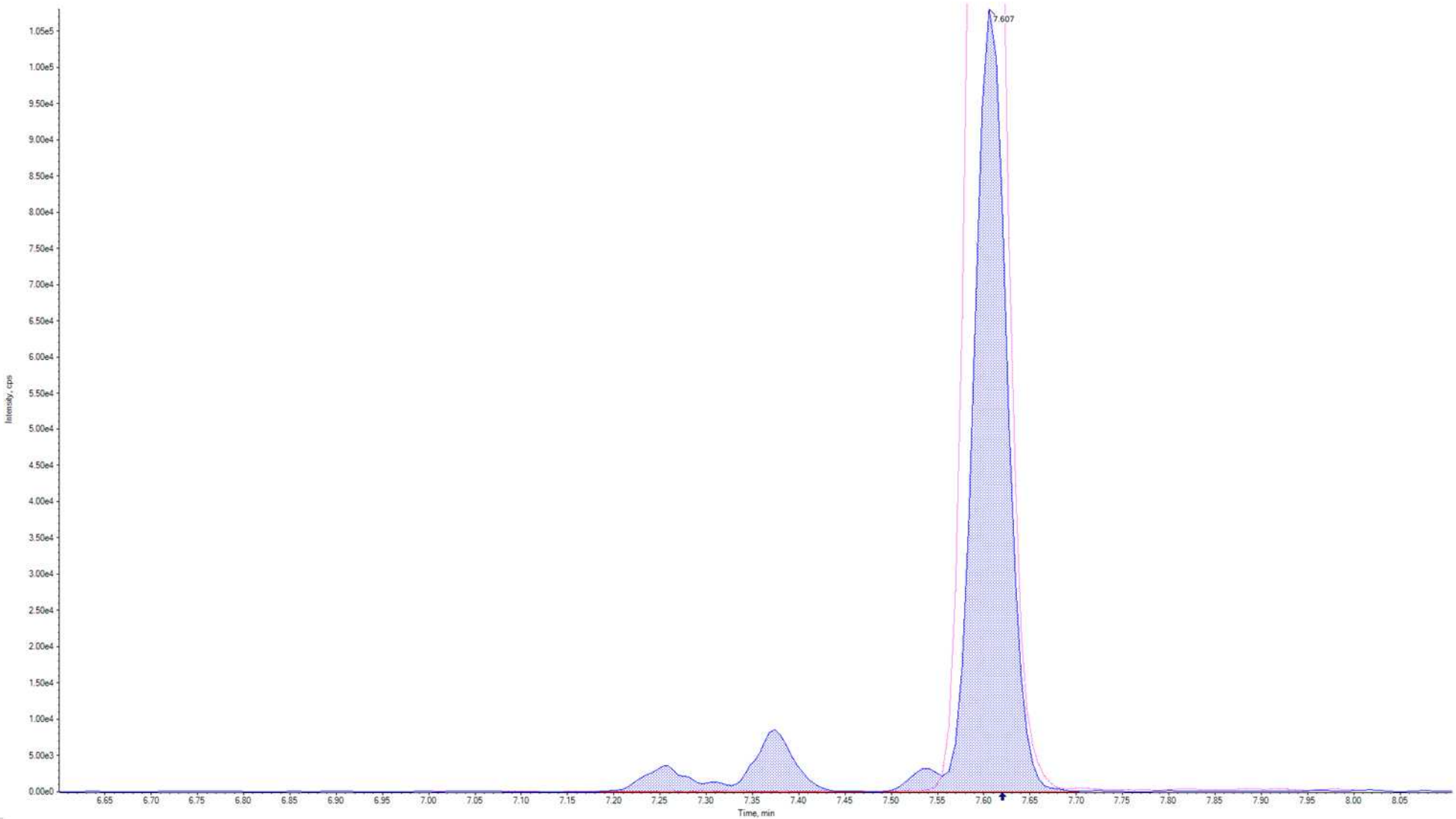
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHxS
Sample: WG1971858-5 S/N:1565.3 Points Across peak:84



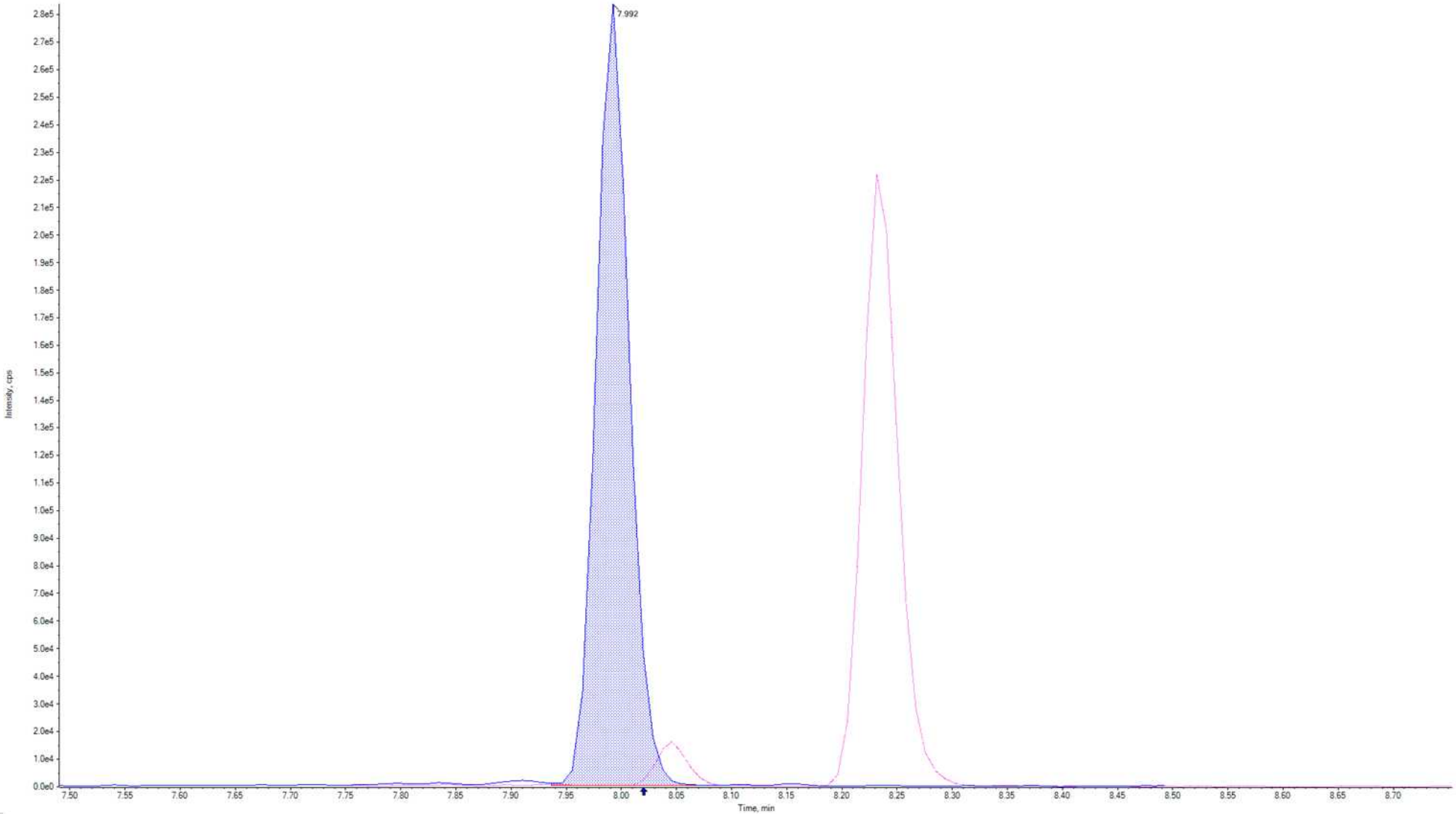
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHxS_2
Sample: WG1971858-5 S/N:30181.6 Points Across peak:87



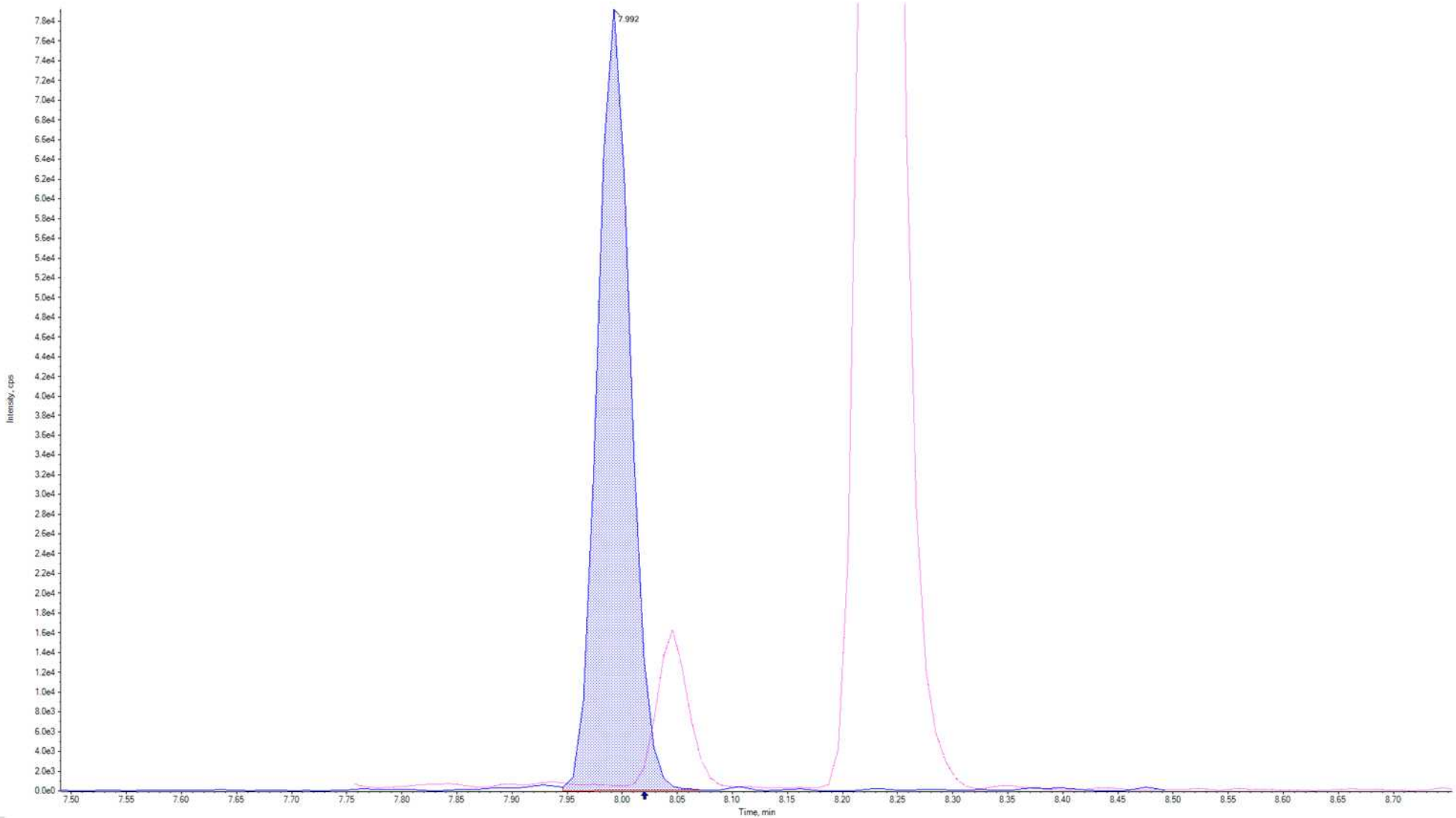
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS
Sample: WG1971858-5 S/N:1546.3 Points Across peak:18



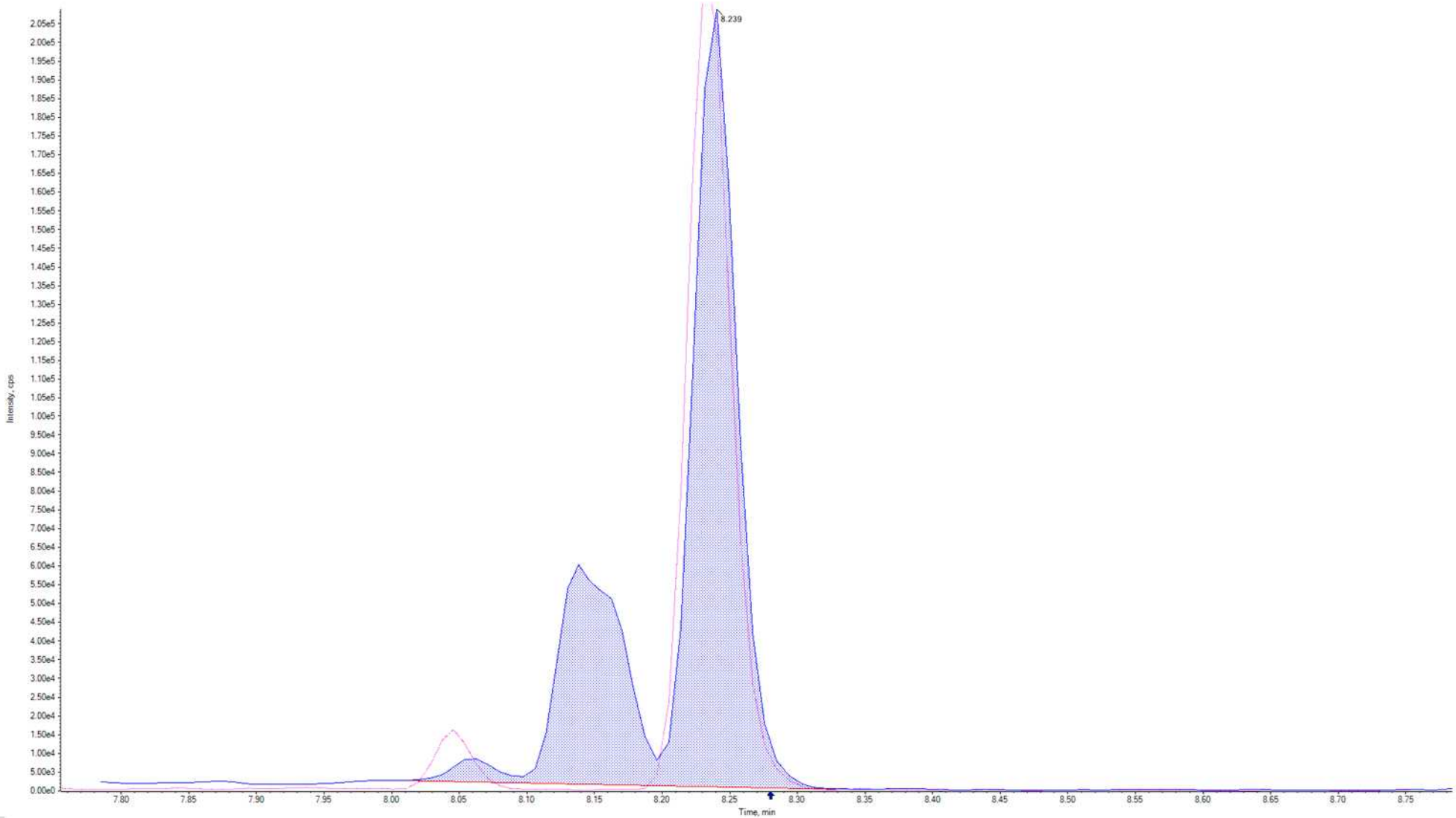
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFHpS_2
Sample: WG1971858-5 S/N:8653.9 Points Across peak:16



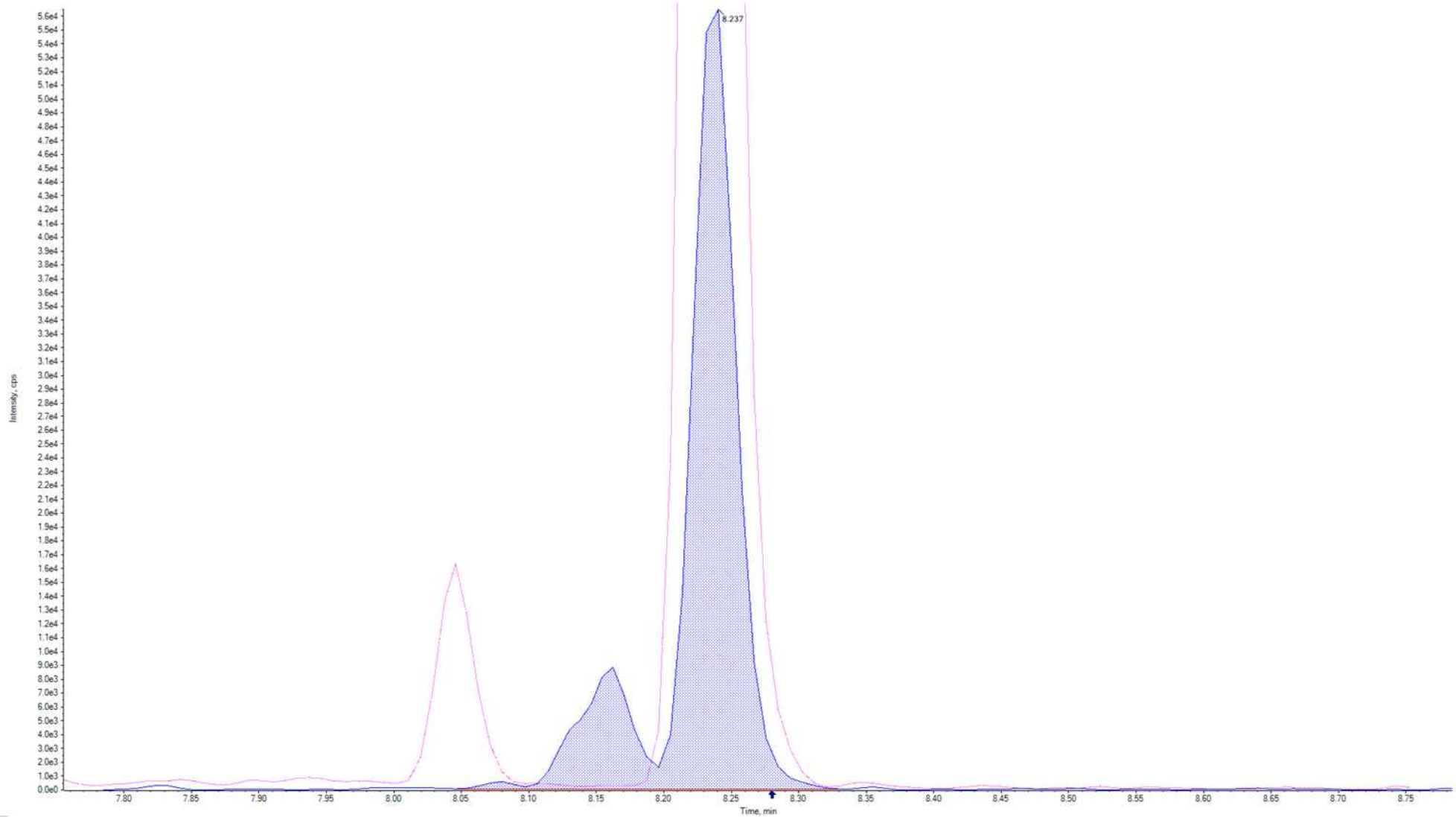
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOS
Sample: WG1971858-5 S/N:959.3 Points Across peak:38



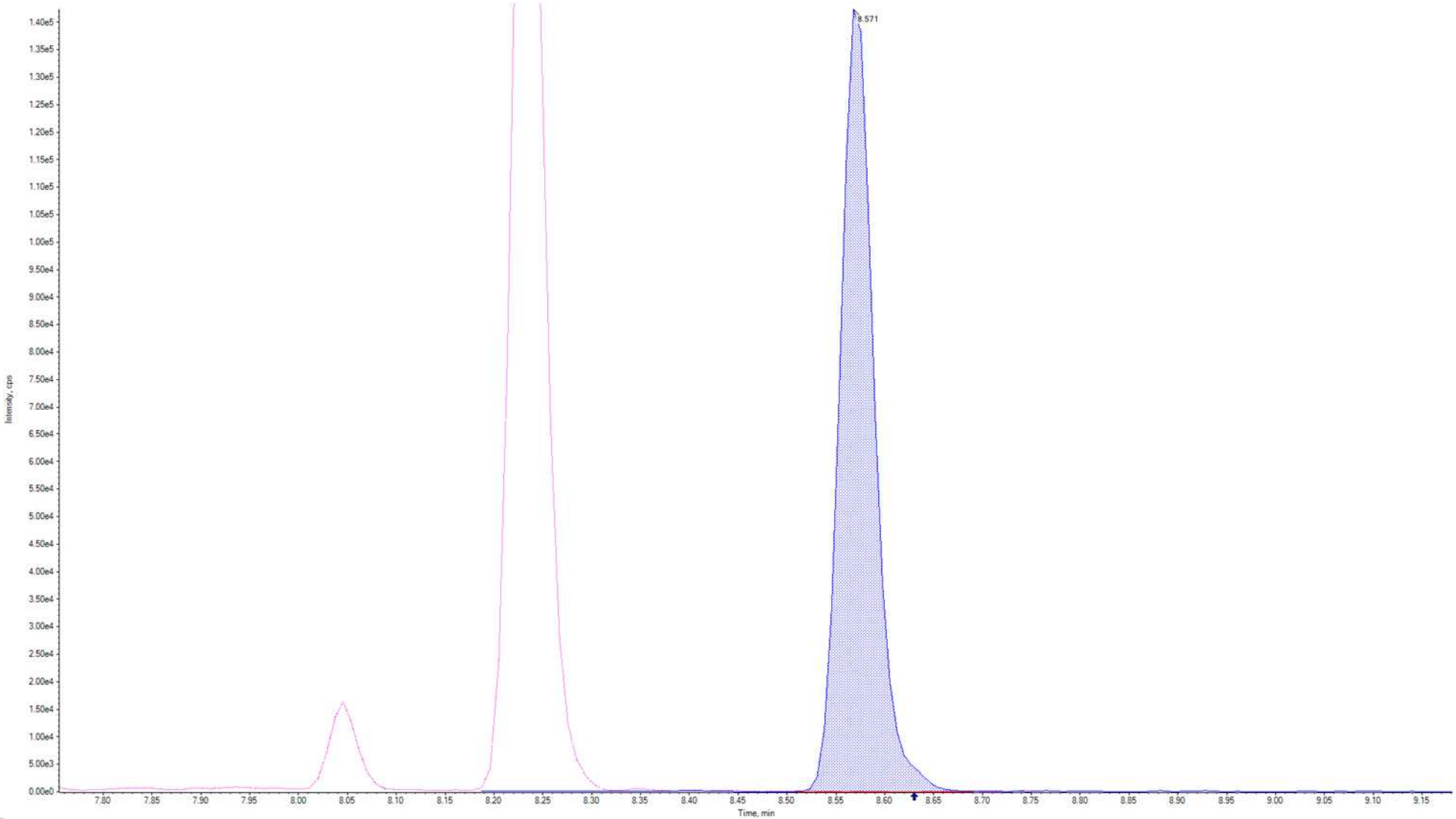
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOS_2
Sample: WG1971858-5 S/N:9758.8 Points Across peak:35



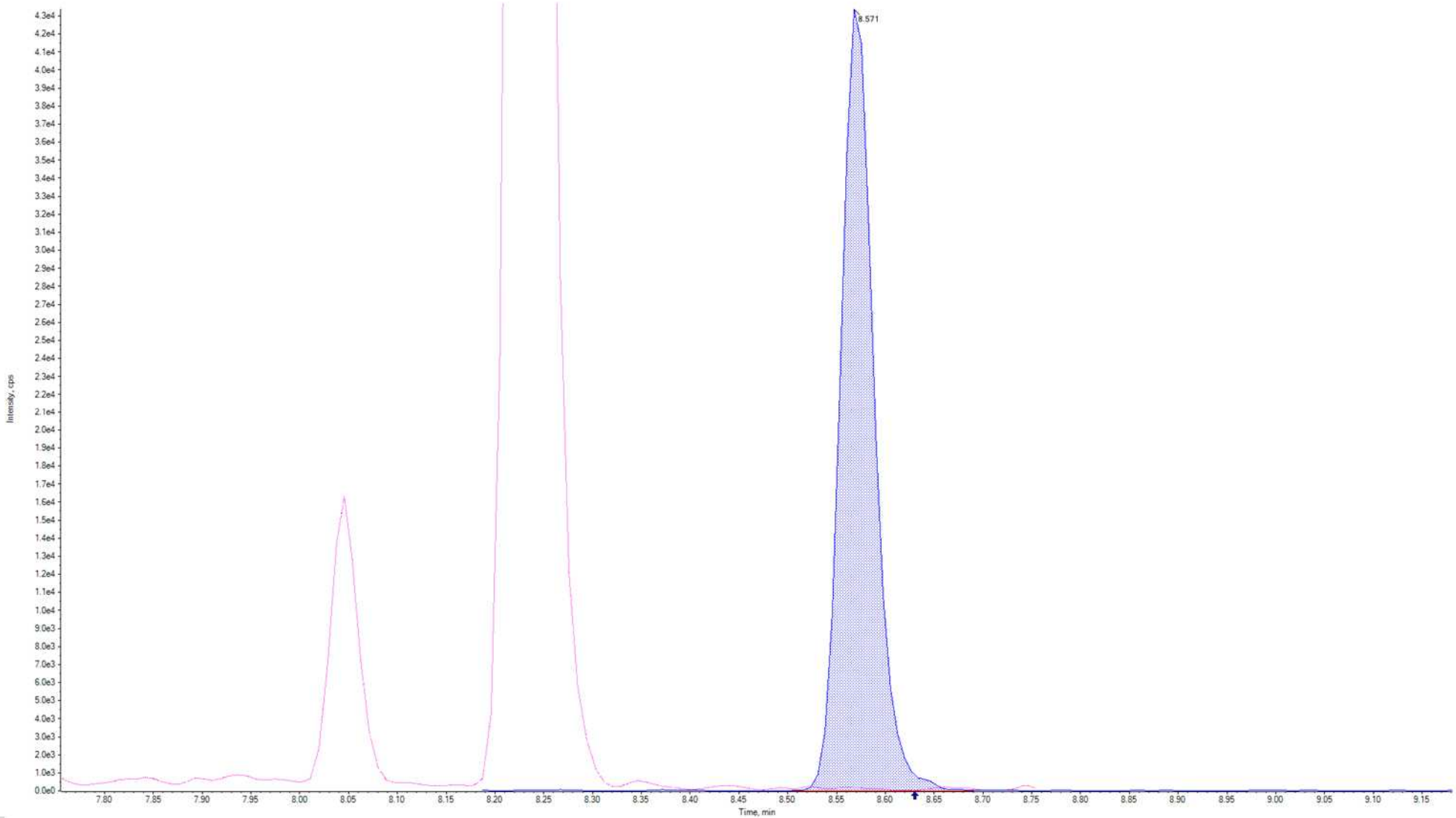
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

PFNS
Sample: WG1971858-5 S/N:7366.0 Points Across peak:29



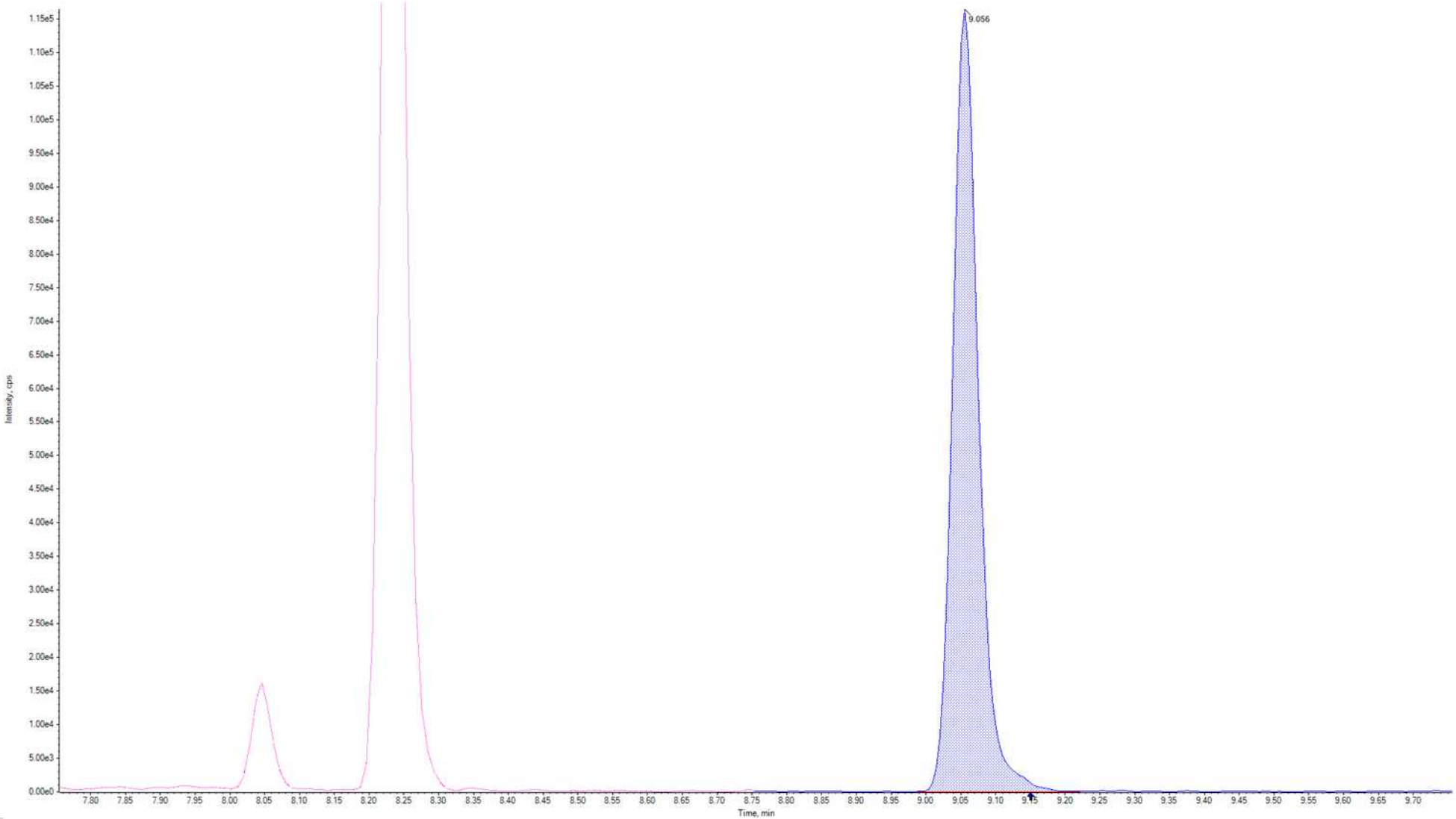
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFNS_2
Sample: WG1971858-5 S/N:1974.7 Points Across peak:29



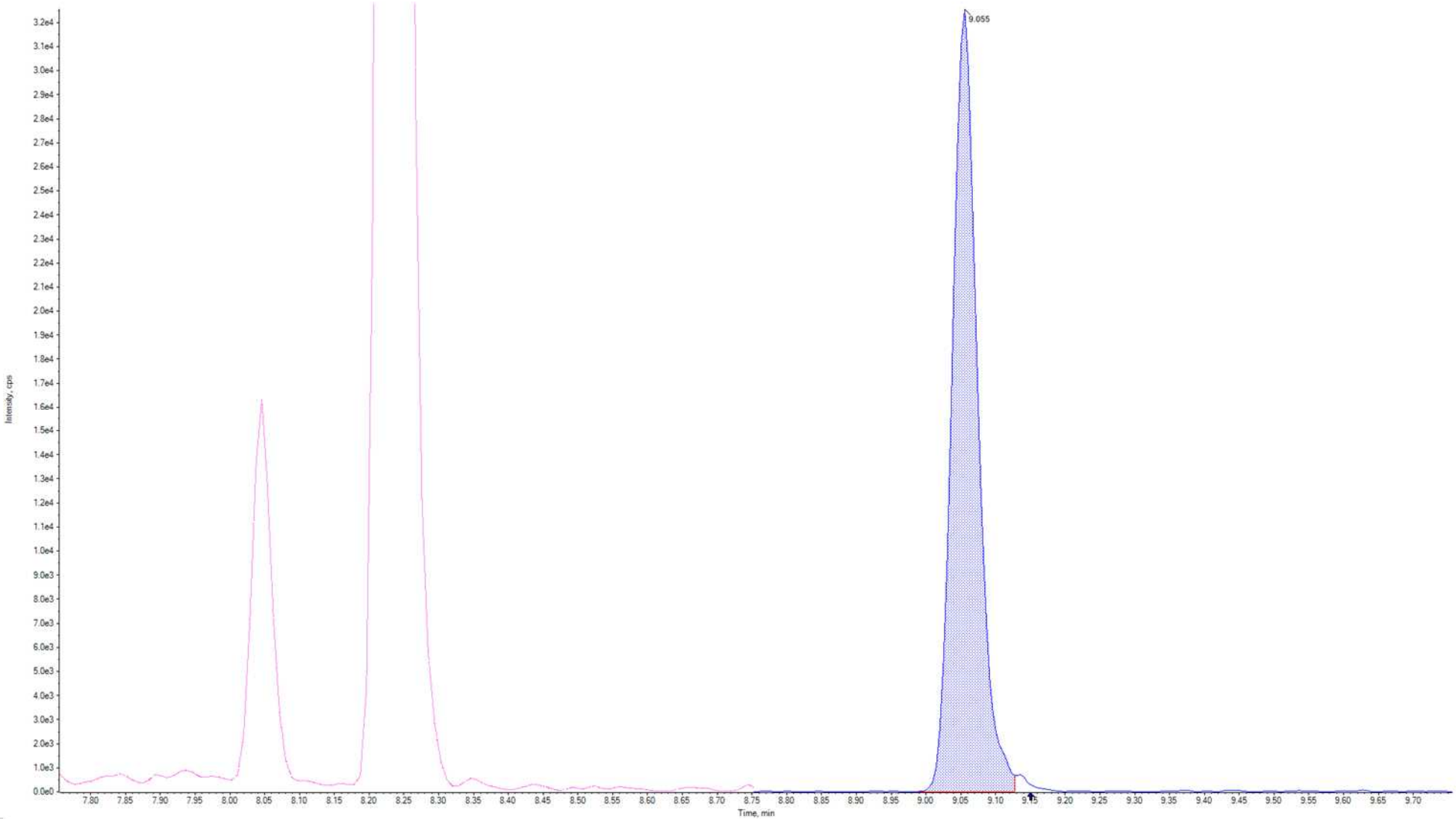
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Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

PFDS
Sample: WG1971858-5 S/N:4706.8 Points Across peak:48



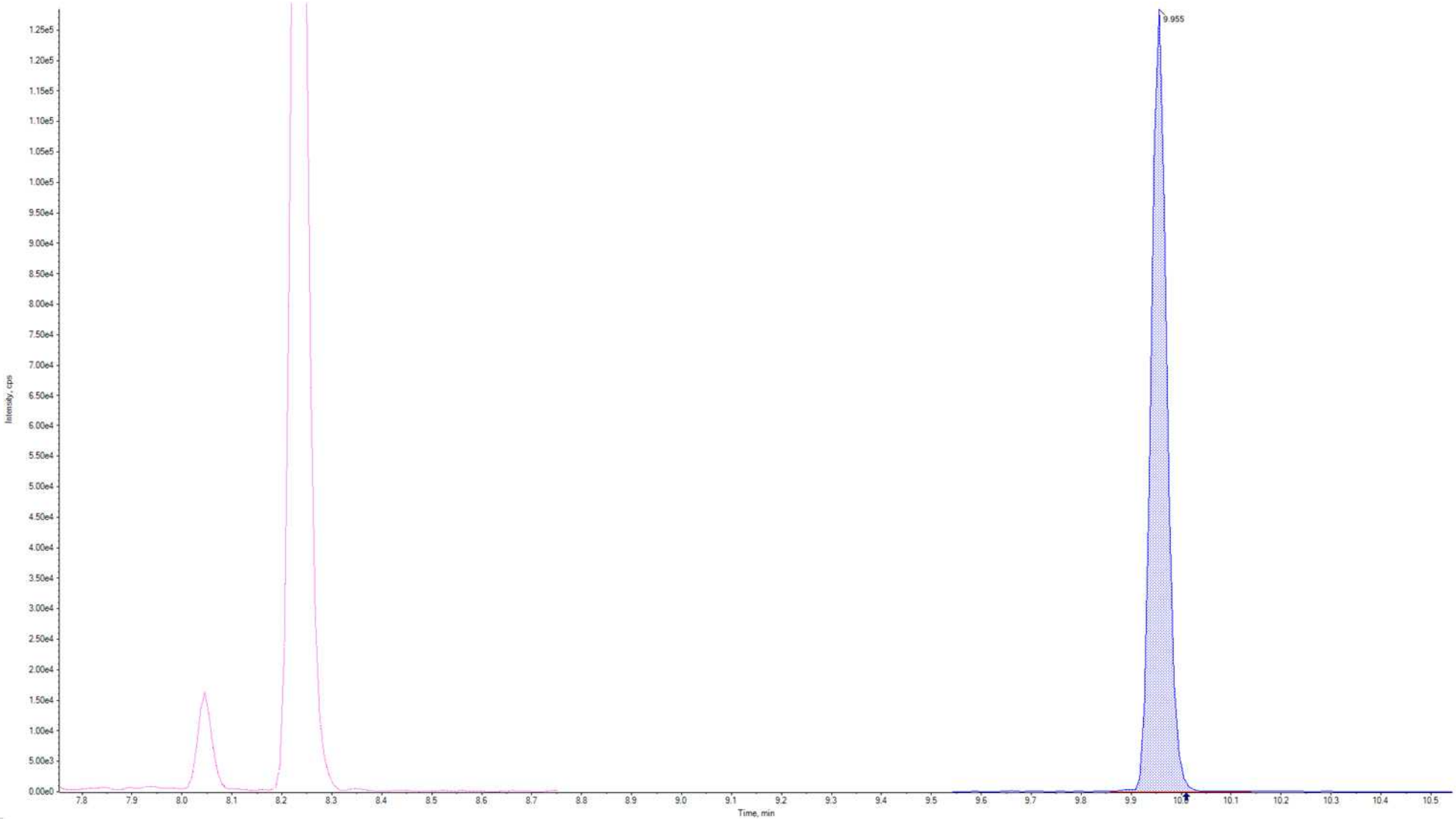
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Last Altered: 9/17/2024 10:47:11 AM
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PFDS_2
Sample: WG1971858-5 S/N:79592.9 Points Across peak:33



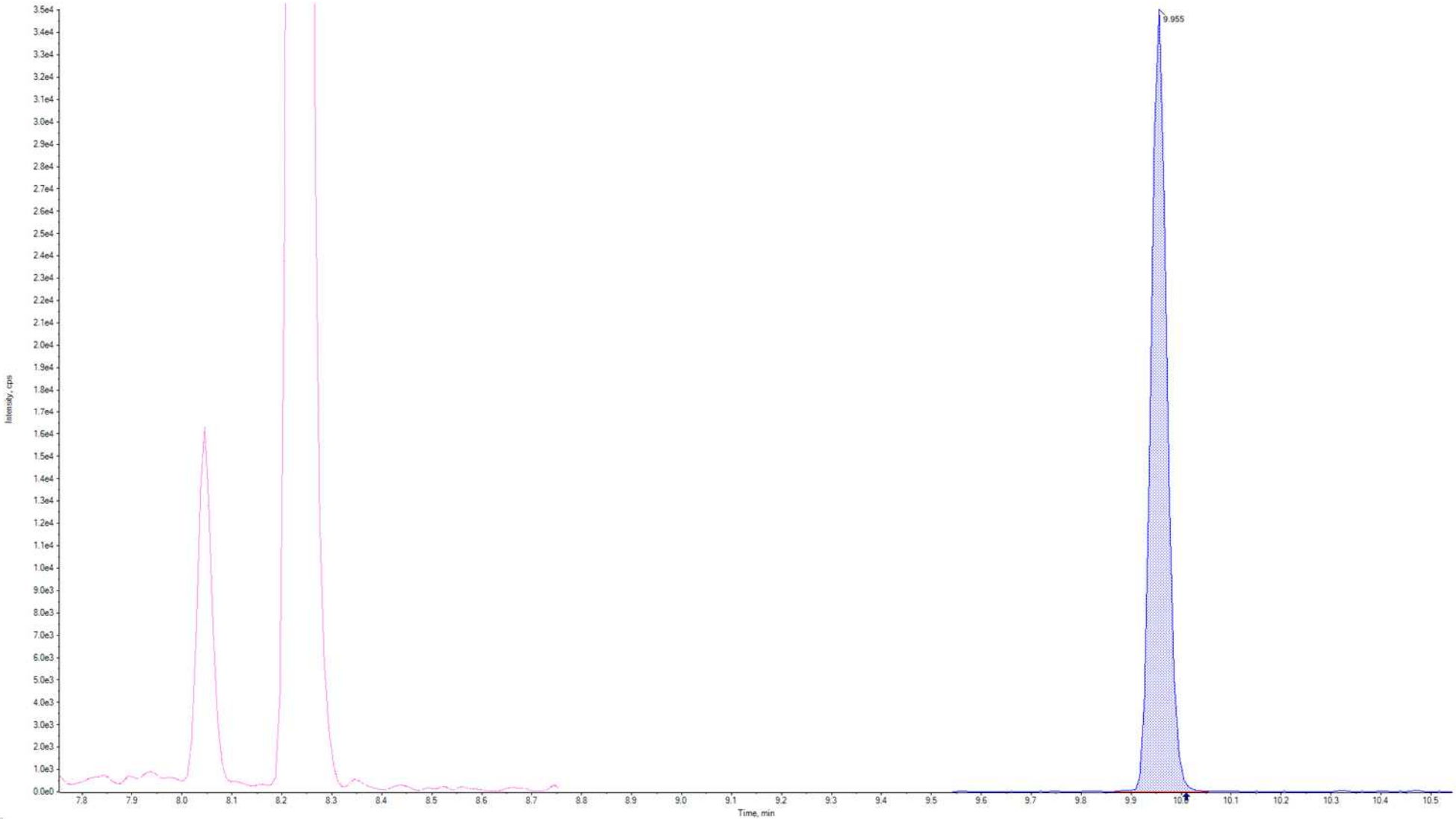
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS
Sample: WG1971858-5 S/N:1055557.2 Points Across peak:30



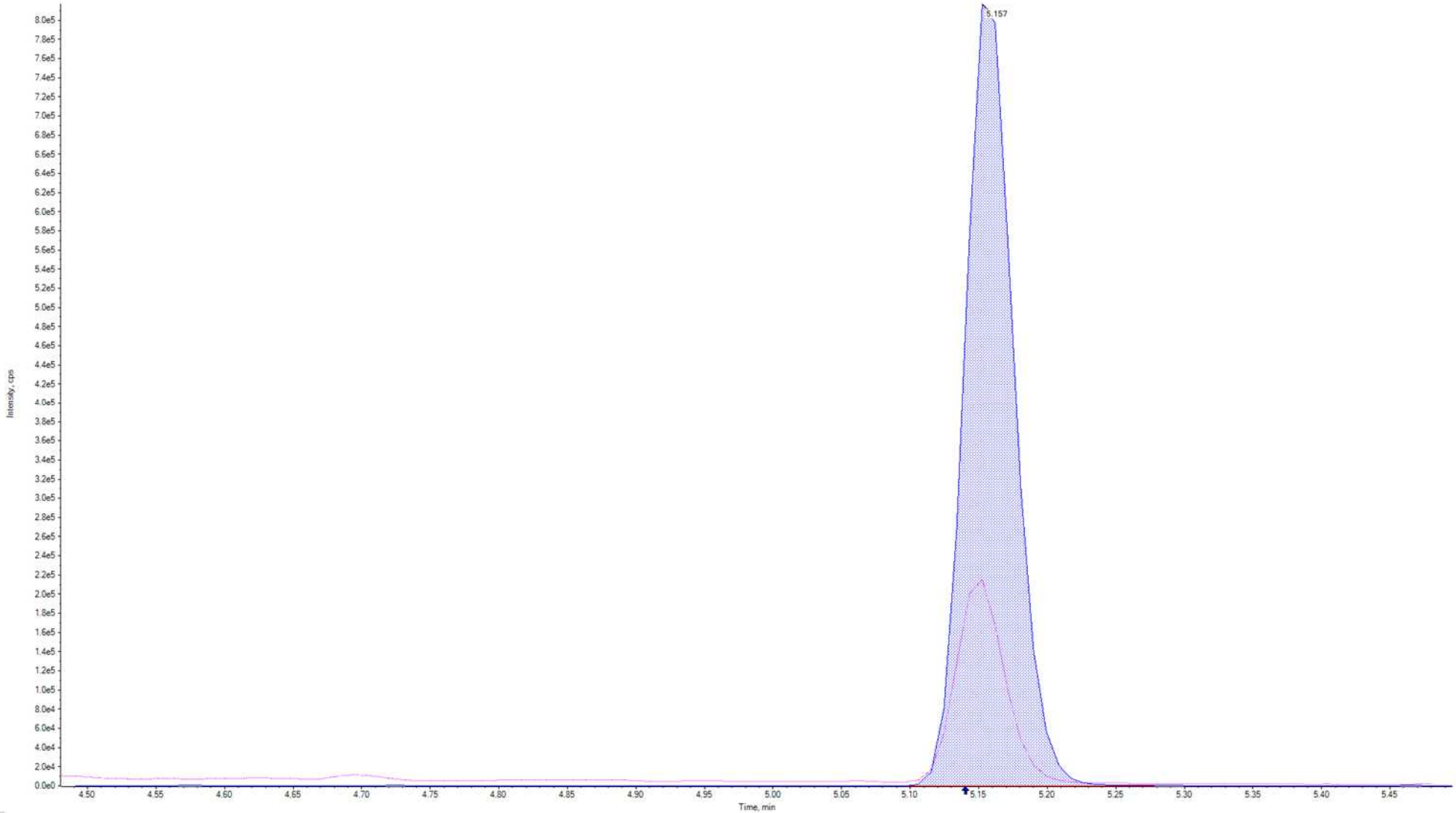
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFDoS_2
Sample: WG1971858-5 S/N:11621436.7 Points Across peak:22



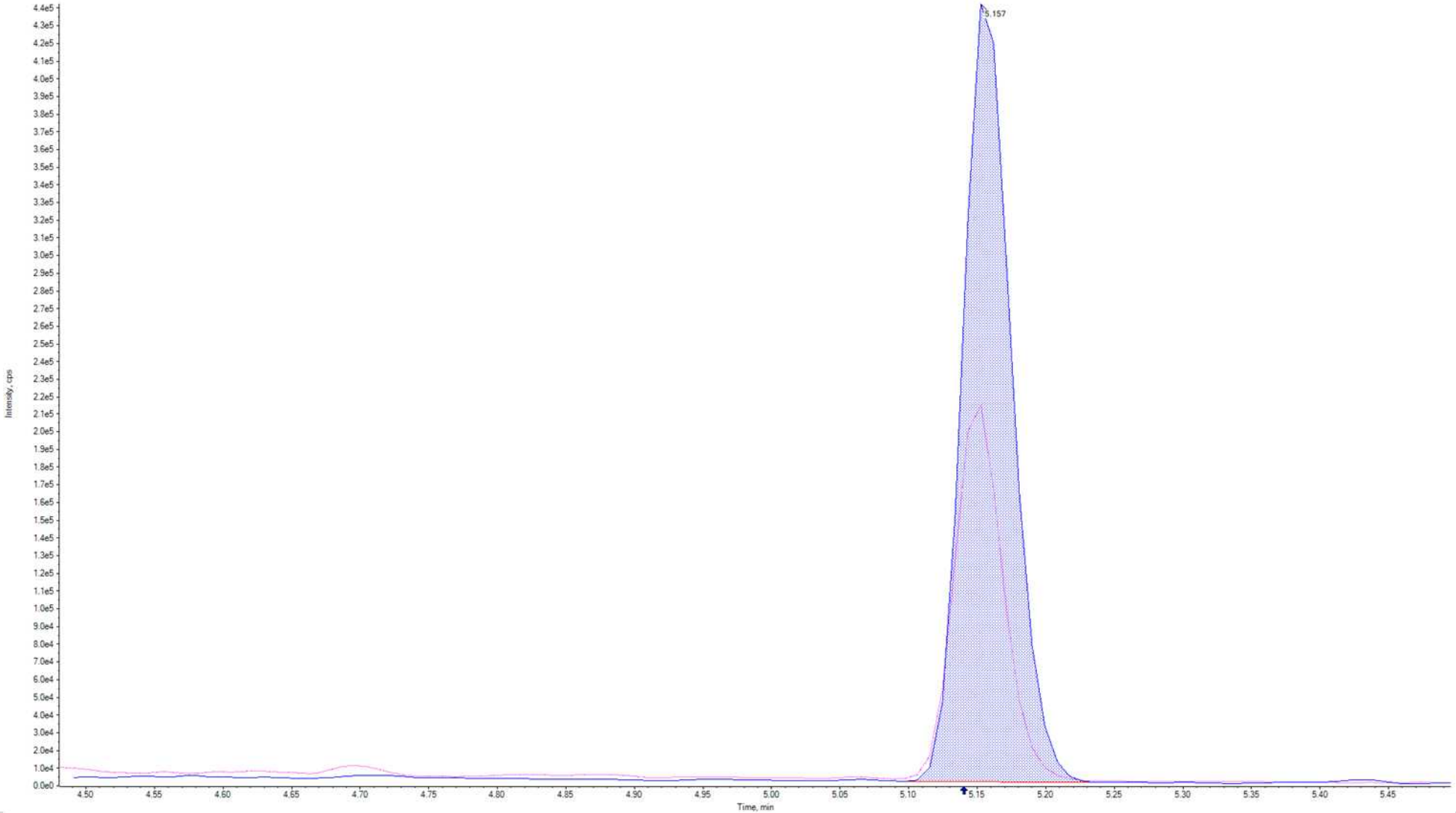
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS
Sample: WG1971858-5 S/N:3214.2 Points Across peak:22



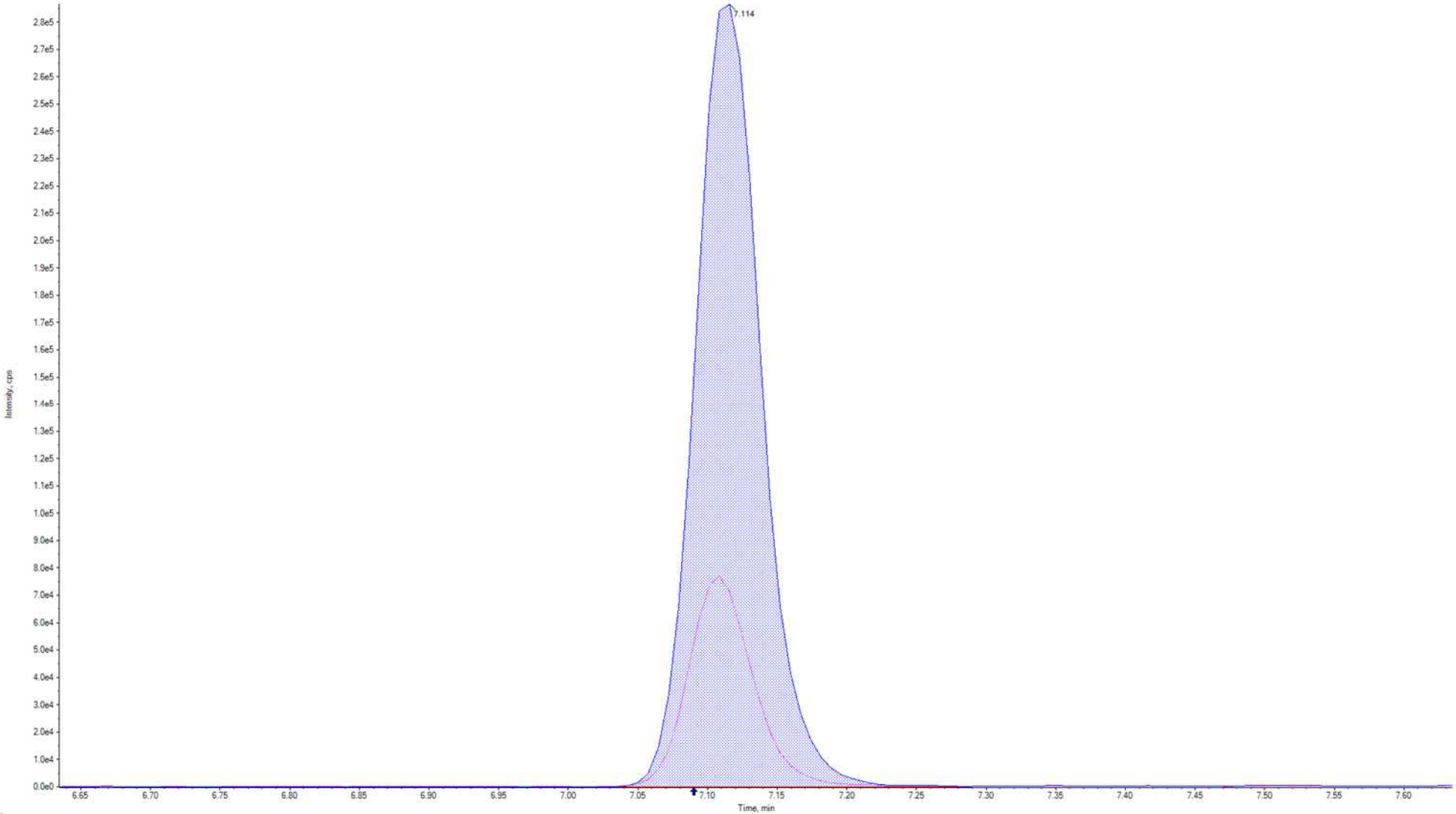
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

4:2FTS_2
Sample: WG1971858-5 S/N:557.3 Points Across peak:17



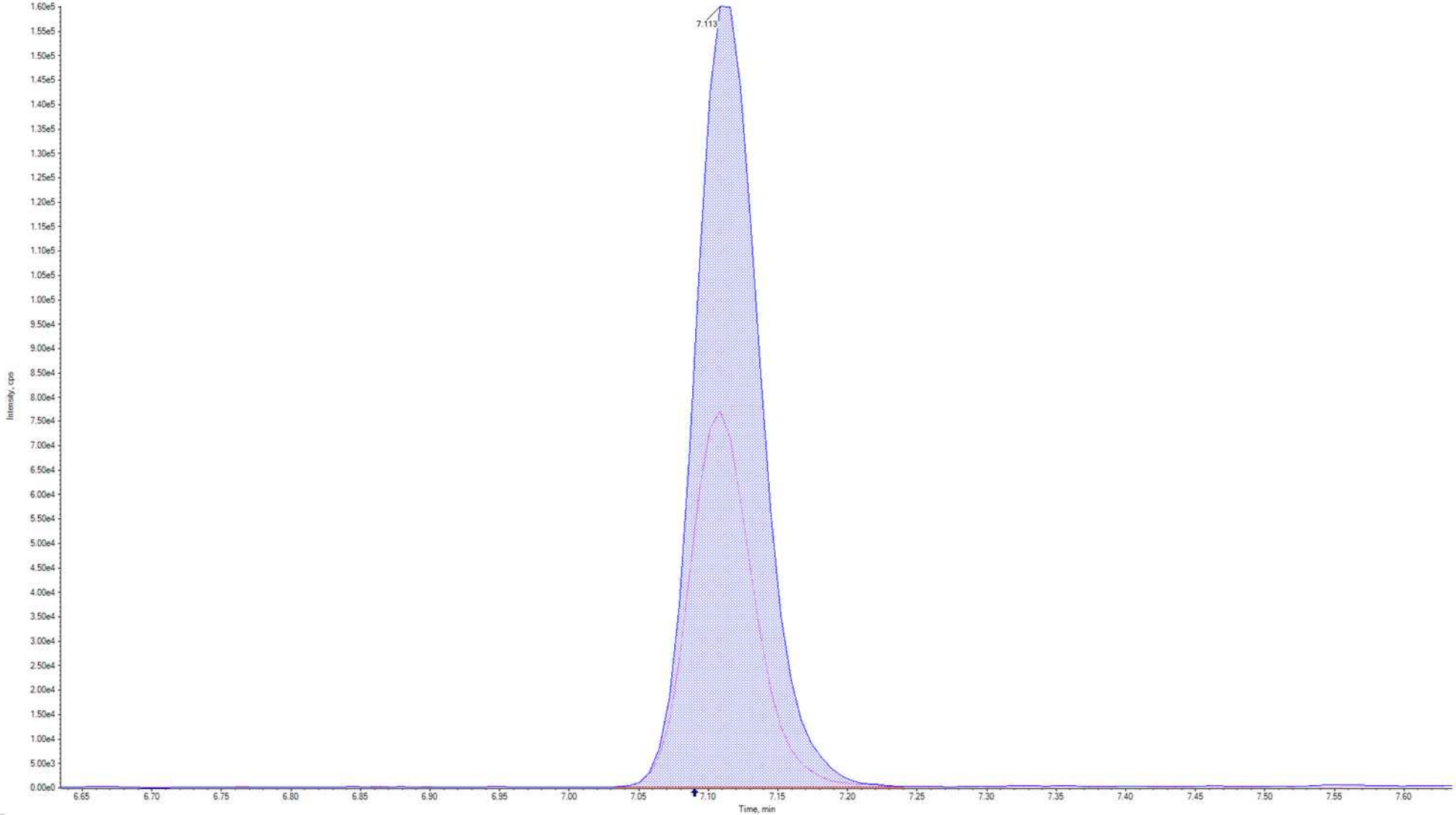
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS
Sample: WG1971858-5 S/N:8871.6 Points Across peak:39



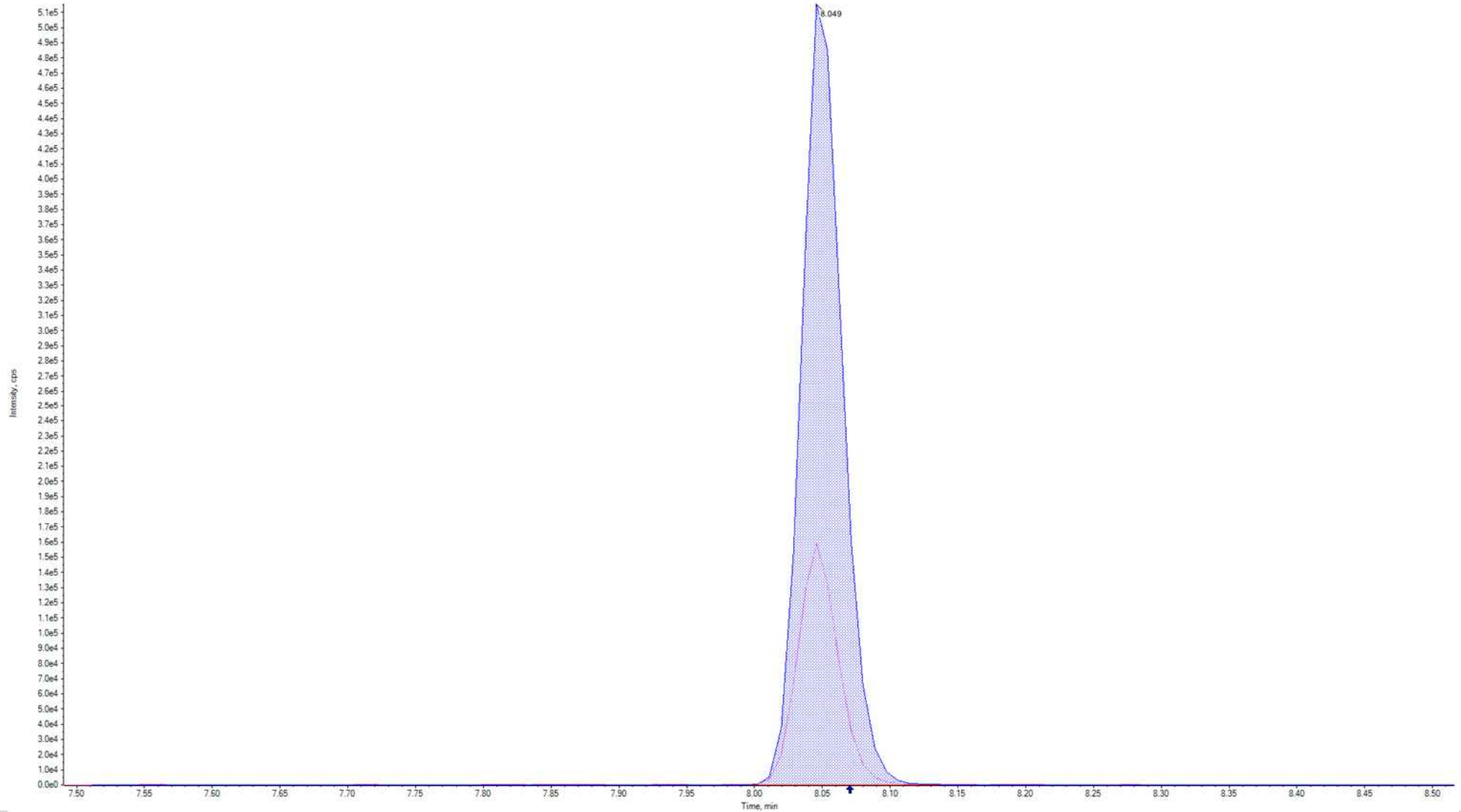
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

6:2FTS_2
Sample: WG1971858-5 S/N:2242.5 Points Across peak:31



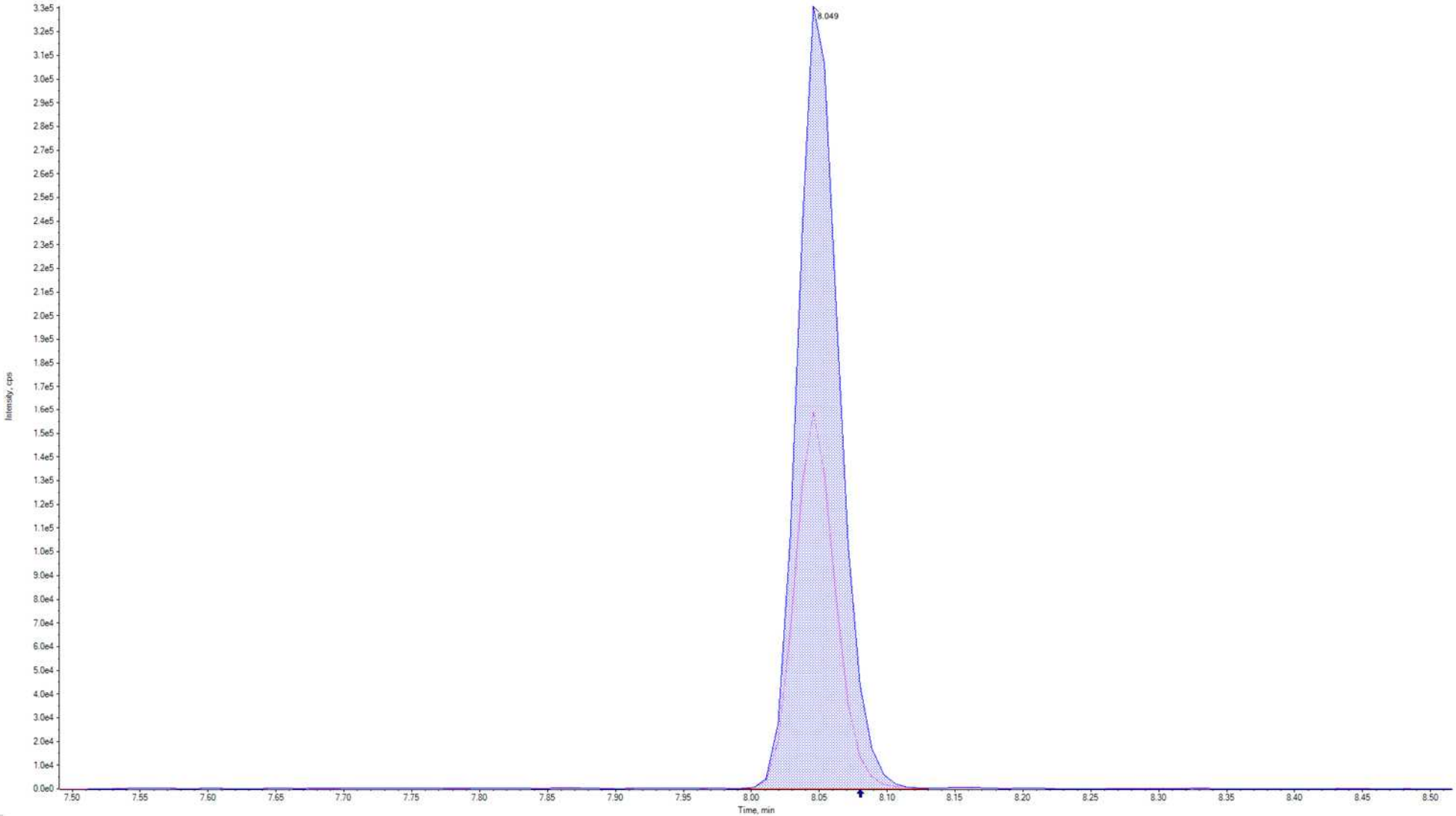
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

8:2FTS
Sample: WG1971858-5 S/N:3093.4 Points Across peak:23



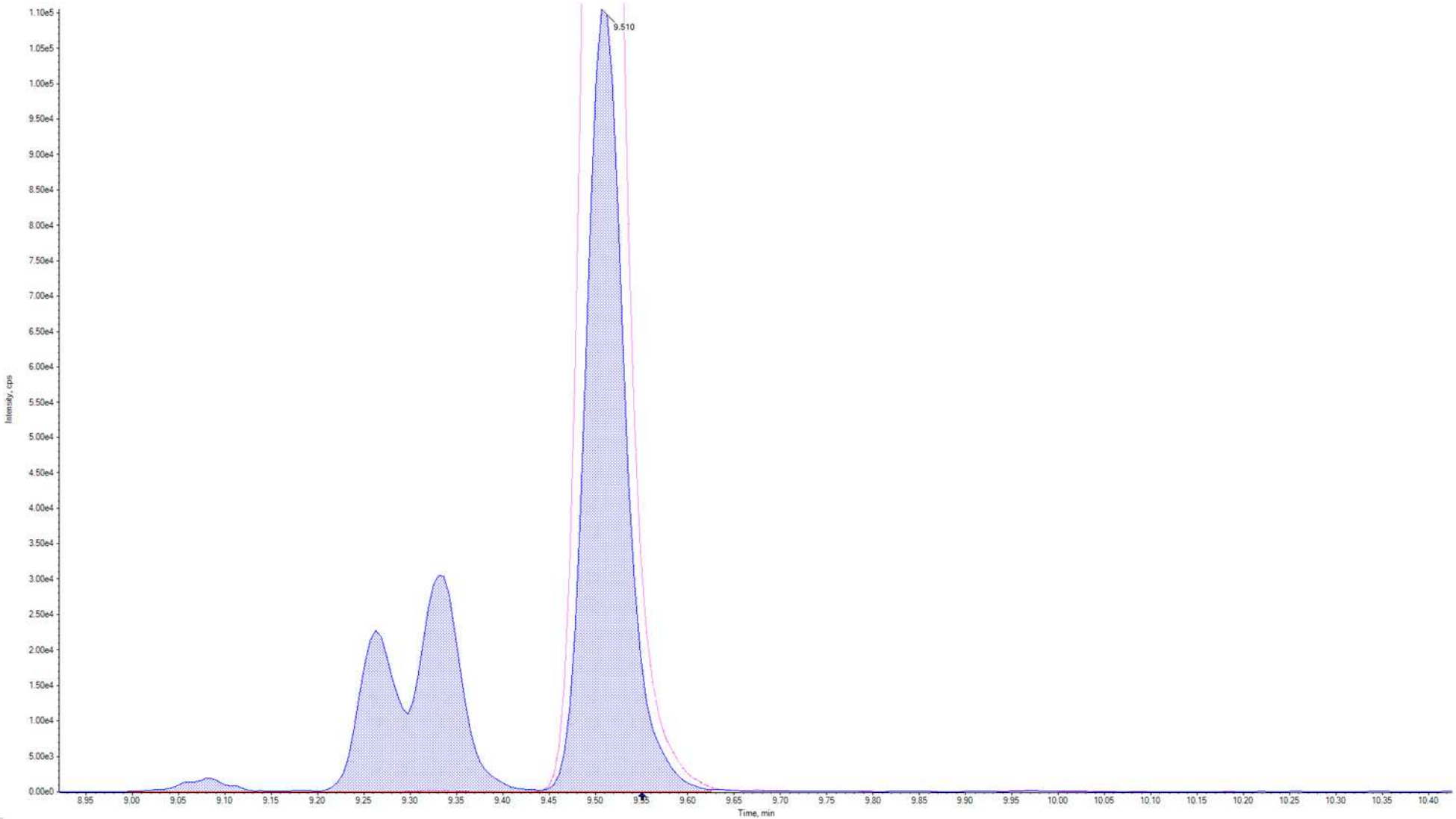
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Generated: 9/17/2024 6:15:27 AM

8:2FTS_2
Sample: WG1971858-5 S/N:3139.3 Points Across peak:18



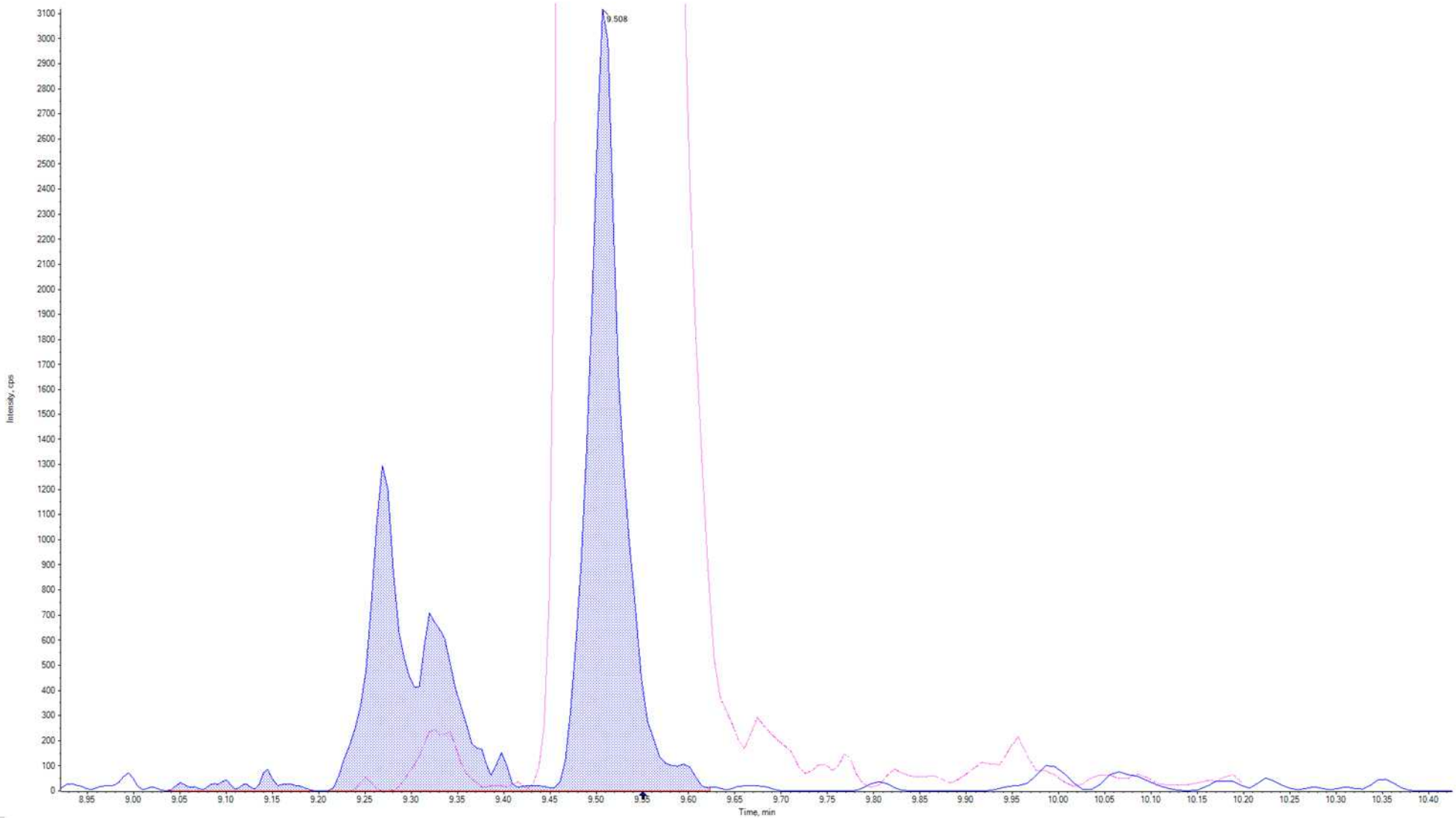
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Generated: 9/17/2024 6:15:27 AM

PFOSA
Sample: WG1971858-5 S/N:17257.5 Points Across peak:116



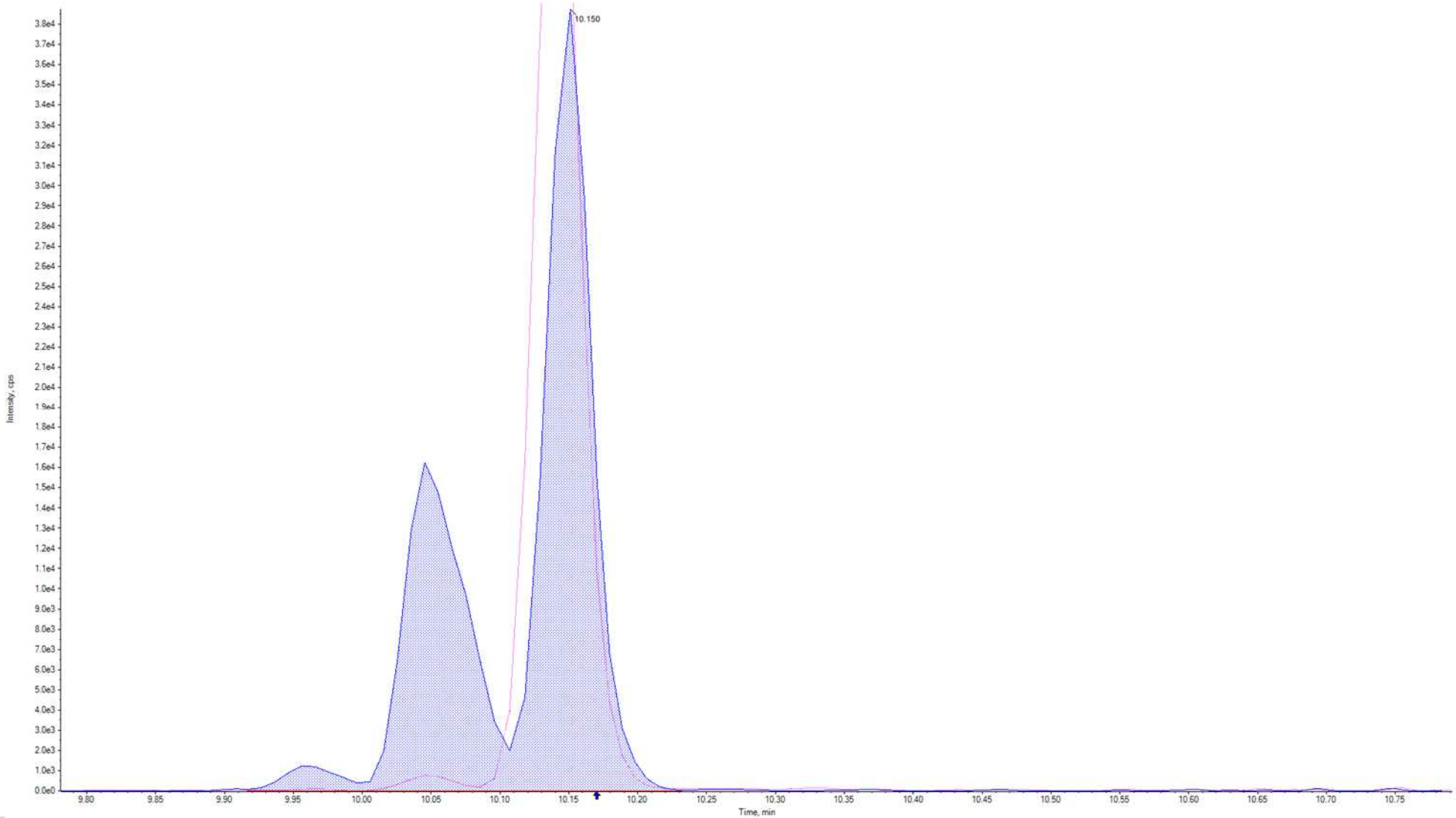
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFOSA_2
Sample: WG1971858-5 S/N:287.1 Points Across peak:107



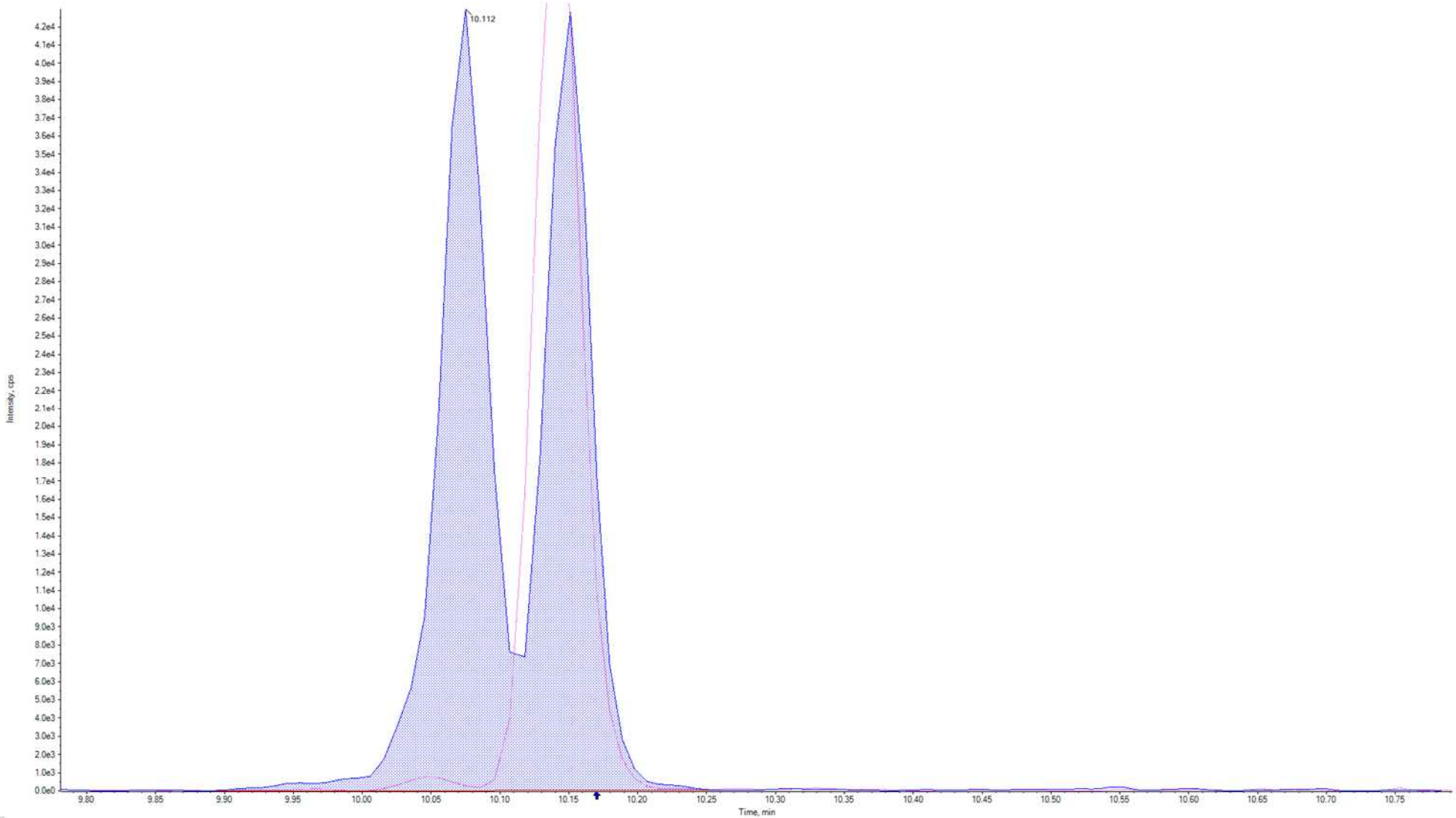
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Generated: 9/17/2024 6:15:27 AM

NMeFOSA
Sample: WG1971858-5 S/N:583780.3 Points Across peak:34



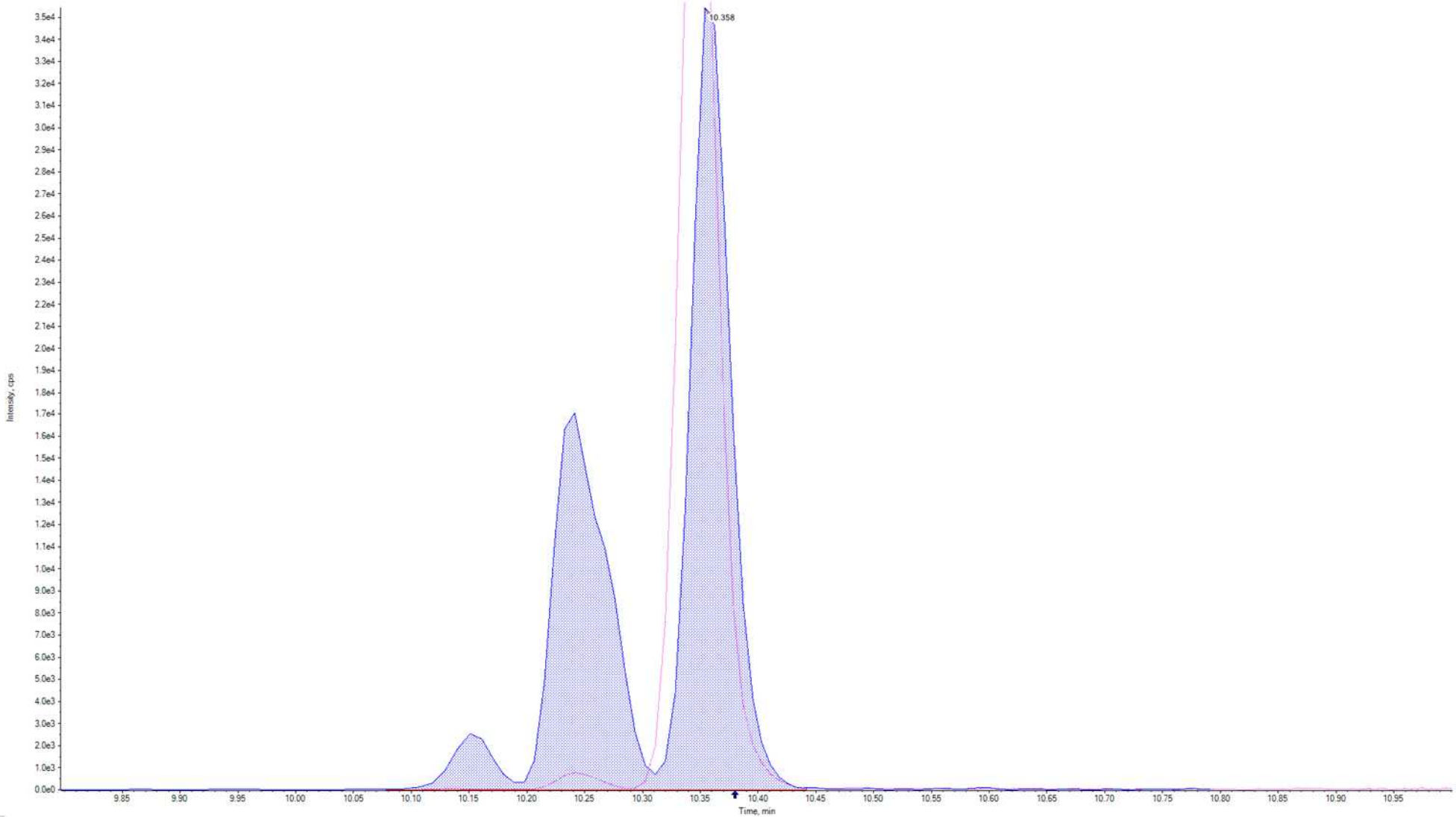
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Alpha Analytical Inc.
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NMeFOSA_2
Sample: WG1971858-5 S/N:2532.0 Points Across peak:40



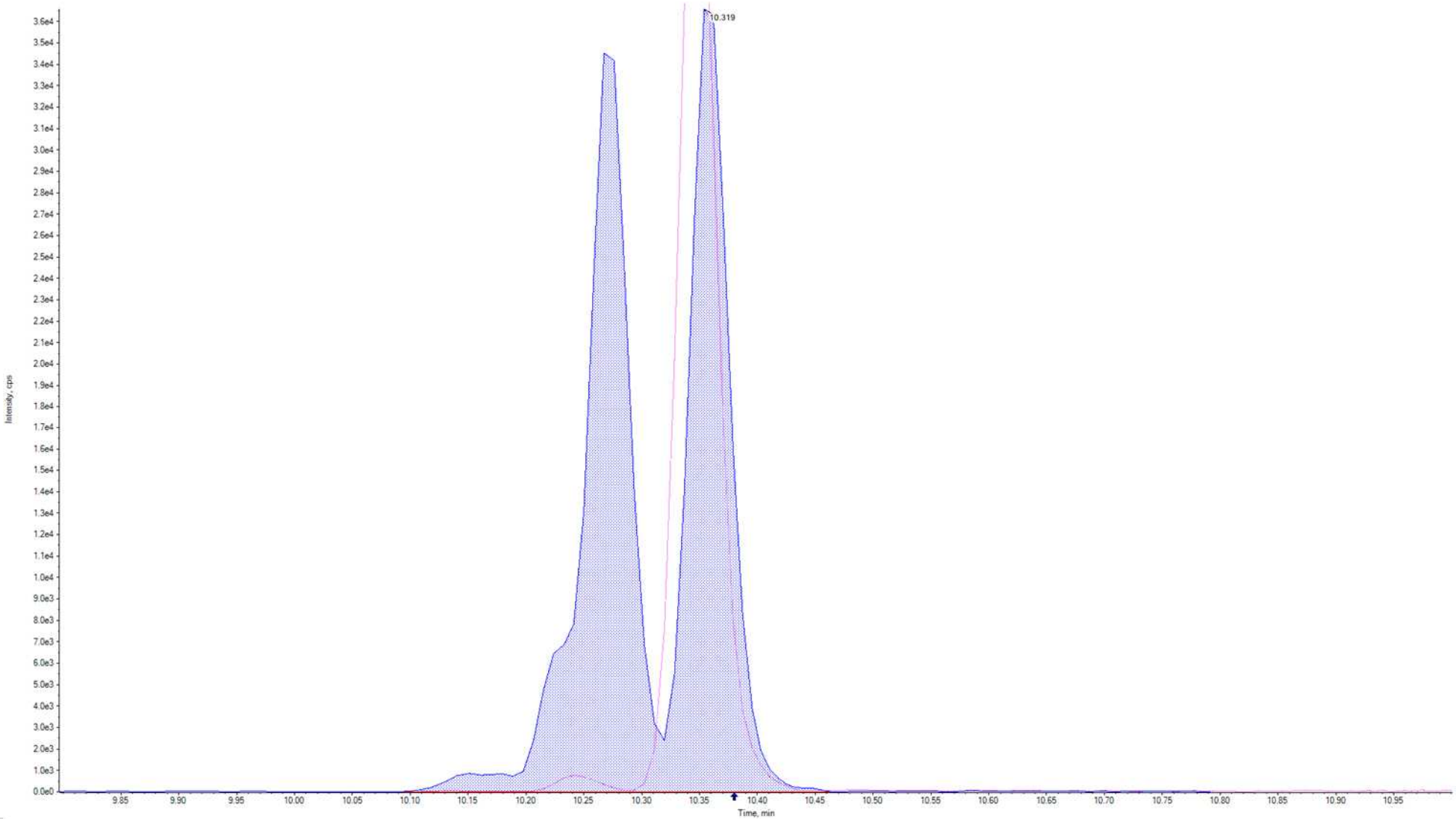
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA
Sample: WG1971858-5 S/N:648.9 Points Across peak:43



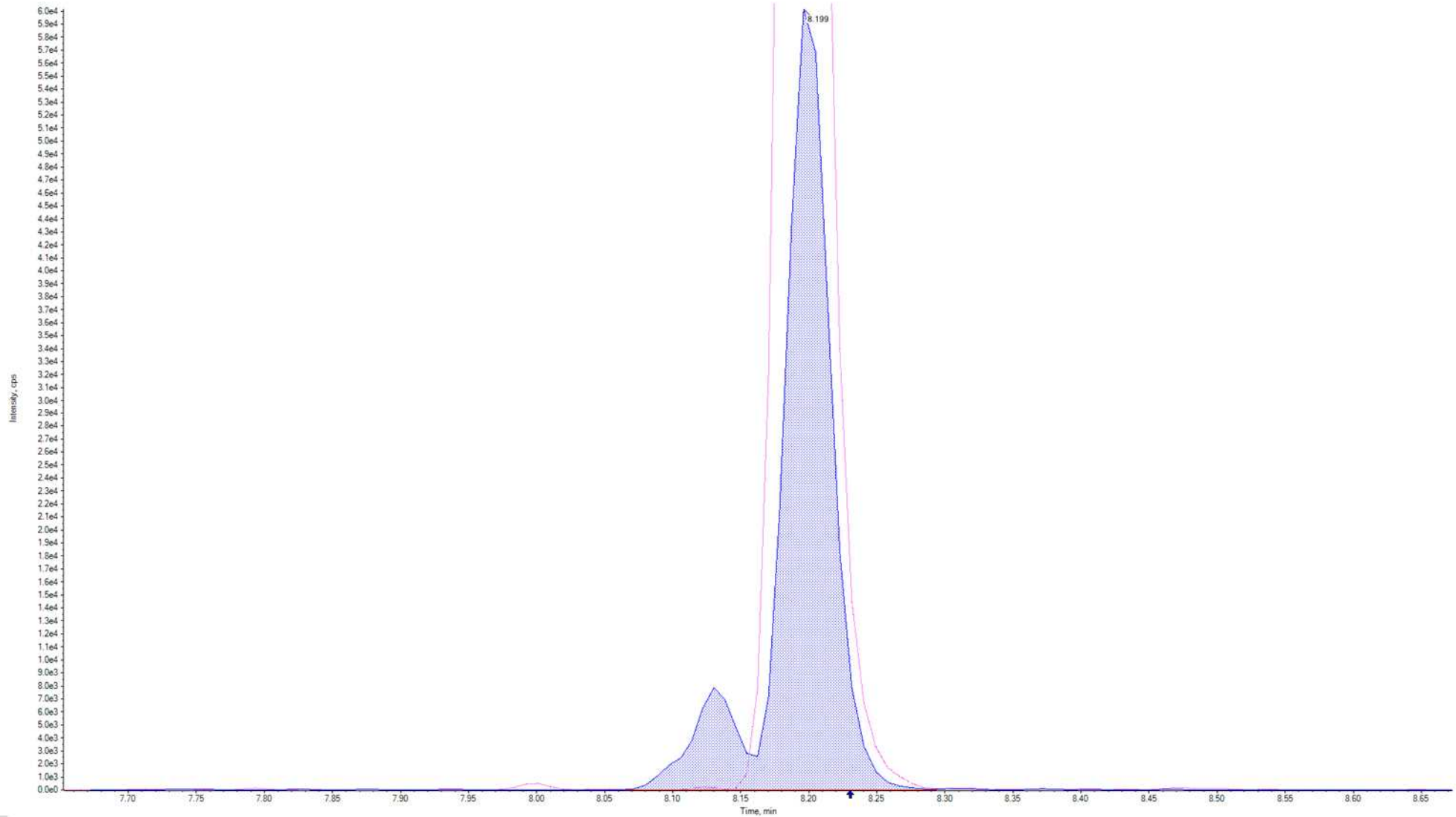
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSA_2
Sample: WG1971858-5 S/N:6145.1 Points Across peak:45



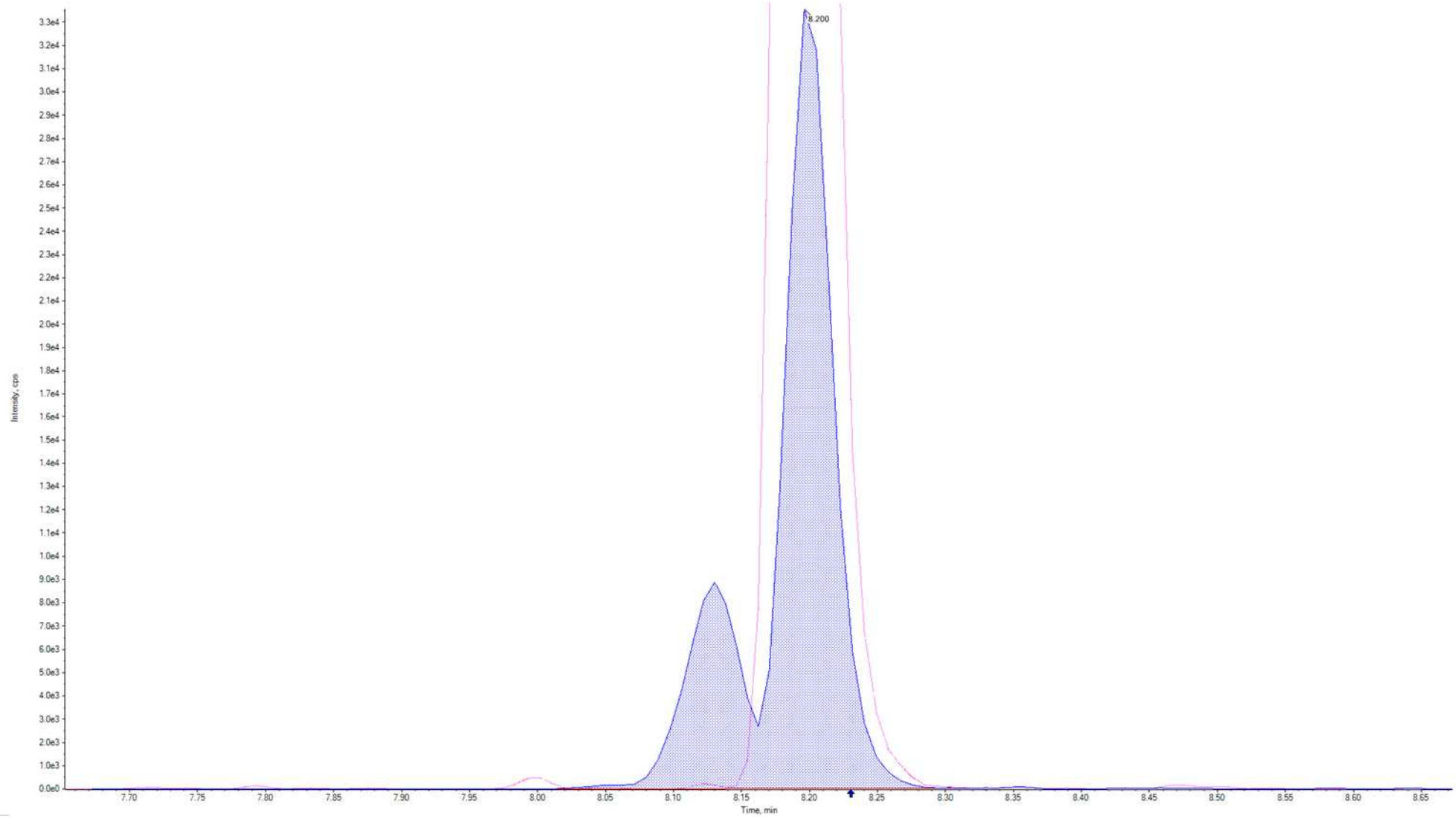
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA
Sample: WG1971858-5 S/N:967.8 Points Across peak:29



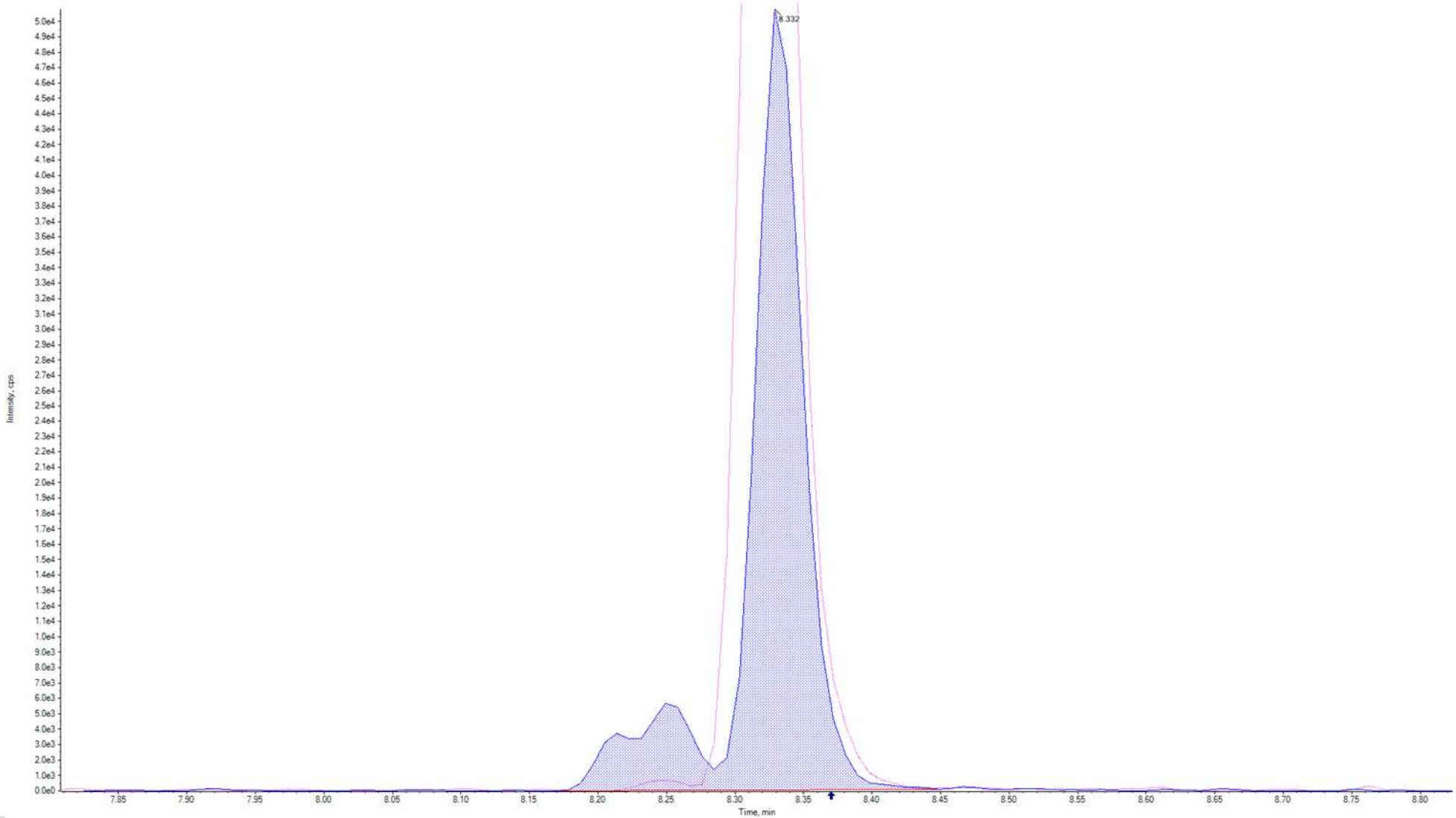
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSAA_2
Sample: WG1971858-5 S/N:531.3 Points Across peak:38



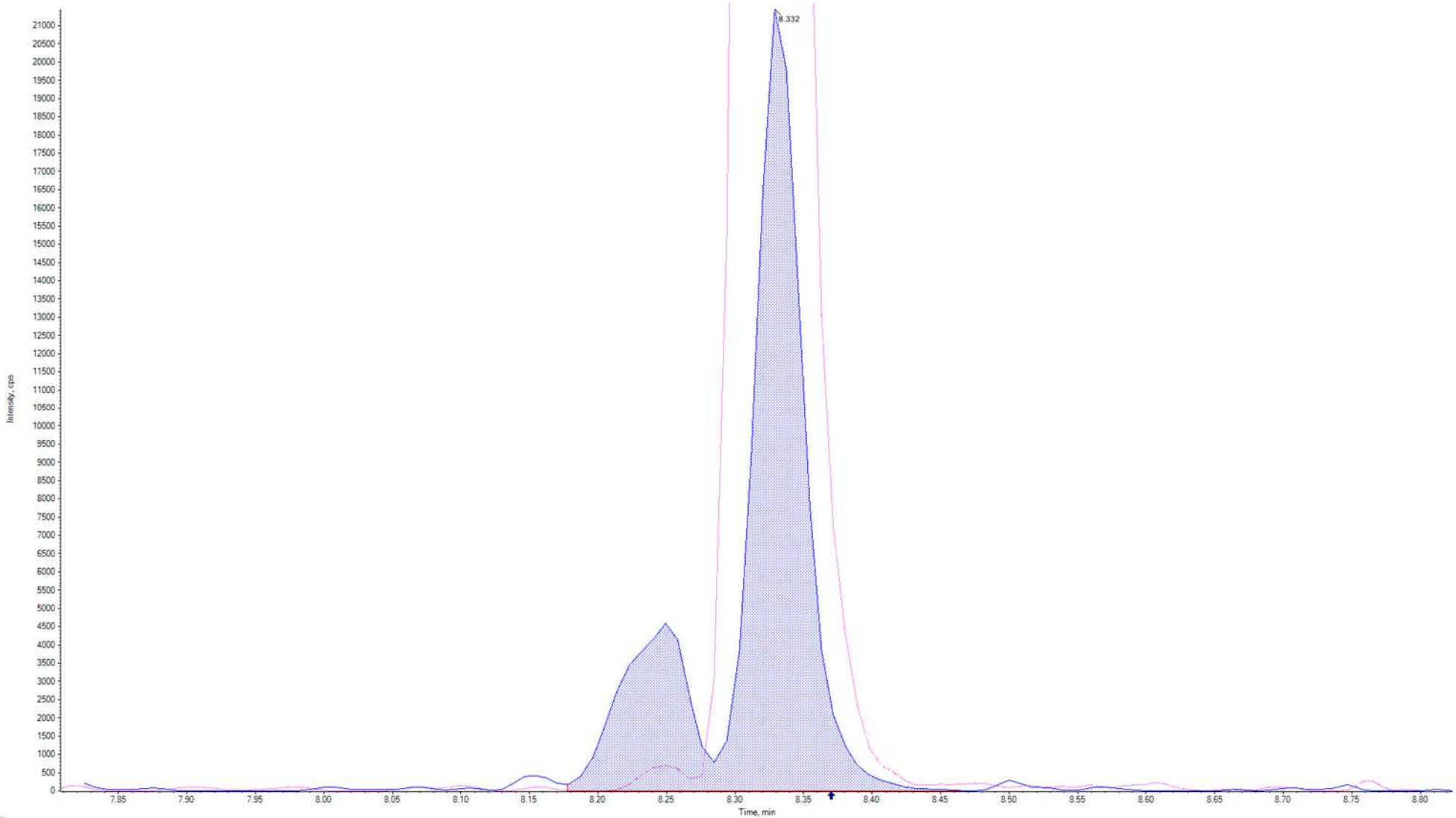
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA
Sample: WG1971858-5 S/N:559.4 Points Across peak:34



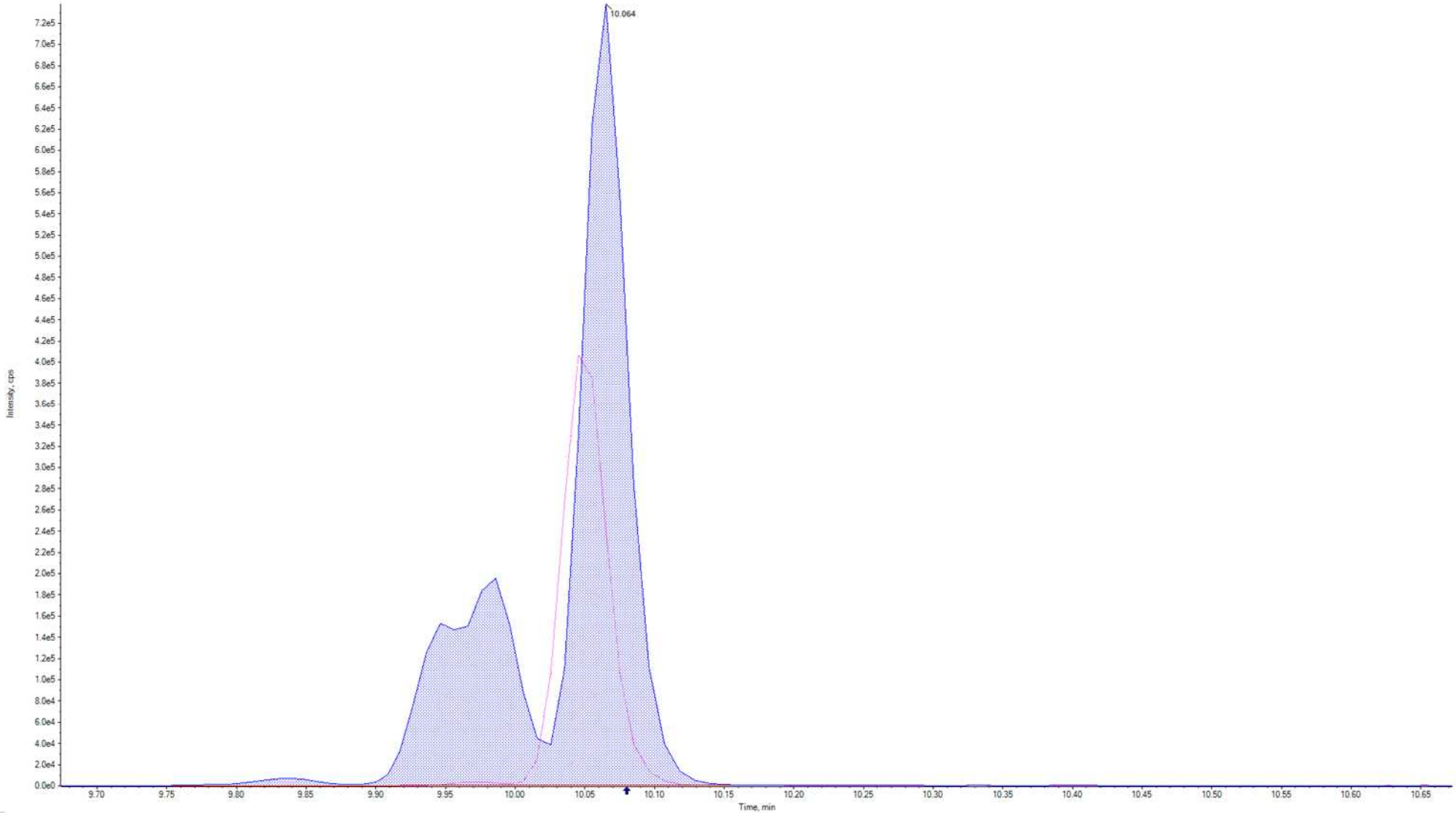
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSAA_2
Sample: WG1971858-5 S/N:316.4 Points Across peak:36



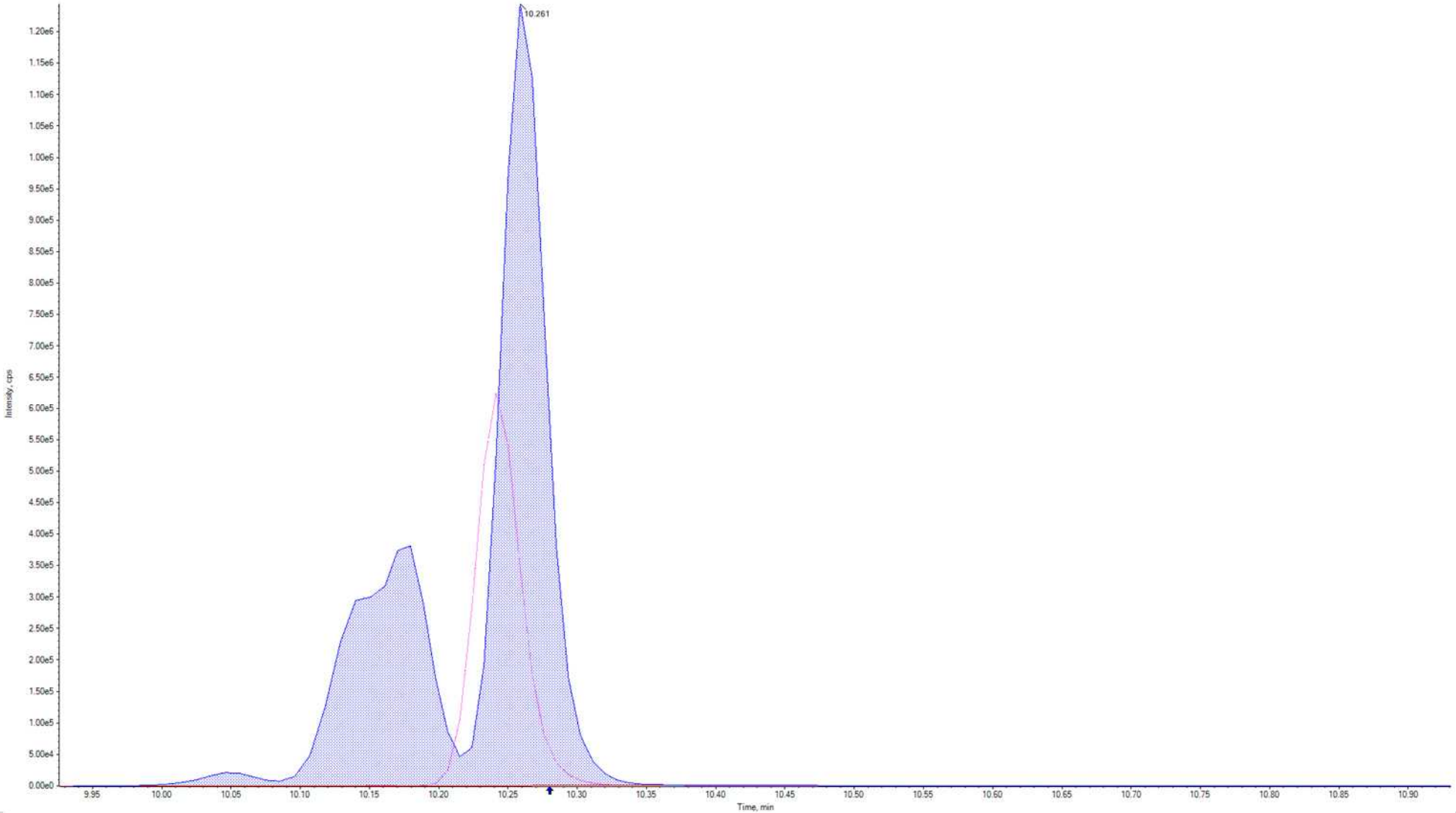
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NMeFOSE
Sample: WG1971858-5 S/N:2540.3 Points Across peak:50



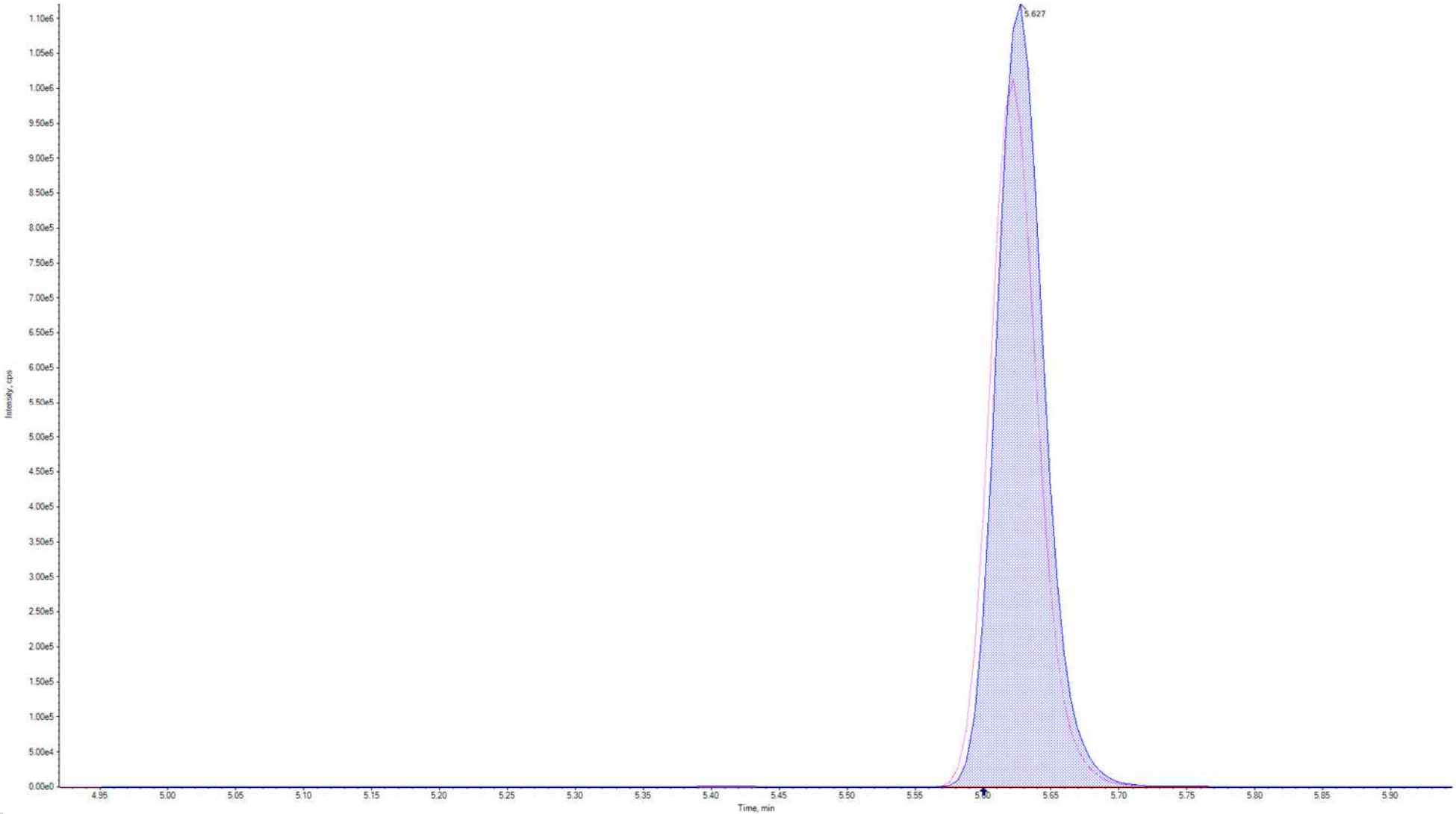
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NEtFOSE
Sample: WG1971858-5 S/N:2641.4 Points Across peak:49



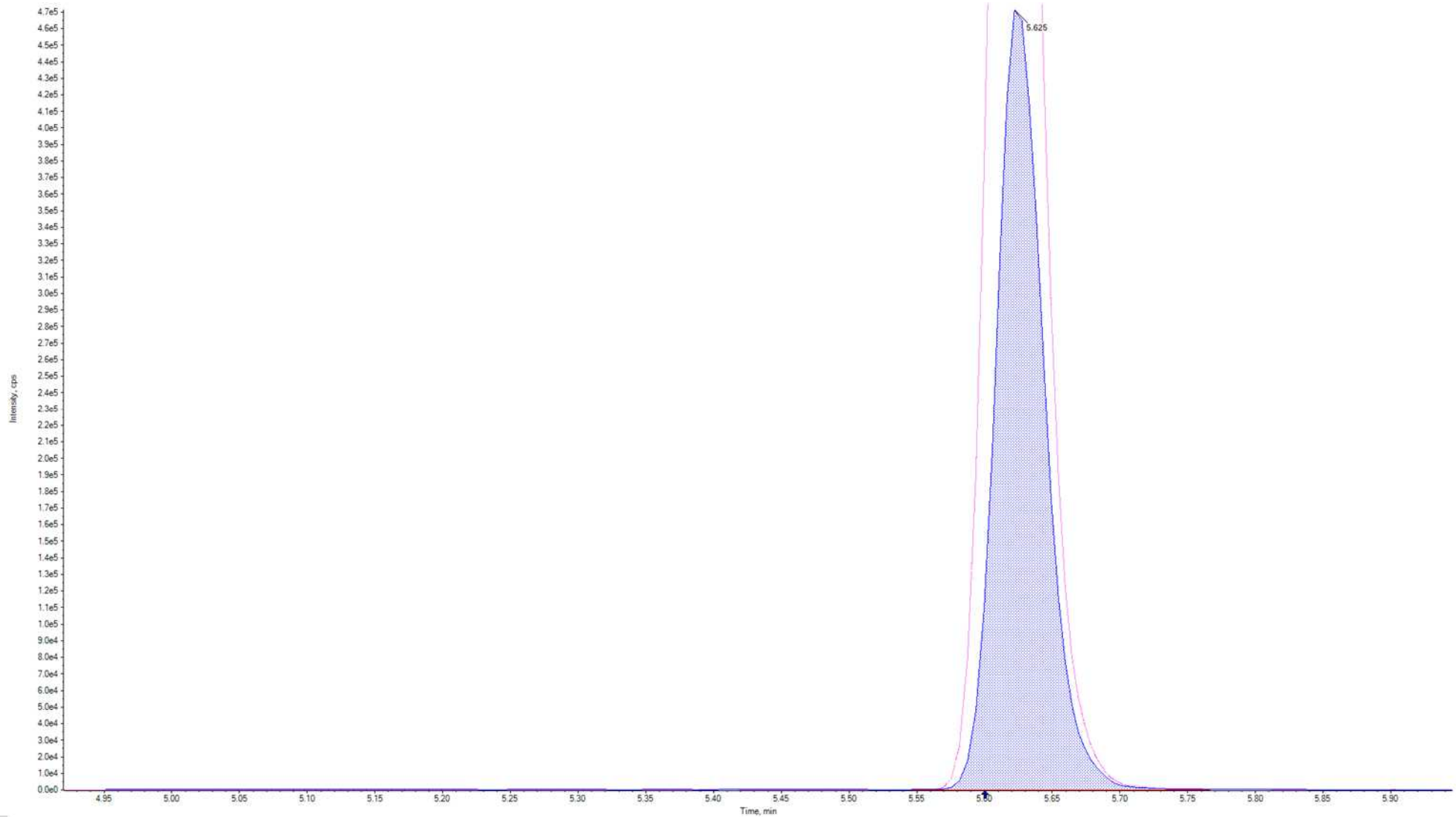
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA
Sample: WG1971858-5 S/N:8991.7 Points Across peak:61



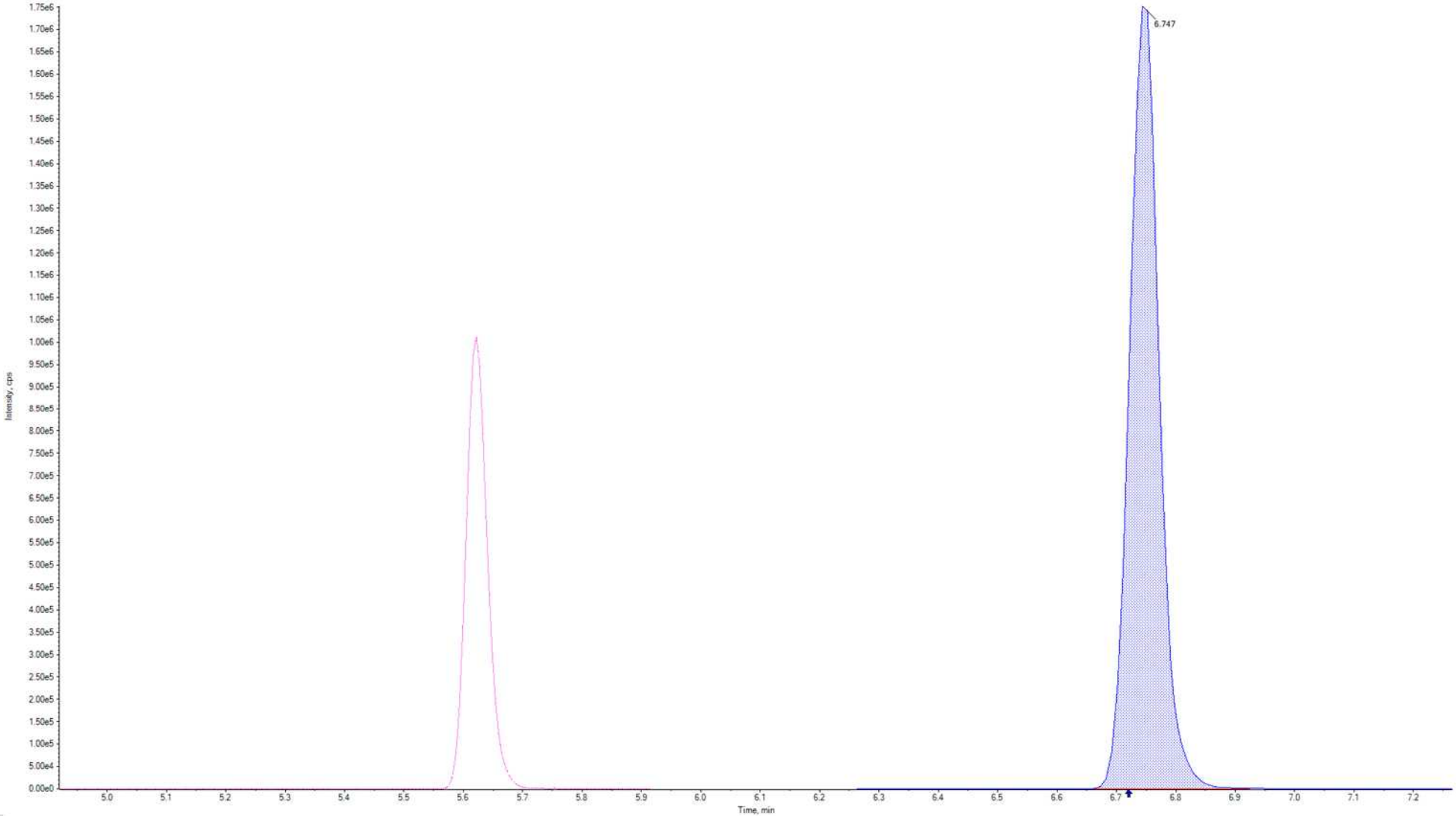
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

HFPO-DA_2
Sample: WG1971858-5 S/N:3320.9 Points Across peak:47



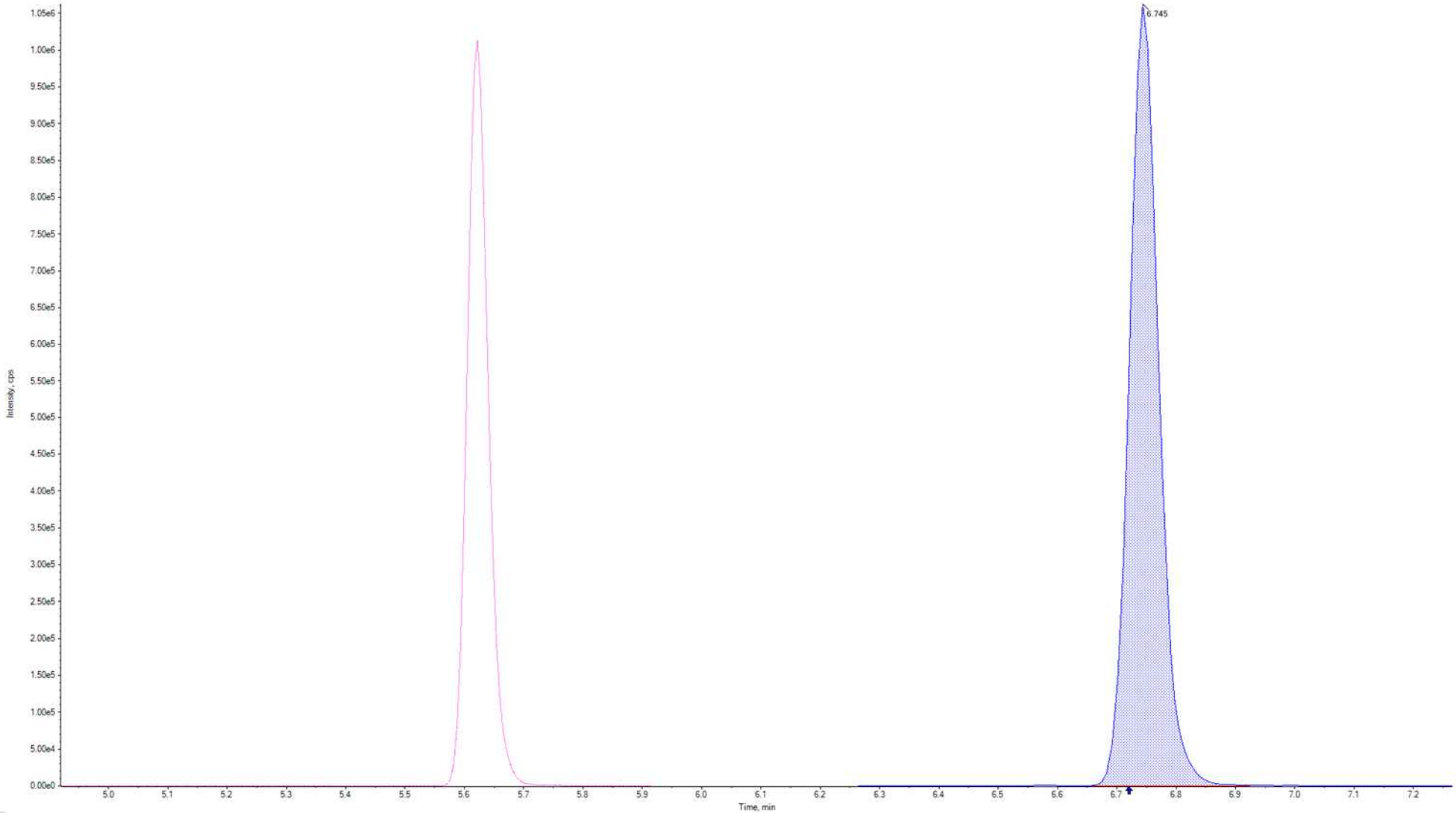
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

ADONA
Sample: WG1971858-5 S/N:10107.4 Points Across peak:40



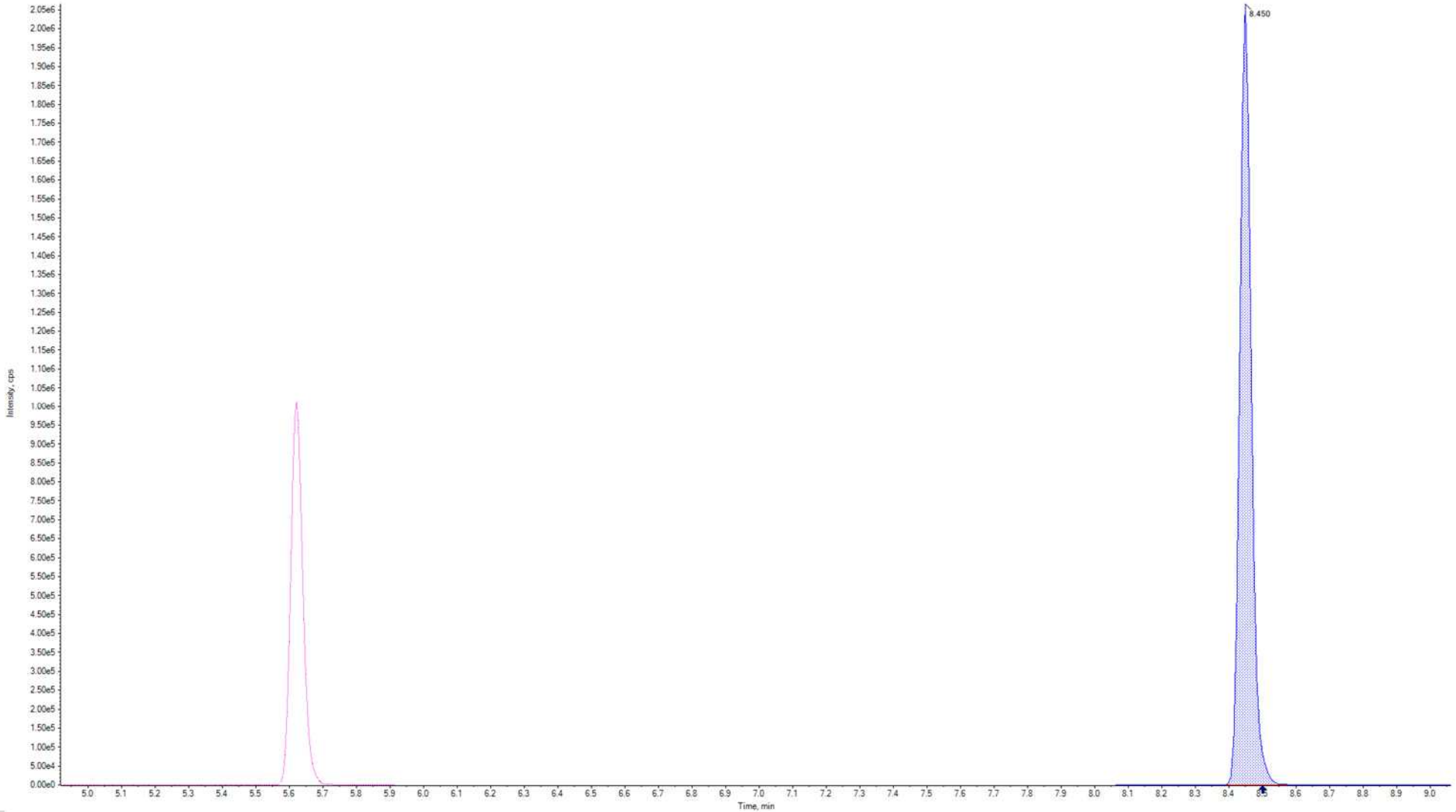
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

ADONA_2
Sample: WG1971858-5 S/N:4135.8 Points Across peak:40



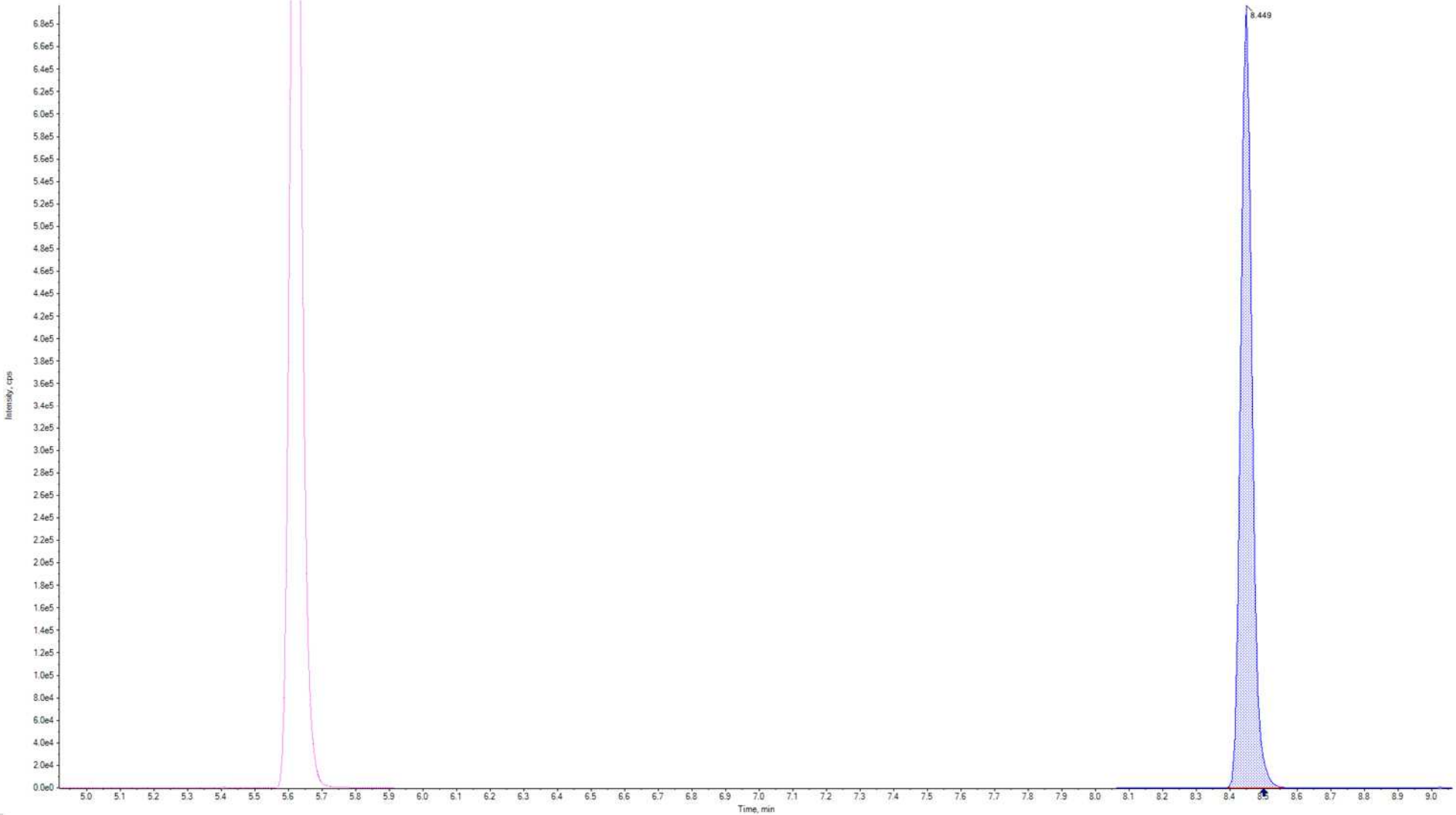
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS
Sample: WG1971858-5 S/N:71915.2 Points Across peak:33



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

9Cl-PF3ONS_2
Sample: WG1971858-5 S/N:28519.2 Points Across peak:26



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

11Cl-PF3OUdS
Sample: WG1971858-5 S/N:6395255.5 Points Across peak:41



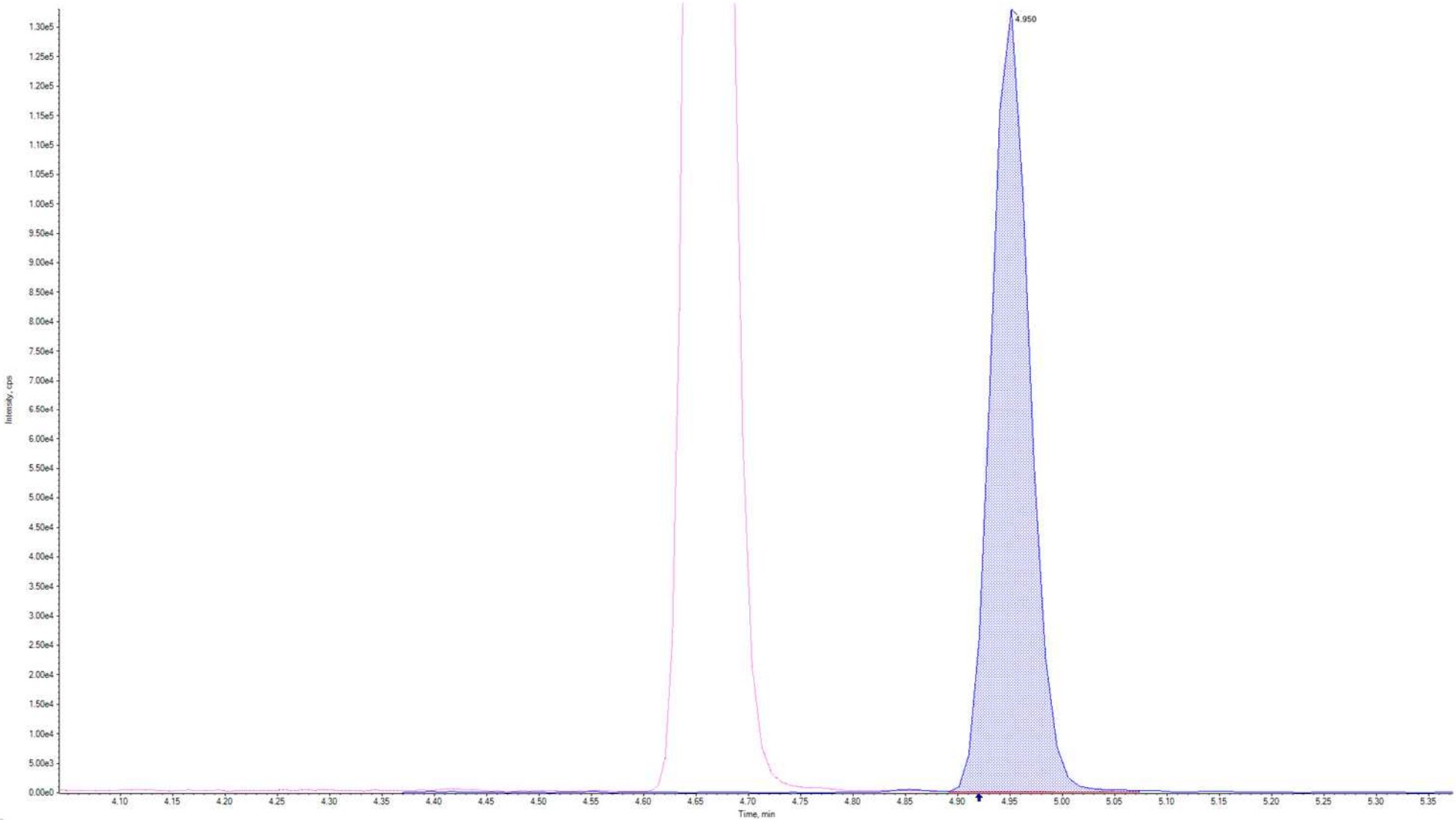
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

11Cl-PF3OUdS_2
Sample: WG1971858-5 S/N:60311287.0 Points Across peak:44



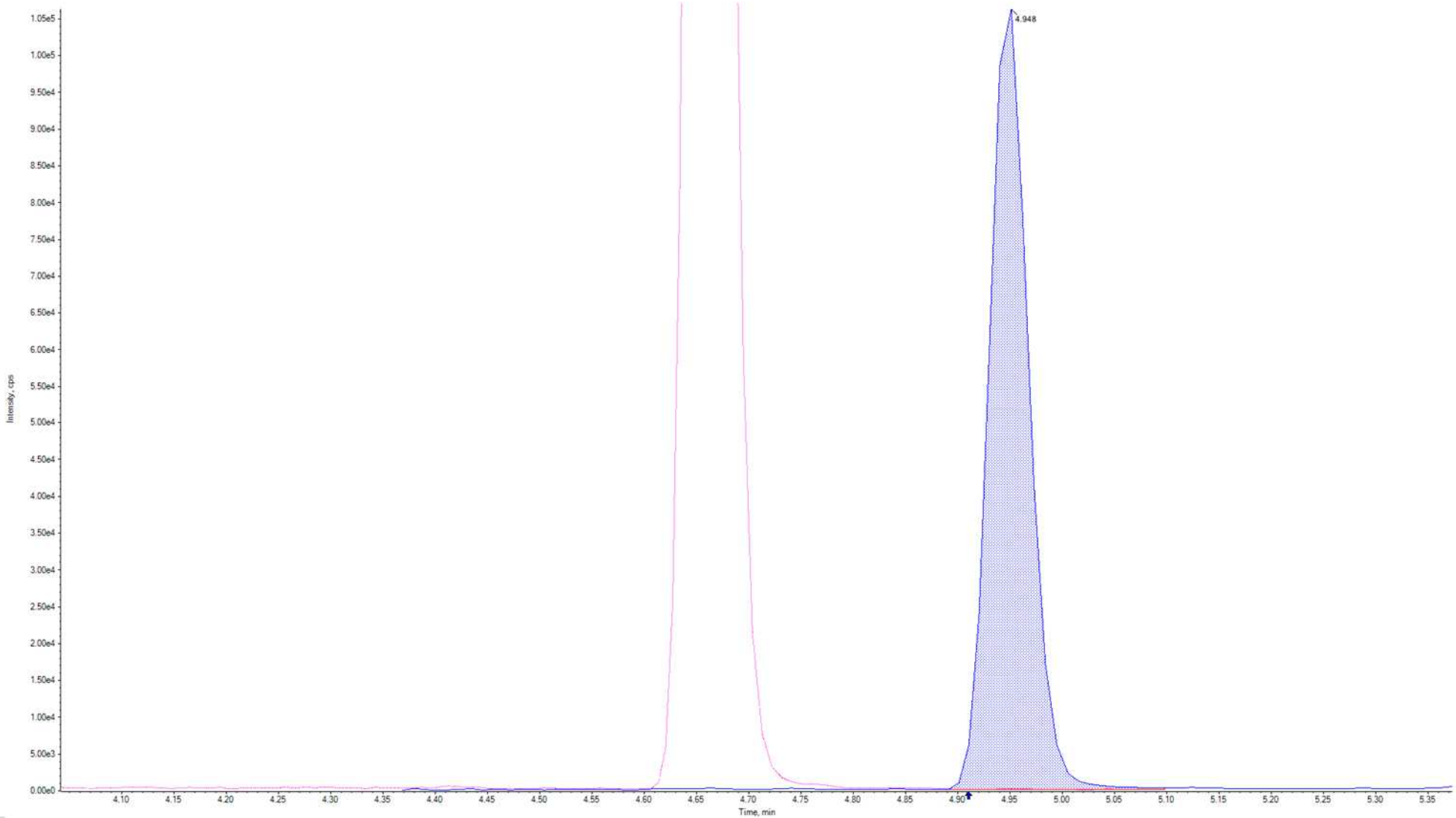
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

3:3FTCA
Sample: WG1971858-5 S/N:2628.1 Points Across peak:19



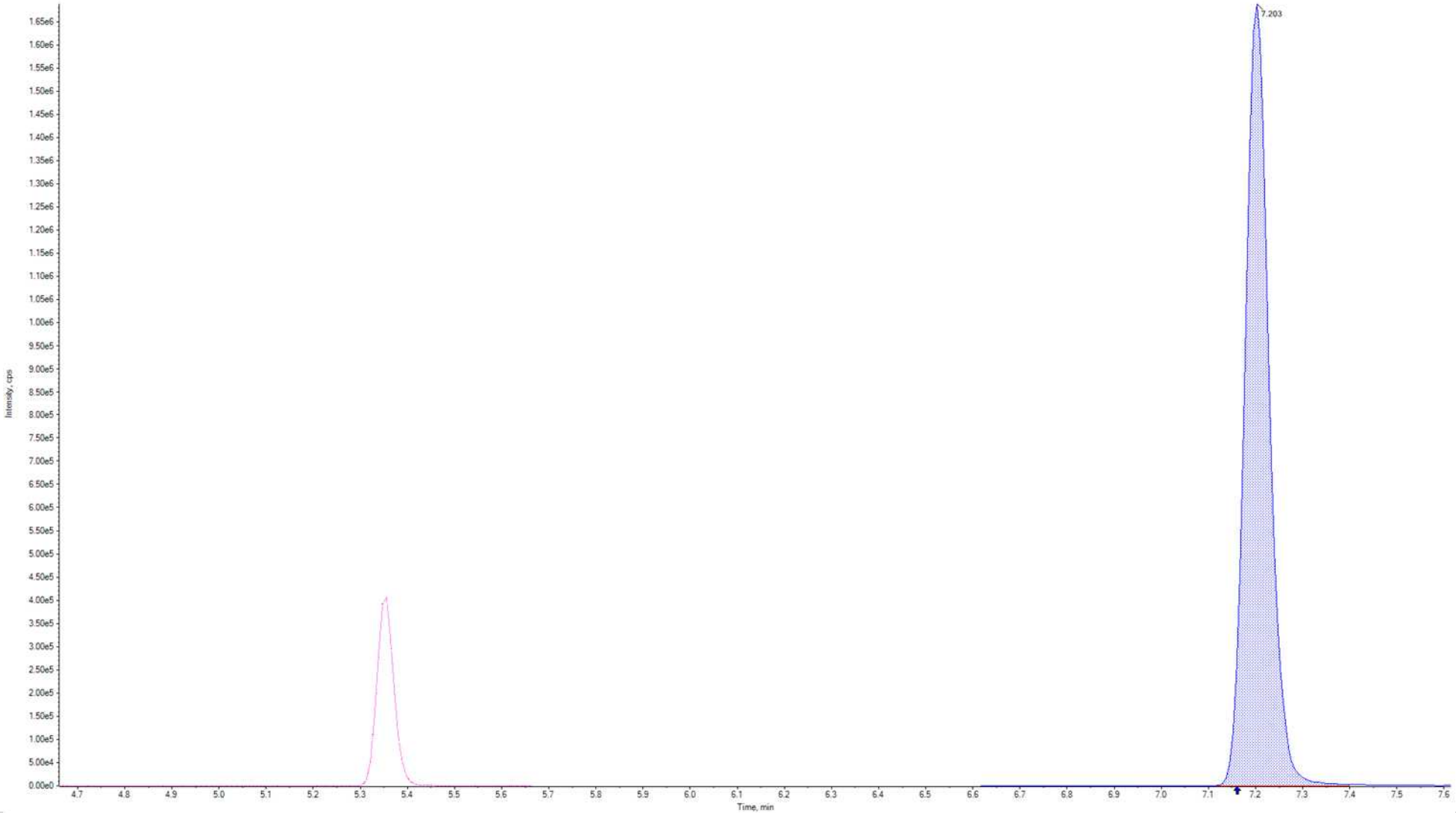
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

3:3FTCA_2
Sample: WG1971858-5 S/N:1246.3 Points Across peak:23



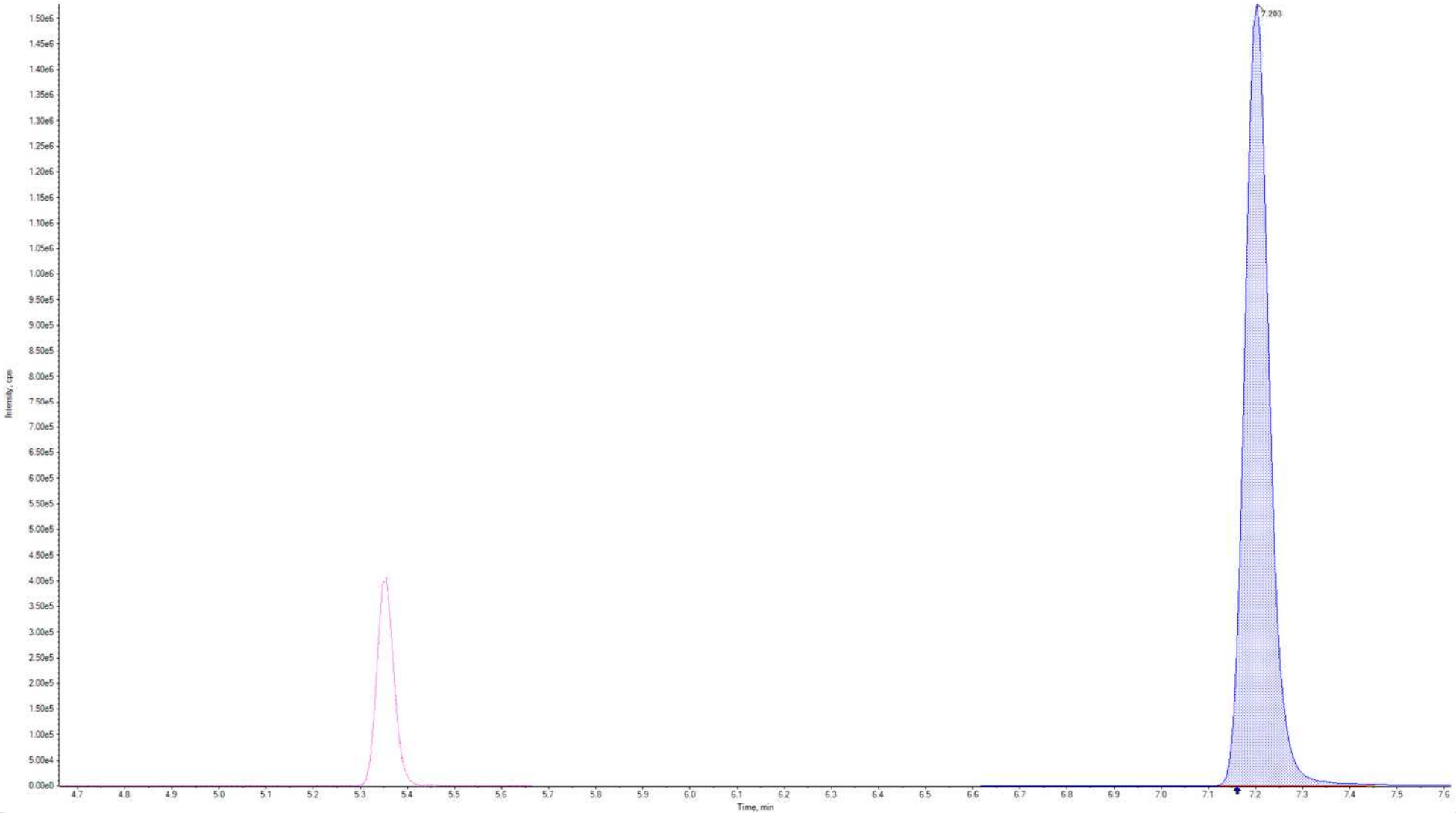
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA
Sample: WG1971858-5 S/N:17487.2 Points Across peak:52



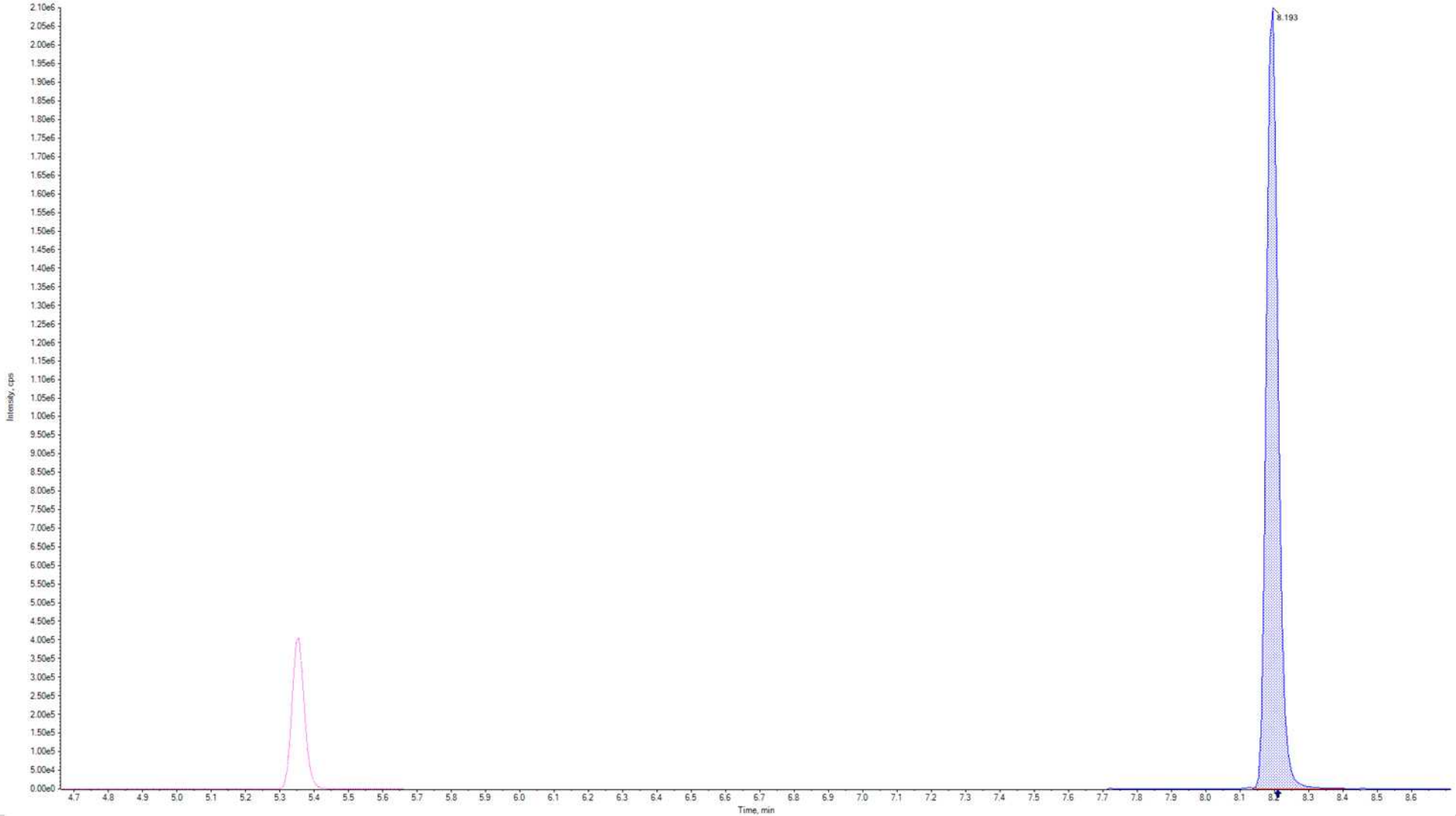
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

5:3FTCA_2
Sample: WG1971858-5 S/N:6089.6 Points Across peak:59



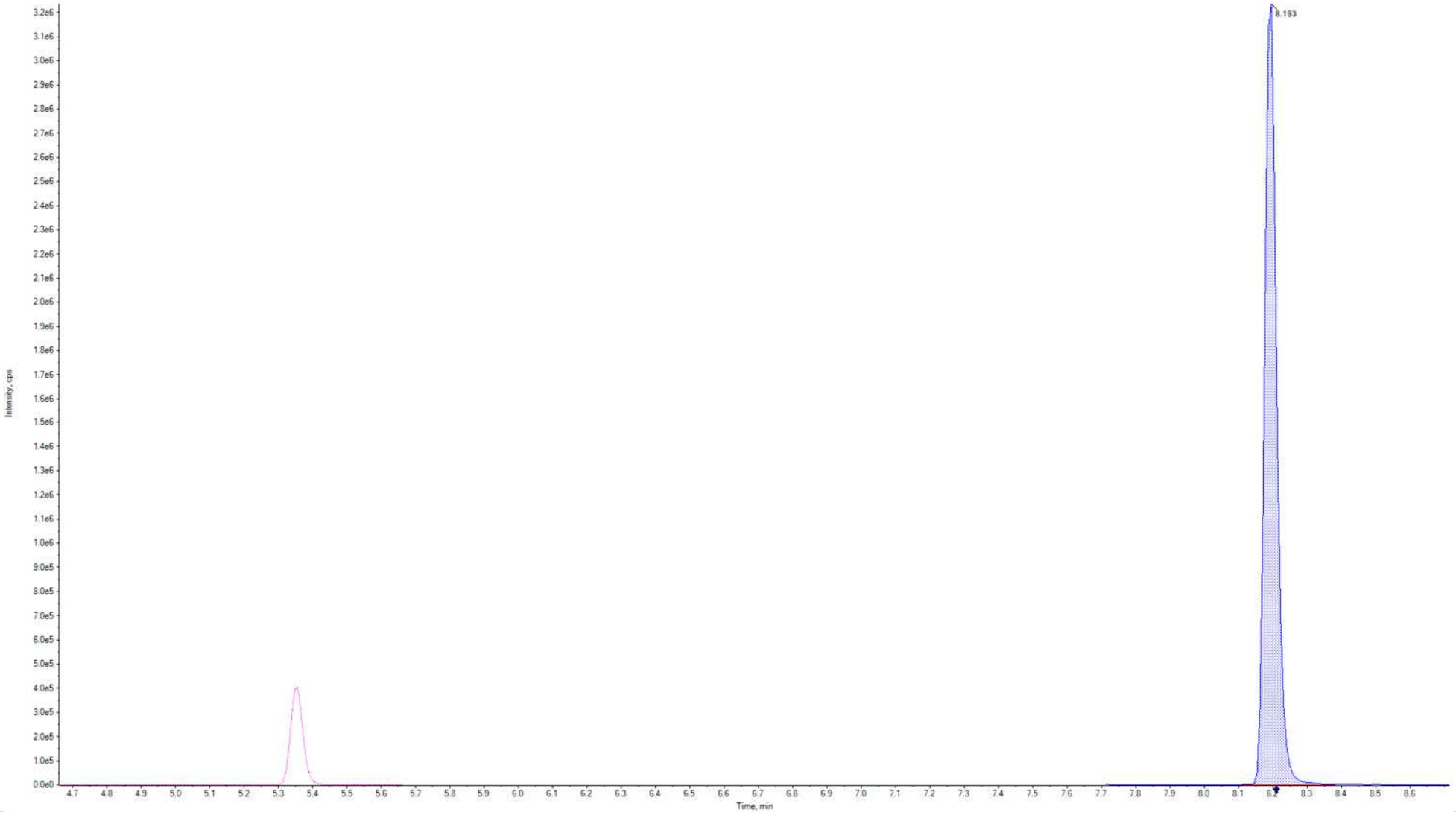
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA
Sample: WG1971858-5 S/N:4855.7 Points Across peak:35



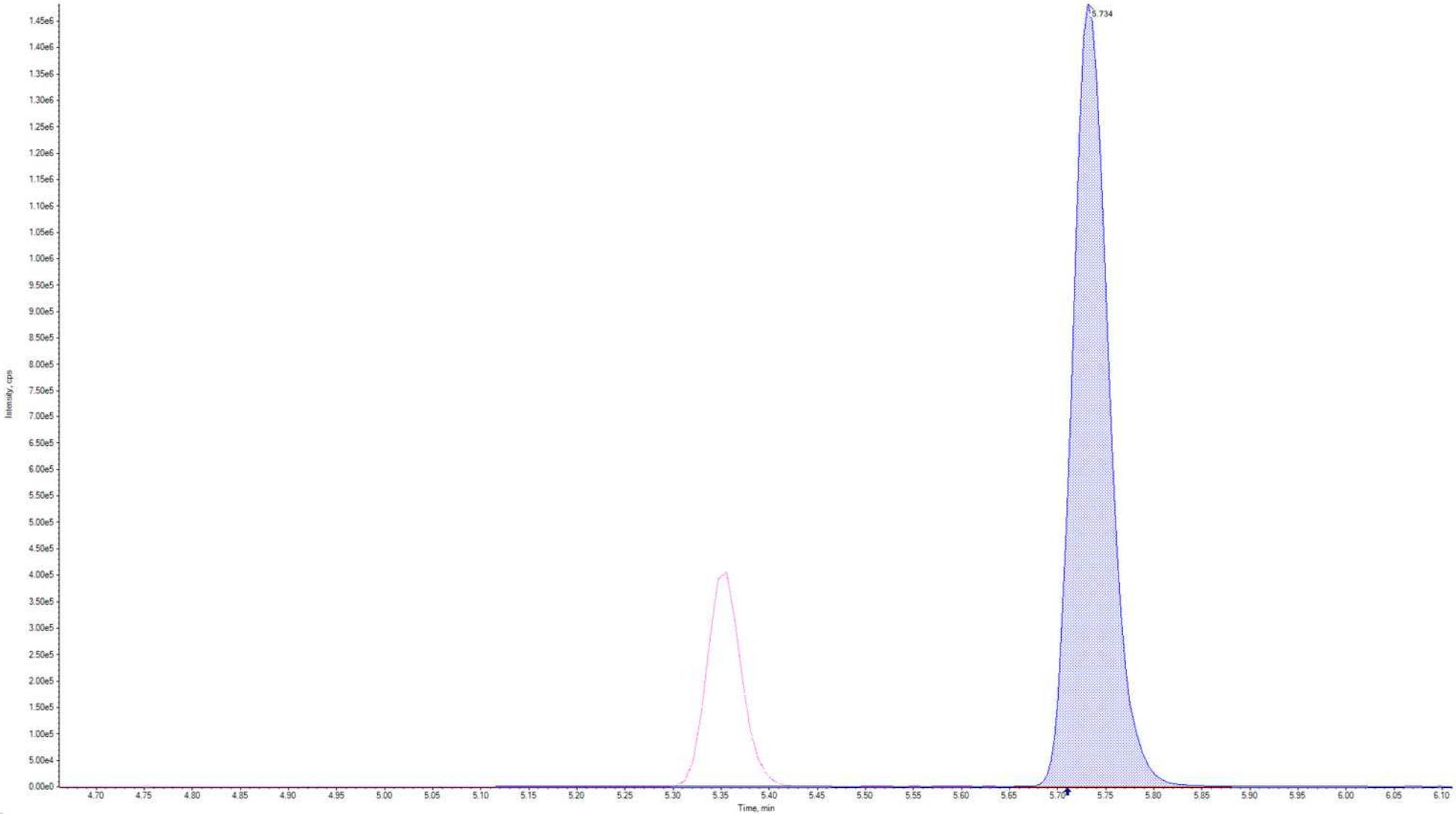
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

7:3FTCA_2
Sample: WG1971858-5 S/N:4061.2 Points Across peak:35



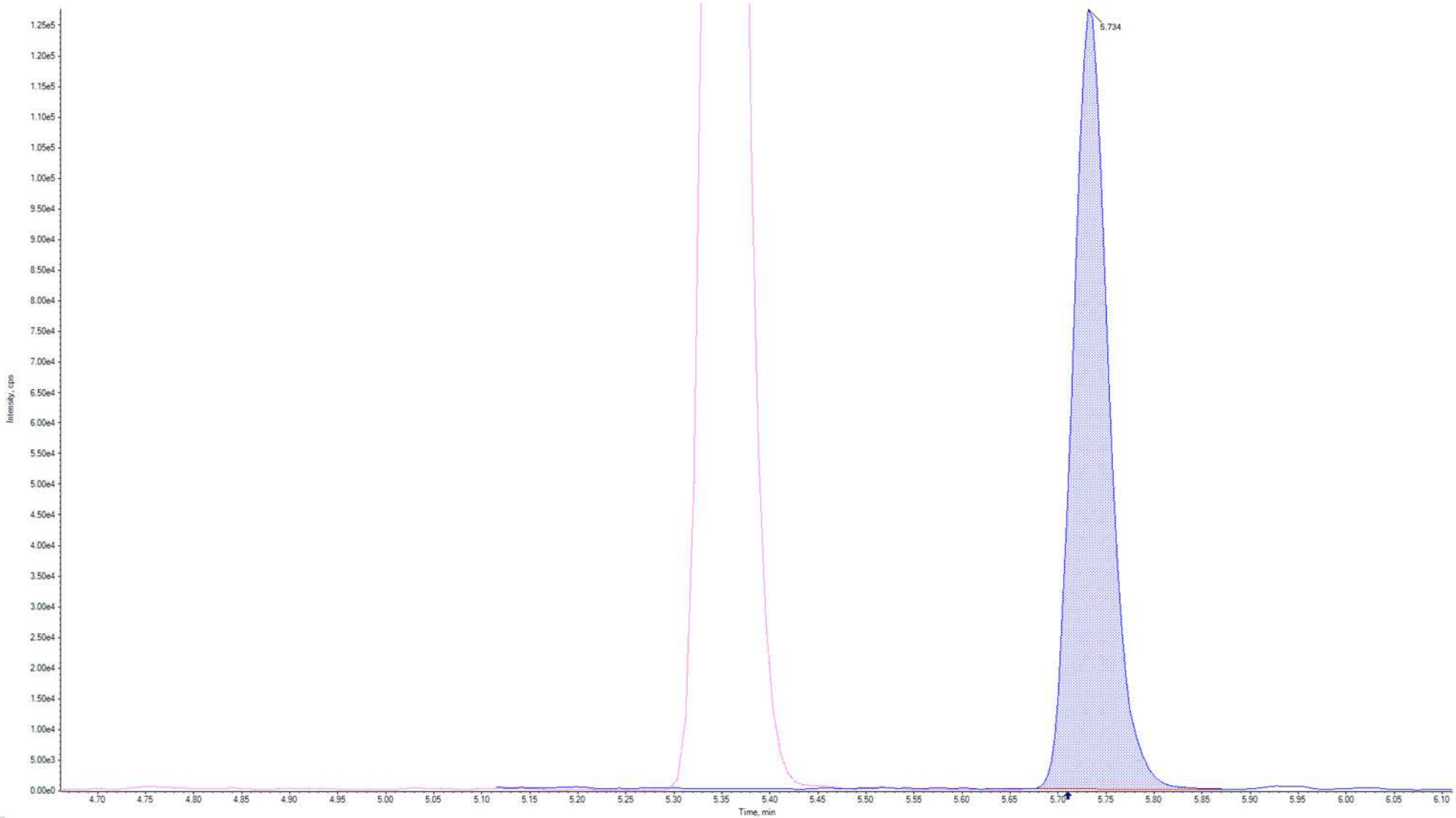
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFEESA
Sample: WG1971858-5 S/N:2649.6 Points Across peak:47



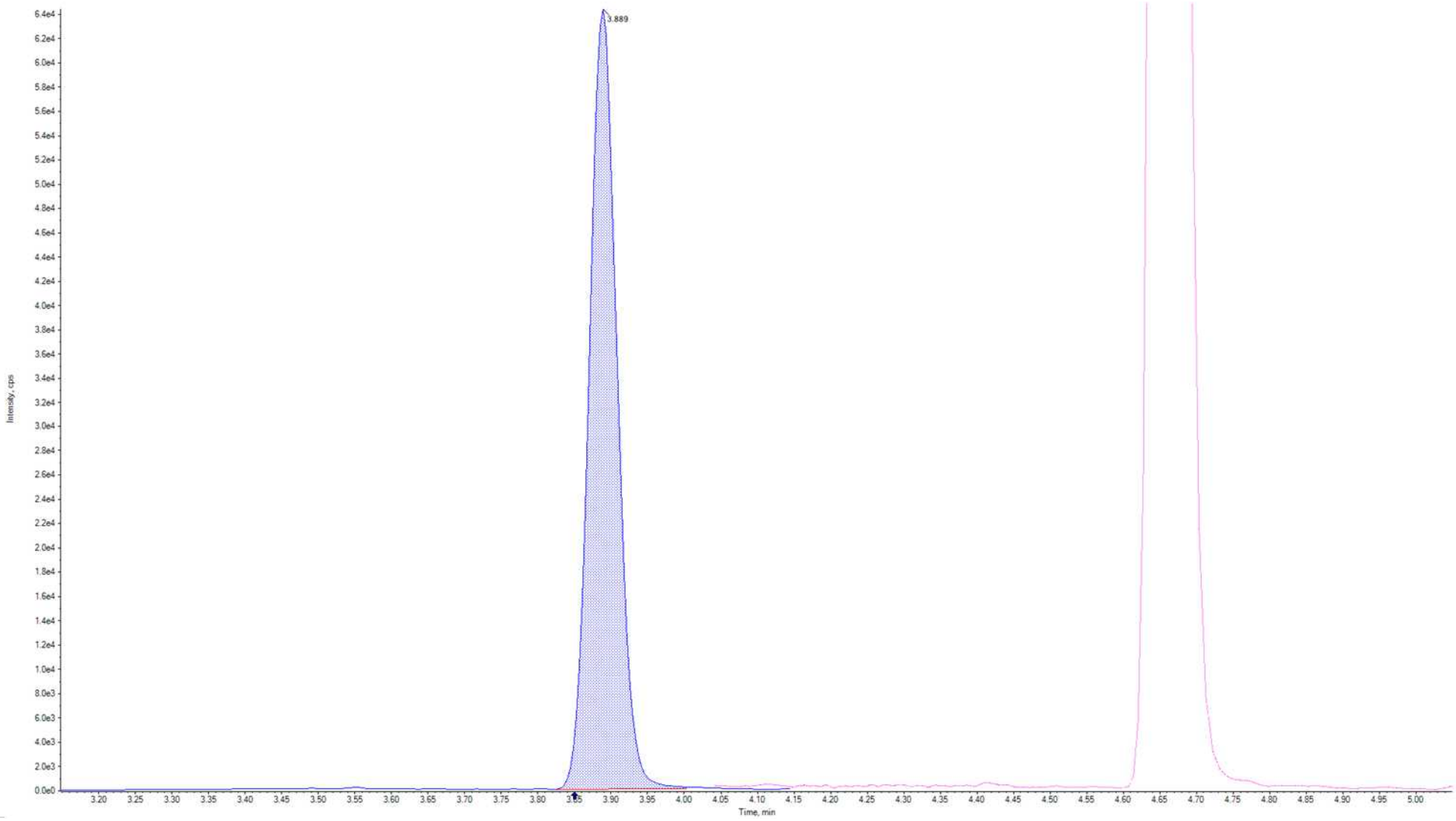
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Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

PFEESA_2
Sample: WG1971858-5 S/N:1299.9 Points Across peak:41



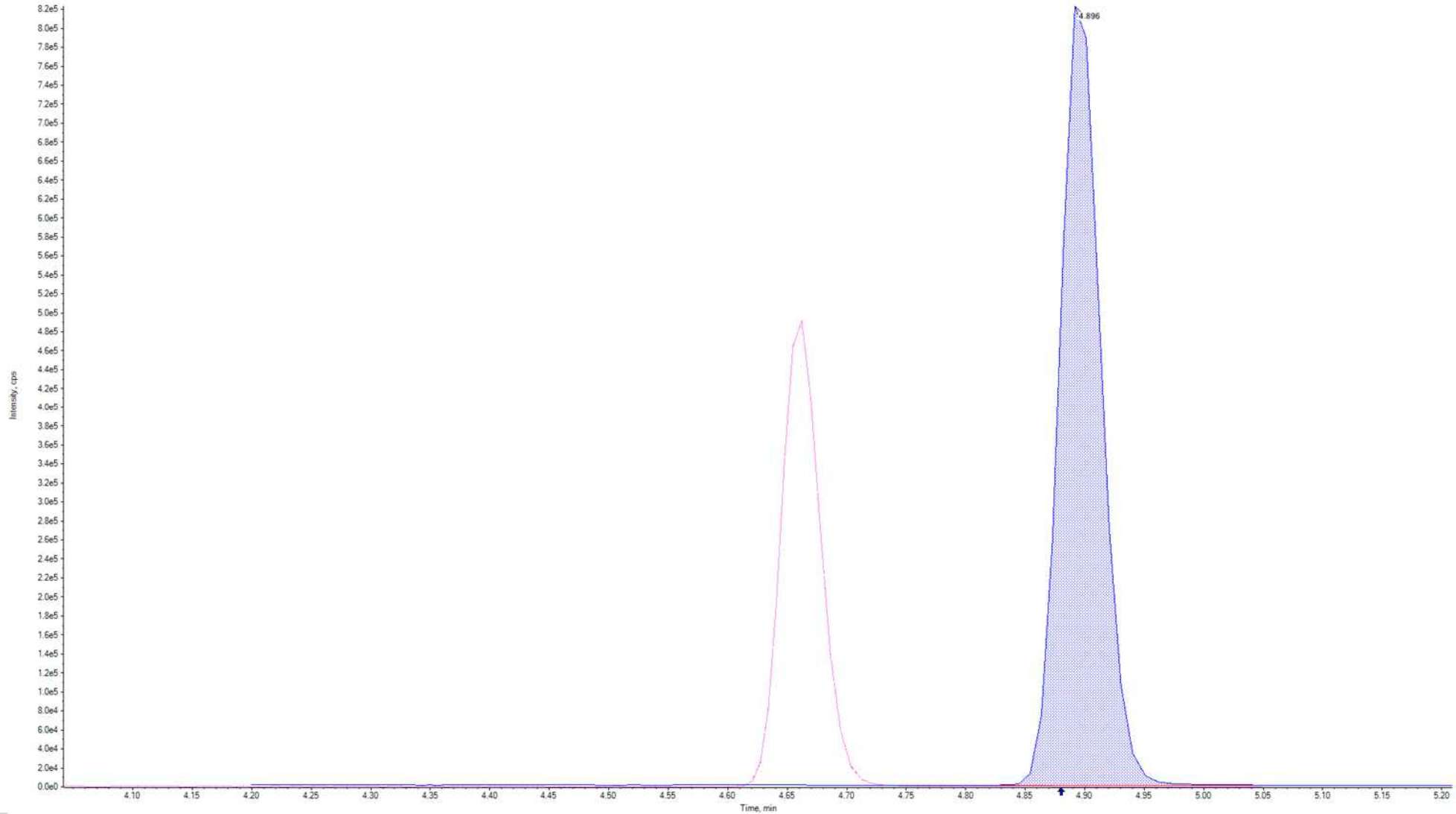
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

PFMPA
Sample: WG1971858-5 S/N:3035.0 Points Across peak:46



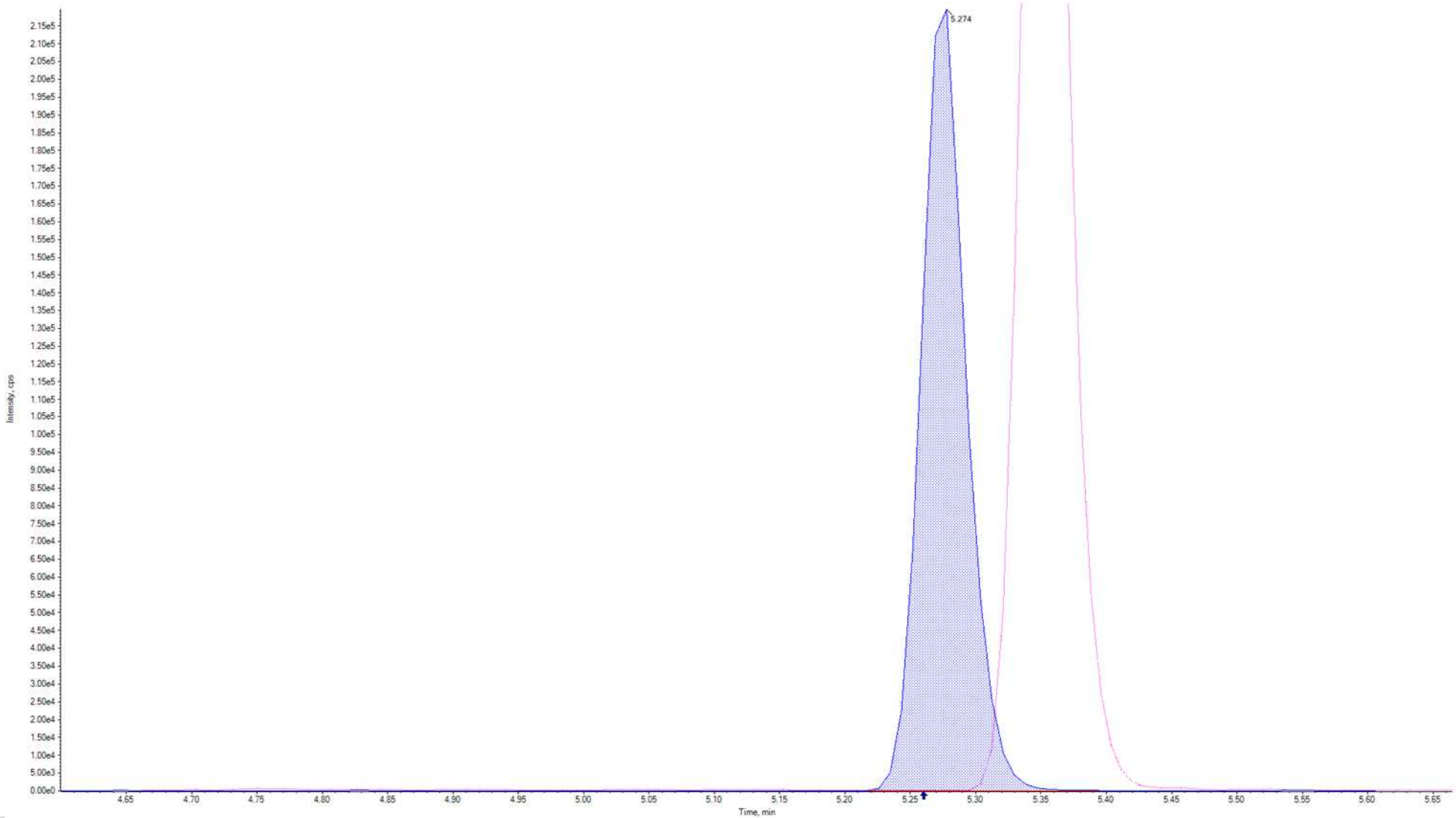
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Alpha Analytical Inc.
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PFMBA
Sample: WG1971858-5 S/N:917.0 Points Across peak:33



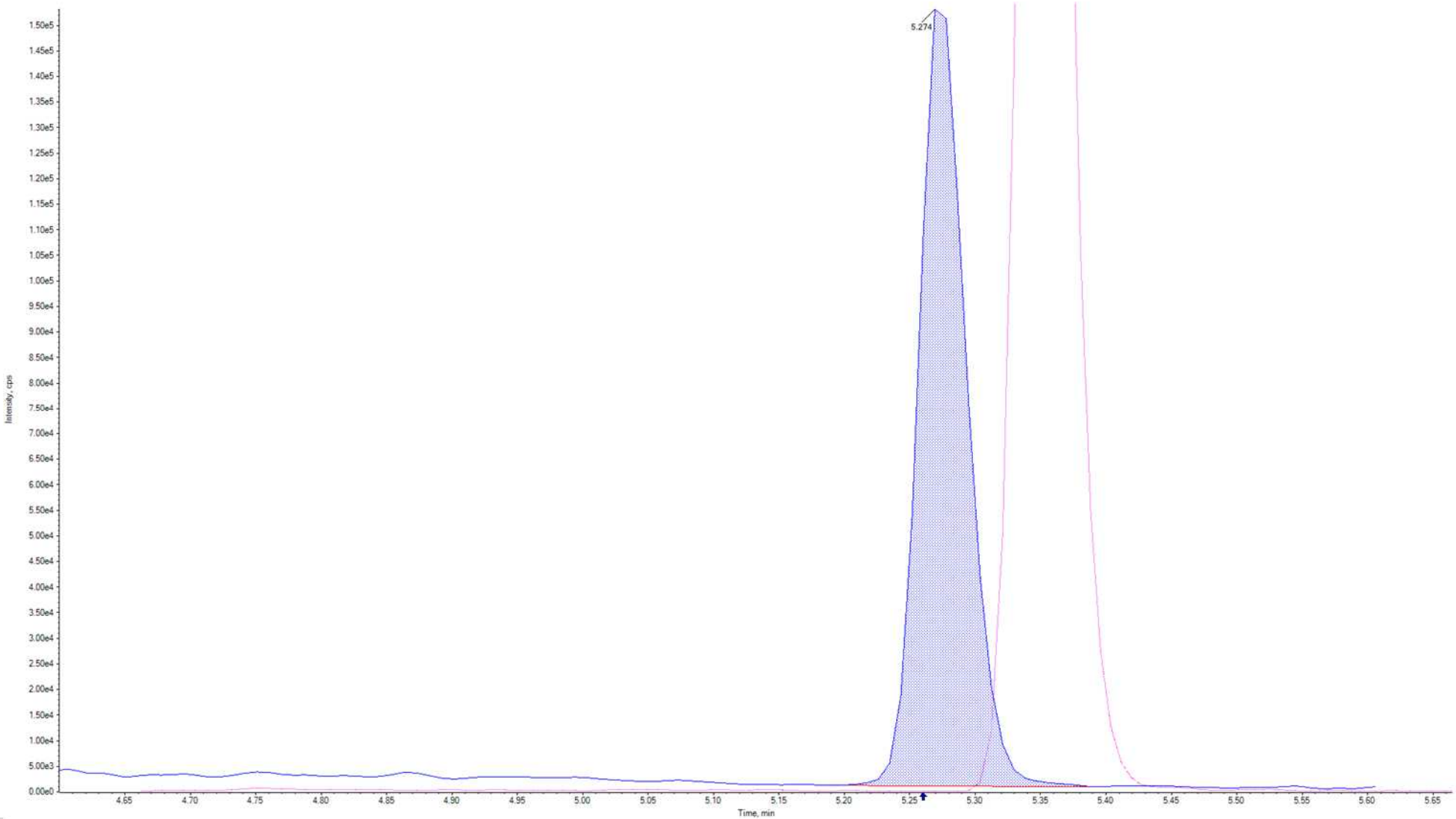
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Generated: 9/17/2024 6:15:27 AM

NFDHA
Sample: WG1971858-5 S/N:24127.3 Points Across peak:26



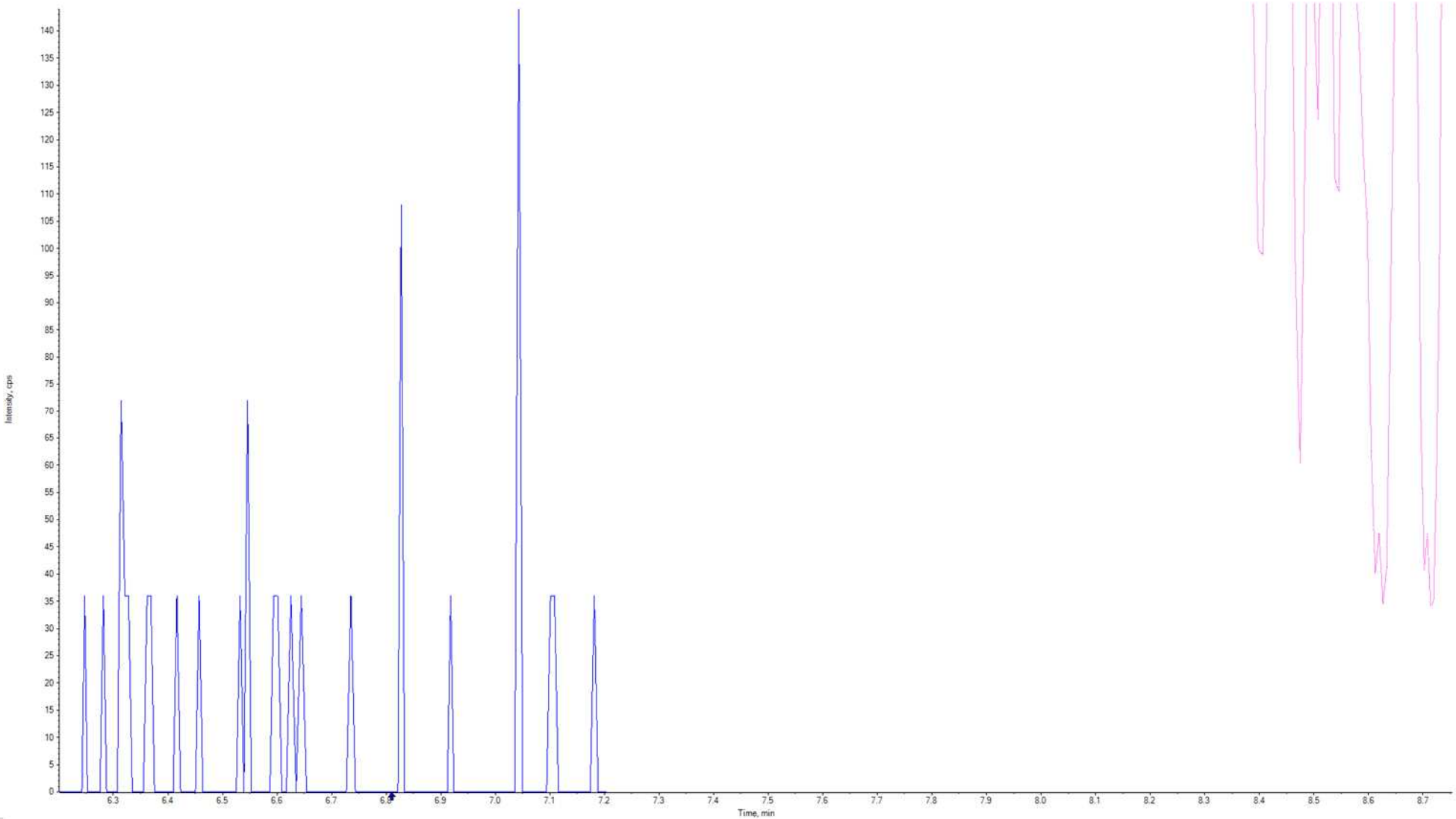
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

NFDHA_2
Sample: WG1971858-5 S/N:555.2 Points Across peak:25



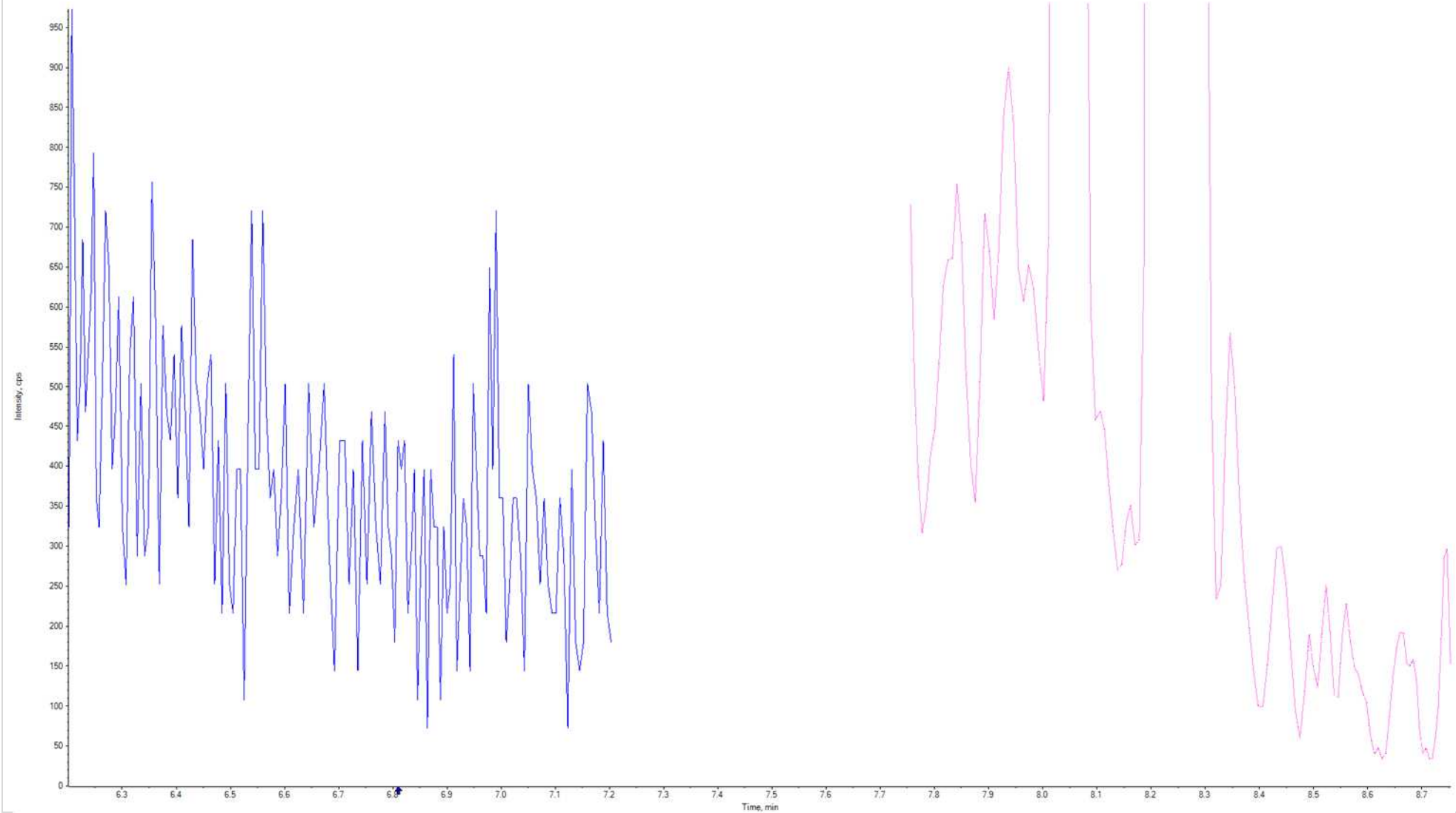
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

TDCA
Sample: WG1971858-5 S/N:N/A Points Across peak:N/A



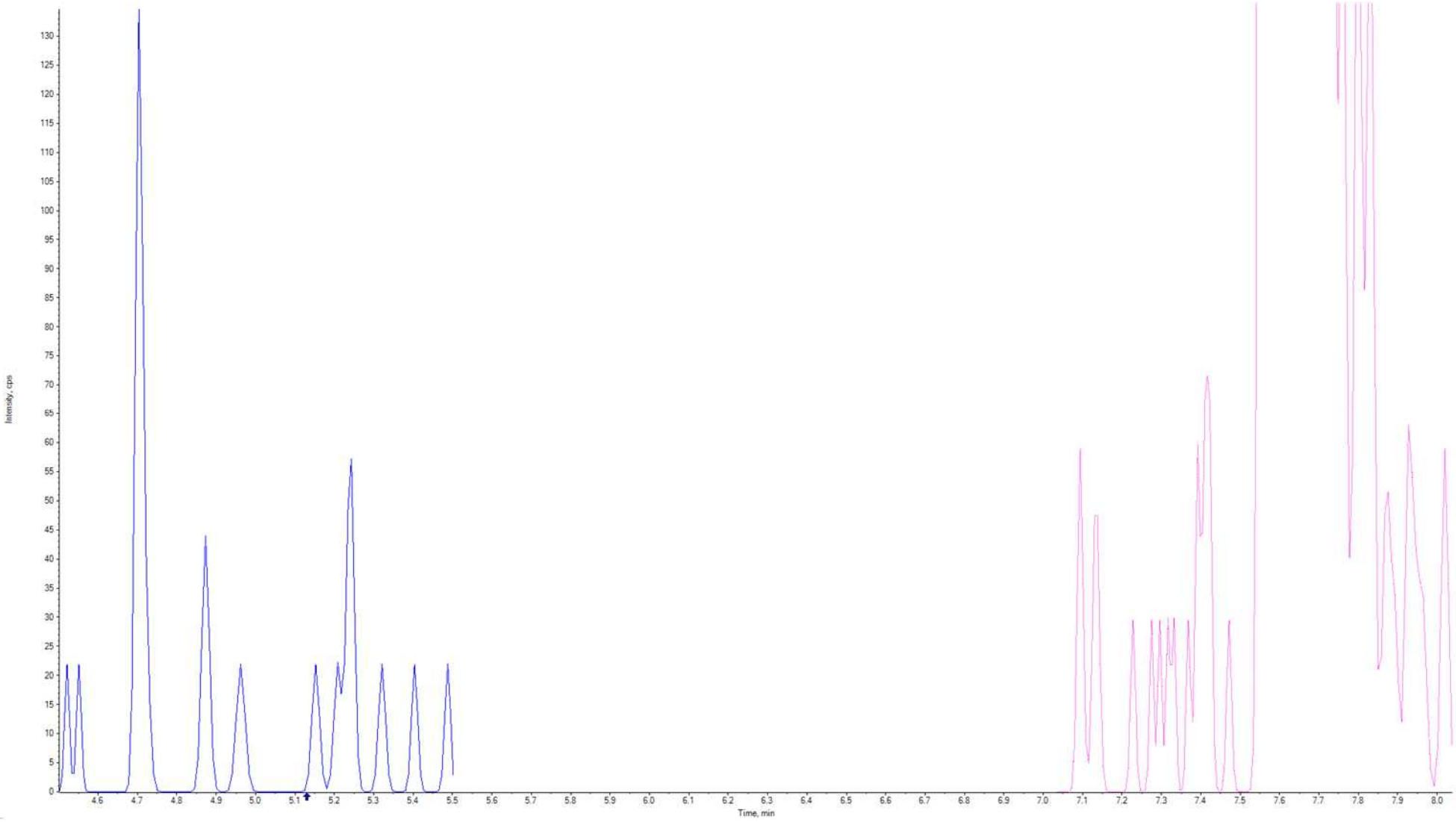
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Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

TDCA_2
Sample: WG1971858-5 S/N:N/A Points Across peak:N/A



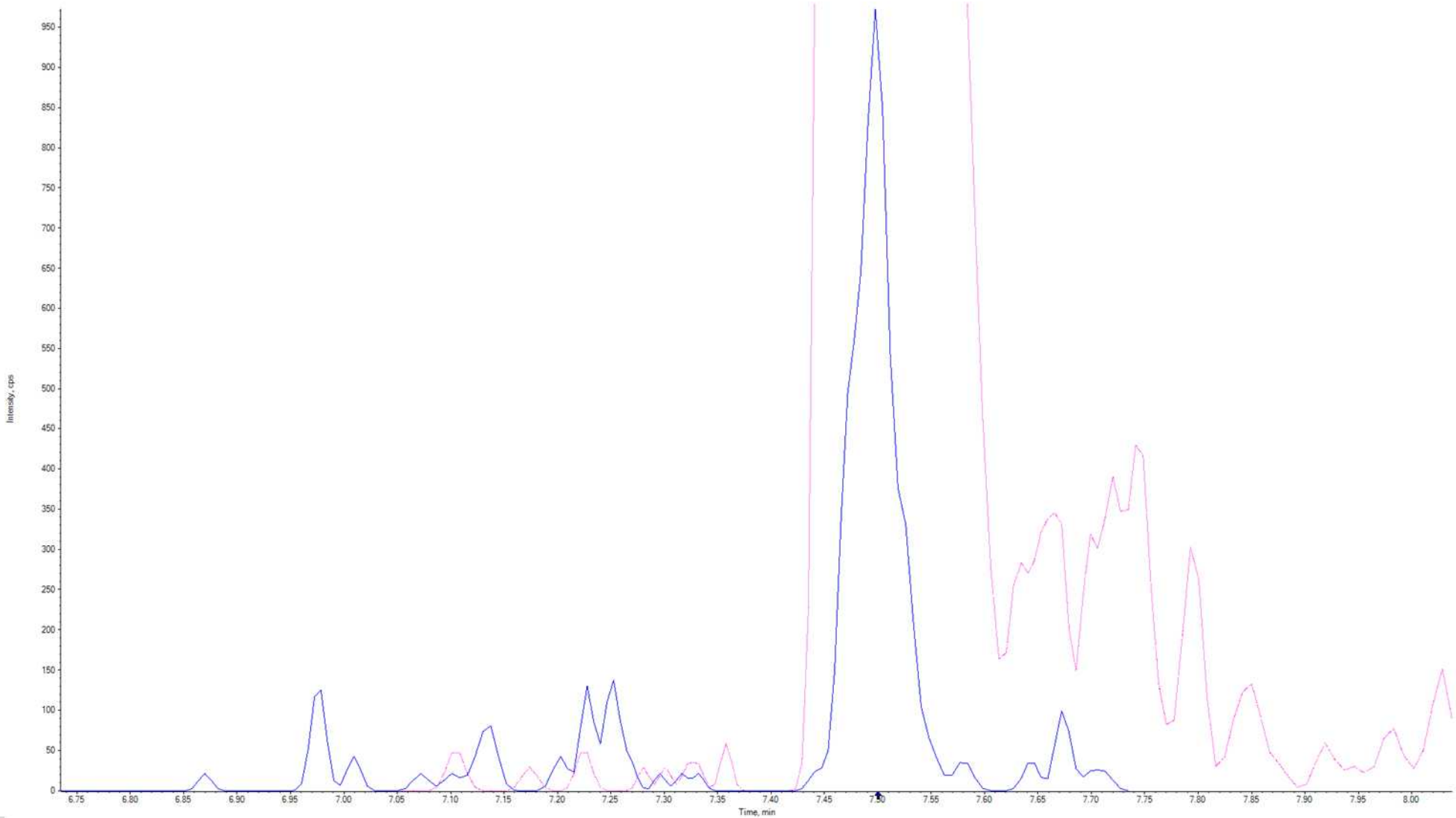
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C2D4-4:2FTS
Sample: WG1971858-5 S/N:N/A Points Across peak:N/A

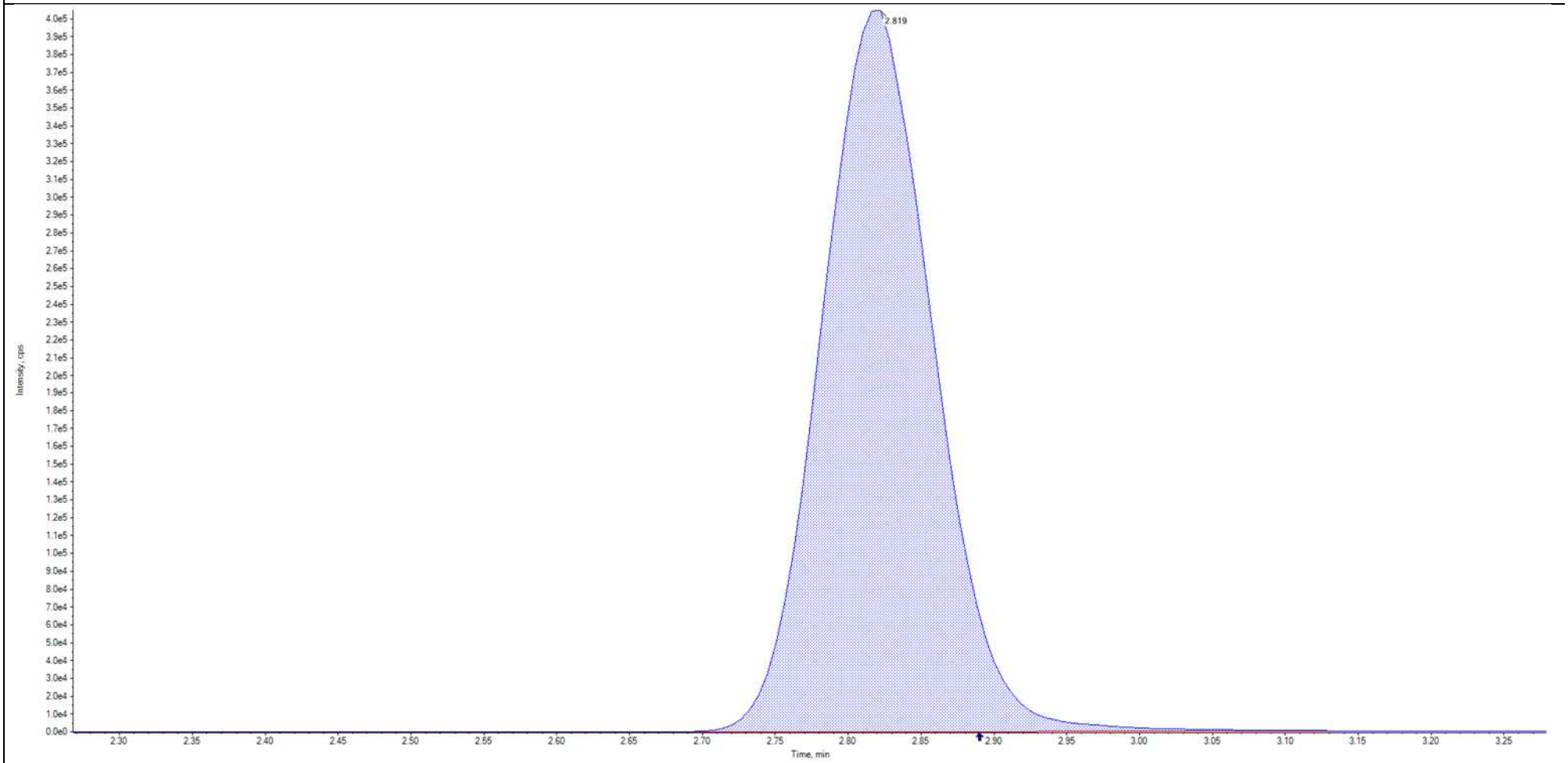


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

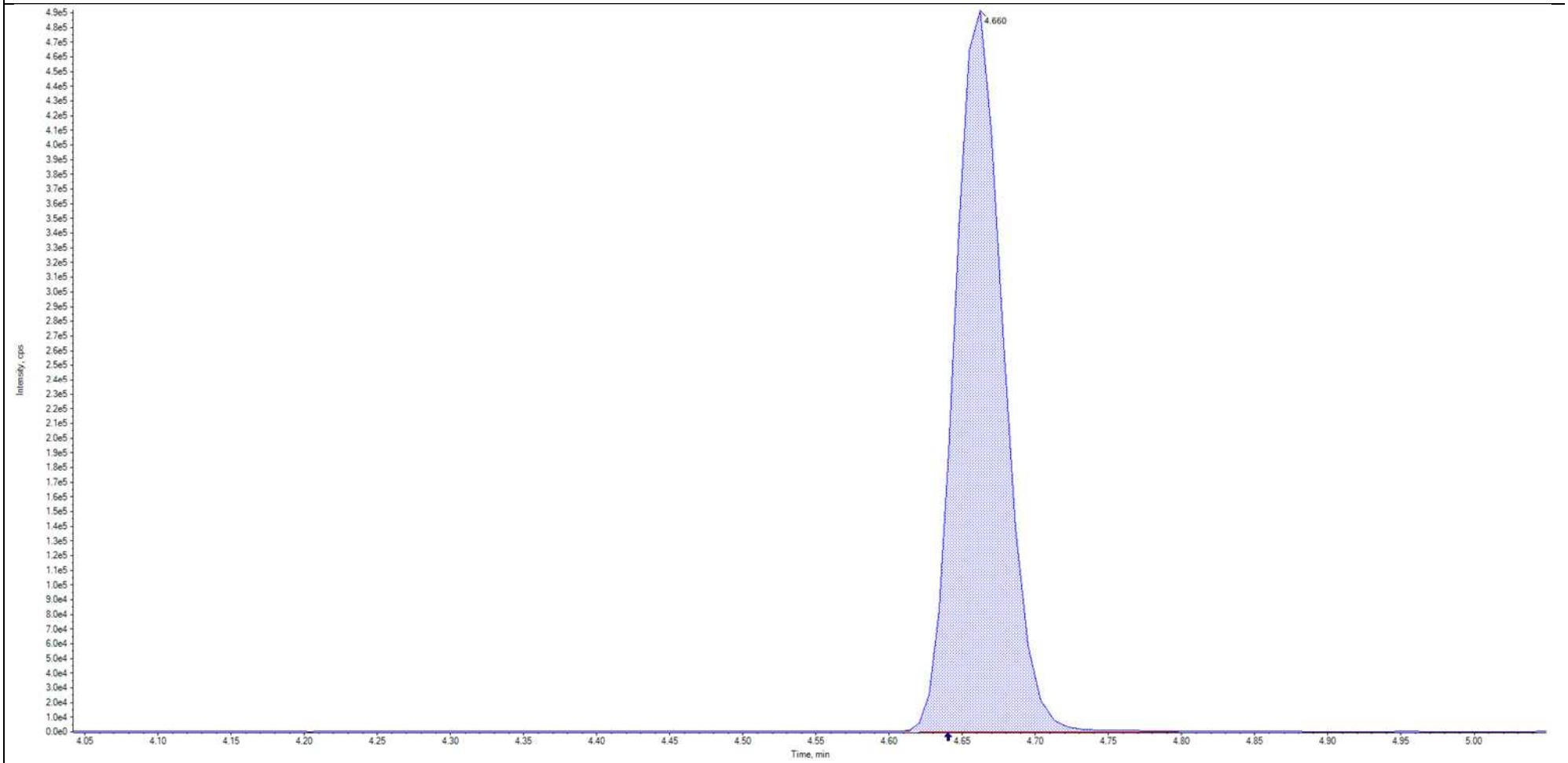
13C2-PFOA
Sample: WG1971858-5 S/N:N/A Points Across peak:N/A



13C4-PFBA
Sample: WG1971858-5

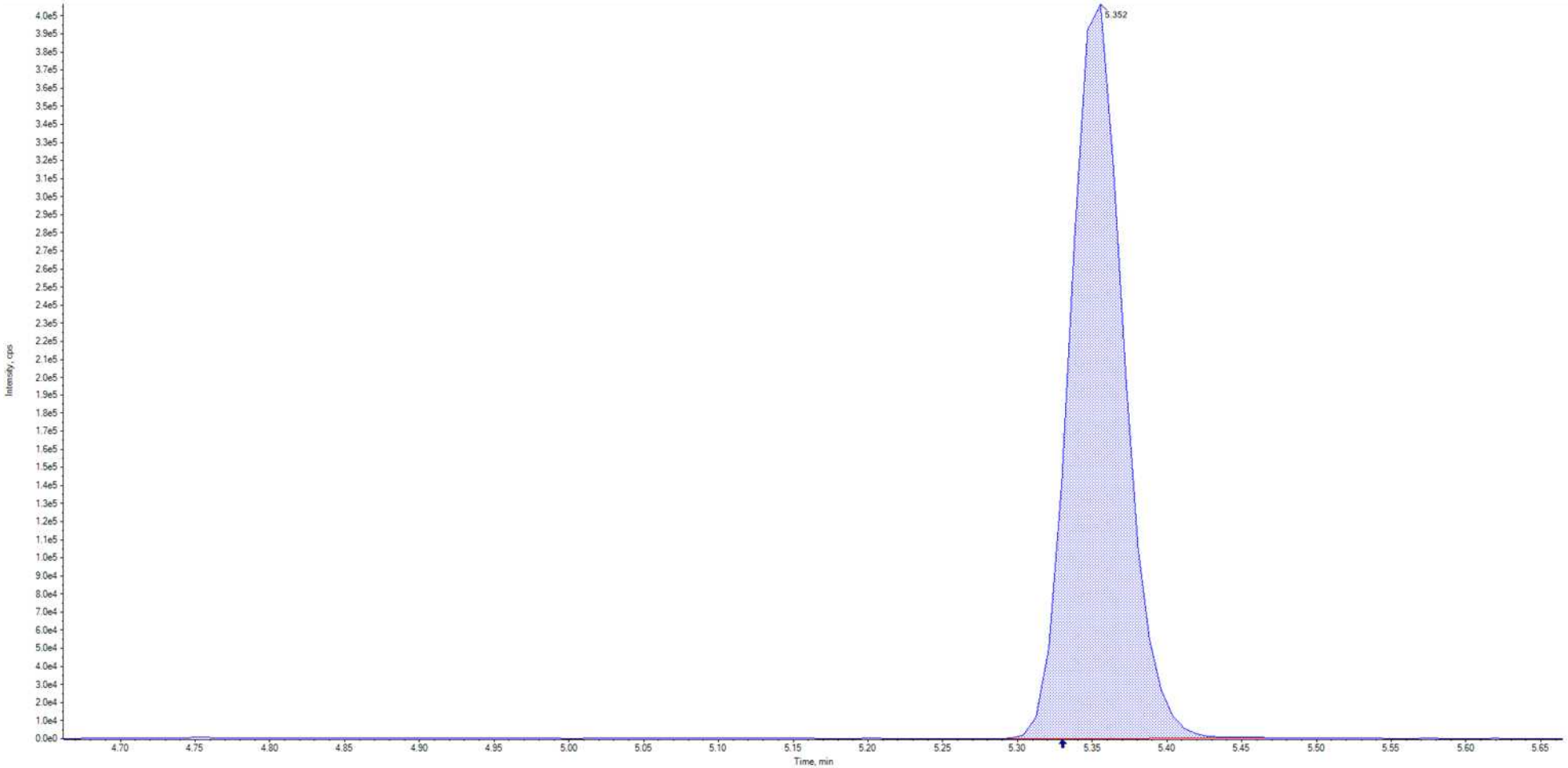


13C5-PFPeA
Sample: WG1971858-5



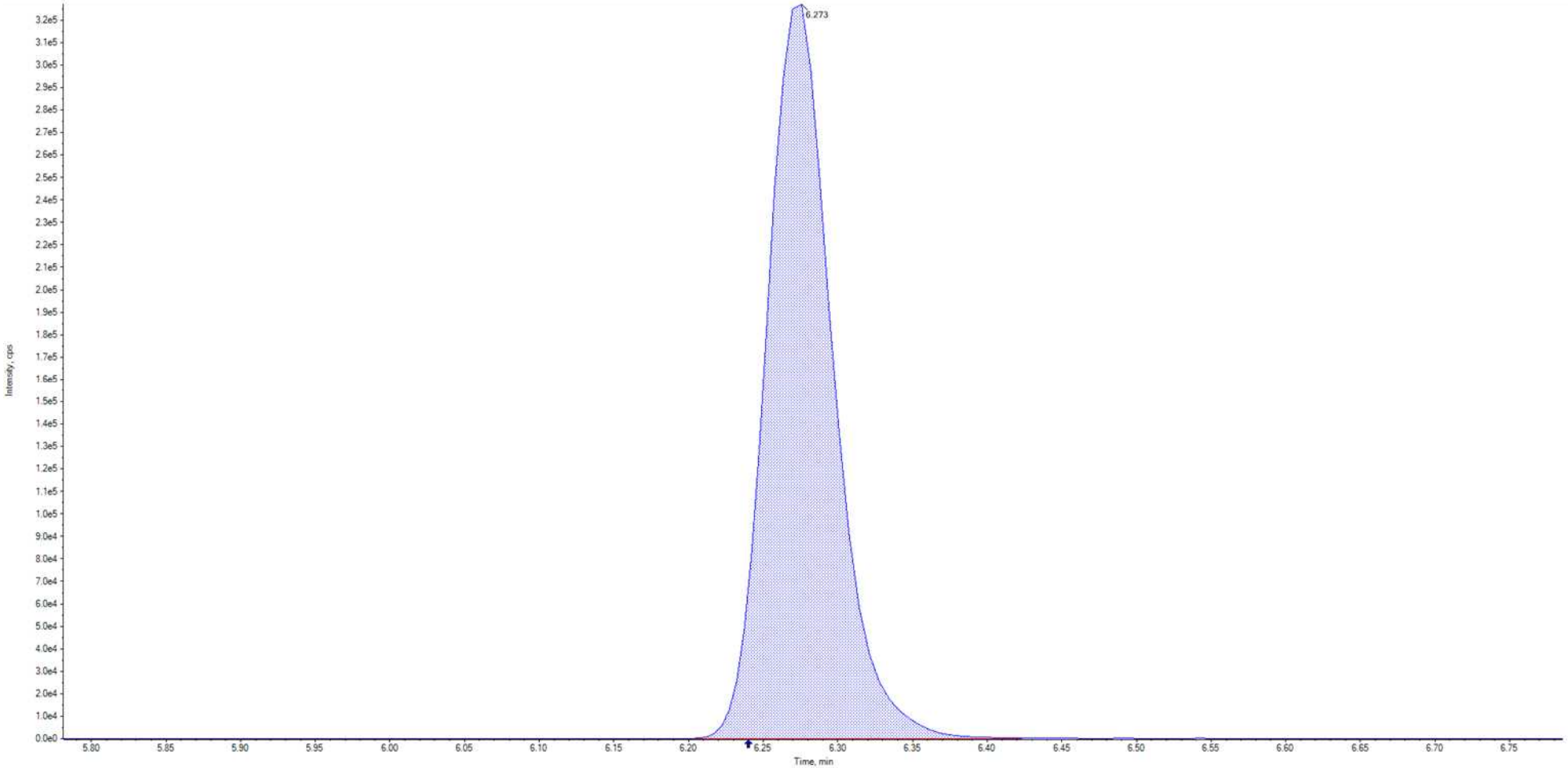
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C5-PFHxA
Sample: WG1971858-5



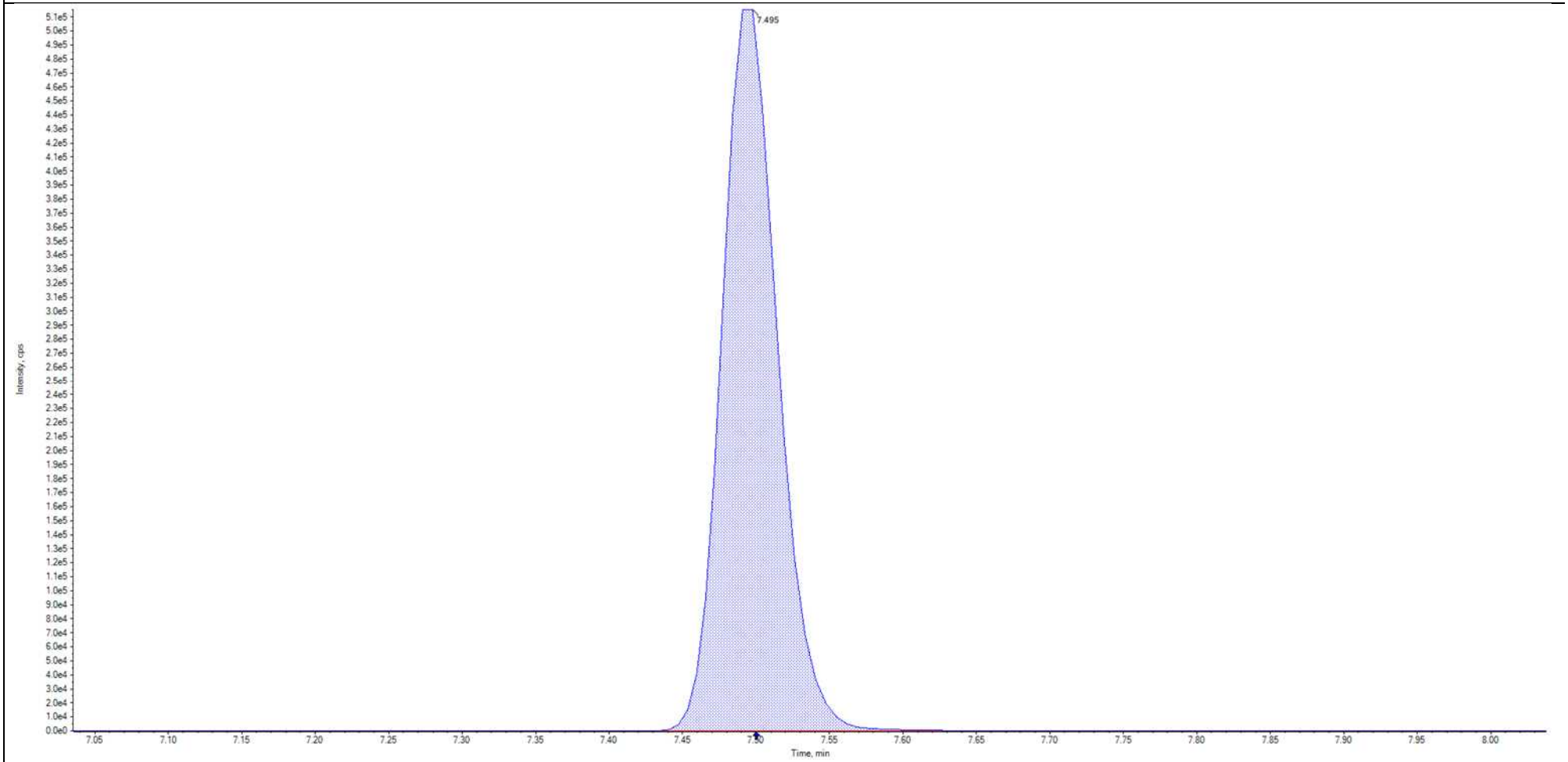
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Generated: 9/17/2024 6:15:27 AM

13C4-PFHpA
Sample: WG1971858-5

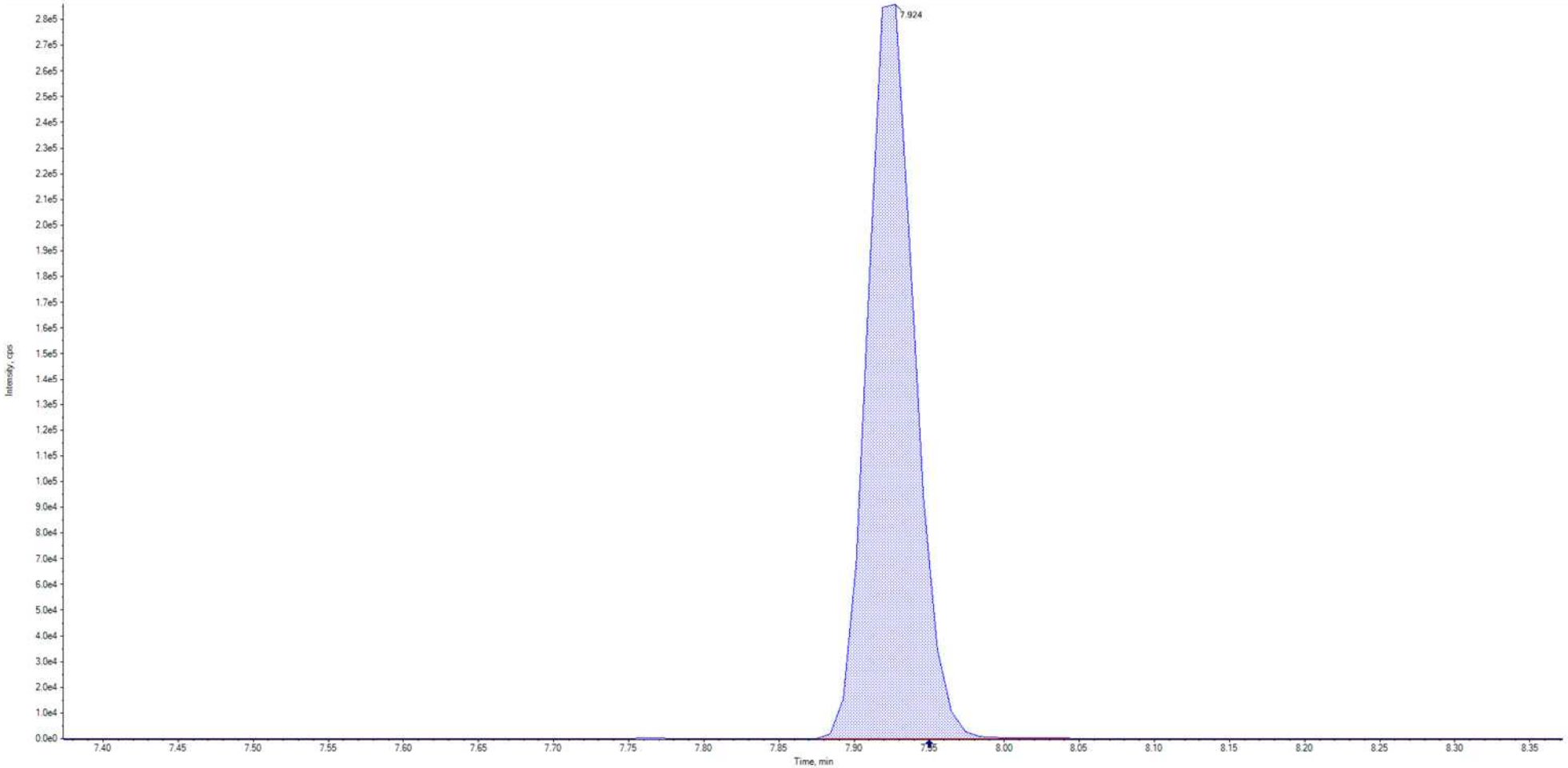


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
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Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

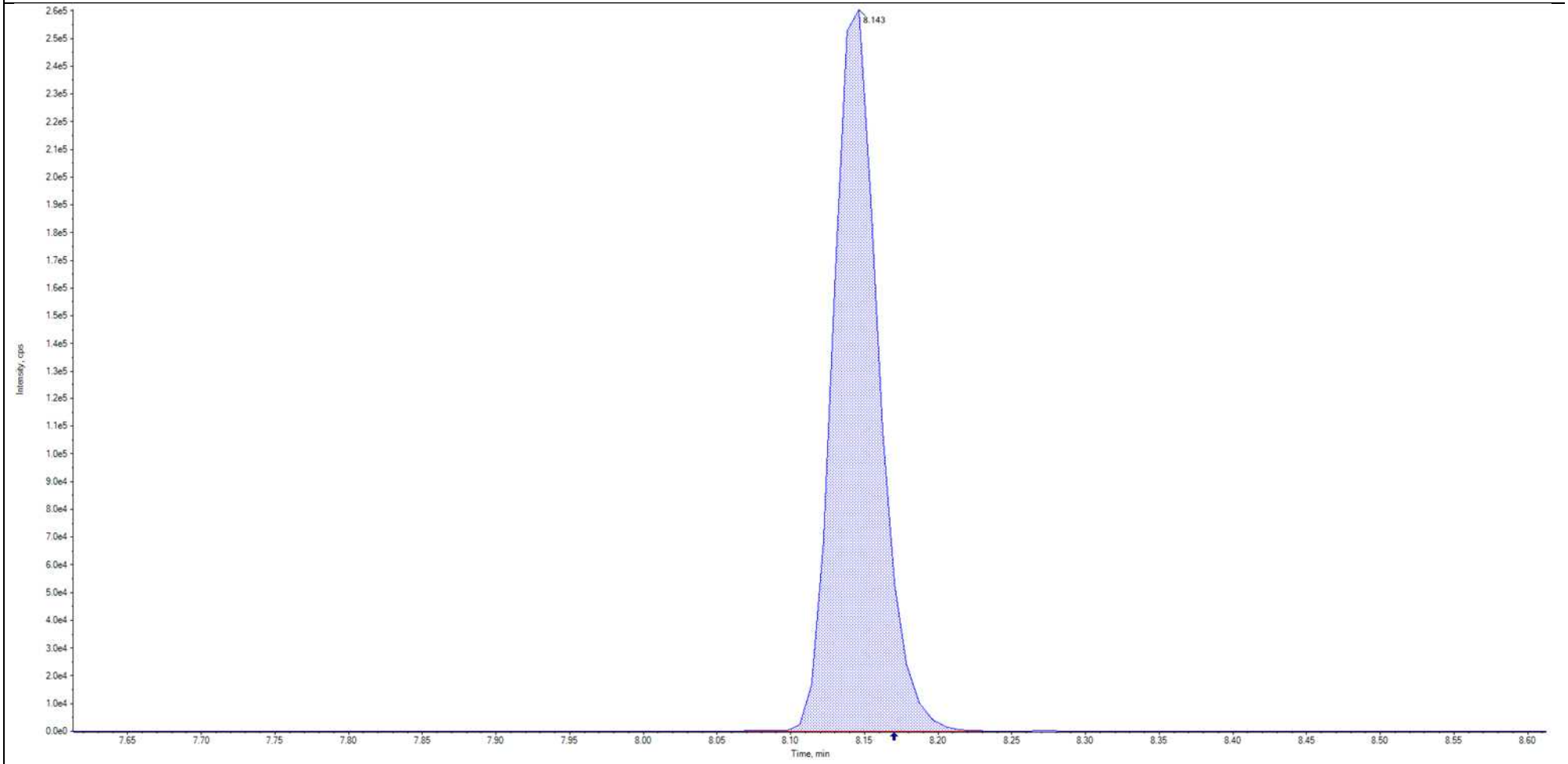
13C8-PFOA
Sample: WG1971858-5



13C9-PFNA
Sample: WG1971858-5

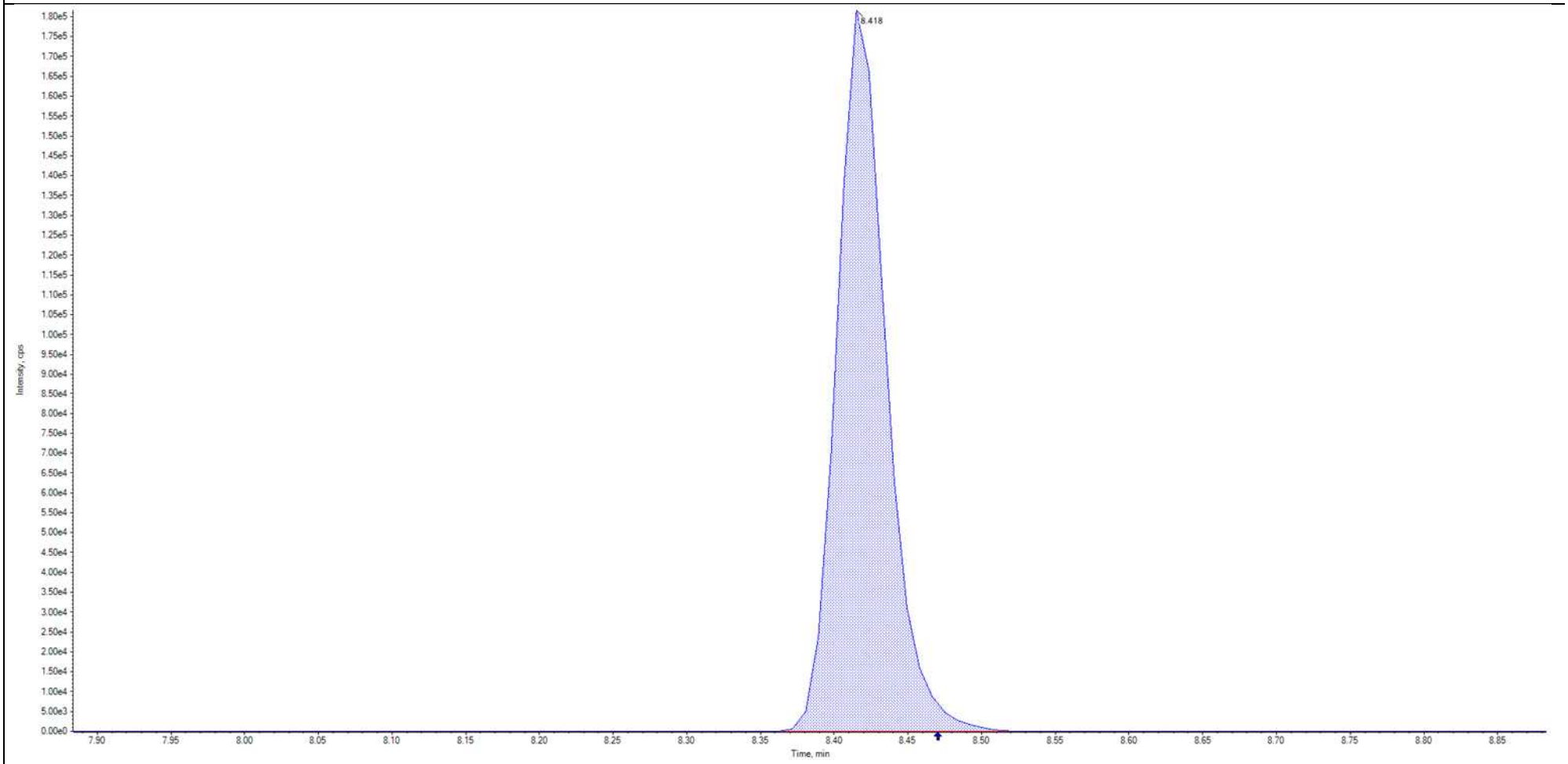


13C6-PFDA
Sample: WG1971858-5



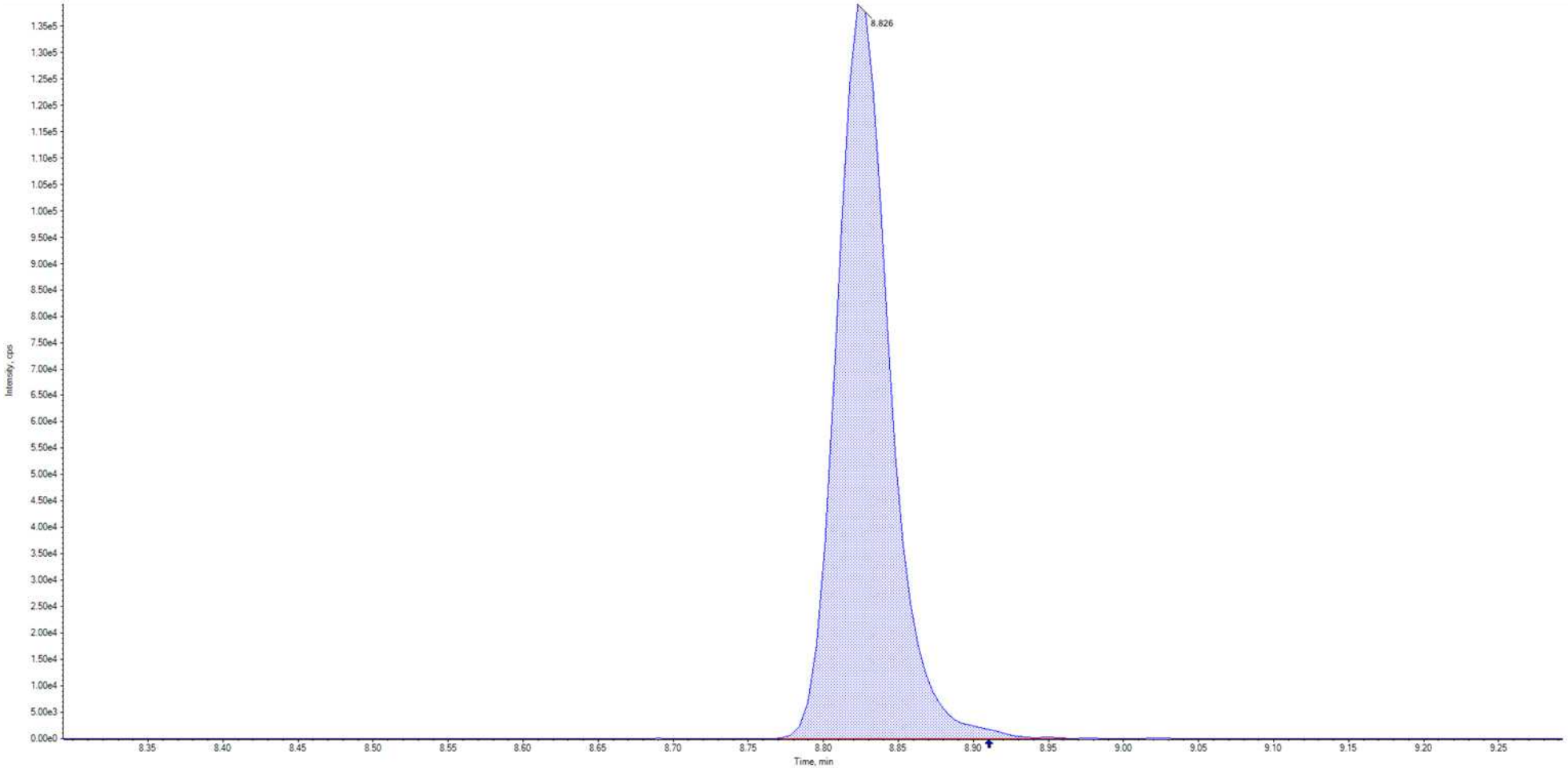
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C7-PFUnA
Sample: WG1971858-5

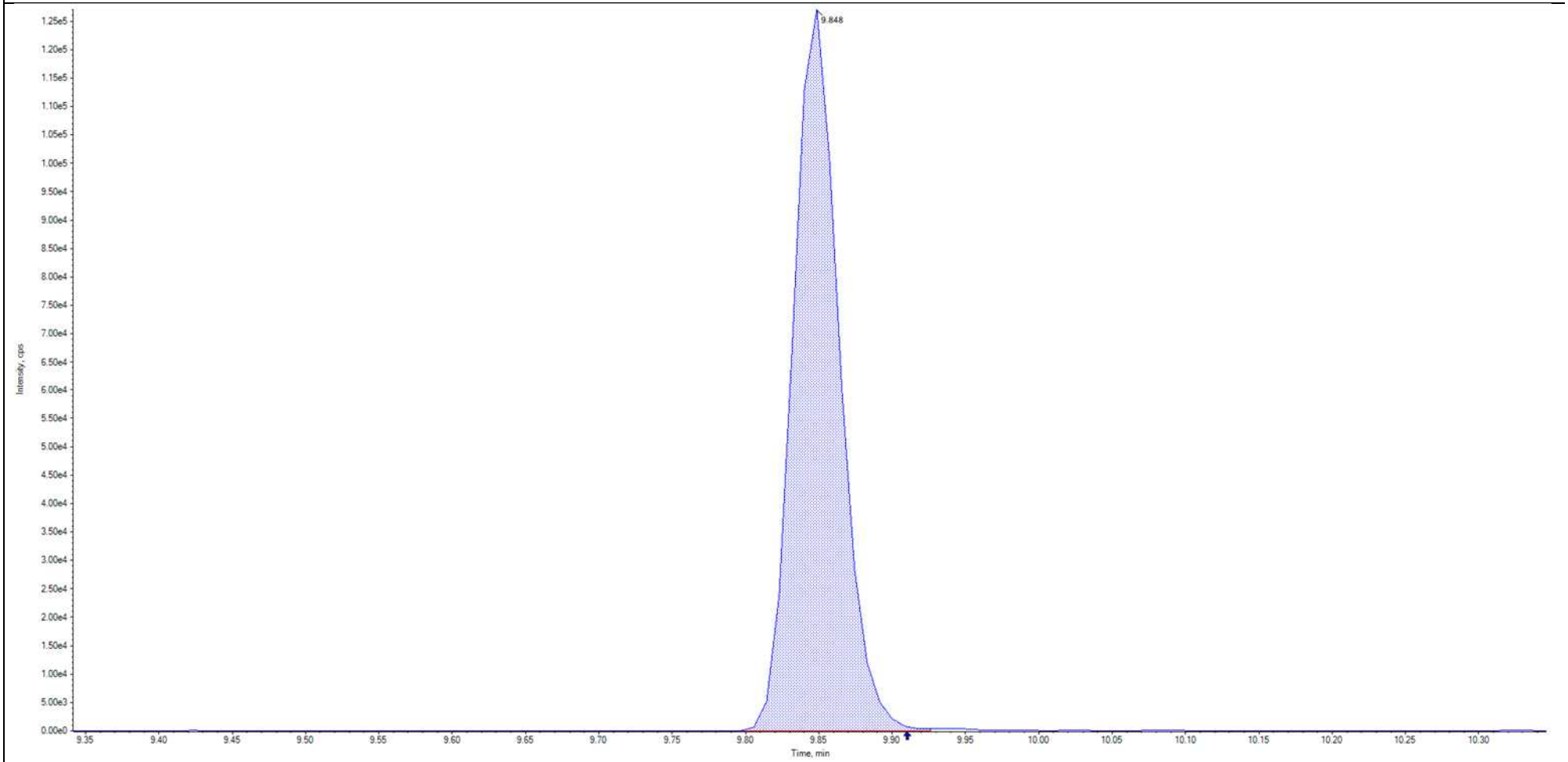


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C2-PFDoA
Sample: WG1971858-5

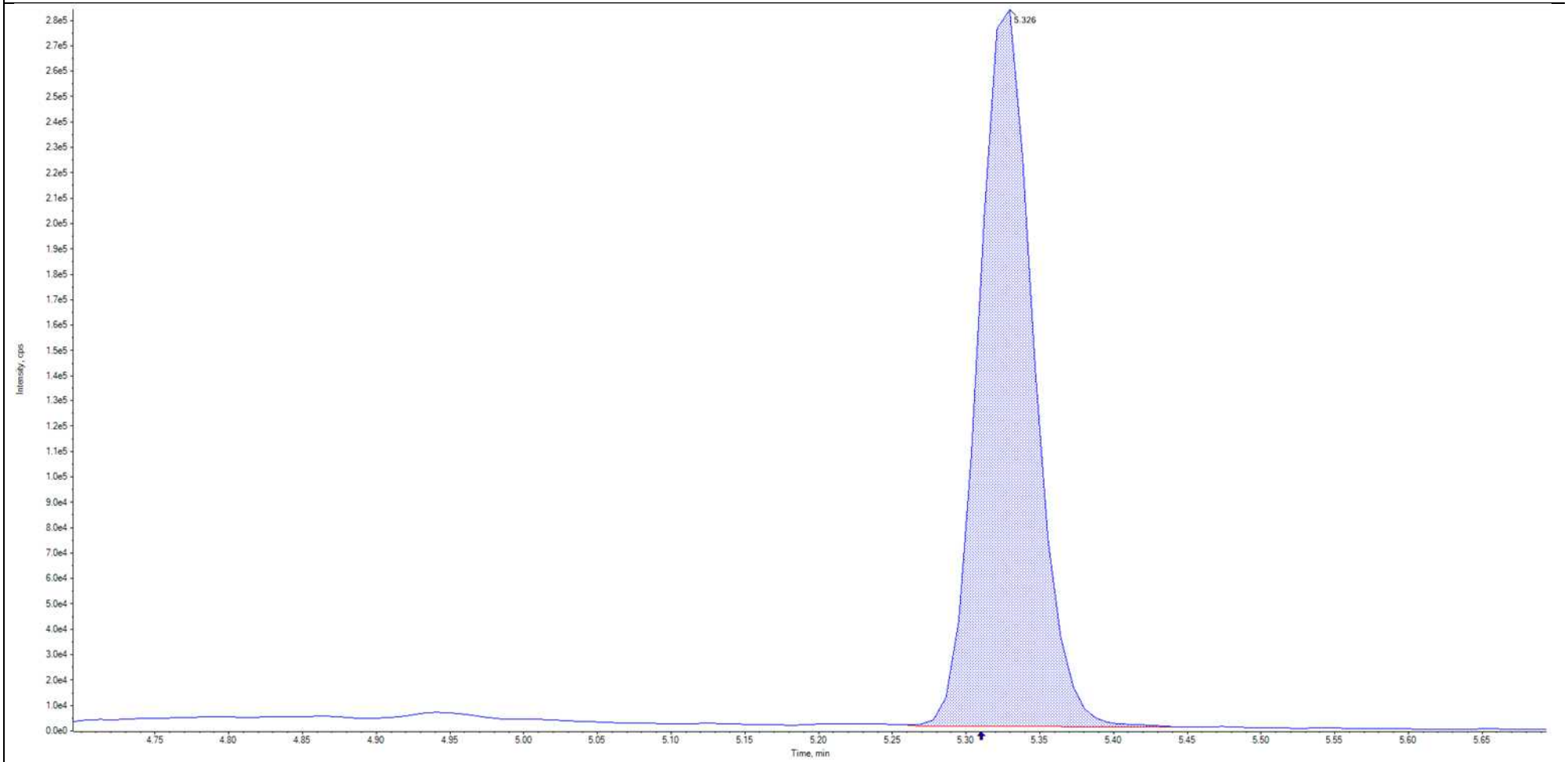


13C2-PFTeDA
Sample: WG1971858-5



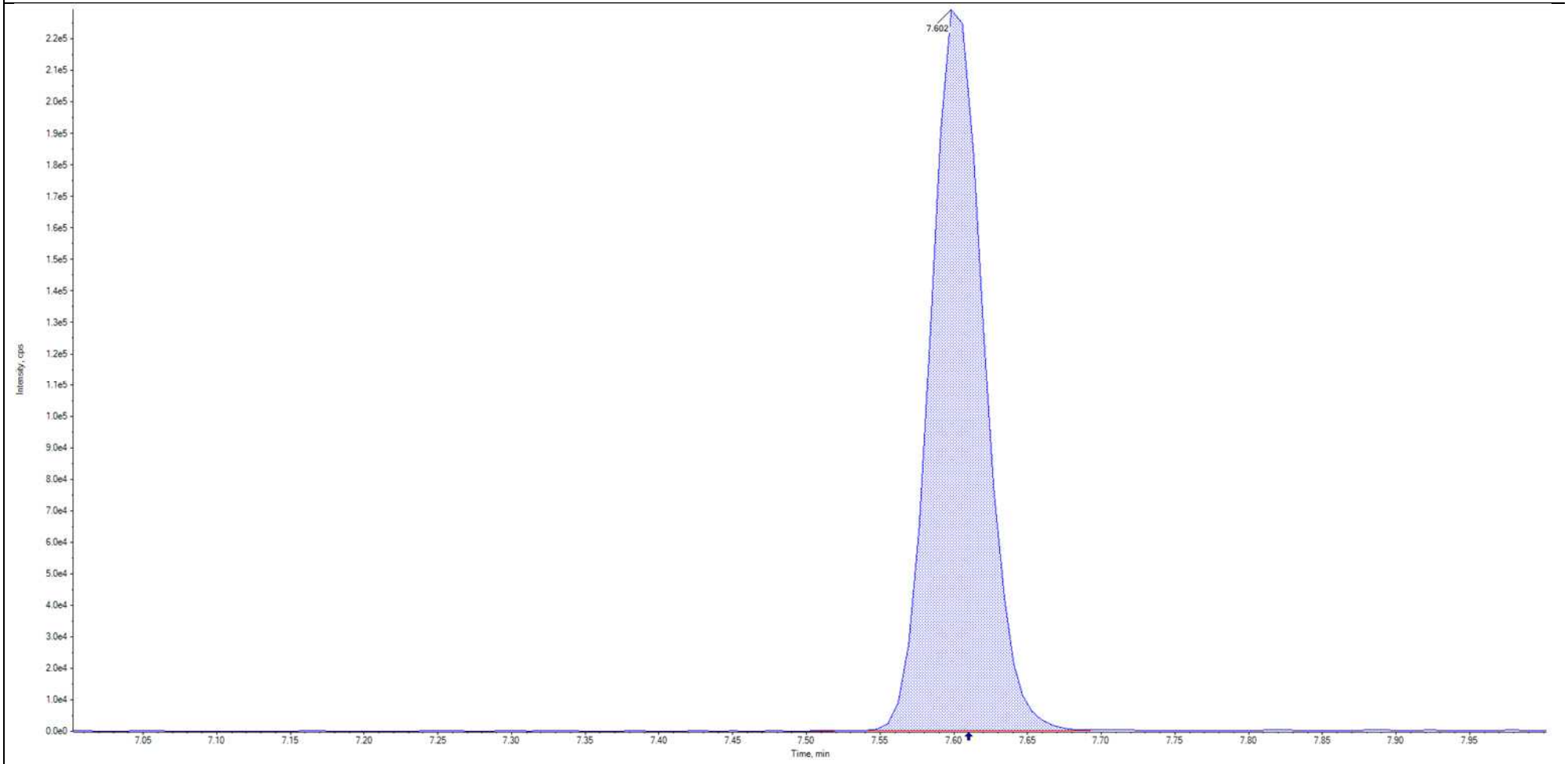
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C3-PFBS
Sample: WG1971858-5



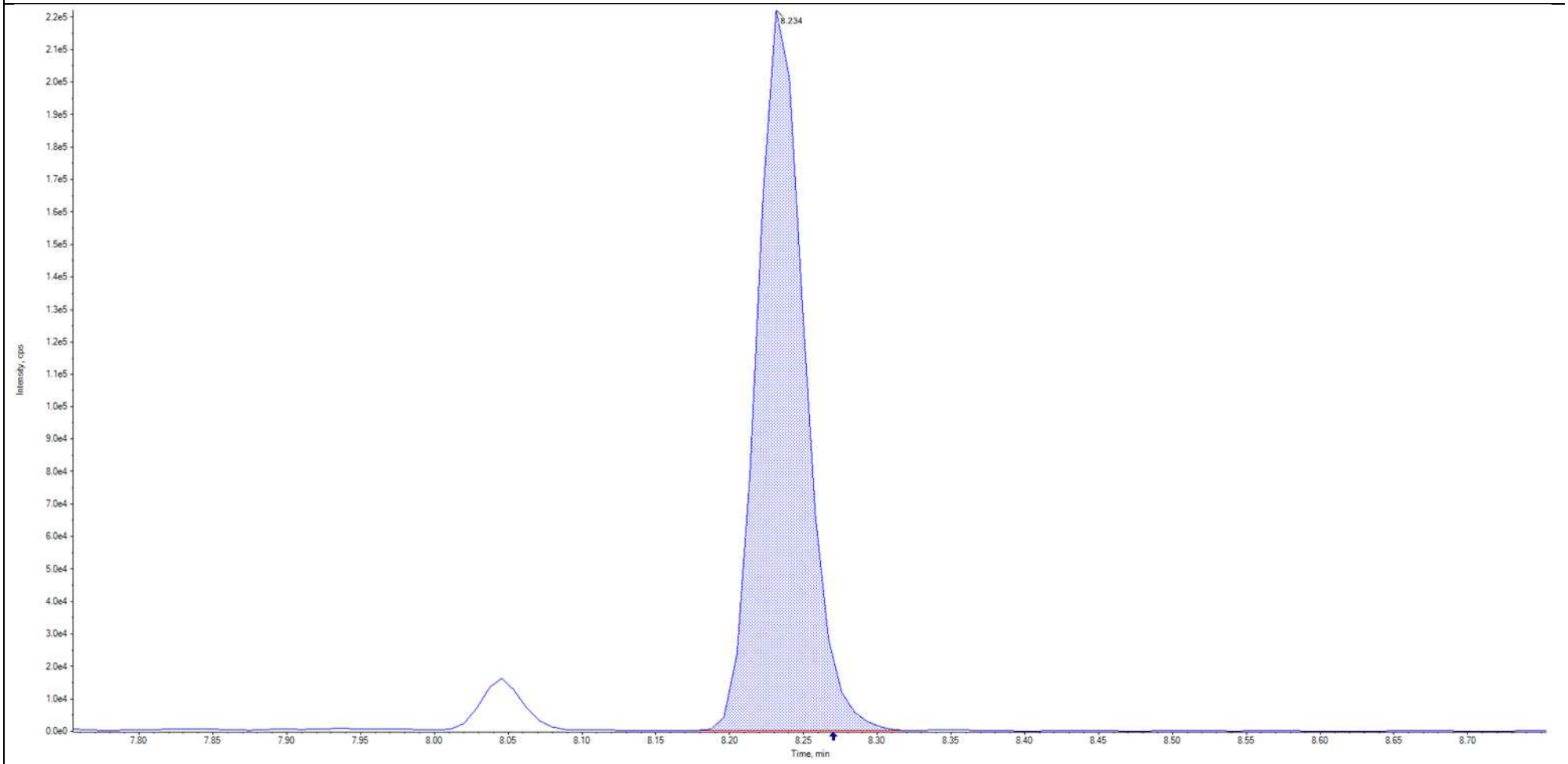
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C3-PFHxS
Sample: WG1971858-5



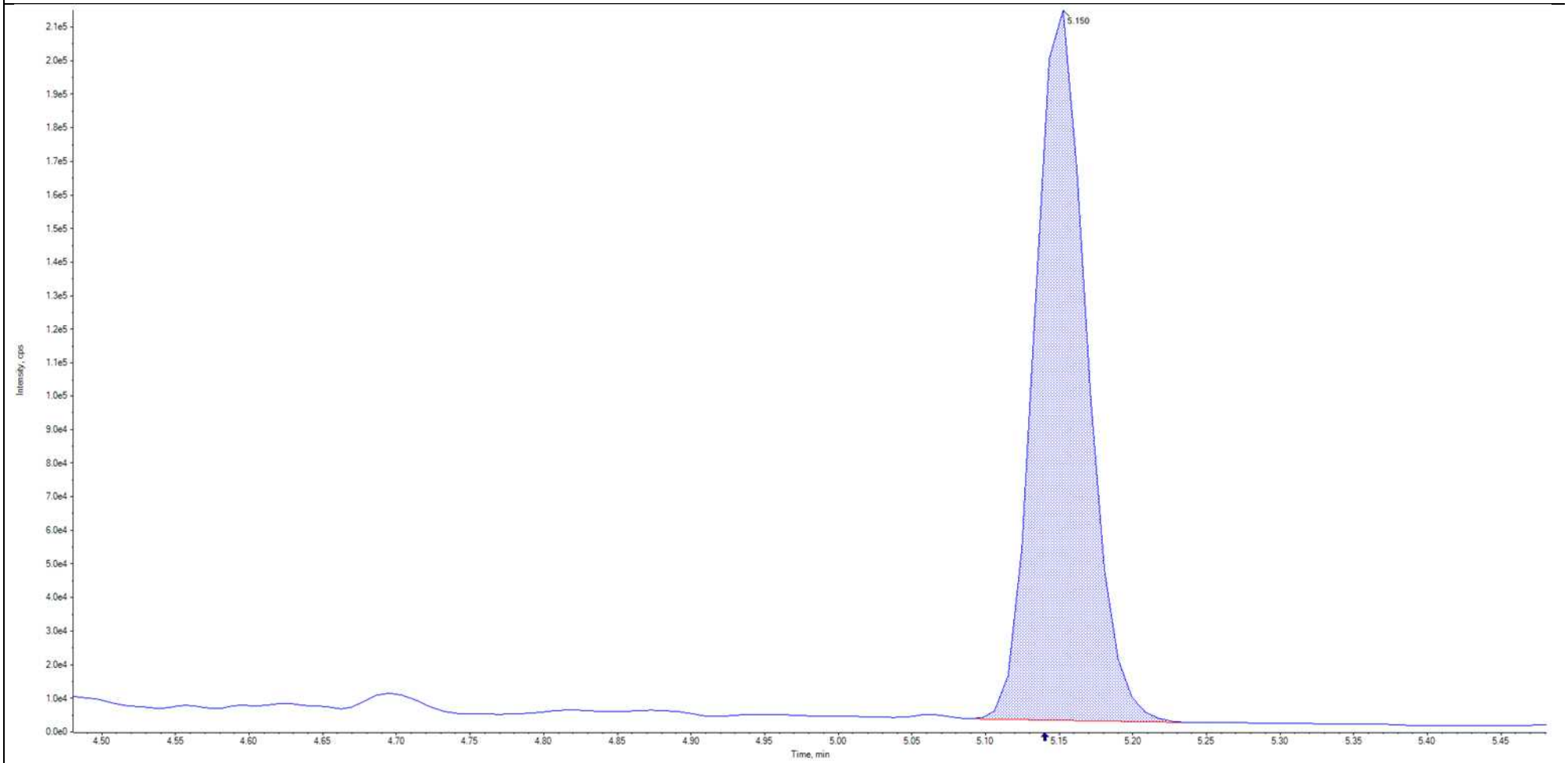
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C8-PFOS
Sample: WG1971858-5



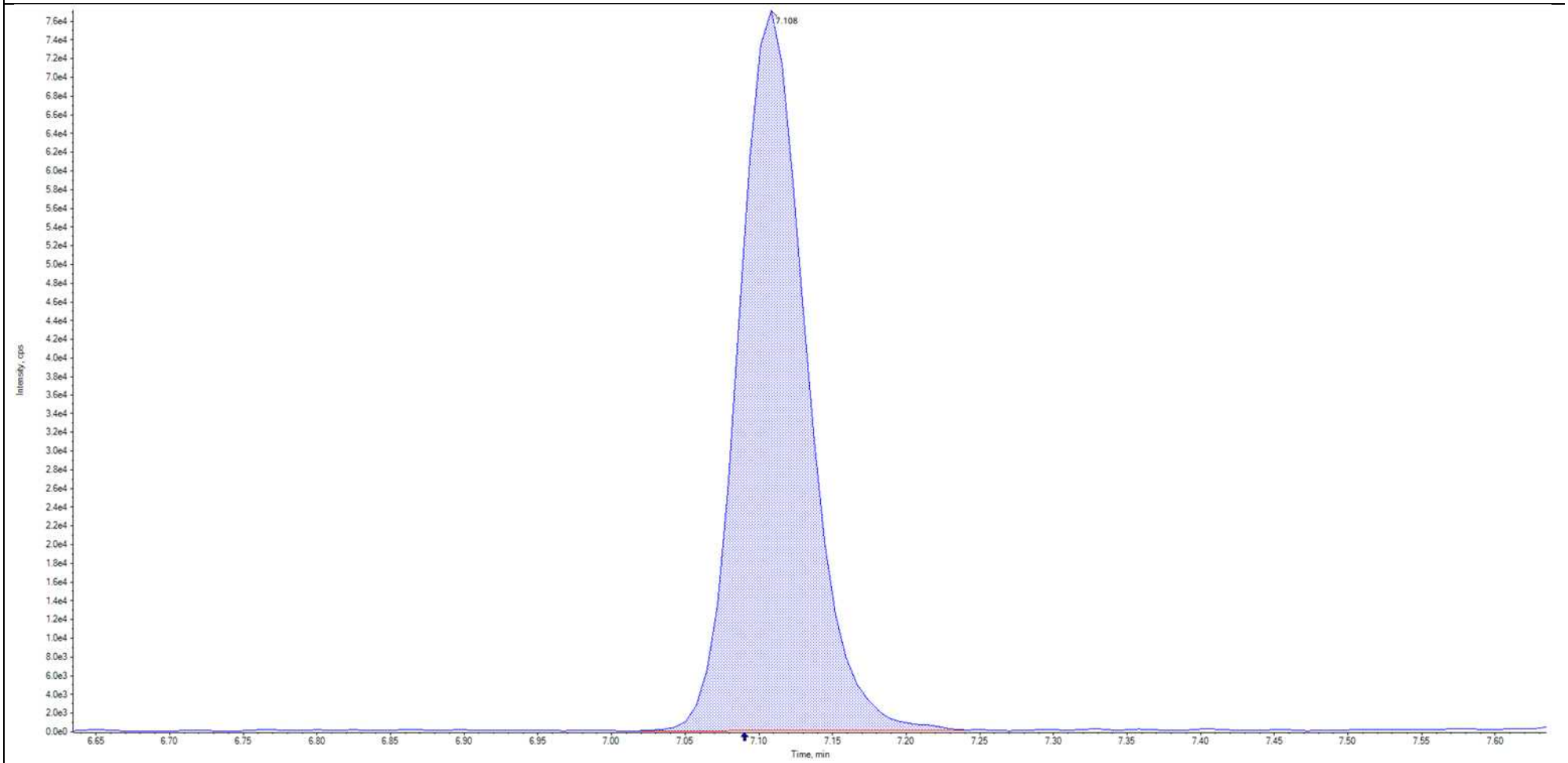
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C2-4:2FTS
Sample: WG1971858-5

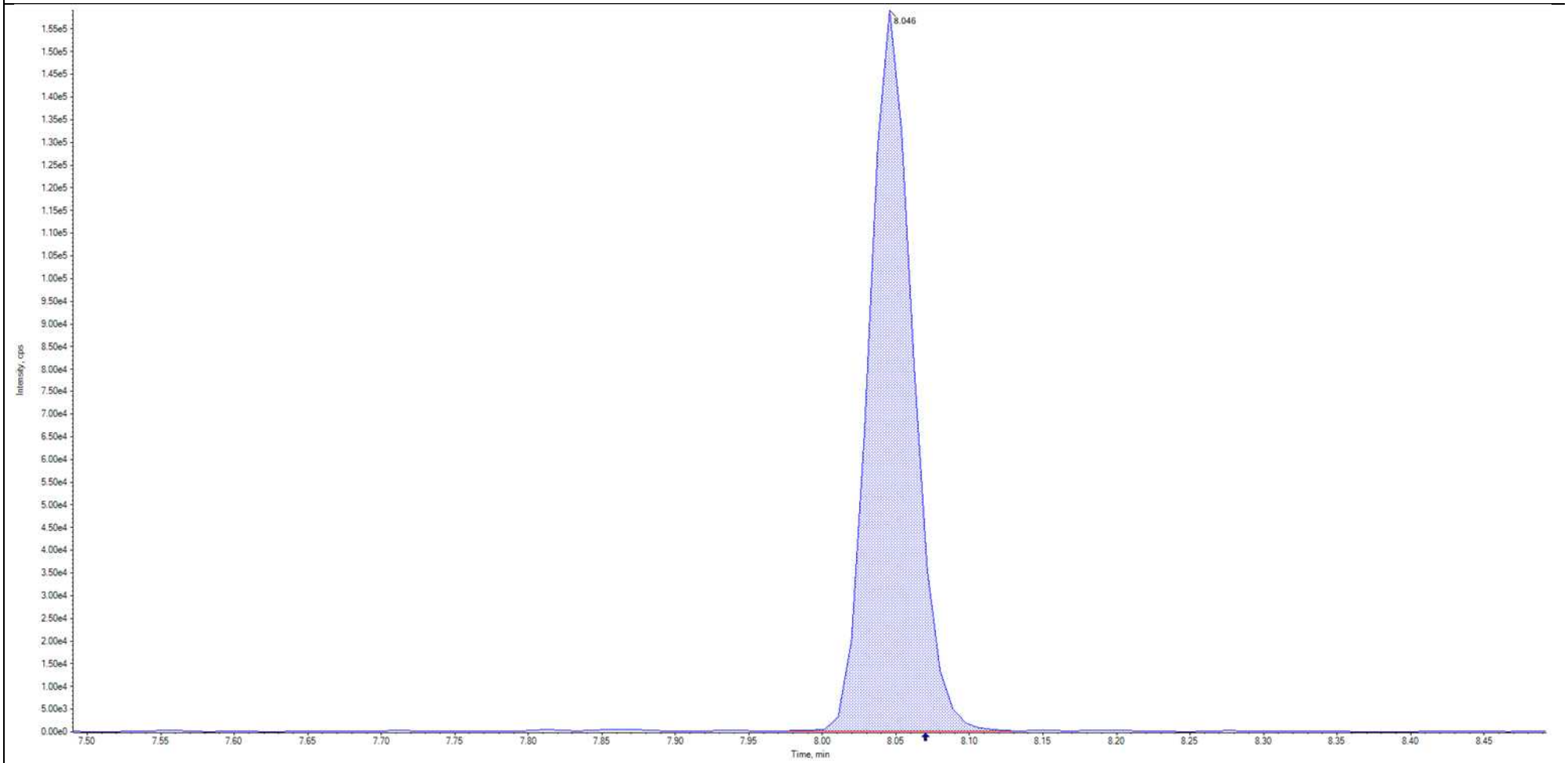


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

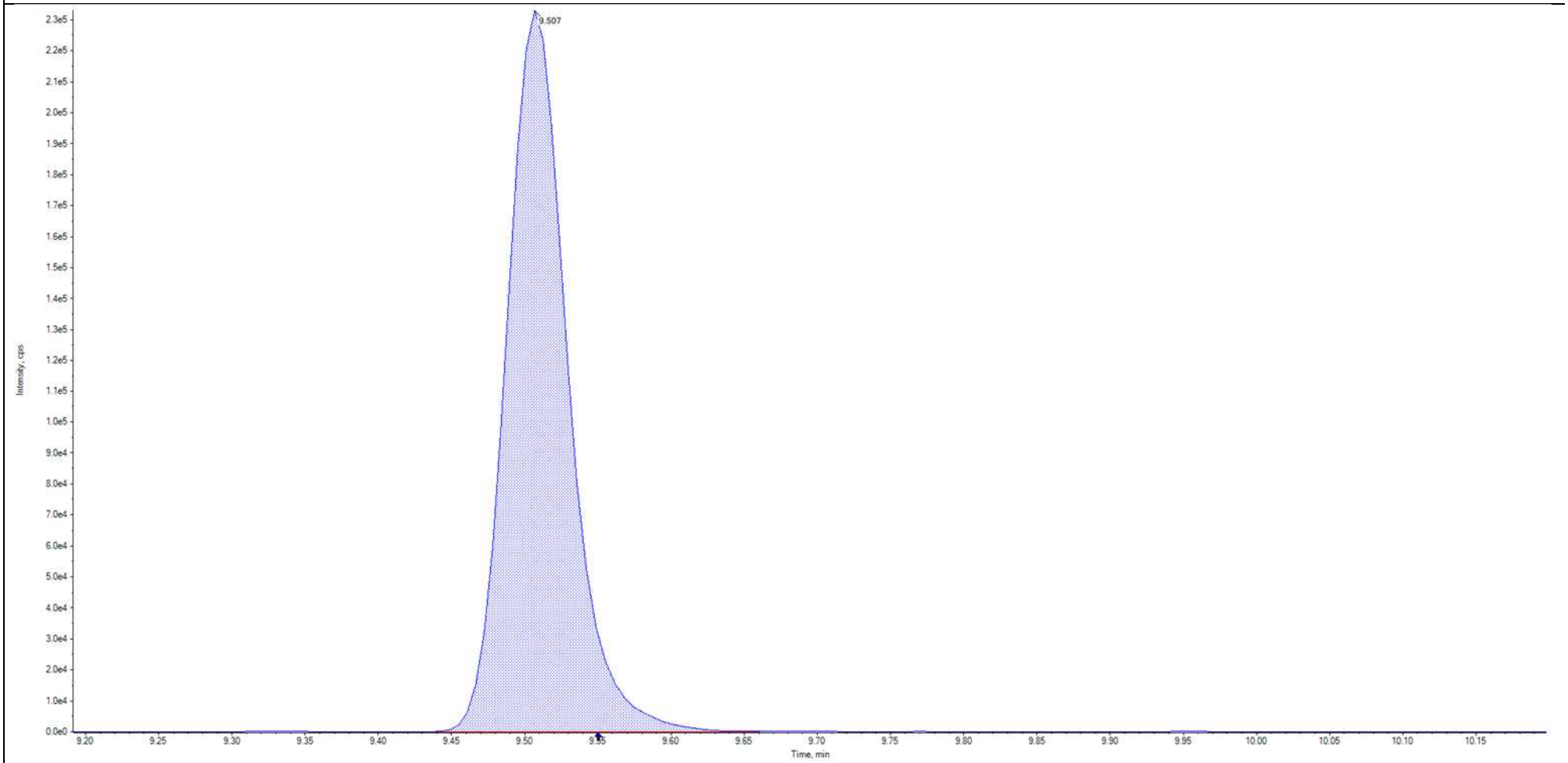
13C2-6:2FTS
Sample: WG1971858-5



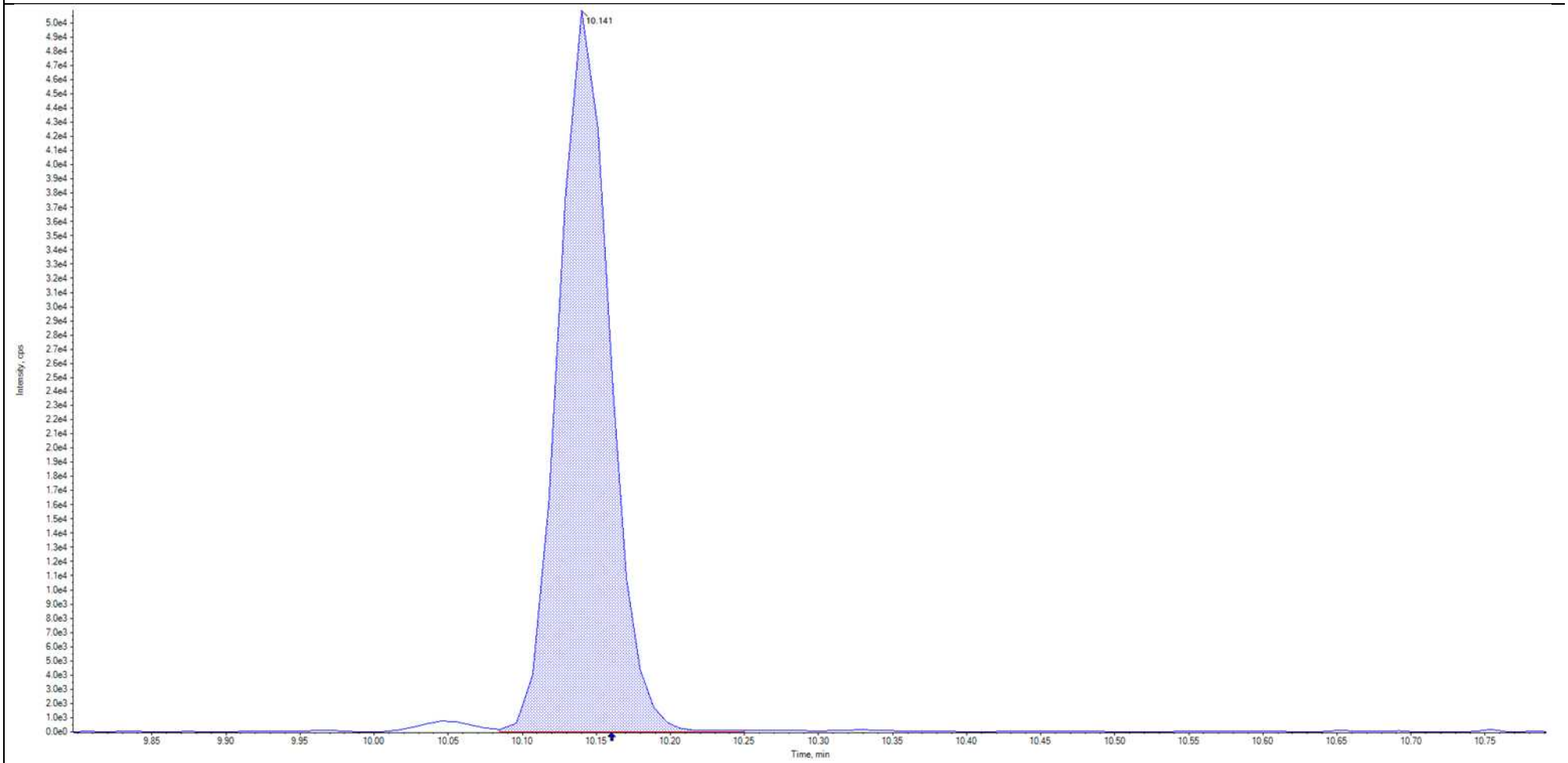
13C2-8:2FTS
Sample: WG1971858-5



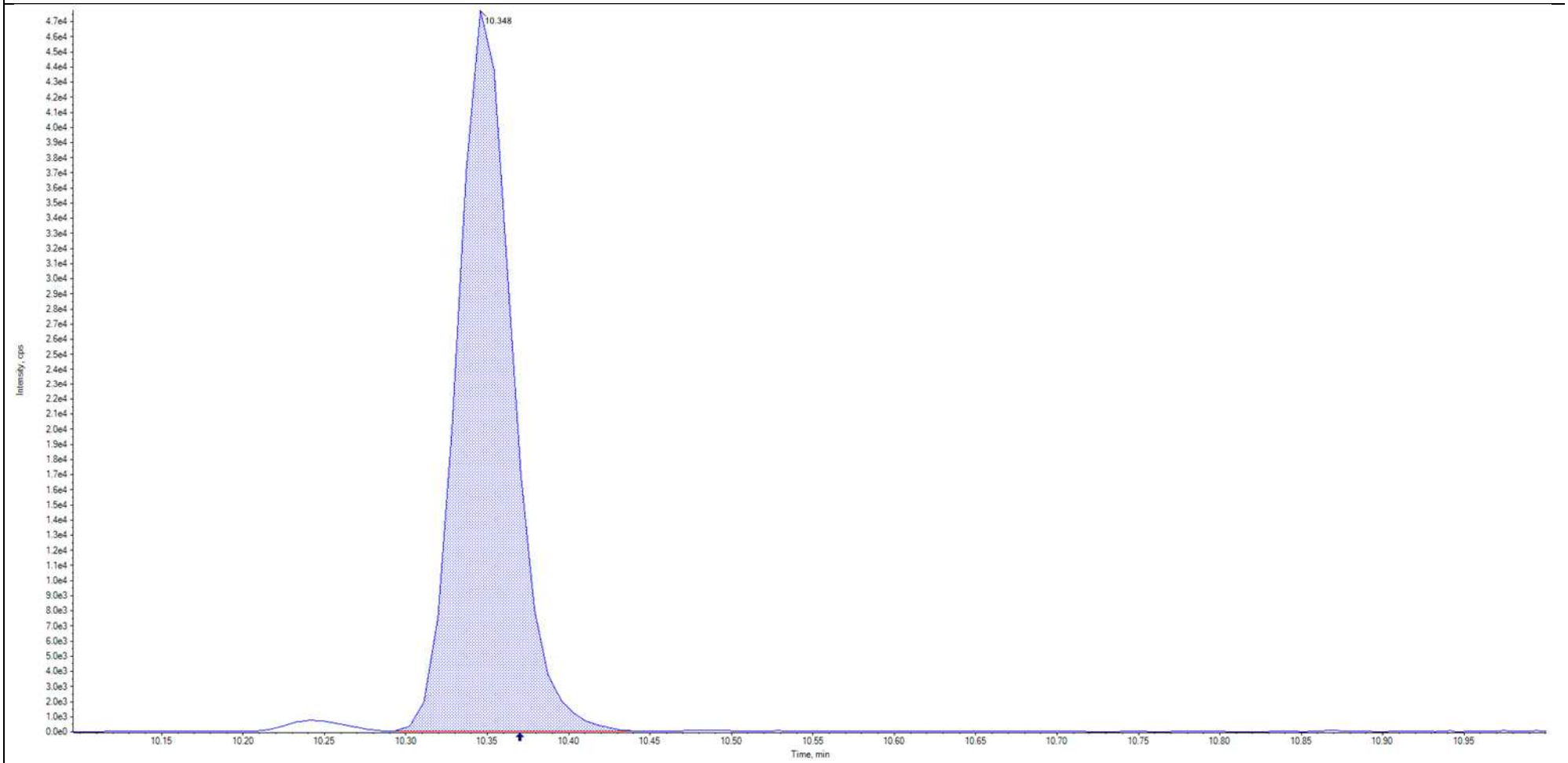
13C8-PFOSA
Sample: WG1971858-5



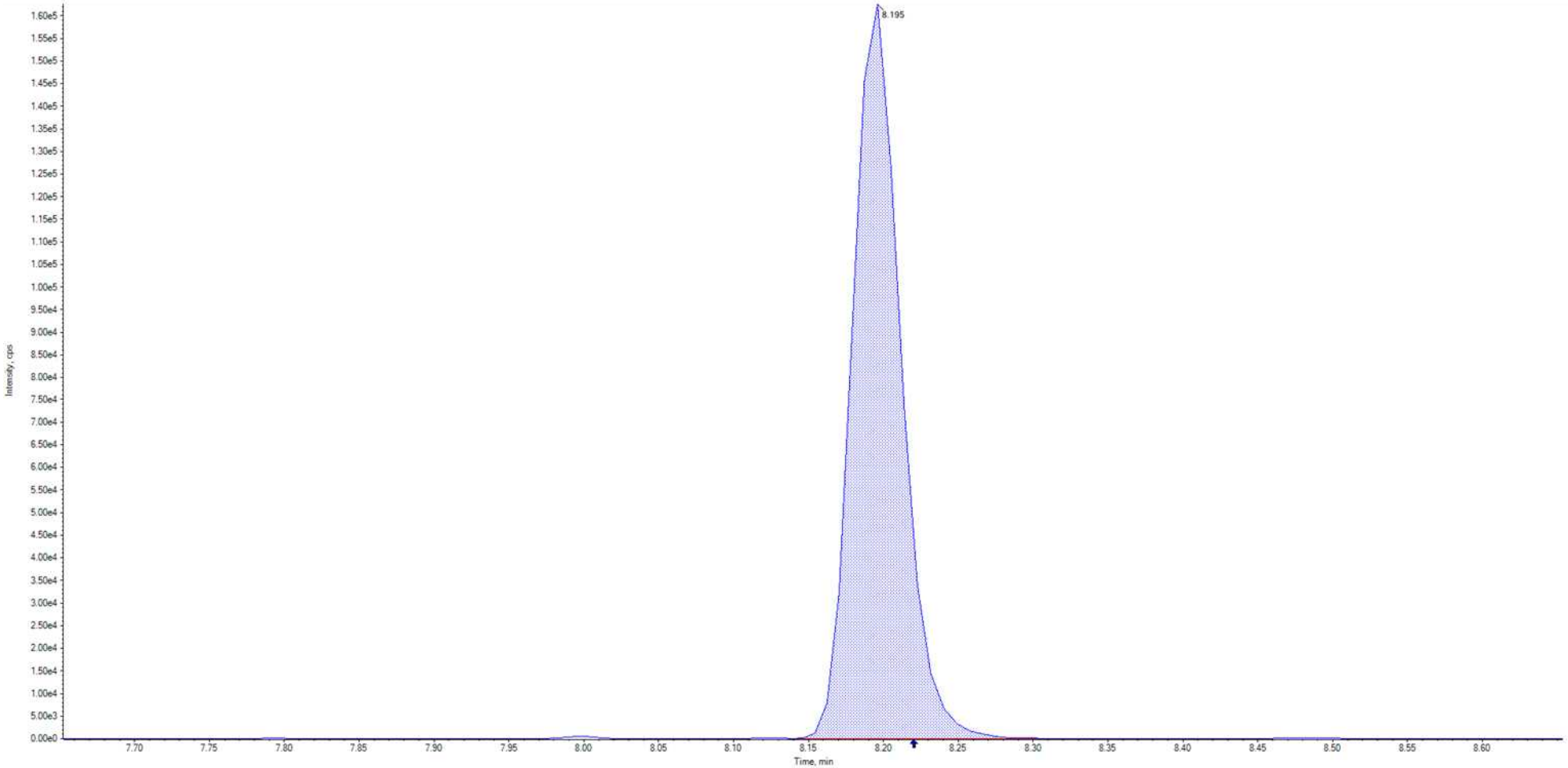
d3-NMeFOSA
Sample: WG1971858-5



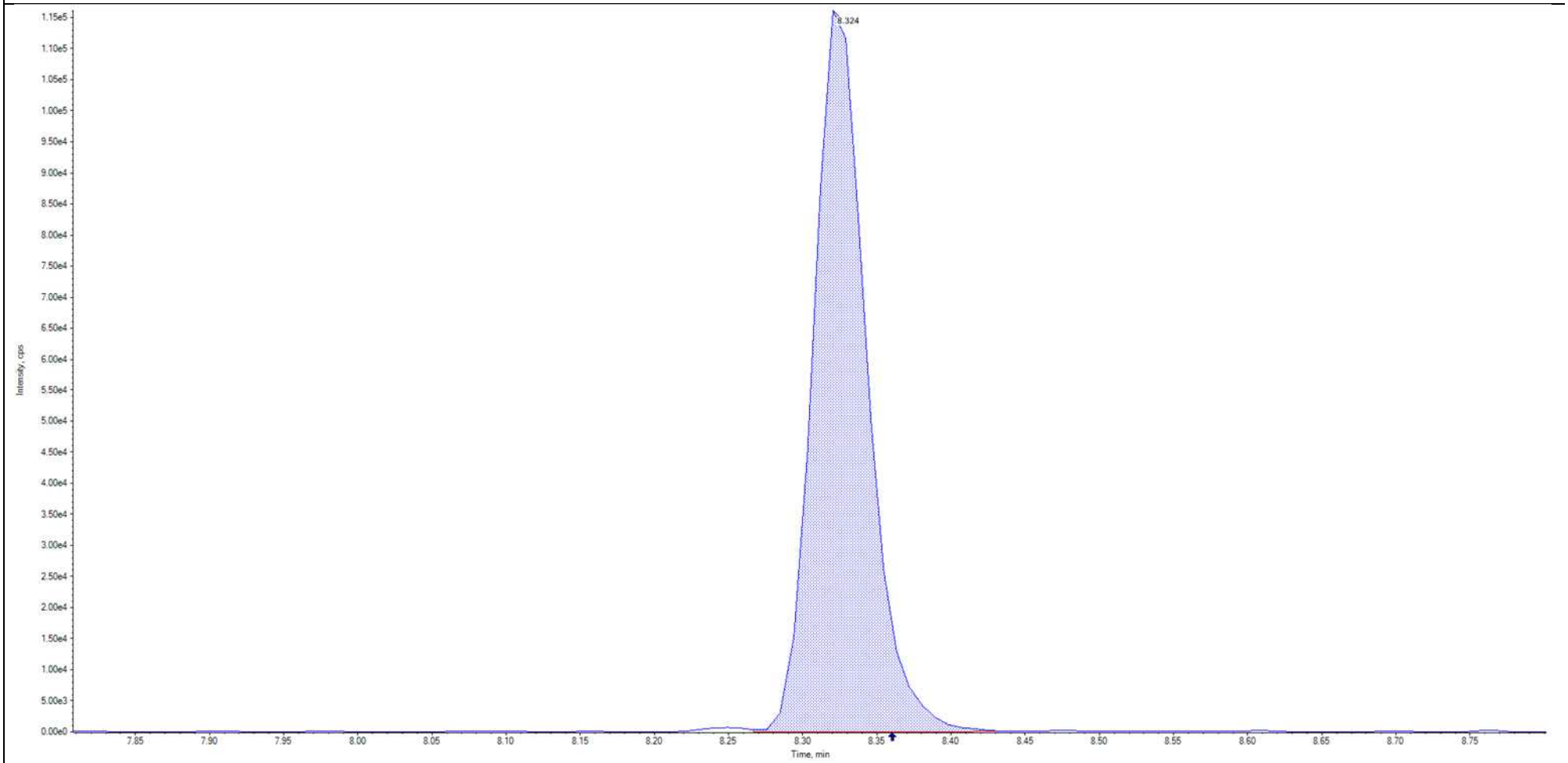
d5-NEtFOSA
Sample: WG1971858-5



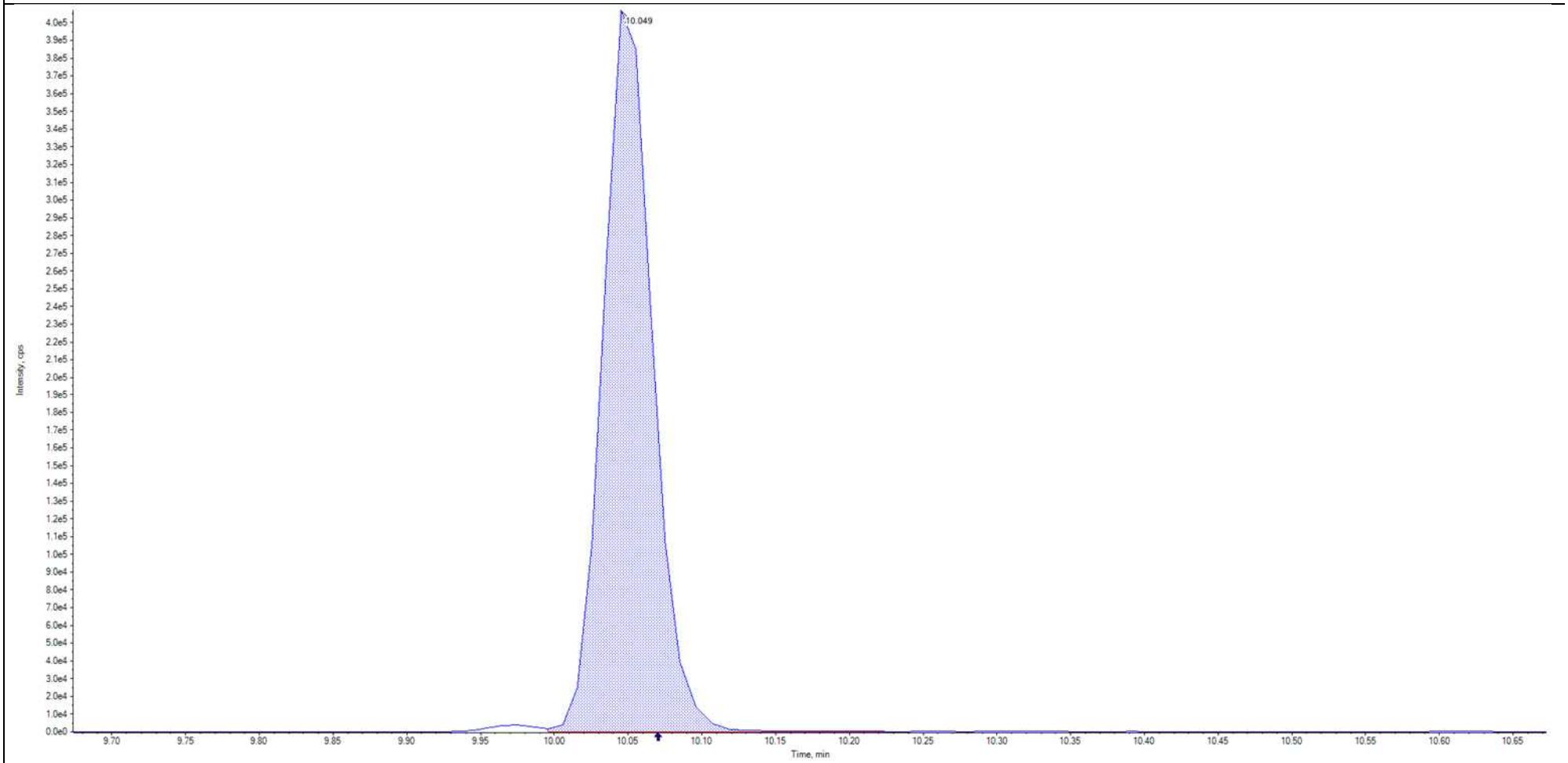
d3-NMeFOSAA
Sample: WG1971858-5



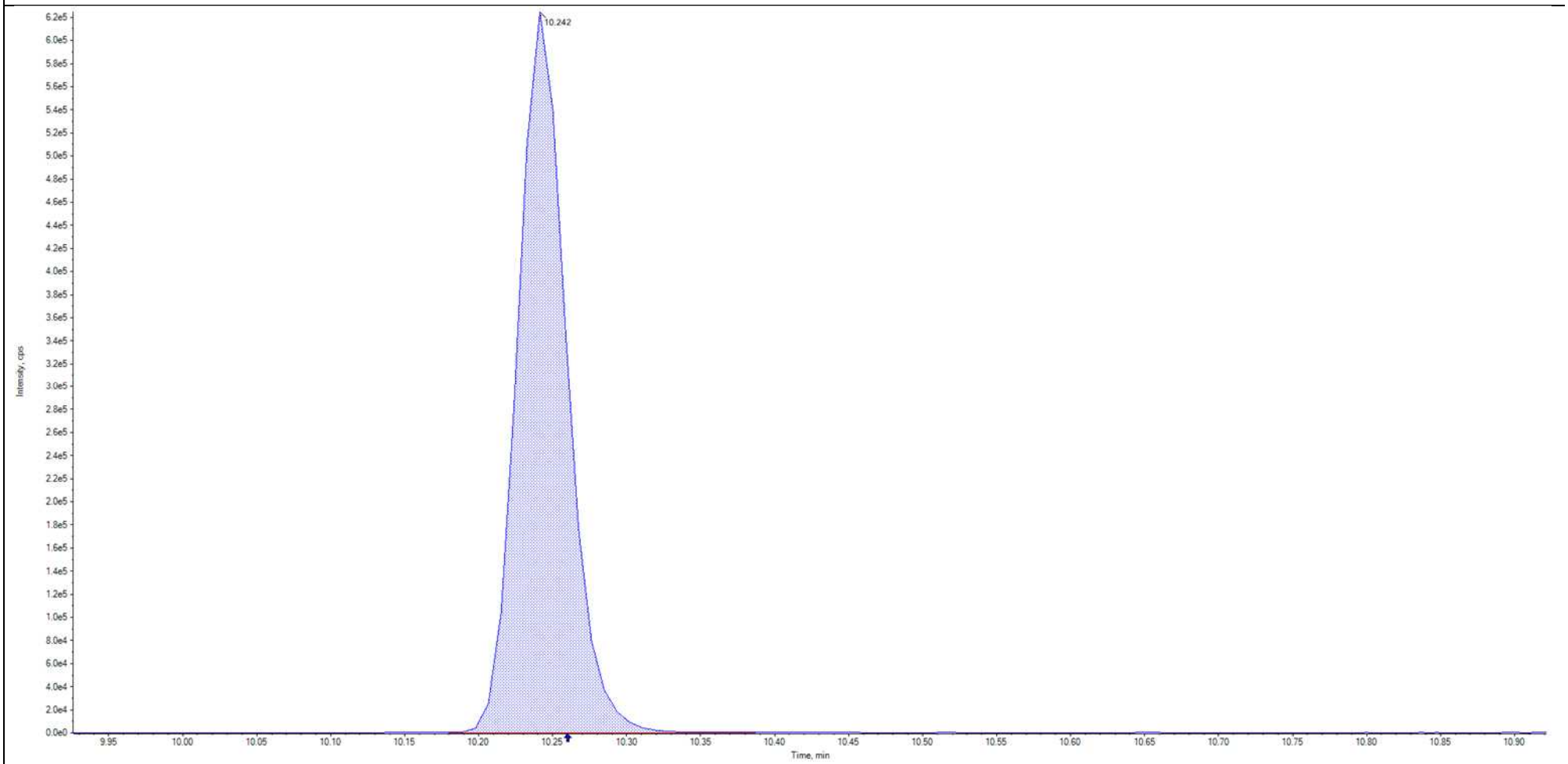
d5-NEtFOSAA
Sample: WG1971858-5



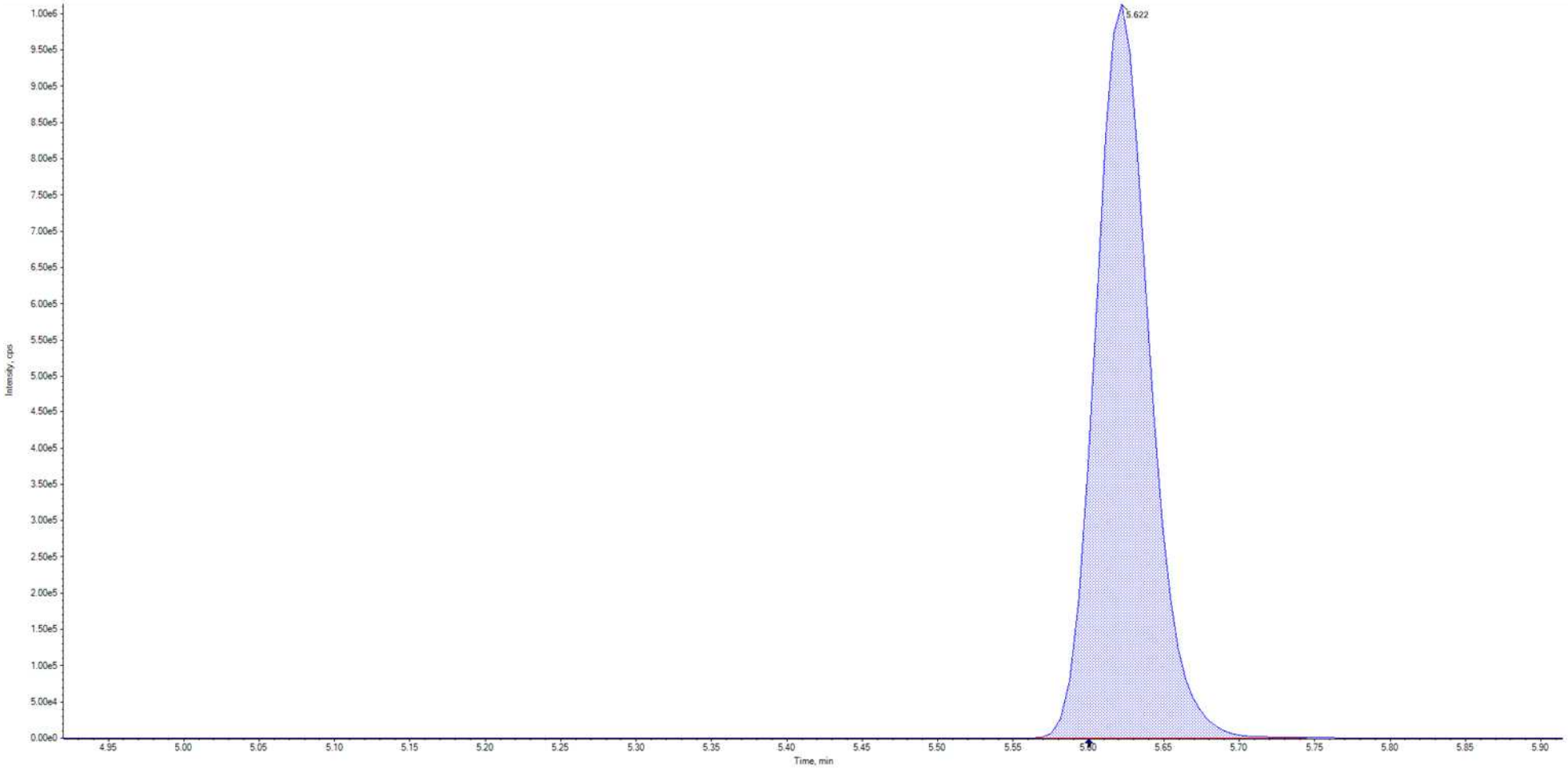
d7-NMeFOSE
Sample: WG1971858-5



d9-NEtFOSE
Sample: WG1971858-5

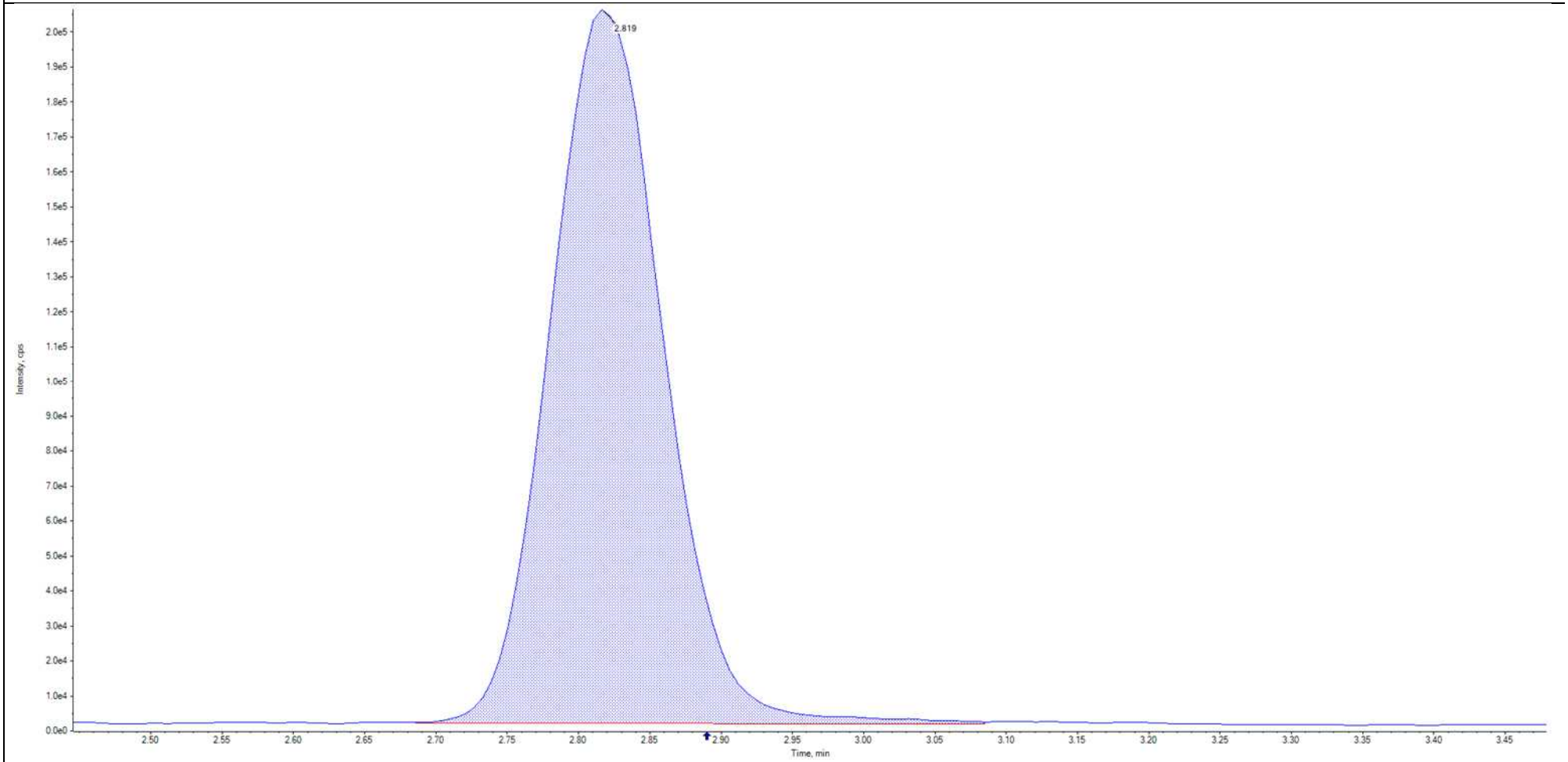


13C3-HFPO-DA
Sample: WG1971858-5



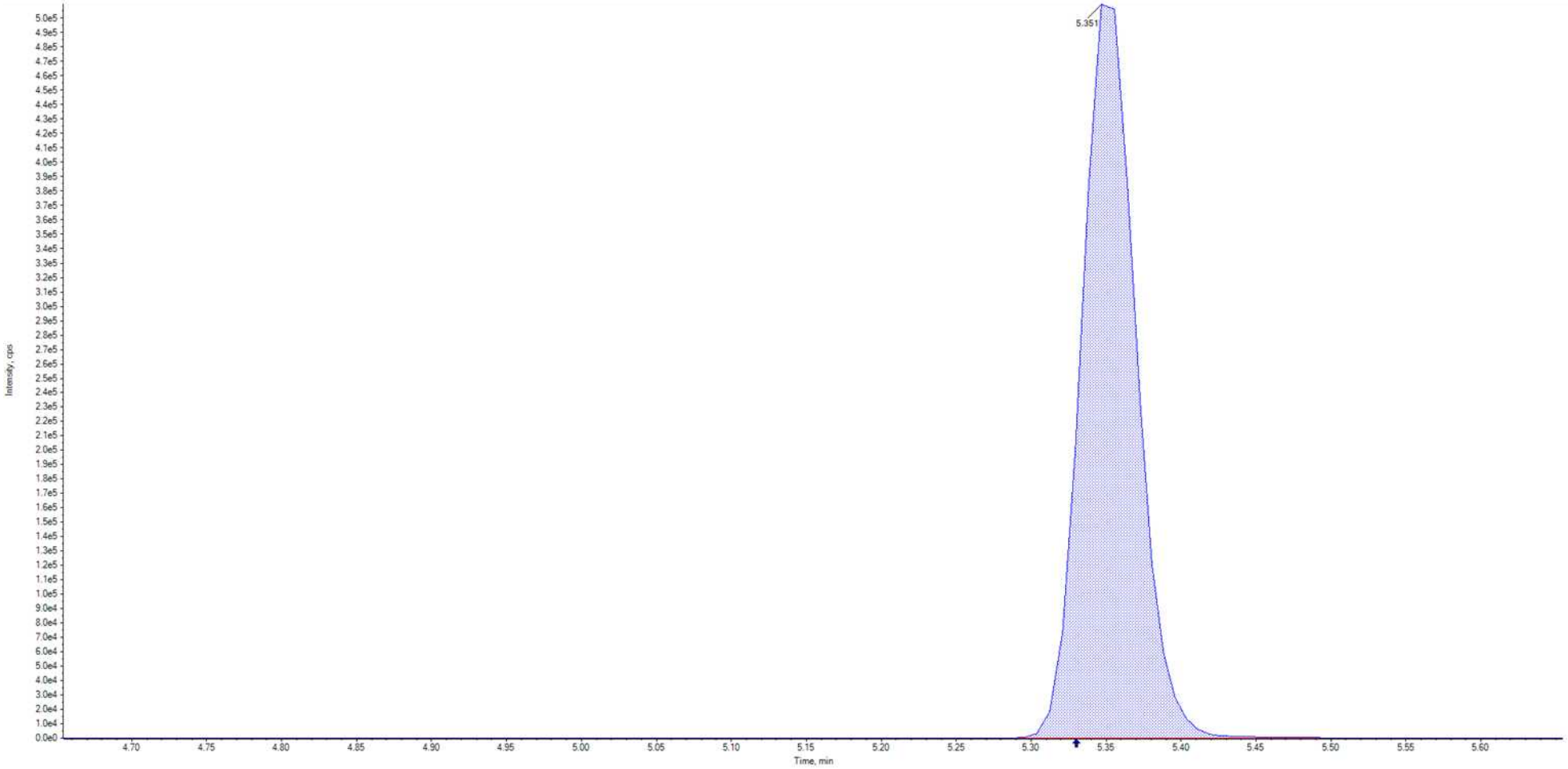
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
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Generated: 9/17/2024 6:15:27 AM

13C3-PFBA
Sample: WG1971858-5

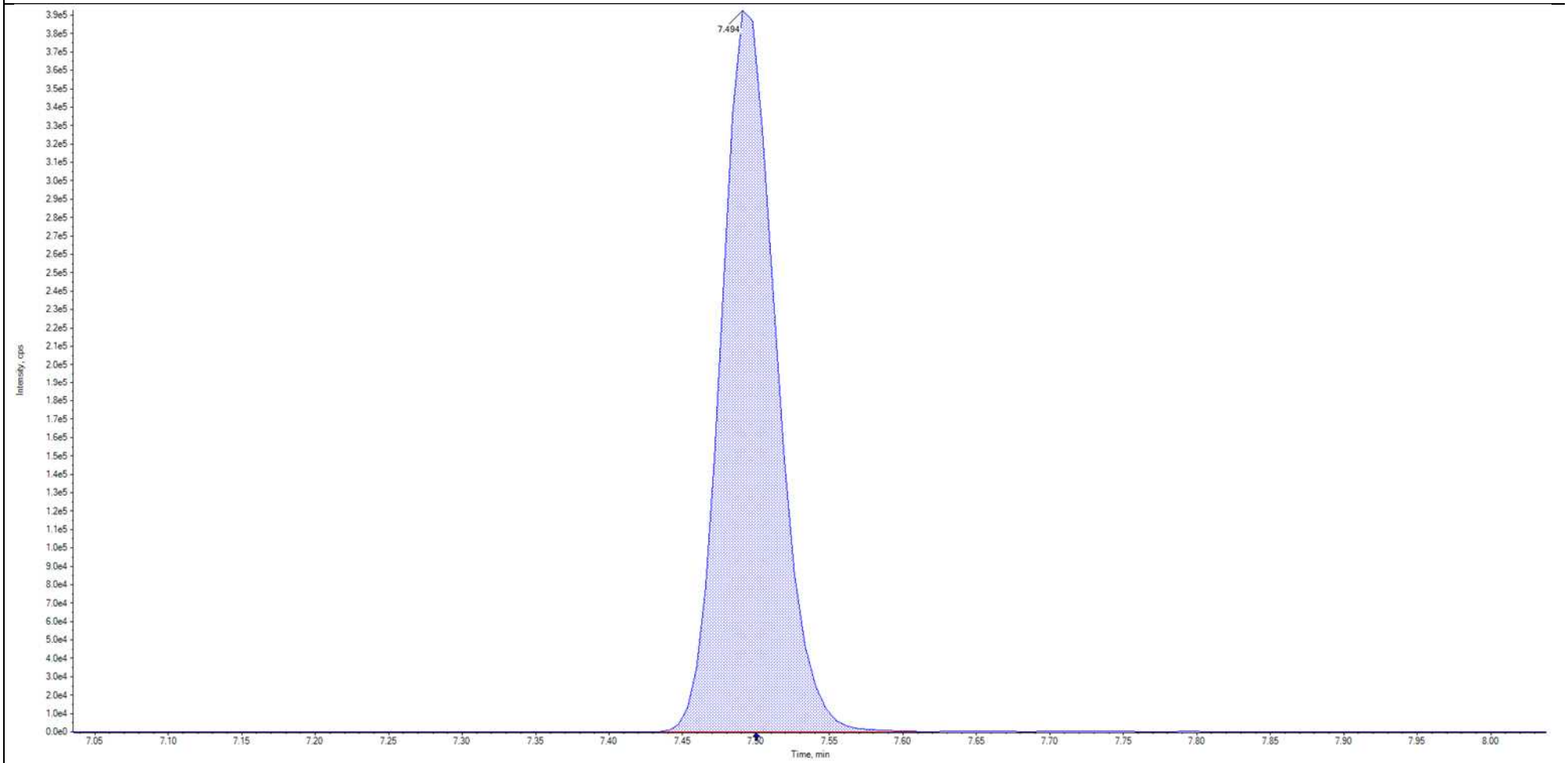


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C2-PFHxA
Sample: WG1971858-5

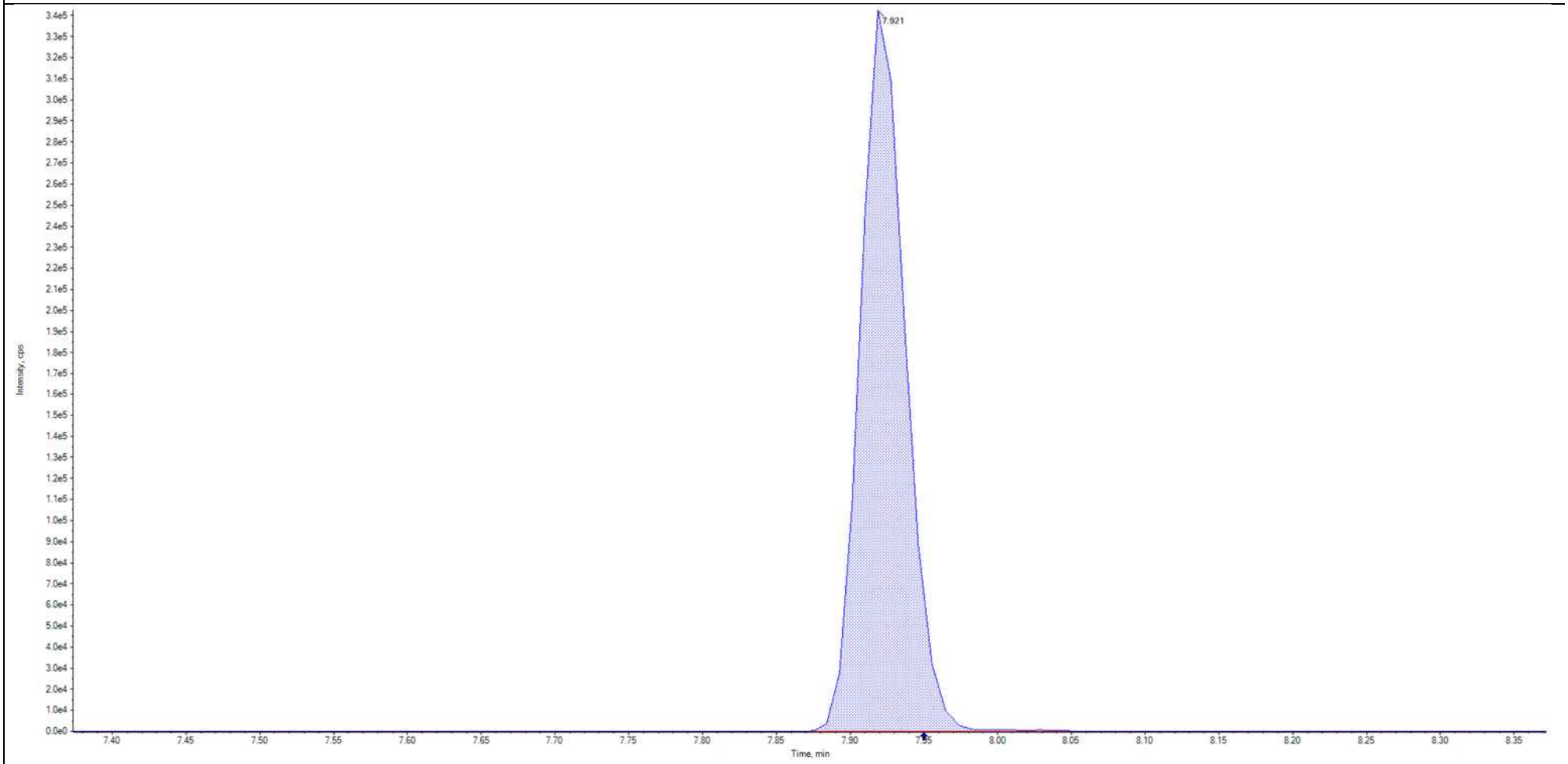


13C4-PFOA
Sample: WG1971858-5

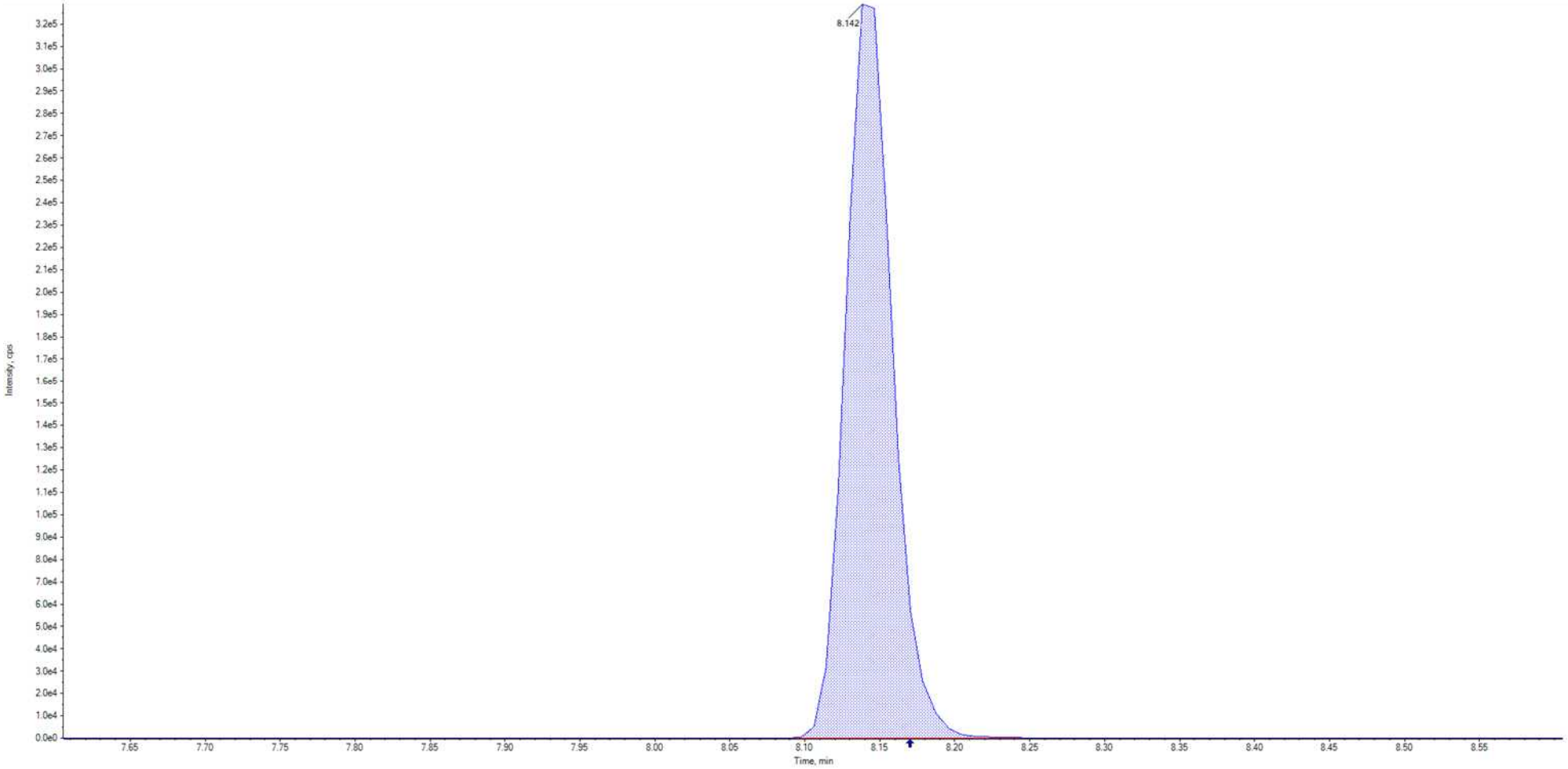


Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C5-PFNA
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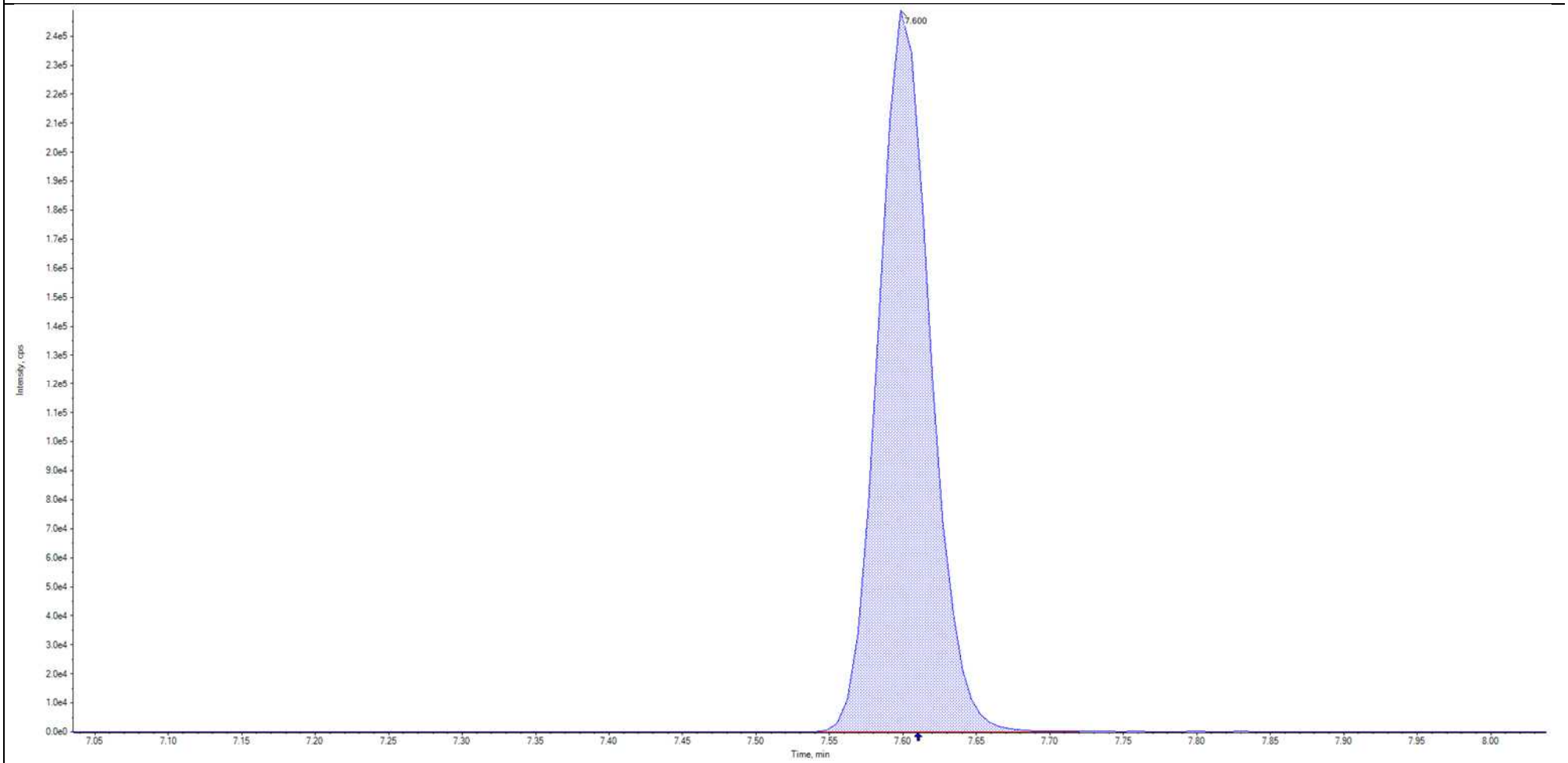


13C2-PFDA
Sample: WG1971858-5



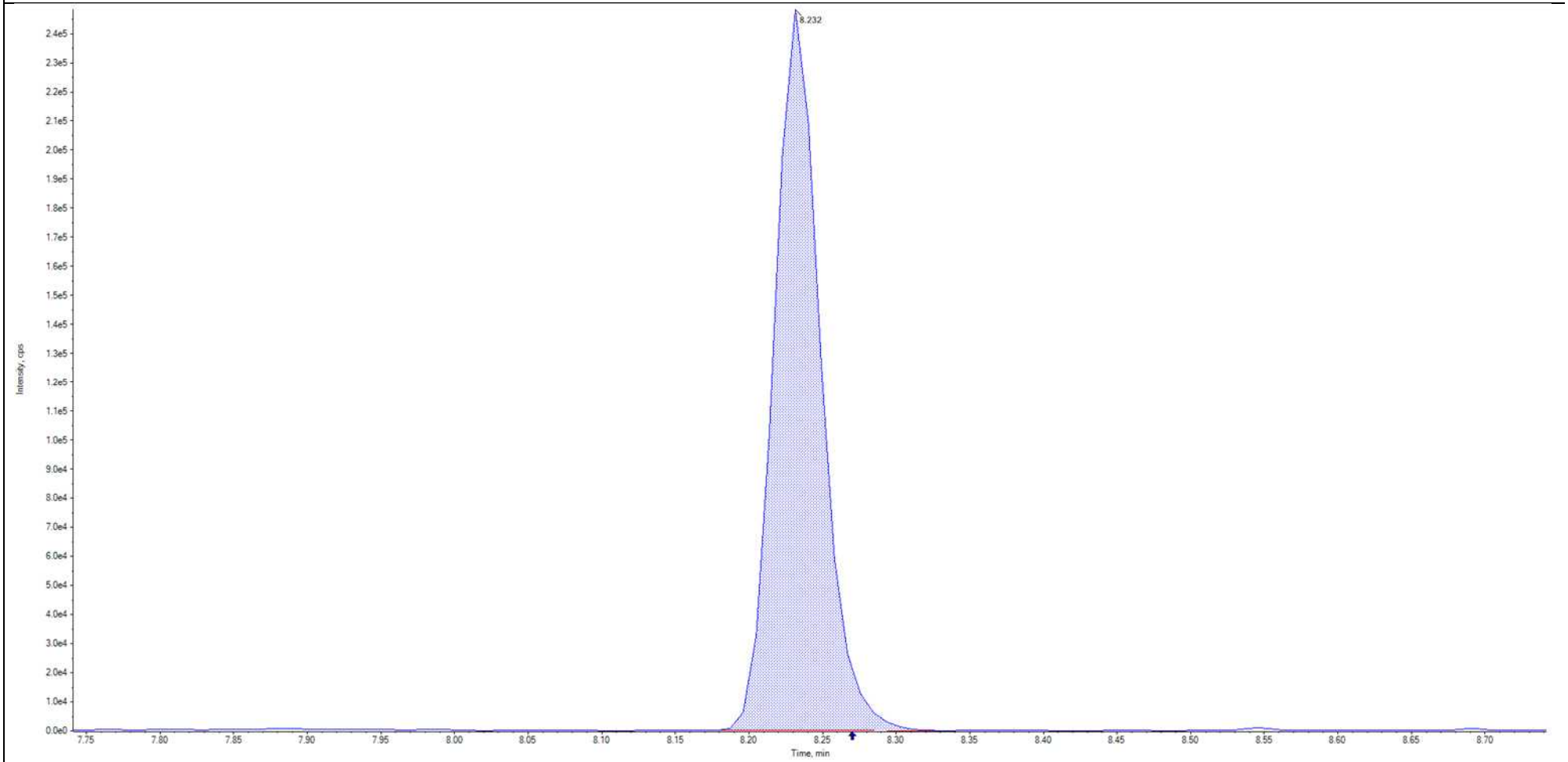
Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

18O2-PFHxS
Sample: WG1971858-5



Quantify Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

13C4-PFOS
Sample: WG1971858-5



Quantity Sample Summary Report SCIEX OS Version 3.0.0.3339
Alpha Analytical Inc.
Dataset: D:\Analyst Data\Projects\PFAS\2024_09_17\Data\SCI05_240917_22.wiff
Last Altered: 9/17/2024 10:47:11 AM
Generated: 9/17/2024 6:15:27 AM

Calculation of Semi Volatile Organic Compounds

Aqueous Concentration Formula: Amt * DF * 1000 * (1/Vo) * Vf

Where:
DF = Dilution Factor
Vo = Volume of Sample (mL)
Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: Amt * DF * 1000 * (1/Wt) * Vf * (100/TS)
Where:
DF = Dilution Factor
Wt = Weight of Sample (g)
Vf = Extraction Lab Final Volume (mL)
TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 17 2024, 04:05 pm

Work Group: WG1971858 for Department: 2 Organic Preparation

Created: 15-SEP-24 Due: Operator: TCH

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2447503-01	MW-1S	S	A2-1633-DRAFT	WATER	DONE	U	0916	0919	S0	Plastic-A.5
L2447503-05	MW-5S	S	A2-1633-DRAFT	WATER	DONE	U	0917	0919	S0	Plastic-A.5
L2447503-07	MW-7S	S	A2-1633-DRAFT	WATER	DONE	U	0916	0919	S0	Plastic-A.5
L2447503-08	MW-8S	S	A2-1633-DRAFT	WATER	DONE	U	0917	0919	S0	Plastic-A.5
L2447503-09	DUP	S	A2-1633-DRAFT	WATER	DONE	U	0917	0919	S0	Plastic-A.5
L2447503-10	FIELD BLANK	S	A2-1633-DRAFT	WATER	DONE	U	0917	0919	S0	Plastic-A.5
L2447503-11	EQUIPMENT BLANK	S	A2-1633-DRAFT	WATER	DONE	U	0917	0919	S0	Plastic-A.5
L2449839-01	DSN002E-08302024	S	A2-1633-DRAFT	WATER	DONE	U	0927	0916	S0	Plastic-A.5
L2450207-02	MW-8	S	A2-NJ-1633-DRAFT-3	WATER	DONE	U	1001	0918	S0	Plastic-A.5
L2450219-01	E4I0009-01	S	A2-1633-DRAFT	WATER	DONE	U	1001	0918	S0	Plastic-A.5
L2450219-02	E4I0009-02	S	A2-1633-DRAFT	WATER	DONE	U	1001	0918	S0	Plastic-A.5
L2450221-01	E4I0067-01	S	A2-1633-DRAFT	WATER	DONE	U	1002	0918	S0	Plastic-A.5
L2450221-02	E4I0067-02	S	A2-1633-DRAFT	WATER	DONE	U	1002	0918	S0	Plastic-A.5
L2450695-01	BRUNSWICK SD UPSTREAM #1	S	A2-1633-DRAFT	WATER	DONE	U	1003	0919	S0	Plastic-A.5
L2450701-01	BRUNSWICK SD DOWNSTREAM #1	S	A2-1633-DRAFT	WATER	DONE	U	1003	0919	S0	Plastic-A.5
WG1971858-1	Laboratory Method Bl	S	A2-1633-DRAFT	WATER	DONE	U				
WG1971858-2	Laboratory Control S	S	A2-1633-DRAFT	WATER	DONE	U				
WG1971858-3	Laboratory Control S	S	A2-1633-DRAFT	WATER	DONE	U				
WG1971858-4	Matrix Spike	S	A2-1633-DRAFT	WATER	DONE	U				
WG1971858-5	Matrix Spike Duplica	S	A2-1633-DRAFT	WATER	DONE	U				

Comments:

WG1971858-4 L2447503-07
WG1971858-5 L2447503-07

Product:	**1633**
Run Date:	**8/13/2024**
Instrument:	**LCMS05**

ICAL info:	**ical21391**
CCAL LOTS:	40724G IS: 240724AA TOP: 240404 SOLV
Mobile Phase A:	EC081324A
Mobile Phase B:	64094
Bile Salts Standard:	240709_BILE , 240226_TRS

SAMPLE NAME	SAMPLE ID	VIAL	DATA FILE	SITUATION
Blank	WG1958909	2	SCI05_240813_70	
IA1633STD-.1	WG1958909,,,80ul IA1633STD-1.25	3	SCI05_240813_71	
IA1633STD-.2	WG1958909,,,80 ul IA1633STD-2.5	4	SCI05_240813_72	
IA1633STD-.5	WG1958909,,,100 ul IA1633STD-5	5	SCI05_240813_73	
IA1633STD-1.25	WG1958909,,,12.5 ul EPA1633_240813_CAL	6	SCI05_240813_74	
IA1633STD-2.5	WG1958909,,,25 ul EPA1633_240813_CAL	7	SCI05_240813_75	
IA1633STD-5	WG1958909,,,50 ul EPA1633_240813_CAL	8	SCI05_240813_76	
IA1633STD-12.5	WG1958909,,,125 ul EPA1633_240813_CAL	9	SCI05_240813_77	
IA1633STD-25	WG1958909,,,250 ul EPA1633_240813_CAL	10	SCI05_240813_78	
IA1633STD-62.5	WG1958909,,,625 ul EPA1633_240813_CAL	11	SCI05_240813_79	
WG1958909-2,INSTBLANK	WG1958909	12	SCI05_240813_80	
WG1958909-3,INSTBLANK	WG1958909	12	SCI05_240813_81	
CA1633STD-10	WG1958909,,,5 µl LCMS231120C	13	SCI05_240813_82	
WG1958909-4,TRS/-5,BSICS	WG1958909	14	SCI05_240813_83	
WG1958909-6,INSTBLANK	WG1958909	12	SCI05_240813_84	

Product:	1633
Run Date:	9/17/2024
Instrument:	LCMS05

ICAL info:	ICAL21391
CCAL LOTS:	827U IS: 240827AT TOP: 240826_TOP SC
Mobile Phase A:	EC091624A
Mobile Phase B:	64179
Bile Salts Standard:	240822_BILE , 240829_TRS

SAMPLE NAME	SAMPLE ID	VIAL	DATA FILE	SITUATION
BLANK	BLANK	2	SCI05_240917_04	**MCV: 5:35**
WG1972379-2,1633LOW	***WG1972379,WG1970000,ICAL21391,1633LOW***	3	SCI05_240917_05	**TARGET HIGH**
WG1972379-3,1633MED	***WG1972379,WG1970000,ICAL21391,1633MED***	4	SCI05_240917_06	**TARGET HIGH**
WG1972379-4,INSTBLANK	WG1972379,WG1970000,ICAL21391	6	SCI05_240917_07	
WG1972379-5,TRS/-6,BSICS	WG1972379,WG1970000,ICAL21391	5	SCI05_240917_08	
WG1972379-7,INSTBLANK	WG1972379,WG1970000,ICAL21391	6	SCI05_240917_09	
L2450017-02RE/R	WG1972379,WG1971789,ICAL21391	27	SCI05_240917_10	
L2450138-01R	WG1972379,WG1971789,ICAL21391	28	SCI05_240917_11	
L2450138-02R	WG1972379,WG1971789,ICAL21391	29	SCI05_240917_12	
L2450017-01RE/R	WG1972379,WG1971789,ICAL21391	30	SCI05_240917_13	**EIS LOW**
L2450016-01R	WG1972379,WG1971789,ICAL21391	31	SCI05_240917_14	**EIS LOW**
WG1971858-1	WG1972379,WG1971858,ICAL21391	7	SCI05_240917_15	
WG1971858-2	WG1972379,WG1971858,ICAL21391	8	SCI05_240917_16	
WG1971858-3	WG1972379,WG1971858,ICAL21391	9	SCI05_240917_17	
L2447503-01	WG1972379,WG1971858,ICAL21391	10	SCI05_240917_18	
L2447503-05	WG1972379,WG1971858,ICAL21391	11	SCI05_240917_19	
L2447503-07	WG1972379,WG1971858,ICAL21391	12	SCI05_240917_20	
WG1971858-4	WG1972379,WG1971858,ICAL21391	13	SCI05_240917_21	
WG1971858-5	WG1972379,WG1971858,ICAL21391	14	SCI05_240917_22	
L2447503-08	WG1972379,WG1971858,ICAL21391	15	SCI05_240917_23	
L2447503-09	WG1972379,WG1971858,ICAL21391	16	SCI05_240917_24	
WG1972379-8,1633MED	***WG1972379,WG1970000,ICAL21391,1633MED***	4	SCI05_240917_25	**TARGET HIGH**
WG1972379-9,INSTBLANK	WG1972379,WG1970000,ICAL21391	6	SCI05_240917_26	
L2447503-10	WG1972379,WG1971858,ICAL21391	17	SCI05_240917_27	
L2447503-11	WG1972379,WG1971858,ICAL21391	18	SCI05_240917_28	
L2449839-01	WG1972379,WG1971858,ICAL21391	19	SCI05_240917_29	
L2450207-02RE	WG1972379,WG1971858,ICAL21391	20	SCI05_240917_30	
L2450219-01	WG1972379,WG1971858,ICAL21391	21	SCI05_240917_31	
L2450219-02	WG1972379,WG1971858,ICAL21391	22	SCI05_240917_32	
L2450221-01	WG1972379,WG1971858,ICAL21391	23	SCI05_240917_33	
L2450221-02	WG1972379,WG1971858,ICAL21391	24	SCI05_240917_34	
L2450695-01	WG1972379,WG1971858,ICAL21391	25	SCI05_240917_35	
L2450701-01	WG1972379,WG1971858,ICAL21391	26	SCI05_240917_36	

WG1972379-10,1633MED	***WG1972379,WG1970000,ICAL21391,1633MED***	4	SCI05_240917_37	

ORGANIC ELN REPORT

Workgroup: WG1971858

Prep Method: EPA 1633
Solvent Type: NA **Lot #:** N/A
Surrogate Type: 1633 **Lot #:** LCMS240916A/B
Spike Type: 1633 **Lot #:** EPA1633_240908_CAL
Spike Verify by: RSB
Lims Spikelot: 1633

Additional Reagents/Stds

1:1 Formic Acid:MeOH	ECP090824C
0.3M Formic Acid	ECP091224M
1% NH4OH	ECP090924G
1:1 Formic Aid:MeOH	
Acetic Acid	2023111300
Filter	
GCB	B24-001445:1264
IS	LCMS240827AP
pH Strip	10BDH1341

Conc.Method: NA
Solvent Type: NA
Lot #: N/A

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Extraction **Concentration**

Sample/ Type	Extract Date	Analyst	Initial Sample Weight	Final Weight g	Sample Vol g	Ph	Balance Id	Surr Amt ml	Spike Amt ml	Pipette Id	Lot: Spe Cartridge	Flow Rate ml/min	Final Vol ml
L2447503-01 SAMP	09/15/24 14:15 **1,4 804**	Blake Page	599.13	42.52	556.61	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2447503-05 SAMP	09/15/24 14:15 **1,5 408**	Blake Page	575.44	42.68	532.76	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2447503-07 SAMP	09/15/24 14:15 **1,6 911**	Blake Page	604.14	42.67	561.47	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2447503-08 SAMP	09/15/24 14:15 **2,3 711**	Blake Page	564.80	42.24	522.56	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2447503-09 SAMP	09/15/24 14:15 **2,4 905**	Blake Page	567.73	42.22	525.51	6	BAL-27	.02		377	S308-0173, S24-00293	5	4

Reported: 17-SEP-24 04:05 PM

ORGANIC ELN REPORT

Workgroup: WG1971858

Sample/ Type	Extraction											Concentration
	Extract Date	Analyst	Initial Sample Weight	Final Weight **g**	Sample Vol **g**	Ph	Balance Id	Surr Amt **ml**	Spike Amt **ml**	Pipette Id	Lot: Spe Cartridge	Flow Rate **ml/min**	Final Vol **ml**
L2447503-10 SAMP	09/15/24 14:15 **2,5 908**	Blake Page	556.81	42.62	514.19	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2447503-11 SAMP	09/15/24 14:15 **2,6 410**	Blake Page	536.66	42.38	494.28	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2449839-01 SAMP	09/15/24 14:15 **3,1 718**	Blake Page	540.81	42.33	498.48	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2450207-02 SAMP	09/15/24 14:15 **3,2 211 100mL of sample diluted per RX sheet 9/16/24 BRP**	Blake Page	100	0	100	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2450219-01 WATER	09/15/24 14:15 **4,1 707 200mL of sample diluted due to cloudy matrix 9/16/24 BRP**	Blake Page	200	0	200	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2450219-02 WATER	09/15/24 14:15 **4,2 716**	Blake Page	537.01	42.78	494.23	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2450221-01 WATER	09/15/24 14:15 **4,3 19**	Blake Page	560.96	43.23	517.73	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2450221-02 WATER	09/15/24 14:15 **4,4 413 250mL of sample diluted due to cloudy matrix 9/16/24 BRP**	Blake Page	250	0	250	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2450695-01 SAMP	09/15/24 14:15 **4,5 401**	Blake Page	570.68	40.21	530.47	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
L2450701-01 SAMP	09/15/24 14:15 **4,6 801**	Blake Page	508.86	39.89	468.97	6	BAL-27	.02		377	S308-0173, S24-00293	5	4

ORGANIC ELN REPORT

Workgroup: WG1971858

Sample/ Type	Extraction											Concentration
	Extract Date	Analyst	Initial Sample Weight	Final Weight **g**	Sample Vol **g**	Ph	Balance Id	Surr Amt **ml**	Spike Amt **ml**	Pipette Id	Lot: Spe Cartridge	Flow Rate **ml/min**	Final Vol **ml**
WG1971858-1 BLANK	09/15/24 14:15 **1,1 216**	Blake Page	540	40	500	6	BAL-27	.02		377	S308-0173, S24-00293	5	4
WG1971858-2 LCS	09/15/24 14:15 **1,2 710**	Blake Page	540	40	500	6	BAL-27	.02	.016	377	S308-0173, S24-00293	5	4
WG1971858-3 LCS	09/15/24 14:15 **1,3 907**	Blake Page	540	40	500	6	BAL-27	.02	.1	377,406	S308-0173, S24-00293	5	4
WG1971858-4 MS	09/15/24 14:15 **2,1 503**	Blake Page	600.23	42.75	557.48	6	BAL-27	.02	.1	377,406	S308-0173, S24-00293	5	4
WG1971858-5 MSD	09/15/24 14:15 **2,2 421**	Blake Page	593.15	42.52	550.63	6	BAL-27	.02	.1	377,406	S308-0173, S24-00293	5	4

Reported: 17-SEP-24 04:05 PM

Metals

Inorganic Data
(ICPMS Analysis)

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 11:34
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1962883.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-23-5	Sodium, Total	23.8	1.00	0.293	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 11:12
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1962883.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00345	0.0100	0.00327	J
7440-36-0	Antimony, Total	0.00103	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00030	0.00050	0.00016	J
7440-39-3	Barium, Total	0.09513	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	132.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00048	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00033	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00170	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	15.6	0.0700	0.0242	
7439-96-5	Manganese, Total	0.3799	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	15.1	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-28-0	Thallium, Total	0.00057	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1962897-1	**Date Collected**	: NA
Client ID	: WG1962897-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/23/24 11:03
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1962883.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	0.0739	0.100	0.0293	J
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1962897-6	**Date Collected**	:
Client ID	: Serial Dilution	**Date Received**	:
Sample Location	:	**Date Analyzed**	: 08/23/24 11:30
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1962883.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-39-3	Barium, Total	0.09089	0.00250	0.0009	
7440-70-2	Calcium, Total	127.	0.500	0.197	
7439-95-4	Magnesium, Total	15.2	0.350	0.121	
7439-96-5	Manganese, Total	0.3682	0.00500	0.0022	
7440-09-7	Potassium, Total	14.5	0.500	0.154	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 17:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.613	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00054	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00423	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.00805	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	64.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00049	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00071	0.00100	0.00038	J
7439-89-6	Iron, Dissolved	0.238	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.511	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	1.048	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00328	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	25.0	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	54.8	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.01245	0.00500	0.00157	
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 17:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00068	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00019	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.03078	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	99.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00111	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00041	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00215	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	9.28	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	13.7	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	6.82	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 18:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00090	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00053	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.07760	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	90.4	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00146	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00062	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00258	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	7.09	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00464	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	29.2	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	38.0	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00025	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	0.00295	0.00500	0.00157	J
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 18:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.06349	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	21.6	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00213	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	12.4	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00066	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	1.34	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	51.0	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 18:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00385	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.00460	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	6.99	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	1.19	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00590	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	1.08	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	5.16	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 18:35
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00020	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.05466	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	128.	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00044	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00087	0.00100	0.00038	J
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	22.0	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	3.341	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	27.2	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	36.2	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 17:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00064	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00020	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.08926	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	138.	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.01138	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00054	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00180	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0504	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	14.8	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.3930	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00702	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	15.0	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	24.0	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00048	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 18:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.03807	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	33.3	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	0.00240	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	3.32	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00088	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	20.6	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	24.0	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00018	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 18:44
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00490	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	0.00464	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	6.79	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	1.18	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00587	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	1.08	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	5.17	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-10	**Date Collected**	: 08/20/24 11:35
Client ID	: FIELD BLANK	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 18:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	ND	0.100	0.0293	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963944-1	**Date Collected**	: NA
Client ID	: WG1963944-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/27/24 17:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	0.00291	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	ND	0.100	0.0293	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963944-6	**Date Collected**	:
Client ID	: Serial Dilution	**Date Received**	:
Sample Location	:	**Date Analyzed**	: 08/27/24 17:48
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.pdf	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-39-3	Barium, Dissolved	0.08868	0.00250	0.0009	
7440-70-2	Calcium, Dissolved	136.	0.500	0.197	
7439-95-4	Magnesium, Dissolved	14.7	0.350	0.121	
7439-96-5	Manganese, Dissolved	0.3971	0.00500	0.0022	
7440-09-7	Potassium, Dissolved	14.8	0.500	0.154	
7440-23-5	Sodium, Dissolved	23.8	0.500	0.146	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.727	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00048	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00478	0.00050	0.00016	
7440-39-3	Barium, Total	0.00780	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	69.1	0.100	0.0394	
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	0.00055	0.00050	0.00016	
7440-50-8	Copper, Total	0.00099	0.00100	0.00038	J
7439-89-6	Iron, Total	0.364	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	0.522	0.0700	0.0242	
7439-96-5	Manganese, Total	0.8728	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00388	0.00200	0.00055	
7440-09-7	Potassium, Total	25.8	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	51.6	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.01499	0.00500	0.00157	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:55
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00558	0.0100	0.00327	J
7440-36-0	Antimony, Total	0.00059	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00027	0.00050	0.00016	J
7440-39-3	Barium, Total	0.03119	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	106.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00114	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00038	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00206	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	10.0	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00051	0.00100	0.00044	J
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	14.4	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	7.21	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	0.00086	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00049	0.00050	0.00016	J
7440-39-3	Barium, Total	0.08209	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	94.1	0.100	0.0394	
7440-47-3	Chromium, Total	0.00142	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00071	0.00050	0.00016	
7440-50-8	Copper, Total	0.00234	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	6.95	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00554	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	31.0	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	37.6	0.100	0.0293	
7440-28-0	Thallium, Total	0.00026	0.00100	0.00014	J
7440-62-2	Vanadium, Total	0.00300	0.00500	0.00157	J
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00508	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.06482	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	22.7	0.100	0.0394	
7440-47-3	Chromium, Total	0.00339	0.00100	0.00017	
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	13.1	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00143	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00112	0.00200	0.00055	J
7440-09-7	Potassium, Total	1.41	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	54.8	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:08
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00954	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00833	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	6.72	0.100	0.0394	
7440-47-3	Chromium, Total	0.00018	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	1.13	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00505	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	1.02	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	4.92	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:13
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.0251	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.05608	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	0.00006	0.00020	0.00005	J
7440-70-2	Calcium, Total	133.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00032	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00045	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00091	0.00100	0.00038	J
7439-89-6	Iron, Total	0.0398	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	22.8	0.0700	0.0242	
7439-96-5	Manganese, Total	3.259	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	28.2	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	34.8	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00376	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00023	0.00050	0.00016	J
7440-39-3	Barium, Total	0.03855	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	35.0	0.100	0.0394	
7440-47-3	Chromium, Total	0.00075	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00016	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00202	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	3.37	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00263	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	20.9	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	24.0	0.100	0.0293	
7440-28-0	Thallium, Total	0.00016	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00455	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00442	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	6.38	0.100	0.0394	
7440-47-3	Chromium, Total	0.00020	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	1.18	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00520	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	0.947	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	5.14	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-10	**Date Collected**	: 08/20/24 11:35
Client ID	: FIELD BLANK	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-11	**Date Collected**	: 08/20/24 09:30
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: NTB
Lab File ID	: WG1964175.csv	**Instrument ID**	: ICPMSQ2
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	0.00048	0.00100	0.00044	J
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1867622-1			R1867622-4			R1867622-6		R1867622-8	
Date Analyzed:	08/23/24 05:32			08/23/24 05:58			08/23/24 06:31		08/23/24 07:34	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	49.5000	99	60.0000	63.5	106	64.0	107	61.6	103
Antimony	50.0	50.7000	101	60.0000	61.4	102	61.4	102	60.9	102
Arsenic	50.0	51.8000	104	60.0000	62.7	104	63.1	105	64.1	107
Barium	50.0	50.8000	102	60.0000	62.2	104	62.1	104	61.4	102
Beryllium	50.0	51.5000	103	60.0000	64.1	107	64.2	107	65.1	108
Cadmium	50.0	51.3000	103	60.0000	62.6	104	62.0	103	61.6	103
Calcium	5000	5000.0000	100	6000.0000	5940	99	6070	101	6040	101
Chromium	50.0	50.6000	101	60.0000	62.9	105	62.2	104	62.4	104
Cobalt	50.0	51.9000	104	60.0000	64.5	108	63.4	106	65.2	109
Copper	50.0	52.2000	104	60.0000	64.3	107	63.8	106	65.7	110
Iron	5000	5080.0000	102	6000.0000	6250	104	6190	103	6260	104
Lead	50.0	52.5000	105	60.0000	61.7	103	62.5	104	62.5	104
Magnesium	5000	4900.0000	98	6000.0000	6080	101	6210	104	6180	103
Manganese	50.0	50.2000	100	60.0000	61.9	103	63.0	105	61.2	102
Nickel	50.0	51.3000	103	60.0000	64.5	108	62.9	105	64.6	108
Potassium	5000	4860.0000	97	6000.0000	6080	101	6230	104	6090	102
Selenium	50.0	50.1000	100	60.0000	63.0	105	63.3	106	61.5	102
Silver	50.0	50.5000	101	60.0000	59.2	99	58.9	98	59.2	99
Sodium	5000	4890.0000	98	6000.0000	6150	102	6260	104	6240	104
Thallium	50.0	51.6000	103	60.0000	65.8	110	61.3	102	62.4	104
Vanadium	50.0	51.0000	102	60.0000	60.7	101	60.6	101	59.7	100
Zinc	50.0	52.6000	105	60.0000	64.6	108	65.9	110	65.6	109

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1867622-11			R1867622-13		R1867622-15	
Date Analyzed:				08/23/24 08:41			08/23/24 08:55		08/23/24 09:26	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	66.0	110	62.2	104	61.3	102
Antimony				60.0000	61.8	103	60.6	101	60.9	102
Arsenic				60.0000	64.8	108	63.0	105	62.6	104
Barium				60.0000	62.6	104	61.0	102	60.7	101
Beryllium				60.0000	67.8	113	63.5	106	63.6	106
Cadmium				60.0000	63.3	106	61.7	103	62.4	104
Calcium				6000.0000	6250	104	5920	99	5720	95
Chromium				60.0000	63.9	106	61.2	102	61.6	103
Cobalt				60.0000	65.2	109	62.4	104	62.8	105
Copper				60.0000	64.7	108	63.0	105	64.1	107
Iron				6000.0000	6410	107	6220	104	6200	103
Lead				60.0000	62.4	104	62.9	105	63.4	106
Magnesium				6000.0000	6550	109	6160	103	6100	102
Manganese				60.0000	64.2	107	62.5	104	61.8	103
Nickel				60.0000	64.6	108	62.5	104	63.1	105
Potassium				6000.0000	6390	106	6030	100	5980	100
Selenium				60.0000	64.2	107	63.2	105	61.1	102
Silver				60.0000	59.6	99	61.3	102	62.1	104
Sodium				6000.0000	6590	110	6220	104	6200	103
Thallium				60.0000	62.3	104	61.7	103	61.9	103
Vanadium				60.0000	60.7	101	60.0	100	58.3	97
Zinc				60.0000	65.1	108	63.2	105	62.9	105

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1867622-17			R1867622-19		R1867622-21	
Date Analyzed:				08/23/24 10:10			08/23/24 10:34		08/23/24 11:50	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	61.4	102	58.9	98	64.6	108
Antimony				60.0000	61.2	102	55.1	92	54.4	91
Arsenic				60.0000	61.9	103	60.5	101	60.1	100
Barium				60.0000	62.3	104	60.4	101	60.1	100
Beryllium				60.0000	61.3	102	59.2	99	59.9	100
Cadmium				60.0000	61.6	103	60.2	100	59.7	100
Calcium				6000.0000	6540	109	6000	100	6150	102
Chromium				60.0000	63.0	105	59.6	99	60.8	101
Cobalt				60.0000	62.4	104	59.4	99	61.4	102
Copper				60.0000	62.0	103	59.5	99	60.6	101
Iron				6000.0000	6190	103	5900	98	6120	102
Lead				60.0000	60.8	101	61.0	102	60.5	101
Magnesium				6000.0000	6510	108	5820	97	6310	105
Manganese				60.0000	62.7	104	59.1	98	62.5	104
Nickel				60.0000	62.2	104	59.2	99	61.0	102
Potassium				6000.0000	6440	107	5910	98	6230	104
Selenium				60.0000	65.2	109	63.6	106	62.1	104
Silver				60.0000	60.5	101	60.3	100	59.8	100
Sodium				6000.0000	6610	110	5850	98	6420	107
Thallium				60.0000	53.9	90	55.6	93	57.2	95
Vanadium				60.0000	64.7	108	61.4	102	60.8	101
Zinc				60.0000	62.7	104	61.0	102	60.3	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1868912-1			R1868912-4			R1868912-6		R1868912-8	
Date Analyzed :	08/27/24 05:37			08/27/24 06:10			08/27/24 06:42		08/27/24 07:44	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	52.9000	106	60.0000	62.6	104	61.4	102	61.9	103
Antimony	50.0	50.3000	101	60.0000	59.2	99	59.5	99	60.2	100
Arsenic	50.0	50.6000	101	60.0000	61.7	103	59.9	100	61.3	102
Barium	50.0	50.3000	101	60.0000	59.2	99	60.0	100	59.9	100
Beryllium	50.0	51.6000	103	60.0000	60.8	101	61.2	102	61.4	102
Cadmium	50.0	51.0000	102	60.0000	59.7	100	60.1	100	60.3	100
Calcium	5000	5220.0000	104	6000.0000	6270	104	5900	98	5770	96
Chromium	50.0	51.5000	103	60.0000	62.3	104	60.3	100	61.6	103
Cobalt	50.0	51.9000	104	60.0000	62.2	104	61.8	103	63.2	105
Copper	50.0	51.8000	104	60.0000	62.9	105	62.2	104	64.1	107
Iron	5000	5110.0000	102	6000.0000	6160	103	6140	102	6190	103
Lead	50.0	51.5000	103	60.0000	63.7	106	63.7	106	61.8	103
Magnesium	5000	5060.0000	101	6000.0000	6350	106	5980	100	5940	99
Manganese	50.0	51.7000	103	60.0000	62.4	104	61.0	102	61.1	102
Nickel	50.0	51.8000	104	60.0000	62.5	104	61.6	103	63.0	105
Potassium	5000	5140.0000	103	6000.0000	6270	104	6010	100	5960	99
Selenium	50.0	49.9000	100	60.0000	60.1	100	58.6	98	58.3	97
Silver	50.0	48.3000	97	60.0000	60.2	100	60.0	100	60.8	101
Sodium	5000	5120.0000	102	6000.0000	6360	106	6040	101	6020	100
Thallium	50.0	51.2000	102	60.0000	63.4	106	63.6	106	65.6	109
Vanadium	50.0	51.7000	103	60.0000	60.6	101	58.7	98	60.6	101
Zinc	50.0	51.2000	102	60.0000	61.5	102	60.4	101	60.9	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1868912-10			R1868912-13		R1868912-15	
Date Analyzed:				08/27/24 08:35			08/27/24 09:46		08/27/24 10:15	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	64.9	108	62.4	104	65.8	110
Antimony				60.0000	59.5	99	60.0	100	59.1	98
Arsenic				60.0000	60.6	101	59.1	98	57.6	96
Barium				60.0000	59.4	99	61.0	102	61.7	103
Beryllium				60.0000	61.6	103	57.4	96	59.4	99
Cadmium				60.0000	59.6	99	60.0	100	59.2	99
Calcium				6000.0000	6170	103	6020	100	5940	99
Chromium				60.0000	63.8	106	58.9	98	58.2	97
Cobalt				60.0000	65.2	109	58.6	98	57.0	95
Copper				60.0000	64.0	107	59.4	99	56.4	94
Iron				6000.0000	6390	106	5840	97	5610	94
Lead				60.0000	62.0	103	71.4	119	121.	202
Magnesium				6000.0000	6130	102	5870	98	5960	99
Manganese				60.0000	65.4	109	59.1	98	58.9	98
Nickel				60.0000	64.3	107	57.7	96	55.8	93
Potassium				6000.0000	6240	104	5890	98	5800	97
Selenium				60.0000	58.7	98	62.9	105	63.0	105
Silver				60.0000	60.9	102	59.4	99	58.6	98
Sodium				6000.0000	6170	103	6070	101	5880	98
Thallium				60.0000	61.8	103	69.9	116	110.	183
Vanadium				60.0000	61.9	103	60.6	101	60.9	102
Zinc				60.0000	61.7	103	59.3	99	58.3	97

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1868912-17			R1868912-20			R1868912-22		R1868912-24	
Date Analyzed:	08/27/24 11:05			08/27/24 11:42			08/27/24 12:30		08/27/24 13:23	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	54.4000	109	60.0000	58.0	97	62.3	104	60.5	101
Antimony	50.0	50.4000	101	60.0000	59.2	99	59.4	99	59.1	98
Arsenic	50.0	50.6000	101	60.0000	60.5	101	60.4	101	59.7	100
Barium	50.0	51.3000	103	60.0000	59.0	98	58.6	98	58.7	98
Beryllium	50.0	51.4000	103	60.0000	60.3	100	60.6	101	61.6	103
Cadmium	50.0	50.8000	102	60.0000	59.8	100	60.4	101	59.7	100
Calcium	5000	5420.0000	108	6000.0000	6230	104	6460	108	6320	105
Chromium	50.0	52.8000	106	60.0000	62.6	104	65.1	108	62.9	105
Cobalt	50.0	50.8000	102	60.0000	61.9	103	63.3	106	61.2	102
Copper	50.0	51.3000	103	60.0000	61.7	103	63.6	106	62.0	103
Iron	5000	5210.0000	104	6000.0000	6240	104	6460	108	6200	103
Lead	50.0	50.4000	101	60.0000	60.2	100	62.6	104	61.1	102
Magnesium	5000	5350.0000	107	6000.0000	5970	100	6080	101	5890	98
Manganese	50.0	52.0000	104	60.0000	62.4	104	66.3	110	63.9	106
Nickel	50.0	52.3000	105	60.0000	63.2	105	65.7	110	60.4	101
Potassium	5000	5420.0000	108	6000.0000	6260	104	6370	106	6300	105
Selenium	50.0	51.1000	102	60.0000	56.8	95	59.7	100	59.9	100
Silver	50.0	48.2000	96	60.0000	60.4	101	60.3	100	60.0	100
Sodium	5000	5240.0000	105	6000.0000	5940	99	6110	102	5840	97
Thallium	50.0	50.0000	100	60.0000	60.2	100	62.5	104	60.3	100
Vanadium	50.0	52.3000	105	60.0000	60.7	101	64.3	107	62.5	104
Zinc	50.0	50.7000	101	60.0000	60.8	101	62.0	103	60.2	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1868912-26			R1868912-28		R1868912-30	
Date Analyzed:				08/27/24 14:26			08/27/24 14:50		08/27/24 15:47	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	63.4	106	61.7	103	59.6	99
Antimony				60.0000	59.9	100	59.9	100	59.8	100
Arsenic				60.0000	62.6	104	60.9	102	59.9	100
Barium				60.0000	59.3	99	58.8	98	58.1	97
Beryllium				60.0000	61.4	102	61.0	102	62.6	104
Cadmium				60.0000	60.2	100	60.7	101	60.8	101
Calcium				6000.0000	6400	107	6460	108	6400	107
Chromium				60.0000	63.1	105	63.6	106	63.5	106
Cobalt				60.0000	63.1	105	61.8	103	62.6	104
Copper				60.0000	62.1	104	62.3	104	60.8	101
Iron				6000.0000	6400	107	6340	106	6370	106
Lead				60.0000	62.2	104	61.4	102	63.0	105
Magnesium				6000.0000	6260	104	6240	104	5890	98
Manganese				60.0000	63.2	105	66.0	110	63.8	106
Nickel				60.0000	64.9	108	62.1	104	64.4	107
Potassium				6000.0000	6410	107	6420	107	6330	106
Selenium				60.0000	62.2	104	59.8	100	55.1	92
Silver				60.0000	60.4	101	60.8	101	60.9	102
Sodium				6000.0000	6270	104	6220	104	5820	97
Thallium				60.0000	61.3	102	60.8	101	62.9	105
Vanadium				60.0000	62.4	104	60.7	101	63.4	106
Zinc				60.0000	62.1	104	61.4	102	60.4	101

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1868912-32			R1868912-34		R1868912-36	
Date Analyzed:				08/27/24 16:46			08/27/24 18:06		08/27/24 19:02	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	62.0	103	59.4	99	62.6	104
Antimony				60.0000	60.5	101	59.8	100	60.1	100
Arsenic				60.0000	62.1	104	62.9	105	63.0	105
Barium				60.0000	59.3	99	60.0	100	58.2	97
Beryllium				60.0000	63.2	105	63.1	105	63.8	106
Cadmium				60.0000	61.7	103	62.0	103	60.6	101
Calcium				6000.0000	6310	105	6150	102	6300	105
Chromium				60.0000	63.7	106	65.1	108	63.0	105
Cobalt				60.0000	63.7	106	64.6	108	62.9	105
Copper				60.0000	63.9	106	66.3	110	63.7	106
Iron				6000.0000	6400	107	6470	108	6290	105
Lead				60.0000	62.8	105	63.1	105	62.8	105
Magnesium				6000.0000	6060	101	5900	98	6330	106
Manganese				60.0000	64.2	107	64.2	107	62.5	104
Nickel				60.0000	65.2	109	65.9	110	64.6	108
Potassium				6000.0000	6250	104	6250	104	6220	104
Selenium				60.0000	59.3	99	59.1	98	59.8	100
Silver				60.0000	61.6	103	61.6	103	61.4	102
Sodium				6000.0000	6060	101	5890	98	6410	107
Thallium				60.0000	62.8	105	62.9	105	62.4	104
Vanadium				60.0000	62.7	104	63.7	106	61.3	102
Zinc				60.0000	62.5	104	63.2	105	62.9	105

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1868912-38			R1868912-40			
Date Analyzed:				08/27/24 19:56			08/27/24 20:50			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	57.3	96	57.5	96		
Antimony				60.0000	59.9	100	59.7	100		
Arsenic				60.0000	60.5	101	60.3	100		
Barium				60.0000	60.3	100	58.1	97		
Beryllium				60.0000	63.6	106	63.9	106		
Cadmium				60.0000	60.8	101	61.2	102		
Calcium				6000.0000	6500	108	6280	105		
Chromium				60.0000	63.6	106	63.6	106		
Cobalt				60.0000	62.0	103	63.4	106		
Copper				60.0000	62.6	104	62.8	105		
Iron				6000.0000	6260	104	6370	106		
Lead				60.0000	62.1	104	62.9	105		
Magnesium				6000.0000	5910	98	6020	100		
Manganese				60.0000	63.4	106	62.8	105		
Nickel				60.0000	63.2	105	64.8	108		
Potassium				6000.0000	6340	106	6310	105		
Selenium				60.0000	60.9	102	59.7	100		
Silver				60.0000	60.8	101	61.8	103		
Sodium				6000.0000	5900	98	6100	102		
Thallium				60.0000	61.5	102	62.6	104		
Vanadium				60.0000	62.6	104	61.4	102		
Zinc				60.0000	61.1	102	61.2	102		

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1868912-1			R1868912-4			R1868912-6		R1868912-8	
Date Analyzed:	08/27/24 05:37			08/27/24 06:10			08/27/24 06:42		08/27/24 07:44	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	52.9000	106	60.0000	62.6	104	61.4	102	61.9	103
Antimony	50.0	50.3000	101	60.0000	59.2	99	59.5	99	60.2	100
Arsenic	50.0	50.6000	101	60.0000	61.7	103	59.9	100	61.3	102
Barium	50.0	50.3000	101	60.0000	59.2	99	60.0	100	59.9	100
Beryllium	50.0	51.6000	103	60.0000	60.8	101	61.2	102	61.4	102
Cadmium	50.0	51.0000	102	60.0000	59.7	100	60.1	100	60.3	100
Calcium	5000	5220.0000	104	6000.0000	6270	104	5900	98	5770	96
Chromium	50.0	51.5000	103	60.0000	62.3	104	60.3	100	61.6	103
Cobalt	50.0	51.9000	104	60.0000	62.2	104	61.8	103	63.2	105
Copper	50.0	51.8000	104	60.0000	62.9	105	62.2	104	64.1	107
Iron	5000	5110.0000	102	6000.0000	6160	103	6140	102	6190	103
Lead	50.0	51.5000	103	60.0000	63.7	106	63.7	106	61.8	103
Magnesium	5000	5060.0000	101	6000.0000	6350	106	5980	100	5940	99
Manganese	50.0	51.7000	103	60.0000	62.4	104	61.0	102	61.1	102
Nickel	50.0	51.8000	104	60.0000	62.5	104	61.6	103	63.0	105
Potassium	5000	5140.0000	103	6000.0000	6270	104	6010	100	5960	99
Selenium	50.0	49.9000	100	60.0000	60.1	100	58.6	98	58.3	97
Silver	50.0	48.3000	97	60.0000	60.2	100	60.0	100	60.8	101
Sodium	5000	5120.0000	102	6000.0000	6360	106	6040	101	6020	100
Thallium	50.0	51.2000	102	60.0000	63.4	106	63.6	106	65.6	109
Vanadium	50.0	51.7000	103	60.0000	60.6	101	58.7	98	60.6	101
Zinc	50.0	51.2000	102	60.0000	61.5	102	60.4	101	60.9	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1868912-10			R1868912-13		R1868912-15	
Date Analyzed:				08/27/24 08:35			08/27/24 09:46		08/27/24 10:15	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	64.9	108	62.4	104	65.8	110
Antimony				60.0000	59.5	99	60.0	100	59.1	98
Arsenic				60.0000	60.6	101	59.1	98	57.6	96
Barium				60.0000	59.4	99	61.0	102	61.7	103
Beryllium				60.0000	61.6	103	57.4	96	59.4	99
Cadmium				60.0000	59.6	99	60.0	100	59.2	99
Calcium				6000.0000	6170	103	6020	100	5940	99
Chromium				60.0000	63.8	106	58.9	98	58.2	97
Cobalt				60.0000	65.2	109	58.6	98	57.0	95
Copper				60.0000	64.0	107	59.4	99	56.4	94
Iron				6000.0000	6390	106	5840	97	5610	94
Lead				60.0000	62.0	103	71.4	119	121.	202
Magnesium				6000.0000	6130	102	5870	98	5960	99
Manganese				60.0000	65.4	109	59.1	98	58.9	98
Nickel				60.0000	64.3	107	57.7	96	55.8	93
Potassium				6000.0000	6240	104	5890	98	5800	97
Selenium				60.0000	58.7	98	62.9	105	63.0	105
Silver				60.0000	60.9	102	59.4	99	58.6	98
Sodium				6000.0000	6170	103	6070	101	5880	98
Thallium				60.0000	61.8	103	69.9	116	110.	183
Vanadium				60.0000	61.9	103	60.6	101	60.9	102
Zinc				60.0000	61.7	103	59.3	99	58.3	97

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1868912-17			R1868912-20			R1868912-22		R1868912-24	
Date Analyzed:	08/27/24 11:05			08/27/24 11:42			08/27/24 12:30		08/27/24 13:23	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	54.4000	109	60.0000	58.0	97	62.3	104	60.5	101
Antimony	50.0	50.4000	101	60.0000	59.2	99	59.4	99	59.1	98
Arsenic	50.0	50.6000	101	60.0000	60.5	101	60.4	101	59.7	100
Barium	50.0	51.3000	103	60.0000	59.0	98	58.6	98	58.7	98
Beryllium	50.0	51.4000	103	60.0000	60.3	100	60.6	101	61.6	103
Cadmium	50.0	50.8000	102	60.0000	59.8	100	60.4	101	59.7	100
Calcium	5000	5420.0000	108	6000.0000	6230	104	6460	108	6320	105
Chromium	50.0	52.8000	106	60.0000	62.6	104	65.1	108	62.9	105
Cobalt	50.0	50.8000	102	60.0000	61.9	103	63.3	106	61.2	102
Copper	50.0	51.3000	103	60.0000	61.7	103	63.6	106	62.0	103
Iron	5000	5210.0000	104	6000.0000	6240	104	6460	108	6200	103
Lead	50.0	50.4000	101	60.0000	60.2	100	62.6	104	61.1	102
Magnesium	5000	5350.0000	107	6000.0000	5970	100	6080	101	5890	98
Manganese	50.0	52.0000	104	60.0000	62.4	104	66.3	110	63.9	106
Nickel	50.0	52.3000	105	60.0000	63.2	105	65.7	110	60.4	101
Potassium	5000	5420.0000	108	6000.0000	6260	104	6370	106	6300	105
Selenium	50.0	51.1000	102	60.0000	56.8	95	59.7	100	59.9	100
Silver	50.0	48.2000	96	60.0000	60.4	101	60.3	100	60.0	100
Sodium	5000	5240.0000	105	6000.0000	5940	99	6110	102	5840	97
Thallium	50.0	50.0000	100	60.0000	60.2	100	62.5	104	60.3	100
Vanadium	50.0	52.3000	105	60.0000	60.7	101	64.3	107	62.5	104
Zinc	50.0	50.7000	101	60.0000	60.8	101	62.0	103	60.2	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1868912-26			R1868912-28			
Date Analyzed :				08/27/24 14:26			08/27/24 14:50			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	63.4	106	61.7	103		
Antimony				60.0000	59.9	100	59.9	100		
Arsenic				60.0000	62.6	104	60.9	102		
Barium				60.0000	59.3	99	58.8	98		
Beryllium				60.0000	61.4	102	61.0	102		
Cadmium				60.0000	60.2	100	60.7	101		
Calcium				6000.0000	6400	107	6460	108		
Chromium				60.0000	63.1	105	63.6	106		
Cobalt				60.0000	63.1	105	61.8	103		
Copper				60.0000	62.1	104	62.3	104		
Iron				6000.0000	6400	107	6340	106		
Lead				60.0000	62.2	104	61.4	102		
Magnesium				6000.0000	6260	104	6240	104		
Manganese				60.0000	63.2	105	66.0	110		
Nickel				60.0000	64.9	108	62.1	104		
Potassium				6000.0000	6410	107	6420	107		
Selenium				60.0000	62.2	104	59.8	100		
Silver				60.0000	60.4	101	60.8	101		
Sodium				6000.0000	6270	104	6220	104		
Thallium				60.0000	61.3	102	60.8	101		
Vanadium				60.0000	62.4	104	60.7	101		
Zinc				60.0000	62.1	104	61.4	102		

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1867622-2		R1867622-5		R1867622-7		R1867622-9		WG1962897-1	
Date Analyzed :	08/23/24 05:36		08/23/24 06:02		08/23/24 06:35		08/23/24 07:38		08/23/24 11:03	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U	0.00327	U
Antimony	0.429	U	0.429	U	0.429	U	0.429	U	0.00042	U
Arsenic	0.165	U	0.165	U	0.352	J	0.165	U	0.00016	U
Barium	0.173	U	0.173	U	0.173	U	0.173	U	0.00017	U
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U	0.00010	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.00005	U
Calcium	39.4	U	39.4	U	39.4	U	39.4	U	0.0394	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.00017	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Copper	0.384	U	0.384	U	0.384	U	0.384	U	0.00038	U
Iron	19.1	U	19.1	U	19.1	U	19.1	U	0.0191	U
Lead	0.343	U	0.343	U	0.518	J	0.343	U	0.00034	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U	0.0242	U
Manganese	0.440	U	0.440	U	0.440	U	0.440	U	0.00044	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	0.00055	U
Potassium	30.9	U	30.9	U	30.9	U	30.9	U	0.0309	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U	0.00173	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Sodium	29.3	U	29.3	U	29.3	U	32.1	J	0.0739	J
Thallium	0.395	J	0.392	J	0.426	J	0.302	J	0.00014	U
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U	0.00157	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.00341	U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1867622-12		R1867622-14		R1867622-16			
Date Analyzed:			08/23/24 08:45		08/23/24 08:59		08/23/24 09:31			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			52.0	J	43.4	J	34.4	J		
Thallium			0.367	J	0.363	J	0.321	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1867622-18		R1867622-20		R1867622-22			
Date Analyzed:			08/23/24 10:14		08/23/24 10:39		08/23/24 11:54			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.743	J	0.878	J		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	57.4	J		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.534	J		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			156.		96.8	J	139.			
Thallium			1.74		0.499	J	0.583	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1868912-2		R1868912-5		R1868912-7		R1868912-9		WG1963944-1	
Date Analyzed :	08/27/24 05:42		08/27/24 06:14		08/27/24 06:47		08/27/24 07:49		08/27/24 17:21	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U	0.00327	U
Antimony	0.429	U	0.429	U	0.429	U	0.429	U	0.00291	J
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U	0.00016	U
Barium	0.173	U	0.173	U	0.173	U	0.173	U	0.00017	U
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U	0.00010	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.00005	U
Calcium	39.4	U	39.4	U	39.4	U	39.4	U	0.0394	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.00017	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Copper	0.384	U	0.384	U	0.384	U	0.384	U	0.00038	U
Iron	19.1	U	19.1	U	19.1	U	19.1	U	0.0191	U
Lead	0.343	U	0.343	U	0.343	U	0.343	U	0.00034	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U	0.0242	U
Manganese	0.440	U	0.440	U	0.440	U	0.440	U	0.00044	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	0.00055	U
Potassium	30.9	U	30.9	U	30.9	U	30.9	U	0.0309	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U	0.00173	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Sodium	29.3	U	29.3	U	29.3	U	29.3	U	0.0293	U
Thallium	0.279	J	0.280	J	0.252	J	0.250	J	0.00014	U
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U	0.00157	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.00341	U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1868912-18		R1868912-11		R1868912-14		R1868912-16			
Date Analyzed:	08/27/24 11:09		08/27/24 08:39		08/27/24 09:50		08/27/24 10:20			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	30.9	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	221.		29.3	U		
Thallium	0.227	J	0.215	J	0.282	J	0.335	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1868912-21		R1868912-23		R1868912-25			
Date Analyzed :			08/27/24 11:47		08/27/24 12:34		08/27/24 13:28			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	34.1	J	29.3	U		
Thallium			0.184	J	0.241	J	0.217	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1868912-27		R1868912-29		R1868912-31			
Date Analyzed :			08/27/24 14:31		08/27/24 14:55		08/27/24 15:52			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.202	J	0.229	J	0.143	U		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1868912-33		R1868912-35		R1868912-37			
Date Analyzed:			08/27/24 16:51		08/27/24 18:10		08/27/24 19:06			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.179	J	0.205	J	0.224	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1868912-39		R1868912-41					
Date Analyzed :			08/27/24 20:00		08/27/24 20:54					
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U				
Antimony			0.429	U	0.429	U				
Arsenic			0.165	U	0.165	U				
Barium			0.173	U	0.173	U				
Beryllium			0.107	U	0.107	U				
Cadmium			0.0599	U	0.0599	U				
Calcium			39.4	U	39.4	U				
Chromium			0.178	U	0.178	U				
Cobalt			0.163	U	0.163	U				
Copper			0.384	U	0.384	U				
Iron			19.1	U	19.1	U				
Lead			0.343	U	0.343	U				
Magnesium			24.2	U	24.2	U				
Manganese			0.440	U	0.440	U				
Nickel			0.556	U	0.556	U				
Potassium			30.9	U	30.9	U				
Selenium			1.73	U	1.73	U				
Silver			0.163	U	0.163	U				
Sodium			29.3	U	29.3	U				
Thallium			0.245	J	0.221	J				
Vanadium			1.57	U	1.57	U				
Zinc			3.41	U	3.41	U				

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1868912-2		R1868912-5		R1868912-7		R1868912-9			
Date Analyzed :	08/27/24 05:42		08/27/24 06:14		08/27/24 06:47		08/27/24 07:49			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	30.9	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	29.3	U	29.3	U		
Thallium	0.279	J	0.280	J	0.252	J	0.250	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1868912-18		R1868912-11		R1868912-14		R1868912-16			
Date Analyzed :	08/27/24 11:09		08/27/24 08:39		08/27/24 09:50		08/27/24 10:20			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	30.9	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	221.		29.3	U		
Thallium	0.227	J	0.215	J	0.282	J	0.335	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1868912-21		R1868912-23		R1868912-25			
Date Analyzed :			08/27/24 11:47		08/27/24 12:34		08/27/24 13:28			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	34.1	J	29.3	U		
Thallium			0.184	J	0.241	J	0.217	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1868912-27		R1868912-29					
Date Analyzed :			08/27/24 14:31		08/27/24 14:55					
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U				
Antimony			0.429	U	0.429	U				
Arsenic			0.165	U	0.165	U				
Barium			0.173	U	0.173	U				
Beryllium			0.107	U	0.107	U				
Cadmium			0.0599	U	0.0599	U				
Calcium			39.4	U	39.4	U				
Chromium			0.178	U	0.178	U				
Cobalt			0.163	U	0.163	U				
Copper			0.384	U	0.384	U				
Iron			19.1	U	19.1	U				
Lead			0.343	U	0.343	U				
Magnesium			24.2	U	24.2	U				
Manganese			0.440	U	0.440	U				
Nickel			0.556	U	0.556	U				
Potassium			30.9	U	30.9	U				
Selenium			1.73	U	1.73	U				
Silver			0.163	U	0.163	U				
Sodium			29.3	U	29.3	U				
Thallium			0.202	J	0.229	J				
Vanadium			1.57	U	1.57	U				
Zinc			3.41	U	3.41	U				

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

			Initial Found				Final Found			
Lab ID	:		R1867622-3							
Analysis Date	:		08/23/24 05:44							
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Aluminum	100000		101000	101						
Antimony			0.189							
Arsenic			0.396							
Barium			1.28							
Beryllium			0.0397							
Cadmium			0.562							
Calcium	300000		290000	97						
Chromium			1.57							
Cobalt			2.22							
Copper			1.05							
Iron	250000		216000	86						
Lead			1.74							
Magnesium	100000		80100	80						
Manganese			4.41							
Nickel			2.68							
Potassium	100000		97700	98						
Selenium			3.35							
Silver			0.0359							
Sodium	250000		208000	83						
Thallium			0.105							
Vanadium			0.00569							
Zinc			2.07							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1868912-3				R1868912-19			
Analysis Date :			08/27/24 05:50				08/27/24 11:15			
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Aluminum	100000		99100	99			102000	102		
Antimony			0.203				0.212			
Arsenic			0.422				0.355			
Barium			1.27				1.21			
Beryllium			0.0260				0.0387			
Cadmium			0.522				0.538			
Calcium	300000		293000	98			308000	103		
Chromium			1.44				1.46			
Cobalt			2.20				2.16			
Copper			1.04				0.912			
Iron	250000		214000	86			205000	82		
Lead			1.74				1.62			
Magnesium	100000		76200	76			99500	100		
Manganese			4.49				4.72			
Nickel			3.01				2.43			
Potassium	100000		97300	97			101000	101		
Selenium			3.26				3.81			
Silver			0.0222				0.0230			
Sodium	250000		200000	80			208000	83		
Thallium			0.0943				0.0616			
Vanadium			0.0447				0.159			
Zinc			2.40				0.394			

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1868912-3				R1868912-19			
Analysis Date :			08/27/24 05:50				08/27/24 11:15			
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Aluminum	100000		99100	99			102000	102		
Antimony			0.203				0.212			
Arsenic			0.422				0.355			
Barium			1.27				1.21			
Beryllium			0.0260				0.0387			
Cadmium			0.522				0.538			
Calcium	300000		293000	98			308000	103		
Chromium			1.44				1.46			
Cobalt			2.20				2.16			
Copper			1.04				0.912			
Iron	250000		214000	86			205000	82		
Lead			1.74				1.62			
Magnesium	100000		76200	76			99500	100		
Manganese			4.49				4.72			
Nickel			3.01				2.43			
Potassium	100000		97300	97			101000	101		
Selenium			3.26				3.81			
Silver			0.0222				0.0230			
Sodium	250000		200000	80			208000	83		
Thallium			0.0943				0.0616			
Vanadium			0.0447				0.159			
Zinc			2.40				0.394			

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-7S	**Matrix**	: WATER
Lab Sample ID	: L2447503-07		
Matrix Spike	: WG1962897-3	**MS Analysis Date**	: 08/23/24 11:16
Matrix Spike Dup	: WG1962897-4	**MSD Analysis Date**	: 08/23/24 11:21

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R		RPD	Recovery Limits	RPD Limit
Aluminum, Total	0.00345J	2	2.10	105		2	2.02	101		4	75-125	20
Antimony, Total	0.00103J	0.5	0.4783	96		0.5	0.4866	97		2	75-125	20
Arsenic, Total	0.00030J	0.12	0.1238	103		0.12	0.1251	104		1	75-125	20
Barium, Total	0.09513	2	2.083	99		2	2.103	100		1	75-125	20
Beryllium, Total	ND	0.05	0.04961	99		0.05	0.04963	99		0	75-125	20
Cadmium, Total	ND	0.053	0.05202	98		0.053	0.05103	96		2	75-125	20
Calcium, Total	132.	10	135.	30	Q	10	133.	10	Q	1	75-125	20
Chromium, Total	0.00048J	0.2	0.1944	97		0.2	0.1917	96		1	75-125	20
Cobalt, Total	0.00033J	0.5	0.4976	100		0.5	0.4942	99		1	75-125	20
Copper, Total	0.00170	0.25	0.2521	100		0.25	0.2502	99		1	75-125	20
Iron, Total	ND	1	0.997	100		1	1.02	102		2	75-125	20
Lead, Total	ND	0.53	0.5254	99		0.53	0.5241	99		0	75-125	20
Magnesium, Total	15.6	10	25.0	94		10	24.4	88		2	75-125	20
Manganese, Total	0.3799	0.5	0.8676	98		0.5	0.8754	99		1	75-125	20
Nickel, Total	ND	0.5	0.4916	98		0.5	0.4882	98		1	75-125	20
Potassium, Total	15.1	10	24.7	96		10	24.6	95		0	75-125	20
Selenium, Total	ND	0.12	0.121	101		0.12	0.128	107		6	75-125	20
Silver, Total	ND	0.05	0.04778	96		0.05	0.04782	96		0	75-125	20
Sodium, Total	23.8	10	35.6	118		10	34.7	109		3	75-125	20
Thallium, Total	0.00057J	0.12	0.1189	99		0.12	0.1183	98		1	75-125	20
Vanadium, Total	ND	0.5	0.4736	95		0.5	0.4753	95		0	75-125	20
Zinc, Total	ND	0.5	0.4840	97		0.5	0.4932	99		2	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-7S	**Matrix**	: WATER
Lab Sample ID	: L2447503-07		
Matrix Spike	: WG1963944-3	**MS Analysis Date**	: 08/27/24 17:34
Matrix Spike Dup	: WG1963944-4	**MSD Analysis Date**	: 08/27/24 17:39

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Dissolved	ND	2	2.06	103	2	2.04	102	1	75-125	20
Antimony, Dissolved	0.00064J	0.5	0.5156	103	0.5	0.5199	104	1	75-125	20
Arsenic, Dissolved	0.00020J	0.12	0.1144	95	0.12	0.1137	95	1	75-125	20
Barium, Dissolved	0.08926	2	2.196	105	2	2.181	104	1	75-125	20
Beryllium, Dissolved	ND	0.05	0.05711	114	0.05	0.05708	114	0	75-125	20
Cadmium, Dissolved	ND	0.053	0.05659	107	0.053	0.05595	106	1	75-125	20
Calcium, Dissolved	138.	10	152.	140 Q	10	159.	210 Q	5	75-125	20
Chromium, Dissolved	0.01138	0.2	0.2229	106	0.2	0.2345	112	5	75-125	20
Cobalt, Dissolved	0.00054	0.5	0.5642	113	0.5	0.5723	114	1	75-125	20
Copper, Dissolved	0.00180	0.25	0.2820	112	0.25	0.2771	110	2	75-125	20
Iron, Dissolved	0.0504	1	1.12	107	1	1.19	114	6	75-125	20
Lead, Dissolved	ND	0.53	0.5443	103	0.53	0.5558	105	2	75-125	20
Magnesium, Dissolved	14.8	10	25.4	106	10	25.2	104	1	75-125	20
Manganese, Dissolved	0.3930	0.5	0.9523	112	0.5	0.9965	121	5	75-125	20
Nickel, Dissolved	0.00702	0.5	0.5699	112	0.5	0.5702	113	0	75-125	20
Potassium, Dissolved	15.0	10	25.6	106	10	27.4	124	7	75-125	20
Selenium, Dissolved	ND	0.12	0.116	97	0.12	0.119	99	3	75-125	20
Silver, Dissolved	ND	0.05	0.05228	104	0.05	0.05329	106	2	75-125	20
Sodium, Dissolved	24.0	10	35.2	112	10	34.7	107	1	75-125	20
Thallium, Dissolved	0.00048J	0.12	0.1162	97	0.12	0.1184	99	2	75-125	20
Vanadium, Dissolved	ND	0.5	0.5493	110	0.5	0.5743	115	4	75-125	20
Zinc, Dissolved	ND	0.5	0.5468	109	0.5	0.5451	109	0	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2447832-01		
Matrix Spike	: WG1963944-7	**MS Analysis Date**	: 08/27/24 20:09
Matrix Spike Dup	: WG1963944-8	**MSD Analysis Date**	: 08/27/24 20:14

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Dissolved	ND	2	2.10	105	2	2.17	108	3	75-125	20
Antimony, Dissolved	ND	0.5	0.5153	103	0.5	0.5159	103	0	75-125	20
Arsenic, Dissolved	ND	0.12	0.1140	95	0.12	0.1146	96	1	75-125	20
Barium, Dissolved	0.0657	2	2.152	104	2	2.133	103	1	75-125	20
Beryllium, Dissolved	ND	0.05	0.05923	118	0.05	0.05794	116	2	75-125	20
Cadmium, Dissolved	0.0013	0.053	0.05911	109	0.053	0.05919	109	0	75-125	20
Calcium, Dissolved	75.8	10	92.2	164 Q	10	93.8	180 Q	2	75-125	20
Chromium, Dissolved	ND	0.2	0.2303	115	0.2	0.2286	114	1	75-125	20
Cobalt, Dissolved	0.0018	0.5	0.5621	112	0.5	0.5676	113	1	75-125	20
Copper, Dissolved	0.0009J	0.25	0.2879	115	0.25	0.2804	112	3	75-125	20
Iron, Dissolved	ND	1	1.12	112	1	1.19	119	6	75-125	20
Lead, Dissolved	ND	0.53	0.5609	106	0.53	0.5621	106	0	75-125	20
Magnesium, Dissolved	8.49	10	19.0	105	10	20.7	122	9	75-125	20
Manganese, Dissolved	2.448	0.5	3.093	129 Q	0.5	3.223	155 Q	4	75-125	20
Nickel, Dissolved	0.004	0.5	0.5823	116	0.5	0.5864	116	1	75-125	20
Potassium, Dissolved	13.1	10	24.7	116	10	26.8	137 Q	8	75-125	20
Selenium, Dissolved	ND	0.12	0.114	95	0.12	0.0984	82	15	75-125	20
Silver, Dissolved	ND	0.05	0.05366	107	0.05	0.05213	104	3	75-125	20
Sodium, Dissolved	89.7	10	124.	343 Q	10	137.	473 Q	10	75-125	20
Thallium, Dissolved	ND	0.12	0.1181	98	0.12	0.1180	98	0	75-125	20
Vanadium, Dissolved	ND	0.5	0.5668	113	0.5	0.5587	112	1	75-125	20
Zinc, Dissolved	ND	0.5	0.5315	106	0.5	0.5346	107	1	75-125	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1962897-2	**LCS Analysis Date**	: 08/23/24 11:07
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Total	2.00	2.06	103.					80-120	20
Antimony, Total	0.500	0.428	86.					80-120	20
Arsenic, Total	0.120	0.125	104.					80-120	20
Barium, Total	2.00	2.03	101.					80-120	20
Beryllium, Total	0.0500	0.0494	99.					80-120	20
Cadmium, Total	0.0530	0.0532	100.					80-120	20
Calcium, Total	10.0	10.4	104.					80-120	20
Chromium, Total	0.200	0.196	98.					80-120	20
Cobalt, Total	0.500	0.496	99.					80-120	20
Copper, Total	0.250	0.248	99.					80-120	20
Iron, Total	1.00	0.996	100.					80-120	20
Lead, Total	0.530	0.531	100.					80-120	20
Magnesium, Total	10.0	9.87	99.					80-120	20
Manganese, Total	0.500	0.503	101.					80-120	20
Nickel, Total	0.500	0.488	98.					80-120	20
Potassium, Total	10.0	10.2	102.					80-120	20
Selenium, Total	0.120	0.123	102.					80-120	20
Silver, Total	0.0500	0.0490	98.					80-120	20
Sodium, Total	10.0	10.9	109.					80-120	20
Thallium, Total	0.120	0.119	99.					80-120	20
Vanadium, Total	0.500	0.491	98.					80-120	20
Zinc, Total	0.500	0.505	101.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963944-2	**LCS Analysis Date**	: 08/27/24 17:25
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Dissolved	2.00	2.18	109.					80-120	20
Antimony, Dissolved	0.500	0.478	96.					80-120	20
Arsenic, Dissolved	0.120	0.113	94.					80-120	20
Barium, Dissolved	2.00	2.10	105.					80-120	20
Beryllium, Dissolved	0.0500	0.0565	113.					80-120	20
Cadmium, Dissolved	0.0530	0.0567	107.					80-120	20
Calcium, Dissolved	10.0	12.0	120.					80-120	20
Chromium, Dissolved	0.200	0.232	116.					80-120	20
Cobalt, Dissolved	0.500	0.560	112.					80-120	20
Copper, Dissolved	0.250	0.278	111.					80-120	20
Iron, Dissolved	1.00	1.09	109.					80-120	20
Lead, Dissolved	0.530	0.554	104.					80-120	20
Magnesium, Dissolved	10.0	10.8	108.					80-120	20
Manganese, Dissolved	0.500	0.571	114.					80-120	20
Nickel, Dissolved	0.500	0.558	112.					80-120	20
Potassium, Dissolved	10.0	11.6	116.					80-120	20
Selenium, Dissolved	0.120	0.104	87.					80-120	20
Silver, Dissolved	0.0500	0.0532	106.					80-120	20
Sodium, Dissolved	10.0	11.1	111.					80-120	20
Thallium, Dissolved	0.120	0.117	98.					80-120	20
Vanadium, Dissolved	0.500	0.556	111.					80-120	20
Zinc, Dissolved	0.500	0.535	107.					80-120	20

Form 8
Serial Dilutions

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-7S	**Matrix**	: WATER
Lab Sample ID	: L2447503-07	**Analysis Date**	: 08/23/24 11:12
Serial Dilution ID	: WG1962897-6	**Analysis Date**	: 08/23/24 11:30

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Barium, Total	0.09513	0.09089	4	20
Calcium, Total	132.	127.	4	20
Magnesium, Total	15.6	15.2	3	20
Manganese, Total	0.3799	0.3682	3	20
Potassium, Total	15.1	14.5	4	20

Form 8
Serial Dilutions

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-7S	**Matrix**	: WATER
Lab Sample ID	: L2447503-07	**Analysis Date**	: 08/27/24 17:30
Serial Dilution ID	: WG1963944-6	**Analysis Date**	: 08/27/24 17:48

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Barium, Dissolved	0.08926	0.08868	1	20
Calcium, Dissolved	138.	136.	1	20
Magnesium, Dissolved	14.8	14.7	1	20
Manganese, Dissolved	0.3930	0.3971	1	20
Potassium, Dissolved	15.0	14.8	1	20
Sodium, Dissolved	24.0	23.8	1	20

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2447503-07	08/23/24 07:40	-	50
WG1962897-1	08/23/24 07:40	-	50
WG1962897-2	08/23/24 07:40	-	50
WG1962897-3	08/23/24 07:40	-	50
WG1962897-4	08/23/24 07:40	-	50
WG1962897-6	08/23/24 07:40	-	50

Form 12
Preparation Log

Client	: **Alpha Geoscience**	**Lab Number**	: **L2447503**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Matrix	: **WATER**	**Prep Method**	: **EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2447503-01	08/26/24 18:22	-	50
L2447503-02	08/26/24 18:22	-	50
L2447503-03	08/26/24 18:22	-	50
L2447503-04	08/26/24 18:22	-	50
L2447503-05	08/26/24 18:22	-	50
L2447503-06	08/26/24 18:22	-	50
L2447503-07	08/26/24 18:22	-	50
L2447503-08	08/26/24 18:22	-	50
L2447503-09	08/26/24 18:22	-	50
L2447503-10	08/26/24 18:22	-	50
WG1963944-1	08/26/24 18:22	-	50
WG1963944-2	08/26/24 18:22	-	50
WG1963944-3	08/26/24 18:22	-	50
WG1963944-4	08/26/24 18:22	-	50
WG1963944-6	08/26/24 18:22	-	50
WG1963944-7	08/26/24 18:22	-	50
WG1963944-8	08/26/24 18:22	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2447503-01	08/23/24 07:40	-	50
L2447503-02	08/23/24 07:40	-	50
L2447503-03	08/23/24 07:40	-	50
L2447503-04	08/23/24 07:40	-	50
L2447503-05	08/23/24 07:40	-	50
L2447503-06	08/23/24 07:40	-	50
L2447503-08	08/23/24 07:40	-	50
L2447503-09	08/23/24 07:40	-	50
L2447503-10	08/23/24 07:40	-	50
L2447503-11	08/23/24 07:40	-	50

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 08/23/24 04:35	**End Date**	: 08/23/24 11:54

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1867622-10 TUNE		04:35:00																						
R1867622-1 ICV	1	05:32:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-2 ICB	1	05:36:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-3 ICSA	1	05:44:43	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-4 CCV	1	05:58:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-5 CCB	1	06:02:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-6 CCV	1	06:31:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-7 CCB	1	06:35:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-8 CCV	1	07:34:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-9 CCB	1	07:38:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-11 CCV	1	08:41:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-12 CCB	1	08:45:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-13 CCV	1	08:55:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-14 CCB	1	08:59:40	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-15 CCV	1	09:26:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-16 CCB	1	09:31:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-17 CCV	1	10:10:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-18 CCB	1	10:14:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-19 CCV	1	10:34:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-20 CCB	1	10:39:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1962897-1 BLANK	1	11:03:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1962897-2 LCS	10	11:07:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-07	1	11:12:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		X	X	X
WG1962897-3 MS	10	11:16:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1962897-4 MSD	10	11:21:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1962897-6 SERDIL	5	11:30:13				X			X						X	X		X						
L2447503-07	10	11:34:41																			X			

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 08/23/24 04:35	**End Date**	: 08/23/24 11:54

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1867622-21 CCV	1	11:50:24	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1867622-22 CCB	1	11:54:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24 04:41	**End Date**	: 08/27/24 20:54

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
R1868912-12 TUNE		04:41:00																						
R1868912-1 ICV	1	05:37:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-2 ICB	1	05:42:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-3 ICSA	1	05:50:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-4 CCV	1	06:10:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-5 CCB	1	06:14:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-6 CCV	1	06:42:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-7 CCB	1	06:47:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-8 CCV	1	07:44:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-9 CCB	1	07:49:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-10 CCV	1	08:35:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-11 CCB	1	08:39:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-13 CCV	1	09:46:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-14 CCB	1	09:50:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-15 CCV	1	10:15:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-16 CCB	1	10:20:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-17 ICV	1	11:05:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-18 ICB	1	11:09:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-19 ICSA	1	11:15:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-20 CCV	1	11:42:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-21 CCB	1	11:47:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-22 CCV	1	12:30:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-23 CCB	1	12:34:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-24 CCV	1	13:23:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-25 CCB	1	13:28:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-26 CCV	1	14:26:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-27 CCB	1	14:31:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24 04:41	**End Date**	: 08/27/24 20:54

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
R1868912-28 CCV	1	14:50:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-29 CCB	1	14:55:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-30 CCV	1	15:47:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-31 CCB	1	15:52:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-32 CCV	1	16:46:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-33 CCB	1	16:51:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1963944-1 BLANK	1	17:21:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1963944-2 LCS	10	17:25:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-07	1	17:30:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1963944-3 MS	10	17:34:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1963944-4 MSD	10	17:39:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1963944-6 SERDIL	5	17:48:19				X			X						X	X		X			X			
L2447503-01	1	17:52:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-02	1	17:57:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-03	1	18:01:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-34 CCV	1	18:06:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-35 CCB	1	18:10:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-10	1	18:17:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-04	1	18:26:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-05	1	18:30:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-06	1	18:35:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-08	1	18:39:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-09	1	18:44:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-36 CCV	1	19:02:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-37 CCB	1	19:06:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-38 CCV	1	19:56:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-39 CCB	1	20:00:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24 04:41	**End Date**	: 08/27/24 20:54

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
WG1963944-7 MS	10	20:09:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1963944-8 MSD	10	20:14:21	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-40 CCV	1	20:50:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-41 CCB	1	20:54:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24 04:41	**End Date**	: 08/27/24 14:55

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1868912-12 TUNE		04:41:00																						
R1868912-1 ICV	1	05:37:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-2 ICB	1	05:42:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-3 ICSA	1	05:50:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-4 CCV	1	06:10:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-5 CCB	1	06:14:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-6 CCV	1	06:42:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-7 CCB	1	06:47:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-8 CCV	1	07:44:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-9 CCB	1	07:49:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-10 CCV	1	08:35:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-11 CCB	1	08:39:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-13 CCV	1	09:46:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-14 CCB	1	09:50:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-15 CCV	1	10:15:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-16 CCB	1	10:20:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-17 ICV	1	11:05:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-18 ICB	1	11:09:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-19 ICSA	1	11:15:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-20 CCV	1	11:42:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-21 CCB	1	11:47:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-22 CCV	1	12:30:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-23 CCB	1	12:34:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-24 CCV	1	13:23:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-25 CCB	1	13:28:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-01	1	13:50:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-02	1	13:55:12	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24 04:41	**End Date**	: 08/27/24 14:55

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
L2447503-03	1	13:59:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-04	1	14:04:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-05	1	14:08:39	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-06	1	14:13:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-08	1	14:17:36	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-09	1	14:22:03	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-26 CCV	1	14:26:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-27 CCB	1	14:31:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-10	1	14:36:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2447503-11	1	14:41:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-28 CCV	1	14:50:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1868912-29 CCB	1	14:55:28	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: R1867622-10	**Analysis Date**	: 08/23/24 04:35
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9418	0.68	0.4
115 In	114.8873	0.713	0.6
7 Li	7.0242	0.663	0.7
238 U	238.0303	0.7	0.7

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: R1868912-12	**Analysis Date**	: 08/27/24 04:41
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9428	0.68	1.1
115 In	114.8938	0.714	1.6
7 Li	7.0215	0.664	1
238 U	238.0447	0.696	2

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: R1868912-12	**Analysis Date**	: 08/27/24 04:41
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9428	0.68	1.1
115 In	114.8938	0.714	1.6
7 Li	7.0215	0.664	1
238 U	238.0447	0.696	2

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 08/23/24	**End Date**	: 08/23/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1867622-1 ICV	05:32:07	92	92	92	94	90
R1867622-2 ICB	05:36:37	94	91	92	94	88
R1867622-3 ICSA	05:44:43	83	85	87	83	73
R1867622-4 CCV	05:58:10	99	104	98	98	87
R1867622-5 CCB	06:02:41	101	104	99	100	88
R1867622-6 CCV	06:31:06	96	99	101	100	84
R1867622-7 CCB	06:35:37	96	97	95	98	82
R1867622-8 CCV	07:34:02	104	108	99	100	78
R1867622-9 CCB	07:38:33	105	107	97	99	77
R1867622-11 CCV	08:41:04	103	105	98	98	70
R1867622-12 CCB	08:45:35	107	105	97	96	69
R1867622-13 CCV	08:55:09	102	106	96	98	76
R1867622-14 CCB	08:59:40	104	102	92	94	69
R1867622-15 CCV	09:26:32	105	106	98	94	68
R1867622-16 CCB	09:31:03	107	106	93	92	66
R1867622-17 CCV	10:10:19	87	82	88	89	58
R1867622-18 CCB	10:14:50	87	78	82	90	58
R1867622-19 CCV	10:34:36	89	83	82	86	60
R1867622-20 CCB	10:39:55	91	84	83	86	59
WG1962897-1 BLANK	11:03:29	92	85	86	93	63
WG1962897-2 LCS	11:07:56	90	84	86	90	59
L2447503-07	11:12:22	91	90	92	92	54
WG1962897-3 MS	11:16:50	96	92	97	97	60
WG1962897-4 MSD	11:21:17	96	92	95	94	59
WG1962897-6 SERDIL	11:30:13	96	93	95	96	59
L2447503-07	11:34:41	99	96	99	95	59
R1867622-21 CCV	11:50:24	93	91	90	94	60

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 08/23/24	**End Date**	: 08/23/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1867622-22 CCB	11:54:54	94	89	89	90	57

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24	**End Date**	: 08/27/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1868912-1 ICV	05:37:30	96	98	99	100	111
R1868912-2 ICB	05:42:00	98	99	96	100	108
R1868912-3 ICSA	05:50:12	83	88	93	89	92
R1868912-4 CCV	06:10:13	98	104	105	107	112
R1868912-5 CCB	06:14:44	98	101	103	103	111
R1868912-6 CCV	06:42:31	102	109	109	106	111
R1868912-7 CCB	06:47:01	102	105	105	106	108
R1868912-8 CCV	07:44:58	101	109	107	105	109
R1868912-9 CCB	07:49:29	103	107	107	105	111
R1868912-10 CCV	08:35:14	101	107	111	104	99
R1868912-11 CCB	08:39:45	100	102	101	105	100
R1868912-13 CCV	09:46:01	75	67	68	72	66
R1868912-14 CCB	09:50:33	76	65	66	71	65
R1868912-15 CCV	10:15:55	68	61	64	69	37
R1868912-16 CCB	10:20:23	69	61	64	69	58
R1868912-17 ICV	11:05:27	95	100	103	99	106
R1868912-18 ICB	11:09:57	95	98	103	102	106
R1868912-19 ICSA	11:15:08	78	84	92	86	90
R1868912-20 CCV	11:42:49	93	100	102	99	108
R1868912-21 CCB	11:47:20	96	102	103	103	109
R1868912-22 CCV	12:30:20	86	92	91	89	95
R1868912-23 CCB	12:34:52	89	93	95	92	92
R1868912-24 CCV	13:23:55	84	91	96	94	88
R1868912-25 CCB	13:28:26	84	88	104	90	86
R1868912-26 CCV	14:26:31	85	91	89	91	86
R1868912-27 CCB	14:31:02	88	93	93	93	85
R1868912-28 CCV	14:50:57	88	97	91	90	85

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24	**End Date**	: 08/27/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1868912-29 CCB	14:55:28	89	94	93	93	85
R1868912-30 CCV	15:47:56	85	93	92	87	77
R1868912-31 CCB	15:52:27	86	94	92	90	79
R1868912-32 CCV	16:46:36	92	104	97	93	80
R1868912-33 CCB	16:51:08	92	101	96	93	78
WG1963944-1 BLANK	17:21:30	91	102	97	97	89
WG1963944-2 LCS	17:25:57	89	96	98	91	76
L2447503-07	17:30:25	89	102	99	93	73
WG1963944-3 MS	17:34:54	95	106	105	98	79
WG1963944-4 MSD	17:39:22	96	107	107	98	80
WG1963944-6 SERDIL	17:48:19	96	109	101	96	77
L2447503-01	17:52:48	90	104	100	94	76
L2447503-02	17:57:17	93	109	105	98	78
L2447503-03	18:01:46	91	105	100	94	74
R1868912-34 CCV	18:06:15	94	104	97	93	78
R1868912-35 CCB	18:10:46	98	107	102	97	80
L2447503-10	18:17:26	95	104	100	95	79
L2447503-04	18:26:25	92	102	100	94	74
L2447503-05	18:30:53	96	106	103	100	78
L2447503-06	18:35:22	92	106	101	95	73
L2447503-08	18:39:51	94	106	103	100	77
L2447503-09	18:44:20	96	107	105	101	79
R1868912-36 CCV	19:02:17	93	103	99	96	75
R1868912-37 CCB	19:06:49	97	107	100	99	77
R1868912-38 CCV	19:56:17	95	106	106	100	76
R1868912-39 CCB	20:00:49	96	107	105	99	76
WG1963944-7 MS	20:09:51	97	109	111	102	76

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24	**End Date**	: 08/27/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
WG1963944-8 MSD	20:14:21	96	108	109	101	75
R1868912-40 CCV	20:50:16	94	108	108	101	74
R1868912-41 CCB	20:54:48	95	103	100	98	74

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24	**End Date**	: 08/27/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1868912-1 ICV	05:37:30	96	98	99	100	111
R1868912-2 ICB	05:42:00	98	99	96	100	108
R1868912-3 ICSA	05:50:12	83	88	93	89	92
R1868912-4 CCV	06:10:13	98	104	105	107	112
R1868912-5 CCB	06:14:44	98	101	103	103	111
R1868912-6 CCV	06:42:31	102	109	109	106	111
R1868912-7 CCB	06:47:01	102	105	105	106	108
R1868912-8 CCV	07:44:58	101	109	107	105	109
R1868912-9 CCB	07:49:29	103	107	107	105	111
R1868912-10 CCV	08:35:14	101	107	111	104	99
R1868912-11 CCB	08:39:45	100	102	101	105	100
R1868912-13 CCV	09:46:01	75	67	68	72	66
R1868912-14 CCB	09:50:33	76	65	66	71	65
R1868912-15 CCV	10:15:55	68	61	64	69	37
R1868912-16 CCB	10:20:23	69	61	64	69	58
R1868912-17 ICV	11:05:27	95	100	103	99	106
R1868912-18 ICB	11:09:57	95	98	103	102	106
R1868912-19 ICSA	11:15:08	78	84	92	86	90
R1868912-20 CCV	11:42:49	93	100	102	99	108
R1868912-21 CCB	11:47:20	96	102	103	103	109
R1868912-22 CCV	12:30:20	86	92	91	89	95
R1868912-23 CCB	12:34:52	89	93	95	92	92
R1868912-24 CCV	13:23:55	84	91	96	94	88
R1868912-25 CCB	13:28:26	84	88	104	90	86
L2447503-01	13:50:44	78	84	83	85	84
L2447503-02	13:55:12	83	91	93	91	86
L2447503-03	13:59:41	79	88	88	86	83

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ2	**Analysis Method**	: 1,6020B
Start Date	: 08/27/24	**End Date**	: 08/27/24

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
L2447503-04	14:04:10	82	92	90	87	83
L2447503-05	14:08:39	86	93	91	92	87
L2447503-06	14:13:09	81	89	94	88	80
L2447503-08	14:17:36	83	90	89	89	81
L2447503-09	14:22:03	88	94	97	94	84
R1868912-26 CCV	14:26:31	85	91	89	91	86
R1868912-27 CCB	14:31:02	88	93	93	93	85
L2447503-10	14:36:35	85	89	93	91	85
L2447503-11	14:41:02	85	91	91	91	83
R1868912-28 CCV	14:50:57	88	97	91	90	85
R1868912-29 CCB	14:55:28	89	94	93	93	85

Date Created: 01/22/21
Created By: Jason Hebert
File: PM9836-1
Page: 1

METALS by 6020B (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	0.01	0.00327	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Antimony, Total	7440-36-0	0.004	0.000429	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Arsenic, Total	7440-38-2	0.0005	0.000165	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Barium, Total	7440-39-3	0.0005	0.000173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Beryllium, Total	7440-41-7	0.0005	0.000107	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cadmium, Total	7440-43-9	0.0002	0.0000599	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Calcium, Total	7440-70-2	0.1	0.0394	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Chromium, Total	7440-47-3	0.001	0.000178	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cobalt, Total	7440-48-4	0.0005	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Copper, Total	7440-50-8	0.001	0.000384	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lithium, Total	7439-93-2	0.001	0.000083	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Iron, Total	7439-89-6	0.05	0.0191	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lead, Total	7439-92-1	0.001	0.000343	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Magnesium, Total	7439-95-4	0.07	0.0242	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Manganese, Total	7439-96-5	0.001	0.00044	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Nickel, Total	7440-02-0	0.002	0.000556	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Potassium, Total	7440-09-7	0.1	0.0309	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Selenium, Total	7782-49-2	0.005	0.00173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Silver, Total	7440-22-4	0.0004	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Sodium, Total	7440-23-5	0.1	0.0293	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Thallium, Total	7440-28-0	0.0005	0.000143	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Vanadium, Total	7440-62-2	0.005	0.00157	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Zinc, Total	7440-66-6	0.01	0.00341	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 01/22/21
Created By: Jason Hebert
File: PM9837-1
Page: 1

METALS by 6020B (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	10	1.48	mg/kg	48-151	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Antimony, Total	7440-36-0	0.16	0.01352	mg/kg	1-208	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Arsenic, Total	7440-38-2	0.05	0.0066	mg/kg	79-121	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Barium, Total	7440-39-3	0.3	0.02112	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Beryllium, Total	7440-41-7	0.03	0.00872	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cadmium, Total	7440-43-9	0.02	0.00264	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Calcium, Total	7440-70-2	50	6.08	mg/kg	81-119	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Chromium, Total	7440-47-3	0.2	0.0468	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cobalt, Total	7440-48-4	0.05	0.00532	mg/kg	84-115	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Copper, Total	7440-50-8	0.2	0.0194	mg/kg	81-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Iron, Total	7439-89-6	20	2.06	mg/kg	45-155	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Lead, Total	7439-92-1	0.06	0.0146	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Magnesium, Total	7439-95-4	10	1.232	mg/kg	76-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Manganese, Total	7439-96-5	0.2	0.0444	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Nickel, Total	7440-02-0	0.1	0.02672	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Potassium, Total	7440-09-7	10	1.588	mg/kg	71-129	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Selenium, Total	7782-49-2	0.2	0.0756	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Silver, Total	7440-22-4	0.05	0.00488	mg/kg	75-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Sodium, Total	7440-23-5	15	1.172	mg/kg	72-127	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Thallium, Total	7440-28-0	0.02	0.00516	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Vanadium, Total	7440-62-2	0.1	0.03792	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Zinc, Total	7440-66-6	1	0.26	mg/kg	82-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

System

Start time:	8/23/2024 4:35:01 AM
Instrument:	iCAP Q
Operator:	ALPHALAB\a2-icpmsq2
Template:	STD AGD
Instrument Serial Number:	Q01717
Last Autotune:	Autotune-Torch Position via In115 ONLY-20240627-201110165.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	0.0 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.0 CPS	Less than	5.0 CPS
7Li	Passed	30,758.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	37,492.0 CPS	Greater than	1,000.0 CPS
238U	Passed	66,333.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.0122	Less than	0.025
137Ba++/137Ba	Passed	0.0238	Less than	0.034
115In	Passed	51,119.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	0.7%	5
59Co	0.4%	5
238U	0.7%	5
140Ce.16O	1.5%	2
140Ce	0.9%	2
115In	0.6%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0242	0.0082	0.663	0.650	0.850
59Co	Passed	58.9418	0.0086	0.680	0.650	0.850
115In	Passed	114.8873	0.0165	0.713	0.650	0.850
238U	Passed	238.0303	0.0205	0.700	0.650	0.850

Tune Settings

Parameter	Value
Additional Gas Flow 1	41.00
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-384.97
Auxilliary Flow	0.80
CCT Bias	-3.21
CCT Entry Lens	-70.02
CCT Exit Lens	-160.01
CCT Focus Lens	-11.56
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-200.05
D2 Lens	-90.01
Deflection Entry Lens	-35.01
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-130.40
Focus Lens	21.00
Nebulizer Flow	0.54
Peristaltic Pump Speed	17.00
Plasma Power	1550.00
Pole Bias	1.00
Quad Entry Lens	-20.00
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	-0.19
Torch Vertical Position	-0.84
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	0.01

Vacuum Check

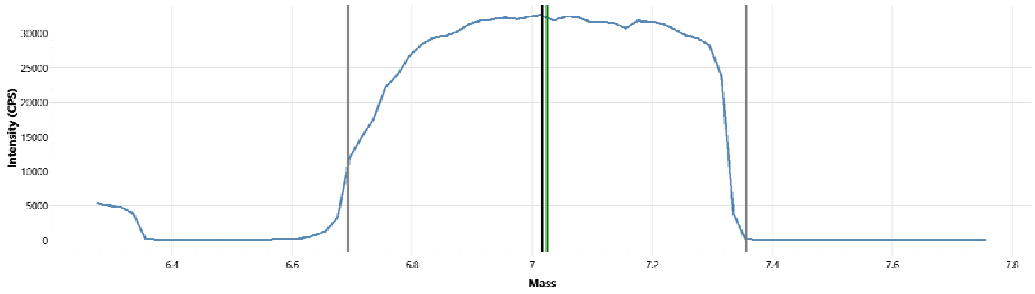
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	3.603e-7
Interface Pressure		1.936e+0

Detector Voltages

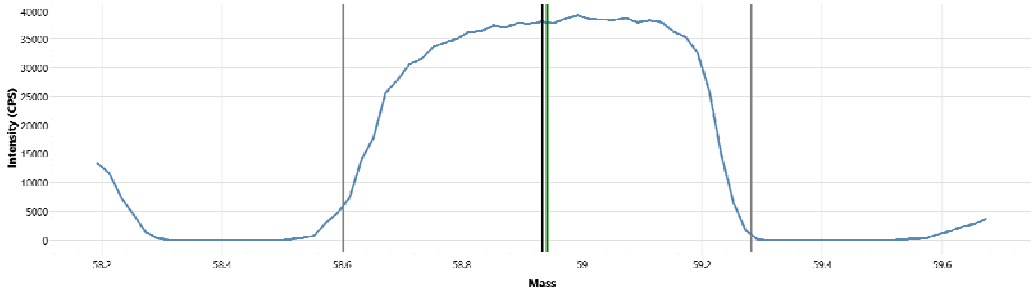
Analog	Counting
-2087.50	1662.50

Mass Calibration Peaks

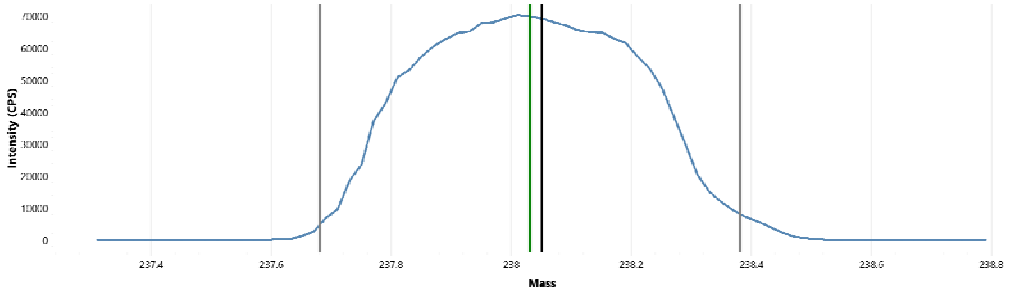
Analyte: 7Li



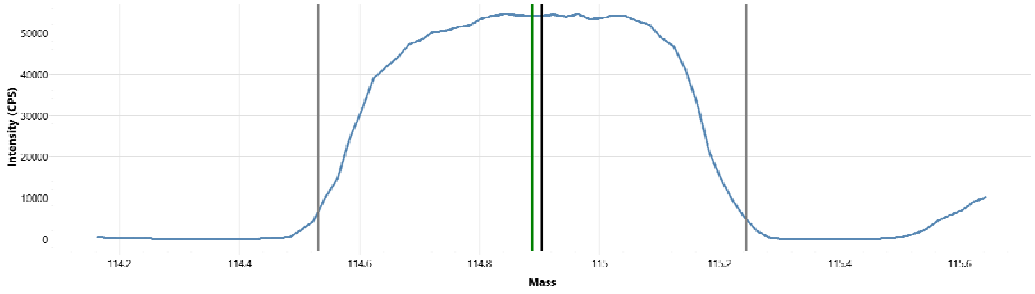
Analyte: 59Co



Analyte: 238U



Analyte: 115In



Performance Report

System

Start time:	8/27/2024 4:41:27 AM
Instrument:	iCAP Q
Operator:	ALPHALAB\a2-icpmsq2
Template:	STD AGD
Instrument Serial Number:	Q01717
Last Autotune:	Autotune-Torch Position via In115 ONLY-20240627-201110165.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	0.0 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.0 CPS	Less than	5.0 CPS
7Li	Passed	17,972.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	21,852.0 CPS	Greater than	1,000.0 CPS
238U	Passed	39,754.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.012	Less than	0.025
137Ba++/137Ba	Passed	0.019	Less than	0.034
115In	Passed	30,422.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	1.0%	5
59Co	1.1%	5
238U	2.0%	5
140Ce.16O	5.0%	2
140Ce	1.3%	2
115In	1.6%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0215	0.0055	0.664	0.650	0.850
59Co	Passed	58.9428	0.0096	0.680	0.650	0.850
115In	Passed	114.8938	0.0101	0.714	0.650	0.850
238U	Passed	238.0447	0.0061	0.696	0.650	0.850

Tune Settings

Parameter	Value
Additional Gas Flow 1	41.00
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-384.97
Auxilliary Flow	0.80
CCT Bias	-3.21
CCT Entry Lens	-70.02
CCT Exit Lens	-160.01
CCT Focus Lens	-11.56
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-200.05
D2 Lens	-90.01
Deflection Entry Lens	-35.01
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-130.40
Focus Lens	21.00
Nebulizer Flow	0.54
Peristaltic Pump Speed	17.00
Plasma Power	1550.00
Pole Bias	1.00
Quad Entry Lens	-20.00
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	-0.19
Torch Vertical Position	-0.84
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	0.01

Vacuum Check

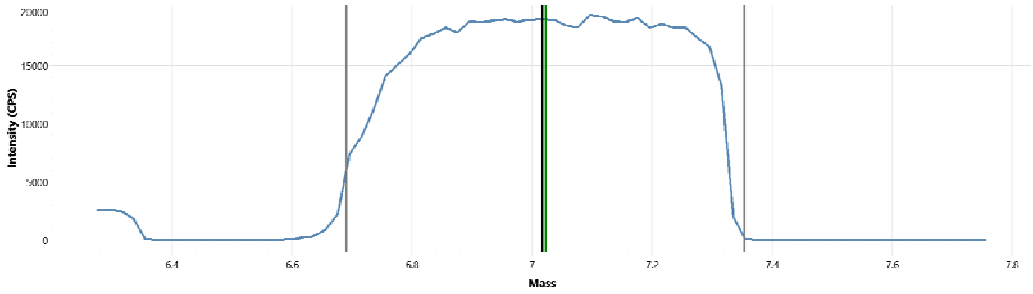
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	3.293e-7
Interface Pressure		1.851e+0

Detector Voltages

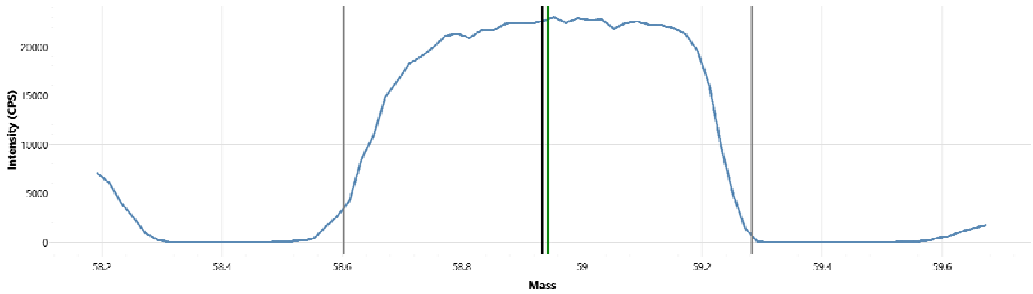
Analog	Counting
-2087.50	1662.50

Mass Calibration Peaks

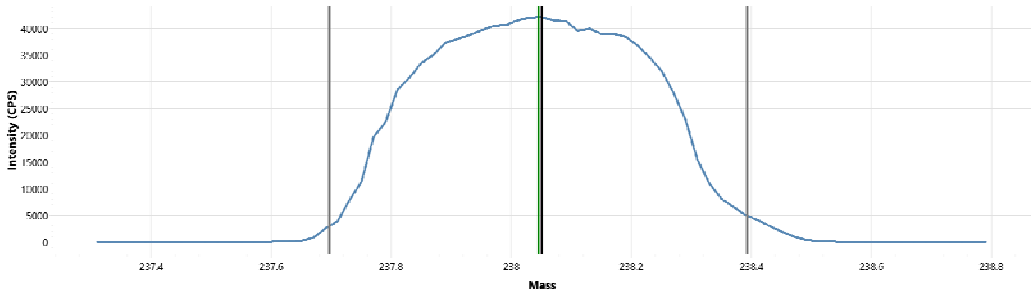
Analyte: 7Li



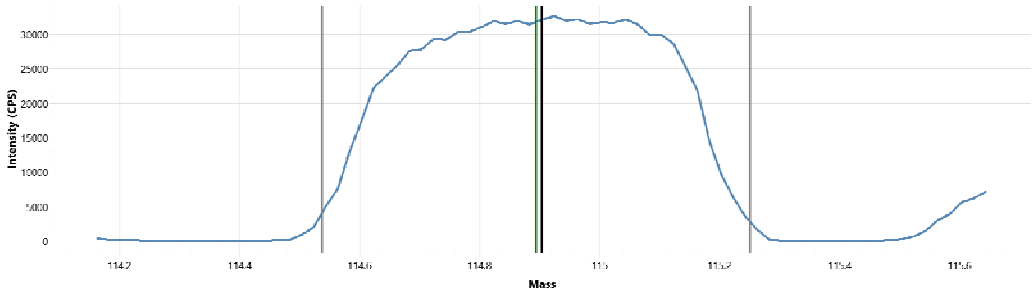
Analyte: 59Co



Analyte: 238U

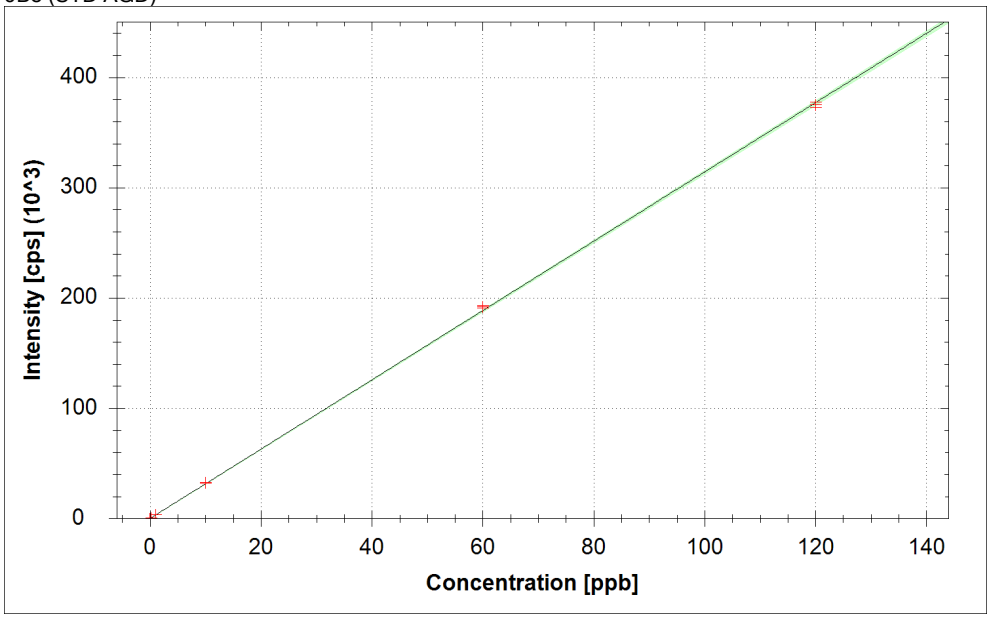


Analyte: 115In



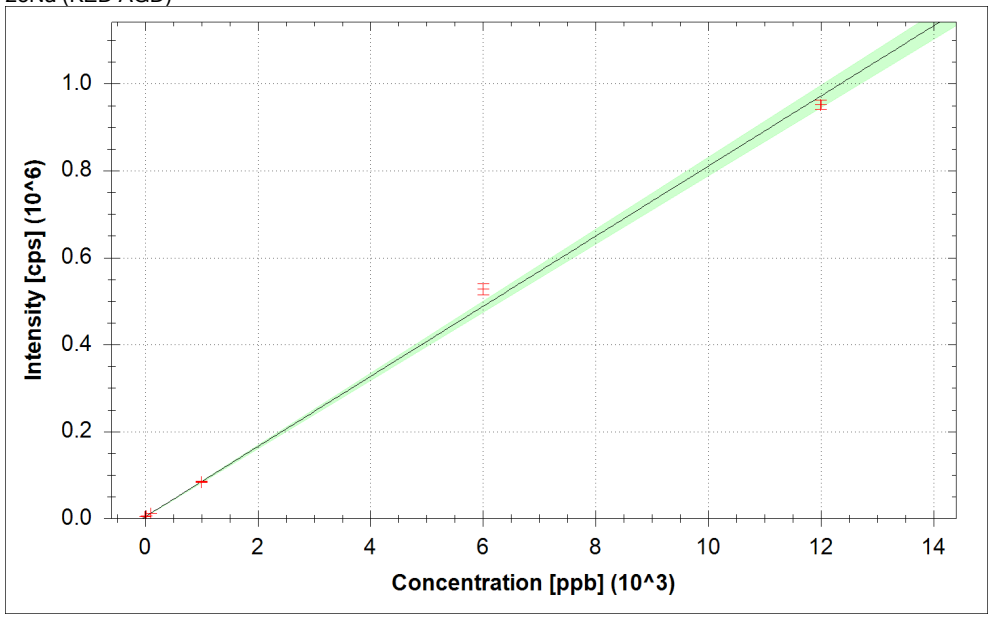
Calibration Curves:

9Be (STD AGD)



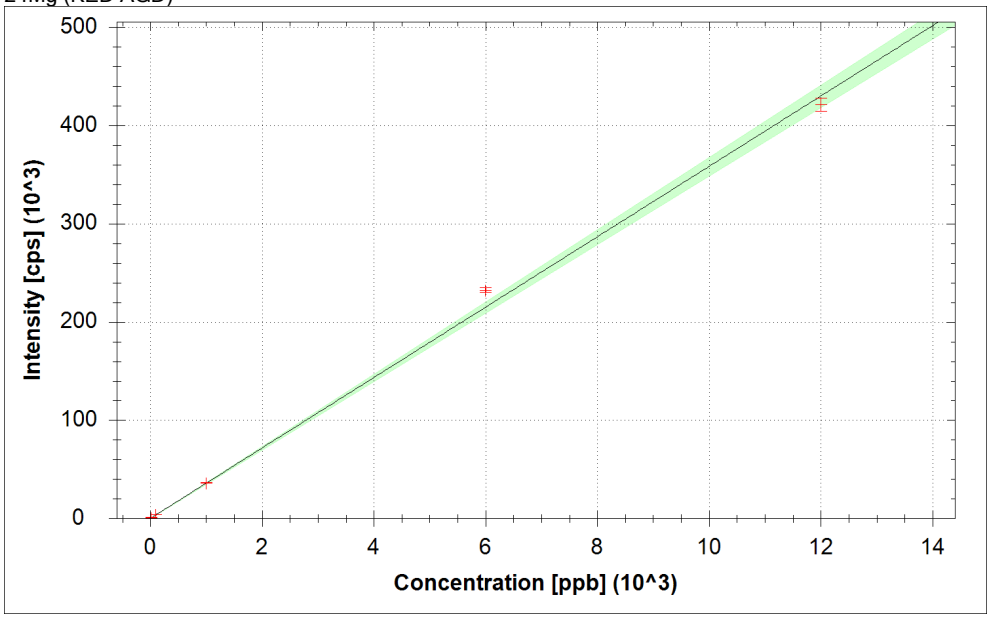
f(x) = 3140.5777*x + 32.0130
R² = 0.9999
BEC = 0.010 ppb
LoD = 0.0078 ppb

23Na (KED AGD)



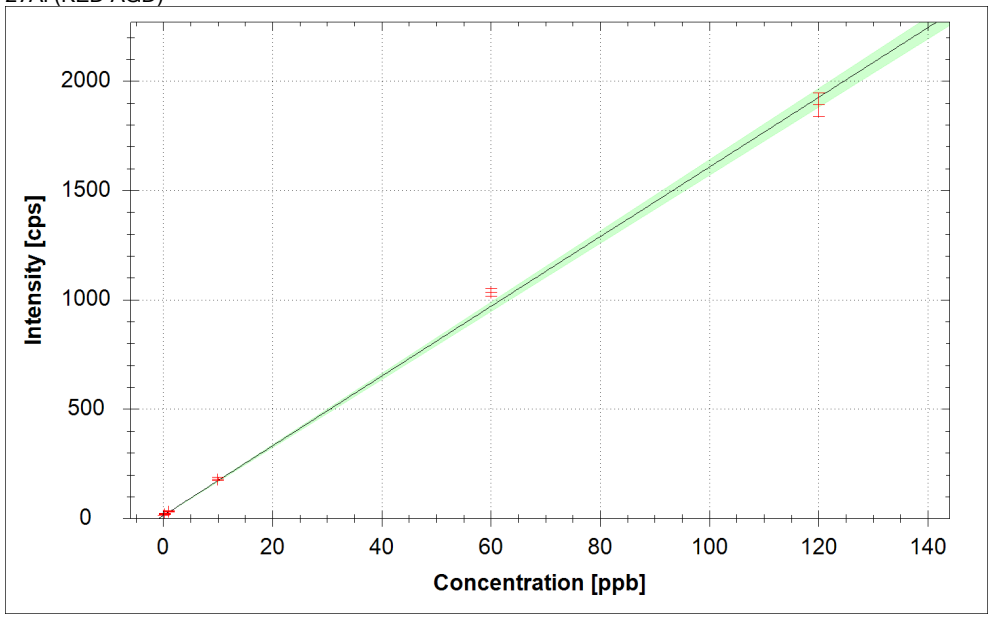
f(x) = 80.6228*x + 3937.1239
R² = 0.9975
BEC = 48.834 ppb
LoD = 8.1598 ppb

24Mg (KED AGD)



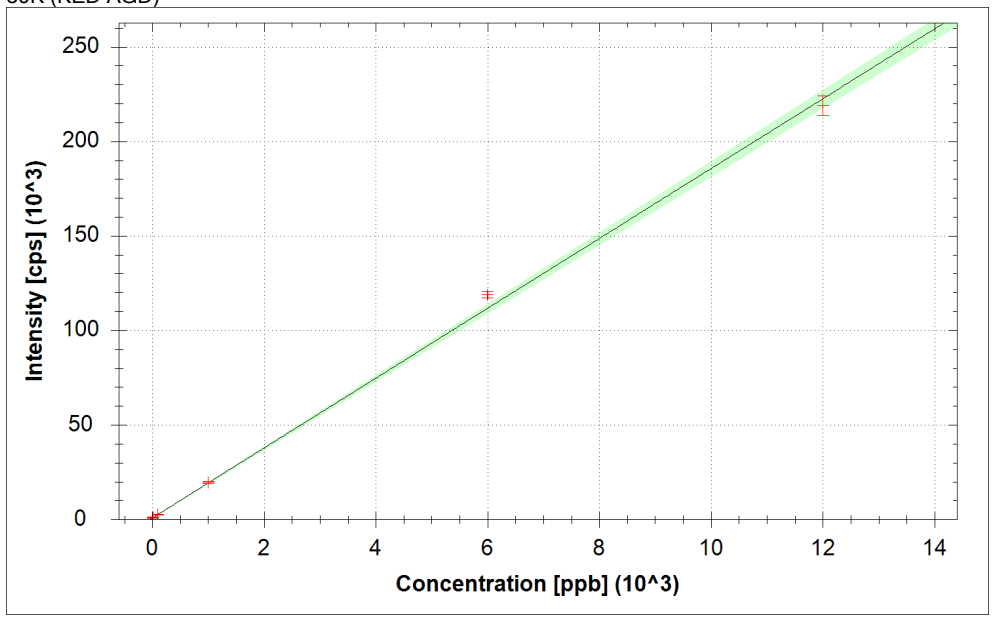
f(x) = 35.8204*x + 60.1471
R² = 0.9975
BEC = 1.679 ppb
LoD = 0.6849 ppb

27Al (KED AGD)



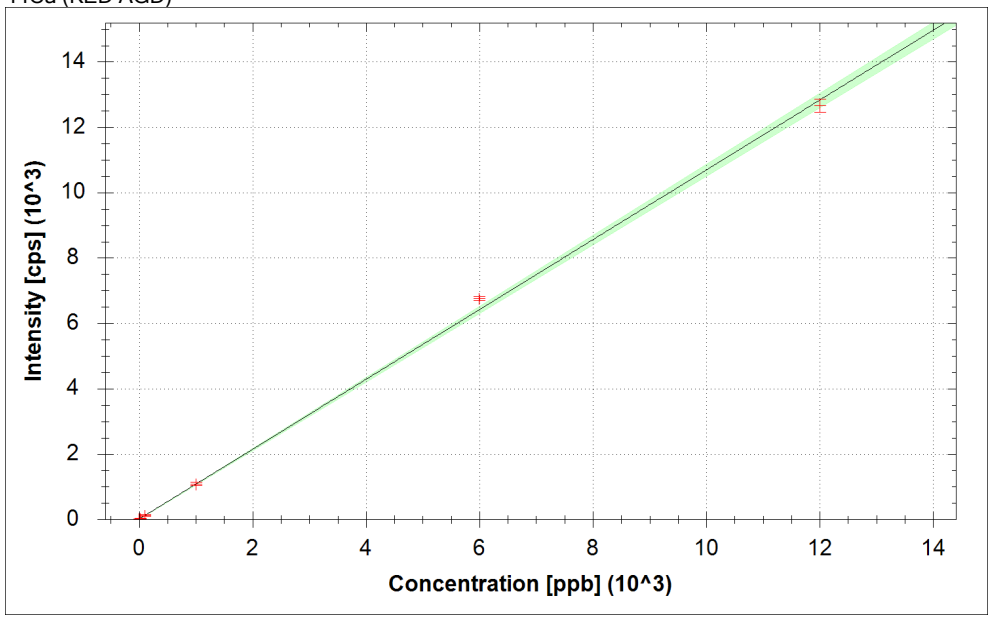
f(x) = 15.9300*x + 13.3404
R² = 0.9982
BEC = 0.837 ppb
LoD = 0.0701 ppb

39K (KED AGD)



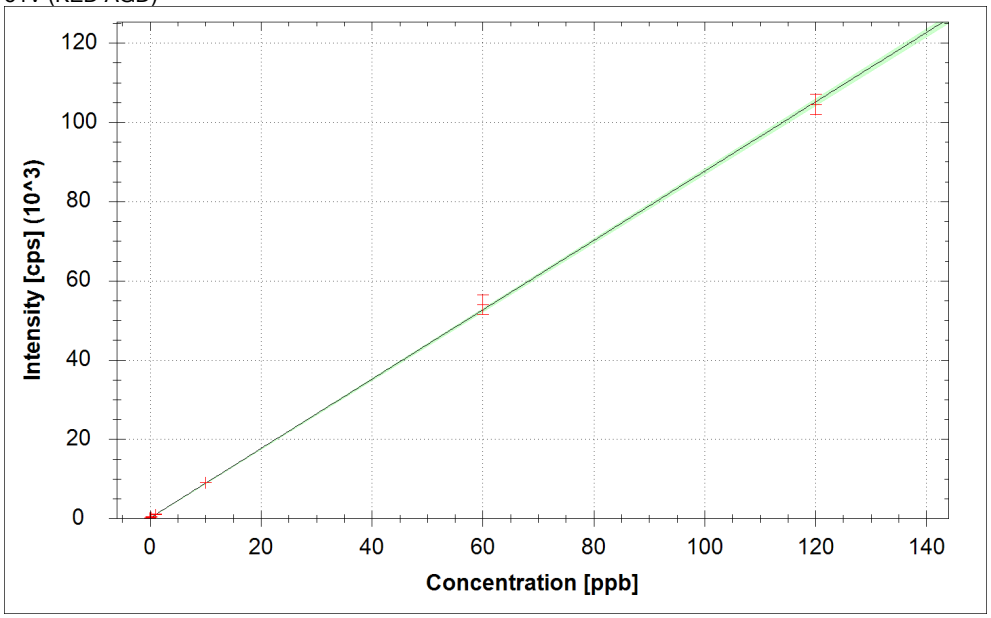
f(x) = 18.4713*x + 819.2955
R² = 0.9984
BEC = 44.355 ppb
LoD = 8.6884 ppb

44Ca (KED AGD)



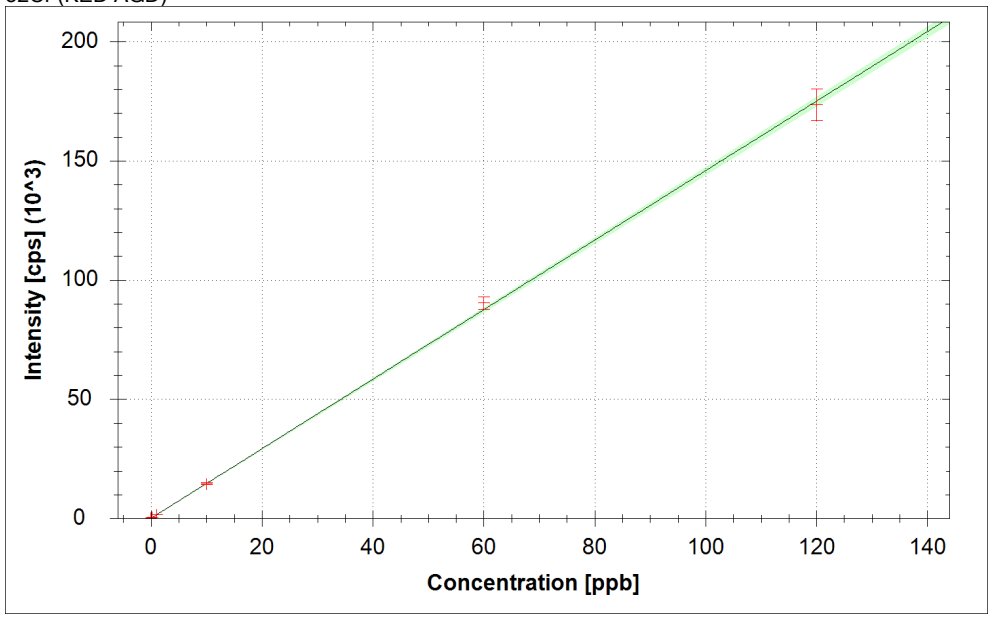
f(x) = 1.0681*x + 10.4660
R² = 0.9990
BEC = 9.799 ppb
LoD = 3.6568 ppb

51V (KED AGD)



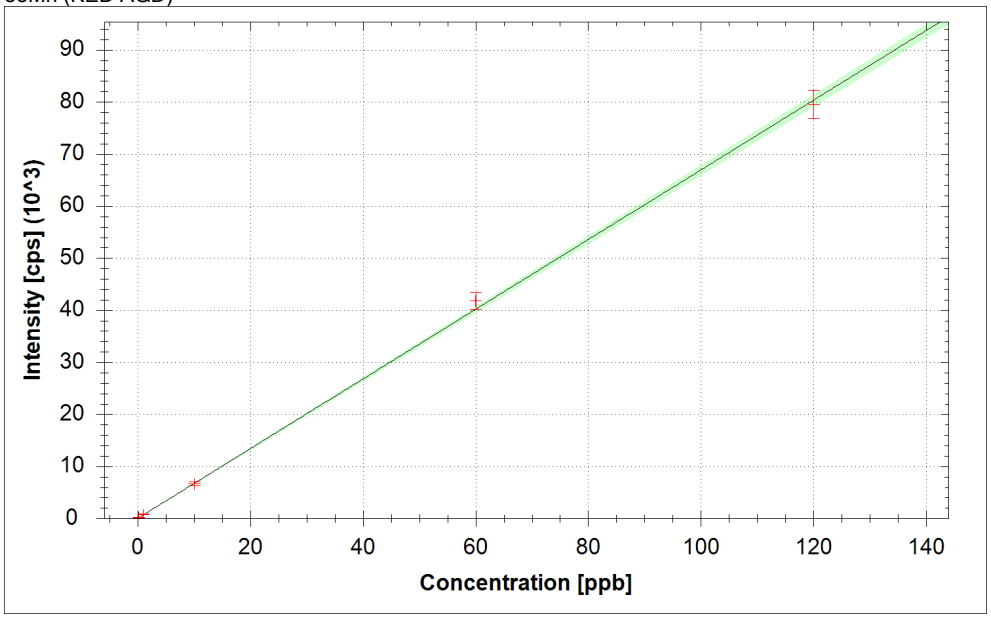
f(x) = 874.7599*x + 132.7451
R² = 0.9998
BEC = 0.152 ppb
LoD = 0.1522 ppb

52Cr (KED AGD)



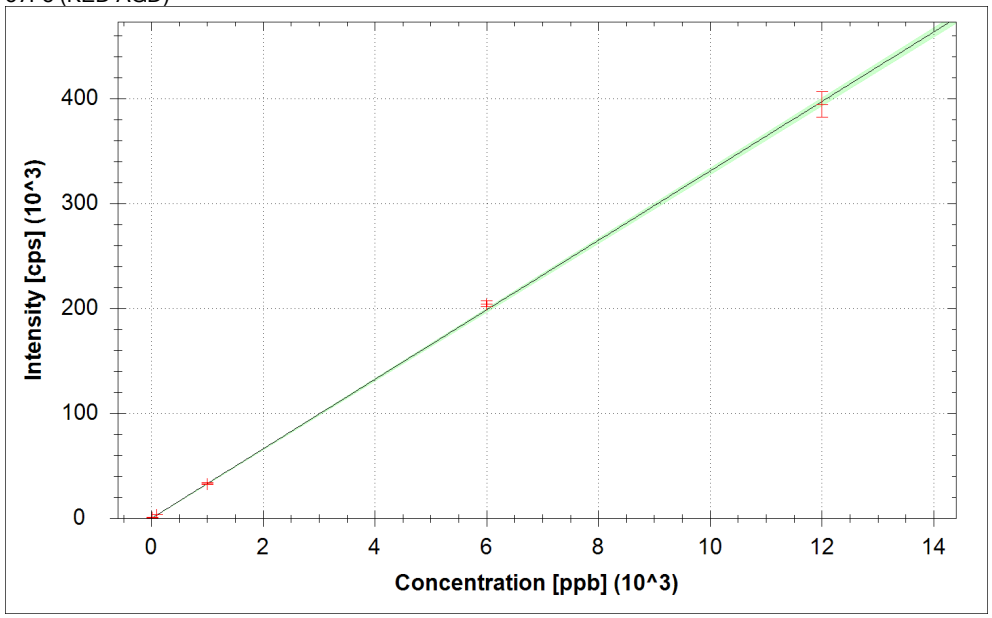
f(x) = 1457.5307*x + 94.1731
R² = 0.9996
BEC = 0.065 ppb
LoD = 0.0411 ppb

55Mn (KED AGD)



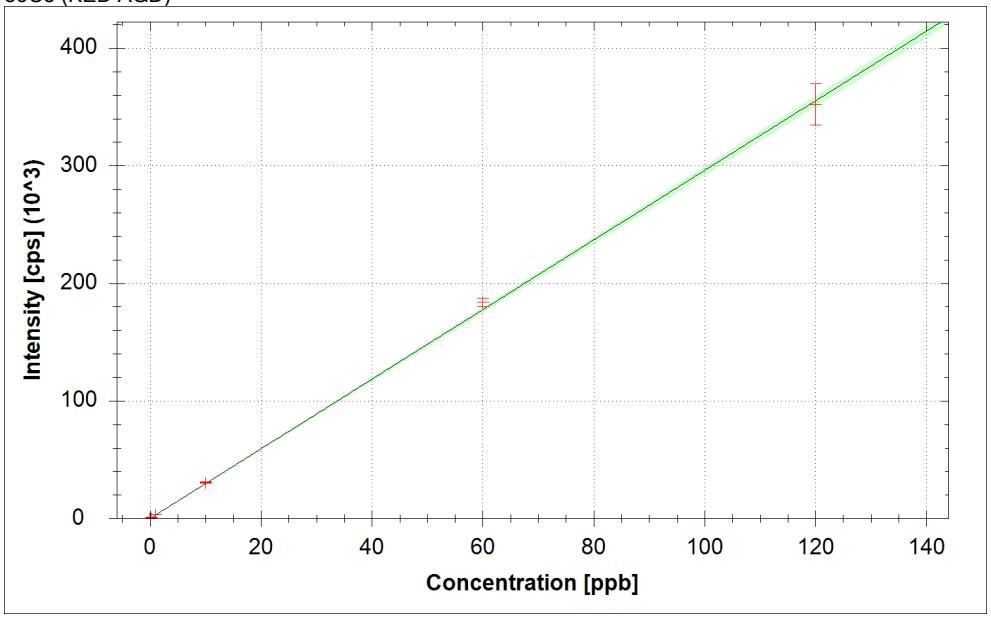
f(x) = 668.7954*x + 40.0339
R² = 0.9994
BEC = 0.060 ppb
LoD = 0.1040 ppb

57Fe (KED AGD)



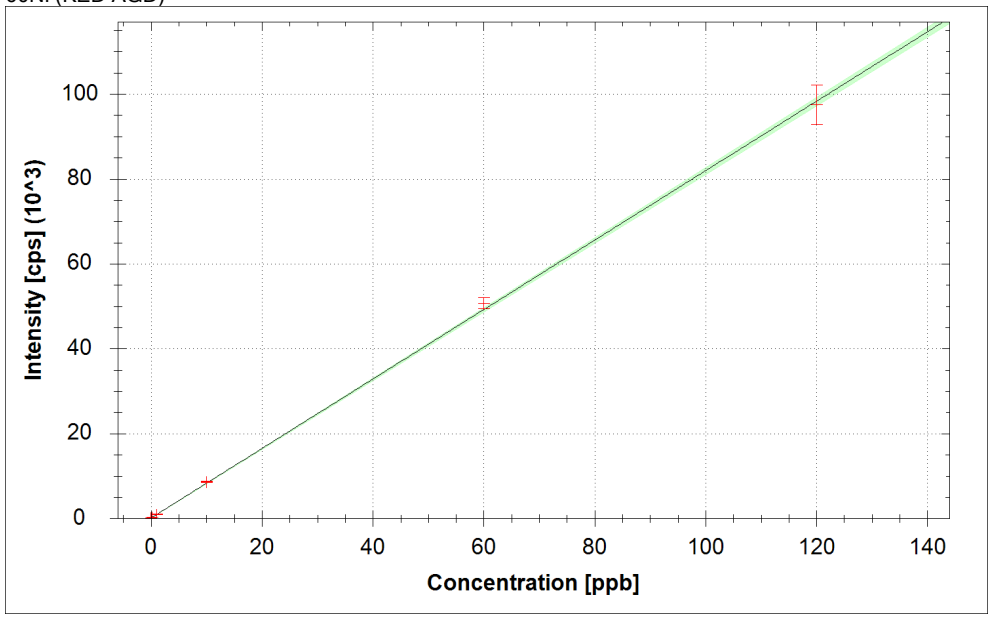
f(x) = 33.0915*x + 35.6669
R² = 0.9997
BEC = 1.078 ppb
LoD = 1.8882 ppb

59Co (KED AGD)



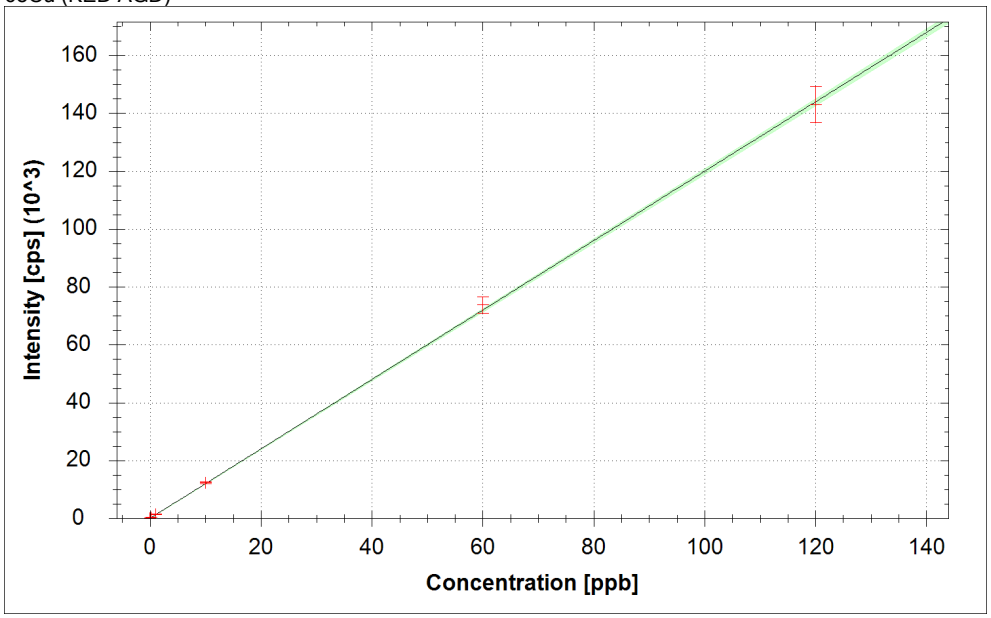
f(x) = 2958.6179*x + 11.1656
R² = 0.9995
BEC = 0.004 ppb
LoD = 0.0041 ppb

60Ni (KED AGD)



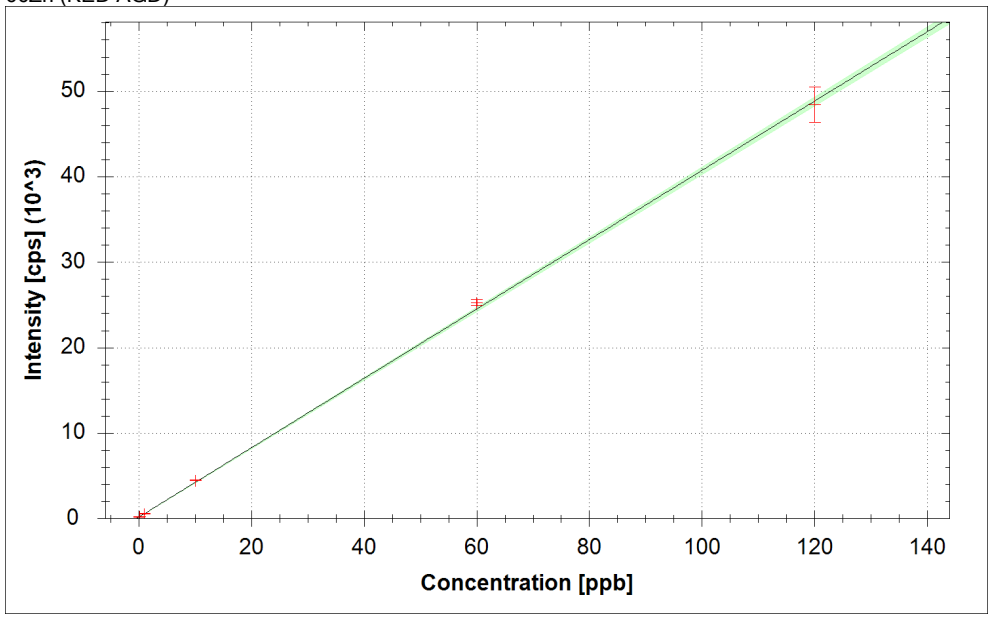
f(x) = 817.9874*x + 122.3741
R² = 0.9996
BEC = 0.150 ppb
LoD = 0.0456 ppb

65Cu (KED AGD)



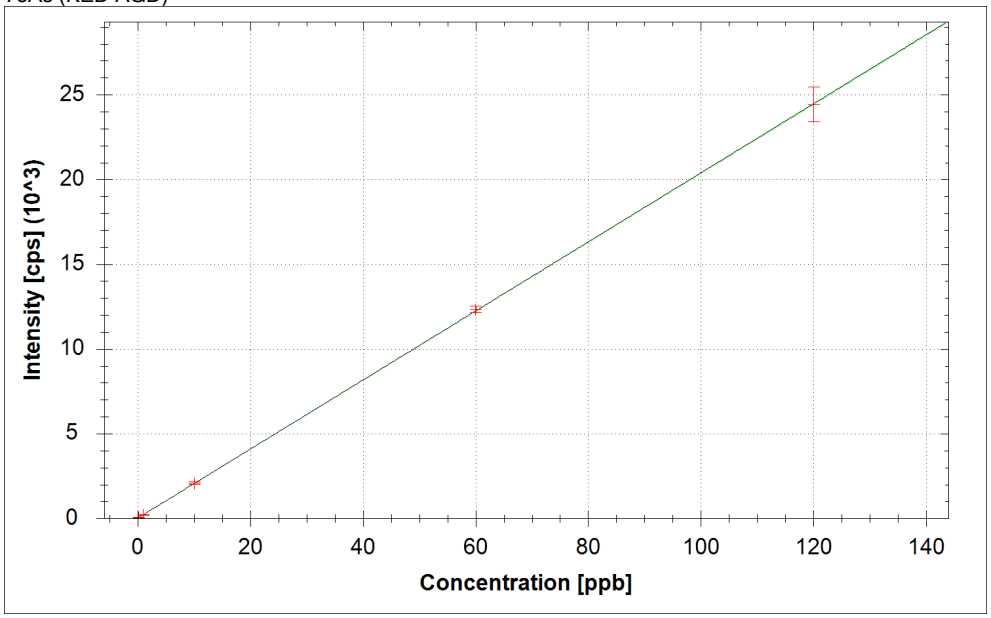
f(x) = 1198.5927*x + 57.6802
R² = 0.9998
BEC = 0.048 ppb
LoD = 0.0234 ppb

66Zn (KED AGD)



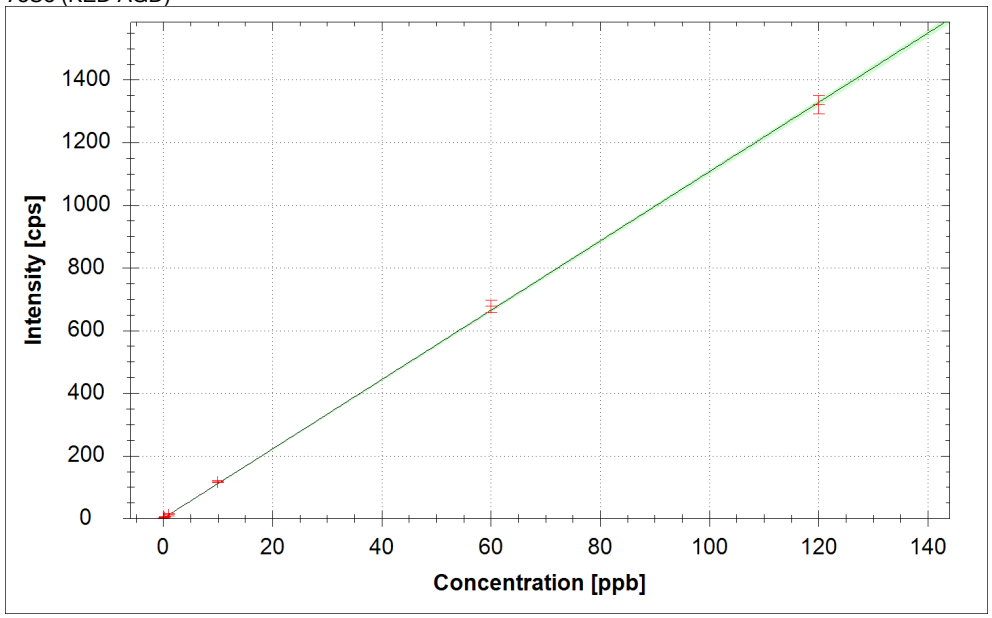
f(x) = 405.4430*x + 163.6416
R² = 0.9996
BEC = 0.404 ppb
LoD = 0.0839 ppb

75As (KED AGD)



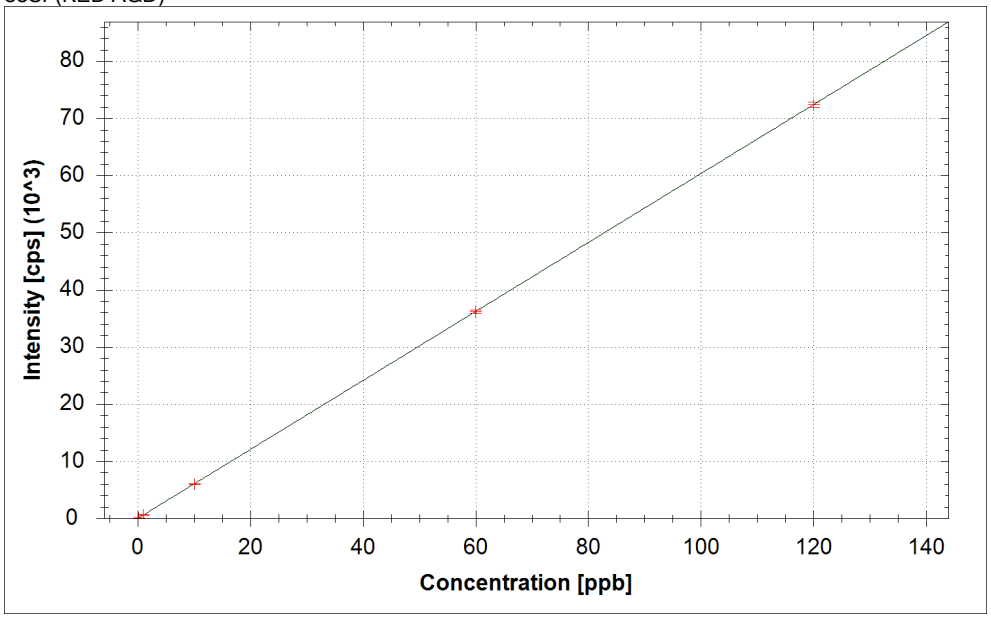
f(x) = 203.6239*x + 23.0380
R² = 1.0000
BEC = 0.113 ppb
LoD = 0.0708 ppb

78Se (KED AGD)



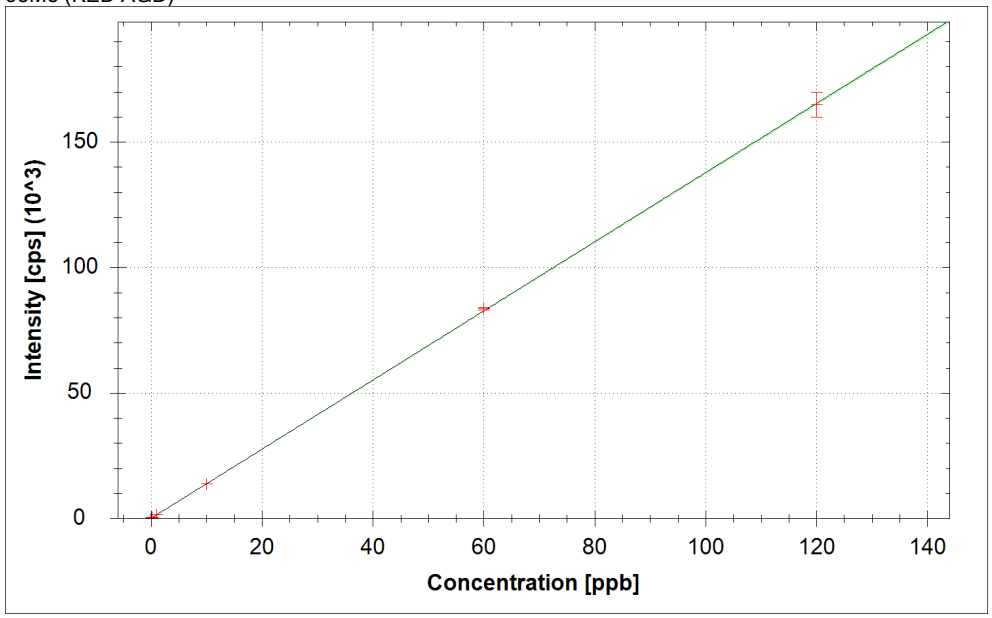
f(x) = 11.0596*x + 0.5196
R² = 0.9998
BEC = 0.047 ppb
LoD = 0.1942 ppb

88Sr (KED AGD)



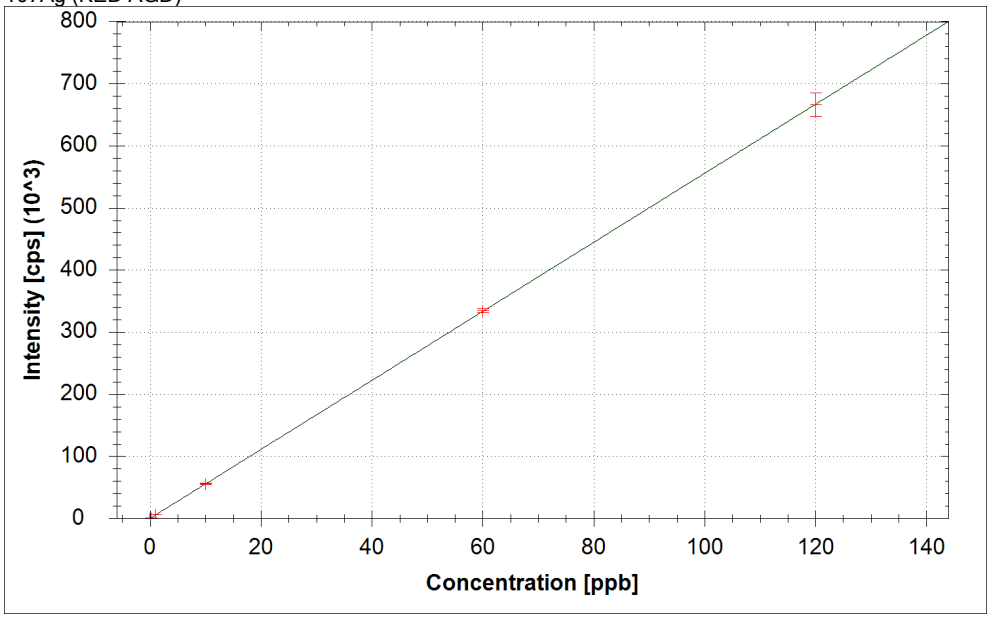
f(x) = 603.0707*x + 16.5372
R² = 1.0000
BEC = 0.027 ppb
LoD = 0.0029 ppb

95Mo (KED AGD)



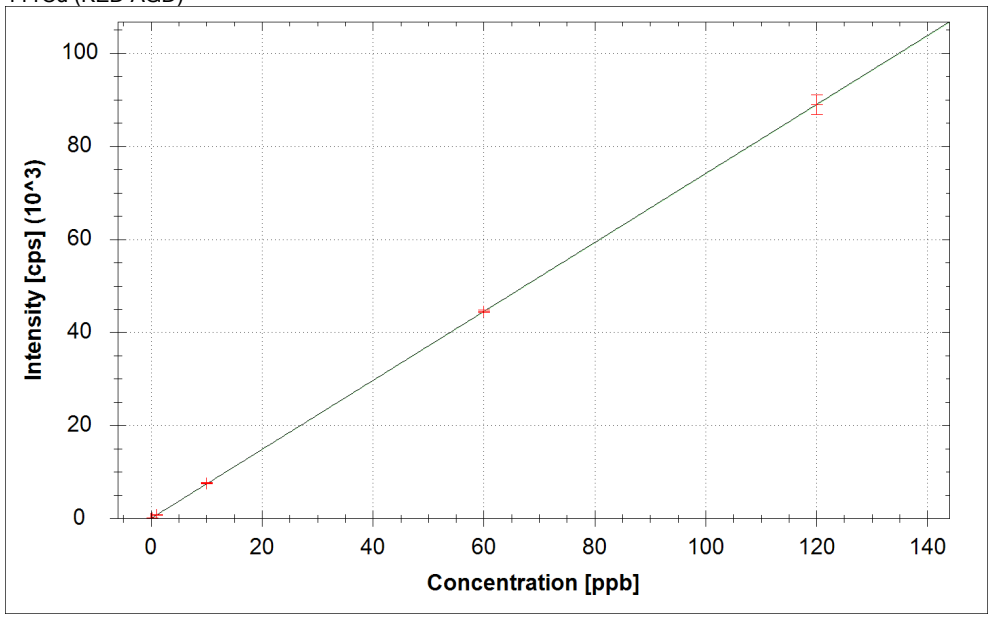
f(x) = 1376.7092*x + 48.9969
R² = 1.0000
BEC = 0.036 ppb
LoD = 0.0186 ppb

107Ag (KED AGD)



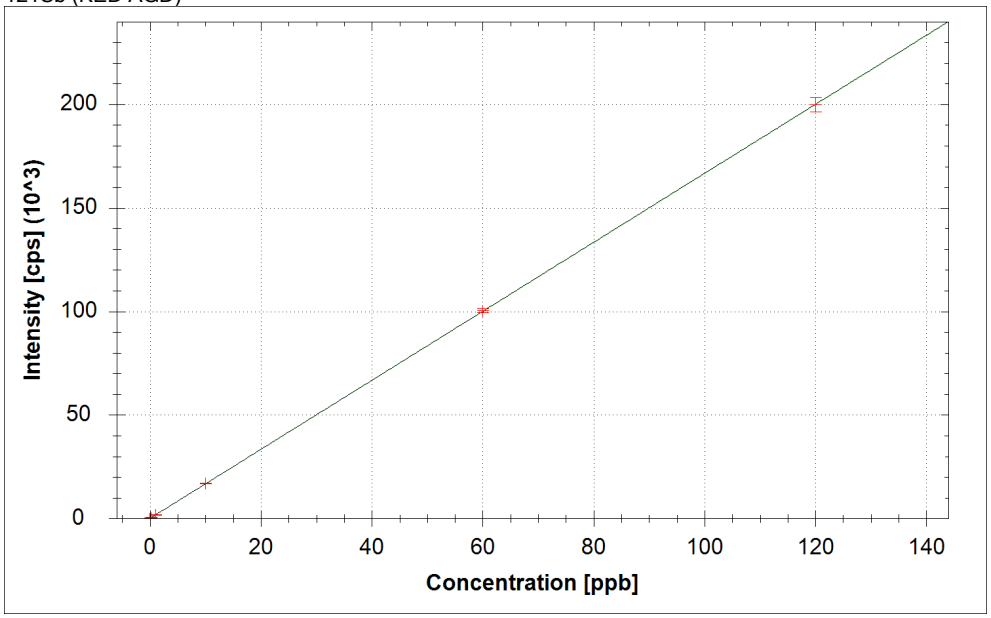
f(x) = 5554.8081*x + 8.9428
R² = 1.0000
BEC = 0.002 ppb
LoD = 0.0022 ppb

111Cd (KED AGD)



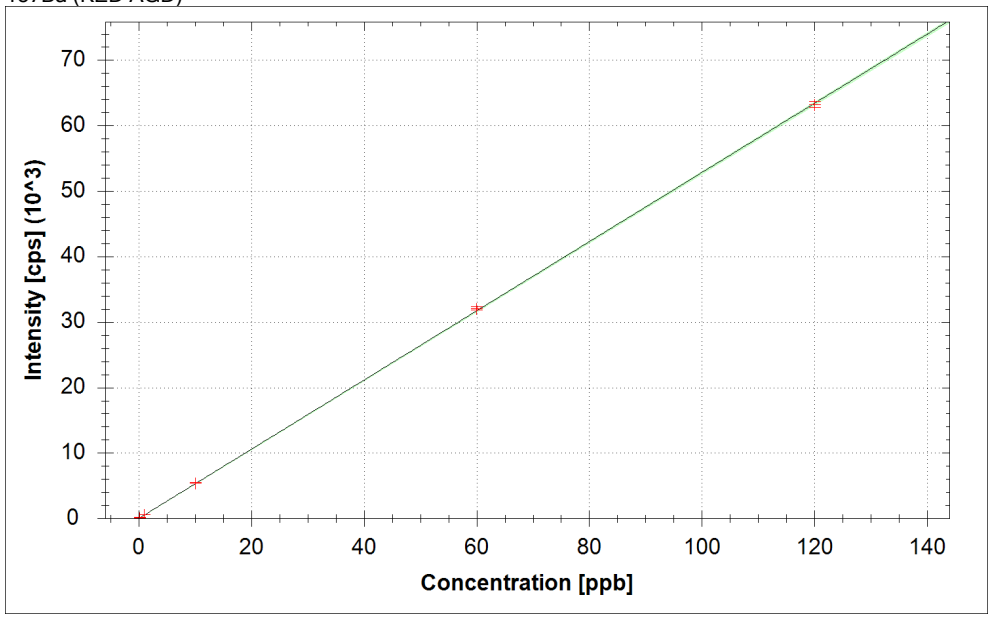
f(x) = 741.3130*x + 0.4451
R² = 1.0000
BEC = 0.001 ppb
LoD = 0.0031 ppb

121Sb (KED AGD)



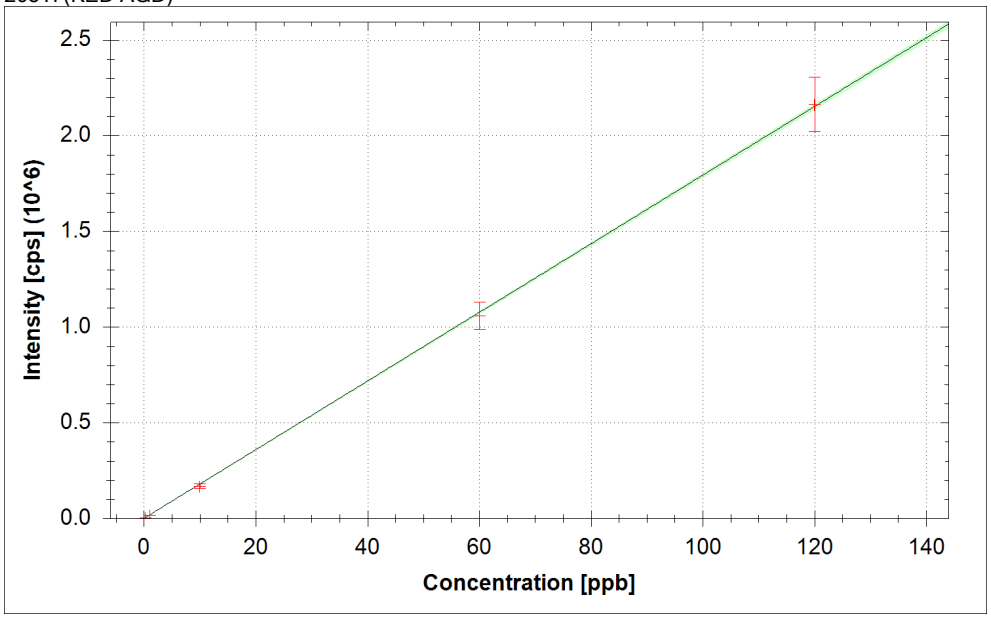
f(x) = 1666.4135*x + 66.4139
R² = 1.0000
BEC = 0.040 ppb
LoD = 0.0244 ppb

137Ba (KED AGD)



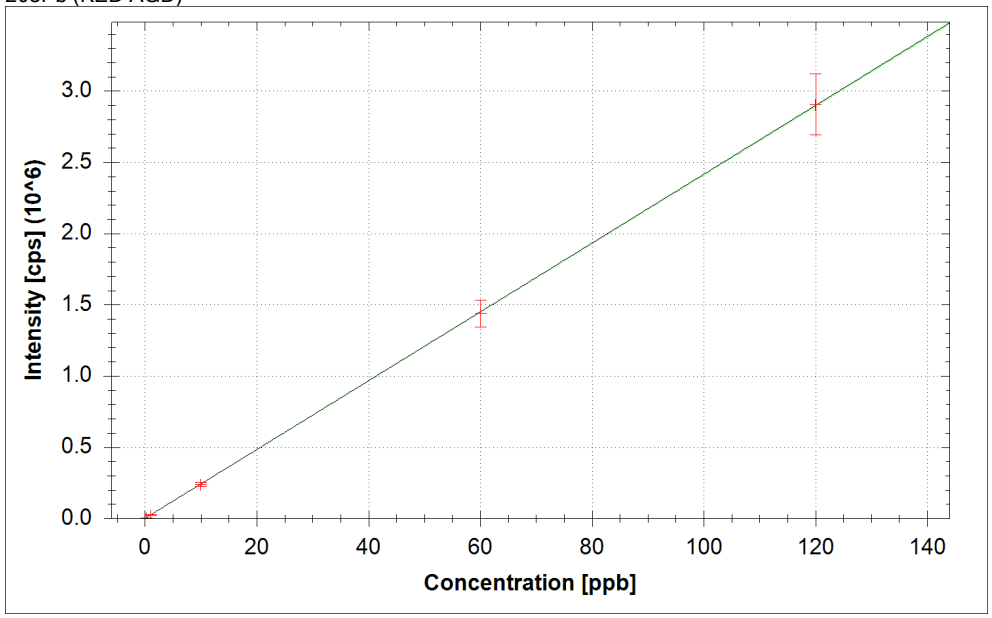
f(x) = 528.1759*x + 12.3241
R² = 0.9999
BEC = 0.023 ppb
LoD = 0.0308 ppb

205Tl (KED AGD)



f(x) = 17926.1546*x + 438.4913
R² = 0.9999
BEC = 0.024 ppb
LoD = 0.0274 ppb

208Pb (KED AGD)



f(x) = 24143.8110*x + 312.5696
R² = 1.0000
BEC = 0.013 ppb
LoD = 0.0037 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 8/23/2024 5:04:19 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.443 %	0.9 %		0.000 %
6Li (KED AGD)	102.418 %	4.9 %		0.000 %
9Be (STD AGD)	0.197 ppb	2.4 %	0.200 ppb	1.423 %
23Na (KED AGD)	21.600 ppb	8.4 %	20.000 ppb	8.002 %
24Mg (KED AGD)	20.173 ppb	9.4 %	20.000 ppb	0.866 %
27Al (KED AGD)	0.462 ppb	45.2 %	0.200 ppb	130.922 %
39K (KED AGD)	22.487 ppb	22.9 %	20.000 ppb	12.437 %
44Ca (KED AGD)	12.414 ppb	52.1 %	20.000 ppb	37.932 %
45Sc (STD AGD)	99.177 %	1.1 %		0.000 %
51V (KED AGD)	0.184 ppb	53.0 %	0.200 ppb	7.888 %
52Cr (KED AGD)	0.184 ppb	4.9 %	0.200 ppb	8.241 %
55Mn (KED AGD)	0.187 ppb	62.1 %	0.200 ppb	6.384 %
57Fe (KED AGD)	22.702 ppb	12.8 %	20.000 ppb	13.509 %
59Co (KED AGD)	0.204 ppb	11.2 %	0.200 ppb	1.871 %
60Ni (KED AGD)	0.151 ppb	28.6 %	0.200 ppb	24.738 %
65Cu (KED AGD)	0.258 ppb	21.2 %	0.200 ppb	29.090 %
66Zn (KED AGD)	0.040 ppb	47.3 %	0.200 ppb	80.211 %
74Ge (KED AGD)	100.311 %	4.1 %		0.000 %
75As (KED AGD)	0.225 ppb	16.9 %	0.200 ppb	12.388 %
78Se (KED AGD)	0.195 ppb	104.0 %	0.200 ppb	2.486 %
88Sr (KED AGD)	0.191 ppb	2.2 %	0.200 ppb	4.440 %
95Mo (KED AGD)	0.226 ppb	20.6 %	0.200 ppb	13.176 %
103Rh (KED AGD)	98.489 %	3.8 %		0.000 %
107Ag (KED AGD)	0.202 ppb	9.2 %	0.200 ppb	0.935 %
111Cd (KED AGD)	0.208 ppb	8.1 %	0.200 ppb	3.836 %
115In (KED AGD)	100.168 %	6.4 %		0.000 %
121Sb (KED AGD)	0.188 ppb	12.8 %	0.200 ppb	6.060 %
137Ba (KED AGD)	0.201 ppb	19.5 %	0.200 ppb	0.323 %
159Tb (KED AGD)	101.121 %	2.4 %		0.000 %
175Lu (KED AGD)	101.907 %	5.4 %		0.000 %
205Tl (KED AGD)	0.171 ppb	17.5 %	0.200 ppb	14.335 %
208Pb (KED AGD)	0.190 ppb	3.4 %	0.200 ppb	5.130 %
209Bi (KED AGD)	99.665 %	5.4 %		0.000 %

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 8/23/2024 5:08:46 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	98.164 %	1.4 %		0.000 %
6Li (KED AGD)	99.085 %	4.0 %		0.000 %
9Be (STD AGD)	1.034 ppb	0.8 %	1.000 ppb	3.431 %
23Na (KED AGD)	100.787 ppb	1.7 %	100.000 ppb	0.787 %
24Mg (KED AGD)	101.550 ppb	5.9 %	100.000 ppb	1.550 %
27Al (KED AGD)	1.200 ppb	14.3 %	1.000 ppb	20.025 %
39K (KED AGD)	99.855 ppb	8.9 %	100.000 ppb	0.145 %
44Ca (KED AGD)	104.534 ppb	20.7 %	100.000 ppb	4.534 %
45Sc (STD AGD)	97.673 %	1.3 %		0.000 %
51V (KED AGD)	0.981 ppb	14.3 %	1.000 ppb	1.949 %
52Cr (KED AGD)	0.989 ppb	3.2 %	1.000 ppb	1.110 %
55Mn (KED AGD)	1.110 ppb	14.0 %	1.000 ppb	10.982 %
57Fe (KED AGD)	99.461 ppb	2.0 %	100.000 ppb	0.539 %
59Co (KED AGD)	1.024 ppb	0.7 %	1.000 ppb	2.353 %
60Ni (KED AGD)	1.014 ppb	16.8 %	1.000 ppb	1.395 %
65Cu (KED AGD)	1.155 ppb	10.1 %	1.000 ppb	15.502 %
66Zn (KED AGD)	0.928 ppb	12.6 %	1.000 ppb	7.209 %
74Ge (KED AGD)	99.080 %	4.9 %		0.000 %
75As (KED AGD)	0.928 ppb	10.3 %	1.000 ppb	7.213 %
78Se (KED AGD)	1.047 ppb	29.3 %	1.000 ppb	4.665 %
88Sr (KED AGD)	0.986 ppb	3.4 %	1.000 ppb	1.399 %
95Mo (KED AGD)	1.038 ppb	4.0 %	1.000 ppb	3.814 %
103Rh (KED AGD)	99.474 %	1.0 %		0.000 %
107Ag (KED AGD)	1.002 ppb	0.8 %	1.000 ppb	0.208 %
111Cd (KED AGD)	1.011 ppb	6.4 %	1.000 ppb	1.090 %
115In (KED AGD)	102.120 %	3.7 %		0.000 %
121Sb (KED AGD)	0.962 ppb	2.6 %	1.000 ppb	3.786 %
137Ba (KED AGD)	0.992 ppb	1.3 %	1.000 ppb	0.822 %
159Tb (KED AGD)	103.417 %	2.0 %		0.000 %
175Lu (KED AGD)	103.231 %	3.2 %		0.000 %
205Tl (KED AGD)	0.874 ppb	7.5 %	1.000 ppb	12.588 %
208Pb (KED AGD)	0.959 ppb	5.8 %	1.000 ppb	4.115 %
209Bi (KED AGD)	97.691 %	6.1 %		0.000 %

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 8/23/2024 5:13:13 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	96.840 %	0.9 %		0.000 %
6Li (KED AGD)	104.118 %	3.1 %		0.000 %
9Be (STD AGD)	10.286 ppb	0.9 %	10.000 ppb	2.862 %
23Na (KED AGD)	995.400 ppb	1.1 %	1,000.000 ppb	0.460 %
24Mg (KED AGD)	1,002.834 ppb	0.9 %	1,000.000 ppb	0.283 %
27Al (KED AGD)	10.458 ppb	4.2 %	10.000 ppb	4.581 %
39K (KED AGD)	1,015.780 ppb	2.9 %	1,000.000 ppb	1.578 %
44Ca (KED AGD)	1,007.670 ppb	5.4 %	1,000.000 ppb	0.767 %
45Sc (STD AGD)	97.053 %	0.6 %		0.000 %
51V (KED AGD)	10.225 ppb	0.5 %	10.000 ppb	2.252 %
52Cr (KED AGD)	9.954 ppb	2.4 %	10.000 ppb	0.460 %
55Mn (KED AGD)	9.904 ppb	5.4 %	10.000 ppb	0.959 %
57Fe (KED AGD)	996.690 ppb	3.1 %	1,000.000 ppb	0.331 %
59Co (KED AGD)	10.337 ppb	1.5 %	10.000 ppb	3.365 %
60Ni (KED AGD)	10.364 ppb	1.1 %	10.000 ppb	3.641 %
65Cu (KED AGD)	10.224 ppb	3.1 %	10.000 ppb	2.242 %
66Zn (KED AGD)	10.612 ppb	0.6 %	10.000 ppb	6.123 %
74Ge (KED AGD)	98.734 %	5.2 %		0.000 %
75As (KED AGD)	10.057 ppb	3.9 %	10.000 ppb	0.571 %
78Se (KED AGD)	10.571 ppb	2.9 %	10.000 ppb	5.707 %
88Sr (KED AGD)	9.935 ppb	0.8 %	10.000 ppb	0.651 %
95Mo (KED AGD)	9.976 ppb	0.8 %	10.000 ppb	0.243 %
103Rh (KED AGD)	98.236 %	2.4 %		0.000 %
107Ag (KED AGD)	10.065 ppb	2.1 %	10.000 ppb	0.652 %
111Cd (KED AGD)	10.209 ppb	1.0 %	10.000 ppb	2.090 %
115In (KED AGD)	98.747 %	3.5 %		0.000 %
121Sb (KED AGD)	10.093 ppb	1.1 %	10.000 ppb	0.932 %
137Ba (KED AGD)	10.245 ppb	1.2 %	10.000 ppb	2.446 %
159Tb (KED AGD)	101.443 %	2.8 %		0.000 %
175Lu (KED AGD)	101.616 %	3.6 %		0.000 %
205Tl (KED AGD)	9.351 ppb	6.8 %	10.000 ppb	6.490 %
208Pb (KED AGD)	9.808 ppb	5.8 %	10.000 ppb	1.924 %
209Bi (KED AGD)	95.819 %	7.7 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 8/23/2024 5:17:41 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	92.991 %	1.5 %		0.000 %
6Li (KED AGD)	91.569 %	2.7 %		0.000 %
9Be (STD AGD)	61.037 ppb	0.6 %	60.000 ppb	1.728 %
23Na (KED AGD)	6,486.398 ppb	2.4 %	6,000.000 ppb	8.107 %
24Mg (KED AGD)	6,486.557 ppb	1.0 %	6,000.000 ppb	8.109 %
27Al (KED AGD)	64.037 ppb	1.7 %	60.000 ppb	6.728 %
39K (KED AGD)	6,387.351 ppb	1.5 %	6,000.000 ppb	6.456 %
44Ca (KED AGD)	6,315.778 ppb	1.0 %	6,000.000 ppb	5.263 %
45Sc (STD AGD)	96.280 %	1.1 %		0.000 %
51V (KED AGD)	61.510 ppb	4.7 %	60.000 ppb	2.517 %
52Cr (KED AGD)	61.956 ppb	2.9 %	60.000 ppb	3.260 %
55Mn (KED AGD)	62.480 ppb	4.0 %	60.000 ppb	4.133 %
57Fe (KED AGD)	6,176.215 ppb	1.4 %	6,000.000 ppb	2.937 %
59Co (KED AGD)	62.098 ppb	2.0 %	60.000 ppb	3.497 %
60Ni (KED AGD)	61.850 ppb	2.6 %	60.000 ppb	3.084 %
65Cu (KED AGD)	61.506 ppb	3.8 %	60.000 ppb	2.510 %
66Zn (KED AGD)	61.878 ppb	1.4 %	60.000 ppb	3.130 %
74Ge (KED AGD)	96.090 %	2.2 %		0.000 %
75As (KED AGD)	60.439 ppb	1.6 %	60.000 ppb	0.731 %
78Se (KED AGD)	61.146 ppb	2.9 %	60.000 ppb	1.911 %
88Sr (KED AGD)	60.014 ppb	0.8 %	60.000 ppb	0.023 %
95Mo (KED AGD)	60.612 ppb	0.5 %	60.000 ppb	1.021 %
103Rh (KED AGD)	95.253 %	0.7 %		0.000 %
107Ag (KED AGD)	60.190 ppb	1.0 %	60.000 ppb	0.317 %
111Cd (KED AGD)	60.010 ppb	0.7 %	60.000 ppb	0.016 %
115In (KED AGD)	97.201 %	2.5 %		0.000 %
121Sb (KED AGD)	60.192 ppb	1.0 %	60.000 ppb	0.320 %
137Ba (KED AGD)	60.689 ppb	0.7 %	60.000 ppb	1.149 %
159Tb (KED AGD)	101.052 %	0.6 %		0.000 %
175Lu (KED AGD)	101.307 %	1.1 %		0.000 %
205Tl (KED AGD)	59.000 ppb	6.8 %	60.000 ppb	1.667 %
208Pb (KED AGD)	59.511 ppb	6.5 %	60.000 ppb	0.815 %
209Bi (KED AGD)	93.503 %	6.3 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 8/23/2024 5:22:09 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	90.885 %	0.9 %		0.000 %
6Li (KED AGD)	98.824 %	3.2 %		0.000 %
9Be (STD AGD)	119.457 ppb	0.6 %	120.000 ppb	0.452 %
23Na (KED AGD)	11,757.175 ppb	1.1 %	12,000.000 ppb	2.024 %
24Mg (KED AGD)	11,756.472 ppb	1.6 %	12,000.000 ppb	2.029 %
27Al (KED AGD)	117.941 ppb	2.9 %	120.000 ppb	1.716 %
39K (KED AGD)	11,805.006 ppb	2.4 %	12,000.000 ppb	1.625 %
44Ca (KED AGD)	11,841.447 ppb	1.6 %	12,000.000 ppb	1.321 %
45Sc (STD AGD)	97.082 %	0.3 %		0.000 %
51V (KED AGD)	119.226 ppb	2.5 %	120.000 ppb	0.645 %
52Cr (KED AGD)	119.026 ppb	3.8 %	120.000 ppb	0.812 %
55Mn (KED AGD)	118.767 ppb	3.4 %	120.000 ppb	1.027 %
57Fe (KED AGD)	11,912.168 ppb	3.1 %	12,000.000 ppb	0.732 %
59Co (KED AGD)	118.923 ppb	5.0 %	120.000 ppb	0.898 %
60Ni (KED AGD)	119.044 ppb	4.7 %	120.000 ppb	0.796 %
65Cu (KED AGD)	119.227 ppb	4.4 %	120.000 ppb	0.644 %
66Zn (KED AGD)	119.011 ppb	4.3 %	120.000 ppb	0.824 %
74Ge (KED AGD)	93.106 %	6.4 %		0.000 %
75As (KED AGD)	119.776 ppb	4.2 %	120.000 ppb	0.186 %
78Se (KED AGD)	119.379 ppb	2.2 %	120.000 ppb	0.518 %
88Sr (KED AGD)	119.999 ppb	0.6 %	120.000 ppb	0.001 %
95Mo (KED AGD)	119.695 ppb	3.1 %	120.000 ppb	0.254 %
103Rh (KED AGD)	92.059 %	1.8 %		0.000 %
107Ag (KED AGD)	119.899 ppb	2.9 %	120.000 ppb	0.084 %
111Cd (KED AGD)	119.978 ppb	2.4 %	120.000 ppb	0.019 %
115In (KED AGD)	93.702 %	4.4 %		0.000 %
121Sb (KED AGD)	119.896 ppb	1.7 %	120.000 ppb	0.086 %
137Ba (KED AGD)	119.635 ppb	0.7 %	120.000 ppb	0.304 %
159Tb (KED AGD)	100.493 %	2.8 %		0.000 %
175Lu (KED AGD)	100.692 %	4.8 %		0.000 %
205Tl (KED AGD)	120.555 ppb	6.6 %	120.000 ppb	0.463 %
208Pb (KED AGD)	120.261 ppb	7.4 %	120.000 ppb	0.217 %
209Bi (KED AGD)	90.683 %	6.4 %		0.000 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	8/23/2024 4:50:56 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.161 %	107.320 %	0.007 ppb	5.959 ppb	1.756 ppb	1.133 ppb	-3.878 ppb	5.266 ppb	102.166 %
Concentration per Run 1	104.181 %	106.275 %	0.009 ppb	7.721 ppb	2.253 ppb	1.502 ppb	0.443 ppb	-0.224 ppb	104.135 %
Concentration per Run 2	102.927 %	104.902 %	0.005 ppb	7.087 ppb	2.286 ppb	0.951 ppb	-6.806 ppb	4.734 ppb	101.232 %
Concentration per Run 3	102.375 %	110.784 %	0.009 ppb	3.067 ppb	0.727 ppb	0.947 ppb	-5.270 ppb	11.287 ppb	101.131 %
Concentration RSD	0.9 %	2.9 %	31.8 %	42.4 %	50.7 %	28.2 %	98.5 %	109.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.035 ppb	-0.012 ppb	0.531 ppb	7.607 ppb	0.008 ppb	0.356 ppb	0.792 ppb	1.286 ppb	99.386 %
Concentration per Run 1	0.045 ppb	-0.019 ppb	0.456 ppb	8.174 ppb	0.001 ppb	0.373 ppb	0.782 ppb	1.359 ppb	98.132 %
Concentration per Run 2	0.060 ppb	-0.017 ppb	0.486 ppb	7.564 ppb	0.007 ppb	0.323 ppb	0.639 ppb	1.217 ppb	98.694 %
Concentration per Run 3	0.001 ppb	-0.001 ppb	0.650 ppb	7.082 ppb	0.016 ppb	0.371 ppb	0.955 ppb	1.282 ppb	101.334 %
Concentration RSD	86.0 %	79.6 %	19.6 %	7.2 %	94.3 %	7.9 %	20.0 %	5.5 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.001 ppb	0.020 ppb	0.008 ppb	0.007 ppb	99.084 %	0.009 ppb	0.001 ppb	99.993 %	0.014 ppb
Concentration per Run 1	-0.017 ppb	0.046 ppb	0.009 ppb	-0.001 ppb	98.557 %	0.007 ppb	0.001 ppb	100.191 %	0.001 ppb
Concentration per Run 2	0.028 ppb	-0.001 ppb	0.008 ppb	0.013 ppb	100.022 %	0.004 ppb	-0.001 ppb	98.598 %	0.016 ppb
Concentration per Run 3	-0.008 ppb	0.015 ppb	0.006 ppb	0.008 ppb	98.674 %	0.014 ppb	0.003 ppb	101.191 %	0.024 ppb
Concentration RSD	2,845.5 %	118.0 %	26.1 %	107.5 %	0.8 %	57.0 %	149.8 %	1.3 %	83.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.026 ppb	103.698 %	104.618 %	0.004 ppb	0.026 ppb	110.931 %
Concentration per Run 1	0.013 ppb	106.176 %	108.016 %	-0.004 ppb	0.024 ppb	118.300 %
Concentration per Run 2	0.039 ppb	103.032 %	102.552 %	0.007 ppb	0.027 ppb	108.639 %
Concentration per Run 3	0.026 ppb	101.886 %	103.286 %	0.010 ppb	0.026 ppb	105.853 %
Concentration RSD	49.2 %	2.1 %	2.8 %	163.1 %	4.0 %	5.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CAL LOT #M23-1225	Rack	0		
Analysis started at:	8/23/2024 4:55:22 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.048 %	101.438 %	0.009 ppb	5.408 ppb	1.765 ppb	1.328 ppb	-7.351 ppb	1.503 ppb	101.875 %
Concentration per Run 1	102.603 %	96.667 %	0.010 ppb	7.752 ppb	2.292 ppb	1.621 ppb	1.889 ppb	-2.587 ppb	102.835 %
Concentration per Run 2	102.421 %	100.588 %	0.009 ppb	6.582 ppb	1.660 ppb	1.875 ppb	-12.274 ppb	1.212 ppb	101.113 %
Concentration per Run 3	101.121 %	107.059 %	0.008 ppb	1.889 ppb	1.343 ppb	0.487 ppb	-11.668 ppb	5.886 ppb	101.678 %
Concentration RSD	0.8 %	5.2 %	14.3 %	57.4 %	27.4 %	55.7 %	108.9 %	282.3 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.020 ppb	0.005 ppb	0.578 ppb	8.196 ppb	0.004 ppb	0.307 ppb	0.807 ppb	1.204 ppb	100.346 %
Concentration per Run 1	0.014 ppb	0.008 ppb	0.471 ppb	8.434 ppb	0.003 ppb	0.314 ppb	0.739 ppb	1.023 ppb	103.338 %
Concentration per Run 2	-0.015 ppb	0.004 ppb	0.579 ppb	6.789 ppb	0.008 ppb	0.324 ppb	0.744 ppb	1.377 ppb	99.641 %
Concentration per Run 3	0.059 ppb	0.003 ppb	0.684 ppb	9.366 ppb	0.001 ppb	0.283 ppb	0.938 ppb	1.212 ppb	98.058 %
Concentration RSD	189.5 %	46.8 %	18.4 %	15.9 %	93.7 %	7.0 %	14.1 %	14.7 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.008 ppb	0.022 ppb	0.007 ppb	0.004 ppb	98.702 %	0.005 ppb	0.000 ppb	98.726 %	0.002 ppb
Concentration per Run 1	-0.006 ppb	-0.010 ppb	0.009 ppb	-0.007 ppb	100.658 %	0.003 ppb	-0.001 ppb	101.447 %	0.001 ppb
Concentration per Run 2	0.002 ppb	0.075 ppb	0.005 ppb	-0.011 ppb	99.692 %	0.004 ppb	-0.001 ppb	99.656 %	0.000 ppb
Concentration per Run 3	0.029 ppb	0.000 ppb	0.007 ppb	0.030 ppb	95.756 %	0.007 ppb	0.001 ppb	95.075 %	0.004 ppb
Concentration RSD	223.5 %	215.1 %	28.4 %	588.5 %	2.6 %	49.4 %	3,793.7 %	3.3 %	110.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.046 ppb	100.603 %	99.897 %	0.003 ppb	0.021 ppb	103.510 %
Concentration per Run 1	0.039 ppb	101.956 %	101.232 %	-0.007 ppb	0.021 ppb	109.305 %
Concentration per Run 2	0.064 ppb	102.162 %	100.859 %	0.012 ppb	0.019 ppb	102.584 %
Concentration per Run 3	0.036 ppb	97.691 %	97.600 %	0.006 ppb	0.023 ppb	98.641 %
Concentration RSD	34.0 %	2.5 %	2.0 %	286.2 %	9.8 %	5.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank EJF ICPMSQ	Rack	4		
Analysis started at:	8/23/2024 4:59:48 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.3 %	0.1 %	0.1 %	0.0 %	0.1 %	0.1 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.3 %	0.2 %	0.6 %	0.6 %	0.4 %	0.1 %	0.2 %	0.1 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.2 %	1.4 %	0.0 %	0.2 %	0.0 %	0.5 %	1.7 %	0.0 %	0.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.4 %	0.0 %	0.0 %	0.4 %	0.1 %	0.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	8/23/2024 5:04:19 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.443 %	102.418 %	0.197 ppb	21.600 ppb	20.173 ppb	0.462 ppb	22.487 ppb	12.414 ppb	99.177 %
Concentration per Run 1	101.331 %	107.843 %	0.193 ppb	21.760 ppb	18.133 ppb	0.532 ppb	20.397 ppb	19.262 ppb	99.642 %
Concentration per Run 2	100.487 %	101.373 %	0.196 ppb	19.707 ppb	21.902 ppb	0.627 ppb	28.347 ppb	6.419 ppb	99.984 %
Concentration per Run 3	99.510 %	98.039 %	0.202 ppb	23.335 ppb	20.485 ppb	0.227 ppb	18.718 ppb	11.560 ppb	97.905 %
Concentration RSD	0.9 %	4.9 %	2.4 %	8.4 %	9.4 %	45.2 %	22.9 %	52.1 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.184 ppb	0.184 ppb	0.187 ppb	22.702 ppb	0.204 ppb	0.151 ppb	0.258 ppb	0.040 ppb	100.311 %
Concentration per Run 1	0.122 ppb	0.192 ppb	0.317 ppb	19.695 ppb	0.220 ppb	0.121 ppb	0.321 ppb	0.058 ppb	105.007 %
Concentration per Run 2	0.134 ppb	0.184 ppb	0.092 ppb	22.936 ppb	0.178 ppb	0.200 ppb	0.225 ppb	0.021 ppb	97.086 %
Concentration per Run 3	0.297 ppb	0.174 ppb	0.152 ppb	25.474 ppb	0.213 ppb	0.131 ppb	0.228 ppb	0.039 ppb	98.840 %
Concentration RSD	53.0 %	4.9 %	62.1 %	12.8 %	11.2 %	28.6 %	21.2 %	47.3 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.225 ppb	0.195 ppb	0.191 ppb	0.226 ppb	98.489 %	0.202 ppb	0.208 ppb	100.168 %	0.188 ppb
Concentration per Run 1	0.199 ppb	0.040 ppb	0.196 ppb	0.260 ppb	102.586 %	0.187 ppb	0.223 ppb	107.038 %	0.163 ppb
Concentration per Run 2	0.207 ppb	0.120 ppb	0.188 ppb	0.173 ppb	97.536 %	0.196 ppb	0.211 ppb	99.068 %	0.211 ppb
Concentration per Run 3	0.268 ppb	0.425 ppb	0.190 ppb	0.246 ppb	95.346 %	0.223 ppb	0.189 ppb	94.397 %	0.190 ppb
Concentration RSD	16.9 %	104.0 %	2.2 %	20.6 %	3.8 %	9.2 %	8.1 %	6.4 %	12.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.201 ppb	101.121 %	101.907 %	0.171 ppb	0.190 ppb	99.665 %
Concentration per Run 1	0.204 ppb	103.735 %	108.169 %	0.138 ppb	0.184 ppb	105.818 %
Concentration per Run 2	0.160 ppb	100.656 %	99.895 %	0.179 ppb	0.188 ppb	97.289 %
Concentration per Run 3	0.238 ppb	98.973 %	97.659 %	0.197 ppb	0.197 ppb	95.889 %
Concentration RSD	19.5 %	2.4 %	5.4 %	17.5 %	3.4 %	5.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	8/23/2024 5:08:46 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.164 %	99.085 %	1.034 ppb	100.787 ppb	101.550 ppb	1.200 ppb	99.855 ppb	104.534 ppb	97.673 %
Concentration per Run 1	99.027 %	100.980 %	1.027 ppb	101.755 ppb	98.852 ppb	1.214 ppb	110.166 ppb	115.446 ppb	98.316 %
Concentration per Run 2	98.903 %	101.765 %	1.033 ppb	98.765 ppb	97.423 ppb	1.365 ppb	94.459 ppb	118.512 ppb	98.450 %
Concentration per Run 3	96.563 %	94.510 %	1.044 ppb	101.842 ppb	108.373 ppb	1.021 ppb	94.939 ppb	79.643 ppb	96.255 %
Concentration RSD	1.4 %	4.0 %	0.8 %	1.7 %	5.9 %	14.3 %	8.9 %	20.7 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.981 ppb	0.989 ppb	1.110 ppb	99.461 ppb	1.024 ppb	1.014 ppb	1.155 ppb	0.928 ppb	99.080 %
Concentration per Run 1	1.105 ppb	0.957 ppb	1.204 ppb	97.905 ppb	1.028 ppb	1.078 ppb	1.034 ppb	1.037 ppb	104.218 %
Concentration per Run 2	0.829 ppb	0.989 ppb	1.195 ppb	101.688 ppb	1.015 ppb	0.821 ppb	1.162 ppb	0.805 ppb	98.357 %
Concentration per Run 3	1.008 ppb	1.021 ppb	0.930 ppb	98.789 ppb	1.027 ppb	1.142 ppb	1.268 ppb	0.941 ppb	94.663 %
Concentration RSD	14.3 %	3.2 %	14.0 %	2.0 %	0.7 %	16.8 %	10.1 %	12.6 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.928 ppb	1.047 ppb	0.986 ppb	1.038 ppb	99.474 %	1.002 ppb	1.011 ppb	102.120 %	0.962 ppb
Concentration per Run 1	0.823 ppb	1.397 ppb	1.025 ppb	1.028 ppb	100.489 %	0.992 ppb	1.017 ppb	106.443 %	0.974 ppb
Concentration per Run 2	0.952 ppb	0.825 ppb	0.967 ppb	1.083 ppb	99.389 %	1.008 ppb	1.072 ppb	99.470 %	0.934 ppb
Concentration per Run 3	1.009 ppb	0.917 ppb	0.966 ppb	1.003 ppb	98.545 %	1.006 ppb	0.944 ppb	100.447 %	0.979 ppb
Concentration RSD	10.3 %	29.3 %	3.4 %	4.0 %	1.0 %	0.8 %	6.4 %	3.7 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.992 ppb	103.417 %	103.231 %	0.874 ppb	0.959 ppb	97.691 %
Concentration per Run 1	1.006 ppb	105.681 %	107.042 %	0.807 ppb	0.896 ppb	104.317 %
Concentration per Run 2	0.988 ppb	102.782 %	101.104 %	0.876 ppb	0.983 ppb	96.106 %
Concentration per Run 3	0.982 ppb	101.787 %	101.548 %	0.939 ppb	0.998 ppb	92.649 %
Concentration RSD	1.3 %	2.0 %	3.2 %	7.5 %	5.8 %	6.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	8/23/2024 5:13:13 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.840 %	104.118 %	10.286 ppb	995.400 ppb	1,002.834 ppb	10.458 ppb	1,015.780 ppb	1,007.670 ppb	97.053 %
Concentration per Run 1	97.724 %	107.843 %	10.184 ppb	991.245 ppb	996.245 ppb	10.088 ppb	1,049.016 ppb	1,047.697 ppb	97.394 %
Concentration per Run 2	96.812 %	102.353 %	10.332 ppb	986.827 ppb	1,013.027 ppb	10.346 ppb	1,006.298 ppb	1,029.329 ppb	96.337 %
Concentration per Run 3	95.984 %	102.157 %	10.342 ppb	1,008.129 ppb	999.231 ppb	10.941 ppb	992.027 ppb	945.984 ppb	97.428 %
Concentration RSD	0.9 %	3.1 %	0.9 %	1.1 %	0.9 %	4.2 %	2.9 %	5.4 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.225 ppb	9.954 ppb	9.904 ppb	996.690 ppb	10.337 ppb	10.364 ppb	10.224 ppb	10.612 ppb	98.734 %
Concentration per Run 1	10.229 ppb	9.719 ppb	10.518 ppb	961.431 ppb	10.164 ppb	10.499 ppb	10.471 ppb	10.575 ppb	104.703 %
Concentration per Run 2	10.272 ppb	10.196 ppb	9.661 ppb	1,012.248 ppb	10.374 ppb	10.284 ppb	9.864 ppb	10.576 ppb	95.677 %
Concentration per Run 3	10.175 ppb	9.947 ppb	9.534 ppb	1,016.391 ppb	10.471 ppb	10.309 ppb	10.338 ppb	10.686 ppb	95.822 %
Concentration RSD	0.5 %	2.4 %	5.4 %	3.1 %	1.5 %	1.1 %	3.1 %	0.6 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.057 ppb	10.571 ppb	9.935 ppb	9.976 ppb	98.236 %	10.065 ppb	10.209 ppb	98.747 %	10.093 ppb
Concentration per Run 1	9.640 ppb	10.896 ppb	10.025 ppb	9.886 ppb	100.930 %	9.829 ppb	10.177 ppb	102.699 %	10.215 ppb
Concentration per Run 2	10.418 ppb	10.516 ppb	9.897 ppb	10.008 ppb	97.049 %	10.129 ppb	10.124 ppb	96.343 %	10.080 ppb
Concentration per Run 3	10.113 ppb	10.300 ppb	9.882 ppb	10.033 ppb	96.730 %	10.238 ppb	10.326 ppb	97.200 %	9.984 ppb
Concentration RSD	3.9 %	2.9 %	0.8 %	0.8 %	2.4 %	2.1 %	1.0 %	3.5 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.245 ppb	101.443 %	101.616 %	9.351 ppb	9.808 ppb	95.819 %
Concentration per Run 1	10.159 ppb	104.232 %	105.653 %	8.642 ppb	9.174 ppb	104.285 %
Concentration per Run 2	10.391 ppb	101.628 %	100.818 %	9.550 ppb	9.967 ppb	92.439 %
Concentration per Run 3	10.184 ppb	98.468 %	98.379 %	9.861 ppb	10.282 ppb	90.733 %
Concentration RSD	1.2 %	2.8 %	3.6 %	6.8 %	5.8 %	7.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	8/23/2024 5:17:41 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.991 %	91.569 %	61.037 ppb	6,486.398 ppb	6,486.557 ppb	64.037 ppb	6,387.351 ppb	6,315.778 ppb	96.280 %
Concentration per Run 1	94.377 %	93.725 %	60.873 ppb	6,306.572 ppb	6,419.545 ppb	62.988 ppb	6,279.072 ppb	6,287.156 ppb	97.457 %
Concentration per Run 2	92.984 %	92.157 %	60.801 ppb	6,573.653 ppb	6,497.322 ppb	65.146 ppb	6,434.976 ppb	6,384.941 ppb	96.111 %
Concentration per Run 3	91.611 %	88.823 %	61.437 ppb	6,578.967 ppb	6,542.805 ppb	63.976 ppb	6,448.006 ppb	6,275.237 ppb	95.271 %
Concentration RSD	1.5 %	2.7 %	0.6 %	2.4 %	1.0 %	1.7 %	1.5 %	1.0 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.510 ppb	61.956 ppb	62.480 ppb	6,176.215 ppb	62.098 ppb	61.850 ppb	61.506 ppb	61.878 ppb	96.090 %
Concentration per Run 1	59.715 ppb	60.113 ppb	60.186 ppb	6,104.545 ppb	61.141 ppb	60.553 ppb	59.507 ppb	61.136 ppb	96.836 %
Concentration per Run 2	59.965 ppb	62.046 ppb	62.145 ppb	6,151.433 ppb	61.631 ppb	61.336 ppb	60.927 ppb	61.711 ppb	97.711 %
Concentration per Run 3	64.850 ppb	63.708 ppb	65.108 ppb	6,272.667 ppb	63.522 ppb	63.662 ppb	64.084 ppb	62.786 ppb	93.724 %
Concentration RSD	4.7 %	2.9 %	4.0 %	1.4 %	2.0 %	2.6 %	3.8 %	1.4 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.439 ppb	61.146 ppb	60.014 ppb	60.612 ppb	95.253 %	60.190 ppb	60.010 ppb	97.201 %	60.192 ppb
Concentration per Run 1	59.374 ppb	62.595 ppb	59.913 ppb	60.916 ppb	96.052 %	60.107 ppb	59.633 ppb	99.183 %	59.571 ppb
Concentration per Run 2	61.207 ppb	61.690 ppb	60.525 ppb	60.290 ppb	94.754 %	59.649 ppb	59.905 ppb	97.913 %	60.181 ppb
Concentration per Run 3	60.736 ppb	59.153 ppb	59.603 ppb	60.632 ppb	94.954 %	60.814 ppb	60.491 ppb	94.507 %	60.825 ppb
Concentration RSD	1.6 %	2.9 %	0.8 %	0.5 %	0.7 %	1.0 %	0.7 %	2.5 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.689 ppb	101.052 %	101.307 %	59.000 ppb	59.511 ppb	93.503 %
Concentration per Run 1	60.197 ppb	101.599 %	101.888 %	54.650 ppb	55.149 ppb	100.033 %
Concentration per Run 2	60.950 ppb	101.217 %	102.048 %	59.732 ppb	61.007 ppb	91.950 %
Concentration per Run 3	60.920 ppb	100.341 %	99.987 %	62.618 ppb	62.377 ppb	88.526 %
Concentration RSD	0.7 %	0.6 %	1.1 %	6.8 %	6.5 %	6.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	8/23/2024 5:22:09 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.885 %	98.824 %	119.457 ppb	11,757.175 ppb	11,756.472 ppb	117.941 ppb	11,805.006 ppb	11,841.447 ppb	97.082 %
Concentration per Run 1	91.866 %	95.294 %	118.667 ppb	11,742.451 ppb	11,819.708 ppb	114.426 ppb	12,004.993 ppb	11,883.262 ppb	97.188 %
Concentration per Run 2	90.426 %	99.804 %	119.540 ppb	11,894.204 ppb	11,907.686 ppb	121.171 ppb	11,924.091 ppb	12,001.531 ppb	97.307 %
Concentration per Run 3	90.363 %	101.373 %	120.165 ppb	11,634.871 ppb	11,542.022 ppb	118.228 ppb	11,485.936 ppb	11,639.547 ppb	96.752 %
Concentration RSD	0.9 %	3.2 %	0.6 %	1.1 %	1.6 %	2.9 %	2.4 %	1.6 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	119.226 ppb	119.026 ppb	118.767 ppb	11,912.168 ppb	118.923 ppb	119.044 ppb	119.227 ppb	119.011 ppb	93.106 %
Concentration per Run 1	121.102 ppb	122.900 ppb	122.917 ppb	12,252.912 ppb	122.996 ppb	123.121 ppb	123.274 ppb	122.840 ppb	88.541 %
Concentration per Run 2	115.843 ppb	114.044 ppb	114.793 ppb	11,525.786 ppb	112.068 ppb	112.599 ppb	113.336 ppb	113.168 ppb	99.867 %
Concentration per Run 3	120.734 ppb	120.134 ppb	118.592 ppb	11,957.807 ppb	121.705 ppb	121.413 ppb	121.071 ppb	121.025 ppb	90.910 %
Concentration RSD	2.5 %	3.8 %	3.4 %	3.1 %	5.0 %	4.7 %	4.4 %	4.3 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	119.776 ppb	119.379 ppb	119.999 ppb	119.695 ppb	92.059 %	119.899 ppb	119.978 ppb	93.702 %	119.896 ppb
Concentration per Run 1	123.657 ppb	121.528 ppb	119.171 ppb	120.903 ppb	91.184 %	122.089 ppb	121.323 ppb	90.933 %	119.285 ppb
Concentration per Run 2	114.058 ppb	116.439 ppb	120.523 ppb	115.584 ppb	93.986 %	115.932 ppb	116.689 ppb	98.457 %	118.240 ppb
Concentration per Run 3	121.614 ppb	120.169 ppb	120.302 ppb	122.600 ppb	91.008 %	121.677 ppb	121.920 ppb	91.716 %	122.165 ppb
Concentration RSD	4.2 %	2.2 %	0.6 %	3.1 %	1.8 %	2.9 %	2.4 %	4.4 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	119.635 ppb	100.493 %	100.692 %	120.555 ppb	120.261 ppb	90.683 %
Concentration per Run 1	119.246 ppb	98.883 %	97.251 %	113.170 ppb	111.023 ppb	96.784 %
Concentration per Run 2	119.065 ppb	103.686 %	106.259 %	119.524 ppb	121.027 ppb	90.062 %
Concentration per Run 3	120.595 ppb	98.911 %	98.565 %	128.972 ppb	128.733 ppb	85.203 %
Concentration RSD	0.7 %	2.8 %	4.8 %	6.6 %	7.4 %	6.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	8/23/2024 5:27:36 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.993 %	99.216 %	0.075 ppb	1.383 ppb	2.634 ppb	0.320 ppb	-3.331 ppb	-0.097 ppb	93.367 %
Concentration per Run 1	96.585 %	97.451 %	0.087 ppb	1.082 ppb	3.087 ppb	0.491 ppb	2.524 ppb	-45.246 ppb	92.974 %
Concentration per Run 2	96.000 %	100.392 %	0.061 ppb	-1.446 ppb	0.599 ppb	0.320 ppb	-9.030 ppb	45.818 ppb	92.723 %
Concentration per Run 3	95.396 %	99.804 %	0.077 ppb	4.512 ppb	4.216 ppb	0.149 ppb	-3.487 ppb	-0.863 ppb	94.404 %
Concentration RSD	0.6 %	1.6 %	17.6 %	216.3 %	70.2 %	53.4 %	173.5 %	46,865.8 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.091 ppb	0.254 ppb	0.163 ppb	10.274 ppb	0.022 ppb	0.025 ppb	0.089 ppb	0.327 ppb	94.023 %
Concentration per Run 1	-0.097 ppb	-0.002 ppb	0.154 ppb	8.794 ppb	0.017 ppb	-0.017 ppb	0.071 ppb	0.301 ppb	98.132 %
Concentration per Run 2	-0.103 ppb	0.001 ppb	0.142 ppb	6.235 ppb	0.018 ppb	0.034 ppb	0.072 ppb	0.343 ppb	91.428 %
Concentration per Run 3	-0.072 ppb	0.763 ppb	0.193 ppb	15.794 ppb	0.032 ppb	0.058 ppb	0.124 ppb	0.336 ppb	92.510 %
Concentration RSD	18.6 %	173.4 %	16.5 %	48.2 %	38.1 %	151.3 %	34.3 %	7.0 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.031 ppb	0.138 ppb	193.935 ppb	0.313 ppb	95.196 %	0.029 ppb	0.029 ppb	96.181 %	0.044 ppb
Concentration per Run 1	-0.013 ppb	0.244 ppb	197.506 ppb	0.205 ppb	96.272 %	0.019 ppb	0.009 ppb	99.452 %	0.018 ppb
Concentration per Run 2	0.021 ppb	0.033 ppb	192.104 ppb	0.263 ppb	95.021 %	0.017 ppb	0.018 ppb	95.098 %	0.034 ppb
Concentration per Run 3	0.086 ppb	0.136 ppb	192.193 ppb	0.470 ppb	94.295 %	0.050 ppb	0.059 ppb	93.992 %	0.078 ppb
Concentration RSD	160.6 %	76.4 %	1.6 %	44.7 %	1.1 %	64.5 %	93.2 %	3.0 %	71.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.184 ppb	100.972 %	101.869 %	0.345 ppb	0.216 ppb	92.708 %
Concentration per Run 1	0.152 ppb	102.503 %	104.431 %	0.233 ppb	0.185 ppb	102.596 %
Concentration per Run 2	0.208 ppb	100.928 %	102.008 %	0.402 ppb	0.220 ppb	88.503 %
Concentration per Run 3	0.192 ppb	99.485 %	99.169 %	0.399 ppb	0.244 ppb	87.026 %
Concentration RSD	15.9 %	1.5 %	2.6 %	28.1 %	13.7 %	9.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	8/23/2024 5:32:07 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.300 %	97.778 %	51.475 ppb	4,892.574 ppb	4,900.885 ppb	49.497 ppb	4,857.531 ppb	4,998.489 ppb	92.479 %
Concentration per Run 1	92.044 %	100.196 %	51.427 ppb	4,607.267 ppb	4,665.499 ppb	48.345 ppb	4,626.679 ppb	4,897.190 ppb	92.576 %
Concentration per Run 2	92.731 %	94.902 %	51.294 ppb	5,096.320 ppb	5,090.588 ppb	52.366 ppb	5,000.701 ppb	5,067.936 ppb	92.694 %
Concentration per Run 3	92.126 %	98.235 %	51.702 ppb	4,974.137 ppb	4,946.567 ppb	47.780 ppb	4,945.212 ppb	5,030.340 ppb	92.166 %
Recovery Percentage 1			102.949 %	97.851 %	98.018 %	98.994 %	97.151 %	99.970 %	
Concentration RSD	0.4 %	2.7 %	0.4 %	5.2 %	4.4 %	5.1 %	4.2 %	1.8 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	51.016 ppb	50.642 ppb	50.161 ppb	5,083.345 ppb	51.865 ppb	51.339 ppb	52.215 ppb	52.648 ppb	91.625 %
Concentration per Run 1	49.472 ppb	49.569 ppb	48.844 ppb	4,984.923 ppb	50.347 ppb	51.293 ppb	52.301 ppb	51.636 ppb	91.796 %
Concentration per Run 2	50.665 ppb	50.476 ppb	50.101 ppb	5,058.827 ppb	52.174 ppb	50.958 ppb	51.213 ppb	52.061 ppb	93.258 %
Concentration per Run 3	52.911 ppb	51.880 ppb	51.538 ppb	5,206.285 ppb	53.073 ppb	51.767 ppb	53.130 ppb	54.247 ppb	89.821 %
Recovery Percentage 1	102.032 %	101.284 %	100.322 %	101.667 %	103.729 %	102.679 %	104.430 %	105.296 %	
Concentration RSD	3.4 %	2.3 %	2.7 %	2.2 %	2.7 %	0.8 %	1.8 %	2.7 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	51.849 ppb	50.107 ppb	50.993 ppb	51.235 ppb	93.434 %	50.537 ppb	51.347 ppb	94.252 %	50.677 ppb
Concentration per Run 1	51.384 ppb	49.241 ppb	51.438 ppb	49.562 ppb	92.849 %	49.729 ppb	50.239 ppb	95.014 %	50.550 ppb
Concentration per Run 2	51.148 ppb	50.483 ppb	50.232 ppb	51.066 ppb	94.503 %	50.643 ppb	51.886 ppb	94.270 %	51.194 ppb
Concentration per Run 3	53.016 ppb	50.596 ppb	51.309 ppb	53.078 ppb	92.950 %	51.240 ppb	51.917 ppb	93.471 %	50.288 ppb
Recovery Percentage 1	103.699 %	100.213 %	101.986 %	102.470 %		101.075 %	102.695 %		101.354 %
Concentration RSD	2.0 %	1.5 %	1.3 %	3.4 %	1.0 %	1.5 %	1.9 %	0.8 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.838 ppb	99.675 %	100.328 %	51.577 ppb	52.519 ppb	89.525 %
Concentration per Run 1	51.561 ppb	99.232 %	100.527 %	47.308 ppb	48.315 ppb	96.688 %
Concentration per Run 2	50.591 ppb	100.274 %	100.822 %	53.588 ppb	54.471 ppb	86.699 %
Concentration per Run 3	50.363 ppb	99.520 %	99.634 %	53.834 ppb	54.769 ppb	85.188 %
Recovery Percentage 1	101.677 %			103.154 %	105.037 %	
Concentration RSD	1.3 %	0.5 %	0.6 %	7.2 %	6.9 %	7.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	11	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	8/23/2024 5:36:37 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.775 %	96.405 %	0.053 ppb	1.712 ppb	3.749 ppb	-0.100 ppb	0.518 ppb	1.431 ppb	91.483 %
Concentration per Run 1	94.902 %	92.549 %	0.049 ppb	4.765 ppb	5.387 ppb	0.162 ppb	2.780 ppb	1.558 ppb	92.525 %
Concentration per Run 2	93.339 %	98.235 %	0.067 ppb	1.779 ppb	2.564 ppb	-0.359 ppb	-4.871 ppb	1.435 ppb	90.252 %
Concentration per Run 3	93.085 %	98.431 %	0.042 ppb	-1.408 ppb	3.297 ppb	-0.104 ppb	3.647 ppb	1.300 ppb	91.673 %
Recovery Percentage 1			10.574 %	1.712 %	5.356 %	-1.005 %	0.518 %	1.431 %	
Concentration RSD	1.0 %	3.5 %	23.9 %	180.3 %	39.1 %	259.3 %	904.2 %	9.0 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.032 ppb	0.012 ppb	0.051 ppb	8.440 ppb	0.046 ppb	0.016 ppb	0.030 ppb	-0.189 ppb	92.275 %
Concentration per Run 1	-0.002 ppb	0.020 ppb	0.082 ppb	10.368 ppb	0.068 ppb	-0.007 ppb	0.037 ppb	-0.184 ppb	91.190 %
Concentration per Run 2	-0.054 ppb	0.016 ppb	0.025 ppb	7.340 ppb	0.040 ppb	0.008 ppb	0.030 ppb	-0.197 ppb	91.709 %
Concentration per Run 3	-0.040 ppb	0.000 ppb	0.045 ppb	7.612 ppb	0.032 ppb	0.048 ppb	0.022 ppb	-0.184 ppb	93.927 %
Recovery Percentage 1	-0.643 %	1.207 %	5.064 %	16.880 %	9.284 %	0.817 %	2.986 %	-3.771 %	
Concentration RSD	84.1 %	87.6 %	56.4 %	19.8 %	40.5 %	174.1 %	24.5 %	4.0 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.075 ppb	0.263 ppb	0.078 ppb	0.297 ppb	93.708 %	0.049 ppb	0.053 ppb	93.771 %	0.082 ppb
Concentration per Run 1	0.093 ppb	0.223 ppb	0.100 ppb	0.206 ppb	95.451 %	0.058 ppb	0.054 ppb	95.270 %	0.085 ppb
Concentration per Run 2	0.056 ppb	0.287 ppb	0.071 ppb	0.304 ppb	90.926 %	0.047 ppb	0.047 ppb	89.684 %	0.076 ppb
Concentration per Run 3	0.074 ppb	0.280 ppb	0.064 ppb	0.379 ppb	94.748 %	0.044 ppb	0.058 ppb	96.358 %	0.085 ppb
Recovery Percentage 1	14.908 %	5.265 %	0.785 %	14.828 %		12.337 %	26.502 %		2.053 %
Concentration RSD	24.5 %	13.4 %	24.5 %	29.4 %	2.6 %	14.7 %	9.9 %	3.8 %	6.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.047 ppb	98.112 %	98.562 %	0.395 ppb	0.064 ppb	88.425 %
Concentration per Run 1	0.042 ppb	99.211 %	100.420 %	0.302 ppb	0.071 ppb	97.476 %
Concentration per Run 2	0.065 ppb	95.460 %	95.708 %	0.471 ppb	0.066 ppb	83.809 %
Concentration per Run 3	0.035 ppb	99.665 %	99.558 %	0.412 ppb	0.056 ppb	83.991 %
Recovery Percentage 1	9.432 %			39.497 %	6.402 %	
Concentration RSD	34.1 %	2.4 %	2.5 %	21.8 %	11.8 %	8.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	8/23/2024 5:44:43 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.090 %	84.379 %	0.040 ppb	**208,142.665 ppb**	**80,117.320 ppb**	**100,888.133 ppb**	97,700.853 ppb	289,968.012 ppb	85.125 %
Concentration per Run 1	83.794 %	77.451 %	0.045 ppb	221,127.849 ppb	84,855.933 ppb	105,959.723 ppb	101,896.225 ppb	305,087.370 ppb	85.656 %
Concentration per Run 2	83.447 %	88.431 %	0.040 ppb	196,010.160 ppb	74,998.852 ppb	96,082.860 ppb	94,375.857 ppb	282,257.942 ppb	84.916 %
Concentration per Run 3	82.031 %	87.255 %	0.034 ppb	207,289.986 ppb	80,497.176 ppb	100,621.816 ppb	96,830.476 ppb	282,558.725 ppb	84.804 %
Recovery Percentage 1			3.975 %	83.257 %	80.117 %	100.888 %	97.701 %	96.656 %	
Concentration RSD	1.1 %	7.1 %	14.8 %	6.0 %	6.2 %	4.9 %	3.9 %	4.5 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	1.567 ppb	4.412 ppb	**215,637.940 ppb**	2.222 ppb	2.684 ppb	1.047 ppb	2.074 ppb	86.640 %
Concentration per Run 1	0.026 ppb	1.494 ppb	4.495 ppb	218,809.537 ppb	2.310 ppb	3.069 ppb	1.128 ppb	2.070 ppb	83.564 %
Concentration per Run 2	0.014 ppb	1.563 ppb	3.904 ppb	211,288.122 ppb	2.120 ppb	2.487 ppb	1.029 ppb	2.070 ppb	86.461 %
Concentration per Run 3	-0.023 ppb	1.644 ppb	4.838 ppb	216,816.159 ppb	2.235 ppb	2.496 ppb	0.983 ppb	2.082 ppb	89.894 %
Recovery Percentage 1	0.114 %	47.486 %	77.411 %	86.255 %	77.410 %	43.999 %	127.667 %	18.190 %	
Concentration RSD	452.7 %	4.8 %	10.7 %	1.8 %	4.3 %	12.4 %	7.1 %	0.3 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.396 ppb	3.352 ppb	2.407 ppb	**2,216.139 ppb**	78.648 %	0.036 ppb	0.563 ppb	83.246 %	0.189 ppb
Concentration per Run 1	0.398 ppb	3.279 ppb	2.469 ppb	2,272.386 ppb	76.499 %	0.041 ppb	0.656 ppb	81.334 %	0.170 ppb
Concentration per Run 2	0.399 ppb	3.004 ppb	2.388 ppb	2,168.135 ppb	79.574 %	0.032 ppb	0.491 ppb	83.813 %	0.177 ppb
Concentration per Run 3	0.390 ppb	3.772 ppb	2.365 ppb	2,207.895 ppb	79.870 %	0.034 ppb	0.541 ppb	84.592 %	0.218 ppb
Recovery Percentage 1	24.269 %	25.983 %	481.481 %	110.807 %		4.485 %	140.626 %		2.360 %
Concentration RSD	1.3 %	11.6 %	2.3 %	2.4 %	2.4 %	13.5 %	15.1 %	2.0 %	13.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.282 ppb	92.288 %	92.612 %	0.105 ppb	1.740 ppb	73.458 %
Concentration per Run 1	1.338 ppb	90.233 %	90.726 %	0.060 ppb	1.578 ppb	81.131 %
Concentration per Run 2	1.368 ppb	93.086 %	93.883 %	0.121 ppb	1.816 ppb	69.782 %
Concentration per Run 3	1.139 ppb	93.544 %	93.228 %	0.132 ppb	1.826 ppb	69.462 %
Recovery Percentage 1	68.167 %			5.231 %	56.135 %	
Concentration RSD	9.7 %	1.9 %	1.8 %	37.0 %	8.1 %	9.0 %

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	wrong spot
Analysis label:	xLDR	Rack	4		
Analysis started at:	8/23/2024 5:49:14 AM	Vial	2		

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	8/23/2024 5:53:44 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.319 %	100.719 %	0.014 ppb	38.614 ppb	2.739 ppb	1.079 ppb	-1.551 ppb	1.305 ppb	102.746 %
Concentration per Run 1	100.112 %	96.274 %	0.016 ppb	50.019 ppb	1.968 ppb	1.059 ppb	-1.433 ppb	2.755 ppb	103.017 %
Concentration per Run 2	99.104 %	96.667 %	0.010 ppb	36.757 ppb	2.693 ppb	1.125 ppb	-1.671 ppb	6.361 ppb	102.663 %
Concentration per Run 3	98.741 %	109.216 %	0.015 ppb	29.066 ppb	3.555 ppb	1.053 ppb	-1.549 ppb	-5.201 ppb	102.558 %
Concentration RSD	0.7 %	7.3 %	23.9 %	27.4 %	29.0 %	3.7 %	7.7 %	453.2 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.098 ppb	0.008 ppb	0.624 ppb	19.439 ppb	0.011 ppb	0.338 ppb	0.820 ppb	1.179 ppb	99.948 %
Concentration per Run 1	-0.097 ppb	-0.002 ppb	0.681 ppb	18.405 ppb	0.008 ppb	0.273 ppb	0.714 ppb	1.114 ppb	98.895 %
Concentration per Run 2	-0.098 ppb	0.022 ppb	0.588 ppb	20.845 ppb	0.012 ppb	0.346 ppb	0.902 ppb	1.156 ppb	101.339 %
Concentration per Run 3	-0.100 ppb	0.002 ppb	0.603 ppb	19.066 ppb	0.014 ppb	0.396 ppb	0.845 ppb	1.268 ppb	99.611 %
Concentration RSD	1.3 %	168.8 %	8.1 %	6.5 %	28.6 %	18.3 %	11.8 %	6.7 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.009 ppb	0.044 ppb	0.003 ppb	0.789 ppb	99.574 %	0.010 ppb	0.001 ppb	98.047 %	-0.007 ppb
Concentration per Run 1	-0.006 ppb	0.051 ppb	0.004 ppb	0.635 ppb	99.004 %	0.007 ppb	-0.001 ppb	99.197 %	-0.012 ppb
Concentration per Run 2	-0.008 ppb	0.056 ppb	0.000 ppb	0.758 ppb	100.461 %	0.009 ppb	0.005 ppb	98.908 %	-0.008 ppb
Concentration per Run 3	-0.015 ppb	0.025 ppb	0.005 ppb	0.973 ppb	99.258 %	0.014 ppb	-0.001 ppb	96.034 %	-0.002 ppb
Concentration RSD	49.2 %	37.0 %	101.2 %	21.7 %	0.8 %	33.3 %	259.2 %	1.8 %	68.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.021 ppb	102.160 %	99.950 %	0.046 ppb	0.033 ppb	91.249 %
Concentration per Run 1	0.039 ppb	102.337 %	99.349 %	0.018 ppb	0.030 ppb	101.366 %
Concentration per Run 2	0.021 ppb	102.585 %	101.155 %	0.056 ppb	0.036 ppb	88.354 %
Concentration per Run 3	0.002 ppb	101.557 %	99.345 %	0.066 ppb	0.031 ppb	84.026 %
Concentration RSD	89.7 %	0.5 %	1.0 %	54.8 %	9.8 %	9.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 5:58:10 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.776 %	103.007 %	64.089 ppb	6,152.117 ppb	6,083.061 ppb	63.505 ppb	6,075.304 ppb	5,939.241 ppb	104.067 %
Concentration per Run 1	99.080 %	100.588 %	64.320 ppb	6,249.262 ppb	6,165.675 ppb	65.179 ppb	6,200.768 ppb	6,105.344 ppb	103.460 %
Concentration per Run 2	98.722 %	102.157 %	64.197 ppb	6,161.034 ppb	6,124.418 ppb	62.658 ppb	6,088.567 ppb	5,895.111 ppb	103.890 %
Concentration per Run 3	98.527 %	106.275 %	63.751 ppb	6,046.055 ppb	5,959.089 ppb	62.678 ppb	5,936.578 ppb	5,817.267 ppb	104.852 %
Recovery Percentage 1			106.816 %	102.535 %	101.384 %	105.841 %	101.255 %	98.987 %	
Concentration RSD	0.3 %	2.9 %	0.5 %	1.7 %	1.8 %	2.3 %	2.2 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.704 ppb	62.902 ppb	61.934 ppb	6,253.926 ppb	64.533 ppb	64.524 ppb	64.283 ppb	64.608 ppb	98.393 %
Concentration per Run 1	61.624 ppb	63.921 ppb	61.692 ppb	6,330.813 ppb	65.093 ppb	64.565 ppb	64.068 ppb	63.942 ppb	97.577 %
Concentration per Run 2	60.209 ppb	62.392 ppb	62.296 ppb	6,233.786 ppb	64.622 ppb	64.103 ppb	65.029 ppb	63.418 ppb	99.406 %
Concentration per Run 3	60.279 ppb	62.393 ppb	61.814 ppb	6,197.180 ppb	63.884 ppb	64.905 ppb	63.753 ppb	66.464 ppb	98.196 %
Recovery Percentage 1	101.173 %	104.837 %	103.224 %	104.232 %	107.555 %	107.541 %	107.139 %	107.680 %	
Concentration RSD	1.3 %	1.4 %	0.5 %	1.1 %	0.9 %	0.6 %	1.0 %	2.5 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.683 ppb	63.036 ppb	58.102 ppb	59.912 ppb	100.078 %	59.205 ppb	62.636 ppb	97.549 %	61.360 ppb
Concentration per Run 1	63.925 ppb	64.211 ppb	58.049 ppb	59.327 ppb	100.608 %	59.801 ppb	63.485 ppb	96.917 %	61.588 ppb
Concentration per Run 2	62.027 ppb	61.563 ppb	57.313 ppb	58.913 ppb	100.914 %	58.624 ppb	61.985 ppb	98.251 %	60.956 ppb
Concentration per Run 3	62.097 ppb	63.335 ppb	58.943 ppb	61.495 ppb	98.713 %	59.192 ppb	62.438 ppb	97.480 %	61.535 ppb
Recovery Percentage 1	104.471 %	105.061 %	96.836 %	99.853 %		98.676 %	104.393 %		102.266 %
Concentration RSD	1.7 %	2.1 %	1.4 %	2.3 %	1.2 %	1.0 %	1.2 %	0.7 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.215 ppb	103.299 %	103.142 %	65.837 ppb	61.664 ppb	86.646 %
Concentration per Run 1	63.239 ppb	102.570 %	103.086 %	60.890 ppb	61.102 ppb	94.267 %
Concentration per Run 2	61.790 ppb	104.523 %	103.653 %	66.881 ppb	61.389 ppb	83.847 %
Concentration per Run 3	61.617 ppb	102.803 %	102.686 %	69.740 ppb	62.500 ppb	81.822 %
Recovery Percentage 1	103.692 %			109.728 %	102.773 %	
Concentration RSD	1.4 %	1.0 %	0.5 %	6.9 %	1.2 %	7.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 6:02:41 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.636 %	105.098 %	0.047 ppb	15.326 ppb	2.639 ppb	0.679 ppb	-3.458 ppb	1.340 ppb	103.756 %
Concentration per Run 1	101.233 %	107.647 %	0.039 ppb	16.872 ppb	2.928 ppb	0.403 ppb	-2.249 ppb	-1.629 ppb	104.228 %
Concentration per Run 2	101.095 %	102.745 %	0.043 ppb	16.267 ppb	3.414 ppb	0.922 ppb	-0.112 ppb	3.341 ppb	103.208 %
Concentration per Run 3	99.579 %	104.902 %	0.058 ppb	12.839 ppb	1.575 ppb	0.712 ppb	-8.012 ppb	2.308 ppb	103.833 %
Recovery Percentage 1			9.336 %	15.326 %	3.770 %	6.792 %	-3.458 %	1.340 %	
Concentration RSD	0.9 %	2.3 %	21.0 %	14.2 %	36.1 %	38.5 %	118.2 %	195.8 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.066 ppb	0.016 ppb	0.032 ppb	11.955 ppb	0.033 ppb	-0.047 ppb	0.063 ppb	-0.209 ppb	98.808 %
Concentration per Run 1	-0.076 ppb	0.019 ppb	0.059 ppb	10.778 ppb	0.037 ppb	-0.060 ppb	0.047 ppb	-0.188 ppb	97.789 %
Concentration per Run 2	-0.092 ppb	0.034 ppb	0.058 ppb	14.198 ppb	0.032 ppb	-0.013 ppb	0.089 ppb	-0.202 ppb	101.157 %
Concentration per Run 3	-0.030 ppb	-0.005 ppb	-0.020 ppb	10.888 ppb	0.030 ppb	-0.067 ppb	0.054 ppb	-0.236 ppb	97.477 %
Recovery Percentage 1	-1.320 %	1.616 %	3.239 %	23.910 %	6.591 %	-2.336 %	6.330 %	-4.176 %	
Concentration RSD	48.9 %	123.1 %	139.6 %	16.3 %	10.3 %	62.9 %	35.6 %	12.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.066 ppb	0.217 ppb	0.023 ppb	0.517 ppb	102.374 %	0.034 ppb	0.026 ppb	100.496 %	0.041 ppb
Concentration per Run 1	0.067 ppb	0.143 ppb	0.030 ppb	0.357 ppb	102.490 %	0.037 ppb	0.035 ppb	99.687 %	0.049 ppb
Concentration per Run 2	0.040 ppb	0.228 ppb	0.023 ppb	0.488 ppb	103.121 %	0.036 ppb	0.021 ppb	101.612 %	0.031 ppb
Concentration per Run 3	0.092 ppb	0.278 ppb	0.015 ppb	0.707 ppb	101.513 %	0.029 ppb	0.023 ppb	100.189 %	0.043 ppb
Recovery Percentage 1	13.287 %	4.331 %	0.226 %	25.875 %		8.490 %	13.053 %		1.023 %
Concentration RSD	39.0 %	31.5 %	34.6 %	34.2 %	0.8 %	13.7 %	30.3 %	1.0 %	22.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.016 ppb	104.855 %	102.524 %	0.392 ppb	0.049 ppb	87.696 %
Concentration per Run 1	0.020 ppb	104.144 %	101.943 %	0.288 ppb	0.048 ppb	96.527 %
Concentration per Run 2	0.025 ppb	105.430 %	103.105 %	0.476 ppb	0.049 ppb	84.169 %
Concentration per Run 3	0.001 ppb	104.992 %	102.522 %	0.413 ppb	0.048 ppb	82.391 %
Recovery Percentage 1	3.115 %			39.229 %	4.868 %	
Concentration RSD	81.4 %	0.6 %	0.6 %	24.4 %	1.1 %	8.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	8/23/2024 6:12:28 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.466 %	110.784 %	0.029 ppb	29.669 ppb	1.891 ppb	1.653 ppb	3.510 ppb	11.652 ppb	113.744 %
Concentration per Run 1	110.667 %	106.275 %	0.032 ppb	31.126 ppb	2.448 ppb	1.630 ppb	-0.656 ppb	10.128 ppb	113.407 %
Concentration per Run 2	111.026 %	110.981 %	0.026 ppb	29.345 ppb	1.186 ppb	1.514 ppb	2.912 ppb	12.498 ppb	113.928 %
Concentration per Run 3	109.705 %	115.098 %	0.028 ppb	28.537 ppb	2.038 ppb	1.815 ppb	8.274 ppb	12.331 ppb	113.897 %
Concentration RSD	0.6 %	4.0 %	10.4 %	4.5 %	34.0 %	9.2 %	128.1 %	11.4 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.081 ppb	0.029 ppb	8,543.025 ppb	3.332 ppb	0.040 ppb	8,637.670 ppb	9,271.665 ppb	9,173.534 ppb	112.622 %
Concentration per Run 1	-0.076 ppb	0.032 ppb	8,100.818 ppb	2.886 ppb	0.038 ppb	8,363.373 ppb	9,251.313 ppb	9,065.125 ppb	113.649 %
Concentration per Run 2	-0.082 ppb	0.027 ppb	8,460.947 ppb	2.421 ppb	0.037 ppb	8,656.615 ppb	9,435.346 ppb	9,259.386 ppb	108.876 %
Concentration per Run 3	-0.086 ppb	0.027 ppb	9,067.311 ppb	4.689 ppb	0.043 ppb	8,893.023 ppb	9,128.336 ppb	9,196.092 ppb	115.342 %
Concentration RSD	5.8 %	10.2 %	5.7 %	36.0 %	7.6 %	3.1 %	1.7 %	1.1 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	959.621 ppb	1.137 ppb	0.210 ppb	0.160 ppb	110.755 %	0.176 ppb	0.077 ppb	109.168 %	1.130 ppb
Concentration per Run 1	919.411 ppb	1.027 ppb	0.197 ppb	0.129 ppb	111.238 %	0.166 ppb	0.088 ppb	107.986 %	1.110 ppb
Concentration per Run 2	976.870 ppb	0.976 ppb	0.206 ppb	0.142 ppb	109.297 %	0.188 ppb	0.073 ppb	106.196 %	1.174 ppb
Concentration per Run 3	982.581 ppb	1.407 ppb	0.227 ppb	0.209 ppb	111.731 %	0.175 ppb	0.070 ppb	113.322 %	1.104 ppb
Concentration RSD	3.6 %	20.7 %	7.1 %	27.0 %	1.2 %	6.2 %	13.0 %	3.4 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9,337.412 ppb	111.482 %	112.649 %	0.063 ppb	10,956.736 ppb	93.073 %
Concentration per Run 1	9,207.630 ppb	111.907 %	112.252 %	0.032 ppb	9,758.789 ppb	104.455 %
Concentration per Run 2	9,270.703 ppb	108.966 %	109.945 %	0.076 ppb	11,570.377 ppb	88.122 %
Concentration per Run 3	9,533.903 ppb	113.572 %	115.751 %	0.082 ppb	11,541.040 ppb	86.641 %
Concentration RSD	1.9 %	2.1 %	2.6 %	43.3 %	9.5 %	10.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check (5x ICSA)	Rack	4		
Analysis started at:	8/23/2024 6:16:58 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.258 %	95.752 %	0.016 ppb	40,250.298 ppb	19,801.515 ppb	19,461.201 ppb	19,410.199 ppb	58,384.521 ppb	90.582 %
Concentration per Run 1	87.915 %	90.588 %	0.016 ppb	41,217.897 ppb	20,350.073 ppb	19,655.695 ppb	19,645.580 ppb	58,695.206 ppb	90.417 %
Concentration per Run 2	87.304 %	102.745 %	0.012 ppb	37,382.298 ppb	18,093.639 ppb	17,824.570 ppb	18,052.228 ppb	55,067.072 ppb	90.477 %
Concentration per Run 3	86.557 %	93.921 %	0.021 ppb	42,150.698 ppb	20,960.834 ppb	20,903.337 ppb	20,532.790 ppb	61,391.285 ppb	90.852 %
Concentration RSD	0.8 %	6.6 %	27.6 %	6.3 %	7.6 %	8.0 %	6.5 %	5.4 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.074 ppb	0.309 ppb	7.536 ppb	50,016.138 ppb	0.429 ppb	6.679 ppb	6.600 ppb	8.607 ppb	89.406 %
Concentration per Run 1	-0.059 ppb	0.298 ppb	8.071 ppb	50,663.506 ppb	0.453 ppb	7.486 ppb	7.479 ppb	9.803 ppb	90.115 %
Concentration per Run 2	-0.086 ppb	0.340 ppb	7.417 ppb	49,370.148 ppb	0.402 ppb	6.287 ppb	6.340 ppb	8.202 ppb	86.918 %
Concentration per Run 3	-0.077 ppb	0.288 ppb	7.118 ppb	50,014.759 ppb	0.431 ppb	6.265 ppb	5.981 ppb	7.817 ppb	91.184 %
Concentration RSD	18.5 %	9.0 %	6.5 %	1.3 %	5.9 %	10.5 %	11.9 %	12.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.987 ppb	0.851 ppb	0.466 ppb	419.529 ppb	87.091 %	0.008 ppb	0.110 ppb	89.442 %	0.099 ppb
Concentration per Run 1	2.079 ppb	0.905 ppb	0.447 ppb	409.444 ppb	86.805 %	0.011 ppb	0.106 ppb	87.757 %	0.085 ppb
Concentration per Run 2	2.100 ppb	0.879 ppb	0.469 ppb	419.761 ppb	86.595 %	0.004 ppb	0.111 ppb	87.179 %	0.106 ppb
Concentration per Run 3	1.783 ppb	0.769 ppb	0.483 ppb	429.381 ppb	87.874 %	0.010 ppb	0.113 ppb	93.389 %	0.105 ppb
Concentration RSD	8.9 %	8.5 %	3.9 %	2.4 %	0.8 %	46.1 %	3.2 %	3.8 %	11.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.368 ppb	97.432 %	98.313 %	0.043 ppb	8.839 ppb	76.730 %
Concentration per Run 1	7.655 ppb	96.886 %	97.261 %	0.017 ppb	9.578 ppb	85.386 %
Concentration per Run 2	5.884 ppb	96.586 %	96.382 %	0.051 ppb	8.542 ppb	72.904 %
Concentration per Run 3	5.566 ppb	98.824 %	101.297 %	0.062 ppb	8.396 ppb	71.901 %
Concentration RSD	17.7 %	1.2 %	2.7 %	53.8 %	7.3 %	9.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check (5/.5ppm)	Rack	4		
Analysis started at:	8/23/2024 6:24:11 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.503 %	105.817 %	0.017 ppb	34.088 ppb	8.893 ppb	8.078 ppb	5.561 ppb	37.997 ppb	111.180 %
Concentration per Run 1	107.661 %	102.353 %	0.017 ppb	31.792 ppb	6.353 ppb	6.269 ppb	2.888 ppb	33.543 ppb	111.038 %
Concentration per Run 2	107.680 %	112.549 %	0.018 ppb	35.769 ppb	11.083 ppb	10.490 ppb	8.718 ppb	45.116 ppb	110.491 %
Concentration per Run 3	107.169 %	102.549 %	0.017 ppb	34.704 ppb	9.241 ppb	7.476 ppb	5.078 ppb	35.332 ppb	112.011 %
Concentration RSD	0.3 %	5.5 %	4.6 %	6.0 %	26.8 %	26.9 %	53.0 %	16.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.090 ppb	-0.003 ppb	4,208.874 ppb	23.601 ppb	0.028 ppb	4,353.917 ppb	4,561.864 ppb	5,277.662 ppb	101.251 %
Concentration per Run 1	-0.077 ppb	-0.001 ppb	4,090.772 ppb	20.819 ppb	0.034 ppb	4,336.686 ppb	4,499.614 ppb	5,224.525 ppb	100.826 %
Concentration per Run 2	-0.099 ppb	0.001 ppb	4,375.497 ppb	26.483 ppb	0.021 ppb	4,362.272 ppb	4,647.355 ppb	5,350.051 ppb	95.036 %
Concentration per Run 3	-0.094 ppb	-0.009 ppb	4,160.353 ppb	23.502 ppb	0.028 ppb	4,362.792 ppb	4,538.623 ppb	5,258.409 ppb	107.891 %
Concentration RSD	13.1 %	174.4 %	3.5 %	12.0 %	23.1 %	0.3 %	1.7 %	1.2 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	473.598 ppb	0.660 ppb	0.116 ppb	0.494 ppb	103.653 %	0.089 ppb	0.039 ppb	100.514 %	0.585 ppb
Concentration per Run 1	471.485 ppb	0.732 ppb	0.111 ppb	0.452 ppb	101.408 %	0.096 ppb	0.039 ppb	99.019 %	0.578 ppb
Concentration per Run 2	489.413 ppb	0.562 ppb	0.119 ppb	0.408 ppb	104.076 %	0.091 ppb	0.044 ppb	100.522 %	0.595 ppb
Concentration per Run 3	459.897 ppb	0.686 ppb	0.118 ppb	0.621 ppb	105.475 %	0.080 ppb	0.034 ppb	102.000 %	0.581 ppb
Concentration RSD	3.1 %	13.3 %	4.1 %	22.8 %	2.0 %	8.9 %	12.0 %	1.5 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4,584.877 ppb	105.417 %	104.894 %	0.032 ppb	5,133.033 ppb	85.418 %
Concentration per Run 1	4,582.539 ppb	104.479 %	102.763 %	0.003 ppb	5,258.751 ppb	95.359 %
Concentration per Run 2	4,506.667 ppb	104.664 %	105.696 %	0.043 ppb	5,109.450 ppb	81.137 %
Concentration per Run 3	4,665.425 ppb	107.108 %	106.222 %	0.049 ppb	5,030.898 ppb	79.757 %
Concentration RSD	1.7 %	1.4 %	1.8 %	78.4 %	2.3 %	10.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 6:31:06 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.773 %	102.811 %	64.169 ppb	6,260.423 ppb	6,211.466 ppb	64.007 ppb	6,234.695 ppb	6,067.028 ppb	99.018 %
Concentration per Run 1	97.919 %	98.039 %	63.357 ppb	6,439.809 ppb	6,296.536 ppb	64.938 ppb	6,269.262 ppb	6,137.345 ppb	99.866 %
Concentration per Run 2	95.776 %	101.765 %	64.392 ppb	6,212.052 ppb	6,145.148 ppb	63.595 ppb	6,138.148 ppb	5,932.370 ppb	99.088 %
Concentration per Run 3	93.624 %	108.628 %	64.759 ppb	6,129.407 ppb	6,192.714 ppb	63.489 ppb	6,296.676 ppb	6,131.367 ppb	98.099 %
Recovery Percentage 1			106.949 %	104.340 %	103.524 %	106.679 %	103.912 %	101.117 %	
Concentration RSD	2.2 %	5.2 %	1.1 %	2.6 %	1.2 %	1.3 %	1.4 %	1.9 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.583 ppb	62.211 ppb	62.965 ppb	6,187.622 ppb	63.368 ppb	62.878 ppb	63.849 ppb	65.922 ppb	101.436 %
Concentration per Run 1	60.293 ppb	63.341 ppb	63.562 ppb	6,300.264 ppb	64.972 ppb	65.855 ppb	65.017 ppb	66.901 ppb	101.990 %
Concentration per Run 2	60.179 ppb	62.593 ppb	63.935 ppb	6,237.793 ppb	64.615 ppb	64.643 ppb	65.332 ppb	66.345 ppb	98.667 %
Concentration per Run 3	61.277 ppb	60.699 ppb	61.398 ppb	6,024.809 ppb	60.516 ppb	58.136 ppb	61.199 ppb	64.520 ppb	103.652 %
Recovery Percentage 1	100.971 %	103.685 %	104.942 %	103.127 %	105.613 %	104.797 %	106.415 %	109.870 %	
Concentration RSD	1.0 %	2.2 %	2.2 %	2.3 %	3.9 %	6.6 %	3.6 %	1.9 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	63.131 ppb	63.286 ppb	58.776 ppb	60.211 ppb	101.297 %	58.865 ppb	62.046 ppb	99.943 %	61.373 ppb
Concentration per Run 1	63.210 ppb	60.055 ppb	56.869 ppb	60.293 ppb	103.932 %	59.019 ppb	62.695 ppb	99.275 %	61.179 ppb
Concentration per Run 2	62.677 ppb	62.875 ppb	57.764 ppb	60.693 ppb	100.654 %	59.460 ppb	62.313 ppb	97.170 %	61.586 ppb
Concentration per Run 3	63.506 ppb	66.928 ppb	61.694 ppb	59.647 ppb	99.304 %	58.115 ppb	61.132 ppb	103.383 %	61.353 ppb
Recovery Percentage 1	105.219 %	105.476 %	97.960 %	100.351 %		98.108 %	103.411 %		102.288 %
Concentration RSD	0.7 %	5.5 %	4.4 %	0.9 %	2.3 %	1.2 %	1.3 %	3.2 %	0.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.088 ppb	106.924 %	106.458 %	61.287 ppb	62.460 ppb	83.833 %
Concentration per Run 1	61.628 ppb	107.666 %	105.119 %	62.404 ppb	63.820 ppb	93.159 %
Concentration per Run 2	61.438 ppb	105.817 %	104.613 %	61.911 ppb	62.947 ppb	79.729 %
Concentration per Run 3	63.199 ppb	107.288 %	109.641 %	59.546 ppb	60.614 ppb	78.610 %
Recovery Percentage 1	103.480 %			102.145 %	104.101 %	
Concentration RSD	1.6 %	0.9 %	2.6 %	2.5 %	2.7 %	9.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 6:35:37 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.578 %	96.993 %	0.014 ppb	7.484 ppb	2.615 ppb	-0.423 ppb	3.806 ppb	-0.593 ppb	97.430 %
Concentration per Run 1	98.032 %	90.392 %	0.014 ppb	15.592 ppb	5.936 ppb	-0.467 ppb	13.102 ppb	3.405 ppb	98.467 %
Concentration per Run 2	96.389 %	95.294 %	0.011 ppb	4.872 ppb	3.057 ppb	-0.482 ppb	-1.504 ppb	-4.786 ppb	97.961 %
Concentration per Run 3	95.313 %	105.294 %	0.018 ppb	1.989 ppb	-1.147 ppb	-0.319 ppb	-0.181 ppb	-0.397 ppb	95.863 %
Recovery Percentage 1			2.856 %	7.484 %	3.736 %	-4.225 %	3.806 %	-0.593 %	
Concentration RSD	1.4 %	7.8 %	26.1 %	95.8 %	136.2 %	21.4 %	212.3 %	691.3 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.087 ppb	0.015 ppb	0.114 ppb	8.139 ppb	0.026 ppb	0.014 ppb	0.106 ppb	0.227 ppb	95.317 %
Concentration per Run 1	-0.059 ppb	0.062 ppb	0.205 ppb	8.940 ppb	0.066 ppb	0.085 ppb	0.198 ppb	0.385 ppb	90.530 %
Concentration per Run 2	-0.094 ppb	0.014 ppb	0.091 ppb	9.593 ppb	0.016 ppb	0.053 ppb	0.109 ppb	0.229 ppb	91.587 %
Concentration per Run 3	-0.108 ppb	-0.032 ppb	0.045 ppb	5.883 ppb	-0.004 ppb	-0.095 ppb	0.011 ppb	0.068 ppb	103.833 %
Recovery Percentage 1	-1.742 %	1.477 %	11.355 %	16.277 %	5.194 %	0.718 %	10.577 %	4.542 %	
Concentration RSD	28.9 %	316.5 %	72.2 %	24.3 %	138.5 %	667.1 %	88.4 %	69.9 %	7.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.352 ppb	0.186 ppb	0.025 ppb	0.374 ppb	98.864 %	0.031 ppb	0.033 ppb	98.037 %	0.051 ppb
Concentration per Run 1	0.455 ppb	0.164 ppb	0.057 ppb	0.340 ppb	97.335 %	0.064 ppb	0.055 ppb	96.264 %	0.065 ppb
Concentration per Run 2	0.288 ppb	0.294 ppb	0.022 ppb	0.366 ppb	98.362 %	0.025 ppb	0.039 ppb	94.946 %	0.042 ppb
Concentration per Run 3	0.313 ppb	0.101 ppb	-0.004 ppb	0.417 ppb	100.894 %	0.004 ppb	0.006 ppb	102.901 %	0.046 ppb
Recovery Percentage 1	70.396 %	3.723 %	0.251 %	18.708 %		7.718 %	16.732 %		1.275 %
Concentration RSD	25.6 %	52.7 %	121.6 %	10.5 %	1.9 %	99.0 %	74.2 %	4.3 %	24.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.055 ppb	103.098 %	102.960 %	0.426 ppb	0.518 ppb	82.210 %
Concentration per Run 1	0.106 ppb	98.644 %	99.318 %	0.340 ppb	0.582 ppb	90.949 %
Concentration per Run 2	0.034 ppb	103.437 %	101.838 %	0.525 ppb	0.544 ppb	77.908 %
Concentration per Run 3	0.025 ppb	107.212 %	107.726 %	0.412 ppb	0.429 ppb	77.772 %
Recovery Percentage 1	10.989 %			42.554 %	51.825 %	
Concentration RSD	81.2 %	4.2 %	4.2 %	21.9 %	15.4 %	9.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2446922-03d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 6:44:10 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.383 %	98.824 %	0.035 ppb	4,321.861 ppb	1,328.709 ppb	29.775 ppb	1,470.021 ppb	6,998.155 ppb	95.355 %
Concentration per Run 1	95.199 %	96.078 %	0.020 ppb	4,277.237 ppb	1,332.374 ppb	29.717 ppb	1,464.386 ppb	6,827.244 ppb	94.736 %
Concentration per Run 2	96.900 %	98.235 %	0.037 ppb	4,274.181 ppb	1,308.176 ppb	27.660 ppb	1,414.007 ppb	6,908.427 ppb	95.926 %
Concentration per Run 3	94.050 %	102.157 %	0.047 ppb	4,414.165 ppb	1,345.577 ppb	31.947 ppb	1,531.671 ppb	7,258.794 ppb	95.404 %
Concentration RSD	1.5 %	3.1 %	39.2 %	1.8 %	1.4 %	7.2 %	4.0 %	3.3 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.020 ppb	0.315 ppb	50.866 ppb	1,837.767 ppb	0.068 ppb	0.708 ppb	0.498 ppb	366.212 ppb	94.822 %
Concentration per Run 1	0.026 ppb	0.324 ppb	50.336 ppb	1,860.433 ppb	0.051 ppb	0.711 ppb	0.528 ppb	363.246 ppb	93.213 %
Concentration per Run 2	0.026 ppb	0.290 ppb	50.743 ppb	1,823.792 ppb	0.064 ppb	0.697 ppb	0.473 ppb	367.347 ppb	92.094 %
Concentration per Run 3	0.008 ppb	0.331 ppb	51.519 ppb	1,829.077 ppb	0.089 ppb	0.716 ppb	0.494 ppb	368.043 ppb	99.159 %
Concentration RSD	52.2 %	6.9 %	1.2 %	1.1 %	28.0 %	1.4 %	5.6 %	0.7 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.270 ppb	0.058 ppb	44.061 ppb	0.204 ppb	95.315 %	0.019 ppb	0.044 ppb	96.867 %	0.021 ppb
Concentration per Run 1	0.194 ppb	0.028 ppb	42.714 ppb	0.174 ppb	95.064 %	0.019 ppb	0.045 ppb	95.247 %	0.016 ppb
Concentration per Run 2	0.304 ppb	0.057 ppb	44.453 ppb	0.240 ppb	95.901 %	0.020 ppb	0.050 ppb	97.368 %	0.027 ppb
Concentration per Run 3	0.313 ppb	0.087 ppb	45.015 ppb	0.196 ppb	94.978 %	0.018 ppb	0.036 ppb	97.985 %	0.021 ppb
Concentration RSD	24.5 %	51.3 %	2.7 %	16.4 %	0.5 %	6.4 %	15.1 %	1.5 %	26.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.450 ppb	103.856 %	105.893 %	0.078 ppb	0.640 ppb	82.402 %
Concentration per Run 1	9.145 ppb	102.074 %	103.437 %	0.039 ppb	0.598 ppb	93.069 %
Concentration per Run 2	9.572 ppb	104.078 %	105.455 %	0.095 ppb	0.676 ppb	77.226 %
Concentration per Run 3	9.635 ppb	105.416 %	108.786 %	0.101 ppb	0.646 ppb	76.912 %
Concentration RSD	2.8 %	1.6 %	2.6 %	43.6 %	6.1 %	11.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2446922-04d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 6:48:36 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.243 %	93.660 %	0.013 ppb	24,908.896 ppb	5,417.333 ppb	5.881 ppb	2,993.132 ppb	17,646.321 ppb	95.943 %
Concentration per Run 1	92.811 %	93.921 %	0.015 ppb	24,177.649 ppb	5,270.351 ppb	5.693 ppb	2,989.367 ppb	17,585.746 ppb	96.088 %
Concentration per Run 2	92.644 %	92.745 %	0.012 ppb	24,667.906 ppb	5,407.276 ppb	5.803 ppb	2,881.022 ppb	17,087.042 ppb	96.713 %
Concentration per Run 3	91.273 %	94.314 %	0.011 ppb	25,881.133 ppb	5,574.371 ppb	6.148 ppb	3,109.007 ppb	18,266.175 ppb	95.028 %
Concentration RSD	0.9 %	0.9 %	18.8 %	3.5 %	2.8 %	4.0 %	3.8 %	3.4 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.109 ppb	0.029 ppb	103.305 ppb	58,850.806 ppb	0.066 ppb	0.129 ppb	0.065 ppb	4.073 ppb	94.103 %
Concentration per Run 1	-0.101 ppb	0.021 ppb	102.654 ppb	63,463.023 ppb	0.077 ppb	0.187 ppb	0.070 ppb	4.125 ppb	88.630 %
Concentration per Run 2	-0.127 ppb	0.029 ppb	102.117 ppb	62,125.850 ppb	0.050 ppb	0.080 ppb	0.090 ppb	4.128 ppb	92.412 %
Concentration per Run 3	-0.098 ppb	0.037 ppb	105.145 ppb	50,963.546 ppb	0.073 ppb	0.120 ppb	0.035 ppb	3.964 ppb	101.267 %
Concentration RSD	14.7 %	26.6 %	1.6 %	11.7 %	21.8 %	42.0 %	42.9 %	2.3 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.325 ppb	0.072 ppb	179.600 ppb	0.084 ppb	92.100 %	0.001 ppb	0.008 ppb	95.649 %	0.004 ppb
Concentration per Run 1	0.348 ppb	0.102 ppb	178.663 ppb	0.050 ppb	90.652 %	0.000 ppb	0.007 ppb	92.668 %	-0.005 ppb
Concentration per Run 2	0.285 ppb	0.062 ppb	175.929 ppb	0.074 ppb	92.691 %	0.003 ppb	0.011 ppb	92.784 %	0.001 ppb
Concentration per Run 3	0.341 ppb	0.051 ppb	184.207 ppb	0.127 ppb	92.956 %	0.000 ppb	0.005 ppb	101.495 %	0.014 ppb
Concentration RSD	10.6 %	37.2 %	2.3 %	46.8 %	1.4 %	178.0 %	40.4 %	5.3 %	276.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	25.855 ppb	101.010 %	100.987 %	0.045 ppb	0.227 ppb	77.747 %
Concentration per Run 1	25.776 ppb	98.484 %	98.792 %	0.012 ppb	0.224 ppb	85.748 %
Concentration per Run 2	25.748 ppb	102.203 %	100.148 %	0.051 ppb	0.237 ppb	73.315 %
Concentration per Run 3	26.042 ppb	102.342 %	104.020 %	0.071 ppb	0.219 ppb	74.177 %
Concentration RSD	0.6 %	2.2 %	2.7 %	66.5 %	4.0 %	8.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2446922-05d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 6:53:03 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.231 %	90.980 %	0.013 ppb	28,376.262 ppb	3,977.310 ppb	55.019 ppb	3,048.436 ppb	18,711.556 ppb	94.821 %
Concentration per Run 1	91.427 %	86.274 %	0.011 ppb	27,875.962 ppb	3,932.271 ppb	53.410 ppb	3,017.738 ppb	18,795.760 ppb	94.724 %
Concentration per Run 2	91.869 %	90.196 %	0.013 ppb	29,012.240 ppb	4,091.402 ppb	55.724 ppb	3,054.384 ppb	18,722.677 ppb	94.747 %
Concentration per Run 3	90.398 %	96.471 %	0.014 ppb	28,240.585 ppb	3,908.257 ppb	55.925 ppb	3,073.187 ppb	18,616.230 ppb	94.991 %
Concentration RSD	0.8 %	5.7 %	12.0 %	2.0 %	2.5 %	2.5 %	0.9 %	0.5 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.580 ppb	0.391 ppb	37.212 ppb	60,545.875 ppb	0.110 ppb	0.360 ppb	0.160 ppb	20.214 ppb	91.365 %
Concentration per Run 1	0.551 ppb	0.414 ppb	36.607 ppb	60,462.937 ppb	0.101 ppb	0.396 ppb	0.210 ppb	20.323 ppb	88.703 %
Concentration per Run 2	0.610 ppb	0.395 ppb	37.366 ppb	60,637.254 ppb	0.109 ppb	0.364 ppb	0.147 ppb	19.459 ppb	94.514 %
Concentration per Run 3	0.579 ppb	0.365 ppb	37.663 ppb	60,537.435 ppb	0.119 ppb	0.320 ppb	0.122 ppb	20.861 ppb	90.878 %
Concentration RSD	5.1 %	6.4 %	1.5 %	0.1 %	8.0 %	10.6 %	28.4 %	3.5 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.357 ppb	0.073 ppb	122.776 ppb	0.156 ppb	90.918 %	0.001 ppb	0.011 ppb	91.797 %	0.009 ppb
Concentration per Run 1	0.362 ppb	0.060 ppb	122.612 ppb	0.115 ppb	90.838 %	0.002 ppb	0.009 ppb	91.922 %	0.000 ppb
Concentration per Run 2	0.364 ppb	0.194 ppb	123.632 ppb	0.144 ppb	90.751 %	0.000 ppb	0.017 ppb	91.506 %	0.003 ppb
Concentration per Run 3	0.346 ppb	-0.034 ppb	122.085 ppb	0.209 ppb	91.164 %	0.000 ppb	0.007 ppb	91.964 %	0.024 ppb
Concentration RSD	2.7 %	156.6 %	0.6 %	31.0 %	0.2 %	94.7 %	46.7 %	0.3 %	144.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	21.988 ppb	98.767 %	98.608 %	0.036 ppb	0.268 ppb	74.507 %
Concentration per Run 1	21.806 ppb	97.531 %	96.580 %	0.012 ppb	0.247 ppb	80.917 %
Concentration per Run 2	22.567 ppb	100.286 %	100.536 %	0.041 ppb	0.293 ppb	72.254 %
Concentration per Run 3	21.592 ppb	98.485 %	98.708 %	0.053 ppb	0.263 ppb	70.350 %
Concentration RSD	2.3 %	1.4 %	2.0 %	58.6 %	8.7 %	7.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2446922-06d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 6:57:30 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.710 %	97.451 %	0.010 ppb	14,882.673 ppb	1,712.550 ppb	6.678 ppb	1,774.269 ppb	6,189.326 ppb	94.212 %
Concentration per Run 1	93.936 %	94.902 %	0.006 ppb	13,054.228 ppb	1,772.527 ppb	7.207 ppb	1,833.922 ppb	6,522.105 ppb	94.679 %
Concentration per Run 2	93.286 %	90.392 %	0.011 ppb	16,350.991 ppb	1,722.165 ppb	6.421 ppb	1,725.019 ppb	6,132.219 ppb	95.234 %
Concentration per Run 3	90.907 %	107.059 %	0.012 ppb	15,242.799 ppb	1,642.957 ppb	6.408 ppb	1,763.867 ppb	5,913.655 ppb	92.724 %
Concentration RSD	1.7 %	8.8 %	36.3 %	11.3 %	3.8 %	6.9 %	3.1 %	5.0 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.034 ppb	0.049 ppb	43.014 ppb	15,120.232 ppb	0.030 ppb	0.095 ppb	0.083 ppb	29.335 ppb	92.219 %
Concentration per Run 1	-0.029 ppb	0.031 ppb	43.014 ppb	15,435.914 ppb	0.028 ppb	0.034 ppb	0.084 ppb	30.008 ppb	92.510 %
Concentration per Run 2	0.008 ppb	0.056 ppb	42.672 ppb	15,039.663 ppb	0.048 ppb	0.120 ppb	0.044 ppb	28.867 ppb	90.826 %
Concentration per Run 3	-0.082 ppb	0.059 ppb	43.355 ppb	14,885.120 ppb	0.013 ppb	0.130 ppb	0.121 ppb	29.129 ppb	93.322 %
Concentration RSD	131.2 %	31.9 %	0.8 %	1.9 %	60.8 %	55.4 %	46.8 %	2.0 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.264 ppb	0.011 ppb	86.281 ppb	0.041 ppb	93.426 %	0.000 ppb	0.008 ppb	92.690 %	0.011 ppb
Concentration per Run 1	0.267 ppb	-0.004 ppb	85.409 ppb	0.022 ppb	93.429 %	0.000 ppb	0.005 ppb	92.238 %	0.003 ppb
Concentration per Run 2	0.269 ppb	-0.028 ppb	86.054 ppb	0.042 ppb	93.915 %	0.000 ppb	0.009 ppb	92.938 %	0.015 ppb
Concentration per Run 3	0.255 ppb	0.065 ppb	87.380 ppb	0.058 ppb	92.933 %	-0.002 ppb	0.011 ppb	92.895 %	0.017 ppb
Concentration RSD	2.9 %	438.3 %	1.2 %	45.0 %	0.5 %	344.1 %	34.9 %	0.4 %	63.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.825 ppb	99.084 %	98.292 %	0.026 ppb	0.143 ppb	75.429 %
Concentration per Run 1	13.346 ppb	98.151 %	96.646 %	0.001 ppb	0.127 ppb	83.889 %
Concentration per Run 2	13.967 ppb	100.913 %	99.992 %	0.034 ppb	0.151 ppb	71.914 %
Concentration per Run 3	14.163 ppb	98.190 %	98.239 %	0.043 ppb	0.152 ppb	70.485 %
Concentration RSD	3.1 %	1.6 %	1.7 %	86.7 %	9.8 %	9.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check (2x ICSA)	Rack	4		
Analysis started at:	8/23/2024 7:01:58 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.623 %	81.111 %	0.015 ppb	103,164.511 ppb	50,607.170 ppb	48,983.173 ppb	47,758.896 ppb	142,754.020 ppb	86.417 %
Concentration per Run 1	82.723 %	80.980 %	0.016 ppb	103,843.759 ppb	50,013.400 ppb	48,581.653 ppb	48,484.916 ppb	144,114.350 ppb	85.426 %
Concentration per Run 2	82.888 %	80.000 %	0.017 ppb	101,385.672 ppb	49,926.536 ppb	47,830.740 ppb	45,937.147 ppb	140,863.966 ppb	87.472 %
Concentration per Run 3	82.257 %	82.353 %	0.012 ppb	104,264.102 ppb	51,881.575 ppb	50,537.125 ppb	48,854.626 ppb	143,283.743 ppb	86.353 %
Concentration RSD	0.4 %	1.5 %	15.4 %	1.5 %	2.2 %	2.9 %	3.3 %	1.2 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.051 ppb	0.779 ppb	2.404 ppb	100,855.406 ppb	1.128 ppb	1.451 ppb	0.591 ppb	1.238 ppb	85.140 %
Concentration per Run 1	-0.071 ppb	0.706 ppb	2.608 ppb	100,332.404 ppb	1.153 ppb	1.364 ppb	0.553 ppb	1.361 ppb	86.809 %
Concentration per Run 2	-0.028 ppb	0.803 ppb	2.054 ppb	101,139.650 ppb	1.166 ppb	1.558 ppb	0.632 ppb	1.179 ppb	80.212 %
Concentration per Run 3	-0.055 ppb	0.827 ppb	2.550 ppb	101,094.166 ppb	1.065 ppb	1.431 ppb	0.587 ppb	1.175 ppb	88.398 %
Concentration RSD	42.2 %	8.3 %	12.7 %	0.4 %	4.8 %	6.8 %	6.7 %	8.5 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.435 ppb	1.638 ppb	1.209 ppb	1,062.483 ppb	81.695 %	0.010 ppb	0.279 ppb	83.224 %	0.089 ppb
Concentration per Run 1	0.383 ppb	1.613 ppb	1.181 ppb	1,054.238 ppb	82.092 %	0.012 ppb	0.297 ppb	82.042 %	0.071 ppb
Concentration per Run 2	0.484 ppb	1.816 ppb	1.256 ppb	1,081.280 ppb	80.988 %	0.005 ppb	0.283 ppb	83.386 %	0.092 ppb
Concentration per Run 3	0.439 ppb	1.486 ppb	1.189 ppb	1,051.931 ppb	82.005 %	0.013 ppb	0.258 ppb	84.244 %	0.102 ppb
Concentration RSD	11.6 %	10.1 %	3.4 %	1.5 %	0.8 %	43.1 %	7.2 %	1.3 %	17.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.623 ppb	93.258 %	93.180 %	0.029 ppb	1.133 ppb	66.849 %
Concentration per Run 1	0.588 ppb	93.375 %	93.664 %	0.001 ppb	0.959 ppb	76.480 %
Concentration per Run 2	0.622 ppb	92.552 %	93.511 %	0.041 ppb	1.191 ppb	62.764 %
Concentration per Run 3	0.657 ppb	93.848 %	92.364 %	0.045 ppb	1.247 ppb	61.304 %
Concentration RSD	5.5 %	0.7 %	0.8 %	84.2 %	13.5 %	12.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446863-02 6020SL	Rack	1		
Analysis started at:	8/23/2024 7:08:01 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.678 %	101.830 %	0.012 ppb	129,150.185 ppb	21,785.687 ppb	34.284 ppb	16,532.920 ppb	96,008.113 ppb	105.854 %
Concentration per Run 1	100.288 %	93.137 %	0.016 ppb	132,669.469 ppb	22,466.820 ppb	42.536 ppb	17,033.283 ppb	98,735.700 ppb	106.163 %
Concentration per Run 2	99.466 %	103.922 %	0.012 ppb	125,220.315 ppb	21,023.780 ppb	31.694 ppb	15,938.107 ppb	92,962.592 ppb	105.629 %
Concentration per Run 3	99.280 %	108.431 %	0.008 ppb	129,560.772 ppb	21,866.461 ppb	28.622 ppb	16,627.371 ppb	96,326.047 ppb	105.771 %
Concentration RSD	0.5 %	7.7 %	33.5 %	2.9 %	3.3 %	21.3 %	3.3 %	3.0 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.792 ppb	0.737 ppb	372.427 ppb	3,458.805 ppb	0.169 ppb	0.217 ppb	0.197 ppb	1.068 ppb	92.194 %
Concentration per Run 1	1.745 ppb	0.786 ppb	368.120 ppb	3,467.607 ppb	0.145 ppb	0.209 ppb	0.253 ppb	1.132 ppb	90.243 %
Concentration per Run 2	1.680 ppb	0.716 ppb	375.421 ppb	3,425.724 ppb	0.200 ppb	0.271 ppb	0.147 ppb	0.998 ppb	92.754 %
Concentration per Run 3	1.951 ppb	0.709 ppb	373.741 ppb	3,483.083 ppb	0.164 ppb	0.171 ppb	0.191 ppb	1.073 ppb	93.585 %
Concentration RSD	7.9 %	5.7 %	1.0 %	0.9 %	16.4 %	23.2 %	27.1 %	6.3 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.243 ppb	0.102 ppb	624.880 ppb	1.681 ppb	87.356 %	-0.001 ppb	0.003 ppb	88.336 %	0.112 ppb
Concentration per Run 1	0.255 ppb	0.211 ppb	620.020 ppb	1.640 ppb	87.340 %	-0.002 ppb	0.001 ppb	90.242 %	0.102 ppb
Concentration per Run 2	0.276 ppb	-0.009 ppb	617.896 ppb	1.505 ppb	84.453 %	0.001 ppb	0.006 ppb	83.380 %	0.117 ppb
Concentration per Run 3	0.198 ppb	0.105 ppb	636.724 ppb	1.898 ppb	90.274 %	-0.001 ppb	0.001 ppb	91.387 %	0.117 ppb
Concentration RSD	16.7 %	107.7 %	1.7 %	11.9 %	3.3 %	162.2 %	89.2 %	4.9 %	7.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.166 ppb	97.346 %	96.517 %	0.014 ppb	0.130 ppb	68.219 %
Concentration per Run 1	1.186 ppb	97.618 %	97.203 %	-0.001 ppb	0.119 ppb	77.510 %
Concentration per Run 2	1.126 ppb	95.617 %	94.465 %	0.011 ppb	0.131 ppb	62.989 %
Concentration per Run 3	1.185 ppb	98.802 %	97.884 %	0.031 ppb	0.139 ppb	64.159 %
Concentration RSD	2.9 %	1.7 %	1.9 %	118.1 %	7.6 %	11.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	28	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446863-03 6020SL	Rack	1		
Analysis started at:	8/23/2024 7:12:29 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.000 %	97.843 %	0.029 ppb	637,547.215 ppb	36,123.975 ppb	47.259 ppb	33,314.608 ppb	31,631.340 ppb	94.175 %
Concentration per Run 1	86.504 %	97.059 %	0.033 ppb	635,829.422 ppb	36,202.507 ppb	48.157 ppb	33,705.340 ppb	31,778.563 ppb	94.904 %
Concentration per Run 2	85.624 %	100.784 %	0.027 ppb	618,804.010 ppb	35,064.607 ppb	45.934 ppb	32,174.302 ppb	30,127.628 ppb	94.100 %
Concentration per Run 3	85.871 %	95.686 %	0.028 ppb	658,008.213 ppb	37,104.811 ppb	47.685 ppb	34,064.182 ppb	32,987.830 ppb	93.522 %
Concentration RSD	0.5 %	2.7 %	10.9 %	3.1 %	2.8 %	2.5 %	3.0 %	4.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	6.183 ppb	2.307 ppb	65.475 ppb	1,112.810 ppb	0.513 ppb	0.803 ppb	0.264 ppb	0.900 ppb	92.744 %
Concentration per Run 1	5.823 ppb	2.361 ppb	65.040 ppb	1,108.643 ppb	0.523 ppb	0.698 ppb	0.281 ppb	0.918 ppb	92.284 %
Concentration per Run 2	6.189 ppb	2.172 ppb	64.315 ppb	1,098.676 ppb	0.534 ppb	0.872 ppb	0.252 ppb	0.852 ppb	93.444 %
Concentration per Run 3	6.536 ppb	2.388 ppb	67.070 ppb	1,131.109 ppb	0.482 ppb	0.839 ppb	0.257 ppb	0.931 ppb	92.504 %
Concentration RSD	5.8 %	5.1 %	2.2 %	1.5 %	5.3 %	11.5 %	5.9 %	4.7 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.421 ppb	0.119 ppb	330.974 ppb	0.949 ppb	86.470 %	0.003 ppb	0.007 ppb	85.881 %	0.036 ppb
Concentration per Run 1	0.469 ppb	0.059 ppb	328.697 ppb	0.893 ppb	87.312 %	0.005 ppb	0.008 ppb	87.305 %	0.043 ppb
Concentration per Run 2	0.357 ppb	0.064 ppb	330.521 ppb	0.846 ppb	85.036 %	0.003 ppb	0.008 ppb	84.807 %	0.028 ppb
Concentration per Run 3	0.437 ppb	0.235 ppb	333.705 ppb	1.107 ppb	87.062 %	0.002 ppb	0.006 ppb	85.533 %	0.038 ppb
Concentration RSD	13.7 %	84.2 %	0.8 %	14.7 %	1.4 %	41.8 %	17.1 %	1.5 %	20.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.726 ppb	93.540 %	90.252 %	0.020 ppb	0.252 ppb	59.849 %
Concentration per Run 1	3.405 ppb	94.973 %	91.157 %	0.001 ppb	0.217 ppb	69.033 %
Concentration per Run 2	3.761 ppb	92.334 %	89.586 %	0.025 ppb	0.276 ppb	56.415 %
Concentration per Run 3	4.014 ppb	93.313 %	90.012 %	0.035 ppb	0.264 ppb	54.099 %
Concentration RSD	8.2 %	1.4 %	0.9 %	84.3 %	12.4 %	13.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446863-04 6020SL	Rack	1		
Analysis started at:	8/23/2024 7:16:57 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.777 %	108.431 %	0.011 ppb	121,005.239 ppb	6,395.864 ppb	11.119 ppb	8,027.121 ppb	50,212.202 ppb	111.651 %
Concentration per Run 1	103.275 %	104.118 %	0.015 ppb	120,344.652 ppb	6,406.970 ppb	14.417 ppb	7,984.898 ppb	50,493.762 ppb	110.940 %
Concentration per Run 2	102.275 %	109.216 %	0.010 ppb	123,818.881 ppb	6,541.457 ppb	10.871 ppb	8,379.929 ppb	51,603.014 ppb	111.258 %
Concentration per Run 3	102.781 %	111.961 %	0.008 ppb	118,852.184 ppb	6,239.165 ppb	8.068 ppb	7,716.534 ppb	48,539.830 ppb	112.754 %
Concentration RSD	0.5 %	3.7 %	30.5 %	2.1 %	2.4 %	28.6 %	4.2 %	3.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.634 ppb	0.725 ppb	0.494 ppb	315.206 ppb	2.013 ppb	1.455 ppb	0.896 ppb	0.906 ppb	105.883 %
Concentration per Run 1	0.550 ppb	0.729 ppb	0.539 ppb	323.597 ppb	1.940 ppb	1.495 ppb	0.849 ppb	0.909 ppb	102.776 %
Concentration per Run 2	0.691 ppb	0.737 ppb	0.608 ppb	308.533 ppb	2.058 ppb	1.369 ppb	0.872 ppb	0.892 ppb	110.892 %
Concentration per Run 3	0.663 ppb	0.708 ppb	0.334 ppb	313.487 ppb	2.040 ppb	1.502 ppb	0.969 ppb	0.916 ppb	103.981 %
Concentration RSD	11.8 %	2.1 %	28.8 %	2.4 %	3.2 %	5.1 %	7.1 %	1.4 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.031 ppb	0.496 ppb	367.531 ppb	1.232 ppb	100.264 %	0.001 ppb	0.009 ppb	98.963 %	0.051 ppb
Concentration per Run 1	1.059 ppb	0.523 ppb	354.907 ppb	1.205 ppb	98.865 %	0.001 ppb	0.012 ppb	96.032 %	0.053 ppb
Concentration per Run 2	1.015 ppb	0.333 ppb	381.314 ppb	1.194 ppb	102.459 %	0.000 ppb	0.006 ppb	103.282 %	0.042 ppb
Concentration per Run 3	1.018 ppb	0.633 ppb	366.371 ppb	1.296 ppb	99.469 %	0.003 ppb	0.009 ppb	97.574 %	0.059 ppb
Concentration RSD	2.4 %	30.6 %	3.6 %	4.6 %	1.9 %	106.7 %	33.3 %	3.9 %	17.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.049 ppb	103.846 %	101.456 %	0.029 ppb	0.077 ppb	71.684 %
Concentration per Run 1	1.038 ppb	101.376 %	98.604 %	0.014 ppb	0.071 ppb	80.682 %
Concentration per Run 2	1.214 ppb	105.920 %	105.469 %	0.032 ppb	0.074 ppb	68.668 %
Concentration per Run 3	0.896 ppb	104.243 %	100.297 %	0.042 ppb	0.086 ppb	65.701 %
Concentration RSD	15.2 %	2.2 %	3.5 %	49.3 %	10.2 %	11.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446863-05 6020SL	Rack	1		
Analysis started at:	8/23/2024 7:21:25 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.443 %	103.529 %	0.019 ppb	355,459.199 ppb	24,747.495 ppb	19.170 ppb	22,454.104 ppb	47,729.780 ppb	103.078 %
Concentration per Run 1	95.750 %	102.941 %	0.018 ppb	349,602.956 ppb	24,460.863 ppb	20.608 ppb	22,257.229 ppb	47,686.270 ppb	102.762 %
Concentration per Run 2	95.454 %	103.529 %	0.019 ppb	360,077.895 ppb	25,021.541 ppb	17.746 ppb	22,602.672 ppb	47,979.724 ppb	103.254 %
Concentration per Run 3	95.124 %	104.118 %	0.019 ppb	356,696.746 ppb	24,760.082 ppb	19.154 ppb	22,502.411 ppb	47,523.347 ppb	103.218 %
Concentration RSD	0.3 %	0.6 %	0.4 %	1.5 %	1.1 %	7.5 %	0.8 %	0.5 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	3.750 ppb	1.384 ppb	128.077 ppb	2,091.593 ppb	0.652 ppb	0.359 ppb	0.213 ppb	1.070 ppb	97.027 %
Concentration per Run 1	3.476 ppb	1.332 ppb	128.424 ppb	2,076.516 ppb	0.660 ppb	0.259 ppb	0.227 ppb	1.168 ppb	96.298 %
Concentration per Run 2	3.945 ppb	1.372 ppb	130.416 ppb	2,139.710 ppb	0.652 ppb	0.474 ppb	0.166 ppb	0.977 ppb	94.984 %
Concentration per Run 3	3.830 ppb	1.447 ppb	125.393 ppb	2,058.553 ppb	0.645 ppb	0.344 ppb	0.246 ppb	1.065 ppb	99.800 %
Concentration RSD	6.5 %	4.2 %	2.0 %	2.0 %	1.2 %	30.1 %	19.5 %	8.9 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.236 ppb	0.215 ppb	383.546 ppb	0.366 ppb	92.093 %	0.002 ppb	-0.001 ppb	89.328 %	0.061 ppb
Concentration per Run 1	0.253 ppb	0.187 ppb	379.293 ppb	0.383 ppb	92.720 %	0.002 ppb	-0.001 ppb	89.562 %	0.063 ppb
Concentration per Run 2	0.210 ppb	0.185 ppb	387.829 ppb	0.301 ppb	91.131 %	0.004 ppb	-0.001 ppb	89.019 %	0.056 ppb
Concentration per Run 3	0.245 ppb	0.274 ppb	383.515 ppb	0.416 ppb	92.428 %	0.001 ppb	-0.001 ppb	89.405 %	0.063 ppb
Concentration RSD	9.5 %	23.5 %	1.1 %	16.2 %	0.9 %	75.6 %	0.0 %	0.3 %	6.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.677 ppb	98.255 %	95.169 %	0.011 ppb	0.089 ppb	65.410 %
Concentration per Run 1	2.778 ppb	97.878 %	93.971 %	-0.005 ppb	0.080 ppb	75.076 %
Concentration per Run 2	2.551 ppb	97.316 %	94.690 %	0.016 ppb	0.097 ppb	61.708 %
Concentration per Run 3	2.702 ppb	99.571 %	96.845 %	0.023 ppb	0.091 ppb	59.446 %
Concentration RSD	4.3 %	1.2 %	1.6 %	133.0 %	9.6 %	12.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446863-06 6020SL	Rack	1		
Analysis started at:	8/23/2024 7:25:54 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.698 %	107.190 %	0.008 ppb	123,690.216 ppb	6,793.845 ppb	4.903 ppb	8,296.228 ppb	54,640.822 ppb	112.025 %
Concentration per Run 1	104.408 %	104.314 %	0.008 ppb	121,278.124 ppb	6,608.481 ppb	5.303 ppb	8,063.077 ppb	53,419.247 ppb	112.126 %
Concentration per Run 2	103.007 %	111.373 %	0.007 ppb	122,387.431 ppb	6,840.942 ppb	5.106 ppb	8,579.486 ppb	55,749.331 ppb	111.507 %
Concentration per Run 3	103.679 %	105.882 %	0.008 ppb	127,405.092 ppb	6,932.113 ppb	4.300 ppb	8,246.120 ppb	54,753.890 ppb	112.442 %
Concentration RSD	0.7 %	3.5 %	12.0 %	2.6 %	2.5 %	10.8 %	3.2 %	2.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.761 ppb	0.762 ppb	0.388 ppb	335.852 ppb	2.078 ppb	1.313 ppb	0.838 ppb	1.307 ppb	106.178 %
Concentration per Run 1	0.799 ppb	0.762 ppb	0.361 ppb	316.788 ppb	2.048 ppb	1.328 ppb	0.891 ppb	1.335 ppb	104.218 %
Concentration per Run 2	0.802 ppb	0.746 ppb	0.335 ppb	338.385 ppb	2.141 ppb	1.347 ppb	0.758 ppb	1.228 ppb	111.003 %
Concentration per Run 3	0.682 ppb	0.776 ppb	0.467 ppb	352.384 ppb	2.044 ppb	1.263 ppb	0.864 ppb	1.358 ppb	103.314 %
Concentration RSD	8.9 %	2.0 %	18.1 %	5.3 %	2.6 %	3.4 %	8.4 %	5.3 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.942 ppb	0.494 ppb	384.978 ppb	0.937 ppb	101.431 %	0.003 ppb	0.009 ppb	99.509 %	23.193 ppb
Concentration per Run 1	0.893 ppb	0.539 ppb	368.919 ppb	1.024 ppb	101.734 %	0.003 ppb	0.007 ppb	96.299 %	69.507 ppb
Concentration per Run 2	0.859 ppb	0.259 ppb	399.801 ppb	0.940 ppb	102.363 %	0.002 ppb	0.001 ppb	104.845 %	0.038 ppb
Concentration per Run 3	1.073 ppb	0.683 ppb	386.215 ppb	0.846 ppb	100.196 %	0.003 ppb	0.018 ppb	97.382 %	0.035 ppb
Concentration RSD	12.2 %	43.6 %	4.0 %	9.5 %	1.1 %	26.3 %	98.9 %	4.7 %	172.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.141 ppb	105.794 %	102.584 %	0.030 ppb	0.038 ppb	72.346 %
Concentration per Run 1	1.137 ppb	105.022 %	100.065 %	0.011 ppb	0.034 ppb	82.136 %
Concentration per Run 2	1.102 ppb	108.319 %	107.213 %	0.038 ppb	0.038 ppb	68.662 %
Concentration per Run 3	1.186 ppb	104.040 %	100.473 %	0.041 ppb	0.041 ppb	66.242 %
Concentration RSD	3.7 %	2.1 %	3.9 %	54.4 %	10.2 %	11.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 7:34:02 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.780 %	104.967 %	65.097 ppb	6,237.952 ppb	6,185.407 ppb	61.641 ppb	6,091.162 ppb	6,044.473 ppb	107.580 %
Concentration per Run 1	104.887 %	105.490 %	64.211 ppb	6,281.424 ppb	6,310.192 ppb	61.476 ppb	6,049.680 ppb	5,968.256 ppb	108.381 %
Concentration per Run 2	103.756 %	104.510 %	65.420 ppb	6,388.942 ppb	6,266.077 ppb	63.718 ppb	6,240.941 ppb	6,144.332 ppb	107.731 %
Concentration per Run 3	102.698 %	104.902 %	65.659 ppb	6,043.491 ppb	5,979.953 ppb	59.728 ppb	5,982.867 ppb	6,020.830 ppb	106.628 %
Recovery Percentage 1			108.494 %	103.966 %	103.090 %	102.735 %	101.519 %	100.741 %	
Concentration RSD	1.1 %	0.5 %	1.2 %	2.8 %	2.9 %	3.2 %	2.2 %	1.5 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.703 ppb	62.397 ppb	61.228 ppb	6,263.216 ppb	65.176 ppb	64.577 ppb	65.736 ppb	65.560 ppb	98.883 %
Concentration per Run 1	59.700 ppb	62.083 ppb	61.650 ppb	6,319.478 ppb	65.897 ppb	64.967 ppb	67.565 ppb	65.436 ppb	103.822 %
Concentration per Run 2	60.914 ppb	64.214 ppb	62.512 ppb	6,441.690 ppb	66.948 ppb	66.058 ppb	66.268 ppb	67.094 ppb	97.569 %
Concentration per Run 3	58.494 ppb	60.895 ppb	59.521 ppb	6,028.479 ppb	62.683 ppb	62.706 ppb	63.375 ppb	64.149 ppb	95.257 %
Recovery Percentage 1	99.505 %	103.995 %	102.046 %	104.387 %	108.627 %	107.628 %	109.560 %	109.266 %	
Concentration RSD	2.0 %	2.7 %	2.5 %	3.4 %	3.4 %	2.6 %	3.3 %	2.3 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	64.129 ppb	61.529 ppb	57.242 ppb	59.582 ppb	103.168 %	59.210 ppb	61.650 ppb	100.308 %	60.928 ppb
Concentration per Run 1	63.379 ppb	60.068 ppb	57.125 ppb	59.644 ppb	103.906 %	59.800 ppb	61.851 ppb	101.535 %	61.437 ppb
Concentration per Run 2	65.565 ppb	62.108 ppb	57.476 ppb	59.552 ppb	104.035 %	59.075 ppb	61.309 ppb	101.308 %	60.052 ppb
Concentration per Run 3	63.441 ppb	62.411 ppb	57.126 ppb	59.551 ppb	101.564 %	58.754 ppb	61.791 ppb	98.083 %	61.296 ppb
Recovery Percentage 1	106.881 %	102.549 %	95.403 %	99.304 %		98.683 %	102.750 %		101.547 %
Concentration RSD	1.9 %	2.1 %	0.4 %	0.1 %	1.3 %	0.9 %	0.5 %	1.9 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.436 ppb	107.844 %	106.261 %	62.434 ppb	62.502 ppb	78.221 %
Concentration per Run 1	62.044 ppb	108.891 %	107.173 %	63.383 ppb	63.056 ppb	89.899 %
Concentration per Run 2	61.725 ppb	107.746 %	106.214 %	62.141 ppb	62.558 ppb	73.889 %
Concentration per Run 3	60.539 ppb	106.894 %	105.397 %	61.779 ppb	61.891 ppb	70.876 %
Recovery Percentage 1	102.394 %			104.057 %	104.169 %	
Concentration RSD	1.3 %	0.9 %	0.8 %	1.3 %	0.9 %	13.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 7:38:33 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.375 %	103.072 %	0.007 ppb	32.133 ppb	-1.008 ppb	-0.493 ppb	-1.795 ppb	-3.738 ppb	106.990 %
Concentration per Run 1	105.564 %	104.118 %	0.007 ppb	37.003 ppb	-0.778 ppb	-0.391 ppb	-2.494 ppb	-1.406 ppb	107.355 %
Concentration per Run 2	105.909 %	103.922 %	0.007 ppb	28.488 ppb	-1.313 ppb	-0.672 ppb	1.943 ppb	-4.938 ppb	107.590 %
Concentration per Run 3	104.651 %	101.177 %	0.007 ppb	30.908 ppb	-0.933 ppb	-0.417 ppb	-4.834 ppb	-4.870 ppb	106.026 %
Recovery Percentage 1			1.449 %	32.133 %	-1.440 %	-4.935 %	-1.795 %	-3.738 %	
Concentration RSD	0.6 %	1.6 %	3.2 %	13.7 %	27.3 %	31.5 %	191.8 %	54.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.073 ppb	-0.017 ppb	0.001 ppb	6.061 ppb	-0.001 ppb	-0.020 ppb	0.039 ppb	-0.212 ppb	97.443 %
Concentration per Run 1	-0.070 ppb	0.000 ppb	-0.021 ppb	5.652 ppb	0.005 ppb	-0.037 ppb	0.051 ppb	-0.193 ppb	100.997 %
Concentration per Run 2	-0.074 ppb	-0.025 ppb	0.001 ppb	6.772 ppb	-0.004 ppb	-0.007 ppb	0.061 ppb	-0.223 ppb	95.400 %
Concentration per Run 3	-0.074 ppb	-0.027 ppb	0.022 ppb	5.759 ppb	-0.004 ppb	-0.015 ppb	0.004 ppb	-0.220 ppb	95.933 %
Recovery Percentage 1	-1.450 %	-1.724 %	0.087 %	12.122 %	-0.164 %	-0.992 %	3.855 %	-4.235 %	
Concentration RSD	3.5 %	88.9 %	2,462.8 %	10.2 %	624.6 %	79.1 %	79.6 %	7.8 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.129 ppb	0.099 ppb	-0.004 ppb	0.380 ppb	102.042 %	0.005 ppb	0.004 ppb	99.243 %	0.014 ppb
Concentration per Run 1	0.085 ppb	0.077 ppb	-0.006 ppb	0.269 ppb	102.126 %	0.005 ppb	0.001 ppb	102.457 %	0.008 ppb
Concentration per Run 2	0.182 ppb	0.100 ppb	-0.002 ppb	0.420 ppb	101.693 %	0.006 ppb	0.005 ppb	97.735 %	0.004 ppb
Concentration per Run 3	0.121 ppb	0.119 ppb	-0.005 ppb	0.451 ppb	102.309 %	0.004 ppb	0.005 ppb	97.538 %	0.029 ppb
Recovery Percentage 1	25.899 %	1.971 %	-0.043 %	18.991 %		1.229 %	1.808 %		0.338 %
Concentration RSD	37.8 %	21.5 %	56.5 %	25.6 %	0.3 %	20.6 %	58.9 %	2.8 %	100.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.007 ppb	105.324 %	104.450 %	0.302 ppb	0.023 ppb	76.823 %
Concentration per Run 1	0.007 ppb	106.265 %	106.276 %	0.233 ppb	0.021 ppb	89.619 %
Concentration per Run 2	-0.017 ppb	103.400 %	102.979 %	0.379 ppb	0.030 ppb	72.467 %
Concentration per Run 3	-0.011 ppb	106.307 %	104.096 %	0.293 ppb	0.018 ppb	68.381 %
Recovery Percentage 1	-1.407 %			30.164 %	2.293 %	
Concentration RSD	177.0 %	1.6 %	1.6 %	24.2 %	27.5 %	14.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check (1/.1ppm)	Rack	4		
Analysis started at:	8/23/2024 7:44:25 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.682 %	105.490 %	0.011 ppb	29.628 ppb	-0.199 ppb	0.472 ppb	5.655 ppb	-3.192 ppb	110.264 %
Concentration per Run 1	107.041 %	105.098 %	0.010 ppb	26.251 ppb	-0.237 ppb	0.627 ppb	3.576 ppb	-5.208 ppb	109.398 %
Concentration per Run 2	108.603 %	100.784 %	0.006 ppb	34.435 ppb	-0.750 ppb	0.460 ppb	9.287 ppb	-2.577 ppb	111.005 %
Concentration per Run 3	107.403 %	110.588 %	0.017 ppb	28.197 ppb	0.390 ppb	0.330 ppb	4.102 ppb	-1.790 ppb	110.391 %
Concentration RSD	0.8 %	4.7 %	50.0 %	14.4 %	286.8 %	31.5 %	55.8 %	56.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.044 ppb	-0.007 ppb	1,072.856 ppb	1.790 ppb	0.005 ppb	1,073.475 ppb	1,116.373 ppb	1,096.574 ppb	98.991 %
Concentration per Run 1	-0.045 ppb	0.006 ppb	1,074.281 ppb	1.345 ppb	-0.002 ppb	1,079.245 ppb	1,115.955 ppb	1,083.439 ppb	98.009 %
Concentration per Run 2	-0.036 ppb	-0.028 ppb	1,082.420 ppb	1.977 ppb	0.010 ppb	1,081.346 ppb	1,125.606 ppb	1,114.871 ppb	98.309 %
Concentration per Run 3	-0.049 ppb	0.001 ppb	1,061.868 ppb	2.047 ppb	0.007 ppb	1,059.834 ppb	1,107.559 ppb	1,091.412 ppb	100.655 %
Concentration RSD	15.0 %	272.1 %	1.0 %	21.6 %	114.8 %	1.1 %	0.8 %	1.5 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	95.490 ppb	0.194 ppb	0.021 ppb	0.081 ppb	102.191 %	0.016 ppb	0.005 ppb	97.141 %	0.100 ppb
Concentration per Run 1	95.512 ppb	0.234 ppb	0.023 ppb	0.021 ppb	104.698 %	0.017 ppb	0.005 ppb	98.944 %	0.076 ppb
Concentration per Run 2	95.995 ppb	0.181 ppb	0.019 ppb	0.068 ppb	98.558 %	0.014 ppb	0.005 ppb	91.542 %	0.115 ppb
Concentration per Run 3	94.963 ppb	0.168 ppb	0.020 ppb	0.153 ppb	103.316 %	0.017 ppb	0.006 ppb	100.937 %	0.107 ppb
Concentration RSD	0.5 %	17.8 %	11.5 %	83.3 %	3.2 %	11.2 %	16.5 %	5.1 %	20.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1,032.568 ppb	104.966 %	102.315 %	0.076 ppb	1,285.104 ppb	77.255 %
Concentration per Run 1	1,028.385 ppb	105.836 %	104.052 %	0.034 ppb	1,123.572 ppb	88.446 %
Concentration per Run 2	1,027.604 ppb	102.790 %	99.185 %	0.097 ppb	1,351.051 ppb	71.634 %
Concentration per Run 3	1,041.716 ppb	106.272 %	103.707 %	0.098 ppb	1,380.690 ppb	71.684 %
Concentration RSD	0.8 %	1.8 %	2.7 %	47.5 %	10.9 %	12.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2446713-02 6020TL	Rack	1		
Analysis started at:	8/23/2024 7:52:58 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.169 %	109.020 %	0.012 ppb	137,861.647 ppb	41,209.171 ppb	343.617 ppb	2,256.956 ppb	118,127.412 ppb	108.951 %
Concentration per Run 1	100.959 %	109.412 %	0.011 ppb	139,234.689 ppb	41,897.341 ppb	354.032 ppb	2,375.780 ppb	123,649.655 ppb	108.447 %
Concentration per Run 2	102.152 %	103.922 %	0.014 ppb	142,217.062 ppb	42,052.149 ppb	348.328 ppb	2,219.020 ppb	117,520.501 ppb	109.889 %
Concentration per Run 3	100.396 %	113.726 %	0.013 ppb	132,133.189 ppb	39,678.021 ppb	328.489 ppb	2,176.068 ppb	113,212.081 ppb	108.515 %
Concentration RSD	0.9 %	4.5 %	12.7 %	3.8 %	3.2 %	3.9 %	4.7 %	4.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	3.083 ppb	0.330 ppb	215.300 ppb	592.651 ppb	0.350 ppb	1.733 ppb	1.567 ppb	2.919 ppb	99.939 %
Concentration per Run 1	3.153 ppb	0.301 ppb	216.238 ppb	592.014 ppb	0.337 ppb	1.618 ppb	1.529 ppb	2.839 ppb	104.048 %
Concentration per Run 2	2.984 ppb	0.331 ppb	216.714 ppb	605.658 ppb	0.363 ppb	2.098 ppb	1.509 ppb	2.923 ppb	98.193 %
Concentration per Run 3	3.110 ppb	0.358 ppb	212.949 ppb	580.279 ppb	0.350 ppb	1.482 ppb	1.664 ppb	2.995 ppb	97.575 %
Concentration RSD	2.8 %	8.7 %	1.0 %	2.1 %	3.8 %	18.7 %	5.4 %	2.7 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.234 ppb	0.325 ppb	443.664 ppb	1.051 ppb	93.620 %	0.010 ppb	0.040 ppb	93.388 %	0.051 ppb
Concentration per Run 1	1.181 ppb	0.424 ppb	454.547 ppb	0.972 ppb	95.778 %	0.006 ppb	0.051 ppb	98.048 %	0.057 ppb
Concentration per Run 2	1.210 ppb	0.235 ppb	441.558 ppb	1.032 ppb	94.196 %	0.012 ppb	0.032 ppb	94.715 %	0.049 ppb
Concentration per Run 3	1.312 ppb	0.314 ppb	434.887 ppb	1.150 ppb	90.885 %	0.011 ppb	0.036 ppb	87.401 %	0.047 ppb
Concentration RSD	5.6 %	29.2 %	2.3 %	8.6 %	2.7 %	35.4 %	25.8 %	5.8 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	323.034 ppb	103.164 %	102.807 %	0.046 ppb	0.579 ppb	68.468 %
Concentration per Run 1	327.646 ppb	108.140 %	111.005 %	0.016 ppb	0.505 ppb	81.257 %
Concentration per Run 2	319.951 ppb	103.511 %	102.871 %	0.048 ppb	0.618 ppb	64.702 %
Concentration per Run 3	321.504 ppb	97.839 %	94.544 %	0.073 ppb	0.613 ppb	59.443 %
Concentration RSD	1.3 %	5.0 %	8.0 %	62.1 %	11.0 %	16.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2446713-03 6020TL	Rack	1		
Analysis started at:	8/23/2024 7:57:28 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.727 %	102.157 %	0.028 ppb	413,555.474 ppb	52,219.986 ppb	283.373 ppb	4,641.825 ppb	292,345.124 ppb	98.566 %
Concentration per Run 1	91.325 %	108.039 %	0.026 ppb	406,193.005 ppb	43,006.521 ppb	283.043 ppb	4,699.659 ppb	295,335.038 ppb	99.345 %
Concentration per Run 2	88.971 %	101.961 %	0.031 ppb	403,384.296 ppb	55,068.456 ppb	278.480 ppb	4,554.712 ppb	284,929.731 ppb	98.170 %
Concentration per Run 3	88.884 %	96.471 %	0.025 ppb	431,089.120 ppb	58,584.982 ppb	288.594 ppb	4,671.103 ppb	296,770.604 ppb	98.182 %
Concentration RSD	1.5 %	5.7 %	12.4 %	3.7 %	15.6 %	1.8 %	1.7 %	2.2 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.020 ppb	1.196 ppb	3,494.583 ppb	533.827 ppb	0.576 ppb	3.105 ppb	2.908 ppb	9.459 ppb	94.483 %
Concentration per Run 1	1.846 ppb	1.134 ppb	3,490.281 ppb	537.608 ppb	0.612 ppb	3.022 ppb	2.836 ppb	9.280 ppb	97.570 %
Concentration per Run 2	2.276 ppb	1.219 ppb	3,439.927 ppb	526.370 ppb	0.573 ppb	3.016 ppb	3.026 ppb	9.720 ppb	93.518 %
Concentration per Run 3	1.938 ppb	1.236 ppb	3,553.541 ppb	537.505 ppb	0.542 ppb	3.278 ppb	2.862 ppb	9.377 ppb	92.363 %
Concentration RSD	11.2 %	4.6 %	1.6 %	1.2 %	6.1 %	4.8 %	3.6 %	2.4 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.699 ppb	0.271 ppb	828.181 ppb	0.443 ppb	88.279 %	0.029 ppb	0.606 ppb	91.218 %	0.185 ppb
Concentration per Run 1	0.656 ppb	0.163 ppb	849.022 ppb	0.381 ppb	91.303 %	0.030 ppb	0.561 ppb	96.551 %	0.192 ppb
Concentration per Run 2	0.725 ppb	0.304 ppb	812.729 ppb	0.467 ppb	86.891 %	0.029 ppb	0.632 ppb	87.549 %	0.168 ppb
Concentration per Run 3	0.717 ppb	0.347 ppb	822.790 ppb	0.480 ppb	86.644 %	0.027 ppb	0.627 ppb	89.556 %	0.196 ppb
Concentration RSD	5.4 %	35.6 %	2.3 %	12.2 %	3.0 %	5.2 %	6.5 %	5.2 %	8.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	279.941 ppb	98.484 %	96.458 %	0.034 ppb	1.326 ppb	61.622 %
Concentration per Run 1	280.045 ppb	101.967 %	100.832 %	0.011 ppb	1.123 ppb	72.050 %
Concentration per Run 2	281.252 ppb	97.118 %	93.637 %	0.039 ppb	1.401 ppb	57.828 %
Concentration per Run 3	278.526 ppb	96.367 %	94.905 %	0.051 ppb	1.455 ppb	54.988 %
Concentration RSD	0.5 %	3.1 %	4.0 %	60.6 %	13.4 %	14.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xL2446713-04 6020TL	Rack	1		
Analysis started at:	8/23/2024 8:01:57 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.804 %	106.013 %	0.012 ppb	51,343.923 ppb	33,393.005 ppb	49.493 ppb	1,891.383 ppb	117,966.247 ppb	113.416 %
Concentration per Run 1	104.898 %	103.529 %	0.010 ppb	52,421.642 ppb	34,199.343 ppb	51.144 ppb	1,935.672 ppb	121,421.834 ppb	114.136 %
Concentration per Run 2	105.079 %	104.118 %	0.011 ppb	51,792.235 ppb	33,507.738 ppb	51.742 ppb	1,823.129 ppb	115,276.017 ppb	113.513 %
Concentration per Run 3	104.436 %	110.392 %	0.015 ppb	49,817.891 ppb	32,471.933 ppb	45.593 ppb	1,915.348 ppb	117,200.889 ppb	112.599 %
Concentration RSD	0.3 %	3.6 %	21.8 %	2.6 %	2.6 %	6.9 %	3.2 %	2.7 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.471 ppb	0.779 ppb	46.422 ppb	240.184 ppb	0.277 ppb	0.276 ppb	0.713 ppb	1.101 ppb	98.292 %
Concentration per Run 1	4.628 ppb	0.814 ppb	46.700 ppb	245.091 ppb	0.305 ppb	0.351 ppb	0.667 ppb	1.059 ppb	96.255 %
Concentration per Run 2	4.420 ppb	0.740 ppb	46.518 ppb	235.353 ppb	0.284 ppb	0.282 ppb	0.789 ppb	1.057 ppb	98.944 %
Concentration per Run 3	4.364 ppb	0.782 ppb	46.047 ppb	240.108 ppb	0.241 ppb	0.194 ppb	0.684 ppb	1.186 ppb	99.677 %
Concentration RSD	3.1 %	4.8 %	0.7 %	2.0 %	11.7 %	28.4 %	9.3 %	6.7 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.913 ppb	0.917 ppb	366.895 ppb	0.088 ppb	96.131 %	0.007 ppb	0.006 ppb	95.908 %	0.033 ppb
Concentration per Run 1	1.924 ppb	1.116 ppb	372.382 ppb	0.045 ppb	95.453 %	0.005 ppb	0.007 ppb	94.815 %	0.029 ppb
Concentration per Run 2	1.888 ppb	0.732 ppb	366.827 ppb	0.117 ppb	94.209 %	0.008 ppb	0.005 ppb	95.478 %	0.039 ppb
Concentration per Run 3	1.928 ppb	0.903 ppb	361.476 ppb	0.101 ppb	98.733 %	0.007 ppb	0.007 ppb	97.431 %	0.031 ppb
Concentration RSD	1.2 %	21.0 %	1.5 %	42.7 %	2.4 %	25.3 %	16.5 %	1.4 %	16.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	259.396 ppb	101.395 %	98.777 %	0.021 ppb	0.203 ppb	66.622 %
Concentration per Run 1	257.663 ppb	100.683 %	98.149 %	0.000 ppb	0.178 ppb	76.525 %
Concentration per Run 2	260.174 ppb	100.143 %	98.641 %	0.029 ppb	0.216 ppb	62.570 %
Concentration per Run 3	260.349 ppb	103.360 %	99.542 %	0.033 ppb	0.215 ppb	60.771 %
Concentration RSD	0.6 %	1.7 %	0.7 %	89.2 %	10.8 %	12.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962103-1 MCP-6020SL-10	Rack	1		
Analysis started at:	8/23/2024 8:14:17 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.887 %	108.824 %	0.004 ppb	121.511 ppb	-0.008 ppb	1.452 ppb	3.690 ppb	12.772 ppb	115.365 %
Concentration per Run 1	112.548 %	112.941 %	0.004 ppb	118.151 ppb	0.506 ppb	1.286 ppb	1.705 ppb	15.257 ppb	115.076 %
Concentration per Run 2	113.679 %	103.922 %	0.003 ppb	123.640 ppb	-0.250 ppb	1.893 ppb	6.806 ppb	8.943 ppb	115.911 %
Concentration per Run 3	112.436 %	109.608 %	0.006 ppb	122.741 ppb	-0.281 ppb	1.177 ppb	2.558 ppb	14.116 ppb	115.109 %
Concentration RSD	0.6 %	4.2 %	40.2 %	2.4 %	5,274.2 %	26.6 %	74.1 %	26.3 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.011 ppb	0.063 ppb	0.087 ppb	2.226 ppb	0.008 ppb	-0.032 ppb	0.201 ppb	0.212 ppb	102.455 %
Concentration per Run 1	0.011 ppb	0.072 ppb	0.071 ppb	2.509 ppb	0.011 ppb	-0.027 ppb	0.262 ppb	0.169 ppb	104.658 %
Concentration per Run 2	-0.013 ppb	0.045 ppb	0.093 ppb	0.847 ppb	0.013 ppb	-0.025 ppb	0.175 ppb	0.268 ppb	104.933 %
Concentration per Run 3	0.035 ppb	0.073 ppb	0.098 ppb	3.322 ppb	0.001 ppb	-0.044 ppb	0.165 ppb	0.200 ppb	97.774 %
Concentration RSD	218.2 %	25.2 %	16.6 %	56.7 %	80.5 %	32.3 %	26.7 %	23.8 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.054 ppb	0.110 ppb	0.022 ppb	0.010 ppb	107.245 %	0.002 ppb	0.000 ppb	104.899 %	0.409 ppb
Concentration per Run 1	0.020 ppb	0.050 ppb	0.017 ppb	0.000 ppb	109.177 %	0.003 ppb	0.001 ppb	108.976 %	0.387 ppb
Concentration per Run 2	0.051 ppb	0.163 ppb	0.027 ppb	0.001 ppb	106.918 %	0.001 ppb	-0.001 ppb	104.773 %	0.403 ppb
Concentration per Run 3	0.091 ppb	0.117 ppb	0.021 ppb	0.030 ppb	105.640 %	0.002 ppb	-0.001 ppb	100.949 %	0.436 ppb
Concentration RSD	66.8 %	51.6 %	22.2 %	163.7 %	1.7 %	40.6 %	1,883.7 %	3.8 %	6.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.040 ppb	108.686 %	108.719 %	0.012 ppb	0.025 ppb	78.612 %
Concentration per Run 1	0.051 ppb	112.867 %	114.487 %	-0.008 ppb	0.022 ppb	91.842 %
Concentration per Run 2	0.012 ppb	107.239 %	106.549 %	0.021 ppb	0.025 ppb	72.895 %
Concentration per Run 3	0.056 ppb	105.952 %	105.123 %	0.023 ppb	0.027 ppb	71.100 %
Concentration RSD	59.9 %	3.4 %	4.6 %	143.7 %	10.1 %	14.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962103-2d10 MCP-6020SL-10	Rack	1		
Analysis started at:	8/23/2024 8:18:46 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.776 %	111.569 %	5.306 ppb	1,101.930 ppb	1,005.600 ppb	200.965 ppb	1,010.583 ppb	1,013.843 ppb	109.932 %
Concentration per Run 1	110.001 %	111.569 %	5.237 ppb	1,145.347 ppb	1,061.291 ppb	218.760 ppb	1,080.672 ppb	1,067.352 ppb	109.279 %
Concentration per Run 2	109.993 %	111.765 %	5.342 ppb	1,094.989 ppb	987.998 ppb	198.660 ppb	978.791 ppb	1,024.847 ppb	110.137 %
Concentration per Run 3	109.333 %	111.373 %	5.338 ppb	1,065.453 ppb	967.510 ppb	185.476 ppb	972.285 ppb	949.329 ppb	110.379 %
Concentration RSD	0.3 %	0.2 %	1.1 %	3.7 %	4.9 %	8.3 %	6.0 %	5.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.820 ppb	20.222 ppb	51.842 ppb	108.725 ppb	52.403 ppb	52.086 ppb	26.963 ppb	51.682 ppb	102.313 %
Concentration per Run 1	49.077 ppb	20.557 ppb	53.480 ppb	108.078 ppb	52.512 ppb	51.985 ppb	26.818 ppb	51.976 ppb	107.038 %
Concentration per Run 2	48.289 ppb	20.296 ppb	52.364 ppb	116.156 ppb	52.974 ppb	52.546 ppb	27.500 ppb	52.394 ppb	101.159 %
Concentration per Run 3	46.094 ppb	19.812 ppb	49.682 ppb	101.941 ppb	51.723 ppb	51.727 ppb	26.570 ppb	50.676 ppb	98.741 %
Concentration RSD	3.2 %	1.9 %	3.8 %	6.6 %	1.2 %	0.8 %	1.8 %	1.7 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.651 ppb	12.227 ppb	91.619 ppb	98.632 ppb	103.636 %	5.138 ppb	5.523 ppb	101.226 %	45.753 ppb
Concentration per Run 1	12.581 ppb	13.727 ppb	94.896 ppb	97.272 ppb	106.446 %	5.063 ppb	5.457 ppb	106.483 %	45.141 ppb
Concentration per Run 2	12.879 ppb	11.799 ppb	90.998 ppb	100.038 ppb	102.847 %	5.139 ppb	5.578 ppb	99.395 %	45.802 ppb
Concentration per Run 3	12.492 ppb	11.155 ppb	88.962 ppb	98.586 ppb	101.614 %	5.213 ppb	5.534 ppb	97.800 %	46.317 ppb
Concentration RSD	1.6 %	10.9 %	3.3 %	1.4 %	2.4 %	1.5 %	1.1 %	4.6 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	204.297 ppb	107.281 %	105.636 %	15.353 ppb	55.106 ppb	74.907 %
Concentration per Run 1	203.003 ppb	109.461 %	108.770 %	13.348 ppb	53.750 ppb	87.518 %
Concentration per Run 2	203.411 ppb	107.208 %	105.152 %	16.062 ppb	54.899 ppb	69.373 %
Concentration per Run 3	206.479 ppb	105.175 %	102.985 %	16.650 ppb	56.670 ppb	67.830 %
Concentration RSD	0.9 %	2.0 %	2.8 %	11.5 %	2.7 %	14.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962103-3d10 MCP-6020SL-10	Rack	1		
Analysis started at:	8/23/2024 8:23:16 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.334 %	111.438 %	5.216 ppb	1,063.574 ppb	989.340 ppb	197.358 ppb	970.940 ppb	1,003.258 ppb	106.960 %
Concentration per Run 1	107.526 %	111.569 %	5.093 ppb	1,079.429 ppb	1,027.430 ppb	204.290 ppb	1,039.260 ppb	1,021.129 ppb	106.508 %
Concentration per Run 2	107.657 %	115.490 %	5.216 ppb	1,019.017 ppb	942.547 ppb	185.526 ppb	907.172 ppb	1,073.324 ppb	107.910 %
Concentration per Run 3	106.819 %	107.255 %	5.338 ppb	1,092.276 ppb	998.043 ppb	202.258 ppb	966.387 ppb	915.321 ppb	106.464 %
Concentration RSD	0.4 %	3.7 %	2.3 %	3.7 %	4.4 %	5.2 %	6.8 %	8.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.334 ppb	19.766 ppb	51.518 ppb	104.769 ppb	51.640 ppb	51.731 ppb	26.039 ppb	51.319 ppb	102.020 %
Concentration per Run 1	45.278 ppb	19.720 ppb	52.145 ppb	102.509 ppb	50.808 ppb	50.460 ppb	24.965 ppb	50.919 ppb	106.232 %
Concentration per Run 2	43.758 ppb	19.390 ppb	49.941 ppb	109.164 ppb	51.405 ppb	50.916 ppb	26.269 ppb	50.771 ppb	101.140 %
Concentration per Run 3	46.965 ppb	20.187 ppb	52.467 ppb	102.633 ppb	52.706 ppb	53.818 ppb	26.882 ppb	52.266 ppb	98.689 %
Concentration RSD	3.5 %	2.0 %	2.7 %	3.6 %	1.9 %	3.5 %	3.8 %	1.6 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.708 ppb	12.333 ppb	90.918 ppb	98.551 ppb	102.065 %	5.051 ppb	5.452 ppb	99.948 %	46.983 ppb
Concentration per Run 1	12.470 ppb	12.277 ppb	92.696 ppb	96.874 ppb	104.393 %	5.032 ppb	5.407 ppb	105.292 %	46.288 ppb
Concentration per Run 2	12.462 ppb	11.990 ppb	88.932 ppb	98.678 ppb	101.680 %	5.006 ppb	5.590 ppb	96.940 %	47.454 ppb
Concentration per Run 3	13.193 ppb	12.732 ppb	91.124 ppb	100.100 ppb	100.122 %	5.115 ppb	5.359 ppb	97.612 %	47.207 ppb
Concentration RSD	3.3 %	3.0 %	2.1 %	1.6 %	2.1 %	1.1 %	2.2 %	4.6 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	204.793 ppb	105.769 %	103.761 %	15.510 ppb	54.432 ppb	73.241 %
Concentration per Run 1	206.169 ppb	109.186 %	107.081 %	13.450 ppb	53.809 ppb	86.716 %
Concentration per Run 2	203.855 ppb	103.655 %	102.175 %	16.531 ppb	54.757 ppb	67.347 %
Concentration per Run 3	204.355 ppb	104.467 %	102.029 %	16.549 ppb	54.729 ppb	65.661 %
Concentration RSD	0.6 %	2.8 %	2.8 %	11.5 %	1.0 %	16.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2446755-01 MCP-6020SL-10	Rack	1		
Analysis started at:	8/23/2024 8:27:46 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.955 %	96.928 %	0.016 ppb	329,565.512 ppb	4,786.541 ppb	4.286 ppb	5,051.805 ppb	33,535.282 ppb	102.409 %
Concentration per Run 1	94.637 %	91.372 %	0.014 ppb	339,078.499 ppb	4,950.879 ppb	5.383 ppb	5,136.496 ppb	34,163.195 ppb	103.306 %
Concentration per Run 2	93.345 %	100.784 %	0.011 ppb	324,318.918 ppb	4,730.309 ppb	3.230 ppb	5,071.593 ppb	33,762.118 ppb	101.592 %
Concentration per Run 3	93.884 %	98.627 %	0.023 ppb	325,299.119 ppb	4,678.435 ppb	4.244 ppb	4,947.326 ppb	32,680.533 ppb	102.328 %
Concentration RSD	0.7 %	5.1 %	36.6 %	2.5 %	3.0 %	25.1 %	1.9 %	2.3 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.091 ppb	0.065 ppb	3,054.103 ppb	939.696 ppb	0.252 ppb	0.620 ppb	1.056 ppb	2.400 ppb	92.441 %
Concentration per Run 1	0.098 ppb	0.075 ppb	3,501.953 ppb	944.990 ppb	0.225 ppb	0.721 ppb	1.031 ppb	2.575 ppb	91.801 %
Concentration per Run 2	0.117 ppb	0.061 ppb	2,801.875 ppb	948.611 ppb	0.274 ppb	0.498 ppb	1.092 ppb	2.223 ppb	94.264 %
Concentration per Run 3	0.060 ppb	0.060 ppb	2,858.479 ppb	925.488 ppb	0.258 ppb	0.641 ppb	1.043 ppb	2.402 ppb	91.257 %
Concentration RSD	31.9 %	12.9 %	12.7 %	1.3 %	10.0 %	18.2 %	3.1 %	7.3 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.422 ppb	0.149 ppb	243.106 ppb	5.094 ppb	89.440 %	0.001 ppb	0.003 ppb	92.275 %	0.937 ppb
Concentration per Run 1	5.569 ppb	0.128 ppb	242.791 ppb	4.161 ppb	90.768 %	0.002 ppb	0.003 ppb	93.694 %	0.860 ppb
Concentration per Run 2	5.595 ppb	0.091 ppb	245.768 ppb	5.014 ppb	88.595 %	0.002 ppb	0.005 ppb	92.943 %	0.936 ppb
Concentration per Run 3	5.103 ppb	0.227 ppb	240.760 ppb	6.106 ppb	88.957 %	0.001 ppb	-0.001 ppb	90.189 %	1.016 ppb
Concentration RSD	5.1 %	47.4 %	1.0 %	19.1 %	1.3 %	24.0 %	112.7 %	2.0 %	8.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	70.492 ppb	98.329 %	97.510 %	0.022 ppb	0.041 ppb	63.298 %
Concentration per Run 1	70.523 ppb	99.447 %	98.873 %	0.003 ppb	0.046 ppb	73.442 %
Concentration per Run 2	70.734 ppb	98.582 %	98.382 %	0.032 ppb	0.041 ppb	59.731 %
Concentration per Run 3	70.218 ppb	96.957 %	95.274 %	0.031 ppb	0.037 ppb	56.721 %
Concentration RSD	0.4 %	1.3 %	2.0 %	74.8 %	11.0 %	14.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446632-01 CT-6020TL	Rack	1		
Analysis started at:	8/23/2024 8:32:12 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.146 %	104.314 %	0.007 ppb	93,267.829 ppb	22,833.386 ppb	2.638 ppb	8,920.667 ppb	60,875.363 ppb	108.552 %
Concentration per Run 1	101.741 %	103.922 %	0.004 ppb	90,540.764 ppb	22,148.673 ppb	2.590 ppb	8,537.897 ppb	58,334.976 ppb	108.284 %
Concentration per Run 2	101.003 %	106.667 %	0.011 ppb	94,391.418 ppb	23,449.049 ppb	2.291 ppb	9,328.006 ppb	62,928.183 ppb	108.662 %
Concentration per Run 3	100.695 %	102.353 %	0.007 ppb	94,871.305 ppb	22,902.436 ppb	3.033 ppb	8,896.099 ppb	61,362.930 ppb	108.710 %
Concentration RSD	0.5 %	2.1 %	52.9 %	2.5 %	2.9 %	14.2 %	4.4 %	3.8 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.119 ppb	52.668 ppb	0.455 ppb	5.376 ppb	0.059 ppb	1.118 ppb	5.373 ppb	12.734 ppb	98.543 %
Concentration per Run 1	0.096 ppb	52.279 ppb	0.408 ppb	5.522 ppb	0.068 ppb	1.031 ppb	5.372 ppb	12.481 ppb	95.595 %
Concentration per Run 2	0.118 ppb	52.647 ppb	0.561 ppb	5.105 ppb	0.061 ppb	1.087 ppb	5.467 ppb	12.801 ppb	103.479 %
Concentration per Run 3	0.142 ppb	53.078 ppb	0.397 ppb	5.500 ppb	0.047 ppb	1.235 ppb	5.280 ppb	12.921 ppb	96.556 %
Concentration RSD	19.4 %	0.8 %	20.1 %	4.4 %	18.3 %	9.4 %	1.7 %	1.8 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.174 ppb	1.234 ppb	289.754 ppb	0.796 ppb	94.031 %	0.109 ppb	0.174 ppb	94.824 %	0.434 ppb
Concentration per Run 1	0.140 ppb	1.097 ppb	284.616 ppb	0.800 ppb	91.638 %	0.112 ppb	0.163 ppb	90.912 %	0.387 ppb
Concentration per Run 2	0.164 ppb	1.485 ppb	298.343 ppb	0.782 ppb	95.525 %	0.122 ppb	0.144 ppb	98.242 %	0.429 ppb
Concentration per Run 3	0.218 ppb	1.119 ppb	286.303 ppb	0.807 ppb	94.929 %	0.092 ppb	0.215 ppb	95.318 %	0.487 ppb
Concentration RSD	22.9 %	17.6 %	2.6 %	1.6 %	2.2 %	13.7 %	21.2 %	3.9 %	11.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	82.524 ppb	99.937 %	98.425 %	0.035 ppb	0.039 ppb	63.508 %
Concentration per Run 1	83.137 ppb	96.756 %	94.481 %	0.019 ppb	0.034 ppb	71.774 %
Concentration per Run 2	83.651 ppb	101.898 %	102.471 %	0.031 ppb	0.042 ppb	60.520 %
Concentration per Run 3	80.783 ppb	101.156 %	98.323 %	0.054 ppb	0.041 ppb	58.231 %
Concentration RSD	1.9 %	2.8 %	4.1 %	51.5 %	10.3 %	11.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446632-02 CT-6020TL	Rack	1		
Analysis started at:	8/23/2024 8:36:38 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.669 %	103.922 %	0.009 ppb	94,375.514 ppb	23,305.234 ppb	1.904 ppb	8,856.531 ppb	59,775.701 ppb	109.230 %
Concentration per Run 1	102.600 %	101.373 %	0.008 ppb	94,367.082 ppb	23,067.742 ppb	2.000 ppb	8,674.661 ppb	58,753.113 ppb	109.428 %
Concentration per Run 2	101.901 %	103.137 %	0.007 ppb	96,246.877 ppb	23,936.569 ppb	1.813 ppb	9,204.215 ppb	61,751.692 ppb	109.739 %
Concentration per Run 3	100.507 %	107.255 %	0.011 ppb	92,512.582 ppb	22,911.393 ppb	1.899 ppb	8,690.716 ppb	58,822.297 ppb	108.523 %
Concentration RSD	1.0 %	2.9 %	23.4 %	2.0 %	2.4 %	4.9 %	3.4 %	2.9 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.118 ppb	51.911 ppb	0.382 ppb	4.560 ppb	0.058 ppb	1.084 ppb	5.175 ppb	12.417 ppb	103.657 %
Concentration per Run 1	0.139 ppb	51.630 ppb	0.408 ppb	4.238 ppb	0.060 ppb	1.052 ppb	5.137 ppb	12.398 ppb	102.642 %
Concentration per Run 2	0.101 ppb	52.125 ppb	0.374 ppb	3.874 ppb	0.058 ppb	1.081 ppb	5.301 ppb	12.169 ppb	106.664 %
Concentration per Run 3	0.113 ppb	51.978 ppb	0.365 ppb	5.568 ppb	0.055 ppb	1.119 ppb	5.086 ppb	12.683 ppb	101.664 %
Concentration RSD	16.4 %	0.5 %	5.9 %	19.6 %	4.1 %	3.1 %	2.2 %	2.1 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.199 ppb	1.451 ppb	282.725 ppb	0.550 ppb	97.457 %	0.108 ppb	0.164 ppb	98.312 %	0.235 ppb
Concentration per Run 1	0.190 ppb	2.005 ppb	273.858 ppb	0.486 ppb	96.751 %	0.113 ppb	0.161 ppb	95.284 %	0.214 ppb
Concentration per Run 2	0.233 ppb	1.072 ppb	290.068 ppb	0.579 ppb	98.756 %	0.091 ppb	0.183 ppb	102.311 %	0.223 ppb
Concentration per Run 3	0.173 ppb	1.276 ppb	284.249 ppb	0.586 ppb	96.865 %	0.121 ppb	0.147 ppb	97.343 %	0.269 ppb
Concentration RSD	15.5 %	33.8 %	2.9 %	10.1 %	1.2 %	14.0 %	10.8 %	3.7 %	12.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	81.982 ppb	103.283 %	101.673 %	0.033 ppb	0.018 ppb	66.183 %
Concentration per Run 1	81.234 ppb	101.753 %	98.706 %	0.015 ppb	0.012 ppb	75.915 %
Concentration per Run 2	83.234 ppb	104.981 %	105.189 %	0.048 ppb	0.023 ppb	62.239 %
Concentration per Run 3	81.477 ppb	103.114 %	101.123 %	0.037 ppb	0.019 ppb	60.394 %
Concentration RSD	1.3 %	1.6 %	3.2 %	51.3 %	29.1 %	12.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 8:41:04 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.986 %	100.654 %	67.751 ppb	6,588.447 ppb	6,553.752 ppb	65.976 ppb	6,393.262 ppb	6,251.043 ppb	104.935 %
Concentration per Run 1	105.742 %	94.314 %	65.132 ppb	6,901.757 ppb	6,840.930 ppb	68.976 ppb	6,570.902 ppb	6,382.814 ppb	107.838 %
Concentration per Run 2	104.380 %	101.176 %	66.872 ppb	6,281.081 ppb	6,258.476 ppb	61.804 ppb	6,100.683 ppb	5,976.950 ppb	106.954 %
Concentration per Run 3	98.835 %	106.471 %	71.248 ppb	6,582.505 ppb	6,561.849 ppb	67.149 ppb	6,508.200 ppb	6,393.364 ppb	100.014 %
Recovery Percentage 1			112.918 %	109.807 %	109.229 %	109.960 %	106.554 %	104.184 %	
Concentration RSD	3.6 %	6.1 %	4.7 %	4.7 %	4.4 %	5.6 %	4.0 %	3.8 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.738 ppb	63.903 ppb	64.232 ppb	6,408.828 ppb	65.179 ppb	64.591 ppb	64.670 ppb	65.109 ppb	97.608 %
Concentration per Run 1	62.127 ppb	65.980 ppb	64.731 ppb	6,673.223 ppb	69.099 ppb	69.106 ppb	64.935 ppb	65.716 ppb	94.846 %
Concentration per Run 2	59.271 ppb	62.790 ppb	62.623 ppb	6,200.244 ppb	63.609 ppb	63.020 ppb	64.229 ppb	63.619 ppb	97.202 %
Concentration per Run 3	60.817 ppb	62.938 ppb	65.340 ppb	6,353.017 ppb	62.830 ppb	61.646 ppb	64.847 ppb	65.993 ppb	100.776 %
Recovery Percentage 1	101.230 %	106.504 %	107.053 %	106.814 %	108.632 %	107.651 %	107.784 %	108.515 %	
Concentration RSD	2.4 %	2.8 %	2.2 %	3.8 %	5.2 %	6.1 %	0.6 %	2.0 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	64.763 ppb	64.257 ppb	59.056 ppb	60.778 ppb	99.258 %	59.658 ppb	63.320 ppb	98.147 %	61.768 ppb
Concentration per Run 1	65.652 ppb	64.886 ppb	58.066 ppb	61.739 ppb	99.604 %	59.797 ppb	63.823 ppb	95.134 %	62.304 ppb
Concentration per Run 2	62.675 ppb	60.447 ppb	56.882 ppb	59.307 ppb	98.055 %	59.769 ppb	63.851 ppb	95.185 %	62.024 ppb
Concentration per Run 3	65.962 ppb	67.438 ppb	62.220 ppb	61.287 ppb	100.114 %	59.409 ppb	62.286 ppb	104.121 %	60.978 ppb
Recovery Percentage 1	107.938 %	107.095 %	98.427 %	101.296 %		99.430 %	105.533 %		102.947 %
Concentration RSD	2.8 %	5.5 %	4.7 %	2.1 %	1.1 %	0.4 %	1.4 %	5.3 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.588 ppb	102.564 %	101.131 %	62.309 ppb	62.445 ppb	69.828 %
Concentration per Run 1	61.955 ppb	101.525 %	98.036 %	62.444 ppb	63.734 ppb	80.341 %
Concentration per Run 2	61.833 ppb	100.183 %	99.044 %	63.403 ppb	63.244 ppb	64.117 %
Concentration per Run 3	63.977 ppb	105.984 %	106.312 %	61.082 ppb	60.357 ppb	65.025 %
Recovery Percentage 1	104.314 %			103.849 %	104.075 %	
Concentration RSD	1.9 %	3.0 %	4.5 %	1.9 %	2.9 %	13.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 8:45:35 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.950 %	101.699 %	0.045 ppb	51.960 ppb	2.885 ppb	-0.331 ppb	4.395 ppb	4.158 ppb	104.956 %
Concentration per Run 1	107.997 %	100.196 %	0.049 ppb	52.794 ppb	2.294 ppb	-0.197 ppb	0.728 ppb	6.660 ppb	104.726 %
Concentration per Run 2	106.997 %	96.667 %	0.036 ppb	52.249 ppb	3.163 ppb	-0.271 ppb	3.200 ppb	4.187 ppb	105.207 %
Concentration per Run 3	105.857 %	108.235 %	0.052 ppb	50.836 ppb	3.198 ppb	-0.523 ppb	9.258 ppb	1.628 ppb	104.935 %
Recovery Percentage 1			9.068 %	51.960 %	4.121 %	-3.305 %	4.395 %	4.158 %	
Concentration RSD	1.0 %	5.8 %	18.4 %	1.9 %	17.8 %	51.7 %	99.9 %	60.5 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.015 ppb	0.021 ppb	0.083 ppb	7.510 ppb	0.027 ppb	-0.055 ppb	0.031 ppb	-0.198 ppb	96.960 %
Concentration per Run 1	-0.040 ppb	0.024 ppb	0.087 ppb	8.035 ppb	0.022 ppb	-0.003 ppb	0.003 ppb	-0.234 ppb	93.347 %
Concentration per Run 2	0.056 ppb	0.029 ppb	0.097 ppb	5.916 ppb	0.032 ppb	-0.090 ppb	0.060 ppb	-0.184 ppb	94.533 %
Concentration per Run 3	0.030 ppb	0.010 ppb	0.064 ppb	8.579 ppb	0.027 ppb	-0.071 ppb	0.029 ppb	-0.177 ppb	103.002 %
Recovery Percentage 1	0.308 %	2.088 %	8.272 %	15.020 %	5.378 %	-2.737 %	3.099 %	-3.965 %	
Concentration RSD	324.3 %	48.1 %	20.4 %	18.7 %	17.6 %	82.9 %	91.6 %	15.7 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.155 ppb	0.169 ppb	0.033 ppb	0.373 ppb	97.717 %	0.027 ppb	0.022 ppb	96.312 %	0.121 ppb
Concentration per Run 1	0.176 ppb	0.154 ppb	0.029 ppb	0.247 ppb	96.730 %	0.032 ppb	0.015 ppb	92.373 %	0.086 ppb
Concentration per Run 2	0.112 ppb	0.158 ppb	0.031 ppb	0.393 ppb	96.669 %	0.025 ppb	0.028 ppb	93.864 %	0.127 ppb
Concentration per Run 3	0.177 ppb	0.194 ppb	0.038 ppb	0.479 ppb	99.753 %	0.023 ppb	0.022 ppb	102.700 %	0.149 ppb
Recovery Percentage 1	30.992 %	3.379 %	0.327 %	18.659 %		6.661 %	10.830 %		3.014 %
Concentration RSD	24.1 %	13.0 %	13.7 %	31.4 %	1.8 %	19.1 %	30.4 %	5.8 %	26.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	101.379 %	100.453 %	0.367 ppb	0.041 ppb	69.234 %
Concentration per Run 1	0.016 ppb	98.236 %	96.722 %	0.303 ppb	0.041 ppb	79.160 %
Concentration per Run 2	0.003 ppb	101.254 %	100.084 %	0.445 ppb	0.037 ppb	63.771 %
Concentration per Run 3	0.007 ppb	104.648 %	104.552 %	0.352 ppb	0.043 ppb	64.770 %
Recovery Percentage 1	1.736 %			36.691 %	4.062 %	
Concentration RSD	81.3 %	3.2 %	3.9 %	19.6 %	7.4 %	12.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 8:55:09 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.342 %	101.176 %	63.466 ppb	6,215.715 ppb	6,162.456 ppb	62.246 ppb	6,031.741 ppb	5,915.490 ppb	105.977 %
Concentration per Run 1	102.513 %	102.157 %	63.578 ppb	5,903.206 ppb	5,867.785 ppb	59.525 ppb	5,751.002 ppb	5,653.788 ppb	106.651 %
Concentration per Run 2	103.090 %	100.588 %	63.707 ppb	6,118.875 ppb	6,033.517 ppb	59.145 ppb	5,791.260 ppb	5,716.391 ppb	105.262 %
Concentration per Run 3	101.424 %	100.784 %	63.114 ppb	6,625.064 ppb	6,586.064 ppb	68.066 ppb	6,552.961 ppb	6,376.293 ppb	106.019 %
Recovery Percentage 1			105.777 %	103.595 %	102.708 %	103.743 %	100.529 %	98.592 %	
Concentration RSD	0.8 %	0.8 %	0.5 %	6.0 %	6.1 %	8.1 %	7.5 %	6.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.034 ppb	61.205 ppb	62.464 ppb	6,215.113 ppb	62.421 ppb	62.530 ppb	62.983 ppb	63.211 ppb	95.809 %
Concentration per Run 1	59.301 ppb	60.203 ppb	61.432 ppb	6,173.795 ppb	62.040 ppb	62.909 ppb	62.602 ppb	62.758 ppb	93.978 %
Concentration per Run 2	59.048 ppb	60.146 ppb	59.719 ppb	6,120.444 ppb	61.497 ppb	61.052 ppb	63.721 ppb	61.650 ppb	97.048 %
Concentration per Run 3	61.753 ppb	63.268 ppb	66.241 ppb	6,351.099 ppb	63.726 ppb	63.629 ppb	62.625 ppb	65.224 ppb	96.401 %
Recovery Percentage 1	100.057 %	102.009 %	104.106 %	103.585 %	104.035 %	104.216 %	104.972 %	105.351 %	
Concentration RSD	2.5 %	2.9 %	5.4 %	1.9 %	1.9 %	2.1 %	1.0 %	2.9 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.974 ppb	63.183 ppb	57.996 ppb	59.788 ppb	96.231 %	61.326 ppb	61.666 ppb	98.125 %	60.558 ppb
Concentration per Run 1	62.533 ppb	61.794 ppb	56.427 ppb	59.035 ppb	96.451 %	61.609 ppb	62.210 ppb	97.073 %	61.167 ppb
Concentration per Run 2	61.754 ppb	61.015 ppb	56.110 ppb	59.717 ppb	95.765 %	62.038 ppb	61.738 ppb	95.632 %	60.681 ppb
Concentration per Run 3	64.634 ppb	66.740 ppb	61.452 ppb	60.610 ppb	96.477 %	60.330 ppb	61.051 ppb	101.669 %	59.827 ppb
Recovery Percentage 1	104.956 %	105.305 %	96.661 %	99.646 %		102.209 %	102.777 %		100.931 %
Concentration RSD	2.4 %	4.9 %	5.2 %	1.3 %	0.4 %	1.4 %	0.9 %	3.2 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.987 ppb	103.793 %	104.160 %	61.669 ppb	62.923 ppb	76.107 %
Concentration per Run 1	60.094 ppb	104.790 %	103.809 %	61.958 ppb	63.269 ppb	92.585 %
Concentration per Run 2	61.248 ppb	103.793 %	102.740 %	62.118 ppb	63.738 ppb	70.137 %
Concentration per Run 3	61.620 ppb	102.795 %	105.933 %	60.930 ppb	61.760 ppb	65.597 %
Recovery Percentage 1	101.645 %			102.781 %	104.871 %	
Concentration RSD	1.3 %	1.0 %	1.6 %	1.0 %	1.6 %	19.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	47	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 8:59:40 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.745 %	98.105 %	0.052 ppb	43.439 ppb	4.506 ppb	-0.212 ppb	6.274 ppb	5.980 ppb	102.104 %
Concentration per Run 1	104.015 %	104.706 %	0.052 ppb	36.930 ppb	3.461 ppb	-0.173 ppb	9.076 ppb	5.019 ppb	102.526 %
Concentration per Run 2	104.062 %	88.431 %	0.053 ppb	52.064 ppb	4.809 ppb	-0.132 ppb	10.997 ppb	6.467 ppb	102.482 %
Concentration per Run 3	103.156 %	101.176 %	0.050 ppb	41.322 ppb	5.247 ppb	-0.331 ppb	-1.251 ppb	6.453 ppb	101.304 %
Recovery Percentage 1			10.334 %	43.439 %	6.436 %	-2.121 %	6.274 %	5.980 %	
Concentration RSD	0.5 %	8.7 %	2.3 %	17.9 %	20.7 %	49.4 %	105.0 %	13.9 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	0.019 ppb	0.061 ppb	10.605 ppb	0.044 ppb	0.008 ppb	0.057 ppb	-0.158 ppb	92.344 %
Concentration per Run 1	-0.025 ppb	0.023 ppb	0.065 ppb	11.182 ppb	0.046 ppb	-0.038 ppb	0.053 ppb	-0.091 ppb	92.173 %
Concentration per Run 2	0.027 ppb	0.012 ppb	0.073 ppb	11.034 ppb	0.044 ppb	0.041 ppb	0.045 ppb	-0.177 ppb	90.291 %
Concentration per Run 3	0.021 ppb	0.021 ppb	0.044 ppb	9.600 ppb	0.041 ppb	0.020 ppb	0.074 ppb	-0.207 ppb	94.569 %
Recovery Percentage 1	0.153 %	1.858 %	6.069 %	21.211 %	8.716 %	0.388 %	5.715 %	-3.169 %	
Concentration RSD	374.7 %	32.1 %	25.4 %	8.2 %	6.1 %	524.9 %	26.9 %	38.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.140 ppb	0.156 ppb	0.041 ppb	0.384 ppb	96.345 %	0.050 ppb	0.044 ppb	94.208 %	0.085 ppb
Concentration per Run 1	0.175 ppb	0.027 ppb	0.051 ppb	0.260 ppb	96.075 %	0.059 ppb	0.047 ppb	93.731 %	0.069 ppb
Concentration per Run 2	0.158 ppb	0.262 ppb	0.040 ppb	0.390 ppb	96.162 %	0.052 ppb	0.045 ppb	94.446 %	0.085 ppb
Concentration per Run 3	0.086 ppb	0.180 ppb	0.032 ppb	0.503 ppb	96.799 %	0.039 ppb	0.039 ppb	94.448 %	0.101 ppb
Recovery Percentage 1	27.934 %	3.124 %	0.409 %	19.212 %		12.572 %	21.811 %		2.133 %
Concentration RSD	34.0 %	76.4 %	23.7 %	31.7 %	0.4 %	20.7 %	9.4 %	0.4 %	18.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.029 ppb	99.947 %	98.454 %	0.363 ppb	0.056 ppb	68.602 %
Concentration per Run 1	0.035 ppb	99.697 %	98.240 %	0.292 ppb	0.067 ppb	78.877 %
Concentration per Run 2	0.016 ppb	99.708 %	97.576 %	0.427 ppb	0.052 ppb	63.717 %
Concentration per Run 3	0.035 ppb	100.436 %	99.545 %	0.369 ppb	0.049 ppb	63.211 %
Recovery Percentage 1	5.735 %			36.272 %	5.592 %	
Concentration RSD	39.3 %	0.4 %	1.0 %	18.6 %	17.6 %	13.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446632-03 CT-6020TL	Rack	1		
Analysis started at:	8/23/2024 9:07:36 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.722 %	106.144 %	0.036 ppb	107,985.117 ppb	27,675.926 ppb	2.835 ppb	9,033.263 ppb	67,476.127 ppb	102.996 %
Concentration per Run 1	99.548 %	105.882 %	0.037 ppb	106,818.585 ppb	27,375.362 ppb	2.904 ppb	9,206.472 ppb	68,153.061 ppb	103.134 %
Concentration per Run 2	99.534 %	103.726 %	0.043 ppb	109,699.085 ppb	28,186.651 ppb	3.212 ppb	9,000.313 ppb	67,130.752 ppb	103.874 %
Concentration per Run 3	97.082 %	108.824 %	0.027 ppb	107,437.683 ppb	27,465.766 ppb	2.390 ppb	8,893.003 ppb	67,144.569 ppb	101.981 %
Concentration RSD	1.4 %	2.4 %	22.1 %	1.4 %	1.6 %	14.7 %	1.8 %	0.9 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.528 ppb	0.234 ppb	236.692 ppb	978.512 ppb	0.126 ppb	0.892 ppb	0.870 ppb	39.742 ppb	93.862 %
Concentration per Run 1	0.563 ppb	0.247 ppb	236.207 ppb	947.366 ppb	0.121 ppb	0.851 ppb	0.907 ppb	40.001 ppb	92.589 %
Concentration per Run 2	0.545 ppb	0.271 ppb	240.332 ppb	987.369 ppb	0.139 ppb	0.874 ppb	0.846 ppb	39.765 ppb	92.436 %
Concentration per Run 3	0.476 ppb	0.183 ppb	233.537 ppb	1,000.800 ppb	0.119 ppb	0.953 ppb	0.858 ppb	39.458 ppb	96.562 %
Concentration RSD	8.6 %	19.4 %	1.4 %	2.8 %	8.6 %	6.0 %	3.7 %	0.7 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.294 ppb	0.335 ppb	331.110 ppb	0.854 ppb	90.006 %	0.013 ppb	0.020 ppb	90.756 %	0.140 ppb
Concentration per Run 1	0.276 ppb	0.357 ppb	330.869 ppb	0.792 ppb	90.838 %	0.011 ppb	0.023 ppb	92.047 %	0.121 ppb
Concentration per Run 2	0.290 ppb	0.287 ppb	335.036 ppb	0.793 ppb	90.674 %	0.017 ppb	0.025 ppb	90.827 %	0.126 ppb
Concentration per Run 3	0.316 ppb	0.360 ppb	327.424 ppb	0.979 ppb	88.507 %	0.013 ppb	0.012 ppb	89.395 %	0.172 ppb
Concentration RSD	6.9 %	12.5 %	1.2 %	12.6 %	1.4 %	23.1 %	36.9 %	1.5 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	99.474 ppb	99.708 %	99.603 %	0.117 ppb	0.040 ppb	63.429 %
Concentration per Run 1	99.641 ppb	101.447 %	101.243 %	0.065 ppb	0.031 ppb	74.786 %
Concentration per Run 2	99.937 ppb	99.939 %	100.144 %	0.145 ppb	0.042 ppb	59.254 %
Concentration per Run 3	98.843 ppb	97.737 %	97.421 %	0.142 ppb	0.047 ppb	56.246 %
Concentration RSD	0.6 %	1.9 %	2.0 %	38.4 %	21.2 %	15.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446632-04 CT-6020TL	Rack	1		
Analysis started at:	8/23/2024 9:12:03 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.512 %	97.516 %	0.018 ppb	8,441.818 ppb	19,797.715 ppb	8.587 ppb	5,164.790 ppb	55,292.488 ppb	102.838 %
Concentration per Run 1	98.514 %	101.765 %	0.019 ppb	8,422.365 ppb	19,878.655 ppb	8.278 ppb	5,475.027 ppb	56,984.502 ppb	102.999 %
Concentration per Run 2	97.304 %	96.078 %	0.020 ppb	8,456.606 ppb	19,818.256 ppb	7.840 ppb	5,133.685 ppb	54,628.390 ppb	103.073 %
Concentration per Run 3	96.718 %	94.706 %	0.014 ppb	8,446.482 ppb	19,696.232 ppb	9.642 ppb	4,885.657 ppb	54,264.573 ppb	102.442 %
Concentration RSD	0.9 %	3.8 %	18.9 %	0.2 %	0.5 %	10.9 %	5.7 %	2.7 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.109 ppb	0.626 ppb	2,766.366 ppb	36,548.285 ppb	0.093 ppb	0.359 ppb	0.194 ppb	2.774 ppb	94.184 %
Concentration per Run 1	1.013 ppb	0.623 ppb	2,924.123 ppb	35,718.706 ppb	0.068 ppb	0.275 ppb	0.164 ppb	2.872 ppb	99.305 %
Concentration per Run 2	1.173 ppb	0.587 ppb	2,947.280 ppb	36,791.312 ppb	0.105 ppb	0.427 ppb	0.209 ppb	2.718 ppb	92.613 %
Concentration per Run 3	1.140 ppb	0.667 ppb	2,427.695 ppb	37,134.837 ppb	0.107 ppb	0.376 ppb	0.208 ppb	2.733 ppb	90.634 %
Concentration RSD	7.6 %	6.4 %	10.6 %	2.0 %	23.2 %	21.5 %	13.3 %	3.1 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.863 ppb	0.225 ppb	161.472 ppb	0.763 ppb	92.276 %	0.008 ppb	0.007 ppb	93.168 %	0.058 ppb
Concentration per Run 1	1.728 ppb	0.164 ppb	159.746 ppb	0.742 ppb	93.730 %	0.007 ppb	0.005 ppb	95.777 %	0.052 ppb
Concentration per Run 2	1.952 ppb	0.257 ppb	159.710 ppb	0.684 ppb	91.081 %	0.010 ppb	0.009 ppb	91.083 %	0.057 ppb
Concentration per Run 3	1.909 ppb	0.253 ppb	164.960 ppb	0.863 ppb	92.017 %	0.009 ppb	0.005 ppb	92.644 %	0.066 ppb
Concentration RSD	6.4 %	23.3 %	1.9 %	11.9 %	1.5 %	18.2 %	36.4 %	2.6 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.344 ppb	97.712 %	97.014 %	0.065 ppb	0.177 ppb	64.992 %
Concentration per Run 1	59.624 ppb	99.678 %	100.769 %	0.023 ppb	0.148 ppb	77.222 %
Concentration per Run 2	61.717 ppb	98.626 %	97.475 %	0.090 ppb	0.193 ppb	60.459 %
Concentration per Run 3	59.689 ppb	94.831 %	92.797 %	0.081 ppb	0.189 ppb	57.294 %
Concentration RSD	2.0 %	2.6 %	4.1 %	55.6 %	14.3 %	16.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446632-05 CT-6020TL	Rack	1		
Analysis started at:	8/23/2024 9:17:37 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.628 %	100.000 %	0.014 ppb	12,077.704 ppb	28,471.813 ppb	9.687 ppb	9,144.753 ppb	212,232.653 ppb	108.636 %
Concentration per Run 1	100.185 %	101.373 %	0.013 ppb	11,434.578 ppb	26,990.881 ppb	9.511 ppb	8,756.352 ppb	206,486.973 ppb	108.680 %
Concentration per Run 2	99.821 %	97.451 %	0.015 ppb	12,521.440 ppb	29,548.659 ppb	9.840 ppb	9,549.071 ppb	218,865.803 ppb	109.115 %
Concentration per Run 3	98.877 %	101.176 %	0.015 ppb	12,277.093 ppb	28,875.899 ppb	9.708 ppb	9,128.837 ppb	211,345.183 ppb	108.112 %
Concentration RSD	0.7 %	2.2 %	11.0 %	4.7 %	4.7 %	1.7 %	4.3 %	2.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.059 ppb	0.142 ppb	5,721.385 ppb	9,219.000 ppb	11.465 ppb	29.767 ppb	0.465 ppb	3.824 ppb	92.152 %
Concentration per Run 1	0.829 ppb	0.132 ppb	5,491.055 ppb	8,812.687 ppb	11.012 ppb	28.418 ppb	0.474 ppb	3.786 ppb	92.626 %
Concentration per Run 2	1.246 ppb	0.158 ppb	5,845.250 ppb	9,388.900 ppb	11.794 ppb	30.386 ppb	0.464 ppb	3.970 ppb	90.293 %
Concentration per Run 3	1.101 ppb	0.135 ppb	5,827.849 ppb	9,455.414 ppb	11.588 ppb	30.497 ppb	0.458 ppb	3.716 ppb	93.536 %
Concentration RSD	20.0 %	9.9 %	3.5 %	3.8 %	3.5 %	3.9 %	1.7 %	3.4 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.783 ppb	0.107 ppb	726.382 ppb	3.964 ppb	90.327 %	0.005 ppb	0.012 ppb	90.206 %	0.102 ppb
Concentration per Run 1	0.741 ppb	0.160 ppb	726.221 ppb	3.963 ppb	89.172 %	0.004 ppb	0.009 ppb	89.252 %	0.099 ppb
Concentration per Run 2	0.762 ppb	0.066 ppb	707.474 ppb	3.940 ppb	90.449 %	0.003 ppb	0.016 ppb	88.796 %	0.099 ppb
Concentration per Run 3	0.846 ppb	0.095 ppb	745.452 ppb	3.988 ppb	91.360 %	0.008 ppb	0.011 ppb	92.570 %	0.108 ppb
Concentration RSD	7.1 %	44.9 %	2.6 %	0.6 %	1.2 %	50.3 %	25.9 %	2.3 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	137.047 ppb	99.863 %	98.687 %	0.050 ppb	0.045 ppb	63.760 %
Concentration per Run 1	134.299 ppb	98.172 %	98.187 %	0.014 ppb	0.034 ppb	73.709 %
Concentration per Run 2	138.144 ppb	100.679 %	98.131 %	0.064 ppb	0.046 ppb	59.411 %
Concentration per Run 3	138.699 ppb	100.739 %	99.742 %	0.071 ppb	0.053 ppb	58.158 %
Concentration RSD	1.7 %	1.5 %	0.9 %	61.8 %	21.5 %	13.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446632-06 CT-6020TL	Rack	1		
Analysis started at:	8/23/2024 9:22:04 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.584 %	102.157 %	0.008 ppb	68,217.355 ppb	16,991.211 ppb	2.394 ppb	5,754.919 ppb	40,669.514 ppb	110.789 %
Concentration per Run 1	103.123 %	96.667 %	0.008 ppb	68,430.477 ppb	17,137.625 ppb	3.048 ppb	5,817.719 ppb	41,285.245 ppb	109.090 %
Concentration per Run 2	104.458 %	96.274 %	0.008 ppb	69,470.350 ppb	17,317.504 ppb	2.158 ppb	5,788.847 ppb	41,066.498 ppb	112.398 %
Concentration per Run 3	103.172 %	113.530 %	0.009 ppb	66,751.237 ppb	16,518.504 ppb	1.975 ppb	5,658.191 ppb	39,656.799 ppb	110.879 %
Concentration RSD	0.7 %	9.6 %	6.8 %	2.0 %	2.5 %	24.0 %	1.5 %	2.2 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.067 ppb	28.323 ppb	0.349 ppb	9.069 ppb	0.029 ppb	0.473 ppb	4.870 ppb	16.894 ppb	100.525 %
Concentration per Run 1	0.013 ppb	28.540 ppb	0.350 ppb	6.580 ppb	0.036 ppb	0.420 ppb	4.828 ppb	16.861 ppb	97.564 %
Concentration per Run 2	0.117 ppb	29.087 ppb	0.374 ppb	10.605 ppb	0.017 ppb	0.525 ppb	5.077 ppb	17.102 ppb	96.671 %
Concentration per Run 3	0.071 ppb	27.340 ppb	0.324 ppb	10.023 ppb	0.036 ppb	0.473 ppb	4.705 ppb	16.718 ppb	107.342 %
Concentration RSD	77.9 %	3.2 %	7.1 %	24.0 %	36.0 %	11.2 %	3.9 %	1.1 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.136 ppb	0.767 ppb	205.339 ppb	0.890 ppb	95.257 %	0.158 ppb	0.142 ppb	96.106 %	0.036 ppb
Concentration per Run 1	0.147 ppb	0.740 ppb	202.801 ppb	0.763 ppb	95.087 %	0.155 ppb	0.130 ppb	95.223 %	0.030 ppb
Concentration per Run 2	0.146 ppb	0.732 ppb	205.461 ppb	0.912 ppb	88.845 %	0.168 ppb	0.139 ppb	89.259 %	0.029 ppb
Concentration per Run 3	0.116 ppb	0.829 ppb	207.755 ppb	0.995 ppb	101.838 %	0.152 ppb	0.156 ppb	103.835 %	0.050 ppb
Concentration RSD	12.9 %	7.0 %	1.2 %	13.2 %	6.8 %	5.6 %	9.5 %	7.6 %	31.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.619 ppb	101.602 %	99.357 %	0.034 ppb	0.022 ppb	64.746 %
Concentration per Run 1	66.603 ppb	100.976 %	98.674 %	0.005 ppb	0.018 ppb	74.840 %
Concentration per Run 2	66.728 ppb	95.247 %	93.685 %	0.042 ppb	0.026 ppb	58.284 %
Concentration per Run 3	66.527 ppb	108.583 %	105.711 %	0.057 ppb	0.022 ppb	61.114 %
Concentration RSD	0.2 %	6.6 %	6.1 %	78.4 %	18.6 %	13.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	52	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 9:26:32 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.699 %	105.556 %	63.617 ppb	6,196.025 ppb	6,098.826 ppb	61.282 ppb	5,977.165 ppb	5,718.609 ppb	105.758 %
Concentration per Run 1	104.501 %	104.902 %	63.358 ppb	6,328.049 ppb	6,253.753 ppb	62.288 ppb	6,065.218 ppb	5,739.963 ppb	105.732 %
Concentration per Run 2	104.693 %	110.784 %	63.935 ppb	5,878.265 ppb	5,766.759 ppb	59.268 ppb	5,705.427 ppb	5,534.468 ppb	105.798 %
Concentration per Run 3	104.904 %	100.980 %	63.559 ppb	6,381.761 ppb	6,275.965 ppb	62.290 ppb	6,160.850 ppb	5,881.396 ppb	105.743 %
Recovery Percentage 1			106.028 %	103.267 %	101.647 %	102.137 %	99.619 %	95.310 %	
Concentration RSD	0.2 %	4.7 %	0.5 %	4.5 %	4.7 %	2.8 %	4.0 %	3.1 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.267 ppb	61.648 ppb	61.778 ppb	6,205.926 ppb	62.757 ppb	63.126 ppb	64.077 ppb	62.920 ppb	98.204 %
Concentration per Run 1	57.563 ppb	62.655 ppb	64.330 ppb	6,368.670 ppb	64.273 ppb	64.295 ppb	66.308 ppb	64.296 ppb	96.256 %
Concentration per Run 2	56.539 ppb	59.286 ppb	59.123 ppb	5,980.950 ppb	60.694 ppb	61.340 ppb	61.620 ppb	61.012 ppb	100.630 %
Concentration per Run 3	60.698 ppb	63.004 ppb	61.881 ppb	6,268.158 ppb	63.303 ppb	63.744 ppb	64.304 ppb	63.453 ppb	97.725 %
Recovery Percentage 1	97.111 %	102.747 %	102.964 %	103.432 %	104.595 %	105.211 %	106.795 %	104.867 %	
Concentration RSD	3.7 %	3.3 %	4.2 %	3.2 %	2.9 %	2.5 %	3.7 %	2.7 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.613 ppb	61.096 ppb	54.576 ppb	59.894 ppb	97.397 %	62.145 ppb	62.431 ppb	94.359 %	60.940 ppb
Concentration per Run 1	64.013 ppb	63.173 ppb	55.651 ppb	60.108 ppb	99.033 %	62.206 ppb	62.414 ppb	95.531 %	60.701 ppb
Concentration per Run 2	60.558 ppb	56.231 ppb	51.593 ppb	59.114 ppb	96.942 %	62.196 ppb	62.598 ppb	92.067 %	61.158 ppb
Concentration per Run 3	63.268 ppb	63.884 ppb	56.484 ppb	60.460 ppb	96.216 %	62.031 ppb	62.282 ppb	95.479 %	60.960 ppb
Recovery Percentage 1	104.355 %	101.827 %	90.960 %	99.823 %		103.574 %	104.052 %		101.566 %
Concentration RSD	2.9 %	6.9 %	4.8 %	1.2 %	1.5 %	0.2 %	0.3 %	2.1 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.747 ppb	100.837 %	98.873 %	61.887 ppb	63.458 ppb	67.615 %
Concentration per Run 1	60.321 ppb	100.015 %	98.553 %	62.133 ppb	63.100 ppb	78.091 %
Concentration per Run 2	60.500 ppb	99.996 %	98.274 %	62.164 ppb	63.843 ppb	62.676 %
Concentration per Run 3	61.421 ppb	102.499 %	99.791 %	61.365 ppb	63.429 ppb	62.078 %
Recovery Percentage 1	101.246 %			103.145 %	105.763 %	
Concentration RSD	1.0 %	1.4 %	0.8 %	0.7 %	0.6 %	13.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	53	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 9:31:03 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.128 %	98.954 %	0.009 ppb	34.393 ppb	-1.170 ppb	-0.422 ppb	-0.994 ppb	-6.354 ppb	106.072 %
Concentration per Run 1	107.896 %	91.765 %	0.007 ppb	39.222 ppb	-1.276 ppb	-0.429 ppb	11.374 ppb	-1.830 ppb	105.907 %
Concentration per Run 2	107.362 %	106.079 %	0.013 ppb	29.969 ppb	-1.316 ppb	-0.386 ppb	-8.505 ppb	-9.926 ppb	106.983 %
Concentration per Run 3	106.126 %	99.020 %	0.008 ppb	33.989 ppb	-0.917 ppb	-0.451 ppb	-5.851 ppb	-7.308 ppb	105.326 %
Recovery Percentage 1			1.874 %	34.393 %	-1.671 %	-4.221 %	-0.994 %	-6.354 %	
Concentration RSD	0.8 %	7.2 %	35.1 %	13.5 %	18.8 %	7.8 %	1,085.9 %	65.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.064 ppb	-0.024 ppb	0.042 ppb	5.217 ppb	-0.001 ppb	-0.055 ppb	0.029 ppb	-0.242 ppb	93.440 %
Concentration per Run 1	-0.070 ppb	-0.013 ppb	0.047 ppb	4.117 ppb	0.003 ppb	-0.053 ppb	0.000 ppb	-0.241 ppb	93.518 %
Concentration per Run 2	-0.081 ppb	-0.034 ppb	0.064 ppb	5.207 ppb	-0.004 ppb	-0.039 ppb	0.058 ppb	-0.257 ppb	92.871 %
Concentration per Run 3	-0.040 ppb	-0.024 ppb	0.013 ppb	6.329 ppb	-0.001 ppb	-0.072 ppb	0.028 ppb	-0.226 ppb	93.933 %
Recovery Percentage 1	-1.275 %	-2.363 %	4.154 %	10.435 %	-0.113 %	-2.742 %	2.852 %	-4.833 %	
Concentration RSD	33.2 %	44.6 %	62.2 %	21.2 %	656.0 %	30.7 %	101.9 %	6.4 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.104 ppb	0.106 ppb	-0.011 ppb	0.288 ppb	95.507 %	0.005 ppb	0.001 ppb	92.272 %	0.022 ppb
Concentration per Run 1	0.097 ppb	0.076 ppb	-0.012 ppb	0.244 ppb	96.096 %	0.005 ppb	-0.001 ppb	91.719 %	0.006 ppb
Concentration per Run 2	0.151 ppb	0.089 ppb	-0.008 ppb	0.298 ppb	96.820 %	0.005 ppb	0.003 ppb	94.206 %	0.016 ppb
Concentration per Run 3	0.066 ppb	0.152 ppb	-0.012 ppb	0.321 ppb	93.604 %	0.005 ppb	0.001 ppb	90.891 %	0.043 ppb
Recovery Percentage 1	20.874 %	2.117 %	-0.106 %	14.382 %		1.187 %	0.657 %		0.542 %
Concentration RSD	41.4 %	38.5 %	20.6 %	13.8 %	1.8 %	2.3 %	144.0 %	1.9 %	88.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.010 ppb	97.033 %	96.029 %	0.321 ppb	0.010 ppb	65.954 %
Concentration per Run 1	-0.003 ppb	96.640 %	96.609 %	0.257 ppb	0.013 ppb	76.014 %
Concentration per Run 2	-0.010 ppb	99.224 %	98.094 %	0.370 ppb	0.009 ppb	61.491 %
Concentration per Run 3	-0.017 ppb	95.235 %	93.384 %	0.335 ppb	0.007 ppb	60.356 %
Recovery Percentage 1	-2.004 %			32.063 %	0.984 %	
Concentration RSD	66.5 %	2.1 %	2.5 %	18.1 %	28.1 %	13.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446709-01 2008TL	Rack	1		
Analysis started at:	8/23/2024 9:38:08 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.283 %	106.471 %	0.006 ppb	173,130.872 ppb	18,184.021 ppb	14.782 ppb	9,505.820 ppb	47,090.040 ppb	106.850 %
Concentration per Run 1	102.413 %	109.020 %	0.004 ppb	165,516.508 ppb	17,520.664 ppb	13.910 ppb	9,288.597 ppb	46,046.163 ppb	107.184 %
Concentration per Run 2	102.512 %	109.608 %	0.008 ppb	168,662.471 ppb	17,621.829 ppb	14.687 ppb	9,301.293 ppb	46,477.687 ppb	107.312 %
Concentration per Run 3	101.924 %	100.784 %	0.006 ppb	185,213.638 ppb	19,409.569 ppb	15.749 ppb	9,927.569 ppb	48,746.270 ppb	106.053 %
Concentration RSD	0.3 %	4.6 %	37.3 %	6.1 %	5.8 %	6.2 %	3.8 %	3.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.304 ppb	0.073 ppb	0.567 ppb	9.154 ppb	0.033 ppb	1.043 ppb	0.442 ppb	7.718 ppb	98.388 %
Concentration per Run 1	2.256 ppb	0.082 ppb	0.533 ppb	9.934 ppb	0.037 ppb	1.071 ppb	0.439 ppb	7.761 ppb	97.827 %
Concentration per Run 2	2.170 ppb	0.066 ppb	0.601 ppb	8.925 ppb	0.028 ppb	0.941 ppb	0.445 ppb	7.735 ppb	97.735 %
Concentration per Run 3	2.485 ppb	0.070 ppb	0.569 ppb	8.602 ppb	0.035 ppb	1.116 ppb	0.443 ppb	7.659 ppb	99.604 %
Concentration RSD	7.1 %	11.3 %	6.0 %	7.6 %	14.3 %	8.7 %	0.6 %	0.7 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.844 ppb	0.285 ppb	367.561 ppb	4.251 ppb	93.165 %	0.003 ppb	0.008 ppb	94.577 %	0.964 ppb
Concentration per Run 1	0.834 ppb	0.343 ppb	362.578 ppb	4.528 ppb	92.441 %	0.002 ppb	0.003 ppb	93.468 %	1.002 ppb
Concentration per Run 2	0.910 ppb	0.248 ppb	369.792 ppb	4.170 ppb	92.715 %	0.004 ppb	0.009 ppb	94.085 %	0.955 ppb
Concentration per Run 3	0.788 ppb	0.264 ppb	370.312 ppb	4.055 ppb	94.337 %	0.004 ppb	0.013 ppb	96.177 %	0.935 ppb
Concentration RSD	7.3 %	17.8 %	1.2 %	5.8 %	1.1 %	41.9 %	56.7 %	1.5 %	3.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.451 ppb	102.448 %	101.462 %	0.095 ppb	0.052 ppb	62.581 %
Concentration per Run 1	65.885 ppb	101.970 %	101.603 %	0.045 ppb	0.042 ppb	74.497 %
Concentration per Run 2	65.646 ppb	102.719 %	100.704 %	0.116 ppb	0.059 ppb	58.011 %
Concentration per Run 3	67.822 ppb	102.654 %	102.077 %	0.124 ppb	0.056 ppb	55.234 %
Concentration RSD	1.8 %	0.4 %	0.7 %	45.7 %	16.9 %	16.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	55	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446709-02 2008TL	Rack	1		
Analysis started at:	8/23/2024 9:42:36 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.999 %	101.830 %	0.010 ppb	185,826.408 ppb	19,772.704 ppb	47.764 ppb	10,165.396 ppb	50,429.070 ppb	106.621 %
Concentration per Run 1	102.612 %	95.882 %	0.010 ppb	194,270.088 ppb	20,706.402 ppb	49.143 ppb	10,667.784 ppb	51,923.745 ppb	106.584 %
Concentration per Run 2	101.366 %	100.784 %	0.008 ppb	186,399.543 ppb	19,772.541 ppb	47.496 ppb	10,038.360 ppb	49,666.415 ppb	106.147 %
Concentration per Run 3	102.020 %	108.824 %	0.013 ppb	176,809.592 ppb	18,839.169 ppb	46.652 ppb	9,790.045 ppb	49,697.050 ppb	107.133 %
Concentration RSD	0.6 %	6.4 %	22.4 %	4.7 %	4.7 %	2.7 %	4.5 %	2.6 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.413 ppb	0.359 ppb	7.816 ppb	103.550 ppb	0.101 ppb	0.619 ppb	2.929 ppb	31.158 ppb	98.777 %
Concentration per Run 1	2.480 ppb	0.365 ppb	8.260 ppb	109.076 ppb	0.096 ppb	0.644 ppb	2.826 ppb	31.634 ppb	98.034 %
Concentration per Run 2	2.599 ppb	0.347 ppb	7.450 ppb	99.779 ppb	0.104 ppb	0.628 ppb	2.932 ppb	31.288 ppb	97.991 %
Concentration per Run 3	2.160 ppb	0.366 ppb	7.737 ppb	101.794 ppb	0.104 ppb	0.585 ppb	3.029 ppb	30.554 ppb	100.307 %
Concentration RSD	9.4 %	3.0 %	5.3 %	4.7 %	4.8 %	4.9 %	3.5 %	1.8 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.959 ppb	0.266 ppb	371.052 ppb	4.069 ppb	94.974 %	0.005 ppb	0.032 ppb	94.483 %	0.973 ppb
Concentration per Run 1	0.969 ppb	0.228 ppb	370.744 ppb	3.917 ppb	95.499 %	0.003 ppb	0.035 ppb	94.628 %	0.928 ppb
Concentration per Run 2	0.966 ppb	0.276 ppb	370.561 ppb	4.275 ppb	94.728 %	0.007 ppb	0.028 ppb	95.003 %	0.975 ppb
Concentration per Run 3	0.942 ppb	0.294 ppb	371.852 ppb	4.016 ppb	94.694 %	0.003 ppb	0.034 ppb	93.817 %	1.017 ppb
Concentration RSD	1.6 %	12.9 %	0.2 %	4.5 %	0.5 %	53.2 %	12.3 %	0.6 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.389 ppb	100.672 %	98.876 %	0.062 ppb	0.295 ppb	60.530 %
Concentration per Run 1	65.584 ppb	100.972 %	99.679 %	0.024 ppb	0.256 ppb	70.853 %
Concentration per Run 2	66.418 ppb	99.225 %	97.319 %	0.084 ppb	0.306 ppb	55.777 %
Concentration per Run 3	67.164 ppb	101.818 %	99.632 %	0.079 ppb	0.322 ppb	54.959 %
Concentration RSD	1.2 %	1.3 %	1.4 %	53.2 %	11.7 %	14.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	56	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446711-01 2008TL	Rack	1		
Analysis started at:	8/23/2024 9:47:04 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	65.499 %	90.588 %	0.005 ppb	1,702,465.007 ppb	239,824.915 ppb	2.814 ppb	29,471.908 ppb	471,789.500 ppb	63.684 %
Concentration per Run 1	65.484 %	92.941 %	0.010 ppb	1,724,419.132 ppb	241,203.664 ppb	2.819 ppb	29,231.899 ppb	459,305.412 ppb	63.990 %
Concentration per Run 2	65.929 %	93.529 %	0.003 ppb	1,654,391.129 ppb	232,861.050 ppb	2.723 ppb	28,913.600 ppb	463,433.089 ppb	63.698 %
Concentration per Run 3	65.085 %	85.294 %	0.003 ppb	1,728,584.760 ppb	245,410.031 ppb	2.900 ppb	30,270.227 ppb	492,629.998 ppb	63.363 %
Concentration RSD	0.6 %	5.1 %	73.1 %	2.4 %	2.7 %	3.2 %	2.4 %	3.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.021 ppb	0.063 ppb	2,938.139 ppb	64.764 ppb	0.771 ppb	1.883 ppb	3.022 ppb	4.445 ppb	76.948 %
Concentration per Run 1	-0.041 ppb	0.069 ppb	2,938.556 ppb	67.126 ppb	0.802 ppb	1.985 ppb	3.049 ppb	4.585 ppb	77.332 %
Concentration per Run 2	-0.003 ppb	0.036 ppb	2,936.269 ppb	63.760 ppb	0.754 ppb	1.885 ppb	3.108 ppb	4.413 ppb	76.129 %
Concentration per Run 3	-0.018 ppb	0.084 ppb	2,939.591 ppb	63.406 ppb	0.757 ppb	1.779 ppb	2.910 ppb	4.338 ppb	77.381 %
Concentration RSD	91.5 %	39.0 %	0.1 %	3.2 %	3.5 %	5.5 %	3.4 %	2.9 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.194 ppb	0.102 ppb	6,343.114 ppb	1.645 ppb	70.541 %	0.008 ppb	0.002 ppb	71.035 %	0.083 ppb
Concentration per Run 1	1.175 ppb	0.172 ppb	6,317.325 ppb	1.619 ppb	72.803 %	0.006 ppb	-0.001 ppb	73.418 %	0.068 ppb
Concentration per Run 2	1.229 ppb	0.091 ppb	6,383.697 ppb	1.716 ppb	70.643 %	0.013 ppb	0.002 ppb	70.086 %	0.096 ppb
Concentration per Run 3	1.177 ppb	0.043 ppb	6,328.319 ppb	1.601 ppb	68.178 %	0.005 ppb	0.005 ppb	69.601 %	0.085 ppb
Concentration RSD	2.5 %	64.0 %	0.6 %	3.8 %	3.3 %	58.3 %	130.9 %	2.9 %	17.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	286.490 ppb	78.855 %	76.403 %	0.038 ppb	0.402 ppb	42.391 %
Concentration per Run 1	282.009 ppb	81.190 %	78.427 %	0.009 ppb	0.406 ppb	50.966 %
Concentration per Run 2	290.816 ppb	78.541 %	76.241 %	0.048 ppb	0.413 ppb	39.281 %
Concentration per Run 3	286.646 ppb	76.833 %	74.541 %	0.056 ppb	0.388 ppb	36.927 %
Concentration RSD	1.5 %	2.8 %	2.5 %	66.4 %	3.2 %	17.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446711-02 2008TL	Rack	1		
Analysis started at:	8/23/2024 9:52:29 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	57.791 %	74.902 %	0.020 ppb	1,762,115.919 ppb	252,047.268 ppb	5.810 ppb	32,281.021 ppb	542,976.046 ppb	54.940 %
Concentration per Run 1	58.612 %	75.294 %	0.017 ppb	1,830,830.022 ppb	262,079.246 ppb	5.742 ppb	33,161.569 ppb	552,887.956 ppb	55.772 %
Concentration per Run 2	57.737 %	77.843 %	0.017 ppb	1,694,412.435 ppb	243,469.230 ppb	5.650 ppb	31,588.016 ppb	532,837.471 ppb	54.372 %
Concentration per Run 3	57.022 %	71.568 %	0.025 ppb	1,761,105.298 ppb	250,593.328 ppb	6.038 ppb	32,093.477 ppb	543,202.710 ppb	54.675 %
Concentration RSD	1.4 %	4.2 %	23.6 %	3.9 %	3.7 %	3.5 %	2.5 %	1.8 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.071 ppb	1.103 ppb	2,994.273 ppb	4,300.462 ppb	0.851 ppb	1.146 ppb	1.893 ppb	6.920 ppb	66.937 %
Concentration per Run 1	0.085 ppb	1.179 ppb	3,025.884 ppb	4,398.886 ppb	0.893 ppb	1.205 ppb	1.992 ppb	7.081 ppb	68.345 %
Concentration per Run 2	0.066 ppb	1.079 ppb	2,993.256 ppb	4,277.506 ppb	0.834 ppb	1.065 ppb	1.771 ppb	6.854 ppb	65.988 %
Concentration per Run 3	0.061 ppb	1.050 ppb	2,963.678 ppb	4,224.995 ppb	0.826 ppb	1.166 ppb	1.915 ppb	6.824 ppb	66.477 %
Concentration RSD	18.5 %	6.2 %	1.0 %	2.1 %	4.3 %	6.3 %	5.9 %	2.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.706 ppb	0.034 ppb	6,871.597 ppb	1.694 ppb	63.494 %	0.000 ppb	0.006 ppb	65.049 %	0.186 ppb
Concentration per Run 1	9.166 ppb	0.189 ppb	6,691.088 ppb	1.492 ppb	66.352 %	-0.001 ppb	0.005 ppb	67.402 %	0.166 ppb
Concentration per Run 2	8.238 ppb	-0.012 ppb	6,850.166 ppb	1.844 ppb	62.412 %	0.002 ppb	0.005 ppb	64.686 %	0.191 ppb
Concentration per Run 3	8.713 ppb	-0.075 ppb	7,073.538 ppb	1.747 ppb	61.717 %	-0.002 ppb	0.008 ppb	63.057 %	0.200 ppb
Concentration RSD	5.3 %	405.4 %	2.8 %	10.7 %	3.9 %	4,572.1 %	30.4 %	3.4 %	9.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	291.443 ppb	71.624 %	70.065 %	0.026 ppb	2.497 ppb	37.468 %
Concentration per Run 1	290.832 ppb	74.709 %	73.674 %	0.003 ppb	2.120 ppb	46.596 %
Concentration per Run 2	291.945 ppb	72.313 %	70.405 %	0.032 ppb	2.644 ppb	34.591 %
Concentration per Run 3	291.553 ppb	67.850 %	66.116 %	0.044 ppb	2.726 ppb	31.218 %
Concentration RSD	0.2 %	4.9 %	5.4 %	80.9 %	13.2 %	21.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446860-01d10 2008TL	Rack	1		
Analysis started at:	8/23/2024 9:56:58 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.287 %	81.765 %	0.007 ppb	63,596.134 ppb	2,781.697 ppb	75.388 ppb	7,245.753 ppb	10,273.536 ppb	76.804 %
Concentration per Run 1	83.537 %	87.255 %	0.004 ppb	64,258.083 ppb	2,982.977 ppb	76.105 ppb	7,635.709 ppb	10,995.088 ppb	76.582 %
Concentration per Run 2	83.264 %	75.294 %	0.005 ppb	66,309.061 ppb	2,801.328 ppb	80.738 ppb	7,195.727 ppb	10,218.995 ppb	77.113 %
Concentration per Run 3	83.059 %	82.745 %	0.011 ppb	60,221.256 ppb	2,560.787 ppb	69.322 ppb	6,905.823 ppb	9,606.524 ppb	76.716 %
Concentration RSD	0.3 %	7.4 %	58.3 %	4.9 %	7.6 %	7.6 %	5.1 %	6.8 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.577 ppb	2.945 ppb	18.326 ppb	1,627.461 ppb	0.281 ppb	3.317 ppb	169.975 ppb	98.149 ppb	82.089 %
Concentration per Run 1	0.643 ppb	2.943 ppb	20.118 ppb	1,626.873 ppb	0.278 ppb	3.298 ppb	165.727 ppb	97.773 ppb	87.230 %
Concentration per Run 2	0.531 ppb	3.018 ppb	18.457 ppb	1,642.439 ppb	0.295 ppb	3.188 ppb	173.189 ppb	99.234 ppb	81.340 %
Concentration per Run 3	0.559 ppb	2.873 ppb	16.403 ppb	1,613.070 ppb	0.271 ppb	3.463 ppb	171.010 ppb	97.442 ppb	77.696 %
Concentration RSD	10.2 %	2.5 %	10.2 %	0.9 %	4.4 %	4.2 %	2.3 %	1.0 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	14.074 ppb	1.829 ppb	106.053 ppb	1.023 ppb	82.368 %	3.365 ppb	1.212 ppb	86.006 %	0.112 ppb
Concentration per Run 1	14.260 ppb	1.873 ppb	112.478 ppb	0.969 ppb	84.554 %	3.281 ppb	1.202 ppb	89.434 %	0.093 ppb
Concentration per Run 2	14.109 ppb	1.907 ppb	103.160 ppb	1.064 ppb	80.927 %	3.438 ppb	1.277 ppb	83.935 %	0.115 ppb
Concentration per Run 3	13.854 ppb	1.706 ppb	102.522 ppb	1.035 ppb	81.625 %	3.377 ppb	1.156 ppb	84.648 %	0.127 ppb
Concentration RSD	1.5 %	5.9 %	5.3 %	4.7 %	2.3 %	2.3 %	5.0 %	3.5 %	15.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.147 ppb	86.416 %	85.735 %	0.006 ppb	0.991 ppb	53.369 %
Concentration per Run 1	3.373 ppb	85.608 %	85.811 %	-0.010 ppb	0.840 ppb	62.642 %
Concentration per Run 2	3.008 ppb	85.543 %	84.985 %	0.013 ppb	1.057 ppb	48.769 %
Concentration per Run 3	3.060 ppb	88.097 %	86.409 %	0.015 ppb	1.077 ppb	48.694 %
Concentration RSD	6.3 %	1.7 %	0.8 %	222.8 %	13.3 %	15.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446860-02d10 2008TL	Rack	1		
Analysis started at:	8/23/2024 10:01:27 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.076 %	79.085 %	0.006 ppb	17,733.485 ppb	1,158.685 ppb	39.671 ppb	2,839.451 ppb	5,309.671 ppb	78.761 %
Concentration per Run 1	86.316 %	80.000 %	0.009 ppb	17,496.201 ppb	1,145.507 ppb	40.310 ppb	2,868.395 ppb	5,545.185 ppb	79.321 %
Concentration per Run 2	86.339 %	77.059 %	0.002 ppb	17,930.915 ppb	1,160.601 ppb	40.922 ppb	2,849.255 ppb	5,165.545 ppb	78.808 %
Concentration per Run 3	85.572 %	80.196 %	0.006 ppb	17,773.340 ppb	1,169.948 ppb	37.781 ppb	2,800.702 ppb	5,218.282 ppb	78.155 %
Concentration RSD	0.5 %	2.2 %	57.2 %	1.2 %	1.1 %	4.2 %	1.2 %	3.9 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.210 ppb	0.308 ppb	3.021 ppb	82.880 ppb	0.039 ppb	0.391 ppb	35.794 ppb	37.849 ppb	84.656 %
Concentration per Run 1	0.221 ppb	0.309 ppb	2.748 ppb	83.760 ppb	0.036 ppb	0.303 ppb	35.430 ppb	37.783 ppb	85.746 %
Concentration per Run 2	0.154 ppb	0.321 ppb	3.436 ppb	85.908 ppb	0.040 ppb	0.418 ppb	35.501 ppb	37.513 ppb	84.878 %
Concentration per Run 3	0.256 ppb	0.294 ppb	2.878 ppb	78.971 ppb	0.040 ppb	0.452 ppb	36.452 ppb	38.252 ppb	83.344 %
Concentration RSD	24.6 %	4.5 %	12.1 %	4.3 %	5.2 %	19.9 %	1.6 %	1.0 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.270 ppb	0.489 ppb	36.377 ppb	0.777 ppb	82.425 %	0.794 ppb	0.086 ppb	86.130 %	0.015 ppb
Concentration per Run 1	5.065 ppb	0.568 ppb	37.006 ppb	0.771 ppb	81.688 %	0.780 ppb	0.090 ppb	87.092 %	0.003 ppb
Concentration per Run 2	5.255 ppb	0.540 ppb	35.815 ppb	0.779 ppb	81.824 %	0.769 ppb	0.089 ppb	85.097 %	0.014 ppb
Concentration per Run 3	5.489 ppb	0.358 ppb	36.311 ppb	0.781 ppb	83.763 %	0.832 ppb	0.079 ppb	86.201 %	0.027 ppb
Concentration RSD	4.0 %	23.3 %	1.6 %	0.6 %	1.4 %	4.3 %	6.9 %	1.2 %	80.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.933 ppb	85.937 %	87.436 %	-0.015 ppb	0.107 ppb	55.962 %
Concentration per Run 1	2.926 ppb	85.790 %	87.934 %	-0.022 ppb	0.099 ppb	64.246 %
Concentration per Run 2	2.826 ppb	85.449 %	85.854 %	-0.014 ppb	0.110 ppb	52.255 %
Concentration per Run 3	3.045 ppb	86.571 %	88.521 %	-0.011 ppb	0.111 ppb	51.387 %
Concentration RSD	3.7 %	0.7 %	1.6 %	36.9 %	6.3 %	12.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446915-01 2008TL	Rack	1		
Analysis started at:	8/23/2024 10:05:53 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.911 %	77.647 %	0.012 ppb	296,630.227 ppb	34,093.953 ppb	105.444 ppb	6,307.169 ppb	101,600.762 ppb	81.006 %
Concentration per Run 1	81.015 %	74.706 %	0.007 ppb	292,748.679 ppb	33,412.552 ppb	98.550 ppb	6,153.490 ppb	100,226.430 ppb	82.034 %
Concentration per Run 2	79.815 %	76.470 %	0.013 ppb	307,215.355 ppb	35,510.738 ppb	118.078 ppb	6,625.507 ppb	105,280.124 ppb	81.216 %
Concentration per Run 3	78.903 %	81.765 %	0.017 ppb	289,926.647 ppb	33,358.570 ppb	99.704 ppb	6,142.509 ppb	99,295.731 ppb	79.769 %
Concentration RSD	1.3 %	4.7 %	44.1 %	3.1 %	3.6 %	10.4 %	4.4 %	3.2 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.560 ppb	1.989 ppb	10.410 ppb	495.004 ppb	0.207 ppb	0.507 ppb	3.752 ppb	3.613 ppb	82.524 %
Concentration per Run 1	0.502 ppb	1.988 ppb	10.186 ppb	491.642 ppb	0.211 ppb	0.461 ppb	3.527 ppb	3.741 ppb	79.880 %
Concentration per Run 2	0.751 ppb	2.005 ppb	10.664 ppb	490.639 ppb	0.176 ppb	0.423 ppb	3.715 ppb	3.364 ppb	85.960 %
Concentration per Run 3	0.426 ppb	1.972 ppb	10.381 ppb	502.731 ppb	0.233 ppb	0.638 ppb	4.015 ppb	3.733 ppb	81.731 %
Concentration RSD	30.3 %	0.8 %	2.3 %	1.4 %	13.9 %	22.7 %	6.6 %	6.0 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.288 ppb	0.868 ppb	660.485 ppb	0.615 ppb	78.057 %	0.164 ppb	0.080 ppb	83.031 %	0.168 ppb
Concentration per Run 1	0.272 ppb	0.508 ppb	636.589 ppb	0.758 ppb	77.369 %	0.158 ppb	0.077 ppb	79.608 %	0.165 ppb
Concentration per Run 2	0.283 ppb	1.273 ppb	684.519 ppb	0.529 ppb	78.537 %	0.153 ppb	0.077 ppb	86.501 %	0.162 ppb
Concentration per Run 3	0.308 ppb	0.823 ppb	660.348 ppb	0.557 ppb	78.266 %	0.180 ppb	0.086 ppb	82.982 %	0.178 ppb
Concentration RSD	6.5 %	44.3 %	3.6 %	20.3 %	0.8 %	8.9 %	6.4 %	4.2 %	5.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	129.513 ppb	85.443 %	86.444 %	0.029 ppb	3.168 ppb	50.551 %
Concentration per Run 1	129.667 ppb	83.681 %	84.666 %	0.013 ppb	3.167 ppb	58.572 %
Concentration per Run 2	131.716 ppb	86.368 %	88.543 %	0.031 ppb	3.128 ppb	47.157 %
Concentration per Run 3	127.157 ppb	86.280 %	86.124 %	0.043 ppb	3.208 ppb	45.923 %
Concentration RSD	1.8 %	1.8 %	2.3 %	51.8 %	1.3 %	13.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 10:10:19 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.984 %	80.196 %	61.303 ppb	6,608.072 ppb	6,509.956 ppb	61.433 ppb	6,437.085 ppb	6,545.023 ppb	81.984 %
Concentration per Run 1	87.905 %	78.627 %	61.336 ppb	6,679.823 ppb	6,584.506 ppb	62.764 ppb	6,457.580 ppb	6,686.337 ppb	82.836 %
Concentration per Run 2	87.906 %	79.215 %	61.190 ppb	6,808.583 ppb	6,704.667 ppb	61.727 ppb	6,763.191 ppb	6,743.290 ppb	82.584 %
Concentration per Run 3	85.142 %	82.745 %	61.384 ppb	6,335.811 ppb	6,240.695 ppb	59.807 ppb	6,090.484 ppb	6,205.443 ppb	80.531 %
Recovery Percentage 1			102.172 %	110.135 %	108.499 %	102.388 %	107.285 %	109.084 %	
Concentration RSD	1.8 %	2.8 %	0.2 %	3.7 %	3.7 %	2.4 %	5.2 %	4.5 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	64.684 ppb	62.957 ppb	62.681 ppb	6,187.293 ppb	62.447 ppb	62.162 ppb	62.034 ppb	62.694 ppb	87.934 %
Concentration per Run 1	65.637 ppb	64.148 ppb	62.324 ppb	6,254.927 ppb	64.528 ppb	62.761 ppb	64.681 ppb	63.865 ppb	84.759 %
Concentration per Run 2	64.556 ppb	62.631 ppb	64.327 ppb	6,141.586 ppb	61.410 ppb	60.755 ppb	60.095 ppb	61.957 ppb	91.962 %
Concentration per Run 3	63.860 ppb	62.093 ppb	61.391 ppb	6,165.365 ppb	61.403 ppb	62.970 ppb	61.325 ppb	62.259 ppb	87.080 %
Recovery Percentage 1	107.807 %	104.929 %	104.468 %	103.122 %	104.078 %	103.603 %	103.390 %	104.489 %	
Concentration RSD	1.4 %	1.7 %	2.4 %	1.0 %	2.9 %	2.0 %	3.8 %	1.6 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.898 ppb	65.197 ppb	59.574 ppb	59.406 ppb	85.267 %	60.470 ppb	61.621 ppb	88.880 %	61.183 ppb
Concentration per Run 1	63.862 ppb	65.912 ppb	59.279 ppb	59.457 ppb	85.344 %	61.809 ppb	62.875 ppb	85.813 %	62.428 ppb
Concentration per Run 2	60.282 ppb	66.759 ppb	60.889 ppb	59.837 ppb	86.076 %	59.026 ppb	61.066 ppb	92.810 %	60.829 ppb
Concentration per Run 3	61.551 ppb	62.920 ppb	58.552 ppb	58.924 ppb	84.382 %	60.577 ppb	60.921 ppb	88.017 %	60.292 ppb
Recovery Percentage 1	103.163 %	108.662 %	99.289 %	99.010 %		100.784 %	102.701 %		101.972 %
Concentration RSD	2.9 %	3.1 %	2.0 %	0.8 %	1.0 %	2.3 %	1.8 %	4.0 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.338 ppb	90.002 %	90.972 %	53.884 ppb	60.760 ppb	57.724 %
Concentration per Run 1	62.237 ppb	88.167 %	88.258 %	49.079 ppb	61.141 ppb	66.507 %
Concentration per Run 2	62.952 ppb	91.754 %	93.559 %	51.769 ppb	59.879 ppb	55.088 %
Concentration per Run 3	61.826 ppb	90.087 %	91.100 %	60.804 ppb	61.258 ppb	51.576 %
Recovery Percentage 1	103.897 %			89.806 %	101.266 %	
Concentration RSD	0.9 %	2.0 %	2.9 %	11.4 %	1.3 %	13.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	62	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 10:14:50 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.706 %	82.222 %	0.005 ppb	156.449 ppb	-0.165 ppb	-0.497 ppb	7.894 ppb	-4.865 ppb	78.481 %
Concentration per Run 1	87.438 %	81.764 %	0.006 ppb	152.947 ppb	0.156 ppb	-0.424 ppb	3.091 ppb	-0.647 ppb	77.580 %
Concentration per Run 2	85.523 %	85.686 %	0.005 ppb	156.339 ppb	-0.580 ppb	-0.639 ppb	12.088 ppb	-5.484 ppb	77.962 %
Concentration per Run 3	87.156 %	79.215 %	0.004 ppb	160.062 ppb	-0.072 ppb	-0.426 ppb	8.504 ppb	-8.462 ppb	79.900 %
Recovery Percentage 1			0.987 %	156.449 %	-0.236 %	-4.965 %	7.894 %	-4.865 %	
Concentration RSD	1.2 %	4.0 %	25.5 %	2.3 %	227.6 %	24.9 %	57.4 %	81.1 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.023 ppb	-0.009 ppb	0.021 ppb	5.528 ppb	0.004 ppb	-0.037 ppb	0.093 ppb	-0.223 ppb	82.470 %
Concentration per Run 1	-0.047 ppb	-0.016 ppb	0.027 ppb	5.720 ppb	0.007 ppb	-0.017 ppb	0.063 ppb	-0.193 ppb	79.440 %
Concentration per Run 2	-0.005 ppb	0.004 ppb	0.036 ppb	5.741 ppb	0.004 ppb	-0.041 ppb	0.094 ppb	-0.268 ppb	81.737 %
Concentration per Run 3	-0.015 ppb	-0.016 ppb	-0.001 ppb	5.123 ppb	0.002 ppb	-0.053 ppb	0.121 ppb	-0.207 ppb	86.234 %
Recovery Percentage 1	-0.451 %	-0.915 %	2.098 %	11.056 %	0.897 %	-1.859 %	9.292 %	-4.454 %	
Concentration RSD	97.7 %	127.0 %	92.2 %	6.4 %	66.4 %	49.8 %	31.2 %	17.7 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.192 ppb	-0.004 ppb	0.282 ppb	84.663 %	0.010 ppb	0.010 ppb	89.578 %	0.015 ppb
Concentration per Run 1	0.067 ppb	0.069 ppb	-0.005 ppb	0.224 ppb	82.931 %	0.010 ppb	0.010 ppb	85.260 %	0.011 ppb
Concentration per Run 2	0.052 ppb	0.118 ppb	-0.002 ppb	0.244 ppb	85.987 %	0.011 ppb	0.011 ppb	93.411 %	0.006 ppb
Concentration per Run 3	0.091 ppb	0.389 ppb	-0.004 ppb	0.378 ppb	85.071 %	0.009 ppb	0.008 ppb	90.064 %	0.028 ppb
Recovery Percentage 1	13.981 %	3.845 %	-0.036 %	14.116 %		2.550 %	4.808 %		0.368 %
Concentration RSD	28.3 %	89.6 %	31.2 %	29.7 %	1.9 %	9.4 %	19.8 %	4.6 %	78.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.005 ppb	89.002 %	90.179 %	1.739 ppb	0.005 ppb	57.901 %
Concentration per Run 1	-0.009 ppb	86.584 %	86.110 %	1.347 ppb	0.008 ppb	66.326 %
Concentration per Run 2	-0.003 ppb	90.643 %	93.381 %	1.982 ppb	0.002 ppb	54.879 %
Concentration per Run 3	-0.002 ppb	89.778 %	91.046 %	1.887 ppb	0.004 ppb	52.499 %
Recovery Percentage 1	-0.912 %			173.867 %	0.480 %	
Concentration RSD	77.7 %	2.4 %	4.1 %	19.7 %	55.8 %	12.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 10:34:36 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.938 %	86.340 %	59.212 ppb	5,852.434 ppb	5,820.702 ppb	58.890 ppb	5,910.225 ppb	6,000.624 ppb	83.215 %
Concentration per Run 1	88.421 %	86.470 %	59.479 ppb	5,743.992 ppb	5,757.973 ppb	60.539 ppb	5,746.221 ppb	5,885.374 ppb	81.982 %
Concentration per Run 2	89.597 %	88.235 %	58.508 ppb	5,718.056 ppb	5,628.436 ppb	56.917 ppb	5,754.990 ppb	5,728.054 ppb	84.065 %
Concentration per Run 3	88.795 %	84.314 %	59.648 ppb	6,095.254 ppb	6,075.696 ppb	59.214 ppb	6,229.465 ppb	6,388.443 ppb	83.597 %
Recovery Percentage 1			98.686 %	97.541 %	97.012 %	98.151 %	98.504 %	100.010 %	
Concentration RSD	0.7 %	2.3 %	1.0 %	3.6 %	4.0 %	3.1 %	4.7 %	5.7 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.377 ppb	59.573 ppb	59.102 ppb	5,901.064 ppb	59.367 ppb	59.245 ppb	59.510 ppb	60.975 ppb	82.210 %
Concentration per Run 1	60.498 ppb	59.026 ppb	58.920 ppb	5,771.053 ppb	59.095 ppb	59.123 ppb	59.073 ppb	60.407 ppb	80.700 %
Concentration per Run 2	59.388 ppb	58.227 ppb	57.804 ppb	5,895.198 ppb	58.373 ppb	59.098 ppb	59.386 ppb	60.280 ppb	83.154 %
Concentration per Run 3	64.244 ppb	61.466 ppb	60.582 ppb	6,036.943 ppb	60.631 ppb	59.513 ppb	60.073 ppb	62.239 ppb	82.777 %
Recovery Percentage 1	102.294 %	99.288 %	98.503 %	98.351 %	98.944 %	98.741 %	99.184 %	101.626 %	
Concentration RSD	4.1 %	2.8 %	2.4 %	2.3 %	1.9 %	0.4 %	0.9 %	1.8 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.539 ppb	63.559 ppb	58.040 ppb	59.934 ppb	82.397 %	60.265 ppb	60.172 ppb	85.551 %	55.110 ppb
Concentration per Run 1	60.117 ppb	62.423 ppb	58.355 ppb	59.403 ppb	82.654 %	60.496 ppb	60.168 ppb	85.724 %	55.757 ppb
Concentration per Run 2	59.206 ppb	65.167 ppb	58.499 ppb	59.738 ppb	83.558 %	59.866 ppb	59.630 ppb	87.629 %	55.401 ppb
Concentration per Run 3	62.294 ppb	63.086 ppb	57.266 ppb	60.662 ppb	80.979 %	60.432 ppb	60.718 ppb	83.300 %	54.171 ppb
Recovery Percentage 1	100.899 %	105.932 %	96.733 %	99.891 %		100.441 %	100.287 %		91.849 %
Concentration RSD	2.6 %	2.3 %	1.2 %	1.1 %	1.6 %	0.6 %	0.9 %	2.5 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.446 ppb	91.958 %	94.478 %	55.641 ppb	61.043 ppb	60.005 %
Concentration per Run 1	60.950 ppb	92.947 %	95.530 %	55.537 ppb	60.725 ppb	71.772 %
Concentration per Run 2	60.172 ppb	93.056 %	95.996 %	54.452 ppb	60.115 ppb	55.198 %
Concentration per Run 3	60.215 ppb	89.870 %	91.907 %	56.933 ppb	62.287 ppb	53.044 %
Recovery Percentage 1	100.743 %			92.734 %	101.738 %	
Concentration RSD	0.7 %	2.0 %	2.4 %	2.2 %	1.8 %	17.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 10:39:55 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.149 %	80.523 %	0.010 ppb	96.791 ppb	0.009 ppb	-0.222 ppb	5.011 ppb	-3.307 ppb	83.583 %
Concentration per Run 1	92.061 %	83.333 %	0.013 ppb	88.101 ppb	-0.335 ppb	-0.082 ppb	1.347 ppb	-5.430 ppb	84.252 %
Concentration per Run 2	91.717 %	77.647 %	0.010 ppb	99.902 ppb	0.441 ppb	-0.415 ppb	10.142 ppb	0.923 ppb	83.635 %
Concentration per Run 3	89.669 %	80.588 %	0.008 ppb	102.370 ppb	-0.079 ppb	-0.170 ppb	3.543 ppb	-5.415 ppb	82.862 %
Recovery Percentage 1			2.083 %	96.791 %	0.012 %	-2.224 %	5.011 %	-3.307 %	
Concentration RSD	1.4 %	3.5 %	20.0 %	7.9 %	4,523.5 %	77.6 %	91.4 %	110.8 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.050 ppb	0.000 ppb	0.033 ppb	3.076 ppb	0.001 ppb	-0.031 ppb	0.073 ppb	-0.209 ppb	83.017 %
Concentration per Run 1	-0.023 ppb	-0.007 ppb	0.000 ppb	2.576 ppb	0.002 ppb	-0.012 ppb	0.080 ppb	-0.212 ppb	82.489 %
Concentration per Run 2	-0.086 ppb	0.003 ppb	0.038 ppb	2.630 ppb	-0.004 ppb	-0.070 ppb	0.081 ppb	-0.180 ppb	82.782 %
Concentration per Run 3	-0.041 ppb	0.004 ppb	0.060 ppb	4.021 ppb	0.004 ppb	-0.012 ppb	0.059 ppb	-0.234 ppb	83.779 %
Recovery Percentage 1	-1.000 %	0.032 %	3.299 %	6.151 %	0.151 %	-1.562 %	7.302 %	-4.174 %	
Concentration RSD	64.9 %	1,891.7 %	92.0 %	26.6 %	548.8 %	107.0 %	17.1 %	13.2 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.043 ppb	0.130 ppb	-0.006 ppb	0.190 ppb	83.885 %	0.010 ppb	0.003 ppb	86.181 %	0.743 ppb
Concentration per Run 1	0.021 ppb	-0.005 ppb	-0.006 ppb	0.175 ppb	86.287 %	0.011 ppb	0.008 ppb	88.996 %	0.720 ppb
Concentration per Run 2	0.040 ppb	0.187 ppb	-0.008 ppb	0.155 ppb	80.621 %	0.012 ppb	-0.001 ppb	80.633 %	0.696 ppb
Concentration per Run 3	0.068 ppb	0.208 ppb	-0.004 ppb	0.240 ppb	84.747 %	0.007 ppb	0.004 ppb	88.914 %	0.812 ppb
Recovery Percentage 1	8.559 %	2.592 %	-0.061 %	9.490 %		2.501 %	1.746 %		18.574 %
Concentration RSD	55.1 %	90.5 %	36.9 %	23.3 %	3.5 %	22.7 %	116.9 %	5.6 %	8.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.006 ppb	90.200 %	91.420 %	0.499 ppb	0.008 ppb	58.735 %
Concentration per Run 1	-0.016 ppb	91.772 %	93.402 %	0.359 ppb	0.008 ppb	69.249 %
Concentration per Run 2	-0.001 ppb	87.056 %	87.670 %	0.571 ppb	0.008 ppb	53.048 %
Concentration per Run 3	-0.002 ppb	91.773 %	93.189 %	0.568 ppb	0.008 ppb	53.909 %
Recovery Percentage 1	-1.299 %			49.912 %	0.764 %	
Concentration RSD	132.1 %	3.0 %	3.6 %	24.4 %	0.3 %	15.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962897-1 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:03:29 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.658 %	83.725 %	0.000 ppb	73.912 ppb	1.856 ppb	2.091 ppb	1.356 ppb	8.526 ppb	84.810 %
Concentration per Run 1	92.525 %	92.549 %	0.001 ppb	60.797 ppb	1.757 ppb	1.619 ppb	1.698 ppb	10.424 ppb	85.368 %
Concentration per Run 2	91.294 %	77.647 %	-0.001 ppb	79.349 ppb	1.620 ppb	2.016 ppb	1.610 ppb	13.189 ppb	84.841 %
Concentration per Run 3	91.157 %	80.980 %	0.001 ppb	81.591 ppb	2.191 ppb	2.638 ppb	0.760 ppb	1.965 ppb	84.222 %
Concentration RSD	0.8 %	9.3 %	662.6 %	15.4 %	16.1 %	24.6 %	38.2 %	68.6 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.037 ppb	-0.006 ppb	0.065 ppb	1.045 ppb	0.002 ppb	0.001 ppb	0.159 ppb	0.251 ppb	85.799 %
Concentration per Run 1	-0.060 ppb	-0.012 ppb	0.038 ppb	1.130 ppb	0.001 ppb	-0.024 ppb	0.184 ppb	0.157 ppb	90.794 %
Concentration per Run 2	-0.011 ppb	-0.003 ppb	0.014 ppb	0.901 ppb	-0.001 ppb	-0.010 ppb	0.128 ppb	0.277 ppb	82.690 %
Concentration per Run 3	-0.041 ppb	-0.004 ppb	0.144 ppb	1.102 ppb	0.007 ppb	0.036 ppb	0.165 ppb	0.320 ppb	83.912 %
Concentration RSD	66.8 %	82.9 %	105.9 %	11.9 %	173.6 %	4,792.4 %	17.9 %	33.8 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.046 ppb	0.040 ppb	0.012 ppb	0.011 ppb	87.967 %	0.006 ppb	0.001 ppb	93.424 %	0.023 ppb
Concentration per Run 1	0.031 ppb	0.095 ppb	0.007 ppb	-0.003 ppb	88.861 %	0.010 ppb	-0.001 ppb	96.050 %	0.013 ppb
Concentration per Run 2	0.065 ppb	-0.010 ppb	0.012 ppb	0.004 ppb	87.299 %	0.004 ppb	0.005 ppb	91.590 %	0.024 ppb
Concentration per Run 3	0.043 ppb	0.034 ppb	0.018 ppb	0.031 ppb	87.740 %	0.005 ppb	-0.001 ppb	92.632 %	0.033 ppb
Concentration RSD	36.8 %	132.6 %	48.2 %	170.4 %	0.9 %	49.1 %	247.8 %	2.5 %	42.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.156 ppb	96.340 %	100.161 %	0.071 ppb	0.007 ppb	62.851 %
Concentration per Run 1	0.165 ppb	98.639 %	104.555 %	0.035 ppb	0.007 ppb	75.493 %
Concentration per Run 2	0.159 ppb	95.639 %	98.115 %	0.091 ppb	0.007 ppb	57.525 %
Concentration per Run 3	0.145 ppb	94.742 %	97.814 %	0.086 ppb	0.007 ppb	55.535 %
Concentration RSD	6.4 %	2.1 %	3.8 %	43.3 %	2.8 %	17.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	66	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962897-2d10 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:07:56 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.152 %	85.751 %	4.940 ppb	1,089.994 ppb	986.688 ppb	205.725 ppb	1,023.111 ppb	1,037.694 ppb	83.818 %
Concentration per Run 1	90.603 %	82.745 %	4.916 ppb	1,085.921 ppb	998.822 ppb	201.624 ppb	1,004.990 ppb	1,032.457 ppb	83.872 %
Concentration per Run 2	90.879 %	87.647 %	4.948 ppb	1,104.313 ppb	997.192 ppb	217.752 ppb	1,049.580 ppb	988.678 ppb	84.556 %
Concentration per Run 3	88.974 %	86.863 %	4.957 ppb	1,079.749 ppb	964.050 ppb	197.800 ppb	1,014.763 ppb	1,091.946 ppb	83.027 %
Concentration RSD	1.1 %	3.1 %	0.4 %	1.2 %	2.0 %	5.1 %	2.3 %	5.0 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.124 ppb	19.589 ppb	50.304 ppb	99.565 ppb	49.650 ppb	48.828 ppb	24.787 ppb	50.492 ppb	86.126 %
Concentration per Run 1	48.673 ppb	19.677 ppb	49.441 ppb	98.689 ppb	49.233 ppb	48.439 ppb	25.039 ppb	49.264 ppb	85.784 %
Concentration per Run 2	49.658 ppb	19.580 ppb	52.300 ppb	98.433 ppb	49.472 ppb	48.246 ppb	24.263 ppb	50.872 ppb	88.491 %
Concentration per Run 3	49.042 ppb	19.510 ppb	49.170 ppb	101.574 ppb	50.245 ppb	49.799 ppb	25.059 ppb	51.341 ppb	84.103 %
Concentration RSD	1.0 %	0.4 %	3.4 %	1.8 %	1.1 %	1.7 %	1.8 %	2.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.512 ppb	12.286 ppb	96.600 ppb	98.833 ppb	85.640 %	4.895 ppb	5.320 ppb	90.509 %	42.841 ppb
Concentration per Run 1	12.057 ppb	11.963 ppb	94.021 ppb	96.503 ppb	85.113 %	4.833 ppb	5.329 ppb	90.548 %	42.117 ppb
Concentration per Run 2	12.557 ppb	13.231 ppb	99.928 ppb	100.244 ppb	86.283 %	4.983 ppb	5.301 ppb	92.501 %	43.136 ppb
Concentration per Run 3	12.921 ppb	11.663 ppb	95.851 ppb	99.751 ppb	85.525 %	4.870 ppb	5.331 ppb	88.478 %	43.270 ppb
Concentration RSD	3.5 %	6.8 %	3.1 %	2.1 %	0.7 %	1.6 %	0.3 %	2.2 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.658 ppb	92.381 %	95.280 %	11.921 ppb	53.110 ppb	58.727 %
Concentration per Run 1	203.219 ppb	90.977 %	94.381 %	11.872 ppb	52.667 ppb	68.257 %
Concentration per Run 2	204.134 ppb	93.569 %	96.052 %	11.923 ppb	53.426 ppb	55.404 %
Concentration per Run 3	200.621 ppb	92.599 %	95.408 %	11.968 ppb	53.237 ppb	52.519 %
Concentration RSD	0.9 %	1.4 %	0.9 %	0.4 %	0.7 %	14.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	67	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-07 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:12:22 AM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.273 %	87.582 %	0.007 ppb	20,868.843 ppb	15,586.067 ppb	3.452 ppb	15,064.628 ppb	132,418.246 ppb	90.114 %
Concentration per Run 1	91.260 %	84.117 %	0.011 ppb	20,728.202 ppb	15,493.280 ppb	4.473 ppb	15,131.586 ppb	133,075.615 ppb	89.457 %
Concentration per Run 2	91.008 %	92.157 %	0.007 ppb	20,813.302 ppb	15,651.487 ppb	2.768 ppb	15,369.651 ppb	134,649.994 ppb	89.961 %
Concentration per Run 3	91.551 %	86.470 %	0.003 ppb	21,065.023 ppb	15,613.434 ppb	3.115 ppb	14,692.646 ppb	129,529.128 ppb	90.924 %
Concentration RSD	0.3 %	4.7 %	61.4 %	0.8 %	0.5 %	26.1 %	2.3 %	2.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.372 ppb	0.486 ppb	379.930 ppb	5.460 ppb	0.330 ppb	0.506 ppb	1.700 ppb	0.634 ppb	92.086 %
Concentration per Run 1	0.352 ppb	0.489 ppb	383.194 ppb	4.276 ppb	0.363 ppb	0.509 ppb	1.827 ppb	0.651 ppb	87.353 %
Concentration per Run 2	0.442 ppb	0.514 ppb	386.596 ppb	6.864 ppb	0.322 ppb	0.423 ppb	1.583 ppb	0.651 ppb	94.435 %
Concentration per Run 3	0.322 ppb	0.456 ppb	369.999 ppb	5.240 ppb	0.305 ppb	0.588 ppb	1.691 ppb	0.598 ppb	94.471 %
Concentration RSD	16.9 %	6.0 %	2.3 %	23.9 %	9.0 %	16.3 %	7.2 %	4.8 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.308 ppb	0.252 ppb	536.041 ppb	0.595 ppb	87.097 %	0.004 ppb	0.033 ppb	92.074 %	1.034 ppb
Concentration per Run 1	0.300 ppb	0.216 ppb	531.578 ppb	0.466 ppb	84.090 %	0.008 ppb	0.020 ppb	87.270 %	1.040 ppb
Concentration per Run 2	0.321 ppb	0.183 ppb	555.944 ppb	0.564 ppb	89.022 %	0.004 ppb	0.035 ppb	97.485 %	0.980 ppb
Concentration per Run 3	0.304 ppb	0.358 ppb	520.602 ppb	0.756 ppb	88.179 %	0.001 ppb	0.043 ppb	91.468 %	1.082 ppb
Concentration RSD	3.7 %	36.9 %	3.4 %	24.8 %	3.0 %	75.3 %	35.4 %	5.6 %	5.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	95.132 ppb	95.183 %	96.335 %	0.573 ppb	0.014 ppb	54.386 %
Concentration per Run 1	94.452 ppb	90.778 %	92.097 %	0.523 ppb	0.011 ppb	61.863 %
Concentration per Run 2	97.546 ppb	98.033 %	100.652 %	0.599 ppb	0.016 ppb	51.227 %
Concentration per Run 3	93.399 ppb	96.738 %	96.257 %	0.596 ppb	0.014 ppb	50.069 %
Concentration RSD	2.3 %	4.1 %	4.4 %	7.5 %	16.4 %	12.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	68	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962897-3d10 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:16:50 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.669 %	93.856 %	4.961 ppb	3,555.304 ppb	2,498.058 ppb	209.962 ppb	2,472.740 ppb	13,481.047 ppb	92.328 %
Concentration per Run 1	95.637 %	83.529 %	4.885 ppb	3,790.607 ppb	2,662.159 ppb	222.577 ppb	2,672.279 ppb	13,983.843 ppb	91.454 %
Concentration per Run 2	95.849 %	99.804 %	5.020 ppb	3,433.679 ppb	2,433.385 ppb	207.276 ppb	2,407.267 ppb	13,264.707 ppb	92.511 %
Concentration per Run 3	95.521 %	98.235 %	4.977 ppb	3,441.626 ppb	2,398.628 ppb	200.033 ppb	2,338.674 ppb	13,194.593 ppb	93.019 %
Concentration RSD	0.2 %	9.6 %	1.4 %	5.7 %	5.7 %	5.5 %	7.1 %	3.2 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.358 ppb	19.436 ppb	86.761 ppb	99.690 ppb	49.762 ppb	49.165 ppb	25.211 ppb	48.398 ppb	96.949 %
Concentration per Run 1	48.846 ppb	19.975 ppb	88.594 ppb	101.709 ppb	51.618 ppb	50.918 ppb	26.015 ppb	49.935 ppb	91.864 %
Concentration per Run 2	46.471 ppb	19.324 ppb	87.749 ppb	98.734 ppb	49.060 ppb	48.262 ppb	25.148 ppb	48.885 ppb	98.081 %
Concentration per Run 3	46.757 ppb	19.009 ppb	83.940 ppb	98.626 ppb	48.608 ppb	48.315 ppb	24.470 ppb	46.374 ppb	100.902 %
Concentration RSD	2.7 %	2.5 %	2.9 %	1.8 %	3.3 %	3.1 %	3.1 %	3.8 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.382 ppb	12.147 ppb	146.196 ppb	98.753 ppb	93.434 %	4.778 ppb	5.202 ppb	97.169 %	47.833 ppb
Concentration per Run 1	12.587 ppb	12.827 ppb	143.707 ppb	99.476 ppb	91.354 %	4.748 ppb	5.077 ppb	93.599 %	47.641 ppb
Concentration per Run 2	12.538 ppb	12.326 ppb	151.831 ppb	100.159 ppb	95.570 %	4.684 ppb	5.169 ppb	101.510 %	48.051 ppb
Concentration per Run 3	12.022 ppb	11.290 ppb	143.049 ppb	96.624 ppb	93.377 %	4.903 ppb	5.359 ppb	96.398 %	47.807 ppb
Concentration RSD	2.5 %	6.5 %	3.3 %	1.9 %	2.3 %	2.4 %	2.8 %	4.1 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	208.348 ppb	97.590 %	98.730 %	11.888 ppb	52.536 ppb	59.602 %
Concentration per Run 1	205.749 ppb	95.392 %	94.668 %	12.111 ppb	53.414 ppb	68.118 %
Concentration per Run 2	212.317 ppb	99.271 %	102.959 %	11.530 ppb	51.152 ppb	56.146 %
Concentration per Run 3	206.979 ppb	98.105 %	98.562 %	12.023 ppb	53.041 ppb	54.541 %
Concentration RSD	1.7 %	2.0 %	4.2 %	2.6 %	2.3 %	12.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	69	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962897-4d10 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:21:17 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.646 %	96.797 %	4.963 ppb	3,466.669 ppb	2,443.761 ppb	202.235 ppb	2,460.169 ppb	13,313.052 ppb	92.146 %
Concentration per Run 1	95.814 %	94.118 %	4.991 ppb	3,445.656 ppb	2,408.512 ppb	198.295 ppb	2,451.480 ppb	13,026.636 ppb	91.999 %
Concentration per Run 2	95.459 %	88.627 %	4.970 ppb	3,593.346 ppb	2,542.404 ppb	210.106 ppb	2,504.615 ppb	13,488.549 ppb	92.109 %
Concentration per Run 3	95.663 %	107.647 %	4.929 ppb	3,361.005 ppb	2,380.367 ppb	198.304 ppb	2,424.413 ppb	13,423.971 ppb	92.331 %
Concentration RSD	0.2 %	10.1 %	0.6 %	3.4 %	3.5 %	3.4 %	1.7 %	1.9 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.526 ppb	19.167 ppb	87.537 ppb	101.866 ppb	49.417 ppb	48.821 ppb	25.020 ppb	49.320 ppb	95.274 %
Concentration per Run 1	47.255 ppb	19.006 ppb	85.019 ppb	94.142 ppb	49.119 ppb	48.438 ppb	24.293 ppb	49.181 ppb	94.742 %
Concentration per Run 2	48.542 ppb	19.621 ppb	90.822 ppb	108.729 ppb	50.916 ppb	50.997 ppb	26.577 ppb	50.362 ppb	90.830 %
Concentration per Run 3	46.781 ppb	18.875 ppb	86.769 ppb	102.726 ppb	48.216 ppb	47.028 ppb	24.190 ppb	48.418 ppb	100.249 %
Concentration RSD	1.9 %	2.1 %	3.4 %	7.2 %	2.8 %	4.1 %	5.4 %	2.0 %	5.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.509 ppb	12.798 ppb	147.316 ppb	100.111 ppb	92.432 %	4.782 ppb	5.103 ppb	94.391 %	48.664 ppb
Concentration per Run 1	12.160 ppb	12.916 ppb	142.064 ppb	98.724 ppb	90.802 %	4.802 ppb	5.171 ppb	91.715 %	47.868 ppb
Concentration per Run 2	12.479 ppb	12.401 ppb	146.110 ppb	101.697 ppb	91.394 %	4.778 ppb	5.148 ppb	91.621 %	48.825 ppb
Concentration per Run 3	12.889 ppb	13.076 ppb	153.773 ppb	99.911 ppb	95.100 %	4.765 ppb	4.990 ppb	99.838 %	49.300 ppb
Concentration RSD	2.9 %	2.8 %	4.0 %	1.5 %	2.5 %	0.4 %	1.9 %	5.0 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	210.266 ppb	96.577 %	98.679 %	11.831 ppb	52.412 ppb	58.990 %
Concentration per Run 1	209.746 ppb	94.597 %	95.629 %	11.991 ppb	52.487 ppb	67.942 %
Concentration per Run 2	208.444 ppb	94.768 %	96.635 %	11.909 ppb	53.554 ppb	54.466 %
Concentration per Run 3	212.607 ppb	100.367 %	103.775 %	11.592 ppb	51.196 ppb	54.561 %
Concentration RSD	1.0 %	3.4 %	4.5 %	1.8 %	2.3 %	13.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	70	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962897-5d10 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:25:45 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.725 %	92.941 %	50.163 ppb	7,473.343 ppb	6,521.320 ppb	52.951 ppb	6,398.884 ppb	17,447.268 ppb	89.144 %
Concentration per Run 1	93.713 %	90.588 %	49.675 ppb	7,343.037 ppb	6,359.151 ppb	49.310 ppb	6,181.207 ppb	16,673.022 ppb	91.166 %
Concentration per Run 2	92.997 %	91.765 %	50.217 ppb	7,445.710 ppb	6,516.551 ppb	53.950 ppb	6,347.570 ppb	17,449.744 ppb	89.223 %
Concentration per Run 3	91.464 %	96.471 %	50.598 ppb	7,631.282 ppb	6,688.257 ppb	55.593 ppb	6,667.875 ppb	18,219.037 ppb	87.043 %
Concentration RSD	1.2 %	3.3 %	0.9 %	2.0 %	2.5 %	6.2 %	3.9 %	4.4 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.391 ppb	49.547 ppb	86.828 ppb	5,005.676 ppb	50.268 ppb	49.337 ppb	50.087 ppb	50.275 ppb	92.422 %
Concentration per Run 1	50.802 ppb	49.462 ppb	84.698 ppb	5,027.477 ppb	50.884 ppb	48.894 ppb	51.273 ppb	49.848 ppb	91.002 %
Concentration per Run 2	50.385 ppb	50.088 ppb	88.439 ppb	5,060.084 ppb	50.720 ppb	50.286 ppb	50.454 ppb	50.547 ppb	90.457 %
Concentration per Run 3	49.987 ppb	49.089 ppb	87.347 ppb	4,929.466 ppb	49.201 ppb	48.830 ppb	48.533 ppb	50.431 ppb	95.806 %
Concentration RSD	0.8 %	1.0 %	2.2 %	1.4 %	1.8 %	1.7 %	2.8 %	0.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	51.514 ppb	52.495 ppb	100.310 ppb	51.935 ppb	89.739 %	1.516 ppb	50.134 ppb	94.000 %	50.679 ppb
Concentration per Run 1	51.614 ppb	51.734 ppb	97.190 ppb	51.248 ppb	89.222 %	1.461 ppb	49.867 ppb	92.473 %	50.321 ppb
Concentration per Run 2	51.161 ppb	51.854 ppb	98.736 ppb	51.813 ppb	89.078 %	1.560 ppb	50.541 ppb	91.404 %	50.989 ppb
Concentration per Run 3	51.768 ppb	53.897 ppb	105.005 ppb	52.742 ppb	90.918 %	1.529 ppb	49.996 ppb	98.125 %	50.727 ppb
Concentration RSD	0.6 %	2.3 %	4.1 %	1.5 %	1.1 %	3.3 %	0.7 %	3.8 %	0.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.048 ppb	96.345 %	97.097 %	44.493 ppb	50.588 ppb	58.553 %
Concentration per Run 1	59.853 ppb	95.492 %	95.359 %	44.709 ppb	50.396 ppb	68.767 %
Concentration per Run 2	61.230 ppb	96.034 %	95.368 %	44.529 ppb	52.099 ppb	53.747 %
Concentration per Run 3	62.060 ppb	97.509 %	100.564 %	44.241 ppb	49.268 ppb	53.144 %
Concentration RSD	1.8 %	1.1 %	3.1 %	0.5 %	2.8 %	15.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	71	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962897-6d5 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:30:13 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.492 %	89.346 %	0.006 ppb	5,023.459 ppb	3,048.964 ppb	1.110 ppb	2,892.170 ppb	25,499.092 ppb	93.340 %
Concentration per Run 1	96.344 %	86.863 %	0.007 ppb	4,948.751 ppb	3,002.916 ppb	1.176 ppb	2,801.050 ppb	25,003.430 ppb	94.121 %
Concentration per Run 2	96.591 %	91.372 %	0.006 ppb	4,887.699 ppb	2,951.805 ppb	0.976 ppb	2,851.892 ppb	24,968.085 ppb	93.280 %
Concentration per Run 3	96.541 %	89.804 %	0.005 ppb	5,233.928 ppb	3,192.170 ppb	1.179 ppb	3,023.568 ppb	26,525.761 ppb	92.620 %
Concentration RSD	0.1 %	2.6 %	22.7 %	3.7 %	4.2 %	10.5 %	4.0 %	3.5 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.007 ppb	0.099 ppb	73.636 ppb	5.538 ppb	0.076 ppb	0.088 ppb	0.382 ppb	0.024 ppb	94.693 %
Concentration per Run 1	-0.061 ppb	0.081 ppb	69.515 ppb	4.991 ppb	0.081 ppb	0.016 ppb	0.307 ppb	0.030 ppb	94.984 %
Concentration per Run 2	0.003 ppb	0.097 ppb	73.865 ppb	6.666 ppb	0.066 ppb	0.163 ppb	0.419 ppb	0.047 ppb	94.416 %
Concentration per Run 3	0.037 ppb	0.117 ppb	77.527 ppb	4.958 ppb	0.080 ppb	0.085 ppb	0.419 ppb	-0.005 ppb	94.679 %
Concentration RSD	712.2 %	18.2 %	5.4 %	17.6 %	11.2 %	83.2 %	16.9 %	111.4 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.084 ppb	0.271 ppb	102.854 ppb	0.406 ppb	90.890 %	0.003 ppb	0.008 ppb	96.130 %	0.190 ppb
Concentration per Run 1	0.094 ppb	0.161 ppb	99.393 ppb	0.293 ppb	89.826 %	0.004 ppb	0.011 ppb	93.212 %	0.153 ppb
Concentration per Run 2	0.069 ppb	0.283 ppb	101.855 ppb	0.399 ppb	90.213 %	0.002 ppb	0.007 ppb	94.616 %	0.179 ppb
Concentration per Run 3	0.090 ppb	0.369 ppb	107.314 ppb	0.526 ppb	92.630 %	0.003 ppb	0.005 ppb	100.563 %	0.239 ppb
Concentration RSD	15.8 %	38.5 %	3.9 %	28.6 %	1.7 %	37.5 %	40.8 %	4.1 %	23.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.178 ppb	97.245 %	97.164 %	1.018 ppb	0.024 ppb	59.245 %
Concentration per Run 1	18.245 ppb	96.176 %	94.853 %	0.759 ppb	0.024 ppb	68.617 %
Concentration per Run 2	18.639 ppb	95.844 %	96.712 %	1.209 ppb	0.026 ppb	55.218 %
Concentration per Run 3	17.649 ppb	99.714 %	99.928 %	1.087 ppb	0.022 ppb	53.900 %
Concentration RSD	2.7 %	2.2 %	2.6 %	22.9 %	8.8 %	13.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-07d10 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:34:41 AM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.014 %	97.451 %	0.011 ppb	2,377.585 ppb	1,473.389 ppb	0.718 ppb	1,382.814 ppb	11,879.797 ppb	96.508 %
Concentration per Run 1	99.036 %	94.706 %	0.013 ppb	2,470.432 ppb	1,493.942 ppb	0.817 ppb	1,394.084 ppb	12,133.505 ppb	95.932 %
Concentration per Run 2	99.208 %	98.235 %	0.007 ppb	2,353.397 ppb	1,442.459 ppb	0.954 ppb	1,358.097 ppb	11,629.807 ppb	96.714 %
Concentration per Run 3	98.799 %	99.412 %	0.013 ppb	2,308.925 ppb	1,483.767 ppb	0.383 ppb	1,396.261 ppb	11,876.078 ppb	96.878 %
Concentration RSD	0.2 %	2.5 %	33.9 %	3.5 %	1.9 %	41.5 %	1.5 %	2.1 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.055 ppb	0.035 ppb	36.444 ppb	1.851 ppb	0.033 ppb	0.016 ppb	0.194 ppb	-0.083 ppb	98.851 %
Concentration per Run 1	0.020 ppb	0.055 ppb	35.811 ppb	1.387 ppb	0.038 ppb	0.033 ppb	0.228 ppb	-0.100 ppb	99.232 %
Concentration per Run 2	0.035 ppb	0.010 ppb	36.726 ppb	1.803 ppb	0.026 ppb	0.000 ppb	0.151 ppb	-0.115 ppb	97.795 %
Concentration per Run 3	0.109 ppb	0.039 ppb	36.796 ppb	2.364 ppb	0.035 ppb	0.014 ppb	0.203 ppb	-0.033 ppb	99.525 %
Concentration RSD	87.2 %	65.4 %	1.5 %	26.5 %	18.1 %	103.6 %	20.4 %	52.3 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.080 ppb	0.069 ppb	49.647 ppb	0.146 ppb	92.704 %	0.001 ppb	0.008 ppb	95.420 %	0.091 ppb
Concentration per Run 1	0.060 ppb	0.145 ppb	49.713 ppb	0.086 ppb	94.393 %	0.004 ppb	0.016 ppb	97.323 %	0.060 ppb
Concentration per Run 2	0.072 ppb	-0.009 ppb	49.356 ppb	0.156 ppb	88.615 %	0.000 ppb	-0.001 ppb	91.260 %	0.097 ppb
Concentration per Run 3	0.109 ppb	0.072 ppb	49.872 ppb	0.196 ppb	95.103 %	0.000 ppb	0.009 ppb	97.678 %	0.116 ppb
Concentration RSD	31.8 %	111.4 %	0.5 %	38.2 %	3.8 %	220.9 %	104.0 %	3.8 %	31.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.367 ppb	96.127 %	96.934 %	0.373 ppb	0.022 ppb	59.234 %
Concentration per Run 1	9.283 ppb	97.750 %	97.934 %	0.256 ppb	0.016 ppb	71.147 %
Concentration per Run 2	9.322 ppb	91.930 %	93.627 %	0.421 ppb	0.028 ppb	53.314 %
Concentration per Run 3	9.498 ppb	98.700 %	99.240 %	0.442 ppb	0.023 ppb	53.240 %
Concentration RSD	1.2 %	3.8 %	3.0 %	27.4 %	28.8 %	17.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962897-6d50 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:39:08 AM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.564 %	94.575 %	0.003 ppb	528.051 ppb	301.248 ppb	0.230 ppb	281.330 ppb	2,501.670 ppb	96.079 %
Concentration per Run 1	100.180 %	96.863 %	0.001 ppb	511.898 ppb	296.043 ppb	-0.403 ppb	282.933 ppb	2,617.856 ppb	96.697 %
Concentration per Run 2	100.466 %	95.098 %	0.004 ppb	504.806 ppb	292.282 ppb	0.273 ppb	286.758 ppb	2,324.505 ppb	96.374 %
Concentration per Run 3	98.046 %	91.765 %	0.002 ppb	567.449 ppb	315.418 ppb	0.820 ppb	274.298 ppb	2,562.649 ppb	95.166 %
Concentration RSD	1.3 %	2.7 %	56.4 %	6.5 %	4.1 %	266.1 %	2.3 %	6.2 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.052 ppb	-0.007 ppb	7.658 ppb	1.970 ppb	0.013 ppb	-0.012 ppb	0.053 ppb	-0.112 ppb	94.756 %
Concentration per Run 1	0.071 ppb	-0.012 ppb	7.987 ppb	2.720 ppb	0.013 ppb	-0.021 ppb	0.057 ppb	-0.086 ppb	95.008 %
Concentration per Run 2	0.086 ppb	-0.018 ppb	7.362 ppb	1.742 ppb	0.013 ppb	0.017 ppb	0.036 ppb	-0.151 ppb	92.125 %
Concentration per Run 3	0.000 ppb	0.010 ppb	7.624 ppb	1.446 ppb	0.013 ppb	-0.031 ppb	0.067 ppb	-0.100 ppb	97.135 %
Concentration RSD	87.4 %	215.9 %	4.1 %	33.9 %	2.3 %	219.8 %	29.8 %	30.5 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.016 ppb	0.104 ppb	10.137 ppb	0.066 ppb	94.959 %	0.004 ppb	0.003 ppb	96.286 %	0.068 ppb
Concentration per Run 1	0.016 ppb	0.093 ppb	10.101 ppb	0.021 ppb	94.048 %	0.002 ppb	0.005 ppb	95.523 %	0.043 ppb
Concentration per Run 2	0.007 ppb	0.096 ppb	10.194 ppb	0.083 ppb	94.686 %	0.004 ppb	0.001 ppb	96.800 %	0.068 ppb
Concentration per Run 3	0.026 ppb	0.124 ppb	10.115 ppb	0.095 ppb	96.142 %	0.006 ppb	0.001 ppb	96.536 %	0.092 ppb
Concentration RSD	59.2 %	16.7 %	0.5 %	60.0 %	1.1 %	61.1 %	86.7 %	0.7 %	35.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.907 ppb	95.569 %	95.566 %	0.201 ppb	0.014 ppb	58.022 %
Concentration per Run 1	2.034 ppb	95.308 %	95.930 %	0.129 ppb	0.014 ppb	69.964 %
Concentration per Run 2	1.803 ppb	93.301 %	92.081 %	0.223 ppb	0.016 ppb	50.790 %
Concentration per Run 3	1.883 ppb	98.097 %	98.687 %	0.251 ppb	0.013 ppb	53.313 %
Concentration RSD	6.2 %	2.5 %	3.5 %	31.9 %	9.5 %	18.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-01 6020TL	Rack	1		
Analysis started at:	8/23/2024 11:43:35 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.714 %	83.464 %	0.033 ppb	238,486.369 ppb	59,345.895 ppb	202.713 ppb	51,930.762 ppb	204,643.388 ppb	94.618 %
Concentration per Run 1	85.248 %	77.255 %	0.025 ppb	245,170.264 ppb	65,669.725 ppb	216.269 ppb	53,449.864 ppb	210,217.267 ppb	93.922 %
Concentration per Run 2	84.684 %	88.823 %	0.042 ppb	226,170.668 ppb	47,805.821 ppb	188.667 ppb	49,662.143 ppb	195,288.789 ppb	94.667 %
Concentration per Run 3	84.210 %	84.314 %	0.031 ppb	244,118.176 ppb	64,562.139 ppb	203.204 ppb	52,680.280 ppb	208,424.108 ppb	95.266 %
Concentration RSD	0.6 %	7.0 %	26.7 %	4.5 %	16.9 %	6.8 %	3.9 %	4.0 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.644 ppb	1.203 ppb	1,816.614 ppb	7,702.720 ppb	0.500 ppb	1.376 ppb	0.326 ppb	2.240 ppb	81.896 %
Concentration per Run 1	2.643 ppb	1.119 ppb	1,834.697 ppb	7,830.483 ppb	0.569 ppb	1.488 ppb	0.310 ppb	2.283 ppb	79.605 %
Concentration per Run 2	2.666 ppb	1.235 ppb	1,767.236 ppb	7,479.698 ppb	0.484 ppb	1.178 ppb	0.300 ppb	2.238 ppb	82.122 %
Concentration per Run 3	2.622 ppb	1.255 ppb	1,847.908 ppb	7,797.980 ppb	0.447 ppb	1.460 ppb	0.369 ppb	2.200 ppb	83.961 %
Concentration RSD	0.8 %	6.1 %	2.4 %	2.5 %	12.5 %	12.5 %	11.4 %	1.9 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.457 ppb	0.225 ppb	1,185.647 ppb	0.251 ppb	77.654 %	0.004 ppb	0.002 ppb	82.731 %	0.070 ppb
Concentration per Run 1	0.515 ppb	0.156 ppb	1,177.074 ppb	0.189 ppb	76.688 %	0.005 ppb	0.002 ppb	80.567 %	0.054 ppb
Concentration per Run 2	0.441 ppb	0.338 ppb	1,190.575 ppb	0.323 ppb	77.018 %	0.004 ppb	0.004 ppb	83.626 %	0.064 ppb
Concentration per Run 3	0.414 ppb	0.182 ppb	1,189.292 ppb	0.241 ppb	79.256 %	0.004 ppb	0.002 ppb	83.999 %	0.093 ppb
Concentration RSD	11.4 %	43.6 %	0.6 %	26.8 %	1.8 %	10.6 %	53.8 %	2.3 %	28.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	235.627 ppb	88.742 %	89.764 %	0.147 ppb	0.379 ppb	49.335 %
Concentration per Run 1	235.562 ppb	87.395 %	87.533 %	0.077 ppb	0.388 ppb	57.449 %
Concentration per Run 2	230.252 ppb	89.120 %	90.208 %	0.176 ppb	0.380 ppb	45.564 %
Concentration per Run 3	241.068 ppb	89.710 %	91.549 %	0.190 ppb	0.369 ppb	44.992 %
Concentration RSD	2.3 %	1.4 %	2.3 %	41.9 %	2.6 %	14.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 11:50:24 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.792 %	88.301 %	59.927 ppb	6,416.615 ppb	6,306.435 ppb	64.571 ppb	6,229.851 ppb	6,147.533 ppb	90.622 %
Concentration per Run 1	93.206 %	95.098 %	59.218 ppb	6,183.095 ppb	6,111.202 ppb	62.593 ppb	6,161.574 ppb	6,144.451 ppb	90.215 %
Concentration per Run 2	92.408 %	83.529 %	60.180 ppb	6,575.944 ppb	6,485.766 ppb	68.949 ppb	6,363.427 ppb	6,202.475 ppb	90.939 %
Concentration per Run 3	92.763 %	86.274 %	60.383 ppb	6,490.808 ppb	6,322.336 ppb	62.170 ppb	6,164.551 ppb	6,095.672 ppb	90.711 %
Recovery Percentage 1			99.878 %	106.944 %	105.107 %	107.618 %	103.831 %	102.459 %	
Concentration RSD	0.4 %	6.8 %	1.0 %	3.2 %	3.0 %	5.9 %	1.9 %	0.9 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.753 ppb	60.813 ppb	62.512 ppb	6,119.796 ppb	61.373 ppb	60.953 ppb	60.601 ppb	60.319 ppb	90.405 %
Concentration per Run 1	59.338 ppb	60.055 ppb	62.102 ppb	6,058.615 ppb	59.467 ppb	58.272 ppb	58.248 ppb	59.362 ppb	93.963 %
Concentration per Run 2	61.985 ppb	61.815 ppb	63.767 ppb	6,257.536 ppb	64.046 ppb	64.156 ppb	63.049 ppb	62.610 ppb	86.861 %
Concentration per Run 3	60.935 ppb	60.568 ppb	61.667 ppb	6,043.236 ppb	60.605 ppb	60.431 ppb	60.506 ppb	58.984 ppb	90.391 %
Recovery Percentage 1	101.254 %	101.354 %	104.187 %	101.997 %	102.288 %	101.588 %	101.002 %	100.531 %	
Concentration RSD	2.2 %	1.5 %	1.8 %	2.0 %	3.9 %	4.9 %	4.0 %	3.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.089 ppb	62.099 ppb	59.002 ppb	59.724 ppb	89.011 %	59.828 ppb	59.695 ppb	93.739 %	54.375 ppb
Concentration per Run 1	60.228 ppb	64.752 ppb	61.067 ppb	60.109 ppb	89.320 %	59.118 ppb	58.632 ppb	99.842 %	53.351 ppb
Concentration per Run 2	60.979 ppb	62.159 ppb	58.464 ppb	59.788 ppb	88.065 %	60.357 ppb	60.505 ppb	89.863 %	55.405 ppb
Concentration per Run 3	59.059 ppb	59.384 ppb	57.473 ppb	59.275 ppb	89.648 %	60.009 ppb	59.949 ppb	91.514 %	54.370 ppb
Recovery Percentage 1	100.148 %	103.498 %	98.336 %	99.540 %		99.713 %	99.492 %		90.625 %
Concentration RSD	1.6 %	4.3 %	3.1 %	0.7 %	0.9 %	1.1 %	1.6 %	5.7 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.117 ppb	95.560 %	97.139 %	57.199 ppb	60.470 ppb	60.054 %
Concentration per Run 1	59.602 ppb	98.528 %	100.322 %	55.678 ppb	58.711 ppb	74.047 %
Concentration per Run 2	61.384 ppb	92.387 %	94.939 %	57.755 ppb	61.758 ppb	54.135 %
Concentration per Run 3	59.363 ppb	95.765 %	96.158 %	58.165 ppb	60.939 ppb	51.981 %
Recovery Percentage 1	100.194 %			95.332 %	100.783 %	
Concentration RSD	1.8 %	3.2 %	2.9 %	2.3 %	2.6 %	20.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 11:54:54 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.531 %	89.412 %	0.041 ppb	138.957 ppb	18.658 ppb	-0.147 ppb	20.153 ppb	57.409 ppb	88.635 %
Concentration per Run 1	94.559 %	83.921 %	0.039 ppb	148.961 ppb	17.766 ppb	-0.053 ppb	26.377 ppb	59.717 ppb	88.476 %
Concentration per Run 2	94.670 %	89.019 %	0.052 ppb	130.187 ppb	19.077 ppb	-0.130 ppb	20.848 ppb	50.211 ppb	88.800 %
Concentration per Run 3	94.365 %	95.294 %	0.032 ppb	137.723 ppb	19.131 ppb	-0.257 ppb	13.235 ppb	62.298 ppb	88.630 %
Recovery Percentage 1			8.188 %	138.957 %	26.654 %	-1.467 %	20.153 %	57.409 %	
Concentration RSD	0.2 %	6.4 %	23.9 %	6.8 %	4.1 %	70.0 %	32.7 %	11.1 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.035 ppb	0.002 ppb	0.534 ppb	9.774 ppb	0.033 ppb	-0.021 ppb	0.035 ppb	-0.192 ppb	88.951 %
Concentration per Run 1	-0.073 ppb	-0.010 ppb	0.613 ppb	7.901 ppb	0.045 ppb	-0.047 ppb	0.034 ppb	-0.172 ppb	88.697 %
Concentration per Run 2	0.003 ppb	0.008 ppb	0.459 ppb	11.696 ppb	0.027 ppb	0.017 ppb	0.021 ppb	-0.228 ppb	88.091 %
Concentration per Run 3	-0.036 ppb	0.008 ppb	0.528 ppb	9.726 ppb	0.028 ppb	-0.033 ppb	0.050 ppb	-0.175 ppb	90.066 %
Recovery Percentage 1	-0.701 %	0.200 %	53.359 %	19.549 %	6.684 %	-1.070 %	3.505 %	-3.839 %	
Concentration RSD	109.0 %	498.3 %	14.5 %	19.4 %	30.3 %	157.1 %	41.0 %	16.5 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.080 ppb	0.212 ppb	0.310 ppb	0.313 ppb	88.529 %	0.031 ppb	0.028 ppb	90.450 %	0.878 ppb
Concentration per Run 1	0.085 ppb	0.063 ppb	0.347 ppb	0.194 ppb	85.822 %	0.031 ppb	0.031 ppb	86.821 %	0.847 ppb
Concentration per Run 2	0.077 ppb	0.233 ppb	0.274 ppb	0.345 ppb	89.585 %	0.030 ppb	0.017 ppb	92.703 %	0.844 ppb
Concentration per Run 3	0.078 ppb	0.340 ppb	0.309 ppb	0.400 ppb	90.180 %	0.033 ppb	0.037 ppb	91.826 %	0.942 ppb
Recovery Percentage 1	16.027 %	4.240 %	3.099 %	15.628 %		7.785 %	14.082 %		21.952 %
Concentration RSD	5.8 %	66.1 %	11.9 %	34.1 %	2.7 %	5.3 %	35.9 %	3.5 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.064 ppb	93.358 %	93.047 %	0.583 ppb	0.035 ppb	57.447 %
Concentration per Run 1	0.062 ppb	90.350 %	88.583 %	0.435 ppb	0.038 ppb	65.541 %
Concentration per Run 2	0.064 ppb	95.076 %	96.265 %	0.661 ppb	0.030 ppb	53.950 %
Concentration per Run 3	0.065 ppb	94.648 %	94.293 %	0.653 ppb	0.036 ppb	52.849 %
Recovery Percentage 1	12.725 %			58.337 %	3.469 %	
Concentration RSD	2.1 %	2.8 %	4.3 %	22.0 %	12.5 %	12.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 12:07:33 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.797 %	95.490 %	0.020 ppb	66.030 ppb	6.161 ppb	-0.246 ppb	5.921 ppb	9.092 ppb	91.386 %
Concentration per Run 1	100.186 %	101.765 %	0.018 ppb	71.679 ppb	7.909 ppb	-0.339 ppb	6.048 ppb	15.410 ppb	90.049 %
Concentration per Run 2	99.213 %	94.902 %	0.018 ppb	63.139 ppb	5.797 ppb	-0.218 ppb	5.759 ppb	4.114 ppb	91.031 %
Concentration per Run 3	99.992 %	89.804 %	0.024 ppb	63.271 ppb	4.779 ppb	-0.181 ppb	5.954 ppb	7.752 ppb	93.078 %
Recovery Percentage 1			3.983 %	66.030 %	8.802 %	-2.460 %	5.921 %	9.092 %	
Concentration RSD	0.5 %	6.3 %	15.8 %	7.4 %	25.9 %	33.6 %	2.5 %	63.4 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.025 ppb	-0.018 ppb	0.163 ppb	1.746 ppb	0.005 ppb	-0.055 ppb	0.033 ppb	-0.158 ppb	93.494 %
Concentration per Run 1	0.024 ppb	-0.021 ppb	0.150 ppb	2.975 ppb	0.008 ppb	-0.026 ppb	0.030 ppb	-0.174 ppb	98.651 %
Concentration per Run 2	0.075 ppb	-0.016 ppb	0.163 ppb	1.064 ppb	-0.001 ppb	-0.072 ppb	0.029 ppb	-0.172 ppb	93.762 %
Concentration per Run 3	-0.023 ppb	-0.016 ppb	0.177 ppb	1.199 ppb	0.009 ppb	-0.067 ppb	0.040 ppb	-0.128 ppb	88.068 %
Recovery Percentage 1	0.508 %	-1.754 %	16.322 %	3.492 %	1.010 %	-2.745 %	3.314 %	-3.166 %	
Concentration RSD	192.5 %	17.2 %	8.0 %	61.1 %	111.1 %	45.1 %	18.3 %	16.6 %	5.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.095 ppb	0.086 ppb	0.089 ppb	0.047 ppb	94.626 %	0.009 ppb	0.007 ppb	98.425 %	0.068 ppb
Concentration per Run 1	0.111 ppb	0.053 ppb	0.123 ppb	0.049 ppb	96.293 %	0.014 ppb	0.008 ppb	101.445 %	0.047 ppb
Concentration per Run 2	0.066 ppb	0.068 ppb	0.069 ppb	0.047 ppb	93.513 %	0.008 ppb	0.007 ppb	96.665 %	0.087 ppb
Concentration per Run 3	0.109 ppb	0.136 ppb	0.076 ppb	0.043 ppb	94.072 %	0.006 ppb	0.007 ppb	97.164 %	0.071 ppb
Recovery Percentage 1	19.086 %	1.713 %	0.895 %	2.326 %		2.297 %	3.704 %		1.709 %
Concentration RSD	26.9 %	51.4 %	33.0 %	6.9 %	1.6 %	43.8 %	11.8 %	2.7 %	29.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	101.729 %	104.651 %	0.124 ppb	0.008 ppb	60.897 %
Concentration per Run 1	-0.005 ppb	104.762 %	109.831 %	0.069 ppb	0.009 ppb	73.554 %
Concentration per Run 2	0.015 ppb	100.236 %	101.529 %	0.140 ppb	0.007 ppb	56.085 %
Concentration per Run 3	-0.011 ppb	100.190 %	102.593 %	0.162 ppb	0.009 ppb	53.052 %
Recovery Percentage 1	-0.026 %			12.358 %	0.844 %	
Concentration RSD	10,589.8 %	2.6 %	4.3 %	39.6 %	11.8 %	18.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-02 6020TL	Rack	1		
Analysis started at:	8/23/2024 12:15:12 PM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.533 %	86.732 %	0.027 ppb	120,772.483 ppb	35,260.428 ppb	75.261 ppb	22,765.950 ppb	74,337.940 ppb	90.351 %
Concentration per Run 1	87.318 %	85.294 %	0.025 ppb	119,179.245 ppb	34,720.714 ppb	67.350 ppb	22,552.083 ppb	74,245.621 ppb	91.208 %
Concentration per Run 2	85.811 %	90.196 %	0.032 ppb	116,517.678 ppb	34,306.866 ppb	85.484 ppb	22,391.065 ppb	72,844.709 ppb	89.682 %
Concentration per Run 3	86.472 %	84.706 %	0.025 ppb	126,620.527 ppb	36,753.705 ppb	72.948 ppb	23,354.702 ppb	75,923.490 ppb	90.164 %
Concentration RSD	0.9 %	3.5 %	14.0 %	4.3 %	3.7 %	12.3 %	2.3 %	2.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.232 ppb	0.176 ppb	2,246.084 ppb	11,817.467 ppb	1.013 ppb	4.227 ppb	0.548 ppb	1.921 ppb	82.719 %
Concentration per Run 1	0.262 ppb	0.164 ppb	2,228.009 ppb	11,739.560 ppb	1.025 ppb	4.049 ppb	0.452 ppb	1.885 ppb	81.780 %
Concentration per Run 2	0.216 ppb	0.159 ppb	2,212.830 ppb	11,557.778 ppb	1.058 ppb	4.347 ppb	0.593 ppb	1.948 ppb	82.293 %
Concentration per Run 3	0.219 ppb	0.204 ppb	2,297.411 ppb	12,155.063 ppb	0.957 ppb	4.284 ppb	0.600 ppb	1.929 ppb	84.083 %
Concentration RSD	11.0 %	14.0 %	2.0 %	2.6 %	5.1 %	3.7 %	15.2 %	1.7 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	23.163 ppb	0.134 ppb	506.684 ppb	1.014 ppb	80.735 %	0.020 ppb	0.004 ppb	85.673 %	0.127 ppb
Concentration per Run 1	22.591 ppb	0.076 ppb	503.362 ppb	0.955 ppb	79.604 %	0.019 ppb	0.006 ppb	85.690 %	0.095 ppb
Concentration per Run 2	23.939 ppb	0.162 ppb	508.336 ppb	0.995 ppb	80.953 %	0.023 ppb	0.004 ppb	83.961 %	0.144 ppb
Concentration per Run 3	22.960 ppb	0.162 ppb	508.354 ppb	1.094 ppb	81.648 %	0.018 ppb	0.004 ppb	87.366 %	0.142 ppb
Concentration RSD	3.0 %	37.2 %	0.6 %	7.1 %	1.3 %	12.6 %	28.6 %	2.0 %	21.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	351.287 ppb	92.929 %	94.591 %	0.087 ppb	0.168 ppb	53.455 %
Concentration per Run 1	351.090 ppb	91.731 %	93.004 %	0.054 ppb	0.165 ppb	64.172 %
Concentration per Run 2	353.179 ppb	93.205 %	95.059 %	0.099 ppb	0.172 ppb	49.234 %
Concentration per Run 3	349.593 ppb	93.851 %	95.710 %	0.108 ppb	0.167 ppb	46.959 %
Concentration RSD	0.5 %	1.2 %	1.5 %	33.2 %	2.2 %	17.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	79	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-03 6020TL	Rack	1		
Analysis started at:	8/23/2024 12:19:40 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.696 %	100.588 %	0.013 ppb	373,881.994 ppb	56,358.413 ppb	63.923 ppb	40,573.425 ppb	139,847.295 ppb	90.250 %
Concentration per Run 1	93.965 %	99.020 %	0.009 ppb	370,325.562 ppb	60,587.270 ppb	59.927 ppb	40,356.392 ppb	141,862.367 ppb	89.787 %
Concentration per Run 2	94.497 %	96.471 %	0.010 ppb	383,583.285 ppb	48,164.632 ppb	69.437 ppb	40,530.430 ppb	138,319.249 ppb	90.732 %
Concentration per Run 3	92.626 %	106.275 %	0.020 ppb	367,737.137 ppb	60,323.336 ppb	62.404 ppb	40,833.451 ppb	139,360.267 ppb	90.232 %
Concentration RSD	1.0 %	5.1 %	45.8 %	2.3 %	12.6 %	7.7 %	0.6 %	1.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.555 ppb	0.361 ppb	54.360 ppb	797.785 ppb	0.745 ppb	5.336 ppb	2.495 ppb	5.757 ppb	84.634 %
Concentration per Run 1	4.446 ppb	0.355 ppb	54.644 ppb	814.033 ppb	0.761 ppb	5.770 ppb	2.431 ppb	5.713 ppb	83.925 %
Concentration per Run 2	4.355 ppb	0.329 ppb	54.372 ppb	805.464 ppb	0.714 ppb	4.865 ppb	2.456 ppb	5.911 ppb	85.117 %
Concentration per Run 3	4.863 ppb	0.399 ppb	54.062 ppb	773.856 ppb	0.761 ppb	5.375 ppb	2.597 ppb	5.645 ppb	84.860 %
Concentration RSD	6.0 %	9.7 %	0.5 %	2.7 %	3.6 %	8.5 %	3.6 %	2.4 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	6.157 ppb	2.741 ppb	1,268.470 ppb	9.147 ppb	78.292 %	0.006 ppb	0.018 ppb	82.411 %	3.117 ppb
Concentration per Run 1	6.096 ppb	3.273 ppb	1,261.277 ppb	8.980 ppb	77.771 %	0.007 ppb	0.028 ppb	81.639 %	3.140 ppb
Concentration per Run 2	5.999 ppb	2.550 ppb	1,263.445 ppb	9.219 ppb	77.164 %	0.008 ppb	0.017 ppb	81.890 %	3.107 ppb
Concentration per Run 3	6.377 ppb	2.399 ppb	1,280.686 ppb	9.242 ppb	79.941 %	0.003 ppb	0.008 ppb	83.704 %	3.105 ppb
Concentration RSD	3.2 %	17.0 %	0.8 %	1.6 %	1.9 %	47.4 %	56.7 %	1.4 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	97.202 ppb	88.898 %	88.668 %	0.065 ppb	3.862 ppb	47.445 %
Concentration per Run 1	97.803 ppb	88.589 %	89.265 %	0.040 ppb	3.898 ppb	56.278 %
Concentration per Run 2	96.192 ppb	87.845 %	87.259 %	0.071 ppb	3.870 ppb	43.151 %
Concentration per Run 3	97.610 ppb	90.259 %	89.478 %	0.085 ppb	3.817 ppb	42.906 %
Concentration RSD	0.9 %	1.4 %	1.4 %	35.3 %	1.1 %	16.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	80	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-04 6020TL	Rack	1		
Analysis started at:	8/23/2024 12:24:09 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.188 %	90.131 %	0.014 ppb	1,228,046.384 ppb	110,141.423 ppb	87.179 ppb	73,940.763 ppb	174,300.961 ppb	69.663 %
Concentration per Run 1	75.640 %	87.059 %	0.015 ppb	1,237,576.315 ppb	111,603.603 ppb	88.047 ppb	74,780.001 ppb	174,531.479 ppb	70.305 %
Concentration per Run 2	75.497 %	88.235 %	0.015 ppb	1,251,017.776 ppb	110,700.177 ppb	92.951 ppb	73,357.425 ppb	173,953.310 ppb	69.705 %
Concentration per Run 3	74.425 %	95.098 %	0.013 ppb	1,195,545.062 ppb	108,120.489 ppb	80.538 ppb	73,684.863 ppb	174,418.093 ppb	68.979 %
Concentration RSD	0.9 %	4.8 %	9.2 %	2.4 %	1.6 %	7.2 %	1.0 %	0.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.920 ppb	0.674 ppb	333.629 ppb	84.221 ppb	0.477 ppb	4.713 ppb	0.188 ppb	0.792 ppb	79.636 %
Concentration per Run 1	1.684 ppb	0.697 ppb	327.785 ppb	86.850 ppb	0.489 ppb	4.777 ppb	0.123 ppb	0.747 ppb	80.357 %
Concentration per Run 2	1.902 ppb	0.699 ppb	337.656 ppb	75.314 ppb	0.528 ppb	4.592 ppb	0.199 ppb	0.807 ppb	79.953 %
Concentration per Run 3	2.175 ppb	0.625 ppb	335.448 ppb	90.500 ppb	0.413 ppb	4.771 ppb	0.241 ppb	0.821 ppb	78.598 %
Concentration RSD	12.8 %	6.3 %	1.6 %	9.4 %	12.3 %	2.2 %	31.9 %	5.0 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.805 ppb	0.265 ppb	1,867.592 ppb	0.223 ppb	71.249 %	0.001 ppb	0.005 ppb	74.075 %	0.177 ppb
Concentration per Run 1	0.792 ppb	0.313 ppb	1,830.655 ppb	0.199 ppb	71.938 %	0.001 ppb	0.004 ppb	72.914 %	0.158 ppb
Concentration per Run 2	0.894 ppb	0.236 ppb	1,862.329 ppb	0.228 ppb	70.874 %	0.003 ppb	0.009 ppb	74.105 %	0.183 ppb
Concentration per Run 3	0.728 ppb	0.245 ppb	1,909.791 ppb	0.243 ppb	70.935 %	-0.001 ppb	0.002 ppb	75.205 %	0.190 ppb
Concentration RSD	10.4 %	15.8 %	2.1 %	10.0 %	0.8 %	180.4 %	73.2 %	1.5 %	9.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	170.499 ppb	79.863 %	79.231 %	0.047 ppb	0.550 ppb	40.303 %
Concentration per Run 1	169.442 ppb	80.450 %	79.256 %	0.012 ppb	0.553 ppb	48.047 %
Concentration per Run 2	171.081 ppb	79.058 %	79.175 %	0.058 ppb	0.551 ppb	37.015 %
Concentration per Run 3	170.975 ppb	80.080 %	79.261 %	0.071 ppb	0.546 ppb	35.848 %
Concentration RSD	0.5 %	0.9 %	0.1 %	65.5 %	0.6 %	16.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	81	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-05 6020TL	Rack	1		
Analysis started at:	8/23/2024 12:28:36 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.360 %	91.242 %	0.047 ppb	174,294.959 ppb	55,394.485 ppb	498.298 ppb	40,300.623 ppb	113,898.935 ppb	90.275 %
Concentration per Run 1	90.968 %	86.470 %	0.047 ppb	179,575.769 ppb	57,207.959 ppb	506.491 ppb	40,660.722 ppb	115,457.129 ppb	90.745 %
Concentration per Run 2	90.583 %	92.157 %	0.046 ppb	172,798.146 ppb	54,922.862 ppb	499.533 ppb	40,430.423 ppb	114,234.408 ppb	90.710 %
Concentration per Run 3	89.529 %	95.098 %	0.047 ppb	170,510.962 ppb	54,052.634 ppb	488.869 ppb	39,810.724 ppb	112,005.268 ppb	89.369 %
Concentration RSD	0.8 %	4.8 %	1.2 %	2.7 %	2.9 %	1.8 %	1.1 %	1.5 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	3.980 ppb	1.733 ppb	475.675 ppb	4,312.104 ppb	0.539 ppb	8.761 ppb	3.760 ppb	18.163 ppb	87.361 %
Concentration per Run 1	3.935 ppb	1.823 ppb	482.056 ppb	4,410.195 ppb	0.520 ppb	8.940 ppb	3.709 ppb	18.631 ppb	85.440 %
Concentration per Run 2	4.447 ppb	1.763 ppb	475.734 ppb	4,285.574 ppb	0.540 ppb	8.677 ppb	3.939 ppb	18.100 ppb	86.131 %
Concentration per Run 3	3.557 ppb	1.611 ppb	469.236 ppb	4,240.542 ppb	0.558 ppb	8.666 ppb	3.633 ppb	17.758 ppb	90.511 %
Concentration RSD	11.2 %	6.3 %	1.3 %	2.0 %	3.5 %	1.8 %	4.2 %	2.4 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.857 ppb	0.221 ppb	807.088 ppb	0.437 ppb	81.763 %	0.005 ppb	0.068 ppb	86.060 %	0.161 ppb
Concentration per Run 1	0.837 ppb	0.100 ppb	802.334 ppb	0.396 ppb	80.577 %	0.002 ppb	0.071 ppb	83.792 %	0.163 ppb
Concentration per Run 2	0.886 ppb	0.236 ppb	810.365 ppb	0.400 ppb	82.448 %	0.006 ppb	0.058 ppb	87.332 %	0.140 ppb
Concentration per Run 3	0.848 ppb	0.327 ppb	808.564 ppb	0.514 ppb	82.265 %	0.008 ppb	0.075 ppb	87.055 %	0.180 ppb
Concentration RSD	3.0 %	51.5 %	0.5 %	15.4 %	1.3 %	59.5 %	13.0 %	2.3 %	12.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	123.420 ppb	89.121 %	88.822 %	0.053 ppb	10.758 ppb	47.858 %
Concentration per Run 1	121.010 ppb	86.440 %	86.008 %	0.027 ppb	10.753 ppb	54.805 %
Concentration per Run 2	124.248 ppb	90.208 %	89.538 %	0.063 ppb	10.837 ppb	45.526 %
Concentration per Run 3	125.002 ppb	90.714 %	90.920 %	0.067 ppb	10.684 ppb	43.244 %
Concentration RSD	1.7 %	2.6 %	2.9 %	42.1 %	0.7 %	12.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	82	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-06 6020TL	Rack	1		
Analysis started at:	8/23/2024 12:33:03 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.000 %	87.255 %	0.025 ppb	165,493.564 ppb	58,507.127 ppb	276.721 ppb	42,504.924 ppb	88,497.012 ppb	88.359 %
Concentration per Run 1	89.667 %	83.137 %	0.027 ppb	168,134.690 ppb	59,848.528 ppb	272.284 ppb	44,227.486 ppb	91,509.162 ppb	89.327 %
Concentration per Run 2	89.181 %	87.059 %	0.026 ppb	165,873.937 ppb	58,363.747 ppb	277.026 ppb	41,646.127 ppb	87,040.639 ppb	88.519 %
Concentration per Run 3	88.151 %	91.569 %	0.023 ppb	162,472.067 ppb	57,309.107 ppb	280.852 ppb	41,641.158 ppb	86,941.233 ppb	87.229 %
Concentration RSD	0.9 %	4.8 %	9.2 %	1.7 %	2.2 %	1.6 %	3.5 %	2.9 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.366 ppb	0.862 ppb	403.415 ppb	3,411.976 ppb	0.276 ppb	8.127 ppb	1.371 ppb	7.365 ppb	85.330 %
Concentration per Run 1	2.530 ppb	0.891 ppb	407.146 ppb	3,498.942 ppb	0.272 ppb	8.619 ppb	1.381 ppb	7.385 ppb	83.339 %
Concentration per Run 2	2.383 ppb	0.863 ppb	406.198 ppb	3,441.152 ppb	0.289 ppb	7.856 ppb	1.393 ppb	7.554 ppb	85.916 %
Concentration per Run 3	2.186 ppb	0.832 ppb	396.902 ppb	3,295.835 ppb	0.266 ppb	7.907 ppb	1.340 ppb	7.157 ppb	86.736 %
Concentration RSD	7.3 %	3.5 %	1.4 %	3.1 %	4.4 %	5.3 %	2.0 %	2.7 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.358 ppb	0.187 ppb	730.619 ppb	0.348 ppb	81.498 %	0.005 ppb	0.022 ppb	85.578 %	0.083 ppb
Concentration per Run 1	0.393 ppb	0.217 ppb	734.383 ppb	0.363 ppb	80.645 %	0.003 ppb	0.023 ppb	84.784 %	0.072 ppb
Concentration per Run 2	0.316 ppb	0.210 ppb	724.908 ppb	0.298 ppb	81.630 %	0.005 ppb	0.029 ppb	85.199 %	0.083 ppb
Concentration per Run 3	0.364 ppb	0.133 ppb	732.567 ppb	0.382 ppb	82.217 %	0.008 ppb	0.012 ppb	86.751 %	0.093 ppb
Concentration RSD	10.9 %	24.9 %	0.7 %	12.7 %	1.0 %	48.1 %	40.7 %	1.2 %	13.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	117.035 ppb	89.701 %	89.747 %	0.048 ppb	3.576 ppb	48.023 %
Concentration per Run 1	116.956 ppb	89.181 %	88.176 %	0.020 ppb	3.607 ppb	56.775 %
Concentration per Run 2	116.831 ppb	89.648 %	89.898 %	0.054 ppb	3.558 ppb	44.156 %
Concentration per Run 3	117.318 ppb	90.275 %	91.169 %	0.069 ppb	3.562 ppb	43.139 %
Concentration RSD	0.2 %	0.6 %	1.7 %	53.5 %	0.8 %	15.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	83	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-01d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 12:37:30 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.527 %	84.902 %	0.004 ppb	15,583.425 ppb	3,315.739 ppb	12.254 ppb	2,736.916 ppb	10,792.870 ppb	89.235 %
Concentration per Run 1	94.341 %	83.137 %	0.005 ppb	15,585.621 ppb	3,301.034 ppb	11.000 ppb	2,809.591 ppb	10,855.671 ppb	89.397 %
Concentration per Run 2	93.231 %	81.764 %	0.005 ppb	16,004.356 ppb	3,414.678 ppb	15.086 ppb	2,721.449 ppb	10,905.914 ppb	89.435 %
Concentration per Run 3	93.008 %	89.804 %	0.003 ppb	15,160.299 ppb	3,231.506 ppb	10.675 ppb	2,679.707 ppb	10,617.025 ppb	88.872 %
Concentration RSD	0.8 %	5.1 %	33.5 %	2.7 %	2.8 %	20.1 %	2.4 %	1.4 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.208 ppb	0.038 ppb	92.299 ppb	410.553 ppb	0.027 ppb	0.013 ppb	0.075 ppb	-0.037 ppb	89.868 %
Concentration per Run 1	0.173 ppb	0.014 ppb	92.563 ppb	407.867 ppb	0.030 ppb	0.046 ppb	0.085 ppb	-0.023 ppb	88.672 %
Concentration per Run 2	0.213 ppb	0.047 ppb	94.173 ppb	421.829 ppb	0.020 ppb	-0.008 ppb	0.074 ppb	-0.112 ppb	87.640 %
Concentration per Run 3	0.237 ppb	0.052 ppb	90.162 ppb	401.962 ppb	0.033 ppb	0.000 ppb	0.066 ppb	0.025 ppb	93.292 %
Concentration RSD	15.6 %	54.2 %	2.2 %	2.5 %	24.9 %	231.1 %	12.8 %	189.9 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.079 ppb	0.007 ppb	58.353 ppb	0.017 ppb	89.619 %	0.002 ppb	-0.001 ppb	90.993 %	0.021 ppb
Concentration per Run 1	0.071 ppb	0.008 ppb	57.705 ppb	0.013 ppb	89.993 %	0.001 ppb	-0.001 ppb	91.184 %	0.011 ppb
Concentration per Run 2	0.106 ppb	-0.040 ppb	59.061 ppb	0.020 ppb	87.894 %	0.002 ppb	-0.001 ppb	88.035 %	0.030 ppb
Concentration per Run 3	0.058 ppb	0.053 ppb	58.291 ppb	0.017 ppb	90.968 %	0.002 ppb	-0.001 ppb	93.761 %	0.023 ppb
Concentration RSD	31.7 %	640.5 %	1.2 %	19.9 %	1.8 %	26.7 %	0.0 %	3.2 %	44.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.301 ppb	92.468 %	91.836 %	0.041 ppb	0.026 ppb	53.977 %
Concentration per Run 1	12.590 ppb	91.594 %	90.879 %	0.013 ppb	0.027 ppb	63.109 %
Concentration per Run 2	12.056 ppb	91.948 %	91.544 %	0.046 ppb	0.023 ppb	49.471 %
Concentration per Run 3	12.257 ppb	93.862 %	93.086 %	0.063 ppb	0.027 ppb	49.352 %
Concentration RSD	2.2 %	1.3 %	1.2 %	61.7 %	8.7 %	14.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR 20,000 Na	Rack	1		
Analysis started at:	8/23/2024 12:52:19 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.371 %	95.229 %	0.002 ppb	19,376.405 ppb	2.490 ppb	0.394 ppb	10.844 ppb	9.948 ppb	88.903 %
Concentration per Run 1	95.298 %	95.294 %	0.002 ppb	18,934.267 ppb	1.902 ppb	0.105 ppb	14.816 ppb	3.312 ppb	89.240 %
Concentration per Run 2	95.956 %	92.745 %	0.000 ppb	19,810.956 ppb	3.168 ppb	0.163 ppb	10.372 ppb	16.894 ppb	89.157 %
Concentration per Run 3	94.857 %	97.647 %	0.005 ppb	19,383.991 ppb	2.401 ppb	0.916 ppb	7.342 ppb	9.636 ppb	88.312 %
Concentration RSD	0.6 %	2.6 %	101.7 %	2.3 %	25.6 %	114.7 %	34.7 %	68.3 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.075 ppb	-0.006 ppb	0.119 ppb	1.643 ppb	0.002 ppb	-0.037 ppb	0.079 ppb	-0.102 ppb	89.972 %
Concentration per Run 1	0.024 ppb	-0.004 ppb	0.149 ppb	1.151 ppb	0.006 ppb	-0.095 ppb	0.107 ppb	-0.077 ppb	88.727 %
Concentration per Run 2	0.107 ppb	-0.007 ppb	0.148 ppb	2.240 ppb	-0.001 ppb	-0.015 ppb	0.062 ppb	-0.128 ppb	90.536 %
Concentration per Run 3	0.094 ppb	-0.006 ppb	0.059 ppb	1.539 ppb	0.001 ppb	0.001 ppb	0.067 ppb	-0.102 ppb	90.652 %
Concentration RSD	59.3 %	24.9 %	43.8 %	33.6 %	190.8 %	140.8 %	31.2 %	25.3 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.043 ppb	-0.018 ppb	0.055 ppb	-0.005 ppb	89.741 %	0.003 ppb	0.002 ppb	92.433 %	0.003 ppb
Concentration per Run 1	0.039 ppb	-0.030 ppb	0.050 ppb	-0.025 ppb	89.168 %	0.002 ppb	0.003 ppb	93.252 %	-0.001 ppb
Concentration per Run 2	0.018 ppb	-0.003 ppb	0.060 ppb	0.002 ppb	90.316 %	0.003 ppb	0.001 ppb	91.933 %	0.005 ppb
Concentration per Run 3	0.072 ppb	-0.021 ppb	0.055 ppb	0.007 ppb	89.738 %	0.003 ppb	0.001 ppb	92.113 %	0.005 ppb
Concentration RSD	63.4 %	77.5 %	9.0 %	336.4 %	0.6 %	13.5 %	55.7 %	0.8 %	126.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.001 ppb	95.781 %	97.480 %	0.021 ppb	0.011 ppb	56.837 %
Concentration per Run 1	0.003 ppb	95.519 %	99.126 %	0.001 ppb	0.012 ppb	68.223 %
Concentration per Run 2	-0.003 ppb	96.730 %	97.408 %	0.032 ppb	0.012 ppb	52.347 %
Concentration per Run 3	0.004 ppb	95.095 %	95.906 %	0.032 ppb	0.009 ppb	49.941 %
Concentration RSD	310.6 %	0.9 %	1.7 %	83.6 %	15.6 %	17.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	85	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-02d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 12:58:29 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.813 %	86.274 %	0.003 ppb	7,759.817 ppb	1,807.370 ppb	3.350 ppb	1,201.652 ppb	3,836.695 ppb	84.122 %
Concentration per Run 1	91.857 %	84.706 %	0.007 ppb	7,903.108 ppb	1,846.409 ppb	3.993 ppb	1,241.265 ppb	3,961.405 ppb	84.002 %
Concentration per Run 2	92.117 %	84.902 %	0.002 ppb	7,804.599 ppb	1,806.145 ppb	3.207 ppb	1,161.425 ppb	3,694.433 ppb	84.231 %
Concentration per Run 3	91.464 %	89.216 %	-0.001 ppb	7,571.745 ppb	1,769.557 ppb	2.848 ppb	1,202.265 ppb	3,854.247 ppb	84.134 %
Concentration RSD	0.4 %	3.0 %	156.2 %	2.2 %	2.1 %	17.5 %	3.3 %	3.5 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.114 ppb	-0.006 ppb	112.437 ppb	606.962 ppb	0.048 ppb	0.226 ppb	0.044 ppb	-0.059 ppb	88.899 %
Concentration per Run 1	0.076 ppb	-0.004 ppb	115.799 ppb	622.155 ppb	0.061 ppb	0.167 ppb	0.053 ppb	-0.055 ppb	88.135 %
Concentration per Run 2	0.053 ppb	-0.006 ppb	109.400 ppb	589.813 ppb	0.031 ppb	0.176 ppb	0.038 ppb	-0.034 ppb	91.434 %
Concentration per Run 3	0.213 ppb	-0.007 ppb	112.111 ppb	608.917 ppb	0.053 ppb	0.334 ppb	0.041 ppb	-0.087 ppb	87.127 %
Concentration RSD	75.6 %	27.4 %	2.9 %	2.7 %	31.6 %	41.6 %	18.6 %	46.2 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.223 ppb	-0.025 ppb	24.691 ppb	0.054 ppb	88.690 %	0.002 ppb	0.001 ppb	92.559 %	0.010 ppb
Concentration per Run 1	1.312 ppb	-0.002 ppb	24.732 ppb	-0.003 ppb	89.625 %	0.002 ppb	0.001 ppb	94.242 %	0.005 ppb
Concentration per Run 2	1.128 ppb	-0.038 ppb	24.196 ppb	0.084 ppb	88.484 %	0.001 ppb	-0.001 ppb	91.606 %	0.019 ppb
Concentration per Run 3	1.230 ppb	-0.036 ppb	25.143 ppb	0.080 ppb	87.961 %	0.004 ppb	0.001 ppb	91.830 %	0.007 ppb
Concentration RSD	7.5 %	81.3 %	1.9 %	91.5 %	1.0 %	65.1 %	160.0 %	1.6 %	73.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.536 ppb	94.492 %	95.643 %	0.017 ppb	0.013 ppb	55.647 %
Concentration per Run 1	17.219 ppb	94.980 %	97.417 %	-0.002 ppb	0.012 ppb	66.578 %
Concentration per Run 2	18.042 ppb	94.667 %	94.872 %	0.021 ppb	0.014 ppb	51.315 %
Concentration per Run 3	17.346 ppb	93.829 %	94.641 %	0.031 ppb	0.013 ppb	49.047 %
Concentration RSD	2.5 %	0.6 %	1.6 %	100.4 %	5.8 %	17.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	86	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-03d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 1:02:57 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.100 %	89.738 %	0.002 ppb	20,245.950 ppb	3,254.681 ppb	3.471 ppb	2,231.629 ppb	7,901.114 ppb	85.556 %
Concentration per Run 1	93.542 %	88.627 %	0.002 ppb	20,095.548 ppb	3,232.537 ppb	5.453 ppb	2,220.164 ppb	7,872.104 ppb	84.897 %
Concentration per Run 2	93.368 %	94.902 %	0.001 ppb	19,211.063 ppb	3,066.731 ppb	1.997 ppb	2,124.346 ppb	7,596.796 ppb	86.090 %
Concentration per Run 3	92.389 %	85.686 %	0.003 ppb	21,431.239 ppb	3,464.774 ppb	2.963 ppb	2,350.376 ppb	8,234.441 ppb	85.680 %
Concentration RSD	0.7 %	5.2 %	59.3 %	5.5 %	6.1 %	51.4 %	5.1 %	4.0 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.363 ppb	-0.006 ppb	2.894 ppb	44.105 ppb	0.036 ppb	0.224 ppb	0.183 ppb	0.167 ppb	87.762 %
Concentration per Run 1	0.383 ppb	0.010 ppb	2.807 ppb	47.754 ppb	0.035 ppb	0.266 ppb	0.229 ppb	0.163 ppb	88.183 %
Concentration per Run 2	0.343 ppb	-0.007 ppb	2.915 ppb	43.327 ppb	0.029 ppb	0.167 ppb	0.200 ppb	0.192 ppb	88.751 %
Concentration per Run 3	0.361 ppb	-0.022 ppb	2.960 ppb	41.234 ppb	0.043 ppb	0.238 ppb	0.120 ppb	0.145 ppb	86.351 %
Concentration RSD	5.5 %	267.4 %	2.7 %	7.5 %	20.6 %	22.7 %	31.1 %	14.1 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.313 ppb	0.191 ppb	62.198 ppb	0.412 ppb	86.799 %	0.000 ppb	0.002 ppb	90.295 %	0.150 ppb
Concentration per Run 1	0.365 ppb	0.157 ppb	61.222 ppb	0.330 ppb	89.045 %	0.000 ppb	0.005 ppb	90.527 %	0.165 ppb
Concentration per Run 2	0.275 ppb	0.233 ppb	61.876 ppb	0.384 ppb	85.790 %	-0.002 ppb	0.001 ppb	89.533 %	0.139 ppb
Concentration per Run 3	0.299 ppb	0.183 ppb	63.498 ppb	0.523 ppb	85.563 %	0.001 ppb	-0.001 ppb	90.825 %	0.146 ppb
Concentration RSD	14.9 %	20.4 %	1.9 %	24.2 %	2.2 %	6,082.4 %	146.8 %	0.7 %	8.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.955 ppb	92.278 %	93.094 %	0.018 ppb	0.215 ppb	53.745 %
Concentration per Run 1	4.870 ppb	94.683 %	93.961 %	0.000 ppb	0.211 ppb	64.597 %
Concentration per Run 2	5.248 ppb	92.005 %	93.948 %	0.025 ppb	0.220 ppb	49.971 %
Concentration per Run 3	4.748 ppb	90.146 %	91.373 %	0.028 ppb	0.214 ppb	46.666 %
Concentration RSD	5.3 %	2.5 %	1.6 %	87.6 %	2.0 %	17.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	87	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-04d100 6020TL	Rack	1		
Analysis started at:	8/23/2024 1:07:26 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.888 %	88.104 %	0.002 ppb	16,636.112 ppb	1,552.528 ppb	1.306 ppb	893.319 ppb	2,248.049 ppb	91.287 %
Concentration per Run 1	96.444 %	82.745 %	0.004 ppb	16,893.407 ppb	1,552.058 ppb	1.064 ppb	875.001 ppb	2,279.107 ppb	90.936 %
Concentration per Run 2	95.651 %	92.353 %	0.003 ppb	16,096.404 ppb	1,517.047 ppb	1.426 ppb	892.031 ppb	2,309.086 ppb	90.861 %
Concentration per Run 3	95.569 %	89.216 %	0.000 ppb	16,918.523 ppb	1,588.478 ppb	1.428 ppb	912.927 ppb	2,155.955 ppb	92.064 %
Concentration RSD	0.5 %	5.6 %	106.9 %	2.8 %	2.3 %	16.1 %	2.1 %	3.6 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.099 ppb	-0.007 ppb	3.759 ppb	2.729 ppb	0.007 ppb	0.016 ppb	0.024 ppb	-0.105 ppb	92.964 %
Concentration per Run 1	0.130 ppb	-0.019 ppb	3.595 ppb	2.938 ppb	0.004 ppb	-0.033 ppb	0.037 ppb	-0.109 ppb	92.828 %
Concentration per Run 2	0.079 ppb	0.010 ppb	3.505 ppb	3.275 ppb	0.006 ppb	0.070 ppb	0.006 ppb	-0.080 ppb	92.632 %
Concentration per Run 3	0.088 ppb	-0.012 ppb	4.176 ppb	1.975 ppb	0.011 ppb	0.009 ppb	0.030 ppb	-0.124 ppb	93.433 %
Concentration RSD	27.2 %	205.9 %	9.7 %	24.7 %	53.5 %	335.2 %	67.1 %	21.2 %	0.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.037 ppb	0.031 ppb	18.793 ppb	-0.013 ppb	90.205 %	-0.001 ppb	0.001 ppb	92.409 %	0.001 ppb
Concentration per Run 1	0.050 ppb	0.068 ppb	18.319 ppb	-0.019 ppb	88.466 %	0.000 ppb	0.003 ppb	91.221 %	0.001 ppb
Concentration per Run 2	0.042 ppb	0.062 ppb	19.043 ppb	-0.009 ppb	89.662 %	-0.001 ppb	-0.001 ppb	92.322 %	-0.001 ppb
Concentration per Run 3	0.018 ppb	-0.036 ppb	19.015 ppb	-0.009 ppb	92.489 %	0.000 ppb	0.001 ppb	93.684 %	0.003 ppb
Concentration RSD	45.0 %	187.9 %	2.2 %	47.1 %	2.3 %	74.2 %	145.4 %	1.3 %	185.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.693 ppb	93.788 %	94.069 %	0.016 ppb	0.010 ppb	54.175 %
Concentration per Run 1	1.836 ppb	91.422 %	92.472 %	0.002 ppb	0.008 ppb	63.111 %
Concentration per Run 2	1.577 ppb	95.451 %	94.169 %	0.020 ppb	0.011 ppb	50.887 %
Concentration per Run 3	1.667 ppb	94.491 %	95.565 %	0.026 ppb	0.012 ppb	48.525 %
Concentration RSD	7.8 %	2.2 %	1.6 %	76.8 %	16.4 %	14.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 1:11:55 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.537 %	85.817 %	59.839 ppb	6,127.647 ppb	6,054.134 ppb	63.088 ppb	5,956.279 ppb	5,927.738 ppb	84.994 %
Concentration per Run 1	89.463 %	84.902 %	59.258 ppb	6,178.392 ppb	6,141.169 ppb	60.892 ppb	6,013.348 ppb	6,096.839 ppb	85.215 %
Concentration per Run 2	88.196 %	80.980 %	60.329 ppb	6,324.804 ppb	6,258.834 ppb	66.192 ppb	6,191.084 ppb	5,922.010 ppb	84.960 %
Concentration per Run 3	87.952 %	91.569 %	59.929 ppb	5,879.746 ppb	5,762.400 ppb	62.182 ppb	5,664.406 ppb	5,764.366 ppb	84.808 %
Recovery Percentage 1			99.731 %	102.127 %	100.902 %	105.147 %	99.271 %	98.796 %	
Concentration RSD	0.9 %	6.2 %	0.9 %	3.7 %	4.3 %	4.4 %	4.5 %	2.8 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.074 ppb	60.235 ppb	60.557 ppb	6,073.443 ppb	61.474 ppb	61.000 ppb	60.858 ppb	60.670 ppb	85.770 %
Concentration per Run 1	59.748 ppb	61.378 ppb	61.203 ppb	6,133.949 ppb	62.313 ppb	62.467 ppb	61.100 ppb	61.065 ppb	84.842 %
Concentration per Run 2	61.662 ppb	60.587 ppb	61.833 ppb	6,166.804 ppb	62.400 ppb	61.227 ppb	61.924 ppb	60.795 ppb	86.241 %
Concentration per Run 3	61.811 ppb	58.739 ppb	58.634 ppb	5,919.575 ppb	59.708 ppb	59.307 ppb	59.549 ppb	60.151 ppb	86.229 %
Recovery Percentage 1	101.790 %	100.392 %	100.928 %	101.224 %	102.456 %	101.667 %	101.430 %	101.117 %	
Concentration RSD	1.9 %	2.2 %	2.8 %	2.2 %	2.5 %	2.6 %	2.0 %	0.8 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.250 ppb	61.958 ppb	57.649 ppb	58.814 ppb	85.928 %	60.220 ppb	60.377 ppb	87.891 %	54.425 ppb
Concentration per Run 1	59.785 ppb	64.614 ppb	57.171 ppb	60.144 ppb	87.535 %	59.367 ppb	59.731 ppb	88.374 %	53.847 ppb
Concentration per Run 2	61.052 ppb	61.026 ppb	58.176 ppb	57.694 ppb	84.168 %	60.387 ppb	60.690 ppb	87.470 %	54.514 ppb
Concentration per Run 3	59.911 ppb	60.235 ppb	57.601 ppb	58.605 ppb	86.081 %	60.904 ppb	60.711 ppb	87.831 %	54.914 ppb
Recovery Percentage 1	100.416 %	103.264 %	96.082 %	98.024 %		100.366 %	100.629 %		90.708 %
Concentration RSD	1.2 %	3.8 %	0.9 %	2.1 %	2.0 %	1.3 %	0.9 %	0.5 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.594 ppb	91.287 %	92.057 %	59.049 ppb	60.894 ppb	53.373 %
Concentration per Run 1	60.908 ppb	89.796 %	91.512 %	59.176 ppb	60.620 ppb	63.149 %
Concentration per Run 2	60.954 ppb	90.316 %	90.608 %	59.534 ppb	62.407 ppb	49.593 %
Concentration per Run 3	59.918 ppb	93.748 %	94.052 %	58.436 ppb	59.655 ppb	47.378 %
Recovery Percentage 1	100.989 %			98.414 %	101.490 %	
Concentration RSD	1.0 %	2.4 %	1.9 %	0.9 %	2.3 %	16.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 1:16:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.734 %	81.830 %	0.052 ppb	78.037 ppb	4.529 ppb	-0.109 ppb	13.004 ppb	-1.533 ppb	81.726 %
Concentration per Run 1	89.512 %	76.470 %	0.054 ppb	82.779 ppb	4.521 ppb	-0.250 ppb	15.681 ppb	0.720 ppb	82.118 %
Concentration per Run 2	88.410 %	85.294 %	0.054 ppb	76.149 ppb	2.309 ppb	-0.088 ppb	10.914 ppb	-1.097 ppb	81.403 %
Concentration per Run 3	88.280 %	83.725 %	0.047 ppb	75.185 ppb	6.757 ppb	0.011 ppb	12.417 ppb	-4.222 ppb	81.655 %
Recovery Percentage 1			10.379 %	78.037 %	6.470 %	-1.089 %	13.004 %	-1.533 %	
Concentration RSD	0.8 %	5.8 %	7.6 %	5.3 %	49.1 %	120.7 %	18.7 %	163.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.006 ppb	0.015 ppb	0.086 ppb	5.807 ppb	0.021 ppb	-0.001 ppb	0.038 ppb	-0.188 ppb	82.328 %
Concentration per Run 1	0.019 ppb	0.006 ppb	0.150 ppb	9.128 ppb	0.027 ppb	-0.049 ppb	0.020 ppb	-0.194 ppb	82.422 %
Concentration per Run 2	-0.022 ppb	0.030 ppb	0.062 ppb	3.857 ppb	0.027 ppb	0.041 ppb	0.068 ppb	-0.164 ppb	80.436 %
Concentration per Run 3	-0.016 ppb	0.009 ppb	0.047 ppb	4.437 ppb	0.010 ppb	0.006 ppb	0.025 ppb	-0.204 ppb	84.126 %
Recovery Percentage 1	-0.124 %	1.517 %	8.630 %	11.615 %	4.204 %	-0.052 %	3.772 %	-3.751 %	
Concentration RSD	354.3 %	86.2 %	64.5 %	49.8 %	46.9 %	4,344.3 %	70.9 %	11.1 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.057 ppb	0.166 ppb	0.030 ppb	0.273 ppb	82.572 %	0.033 ppb	0.037 ppb	84.859 %	0.845 ppb
Concentration per Run 1	0.075 ppb	0.047 ppb	0.034 ppb	0.192 ppb	83.001 %	0.039 ppb	0.034 ppb	83.571 %	0.799 ppb
Concentration per Run 2	0.029 ppb	0.197 ppb	0.028 ppb	0.269 ppb	81.346 %	0.038 ppb	0.036 ppb	85.489 %	0.889 ppb
Concentration per Run 3	0.067 ppb	0.254 ppb	0.027 ppb	0.358 ppb	83.368 %	0.023 ppb	0.042 ppb	85.517 %	0.848 ppb
Recovery Percentage 1	11.445 %	3.318 %	0.296 %	13.663 %		8.310 %	18.581 %		21.127 %
Concentration RSD	43.0 %	64.4 %	12.3 %	30.4 %	1.3 %	27.6 %	11.1 %	1.3 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.025 ppb	88.082 %	88.967 %	0.372 ppb	0.030 ppb	51.973 %
Concentration per Run 1	-0.001 ppb	87.349 %	88.255 %	0.273 ppb	0.035 ppb	61.399 %
Concentration per Run 2	0.064 ppb	87.882 %	88.988 %	0.433 ppb	0.026 ppb	48.197 %
Concentration per Run 3	0.013 ppb	89.016 %	89.656 %	0.410 ppb	0.028 ppb	46.322 %
Recovery Percentage 1	5.045 %			37.213 %	2.955 %	
Concentration RSD	136.1 %	1.0 %	0.8 %	23.3 %	16.3 %	15.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	90	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-05d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 1:24:17 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.086 %	86.536 %	0.018 ppb	10,427.287 ppb	2,643.377 ppb	23.251 ppb	1,993.655 ppb	5,640.893 ppb	83.713 %
Concentration per Run 1	90.228 %	83.921 %	0.020 ppb	10,437.087 ppb	2,657.458 ppb	21.638 ppb	1,986.568 ppb	5,866.475 ppb	83.498 %
Concentration per Run 2	90.713 %	88.039 %	0.014 ppb	10,288.690 ppb	2,603.765 ppb	22.906 ppb	1,943.602 ppb	5,309.899 ppb	84.283 %
Concentration per Run 3	89.318 %	87.647 %	0.019 ppb	10,556.085 ppb	2,668.908 ppb	25.209 ppb	2,050.795 ppb	5,746.304 ppb	83.358 %
Concentration RSD	0.8 %	2.6 %	16.5 %	1.3 %	1.3 %	7.8 %	2.7 %	5.2 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.174 ppb	0.060 ppb	23.523 ppb	214.772 ppb	0.040 ppb	0.469 ppb	0.238 ppb	0.894 ppb	83.964 %
Concentration per Run 1	0.124 ppb	0.049 ppb	24.468 ppb	223.337 ppb	0.029 ppb	0.501 ppb	0.235 ppb	0.940 ppb	82.294 %
Concentration per Run 2	0.278 ppb	0.067 ppb	23.254 ppb	204.862 ppb	0.047 ppb	0.524 ppb	0.268 ppb	0.822 ppb	83.765 %
Concentration per Run 3	0.122 ppb	0.065 ppb	22.847 ppb	216.116 ppb	0.043 ppb	0.380 ppb	0.210 ppb	0.919 ppb	85.832 %
Concentration RSD	51.2 %	16.8 %	3.6 %	4.3 %	23.8 %	16.6 %	12.3 %	7.1 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.038 ppb	-0.003 ppb	39.422 ppb	0.050 ppb	84.634 %	0.014 ppb	0.013 ppb	87.955 %	0.212 ppb
Concentration per Run 1	-0.004 ppb	-0.035 ppb	39.388 ppb	0.034 ppb	83.831 %	0.011 ppb	0.010 ppb	87.695 %	0.212 ppb
Concentration per Run 2	0.073 ppb	0.050 ppb	39.643 ppb	0.057 ppb	83.557 %	0.015 ppb	0.010 ppb	87.366 %	0.223 ppb
Concentration per Run 3	0.044 ppb	-0.025 ppb	39.235 ppb	0.060 ppb	86.513 %	0.016 ppb	0.020 ppb	88.803 %	0.202 ppb
Concentration RSD	102.5 %	1,453.2 %	0.5 %	28.1 %	1.9 %	19.5 %	43.9 %	0.9 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.854 ppb	93.588 %	95.327 %	0.094 ppb	0.580 ppb	54.214 %
Concentration per Run 1	5.699 ppb	93.412 %	93.829 %	0.062 ppb	0.593 ppb	64.419 %
Concentration per Run 2	6.205 ppb	93.033 %	95.209 %	0.111 ppb	0.584 ppb	49.479 %
Concentration per Run 3	5.657 ppb	94.318 %	96.942 %	0.111 ppb	0.563 ppb	48.743 %
Concentration RSD	5.2 %	0.7 %	1.6 %	29.7 %	2.7 %	16.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-06d20 6020TL	Rack	1		
Analysis started at:	8/23/2024 1:28:45 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.823 %	85.948 %	0.008 ppb	10,440.865 ppb	2,939.000 ppb	11.857 ppb	2,121.741 ppb	4,347.535 ppb	87.273 %
Concentration per Run 1	91.694 %	86.667 %	0.009 ppb	10,072.367 ppb	2,831.128 ppb	10.842 ppb	2,067.767 ppb	4,157.471 ppb	85.377 %
Concentration per Run 2	93.140 %	88.627 %	0.008 ppb	10,289.476 ppb	2,904.034 ppb	12.435 ppb	2,089.448 ppb	4,371.951 ppb	87.332 %
Concentration per Run 3	93.634 %	82.549 %	0.007 ppb	10,960.750 ppb	3,081.838 ppb	12.294 ppb	2,208.008 ppb	4,513.183 ppb	89.111 %
Concentration RSD	1.1 %	3.6 %	13.8 %	4.4 %	4.4 %	7.4 %	3.6 %	4.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.226 ppb	0.032 ppb	20.026 ppb	172.985 ppb	0.023 ppb	0.387 ppb	0.098 ppb	0.303 ppb	88.124 %
Concentration per Run 1	0.245 ppb	0.034 ppb	19.480 ppb	176.245 ppb	0.024 ppb	0.375 ppb	0.102 ppb	0.344 ppb	89.142 %
Concentration per Run 2	0.160 ppb	0.026 ppb	20.196 ppb	173.795 ppb	0.009 ppb	0.333 ppb	0.028 ppb	0.317 ppb	87.529 %
Concentration per Run 3	0.274 ppb	0.036 ppb	20.404 ppb	168.915 ppb	0.035 ppb	0.452 ppb	0.163 ppb	0.250 ppb	87.701 %
Concentration RSD	26.1 %	16.0 %	2.4 %	2.2 %	57.6 %	15.6 %	69.1 %	16.0 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.040 ppb	0.044 ppb	35.663 ppb	0.032 ppb	87.667 %	0.007 ppb	0.007 ppb	90.386 %	0.096 ppb
Concentration per Run 1	0.020 ppb	0.024 ppb	35.228 ppb	0.036 ppb	86.946 %	0.006 ppb	0.005 ppb	89.885 %	0.093 ppb
Concentration per Run 2	0.036 ppb	0.098 ppb	35.892 ppb	0.041 ppb	88.518 %	0.005 ppb	0.007 ppb	91.982 %	0.091 ppb
Concentration per Run 3	0.064 ppb	0.009 ppb	35.870 ppb	0.020 ppb	87.538 %	0.009 ppb	0.008 ppb	89.292 %	0.105 ppb
Concentration RSD	55.4 %	108.9 %	1.1 %	34.8 %	0.9 %	28.2 %	16.7 %	1.6 %	7.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.830 ppb	92.990 %	94.723 %	0.059 ppb	0.201 ppb	53.328 %
Concentration per Run 1	5.740 ppb	92.565 %	94.199 %	0.034 ppb	0.205 ppb	63.400 %
Concentration per Run 2	5.887 ppb	93.633 %	95.849 %	0.068 ppb	0.187 ppb	49.285 %
Concentration per Run 3	5.863 ppb	92.771 %	94.121 %	0.075 ppb	0.211 ppb	47.298 %
Concentration RSD	1.4 %	0.6 %	1.0 %	37.6 %	6.1 %	16.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	92	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448142-03d100 6020TL	Rack	1		
Analysis started at:	8/23/2024 1:33:15 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.191 %	91.242 %	0.002 ppb	5,038.937 ppb	648.110 ppb	1.131 ppb	426.952 ppb	1,529.476 ppb	89.532 %
Concentration per Run 1	96.910 %	98.039 %	0.000 ppb	4,566.301 ppb	592.919 ppb	1.054 ppb	415.800 ppb	1,495.193 ppb	89.254 %
Concentration per Run 2	95.764 %	88.235 %	0.003 ppb	5,232.570 ppb	659.799 ppb	1.029 ppb	422.449 ppb	1,491.257 ppb	89.697 %
Concentration per Run 3	95.898 %	87.451 %	0.002 ppb	5,317.940 ppb	691.613 ppb	1.310 ppb	442.607 ppb	1,601.979 ppb	89.646 %
Concentration RSD	0.7 %	6.5 %	69.2 %	8.2 %	7.8 %	13.7 %	3.3 %	4.1 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.192 ppb	-0.016 ppb	0.576 ppb	7.845 ppb	0.010 ppb	-0.006 ppb	0.069 ppb	-0.049 ppb	89.968 %
Concentration per Run 1	0.197 ppb	-0.027 ppb	0.486 ppb	6.666 ppb	0.014 ppb	0.003 ppb	0.076 ppb	-0.089 ppb	88.734 %
Concentration per Run 2	0.115 ppb	-0.007 ppb	0.713 ppb	9.026 ppb	0.008 ppb	0.045 ppb	0.072 ppb	0.027 ppb	92.882 %
Concentration per Run 3	0.264 ppb	-0.013 ppb	0.529 ppb	7.843 ppb	0.009 ppb	-0.066 ppb	0.059 ppb	-0.087 ppb	88.287 %
Concentration RSD	38.8 %	66.6 %	20.9 %	15.0 %	27.1 %	958.5 %	12.6 %	134.6 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.119 ppb	0.106 ppb	12.343 ppb	0.098 ppb	88.664 %	0.000 ppb	0.001 ppb	91.919 %	0.086 ppb
Concentration per Run 1	0.113 ppb	0.100 ppb	12.215 ppb	0.119 ppb	87.529 %	0.000 ppb	0.001 ppb	91.297 %	0.069 ppb
Concentration per Run 2	0.121 ppb	0.071 ppb	12.168 ppb	0.119 ppb	90.259 %	0.000 ppb	-0.001 ppb	93.314 %	0.084 ppb
Concentration per Run 3	0.123 ppb	0.147 ppb	12.646 ppb	0.058 ppb	88.204 %	0.001 ppb	0.001 ppb	91.146 %	0.106 ppb
Concentration RSD	4.5 %	36.1 %	2.1 %	35.8 %	1.6 %	171.5 %	157.8 %	1.3 %	21.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.010 ppb	93.444 %	94.681 %	0.032 ppb	0.047 ppb	54.195 %
Concentration per Run 1	0.999 ppb	91.383 %	91.691 %	0.004 ppb	0.047 ppb	63.928 %
Concentration per Run 2	0.895 ppb	95.020 %	96.725 %	0.041 ppb	0.046 ppb	50.668 %
Concentration per Run 3	1.136 ppb	93.930 %	95.628 %	0.052 ppb	0.049 ppb	47.988 %
Concentration RSD	12.0 %	2.0 %	2.8 %	78.7 %	3.3 %	15.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	93	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 1:38:42 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.051 %	83.595 %	59.254 ppb	6,220.738 ppb	6,247.566 ppb	62.360 ppb	6,034.994 ppb	6,022.107 ppb	85.235 %
Concentration per Run 1	89.501 %	83.725 %	58.469 ppb	6,165.176 ppb	6,159.825 ppb	60.964 ppb	5,957.606 ppb	6,105.872 ppb	85.141 %
Concentration per Run 2	89.217 %	84.706 %	59.502 ppb	6,095.503 ppb	6,138.099 ppb	62.306 ppb	6,006.210 ppb	5,815.601 ppb	85.655 %
Concentration per Run 3	88.437 %	82.353 %	59.791 ppb	6,401.533 ppb	6,444.775 ppb	63.810 ppb	6,141.167 ppb	6,144.848 ppb	84.910 %
Recovery Percentage 1			98.757 %	103.679 %	104.126 %	103.933 %	100.583 %	100.368 %	
Concentration RSD	0.6 %	1.4 %	1.2 %	2.6 %	2.7 %	2.3 %	1.6 %	3.0 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.953 ppb	61.866 ppb	61.984 ppb	6,085.496 ppb	60.974 ppb	61.003 ppb	61.399 ppb	61.124 ppb	85.118 %
Concentration per Run 1	63.285 ppb	62.396 ppb	63.600 ppb	6,102.521 ppb	61.066 ppb	60.878 ppb	61.600 ppb	61.356 ppb	85.179 %
Concentration per Run 2	61.281 ppb	61.563 ppb	61.451 ppb	6,090.338 ppb	61.258 ppb	61.032 ppb	61.394 ppb	61.238 ppb	84.488 %
Concentration per Run 3	61.292 ppb	61.638 ppb	60.900 ppb	6,063.629 ppb	60.598 ppb	61.099 ppb	61.203 ppb	60.778 ppb	85.688 %
Recovery Percentage 1	103.255 %	103.109 %	103.306 %	101.425 %	101.623 %	101.672 %	102.331 %	101.873 %	
Concentration RSD	1.9 %	0.7 %	2.3 %	0.3 %	0.6 %	0.2 %	0.3 %	0.5 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.686 ppb	62.643 ppb	58.354 ppb	59.555 ppb	85.987 %	60.428 ppb	61.298 ppb	88.152 %	55.110 ppb
Concentration per Run 1	61.529 ppb	61.078 ppb	58.174 ppb	58.978 ppb	86.083 %	60.158 ppb	61.293 ppb	87.475 %	54.352 ppb
Concentration per Run 2	60.526 ppb	65.149 ppb	58.357 ppb	60.013 ppb	87.125 %	59.738 ppb	60.361 ppb	89.822 %	54.567 ppb
Concentration per Run 3	60.003 ppb	61.701 ppb	58.530 ppb	59.675 ppb	84.752 %	61.388 ppb	62.241 ppb	87.157 %	56.409 ppb
Recovery Percentage 1	101.144 %	104.404 %	97.257 %	99.258 %		100.714 %	102.164 %		91.849 %
Concentration RSD	1.3 %	3.5 %	0.3 %	0.9 %	1.4 %	1.4 %	1.5 %	1.7 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.208 ppb	93.347 %	94.560 %	59.281 ppb	61.428 ppb	54.038 %
Concentration per Run 1	60.704 ppb	92.065 %	94.953 %	58.659 ppb	60.486 ppb	64.197 %
Concentration per Run 2	61.430 ppb	93.854 %	94.978 %	58.748 ppb	61.564 ppb	49.652 %
Concentration per Run 3	61.490 ppb	94.122 %	93.748 %	60.436 ppb	62.232 ppb	48.266 %
Recovery Percentage 1	102.013 %			98.801 %	102.379 %	
Concentration RSD	0.7 %	1.2 %	0.7 %	1.7 %	1.4 %	16.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	94	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 1:43:13 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.090 %	89.608 %	0.043 ppb	49.021 ppb	4.039 ppb	-0.248 ppb	9.718 ppb	2.857 ppb	81.107 %
Concentration per Run 1	89.397 %	84.902 %	0.048 ppb	50.672 ppb	4.703 ppb	-0.243 ppb	13.882 ppb	6.118 ppb	80.962 %
Concentration per Run 2	88.756 %	89.804 %	0.042 ppb	49.157 ppb	3.809 ppb	-0.123 ppb	5.958 ppb	-0.064 ppb	80.953 %
Concentration per Run 3	89.116 %	94.118 %	0.039 ppb	47.235 ppb	3.605 ppb	-0.378 ppb	9.312 ppb	2.518 ppb	81.407 %
Recovery Percentage 1			8.581 %	49.021 %	5.770 %	-2.482 %	9.718 %	2.857 %	
Concentration RSD	0.4 %	5.1 %	10.1 %	3.5 %	14.5 %	51.4 %	40.9 %	108.7 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.014 ppb	0.022 ppb	0.042 ppb	6.326 ppb	0.036 ppb	-0.041 ppb	0.044 ppb	-0.152 ppb	83.916 %
Concentration per Run 1	-0.016 ppb	0.033 ppb	0.059 ppb	6.121 ppb	0.028 ppb	0.016 ppb	0.058 ppb	-0.101 ppb	83.638 %
Concentration per Run 2	0.053 ppb	0.026 ppb	0.069 ppb	7.675 ppb	0.041 ppb	-0.121 ppb	0.038 ppb	-0.201 ppb	83.619 %
Concentration per Run 3	0.005 ppb	0.006 ppb	-0.003 ppb	5.182 ppb	0.038 ppb	-0.018 ppb	0.036 ppb	-0.154 ppb	84.493 %
Recovery Percentage 1	0.277 %	2.181 %	4.158 %	12.652 %	7.173 %	-2.049 %	4.392 %	-3.042 %	
Concentration RSD	253.9 %	65.4 %	93.0 %	19.9 %	18.5 %	173.5 %	27.9 %	32.7 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.115 ppb	0.028 ppb	0.275 ppb	87.169 %	0.041 ppb	0.047 ppb	89.264 %	0.878 ppb
Concentration per Run 1	0.073 ppb	0.102 ppb	0.030 ppb	0.190 ppb	86.667 %	0.048 ppb	0.044 ppb	88.953 %	0.827 ppb
Concentration per Run 2	0.082 ppb	0.139 ppb	0.030 ppb	0.244 ppb	87.737 %	0.043 ppb	0.040 ppb	89.188 %	0.929 ppb
Concentration per Run 3	0.056 ppb	0.103 ppb	0.025 ppb	0.390 ppb	87.104 %	0.032 ppb	0.056 ppb	89.650 %	0.878 ppb
Recovery Percentage 1	14.071 %	2.292 %	0.281 %	13.743 %		10.186 %	23.389 %		21.947 %
Concentration RSD	18.7 %	18.8 %	9.8 %	37.7 %	0.6 %	20.0 %	17.9 %	0.4 %	5.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.023 ppb	92.966 %	94.067 %	0.389 ppb	0.038 ppb	53.369 %
Concentration per Run 1	0.012 ppb	92.081 %	93.166 %	0.299 ppb	0.045 ppb	62.456 %
Concentration per Run 2	0.025 ppb	93.493 %	93.324 %	0.456 ppb	0.037 ppb	49.080 %
Concentration per Run 3	0.032 ppb	93.324 %	95.710 %	0.413 ppb	0.032 ppb	48.571 %
Recovery Percentage 1	4.561 %			38.936 %	3.795 %	
Concentration RSD	45.4 %	0.8 %	1.5 %	20.9 %	17.5 %	14.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962640-1 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:05:56 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.035 %	89.150 %	0.009 ppb	66.725 ppb	2.770 ppb	2.419 ppb	3.851 ppb	16.209 ppb	84.991 %
Concentration per Run 1	88.233 %	87.843 %	0.006 ppb	63.716 ppb	2.424 ppb	2.719 ppb	5.012 ppb	23.923 ppb	84.857 %
Concentration per Run 2	88.787 %	85.882 %	0.010 ppb	73.131 ppb	1.841 ppb	2.188 ppb	5.772 ppb	9.306 ppb	85.848 %
Concentration per Run 3	87.087 %	93.725 %	0.009 ppb	63.330 ppb	4.046 ppb	2.350 ppb	0.769 ppb	15.397 ppb	84.267 %
Concentration RSD	1.0 %	4.6 %	25.0 %	8.3 %	41.2 %	11.2 %	70.0 %	45.3 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.061 ppb	0.009 ppb	0.300 ppb	4.220 ppb	0.019 ppb	0.013 ppb	0.814 ppb	1.118 ppb	82.053 %
Concentration per Run 1	0.049 ppb	0.004 ppb	0.239 ppb	3.041 ppb	0.021 ppb	-0.002 ppb	0.802 ppb	1.134 ppb	81.591 %
Concentration per Run 2	0.033 ppb	0.013 ppb	0.352 ppb	5.781 ppb	0.018 ppb	0.049 ppb	0.830 ppb	1.269 ppb	81.023 %
Concentration per Run 3	0.102 ppb	0.012 ppb	0.309 ppb	3.836 ppb	0.017 ppb	-0.007 ppb	0.810 ppb	0.951 ppb	83.546 %
Concentration RSD	59.7 %	52.5 %	18.9 %	33.4 %	9.5 %	231.8 %	1.8 %	14.3 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.016 ppb	0.081 ppb	0.025 ppb	0.072 ppb	84.483 %	0.006 ppb	0.005 ppb	94.410 %	0.423 ppb
Concentration per Run 1	0.022 ppb	0.156 ppb	0.020 ppb	0.116 ppb	83.388 %	0.006 ppb	0.007 ppb	98.787 %	0.411 ppb
Concentration per Run 2	0.003 ppb	0.007 ppb	0.033 ppb	0.040 ppb	84.263 %	0.009 ppb	0.001 ppb	93.917 %	0.416 ppb
Concentration per Run 3	0.024 ppb	0.081 ppb	0.023 ppb	0.061 ppb	85.798 %	0.005 ppb	0.007 ppb	90.525 %	0.441 ppb
Concentration RSD	71.5 %	91.7 %	26.7 %	54.5 %	1.4 %	33.0 %	64.2 %	4.4 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.094 ppb	95.388 %	98.696 %	0.136 ppb	0.055 ppb	72.003 %
Concentration per Run 1	0.094 ppb	95.577 %	98.541 %	0.116 ppb	0.050 ppb	101.558 %
Concentration per Run 2	0.084 ppb	94.799 %	98.284 %	0.157 ppb	0.052 ppb	60.718 %
Concentration per Run 3	0.105 ppb	95.787 %	99.264 %	0.134 ppb	0.063 ppb	53.734 %
Concentration RSD	11.5 %	0.5 %	0.5 %	15.2 %	13.1 %	35.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962640-2d10 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:10:22 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.612 %	80.849 %	5.068 ppb	1,136.842 ppb	1,064.169 ppb	207.948 ppb	1,033.151 ppb	1,046.446 ppb	84.576 %
Concentration per Run 1	90.843 %	78.823 %	5.035 ppb	1,122.777 ppb	1,047.245 ppb	203.884 ppb	1,057.303 ppb	1,034.292 ppb	85.192 %
Concentration per Run 2	89.858 %	81.176 %	5.098 ppb	1,134.211 ppb	1,066.376 ppb	202.433 ppb	983.034 ppb	1,083.368 ppb	84.178 %
Concentration per Run 3	88.136 %	82.549 %	5.073 ppb	1,153.537 ppb	1,078.885 ppb	217.527 ppb	1,059.117 ppb	1,021.679 ppb	84.357 %
Concentration RSD	1.5 %	2.3 %	0.6 %	1.4 %	1.5 %	4.0 %	4.2 %	3.1 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.661 ppb	20.297 ppb	52.068 ppb	107.443 ppb	51.076 ppb	51.043 ppb	25.314 ppb	51.529 ppb	83.847 %
Concentration per Run 1	50.882 ppb	20.106 ppb	51.565 ppb	106.768 ppb	51.206 ppb	51.290 ppb	25.719 ppb	51.797 ppb	81.837 %
Concentration per Run 2	49.400 ppb	19.857 ppb	50.763 ppb	97.224 ppb	50.396 ppb	49.660 ppb	24.691 ppb	50.419 ppb	86.083 %
Concentration per Run 3	51.700 ppb	20.928 ppb	53.877 ppb	118.338 ppb	51.627 ppb	52.178 ppb	25.530 ppb	52.369 ppb	83.620 %
Concentration RSD	2.3 %	2.8 %	3.1 %	9.8 %	1.2 %	2.5 %	2.2 %	1.9 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.693 ppb	12.402 ppb	97.472 ppb	102.788 ppb	84.287 %	4.936 ppb	5.355 ppb	88.491 %	44.120 ppb
Concentration per Run 1	12.859 ppb	11.290 ppb	97.652 ppb	102.242 ppb	83.023 %	4.810 ppb	5.241 ppb	87.748 %	43.284 ppb
Concentration per Run 2	12.373 ppb	12.907 ppb	96.345 ppb	102.202 ppb	84.137 %	4.985 ppb	5.430 ppb	87.704 %	44.844 ppb
Concentration per Run 3	12.846 ppb	13.008 ppb	98.418 ppb	103.921 ppb	85.701 %	5.012 ppb	5.393 ppb	90.020 %	44.232 ppb
Concentration RSD	2.2 %	7.8 %	1.1 %	1.0 %	1.6 %	2.2 %	1.9 %	1.5 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	204.695 ppb	92.083 %	95.290 %	12.404 ppb	55.160 ppb	54.688 %
Concentration per Run 1	204.760 ppb	89.569 %	92.430 %	12.509 ppb	55.381 ppb	64.679 %
Concentration per Run 2	206.568 ppb	92.002 %	96.708 %	12.314 ppb	54.649 ppb	50.771 %
Concentration per Run 3	202.757 ppb	94.678 %	96.733 %	12.388 ppb	55.452 ppb	48.612 %
Concentration RSD	0.9 %	2.8 %	2.6 %	0.8 %	0.8 %	15.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	97	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-06 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:14:50 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.149 %	81.242 %	0.012 ppb	15,030.197 ppb	4,785.956 ppb	29.336 ppb	1,567.708 ppb	24,253.724 ppb	87.850 %
Concentration per Run 1	90.365 %	78.627 %	0.018 ppb	14,809.880 ppb	4,711.129 ppb	29.642 ppb	1,594.252 ppb	24,293.392 ppb	87.386 %
Concentration per Run 2	90.651 %	77.059 %	0.009 ppb	15,527.742 ppb	4,932.067 ppb	30.324 ppb	1,574.141 ppb	24,691.019 ppb	88.234 %
Concentration per Run 3	89.432 %	88.039 %	0.007 ppb	14,752.970 ppb	4,714.672 ppb	28.040 ppb	1,534.732 ppb	23,776.762 ppb	87.930 %
Concentration RSD	0.7 %	7.3 %	49.9 %	2.9 %	2.6 %	4.0 %	1.9 %	1.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.498 ppb	0.126 ppb	1.591 ppb	82.878 ppb	0.055 ppb	0.466 ppb	1.497 ppb	0.994 ppb	85.348 %
Concentration per Run 1	0.459 ppb	0.136 ppb	1.657 ppb	82.818 ppb	0.054 ppb	0.380 ppb	1.508 ppb	0.954 ppb	82.342 %
Concentration per Run 2	0.522 ppb	0.101 ppb	1.572 ppb	83.306 ppb	0.058 ppb	0.503 ppb	1.608 ppb	1.076 ppb	85.422 %
Concentration per Run 3	0.514 ppb	0.140 ppb	1.545 ppb	82.511 ppb	0.052 ppb	0.515 ppb	1.376 ppb	0.953 ppb	88.281 %
Concentration RSD	6.8 %	16.9 %	3.7 %	0.5 %	5.4 %	16.1 %	7.8 %	7.2 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.832 ppb	0.065 ppb	146.417 ppb	0.869 ppb	84.644 %	0.007 ppb	0.010 ppb	89.348 %	1.266 ppb
Concentration per Run 1	0.886 ppb	0.056 ppb	145.191 ppb	0.778 ppb	82.945 %	0.010 ppb	0.016 ppb	86.408 %	1.260 ppb
Concentration per Run 2	0.788 ppb	0.148 ppb	146.619 ppb	0.890 ppb	84.542 %	0.005 ppb	0.008 ppb	89.366 %	1.214 ppb
Concentration per Run 3	0.824 ppb	-0.008 ppb	147.441 ppb	0.939 ppb	86.444 %	0.007 ppb	0.005 ppb	92.268 %	1.322 ppb
Concentration RSD	5.9 %	119.5 %	0.8 %	9.5 %	2.1 %	31.9 %	59.1 %	3.3 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.687 ppb	92.515 %	93.809 %	0.064 ppb	0.214 ppb	51.683 %
Concentration per Run 1	20.750 ppb	90.412 %	92.669 %	0.045 ppb	0.217 ppb	60.161 %
Concentration per Run 2	20.657 ppb	92.654 %	92.591 %	0.073 ppb	0.218 ppb	48.065 %
Concentration per Run 3	20.654 ppb	94.480 %	96.167 %	0.076 ppb	0.207 ppb	46.822 %
Concentration RSD	0.3 %	2.2 %	2.2 %	26.8 %	2.7 %	14.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962640-3d10 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:19:17 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.948 %	90.719 %	4.681 ppb	2,528.515 ppb	1,476.145 ppb	198.689 ppb	1,161.404 ppb	3,379.573 ppb	90.033 %
Concentration per Run 1	95.145 %	88.823 %	4.850 ppb	2,523.751 ppb	1,495.830 ppb	196.914 ppb	1,183.015 ppb	3,442.893 ppb	88.560 %
Concentration per Run 2	97.117 %	91.176 %	4.586 ppb	2,538.028 ppb	1,467.487 ppb	200.040 ppb	1,119.329 ppb	3,408.079 ppb	91.815 %
Concentration per Run 3	95.581 %	92.157 %	4.608 ppb	2,523.768 ppb	1,465.117 ppb	199.113 ppb	1,181.868 ppb	3,287.746 ppb	89.725 %
Concentration RSD	1.1 %	1.9 %	3.1 %	0.3 %	1.2 %	0.8 %	3.1 %	2.4 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.903 ppb	18.864 ppb	48.360 ppb	101.481 ppb	48.210 ppb	47.920 ppb	24.205 ppb	48.081 ppb	91.175 %
Concentration per Run 1	45.185 ppb	18.665 ppb	48.660 ppb	101.868 ppb	49.003 ppb	49.477 ppb	24.792 ppb	48.457 ppb	90.697 %
Concentration per Run 2	47.952 ppb	18.735 ppb	47.418 ppb	94.640 ppb	47.458 ppb	46.985 ppb	24.071 ppb	48.097 ppb	90.574 %
Concentration per Run 3	47.572 ppb	19.191 ppb	49.004 ppb	107.936 ppb	48.169 ppb	47.298 ppb	23.753 ppb	47.689 ppb	92.255 %
Concentration RSD	3.2 %	1.5 %	1.7 %	6.6 %	1.6 %	2.8 %	2.2 %	0.8 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.305 ppb	11.728 ppb	107.923 ppb	100.340 ppb	89.141 %	4.767 ppb	5.160 ppb	92.113 %	44.428 ppb
Concentration per Run 1	12.204 ppb	10.856 ppb	108.477 ppb	100.390 ppb	88.429 %	4.828 ppb	5.187 ppb	91.488 %	44.344 ppb
Concentration per Run 2	12.548 ppb	12.148 ppb	107.189 ppb	98.828 ppb	88.841 %	4.748 ppb	5.016 ppb	91.546 %	44.773 ppb
Concentration per Run 3	12.163 ppb	12.180 ppb	108.103 ppb	101.801 ppb	90.151 %	4.724 ppb	5.278 ppb	93.305 %	44.166 ppb
Concentration RSD	1.7 %	6.4 %	0.6 %	1.5 %	1.0 %	1.1 %	2.6 %	1.1 %	0.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	199.559 ppb	94.403 %	95.970 %	12.124 ppb	53.278 ppb	52.930 %
Concentration per Run 1	202.016 ppb	93.449 %	94.082 %	12.149 ppb	54.059 ppb	62.628 %
Concentration per Run 2	199.119 ppb	93.885 %	96.732 %	12.148 ppb	52.842 ppb	48.597 %
Concentration per Run 3	197.540 ppb	95.875 %	97.096 %	12.075 ppb	52.934 ppb	47.563 %
Concentration RSD	1.1 %	1.4 %	1.7 %	0.3 %	1.3 %	15.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	99	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962640-4d10 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:23:45 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.017 %	91.111 %	4.653 ppb	2,496.729 ppb	1,448.615 ppb	189.048 ppb	1,113.796 ppb	3,328.557 ppb	88.701 %
Concentration per Run 1	93.404 %	91.569 %	4.652 ppb	2,435.051 ppb	1,399.555 ppb	186.955 ppb	1,098.172 ppb	3,238.789 ppb	88.249 %
Concentration per Run 2	94.337 %	90.980 %	4.623 ppb	2,464.795 ppb	1,438.955 ppb	188.195 ppb	1,145.417 ppb	3,361.077 ppb	88.939 %
Concentration per Run 3	94.309 %	90.784 %	4.682 ppb	2,590.340 ppb	1,507.333 ppb	191.994 ppb	1,097.799 ppb	3,385.804 ppb	88.915 %
Concentration RSD	0.6 %	0.4 %	0.6 %	3.3 %	3.8 %	1.4 %	2.5 %	2.4 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	44.435 ppb	18.027 ppb	46.818 ppb	104.549 ppb	45.657 ppb	45.963 ppb	23.250 ppb	45.807 ppb	90.087 %
Concentration per Run 1	42.489 ppb	17.718 ppb	45.453 ppb	103.155 ppb	44.756 ppb	44.566 ppb	22.402 ppb	44.005 ppb	89.584 %
Concentration per Run 2	45.258 ppb	18.074 ppb	46.908 ppb	104.337 ppb	46.019 ppb	46.635 ppb	23.801 ppb	47.315 ppb	88.178 %
Concentration per Run 3	45.558 ppb	18.288 ppb	48.094 ppb	106.155 ppb	46.196 ppb	46.688 ppb	23.546 ppb	46.101 ppb	92.500 %
Concentration RSD	3.8 %	1.6 %	2.8 %	1.4 %	1.7 %	2.6 %	3.2 %	3.7 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.271 ppb	13.032 ppb	108.095 ppb	99.264 ppb	88.892 %	4.549 ppb	5.016 ppb	91.347 %	43.542 ppb
Concentration per Run 1	12.145 ppb	13.220 ppb	105.612 ppb	97.414 ppb	87.654 %	4.511 ppb	5.090 ppb	89.487 %	43.031 ppb
Concentration per Run 2	12.835 ppb	14.159 ppb	109.910 ppb	100.178 ppb	89.462 %	4.585 ppb	4.978 ppb	90.279 %	44.114 ppb
Concentration per Run 3	11.834 ppb	11.717 ppb	108.764 ppb	100.200 ppb	89.559 %	4.550 ppb	4.981 ppb	94.275 %	43.480 ppb
Concentration RSD	4.2 %	9.5 %	2.1 %	1.6 %	1.2 %	0.8 %	1.3 %	2.8 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	188.504 ppb	94.435 %	95.185 %	12.163 ppb	53.794 ppb	53.249 %
Concentration per Run 1	189.105 ppb	91.850 %	93.441 %	12.142 ppb	53.223 ppb	62.711 %
Concentration per Run 2	189.432 ppb	95.297 %	94.734 %	12.243 ppb	54.226 ppb	49.352 %
Concentration per Run 3	186.976 ppb	96.157 %	97.381 %	12.102 ppb	53.932 ppb	47.685 %
Concentration RSD	0.7 %	2.4 %	2.1 %	0.6 %	1.0 %	15.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	100	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-01 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:28:13 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.575 %	87.320 %	0.010 ppb	9,866.314 ppb	4,302.726 ppb	31.578 ppb	1,116.731 ppb	16,876.844 ppb	90.998 %
Concentration per Run 1	93.812 %	84.706 %	0.006 ppb	9,897.250 ppb	4,400.477 ppb	32.631 ppb	1,096.136 ppb	17,273.865 ppb	91.198 %
Concentration per Run 2	93.863 %	82.941 %	0.008 ppb	10,122.175 ppb	4,381.066 ppb	33.255 ppb	1,117.646 ppb	16,868.557 ppb	91.190 %
Concentration per Run 3	93.050 %	94.314 %	0.014 ppb	9,579.519 ppb	4,126.634 ppb	28.848 ppb	1,136.410 ppb	16,488.110 ppb	90.606 %
Concentration RSD	0.5 %	7.0 %	44.7 %	2.8 %	3.6 %	7.6 %	1.8 %	2.3 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.461 ppb	0.081 ppb	10.433 ppb	43.293 ppb	0.125 ppb	0.492 ppb	0.942 ppb	0.610 ppb	88.790 %
Concentration per Run 1	0.489 ppb	0.098 ppb	10.242 ppb	49.175 ppb	0.135 ppb	0.448 ppb	0.922 ppb	0.660 ppb	86.161 %
Concentration per Run 2	0.432 ppb	0.056 ppb	10.587 ppb	44.117 ppb	0.132 ppb	0.448 ppb	0.903 ppb	0.578 ppb	91.825 %
Concentration per Run 3	0.464 ppb	0.087 ppb	10.471 ppb	36.586 ppb	0.109 ppb	0.578 ppb	1.000 ppb	0.593 ppb	88.385 %
Concentration RSD	6.2 %	27.0 %	1.7 %	14.6 %	11.2 %	15.2 %	5.4 %	7.1 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.562 ppb	0.231 ppb	80.161 ppb	0.894 ppb	89.356 %	0.004 ppb	0.003 ppb	93.488 %	1.127 ppb
Concentration per Run 1	0.580 ppb	0.209 ppb	79.935 ppb	0.821 ppb	88.241 %	0.004 ppb	0.001 ppb	92.641 %	1.052 ppb
Concentration per Run 2	0.511 ppb	0.369 ppb	79.507 ppb	0.932 ppb	89.405 %	0.007 ppb	0.005 ppb	93.745 %	1.124 ppb
Concentration per Run 3	0.595 ppb	0.115 ppb	81.041 ppb	0.929 ppb	90.422 %	0.002 ppb	0.003 ppb	94.078 %	1.204 ppb
Concentration RSD	7.9 %	55.8 %	1.0 %	7.1 %	1.2 %	61.1 %	58.7 %	0.8 %	6.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.376 ppb	94.631 %	96.651 %	0.046 ppb	0.115 ppb	52.217 %
Concentration per Run 1	10.124 ppb	91.729 %	95.055 %	0.026 ppb	0.124 ppb	61.290 %
Concentration per Run 2	10.437 ppb	96.460 %	98.032 %	0.050 ppb	0.110 ppb	48.434 %
Concentration per Run 3	10.567 ppb	95.704 %	96.867 %	0.061 ppb	0.111 ppb	46.928 %
Concentration RSD	2.2 %	2.7 %	1.6 %	38.4 %	6.7 %	15.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	101	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962640-5d10 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:32:41 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.276 %	91.176 %	4.561 ppb	1,974.739 ppb	1,387.643 ppb	184.148 ppb	1,100.918 ppb	2,656.803 ppb	88.648 %
Concentration per Run 1	94.638 %	92.745 %	4.520 ppb	1,905.407 ppb	1,346.318 ppb	175.284 ppb	1,034.077 ppb	2,566.664 ppb	88.064 %
Concentration per Run 2	94.524 %	87.451 %	4.549 ppb	2,021.164 ppb	1,422.188 ppb	190.458 ppb	1,145.545 ppb	2,714.428 ppb	89.124 %
Concentration per Run 3	93.667 %	93.333 %	4.613 ppb	1,997.647 ppb	1,394.422 ppb	186.703 ppb	1,123.133 ppb	2,689.316 ppb	88.755 %
Concentration RSD	0.6 %	3.6 %	1.1 %	3.1 %	2.8 %	4.3 %	5.4 %	3.0 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.977 ppb	17.652 ppb	47.118 ppb	101.966 ppb	45.285 ppb	45.240 ppb	22.791 ppb	45.259 ppb	88.898 %
Concentration per Run 1	42.405 ppb	17.339 ppb	45.714 ppb	99.133 ppb	44.714 ppb	44.832 ppb	22.933 ppb	44.814 ppb	88.382 %
Concentration per Run 2	45.251 ppb	18.035 ppb	48.452 ppb	107.601 ppb	45.642 ppb	45.862 ppb	22.843 ppb	45.916 ppb	88.021 %
Concentration per Run 3	44.276 ppb	17.581 ppb	47.187 ppb	99.164 ppb	45.498 ppb	45.028 ppb	22.598 ppb	45.046 ppb	90.293 %
Concentration RSD	3.3 %	2.0 %	2.9 %	4.8 %	1.1 %	1.2 %	0.8 %	1.3 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.608 ppb	12.868 ppb	101.428 ppb	100.541 ppb	87.627 %	4.468 ppb	4.829 ppb	89.697 %	41.770 ppb
Concentration per Run 1	12.623 ppb	12.516 ppb	100.864 ppb	100.807 ppb	86.298 %	4.431 ppb	4.721 ppb	89.201 %	40.744 ppb
Concentration per Run 2	12.605 ppb	13.073 ppb	102.086 ppb	100.868 ppb	86.940 %	4.521 ppb	4.906 ppb	88.943 %	42.250 ppb
Concentration per Run 3	12.596 ppb	13.014 ppb	101.334 ppb	99.947 ppb	89.643 %	4.451 ppb	4.861 ppb	90.947 %	42.317 ppb
Concentration RSD	0.1 %	2.4 %	0.6 %	0.5 %	2.0 %	1.1 %	2.0 %	1.2 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	186.940 ppb	92.859 %	92.853 %	12.162 ppb	53.810 ppb	50.888 %
Concentration per Run 1	184.811 ppb	90.874 %	91.070 %	12.270 ppb	53.726 ppb	59.659 %
Concentration per Run 2	188.540 ppb	91.933 %	93.049 %	12.065 ppb	53.449 ppb	46.664 %
Concentration per Run 3	187.469 ppb	95.770 %	94.441 %	12.150 ppb	54.255 ppb	46.340 %
Concentration RSD	1.0 %	2.8 %	1.8 %	0.8 %	0.8 %	14.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	102	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962640-6d10 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:37:10 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.966 %	87.255 %	4.646 ppb	2,088.962 ppb	1,478.619 ppb	197.875 ppb	1,125.061 ppb	2,700.756 ppb	87.698 %
Concentration per Run 1	93.472 %	92.157 %	4.608 ppb	1,961.099 ppb	1,386.038 ppb	182.344 ppb	1,111.130 ppb	2,552.687 ppb	87.730 %
Concentration per Run 2	93.103 %	82.549 %	4.738 ppb	2,170.440 ppb	1,519.560 ppb	207.676 ppb	1,138.411 ppb	2,779.955 ppb	88.299 %
Concentration per Run 3	92.322 %	87.059 %	4.592 ppb	2,135.345 ppb	1,530.260 ppb	203.604 ppb	1,125.644 ppb	2,769.625 ppb	87.066 %
Concentration RSD	0.6 %	5.5 %	1.7 %	5.4 %	5.4 %	6.9 %	1.2 %	4.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.421 ppb	18.608 ppb	48.059 ppb	99.036 ppb	46.381 ppb	46.483 ppb	23.202 ppb	47.001 ppb	88.698 %
Concentration per Run 1	42.851 ppb	18.044 ppb	46.210 ppb	92.697 ppb	45.359 ppb	45.130 ppb	23.100 ppb	45.818 ppb	89.316 %
Concentration per Run 2	45.943 ppb	18.768 ppb	48.524 ppb	96.842 ppb	46.094 ppb	47.346 ppb	23.278 ppb	47.743 ppb	89.085 %
Concentration per Run 3	47.468 ppb	19.013 ppb	49.442 ppb	107.568 ppb	47.692 ppb	46.974 ppb	23.230 ppb	47.442 ppb	87.693 %
Concentration RSD	5.2 %	2.7 %	3.5 %	7.7 %	2.6 %	2.6 %	0.4 %	2.2 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.921 ppb	12.713 ppb	102.600 ppb	100.922 ppb	88.445 %	4.651 ppb	5.007 ppb	91.517 %	43.286 ppb
Concentration per Run 1	12.217 ppb	12.736 ppb	101.414 ppb	99.838 ppb	88.708 %	4.637 ppb	4.985 ppb	92.412 %	42.288 ppb
Concentration per Run 2	13.336 ppb	12.331 ppb	102.349 ppb	101.350 ppb	87.932 %	4.684 ppb	5.008 ppb	89.916 %	43.846 ppb
Concentration per Run 3	13.211 ppb	13.073 ppb	104.036 ppb	101.578 ppb	88.696 %	4.632 ppb	5.030 ppb	92.222 %	43.724 ppb
Concentration RSD	4.7 %	2.9 %	1.3 %	0.9 %	0.5 %	0.6 %	0.4 %	1.5 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	188.391 ppb	93.583 %	94.855 %	12.194 ppb	54.116 ppb	52.434 %
Concentration per Run 1	186.665 ppb	93.269 %	94.046 %	12.163 ppb	53.689 ppb	61.988 %
Concentration per Run 2	188.680 ppb	92.941 %	94.451 %	12.297 ppb	54.622 ppb	48.634 %
Concentration per Run 3	189.828 ppb	94.539 %	96.068 %	12.123 ppb	54.038 ppb	46.679 %
Concentration RSD	0.8 %	0.9 %	1.1 %	0.7 %	0.9 %	15.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-01 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:41:39 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.331 %	88.889 %	0.010 ppb	14,349.322 ppb	4,530.218 ppb	29.043 ppb	1,511.106 ppb	24,012.024 ppb	86.540 %
Concentration per Run 1	89.803 %	81.568 %	0.013 ppb	15,101.211 ppb	4,721.292 ppb	30.761 ppb	1,564.422 ppb	25,262.031 ppb	86.348 %
Concentration per Run 2	89.558 %	91.961 %	0.009 ppb	14,066.285 ppb	4,451.059 ppb	28.158 ppb	1,478.125 ppb	23,498.839 ppb	86.687 %
Concentration per Run 3	88.631 %	93.137 %	0.008 ppb	13,880.469 ppb	4,418.302 ppb	28.211 ppb	1,490.771 ppb	23,275.203 ppb	86.584 %
Concentration RSD	0.7 %	7.2 %	23.4 %	4.6 %	3.7 %	5.1 %	3.1 %	4.5 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.604 ppb	0.129 ppb	1.116 ppb	75.729 ppb	0.083 ppb	0.416 ppb	1.688 ppb	0.642 ppb	88.340 %
Concentration per Run 1	0.679 ppb	0.112 ppb	1.360 ppb	84.638 ppb	0.085 ppb	0.409 ppb	1.605 ppb	0.668 ppb	87.206 %
Concentration per Run 2	0.587 ppb	0.122 ppb	1.009 ppb	73.696 ppb	0.112 ppb	0.462 ppb	1.957 ppb	0.598 ppb	88.623 %
Concentration per Run 3	0.547 ppb	0.153 ppb	0.978 ppb	68.853 ppb	0.051 ppb	0.376 ppb	1.502 ppb	0.660 ppb	89.191 %
Concentration RSD	11.2 %	16.5 %	19.0 %	10.7 %	36.8 %	10.5 %	14.1 %	6.0 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.813 ppb	0.183 ppb	145.327 ppb	1.002 ppb	86.398 %	0.006 ppb	0.007 ppb	90.000 %	1.245 ppb
Concentration per Run 1	0.849 ppb	0.099 ppb	144.102 ppb	0.910 ppb	86.314 %	0.008 ppb	0.001 ppb	89.968 %	1.229 ppb
Concentration per Run 2	0.719 ppb	0.143 ppb	145.553 ppb	0.974 ppb	86.785 %	0.002 ppb	0.009 ppb	90.738 %	1.207 ppb
Concentration per Run 3	0.870 ppb	0.306 ppb	146.325 ppb	1.123 ppb	86.093 %	0.007 ppb	0.010 ppb	89.295 %	1.300 ppb
Concentration RSD	10.1 %	59.7 %	0.8 %	10.9 %	0.4 %	59.6 %	68.5 %	0.8 %	3.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.430 ppb	94.054 %	95.057 %	0.040 ppb	0.217 ppb	51.221 %
Concentration per Run 1	20.221 ppb	93.659 %	94.583 %	0.022 ppb	0.219 ppb	61.296 %
Concentration per Run 2	20.752 ppb	93.547 %	95.316 %	0.052 ppb	0.221 ppb	47.340 %
Concentration per Run 3	20.317 ppb	94.957 %	95.273 %	0.046 ppb	0.210 ppb	45.027 %
Concentration RSD	1.4 %	0.8 %	0.4 %	39.9 %	2.7 %	17.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-02 2008SL	Rack	1		
Analysis started at:	8/23/2024 2:46:08 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.945 %	93.268 %	0.007 ppb	13,978.162 ppb	4,418.058 ppb	26.361 ppb	1,514.104 ppb	23,410.980 ppb	88.396 %
Concentration per Run 1	91.723 %	88.235 %	0.005 ppb	14,418.980 ppb	4,621.836 ppb	29.131 ppb	1,617.177 ppb	23,837.392 ppb	87.311 %
Concentration per Run 2	92.882 %	95.294 %	0.010 ppb	13,713.759 ppb	4,337.504 ppb	25.354 ppb	1,447.372 ppb	23,238.583 ppb	89.371 %
Concentration per Run 3	91.230 %	96.274 %	0.005 ppb	13,801.747 ppb	4,294.833 ppb	24.597 ppb	1,477.763 ppb	23,156.963 ppb	88.507 %
Concentration RSD	0.9 %	4.7 %	44.1 %	2.7 %	4.0 %	9.2 %	6.0 %	1.6 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.589 ppb	0.103 ppb	1.216 ppb	82.530 ppb	0.050 ppb	0.457 ppb	1.630 ppb	1.530 ppb	89.228 %
Concentration per Run 1	0.457 ppb	0.095 ppb	1.180 ppb	78.723 ppb	0.048 ppb	0.483 ppb	1.681 ppb	1.581 ppb	87.402 %
Concentration per Run 2	0.563 ppb	0.073 ppb	1.368 ppb	88.772 ppb	0.043 ppb	0.414 ppb	1.566 ppb	1.492 ppb	89.925 %
Concentration per Run 3	0.748 ppb	0.141 ppb	1.099 ppb	80.096 ppb	0.060 ppb	0.473 ppb	1.642 ppb	1.518 ppb	90.359 %
Concentration RSD	25.0 %	34.0 %	11.4 %	6.6 %	17.4 %	8.1 %	3.6 %	3.0 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.790 ppb	0.105 ppb	143.831 ppb	0.618 ppb	87.676 %	0.003 ppb	0.006 ppb	91.528 %	0.519 ppb
Concentration per Run 1	0.809 ppb	0.076 ppb	143.880 ppb	0.613 ppb	88.288 %	0.002 ppb	0.009 ppb	92.082 %	0.452 ppb
Concentration per Run 2	0.734 ppb	0.038 ppb	144.304 ppb	0.615 ppb	86.944 %	0.005 ppb	0.005 ppb	90.569 %	0.526 ppb
Concentration per Run 3	0.825 ppb	0.201 ppb	143.310 ppb	0.626 ppb	87.796 %	0.001 ppb	0.003 ppb	91.933 %	0.579 ppb
Concentration RSD	6.1 %	81.3 %	0.3 %	1.1 %	0.8 %	72.5 %	49.9 %	0.9 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.950 ppb	94.125 %	94.822 %	0.024 ppb	0.182 ppb	51.233 %
Concentration per Run 1	20.739 ppb	92.680 %	93.706 %	0.004 ppb	0.187 ppb	60.773 %
Concentration per Run 2	21.067 ppb	94.259 %	95.954 %	0.031 ppb	0.182 ppb	47.157 %
Concentration per Run 3	21.044 ppb	95.434 %	94.805 %	0.038 ppb	0.178 ppb	45.769 %
Concentration RSD	0.9 %	1.5 %	1.2 %	72.7 %	2.3 %	16.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	105	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 2:50:38 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.150 %	81.699 %	59.249 ppb	6,157.926 ppb	6,128.761 ppb	61.293 ppb	5,893.138 ppb	5,821.566 ppb	83.537 %
Concentration per Run 1	88.107 %	77.647 %	58.654 ppb	6,320.015 ppb	6,270.123 ppb	63.072 ppb	6,092.365 ppb	6,162.200 ppb	83.717 %
Concentration per Run 2	87.717 %	76.274 %	59.184 ppb	6,438.087 ppb	6,404.792 ppb	64.826 ppb	6,102.879 ppb	5,899.608 ppb	83.506 %
Concentration per Run 3	85.626 %	91.176 %	59.909 ppb	5,715.677 ppb	5,711.368 ppb	55.982 ppb	5,484.170 ppb	5,402.891 ppb	83.389 %
Recovery Percentage 1			98.748 %	102.632 %	102.146 %	102.156 %	98.219 %	97.026 %	
Concentration RSD	1.5 %	10.1 %	1.1 %	6.3 %	6.0 %	7.6 %	6.0 %	6.6 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.274 ppb	57.918 ppb	58.616 ppb	5,811.566 ppb	58.017 ppb	57.624 ppb	57.131 ppb	57.228 ppb	88.507 %
Concentration per Run 1	59.956 ppb	59.514 ppb	60.168 ppb	6,031.825 ppb	59.591 ppb	60.599 ppb	58.946 ppb	58.186 ppb	84.705 %
Concentration per Run 2	60.509 ppb	59.237 ppb	59.409 ppb	5,858.512 ppb	58.348 ppb	57.781 ppb	56.535 ppb	57.769 ppb	89.130 %
Concentration per Run 3	57.358 ppb	55.004 ppb	56.270 ppb	5,544.361 ppb	56.111 ppb	54.493 ppb	55.911 ppb	55.730 ppb	91.686 %
Recovery Percentage 1	98.790 %	96.531 %	97.693 %	96.859 %	96.695 %	96.040 %	95.218 %	95.381 %	
Concentration RSD	2.8 %	4.4 %	3.5 %	4.3 %	3.0 %	5.3 %	2.8 %	2.3 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	56.504 ppb	58.762 ppb	56.099 ppb	58.624 ppb	83.243 %	60.357 ppb	61.532 ppb	86.568 %	55.140 ppb
Concentration per Run 1	58.388 ppb	60.110 ppb	56.758 ppb	57.925 ppb	81.989 %	60.420 ppb	61.515 ppb	85.131 %	54.506 ppb
Concentration per Run 2	55.734 ppb	57.796 ppb	55.997 ppb	59.538 ppb	83.810 %	60.522 ppb	61.943 ppb	86.692 %	55.259 ppb
Concentration per Run 3	55.389 ppb	58.379 ppb	55.541 ppb	58.408 ppb	83.930 %	60.128 ppb	61.138 ppb	87.883 %	55.655 ppb
Recovery Percentage 1	94.173 %	97.936 %	93.498 %	97.706 %		100.595 %	102.553 %		91.900 %
Concentration RSD	2.9 %	2.0 %	1.1 %	1.4 %	1.3 %	0.3 %	0.7 %	1.6 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.745 ppb	90.329 %	92.046 %	59.179 ppb	60.304 ppb	50.592 %
Concentration per Run 1	61.060 ppb	87.564 %	90.436 %	59.365 ppb	60.107 ppb	59.928 %
Concentration per Run 2	60.644 ppb	91.108 %	91.993 %	59.507 ppb	60.769 ppb	47.029 %
Concentration per Run 3	60.531 ppb	92.317 %	93.709 %	58.666 ppb	60.037 ppb	44.821 %
Recovery Percentage 1	101.242 %			98.632 %	100.507 %	
Concentration RSD	0.5 %	2.7 %	1.8 %	0.8 %	0.7 %	16.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	106	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 2:55:10 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.530 %	84.117 %	0.008 ppb	32.126 ppb	-1.032 ppb	-0.381 ppb	1.005 ppb	1.088 ppb	81.069 %
Concentration per Run 1	87.819 %	86.078 %	0.013 ppb	28.692 ppb	-0.802 ppb	-0.245 ppb	8.121 ppb	-0.957 ppb	80.589 %
Concentration per Run 2	87.922 %	80.980 %	0.006 ppb	35.577 ppb	-1.679 ppb	-0.538 ppb	0.033 ppb	0.222 ppb	81.398 %
Concentration per Run 3	86.848 %	85.294 %	0.004 ppb	32.110 ppb	-0.615 ppb	-0.361 ppb	-5.137 ppb	3.999 ppb	81.222 %
Recovery Percentage 1			1.536 %	32.126 %	-1.475 %	-3.811 %	1.005 %	1.088 %	
Concentration RSD	0.7 %	3.3 %	62.8 %	10.7 %	55.0 %	38.7 %	664.7 %	237.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.038 ppb	-0.020 ppb	0.005 ppb	2.983 ppb	-0.003 ppb	-0.027 ppb	0.016 ppb	-0.233 ppb	88.385 %
Concentration per Run 1	-0.060 ppb	-0.021 ppb	-0.024 ppb	2.575 ppb	-0.001 ppb	0.008 ppb	0.053 ppb	-0.195 ppb	81.615 %
Concentration per Run 2	-0.038 ppb	-0.017 ppb	0.043 ppb	2.824 ppb	-0.004 ppb	-0.020 ppb	0.002 ppb	-0.282 ppb	90.047 %
Concentration per Run 3	-0.017 ppb	-0.022 ppb	-0.005 ppb	3.549 ppb	-0.004 ppb	-0.070 ppb	-0.006 ppb	-0.222 ppb	93.493 %
Recovery Percentage 1	-0.768 %	-1.991 %	0.456 %	5.965 %	-0.573 %	-1.359 %	1.645 %	-4.663 %	
Concentration RSD	55.6 %	11.5 %	751.9 %	17.0 %	55.0 %	145.4 %	195.9 %	18.9 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.048 ppb	0.151 ppb	-0.010 ppb	0.308 ppb	83.098 %	0.005 ppb	0.004 ppb	86.744 %	0.880 ppb
Concentration per Run 1	0.072 ppb	0.035 ppb	-0.010 ppb	0.184 ppb	81.831 %	0.005 ppb	0.010 ppb	84.386 %	0.851 ppb
Concentration per Run 2	0.014 ppb	0.317 ppb	-0.008 ppb	0.365 ppb	82.580 %	0.008 ppb	-0.001 ppb	86.508 %	0.867 ppb
Concentration per Run 3	0.058 ppb	0.102 ppb	-0.014 ppb	0.375 ppb	84.881 %	0.003 ppb	0.001 ppb	89.338 %	0.922 ppb
Recovery Percentage 1	9.665 %	3.028 %	-0.104 %	15.392 %		1.324 %	1.835 %		22.001 %
Concentration RSD	62.4 %	97.5 %	30.1 %	35.0 %	1.9 %	55.5 %	155.7 %	2.9 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.009 ppb	89.731 %	91.718 %	0.300 ppb	0.007 ppb	50.540 %
Concentration per Run 1	-0.016 ppb	87.080 %	88.969 %	0.209 ppb	0.012 ppb	58.697 %
Concentration per Run 2	-0.002 ppb	90.296 %	91.547 %	0.368 ppb	0.006 ppb	46.809 %
Concentration per Run 3	-0.009 ppb	91.818 %	94.637 %	0.322 ppb	0.002 ppb	46.114 %
Recovery Percentage 1	-1.819 %			29.960 %	0.667 %	
Concentration RSD	77.3 %	2.7 %	3.1 %	27.4 %	72.1 %	14.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	107	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-03 2008SL	Rack	1		
Analysis started at:	8/23/2024 3:06:06 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.277 %	85.294 %	0.011 ppb	14,168.991 ppb	4,479.852 ppb	33.924 ppb	1,486.342 ppb	23,153.750 ppb	88.428 %
Concentration per Run 1	90.674 %	82.353 %	0.009 ppb	14,052.164 ppb	4,495.627 ppb	32.288 ppb	1,464.995 ppb	22,677.582 ppb	87.343 %
Concentration per Run 2	91.462 %	84.510 %	0.013 ppb	14,322.362 ppb	4,504.909 ppb	35.628 ppb	1,473.664 ppb	23,278.868 ppb	88.942 %
Concentration per Run 3	91.694 %	89.019 %	0.012 ppb	14,132.447 ppb	4,439.019 ppb	33.855 ppb	1,520.366 ppb	23,504.799 ppb	88.999 %
Concentration RSD	0.6 %	4.0 %	19.7 %	1.0 %	0.8 %	4.9 %	2.0 %	1.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.497 ppb	0.093 ppb	1.405 ppb	79.568 ppb	0.035 ppb	0.346 ppb	1.354 ppb	0.489 ppb	91.106 %
Concentration per Run 1	0.418 ppb	0.119 ppb	1.240 ppb	83.545 ppb	0.045 ppb	0.342 ppb	1.348 ppb	0.521 ppb	89.375 %
Concentration per Run 2	0.485 ppb	0.108 ppb	1.419 ppb	72.353 ppb	0.038 ppb	0.361 ppb	1.295 ppb	0.397 ppb	92.559 %
Concentration per Run 3	0.589 ppb	0.051 ppb	1.555 ppb	82.805 ppb	0.021 ppb	0.335 ppb	1.418 ppb	0.549 ppb	91.385 %
Concentration RSD	17.3 %	39.1 %	11.3 %	7.9 %	35.6 %	4.0 %	4.5 %	16.6 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.658 ppb	0.119 ppb	140.137 ppb	0.490 ppb	86.641 %	0.004 ppb	0.007 ppb	92.954 %	0.474 ppb
Concentration per Run 1	0.634 ppb	0.092 ppb	138.720 ppb	0.495 ppb	85.747 %	0.005 ppb	0.007 ppb	92.319 %	0.449 ppb
Concentration per Run 2	0.609 ppb	0.128 ppb	139.826 ppb	0.484 ppb	85.735 %	0.003 ppb	0.005 ppb	93.202 %	0.497 ppb
Concentration per Run 3	0.730 ppb	0.136 ppb	141.866 ppb	0.491 ppb	88.442 %	0.005 ppb	0.007 ppb	93.342 %	0.477 ppb
Concentration RSD	9.7 %	19.9 %	1.1 %	1.1 %	1.8 %	23.1 %	17.1 %	0.6 %	5.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20.617 ppb	97.936 %	101.915 %	0.061 ppb	0.161 ppb	53.933 %
Concentration per Run 1	20.747 ppb	97.664 %	103.319 %	0.039 ppb	0.158 ppb	66.816 %
Concentration per Run 2	20.734 ppb	96.297 %	100.213 %	0.072 ppb	0.165 ppb	48.098 %
Concentration per Run 3	20.370 ppb	99.847 %	102.213 %	0.072 ppb	0.161 ppb	46.883 %
Concentration RSD	1.0 %	1.8 %	1.5 %	31.0 %	2.3 %	20.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	108	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-04 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:10:35 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.651 %	86.078 %	0.008 ppb	14,695.943 ppb	4,744.837 ppb	32.293 ppb	1,601.366 ppb	24,716.938 ppb	84.999 %
Concentration per Run 1	89.799 %	89.804 %	0.005 ppb	14,353.543 ppb	4,654.537 ppb	33.490 ppb	1,590.441 ppb	24,656.764 ppb	84.433 %
Concentration per Run 2	90.314 %	82.157 %	0.007 ppb	15,230.873 ppb	4,849.916 ppb	30.439 ppb	1,637.445 ppb	25,221.190 ppb	85.713 %
Concentration per Run 3	88.839 %	86.274 %	0.011 ppb	14,503.413 ppb	4,730.057 ppb	32.951 ppb	1,576.214 ppb	24,272.859 ppb	84.851 %
Concentration RSD	0.8 %	4.4 %	42.6 %	3.2 %	2.1 %	5.0 %	2.0 %	1.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.596 ppb	0.086 ppb	1.280 ppb	76.749 ppb	0.050 ppb	0.644 ppb	1.513 ppb	1.398 ppb	86.357 %
Concentration per Run 1	0.792 ppb	0.074 ppb	1.085 ppb	74.305 ppb	0.044 ppb	0.503 ppb	1.453 ppb	1.390 ppb	88.379 %
Concentration per Run 2	0.484 ppb	0.087 ppb	1.433 ppb	84.567 ppb	0.056 ppb	0.824 ppb	1.569 ppb	1.468 ppb	83.027 %
Concentration per Run 3	0.513 ppb	0.095 ppb	1.322 ppb	71.376 ppb	0.050 ppb	0.606 ppb	1.516 ppb	1.337 ppb	87.664 %
Concentration RSD	28.5 %	12.3 %	13.9 %	9.0 %	11.5 %	25.5 %	3.8 %	4.7 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.706 ppb	0.153 ppb	149.328 ppb	0.466 ppb	85.438 %	0.001 ppb	0.006 ppb	89.596 %	0.287 ppb
Concentration per Run 1	0.679 ppb	-0.002 ppb	147.124 ppb	0.422 ppb	87.580 %	0.001 ppb	0.007 ppb	92.651 %	0.253 ppb
Concentration per Run 2	0.714 ppb	0.148 ppb	151.931 ppb	0.521 ppb	84.876 %	0.001 ppb	0.008 ppb	89.599 %	0.284 ppb
Concentration per Run 3	0.724 ppb	0.312 ppb	148.929 ppb	0.455 ppb	83.860 %	0.002 ppb	0.004 ppb	86.538 %	0.325 ppb
Concentration RSD	3.3 %	102.6 %	1.6 %	10.8 %	2.3 %	33.6 %	36.1 %	3.4 %	12.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	21.625 ppb	92.496 %	94.161 %	0.037 ppb	0.172 ppb	50.935 %
Concentration per Run 1	21.370 ppb	93.751 %	94.573 %	0.010 ppb	0.173 ppb	62.420 %
Concentration per Run 2	21.777 ppb	92.339 %	95.198 %	0.050 ppb	0.176 ppb	46.713 %
Concentration per Run 3	21.728 ppb	91.398 %	92.712 %	0.052 ppb	0.168 ppb	43.672 %
Concentration RSD	1.0 %	1.3 %	1.4 %	62.6 %	2.3 %	19.8 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	109	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-05 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:15:03 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.013 %	83.856 %	0.008 ppb	14,389.567 ppb	4,541.157 ppb	31.671 ppb	1,568.683 ppb	24,111.102 ppb	82.868 %
Concentration per Run 1	86.209 %	80.784 %	0.009 ppb	14,838.580 ppb	4,685.456 ppb	31.347 ppb	1,607.116 ppb	24,596.964 ppb	83.012 %
Concentration per Run 2	85.861 %	86.274 %	0.010 ppb	13,820.985 ppb	4,353.963 ppb	32.084 ppb	1,524.676 ppb	23,831.232 ppb	83.210 %
Concentration per Run 3	85.969 %	84.510 %	0.006 ppb	14,509.135 ppb	4,584.050 ppb	31.582 ppb	1,574.257 ppb	23,905.108 ppb	82.381 %
Concentration RSD	0.2 %	3.3 %	25.9 %	3.6 %	3.7 %	1.2 %	2.6 %	1.8 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.537 ppb	0.094 ppb	1.210 ppb	87.655 ppb	0.045 ppb	0.496 ppb	1.707 ppb	1.329 ppb	84.351 %
Concentration per Run 1	0.476 ppb	0.064 ppb	1.269 ppb	83.177 ppb	0.063 ppb	0.488 ppb	1.692 ppb	1.323 ppb	85.307 %
Concentration per Run 2	0.420 ppb	0.099 ppb	1.262 ppb	91.925 ppb	0.036 ppb	0.396 ppb	1.720 ppb	1.346 ppb	84.762 %
Concentration per Run 3	0.715 ppb	0.119 ppb	1.099 ppb	87.863 ppb	0.037 ppb	0.604 ppb	1.711 ppb	1.317 ppb	82.984 %
Concentration RSD	29.2 %	29.9 %	7.9 %	5.0 %	34.0 %	20.9 %	0.8 %	1.2 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.780 ppb	0.172 ppb	145.518 ppb	0.439 ppb	81.629 %	0.004 ppb	0.004 ppb	86.128 %	0.264 ppb
Concentration per Run 1	0.799 ppb	0.162 ppb	143.786 ppb	0.426 ppb	83.282 %	0.003 ppb	0.001 ppb	87.915 %	0.255 ppb
Concentration per Run 2	0.782 ppb	0.264 ppb	145.513 ppb	0.427 ppb	80.548 %	0.004 ppb	0.010 ppb	84.821 %	0.263 ppb
Concentration per Run 3	0.760 ppb	0.090 ppb	147.256 ppb	0.463 ppb	81.057 %	0.004 ppb	-0.001 ppb	85.648 %	0.274 ppb
Concentration RSD	2.5 %	50.9 %	1.2 %	4.8 %	1.8 %	12.4 %	155.1 %	1.9 %	3.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	21.285 ppb	88.326 %	89.799 %	0.031 ppb	0.241 ppb	48.185 %
Concentration per Run 1	21.119 ppb	90.003 %	91.576 %	0.006 ppb	0.231 ppb	58.116 %
Concentration per Run 2	21.352 ppb	87.557 %	88.571 %	0.042 ppb	0.256 ppb	44.172 %
Concentration per Run 3	21.383 ppb	87.419 %	89.249 %	0.044 ppb	0.237 ppb	42.267 %
Concentration RSD	0.7 %	1.6 %	1.8 %	70.8 %	5.5 %	18.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	110	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-10 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:19:31 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.936 %	88.823 %	0.006 ppb	13,364.819 ppb	4,091.969 ppb	56.029 ppb	1,367.157 ppb	21,028.660 ppb	88.647 %
Concentration per Run 1	92.058 %	88.627 %	0.006 ppb	13,167.628 ppb	4,062.779 ppb	55.886 ppb	1,361.056 ppb	21,617.230 ppb	87.583 %
Concentration per Run 2	92.317 %	91.176 %	0.005 ppb	13,022.884 ppb	3,958.079 ppb	56.236 ppb	1,330.553 ppb	19,760.122 ppb	88.376 %
Concentration per Run 3	91.434 %	86.667 %	0.007 ppb	13,903.946 ppb	4,255.049 ppb	55.965 ppb	1,409.863 ppb	21,708.629 ppb	89.983 %
Concentration RSD	0.5 %	2.5 %	16.2 %	3.5 %	3.7 %	0.3 %	2.9 %	5.2 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.525 ppb	0.142 ppb	4.026 ppb	158.440 ppb	0.059 ppb	0.536 ppb	1.491 ppb	0.797 ppb	95.897 %
Concentration per Run 1	0.677 ppb	0.143 ppb	4.179 ppb	165.467 ppb	0.051 ppb	0.472 ppb	1.474 ppb	0.851 ppb	90.964 %
Concentration per Run 2	0.419 ppb	0.181 ppb	3.730 ppb	157.000 ppb	0.056 ppb	0.593 ppb	1.544 ppb	0.804 ppb	100.820 %
Concentration per Run 3	0.481 ppb	0.103 ppb	4.170 ppb	152.854 ppb	0.071 ppb	0.544 ppb	1.456 ppb	0.737 ppb	95.907 %
Concentration RSD	25.6 %	27.5 %	6.4 %	4.1 %	17.4 %	11.3 %	3.1 %	7.2 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.566 ppb	0.102 ppb	123.209 ppb	0.399 ppb	86.911 %	0.004 ppb	0.002 ppb	90.792 %	0.244 ppb
Concentration per Run 1	0.577 ppb	0.060 ppb	124.188 ppb	0.309 ppb	85.721 %	0.005 ppb	-0.001 ppb	89.688 %	0.223 ppb
Concentration per Run 2	0.588 ppb	0.020 ppb	119.621 ppb	0.431 ppb	87.609 %	0.004 ppb	0.003 ppb	89.914 %	0.251 ppb
Concentration per Run 3	0.533 ppb	0.226 ppb	125.817 ppb	0.455 ppb	87.404 %	0.003 ppb	0.003 ppb	92.773 %	0.258 ppb
Concentration RSD	5.1 %	106.8 %	2.6 %	19.7 %	1.2 %	27.4 %	111.8 %	1.9 %	7.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.476 ppb	93.780 %	95.058 %	0.023 ppb	0.212 ppb	51.236 %
Concentration per Run 1	19.407 ppb	90.974 %	93.838 %	0.004 ppb	0.200 ppb	59.878 %
Concentration per Run 2	19.469 ppb	95.419 %	95.860 %	0.031 ppb	0.217 ppb	47.614 %
Concentration per Run 3	19.551 ppb	94.947 %	95.476 %	0.035 ppb	0.219 ppb	46.215 %
Concentration RSD	0.4 %	2.6 %	1.1 %	73.8 %	4.8 %	14.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index: 111 User name ALPHALAB\a2-icpmsq2 Comment <Comment>
Analysis label: L2447880-11 2008SL Rack 2
Analysis started at: 8/23/2024 3:23:59 PM Vial 4

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.245 %	86.274 %	0.007 ppb	14,069.445 ppb	4,272.846 ppb	40.199 ppb	1,413.993 ppb	22,133.011 ppb	89.403 %
Concentration per Run 1	92.856 %	88.431 %	0.009 ppb	13,612.868 ppb	4,142.922 ppb	36.529 ppb	1,382.673 ppb	21,994.576 ppb	88.902 %
Concentration per Run 2	92.130 %	81.372 %	0.004 ppb	14,535.643 ppb	4,343.415 ppb	44.556 ppb	1,446.994 ppb	22,731.861 ppb	90.572 %
Concentration per Run 3	91.748 %	89.019 %	0.007 ppb	14,059.825 ppb	4,332.203 ppb	39.513 ppb	1,412.312 ppb	21,672.595 ppb	88.734 %
Concentration RSD	0.6 %	4.9 %	37.8 %	3.3 %	2.6 %	10.1 %	2.3 %	2.5 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.549 ppb	0.134 ppb	2.740 ppb	116.569 ppb	0.043 ppb	0.391 ppb	1.401 ppb	0.743 ppb	90.923 %
Concentration per Run 1	0.485 ppb	0.098 ppb	2.869 ppb	112.313 ppb	0.039 ppb	0.312 ppb	1.371 ppb	0.639 ppb	90.408 %
Concentration per Run 2	0.658 ppb	0.186 ppb	2.712 ppb	128.383 ppb	0.039 ppb	0.438 ppb	1.431 ppb	0.844 ppb	90.750 %
Concentration per Run 3	0.503 ppb	0.117 ppb	2.638 ppb	109.011 ppb	0.051 ppb	0.423 ppb	1.402 ppb	0.745 ppb	91.611 %
Concentration RSD	17.3 %	34.4 %	4.3 %	8.9 %	15.6 %	17.5 %	2.1 %	13.8 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.596 ppb	0.140 ppb	129.189 ppb	0.424 ppb	88.452 %	0.000 ppb	0.005 ppb	93.008 %	0.238 ppb
Concentration per Run 1	0.580 ppb	0.058 ppb	128.304 ppb	0.412 ppb	88.036 %	-0.001 ppb	0.001 ppb	92.812 %	0.213 ppb
Concentration per Run 2	0.591 ppb	0.091 ppb	127.891 ppb	0.416 ppb	89.698 %	0.000 ppb	0.003 ppb	93.468 %	0.255 ppb
Concentration per Run 3	0.616 ppb	0.270 ppb	131.372 ppb	0.445 ppb	87.624 %	0.002 ppb	0.009 ppb	92.743 %	0.246 ppb
Concentration RSD	3.1 %	81.5 %	1.5 %	4.2 %	1.2 %	812.5 %	88.7 %	0.4 %	9.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.390 ppb	96.165 %	97.641 %	0.021 ppb	0.175 ppb	51.877 %
Concentration per Run 1	18.994 ppb	94.889 %	96.576 %	0.006 ppb	0.175 ppb	62.227 %
Concentration per Run 2	19.626 ppb	96.940 %	97.622 %	0.028 ppb	0.179 ppb	47.744 %
Concentration per Run 3	19.550 ppb	96.664 %	98.726 %	0.029 ppb	0.171 ppb	45.660 %
Concentration RSD	1.8 %	1.2 %	1.1 %	61.4 %	2.2 %	17.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	112	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-12 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:28:27 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.851 %	92.810 %	0.006 ppb	13,201.234 ppb	4,013.999 ppb	44.034 ppb	1,351.198 ppb	21,125.965 ppb	89.965 %
Concentration per Run 1	92.943 %	89.608 %	0.007 ppb	13,319.162 ppb	4,053.888 ppb	41.811 ppb	1,420.190 ppb	21,695.461 ppb	89.823 %
Concentration per Run 2	92.945 %	91.569 %	0.001 ppb	13,299.195 ppb	4,042.177 ppb	48.335 ppb	1,328.934 ppb	20,924.136 ppb	89.925 %
Concentration per Run 3	92.665 %	97.255 %	0.009 ppb	12,985.344 ppb	3,945.932 ppb	41.955 ppb	1,304.469 ppb	20,758.299 ppb	90.147 %
Concentration RSD	0.2 %	4.3 %	75.3 %	1.4 %	1.5 %	8.5 %	4.5 %	2.4 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.497 ppb	0.083 ppb	2.757 ppb	103.282 ppb	0.035 ppb	0.381 ppb	1.518 ppb	0.639 ppb	94.524 %
Concentration per Run 1	0.408 ppb	0.093 ppb	2.766 ppb	103.238 ppb	0.035 ppb	0.332 ppb	1.577 ppb	0.571 ppb	94.007 %
Concentration per Run 2	0.595 ppb	0.102 ppb	2.685 ppb	101.868 ppb	0.051 ppb	0.388 ppb	1.379 ppb	0.648 ppb	96.567 %
Concentration per Run 3	0.486 ppb	0.054 ppb	2.819 ppb	104.740 ppb	0.020 ppb	0.423 ppb	1.599 ppb	0.697 ppb	92.998 %
Concentration RSD	18.9 %	30.6 %	2.5 %	1.4 %	43.0 %	12.1 %	8.0 %	10.0 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.634 ppb	0.092 ppb	124.923 ppb	0.413 ppb	90.159 %	0.000 ppb	0.003 ppb	95.807 %	0.259 ppb
Concentration per Run 1	0.650 ppb	0.171 ppb	123.388 ppb	0.373 ppb	90.321 %	-0.002 ppb	0.001 ppb	94.043 %	0.227 ppb
Concentration per Run 2	0.660 ppb	0.109 ppb	123.019 ppb	0.440 ppb	91.099 %	0.002 ppb	0.007 ppb	96.635 %	0.267 ppb
Concentration per Run 3	0.592 ppb	-0.004 ppb	128.363 ppb	0.426 ppb	89.056 %	0.000 ppb	-0.001 ppb	96.745 %	0.283 ppb
Concentration RSD	5.8 %	96.0 %	2.4 %	8.6 %	1.1 %	1,670.3 %	153.1 %	1.6 %	11.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.967 ppb	98.886 %	100.176 %	0.018 ppb	0.163 ppb	53.428 %
Concentration per Run 1	18.994 ppb	97.844 %	99.526 %	0.003 ppb	0.160 ppb	63.598 %
Concentration per Run 2	18.816 ppb	99.483 %	100.794 %	0.025 ppb	0.151 ppb	49.344 %
Concentration per Run 3	19.090 ppb	99.330 %	100.208 %	0.026 ppb	0.176 ppb	47.343 %
Concentration RSD	0.7 %	0.9 %	0.6 %	70.0 %	7.7 %	16.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	113	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447880-13 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:32:55 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.671 %	95.425 %	0.003 ppb	97.869 ppb	6.048 ppb	3.246 ppb	0.446 ppb	38.011 ppb	92.219 %
Concentration per Run 1	97.803 %	102.745 %	0.003 ppb	88.069 ppb	5.906 ppb	3.296 ppb	-2.349 ppb	29.288 ppb	92.288 %
Concentration per Run 2	96.730 %	90.980 %	-0.001 ppb	104.868 ppb	6.188 ppb	3.145 ppb	4.761 ppb	35.609 ppb	92.883 %
Concentration per Run 3	95.478 %	92.549 %	0.008 ppb	100.669 ppb	6.049 ppb	3.296 ppb	-1.075 ppb	49.137 ppb	91.487 %
Concentration RSD	1.2 %	6.7 %	129.6 %	8.9 %	2.3 %	2.7 %	850.9 %	26.7 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.076 ppb	-0.010 ppb	0.096 ppb	2.354 ppb	0.014 ppb	0.074 ppb	0.091 ppb	1.068 ppb	96.068 %
Concentration per Run 1	0.122 ppb	-0.013 ppb	0.084 ppb	2.465 ppb	0.022 ppb	0.079 ppb	0.091 ppb	1.079 ppb	94.642 %
Concentration per Run 2	0.034 ppb	-0.014 ppb	0.098 ppb	2.542 ppb	0.006 ppb	0.074 ppb	0.104 ppb	1.067 ppb	95.815 %
Concentration per Run 3	0.071 ppb	-0.003 ppb	0.106 ppb	2.055 ppb	0.015 ppb	0.070 ppb	0.078 ppb	1.059 ppb	97.746 %
Concentration RSD	58.3 %	62.6 %	11.4 %	11.1 %	57.2 %	6.3 %	14.2 %	0.9 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.013 ppb	0.026 ppb	0.172 ppb	0.043 ppb	94.244 %	0.000 ppb	0.000 ppb	99.044 %	0.274 ppb
Concentration per Run 1	-0.005 ppb	-0.031 ppb	0.214 ppb	0.026 ppb	95.079 %	0.000 ppb	-0.001 ppb	99.055 %	0.248 ppb
Concentration per Run 2	0.011 ppb	0.105 ppb	0.152 ppb	0.042 ppb	93.499 %	0.000 ppb	0.001 ppb	98.353 %	0.285 ppb
Concentration per Run 3	0.034 ppb	0.004 ppb	0.152 ppb	0.061 ppb	94.154 %	-0.001 ppb	-0.001 ppb	99.722 %	0.289 ppb
Concentration RSD	148.0 %	271.1 %	20.9 %	41.6 %	0.8 %	488.9 %	5,533.2 %	0.7 %	8.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	99.893 %	100.894 %	0.011 ppb	0.062 ppb	55.141 %
Concentration per Run 1	0.047 ppb	99.233 %	99.771 %	-0.006 ppb	0.065 ppb	66.080 %
Concentration per Run 2	-0.004 ppb	99.454 %	100.560 %	0.020 ppb	0.060 ppb	51.269 %
Concentration per Run 3	0.008 ppb	100.993 %	102.349 %	0.018 ppb	0.060 ppb	48.073 %
Concentration RSD	157.4 %	1.0 %	1.3 %	132.0 %	4.8 %	17.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	114	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-02 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:37:23 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.825 %	93.268 %	0.002 ppb	9,507.390 ppb	4,109.167 ppb	8.511 ppb	1,076.473 ppb	16,094.732 ppb	91.240 %
Concentration per Run 1	93.959 %	93.529 %	0.004 ppb	9,335.421 ppb	4,015.192 ppb	9.340 ppb	1,092.383 ppb	16,267.707 ppb	90.053 %
Concentration per Run 2	95.065 %	93.529 %	0.001 ppb	9,381.146 ppb	4,079.908 ppb	7.529 ppb	1,048.578 ppb	15,842.102 ppb	90.412 %
Concentration per Run 3	95.452 %	92.745 %	0.003 ppb	9,805.604 ppb	4,232.400 ppb	8.662 ppb	1,088.458 ppb	16,174.388 ppb	93.254 %
Concentration RSD	0.8 %	0.5 %	70.2 %	2.7 %	2.7 %	10.8 %	2.3 %	1.4 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.265 ppb	0.044 ppb	3.527 ppb	23.328 ppb	0.037 ppb	0.325 ppb	0.905 ppb	0.340 ppb	97.679 %
Concentration per Run 1	0.222 ppb	0.045 ppb	3.535 ppb	22.621 ppb	0.029 ppb	0.342 ppb	0.817 ppb	0.387 ppb	96.909 %
Concentration per Run 2	0.289 ppb	0.046 ppb	3.627 ppb	23.586 ppb	0.054 ppb	0.344 ppb	0.885 ppb	0.336 ppb	98.431 %
Concentration per Run 3	0.285 ppb	0.040 ppb	3.418 ppb	23.777 ppb	0.029 ppb	0.289 ppb	1.012 ppb	0.297 ppb	97.697 %
Concentration RSD	14.1 %	7.6 %	3.0 %	2.7 %	38.9 %	9.6 %	11.0 %	13.2 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.464 ppb	0.064 ppb	76.759 ppb	0.249 ppb	92.614 %	0.002 ppb	0.002 ppb	96.264 %	0.175 ppb
Concentration per Run 1	0.407 ppb	0.087 ppb	76.178 ppb	0.310 ppb	92.768 %	0.000 ppb	0.003 ppb	95.523 %	0.161 ppb
Concentration per Run 2	0.495 ppb	0.002 ppb	76.505 ppb	0.207 ppb	91.825 %	0.002 ppb	0.001 ppb	96.427 %	0.188 ppb
Concentration per Run 3	0.491 ppb	0.104 ppb	77.595 ppb	0.231 ppb	93.248 %	0.003 ppb	0.001 ppb	96.841 %	0.177 ppb
Concentration RSD	10.7 %	85.5 %	1.0 %	21.5 %	0.8 %	120.1 %	57.4 %	0.7 %	7.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.649 ppb	99.123 %	99.861 %	0.013 ppb	0.032 ppb	53.193 %
Concentration per Run 1	8.392 ppb	99.495 %	99.729 %	-0.003 ppb	0.032 ppb	63.104 %
Concentration per Run 2	8.697 ppb	98.876 %	99.440 %	0.020 ppb	0.029 ppb	49.013 %
Concentration per Run 3	8.860 ppb	98.999 %	100.415 %	0.021 ppb	0.033 ppb	47.461 %
Concentration RSD	2.7 %	0.3 %	0.5 %	106.5 %	6.0 %	16.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	115	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-03 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:41:52 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.476 %	92.026 %	0.003 ppb	9,596.265 ppb	4,165.345 ppb	11.257 ppb	1,074.923 ppb	16,510.335 ppb	91.788 %
Concentration per Run 1	94.062 %	90.392 %	0.000 ppb	9,372.671 ppb	4,077.985 ppb	10.514 ppb	1,055.899 ppb	16,534.954 ppb	91.201 %
Concentration per Run 2	95.151 %	95.490 %	0.006 ppb	9,332.714 ppb	4,122.114 ppb	12.773 ppb	1,052.344 ppb	16,120.300 ppb	92.214 %
Concentration per Run 3	94.214 %	90.196 %	0.003 ppb	10,083.411 ppb	4,295.937 ppb	10.483 ppb	1,116.527 ppb	16,875.750 ppb	91.950 %
Concentration RSD	0.6 %	3.3 %	94.8 %	4.4 %	2.8 %	11.7 %	3.4 %	2.3 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.265 ppb	0.030 ppb	1.730 ppb	20.131 ppb	0.029 ppb	0.652 ppb	0.964 ppb	0.556 ppb	93.905 %
Concentration per Run 1	0.224 ppb	0.033 ppb	1.611 ppb	18.893 ppb	0.030 ppb	0.726 ppb	0.848 ppb	0.516 ppb	94.960 %
Concentration per Run 2	0.303 ppb	0.016 ppb	1.813 ppb	19.588 ppb	0.028 ppb	0.609 ppb	0.948 ppb	0.580 ppb	92.955 %
Concentration per Run 3	0.268 ppb	0.042 ppb	1.766 ppb	21.910 ppb	0.030 ppb	0.621 ppb	1.096 ppb	0.572 ppb	93.799 %
Concentration RSD	15.1 %	43.4 %	6.1 %	7.8 %	4.8 %	9.9 %	13.0 %	6.3 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.469 ppb	0.093 ppb	77.987 ppb	0.433 ppb	92.037 %	0.000 ppb	0.004 ppb	96.986 %	0.186 ppb
Concentration per Run 1	0.521 ppb	0.106 ppb	76.192 ppb	0.458 ppb	92.534 %	0.002 ppb	0.005 ppb	95.686 %	0.186 ppb
Concentration per Run 2	0.393 ppb	0.100 ppb	78.403 ppb	0.386 ppb	91.396 %	-0.001 ppb	0.003 ppb	97.032 %	0.205 ppb
Concentration per Run 3	0.494 ppb	0.072 ppb	79.366 ppb	0.456 ppb	92.180 %	-0.001 ppb	0.003 ppb	98.240 %	0.166 ppb
Concentration RSD	14.3 %	19.7 %	2.1 %	9.4 %	0.6 %	1,864.3 %	29.5 %	1.3 %	10.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.107 ppb	99.030 %	100.681 %	0.010 ppb	0.019 ppb	53.190 %
Concentration per Run 1	7.702 ppb	99.114 %	101.164 %	-0.005 ppb	0.019 ppb	63.780 %
Concentration per Run 2	8.239 ppb	99.309 %	100.942 %	0.016 ppb	0.017 ppb	48.593 %
Concentration per Run 3	8.382 ppb	98.666 %	99.938 %	0.018 ppb	0.022 ppb	47.198 %
Concentration RSD	4.4 %	0.3 %	0.6 %	135.7 %	12.6 %	17.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	116	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-04 2008SL	Rack	2		
Analysis started at:	8/23/2024 3:46:20 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.645 %	95.229 %	0.004 ppb	9,290.558 ppb	3,997.987 ppb	9.604 ppb	1,036.748 ppb	15,929.557 ppb	92.504 %
Concentration per Run 1	96.276 %	92.353 %	0.000 ppb	9,360.117 ppb	4,012.369 ppb	9.189 ppb	1,037.454 ppb	16,000.197 ppb	93.060 %
Concentration per Run 2	94.990 %	95.490 %	0.008 ppb	9,254.836 ppb	4,010.173 ppb	10.882 ppb	1,010.367 ppb	15,506.117 ppb	91.523 %
Concentration per Run 3	95.669 %	97.843 %	0.004 ppb	9,256.720 ppb	3,971.418 ppb	8.739 ppb	1,062.423 ppb	16,282.358 ppb	92.930 %
Concentration RSD	0.7 %	2.9 %	95.9 %	0.6 %	0.6 %	11.8 %	2.5 %	2.5 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.247 ppb	0.042 ppb	1.379 ppb	19.899 ppb	0.037 ppb	0.377 ppb	0.869 ppb	0.415 ppb	92.815 %
Concentration per Run 1	0.245 ppb	0.050 ppb	1.358 ppb	18.612 ppb	0.043 ppb	0.328 ppb	0.743 ppb	0.407 ppb	92.002 %
Concentration per Run 2	0.263 ppb	0.040 ppb	1.316 ppb	19.414 ppb	0.030 ppb	0.462 ppb	0.950 ppb	0.480 ppb	92.705 %
Concentration per Run 3	0.233 ppb	0.036 ppb	1.463 ppb	21.670 ppb	0.039 ppb	0.342 ppb	0.914 ppb	0.357 ppb	93.738 %
Concentration RSD	6.2 %	16.0 %	5.5 %	8.0 %	17.5 %	19.5 %	12.7 %	14.9 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.484 ppb	0.095 ppb	77.148 ppb	0.288 ppb	91.226 %	0.001 ppb	0.000 ppb	95.825 %	0.200 ppb
Concentration per Run 1	0.497 ppb	0.099 ppb	76.114 ppb	0.278 ppb	90.616 %	0.000 ppb	-0.001 ppb	93.898 %	0.185 ppb
Concentration per Run 2	0.510 ppb	0.133 ppb	77.175 ppb	0.287 ppb	91.045 %	0.002 ppb	-0.001 ppb	95.718 %	0.189 ppb
Concentration per Run 3	0.446 ppb	0.053 ppb	78.154 ppb	0.299 ppb	92.018 %	0.002 ppb	0.001 ppb	97.860 %	0.226 ppb
Concentration RSD	6.9 %	42.5 %	1.3 %	3.7 %	0.8 %	68.1 %	4,380.8 %	2.1 %	11.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.880 ppb	98.242 %	99.163 %	0.008 ppb	0.018 ppb	52.432 %
Concentration per Run 1	7.970 ppb	97.507 %	97.192 %	-0.006 ppb	0.019 ppb	62.413 %
Concentration per Run 2	8.053 ppb	97.953 %	99.294 %	0.016 ppb	0.017 ppb	48.222 %
Concentration per Run 3	7.617 ppb	99.267 %	101.004 %	0.013 ppb	0.017 ppb	46.660 %
Concentration RSD	2.9 %	0.9 %	1.9 %	155.0 %	6.0 %	16.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	117	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 3:50:49 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.595 %	93.399 %	59.351 ppb	5,830.754 ppb	5,798.100 ppb	61.576 ppb	5,803.312 ppb	5,777.667 ppb	88.547 %
Concentration per Run 1	92.688 %	89.412 %	59.220 ppb	6,068.767 ppb	6,017.499 ppb	63.825 ppb	6,026.137 ppb	5,869.476 ppb	88.529 %
Concentration per Run 2	90.473 %	91.765 %	59.359 ppb	5,867.016 ppb	5,736.389 ppb	61.285 ppb	5,737.332 ppb	5,819.461 ppb	87.607 %
Concentration per Run 3	91.623 %	99.020 %	59.474 ppb	5,556.479 ppb	5,640.411 ppb	59.620 ppb	5,646.467 ppb	5,644.063 ppb	89.505 %
Recovery Percentage 1			98.919 %	97.179 %	96.635 %	102.627 %	96.722 %	96.294 %	
Concentration RSD	1.2 %	5.4 %	0.2 %	4.4 %	3.4 %	3.4 %	3.4 %	2.0 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.097 ppb	58.983 ppb	59.196 ppb	5,910.477 ppb	59.730 ppb	59.364 ppb	60.119 ppb	60.754 ppb	86.247 %
Concentration per Run 1	60.158 ppb	59.639 ppb	59.857 ppb	5,909.332 ppb	59.819 ppb	60.850 ppb	60.017 ppb	61.203 ppb	87.011 %
Concentration per Run 2	60.427 ppb	58.790 ppb	59.923 ppb	5,904.162 ppb	59.552 ppb	58.407 ppb	59.201 ppb	59.626 ppb	87.376 %
Concentration per Run 3	59.707 ppb	58.519 ppb	57.809 ppb	5,917.936 ppb	59.820 ppb	58.835 ppb	61.138 ppb	61.432 ppb	84.354 %
Recovery Percentage 1	100.162 %	98.304 %	98.660 %	98.508 %	99.550 %	98.940 %	100.198 %	101.256 %	
Concentration RSD	0.6 %	1.0 %	2.0 %	0.1 %	0.3 %	2.2 %	1.6 %	1.6 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.135 ppb	62.006 ppb	58.291 ppb	60.014 ppb	86.925 %	59.710 ppb	60.394 ppb	91.361 %	55.057 ppb
Concentration per Run 1	60.024 ppb	61.280 ppb	58.101 ppb	60.684 ppb	88.734 %	59.550 ppb	60.472 ppb	93.691 %	53.929 ppb
Concentration per Run 2	58.906 ppb	60.921 ppb	57.432 ppb	59.199 ppb	86.687 %	60.358 ppb	60.414 ppb	90.403 %	55.870 ppb
Concentration per Run 3	61.474 ppb	63.818 ppb	59.342 ppb	60.160 ppb	85.354 %	59.222 ppb	60.296 ppb	89.989 %	55.372 ppb
Recovery Percentage 1	100.224 %	103.344 %	97.152 %	100.023 %		99.517 %	100.656 %		91.762 %
Concentration RSD	2.1 %	2.5 %	1.7 %	1.3 %	2.0 %	1.0 %	0.1 %	2.2 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.320 ppb	95.343 %	97.561 %	59.306 ppb	60.873 ppb	51.601 %
Concentration per Run 1	61.431 ppb	95.543 %	97.046 %	59.829 ppb	61.332 ppb	61.935 %
Concentration per Run 2	60.944 ppb	94.449 %	96.982 %	59.759 ppb	61.709 ppb	47.447 %
Concentration per Run 3	61.586 ppb	96.037 %	98.657 %	58.330 ppb	59.578 ppb	45.422 %
Recovery Percentage 1	102.200 %			98.844 %	101.455 %	
Concentration RSD	0.5 %	0.9 %	1.0 %	1.4 %	1.9 %	17.5 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	118	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 3:55:21 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.682 %	91.307 %	0.046 ppb	31.684 ppb	5.050 ppb	-0.336 ppb	0.473 ppb	14.745 ppb	85.458 %
Concentration per Run 1	92.475 %	89.608 %	0.036 ppb	33.132 ppb	4.879 ppb	-0.122 ppb	-0.189 ppb	15.525 ppb	85.579 %
Concentration per Run 2	93.451 %	91.176 %	0.052 ppb	31.836 ppb	6.248 ppb	-0.555 ppb	1.803 ppb	16.788 ppb	85.776 %
Concentration per Run 3	92.119 %	93.137 %	0.049 ppb	30.085 ppb	4.024 ppb	-0.332 ppb	-0.194 ppb	11.921 ppb	85.017 %
Recovery Percentage 1			9.110 %	31.684 %	7.215 %	-3.362 %	0.473 %	14.745 %	
Concentration RSD	0.7 %	1.9 %	19.3 %	4.8 %	22.2 %	64.4 %	243.3 %	17.1 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.041 ppb	0.015 ppb	0.067 ppb	5.702 ppb	0.024 ppb	-0.036 ppb	0.041 ppb	-0.164 ppb	84.564 %
Concentration per Run 1	0.053 ppb	0.032 ppb	0.034 ppb	6.507 ppb	0.049 ppb	-0.053 ppb	0.051 ppb	-0.115 ppb	83.461 %
Concentration per Run 2	0.007 ppb	-0.006 ppb	0.103 ppb	5.276 ppb	0.015 ppb	-0.016 ppb	0.031 ppb	-0.186 ppb	83.760 %
Concentration per Run 3	0.063 ppb	0.021 ppb	0.064 ppb	5.322 ppb	0.009 ppb	-0.038 ppb	0.041 ppb	-0.193 ppb	86.473 %
Recovery Percentage 1	0.823 %	1.535 %	6.692 %	11.403 %	4.873 %	-1.792 %	4.084 %	-3.287 %	
Concentration RSD	72.3 %	127.0 %	51.6 %	12.2 %	89.6 %	52.8 %	24.8 %	26.3 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.095 ppb	0.160 ppb	0.074 ppb	0.257 ppb	87.250 %	0.031 ppb	0.035 ppb	91.086 %	0.823 ppb
Concentration per Run 1	0.097 ppb	0.151 ppb	0.084 ppb	0.199 ppb	87.803 %	0.038 ppb	0.042 ppb	90.124 %	0.805 ppb
Concentration per Run 2	0.097 ppb	0.153 ppb	0.072 ppb	0.246 ppb	86.937 %	0.033 ppb	0.029 ppb	91.887 %	0.810 ppb
Concentration per Run 3	0.090 ppb	0.176 ppb	0.066 ppb	0.327 ppb	87.010 %	0.021 ppb	0.033 ppb	91.246 %	0.854 ppb
Recovery Percentage 1	18.956 %	3.192 %	0.742 %	12.863 %		7.674 %	17.401 %		20.579 %
Concentration RSD	4.1 %	8.7 %	12.0 %	25.1 %	0.6 %	29.3 %	18.1 %	1.0 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.022 ppb	94.643 %	95.691 %	0.302 ppb	0.030 ppb	51.801 %
Concentration per Run 1	0.018 ppb	94.224 %	94.927 %	0.235 ppb	0.043 ppb	62.058 %
Concentration per Run 2	0.017 ppb	94.472 %	94.904 %	0.354 ppb	0.027 ppb	48.238 %
Concentration per Run 3	0.031 ppb	95.234 %	97.243 %	0.318 ppb	0.020 ppb	45.107 %
Recovery Percentage 1	4.391 %			30.234 %	2.998 %	
Concentration RSD	35.0 %	0.6 %	1.4 %	20.3 %	39.4 %	17.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	119	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-05 2008SL	Rack	2		
Analysis started at:	8/23/2024 4:03:59 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.950 %	90.000 %	0.005 ppb	9,054.321 ppb	3,945.496 ppb	9.865 ppb	1,034.216 ppb	15,963.975 ppb	90.668 %
Concentration per Run 1	92.758 %	82.549 %	0.003 ppb	9,327.045 ppb	4,053.610 ppb	8.945 ppb	1,046.880 ppb	16,692.079 ppb	90.610 %
Concentration per Run 2	92.011 %	92.157 %	0.010 ppb	8,890.746 ppb	3,844.706 ppb	10.471 ppb	1,030.717 ppb	15,421.399 ppb	91.301 %
Concentration per Run 3	91.080 %	95.294 %	0.002 ppb	8,945.171 ppb	3,938.172 ppb	10.179 ppb	1,025.051 ppb	15,778.449 ppb	90.094 %
Concentration RSD	0.9 %	7.4 %	81.9 %	2.6 %	2.7 %	8.2 %	1.1 %	4.1 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.268 ppb	0.034 ppb	1.003 ppb	25.614 ppb	0.034 ppb	0.335 ppb	0.828 ppb	2.029 ppb	88.039 %
Concentration per Run 1	0.254 ppb	0.032 ppb	1.038 ppb	22.828 ppb	0.034 ppb	0.344 ppb	0.854 ppb	2.029 ppb	82.605 %
Concentration per Run 2	0.244 ppb	0.019 ppb	0.988 ppb	36.395 ppb	0.026 ppb	0.239 ppb	0.780 ppb	2.048 ppb	89.729 %
Concentration per Run 3	0.307 ppb	0.051 ppb	0.983 ppb	17.621 ppb	0.042 ppb	0.423 ppb	0.850 ppb	2.011 ppb	91.782 %
Concentration RSD	12.7 %	47.6 %	3.1 %	37.8 %	23.7 %	27.6 %	5.1 %	0.9 %	5.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.496 ppb	0.183 ppb	78.216 ppb	0.377 ppb	86.379 %	0.002 ppb	0.000 ppb	94.514 %	0.456 ppb
Concentration per Run 1	0.541 ppb	0.136 ppb	78.904 ppb	0.342 ppb	83.637 %	0.005 ppb	-0.001 ppb	94.755 %	0.427 ppb
Concentration per Run 2	0.476 ppb	0.407 ppb	77.572 ppb	0.433 ppb	87.153 %	0.000 ppb	-0.001 ppb	94.947 %	0.442 ppb
Concentration per Run 3	0.472 ppb	0.007 ppb	78.172 ppb	0.355 ppb	88.346 %	0.001 ppb	0.001 ppb	93.840 %	0.497 ppb
Concentration RSD	7.8 %	111.3 %	0.9 %	13.1 %	2.8 %	143.5 %	2,202.7 %	0.6 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.053 ppb	97.493 %	100.867 %	0.111 ppb	0.019 ppb	55.196 %
Concentration per Run 1	7.974 ppb	95.779 %	99.545 %	0.087 ppb	0.017 ppb	69.457 %
Concentration per Run 2	7.840 ppb	98.353 %	101.919 %	0.135 ppb	0.020 ppb	49.662 %
Concentration per Run 3	8.345 ppb	98.348 %	101.136 %	0.110 ppb	0.019 ppb	46.470 %
Concentration RSD	3.3 %	1.5 %	1.2 %	21.3 %	7.9 %	22.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	120	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-06 2008SL	Rack	2		
Analysis started at:	8/23/2024 4:08:28 PM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.985 %	91.438 %	0.004 ppb	9,496.376 ppb	4,050.288 ppb	9.432 ppb	1,073.864 ppb	16,265.273 ppb	90.550 %
Concentration per Run 1	93.653 %	92.157 %	0.006 ppb	9,383.451 ppb	3,994.240 ppb	10.203 ppb	1,068.969 ppb	16,447.041 ppb	90.835 %
Concentration per Run 2	94.369 %	92.549 %	0.003 ppb	9,309.067 ppb	4,003.635 ppb	9.109 ppb	1,060.099 ppb	15,995.622 ppb	90.292 %
Concentration per Run 3	93.932 %	89.608 %	0.003 ppb	9,796.610 ppb	4,152.988 ppb	8.983 ppb	1,092.525 ppb	16,353.157 ppb	90.522 %
Concentration RSD	0.4 %	1.7 %	46.7 %	2.8 %	2.2 %	7.1 %	1.6 %	1.5 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.281 ppb	0.120 ppb	3.766 ppb	38.755 ppb	0.036 ppb	0.509 ppb	0.954 ppb	0.408 ppb	89.980 %
Concentration per Run 1	0.291 ppb	0.141 ppb	3.746 ppb	40.488 ppb	0.018 ppb	0.459 ppb	0.906 ppb	0.312 ppb	90.780 %
Concentration per Run 2	0.276 ppb	0.131 ppb	3.662 ppb	37.621 ppb	0.047 ppb	0.497 ppb	1.022 ppb	0.450 ppb	87.157 %
Concentration per Run 3	0.274 ppb	0.088 ppb	3.891 ppb	38.157 ppb	0.043 ppb	0.572 ppb	0.935 ppb	0.460 ppb	92.002 %
Concentration RSD	3.2 %	23.3 %	3.1 %	3.9 %	42.8 %	11.3 %	6.3 %	20.3 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.477 ppb	0.124 ppb	79.408 ppb	0.347 ppb	88.213 %	0.000 ppb	0.003 ppb	93.207 %	0.307 ppb
Concentration per Run 1	0.415 ppb	0.197 ppb	77.308 ppb	0.337 ppb	89.418 %	-0.001 ppb	0.001 ppb	94.584 %	0.296 ppb
Concentration per Run 2	0.516 ppb	0.042 ppb	81.544 ppb	0.350 ppb	86.450 %	0.001 ppb	-0.001 ppb	91.072 %	0.304 ppb
Concentration per Run 3	0.501 ppb	0.133 ppb	79.372 ppb	0.353 ppb	88.771 %	0.001 ppb	0.007 ppb	93.964 %	0.320 ppb
Concentration RSD	11.5 %	62.8 %	2.7 %	2.6 %	1.8 %	291.3 %	153.5 %	2.0 %	3.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.148 ppb	95.713 %	97.390 %	0.041 ppb	0.024 ppb	50.272 %
Concentration per Run 1	7.778 ppb	95.075 %	97.675 %	0.011 ppb	0.022 ppb	61.365 %
Concentration per Run 2	8.105 ppb	94.845 %	96.518 %	0.059 ppb	0.030 ppb	45.783 %
Concentration per Run 3	8.561 ppb	97.220 %	97.976 %	0.052 ppb	0.022 ppb	43.669 %
Concentration RSD	4.8 %	1.4 %	0.8 %	63.8 %	18.3 %	19.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	121	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-07 2008SL	Rack	2		
Analysis started at:	8/23/2024 4:12:57 PM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.653 %	90.523 %	0.003 ppb	9,400.659 ppb	4,058.606 ppb	67.822 ppb	1,058.369 ppb	15,906.622 ppb	91.155 %
Concentration per Run 1	93.982 %	92.941 %	0.002 ppb	9,167.160 ppb	3,956.677 ppb	63.695 ppb	1,047.806 ppb	15,728.802 ppb	91.127 %
Concentration per Run 2	95.484 %	88.431 %	0.004 ppb	9,597.388 ppb	4,122.712 ppb	71.364 ppb	1,054.991 ppb	16,105.360 ppb	90.932 %
Concentration per Run 3	94.491 %	90.196 %	0.003 ppb	9,437.430 ppb	4,096.430 ppb	68.407 ppb	1,072.309 ppb	15,885.703 ppb	91.406 %
Concentration RSD	0.8 %	2.5 %	44.1 %	2.3 %	2.2 %	5.7 %	1.2 %	1.2 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.473 ppb	0.113 ppb	7.280 ppb	69.541 ppb	0.064 ppb	0.405 ppb	0.879 ppb	0.378 ppb	94.464 %
Concentration per Run 1	0.455 ppb	0.137 ppb	7.300 ppb	68.305 ppb	0.054 ppb	0.482 ppb	0.844 ppb	0.379 ppb	92.919 %
Concentration per Run 2	0.502 ppb	0.100 ppb	7.405 ppb	73.858 ppb	0.061 ppb	0.326 ppb	1.009 ppb	0.363 ppb	95.640 %
Concentration per Run 3	0.461 ppb	0.102 ppb	7.135 ppb	66.461 ppb	0.075 ppb	0.406 ppb	0.784 ppb	0.392 ppb	94.832 %
Concentration RSD	5.4 %	18.6 %	1.9 %	5.5 %	17.0 %	19.2 %	13.3 %	3.8 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.506 ppb	0.046 ppb	75.636 ppb	0.279 ppb	90.825 %	0.002 ppb	0.001 ppb	95.088 %	0.220 ppb
Concentration per Run 1	0.544 ppb	0.084 ppb	75.243 ppb	0.292 ppb	91.261 %	0.003 ppb	0.001 ppb	93.032 %	0.192 ppb
Concentration per Run 2	0.474 ppb	0.025 ppb	75.390 ppb	0.291 ppb	90.334 %	0.002 ppb	0.001 ppb	95.970 %	0.225 ppb
Concentration per Run 3	0.501 ppb	0.029 ppb	76.276 ppb	0.254 ppb	90.879 %	0.002 ppb	-0.001 ppb	96.262 %	0.241 ppb
Concentration RSD	6.9 %	71.0 %	0.7 %	7.8 %	0.5 %	28.8 %	162.5 %	1.9 %	11.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.588 ppb	96.776 %	98.176 %	0.026 ppb	0.057 ppb	51.134 %
Concentration per Run 1	9.635 ppb	95.581 %	97.169 %	0.004 ppb	0.055 ppb	60.936 %
Concentration per Run 2	9.559 ppb	96.779 %	97.193 %	0.034 ppb	0.057 ppb	47.324 %
Concentration per Run 3	9.570 ppb	97.968 %	100.166 %	0.039 ppb	0.059 ppb	45.142 %
Concentration RSD	0.4 %	1.2 %	1.8 %	73.2 %	4.0 %	16.7 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	122	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-08 2008SL	Rack	2		
Analysis started at:	8/23/2024 4:17:27 PM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.330 %	93.072 %	0.002 ppb	9,264.889 ppb	4,012.531 ppb	14.665 ppb	1,036.300 ppb	15,802.023 ppb	92.766 %
Concentration per Run 1	95.639 %	90.000 %	0.001 ppb	9,391.936 ppb	4,088.105 ppb	15.175 ppb	1,071.099 ppb	16,233.065 ppb	91.169 %
Concentration per Run 2	96.924 %	88.431 %	0.001 ppb	9,666.648 ppb	4,196.535 ppb	16.023 ppb	1,045.506 ppb	15,972.658 ppb	94.085 %
Concentration per Run 3	96.426 %	100.784 %	0.002 ppb	8,736.083 ppb	3,752.951 ppb	12.796 ppb	992.294 ppb	15,200.346 ppb	93.045 %
Concentration RSD	0.7 %	7.2 %	31.7 %	5.2 %	5.8 %	11.4 %	3.9 %	3.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.311 ppb	0.071 ppb	4.212 ppb	26.662 ppb	0.027 ppb	0.310 ppb	0.852 ppb	0.572 ppb	94.060 %
Concentration per Run 1	0.390 ppb	0.103 ppb	3.999 ppb	27.929 ppb	0.031 ppb	0.223 ppb	0.877 ppb	0.612 ppb	92.241 %
Concentration per Run 2	0.315 ppb	0.058 ppb	4.462 ppb	28.598 ppb	0.025 ppb	0.362 ppb	0.823 ppb	0.570 ppb	95.443 %
Concentration per Run 3	0.227 ppb	0.051 ppb	4.176 ppb	23.459 ppb	0.027 ppb	0.344 ppb	0.856 ppb	0.536 ppb	94.495 %
Concentration RSD	26.3 %	39.4 %	5.5 %	10.5 %	10.4 %	24.3 %	3.2 %	6.7 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.460 ppb	0.072 ppb	75.886 ppb	0.270 ppb	90.341 %	0.001 ppb	0.001 ppb	94.240 %	0.191 ppb
Concentration per Run 1	0.442 ppb	0.130 ppb	76.021 ppb	0.237 ppb	90.039 %	0.000 ppb	0.001 ppb	94.071 %	0.191 ppb
Concentration per Run 2	0.480 ppb	0.029 ppb	75.988 ppb	0.243 ppb	90.635 %	0.001 ppb	-0.001 ppb	95.573 %	0.193 ppb
Concentration per Run 3	0.459 ppb	0.056 ppb	75.648 ppb	0.330 ppb	90.349 %	0.001 ppb	0.003 ppb	93.075 %	0.189 ppb
Concentration RSD	4.1 %	72.8 %	0.3 %	19.2 %	0.3 %	47.2 %	144.9 %	1.3 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.168 ppb	96.947 %	97.902 %	0.021 ppb	0.029 ppb	50.832 %
Concentration per Run 1	8.314 ppb	95.808 %	96.712 %	0.002 ppb	0.032 ppb	60.333 %
Concentration per Run 2	8.047 ppb	98.868 %	99.576 %	0.029 ppb	0.026 ppb	48.012 %
Concentration per Run 3	8.142 ppb	96.165 %	97.416 %	0.031 ppb	0.030 ppb	44.151 %
Concentration RSD	1.7 %	1.7 %	1.5 %	79.1 %	9.6 %	16.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	123	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-09 2008SL	Rack	2		
Analysis started at:	8/23/2024 4:21:55 PM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.121 %	91.111 %	0.004 ppb	9,709.380 ppb	3,986.246 ppb	9.550 ppb	1,037.202 ppb	15,910.140 ppb	89.950 %
Concentration per Run 1	93.054 %	89.216 %	0.007 ppb	9,637.354 ppb	4,012.742 ppb	8.526 ppb	1,052.196 ppb	16,046.074 ppb	87.703 %
Concentration per Run 2	93.866 %	90.196 %	0.003 ppb	9,855.975 ppb	4,028.702 ppb	10.160 ppb	1,045.005 ppb	15,920.926 ppb	89.809 %
Concentration per Run 3	95.444 %	93.921 %	0.003 ppb	9,634.813 ppb	3,917.295 ppb	9.963 ppb	1,014.405 ppb	15,763.420 ppb	92.338 %
Concentration RSD	1.3 %	2.7 %	54.1 %	1.3 %	1.5 %	9.3 %	1.9 %	0.9 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.379 ppb	0.055 ppb	3.980 ppb	27.404 ppb	0.035 ppb	0.407 ppb	0.924 ppb	3.140 ppb	92.844 %
Concentration per Run 1	0.336 ppb	0.057 ppb	3.987 ppb	27.572 ppb	0.031 ppb	0.506 ppb	0.845 ppb	3.110 ppb	91.214 %
Concentration per Run 2	0.421 ppb	0.052 ppb	3.941 ppb	26.508 ppb	0.040 ppb	0.372 ppb	0.976 ppb	3.090 ppb	92.632 %
Concentration per Run 3	0.381 ppb	0.056 ppb	4.013 ppb	28.132 ppb	0.034 ppb	0.342 ppb	0.952 ppb	3.219 ppb	94.685 %
Concentration RSD	11.1 %	4.3 %	0.9 %	3.0 %	13.4 %	21.4 %	7.6 %	2.2 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.546 ppb	0.090 ppb	76.017 ppb	0.280 ppb	89.687 %	0.001 ppb	0.002 ppb	94.056 %	0.209 ppb
Concentration per Run 1	0.623 ppb	0.095 ppb	74.941 ppb	0.283 ppb	89.116 %	0.000 ppb	-0.001 ppb	94.226 %	0.202 ppb
Concentration per Run 2	0.493 ppb	0.094 ppb	75.986 ppb	0.268 ppb	90.216 %	0.002 ppb	0.003 ppb	94.388 %	0.206 ppb
Concentration per Run 3	0.523 ppb	0.080 ppb	77.124 ppb	0.289 ppb	89.728 %	0.000 ppb	0.003 ppb	93.554 %	0.220 ppb
Concentration RSD	12.5 %	9.2 %	1.4 %	3.8 %	0.6 %	259.7 %	112.8 %	0.5 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.140 ppb	97.119 %	97.991 %	0.014 ppb	0.034 ppb	50.611 %
Concentration per Run 1	8.320 ppb	95.509 %	95.461 %	-0.001 ppb	0.033 ppb	60.762 %
Concentration per Run 2	7.882 ppb	97.889 %	98.938 %	0.024 ppb	0.032 ppb	46.308 %
Concentration per Run 3	8.217 ppb	97.958 %	99.574 %	0.020 ppb	0.036 ppb	44.761 %
Concentration RSD	2.8 %	1.4 %	2.3 %	92.5 %	6.2 %	17.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	124	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447886-13 2008SL	Rack	2		
Analysis started at:	8/23/2024 4:26:24 PM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.685 %	90.719 %	0.001 ppb	42.694 ppb	0.854 ppb	1.853 ppb	4.718 ppb	4.681 ppb	90.655 %
Concentration per Run 1	95.422 %	90.980 %	0.000 ppb	40.687 ppb	0.998 ppb	1.110 ppb	1.440 ppb	8.080 ppb	90.469 %
Concentration per Run 2	95.430 %	90.392 %	0.001 ppb	44.173 ppb	1.815 ppb	2.536 ppb	7.001 ppb	2.360 ppb	91.039 %
Concentration per Run 3	93.205 %	90.784 %	0.003 ppb	43.221 ppb	-0.251 ppb	1.914 ppb	5.713 ppb	3.604 ppb	90.458 %
Concentration RSD	1.4 %	0.3 %	111.5 %	4.2 %	121.8 %	38.6 %	61.7 %	64.3 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.042 ppb	0.004 ppb	0.021 ppb	0.920 ppb	0.005 ppb	0.054 ppb	0.069 ppb	0.035 ppb	90.656 %
Concentration per Run 1	0.070 ppb	-0.008 ppb	0.007 ppb	0.503 ppb	0.009 ppb	0.006 ppb	0.071 ppb	0.018 ppb	88.648 %
Concentration per Run 2	0.058 ppb	0.031 ppb	0.039 ppb	1.362 ppb	0.001 ppb	0.075 ppb	0.080 ppb	0.041 ppb	90.951 %
Concentration per Run 3	-0.002 ppb	-0.010 ppb	0.016 ppb	0.894 ppb	0.004 ppb	0.081 ppb	0.054 ppb	0.046 ppb	92.369 %
Concentration RSD	92.5 %	537.7 %	79.3 %	46.8 %	86.5 %	77.4 %	19.1 %	42.7 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.001 ppb	0.029 ppb	0.005 ppb	0.018 ppb	90.709 %	0.001 ppb	0.000 ppb	93.565 %	0.341 ppb
Concentration per Run 1	0.025 ppb	0.020 ppb	0.005 ppb	0.013 ppb	89.701 %	-0.001 ppb	-0.001 ppb	91.945 %	0.326 ppb
Concentration per Run 2	0.004 ppb	0.065 ppb	0.006 ppb	-0.004 ppb	91.214 %	0.002 ppb	0.001 ppb	94.283 %	0.344 ppb
Concentration per Run 3	-0.033 ppb	0.002 ppb	0.004 ppb	0.044 ppb	91.213 %	0.001 ppb	-0.001 ppb	94.466 %	0.353 ppb
Concentration RSD	2,113.3 %	111.3 %	17.5 %	135.7 %	1.0 %	209.2 %	2,620.3 %	1.5 %	4.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	95.850 %	97.026 %	0.007 ppb	0.002 ppb	50.793 %
Concentration per Run 1	0.031 ppb	93.556 %	94.830 %	-0.006 ppb	0.001 ppb	60.181 %
Concentration per Run 2	-0.010 ppb	96.203 %	97.946 %	0.012 ppb	0.002 ppb	46.804 %
Concentration per Run 3	0.003 ppb	97.792 %	98.300 %	0.016 ppb	0.002 ppb	45.393 %
Concentration RSD	263.7 %	2.2 %	2.0 %	159.9 %	58.7 %	16.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	125	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 4:35:23 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.942 %	86.274 %	59.573 ppb	5,968.239 ppb	5,916.919 ppb	61.572 ppb	5,783.134 ppb	5,835.076 ppb	85.638 %
Concentration per Run 1	88.984 %	85.686 %	59.383 ppb	5,985.856 ppb	5,886.204 ppb	63.543 ppb	5,911.280 ppb	5,958.340 ppb	85.207 %
Concentration per Run 2	88.821 %	84.902 %	59.381 ppb	5,985.468 ppb	5,976.975 ppb	61.395 ppb	5,747.255 ppb	5,789.942 ppb	86.209 %
Concentration per Run 3	89.022 %	88.235 %	59.954 ppb	5,933.394 ppb	5,887.577 ppb	59.779 ppb	5,690.866 ppb	5,756.948 ppb	85.499 %
Recovery Percentage 1			99.288 %	99.471 %	98.615 %	102.620 %	96.386 %	97.251 %	
Concentration RSD	0.1 %	2.0 %	0.6 %	0.5 %	0.9 %	3.1 %	2.0 %	1.9 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	60.198 ppb	58.737 ppb	59.118 ppb	5,805.748 ppb	58.216 ppb	58.418 ppb	57.819 ppb	59.445 ppb	85.352 %
Concentration per Run 1	60.075 ppb	58.543 ppb	57.673 ppb	5,732.837 ppb	58.607 ppb	57.898 ppb	57.967 ppb	59.577 ppb	84.819 %
Concentration per Run 2	60.698 ppb	59.029 ppb	60.895 ppb	5,856.542 ppb	59.005 ppb	57.881 ppb	58.843 ppb	58.655 ppb	85.232 %
Concentration per Run 3	59.822 ppb	58.640 ppb	58.786 ppb	5,827.867 ppb	57.035 ppb	59.476 ppb	56.647 ppb	60.104 ppb	86.005 %
Recovery Percentage 1	100.331 %	97.895 %	98.530 %	96.762 %	97.026 %	97.364 %	96.365 %	99.076 %	
Concentration RSD	0.7 %	0.4 %	2.8 %	1.1 %	1.8 %	1.6 %	1.9 %	1.2 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.557 ppb	61.058 ppb	57.948 ppb	60.133 ppb	83.862 %	60.133 ppb	60.845 ppb	89.493 %	54.677 ppb
Concentration per Run 1	59.957 ppb	60.101 ppb	57.880 ppb	59.607 ppb	83.525 %	59.787 ppb	60.544 ppb	88.424 %	53.930 ppb
Concentration per Run 2	58.819 ppb	60.498 ppb	57.993 ppb	61.541 ppb	83.553 %	60.639 ppb	60.668 ppb	90.326 %	54.917 ppb
Concentration per Run 3	59.895 ppb	62.574 ppb	57.970 ppb	59.250 ppb	84.508 %	59.972 ppb	61.324 ppb	89.728 %	55.185 ppb
Recovery Percentage 1	99.262 %	101.763 %	96.579 %	100.221 %		100.222 %	101.409 %		91.129 %
Concentration RSD	1.1 %	2.2 %	0.1 %	2.0 %	0.7 %	0.7 %	0.7 %	1.1 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.910 ppb	94.062 %	98.089 %	58.909 ppb	60.422 ppb	50.946 %
Concentration per Run 1	61.171 ppb	93.821 %	98.064 %	57.865 ppb	59.906 ppb	61.415 %
Concentration per Run 2	61.956 ppb	93.690 %	97.234 %	59.578 ppb	61.553 ppb	46.991 %
Concentration per Run 3	59.603 ppb	94.676 %	98.970 %	59.285 ppb	59.808 ppb	44.431 %
Recovery Percentage 1	101.517 %			98.182 %	100.704 %	
Concentration RSD	2.0 %	0.6 %	0.9 %	1.6 %	1.6 %	18.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	126	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 4:39:54 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.981 %	87.385 %	0.018 ppb	26.995 ppb	2.338 ppb	-0.483 ppb	-1.031 ppb	-1.586 ppb	81.409 %
Concentration per Run 1	88.707 %	87.647 %	0.020 ppb	24.388 ppb	3.197 ppb	-0.552 ppb	2.856 ppb	3.959 ppb	80.864 %
Concentration per Run 2	89.380 %	82.157 %	0.015 ppb	31.913 ppb	1.237 ppb	-0.334 ppb	-0.344 ppb	-4.134 ppb	81.409 %
Concentration per Run 3	88.856 %	92.353 %	0.020 ppb	24.683 ppb	2.580 ppb	-0.564 ppb	-5.605 ppb	-4.581 ppb	81.954 %
Recovery Percentage 1			3.662 %	26.995 %	3.340 %	-4.830 %	-1.031 %	-1.586 %	
Concentration RSD	0.4 %	5.8 %	15.0 %	15.8 %	42.9 %	26.8 %	414.3 %	303.2 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.011 ppb	0.017 ppb	0.065 ppb	7.834 ppb	0.026 ppb	0.036 ppb	0.032 ppb	-0.134 ppb	87.862 %
Concentration per Run 1	-0.022 ppb	0.019 ppb	0.076 ppb	8.301 ppb	0.035 ppb	0.017 ppb	0.047 ppb	-0.131 ppb	88.208 %
Concentration per Run 2	0.038 ppb	0.025 ppb	0.046 ppb	5.839 ppb	0.031 ppb	0.043 ppb	0.037 ppb	-0.063 ppb	85.232 %
Concentration per Run 3	0.016 ppb	0.008 ppb	0.072 ppb	9.362 ppb	0.014 ppb	0.048 ppb	0.013 ppb	-0.207 ppb	90.145 %
Recovery Percentage 1	0.216 %	1.730 %	6.480 %	15.669 %	5.273 %	1.805 %	3.235 %	-2.674 %	
Concentration RSD	281.6 %	48.4 %	24.7 %	23.1 %	42.4 %	46.6 %	52.8 %	54.1 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.081 ppb	0.159 ppb	0.021 ppb	0.281 ppb	86.127 %	0.028 ppb	0.025 ppb	89.040 %	4.635 ppb
Concentration per Run 1	0.119 ppb	0.287 ppb	0.037 ppb	0.270 ppb	86.793 %	0.031 ppb	0.028 ppb	89.922 %	12.239 ppb
Concentration per Run 2	0.084 ppb	0.081 ppb	0.014 ppb	0.231 ppb	85.521 %	0.030 ppb	0.033 ppb	87.240 %	0.781 ppb
Concentration per Run 3	0.041 ppb	0.107 ppb	0.012 ppb	0.342 ppb	86.068 %	0.024 ppb	0.014 ppb	89.959 %	0.885 ppb
Recovery Percentage 1	16.275 %	3.170 %	0.212 %	14.046 %		7.120 %	12.323 %		115.871 %
Concentration RSD	47.7 %	70.7 %	64.0 %	20.1 %	0.7 %	12.1 %	40.1 %	1.8 %	142.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.018 ppb	93.395 %	95.789 %	0.263 ppb	0.029 ppb	49.388 %
Concentration per Run 1	0.011 ppb	93.891 %	95.242 %	0.215 ppb	0.033 ppb	58.468 %
Concentration per Run 2	0.040 ppb	93.523 %	96.713 %	0.292 ppb	0.026 ppb	45.734 %
Concentration per Run 3	0.004 ppb	92.771 %	95.412 %	0.282 ppb	0.028 ppb	43.963 %
Recovery Percentage 1	3.654 %			26.300 %	2.918 %	
Concentration RSD	102.3 %	0.6 %	0.8 %	15.9 %	12.9 %	16.0 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	127	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 4:51:20 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.732 %	87.516 %	0.012 ppb	21.463 ppb	-0.100 ppb	-0.469 ppb	-8.505 ppb	0.180 ppb	83.719 %
Concentration per Run 1	91.058 %	83.725 %	0.015 ppb	19.668 ppb	0.319 ppb	-0.538 ppb	-9.098 ppb	3.360 ppb	83.384 %
Concentration per Run 2	90.646 %	91.176 %	0.008 ppb	20.303 ppb	-0.215 ppb	-0.365 ppb	-8.735 ppb	-1.365 ppb	83.347 %
Concentration per Run 3	90.492 %	87.647 %	0.014 ppb	24.417 ppb	-0.405 ppb	-0.503 ppb	-7.681 ppb	-1.453 ppb	84.427 %
Recovery Percentage 1			2.480 %	21.463 %	-0.143 %	-4.687 %	-8.505 %	0.180 %	
Concentration RSD	0.3 %	4.3 %	32.9 %	12.0 %	373.9 %	19.5 %	8.7 %	1,525.7 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.003 ppb	-0.010 ppb	0.006 ppb	1.197 ppb	0.010 ppb	-0.070 ppb	0.036 ppb	-0.245 ppb	84.855 %
Concentration per Run 1	0.039 ppb	0.001 ppb	-0.001 ppb	0.600 ppb	0.015 ppb	-0.082 ppb	0.071 ppb	-0.224 ppb	84.175 %
Concentration per Run 2	0.008 ppb	-0.016 ppb	0.010 ppb	1.768 ppb	0.012 ppb	-0.053 ppb	-0.015 ppb	-0.223 ppb	82.861 %
Concentration per Run 3	-0.039 ppb	-0.015 ppb	0.008 ppb	1.223 ppb	0.004 ppb	-0.075 ppb	0.054 ppb	-0.287 ppb	87.529 %
Recovery Percentage 1	0.057 %	-1.026 %	0.608 %	2.394 %	2.075 %	-3.502 %	3.648 %	-4.894 %	
Concentration RSD	1,377.6 %	92.9 %	95.9 %	48.8 %	55.3 %	21.3 %	124.5 %	15.0 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.040 ppb	-0.007 ppb	0.005 ppb	0.026 ppb	84.375 %	0.012 ppb	0.012 ppb	89.365 %	0.365 ppb
Concentration per Run 1	0.018 ppb	-0.031 ppb	0.005 ppb	-0.001 ppb	84.822 %	0.010 ppb	0.016 ppb	88.004 %	0.172 ppb
Concentration per Run 2	0.065 ppb	0.083 ppb	0.007 ppb	0.051 ppb	83.686 %	0.014 ppb	0.014 ppb	91.319 %	0.184 ppb
Concentration per Run 3	0.037 ppb	-0.072 ppb	0.003 ppb	0.027 ppb	84.618 %	0.014 ppb	0.008 ppb	88.771 %	0.740 ppb
Recovery Percentage 1	7.957 %	-0.135 %	0.049 %	1.282 %		3.084 %	6.194 %		9.130 %
Concentration RSD	58.8 %	1,191.6 %	32.6 %	102.8 %	0.7 %	19.4 %	34.6 %	1.9 %	89.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.003 ppb	94.588 %	98.666 %	0.550 ppb	0.008 ppb	51.555 %
Concentration per Run 1	-0.003 ppb	94.989 %	99.744 %	1.530 ppb	0.007 ppb	62.969 %
Concentration per Run 2	-0.003 ppb	93.651 %	97.872 %	0.060 ppb	0.009 ppb	46.652 %
Concentration per Run 3	-0.003 ppb	95.123 %	98.381 %	0.060 ppb	0.007 ppb	45.046 %
Recovery Percentage 1	-0.550 %			54.971 %	0.758 %	
Concentration RSD	4.0 %	0.9 %	1.0 %	154.4 %	15.6 %	19.2 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	128	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962132-1 2008TL	Rack	2		
Analysis started at:	8/23/2024 4:56:47 PM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.989 %	85.098 %	0.005 ppb	17.149 ppb	0.563 ppb	0.534 ppb	-9.315 ppb	1.972 ppb	81.510 %
Concentration per Run 1	88.487 %	84.510 %	0.000 ppb	18.309 ppb	0.521 ppb	0.597 ppb	-5.569 ppb	1.730 ppb	80.707 %
Concentration per Run 2	89.520 %	86.274 %	0.002 ppb	6.826 ppb	0.220 ppb	0.365 ppb	-16.521 ppb	-3.297 ppb	82.805 %
Concentration per Run 3	88.960 %	84.510 %	0.014 ppb	26.313 ppb	0.950 ppb	0.639 ppb	-5.855 ppb	7.484 ppb	81.018 %
Concentration RSD	0.6 %	1.2 %	139.7 %	57.1 %	65.1 %	27.7 %	67.0 %	273.6 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.020 ppb	-0.029 ppb	0.027 ppb	0.803 ppb	0.005 ppb	-0.060 ppb	0.021 ppb	0.018 ppb	112.909 %
Concentration per Run 1	-0.008 ppb	-0.030 ppb	0.046 ppb	1.061 ppb	0.010 ppb	-0.092 ppb	0.037 ppb	0.073 ppb	84.865 %
Concentration per Run 2	-0.059 ppb	-0.032 ppb	0.002 ppb	-0.394 ppb	-0.001 ppb	-0.052 ppb	-0.016 ppb	-0.090 ppb	167.700 %
Concentration per Run 3	0.009 ppb	-0.025 ppb	0.033 ppb	1.742 ppb	0.007 ppb	-0.036 ppb	0.042 ppb	0.071 ppb	86.161 %
Concentration RSD	181.0 %	13.6 %	83.5 %	135.9 %	103.0 %	48.2 %	153.6 %	513.8 %	42.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.032 ppb	0.104 ppb	0.005 ppb	0.013 ppb	83.687 %	0.005 ppb	0.004 ppb	87.707 %	0.181 ppb
Concentration per Run 1	-0.007 ppb	0.263 ppb	0.011 ppb	-0.012 ppb	82.388 %	0.006 ppb	0.004 ppb	88.237 %	0.078 ppb
Concentration per Run 2	-0.051 ppb	-0.015 ppb	-0.008 ppb	0.023 ppb	85.134 %	0.003 ppb	0.006 ppb	88.583 %	0.394 ppb
Concentration per Run 3	-0.037 ppb	0.066 ppb	0.010 ppb	0.028 ppb	83.539 %	0.005 ppb	0.002 ppb	86.301 %	0.072 ppb
Concentration RSD	71.2 %	137.1 %	235.3 %	171.4 %	1.6 %	25.4 %	57.3 %	1.4 %	101.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	92.302 %	95.460 %	0.028 ppb	0.004 ppb	50.890 %
Concentration per Run 1	0.005 ppb	90.955 %	94.797 %	0.005 ppb	0.006 ppb	61.664 %
Concentration per Run 2	0.019 ppb	91.281 %	94.931 %	0.043 ppb	-0.001 ppb	47.079 %
Concentration per Run 3	-0.002 ppb	94.670 %	96.653 %	0.036 ppb	0.005 ppb	43.926 %
Concentration RSD	152.3 %	2.2 %	1.1 %	71.3 %	110.1 %	18.6 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	129	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447529-14 2008TL	Rack	2		
Analysis started at:	8/23/2024 5:01:14 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.616 %	88.301 %	0.004 ppb	18.848 ppb	0.501 ppb	1.443 ppb	-5.452 ppb	9.680 ppb	80.869 %
Concentration per Run 1	88.059 %	87.059 %	0.004 ppb	18.286 ppb	0.037 ppb	1.382 ppb	-5.155 ppb	8.012 ppb	80.013 %
Concentration per Run 2	89.299 %	88.823 %	0.004 ppb	17.623 ppb	0.595 ppb	1.436 ppb	-8.665 ppb	7.063 ppb	81.412 %
Concentration per Run 3	88.490 %	89.019 %	0.004 ppb	20.635 ppb	0.872 ppb	1.512 ppb	-2.537 ppb	13.966 ppb	81.181 %
Concentration RSD	0.7 %	1.2 %	6.9 %	8.4 %	84.9 %	4.5 %	56.4 %	38.7 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.019 ppb	0.273 ppb	0.057 ppb	3.412 ppb	0.005 ppb	0.112 ppb	0.024 ppb	0.046 ppb	87.596 %
Concentration per Run 1	-0.019 ppb	0.259 ppb	-0.025 ppb	1.724 ppb	0.009 ppb	0.162 ppb	0.029 ppb	0.074 ppb	86.008 %
Concentration per Run 2	0.023 ppb	0.239 ppb	0.103 ppb	4.603 ppb	-0.004 ppb	0.141 ppb	0.024 ppb	-0.024 ppb	93.343 %
Concentration per Run 3	0.054 ppb	0.322 ppb	0.093 ppb	3.909 ppb	0.010 ppb	0.033 ppb	0.018 ppb	0.089 ppb	83.436 %
Concentration RSD	193.4 %	15.8 %	125.5 %	44.0 %	151.8 %	61.5 %	24.0 %	133.6 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.083 ppb	0.113 ppb	0.367 ppb	84.629 %	0.003 ppb	0.004 ppb	88.614 %	0.034 ppb
Concentration per Run 1	0.025 ppb	0.033 ppb	0.114 ppb	-0.002 ppb	85.333 %	0.003 ppb	0.008 ppb	88.566 %	0.025 ppb
Concentration per Run 2	-0.030 ppb	0.062 ppb	0.108 ppb	1.080 ppb	84.994 %	0.004 ppb	0.004 ppb	88.907 %	0.039 ppb
Concentration per Run 3	0.005 ppb	0.154 ppb	0.115 ppb	0.022 ppb	83.560 %	0.003 ppb	-0.001 ppb	88.369 %	0.038 ppb
Concentration RSD	69,834.0 %	76.6 %	3.2 %	168.3 %	1.1 %	21.3 %	117.2 %	0.3 %	23.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.123 ppb	92.571 %	94.825 %	0.019 ppb	0.002 ppb	49.975 %
Concentration per Run 1	0.117 ppb	91.861 %	94.186 %	0.002 ppb	0.001 ppb	60.209 %
Concentration per Run 2	0.143 ppb	93.390 %	94.609 %	0.028 ppb	0.003 ppb	46.013 %
Concentration per Run 3	0.109 ppb	92.461 %	95.681 %	0.027 ppb	0.002 ppb	43.703 %
Concentration RSD	14.4 %	0.8 %	0.8 %	77.7 %	77.5 %	17.9 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	130	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962132-2d10 2008TL	Rack	2		
Analysis started at:	8/23/2024 5:05:43 PM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.305 %	88.758 %	4.993 ppb	1,031.048 ppb	973.699 ppb	200.126 ppb	983.000 ppb	982.385 ppb	83.297 %
Concentration per Run 1	90.664 %	79.804 %	4.954 ppb	1,089.279 ppb	1,017.768 ppb	201.964 ppb	1,019.296 ppb	1,010.691 ppb	84.090 %
Concentration per Run 2	90.517 %	90.980 %	5.015 ppb	1,001.611 ppb	946.571 ppb	190.382 ppb	940.393 ppb	966.278 ppb	84.362 %
Concentration per Run 3	89.734 %	95.490 %	5.009 ppb	1,002.255 ppb	956.758 ppb	208.031 ppb	989.312 ppb	970.186 ppb	81.439 %
Concentration RSD	0.6 %	9.1 %	0.7 %	4.9 %	4.0 %	4.5 %	4.1 %	2.5 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.028 ppb	18.747 ppb	48.806 ppb	96.893 ppb	47.714 ppb	47.892 ppb	23.957 ppb	49.260 ppb	87.450 %
Concentration per Run 1	48.277 ppb	18.773 ppb	49.868 ppb	94.647 ppb	48.544 ppb	47.923 ppb	24.020 ppb	49.068 ppb	86.500 %
Concentration per Run 2	47.405 ppb	18.878 ppb	48.450 ppb	97.537 ppb	47.444 ppb	48.517 ppb	24.196 ppb	49.903 ppb	86.541 %
Concentration per Run 3	48.402 ppb	18.588 ppb	48.099 ppb	98.495 ppb	47.155 ppb	47.234 ppb	23.656 ppb	48.809 ppb	89.310 %
Concentration RSD	1.1 %	0.8 %	1.9 %	2.1 %	1.5 %	1.3 %	1.2 %	1.2 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.977 ppb	11.889 ppb	92.902 ppb	98.162 ppb	84.842 %	4.890 ppb	5.435 ppb	89.333 %	44.980 ppb
Concentration per Run 1	11.516 ppb	11.614 ppb	92.153 ppb	97.323 ppb	84.659 %	4.931 ppb	5.289 ppb	88.725 %	44.170 ppb
Concentration per Run 2	11.949 ppb	11.606 ppb	88.500 ppb	97.758 ppb	82.046 %	4.934 ppb	5.539 ppb	84.736 %	45.501 ppb
Concentration per Run 3	12.465 ppb	12.446 ppb	98.051 ppb	99.404 ppb	87.822 %	4.806 ppb	5.478 ppb	94.538 %	45.269 ppb
Concentration RSD	4.0 %	4.1 %	5.2 %	1.1 %	3.4 %	1.5 %	2.4 %	5.5 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.843 ppb	93.714 %	95.115 %	12.165 ppb	54.137 ppb	49.483 %
Concentration per Run 1	199.677 ppb	92.151 %	92.719 %	12.354 ppb	54.864 ppb	59.295 %
Concentration per Run 2	199.238 ppb	92.605 %	93.916 %	12.281 ppb	54.598 ppb	45.485 %
Concentration per Run 3	203.614 ppb	96.385 %	98.710 %	11.861 ppb	52.950 ppb	43.668 %
Concentration RSD	1.2 %	2.5 %	3.3 %	2.2 %	1.9 %	17.3 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	131	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2446776-01 2008TL	Rack	2		
Analysis started at:	8/23/2024 5:10:12 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.648 %	85.425 %	0.010 ppb	3,309.058 ppb	808.209 ppb	68.753 ppb	1,745.894 ppb	9,219.685 ppb	82.118 %
Concentration per Run 1	88.329 %	82.941 %	0.012 ppb	3,413.583 ppb	820.957 ppb	68.923 ppb	1,820.656 ppb	9,696.624 ppb	82.149 %
Concentration per Run 2	89.174 %	87.059 %	0.008 ppb	3,223.250 ppb	803.476 ppb	68.190 ppb	1,696.421 ppb	8,925.952 ppb	82.030 %
Concentration per Run 3	88.440 %	86.274 %	0.010 ppb	3,290.342 ppb	800.196 ppb	69.146 ppb	1,720.604 ppb	9,036.478 ppb	82.176 %
Concentration RSD	0.5 %	2.6 %	18.3 %	2.9 %	1.4 %	0.7 %	3.8 %	4.5 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.761 ppb	0.613 ppb	36.864 ppb	267.669 ppb	0.143 ppb	1.877 ppb	107.336 ppb	108.755 ppb	87.102 %
Concentration per Run 1	0.583 ppb	0.623 ppb	37.228 ppb	265.182 ppb	0.131 ppb	1.655 ppb	106.326 ppb	108.377 ppb	87.701 %
Concentration per Run 2	0.798 ppb	0.624 ppb	35.540 ppb	264.339 ppb	0.152 ppb	2.043 ppb	107.656 ppb	109.142 ppb	86.491 %
Concentration per Run 3	0.902 ppb	0.591 ppb	37.825 ppb	273.486 ppb	0.147 ppb	1.932 ppb	108.025 ppb	108.745 ppb	87.114 %
Concentration RSD	21.4 %	3.0 %	3.2 %	1.9 %	7.5 %	10.7 %	0.8 %	0.4 %	0.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.369 ppb	0.125 ppb	56.326 ppb	1.749 ppb	83.040 %	0.025 ppb	0.054 ppb	87.742 %	1.004 ppb
Concentration per Run 1	0.307 ppb	0.111 ppb	57.099 ppb	1.709 ppb	84.255 %	0.028 ppb	0.063 ppb	90.121 %	0.922 ppb
Concentration per Run 2	0.413 ppb	0.080 ppb	56.587 ppb	1.717 ppb	83.412 %	0.031 ppb	0.053 ppb	89.054 %	0.988 ppb
Concentration per Run 3	0.386 ppb	0.185 ppb	55.293 ppb	1.820 ppb	81.453 %	0.017 ppb	0.047 ppb	84.051 %	1.103 ppb
Concentration RSD	14.8 %	42.8 %	1.7 %	3.5 %	1.7 %	30.7 %	14.6 %	3.7 %	9.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	14.775 ppb	91.436 %	93.997 %	0.029 ppb	1.807 ppb	48.623 %
Concentration per Run 1	15.004 ppb	92.204 %	94.992 %	0.013 ppb	1.780 ppb	59.422 %
Concentration per Run 2	14.589 ppb	91.536 %	94.528 %	0.039 ppb	1.802 ppb	44.425 %
Concentration per Run 3	14.734 ppb	90.569 %	92.471 %	0.036 ppb	1.838 ppb	42.022 %
Concentration RSD	1.4 %	0.9 %	1.4 %	48.4 %	1.6 %	19.4 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	132	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962132-3d10 2008TL	Rack	2		
Analysis started at:	8/23/2024 5:14:40 PM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.006 %	84.117 %	5.206 ppb	1,407.956 ppb	1,112.084 ppb	217.194 ppb	1,237.943 ppb	1,840.140 ppb	85.676 %
Concentration per Run 1	91.602 %	86.863 %	5.210 ppb	1,361.157 ppb	1,057.082 ppb	219.431 ppb	1,211.956 ppb	1,898.948 ppb	85.409 %
Concentration per Run 2	91.174 %	82.941 %	5.169 ppb	1,424.143 ppb	1,150.439 ppb	212.408 ppb	1,278.818 ppb	1,810.727 ppb	85.677 %
Concentration per Run 3	90.243 %	82.549 %	5.238 ppb	1,438.568 ppb	1,128.732 ppb	219.745 ppb	1,223.055 ppb	1,810.744 ppb	85.943 %
Concentration RSD	0.8 %	2.8 %	0.7 %	2.9 %	4.4 %	1.9 %	2.9 %	2.8 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.148 ppb	19.767 ppb	54.850 ppb	122.358 ppb	48.791 ppb	48.715 ppb	34.078 ppb	60.092 ppb	88.913 %
Concentration per Run 1	48.324 ppb	19.047 ppb	53.443 ppb	121.264 ppb	46.406 ppb	45.476 ppb	32.312 ppb	57.600 ppb	93.801 %
Concentration per Run 2	52.118 ppb	20.432 ppb	56.346 ppb	121.229 ppb	51.216 ppb	51.325 ppb	35.338 ppb	62.759 ppb	83.718 %
Concentration per Run 3	50.001 ppb	19.823 ppb	54.762 ppb	124.582 ppb	48.751 ppb	49.344 ppb	34.584 ppb	59.918 ppb	89.219 %
Concentration RSD	3.8 %	3.5 %	2.6 %	1.6 %	4.9 %	6.1 %	4.6 %	4.3 %	5.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.149 ppb	12.551 ppb	101.329 ppb	99.633 ppb	85.621 %	4.946 ppb	5.433 ppb	92.049 %	44.463 ppb
Concentration per Run 1	11.770 ppb	12.457 ppb	100.884 ppb	95.876 ppb	87.354 %	4.786 ppb	5.223 ppb	96.092 %	42.429 ppb
Concentration per Run 2	13.156 ppb	12.531 ppb	101.853 ppb	101.167 ppb	85.361 %	4.924 ppb	5.526 ppb	89.293 %	45.320 ppb
Concentration per Run 3	11.521 ppb	12.664 ppb	101.249 ppb	101.855 ppb	84.149 %	5.126 ppb	5.549 ppb	90.764 %	45.642 ppb
Concentration RSD	7.3 %	0.8 %	0.5 %	3.3 %	1.9 %	3.5 %	3.3 %	3.9 %	4.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	207.220 ppb	94.404 %	96.752 %	12.214 ppb	54.437 ppb	49.827 %
Concentration per Run 1	204.845 ppb	95.232 %	98.696 %	11.805 ppb	52.564 ppb	60.217 %
Concentration per Run 2	209.972 ppb	93.687 %	95.947 %	12.317 ppb	54.629 ppb	45.256 %
Concentration per Run 3	206.845 ppb	94.293 %	95.611 %	12.519 ppb	56.119 ppb	44.008 %
Concentration RSD	1.2 %	0.8 %	1.7 %	3.0 %	3.3 %	18.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	133	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1962132-4 2008TL	Rack	2		
Analysis started at:	8/23/2024 5:19:09 PM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.516 %	87.255 %	0.006 ppb	2,987.167 ppb	675.355 ppb	62.860 ppb	1,644.429 ppb	8,505.512 ppb	83.003 %
Concentration per Run 1	88.468 %	77.255 %	0.006 ppb	3,229.661 ppb	723.172 ppb	65.260 ppb	1,737.040 ppb	8,734.350 ppb	82.871 %
Concentration per Run 2	88.851 %	93.333 %	0.001 ppb	2,811.010 ppb	638.948 ppb	60.450 ppb	1,580.357 ppb	8,317.914 ppb	83.914 %
Concentration per Run 3	88.228 %	91.176 %	0.011 ppb	2,920.831 ppb	663.943 ppb	62.868 ppb	1,615.891 ppb	8,464.273 ppb	82.224 %
Concentration RSD	0.4 %	10.0 %	84.8 %	7.3 %	6.4 %	3.8 %	5.0 %	2.5 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.858 ppb	0.479 ppb	34.959 ppb	240.819 ppb	0.119 ppb	0.849 ppb	103.459 ppb	96.486 ppb	85.279 %
Concentration per Run 1	0.896 ppb	0.592 ppb	36.274 ppb	238.801 ppb	0.132 ppb	0.961 ppb	105.502 ppb	98.741 ppb	82.562 %
Concentration per Run 2	0.789 ppb	0.436 ppb	34.181 ppb	232.388 ppb	0.139 ppb	0.783 ppb	102.047 ppb	94.242 ppb	86.967 %
Concentration per Run 3	0.888 ppb	0.409 ppb	34.420 ppb	251.268 ppb	0.086 ppb	0.803 ppb	102.829 ppb	96.474 ppb	86.308 %
Concentration RSD	6.9 %	20.6 %	3.3 %	4.0 %	23.9 %	11.5 %	1.8 %	2.3 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.462 ppb	0.159 ppb	55.179 ppb	1.837 ppb	83.170 %	0.011 ppb	0.056 ppb	88.652 %	1.315 ppb
Concentration per Run 1	0.561 ppb	0.114 ppb	55.266 ppb	1.687 ppb	81.891 %	0.011 ppb	0.073 ppb	86.681 %	1.213 ppb
Concentration per Run 2	0.386 ppb	0.147 ppb	54.756 ppb	1.822 ppb	83.850 %	0.010 ppb	0.047 ppb	88.727 %	1.285 ppb
Concentration per Run 3	0.437 ppb	0.216 ppb	55.516 ppb	2.000 ppb	83.768 %	0.012 ppb	0.048 ppb	90.548 %	1.447 ppb
Concentration RSD	19.5 %	33.0 %	0.7 %	8.5 %	1.3 %	8.9 %	26.5 %	2.2 %	9.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.373 ppb	92.077 %	94.245 %	0.014 ppb	1.200 ppb	47.918 %
Concentration per Run 1	12.321 ppb	90.258 %	91.660 %	0.003 ppb	1.188 ppb	57.245 %
Concentration per Run 2	12.303 ppb	93.176 %	95.569 %	0.022 ppb	1.199 ppb	44.521 %
Concentration per Run 3	12.495 ppb	92.797 %	95.507 %	0.018 ppb	1.212 ppb	41.987 %
Concentration RSD	0.9 %	1.7 %	2.4 %	71.7 %	1.0 %	17.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	134	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/23/2024 5:23:38 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.352 %	89.935 %	59.483 ppb	5,782.333 ppb	5,798.930 ppb	59.399 ppb	5,706.187 ppb	5,634.447 ppb	86.289 %
Concentration per Run 1	89.675 %	86.667 %	59.478 ppb	5,823.444 ppb	5,883.405 ppb	58.051 ppb	5,775.409 ppb	5,518.779 ppb	86.511 %
Concentration per Run 2	89.220 %	95.882 %	59.395 ppb	5,569.987 ppb	5,608.470 ppb	56.848 ppb	5,438.155 ppb	5,483.576 ppb	86.203 %
Concentration per Run 3	89.162 %	87.255 %	59.576 ppb	5,953.566 ppb	5,904.915 ppb	63.297 ppb	5,904.997 ppb	5,900.987 ppb	86.154 %
Recovery Percentage 1			99.138 %	96.372 %	96.649 %	98.998 %	95.103 %	93.907 %	
Concentration RSD	0.3 %	5.7 %	0.2 %	3.4 %	2.9 %	5.8 %	4.2 %	4.1 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.349 ppb	57.680 ppb	59.603 ppb	5,683.621 ppb	57.225 ppb	57.430 ppb	57.554 ppb	58.804 ppb	85.692 %
Concentration per Run 1	57.950 ppb	57.146 ppb	58.849 ppb	5,600.705 ppb	56.077 ppb	56.479 ppb	57.348 ppb	57.808 ppb	86.555 %
Concentration per Run 2	57.425 ppb	56.880 ppb	59.087 ppb	5,705.478 ppb	57.764 ppb	57.383 ppb	56.885 ppb	58.806 ppb	85.405 %
Concentration per Run 3	59.672 ppb	59.014 ppb	60.872 ppb	5,744.679 ppb	57.833 ppb	58.427 ppb	58.430 ppb	59.797 ppb	85.115 %
Recovery Percentage 1	97.248 %	96.134 %	99.338 %	94.727 %	95.375 %	95.716 %	95.924 %	98.006 %	
Concentration RSD	2.0 %	2.0 %	1.9 %	1.3 %	1.7 %	1.7 %	1.4 %	1.7 %	0.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.085 ppb	59.713 ppb	57.722 ppb	59.578 ppb	83.040 %	60.152 ppb	60.990 ppb	86.897 %	56.302 ppb
Concentration per Run 1	57.394 ppb	60.359 ppb	57.327 ppb	59.456 ppb	82.524 %	59.471 ppb	60.788 ppb	87.008 %	55.265 ppb
Concentration per Run 2	58.696 ppb	60.183 ppb	57.244 ppb	59.038 ppb	83.873 %	60.283 ppb	60.622 ppb	86.462 %	57.099 ppb
Concentration per Run 3	58.166 ppb	58.596 ppb	58.596 ppb	60.239 ppb	82.722 %	60.703 ppb	61.560 ppb	87.221 %	56.542 ppb
Recovery Percentage 1	96.808 %	99.521 %	96.204 %	99.296 %		100.254 %	101.651 %		93.836 %
Concentration RSD	1.1 %	1.6 %	1.3 %	1.0 %	0.9 %	1.0 %	0.8 %	0.5 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.486 ppb	92.030 %	95.367 %	59.041 ppb	60.406 ppb	48.340 %
Concentration per Run 1	60.170 ppb	91.163 %	93.973 %	59.009 ppb	60.924 ppb	58.394 %
Concentration per Run 2	61.659 ppb	92.042 %	95.596 %	58.884 ppb	60.297 ppb	44.371 %
Concentration per Run 3	62.628 ppb	92.885 %	96.533 %	59.230 ppb	59.997 ppb	42.254 %
Recovery Percentage 1	102.476 %			98.402 %	100.676 %	
Concentration RSD	2.0 %	0.9 %	1.4 %	0.3 %	0.8 %	18.1 %

Alpha ICPMSQ2 Data with SRD

8/23/2024 5:33:52 PM

Analysis index:	135	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/23/2024 5:28:10 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.700 %	83.921 %	0.047 ppb	26.320 ppb	2.705 ppb	-0.255 ppb	1.043 ppb	4.056 ppb	82.802 %
Concentration per Run 1	90.971 %	84.117 %	0.053 ppb	26.765 ppb	3.001 ppb	-0.085 ppb	5.222 ppb	10.726 ppb	84.220 %
Concentration per Run 2	89.212 %	80.980 %	0.041 ppb	24.377 ppb	3.564 ppb	-0.377 ppb	-0.008 ppb	-2.789 ppb	83.271 %
Concentration per Run 3	88.916 %	86.666 %	0.046 ppb	27.819 ppb	1.551 ppb	-0.305 ppb	-2.086 ppb	4.229 ppb	80.914 %
Recovery Percentage 1			9.317 %	26.320 %	3.865 %	-2.554 %	1.043 %	4.056 %	
Concentration RSD	1.2 %	3.4 %	12.2 %	6.7 %	38.4 %	59.6 %	361.2 %	166.7 %	2.1 %

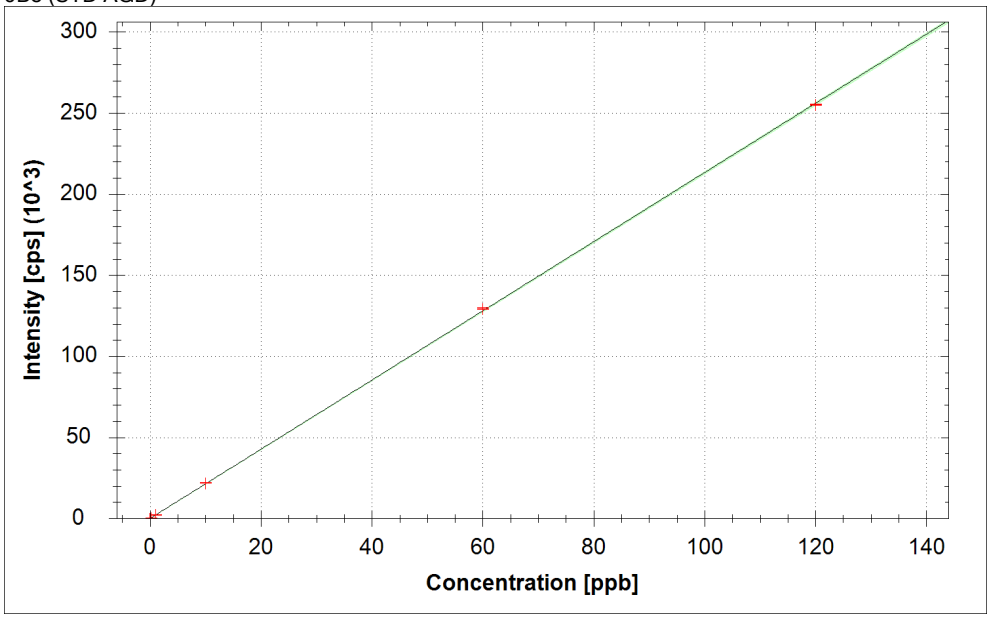
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	0.021 ppb	0.048 ppb	7.559 ppb	0.043 ppb	0.006 ppb	0.061 ppb	-0.163 ppb	83.699 %
Concentration per Run 1	-0.032 ppb	0.021 ppb	0.073 ppb	5.036 ppb	0.029 ppb	-0.021 ppb	0.121 ppb	-0.079 ppb	81.805 %
Concentration per Run 2	0.023 ppb	0.007 ppb	0.085 ppb	8.647 ppb	0.029 ppb	0.047 ppb	0.039 ppb	-0.210 ppb	83.497 %
Concentration per Run 3	0.025 ppb	0.034 ppb	-0.014 ppb	8.994 ppb	0.070 ppb	-0.007 ppb	0.023 ppb	-0.201 ppb	85.794 %
Recovery Percentage 1	0.113 %	2.076 %	4.808 %	15.118 %	8.500 %	0.310 %	6.105 %	-3.265 %	
Concentration RSD	573.3 %	63.6 %	111.6 %	29.0 %	55.2 %	578.1 %	86.3 %	44.7 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.083 ppb	0.088 ppb	0.050 ppb	0.320 ppb	84.720 %	0.040 ppb	0.032 ppb	89.448 %	0.876 ppb
Concentration per Run 1	0.132 ppb	0.123 ppb	0.057 ppb	0.261 ppb	84.021 %	0.053 ppb	0.032 ppb	88.628 %	0.829 ppb
Concentration per Run 2	0.058 ppb	-0.004 ppb	0.054 ppb	0.305 ppb	85.846 %	0.035 ppb	0.030 ppb	90.388 %	0.867 ppb
Concentration per Run 3	0.059 ppb	0.145 ppb	0.041 ppb	0.393 ppb	84.292 %	0.033 ppb	0.034 ppb	89.328 %	0.933 ppb
Recovery Percentage 1	16.580 %	1.764 %	0.505 %	15.985 %		10.041 %	16.081 %		21.908 %
Concentration RSD	51.1 %	90.9 %	17.2 %	21.1 %	1.2 %	28.0 %	7.1 %	1.0 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.023 ppb	92.649 %	94.794 %	0.281 ppb	0.037 ppb	47.704 %
Concentration per Run 1	0.019 ppb	90.779 %	92.538 %	0.232 ppb	0.046 ppb	58.137 %
Concentration per Run 2	-0.010 ppb	93.055 %	95.622 %	0.323 ppb	0.034 ppb	41.815 %
Concentration per Run 3	0.059 ppb	94.114 %	96.222 %	0.289 ppb	0.032 ppb	43.161 %
Recovery Percentage 1	4.570 %			28.117 %	3.739 %	
Concentration RSD	151.3 %	1.8 %	2.1 %	16.3 %	20.8 %	19.0 %

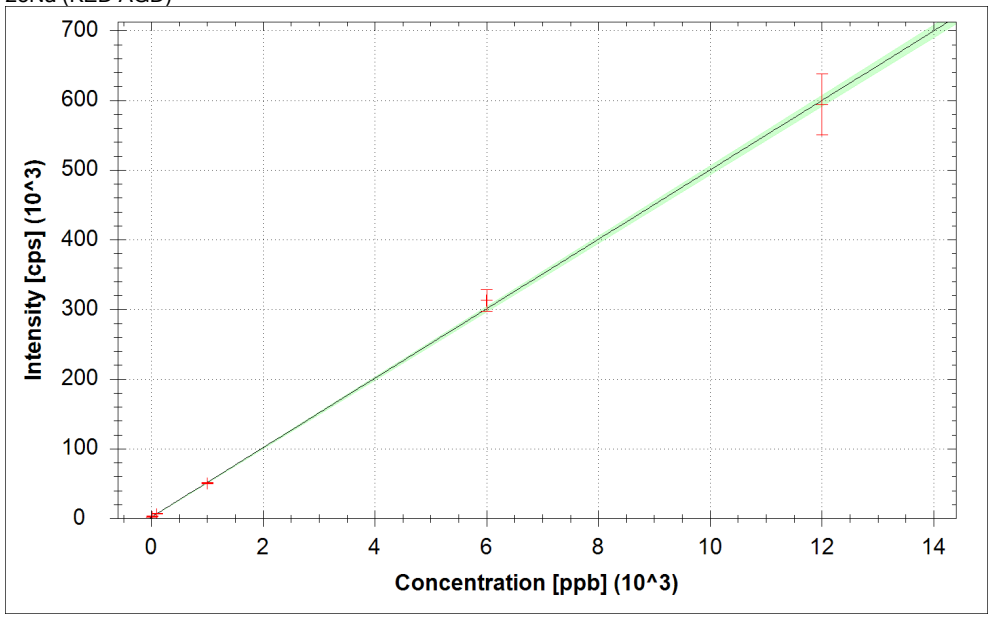
Calibration Curves:

9Be (STD AGD)



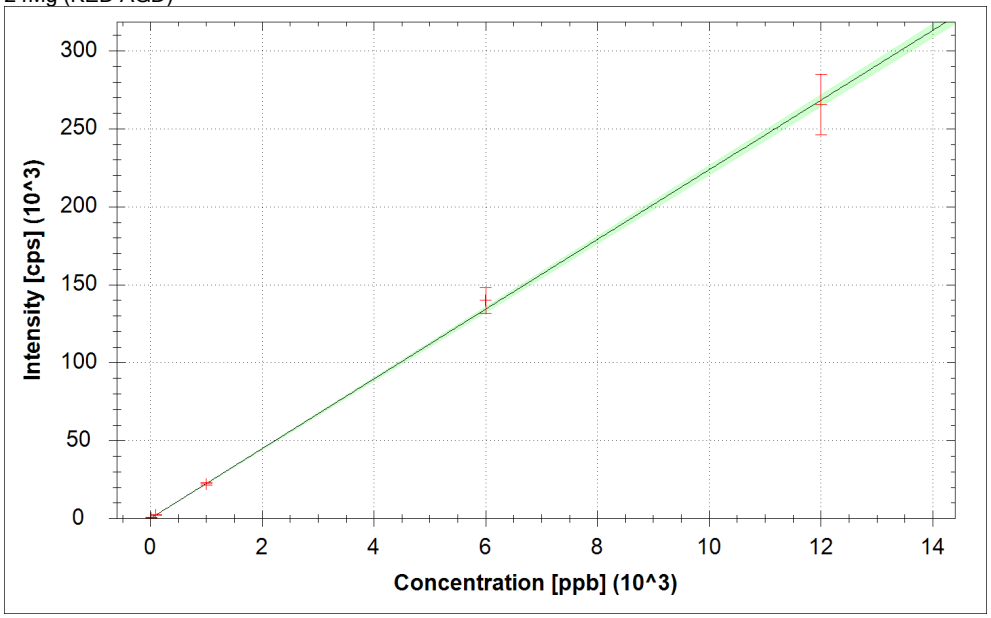
f(x) = 2132.3409*x + 31.1132
R² = 0.9999
BEC = 0.015 ppb
LoD = 0.0133 ppb

23Na (KED AGD)



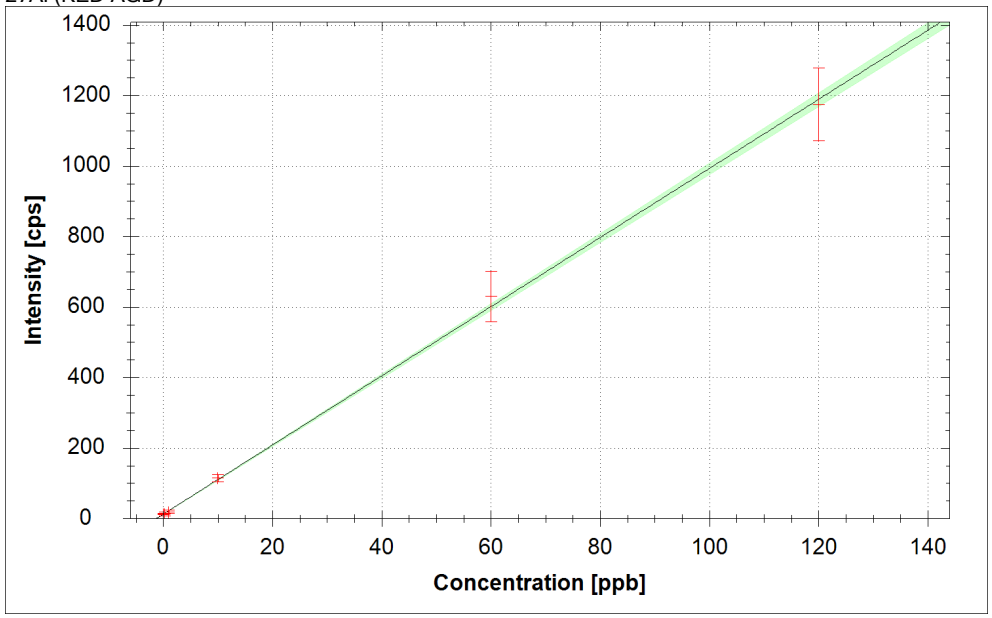
f(x) = 49.8177*x + 1837.9542
R² = 0.9994
BEC = 36.894 ppb
LoD = 7.9587 ppb

24Mg (KED AGD)



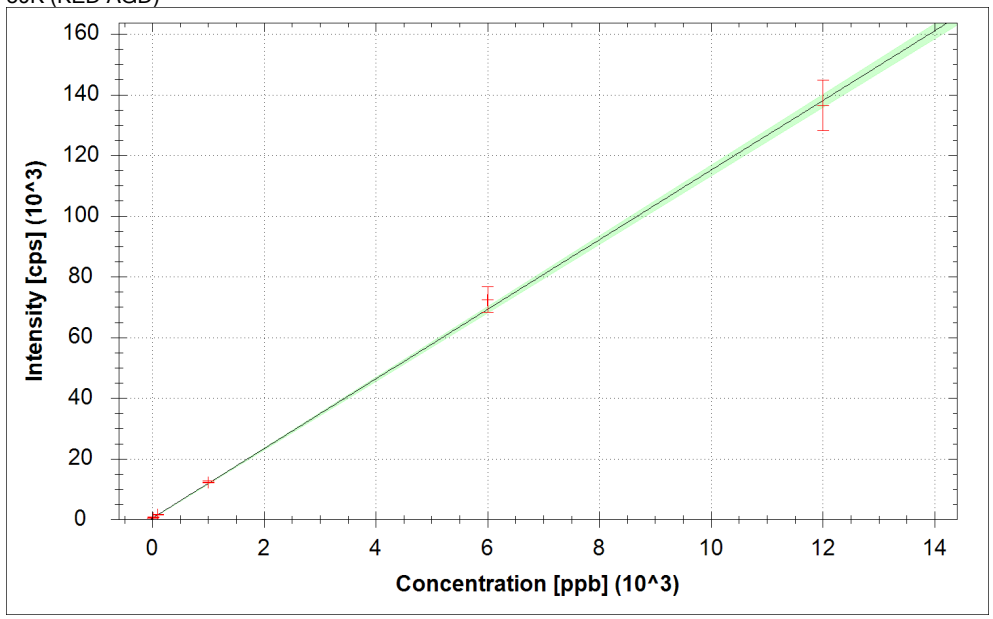
f(x) = 22.3474*x + 46.7387
R² = 0.9993
BEC = 2.091 ppb
LoD = 1.5938 ppb

27Al (KED AGD)



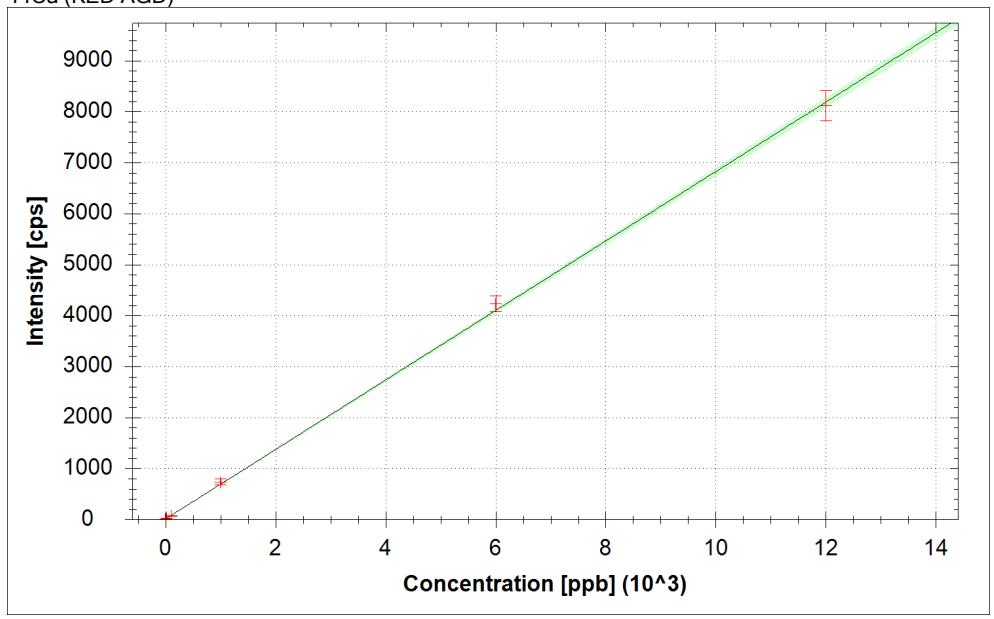
f(x) = 9.8013*x + 12.2674
R² = 0.9991
BEC = 1.252 ppb
LoD = 0.6078 ppb

39K (KED AGD)



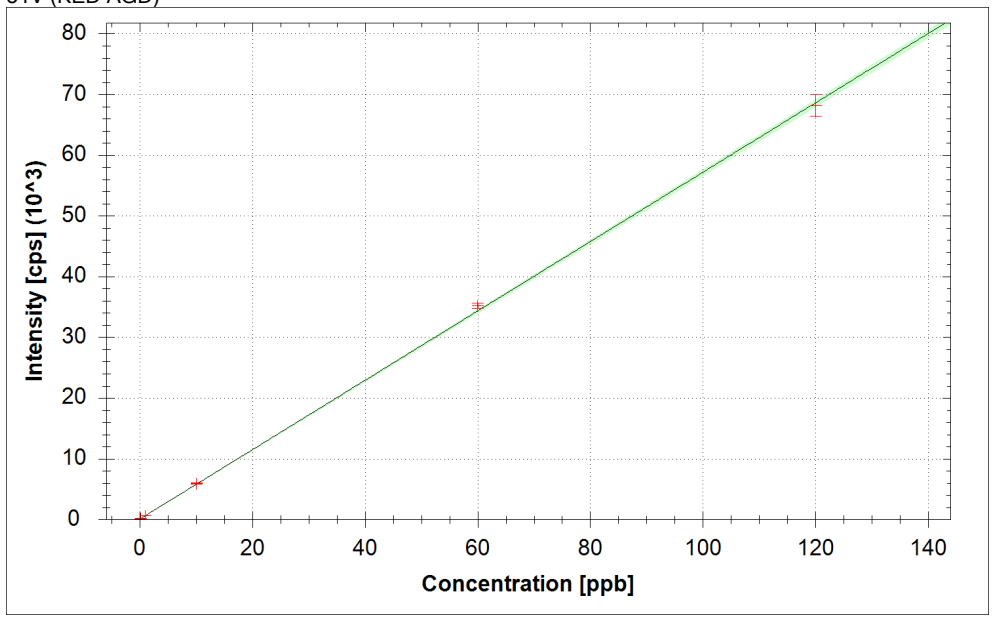
f(x) = 11.4690*x + 401.3415
R² = 0.9991
BEC = 34.994 ppb
LoD = 10.5640 ppb

44Ca (KED AGD)



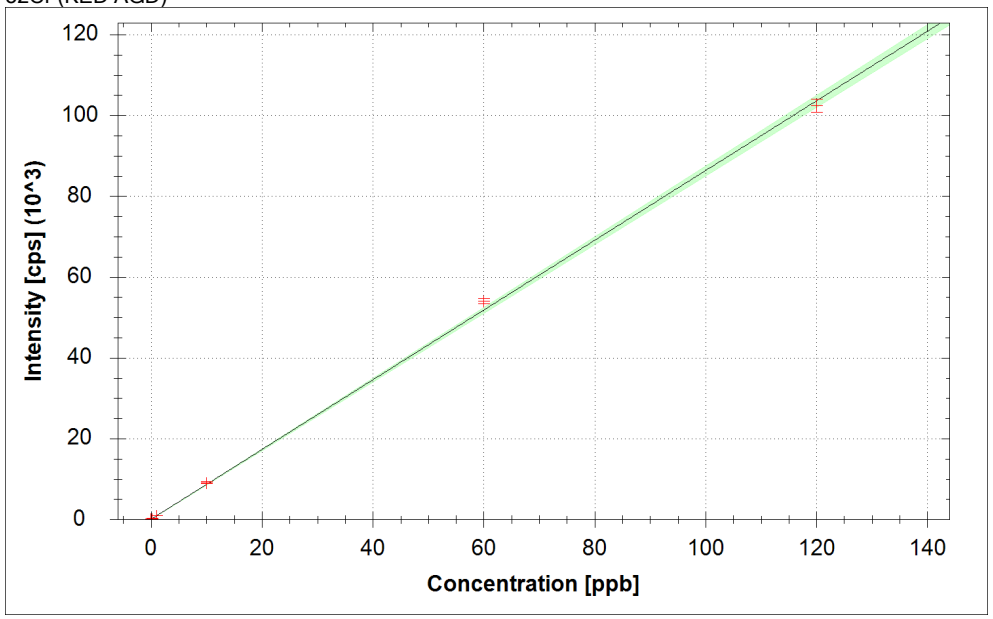
f(x) = 0.6813*x + 9.1953
R² = 0.9996
BEC = 13.496 ppb
LoD = 17.1912 ppb

51V (KED AGD)



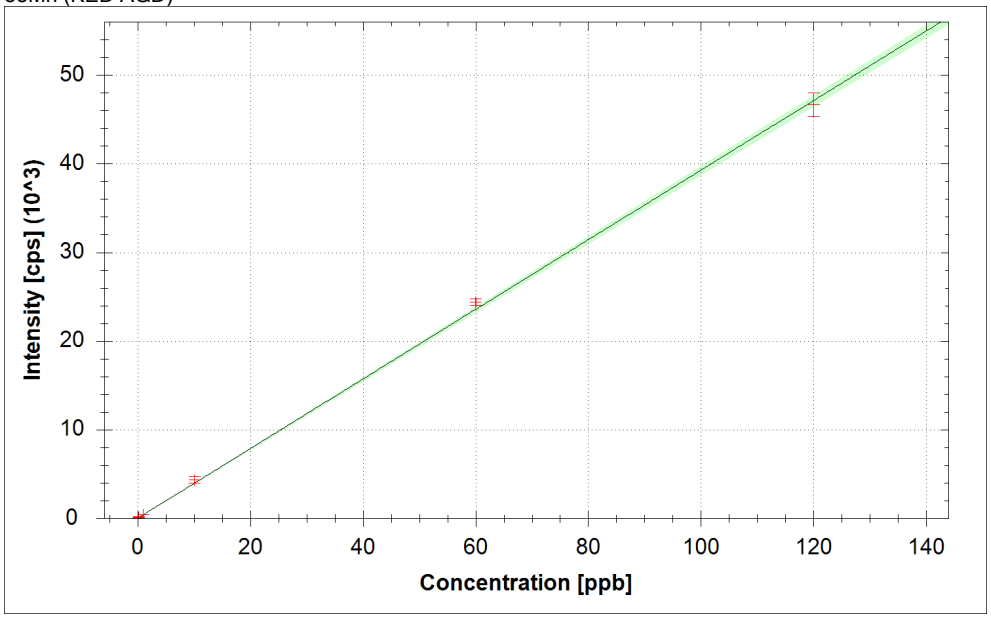
f(x) = 570.8662*x + 71.1988
R² = 0.9998
BEC = 0.125 ppb
LoD = 0.0580 ppb

52Cr (KED AGD)



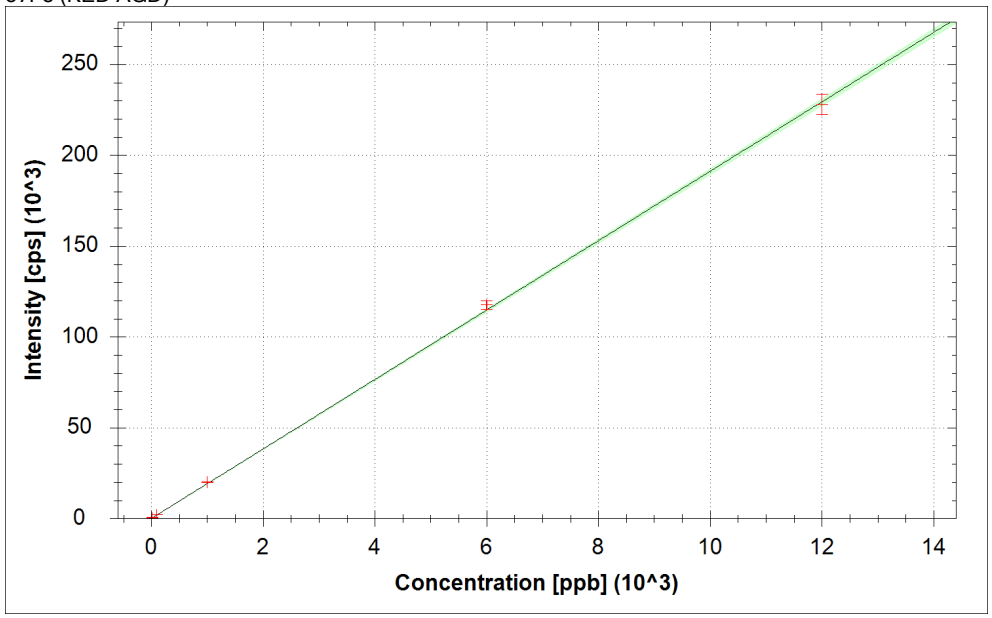
f(x) = 862.4903*x + 65.8192
R² = 0.9993
BEC = 0.076 ppb
LoD = 0.0718 ppb

55Mn (KED AGD)



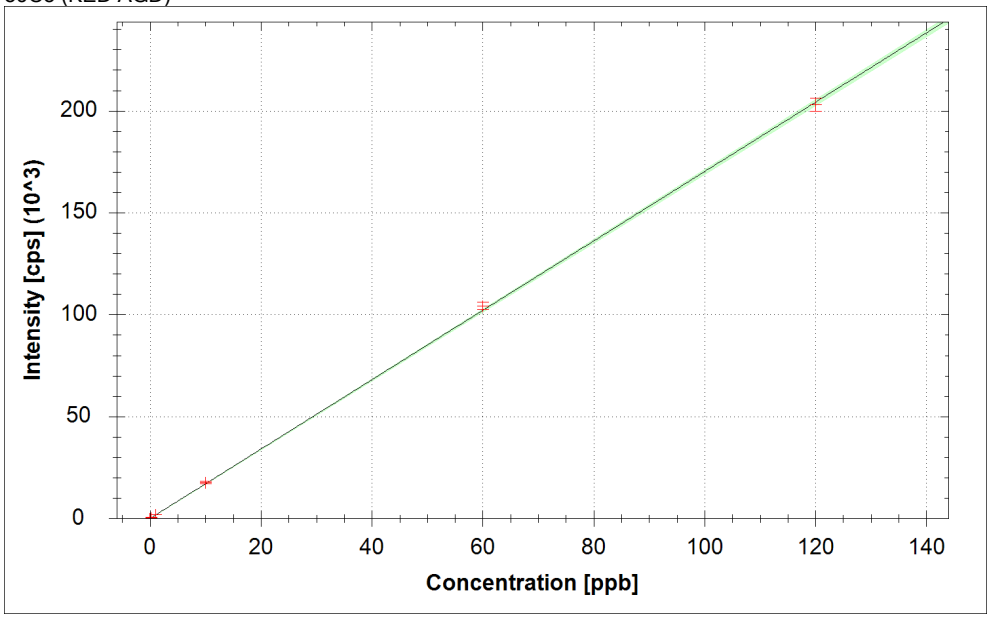
f(x) = 392.1377*x + 39.9889
R² = 0.9995
BEC = 0.102 ppb
LoD = 0.0876 ppb

57Fe (KED AGD)



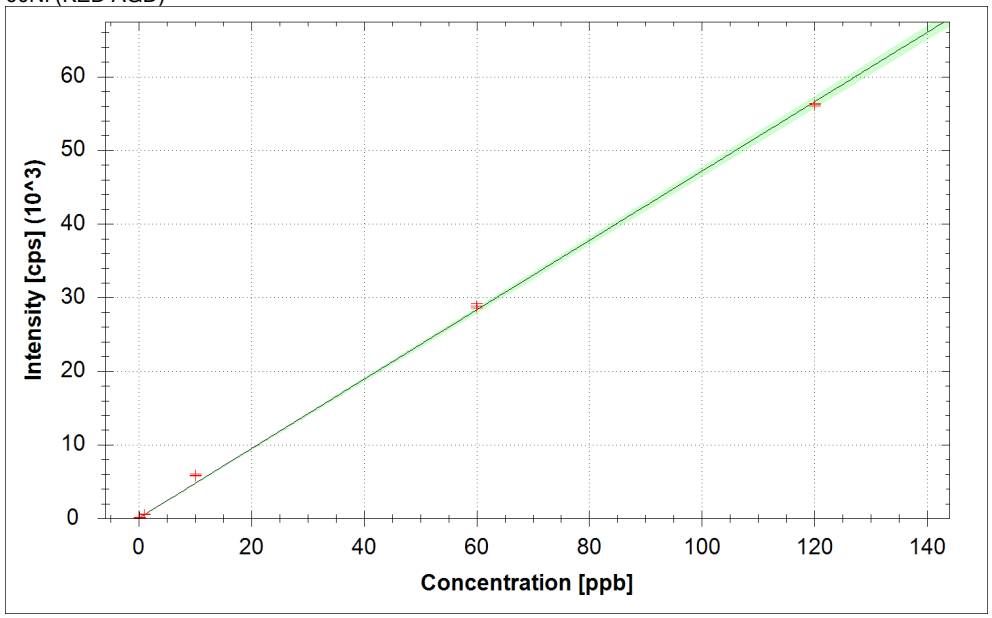
f(x) = 19.1070*x + 31.1411
R² = 0.9998
BEC = 1.630 ppb
LoD = 2.4279 ppb

59Co (KED AGD)



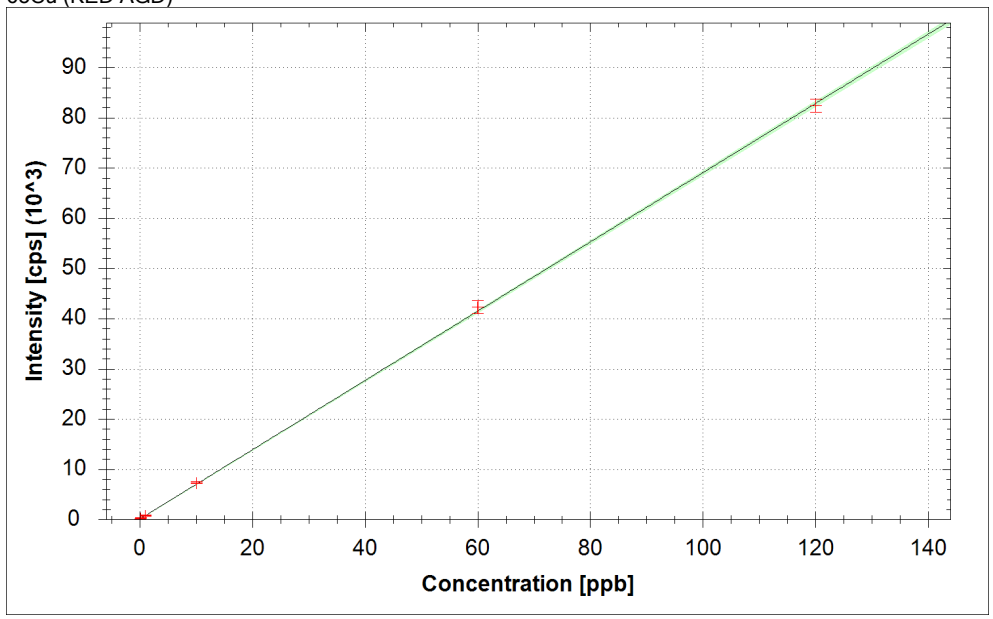
f(x) = 1701.1339*x + 2.2484
R² = 0.9998
BEC = 0.001 ppb
LoD = 0.0069 ppb

60Ni (KED AGD)



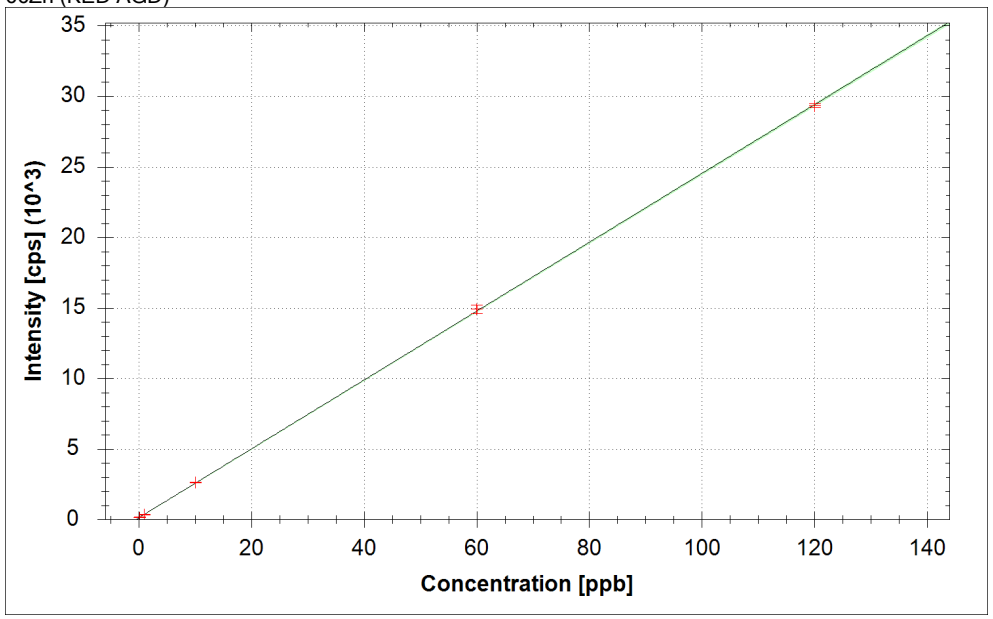
f(x) = 470.9902*x + 55.5220
R² = 0.9993
BEC = 0.118 ppb
LoD = 0.0631 ppb

65Cu (KED AGD)



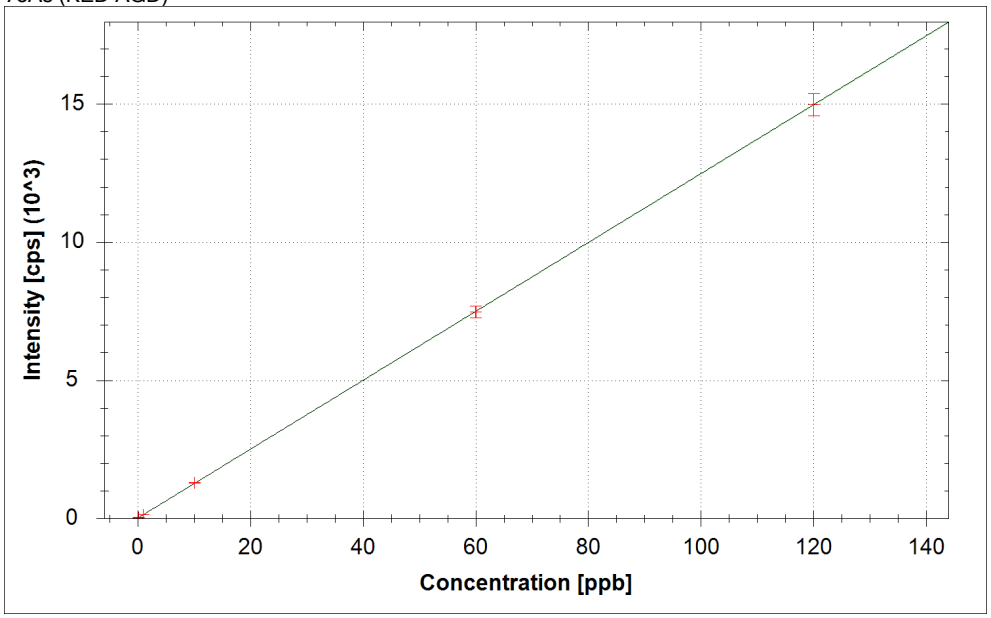
f(x) = 689.4723*x + 97.7729
R² = 0.9998
BEC = 0.142 ppb
LoD = 0.0157 ppb

66Zn (KED AGD)



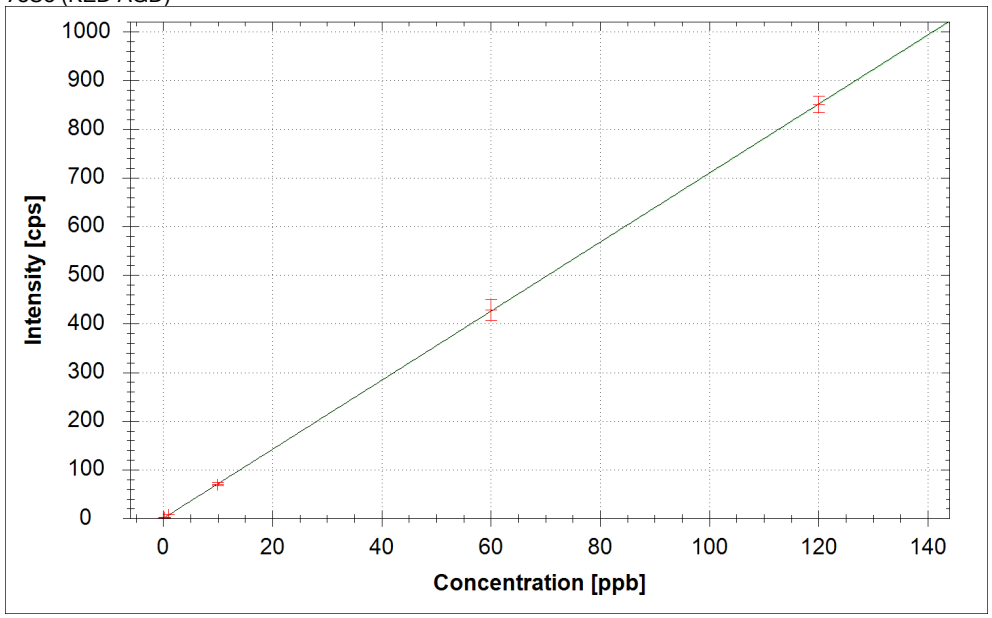
f(x) = 243.9667*x + 125.3575
R² = 1.0000
BEC = 0.514 ppb
LoD = 0.2603 ppb

75As (KED AGD)



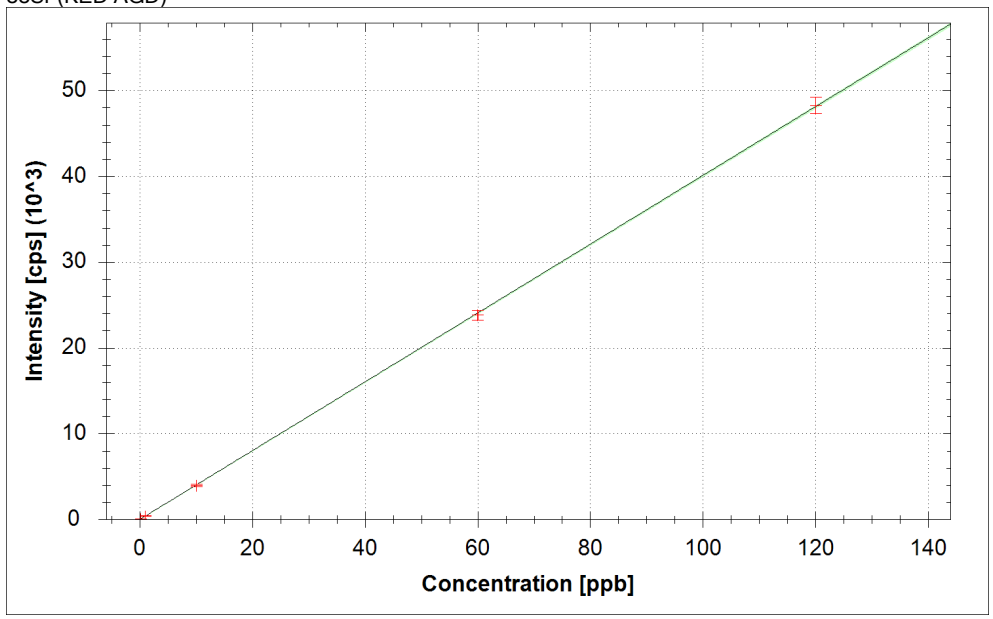
f(x) = 124.6168*x + 14.7506
R² = 1.0000
BEC = 0.118 ppb
LoD = 0.1021 ppb

78Se (KED AGD)



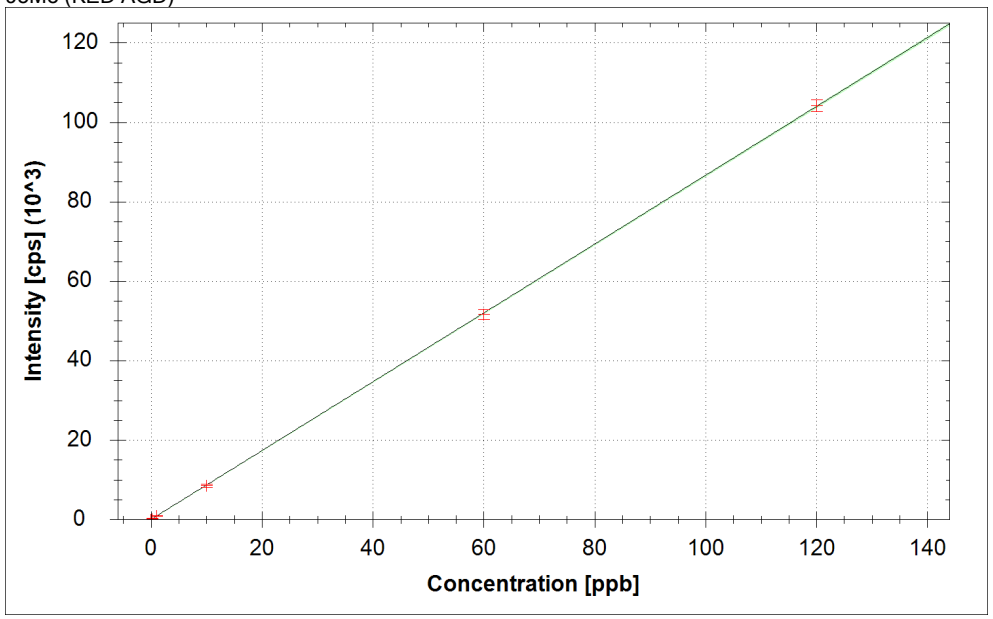
f(x) = 7.0945*x + 0.1467
R² = 1.0000
BEC = 0.021 ppb
LoD = 0.0768 ppb

88Sr (KED AGD)



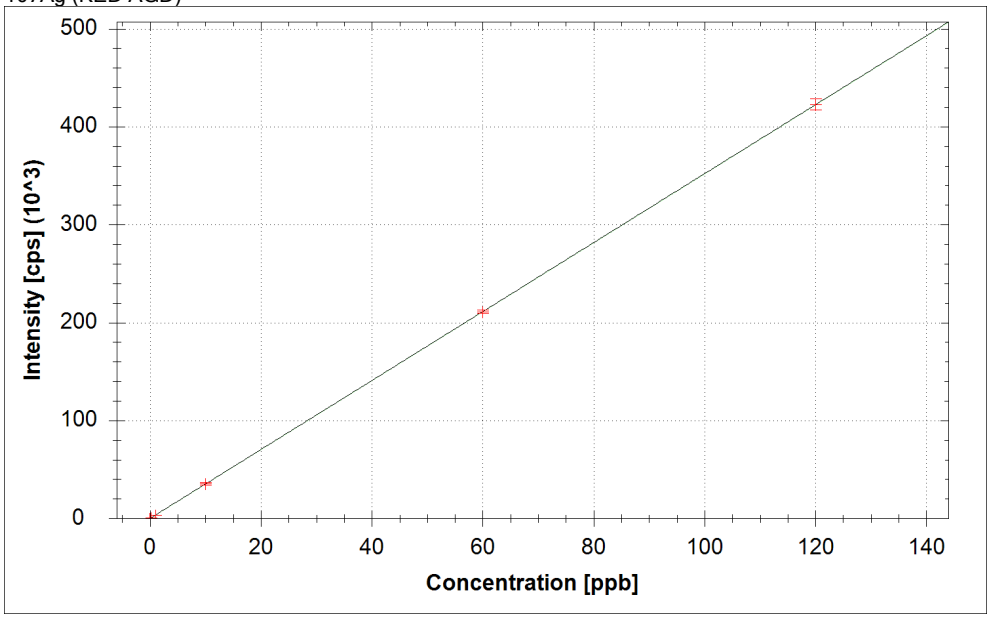
f(x) = 400.8927*x + 8.8931
R² = 1.0000
BEC = 0.022 ppb
LoD = 0.0096 ppb

95Mo (KED AGD)



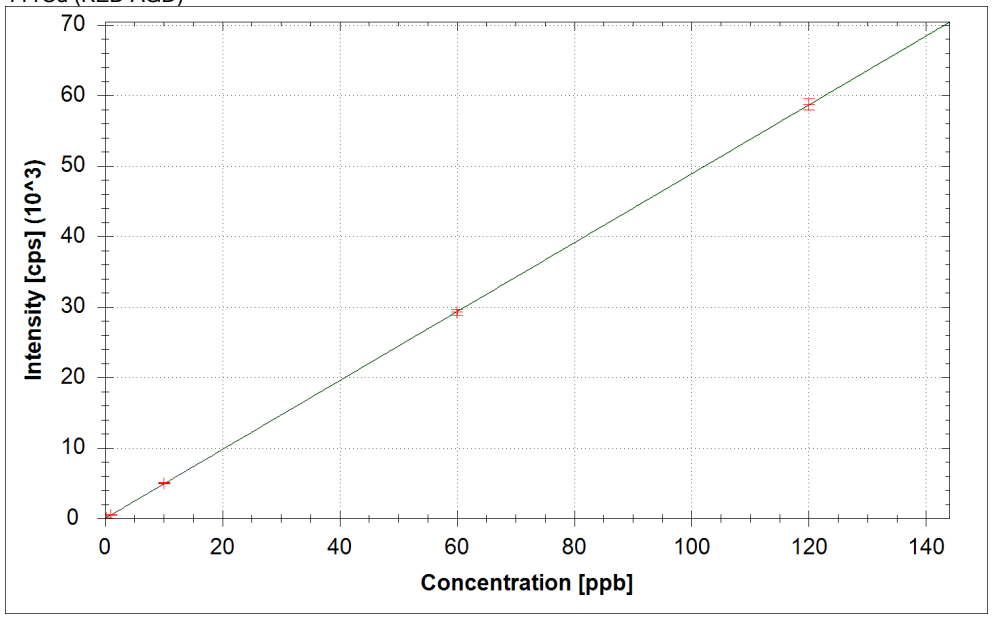
f(x) = 866.1211*x + 13.3718
R² = 1.0000
BEC = 0.015 ppb
LoD = 0.0236 ppb

107Ag (KED AGD)



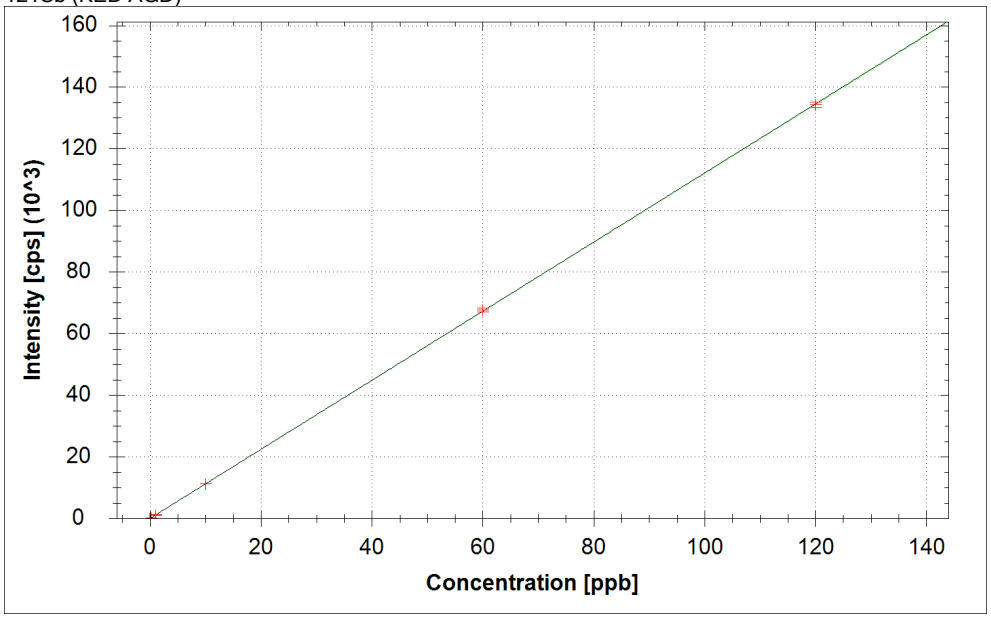
f(x) = 3519.7493*x + 13.3372
R² = 1.0000
BEC = 0.004 ppb
LoD = 0.0002 ppb

111Cd (KED AGD)



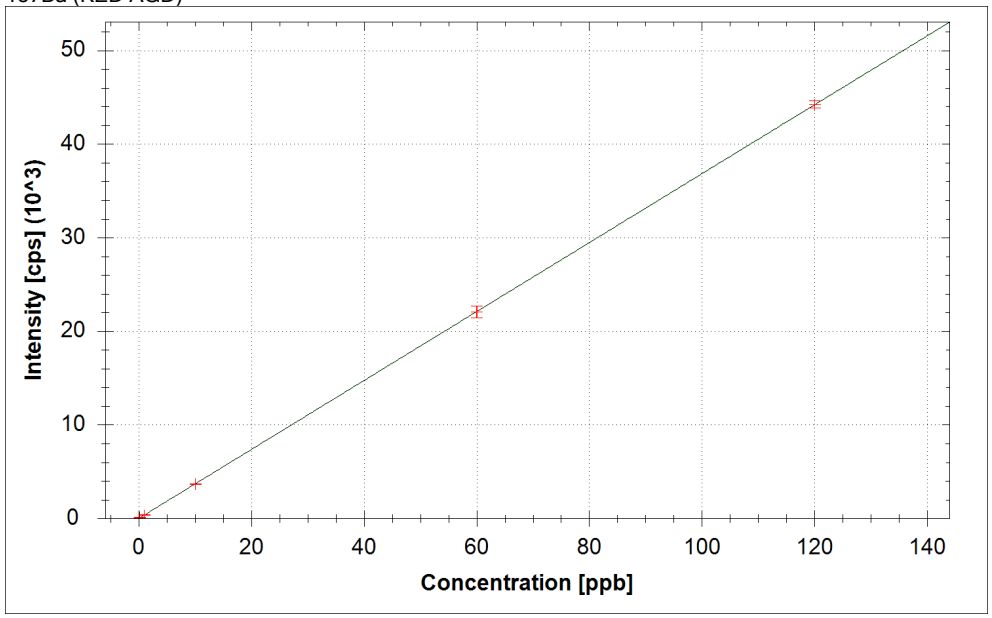
f(x) = 488.7436*x
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0000 ppb

121Sb (KED AGD)



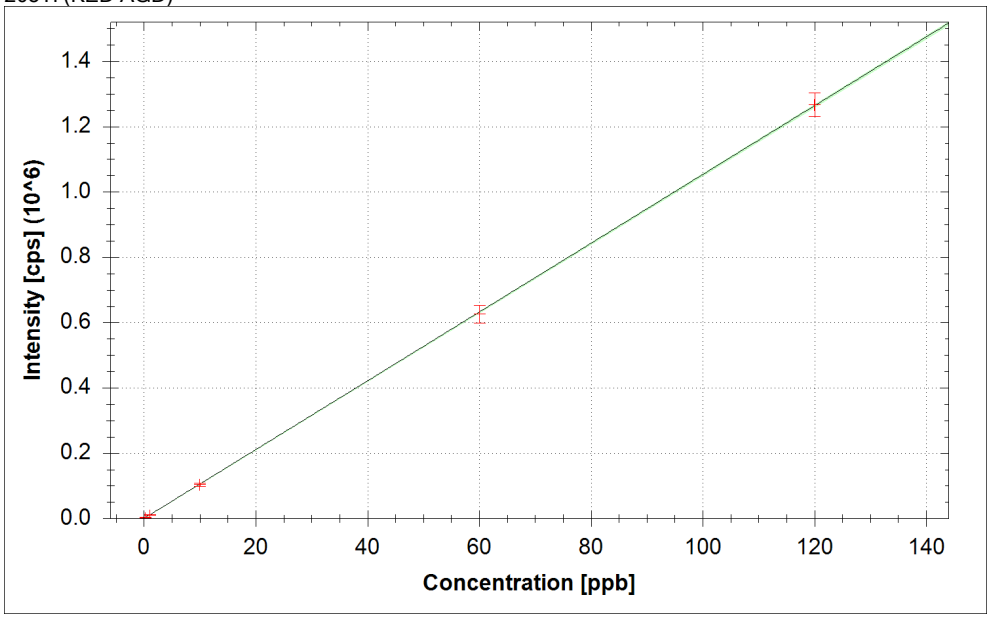
f(x) = 1120.7079*x + 16.0911
R² = 1.0000
BEC = 0.014 ppb
LoD = 0.0141 ppb

137Ba (KED AGD)



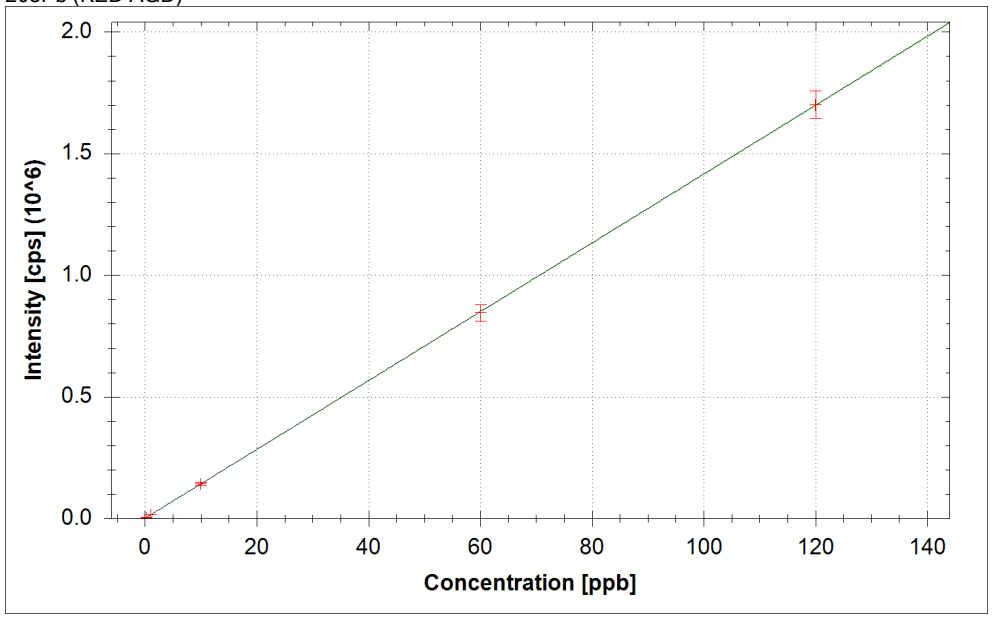
f(x) = 368.1290*x + 13.4551
R² = 1.0000
BEC = 0.037 ppb
LoD = 0.0839 ppb

205Tl (KED AGD)



f(x) = 10528.3034*x + 131.5015
R² = 1.0000
BEC = 0.012 ppb
LoD = 0.0197 ppb

208Pb (KED AGD)



f(x) = 14148.3396*x + 481.1511
R² = 1.0000
BEC = 0.034 ppb
LoD = 0.0103 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 5:08:01 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	97.883 %	0.5 %		0.000 %
6Li (KED AGD)	94.175 %	13.0 %		0.000 %
9Be (STD AGD)	0.198 ppb	3.6 %	0.200 ppb	0.878 %
23Na (KED AGD)	19.058 ppb	26.8 %	20.000 ppb	4.710 %
24Mg (KED AGD)	19.594 ppb	23.6 %	20.000 ppb	2.030 %
27Al (KED AGD)	-0.023 ppb	2,279.0 %	0.200 ppb	111.748 %
39K (KED AGD)	24.343 ppb	16.8 %	20.000 ppb	21.715 %
44Ca (KED AGD)	17.606 ppb	13.0 %	20.000 ppb	11.971 %
45Sc (STD AGD)	97.258 %	0.2 %		0.000 %
45Sc (KED AGD)	100.383 %	2.2 %		0.000 %
51V (KED AGD)	0.180 ppb	10.8 %	0.200 ppb	9.986 %
52Cr (KED AGD)	0.151 ppb	15.7 %	0.200 ppb	24.460 %
55Mn (KED AGD)	0.256 ppb	25.4 %	0.200 ppb	28.001 %
57Fe (KED AGD)	21.126 ppb	13.6 %	20.000 ppb	5.630 %
59Co (KED AGD)	0.199 ppb	22.8 %	0.200 ppb	0.358 %
60Ni (KED AGD)	0.137 ppb	56.6 %	0.200 ppb	31.530 %
65Cu (KED AGD)	0.260 ppb	16.0 %	0.200 ppb	30.116 %
66Zn (KED AGD)	0.088 ppb	28.7 %	0.200 ppb	56.006 %
74Ge (KED AGD)	102.622 %	3.0 %		0.000 %
75As (KED AGD)	0.207 ppb	38.5 %	0.200 ppb	3.516 %
78Se (KED AGD)	0.222 ppb	30.7 %	0.200 ppb	11.145 %
88Sr (KED AGD)	0.192 ppb	3.0 %	0.200 ppb	3.974 %
95Mo (KED AGD)	0.198 ppb	21.8 %	0.200 ppb	1.230 %
103Rh (KED AGD)	100.993 %	3.0 %		0.000 %
107Ag (KED AGD)	0.195 ppb	1.5 %	0.200 ppb	2.466 %
111Cd (KED AGD)	0.205 ppb	10.0 %	0.200 ppb	2.321 %
115In (KED AGD)	100.508 %	4.0 %		0.000 %
121Sb (KED AGD)	0.195 ppb	1.8 %	0.200 ppb	2.345 %
137Ba (KED AGD)	0.204 ppb	27.7 %	0.200 ppb	2.125 %
159Tb (KED AGD)	101.646 %	2.0 %		0.000 %
175Lu (KED AGD)	100.864 %	3.0 %		0.000 %
205Tl (KED AGD)	0.198 ppb	13.9 %	0.200 ppb	1.216 %
208Pb (KED AGD)	0.210 ppb	6.8 %	0.200 ppb	5.218 %
209Bi (KED AGD)	106.340 %	5.6 %		0.000 %

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 5:12:28 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	98.342 %	0.6 %		0.000 %
6Li (KED AGD)	101.359 %	7.2 %		0.000 %
9Be (STD AGD)	0.989 ppb	1.5 %	1.000 ppb	1.150 %
23Na (KED AGD)	96.792 ppb	8.5 %	100.000 ppb	3.208 %
24Mg (KED AGD)	98.033 ppb	4.9 %	100.000 ppb	1.967 %
27Al (KED AGD)	0.620 ppb	75.0 %	1.000 ppb	37.957 %
39K (KED AGD)	101.821 ppb	5.9 %	100.000 ppb	1.821 %
44Ca (KED AGD)	88.219 ppb	14.5 %	100.000 ppb	11.781 %
45Sc (STD AGD)	97.345 %	1.3 %		0.000 %
45Sc (KED AGD)	105.359 %	2.3 %		0.000 %
51V (KED AGD)	0.944 ppb	5.0 %	1.000 ppb	5.621 %
52Cr (KED AGD)	0.948 ppb	2.1 %	1.000 ppb	5.190 %
55Mn (KED AGD)	0.988 ppb	6.5 %	1.000 ppb	1.192 %
57Fe (KED AGD)	102.691 ppb	3.4 %	100.000 ppb	2.691 %
59Co (KED AGD)	1.015 ppb	2.6 %	1.000 ppb	1.515 %
60Ni (KED AGD)	1.046 ppb	15.8 %	1.000 ppb	4.562 %
65Cu (KED AGD)	0.987 ppb	18.1 %	1.000 ppb	1.273 %
66Zn (KED AGD)	0.877 ppb	6.7 %	1.000 ppb	12.265 %
74Ge (KED AGD)	101.193 %	2.9 %		0.000 %
75As (KED AGD)	1.021 ppb	3.2 %	1.000 ppb	2.127 %
78Se (KED AGD)	1.049 ppb	4.3 %	1.000 ppb	4.924 %
88Sr (KED AGD)	0.969 ppb	7.8 %	1.000 ppb	3.089 %
95Mo (KED AGD)	0.990 ppb	4.7 %	1.000 ppb	0.998 %
103Rh (KED AGD)	100.563 %	2.2 %		0.000 %
107Ag (KED AGD)	0.969 ppb	0.8 %	1.000 ppb	3.135 %
111Cd (KED AGD)	1.030 ppb	6.5 %	1.000 ppb	3.012 %
115In (KED AGD)	101.932 %	5.7 %		0.000 %
121Sb (KED AGD)	0.956 ppb	5.1 %	1.000 ppb	4.425 %
137Ba (KED AGD)	0.929 ppb	4.3 %	1.000 ppb	7.113 %
159Tb (KED AGD)	101.246 %	2.3 %		0.000 %
175Lu (KED AGD)	102.045 %	3.0 %		0.000 %
205Tl (KED AGD)	0.918 ppb	7.3 %	1.000 ppb	8.185 %
208Pb (KED AGD)	0.994 ppb	2.3 %	1.000 ppb	0.570 %
209Bi (KED AGD)	109.178 %	4.3 %		0.000 %

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 5:16:55 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	98.713 %	0.7 %		0.000 %
6Li (KED AGD)	107.573 %	7.0 %		0.000 %
9Be (STD AGD)	10.240 ppb	0.5 %	10.000 ppb	2.401 %
23Na (KED AGD)	978.356 ppb	1.9 %	1,000.000 ppb	2.164 %
24Mg (KED AGD)	989.890 ppb	4.5 %	1,000.000 ppb	1.011 %
27Al (KED AGD)	10.386 ppb	9.7 %	10.000 ppb	3.862 %
39K (KED AGD)	1,038.797 ppb	3.2 %	1,000.000 ppb	3.880 %
44Ca (KED AGD)	1,059.360 ppb	7.9 %	1,000.000 ppb	5.936 %
45Sc (STD AGD)	100.548 %	0.6 %		0.000 %
45Sc (KED AGD)	102.679 %	3.7 %		0.000 %
51V (KED AGD)	10.240 ppb	1.9 %	10.000 ppb	2.399 %
52Cr (KED AGD)	10.481 ppb	2.1 %	10.000 ppb	4.813 %
55Mn (KED AGD)	10.885 ppb	8.7 %	10.000 ppb	8.848 %
57Fe (KED AGD)	1,044.753 ppb	1.5 %	1,000.000 ppb	4.475 %
59Co (KED AGD)	10.385 ppb	4.2 %	10.000 ppb	3.848 %
60Ni (KED AGD)	12.399 ppb	2.9 %	10.000 ppb	23.989 %
65Cu (KED AGD)	10.423 ppb	2.7 %	10.000 ppb	4.232 %
66Zn (KED AGD)	10.202 ppb	1.4 %	10.000 ppb	2.024 %
74Ge (KED AGD)	102.050 %	5.0 %		0.000 %
75As (KED AGD)	10.255 ppb	1.0 %	10.000 ppb	2.549 %
78Se (KED AGD)	9.892 ppb	5.1 %	10.000 ppb	1.078 %
88Sr (KED AGD)	9.819 ppb	4.1 %	10.000 ppb	1.812 %
95Mo (KED AGD)	9.753 ppb	4.9 %	10.000 ppb	2.467 %
103Rh (KED AGD)	100.365 %	4.5 %		0.000 %
107Ag (KED AGD)	10.015 ppb	3.7 %	10.000 ppb	0.146 %
111Cd (KED AGD)	10.204 ppb	1.2 %	10.000 ppb	2.040 %
115In (KED AGD)	101.584 %	7.0 %		0.000 %
121Sb (KED AGD)	10.016 ppb	0.3 %	10.000 ppb	0.156 %
137Ba (KED AGD)	9.924 ppb	1.4 %	10.000 ppb	0.756 %
159Tb (KED AGD)	101.178 %	3.2 %		0.000 %
175Lu (KED AGD)	101.886 %	4.6 %		0.000 %
205Tl (KED AGD)	9.779 ppb	5.2 %	10.000 ppb	2.214 %
208Pb (KED AGD)	9.934 ppb	4.3 %	10.000 ppb	0.662 %
209Bi (KED AGD)	112.186 %	6.2 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 5:21:23 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	96.198 %	0.7 %		0.000 %
6Li (KED AGD)	96.699 %	6.4 %		0.000 %
9Be (STD AGD)	60.664 ppb	0.5 %	60.000 ppb	1.107 %
23Na (KED AGD)	6,239.844 ppb	4.9 %	6,000.000 ppb	3.997 %
24Mg (KED AGD)	6,254.039 ppb	5.9 %	6,000.000 ppb	4.234 %
27Al (KED AGD)	62.950 ppb	11.7 %	60.000 ppb	4.916 %
39K (KED AGD)	6,282.660 ppb	5.8 %	6,000.000 ppb	4.711 %
44Ca (KED AGD)	6,191.979 ppb	3.6 %	6,000.000 ppb	3.200 %
45Sc (STD AGD)	100.037 %	0.3 %		0.000 %
45Sc (KED AGD)	102.561 %	1.2 %		0.000 %
51V (KED AGD)	61.494 ppb	1.1 %	60.000 ppb	2.490 %
52Cr (KED AGD)	62.597 ppb	1.2 %	60.000 ppb	4.328 %
55Mn (KED AGD)	62.113 ppb	1.5 %	60.000 ppb	3.522 %
57Fe (KED AGD)	6,146.541 ppb	2.1 %	6,000.000 ppb	2.442 %
59Co (KED AGD)	61.295 ppb	1.6 %	60.000 ppb	2.159 %
60Ni (KED AGD)	61.192 ppb	1.2 %	60.000 ppb	1.986 %
65Cu (KED AGD)	61.148 ppb	3.0 %	60.000 ppb	1.914 %
66Zn (KED AGD)	60.530 ppb	2.0 %	60.000 ppb	0.884 %
74Ge (KED AGD)	103.099 %	5.4 %		0.000 %
75As (KED AGD)	59.869 ppb	2.9 %	60.000 ppb	0.219 %
78Se (KED AGD)	60.349 ppb	5.1 %	60.000 ppb	0.582 %
88Sr (KED AGD)	59.414 ppb	2.4 %	60.000 ppb	0.976 %
95Mo (KED AGD)	59.540 ppb	2.5 %	60.000 ppb	0.766 %
103Rh (KED AGD)	99.445 %	0.7 %		0.000 %
107Ag (KED AGD)	59.959 ppb	0.9 %	60.000 ppb	0.068 %
111Cd (KED AGD)	59.808 ppb	1.5 %	60.000 ppb	0.319 %
115In (KED AGD)	101.703 %	3.6 %		0.000 %
121Sb (KED AGD)	60.373 ppb	0.9 %	60.000 ppb	0.622 %
137Ba (KED AGD)	59.912 ppb	2.8 %	60.000 ppb	0.146 %
159Tb (KED AGD)	102.420 %	0.4 %		0.000 %
175Lu (KED AGD)	102.417 %	1.9 %		0.000 %
205Tl (KED AGD)	59.382 ppb	4.4 %	60.000 ppb	1.030 %
208Pb (KED AGD)	59.654 ppb	4.1 %	60.000 ppb	0.576 %
209Bi (KED AGD)	111.672 %	3.3 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 5:25:51 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	93.909 %	0.4 %		0.000 %
6Li (KED AGD)	99.515 %	10.0 %		0.000 %
9Be (STD AGD)	119.648 ppb	0.1 %	120.000 ppb	0.293 %
23Na (KED AGD)	11,881.910 ppb	7.4 %	12,000.000 ppb	0.984 %
24Mg (KED AGD)	11,873.840 ppb	7.3 %	12,000.000 ppb	1.051 %
27Al (KED AGD)	118.496 ppb	8.9 %	120.000 ppb	1.253 %
39K (KED AGD)	11,855.415 ppb	6.1 %	12,000.000 ppb	1.205 %
44Ca (KED AGD)	11,899.166 ppb	3.6 %	12,000.000 ppb	0.840 %
45Sc (STD AGD)	102.443 %	0.4 %		0.000 %
45Sc (KED AGD)	106.742 %	0.5 %		0.000 %
51V (KED AGD)	119.234 ppb	2.6 %	120.000 ppb	0.639 %
52Cr (KED AGD)	118.662 ppb	1.6 %	120.000 ppb	1.115 %
55Mn (KED AGD)	118.870 ppb	2.9 %	120.000 ppb	0.942 %
57Fe (KED AGD)	11,922.976 ppb	2.5 %	12,000.000 ppb	0.642 %
59Co (KED AGD)	119.320 ppb	1.6 %	120.000 ppb	0.567 %
60Ni (KED AGD)	119.204 ppb	0.3 %	120.000 ppb	0.663 %
65Cu (KED AGD)	119.391 ppb	1.6 %	120.000 ppb	0.508 %
66Zn (KED AGD)	119.719 ppb	0.5 %	120.000 ppb	0.234 %
74Ge (KED AGD)	100.232 %	1.4 %		0.000 %
75As (KED AGD)	120.044 ppb	2.7 %	120.000 ppb	0.037 %
78Se (KED AGD)	119.834 ppb	2.0 %	120.000 ppb	0.138 %
88Sr (KED AGD)	120.308 ppb	2.0 %	120.000 ppb	0.257 %
95Mo (KED AGD)	120.250 ppb	1.5 %	120.000 ppb	0.209 %
103Rh (KED AGD)	97.446 %	1.7 %		0.000 %
107Ag (KED AGD)	120.019 ppb	1.3 %	120.000 ppb	0.016 %
111Cd (KED AGD)	120.079 ppb	1.4 %	120.000 ppb	0.065 %
115In (KED AGD)	99.790 %	2.1 %		0.000 %
121Sb (KED AGD)	119.813 ppb	0.6 %	120.000 ppb	0.156 %
137Ba (KED AGD)	120.051 ppb	0.9 %	120.000 ppb	0.042 %
159Tb (KED AGD)	103.643 %	2.1 %		0.000 %
175Lu (KED AGD)	103.721 %	2.5 %		0.000 %
205Tl (KED AGD)	120.328 ppb	2.8 %	120.000 ppb	0.273 %
208Pb (KED AGD)	120.178 ppb	3.4 %	120.000 ppb	0.149 %
209Bi (KED AGD)	110.449 %	2.8 %		0.000 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	8/27/2024 4:54:39 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.957 %	107.864 %	0.020 ppb	3.362 ppb	0.893 ppb	0.604 ppb	12.401 ppb	12.330 ppb	99.643 %
Concentration per Run 1	99.194 %	99.029 %	0.023 ppb	3.871 ppb	1.440 ppb	0.620 ppb	12.258 ppb	8.857 ppb	98.299 %
Concentration per Run 2	100.071 %	115.049 %	0.015 ppb	1.552 ppb	1.295 ppb	0.968 ppb	13.667 ppb	21.197 ppb	100.031 %
Concentration per Run 3	100.605 %	109.515 %	0.021 ppb	4.662 ppb	-0.055 ppb	0.224 ppb	11.279 ppb	6.935 ppb	100.598 %
Concentration RSD	0.7 %	7.5 %	19.2 %	48.1 %	92.3 %	61.6 %	9.7 %	62.8 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.792 %	0.037 ppb	-0.008 ppb	0.379 ppb	9.310 ppb	0.014 ppb	0.639 ppb	0.620 ppb	2.540 ppb
Concentration per Run 1	104.122 %	0.044 ppb	-0.017 ppb	0.194 ppb	8.831 ppb	0.014 ppb	0.568 ppb	0.638 ppb	2.600 ppb
Concentration per Run 2	94.848 %	0.058 ppb	0.012 ppb	0.587 ppb	9.210 ppb	0.011 ppb	0.626 ppb	0.591 ppb	2.514 ppb
Concentration per Run 3	94.406 %	0.010 ppb	-0.020 ppb	0.356 ppb	9.890 ppb	0.019 ppb	0.724 ppb	0.633 ppb	2.506 ppb
Concentration RSD	5.6 %	67.2 %	220.8 %	52.1 %	5.8 %	27.8 %	12.3 %	4.2 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.620 %	-0.007 ppb	0.059 ppb	0.010 ppb	0.026 ppb	99.568 %	0.008 ppb	0.001 ppb	98.836 %
Concentration per Run 1	102.371 %	-0.027 ppb	0.098 ppb	0.014 ppb	0.015 ppb	101.632 %	0.004 ppb	0.000 ppb	100.920 %
Concentration per Run 2	98.993 %	-0.010 ppb	0.018 ppb	0.007 ppb	0.016 ppb	97.400 %	0.012 ppb	0.000 ppb	96.116 %
Concentration per Run 3	100.495 %	0.015 ppb	0.062 ppb	0.009 ppb	0.046 ppb	99.671 %	0.010 ppb	0.003 ppb	99.471 %
Concentration RSD	1.7 %	281.2 %	67.2 %	38.2 %	69.3 %	2.1 %	50.3 %	173.2 %	2.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.021 ppb	0.033 ppb	101.531 %	102.519 %	0.008 ppb	0.097 ppb	75.077 %
Concentration per Run 1	0.015 ppb	0.025 ppb	103.497 %	104.595 %	0.002 ppb	0.079 ppb	88.955 %
Concentration per Run 2	0.031 ppb	0.028 ppb	100.243 %	100.541 %	0.012 ppb	0.100 ppb	72.397 %
Concentration per Run 3	0.018 ppb	0.045 ppb	100.852 %	102.421 %	0.009 ppb	0.112 ppb	63.880 %
Concentration RSD	40.4 %	32.1 %	1.7 %	2.0 %	64.5 %	17.4 %	17.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CAL LOT #M23-1225	Rack	0		
Analysis started at:	8/27/2024 4:59:04 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.441 %	100.291 %	0.019 ppb	4.931 ppb	2.549 ppb	0.502 ppb	4.503 ppb	8.261 ppb	102.066 %
Concentration per Run 1	99.902 %	99.320 %	0.023 ppb	3.461 ppb	2.337 ppb	0.762 ppb	4.142 ppb	3.409 ppb	100.337 %
Concentration per Run 2	101.198 %	100.194 %	0.017 ppb	4.251 ppb	2.660 ppb	0.711 ppb	4.846 ppb	9.625 ppb	103.984 %
Concentration per Run 3	100.222 %	101.359 %	0.018 ppb	7.081 ppb	2.651 ppb	0.034 ppb	4.520 ppb	11.750 ppb	101.877 %
Concentration RSD	0.7 %	1.0 %	15.8 %	38.6 %	7.2 %	80.9 %	7.8 %	52.5 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.207 %	-0.036 ppb	-0.009 ppb	0.386 ppb	6.860 ppb	0.016 ppb	0.780 ppb	0.551 ppb	2.459 ppb
Concentration per Run 1	103.062 %	-0.068 ppb	-0.001 ppb	0.313 ppb	6.910 ppb	0.014 ppb	0.910 ppb	0.715 ppb	2.298 ppb
Concentration per Run 2	100.766 %	-0.032 ppb	-0.011 ppb	0.493 ppb	5.700 ppb	0.026 ppb	0.677 ppb	0.413 ppb	2.781 ppb
Concentration per Run 3	99.794 %	-0.009 ppb	-0.015 ppb	0.351 ppb	7.970 ppb	0.006 ppb	0.754 ppb	0.524 ppb	2.297 ppb
Concentration RSD	1.7 %	82.4 %	81.2 %	24.5 %	16.6 %	64.3 %	15.2 %	27.8 %	11.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.413 %	0.005 ppb	0.006 ppb	0.010 ppb	0.023 ppb	99.435 %	0.004 ppb	0.002 ppb	97.796 %
Concentration per Run 1	100.851 %	0.014 ppb	0.015 ppb	0.009 ppb	0.007 ppb	101.345 %	0.006 ppb	0.000 ppb	97.821 %
Concentration per Run 2	98.814 %	-0.003 ppb	0.001 ppb	0.008 ppb	0.000 ppb	96.374 %	0.004 ppb	0.006 ppb	94.711 %
Concentration per Run 3	104.575 %	0.003 ppb	0.002 ppb	0.013 ppb	0.060 ppb	100.584 %	0.002 ppb	0.000 ppb	100.855 %
Concentration RSD	2.9 %	185.1 %	124.8 %	28.6 %	144.2 %	2.7 %	49.4 %	173.2 %	3.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	0.031 ppb	100.263 %	100.444 %	0.000 ppb	0.045 ppb	113.477 %
Concentration per Run 1	0.011 ppb	0.000 ppb	100.160 %	99.685 %	-0.004 ppb	0.040 ppb	120.630 %
Concentration per Run 2	0.013 ppb	0.049 ppb	96.858 %	97.784 %	0.001 ppb	0.045 ppb	111.001 %
Concentration per Run 3	0.017 ppb	0.043 ppb	103.770 %	103.864 %	0.002 ppb	0.051 ppb	108.802 %
Concentration RSD	23.0 %	86.9 %	3.4 %	3.1 %	869.9 %	11.4 %	5.5 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank EJF ICPMSQ2	Rack	4		
Analysis started at:	8/27/2024 5:03:30 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.3 %	0.1 %	0.3 %	0.2 %	0.1 %	0.4 %	0.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.2 %	0.3 %	0.3 %	0.5 %	1.7 %	0.2 %	0.0 %	0.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.3 %	1.2 %	0.1 %	0.5 %	0.0 %	0.0 %		0.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.3 %	0.8 %	0.0 %	0.0 %	0.5 %	0.1 %	0.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	8/27/2024 5:08:01 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.883 %	94.175 %	0.198 ppb	19.058 ppb	19.594 ppb	-0.023 ppb	24.343 ppb	17.606 ppb	97.258 %
Concentration per Run 1	97.600 %	105.728 %	0.192 ppb	15.076 ppb	19.192 ppb	-0.133 ppb	20.258 ppb	19.751 ppb	97.202 %
Concentration per Run 2	97.647 %	81.262 %	0.206 ppb	24.812 ppb	24.414 ppb	0.558 ppb	28.444 ppb	15.209 ppb	97.072 %
Concentration per Run 3	98.404 %	95.534 %	0.197 ppb	17.286 ppb	15.176 ppb	-0.496 ppb	24.327 ppb	17.857 ppb	97.499 %
Concentration RSD	0.5 %	13.0 %	3.6 %	26.8 %	23.6 %	2,279.0 %	16.8 %	13.0 %	0.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.383 %	0.180 ppb	0.151 ppb	0.256 ppb	21.126 ppb	0.199 ppb	0.137 ppb	0.260 ppb	0.088 ppb
Concentration per Run 1	101.384 %	0.196 ppb	0.147 ppb	0.329 ppb	18.049 ppb	0.227 ppb	0.225 ppb	0.212 ppb	0.075 ppb
Concentration per Run 2	97.851 %	0.158 ppb	0.177 ppb	0.204 ppb	23.755 ppb	0.224 ppb	0.106 ppb	0.285 ppb	0.117 ppb
Concentration per Run 3	101.914 %	0.186 ppb	0.130 ppb	0.235 ppb	21.575 ppb	0.147 ppb	0.079 ppb	0.284 ppb	0.072 ppb
Concentration RSD	2.2 %	10.8 %	15.7 %	25.4 %	13.6 %	22.8 %	56.6 %	16.0 %	28.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.622 %	0.207 ppb	0.222 ppb	0.192 ppb	0.198 ppb	100.993 %	0.195 ppb	0.205 ppb	100.508 %
Concentration per Run 1	104.901 %	0.137 ppb	0.145 ppb	0.198 ppb	0.148 ppb	103.246 %	0.192 ppb	0.228 ppb	104.403 %
Concentration per Run 2	103.873 %	0.191 ppb	0.275 ppb	0.186 ppb	0.225 ppb	102.150 %	0.196 ppb	0.194 ppb	100.692 %
Concentration per Run 3	99.091 %	0.294 ppb	0.247 ppb	0.193 ppb	0.220 ppb	97.583 %	0.197 ppb	0.192 ppb	96.430 %
Concentration RSD	3.0 %	38.5 %	30.7 %	3.0 %	21.8 %	3.0 %	1.5 %	10.0 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.195 ppb	0.204 ppb	101.646 %	100.864 %	0.198 ppb	0.210 ppb	106.340 %
Concentration per Run 1	0.193 ppb	0.243 ppb	103.161 %	102.885 %	0.169 ppb	0.194 ppb	112.313 %
Concentration per Run 2	0.193 ppb	0.231 ppb	102.476 %	102.338 %	0.201 ppb	0.215 ppb	106.203 %
Concentration per Run 3	0.199 ppb	0.139 ppb	99.300 %	97.368 %	0.223 ppb	0.222 ppb	100.504 %
Concentration RSD	1.8 %	27.7 %	2.0 %	3.0 %	13.9 %	6.8 %	5.6 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	8/27/2024 5:12:28 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.342 %	101.359 %	0.989 ppb	96.792 ppb	98.033 ppb	0.620 ppb	101.821 ppb	88.219 ppb	97.345 %
Concentration per Run 1	97.781 %	97.573 %	0.979 ppb	105.722 ppb	101.976 ppb	0.529 ppb	107.155 ppb	92.510 ppb	95.915 %
Concentration per Run 2	98.304 %	96.699 %	0.980 ppb	95.038 ppb	99.377 ppb	1.125 ppb	95.317 ppb	98.284 ppb	97.682 %
Concentration per Run 3	98.942 %	109.806 %	1.006 ppb	89.616 ppb	92.745 ppb	0.207 ppb	102.992 ppb	73.863 ppb	98.439 %
Concentration RSD	0.6 %	7.2 %	1.5 %	8.5 %	4.9 %	75.0 %	5.9 %	14.5 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.359 %	0.944 ppb	0.948 ppb	0.988 ppb	102.691 ppb	1.015 ppb	1.046 ppb	0.987 ppb	0.877 ppb
Concentration per Run 1	107.920 %	0.997 ppb	0.963 ppb	1.045 ppb	98.622 ppb	0.998 ppb	0.869 ppb	1.177 ppb	0.922 ppb
Concentration per Run 2	103.150 %	0.925 ppb	0.926 ppb	1.001 ppb	104.621 ppb	1.002 ppb	1.073 ppb	0.822 ppb	0.811 ppb
Concentration per Run 3	105.005 %	0.909 ppb	0.955 ppb	0.919 ppb	104.831 ppb	1.046 ppb	1.195 ppb	0.963 ppb	0.899 ppb
Concentration RSD	2.3 %	5.0 %	2.1 %	6.5 %	3.4 %	2.6 %	15.8 %	18.1 %	6.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.193 %	1.021 ppb	1.049 ppb	0.969 ppb	0.990 ppb	100.563 %	0.969 ppb	1.030 ppb	101.932 %
Concentration per Run 1	104.506 %	0.989 ppb	1.003 ppb	1.056 ppb	1.025 ppb	102.172 %	0.959 ppb	0.956 ppb	107.799 %
Concentration per Run 2	99.112 %	1.055 ppb	1.052 ppb	0.936 ppb	1.007 ppb	101.528 %	0.974 ppb	1.086 ppb	101.794 %
Concentration per Run 3	99.960 %	1.020 ppb	1.093 ppb	0.916 ppb	0.938 ppb	97.989 %	0.973 ppb	1.048 ppb	96.204 %
Concentration RSD	2.9 %	3.2 %	4.3 %	7.8 %	4.7 %	2.2 %	0.8 %	6.5 %	5.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.956 ppb	0.929 ppb	101.246 %	102.045 %	0.918 ppb	0.994 ppb	109.178 %
Concentration per Run 1	0.940 ppb	0.957 ppb	103.722 %	105.344 %	0.842 ppb	0.968 ppb	114.326 %
Concentration per Run 2	0.917 ppb	0.884 ppb	100.915 %	101.435 %	0.950 ppb	1.007 ppb	108.130 %
Concentration per Run 3	1.010 ppb	0.946 ppb	99.101 %	99.355 %	0.963 ppb	1.008 ppb	105.079 %
Concentration RSD	5.1 %	4.3 %	2.3 %	3.0 %	7.3 %	2.3 %	4.3 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	8/27/2024 5:16:55 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.713 %	107.573 %	10.240 ppb	978.356 ppb	989.890 ppb	10.386 ppb	1,038.797 ppb	1,059.360 ppb	100.548 %
Concentration per Run 1	99.182 %	115.922 %	10.213 ppb	963.558 ppb	978.233 ppb	11.478 ppb	1,053.051 ppb	1,155.857 ppb	99.902 %
Concentration per Run 2	98.997 %	101.359 %	10.209 ppb	998.749 ppb	1,039.364 ppb	10.184 ppb	1,062.052 ppb	1,010.713 ppb	100.688 %
Concentration per Run 3	97.960 %	105.437 %	10.299 ppb	972.760 ppb	952.075 ppb	9.496 ppb	1,001.287 ppb	1,011.512 ppb	101.055 %
Concentration RSD	0.7 %	7.0 %	0.5 %	1.9 %	4.5 %	9.7 %	3.2 %	7.9 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.679 %	10.240 ppb	10.481 ppb	10.885 ppb	1,044.753 ppb	10.385 ppb	12.399 ppb	10.423 ppb	10.202 ppb
Concentration per Run 1	107.037 %	10.095 ppb	10.242 ppb	11.289 ppb	1,049.351 ppb	9.886 ppb	12.264 ppb	10.507 ppb	10.310 ppb
Concentration per Run 2	99.794 %	10.170 ppb	10.520 ppb	9.805 ppb	1,027.667 ppb	10.611 ppb	12.802 ppb	10.112 ppb	10.036 ppb
Concentration per Run 3	101.207 %	10.455 ppb	10.682 ppb	11.561 ppb	1,057.241 ppb	10.657 ppb	12.130 ppb	10.650 ppb	10.261 ppb
Concentration RSD	3.7 %	1.9 %	2.1 %	8.7 %	1.5 %	4.2 %	2.9 %	2.7 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.050 %	10.255 ppb	9.892 ppb	9.819 ppb	9.753 ppb	100.365 %	10.015 ppb	10.204 ppb	101.584 %
Concentration per Run 1	107.896 %	10.185 ppb	9.709 ppb	10.211 ppb	9.210 ppb	105.279 %	9.592 ppb	10.190 ppb	109.476 %
Concentration per Run 2	100.072 %	10.209 ppb	9.501 ppb	9.834 ppb	9.962 ppb	99.459 %	10.265 ppb	10.332 ppb	99.613 %
Concentration per Run 3	98.184 %	10.371 ppb	10.466 ppb	9.411 ppb	10.088 ppb	96.357 %	10.188 ppb	10.090 ppb	95.663 %
Concentration RSD	5.0 %	1.0 %	5.1 %	4.1 %	4.9 %	4.5 %	3.7 %	1.2 %	7.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.016 ppb	9.924 ppb	101.178 %	101.886 %	9.779 ppb	9.934 ppb	112.186 %
Concentration per Run 1	9.994 ppb	9.949 ppb	104.385 %	106.739 %	9.216 ppb	9.490 ppb	119.840 %
Concentration per Run 2	10.051 ppb	9.779 ppb	101.144 %	101.436 %	9.923 ppb	9.971 ppb	110.314 %
Concentration per Run 3	10.002 ppb	10.045 ppb	98.005 %	97.483 %	10.197 ppb	10.340 ppb	106.404 %
Concentration RSD	0.3 %	1.4 %	3.2 %	4.6 %	5.2 %	4.3 %	6.2 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	8/27/2024 5:21:23 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.198 %	96.699 %	60.664 ppb	6,239.844 ppb	6,254.039 ppb	62.950 ppb	6,282.660 ppb	6,191.979 ppb	100.037 %
Concentration per Run 1	95.667 %	89.709 %	60.712 ppb	6,591.189 ppb	6,676.690 ppb	71.162 ppb	6,704.184 ppb	6,289.586 ppb	99.734 %
Concentration per Run 2	97.012 %	101.651 %	60.368 ppb	6,012.675 ppb	6,080.180 ppb	57.005 ppb	6,087.073 ppb	6,349.476 ppb	100.210 %
Concentration per Run 3	95.914 %	98.738 %	60.912 ppb	6,115.667 ppb	6,005.247 ppb	60.682 ppb	6,056.722 ppb	5,936.875 ppb	100.166 %
Concentration RSD	0.7 %	6.4 %	0.5 %	4.9 %	5.9 %	11.7 %	5.8 %	3.6 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.561 %	61.494 ppb	62.597 ppb	62.113 ppb	6,146.541 ppb	61.295 ppb	61.192 ppb	61.148 ppb	60.530 ppb
Concentration per Run 1	101.914 %	62.290 ppb	63.298 ppb	62.988 ppb	6,224.796 ppb	61.606 ppb	60.365 ppb	59.253 ppb	60.037 ppb
Concentration per Run 2	101.737 %	61.204 ppb	61.842 ppb	62.247 ppb	5,996.157 ppb	60.204 ppb	61.776 ppb	61.243 ppb	59.617 ppb
Concentration per Run 3	104.034 %	60.987 ppb	62.649 ppb	61.103 ppb	6,218.670 ppb	62.077 ppb	61.434 ppb	62.949 ppb	61.936 ppb
Concentration RSD	1.2 %	1.1 %	1.2 %	1.5 %	2.1 %	1.6 %	1.2 %	3.0 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.099 %	59.869 ppb	60.349 ppb	59.414 ppb	59.540 ppb	99.445 %	59.959 ppb	59.808 ppb	101.703 %
Concentration per Run 1	107.462 %	59.236 ppb	61.887 ppb	60.846 ppb	58.377 ppb	100.248 %	59.327 ppb	58.800 ppb	105.911 %
Concentration per Run 2	104.956 %	58.561 ppb	56.818 ppb	57.981 ppb	59.063 ppb	99.021 %	60.403 ppb	60.046 ppb	99.577 %
Concentration per Run 3	96.879 %	61.810 ppb	62.343 ppb	59.416 ppb	61.182 ppb	99.067 %	60.148 ppb	60.578 ppb	99.620 %
Concentration RSD	5.4 %	2.9 %	5.1 %	2.4 %	2.5 %	0.7 %	0.9 %	1.5 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.373 ppb	59.912 ppb	102.420 %	102.417 %	59.382 ppb	59.654 ppb	111.672 %
Concentration per Run 1	59.887 ppb	61.708 ppb	102.826 %	104.537 %	57.057 ppb	57.205 ppb	115.405 %
Concentration per Run 2	60.258 ppb	59.663 ppb	102.450 %	101.842 %	58.917 ppb	59.709 ppb	111.640 %
Concentration per Run 3	60.975 ppb	58.366 ppb	101.985 %	100.873 %	62.172 ppb	62.049 ppb	107.971 %
Concentration RSD	0.9 %	2.8 %	0.4 %	1.9 %	4.4 %	4.1 %	3.3 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	8/27/2024 5:25:51 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.909 %	99.515 %	119.648 ppb	11,881.910 ppb	11,873.840 ppb	118.496 ppb	11,855.415 ppb	11,899.166 ppb	102.443 %
Concentration per Run 1	94.325 %	97.282 %	119.501 ppb	11,864.872 ppb	11,811.010 ppb	117.917 ppb	11,805.844 ppb	11,895.073 ppb	102.861 %
Concentration per Run 2	93.793 %	90.874 %	119.635 ppb	12,770.765 ppb	12,769.930 ppb	129.341 ppb	12,601.805 ppb	12,333.958 ppb	102.420 %
Concentration per Run 3	93.611 %	110.388 %	119.807 ppb	11,010.094 ppb	11,040.580 ppb	108.231 ppb	11,158.595 ppb	11,468.467 ppb	102.049 %
Concentration RSD	0.4 %	10.0 %	0.1 %	7.4 %	7.3 %	8.9 %	6.1 %	3.6 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.742 %	119.234 ppb	118.662 ppb	118.870 ppb	11,922.976 ppb	119.320 ppb	119.204 ppb	119.391 ppb	119.719 ppb
Concentration per Run 1	106.154 %	119.298 ppb	117.856 ppb	116.577 ppb	11,610.745 ppb	117.168 ppb	118.765 ppb	117.468 ppb	119.409 ppb
Concentration per Run 2	106.772 %	122.324 ppb	120.773 ppb	122.823 ppb	12,197.956 ppb	120.855 ppb	119.478 ppb	121.244 ppb	120.357 ppb
Concentration per Run 3	107.302 %	116.079 ppb	117.357 ppb	117.209 ppb	11,960.226 ppb	119.937 ppb	119.369 ppb	119.459 ppb	119.391 ppb
Concentration RSD	0.5 %	2.6 %	1.6 %	2.9 %	2.5 %	1.6 %	0.3 %	1.6 %	0.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.232 %	120.044 ppb	119.834 ppb	120.308 ppb	120.250 ppb	97.446 %	120.019 ppb	120.079 ppb	99.790 %
Concentration per Run 1	100.542 %	117.744 ppb	118.502 ppb	118.934 ppb	119.314 ppb	98.033 %	118.376 ppb	118.236 ppb	100.310 %
Concentration per Run 2	101.442 %	123.720 ppb	122.604 ppb	123.101 ppb	119.156 ppb	98.770 %	120.077 ppb	120.589 ppb	101.615 %
Concentration per Run 3	98.712 %	118.669 ppb	118.396 ppb	118.890 ppb	122.281 ppb	95.535 %	121.605 ppb	121.410 ppb	97.447 %
Concentration RSD	1.4 %	2.7 %	2.0 %	2.0 %	1.5 %	1.7 %	1.3 %	1.4 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	119.813 ppb	120.051 ppb	103.643 %	103.721 %	120.328 ppb	120.178 ppb	110.449 %
Concentration per Run 1	119.014 ppb	119.062 ppb	101.662 %	102.151 %	117.459 ppb	116.366 ppb	112.512 %
Concentration per Run 2	119.877 ppb	121.184 ppb	105.953 %	106.675 %	119.439 ppb	119.745 ppb	111.916 %
Concentration per Run 3	120.546 ppb	119.906 ppb	103.314 %	102.337 %	124.086 ppb	124.424 ppb	106.918 %
Concentration RSD	0.6 %	0.9 %	2.1 %	2.5 %	2.8 %	3.4 %	2.8 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	8/27/2024 5:32:59 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.862 %	93.398 %	0.004 ppb	-2.390 ppb	0.362 ppb	0.137 ppb	3.702 ppb	0.181 ppb	98.768 %
Concentration per Run 1	96.405 %	84.175 %	0.006 ppb	-1.082 ppb	1.252 ppb	-0.194 ppb	-0.152 ppb	-5.322 ppb	97.526 %
Concentration per Run 2	98.897 %	93.204 %	0.003 ppb	-2.711 ppb	-0.181 ppb	0.199 ppb	2.082 ppb	-52.093 ppb	99.240 %
Concentration per Run 3	98.283 %	102.816 %	0.001 ppb	-3.376 ppb	0.015 ppb	0.405 ppb	9.175 ppb	57.956 ppb	99.539 %
Concentration RSD	1.3 %	10.0 %	69.6 %	49.4 %	214.6 %	222.7 %	131.6 %	30,598.2 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.730 %	-0.088 ppb	0.007 ppb	0.110 ppb	14.730 ppb	0.008 ppb	0.081 ppb	0.115 ppb	1.656 ppb
Concentration per Run 1	95.113 %	-0.100 ppb	0.016 ppb	0.108 ppb	15.223 ppb	-0.001 ppb	0.114 ppb	0.113 ppb	1.651 ppb
Concentration per Run 2	94.229 %	-0.064 ppb	-0.012 ppb	0.128 ppb	13.177 ppb	0.015 ppb	0.028 ppb	0.144 ppb	1.547 ppb
Concentration per Run 3	94.848 %	-0.100 ppb	0.017 ppb	0.093 ppb	15.790 ppb	0.011 ppb	0.102 ppb	0.087 ppb	1.771 ppb
Concentration RSD	0.5 %	24.1 %	231.3 %	15.9 %	9.3 %	103.6 %	57.4 %	24.6 %	6.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.470 %	0.003 ppb	0.076 ppb	190.783 ppb	0.180 ppb	97.376 %	0.004 ppb	0.002 ppb	98.217 %
Concentration per Run 1	100.425 %	-0.025 ppb	0.198 ppb	190.955 ppb	0.106 ppb	92.794 %	0.007 ppb	0.000 ppb	93.204 %
Concentration per Run 2	100.000 %	0.022 ppb	0.012 ppb	189.644 ppb	0.232 ppb	99.439 %	0.001 ppb	0.005 ppb	100.850 %
Concentration per Run 3	97.984 %	0.011 ppb	0.018 ppb	191.749 ppb	0.201 ppb	99.895 %	0.004 ppb	0.000 ppb	100.596 %
Concentration RSD	1.3 %	877.7 %	138.7 %	0.6 %	36.4 %	4.1 %	80.1 %	173.2 %	4.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	0.114 ppb	101.589 %	101.665 %	0.229 ppb	0.185 ppb	108.283 %
Concentration per Run 1	0.011 ppb	0.077 ppb	97.752 %	96.749 %	0.216 ppb	0.182 ppb	108.207 %
Concentration per Run 2	0.026 ppb	0.177 ppb	103.094 %	103.850 %	0.248 ppb	0.181 ppb	111.006 %
Concentration per Run 3	0.020 ppb	0.087 ppb	103.922 %	104.395 %	0.221 ppb	0.194 ppb	105.635 %
Concentration RSD	39.2 %	48.0 %	3.3 %	4.2 %	7.4 %	3.9 %	2.5 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	8/27/2024 5:37:30 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.685 %	98.252 %	51.653 ppb	5,120.173 ppb	5,055.671 ppb	52.885 ppb	5,143.794 ppb	5,219.138 ppb	98.263 %
Concentration per Run 1	95.935 %	87.961 %	51.205 ppb	5,302.075 ppb	5,183.924 ppb	56.090 ppb	5,184.796 ppb	5,047.592 ppb	98.780 %
Concentration per Run 2	95.566 %	107.476 %	51.800 ppb	4,839.000 ppb	4,811.033 ppb	49.482 ppb	5,081.385 ppb	5,194.971 ppb	98.140 %
Concentration per Run 3	95.555 %	99.320 %	51.956 ppb	5,219.445 ppb	5,172.058 ppb	53.083 ppb	5,165.201 ppb	5,414.850 ppb	97.869 %
Recovery Percentage 1			103.307 %	102.403 %	101.113 %	105.770 %	102.876 %	104.383 %	
Concentration RSD	0.2 %	10.0 %	0.8 %	4.8 %	4.2 %	6.3 %	1.1 %	3.5 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.176 %	51.690 ppb	51.514 ppb	51.698 ppb	5,113.845 ppb	51.873 ppb	51.850 ppb	51.803 ppb	51.162 ppb
Concentration per Run 1	96.438 %	51.283 ppb	50.222 ppb	51.658 ppb	5,084.337 ppb	51.115 ppb	50.751 ppb	50.789 ppb	50.739 ppb
Concentration per Run 2	102.090 %	51.496 ppb	51.417 ppb	52.180 ppb	5,096.655 ppb	51.812 ppb	51.783 ppb	52.152 ppb	51.925 ppb
Concentration per Run 3	98.999 %	52.290 ppb	52.903 ppb	51.257 ppb	5,160.544 ppb	52.693 ppb	53.016 ppb	52.468 ppb	50.822 ppb
Recovery Percentage 1		103.380 %	103.028 %	103.396 %	102.277 %	103.746 %	103.700 %	103.606 %	102.324 %
Concentration RSD	2.9 %	1.0 %	2.6 %	0.9 %	0.8 %	1.5 %	2.2 %	1.7 %	1.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.394 %	50.634 ppb	49.894 ppb	47.544 ppb	50.804 ppb	99.291 %	48.292 ppb	50.967 ppb	100.302 %
Concentration per Run 1	96.093 %	49.860 ppb	48.313 ppb	46.978 ppb	51.042 ppb	99.578 %	48.136 ppb	50.815 ppb	100.146 %
Concentration per Run 2	98.885 %	52.030 ppb	55.170 ppb	48.482 ppb	51.499 ppb	97.636 %	48.645 ppb	50.654 ppb	99.569 %
Concentration per Run 3	103.202 %	50.012 ppb	46.199 ppb	47.173 ppb	49.872 ppb	100.659 %	48.096 ppb	51.431 ppb	101.191 %
Recovery Percentage 1		101.268 %	99.788 %	95.089 %	101.608 %		96.585 %	101.933 %	
Concentration RSD	3.6 %	2.4 %	9.4 %	1.7 %	1.7 %	1.5 %	0.6 %	0.8 %	0.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.263 ppb	50.282 ppb	103.464 %	102.502 %	51.257 ppb	51.518 ppb	111.017 %
Concentration per Run 1	50.028 ppb	49.883 ppb	102.871 %	101.671 %	49.506 ppb	49.472 ppb	113.278 %
Concentration per Run 2	50.529 ppb	50.319 ppb	102.845 %	102.306 %	50.781 ppb	51.718 ppb	111.891 %
Concentration per Run 3	50.232 ppb	50.645 ppb	104.677 %	103.529 %	53.483 ppb	53.363 ppb	107.882 %
Recovery Percentage 1	100.526 %	100.565 %			102.513 %	103.035 %	
Concentration RSD	0.5 %	0.8 %	1.0 %	0.9 %	4.0 %	3.8 %	2.5 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	11	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	8/27/2024 5:42:00 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.005 %	95.243 %	0.001 ppb	-0.599 ppb	-1.233 ppb	-0.705 ppb	10.494 ppb	-8.816 ppb	98.789 %
Concentration per Run 1	97.940 %	96.116 %	0.000 ppb	-1.315 ppb	-1.162 ppb	-0.899 ppb	14.420 ppb	-7.520 ppb	98.458 %
Concentration per Run 2	97.913 %	87.961 %	0.003 ppb	-0.662 ppb	-0.445 ppb	-0.579 ppb	8.881 ppb	-7.330 ppb	98.374 %
Concentration per Run 3	98.161 %	101.650 %	-0.001 ppb	0.182 ppb	-2.091 ppb	-0.636 ppb	8.181 ppb	-11.598 ppb	99.536 %
Recovery Percentage 1			0.143 %	-0.599 %	-1.761 %	-7.046 %	10.494 %	-8.816 %	
Concentration RSD	0.1 %	7.2 %	324.9 %	125.4 %	67.0 %	24.2 %	32.6 %	27.3 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.937 %	-0.080 ppb	-0.028 ppb	-0.031 ppb	2.370 ppb	0.003 ppb	0.029 ppb	-0.041 ppb	-0.259 ppb
Concentration per Run 1	96.526 %	-0.076 ppb	-0.024 ppb	0.003 ppb	1.975 ppb	0.007 ppb	0.057 ppb	-0.062 ppb	-0.226 ppb
Concentration per Run 2	93.612 %	-0.075 ppb	-0.035 ppb	-0.047 ppb	2.482 ppb	0.003 ppb	0.004 ppb	-0.038 ppb	-0.256 ppb
Concentration per Run 3	97.674 %	-0.089 ppb	-0.025 ppb	-0.050 ppb	2.654 ppb	-0.001 ppb	0.027 ppb	-0.023 ppb	-0.296 ppb
Recovery Percentage 1		-1.600 %	-2.807 %	-3.123 %	4.740 %	0.555 %	1.465 %	-4.107 %	-5.187 %
Concentration RSD	2.2 %	9.6 %	21.3 %	96.3 %	14.9 %	145.8 %	92.4 %	47.7 %	13.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.992 %	0.023 ppb	0.256 ppb	-0.006 ppb	0.296 ppb	99.745 %	0.002 ppb	0.003 ppb	99.531 %
Concentration per Run 1	97.154 %	0.019 ppb	0.016 ppb	-0.006 ppb	0.271 ppb	100.276 %	0.003 ppb	0.000 ppb	98.078 %
Concentration per Run 2	92.967 %	0.011 ppb	0.211 ppb	-0.005 ppb	0.268 ppb	99.472 %	0.003 ppb	0.003 ppb	98.161 %
Concentration per Run 3	97.856 %	0.039 ppb	0.540 ppb	-0.006 ppb	0.350 ppb	99.488 %	-0.001 ppb	0.005 ppb	102.355 %
Recovery Percentage 1		4.577 %	5.111 %	-0.057 %	14.819 %		0.401 %	1.358 %	
Concentration RSD	2.8 %	62.6 %	103.6 %	13.3 %	15.6 %	0.5 %	138.4 %	99.1 %	2.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.054 ppb	-0.010 ppb	101.961 %	101.995 %	0.279 ppb	0.001 ppb	108.193 %
Concentration per Run 1	0.052 ppb	-0.018 ppb	101.304 %	100.721 %	0.239 ppb	0.002 ppb	110.463 %
Concentration per Run 2	0.046 ppb	-0.018 ppb	102.212 %	102.188 %	0.331 ppb	0.002 ppb	107.308 %
Concentration per Run 3	0.065 ppb	0.008 ppb	102.366 %	103.074 %	0.269 ppb	-0.001 ppb	106.810 %
Recovery Percentage 1	1.355 %	-1.945 %			27.944 %	0.103 %	
Concentration RSD	17.7 %	155.0 %	0.6 %	1.2 %	16.8 %	145.0 %	1.8 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	8/27/2024 5:50:12 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.254 %	92.330 %	0.026 ppb	**200,564.641 ppb**	**76,244.070 ppb**	99,081.181 ppb	97,313.723 ppb	292,829.095 ppb	88.566 %
Concentration per Run 1	83.387 %	84.466 %	0.029 ppb	204,857.042 ppb	81,441.412 ppb	102,173.728 ppb	98,357.711 ppb	295,528.069 ppb	88.156 %
Concentration per Run 2	83.494 %	93.204 %	0.029 ppb	201,270.554 ppb	75,026.630 ppb	98,732.306 ppb	97,995.536 ppb	294,288.572 ppb	88.955 %
Concentration per Run 3	82.881 %	99.320 %	0.021 ppb	195,566.326 ppb	72,264.167 ppb	96,337.508 ppb	95,587.921 ppb	288,670.646 ppb	88.589 %
Recovery Percentage 1			2.601 %	80.226 %	76.244 %	99.081 %	97.314 %	97.610 %	
Concentration RSD	0.4 %	8.1 %	17.7 %	2.3 %	6.2 %	3.0 %	1.5 %	1.2 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.644 %	0.045 ppb	1.440 ppb	4.487 ppb	**213,890.410 ppb**	2.196 ppb	3.013 ppb	1.042 ppb	2.401 ppb
Concentration per Run 1	96.261 %	0.071 ppb	1.524 ppb	4.404 ppb	214,574.822 ppb	2.127 ppb	2.730 ppb	1.114 ppb	2.466 ppb
Concentration per Run 2	96.526 %	0.069 ppb	1.434 ppb	4.727 ppb	215,881.066 ppb	2.290 ppb	3.188 ppb	1.010 ppb	2.388 ppb
Concentration per Run 3	100.147 %	-0.006 ppb	1.364 ppb	4.331 ppb	211,215.341 ppb	2.172 ppb	3.120 ppb	1.003 ppb	2.351 ppb
Recovery Percentage 1		0.895 %	43.647 %	78.725 %	85.556 %	76.531 %	49.388 %	127.115 %	21.065 %
Concentration RSD	2.2 %	99.1 %	5.6 %	4.7 %	1.1 %	3.8 %	8.2 %	6.0 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.479 %	0.422 ppb	3.258 ppb	2.385 ppb	**2,110.463 ppb**	84.875 %	0.022 ppb	0.522 ppb	89.011 %
Concentration per Run 1	91.751 %	0.474 ppb	3.752 ppb	2.444 ppb	2,116.476 ppb	82.986 %	0.022 ppb	0.494 ppb	87.664 %
Concentration per Run 2	95.367 %	0.508 ppb	3.214 ppb	2.333 ppb	2,071.729 ppb	85.278 %	0.024 ppb	0.500 ppb	89.115 %
Concentration per Run 3	93.321 %	0.284 ppb	2.809 ppb	2.379 ppb	2,143.185 ppb	86.360 %	0.021 ppb	0.570 ppb	90.255 %
Recovery Percentage 1		25.887 %	25.259 %	477.075 %	105.523 %		2.775 %	130.395 %	
Concentration RSD	1.9 %	28.6 %	14.5 %	2.3 %	1.7 %	2.0 %	5.7 %	8.1 %	1.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.203 ppb	1.267 ppb	96.143 %	96.687 %	0.094 ppb	1.738 ppb	92.233 %
Concentration per Run 1	0.211 ppb	1.207 ppb	95.848 %	95.433 %	0.091 ppb	1.683 ppb	96.165 %
Concentration per Run 2	0.173 ppb	1.385 ppb	96.835 %	97.360 %	0.094 ppb	1.755 ppb	91.345 %
Concentration per Run 3	0.226 ppb	1.210 ppb	95.746 %	97.269 %	0.097 ppb	1.777 ppb	89.189 %
Recovery Percentage 1	2.542 %	67.412 %			4.715 %	56.075 %	
Concentration RSD	13.5 %	8.1 %	0.6 %	1.1 %	3.3 %	2.8 %	3.9 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	8/27/2024 5:54:43 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.556 %	107.767 %	0.026 ppb	45.921 ppb	3.427 ppb	5.318 ppb	19.415 ppb	7.189 ppb	110.339 %
Concentration per Run 1	105.423 %	97.282 %	0.022 ppb	57.121 ppb	6.034 ppb	5.588 ppb	29.673 ppb	2.263 ppb	112.084 %
Concentration per Run 2	104.765 %	105.146 %	0.032 ppb	44.493 ppb	2.492 ppb	5.617 ppb	14.522 ppb	11.489 ppb	109.967 %
Concentration per Run 3	103.478 %	120.874 %	0.022 ppb	36.150 ppb	1.754 ppb	4.749 ppb	14.048 ppb	7.816 ppb	108.966 %
Recovery Percentage 1									
Concentration RSD	0.9 %	11.1 %	23.4 %	23.0 %	66.8 %	9.3 %	45.8 %	64.6 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.123 %	-0.062 ppb	0.063 ppb	9,215.425 ppb	35.368 ppb	0.053 ppb	9,086.716 ppb	9,430.787 ppb	9,288.135 ppb
Concentration per Run 1	101.295 %	-0.056 ppb	0.090 ppb	9,312.085 ppb	31.782 ppb	0.036 ppb	9,009.579 ppb	9,400.385 ppb	9,220.013 ppb
Concentration per Run 2	102.974 %	-0.057 ppb	0.076 ppb	9,447.524 ppb	34.583 ppb	0.077 ppb	9,237.446 ppb	9,584.900 ppb	9,445.625 ppb
Concentration per Run 3	111.100 %	-0.072 ppb	0.025 ppb	8,886.665 ppb	39.738 ppb	0.045 ppb	9,013.123 ppb	9,307.077 ppb	9,198.767 ppb
Recovery Percentage 1				92.154 %			90.867 %	94.308 %	92.881 %
Concentration RSD	5.0 %	14.2 %	53.7 %	3.2 %	11.4 %	40.4 %	1.4 %	1.5 %	1.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.974 %	983.773 ppb	1.262 ppb	0.217 ppb	3.112 ppb	108.592 %	0.165 ppb	0.073 ppb	105.532 %
Concentration per Run 1	106.354 %	974.907 ppb	1.375 ppb	0.223 ppb	2.625 ppb	103.199 %	0.181 ppb	0.067 ppb	101.857 %
Concentration per Run 2	107.935 %	992.001 ppb	1.162 ppb	0.212 ppb	3.027 ppb	110.538 %	0.157 ppb	0.076 ppb	106.446 %
Concentration per Run 3	109.635 %	984.410 ppb	1.248 ppb	0.216 ppb	3.682 ppb	112.040 %	0.156 ppb	0.077 ppb	108.293 %
Recovery Percentage 1		98.377 %							
Concentration RSD	1.5 %	0.9 %	8.5 %	2.6 %	17.2 %	4.4 %	8.8 %	7.8 %	3.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.252 ppb	9,025.206 ppb	105.170 %	104.333 %	0.053 ppb	10,102.144 ppb	110.358 %
Concentration per Run 1	1.294 ppb	8,991.669 ppb	99.869 %	99.649 %	0.030 ppb	9,700.235 ppb	109.162 %
Concentration per Run 2	1.286 ppb	9,102.869 ppb	107.317 %	106.573 %	0.058 ppb	10,219.306 ppb	112.170 %
Concentration per Run 3	1.174 ppb	8,981.081 ppb	108.324 %	106.777 %	0.070 ppb	10,386.889 ppb	109.743 %
Recovery Percentage 1		90.252 %				0.000 %	
Concentration RSD	5.3 %	0.7 %	4.4 %	3.9 %	39.1 %	3.5 %	1.4 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	8/27/2024 5:59:13 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.583 %	104.757 %	0.020 ppb	8.943 ppb	3.201 ppb	0.531 ppb	15.648 ppb	5.642 ppb	105.093 %
Concentration per Run 1	101.285 %	103.689 %	0.014 ppb	7.277 ppb	3.638 ppb	0.445 ppb	18.962 ppb	-2.465 ppb	104.682 %
Concentration per Run 2	102.101 %	104.563 %	0.024 ppb	10.396 ppb	2.562 ppb	0.678 ppb	18.584 ppb	7.694 ppb	106.283 %
Concentration per Run 3	101.364 %	106.019 %	0.020 ppb	9.158 ppb	3.402 ppb	0.470 ppb	9.399 ppb	11.696 ppb	104.313 %
Concentration RSD	0.4 %	1.1 %	25.8 %	17.6 %	17.7 %	24.0 %	34.6 %	129.4 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.590 %	-0.079 ppb	0.000 ppb	0.696 ppb	16.187 ppb	0.018 ppb	1.009 ppb	0.800 ppb	4.376 ppb
Concentration per Run 1	104.652 %	-0.091 ppb	-0.006 ppb	0.860 ppb	16.444 ppb	0.025 ppb	1.092 ppb	0.853 ppb	4.597 ppb
Concentration per Run 2	100.236 %	-0.079 ppb	0.011 ppb	0.692 ppb	18.310 ppb	0.014 ppb	0.944 ppb	0.777 ppb	4.496 ppb
Concentration per Run 3	99.882 %	-0.067 ppb	-0.004 ppb	0.535 ppb	13.808 ppb	0.014 ppb	0.991 ppb	0.769 ppb	4.035 ppb
Concentration RSD	2.6 %	15.5 %	2,125.9 %	23.3 %	14.0 %	36.4 %	7.5 %	5.8 %	6.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.162 %	1.073 ppb	0.078 ppb	0.012 ppb	0.649 ppb	107.227 %	0.006 ppb	0.002 ppb	105.155 %
Concentration per Run 1	103.678 %	1.029 ppb	0.003 ppb	0.008 ppb	0.435 ppb	104.451 %	0.004 ppb	0.000 ppb	100.622 %
Concentration per Run 2	107.509 %	1.156 ppb	0.140 ppb	0.015 ppb	0.678 ppb	109.363 %	0.011 ppb	0.003 ppb	107.083 %
Concentration per Run 3	104.299 %	1.034 ppb	0.092 ppb	0.013 ppb	0.834 ppb	107.867 %	0.004 ppb	0.003 ppb	107.760 %
Concentration RSD	2.0 %	6.7 %	89.3 %	33.2 %	31.0 %	2.3 %	66.8 %	86.6 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.049 ppb	0.294 ppb	106.019 %	103.707 %	0.022 ppb	1.052 ppb	132.678 %
Concentration per Run 1	0.056 ppb	0.417 ppb	103.164 %	100.551 %	0.008 ppb	1.250 ppb	131.672 %
Concentration per Run 2	0.034 ppb	0.282 ppb	108.971 %	105.615 %	0.025 ppb	0.999 ppb	135.578 %
Concentration per Run 3	0.058 ppb	0.184 ppb	105.921 %	104.954 %	0.033 ppb	0.906 ppb	130.783 %
Concentration RSD	26.4 %	39.7 %	2.7 %	2.7 %	58.1 %	16.9 %	1.9 %

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	empty
Analysis label:	xCCV	Rack	0		
Analysis started at:	8/27/2024 6:03:39 AM	Vial	9		

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	xCCB	Rack	0		
Analysis started at:	8/27/2024 6:08:10 AM	Vial	10		

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 6:10:13 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.981 %	99.515 %	60.818 ppb	6,358.984 ppb	6,350.301 ppb	62.571 ppb	6,274.632 ppb	6,273.666 ppb	104.437 %
Concentration per Run 1	97.953 %	96.408 %	60.419 ppb	6,357.234 ppb	6,340.548 ppb	63.978 ppb	6,144.912 ppb	6,057.801 ppb	104.464 %
Concentration per Run 2	97.968 %	102.816 %	61.029 ppb	6,217.944 ppb	6,220.721 ppb	57.903 ppb	6,260.871 ppb	6,391.056 ppb	104.299 %
Concentration per Run 3	98.021 %	99.320 %	61.006 ppb	6,501.775 ppb	6,489.634 ppb	65.832 ppb	6,418.114 ppb	6,372.140 ppb	104.547 %
Recovery Percentage 1			101.364 %	105.983 %	105.838 %	104.285 %	104.577 %	104.561 %	
Concentration RSD	0.0 %	3.2 %	0.6 %	2.2 %	2.1 %	6.6 %	2.2 %	3.0 %	0.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.332 %	60.597 ppb	62.278 ppb	62.358 ppb	6,155.780 ppb	62.219 ppb	62.475 ppb	62.889 ppb	61.527 ppb
Concentration per Run 1	109.863 %	60.112 ppb	61.533 ppb	60.422 ppb	6,072.366 ppb	62.010 ppb	62.674 ppb	63.593 ppb	61.255 ppb
Concentration per Run 2	102.355 %	62.727 ppb	64.546 ppb	64.193 ppb	6,338.123 ppb	64.411 ppb	65.089 ppb	64.874 ppb	62.603 ppb
Concentration per Run 3	112.778 %	58.951 ppb	60.754 ppb	62.460 ppb	6,056.852 ppb	60.234 ppb	59.664 ppb	60.199 ppb	60.722 ppb
Recovery Percentage 1		100.994 %	103.796 %	103.931 %	102.596 %	103.698 %	104.126 %	104.814 %	102.545 %
Concentration RSD	5.0 %	3.2 %	3.2 %	3.0 %	2.6 %	3.4 %	4.4 %	3.8 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.460 %	61.677 ppb	60.074 ppb	57.516 ppb	59.640 ppb	105.286 %	60.166 ppb	59.728 ppb	106.622 %
Concentration per Run 1	105.609 %	62.897 ppb	58.898 ppb	56.082 ppb	59.843 ppb	105.718 %	60.708 ppb	59.925 ppb	104.519 %
Concentration per Run 2	101.668 %	62.050 ppb	59.888 ppb	57.020 ppb	59.742 ppb	103.588 %	60.849 ppb	60.292 ppb	104.204 %
Concentration per Run 3	109.101 %	60.085 ppb	61.437 ppb	59.447 ppb	59.336 ppb	106.551 %	58.940 ppb	58.968 ppb	111.144 %
Recovery Percentage 1		102.796 %	100.124 %	95.860 %	99.401 %		100.276 %	99.547 %	
Concentration RSD	3.5 %	2.3 %	2.1 %	3.0 %	0.4 %	1.5 %	1.8 %	1.1 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.208 ppb	59.202 ppb	109.149 %	109.315 %	63.368 ppb	63.689 ppb	112.041 %
Concentration per Run 1	58.951 ppb	59.459 ppb	109.545 %	107.299 %	62.203 ppb	62.233 ppb	114.858 %
Concentration per Run 2	59.443 ppb	58.395 ppb	108.044 %	109.362 %	63.570 ppb	64.091 ppb	110.506 %
Concentration per Run 3	59.230 ppb	59.751 ppb	109.857 %	111.283 %	64.332 ppb	64.742 ppb	110.759 %
Recovery Percentage 1	98.680 %	98.670 %			105.614 %	106.148 %	
Concentration RSD	0.4 %	1.2 %	0.9 %	1.8 %	1.7 %	2.0 %	2.2 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 6:14:44 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.110 %	96.893 %	0.004 ppb	2.699 ppb	-0.967 ppb	-0.599 ppb	12.674 ppb	-2.933 ppb	101.316 %
Concentration per Run 1	98.513 %	97.573 %	0.004 ppb	-0.232 ppb	-0.256 ppb	-0.763 ppb	15.679 ppb	-1.610 ppb	102.347 %
Concentration per Run 2	98.423 %	97.864 %	0.003 ppb	3.405 ppb	-1.168 ppb	-0.619 ppb	5.519 ppb	-3.411 ppb	100.986 %
Concentration per Run 3	97.394 %	95.243 %	0.006 ppb	4.925 ppb	-1.477 ppb	-0.414 ppb	16.824 ppb	-3.778 ppb	100.616 %
Recovery Percentage 1			0.855 %	2.699 %	-1.382 %	-5.988 %	12.674 %	-2.933 %	
Concentration RSD	0.6 %	1.5 %	33.7 %	98.2 %	65.6 %	29.3 %	49.1 %	39.6 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.556 %	-0.093 ppb	-0.021 ppb	-0.017 ppb	2.808 ppb	0.005 ppb	0.019 ppb	-0.030 ppb	-0.125 ppb
Concentration per Run 1	97.497 %	-0.077 ppb	-0.017 ppb	-0.050 ppb	2.249 ppb	0.007 ppb	0.039 ppb	-0.026 ppb	-0.126 ppb
Concentration per Run 2	95.819 %	-0.089 ppb	-0.013 ppb	-0.015 ppb	3.704 ppb	-0.001 ppb	0.011 ppb	-0.035 ppb	-0.103 ppb
Concentration per Run 3	99.352 %	-0.113 ppb	-0.034 ppb	0.015 ppb	2.469 ppb	0.010 ppb	0.006 ppb	-0.030 ppb	-0.147 ppb
Recovery Percentage 1		-1.859 %	-2.141 %	-1.675 %	5.615 %	1.026 %	0.935 %	-3.033 %	-2.507 %
Concentration RSD	1.8 %	19.8 %	52.9 %	195.4 %	27.9 %	114.3 %	94.7 %	15.5 %	17.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.826 %	0.154 ppb	0.133 ppb	-0.002 ppb	0.322 ppb	102.254 %	0.004 ppb	0.004 ppb	103.227 %
Concentration per Run 1	100.988 %	0.166 ppb	0.145 ppb	0.001 ppb	0.265 ppb	101.619 %	0.002 ppb	0.008 ppb	100.522 %
Concentration per Run 2	101.383 %	0.099 ppb	0.107 ppb	-0.004 ppb	0.319 ppb	101.405 %	0.005 ppb	0.005 ppb	103.688 %
Concentration per Run 3	106.107 %	0.197 ppb	0.146 ppb	-0.002 ppb	0.383 ppb	103.738 %	0.004 ppb	0.000 ppb	105.470 %
Recovery Percentage 1		30.840 %	2.658 %	-0.016 %	16.110 %		0.896 %	2.236 %	
Concentration RSD	2.8 %	32.4 %	16.8 %	170.5 %	18.2 %	1.3 %	42.7 %	92.1 %	2.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.063 ppb	-0.016 ppb	106.247 %	105.496 %	0.280 ppb	0.213 ppb	110.650 %
Concentration per Run 1	0.048 ppb	-0.010 ppb	105.997 %	102.670 %	0.210 ppb	0.222 ppb	113.223 %
Concentration per Run 2	0.073 ppb	-0.028 ppb	105.705 %	104.373 %	0.343 ppb	0.219 ppb	110.146 %
Concentration per Run 3	0.069 ppb	-0.011 ppb	107.039 %	109.446 %	0.285 ppb	0.198 ppb	108.582 %
Recovery Percentage 1	1.579 %	-3.275 %			27.954 %	21.327 %	
Concentration RSD	21.1 %	61.0 %	0.7 %	3.3 %	23.8 %	6.1 %	2.1 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check (2x ICSA)	Rack	4		
Analysis started at:	8/27/2024 6:26:28 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.013 %	89.612 %	0.017 ppb	99,534.765 ppb	48,811.285 ppb	48,672.623 ppb	47,528.574 ppb	142,658.956 ppb	92.435 %
Concentration per Run 1	87.443 %	96.408 %	0.016 ppb	94,897.635 ppb	48,239.347 ppb	46,983.442 ppb	46,984.088 ppb	142,911.840 ppb	90.885 %
Concentration per Run 2	87.962 %	85.922 %	0.020 ppb	104,139.003 ppb	50,628.200 ppb	50,997.904 ppb	49,334.052 ppb	147,306.575 ppb	93.542 %
Concentration per Run 3	88.634 %	86.505 %	0.014 ppb	99,567.656 ppb	47,566.310 ppb	48,036.523 ppb	46,267.581 ppb	137,758.452 ppb	92.877 %
Concentration RSD	0.7 %	6.6 %	17.8 %	4.6 %	3.3 %	4.3 %	3.4 %	3.4 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.967 %	-0.043 ppb	1.249 ppb	2.183 ppb	120,598.074 ppb	1.066 ppb	1.403 ppb	0.436 ppb	1.231 ppb
Concentration per Run 1	97.586 %	-0.052 ppb	0.777 ppb	1.728 ppb	117,846.007 ppb	1.065 ppb	1.369 ppb	0.343 ppb	1.201 ppb
Concentration per Run 2	93.699 %	-0.050 ppb	0.770 ppb	2.367 ppb	123,765.913 ppb	1.030 ppb	1.380 ppb	0.466 ppb	1.342 ppb
Concentration per Run 3	96.615 %	-0.027 ppb	2.199 ppb	2.456 ppb	120,182.301 ppb	1.103 ppb	1.459 ppb	0.500 ppb	1.150 ppb
Concentration RSD	2.1 %	32.3 %	65.9 %	18.2 %	2.5 %	3.4 %	3.5 %	18.9 %	8.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.834 %	0.404 ppb	1.976 ppb	1.108 ppb	1,049.956 ppb	88.799 %	0.012 ppb	0.256 ppb	90.638 %
Concentration per Run 1	94.853 %	0.391 ppb	1.961 ppb	1.091 ppb	1,042.657 ppb	87.530 %	0.011 ppb	0.296 ppb	90.363 %
Concentration per Run 2	91.602 %	0.393 ppb	1.655 ppb	1.111 ppb	1,045.571 ppb	88.526 %	0.010 ppb	0.234 ppb	90.579 %
Concentration per Run 3	92.047 %	0.427 ppb	2.312 ppb	1.121 ppb	1,061.639 ppb	90.343 %	0.015 ppb	0.237 ppb	90.973 %
Concentration RSD	1.9 %	5.0 %	16.6 %	1.4 %	1.0 %	1.6 %	21.7 %	13.7 %	0.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.103 ppb	0.506 ppb	101.641 %	102.930 %	0.053 ppb	1.079 ppb	95.848 %
Concentration per Run 1	0.093 ppb	0.486 ppb	100.406 %	103.225 %	0.035 ppb	1.059 ppb	99.713 %
Concentration per Run 2	0.111 ppb	0.563 ppb	102.801 %	103.187 %	0.060 ppb	1.094 ppb	95.699 %
Concentration per Run 3	0.105 ppb	0.471 ppb	101.716 %	102.378 %	0.066 ppb	1.083 ppb	92.134 %
Concentration RSD	8.7 %	9.7 %	1.2 %	0.5 %	31.0 %	1.7 %	4.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check (5x ICSA)	Rack	4		
Analysis started at:	8/27/2024 6:30:59 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.751 %	102.330 %	0.009 ppb	42,395.692 ppb	19,855.586 ppb	20,104.513 ppb	20,151.621 ppb	61,054.060 ppb	100.266 %
Concentration per Run 1	94.501 %	109.223 %	0.008 ppb	39,952.395 ppb	19,079.314 ppb	19,649.463 ppb	19,449.480 ppb	58,428.268 ppb	101.017 %
Concentration per Run 2	93.679 %	99.612 %	0.009 ppb	44,710.383 ppb	20,193.793 ppb	20,397.589 ppb	20,984.899 ppb	63,687.837 ppb	99.150 %
Concentration per Run 3	93.075 %	98.155 %	0.008 ppb	42,524.298 ppb	20,293.650 ppb	20,266.488 ppb	20,020.485 ppb	61,046.075 ppb	100.631 %
Concentration RSD	0.8 %	5.9 %	7.3 %	5.6 %	3.4 %	2.0 %	3.9 %	4.3 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.767 %	-0.063 ppb	0.265 ppb	0.940 ppb	50,786.101 ppb	0.516 ppb	0.715 ppb	0.172 ppb	0.446 ppb
Concentration per Run 1	110.835 %	-0.060 ppb	0.290 ppb	0.797 ppb	48,642.860 ppb	0.492 ppb	0.522 ppb	0.182 ppb	0.513 ppb
Concentration per Run 2	93.523 %	-0.039 ppb	0.244 ppb	1.085 ppb	52,252.834 ppb	0.500 ppb	0.800 ppb	0.173 ppb	0.362 ppb
Concentration per Run 3	100.942 %	-0.090 ppb	0.260 ppb	0.938 ppb	51,462.609 ppb	0.555 ppb	0.824 ppb	0.162 ppb	0.463 ppb
Concentration RSD	8.5 %	40.7 %	8.8 %	15.3 %	3.7 %	6.7 %	23.5 %	5.6 %	17.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.981 %	0.163 ppb	1.017 ppb	0.447 ppb	415.668 ppb	95.872 %	0.003 ppb	0.121 ppb	97.892 %
Concentration per Run 1	101.858 %	0.118 ppb	0.986 ppb	0.464 ppb	411.911 ppb	97.575 %	0.001 ppb	0.109 ppb	101.556 %
Concentration per Run 2	100.593 %	0.195 ppb	1.328 ppb	0.421 ppb	413.985 ppb	94.600 %	0.006 ppb	0.129 ppb	95.400 %
Concentration per Run 3	97.491 %	0.177 ppb	0.738 ppb	0.456 ppb	421.109 ppb	95.442 %	0.002 ppb	0.125 ppb	96.720 %
Concentration RSD	2.2 %	24.5 %	29.1 %	5.0 %	1.2 %	1.6 %	87.8 %	8.8 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.037 ppb	0.250 ppb	104.596 %	105.981 %	0.031 ppb	0.450 ppb	103.613 %
Concentration per Run 1	0.039 ppb	0.191 ppb	105.400 %	108.082 %	0.018 ppb	0.435 ppb	108.501 %
Concentration per Run 2	0.042 ppb	0.299 ppb	104.093 %	103.951 %	0.042 ppb	0.452 ppb	101.659 %
Concentration per Run 3	0.029 ppb	0.261 ppb	104.297 %	105.910 %	0.033 ppb	0.463 ppb	100.679 %
Concentration RSD	18.1 %	21.9 %	0.7 %	1.9 %	39.2 %	3.1 %	4.1 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	8/27/2024 6:38:05 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.363 %	111.942 %	0.024 ppb	17.594 ppb	2.044 ppb	0.513 ppb	13.298 ppb	6.986 ppb	105.706 %
Concentration per Run 1	102.011 %	108.932 %	0.029 ppb	23.724 ppb	2.518 ppb	1.032 ppb	12.698 ppb	10.925 ppb	105.311 %
Concentration per Run 2	102.360 %	107.476 %	0.020 ppb	17.059 ppb	1.422 ppb	0.028 ppb	20.602 ppb	4.690 ppb	105.920 %
Concentration per Run 3	102.719 %	119.418 %	0.024 ppb	11.999 ppb	2.191 ppb	0.478 ppb	6.594 ppb	5.343 ppb	105.888 %
Concentration RSD	0.3 %	5.8 %	18.0 %	33.4 %	27.5 %	98.1 %	52.8 %	49.1 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.944 %	-0.087 ppb	-0.007 ppb	0.386 ppb	15.801 ppb	0.009 ppb	0.704 ppb	0.376 ppb	2.565 ppb
Concentration per Run 1	111.277 %	-0.093 ppb	-0.020 ppb	0.470 ppb	16.486 ppb	0.009 ppb	0.632 ppb	0.374 ppb	2.519 ppb
Concentration per Run 2	95.378 %	-0.065 ppb	0.011 ppb	0.261 ppb	14.232 ppb	0.007 ppb	0.732 ppb	0.392 ppb	2.539 ppb
Concentration per Run 3	102.179 %	-0.102 ppb	-0.012 ppb	0.427 ppb	16.686 ppb	0.010 ppb	0.748 ppb	0.363 ppb	2.637 ppb
Concentration RSD	7.7 %	22.5 %	224.4 %	28.6 %	8.6 %	21.7 %	8.9 %	3.9 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.211 %	0.066 ppb	0.051 ppb	0.011 ppb	0.649 ppb	104.245 %	0.006 ppb	0.001 ppb	103.422 %
Concentration per Run 1	107.668 %	0.062 ppb	0.004 ppb	0.012 ppb	0.357 ppb	104.466 %	0.004 ppb	0.000 ppb	107.196 %
Concentration per Run 2	104.110 %	0.061 ppb	0.092 ppb	0.009 ppb	0.759 ppb	105.912 %	0.009 ppb	0.000 ppb	103.769 %
Concentration per Run 3	103.855 %	0.075 ppb	0.056 ppb	0.013 ppb	0.831 ppb	102.357 %	0.006 ppb	0.003 ppb	99.302 %
Concentration RSD	2.0 %	11.6 %	86.6 %	20.2 %	39.3 %	1.7 %	37.4 %	173.2 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	0.038 ppb	107.505 %	107.332 %	0.019 ppb	0.102 ppb	133.431 %
Concentration per Run 1	0.007 ppb	0.055 ppb	109.574 %	110.426 %	0.009 ppb	0.105 ppb	137.175 %
Concentration per Run 2	0.007 ppb	0.032 ppb	106.388 %	107.591 %	0.028 ppb	0.106 ppb	132.352 %
Concentration per Run 3	0.014 ppb	0.025 ppb	106.553 %	103.980 %	0.022 ppb	0.094 ppb	130.767 %
Concentration RSD	43.9 %	42.1 %	1.7 %	3.0 %	51.0 %	6.6 %	2.5 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 6:42:31 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.536 %	107.864 %	61.161 ppb	6,042.220 ppb	5,976.600 ppb	61.381 ppb	6,013.494 ppb	5,898.423 ppb	108.705 %
Concentration per Run 1	100.520 %	110.097 %	61.474 ppb	6,014.845 ppb	6,042.295 ppb	60.623 ppb	5,945.534 ppb	5,841.876 ppb	107.195 %
Concentration per Run 2	102.401 %	108.058 %	60.668 ppb	6,044.634 ppb	5,941.338 ppb	61.180 ppb	6,089.439 ppb	6,004.236 ppb	109.261 %
Concentration per Run 3	101.687 %	105.437 %	61.340 ppb	6,067.181 ppb	5,946.167 ppb	62.339 ppb	6,005.511 ppb	5,849.158 ppb	109.659 %
Recovery Percentage 1			101.934 %	100.704 %	99.610 %	102.301 %	100.225 %	98.307 %	
Concentration RSD	0.9 %	2.2 %	0.7 %	0.4 %	1.0 %	1.4 %	1.2 %	1.6 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.101 %	58.688 ppb	60.329 ppb	60.956 ppb	6,143.181 ppb	61.823 ppb	61.581 ppb	62.157 ppb	60.453 ppb
Concentration per Run 1	117.548 %	56.201 ppb	58.136 ppb	59.995 ppb	5,975.987 ppb	59.783 ppb	59.615 ppb	60.664 ppb	60.604 ppb
Concentration per Run 2	108.097 %	60.096 ppb	61.762 ppb	62.918 ppb	6,321.715 ppb	62.927 ppb	63.098 ppb	63.801 ppb	60.996 ppb
Concentration per Run 3	110.658 %	59.766 ppb	61.089 ppb	59.955 ppb	6,131.840 ppb	62.760 ppb	62.030 ppb	62.007 ppb	59.760 ppb
Recovery Percentage 1		97.813 %	100.549 %	101.593 %	102.386 %	103.038 %	102.635 %	103.595 %	100.756 %
Concentration RSD	4.4 %	3.7 %	3.2 %	2.8 %	2.8 %	2.9 %	2.9 %	2.5 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.725 %	59.912 ppb	58.566 ppb	56.373 ppb	59.236 ppb	107.691 %	60.059 ppb	60.095 ppb	105.722 %
Concentration per Run 1	110.013 %	60.332 ppb	61.847 ppb	58.590 ppb	58.069 ppb	110.171 %	58.963 ppb	59.344 ppb	110.388 %
Concentration per Run 2	107.727 %	60.195 ppb	56.454 ppb	55.678 ppb	59.411 ppb	105.792 %	60.702 ppb	61.649 ppb	102.329 %
Concentration per Run 3	108.437 %	59.208 ppb	57.396 ppb	54.851 ppb	60.228 ppb	107.111 %	60.512 ppb	59.292 ppb	104.449 %
Recovery Percentage 1		99.853 %	97.610 %	93.955 %	98.727 %		100.098 %	100.158 %	
Concentration RSD	1.1 %	1.0 %	4.9 %	3.5 %	1.8 %	2.1 %	1.6 %	2.2 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.467 ppb	60.034 ppb	109.432 %	108.924 %	63.577 ppb	63.739 ppb	110.640 %
Concentration per Run 1	57.589 ppb	59.624 ppb	111.479 %	112.722 %	60.605 ppb	59.998 ppb	116.610 %
Concentration per Run 2	61.036 ppb	61.129 ppb	107.966 %	107.712 %	64.459 ppb	64.986 ppb	108.414 %
Concentration per Run 3	59.776 ppb	59.349 ppb	108.851 %	106.337 %	65.665 ppb	66.233 ppb	106.895 %
Recovery Percentage 1	99.111 %	100.057 %			105.961 %	106.232 %	
Concentration RSD	2.9 %	1.6 %	1.7 %	3.1 %	4.2 %	5.2 %	4.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 6:47:01 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.081 %	112.330 %	0.002 ppb	4.434 ppb	-0.985 ppb	-0.749 ppb	8.918 ppb	-4.804 ppb	104.619 %
Concentration per Run 1	101.295 %	112.427 %	0.000 ppb	6.660 ppb	-1.530 ppb	-0.800 ppb	23.544 ppb	-3.819 ppb	104.655 %
Concentration per Run 2	103.158 %	119.126 %	0.002 ppb	3.422 ppb	-1.053 ppb	-0.656 ppb	2.589 ppb	-6.509 ppb	104.696 %
Concentration per Run 3	101.791 %	105.437 %	0.002 ppb	3.220 ppb	-0.371 ppb	-0.793 ppb	0.620 ppb	-4.083 ppb	104.507 %
Recovery Percentage 1			0.301 %	4.434 %	-1.407 %	-7.494 %	8.918 %	-4.804 %	
Concentration RSD	0.9 %	6.1 %	77.0 %	43.5 %	59.2 %	10.8 %	142.5 %	30.9 %	0.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.857 %	-0.081 ppb	-0.025 ppb	-0.008 ppb	2.595 ppb	0.001 ppb	0.027 ppb	-0.052 ppb	-0.253 ppb
Concentration per Run 1	99.264 %	-0.090 ppb	-0.007 ppb	0.067 ppb	1.839 ppb	-0.001 ppb	0.050 ppb	0.001 ppb	-0.283 ppb
Concentration per Run 2	109.952 %	-0.050 ppb	-0.034 ppb	-0.040 ppb	3.142 ppb	-0.001 ppb	0.024 ppb	-0.062 ppb	-0.234 ppb
Concentration per Run 3	102.355 %	-0.102 ppb	-0.035 ppb	-0.052 ppb	2.805 ppb	0.006 ppb	0.007 ppb	-0.095 ppb	-0.241 ppb
Recovery Percentage 1		-1.612 %	-2.520 %	-0.824 %	5.190 %	0.247 %	1.354 %	-5.192 %	-5.053 %
Concentration RSD	5.3 %	33.5 %	63.3 %	798.3 %	26.1 %	358.9 %	81.2 %	93.7 %	10.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.655 %	0.101 ppb	0.270 ppb	-0.002 ppb	0.509 ppb	106.217 %	0.005 ppb	0.011 ppb	105.679 %
Concentration per Run 1	102.490 %	0.071 ppb	0.286 ppb	0.000 ppb	0.446 ppb	103.639 %	0.009 ppb	0.011 ppb	103.488 %
Concentration per Run 2	109.289 %	0.102 ppb	0.093 ppb	-0.004 ppb	0.438 ppb	108.434 %	0.001 ppb	0.020 ppb	111.015 %
Concentration per Run 3	102.185 %	0.130 ppb	0.431 ppb	-0.001 ppb	0.642 ppb	106.579 %	0.003 ppb	0.003 ppb	102.535 %
Recovery Percentage 1		20.179 %	5.396 %	-0.017 %	25.440 %		1.153 %	5.496 %	
Concentration RSD	3.8 %	29.3 %	62.9 %	108.1 %	22.7 %	2.3 %	85.5 %	78.3 %	4.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.073 ppb	-0.005 ppb	107.496 %	107.016 %	0.252 ppb	0.053 ppb	108.252 %
Concentration per Run 1	0.067 ppb	-0.002 ppb	105.128 %	103.533 %	0.184 ppb	0.058 ppb	110.620 %
Concentration per Run 2	0.051 ppb	-0.012 ppb	109.827 %	110.750 %	0.307 ppb	0.046 ppb	108.748 %
Concentration per Run 3	0.101 ppb	-0.002 ppb	107.533 %	106.765 %	0.265 ppb	0.055 ppb	105.387 %
Recovery Percentage 1	1.826 %	-1.056 %			25.231 %	5.285 %	
Concentration RSD	34.8 %	109.4 %	2.2 %	3.4 %	24.7 %	12.2 %	2.4 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963135-1d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 6:55:53 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.728 %	110.583 %	0.000 ppb	2.058 ppb	0.108 ppb	0.160 ppb	1.193 ppb	0.274 ppb	107.532 %
Concentration per Run 1	104.677 %	114.757 %	0.002 ppb	-0.810 ppb	0.550 ppb	0.016 ppb	-1.088 ppb	3.989 ppb	106.881 %
Concentration per Run 2	103.526 %	102.524 %	-0.003 ppb	5.062 ppb	-0.282 ppb	0.547 ppb	3.171 ppb	-9.556 ppb	106.784 %
Concentration per Run 3	105.981 %	114.466 %	0.001 ppb	1.920 ppb	0.056 ppb	-0.083 ppb	1.495 ppb	6.389 ppb	108.931 %
Concentration RSD	1.2 %	6.3 %	2,058.3 %	142.8 %	387.8 %	211.3 %	179.9 %	3,136.3 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.269 %	-0.088 ppb	-0.011 ppb	0.027 ppb	5.595 ppb	0.002 ppb	0.057 ppb	0.017 ppb	-0.077 ppb
Concentration per Run 1	110.835 %	-0.093 ppb	-0.038 ppb	-0.010 ppb	5.300 ppb	0.002 ppb	0.035 ppb	0.033 ppb	-0.075 ppb
Concentration per Run 2	94.760 %	-0.100 ppb	0.008 ppb	-0.015 ppb	6.227 ppb	-0.001 ppb	0.040 ppb	0.023 ppb	-0.065 ppb
Concentration per Run 3	107.213 %	-0.070 ppb	-0.004 ppb	0.105 ppb	5.256 ppb	0.006 ppb	0.095 ppb	-0.005 ppb	-0.090 ppb
Concentration RSD	8.1 %	18.0 %	209.6 %	251.7 %	9.8 %	159.3 %	58.3 %	114.6 %	16.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.930 %	0.048 ppb	0.083 ppb	0.003 ppb	0.102 ppb	107.496 %	0.001 ppb	0.003 ppb	106.038 %
Concentration per Run 1	110.672 %	0.063 ppb	0.004 ppb	0.002 ppb	0.048 ppb	109.062 %	0.001 ppb	0.005 ppb	107.923 %
Concentration per Run 2	101.860 %	0.104 ppb	0.195 ppb	0.003 ppb	0.087 ppb	106.491 %	-0.003 ppb	0.003 ppb	104.572 %
Concentration per Run 3	105.257 %	-0.023 ppb	0.052 ppb	0.003 ppb	0.173 ppb	106.933 %	0.004 ppb	0.003 ppb	105.620 %
Concentration RSD	4.2 %	135.3 %	118.8 %	25.4 %	62.3 %	1.3 %	389.6 %	41.7 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	0.014 ppb	109.429 %	109.043 %	0.044 ppb	0.049 ppb	110.446 %
Concentration per Run 1	0.010 ppb	-0.003 ppb	110.217 %	109.313 %	0.022 ppb	0.050 ppb	118.918 %
Concentration per Run 2	0.009 ppb	0.023 ppb	108.515 %	107.761 %	0.058 ppb	0.055 ppb	108.472 %
Concentration per Run 3	0.008 ppb	0.022 ppb	109.554 %	110.056 %	0.052 ppb	0.043 ppb	103.950 %
Concentration RSD	10.2 %	107.3 %	0.8 %	1.1 %	43.3 %	12.7 %	7.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963135-2d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:00:20 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.752 %	105.631 %	10.959 ppb	2,224.450 ppb	2,144.543 ppb	424.043 ppb	2,190.353 ppb	2,301.120 ppb	106.964 %
Concentration per Run 1	103.959 %	102.816 %	10.893 ppb	2,233.444 ppb	2,177.877 ppb	416.905 ppb	2,199.188 ppb	2,244.672 ppb	107.555 %
Concentration per Run 2	104.258 %	110.680 %	10.907 ppb	2,139.588 ppb	2,042.288 ppb	409.953 ppb	2,107.673 ppb	2,334.720 ppb	107.157 %
Concentration per Run 3	103.038 %	103.398 %	11.077 ppb	2,300.317 ppb	2,213.464 ppb	445.271 ppb	2,264.197 ppb	2,323.968 ppb	106.180 %
Concentration RSD	0.6 %	4.1 %	0.9 %	3.6 %	4.2 %	4.4 %	3.6 %	2.1 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.268 %	107.821 ppb	45.031 ppb	114.452 ppb	220.121 ppb	114.289 ppb	114.698 ppb	58.228 ppb	110.570 ppb
Concentration per Run 1	104.122 %	103.693 ppb	43.628 ppb	113.167 ppb	213.574 ppb	111.150 ppb	114.366 ppb	56.489 ppb	108.747 ppb
Concentration per Run 2	102.444 %	110.224 ppb	45.545 ppb	112.764 ppb	217.829 ppb	116.233 ppb	117.131 ppb	60.203 ppb	113.189 ppb
Concentration per Run 3	103.239 %	109.546 ppb	45.920 ppb	117.424 ppb	228.961 ppb	115.484 ppb	112.596 ppb	57.993 ppb	109.774 ppb
Concentration RSD	0.8 %	3.3 %	2.7 %	2.3 %	3.6 %	2.4 %	2.0 %	3.2 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.492 %	25.230 ppb	24.812 ppb	190.586 ppb	205.543 ppb	104.545 %	10.470 ppb	11.377 ppb	102.243 %
Concentration per Run 1	106.774 %	25.145 ppb	23.964 ppb	189.367 ppb	206.421 ppb	104.227 %	10.531 ppb	11.355 ppb	103.613 %
Concentration per Run 2	102.850 %	25.705 ppb	25.034 ppb	190.186 ppb	203.260 ppb	101.993 %	10.436 ppb	11.233 ppb	96.728 %
Concentration per Run 3	106.851 %	24.839 ppb	25.438 ppb	192.204 ppb	206.949 ppb	107.415 %	10.443 ppb	11.543 ppb	106.388 %
Concentration RSD	2.2 %	1.7 %	3.1 %	0.8 %	1.0 %	2.6 %	0.5 %	1.4 %	4.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	105.943 ppb	421.007 ppb	105.967 %	105.838 %	25.434 ppb	116.077 ppb	111.182 %
Concentration per Run 1	107.599 ppb	426.215 ppb	105.298 %	105.251 %	24.666 ppb	113.052 ppb	114.994 %
Concentration per Run 2	105.406 ppb	419.127 ppb	103.052 %	103.145 %	25.078 ppb	114.911 ppb	109.422 %
Concentration per Run 3	104.824 ppb	417.680 ppb	109.550 %	109.120 %	26.558 ppb	120.269 ppb	109.130 %
Concentration RSD	1.4 %	1.1 %	3.1 %	2.9 %	3.9 %	3.2 %	3.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445805-01d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:04:47 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.647 %	107.767 %	0.911 ppb	1,983.449 ppb	19,544.536 ppb	13,635.474 ppb	2,297.966 ppb	21,237.535 ppb	114.508 %
Concentration per Run 1	105.112 %	105.437 %	0.913 ppb	2,021.672 ppb	20,071.012 ppb	13,909.854 ppb	2,355.619 ppb	22,120.854 ppb	114.062 %
Concentration per Run 2	104.472 %	106.602 %	0.935 ppb	1,990.458 ppb	19,621.495 ppb	13,659.090 ppb	2,304.810 ppb	21,342.909 ppb	116.521 %
Concentration per Run 3	104.358 %	111.262 %	0.886 ppb	1,938.218 ppb	18,941.100 ppb	13,337.479 ppb	2,233.470 ppb	20,248.842 ppb	112.940 %
Concentration RSD	0.4 %	2.9 %	2.7 %	2.1 %	2.9 %	2.1 %	2.7 %	4.4 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	118.667 %	49.420 ppb	150.167 ppb	1,453.656 ppb	32,212.256 ppb	12.576 ppb	42.696 ppb	99.375 ppb	505.746 ppb
Concentration per Run 1	116.664 %	50.097 ppb	152.944 ppb	1,467.763 ppb	32,685.984 ppb	12.804 ppb	43.656 ppb	99.232 ppb	507.318 ppb
Concentration per Run 2	116.841 %	49.575 ppb	151.011 ppb	1,460.504 ppb	32,463.041 ppb	12.509 ppb	42.642 ppb	100.484 ppb	509.131 ppb
Concentration per Run 3	122.494 %	48.588 ppb	146.546 ppb	1,432.702 ppb	31,487.742 ppb	12.415 ppb	41.789 ppb	98.410 ppb	500.788 ppb
Concentration RSD	2.8 %	1.6 %	2.2 %	1.3 %	2.0 %	1.6 %	2.2 %	1.1 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	109.078 %	7.705 ppb	2.552 ppb	98.766 ppb	1.823 ppb	104.451 %	2.026 ppb	1.606 ppb	102.517 %
Concentration per Run 1	110.309 %	7.700 ppb	2.415 ppb	100.768 ppb	1.822 ppb	103.767 %	1.991 ppb	1.623 ppb	104.218 %
Concentration per Run 2	106.940 %	8.117 ppb	2.939 ppb	100.650 ppb	1.683 ppb	106.966 %	2.021 ppb	1.637 ppb	103.757 %
Concentration per Run 3	109.985 %	7.299 ppb	2.304 ppb	94.881 ppb	1.963 ppb	102.620 %	2.068 ppb	1.559 ppb	99.576 %
Concentration RSD	1.7 %	5.3 %	13.3 %	3.4 %	7.7 %	2.2 %	1.9 %	2.6 %	2.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.266 ppb	155.633 ppb	110.643 %	107.909 %	0.431 ppb	255.479 ppb	114.956 %
Concentration per Run 1	1.239 ppb	155.775 ppb	109.913 %	107.489 %	0.362 ppb	244.435 ppb	118.585 %
Concentration per Run 2	1.247 ppb	155.356 ppb	111.902 %	110.232 %	0.495 ppb	254.845 ppb	115.156 %
Concentration per Run 3	1.311 ppb	155.769 ppb	110.114 %	106.005 %	0.436 ppb	267.156 ppb	111.127 %
Concentration RSD	3.1 %	0.2 %	1.0 %	2.0 %	15.5 %	4.5 %	3.2 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963135-3d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:09:14 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.775 %	110.388 %	10.621 ppb	4,053.878 ppb	25,024.092 ppb	14,448.388 ppb	3,928.255 ppb	27,410.754 ppb	115.568 %
Concentration per Run 1	105.434 %	118.544 %	10.503 ppb	3,840.172 ppb	24,272.703 ppb	14,307.074 ppb	4,023.688 ppb	27,353.949 ppb	115.226 %
Concentration per Run 2	104.724 %	103.689 %	10.720 ppb	4,288.297 ppb	26,130.057 ppb	14,906.694 ppb	3,978.625 ppb	28,025.519 ppb	115.841 %
Concentration per Run 3	104.166 %	108.932 %	10.641 ppb	4,033.164 ppb	24,669.518 ppb	14,131.396 ppb	3,782.451 ppb	26,852.795 ppb	115.638 %
Concentration RSD	0.6 %	6.8 %	1.0 %	5.5 %	3.9 %	2.8 %	3.3 %	2.1 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	115.634 %	152.546 ppb	289.312 ppb	1,715.900 ppb	32,505.506 ppb	113.275 ppb	150.185 ppb	150.905 ppb	767.119 ppb
Concentration per Run 1	123.643 %	147.859 ppb	277.200 ppb	1,699.385 ppb	33,706.121 ppb	109.464 ppb	143.799 ppb	145.131 ppb	756.343 ppb
Concentration per Run 2	110.393 %	156.636 ppb	294.197 ppb	1,719.210 ppb	28,997.400 ppb	113.897 ppb	150.816 ppb	149.725 ppb	754.402 ppb
Concentration per Run 3	112.867 %	153.141 ppb	296.537 ppb	1,729.106 ppb	34,812.997 ppb	116.465 ppb	155.941 ppb	157.858 ppb	790.611 ppb
Concentration RSD	6.1 %	2.9 %	3.6 %	0.9 %	9.5 %	3.1 %	4.1 %	4.3 %	2.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.389 %	31.788 ppb	24.512 ppb	284.823 ppb	194.371 ppb	102.590 %	13.364 ppb	12.882 ppb	101.286 %
Concentration per Run 1	111.171 %	32.415 ppb	23.834 ppb	295.085 ppb	193.032 ppb	106.701 %	13.181 ppb	12.600 ppb	107.030 %
Concentration per Run 2	111.805 %	30.051 ppb	24.986 ppb	277.932 ppb	193.178 ppb	103.951 %	13.290 ppb	12.820 ppb	102.625 %
Concentration per Run 3	102.190 %	32.899 ppb	24.717 ppb	281.453 ppb	196.903 ppb	97.118 %	13.622 ppb	13.226 ppb	94.204 %
Concentration RSD	5.0 %	4.8 %	2.5 %	3.2 %	1.1 %	4.8 %	1.7 %	2.5 %	6.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	88.624 ppb	599.550 ppb	109.502 %	107.346 %	24.050 ppb	374.480 ppb	112.550 %
Concentration per Run 1	88.316 ppb	605.821 ppb	112.700 %	112.173 %	22.664 ppb	354.699 ppb	117.722 %
Concentration per Run 2	87.329 ppb	590.462 ppb	112.476 %	108.610 %	23.780 ppb	372.585 ppb	115.552 %
Concentration per Run 3	90.226 ppb	602.365 ppb	103.331 %	101.255 %	25.708 ppb	396.155 ppb	104.378 %
Concentration RSD	1.7 %	1.3 %	4.9 %	5.2 %	6.4 %	5.6 %	6.4 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	28	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963135-4d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:13:42 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.966 %	111.554 %	0.626 ppb	1,614.291 ppb	14,970.154 ppb	9,802.732 ppb	1,507.323 ppb	15,771.450 ppb	119.945 %
Concentration per Run 1	107.023 %	117.961 %	0.621 ppb	1,575.874 ppb	14,577.430 ppb	9,758.728 ppb	1,472.619 ppb	15,673.795 ppb	119.930 %
Concentration per Run 2	106.105 %	111.845 %	0.629 ppb	1,576.894 ppb	14,591.953 ppb	9,546.002 ppb	1,535.947 ppb	15,649.602 ppb	119.225 %
Concentration per Run 3	107.769 %	104.854 %	0.627 ppb	1,690.107 ppb	15,741.079 ppb	10,103.466 ppb	1,513.405 ppb	15,990.952 ppb	120.680 %
Concentration RSD	0.8 %	5.9 %	0.6 %	4.1 %	4.5 %	2.9 %	2.1 %	1.2 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	121.317 %	41.148 ppb	126.430 ppb	1,297.061 ppb	39,411.619 ppb	11.162 ppb	38.320 ppb	1,206.677 ppb	473.841 ppb
Concentration per Run 1	128.236 %	39.775 ppb	122.016 ppb	1,283.692 ppb	38,536.807 ppb	10.829 ppb	36.355 ppb	1,178.032 ppb	469.735 ppb
Concentration per Run 2	120.728 %	41.465 ppb	127.497 ppb	1,288.865 ppb	39,656.114 ppb	11.283 ppb	38.912 ppb	1,222.492 ppb	478.773 ppb
Concentration per Run 3	114.986 %	42.203 ppb	129.778 ppb	1,318.624 ppb	40,041.937 ppb	11.374 ppb	39.695 ppb	1,219.507 ppb	473.014 ppb
Concentration RSD	5.5 %	3.0 %	3.2 %	1.5 %	2.0 %	2.6 %	4.6 %	2.1 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	112.107 %	6.336 ppb	2.519 ppb	71.950 ppb	2.133 ppb	107.951 %	1.740 ppb	1.317 ppb	107.667 %
Concentration per Run 1	113.320 %	6.415 ppb	2.295 ppb	74.472 ppb	1.895 ppb	107.072 %	1.697 ppb	1.279 ppb	111.928 %
Concentration per Run 2	109.627 %	6.327 ppb	2.583 ppb	71.443 ppb	2.090 ppb	107.653 %	1.757 ppb	1.348 ppb	105.274 %
Concentration per Run 3	113.373 %	6.266 ppb	2.681 ppb	69.933 ppb	2.413 ppb	109.128 %	1.767 ppb	1.324 ppb	105.798 %
Concentration RSD	1.9 %	1.2 %	8.0 %	3.2 %	12.3 %	1.0 %	2.2 %	2.7 %	3.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.977 ppb	137.641 ppb	111.549 %	109.797 %	0.289 ppb	224.317 ppb	108.916 %
Concentration per Run 1	0.951 ppb	137.610 ppb	113.771 %	112.964 %	0.224 ppb	207.844 ppb	115.820 %
Concentration per Run 2	0.999 ppb	138.191 ppb	110.628 %	108.624 %	0.323 ppb	228.218 ppb	106.799 %
Concentration per Run 3	0.982 ppb	137.122 ppb	110.247 %	107.802 %	0.319 ppb	236.888 ppb	104.130 %
Concentration RSD	2.5 %	0.4 %	1.7 %	2.5 %	19.5 %	6.6 %	5.6 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963135-5d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:18:10 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.583 %	110.194 %	49.311 ppb	6,759.854 ppb	23,923.456 ppb	13,519.803 ppb	6,850.295 ppb	25,342.635 ppb	114.789 %
Concentration per Run 1	102.113 %	108.932 %	49.642 ppb	6,763.919 ppb	23,741.150 ppb	13,232.379 ppb	6,805.616 ppb	24,981.470 ppb	112.669 %
Concentration per Run 2	105.149 %	111.262 %	49.575 ppb	6,862.801 ppb	24,568.944 ppb	14,184.484 ppb	7,017.612 ppb	25,788.604 ppb	115.870 %
Concentration per Run 3	103.486 %	110.388 %	48.716 ppb	6,652.842 ppb	23,460.275 ppb	13,142.545 ppb	6,727.658 ppb	25,257.830 ppb	115.828 %
Concentration RSD	1.5 %	1.1 %	1.0 %	1.6 %	2.4 %	4.3 %	2.2 %	1.6 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	123.496 %	95.528 ppb	191.451 ppb	1,463.604 ppb	36,502.984 ppb	60.722 ppb	89.254 ppb	147.143 ppb	549.765 ppb
Concentration per Run 1	121.965 %	94.272 ppb	189.942 ppb	1,425.665 ppb	35,920.034 ppb	59.752 ppb	87.918 ppb	145.698 ppb	532.554 ppb
Concentration per Run 2	127.706 %	95.838 ppb	190.294 ppb	1,488.709 ppb	36,535.615 ppb	60.139 ppb	87.626 ppb	142.528 ppb	543.953 ppb
Concentration per Run 3	120.816 %	96.474 ppb	194.116 ppb	1,476.439 ppb	37,053.303 ppb	62.274 ppb	92.217 ppb	153.204 ppb	572.788 ppb
Concentration RSD	3.0 %	1.2 %	1.2 %	2.3 %	1.6 %	2.2 %	2.9 %	3.7 %	3.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.942 %	58.336 ppb	50.212 ppb	151.710 ppb	52.612 ppb	103.797 %	3.192 ppb	51.764 ppb	104.557 %
Concentration per Run 1	110.308 %	56.424 ppb	48.349 ppb	147.288 ppb	51.235 ppb	105.471 %	3.157 ppb	51.699 ppb	106.327 %
Concentration per Run 2	111.454 %	56.300 ppb	47.954 ppb	153.615 ppb	52.296 ppb	104.185 %	3.144 ppb	51.076 ppb	106.902 %
Concentration per Run 3	99.064 %	62.284 ppb	54.332 ppb	154.227 ppb	54.304 ppb	101.735 %	3.275 ppb	52.516 ppb	100.440 %
Concentration RSD	6.4 %	5.9 %	7.1 %	2.5 %	3.0 %	1.8 %	2.3 %	1.4 %	3.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.430 ppb	208.296 ppb	109.052 %	107.849 %	53.258 ppb	319.547 ppb	109.515 %
Concentration per Run 1	50.791 ppb	206.960 ppb	109.926 %	106.651 %	51.161 ppb	305.424 ppb	113.291 %
Concentration per Run 2	51.617 ppb	211.098 ppb	109.738 %	111.573 %	53.285 ppb	322.491 ppb	109.437 %
Concentration per Run 3	51.881 ppb	206.830 ppb	107.494 %	105.323 %	55.329 ppb	330.725 ppb	105.818 %
Concentration RSD	1.1 %	1.2 %	1.2 %	3.1 %	3.9 %	4.0 %	3.4 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963135-6d50 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:22:38 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.145 %	106.893 %	0.191 ppb	422.878 ppb	4,150.240 ppb	2,955.034 ppb	498.585 ppb	4,803.887 ppb	109.713 %
Concentration per Run 1	102.711 %	109.806 %	0.181 ppb	412.414 ppb	4,065.951 ppb	2,919.772 ppb	513.817 ppb	4,893.053 ppb	107.928 %
Concentration per Run 2	103.652 %	101.650 %	0.194 ppb	439.803 ppb	4,305.511 ppb	3,049.362 ppb	512.456 ppb	4,764.422 ppb	110.986 %
Concentration per Run 3	103.074 %	109.223 %	0.197 ppb	416.416 ppb	4,079.259 ppb	2,895.967 ppb	469.482 ppb	4,754.187 ppb	110.224 %
Concentration RSD	0.5 %	4.3 %	4.4 %	3.5 %	3.2 %	2.8 %	5.1 %	1.6 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.447 %	11.217 ppb	32.827 ppb	314.209 ppb	7,032.953 ppb	2.779 ppb	9.094 ppb	21.148 ppb	107.751 ppb
Concentration per Run 1	103.239 %	11.168 ppb	33.185 ppb	309.475 ppb	6,919.530 ppb	2.711 ppb	9.111 ppb	20.481 ppb	105.033 ppb
Concentration per Run 2	104.652 %	11.434 ppb	33.063 ppb	319.664 ppb	7,116.168 ppb	2.826 ppb	9.273 ppb	21.446 ppb	108.253 ppb
Concentration per Run 3	108.450 %	11.048 ppb	32.233 ppb	313.487 ppb	7,063.161 ppb	2.800 ppb	8.900 ppb	21.519 ppb	109.968 ppb
Concentration RSD	2.6 %	1.8 %	1.6 %	1.6 %	1.4 %	2.2 %	2.1 %	2.7 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	110.264 %	1.627 ppb	0.718 ppb	19.896 ppb	0.484 ppb	109.154 %	0.408 ppb	0.317 ppb	106.531 %
Concentration per Run 1	114.229 %	1.523 ppb	0.541 ppb	19.385 ppb	0.374 ppb	109.215 %	0.411 ppb	0.329 ppb	104.559 %
Concentration per Run 2	109.269 %	1.663 ppb	0.687 ppb	20.031 ppb	0.509 ppb	108.484 %	0.420 ppb	0.295 ppb	106.879 %
Concentration per Run 3	107.293 %	1.694 ppb	0.926 ppb	20.274 ppb	0.570 ppb	109.763 %	0.392 ppb	0.326 ppb	108.155 %
Concentration RSD	3.2 %	5.6 %	27.1 %	2.3 %	20.7 %	0.6 %	3.6 %	6.0 %	1.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.273 ppb	31.524 ppb	110.803 %	109.233 %	0.284 ppb	52.682 ppb	113.476 %
Concentration per Run 1	0.256 ppb	31.995 ppb	109.883 %	107.440 %	0.227 ppb	50.094 ppb	117.344 %
Concentration per Run 2	0.289 ppb	31.127 ppb	111.559 %	108.977 %	0.345 ppb	53.317 ppb	113.067 %
Concentration per Run 3	0.275 ppb	31.451 ppb	110.969 %	111.280 %	0.282 ppb	54.635 ppb	110.019 %
Concentration RSD	6.1 %	1.4 %	0.8 %	1.8 %	20.8 %	4.4 %	3.2 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445747-01d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:27:06 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.608 %	114.757 %	3.922 ppb	234.859 ppb	1,910.104 ppb	11,399.546 ppb	3,239.343 ppb	5,839.085 ppb	132.475 %
Concentration per Run 1	107.611 %	112.136 %	3.949 ppb	234.462 ppb	1,926.731 ppb	11,228.823 ppb	3,217.105 ppb	5,950.319 ppb	130.555 %
Concentration per Run 2	108.632 %	116.214 %	3.959 ppb	236.571 ppb	1,950.487 ppb	11,571.741 ppb	3,351.502 ppb	5,981.200 ppb	131.614 %
Concentration per Run 3	109.581 %	115.922 %	3.857 ppb	233.545 ppb	1,853.093 ppb	11,398.073 ppb	3,149.423 ppb	5,585.735 ppb	135.256 %
Concentration RSD	0.9 %	2.0 %	1.4 %	0.7 %	2.7 %	1.5 %	3.2 %	3.8 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	129.414 %	115.677 ppb	149.031 ppb	326.041 ppb	129,513.956 ppb	15.855 ppb	39.130 ppb	25.022 ppb	296.651 ppb
Concentration per Run 1	122.053 %	118.849 ppb	153.036 ppb	330.981 ppb	131,186.791 ppb	16.098 ppb	39.578 ppb	26.082 ppb	296.768 ppb
Concentration per Run 2	127.353 %	116.237 ppb	151.391 ppb	329.724 ppb	132,898.550 ppb	16.212 ppb	39.936 ppb	24.422 ppb	302.462 ppb
Concentration per Run 3	138.837 %	111.945 ppb	142.665 ppb	317.419 ppb	124,456.528 ppb	15.254 ppb	37.875 ppb	24.563 ppb	290.723 ppb
Concentration RSD	6.6 %	3.0 %	3.7 %	2.3 %	3.4 %	3.3 %	2.8 %	3.7 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	121.464 %	37.321 ppb	3.829 ppb	39.905 ppb	1.526 ppb	113.507 %	0.194 ppb	2.049 ppb	114.246 %
Concentration per Run 1	120.272 %	37.228 ppb	4.040 ppb	38.435 ppb	1.491 ppb	112.282 %	0.192 ppb	2.082 ppb	111.892 %
Concentration per Run 2	120.005 %	37.440 ppb	3.665 ppb	40.813 ppb	1.589 ppb	114.605 %	0.190 ppb	1.995 ppb	116.195 %
Concentration per Run 3	124.116 %	37.294 ppb	3.781 ppb	40.468 ppb	1.497 ppb	113.635 %	0.201 ppb	2.069 ppb	114.652 %
Concentration RSD	1.9 %	0.3 %	5.0 %	3.2 %	3.6 %	1.0 %	3.2 %	2.3 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.357 ppb	130.857 ppb	116.203 %	111.772 %	0.203 ppb	34.792 ppb	115.998 %
Concentration per Run 1	1.314 ppb	129.458 ppb	114.537 %	108.298 %	0.156 ppb	33.005 ppb	120.233 %
Concentration per Run 2	1.299 ppb	131.269 ppb	116.676 %	113.362 %	0.222 ppb	35.010 ppb	116.226 %
Concentration per Run 3	1.458 ppb	131.842 ppb	117.395 %	113.655 %	0.230 ppb	36.361 ppb	111.535 %
Concentration RSD	6.5 %	1.0 %	1.3 %	2.7 %	19.8 %	4.9 %	3.8 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445747-03d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:31:35 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.545 %	112.524 %	3.849 ppb	411.241 ppb	2,262.583 ppb	13,761.969 ppb	3,537.086 ppb	3,688.486 ppb	130.082 %
Concentration per Run 1	106.334 %	104.563 %	3.878 ppb	422.553 ppb	2,349.737 ppb	13,928.828 ppb	3,636.311 ppb	3,761.198 ppb	129.648 %
Concentration per Run 2	106.608 %	111.262 %	3.882 ppb	409.609 ppb	2,241.540 ppb	13,400.021 ppb	3,330.755 ppb	3,533.573 ppb	130.293 %
Concentration per Run 3	106.693 %	121.748 %	3.788 ppb	401.560 ppb	2,196.470 ppb	13,957.060 ppb	3,644.191 ppb	3,770.688 ppb	130.304 %
Concentration RSD	0.2 %	7.7 %	1.4 %	2.6 %	3.5 %	2.3 %	5.1 %	3.6 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	129.885 %	133.097 ppb	180.657 ppb	176.469 ppb	129,046.194 ppb	11.674 ppb	38.053 ppb	40.969 ppb	365.318 ppb
Concentration per Run 1	120.463 %	136.942 ppb	188.906 ppb	180.771 ppb	133,730.641 ppb	12.005 ppb	39.807 ppb	42.103 ppb	376.503 ppb
Concentration per Run 2	128.855 %	131.088 ppb	178.932 ppb	175.991 ppb	126,647.254 ppb	11.859 ppb	37.538 ppb	40.647 ppb	357.087 ppb
Concentration per Run 3	140.339 %	131.261 ppb	174.134 ppb	172.645 ppb	126,760.686 ppb	11.156 ppb	36.815 ppb	40.156 ppb	362.365 ppb
Concentration RSD	7.7 %	2.5 %	4.2 %	2.3 %	3.1 %	3.9 %	4.1 %	2.5 %	2.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	116.906 %	49.636 ppb	4.877 ppb	20.156 ppb	2.023 ppb	111.215 %	2.178 ppb	1.543 ppb	112.090 %
Concentration per Run 1	113.752 %	48.739 ppb	4.920 ppb	19.880 ppb	1.940 ppb	109.947 %	2.196 ppb	1.560 ppb	108.700 %
Concentration per Run 2	117.140 %	49.958 ppb	4.740 ppb	19.557 ppb	2.099 ppb	111.192 %	2.171 ppb	1.550 ppb	110.229 %
Concentration per Run 3	119.828 %	50.212 ppb	4.972 ppb	21.031 ppb	2.028 ppb	112.506 %	2.167 ppb	1.518 ppb	117.343 %
Concentration RSD	2.6 %	1.6 %	2.5 %	3.8 %	3.9 %	1.2 %	0.7 %	1.4 %	4.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.379 ppb	100.062 ppb	113.665 %	110.647 %	0.184 ppb	58.973 ppb	117.691 %
Concentration per Run 1	1.392 ppb	98.521 ppb	110.253 %	106.164 %	0.157 ppb	57.793 ppb	118.043 %
Concentration per Run 2	1.381 ppb	98.483 ppb	112.312 %	109.789 %	0.187 ppb	58.232 ppb	119.095 %
Concentration per Run 3	1.364 ppb	103.182 ppb	118.431 %	115.987 %	0.207 ppb	60.894 ppb	115.935 %
Concentration RSD	1.0 %	2.7 %	3.7 %	4.5 %	13.9 %	2.8 %	1.4 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check - Cr 1 ppm	Rack	1		
Analysis started at:	8/27/2024 7:36:04 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.159 %	100.485 %	-0.001 ppb	2.304 ppb	0.252 ppb	-0.154 ppb	8.828 ppb	-7.590 ppb	106.029 %
Concentration per Run 1	100.782 %	97.573 %	-0.002 ppb	2.280 ppb	-0.572 ppb	-0.490 ppb	17.460 ppb	-9.731 ppb	105.837 %
Concentration per Run 2	101.959 %	101.359 %	0.003 ppb	0.336 ppb	-0.661 ppb	0.177 ppb	5.326 ppb	-2.729 ppb	106.622 %
Concentration per Run 3	100.737 %	102.524 %	-0.003 ppb	4.296 ppb	1.988 ppb	-0.148 ppb	3.697 ppb	-10.309 ppb	105.628 %
Concentration RSD	0.7 %	2.6 %	508.2 %	85.9 %	597.6 %	217.2 %	85.2 %	55.6 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.185 %	-0.100 ppb	1,060.690 ppb	-0.017 ppb	22.391 ppb	0.010 ppb	-0.004 ppb	-0.044 ppb	-0.088 ppb
Concentration per Run 1	98.822 %	-0.113 ppb	1,029.819 ppb	0.049 ppb	25.818 ppb	0.014 ppb	0.020 ppb	-0.086 ppb	-0.098 ppb
Concentration per Run 2	107.655 %	-0.092 ppb	1,054.197 ppb	-0.086 ppb	20.375 ppb	0.006 ppb	-0.024 ppb	-0.032 ppb	-0.031 ppb
Concentration per Run 3	118.078 %	-0.095 ppb	1,098.056 ppb	-0.014 ppb	20.978 ppb	0.009 ppb	-0.007 ppb	-0.015 ppb	-0.135 ppb
Concentration RSD	8.9 %	11.5 %	3.3 %	398.2 %	13.3 %	41.8 %	600.6 %	84.2 %	60.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.483 %	0.074 ppb	0.075 ppb	0.003 ppb	0.074 ppb	109.944 %	0.015 ppb	0.002 ppb	109.114 %
Concentration per Run 1	105.770 %	0.052 ppb	0.121 ppb	0.006 ppb	0.041 ppb	109.920 %	0.017 ppb	0.003 ppb	107.765 %
Concentration per Run 2	104.229 %	0.074 ppb	0.008 ppb	0.002 ppb	0.077 ppb	109.304 %	0.021 ppb	0.003 ppb	106.164 %
Concentration per Run 3	112.451 %	0.096 ppb	0.097 ppb	0.000 ppb	0.102 ppb	110.607 %	0.007 ppb	0.002 ppb	113.412 %
Concentration RSD	4.1 %	29.6 %	79.3 %	95.5 %	41.8 %	0.6 %	46.4 %	2.5 %	3.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	-0.017 ppb	109.706 %	108.355 %	0.036 ppb	0.061 ppb	113.578 %
Concentration per Run 1	0.023 ppb	-0.020 ppb	106.904 %	104.368 %	0.016 ppb	0.059 ppb	117.138 %
Concentration per Run 2	0.001 ppb	-0.028 ppb	108.768 %	107.286 %	0.050 ppb	0.062 ppb	112.084 %
Concentration per Run 3	0.018 ppb	-0.005 ppb	113.445 %	113.411 %	0.043 ppb	0.061 ppb	111.512 %
Concentration RSD	80.8 %	68.1 %	3.1 %	4.3 %	49.3 %	2.2 %	2.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 7:44:58 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.450 %	108.447 %	61.358 ppb	6,018.479 ppb	5,938.175 ppb	61.928 ppb	5,961.667 ppb	5,774.712 ppb	108.682 %
Concentration per Run 1	100.766 %	102.233 %	60.902 ppb	5,897.932 ppb	5,837.580 ppb	56.043 ppb	5,682.279 ppb	5,372.848 ppb	107.312 %
Concentration per Run 2	101.078 %	116.214 %	62.095 ppb	5,802.096 ppb	5,725.664 ppb	64.190 ppb	6,064.992 ppb	5,946.539 ppb	107.731 %
Concentration per Run 3	102.505 %	106.893 %	61.076 ppb	6,355.408 ppb	6,251.281 ppb	65.553 ppb	6,137.731 ppb	6,004.749 ppb	111.003 %
Recovery Percentage 1			102.263 %	100.308 %	98.970 %	103.214 %	99.361 %	96.245 %	
Concentration RSD	0.9 %	6.6 %	1.1 %	4.9 %	4.7 %	8.3 %	4.1 %	6.0 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	111.865 %	60.591 ppb	61.580 ppb	61.137 ppb	6,192.565 ppb	63.257 ppb	63.044 ppb	64.067 ppb	60.933 ppb
Concentration per Run 1	118.520 %	57.986 ppb	57.942 ppb	59.358 ppb	5,995.003 ppb	61.944 ppb	60.530 ppb	62.885 ppb	59.715 ppb
Concentration per Run 2	107.125 %	62.899 ppb	63.727 ppb	62.208 ppb	6,302.367 ppb	63.514 ppb	63.881 ppb	63.607 ppb	61.533 ppb
Concentration per Run 3	109.952 %	60.888 ppb	63.071 ppb	61.845 ppb	6,280.324 ppb	64.312 ppb	64.721 ppb	65.708 ppb	61.550 ppb
Recovery Percentage 1		100.985 %	102.633 %	101.895 %	103.209 %	105.428 %	105.073 %	106.778 %	101.555 %
Concentration RSD	5.3 %	4.1 %	5.1 %	2.5 %	2.8 %	1.9 %	3.5 %	2.3 %	1.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.789 %	61.292 ppb	58.289 ppb	56.407 ppb	59.485 ppb	107.198 %	60.842 ppb	60.292 ppb	104.997 %
Concentration per Run 1	104.837 %	61.813 ppb	59.627 ppb	56.988 ppb	58.579 ppb	106.372 %	60.314 ppb	59.793 ppb	104.915 %
Concentration per Run 2	109.257 %	59.750 ppb	57.130 ppb	55.116 ppb	59.271 ppb	107.879 %	61.088 ppb	60.419 ppb	104.988 %
Concentration per Run 3	106.274 %	62.314 ppb	58.109 ppb	57.118 ppb	60.606 ppb	107.344 %	61.124 ppb	60.662 ppb	105.086 %
Recovery Percentage 1		102.154 %	97.148 %	94.012 %	99.142 %		101.403 %	100.486 %	
Concentration RSD	2.1 %	2.2 %	2.2 %	2.0 %	1.7 %	0.7 %	0.8 %	0.7 %	0.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.196 ppb	59.888 ppb	109.439 %	109.901 %	65.590 ppb	61.774 ppb	109.369 %
Concentration per Run 1	60.219 ppb	59.697 ppb	107.505 %	108.756 %	58.967 ppb	62.525 ppb	120.804 %
Concentration per Run 2	60.554 ppb	59.543 ppb	110.571 %	111.770 %	67.169 ppb	61.479 ppb	106.722 %
Concentration per Run 3	59.815 ppb	60.425 ppb	110.240 %	109.177 %	70.634 ppb	61.319 ppb	100.583 %
Recovery Percentage 1	100.327 %	99.814 %			109.317 %	102.957 %	
Concentration RSD	0.6 %	0.8 %	1.5 %	1.5 %	9.1 %	1.1 %	9.5 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 7:49:29 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.685 %	104.563 %	0.003 ppb	0.359 ppb	-0.758 ppb	-0.792 ppb	5.371 ppb	-4.707 ppb	106.770 %
Concentration per Run 1	102.333 %	102.816 %	-0.002 ppb	-0.680 ppb	-1.214 ppb	-0.650 ppb	20.132 ppb	-1.974 ppb	106.296 %
Concentration per Run 2	103.020 %	102.233 %	0.004 ppb	1.407 ppb	-0.671 ppb	-0.929 ppb	-0.854 ppb	-8.191 ppb	107.158 %
Concentration per Run 3	102.701 %	108.641 %	0.008 ppb	0.349 ppb	-0.390 ppb	-0.796 ppb	-3.166 ppb	-3.957 ppb	106.856 %
Recovery Percentage 1			0.601 %	0.359 %	-1.083 %	-7.919 %	5.371 %	-4.707 %	
Concentration RSD	0.3 %	3.4 %	171.6 %	290.9 %	55.3 %	17.6 %	239.0 %	67.5 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.415 %	-0.069 ppb	-0.018 ppb	-0.042 ppb	3.018 ppb	0.002 ppb	0.021 ppb	-0.030 ppb	-0.209 ppb
Concentration per Run 1	100.942 %	-0.056 ppb	-0.009 ppb	-0.036 ppb	2.733 ppb	0.006 ppb	0.004 ppb	-0.051 ppb	-0.200 ppb
Concentration per Run 2	108.185 %	-0.081 ppb	-0.018 ppb	-0.054 ppb	2.649 ppb	0.002 ppb	0.043 ppb	-0.031 ppb	-0.210 ppb
Concentration per Run 3	101.119 %	-0.068 ppb	-0.028 ppb	-0.037 ppb	3.672 ppb	-0.001 ppb	0.015 ppb	-0.008 ppb	-0.216 ppb
Recovery Percentage 1		-1.371 %	-1.828 %	-4.241 %	6.036 %	0.483 %	1.036 %	-2.968 %	-4.178 %
Concentration RSD	4.0 %	18.1 %	52.6 %	23.7 %	18.8 %	155.3 %	97.8 %	72.4 %	4.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.471 %	0.045 ppb	0.198 ppb	-0.005 ppb	0.305 ppb	107.970 %	0.002 ppb	0.007 ppb	105.368 %
Concentration per Run 1	108.242 %	0.018 ppb	0.349 ppb	-0.007 ppb	0.228 ppb	106.938 %	0.005 ppb	0.008 ppb	105.478 %
Concentration per Run 2	102.945 %	0.031 ppb	0.149 ppb	-0.002 ppb	0.301 ppb	108.608 %	0.003 ppb	0.005 ppb	106.366 %
Concentration per Run 3	111.225 %	0.086 ppb	0.096 ppb	-0.005 ppb	0.387 ppb	108.363 %	-0.001 ppb	0.008 ppb	104.262 %
Recovery Percentage 1		8.973 %	3.968 %	-0.047 %	15.266 %		0.601 %	3.428 %	
Concentration RSD	3.9 %	81.2 %	67.3 %	57.9 %	25.9 %	0.8 %	133.3 %	22.3 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.055 ppb	-0.020 ppb	108.340 %	106.986 %	0.250 ppb	0.032 ppb	111.089 %
Concentration per Run 1	0.041 ppb	-0.020 ppb	107.199 %	105.102 %	0.177 ppb	0.032 ppb	114.864 %
Concentration per Run 2	0.050 ppb	-0.037 ppb	109.482 %	108.499 %	0.306 ppb	0.033 ppb	110.588 %
Concentration per Run 3	0.075 ppb	-0.002 ppb	108.338 %	107.357 %	0.266 ppb	0.032 ppb	107.815 %
Recovery Percentage 1	1.386 %	-3.903 %			24.994 %	3.230 %	
Concentration RSD	32.2 %	87.3 %	1.1 %	1.6 %	26.4 %	1.8 %	3.2 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445747-05d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:54:35 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.472 %	105.437 %	4.057 ppb	170.130 ppb	1,784.836 ppb	12,260.299 ppb	2,719.356 ppb	1,416.169 ppb	128.713 %
Concentration per Run 1	108.052 %	99.320 %	3.954 ppb	171.131 ppb	1,804.073 ppb	12,347.551 ppb	2,796.683 ppb	1,373.159 ppb	127.091 %
Concentration per Run 2	107.747 %	105.437 %	4.199 ppb	174.770 ppb	1,831.839 ppb	12,541.478 ppb	2,764.253 ppb	1,424.079 ppb	130.605 %
Concentration per Run 3	106.616 %	111.554 %	4.017 ppb	164.489 ppb	1,718.596 ppb	11,891.868 ppb	2,597.131 ppb	1,451.269 ppb	128.444 %
Concentration RSD	0.7 %	5.8 %	3.1 %	3.1 %	3.3 %	2.7 %	3.9 %	2.8 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	131.033 %	120.800 ppb	157.487 ppb	153.612 ppb	106,193.917 ppb	8.243 ppb	21.705 ppb	28.092 ppb	221.994 ppb
Concentration per Run 1	130.974 %	117.460 ppb	154.503 ppb	152.345 ppb	106,397.932 ppb	8.245 ppb	21.873 ppb	27.632 ppb	217.693 ppb
Concentration per Run 2	128.413 %	124.981 ppb	163.493 ppb	155.295 ppb	107,322.777 ppb	8.295 ppb	22.169 ppb	29.184 ppb	226.548 ppb
Concentration per Run 3	133.713 %	119.958 ppb	154.466 ppb	153.195 ppb	104,861.043 ppb	8.190 ppb	21.073 ppb	27.461 ppb	221.742 ppb
Concentration RSD	2.0 %	3.2 %	3.3 %	1.0 %	1.2 %	0.6 %	2.6 %	3.4 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	114.544 %	38.333 ppb	4.783 ppb	9.632 ppb	1.603 ppb	111.642 %	0.287 ppb	0.637 ppb	110.916 %
Concentration per Run 1	115.679 %	37.935 ppb	4.674 ppb	9.476 ppb	1.538 ppb	111.937 %	0.285 ppb	0.597 ppb	111.144 %
Concentration per Run 2	112.573 %	40.161 ppb	4.349 ppb	9.693 ppb	1.645 ppb	112.046 %	0.276 ppb	0.644 ppb	110.568 %
Concentration per Run 3	115.380 %	36.904 ppb	5.325 ppb	9.726 ppb	1.625 ppb	110.944 %	0.300 ppb	0.671 ppb	111.038 %
Concentration RSD	1.5 %	4.3 %	10.4 %	1.4 %	3.5 %	0.5 %	4.2 %	5.8 %	0.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.261 ppb	70.846 ppb	114.749 %	111.474 %	0.192 ppb	302.325 ppb	114.851 %
Concentration per Run 1	1.221 ppb	72.013 ppb	114.665 %	110.739 %	0.147 ppb	289.760 ppb	120.365 %
Concentration per Run 2	1.256 ppb	70.190 ppb	115.521 %	114.032 %	0.210 ppb	307.919 ppb	113.817 %
Concentration per Run 3	1.305 ppb	70.336 ppb	114.062 %	109.651 %	0.217 ppb	309.296 ppb	110.371 %
Concentration RSD	3.4 %	1.4 %	0.6 %	2.0 %	20.2 %	3.6 %	4.4 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	37	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445747-07d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 7:59:04 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.311 %	109.223 %	4.324 ppb	228.900 ppb	2,635.707 ppb	19,259.311 ppb	3,690.393 ppb	2,943.216 ppb	133.235 %
Concentration per Run 1	107.612 %	108.932 %	4.262 ppb	223.152 ppb	2,615.565 ppb	19,164.115 ppb	3,792.540 ppb	3,024.160 ppb	133.564 %
Concentration per Run 2	105.752 %	115.049 %	4.327 ppb	221.145 ppb	2,577.393 ppb	19,042.308 ppb	3,567.016 ppb	2,906.296 ppb	132.714 %
Concentration per Run 3	105.568 %	103.689 %	4.382 ppb	242.403 ppb	2,714.163 ppb	19,571.511 ppb	3,711.623 ppb	2,899.191 ppb	133.428 %
Concentration RSD	1.1 %	5.2 %	1.4 %	5.1 %	2.7 %	1.4 %	3.1 %	2.4 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	129.384 %	166.328 ppb	231.435 ppb	196.258 ppb	128,830.712 ppb	10.341 ppb	27.756 ppb	45.614 ppb	209.399 ppb
Concentration per Run 1	125.763 %	164.838 ppb	231.510 ppb	193.675 ppb	127,513.856 ppb	10.180 ppb	27.747 ppb	44.189 ppb	205.153 ppb
Concentration per Run 2	130.356 %	167.710 ppb	232.642 ppb	197.008 ppb	130,647.730 ppb	10.429 ppb	28.164 ppb	46.901 ppb	214.908 ppb
Concentration per Run 3	132.034 %	166.435 ppb	230.151 ppb	198.092 ppb	128,330.549 ppb	10.413 ppb	27.359 ppb	45.752 ppb	208.136 ppb
Concentration RSD	2.5 %	0.9 %	0.5 %	1.2 %	1.3 %	1.3 %	1.5 %	3.0 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	111.685 %	70.265 ppb	7.098 ppb	19.896 ppb	1.871 ppb	107.817 %	0.962 ppb	1.207 ppb	107.451 %
Concentration per Run 1	114.533 %	67.484 ppb	7.478 ppb	19.162 ppb	1.752 ppb	108.525 %	0.987 ppb	1.217 ppb	107.515 %
Concentration per Run 2	108.666 %	71.372 ppb	6.363 ppb	20.485 ppb	1.996 ppb	107.126 %	0.937 ppb	1.263 ppb	107.182 %
Concentration per Run 3	111.854 %	71.940 ppb	7.453 ppb	20.041 ppb	1.864 ppb	107.800 %	0.962 ppb	1.142 ppb	107.656 %
Concentration RSD	2.6 %	3.5 %	9.0 %	3.4 %	6.5 %	0.6 %	2.6 %	5.0 %	0.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.665 ppb	138.607 ppb	113.208 %	108.622 %	0.264 ppb	100.169 ppb	112.986 %
Concentration per Run 1	1.529 ppb	135.644 ppb	112.077 %	109.732 %	0.226 ppb	94.172 ppb	117.358 %
Concentration per Run 2	1.789 ppb	140.581 ppb	114.313 %	107.018 %	0.283 ppb	101.469 ppb	112.723 %
Concentration per Run 3	1.676 ppb	139.598 ppb	113.235 %	109.118 %	0.282 ppb	104.866 ppb	108.877 %
Concentration RSD	7.8 %	1.9 %	1.0 %	1.3 %	12.4 %	5.5 %	3.8 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445747-16d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:03:34 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.009 %	112.816 %	3.633 ppb	182.741 ppb	1,772.588 ppb	10,495.596 ppb	3,385.444 ppb	5,579.792 ppb	128.073 %
Concentration per Run 1	108.521 %	115.049 %	3.611 ppb	179.114 ppb	1,752.368 ppb	10,346.519 ppb	3,321.747 ppb	5,508.835 ppb	128.760 %
Concentration per Run 2	106.920 %	112.136 %	3.592 ppb	181.072 ppb	1,767.665 ppb	10,401.827 ppb	3,350.004 ppb	5,446.734 ppb	128.592 %
Concentration per Run 3	105.587 %	111.262 %	3.694 ppb	188.038 ppb	1,797.732 ppb	10,738.443 ppb	3,484.579 ppb	5,783.807 ppb	126.866 %
Concentration RSD	1.4 %	1.8 %	1.5 %	2.6 %	1.3 %	2.0 %	2.6 %	3.2 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	124.202 %	115.096 ppb	156.495 ppb	195.561 ppb	119,586.473 ppb	11.765 ppb	32.683 ppb	20.634 ppb	276.775 ppb
Concentration per Run 1	124.703 %	113.828 ppb	152.460 ppb	192.487 ppb	117,430.486 ppb	11.551 ppb	32.092 ppb	19.777 ppb	270.037 ppb
Concentration per Run 2	125.056 %	114.339 ppb	156.731 ppb	196.637 ppb	119,497.365 ppb	12.004 ppb	33.297 ppb	21.140 ppb	281.229 ppb
Concentration per Run 3	122.848 %	117.120 ppb	160.294 ppb	197.560 ppb	121,831.568 ppb	11.739 ppb	32.660 ppb	20.985 ppb	279.060 ppb
Concentration RSD	1.0 %	1.5 %	2.5 %	1.4 %	1.8 %	1.9 %	1.8 %	3.6 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	110.884 %	39.336 ppb	3.561 ppb	49.759 ppb	1.210 ppb	109.813 %	0.197 ppb	1.475 ppb	108.532 %
Concentration per Run 1	114.186 %	37.807 ppb	3.345 ppb	47.945 ppb	1.219 ppb	109.817 %	0.189 ppb	1.478 ppb	108.960 %
Concentration per Run 2	109.390 %	40.184 ppb	3.896 ppb	50.798 ppb	1.210 ppb	109.276 %	0.224 ppb	1.462 ppb	108.280 %
Concentration per Run 3	109.076 %	40.018 ppb	3.443 ppb	50.535 ppb	1.202 ppb	110.346 %	0.178 ppb	1.484 ppb	108.357 %
Concentration RSD	2.6 %	3.4 %	8.3 %	3.2 %	0.7 %	0.5 %	12.3 %	0.8 %	0.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.188 ppb	117.373 ppb	111.928 %	108.103 %	0.137 ppb	34.820 ppb	109.924 %
Concentration per Run 1	1.124 ppb	115.416 ppb	110.439 %	106.551 %	0.120 ppb	32.878 ppb	115.029 %
Concentration per Run 2	1.226 ppb	120.246 ppb	111.892 %	107.659 %	0.143 ppb	35.487 ppb	108.861 %
Concentration per Run 3	1.214 ppb	116.456 ppb	113.453 %	110.097 %	0.149 ppb	36.094 ppb	105.882 %
Concentration RSD	4.7 %	2.2 %	1.3 %	1.7 %	11.4 %	4.9 %	4.2 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445805-02d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:08:05 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.676 %	106.602 %	0.971 ppb	1,745.427 ppb	20,138.454 ppb	13,440.085 ppb	1,421.453 ppb	23,423.579 ppb	118.527 %
Concentration per Run 1	105.501 %	110.680 %	0.979 ppb	1,654.593 ppb	18,949.072 ppb	12,719.096 ppb	1,335.609 ppb	22,118.149 ppb	118.513 %
Concentration per Run 2	106.559 %	98.738 %	0.939 ppb	1,847.857 ppb	21,376.824 ppb	14,130.087 ppb	1,417.342 ppb	24,065.392 ppb	118.753 %
Concentration per Run 3	104.967 %	110.388 %	0.994 ppb	1,733.829 ppb	20,089.467 ppb	13,471.072 ppb	1,511.408 ppb	24,087.195 ppb	118.314 %
Concentration RSD	0.8 %	6.4 %	2.9 %	5.6 %	6.0 %	5.3 %	6.2 %	4.8 %	0.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	115.428 %	52.784 ppb	50.921 ppb	1,602.834 ppb	32,685.352 ppb	12.513 ppb	45.183 ppb	294.807 ppb	755.385 ppb
Concentration per Run 1	122.229 %	49.210 ppb	48.465 ppb	1,526.826 ppb	31,190.705 ppb	11.923 ppb	43.841 ppb	282.142 ppb	720.137 ppb
Concentration per Run 2	110.658 %	55.420 ppb	52.084 ppb	1,643.995 ppb	33,697.231 ppb	12.719 ppb	45.746 ppb	303.971 ppb	782.098 ppb
Concentration per Run 3	113.396 %	53.722 ppb	52.214 ppb	1,637.681 ppb	33,168.120 ppb	12.896 ppb	45.962 ppb	298.308 ppb	763.920 ppb
Concentration RSD	5.2 %	6.1 %	4.2 %	4.1 %	4.0 %	4.1 %	2.6 %	3.8 %	4.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.699 %	18.983 ppb	2.640 ppb	91.727 ppb	1.922 ppb	105.244 %	0.835 ppb	1.568 ppb	104.730 %
Concentration per Run 1	112.297 %	18.393 ppb	2.438 ppb	89.278 ppb	1.997 ppb	105.686 %	0.828 ppb	1.585 ppb	103.361 %
Concentration per Run 2	103.533 %	19.659 ppb	3.189 ppb	93.907 ppb	1.989 ppb	104.831 %	0.831 ppb	1.545 ppb	107.047 %
Concentration per Run 3	107.267 %	18.898 ppb	2.292 ppb	91.996 ppb	1.782 ppb	105.214 %	0.846 ppb	1.573 ppb	103.782 %
Concentration RSD	4.1 %	3.4 %	18.2 %	2.5 %	6.3 %	0.4 %	1.2 %	1.3 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.035 ppb	199.612 ppb	108.511 %	105.335 %	0.245 ppb	863.165 ppb	115.174 %
Concentration per Run 1	2.075 ppb	204.152 ppb	107.067 %	103.434 %	0.215 ppb	822.380 ppb	120.205 %
Concentration per Run 2	1.990 ppb	191.860 ppb	108.503 %	105.099 %	0.253 ppb	873.004 ppb	113.615 %
Concentration per Run 3	2.040 ppb	202.826 ppb	109.963 %	107.471 %	0.265 ppb	894.110 ppb	111.702 %
Concentration RSD	2.1 %	3.4 %	1.3 %	1.9 %	10.7 %	4.3 %	3.9 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445805-03d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:12:56 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.143 %	114.175 %	0.495 ppb	4,047.204 ppb	7,388.040 ppb	7,550.098 ppb	1,352.714 ppb	3,780.660 ppb	123.690 %
Concentration per Run 1	111.783 %	111.262 %	0.478 ppb	3,984.718 ppb	7,279.822 ppb	7,426.013 ppb	1,357.774 ppb	3,874.575 ppb	121.538 %
Concentration per Run 2	112.696 %	102.816 %	0.504 ppb	4,352.411 ppb	7,938.852 ppb	8,103.937 ppb	1,394.988 ppb	3,758.599 ppb	125.456 %
Concentration per Run 3	111.950 %	128.447 %	0.504 ppb	3,804.482 ppb	6,945.445 ppb	7,120.345 ppb	1,305.381 ppb	3,708.806 ppb	124.077 %
Concentration RSD	0.4 %	11.4 %	3.1 %	6.9 %	6.8 %	6.7 %	3.3 %	2.2 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	116.370 %	40.537 ppb	77.033 ppb	4,696.544 ppb	23,534.811 ppb	10.918 ppb	56.287 ppb	115.237 ppb	291.299 ppb
Concentration per Run 1	117.636 %	39.727 ppb	74.186 ppb	4,586.565 ppb	23,040.191 ppb	10.827 ppb	54.751 ppb	113.058 ppb	286.204 ppb
Concentration per Run 2	112.601 %	42.386 ppb	79.977 ppb	4,891.110 ppb	24,375.244 ppb	11.175 ppb	58.673 ppb	118.814 ppb	299.678 ppb
Concentration per Run 3	118.873 %	39.496 ppb	76.936 ppb	4,611.957 ppb	23,188.998 ppb	10.752 ppb	55.437 ppb	113.840 ppb	288.015 ppb
Concentration RSD	2.9 %	4.0 %	3.8 %	3.6 %	3.1 %	2.1 %	3.7 %	2.7 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	114.564 %	10.503 ppb	2.478 ppb	49.398 ppb	2.756 ppb	112.081 %	1.980 ppb	1.117 ppb	109.003 %
Concentration per Run 1	114.361 %	10.503 ppb	2.257 ppb	48.439 ppb	2.753 ppb	111.968 %	1.969 ppb	1.105 ppb	107.319 %
Concentration per Run 2	112.274 %	10.566 ppb	2.732 ppb	50.561 ppb	2.972 ppb	110.941 %	2.047 ppb	1.122 ppb	110.094 %
Concentration per Run 3	117.056 %	10.440 ppb	2.447 ppb	49.195 ppb	2.542 ppb	113.335 %	1.924 ppb	1.122 ppb	109.595 %
Concentration RSD	2.1 %	0.6 %	9.6 %	2.2 %	7.8 %	1.1 %	3.2 %	0.9 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.243 ppb	179.342 ppb	112.292 %	108.900 %	0.145 ppb	126.032 ppb	116.349 %
Concentration per Run 1	1.173 ppb	176.695 ppb	111.318 %	109.470 %	0.123 ppb	120.535 ppb	118.713 %
Concentration per Run 2	1.226 ppb	179.407 ppb	112.678 %	108.022 %	0.149 ppb	125.674 ppb	117.803 %
Concentration per Run 3	1.331 ppb	181.923 ppb	112.881 %	109.209 %	0.163 ppb	131.887 ppb	112.532 %
Concentration RSD	6.5 %	1.5 %	0.8 %	0.7 %	14.0 %	4.5 %	2.9 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445805-04d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:17:23 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.991 %	117.282 %	0.354 ppb	3,847.910 ppb	3,946.861 ppb	5,771.580 ppb	1,037.744 ppb	3,765.225 ppb	121.692 %
Concentration per Run 1	112.628 %	117.379 %	0.354 ppb	3,802.682 ppb	3,864.534 ppb	5,673.467 ppb	1,047.401 ppb	3,653.030 ppb	122.403 %
Concentration per Run 2	112.021 %	112.719 %	0.355 ppb	3,909.524 ppb	4,021.324 ppb	5,846.615 ppb	1,028.488 ppb	3,877.820 ppb	121.221 %
Concentration per Run 3	111.323 %	121.748 %	0.351 ppb	3,831.523 ppb	3,954.725 ppb	5,794.658 ppb	1,037.342 ppb	3,764.826 ppb	121.451 %
Concentration RSD	0.6 %	3.9 %	0.7 %	1.4 %	2.0 %	1.5 %	0.9 %	3.0 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	117.342 %	20.216 ppb	90.079 ppb	4,293.128 ppb	15,030.861 ppb	6.857 ppb	23.186 ppb	68.727 ppb	228.993 ppb
Concentration per Run 1	120.021 %	20.185 ppb	87.779 ppb	4,520.175 ppb	14,675.098 ppb	6.758 ppb	23.003 ppb	67.603 ppb	224.945 ppb
Concentration per Run 2	115.428 %	20.214 ppb	91.130 ppb	3,715.137 ppb	15,311.888 ppb	6.971 ppb	23.839 ppb	70.199 ppb	229.653 ppb
Concentration per Run 3	116.576 %	20.250 ppb	91.328 ppb	4,644.070 ppb	15,105.596 ppb	6.843 ppb	22.715 ppb	68.380 ppb	232.380 ppb
Concentration RSD	2.0 %	0.2 %	2.2 %	11.7 %	2.2 %	1.6 %	2.5 %	1.9 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	115.113 %	6.743 ppb	1.918 ppb	41.402 ppb	2.691 ppb	111.236 %	1.130 ppb	0.643 ppb	108.865 %
Concentration per Run 1	116.652 %	6.784 ppb	1.775 ppb	40.782 ppb	2.680 ppb	108.192 %	1.116 ppb	0.645 ppb	104.528 %
Concentration per Run 2	113.983 %	6.744 ppb	2.105 ppb	41.558 ppb	2.486 ppb	112.125 %	1.147 ppb	0.642 ppb	111.514 %
Concentration per Run 3	114.705 %	6.700 ppb	1.873 ppb	41.866 ppb	2.908 ppb	113.390 %	1.127 ppb	0.641 ppb	110.554 %
Concentration RSD	1.2 %	0.6 %	8.8 %	1.3 %	7.9 %	2.4 %	1.4 %	0.3 %	3.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.878 ppb	149.775 ppb	109.663 %	107.214 %	0.085 ppb	94.513 ppb	113.547 %
Concentration per Run 1	0.881 ppb	146.927 ppb	107.913 %	102.487 %	0.071 ppb	90.652 ppb	114.481 %
Concentration per Run 2	0.880 ppb	154.607 ppb	109.250 %	109.514 %	0.087 ppb	95.492 ppb	113.308 %
Concentration per Run 3	0.872 ppb	147.792 ppb	111.827 %	109.640 %	0.097 ppb	97.395 ppb	112.854 %
Concentration RSD	0.6 %	2.8 %	1.8 %	3.8 %	15.8 %	3.7 %	0.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445805-05d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:21:49 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.840 %	107.185 %	0.213 ppb	2,892.119 ppb	2,784.811 ppb	3,678.986 ppb	717.582 ppb	2,293.982 ppb	119.740 %
Concentration per Run 1	111.798 %	99.612 %	0.222 ppb	2,844.473 ppb	2,702.230 ppb	3,573.575 ppb	665.794 ppb	2,148.923 ppb	119.290 %
Concentration per Run 2	112.822 %	110.388 %	0.201 ppb	2,937.128 ppb	2,821.584 ppb	3,728.926 ppb	791.965 ppb	2,278.559 ppb	120.124 %
Concentration per Run 3	110.900 %	111.554 %	0.217 ppb	2,894.757 ppb	2,830.620 ppb	3,734.457 ppb	694.988 ppb	2,454.464 ppb	119.805 %
Concentration RSD	0.9 %	6.1 %	5.1 %	1.6 %	2.6 %	2.5 %	9.2 %	6.7 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	109.775 %	13.133 ppb	47.537 ppb	229.541 ppb	5,946.431 ppb	2.884 ppb	13.926 ppb	47.172 ppb	74.603 ppb
Concentration per Run 1	108.098 %	12.765 ppb	46.013 ppb	221.091 ppb	5,817.974 ppb	2.777 ppb	13.778 ppb	46.655 ppb	71.397 ppb
Concentration per Run 2	110.747 %	13.612 ppb	47.784 ppb	231.717 ppb	5,937.112 ppb	2.934 ppb	13.634 ppb	46.537 ppb	75.816 ppb
Concentration per Run 3	110.482 %	13.021 ppb	48.813 ppb	235.816 ppb	6,084.206 ppb	2.942 ppb	14.366 ppb	48.323 ppb	76.597 ppb
Concentration RSD	1.3 %	3.3 %	3.0 %	3.3 %	2.2 %	3.2 %	2.8 %	2.1 %	3.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	113.727 %	3.013 ppb	1.221 ppb	22.078 ppb	1.135 ppb	113.066 %	1.268 ppb	0.242 ppb	110.111 %
Concentration per Run 1	113.047 %	2.792 ppb	1.269 ppb	21.639 ppb	1.093 ppb	113.236 %	1.249 ppb	0.255 ppb	108.879 %
Concentration per Run 2	115.605 %	3.031 ppb	1.182 ppb	22.188 ppb	1.281 ppb	113.378 %	1.259 ppb	0.249 ppb	111.125 %
Concentration per Run 3	112.529 %	3.215 ppb	1.212 ppb	22.405 ppb	1.031 ppb	112.583 %	1.297 ppb	0.223 ppb	110.329 %
Concentration RSD	1.4 %	7.0 %	3.6 %	1.8 %	11.5 %	0.4 %	2.0 %	6.8 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.550 ppb	24.191 ppb	111.331 %	108.630 %	0.034 ppb	40.458 ppb	114.592 %
Concentration per Run 1	0.573 ppb	23.990 ppb	110.919 %	108.685 %	0.021 ppb	38.822 ppb	118.064 %
Concentration per Run 2	0.517 ppb	24.158 ppb	112.696 %	108.436 %	0.039 ppb	40.554 ppb	115.613 %
Concentration per Run 3	0.559 ppb	24.425 ppb	110.379 %	108.768 %	0.040 ppb	41.998 ppb	110.101 %
Concentration RSD	5.3 %	0.9 %	1.1 %	0.2 %	32.3 %	3.9 %	3.6 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445805-06d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:26:17 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.089 %	112.719 %	0.221 ppb	3,644.851 ppb	2,764.665 ppb	4,375.201 ppb	945.837 ppb	2,007.400 ppb	122.264 %
Concentration per Run 1	112.835 %	113.592 %	0.229 ppb	3,539.260 ppb	2,671.537 ppb	4,177.759 ppb	918.860 ppb	2,018.207 ppb	122.242 %
Concentration per Run 2	111.918 %	115.049 %	0.219 ppb	3,654.444 ppb	2,776.784 ppb	4,458.358 ppb	986.395 ppb	2,014.730 ppb	122.692 %
Concentration per Run 3	111.513 %	109.515 %	0.214 ppb	3,740.849 ppb	2,845.674 ppb	4,489.487 ppb	932.256 ppb	1,989.263 ppb	121.857 %
Concentration RSD	0.6 %	2.5 %	3.3 %	2.8 %	3.2 %	3.9 %	3.8 %	0.8 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.864 %	17.960 ppb	37.284 ppb	698.688 ppb	11,566.651 ppb	4.462 ppb	13.576 ppb	38.792 ppb	121.482 ppb
Concentration per Run 1	112.866 %	16.738 ppb	36.339 ppb	686.633 ppb	11,379.250 ppb	4.548 ppb	13.328 ppb	39.460 ppb	122.135 ppb
Concentration per Run 2	108.891 %	18.927 ppb	38.419 ppb	712.259 ppb	11,840.470 ppb	4.454 ppb	13.637 ppb	39.343 ppb	122.254 ppb
Concentration per Run 3	110.835 %	18.216 ppb	37.094 ppb	697.172 ppb	11,480.233 ppb	4.384 ppb	13.764 ppb	37.572 ppb	120.057 ppb
Concentration RSD	1.8 %	6.2 %	2.8 %	1.8 %	2.1 %	1.8 %	1.7 %	2.7 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	110.801 %	5.727 ppb	0.913 ppb	18.123 ppb	3.846 ppb	112.728 %	0.606 ppb	0.357 ppb	108.421 %
Concentration per Run 1	108.825 %	5.619 ppb	1.164 ppb	18.257 ppb	3.897 ppb	113.442 %	0.625 ppb	0.381 ppb	108.738 %
Concentration per Run 2	109.912 %	5.719 ppb	0.846 ppb	17.677 ppb	3.920 ppb	111.848 %	0.597 ppb	0.324 ppb	106.778 %
Concentration per Run 3	113.666 %	5.843 ppb	0.728 ppb	18.434 ppb	3.721 ppb	112.894 %	0.595 ppb	0.367 ppb	109.746 %
Concentration RSD	2.3 %	2.0 %	24.7 %	2.2 %	2.8 %	0.7 %	2.8 %	8.2 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.794 ppb	60.395 ppb	111.127 %	108.820 %	0.078 ppb	59.956 ppb	110.673 %
Concentration per Run 1	0.790 ppb	60.824 ppb	109.797 %	108.072 %	0.065 ppb	57.386 ppb	113.264 %
Concentration per Run 2	0.778 ppb	60.503 ppb	111.298 %	108.542 %	0.086 ppb	59.894 ppb	111.277 %
Concentration per Run 3	0.816 ppb	59.857 ppb	112.287 %	109.847 %	0.083 ppb	62.587 ppb	107.479 %
Concentration RSD	2.4 %	0.8 %	1.1 %	0.8 %	14.2 %	4.3 %	2.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2445805-07d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:30:44 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.635 %	121.748 %	0.424 ppb	3,481.210 ppb	4,462.273 ppb	7,049.996 ppb	1,264.703 ppb	4,205.811 ppb	123.288 %
Concentration per Run 1	112.192 %	121.457 %	0.405 ppb	3,516.203 ppb	4,398.562 ppb	7,013.630 ppb	1,299.100 ppb	4,320.323 ppb	122.527 %
Concentration per Run 2	113.559 %	118.544 %	0.434 ppb	3,466.216 ppb	4,416.833 ppb	7,055.601 ppb	1,265.112 ppb	4,000.055 ppb	123.601 %
Concentration per Run 3	112.156 %	125.243 %	0.434 ppb	3,461.212 ppb	4,571.423 ppb	7,080.756 ppb	1,229.896 ppb	4,297.054 ppb	123.735 %
Concentration RSD	0.7 %	2.8 %	4.0 %	0.9 %	2.1 %	0.5 %	2.7 %	4.2 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	116.252 %	24.388 ppb	91.278 ppb	5,886.242 ppb	19,384.569 ppb	8.495 ppb	25.761 ppb	70.003 ppb	231.455 ppb
Concentration per Run 1	114.986 %	24.967 ppb	91.694 ppb	5,892.549 ppb	19,259.955 ppb	8.775 ppb	26.083 ppb	69.230 ppb	229.449 ppb
Concentration per Run 2	117.195 %	24.589 ppb	91.287 ppb	5,901.775 ppb	19,437.806 ppb	8.293 ppb	25.944 ppb	70.864 ppb	234.222 ppb
Concentration per Run 3	116.576 %	23.607 ppb	90.854 ppb	5,864.401 ppb	19,455.944 ppb	8.417 ppb	25.257 ppb	69.916 ppb	230.693 ppb
Concentration RSD	1.0 %	2.9 %	0.5 %	0.3 %	0.6 %	2.9 %	1.7 %	1.2 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	114.784 %	7.100 ppb	1.968 ppb	47.356 ppb	3.335 ppb	111.924 %	1.117 ppb	0.717 ppb	108.758 %
Concentration per Run 1	117.472 %	7.041 ppb	2.064 ppb	46.994 ppb	3.199 ppb	112.998 %	1.092 ppb	0.688 ppb	108.760 %
Concentration per Run 2	111.137 %	7.062 ppb	2.009 ppb	46.378 ppb	3.440 ppb	110.560 %	1.139 ppb	0.753 ppb	107.649 %
Concentration per Run 3	115.742 %	7.198 ppb	1.832 ppb	48.696 ppb	3.365 ppb	112.214 %	1.120 ppb	0.710 ppb	109.865 %
Concentration RSD	2.9 %	1.2 %	6.1 %	2.5 %	3.7 %	1.1 %	2.1 %	4.6 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.069 ppb	207.956 ppb	111.656 %	109.188 %	0.098 ppb	95.815 ppb	109.292 %
Concentration per Run 1	1.076 ppb	207.867 ppb	110.805 %	108.802 %	0.092 ppb	91.167 ppb	113.958 %
Concentration per Run 2	1.063 ppb	208.802 ppb	110.132 %	108.309 %	0.103 ppb	96.594 ppb	108.485 %
Concentration per Run 3	1.068 ppb	207.200 ppb	114.031 %	110.453 %	0.098 ppb	99.685 ppb	105.431 %
Concentration RSD	0.6 %	0.4 %	1.9 %	1.0 %	5.6 %	4.5 %	4.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 8:35:14 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.308 %	108.641 %	61.587 ppb	6,166.351 ppb	6,128.865 ppb	64.900 ppb	6,235.488 ppb	6,168.295 ppb	107.214 %
Concentration per Run 1	101.909 %	102.524 %	61.071 ppb	6,335.988 ppb	6,249.817 ppb	65.943 ppb	6,389.245 ppb	6,047.806 ppb	107.973 %
Concentration per Run 2	101.819 %	110.971 %	61.560 ppb	6,052.032 ppb	6,027.422 ppb	64.593 ppb	6,063.245 ppb	6,140.724 ppb	108.207 %
Concentration per Run 3	100.195 %	112.427 %	62.130 ppb	6,111.034 ppb	6,109.358 ppb	64.166 ppb	6,253.973 ppb	6,316.355 ppb	105.461 %
Recovery Percentage 1			102.645 %	102.773 %	102.148 %	108.167 %	103.925 %	102.805 %	
Concentration RSD	1.0 %	4.9 %	0.9 %	2.4 %	1.8 %	1.4 %	2.6 %	2.2 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.038 %	61.909 ppb	63.801 ppb	65.385 ppb	6,392.025 ppb	65.190 ppb	64.328 ppb	64.030 ppb	61.717 ppb
Concentration per Run 1	110.835 %	59.573 ppb	63.388 ppb	66.969 ppb	6,415.360 ppb	64.889 ppb	63.671 ppb	62.636 ppb	60.705 ppb
Concentration per Run 2	108.626 %	62.324 ppb	63.149 ppb	64.573 ppb	6,370.071 ppb	64.609 ppb	64.194 ppb	64.092 ppb	62.861 ppb
Concentration per Run 3	104.652 %	63.829 ppb	64.865 ppb	64.613 ppb	6,390.643 ppb	66.074 ppb	65.119 ppb	65.363 ppb	61.585 ppb
Recovery Percentage 1		103.182 %	106.334 %	108.975 %	106.534 %	108.651 %	107.213 %	106.717 %	102.861 %
Concentration RSD	2.9 %	3.5 %	1.5 %	2.1 %	0.4 %	1.2 %	1.1 %	2.1 %	1.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	111.140 %	60.645 ppb	58.664 ppb	54.068 ppb	58.631 ppb	107.751 %	60.877 ppb	59.563 ppb	103.998 %
Concentration per Run 1	116.035 %	57.872 ppb	57.540 ppb	53.640 ppb	58.195 ppb	112.003 %	60.492 ppb	59.319 ppb	107.866 %
Concentration per Run 2	110.549 %	61.775 ppb	57.319 ppb	53.021 ppb	58.448 ppb	104.464 %	61.766 ppb	59.758 ppb	99.792 %
Concentration per Run 3	106.837 %	62.289 ppb	61.134 ppb	55.542 ppb	59.249 ppb	106.785 %	60.371 ppb	59.613 ppb	104.335 %
Recovery Percentage 1		101.076 %	97.774 %	90.113 %	97.718 %		101.461 %	99.272 %	
Concentration RSD	4.2 %	4.0 %	3.7 %	2.4 %	0.9 %	3.6 %	1.3 %	0.4 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.487 ppb	59.429 ppb	106.736 %	105.103 %	61.780 ppb	62.044 ppb	99.205 %
Concentration per Run 1	59.269 ppb	60.064 ppb	107.935 %	105.455 %	61.497 ppb	62.050 ppb	103.908 %
Concentration per Run 2	59.696 ppb	58.969 ppb	104.037 %	102.681 %	62.972 ppb	62.762 ppb	97.448 %
Concentration per Run 3	59.495 ppb	59.254 ppb	108.235 %	107.174 %	60.871 ppb	61.321 ppb	96.260 %
Recovery Percentage 1	99.145 %	99.049 %			102.967 %	103.407 %	
Concentration RSD	0.4 %	1.0 %	2.2 %	2.2 %	1.7 %	1.2 %	4.1 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 8:39:45 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.440 %	108.058 %	0.002 ppb	-3.758 ppb	-1.145 ppb	-0.577 ppb	4.018 ppb	-1.366 ppb	102.296 %
Concentration per Run 1	99.933 %	104.272 %	0.004 ppb	-3.454 ppb	-1.221 ppb	-0.390 ppb	10.742 ppb	3.757 ppb	102.193 %
Concentration per Run 2	101.007 %	105.728 %	0.003 ppb	-3.504 ppb	-1.242 ppb	-0.670 ppb	0.449 ppb	-6.158 ppb	101.900 %
Concentration per Run 3	100.380 %	114.175 %	-0.002 ppb	-4.315 ppb	-0.973 ppb	-0.671 ppb	0.862 ppb	-1.698 ppb	102.796 %
Recovery Percentage 1			0.398 %	-3.758 %	-1.636 %	-5.770 %	4.018 %	-1.366 %	
Concentration RSD	0.5 %	4.9 %	154.7 %	12.9 %	13.0 %	28.1 %	145.0 %	363.5 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.355 %	-0.063 ppb	-0.005 ppb	0.031 ppb	5.378 ppb	0.002 ppb	-0.038 ppb	-0.050 ppb	-0.155 ppb
Concentration per Run 1	101.207 %	-0.056 ppb	0.007 ppb	0.014 ppb	4.164 ppb	-0.001 ppb	-0.090 ppb	-0.048 ppb	-0.127 ppb
Concentration per Run 2	104.828 %	-0.080 ppb	-0.021 ppb	0.094 ppb	5.751 ppb	0.010 ppb	-0.036 ppb	-0.048 ppb	-0.186 ppb
Concentration per Run 3	98.028 %	-0.053 ppb	-0.001 ppb	-0.015 ppb	6.218 ppb	-0.001 ppb	0.012 ppb	-0.053 ppb	-0.150 ppb
Recovery Percentage 1		-1.260 %	-0.498 %	3.110 %	10.755 %	0.490 %	-1.899 %	-4.971 %	-3.090 %
Concentration RSD	3.4 %	23.4 %	287.5 %	181.3 %	20.0 %	266.6 %	135.3 %	5.2 %	19.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.457 %	0.031 ppb	0.280 ppb	-0.002 ppb	0.325 ppb	106.236 %	0.001 ppb	0.003 ppb	105.044 %
Concentration per Run 1	104.022 %	0.004 ppb	0.219 ppb	-0.002 ppb	0.290 ppb	106.301 %	0.001 ppb	0.003 ppb	105.472 %
Concentration per Run 2	102.836 %	0.051 ppb	0.278 ppb	-0.002 ppb	0.321 ppb	106.048 %	0.001 ppb	0.005 ppb	106.234 %
Concentration per Run 3	97.512 %	0.039 ppb	0.343 ppb	-0.003 ppb	0.362 ppb	106.359 %	0.001 ppb	0.003 ppb	103.425 %
Recovery Percentage 1		6.205 %	5.603 %	-0.024 %	16.235 %		0.171 %	1.722 %	
Concentration RSD	3.4 %	78.6 %	22.0 %	20.0 %	11.1 %	0.2 %	2.5 %	42.6 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.057 ppb	-0.016 ppb	105.583 %	104.486 %	0.215 ppb	0.041 ppb	99.673 %
Concentration per Run 1	0.044 ppb	-0.019 ppb	104.185 %	103.448 %	0.177 ppb	0.046 ppb	103.114 %
Concentration per Run 2	0.048 ppb	-0.020 ppb	106.375 %	104.536 %	0.269 ppb	0.041 ppb	99.578 %
Concentration per Run 3	0.077 ppb	-0.011 ppb	106.188 %	105.475 %	0.199 ppb	0.038 ppb	96.329 %
Recovery Percentage 1	1.417 %	-3.295 %			21.486 %	4.136 %	
Concentration RSD	31.7 %	30.7 %	1.1 %	1.0 %	22.2 %	9.8 %	3.4 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	47	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG1963148-1 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:47:58 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.445 %	106.311 %	-0.003 ppb	-1.237 ppb	0.204 ppb	0.799 ppb	2.562 ppb	18.155 ppb	104.258 %
Concentration per Run 1	102.032 %	108.058 %	-0.004 ppb	-1.792 ppb	-0.959 ppb	1.211 ppb	-1.748 ppb	14.803 ppb	103.140 %
Concentration per Run 2	101.496 %	110.388 %	0.000 ppb	-2.015 ppb	-0.205 ppb	0.468 ppb	3.789 ppb	14.365 ppb	104.669 %
Concentration per Run 3	100.805 %	100.485 %	-0.005 ppb	0.094 ppb	1.776 ppb	0.716 ppb	5.646 ppb	25.298 ppb	104.964 %
Concentration RSD	0.6 %	4.9 %	75.6 %	93.6 %	692.6 %	47.4 %	150.1 %	34.1 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.446 %	-0.088 ppb	-0.033 ppb	0.104 ppb	6.722 ppb	0.002 ppb	-0.011 ppb	0.010 ppb	0.035 ppb
Concentration per Run 1	102.267 %	-0.091 ppb	-0.054 ppb	0.110 ppb	9.021 ppb	0.002 ppb	-0.011 ppb	-0.015 ppb	0.029 ppb
Concentration per Run 2	111.012 %	-0.072 ppb	-0.031 ppb	0.020 ppb	5.276 ppb	-0.001 ppb	-0.016 ppb	0.067 ppb	0.022 ppb
Concentration per Run 3	100.059 %	-0.102 ppb	-0.015 ppb	0.181 ppb	5.868 ppb	0.006 ppb	-0.008 ppb	-0.021 ppb	0.053 ppb
Concentration RSD	5.5 %	16.9 %	58.0 %	77.7 %	30.0 %	154.9 %	36.3 %	470.7 %	47.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.495 %	0.022 ppb	0.052 ppb	0.029 ppb	0.041 ppb	108.422 %	-0.002 ppb	0.000 ppb	108.178 %
Concentration per Run 1	108.458 %	0.024 ppb	0.007 ppb	0.032 ppb	0.036 ppb	104.455 %	0.001 ppb	0.000 ppb	102.386 %
Concentration per Run 2	111.374 %	0.002 ppb	0.051 ppb	0.032 ppb	0.026 ppb	111.229 %	-0.004 ppb	0.000 ppb	113.426 %
Concentration per Run 3	105.652 %	0.040 ppb	0.099 ppb	0.024 ppb	0.063 ppb	109.583 %	-0.002 ppb	0.000 ppb	108.723 %
Concentration RSD	2.6 %	87.9 %	87.9 %	16.2 %	45.7 %	3.3 %	136.3 %	N/A	5.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.004 ppb	0.018 ppb	109.412 %	109.941 %	0.044 ppb	0.052 ppb	95.428 %
Concentration per Run 1	0.001 ppb	-0.028 ppb	105.178 %	105.566 %	0.022 ppb	0.056 ppb	97.532 %
Concentration per Run 2	0.007 ppb	0.051 ppb	113.479 %	116.162 %	0.060 ppb	0.048 ppb	96.557 %
Concentration per Run 3	0.005 ppb	0.030 ppb	109.579 %	108.095 %	0.050 ppb	0.051 ppb	92.195 %
Concentration RSD	74.0 %	230.5 %	3.8 %	5.0 %	44.7 %	7.4 %	3.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG1963148-2d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:52:26 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.019 %	116.117 %	5.395 ppb	1,062.907 ppb	1,028.042 ppb	207.808 ppb	1,083.229 ppb	1,130.988 ppb	110.843 %
Concentration per Run 1	102.982 %	115.049 %	5.486 ppb	1,021.645 ppb	992.637 ppb	192.878 ppb	1,055.450 ppb	1,066.633 ppb	107.211 %
Concentration per Run 2	106.086 %	115.631 %	5.380 ppb	1,095.204 ppb	1,067.938 ppb	219.479 ppb	1,162.211 ppb	1,174.725 ppb	112.080 %
Concentration per Run 3	105.987 %	117.670 %	5.320 ppb	1,071.870 ppb	1,023.550 ppb	211.066 ppb	1,032.026 ppb	1,151.607 ppb	113.239 %
Concentration RSD	1.7 %	1.2 %	1.6 %	3.5 %	3.7 %	6.5 %	6.4 %	5.0 %	2.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.660 %	52.327 ppb	21.622 ppb	54.188 ppb	109.738 ppb	54.098 ppb	53.918 ppb	26.856 ppb	52.770 ppb
Concentration per Run 1	113.661 %	50.777 ppb	21.000 ppb	53.342 ppb	102.697 ppb	53.538 ppb	53.234 ppb	26.875 ppb	52.491 ppb
Concentration per Run 2	114.368 %	52.019 ppb	22.029 ppb	55.248 ppb	116.516 ppb	54.565 ppb	52.922 ppb	27.069 ppb	53.153 ppb
Concentration per Run 3	109.951 %	54.186 ppb	21.835 ppb	53.974 ppb	110.001 ppb	54.192 ppb	55.599 ppb	26.624 ppb	52.666 ppb
Concentration RSD	2.1 %	3.3 %	2.5 %	1.8 %	6.3 %	1.0 %	2.7 %	0.8 %	0.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	111.112 %	11.800 ppb	10.603 ppb	97.063 ppb	103.459 ppb	108.474 %	5.245 ppb	5.543 ppb	107.568 %
Concentration per Run 1	108.144 %	11.479 ppb	11.591 ppb	96.132 ppb	104.538 ppb	105.929 %	5.411 ppb	5.889 ppb	100.611 %
Concentration per Run 2	112.780 %	11.900 ppb	11.324 ppb	100.746 ppb	104.417 ppb	110.038 %	5.180 ppb	5.186 ppb	114.577 %
Concentration per Run 3	112.413 %	12.023 ppb	8.894 ppb	94.312 ppb	101.422 ppb	109.455 %	5.143 ppb	5.555 ppb	107.515 %
Concentration RSD	2.3 %	2.4 %	14.0 %	3.4 %	1.7 %	2.0 %	2.8 %	6.3 %	6.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.360 ppb	212.764 ppb	110.291 %	109.705 %	13.624 ppb	65.594 ppb	99.394 %
Concentration per Run 1	45.659 ppb	220.198 ppb	105.792 %	103.947 %	13.116 ppb	62.293 ppb	102.866 %
Concentration per Run 2	44.982 ppb	212.417 ppb	114.060 %	113.877 %	13.509 ppb	65.476 ppb	101.696 %
Concentration per Run 3	45.438 ppb	205.677 ppb	111.021 %	111.292 %	14.247 ppb	69.012 ppb	93.622 %
Concentration RSD	0.8 %	3.4 %	3.8 %	4.7 %	4.2 %	5.1 %	5.1 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xl2447194-06 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 8:56:55 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	44.737 %	65.922 %	0.090 ppb	5,697,006.211 ppb	660,122.921 ppb	1,875.299 ppb	257,060.375 ppb	249,958.251 ppb	33.220 %
Concentration per Run 1	45.250 %	80.679 %	0.090 ppb	5,704,290.780 ppb	650,557.739 ppb	1,786.744 ppb	244,976.845 ppb	231,208.145 ppb	33.735 %
Concentration per Run 2	44.893 %	67.281 %	0.081 ppb	5,522,900.064 ppb	636,934.593 ppb	1,803.586 ppb	256,982.885 ppb	256,151.862 ppb	33.119 %
Concentration per Run 3	44.070 %	49.806 %	0.098 ppb	5,863,827.789 ppb	692,876.431 ppb	2,035.568 ppb	269,221.395 ppb	262,514.744 ppb	32.806 %
Concentration RSD	1.4 %	23.5 %	9.9 %	3.0 %	4.4 %	7.4 %	4.7 %	6.6 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	45.625 %	6.855 ppb	9.984 ppb	166.172 ppb	4,620.230 ppb	1.609 ppb	5.520 ppb	36.769 ppb	43.139 ppb
Concentration per Run 1	49.275 %	6.804 ppb	9.990 ppb	171.757 ppb	4,901.752 ppb	1.641 ppb	5.955 ppb	38.775 ppb	45.415 ppb
Concentration per Run 2	42.122 %	7.442 ppb	10.639 ppb	171.091 ppb	4,778.248 ppb	1.812 ppb	5.740 ppb	39.355 ppb	43.432 ppb
Concentration per Run 3	45.477 %	6.319 ppb	9.321 ppb	155.668 ppb	4,180.691 ppb	1.374 ppb	4.865 ppb	32.178 ppb	40.570 ppb
Concentration RSD	7.8 %	8.2 %	6.6 %	5.5 %	8.3 %	13.7 %	10.5 %	10.8 %	5.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	60.054 %	8.811 ppb	0.677 ppb	4,702.196 ppb	7.632 ppb	50.271 %	0.449 ppb	0.392 ppb	54.258 %
Concentration per Run 1	65.323 %	9.642 ppb	0.694 ppb	4,551.788 ppb	7.601 ppb	56.627 %	0.494 ppb	0.413 ppb	57.925 %
Concentration per Run 2	57.874 %	8.322 ppb	0.782 ppb	4,647.293 ppb	7.785 ppb	49.906 %	0.419 ppb	0.417 ppb	53.484 %
Concentration per Run 3	56.965 %	8.470 ppb	0.554 ppb	4,907.508 ppb	7.509 ppb	44.280 %	0.435 ppb	0.345 ppb	51.364 %
Concentration RSD	7.6 %	8.2 %	17.0 %	3.9 %	1.8 %	12.3 %	8.8 %	10.3 %	6.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.743 ppb	31.365 ppb	58.613 %	57.139 %	0.063 ppb	56.698 ppb	42.257 %
Concentration per Run 1	3.874 ppb	30.760 ppb	63.539 %	60.480 %	0.053 ppb	54.594 ppb	48.274 %
Concentration per Run 2	3.866 ppb	30.887 ppb	57.933 %	56.484 %	0.071 ppb	56.488 ppb	41.815 %
Concentration per Run 3	3.490 ppb	32.447 ppb	54.365 %	54.451 %	0.064 ppb	59.011 ppb	36.681 %
Concentration RSD	5.9 %	3.0 %	7.9 %	5.4 %	14.5 %	3.9 %	13.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG1963148-3d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 9:01:24 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	71.492 %	54.369 %	4.381 ppb	541,795.905 ppb	81,934.947 ppb	411.419 ppb	26,391.884 ppb	28,497.463 ppb	65.997 %
Concentration per Run 1	70.966 %	49.223 %	4.440 ppb	565,928.018 ppb	85,407.991 ppb	416.410 ppb	26,525.668 ppb	28,132.548 ppb	64.904 %
Concentration per Run 2	71.119 %	57.087 %	4.394 ppb	512,470.594 ppb	77,341.259 ppb	389.375 ppb	24,787.968 ppb	26,999.087 ppb	65.703 %
Concentration per Run 3	72.391 %	56.796 %	4.309 ppb	546,989.103 ppb	83,055.591 ppb	428.472 ppb	27,862.016 ppb	30,360.753 ppb	67.383 %
Concentration RSD	1.1 %	8.2 %	1.5 %	5.0 %	5.1 %	4.9 %	5.8 %	6.0 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	67.556 %	53.548 ppb	19.386 ppb	65.684 ppb	512.469 ppb	48.275 ppb	45.037 ppb	25.876 ppb	46.527 ppb
Concentration per Run 1	63.494 %	53.692 ppb	18.319 ppb	65.445 ppb	496.208 ppb	48.102 ppb	43.115 ppb	24.562 ppb	44.348 ppb
Concentration per Run 2	68.174 %	52.811 ppb	20.779 ppb	65.159 ppb	540.095 ppb	49.820 ppb	48.583 ppb	28.068 ppb	49.185 ppb
Concentration per Run 3	71.001 %	54.142 ppb	19.061 ppb	66.447 ppb	501.105 ppb	46.903 ppb	43.414 ppb	24.997 ppb	46.050 ppb
Concentration RSD	5.6 %	1.3 %	6.5 %	1.0 %	4.7 %	3.0 %	6.8 %	7.4 %	5.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	70.908 %	11.474 ppb	10.179 ppb	592.372 ppb	106.895 ppb	62.843 %	4.442 ppb	4.980 ppb	70.273 %
Concentration per Run 1	72.357 %	10.484 ppb	9.877 ppb	556.749 ppb	103.673 ppb	61.683 %	4.468 ppb	5.218 ppb	66.704 %
Concentration per Run 2	65.965 %	12.029 ppb	9.986 ppb	610.283 ppb	109.727 ppb	61.619 %	4.550 ppb	4.982 ppb	68.978 %
Concentration per Run 3	74.403 %	11.911 ppb	10.675 ppb	610.084 ppb	107.284 ppb	65.227 %	4.309 ppb	4.739 ppb	75.136 %
Concentration RSD	6.2 %	7.5 %	4.2 %	5.2 %	2.8 %	3.3 %	2.8 %	4.8 %	6.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	49.896 ppb	211.192 ppb	70.569 %	72.672 %	9.675 ppb	50.903 ppb	55.120 %
Concentration per Run 1	50.671 ppb	212.396 ppb	67.983 %	69.227 %	9.878 ppb	51.874 ppb	55.397 %
Concentration per Run 2	49.811 ppb	211.849 ppb	70.272 %	71.751 %	9.684 ppb	51.704 ppb	55.103 %
Concentration per Run 3	49.204 ppb	209.332 ppb	73.453 %	77.038 %	9.462 ppb	49.130 ppb	54.859 %
Concentration RSD	1.5 %	0.8 %	3.9 %	5.5 %	2.2 %	3.0 %	0.5 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG1963148-4d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 9:05:53 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.646 %	55.145 %	4.563 ppb	569,050.672 ppb	86,305.067 ppb	423.719 ppb	26,656.334 ppb	29,050.212 ppb	67.101 %
Concentration per Run 1	72.390 %	56.796 %	4.585 ppb	548,588.386 ppb	83,208.722 ppb	409.327 ppb	25,886.827 ppb	28,846.909 ppb	66.411 %
Concentration per Run 2	72.443 %	57.087 %	4.503 ppb	559,993.657 ppb	84,034.205 ppb	422.681 ppb	26,574.932 ppb	28,655.598 ppb	67.008 %
Concentration per Run 3	73.106 %	51.553 %	4.602 ppb	598,569.972 ppb	91,672.273 ppb	439.148 ppb	27,507.243 ppb	29,648.130 ppb	67.885 %
Concentration RSD	0.5 %	5.6 %	1.2 %	4.6 %	5.4 %	3.5 %	3.1 %	1.8 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	72.090 %	53.728 ppb	20.122 ppb	66.509 ppb	537.535 ppb	50.020 ppb	47.034 ppb	27.131 ppb	48.622 ppb
Concentration per Run 1	71.442 %	52.164 ppb	19.870 ppb	64.522 ppb	537.254 ppb	50.848 ppb	48.240 ppb	26.949 ppb	48.751 ppb
Concentration per Run 2	69.853 %	55.481 ppb	20.421 ppb	69.703 ppb	542.371 ppb	50.945 ppb	47.610 ppb	28.096 ppb	49.350 ppb
Concentration per Run 3	74.975 %	53.540 ppb	20.076 ppb	65.301 ppb	532.979 ppb	48.268 ppb	45.250 ppb	26.347 ppb	47.764 ppb
Concentration RSD	3.6 %	3.1 %	1.4 %	4.2 %	0.9 %	3.0 %	3.4 %	3.3 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	73.174 %	11.857 ppb	9.876 ppb	615.862 ppb	109.335 ppb	65.616 %	4.479 ppb	4.896 ppb	73.430 %
Concentration per Run 1	72.840 %	11.626 ppb	9.868 ppb	597.985 ppb	107.072 ppb	64.930 %	4.780 ppb	5.136 ppb	70.500 %
Concentration per Run 2	70.353 %	12.222 ppb	9.224 ppb	614.696 ppb	111.168 ppb	64.924 %	4.325 ppb	4.929 ppb	72.236 %
Concentration per Run 3	76.330 %	11.721 ppb	10.536 ppb	634.904 ppb	109.764 ppb	66.993 %	4.331 ppb	4.623 ppb	77.555 %
Concentration RSD	4.1 %	2.7 %	6.6 %	3.0 %	1.9 %	1.8 %	5.8 %	5.3 %	5.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.588 ppb	214.826 ppb	73.104 %	75.503 %	9.783 ppb	50.942 ppb	56.015 %
Concentration per Run 1	51.572 ppb	218.514 ppb	71.153 %	72.752 %	9.884 ppb	51.712 ppb	57.114 %
Concentration per Run 2	50.224 ppb	209.177 ppb	73.130 %	75.462 %	9.822 ppb	51.089 ppb	55.410 %
Concentration per Run 3	49.969 ppb	216.789 ppb	75.030 %	78.296 %	9.642 ppb	50.024 ppb	55.520 %
Concentration RSD	1.7 %	2.3 %	2.7 %	3.7 %	1.3 %	1.7 %	1.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	52	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG1963148-5d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 9:10:22 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	71.167 %	49.903 %	42.831 ppb	539,343.119 ppb	85,012.739 ppb	225.639 ppb	28,469.361 ppb	30,752.805 ppb	65.371 %
Concentration per Run 1	70.880 %	50.097 %	43.036 ppb	539,053.321 ppb	84,693.102 ppb	226.068 ppb	28,814.036 ppb	31,047.309 ppb	64.852 %
Concentration per Run 2	71.792 %	46.893 %	42.674 ppb	555,722.530 ppb	87,027.698 ppb	224.184 ppb	28,639.598 ppb	31,205.686 ppb	66.174 %
Concentration per Run 3	70.829 %	52.718 %	42.782 ppb	523,253.507 ppb	83,317.417 ppb	226.664 ppb	27,954.449 ppb	30,005.420 ppb	65.086 %
Concentration RSD	0.8 %	5.8 %	0.4 %	3.0 %	2.2 %	0.6 %	1.6 %	2.1 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	70.706 %	51.777 ppb	47.976 ppb	62.508 ppb	5,164.207 ppb	48.256 ppb	45.557 ppb	48.471 ppb	47.184 ppb
Concentration per Run 1	70.206 %	52.443 ppb	49.094 ppb	63.246 ppb	5,232.500 ppb	49.247 ppb	46.659 ppb	49.973 ppb	47.553 ppb
Concentration per Run 2	70.647 %	51.455 ppb	46.185 ppb	63.248 ppb	5,100.969 ppb	47.802 ppb	43.359 ppb	46.060 ppb	45.435 ppb
Concentration per Run 3	71.266 %	51.433 ppb	48.650 ppb	61.031 ppb	5,159.153 ppb	47.719 ppb	46.654 ppb	49.380 ppb	48.563 ppb
Concentration RSD	0.8 %	1.1 %	3.3 %	2.0 %	1.3 %	1.8 %	4.2 %	4.4 %	3.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	70.422 %	49.258 ppb	43.114 ppb	519.533 ppb	54.681 ppb	63.375 %	1.158 ppb	45.167 ppb	70.549 %
Concentration per Run 1	69.181 %	50.398 ppb	43.333 ppb	524.893 ppb	55.684 ppb	62.741 %	1.163 ppb	45.586 ppb	70.542 %
Concentration per Run 2	73.637 %	46.868 ppb	41.931 ppb	505.597 ppb	55.108 ppb	64.332 %	1.166 ppb	45.410 ppb	70.658 %
Concentration per Run 3	68.449 %	50.508 ppb	44.077 ppb	528.108 ppb	53.249 ppb	63.052 %	1.144 ppb	44.506 ppb	70.448 %
Concentration RSD	4.0 %	4.2 %	2.5 %	2.3 %	2.3 %	1.3 %	1.0 %	1.3 %	0.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.148 ppb	55.479 ppb	72.063 %	73.076 %	44.633 ppb	49.295 ppb	57.301 %
Concentration per Run 1	49.878 ppb	56.336 ppb	70.859 %	70.957 %	45.331 ppb	50.397 ppb	59.403 %
Concentration per Run 2	50.365 ppb	55.764 ppb	72.615 %	74.647 %	44.077 ppb	48.380 ppb	57.333 %
Concentration per Run 3	50.203 ppb	54.338 ppb	72.714 %	73.623 %	44.491 ppb	49.108 ppb	55.167 %
Concentration RSD	0.5 %	1.9 %	1.4 %	2.6 %	1.4 %	2.1 %	3.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	53	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xWG1963148-6d5 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 9:14:49 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	64.402 %	47.184 %	0.024 ppb	1,125,082.465 ppb	169,572.015 ppb	364.633 ppb	49,736.511 ppb	52,897.273 ppb	58.378 %
Concentration per Run 1	64.685 %	49.514 %	0.035 ppb	1,097,031.598 ppb	166,168.813 ppb	363.003 ppb	49,963.061 ppb	52,825.554 ppb	58.724 %
Concentration per Run 2	64.028 %	40.776 %	0.021 ppb	1,211,690.071 ppb	181,515.465 ppb	392.618 ppb	50,522.313 ppb	52,935.149 ppb	58.026 %
Concentration per Run 3	64.492 %	51.262 %	0.017 ppb	1,066,525.725 ppb	161,031.768 ppb	338.280 ppb	48,724.157 ppb	52,931.117 ppb	58.384 %
Concentration RSD	0.5 %	11.9 %	39.9 %	6.8 %	6.3 %	7.5 %	1.9 %	0.1 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	64.112 %	1.589 ppb	1.709 ppb	28.657 ppb	809.719 ppb	0.318 ppb	1.069 ppb	7.158 ppb	8.526 ppb
Concentration per Run 1	63.582 %	1.493 ppb	1.670 ppb	28.014 ppb	802.650 ppb	0.314 ppb	0.930 ppb	7.557 ppb	8.776 ppb
Concentration per Run 2	63.229 %	1.711 ppb	1.711 ppb	29.066 ppb	820.018 ppb	0.363 ppb	1.044 ppb	7.052 ppb	8.308 ppb
Concentration per Run 3	65.525 %	1.564 ppb	1.747 ppb	28.890 ppb	806.488 ppb	0.278 ppb	1.234 ppb	6.866 ppb	8.495 ppb
Concentration RSD	1.9 %	7.0 %	2.3 %	2.0 %	1.1 %	13.4 %	14.4 %	5.0 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	65.984 %	1.896 ppb	0.126 ppb	983.668 ppb	1.788 ppb	58.490 %	0.084 ppb	0.073 ppb	65.503 %
Concentration per Run 1	63.366 %	1.894 ppb	0.027 ppb	1,006.182 ppb	1.456 ppb	56.768 %	0.078 ppb	0.057 ppb	64.505 %
Concentration per Run 2	68.226 %	1.870 ppb	0.168 ppb	962.231 ppb	2.021 ppb	59.612 %	0.086 ppb	0.085 ppb	66.901 %
Concentration per Run 3	66.360 %	1.925 ppb	0.182 ppb	982.593 ppb	1.887 ppb	59.089 %	0.089 ppb	0.078 ppb	65.103 %
Concentration RSD	3.7 %	1.4 %	68.2 %	2.2 %	16.5 %	2.6 %	7.2 %	19.4 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.615 ppb	6.801 ppb	66.816 %	67.828 %	0.335 ppb	12.169 ppb	48.312 %
Concentration per Run 1	0.609 ppb	6.948 ppb	64.629 %	65.342 %	0.258 ppb	11.721 ppb	49.478 %
Concentration per Run 2	0.557 ppb	6.545 ppb	68.203 %	69.929 %	0.419 ppb	12.210 ppb	48.484 %
Concentration per Run 3	0.680 ppb	6.909 ppb	67.616 %	68.214 %	0.329 ppb	12.576 ppb	46.973 %
Concentration RSD	10.1 %	3.3 %	2.9 %	3.4 %	24.0 %	3.5 %	2.6 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	FB
Analysis label:	xl2445805-08 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 9:19:15 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.454 %	60.582 %	-0.001 ppb	524.802 ppb	8.722 ppb	2.894 ppb	34.149 ppb	6.988 ppb	78.404 %
Concentration per Run 1	86.321 %	61.456 %	-0.003 ppb	594.084 ppb	11.386 ppb	2.600 ppb	37.438 ppb	4.270 ppb	77.938 %
Concentration per Run 2	86.589 %	60.582 %	0.005 ppb	500.334 ppb	8.588 ppb	2.465 ppb	34.723 ppb	16.780 ppb	78.148 %
Concentration per Run 3	86.451 %	59.709 %	-0.004 ppb	479.988 ppb	6.192 ppb	3.615 ppb	30.286 ppb	-0.087 ppb	79.126 %
Concentration RSD	0.2 %	1.4 %	947.5 %	11.6 %	29.8 %	21.7 %	10.6 %	125.3 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	80.333 %	0.126 ppb	0.209 ppb	0.450 ppb	4.677 ppb	0.002 ppb	-0.008 ppb	0.166 ppb	0.168 ppb
Concentration per Run 1	81.776 %	0.103 ppb	0.192 ppb	0.520 ppb	4.745 ppb	-0.001 ppb	0.003 ppb	0.070 ppb	0.176 ppb
Concentration per Run 2	80.627 %	0.106 ppb	0.210 ppb	0.381 ppb	4.398 ppb	0.004 ppb	-0.048 ppb	0.215 ppb	0.151 ppb
Concentration per Run 3	78.596 %	0.169 ppb	0.225 ppb	0.450 ppb	4.887 ppb	0.004 ppb	0.022 ppb	0.214 ppb	0.176 ppb
Concentration RSD	2.0 %	29.4 %	7.7 %	15.4 %	5.4 %	146.5 %	473.4 %	50.3 %	8.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	82.304 %	-0.005 ppb	0.078 ppb	0.586 ppb	0.122 ppb	79.338 %	-0.003 ppb	0.001 ppb	84.100 %
Concentration per Run 1	82.562 %	-0.029 ppb	0.016 ppb	0.588 ppb	0.053 ppb	78.054 %	-0.001 ppb	0.000 ppb	82.888 %
Concentration per Run 2	81.623 %	-0.020 ppb	0.074 ppb	0.576 ppb	0.108 ppb	80.726 %	-0.003 ppb	0.000 ppb	84.364 %
Concentration per Run 3	82.729 %	0.035 ppb	0.144 ppb	0.593 ppb	0.205 ppb	79.233 %	-0.004 ppb	0.003 ppb	85.047 %
Concentration RSD	0.7 %	766.0 %	82.5 %	1.5 %	63.4 %	1.7 %	45.5 %	173.2 %	1.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.059 ppb	0.694 ppb	80.662 %	82.035 %	0.099 ppb	0.143 ppb	70.258 %
Concentration per Run 1	0.042 ppb	0.787 ppb	77.551 %	79.497 %	0.050 ppb	0.132 ppb	72.575 %
Concentration per Run 2	0.056 ppb	0.682 ppb	82.058 %	82.858 %	0.116 ppb	0.145 ppb	69.591 %
Concentration per Run 3	0.080 ppb	0.612 ppb	82.378 %	83.751 %	0.131 ppb	0.151 ppb	68.608 %
Concentration RSD	32.0 %	12.7 %	3.3 %	2.7 %	43.9 %	7.0 %	2.9 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	55	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xl2447194-06d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 9:36:38 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.870 %	54.272 %	0.010 ppb	527,246.627 ppb	79,163.489 ppb	169.805 ppb	24,531.225 ppb	26,883.958 ppb	64.298 %
Concentration per Run 1	71.262 %	50.388 %	0.013 ppb	534,572.015 ppb	80,304.134 ppb	168.448 ppb	24,299.129 ppb	27,301.095 ppb	65.079 %
Concentration per Run 2	70.723 %	60.000 %	0.009 ppb	509,708.615 ppb	76,293.586 ppb	168.955 ppb	24,712.516 ppb	27,198.880 ppb	64.175 %
Concentration per Run 3	70.625 %	52.427 %	0.009 ppb	537,459.250 ppb	80,892.747 ppb	172.013 ppb	24,582.029 ppb	26,151.898 ppb	63.638 %
Concentration RSD	0.5 %	9.3 %	21.5 %	2.9 %	3.2 %	1.1 %	0.9 %	2.4 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	65.937 %	0.787 ppb	0.803 ppb	14.663 ppb	404.857 ppb	0.133 ppb	0.621 ppb	3.841 ppb	4.561 ppb
Concentration per Run 1	64.377 %	0.617 ppb	0.923 ppb	14.192 ppb	419.141 ppb	0.114 ppb	0.733 ppb	3.947 ppb	4.584 ppb
Concentration per Run 2	63.759 %	0.859 ppb	0.743 ppb	15.433 ppb	396.178 ppb	0.120 ppb	0.692 ppb	3.982 ppb	4.631 ppb
Concentration per Run 3	69.676 %	0.887 ppb	0.745 ppb	14.364 ppb	399.253 ppb	0.164 ppb	0.439 ppb	3.595 ppb	4.467 ppb
Concentration RSD	4.9 %	18.9 %	12.9 %	4.6 %	3.1 %	20.7 %	25.7 %	5.6 %	1.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	66.182 %	1.042 ppb	0.197 ppb	481.384 ppb	0.827 ppb	62.394 %	0.055 ppb	0.043 ppb	69.845 %
Concentration per Run 1	65.342 %	1.040 ppb	0.166 ppb	481.295 ppb	0.829 ppb	61.949 %	0.049 ppb	0.020 ppb	69.991 %
Concentration per Run 2	65.500 %	0.987 ppb	0.179 ppb	465.661 ppb	0.907 ppb	61.465 %	0.066 ppb	0.050 ppb	67.800 %
Concentration per Run 3	67.704 %	1.099 ppb	0.246 ppb	497.197 ppb	0.744 ppb	63.768 %	0.050 ppb	0.059 ppb	71.744 %
Concentration RSD	2.0 %	5.4 %	22.0 %	3.3 %	9.9 %	1.9 %	17.4 %	47.2 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.248 ppb	3.228 ppb	72.633 %	76.012 %	0.032 ppb	5.898 ppb	58.693 %
Concentration per Run 1	0.228 ppb	3.425 ppb	72.333 %	75.152 %	0.013 ppb	5.522 ppb	61.855 %
Concentration per Run 2	0.233 ppb	2.985 ppb	71.255 %	75.219 %	0.041 ppb	6.077 ppb	57.393 %
Concentration per Run 3	0.283 ppb	3.274 ppb	74.310 %	77.665 %	0.043 ppb	6.094 ppb	56.830 %
Concentration RSD	12.2 %	6.9 %	2.1 %	1.9 %	50.7 %	5.5 %	4.7 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	56	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	xl2447194-06d20 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 9:41:33 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.621 %	54.466 %	0.014 ppb	316,093.165 ppb	46,855.966 ppb	99.922 ppb	14,301.394 ppb	16,039.477 ppb	66.865 %
Concentration per Run 1	73.911 %	51.844 %	0.010 ppb	324,009.237 ppb	47,845.623 ppb	98.286 ppb	14,417.687 ppb	15,866.963 ppb	67.179 %
Concentration per Run 2	73.401 %	54.466 %	0.011 ppb	314,889.911 ppb	46,802.221 ppb	105.182 ppb	14,112.987 ppb	15,979.712 ppb	66.365 %
Concentration per Run 3	73.552 %	57.087 %	0.023 ppb	309,380.347 ppb	45,920.055 ppb	96.297 ppb	14,373.507 ppb	16,271.756 ppb	67.051 %
Concentration RSD	0.4 %	4.8 %	49.1 %	2.3 %	2.1 %	4.7 %	1.2 %	1.3 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	71.089 %	0.433 ppb	0.484 ppb	7.963 ppb	225.746 ppb	0.112 ppb	0.491 ppb	2.046 ppb	3.565 ppb
Concentration per Run 1	71.177 %	0.437 ppb	0.459 ppb	7.437 ppb	208.408 ppb	0.144 ppb	0.348 ppb	2.206 ppb	3.486 ppb
Concentration per Run 2	71.884 %	0.439 ppb	0.499 ppb	8.209 ppb	238.365 ppb	0.091 ppb	0.553 ppb	2.148 ppb	3.371 ppb
Concentration per Run 3	70.206 %	0.424 ppb	0.494 ppb	8.243 ppb	230.465 ppb	0.102 ppb	0.573 ppb	1.785 ppb	3.837 ppb
Concentration RSD	1.2 %	1.9 %	4.5 %	5.7 %	6.9 %	24.7 %	25.3 %	11.2 %	6.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	69.709 %	0.600 ppb	0.099 ppb	281.809 ppb	0.458 ppb	66.053 %	0.022 ppb	0.011 ppb	71.913 %
Concentration per Run 1	68.573 %	0.750 ppb	0.031 ppb	290.207 ppb	0.390 ppb	65.638 %	0.023 ppb	0.008 ppb	71.330 %
Concentration per Run 2	70.321 %	0.595 ppb	0.030 ppb	273.168 ppb	0.438 ppb	64.549 %	0.028 ppb	0.008 ppb	69.866 %
Concentration per Run 3	70.232 %	0.453 ppb	0.236 ppb	282.053 ppb	0.546 ppb	67.972 %	0.014 ppb	0.018 ppb	74.542 %
Concentration RSD	1.4 %	24.8 %	119.5 %	3.0 %	17.4 %	2.6 %	31.8 %	54.2 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.160 ppb	1.670 ppb	73.128 %	75.148 %	0.019 ppb	2.525 ppb	59.871 %
Concentration per Run 1	0.147 ppb	1.774 ppb	71.705 %	73.688 %	0.006 ppb	2.521 ppb	61.318 %
Concentration per Run 2	0.157 ppb	1.580 ppb	72.427 %	74.706 %	0.024 ppb	2.591 ppb	59.588 %
Concentration per Run 3	0.177 ppb	1.656 ppb	75.253 %	77.049 %	0.026 ppb	2.462 ppb	58.709 %
Concentration RSD	9.4 %	5.9 %	2.6 %	2.3 %	59.9 %	2.6 %	2.2 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 9:46:01 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.208 %	54.854 %	57.403 ppb	6,066.896 ppb	5,872.882 ppb	62.425 ppb	5,891.005 ppb	6,015.949 ppb	67.280 %
Concentration per Run 1	74.907 %	52.427 %	57.596 ppb	6,407.625 ppb	6,213.236 ppb	63.613 ppb	6,127.376 ppb	6,257.972 ppb	66.453 %
Concentration per Run 2	75.325 %	52.718 %	57.633 ppb	6,091.935 ppb	5,868.967 ppb	63.847 ppb	5,795.434 ppb	5,962.743 ppb	67.659 %
Concentration per Run 3	75.392 %	59.417 %	56.981 ppb	5,701.129 ppb	5,536.443 ppb	59.813 ppb	5,750.203 ppb	5,827.134 ppb	67.728 %
Recovery Percentage 1			95.672 %	101.115 %	97.881 %	104.041 %	98.183 %	100.266 %	
Concentration RSD	0.3 %	7.2 %	0.6 %	5.8 %	5.8 %	3.6 %	3.5 %	3.7 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	67.910 %	60.587 ppb	58.906 ppb	59.075 ppb	5,839.069 ppb	58.616 ppb	57.675 ppb	59.357 ppb	59.312 ppb
Concentration per Run 1	67.821 %	62.413 ppb	60.500 ppb	61.300 ppb	5,901.111 ppb	59.703 ppb	60.281 ppb	62.505 ppb	59.729 ppb
Concentration per Run 2	65.613 %	60.194 ppb	58.467 ppb	55.926 ppb	5,901.252 ppb	58.252 ppb	56.624 ppb	59.532 ppb	58.708 ppb
Concentration per Run 3	70.294 %	59.156 ppb	57.751 ppb	59.999 ppb	5,714.844 ppb	57.893 ppb	56.120 ppb	56.033 ppb	59.498 ppb
Recovery Percentage 1		100.979 %	98.177 %	98.458 %	97.318 %	97.693 %	96.125 %	98.928 %	98.853 %
Concentration RSD	3.4 %	2.7 %	2.4 %	4.7 %	1.8 %	1.6 %	3.9 %	5.5 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	68.446 %	59.129 ppb	62.890 ppb	59.614 ppb	59.523 ppb	67.705 %	59.382 ppb	60.033 ppb	71.595 %
Concentration per Run 1	68.877 %	60.179 ppb	57.956 ppb	59.506 ppb	58.731 ppb	68.796 %	59.385 ppb	60.691 ppb	72.352 %
Concentration per Run 2	68.252 %	57.771 ppb	68.249 ppb	59.791 ppb	60.058 ppb	66.846 %	60.007 ppb	59.992 ppb	70.514 %
Concentration per Run 3	68.209 %	59.436 ppb	62.464 ppb	59.546 ppb	59.779 ppb	67.474 %	58.753 ppb	59.414 ppb	71.920 %
Recovery Percentage 1		98.548 %	104.816 %	99.357 %	99.205 %		98.970 %	100.054 %	
Concentration RSD	0.5 %	2.1 %	8.2 %	0.3 %	1.2 %	1.5 %	1.1 %	1.1 %	1.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.978 ppb	61.022 ppb	72.810 %	75.434 %	69.942 ppb	71.385 ppb	66.354 %
Concentration per Run 1	60.923 ppb	61.711 ppb	73.742 %	76.140 %	66.355 ppb	67.403 ppb	70.848 %
Concentration per Run 2	58.257 ppb	59.035 ppb	70.016 %	72.086 %	71.055 ppb	72.487 ppb	63.161 %
Concentration per Run 3	60.756 ppb	62.318 ppb	74.672 %	78.075 %	72.417 ppb	74.266 ppb	65.051 %
Recovery Percentage 1	99.964 %	101.703 %			116.571 %	118.976 %	
Concentration RSD	2.5 %	2.9 %	3.4 %	4.1 %	4.5 %	5.0 %	6.0 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 9:50:33 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.045 %	54.175 %	0.005 ppb	220.745 ppb	-0.571 ppb	-0.606 ppb	15.701 ppb	-7.733 ppb	64.991 %
Concentration per Run 1	75.959 %	53.883 %	0.005 ppb	234.316 ppb	-0.028 ppb	-0.321 ppb	13.512 ppb	-10.455 ppb	64.762 %
Concentration per Run 2	75.860 %	58.835 %	0.004 ppb	214.214 ppb	-1.114 ppb	-0.809 ppb	20.432 ppb	-10.505 ppb	64.830 %
Concentration per Run 3	76.317 %	49.806 %	0.007 ppb	213.706 ppb	-0.571 ppb	-0.688 ppb	13.160 ppb	-2.239 ppb	65.382 %
Recovery Percentage 1			1.076 %	220.745 %	-0.816 %	-6.061 %	15.701 %	-7.733 %	
Concentration RSD	0.3 %	8.3 %	22.0 %	5.3 %	95.1 %	41.9 %	26.1 %	61.5 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	65.172 %	-0.059 ppb	-0.004 ppb	0.010 ppb	3.507 ppb	0.003 ppb	0.040 ppb	0.050 ppb	-0.250 ppb
Concentration per Run 1	62.434 %	-0.088 ppb	-0.009 ppb	-0.048 ppb	2.231 ppb	0.005 ppb	0.061 ppb	0.116 ppb	-0.223 ppb
Concentration per Run 2	63.670 %	-0.015 ppb	-0.016 ppb	0.083 ppb	4.881 ppb	-0.001 ppb	0.014 ppb	0.008 ppb	-0.210 ppb
Concentration per Run 3	69.411 %	-0.074 ppb	0.013 ppb	-0.004 ppb	3.409 ppb	0.004 ppb	0.046 ppb	0.026 ppb	-0.316 ppb
Recovery Percentage 1		-1.180 %	-0.394 %	1.049 %	7.014 %	0.525 %	2.002 %	4.980 %	-4.995 %
Concentration RSD	5.7 %	65.2 %	381.6 %	638.0 %	37.8 %	130.6 %	59.6 %	116.3 %	23.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	66.218 %	-0.011 ppb	0.126 ppb	-0.007 ppb	0.249 ppb	65.733 %	0.003 ppb	0.007 ppb	70.719 %
Concentration per Run 1	64.414 %	-0.004 ppb	0.112 ppb	-0.007 ppb	0.126 ppb	65.351 %	0.003 ppb	0.004 ppb	69.654 %
Concentration per Run 2	65.223 %	-0.036 ppb	0.240 ppb	-0.009 ppb	0.274 ppb	67.074 %	-0.001 ppb	0.012 ppb	72.187 %
Concentration per Run 3	69.017 %	0.008 ppb	0.027 ppb	-0.006 ppb	0.346 ppb	64.774 %	0.008 ppb	0.004 ppb	70.315 %
Recovery Percentage 1		-2.186 %	2.526 %	-0.072 %	12.442 %		0.821 %	3.266 %	
Concentration RSD	3.7 %	209.4 %	85.0 %	23.5 %	45.0 %	1.8 %	131.3 %	67.4 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.070 ppb	0.002 ppb	71.872 %	75.596 %	0.282 ppb	-0.012 ppb	65.443 %
Concentration per Run 1	0.059 ppb	0.015 ppb	70.692 %	74.593 %	0.187 ppb	-0.014 ppb	68.495 %
Concentration per Run 2	0.068 ppb	-0.024 ppb	73.445 %	77.303 %	0.348 ppb	-0.012 ppb	65.646 %
Concentration per Run 3	0.082 ppb	0.015 ppb	71.478 %	74.890 %	0.310 ppb	-0.011 ppb	62.189 %
Recovery Percentage 1	1.739 %	0.366 %			28.171 %	-1.246 %	
Concentration RSD	16.6 %	1,228.5 %	2.0 %	2.0 %	29.8 %	12.4 %	4.8 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 10:15:55 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	68.487 %	46.213 %	59.438 ppb	5,884.847 ppb	5,965.056 ppb	65.849 ppb	5,800.480 ppb	5,945.995 ppb	60.985 %
Concentration per Run 1	68.926 %	47.475 %	59.231 ppb	5,671.430 ppb	5,774.061 ppb	63.611 ppb	5,723.525 ppb	5,621.719 ppb	61.028 %
Concentration per Run 2	67.882 %	45.728 %	59.509 ppb	5,950.679 ppb	6,055.219 ppb	68.819 ppb	5,667.008 ppb	5,920.200 ppb	60.493 %
Concentration per Run 3	68.654 %	45.437 %	59.574 ppb	6,032.430 ppb	6,065.887 ppb	65.116 ppb	6,010.906 ppb	6,296.065 ppb	61.435 %
Recovery Percentage 1			99.063 %	98.081 %	99.418 %	109.748 %	96.675 %	99.100 %	
Concentration RSD	0.8 %	2.4 %	0.3 %	3.2 %	2.8 %	4.1 %	3.2 %	5.7 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	62.463 %	60.920 ppb	58.153 ppb	58.918 ppb	5,609.247 ppb	56.998 ppb	55.820 ppb	56.456 ppb	58.326 ppb
Concentration per Run 1	68.175 %	57.178 ppb	54.880 ppb	56.403 ppb	5,274.289 ppb	52.406 ppb	52.132 ppb	51.751 ppb	54.340 ppb
Concentration per Run 2	60.138 %	62.269 ppb	58.482 ppb	58.005 ppb	5,612.476 ppb	57.416 ppb	55.487 ppb	57.043 ppb	58.102 ppb
Concentration per Run 3	59.078 %	63.312 ppb	61.098 ppb	62.345 ppb	5,940.977 ppb	61.171 ppb	59.842 ppb	60.573 ppb	62.536 ppb
Recovery Percentage 1		101.533 %	96.922 %	98.196 %	93.487 %	94.996 %	93.033 %	94.093 %	97.209 %
Concentration RSD	8.0 %	5.4 %	5.4 %	5.2 %	5.9 %	7.7 %	6.9 %	7.9 %	7.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	64.114 %	57.649 ppb	62.987 ppb	60.173 ppb	58.859 ppb	61.549 %	58.640 ppb	59.225 ppb	68.624 %
Concentration per Run 1	69.441 %	55.553 ppb	60.909 ppb	60.417 ppb	57.518 ppb	62.841 %	58.148 ppb	58.039 ppb	71.558 %
Concentration per Run 2	65.465 %	56.275 ppb	58.940 ppb	57.735 ppb	59.737 ppb	61.093 %	58.675 ppb	60.111 ppb	66.461 %
Concentration per Run 3	57.436 %	61.118 ppb	69.112 ppb	62.367 ppb	59.322 ppb	60.714 %	59.098 ppb	59.526 ppb	67.852 %
Recovery Percentage 1		96.081 %	104.978 %	100.289 %	98.098 %		97.734 %	98.709 %	
Concentration RSD	9.5 %	5.2 %	8.6 %	3.9 %	2.0 %	1.8 %	0.8 %	1.8 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.119 ppb	61.724 ppb	70.299 %	74.930 %	110.144 ppb	121.357 ppb	37.437 %
Concentration per Run 1	59.013 ppb	61.397 ppb	72.184 %	77.142 %	96.724 ppb	104.137 ppb	43.509 %
Concentration per Run 2	59.232 ppb	62.052 ppb	69.427 %	74.479 %	108.966 ppb	119.939 ppb	37.206 %
Concentration per Run 3	59.112 ppb	61.724 ppb	69.287 %	73.170 %	124.743 ppb	139.995 ppb	31.595 %
Recovery Percentage 1	98.532 %	102.874 %			183.574 %	202.261 %	
Concentration RSD	0.2 %	0.5 %	2.3 %	2.7 %	12.8 %	14.8 %	15.9 %

Alpha ICPMSQ2 Data with SRD

8/27/2024 10:28:06 AM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 10:20:23 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	69.359 %	45.242 %	0.005 ppb	13.385 ppb	-1.349 ppb	-0.793 ppb	8.486 ppb	-4.117 ppb	60.816 %
Concentration per Run 1	68.636 %	45.437 %	0.000 ppb	13.305 ppb	-1.548 ppb	-1.131 ppb	4.803 ppb	-7.634 ppb	59.532 %
Concentration per Run 2	69.415 %	46.310 %	0.004 ppb	14.433 ppb	-0.987 ppb	-0.514 ppb	8.260 ppb	-4.214 ppb	61.428 %
Concentration per Run 3	70.027 %	43.980 %	0.012 ppb	12.416 ppb	-1.511 ppb	-0.735 ppb	12.395 ppb	-0.504 ppb	61.487 %
Recovery Percentage 1			1.018 %	13.385 %	-1.927 %	-7.934 %	8.486 %	-4.117 %	
Concentration RSD	1.0 %	2.6 %	115.0 %	7.5 %	23.3 %	39.4 %	44.8 %	86.6 %	1.8 %

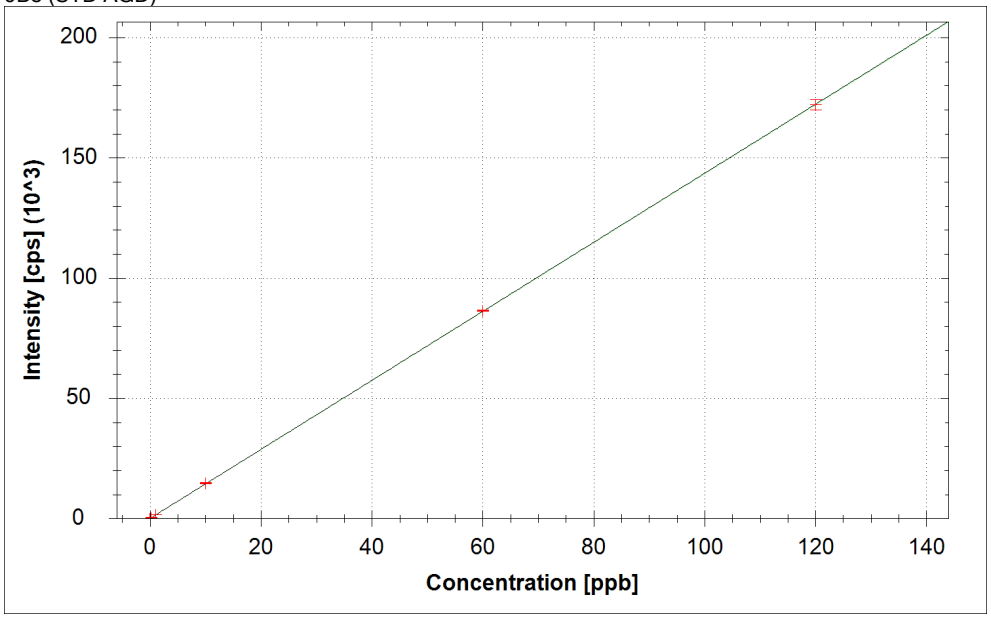
Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	63.052 %	-0.100 ppb	-0.037 ppb	-0.029 ppb	5.389 ppb	0.003 ppb	0.075 ppb	-0.055 ppb	-0.147 ppb
Concentration per Run 1	65.967 %	-0.089 ppb	-0.047 ppb	-0.050 ppb	4.723 ppb	0.005 ppb	0.097 ppb	-0.024 ppb	-0.198 ppb
Concentration per Run 2	63.052 %	-0.125 ppb	-0.052 ppb	-0.048 ppb	4.410 ppb	-0.001 ppb	0.082 ppb	-0.112 ppb	-0.035 ppb
Concentration per Run 3	60.138 %	-0.086 ppb	-0.012 ppb	0.011 ppb	7.034 ppb	0.005 ppb	0.046 ppb	-0.030 ppb	-0.207 ppb
Recovery Percentage 1		-2.000 %	-3.704 %	-2.937 %	10.779 %	0.564 %	3.752 %	-5.533 %	-2.938 %
Concentration RSD	4.6 %	21.5 %	58.4 %	118.2 %	26.6 %	127.5 %	35.0 %	88.1 %	66.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	63.613 %	0.104 ppb	0.203 ppb	-0.005 ppb	0.292 ppb	62.204 %	0.005 ppb	0.004 ppb	68.643 %
Concentration per Run 1	65.816 %	0.075 ppb	0.173 ppb	-0.003 ppb	0.192 ppb	62.055 %	0.002 ppb	0.000 ppb	69.022 %
Concentration per Run 2	64.236 %	0.090 ppb	0.173 ppb	-0.008 ppb	0.344 ppb	61.350 %	0.005 ppb	0.012 ppb	68.837 %
Concentration per Run 3	60.788 %	0.145 ppb	0.263 ppb	-0.005 ppb	0.341 ppb	63.208 %	0.008 ppb	0.000 ppb	68.070 %
Recovery Percentage 1		20.701 %	4.066 %	-0.055 %	14.620 %		1.259 %	2.056 %	
Concentration RSD	4.0 %	35.7 %	25.6 %	41.1 %	29.8 %	1.5 %	57.6 %	173.2 %	0.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.081 ppb	-0.002 ppb	69.713 %	73.783 %	0.335 ppb	0.009 ppb	57.900 %
Concentration per Run 1	0.060 ppb	0.003 ppb	69.792 %	74.448 %	0.233 ppb	0.015 ppb	60.627 %
Concentration per Run 2	0.075 ppb	-0.037 ppb	69.479 %	73.539 %	0.426 ppb	0.006 ppb	57.998 %
Concentration per Run 3	0.109 ppb	0.029 ppb	69.867 %	73.361 %	0.348 ppb	0.005 ppb	55.076 %
Recovery Percentage 1	2.036 %	-0.324 %			33.537 %	0.875 %	
Concentration RSD	31.1 %	2,035.5 %	0.3 %	0.8 %	29.0 %	66.0 %	4.8 %

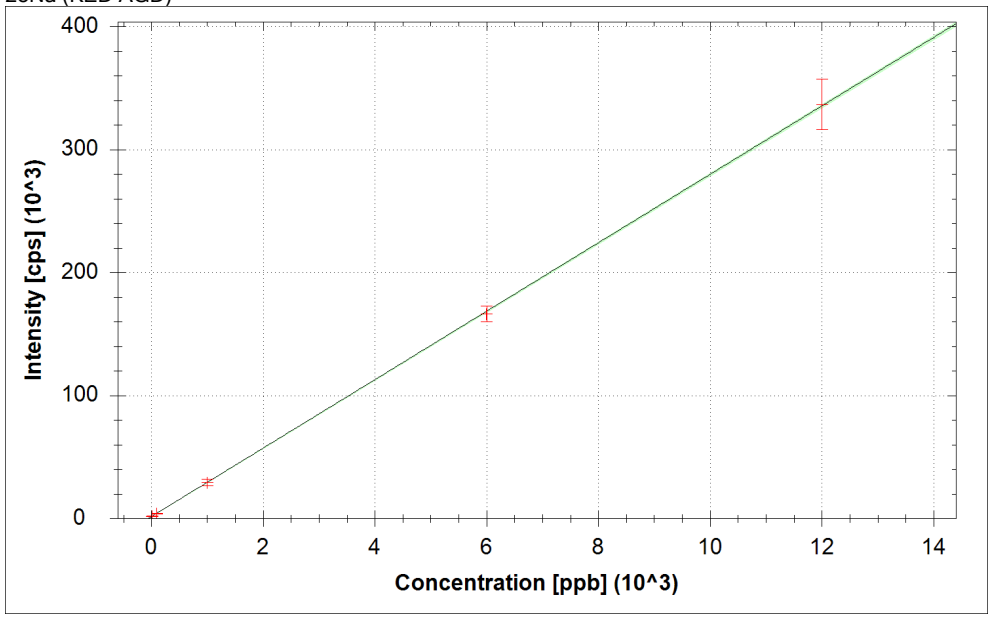
Calibration Curves:

9Be (STD AGD)



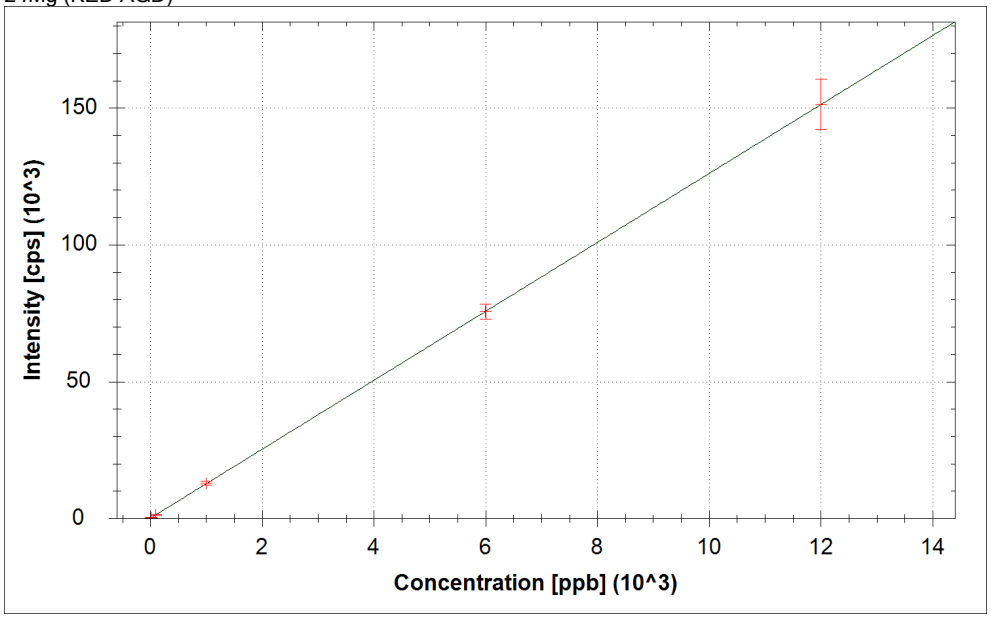
f(x) = 1434.7892*x + 17.7828
R² = 1.0000
BEC = 0.012 ppb
LoD = 0.0086 ppb

23Na (KED AGD)



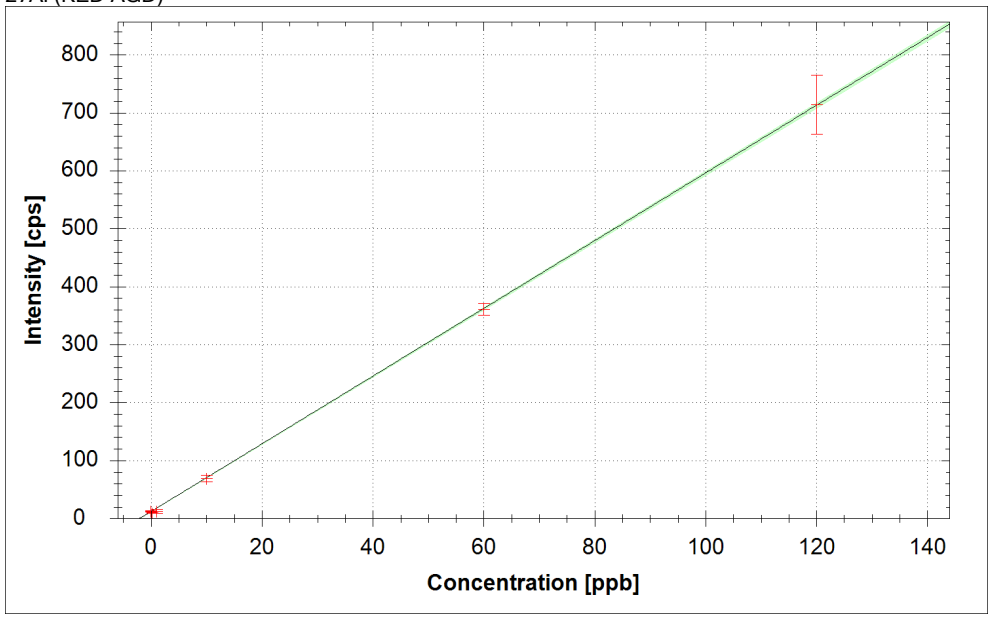
f(x) = 27.8227*x + 1533.8403
R² = 0.9999
BEC = 55.129 ppb
LoD = 16.3589 ppb

24Mg (KED AGD)



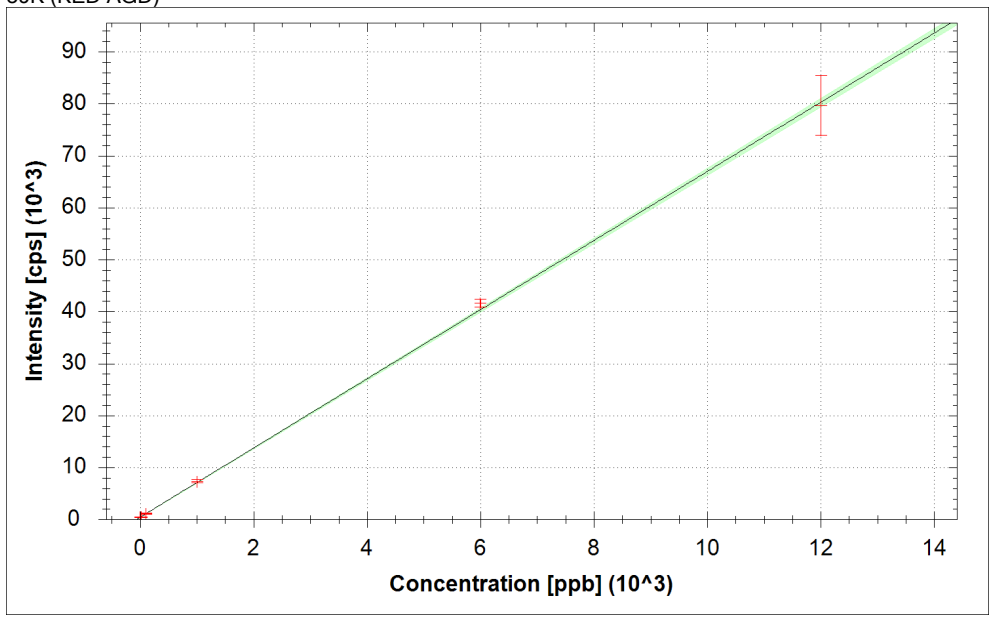
f(x) = 12.5936*x + 86.7968
R² = 1.0000
BEC = 6.892 ppb
LoD = 10.3462 ppb

27Al (KED AGD)



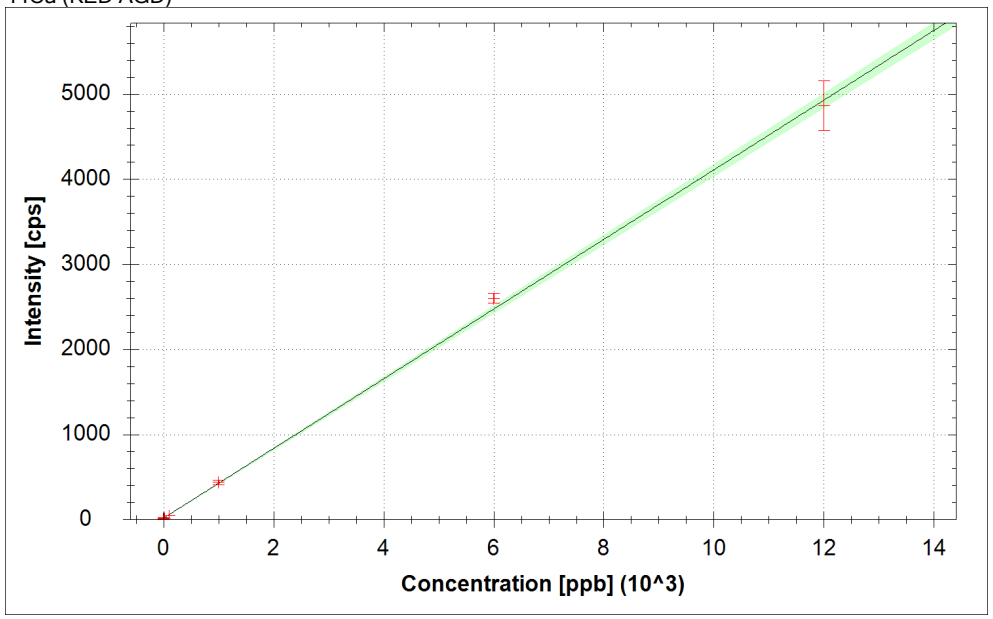
f(x) = 5.8395*x + 11.9897
R² = 0.9999
BEC = 2.053 ppb
LoD = 0.6030 ppb

39K (KED AGD)



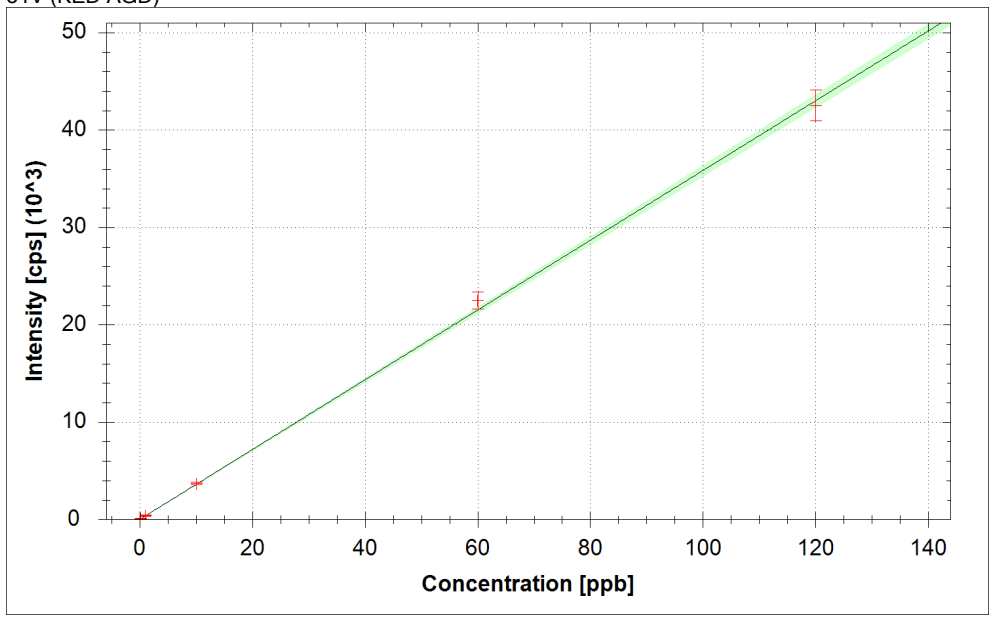
f(x) = 6.6522*x + 436.9833
R² = 0.9996
BEC = 65.690 ppb
LoD = 29.0417 ppb

44Ca (KED AGD)



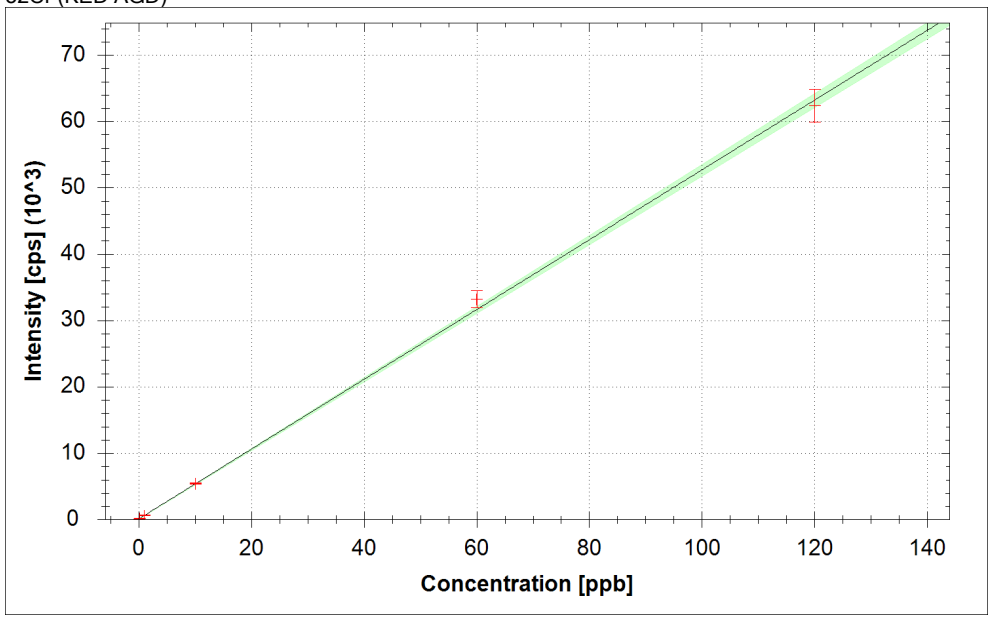
f(x) = 0.4094*x + 14.5091
R² = 0.9990
BEC = 35.438 ppb
LoD = 41.7144 ppb

51V (KED AGD)



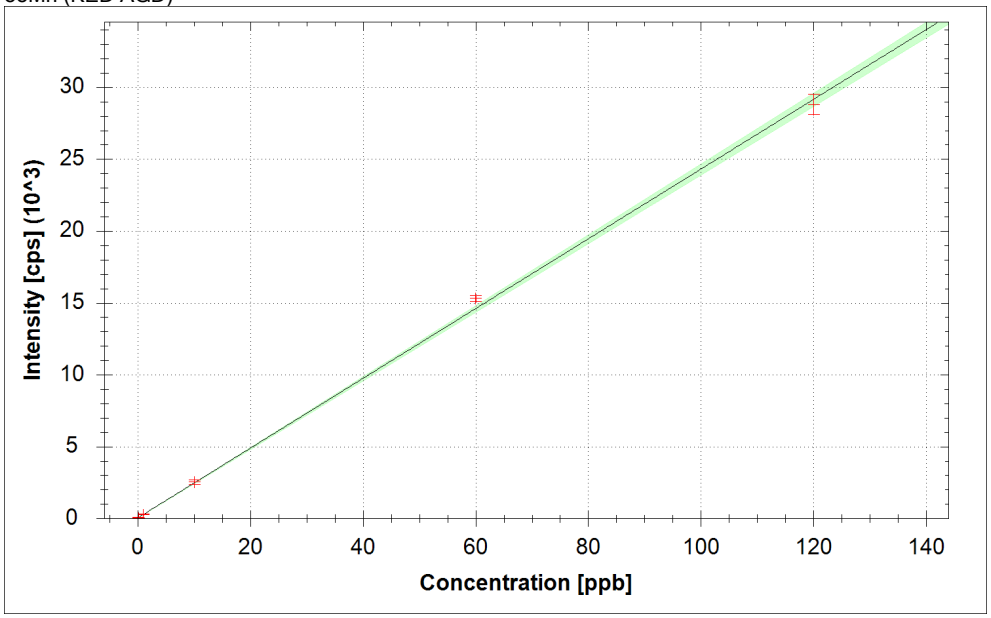
f(x) = 358.1518*x + 22.1601
R² = 0.9992
BEC = 0.062 ppb
LoD = 0.0256 ppb

52Cr (KED AGD)



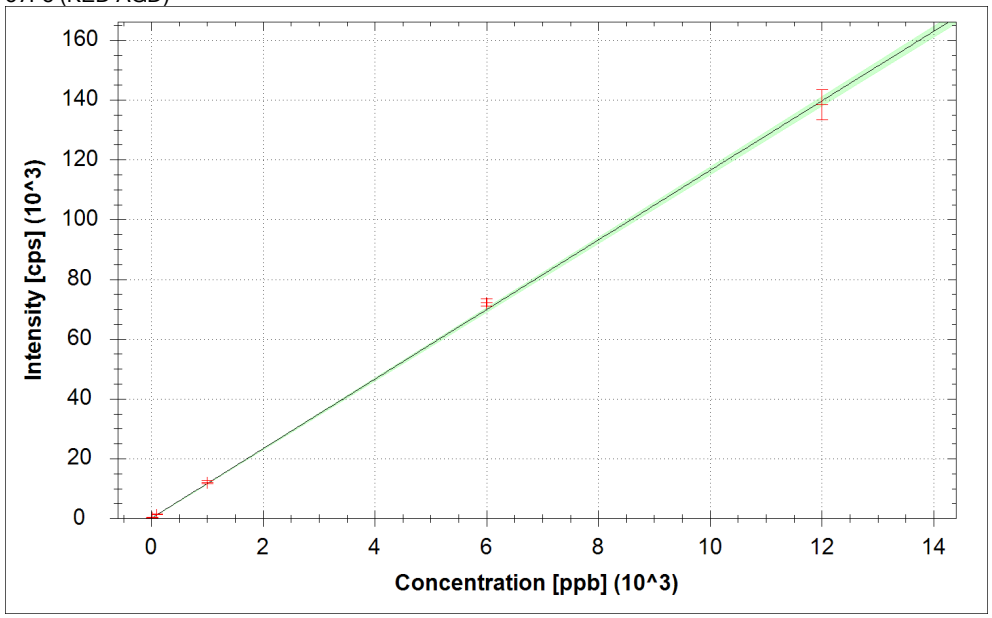
f(x) = 525.7710*x + 79.9623
R² = 0.9990
BEC = 0.152 ppb
LoD = 0.1312 ppb

55Mn (KED AGD)



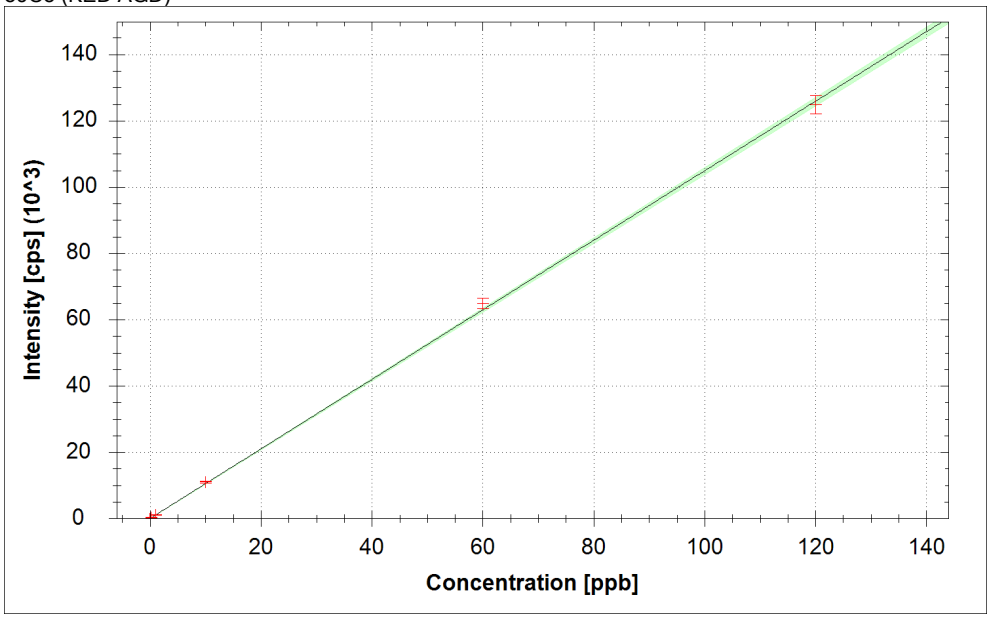
f(x) = 242.5465*x + 42.5270
R² = 0.9991
BEC = 0.175 ppb
LoD = 0.1832 ppb

57Fe (KED AGD)



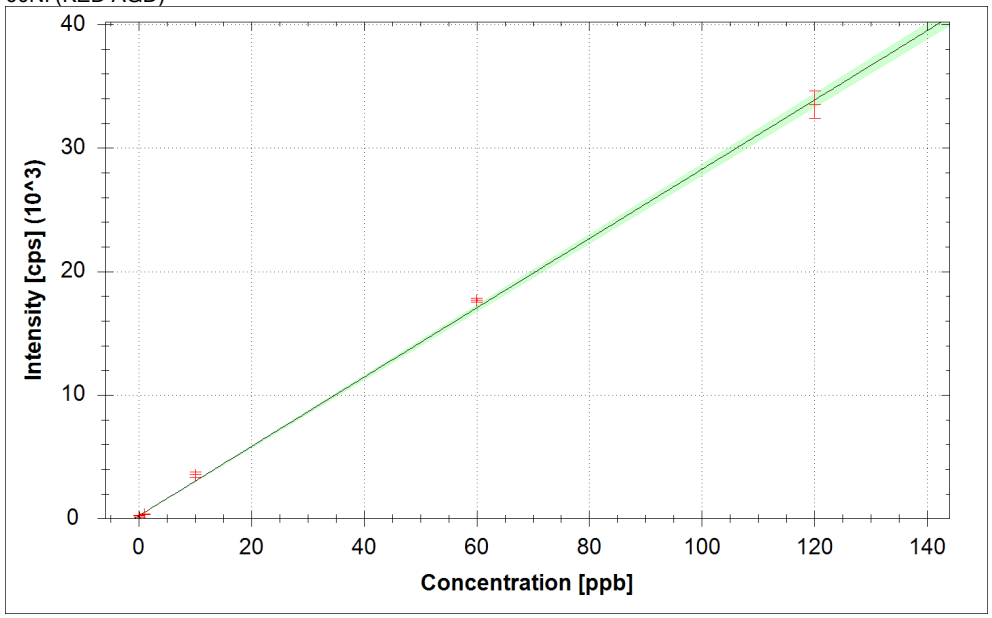
f(x) = 11.6310*x + 46.5393
R² = 0.9995
BEC = 4.001 ppb
LoD = 3.1687 ppb

59Co (KED AGD)



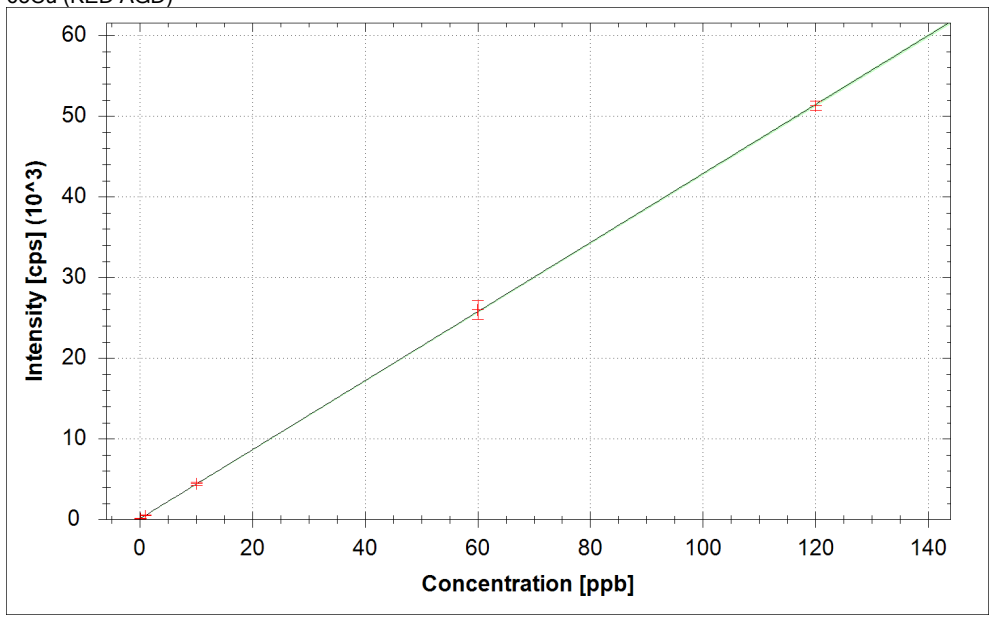
f(x) = 1048.6850*x + 11.1198
R² = 0.9996
BEC = 0.011 ppb
LoD = 0.0111 ppb

60Ni (KED AGD)



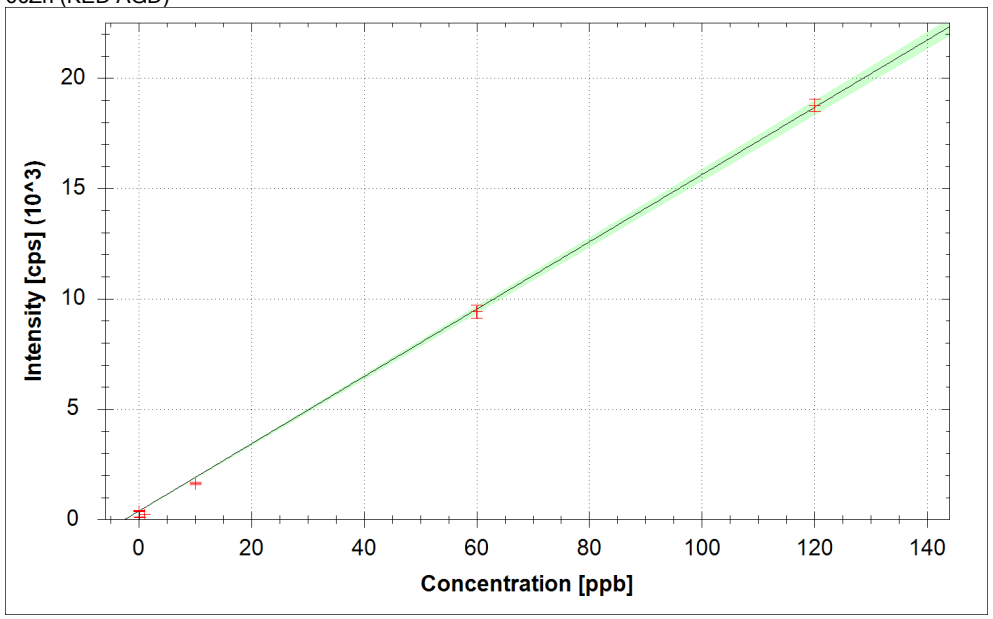
f(x) = 280.5058*x + 213.1828
R² = 0.9991
BEC = 0.760 ppb
LoD = 0.2456 ppb

65Cu (KED AGD)



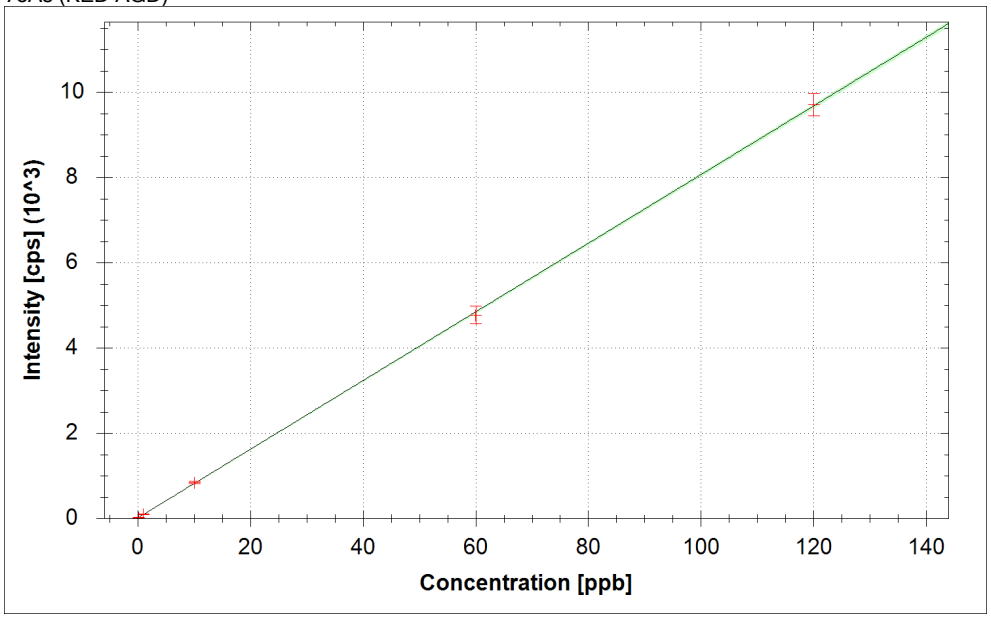
f(x) = 427.6508*x + 93.6635
R² = 1.0000
BEC = 0.219 ppb
LoD = 0.1037 ppb

66Zn (KED AGD)



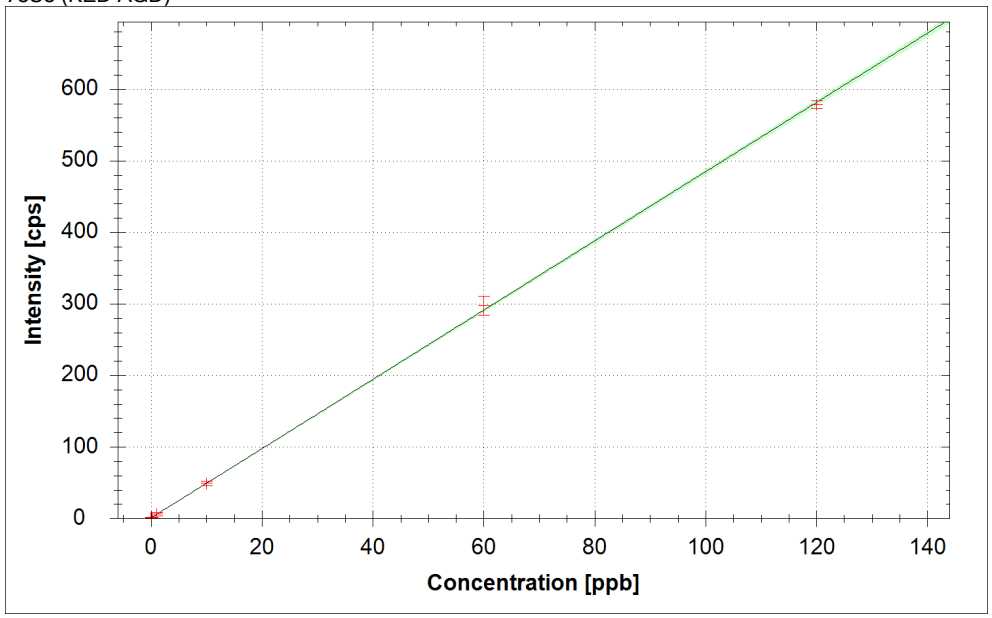
f(x) = 152.4004*x + 377.8674
R² = 0.9990
BEC = 2.479 ppb
LoD = 0.4369 ppb

75As (KED AGD)



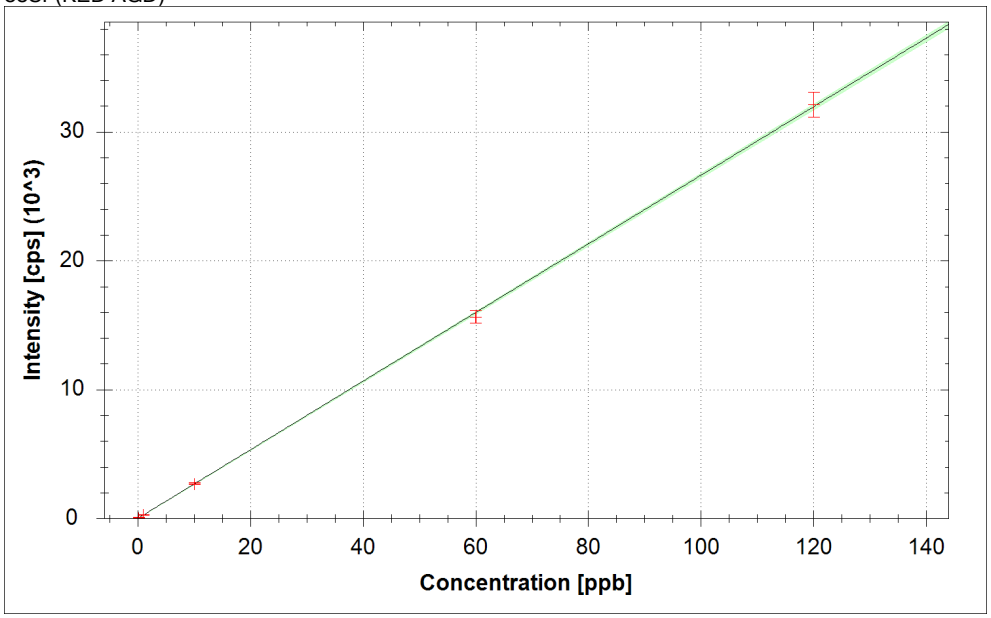
f(x) = 80.4782*x + 14.7880
R² = 0.9999
BEC = 0.184 ppb
LoD = 0.1227 ppb

78Se (KED AGD)



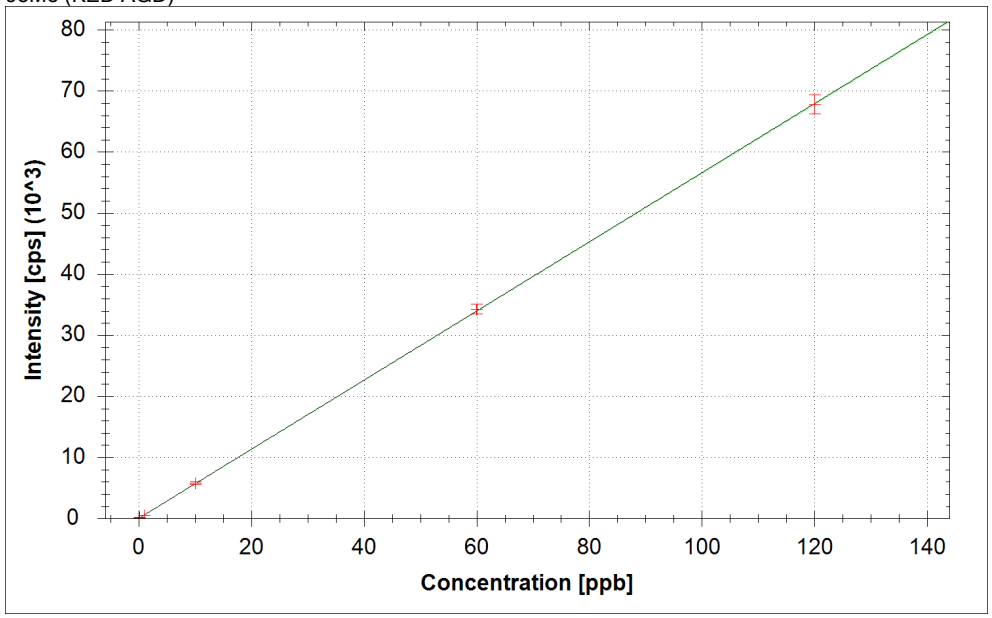
f(x) = 4.8381*x + 0.8095
R² = 0.9998
BEC = 0.167 ppb
LoD = 0.2828 ppb

88Sr (KED AGD)



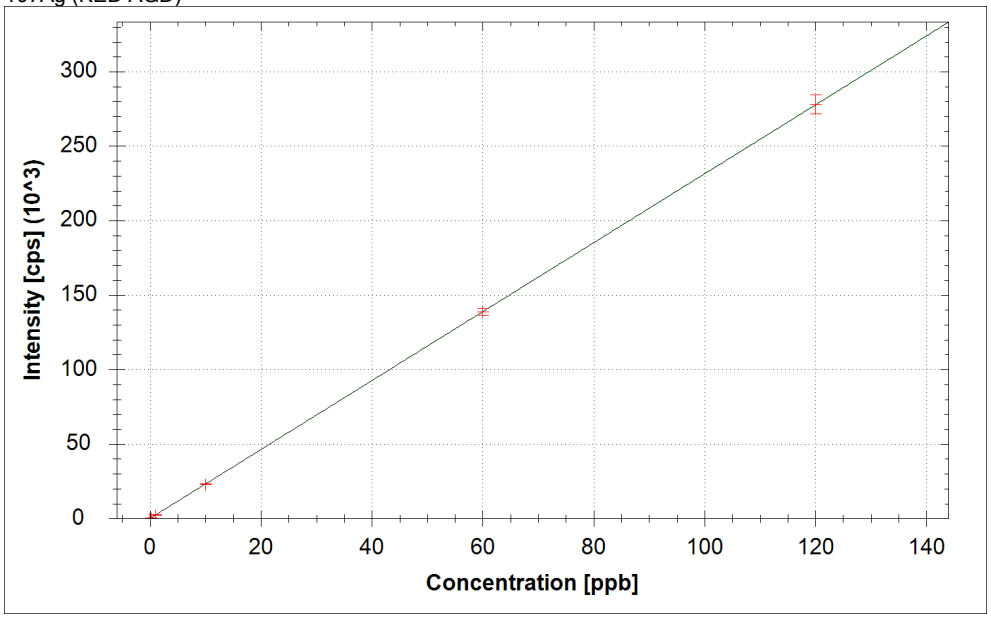
f(x) = 266.0875*x + 9.4565
R² = 0.9998
BEC = 0.036 ppb
LoD = 0.0113 ppb

95Mo (KED AGD)



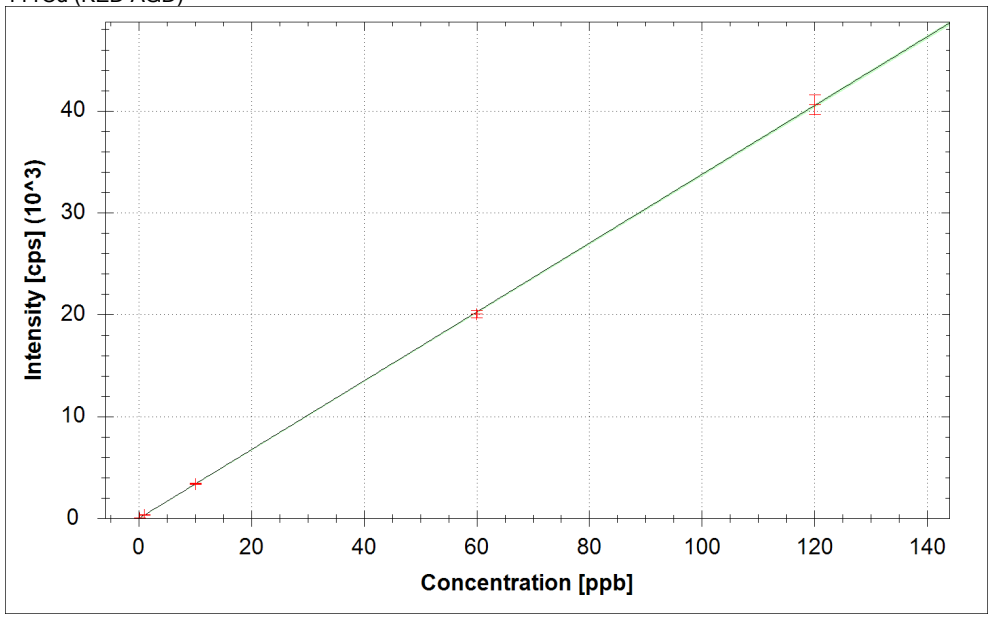
f(x) = 565.5432*x + 22.4698
R² = 1.0000
BEC = 0.040 ppb
LoD = 0.1163 ppb

107Ag (KED AGD)



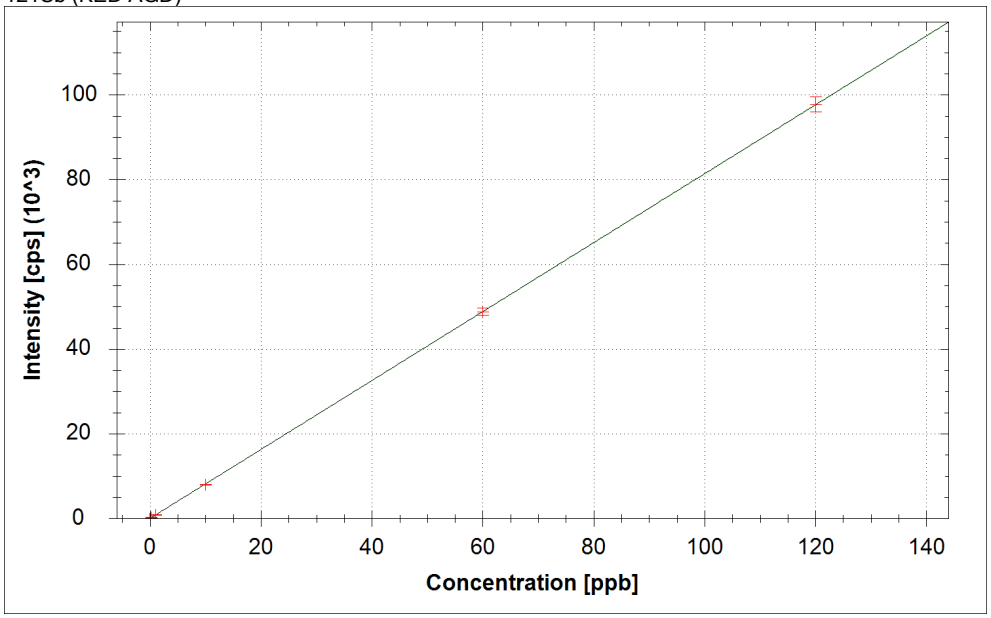
f(x) = 2313.7992*x + 10.9998
R² = 1.0000
BEC = 0.005 ppb
LoD = 0.0095 ppb

111Cd (KED AGD)



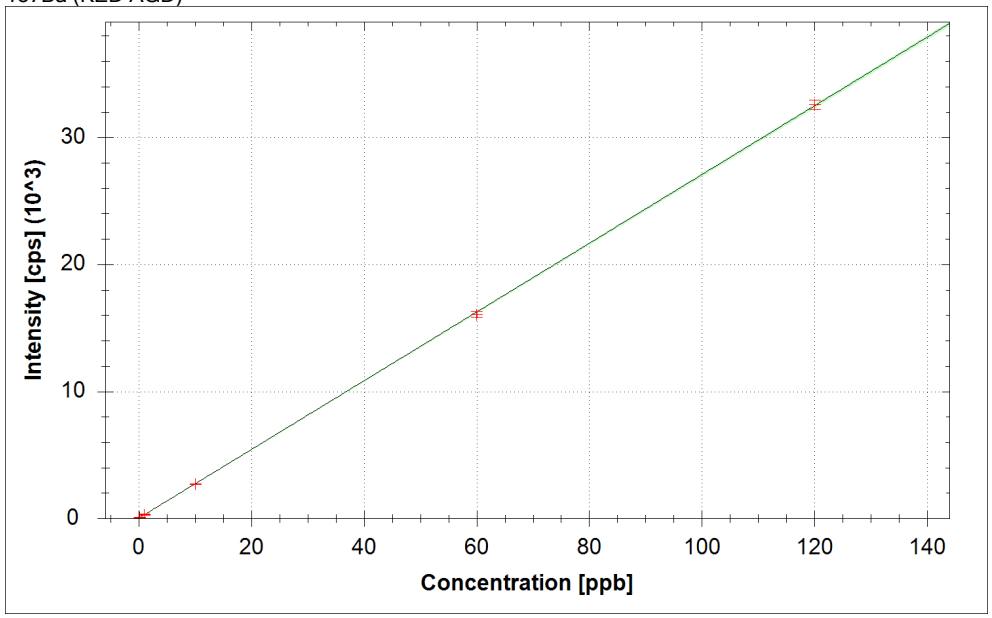
f(x) = 337.5525*x + 0.4290
R² = 1.0000
BEC = 0.001 ppb
LoD = 0.0066 ppb

121Sb (KED AGD)



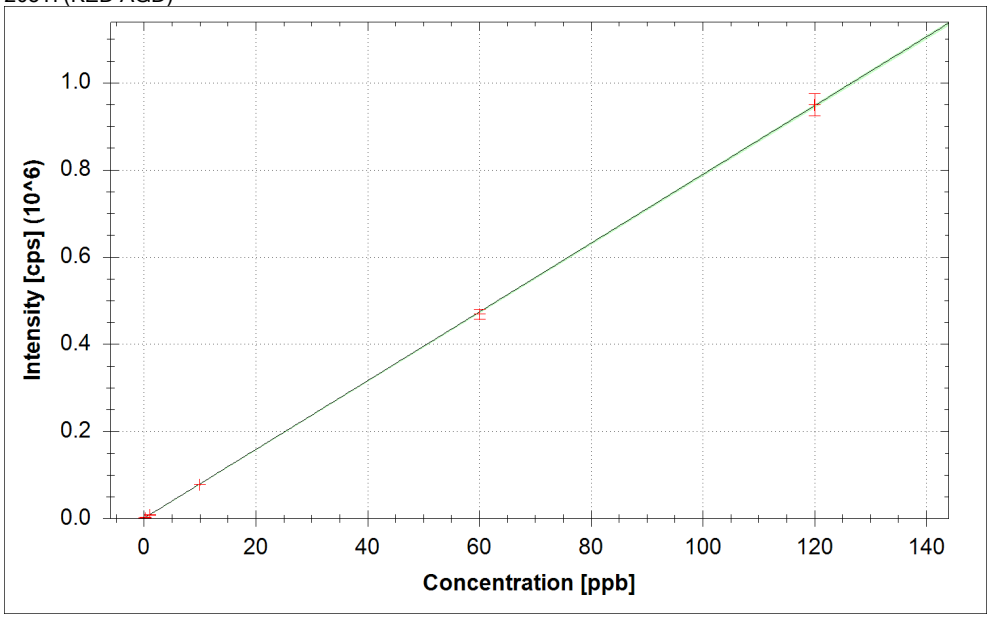
f(x) = 813.4798*x + 18.5372
R² = 1.0000
BEC = 0.023 ppb
LoD = 0.0198 ppb

137Ba (KED AGD)



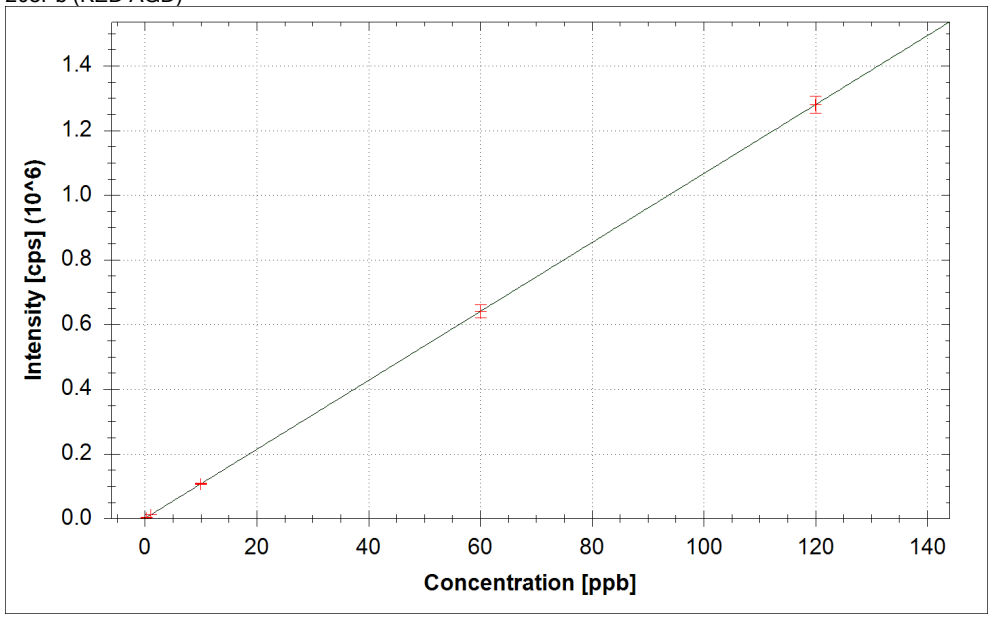
f(x) = 270.4218*x + 26.6394
R² = 0.9999
BEC = 0.099 ppb
LoD = 0.0974 ppb

205Tl (KED AGD)



f(x) = 7887.6299*x + 369.1270
R² = 1.0000
BEC = 0.047 ppb
LoD = 0.0642 ppb

208Pb (KED AGD)



f(x) = 10660.0000*x + 344.7151
R² = 1.0000
BEC = 0.032 ppb
LoD = 0.0065 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 10:38:34 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	100.878 %	0.5 %		0.000 %
6Li (KED AGD)	102.996 %	5.8 %		0.000 %
9Be (STD AGD)	0.208 ppb	4.9 %	0.200 ppb	4.092 %
23Na (KED AGD)	8.870 ppb	46.5 %	20.000 ppb	55.652 %
24Mg (KED AGD)	17.521 ppb	12.8 %	20.000 ppb	12.395 %
27Al (KED AGD)	-0.516 ppb	20.2 %	0.200 ppb	358.100 %
39K (KED AGD)	-1.687 ppb	262.7 %	20.000 ppb	108.435 %
44Ca (KED AGD)	-1.127 ppb	634.3 %	20.000 ppb	105.634 %
45Sc (STD AGD)	103.711 %	0.9 %		0.000 %
45Sc (KED AGD)	100.534 %	3.6 %		0.000 %
51V (KED AGD)	0.186 ppb	44.1 %	0.200 ppb	7.044 %
52Cr (KED AGD)	0.137 ppb	29.7 %	0.200 ppb	31.544 %
55Mn (KED AGD)	0.015 ppb	161.1 %	0.200 ppb	92.385 %
57Fe (KED AGD)	20.227 ppb	7.1 %	20.000 ppb	1.134 %
59Co (KED AGD)	0.221 ppb	17.8 %	0.200 ppb	10.384 %
60Ni (KED AGD)	-0.439 ppb	19.4 %	0.200 ppb	319.513 %
65Cu (KED AGD)	0.063 ppb	69.1 %	0.200 ppb	68.525 %
66Zn (KED AGD)	-1.783 ppb	6.7 %	0.200 ppb	991.356 %
74Ge (KED AGD)	101.431 %	3.1 %		0.000 %
75As (KED AGD)	0.149 ppb	39.1 %	0.200 ppb	25.714 %
78Se (KED AGD)	0.059 ppb	169.7 %	0.200 ppb	70.341 %
88Sr (KED AGD)	0.192 ppb	3.5 %	0.200 ppb	3.755 %
95Mo (KED AGD)	0.226 ppb	6.3 %	0.200 ppb	12.759 %
103Rh (KED AGD)	102.571 %	1.2 %		0.000 %
107Ag (KED AGD)	0.195 ppb	2.9 %	0.200 ppb	2.461 %
111Cd (KED AGD)	0.175 ppb	15.4 %	0.200 ppb	12.639 %
115In (KED AGD)	102.604 %	3.2 %		0.000 %
121Sb (KED AGD)	0.222 ppb	13.4 %	0.200 ppb	10.942 %
137Ba (KED AGD)	0.134 ppb	68.0 %	0.200 ppb	32.936 %
159Tb (KED AGD)	101.666 %	1.7 %		0.000 %
175Lu (KED AGD)	101.881 %	1.7 %		0.000 %
205Tl (KED AGD)	0.184 ppb	12.6 %	0.200 ppb	7.963 %
208Pb (KED AGD)	0.197 ppb	5.9 %	0.200 ppb	1.541 %
209Bi (KED AGD)	102.404 %	0.7 %		0.000 %

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 10:43:01 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	101.192 %	0.4 %		0.000 %
6Li (KED AGD)	106.180 %	5.2 %		0.000 %
9Be (STD AGD)	1.030 ppb	3.1 %	1.000 ppb	3.022 %
23Na (KED AGD)	83.858 ppb	4.1 %	100.000 ppb	16.142 %
24Mg (KED AGD)	95.919 ppb	10.3 %	100.000 ppb	4.081 %
27Al (KED AGD)	-0.013 ppb	4,332.2 %	1.000 ppb	101.305 %
39K (KED AGD)	94.278 ppb	17.3 %	100.000 ppb	5.722 %
44Ca (KED AGD)	71.627 ppb	11.6 %	100.000 ppb	28.373 %
45Sc (STD AGD)	104.661 %	0.6 %		0.000 %
45Sc (KED AGD)	100.534 %	5.3 %		0.000 %
51V (KED AGD)	0.982 ppb	19.7 %	1.000 ppb	1.845 %
52Cr (KED AGD)	1.003 ppb	5.7 %	1.000 ppb	0.307 %
55Mn (KED AGD)	0.975 ppb	15.9 %	1.000 ppb	2.484 %
57Fe (KED AGD)	109.262 ppb	5.0 %	100.000 ppb	9.262 %
59Co (KED AGD)	1.043 ppb	7.6 %	1.000 ppb	4.322 %
60Ni (KED AGD)	0.417 ppb	22.7 %	1.000 ppb	58.278 %
65Cu (KED AGD)	0.935 ppb	14.3 %	1.000 ppb	6.492 %
66Zn (KED AGD)	-0.954 ppb	7.9 %	1.000 ppb	195.385 %
74Ge (KED AGD)	103.649 %	1.1 %		0.000 %
75As (KED AGD)	1.045 ppb	9.9 %	1.000 ppb	4.524 %
78Se (KED AGD)	1.030 ppb	39.2 %	1.000 ppb	3.015 %
88Sr (KED AGD)	0.998 ppb	4.8 %	1.000 ppb	0.228 %
95Mo (KED AGD)	0.902 ppb	3.0 %	1.000 ppb	9.754 %
103Rh (KED AGD)	102.156 %	2.1 %		0.000 %
107Ag (KED AGD)	0.968 ppb	2.5 %	1.000 ppb	3.247 %
111Cd (KED AGD)	0.999 ppb	6.3 %	1.000 ppb	0.087 %
115In (KED AGD)	102.868 %	5.1 %		0.000 %
121Sb (KED AGD)	0.970 ppb	3.2 %	1.000 ppb	3.030 %
137Ba (KED AGD)	0.984 ppb	13.9 %	1.000 ppb	1.555 %
159Tb (KED AGD)	102.374 %	2.3 %		0.000 %
175Lu (KED AGD)	101.317 %	3.9 %		0.000 %
205Tl (KED AGD)	0.960 ppb	3.7 %	1.000 ppb	3.968 %
208Pb (KED AGD)	0.992 ppb	2.0 %	1.000 ppb	0.837 %
209Bi (KED AGD)	104.022 %	1.1 %		0.000 %

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 10:47:29 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	99.747 %	0.4 %		0.000 %
6Li (KED AGD)	102.434 %	13.2 %		0.000 %
9Be (STD AGD)	10.197 ppb	2.1 %	10.000 ppb	1.973 %
23Na (KED AGD)	995.260 ppb	9.7 %	1,000.000 ppb	0.474 %
24Mg (KED AGD)	1,013.057 ppb	5.8 %	1,000.000 ppb	1.306 %
27Al (KED AGD)	9.683 ppb	9.5 %	10.000 ppb	3.169 %
39K (KED AGD)	1,038.119 ppb	5.1 %	1,000.000 ppb	3.812 %
44Ca (KED AGD)	1,023.325 ppb	5.6 %	1,000.000 ppb	2.333 %
45Sc (STD AGD)	103.148 %	1.0 %		0.000 %
45Sc (KED AGD)	105.475 %	5.7 %		0.000 %
51V (KED AGD)	10.259 ppb	3.1 %	10.000 ppb	2.590 %
52Cr (KED AGD)	10.203 ppb	1.7 %	10.000 ppb	2.025 %
55Mn (KED AGD)	10.275 ppb	6.1 %	10.000 ppb	2.748 %
57Fe (KED AGD)	1,031.352 ppb	4.3 %	1,000.000 ppb	3.135 %
59Co (KED AGD)	10.447 ppb	3.1 %	10.000 ppb	4.473 %
60Ni (KED AGD)	11.858 ppb	6.8 %	10.000 ppb	18.580 %
65Cu (KED AGD)	10.108 ppb	4.7 %	10.000 ppb	1.081 %
66Zn (KED AGD)	8.121 ppb	4.6 %	10.000 ppb	18.791 %
74Ge (KED AGD)	103.403 %	4.4 %		0.000 %
75As (KED AGD)	10.308 ppb	3.6 %	10.000 ppb	3.077 %
78Se (KED AGD)	9.936 ppb	7.2 %	10.000 ppb	0.640 %
88Sr (KED AGD)	10.118 ppb	3.1 %	10.000 ppb	1.183 %
95Mo (KED AGD)	10.124 ppb	4.3 %	10.000 ppb	1.243 %
103Rh (KED AGD)	100.887 %	1.5 %		0.000 %
107Ag (KED AGD)	9.918 ppb	1.1 %	10.000 ppb	0.824 %
111Cd (KED AGD)	10.117 ppb	1.7 %	10.000 ppb	1.167 %
115In (KED AGD)	102.045 %	3.6 %		0.000 %
121Sb (KED AGD)	9.801 ppb	0.9 %	10.000 ppb	1.994 %
137Ba (KED AGD)	9.925 ppb	1.1 %	10.000 ppb	0.749 %
159Tb (KED AGD)	100.614 %	2.5 %		0.000 %
175Lu (KED AGD)	101.800 %	4.0 %		0.000 %
205Tl (KED AGD)	9.802 ppb	0.7 %	10.000 ppb	1.976 %
208Pb (KED AGD)	10.069 ppb	1.8 %	10.000 ppb	0.693 %
209Bi (KED AGD)	104.421 %	2.1 %		0.000 %

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 10:51:57 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	96.620 %	1.0 %		0.000 %
6Li (KED AGD)	102.247 %	7.7 %		0.000 %
9Be (STD AGD)	60.159 ppb	0.4 %	60.000 ppb	0.265 %
23Na (KED AGD)	5,923.597 ppb	3.8 %	6,000.000 ppb	1.273 %
24Mg (KED AGD)	5,999.601 ppb	3.7 %	6,000.000 ppb	0.007 %
27Al (KED AGD)	59.658 ppb	2.9 %	60.000 ppb	0.570 %
39K (KED AGD)	6,185.787 ppb	1.8 %	6,000.000 ppb	3.096 %
44Ca (KED AGD)	6,308.145 ppb	2.3 %	6,000.000 ppb	5.136 %
45Sc (STD AGD)	103.458 %	0.6 %		0.000 %
45Sc (KED AGD)	101.513 %	3.6 %		0.000 %
51V (KED AGD)	62.736 ppb	3.8 %	60.000 ppb	4.561 %
52Cr (KED AGD)	63.050 ppb	3.9 %	60.000 ppb	5.083 %
55Mn (KED AGD)	62.904 ppb	1.4 %	60.000 ppb	4.839 %
57Fe (KED AGD)	6,204.384 ppb	1.8 %	6,000.000 ppb	3.406 %
59Co (KED AGD)	61.840 ppb	2.6 %	60.000 ppb	3.067 %
60Ni (KED AGD)	62.288 ppb	0.9 %	60.000 ppb	3.814 %
65Cu (KED AGD)	60.541 ppb	4.6 %	60.000 ppb	0.902 %
66Zn (KED AGD)	59.248 ppb	3.3 %	60.000 ppb	1.253 %
74Ge (KED AGD)	102.852 %	4.3 %		0.000 %
75As (KED AGD)	59.112 ppb	4.5 %	60.000 ppb	1.481 %
78Se (KED AGD)	61.271 ppb	4.6 %	60.000 ppb	2.118 %
88Sr (KED AGD)	58.702 ppb	3.0 %	60.000 ppb	2.164 %
95Mo (KED AGD)	60.507 ppb	2.4 %	60.000 ppb	0.846 %
103Rh (KED AGD)	100.131 %	0.2 %		0.000 %
107Ag (KED AGD)	59.885 ppb	1.7 %	60.000 ppb	0.192 %
111Cd (KED AGD)	59.386 ppb	1.8 %	60.000 ppb	1.023 %
115In (KED AGD)	98.199 %	0.9 %		0.000 %
121Sb (KED AGD)	59.938 ppb	1.8 %	60.000 ppb	0.103 %
137Ba (KED AGD)	59.258 ppb	1.4 %	60.000 ppb	1.237 %
159Tb (KED AGD)	100.981 %	1.5 %		0.000 %
175Lu (KED AGD)	99.520 %	1.1 %		0.000 %
205Tl (KED AGD)	59.355 ppb	2.5 %	60.000 ppb	1.074 %
208Pb (KED AGD)	59.970 ppb	3.2 %	60.000 ppb	0.049 %
209Bi (KED AGD)	104.707 %	0.6 %		0.000 %

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 8/27/2024 10:56:26 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration	Standard Relative Difference
6Li (STD AGD)	94.753 %	0.6 %		0.000 %
6Li (KED AGD)	93.820 %	6.7 %		0.000 %
9Be (STD AGD)	119.904 ppb	1.3 %	120.000 ppb	0.080 %
23Na (KED AGD)	12,038.749 ppb	6.1 %	12,000.000 ppb	0.323 %
24Mg (KED AGD)	11,999.150 ppb	6.1 %	12,000.000 ppb	0.007 %
27Al (KED AGD)	120.207 ppb	7.3 %	120.000 ppb	0.173 %
39K (KED AGD)	11,904.014 ppb	7.2 %	12,000.000 ppb	0.800 %
44Ca (KED AGD)	11,844.255 ppb	6.1 %	12,000.000 ppb	1.298 %
45Sc (STD AGD)	102.084 %	0.9 %		0.000 %
45Sc (KED AGD)	106.854 %	5.9 %		0.000 %
51V (KED AGD)	118.610 ppb	3.7 %	120.000 ppb	1.158 %
52Cr (KED AGD)	118.458 ppb	4.0 %	120.000 ppb	1.285 %
55Mn (KED AGD)	118.526 ppb	2.5 %	120.000 ppb	1.228 %
57Fe (KED AGD)	11,895.118 ppb	3.7 %	12,000.000 ppb	0.874 %
59Co (KED AGD)	119.042 ppb	2.3 %	120.000 ppb	0.798 %
60Ni (KED AGD)	118.707 ppb	3.3 %	120.000 ppb	1.078 %
65Cu (KED AGD)	119.721 ppb	1.1 %	120.000 ppb	0.232 %
66Zn (KED AGD)	120.552 ppb	1.5 %	120.000 ppb	0.460 %
74Ge (KED AGD)	97.779 %	2.6 %		0.000 %
75As (KED AGD)	120.418 ppb	2.7 %	120.000 ppb	0.349 %
78Se (KED AGD)	119.370 ppb	0.9 %	120.000 ppb	0.525 %
88Sr (KED AGD)	120.639 ppb	3.0 %	120.000 ppb	0.533 %
95Mo (KED AGD)	119.737 ppb	2.3 %	120.000 ppb	0.219 %
103Rh (KED AGD)	97.897 %	1.6 %		0.000 %
107Ag (KED AGD)	120.065 ppb	2.3 %	120.000 ppb	0.054 %
111Cd (KED AGD)	120.297 ppb	2.4 %	120.000 ppb	0.248 %
115In (KED AGD)	96.418 %	1.7 %		0.000 %
121Sb (KED AGD)	120.048 ppb	1.8 %	120.000 ppb	0.040 %
137Ba (KED AGD)	120.377 ppb	1.2 %	120.000 ppb	0.315 %
159Tb (KED AGD)	100.217 %	1.4 %		0.000 %
175Lu (KED AGD)	100.494 %	0.6 %		0.000 %
205Tl (KED AGD)	120.339 ppb	2.7 %	120.000 ppb	0.283 %
208Pb (KED AGD)	120.009 ppb	2.1 %	120.000 ppb	0.008 %
209Bi (KED AGD)	102.620 %	0.9 %		0.000 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	1	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	8/27/2024 10:25:10 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.348 %	98.502 %	0.027 ppb	-2.165 ppb	-2.802 ppb	-0.168 ppb	-13.578 ppb	-19.172 ppb	101.276 %
Concentration per Run 1	99.088 %	96.629 %	0.017 ppb	-4.383 ppb	-1.110 ppb	-0.477 ppb	-11.784 ppb	-20.120 ppb	101.579 %
Concentration per Run 2	99.635 %	101.124 %	0.031 ppb	-0.881 ppb	-4.214 ppb	0.382 ppb	-12.941 ppb	-15.288 ppb	100.698 %
Concentration per Run 3	99.321 %	97.753 %	0.032 ppb	-1.231 ppb	-3.082 ppb	-0.408 ppb	-16.010 ppb	-22.108 ppb	101.550 %
Concentration RSD	0.3 %	2.4 %	32.3 %	89.1 %	56.1 %	285.0 %	16.1 %	18.3 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.421 %	-0.005 ppb	-0.112 ppb	0.270 ppb	5.657 ppb	0.013 ppb	0.139 ppb	0.283 ppb	0.521 ppb
Concentration per Run 1	105.474 %	-0.026 ppb	-0.085 ppb	0.251 ppb	6.591 ppb	0.020 ppb	0.217 ppb	0.306 ppb	0.393 ppb
Concentration per Run 2	96.128 %	-0.004 ppb	-0.132 ppb	0.281 ppb	6.695 ppb	0.003 ppb	0.028 ppb	0.297 ppb	0.578 ppb
Concentration per Run 3	96.662 %	0.015 ppb	-0.119 ppb	0.279 ppb	3.685 ppb	0.016 ppb	0.171 ppb	0.246 ppb	0.591 ppb
Concentration RSD	5.3 %	413.1 %	21.8 %	6.2 %	30.2 %	71.8 %	71.2 %	11.3 %	21.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.772 %	0.032 ppb	-0.040 ppb	-0.010 ppb	0.077 ppb	97.570 %	0.003 ppb	-0.001 ppb	97.925 %
Concentration per Run 1	99.042 %	-0.048 ppb	-0.115 ppb	-0.008 ppb	0.081 ppb	97.376 %	0.004 ppb	-0.001 ppb	100.140 %
Concentration per Run 2	96.925 %	0.126 ppb	-0.051 ppb	-0.011 ppb	0.058 ppb	96.926 %	0.004 ppb	-0.001 ppb	97.536 %
Concentration per Run 3	97.349 %	0.018 ppb	0.045 ppb	-0.012 ppb	0.092 ppb	98.407 %	0.000 ppb	-0.001 ppb	96.097 %
Concentration RSD	1.1 %	272.6 %	198.8 %	19.9 %	23.1 %	0.8 %	97.5 %	0.0 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.035 ppb	-0.015 ppb	98.299 %	98.858 %	0.035 ppb	0.034 ppb	114.795 %
Concentration per Run 1	0.020 ppb	0.000 ppb	99.352 %	99.023 %	0.013 ppb	0.027 ppb	117.210 %
Concentration per Run 2	0.038 ppb	-0.010 ppb	97.188 %	98.565 %	0.047 ppb	0.035 ppb	114.036 %
Concentration per Run 3	0.047 ppb	-0.035 ppb	98.357 %	98.984 %	0.045 ppb	0.038 ppb	113.139 %
Concentration RSD	39.6 %	122.6 %	1.1 %	0.3 %	54.4 %	17.2 %	1.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	2	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CAL LOT #M23-1225	Rack	0		
Analysis started at:	8/27/2024 10:29:36 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.573 %	102.622 %	0.023 ppb	-2.991 ppb	-3.249 ppb	-0.826 ppb	-19.870 ppb	-15.296 ppb	104.116 %
Concentration per Run 1	101.026 %	102.809 %	0.018 ppb	-4.215 ppb	-1.712 ppb	-0.935 ppb	-28.234 ppb	-32.454 ppb	102.931 %
Concentration per Run 2	101.306 %	105.056 %	0.028 ppb	-2.891 ppb	-5.376 ppb	-0.745 ppb	-17.741 ppb	-20.037 ppb	103.787 %
Concentration per Run 3	102.388 %	100.000 %	0.024 ppb	-1.867 ppb	-2.660 ppb	-0.798 ppb	-13.635 ppb	6.604 ppb	105.630 %
Concentration RSD	0.7 %	2.5 %	21.6 %	39.4 %	58.5 %	11.9 %	37.9 %	130.5 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.003 %	-0.013 ppb	-0.109 ppb	0.291 ppb	8.873 ppb	-0.002 ppb	0.095 ppb	0.361 ppb	0.208 ppb
Concentration per Run 1	101.469 %	-0.025 ppb	-0.102 ppb	0.263 ppb	6.879 ppb	0.002 ppb	0.026 ppb	0.331 ppb	0.347 ppb
Concentration per Run 2	104.406 %	-0.026 ppb	-0.110 ppb	0.295 ppb	11.233 ppb	-0.005 ppb	-0.040 ppb	0.369 ppb	0.012 ppb
Concentration per Run 3	100.134 %	0.012 ppb	-0.114 ppb	0.316 ppb	8.508 ppb	-0.004 ppb	0.299 ppb	0.381 ppb	0.267 ppb
Concentration RSD	2.1 %	168.0 %	5.9 %	9.2 %	24.8 %	168.6 %	188.6 %	7.3 %	84.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.197 %	-0.018 ppb	-0.073 ppb	0.001 ppb	0.041 ppb	100.034 %	0.001 ppb	-0.001 ppb	99.894 %
Concentration per Run 1	98.135 %	0.006 ppb	-0.114 ppb	0.003 ppb	-0.004 ppb	98.102 %	0.001 ppb	-0.001 ppb	97.758 %
Concentration per Run 2	106.694 %	0.001 ppb	-0.053 ppb	-0.003 ppb	0.098 ppb	101.496 %	0.004 ppb	-0.001 ppb	103.452 %
Concentration per Run 3	101.763 %	-0.062 ppb	-0.052 ppb	0.004 ppb	0.030 ppb	100.505 %	0.000 ppb	-0.001 ppb	98.471 %
Concentration RSD	4.2 %	207.7 %	48.5 %	300.9 %	124.4 %	1.7 %	142.0 %	0.0 %	3.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.016 ppb	-0.041 ppb	100.131 %	100.350 %	0.008 ppb	0.028 ppb	120.672 %
Concentration per Run 1	0.007 ppb	-0.048 ppb	97.375 %	96.901 %	-0.017 ppb	0.024 ppb	120.496 %
Concentration per Run 2	0.023 ppb	-0.038 ppb	101.627 %	102.833 %	0.024 ppb	0.031 ppb	121.829 %
Concentration per Run 3	0.017 ppb	-0.037 ppb	101.392 %	101.315 %	0.018 ppb	0.030 ppb	119.690 %
Concentration RSD	50.3 %	14.7 %	2.4 %	3.1 %	263.1 %	14.1 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	3	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Blank NTB ICPMSQ2	Rack	4		
Analysis started at:	8/27/2024 10:34:02 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.1 %	0.2 %	0.1 %	0.5 %	0.1 %	0.1 %	0.4 %	0.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.1 %	0.3 %	0.3 %	0.3 %	0.3 %	0.1 %	0.2 %	0.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.2 %	0.6 %	0.1 %	1.0 %	0.0 %	0.7 %	1.7 %	0.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.3 %	0.3 %	0.0 %	0.0 %	0.5 %	0.1 %	0.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	4	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	8/27/2024 10:38:34 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.878 %	102.996 %	0.208 ppb	8.870 ppb	17.521 ppb	-0.516 ppb	-1.687 ppb	-1.127 ppb	103.711 %
Concentration per Run 1	100.300 %	96.067 %	0.197 ppb	10.804 ppb	17.740 ppb	-0.402 ppb	2.327 ppb	6.626 ppb	102.904 %
Concentration per Run 2	101.067 %	106.742 %	0.212 ppb	4.132 ppb	19.646 ppb	-0.539 ppb	-6.444 ppb	-2.556 ppb	103.439 %
Concentration per Run 3	101.267 %	106.180 %	0.215 ppb	11.673 ppb	15.177 ppb	-0.607 ppb	-0.944 ppb	-7.451 ppb	104.789 %
Concentration RSD	0.5 %	5.8 %	4.9 %	46.5 %	12.8 %	20.2 %	262.7 %	634.3 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.534 %	0.186 ppb	0.137 ppb	0.015 ppb	20.227 ppb	0.221 ppb	-0.439 ppb	0.063 ppb	-1.783 ppb
Concentration per Run 1	97.463 %	0.281 ppb	0.094 ppb	-0.007 ppb	19.332 ppb	0.261 ppb	-0.494 ppb	0.033 ppb	-1.895 ppb
Concentration per Run 2	104.540 %	0.136 ppb	0.142 ppb	0.012 ppb	19.459 ppb	0.219 ppb	-0.341 ppb	0.043 ppb	-1.658 ppb
Concentration per Run 3	99.599 %	0.141 ppb	0.175 ppb	0.041 ppb	21.889 ppb	0.182 ppb	-0.481 ppb	0.113 ppb	-1.795 ppb
Concentration RSD	3.6 %	44.1 %	29.7 %	161.1 %	7.1 %	17.8 %	19.4 %	69.1 %	6.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.431 %	0.149 ppb	0.059 ppb	0.192 ppb	0.226 ppb	102.571 %	0.195 ppb	0.175 ppb	102.604 %
Concentration per Run 1	99.390 %	0.139 ppb	-0.054 ppb	0.190 ppb	0.241 ppb	101.144 %	0.189 ppb	0.193 ppb	98.934 %
Concentration per Run 2	99.889 %	0.096 ppb	0.095 ppb	0.200 ppb	0.214 ppb	103.208 %	0.200 ppb	0.144 ppb	103.511 %
Concentration per Run 3	105.015 %	0.211 ppb	0.137 ppb	0.187 ppb	0.221 ppb	103.362 %	0.196 ppb	0.187 ppb	105.366 %
Concentration RSD	3.1 %	39.1 %	169.7 %	3.5 %	6.3 %	1.2 %	2.9 %	15.4 %	3.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.222 ppb	0.134 ppb	101.666 %	101.881 %	0.184 ppb	0.197 ppb	102.404 %
Concentration per Run 1	0.192 ppb	0.063 ppb	99.730 %	99.893 %	0.157 ppb	0.190 ppb	101.704 %
Concentration per Run 2	0.221 ppb	0.237 ppb	102.252 %	102.593 %	0.198 ppb	0.210 ppb	102.479 %
Concentration per Run 3	0.252 ppb	0.103 ppb	103.017 %	103.158 %	0.197 ppb	0.191 ppb	103.030 %
Concentration RSD	13.4 %	68.0 %	1.7 %	1.7 %	12.6 %	5.9 %	0.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	5	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	8/27/2024 10:43:01 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.192 %	106.180 %	1.030 ppb	83.858 ppb	95.919 ppb	-0.013 ppb	94.278 ppb	71.627 ppb	104.661 %
Concentration per Run 1	101.618 %	101.685 %	1.067 ppb	82.596 ppb	99.464 ppb	0.594 ppb	80.890 ppb	68.722 ppb	105.133 %
Concentration per Run 2	101.153 %	112.360 %	1.011 ppb	81.194 ppb	84.789 ppb	-0.525 ppb	89.507 ppb	81.035 ppb	104.905 %
Concentration per Run 3	100.806 %	104.494 %	1.013 ppb	87.783 ppb	103.503 ppb	-0.108 ppb	112.436 ppb	65.124 ppb	103.946 %
Concentration RSD	0.4 %	5.2 %	3.1 %	4.1 %	10.3 %	4,332.2 %	17.3 %	11.6 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.534 %	0.982 ppb	1.003 ppb	0.975 ppb	109.262 ppb	1.043 ppb	0.417 ppb	0.935 ppb	-0.954 ppb
Concentration per Run 1	97.062 %	0.905 ppb	1.028 ppb	0.853 ppb	114.942 ppb	0.953 ppb	0.359 ppb	0.864 ppb	-0.997 ppb
Concentration per Run 2	97.864 %	0.838 ppb	0.938 ppb	0.922 ppb	108.794 ppb	1.077 ppb	0.366 ppb	1.089 ppb	-0.997 ppb
Concentration per Run 3	106.676 %	1.201 ppb	1.044 ppb	1.150 ppb	104.050 ppb	1.099 ppb	0.527 ppb	0.852 ppb	-0.867 ppb
Concentration RSD	5.3 %	19.7 %	5.7 %	15.9 %	5.0 %	7.6 %	22.7 %	14.3 %	7.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.649 %	1.045 ppb	1.030 ppb	0.998 ppb	0.902 ppb	102.156 %	0.968 ppb	0.999 ppb	102.868 %
Concentration per Run 1	102.414 %	0.959 ppb	0.941 ppb	0.990 ppb	0.900 ppb	101.233 %	0.967 ppb	0.944 ppb	100.423 %
Concentration per Run 2	104.531 %	1.016 ppb	0.678 ppb	0.954 ppb	0.876 ppb	100.621 %	0.992 ppb	0.985 ppb	99.299 %
Concentration per Run 3	104.001 %	1.160 ppb	1.471 ppb	1.049 ppb	0.931 ppb	104.615 %	0.944 ppb	1.068 ppb	108.883 %
Concentration RSD	1.1 %	9.9 %	39.2 %	4.8 %	3.0 %	2.1 %	2.5 %	6.3 %	5.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.970 ppb	0.984 ppb	102.374 %	101.317 %	0.960 ppb	0.992 ppb	104.022 %
Concentration per Run 1	0.940 ppb	1.061 ppb	101.512 %	98.612 %	0.919 ppb	0.970 ppb	102.726 %
Concentration per Run 2	0.966 ppb	0.826 ppb	100.614 %	99.505 %	0.977 ppb	0.994 ppb	104.377 %
Concentration per Run 3	1.003 ppb	1.066 ppb	104.997 %	105.833 %	0.984 ppb	1.010 ppb	104.964 %
Concentration RSD	3.2 %	13.9 %	2.3 %	3.9 %	3.7 %	2.0 %	1.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	6	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	8/27/2024 10:47:29 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.747 %	102.434 %	10.197 ppb	995.260 ppb	1,013.057 ppb	9.683 ppb	1,038.119 ppb	1,023.325 ppb	103.148 %
Concentration per Run 1	99.362 %	114.045 %	10.002 ppb	890.642 ppb	951.549 ppb	8.764 ppb	982.666 ppb	958.793 ppb	102.007 %
Concentration per Run 2	99.776 %	87.640 %	10.166 ppb	1,080.778 ppb	1,068.059 ppb	9.673 ppb	1,042.562 ppb	1,067.260 ppb	104.160 %
Concentration per Run 3	100.101 %	105.618 %	10.423 ppb	1,014.361 ppb	1,019.562 ppb	10.613 ppb	1,089.129 ppb	1,043.922 ppb	103.279 %
Concentration RSD	0.4 %	13.2 %	2.1 %	9.7 %	5.8 %	9.5 %	5.1 %	5.6 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.475 %	10.259 ppb	10.203 ppb	10.275 ppb	1,031.352 ppb	10.447 ppb	11.858 ppb	10.108 ppb	8.121 ppb
Concentration per Run 1	104.139 %	10.005 ppb	10.108 ppb	10.908 ppb	1,049.040 ppb	10.366 ppb	11.184 ppb	9.925 ppb	7.837 ppb
Concentration per Run 2	100.267 %	10.615 ppb	10.404 ppb	10.271 ppb	1,064.504 ppb	10.800 ppb	12.755 ppb	10.653 ppb	8.544 ppb
Concentration per Run 3	112.018 %	10.157 ppb	10.096 ppb	9.645 ppb	980.511 ppb	10.177 ppb	11.635 ppb	9.746 ppb	7.982 ppb
Concentration RSD	5.7 %	3.1 %	1.7 %	6.1 %	4.3 %	3.1 %	6.8 %	4.7 %	4.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.403 %	10.308 ppb	9.936 ppb	10.118 ppb	10.124 ppb	100.887 %	9.918 ppb	10.117 ppb	102.045 %
Concentration per Run 1	101.340 %	9.892 ppb	10.759 ppb	9.800 ppb	9.703 ppb	101.284 %	9.891 ppb	9.983 ppb	99.810 %
Concentration per Run 2	100.240 %	10.450 ppb	9.452 ppb	10.120 ppb	10.105 ppb	99.201 %	10.042 ppb	10.304 ppb	100.073 %
Concentration per Run 3	108.629 %	10.582 ppb	9.597 ppb	10.435 ppb	10.565 ppb	102.176 %	9.820 ppb	10.062 ppb	106.251 %
Concentration RSD	4.4 %	3.6 %	7.2 %	3.1 %	4.3 %	1.5 %	1.1 %	1.7 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.801 ppb	9.925 ppb	100.614 %	101.800 %	9.802 ppb	10.069 ppb	104.421 %
Concentration per Run 1	9.897 ppb	9.958 ppb	98.045 %	99.105 %	9.786 ppb	9.884 ppb	103.231 %
Concentration per Run 2	9.771 ppb	9.799 ppb	100.707 %	99.789 %	9.876 ppb	10.245 ppb	103.059 %
Concentration per Run 3	9.734 ppb	10.018 ppb	103.091 %	106.507 %	9.745 ppb	10.079 ppb	106.972 %
Concentration RSD	0.9 %	1.1 %	2.5 %	4.0 %	0.7 %	1.8 %	2.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	7	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	8/27/2024 10:51:57 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.620 %	102.247 %	60.159 ppb	5,923.597 ppb	5,999.601 ppb	59.658 ppb	6,185.787 ppb	6,308.145 ppb	103.458 %
Concentration per Run 1	96.257 %	110.112 %	60.089 ppb	5,668.485 ppb	5,785.267 ppb	58.995 ppb	6,292.302 ppb	6,421.216 ppb	103.058 %
Concentration per Run 2	95.897 %	94.382 %	60.439 ppb	6,102.725 ppb	6,223.914 ppb	61.610 ppb	6,069.233 ppb	6,147.017 ppb	103.152 %
Concentration per Run 3	97.706 %	102.247 %	59.950 ppb	5,999.582 ppb	5,989.621 ppb	58.368 ppb	6,195.826 ppb	6,356.202 ppb	104.164 %
Concentration RSD	1.0 %	7.7 %	0.4 %	3.8 %	3.7 %	2.9 %	1.8 %	2.3 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.513 %	62.736 ppb	63.050 ppb	62.904 ppb	6,204.384 ppb	61.840 ppb	62.288 ppb	60.541 ppb	59.248 ppb
Concentration per Run 1	97.329 %	61.767 ppb	64.473 ppb	62.491 ppb	6,202.498 ppb	62.592 ppb	62.574 ppb	60.178 ppb	58.443 ppb
Concentration per Run 2	103.605 %	60.971 ppb	60.225 ppb	62.301 ppb	6,095.800 ppb	60.024 ppb	61.655 ppb	57.969 ppb	57.827 ppb
Concentration per Run 3	103.605 %	65.471 ppb	64.452 ppb	63.919 ppb	6,314.854 ppb	62.904 ppb	62.636 ppb	63.476 ppb	61.475 ppb
Concentration RSD	3.6 %	3.8 %	3.9 %	1.4 %	1.8 %	2.6 %	0.9 %	4.6 %	3.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.852 %	59.112 ppb	61.271 ppb	58.702 ppb	60.507 ppb	100.131 %	59.885 ppb	59.386 ppb	98.199 %
Concentration per Run 1	104.754 %	57.607 ppb	59.469 ppb	57.400 ppb	59.332 ppb	99.954 %	58.923 ppb	58.200 ppb	98.821 %
Concentration per Run 2	105.975 %	57.559 ppb	59.832 ppb	57.988 ppb	60.074 ppb	100.041 %	59.763 ppb	59.813 ppb	97.224 %
Concentration per Run 3	97.828 %	62.169 ppb	64.511 ppb	60.716 ppb	62.117 ppb	100.398 %	60.969 ppb	60.145 ppb	98.552 %
Concentration RSD	4.3 %	4.5 %	4.6 %	3.0 %	2.4 %	0.2 %	1.7 %	1.8 %	0.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.938 ppb	59.258 ppb	100.981 %	99.520 %	59.355 ppb	59.970 ppb	104.707 %
Concentration per Run 1	58.688 ppb	58.276 ppb	99.753 %	98.984 %	57.865 ppb	57.793 ppb	105.275 %
Concentration per Run 2	60.504 ppb	59.710 ppb	100.512 %	98.848 %	59.419 ppb	61.170 ppb	104.852 %
Concentration per Run 3	60.623 ppb	59.788 ppb	102.678 %	100.727 %	60.783 ppb	60.949 ppb	103.994 %
Concentration RSD	1.8 %	1.4 %	1.5 %	1.1 %	2.5 %	3.2 %	0.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	8	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	8/27/2024 10:56:26 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.753 %	93.820 %	119.904 ppb	12,038.749 ppb	11,999.150 ppb	120.207 ppb	11,904.014 ppb	11,844.255 ppb	102.084 %
Concentration per Run 1	94.242 %	89.888 %	120.930 ppb	12,362.328 ppb	12,335.189 ppb	125.152 ppb	12,458.843 ppb	12,467.373 ppb	101.062 %
Concentration per Run 2	95.362 %	101.124 %	118.171 ppb	11,196.291 ppb	11,156.257 ppb	110.142 ppb	10,910.982 ppb	11,060.143 ppb	102.725 %
Concentration per Run 3	94.656 %	90.449 %	120.611 ppb	12,557.629 ppb	12,506.003 ppb	125.326 ppb	12,342.216 ppb	12,005.250 ppb	102.464 %
Concentration RSD	0.6 %	6.7 %	1.3 %	6.1 %	6.1 %	7.3 %	7.2 %	6.1 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.854 %	118.610 ppb	118.458 ppb	118.526 ppb	11,895.118 ppb	119.042 ppb	118.707 ppb	119.721 ppb	120.552 ppb
Concentration per Run 1	102.136 %	119.403 ppb	119.886 ppb	119.974 ppb	12,070.559 ppb	120.509 ppb	117.026 ppb	119.097 ppb	119.174 ppb
Concentration per Run 2	114.020 %	113.878 ppb	113.161 ppb	115.176 ppb	11,396.841 ppb	115.925 ppb	115.851 ppb	118.814 ppb	119.817 ppb
Concentration per Run 3	104.406 %	122.550 ppb	122.328 ppb	120.427 ppb	12,217.953 ppb	120.693 ppb	123.243 ppb	121.252 ppb	122.665 ppb
Concentration RSD	5.9 %	3.7 %	4.0 %	2.5 %	3.7 %	2.3 %	3.3 %	1.1 %	1.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.779 %	120.418 ppb	119.370 ppb	120.639 ppb	119.737 ppb	97.897 %	120.065 ppb	120.297 ppb	96.418 %
Concentration per Run 1	100.651 %	116.698 ppb	118.411 ppb	116.736 ppb	116.625 ppb	99.644 %	116.883 ppb	117.127 ppb	98.185 %
Concentration per Run 2	96.069 %	122.475 ppb	119.088 ppb	121.289 ppb	120.860 ppb	97.368 %	121.731 ppb	122.869 ppb	95.028 %
Concentration per Run 3	96.617 %	122.081 ppb	120.610 ppb	123.894 ppb	121.725 ppb	96.678 %	121.581 ppb	120.895 ppb	96.043 %
Concentration RSD	2.6 %	2.7 %	0.9 %	3.0 %	2.3 %	1.6 %	2.3 %	2.4 %	1.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.048 ppb	120.377 ppb	100.217 %	100.494 %	120.339 ppb	120.009 ppb	102.620 %
Concentration per Run 1	117.585 ppb	118.844 ppb	98.907 %	100.333 %	116.571 ppb	117.157 ppb	103.218 %
Concentration per Run 2	120.917 ppb	120.712 ppb	100.123 %	99.992 %	122.693 ppb	121.385 ppb	101.595 %
Concentration per Run 3	121.642 ppb	121.577 ppb	101.622 %	101.156 %	121.753 ppb	121.485 ppb	103.046 %
Concentration RSD	1.8 %	1.2 %	1.4 %	0.6 %	2.7 %	2.1 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	9	User name	ALPHALAB\a2-icpmsq2	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	8/27/2024 11:00:55 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.441 %	95.318 %	0.015 ppb	-12.261 ppb	-4.396 ppb	-0.649 ppb	-27.096 ppb	-5.239 ppb	99.509 %
Concentration per Run 1	95.458 %	85.393 %	0.016 ppb	-8.649 ppb	-5.738 ppb	-0.699 ppb	-25.380 ppb	46.967 ppb	99.298 %
Concentration per Run 2	96.230 %	97.753 %	0.011 ppb	-13.457 ppb	-4.747 ppb	-0.552 ppb	-29.445 ppb	-119.819 ppb	100.149 %
Concentration per Run 3	97.635 %	102.809 %	0.017 ppb	-14.677 ppb	-2.702 ppb	-0.694 ppb	-26.464 ppb	57.135 ppb	99.078 %
Concentration RSD	1.1 %	9.4 %	23.1 %	26.0 %	35.2 %	12.8 %	7.8 %	1,896.5 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.332 %	0.001 ppb	-0.090 ppb	0.120 ppb	18.021 ppb	0.005 ppb	-0.545 ppb	-0.011 ppb	-0.204 ppb
Concentration per Run 1	99.065 %	0.013 ppb	-0.101 ppb	0.126 ppb	17.615 ppb	-0.004 ppb	-0.478 ppb	0.102 ppb	-0.182 ppb
Concentration per Run 2	99.866 %	0.014 ppb	-0.062 ppb	0.078 ppb	22.508 ppb	0.016 ppb	-0.686 ppb	-0.072 ppb	0.071 ppb
Concentration per Run 3	99.065 %	-0.024 ppb	-0.107 ppb	0.158 ppb	13.941 ppb	0.002 ppb	-0.472 ppb	-0.062 ppb	-0.500 ppb
Concentration RSD	0.5 %	3,222.4 %	27.4 %	33.4 %	23.8 %	224.9 %	22.4 %	930.3 %	140.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.604 %	0.029 ppb	0.281 ppb	196.002 ppb	0.515 ppb	98.925 %	0.004 ppb	0.007 ppb	98.097 %
Concentration per Run 1	103.172 %	0.027 ppb	0.415 ppb	189.159 ppb	0.412 ppb	101.173 %	0.001 ppb	0.007 ppb	100.209 %
Concentration per Run 2	93.659 %	-0.029 ppb	0.120 ppb	200.315 ppb	0.500 ppb	100.054 %	0.010 ppb	0.007 ppb	100.305 %
Concentration per Run 3	98.981 %	0.089 ppb	0.310 ppb	198.534 ppb	0.632 ppb	95.548 %	0.001 ppb	0.007 ppb	93.777 %
Concentration RSD	4.8 %	204.8 %	53.2 %	3.1 %	21.5 %	3.0 %	123.7 %	4.3 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.052 ppb	0.076 ppb	99.888 %	98.442 %	0.353 ppb	0.177 ppb	104.970 %
Concentration per Run 1	0.044 ppb	0.097 ppb	101.267 %	99.083 %	0.257 ppb	0.183 ppb	106.969 %
Concentration per Run 2	0.042 ppb	0.023 ppb	101.867 %	101.052 %	0.438 ppb	0.177 ppb	106.296 %
Concentration per Run 3	0.069 ppb	0.109 ppb	96.530 %	95.192 %	0.365 ppb	0.172 ppb	101.645 %
Concentration RSD	29.1 %	60.5 %	2.9 %	3.0 %	25.9 %	3.2 %	2.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	10	User name	ALPHALAB\a2-icpmsq2	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	8/27/2024 11:05:27 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.149 %	96.816 %	51.408 ppb	5,242.900 ppb	5,350.151 ppb	54.410 ppb	5,425.016 ppb	5,416.421 ppb	100.131 %
Concentration per Run 1	95.067 %	99.438 %	51.385 ppb	5,093.905 ppb	5,302.071 ppb	53.232 ppb	5,519.277 ppb	5,583.728 ppb	98.313 %
Concentration per Run 2	95.423 %	91.011 %	51.453 ppb	5,485.607 ppb	5,480.262 ppb	56.956 ppb	5,468.348 ppb	5,497.470 ppb	101.825 %
Concentration per Run 3	94.956 %	100.000 %	51.387 ppb	5,149.188 ppb	5,268.119 ppb	53.040 ppb	5,287.423 ppb	5,168.064 ppb	100.256 %
Recovery Percentage 1			102.817 %	104.858 %	107.003 %	108.819 %	108.500 %	108.328 %	
Concentration RSD	0.3 %	5.2 %	0.1 %	4.0 %	2.1 %	4.1 %	2.2 %	4.0 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.003 %	52.267 ppb	52.844 ppb	51.994 ppb	5,206.803 ppb	50.768 ppb	52.332 ppb	51.303 ppb	50.714 ppb
Concentration per Run 1	103.071 %	52.174 ppb	51.580 ppb	49.843 ppb	5,053.606 ppb	49.136 ppb	50.432 ppb	49.317 ppb	48.010 ppb
Concentration per Run 2	102.003 %	52.741 ppb	53.982 ppb	52.835 ppb	5,349.285 ppb	51.979 ppb	52.598 ppb	52.682 ppb	51.289 ppb
Concentration per Run 3	100.934 %	51.887 ppb	52.970 ppb	53.305 ppb	5,217.518 ppb	51.188 ppb	53.968 ppb	51.909 ppb	52.843 ppb
Recovery Percentage 1		104.535 %	105.688 %	103.988 %	104.136 %	101.535 %	104.665 %	102.605 %	101.428 %
Concentration RSD	1.0 %	0.8 %	2.3 %	3.6 %	2.8 %	2.9 %	3.4 %	3.4 %	4.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.419 %	50.597 ppb	51.121 ppb	49.714 ppb	51.018 ppb	100.215 %	48.242 ppb	50.819 ppb	99.455 %
Concentration per Run 1	110.465 %	48.279 ppb	48.865 ppb	48.982 ppb	49.684 ppb	101.085 %	47.452 ppb	49.907 ppb	101.841 %
Concentration per Run 2	102.122 %	51.136 ppb	50.024 ppb	50.301 ppb	52.620 ppb	98.949 %	48.461 ppb	51.394 ppb	98.016 %
Concentration per Run 3	97.672 %	52.376 ppb	54.473 ppb	49.858 ppb	50.750 ppb	100.611 %	48.812 ppb	51.157 ppb	98.507 %
Recovery Percentage 1		101.194 %	102.241 %	99.428 %	102.036 %		96.483 %	101.638 %	
Concentration RSD	6.3 %	4.2 %	5.8 %	1.4 %	2.9 %	1.1 %	1.5 %	1.6 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.451 ppb	51.277 ppb	101.522 %	101.906 %	49.983 ppb	50.430 ppb	106.468 %
Concentration per Run 1	49.661 ppb	50.460 ppb	102.533 %	102.662 %	47.859 ppb	48.654 ppb	107.561 %
Concentration per Run 2	51.386 ppb	51.323 ppb	101.106 %	100.636 %	50.055 ppb	50.724 ppb	107.270 %
Concentration per Run 3	50.305 ppb	52.047 ppb	100.928 %	102.419 %	52.036 ppb	51.912 ppb	104.573 %
Recovery Percentage 1	100.901 %	102.553 %			99.966 %	100.860 %	
Concentration RSD	1.7 %	1.5 %	0.9 %	1.1 %	4.2 %	3.3 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	11	User name	ALPHALAB\a2-icpmsq2	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	8/27/2024 11:09:57 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.833 %	96.816 %	0.012 ppb	-13.881 ppb	-5.654 ppb	-1.558 ppb	-21.609 ppb	-31.136 ppb	98.436 %
Concentration per Run 1	94.150 %	97.191 %	0.009 ppb	-15.839 ppb	-6.360 ppb	-1.481 ppb	-13.236 ppb	-32.350 ppb	98.957 %
Concentration per Run 2	94.469 %	91.573 %	0.010 ppb	-9.990 ppb	-6.892 ppb	-1.485 ppb	-27.686 ppb	-35.513 ppb	97.685 %
Concentration per Run 3	95.881 %	101.685 %	0.018 ppb	-15.816 ppb	-3.711 ppb	-1.709 ppb	-23.906 ppb	-25.546 ppb	98.665 %
Recovery Percentage 1			2.466 %	-13.881 %	-8.078 %	-15.584 %	-21.609 %	-31.136 %	
Concentration RSD	1.0 %	5.2 %	37.1 %	24.3 %	30.1 %	8.4 %	34.7 %	16.4 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.581 %	-0.008 ppb	-0.082 ppb	-0.140 ppb	0.682 ppb	-0.006 ppb	-0.605 ppb	-0.185 ppb	-2.144 ppb
Concentration per Run 1	102.003 %	0.011 ppb	-0.078 ppb	-0.122 ppb	-0.669 ppb	-0.011 ppb	-0.714 ppb	-0.174 ppb	-2.126 ppb
Concentration per Run 2	108.012 %	-0.010 ppb	-0.081 ppb	-0.124 ppb	0.270 ppb	-0.005 ppb	-0.583 ppb	-0.161 ppb	-2.103 ppb
Concentration per Run 3	97.730 %	-0.024 ppb	-0.087 ppb	-0.175 ppb	2.445 ppb	-0.004 ppb	-0.517 ppb	-0.219 ppb	-2.202 ppb
Recovery Percentage 1		-0.154 %	-8.222 %	-14.049 %	1.364 %	-1.292 %	-30.229 %	-18.459 %	-42.877 %
Concentration RSD	5.0 %	225.3 %	5.7 %	21.5 %	234.2 %	55.7 %	16.6 %	16.6 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.080 %	-0.060 ppb	0.036 ppb	-0.020 ppb	0.274 ppb	101.222 %	0.001 ppb	0.005 ppb	101.782 %
Concentration per Run 1	104.894 %	-0.075 ppb	0.212 ppb	-0.018 ppb	0.144 ppb	101.552 %	0.002 ppb	0.007 ppb	99.890 %
Concentration per Run 2	106.420 %	-0.038 ppb	-0.126 ppb	-0.023 ppb	0.328 ppb	101.186 %	0.001 ppb	0.003 ppb	105.645 %
Concentration per Run 3	97.925 %	-0.068 ppb	0.022 ppb	-0.020 ppb	0.349 ppb	100.928 %	0.000 ppb	0.007 ppb	99.812 %
Recovery Percentage 1		-12.010 %	0.721 %	-0.200 %	13.684 %		0.232 %	2.622 %	
Concentration RSD	4.4 %	33.0 %	470.9 %	12.3 %	41.1 %	0.3 %	153.0 %	45.0 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.059 ppb	-0.070 ppb	100.755 %	100.866 %	0.227 ppb	-0.007 ppb	106.465 %
Concentration per Run 1	0.036 ppb	-0.086 ppb	98.742 %	98.925 %	0.162 ppb	-0.006 ppb	106.690 %
Concentration per Run 2	0.060 ppb	-0.051 ppb	102.929 %	103.591 %	0.282 ppb	-0.006 ppb	107.427 %
Concentration per Run 3	0.081 ppb	-0.074 ppb	100.593 %	100.081 %	0.238 ppb	-0.008 ppb	105.277 %
Recovery Percentage 1	1.472 %	-14.083 %			22.746 %	-0.675 %	
Concentration RSD	37.5 %	25.1 %	2.1 %	2.4 %	26.7 %	15.8 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	12	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	8/27/2024 11:15:08 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.629 %	95.318 %	0.039 ppb	208,524.562 ppb	99,503.416 ppb	101,986.232 ppb	100,677.536 ppb	308,366.455 ppb	84.337 %
Concentration per Run 1	77.269 %	91.011 %	0.033 ppb	211,260.786 ppb	103,214.841 ppb	107,409.203 ppb	104,387.468 ppb	320,646.130 ppb	83.013 %
Concentration per Run 2	77.729 %	85.955 %	0.043 ppb	205,240.135 ppb	102,048.981 ppb	103,363.060 ppb	98,603.223 ppb	298,984.458 ppb	85.541 %
Concentration per Run 3	77.887 %	108.989 %	0.040 ppb	209,072.764 ppb	93,246.426 ppb	95,186.435 ppb	99,041.917 ppb	305,468.777 ppb	84.457 %
Recovery Percentage 1			3.873 %	83.410 %	99.503 %	101.986 %	100.678 %	102.789 %	
Concentration RSD	0.4 %	12.7 %	13.5 %	1.5 %	5.5 %	6.1 %	3.2 %	3.6 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.706 %	0.159 ppb	1.463 ppb	4.722 ppb	204,792.927 ppb	2.164 ppb	2.428 ppb	0.912 ppb	0.394 ppb
Concentration per Run 1	94.792 %	0.252 ppb	1.432 ppb	5.009 ppb	205,410.296 ppb	1.885 ppb	2.719 ppb	0.946 ppb	0.348 ppb
Concentration per Run 2	96.261 %	0.035 ppb	1.501 ppb	4.678 ppb	202,743.092 ppb	2.347 ppb	2.079 ppb	0.882 ppb	0.519 ppb
Concentration per Run 3	99.065 %	0.189 ppb	1.455 ppb	4.478 ppb	206,225.393 ppb	2.260 ppb	2.487 ppb	0.908 ppb	0.317 ppb
Recovery Percentage 1		3.175 %	44.319 %	82.843 %	81.917 %	75.393 %	39.811 %	111.202 %	3.460 %
Concentration RSD	2.2 %	70.4 %	2.4 %	5.7 %	0.9 %	11.4 %	13.4 %	3.5 %	27.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.411 %	0.355 ppb	3.810 ppb	2.413 ppb	2,078.757 ppb	84.104 %	0.023 ppb	0.538 ppb	85.720 %
Concentration per Run 1	95.097 %	0.374 ppb	4.084 ppb	2.472 ppb	2,020.139 ppb	84.286 %	0.024 ppb	0.546 ppb	88.942 %
Concentration per Run 2	96.306 %	0.259 ppb	3.028 ppb	2.319 ppb	1,961.115 ppb	83.001 %	0.025 ppb	0.537 ppb	84.057 %
Concentration per Run 3	85.830 %	0.432 ppb	4.319 ppb	2.448 ppb	2,255.015 ppb	85.024 %	0.021 ppb	0.532 ppb	84.160 %
Recovery Percentage 1		21.773 %	29.538 %	482.607 %	103.938 %		2.881 %	134.525 %	
Concentration RSD	6.2 %	24.7 %	18.0 %	3.4 %	7.5 %	1.2 %	8.8 %	1.3 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.212 ppb	1.209 ppb	93.207 %	93.580 %	0.062 ppb	1.624 ppb	90.556 %
Concentration per Run 1	0.178 ppb	1.328 ppb	94.223 %	95.403 %	0.020 ppb	1.573 ppb	91.422 %
Concentration per Run 2	0.200 ppb	1.156 ppb	92.780 %	93.116 %	0.084 ppb	1.636 ppb	89.922 %
Concentration per Run 3	0.258 ppb	1.143 ppb	92.618 %	92.222 %	0.081 ppb	1.662 ppb	90.325 %
Recovery Percentage 1	2.651 %	64.311 %			3.079 %	52.377 %	
Concentration RSD	19.3 %	8.6 %	0.9 %	1.8 %	58.7 %	2.8 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	13	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR	Rack	4		
Analysis started at:	8/27/2024 11:19:39 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.846 %	118.539 %	0.033 ppb	49.418 ppb	3.133 ppb	3.869 ppb	-2.002 ppb	-2.101 ppb	110.936 %
Concentration per Run 1	99.535 %	116.854 %	0.030 ppb	73.637 ppb	4.022 ppb	3.835 ppb	4.268 ppb	-5.921 ppb	111.498 %
Concentration per Run 2	99.760 %	115.169 %	0.036 ppb	47.394 ppb	4.409 ppb	3.963 ppb	-9.269 ppb	-7.184 ppb	112.314 %
Concentration per Run 3	97.242 %	123.596 %	0.034 ppb	27.225 ppb	0.968 ppb	3.808 ppb	-1.006 ppb	6.801 ppb	108.996 %
Recovery Percentage 1									
Concentration RSD	1.4 %	3.8 %	8.4 %	47.1 %	60.2 %	2.1 %	340.7 %	368.1 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	109.658 %	0.005 ppb	-0.043 ppb	9,256.112 ppb	34.314 ppb	0.040 ppb	9,523.724 ppb	9,672.349 ppb	10,815.392 ppb
Concentration per Run 1	115.890 %	0.003 ppb	-0.081 ppb	8,939.463 ppb	31.753 ppb	0.039 ppb	8,961.293 ppb	9,101.714 ppb	10,726.735 ppb
Concentration per Run 2	109.213 %	0.005 ppb	-0.027 ppb	9,250.230 ppb	32.405 ppb	0.045 ppb	9,549.995 ppb	9,732.817 ppb	10,556.655 ppb
Concentration per Run 3	103.872 %	0.009 ppb	-0.020 ppb	9,578.642 ppb	38.784 ppb	0.037 ppb	10,059.885 ppb	10,182.517 ppb	11,162.785 ppb
Recovery Percentage 1				92.561 %			95.237 %	96.723 %	108.154 %
Concentration RSD	5.5 %	57.5 %	77.6 %	3.5 %	11.3 %	10.9 %	5.8 %	5.6 %	2.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	115.291 %	927.627 ppb	0.923 ppb	0.198 ppb	2.887 ppb	112.429 %	0.148 ppb	0.085 ppb	108.653 %
Concentration per Run 1	114.767 %	950.757 ppb	0.936 ppb	0.201 ppb	2.479 ppb	112.711 %	0.130 ppb	0.086 ppb	114.056 %
Concentration per Run 2	119.242 %	896.667 ppb	1.215 ppb	0.204 ppb	3.037 ppb	113.299 %	0.160 ppb	0.079 ppb	106.750 %
Concentration per Run 3	111.863 %	935.456 ppb	0.619 ppb	0.190 ppb	3.145 ppb	111.276 %	0.155 ppb	0.091 ppb	105.152 %
Recovery Percentage 1		92.763 %							
Concentration RSD	3.2 %	3.0 %	32.3 %	3.7 %	12.4 %	0.9 %	10.7 %	7.3 %	4.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.218 ppb	9,016.206 ppb	105.932 %	104.891 %	0.033 ppb	9,735.645 ppb	110.710 %
Concentration per Run 1	1.228 ppb	8,912.669 ppb	106.962 %	106.308 %	0.004 ppb	9,635.816 ppb	112.004 %
Concentration per Run 2	1.216 ppb	9,077.354 ppb	105.170 %	105.059 %	0.041 ppb	9,697.657 ppb	110.675 %
Concentration per Run 3	1.211 ppb	9,058.593 ppb	105.664 %	103.305 %	0.055 ppb	9,873.462 ppb	109.451 %
Recovery Percentage 1		90.162 %				0.000 %	
Concentration RSD	0.7 %	1.0 %	0.9 %	1.4 %	80.1 %	1.3 %	1.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	14	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check - ICSA 2x	Rack	4		
Analysis started at:	8/27/2024 11:31:46 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.152 %	89.326 %	0.015 ppb	102,060.048 ppb	48,114.746 ppb	48,398.392 ppb	47,292.781 ppb	144,298.058 ppb	86.225 %
Concentration per Run 1	80.414 %	84.270 %	0.020 ppb	106,417.105 ppb	49,983.645 ppb	50,104.462 ppb	48,991.305 ppb	148,979.417 ppb	84.690 %
Concentration per Run 2	80.315 %	88.202 %	0.011 ppb	98,848.823 ppb	47,092.365 ppb	47,084.741 ppb	45,486.037 ppb	139,386.299 ppb	86.879 %
Concentration per Run 3	79.727 %	95.506 %	0.015 ppb	100,914.216 ppb	47,268.227 ppb	48,005.972 ppb	47,401.000 ppb	144,528.459 ppb	87.105 %
Concentration RSD	0.5 %	6.4 %	30.2 %	3.8 %	3.4 %	3.2 %	3.7 %	3.3 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.475 %	0.008 ppb	0.716 ppb	2.458 ppb	123,148.370 ppb	1.048 ppb	1.000 ppb	0.534 ppb	-0.521 ppb
Concentration per Run 1	85.045 %	0.048 ppb	0.732 ppb	2.460 ppb	121,870.813 ppb	1.106 ppb	1.047 ppb	0.543 ppb	-0.320 ppb
Concentration per Run 2	90.520 %	-0.041 ppb	0.629 ppb	2.304 ppb	119,504.290 ppb	0.885 ppb	0.945 ppb	0.463 ppb	-0.582 ppb
Concentration per Run 3	95.861 %	0.017 ppb	0.788 ppb	2.609 ppb	128,070.008 ppb	1.152 ppb	1.009 ppb	0.597 ppb	-0.662 ppb
Concentration RSD	6.0 %	570.4 %	11.2 %	6.2 %	3.6 %	13.6 %	5.1 %	12.7 %	34.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	86.151 %	0.477 ppb	1.528 ppb	1.120 ppb	1,057.936 ppb	83.922 %	0.009 ppb	0.233 ppb	84.604 %
Concentration per Run 1	83.410 %	0.475 ppb	1.644 ppb	1.145 ppb	1,042.241 ppb	82.100 %	0.009 ppb	0.246 ppb	83.734 %
Concentration per Run 2	85.253 %	0.424 ppb	1.523 ppb	1.113 ppb	1,068.801 ppb	84.269 %	0.011 ppb	0.227 ppb	82.651 %
Concentration per Run 3	89.789 %	0.532 ppb	1.417 ppb	1.101 ppb	1,062.765 ppb	85.396 %	0.007 ppb	0.226 ppb	87.426 %
Concentration RSD	3.8 %	11.4 %	7.4 %	2.0 %	1.3 %	2.0 %	21.1 %	4.7 %	3.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.106 ppb	0.529 ppb	93.480 %	92.802 %	0.000 ppb	1.414 ppb	93.199 %
Concentration per Run 1	0.089 ppb	0.448 ppb	92.177 %	93.106 %	-0.022 ppb	1.589 ppb	96.586 %
Concentration per Run 2	0.124 ppb	0.581 ppb	91.621 %	89.553 %	0.012 ppb	1.419 ppb	88.352 %
Concentration per Run 3	0.105 ppb	0.558 ppb	96.643 %	95.746 %	0.010 ppb	1.234 ppb	94.659 %
Concentration RSD	16.3 %	13.4 %	2.9 %	3.3 %	11,649.9 %	12.5 %	4.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	15	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	8/27/2024 11:38:23 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.729 %	100.936 %	0.018 ppb	11.690 ppb	-2.171 ppb	0.389 ppb	-18.925 ppb	-19.881 ppb	97.527 %
Concentration per Run 1	91.989 %	96.067 %	0.011 ppb	18.458 ppb	0.941 ppb	0.487 ppb	-16.335 ppb	-25.123 ppb	97.053 %
Concentration per Run 2	90.886 %	102.247 %	0.022 ppb	9.786 ppb	-3.163 ppb	0.256 ppb	-14.007 ppb	-18.678 ppb	96.391 %
Concentration per Run 3	92.312 %	104.494 %	0.022 ppb	6.827 ppb	-4.292 ppb	0.425 ppb	-26.433 ppb	-15.843 ppb	99.135 %
Concentration RSD	0.8 %	4.3 %	35.5 %	51.7 %	126.8 %	30.7 %	34.9 %	23.9 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.861 %	-0.023 ppb	-0.052 ppb	0.297 ppb	16.688 ppb	0.005 ppb	-0.017 ppb	0.369 ppb	0.319 ppb
Concentration per Run 1	92.923 %	-0.022 ppb	0.004 ppb	0.265 ppb	13.122 ppb	0.003 ppb	0.024 ppb	0.459 ppb	0.164 ppb
Concentration per Run 2	95.994 %	-0.023 ppb	-0.079 ppb	0.463 ppb	20.286 ppb	0.023 ppb	-0.052 ppb	0.299 ppb	0.318 ppb
Concentration per Run 3	98.665 %	-0.024 ppb	-0.081 ppb	0.163 ppb	16.658 ppb	-0.011 ppb	-0.023 ppb	0.349 ppb	0.475 ppb
Concentration RSD	3.0 %	4.1 %	93.4 %	51.3 %	21.5 %	328.9 %	229.3 %	22.2 %	48.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.972 %	0.202 ppb	-0.008 ppb	-0.005 ppb	0.834 ppb	98.263 %	0.002 ppb	-0.001 ppb	94.848 %
Concentration per Run 1	94.869 %	0.143 ppb	0.041 ppb	-0.005 ppb	0.531 ppb	97.886 %	-0.002 ppb	-0.001 ppb	94.871 %
Concentration per Run 2	92.147 %	0.254 ppb	-0.037 ppb	-0.006 ppb	0.889 ppb	98.043 %	0.006 ppb	-0.001 ppb	93.737 %
Concentration per Run 3	94.901 %	0.208 ppb	-0.027 ppb	-0.005 ppb	1.082 ppb	98.860 %	0.001 ppb	-0.001 ppb	95.935 %
Concentration RSD	1.7 %	27.5 %	538.4 %	11.8 %	33.5 %	0.5 %	224.0 %	0.0 %	1.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	-0.022 ppb	99.391 %	98.760 %	-0.018 ppb	0.169 ppb	125.894 %
Concentration per Run 1	-0.004 ppb	0.004 ppb	98.162 %	98.622 %	-0.028 ppb	0.205 ppb	124.857 %
Concentration per Run 2	-0.002 ppb	-0.073 ppb	99.570 %	98.726 %	-0.012 ppb	0.160 ppb	127.885 %
Concentration per Run 3	0.006 ppb	0.002 ppb	100.440 %	98.931 %	-0.014 ppb	0.141 ppb	124.940 %
Concentration RSD	7,248.9 %	194.8 %	1.2 %	0.2 %	47.6 %	19.3 %	1.4 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	16	User name	ALPHALAB\a2-icpmsq2	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 11:42:49 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.683 %	109.738 %	60.315 ppb	5,941.985 ppb	5,971.291 ppb	57.993 ppb	6,260.886 ppb	6,233.676 ppb	99.850 %
Concentration per Run 1	93.038 %	119.663 %	59.477 ppb	5,560.689 ppb	5,634.592 ppb	53.318 ppb	6,044.322 ppb	6,154.830 ppb	99.658 %
Concentration per Run 2	93.232 %	100.562 %	60.458 ppb	6,330.831 ppb	6,281.375 ppb	60.473 ppb	6,535.304 ppb	6,533.819 ppb	100.747 %
Concentration per Run 3	91.778 %	108.989 %	61.010 ppb	5,934.435 ppb	5,997.906 ppb	60.188 ppb	6,203.031 ppb	6,012.381 ppb	99.145 %
Recovery Percentage 1			100.525 %	99.033 %	99.522 %	96.655 %	104.348 %	103.895 %	
Concentration RSD	0.9 %	8.7 %	1.3 %	6.5 %	5.4 %	7.0 %	4.0 %	4.3 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.739 %	60.682 ppb	62.566 ppb	62.420 ppb	6,236.616 ppb	61.871 ppb	63.236 ppb	61.666 ppb	60.808 ppb
Concentration per Run 1	102.670 %	59.726 ppb	62.572 ppb	61.521 ppb	6,139.533 ppb	61.518 ppb	62.652 ppb	61.643 ppb	59.824 ppb
Concentration per Run 2	102.003 %	62.218 ppb	62.674 ppb	60.569 ppb	6,218.977 ppb	62.078 ppb	63.370 ppb	60.837 ppb	60.609 ppb
Concentration per Run 3	106.543 %	60.103 ppb	62.453 ppb	65.170 ppb	6,351.338 ppb	62.015 ppb	63.686 ppb	62.518 ppb	61.990 ppb
Recovery Percentage 1		101.137 %	104.277 %	104.034 %	103.944 %	103.118 %	105.393 %	102.777 %	101.346 %
Concentration RSD	2.4 %	2.2 %	0.2 %	3.9 %	1.7 %	0.5 %	0.8 %	1.4 %	1.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.423 %	60.519 ppb	56.776 ppb	57.195 ppb	59.329 ppb	102.640 %	60.368 ppb	59.809 ppb	99.152 %
Concentration per Run 1	103.299 %	59.921 ppb	58.585 ppb	56.264 ppb	57.353 ppb	102.401 %	59.834 ppb	59.343 ppb	98.531 %
Concentration per Run 2	103.199 %	59.923 ppb	54.376 ppb	56.937 ppb	60.812 ppb	102.080 %	61.180 ppb	60.160 ppb	98.443 %
Concentration per Run 3	100.770 %	61.714 ppb	57.367 ppb	58.385 ppb	59.821 ppb	103.438 %	60.090 ppb	59.925 ppb	100.481 %
Recovery Percentage 1		100.865 %	94.626 %	95.326 %	98.881 %		100.614 %	99.682 %	
Concentration RSD	1.4 %	1.7 %	3.8 %	1.9 %	3.0 %	0.7 %	1.2 %	0.7 %	1.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.157 ppb	59.000 ppb	104.029 %	102.686 %	60.198 ppb	60.256 ppb	107.934 %
Concentration per Run 1	58.744 ppb	59.513 ppb	103.047 %	100.691 %	58.593 ppb	59.056 ppb	107.939 %
Concentration per Run 2	59.977 ppb	58.798 ppb	103.529 %	102.764 %	60.628 ppb	60.887 ppb	107.023 %
Concentration per Run 3	58.750 ppb	58.691 ppb	105.510 %	104.604 %	61.373 ppb	60.824 ppb	108.839 %
Recovery Percentage 1	98.595 %	98.334 %			100.330 %	100.426 %	
Concentration RSD	1.2 %	0.8 %	1.3 %	1.9 %	2.4 %	1.7 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	17	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 11:47:20 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.581 %	109.363 %	0.008 ppb	-12.601 ppb	-5.063 ppb	-1.580 ppb	-25.952 ppb	-23.907 ppb	101.966 %
Concentration per Run 1	95.240 %	123.034 %	0.013 ppb	-14.338 ppb	-5.516 ppb	-1.753 ppb	-33.533 ppb	-26.416 ppb	100.537 %
Concentration per Run 2	95.323 %	105.618 %	0.006 ppb	-13.648 ppb	-3.308 ppb	-1.388 ppb	-20.289 ppb	-19.411 ppb	101.919 %
Concentration per Run 3	96.180 %	99.438 %	0.005 ppb	-9.816 ppb	-6.364 ppb	-1.599 ppb	-24.033 ppb	-25.896 ppb	103.441 %
Recovery Percentage 1			1.586 %	-12.601 %	-7.233 %	-15.800 %	-25.952 %	-23.907 %	
Concentration RSD	0.5 %	11.2 %	54.4 %	19.3 %	31.2 %	11.6 %	26.3 %	16.3 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.893 %	-0.019 ppb	-0.078 ppb	-0.095 ppb	4.328 ppb	-0.008 ppb	-0.638 ppb	-0.143 ppb	-2.132 ppb
Concentration per Run 1	106.543 %	-0.044 ppb	-0.069 ppb	-0.098 ppb	4.562 ppb	-0.011 ppb	-0.583 ppb	-0.175 ppb	-2.219 ppb
Concentration per Run 2	100.801 %	-0.043 ppb	-0.089 ppb	-0.121 ppb	2.850 ppb	-0.004 ppb	-0.642 ppb	-0.157 ppb	-1.981 ppb
Concentration per Run 3	101.335 %	0.030 ppb	-0.077 ppb	-0.067 ppb	5.572 ppb	-0.011 ppb	-0.690 ppb	-0.097 ppb	-2.197 ppb
Recovery Percentage 1		-0.387 %	-7.842 %	-9.538 %	8.656 %	-1.698 %	-31.903 %	-14.303 %	-42.646 %
Concentration RSD	3.1 %	219.8 %	12.8 %	28.1 %	31.8 %	43.1 %	8.4 %	28.7 %	6.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.371 %	0.076 ppb	-0.004 ppb	-0.018 ppb	0.396 ppb	105.318 %	-0.003 ppb	0.000 ppb	102.647 %
Concentration per Run 1	107.872 %	0.085 ppb	0.066 ppb	-0.017 ppb	0.249 ppb	105.575 %	-0.002 ppb	0.003 ppb	102.764 %
Concentration per Run 2	99.814 %	0.065 ppb	-0.111 ppb	-0.018 ppb	0.381 ppb	105.214 %	-0.005 ppb	-0.001 ppb	101.550 %
Concentration per Run 3	102.429 %	0.079 ppb	0.034 ppb	-0.019 ppb	0.559 ppb	105.165 %	-0.003 ppb	-0.001 ppb	103.625 %
Recovery Percentage 1		15.256 %	-0.080 %	-0.178 %	19.805 %		-0.844 %	-0.001 %	
Concentration RSD	4.0 %	13.7 %	2,348.5 %	5.3 %	39.3 %	0.2 %	40.8 %	159,314.2 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.039 ppb	-0.067 ppb	105.285 %	103.299 %	0.184 ppb	0.055 ppb	108.706 %
Concentration per Run 1	0.031 ppb	-0.063 ppb	105.640 %	102.663 %	0.137 ppb	0.064 ppb	108.074 %
Concentration per Run 2	0.035 ppb	-0.051 ppb	103.851 %	102.825 %	0.244 ppb	0.053 ppb	109.415 %
Concentration per Run 3	0.050 ppb	-0.087 ppb	106.364 %	104.410 %	0.172 ppb	0.050 ppb	108.628 %
Recovery Percentage 1	0.967 %	-13.353 %			18.427 %	5.545 %	
Concentration RSD	25.2 %	27.6 %	1.2 %	0.9 %	29.6 %	12.9 %	0.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	18	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963148-1 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 11:52:05 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.401 %	110.487 %	0.007 ppb	-12.900 ppb	-3.058 ppb	-0.126 ppb	-25.777 ppb	4.177 ppb	97.454 %
Concentration per Run 1	90.068 %	108.989 %	0.007 ppb	-11.367 ppb	-3.837 ppb	0.161 ppb	-23.514 ppb	0.656 ppb	95.171 %
Concentration per Run 2	90.798 %	102.247 %	0.003 ppb	-13.350 ppb	-2.258 ppb	0.055 ppb	-27.847 ppb	-10.506 ppb	98.877 %
Concentration per Run 3	90.336 %	120.225 %	0.011 ppb	-13.983 ppb	-3.079 ppb	-0.594 ppb	-25.971 ppb	22.379 ppb	98.313 %
Concentration RSD	0.4 %	8.2 %	58.7 %	10.6 %	25.8 %	323.4 %	8.4 %	400.4 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.667 %	0.006 ppb	-0.083 ppb	-0.002 ppb	6.644 ppb	0.000 ppb	-0.642 ppb	-0.121 ppb	-1.920 ppb
Concentration per Run 1	98.130 %	-0.005 ppb	-0.069 ppb	-0.010 ppb	5.190 ppb	-0.004 ppb	-0.523 ppb	-0.126 ppb	-1.787 ppb
Concentration per Run 2	103.472 %	-0.008 ppb	-0.103 ppb	-0.041 ppb	4.984 ppb	0.002 ppb	-0.713 ppb	-0.188 ppb	-1.916 ppb
Concentration per Run 3	100.400 %	0.031 ppb	-0.076 ppb	0.044 ppb	9.758 ppb	0.002 ppb	-0.689 ppb	-0.047 ppb	-2.058 ppb
Concentration RSD	2.7 %	360.5 %	21.5 %	2,109.3 %	40.6 %	4,412.3 %	16.1 %	58.7 %	7.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.524 %	0.026 ppb	-0.111 ppb	0.010 ppb	0.109 ppb	104.648 %	-0.002 ppb	0.000 ppb	102.104 %
Concentration per Run 1	102.112 %	-0.022 ppb	-0.184 ppb	0.013 ppb	0.061 ppb	107.105 %	-0.002 ppb	0.002 ppb	104.003 %
Concentration per Run 2	100.070 %	0.054 ppb	-0.039 ppb	0.007 ppb	0.096 ppb	105.470 %	-0.003 ppb	-0.001 ppb	103.497 %
Concentration per Run 3	99.390 %	0.045 ppb	-0.111 ppb	0.010 ppb	0.171 ppb	101.369 %	0.000 ppb	-0.001 ppb	98.812 %
Concentration RSD	1.4 %	160.6 %	65.1 %	26.8 %	51.4 %	2.8 %	74.8 %	12,387.3 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.002 ppb	-0.067 ppb	103.936 %	101.789 %	0.033 ppb	0.036 ppb	106.626 %
Concentration per Run 1	-0.007 ppb	-0.063 ppb	105.223 %	103.252 %	0.007 ppb	0.037 ppb	106.773 %
Concentration per Run 2	0.001 ppb	-0.075 ppb	104.314 %	101.988 %	0.051 ppb	0.041 ppb	107.026 %
Concentration per Run 3	0.012 ppb	-0.062 ppb	102.272 %	100.127 %	0.041 ppb	0.031 ppb	106.079 %
Concentration RSD	494.2 %	10.8 %	1.5 %	1.5 %	69.2 %	15.0 %	0.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	19	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2445805-08 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 11:56:33 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.217 %	114.794 %	0.010 ppb	30.162 ppb	-0.822 ppb	1.405 ppb	-30.233 ppb	-10.939 ppb	97.459 %
Concentration per Run 1	88.819 %	120.225 %	0.008 ppb	27.837 ppb	-1.802 ppb	0.866 ppb	-33.672 ppb	-23.505 ppb	95.328 %
Concentration per Run 2	92.888 %	106.180 %	0.009 ppb	35.110 ppb	-0.295 ppb	1.459 ppb	-29.604 ppb	-0.517 ppb	99.394 %
Concentration per Run 3	91.945 %	117.978 %	0.011 ppb	27.538 ppb	-0.370 ppb	1.891 ppb	-27.423 ppb	-8.793 ppb	97.655 %
Concentration RSD	2.3 %	6.6 %	12.2 %	14.2 %	103.3 %	36.6 %	10.5 %	106.4 %	2.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.098 %	0.055 ppb	0.197 ppb	0.496 ppb	1.020 ppb	-0.001 ppb	-0.573 ppb	0.144 ppb	-1.713 ppb
Concentration per Run 1	107.611 %	0.042 ppb	0.219 ppb	0.667 ppb	3.448 ppb	-0.011 ppb	-0.584 ppb	0.114 ppb	-1.700 ppb
Concentration per Run 2	102.136 %	0.046 ppb	0.233 ppb	0.299 ppb	-0.721 ppb	0.008 ppb	-0.602 ppb	0.161 ppb	-1.710 ppb
Concentration per Run 3	108.546 %	0.077 ppb	0.138 ppb	0.523 ppb	0.333 ppb	0.001 ppb	-0.534 ppb	0.156 ppb	-1.729 ppb
Concentration RSD	3.3 %	35.0 %	25.9 %	37.4 %	212.5 %	1,702.3 %	6.2 %	18.1 %	0.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.138 %	0.074 ppb	-0.080 ppb	0.515 ppb	0.066 ppb	103.742 %	-0.003 ppb	0.001 ppb	101.063 %
Concentration per Run 1	107.872 %	0.066 ppb	-0.191 ppb	0.491 ppb	0.037 ppb	108.335 %	-0.005 ppb	0.002 ppb	103.729 %
Concentration per Run 2	108.658 %	0.036 ppb	-0.006 ppb	0.509 ppb	0.077 ppb	98.377 %	0.000 ppb	0.003 ppb	96.725 %
Concentration per Run 3	101.884 %	0.121 ppb	-0.045 ppb	0.545 ppb	0.085 ppb	104.515 %	-0.003 ppb	-0.001 ppb	102.735 %
Concentration RSD	3.5 %	57.9 %	121.1 %	5.3 %	39.3 %	4.8 %	80.1 %	169.6 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	0.535 ppb	104.976 %	103.562 %	0.005 ppb	0.146 ppb	108.763 %
Concentration per Run 1	-0.004 ppb	0.543 ppb	107.560 %	104.778 %	-0.018 ppb	0.141 ppb	110.848 %
Concentration per Run 2	0.014 ppb	0.487 ppb	101.073 %	100.711 %	0.011 ppb	0.147 ppb	106.033 %
Concentration per Run 3	0.030 ppb	0.574 ppb	106.295 %	105.197 %	0.022 ppb	0.150 ppb	109.407 %
Concentration RSD	126.0 %	8.2 %	3.3 %	2.4 %	393.9 %	3.2 %	2.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	20	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963148-2d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 12:00:59 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.560 %	110.300 %	5.492 ppb	1,027.243 ppb	1,008.205 ppb	201.037 ppb	1,031.414 ppb	1,023.807 ppb	96.131 %
Concentration per Run 1	88.603 %	106.180 %	5.437 ppb	1,056.936 ppb	1,055.416 ppb	207.421 ppb	968.628 ppb	1,001.436 ppb	95.449 %
Concentration per Run 2	88.309 %	121.910 %	5.536 ppb	940.864 ppb	938.481 ppb	186.949 ppb	1,031.662 ppb	995.202 ppb	95.720 %
Concentration per Run 3	88.768 %	102.809 %	5.505 ppb	1,083.930 ppb	1,030.719 ppb	208.740 ppb	1,093.951 ppb	1,074.783 ppb	97.223 %
Concentration RSD	0.3 %	9.2 %	0.9 %	7.4 %	6.1 %	6.1 %	6.1 %	4.3 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.510 %	53.085 ppb	21.370 ppb	53.544 ppb	109.027 ppb	53.662 ppb	55.539 ppb	27.292 ppb	52.302 ppb
Concentration per Run 1	110.014 %	50.023 ppb	20.588 ppb	51.318 ppb	105.322 ppb	52.367 ppb	51.536 ppb	25.645 ppb	50.536 ppb
Concentration per Run 2	97.997 %	53.057 ppb	20.467 ppb	54.322 ppb	121.435 ppb	54.698 ppb	56.744 ppb	28.236 ppb	54.291 ppb
Concentration per Run 3	90.520 %	56.175 ppb	23.056 ppb	54.993 ppb	100.323 ppb	53.921 ppb	58.336 ppb	27.995 ppb	52.078 ppb
Concentration RSD	9.9 %	5.8 %	6.8 %	3.7 %	10.1 %	2.2 %	6.4 %	5.2 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.356 %	11.155 ppb	10.712 ppb	97.049 ppb	101.934 ppb	100.368 %	5.190 ppb	5.640 ppb	95.494 %
Concentration per Run 1	107.708 %	10.826 ppb	10.047 ppb	94.256 ppb	98.387 ppb	107.215 %	5.209 ppb	5.479 ppb	103.402 %
Concentration per Run 2	94.189 %	11.389 ppb	10.013 ppb	98.225 ppb	103.446 ppb	97.643 %	5.129 ppb	5.662 ppb	93.376 %
Concentration per Run 3	96.171 %	11.251 ppb	12.078 ppb	98.666 ppb	103.971 ppb	96.245 %	5.234 ppb	5.781 ppb	89.703 %
Concentration RSD	7.3 %	2.6 %	11.0 %	2.5 %	3.0 %	5.9 %	1.1 %	2.7 %	7.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	43.538 ppb	202.033 ppb	98.874 %	97.736 %	12.008 ppb	56.771 ppb	98.393 %
Concentration per Run 1	41.882 ppb	197.371 ppb	106.156 %	105.469 %	11.597 ppb	55.073 ppb	107.020 %
Concentration per Run 2	44.600 ppb	205.360 ppb	97.778 %	97.221 %	12.159 ppb	57.907 ppb	95.645 %
Concentration per Run 3	44.131 ppb	203.369 ppb	92.687 %	90.519 %	12.268 ppb	57.332 ppb	92.514 %
Concentration RSD	3.3 %	2.1 %	6.9 %	7.7 %	3.0 %	2.6 %	7.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	21	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447194-06d20 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 12:05:28 PM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.087 %	103.933 %	0.016 ppb	284,326.559 ppb	42,313.562 ppb	87.417 ppb	13,249.155 ppb	14,409.199 ppb	91.114 %
Concentration per Run 1	82.293 %	106.742 %	0.016 ppb	283,753.335 ppb	42,715.528 ppb	88.324 ppb	13,509.432 ppb	14,272.099 ppb	90.908 %
Concentration per Run 2	82.010 %	94.382 %	0.018 ppb	298,965.118 ppb	44,170.519 ppb	94.777 ppb	13,499.352 ppb	14,892.080 ppb	91.180 %
Concentration per Run 3	81.956 %	110.674 %	0.015 ppb	270,261.223 ppb	40,054.640 ppb	79.151 ppb	12,738.682 ppb	14,063.418 ppb	91.254 %
Concentration RSD	0.2 %	8.2 %	10.7 %	5.1 %	4.9 %	9.0 %	3.3 %	3.0 %	0.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.353 %	0.342 ppb	0.422 ppb	7.390 ppb	210.081 ppb	0.079 ppb	-0.331 ppb	1.957 ppb	3.409 ppb
Concentration per Run 1	106.276 %	0.344 ppb	0.467 ppb	7.671 ppb	214.096 ppb	0.050 ppb	-0.419 ppb	1.551 ppb	3.234 ppb
Concentration per Run 2	92.523 %	0.341 ppb	0.389 ppb	7.167 ppb	221.655 ppb	0.093 ppb	-0.349 ppb	2.007 ppb	3.617 ppb
Concentration per Run 3	96.261 %	0.341 ppb	0.410 ppb	7.333 ppb	194.494 ppb	0.093 ppb	-0.226 ppb	2.313 ppb	3.376 ppb
Concentration RSD	7.2 %	0.5 %	9.5 %	3.5 %	6.7 %	31.4 %	29.4 %	19.6 %	5.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.266 %	0.485 ppb	-0.046 ppb	239.719 ppb	0.889 ppb	95.118 %	0.028 ppb	0.014 ppb	95.525 %
Concentration per Run 1	102.884 %	0.421 ppb	-0.116 ppb	246.629 ppb	0.766 ppb	98.235 %	0.032 ppb	0.015 ppb	99.931 %
Concentration per Run 2	92.389 %	0.612 ppb	-0.041 ppb	245.470 ppb	1.042 ppb	91.236 %	0.036 ppb	0.016 ppb	92.755 %
Concentration per Run 3	99.526 %	0.420 ppb	0.020 ppb	227.058 ppb	0.861 ppb	95.884 %	0.015 ppb	0.011 ppb	93.890 %
Concentration RSD	5.5 %	22.8 %	150.1 %	4.6 %	15.8 %	3.7 %	40.5 %	17.1 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.057 ppb	1.630 ppb	97.919 %	97.903 %	-0.002 ppb	2.652 ppb	88.452 %
Concentration per Run 1	0.982 ppb	1.671 ppb	100.713 %	101.221 %	-0.009 ppb	2.687 ppb	90.287 %
Concentration per Run 2	1.080 ppb	1.694 ppb	95.719 %	94.923 %	0.005 ppb	2.654 ppb	85.646 %
Concentration per Run 3	1.110 ppb	1.526 ppb	97.325 %	97.566 %	-0.001 ppb	2.617 ppb	89.423 %
Concentration RSD	6.4 %	5.6 %	2.6 %	3.2 %	452.3 %	1.3 %	2.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	22	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963148-3d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 12:09:55 PM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.214 %	104.494 %	4.703 ppb	557,675.701 ppb	82,515.752 ppb	397.956 ppb	26,874.233 ppb	29,194.379 ppb	90.122 %
Concentration per Run 1	80.268 %	117.416 %	4.635 ppb	498,454.731 ppb	73,857.793 ppb	363.576 ppb	25,212.432 ppb	27,440.120 ppb	90.610 %
Concentration per Run 2	79.000 %	100.562 %	4.711 ppb	581,907.552 ppb	85,691.955 ppb	410.738 ppb	27,329.125 ppb	29,991.837 ppb	89.857 %
Concentration per Run 3	78.373 %	95.506 %	4.762 ppb	592,664.819 ppb	87,997.508 ppb	419.556 ppb	28,081.142 ppb	30,151.181 ppb	89.898 %
Concentration RSD	1.2 %	11.0 %	1.4 %	9.2 %	9.2 %	7.6 %	5.5 %	5.2 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.104 %	53.579 ppb	22.078 ppb	67.218 ppb	529.550 ppb	51.815 ppb	51.147 ppb	28.608 ppb	47.676 ppb
Concentration per Run 1	101.869 %	49.236 ppb	20.900 ppb	63.843 ppb	507.537 ppb	50.059 ppb	50.055 ppb	28.245 ppb	46.354 ppb
Concentration per Run 2	94.258 %	53.956 ppb	22.418 ppb	68.846 ppb	525.802 ppb	52.831 ppb	49.513 ppb	28.841 ppb	48.322 ppb
Concentration per Run 3	89.185 %	57.546 ppb	22.917 ppb	68.966 ppb	555.311 ppb	52.554 ppb	53.871 ppb	28.739 ppb	48.353 ppb
Concentration RSD	6.7 %	7.8 %	4.8 %	4.4 %	4.6 %	2.9 %	4.6 %	1.1 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.310 %	11.278 ppb	9.917 ppb	545.429 ppb	106.019 ppb	94.257 %	4.808 ppb	4.967 ppb	92.831 %
Concentration per Run 1	102.976 %	11.017 ppb	10.202 ppb	533.345 ppb	103.310 ppb	97.935 %	4.663 ppb	4.853 ppb	95.184 %
Concentration per Run 2	102.884 %	10.920 ppb	9.419 ppb	551.042 ppb	109.971 ppb	94.304 %	4.909 ppb	5.128 ppb	93.323 %
Concentration per Run 3	101.069 %	11.898 ppb	10.129 ppb	551.900 ppb	104.776 ppb	90.532 %	4.851 ppb	4.919 ppb	89.985 %
Concentration RSD	1.1 %	4.8 %	4.4 %	1.9 %	3.3 %	3.9 %	2.7 %	2.9 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	48.790 ppb	198.912 ppb	98.935 %	96.120 %	11.491 ppb	60.918 ppb	85.398 %
Concentration per Run 1	47.799 ppb	192.508 ppb	102.082 %	97.698 %	10.975 ppb	58.310 ppb	88.634 %
Concentration per Run 2	48.805 ppb	198.967 ppb	98.836 %	97.872 %	11.814 ppb	63.006 ppb	84.342 %
Concentration per Run 3	49.767 ppb	205.260 ppb	95.887 %	92.791 %	11.683 ppb	61.437 ppb	83.217 %
Concentration RSD	2.0 %	3.2 %	3.1 %	3.0 %	3.9 %	3.9 %	3.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	23	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963148-4d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 12:14:24 PM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.311 %	105.618 %	4.815 ppb	559,665.256 ppb	84,194.341 ppb	397.222 ppb	27,999.432 ppb	30,244.675 ppb	92.189 %
Concentration per Run 1	79.946 %	111.798 %	4.856 ppb	529,821.600 ppb	79,592.084 ppb	372.997 ppb	27,336.615 ppb	29,697.492 ppb	93.046 %
Concentration per Run 2	79.620 %	100.562 %	4.833 ppb	575,300.638 ppb	86,071.256 ppb	411.870 ppb	28,569.690 ppb	31,166.757 ppb	91.936 %
Concentration per Run 3	78.369 %	104.494 %	4.755 ppb	573,873.530 ppb	86,919.684 ppb	406.799 ppb	28,091.990 ppb	29,869.775 ppb	91.583 %
Concentration RSD	1.0 %	5.4 %	1.1 %	4.6 %	4.8 %	5.3 %	2.2 %	2.7 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.855 %	54.880 ppb	22.328 ppb	70.138 ppb	565.570 ppb	53.641 ppb	52.369 ppb	30.307 ppb	49.780 ppb
Concentration per Run 1	94.926 %	51.018 ppb	21.378 ppb	68.496 ppb	546.661 ppb	50.272 ppb	50.035 ppb	29.710 ppb	48.431 ppb
Concentration per Run 2	89.051 %	56.799 ppb	22.934 ppb	73.030 ppb	575.589 ppb	56.123 ppb	54.496 ppb	30.532 ppb	51.479 ppb
Concentration per Run 3	91.588 %	56.824 ppb	22.672 ppb	68.888 ppb	574.459 ppb	54.528 ppb	52.576 ppb	30.678 ppb	49.430 ppb
Concentration RSD	3.2 %	6.1 %	3.7 %	3.6 %	2.9 %	5.6 %	4.3 %	1.7 %	3.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.924 %	11.870 ppb	8.674 ppb	570.591 ppb	107.920 ppb	89.079 %	4.940 ppb	4.923 ppb	87.715 %
Concentration per Run 1	100.027 %	11.428 ppb	7.969 ppb	542.533 ppb	103.939 ppb	90.490 %	4.904 ppb	4.558 ppb	89.266 %
Concentration per Run 2	91.863 %	12.313 ppb	8.806 ppb	588.729 ppb	110.064 ppb	87.902 %	4.847 ppb	5.022 ppb	87.331 %
Concentration per Run 3	95.883 %	11.867 ppb	9.247 ppb	580.512 ppb	109.757 ppb	88.844 %	5.069 ppb	5.188 ppb	86.547 %
Concentration RSD	4.3 %	3.7 %	7.5 %	4.3 %	3.2 %	1.5 %	2.3 %	6.6 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	49.763 ppb	207.583 ppb	92.555 %	90.556 %	11.394 ppb	61.325 ppb	80.883 %
Concentration per Run 1	48.415 ppb	201.457 ppb	93.530 %	91.839 %	11.213 ppb	59.362 ppb	82.281 %
Concentration per Run 2	50.558 ppb	210.880 ppb	92.287 %	89.456 %	11.420 ppb	62.532 ppb	79.647 %
Concentration per Run 3	50.316 ppb	210.411 ppb	91.849 %	90.372 %	11.549 ppb	62.082 ppb	80.721 %
Concentration RSD	2.4 %	2.6 %	0.9 %	1.3 %	1.5 %	2.8 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	24	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963148-5d10 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 12:18:54 PM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.582 %	105.618 %	45.144 ppb	560,527.421 ppb	87,550.254 ppb	221.647 ppb	31,362.441 ppb	33,104.961 ppb	95.051 %
Concentration per Run 1	83.715 %	104.494 %	44.566 ppb	554,955.652 ppb	86,026.981 ppb	220.956 ppb	31,101.693 ppb	33,227.487 ppb	94.325 %
Concentration per Run 2	84.477 %	106.180 %	45.244 ppb	556,783.352 ppb	86,928.157 ppb	212.375 ppb	31,398.658 ppb	32,833.656 ppb	95.120 %
Concentration per Run 3	82.555 %	106.180 %	45.621 ppb	569,843.258 ppb	89,695.623 ppb	231.610 ppb	31,586.973 ppb	33,253.738 ppb	95.708 %
Concentration RSD	1.2 %	0.9 %	1.2 %	1.4 %	2.2 %	4.3 %	0.8 %	0.7 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.353 %	54.801 ppb	54.681 ppb	67.555 ppb	5,683.279 ppb	52.168 ppb	50.542 ppb	52.167 ppb	48.665 ppb
Concentration per Run 1	93.457 %	55.339 ppb	54.841 ppb	66.136 ppb	5,683.649 ppb	51.606 ppb	51.946 ppb	52.855 ppb	48.963 ppb
Concentration per Run 2	97.062 %	55.631 ppb	55.785 ppb	66.997 ppb	5,745.119 ppb	53.644 ppb	49.807 ppb	53.091 ppb	48.604 ppb
Concentration per Run 3	104.540 %	53.433 ppb	53.417 ppb	69.531 ppb	5,621.067 ppb	51.253 ppb	49.875 ppb	50.555 ppb	48.429 ppb
Concentration RSD	5.7 %	2.2 %	2.2 %	2.6 %	1.1 %	2.5 %	2.4 %	2.7 %	0.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.377 %	49.022 ppb	41.719 ppb	499.605 ppb	54.397 ppb	96.163 %	1.264 ppb	47.204 ppb	94.268 %
Concentration per Run 1	102.328 %	47.550 ppb	38.780 ppb	484.491 ppb	53.865 ppb	93.897 %	1.242 ppb	47.626 ppb	89.502 %
Concentration per Run 2	103.890 %	49.248 ppb	40.664 ppb	488.951 ppb	53.388 ppb	96.781 %	1.295 ppb	46.973 ppb	95.160 %
Concentration per Run 3	106.914 %	50.268 ppb	45.715 ppb	525.372 ppb	55.939 ppb	97.809 %	1.256 ppb	47.014 ppb	98.142 %
Concentration RSD	2.2 %	2.8 %	8.6 %	4.5 %	2.5 %	2.1 %	2.1 %	0.8 %	4.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.736 ppb	53.469 ppb	100.519 %	98.042 %	51.088 ppb	56.688 ppb	90.052 %
Concentration per Run 1	50.609 ppb	52.312 ppb	98.189 %	95.094 %	50.076 ppb	55.632 ppb	88.412 %
Concentration per Run 2	50.417 ppb	53.380 ppb	99.351 %	97.956 %	51.684 ppb	57.422 ppb	89.576 %
Concentration per Run 3	51.182 ppb	54.714 ppb	104.017 %	101.076 %	51.505 ppb	57.011 ppb	92.168 %
Concentration RSD	0.8 %	2.3 %	3.1 %	3.1 %	1.7 %	1.7 %	2.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	25	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963148-6d100 A2-6020T	Rack	1		
Analysis started at:	8/27/2024 12:23:20 PM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.533 %	113.296 %	0.011 ppb	48,540.199 ppb	7,178.781 ppb	15.807 ppb	2,344.032 ppb	2,573.571 ppb	100.822 %
Concentration per Run 1	91.620 %	119.101 %	0.006 ppb	48,445.514 ppb	7,277.764 ppb	15.397 ppb	2,456.121 ppb	2,669.733 ppb	100.564 %
Concentration per Run 2	92.120 %	117.416 %	0.009 ppb	45,510.771 ppb	6,831.130 ppb	14.670 ppb	2,244.426 ppb	2,393.187 ppb	101.599 %
Concentration per Run 3	90.859 %	103.371 %	0.018 ppb	51,664.312 ppb	7,427.449 ppb	17.354 ppb	2,331.551 ppb	2,657.792 ppb	100.303 %
Concentration RSD	0.7 %	7.6 %	59.6 %	6.3 %	4.3 %	8.8 %	4.5 %	6.1 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.157 %	0.222 ppb	0.000 ppb	1.272 ppb	37.917 ppb	0.016 ppb	-0.602 ppb	0.381 ppb	-0.702 ppb
Concentration per Run 1	99.599 %	0.230 ppb	0.040 ppb	1.202 ppb	40.946 ppb	0.014 ppb	-0.603 ppb	0.431 ppb	-0.638 ppb
Concentration per Run 2	103.471 %	0.242 ppb	-0.049 ppb	1.190 ppb	36.954 ppb	0.020 ppb	-0.625 ppb	0.399 ppb	-0.690 ppb
Concentration per Run 3	100.400 %	0.194 ppb	0.009 ppb	1.425 ppb	35.850 ppb	0.014 ppb	-0.578 ppb	0.312 ppb	-0.778 ppb
Concentration RSD	2.0 %	11.3 %	2,449,484.2 %	10.4 %	7.1 %	21.9 %	3.9 %	16.2 %	10.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.915 %	0.127 ppb	0.051 ppb	39.576 ppb	0.425 ppb	102.014 %	0.005 ppb	0.004 ppb	98.416 %
Concentration per Run 1	111.622 %	0.132 ppb	0.012 ppb	39.381 ppb	0.203 ppb	105.200 %	0.005 ppb	0.003 ppb	100.117 %
Concentration per Run 2	107.086 %	0.146 ppb	-0.053 ppb	39.539 ppb	0.442 ppb	101.137 %	0.008 ppb	0.003 ppb	97.402 %
Concentration per Run 3	108.039 %	0.105 ppb	0.196 ppb	39.808 ppb	0.631 ppb	99.705 %	0.003 ppb	0.007 ppb	97.728 %
Concentration RSD	2.2 %	16.4 %	251.5 %	0.5 %	50.4 %	2.8 %	54.6 %	58.5 %	1.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.116 ppb	0.262 ppb	100.204 %	96.620 %	0.257 ppb	0.475 ppb	94.579 %
Concentration per Run 1	0.090 ppb	0.254 ppb	102.546 %	98.139 %	0.170 ppb	0.470 ppb	97.108 %
Concentration per Run 2	0.106 ppb	0.251 ppb	99.855 %	95.659 %	0.340 ppb	0.480 ppb	92.901 %
Concentration per Run 3	0.153 ppb	0.279 ppb	98.211 %	96.063 %	0.260 ppb	0.475 ppb	93.729 %
Concentration RSD	28.2 %	5.8 %	2.2 %	1.4 %	33.2 %	1.1 %	2.4 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	26	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 12:30:20 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.184 %	100.936 %	60.580 ppb	6,111.070 ppb	6,080.095 ppb	62.276 ppb	6,370.385 ppb	6,457.016 ppb	92.254 %
Concentration per Run 1	86.425 %	102.247 %	60.601 ppb	6,066.333 ppb	6,044.702 ppb	66.203 ppb	6,457.538 ppb	6,427.181 ppb	92.048 %
Concentration per Run 2	86.049 %	107.865 %	60.580 ppb	5,944.371 ppb	5,847.467 ppb	62.590 ppb	6,388.417 ppb	6,637.784 ppb	92.095 %
Concentration per Run 3	86.077 %	92.697 %	60.559 ppb	6,322.506 ppb	6,348.116 ppb	58.034 ppb	6,265.199 ppb	6,306.083 ppb	92.619 %
Recovery Percentage 1			100.967 %	101.851 %	101.335 %	103.793 %	106.173 %	107.617 %	
Concentration RSD	0.2 %	7.6 %	0.0 %	3.2 %	4.1 %	6.6 %	1.5 %	2.6 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.739 %	64.260 ppb	65.123 ppb	66.263 ppb	6,455.405 ppb	63.310 ppb	65.691 ppb	63.554 ppb	62.049 ppb
Concentration per Run 1	93.457 %	62.073 ppb	62.773 ppb	64.274 ppb	6,313.793 ppb	61.837 ppb	64.882 ppb	61.545 ppb	60.547 ppb
Concentration per Run 2	85.312 %	66.049 ppb	66.557 ppb	69.609 ppb	6,565.279 ppb	64.517 ppb	64.828 ppb	63.861 ppb	62.914 ppb
Concentration per Run 3	87.449 %	64.659 ppb	66.039 ppb	64.906 ppb	6,487.142 ppb	63.574 ppb	67.364 ppb	65.256 ppb	62.686 ppb
Recovery Percentage 1		107.101 %	108.538 %	110.438 %	107.590 %	105.516 %	109.485 %	105.923 %	103.415 %
Concentration RSD	4.8 %	3.1 %	3.2 %	4.4 %	2.0 %	2.1 %	2.2 %	2.9 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.462 %	60.403 ppb	59.685 ppb	56.647 ppb	59.052 ppb	92.980 %	60.272 ppb	60.425 ppb	88.764 %
Concentration per Run 1	96.792 %	59.595 ppb	59.038 ppb	56.683 ppb	57.750 ppb	97.383 %	58.851 ppb	58.896 ppb	94.137 %
Concentration per Run 2	89.464 %	60.919 ppb	59.178 ppb	58.220 ppb	59.359 ppb	92.278 %	60.768 ppb	60.806 ppb	90.280 %
Concentration per Run 3	88.131 %	60.696 ppb	60.838 ppb	55.037 ppb	60.047 ppb	89.279 %	61.196 ppb	61.573 ppb	81.873 %
Recovery Percentage 1		100.672 %	99.474 %	94.411 %	98.421 %		100.453 %	100.708 %	
Concentration RSD	5.1 %	1.2 %	1.7 %	2.8 %	2.0 %	4.4 %	2.1 %	2.3 %	7.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.453 ppb	58.626 ppb	94.283 %	93.025 %	62.471 ppb	62.568 ppb	94.749 %
Concentration per Run 1	58.817 ppb	57.815 ppb	98.050 %	97.613 %	60.444 ppb	60.656 ppb	98.027 %
Concentration per Run 2	58.756 ppb	59.377 ppb	94.078 %	93.610 %	62.650 ppb	63.357 ppb	94.067 %
Concentration per Run 3	60.785 ppb	58.685 ppb	90.721 %	87.852 %	64.320 ppb	63.692 ppb	92.153 %
Recovery Percentage 1	99.088 %	97.710 %			104.119 %	104.281 %	
Concentration RSD	1.9 %	1.3 %	3.9 %	5.3 %	3.1 %	2.7 %	3.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	27	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 12:34:52 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.714 %	104.307 %	0.009 ppb	34.062 ppb	-4.930 ppb	-1.742 ppb	-26.322 ppb	-26.228 ppb	93.446 %
Concentration per Run 1	89.227 %	103.933 %	0.013 ppb	45.868 ppb	-4.251 ppb	-1.709 ppb	-16.150 ppb	-21.956 ppb	92.412 %
Concentration per Run 2	88.311 %	104.494 %	0.003 ppb	35.414 ppb	-5.805 ppb	-1.816 ppb	-27.372 ppb	-31.899 ppb	93.817 %
Concentration per Run 3	88.604 %	104.494 %	0.012 ppb	20.903 ppb	-4.734 ppb	-1.700 ppb	-35.446 ppb	-24.828 ppb	94.110 %
Recovery Percentage 1			1.831 %	34.062 %	-7.043 %	-17.419 %	-26.322 %	-26.228 %	
Concentration RSD	0.5 %	0.3 %	55.5 %	36.8 %	16.1 %	3.7 %	36.8 %	19.5 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.899 %	0.032 ppb	-0.093 ppb	-0.135 ppb	0.310 ppb	-0.008 ppb	-0.599 ppb	-0.125 ppb	-2.175 ppb
Concentration per Run 1	95.861 %	0.035 ppb	-0.093 ppb	-0.175 ppb	0.123 ppb	-0.011 ppb	-0.590 ppb	-0.124 ppb	-2.195 ppb
Concentration per Run 2	89.184 %	0.021 ppb	-0.082 ppb	-0.115 ppb	1.661 ppb	-0.004 ppb	-0.630 ppb	-0.118 ppb	-2.149 ppb
Concentration per Run 3	90.653 %	0.041 ppb	-0.103 ppb	-0.115 ppb	-0.855 ppb	-0.011 ppb	-0.578 ppb	-0.134 ppb	-2.183 ppb
Recovery Percentage 1		0.638 %	-9.274 %	-13.502 %	0.619 %	-1.657 %	-29.957 %	-12.510 %	-43.507 %
Concentration RSD	3.8 %	31.8 %	11.5 %	25.9 %	409.6 %	48.5 %	4.6 %	6.4 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.945 %	0.052 ppb	0.080 ppb	-0.019 ppb	0.291 ppb	95.205 %	0.003 ppb	-0.001 ppb	92.476 %
Concentration per Run 1	99.284 %	0.088 ppb	0.078 ppb	-0.023 ppb	0.292 ppb	94.578 %	0.001 ppb	-0.001 ppb	95.940 %
Concentration per Run 2	93.826 %	0.026 ppb	-0.030 ppb	-0.020 ppb	0.234 ppb	95.257 %	0.003 ppb	-0.001 ppb	91.226 %
Concentration per Run 3	91.724 %	0.042 ppb	0.192 ppb	-0.015 ppb	0.346 ppb	95.780 %	0.006 ppb	-0.001 ppb	90.261 %
Recovery Percentage 1		10.358 %	1.605 %	-0.193 %	14.537 %		0.851 %	-0.636 %	
Concentration RSD	4.1 %	62.2 %	138.4 %	19.5 %	19.4 %	0.6 %	69.8 %	0.0 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.072 ppb	-0.081 ppb	93.068 %	92.660 %	0.241 ppb	0.002 ppb	91.905 %
Concentration per Run 1	0.056 ppb	-0.060 ppb	94.919 %	95.863 %	0.163 ppb	0.002 ppb	93.275 %
Concentration per Run 2	0.074 ppb	-0.099 ppb	94.397 %	94.194 %	0.308 ppb	0.001 ppb	93.271 %
Concentration per Run 3	0.086 ppb	-0.085 ppb	89.886 %	87.923 %	0.252 ppb	0.003 ppb	89.167 %
Recovery Percentage 1	1.799 %	-16.206 %			24.088 %	0.215 %	
Concentration RSD	21.2 %	24.3 %	3.0 %	4.5 %	30.2 %	54.4 %	2.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	28	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1956857-1d5 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 12:41:59 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.520 %	105.618 %	0.007 ppb	408.494 ppb	16.433 ppb	3.846 ppb	-18.146 ppb	-15.687 ppb	94.832 %
Concentration per Run 1	90.009 %	94.944 %	0.009 ppb	430.187 ppb	17.465 ppb	4.561 ppb	-22.219 ppb	-15.113 ppb	94.616 %
Concentration per Run 2	91.466 %	108.989 %	0.009 ppb	389.761 ppb	18.625 ppb	3.830 ppb	-11.217 ppb	-9.717 ppb	95.720 %
Concentration per Run 3	90.085 %	112.921 %	0.003 ppb	405.534 ppb	13.209 ppb	3.146 ppb	-21.003 ppb	-22.231 ppb	94.159 %
Concentration RSD	0.9 %	8.9 %	49.4 %	5.0 %	17.4 %	18.4 %	33.2 %	40.0 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.368 %	0.112 ppb	2.651 ppb	0.218 ppb	15.520 ppb	0.046 ppb	1.256 ppb	0.162 ppb	7.396 ppb
Concentration per Run 1	91.721 %	0.161 ppb	2.690 ppb	0.065 ppb	15.387 ppb	0.038 ppb	1.289 ppb	0.275 ppb	7.885 ppb
Concentration per Run 2	97.596 %	0.016 ppb	2.532 ppb	0.262 ppb	16.231 ppb	0.058 ppb	1.605 ppb	0.090 ppb	6.927 ppb
Concentration per Run 3	90.787 %	0.160 ppb	2.732 ppb	0.326 ppb	14.943 ppb	0.043 ppb	0.874 ppb	0.123 ppb	7.376 ppb
Concentration RSD	4.0 %	74.2 %	4.0 %	62.6 %	4.2 %	22.2 %	29.2 %	60.6 %	6.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.425 %	0.281 ppb	-0.135 ppb	0.127 ppb	0.102 ppb	94.296 %	0.004 ppb	0.072 ppb	92.439 %
Concentration per Run 1	91.543 %	0.302 ppb	-0.186 ppb	0.124 ppb	0.062 ppb	93.553 %	0.000 ppb	0.071 ppb	92.111 %
Concentration per Run 2	87.672 %	0.311 ppb	-0.035 ppb	0.126 ppb	0.088 ppb	93.824 %	0.009 ppb	0.084 ppb	92.245 %
Concentration per Run 3	98.060 %	0.228 ppb	-0.184 ppb	0.131 ppb	0.156 ppb	95.512 %	0.003 ppb	0.062 ppb	92.962 %
Concentration RSD	5.7 %	16.2 %	64.0 %	2.8 %	47.8 %	1.1 %	119.2 %	15.3 %	0.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.063 ppb	0.636 ppb	96.534 %	95.748 %	0.026 ppb	0.153 ppb	96.840 %
Concentration per Run 1	0.027 ppb	0.545 ppb	95.641 %	94.600 %	0.000 ppb	0.155 ppb	95.750 %
Concentration per Run 2	0.058 ppb	0.698 ppb	96.622 %	96.167 %	0.041 ppb	0.143 ppb	97.316 %
Concentration per Run 3	0.105 ppb	0.666 ppb	97.339 %	96.477 %	0.038 ppb	0.162 ppb	97.453 %
Concentration RSD	62.1 %	12.7 %	0.9 %	1.1 %	88.0 %	6.3 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	29	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1956857-2d10 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 12:46:27 PM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.355 %	105.618 %	0.005 ppb	473.100 ppb	-2.489 ppb	1.207 ppb	5.984 ppb	-20.711 ppb	94.638 %
Concentration per Run 1	88.932 %	98.876 %	0.001 ppb	486.650 ppb	-1.933 ppb	0.216 ppb	-9.018 ppb	-11.153 ppb	93.559 %
Concentration per Run 2	89.252 %	112.360 %	0.004 ppb	450.353 ppb	-2.842 ppb	2.148 ppb	18.116 ppb	-22.141 ppb	94.679 %
Concentration per Run 3	89.880 %	105.618 %	0.009 ppb	482.296 ppb	-2.691 ppb	1.257 ppb	8.856 ppb	-28.838 ppb	95.676 %
Concentration RSD	0.5 %	6.4 %	84.2 %	4.2 %	19.6 %	80.1 %	230.5 %	43.1 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.481 %	0.043 ppb	0.829 ppb	0.103 ppb	6.933 ppb	0.003 ppb	54.340 ppb	53.040 ppb	266.615 ppb
Concentration per Run 1	92.790 %	0.076 ppb	0.839 ppb	0.314 ppb	4.959 ppb	0.009 ppb	53.270 ppb	52.305 ppb	261.749 ppb
Concentration per Run 2	95.460 %	-0.004 ppb	0.829 ppb	-0.033 ppb	7.839 ppb	-0.004 ppb	53.089 ppb	52.247 ppb	263.635 ppb
Concentration per Run 3	95.193 %	0.055 ppb	0.818 ppb	0.026 ppb	8.001 ppb	0.003 ppb	56.661 ppb	54.568 ppb	274.461 ppb
Concentration RSD	1.6 %	97.5 %	1.3 %	181.3 %	24.7 %	253.8 %	3.7 %	2.5 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.377 %	0.083 ppb	-0.039 ppb	0.006 ppb	0.038 ppb	95.040 %	-0.001 ppb	26.464 ppb	92.132 %
Concentration per Run 1	100.433 %	0.095 ppb	0.097 ppb	0.003 ppb	-0.027 ppb	94.563 %	0.000 ppb	25.921 ppb	91.781 %
Concentration per Run 2	98.740 %	0.037 ppb	-0.167 ppb	0.012 ppb	0.059 ppb	94.504 %	-0.003 ppb	26.759 ppb	91.395 %
Concentration per Run 3	95.958 %	0.118 ppb	-0.046 ppb	0.002 ppb	0.083 ppb	96.052 %	0.000 ppb	26.712 ppb	93.220 %
Concentration RSD	2.3 %	50.4 %	341.1 %	103.9 %	152.3 %	0.9 %	147.8 %	1.8 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.032 ppb	0.002 ppb	94.781 %	93.259 %	0.007 ppb	277.106 ppb	94.842 %
Concentration per Run 1	0.027 ppb	0.008 ppb	93.519 %	91.969 %	-0.013 ppb	269.276 ppb	94.762 %
Concentration per Run 2	0.031 ppb	-0.019 ppb	94.309 %	92.200 %	0.022 ppb	282.437 ppb	93.984 %
Concentration per Run 3	0.037 ppb	0.018 ppb	96.514 %	95.609 %	0.011 ppb	279.605 ppb	95.779 %
Concentration RSD	15.4 %	769.4 %	1.6 %	2.2 %	265.7 %	2.5 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	30	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2442888-01d5 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 12:50:56 PM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.918 %	112.360 %	0.956 ppb	175.670 ppb	1,293.229 ppb	8,548.917 ppb	1,003.941 ppb	7,783.108 ppb	97.728 %
Concentration per Run 1	89.914 %	107.303 %	0.975 ppb	180.582 ppb	1,330.940 ppb	8,568.208 ppb	1,013.837 ppb	7,990.735 ppb	97.343 %
Concentration per Run 2	90.321 %	110.112 %	0.970 ppb	176.683 ppb	1,327.188 ppb	8,756.432 ppb	1,008.475 ppb	7,681.242 ppb	97.927 %
Concentration per Run 3	89.520 %	119.663 %	0.923 ppb	169.746 ppb	1,221.560 ppb	8,322.109 ppb	989.510 ppb	7,677.347 ppb	97.913 %
Concentration RSD	0.4 %	5.8 %	3.0 %	3.1 %	4.8 %	2.5 %	1.3 %	2.3 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.662 %	20.858 ppb	9.979 ppb	719.636 ppb	12,247.872 ppb	6.922 ppb	6.560 ppb	8.265 ppb	59.487 ppb
Concentration per Run 1	96.929 %	20.401 ppb	9.889 ppb	728.079 ppb	12,325.571 ppb	6.885 ppb	6.759 ppb	8.771 ppb	61.632 ppb
Concentration per Run 2	94.793 %	21.656 ppb	10.114 ppb	725.264 ppb	12,467.673 ppb	7.253 ppb	7.095 ppb	8.452 ppb	58.364 ppb
Concentration per Run 3	98.264 %	20.518 ppb	9.936 ppb	705.564 ppb	11,950.374 ppb	6.627 ppb	5.825 ppb	7.571 ppb	58.465 ppb
Concentration RSD	1.8 %	3.3 %	1.2 %	1.7 %	2.2 %	4.5 %	10.0 %	7.5 %	3.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.208 %	5.809 ppb	0.911 ppb	21.564 ppb	0.099 ppb	93.797 %	0.070 ppb	0.607 ppb	91.669 %
Concentration per Run 1	95.943 %	5.855 ppb	0.802 ppb	22.314 ppb	0.123 ppb	93.323 %	0.084 ppb	0.590 ppb	90.545 %
Concentration per Run 2	102.823 %	5.777 ppb	1.017 ppb	21.485 ppb	0.083 ppb	93.203 %	0.070 ppb	0.597 ppb	92.038 %
Concentration per Run 3	107.857 %	5.793 ppb	0.913 ppb	20.893 ppb	0.092 ppb	94.864 %	0.055 ppb	0.634 ppb	92.426 %
Concentration RSD	5.9 %	0.7 %	11.8 %	3.3 %	21.1 %	1.0 %	20.9 %	3.9 %	1.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.335 ppb	89.197 ppb	97.009 %	95.672 %	0.120 ppb	26.934 ppb	100.253 %
Concentration per Run 1	0.320 ppb	88.747 ppb	96.008 %	93.946 %	0.081 ppb	26.428 ppb	99.265 %
Concentration per Run 2	0.335 ppb	88.475 ppb	96.481 %	95.863 %	0.143 ppb	27.129 ppb	100.033 %
Concentration per Run 3	0.350 ppb	90.369 ppb	98.537 %	97.208 %	0.136 ppb	27.244 ppb	101.461 %
Concentration RSD	4.4 %	1.1 %	1.4 %	1.7 %	28.0 %	1.6 %	1.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	31	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1956857-3d10 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 12:55:24 PM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.703 %	104.120 %	0.207 ppb	368.598 ppb	208.096 ppb	1,666.189 ppb	85.854 ppb	1,677.083 ppb	92.907 %
Concentration per Run 1	87.546 %	102.247 %	0.204 ppb	339.343 ppb	195.521 ppb	1,573.899 ppb	89.777 ppb	1,521.956 ppb	92.518 %
Concentration per Run 2	87.875 %	99.438 %	0.225 ppb	400.658 ppb	210.737 ppb	1,769.570 ppb	71.936 ppb	1,863.409 ppb	92.500 %
Concentration per Run 3	87.689 %	110.674 %	0.191 ppb	365.793 ppb	218.030 ppb	1,655.098 ppb	95.850 ppb	1,645.882 ppb	93.705 %
Concentration RSD	0.2 %	5.6 %	8.2 %	8.3 %	5.5 %	5.9 %	14.5 %	10.3 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.033 %	2.605 ppb	2.853 ppb	178.397 ppb	1,611.205 ppb	1.290 ppb	52.172 ppb	51.772 ppb	257.959 ppb
Concentration per Run 1	94.926 %	2.371 ppb	2.675 ppb	164.980 ppb	1,590.250 ppb	1.279 ppb	52.427 ppb	49.792 ppb	254.890 ppb
Concentration per Run 2	86.915 %	2.636 ppb	2.943 ppb	190.779 ppb	1,616.728 ppb	1.334 ppb	53.397 ppb	53.631 ppb	260.636 ppb
Concentration per Run 3	94.258 %	2.808 ppb	2.942 ppb	179.432 ppb	1,626.638 ppb	1.257 ppb	50.691 ppb	51.895 ppb	258.350 ppb
Concentration RSD	4.8 %	8.4 %	5.4 %	7.2 %	1.2 %	3.1 %	2.6 %	3.7 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.597 %	1.222 ppb	0.151 ppb	6.210 ppb	0.038 ppb	94.111 %	0.010 ppb	25.536 ppb	91.561 %
Concentration per Run 1	98.377 %	1.124 ppb	0.097 ppb	6.280 ppb	0.035 ppb	93.755 %	0.009 ppb	25.260 ppb	92.280 %
Concentration per Run 2	103.699 %	1.179 ppb	0.200 ppb	6.223 ppb	-0.028 ppb	93.654 %	0.012 ppb	25.807 ppb	90.435 %
Concentration per Run 3	102.717 %	1.363 ppb	0.155 ppb	6.128 ppb	0.106 ppb	94.923 %	0.009 ppb	25.542 ppb	91.967 %
Concentration RSD	2.8 %	10.2 %	34.0 %	1.2 %	177.1 %	0.7 %	18.5 %	1.1 %	1.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.183 ppb	20.238 ppb	94.757 %	94.708 %	0.010 ppb	267.900 ppb	97.261 %
Concentration per Run 1	0.162 ppb	20.461 ppb	92.899 %	92.979 %	-0.007 ppb	264.787 ppb	96.913 %
Concentration per Run 2	0.207 ppb	19.863 ppb	95.473 %	94.787 %	0.018 ppb	271.019 ppb	96.576 %
Concentration per Run 3	0.179 ppb	20.390 ppb	95.900 %	96.359 %	0.020 ppb	267.894 ppb	98.295 %
Concentration RSD	12.6 %	1.6 %	1.7 %	1.8 %	144.6 %	1.2 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	32	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1956857-4d5 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 12:59:53 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.003 %	102.996 %	0.634 ppb	222.474 ppb	693.508 ppb	5,026.190 ppb	345.534 ppb	6,505.813 ppb	94.874 %
Concentration per Run 1	88.188 %	110.674 %	0.645 ppb	208.147 ppb	679.775 ppb	4,768.703 ppb	344.684 ppb	6,056.695 ppb	94.716 %
Concentration per Run 2	89.118 %	98.315 %	0.630 ppb	235.617 ppb	743.841 ppb	5,168.116 ppb	340.006 ppb	6,585.534 ppb	94.432 %
Concentration per Run 3	89.702 %	100.000 %	0.628 ppb	223.659 ppb	656.909 ppb	5,141.751 ppb	351.913 ppb	6,875.210 ppb	95.474 %
Concentration RSD	0.9 %	6.5 %	1.4 %	6.2 %	6.5 %	4.4 %	1.7 %	6.4 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.659 %	9.287 ppb	3.613 ppb	458.122 ppb	4,532.140 ppb	3.185 ppb	3.115 ppb	6.734 ppb	35.719 ppb
Concentration per Run 1	98.798 %	9.250 ppb	3.663 ppb	441.912 ppb	4,390.846 ppb	2.969 ppb	2.815 ppb	6.749 ppb	36.623 ppb
Concentration per Run 2	91.321 %	8.837 ppb	3.395 ppb	463.448 ppb	4,496.105 ppb	3.263 ppb	3.304 ppb	6.789 ppb	34.298 ppb
Concentration per Run 3	93.858 %	9.775 ppb	3.783 ppb	469.004 ppb	4,709.469 ppb	3.323 ppb	3.227 ppb	6.665 ppb	36.237 ppb
Concentration RSD	4.0 %	5.1 %	5.5 %	3.1 %	3.6 %	5.9 %	8.4 %	0.9 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.144 %	3.047 ppb	0.839 ppb	19.501 ppb	0.038 ppb	93.102 %	0.043 ppb	0.717 ppb	91.552 %
Concentration per Run 1	100.571 %	3.388 ppb	0.548 ppb	19.757 ppb	0.022 ppb	93.228 %	0.036 ppb	0.701 ppb	91.814 %
Concentration per Run 2	106.968 %	2.646 ppb	0.712 ppb	19.520 ppb	0.058 ppb	92.496 %	0.052 ppb	0.735 ppb	89.786 %
Concentration per Run 3	104.894 %	3.106 ppb	1.259 ppb	19.227 ppb	0.033 ppb	93.581 %	0.042 ppb	0.715 ppb	93.057 %
Concentration RSD	3.1 %	12.3 %	44.4 %	1.4 %	48.4 %	0.6 %	19.1 %	2.4 %	1.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.284 ppb	53.188 ppb	95.598 %	94.790 %	0.050 ppb	21.021 ppb	98.888 %
Concentration per Run 1	0.262 ppb	53.590 ppb	93.245 %	91.354 %	0.032 ppb	21.099 ppb	96.508 %
Concentration per Run 2	0.316 ppb	52.798 ppb	94.732 %	93.426 %	0.057 ppb	21.051 ppb	98.453 %
Concentration per Run 3	0.272 ppb	53.176 ppb	98.818 %	99.592 %	0.060 ppb	20.913 ppb	101.702 %
Concentration RSD	10.1 %	0.7 %	3.0 %	4.5 %	31.5 %	0.5 %	2.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	33	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2442888-02d5 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 1:04:22 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.490 %	105.805 %	0.446 ppb	209.907 ppb	484.363 ppb	3,766.743 ppb	504.384 ppb	4,715.406 ppb	97.076 %
Concentration per Run 1	89.898 %	95.506 %	0.454 ppb	215.066 ppb	500.789 ppb	3,819.534 ppb	506.611 ppb	4,541.936 ppb	97.254 %
Concentration per Run 2	90.588 %	108.427 %	0.445 ppb	208.021 ppb	455.784 ppb	3,743.093 ppb	526.756 ppb	4,930.263 ppb	95.314 %
Concentration per Run 3	90.984 %	113.483 %	0.439 ppb	206.635 ppb	496.516 ppb	3,737.604 ppb	479.785 ppb	4,674.018 ppb	98.659 %
Concentration RSD	0.6 %	8.8 %	1.7 %	2.2 %	5.1 %	1.2 %	4.7 %	4.2 %	1.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.434 %	6.305 ppb	23.918 ppb	822.260 ppb	5,948.920 ppb	3.879 ppb	7.935 ppb	111.571 ppb	70.478 ppb
Concentration per Run 1	93.991 %	6.211 ppb	22.865 ppb	786.996 ppb	5,681.936 ppb	3.649 ppb	7.737 ppb	109.563 ppb	70.014 ppb
Concentration per Run 2	91.454 %	6.301 ppb	24.185 ppb	846.058 ppb	6,059.534 ppb	3.831 ppb	8.033 ppb	112.378 ppb	71.339 ppb
Concentration per Run 3	91.855 %	6.402 ppb	24.706 ppb	833.727 ppb	6,105.289 ppb	4.157 ppb	8.035 ppb	112.771 ppb	70.082 ppb
Concentration RSD	1.5 %	1.5 %	4.0 %	3.8 %	3.9 %	6.6 %	2.2 %	1.6 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.724 %	6.301 ppb	0.895 ppb	13.260 ppb	0.126 ppb	94.955 %	0.091 ppb	0.944 ppb	91.192 %
Concentration per Run 1	101.568 %	6.086 ppb	0.903 ppb	13.123 ppb	0.072 ppb	92.133 %	0.089 ppb	1.022 ppb	88.249 %
Concentration per Run 2	99.134 %	6.383 ppb	0.710 ppb	13.309 ppb	0.155 ppb	96.271 %	0.088 ppb	0.892 ppb	92.447 %
Concentration per Run 3	104.471 %	6.435 ppb	1.071 ppb	13.348 ppb	0.151 ppb	96.462 %	0.095 ppb	0.918 ppb	92.878 %
Concentration RSD	2.6 %	3.0 %	20.2 %	0.9 %	37.0 %	2.6 %	4.4 %	7.3 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.883 ppb	59.643 ppb	96.541 %	94.703 %	0.021 ppb	89.939 ppb	99.083 %
Concentration per Run 1	0.904 ppb	59.941 ppb	93.227 %	92.166 %	0.010 ppb	88.987 ppb	96.948 %
Concentration per Run 2	0.849 ppb	59.136 ppb	96.704 %	94.789 %	0.024 ppb	90.629 ppb	99.184 %
Concentration per Run 3	0.896 ppb	59.854 ppb	99.691 %	97.153 %	0.030 ppb	90.200 ppb	101.118 %
Concentration RSD	3.4 %	0.7 %	3.4 %	2.6 %	49.0 %	0.9 %	2.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	34	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2442888-03d5 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 1:08:49 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.831 %	114.607 %	0.535 ppb	284.503 ppb	588.065 ppb	5,801.617 ppb	266.652 ppb	3,930.627 ppb	97.374 %
Concentration per Run 1	92.895 %	101.124 %	0.535 ppb	317.296 ppb	649.136 ppb	6,123.972 ppb	288.464 ppb	4,182.431 ppb	97.355 %
Concentration per Run 2	92.941 %	130.899 %	0.520 ppb	255.253 ppb	536.185 ppb	5,427.492 ppb	254.393 ppb	3,839.261 ppb	96.519 %
Concentration per Run 3	92.657 %	111.798 %	0.551 ppb	280.959 ppb	578.875 ppb	5,853.389 ppb	257.099 ppb	3,770.188 ppb	98.246 %
Concentration RSD	0.2 %	13.2 %	2.9 %	11.0 %	9.7 %	6.1 %	7.1 %	5.6 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.196 %	6.238 ppb	8.774 ppb	119.984 ppb	3,041.730 ppb	2.284 ppb	5.335 ppb	12.367 ppb	24.549 ppb
Concentration per Run 1	93.991 %	6.166 ppb	8.839 ppb	121.952 ppb	3,071.100 ppb	2.288 ppb	5.162 ppb	11.679 ppb	22.928 ppb
Concentration per Run 2	95.727 %	6.518 ppb	8.914 ppb	121.406 ppb	3,067.054 ppb	2.464 ppb	5.283 ppb	13.080 ppb	24.881 ppb
Concentration per Run 3	101.869 %	6.032 ppb	8.570 ppb	116.594 ppb	2,987.035 ppb	2.099 ppb	5.561 ppb	12.343 ppb	25.838 ppb
Concentration RSD	4.3 %	4.0 %	2.1 %	2.5 %	1.6 %	8.0 %	3.8 %	5.7 %	6.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.262 %	2.786 ppb	0.906 ppb	14.352 ppb	0.096 ppb	96.893 %	0.078 ppb	0.337 ppb	94.015 %
Concentration per Run 1	107.829 %	2.526 ppb	1.206 ppb	14.066 ppb	0.068 ppb	95.330 %	0.089 ppb	0.340 ppb	94.756 %
Concentration per Run 2	100.753 %	2.841 ppb	0.465 ppb	14.459 ppb	0.104 ppb	97.247 %	0.075 ppb	0.320 ppb	93.520 %
Concentration per Run 3	101.205 %	2.991 ppb	1.047 ppb	14.531 ppb	0.115 ppb	98.101 %	0.071 ppb	0.351 ppb	93.768 %
Concentration RSD	3.8 %	8.5 %	43.0 %	1.7 %	26.0 %	1.5 %	12.1 %	4.8 %	0.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.338 ppb	43.970 ppb	97.834 %	95.749 %	0.029 ppb	41.410 ppb	100.369 %
Concentration per Run 1	0.348 ppb	43.706 ppb	96.850 %	94.596 %	0.016 ppb	40.863 ppb	100.429 %
Concentration per Run 2	0.322 ppb	44.531 ppb	97.310 %	94.744 %	0.039 ppb	41.536 ppb	100.116 %
Concentration per Run 3	0.343 ppb	43.672 ppb	99.342 %	97.906 %	0.032 ppb	41.831 ppb	100.561 %
Concentration RSD	4.0 %	1.1 %	1.4 %	2.0 %	39.9 %	1.2 %	0.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	35	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2442888-04d5 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 1:13:16 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.435 %	115.730 %	0.755 ppb	177.536 ppb	1,001.208 ppb	6,536.759 ppb	812.323 ppb	6,054.662 ppb	99.759 %
Concentration per Run 1	90.918 %	105.618 %	0.767 ppb	183.375 ppb	1,036.117 ppb	6,780.489 ppb	850.092 ppb	6,025.291 ppb	99.941 %
Concentration per Run 2	91.652 %	119.663 %	0.757 ppb	176.438 ppb	961.679 ppb	6,436.078 ppb	778.418 ppb	6,075.880 ppb	99.764 %
Concentration per Run 3	91.736 %	121.910 %	0.740 ppb	172.794 ppb	1,005.827 ppb	6,393.711 ppb	808.458 ppb	6,062.815 ppb	99.573 %
Concentration RSD	0.5 %	7.6 %	1.8 %	3.0 %	3.7 %	3.2 %	4.4 %	0.4 %	0.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.080 %	13.601 ppb	10.764 ppb	1,956.129 ppb	14,266.837 ppb	10.766 ppb	8.925 ppb	11.509 ppb	632.953 ppb
Concentration per Run 1	93.858 %	13.215 ppb	11.033 ppb	1,978.047 ppb	14,529.856 ppb	11.403 ppb	8.959 ppb	11.894 ppb	651.643 ppb
Concentration per Run 2	93.324 %	13.198 ppb	10.435 ppb	1,858.594 ppb	13,548.449 ppb	9.898 ppb	8.308 ppb	10.417 ppb	577.591 ppb
Concentration per Run 3	95.059 %	14.389 ppb	10.822 ppb	2,031.747 ppb	14,722.207 ppb	10.996 ppb	9.508 ppb	12.217 ppb	669.626 ppb
Concentration RSD	0.9 %	5.0 %	2.8 %	4.5 %	4.4 %	7.2 %	6.7 %	8.3 %	7.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	139.633 %	13.594 ppb	0.471 ppb	23.372 ppb	0.205 ppb	96.947 %	0.053 ppb	0.399 ppb	93.587 %
Concentration per Run 1	132.294 %	13.983 ppb	0.575 ppb	24.211 ppb	0.196 ppb	94.599 %	0.052 ppb	0.372 ppb	92.375 %
Concentration per Run 2	154.660 %	12.228 ppb	0.644 ppb	21.923 ppb	0.242 ppb	97.162 %	0.049 ppb	0.470 ppb	93.385 %
Concentration per Run 3	131.944 %	14.572 ppb	0.195 ppb	23.983 ppb	0.178 ppb	99.081 %	0.059 ppb	0.355 ppb	95.001 %
Concentration RSD	9.3 %	9.0 %	51.3 %	5.4 %	16.0 %	2.3 %	9.0 %	15.6 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.339 ppb	155.900 ppb	96.767 %	94.927 %	0.118 ppb	24.552 ppb	98.183 %
Concentration per Run 1	0.352 ppb	155.221 ppb	95.343 %	92.729 %	0.097 ppb	24.485 ppb	96.842 %
Concentration per Run 2	0.318 ppb	156.743 ppb	96.642 %	96.796 %	0.142 ppb	24.715 ppb	97.805 %
Concentration per Run 3	0.346 ppb	155.737 ppb	98.317 %	95.255 %	0.115 ppb	24.456 ppb	99.901 %
Concentration RSD	5.4 %	0.5 %	1.5 %	2.2 %	18.9 %	0.6 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	36	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2442888-05d5 A2-SEM	Rack	1		
Analysis started at:	8/27/2024 1:17:43 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.760 %	110.487 %	0.486 ppb	238.393 ppb	594.099 ppb	3,892.778 ppb	606.491 ppb	2,653.416 ppb	102.649 %
Concentration per Run 1	95.475 %	109.551 %	0.469 ppb	228.650 ppb	588.060 ppb	3,814.577 ppb	618.124 ppb	2,847.643 ppb	102.454 %
Concentration per Run 2	95.212 %	119.663 %	0.498 ppb	226.989 ppb	554.180 ppb	3,753.052 ppb	599.290 ppb	2,534.197 ppb	102.692 %
Concentration per Run 3	96.593 %	102.247 %	0.491 ppb	259.541 ppb	640.056 ppb	4,110.703 ppb	602.059 ppb	2,578.408 ppb	102.800 %
Concentration RSD	0.8 %	7.9 %	3.2 %	7.7 %	7.3 %	4.9 %	1.7 %	6.4 %	0.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.510 %	6.765 ppb	15.576 ppb	1,261.111 ppb	5,657.722 ppb	4.960 ppb	9.681 ppb	9.951 ppb	58.978 ppb
Concentration per Run 1	100.133 %	6.757 ppb	15.901 ppb	1,244.166 ppb	5,593.878 ppb	4.997 ppb	9.066 ppb	10.181 ppb	58.060 ppb
Concentration per Run 2	97.596 %	6.535 ppb	15.186 ppb	1,254.894 ppb	5,646.830 ppb	5.086 ppb	9.625 ppb	9.313 ppb	57.367 ppb
Concentration per Run 3	100.801 %	7.004 ppb	15.640 ppb	1,284.274 ppb	5,732.458 ppb	4.798 ppb	10.353 ppb	10.359 ppb	61.507 ppb
Concentration RSD	1.7 %	3.5 %	2.3 %	1.6 %	1.2 %	3.0 %	6.7 %	5.6 %	3.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	112.732 %	4.486 ppb	0.858 ppb	9.449 ppb	0.169 ppb	99.570 %	0.073 ppb	0.448 ppb	95.736 %
Concentration per Run 1	112.333 %	4.519 ppb	0.867 ppb	9.451 ppb	0.110 ppb	98.657 %	0.078 ppb	0.429 ppb	96.696 %
Concentration per Run 2	116.901 %	4.626 ppb	1.012 ppb	9.276 ppb	0.142 ppb	98.538 %	0.069 ppb	0.425 ppb	95.357 %
Concentration per Run 3	108.960 %	4.312 ppb	0.695 ppb	9.620 ppb	0.256 ppb	101.515 %	0.074 ppb	0.490 ppb	95.155 %
Concentration RSD	3.5 %	3.5 %	18.5 %	1.8 %	45.3 %	1.7 %	5.7 %	8.2 %	0.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.353 ppb	70.622 ppb	98.671 %	96.431 %	0.051 ppb	33.260 ppb	100.499 %
Concentration per Run 1	0.360 ppb	69.938 ppb	97.822 %	94.599 %	0.036 ppb	32.847 ppb	99.665 %
Concentration per Run 2	0.360 ppb	69.767 ppb	99.002 %	97.261 %	0.055 ppb	33.388 ppb	100.459 %
Concentration per Run 3	0.339 ppb	72.162 ppb	99.187 %	97.432 %	0.064 ppb	33.543 ppb	101.374 %
Concentration RSD	3.5 %	1.9 %	0.8 %	1.6 %	27.5 %	1.1 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	38	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 1:23:55 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.536 %	111.985 %	61.658 ppb	5,839.622 ppb	5,888.292 ppb	60.499 ppb	6,295.114 ppb	6,322.776 ppb	90.699 %
Concentration per Run 1	84.067 %	107.865 %	61.487 ppb	5,729.899 ppb	5,775.970 ppb	57.352 ppb	6,214.055 ppb	6,157.533 ppb	89.783 %
Concentration per Run 2	84.858 %	109.551 %	61.733 ppb	6,004.673 ppb	6,070.117 ppb	61.275 ppb	6,437.950 ppb	6,516.665 ppb	90.839 %
Concentration per Run 3	84.683 %	118.539 %	61.753 ppb	5,784.294 ppb	5,818.789 ppb	62.869 ppb	6,233.336 ppb	6,294.130 ppb	91.476 %
Recovery Percentage 1			102.763 %	97.327 %	98.138 %	100.831 %	104.919 %	105.380 %	
Concentration RSD	0.5 %	5.1 %	0.2 %	2.5 %	2.7 %	4.7 %	2.0 %	2.9 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.508 %	62.465 ppb	62.911 ppb	63.867 ppb	6,200.904 ppb	61.188 ppb	60.457 ppb	62.000 ppb	60.169 ppb
Concentration per Run 1	97.062 %	62.905 ppb	61.415 ppb	61.299 ppb	6,064.381 ppb	60.200 ppb	59.720 ppb	62.596 ppb	59.780 ppb
Concentration per Run 2	94.258 %	62.772 ppb	64.769 ppb	65.404 ppb	6,334.833 ppb	62.878 ppb	63.209 ppb	62.215 ppb	61.676 ppb
Concentration per Run 3	101.202 %	61.719 ppb	62.549 ppb	64.897 ppb	6,203.497 ppb	60.485 ppb	58.443 ppb	61.190 ppb	59.049 ppb
Recovery Percentage 1		104.109 %	104.851 %	106.445 %	103.348 %	101.979 %	100.762 %	103.334 %	100.281 %
Concentration RSD	3.6 %	1.0 %	2.7 %	3.5 %	2.2 %	2.4 %	4.1 %	1.2 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.600 %	59.746 ppb	59.925 ppb	58.631 ppb	58.532 ppb	94.716 %	60.037 ppb	59.709 ppb	94.118 %
Concentration per Run 1	92.698 %	58.872 ppb	57.612 ppb	56.992 ppb	57.799 ppb	94.793 %	59.473 ppb	59.159 ppb	92.681 %
Concentration per Run 2	97.116 %	59.814 ppb	60.937 ppb	59.386 ppb	59.394 ppb	95.083 %	60.725 ppb	59.522 ppb	95.269 %
Concentration per Run 3	96.984 %	60.552 ppb	61.226 ppb	59.514 ppb	58.404 ppb	94.271 %	59.912 ppb	60.447 ppb	94.403 %
Recovery Percentage 1		99.577 %	99.875 %	97.718 %	97.554 %		100.061 %	99.516 %	
Concentration RSD	2.6 %	1.4 %	3.4 %	2.4 %	1.4 %	0.4 %	1.1 %	1.1 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.144 ppb	58.737 ppb	96.533 %	96.453 %	60.290 ppb	61.063 ppb	88.067 %
Concentration per Run 1	58.866 ppb	56.366 ppb	96.393 %	93.701 %	60.542 ppb	61.571 ppb	88.333 %
Concentration per Run 2	59.251 ppb	60.891 ppb	96.532 %	97.403 %	61.042 ppb	61.730 ppb	89.261 %
Concentration per Run 3	59.314 ppb	58.952 ppb	96.675 %	98.256 %	59.286 ppb	59.887 ppb	86.606 %
Recovery Percentage 1	98.573 %	97.894 %			100.483 %	101.771 %	
Concentration RSD	0.4 %	3.9 %	0.1 %	2.5 %	1.5 %	1.7 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	39	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 1:28:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.582 %	108.802 %	0.008 ppb	-18.667 ppb	-5.843 ppb	-1.376 ppb	-26.751 ppb	-28.849 ppb	88.505 %
Concentration per Run 1	83.993 %	106.180 %	0.007 ppb	-17.192 ppb	-4.768 ppb	-1.474 ppb	-28.487 ppb	-32.049 ppb	88.811 %
Concentration per Run 2	85.339 %	101.685 %	0.001 ppb	-19.558 ppb	-6.354 ppb	-1.237 ppb	-22.772 ppb	-35.539 ppb	89.037 %
Concentration per Run 3	84.415 %	118.539 %	0.017 ppb	-19.249 ppb	-6.406 ppb	-1.415 ppb	-28.992 ppb	-18.959 ppb	87.667 %
Recovery Percentage 1			1.687 %	-18.667 %	-8.347 %	-13.756 %	-26.751 %	-28.849 %	
Concentration RSD	0.8 %	8.0 %	99.0 %	6.9 %	15.9 %	9.0 %	12.9 %	30.3 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.881 %	0.002 ppb	-0.104 ppb	-0.100 ppb	1.382 ppb	-0.006 ppb	-0.609 ppb	-0.135 ppb	-2.167 ppb
Concentration per Run 1	92.122 %	-0.022 ppb	-0.085 ppb	-0.118 ppb	0.151 ppb	-0.004 ppb	-0.566 ppb	-0.047 ppb	-2.235 ppb
Concentration per Run 2	94.659 %	-0.003 ppb	-0.112 ppb	-0.061 ppb	0.751 ppb	-0.011 ppb	-0.662 ppb	-0.155 ppb	-2.158 ppb
Concentration per Run 3	97.864 %	0.031 ppb	-0.114 ppb	-0.121 ppb	3.245 ppb	-0.004 ppb	-0.600 ppb	-0.204 ppb	-2.110 ppb
Recovery Percentage 1		0.033 %	-10.395 %	-10.016 %	2.764 %	-1.277 %	-30.460 %	-13.549 %	-43.347 %
Concentration RSD	3.0 %	1,620.2 %	15.7 %	33.9 %	118.7 %	57.3 %	8.0 %	59.4 %	2.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.001 %	0.017 ppb	-0.033 ppb	-0.019 ppb	0.208 ppb	91.790 %	-0.001 ppb	0.002 ppb	89.587 %
Concentration per Run 1	103.033 %	-0.012 ppb	-0.056 ppb	-0.015 ppb	0.109 ppb	92.062 %	0.000 ppb	-0.001 ppb	87.121 %
Concentration per Run 2	99.102 %	0.057 ppb	-0.172 ppb	-0.019 ppb	0.253 ppb	90.137 %	-0.003 ppb	-0.001 ppb	88.027 %
Concentration per Run 3	109.868 %	0.006 ppb	0.130 ppb	-0.024 ppb	0.262 ppb	93.171 %	0.000 ppb	0.007 ppb	93.613 %
Recovery Percentage 1		3.386 %	-0.656 %	-0.191 %	10.395 %		-0.270 %	0.773 %	
Concentration RSD	5.2 %	213.4 %	463.2 %	25.5 %	41.2 %	1.7 %	165.6 %	315.6 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.030 ppb	-0.081 ppb	91.711 %	91.520 %	0.217 ppb	-0.001 ppb	85.951 %
Concentration per Run 1	0.011 ppb	-0.099 ppb	91.265 %	89.204 %	0.161 ppb	0.001 ppb	86.270 %
Concentration per Run 2	0.027 ppb	-0.071 ppb	90.026 %	90.201 %	0.273 ppb	-0.002 ppb	85.781 %
Concentration per Run 3	0.051 ppb	-0.072 ppb	93.843 %	95.153 %	0.216 ppb	-0.002 ppb	85.803 %
Recovery Percentage 1	0.741 %	-16.103 %			21.683 %	-0.097 %	
Concentration RSD	67.6 %	19.4 %	2.1 %	3.5 %	26.0 %	201.3 %	0.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	40	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447382-01 6020TL	Rack	1		
Analysis started at:	8/27/2024 1:41:48 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.199 %	121.536 %	7.686 ppb	22,422.073 ppb	12,430.896 ppb	166.930 ppb	5,854.447 ppb	54,505.969 ppb	86.303 %
Concentration per Run 1	94.825 %	116.292 %	7.763 ppb	22,264.789 ppb	12,281.244 ppb	169.030 ppb	5,894.939 ppb	53,461.383 ppb	85.338 %
Concentration per Run 2	95.397 %	122.472 %	7.616 ppb	22,400.682 ppb	12,460.863 ppb	159.291 ppb	5,603.822 ppb	53,521.814 ppb	86.953 %
Concentration per Run 3	95.374 %	125.843 %	7.679 ppb	22,600.749 ppb	12,550.582 ppb	172.469 ppb	6,064.579 ppb	56,534.708 ppb	86.617 %
Concentration RSD	0.3 %	4.0 %	1.0 %	0.8 %	1.1 %	4.1 %	4.0 %	3.2 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	85.624 %	0.084 ppb	0.226 ppb	4.932 ppb	58.806 ppb	0.037 ppb	-0.067 ppb	0.315 ppb	304.208 ppb
Concentration per Run 1	89.318 %	0.086 ppb	0.158 ppb	4.793 ppb	55.270 ppb	0.033 ppb	-0.238 ppb	0.310 ppb	301.685 ppb
Concentration per Run 2	85.045 %	0.093 ppb	0.322 ppb	4.707 ppb	66.578 ppb	0.043 ppb	-0.047 ppb	0.196 ppb	309.509 ppb
Concentration per Run 3	82.508 %	0.072 ppb	0.197 ppb	5.297 ppb	54.569 ppb	0.035 ppb	0.083 ppb	0.439 ppb	301.429 ppb
Concentration RSD	4.0 %	12.5 %	38.0 %	6.5 %	11.5 %	13.8 %	240.3 %	38.7 %	1.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	83.994 %	0.060 ppb	1.182 ppb	221.257 ppb	0.928 ppb	82.958 %	0.000 ppb	0.465 ppb	83.995 %
Concentration per Run 1	83.802 %	0.125 ppb	1.506 ppb	220.643 ppb	1.009 ppb	82.962 %	-0.003 ppb	0.457 ppb	85.180 %
Concentration per Run 2	81.671 %	0.095 ppb	1.135 ppb	225.473 ppb	0.835 ppb	82.440 %	0.000 ppb	0.454 ppb	83.630 %
Concentration per Run 3	86.509 %	-0.040 ppb	0.904 ppb	217.654 ppb	0.939 ppb	83.472 %	0.002 ppb	0.483 ppb	83.175 %
Concentration RSD	2.9 %	146.3 %	25.7 %	1.8 %	9.4 %	0.6 %	1,928.4 %	3.3 %	1.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.055 ppb	18.918 ppb	90.933 %	90.652 %	0.014 ppb	0.351 ppb	80.229 %
Concentration per Run 1	0.031 ppb	18.369 ppb	91.061 %	91.503 %	-0.007 ppb	0.330 ppb	80.986 %
Concentration per Run 2	0.078 ppb	19.593 ppb	91.305 %	89.835 %	0.018 ppb	0.370 ppb	79.727 %
Concentration per Run 3	0.055 ppb	18.792 ppb	90.433 %	90.619 %	0.030 ppb	0.352 ppb	79.973 %
Concentration RSD	43.4 %	3.3 %	0.5 %	0.9 %	136.0 %	5.8 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	41	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447382-02 6020TL	Rack	1		
Analysis started at:	8/27/2024 1:46:16 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.680 %	104.494 %	5.425 ppb	8,212.239 ppb	987.152 ppb	707.046 ppb	2,966.122 ppb	9,260.911 ppb	94.057 %
Concentration per Run 1	84.902 %	100.562 %	5.333 ppb	8,236.629 ppb	1,002.270 ppb	709.597 ppb	2,917.900 ppb	9,319.477 ppb	92.471 %
Concentration per Run 2	86.076 %	103.371 %	5.506 ppb	8,176.676 ppb	971.472 ppb	697.321 ppb	3,000.757 ppb	9,241.149 ppb	95.181 %
Concentration per Run 3	86.061 %	109.551 %	5.434 ppb	8,223.412 ppb	987.713 ppb	714.219 ppb	2,979.708 ppb	9,222.107 ppb	94.519 %
Concentration RSD	0.8 %	4.4 %	1.6 %	0.4 %	1.6 %	1.2 %	1.5 %	0.6 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	86.737 %	0.506 ppb	0.376 ppb	26.014 ppb	54.034 ppb	0.025 ppb	0.303 ppb	0.573 ppb	197.320 ppb
Concentration per Run 1	87.582 %	0.488 ppb	0.366 ppb	25.386 ppb	55.623 ppb	0.025 ppb	0.285 ppb	0.481 ppb	194.003 ppb
Concentration per Run 2	86.648 %	0.447 ppb	0.352 ppb	25.366 ppb	52.048 ppb	0.032 ppb	0.487 ppb	0.642 ppb	194.834 ppb
Concentration per Run 3	85.980 %	0.583 ppb	0.411 ppb	27.291 ppb	54.431 ppb	0.018 ppb	0.135 ppb	0.594 ppb	203.124 ppb
Concentration RSD	0.9 %	13.8 %	8.1 %	4.2 %	3.4 %	27.0 %	58.4 %	14.4 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	90.374 %	0.072 ppb	0.038 ppb	28.749 ppb	0.296 ppb	88.366 %	0.001 ppb	0.143 ppb	87.194 %
Concentration per Run 1	89.668 %	0.117 ppb	0.103 ppb	28.691 ppb	0.293 ppb	88.069 %	0.002 ppb	0.189 ppb	87.060 %
Concentration per Run 2	92.268 %	0.052 ppb	-0.035 ppb	28.323 ppb	0.331 ppb	87.718 %	0.000 ppb	0.121 ppb	86.833 %
Concentration per Run 3	89.184 %	0.048 ppb	0.046 ppb	29.235 ppb	0.264 ppb	89.312 %	0.000 ppb	0.120 ppb	87.689 %
Concentration RSD	1.8 %	52.9 %	183.7 %	1.6 %	11.4 %	0.9 %	136.0 %	27.5 %	0.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.221 ppb	29.666 ppb	91.086 %	90.843 %	0.003 ppb	0.262 ppb	87.471 %
Concentration per Run 1	0.198 ppb	29.458 ppb	91.073 %	90.163 %	-0.021 ppb	0.238 ppb	87.706 %
Concentration per Run 2	0.225 ppb	28.963 ppb	90.598 %	91.570 %	0.014 ppb	0.274 ppb	87.050 %
Concentration per Run 3	0.241 ppb	30.576 ppb	91.587 %	90.796 %	0.015 ppb	0.273 ppb	87.658 %
Concentration RSD	9.8 %	2.8 %	0.5 %	0.8 %	757.1 %	7.7 %	0.4 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	42	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-01 6020TL	Rack	1		
Analysis started at:	8/27/2024 1:50:44 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.543 %	99.813 %	0.005 ppb	51,620.678 ppb	522.024 ppb	726.934 ppb	25,782.656 ppb	69,128.967 ppb	84.354 %
Concentration per Run 1	77.720 %	92.697 %	0.007 ppb	54,049.540 ppb	544.055 ppb	766.180 ppb	26,352.205 ppb	70,815.092 ppb	84.069 %
Concentration per Run 2	77.375 %	112.360 %	-0.002 ppb	47,529.665 ppb	463.836 ppb	654.072 ppb	24,232.624 ppb	66,456.461 ppb	84.353 %
Concentration per Run 3	77.535 %	94.382 %	0.011 ppb	53,282.830 ppb	558.180 ppb	760.550 ppb	26,763.140 ppb	70,115.347 ppb	84.641 %
Concentration RSD	0.2 %	10.9 %	121.2 %	6.9 %	9.7 %	8.7 %	5.3 %	3.4 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	85.713 %	14.992 ppb	0.082 ppb	872.817 ppb	364.350 ppb	0.551 ppb	3.885 ppb	0.994 ppb	-0.501 ppb
Concentration per Run 1	83.844 %	15.270 ppb	0.112 ppb	891.992 ppb	358.511 ppb	0.595 ppb	3.654 ppb	0.894 ppb	-0.627 ppb
Concentration per Run 2	89.719 %	14.281 ppb	0.049 ppb	841.260 ppb	355.478 ppb	0.510 ppb	3.916 ppb	0.951 ppb	-0.629 ppb
Concentration per Run 3	83.577 %	15.424 ppb	0.084 ppb	885.201 ppb	379.062 ppb	0.549 ppb	4.084 ppb	1.138 ppb	-0.246 ppb
Concentration RSD	4.1 %	4.1 %	38.6 %	3.2 %	3.5 %	7.7 %	5.6 %	12.9 %	44.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	83.263 %	4.781 ppb	0.815 ppb	613.441 ppb	38.459 ppb	84.038 %	-0.001 ppb	0.003 ppb	84.863 %
Concentration per Run 1	84.150 %	4.924 ppb	0.975 ppb	613.042 ppb	39.339 ppb	83.779 %	0.000 ppb	0.003 ppb	86.415 %
Concentration per Run 2	83.318 %	4.463 ppb	0.731 ppb	615.362 ppb	37.174 ppb	83.957 %	0.000 ppb	-0.001 ppb	84.189 %
Concentration per Run 3	82.322 %	4.956 ppb	0.740 ppb	611.919 ppb	38.865 ppb	84.379 %	-0.003 ppb	0.008 ppb	83.984 %
Concentration RSD	1.1 %	5.8 %	16.9 %	0.3 %	3.0 %	0.4 %	256.7 %	138.2 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.487 ppb	7.809 ppb	90.206 %	89.660 %	0.000 ppb	0.035 ppb	83.644 %
Concentration per Run 1	0.453 ppb	7.234 ppb	89.783 %	89.775 %	-0.019 ppb	0.027 ppb	84.470 %
Concentration per Run 2	0.533 ppb	8.559 ppb	90.105 %	89.203 %	0.008 ppb	0.035 ppb	82.533 %
Concentration per Run 3	0.475 ppb	7.635 ppb	90.731 %	90.001 %	0.010 ppb	0.044 ppb	83.930 %
Concentration RSD	8.5 %	8.7 %	0.5 %	0.5 %	5,539.6 %	23.1 %	1.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	43	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-02 6020TL	Rack	1		
Analysis started at:	8/27/2024 1:55:12 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.890 %	100.187 %	0.005 ppb	7,209.163 ppb	10,022.578 ppb	5.582 ppb	14,431.369 ppb	105,677.595 ppb	91.140 %
Concentration per Run 1	83.166 %	94.944 %	0.004 ppb	7,163.575 ppb	9,796.880 ppb	5.552 ppb	13,485.072 ppb	97,603.802 ppb	90.898 %
Concentration per Run 2	82.887 %	96.067 %	0.004 ppb	7,379.271 ppb	10,214.033 ppb	5.606 ppb	14,552.507 ppb	108,113.323 ppb	90.756 %
Concentration per Run 3	82.618 %	109.551 %	0.008 ppb	7,084.644 ppb	10,056.821 ppb	5.589 ppb	15,256.526 ppb	111,315.658 ppb	91.766 %
Concentration RSD	0.3 %	8.1 %	36.4 %	2.1 %	2.1 %	0.5 %	6.2 %	6.8 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.920 %	0.775 ppb	1.145 ppb	0.515 ppb	3.910 ppb	0.383 ppb	-0.288 ppb	2.069 ppb	-1.370 ppb
Concentration per Run 1	94.258 %	0.652 ppb	0.991 ppb	0.589 ppb	3.362 ppb	0.344 ppb	-0.148 ppb	1.746 ppb	-1.433 ppb
Concentration per Run 2	86.514 %	0.802 ppb	1.106 ppb	0.622 ppb	4.258 ppb	0.367 ppb	-0.343 ppb	2.371 ppb	-1.351 ppb
Concentration per Run 3	91.989 %	0.870 ppb	1.338 ppb	0.333 ppb	4.109 ppb	0.439 ppb	-0.372 ppb	2.091 ppb	-1.326 ppb
Concentration RSD	4.4 %	14.4 %	15.4 %	30.7 %	12.3 %	13.0 %	42.3 %	15.1 %	4.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.130 %	0.277 ppb	0.702 ppb	367.540 ppb	12.343 ppb	91.162 %	-0.003 ppb	0.000 ppb	91.235 %
Concentration per Run 1	92.208 %	0.311 ppb	1.004 ppb	359.117 ppb	12.442 ppb	90.504 %	-0.003 ppb	-0.001 ppb	89.455 %
Concentration per Run 2	95.474 %	0.229 ppb	0.537 ppb	355.163 ppb	12.261 ppb	90.843 %	-0.005 ppb	-0.001 ppb	89.928 %
Concentration per Run 3	91.710 %	0.290 ppb	0.565 ppb	388.340 ppb	12.326 ppb	92.138 %	0.000 ppb	0.003 ppb	94.322 %
Concentration RSD	2.2 %	15.4 %	37.3 %	4.9 %	0.7 %	0.9 %	88.6 %	1,795.2 %	2.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.593 ppb	31.195 ppb	94.219 %	94.426 %	0.002 ppb	0.028 ppb	86.286 %
Concentration per Run 1	0.566 ppb	30.849 ppb	92.786 %	92.416 %	-0.008 ppb	0.021 ppb	87.760 %
Concentration per Run 2	0.577 ppb	30.889 ppb	93.591 %	92.877 %	0.005 ppb	0.027 ppb	84.972 %
Concentration per Run 3	0.636 ppb	31.847 ppb	96.280 %	97.985 %	0.008 ppb	0.037 ppb	86.126 %
Concentration RSD	6.3 %	1.8 %	1.9 %	3.3 %	549.8 %	28.9 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	44	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-03 6020TL	Rack	1		
Analysis started at:	8/27/2024 1:59:41 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.956 %	107.678 %	0.003 ppb	37,572.773 ppb	6,954.874 ppb	2.611 ppb	30,971.908 ppb	94,078.232 ppb	87.659 %
Concentration per Run 1	78.796 %	119.101 %	0.004 ppb	34,432.696 ppb	6,333.309 ppb	0.556 ppb	29,529.806 ppb	88,873.890 ppb	86.243 %
Concentration per Run 2	79.031 %	96.067 %	0.002 ppb	39,978.571 ppb	7,428.214 ppb	2.652 ppb	31,685.095 ppb	97,038.046 ppb	87.934 %
Concentration per Run 3	79.041 %	107.865 %	0.003 ppb	38,307.053 ppb	7,103.099 ppb	4.626 ppb	31,700.823 ppb	96,322.759 ppb	88.801 %
Concentration RSD	0.2 %	10.7 %	43.2 %	7.6 %	8.1 %	77.9 %	4.0 %	4.8 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	87.538 %	3.004 ppb	1.423 ppb	5.547 ppb	6.893 ppb	0.719 ppb	-0.074 ppb	2.343 ppb	-1.516 ppb
Concentration per Run 1	92.923 %	3.038 ppb	1.390 ppb	5.522 ppb	6.726 ppb	0.636 ppb	-0.076 ppb	1.977 ppb	-1.450 ppb
Concentration per Run 2	84.378 %	3.214 ppb	1.494 ppb	5.265 ppb	7.465 ppb	0.714 ppb	-0.090 ppb	2.830 ppb	-1.445 ppb
Concentration per Run 3	85.312 %	2.762 ppb	1.386 ppb	5.855 ppb	6.490 ppb	0.808 ppb	-0.057 ppb	2.221 ppb	-1.654 ppb
Concentration RSD	5.4 %	7.6 %	4.3 %	5.3 %	7.4 %	12.0 %	22.0 %	18.8 %	7.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.041 %	0.493 ppb	0.338 ppb	470.981 ppb	7.566 ppb	86.492 %	-0.003 ppb	0.019 ppb	85.504 %
Concentration per Run 1	87.885 %	0.441 ppb	0.515 ppb	469.618 ppb	7.567 ppb	87.236 %	-0.003 ppb	0.017 ppb	87.485 %
Concentration per Run 2	85.844 %	0.624 ppb	0.219 ppb	478.362 ppb	7.637 ppb	86.068 %	0.000 ppb	0.017 ppb	84.831 %
Concentration per Run 3	90.394 %	0.413 ppb	0.279 ppb	464.963 ppb	7.493 ppb	86.171 %	-0.005 ppb	0.022 ppb	84.195 %
Concentration RSD	2.6 %	23.3 %	46.3 %	1.4 %	1.0 %	0.7 %	102.0 %	15.4 %	2.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.862 ppb	82.094 ppb	89.581 %	89.613 %	0.264 ppb	0.006 ppb	82.841 %
Concentration per Run 1	0.842 ppb	81.988 ppb	89.156 %	89.433 %	0.236 ppb	0.004 ppb	84.362 %
Concentration per Run 2	0.861 ppb	81.968 ppb	89.568 %	89.354 %	0.278 ppb	0.013 ppb	81.079 %
Concentration per Run 3	0.884 ppb	82.325 ppb	90.018 %	90.051 %	0.277 ppb	0.001 ppb	83.083 %
Concentration RSD	2.4 %	0.2 %	0.5 %	0.4 %	9.0 %	112.0 %	2.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	45	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-04 6020TL	Rack	1		
Analysis started at:	8/27/2024 2:04:10 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.557 %	99.064 %	0.002 ppb	54,844.977 ppb	13,118.109 ppb	5.086 ppb	1,409.232 ppb	22,679.116 ppb	91.784 %
Concentration per Run 1	81.468 %	112.921 %	0.003 ppb	51,327.782 ppb	12,349.080 ppb	5.778 ppb	1,444.897 ppb	22,936.298 ppb	90.028 %
Concentration per Run 2	82.791 %	96.067 %	0.003 ppb	55,511.144 ppb	13,342.631 ppb	3.066 ppb	1,414.804 ppb	22,751.752 ppb	92.884 %
Concentration per Run 3	83.411 %	88.202 %	0.000 ppb	57,696.006 ppb	13,662.617 ppb	6.413 ppb	1,367.996 ppb	22,349.298 ppb	92.439 %
Concentration RSD	1.2 %	12.7 %	96.6 %	5.9 %	5.2 %	34.9 %	2.7 %	1.3 %	1.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	87.315 %	0.298 ppb	3.398 ppb	1.436 ppb	15.668 ppb	0.044 ppb	1.127 ppb	0.042 ppb	-0.376 ppb
Concentration per Run 1	87.315 %	0.338 ppb	3.365 ppb	1.333 ppb	15.173 ppb	0.046 ppb	1.162 ppb	0.140 ppb	-0.174 ppb
Concentration per Run 2	87.449 %	0.297 ppb	3.519 ppb	1.655 ppb	19.870 ppb	0.068 ppb	1.292 ppb	0.024 ppb	-0.504 ppb
Concentration per Run 3	87.182 %	0.260 ppb	3.311 ppb	1.321 ppb	11.960 ppb	0.019 ppb	0.927 ppb	-0.037 ppb	-0.452 ppb
Concentration RSD	0.2 %	13.0 %	3.2 %	13.2 %	25.4 %	55.4 %	16.4 %	211.6 %	47.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.543 %	-0.024 ppb	0.270 ppb	98.404 ppb	0.209 ppb	88.248 %	-0.002 ppb	0.011 ppb	87.282 %
Concentration per Run 1	93.040 %	-0.083 ppb	0.336 ppb	97.399 ppb	0.196 ppb	88.618 %	-0.005 ppb	0.008 ppb	88.252 %
Concentration per Run 2	90.817 %	-0.035 ppb	0.343 ppb	97.532 ppb	0.254 ppb	87.260 %	0.004 ppb	0.017 ppb	86.681 %
Concentration per Run 3	84.771 %	0.048 ppb	0.131 ppb	100.281 ppb	0.175 ppb	88.866 %	-0.005 ppb	0.008 ppb	86.911 %
Concentration RSD	4.8 %	281.6 %	44.6 %	1.7 %	19.6 %	1.0 %	239.3 %	49.3 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	64.825 ppb	91.257 %	90.068 %	-0.022 ppb	0.000 ppb	82.972 %
Concentration per Run 1	0.020 ppb	63.059 ppb	91.572 %	89.576 %	-0.032 ppb	0.002 ppb	83.543 %
Concentration per Run 2	0.000 ppb	65.816 ppb	90.714 %	89.713 %	-0.018 ppb	-0.003 ppb	81.983 %
Concentration per Run 3	0.018 ppb	65.599 ppb	91.485 %	90.914 %	-0.017 ppb	0.000 ppb	83.390 %
Concentration RSD	88.4 %	2.4 %	0.5 %	0.8 %	37.2 %	990.3 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	46	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-05 6020TL	Rack	1		
Analysis started at:	8/27/2024 2:08:39 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.660 %	113.858 %	0.042 ppb	4,923.871 ppb	1,126.912 ppb	9.537 ppb	1,015.052 ppb	6,725.144 ppb	93.043 %
Concentration per Run 1	85.992 %	118.539 %	0.045 ppb	4,823.129 ppb	1,117.667 ppb	10.068 ppb	998.869 ppb	6,226.028 ppb	92.359 %
Concentration per Run 2	85.730 %	115.169 %	0.041 ppb	5,027.038 ppb	1,200.960 ppb	9.197 ppb	1,053.409 ppb	6,877.986 ppb	93.474 %
Concentration per Run 3	85.258 %	107.865 %	0.040 ppb	4,921.447 ppb	1,062.108 ppb	9.346 ppb	992.878 ppb	7,071.416 ppb	93.295 %
Concentration RSD	0.4 %	4.8 %	6.0 %	2.1 %	6.2 %	4.9 %	3.3 %	6.6 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.256 %	0.188 ppb	0.184 ppb	5.054 ppb	14.794 ppb	0.040 ppb	-0.261 ppb	0.055 ppb	-0.750 ppb
Concentration per Run 1	106.543 %	0.081 ppb	0.173 ppb	5.284 ppb	12.968 ppb	0.034 ppb	-0.261 ppb	0.004 ppb	-0.764 ppb
Concentration per Run 2	85.980 %	0.236 ppb	0.159 ppb	4.866 ppb	16.653 ppb	0.053 ppb	-0.149 ppb	0.090 ppb	-0.959 ppb
Concentration per Run 3	84.245 %	0.245 ppb	0.221 ppb	5.011 ppb	14.762 ppb	0.034 ppb	-0.372 ppb	0.070 ppb	-0.528 ppb
Concentration RSD	13.4 %	49.1 %	17.7 %	4.2 %	12.5 %	28.2 %	42.8 %	82.5 %	28.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.377 %	-0.006 ppb	0.091 ppb	36.120 ppb	0.049 ppb	93.791 %	0.006 ppb	0.020 ppb	92.578 %
Concentration per Run 1	93.947 %	0.015 ppb	0.099 ppb	37.545 ppb	0.036 ppb	93.945 %	0.006 ppb	0.027 ppb	97.775 %
Concentration per Run 2	92.813 %	-0.039 ppb	0.116 ppb	34.979 ppb	0.036 ppb	93.900 %	0.009 ppb	0.012 ppb	89.103 %
Concentration per Run 3	87.370 %	0.005 ppb	0.057 ppb	35.836 ppb	0.076 ppb	93.527 %	0.003 ppb	0.020 ppb	90.856 %
Concentration RSD	3.8 %	457.6 %	33.0 %	3.6 %	47.2 %	0.2 %	51.9 %	39.4 %	5.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.018 ppb	8.337 ppb	93.747 %	92.436 %	-0.019 ppb	0.028 ppb	86.757 %
Concentration per Run 1	0.009 ppb	8.432 ppb	94.132 %	94.640 %	-0.029 ppb	0.024 ppb	88.928 %
Concentration per Run 2	0.017 ppb	8.059 ppb	93.445 %	92.292 %	-0.012 ppb	0.033 ppb	85.317 %
Concentration per Run 3	0.028 ppb	8.520 ppb	93.664 %	90.375 %	-0.017 ppb	0.027 ppb	86.027 %
Concentration RSD	50.7 %	2.9 %	0.4 %	2.3 %	45.3 %	15.7 %	2.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	47	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-06 6020TL	Rack	1		
Analysis started at:	8/27/2024 2:13:09 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.617 %	101.124 %	0.000 ppb	34,755.214 ppb	22,775.311 ppb	25.067 ppb	28,166.004 ppb	133,067.328 ppb	89.313 %
Concentration per Run 1	80.409 %	109.551 %	0.001 ppb	33,441.963 ppb	22,400.025 ppb	26.532 ppb	28,653.393 ppb	135,255.183 ppb	87.952 %
Concentration per Run 2	80.840 %	97.753 %	-0.003 ppb	34,891.383 ppb	22,114.829 ppb	23.714 ppb	26,873.250 ppb	128,213.024 ppb	89.990 %
Concentration per Run 3	80.602 %	96.067 %	0.001 ppb	35,932.296 ppb	23,811.077 ppb	24.956 ppb	28,971.370 ppb	135,733.776 ppb	89.998 %
Concentration RSD	0.3 %	7.3 %	1,372.0 %	3.6 %	4.0 %	5.6 %	4.0 %	3.2 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.947 %	0.557 ppb	0.323 ppb	3,258.657 ppb	39.824 ppb	0.454 ppb	0.311 ppb	0.919 ppb	-0.755 ppb
Concentration per Run 1	97.463 %	0.734 ppb	0.292 ppb	3,234.070 ppb	34.747 ppb	0.476 ppb	0.458 ppb	0.994 ppb	-0.771 ppb
Concentration per Run 2	95.594 %	0.312 ppb	0.311 ppb	3,183.999 ppb	37.010 ppb	0.446 ppb	0.312 ppb	0.828 ppb	-0.657 ppb
Concentration per Run 3	88.784 %	0.626 ppb	0.366 ppb	3,357.901 ppb	47.716 ppb	0.442 ppb	0.164 ppb	0.936 ppb	-0.836 ppb
Concentration RSD	4.9 %	39.3 %	11.8 %	2.7 %	17.4 %	4.1 %	47.2 %	9.2 %	12.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.501 %	0.158 ppb	0.140 ppb	231.061 ppb	0.125 ppb	88.375 %	0.000 ppb	0.062 ppb	87.995 %
Concentration per Run 1	101.447 %	0.216 ppb	0.092 ppb	233.077 ppb	0.174 ppb	90.598 %	0.000 ppb	0.054 ppb	92.941 %
Concentration per Run 2	90.877 %	0.136 ppb	0.133 ppb	229.398 ppb	0.120 ppb	87.753 %	-0.001 ppb	0.086 ppb	85.118 %
Concentration per Run 3	91.180 %	0.123 ppb	0.195 ppb	230.708 ppb	0.081 ppb	86.774 %	0.002 ppb	0.045 ppb	85.928 %
Concentration RSD	6.4 %	31.7 %	37.1 %	0.8 %	37.6 %	2.2 %	1,128.1 %	35.1 %	4.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.021 ppb	56.080 ppb	92.986 %	92.274 %	0.103 ppb	0.029 ppb	79.513 %
Concentration per Run 1	0.026 ppb	55.295 ppb	95.736 %	96.585 %	0.093 ppb	0.022 ppb	81.983 %
Concentration per Run 2	0.015 ppb	55.604 ppb	91.836 %	89.626 %	0.114 ppb	0.027 ppb	77.334 %
Concentration per Run 3	0.023 ppb	57.342 ppb	91.385 %	90.610 %	0.102 ppb	0.038 ppb	79.222 %
Concentration RSD	26.3 %	2.0 %	2.6 %	4.1 %	10.3 %	28.6 %	2.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	48	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-08 6020TL	Rack	1		
Analysis started at:	8/27/2024 2:17:36 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.024 %	104.869 %	0.003 ppb	23,963.054 ppb	3,372.675 ppb	3.765 ppb	20,927.425 ppb	34,959.880 ppb	90.118 %
Concentration per Run 1	82.584 %	111.236 %	-0.001 ppb	23,227.350 ppb	3,259.315 ppb	4.239 ppb	21,993.614 ppb	37,438.857 ppb	89.528 %
Concentration per Run 2	82.532 %	102.247 %	0.007 ppb	24,216.397 ppb	3,437.180 ppb	3.109 ppb	20,378.944 ppb	33,542.367 ppb	89.529 %
Concentration per Run 3	83.956 %	101.124 %	0.004 ppb	24,445.417 ppb	3,421.529 ppb	3.947 ppb	20,409.717 ppb	33,898.415 ppb	91.296 %
Concentration RSD	1.0 %	5.3 %	126.2 %	2.7 %	2.9 %	15.6 %	4.4 %	6.2 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	87.894 %	0.467 ppb	0.756 ppb	2.638 ppb	8.003 ppb	0.163 ppb	0.245 ppb	2.022 ppb	-1.790 ppb
Concentration per Run 1	76.500 %	0.554 ppb	0.828 ppb	2.680 ppb	11.645 ppb	0.177 ppb	0.492 ppb	2.213 ppb	-1.727 ppb
Concentration per Run 2	97.196 %	0.305 ppb	0.678 ppb	2.609 ppb	8.005 ppb	0.136 ppb	0.040 ppb	1.731 ppb	-1.866 ppb
Concentration per Run 3	89.986 %	0.541 ppb	0.762 ppb	2.627 ppb	4.360 ppb	0.175 ppb	0.202 ppb	2.123 ppb	-1.777 ppb
Concentration RSD	12.0 %	30.0 %	9.9 %	1.4 %	45.5 %	14.1 %	93.5 %	12.7 %	4.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.109 %	0.237 ppb	0.077 ppb	132.598 ppb	6.098 ppb	89.064 %	-0.002 ppb	0.000 ppb	89.046 %
Concentration per Run 1	86.402 %	0.164 ppb	0.067 ppb	130.644 ppb	6.200 ppb	87.628 %	-0.001 ppb	-0.001 ppb	85.880 %
Concentration per Run 2	93.040 %	0.273 ppb	-0.032 ppb	136.163 ppb	5.640 ppb	90.672 %	-0.003 ppb	0.003 ppb	92.817 %
Concentration per Run 3	87.885 %	0.276 ppb	0.195 ppb	130.986 ppb	6.453 ppb	88.893 %	-0.002 ppb	-0.001 ppb	88.442 %
Concentration RSD	3.9 %	26.9 %	149.1 %	2.3 %	6.8 %	1.7 %	48.1 %	1,562.0 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.049 ppb	38.555 ppb	91.542 %	91.116 %	0.161 ppb	-0.009 ppb	80.867 %
Concentration per Run 1	0.057 ppb	38.654 ppb	88.748 %	87.650 %	0.156 ppb	-0.004 ppb	80.338 %
Concentration per Run 2	0.057 ppb	39.006 ppb	93.867 %	94.434 %	0.152 ppb	-0.012 ppb	81.216 %
Concentration per Run 3	0.034 ppb	38.005 ppb	92.011 %	91.265 %	0.175 ppb	-0.012 ppb	81.047 %
Concentration RSD	26.3 %	1.3 %	2.8 %	3.7 %	7.8 %	45.3 %	0.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	49	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-09 6020TL	Rack	1		
Analysis started at:	8/27/2024 2:22:03 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.094 %	110.487 %	0.038 ppb	5,142.204 ppb	1,182.681 ppb	4.551 ppb	946.987 ppb	6,382.267 ppb	94.242 %
Concentration per Run 1	87.920 %	112.360 %	0.033 ppb	5,134.697 ppb	1,188.092 ppb	4.236 ppb	944.905 ppb	6,326.438 ppb	93.453 %
Concentration per Run 2	88.748 %	111.236 %	0.036 ppb	5,195.178 ppb	1,193.190 ppb	5.648 ppb	997.391 ppb	6,663.684 ppb	95.283 %
Concentration per Run 3	87.614 %	107.865 %	0.046 ppb	5,096.736 ppb	1,166.761 ppb	3.769 ppb	898.664 ppb	6,156.680 ppb	93.990 %
Concentration RSD	0.7 %	2.1 %	17.8 %	1.0 %	1.2 %	21.5 %	5.2 %	4.0 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.843 %	0.152 ppb	0.204 ppb	5.202 ppb	7.121 ppb	0.030 ppb	-0.307 ppb	-0.102 ppb	-1.624 ppb
Concentration per Run 1	95.861 %	0.130 ppb	0.220 ppb	4.617 ppb	6.544 ppb	0.041 ppb	-0.277 ppb	-0.062 ppb	-1.748 ppb
Concentration per Run 2	100.133 %	0.199 ppb	0.280 ppb	5.391 ppb	4.049 ppb	0.040 ppb	-0.330 ppb	-0.156 ppb	-1.572 ppb
Concentration per Run 3	100.534 %	0.127 ppb	0.112 ppb	5.598 ppb	10.769 ppb	0.009 ppb	-0.315 ppb	-0.087 ppb	-1.552 ppb
Concentration RSD	2.6 %	26.8 %	41.7 %	9.9 %	47.7 %	60.4 %	9.0 %	48.0 %	6.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.233 %	0.052 ppb	0.150 ppb	36.598 ppb	0.084 ppb	94.899 %	-0.004 ppb	0.034 ppb	94.224 %
Concentration per Run 1	100.646 %	0.022 ppb	0.023 ppb	34.986 ppb	0.069 ppb	95.922 %	-0.003 ppb	0.041 ppb	91.543 %
Concentration per Run 2	99.028 %	0.036 ppb	0.095 ppb	37.772 ppb	0.070 ppb	95.441 %	-0.003 ppb	0.027 ppb	97.974 %
Concentration per Run 3	92.026 %	0.097 ppb	0.333 ppb	37.037 ppb	0.112 ppb	93.333 %	-0.005 ppb	0.033 ppb	93.156 %
Concentration RSD	4.7 %	76.9 %	108.0 %	3.9 %	29.3 %	1.5 %	23.3 %	21.0 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	4.423 ppb	96.176 %	95.256 %	-0.024 ppb	-0.015 ppb	84.182 %
Concentration per Run 1	-0.003 ppb	4.475 ppb	96.049 %	94.000 %	-0.034 ppb	-0.016 ppb	84.262 %
Concentration per Run 2	0.014 ppb	4.627 ppb	97.146 %	97.634 %	-0.022 ppb	-0.013 ppb	84.099 %
Concentration per Run 3	0.009 ppb	4.166 ppb	95.332 %	94.135 %	-0.016 ppb	-0.017 ppb	84.186 %
Concentration RSD	135.4 %	5.3 %	0.9 %	2.2 %	38.2 %	14.7 %	0.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	50	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 2:26:31 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.172 %	103.745 %	61.458 ppb	6,271.940 ppb	6,258.336 ppb	63.362 ppb	6,409.775 ppb	6,402.430 ppb	91.182 %
Concentration per Run 1	85.537 %	108.427 %	60.702 ppb	5,958.065 ppb	5,871.673 ppb	55.680 ppb	6,319.375 ppb	6,327.766 ppb	90.315 %
Concentration per Run 2	85.113 %	89.326 %	61.513 ppb	6,922.224 ppb	6,983.620 ppb	67.704 ppb	6,568.186 ppb	6,664.149 ppb	91.103 %
Concentration per Run 3	84.867 %	113.483 %	62.159 ppb	5,935.531 ppb	5,919.715 ppb	66.703 ppb	6,341.763 ppb	6,215.376 ppb	92.128 %
Recovery Percentage 1			102.430 %	104.532 %	104.306 %	105.604 %	106.830 %	106.707 %	
Concentration RSD	0.4 %	12.3 %	1.2 %	9.0 %	10.0 %	10.5 %	2.1 %	3.6 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.193 %	62.396 ppb	63.108 ppb	63.158 ppb	6,399.850 ppb	63.070 ppb	64.883 ppb	62.076 ppb	62.072 ppb
Concentration per Run 1	92.523 %	64.025 ppb	64.865 ppb	64.826 ppb	6,559.230 ppb	65.029 ppb	67.539 ppb	64.792 ppb	65.148 ppb
Concentration per Run 2	97.597 %	62.274 ppb	62.124 ppb	63.822 ppb	6,432.086 ppb	62.868 ppb	64.303 ppb	60.978 ppb	61.573 ppb
Concentration per Run 3	95.460 %	60.889 ppb	62.335 ppb	60.825 ppb	6,208.233 ppb	61.313 ppb	62.806 ppb	60.458 ppb	59.493 ppb
Recovery Percentage 1		103.994 %	105.180 %	105.263 %	106.664 %	105.117 %	108.138 %	103.460 %	103.453 %
Concentration RSD	2.7 %	2.5 %	2.4 %	3.3 %	2.8 %	3.0 %	3.7 %	3.8 %	4.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	89.148 %	62.655 ppb	62.186 ppb	59.854 ppb	59.703 ppb	92.365 %	60.430 ppb	60.154 ppb	91.100 %
Concentration per Run 1	83.829 %	64.977 ppb	63.342 ppb	59.616 ppb	60.035 ppb	92.462 %	59.695 ppb	59.599 ppb	89.804 %
Concentration per Run 2	91.734 %	62.061 ppb	64.280 ppb	60.599 ppb	59.016 ppb	93.032 %	60.135 ppb	60.751 ppb	92.714 %
Concentration per Run 3	91.880 %	60.928 ppb	58.938 ppb	59.346 ppb	60.057 ppb	91.601 %	61.461 ppb	60.112 ppb	90.783 %
Recovery Percentage 1		104.425 %	103.644 %	99.756 %	99.505 %		100.717 %	100.257 %	
Concentration RSD	5.2 %	3.3 %	4.6 %	1.1 %	1.0 %	0.8 %	1.5 %	1.0 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.920 ppb	59.273 ppb	94.594 %	93.379 %	61.333 ppb	62.190 ppb	86.037 %
Concentration per Run 1	59.655 ppb	58.127 ppb	94.021 %	92.076 %	60.571 ppb	61.868 ppb	86.340 %
Concentration per Run 2	60.353 ppb	60.233 ppb	96.108 %	95.742 %	60.727 ppb	61.882 ppb	87.182 %
Concentration per Run 3	59.753 ppb	59.459 ppb	93.654 %	92.321 %	62.701 ppb	62.820 ppb	84.588 %
Recovery Percentage 1	99.867 %	98.788 %			102.222 %	103.650 %	
Concentration RSD	0.6 %	1.8 %	1.4 %	2.2 %	1.9 %	0.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	51	User name	ALPHALAB\a2-icpmsq2	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 2:31:02 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.941 %	107.116 %	0.005 ppb	-11.913 ppb	-6.365 ppb	-1.631 ppb	-15.030 ppb	-25.043 ppb	92.616 %
Concentration per Run 1	87.995 %	102.809 %	0.012 ppb	-11.210 ppb	-6.346 ppb	-1.459 ppb	-21.117 ppb	-21.165 ppb	92.138 %
Concentration per Run 2	87.905 %	108.427 %	0.004 ppb	-11.551 ppb	-6.364 ppb	-1.822 ppb	-5.666 ppb	-28.391 ppb	93.012 %
Concentration per Run 3	87.925 %	110.112 %	-0.002 ppb	-12.977 ppb	-6.384 ppb	-1.611 ppb	-18.307 ppb	-25.573 ppb	92.697 %
Recovery Percentage 1			0.959 %	-11.913 %	-9.093 %	-16.308 %	-15.030 %	-25.043 %	
Concentration RSD	0.1 %	3.6 %	142.8 %	7.9 %	0.3 %	11.2 %	54.8 %	14.5 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.834 %	0.017 ppb	-0.075 ppb	-0.097 ppb	1.261 ppb	-0.008 ppb	-0.639 ppb	-0.135 ppb	-2.130 ppb
Concentration per Run 1	90.253 %	0.020 ppb	-0.075 ppb	-0.085 ppb	-1.499 ppb	-0.011 ppb	-0.631 ppb	-0.185 ppb	-2.130 ppb
Concentration per Run 2	90.787 %	-0.021 ppb	-0.096 ppb	-0.145 ppb	0.451 ppb	-0.004 ppb	-0.575 ppb	-0.097 ppb	-2.187 ppb
Concentration per Run 3	97.463 %	0.053 ppb	-0.054 ppb	-0.062 ppb	4.830 ppb	-0.011 ppb	-0.711 ppb	-0.123 ppb	-2.075 ppb
Recovery Percentage 1		0.347 %	-7.531 %	-9.747 %	2.521 %	-1.650 %	-31.950 %	-13.518 %	-42.609 %
Concentration RSD	4.3 %	212.1 %	27.6 %	43.7 %	257.1 %	49.4 %	10.7 %	33.5 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.312 %	0.003 ppb	0.087 ppb	-0.017 ppb	0.177 ppb	94.939 %	0.003 ppb	0.006 ppb	93.227 %
Concentration per Run 1	93.538 %	0.071 ppb	-0.051 ppb	-0.018 ppb	0.111 ppb	93.559 %	0.000 ppb	0.012 ppb	90.948 %
Concentration per Run 2	89.184 %	-0.079 ppb	0.198 ppb	-0.020 ppb	0.228 ppb	93.539 %	0.006 ppb	0.007 ppb	90.184 %
Concentration per Run 3	97.213 %	0.019 ppb	0.116 ppb	-0.014 ppb	0.190 ppb	97.719 %	0.003 ppb	-0.001 ppb	98.549 %
Recovery Percentage 1		0.668 %	1.749 %	-0.175 %	8.827 %		0.722 %	2.958 %	
Concentration RSD	4.3 %	2,284.3 %	145.2 %	16.4 %	33.7 %	2.5 %	108.6 %	111.2 %	5.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.027 ppb	-0.050 ppb	95.611 %	95.125 %	0.202 ppb	-0.008 ppb	84.763 %
Concentration per Run 1	0.020 ppb	-0.032 ppb	94.010 %	93.228 %	0.148 ppb	-0.006 ppb	82.798 %
Concentration per Run 2	0.035 ppb	-0.058 ppb	94.351 %	92.459 %	0.269 ppb	-0.008 ppb	84.883 %
Concentration per Run 3	0.027 ppb	-0.061 ppb	98.472 %	99.687 %	0.190 ppb	-0.009 ppb	86.609 %
Recovery Percentage 1	0.687 %	-10.085 %			20.233 %	-0.800 %	
Concentration RSD	26.9 %	32.0 %	2.6 %	4.2 %	30.4 %	18.5 %	2.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	52	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-10 6020TL	Rack	1		
Analysis started at:	8/27/2024 2:36:35 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.107 %	119.101 %	0.000 ppb	-15.527 ppb	-3.757 ppb	-0.386 ppb	-21.143 ppb	-19.301 ppb	88.708 %
Concentration per Run 1	85.312 %	125.843 %	-0.002 ppb	-13.884 ppb	-3.469 ppb	-0.969 ppb	-27.137 ppb	-13.637 ppb	89.094 %
Concentration per Run 2	85.008 %	111.236 %	0.001 ppb	-13.347 ppb	-2.875 ppb	0.570 ppb	-16.875 ppb	-22.490 ppb	88.066 %
Concentration per Run 3	85.001 %	120.225 %	0.002 ppb	-19.351 ppb	-4.928 ppb	-0.758 ppb	-19.418 ppb	-21.776 ppb	88.966 %
Concentration RSD	0.2 %	6.2 %	551.2 %	21.4 %	28.1 %	216.2 %	25.3 %	25.5 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.235 %	0.018 ppb	-0.018 ppb	-0.087 ppb	-0.161 ppb	-0.011 ppb	-0.556 ppb	0.106 ppb	-1.891 ppb
Concentration per Run 1	87.716 %	0.023 ppb	-0.079 ppb	-0.081 ppb	-0.045 ppb	-0.011 ppb	-0.541 ppb	0.106 ppb	-1.942 ppb
Concentration per Run 2	98.665 %	0.013 ppb	0.002 ppb	-0.092 ppb	2.950 ppb	-0.011 ppb	-0.496 ppb	0.080 ppb	-1.915 ppb
Concentration per Run 3	93.324 %	0.018 ppb	0.024 ppb	-0.087 ppb	-3.388 ppb	-0.011 ppb	-0.633 ppb	0.131 ppb	-1.815 ppb
Concentration RSD	5.9 %	27.2 %	308.9 %	6.6 %	1,972.7 %	0.0 %	12.5 %	24.4 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.873 %	-0.009 ppb	-0.018 ppb	0.000 ppb	0.045 ppb	92.946 %	-0.001 ppb	-0.001 ppb	91.272 %
Concentration per Run 1	85.797 %	-0.039 ppb	-0.033 ppb	0.003 ppb	0.051 ppb	92.251 %	0.002 ppb	-0.001 ppb	89.316 %
Concentration per Run 2	99.344 %	-0.058 ppb	-0.114 ppb	0.001 ppb	0.034 ppb	93.783 %	0.001 ppb	-0.001 ppb	95.129 %
Concentration per Run 3	93.478 %	0.071 ppb	0.092 ppb	-0.003 ppb	0.049 ppb	92.803 %	-0.005 ppb	-0.001 ppb	89.372 %
Concentration RSD	7.3 %	787.2 %	565.6 %	1,035.2 %	20.4 %	0.8 %	587.4 %	0.0 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.025 ppb	-0.050 ppb	93.669 %	92.704 %	0.029 ppb	-0.018 ppb	85.436 %
Concentration per Run 1	0.028 ppb	-0.057 ppb	90.778 %	90.358 %	0.004 ppb	-0.019 ppb	84.857 %
Concentration per Run 2	0.013 ppb	-0.060 ppb	96.244 %	96.152 %	0.035 ppb	-0.020 ppb	86.462 %
Concentration per Run 3	0.032 ppb	-0.031 ppb	93.984 %	91.600 %	0.047 ppb	-0.014 ppb	84.988 %
Concentration RSD	40.2 %	32.0 %	2.9 %	3.3 %	78.6 %	19.8 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	53	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-11 6020TL	Rack	1		
Analysis started at:	8/27/2024 2:41:02 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.122 %	105.056 %	0.002 ppb	-14.383 ppb	-3.560 ppb	0.205 ppb	-1.662 ppb	-18.911 ppb	90.748 %
Concentration per Run 1	85.142 %	104.494 %	-0.004 ppb	-12.780 ppb	-3.646 ppb	0.189 ppb	2.692 ppb	-28.710 ppb	89.953 %
Concentration per Run 2	85.897 %	111.236 %	0.005 ppb	-15.881 ppb	-2.835 ppb	0.269 ppb	-0.690 ppb	-8.997 ppb	91.613 %
Concentration per Run 3	84.328 %	99.438 %	0.004 ppb	-14.487 ppb	-4.199 ppb	0.158 ppb	-6.989 ppb	-19.027 ppb	90.679 %
Concentration RSD	0.9 %	5.6 %	273.6 %	10.8 %	19.3 %	27.8 %	295.6 %	52.1 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.481 %	0.037 ppb	0.057 ppb	0.481 ppb	0.917 ppb	-0.002 ppb	-0.633 ppb	-0.123 ppb	-2.030 ppb
Concentration per Run 1	90.119 %	0.000 ppb	0.017 ppb	0.437 ppb	0.474 ppb	-0.011 ppb	-0.680 ppb	-0.114 ppb	-2.039 ppb
Concentration per Run 2	96.395 %	0.054 ppb	0.112 ppb	0.599 ppb	1.390 ppb	-0.004 ppb	-0.611 ppb	-0.121 ppb	-2.010 ppb
Concentration per Run 3	96.929 %	0.055 ppb	0.041 ppb	0.407 ppb	0.886 ppb	0.010 ppb	-0.607 ppb	-0.134 ppb	-2.040 ppb
Concentration RSD	4.0 %	86.0 %	86.8 %	21.5 %	50.1 %	662.7 %	6.5 %	8.2 %	0.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.034 %	0.006 ppb	-0.087 ppb	0.041 ppb	0.055 ppb	91.746 %	-0.003 ppb	0.000 ppb	90.812 %
Concentration per Run 1	89.003 %	0.037 ppb	-0.109 ppb	0.044 ppb	0.013 ppb	90.659 %	-0.003 ppb	0.003 ppb	86.403 %
Concentration per Run 2	94.673 %	0.002 ppb	-0.134 ppb	0.047 ppb	0.024 ppb	92.518 %	-0.003 ppb	-0.001 ppb	96.604 %
Concentration per Run 3	89.426 %	-0.022 ppb	-0.019 ppb	0.032 ppb	0.128 ppb	92.060 %	-0.003 ppb	-0.001 ppb	89.427 %
Concentration RSD	3.5 %	503.0 %	69.8 %	19.8 %	116.5 %	1.1 %	1.3 %	1,138.0 %	5.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.005 ppb	-0.026 ppb	92.331 %	91.900 %	0.007 ppb	-0.018 ppb	82.865 %
Concentration per Run 1	0.006 ppb	-0.028 ppb	89.635 %	88.887 %	-0.019 ppb	-0.019 ppb	81.466 %
Concentration per Run 2	0.003 ppb	-0.073 ppb	94.851 %	95.251 %	0.023 ppb	-0.018 ppb	83.026 %
Concentration per Run 3	0.008 ppb	0.023 ppb	92.506 %	91.564 %	0.016 ppb	-0.017 ppb	84.103 %
Concentration RSD	50.1 %	185.7 %	2.8 %	3.5 %	331.4 %	7.1 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	54	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	LDR Check - Na 100 ppm	Rack	1		
Analysis started at:	8/27/2024 2:45:30 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.334 %	112.547 %	0.002 ppb	97,947.337 ppb	-4.829 ppb	-1.450 ppb	-9.647 ppb	-24.904 ppb	91.716 %
Concentration per Run 1	85.736 %	114.045 %	0.007 ppb	96,094.932 ppb	-3.782 ppb	-1.483 ppb	-10.266 ppb	-24.652 ppb	91.063 %
Concentration per Run 2	85.335 %	113.483 %	0.001 ppb	95,927.963 ppb	-4.330 ppb	-1.267 ppb	-8.630 ppb	-21.474 ppb	92.339 %
Concentration per Run 3	84.931 %	110.112 %	-0.002 ppb	101,819.117 ppb	-6.374 ppb	-1.600 ppb	-10.045 ppb	-28.587 ppb	91.748 %
Concentration RSD	0.5 %	1.9 %	219.0 %	3.4 %	28.3 %	11.7 %	9.2 %	14.3 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.831 %	0.033 ppb	-0.053 ppb	-0.036 ppb	-3.785 ppb	-0.011 ppb	-0.612 ppb	-0.134 ppb	-2.154 ppb
Concentration per Run 1	88.250 %	0.022 ppb	-0.073 ppb	-0.051 ppb	-3.352 ppb	-0.011 ppb	-0.572 ppb	-0.096 ppb	-2.192 ppb
Concentration per Run 2	91.455 %	0.060 ppb	-0.028 ppb	-0.086 ppb	-4.001 ppb	-0.011 ppb	-0.631 ppb	-0.185 ppb	-2.102 ppb
Concentration per Run 3	92.790 %	0.018 ppb	-0.057 ppb	0.030 ppb	-4.001 ppb	-0.011 ppb	-0.634 ppb	-0.120 ppb	-2.166 ppb
Concentration RSD	2.6 %	68.8 %	43.5 %	166.6 %	9.9 %	0.0 %	5.8 %	34.7 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.485 %	-0.037 ppb	-0.106 ppb	-0.006 ppb	0.007 ppb	90.252 %	0.014 ppb	0.010 ppb	90.161 %
Concentration per Run 1	88.444 %	0.039 ppb	-0.108 ppb	-0.001 ppb	-0.013 ppb	87.885 %	0.015 ppb	0.008 ppb	84.582 %
Concentration per Run 2	93.357 %	-0.084 ppb	-0.102 ppb	-0.003 ppb	-0.014 ppb	90.179 %	0.016 ppb	0.016 ppb	91.948 %
Concentration per Run 3	95.655 %	-0.065 ppb	-0.108 ppb	-0.013 ppb	0.049 ppb	92.692 %	0.012 ppb	0.007 ppb	93.954 %
Concentration RSD	4.0 %	180.4 %	3.3 %	105.3 %	493.7 %	2.7 %	13.3 %	47.2 %	5.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.006 ppb	-0.031 ppb	93.211 %	93.424 %	-0.011 ppb	-0.001 ppb	80.104 %
Concentration per Run 1	-0.011 ppb	-0.028 ppb	90.148 %	89.106 %	-0.025 ppb	0.002 ppb	77.273 %
Concentration per Run 2	-0.001 ppb	-0.045 ppb	92.869 %	94.805 %	-0.002 ppb	0.001 ppb	79.804 %
Concentration per Run 3	-0.005 ppb	-0.021 ppb	96.617 %	96.362 %	-0.006 ppb	-0.005 ppb	83.236 %
Concentration RSD	82.0 %	39.8 %	3.5 %	4.1 %	108.5 %	427.6 %	3.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	55	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 2:50:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.908 %	102.247 %	61.042 ppb	6,220.849 ppb	6,244.513 ppb	61.737 ppb	6,425.187 ppb	6,456.104 ppb	96.702 %
Concentration per Run 1	87.999 %	102.809 %	60.313 ppb	5,955.854 ppb	5,992.096 ppb	58.905 ppb	6,165.616 ppb	6,126.886 ppb	97.445 %
Concentration per Run 2	88.608 %	102.247 %	61.125 ppb	6,399.717 ppb	6,434.838 ppb	65.474 ppb	6,694.732 ppb	6,824.015 ppb	97.672 %
Concentration per Run 3	87.117 %	101.685 %	61.689 ppb	6,306.976 ppb	6,306.604 ppb	60.831 ppb	6,415.212 ppb	6,417.409 ppb	94.988 %
Recovery Percentage 1			101.737 %	103.681 %	104.075 %	102.894 %	107.086 %	107.602 %	
Concentration RSD	0.9 %	0.5 %	1.1 %	3.8 %	3.6 %	5.5 %	4.1 %	5.4 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.125 %	60.713 ppb	63.582 ppb	66.059 ppb	6,336.515 ppb	61.812 ppb	62.065 ppb	62.287 ppb	61.428 ppb
Concentration per Run 1	102.136 %	56.711 ppb	60.185 ppb	63.783 ppb	6,016.368 ppb	57.838 ppb	61.082 ppb	62.239 ppb	59.238 ppb
Concentration per Run 2	90.386 %	61.683 ppb	64.822 ppb	67.228 ppb	6,516.694 ppb	62.508 ppb	61.776 ppb	61.933 ppb	61.366 ppb
Concentration per Run 3	89.852 %	63.743 ppb	65.740 ppb	67.165 ppb	6,476.485 ppb	65.089 ppb	63.337 ppb	62.688 ppb	63.681 ppb
Recovery Percentage 1		101.188 %	105.971 %	110.098 %	105.609 %	103.019 %	103.442 %	103.811 %	102.380 %
Concentration RSD	7.4 %	6.0 %	4.7 %	3.0 %	4.4 %	5.9 %	1.9 %	0.6 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.092 %	60.878 ppb	59.831 ppb	59.115 ppb	59.139 ppb	90.569 %	60.798 ppb	60.744 ppb	89.651 %
Concentration per Run 1	91.883 %	62.071 ppb	59.380 ppb	59.236 ppb	58.610 ppb	92.303 %	59.567 ppb	59.229 ppb	93.631 %
Concentration per Run 2	92.022 %	60.121 ppb	60.938 ppb	58.893 ppb	58.246 ppb	90.890 %	60.911 ppb	61.157 ppb	87.465 %
Concentration per Run 3	89.372 %	60.442 ppb	59.175 ppb	59.215 ppb	60.562 ppb	88.513 %	61.914 ppb	61.845 ppb	87.857 %
Recovery Percentage 1		101.464 %	99.719 %	98.524 %	98.565 %		101.329 %	101.239 %	
Concentration RSD	1.6 %	1.7 %	1.6 %	0.3 %	2.1 %	2.1 %	1.9 %	2.2 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.861 ppb	58.761 ppb	94.016 %	93.669 %	60.832 ppb	61.400 ppb	84.908 %
Concentration per Run 1	58.599 ppb	57.044 ppb	95.403 %	94.734 %	59.260 ppb	60.122 ppb	86.450 %
Concentration per Run 2	60.735 ppb	58.437 ppb	93.404 %	94.191 %	60.507 ppb	61.006 ppb	82.568 %
Concentration per Run 3	60.248 ppb	60.803 ppb	93.241 %	92.081 %	62.730 ppb	63.072 ppb	85.707 %
Recovery Percentage 1	99.768 %	97.935 %			101.387 %	102.333 %	
Concentration RSD	1.9 %	3.2 %	1.3 %	1.5 %	2.9 %	2.5 %	2.4 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	56	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 2:55:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.088 %	112.360 %	0.008 ppb	-10.716 ppb	-5.034 ppb	-1.757 ppb	-19.531 ppb	-19.652 ppb	94.275 %
Concentration per Run 1	88.359 %	112.921 %	0.010 ppb	-10.282 ppb	-4.370 ppb	-1.943 ppb	-19.793 ppb	-15.176 ppb	92.571 %
Concentration per Run 2	89.201 %	114.045 %	0.007 ppb	-11.250 ppb	-5.386 ppb	-1.724 ppb	-20.840 ppb	-18.565 ppb	94.844 %
Concentration per Run 3	89.703 %	110.112 %	0.006 ppb	-10.616 ppb	-5.346 ppb	-1.603 ppb	-17.959 ppb	-25.214 ppb	95.409 %
Recovery Percentage 1			1.539 %	-10.716 %	-7.192 %	-17.568 %	-19.531 %	-19.652 %	
Concentration RSD	0.8 %	1.8 %	22.8 %	4.6 %	11.4 %	9.8 %	7.5 %	26.0 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.060 %	-0.023 ppb	-0.080 ppb	-0.107 ppb	0.457 ppb	-0.004 ppb	-0.599 ppb	-0.158 ppb	-2.166 ppb
Concentration per Run 1	95.594 %	0.036 ppb	-0.079 ppb	-0.117 ppb	-0.353 ppb	-0.004 ppb	-0.608 ppb	-0.152 ppb	-2.207 ppb
Concentration per Run 2	95.460 %	-0.042 ppb	-0.099 ppb	-0.118 ppb	1.396 ppb	-0.004 ppb	-0.636 ppb	-0.138 ppb	-2.022 ppb
Concentration per Run 3	94.125 %	-0.062 ppb	-0.064 ppb	-0.087 ppb	0.329 ppb	-0.004 ppb	-0.554 ppb	-0.185 ppb	-2.269 ppb
Recovery Percentage 1		-0.454 %	-8.042 %	-10.718 %	0.915 %	-0.768 %	-29.964 %	-15.826 %	-43.325 %
Concentration RSD	0.9 %	228.7 %	22.0 %	16.7 %	192.7 %	3.0 %	6.9 %	15.4 %	5.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.899 %	-0.016 ppb	0.085 ppb	-0.019 ppb	0.210 ppb	95.022 %	-0.002 ppb	0.002 ppb	92.832 %
Concentration per Run 1	92.361 %	-0.038 ppb	-0.116 ppb	-0.021 ppb	0.086 ppb	93.966 %	0.000 ppb	0.007 ppb	88.275 %
Concentration per Run 2	95.762 %	-0.032 ppb	0.255 ppb	-0.019 ppb	0.206 ppb	96.065 %	-0.003 ppb	-0.001 ppb	97.291 %
Concentration per Run 3	90.575 %	0.022 ppb	0.117 ppb	-0.017 ppb	0.337 ppb	95.036 %	-0.002 ppb	-0.001 ppb	92.931 %
Recovery Percentage 1		-3.253 %	1.709 %	-0.188 %	10.491 %		-0.418 %	0.825 %	
Concentration RSD	2.8 %	202.8 %	219.3 %	11.7 %	59.8 %	1.1 %	95.6 %	306.7 %	4.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.026 ppb	-0.081 ppb	96.123 %	94.651 %	0.229 ppb	-0.012 ppb	85.448 %
Concentration per Run 1	0.018 ppb	-0.071 ppb	93.183 %	90.563 %	0.160 ppb	-0.011 ppb	84.745 %
Concentration per Run 2	0.031 ppb	-0.073 ppb	98.502 %	97.761 %	0.288 ppb	-0.013 ppb	86.283 %
Concentration per Run 3	0.028 ppb	-0.099 ppb	96.684 %	95.628 %	0.238 ppb	-0.014 ppb	85.317 %
Recovery Percentage 1	0.641 %	-16.212 %			22.862 %	-1.238 %	
Concentration RSD	27.2 %	18.7 %	2.8 %	3.9 %	28.1 %	12.6 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	57	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963935-1 6020TL	Rack	1		
Analysis started at:	8/27/2024 3:03:11 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.676 %	107.116 %	0.000 ppb	-15.260 ppb	-5.112 ppb	-0.446 ppb	-19.841 ppb	-20.876 ppb	90.043 %
Concentration per Run 1	85.679 %	101.685 %	0.000 ppb	-12.035 ppb	-5.761 ppb	-0.445 ppb	-27.644 ppb	-16.378 ppb	88.756 %
Concentration per Run 2	85.746 %	108.427 %	-0.002 ppb	-16.919 ppb	-6.370 ppb	-0.573 ppb	-14.348 ppb	-21.675 ppb	90.293 %
Concentration per Run 3	85.603 %	111.236 %	0.003 ppb	-16.827 ppb	-3.205 ppb	-0.318 ppb	-17.529 ppb	-24.574 ppb	91.079 %
Concentration RSD	0.1 %	4.6 %	1,065.9 %	18.3 %	32.9 %	28.6 %	35.0 %	19.9 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.517 %	-0.020 ppb	-0.097 ppb	-0.089 ppb	-2.230 ppb	-0.008 ppb	-0.660 ppb	-0.099 ppb	-1.880 ppb
Concentration per Run 1	84.244 %	-0.018 ppb	-0.107 ppb	-0.012 ppb	-1.271 ppb	-0.011 ppb	-0.675 ppb	-0.126 ppb	-1.801 ppb
Concentration per Run 2	93.324 %	-0.001 ppb	-0.104 ppb	-0.175 ppb	-2.740 ppb	-0.004 ppb	-0.655 ppb	-0.114 ppb	-1.890 ppb
Concentration per Run 3	87.983 %	-0.041 ppb	-0.079 ppb	-0.080 ppb	-2.678 ppb	-0.011 ppb	-0.650 ppb	-0.055 ppb	-1.948 ppb
Concentration RSD	5.2 %	99.7 %	15.6 %	92.1 %	37.2 %	49.1 %	2.0 %	38.4 %	3.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	85.259 %	-0.014 ppb	-0.048 ppb	-0.009 ppb	0.031 ppb	90.825 %	-0.001 ppb	0.000 ppb	87.547 %
Concentration per Run 1	83.620 %	-0.036 ppb	-0.101 ppb	-0.008 ppb	0.041 ppb	89.857 %	-0.003 ppb	0.003 ppb	86.705 %
Concentration per Run 2	87.462 %	-0.054 ppb	-0.089 ppb	-0.011 ppb	0.000 ppb	90.431 %	0.002 ppb	-0.001 ppb	88.541 %
Concentration per Run 3	84.695 %	0.048 ppb	0.044 ppb	-0.008 ppb	0.052 ppb	92.187 %	-0.002 ppb	-0.001 ppb	87.394 %
Concentration RSD	2.3 %	392.5 %	166.6 %	20.9 %	89.3 %	1.3 %	241.2 %	1,133.2 %	1.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.006 ppb	-0.080 ppb	91.448 %	90.464 %	0.015 ppb	-0.016 ppb	80.817 %
Concentration per Run 1	-0.010 ppb	-0.084 ppb	89.067 %	88.593 %	-0.006 ppb	-0.011 ppb	80.727 %
Concentration per Run 2	-0.003 ppb	-0.071 ppb	92.271 %	91.024 %	0.034 ppb	-0.019 ppb	80.935 %
Concentration per Run 3	-0.006 ppb	-0.085 ppb	93.007 %	91.776 %	0.018 ppb	-0.017 ppb	80.788 %
Concentration RSD	58.2 %	9.7 %	2.3 %	1.8 %	133.8 %	28.3 %	0.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	58	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963935-2d10 6020TL	Rack	1		
Analysis started at:	8/27/2024 3:07:39 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.179 %	105.431 %	5.475 ppb	1,079.364 ppb	1,041.750 ppb	220.079 ppb	1,112.508 ppb	1,068.575 ppb	90.261 %
Concentration per Run 1	84.505 %	106.742 %	5.418 ppb	1,027.604 ppb	987.432 ppb	200.922 ppb	1,049.213 ppb	988.951 ppb	90.719 %
Concentration per Run 2	85.252 %	101.124 %	5.462 ppb	1,118.366 ppb	1,065.723 ppb	235.178 ppb	1,166.171 ppb	1,116.991 ppb	89.740 %
Concentration per Run 3	85.780 %	108.427 %	5.546 ppb	1,092.123 ppb	1,072.095 ppb	224.137 ppb	1,122.139 ppb	1,099.782 ppb	90.323 %
Concentration RSD	0.8 %	3.6 %	1.2 %	4.3 %	4.5 %	7.9 %	5.3 %	6.5 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	83.666 %	56.130 ppb	22.752 ppb	56.902 ppb	117.496 ppb	55.220 ppb	57.578 ppb	27.862 ppb	54.199 ppb
Concentration per Run 1	85.045 %	54.213 ppb	22.094 ppb	54.668 ppb	107.737 ppb	53.961 ppb	57.990 ppb	27.406 ppb	54.298 ppb
Concentration per Run 2	81.440 %	57.895 ppb	22.910 ppb	57.072 ppb	113.187 ppb	54.659 ppb	57.209 ppb	27.516 ppb	53.701 ppb
Concentration per Run 3	84.511 %	56.280 ppb	23.250 ppb	58.968 ppb	131.566 ppb	57.040 ppb	57.534 ppb	28.665 ppb	54.598 ppb
Concentration RSD	2.3 %	3.3 %	2.6 %	3.8 %	10.6 %	2.9 %	0.7 %	2.5 %	0.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	87.865 %	11.698 ppb	10.780 ppb	96.888 ppb	102.621 ppb	88.246 %	5.198 ppb	5.694 ppb	84.951 %
Concentration per Run 1	83.862 %	11.801 ppb	10.427 ppb	97.217 ppb	101.650 ppb	87.343 %	5.192 ppb	5.590 ppb	83.711 %
Concentration per Run 2	90.304 %	11.133 ppb	10.301 ppb	95.937 ppb	102.166 ppb	87.836 %	5.277 ppb	5.846 ppb	84.971 %
Concentration per Run 3	89.429 %	12.159 ppb	11.613 ppb	97.509 ppb	104.047 ppb	89.558 %	5.126 ppb	5.646 ppb	86.171 %
Concentration RSD	4.0 %	4.5 %	6.7 %	0.9 %	1.2 %	1.3 %	1.5 %	2.4 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	46.902 ppb	208.516 ppb	89.807 %	88.279 %	13.069 ppb	63.079 ppb	80.420 %
Concentration per Run 1	45.667 ppb	206.613 ppb	87.855 %	85.728 %	12.752 ppb	61.212 ppb	79.254 %
Concentration per Run 2	47.892 ppb	212.188 ppb	89.447 %	87.775 %	13.296 ppb	64.085 ppb	80.379 %
Concentration per Run 3	47.146 ppb	206.746 ppb	92.119 %	91.332 %	13.159 ppb	63.941 ppb	81.626 %
Concentration RSD	2.4 %	1.5 %	2.4 %	3.2 %	2.2 %	2.6 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	59	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963935-4 6020TL	Rack	1		
Analysis started at:	8/27/2024 3:12:07 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.027 %	100.187 %	0.305 ppb	30,630.232 ppb	6,945.163 ppb	250.418 ppb	3,138.775 ppb	22,139.243 ppb	82.765 %
Concentration per Run 1	75.956 %	98.876 %	0.281 ppb	30,317.717 ppb	6,920.632 ppb	246.619 ppb	3,026.615 ppb	21,154.937 ppb	81.669 %
Concentration per Run 2	76.010 %	100.000 %	0.347 ppb	31,068.527 ppb	7,106.342 ppb	255.494 ppb	3,286.901 ppb	23,112.761 ppb	83.718 %
Concentration per Run 3	76.115 %	101.685 %	0.288 ppb	30,504.451 ppb	6,808.517 ppb	249.142 ppb	3,102.808 ppb	22,150.032 ppb	82.909 %
Concentration RSD	0.1 %	1.4 %	11.8 %	1.3 %	2.2 %	1.8 %	4.3 %	4.4 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	80.817 %	0.780 ppb	0.726 ppb	1,589.067 ppb	317.096 ppb	44.837 ppb	45.724 ppb	5.686 ppb	1,243.011 ppb
Concentration per Run 1	84.244 %	0.605 ppb	0.765 ppb	1,539.596 ppb	298.431 ppb	42.519 ppb	41.861 ppb	5.411 ppb	1,208.840 ppb
Concentration per Run 2	76.634 %	0.860 ppb	0.765 ppb	1,641.796 ppb	331.072 ppb	47.041 ppb	49.478 ppb	6.083 ppb	1,287.541 ppb
Concentration per Run 3	81.574 %	0.874 ppb	0.649 ppb	1,585.808 ppb	321.784 ppb	44.952 ppb	45.834 ppb	5.565 ppb	1,232.650 ppb
Concentration RSD	4.8 %	19.4 %	9.2 %	3.2 %	5.3 %	5.0 %	8.3 %	6.2 %	3.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	80.048 %	0.833 ppb	0.616 ppb	99.975 ppb	0.777 ppb	80.010 %	0.005 ppb	11.844 ppb	78.515 %
Concentration per Run 1	81.746 %	0.804 ppb	0.471 ppb	98.305 ppb	0.653 ppb	81.696 %	0.002 ppb	11.508 ppb	79.533 %
Concentration per Run 2	77.075 %	0.796 ppb	0.874 ppb	101.691 ppb	0.890 ppb	79.157 %	0.006 ppb	11.739 ppb	78.079 %
Concentration per Run 3	81.322 %	0.900 ppb	0.503 ppb	99.930 ppb	0.788 ppb	79.177 %	0.006 ppb	12.287 ppb	77.933 %
Concentration RSD	3.2 %	6.9 %	36.4 %	1.7 %	15.3 %	1.8 %	45.1 %	3.4 %	1.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.125 ppb	68.268 ppb	83.171 %	82.360 %	0.079 ppb	3.369 ppb	70.528 %
Concentration per Run 1	4.172 ppb	66.520 ppb	83.724 %	83.435 %	0.052 ppb	3.332 ppb	71.936 %
Concentration per Run 2	4.043 ppb	67.804 ppb	81.399 %	81.191 %	0.103 ppb	3.376 ppb	68.612 %
Concentration per Run 3	4.160 ppb	70.478 ppb	84.388 %	82.454 %	0.082 ppb	3.400 ppb	71.038 %
Concentration RSD	1.7 %	3.0 %	1.9 %	1.4 %	32.7 %	1.0 %	2.4 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	60	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963935-3d10 6020TL	Rack	1		
Analysis started at:	8/27/2024 3:16:36 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.334 %	98.502 %	5.664 ppb	4,177.950 ppb	1,727.754 ppb	231.951 ppb	1,437.207 ppb	3,371.956 ppb	80.630 %
Concentration per Run 1	75.998 %	103.933 %	5.523 ppb	4,123.440 ppb	1,662.218 ppb	225.904 ppb	1,383.515 ppb	3,244.344 ppb	78.792 %
Concentration per Run 2	76.586 %	100.000 %	5.871 ppb	4,056.319 ppb	1,708.940 ppb	227.572 ppb	1,490.641 ppb	3,444.693 ppb	80.807 %
Concentration per Run 3	76.419 %	91.573 %	5.597 ppb	4,354.092 ppb	1,812.104 ppb	242.378 ppb	1,437.463 ppb	3,426.831 ppb	82.290 %
Concentration RSD	0.4 %	6.4 %	3.2 %	3.7 %	4.4 %	3.9 %	3.7 %	3.3 %	2.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	74.497 %	55.911 ppb	22.976 ppb	220.264 ppb	148.608 ppb	60.436 ppb	60.918 ppb	28.503 ppb	181.386 ppb
Concentration per Run 1	80.105 %	54.190 ppb	22.578 ppb	222.052 ppb	153.337 ppb	60.084 ppb	63.794 ppb	28.838 ppb	188.339 ppb
Concentration per Run 2	66.086 %	57.108 ppb	24.561 ppb	222.777 ppb	144.831 ppb	61.825 ppb	59.965 ppb	28.395 ppb	178.304 ppb
Concentration per Run 3	77.301 %	56.436 ppb	21.787 ppb	215.963 ppb	147.656 ppb	59.399 ppb	58.996 ppb	28.276 ppb	177.513 ppb
Concentration RSD	10.0 %	2.7 %	6.2 %	1.7 %	2.9 %	2.1 %	4.2 %	1.0 %	3.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	77.951 %	11.638 ppb	11.880 ppb	107.321 ppb	103.537 ppb	77.206 %	5.256 ppb	6.851 ppb	74.811 %
Concentration per Run 1	77.573 %	12.987 ppb	12.002 ppb	110.320 ppb	103.562 ppb	80.598 %	5.014 ppb	6.967 ppb	80.029 %
Concentration per Run 2	76.712 %	11.077 ppb	11.922 ppb	105.448 ppb	102.142 ppb	73.438 %	5.449 ppb	6.668 ppb	70.340 %
Concentration per Run 3	79.569 %	10.849 ppb	11.715 ppb	106.194 ppb	104.909 ppb	77.582 %	5.305 ppb	6.919 ppb	74.064 %
Concentration RSD	1.9 %	10.1 %	1.2 %	2.4 %	1.3 %	4.7 %	4.2 %	2.3 %	6.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.780 ppb	212.848 ppb	78.262 %	77.170 %	11.844 ppb	56.844 ppb	68.653 %
Concentration per Run 1	49.694 ppb	208.945 ppb	81.326 %	80.659 %	11.497 ppb	55.308 ppb	71.358 %
Concentration per Run 2	52.907 ppb	215.292 ppb	75.361 %	74.099 %	11.817 ppb	56.765 ppb	65.704 %
Concentration per Run 3	52.740 ppb	214.306 ppb	78.099 %	76.754 %	12.219 ppb	58.460 ppb	68.896 %
Concentration RSD	3.5 %	1.6 %	3.8 %	4.3 %	3.1 %	2.8 %	4.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	61	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-01 6020TL	Rack	1		
Analysis started at:	8/27/2024 3:21:05 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.845 %	96.255 %	0.314 ppb	32,852.930 ppb	7,537.370 ppb	275.267 ppb	3,526.210 ppb	23,913.469 ppb	87.055 %
Concentration per Run 1	80.185 %	99.438 %	0.347 ppb	32,251.540 ppb	7,292.695 ppb	272.767 ppb	3,367.552 ppb	23,687.592 ppb	86.772 %
Concentration per Run 2	79.981 %	95.506 %	0.292 ppb	32,772.142 ppb	7,668.320 ppb	272.696 ppb	3,597.222 ppb	24,435.506 ppb	87.268 %
Concentration per Run 3	79.368 %	93.820 %	0.303 ppb	33,535.107 ppb	7,651.094 ppb	280.337 ppb	3,613.854 ppb	23,617.310 ppb	87.125 %
Concentration RSD	0.5 %	3.0 %	9.3 %	2.0 %	2.8 %	1.6 %	3.9 %	1.9 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	78.503 %	0.847 ppb	0.765 ppb	1,664.735 ppb	352.169 ppb	46.715 ppb	48.180 ppb	5.749 ppb	1,284.524 ppb
Concentration per Run 1	80.105 %	0.849 ppb	0.835 ppb	1,631.839 ppb	361.663 ppb	47.722 ppb	49.209 ppb	6.111 ppb	1,309.174 ppb
Concentration per Run 2	73.563 %	0.735 ppb	0.795 ppb	1,694.967 ppb	353.550 ppb	47.131 ppb	48.839 ppb	5.566 ppb	1,284.816 ppb
Concentration per Run 3	81.841 %	0.958 ppb	0.666 ppb	1,667.399 ppb	341.295 ppb	45.293 ppb	46.493 ppb	5.570 ppb	1,259.581 ppb
Concentration RSD	5.6 %	13.2 %	11.5 %	1.9 %	2.9 %	2.7 %	3.1 %	5.5 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	80.244 %	0.848 ppb	0.715 ppb	103.884 ppb	0.765 ppb	79.245 %	0.003 ppb	11.631 ppb	79.857 %
Concentration per Run 1	78.224 %	0.782 ppb	0.749 ppb	102.435 ppb	0.697 ppb	80.681 %	-0.003 ppb	11.702 ppb	80.977 %
Concentration per Run 2	79.448 %	0.899 ppb	1.019 ppb	103.783 ppb	0.715 ppb	77.525 %	0.006 ppb	11.307 ppb	78.251 %
Concentration per Run 3	83.062 %	0.865 ppb	0.376 ppb	105.433 ppb	0.883 ppb	79.527 %	0.004 ppb	11.884 ppb	80.342 %
Concentration RSD	3.1 %	7.1 %	45.2 %	1.4 %	13.4 %	2.0 %	191.7 %	2.5 %	1.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.804 ppb	70.370 ppb	83.498 %	82.617 %	0.063 ppb	3.423 ppb	70.576 %
Concentration per Run 1	3.762 ppb	69.027 ppb	84.929 %	82.611 %	0.040 ppb	3.319 ppb	72.150 %
Concentration per Run 2	3.787 ppb	70.640 ppb	81.500 %	80.388 %	0.082 ppb	3.511 ppb	68.938 %
Concentration per Run 3	3.862 ppb	71.444 ppb	84.065 %	84.854 %	0.066 ppb	3.439 ppb	70.639 %
Concentration RSD	1.4 %	1.7 %	2.1 %	2.7 %	33.6 %	2.8 %	2.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	62	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963935-5d10 6020TL	Rack	1		
Analysis started at:	8/27/2024 3:25:34 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.017 %	94.569 %	52.798 ppb	8,423.849 ppb	5,912.621 ppb	82.434 ppb	5,784.725 ppb	7,555.364 ppb	80.530 %
Concentration per Run 1	73.733 %	84.831 %	52.697 ppb	8,436.773 ppb	5,961.128 ppb	82.068 ppb	5,800.341 ppb	7,421.727 ppb	79.841 %
Concentration per Run 2	74.357 %	95.506 %	52.810 ppb	8,388.622 ppb	5,873.898 ppb	81.575 ppb	5,684.332 ppb	7,599.693 ppb	80.626 %
Concentration per Run 3	73.961 %	103.371 %	52.888 ppb	8,446.151 ppb	5,902.838 ppb	83.658 ppb	5,869.501 ppb	7,644.673 ppb	81.123 %
Concentration RSD	0.4 %	9.8 %	0.2 %	0.4 %	0.8 %	1.3 %	1.6 %	1.6 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	81.841 %	52.789 ppb	53.080 ppb	214.159 ppb	5,270.150 ppb	56.713 ppb	56.617 ppb	51.932 ppb	176.571 ppb
Concentration per Run 1	71.961 %	53.986 ppb	53.448 ppb	213.348 ppb	5,243.167 ppb	57.037 ppb	55.178 ppb	50.925 ppb	175.912 ppb
Concentration per Run 2	78.369 %	53.531 ppb	55.093 ppb	218.179 ppb	5,406.312 ppb	58.461 ppb	60.579 ppb	55.127 ppb	179.348 ppb
Concentration per Run 3	95.193 %	50.849 ppb	50.699 ppb	210.949 ppb	5,160.972 ppb	54.640 ppb	54.093 ppb	49.743 ppb	174.454 ppb
Concentration RSD	14.7 %	3.2 %	4.2 %	1.7 %	2.4 %	3.4 %	6.1 %	5.4 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	81.743 %	50.879 ppb	49.062 ppb	58.310 ppb	50.429 ppb	80.178 %	1.432 ppb	51.706 ppb	78.758 %
Concentration per Run 1	75.751 %	49.488 ppb	45.546 ppb	56.904 ppb	49.019 ppb	74.957 %	1.373 ppb	50.809 ppb	73.206 %
Concentration per Run 2	79.379 %	51.904 ppb	51.173 ppb	57.836 ppb	51.057 ppb	79.680 %	1.370 ppb	51.764 ppb	77.327 %
Concentration per Run 3	90.098 %	51.245 ppb	50.466 ppb	60.190 ppb	51.210 ppb	85.898 %	1.553 ppb	52.546 ppb	85.740 %
Concentration RSD	9.1 %	2.5 %	6.2 %	2.9 %	2.4 %	6.8 %	7.3 %	1.7 %	8.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.241 ppb	57.186 ppb	81.974 %	81.026 %	59.793 ppb	60.861 ppb	70.675 %
Concentration per Run 1	51.081 ppb	55.294 ppb	76.225 %	73.589 %	58.936 ppb	59.884 ppb	66.074 %
Concentration per Run 2	51.799 ppb	58.434 ppb	82.133 %	80.361 %	60.149 ppb	61.239 ppb	70.735 %
Concentration per Run 3	50.843 ppb	57.831 ppb	87.564 %	89.126 %	60.293 ppb	61.459 ppb	75.217 %
Concentration RSD	1.0 %	2.9 %	6.9 %	9.6 %	1.2 %	1.4 %	6.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	63	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	WG1963935-6d5 6020TL	Rack	2		
Analysis started at:	8/27/2024 3:30:04 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.531 %	95.131 %	0.071 ppb	6,380.881 ppb	1,452.896 ppb	49.981 ppb	651.849 ppb	4,519.559 ppb	83.608 %
Concentration per Run 1	78.400 %	99.438 %	0.067 ppb	6,283.456 ppb	1,387.762 ppb	47.915 ppb	688.725 ppb	4,600.560 ppb	83.279 %
Concentration per Run 2	78.485 %	93.820 %	0.075 ppb	6,339.836 ppb	1,479.823 ppb	49.953 ppb	643.379 ppb	4,500.945 ppb	83.105 %
Concentration per Run 3	78.707 %	92.135 %	0.072 ppb	6,519.351 ppb	1,491.103 ppb	52.075 ppb	623.442 ppb	4,457.172 ppb	84.440 %
Concentration RSD	0.2 %	4.0 %	5.9 %	1.9 %	3.9 %	4.2 %	5.1 %	1.6 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	81.173 %	0.171 ppb	0.094 ppb	296.567 ppb	55.544 ppb	8.503 ppb	7.649 ppb	1.039 ppb	217.329 ppb
Concentration per Run 1	77.702 %	0.160 ppb	0.109 ppb	296.693 ppb	46.711 ppb	8.311 ppb	8.458 ppb	0.979 ppb	206.314 ppb
Concentration per Run 2	81.841 %	0.156 ppb	0.083 ppb	295.480 ppb	51.827 ppb	8.604 ppb	7.632 ppb	1.021 ppb	216.565 ppb
Concentration per Run 3	83.977 %	0.199 ppb	0.091 ppb	297.530 ppb	68.094 ppb	8.592 ppb	6.856 ppb	1.118 ppb	229.108 ppb
Concentration RSD	3.9 %	13.9 %	13.7 %	0.3 %	20.1 %	2.0 %	10.5 %	6.9 %	5.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.262 %	0.114 ppb	0.119 ppb	17.738 ppb	0.319 ppb	79.924 %	-0.002 ppb	2.441 ppb	77.485 %
Concentration per Run 1	108.462 %	0.038 ppb	0.081 ppb	16.731 ppb	0.286 ppb	78.780 %	-0.003 ppb	2.462 ppb	76.779 %
Concentration per Run 2	99.935 %	0.140 ppb	0.324 ppb	17.876 ppb	0.331 ppb	80.347 %	-0.003 ppb	2.514 ppb	77.368 %
Concentration per Run 3	92.389 %	0.165 ppb	-0.048 ppb	18.607 ppb	0.340 ppb	80.646 %	-0.001 ppb	2.346 ppb	78.308 %
Concentration RSD	8.0 %	58.9 %	158.8 %	5.3 %	9.1 %	1.3 %	44.0 %	3.5 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.795 ppb	13.522 ppb	82.332 %	80.770 %	0.178 ppb	0.683 ppb	70.062 %
Concentration per Run 1	0.822 ppb	13.202 ppb	81.347 %	79.779 %	0.116 ppb	0.664 ppb	70.128 %
Concentration per Run 2	0.816 ppb	13.592 ppb	81.657 %	80.364 %	0.230 ppb	0.709 ppb	69.547 %
Concentration per Run 3	0.746 ppb	13.772 ppb	83.991 %	82.168 %	0.189 ppb	0.676 ppb	70.512 %
Concentration RSD	5.3 %	2.2 %	1.8 %	1.5 %	32.4 %	3.4 %	0.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	64	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-02 6020TL	Rack	2		
Analysis started at:	8/27/2024 3:34:32 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.566 %	97.378 %	0.015 ppb	42,635.520 ppb	6,325.506 ppb	131.760 ppb	2,943.120 ppb	31,534.464 ppb	86.004 %
Concentration per Run 1	75.464 %	98.315 %	0.018 ppb	41,007.571 ppb	5,978.757 ppb	126.459 ppb	2,779.216 ppb	30,428.755 ppb	85.815 %
Concentration per Run 2	75.807 %	87.079 %	0.012 ppb	44,679.919 ppb	6,625.041 ppb	135.726 ppb	2,951.428 ppb	31,110.687 ppb	86.786 %
Concentration per Run 3	75.427 %	106.742 %	0.016 ppb	42,219.070 ppb	6,372.720 ppb	133.095 ppb	3,098.716 ppb	33,063.950 ppb	85.411 %
Concentration RSD	0.3 %	10.1 %	20.6 %	4.4 %	5.1 %	3.6 %	5.4 %	4.3 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	87.004 %	0.482 ppb	0.618 ppb	1,005.062 ppb	43,982.267 ppb	11.935 ppb	2.015 ppb	1.281 ppb	18.275 ppb
Concentration per Run 1	87.315 %	0.488 ppb	0.603 ppb	958.932 ppb	42,164.498 ppb	11.548 ppb	2.064 ppb	1.447 ppb	17.360 ppb
Concentration per Run 2	85.713 %	0.531 ppb	0.665 ppb	1,012.373 ppb	44,500.522 ppb	11.867 ppb	2.009 ppb	1.086 ppb	19.025 ppb
Concentration per Run 3	87.983 %	0.427 ppb	0.587 ppb	1,043.882 ppb	45,281.780 ppb	12.389 ppb	1.973 ppb	1.310 ppb	18.441 ppb
Concentration RSD	1.3 %	10.9 %	6.7 %	4.3 %	3.7 %	3.6 %	2.3 %	14.2 %	4.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	85.994 %	14.575 ppb	-0.063 ppb	168.246 ppb	0.871 ppb	79.222 %	0.000 ppb	0.017 ppb	79.247 %
Concentration per Run 1	90.984 %	13.264 ppb	-0.032 ppb	157.228 ppb	0.967 ppb	78.540 %	0.001 ppb	0.019 ppb	78.140 %
Concentration per Run 2	80.960 %	15.413 ppb	-0.097 ppb	168.668 ppb	0.855 ppb	78.336 %	0.001 ppb	0.019 ppb	76.640 %
Concentration per Run 3	86.040 %	15.049 ppb	-0.060 ppb	178.842 ppb	0.792 ppb	80.792 %	-0.003 ppb	0.013 ppb	82.961 %
Concentration RSD	5.8 %	7.9 %	52.3 %	6.4 %	10.2 %	1.7 %	457.8 %	20.0 %	4.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.609 ppb	97.844 ppb	83.481 %	83.611 %	0.014 ppb	1.131 ppb	68.834 %
Concentration per Run 1	0.608 ppb	97.488 ppb	82.188 %	82.144 %	-0.004 ppb	1.134 ppb	69.062 %
Concentration per Run 2	0.628 ppb	96.774 ppb	81.734 %	81.852 %	0.022 ppb	1.144 ppb	68.021 %
Concentration per Run 3	0.592 ppb	99.271 ppb	86.522 %	86.836 %	0.024 ppb	1.113 ppb	69.419 %
Concentration RSD	2.9 %	1.3 %	3.2 %	3.3 %	113.1 %	1.4 %	1.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	65	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-03 6020TL	Rack	2		
Analysis started at:	8/27/2024 3:39:00 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.914 %	122.659 %	4.889 ppb	39,573.579 ppb	16,437.225 ppb	47,162.158 ppb	5,772.722 ppb	33,098.997 ppb	165.479 %
Concentration per Run 1	90.792 %	125.281 %	4.930 ppb	32,122.077 ppb	15,861.120 ppb	45,378.735 ppb	5,621.775 ppb	32,816.826 ppb	162.436 %
Concentration per Run 2	92.522 %	112.921 %	4.936 ppb	44,406.113 ppb	17,149.461 ppb	48,977.636 ppb	5,780.817 ppb	32,666.208 ppb	167.856 %
Concentration per Run 3	92.428 %	129.775 %	4.802 ppb	42,192.548 ppb	16,301.094 ppb	47,130.104 ppb	5,915.575 ppb	33,813.958 ppb	166.144 %
Concentration RSD	1.1 %	7.1 %	1.5 %	16.5 %	4.0 %	3.8 %	2.5 %	1.9 %	1.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	155.193 %	78.618 ppb	112.688 ppb	2,810.315 ppb	145,720.613 ppb	61.735 ppb	85.312 ppb	246.207 ppb	660.586 ppb
Concentration per Run 1	155.282 %	76.654 ppb	111.233 ppb	2,773.933 ppb	142,962.596 ppb	60.971 ppb	83.566 ppb	245.612 ppb	654.930 ppb
Concentration per Run 2	155.148 %	79.167 ppb	112.776 ppb	2,807.303 ppb	146,569.938 ppb	61.864 ppb	85.983 ppb	246.775 ppb	658.801 ppb
Concentration per Run 3	155.149 %	80.032 ppb	114.054 ppb	2,849.709 ppb	147,629.304 ppb	62.371 ppb	86.387 ppb	246.234 ppb	668.026 ppb
Concentration RSD	0.0 %	2.2 %	1.3 %	1.4 %	1.7 %	1.1 %	1.8 %	0.2 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	87.509 %	78.806 ppb	8.160 ppb	300.284 ppb	1.775 ppb	81.393 %	0.206 ppb	4.340 ppb	80.094 %
Concentration per Run 1	86.060 %	78.343 ppb	8.387 ppb	298.688 ppb	1.481 ppb	80.678 %	0.198 ppb	4.280 ppb	79.103 %
Concentration per Run 2	87.981 %	80.585 ppb	7.811 ppb	298.835 ppb	2.032 ppb	82.019 %	0.227 ppb	4.421 ppb	80.509 %
Concentration per Run 3	88.485 %	77.491 ppb	8.281 ppb	303.329 ppb	1.812 ppb	81.482 %	0.194 ppb	4.318 ppb	80.669 %
Concentration RSD	1.5 %	2.0 %	3.8 %	0.9 %	15.6 %	0.8 %	8.6 %	1.7 %	1.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.332 ppb	444.117 ppb	91.031 %	84.339 %	0.634 ppb	118.960 ppb	74.067 %
Concentration per Run 1	0.325 ppb	444.879 ppb	89.778 %	82.620 %	0.591 ppb	116.239 ppb	73.884 %
Concentration per Run 2	0.315 ppb	438.328 ppb	91.046 %	84.721 %	0.675 ppb	119.894 ppb	74.088 %
Concentration per Run 3	0.356 ppb	449.144 ppb	92.268 %	85.675 %	0.636 ppb	120.746 ppb	74.229 %
Concentration RSD	6.4 %	1.2 %	1.4 %	1.9 %	6.6 %	2.0 %	0.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	66	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-04 6020TL	Rack	2		
Analysis started at:	8/27/2024 3:43:28 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.287 %	111.798 %	0.178 ppb	23,914.726 ppb	9,451.525 ppb	2,032.290 ppb	3,905.655 ppb	40,331.350 ppb	92.658 %
Concentration per Run 1	78.877 %	104.494 %	0.169 ppb	24,675.067 ppb	9,669.011 ppb	2,091.600 ppb	3,895.515 ppb	41,296.700 ppb	93.498 %
Concentration per Run 2	79.520 %	115.730 %	0.168 ppb	23,242.733 ppb	9,124.760 ppb	1,945.667 ppb	3,770.494 ppb	38,089.436 ppb	92.819 %
Concentration per Run 3	79.464 %	115.169 %	0.197 ppb	23,826.378 ppb	9,560.805 ppb	2,059.601 ppb	4,050.955 ppb	41,607.916 ppb	91.658 %
Concentration RSD	0.4 %	5.7 %	9.3 %	3.0 %	3.0 %	3.8 %	3.6 %	4.8 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.632 %	5.461 ppb	5.258 ppb	10,618.213 ppb	51,909.895 ppb	20.040 ppb	7.679 ppb	7.642 ppb	48.540 ppb
Concentration per Run 1	88.383 %	5.214 ppb	5.364 ppb	11,380.713 ppb	52,242.000 ppb	19.749 ppb	7.763 ppb	7.281 ppb	47.954 ppb
Concentration per Run 2	95.594 %	5.350 ppb	5.404 ppb	8,933.235 ppb	51,332.800 ppb	20.295 ppb	7.617 ppb	7.798 ppb	49.016 ppb
Concentration per Run 3	90.920 %	5.818 ppb	5.006 ppb	11,540.690 ppb	52,154.885 ppb	20.076 ppb	7.657 ppb	7.849 ppb	48.650 ppb
Concentration RSD	4.0 %	5.8 %	4.2 %	13.8 %	1.0 %	1.4 %	1.0 %	4.1 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	84.200 %	16.071 ppb	0.196 ppb	154.163 ppb	1.374 ppb	84.193 %	0.006 ppb	0.183 ppb	82.029 %
Concentration per Run 1	84.104 %	16.365 ppb	0.294 ppb	152.290 ppb	1.321 ppb	84.002 %	0.011 ppb	0.225 ppb	81.229 %
Concentration per Run 2	82.471 %	16.242 ppb	0.234 ppb	156.073 ppb	1.358 ppb	83.908 %	0.004 ppb	0.170 ppb	82.408 %
Concentration per Run 3	86.025 %	15.606 ppb	0.059 ppb	154.126 ppb	1.443 ppb	84.668 %	0.002 ppb	0.155 ppb	82.450 %
Concentration RSD	2.1 %	2.5 %	62.5 %	1.2 %	4.6 %	0.5 %	82.3 %	19.9 %	0.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.226 ppb	155.095 ppb	85.791 %	84.803 %	0.056 ppb	4.222 ppb	70.111 %
Concentration per Run 1	1.242 ppb	151.365 ppb	84.447 %	83.470 %	0.043 ppb	4.066 ppb	70.099 %
Concentration per Run 2	1.172 ppb	157.550 ppb	85.613 %	84.966 %	0.067 ppb	4.360 ppb	69.445 %
Concentration per Run 3	1.263 ppb	156.370 ppb	87.313 %	85.974 %	0.057 ppb	4.240 ppb	70.789 %
Concentration RSD	3.9 %	2.1 %	1.7 %	1.5 %	21.9 %	3.5 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	67	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 3:47:56 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.226 %	116.105 %	62.603 ppb	5,825.264 ppb	5,887.529 ppb	59.598 ppb	6,332.497 ppb	6,399.896 ppb	93.354 %
Concentration per Run 1	84.692 %	107.865 %	62.648 ppb	5,944.464 ppb	5,971.203 ppb	63.407 ppb	5,987.986 ppb	5,931.611 ppb	91.256 %
Concentration per Run 2	85.191 %	119.101 %	63.072 ppb	5,845.646 ppb	5,902.678 ppb	58.606 ppb	6,795.071 ppb	6,909.756 ppb	94.083 %
Concentration per Run 3	85.795 %	121.348 %	62.089 ppb	5,685.684 ppb	5,788.707 ppb	56.781 ppb	6,214.435 ppb	6,358.322 ppb	94.722 %
Recovery Percentage 1			104.338 %	97.088 %	98.125 %	99.330 %	105.542 %	106.665 %	
Concentration RSD	0.6 %	6.2 %	0.8 %	2.2 %	1.6 %	5.7 %	6.6 %	7.7 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.009 %	63.396 ppb	63.538 ppb	63.780 ppb	6,368.054 ppb	62.642 ppb	64.458 ppb	60.757 ppb	60.350 ppb
Concentration per Run 1	95.727 %	58.326 ppb	60.285 ppb	62.235 ppb	6,154.902 ppb	61.135 ppb	62.367 ppb	59.752 ppb	59.395 ppb
Concentration per Run 2	84.912 %	67.188 ppb	67.302 ppb	65.613 ppb	6,667.002 ppb	65.636 ppb	66.052 ppb	64.137 ppb	61.990 ppb
Concentration per Run 3	92.389 %	64.674 ppb	63.026 ppb	63.492 ppb	6,282.257 ppb	61.155 ppb	64.956 ppb	58.382 ppb	59.665 ppb
Recovery Percentage 1		105.660 %	105.896 %	106.300 %	106.134 %	104.403 %	107.430 %	101.261 %	100.584 %
Concentration RSD	6.1 %	7.2 %	5.6 %	2.7 %	4.2 %	4.1 %	2.9 %	4.9 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.337 %	59.930 ppb	55.120 ppb	56.516 ppb	58.903 ppb	90.451 %	60.928 ppb	60.844 ppb	86.931 %
Concentration per Run 1	92.744 %	58.050 ppb	53.821 ppb	56.184 ppb	57.724 ppb	90.198 %	60.654 ppb	60.989 ppb	86.970 %
Concentration per Run 2	89.977 %	61.463 ppb	58.968 ppb	57.343 ppb	58.936 ppb	89.585 %	61.679 ppb	61.474 ppb	86.448 %
Concentration per Run 3	94.291 %	60.276 ppb	52.570 ppb	56.020 ppb	60.049 ppb	91.569 %	60.451 ppb	60.070 ppb	87.377 %
Recovery Percentage 1		99.883 %	91.867 %	94.193 %	98.172 %		101.547 %	101.407 %	
Concentration RSD	2.4 %	2.9 %	6.2 %	1.3 %	2.0 %	1.1 %	1.1 %	1.2 %	0.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.825 ppb	58.078 ppb	90.708 %	88.094 %	62.906 ppb	63.057 ppb	77.342 %
Concentration per Run 1	59.884 ppb	56.631 ppb	90.562 %	87.335 %	62.464 ppb	63.053 ppb	78.081 %
Concentration per Run 2	59.791 ppb	59.569 ppb	89.830 %	87.378 %	63.434 ppb	63.640 ppb	76.318 %
Concentration per Run 3	59.798 ppb	58.034 ppb	91.731 %	89.569 %	62.819 ppb	62.479 ppb	77.628 %
Recovery Percentage 1	99.708 %	96.797 %			104.843 %	105.096 %	
Concentration RSD	0.1 %	2.5 %	1.1 %	1.5 %	0.8 %	0.9 %	1.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	68	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 3:52:27 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.493 %	108.240 %	0.008 ppb	-4.666 ppb	-5.453 ppb	-1.308 ppb	-14.427 ppb	-24.483 ppb	93.645 %
Concentration per Run 1	84.907 %	107.303 %	0.004 ppb	-0.693 ppb	-5.242 ppb	-1.327 ppb	-18.461 ppb	-27.809 ppb	93.223 %
Concentration per Run 2	87.510 %	102.809 %	0.012 ppb	-1.309 ppb	-5.234 ppb	-1.209 ppb	-9.966 ppb	-17.045 ppb	94.106 %
Concentration per Run 3	87.061 %	114.607 %	0.008 ppb	-11.995 ppb	-5.882 ppb	-1.389 ppb	-14.854 ppb	-28.595 ppb	93.605 %
Recovery Percentage 1			1.571 %	-4.666 %	-7.789 %	-13.084 %	-14.427 %	-24.483 %	
Concentration RSD	1.6 %	5.5 %	50.9 %	136.2 %	6.8 %	7.0 %	29.6 %	26.4 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.072 %	-0.013 ppb	-0.082 ppb	-0.011 ppb	4.521 ppb	-0.004 ppb	-0.655 ppb	-0.173 ppb	-2.132 ppb
Concentration per Run 1	83.310 %	0.004 ppb	-0.115 ppb	0.017 ppb	4.644 ppb	-0.011 ppb	-0.678 ppb	-0.184 ppb	-2.182 ppb
Concentration per Run 2	87.582 %	-0.041 ppb	-0.052 ppb	-0.053 ppb	5.544 ppb	0.003 ppb	-0.629 ppb	-0.134 ppb	-2.108 ppb
Concentration per Run 3	93.324 %	-0.002 ppb	-0.077 ppb	0.001 ppb	3.374 ppb	-0.004 ppb	-0.658 ppb	-0.202 ppb	-2.104 ppb
Recovery Percentage 1		-0.259 %	-8.150 %	-1.138 %	9.042 %	-0.729 %	-32.749 %	-17.332 %	-42.631 %
Concentration RSD	5.7 %	188.0 %	38.5 %	321.9 %	24.1 %	192.7 %	3.8 %	20.4 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.344 %	0.055 ppb	0.136 ppb	-0.017 ppb	0.209 ppb	93.583 %	0.001 ppb	0.002 ppb	90.386 %
Concentration per Run 1	90.273 %	0.057 ppb	0.118 ppb	-0.015 ppb	0.150 ppb	94.214 %	-0.002 ppb	0.007 ppb	89.683 %
Concentration per Run 2	93.599 %	0.026 ppb	0.040 ppb	-0.017 ppb	0.276 ppb	93.070 %	0.006 ppb	-0.001 ppb	89.880 %
Concentration per Run 3	93.161 %	0.083 ppb	0.249 ppb	-0.019 ppb	0.200 ppb	93.465 %	0.000 ppb	-0.001 ppb	91.594 %
Recovery Percentage 1		11.082 %	2.714 %	-0.174 %	10.445 %		0.372 %	0.808 %	
Concentration RSD	2.0 %	51.0 %	77.9 %	11.5 %	30.4 %	0.6 %	279.7 %	309.4 %	1.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.052 ppb	-0.067 ppb	93.048 %	90.744 %	0.136 ppb	0.001 ppb	78.875 %
Concentration per Run 1	0.043 ppb	-0.031 ppb	92.279 %	89.954 %	0.096 ppb	0.007 ppb	79.734 %
Concentration per Run 2	0.043 ppb	-0.071 ppb	92.455 %	90.013 %	0.178 ppb	-0.004 ppb	77.985 %
Concentration per Run 3	0.072 ppb	-0.099 ppb	94.409 %	92.266 %	0.135 ppb	0.000 ppb	78.906 %
Recovery Percentage 1	1.308 %	-13.383 %			13.648 %	0.073 %	
Concentration RSD	32.0 %	51.0 %	1.3 %	1.5 %	29.9 %	799.0 %	1.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	69	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-05 6020TL	Rack	2		
Analysis started at:	8/27/2024 3:59:21 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.147 %	97.566 %	0.062 ppb	36,866.788 ppb	14,624.143 ppb	1,060.275 ppb	5,317.526 ppb	51,672.362 ppb	92.577 %
Concentration per Run 1	81.226 %	99.438 %	0.068 ppb	35,439.406 ppb	13,956.195 ppb	1,000.222 ppb	5,087.013 ppb	49,383.896 ppb	91.452 %
Concentration per Run 2	82.788 %	105.056 %	0.070 ppb	36,546.099 ppb	14,701.194 ppb	1,112.046 ppb	5,763.028 ppb	55,504.598 ppb	92.370 %
Concentration per Run 3	82.426 %	88.202 %	0.047 ppb	38,614.857 ppb	15,215.040 ppb	1,068.555 ppb	5,102.536 ppb	50,128.592 ppb	93.908 %
Concentration RSD	1.0 %	8.8 %	20.9 %	4.4 %	4.3 %	5.3 %	7.3 %	6.5 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.834 %	2.112 ppb	2.369 ppb	8,916.368 ppb	6,978.695 ppb	19.680 ppb	14.026 ppb	8.098 ppb	49.006 ppb
Concentration per Run 1	92.923 %	2.193 ppb	2.435 ppb	8,703.513 ppb	6,878.719 ppb	19.080 ppb	14.698 ppb	8.563 ppb	48.388 ppb
Concentration per Run 2	92.256 %	2.351 ppb	2.271 ppb	9,228.384 ppb	7,139.894 ppb	20.118 ppb	13.904 ppb	7.618 ppb	48.899 ppb
Concentration per Run 3	93.324 %	1.793 ppb	2.400 ppb	8,817.208 ppb	6,917.471 ppb	19.843 ppb	13.475 ppb	8.113 ppb	49.730 ppb
Concentration RSD	0.6 %	13.6 %	3.6 %	3.1 %	2.0 %	2.7 %	4.4 %	5.8 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.019 %	2.044 ppb	0.038 ppb	221.199 ppb	0.518 ppb	86.054 %	0.007 ppb	0.631 ppb	85.882 %
Concentration per Run 1	90.756 %	2.273 ppb	0.124 ppb	215.096 ppb	0.363 ppb	86.598 %	0.010 ppb	0.596 ppb	83.721 %
Concentration per Run 2	93.780 %	1.854 ppb	0.029 ppb	230.941 ppb	0.617 ppb	85.777 %	-0.005 ppb	0.657 ppb	90.334 %
Concentration per Run 3	88.519 %	2.006 ppb	-0.040 ppb	217.559 ppb	0.573 ppb	85.786 %	0.016 ppb	0.640 ppb	83.590 %
Concentration RSD	2.9 %	10.4 %	217.8 %	3.9 %	26.2 %	0.5 %	149.4 %	5.0 %	4.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.810 ppb	245.963 ppb	91.554 %	91.144 %	0.176 ppb	2.264 ppb	74.184 %
Concentration per Run 1	0.758 ppb	241.735 ppb	92.045 %	90.269 %	0.158 ppb	2.220 ppb	74.868 %
Concentration per Run 2	0.861 ppb	249.178 ppb	92.796 %	93.683 %	0.193 ppb	2.255 ppb	74.564 %
Concentration per Run 3	0.810 ppb	246.977 ppb	89.820 %	89.481 %	0.178 ppb	2.317 ppb	73.120 %
Concentration RSD	6.4 %	1.6 %	1.7 %	2.5 %	9.8 %	2.2 %	1.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	70	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-06 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:06:18 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.745 %	126.779 %	2.417 ppb	8,997.876 ppb	14,514.884 ppb	29,174.634 ppb	4,163.133 ppb	24,229.613 ppb	153.939 %
Concentration per Run 1	94.144 %	124.719 %	2.423 ppb	8,684.203 ppb	14,037.726 ppb	28,355.179 ppb	4,121.835 ppb	23,228.644 ppb	153.052 %
Concentration per Run 2	95.459 %	128.090 %	2.414 ppb	8,890.348 ppb	14,170.291 ppb	28,540.568 ppb	3,961.555 ppb	23,347.704 ppb	154.076 %
Concentration per Run 3	94.631 %	127.528 %	2.415 ppb	9,419.077 ppb	15,336.635 ppb	30,628.154 ppb	4,406.008 ppb	26,112.492 ppb	154.690 %
Concentration RSD	0.7 %	1.4 %	0.2 %	4.2 %	4.9 %	4.3 %	5.4 %	6.7 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	142.640 %	45.336 ppb	52.772 ppb	3,619.477 ppb	100,253.529 ppb	37.263 ppb	53.658 ppb	62.560 ppb	144.167 ppb
Concentration per Run 1	141.795 %	43.922 ppb	51.572 ppb	3,494.269 ppb	96,847.595 ppb	35.651 ppb	51.030 ppb	61.941 ppb	137.841 ppb
Concentration per Run 2	147.403 %	44.026 ppb	52.325 ppb	3,591.795 ppb	100,198.337 ppb	37.047 ppb	53.389 ppb	62.013 ppb	145.681 ppb
Concentration per Run 3	138.723 %	48.060 ppb	54.418 ppb	3,772.367 ppb	103,714.655 ppb	39.092 ppb	56.554 ppb	63.726 ppb	148.979 ppb
Concentration RSD	3.1 %	5.2 %	2.8 %	3.9 %	3.4 %	4.6 %	5.2 %	1.6 %	4.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.682 %	24.551 ppb	5.946 ppb	152.483 ppb	0.659 ppb	87.683 %	0.098 ppb	2.185 ppb	86.640 %
Concentration per Run 1	93.495 %	23.058 ppb	5.816 ppb	143.189 ppb	0.641 ppb	83.901 %	0.083 ppb	2.230 ppb	83.129 %
Concentration per Run 2	89.294 %	24.630 ppb	6.650 ppb	156.909 ppb	0.605 ppb	89.754 %	0.100 ppb	2.030 ppb	87.851 %
Concentration per Run 3	92.257 %	25.964 ppb	5.373 ppb	157.352 ppb	0.731 ppb	89.393 %	0.110 ppb	2.295 ppb	88.941 %
Concentration RSD	2.4 %	5.9 %	10.9 %	5.3 %	9.9 %	3.7 %	13.9 %	6.3 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.220 ppb	617.591 ppb	97.561 %	92.656 %	0.690 ppb	57.033 ppb	82.329 %
Concentration per Run 1	0.225 ppb	599.031 ppb	94.581 %	88.420 %	0.658 ppb	52.484 ppb	87.198 %
Concentration per Run 2	0.230 ppb	625.061 ppb	98.746 %	94.521 %	0.691 ppb	59.647 ppb	78.919 %
Concentration per Run 3	0.204 ppb	628.682 ppb	99.356 %	95.027 %	0.723 ppb	58.967 ppb	80.872 %
Concentration RSD	6.4 %	2.6 %	2.7 %	4.0 %	4.7 %	6.9 %	5.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	71	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-07 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:10:46 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.276 %	114.981 %	1.192 ppb	34,169.727 ppb	16,879.631 ppb	16,621.996 ppb	7,791.993 ppb	28,944.690 ppb	118.623 %
Concentration per Run 1	87.034 %	116.854 %	1.213 ppb	33,176.370 ppb	16,333.477 ppb	16,151.935 ppb	7,596.486 ppb	28,207.541 ppb	117.624 %
Concentration per Run 2	87.455 %	112.921 %	1.204 ppb	34,693.975 ppb	17,045.182 ppb	17,016.315 ppb	7,852.633 ppb	28,951.845 ppb	118.732 %
Concentration per Run 3	87.341 %	115.169 %	1.158 ppb	34,638.834 ppb	17,260.234 ppb	16,697.739 ppb	7,926.858 ppb	29,674.682 ppb	119.513 %
Concentration RSD	0.2 %	1.7 %	2.5 %	2.5 %	2.9 %	2.6 %	2.2 %	2.5 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	111.439 %	32.592 ppb	27.364 ppb	2,303.907 ppb	27,041.069 ppb	14.824 ppb	17.964 ppb	20.513 ppb	80.250 ppb
Concentration per Run 1	113.486 %	31.865 ppb	26.965 ppb	2,256.935 ppb	26,260.117 ppb	14.424 ppb	18.574 ppb	19.874 ppb	77.535 ppb
Concentration per Run 2	109.347 %	34.418 ppb	27.632 ppb	2,372.840 ppb	27,988.282 ppb	16.148 ppb	18.318 ppb	21.815 ppb	85.849 ppb
Concentration per Run 3	111.483 %	31.492 ppb	27.496 ppb	2,281.944 ppb	26,874.810 ppb	13.902 ppb	17.000 ppb	19.851 ppb	77.365 ppb
Concentration RSD	1.9 %	4.9 %	1.3 %	2.6 %	3.2 %	7.9 %	4.7 %	5.5 %	6.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.646 %	7.822 ppb	2.073 ppb	141.132 ppb	0.269 ppb	89.036 %	0.068 ppb	1.291 ppb	85.667 %
Concentration per Run 1	96.125 %	7.957 ppb	2.230 ppb	134.104 ppb	0.239 ppb	86.066 %	0.079 ppb	1.190 ppb	81.357 %
Concentration per Run 2	87.281 %	8.043 ppb	2.362 ppb	149.228 ppb	0.318 ppb	89.469 %	0.057 ppb	1.395 ppb	88.543 %
Concentration per Run 3	97.533 %	7.466 ppb	1.629 ppb	140.064 ppb	0.251 ppb	91.574 %	0.069 ppb	1.287 ppb	87.103 %
Concentration RSD	5.9 %	4.0 %	18.8 %	5.4 %	15.9 %	3.1 %	16.3 %	8.0 %	4.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.457 ppb	139.004 ppb	93.897 %	90.021 %	0.245 ppb	20.723 ppb	74.913 %
Concentration per Run 1	0.425 ppb	139.899 ppb	91.349 %	85.348 %	0.244 ppb	20.702 ppb	73.482 %
Concentration per Run 2	0.495 ppb	138.034 ppb	93.821 %	91.649 %	0.248 ppb	20.679 ppb	75.535 %
Concentration per Run 3	0.452 ppb	139.079 ppb	96.522 %	93.066 %	0.242 ppb	20.789 ppb	75.721 %
Concentration RSD	7.7 %	0.7 %	2.8 %	4.6 %	1.3 %	0.3 %	1.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	72	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-08 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:15:14 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.690 %	133.708 %	5.633 ppb	14,754.641 ppb	16,009.786 ppb	48,171.457 ppb	6,337.689 ppb	37,224.582 ppb	206.512 %
Concentration per Run 1	99.050 %	132.584 %	5.693 ppb	14,628.856 ppb	15,949.274 ppb	47,922.368 ppb	6,322.967 ppb	37,003.045 ppb	207.363 %
Concentration per Run 2	99.166 %	127.528 %	5.555 ppb	14,846.371 ppb	16,057.838 ppb	48,257.704 ppb	6,233.127 ppb	36,127.919 ppb	206.999 %
Concentration per Run 3	97.856 %	141.011 %	5.651 ppb	14,788.696 ppb	16,022.246 ppb	48,334.300 ppb	6,456.973 ppb	38,542.782 ppb	205.173 %
Concentration RSD	0.7 %	5.1 %	1.3 %	0.8 %	0.3 %	0.5 %	1.8 %	3.3 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	188.935 %	92.446 ppb	88.488 ppb	6,675.301 ppb	120,729.074 ppb	111.241 ppb	70.933 ppb	103.458 ppb	309.173 ppb
Concentration per Run 1	186.264 %	92.487 ppb	88.305 ppb	6,606.265 ppb	120,699.399 ppb	111.024 ppb	69.844 ppb	104.369 ppb	312.087 ppb
Concentration per Run 2	191.072 %	89.999 ppb	86.408 ppb	6,572.525 ppb	117,801.745 ppb	109.287 ppb	68.943 ppb	99.630 ppb	300.455 ppb
Concentration per Run 3	189.469 %	94.854 ppb	90.752 ppb	6,847.112 ppb	123,686.078 ppb	113.412 ppb	74.013 ppb	106.374 ppb	314.978 ppb
Concentration RSD	1.3 %	2.6 %	2.5 %	2.2 %	2.4 %	1.9 %	3.8 %	3.3 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.023 %	44.223 ppb	13.051 ppb	332.455 ppb	0.914 ppb	89.644 %	0.426 ppb	2.858 ppb	85.835 %
Concentration per Run 1	93.687 %	44.620 ppb	13.192 ppb	337.476 ppb	0.883 ppb	89.568 %	0.421 ppb	2.817 ppb	87.028 %
Concentration per Run 2	98.471 %	43.719 ppb	13.203 ppb	315.647 ppb	0.894 ppb	87.956 %	0.414 ppb	2.882 ppb	82.214 %
Concentration per Run 3	95.913 %	44.331 ppb	12.758 ppb	344.241 ppb	0.965 ppb	91.407 %	0.445 ppb	2.874 ppb	88.264 %
Concentration RSD	2.5 %	1.0 %	1.9 %	4.5 %	4.9 %	1.9 %	3.8 %	1.2 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.319 ppb	591.829 ppb	104.715 %	93.062 %	0.780 ppb	196.679 ppb	80.166 %
Concentration per Run 1	0.331 ppb	587.247 ppb	103.995 %	92.394 %	0.780 ppb	194.072 ppb	80.318 %
Concentration per Run 2	0.296 ppb	587.964 ppb	102.422 %	91.123 %	0.768 ppb	197.016 ppb	78.616 %
Concentration per Run 3	0.331 ppb	600.276 ppb	107.728 %	95.670 %	0.791 ppb	198.948 ppb	81.564 %
Concentration RSD	6.4 %	1.2 %	2.6 %	2.5 %	1.5 %	1.2 %	1.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	73	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-09 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:19:42 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.096 %	112.921 %	0.051 ppb	52,742.084 ppb	8,607.351 ppb	351.584 ppb	9,383.069 ppb	44,354.975 ppb	95.002 %
Concentration per Run 1	83.318 %	117.416 %	0.058 ppb	51,016.648 ppb	8,378.579 ppb	347.604 ppb	9,173.122 ppb	44,386.958 ppb	94.075 %
Concentration per Run 2	84.475 %	103.371 %	0.038 ppb	56,613.769 ppb	9,128.047 ppb	368.461 ppb	9,785.537 ppb	45,465.374 ppb	95.204 %
Concentration per Run 3	84.494 %	117.978 %	0.058 ppb	50,595.835 ppb	8,315.426 ppb	338.688 ppb	9,190.549 ppb	43,212.592 ppb	95.726 %
Concentration RSD	0.8 %	7.3 %	23.1 %	6.4 %	5.3 %	4.3 %	3.7 %	2.5 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.792 %	1.478 ppb	1.989 ppb	593.076 ppb	3,649.591 ppb	6.656 ppb	3.734 ppb	6.033 ppb	80.313 ppb
Concentration per Run 1	95.594 %	1.436 ppb	1.960 ppb	586.870 ppb	3,665.462 ppb	6.526 ppb	3.726 ppb	6.611 ppb	79.490 ppb
Concentration per Run 2	89.719 %	1.873 ppb	2.081 ppb	598.140 ppb	3,729.088 ppb	6.551 ppb	4.071 ppb	5.621 ppb	80.940 ppb
Concentration per Run 3	99.065 %	1.124 ppb	1.926 ppb	594.219 ppb	3,554.222 ppb	6.891 ppb	3.406 ppb	5.867 ppb	80.510 ppb
Concentration RSD	5.0 %	25.5 %	4.1 %	1.0 %	2.4 %	3.1 %	8.9 %	8.5 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.281 %	2.625 ppb	0.077 ppb	310.915 ppb	0.631 ppb	88.445 %	0.011 ppb	0.163 ppb	84.801 %
Concentration per Run 1	90.031 %	2.438 ppb	0.015 ppb	312.686 ppb	0.519 ppb	91.057 %	0.003 ppb	0.156 ppb	86.327 %
Concentration per Run 2	93.176 %	2.603 ppb	0.095 ppb	296.499 ppb	0.742 ppb	85.354 %	0.016 ppb	0.161 ppb	81.537 %
Concentration per Run 3	90.636 %	2.834 ppb	0.119 ppb	323.561 ppb	0.633 ppb	88.925 %	0.013 ppb	0.171 ppb	86.537 %
Concentration RSD	1.8 %	7.6 %	70.9 %	4.4 %	17.7 %	3.3 %	61.3 %	4.6 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.690 ppb	84.986 ppb	90.541 %	88.215 %	-0.002 ppb	6.120 ppb	72.234 %
Concentration per Run 1	1.620 ppb	83.217 ppb	90.703 %	88.518 %	-0.017 ppb	6.014 ppb	72.753 %
Concentration per Run 2	1.725 ppb	85.355 ppb	88.006 %	85.712 %	0.005 ppb	6.154 ppb	71.399 %
Concentration per Run 3	1.725 ppb	86.387 ppb	92.915 %	90.417 %	0.005 ppb	6.193 ppb	72.548 %
Concentration RSD	3.6 %	1.9 %	2.7 %	2.7 %	552.0 %	1.5 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	74	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-10 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:24:11 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.473 %	114.981 %	0.142 ppb	16,937.137 ppb	16,310.396 ppb	962.509 ppb	7,217.028 ppb	51,864.939 ppb	99.644 %
Concentration per Run 1	86.117 %	108.427 %	0.137 ppb	17,436.153 ppb	16,886.889 ppb	972.086 ppb	7,220.958 ppb	51,699.236 ppb	98.753 %
Concentration per Run 2	86.723 %	121.910 %	0.134 ppb	16,593.585 ppb	16,008.191 ppb	957.682 ppb	7,373.035 ppb	53,935.662 ppb	100.061 %
Concentration per Run 3	86.578 %	114.607 %	0.154 ppb	16,781.672 ppb	16,036.107 ppb	957.759 ppb	7,057.091 ppb	49,959.918 ppb	100.118 %
Concentration RSD	0.4 %	5.9 %	7.7 %	2.6 %	3.1 %	0.9 %	2.2 %	3.8 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.481 %	7.522 ppb	12.128 ppb	1,299.742 ppb	25,343.677 ppb	1.142 ppb	2.673 ppb	5.579 ppb	28.131 ppb
Concentration per Run 1	94.392 %	7.621 ppb	11.961 ppb	1,296.896 ppb	25,407.610 ppb	1.138 ppb	2.298 ppb	5.341 ppb	28.476 ppb
Concentration per Run 2	91.988 %	7.593 ppb	12.221 ppb	1,338.141 ppb	25,665.641 ppb	1.248 ppb	2.994 ppb	5.456 ppb	28.283 ppb
Concentration per Run 3	97.062 %	7.352 ppb	12.200 ppb	1,264.188 ppb	24,957.781 ppb	1.040 ppb	2.726 ppb	5.940 ppb	27.634 ppb
Concentration RSD	2.7 %	2.0 %	1.2 %	2.9 %	1.4 %	9.1 %	13.1 %	5.7 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.513 %	2.621 ppb	0.485 ppb	218.123 ppb	1.027 ppb	89.991 %	0.007 ppb	0.041 ppb	84.775 %
Concentration per Run 1	93.720 %	2.527 ppb	0.267 ppb	219.717 ppb	1.060 ppb	90.161 %	0.010 ppb	0.045 ppb	84.063 %
Concentration per Run 2	92.859 %	2.607 ppb	0.787 ppb	224.531 ppb	1.100 ppb	90.269 %	0.007 ppb	0.057 ppb	86.849 %
Concentration per Run 3	93.962 %	2.730 ppb	0.401 ppb	210.120 ppb	0.921 ppb	89.542 %	0.003 ppb	0.022 ppb	83.412 %
Concentration RSD	0.6 %	3.9 %	55.7 %	3.4 %	9.1 %	0.4 %	48.6 %	43.4 %	2.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.800 ppb	224.355 ppb	91.503 %	88.656 %	-0.012 ppb	4.647 ppb	74.052 %
Concentration per Run 1	0.811 ppb	225.292 ppb	90.012 %	87.027 %	-0.022 ppb	4.618 ppb	73.877 %
Concentration per Run 2	0.809 ppb	224.493 ppb	93.248 %	90.542 %	-0.005 ppb	4.670 ppb	74.124 %
Concentration per Run 3	0.780 ppb	223.280 ppb	91.248 %	88.400 %	-0.010 ppb	4.654 ppb	74.155 %
Concentration RSD	2.1 %	0.5 %	1.8 %	2.0 %	69.0 %	0.6 %	0.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	75	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-11 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:28:40 PM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.654 %	115.918 %	0.090 ppb	62,478.238 ppb	13,626.949 ppb	776.005 ppb	8,681.255 ppb	48,940.848 ppb	96.722 %
Concentration per Run 1	82.531 %	123.596 %	0.089 ppb	61,179.188 ppb	13,579.932 ppb	796.255 ppb	9,073.501 ppb	51,131.416 ppb	96.143 %
Concentration per Run 2	82.384 %	116.854 %	0.098 ppb	60,189.733 ppb	13,227.284 ppb	739.810 ppb	8,197.469 ppb	46,974.115 ppb	95.623 %
Concentration per Run 3	83.048 %	107.303 %	0.082 ppb	66,065.793 ppb	14,073.631 ppb	791.949 ppb	8,772.796 ppb	48,717.012 ppb	98.401 %
Concentration RSD	0.4 %	7.1 %	8.6 %	5.0 %	3.1 %	4.0 %	5.1 %	4.3 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.062 %	2.845 ppb	7.536 ppb	1,596.627 ppb	49,313.767 ppb	8.583 ppb	5.982 ppb	8.002 ppb	92.322 ppb
Concentration per Run 1	97.196 %	2.937 ppb	7.680 ppb	1,621.033 ppb	49,212.421 ppb	8.504 ppb	6.239 ppb	7.671 ppb	89.450 ppb
Concentration per Run 2	98.531 %	2.663 ppb	7.383 ppb	1,544.325 ppb	48,684.559 ppb	8.758 ppb	6.138 ppb	8.119 ppb	92.227 ppb
Concentration per Run 3	95.460 %	2.936 ppb	7.546 ppb	1,624.524 ppb	50,044.323 ppb	8.487 ppb	5.570 ppb	8.215 ppb	95.290 ppb
Concentration RSD	1.6 %	5.6 %	2.0 %	2.8 %	1.4 %	1.8 %	6.0 %	3.6 %	3.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.304 %	7.231 ppb	0.064 ppb	314.960 ppb	1.001 ppb	90.023 %	0.032 ppb	0.598 ppb	87.297 %
Concentration per Run 1	98.377 %	7.521 ppb	0.236 ppb	314.113 ppb	0.913 ppb	90.696 %	0.032 ppb	0.603 ppb	88.920 %
Concentration per Run 2	91.226 %	7.450 ppb	0.051 ppb	310.302 ppb	1.128 ppb	89.342 %	0.026 ppb	0.665 ppb	87.777 %
Concentration per Run 3	87.309 %	6.723 ppb	-0.094 ppb	320.463 ppb	0.964 ppb	90.031 %	0.038 ppb	0.527 ppb	85.194 %
Concentration RSD	6.1 %	6.1 %	256.6 %	1.6 %	11.2 %	0.8 %	18.1 %	11.6 %	2.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.095 ppb	285.867 ppb	92.879 %	91.144 %	-0.007 ppb	11.871 ppb	73.655 %
Concentration per Run 1	1.149 ppb	290.584 ppb	94.241 %	91.710 %	-0.008 ppb	11.621 ppb	74.702 %
Concentration per Run 2	1.095 ppb	282.267 ppb	92.532 %	90.239 %	-0.009 ppb	12.053 ppb	73.344 %
Concentration per Run 3	1.039 ppb	284.750 ppb	91.865 %	91.483 %	-0.004 ppb	11.941 ppb	72.919 %
Concentration RSD	5.0 %	1.5 %	1.3 %	0.9 %	35.9 %	1.9 %	1.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	76	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-12 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:33:10 PM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.578 %	118.539 %	1.683 ppb	82,352.285 ppb	11,716.394 ppb	16,302.392 ppb	5,091.686 ppb	28,518.745 ppb	124.257 %
Concentration per Run 1	85.594 %	112.360 %	1.719 ppb	80,666.938 ppb	11,439.905 ppb	15,936.512 ppb	4,779.871 ppb	26,689.033 ppb	123.372 %
Concentration per Run 2	86.866 %	120.787 %	1.671 ppb	82,441.721 ppb	11,615.046 ppb	16,180.157 ppb	4,953.155 ppb	28,055.620 ppb	123.135 %
Concentration per Run 3	87.274 %	122.472 %	1.657 ppb	83,948.196 ppb	12,094.230 ppb	16,790.507 ppb	5,542.031 ppb	30,811.582 ppb	126.264 %
Concentration RSD	1.0 %	4.6 %	1.9 %	2.0 %	2.9 %	2.7 %	7.8 %	7.4 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	119.495 %	55.323 ppb	53.815 ppb	1,504.928 ppb	58,083.529 ppb	44.204 ppb	36.414 ppb	63.391 ppb	913.667 ppb
Concentration per Run 1	127.640 %	52.340 ppb	52.090 ppb	1,429.826 ppb	55,340.449 ppb	42.206 ppb	35.552 ppb	61.410 ppb	906.488 ppb
Concentration per Run 2	119.361 %	55.199 ppb	53.083 ppb	1,532.282 ppb	59,073.256 ppb	44.658 ppb	36.832 ppb	65.195 ppb	927.583 ppb
Concentration per Run 3	111.483 %	58.430 ppb	56.273 ppb	1,552.677 ppb	59,836.882 ppb	45.749 ppb	36.859 ppb	63.569 ppb	906.929 ppb
Concentration RSD	6.8 %	5.5 %	4.1 %	4.4 %	4.1 %	4.1 %	2.1 %	3.0 %	1.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.709 %	13.135 ppb	2.897 ppb	155.717 ppb	0.576 ppb	89.483 %	0.245 ppb	2.195 ppb	87.534 %
Concentration per Run 1	91.002 %	13.888 ppb	3.140 ppb	155.361 ppb	0.589 ppb	89.690 %	0.260 ppb	2.191 ppb	86.254 %
Concentration per Run 2	91.578 %	13.588 ppb	2.882 ppb	157.872 ppb	0.640 ppb	89.653 %	0.227 ppb	2.113 ppb	87.758 %
Concentration per Run 3	98.547 %	11.930 ppb	2.668 ppb	153.916 ppb	0.500 ppb	89.106 %	0.248 ppb	2.282 ppb	88.590 %
Concentration RSD	4.5 %	8.0 %	8.2 %	1.3 %	12.3 %	0.4 %	7.0 %	3.9 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.516 ppb	251.260 ppb	95.807 %	91.730 %	0.798 ppb	287.153 ppb	73.040 %
Concentration per Run 1	2.405 ppb	248.679 ppb	95.998 %	90.722 %	0.773 ppb	282.788 ppb	73.411 %
Concentration per Run 2	2.652 ppb	252.439 ppb	95.743 %	92.221 %	0.815 ppb	288.967 ppb	72.948 %
Concentration per Run 3	2.492 ppb	252.661 ppb	95.680 %	92.246 %	0.806 ppb	289.705 ppb	72.760 %
Concentration RSD	5.0 %	0.9 %	0.2 %	1.0 %	2.8 %	1.3 %	0.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	77	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-03d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:37:39 PM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.069 %	122.847 %	0.681 ppb	6,056.294 ppb	2,426.878 ppb	7,013.378 ppb	916.135 ppb	5,523.293 ppb	114.549 %
Concentration per Run 1	94.511 %	115.169 %	0.671 ppb	6,187.197 ppb	2,510.614 ppb	7,062.596 ppb	956.180 ppb	5,538.419 ppb	113.631 %
Concentration per Run 2	95.112 %	124.719 %	0.691 ppb	6,059.330 ppb	2,436.528 ppb	7,055.506 ppb	938.558 ppb	5,547.239 ppb	115.106 %
Concentration per Run 3	95.584 %	128.652 %	0.682 ppb	5,922.354 ppb	2,333.492 ppb	6,922.032 ppb	853.666 ppb	5,484.222 ppb	114.911 %
Concentration RSD	0.6 %	5.6 %	1.5 %	2.2 %	3.7 %	1.1 %	6.0 %	0.6 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.323 %	12.840 ppb	17.864 ppb	425.860 ppb	21,507.635 ppb	8.877 ppb	12.004 ppb	33.373 ppb	87.140 ppb
Concentration per Run 1	108.679 %	13.287 ppb	17.547 ppb	414.368 ppb	21,078.235 ppb	8.944 ppb	10.690 ppb	32.280 ppb	84.901 ppb
Concentration per Run 2	107.210 %	12.406 ppb	17.973 ppb	431.175 ppb	21,719.027 ppb	8.540 ppb	12.519 ppb	33.251 ppb	87.620 ppb
Concentration per Run 3	109.080 %	12.828 ppb	18.073 ppb	432.038 ppb	21,725.641 ppb	9.146 ppb	12.802 ppb	34.587 ppb	88.900 ppb
Concentration RSD	0.9 %	3.4 %	1.6 %	2.3 %	1.7 %	3.5 %	9.6 %	3.5 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.834 %	8.658 ppb	0.786 ppb	29.739 ppb	0.139 ppb	98.586 %	0.019 ppb	0.461 ppb	92.395 %
Concentration per Run 1	102.461 %	8.339 ppb	0.743 ppb	28.890 ppb	0.103 ppb	97.874 %	0.010 ppb	0.460 ppb	91.086 %
Concentration per Run 2	99.269 %	8.683 ppb	0.832 ppb	29.953 ppb	0.151 ppb	99.087 %	0.019 ppb	0.435 ppb	92.969 %
Concentration per Run 3	97.772 %	8.953 ppb	0.784 ppb	30.374 ppb	0.164 ppb	98.797 %	0.026 ppb	0.489 ppb	93.131 %
Concentration RSD	2.4 %	3.6 %	5.7 %	2.6 %	23.0 %	0.6 %	43.5 %	5.9 %	1.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.034 ppb	46.900 ppb	98.499 %	94.822 %	0.041 ppb	13.195 ppb	80.595 %
Concentration per Run 1	0.041 ppb	46.375 ppb	97.642 %	94.018 %	0.033 ppb	13.024 ppb	80.251 %
Concentration per Run 2	0.026 ppb	47.307 ppb	98.869 %	95.344 %	0.042 ppb	13.199 ppb	81.178 %
Concentration per Run 3	0.035 ppb	47.019 ppb	98.987 %	95.104 %	0.048 ppb	13.361 ppb	80.357 %
Concentration RSD	22.4 %	1.0 %	0.8 %	0.7 %	19.3 %	1.3 %	0.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	78	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	I2447483-04d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 4:42:08 PM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.631 %	139.513 %	0.029 ppb	2,436.644 ppb	975.967 ppb	207.764 ppb	385.914 ppb	4,347.391 ppb	102.681 %
Concentration per Run 1	91.938 %	135.393 %	0.024 ppb	2,474.899 ppb	998.572 ppb	214.065 ppb	415.525 ppb	4,226.758 ppb	100.664 %
Concentration per Run 2	93.012 %	129.775 %	0.038 ppb	2,513.269 ppb	1,007.032 ppb	213.483 ppb	352.602 ppb	4,368.201 ppb	103.453 %
Concentration per Run 3	92.942 %	153.371 %	0.025 ppb	2,321.765 ppb	922.296 ppb	195.742 ppb	389.616 ppb	4,447.214 ppb	103.924 %
Concentration RSD	0.6 %	8.8 %	27.2 %	4.2 %	4.8 %	5.0 %	8.2 %	2.6 %	1.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.222 %	0.654 ppb	0.492 ppb	1,197.354 ppb	5,559.090 ppb	2.151 ppb	0.134 ppb	0.837 ppb	3.600 ppb
Concentration per Run 1	99.199 %	0.731 ppb	0.485 ppb	1,189.063 ppb	5,528.559 ppb	2.130 ppb	0.092 ppb	1.017 ppb	3.610 ppb
Concentration per Run 2	102.136 %	0.493 ppb	0.549 ppb	1,204.619 ppb	5,639.544 ppb	2.213 ppb	0.134 ppb	0.905 ppb	4.114 ppb
Concentration per Run 3	99.332 %	0.737 ppb	0.442 ppb	1,198.381 ppb	5,509.167 ppb	2.110 ppb	0.177 ppb	0.589 ppb	3.077 ppb
Concentration RSD	1.7 %	21.3 %	10.9 %	0.7 %	1.3 %	2.6 %	31.5 %	26.5 %	14.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.170 %	1.763 ppb	-0.037 ppb	15.125 ppb	0.126 ppb	100.114 %	-0.002 ppb	0.018 ppb	94.426 %
Concentration per Run 1	96.139 %	1.946 ppb	-0.113 ppb	15.331 ppb	0.092 ppb	99.813 %	-0.002 ppb	0.024 ppb	92.277 %
Concentration per Run 2	94.869 %	1.876 ppb	0.040 ppb	15.333 ppb	0.128 ppb	99.480 %	-0.002 ppb	0.007 ppb	94.389 %
Concentration per Run 3	103.503 %	1.468 ppb	-0.038 ppb	14.712 ppb	0.157 ppb	101.050 %	-0.002 ppb	0.023 ppb	96.613 %
Concentration RSD	4.7 %	14.6 %	208.0 %	2.4 %	26.2 %	0.8 %	2.0 %	52.9 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.121 ppb	15.380 ppb	97.894 %	94.131 %	-0.024 ppb	0.449 ppb	79.425 %
Concentration per Run 1	0.129 ppb	16.138 ppb	96.949 %	92.258 %	-0.031 ppb	0.433 ppb	79.545 %
Concentration per Run 2	0.095 ppb	14.510 ppb	98.194 %	94.532 %	-0.022 ppb	0.451 ppb	79.334 %
Concentration per Run 3	0.138 ppb	15.493 ppb	98.539 %	95.602 %	-0.021 ppb	0.463 ppb	79.395 %
Concentration RSD	19.0 %	5.3 %	0.9 %	1.8 %	22.2 %	3.4 %	0.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	79	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 4:46:36 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.367 %	123.783 %	63.213 ppb	6,065.632 ppb	6,061.189 ppb	62.030 ppb	6,248.497 ppb	6,309.083 ppb	104.134 %
Concentration per Run 1	92.048 %	124.719 %	63.169 ppb	6,006.262 ppb	6,019.871 ppb	58.762 ppb	6,185.637 ppb	6,120.179 ppb	102.303 %
Concentration per Run 2	92.407 %	123.034 %	63.255 ppb	6,033.874 ppb	6,075.966 ppb	65.249 ppb	6,266.477 ppb	6,470.259 ppb	103.856 %
Concentration per Run 3	92.645 %	123.596 %	63.217 ppb	6,156.760 ppb	6,087.730 ppb	62.079 ppb	6,293.376 ppb	6,336.812 ppb	106.243 %
Recovery Percentage 1			105.356 %	101.094 %	101.020 %	103.384 %	104.142 %	105.151 %	
Concentration RSD	0.3 %	0.7 %	0.1 %	1.3 %	0.6 %	5.2 %	0.9 %	2.8 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.469 %	62.678 ppb	63.736 ppb	64.207 ppb	6,404.789 ppb	63.686 ppb	65.151 ppb	63.933 ppb	62.519 ppb
Concentration per Run 1	100.535 %	62.638 ppb	62.232 ppb	64.092 ppb	6,417.591 ppb	63.306 ppb	64.128 ppb	64.177 ppb	62.932 ppb
Concentration per Run 2	101.202 %	63.043 ppb	64.144 ppb	64.213 ppb	6,444.782 ppb	62.338 ppb	64.372 ppb	62.353 ppb	60.172 ppb
Concentration per Run 3	102.670 %	62.352 ppb	64.832 ppb	64.314 ppb	6,351.993 ppb	65.414 ppb	66.952 ppb	65.270 ppb	64.453 ppb
Recovery Percentage 1		104.463 %	106.227 %	107.011 %	106.746 %	106.143 %	108.584 %	106.555 %	104.198 %
Concentration RSD	1.1 %	0.6 %	2.1 %	0.2 %	0.7 %	2.5 %	2.4 %	2.3 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.265 %	62.129 ppb	59.305 ppb	56.440 ppb	59.218 ppb	99.797 %	61.564 ppb	61.750 ppb	93.259 %
Concentration per Run 1	93.319 %	62.699 ppb	62.163 ppb	56.586 ppb	60.317 ppb	97.648 %	62.131 ppb	62.118 ppb	91.257 %
Concentration per Run 2	102.663 %	60.944 ppb	56.309 ppb	55.213 ppb	58.049 ppb	101.029 %	61.267 ppb	62.152 ppb	94.789 %
Concentration per Run 3	95.814 %	62.745 ppb	59.442 ppb	57.519 ppb	59.287 ppb	100.714 %	61.294 ppb	60.979 ppb	93.733 %
Recovery Percentage 1		103.549 %	98.841 %	94.066 %	98.696 %		102.607 %	102.916 %	
Concentration RSD	5.0 %	1.7 %	4.9 %	2.1 %	1.9 %	1.9 %	0.8 %	1.1 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.544 ppb	59.332 ppb	98.226 %	95.275 %	62.851 ppb	62.795 ppb	80.424 %
Concentration per Run 1	61.452 ppb	59.572 ppb	96.389 %	93.222 %	63.324 ppb	62.982 ppb	81.172 %
Concentration per Run 2	59.744 ppb	59.458 ppb	98.477 %	95.683 %	62.392 ppb	62.594 ppb	80.267 %
Concentration per Run 3	60.435 ppb	58.965 ppb	99.811 %	96.920 %	62.837 ppb	62.809 ppb	79.832 %
Recovery Percentage 1	100.906 %	98.886 %			104.752 %	104.659 %	
Concentration RSD	1.4 %	0.5 %	1.8 %	2.0 %	0.7 %	0.3 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	80	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 4:51:08 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.879 %	120.787 %	0.007 ppb	-7.868 ppb	-5.850 ppb	-1.625 ppb	-22.492 ppb	-28.258 ppb	101.256 %
Concentration per Run 1	91.048 %	101.685 %	0.016 ppb	-4.014 ppb	-6.892 ppb	-1.939 ppb	-4.752 ppb	-32.211 ppb	100.875 %
Concentration per Run 2	92.056 %	128.652 %	0.004 ppb	-7.955 ppb	-5.522 ppb	-1.652 ppb	-29.528 ppb	-29.138 ppb	101.331 %
Concentration per Run 3	92.534 %	132.023 %	0.002 ppb	-11.635 ppb	-5.136 ppb	-1.284 ppb	-33.195 ppb	-23.426 ppb	101.563 %
Recovery Percentage 1			1.410 %	-7.868 %	-8.357 %	-16.247 %	-22.492 %	-28.258 %	
Concentration RSD	0.8 %	13.8 %	110.4 %	48.4 %	15.8 %	20.2 %	68.8 %	15.8 %	0.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.136 %	0.006 ppb	-0.085 ppb	-0.074 ppb	1.914 ppb	-0.004 ppb	-0.673 ppb	-0.130 ppb	-2.084 ppb
Concentration per Run 1	98.130 %	0.034 ppb	-0.113 ppb	-0.062 ppb	-0.456 ppb	-0.004 ppb	-0.711 ppb	-0.154 ppb	-2.116 ppb
Concentration per Run 2	101.068 %	-0.043 ppb	-0.076 ppb	-0.037 ppb	4.078 ppb	-0.004 ppb	-0.688 ppb	-0.171 ppb	-2.078 ppb
Concentration per Run 3	107.210 %	0.027 ppb	-0.067 ppb	-0.122 ppb	2.121 ppb	-0.004 ppb	-0.620 ppb	-0.063 ppb	-2.059 ppb
Recovery Percentage 1		0.113 %	-8.548 %	-7.397 %	3.829 %	-0.841 %	-33.647 %	-12.966 %	-41.680 %
Concentration RSD	4.5 %	754.5 %	28.4 %	59.0 %	118.8 %	4.2 %	7.0 %	44.8 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.416 %	0.006 ppb	-0.010 ppb	-0.021 ppb	0.196 ppb	98.442 %	0.000 ppb	0.001 ppb	92.960 %
Concentration per Run 1	95.413 %	0.022 ppb	-0.104 ppb	-0.020 ppb	0.109 ppb	94.852 %	0.003 ppb	-0.001 ppb	88.695 %
Concentration per Run 2	96.850 %	0.051 ppb	0.041 ppb	-0.018 ppb	0.271 ppb	99.290 %	-0.003 ppb	0.007 ppb	95.270 %
Concentration per Run 3	96.986 %	-0.056 ppb	0.032 ppb	-0.023 ppb	0.208 ppb	101.183 %	0.001 ppb	-0.001 ppb	94.914 %
Recovery Percentage 1		1.195 %	-0.208 %	-0.206 %	9.800 %		0.066 %	0.727 %	
Concentration RSD	0.9 %	927.5 %	780.9 %	12.8 %	41.6 %	3.3 %	1,229.2 %	324.5 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.026 ppb	-0.067 ppb	95.491 %	91.742 %	0.179 ppb	0.006 ppb	78.578 %
Concentration per Run 1	0.012 ppb	-0.044 ppb	91.562 %	87.241 %	0.150 ppb	0.009 ppb	76.793 %
Concentration per Run 2	0.032 ppb	-0.073 ppb	97.275 %	93.338 %	0.230 ppb	0.008 ppb	78.592 %
Concentration per Run 3	0.034 ppb	-0.086 ppb	97.635 %	94.647 %	0.157 ppb	0.001 ppb	80.347 %
Recovery Percentage 1	0.652 %	-13.494 %			17.895 %	0.600 %	
Concentration RSD	46.3 %	31.8 %	3.6 %	4.3 %	24.8 %	77.0 %	2.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	81	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1963944-1 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:21:30 PM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.726 %	114.045 %	0.003 ppb	-3.713 ppb	-3.697 ppb	0.341 ppb	-27.354 ppb	29.055 ppb	101.803 %
Concentration per Run 1	91.392 %	102.809 %	0.005 ppb	-3.647 ppb	-5.426 ppb	0.456 ppb	-31.946 ppb	23.925 ppb	102.493 %
Concentration per Run 2	89.886 %	120.787 %	0.002 ppb	-6.181 ppb	-2.355 ppb	-0.085 ppb	-30.294 ppb	13.516 ppb	100.690 %
Concentration per Run 3	90.901 %	118.539 %	0.003 ppb	-1.309 ppb	-3.310 ppb	0.651 ppb	-19.824 ppb	49.726 ppb	102.226 %
Concentration RSD	0.8 %	8.6 %	45.2 %	65.6 %	42.5 %	111.9 %	24.0 %	64.2 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	114.821 %	0.177 ppb	-0.074 ppb	-0.065 ppb	-0.606 ppb	-0.009 ppb	-0.617 ppb	-0.047 ppb	-1.992 ppb
Concentration per Run 1	114.688 %	0.241 ppb	-0.100 ppb	-0.074 ppb	0.836 ppb	-0.005 ppb	-0.510 ppb	-0.034 ppb	-2.062 ppb
Concentration per Run 2	111.884 %	0.093 ppb	-0.058 ppb	-0.020 ppb	-0.726 ppb	-0.011 ppb	-0.668 ppb	-0.064 ppb	-1.927 ppb
Concentration per Run 3	117.892 %	0.199 ppb	-0.063 ppb	-0.102 ppb	-1.927 ppb	-0.011 ppb	-0.673 ppb	-0.042 ppb	-1.988 ppb
Concentration RSD	2.6 %	43.1 %	31.3 %	63.8 %	228.8 %	40.6 %	15.0 %	32.8 %	3.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.860 %	-0.088 ppb	-0.073 ppb	0.051 ppb	0.139 ppb	97.450 %	-0.003 ppb	-0.001 ppb	96.971 %
Concentration per Run 1	95.217 %	-0.108 ppb	-0.040 ppb	0.050 ppb	0.270 ppb	95.085 %	-0.003 ppb	-0.001 ppb	99.443 %
Concentration per Run 2	95.232 %	-0.097 ppb	-0.194 ppb	0.048 ppb	0.058 ppb	97.215 %	-0.005 ppb	-0.001 ppb	93.342 %
Concentration per Run 3	100.131 %	-0.060 ppb	0.014 ppb	0.055 ppb	0.090 ppb	100.050 %	-0.002 ppb	-0.001 ppb	98.129 %
Concentration RSD	2.9 %	28.6 %	147.0 %	6.7 %	82.2 %	2.6 %	44.0 %	0.0 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.912 ppb	-0.065 ppb	98.617 %	98.010 %	-0.009 ppb	0.008 ppb	88.787 %
Concentration per Run 1	-0.005 ppb	-0.073 ppb	97.334 %	95.849 %	-0.018 ppb	0.008 ppb	98.636 %
Concentration per Run 2	1.029 ppb	-0.060 ppb	98.047 %	96.154 %	0.006 ppb	0.014 ppb	84.719 %
Concentration per Run 3	7.711 ppb	-0.061 ppb	100.470 %	102.025 %	-0.014 ppb	0.001 ppb	83.006 %
Concentration RSD	143.8 %	11.5 %	1.7 %	3.6 %	154.1 %	81.0 %	9.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	82	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1963944-2d10 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:25:57 PM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.403 %	116.292 %	5.647 ppb	1,108.062 ppb	1,077.848 ppb	218.494 ppb	1,157.284 ppb	1,196.034 ppb	95.852 %
Concentration per Run 1	89.485 %	110.674 %	5.576 ppb	1,108.229 ppb	1,080.571 ppb	218.499 ppb	1,081.078 ppb	1,333.142 ppb	94.535 %
Concentration per Run 2	89.464 %	110.674 %	5.850 ppb	1,122.914 ppb	1,080.459 ppb	214.570 ppb	1,188.694 ppb	1,162.925 ppb	96.485 %
Concentration per Run 3	89.261 %	127.528 %	5.515 ppb	1,093.043 ppb	1,072.514 ppb	222.413 ppb	1,202.080 ppb	1,092.034 ppb	96.538 %
Concentration RSD	0.1 %	8.4 %	3.2 %	1.3 %	0.4 %	1.8 %	5.7 %	10.4 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.460 %	55.559 ppb	23.220 ppb	57.133 ppb	108.799 ppb	56.032 ppb	55.780 ppb	27.831 ppb	53.518 ppb
Concentration per Run 1	96.929 %	55.581 ppb	22.881 ppb	55.674 ppb	100.845 ppb	55.979 ppb	55.024 ppb	28.809 ppb	51.615 ppb
Concentration per Run 2	91.988 %	55.729 ppb	23.036 ppb	56.069 ppb	110.287 ppb	57.842 ppb	57.781 ppb	27.574 ppb	55.325 ppb
Concentration per Run 3	97.463 %	55.366 ppb	23.743 ppb	59.656 ppb	115.266 ppb	54.276 ppb	54.536 ppb	27.111 ppb	53.616 ppb
Concentration RSD	3.2 %	0.3 %	2.0 %	3.8 %	6.7 %	3.2 %	3.1 %	3.2 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.047 %	11.294 ppb	10.425 ppb	96.631 ppb	101.328 ppb	95.552 %	5.320 ppb	5.666 ppb	91.423 %
Concentration per Run 1	97.864 %	11.551 ppb	10.273 ppb	95.351 ppb	101.064 ppb	95.263 %	5.351 ppb	5.697 ppb	90.355 %
Concentration per Run 2	93.919 %	11.454 ppb	9.037 ppb	94.911 ppb	99.886 ppb	95.139 %	5.428 ppb	5.618 ppb	90.047 %
Concentration per Run 3	102.357 %	10.876 ppb	11.965 ppb	99.630 ppb	103.033 ppb	96.254 %	5.180 ppb	5.682 ppb	93.867 %
Concentration RSD	4.3 %	3.2 %	14.1 %	2.7 %	1.6 %	0.6 %	2.4 %	0.7 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.833 ppb	210.210 ppb	95.258 %	94.060 %	11.698 ppb	55.397 ppb	76.551 %
Concentration per Run 1	46.941 ppb	208.958 ppb	95.036 %	91.580 %	11.928 ppb	56.821 ppb	77.072 %
Concentration per Run 2	47.905 ppb	208.983 ppb	93.627 %	93.254 %	11.769 ppb	54.867 ppb	74.915 %
Concentration per Run 3	48.654 ppb	212.688 ppb	97.112 %	97.345 %	11.399 ppb	54.503 ppb	77.666 %
Concentration RSD	1.8 %	1.0 %	1.8 %	3.2 %	2.3 %	2.3 %	1.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	83	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-07 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:30:25 PM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.153 %	123.034 %	0.004 ppb	23,968.343 ppb	14,771.070 ppb	1.301 ppb	14,972.886 ppb	137,760.912 ppb	101.655 %
Concentration per Run 1	89.928 %	105.618 %	0.001 ppb	25,590.724 ppb	15,604.053 ppb	1.768 ppb	15,282.918 ppb	139,049.780 ppb	101.801 %
Concentration per Run 2	88.412 %	130.337 %	0.008 ppb	23,431.810 ppb	14,433.208 ppb	1.408 ppb	15,287.978 ppb	143,161.375 ppb	100.810 %
Concentration per Run 3	89.119 %	133.146 %	0.004 ppb	22,882.494 ppb	14,275.948 ppb	0.728 ppb	14,347.763 ppb	131,071.579 ppb	102.355 %
Concentration RSD	0.9 %	12.3 %	84.2 %	6.0 %	4.9 %	40.6 %	3.6 %	4.5 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.534 %	0.357 ppb	11.381 ppb	393.056 ppb	50.374 ppb	0.544 ppb	7.027 ppb	1.808 ppb	-1.502 ppb
Concentration per Run 1	98.131 %	0.523 ppb	11.479 ppb	386.976 ppb	53.216 ppb	0.495 ppb	6.602 ppb	1.732 ppb	-1.385 ppb
Concentration per Run 2	96.528 %	0.382 ppb	11.712 ppb	400.608 ppb	53.650 ppb	0.530 ppb	7.621 ppb	2.078 ppb	-1.517 ppb
Concentration per Run 3	106.943 %	0.167 ppb	10.952 ppb	391.585 ppb	44.256 ppb	0.606 ppb	6.856 ppb	1.614 ppb	-1.602 ppb
Concentration RSD	5.6 %	50.2 %	3.4 %	1.8 %	10.5 %	10.5 %	7.6 %	13.3 %	7.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.360 %	0.206 ppb	0.146 ppb	515.484 ppb	1.950 ppb	96.202 %	-0.003 ppb	0.035 ppb	93.463 %
Concentration per Run 1	100.660 %	0.187 ppb	0.170 ppb	506.759 ppb	1.840 ppb	94.170 %	-0.002 ppb	0.020 ppb	90.901 %
Concentration per Run 2	96.320 %	0.214 ppb	0.034 ppb	522.797 ppb	1.819 ppb	96.462 %	-0.002 ppb	0.041 ppb	93.379 %
Concentration per Run 3	101.098 %	0.216 ppb	0.235 ppb	516.896 ppb	2.191 ppb	97.974 %	-0.005 ppb	0.044 ppb	96.110 %
Concentration RSD	2.7 %	7.8 %	70.0 %	1.6 %	10.7 %	2.0 %	65.0 %	36.6 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.640 ppb	89.261 ppb	97.508 %	95.639 %	0.489 ppb	-0.002 ppb	73.048 %
Concentration per Run 1	0.583 ppb	91.951 ppb	94.605 %	92.067 %	0.487 ppb	0.000 ppb	72.469 %
Concentration per Run 2	0.669 ppb	86.640 ppb	98.617 %	97.205 %	0.490 ppb	-0.003 ppb	73.379 %
Concentration per Run 3	0.668 ppb	89.193 ppb	99.304 %	97.646 %	0.489 ppb	-0.003 ppb	73.296 %
Concentration RSD	7.7 %	3.0 %	2.6 %	3.2 %	0.3 %	98.9 %	0.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	84	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1963944-3d10 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:34:54 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.312 %	129.401 %	5.711 ppb	3,515.010 ppb	2,544.293 ppb	206.117 ppb	2,562.443 ppb	15,151.406 ppb	106.214 %
Concentration per Run 1	95.156 %	132.584 %	5.678 ppb	3,358.735 ppb	2,431.529 ppb	193.234 ppb	2,432.268 ppb	14,051.007 ppb	105.679 %
Concentration per Run 2	95.986 %	131.461 %	5.721 ppb	3,561.348 ppb	2,544.693 ppb	213.110 ppb	2,689.877 ppb	16,161.384 ppb	107.243 %
Concentration per Run 3	94.794 %	124.157 %	5.732 ppb	3,624.947 ppb	2,656.657 ppb	212.006 ppb	2,565.184 ppb	15,241.827 ppb	105.721 %
Concentration RSD	0.6 %	3.5 %	0.5 %	4.0 %	4.4 %	5.4 %	5.0 %	7.0 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.323 %	54.929 ppb	22.293 ppb	95.234 ppb	111.681 ppb	56.417 ppb	56.993 ppb	28.204 ppb	54.679 ppb
Concentration per Run 1	114.688 %	50.371 ppb	20.801 ppb	90.309 ppb	102.817 ppb	54.781 ppb	53.548 ppb	27.423 ppb	51.805 ppb
Concentration per Run 2	100.668 %	59.837 ppb	23.624 ppb	103.517 ppb	124.678 ppb	58.906 ppb	60.574 ppb	29.903 ppb	58.069 ppb
Concentration per Run 3	109.614 %	54.579 ppb	22.453 ppb	91.877 ppb	107.548 ppb	55.562 ppb	56.858 ppb	27.286 ppb	54.161 ppb
Concentration RSD	6.6 %	8.6 %	6.4 %	7.6 %	10.3 %	3.9 %	6.2 %	5.2 %	5.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.768 %	11.446 ppb	11.559 ppb	147.899 ppb	101.146 ppb	104.620 %	5.228 ppb	5.659 ppb	97.885 %
Concentration per Run 1	105.968 %	10.892 ppb	11.740 ppb	146.525 ppb	101.490 ppb	104.892 %	5.061 ppb	5.675 ppb	97.665 %
Concentration per Run 2	102.838 %	11.984 ppb	10.372 ppb	148.999 ppb	100.979 ppb	104.376 %	5.336 ppb	5.610 ppb	98.284 %
Concentration per Run 3	105.499 %	11.461 ppb	12.567 ppb	148.174 ppb	100.969 ppb	104.590 %	5.288 ppb	5.691 ppb	97.706 %
Concentration RSD	1.6 %	4.8 %	9.6 %	0.9 %	0.3 %	0.2 %	2.8 %	0.8 %	0.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.559 ppb	219.601 ppb	100.048 %	97.649 %	11.626 ppb	54.434 ppb	79.234 %
Concentration per Run 1	51.474 ppb	219.894 ppb	99.850 %	96.019 %	11.700 ppb	54.025 ppb	78.935 %
Concentration per Run 2	51.795 ppb	220.917 ppb	99.784 %	97.721 %	11.549 ppb	54.732 ppb	79.532 %
Concentration per Run 3	51.408 ppb	217.992 ppb	100.510 %	99.207 %	11.627 ppb	54.546 ppb	79.235 %
Concentration RSD	0.4 %	0.7 %	0.4 %	1.6 %	0.6 %	0.7 %	0.4 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	85	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1963944-4d10 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:39:22 PM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.845 %	136.517 %	5.708 ppb	3,472.767 ppb	2,518.496 ppb	204.457 ppb	2,741.723 ppb	15,862.888 ppb	106.777 %
Concentration per Run 1	96.102 %	139.326 %	5.664 ppb	3,421.903 ppb	2,498.562 ppb	199.678 ppb	2,743.331 ppb	15,790.789 ppb	106.978 %
Concentration per Run 2	95.777 %	136.517 %	5.747 ppb	3,446.997 ppb	2,495.738 ppb	206.288 ppb	2,677.135 ppb	15,675.002 ppb	107.141 %
Concentration per Run 3	95.656 %	133.708 %	5.714 ppb	3,549.400 ppb	2,561.188 ppb	207.406 ppb	2,804.704 ppb	16,122.874 ppb	106.213 %
Concentration RSD	0.2 %	2.1 %	0.7 %	1.9 %	1.5 %	2.0 %	2.3 %	1.5 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.157 %	57.432 ppb	23.454 ppb	99.647 ppb	118.991 ppb	57.228 ppb	57.024 ppb	27.706 ppb	54.512 ppb
Concentration per Run 1	100.668 %	57.340 ppb	23.534 ppb	100.266 ppb	125.046 ppb	56.762 ppb	56.803 ppb	27.307 ppb	53.711 ppb
Concentration per Run 2	102.403 %	57.144 ppb	23.421 ppb	96.383 ppb	111.405 ppb	57.625 ppb	56.642 ppb	27.879 ppb	55.652 ppb
Concentration per Run 3	100.401 %	57.813 ppb	23.408 ppb	102.293 ppb	120.522 ppb	57.299 ppb	57.627 ppb	27.933 ppb	54.171 ppb
Concentration RSD	1.1 %	0.6 %	0.3 %	3.0 %	5.8 %	0.8 %	0.9 %	1.3 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.102 %	11.374 ppb	11.884 ppb	146.611 ppb	102.027 ppb	103.390 %	5.329 ppb	5.595 ppb	98.129 %
Concentration per Run 1	109.658 %	11.102 ppb	12.154 ppb	144.528 ppb	100.544 ppb	104.153 %	5.318 ppb	5.702 ppb	98.664 %
Concentration per Run 2	105.801 %	11.003 ppb	11.458 ppb	146.861 ppb	101.545 ppb	103.283 %	5.204 ppb	5.353 ppb	98.081 %
Concentration per Run 3	105.847 %	12.018 ppb	12.038 ppb	148.445 ppb	103.991 ppb	102.736 %	5.463 ppb	5.729 ppb	97.643 %
Concentration RSD	2.1 %	4.9 %	3.1 %	1.3 %	1.7 %	0.7 %	2.4 %	3.7 %	0.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.987 ppb	218.124 ppb	100.840 %	97.808 %	11.836 ppb	55.576 ppb	79.622 %
Concentration per Run 1	51.738 ppb	214.580 ppb	99.528 %	95.303 %	12.068 ppb	56.328 ppb	79.852 %
Concentration per Run 2	52.108 ppb	218.907 ppb	100.833 %	98.175 %	11.940 ppb	55.825 ppb	79.110 %
Concentration per Run 3	52.115 ppb	220.884 ppb	102.160 %	99.947 %	11.500 ppb	54.576 ppb	79.903 %
Concentration RSD	0.4 %	1.5 %	1.3 %	2.4 %	2.5 %	1.6 %	0.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	86	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1963944-5d10 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:43:51 PM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.100 %	129.401 %	54.034 ppb	7,351.609 ppb	6,424.769 ppb	51.463 ppb	6,715.453 ppb	18,815.631 ppb	105.199 %
Concentration per Run 1	91.463 %	133.146 %	53.987 ppb	7,085.218 ppb	6,114.019 ppb	47.181 ppb	6,366.060 ppb	17,493.431 ppb	104.915 %
Concentration per Run 2	92.416 %	123.034 %	54.044 ppb	7,602.126 ppb	6,665.187 ppb	55.354 ppb	6,729.652 ppb	18,966.200 ppb	105.750 %
Concentration per Run 3	92.422 %	132.023 %	54.072 ppb	7,367.483 ppb	6,495.101 ppb	51.855 ppb	7,050.647 ppb	19,987.262 ppb	104.931 %
Concentration RSD	0.6 %	4.3 %	0.1 %	3.5 %	4.4 %	8.0 %	5.1 %	6.7 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.694 %	51.972 ppb	54.904 ppb	91.217 ppb	5,368.631 ppb	53.104 ppb	56.099 ppb	52.506 ppb	51.859 ppb
Concentration per Run 1	108.946 %	49.428 ppb	52.794 ppb	86.974 ppb	5,269.417 ppb	51.792 ppb	55.552 ppb	51.592 ppb	49.989 ppb
Concentration per Run 2	101.736 %	51.942 ppb	54.836 ppb	91.936 ppb	5,361.802 ppb	53.901 ppb	56.331 ppb	51.482 ppb	52.321 ppb
Concentration per Run 3	100.400 %	54.546 ppb	57.081 ppb	94.741 ppb	5,474.673 ppb	53.620 ppb	56.413 ppb	54.444 ppb	53.268 ppb
Concentration RSD	4.4 %	4.9 %	3.9 %	4.3 %	1.9 %	2.2 %	0.8 %	3.2 %	3.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.558 %	52.160 ppb	49.482 ppb	98.477 ppb	52.141 ppb	98.973 %	1.537 ppb	51.268 ppb	94.665 %
Concentration per Run 1	100.318 %	51.004 ppb	48.630 ppb	98.275 ppb	49.894 ppb	99.546 %	1.506 ppb	50.789 ppb	94.393 %
Concentration per Run 2	99.457 %	52.523 ppb	49.932 ppb	97.594 ppb	53.942 ppb	99.128 %	1.589 ppb	51.006 ppb	96.014 %
Concentration per Run 3	98.899 %	52.952 ppb	49.885 ppb	99.562 ppb	52.588 ppb	98.244 %	1.515 ppb	52.010 ppb	93.588 %
Concentration RSD	0.7 %	2.0 %	1.5 %	1.0 %	4.0 %	0.7 %	3.0 %	1.3 %	1.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.131 ppb	58.057 ppb	98.558 %	96.315 %	52.500 ppb	52.638 ppb	76.228 %
Concentration per Run 1	51.305 ppb	56.461 ppb	97.944 %	94.788 %	52.589 ppb	52.587 ppb	77.408 %
Concentration per Run 2	51.131 ppb	57.952 ppb	99.800 %	97.363 %	51.987 ppb	52.613 ppb	76.286 %
Concentration per Run 3	50.957 ppb	59.757 ppb	97.931 %	96.794 %	52.923 ppb	52.713 ppb	74.989 %
Concentration RSD	0.3 %	2.8 %	1.1 %	1.4 %	0.9 %	0.1 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	87	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1963944-6d5 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:48:19 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.059 %	126.779 %	0.003 ppb	4,767.071 ppb	2,941.783 ppb	0.235 ppb	2,954.107 ppb	27,157.745 ppb	108.963 %
Concentration per Run 1	95.914 %	123.596 %	0.006 ppb	4,782.041 ppb	3,001.412 ppb	0.730 ppb	2,939.290 ppb	27,402.445 ppb	106.601 %
Concentration per Run 2	95.635 %	131.461 %	-0.002 ppb	4,656.090 ppb	2,846.039 ppb	-0.080 ppb	2,968.937 ppb	27,155.932 ppb	109.689 %
Concentration per Run 3	96.629 %	125.281 %	0.005 ppb	4,863.082 ppb	2,977.898 ppb	0.056 ppb	2,954.095 ppb	26,914.857 ppb	110.597 %
Concentration RSD	0.5 %	3.3 %	142.1 %	2.2 %	2.8 %	184.6 %	0.5 %	0.9 %	1.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.914 %	0.097 ppb	2.241 ppb	79.427 ppb	9.716 ppb	0.100 ppb	1.060 ppb	0.324 ppb	-1.984 ppb
Concentration per Run 1	99.733 %	0.180 ppb	2.316 ppb	80.197 ppb	9.174 ppb	0.091 ppb	1.329 ppb	0.356 ppb	-1.869 ppb
Concentration per Run 2	102.270 %	0.029 ppb	2.137 ppb	77.805 ppb	9.524 ppb	0.064 ppb	0.995 ppb	0.273 ppb	-2.013 ppb
Concentration per Run 3	103.739 %	0.082 ppb	2.270 ppb	80.278 ppb	10.450 ppb	0.144 ppb	0.856 ppb	0.343 ppb	-2.070 ppb
Concentration RSD	2.0 %	78.8 %	4.2 %	1.8 %	6.8 %	40.4 %	22.9 %	13.7 %	5.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.230 %	0.055 ppb	0.044 ppb	101.151 ppb	0.629 ppb	100.099 %	-0.003 ppb	0.006 ppb	95.575 %
Concentration per Run 1	100.525 %	0.033 ppb	-0.043 ppb	100.031 ppb	0.541 ppb	99.162 %	-0.002 ppb	0.011 ppb	93.735 %
Concentration per Run 2	100.917 %	0.073 ppb	-0.047 ppb	101.176 ppb	0.585 ppb	99.606 %	-0.003 ppb	-0.001 ppb	95.491 %
Concentration per Run 3	102.247 %	0.059 ppb	0.221 ppb	102.247 ppb	0.760 ppb	101.527 %	-0.003 ppb	0.007 ppb	97.499 %
Concentration RSD	0.9 %	37.2 %	350.8 %	1.1 %	18.4 %	1.3 %	31.1 %	113.7 %	2.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.191 ppb	17.737 ppb	99.614 %	96.139 %	0.286 ppb	0.003 ppb	76.858 %
Concentration per Run 1	0.170 ppb	18.285 ppb	98.742 %	95.305 %	0.244 ppb	0.008 ppb	77.657 %
Concentration per Run 2	0.187 ppb	17.817 ppb	99.118 %	95.742 %	0.343 ppb	0.003 ppb	75.890 %
Concentration per Run 3	0.216 ppb	17.107 ppb	100.983 %	97.369 %	0.272 ppb	-0.001 ppb	77.027 %
Concentration RSD	12.3 %	3.3 %	1.2 %	1.1 %	17.8 %	136.9 %	1.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	88	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-01 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:52:48 PM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.764 %	129.963 %	0.003 ppb	54,828.031 ppb	511.074 ppb	613.215 ppb	25,049.884 ppb	64,541.521 ppb	104.106 %
Concentration per Run 1	89.662 %	123.596 %	0.001 ppb	66,358.731 ppb	546.629 ppb	644.570 ppb	26,586.743 ppb	68,711.663 ppb	103.887 %
Concentration per Run 2	89.923 %	129.775 %	0.004 ppb	50,104.442 ppb	483.494 ppb	600.536 ppb	24,699.027 ppb	63,642.352 ppb	103.728 %
Concentration per Run 3	89.706 %	136.517 %	0.003 ppb	48,020.921 ppb	503.101 ppb	594.538 ppb	23,863.882 ppb	61,270.549 ppb	104.703 %
Concentration RSD	0.2 %	5.0 %	59.3 %	18.3 %	6.3 %	4.5 %	5.6 %	5.9 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.757 %	12.454 ppb	0.090 ppb	1,047.533 ppb	237.626 ppb	0.499 ppb	3.287 ppb	0.711 ppb	-2.030 ppb
Concentration per Run 1	94.793 %	13.342 ppb	0.084 ppb	1,072.494 ppb	242.968 ppb	0.488 ppb	3.054 ppb	0.782 ppb	-1.954 ppb
Concentration per Run 2	101.736 %	12.382 ppb	0.117 ppb	1,039.767 ppb	238.721 ppb	0.507 ppb	3.586 ppb	0.792 ppb	-2.130 ppb
Concentration per Run 3	105.741 %	11.639 ppb	0.068 ppb	1,030.337 ppb	231.188 ppb	0.501 ppb	3.220 ppb	0.560 ppb	-2.006 ppb
Concentration RSD	5.5 %	6.9 %	28.0 %	2.1 %	2.5 %	2.0 %	8.3 %	18.5 %	4.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.682 %	4.230 ppb	0.652 ppb	544.863 ppb	37.711 ppb	96.878 %	-0.003 ppb	0.001 ppb	93.666 %
Concentration per Run 1	101.870 %	3.827 ppb	0.624 ppb	534.076 ppb	36.896 ppb	97.403 %	-0.005 ppb	0.003 ppb	94.606 %
Concentration per Run 2	99.586 %	4.352 ppb	0.158 ppb	543.136 ppb	37.128 ppb	97.861 %	-0.005 ppb	-0.001 ppb	90.649 %
Concentration per Run 3	97.590 %	4.510 ppb	1.174 ppb	557.377 ppb	39.110 ppb	95.370 %	0.000 ppb	0.003 ppb	95.743 %
Concentration RSD	2.1 %	8.4 %	77.9 %	2.2 %	3.2 %	1.4 %	80.5 %	160.8 %	2.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.541 ppb	8.057 ppb	98.513 %	96.857 %	0.041 ppb	0.004 ppb	75.704 %
Concentration per Run 1	0.518 ppb	7.926 ppb	98.340 %	95.231 %	0.010 ppb	0.002 ppb	77.391 %
Concentration per Run 2	0.515 ppb	8.099 ppb	98.543 %	97.692 %	0.048 ppb	0.005 ppb	73.909 %
Concentration per Run 3	0.591 ppb	8.145 ppb	98.656 %	97.647 %	0.066 ppb	0.004 ppb	75.810 %
Concentration RSD	7.9 %	1.4 %	0.2 %	1.5 %	69.1 %	34.2 %	2.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	89	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-02 6020SL	Rack	2		
Analysis started at:	8/27/2024 5:57:17 PM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.325 %	133.521 %	0.006 ppb	6,825.291 ppb	9,280.491 ppb	2.033 ppb	13,685.728 ppb	99,499.288 ppb	109.161 %
Concentration per Run 1	93.029 %	133.708 %	0.007 ppb	6,633.519 ppb	9,037.179 ppb	2.103 ppb	13,000.455 ppb	92,728.659 ppb	108.017 %
Concentration per Run 2	93.857 %	136.517 %	0.008 ppb	6,870.592 ppb	9,304.919 ppb	2.287 ppb	14,303.424 ppb	104,613.114 ppb	109.386 %
Concentration per Run 3	93.089 %	130.337 %	0.002 ppb	6,971.760 ppb	9,499.376 ppb	1.708 ppb	13,753.304 ppb	101,156.089 ppb	110.080 %
Concentration RSD	0.5 %	2.3 %	52.5 %	2.5 %	2.5 %	14.6 %	4.8 %	6.1 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.326 %	0.632 ppb	1.117 ppb	-0.056 ppb	0.591 ppb	0.410 ppb	-0.363 ppb	2.158 ppb	-1.889 ppb
Concentration per Run 1	120.029 %	0.668 ppb	1.091 ppb	-0.080 ppb	-0.498 ppb	0.454 ppb	-0.256 ppb	1.919 ppb	-1.980 ppb
Concentration per Run 2	102.804 %	0.721 ppb	1.133 ppb	-0.013 ppb	-0.616 ppb	0.447 ppb	-0.338 ppb	2.442 ppb	-1.854 ppb
Concentration per Run 3	108.145 %	0.506 ppb	1.126 ppb	-0.074 ppb	2.887 ppb	0.330 ppb	-0.496 ppb	2.115 ppb	-1.833 ppb
Concentration RSD	8.0 %	17.8 %	2.0 %	66.1 %	336.6 %	16.9 %	33.7 %	12.2 %	4.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.944 %	0.192 ppb	0.827 ppb	355.677 ppb	13.148 ppb	103.002 %	-0.002 ppb	0.004 ppb	98.516 %
Concentration per Run 1	106.723 %	0.137 ppb	0.655 ppb	351.234 ppb	13.249 ppb	104.067 %	-0.002 ppb	0.003 ppb	101.938 %
Concentration per Run 2	99.874 %	0.210 ppb	0.982 ppb	362.292 ppb	12.994 ppb	103.757 %	-0.003 ppb	0.007 ppb	98.213 %
Concentration per Run 3	108.235 %	0.229 ppb	0.845 ppb	353.504 ppb	13.201 ppb	101.181 %	-0.002 ppb	0.003 ppb	95.396 %
Concentration RSD	4.2 %	25.3 %	19.9 %	1.6 %	1.0 %	1.5 %	34.7 %	57.0 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.682 ppb	30.783 ppb	101.689 %	99.673 %	0.016 ppb	0.012 ppb	77.931 %
Concentration per Run 1	0.646 ppb	29.743 ppb	102.269 %	100.382 %	-0.001 ppb	0.011 ppb	79.037 %
Concentration per Run 2	0.673 ppb	30.777 ppb	101.468 %	99.266 %	0.028 ppb	0.018 ppb	77.982 %
Concentration per Run 3	0.727 ppb	31.831 ppb	101.331 %	99.372 %	0.021 ppb	0.007 ppb	76.775 %
Concentration RSD	6.0 %	3.4 %	0.5 %	0.6 %	92.5 %	43.9 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	90	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-03 6020SL	Rack	2		
Analysis started at:	8/27/2024 6:01:46 PM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.292 %	125.843 %	0.010 ppb	37,968.271 ppb	7,090.465 ppb	1.712 ppb	29,224.157 ppb	90,362.724 ppb	105.439 %
Concentration per Run 1	91.041 %	133.146 %	0.014 ppb	36,346.617 ppb	6,814.744 ppb	1.387 ppb	28,342.060 ppb	88,015.883 ppb	104.315 %
Concentration per Run 2	91.435 %	113.483 %	0.010 ppb	39,832.108 ppb	7,435.739 ppb	1.501 ppb	30,035.584 ppb	92,570.127 ppb	106.184 %
Concentration per Run 3	91.400 %	130.899 %	0.007 ppb	37,726.086 ppb	7,020.911 ppb	2.248 ppb	29,294.827 ppb	90,502.162 ppb	105.820 %
Concentration RSD	0.2 %	8.6 %	35.7 %	4.6 %	4.5 %	27.3 %	2.9 %	2.5 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.006 %	2.957 ppb	1.465 ppb	4.641 ppb	1.031 ppb	0.628 ppb	0.188 ppb	2.585 ppb	-0.276 ppb
Concentration per Run 1	107.744 %	2.683 ppb	1.393 ppb	4.534 ppb	0.357 ppb	0.578 ppb	-0.078 ppb	2.326 ppb	-0.227 ppb
Concentration per Run 2	99.599 %	3.031 ppb	1.516 ppb	5.042 ppb	0.574 ppb	0.642 ppb	0.211 ppb	2.880 ppb	-0.124 ppb
Concentration per Run 3	104.673 %	3.158 ppb	1.487 ppb	4.347 ppb	2.161 ppb	0.663 ppb	0.432 ppb	2.551 ppb	-0.478 ppb
Concentration RSD	4.0 %	8.3 %	4.4 %	7.7 %	95.5 %	7.1 %	135.9 %	10.8 %	65.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.564 %	0.532 ppb	0.433 ppb	462.243 ppb	8.189 ppb	97.144 %	-0.003 ppb	0.015 ppb	94.468 %
Concentration per Run 1	101.628 %	0.708 ppb	0.488 ppb	453.560 ppb	7.794 ppb	98.868 %	0.000 ppb	0.015 ppb	95.879 %
Concentration per Run 2	101.084 %	0.493 ppb	0.297 ppb	464.777 ppb	8.140 ppb	95.450 %	-0.005 ppb	0.020 ppb	90.288 %
Concentration per Run 3	98.981 %	0.396 ppb	0.514 ppb	468.392 ppb	8.631 ppb	97.112 %	-0.003 ppb	0.011 ppb	97.238 %
Concentration RSD	1.4 %	30.0 %	27.4 %	1.7 %	5.1 %	1.8 %	80.6 %	30.2 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.905 ppb	77.601 ppb	98.773 %	96.616 %	0.259 ppb	-0.007 ppb	73.731 %
Concentration per Run 1	0.900 ppb	76.736 ppb	100.293 %	96.841 %	0.245 ppb	-0.004 ppb	75.133 %
Concentration per Run 2	0.900 ppb	78.120 ppb	95.447 %	93.807 %	0.267 ppb	-0.009 ppb	71.330 %
Concentration per Run 3	0.915 ppb	77.945 ppb	100.579 %	99.199 %	0.265 ppb	-0.007 ppb	74.730 %
Concentration RSD	1.0 %	1.0 %	2.9 %	2.8 %	4.6 %	39.3 %	2.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	91	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 6:06:15 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.536 %	133.895 %	63.146 ppb	5,886.044 ppb	5,900.584 ppb	59.350 ppb	6,253.285 ppb	6,153.675 ppb	104.408 %
Concentration per Run 1	93.622 %	123.596 %	63.113 ppb	6,157.775 ppb	6,201.646 ppb	58.830 ppb	6,316.755 ppb	6,153.828 ppb	105.009 %
Concentration per Run 2	93.962 %	133.708 %	63.189 ppb	5,708.904 ppb	5,759.724 ppb	59.426 ppb	6,154.692 ppb	5,995.911 ppb	103.623 %
Concentration per Run 3	93.022 %	144.382 %	63.135 ppb	5,791.453 ppb	5,740.381 ppb	59.794 ppb	6,288.409 ppb	6,311.288 ppb	104.591 %
Recovery Percentage 1			105.243 %	98.101 %	98.343 %	98.917 %	104.221 %	102.561 %	
Concentration RSD	0.5 %	7.8 %	0.1 %	4.1 %	4.4 %	0.8 %	1.4 %	2.6 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.029 %	63.671 ppb	65.061 ppb	64.154 ppb	6,468.303 ppb	64.560 ppb	65.911 ppb	66.267 ppb	63.216 ppb
Concentration per Run 1	106.142 %	63.279 ppb	65.730 ppb	65.445 ppb	6,460.287 ppb	63.429 ppb	65.846 ppb	66.883 ppb	63.652 ppb
Concentration per Run 2	105.074 %	63.299 ppb	65.570 ppb	63.348 ppb	6,448.175 ppb	65.871 ppb	67.421 ppb	68.168 ppb	64.017 ppb
Concentration per Run 3	103.872 %	64.433 ppb	63.883 ppb	63.669 ppb	6,496.448 ppb	64.381 ppb	64.466 ppb	63.752 ppb	61.979 ppb
Recovery Percentage 1		106.118 %	108.435 %	106.923 %	107.805 %	107.600 %	109.852 %	110.446 %	105.360 %
Concentration RSD	1.1 %	1.0 %	1.6 %	1.8 %	0.4 %	1.9 %	2.2 %	3.4 %	1.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.694 %	62.864 ppb	59.073 ppb	57.136 ppb	60.788 ppb	100.050 %	61.613 ppb	62.034 ppb	93.455 %
Concentration per Run 1	97.828 %	64.653 ppb	59.194 ppb	58.069 ppb	61.295 ppb	101.896 %	61.318 ppb	61.197 ppb	95.218 %
Concentration per Run 2	92.655 %	62.886 ppb	59.886 ppb	56.165 ppb	61.745 ppb	98.653 %	62.003 ppb	62.879 ppb	91.637 %
Concentration per Run 3	99.599 %	61.053 ppb	58.139 ppb	57.175 ppb	59.324 ppb	99.600 %	61.518 ppb	62.028 ppb	93.509 %
Recovery Percentage 1		104.773 %	98.455 %	95.227 %	101.313 %		102.689 %	103.391 %	
Concentration RSD	3.7 %	2.9 %	1.5 %	1.7 %	2.1 %	1.7 %	0.6 %	1.4 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.846 ppb	60.007 ppb	99.166 %	96.587 %	62.862 ppb	63.101 ppb	77.856 %
Concentration per Run 1	60.047 ppb	59.893 ppb	100.226 %	97.263 %	61.995 ppb	61.782 ppb	79.002 %
Concentration per Run 2	59.876 ppb	58.754 ppb	98.239 %	96.301 %	62.607 ppb	63.759 ppb	77.915 %
Concentration per Run 3	59.616 ppb	61.374 ppb	99.034 %	96.196 %	63.983 ppb	63.761 ppb	76.650 %
Recovery Percentage 1	99.744 %	100.012 %			104.770 %	105.168 %	
Concentration RSD	0.4 %	2.2 %	1.0 %	0.6 %	1.6 %	1.8 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	92	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 6:10:46 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.691 %	133.895 %	0.007 ppb	-14.451 ppb	-5.403 ppb	-1.273 ppb	-13.477 ppb	-23.086 ppb	106.858 %
Concentration per Run 1	97.564 %	134.270 %	0.003 ppb	-12.080 ppb	-4.662 ppb	-0.873 ppb	-7.867 ppb	-22.686 ppb	106.157 %
Concentration per Run 2	97.727 %	125.843 %	0.008 ppb	-15.342 ppb	-5.076 ppb	-1.358 ppb	-17.806 ppb	-14.074 ppb	107.738 %
Concentration per Run 3	97.781 %	141.573 %	0.009 ppb	-15.931 ppb	-6.470 ppb	-1.589 ppb	-14.758 ppb	-32.497 ppb	106.679 %
Recovery Percentage 1			1.361 %	-14.451 %	-7.718 %	-12.734 %	-13.477 %	-23.086 %	
Concentration RSD	0.1 %	5.9 %	52.2 %	14.4 %	17.5 %	28.7 %	37.8 %	39.9 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.362 %	-0.026 ppb	-0.075 ppb	-0.078 ppb	1.354 ppb	-0.007 ppb	-0.653 ppb	-0.133 ppb	-2.170 ppb
Concentration per Run 1	100.534 %	-0.043 ppb	-0.070 ppb	-0.094 ppb	1.659 ppb	-0.011 ppb	-0.666 ppb	-0.081 ppb	-2.136 ppb
Concentration per Run 2	105.742 %	-0.026 ppb	-0.092 ppb	-0.070 ppb	-0.700 ppb	-0.004 ppb	-0.645 ppb	-0.128 ppb	-2.157 ppb
Concentration per Run 3	106.810 %	-0.009 ppb	-0.062 ppb	-0.071 ppb	3.103 ppb	-0.005 ppb	-0.646 ppb	-0.189 ppb	-2.217 ppb
Recovery Percentage 1		-0.526 %	-7.472 %	-7.823 %	2.708 %	-1.308 %	-32.632 %	-13.279 %	-43.397 %
Concentration RSD	3.2 %	65.2 %	20.3 %	17.3 %	141.8 %	53.9 %	1.8 %	40.7 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.137 %	0.016 ppb	-0.028 ppb	-0.020 ppb	0.363 ppb	102.332 %	0.000 ppb	0.001 ppb	97.114 %
Concentration per Run 1	102.308 %	-0.002 ppb	0.018 ppb	-0.020 ppb	0.157 ppb	101.935 %	0.002 ppb	0.003 ppb	97.115 %
Concentration per Run 2	101.931 %	0.091 ppb	-0.053 ppb	-0.020 ppb	0.399 ppb	102.212 %	-0.003 ppb	-0.001 ppb	96.995 %
Concentration per Run 3	102.172 %	-0.042 ppb	-0.049 ppb	-0.021 ppb	0.534 ppb	102.849 %	0.001 ppb	0.003 ppb	97.232 %
Recovery Percentage 1		3.137 %	-0.555 %	-0.202 %	18.165 %		0.005 %	0.696 %	
Concentration RSD	0.2 %	432.6 %	144.2 %	3.0 %	52.7 %	0.5 %	15,375.4 %	165.7 %	0.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.056 ppb	-0.094 ppb	100.593 %	97.211 %	0.205 ppb	-0.009 ppb	80.191 %
Concentration per Run 1	0.041 ppb	-0.099 ppb	99.883 %	96.044 %	0.144 ppb	-0.007 ppb	81.153 %
Concentration per Run 2	0.044 ppb	-0.099 ppb	101.290 %	98.158 %	0.264 ppb	-0.009 ppb	79.625 %
Concentration per Run 3	0.081 ppb	-0.086 ppb	100.606 %	97.432 %	0.207 ppb	-0.012 ppb	79.794 %
Recovery Percentage 1	1.389 %	-18.871 %			20.503 %	-0.924 %	
Concentration RSD	40.1 %	7.6 %	0.7 %	1.1 %	29.4 %	27.3 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	93	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	L2447503-10 6020SL	Rack	2		
Analysis started at:	8/27/2024 6:17:26 PM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.460 %	129.775 %	0.002 ppb	-16.434 ppb	-4.773 ppb	-0.052 ppb	-18.433 ppb	-16.265 ppb	103.678 %
Concentration per Run 1	93.158 %	133.146 %	0.005 ppb	-16.224 ppb	-3.811 ppb	0.170 ppb	-19.931 ppb	-11.018 ppb	100.850 %
Concentration per Run 2	95.814 %	128.652 %	-0.002 ppb	-15.687 ppb	-5.975 ppb	0.165 ppb	-10.017 ppb	-22.706 ppb	103.345 %
Concentration per Run 3	97.406 %	127.528 %	0.004 ppb	-17.391 ppb	-4.533 ppb	-0.491 ppb	-25.351 ppb	-15.071 ppb	106.837 %
Concentration RSD	2.2 %	2.3 %	153.9 %	5.3 %	23.1 %	732.1 %	42.2 %	36.5 %	2.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.822 %	-0.012 ppb	0.057 ppb	-0.028 ppb	-0.204 ppb	-0.008 ppb	-0.611 ppb	-0.083 ppb	-2.173 ppb
Concentration per Run 1	105.208 %	-0.009 ppb	0.082 ppb	-0.072 ppb	0.319 ppb	-0.011 ppb	-0.581 ppb	-0.117 ppb	-2.209 ppb
Concentration per Run 2	100.000 %	-0.024 ppb	0.020 ppb	0.019 ppb	0.065 ppb	-0.004 ppb	-0.615 ppb	-0.076 ppb	-2.130 ppb
Concentration per Run 3	94.258 %	-0.003 ppb	0.068 ppb	-0.031 ppb	-0.997 ppb	-0.011 ppb	-0.636 ppb	-0.057 ppb	-2.179 ppb
Concentration RSD	5.5 %	91.0 %	56.7 %	163.8 %	341.8 %	44.1 %	4.5 %	36.9 %	1.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.403 %	-0.031 ppb	-0.109 ppb	-0.005 ppb	0.227 ppb	99.565 %	-0.003 ppb	0.000 ppb	95.204 %
Concentration per Run 1	107.449 %	-0.078 ppb	-0.050 ppb	-0.006 ppb	0.129 ppb	104.176 %	-0.005 ppb	0.003 ppb	102.372 %
Concentration per Run 2	96.790 %	0.030 ppb	-0.105 ppb	-0.001 ppb	0.247 ppb	99.307 %	0.000 ppb	-0.001 ppb	95.622 %
Concentration per Run 3	96.971 %	-0.045 ppb	-0.172 ppb	-0.006 ppb	0.305 ppb	95.213 %	-0.005 ppb	-0.001 ppb	87.619 %
Concentration RSD	6.1 %	179.0 %	55.8 %	62.5 %	39.7 %	4.5 %	77.4 %	29,165.9 %	7.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.026 ppb	-0.056 ppb	98.478 %	97.452 %	0.022 ppb	-0.009 ppb	78.963 %
Concentration per Run 1	0.009 ppb	-0.074 ppb	101.868 %	103.347 %	-0.008 ppb	-0.014 ppb	83.454 %
Concentration per Run 2	0.039 ppb	-0.035 ppb	99.342 %	97.464 %	0.033 ppb	-0.009 ppb	78.321 %
Concentration per Run 3	0.029 ppb	-0.058 ppb	94.225 %	91.545 %	0.041 ppb	-0.003 ppb	75.114 %
Concentration RSD	58.4 %	35.1 %	4.0 %	6.1 %	121.2 %	59.6 %	5.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	94	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1964021-1 6020TL	Rack	2		
Analysis started at:	8/27/2024 6:21:56 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.042 %	136.330 %	0.000 ppb	-12.889 ppb	-4.255 ppb	0.770 ppb	-22.887 ppb	-13.663 ppb	102.340 %
Concentration per Run 1	93.866 %	130.899 %	0.002 ppb	-11.640 ppb	-3.355 ppb	0.950 ppb	-15.763 ppb	-8.312 ppb	101.270 %
Concentration per Run 2	95.837 %	137.641 %	-0.003 ppb	-15.283 ppb	-3.856 ppb	0.240 ppb	-28.017 ppb	-10.781 ppb	103.521 %
Concentration per Run 3	95.423 %	140.450 %	0.001 ppb	-11.744 ppb	-5.555 ppb	1.119 ppb	-24.881 ppb	-21.895 ppb	102.230 %
Concentration RSD	1.1 %	3.6 %	1,036.6 %	16.1 %	27.1 %	60.6 %	27.8 %	53.0 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.335 %	0.006 ppb	-0.108 ppb	-0.013 ppb	-0.819 ppb	-0.009 ppb	-0.542 ppb	-0.127 ppb	-1.874 ppb
Concentration per Run 1	106.676 %	0.008 ppb	-0.098 ppb	0.057 ppb	-0.222 ppb	-0.011 ppb	-0.558 ppb	-0.116 ppb	-1.859 ppb
Concentration per Run 2	103.872 %	-0.008 ppb	-0.134 ppb	-0.095 ppb	-0.627 ppb	-0.004 ppb	-0.455 ppb	-0.142 ppb	-1.974 ppb
Concentration per Run 3	93.457 %	0.017 ppb	-0.092 ppb	-0.002 ppb	-1.607 ppb	-0.011 ppb	-0.612 ppb	-0.123 ppb	-1.789 ppb
Concentration RSD	6.9 %	214.5 %	20.8 %	580.3 %	87.0 %	42.4 %	14.7 %	10.5 %	5.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.214 %	-0.029 ppb	-0.156 ppb	0.000 ppb	0.104 ppb	101.593 %	-0.002 ppb	-0.001 ppb	97.105 %
Concentration per Run 1	105.438 %	-0.095 ppb	-0.118 ppb	-0.003 ppb	0.097 ppb	103.210 %	-0.001 ppb	-0.001 ppb	99.048 %
Concentration per Run 2	99.163 %	0.025 ppb	-0.180 ppb	0.002 ppb	0.065 ppb	101.478 %	-0.003 ppb	-0.001 ppb	96.107 %
Concentration per Run 3	99.042 %	-0.017 ppb	-0.172 ppb	-0.001 ppb	0.149 ppb	100.090 %	-0.002 ppb	-0.001 ppb	96.159 %
Concentration RSD	3.6 %	210.8 %	21.6 %	639.6 %	40.8 %	1.5 %	74.3 %	0.0 %	1.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	-0.032 ppb	99.408 %	97.599 %	0.005 ppb	-0.011 ppb	77.691 %
Concentration per Run 1	0.014 ppb	-0.025 ppb	100.876 %	100.157 %	-0.018 ppb	-0.012 ppb	79.967 %
Concentration per Run 2	0.011 ppb	-0.023 ppb	99.992 %	96.793 %	0.018 ppb	-0.010 ppb	76.318 %
Concentration per Run 3	0.013 ppb	-0.048 ppb	97.358 %	95.845 %	0.013 ppb	-0.013 ppb	76.788 %
Concentration RSD	10.0 %	43.3 %	1.8 %	2.3 %	422.9 %	14.9 %	2.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	95	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-04 6020SL	Rack	2		
Analysis started at:	8/27/2024 6:26:25 PM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.605 %	122.847 %	0.002 ppb	50,992.431 ppb	12,379.072 ppb	2.970 ppb	1,337.580 ppb	21,647.788 ppb	102.362 %
Concentration per Run 1	90.487 %	126.405 %	0.003 ppb	49,166.935 ppb	11,972.017 ppb	1.311 ppb	1,301.018 ppb	22,189.600 ppb	99.564 %
Concentration per Run 2	91.861 %	123.596 %	0.002 ppb	51,693.310 ppb	12,524.064 ppb	5.396 ppb	1,341.092 ppb	20,992.463 ppb	103.488 %
Concentration per Run 3	92.468 %	118.539 %	0.003 ppb	52,117.047 ppb	12,641.136 ppb	2.201 ppb	1,370.630 ppb	21,761.301 ppb	104.034 %
Concentration RSD	1.1 %	3.2 %	27.6 %	3.1 %	2.9 %	72.3 %	2.6 %	2.8 %	2.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.516 %	0.170 ppb	2.136 ppb	0.662 ppb	9.299 ppb	0.023 ppb	0.294 ppb	0.124 ppb	-1.682 ppb
Concentration per Run 1	99.599 %	0.220 ppb	2.171 ppb	0.746 ppb	10.592 ppb	0.002 ppb	0.212 ppb	0.070 ppb	-1.678 ppb
Concentration per Run 2	113.219 %	0.106 ppb	2.015 ppb	0.575 ppb	9.645 ppb	0.019 ppb	0.294 ppb	0.205 ppb	-1.606 ppb
Concentration per Run 3	97.730 %	0.185 ppb	2.221 ppb	0.664 ppb	7.661 ppb	0.048 ppb	0.375 ppb	0.097 ppb	-1.762 ppb
Concentration RSD	8.2 %	34.6 %	5.0 %	12.9 %	16.1 %	100.0 %	27.8 %	58.0 %	4.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.606 %	0.010 ppb	0.297 ppb	96.560 ppb	0.143 ppb	96.041 %	-0.003 ppb	0.007 ppb	93.706 %
Concentration per Run 1	96.199 %	-0.033 ppb	0.094 ppb	96.011 ppb	0.171 ppb	94.678 %	0.000 ppb	0.003 ppb	92.459 %
Concentration per Run 2	103.517 %	0.017 ppb	0.562 ppb	100.478 ppb	0.079 ppb	98.156 %	-0.005 ppb	0.003 ppb	99.011 %
Concentration per Run 3	99.102 %	0.046 ppb	0.235 ppb	93.192 ppb	0.181 ppb	95.289 %	-0.005 ppb	0.016 ppb	89.649 %
Concentration RSD	3.7 %	399.6 %	80.9 %	3.8 %	39.3 %	1.9 %	82.5 %	105.0 %	5.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.015 ppb	63.490 ppb	97.943 %	96.345 %	-0.007 ppb	0.003 ppb	74.369 %
Concentration per Run 1	0.002 ppb	62.479 ppb	97.000 %	95.149 %	-0.024 ppb	0.003 ppb	74.653 %
Concentration per Run 2	0.022 ppb	64.114 ppb	101.463 %	100.978 %	-0.005 ppb	0.004 ppb	76.241 %
Concentration per Run 3	0.021 ppb	63.876 ppb	95.366 %	92.908 %	0.010 ppb	0.003 ppb	72.214 %
Concentration RSD	75.8 %	1.4 %	3.2 %	4.3 %	261.1 %	24.7 %	2.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	96	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-05 6020SL	Rack	2		
Analysis started at:	8/27/2024 6:30:53 PM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.669 %	134.832 %	0.037 ppb	5,157.040 ppb	1,193.822 ppb	3.847 ppb	1,084.268 ppb	6,990.970 ppb	106.041 %
Concentration per Run 1	95.694 %	132.023 %	0.040 ppb	5,181.454 ppb	1,192.027 ppb	2.779 ppb	1,107.682 ppb	6,996.955 ppb	106.304 %
Concentration per Run 2	96.831 %	136.517 %	0.042 ppb	5,143.285 ppb	1,180.090 ppb	4.006 ppb	1,106.838 ppb	6,907.086 ppb	107.269 %
Concentration per Run 3	94.481 %	135.955 %	0.030 ppb	5,146.380 ppb	1,209.350 ppb	4.758 ppb	1,038.286 ppb	7,068.869 ppb	104.549 %
Concentration RSD	1.2 %	1.8 %	17.7 %	0.4 %	1.2 %	26.0 %	3.7 %	1.2 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.890 %	0.196 ppb	0.175 ppb	5.902 ppb	6.626 ppb	0.039 ppb	-0.226 ppb	-0.027 ppb	-1.482 ppb
Concentration per Run 1	97.463 %	0.146 ppb	0.195 ppb	6.424 ppb	5.795 ppb	0.053 ppb	-0.285 ppb	0.044 ppb	-1.396 ppb
Concentration per Run 2	106.943 %	0.164 ppb	0.162 ppb	5.891 ppb	8.862 ppb	0.031 ppb	-0.182 ppb	-0.030 ppb	-1.530 ppb
Concentration per Run 3	98.264 %	0.277 ppb	0.168 ppb	5.392 ppb	5.222 ppb	0.034 ppb	-0.212 ppb	-0.095 ppb	-1.520 ppb
Concentration RSD	5.2 %	36.2 %	10.0 %	8.7 %	29.5 %	30.4 %	23.3 %	259.1 %	5.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.452 %	0.037 ppb	0.282 ppb	36.891 ppb	0.144 ppb	103.151 %	-0.005 ppb	0.022 ppb	99.513 %
Concentration per Run 1	102.308 %	0.039 ppb	0.216 ppb	35.667 ppb	0.086 ppb	103.497 %	-0.005 ppb	0.042 ppb	98.752 %
Concentration per Run 2	106.951 %	0.000 ppb	0.270 ppb	38.266 ppb	0.118 ppb	104.136 %	-0.005 ppb	0.018 ppb	102.343 %
Concentration per Run 3	101.098 %	0.072 ppb	0.361 ppb	36.740 ppb	0.227 ppb	101.820 %	-0.005 ppb	0.007 ppb	97.445 %
Concentration RSD	3.0 %	96.8 %	26.0 %	3.5 %	51.6 %	1.2 %	0.0 %	81.2 %	2.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	4.604 ppb	102.155 %	98.883 %	-0.011 ppb	-0.005 ppb	78.514 %
Concentration per Run 1	-0.001 ppb	4.595 ppb	100.872 %	96.577 %	-0.023 ppb	-0.006 ppb	79.033 %
Concentration per Run 2	0.024 ppb	4.326 ppb	104.373 %	102.192 %	-0.005 ppb	0.000 ppb	78.746 %
Concentration per Run 3	0.016 ppb	4.890 ppb	101.221 %	97.878 %	-0.004 ppb	-0.009 ppb	77.762 %
Concentration RSD	100.2 %	6.1 %	1.9 %	3.0 %	101.7 %	83.5 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	97	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-06 6020SL	Rack	2		
Analysis started at:	8/27/2024 6:35:22 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.976 %	125.094 %	0.007 ppb	36,258.140 ppb	22,023.548 ppb	0.576 ppb	27,190.995 ppb	127,718.700 ppb	106.053 %
Concentration per Run 1	91.469 %	130.337 %	0.002 ppb	34,765.316 ppb	21,266.193 ppb	0.731 ppb	26,759.322 ppb	127,219.262 ppb	104.002 %
Concentration per Run 2	92.575 %	114.045 %	0.009 ppb	38,002.165 ppb	22,913.000 ppb	0.304 ppb	26,622.642 ppb	124,165.087 ppb	108.284 %
Concentration per Run 3	91.884 %	130.899 %	0.009 ppb	36,006.940 ppb	21,891.451 ppb	0.691 ppb	28,191.022 ppb	131,771.749 ppb	105.874 %
Concentration RSD	0.6 %	7.7 %	64.7 %	4.5 %	3.8 %	40.9 %	3.2 %	3.0 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.896 %	0.380 ppb	0.155 ppb	3,341.339 ppb	2.642 ppb	0.446 ppb	-0.089 ppb	0.880 ppb	-1.258 ppb
Concentration per Run 1	101.469 %	0.378 ppb	0.160 ppb	3,309.798 ppb	1.084 ppb	0.453 ppb	0.013 ppb	0.796 ppb	-1.297 ppb
Concentration per Run 2	109.080 %	0.340 ppb	0.170 ppb	3,343.555 ppb	-0.145 ppb	0.476 ppb	-0.182 ppb	0.958 ppb	-1.354 ppb
Concentration per Run 3	104.139 %	0.420 ppb	0.134 ppb	3,370.664 ppb	6.987 ppb	0.410 ppb	-0.100 ppb	0.885 ppb	-1.123 ppb
Concentration RSD	3.7 %	10.6 %	12.2 %	0.9 %	144.3 %	7.5 %	109.6 %	9.2 %	9.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.968 %	0.206 ppb	0.129 ppb	225.646 ppb	0.721 ppb	98.389 %	-0.003 ppb	0.048 ppb	95.471 %
Concentration per Run 1	101.386 %	0.276 ppb	0.008 ppb	217.197 ppb	0.508 ppb	98.050 %	-0.003 ppb	0.053 ppb	94.113 %
Concentration per Run 2	96.925 %	0.147 ppb	0.024 ppb	234.757 ppb	0.715 ppb	99.018 %	-0.003 ppb	0.039 ppb	96.461 %
Concentration per Run 3	104.592 %	0.193 ppb	0.356 ppb	224.983 ppb	0.940 ppb	98.099 %	-0.002 ppb	0.052 ppb	95.839 %
Concentration RSD	3.8 %	31.8 %	151.8 %	3.9 %	29.9 %	0.6 %	30.7 %	15.6 %	1.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.027 ppb	54.665 ppb	99.525 %	97.634 %	0.125 ppb	-0.009 ppb	73.100 %
Concentration per Run 1	0.017 ppb	53.239 ppb	98.969 %	95.763 %	0.124 ppb	-0.013 ppb	74.184 %
Concentration per Run 2	0.033 ppb	56.357 ppb	99.727 %	99.625 %	0.113 ppb	-0.007 ppb	73.261 %
Concentration per Run 3	0.032 ppb	54.399 ppb	99.879 %	97.514 %	0.138 ppb	-0.008 ppb	71.856 %
Concentration RSD	32.6 %	2.9 %	0.5 %	2.0 %	9.9 %	34.3 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	98	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-08 6020SL	Rack	2		
Analysis started at:	8/27/2024 6:39:51 PM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.351 %	127.716 %	0.003 ppb	24,004.080 ppb	3,324.590 ppb	2.796 ppb	20,593.948 ppb	33,292.492 ppb	105.760 %
Concentration per Run 1	93.816 %	115.169 %	0.004 ppb	24,736.359 ppb	3,418.304 ppb	2.869 ppb	20,291.720 ppb	32,601.852 ppb	104.197 %
Concentration per Run 2	95.074 %	120.225 %	0.003 ppb	24,836.838 ppb	3,419.583 ppb	2.335 ppb	21,204.812 ppb	33,549.543 ppb	105.765 %
Concentration per Run 3	94.162 %	147.753 %	0.002 ppb	22,439.042 ppb	3,135.881 ppb	3.185 ppb	20,285.313 ppb	33,726.081 ppb	107.320 %
Concentration RSD	0.7 %	13.7 %	32.0 %	5.7 %	4.9 %	15.4 %	2.6 %	1.8 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.252 %	0.362 ppb	0.169 ppb	0.886 ppb	0.887 ppb	0.144 ppb	-0.069 ppb	2.406 ppb	-1.646 ppb
Concentration per Run 1	103.739 %	0.332 ppb	0.171 ppb	0.724 ppb	1.509 ppb	0.160 ppb	-0.075 ppb	2.534 ppb	-1.665 ppb
Concentration per Run 2	99.866 %	0.311 ppb	0.165 ppb	1.008 ppb	-1.132 ppb	0.155 ppb	-0.070 ppb	2.527 ppb	-1.674 ppb
Concentration per Run 3	112.151 %	0.442 ppb	0.169 ppb	0.925 ppb	2.283 ppb	0.118 ppb	-0.061 ppb	2.156 ppb	-1.600 ppb
Concentration RSD	6.0 %	19.5 %	1.8 %	16.5 %	202.0 %	16.1 %	10.5 %	9.0 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.322 %	0.160 ppb	0.175 ppb	127.814 ppb	6.521 ppb	101.601 %	-0.003 ppb	0.003 ppb	99.568 %
Concentration per Run 1	104.410 %	0.104 ppb	0.223 ppb	122.223 ppb	6.483 ppb	99.499 %	-0.003 ppb	0.011 ppb	98.480 %
Concentration per Run 2	99.935 %	0.168 ppb	0.216 ppb	126.905 ppb	6.215 ppb	101.709 %	-0.003 ppb	-0.001 ppb	97.279 %
Concentration per Run 3	105.620 %	0.209 ppb	0.086 ppb	134.315 ppb	6.865 ppb	103.595 %	-0.003 ppb	-0.001 ppb	102.946 %
Concentration RSD	2.9 %	32.8 %	44.0 %	4.8 %	5.0 %	2.0 %	0.9 %	254.0 %	3.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.048 ppb	38.067 ppb	101.562 %	99.116 %	0.185 ppb	-0.006 ppb	77.327 %
Concentration per Run 1	0.054 ppb	37.809 ppb	99.436 %	96.028 %	0.163 ppb	-0.012 ppb	79.248 %
Concentration per Run 2	0.031 ppb	37.817 ppb	101.504 %	98.161 %	0.209 ppb	0.000 ppb	75.072 %
Concentration per Run 3	0.058 ppb	38.575 ppb	103.747 %	103.158 %	0.184 ppb	-0.005 ppb	77.660 %
Concentration RSD	30.9 %	1.2 %	2.1 %	3.7 %	12.2 %	101.4 %	2.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	99	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447503-09 6020SL	Rack	2		
Analysis started at:	8/27/2024 6:44:20 PM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.833 %	134.083 %	0.053 ppb	5,169.079 ppb	1,175.484 ppb	4.902 ppb	1,085.262 ppb	6,790.736 ppb	106.808 %
Concentration per Run 1	96.374 %	123.034 %	0.064 ppb	5,457.826 ppb	1,256.609 ppb	4.663 ppb	1,104.490 ppb	7,176.742 ppb	107.082 %
Concentration per Run 2	95.564 %	133.708 %	0.062 ppb	5,035.779 ppb	1,097.447 ppb	5.769 ppb	974.239 ppb	6,027.344 ppb	106.562 %
Concentration per Run 3	95.562 %	145.506 %	0.034 ppb	5,013.634 ppb	1,172.395 ppb	4.273 ppb	1,177.056 ppb	7,168.120 ppb	106.781 %
Concentration RSD	0.5 %	8.4 %	31.6 %	4.8 %	6.8 %	15.8 %	9.5 %	9.7 %	0.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.566 %	0.132 ppb	0.134 ppb	5.874 ppb	4.789 ppb	0.027 ppb	-0.311 ppb	-0.041 ppb	-1.707 ppb
Concentration per Run 1	99.733 %	0.031 ppb	0.112 ppb	5.744 ppb	5.030 ppb	0.027 ppb	-0.247 ppb	0.054 ppb	-1.697 ppb
Concentration per Run 2	113.085 %	0.106 ppb	0.135 ppb	5.747 ppb	4.426 ppb	0.025 ppb	-0.275 ppb	-0.087 ppb	-1.643 ppb
Concentration per Run 3	109.881 %	0.261 ppb	0.155 ppb	6.130 ppb	4.912 ppb	0.030 ppb	-0.412 ppb	-0.090 ppb	-1.781 ppb
Concentration RSD	6.5 %	88.6 %	15.9 %	3.8 %	6.7 %	10.1 %	28.3 %	201.1 %	4.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.146 %	0.021 ppb	0.054 ppb	37.049 ppb	0.494 ppb	104.234 %	-0.004 ppb	0.016 ppb	101.458 %
Concentration per Run 1	104.108 %	0.025 ppb	0.139 ppb	35.997 ppb	0.443 ppb	105.455 %	-0.005 ppb	0.022 ppb	100.699 %
Concentration per Run 2	102.792 %	0.098 ppb	0.009 ppb	36.602 ppb	0.465 ppb	102.618 %	-0.003 ppb	0.022 ppb	98.933 %
Concentration per Run 3	108.537 %	-0.060 ppb	0.012 ppb	38.548 ppb	0.574 ppb	104.630 %	-0.005 ppb	0.003 ppb	104.742 %
Concentration RSD	2.9 %	371.7 %	138.0 %	3.6 %	14.2 %	1.4 %	19.2 %	72.7 %	2.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.006 ppb	4.649 ppb	101.766 %	99.577 %	-0.018 ppb	-0.013 ppb	78.795 %
Concentration per Run 1	-0.005 ppb	4.729 ppb	101.027 %	97.955 %	-0.029 ppb	-0.013 ppb	78.832 %
Concentration per Run 2	0.014 ppb	4.627 ppb	100.904 %	97.103 %	-0.011 ppb	-0.009 ppb	78.433 %
Concentration per Run 3	0.009 ppb	4.593 ppb	103.368 %	103.674 %	-0.014 ppb	-0.017 ppb	79.120 %
Concentration RSD	166.1 %	1.5 %	1.4 %	3.6 %	52.5 %	31.0 %	0.4 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	100	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1964021-2d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 6:48:50 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.340 %	136.143 %	5.505 ppb	1,013.630 ppb	990.054 ppb	197.811 ppb	1,012.284 ppb	1,078.433 ppb	108.627 %
Concentration per Run 1	97.968 %	142.135 %	5.537 ppb	980.181 ppb	980.090 ppb	196.191 ppb	1,032.514 ppb	1,038.151 ppb	108.402 %
Concentration per Run 2	98.174 %	133.146 %	5.422 ppb	1,003.805 ppb	962.045 ppb	190.004 ppb	961.886 ppb	1,062.591 ppb	109.830 %
Concentration per Run 3	98.878 %	133.146 %	5.556 ppb	1,056.903 ppb	1,028.027 ppb	207.239 ppb	1,042.452 ppb	1,134.557 ppb	107.648 %
Concentration RSD	0.5 %	3.8 %	1.3 %	3.9 %	3.4 %	4.4 %	4.3 %	4.6 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.522 %	53.421 ppb	21.574 ppb	54.647 ppb	115.209 ppb	54.209 ppb	54.802 ppb	27.028 ppb	52.262 ppb
Concentration per Run 1	105.341 %	54.321 ppb	21.479 ppb	54.922 ppb	124.556 ppb	54.855 ppb	55.234 ppb	26.807 ppb	51.605 ppb
Concentration per Run 2	114.955 %	50.968 ppb	20.414 ppb	53.356 ppb	109.318 ppb	52.199 ppb	54.167 ppb	26.958 ppb	52.897 ppb
Concentration per Run 3	102.270 %	54.973 ppb	22.828 ppb	55.664 ppb	111.753 ppb	55.574 ppb	55.004 ppb	27.319 ppb	52.282 ppb
Concentration RSD	6.2 %	4.0 %	5.6 %	2.2 %	7.1 %	3.3 %	1.0 %	1.0 %	1.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.583 %	11.237 ppb	9.746 ppb	92.559 ppb	99.274 ppb	105.376 %	5.162 ppb	5.410 ppb	99.268 %
Concentration per Run 1	106.150 %	10.782 ppb	8.718 ppb	91.162 ppb	96.813 ppb	106.013 %	5.075 ppb	5.496 ppb	97.894 %
Concentration per Run 2	99.966 %	11.800 ppb	10.614 ppb	94.437 ppb	102.419 ppb	105.288 %	5.183 ppb	5.406 ppb	100.323 %
Concentration per Run 3	107.633 %	11.131 ppb	9.907 ppb	92.079 ppb	98.592 ppb	104.828 %	5.229 ppb	5.328 ppb	99.587 %
Concentration RSD	3.9 %	4.6 %	9.8 %	1.8 %	2.9 %	0.6 %	1.5 %	1.6 %	1.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	43.822 ppb	199.841 ppb	102.749 %	99.495 %	14.348 ppb	54.292 ppb	78.627 %
Concentration per Run 1	43.298 ppb	202.014 ppb	102.268 %	98.082 %	13.795 ppb	54.079 ppb	80.453 %
Concentration per Run 2	43.610 ppb	198.592 ppb	102.813 %	100.069 %	14.555 ppb	54.634 ppb	77.554 %
Concentration per Run 3	44.560 ppb	198.918 ppb	103.167 %	100.334 %	14.695 ppb	54.162 ppb	77.874 %
Concentration RSD	1.5 %	0.9 %	0.4 %	1.2 %	3.4 %	0.6 %	2.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	101	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447417-01d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 6:53:19 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.260 %	160.487 %	0.004 ppb	158,977.357 ppb	10,701.719 ppb	13.045 ppb	64,242.368 ppb	5,997.974 ppb	101.718 %
Concentration per Run 1	111.827 %	153.933 %	0.004 ppb	161,734.333 ppb	10,903.027 ppb	12.905 ppb	65,472.236 ppb	5,981.781 ppb	100.767 %
Concentration per Run 2	112.691 %	165.731 %	0.002 ppb	153,465.703 ppb	10,267.292 ppb	12.259 ppb	61,412.180 ppb	5,760.373 ppb	101.310 %
Concentration per Run 3	112.261 %	161.798 %	0.007 ppb	161,732.036 ppb	10,934.838 ppb	13.971 ppb	65,842.687 ppb	6,251.769 ppb	103.077 %
Concentration RSD	0.4 %	3.7 %	63.7 %	3.0 %	3.5 %	6.6 %	3.8 %	4.1 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.801 %	1.630 ppb	13.710 ppb	10.829 ppb	110.555 ppb	1.540 ppb	12.205 ppb	0.252 ppb	0.753 ppb
Concentration per Run 1	96.261 %	1.552 ppb	13.853 ppb	11.607 ppb	114.541 ppb	1.527 ppb	11.874 ppb	0.193 ppb	1.288 ppb
Concentration per Run 2	105.341 %	1.247 ppb	13.392 ppb	9.857 ppb	103.094 ppb	1.615 ppb	12.525 ppb	0.186 ppb	0.516 ppb
Concentration per Run 3	100.801 %	2.091 ppb	13.884 ppb	11.023 ppb	114.031 ppb	1.478 ppb	12.215 ppb	0.377 ppb	0.453 ppb
Concentration RSD	4.5 %	26.2 %	2.0 %	8.2 %	5.8 %	4.5 %	2.7 %	43.1 %	61.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.049 %	3.290 ppb	0.119 ppb	112.233 ppb	0.975 ppb	96.290 %	-0.001 ppb	0.007 ppb	90.651 %
Concentration per Run 1	93.841 %	3.588 ppb	0.048 ppb	112.791 ppb	1.063 ppb	95.667 %	0.000 ppb	0.003 ppb	89.418 %
Concentration per Run 2	97.818 %	3.227 ppb	0.098 ppb	112.420 ppb	0.842 ppb	95.703 %	-0.002 ppb	0.016 ppb	90.711 %
Concentration per Run 3	102.489 %	3.055 ppb	0.210 ppb	111.490 ppb	1.021 ppb	97.500 %	0.000 ppb	0.003 ppb	91.823 %
Concentration RSD	4.4 %	8.3 %	69.9 %	0.6 %	12.0 %	1.1 %	126.8 %	101.9 %	1.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.821 ppb	37.790 ppb	98.472 %	95.431 %	-0.019 ppb	0.283 ppb	70.231 %
Concentration per Run 1	1.698 ppb	36.575 ppb	96.728 %	94.136 %	-0.028 ppb	0.259 ppb	71.038 %
Concentration per Run 2	1.839 ppb	38.766 ppb	98.778 %	96.104 %	-0.020 ppb	0.297 ppb	69.429 %
Concentration per Run 3	1.925 ppb	38.028 ppb	99.908 %	96.053 %	-0.010 ppb	0.291 ppb	70.227 %
Concentration RSD	6.3 %	3.0 %	1.6 %	1.2 %	44.9 %	7.2 %	1.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	102	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447417-04d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 6:57:48 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.671 %	161.798 %	-0.001 ppb	160,804.816 ppb	10,858.440 ppb	12.183 ppb	65,000.150 ppb	5,982.667 ppb	103.372 %
Concentration per Run 1	112.029 %	172.472 %	-0.003 ppb	154,269.761 ppb	10,304.652 ppb	12.303 ppb	65,279.062 ppb	5,907.834 ppb	102.916 %
Concentration per Run 2	112.980 %	153.933 %	-0.002 ppb	164,980.996 ppb	11,258.835 ppb	13.671 ppb	65,330.160 ppb	6,115.276 ppb	103.682 %
Concentration per Run 3	113.004 %	158.989 %	0.003 ppb	163,163.691 ppb	11,011.835 ppb	10.575 ppb	64,391.227 ppb	5,924.890 ppb	103.519 %
Concentration RSD	0.5 %	5.9 %	677.2 %	3.6 %	4.6 %	12.7 %	0.8 %	1.9 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.202 %	1.618 ppb	13.798 ppb	10.151 ppb	109.192 ppb	1.572 ppb	12.638 ppb	0.239 ppb	0.752 ppb
Concentration per Run 1	98.798 %	1.406 ppb	13.761 ppb	11.026 ppb	116.200 ppb	1.522 ppb	12.488 ppb	0.293 ppb	0.947 ppb
Concentration per Run 2	102.670 %	1.880 ppb	13.964 ppb	9.962 ppb	102.499 ppb	1.477 ppb	12.366 ppb	0.268 ppb	0.558 ppb
Concentration per Run 3	102.136 %	1.569 ppb	13.668 ppb	9.464 ppb	108.875 ppb	1.716 ppb	13.061 ppb	0.154 ppb	0.750 ppb
Concentration RSD	2.1 %	14.9 %	1.1 %	7.9 %	6.3 %	8.1 %	2.9 %	31.2 %	25.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.976 %	2.996 ppb	0.039 ppb	109.590 ppb	0.575 ppb	98.308 %	0.002 ppb	-0.001 ppb	92.476 %
Concentration per Run 1	105.513 %	2.668 ppb	0.212 ppb	108.865 ppb	0.580 ppb	98.934 %	0.003 ppb	-0.001 ppb	94.043 %
Concentration per Run 2	106.890 %	3.128 ppb	-0.118 ppb	106.914 ppb	0.520 ppb	98.821 %	0.000 ppb	-0.001 ppb	91.711 %
Concentration per Run 3	99.526 %	3.190 ppb	0.024 ppb	112.990 ppb	0.623 ppb	97.169 %	0.003 ppb	-0.001 ppb	91.674 %
Concentration RSD	3.8 %	9.5 %	420.9 %	2.8 %	9.0 %	1.0 %	100.4 %	0.0 %	1.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.064 ppb	38.202 ppb	99.986 %	96.368 %	-0.028 ppb	0.248 ppb	71.325 %
Concentration per Run 1	1.060 ppb	37.064 ppb	99.343 %	96.786 %	-0.037 ppb	0.238 ppb	72.868 %
Concentration per Run 2	1.079 ppb	37.747 ppb	101.316 %	96.498 %	-0.020 ppb	0.273 ppb	70.607 %
Concentration per Run 3	1.052 ppb	39.795 ppb	99.298 %	95.821 %	-0.027 ppb	0.231 ppb	70.499 %
Concentration RSD	1.3 %	3.7 %	1.2 %	0.5 %	30.3 %	9.2 %	1.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	103	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 7:02:17 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.635 %	117.229 %	63.805 ppb	6,413.898 ppb	6,334.268 ppb	62.602 ppb	6,225.873 ppb	6,302.964 ppb	103.060 %
Concentration per Run 1	93.566 %	127.528 %	63.306 ppb	6,135.325 ppb	6,136.343 ppb	61.382 ppb	6,302.627 ppb	6,530.750 ppb	105.697 %
Concentration per Run 2	92.251 %	111.798 %	64.019 ppb	6,763.215 ppb	6,642.062 ppb	67.582 ppb	6,485.916 ppb	6,588.327 ppb	101.192 %
Concentration per Run 3	92.088 %	112.360 %	64.091 ppb	6,343.153 ppb	6,224.400 ppb	58.842 ppb	5,889.075 ppb	5,789.814 ppb	102.289 %
Recovery Percentage 1			106.342 %	106.898 %	105.571 %	104.337 %	103.765 %	105.049 %	
Concentration RSD	0.9 %	7.6 %	0.7 %	5.0 %	4.3 %	7.2 %	4.9 %	7.1 %	2.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	109.302 %	61.298 ppb	62.960 ppb	62.550 ppb	6,290.177 ppb	62.890 ppb	64.581 ppb	63.741 ppb	62.912 ppb
Concentration per Run 1	109.614 %	62.267 ppb	63.162 ppb	61.682 ppb	6,345.878 ppb	63.235 ppb	65.764 ppb	62.805 ppb	62.697 ppb
Concentration per Run 2	103.605 %	62.444 ppb	64.716 ppb	64.493 ppb	6,461.462 ppb	63.409 ppb	63.664 ppb	65.523 ppb	64.234 ppb
Concentration per Run 3	114.688 %	59.184 ppb	61.002 ppb	61.474 ppb	6,063.190 ppb	62.027 ppb	64.313 ppb	62.896 ppb	61.804 ppb
Recovery Percentage 1		102.163 %	104.933 %	104.249 %	104.836 %	104.817 %	107.634 %	106.235 %	104.853 %
Concentration RSD	5.1 %	3.0 %	3.0 %	2.7 %	3.3 %	1.2 %	1.7 %	2.4 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.344 %	63.045 ppb	59.840 ppb	57.469 ppb	59.496 ppb	101.204 %	61.449 ppb	60.646 ppb	96.022 %
Concentration per Run 1	103.132 %	62.063 ppb	58.850 ppb	56.596 ppb	59.737 ppb	102.463 %	61.376 ppb	60.743 ppb	97.776 %
Concentration per Run 2	98.294 %	62.696 ppb	60.897 ppb	57.561 ppb	59.327 ppb	101.741 %	61.137 ppb	59.687 ppb	96.407 %
Concentration per Run 3	96.607 %	64.376 ppb	59.772 ppb	58.252 ppb	59.425 ppb	99.408 %	61.834 ppb	61.507 ppb	93.882 %
Recovery Percentage 1		105.075 %	99.733 %	95.782 %	99.160 %		102.414 %	101.076 %	
Concentration RSD	3.4 %	1.9 %	1.7 %	1.4 %	0.4 %	1.6 %	0.6 %	1.5 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.146 ppb	58.192 ppb	99.380 %	96.189 %	62.439 ppb	62.801 ppb	75.477 %
Concentration per Run 1	58.821 ppb	59.864 ppb	100.234 %	97.034 %	61.254 ppb	61.734 ppb	76.628 %
Concentration per Run 2	60.587 ppb	57.639 ppb	99.230 %	96.217 %	62.372 ppb	63.536 ppb	75.356 %
Concentration per Run 3	61.031 ppb	57.075 ppb	98.677 %	95.317 %	63.690 ppb	63.133 ppb	74.446 %
Recovery Percentage 1	100.244 %	96.987 %			104.064 %	104.669 %	
Concentration RSD	1.9 %	2.5 %	0.8 %	0.9 %	2.0 %	1.5 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	104	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 7:06:49 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.152 %	122.659 %	0.006 ppb	-4.751 ppb	-5.947 ppb	-1.397 ppb	-13.795 ppb	-24.551 ppb	106.614 %
Concentration per Run 1	95.347 %	121.910 %	0.013 ppb	-5.137 ppb	-5.928 ppb	-1.311 ppb	-15.401 ppb	-22.019 ppb	104.431 %
Concentration per Run 2	97.177 %	124.157 %	0.004 ppb	-6.899 ppb	-5.973 ppb	-1.451 ppb	-4.258 ppb	-32.432 ppb	105.831 %
Concentration per Run 3	98.933 %	121.910 %	0.002 ppb	-2.217 ppb	-5.941 ppb	-1.428 ppb	-21.726 ppb	-19.203 ppb	109.581 %
Recovery Percentage 1			1.206 %	-4.751 %	-8.496 %	-13.968 %	-13.795 %	-24.551 %	
Concentration RSD	1.8 %	1.1 %	98.3 %	49.8 %	0.4 %	5.3 %	64.1 %	28.4 %	2.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.778 %	0.038 ppb	-0.091 ppb	-0.129 ppb	2.142 ppb	-0.002 ppb	-0.633 ppb	-0.146 ppb	-2.123 ppb
Concentration per Run 1	95.594 %	0.054 ppb	-0.086 ppb	-0.118 ppb	3.719 ppb	-0.004 ppb	-0.637 ppb	-0.123 ppb	-2.083 ppb
Concentration per Run 2	104.673 %	0.028 ppb	-0.091 ppb	-0.149 ppb	1.030 ppb	0.002 ppb	-0.643 ppb	-0.204 ppb	-2.072 ppb
Concentration per Run 3	99.065 %	0.031 ppb	-0.095 ppb	-0.121 ppb	1.678 ppb	-0.004 ppb	-0.619 ppb	-0.112 ppb	-2.214 ppb
Recovery Percentage 1		0.757 %	-9.068 %	-12.920 %	4.284 %	-0.434 %	-31.667 %	-14.618 %	-42.466 %
Concentration RSD	4.6 %	38.1 %	4.9 %	13.0 %	65.5 %	160.1 %	2.0 %	34.2 %	3.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.298 %	0.026 ppb	0.046 ppb	-0.019 ppb	0.278 ppb	103.479 %	0.001 ppb	0.004 ppb	98.891 %
Concentration per Run 1	97.833 %	0.017 ppb	-0.057 ppb	-0.018 ppb	0.248 ppb	103.937 %	0.004 ppb	0.007 ppb	97.695 %
Concentration per Run 2	99.511 %	0.055 ppb	0.104 ppb	-0.020 ppb	0.269 ppb	104.443 %	0.002 ppb	0.003 ppb	99.523 %
Concentration per Run 3	103.549 %	0.006 ppb	0.091 ppb	-0.018 ppb	0.317 ppb	102.058 %	-0.002 ppb	0.003 ppb	99.454 %
Recovery Percentage 1		5.228 %	0.916 %	-0.186 %	13.907 %		0.340 %	1.991 %	
Concentration RSD	2.9 %	98.3 %	195.6 %	5.8 %	12.6 %	1.2 %	215.1 %	57.9 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.106 ppb	-0.082 ppb	99.914 %	97.372 %	0.224 ppb	-0.013 ppb	77.373 %
Concentration per Run 1	0.071 ppb	-0.086 ppb	99.439 %	96.319 %	0.163 ppb	-0.011 ppb	78.197 %
Concentration per Run 2	0.116 ppb	-0.086 ppb	99.315 %	98.120 %	0.286 ppb	-0.010 ppb	76.794 %
Concentration per Run 3	0.132 ppb	-0.074 ppb	100.987 %	97.675 %	0.224 ppb	-0.017 ppb	77.129 %
Recovery Percentage 1	2.653 %	-16.402 %			22.418 %	-1.273 %	
Concentration RSD	29.7 %	8.6 %	0.9 %	1.0 %	27.3 %	26.1 %	0.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	105	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	L2447832-08 6020SL	Rack	2		
Analysis started at:	8/27/2024 7:11:22 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.517 %	134.644 %	0.008 ppb	17.627 ppb	-4.370 ppb	0.936 ppb	-3.854 ppb	-16.344 ppb	104.407 %
Concentration per Run 1	94.115 %	141.012 %	0.013 ppb	16.697 ppb	-3.837 ppb	0.559 ppb	-3.556 ppb	-9.468 ppb	103.309 %
Concentration per Run 2	94.575 %	128.090 %	-0.002 ppb	20.943 ppb	-5.539 ppb	0.911 ppb	-4.665 ppb	-17.179 ppb	104.301 %
Concentration per Run 3	94.859 %	134.832 %	0.012 ppb	15.242 ppb	-3.736 ppb	1.337 ppb	-3.341 ppb	-22.385 ppb	105.612 %
Concentration RSD	0.4 %	4.8 %	105.5 %	16.8 %	23.2 %	41.6 %	18.4 %	39.8 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.044 %	0.007 ppb	-0.054 ppb	0.027 ppb	6.961 ppb	-0.011 ppb	-0.545 ppb	-0.077 ppb	-1.997 ppb
Concentration per Run 1	98.264 %	-0.006 ppb	-0.050 ppb	0.045 ppb	9.174 ppb	-0.011 ppb	-0.476 ppb	-0.096 ppb	-2.005 ppb
Concentration per Run 2	104.807 %	-0.008 ppb	-0.103 ppb	-0.014 ppb	3.901 ppb	-0.011 ppb	-0.618 ppb	-0.078 ppb	-1.976 ppb
Concentration per Run 3	97.062 %	0.034 ppb	-0.008 ppb	0.051 ppb	7.808 ppb	-0.011 ppb	-0.540 ppb	-0.058 ppb	-2.011 ppb
Concentration RSD	4.2 %	340.6 %	88.1 %	130.5 %	39.3 %	0.0 %	13.1 %	24.2 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.876 %	-0.058 ppb	-0.159 ppb	0.008 ppb	0.109 ppb	101.057 %	-0.001 ppb	0.000 ppb	93.851 %
Concentration per Run 1	102.610 %	-0.073 ppb	-0.112 ppb	0.006 ppb	0.102 ppb	98.550 %	-0.002 ppb	0.003 ppb	91.014 %
Concentration per Run 2	96.925 %	-0.003 ppb	-0.176 ppb	0.013 ppb	0.110 ppb	104.178 %	-0.002 ppb	-0.001 ppb	95.877 %
Concentration per Run 3	97.092 %	-0.099 ppb	-0.189 ppb	0.004 ppb	0.114 ppb	100.444 %	0.000 ppb	-0.001 ppb	94.662 %
Concentration RSD	3.3 %	85.7 %	25.8 %	68.0 %	5.6 %	2.8 %	63.2 %	1,783.1 %	2.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.397 ppb	-0.064 ppb	97.243 %	94.535 %	0.045 ppb	-0.016 ppb	75.469 %
Concentration per Run 1	0.376 ppb	-0.072 ppb	93.506 %	89.819 %	0.012 ppb	-0.011 ppb	75.444 %
Concentration per Run 2	0.411 ppb	-0.048 ppb	100.024 %	98.208 %	0.064 ppb	-0.018 ppb	75.666 %
Concentration per Run 3	0.406 ppb	-0.073 ppb	98.199 %	95.577 %	0.059 ppb	-0.019 ppb	75.296 %
Concentration RSD	4.8 %	21.7 %	3.5 %	4.5 %	63.7 %	25.8 %	0.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	106	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447832-01 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:15:51 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.226 %	125.094 %	0.009 ppb	87,384.596 ppb	8,208.004 ppb	24.936 ppb	12,961.064 ppb	74,273.238 ppb	102.123 %
Concentration per Run 1	88.409 %	140.450 %	0.005 ppb	82,875.591 ppb	7,780.043 ppb	21.249 ppb	12,698.130 ppb	76,274.338 ppb	100.629 %
Concentration per Run 2	89.594 %	114.607 %	0.008 ppb	87,314.380 ppb	8,233.526 ppb	25.706 ppb	12,455.747 ppb	69,847.602 ppb	101.935 %
Concentration per Run 3	89.673 %	120.225 %	0.012 ppb	91,963.816 ppb	8,610.443 ppb	27.854 ppb	13,729.315 ppb	76,697.774 ppb	103.806 %
Concentration RSD	0.8 %	10.9 %	40.6 %	5.2 %	5.1 %	13.5 %	5.2 %	5.2 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.125 %	0.214 ppb	0.107 ppb	2,655.877 ppb	118.187 ppb	2.152 ppb	3.630 ppb	1.061 ppb	0.510 ppb
Concentration per Run 1	92.523 %	0.238 ppb	0.106 ppb	2,719.956 ppb	120.227 ppb	2.265 ppb	3.718 ppb	1.168 ppb	0.695 ppb
Concentration per Run 2	96.528 %	0.188 ppb	0.109 ppb	2,535.376 ppb	122.703 ppb	2.144 ppb	3.581 ppb	0.865 ppb	0.526 ppb
Concentration per Run 3	93.324 %	0.215 ppb	0.104 ppb	2,712.299 ppb	111.631 ppb	2.046 ppb	3.592 ppb	1.151 ppb	0.309 ppb
Concentration RSD	2.3 %	11.8 %	2.6 %	3.9 %	4.9 %	5.1 %	2.1 %	16.0 %	38.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.739 %	0.219 ppb	0.561 ppb	570.384 ppb	0.265 ppb	95.134 %	0.000 ppb	1.227 ppb	90.713 %
Concentration per Run 1	95.292 %	0.175 ppb	0.693 ppb	568.858 ppb	0.216 ppb	97.289 %	0.001 ppb	1.260 ppb	93.247 %
Concentration per Run 2	98.316 %	0.270 ppb	0.817 ppb	569.550 ppb	0.273 ppb	92.777 %	0.002 ppb	1.162 ppb	85.495 %
Concentration per Run 3	96.608 %	0.213 ppb	0.173 ppb	572.743 ppb	0.305 ppb	95.335 %	-0.003 ppb	1.259 ppb	93.399 %
Concentration RSD	1.6 %	21.9 %	61.0 %	0.4 %	17.0 %	2.4 %	2,276.1 %	4.6 %	5.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.242 ppb	61.500 ppb	96.874 %	94.571 %	0.029 ppb	0.086 ppb	68.902 %
Concentration per Run 1	0.216 ppb	59.940 ppb	98.182 %	95.360 %	0.009 ppb	0.101 ppb	70.987 %
Concentration per Run 2	0.250 ppb	61.729 ppb	92.456 %	91.011 %	0.038 ppb	0.082 ppb	65.294 %
Concentration per Run 3	0.261 ppb	62.831 ppb	99.983 %	97.344 %	0.041 ppb	0.076 ppb	70.425 %
Concentration RSD	9.6 %	2.4 %	4.1 %	3.4 %	61.3 %	15.2 %	4.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	107	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1964021-3d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:20:20 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.711 %	134.832 %	5.317 ppb	11,922.551 ppb	1,796.982 ppb	192.755 ppb	2,357.079 ppb	8,628.090 ppb	110.714 %
Concentration per Run 1	97.869 %	135.955 %	5.231 ppb	11,899.921 ppb	1,806.997 ppb	194.616 ppb	2,350.032 ppb	8,496.243 ppb	110.750 %
Concentration per Run 2	99.030 %	129.775 %	5.281 ppb	11,749.900 ppb	1,769.606 ppb	189.702 ppb	2,293.309 ppb	8,504.354 ppb	110.594 %
Concentration per Run 3	99.233 %	138.764 %	5.440 ppb	12,117.831 ppb	1,814.344 ppb	193.947 ppb	2,427.894 ppb	8,883.674 ppb	110.797 %
Concentration RSD	0.7 %	3.4 %	2.1 %	1.6 %	1.3 %	1.4 %	2.9 %	2.6 %	0.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.249 %	51.966 ppb	21.444 ppb	322.733 ppb	114.964 ppb	53.810 ppb	54.319 ppb	27.093 ppb	51.535 ppb
Concentration per Run 1	108.145 %	49.865 ppb	21.306 ppb	316.005 ppb	112.537 ppb	52.613 ppb	53.676 ppb	26.643 ppb	50.231 ppb
Concentration per Run 2	100.401 %	51.424 ppb	21.193 ppb	316.910 ppb	112.213 ppb	53.281 ppb	53.711 ppb	27.176 ppb	51.167 ppb
Concentration per Run 3	101.202 %	54.608 ppb	21.834 ppb	335.285 ppb	120.141 ppb	55.537 ppb	55.569 ppb	27.460 ppb	53.208 ppb
Concentration RSD	4.1 %	4.7 %	1.6 %	3.4 %	3.9 %	2.8 %	2.0 %	1.5 %	3.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.459 %	11.419 ppb	10.388 ppb	148.296 ppb	98.039 ppb	105.273 %	4.935 ppb	5.283 ppb	98.071 %
Concentration per Run 1	103.549 %	11.286 ppb	9.778 ppb	146.293 ppb	98.259 ppb	106.180 %	4.811 ppb	5.368 ppb	96.781 %
Concentration per Run 2	100.934 %	10.851 ppb	10.410 ppb	146.744 ppb	95.850 ppb	104.679 %	4.953 ppb	5.064 ppb	97.983 %
Concentration per Run 3	99.892 %	12.120 ppb	10.976 ppb	151.852 ppb	100.009 ppb	104.961 %	5.042 ppb	5.416 ppb	99.449 %
Concentration RSD	1.9 %	5.6 %	5.8 %	2.1 %	2.1 %	0.8 %	2.4 %	3.6 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	43.977 ppb	200.268 ppb	101.492 %	97.660 %	10.975 ppb	52.479 ppb	76.027 %
Concentration per Run 1	43.276 ppb	198.869 ppb	100.884 %	97.836 %	10.790 ppb	52.145 ppb	77.922 %
Concentration per Run 2	44.366 ppb	197.896 ppb	100.690 %	95.505 %	11.169 ppb	52.600 ppb	73.397 %
Concentration per Run 3	44.290 ppb	204.039 ppb	102.902 %	99.640 %	10.965 ppb	52.691 ppb	76.762 %
Concentration RSD	1.4 %	1.6 %	1.2 %	2.1 %	1.7 %	0.6 %	3.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	108	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1964021-4d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:24:49 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.513 %	142.322 %	5.275 ppb	11,837.734 ppb	1,805.805 ppb	196.137 ppb	2,419.612 ppb	8,777.072 ppb	113.213 %
Concentration per Run 1	100.310 %	140.450 %	5.299 ppb	11,838.847 ppb	1,841.083 ppb	200.029 ppb	2,449.488 ppb	8,704.248 ppb	111.319 %
Concentration per Run 2	100.458 %	134.270 %	5.163 ppb	11,969.895 ppb	1,757.435 ppb	196.554 ppb	2,347.980 ppb	8,596.180 ppb	113.296 %
Concentration per Run 3	100.770 %	152.248 %	5.362 ppb	11,704.458 ppb	1,818.896 ppb	191.828 ppb	2,461.369 ppb	9,030.787 ppb	115.025 %
Concentration RSD	0.2 %	6.4 %	1.9 %	1.1 %	2.4 %	2.1 %	2.6 %	2.6 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.739 %	52.734 ppb	22.012 ppb	327.302 ppb	122.588 ppb	53.784 ppb	54.219 ppb	26.136 ppb	50.495 ppb
Concentration per Run 1	103.205 %	52.907 ppb	21.984 ppb	334.677 ppb	123.182 ppb	54.764 ppb	55.570 ppb	25.688 ppb	50.273 ppb
Concentration per Run 2	106.009 %	50.977 ppb	21.101 ppb	319.294 ppb	111.953 ppb	51.927 ppb	52.419 ppb	26.674 ppb	50.346 ppb
Concentration per Run 3	102.003 %	54.319 ppb	22.950 ppb	327.933 ppb	132.629 ppb	54.659 ppb	54.669 ppb	26.046 ppb	50.864 ppb
Concentration RSD	2.0 %	3.2 %	4.2 %	2.4 %	8.4 %	3.0 %	3.0 %	1.9 %	0.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.066 %	11.240 ppb	10.020 ppb	145.073 ppb	94.906 ppb	105.434 %	4.915 ppb	5.300 ppb	100.258 %
Concentration per Run 1	104.310 %	11.410 ppb	10.220 ppb	146.849 ppb	95.052 ppb	107.258 %	4.970 ppb	5.301 ppb	101.490 %
Concentration per Run 2	107.872 %	11.089 ppb	10.190 ppb	144.068 ppb	94.268 ppb	101.691 %	4.912 ppb	5.417 ppb	95.811 %
Concentration per Run 3	112.017 %	11.222 ppb	9.650 ppb	144.301 ppb	95.399 ppb	107.352 %	4.862 ppb	5.183 ppb	103.473 %
Concentration RSD	3.6 %	1.4 %	3.2 %	1.1 %	0.6 %	3.1 %	1.1 %	2.2 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	43.754 ppb	194.880 ppb	104.434 %	101.049 %	10.966 ppb	51.839 ppb	78.383 %
Concentration per Run 1	43.255 ppb	195.260 ppb	103.539 %	100.481 %	11.012 ppb	51.752 ppb	78.835 %
Concentration per Run 2	43.808 ppb	191.987 ppb	101.693 %	97.393 %	11.005 ppb	52.487 ppb	76.667 %
Concentration per Run 3	44.199 ppb	197.394 ppb	108.069 %	105.274 %	10.882 ppb	51.278 ppb	79.647 %
Concentration RSD	1.1 %	1.4 %	3.1 %	3.9 %	0.7 %	1.2 %	2.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	109	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1964021-5d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:29:19 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.342 %	124.906 %	53.436 ppb	16,918.136 ppb	6,202.329 ppb	55.677 ppb	6,791.514 ppb	13,014.285 ppb	110.566 %
Concentration per Run 1	96.711 %	122.472 %	53.403 ppb	17,205.429 ppb	6,325.568 ppb	53.395 ppb	6,816.538 ppb	13,059.459 ppb	109.840 %
Concentration per Run 2	97.967 %	134.270 %	53.194 ppb	16,268.750 ppb	5,947.502 ppb	54.793 ppb	6,713.328 ppb	12,965.967 ppb	110.932 %
Concentration per Run 3	97.347 %	117.978 %	53.710 ppb	17,280.230 ppb	6,333.917 ppb	58.845 ppb	6,844.675 ppb	13,017.428 ppb	110.926 %
Concentration RSD	0.6 %	6.7 %	0.5 %	3.3 %	3.6 %	5.1 %	1.0 %	0.4 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.810 %	54.129 ppb	54.437 ppb	316.046 ppb	5,437.591 ppb	53.462 ppb	54.071 ppb	53.471 ppb	50.836 ppb
Concentration per Run 1	108.011 %	53.394 ppb	54.486 ppb	316.040 ppb	5,449.215 ppb	52.267 ppb	54.343 ppb	53.178 ppb	50.682 ppb
Concentration per Run 2	105.341 %	54.338 ppb	54.737 ppb	315.263 ppb	5,380.861 ppb	53.843 ppb	54.272 ppb	52.675 ppb	50.514 ppb
Concentration per Run 3	107.077 %	54.656 ppb	54.089 ppb	316.833 ppb	5,482.698 ppb	54.276 ppb	53.598 ppb	54.559 ppb	51.311 ppb
Concentration RSD	1.3 %	1.2 %	0.6 %	0.2 %	1.0 %	2.0 %	0.8 %	1.8 %	0.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.736 %	51.498 ppb	48.493 ppb	101.783 ppb	51.950 ppb	104.234 %	1.552 ppb	51.584 ppb	97.348 %
Concentration per Run 1	107.628 %	52.341 ppb	48.071 ppb	104.636 ppb	52.536 ppb	105.637 %	1.525 ppb	51.028 ppb	100.426 %
Concentration per Run 2	110.145 %	49.218 ppb	48.138 ppb	101.919 ppb	51.541 ppb	105.322 %	1.591 ppb	51.719 ppb	98.090 %
Concentration per Run 3	105.434 %	52.934 ppb	49.270 ppb	98.794 ppb	51.771 ppb	101.742 %	1.539 ppb	52.006 ppb	93.528 %
Concentration RSD	2.2 %	3.9 %	1.4 %	2.9 %	1.0 %	2.1 %	2.3 %	1.0 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.573 ppb	56.059 ppb	104.179 %	100.946 %	52.725 ppb	53.287 ppb	79.031 %
Concentration per Run 1	52.050 ppb	58.440 ppb	104.804 %	100.738 %	52.308 ppb	53.333 ppb	81.382 %
Concentration per Run 2	53.240 ppb	56.166 ppb	104.905 %	103.111 %	52.136 ppb	52.868 ppb	78.848 %
Concentration per Run 3	52.429 ppb	53.569 ppb	102.829 %	98.988 %	53.732 ppb	53.658 ppb	76.861 %
Concentration RSD	1.2 %	4.3 %	1.1 %	2.1 %	1.7 %	0.7 %	2.9 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	110	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	wg1964021-6d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:33:49 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.857 %	135.393 %	0.010 ppb	22,019.196 ppb	1,655.629 ppb	3.960 ppb	2,565.979 ppb	14,792.111 ppb	108.142 %
Concentration per Run 1	96.547 %	139.888 %	0.014 ppb	21,755.583 ppb	1,651.878 ppb	4.514 ppb	2,689.066 ppb	15,115.918 ppb	106.707 %
Concentration per Run 2	97.707 %	142.697 %	0.010 ppb	20,876.927 ppb	1,541.153 ppb	4.144 ppb	2,449.217 ppb	14,476.240 ppb	109.298 %
Concentration per Run 3	96.317 %	123.596 %	0.006 ppb	23,425.079 ppb	1,773.855 ppb	3.221 ppb	2,559.653 ppb	14,784.176 ppb	108.422 %
Concentration RSD	0.8 %	7.6 %	42.4 %	5.9 %	7.0 %	16.8 %	4.7 %	2.2 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.098 %	0.009 ppb	-0.014 ppb	529.506 ppb	23.879 ppb	0.378 ppb	0.391 ppb	0.124 ppb	-1.295 ppb
Concentration per Run 1	115.756 %	0.003 ppb	0.024 ppb	514.640 ppb	20.955 ppb	0.366 ppb	0.256 ppb	0.149 ppb	-1.391 ppb
Concentration per Run 2	103.471 %	0.010 ppb	-0.037 ppb	529.409 ppb	21.107 ppb	0.406 ppb	0.548 ppb	0.149 ppb	-1.408 ppb
Concentration per Run 3	99.066 %	0.014 ppb	-0.029 ppb	544.470 ppb	29.575 ppb	0.363 ppb	0.369 ppb	0.073 ppb	-1.085 ppb
Concentration RSD	8.2 %	64.9 %	236.9 %	2.8 %	20.7 %	6.3 %	37.6 %	35.5 %	14.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.181 %	0.041 ppb	0.130 ppb	114.297 ppb	0.414 ppb	102.838 %	-0.002 ppb	0.257 ppb	98.975 %
Concentration per Run 1	113.543 %	-0.037 ppb	-0.006 ppb	116.544 ppb	0.311 ppb	105.119 %	-0.002 ppb	0.302 ppb	103.902 %
Concentration per Run 2	107.192 %	0.116 ppb	0.072 ppb	111.312 ppb	0.463 ppb	101.555 %	-0.003 ppb	0.218 ppb	97.545 %
Concentration per Run 3	94.810 %	0.045 ppb	0.323 ppb	115.036 ppb	0.468 ppb	101.842 %	0.000 ppb	0.250 ppb	95.478 %
Concentration RSD	9.1 %	186.4 %	132.5 %	2.4 %	21.5 %	1.9 %	75.8 %	16.4 %	4.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.376 ppb	13.014 ppb	103.297 %	100.450 %	0.236 ppb	0.017 ppb	76.505 %
Concentration per Run 1	0.330 ppb	12.959 ppb	104.565 %	102.989 %	0.184 ppb	0.021 ppb	77.903 %
Concentration per Run 2	0.391 ppb	13.342 ppb	102.423 %	98.568 %	0.308 ppb	0.015 ppb	76.082 %
Concentration per Run 3	0.405 ppb	12.741 ppb	102.902 %	99.795 %	0.215 ppb	0.015 ppb	75.529 %
Concentration RSD	10.6 %	2.3 %	1.1 %	2.3 %	27.4 %	19.2 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	111	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447417-09d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:38:19 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.108 %	160.675 %	0.008 ppb	156,299.361 ppb	10,449.432 ppb	9.037 ppb	61,351.707 ppb	5,816.162 ppb	105.548 %
Concentration per Run 1	112.226 %	160.675 %	0.008 ppb	158,306.559 ppb	10,601.371 ppb	9.722 ppb	62,100.431 ppb	5,957.439 ppb	103.441 %
Concentration per Run 2	113.540 %	165.169 %	0.007 ppb	152,620.554 ppb	10,096.278 ppb	8.079 ppb	60,495.288 ppb	5,704.698 ppb	106.005 %
Concentration per Run 3	113.558 %	156.180 %	0.008 ppb	157,970.971 ppb	10,650.648 ppb	9.311 ppb	61,459.400 ppb	5,786.350 ppb	107.198 %
Concentration RSD	0.7 %	2.8 %	13.4 %	2.0 %	2.9 %	9.5 %	1.3 %	2.2 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.234 %	1.316 ppb	12.561 ppb	9.587 ppb	93.356 ppb	1.543 ppb	11.915 ppb	0.155 ppb	0.253 ppb
Concentration per Run 1	112.551 %	1.145 ppb	12.285 ppb	9.385 ppb	112.587 ppb	1.562 ppb	11.964 ppb	0.157 ppb	0.134 ppb
Concentration per Run 2	105.341 %	1.464 ppb	12.905 ppb	9.228 ppb	82.107 ppb	1.616 ppb	11.774 ppb	0.171 ppb	0.283 ppb
Concentration per Run 3	106.810 %	1.339 ppb	12.491 ppb	10.147 ppb	85.374 ppb	1.452 ppb	12.006 ppb	0.137 ppb	0.343 ppb
Concentration RSD	3.5 %	12.2 %	2.5 %	5.1 %	17.9 %	5.4 %	1.0 %	11.1 %	42.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.425 %	3.125 ppb	-0.036 ppb	109.505 ppb	0.498 ppb	99.505 %	-0.002 ppb	0.006 ppb	95.276 %
Concentration per Run 1	105.513 %	3.070 ppb	-0.126 ppb	114.272 ppb	0.412 ppb	100.472 %	-0.003 ppb	-0.001 ppb	99.616 %
Concentration per Run 2	103.336 %	3.319 ppb	0.026 ppb	107.400 ppb	0.408 ppb	98.661 %	-0.003 ppb	0.015 ppb	92.386 %
Concentration per Run 3	104.425 %	2.985 ppb	-0.008 ppb	106.844 ppb	0.674 ppb	99.383 %	0.001 ppb	0.003 ppb	93.825 %
Concentration RSD	1.0 %	5.6 %	219.9 %	3.8 %	30.6 %	0.9 %	141.9 %	153.4 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.945 ppb	37.152 ppb	102.165 %	99.826 %	0.028 ppb	0.148 ppb	71.729 %
Concentration per Run 1	0.948 ppb	37.522 ppb	103.546 %	101.326 %	-0.003 ppb	0.142 ppb	73.798 %
Concentration per Run 2	0.960 ppb	37.533 ppb	100.821 %	98.846 %	0.048 ppb	0.143 ppb	70.157 %
Concentration per Run 3	0.928 ppb	36.401 ppb	102.127 %	99.304 %	0.038 ppb	0.158 ppb	71.233 %
Concentration RSD	1.7 %	1.8 %	1.3 %	1.3 %	97.9 %	6.4 %	2.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	112	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447417-10d10 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:42:48 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.336 %	161.424 %	0.004 ppb	164,618.918 ppb	11,163.534 ppb	34.199 ppb	65,947.301 ppb	6,539.449 ppb	104.471 %
Concentration per Run 1	112.054 %	157.304 %	0.002 ppb	165,239.698 ppb	11,092.361 ppb	36.256 ppb	65,030.036 ppb	6,424.408 ppb	103.747 %
Concentration per Run 2	113.418 %	176.967 %	0.002 ppb	155,635.507 ppb	10,841.142 ppb	31.571 ppb	66,302.156 ppb	6,720.723 ppb	104.694 %
Concentration per Run 3	114.536 %	150.000 %	0.007 ppb	172,981.549 ppb	11,557.099 ppb	34.769 ppb	66,509.711 ppb	6,473.216 ppb	104.972 %
Concentration RSD	1.1 %	8.6 %	89.9 %	5.3 %	3.3 %	7.0 %	1.2 %	2.4 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.721 %	1.582 ppb	14.428 ppb	11.774 ppb	180.745 ppb	1.816 ppb	12.633 ppb	0.866 ppb	5.542 ppb
Concentration per Run 1	104.807 %	1.563 ppb	14.291 ppb	12.093 ppb	186.448 ppb	1.756 ppb	12.576 ppb	0.760 ppb	5.729 ppb
Concentration per Run 2	111.884 %	1.790 ppb	13.982 ppb	11.948 ppb	170.713 ppb	1.746 ppb	12.660 ppb	0.907 ppb	5.272 ppb
Concentration per Run 3	103.472 %	1.392 ppb	15.010 ppb	11.280 ppb	185.073 ppb	1.944 ppb	12.664 ppb	0.931 ppb	5.626 ppb
Concentration RSD	4.2 %	12.6 %	3.7 %	3.7 %	4.8 %	6.1 %	0.4 %	10.7 %	4.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.529 %	3.364 ppb	0.055 ppb	113.624 ppb	0.768 ppb	100.975 %	0.001 ppb	0.019 ppb	97.175 %
Concentration per Run 1	107.569 %	3.386 ppb	0.076 ppb	113.231 ppb	0.743 ppb	100.464 %	0.000 ppb	0.031 ppb	97.464 %
Concentration per Run 2	110.291 %	3.176 ppb	0.062 ppb	115.238 ppb	0.692 ppb	102.547 %	-0.002 ppb	0.018 ppb	100.445 %
Concentration per Run 3	104.727 %	3.530 ppb	0.027 ppb	112.403 ppb	0.868 ppb	99.914 %	0.004 ppb	0.007 ppb	93.617 %
Concentration RSD	2.6 %	5.3 %	45.3 %	1.3 %	11.8 %	1.4 %	535.9 %	63.8 %	3.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.337 ppb	38.510 ppb	102.655 %	100.031 %	0.003 ppb	0.484 ppb	70.913 %
Concentration per Run 1	1.305 ppb	39.545 ppb	102.677 %	99.788 %	-0.012 ppb	0.493 ppb	73.207 %
Concentration per Run 2	1.282 ppb	38.853 ppb	103.886 %	101.853 %	0.014 ppb	0.462 ppb	70.074 %
Concentration per Run 3	1.425 ppb	37.133 ppb	101.401 %	98.452 %	0.006 ppb	0.498 ppb	69.458 %
Concentration RSD	5.7 %	3.2 %	1.2 %	1.7 %	454.2 %	4.0 %	2.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	113	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447501-01 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:47:17 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.361 %	130.150 %	0.030 ppb	25,418.638 ppb	7,285.615 ppb	46.323 ppb	3,098.727 ppb	45,372.385 ppb	108.976 %
Concentration per Run 1	93.458 %	130.337 %	0.023 ppb	24,422.118 ppb	7,048.587 ppb	42.650 ppb	2,974.147 ppb	43,635.663 ppb	107.461 %
Concentration per Run 2	94.782 %	141.012 %	0.042 ppb	25,121.567 ppb	7,184.388 ppb	51.088 ppb	3,201.642 ppb	47,465.558 ppb	109.446 %
Concentration per Run 3	94.843 %	119.101 %	0.026 ppb	26,712.229 ppb	7,623.870 ppb	45.231 ppb	3,120.391 ppb	45,015.934 ppb	110.021 %
Concentration RSD	0.8 %	8.4 %	33.1 %	4.6 %	4.1 %	9.3 %	3.7 %	4.3 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.166 %	0.220 ppb	0.178 ppb	1,044.534 ppb	425.918 ppb	5.122 ppb	3.316 ppb	9.210 ppb	144.493 ppb
Concentration per Run 1	107.878 %	0.196 ppb	0.217 ppb	1,015.332 ppb	408.014 ppb	5.277 ppb	3.730 ppb	8.872 ppb	141.450 ppb
Concentration per Run 2	108.546 %	0.330 ppb	0.132 ppb	1,070.980 ppb	431.919 ppb	4.904 ppb	3.429 ppb	9.277 ppb	144.124 ppb
Concentration per Run 3	105.074 %	0.133 ppb	0.186 ppb	1,047.289 ppb	437.820 ppb	5.186 ppb	2.790 ppb	9.481 ppb	147.903 ppb
Concentration RSD	1.7 %	45.7 %	24.3 %	2.7 %	3.7 %	3.8 %	14.5 %	3.4 %	2.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.951 %	0.141 ppb	0.579 ppb	136.547 ppb	1.013 ppb	103.201 %	0.006 ppb	0.542 ppb	100.146 %
Concentration per Run 1	109.128 %	0.140 ppb	0.581 ppb	131.012 ppb	0.887 ppb	102.446 %	0.001 ppb	0.520 ppb	96.671 %
Concentration per Run 2	112.575 %	0.093 ppb	0.497 ppb	141.825 ppb	1.113 ppb	105.365 %	0.009 ppb	0.554 ppb	105.114 %
Concentration per Run 3	105.150 %	0.191 ppb	0.660 ppb	136.803 ppb	1.039 ppb	101.792 %	0.010 ppb	0.553 ppb	98.653 %
Concentration RSD	3.4 %	34.8 %	14.1 %	4.0 %	11.4 %	1.8 %	73.7 %	3.7 %	4.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.109 ppb	122.432 ppb	102.622 %	100.174 %	0.067 ppb	0.016 ppb	72.352 %
Concentration per Run 1	0.088 ppb	121.956 ppb	100.804 %	96.455 %	0.053 ppb	0.018 ppb	71.891 %
Concentration per Run 2	0.116 ppb	124.394 ppb	104.918 %	103.418 %	0.085 ppb	0.017 ppb	72.967 %
Concentration per Run 3	0.121 ppb	120.945 ppb	102.145 %	100.648 %	0.064 ppb	0.015 ppb	72.197 %
Concentration RSD	16.2 %	1.4 %	2.0 %	3.5 %	23.9 %	9.2 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	114	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447501-02 6020TL	Rack	2		
Analysis started at:	8/27/2024 7:51:47 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.541 %	126.030 %	0.118 ppb	21,560.713 ppb	10,707.649 ppb	1,311.838 ppb	3,026.910 ppb	61,605.893 ppb	111.276 %
Concentration per Run 1	93.634 %	123.034 %	0.117 ppb	21,468.364 ppb	10,742.054 ppb	1,280.168 ppb	3,002.671 ppb	60,459.811 ppb	111.299 %
Concentration per Run 2	93.906 %	138.202 %	0.115 ppb	20,538.597 ppb	10,206.301 ppb	1,259.409 ppb	2,985.029 ppb	61,971.670 ppb	111.938 %
Concentration per Run 3	93.083 %	116.854 %	0.122 ppb	22,675.178 ppb	11,174.594 ppb	1,395.937 ppb	3,093.029 ppb	62,386.198 ppb	110.590 %
Concentration RSD	0.4 %	8.7 %	3.2 %	5.0 %	4.5 %	5.6 %	1.9 %	1.6 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.566 %	2.652 ppb	15.002 ppb	3,237.836 ppb	5,547.371 ppb	15.048 ppb	16.835 ppb	5.483 ppb	13.916 ppb
Concentration per Run 1	107.210 %	2.587 ppb	14.813 ppb	3,135.522 ppb	5,324.736 ppb	14.491 ppb	16.151 ppb	4.939 ppb	13.726 ppb
Concentration per Run 2	111.350 %	2.594 ppb	14.898 ppb	3,270.042 ppb	5,598.908 ppb	14.918 ppb	17.015 ppb	5.786 ppb	14.267 ppb
Concentration per Run 3	104.139 %	2.776 ppb	15.294 ppb	3,307.945 ppb	5,718.470 ppb	15.734 ppb	17.338 ppb	5.723 ppb	13.755 ppb
Concentration RSD	3.4 %	4.0 %	1.7 %	2.8 %	3.6 %	4.2 %	3.6 %	8.6 %	2.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.195 %	1.084 ppb	0.330 ppb	157.383 ppb	5.797 ppb	100.474 %	0.004 ppb	0.102 ppb	97.376 %
Concentration per Run 1	108.658 %	0.992 ppb	-0.006 ppb	150.818 ppb	6.257 ppb	100.289 %	0.004 ppb	0.120 ppb	96.495 %
Concentration per Run 2	104.987 %	1.140 ppb	0.522 ppb	164.096 ppb	5.652 ppb	101.026 %	0.001 ppb	0.082 ppb	99.648 %
Concentration per Run 3	104.940 %	1.121 ppb	0.473 ppb	157.234 ppb	5.481 ppb	100.106 %	0.007 ppb	0.104 ppb	95.984 %
Concentration RSD	2.0 %	7.4 %	88.6 %	4.2 %	7.0 %	0.5 %	75.1 %	18.9 %	2.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.155 ppb	45.321 ppb	103.040 %	100.010 %	0.109 ppb	7.239 ppb	73.238 %
Concentration per Run 1	0.154 ppb	44.852 ppb	101.482 %	98.248 %	0.098 ppb	7.272 ppb	74.171 %
Concentration per Run 2	0.149 ppb	46.414 ppb	103.299 %	102.122 %	0.113 ppb	7.105 ppb	72.654 %
Concentration per Run 3	0.161 ppb	44.696 ppb	104.337 %	99.658 %	0.114 ppb	7.340 ppb	72.887 %
Concentration RSD	3.9 %	2.1 %	1.4 %	2.0 %	8.3 %	1.7 %	1.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	115	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 7:56:17 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.609 %	138.764 %	63.647 ppb	5,903.695 ppb	5,913.288 ppb	57.304 ppb	6,339.587 ppb	6,499.379 ppb	106.428 %
Concentration per Run 1	93.725 %	137.641 %	63.681 ppb	5,802.867 ppb	5,753.992 ppb	55.416 ppb	6,216.029 ppb	6,434.835 ppb	104.861 %
Concentration per Run 2	95.059 %	142.135 %	63.012 ppb	5,757.304 ppb	5,714.950 ppb	55.373 ppb	6,201.196 ppb	6,429.530 ppb	106.127 %
Concentration per Run 3	95.042 %	136.517 %	64.246 ppb	6,150.912 ppb	6,270.921 ppb	61.123 ppb	6,601.536 ppb	6,633.772 ppb	108.296 %
Recovery Percentage 1			106.078 %	98.395 %	98.555 %	95.507 %	105.660 %	108.323 %	
Concentration RSD	0.8 %	2.1 %	1.0 %	3.6 %	5.2 %	5.8 %	3.6 %	1.8 %	1.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.059 %	62.569 ppb	63.592 ppb	63.419 ppb	6,259.029 ppb	61.972 ppb	63.197 ppb	62.648 ppb	61.082 ppb
Concentration per Run 1	108.545 %	61.891 ppb	63.910 ppb	61.715 ppb	6,322.204 ppb	62.409 ppb	64.577 ppb	63.741 ppb	61.073 ppb
Concentration per Run 2	107.077 %	62.807 ppb	64.070 ppb	62.713 ppb	6,238.938 ppb	62.388 ppb	62.765 ppb	62.805 ppb	61.631 ppb
Concentration per Run 3	114.554 %	63.008 ppb	62.795 ppb	65.828 ppb	6,215.945 ppb	61.119 ppb	62.250 ppb	61.398 ppb	60.543 ppb
Recovery Percentage 1		104.281 %	105.986 %	105.698 %	104.317 %	103.287 %	105.329 %	104.414 %	101.804 %
Concentration RSD	3.6 %	1.0 %	1.1 %	3.4 %	0.9 %	1.2 %	1.9 %	1.9 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.790 %	60.477 ppb	60.947 ppb	58.008 ppb	59.536 ppb	105.127 %	60.810 ppb	60.772 ppb	100.040 %
Concentration per Run 1	101.381 %	61.991 ppb	61.058 ppb	57.527 ppb	60.132 ppb	104.669 %	60.425 ppb	60.985 ppb	97.706 %
Concentration per Run 2	105.641 %	60.150 ppb	60.346 ppb	56.272 ppb	59.596 ppb	104.634 %	61.681 ppb	61.144 ppb	97.489 %
Concentration per Run 3	110.347 %	59.289 ppb	61.437 ppb	60.226 ppb	58.878 ppb	106.077 %	60.325 ppb	60.188 ppb	104.924 %
Recovery Percentage 1		100.794 %	101.578 %	96.681 %	99.226 %		101.351 %	101.287 %	
Concentration RSD	4.2 %	2.3 %	0.9 %	3.5 %	1.1 %	0.8 %	1.2 %	0.8 %	4.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.883 ppb	60.299 ppb	103.867 %	101.522 %	61.499 ppb	62.060 ppb	76.225 %
Concentration per Run 1	60.416 ppb	59.753 ppb	101.991 %	98.471 %	62.141 ppb	62.912 ppb	76.912 %
Concentration per Run 2	59.928 ppb	60.575 ppb	102.595 %	100.937 %	61.816 ppb	62.533 ppb	75.915 %
Concentration per Run 3	59.305 ppb	60.571 ppb	107.015 %	105.159 %	60.540 ppb	60.737 ppb	75.849 %
Recovery Percentage 1	99.805 %	100.499 %			102.499 %	103.434 %	
Concentration RSD	0.9 %	0.8 %	2.6 %	3.3 %	1.4 %	1.9 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	116	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 8:00:49 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.534 %	140.262 %	0.005 ppb	-7.914 ppb	-5.903 ppb	-1.448 ppb	-16.931 ppb	-31.550 ppb	106.782 %
Concentration per Run 1	95.996 %	153.933 %	0.002 ppb	-11.742 ppb	-6.488 ppb	-1.514 ppb	-19.881 ppb	-29.361 ppb	106.744 %
Concentration per Run 2	96.933 %	118.539 %	0.005 ppb	-4.154 ppb	-5.939 ppb	-1.222 ppb	-12.182 ppb	-35.525 ppb	105.636 %
Concentration per Run 3	96.672 %	148.315 %	0.008 ppb	-7.846 ppb	-5.281 ppb	-1.609 ppb	-18.730 ppb	-29.764 ppb	107.968 %
Recovery Percentage 1			0.957 %	-7.914 %	-8.432 %	-14.483 %	-16.931 %	-31.550 %	
Concentration RSD	0.5 %	13.6 %	58.6 %	47.9 %	10.2 %	13.9 %	24.5 %	10.9 %	1.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.009 %	-0.038 ppb	-0.082 ppb	-0.088 ppb	-0.063 ppb	-0.006 ppb	-0.617 ppb	-0.105 ppb	-2.163 ppb
Concentration per Run 1	103.872 %	-0.026 ppb	-0.078 ppb	-0.095 ppb	-0.659 ppb	0.002 ppb	-0.621 ppb	-0.051 ppb	-2.120 ppb
Concentration per Run 2	102.403 %	-0.026 ppb	-0.066 ppb	-0.070 ppb	-2.358 ppb	-0.011 ppb	-0.579 ppb	-0.146 ppb	-2.241 ppb
Concentration per Run 3	111.751 %	-0.062 ppb	-0.100 ppb	-0.100 ppb	2.828 ppb	-0.011 ppb	-0.650 ppb	-0.117 ppb	-2.128 ppb
Recovery Percentage 1		-0.758 %	-8.175 %	-8.843 %	-0.126 %	-1.296 %	-30.846 %	-10.475 %	-43.259 %
Concentration RSD	4.7 %	54.8 %	21.0 %	18.4 %	4,184.9 %	110.3 %	5.8 %	46.2 %	3.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.904 %	-0.029 ppb	0.011 ppb	-0.018 ppb	0.290 ppb	104.721 %	0.003 ppb	0.001 ppb	99.478 %
Concentration per Run 1	101.521 %	0.000 ppb	0.015 ppb	-0.016 ppb	0.165 ppb	104.654 %	0.005 ppb	-0.001 ppb	96.876 %
Concentration per Run 2	107.811 %	-0.020 ppb	-0.130 ppb	-0.021 ppb	0.343 ppb	103.640 %	0.002 ppb	0.007 ppb	97.389 %
Concentration per Run 3	105.378 %	-0.066 ppb	0.147 ppb	-0.017 ppb	0.362 ppb	105.870 %	0.001 ppb	-0.001 ppb	104.168 %
Recovery Percentage 1		-5.764 %	0.212 %	-0.178 %	14.485 %		0.682 %	0.688 %	
Concentration RSD	3.0 %	116.5 %	1,308.4 %	17.2 %	37.5 %	1.1 %	81.7 %	333.2 %	4.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.068 ppb	-0.078 ppb	102.525 %	99.530 %	0.245 ppb	-0.011 ppb	76.374 %
Concentration per Run 1	0.050 ppb	-0.074 ppb	100.932 %	97.235 %	0.186 ppb	-0.006 ppb	77.088 %
Concentration per Run 2	0.054 ppb	-0.086 ppb	100.802 %	97.806 %	0.297 ppb	-0.010 ppb	75.382 %
Concentration per Run 3	0.100 ppb	-0.075 ppb	105.841 %	103.550 %	0.253 ppb	-0.017 ppb	76.653 %
Recovery Percentage 1	1.696 %	-15.646 %			24.512 %	-1.088 %	
Concentration RSD	40.8 %	8.7 %	2.8 %	3.5 %	22.8 %	47.2 %	1.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	117	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	L2447832-01 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:05:21 PM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.597 %	129.401 %	0.014 ppb	89,692.839 ppb	8,486.082 ppb	1.062 ppb	13,148.864 ppb	75,750.178 ppb	106.766 %
Concentration per Run 1	89.707 %	132.023 %	0.018 ppb	88,662.897 ppb	8,324.149 ppb	1.192 ppb	13,255.663 ppb	76,546.539 ppb	106.131 %
Concentration per Run 2	91.214 %	119.663 %	0.011 ppb	91,689.195 ppb	8,703.971 ppb	1.315 ppb	12,453.482 ppb	71,545.628 ppb	107.194 %
Concentration per Run 3	90.869 %	136.517 %	0.012 ppb	88,726.426 ppb	8,430.125 ppb	0.679 ppb	13,737.449 ppb	79,158.365 ppb	106.974 %
Concentration RSD	0.9 %	6.7 %	29.9 %	1.9 %	2.3 %	31.7 %	4.9 %	5.1 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.299 %	0.107 ppb	-0.040 ppb	2,448.074 ppb	6.544 ppb	1.849 ppb	4.009 ppb	0.898 ppb	-1.048 ppb
Concentration per Run 1	102.403 %	0.085 ppb	-0.021 ppb	2,498.116 ppb	7.913 ppb	2.027 ppb	4.339 ppb	0.902 ppb	-1.027 ppb
Concentration per Run 2	111.483 %	0.124 ppb	-0.054 ppb	2,361.430 ppb	3.918 ppb	1.789 ppb	3.406 ppb	0.834 ppb	-1.114 ppb
Concentration per Run 3	108.012 %	0.111 ppb	-0.046 ppb	2,484.675 ppb	7.801 ppb	1.730 ppb	4.281 ppb	0.957 ppb	-1.002 ppb
Concentration RSD	4.3 %	19.0 %	42.5 %	3.1 %	34.8 %	8.5 %	13.0 %	6.9 %	5.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.898 %	0.150 ppb	0.645 ppb	616.959 ppb	0.347 ppb	98.440 %	-0.001 ppb	1.340 ppb	96.426 %
Concentration per Run 1	99.074 %	0.193 ppb	0.512 ppb	609.411 ppb	0.344 ppb	97.893 %	0.000 ppb	1.304 ppb	94.457 %
Concentration per Run 2	104.424 %	0.095 ppb	0.882 ppb	598.821 ppb	0.375 ppb	97.719 %	0.000 ppb	1.216 ppb	96.246 %
Concentration per Run 3	105.197 %	0.161 ppb	0.542 ppb	642.646 ppb	0.321 ppb	99.707 %	-0.002 ppb	1.500 ppb	98.575 %
Concentration RSD	3.2 %	33.5 %	31.8 %	3.7 %	7.7 %	1.1 %	110.0 %	10.8 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.308 ppb	65.703 ppb	102.586 %	100.073 %	0.073 ppb	-0.010 ppb	71.792 %
Concentration per Run 1	0.313 ppb	65.260 ppb	100.462 %	98.962 %	0.041 ppb	-0.009 ppb	72.114 %
Concentration per Run 2	0.281 ppb	64.775 ppb	101.731 %	98.293 %	0.088 ppb	-0.008 ppb	70.042 %
Concentration per Run 3	0.330 ppb	67.073 ppb	105.567 %	102.963 %	0.090 ppb	-0.011 ppb	73.220 %
Concentration RSD	7.9 %	1.8 %	2.6 %	2.5 %	37.9 %	18.1 %	2.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	118	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	wg1963944-7d10 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:09:51 PM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.750 %	140.262 %	5.923 ppb	12,444.039 ppb	1,897.952 ppb	209.792 ppb	2,468.729 ppb	9,223.259 ppb	109.197 %
Concentration per Run 1	96.153 %	144.944 %	6.041 ppb	12,111.005 ppb	1,862.433 ppb	200.621 ppb	2,530.490 ppb	9,415.353 ppb	107.966 %
Concentration per Run 2	96.875 %	127.528 %	5.929 ppb	12,915.727 ppb	1,943.771 ppb	219.144 ppb	2,333.128 ppb	8,778.049 ppb	109.987 %
Concentration per Run 3	97.221 %	148.315 %	5.800 ppb	12,305.386 ppb	1,887.652 ppb	209.612 ppb	2,542.570 ppb	9,476.374 ppb	109.638 %
Concentration RSD	0.6 %	8.0 %	2.0 %	3.4 %	2.2 %	4.4 %	4.8 %	4.2 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	109.569 %	56.682 ppb	23.031 ppb	309.291 ppb	112.284 ppb	56.208 ppb	58.235 ppb	28.790 ppb	53.147 ppb
Concentration per Run 1	108.011 %	57.284 ppb	23.048 ppb	313.984 ppb	100.736 ppb	56.753 ppb	60.033 ppb	29.354 ppb	53.832 ppb
Concentration per Run 2	114.421 %	55.755 ppb	22.939 ppb	304.057 ppb	122.864 ppb	56.014 ppb	56.464 ppb	28.948 ppb	54.004 ppb
Concentration per Run 3	106.276 %	57.009 ppb	23.107 ppb	309.832 ppb	113.251 ppb	55.856 ppb	58.207 ppb	28.067 ppb	51.605 ppb
Concentration RSD	3.9 %	1.4 %	0.4 %	1.6 %	9.9 %	0.9 %	3.1 %	2.3 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	111.278 %	11.400 ppb	11.410 ppb	155.342 ppb	103.059 ppb	108.163 %	5.366 ppb	5.911 ppb	101.523 %
Concentration per Run 1	108.860 %	11.279 ppb	12.031 ppb	155.977 ppb	103.221 ppb	108.676 %	5.348 ppb	5.838 ppb	100.606 %
Concentration per Run 2	110.885 %	11.832 ppb	12.258 ppb	155.721 ppb	102.443 ppb	109.283 %	5.353 ppb	5.991 ppb	102.190 %
Concentration per Run 3	114.090 %	11.088 ppb	9.942 ppb	154.329 ppb	103.512 ppb	106.529 %	5.397 ppb	5.904 ppb	101.774 %
Concentration RSD	2.4 %	3.4 %	11.2 %	0.6 %	0.5 %	1.3 %	0.5 %	1.3 %	0.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.529 ppb	215.186 ppb	105.968 %	102.557 %	11.809 ppb	56.090 ppb	76.561 %
Concentration per Run 1	51.943 ppb	216.471 ppb	104.401 %	101.350 %	11.741 ppb	56.101 ppb	78.555 %
Concentration per Run 2	51.394 ppb	213.145 ppb	106.410 %	102.139 %	11.993 ppb	57.063 ppb	76.308 %
Concentration per Run 3	51.250 ppb	215.943 ppb	107.094 %	104.181 %	11.692 ppb	55.106 ppb	74.820 %
Concentration RSD	0.7 %	0.8 %	1.3 %	1.4 %	1.4 %	1.7 %	2.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	119	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	wg1963944-8d10 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:14:21 PM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.220 %	122.472 %	5.794 ppb	13,682.399 ppb	2,072.709 ppb	216.874 ppb	2,679.613 ppb	9,384.731 ppb	108.297 %
Concentration per Run 1	95.631 %	121.348 %	5.924 ppb	13,357.168 ppb	2,016.451 ppb	206.194 ppb	2,513.753 ppb	8,628.191 ppb	106.628 %
Concentration per Run 2	96.614 %	133.146 %	5.719 ppb	12,988.338 ppb	1,935.938 ppb	203.984 ppb	2,726.010 ppb	9,489.012 ppb	109.333 %
Concentration per Run 3	96.415 %	112.921 %	5.740 ppb	14,701.689 ppb	2,265.739 ppb	240.443 ppb	2,799.076 ppb	10,036.989 ppb	108.931 %
Concentration RSD	0.5 %	8.3 %	1.9 %	6.6 %	8.3 %	9.4 %	5.5 %	7.6 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.739 %	55.873 ppb	22.865 ppb	322.265 ppb	118.904 ppb	56.762 ppb	58.640 ppb	28.043 ppb	53.460 ppb
Concentration per Run 1	110.415 %	52.451 ppb	21.513 ppb	310.486 ppb	106.552 ppb	54.437 ppb	55.137 ppb	26.752 ppb	51.220 ppb
Concentration per Run 2	101.469 %	58.689 ppb	23.617 ppb	324.134 ppb	127.006 ppb	57.627 ppb	60.081 ppb	28.889 ppb	54.690 ppb
Concentration per Run 3	99.332 %	56.480 ppb	23.464 ppb	332.175 ppb	123.153 ppb	58.222 ppb	60.702 ppb	28.488 ppb	54.470 ppb
Concentration RSD	5.7 %	5.7 %	5.1 %	3.4 %	9.1 %	3.6 %	5.2 %	4.0 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	109.119 %	11.466 ppb	9.844 ppb	155.576 ppb	103.175 ppb	105.060 %	5.213 ppb	5.919 ppb	100.626 %
Concentration per Run 1	111.728 %	10.971 ppb	9.833 ppb	152.988 ppb	102.591 ppb	104.931 %	5.145 ppb	5.497 ppb	101.759 %
Concentration per Run 2	106.861 %	11.305 ppb	9.124 ppb	157.646 ppb	105.029 ppb	105.281 %	5.215 ppb	6.246 ppb	100.350 %
Concentration per Run 3	108.768 %	12.122 ppb	10.574 ppb	156.095 ppb	101.904 ppb	104.969 %	5.278 ppb	6.015 ppb	99.771 %
Concentration RSD	2.2 %	5.2 %	7.4 %	1.5 %	1.6 %	0.2 %	1.3 %	6.5 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.587 ppb	213.345 ppb	103.277 %	99.451 %	11.796 ppb	56.210 ppb	75.289 %
Concentration per Run 1	50.357 ppb	212.838 ppb	102.730 %	99.238 %	11.558 ppb	55.770 ppb	77.436 %
Concentration per Run 2	51.943 ppb	213.091 ppb	102.678 %	99.101 %	12.036 ppb	56.567 ppb	74.053 %
Concentration per Run 3	52.460 ppb	214.106 ppb	104.423 %	100.016 %	11.794 ppb	56.294 ppb	74.379 %
Concentration RSD	2.1 %	0.3 %	1.0 %	0.5 %	2.0 %	0.7 %	2.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	120	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	wg1963944-9d10 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:18:51 PM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.612 %	123.783 %	52.891 ppb	17,315.517 ppb	6,094.552 ppb	50.147 ppb	6,683.132 ppb	12,944.855 ppb	113.009 %
Concentration per Run 1	98.225 %	130.337 %	52.743 ppb	16,846.203 ppb	5,996.301 ppb	49.869 ppb	6,758.981 ppb	13,473.667 ppb	111.462 %
Concentration per Run 2	98.092 %	121.348 %	52.834 ppb	17,225.149 ppb	6,040.591 ppb	49.329 ppb	6,413.435 ppb	12,112.087 ppb	112.701 %
Concentration per Run 3	99.518 %	119.663 %	53.096 ppb	17,875.201 ppb	6,246.764 ppb	51.242 ppb	6,876.981 ppb	13,248.811 ppb	114.865 %
Concentration RSD	0.8 %	4.6 %	0.3 %	3.0 %	2.2 %	2.0 %	3.6 %	5.6 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.994 %	53.387 ppb	51.808 ppb	298.991 ppb	5,234.469 ppb	52.743 ppb	52.286 ppb	52.296 ppb	50.648 ppb
Concentration per Run 1	110.014 %	53.557 ppb	52.565 ppb	299.928 ppb	5,200.802 ppb	52.487 ppb	51.235 ppb	51.291 ppb	48.640 ppb
Concentration per Run 2	114.688 %	51.464 ppb	49.375 ppb	291.868 ppb	5,155.234 ppb	51.552 ppb	52.349 ppb	51.291 ppb	50.020 ppb
Concentration per Run 3	108.278 %	55.139 ppb	53.484 ppb	305.177 ppb	5,347.371 ppb	54.190 ppb	53.274 ppb	54.304 ppb	53.284 ppb
Concentration RSD	3.0 %	3.5 %	4.2 %	2.2 %	1.9 %	2.5 %	2.0 %	3.3 %	4.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.121 %	51.110 ppb	49.076 ppb	107.630 ppb	50.640 ppb	104.691 %	1.570 ppb	50.580 ppb	98.234 %
Concentration per Run 1	109.284 %	49.067 ppb	48.433 ppb	104.553 ppb	49.118 ppb	105.042 %	1.519 ppb	50.054 ppb	99.974 %
Concentration per Run 2	104.541 %	51.352 ppb	45.984 ppb	108.481 ppb	51.710 ppb	103.919 %	1.555 ppb	50.803 ppb	97.025 %
Concentration per Run 3	101.537 %	52.913 ppb	52.812 ppb	109.856 ppb	51.092 ppb	105.111 %	1.635 ppb	50.885 ppb	97.704 %
Concentration RSD	3.7 %	3.8 %	7.0 %	2.6 %	2.7 %	0.6 %	3.8 %	0.9 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.993 ppb	56.354 ppb	104.925 %	101.134 %	51.659 ppb	52.296 ppb	76.054 %
Concentration per Run 1	49.608 ppb	55.965 ppb	103.485 %	100.679 %	50.947 ppb	51.428 ppb	76.351 %
Concentration per Run 2	51.355 ppb	55.964 ppb	104.721 %	101.280 %	51.645 ppb	52.389 ppb	75.644 %
Concentration per Run 3	52.015 ppb	57.132 ppb	106.568 %	101.443 %	52.385 ppb	53.071 ppb	76.168 %
Concentration RSD	2.4 %	1.2 %	1.5 %	0.4 %	1.4 %	1.6 %	0.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	121	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	wg1963944-10d5 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:23:20 PM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.416 %	136.892 %	0.010 ppb	22,666.370 ppb	1,723.454 ppb	-0.613 ppb	2,621.012 ppb	15,129.303 ppb	106.125 %
Concentration per Run 1	94.301 %	129.775 %	0.011 ppb	23,952.671 ppb	1,801.708 ppb	-0.706 ppb	2,642.246 ppb	15,615.221 ppb	104.465 %
Concentration per Run 2	95.862 %	143.821 %	0.010 ppb	21,580.265 ppb	1,651.610 ppb	-0.552 ppb	2,577.467 ppb	14,521.057 ppb	106.854 %
Concentration per Run 3	96.084 %	137.079 %	0.010 ppb	22,466.175 ppb	1,717.043 ppb	-0.582 ppb	2,643.324 ppb	15,251.630 ppb	107.056 %
Concentration RSD	1.0 %	5.1 %	7.9 %	5.3 %	4.4 %	13.3 %	1.4 %	3.7 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.997 %	0.034 ppb	-0.034 ppb	490.456 ppb	4.005 ppb	0.382 ppb	0.186 ppb	0.073 ppb	-1.802 ppb
Concentration per Run 1	109.080 %	0.077 ppb	-0.045 ppb	494.712 ppb	1.986 ppb	0.366 ppb	0.333 ppb	0.024 ppb	-1.771 ppb
Concentration per Run 2	116.824 %	0.019 ppb	-0.019 ppb	485.345 ppb	5.632 ppb	0.368 ppb	0.194 ppb	0.077 ppb	-1.757 ppb
Concentration per Run 3	113.085 %	0.005 ppb	-0.038 ppb	491.310 ppb	4.397 ppb	0.411 ppb	0.031 ppb	0.117 ppb	-1.879 ppb
Concentration RSD	3.4 %	113.0 %	39.1 %	1.0 %	46.3 %	6.7 %	81.5 %	64.6 %	3.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.780 %	0.060 ppb	0.215 ppb	121.374 ppb	0.360 ppb	105.596 %	-0.002 ppb	0.300 ppb	99.830 %
Concentration per Run 1	99.950 %	0.013 ppb	0.294 ppb	119.740 ppb	0.208 ppb	106.612 %	0.001 ppb	0.303 ppb	100.634 %
Concentration per Run 2	107.690 %	-0.049 ppb	0.270 ppb	121.321 ppb	0.471 ppb	105.637 %	-0.003 ppb	0.284 ppb	100.623 %
Concentration per Run 3	103.699 %	0.216 ppb	0.082 ppb	123.062 ppb	0.401 ppb	104.539 %	-0.002 ppb	0.314 ppb	98.232 %
Concentration RSD	3.7 %	231.8 %	53.9 %	1.4 %	37.9 %	1.0 %	137.9 %	4.9 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.228 ppb	13.354 ppb	105.433 %	101.487 %	0.239 ppb	-0.001 ppb	76.480 %
Concentration per Run 1	0.218 ppb	13.611 ppb	107.093 %	101.789 %	0.179 ppb	0.007 ppb	79.210 %
Concentration per Run 2	0.209 ppb	13.104 ppb	103.312 %	101.979 %	0.303 ppb	-0.006 ppb	76.046 %
Concentration per Run 3	0.256 ppb	13.346 ppb	105.893 %	100.692 %	0.235 ppb	-0.005 ppb	74.184 %
Concentration RSD	11.0 %	1.9 %	1.8 %	0.7 %	26.0 %	620.1 %	3.3 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	122	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	L2447832-02 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:27:49 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.698 %	127.716 %	0.009 ppb	122,085.193 ppb	10,155.330 ppb	3.956 ppb	3,996.925 ppb	86,960.674 ppb	110.183 %
Concentration per Run 1	91.284 %	128.090 %	0.005 ppb	123,021.241 ppb	10,341.300 ppb	4.193 ppb	4,204.643 ppb	91,089.513 ppb	107.868 %
Concentration per Run 2	91.719 %	118.539 %	0.011 ppb	122,926.612 ppb	10,165.030 ppb	4.453 ppb	3,768.944 ppb	81,214.888 ppb	110.343 %
Concentration per Run 3	92.093 %	136.517 %	0.012 ppb	120,307.725 ppb	9,959.661 ppb	3.222 ppb	4,017.187 ppb	88,577.620 ppb	112.338 %
Concentration RSD	0.4 %	7.0 %	43.8 %	1.3 %	1.9 %	16.4 %	5.5 %	5.9 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.718 %	0.606 ppb	0.098 ppb	95.867 ppb	11.859 ppb	0.172 ppb	0.506 ppb	0.363 ppb	-1.346 ppb
Concentration per Run 1	100.668 %	0.647 ppb	0.134 ppb	100.408 ppb	8.734 ppb	0.144 ppb	0.686 ppb	0.386 ppb	-1.352 ppb
Concentration per Run 2	113.486 %	0.606 ppb	0.099 ppb	89.501 ppb	11.168 ppb	0.164 ppb	0.269 ppb	0.364 ppb	-1.274 ppb
Concentration per Run 3	100.000 %	0.565 ppb	0.061 ppb	97.694 ppb	15.677 ppb	0.207 ppb	0.563 ppb	0.340 ppb	-1.413 ppb
Concentration RSD	7.3 %	6.7 %	37.3 %	5.9 %	29.7 %	18.7 %	42.4 %	6.4 %	5.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.815 %	0.107 ppb	0.042 ppb	627.260 ppb	0.661 ppb	99.897 %	0.000 ppb	0.032 ppb	97.330 %
Concentration per Run 1	96.684 %	0.084 ppb	-0.114 ppb	617.140 ppb	0.694 ppb	98.559 %	0.001 ppb	0.040 ppb	94.996 %
Concentration per Run 2	104.047 %	0.075 ppb	0.286 ppb	631.314 ppb	0.564 ppb	100.609 %	-0.002 ppb	0.034 ppb	99.829 %
Concentration per Run 3	104.712 %	0.163 ppb	-0.047 ppb	633.325 ppb	0.725 ppb	100.523 %	0.000 ppb	0.023 ppb	97.164 %
Concentration RSD	4.4 %	45.0 %	511.7 %	1.4 %	13.0 %	1.2 %	406.4 %	26.8 %	2.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.208 ppb	71.347 ppb	102.554 %	99.833 %	0.047 ppb	0.106 ppb	70.422 %
Concentration per Run 1	0.167 ppb	70.771 ppb	101.558 %	98.827 %	0.019 ppb	0.103 ppb	70.652 %
Concentration per Run 2	0.222 ppb	71.773 ppb	104.360 %	100.841 %	0.059 ppb	0.099 ppb	70.588 %
Concentration per Run 3	0.234 ppb	71.497 ppb	101.743 %	99.829 %	0.062 ppb	0.116 ppb	70.026 %
Concentration RSD	17.2 %	0.7 %	1.5 %	1.0 %	51.1 %	8.4 %	0.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	123	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	L2447832-03 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:32:20 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.471 %	124.345 %	0.009 ppb	272,047.843 ppb	6,103.080 ppb	18.278 ppb	8,198.499 ppb	63,313.340 ppb	107.538 %
Concentration per Run 1	88.177 %	123.596 %	0.004 ppb	268,877.635 ppb	6,026.882 ppb	17.075 ppb	7,867.136 ppb	60,503.215 ppb	106.658 %
Concentration per Run 2	89.031 %	128.652 %	0.014 ppb	264,211.961 ppb	5,989.057 ppb	17.319 ppb	8,223.031 ppb	64,761.007 ppb	108.695 %
Concentration per Run 3	88.203 %	120.787 %	0.008 ppb	283,053.933 ppb	6,293.300 ppb	20.439 ppb	8,505.331 ppb	64,675.799 ppb	107.261 %
Concentration RSD	0.5 %	3.2 %	56.7 %	3.6 %	2.7 %	10.3 %	3.9 %	3.8 %	1.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.320 %	0.580 ppb	1.637 ppb	2.813 ppb	74.560 ppb	0.074 ppb	-0.159 ppb	0.754 ppb	-0.425 ppb
Concentration per Run 1	112.418 %	0.683 ppb	1.545 ppb	2.872 ppb	73.931 ppb	0.061 ppb	-0.155 ppb	0.695 ppb	-0.335 ppb
Concentration per Run 2	99.867 %	0.571 ppb	1.681 ppb	2.627 ppb	80.779 ppb	0.085 ppb	-0.048 ppb	0.699 ppb	-0.384 ppb
Concentration per Run 3	106.676 %	0.487 ppb	1.685 ppb	2.938 ppb	68.970 ppb	0.076 ppb	-0.275 ppb	0.869 ppb	-0.556 ppb
Concentration RSD	5.9 %	17.0 %	4.9 %	5.8 %	8.0 %	16.2 %	71.3 %	13.2 %	27.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.016 %	0.137 ppb	1.697 ppb	435.806 ppb	0.744 ppb	99.713 %	0.005 ppb	0.043 ppb	96.787 %
Concentration per Run 1	100.251 %	0.116 ppb	1.950 ppb	430.544 ppb	0.689 ppb	100.336 %	0.008 ppb	0.051 ppb	95.961 %
Concentration per Run 2	100.345 %	0.157 ppb	1.460 ppb	432.095 ppb	0.759 ppb	100.290 %	0.007 ppb	0.043 ppb	98.664 %
Concentration per Run 3	99.451 %	0.139 ppb	1.680 ppb	444.779 ppb	0.784 ppb	98.512 %	0.001 ppb	0.036 ppb	95.735 %
Concentration RSD	0.5 %	15.0 %	14.5 %	1.8 %	6.6 %	1.0 %	69.8 %	18.5 %	1.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.355 ppb	75.521 ppb	102.828 %	99.965 %	0.017 ppb	0.076 ppb	68.867 %
Concentration per Run 1	0.290 ppb	75.237 ppb	102.478 %	98.551 %	0.000 ppb	0.073 ppb	70.582 %
Concentration per Run 2	0.373 ppb	75.928 ppb	103.102 %	100.892 %	0.029 ppb	0.080 ppb	68.331 %
Concentration per Run 3	0.403 ppb	75.397 ppb	102.904 %	100.453 %	0.022 ppb	0.075 ppb	67.689 %
Concentration RSD	16.4 %	0.5 %	0.3 %	1.2 %	88.1 %	5.0 %	2.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	124	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	L2447832-04 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:36:49 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.272 %	129.401 %	0.009 ppb	243,497.471 ppb	30,170.116 ppb	4.540 ppb	3,635.047 ppb	133,983.696 ppb	104.847 %
Concentration per Run 1	87.295 %	133.708 %	-0.001 ppb	234,566.272 ppb	28,818.727 ppb	3.777 ppb	3,439.177 ppb	129,394.979 ppb	104.679 %
Concentration per Run 2	88.068 %	127.528 %	0.022 ppb	250,008.306 ppb	31,008.275 ppb	4.300 ppb	3,802.843 ppb	139,343.314 ppb	105.508 %
Concentration per Run 3	86.453 %	126.966 %	0.005 ppb	245,917.834 ppb	30,683.344 ppb	5.542 ppb	3,663.122 ppb	133,212.794 ppb	104.355 %
Concentration RSD	0.9 %	2.9 %	139.5 %	3.3 %	3.9 %	20.0 %	5.0 %	3.7 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.715 %	0.229 ppb	-0.038 ppb	9,171.892 ppb	42.993 ppb	16.533 ppb	10.984 ppb	65.637 ppb	9.572 ppb
Concentration per Run 1	107.210 %	0.114 ppb	-0.062 ppb	8,775.739 ppb	40.813 ppb	16.257 ppb	10.407 ppb	65.439 ppb	9.381 ppb
Concentration per Run 2	97.596 %	0.221 ppb	0.021 ppb	9,467.425 ppb	42.453 ppb	16.861 ppb	11.866 ppb	65.122 ppb	9.969 ppb
Concentration per Run 3	103.338 %	0.354 ppb	-0.072 ppb	9,272.511 ppb	45.715 ppb	16.482 ppb	10.681 ppb	66.350 ppb	9.368 ppb
Concentration RSD	4.7 %	52.5 %	135.1 %	3.9 %	5.8 %	1.8 %	7.1 %	1.0 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.146 %	0.250 ppb	0.019 ppb	609.223 ppb	1.791 ppb	95.281 %	0.008 ppb	1.914 ppb	92.147 %
Concentration per Run 1	101.582 %	0.194 ppb	-0.116 ppb	604.856 ppb	1.769 ppb	97.196 %	0.012 ppb	1.900 ppb	92.281 %
Concentration per Run 2	103.275 %	0.269 ppb	0.082 ppb	607.681 ppb	1.932 ppb	95.247 %	0.009 ppb	2.038 ppb	92.720 %
Concentration per Run 3	101.582 %	0.286 ppb	0.090 ppb	615.132 ppb	1.673 ppb	93.399 %	0.003 ppb	1.804 ppb	91.441 %
Concentration RSD	1.0 %	19.7 %	618.6 %	0.9 %	7.3 %	2.0 %	56.7 %	6.1 %	0.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.263 ppb	190.452 ppb	100.449 %	96.582 %	0.000 ppb	0.085 ppb	66.029 %
Concentration per Run 1	0.237 ppb	190.113 ppb	101.458 %	96.956 %	-0.016 ppb	0.086 ppb	68.627 %
Concentration per Run 2	0.278 ppb	191.251 ppb	100.332 %	96.770 %	0.001 ppb	0.091 ppb	64.095 %
Concentration per Run 3	0.275 ppb	189.991 ppb	99.556 %	96.021 %	0.016 ppb	0.079 ppb	65.365 %
Concentration RSD	8.7 %	0.4 %	1.0 %	0.5 %	5,118.8 %	6.9 %	3.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	125	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	L2447832-05 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:41:18 PM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.208 %	123.221 %	0.010 ppb	204,124.692 ppb	37,788.260 ppb	5.269 ppb	6,759.760 ppb	221,580.145 ppb	105.918 %
Concentration per Run 1	85.113 %	133.146 %	0.009 ppb	193,125.889 ppb	35,758.350 ppb	3.454 ppb	6,695.929 ppb	226,473.671 ppb	104.101 %
Concentration per Run 2	84.766 %	124.719 %	0.013 ppb	195,388.771 ppb	36,429.375 ppb	4.874 ppb	6,529.667 ppb	209,170.193 ppb	105.662 %
Concentration per Run 3	85.744 %	111.798 %	0.009 ppb	223,859.418 ppb	41,177.056 ppb	7.477 ppb	7,053.684 ppb	229,096.570 ppb	107.992 %
Concentration RSD	0.6 %	8.7 %	24.7 %	8.4 %	7.8 %	38.7 %	4.0 %	4.9 %	1.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.866 %	0.043 ppb	0.183 ppb	5,957.637 ppb	83.210 ppb	3.129 ppb	4.663 ppb	0.229 ppb	0.222 ppb
Concentration per Run 1	97.596 %	-0.024 ppb	0.215 ppb	5,956.823 ppb	83.212 ppb	3.056 ppb	4.392 ppb	0.185 ppb	0.194 ppb
Concentration per Run 2	104.273 %	0.082 ppb	0.173 ppb	5,778.587 ppb	76.422 ppb	3.132 ppb	4.262 ppb	0.242 ppb	0.221 ppb
Concentration per Run 3	97.730 %	0.070 ppb	0.163 ppb	6,137.502 ppb	89.997 ppb	3.198 ppb	5.336 ppb	0.262 ppb	0.250 ppb
Concentration RSD	3.8 %	136.0 %	15.0 %	3.0 %	8.2 %	2.3 %	12.6 %	17.4 %	12.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.219 %	0.141 ppb	0.388 ppb	557.243 ppb	0.205 ppb	96.810 %	-0.004 ppb	0.617 ppb	93.294 %
Concentration per Run 1	101.582 %	0.092 ppb	0.366 ppb	550.955 ppb	0.164 ppb	97.088 %	-0.005 ppb	0.660 ppb	93.833 %
Concentration per Run 2	100.312 %	0.157 ppb	0.576 ppb	559.910 ppb	0.251 ppb	96.101 %	-0.003 ppb	0.537 ppb	91.777 %
Concentration per Run 3	101.763 %	0.173 ppb	0.221 ppb	560.865 ppb	0.200 ppb	97.243 %	-0.003 ppb	0.654 ppb	94.273 %
Concentration RSD	0.8 %	30.6 %	46.1 %	1.0 %	21.4 %	0.6 %	23.3 %	11.3 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.220 ppb	136.582 ppb	100.890 %	97.053 %	-0.010 ppb	0.412 ppb	65.960 %
Concentration per Run 1	0.207 ppb	135.791 ppb	99.965 %	96.201 %	-0.023 ppb	0.382 ppb	67.341 %
Concentration per Run 2	0.235 ppb	135.625 ppb	100.036 %	96.425 %	-0.004 ppb	0.435 ppb	65.254 %
Concentration per Run 3	0.218 ppb	138.330 ppb	102.669 %	98.534 %	-0.002 ppb	0.420 ppb	65.285 %
Concentration RSD	6.3 %	1.1 %	1.5 %	1.3 %	121.1 %	6.6 %	1.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	126	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	L2447832-06 6020SL	Rack	2		
Analysis started at:	8/27/2024 8:45:47 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.167 %	129.588 %	0.011 ppb	321,359.724 ppb	26,003.630 ppb	3.937 ppb	5,951.295 ppb	302,688.676 ppb	107.050 %
Concentration per Run 1	87.181 %	134.832 %	0.019 ppb	310,090.880 ppb	25,167.272 ppb	2.862 ppb	5,863.583 ppb	302,004.950 ppb	105.815 %
Concentration per Run 2	87.243 %	123.034 %	0.010 ppb	331,568.621 ppb	26,804.745 ppb	3.990 ppb	5,970.291 ppb	303,972.633 ppb	108.754 %
Concentration per Run 3	87.076 %	130.899 %	0.003 ppb	322,419.670 ppb	26,038.874 ppb	4.958 ppb	6,020.010 ppb	302,088.445 ppb	106.579 %
Concentration RSD	0.1 %	4.6 %	74.3 %	3.4 %	3.2 %	26.6 %	1.3 %	0.4 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.166 %	0.672 ppb	27.357 ppb	822.500 ppb	10.274 ppb	1.708 ppb	16.478 ppb	5.405 ppb	8.547 ppb
Concentration per Run 1	104.406 %	0.730 ppb	27.395 ppb	822.470 ppb	10.547 ppb	1.820 ppb	16.612 ppb	5.485 ppb	8.336 ppb
Concentration per Run 2	108.545 %	0.619 ppb	27.675 ppb	824.975 ppb	8.604 ppb	1.751 ppb	16.197 ppb	5.317 ppb	8.766 ppb
Concentration per Run 3	108.545 %	0.667 ppb	27.002 ppb	820.056 ppb	11.672 ppb	1.554 ppb	16.624 ppb	5.411 ppb	8.539 ppb
Concentration RSD	2.2 %	8.3 %	1.2 %	0.3 %	15.1 %	8.1 %	1.5 %	1.6 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.380 %	1.269 ppb	6.829 ppb	1,189.724 ppb	0.469 ppb	98.322 %	0.089 ppb	0.326 ppb	93.664 %
Concentration per Run 1	99.650 %	1.313 ppb	6.518 ppb	1,173.580 ppb	0.483 ppb	99.167 %	0.093 ppb	0.342 ppb	93.799 %
Concentration per Run 2	98.970 %	1.292 ppb	6.431 ppb	1,205.927 ppb	0.499 ppb	98.306 %	0.093 ppb	0.334 ppb	94.083 %
Concentration per Run 3	102.521 %	1.202 ppb	7.538 ppb	1,189.664 ppb	0.425 ppb	97.493 %	0.079 ppb	0.304 ppb	93.111 %
Concentration RSD	1.9 %	4.6 %	9.0 %	1.4 %	8.3 %	0.9 %	9.1 %	6.2 %	0.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.386 ppb	50.159 ppb	103.361 %	98.591 %	-0.002 ppb	0.004 ppb	66.283 %
Concentration per Run 1	0.367 ppb	50.879 ppb	103.188 %	97.856 %	-0.013 ppb	0.006 ppb	67.028 %
Concentration per Run 2	0.362 ppb	49.710 ppb	103.018 %	98.046 %	0.006 ppb	0.005 ppb	66.173 %
Concentration per Run 3	0.430 ppb	49.889 ppb	103.877 %	99.871 %	0.002 ppb	-0.001 ppb	65.650 %
Concentration RSD	9.7 %	1.3 %	0.4 %	1.1 %	620.2 %	106.2 %	1.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	127	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 8:50:16 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.465 %	134.644 %	63.903 ppb	6,101.563 ppb	6,017.291 ppb	57.497 ppb	6,309.098 ppb	6,282.124 ppb	107.685 %
Concentration per Run 1	93.838 %	135.393 %	63.809 ppb	6,205.398 ppb	6,070.796 ppb	60.272 ppb	6,605.913 ppb	6,635.647 ppb	106.045 %
Concentration per Run 2	95.038 %	132.584 %	63.626 ppb	6,018.485 ppb	5,950.508 ppb	52.774 ppb	5,962.838 ppb	6,078.372 ppb	108.557 %
Concentration per Run 3	94.520 %	135.955 %	64.275 ppb	6,080.805 ppb	6,030.569 ppb	59.446 ppb	6,358.542 ppb	6,132.352 ppb	108.454 %
Recovery Percentage 1			106.505 %	101.693 %	100.288 %	95.829 %	105.152 %	104.702 %	
Concentration RSD	0.6 %	1.3 %	0.5 %	1.6 %	1.0 %	7.2 %	5.1 %	4.9 %	1.3 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.462 %	61.380 ppb	63.567 ppb	62.790 ppb	6,367.029 ppb	63.431 ppb	64.805 ppb	62.784 ppb	61.253 ppb
Concentration per Run 1	108.813 %	63.789 ppb	64.915 ppb	64.276 ppb	6,519.005 ppb	64.137 ppb	68.204 ppb	63.543 ppb	62.445 ppb
Concentration per Run 2	117.225 %	58.454 ppb	61.638 ppb	61.955 ppb	6,177.908 ppb	62.224 ppb	62.967 ppb	62.243 ppb	61.144 ppb
Concentration per Run 3	111.350 %	61.899 ppb	64.148 ppb	62.139 ppb	6,404.175 ppb	63.931 ppb	63.245 ppb	62.565 ppb	60.170 ppb
Recovery Percentage 1		102.301 %	105.945 %	104.650 %	106.117 %	105.718 %	108.008 %	104.640 %	102.088 %
Concentration RSD	3.8 %	4.4 %	2.7 %	2.1 %	2.7 %	1.7 %	4.5 %	1.1 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.452 %	60.345 ppb	59.714 ppb	56.153 ppb	58.097 ppb	107.939 %	61.757 ppb	61.166 ppb	100.792 %
Concentration per Run 1	109.831 %	60.345 ppb	59.363 ppb	55.509 ppb	57.109 ppb	110.429 %	60.959 ppb	60.113 ppb	102.571 %
Concentration per Run 2	108.368 %	59.080 ppb	62.064 ppb	56.967 ppb	59.126 ppb	105.851 %	62.106 ppb	61.879 ppb	100.106 %
Concentration per Run 3	107.156 %	61.609 ppb	57.716 ppb	55.983 ppb	58.054 ppb	107.539 %	62.208 ppb	61.507 ppb	99.697 %
Recovery Percentage 1		100.574 %	99.524 %	93.588 %	96.828 %		102.929 %	101.944 %	
Concentration RSD	1.2 %	2.1 %	3.7 %	1.3 %	1.7 %	2.1 %	1.1 %	1.5 %	1.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.708 ppb	58.072 ppb	105.586 %	101.185 %	62.652 ppb	62.929 ppb	74.477 %
Concentration per Run 1	59.638 ppb	57.153 ppb	106.020 %	101.788 %	61.101 ppb	61.295 ppb	76.992 %
Concentration per Run 2	59.726 ppb	58.805 ppb	105.359 %	101.352 %	62.538 ppb	63.137 ppb	73.584 %
Concentration per Run 3	59.759 ppb	58.256 ppb	105.378 %	100.414 %	64.317 ppb	64.356 ppb	72.855 %
Recovery Percentage 1	99.513 %	96.786 %			104.420 %	104.882 %	
Concentration RSD	0.1 %	1.4 %	0.4 %	0.7 %	2.6 %	2.4 %	3.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	128	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 8:54:48 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.096 %	131.648 %	0.006 ppb	2.253 ppb	-5.994 ppb	-1.529 ppb	-16.972 ppb	-21.941 ppb	103.210 %
Concentration per Run 1	94.416 %	135.955 %	0.008 ppb	2.914 ppb	-6.452 ppb	-1.665 ppb	-15.272 ppb	-22.925 ppb	102.586 %
Concentration per Run 2	95.340 %	135.955 %	0.004 ppb	-0.863 ppb	-6.001 ppb	-1.462 ppb	-19.663 ppb	-19.268 ppb	102.817 %
Concentration per Run 3	95.532 %	123.034 %	0.006 ppb	4.709 ppb	-5.528 ppb	-1.459 ppb	-15.982 ppb	-23.629 ppb	104.227 %
Recovery Percentage 1			1.212 %	2.253 %	-8.562 %	-15.290 %	-16.972 %	-21.941 %	
Concentration RSD	0.6 %	5.7 %	33.6 %	126.2 %	7.7 %	7.7 %	13.9 %	10.7 %	0.9 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.205 %	-0.002 ppb	-0.085 ppb	-0.024 ppb	2.192 ppb	-0.008 ppb	-0.682 ppb	-0.121 ppb	-2.175 ppb
Concentration per Run 1	102.136 %	0.030 ppb	-0.121 ppb	-0.065 ppb	2.326 ppb	-0.004 ppb	-0.688 ppb	-0.139 ppb	-2.166 ppb
Concentration per Run 2	98.798 %	-0.043 ppb	-0.082 ppb	-0.066 ppb	1.678 ppb	-0.011 ppb	-0.690 ppb	-0.112 ppb	-2.198 ppb
Concentration per Run 3	108.679 %	0.008 ppb	-0.051 ppb	0.060 ppb	2.573 ppb	-0.011 ppb	-0.668 ppb	-0.112 ppb	-2.161 ppb
Recovery Percentage 1		-0.033 %	-8.456 %	-2.396 %	4.384 %	-1.694 %	-34.099 %	-12.127 %	-43.499 %
Concentration RSD	4.9 %	2,300.5 %	41.4 %	302.0 %	21.1 %	43.7 %	1.8 %	13.0 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.648 %	-0.024 ppb	0.110 ppb	-0.012 ppb	0.199 ppb	105.202 %	0.000 ppb	0.004 ppb	98.522 %
Concentration per Run 1	96.125 %	-0.023 ppb	0.032 ppb	-0.012 ppb	0.134 ppb	104.180 %	0.001 ppb	0.007 ppb	98.569 %
Concentration per Run 2	103.958 %	-0.044 ppb	0.284 ppb	-0.011 ppb	0.231 ppb	104.873 %	-0.001 ppb	0.003 ppb	98.313 %
Concentration per Run 3	98.860 %	-0.006 ppb	0.014 ppb	-0.011 ppb	0.231 ppb	106.553 %	0.001 ppb	0.003 ppb	98.684 %
Recovery Percentage 1		-4.877 %	2.204 %	-0.116 %	9.926 %		0.094 %	1.980 %	
Concentration RSD	4.0 %	78.5 %	136.8 %	7.0 %	28.3 %	1.2 %	213.0 %	57.6 %	0.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.058 ppb	-0.070 ppb	102.837 %	99.276 %	0.221 ppb	-0.012 ppb	74.431 %
Concentration per Run 1	0.053 ppb	-0.049 ppb	101.744 %	98.318 %	0.164 ppb	-0.007 ppb	75.903 %
Concentration per Run 2	0.062 ppb	-0.086 ppb	103.155 %	99.282 %	0.275 ppb	-0.012 ppb	73.191 %
Concentration per Run 3	0.060 ppb	-0.074 ppb	103.611 %	100.227 %	0.223 ppb	-0.016 ppb	74.200 %
Recovery Percentage 1	1.456 %	-13.980 %			22.085 %	-1.184 %	
Concentration RSD	7.4 %	27.0 %	0.9 %	1.0 %	25.2 %	35.6 %	1.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	129	User name	ALPHALAB\a2-icpmsq2	Comment	fb
Analysis label:	L2447832-08 6020TL	Rack	3		
Analysis started at:	8/27/2024 8:59:21 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.886 %	132.584 %	0.006 ppb	-5.754 ppb	-2.880 ppb	0.104 ppb	-19.506 ppb	-12.339 ppb	105.586 %
Concentration per Run 1	95.479 %	137.641 %	0.009 ppb	-8.052 ppb	-3.847 ppb	-0.519 ppb	-9.289 ppb	-17.593 ppb	103.602 %
Concentration per Run 2	96.352 %	133.146 %	0.007 ppb	-4.503 ppb	-1.977 ppb	0.112 ppb	-23.236 ppb	-7.673 ppb	107.220 %
Concentration per Run 3	95.826 %	126.966 %	0.002 ppb	-4.707 ppb	-2.817 ppb	0.720 ppb	-25.992 ppb	-11.751 ppb	105.936 %
Concentration RSD	0.5 %	4.0 %	59.5 %	34.6 %	32.5 %	592.9 %	45.9 %	40.4 %	1.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.204 %	0.047 ppb	-0.080 ppb	0.028 ppb	-1.235 ppb	-0.006 ppb	-0.577 ppb	-0.114 ppb	-1.935 ppb
Concentration per Run 1	103.071 %	0.082 ppb	-0.085 ppb	-0.016 ppb	-2.337 ppb	-0.004 ppb	-0.553 ppb	-0.098 ppb	-1.921 ppb
Concentration per Run 2	101.335 %	0.066 ppb	-0.053 ppb	0.066 ppb	-0.647 ppb	-0.004 ppb	-0.644 ppb	-0.159 ppb	-2.023 ppb
Concentration per Run 3	105.207 %	-0.009 ppb	-0.104 ppb	0.034 ppb	-0.720 ppb	-0.011 ppb	-0.533 ppb	-0.085 ppb	-1.860 ppb
Concentration RSD	1.9 %	104.3 %	32.1 %	145.7 %	77.4 %	54.9 %	10.3 %	34.5 %	4.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.041 %	-0.011 ppb	-0.053 ppb	0.121 ppb	0.016 ppb	105.815 %	-0.002 ppb	0.000 ppb	99.185 %
Concentration per Run 1	103.638 %	0.036 ppb	-0.129 ppb	0.123 ppb	-0.028 ppb	105.066 %	-0.002 ppb	-0.001 ppb	99.675 %
Concentration per Run 2	104.243 %	0.005 ppb	0.088 ppb	0.115 ppb	0.005 ppb	106.015 %	-0.003 ppb	0.003 ppb	98.128 %
Concentration per Run 3	104.243 %	-0.075 ppb	-0.117 ppb	0.123 ppb	0.072 ppb	106.364 %	-0.001 ppb	-0.001 ppb	99.751 %
Concentration RSD	0.3 %	506.8 %	232.0 %	3.9 %	317.5 %	0.6 %	69.7 %	6,336.8 %	0.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	0.085 ppb	102.541 %	99.441 %	0.044 ppb	-0.020 ppb	74.341 %
Concentration per Run 1	0.000 ppb	0.121 ppb	102.659 %	99.199 %	0.012 ppb	-0.018 ppb	75.708 %
Concentration per Run 2	0.015 ppb	0.122 ppb	102.870 %	100.116 %	0.058 ppb	-0.018 ppb	73.088 %
Concentration per Run 3	0.025 ppb	0.011 ppb	102.093 %	99.008 %	0.062 ppb	-0.022 ppb	74.226 %
Concentration RSD	92.5 %	75.0 %	0.4 %	0.6 %	62.5 %	12.1 %	1.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	130	User name	ALPHALAB\a2-icpmsq2	Comment	8/28
Analysis label:	L2447832-07 6020SL	Rack	2		
Analysis started at:	8/27/2024 9:03:51 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.378 %	125.656 %	0.005 ppb	122,257.072 ppb	10,165.415 ppb	12.456 ppb	4,061.097 ppb	86,203.756 ppb	109.078 %
Concentration per Run 1	92.320 %	129.214 %	0.001 ppb	117,272.755 ppb	9,728.748 ppb	10.787 ppb	3,904.288 ppb	81,115.972 ppb	109.129 %
Concentration per Run 2	91.224 %	120.225 %	0.004 ppb	125,638.500 ppb	10,449.767 ppb	12.813 ppb	4,064.407 ppb	88,097.087 ppb	109.814 %
Concentration per Run 3	90.590 %	127.528 %	0.012 ppb	123,859.963 ppb	10,317.731 ppb	13.769 ppb	4,214.594 ppb	89,398.209 ppb	108.289 %
Concentration RSD	1.0 %	3.8 %	109.7 %	3.6 %	3.8 %	12.2 %	3.8 %	5.2 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.136 %	0.709 ppb	0.135 ppb	112.597 ppb	32.691 ppb	0.197 ppb	1.063 ppb	0.371 ppb	-1.315 ppb
Concentration per Run 1	107.210 %	0.624 ppb	0.136 ppb	107.262 ppb	30.045 ppb	0.179 ppb	1.189 ppb	0.465 ppb	-1.367 ppb
Concentration per Run 2	99.466 %	0.795 ppb	0.121 ppb	115.054 ppb	37.720 ppb	0.243 ppb	0.754 ppb	0.229 ppb	-1.118 ppb
Concentration per Run 3	99.733 %	0.708 ppb	0.149 ppb	115.475 ppb	30.307 ppb	0.170 ppb	1.247 ppb	0.419 ppb	-1.459 ppb
Concentration RSD	4.3 %	12.1 %	10.4 %	4.1 %	13.3 %	20.0 %	25.4 %	33.7 %	13.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.586 %	0.186 ppb	0.062 ppb	625.569 ppb	0.426 ppb	98.370 %	-0.001 ppb	0.039 ppb	94.258 %
Concentration per Run 1	100.372 %	0.188 ppb	0.148 ppb	617.536 ppb	0.330 ppb	98.183 %	-0.002 ppb	0.040 ppb	94.078 %
Concentration per Run 2	101.461 %	0.256 ppb	0.149 ppb	617.848 ppb	0.389 ppb	98.134 %	0.000 ppb	0.040 ppb	94.433 %
Concentration per Run 3	96.925 %	0.115 ppb	-0.109 ppb	641.323 ppb	0.560 ppb	98.794 %	-0.002 ppb	0.036 ppb	94.263 %
Concentration RSD	2.4 %	37.7 %	238.5 %	2.2 %	28.0 %	0.4 %	66.8 %	6.3 %	0.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.157 ppb	73.497 ppb	101.412 %	98.647 %	0.013 ppb	0.109 ppb	68.188 %
Concentration per Run 1	0.136 ppb	73.133 ppb	100.452 %	98.464 %	-0.006 ppb	0.109 ppb	68.720 %
Concentration per Run 2	0.171 ppb	72.621 ppb	103.064 %	99.328 %	0.024 ppb	0.102 ppb	68.408 %
Concentration per Run 3	0.165 ppb	74.736 ppb	100.719 %	98.149 %	0.022 ppb	0.116 ppb	67.437 %
Concentration RSD	11.9 %	1.5 %	1.4 %	0.6 %	129.3 %	6.7 %	1.0 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	131	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447832-02 6020TL	Rack	2		
Analysis started at:	8/27/2024 9:08:20 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.759 %	121.723 %	0.050 ppb	119,657.075 ppb	10,125.474 ppb	524.286 ppb	4,013.137 ppb	85,058.084 ppb	108.792 %
Concentration per Run 1	91.944 %	124.719 %	0.042 ppb	116,969.218 ppb	9,910.924 ppb	526.653 ppb	4,024.130 ppb	84,324.669 ppb	109.182 %
Concentration per Run 2	91.583 %	126.405 %	0.055 ppb	117,386.679 ppb	9,998.705 ppb	518.973 ppb	4,094.578 ppb	87,715.059 ppb	107.778 %
Concentration per Run 3	91.750 %	114.045 %	0.052 ppb	124,615.329 ppb	10,466.792 ppb	527.234 ppb	3,920.702 ppb	83,134.523 ppb	109.416 %
Concentration RSD	0.2 %	5.5 %	13.1 %	3.6 %	3.0 %	0.9 %	2.2 %	2.8 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.249 %	2.480 ppb	1.717 ppb	134.961 ppb	1,250.714 ppb	1.230 ppb	2.016 ppb	2.548 ppb	4.824 ppb
Concentration per Run 1	102.136 %	2.345 ppb	1.915 ppb	136.950 ppb	1,280.185 ppb	1.181 ppb	2.017 ppb	2.336 ppb	5.158 ppb
Concentration per Run 2	100.801 %	2.508 ppb	1.653 ppb	134.438 ppb	1,216.660 ppb	1.326 ppb	2.003 ppb	2.478 ppb	4.376 ppb
Concentration per Run 3	106.810 %	2.589 ppb	1.584 ppb	133.494 ppb	1,255.297 ppb	1.182 ppb	2.026 ppb	2.831 ppb	4.937 ppb
Concentration RSD	3.1 %	5.0 %	10.2 %	1.3 %	2.6 %	6.8 %	0.6 %	10.0 %	8.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.743 %	0.208 ppb	0.324 ppb	622.934 ppb	0.451 ppb	98.168 %	0.003 ppb	0.057 ppb	95.512 %
Concentration per Run 1	98.256 %	0.248 ppb	0.460 ppb	632.919 ppb	0.310 ppb	97.569 %	0.006 ppb	0.052 ppb	94.997 %
Concentration per Run 2	103.820 %	0.116 ppb	0.422 ppb	612.329 ppb	0.550 ppb	98.369 %	0.000 ppb	0.065 ppb	94.914 %
Concentration per Run 3	103.154 %	0.259 ppb	0.089 ppb	623.553 ppb	0.492 ppb	98.566 %	0.003 ppb	0.056 ppb	96.626 %
Concentration RSD	3.0 %	38.3 %	63.0 %	1.7 %	27.8 %	0.5 %	112.6 %	11.0 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.093 ppb	76.848 ppb	101.130 %	98.344 %	0.003 ppb	0.595 ppb	67.632 %
Concentration per Run 1	0.085 ppb	76.481 ppb	100.507 %	96.655 %	-0.006 ppb	0.599 ppb	68.110 %
Concentration per Run 2	0.088 ppb	74.567 ppb	101.205 %	98.740 %	0.007 ppb	0.602 ppb	66.731 %
Concentration per Run 3	0.105 ppb	79.496 ppb	101.679 %	99.636 %	0.008 ppb	0.583 ppb	68.053 %
Concentration RSD	11.6 %	3.2 %	0.6 %	1.6 %	252.1 %	1.7 %	1.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	132	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447832-03 6020TL	Rack	2		
Analysis started at:	8/27/2024 9:12:50 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.965 %	118.727 %	0.066 ppb	277,263.738 ppb	6,512.379 ppb	890.686 ppb	8,798.059 ppb	65,058.299 ppb	104.438 %
Concentration per Run 1	85.229 %	135.955 %	0.056 ppb	251,914.284 ppb	6,063.879 ppb	818.436 ppb	8,351.590 ppb	62,431.107 ppb	102.153 %
Concentration per Run 2	86.236 %	115.730 %	0.080 ppb	279,926.919 ppb	6,474.792 ppb	895.225 ppb	8,971.040 ppb	65,686.832 ppb	104.736 %
Concentration per Run 3	86.431 %	104.494 %	0.060 ppb	299,950.011 ppb	6,998.465 ppb	958.396 ppb	9,071.546 ppb	67,056.959 ppb	106.424 %
Concentration RSD	0.8 %	13.4 %	19.1 %	8.7 %	7.2 %	7.9 %	4.4 %	3.7 %	2.1 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.846 %	3.006 ppb	5.450 ppb	57.699 ppb	1,936.664 ppb	1.431 ppb	1.926 ppb	5.192 ppb	10.918 ppb
Concentration per Run 1	104.273 %	2.851 ppb	5.232 ppb	56.153 ppb	1,871.726 ppb	1.397 ppb	1.654 ppb	5.113 ppb	10.830 ppb
Concentration per Run 2	99.332 %	2.937 ppb	5.384 ppb	60.931 ppb	1,920.806 ppb	1.555 ppb	2.206 ppb	5.263 ppb	10.840 ppb
Concentration per Run 3	98.932 %	3.229 ppb	5.735 ppb	56.013 ppb	2,017.459 ppb	1.342 ppb	1.917 ppb	5.200 ppb	11.084 ppb
Concentration RSD	2.9 %	6.6 %	4.7 %	4.9 %	3.8 %	7.7 %	14.3 %	1.5 %	1.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.810 %	0.311 ppb	1.712 ppb	437.618 ppb	0.637 ppb	94.621 %	0.117 ppb	0.090 ppb	91.695 %
Concentration per Run 1	100.632 %	0.270 ppb	0.785 ppb	432.260 ppb	0.505 ppb	96.028 %	0.132 ppb	0.088 ppb	91.396 %
Concentration per Run 2	96.324 %	0.343 ppb	2.898 ppb	437.526 ppb	0.530 ppb	94.752 %	0.111 ppb	0.092 ppb	91.641 %
Concentration per Run 3	96.473 %	0.321 ppb	1.453 ppb	443.068 ppb	0.876 ppb	93.085 %	0.109 ppb	0.089 ppb	92.046 %
Concentration RSD	2.5 %	12.1 %	63.1 %	1.2 %	32.5 %	1.6 %	11.3 %	2.8 %	0.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.265 ppb	84.543 ppb	99.116 %	95.958 %	0.005 ppb	3.876 ppb	64.829 %
Concentration per Run 1	0.264 ppb	85.186 ppb	99.819 %	95.328 %	-0.010 ppb	3.893 ppb	65.934 %
Concentration per Run 2	0.281 ppb	83.606 ppb	99.290 %	96.445 %	0.015 ppb	3.875 ppb	64.306 %
Concentration per Run 3	0.251 ppb	84.838 ppb	98.238 %	96.103 %	0.009 ppb	3.859 ppb	64.248 %
Concentration RSD	5.8 %	1.0 %	0.8 %	0.6 %	264.9 %	0.4 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	133	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447832-04 6020TL	Rack	2		
Analysis started at:	8/27/2024 9:17:19 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.715 %	118.539 %	0.021 ppb	241,261.779 ppb	30,912.258 ppb	124.867 ppb	3,667.908 ppb	134,314.575 ppb	98.838 %
Concentration per Run 1	84.419 %	125.281 %	0.014 ppb	233,152.844 ppb	29,840.121 ppb	119.250 ppb	3,655.527 ppb	134,925.036 ppb	97.862 %
Concentration per Run 2	83.937 %	123.034 %	0.021 ppb	234,716.340 ppb	30,037.522 ppb	123.958 ppb	3,637.426 ppb	134,037.802 ppb	98.246 %
Concentration per Run 3	85.789 %	107.303 %	0.028 ppb	255,916.153 ppb	32,859.131 ppb	131.392 ppb	3,710.772 ppb	133,980.888 ppb	100.407 %
Concentration RSD	1.1 %	8.3 %	34.4 %	5.3 %	5.5 %	4.9 %	1.0 %	0.4 %	1.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.754 %	0.513 ppb	0.423 ppb	9,639.093 ppb	440.624 ppb	17.834 ppb	11.931 ppb	129.928 ppb	12.620 ppb
Concentration per Run 1	100.267 %	0.501 ppb	0.392 ppb	9,744.339 ppb	463.135 ppb	17.650 ppb	12.697 ppb	134.494 ppb	12.315 ppb
Concentration per Run 2	97.463 %	0.475 ppb	0.436 ppb	9,691.587 ppb	422.484 ppb	18.061 ppb	11.886 ppb	127.521 ppb	12.898 ppb
Concentration per Run 3	98.531 %	0.563 ppb	0.441 ppb	9,481.352 ppb	436.252 ppb	17.792 ppb	11.210 ppb	127.768 ppb	12.647 ppb
Concentration RSD	1.4 %	8.8 %	6.3 %	1.4 %	4.7 %	1.2 %	6.2 %	3.0 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.150 %	0.446 ppb	0.050 ppb	621.093 ppb	1.471 ppb	90.842 %	0.146 ppb	1.914 ppb	88.751 %
Concentration per Run 1	94.929 %	0.493 ppb	0.097 ppb	624.022 ppb	1.543 ppb	92.425 %	0.150 ppb	1.847 ppb	89.065 %
Concentration per Run 2	95.822 %	0.498 ppb	0.023 ppb	621.314 ppb	1.507 ppb	90.872 %	0.152 ppb	1.897 ppb	88.150 %
Concentration per Run 3	97.697 %	0.348 ppb	0.029 ppb	617.943 ppb	1.364 ppb	89.229 %	0.137 ppb	1.998 ppb	89.038 %
Concentration RSD	1.5 %	19.1 %	82.0 %	0.5 %	6.4 %	1.8 %	5.4 %	4.0 %	0.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.108 ppb	193.222 ppb	97.448 %	94.025 %	-0.012 ppb	1.196 ppb	62.751 %
Concentration per Run 1	0.099 ppb	191.008 ppb	97.899 %	93.291 %	-0.023 ppb	1.187 ppb	64.574 %
Concentration per Run 2	0.124 ppb	196.730 ppb	96.975 %	94.385 %	-0.014 ppb	1.208 ppb	62.257 %
Concentration per Run 3	0.103 ppb	191.928 ppb	97.469 %	94.398 %	0.001 ppb	1.192 ppb	61.421 %
Concentration RSD	12.5 %	1.6 %	0.5 %	0.7 %	99.3 %	0.9 %	2.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	134	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447832-05 6020TL	Rack	2		
Analysis started at:	8/27/2024 9:21:49 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.527 %	133.708 %	0.027 ppb	190,900.560 ppb	32,883.678 ppb	212.087 ppb	6,364.460 ppb	199,735.234 ppb	108.647 %
Concentration per Run 1	87.271 %	132.584 %	0.030 ppb	190,019.069 ppb	32,796.718 ppb	211.630 ppb	6,548.945 ppb	202,834.831 ppb	108.035 %
Concentration per Run 2	87.577 %	130.337 %	0.025 ppb	191,841.988 ppb	32,985.935 ppb	213.562 ppb	6,166.739 ppb	195,068.472 ppb	109.542 %
Concentration per Run 3	87.733 %	138.202 %	0.025 ppb	190,840.625 ppb	32,868.382 ppb	211.068 ppb	6,377.695 ppb	201,302.398 ppb	108.365 %
Concentration RSD	0.3 %	3.0 %	11.6 %	0.5 %	0.3 %	0.6 %	3.0 %	2.1 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.632 %	1.238 ppb	0.769 ppb	6,091.771 ppb	3,373.857 ppb	3.503 ppb	5.072 ppb	1.436 ppb	3.044 ppb
Concentration per Run 1	102.670 %	1.273 ppb	0.746 ppb	6,147.986 ppb	3,407.653 ppb	3.565 ppb	5.129 ppb	1.515 ppb	3.194 ppb
Concentration per Run 2	109.347 %	1.417 ppb	0.734 ppb	5,976.928 ppb	3,309.959 ppb	3.285 ppb	4.941 ppb	1.226 ppb	3.055 ppb
Concentration per Run 3	107.878 %	1.023 ppb	0.827 ppb	6,150.399 ppb	3,403.957 ppb	3.659 ppb	5.145 ppb	1.566 ppb	2.883 ppb
Concentration RSD	3.3 %	16.1 %	6.6 %	1.6 %	1.6 %	5.5 %	2.2 %	12.8 %	5.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.052 %	0.283 ppb	0.252 ppb	560.806 ppb	0.223 ppb	96.195 %	-0.001 ppb	0.685 ppb	92.907 %
Concentration per Run 1	98.469 %	0.427 ppb	0.282 ppb	559.801 ppb	0.206 ppb	95.078 %	-0.002 ppb	0.737 ppb	92.199 %
Concentration per Run 2	97.832 %	0.145 ppb	0.248 ppb	559.942 ppb	0.192 ppb	96.339 %	0.001 ppb	0.621 ppb	93.666 %
Concentration per Run 3	100.856 %	0.279 ppb	0.228 ppb	562.676 ppb	0.272 ppb	97.169 %	-0.002 ppb	0.698 ppb	92.855 %
Concentration RSD	1.6 %	49.8 %	10.8 %	0.3 %	19.3 %	1.1 %	241.4 %	8.6 %	0.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.133 ppb	152.849 ppb	100.682 %	96.795 %	-0.010 ppb	0.356 ppb	64.964 %
Concentration per Run 1	0.118 ppb	149.302 ppb	99.282 %	95.446 %	-0.022 ppb	0.363 ppb	65.739 %
Concentration per Run 2	0.147 ppb	153.291 ppb	101.172 %	97.950 %	0.000 ppb	0.338 ppb	63.281 %
Concentration per Run 3	0.134 ppb	155.952 ppb	101.593 %	96.991 %	-0.009 ppb	0.367 ppb	65.873 %
Concentration RSD	10.9 %	2.2 %	1.2 %	1.3 %	109.8 %	4.4 %	2.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	135	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447832-06 6020TL	Rack	2		
Analysis started at:	8/27/2024 9:26:19 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.075 %	141.386 %	0.013 ppb	297,933.739 ppb	24,185.944 ppb	100.650 ppb	5,981.817 ppb	296,323.850 ppb	105.740 %
Concentration per Run 1	86.303 %	139.326 %	0.010 ppb	292,840.987 ppb	23,717.207 ppb	101.305 ppb	5,762.256 ppb	289,976.410 ppb	104.771 %
Concentration per Run 2	85.887 %	137.079 %	0.016 ppb	307,201.706 ppb	24,799.253 ppb	106.204 ppb	6,088.400 ppb	302,681.578 ppb	106.096 %
Concentration per Run 3	86.036 %	147.753 %	0.014 ppb	293,758.523 ppb	24,041.372 ppb	94.442 ppb	6,094.796 ppb	296,313.561 ppb	106.353 %
Concentration RSD	0.2 %	4.0 %	24.4 %	2.7 %	2.3 %	5.9 %	3.2 %	2.1 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.121 %	1.028 ppb	26.698 ppb	890.322 ppb	278.426 ppb	1.844 ppb	16.816 ppb	6.242 ppb	9.951 ppb
Concentration per Run 1	108.278 %	0.896 ppb	25.656 ppb	866.175 ppb	275.763 ppb	1.653 ppb	15.860 ppb	5.991 ppb	9.808 ppb
Concentration per Run 2	104.406 %	1.029 ppb	27.446 ppb	901.361 ppb	289.238 ppb	2.049 ppb	16.554 ppb	6.324 ppb	10.261 ppb
Concentration per Run 3	108.679 %	1.159 ppb	26.990 ppb	903.431 ppb	270.277 ppb	1.829 ppb	18.034 ppb	6.410 ppb	9.785 ppb
Concentration RSD	2.2 %	12.8 %	3.5 %	2.4 %	3.5 %	10.8 %	6.6 %	3.6 %	2.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.225 %	1.185 ppb	7.257 ppb	1,174.709 ppb	0.570 ppb	96.670 %	0.144 ppb	0.419 ppb	93.652 %
Concentration per Run 1	101.628 %	1.174 ppb	6.778 ppb	1,166.015 ppb	0.491 ppb	96.197 %	0.141 ppb	0.441 ppb	92.663 %
Concentration per Run 2	102.959 %	1.217 ppb	7.587 ppb	1,166.956 ppb	0.548 ppb	96.538 %	0.143 ppb	0.378 ppb	93.829 %
Concentration per Run 3	99.088 %	1.165 ppb	7.405 ppb	1,191.155 ppb	0.672 ppb	97.275 %	0.149 ppb	0.438 ppb	94.464 %
Concentration RSD	1.9 %	2.4 %	5.8 %	1.2 %	16.2 %	0.6 %	3.1 %	8.4 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.293 ppb	52.131 ppb	102.207 %	97.725 %	-0.009 ppb	0.296 ppb	63.991 %
Concentration per Run 1	0.251 ppb	50.576 ppb	102.580 %	95.685 %	-0.019 ppb	0.299 ppb	65.534 %
Concentration per Run 2	0.314 ppb	52.539 ppb	102.104 %	99.695 %	-0.003 ppb	0.299 ppb	63.741 %
Concentration per Run 3	0.314 ppb	53.280 ppb	101.936 %	97.795 %	-0.004 ppb	0.290 ppb	62.697 %
Concentration RSD	12.4 %	2.7 %	0.3 %	2.1 %	103.2 %	1.9 %	2.2 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	136	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2447832-07 6020TL	Rack	3		
Analysis started at:	8/27/2024 9:30:49 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.783 %	132.584 %	0.034 ppb	116,732.219 ppb	9,878.922 ppb	423.900 ppb	4,036.563 ppb	82,659.865 ppb	107.003 %
Concentration per Run 1	90.394 %	134.832 %	0.033 ppb	116,104.859 ppb	9,897.380 ppb	421.470 ppb	4,059.876 ppb	84,252.177 ppb	107.019 %
Concentration per Run 2	89.659 %	133.146 %	0.038 ppb	118,428.363 ppb	9,998.571 ppb	435.443 ppb	4,156.805 ppb	86,081.519 ppb	107.398 %
Concentration per Run 3	89.297 %	129.775 %	0.031 ppb	115,663.436 ppb	9,740.816 ppb	414.789 ppb	3,893.008 ppb	77,645.898 ppb	106.591 %
Concentration RSD	0.6 %	1.9 %	10.4 %	1.3 %	1.3 %	2.5 %	3.3 %	5.4 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.679 %	2.019 ppb	1.414 ppb	137.895 ppb	1,038.435 ppb	1.050 ppb	1.875 ppb	4.889 ppb	4.741 ppb
Concentration per Run 1	107.878 %	1.994 ppb	1.443 ppb	135.294 ppb	1,069.959 ppb	1.059 ppb	2.025 ppb	5.079 ppb	4.641 ppb
Concentration per Run 2	102.670 %	2.075 ppb	1.363 ppb	141.020 ppb	1,028.146 ppb	1.104 ppb	1.886 ppb	4.771 ppb	5.026 ppb
Concentration per Run 3	115.489 %	1.986 ppb	1.435 ppb	137.369 ppb	1,017.201 ppb	0.987 ppb	1.715 ppb	4.818 ppb	4.556 ppb
Concentration RSD	5.9 %	2.4 %	3.1 %	2.1 %	2.7 %	5.6 %	8.3 %	3.4 %	5.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.524 %	0.204 ppb	0.149 ppb	604.195 ppb	0.477 ppb	101.768 %	0.004 ppb	0.039 ppb	95.972 %
Concentration per Run 1	107.206 %	0.145 ppb	0.213 ppb	599.785 ppb	0.370 ppb	102.247 %	0.008 ppb	0.067 ppb	96.543 %
Concentration per Run 2	107.388 %	0.164 ppb	-0.050 ppb	595.378 ppb	0.520 ppb	101.567 %	0.001 ppb	0.027 ppb	95.397 %
Concentration per Run 3	101.977 %	0.304 ppb	0.285 ppb	617.422 ppb	0.540 ppb	101.490 %	0.002 ppb	0.023 ppb	95.975 %
Concentration RSD	2.9 %	42.4 %	118.0 %	1.9 %	19.5 %	0.4 %	96.9 %	62.3 %	0.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.053 ppb	77.016 ppb	102.076 %	99.041 %	-0.011 ppb	0.617 ppb	67.050 %
Concentration per Run 1	0.056 ppb	75.813 ppb	101.430 %	98.283 %	-0.025 ppb	0.624 ppb	67.970 %
Concentration per Run 2	0.039 ppb	77.058 ppb	100.950 %	98.646 %	-0.005 ppb	0.623 ppb	65.949 %
Concentration per Run 3	0.063 ppb	78.175 ppb	103.848 %	100.195 %	-0.003 ppb	0.603 ppb	67.229 %
Concentration RSD	24.2 %	1.5 %	1.5 %	1.0 %	114.3 %	1.8 %	1.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	137	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448458-01 6020TL	Rack	3		
Analysis started at:	8/27/2024 9:35:19 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	211.763 %	307.306 %	-0.003 ppb	199,698.762 ppb	18,648.339 ppb	23.706 ppb	83,607.465 ppb	163,761.185 ppb	107.853 %
Concentration per Run 1	211.166 %	298.317 %	-0.004 ppb	201,399.067 ppb	18,726.123 ppb	23.343 ppb	84,628.916 ppb	165,522.316 ppb	107.141 %
Concentration per Run 2	212.983 %	306.183 %	-0.002 ppb	205,780.841 ppb	18,990.344 ppb	23.581 ppb	84,844.535 ppb	167,329.448 ppb	108.660 %
Concentration per Run 3	211.139 %	317.419 %	-0.002 ppb	191,916.379 ppb	18,228.548 ppb	24.194 ppb	81,348.943 ppb	158,431.790 ppb	107.758 %
Concentration RSD	0.5 %	3.1 %	34.3 %	3.5 %	2.1 %	1.9 %	2.3 %	2.9 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.896 %	0.634 ppb	0.129 ppb	170.858 ppb	366.448 ppb	4.050 ppb	28.211 ppb	26.766 ppb	1.730 ppb
Concentration per Run 1	101.602 %	0.490 ppb	0.142 ppb	168.314 ppb	347.629 ppb	4.159 ppb	28.407 ppb	27.632 ppb	1.694 ppb
Concentration per Run 2	101.469 %	0.670 ppb	0.110 ppb	174.640 ppb	386.097 ppb	3.976 ppb	28.597 ppb	25.475 ppb	1.879 ppb
Concentration per Run 3	111.617 %	0.742 ppb	0.135 ppb	169.620 ppb	365.618 ppb	4.017 ppb	27.629 ppb	27.189 ppb	1.617 ppb
Concentration RSD	5.5 %	20.5 %	13.3 %	2.0 %	5.3 %	2.4 %	1.8 %	4.3 %	7.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.186 %	2.793 ppb	2.850 ppb	1,669.321 ppb	20.321 ppb	97.381 %	0.194 ppb	0.048 ppb	92.773 %
Concentration per Run 1	99.949 %	2.741 ppb	3.477 ppb	1,642.970 ppb	20.058 ppb	96.683 %	0.195 ppb	0.075 ppb	91.687 %
Concentration per Run 2	102.731 %	2.755 ppb	2.655 ppb	1,648.834 ppb	20.276 ppb	96.904 %	0.206 ppb	0.036 ppb	93.707 %
Concentration per Run 3	97.878 %	2.884 ppb	2.418 ppb	1,716.161 ppb	20.629 ppb	98.556 %	0.180 ppb	0.032 ppb	92.926 %
Concentration RSD	2.4 %	2.8 %	19.5 %	2.4 %	1.4 %	1.1 %	6.7 %	49.5 %	1.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.551 ppb	195.219 ppb	101.669 %	98.463 %	0.431 ppb	1.029 ppb	64.592 %
Concentration per Run 1	2.564 ppb	195.123 ppb	99.717 %	96.458 %	0.428 ppb	1.015 ppb	64.392 %
Concentration per Run 2	2.540 ppb	192.906 ppb	102.037 %	97.910 %	0.444 ppb	1.041 ppb	64.171 %
Concentration per Run 3	2.549 ppb	197.628 ppb	103.251 %	101.020 %	0.422 ppb	1.030 ppb	65.212 %
Concentration RSD	0.5 %	1.2 %	1.8 %	2.4 %	2.7 %	1.3 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	138	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448458-02 6020TL	Rack	3		
Analysis started at:	8/27/2024 9:39:49 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	213.065 %	310.303 %	-0.005 ppb	208,435.886 ppb	17,190.310 ppb	9.783 ppb	84,500.321 ppb	93,119.123 ppb	105.622 %
Concentration per Run 1	212.905 %	302.812 %	-0.006 ppb	201,440.461 ppb	17,255.039 ppb	9.339 ppb	83,434.190 ppb	90,458.190 ppb	106.049 %
Concentration per Run 2	213.110 %	311.239 %	-0.002 ppb	204,898.276 ppb	16,954.874 ppb	9.374 ppb	83,258.749 ppb	92,072.599 ppb	105.388 %
Concentration per Run 3	213.181 %	316.857 %	-0.006 ppb	218,968.921 ppb	17,361.019 ppb	10.636 ppb	86,808.025 ppb	96,826.579 ppb	105.430 %
Concentration RSD	0.1 %	2.3 %	58.7 %	4.5 %	1.2 %	7.6 %	2.4 %	3.6 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.296 %	0.295 ppb	0.080 ppb	64.041 ppb	312.520 ppb	3.650 ppb	24.544 ppb	28.947 ppb	-0.431 ppb
Concentration per Run 1	107.077 %	0.394 ppb	0.021 ppb	61.518 ppb	276.980 ppb	3.247 ppb	24.127 ppb	27.415 ppb	-0.365 ppb
Concentration per Run 2	106.142 %	0.170 ppb	0.110 ppb	65.507 ppb	328.331 ppb	3.734 ppb	25.453 ppb	29.327 ppb	-0.152 ppb
Concentration per Run 3	102.670 %	0.321 ppb	0.109 ppb	65.096 ppb	332.248 ppb	3.968 ppb	24.052 ppb	30.100 ppb	-0.775 ppb
Concentration RSD	2.2 %	38.7 %	63.7 %	3.4 %	9.9 %	10.1 %	3.2 %	4.8 %	73.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.470 %	2.609 ppb	2.842 ppb	1,288.077 ppb	19.855 ppb	98.013 %	0.014 ppb	0.017 ppb	92.911 %
Concentration per Run 1	103.215 %	2.500 ppb	2.172 ppb	1,272.978 ppb	19.482 ppb	97.075 %	0.021 ppb	0.024 ppb	92.778 %
Concentration per Run 2	97.669 %	2.647 ppb	2.842 ppb	1,303.067 ppb	19.835 ppb	97.343 %	0.013 ppb	0.015 ppb	93.268 %
Concentration per Run 3	100.525 %	2.681 ppb	3.513 ppb	1,288.186 ppb	20.248 ppb	99.621 %	0.007 ppb	0.011 ppb	92.687 %
Concentration RSD	2.8 %	3.7 %	23.6 %	1.2 %	1.9 %	1.4 %	50.2 %	38.4 %	0.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.389 ppb	91.962 ppb	100.250 %	96.828 %	0.351 ppb	0.384 ppb	63.776 %
Concentration per Run 1	2.387 ppb	91.357 ppb	98.767 %	95.243 %	0.348 ppb	0.370 ppb	64.162 %
Concentration per Run 2	2.319 ppb	92.392 ppb	100.139 %	97.251 %	0.350 ppb	0.402 ppb	63.521 %
Concentration per Run 3	2.460 ppb	92.138 ppb	101.845 %	97.989 %	0.355 ppb	0.381 ppb	63.645 %
Concentration RSD	3.0 %	0.6 %	1.5 %	1.5 %	1.0 %	4.2 %	0.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	139	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	8/27/2024 9:44:19 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.901 %	135.019 %	63.778 ppb	6,025.697 ppb	5,901.428 ppb	58.066 ppb	6,255.674 ppb	6,406.336 ppb	106.350 %
Concentration per Run 1	92.231 %	118.539 %	63.956 ppb	6,489.289 ppb	6,425.554 ppb	60.587 ppb	6,308.750 ppb	6,261.209 ppb	105.558 %
Concentration per Run 2	93.185 %	151.124 %	63.858 ppb	5,591.743 ppb	5,439.812 ppb	53.746 ppb	6,162.187 ppb	6,400.190 ppb	106.449 %
Concentration per Run 3	93.286 %	135.393 %	63.521 ppb	5,996.059 ppb	5,838.918 ppb	59.866 ppb	6,296.085 ppb	6,557.608 ppb	107.043 %
Recovery Percentage 1			106.297 %	100.428 %	98.357 %	96.777 %	104.261 %	106.772 %	
Concentration RSD	0.6 %	12.1 %	0.4 %	7.5 %	8.4 %	6.5 %	1.3 %	2.3 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.299 %	62.987 ppb	63.891 ppb	64.781 ppb	6,463.660 ppb	64.726 ppb	64.416 ppb	64.797 ppb	62.781 ppb
Concentration per Run 1	110.281 %	60.690 ppb	62.187 ppb	61.353 ppb	6,308.991 ppb	63.090 ppb	63.274 ppb	64.984 ppb	61.678 ppb
Concentration per Run 2	106.810 %	63.906 ppb	64.751 ppb	67.103 ppb	6,492.375 ppb	66.344 ppb	64.092 ppb	64.744 ppb	64.081 ppb
Concentration per Run 3	104.807 %	64.364 ppb	64.734 ppb	65.886 ppb	6,589.613 ppb	64.745 ppb	65.882 ppb	64.664 ppb	62.583 ppb
Recovery Percentage 1		104.978 %	106.484 %	107.968 %	107.728 %	107.877 %	107.360 %	107.995 %	104.635 %
Concentration RSD	2.6 %	3.2 %	2.3 %	4.7 %	2.2 %	2.5 %	2.1 %	0.3 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.694 %	61.117 ppb	59.498 ppb	57.133 ppb	59.821 ppb	103.797 %	61.856 ppb	60.799 ppb	95.857 %
Concentration per Run 1	102.879 %	60.608 ppb	58.712 ppb	57.034 ppb	58.893 ppb	105.006 %	61.302 ppb	61.085 ppb	96.399 %
Concentration per Run 2	100.333 %	61.784 ppb	61.284 ppb	57.546 ppb	59.434 ppb	104.143 %	62.123 ppb	60.446 ppb	95.999 %
Concentration per Run 3	101.872 %	60.960 ppb	58.500 ppb	56.819 ppb	61.134 ppb	102.242 %	62.143 ppb	60.868 ppb	95.172 %
Recovery Percentage 1		101.862 %	99.164 %	95.221 %	99.701 %		103.093 %	101.332 %	
Concentration RSD	1.3 %	1.0 %	2.6 %	0.7 %	2.0 %	1.4 %	0.8 %	0.5 %	0.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.827 ppb	58.640 ppb	101.220 %	96.621 %	63.459 ppb	64.612 ppb	69.593 %
Concentration per Run 1	59.455 ppb	59.775 ppb	101.328 %	96.223 %	62.865 ppb	64.140 ppb	70.671 %
Concentration per Run 2	60.020 ppb	57.832 ppb	101.286 %	97.820 %	62.566 ppb	63.989 ppb	69.637 %
Concentration per Run 3	60.006 ppb	58.311 ppb	101.044 %	95.821 %	64.946 ppb	65.708 ppb	68.471 %
Recovery Percentage 1	99.711 %	97.733 %			105.765 %	107.687 %	
Concentration RSD	0.5 %	1.7 %	0.2 %	1.1 %	2.0 %	1.5 %	1.6 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	140	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 9:48:51 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.593 %	119.476 %	0.003 ppb	4.224 ppb	-5.800 ppb	-1.397 ppb	-13.953 ppb	-24.008 ppb	104.292 %
Concentration per Run 1	94.906 %	121.348 %	0.003 ppb	4.670 ppb	-6.417 ppb	-1.222 ppb	-18.144 ppb	-19.407 ppb	104.443 %
Concentration per Run 2	95.019 %	111.236 %	0.006 ppb	3.233 ppb	-5.917 ppb	-1.314 ppb	-12.924 ppb	-26.355 ppb	104.594 %
Concentration per Run 3	93.854 %	125.843 %	-0.001 ppb	4.769 ppb	-5.066 ppb	-1.654 ppb	-10.790 ppb	-26.261 ppb	103.838 %
Recovery Percentage 1			0.573 %	4.224 %	-8.286 %	-13.966 %	-13.953 %	-24.008 %	
Concentration RSD	0.7 %	6.3 %	116.5 %	20.4 %	11.8 %	16.3 %	27.1 %	16.6 %	0.4 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.293 %	0.058 ppb	-0.093 ppb	0.012 ppb	1.580 ppb	-0.002 ppb	-0.636 ppb	-0.082 ppb	-2.137 ppb
Concentration per Run 1	100.000 %	-0.007 ppb	-0.108 ppb	0.068 ppb	1.058 ppb	0.008 ppb	-0.644 ppb	-0.053 ppb	-2.141 ppb
Concentration per Run 2	105.474 %	0.063 ppb	-0.103 ppb	-0.016 ppb	1.005 ppb	-0.004 ppb	-0.598 ppb	-0.004 ppb	-2.186 ppb
Concentration per Run 3	104.406 %	0.118 ppb	-0.066 ppb	-0.016 ppb	2.677 ppb	-0.011 ppb	-0.667 ppb	-0.188 ppb	-2.085 ppb
Recovery Percentage 1		1.161 %	-9.265 %	1.219 %	3.160 %	-0.465 %	-31.816 %	-8.176 %	-42.742 %
Concentration RSD	2.8 %	107.2 %	24.7 %	396.9 %	60.2 %	408.7 %	5.6 %	116.9 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.774 %	0.017 ppb	0.090 ppb	-0.010 ppb	0.268 ppb	103.747 %	0.002 ppb	0.000 ppb	96.567 %
Concentration per Run 1	104.727 %	-0.025 ppb	0.151 ppb	-0.009 ppb	0.202 ppb	101.770 %	0.004 ppb	0.003 ppb	96.264 %
Concentration per Run 2	99.618 %	0.034 ppb	0.168 ppb	-0.006 ppb	0.247 ppb	104.059 %	0.002 ppb	-0.001 ppb	96.531 %
Concentration per Run 3	100.977 %	0.042 ppb	-0.048 ppb	-0.013 ppb	0.356 ppb	105.411 %	-0.001 ppb	-0.001 ppb	96.905 %
Recovery Percentage 1		3.354 %	1.805 %	-0.095 %	13.412 %		0.475 %	0.036 %	
Concentration RSD	2.6 %	218.9 %	133.2 %	35.7 %	29.7 %	1.8 %	118.6 %	3,268.8 %	0.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.036 ppb	-0.082 ppb	101.087 %	98.194 %	0.210 ppb	-0.016 ppb	70.221 %
Concentration per Run 1	0.018 ppb	-0.099 ppb	99.873 %	95.927 %	0.173 ppb	-0.015 ppb	70.895 %
Concentration per Run 2	0.045 ppb	-0.086 ppb	100.838 %	97.726 %	0.247 ppb	-0.017 ppb	69.921 %
Concentration per Run 3	0.046 ppb	-0.061 ppb	102.549 %	100.931 %	0.209 ppb	-0.016 ppb	69.847 %
Recovery Percentage 1	0.905 %	-16.397 %			20.974 %	-1.558 %	
Concentration RSD	43.9 %	23.0 %	1.3 %	2.6 %	17.8 %	6.0 %	0.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	141	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448458-03 6020TL	Rack	3		
Analysis started at:	8/27/2024 9:53:24 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	212.234 %	287.643 %	-0.004 ppb	276,175.123 ppb	16,676.014 ppb	20.962 ppb	90,217.496 ppb	49,395.711 ppb	104.845 %
Concentration per Run 1	211.801 %	263.485 %	-0.005 ppb	271,010.321 ppb	17,307.745 ppb	20.197 ppb	92,982.808 ppb	50,139.872 ppb	105.312 %
Concentration per Run 2	210.271 %	297.756 %	-0.004 ppb	287,060.214 ppb	16,121.180 ppb	21.555 ppb	90,267.751 ppb	50,879.097 ppb	104.176 %
Concentration per Run 3	214.631 %	301.688 %	-0.004 ppb	270,454.835 ppb	16,599.117 ppb	21.136 ppb	87,401.930 ppb	47,168.162 ppb	105.046 %
Concentration RSD	1.0 %	7.3 %	12.9 %	3.4 %	3.6 %	3.3 %	3.1 %	4.0 %	0.6 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.576 %	0.985 ppb	0.209 ppb	7.488 ppb	290.818 ppb	3.921 ppb	26.017 ppb	35.856 ppb	0.457 ppb
Concentration per Run 1	98.130 %	1.136 ppb	0.178 ppb	7.141 ppb	266.177 ppb	3.771 ppb	24.558 ppb	35.582 ppb	0.320 ppb
Concentration per Run 2	94.125 %	0.934 ppb	0.240 ppb	7.924 ppb	315.228 ppb	3.956 ppb	27.521 ppb	36.527 ppb	0.480 ppb
Concentration per Run 3	103.472 %	0.884 ppb	0.208 ppb	7.400 ppb	291.047 ppb	4.037 ppb	25.974 ppb	35.458 ppb	0.570 ppb
Concentration RSD	4.8 %	13.6 %	14.7 %	5.3 %	8.4 %	3.5 %	5.7 %	1.6 %	27.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.201 %	3.012 ppb	3.055 ppb	1,003.783 ppb	21.467 ppb	95.629 %	0.127 ppb	0.012 ppb	91.350 %
Concentration per Run 1	96.850 %	3.283 ppb	3.667 ppb	994.880 ppb	20.955 ppb	94.975 %	0.130 ppb	0.012 ppb	89.662 %
Concentration per Run 2	99.707 %	2.897 ppb	2.389 ppb	1,004.744 ppb	20.866 ppb	93.750 %	0.125 ppb	0.011 ppb	92.443 %
Concentration per Run 3	98.046 %	2.858 ppb	3.109 ppb	1,011.724 ppb	22.580 ppb	98.163 %	0.126 ppb	0.011 ppb	91.946 %
Concentration RSD	1.5 %	7.8 %	21.0 %	0.8 %	4.5 %	2.4 %	2.0 %	1.6 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	39.842 ppb	43.080 ppb	99.625 %	95.749 %	0.312 ppb	0.505 ppb	63.199 %
Concentration per Run 1	39.843 ppb	42.906 ppb	98.051 %	94.655 %	0.287 ppb	0.501 ppb	63.170 %
Concentration per Run 2	39.830 ppb	43.567 ppb	99.663 %	95.937 %	0.326 ppb	0.510 ppb	63.182 %
Concentration per Run 3	39.854 ppb	42.766 ppb	101.161 %	96.654 %	0.323 ppb	0.504 ppb	63.246 %
Concentration RSD	0.0 %	1.0 %	1.6 %	1.1 %	6.9 %	0.9 %	0.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	142	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448458-04 6020TL	Rack	3		
Analysis started at:	8/27/2024 9:57:54 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	218.907 %	320.228 %	-0.005 ppb	227,701.975 ppb	17,081.532 ppb	43.895 ppb	89,293.039 ppb	72,416.334 ppb	108.512 %
Concentration per Run 1	219.434 %	312.363 %	-0.005 ppb	213,843.521 ppb	16,966.404 ppb	43.394 ppb	87,647.294 ppb	68,914.229 ppb	109.363 %
Concentration per Run 2	217.461 %	325.846 %	-0.004 ppb	238,553.224 ppb	16,971.417 ppb	43.360 ppb	89,326.676 ppb	74,420.261 ppb	107.017 %
Concentration per Run 3	219.826 %	322.475 %	-0.005 ppb	230,709.181 ppb	17,306.774 ppb	44.933 ppb	90,905.148 ppb	73,914.512 ppb	109.155 %
Concentration RSD	0.6 %	2.2 %	9.9 %	5.5 %	1.1 %	2.0 %	1.8 %	4.2 %	1.2 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.555 %	1.156 ppb	0.099 ppb	12.669 ppb	143.193 ppb	3.639 ppb	22.694 ppb	29.172 ppb	-0.887 ppb
Concentration per Run 1	103.605 %	0.866 ppb	0.109 ppb	11.180 ppb	144.947 ppb	3.509 ppb	22.240 ppb	28.052 ppb	-0.889 ppb
Concentration per Run 2	95.594 %	1.139 ppb	0.107 ppb	13.480 ppb	143.701 ppb	3.725 ppb	22.901 ppb	30.122 ppb	-0.804 ppb
Concentration per Run 3	99.466 %	1.462 ppb	0.082 ppb	13.348 ppb	140.932 ppb	3.682 ppb	22.942 ppb	29.341 ppb	-0.968 ppb
Concentration RSD	4.0 %	25.8 %	15.1 %	10.2 %	1.4 %	3.1 %	1.7 %	3.6 %	9.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.192 %	3.081 ppb	3.360 ppb	1,165.100 ppb	21.501 ppb	99.679 %	0.053 ppb	0.017 ppb	94.226 %
Concentration per Run 1	107.132 %	3.129 ppb	2.729 ppb	1,144.267 ppb	21.406 ppb	100.138 %	0.074 ppb	0.015 ppb	94.923 %
Concentration per Run 2	105.620 %	2.950 ppb	3.492 ppb	1,162.794 ppb	21.593 ppb	99.349 %	0.037 ppb	0.007 ppb	93.052 %
Concentration per Run 3	102.823 %	3.163 ppb	3.858 ppb	1,188.238 ppb	21.504 ppb	99.551 %	0.047 ppb	0.027 ppb	94.705 %
Concentration RSD	2.1 %	3.7 %	17.1 %	1.9 %	0.4 %	0.4 %	37.0 %	62.2 %	1.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.100 ppb	72.521 ppb	102.163 %	98.494 %	0.381 ppb	0.314 ppb	65.522 %
Concentration per Run 1	3.063 ppb	71.413 ppb	102.008 %	98.708 %	0.362 ppb	0.327 ppb	66.432 %
Concentration per Run 2	3.074 ppb	73.256 ppb	102.802 %	98.895 %	0.389 ppb	0.318 ppb	64.264 %
Concentration per Run 3	3.163 ppb	72.894 ppb	101.679 %	97.878 %	0.394 ppb	0.299 ppb	65.870 %
Concentration RSD	1.8 %	1.3 %	0.6 %	0.5 %	4.5 %	4.5 %	1.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	143	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	L2448458-05 6020TL	Rack	3		
Analysis started at:	8/27/2024 10:02:24 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	219.554 %	349.068 %	-0.003 ppb	272,912.364 ppb	15,199.595 ppb	66.937 ppb	87,353.230 ppb	51,411.500 ppb	109.772 %
Concentration per Run 1	219.539 %	334.835 %	-0.003 ppb	270,420.026 ppb	15,544.761 ppb	66.565 ppb	88,363.654 ppb	51,120.483 ppb	110.561 %
Concentration per Run 2	220.130 %	346.071 %	-0.004 ppb	263,605.827 ppb	15,054.350 ppb	68.053 ppb	84,865.537 ppb	50,083.980 ppb	109.899 %
Concentration per Run 3	218.992 %	366.297 %	-0.002 ppb	284,711.240 ppb	14,999.674 ppb	66.193 ppb	88,830.498 ppb	53,030.038 ppb	108.854 %
Concentration RSD	0.3 %	4.6 %	34.3 %	3.9 %	2.0 %	1.5 %	2.5 %	2.9 %	0.8 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.724 %	2.284 ppb	0.237 ppb	7.459 ppb	229.800 ppb	3.871 ppb	22.560 ppb	33.623 ppb	-0.698 ppb
Concentration per Run 1	107.878 %	2.296 ppb	0.220 ppb	6.912 ppb	223.406 ppb	3.868 ppb	22.114 ppb	33.337 ppb	-0.715 ppb
Concentration per Run 2	112.551 %	2.082 ppb	0.271 ppb	7.782 ppb	230.033 ppb	3.865 ppb	21.371 ppb	33.740 ppb	-0.740 ppb
Concentration per Run 3	105.741 %	2.475 ppb	0.220 ppb	7.685 ppb	235.960 ppb	3.880 ppb	24.195 ppb	33.790 ppb	-0.638 ppb
Concentration RSD	3.2 %	8.6 %	12.4 %	6.4 %	2.7 %	0.2 %	6.5 %	0.7 %	7.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.530 %	3.343 ppb	2.768 ppb	1,041.766 ppb	22.233 ppb	102.395 %	0.823 ppb	0.023 ppb	96.057 %
Concentration per Run 1	105.470 %	3.522 ppb	2.974 ppb	1,029.401 ppb	21.502 ppb	102.038 %	0.848 ppb	0.019 ppb	96.049 %
Concentration per Run 2	105.741 %	3.200 ppb	3.028 ppb	1,046.616 ppb	22.750 ppb	101.294 %	0.844 ppb	0.023 ppb	95.985 %
Concentration per Run 3	105.378 %	3.306 ppb	2.302 ppb	1,049.281 ppb	22.446 ppb	103.853 %	0.776 ppb	0.027 ppb	96.136 %
Concentration RSD	0.2 %	4.9 %	14.6 %	1.0 %	2.9 %	1.3 %	4.9 %	17.2 %	0.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.872 ppb	52.635 ppb	105.030 %	100.797 %	0.295 ppb	0.641 ppb	65.069 %
Concentration per Run 1	2.788 ppb	51.877 ppb	103.803 %	99.406 %	0.271 ppb	0.649 ppb	67.178 %
Concentration per Run 2	2.877 ppb	53.055 ppb	104.732 %	99.984 %	0.301 ppb	0.643 ppb	63.769 %
Concentration per Run 3	2.951 ppb	52.975 ppb	106.557 %	102.999 %	0.314 ppb	0.629 ppb	64.261 %
Concentration RSD	2.8 %	1.3 %	1.3 %	1.9 %	7.6 %	1.6 %	2.8 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index: 144
Analysis label: CCV
Analysis started at: 8/27/2024 10:06:54 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.564 %	148.689 %	63.213 ppb	5,743.526 ppb	5,645.693 ppb	56.413 ppb	6,200.634 ppb	6,262.557 ppb	108.670 %
Concentration per Run 1	94.509 %	151.686 %	62.838 ppb	5,678.944 ppb	5,510.005 ppb	55.337 ppb	6,137.062 ppb	6,290.193 ppb	107.907 %
Concentration per Run 2	95.246 %	147.191 %	63.379 ppb	5,608.977 ppb	5,507.761 ppb	57.488 ppb	5,837.945 ppb	5,843.319 ppb	109.432 %
Concentration per Run 3	93.939 %	147.191 %	63.421 ppb	5,942.656 ppb	5,919.313 ppb	56.415 ppb	6,626.896 ppb	6,654.159 ppb	108.671 %
Recovery Percentage 1			105.354 %	95.725 %	94.095 %	94.022 %	103.344 %	104.376 %	
Concentration RSD	0.7 %	1.7 %	0.5 %	3.1 %	4.2 %	1.9 %	6.4 %	6.5 %	0.7 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	111.528 %	63.725 ppb	64.220 ppb	62.610 ppb	6,435.145 ppb	64.187 ppb	65.698 ppb	64.370 ppb	62.310 ppb
Concentration per Run 1	114.554 %	62.969 ppb	63.095 ppb	62.054 ppb	6,276.499 ppb	63.830 ppb	63.845 ppb	64.008 ppb	62.716 ppb
Concentration per Run 2	118.827 %	60.040 ppb	60.577 ppb	59.964 ppb	6,132.821 ppb	60.992 ppb	64.493 ppb	62.784 ppb	60.376 ppb
Concentration per Run 3	101.202 %	68.167 ppb	68.989 ppb	65.812 ppb	6,896.114 ppb	67.739 ppb	68.754 ppb	66.318 ppb	63.836 ppb
Recovery Percentage 1		106.209 %	107.034 %	104.350 %	107.252 %	106.978 %	109.496 %	107.283 %	103.849 %
Concentration RSD	8.2 %	6.5 %	6.7 %	4.7 %	6.3 %	5.3 %	4.1 %	2.8 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.646 %	60.750 ppb	57.536 ppb	57.005 ppb	59.767 ppb	106.943 %	61.456 ppb	60.616 ppb	99.524 %
Concentration per Run 1	107.401 %	60.787 ppb	55.640 ppb	56.671 ppb	60.114 ppb	109.070 %	61.343 ppb	60.862 ppb	100.595 %
Concentration per Run 2	105.796 %	59.851 ppb	58.870 ppb	57.099 ppb	60.990 ppb	105.976 %	61.640 ppb	60.805 ppb	98.533 %
Concentration per Run 3	103.740 %	61.612 ppb	58.098 ppb	57.245 ppb	58.197 ppb	105.784 %	61.386 ppb	60.182 ppb	99.446 %
Recovery Percentage 1		101.250 %	95.893 %	95.009 %	99.611 %		102.427 %	101.027 %	
Concentration RSD	1.7 %	1.5 %	2.9 %	0.5 %	2.4 %	1.7 %	0.3 %	0.6 %	1.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.050 ppb	59.541 ppb	104.238 %	99.947 %	63.475 ppb	64.440 ppb	71.856 %
Concentration per Run 1	59.793 ppb	59.338 ppb	105.065 %	100.872 %	62.390 ppb	62.638 ppb	74.433 %
Concentration per Run 2	60.600 ppb	60.506 ppb	102.838 %	98.165 %	63.940 ppb	66.094 ppb	70.368 %
Concentration per Run 3	59.758 ppb	58.780 ppb	104.810 %	100.803 %	64.095 ppb	64.589 ppb	70.767 %
Recovery Percentage 1	100.083 %	99.235 %			105.792 %	107.400 %	
Concentration RSD	0.8 %	1.5 %	1.2 %	1.5 %	1.5 %	2.7 %	3.1 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	145	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 10:11:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.461 %	123.408 %	0.007 ppb	17.486 ppb	-5.035 ppb	-1.602 ppb	-0.231 ppb	-24.741 ppb	103.202 %
Concentration per Run 1	93.324 %	124.157 %	0.008 ppb	19.681 ppb	-4.058 ppb	-1.431 ppb	-12.644 ppb	-22.676 ppb	103.175 %
Concentration per Run 2	93.374 %	112.360 %	0.010 ppb	21.567 ppb	-6.892 ppb	-1.725 ppb	3.475 ppb	-19.240 ppb	102.680 %
Concentration per Run 3	93.685 %	133.708 %	0.003 ppb	11.211 ppb	-4.155 ppb	-1.649 ppb	8.477 ppb	-32.306 ppb	103.753 %
Recovery Percentage 1			1.468 %	17.486 %	-7.193 %	-16.019 %	-0.231 %	-24.741 %	
Concentration RSD	0.2 %	8.7 %	49.0 %	31.5 %	32.0 %	9.5 %	4,778.0 %	27.4 %	0.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.062 %	0.130 ppb	-0.074 ppb	-0.063 ppb	3.605 ppb	-0.011 ppb	-0.646 ppb	-0.097 ppb	-2.169 ppb
Concentration per Run 1	97.997 %	0.052 ppb	-0.081 ppb	0.021 ppb	5.330 ppb	-0.011 ppb	-0.712 ppb	-0.156 ppb	-2.080 ppb
Concentration per Run 2	97.730 %	0.109 ppb	-0.075 ppb	-0.092 ppb	5.277 ppb	-0.011 ppb	-0.640 ppb	-0.047 ppb	-2.234 ppb
Concentration per Run 3	95.460 %	0.231 ppb	-0.066 ppb	-0.118 ppb	0.207 ppb	-0.011 ppb	-0.585 ppb	-0.088 ppb	-2.195 ppb
Recovery Percentage 1		2.609 %	-7.383 %	-6.297 %	7.209 %	-2.121 %	-32.287 %	-9.688 %	-43.387 %
Concentration RSD	1.4 %	70.1 %	10.5 %	116.7 %	81.6 %	0.0 %	9.8 %	56.7 %	3.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.094 %	0.013 ppb	-0.007 ppb	0.024 ppb	0.231 ppb	101.113 %	0.001 ppb	0.006 ppb	94.789 %
Concentration per Run 1	98.679 %	-0.005 ppb	-0.062 ppb	0.038 ppb	0.173 ppb	99.847 %	0.006 ppb	0.003 ppb	94.280 %
Concentration per Run 2	100.433 %	0.022 ppb	-0.128 ppb	0.029 ppb	0.239 ppb	101.785 %	-0.003 ppb	0.007 ppb	96.070 %
Concentration per Run 3	95.171 %	0.022 ppb	0.169 ppb	0.005 ppb	0.279 ppb	101.706 %	0.001 ppb	0.007 ppb	94.017 %
Recovery Percentage 1		2.627 %	-0.136 %	0.239 %	11.526 %		0.274 %	2.756 %	
Concentration RSD	2.7 %	122.5 %	2,294.2 %	71.6 %	23.1 %	1.1 %	404.2 %	42.0 %	1.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.033 ppb	-0.094 ppb	100.806 %	97.217 %	0.200 ppb	-0.016 ppb	69.121 %
Concentration per Run 1	0.015 ppb	-0.086 ppb	99.854 %	95.214 %	0.137 ppb	-0.014 ppb	69.509 %
Concentration per Run 2	0.040 ppb	-0.099 ppb	100.834 %	97.157 %	0.270 ppb	-0.015 ppb	68.784 %
Concentration per Run 3	0.044 ppb	-0.099 ppb	101.730 %	99.282 %	0.194 ppb	-0.019 ppb	69.068 %
Recovery Percentage 1	0.829 %	-18.856 %			20.027 %	-1.590 %	
Concentration RSD	47.5 %	7.8 %	0.9 %	2.1 %	33.4 %	18.6 %	0.5 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index: 146
Analysis label: CCV
Analysis started at: 8/27/2024 10:15:59 PM
User name ALPHALAB\a2-icpmsq2
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.648 %	123.408 %	64.482 ppb	6,184.764 ppb	6,146.382 ppb	59.323 ppb	6,332.713 ppb	6,502.094 ppb	102.923 %
Concentration per Run 1	91.906 %	131.461 %	64.484 ppb	5,988.499 ppb	5,948.149 ppb	57.450 ppb	6,390.817 ppb	6,582.743 ppb	101.369 %
Concentration per Run 2	91.177 %	121.348 %	64.581 ppb	6,271.642 ppb	6,272.262 ppb	57.598 ppb	6,348.407 ppb	6,261.836 ppb	103.018 %
Concentration per Run 3	91.862 %	117.416 %	64.379 ppb	6,294.151 ppb	6,218.734 ppb	62.920 ppb	6,258.914 ppb	6,661.704 ppb	104.382 %
Recovery Percentage 1			107.469 %	103.079 %	102.440 %	98.871 %	105.545 %	108.368 %	
Concentration RSD	0.4 %	5.9 %	0.2 %	2.8 %	2.8 %	5.3 %	1.1 %	3.3 %	1.5 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.608 %	62.836 ppb	62.913 ppb	61.491 ppb	6,319.240 ppb	63.290 ppb	63.026 ppb	62.645 ppb	60.768 ppb
Concentration per Run 1	103.605 %	63.677 ppb	63.260 ppb	62.683 ppb	6,410.546 ppb	63.597 ppb	65.253 ppb	62.872 ppb	61.127 ppb
Concentration per Run 2	105.341 %	62.248 ppb	62.486 ppb	59.939 ppb	6,208.753 ppb	63.120 ppb	61.514 ppb	61.317 ppb	60.531 ppb
Concentration per Run 3	107.878 %	62.584 ppb	62.992 ppb	61.852 ppb	6,338.421 ppb	63.154 ppb	62.312 ppb	63.745 ppb	60.645 ppb
Recovery Percentage 1		104.727 %	104.854 %	102.486 %	105.321 %	105.484 %	105.044 %	104.408 %	101.279 %
Concentration RSD	2.0 %	1.2 %	0.6 %	2.3 %	1.6 %	0.4 %	3.1 %	2.0 %	0.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.225 %	60.805 ppb	57.633 ppb	57.374 ppb	59.532 ppb	102.285 %	61.740 ppb	61.712 ppb	96.452 %
Concentration per Run 1	104.132 %	60.767 ppb	57.247 ppb	56.855 ppb	58.316 ppb	103.045 %	60.728 ppb	60.937 ppb	96.591 %
Concentration per Run 2	102.890 %	59.642 ppb	55.844 ppb	56.973 ppb	58.647 ppb	102.156 %	62.396 ppb	62.087 ppb	97.925 %
Concentration per Run 3	99.653 %	62.006 ppb	59.808 ppb	58.294 ppb	61.634 ppb	101.652 %	62.096 ppb	62.112 ppb	94.839 %
Recovery Percentage 1		101.342 %	96.055 %	95.623 %	99.221 %		102.900 %	102.853 %	
Concentration RSD	2.3 %	1.9 %	3.5 %	1.4 %	3.1 %	0.7 %	1.4 %	1.1 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.266 ppb	60.977 ppb	102.454 %	99.631 %	63.244 ppb	63.867 ppb	70.046 %
Concentration per Run 1	60.028 ppb	61.912 ppb	102.682 %	99.728 %	62.428 ppb	63.322 ppb	72.887 %
Concentration per Run 2	60.242 ppb	59.557 ppb	102.595 %	99.613 %	63.183 ppb	64.122 ppb	69.477 %
Concentration per Run 3	60.528 ppb	61.462 ppb	102.083 %	99.553 %	64.122 ppb	64.157 ppb	67.775 %
Recovery Percentage 1	100.443 %	101.628 %			105.407 %	106.445 %	
Concentration RSD	0.4 %	2.1 %	0.3 %	0.1 %	1.3 %	0.7 %	3.7 %

Alpha ICPMSQ2 Data with SRD

8/28/2024 6:05:26 AM

Analysis index:	147	User name	ALPHALAB\a2-icpmsq2	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	8/27/2024 10:20:31 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.200 %	125.656 %	0.020 ppb	4.279 ppb	-2.993 ppb	-1.259 ppb	-8.640 ppb	-23.535 ppb	105.210 %
Concentration per Run 1	94.167 %	125.843 %	0.018 ppb	3.215 ppb	-3.166 ppb	-1.031 ppb	-18.255 ppb	-22.789 ppb	102.918 %
Concentration per Run 2	95.956 %	107.303 %	0.023 ppb	12.153 ppb	-0.673 ppb	-1.377 ppb	-0.139 ppb	-25.699 ppb	105.811 %
Concentration per Run 3	95.476 %	143.821 %	0.018 ppb	-2.532 ppb	-5.140 ppb	-1.370 ppb	-7.525 ppb	-22.117 ppb	106.901 %
Recovery Percentage 1			3.974 %	4.279 %	-4.276 %	-12.592 %	-8.640 %	-23.535 %	
Concentration RSD	1.0 %	14.5 %	14.4 %	173.0 %	74.8 %	15.7 %	105.4 %	8.1 %	2.0 %

Category	45Sc (KED AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.528 %	0.040 ppb	-0.063 ppb	0.097 ppb	2.267 ppb	-0.008 ppb	-0.622 ppb	-0.124 ppb	-2.122 ppb
Concentration per Run 1	99.466 %	0.088 ppb	-0.082 ppb	0.074 ppb	-0.528 ppb	-0.004 ppb	-0.712 ppb	-0.061 ppb	-2.160 ppb
Concentration per Run 2	96.128 %	0.015 ppb	-0.021 ppb	0.051 ppb	5.409 ppb	-0.011 ppb	-0.663 ppb	-0.108 ppb	-2.053 ppb
Concentration per Run 3	93.991 %	0.016 ppb	-0.086 ppb	0.167 ppb	1.918 ppb	-0.011 ppb	-0.492 ppb	-0.203 ppb	-2.152 ppb
Recovery Percentage 1		0.796 %	-6.294 %	9.737 %	4.533 %	-1.692 %	-31.111 %	-12.412 %	-42.436 %
Concentration RSD	2.9 %	105.3 %	57.5 %	63.1 %	131.6 %	43.8 %	18.6 %	58.3 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.516 %	0.003 ppb	-0.053 ppb	0.024 ppb	0.250 ppb	102.297 %	0.006 ppb	0.011 ppb	96.311 %
Concentration per Run 1	98.362 %	0.016 ppb	-0.066 ppb	0.024 ppb	0.181 ppb	102.861 %	0.002 ppb	0.007 ppb	96.075 %
Concentration per Run 2	99.330 %	0.004 ppb	-0.180 ppb	0.028 ppb	0.195 ppb	100.962 %	0.007 ppb	0.023 ppb	95.067 %
Concentration per Run 3	100.856 %	-0.009 ppb	0.089 ppb	0.020 ppb	0.374 ppb	103.067 %	0.008 ppb	0.003 ppb	97.791 %
Recovery Percentage 1		0.693 %	-1.051 %	0.239 %	12.500 %		1.445 %	5.436 %	
Concentration RSD	1.3 %	365.3 %	256.5 %	17.8 %	43.2 %	1.1 %	51.5 %	99.6 %	1.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.065 ppb	-0.065 ppb	100.994 %	98.241 %	0.239 ppb	-0.004 ppb	69.238 %
Concentration per Run 1	0.050 ppb	-0.086 ppb	100.633 %	97.931 %	0.178 ppb	-0.003 ppb	70.965 %
Concentration per Run 2	0.051 ppb	-0.048 ppb	100.118 %	97.078 %	0.309 ppb	-0.004 ppb	67.510 %
Concentration per Run 3	0.095 ppb	-0.062 ppb	102.229 %	99.713 %	0.231 ppb	-0.005 ppb	69.238 %
Recovery Percentage 1	1.637 %	-13.033 %			23.937 %	-0.380 %	
Concentration RSD	39.7 %	29.5 %	1.1 %	1.4 %	27.6 %	28.4 %	2.5 %

Interference Check Solutions
(ICP-MS)

Solution Component	Solution A Concentration (ug/L)	Solution AB Concentration (ug/L)
Al	20,000	20,000
Ca	60,000	60,000
Fe	50,000	50,000
Mg	20,000	20,000
Na	50,000	50,000
K	20,000	20,000
Mo	400	400
As	0.0	20
Cd	0.0	20
Cr	0.0	40
Co	0.0	40
Cu	0.0	40
Mn	0.0	40
Ni	0.0	40
Se	0.0	20
Ag	0.0	10
V	0.0	40
Zn	0.0	20

LCS & MS Concentrations
(ICP-MS)

Element	Liquid Concentration (mg/L)
Aluminum	2.00
Antimony	0.5
Arsenic	0.12
Barium	2.00
Beryllium	0.05
Cadmium	0.051
Calcium	10.0
Chromium	0.20
Cobalt	0.50
Copper	0.25
Iron	1.00
Lead	0.51
Magnesium	10.0
Manganese	0.50
Molybdenum	1.00
Nickel	0.50
Potassium	10.0
Selenium	0.12
Silver	0.05
Sodium	10.0
Thallium	0.12
Vanadium	0.50
Zinc	0.50

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D102-540
Certificate Issue Date: June 22, 2018
Expiration Date: January 31, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8160	6.36	3960 - 12400	4080 - 12200
Antimony	120	60.9	9.42	0.822 - 121	12.0 - 166
Arsenic	144	135	5.08	112 - 158	94.6 - 176
Barium	469	443	6.77	366 - 521	332 - 554
Beryllium	207	197	5.86	164 - 229	148 - 246
Boron	213	174	12.6	127 - 221	105 - 244
Cadmium	224	204	6.65	169 - 240	153 - 256
Calcium	5190	4830	9.12	3950 - 5700	3510 - 6150
Chromium	138	132	8.56	109 - 155	92.2 - 171
Cobalt	182	179	7.93	151 - 207	134 - 224
Copper	191	184	6.72	155 - 213	138 - 230
Iron	15000	14400	10.7	8770 - 20000	5120 - 23600
Lead	225	216	7.72	178 - 254	159 - 274
Magnesium	2570	2340	6.13	1780 - 2900	1460 - 3230
Manganese	331	323	6.71	266 - 380	242 - 404
Mercury	16.8	13.2	16.0	8.64 - 17.7	7.89 - 18.5
Molybdenum	193	175	2.39	141 - 209	125 - 226
Nickel	163	152	5.95	126 - 178	106 - 197
Potassium	2420	2050	6.31	1440 - 2660	1210 - 2890
Selenium	81.9	74.9	4.13	59.3 - 90.5	47.0 - 103
Silver	57.6	53.9	9.00	43.0 - 64.8	37.8 - 70.0
Sodium	161	149	12.1	111 - 188	57.7 - 241
Strontium	100	96.2	4.04	78.1 - 114	69.0 - 123
Thallium	253	232	3.54	188 - 276	168 - 296

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	146	134	10.8	106 - 163	79.5 - 189
Titanium	449	340	7.20	70.2 - 609	44.9 - 711
Uranium	114	113	7.10	85.5 - 140	71.9 - 153
Vanadium	180	172	8.85	137 - 207	126 - 218
Zinc	217	211	6.58	171 - 250	147 - 274

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8160	80.8	138	-	-
Antimony	120	60.9	50.8	135	-	-
Arsenic	144	135	93.8	184	-	-
Barium	469	443	94.5	158	-	-
Beryllium	207	197	95.0	148	-	-
Boron	213	174	81.8	107	-	-
Cadmium	224	204	91.3	199	-	-
Calcium	5190	4830	93.0	122	-	-
Chromium	138	132	95.5	172	-	-
Cobalt	182	179	98.4	140	-	-
Copper	191	184	96.3	183	-	-
Iron	15000	14400	95.6	133	-	-
Lead	225	216	96.2	204	-	-
Magnesium	2570	2340	91.2	122	-	-
Manganese	331	323	97.6	147	-	-
Mercury	16.8	13.2	78.3	128	-	-
Molybdenum	193	175	90.8	143	-	-
Nickel	163	152	93.1	185	-	-
Potassium	2420	2050	84.7	121	-	-
Selenium	81.9	74.9	91.5	163	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	57.6	53.9	93.6	150	-	-
Sodium	161	149	92.8	105	-	-
Strontium	100	96.2	96.2	90	-	-
Thallium	253	232	91.6	147	-	-
Tin	146	134	92.0	100	-	-
Titanium	449	340	75.6	93	-	-
Uranium	114	113	98.8	35	-	-
Vanadium	180	172	95.4	139	-	-
Zinc	217	211	97.0	180	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D105-540
Certificate Issue Date: March 19, 2019
Expiration Date: October 12, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8800	8.32	4600 - 13000	4470 - 13100
Antimony	282	147	7.70	6.17 - 289	28.2 - 366
Arsenic	155	143	6.34	119 - 168	100 - 186
Barium	439	415	5.37	343 - 488	311 - 519
Beryllium	192	179	2.78	149 - 210	134 - 224
Boron	216	160	7.08	113 - 208	96.1 - 238
Cadmium	61.5	56.2	0.528	46.6 - 65.9	42.2 - 70.3
Calcium	5190	4960	6.64	4090 - 5840	3610 - 6310
Chromium	104	101	4.75	83.2 - 118	70.5 - 131
Cobalt	196	189	0.500	158 - 219	141 - 236
Copper	65.0	63.1	2.65	53.1 - 73.1	47.3 - 78.9
Iron	15000	15700	8.94	10100 - 21300	6000 - 25400
Lead	126	125	4.77	103 - 146	89.3 - 160
Magnesium	2570	2410	6.26	1860 - 2970	1520 - 3310
Manganese	387	382	5.37	315 - 449	290 - 474
Mercury	7.76	7.61	13.7	5.53 - 9.69	4.57 - 10.7
Molybdenum	120	107	0.500	86.0 - 128	75.5 - 139
Nickel	117	108	0.514	89.5 - 127	75.7 - 141
Potassium	2420	2110	5.62	1500 - 2720	1260 - 2960
Selenium	84.6	77.9	7.10	61.8 - 94.0	49.2 - 107
Silver	34.6	34.3	8.34	27.8 - 40.9	23.6 - 45.1
Sodium	161	145	6.72	106 - 183	54.3 - 235
Strontium	104	104	3.95	85.1 - 123	74.8 - 133
Thallium	123	113	0.500	91.3 - 134	77.1 - 149

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	118	107	0.500	83.5 - 130	61.2 - 152
Titanium	512	421	5.80	114 - 728	0.00 - 854
Uranium	103	104	6.18	79.1 - 128	71.9 - 135
Vanadium	87.3	83.7	8.55	66.8 - 101	54.2 - 113
Zinc	251	240	3.98	194 - 285	168 - 312

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8800	87.1	193	-	-
Antimony	282	147	52.3	216	-	-
Arsenic	155	143	92.5	240	-	-
Barium	439	415	94.6	222	-	-
Beryllium	192	179	93.4	220	-	-
Boron	216	160	74.2	152	-	-
Cadmium	61.5	56.2	91.5	239	-	-
Calcium	5190	4960	95.6	175	-	-
Chromium	104	101	96.8	237	-	-
Cobalt	196	189	96.2	215	-	-
Copper	65.0	63.1	97.1	237	-	-
Iron	15000	15700	105	195	-	-
Lead	126	125	99.0	243	-	-
Magnesium	2570	2410	93.9	177	-	-
Manganese	387	382	98.7	215	-	-
Mercury	7.76	7.61	98.0	157	-	-
Molybdenum	120	107	89.4	216	-	-
Nickel	117	108	92.5	235	-	-
Potassium	2420	2110	87.2	181	-	-
Selenium	84.6	77.9	92.1	231	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	34.6	34.3	99.3	216	-	-
Sodium	161	145	89.8	166	-	-
Strontium	104	104	99.9	148	-	-
Thallium	123	113	91.8	215	-	-
Tin	118	107	90.4	164	-	-
Titanium	512	421	82.2	157	-	-
Uranium	103	104	101	61	-	-
Vanadium	87.3	83.7	95.9	214	-	-
Zinc	251	240	95.5	234	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D109-540
Certificate Issue Date: March 24, 2020
Expiration Date: October 03, 2023
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8130	2.54	3920 - 12300	4060 - 12200
Antimony	259	134	5.03	4.56 - 264	25.9 - 335
Arsenic	171	156	3.38	129 - 183	109 - 203
Barium	253	239	4.81	197 - 280	179 - 298
Beryllium	179	169	6.59	141 - 198	127 - 212
Boron	114	87.5	10.3	62.5 - 113	52.5 - 125
Cadmium	149	137	5.43	113 - 160	103 - 171
Calcium	5190	4760	3.48	3890 - 5640	3460 - 6070
Chromium	163	154	3.79	126 - 181	108 - 200
Cobalt	127	121	5.07	101 - 141	90.8 - 151
Copper	57.0	54.9	4.13	46.1 - 63.6	41.1 - 68.6
Iron	15000	14100	6.27	8470 - 19700	4920 - 23200
Lead	133	130	3.00	107 - 152	93.3 - 167
Magnesium	2570	2320	3.32	1760 - 2880	1440 - 3200
Manganese	277	269	2.67	221 - 317	199 - 340
Mercury	21.6	20.5	7.72	14.7 - 26.3	12.3 - 28.6
Molybdenum	108	95.4	2.61	76.4 - 114	66.9 - 124
Nickel	58.7	53.9	4.97	44.5 - 63.3	37.7 - 70.0
Potassium	2420	2020	3.06	1410 - 2630	1190 - 2850
Selenium	181	167	5.63	132 - 201	113 - 221
Silver	35.5	33.6	5.20	26.8 - 40.3	23.0 - 44.1
Sodium	161	133	2.76	95.1 - 171	46.5 - 220
Strontium	89.7	87.9	4.59	71.7 - 104	62.8 - 113
Thallium	121	112	5.19	90.3 - 133	76.1 - 147

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Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	83.5	74.0	5.42	57.6 - 90.4	39.7 - 108
Titanium	474	333	7.17	48.6 - 617	46.3 - 620
Uranium	51.9	51.9	3.36	39.6 - 64.3	35.9 - 68.0
Vanadium	68.1	62.6	6.00	49.4 - 75.8	37.0 - 88.3
Zinc	165	158	2.34	128 - 188	111 - 205

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ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8130	80.5	196	-	-
Antimony	259	134	51.8	217	-	-
Arsenic	171	156	91.3	243	-	-
Barium	253	239	94.3	230	-	-
Beryllium	179	169	94.6	223	-	-
Boron	114	87.5	76.7	150	-	-
Cadmium	149	137	91.8	249	-	-
Calcium	5190	4760	91.8	184	-	-
Chromium	163	154	94.4	245	-	-
Cobalt	127	121	95.3	221	-	-
Copper	57.0	54.9	96.2	243	-	-
Iron	15000	14100	93.9	199	-	-
Lead	133	130	97.7	251	-	-
Magnesium	2570	2320	90.1	182	-	-
Manganese	277	269	97.2	220	-	-
Mercury	21.6	20.5	94.7	172	-	-
Molybdenum	108	95.4	88.3	218	-	-
Nickel	58.7	53.9	91.8	242	-	-
Potassium	2420	2020	83.5	187	-	-
Selenium	181	167	92.2	235	-	-
Silver	35.5	33.6	94.5	222	-	-
Sodium	161	133	82.7	177	-	-
Strontium	89.7	87.9	98.0	151	-	-
Thallium	121	112	92.2	219	-	-
Tin	83.5	74.0	88.6	170	-	-
Titanium	474	333	70.3	157	-	-
Uranium	51.9	51.9	100	60	-	-
Vanadium	68.1	62.6	91.9	213	-	-
Zinc	165	158	95.8	238	-	-

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1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

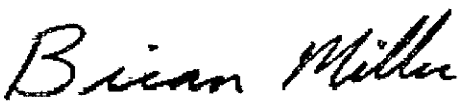
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D113-540
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8630	12.0	4420 - 12800	4370 - 12900
Antimony	256	129	16.8	0.742 - 257	25.6 - 323
Arsenic	91.6	84.5	15.1	70.0 - 99.0	59.2 - 110
Barium	259	249	9.94	206 - 292	187 - 311
Beryllium	175	163	3.89	135 - 191	122 - 204
Boron	95.7	76.7	12.8	55.7 - 97.7	48.0 - 107
Cadmium	107	99.0	11.5	82.2 - 116	74.2 - 124
Calcium	5190	4760	11.8	3890 - 5640	3460 - 6070
Chromium	129	122	14.6	101 - 144	85.7 - 159
Cobalt	63.6	61.7	11.5	51.9 - 71.6	46.3 - 77.2
Copper	62.3	61.5	12.3	51.9 - 71.0	46.1 - 76.8
Iron	15000	14500	15.7	8860 - 20100	5190 - 23800
Lead	122	123	13.9	103 - 144	88.3 - 158
Lithium	6.42	7.30	18.7	5.13 - 9.48	3.20 - 11.4
Magnesium	2570	2360	8.87	1810 - 2920	1480 - 3250
Manganese	470	456	13.4	375 - 538	350 - 563
Mercury	22.1	18.9	14.5	13.0 - 24.8	11.3 - 26.4
Molybdenum	80.1	72.8	11.0	58.7 - 87.0	50.5 - 95.2
Nickel	143	135	14.2	112 - 158	94.7 - 176
Potassium	2420	2090	8.21	1480 - 2700	1240 - 2940
Selenium	128	121	11.7	96.9 - 146	80.4 - 162
Silver	45.4	44.1	6.69	35.5 - 52.8	30.7 - 57.6
Sodium	161	136	9.34	97.4 - 174	48.1 - 223
Strontium	82.2	82.3	8.42	67.4 - 97.1	58.6 - 106

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	154	144	7.54	117 - 171	101 - 187
Tin	89.7	79.8	14.0	62.2 - 97.4	43.5 - 116
Titanium	705	546	10.3	123 - 969	118 - 974
Uranium	29.5	30.9	3.38	23.9 - 37.9	21.3 - 40.5
Vanadium	196	186	14.2	148 - 224	138 - 235
Zinc	307	295	10.4	240 - 351	207 - 384

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

Calculation of Method 6020 Metals

Aqueous Samples

The instrument will calculate the concentration (µg/L). This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, mg/L} = C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)$$

Where:

C_s = Concentration of sample (µg/L)

DF = Dilution Factor

Alpha ICPMSQ2 Seq

8/23/2024 5:34:46 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	8/23/2024 4:50:56 AM
2	CAL LOT #M23-1225	0	1	3	1	8/23/2024 4:55:22 AM
3	Blank EJF ICPMSQ	4	49	3	1	8/23/2024 4:59:48 AM
4	0.2/20 Cal	0	2	3	1	8/23/2024 5:04:19 AM
5	1/100 Cal	0	3	3	1	8/23/2024 5:08:46 AM
6	10/1000 Cal	0	4	3	1	8/23/2024 5:13:13 AM
7	60/6000 Cal	0	5	3	1	8/23/2024 5:17:41 AM
8	120/12000 Cal	0	6	3	1	8/23/2024 5:22:09 AM
9	Sr 200ppb	4	55	3	1	8/23/2024 5:27:36 AM
10	ICV	0	7	3	1	8/23/2024 5:32:07 AM
11	ICB	0	10	3	1	8/23/2024 5:36:37 AM
12	ICSA	4	53	3	1	8/23/2024 5:44:43 AM
13	xLDR	4	2	3	1	8/23/2024 5:49:14 AM
14	Rinse	0	1	3	1	8/23/2024 5:53:44 AM
15	CCV	0	9	3	1	8/23/2024 5:58:10 AM
16	CCB	0	10	3	1	8/23/2024 6:02:41 AM
17	LDR	4	1	3	1	8/23/2024 6:12:28 AM
18	LDR Check (5x ICSA)	4	2	3	1	8/23/2024 6:16:58 AM
19	LDR Check (5/.5ppm)	4	3	3	1	8/23/2024 6:24:11 AM
20	CCV	0	9	3	1	8/23/2024 6:31:06 AM
21	CCB	0	10	3	1	8/23/2024 6:35:37 AM
22	L2446922-03d20 6020TL	1	1	3	1	8/23/2024 6:44:10 AM
23	L2446922-04d20 6020TL	1	2	3	1	8/23/2024 6:48:36 AM
24	L2446922-05d20 6020TL	1	3	3	1	8/23/2024 6:53:03 AM
25	L2446922-06d20 6020TL	1	4	3	1	8/23/2024 6:57:30 AM
26	LDR Check (2x ICSA)	4	4	3	1	8/23/2024 7:01:58 AM
27	I2446863-02 6020SL	1	5	3	1	8/23/2024 7:08:01 AM
28	I2446863-03 6020SL	1	6	3	1	8/23/2024 7:12:29 AM
29	I2446863-04 6020SL	1	7	3	1	8/23/2024 7:16:57 AM
30	I2446863-05 6020SL	1	8	3	1	8/23/2024 7:21:25 AM
31	I2446863-06 6020SL	1	9	3	1	8/23/2024 7:25:54 AM
32	CCV	0	9	3	1	8/23/2024 7:34:02 AM
33	CCB	0	10	3	1	8/23/2024 7:38:33 AM
34	LDR Check (1/.1ppm)	4	5	3	1	8/23/2024 7:44:25 AM
35	xL2446713-02 6020TL	1	10	3	1	8/23/2024 7:52:58 AM
36	xL2446713-03 6020TL	1	11	3	1	8/23/2024 7:57:28 AM
37	xL2446713-04 6020TL	1	12	3	1	8/23/2024 8:01:57 AM
38	WG1962103-1 MCP-6020SL-10	1	10	3	1	8/23/2024 8:14:17 AM
39	WG1962103-2d10 MCP-6020SL-10	1	11	3	1	8/23/2024 8:18:46 AM
40	WG1962103-3d10 MCP-6020SL-10	1	12	3	1	8/23/2024 8:23:16 AM
41	L2446755-01 MCP-6020SL-10	1	13	3	1	8/23/2024 8:27:46 AM
42	I2446632-01 CT-6020TL	1	14	3	1	8/23/2024 8:32:12 AM
43	I2446632-02 CT-6020TL	1	15	3	1	8/23/2024 8:36:38 AM
44	CCV	0	9	3	1	8/23/2024 8:41:04 AM
45	CCB	0	10	3	1	8/23/2024 8:45:35 AM
46	CCV	0	9	3	1	8/23/2024 8:55:09 AM
47	CCB	0	10	3	1	8/23/2024 8:59:40 AM
48	I2446632-03 CT-6020TL	1	16	3	1	8/23/2024 9:07:36 AM
49	I2446632-04 CT-6020TL	1	17	3	1	8/23/2024 9:12:03 AM
50	I2446632-05 CT-6020TL	1	18	3	1	8/23/2024 9:17:37 AM
51	I2446632-06 CT-6020TL	1	19	3	1	8/23/2024 9:22:04 AM

Alpha ICPMSQ2 Seq

8/23/2024 5:34:46 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	8/23/2024 9:26:32 AM
53	CCB	0	10	3	1	8/23/2024 9:31:03 AM
54	I2446709-01 2008TL	1	20	3	1	8/23/2024 9:38:08 AM
55	I2446709-02 2008TL	1	21	3	1	8/23/2024 9:42:36 AM
56	I2446711-01 2008TL	1	22	3	1	8/23/2024 9:47:04 AM
57	I2446711-02 2008TL	1	23	3	1	8/23/2024 9:52:29 AM
58	I2446860-01d10 2008TL	1	24	3	1	8/23/2024 9:56:58 AM
59	I2446860-02d10 2008TL	1	25	3	1	8/23/2024 10:01:27 AM
60	I2446915-01 2008TL	1	26	3	1	8/23/2024 10:05:53 AM
61	CCV	0	9	3	1	8/23/2024 10:10:19 AM
62	CCB	0	10	3	1	8/23/2024 10:14:50 AM
63	CCV	0	9	3	1	8/23/2024 10:34:36 AM
64	CCB	0	10	3	1	8/23/2024 10:39:55 AM
65	WG1962897-1 6020TL	1	27	3	1	8/23/2024 11:03:29 AM
66	WG1962897-2d10 6020TL	1	28	3	1	8/23/2024 11:07:56 AM
67	L2447503-07 6020TL	1	29	3	1	8/23/2024 11:12:22 AM
68	WG1962897-3d10 6020TL	1	30	3	1	8/23/2024 11:16:50 AM
69	WG1962897-4d10 6020TL	1	31	3	1	8/23/2024 11:21:17 AM
70	WG1962897-5d10 6020TL	1	32	3	1	8/23/2024 11:25:45 AM
71	WG1962897-6d5 6020TL	1	33	3	1	8/23/2024 11:30:13 AM
72	L2447503-07d10 6020TL	1	40	3	1	8/23/2024 11:34:41 AM
73	WG1962897-6d50 6020TL	1	41	3	1	8/23/2024 11:39:08 AM
74	L2448142-01 6020TL	1	34	3	1	8/23/2024 11:43:35 AM
75	CCV	0	9	3	1	8/23/2024 11:50:24 AM
76	CCB	0	10	3	1	8/23/2024 11:54:54 AM
77	CCB	0	10	3	1	8/23/2024 12:07:33 PM
78	L2448142-02 6020TL	1	35	3	1	8/23/2024 12:15:12 PM
79	L2448142-03 6020TL	1	36	3	1	8/23/2024 12:19:40 PM
80	L2448142-04 6020TL	1	37	3	1	8/23/2024 12:24:09 PM
81	L2448142-05 6020TL	1	38	3	1	8/23/2024 12:28:36 PM
82	L2448142-06 6020TL	1	39	3	1	8/23/2024 12:33:03 PM
83	L2448142-01d20 6020TL	1	42	3	1	8/23/2024 12:37:30 PM
84	LDR 20,000 Na	1	43	3	1	8/23/2024 12:52:19 PM
85	L2448142-02d20 6020TL	1	44	3	1	8/23/2024 12:58:29 PM
86	L2448142-03d20 6020TL	1	45	3	1	8/23/2024 1:02:57 PM
87	L2448142-04d100 6020TL	1	46	3	1	8/23/2024 1:07:26 PM
88	CCV	0	9	3	1	8/23/2024 1:11:55 PM
89	CCB	0	10	3	1	8/23/2024 1:16:26 PM
90	L2448142-05d20 6020TL	1	47	3	1	8/23/2024 1:24:17 PM
91	L2448142-06d20 6020TL	1	48	3	1	8/23/2024 1:28:45 PM
92	L2448142-03d100 6020TL	1	49	3	1	8/23/2024 1:33:15 PM
93	CCV	0	9	3	1	8/23/2024 1:38:42 PM
94	CCB	0	10	3	1	8/23/2024 1:43:13 PM
95	WG1962640-1 2008SL	1	50	3	1	8/23/2024 2:05:56 PM
96	WG1962640-2d10 2008SL	1	51	3	1	8/23/2024 2:10:22 PM
97	L2447880-06 2008SL	1	52	3	1	8/23/2024 2:14:50 PM
98	WG1962640-3d10 2008SL	1	53	3	1	8/23/2024 2:19:17 PM
99	WG1962640-4d10 2008SL	1	54	3	1	8/23/2024 2:23:45 PM
100	L2447886-01 2008SL	1	55	3	1	8/23/2024 2:28:13 PM
101	WG1962640-5d10 2008SL	1	56	3	1	8/23/2024 2:32:41 PM
102	WG1962640-6d10 2008SL	1	57	3	1	8/23/2024 2:37:10 PM
103	L2447880-01 2008SL	1	58	3	1	8/23/2024 2:41:39 PM
104	L2447880-02 2008SL	1	59	3	1	8/23/2024 2:46:08 PM
105	CCV	0	9	3	1	8/23/2024 2:50:38 PM
106	CCB	0	10	3	1	8/23/2024 2:55:10 PM
107	L2447880-03 2008SL	1	60	3	1	8/23/2024 3:06:06 PM

Alpha ICPMSQ2 Seq

8/23/2024 5:34:46 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
108	L2447880-04 2008SL	2	1	3	1	8/23/2024 3:10:35 PM
109	L2447880-05 2008SL	2	2	3	1	8/23/2024 3:15:03 PM
110	L2447880-10 2008SL	2	3	3	1	8/23/2024 3:19:31 PM
111	L2447880-11 2008SL	2	4	3	1	8/23/2024 3:23:59 PM
112	L2447880-12 2008SL	2	5	3	1	8/23/2024 3:28:27 PM
113	L2447880-13 2008SL	2	6	3	1	8/23/2024 3:32:55 PM
114	L2447886-02 2008SL	2	7	3	1	8/23/2024 3:37:23 PM
115	L2447886-03 2008SL	2	8	3	1	8/23/2024 3:41:52 PM
116	L2447886-04 2008SL	2	9	3	1	8/23/2024 3:46:20 PM
117	CCV	0	9	3	1	8/23/2024 3:50:49 PM
118	CCB	0	10	3	1	8/23/2024 3:55:21 PM
119	L2447886-05 2008SL	2	10	3	1	8/23/2024 4:03:59 PM
120	L2447886-06 2008SL	2	11	3	1	8/23/2024 4:08:28 PM
121	L2447886-07 2008SL	2	12	3	1	8/23/2024 4:12:57 PM
122	L2447886-08 2008SL	2	13	3	1	8/23/2024 4:17:27 PM
123	L2447886-09 2008SL	2	14	3	1	8/23/2024 4:21:55 PM
124	L2447886-13 2008SL	2	15	3	1	8/23/2024 4:26:24 PM
125	CCV	0	9	3	1	8/23/2024 4:35:23 PM
126	CCB	0	10	3	1	8/23/2024 4:39:54 PM
127	CCB	0	10	3	1	8/23/2024 4:51:20 PM
128	WG1962132-1 2008TL	2	16	3	1	8/23/2024 4:56:47 PM
129	I2447529-14 2008TL	2	21	3	1	8/23/2024 5:01:14 PM
130	WG1962132-2d10 2008TL	2	17	3	1	8/23/2024 5:05:43 PM
131	I2446776-01 2008TL	2	18	3	1	8/23/2024 5:10:12 PM
132	WG1962132-3d10 2008TL	2	19	3	1	8/23/2024 5:14:40 PM
133	WG1962132-4 2008TL	2	20	3	1	8/23/2024 5:19:09 PM
134	CCV	0	9	3	1	8/23/2024 5:23:38 PM
135	CCB	0	10	3	1	8/23/2024 5:28:10 PM
136	wg1962580-1 6020TL	2	22	3	1	
137	wg1962580-2d10 6020TL	2	23	3	1	
138	L2446876-01 6020TL	2	24	3	1	
139	wg1962580-3d10 6020TL	2	25	3	1	
140	wg1962580-4 6020TL	2	26	3	1	
141	wg1962580-5d10 6020TL	2	27	3	1	
142	wg1962580-6d5 6020TL	2	28	3	1	
143	L2446779-01 6020TL	2	29	3	1	
144	L2446779-02 6020TL	2	30	3	1	
145	L2446853-01 6020TL	2	31	3	1	
146	CCV	0	9	3	1	
147	CCB	0	10	3	1	
148	WG1962105-1 MCP-6020SL-10	2	34	3	1	
149	WG1962105-2d10 MCP-6020SL-10	2	35	3	1	
150	WG1962105-3d10 MCP-6020SL-10	2	36	3	1	
151	L2446876-02 6020TL	2	32	3	1	
152	L2446876-03 6020TL	2	33	3	1	
153	I2446951-06 MCP-6020SL-10	2	37	3	1	
154	WG1962105-4d10 MCP-6020SL-10	2	38	3	1	
155	WG1962105-5d10 MCP-6020SL-10	2	39	3	1	
156	WG1962105-7d10 MCP-6020SL-10	2	40	3	1	
157	WG1962105-6d5 MCP-6020SL-10	2	41	3	1	
158	CCV	0	9	3	1	
159	CCB	0	10	3	1	
160	I2446951-01 MCP-6020SL-10	2	42	3	1	
161	I2446951-02 MCP-6020SL-10	2	43	3	1	
162	I2446951-03 MCP-6020SL-10	2	44	3	1	
163	I2446951-04 MCP-6020SL-10	2	45	3	1	

Alpha ICPMSQ2 Seq

8/23/2024 5:34:46 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
164	I2446951-05 MCP-6020SL-10	2	46	3	1	
165	I2446951-07 MCP-6020SL-10	2	47	3	1	
166	I2446951-08 MCP-6020SL-10	2	48	3	1	
167	I2446951-09 MCP-6020SL-10	2	49	3	1	
168	I2446951-11 MCP-6020SL-10	2	50	3	1	
169	I2446951-12 MCP-6020SL-10	2	51	3	1	
170	CCV	0	9	3	1	
171	CCB	0	10	3	1	
172	I2446951-13 MCP-6020SL-10	2	52	3	1	
173	I2446951-14d10 MCP-6020SL-10	2	53	3	1	
174	CCV	0	9	3	1	
175	CCB	0	10	3	1	
176	CCV	0	9	3	1	
177	CCB	0	10	3	1	
178	CCV	0	9	3	1	
179	CCB	0	10	3	1	
180	CCV	0	9	3	1	
181	CCB	0	10	3	1	

Alpha ICPMSQ2 Seq

8/27/2024 10:28:24 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	8/27/2024 4:54:39 AM
2	CAL LOT #M23-1225	0	1	3	1	8/27/2024 4:59:04 AM
3	Blank EJF ICPMSQ2	4	49	3	1	8/27/2024 5:03:30 AM
4	0.2/20 Cal	0	2	3	1	8/27/2024 5:08:01 AM
5	1/100 Cal	0	3	3	1	8/27/2024 5:12:28 AM
6	10/1000 Cal	0	4	3	1	8/27/2024 5:16:55 AM
7	60/6000 Cal	0	5	3	1	8/27/2024 5:21:23 AM
8	120/12000 Cal	0	6	3	1	8/27/2024 5:25:51 AM
9	Sr 200ppb	4	55	3	1	8/27/2024 5:32:59 AM
10	ICV	0	7	3	1	8/27/2024 5:37:30 AM
11	ICB	0	10	3	1	8/27/2024 5:42:00 AM
12	ICSA	4	53	3	1	8/27/2024 5:50:12 AM
13	LDR	4	1	3	1	8/27/2024 5:54:43 AM
14	Rinse	0	1	3	1	8/27/2024 5:59:13 AM
15	xCCV	0	9	3	1	8/27/2024 6:03:39 AM
16	xCCB	0	10	3	1	8/27/2024 6:08:10 AM
17	CCV	0	9	3	1	8/27/2024 6:10:13 AM
18	CCB	0	10	3	1	8/27/2024 6:14:44 AM
19	LDR Check (2x ICSA)	4	2	3	1	8/27/2024 6:26:28 AM
20	LDR Check (5x ICSA)	4	3	3	1	8/27/2024 6:30:59 AM
21	Rinse	0	1	3	1	8/27/2024 6:38:05 AM
22	CCV	0	9	3	1	8/27/2024 6:42:31 AM
23	CCB	0	10	3	1	8/27/2024 6:47:01 AM
24	WG1963135-1d10 A2-6020T	1	1	3	1	8/27/2024 6:55:53 AM
25	WG1963135-2d10 A2-6020T	1	2	3	1	8/27/2024 7:00:20 AM
26	L2445805-01d10 A2-6020T	1	3	3	1	8/27/2024 7:04:47 AM
27	WG1963135-3d10 A2-6020T	1	4	3	1	8/27/2024 7:09:14 AM
28	WG1963135-4d10 A2-6020T	1	5	3	1	8/27/2024 7:13:42 AM
29	WG1963135-5d10 A2-6020T	1	6	3	1	8/27/2024 7:18:10 AM
30	WG1963135-6d50 A2-6020T	1	7	3	1	8/27/2024 7:22:38 AM
31	L2445747-01d10 A2-6020T	1	8	3	1	8/27/2024 7:27:06 AM
32	L2445747-03d10 A2-6020T	1	9	3	1	8/27/2024 7:31:35 AM
33	LDR Check - Cr 1 ppm	1	19	3	1	8/27/2024 7:36:04 AM
34	CCV	0	9	3	1	8/27/2024 7:44:58 AM
35	CCB	0	10	3	1	8/27/2024 7:49:29 AM
36	L2445747-05d10 A2-6020T	1	10	3	1	8/27/2024 7:54:35 AM
37	L2445747-07d10 A2-6020T	1	11	3	1	8/27/2024 7:59:04 AM
38	L2445747-16d10 A2-6020T	1	12	3	1	8/27/2024 8:03:34 AM
39	L2445805-02d10 A2-6020T	1	13	3	1	8/27/2024 8:08:05 AM
40	L2445805-03d10 A2-6020T	1	14	3	1	8/27/2024 8:12:56 AM
41	L2445805-04d10 A2-6020T	1	15	3	1	8/27/2024 8:17:23 AM
42	L2445805-05d10 A2-6020T	1	16	3	1	8/27/2024 8:21:49 AM
43	L2445805-06d10 A2-6020T	1	17	3	1	8/27/2024 8:26:17 AM
44	L2445805-07d10 A2-6020T	1	18	3	1	8/27/2024 8:30:44 AM
45	CCV	0	9	3	1	8/27/2024 8:35:14 AM
46	CCB	0	10	3	1	8/27/2024 8:39:45 AM
47	xWG1963148-1 A2-6020T	1	20	3	1	8/27/2024 8:47:58 AM
48	xWG1963148-2d10 A2-6020T	1	21	3	1	8/27/2024 8:52:26 AM
49	xl2447194-06 A2-6020T	1	22	3	1	8/27/2024 8:56:55 AM
50	xWG1963148-3d10 A2-6020T	1	23	3	1	8/27/2024 9:01:24 AM
51	xWG1963148-4d10 A2-6020T	1	24	3	1	8/27/2024 9:05:53 AM

Alpha ICPMSQ2 Seq

8/27/2024 10:28:24 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	xWG1963148-5d10 A2-6020T	1	25	3	1	8/27/2024 9:10:22 AM
53	xWG1963148-6d5 A2-6020T	1	26	3	1	8/27/2024 9:14:49 AM
54	xl2445805-08 A2-6020T	1	27	3	1	8/27/2024 9:19:15 AM
55	xl2447194-06d10 A2-6020T	1	28	3	1	8/27/2024 9:36:38 AM
56	xl2447194-06d20 A2-6020T	1	30	3	1	8/27/2024 9:41:33 AM
57	CCV	0	9	3	1	8/27/2024 9:46:01 AM
58	CCB	0	10	3	1	8/27/2024 9:50:33 AM
59	CCV	0	9	3	1	8/27/2024 10:15:55 AM
60	CCB	0	10	3	1	8/27/2024 10:20:23 AM

Alpha ICPMSQ2 Seq

8/28/2024 6:11:49 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	8/27/2024 10:25:10 AM
2	CAL LOT #M23-1225	0	1	3	1	8/27/2024 10:29:36 AM
3	Blank NTB ICPMSQ2	4	49	3	1	8/27/2024 10:34:02 AM
4	0.2/20 Cal	0	2	3	1	8/27/2024 10:38:34 AM
5	1/100 Cal	0	3	3	1	8/27/2024 10:43:01 AM
6	10/1000 Cal	0	4	3	1	8/27/2024 10:47:29 AM
7	60/6000 Cal	0	5	3	1	8/27/2024 10:51:57 AM
8	120/12000 Cal	0	6	3	1	8/27/2024 10:56:26 AM
9	Sr 200ppb	4	55	3	1	8/27/2024 11:00:55 AM
10	ICV	0	7	3	1	8/27/2024 11:05:27 AM
11	ICB	0	10	3	1	8/27/2024 11:09:57 AM
12	ICSA	4	53	3	1	8/27/2024 11:15:08 AM
13	LDR	4	1	3	1	8/27/2024 11:19:39 AM
14	LDR Check - ICSA 2x	4	2	3	1	8/27/2024 11:31:46 AM
15	Rinse	0	1	3	1	8/27/2024 11:38:23 AM
16	CCV	0	9	3	1	8/27/2024 11:42:49 AM
17	CCB	0	10	3	1	8/27/2024 11:47:20 AM
18	WG1963148-1 A2-6020T	1	20	3	1	8/27/2024 11:52:05 AM
19	I2445805-08 A2-6020T	1	27	3	1	8/27/2024 11:56:33 AM
20	WG1963148-2d10 A2-6020T	1	21	3	1	8/27/2024 12:00:59 PM
21	I2447194-06d20 A2-6020T	1	30	3	1	8/27/2024 12:05:28 PM
22	WG1963148-3d10 A2-6020T	1	23	3	1	8/27/2024 12:09:55 PM
23	WG1963148-4d10 A2-6020T	1	24	3	1	8/27/2024 12:14:24 PM
24	WG1963148-5d10 A2-6020T	1	25	3	1	8/27/2024 12:18:54 PM
25	WG1963148-6d100 A2-6020T	1	31	3	1	8/27/2024 12:23:20 PM
26	CCV	0	9	3	1	8/27/2024 12:30:20 PM
27	CCB	0	10	3	1	8/27/2024 12:34:52 PM
28	WG1956857-1d5 A2-SEM	1	32	3	1	8/27/2024 12:41:59 PM
29	WG1956857-2d10 A2-SEM	1	33	3	1	8/27/2024 12:46:27 PM
30	L2442888-01d5 A2-SEM	1	34	3	1	8/27/2024 12:50:56 PM
31	WG1956857-3d10 A2-SEM	1	35	3	1	8/27/2024 12:55:24 PM
32	WG1956857-4d5 A2-SEM	1	36	3	1	8/27/2024 12:59:53 PM
33	L2442888-02d5 A2-SEM	1	37	3	1	8/27/2024 1:04:22 PM
34	L2442888-03d5 A2-SEM	1	38	3	1	8/27/2024 1:08:49 PM
35	L2442888-04d5 A2-SEM	1	39	3	1	8/27/2024 1:13:16 PM
36	L2442888-05d5 A2-SEM	1	40	3	1	8/27/2024 1:17:43 PM
37	empty	1	41	3	1	8/27/2024 1:22:10 PM
38	CCV	0	9	3	1	8/27/2024 1:23:55 PM
39	CCB	0	10	3	1	8/27/2024 1:28:26 PM
40	L2447382-01 6020TL	1	42	3	1	8/27/2024 1:41:48 PM
41	L2447382-02 6020TL	1	43	3	1	8/27/2024 1:46:16 PM
42	L2447503-01 6020TL	1	44	3	1	8/27/2024 1:50:44 PM
43	L2447503-02 6020TL	1	45	3	1	8/27/2024 1:55:12 PM
44	L2447503-03 6020TL	1	46	3	1	8/27/2024 1:59:41 PM
45	L2447503-04 6020TL	1	47	3	1	8/27/2024 2:04:10 PM
46	L2447503-05 6020TL	1	48	3	1	8/27/2024 2:08:39 PM
47	L2447503-06 6020TL	1	49	3	1	8/27/2024 2:13:09 PM
48	L2447503-08 6020TL	1	50	3	1	8/27/2024 2:17:36 PM
49	L2447503-09 6020TL	1	51	3	1	8/27/2024 2:22:03 PM
50	CCV	0	9	3	1	8/27/2024 2:26:31 PM
51	CCB	0	10	3	1	8/27/2024 2:31:02 PM

Alpha ICPMSQ2 Seq

8/28/2024 6:11:49 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	L2447503-10 6020TL	1	52	3	1	8/27/2024 2:36:35 PM
53	L2447503-11 6020TL	1	53	3	1	8/27/2024 2:41:02 PM
54	LDR Check - Na 100 ppm	1	54	3	1	8/27/2024 2:45:30 PM
55	CCV	0	9	3	1	8/27/2024 2:50:57 PM
56	CCB	0	10	3	1	8/27/2024 2:55:28 PM
57	WG1963935-1 6020TL	1	55	3	1	8/27/2024 3:03:11 PM
58	WG1963935-2d10 6020TL	1	56	3	1	8/27/2024 3:07:39 PM
59	WG1963935-4 6020TL	1	57	3	1	8/27/2024 3:12:07 PM
60	WG1963935-3d10 6020TL	1	58	3	1	8/27/2024 3:16:36 PM
61	I2447483-01 6020TL	1	59	3	1	8/27/2024 3:21:05 PM
62	WG1963935-5d10 6020TL	1	60	3	1	8/27/2024 3:25:34 PM
63	WG1963935-6d5 6020TL	2	1	3	1	8/27/2024 3:30:04 PM
64	I2447483-02 6020TL	2	2	3	1	8/27/2024 3:34:32 PM
65	I2447483-03 6020TL	2	3	3	1	8/27/2024 3:39:00 PM
66	I2447483-04 6020TL	2	4	3	1	8/27/2024 3:43:28 PM
67	CCV	0	9	3	1	8/27/2024 3:47:56 PM
68	CCB	0	10	3	1	8/27/2024 3:52:27 PM
69	I2447483-05 6020TL	2	5	3	1	8/27/2024 3:59:21 PM
70	I2447483-06 6020TL	2	6	3	1	8/27/2024 4:06:18 PM
71	I2447483-07 6020TL	2	7	3	1	8/27/2024 4:10:46 PM
72	I2447483-08 6020TL	2	8	3	1	8/27/2024 4:15:14 PM
73	I2447483-09 6020TL	2	9	3	1	8/27/2024 4:19:42 PM
74	I2447483-10 6020TL	2	10	3	1	8/27/2024 4:24:11 PM
75	I2447483-11 6020TL	2	11	3	1	8/27/2024 4:28:40 PM
76	I2447483-12 6020TL	2	12	3	1	8/27/2024 4:33:10 PM
77	I2447483-03d10 6020TL	2	13	3	1	8/27/2024 4:37:39 PM
78	I2447483-04d10 6020TL	2	14	3	1	8/27/2024 4:42:08 PM
79	CCV	0	9	3	1	8/27/2024 4:46:36 PM
80	CCB	0	10	3	1	8/27/2024 4:51:08 PM
81	wg1963944-1 6020SL	2	15	3	1	8/27/2024 5:21:30 PM
82	wg1963944-2d10 6020SL	2	16	3	1	8/27/2024 5:25:57 PM
83	L2447503-07 6020SL	2	17	3	1	8/27/2024 5:30:25 PM
84	wg1963944-3d10 6020SL	2	18	3	1	8/27/2024 5:34:54 PM
85	wg1963944-4d10 6020SL	2	19	3	1	8/27/2024 5:39:22 PM
86	wg1963944-5d10 6020SL	2	20	3	1	8/27/2024 5:43:51 PM
87	wg1963944-6d5 6020SL	2	21	3	1	8/27/2024 5:48:19 PM
88	L2447503-01 6020SL	2	27	3	1	8/27/2024 5:52:48 PM
89	L2447503-02 6020SL	2	28	3	1	8/27/2024 5:57:17 PM
90	L2447503-03 6020SL	2	29	3	1	8/27/2024 6:01:46 PM
91	CCV	0	9	3	1	8/27/2024 6:06:15 PM
92	CCB	0	10	3	1	8/27/2024 6:10:46 PM
93	L2447503-10 6020SL	2	35	3	1	8/27/2024 6:17:26 PM
94	wg1964021-1 6020TL	2	43	3	1	8/27/2024 6:21:56 PM
95	L2447503-04 6020SL	2	30	3	1	8/27/2024 6:26:25 PM
96	L2447503-05 6020SL	2	31	3	1	8/27/2024 6:30:53 PM
97	L2447503-06 6020SL	2	32	3	1	8/27/2024 6:35:22 PM
98	L2447503-08 6020SL	2	33	3	1	8/27/2024 6:39:51 PM
99	L2447503-09 6020SL	2	34	3	1	8/27/2024 6:44:20 PM
100	wg1964021-2d10 6020TL	2	44	3	1	8/27/2024 6:48:50 PM
101	L2447417-01d10 6020TL	2	50	3	1	8/27/2024 6:53:19 PM
102	L2447417-04d10 6020TL	2	51	3	1	8/27/2024 6:57:48 PM
103	CCV	0	9	3	1	8/27/2024 7:02:17 PM
104	CCB	0	10	3	1	8/27/2024 7:06:49 PM
105	L2447832-08 6020SL	2	42	3	1	8/27/2024 7:11:22 PM
106	L2447832-01 6020TL	2	45	3	1	8/27/2024 7:15:51 PM
107	wg1964021-3d10 6020TL	2	46	3	1	8/27/2024 7:20:20 PM

Alpha ICPMSQ2 Seq

8/28/2024 6:11:49 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
108	wg1964021-4d10 6020TL	2	47	3	1	8/27/2024 7:24:49 PM
109	wg1964021-5d10 6020TL	2	48	3	1	8/27/2024 7:29:19 PM
110	wg1964021-6d10 6020TL	2	49	3	1	8/27/2024 7:33:49 PM
111	L2447417-09d10 6020TL	2	52	3	1	8/27/2024 7:38:19 PM
112	L2447417-10d10 6020TL	2	53	3	1	8/27/2024 7:42:48 PM
113	L2447501-01 6020TL	2	54	3	1	8/27/2024 7:47:17 PM
114	L2447501-02 6020TL	2	55	3	1	8/27/2024 7:51:47 PM
115	CCV	0	9	3	1	8/27/2024 7:56:17 PM
116	CCB	0	10	3	1	8/27/2024 8:00:49 PM
117	L2447832-01 6020SL	2	22	3	1	8/27/2024 8:05:21 PM
118	wg1963944-7d10 6020SL	2	23	3	1	8/27/2024 8:09:51 PM
119	wg1963944-8d10 6020SL	2	24	3	1	8/27/2024 8:14:21 PM
120	wg1963944-9d10 6020SL	2	25	3	1	8/27/2024 8:18:51 PM
121	wg1963944-10d5 6020SL	2	26	3	1	8/27/2024 8:23:20 PM
122	L2447832-02 6020SL	2	36	3	1	8/27/2024 8:27:49 PM
123	L2447832-03 6020SL	2	37	3	1	8/27/2024 8:32:20 PM
124	L2447832-04 6020SL	2	38	3	1	8/27/2024 8:36:49 PM
125	L2447832-05 6020SL	2	39	3	1	8/27/2024 8:41:18 PM
126	L2447832-06 6020SL	2	40	3	1	8/27/2024 8:45:47 PM
127	CCV	0	9	3	1	8/27/2024 8:50:16 PM
128	CCB	0	10	3	1	8/27/2024 8:54:48 PM
129	L2447832-08 6020TL	3	2	3	1	8/27/2024 8:59:21 PM
130	L2447832-07 6020SL	2	41	3	1	8/27/2024 9:03:51 PM
131	L2447832-02 6020TL	2	56	3	1	8/27/2024 9:08:20 PM
132	L2447832-03 6020TL	2	57	3	1	8/27/2024 9:12:50 PM
133	L2447832-04 6020TL	2	58	3	1	8/27/2024 9:17:19 PM
134	L2447832-05 6020TL	2	59	3	1	8/27/2024 9:21:49 PM
135	L2447832-06 6020TL	2	60	3	1	8/27/2024 9:26:19 PM
136	L2447832-07 6020TL	3	1	3	1	8/27/2024 9:30:49 PM
137	L2448458-01 6020TL	3	3	3	1	8/27/2024 9:35:19 PM
138	L2448458-02 6020TL	3	4	3	1	8/27/2024 9:39:49 PM
139	CCV	0	9	3	1	8/27/2024 9:44:19 PM
140	CCB	0	10	3	1	8/27/2024 9:48:51 PM
141	L2448458-03 6020TL	3	5	3	1	8/27/2024 9:53:24 PM
142	L2448458-04 6020TL	3	6	3	1	8/27/2024 9:57:54 PM
143	L2448458-05 6020TL	3	7	3	1	8/27/2024 10:02:24 PM
144	CCV	0	9	3	1	8/27/2024 10:06:54 PM
145	CCB	0	10	3	1	8/27/2024 10:11:26 PM
146	CCV	0	9	3	1	8/27/2024 10:15:59 PM
147	CCB	0	10	3	1	8/27/2024 10:20:31 PM

METALS ELN REPORT

Workgroup: WG1962897

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO324331 40750ADG	1:1 HCl	tHCL243420 0339CLH	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	326, 140

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2447342-01 WATER	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447382-01 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447382-02 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-01 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-02 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-03 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-04 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-05 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-06 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-07 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-08 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-09 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-10 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2447503-11 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	

Reported: 28-AUG-24 01:34 PM

METALS ELN REPORT

Workgroup: WG1962897

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2448142-01 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2448142-02 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2448142-03 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2448142-04 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2448142-05 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
L2448142-06 SAMP	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
WG1962897-1 BLANK	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	
WG1962897-2 LCS	08/23/24 07:40	Alexander Gonatas	50	<2	0.5	08/23/24 07:40	9	95.0	08/23/24 10:40	50	ELN: JDH
WG1962897-3 MS	08/23/24 07:40	Alexander Gonatas	50	<2	0.5	08/23/24 07:40	9	95.0	08/23/24 10:40	50	
WG1962897-4 MSD	08/23/24 07:40	Alexander Gonatas	50	<2	0.5	08/23/24 07:40	9	95.0	08/23/24 10:40	50	FM2433121954 CLH
WG1962897-5 PS	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	IPS2430270135FAC
WG1962897-6 SERDIL	08/23/24 07:40	Alexander Gonatas	50	<2		08/23/24 07:40	9	95.0	08/23/24 10:40	50	

Reported: 28-AUG-24 01:34 PM

METALS ELN REPORT

Workgroup: WG1962897

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 28-AUG-24 01:34 PM

METALS ELN REPORT

Workgroup: WG1963944

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO324331 40750ADG	1:1 HCl	tHCL243420 0339CLH	METALS	METSPIKE2	IPS,FPS,MIX	METPSMS	IPS,FPS,MIX	140, 326

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
L2447503-01 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-02 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-03 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-04 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-05 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-06 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-07 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-08 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-09 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	L
L2447503-10 SAMP	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	J
L2447832-01 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X
L2447832-02 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X
L2447832-03 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X
L2447832-04 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X

Reported: 28-AUG-24 01:34 PM

METALS ELN REPORT

Workgroup: WG1963944

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
L2447832-05 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X
L2447832-06 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X
L2447832-07 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X
L2447832-08 SAMP	08/26/24 18:22	Maisie Mcqueen	08-23-24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	X
WG1963944-1 BLANK	08/26/24 18:22	Maisie Mcqueen	08/23/24 01:45	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	FM2434201112 CME
WG1963944-2 LCS	08/26/24 18:22	Maisie Mcqueen	NA	50	<2	0.5	08/26/24 18:22	7	94.9	08/26/24 21:22	50	ELN: CLH
WG1963944-3 MS	08/26/24 18:22	Maisie Mcqueen	NA	50	<2	0.5	08/26/24 18:22	7	94.9	08/26/24 21:22	50	
WG1963944-4 MSD	08/26/24 18:22	Maisie Mcqueen	NA	50	<2	0.5	08/26/24 18:22	7	94.9	08/26/24 21:22	50	
WG1963944-5 PS	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	
WG1963944-6 SERDIL	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	
WG1963944-7 MS	08/26/24 18:22	Maisie Mcqueen	NA	50	<2	0.5	08/26/24 18:22	7	94.9	08/26/24 21:22	50	
WG1963944-8 MSD	08/26/24 18:22	Maisie Mcqueen	NA	50	<2	0.5	08/26/24 18:22	7	94.9	08/26/24 21:22	50	
WG1963944-9 PS	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	
WG1963944-10 SERDIL	08/26/24 18:22	Maisie Mcqueen	NA	50	<2		08/26/24 18:22	7	94.9	08/26/24 21:22	50	IPS2430270135FAC

Reported: 28-AUG-24 01:34 PM

METALS ELN REPORT

Workgroup: WG1963944

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 28-AUG-24 01:34 PM

Inorganic Data
(Mercury Analysis)

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 12:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: JWN
Lab File ID	: WG1962903.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1962900-1	**Date Collected**	: NA
Client ID	: WG1962900-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/23/24 11:55
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: JWN
Lab File ID	: WG1962903.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 14:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 14:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 14:42
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 14:45
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 14:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 15:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 15:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-10	**Date Collected**	: 08/20/24 11:35
Client ID	: FIELD BLANK	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 15:11
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-11	**Date Collected**	: 08/20/24 09:30
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 15:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: DJR
Lab File ID	: WG1963424.pdf	**Instrument ID**	: NIC3
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:11
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:47
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-10	**Date Collected**	: 08/20/24 11:35
Client ID	: FIELD BLANK	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 14:53
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963948-1	**Date Collected**	: NA
Client ID	: WG1963948-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/27/24 13:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: MJR
Lab File ID	: WG1964330.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R1867717-1			R1867717-3			R1867717-5		R1867717-7	
Date Analyzed	:	08/23/24 06:47			08/23/24 08:19			08/23/24 08:52		08/23/24 10:31	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury		0.00300	0.0032	105	0.0050	0.00530	105	0.00530	105	0.00530	106

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1867717-9						
Date Analyzed :				08/23/24 12:11						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00530	107				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC3	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1868149-1			R1868149-3			R1868149-5		R1868149-7	
Date Analyzed :	08/24/24 13:07			08/24/24 13:52			08/24/24 14:16		08/24/24 14:49	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury	0.00300	0.0029	96	0.0050	0.00490	99	0.00490	99	0.00500	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC3	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1868149-9						
Date Analyzed :				08/24/24 15:41						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00490	98				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R1869015-1			R1869015-3			R1869015-5		R1869015-7	
Date Analyzed	:	08/27/24 09:46			08/27/24 10:47			08/27/24 11:33		08/27/24 12:32	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury		0.00300	0.0031	102	0.0050	0.00510	102	0.00510	102	0.00510	101

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1869015-9			R1869015-11		R1869015-13	
Date Analyzed:				08/27/24 13:00			08/27/24 14:24		08/27/24 15:37	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00500	101	0.00510	102	0.00510	102

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank	Continuing Calibration Blank(s)			Preparation Blank
Lab ID :	R1867717-2	R1867717-4	R1867717-6	R1867717-8	WG1962900-1
Date Analyzed :	08/23/24 06:50	08/23/24 08:23	08/23/24 08:56	08/23/24 10:34	08/23/24 11:55
Parameter	mg/l Q	mg/l Q	mg/l Q	mg/l Q	mg/l Q
Mercury	0.0000915 U	0.0000915 U	0.0000915 U	0.0000915 U	0.00009 U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1867717-10							
Date Analyzed :			08/23/24 12:15							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U						

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC3		

	Initial Calibration Blank	Continuing Calibration Blank(s)			Preparation Blank
Lab ID :	R1868149-2	R1868149-4	R1868149-6	R1868149-8	
Date Analyzed :	08/24/24 13:10	08/24/24 13:56	08/24/24 14:20	08/24/24 14:52	
Parameter	mg/l Q	mg/l Q	mg/l Q	mg/l Q	Q
Mercury	0.0000915 U	0.0000915 U	0.0000915 U	0.0000915 U	

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC3		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1868149-10							
Date Analyzed :			08/24/24 15:44							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U						

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank	Continuing Calibration Blank(s)			Preparation Blank
Lab ID :	R1869015-2	R1869015-4	R1869015-6	R1869015-8	WG1963948-1
Date Analyzed :	08/27/24 09:49	08/27/24 10:50	08/27/24 11:36	08/27/24 12:36	08/27/24 13:51
Parameter	mg/l Q	mg/l Q	mg/l Q	mg/l Q	mg/l Q
Mercury	0.0000915 U	0.0000915 U	0.0000915 U	0.0000915 U	0.00009 U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1869015-10		R1869015-12		R1869015-14			
Date Analyzed :			08/27/24 13:04		08/27/24 14:27		08/27/24 15:40			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U	0.0000915	U	0.0000915	U		

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-7S	**Matrix**	: WATER
Lab Sample ID	: L2447503-07		
Matrix Spike	: WG1962900-3	**MS Analysis Date**	: 08/23/24 12:05
Matrix Spike Dup	: WG1962900-4	**MSD Analysis Date**	: 08/23/24 12:08

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Mercury, Total	ND	0.005	0.00519	104	0.005	0.00508	102	2	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-7S	**Matrix**	: WATER
Lab Sample ID	: L2447503-07		
Matrix Spike	: WG1963948-3	**MS Analysis Date**	: 08/27/24 14:01
Matrix Spike Dup	: WG1963948-4	**MSD Analysis Date**	: 08/27/24 14:04

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Mercury, Dissolved	ND	0.005	0.00463	93	0.005	0.00460	92	1	75-125	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1962900-2	**LCS Analysis Date**	: 08/23/24 11:58
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Mercury, Total	0.00100	0.00103	103.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963948-2	**LCS Analysis Date**	: 08/27/24 13:54
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Mercury, Dissolved	0.00100	0.000880	89.					80-120	20

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 7470A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2447503-07	08/23/24 09:06	-	25
WG1962900-1	08/23/24 09:06	-	25
WG1962900-2	08/23/24 09:06	-	25
WG1962900-3	08/23/24 09:06	-	25
WG1962900-4	08/23/24 09:06	-	25

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 7470A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2447503-01	08/23/24 09:06	-	25
L2447503-02	08/23/24 09:06	-	25
L2447503-03	08/23/24 09:06	-	25
L2447503-04	08/23/24 09:06	-	25
L2447503-05	08/23/24 09:06	-	25
L2447503-06	08/23/24 09:06	-	25
L2447503-08	08/23/24 09:06	-	25
L2447503-09	08/23/24 09:06	-	25
L2447503-10	08/23/24 09:06	-	25
L2447503-11	08/23/24 09:06	-	25

Form 12
Preparation Log

Client	: **Alpha Geoscience**	**Lab Number**	: **L2447503**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Matrix	: **WATER**	**Prep Method**	: **EPA 7470A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2447503-01	08/26/24 20:10	-	25
L2447503-02	08/26/24 20:10	-	25
L2447503-03	08/26/24 20:10	-	25
L2447503-04	08/26/24 20:10	-	25
L2447503-05	08/26/24 20:10	-	25
L2447503-06	08/26/24 20:10	-	25
L2447503-07	08/26/24 20:10	-	25
L2447503-08	08/26/24 20:10	-	25
L2447503-09	08/26/24 20:10	-	25
L2447503-10	08/26/24 20:10	-	25
WG1963948-1	08/26/24 20:10	-	25
WG1963948-2	08/26/24 20:10	-	25
WG1963948-3	08/26/24 20:10	-	25
WG1963948-4	08/26/24 20:10	-	25

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Analysis Method**	: 1,7470A
Start Date	: 08/23/24 06:47	**End Date**	: 08/23/24 12:15

Sample Number	Dilution Factor	Analysis Time	Mercury, Total
R1867717-1 ICV	1	06:47:06	X
R1867717-2 ICB	1	06:50:26	X
R1867717-3 CCV	1	08:19:59	X
R1867717-4 CCB	1	08:23:18	X
R1867717-5 CCV	1	08:52:44	X
R1867717-6 CCB	1	08:56:04	X
R1867717-7 CCV	1	10:31:39	X
R1867717-8 CCB	1	10:34:58	X
WG1962900-1 BLANK	1	11:55:18	X
WG1962900-2 LCS	1	11:58:36	X
L2447503-07	1	12:01:54	X
WG1962900-3 MS	1	12:05:12	X
WG1962900-4 MSD	1	12:08:30	X
R1867717-9 CCV	1	12:11:49	X
R1867717-10 CCB	1	12:15:07	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC3	**Analysis Method**	: 1,7470A
Start Date	: 08/24/24 13:07	**End Date**	: 08/24/24 15:44

Sample Number	Dilution Factor	Analysis Time	Mercury, Total
R1868149-1 ICV	1	13:07:25	X
R1868149-2 ICB	1	13:10:43	X
R1868149-3 CCV	1	13:52:58	X
R1868149-4 CCB	1	13:56:15	X
R1868149-5 CCV	1	14:16:47	X
R1868149-6 CCB	1	14:20:05	X
L2447503-01	1	14:36:04	X
L2447503-02	1	14:39:22	X
L2447503-03	1	14:42:40	X
L2447503-04	1	14:45:58	X
R1868149-7 CCV	1	14:49:17	X
R1868149-8 CCB	1	14:52:34	X
L2447503-05	1	14:57:50	X
L2447503-06	1	15:01:09	X
L2447503-08	1	15:04:27	X
L2447503-09	1	15:07:46	X
L2447503-10	1	15:11:04	X
L2447503-11	1	15:14:23	X
R1868149-9 CCV	1	15:41:39	X
R1868149-10 CCB	1	15:44:58	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Analysis Method**	: 1,7470A
Start Date	: 08/27/24 09:46	**End Date**	: 08/27/24 15:40

Sample Number	Dilution Factor	Analysis Time	Mercury, Dissolved
R1869015-1 ICV	1	09:46:36	X
R1869015-2 ICB	1	09:49:55	X
R1869015-3 CCV	1	10:47:34	X
R1869015-4 CCB	1	10:50:54	X
R1869015-5 CCV	1	11:33:24	X
R1869015-6 CCB	1	11:36:42	X
R1869015-7 CCV	1	12:32:47	X
R1869015-8 CCB	1	12:36:04	X
R1869015-9 CCV	1	13:00:50	X
R1869015-10 CCB	1	13:04:09	X
WG1963948-1 BLANK	1	13:51:21	X
WG1963948-2 LCS	1	13:54:38	X
L2447503-07	1	13:57:55	X
WG1963948-3 MS	1	14:01:13	X
WG1963948-4 MSD	1	14:04:31	X
L2447503-01	1	14:07:49	X
L2447503-02	1	14:11:07	X
L2447503-03	1	14:14:25	X
L2447503-04	1	14:17:42	X
L2447503-05	1	14:21:00	X
R1869015-11 CCV	1	14:24:18	X
R1869015-12 CCB	1	14:27:35	X
L2447503-06	1	14:43:54	X
L2447503-08	1	14:47:11	X
L2447503-09	1	14:50:29	X
L2447503-10	1	14:53:47	X
R1869015-13 CCV	1	15:37:34	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Analysis Method**	: 1,7470A
Start Date	: 08/27/24 09:46	**End Date**	: 08/27/24 15:40

Sample Number	Dilution Factor	Analysis Time	Mercury, Dissolved
R1869015-14 CCB	1	15:40:52	X

Date Created: 03/19/18
Created By: Jason Hebert
File: PM4631-1
Page: 1

MERCURY by 7470A, 245.1 (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.0002	0.0000915	mg/l	80-120	20	75-125	20	20		28 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 01/22/21
Created By: Jason Hebert
File: PM9836-1
Page: 1

METALS by 7470A (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.0002	0.0000915	mg/l	80-120		75-125	20	20		28 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 01/22/21
Created By: Jason Hebert
File: PM9837-1
Page: 1

METALS by 7471B (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.08	0.05216	mg/kg	72-128		80-120	20	20		28 days	Metals Only-Glass 60mL/2oz unpreserv

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Title :
Date : 8/23/2024
Name :

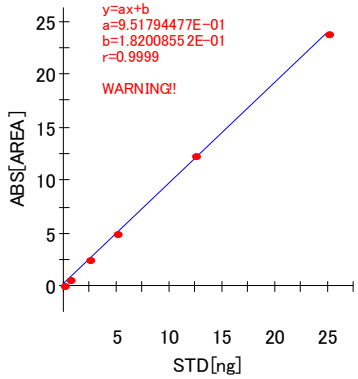
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.1501	-0.0335	-	08/23/2024 06:05	JWN,NIC2
2	0.200	2.500	2.500	2.500	0.500	0.6277	0.4683	6.3	08/23/2024 06:29	JWN,NIC2
3	1.000	2.500	2.500	2.500	2.500	2.5442	2.4818	0.7	08/23/2024 06:11	JWN,NIC2
4	2.000	2.500	2.500	2.500	5.000	4.8826	4.9387	1.2	08/23/2024 06:15	JWN,NIC2
5	5.000	2.500	2.500	2.500	12.500	12.3270	12.7601	2.1	08/23/2024 06:18	JWN,NIC2
6	10.000	2.500	2.500	2.500	25.000	23.8671	24.8847	0.5	08/23/2024 06:21	JWN,NIC2

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	XICV	2.500	2.500	2.500	2.6370	2.5793	1.032	-	08/23/2024 06:36	JWN,NIC2
2	XICB	2.500	2.500	2.500	0.1523	-0.0312	-0.012	-	08/23/2024 06:40	JWN,NIC2
3	ICV	2.500	2.500	2.500	7.6827	7.8806	3.152	-	08/23/2024 06:47	JWN,NIC2
4	ICB	2.500	2.500	2.500	0.1588	-0.0244	-0.010	-	08/23/2024 06:50	JWN,NIC2
5	0.2 PPB	2.500	2.500	2.500	0.6470	0.4885	0.195	-	08/23/2024 06:53	JWN,NIC2
6	xwg1962583-2 wg1962583	2.500	2.500	2.500	15.7900	16.3985	6.559	-	08/23/2024 07:02	JWN,NIC2

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	Check STD(5ug/L)	2.500	2.500	2.500	12.6891	13.1405	5.256	105.1	08/23/2024 08:19	JWN,NIC2
8	Check Blank	2.500	2.500	2.500	0.1506	-0.0330	-0.013	-	08/23/2024 08:23	JWN,NIC2
9	WG1962742-1 WG1962742	2.500	2.500	2.500	0.2300	0.0504	0.020	-	08/23/2024 08:28	JWN,NIC2
10	WG1962742-2 WG1962742	2.500	2.500	2.500	2.6670	2.6108	1.044	-	08/23/2024 08:32	JWN,NIC2
11	L2447332-09 WG1962742	2.500	2.500	2.500	0.2232	0.0433	0.017	-	08/23/2024 08:35	JWN,NIC2
12	WG1962742-3 WG1962742	2.500	2.500	2.500	13.3842	13.8708	5.548	-	08/23/2024 08:38	JWN,NIC2
13	WG1962742-4 WG1962742	2.500	2.500	2.500	0.1834	0.0015	0.001	-	08/23/2024 08:42	JWN,NIC2
14	L2447332-10 WG1962742	2.500	2.500	2.500	0.2025	0.0215	0.009	-	08/23/2024 08:45	JWN,NIC2
15	Check STD(5ug/L)	2.500	2.500	2.500	12.7319	13.1855	5.274	105.5	08/23/2024 08:52	JWN,NIC2
16	Check Blank	2.500	2.500	2.500	0.1516	-0.0319	-0.013	-	08/23/2024 08:56	JWN,NIC2
17	WG1962745-1 WG1962745	2.500	2.500	2.500	0.2320	0.0525	0.021	-	08/23/2024 09:18	JWN,NIC2
18	WG1962745-2 WG1962745	2.500	2.500	2.500	2.5889	2.5288	1.012	-	08/23/2024 09:21	JWN,NIC2
19	L2446763-01 WG1962745	2.500	2.500	2.500	0.2662	0.0885	0.035	-	08/23/2024 09:25	JWN,NIC2
20	WG1962745-3 WG1962745	2.500	2.500	2.500	12.8726	13.3333	5.333	-	08/23/2024 09:28	JWN,NIC2
21	WG1962745-4 WG1962745	2.500	2.500	2.500	0.3491	0.1756	0.070	-	08/23/2024 09:31	JWN,NIC2
22	L2446763-02 WG1962745	2.500	2.500	2.500	0.2911	0.1146	0.046	-	08/23/2024 09:35	JWN,NIC2
23	L2446763-03 WG1962745	2.500	2.500	2.500	0.2731	0.0957	0.038	-	08/23/2024 09:38	JWN,NIC2
24	L2446763-04 WG1962745	2.500	2.500	2.500	0.2563	0.0781	0.031	-	08/23/2024 09:41	JWN,NIC2
25	WG1962681-1 WG1962681	2.500	2.500	2.500	0.1456	-0.0383	-0.015	-	08/23/2024 10:25	JWN,NIC2
26	WG1962681-2 WG1962681	2.500	2.500	2.500	2.4561	2.3893	0.956	-	08/23/2024 10:28	JWN,NIC2
27	Check STD(5ug/L)	2.500	2.500	2.500	12.7428	13.1970	5.279	105.6	08/23/2024 10:31	JWN,NIC2
28	Check Blank	2.500	2.500	2.500	0.1445	-0.0394	-0.016	-	08/23/2024 10:34	JWN,NIC2
29	I2446773-02 WG1962681	2.500	2.500	2.500	0.1663	-0.0165	-0.007	-	08/23/2024 10:38	JWN,NIC2
30	WG1962681-3 WG1962681	2.500	2.500	2.500	11.4762	11.8662	4.746	-	08/23/2024 10:41	JWN,NIC2
31	WG1962681-4 WG1962681	2.500	2.500	2.500	0.1642	-0.0187	-0.007	-	08/23/2024 10:44	JWN,NIC2
32	I2446775-02 WG1962681	2.500	2.500	2.500	0.1631	-0.0199	-0.008	-	08/23/2024 10:48	JWN,NIC2
33	I2447275-01 WG1962681	2.500	2.500	2.500	0.1532	-0.0303	-0.012	-	08/23/2024 10:51	JWN,NIC2
34	WG1962900-1 WG1962900	2.500	2.500	2.500	0.1477	-0.0360	-0.014	-	08/23/2024 11:55	JWN,NIC2
35	WG1962900-2 WG1962900	2.500	2.500	2.500	2.6327	2.5748	1.030	-	08/23/2024 11:58	JWN,NIC2
36	L2447503-07 WG1962900	2.500	2.500	2.500	0.1556	-0.0277	-0.011	-	08/23/2024 12:01	JWN,NIC2
37	WG1962900-3 WG1962900	2.500	2.500	2.500	12.5526	12.9971	5.199	-	08/23/2024 12:05	JWN,NIC2
38	WG1962900-4 WG1962900	2.500	2.500	2.500	12.2786	12.7092	5.084	-	08/23/2024 12:08	JWN,NIC2

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	Check STD(5ug/L)	2.500	2.500	2.500	12.8835	13.3448	5.338	106.8	08/23/2024 12:11	JWN,NIC2
40	Check Blank	2.500	2.500	2.500	0.1410	-0.0431	-0.017	-	08/23/2024 12:15	JWN,NIC2
41	L2448142-01 WG1962900	2.500	2.500	2.500	0.1681	-0.0146	-0.006	-	08/23/2024 12:26	JWN,NIC2
42	L2448142-02 WG1962900	2.500	2.500	2.500	0.1567	-0.0266	-0.011	-	08/23/2024 12:29	JWN,NIC2
43	L2448142-03 WG1962900	2.500	2.500	2.500	0.1887	0.0070	0.003	-	08/23/2024 12:32	JWN,NIC2
44	L2448142-04 WG1962900	2.500	2.500	2.500	0.1726	-0.0099	-0.004	-	08/23/2024 12:36	JWN,NIC2
45	L2448142-05 WG1962900	2.500	2.500	2.500	0.2496	0.0710	0.028	-	08/23/2024 12:39	JWN,NIC2
46	L2448142-06 WG1962900	2.500	2.500	2.500	0.1883	0.0066	0.003	-	08/23/2024 12:42	JWN,NIC2
47	Check STD(5ug/L)	2.500	2.500	2.500	12.7992	13.2562	5.302	106.0	08/23/2024 12:46	JWN,NIC2
48	Check Blank	2.500	2.500	2.500	0.1411	-0.0430	-0.017	-	08/23/2024 12:49	JWN,NIC2
49	Check STD(5ug/L)	2.500	2.500	2.500	11.5640	11.9585	4.783	95.7	08/23/2024 19:02	DJR,NIC2
50	Check Blank	2.500	2.500	2.500	0.1409	-0.0432	-0.017	-	08/23/2024 19:05	DJR,NIC2
51	WG1963195-1 WG1963195	2.500	2.500	2.500	0.1281	-0.0566	-0.023	-	08/23/2024 19:38	DJR,NIC2
52	WG1963195-2 WG1963195	2.500	2.500	2.500	2.4017	2.3321	0.933	-	08/23/2024 19:42	DJR,NIC2
53	L2444328-01 WG1963195	2.500	2.500	2.500	0.1338	-0.0507	-0.020	-	08/23/2024 19:45	DJR,NIC2
54	WG1963195-3 WG1963195	2.500	2.500	2.500	12.8061	13.2635	5.305	-	08/23/2024 19:48	DJR,NIC2
55	WG1963195-4 WG1963195	2.500	2.500	2.500	0.1342	-0.0502	-0.020	-	08/23/2024 19:52	DJR,NIC2
56	L2444328-02 WG1963195	2.500	2.500	2.500	0.1318	-0.0528	-0.021	-	08/23/2024 19:55	DJR,NIC2
57	Check STD(5ug/L)	2.500	2.500	2.500	11.7225	12.1250	4.850	97.0	08/23/2024 20:15	DJR,NIC2
58	Check Blank	2.500	2.500	2.500	0.1464	-0.0374	-0.015	-	08/23/2024 20:18	DJR,NIC2
59	Check STD(5ug/L)	2.500	2.500	2.500	11.6055	12.0021	4.801	96.0	08/23/2024 22:45	DJR,NIC2
60	Check Blank	2.500	2.500	2.500	0.1413	-0.0428	-0.017	-	08/23/2024 22:48	DJR,NIC2
61	WG1963069-1 WG1963069	2.500	2.500	2.500	0.1392	-0.0450	-0.018	-	08/23/2024 23:08	DJR,NIC2
62	WG1963069-2 WG1963069	2.500	2.500	2.500	2.6236	2.5653	1.026	-	08/23/2024 23:11	DJR,NIC2
63	L2447952-02 WG1963069	2.500	2.500	2.500	0.2146	0.0342	0.014	-	08/23/2024 23:14	DJR,NIC2
64	WG1963069-3 WG1963069	2.500	2.500	2.500	12.3584	12.7931	5.117	-	08/23/2024 23:17	DJR,NIC2
65	WG1963069-4 WG1963069	2.500	2.500	2.500	0.2034	0.0225	0.009	-	08/23/2024 23:21	DJR,NIC2
66	L2447952-01 WG1963069	2.500	2.500	2.500	0.1471	-0.0367	-0.015	-	08/23/2024 23:24	DJR,NIC2
67	L2447952-03 WG1963069	2.500	2.500	2.500	0.1518	-0.0317	-0.013	-	08/23/2024 23:27	DJR,NIC2
68	L2447952-13 WG1963069	2.500	2.500	2.500	0.1447	-0.0392	-0.016	-	08/23/2024 23:31	DJR,NIC2
69	XCheck STD(5ug/L)	2.500	2.500	2.500	11.8788	12.2892	4.916	-	08/23/2024 23:34	DJR,NIC2
70	XCheck Blank	2.500	2.500	2.500	0.1471	-0.0367	-0.015	-	08/23/2024 23:37	DJR,NIC2

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
71	Check STD(5ug/L)	2.500	2.500	2.500	12.0247	12.4425	4.977	99.5	08/23/2024 23:41	DJR,NIC2
72	Check Blank	2.500	2.500	2.500	0.1477	-0.0360	-0.014	-	08/23/2024 23:44	DJR,NIC2

Title :
Date : 08/24/2024
Name :

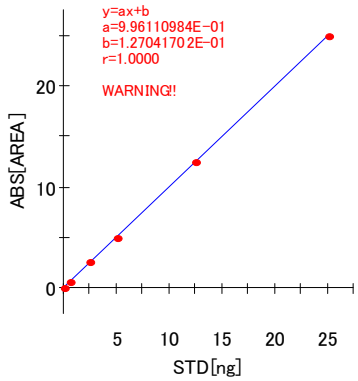
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.1644	0.0375	-	08/24/2024 12:47	DJR,NIC3
2	0.200	2.500	2.500	2.500	0.500	0.6847	0.5598	12.0	08/24/2024 12:50	DJR,NIC3
3	1.000	2.500	2.500	2.500	2.500	2.5814	2.4639	1.4	08/24/2024 12:54	DJR,NIC3
4	2.000	2.500	2.500	2.500	5.000	5.0255	4.9176	1.6	08/24/2024 12:57	DJR,NIC3
5	5.000	2.500	2.500	2.500	12.500	12.5829	12.5045	0.0	08/24/2024 13:00	DJR,NIC3
6	10.000	2.500	2.500	2.500	25.000	25.0464	25.0166	0.1	08/24/2024 13:04	DJR,NIC3

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	ICV	2.500	2.500	2.500	7.3143	7.2153	2.886	-	08/24/2024 13:07	DJR,NIC3
2	ICB	2.500	2.500	2.500	0.1680	0.0411	0.016	-	08/24/2024 13:10	DJR,NIC3
3	0.2PPB	2.500	2.500	2.500	0.6983	0.5735	0.229	-	08/24/2024 13:14	DJR,NIC3
4	WG1962721-1 WG1962721	2.500	2.500	2.500	0.1008	-0.0263	-0.011	-	08/24/2024 13:23	DJR,NIC3
5	WG1962721-2 WG1962721	2.500	2.500	2.500	2.4326	2.3146	0.926	-	08/24/2024 13:26	DJR,NIC3
6	L2447168-02 WG1962721	2.500	2.500	2.500	0.2062	0.0795	0.032	-	08/24/2024 13:29	DJR,NIC3

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	WG1962721-3 WG1962721	2.500	2.500	2.500	11.8742	11.7930	4.717	-	08/24/2024 13:33	DJR,NIC3
8	WG1962721-4 WG1962721	2.500	2.500	2.500	0.1741	0.0472	0.019	-	08/24/2024 13:36	DJR,NIC3
9	L2447168-01 WG1962721	2.500	2.500	2.500	0.1448	0.0178	0.007	-	08/24/2024 13:39	DJR,NIC3
10	L2447184-01 WG1962721	2.500	2.500	2.500	0.1267	-0.0003	-0.000	-	08/24/2024 13:43	DJR,NIC3
11	L2447184-02 WG1962721	2.500	2.500	2.500	0.1307	0.0037	0.001	-	08/24/2024 13:46	DJR,NIC3
12	L2447184-03 WG1962721	2.500	2.500	2.500	0.1398	0.0128	0.005	-	08/24/2024 13:49	DJR,NIC3
13	Check STD(5ug/L)	2.500	2.500	2.500	12.4344	12.3554	4.942	98.8	08/24/2024 13:52	DJR,NIC3
14	Check Blank	2.500	2.500	2.500	0.1716	0.0447	0.018	-	08/24/2024 13:56	DJR,NIC3
15	L2447184-04 WG1962721	2.500	2.500	2.500	0.1329	0.0059	0.002	-	08/24/2024 14:06	DJR,NIC3
16	L2447184-05 WG1962721	2.500	2.500	2.500	0.0929	-0.0343	-0.014	-	08/24/2024 14:10	DJR,NIC3
17	XICV2434240624FAC	2.500	2.500	2.500	7.3704	7.2716	2.909	-	08/24/2024 14:13	DJR,NIC3
18	Check STD(5ug/L)	2.500	2.500	2.500	12.4310	12.3520	4.941	98.8	08/24/2024 14:16	DJR,NIC3
19	Check Blank	2.500	2.500	2.500	0.1698	0.0429	0.017	-	08/24/2024 14:20	DJR,NIC3
20	L2447342-01 WG1962900	2.500	2.500	2.500	0.2117	0.0850	0.034	-	08/24/2024 14:32	DJR,NIC3
21	L2447503-01 WG1962900	2.500	2.500	2.500	0.1240	-0.0031	-0.001	-	08/24/2024 14:36	DJR,NIC3
22	L2447503-02 WG1962900	2.500	2.500	2.500	0.1156	-0.0115	-0.005	-	08/24/2024 14:39	DJR,NIC3
23	L2447503-03 WG1962900	2.500	2.500	2.500	0.1301	0.0031	0.001	-	08/24/2024 14:42	DJR,NIC3
24	L2447503-04 WG1962900	2.500	2.500	2.500	0.1194	-0.0077	-0.003	-	08/24/2024 14:45	DJR,NIC3
25	Check STD(5ug/L)	2.500	2.500	2.500	12.4669	12.3880	4.955	99.1	08/24/2024 14:49	DJR,NIC3
26	Check Blank	2.500	2.500	2.500	0.1706	0.0437	0.017	-	08/24/2024 14:52	DJR,NIC3
27	L2447503-05 WG1962900	2.500	2.500	2.500	0.1132	-0.0139	-0.006	-	08/24/2024 14:57	DJR,NIC3
28	L2447503-06 WG1962900	2.500	2.500	2.500	0.1250	-0.0020	-0.001	-	08/24/2024 15:01	DJR,NIC3
29	L2447503-08 WG1962900	2.500	2.500	2.500	0.1136	-0.0135	-0.005	-	08/24/2024 15:04	DJR,NIC3
30	L2447503-09 WG1962900	2.500	2.500	2.500	0.1122	-0.0149	-0.006	-	08/24/2024 15:07	DJR,NIC3
31	L2447503-10 WG1962900	2.500	2.500	2.500	0.1140	-0.0131	-0.005	-	08/24/2024 15:11	DJR,NIC3
32	L2447503-11 WG1962900	2.500	2.500	2.500	0.1119	-0.0152	-0.006	-	08/24/2024 15:14	DJR,NIC3
33	WG1963084-1 WG1963084	2.500	2.500	2.500	0.0962	-0.0310	-0.012	-	08/24/2024 15:28	DJR,NIC3
34	WG1963084-2 WG1963084	2.500	2.500	2.500	2.4710	2.3531	0.941	-	08/24/2024 15:31	DJR,NIC3
35	L2447150-01 WG1963084	2.500	2.500	2.500	0.3375	0.2113	0.085	-	08/24/2024 15:35	DJR,NIC3
36	WG1963084-3 WG1963084	2.500	2.500	2.500	11.7462	11.6645	4.666	-	08/24/2024 15:38	DJR,NIC3
37	Check STD(5ug/L)	2.500	2.500	2.500	12.2862	12.2066	4.883	97.7	08/24/2024 15:41	DJR,NIC3
38	Check Blank	2.500	2.500	2.500	0.1685	0.0416	0.017	-	08/24/2024 15:44	DJR,NIC3

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	WG1963084-4 WG1963084	2.500	2.500	2.500	0.3807	0.2546	0.102	-	08/24/2024 15:48	DJR,NIC3
40	L2447293-01 WG1963084	2.500	2.500	2.500	0.3307	0.2045	0.082	-	08/24/2024 15:52	DJR,NIC3
41	L2447448-01 WG1963084	2.500	2.500	2.500	0.1589	0.0320	0.013	-	08/24/2024 15:55	DJR,NIC3
42	L2447508-01 WG1963084	2.500	2.500	2.500	0.1631	0.0362	0.014	-	08/24/2024 15:58	DJR,NIC3
43	L2447508-02 WG1963084	2.500	2.500	2.500	0.1186	-0.0085	-0.003	-	08/24/2024 16:02	DJR,NIC3
44	Check STD(5ug/L)	2.500	2.500	2.500	12.1638	12.0838	4.834	96.7	08/24/2024 16:16	DJR,NIC3
45	Check Blank	2.500	2.500	2.500	0.1675	0.0406	0.016	-	08/24/2024 16:20	DJR,NIC3
46	Check STD(5ug/L)	2.500	2.500	2.500	11.9577	11.8768	4.751	95.0	08/24/2024 18:33	DJR,NIC3
47	Check Blank	2.500	2.500	2.500	0.1731	0.0462	0.018	-	08/24/2024 18:37	DJR,NIC3
48	WG1963099-1 WG1963099	2.500	2.500	2.500	0.1013	-0.0258	-0.010	-	08/24/2024 18:55	DJR,NIC3
49	WG1963099-2 WG1963099	2.500	2.500	2.500	2.3143	2.1958	0.878	-	08/24/2024 18:59	DJR,NIC3
50	L2447306-01 WG1963099	2.500	2.500	2.500	0.1010	-0.0261	-0.010	-	08/24/2024 19:02	DJR,NIC3
51	WG1963099-3 WG1963099	2.500	2.500	2.500	11.4658	11.3830	4.553	-	08/24/2024 19:05	DJR,NIC3
52	WG1963099-4 WG1963099	2.500	2.500	2.500	0.1122	-0.0149	-0.006	-	08/24/2024 19:09	DJR,NIC3
53	L2447263-01 WG1963099	2.500	2.500	2.500	0.1558	0.0289	0.012	-	08/24/2024 19:12	DJR,NIC3
54	L2447498-24 WG1963099	2.500	2.500	2.500	0.6336	0.5085	0.203	-	08/24/2024 19:15	DJR,NIC3
55	L2447507-01 WG1963099	2.500	2.500	2.500	0.1332	0.0062	0.002	-	08/24/2024 19:19	DJR,NIC3
56	Check STD(5ug/L)	2.500	2.500	2.500	12.2501	12.1704	4.868	97.4	08/24/2024 19:22	DJR,NIC3
57	Check Blank	2.500	2.500	2.500	0.1842	0.0574	0.023	-	08/24/2024 19:25	DJR,NIC3
58	Check STD(5ug/L)	2.500	2.500	2.500	12.3188	12.2394	4.896	97.9	08/24/2024 19:28	DJR,NIC3
59	Check Blank	2.500	2.500	2.500	0.1838	0.0570	0.023	-	08/24/2024 19:32	DJR,NIC3

Title :
Date : 8/27/2024
Name :

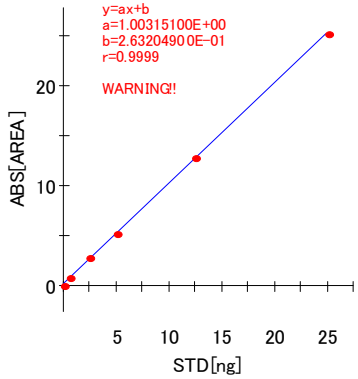
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.1433	-0.1195	-	08/27/2024 09:25	MJR,NIC2
2	0.200	2.500	2.500	2.500	0.500	0.8111	0.5462	9.2	08/27/2024 09:28	MJR,NIC2
3	1.000	2.500	2.500	2.500	2.500	2.8938	2.6223	4.9	08/27/2024 09:31	MJR,NIC2
4	2.000	2.500	2.500	2.500	5.000	5.1731	4.8945	2.1	08/27/2024 09:35	MJR,NIC2
5	5.000	2.500	2.500	2.500	12.500	12.9001	12.5972	0.8	08/27/2024 09:38	MJR,NIC2
6	10.000	2.500	2.500	2.500	25.000	25.3012	24.9593	0.2	08/27/2024 09:41	MJR,NIC2

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	ICV	2.500	2.500	2.500	7.9311	7.6438	3.058	-	08/27/2024 09:46	MJR,NIC2
2	ICB	2.500	2.500	2.500	0.1447	-0.1181	-0.047	-	08/27/2024 09:49	MJR,NIC2
3	0.2 PPB	2.500	2.500	2.500	0.8208	0.5558	0.222	-	08/27/2024 09:53	MJR,NIC2
4	WG1963953-1 WG1963953	2.500	2.500	2.500	0.5691	0.3049	0.122	-	08/27/2024 10:17	MJR,NIC2
5	WG1963953-2 WG1963953	2.500	2.500	2.500	2.9274	2.6558	1.062	-	08/27/2024 10:20	MJR,NIC2
6	L2445879-06 WG1963953	2.500	2.500	2.500	0.2641	0.0009	0.000	-	08/27/2024 10:24	MJR,NIC2

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	WG1963953-3 WG1963953	2.500	2.500	2.500	12.2756	11.9747	4.790	-	08/27/2024 10:27	MJR,NIC2
8	WG1963953-4 WG1963953	2.500	2.500	2.500	12.2147	11.9140	4.766	-	08/27/2024 10:30	MJR,NIC2
9	L2447336-01 WG1963953	2.500	2.500	2.500	0.3056	0.0423	0.017	-	08/27/2024 10:34	MJR,NIC2
10	L2447336-02 WG1963953	2.500	2.500	2.500	0.3397	0.0763	0.031	-	08/27/2024 10:37	MJR,NIC2
11	L2447524-01 WG1963953	2.500	2.500	2.500	0.2361	-0.0270	-0.011	-	08/27/2024 10:40	MJR,NIC2
12	L2447361-01 WG1963953	2.500	2.500	2.500	0.3537	0.0902	0.036	-	08/27/2024 10:44	MJR,NIC2
13	Check STD(5ug/L)	2.500	2.500	2.500	13.0614	12.7580	5.103	102.1	08/27/2024 10:47	MJR,NIC2
14	Check Blank	2.500	2.500	2.500	0.1490	-0.1138	-0.046	-	08/27/2024 10:50	MJR,NIC2
15	L2447361-02 WG1963953	2.500	2.500	2.500	0.2273	-0.0358	-0.014	-	08/27/2024 11:00	MJR,NIC2
16	L2445879-01 WG1963953	2.500	2.500	2.500	0.2312	-0.0319	-0.013	-	08/27/2024 11:03	MJR,NIC2
17	L2445879-02 WG1963953	2.500	2.500	2.500	0.5636	0.2995	0.120	-	08/27/2024 11:06	MJR,NIC2
18	L2445879-03 WG1963953	2.500	2.500	2.500	0.5148	0.2508	0.100	-	08/27/2024 11:10	MJR,NIC2
19	L2445879-04 WG1963953	2.500	2.500	2.500	0.5029	0.2389	0.096	-	08/27/2024 11:13	MJR,NIC2
20	L2445879-05 WG1963953	2.500	2.500	2.500	0.4638	0.2000	0.080	-	08/27/2024 11:16	MJR,NIC2
21	L2445879-07 WG1963953	2.500	2.500	2.500	0.4270	0.1633	0.065	-	08/27/2024 11:20	MJR,NIC2
22	L2445879-08 WG1963953	2.500	2.500	2.500	0.3696	0.1061	0.042	-	08/27/2024 11:23	MJR,NIC2
23	L2445879-09 WG1963953	2.500	2.500	2.500	0.2320	-0.0311	-0.012	-	08/27/2024 11:26	MJR,NIC2
24	L2445879-10 WG1963953	2.500	2.500	2.500	0.2534	-0.0098	-0.004	-	08/27/2024 11:30	MJR,NIC2
25	Check STD(5ug/L)	2.500	2.500	2.500	13.0387	12.7354	5.094	101.9	08/27/2024 11:33	MJR,NIC2
26	Check Blank	2.500	2.500	2.500	0.1471	-0.1157	-0.046	-	08/27/2024 11:36	MJR,NIC2
27	L2447307-01 WG1963953	2.500	2.500	2.500	0.2862	0.0229	0.009	-	08/27/2024 11:40	MJR,NIC2
28	Check STD(5ug/L)	2.500	2.500	2.500	12.9581	12.6550	5.062	101.2	08/27/2024 12:32	MJR,NIC2
29	Check Blank	2.500	2.500	2.500	0.1373	-0.1255	-0.050	-	08/27/2024 12:36	MJR,NIC2
30	WG1964209-1 WG1964209	2.500	2.500	2.500	0.1688	-0.0941	-0.038	-	08/27/2024 12:41	MJR,NIC2
31	WG1964209-2 WG1964209	2.500	2.500	2.500	2.4776	2.2074	0.883	-	08/27/2024 12:44	MJR,NIC2
32	L2447194-06 WG1964209	2.500	2.500	2.500	0.9344	0.6691	0.268	-	08/27/2024 12:47	MJR,NIC2
33	WG1964209-3 WG1964209	2.500	2.500	2.500	12.7007	12.3984	4.959	-	08/27/2024 12:50	MJR,NIC2
34	WG1964209-4 WG1964209	2.500	2.500	2.500	12.5807	12.2788	4.912	-	08/27/2024 12:54	MJR,NIC2
35	L2445805-08 WG1964209	2.500	2.500	2.500	0.1358	-0.1270	-0.051	-	08/27/2024 12:57	MJR,NIC2
36	Check STD(5ug/L)	2.500	2.500	2.500	12.8711	12.5683	5.027	100.5	08/27/2024 13:00	MJR,NIC2
37	Check Blank	2.500	2.500	2.500	0.1373	-0.1255	-0.050	-	08/27/2024 13:04	MJR,NIC2
38	WG1963948-1 WG1963948	2.500	2.500	2.500	0.1191	-0.1437	-0.057	-	08/27/2024 13:51	MJR,NIC2

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	WG1963948-2 WG1963948	2.500	2.500	2.500	2.4881	2.2179	0.887	-	08/27/2024 13:54	MJR,NIC2
40	L2447503-07 WG1963948	2.500	2.500	2.500	0.1547	-0.1082	-0.043	-	08/27/2024 13:57	MJR,NIC2
41	WG1963948-3 WG1963948	2.500	2.500	2.500	11.8913	11.5916	4.637	-	08/27/2024 14:01	MJR,NIC2
42	WG1963948-4 WG1963948	2.500	2.500	2.500	11.8112	11.5117	4.605	-	08/27/2024 14:04	MJR,NIC2
43	L2447503-01 WG1963948	2.500	2.500	2.500	0.1484	-0.1144	-0.046	-	08/27/2024 14:07	MJR,NIC2
44	L2447503-02 WG1963948	2.500	2.500	2.500	0.1184	-0.1444	-0.058	-	08/27/2024 14:11	MJR,NIC2
45	L2447503-03 WG1963948	2.500	2.500	2.500	0.1122	-0.1505	-0.060	-	08/27/2024 14:14	MJR,NIC2
46	L2447503-04 WG1963948	2.500	2.500	2.500	0.1263	-0.1365	-0.055	-	08/27/2024 14:17	MJR,NIC2
47	L2447503-05 WG1963948	2.500	2.500	2.500	0.1120	-0.1507	-0.060	-	08/27/2024 14:21	MJR,NIC2
48	Check STD(5ug/L)	2.500	2.500	2.500	13.0071	12.7039	5.082	101.6	08/27/2024 14:24	MJR,NIC2
49	Check Blank	2.500	2.500	2.500	0.1355	-0.1273	-0.051	-	08/27/2024 14:27	MJR,NIC2
50	L2447503-06 WG1963948	2.500	2.500	2.500	0.1303	-0.1325	-0.053	-	08/27/2024 14:43	MJR,NIC2
51	L2447503-08 WG1963948	2.500	2.500	2.500	0.1381	-0.1247	-0.050	-	08/27/2024 14:47	MJR,NIC2
52	L2447503-09 WG1963948	2.500	2.500	2.500	0.1099	-0.1528	-0.061	-	08/27/2024 14:50	MJR,NIC2
53	L2447503-10 WG1963948	2.500	2.500	2.500	0.1069	-0.1558	-0.062	-	08/27/2024 14:53	MJR,NIC2
54	WG1964022-1 WG1964022	2.500	2.500	2.500	0.1876	-0.0754	-0.030	-	08/27/2024 15:17	MJR,NIC2
55	WG1964022-2 WG1964022	2.500	2.500	2.500	2.5449	2.2745	0.910	-	08/27/2024 15:21	MJR,NIC2
56	L2447501-01 WG1964022	2.500	2.500	2.500	0.3035	0.0402	0.016	-	08/27/2024 15:24	MJR,NIC2
57	WG1964022-3 WG1964022	2.500	2.500	2.500	12.1487	11.8482	4.739	-	08/27/2024 15:27	MJR,NIC2
58	WG1964022-4 WG1964022	2.500	2.500	2.500	0.1223	-0.1405	-0.056	-	08/27/2024 15:30	MJR,NIC2
59	L2447501-02 WG1964022	2.500	2.500	2.500	0.1919	-0.0711	-0.028	-	08/27/2024 15:34	MJR,NIC2
60	Check STD(5ug/L)	2.500	2.500	2.500	12.9897	12.6865	5.075	101.5	08/27/2024 15:37	MJR,NIC2
61	Check Blank	2.500	2.500	2.500	0.1393	-0.1235	-0.049	-	08/27/2024 15:40	MJR,NIC2
62	L2448458-01 WG1964022	2.500	2.500	2.500	0.3196	0.0562	0.022	-	08/27/2024 15:44	MJR,NIC2
63	L2448458-02 WG1964022	2.500	2.500	2.500	0.2953	0.0320	0.013	-	08/27/2024 15:47	MJR,NIC2
64	L2448458-03 WG1964022	2.500	2.500	2.500	0.3117	0.0483	0.019	-	08/27/2024 15:51	MJR,NIC2
65	L2448458-04 WG1964022	2.500	2.500	2.500	0.2622	-0.0010	-0.000	-	08/27/2024 15:54	MJR,NIC2
66	L2448458-05 WG1964022	2.500	2.500	2.500	0.3419	0.0784	0.031	-	08/27/2024 15:57	MJR,NIC2
67	Check STD(5ug/L)	2.500	2.500	2.500	12.6676	12.3654	4.946	98.9	08/27/2024 16:01	DJR,NIC2
68	Check Blank	2.500	2.500	2.500	0.1389	-0.1239	-0.050	-	08/27/2024 16:05	DJR,NIC2

MERCURY TRUE VALUE CRITERIA

ICV	3 ug/l
LCSW	1 ug/l
MS	1 ug/l
CCV	5 ug/l

As of 6/1/13, Mercury True Value criteria is as follows:

ICV	3 ug/l
LCSW	1 ug/l
MS(aq)	5 ug/l
MS(soil)	1 ug/l
CCV	10 ug/l

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D102-540
Certificate Issue Date: June 22, 2018
Expiration Date: January 31, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8160	6.36	3960 - 12400	4080 - 12200
Antimony	120	60.9	9.42	0.822 - 121	12.0 - 166
Arsenic	144	135	5.08	112 - 158	94.6 - 176
Barium	469	443	6.77	366 - 521	332 - 554
Beryllium	207	197	5.86	164 - 229	148 - 246
Boron	213	174	12.6	127 - 221	105 - 244
Cadmium	224	204	6.65	169 - 240	153 - 256
Calcium	5190	4830	9.12	3950 - 5700	3510 - 6150
Chromium	138	132	8.56	109 - 155	92.2 - 171
Cobalt	182	179	7.93	151 - 207	134 - 224
Copper	191	184	6.72	155 - 213	138 - 230
Iron	15000	14400	10.7	8770 - 20000	5120 - 23600
Lead	225	216	7.72	178 - 254	159 - 274
Magnesium	2570	2340	6.13	1780 - 2900	1460 - 3230
Manganese	331	323	6.71	266 - 380	242 - 404
Mercury	16.8	13.2	16.0	8.64 - 17.7	7.89 - 18.5
Molybdenum	193	175	2.39	141 - 209	125 - 226
Nickel	163	152	5.95	126 - 178	106 - 197
Potassium	2420	2050	6.31	1440 - 2660	1210 - 2890
Selenium	81.9	74.9	4.13	59.3 - 90.5	47.0 - 103
Silver	57.6	53.9	9.00	43.0 - 64.8	37.8 - 70.0
Sodium	161	149	12.1	111 - 188	57.7 - 241
Strontium	100	96.2	4.04	78.1 - 114	69.0 - 123
Thallium	253	232	3.54	188 - 276	168 - 296

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	146	134	10.8	106 - 163	79.5 - 189
Titanium	449	340	7.20	70.2 - 609	44.9 - 711
Uranium	114	113	7.10	85.5 - 140	71.9 - 153
Vanadium	180	172	8.85	137 - 207	126 - 218
Zinc	217	211	6.58	171 - 250	147 - 274

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8160	80.8	138	-	-
Antimony	120	60.9	50.8	135	-	-
Arsenic	144	135	93.8	184	-	-
Barium	469	443	94.5	158	-	-
Beryllium	207	197	95.0	148	-	-
Boron	213	174	81.8	107	-	-
Cadmium	224	204	91.3	199	-	-
Calcium	5190	4830	93.0	122	-	-
Chromium	138	132	95.5	172	-	-
Cobalt	182	179	98.4	140	-	-
Copper	191	184	96.3	183	-	-
Iron	15000	14400	95.6	133	-	-
Lead	225	216	96.2	204	-	-
Magnesium	2570	2340	91.2	122	-	-
Manganese	331	323	97.6	147	-	-
Mercury	16.8	13.2	78.3	128	-	-
Molybdenum	193	175	90.8	143	-	-
Nickel	163	152	93.1	185	-	-
Potassium	2420	2050	84.7	121	-	-
Selenium	81.9	74.9	91.5	163	-	-

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	57.6	53.9	93.6	150	-	-
Sodium	161	149	92.8	105	-	-
Strontium	100	96.2	96.2	90	-	-
Thallium	253	232	91.6	147	-	-
Tin	146	134	92.0	100	-	-
Titanium	449	340	75.6	93	-	-
Uranium	114	113	98.8	35	-	-
Vanadium	180	172	95.4	139	-	-
Zinc	217	211	97.0	180	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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ERA
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Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D105-540
Certificate Issue Date: March 19, 2019
Expiration Date: October 12, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8800	8.32	4600 - 13000	4470 - 13100
Antimony	282	147	7.70	6.17 - 289	28.2 - 366
Arsenic	155	143	6.34	119 - 168	100 - 186
Barium	439	415	5.37	343 - 488	311 - 519
Beryllium	192	179	2.78	149 - 210	134 - 224
Boron	216	160	7.08	113 - 208	96.1 - 238
Cadmium	61.5	56.2	0.528	46.6 - 65.9	42.2 - 70.3
Calcium	5190	4960	6.64	4090 - 5840	3610 - 6310
Chromium	104	101	4.75	83.2 - 118	70.5 - 131
Cobalt	196	189	0.500	158 - 219	141 - 236
Copper	65.0	63.1	2.65	53.1 - 73.1	47.3 - 78.9
Iron	15000	15700	8.94	10100 - 21300	6000 - 25400
Lead	126	125	4.77	103 - 146	89.3 - 160
Magnesium	2570	2410	6.26	1860 - 2970	1520 - 3310
Manganese	387	382	5.37	315 - 449	290 - 474
Mercury	7.76	7.61	13.7	5.53 - 9.69	4.57 - 10.7
Molybdenum	120	107	0.500	86.0 - 128	75.5 - 139
Nickel	117	108	0.514	89.5 - 127	75.7 - 141
Potassium	2420	2110	5.62	1500 - 2720	1260 - 2960
Selenium	84.6	77.9	7.10	61.8 - 94.0	49.2 - 107
Silver	34.6	34.3	8.34	27.8 - 40.9	23.6 - 45.1
Sodium	161	145	6.72	106 - 183	54.3 - 235
Strontium	104	104	3.95	85.1 - 123	74.8 - 133
Thallium	123	113	0.500	91.3 - 134	77.1 - 149

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	118	107	0.500	83.5 - 130	61.2 - 152
Titanium	512	421	5.80	114 - 728	0.00 - 854
Uranium	103	104	6.18	79.1 - 128	71.9 - 135
Vanadium	87.3	83.7	8.55	66.8 - 101	54.2 - 113
Zinc	251	240	3.98	194 - 285	168 - 312

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8800	87.1	193	-	-
Antimony	282	147	52.3	216	-	-
Arsenic	155	143	92.5	240	-	-
Barium	439	415	94.6	222	-	-
Beryllium	192	179	93.4	220	-	-
Boron	216	160	74.2	152	-	-
Cadmium	61.5	56.2	91.5	239	-	-
Calcium	5190	4960	95.6	175	-	-
Chromium	104	101	96.8	237	-	-
Cobalt	196	189	96.2	215	-	-
Copper	65.0	63.1	97.1	237	-	-
Iron	15000	15700	105	195	-	-
Lead	126	125	99.0	243	-	-
Magnesium	2570	2410	93.9	177	-	-
Manganese	387	382	98.7	215	-	-
Mercury	7.76	7.61	98.0	157	-	-
Molybdenum	120	107	89.4	216	-	-
Nickel	117	108	92.5	235	-	-
Potassium	2420	2110	87.2	181	-	-
Selenium	84.6	77.9	92.1	231	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	34.6	34.3	99.3	216	-	-
Sodium	161	145	89.8	166	-	-
Strontium	104	104	99.9	148	-	-
Thallium	123	113	91.8	215	-	-
Tin	118	107	90.4	164	-	-
Titanium	512	421	82.2	157	-	-
Uranium	103	104	101	61	-	-
Vanadium	87.3	83.7	95.9	214	-	-
Zinc	251	240	95.5	234	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D109-540
Certificate Issue Date: March 24, 2020
Expiration Date: October 03, 2023
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8130	2.54	3920 - 12300	4060 - 12200
Antimony	259	134	5.03	4.56 - 264	25.9 - 335
Arsenic	171	156	3.38	129 - 183	109 - 203
Barium	253	239	4.81	197 - 280	179 - 298
Beryllium	179	169	6.59	141 - 198	127 - 212
Boron	114	87.5	10.3	62.5 - 113	52.5 - 125
Cadmium	149	137	5.43	113 - 160	103 - 171
Calcium	5190	4760	3.48	3890 - 5640	3460 - 6070
Chromium	163	154	3.79	126 - 181	108 - 200
Cobalt	127	121	5.07	101 - 141	90.8 - 151
Copper	57.0	54.9	4.13	46.1 - 63.6	41.1 - 68.6
Iron	15000	14100	6.27	8470 - 19700	4920 - 23200
Lead	133	130	3.00	107 - 152	93.3 - 167
Magnesium	2570	2320	3.32	1760 - 2880	1440 - 3200
Manganese	277	269	2.67	221 - 317	199 - 340
Mercury	21.6	20.5	7.72	14.7 - 26.3	12.3 - 28.6
Molybdenum	108	95.4	2.61	76.4 - 114	66.9 - 124
Nickel	58.7	53.9	4.97	44.5 - 63.3	37.7 - 70.0
Potassium	2420	2020	3.06	1410 - 2630	1190 - 2850
Selenium	181	167	5.63	132 - 201	113 - 221
Silver	35.5	33.6	5.20	26.8 - 40.3	23.0 - 44.1
Sodium	161	133	2.76	95.1 - 171	46.5 - 220
Strontium	89.7	87.9	4.59	71.7 - 104	62.8 - 113
Thallium	121	112	5.19	90.3 - 133	76.1 - 147

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	83.5	74.0	5.42	57.6 - 90.4	39.7 - 108
Titanium	474	333	7.17	48.6 - 617	46.3 - 620
Uranium	51.9	51.9	3.36	39.6 - 64.3	35.9 - 68.0
Vanadium	68.1	62.6	6.00	49.4 - 75.8	37.0 - 88.3
Zinc	165	158	2.34	128 - 188	111 - 205

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ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8130	80.5	196	-	-
Antimony	259	134	51.8	217	-	-
Arsenic	171	156	91.3	243	-	-
Barium	253	239	94.3	230	-	-
Beryllium	179	169	94.6	223	-	-
Boron	114	87.5	76.7	150	-	-
Cadmium	149	137	91.8	249	-	-
Calcium	5190	4760	91.8	184	-	-
Chromium	163	154	94.4	245	-	-
Cobalt	127	121	95.3	221	-	-
Copper	57.0	54.9	96.2	243	-	-
Iron	15000	14100	93.9	199	-	-
Lead	133	130	97.7	251	-	-
Magnesium	2570	2320	90.1	182	-	-
Manganese	277	269	97.2	220	-	-
Mercury	21.6	20.5	94.7	172	-	-
Molybdenum	108	95.4	88.3	218	-	-
Nickel	58.7	53.9	91.8	242	-	-
Potassium	2420	2020	83.5	187	-	-
Selenium	181	167	92.2	235	-	-
Silver	35.5	33.6	94.5	222	-	-
Sodium	161	133	82.7	177	-	-
Strontium	89.7	87.9	98.0	151	-	-
Thallium	121	112	92.2	219	-	-
Tin	83.5	74.0	88.6	170	-	-
Titanium	474	333	70.3	157	-	-
Uranium	51.9	51.9	100	60	-	-
Vanadium	68.1	62.6	91.9	213	-	-
Zinc	165	158	95.8	238	-	-

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▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

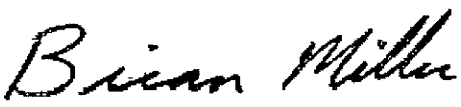
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck



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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D113-540
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8630	12.0	4420 - 12800	4370 - 12900
Antimony	256	129	16.8	0.742 - 257	25.6 - 323
Arsenic	91.6	84.5	15.1	70.0 - 99.0	59.2 - 110
Barium	259	249	9.94	206 - 292	187 - 311
Beryllium	175	163	3.89	135 - 191	122 - 204
Boron	95.7	76.7	12.8	55.7 - 97.7	48.0 - 107
Cadmium	107	99.0	11.5	82.2 - 116	74.2 - 124
Calcium	5190	4760	11.8	3890 - 5640	3460 - 6070
Chromium	129	122	14.6	101 - 144	85.7 - 159
Cobalt	63.6	61.7	11.5	51.9 - 71.6	46.3 - 77.2
Copper	62.3	61.5	12.3	51.9 - 71.0	46.1 - 76.8
Iron	15000	14500	15.7	8860 - 20100	5190 - 23800
Lead	122	123	13.9	103 - 144	88.3 - 158
Lithium	6.42	7.30	18.7	5.13 - 9.48	3.20 - 11.4
Magnesium	2570	2360	8.87	1810 - 2920	1480 - 3250
Manganese	470	456	13.4	375 - 538	350 - 563
Mercury	22.1	18.9	14.5	13.0 - 24.8	11.3 - 26.4
Molybdenum	80.1	72.8	11.0	58.7 - 87.0	50.5 - 95.2
Nickel	143	135	14.2	112 - 158	94.7 - 176
Potassium	2420	2090	8.21	1480 - 2700	1240 - 2940
Selenium	128	121	11.7	96.9 - 146	80.4 - 162
Silver	45.4	44.1	6.69	35.5 - 52.8	30.7 - 57.6
Sodium	161	136	9.34	97.4 - 174	48.1 - 223
Strontium	82.2	82.3	8.42	67.4 - 97.1	58.6 - 106

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	154	144	7.54	117 - 171	101 - 187
Tin	89.7	79.8	14.0	62.2 - 97.4	43.5 - 116
Titanium	705	546	10.3	123 - 969	118 - 974
Uranium	29.5	30.9	3.38	23.9 - 37.9	21.3 - 40.5
Vanadium	196	186	14.2	148 - 224	138 - 235
Zinc	307	295	10.4	240 - 351	207 - 384

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Calculation of 7470A Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x (1mg/1000µg) x (DF)

Calculation of 7471B Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x (1mg/1000µg) x (DF)

The result in mg/kg is calculated on a dry weight basis using the sample weight digested(Wt), the final volume of the digestate(FV), and the percent total solids(%TS).

Result, mg/kg, wet = ((result, mg/L) x (FV)) /Wt

Result, mg/kg, dry wt = (Result, mg/kg wet)/(%TS)

No.	Sample No.	NAME	CURVE: WG1961346
1	1	STD	
2	2	STD	
3	3	STD	
4	4	STD	
5	5	STD	
6	6	STD	
1	7	XICV	
2	8	XICB	
3	7	ICV	
4	8	ICB	
5	9	0.2 PPB	
6	10	xwg1962583-2 wg1962583	
7	11	Check STD(5ug/L)	
8	12	Check Blank	
9	13	WG1962742-1 WG1962742	
10	14	WG1962742-2 WG1962742	
11	15	L2447332-09 WG1962742	
12	16	WG1962742-3 WG1962742	
13	17	WG1962742-4 WG1962742	
14	18	L2447332-10 WG1962742	
15	19	Check STD(5ug/L)	
16	20	Check Blank	
17	21	WG1962745-1 WG1962745	
18	22	WG1962745-2 WG1962745	
19	23	L2446763-01 WG1962745	
20	24	WG1962745-3 WG1962745	
21	25	WG1962745-4 WG1962745	
22	26	L2446763-02 WG1962745	
23	27	L2446763-03 WG1962745	
24	28	L2446763-04 WG1962745	
25	29	WG1962681-1 WG1962681	
26	30	WG1962681-2 WG1962681	
27	31	Check STD(5ug/L)	
28	32	Check Blank	
29	33	l2446773-02 WG1962681	
30	34	WG1962681-3 WG1962681	
31	35	WG1962681-4 WG1962681	
32	36	l2446775-02 WG1962681	
33	37	l2447275-01 WG1962681	
34	38	WG1962900-1 WG1962900	
35	39	WG1962900-2 WG1962900	
36	40	L2447503-07 WG1962900	
37	41	WG1962900-3 WG1962900	

38	42	WG1962900-4 WG1962900
39	43	Check STD(5ug/L)
40	44	Check Blank
41	45	L2448142-01 WG1962900
42	46	L2448142-02 WG1962900
43	47	L2448142-03 WG1962900
44	48	L2448142-04 WG1962900
45	49	L2448142-05 WG1962900
46	50	L2448142-06 WG1962900
47	55	Check STD(5ug/L)
48	56	Check Blank
49	57	Check STD(5ug/L)
50	58	Check Blank
51	59	WG1963195-1 WG1963195
52	60	WG1963195-2 WG1963195
53	61	L2444328-01 WG1963195
54	62	WG1963195-3 WG1963195
55	63	WG1963195-4 WG1963195
56	64	L2444328-02 WG1963195
57	67	Check STD(5ug/L)
58	68	Check Blank
59	69	Check STD(5ug/L)
60	70	Check Blank
61	71	WG1963069-1 WG1963069
62	72	WG1963069-2 WG1963069
63	73	L2447952-02 WG1963069
64	74	WG1963069-3 WG1963069
65	75	WG1963069-4 WG1963069
66	76	L2447952-01 WG1963069
67	77	L2447952-03 WG1963069
68	78	L2447952-13 WG1963069
69	79	XCheck STD(5ug/L)
70	80	XCheck Blank
71	1	Check STD(5ug/L)
72	2	Check Blank

No.	Sample No.	NAME	Curve: WG1962480
1	1	STD	
2	2	STD	
3	3	STD	
4	4	STD	
5	5	STD	
6	6	STD	
1	7	ICV	
2	8	ICB	
3	9	0.2PPB	
4	10	WG1962721-1	WG1962721
5	11	WG1962721-2	WG1962721
6	12	L2447168-02	WG1962721
7	13	WG1962721-3	WG1962721
8	14	WG1962721-4	WG1962721
9	15	L2447168-01	WG1962721
10	16	L2447184-01	WG1962721
11	17	L2447184-02	WG1962721
12	18	L2447184-03	WG1962721
13	19	Check STD(5ug/L)	
14	20	Check Blank	
15	21	L2447184-04	WG1962721
16	22	L2447184-05	WG1962721
17	23	XICV2434240624FAC	
18	24	Check STD(5ug/L)	
19	25	Check Blank	
20	26	L2447342-01	WG1962900
21	27	L2447503-01	WG1962900
22	28	L2447503-02	WG1962900
23	29	L2447503-03	WG1962900
24	30	L2447503-04	WG1962900
25	31	Check STD(5ug/L)	
26	32	Check Blank	
27	33	L2447503-05	WG1962900
28	34	L2447503-06	WG1962900
29	35	L2447503-08	WG1962900
30	36	L2447503-09	WG1962900
31	37	L2447503-10	WG1962900
32	38	L2447503-11	WG1962900
33	39	WG1963084-1	WG1963084
34	40	WG1963084-2	WG1963084
35	41	L2447150-01	WG1963084
36	42	WG1963084-3	WG1963084
37	43	Check STD(5ug/L)	

38	44	Check Blank
39	45	WG1963084-4 WG1963084
40	46	L2447293-01 WG1963084
41	47	L2447448-01 WG1963084
42	48	L2447508-01 WG1963084
43	49	L2447508-02 WG1963084
44	55	Check STD(5ug/L)
45	56	Check Blank
46	57	Check STD(5ug/L)
47	58	Check Blank
48	59	WG1963099-1 WG1963099
49	60	WG1963099-2 WG1963099
50	61	L2447306-01 WG1963099
51	62	WG1963099-3 WG1963099
52	63	WG1963099-4 WG1963099
53	64	L2447263-01 WG1963099
54	65	L2447498-24 WG1963099
55	66	L2447507-01 WG1963099
56	67	Check STD(5ug/L)
57	68	Check Blank
58	69	Check STD(5ug/L)
59	70	Check Blank

No.	Sample No.	NAME	CURVE: WG1963715
1	1	STD	
2	2	STD	
3	3	STD	
4	4	STD	
5	5	STD	
6	6	STD	
1	7	ICV	
2	8	ICB	
3	9	0.2 PPB	
4	10	WG1963953-1 WG1963953	
5	11	WG1963953-2 WG1963953	
6	12	L2445879-06 WG1963953	
7	13	WG1963953-3 WG1963953	
8	14	WG1963953-4 WG1963953	
9	15	L2447336-01 WG1963953	
10	16	L2447336-02 WG1963953	
11	17	L2447524-01 WG1963953	
12	18	L2447361-01 WG1963953	
13	19	Check STD(5ug/L)	
14	20	Check Blank	
15	21	L2447361-02 WG1963953	
16	22	L2445879-01 WG1963953	
17	23	L2445879-02 WG1963953	
18	24	L2445879-03 WG1963953	
19	25	L2445879-04 WG1963953	
20	26	L2445879-05 WG1963953	
21	27	L2445879-07 WG1963953	
22	28	L2445879-08 WG1963953	
23	29	L2445879-09 WG1963953	
24	30	L2445879-10 WG1963953	
25	31	Check STD(5ug/L)	
26	32	Check Blank	
27	33	L2447307-01 WG1963953	
28	34	Check STD(5ug/L)	
29	35	Check Blank	
30	36	WG1964209-1 WG1964209	
31	37	WG1964209-2 WG1964209	
32	38	L2447194-06 WG1964209	
33	39	WG1964209-3 WG1964209	
34	40	WG1964209-4 WG1964209	
35	41	L2445805-08 WG1964209	
36	43	Check STD(5ug/L)	
37	44	Check Blank	

38	45	WG1963948-1 WG1963948
39	46	WG1963948-2 WG1963948
40	47	L2447503-07 WG1963948
41	48	WG1963948-3 WG1963948
42	49	WG1963948-4 WG1963948
43	50	L2447503-01 WG1963948
44	51	L2447503-02 WG1963948
45	52	L2447503-03 WG1963948
46	53	L2447503-04 WG1963948
47	54	L2447503-05 WG1963948
48	55	Check STD(5ug/L)
49	56	Check Blank
50	57	L2447503-06 WG1963948
51	58	L2447503-08 WG1963948
52	59	L2447503-09 WG1963948
53	60	L2447503-10 WG1963948
54	61	WG1964022-1 WG1964022
55	62	WG1964022-2 WG1964022
56	63	L2447501-01 WG1964022
57	64	WG1964022-3 WG1964022
58	65	WG1964022-4 WG1964022
59	66	L2447501-02 WG1964022
60	67	Check STD(5ug/L)
61	68	Check Blank
62	69	L2448458-01 WG1964022
63	70	L2448458-02 WG1964022
64	71	L2448458-03 WG1964022
65	72	L2448458-04 WG1964022
66	73	L2448458-05 WG1964022
67	74	Check STD(5ug/L)
68	75	Check Blank

METALS ELN REPORT

Workgroup: WG1962900

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	24006780	H2SO4	24006780	METALS	METSPIKE	HG24331511 00AJTV1	METSPIKE	HG24331511 00AJTV1	320, 344

Additional Reagent/Std	K2O8S2	PS2433141230AJT
	KMnO4	PP2434220534CME
	NaCl-NH2OH.HCl	HH2433201231JWN
		ICV2432100710FAC

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2447342-01 WATER	08/23/24 09:06	Alexander Gonatas	5		08/23/24 09:06	8	96.0	08/23/24 11:06	25	5X dilution due to KMnO4
L2447503-01 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-02 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-03 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-04 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-05 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-06 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-07 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-08 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-09 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-10 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2447503-11 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	

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METALS ELN REPORT

Workgroup: WG1962900

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2448142-01 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2448142-02 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2448142-03 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2448142-04 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2448142-05 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
L2448142-06 SAMP	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
WG1962900-1 BLANK	08/23/24 09:06	Alexander Gonatas	25		08/23/24 09:06	8	96.0	08/23/24 11:06	25	
WG1962900-2 LCS	08/23/24 09:06	Alexander Gonatas	25	0.25	08/23/24 09:06	8	96.0	08/23/24 11:06	25	ELN:efm
WG1962900-3 MS	08/23/24 09:06	Alexander Gonatas	25	1.25	08/23/24 09:06	8	96.0	08/23/24 11:06	25	ELN:AJT
WG1962900-4 MSD	08/23/24 09:06	Alexander Gonatas	25	1.25	08/23/24 09:06	8	96.0	08/23/24 11:06	25	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

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METALS ELN REPORT

Workgroup: WG1963948

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	24011095	H2SO4	24009418	METALS	METSPIKE	HG24331511100AJTV1	METSPIKE	HG24331511320, 34800AJTV1	

Additional Reagent/Std	K2O8S2	PS2433121938CLH
	KMnO4	PP2434220534CME
	NaCl-NH2OH.HCl	HH2434230842JWN
		ICV2432100710FAC

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol ml	Spike Amt	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2447503-01 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-02 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-03 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-04 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-05 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-06 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-07 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-08 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-09 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	L
L2447503-10 SAMP	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	J
WG1963948-1 BLANK	08/26/24 20:10	Maisie Mcqueen	NA	25		08/26/24 20:10	5	95.0	08/26/24 22:10	25	ELN: CLH

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METALS ELN REPORT

Workgroup: WG1963948

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG1963948-2 LCS	08/26/24 20:10	Maisie Mcqueen	NA	25	0.25	08/26/24 20:10	5	95.0	08/26/24 22:10	25	
WG1963948-3 MS	08/26/24 20:10	Maisie Mcqueen	NA	25	1.25	08/26/24 20:10	5	95.0	08/26/24 22:10	25	
WG1963948-4 MSD	08/26/24 20:10	Maisie Mcqueen	NA	25	1.25	08/26/24 20:10	5	95.0	08/26/24 22:10	25	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

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Wet Chemistry

Total Nitrogen Analysis

Results

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-01**	**Date Collected**	:	**08/19/24 17:00**
Client ID	:	**MW-1S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/27/24 13:00**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**MRM**
Lab File ID	:	**WG1964465.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**3.1**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-02**	**Date Collected**	:	**08/20/24 10:10**
Client ID	:	**MW-2S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/27/24 13:00**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**MRM**
Lab File ID	:	**WG1964465.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**1.9**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: MRM
Lab File ID	: WG1964465.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	3.0	0.30	0.30	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-04**	**Date Collected**	:	**08/20/24 09:55**
Client ID	:	**MW-4D**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/27/24 13:00**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**MRM**
Lab File ID	:	**WG1964465.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.55**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-05**	**Date Collected**	:	**08/20/24 08:30**
Client ID	:	**MW-5S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/27/24 13:00**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**MRM**
Lab File ID	:	**WG1964465.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**1.2**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: MRM
Lab File ID	: WG1964465.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	2.3	0.30	0.30	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: MRM
Lab File ID	: WG1964465.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	6.9	0.30	0.30	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-08**	**Date Collected**	:	**08/20/24 11:50**
Client ID	:	**MW-8S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/27/24 13:00**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**MRM**
Lab File ID	:	**WG1964465.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.65**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 13:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: MRM
Lab File ID	: WG1964465.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	1.2	0.30	0.30	

Sample Raw Data

ALPHA ANALYTICAL LABS

WET CHEMISTRY DEPARTMENT

TOTAL NITROGEN

Last Change 3/5/13 GFF
File tnitrogen.xlt

Sample #: _____

Client: _____

Analysis: Total Nitrogen

Method: *Calculation from TKN & NO3/NO2*

Product: TNITROGEN
Analyte: Total Nitrogen,
Analysis Date: 8/27/2024 13:00
Technician: MRM
Work group: WG1964465
RL: 0.3 mg/L

	Sample Number	TKN (mg/L)	NO3/NO2 (mg/L)	RL Multiplier	Result (mg/L)
SAMP	L2447503-01	3.12	0	1.0	3.12
SAMP	L2447503-02	0.346	1.6	1.0	1.946
SAMP	L2447503-03	0.24	3	1.0	3.24
SAMP	L2447503-04	0.112	0.55	1.0	0.55
SAMP	L2447503-05	0	1.2	1.0	1.2
SAMP	L2447503-06	1.7	0.61	1.0	2.31
SAMP	L2447503-08	0.288	0.65	1.0	0.65
SAMP	L2447503-09	0.109	1.2	1.0	1.2
SAMP	L2447600-01	10.2	24.2	10.0	34.4
SAMP	L2447601-01	35.4	7.4	10.0	42.8
SAMP	L2447610-01	39.8	15.5	5.0	55.3
SAMP	L2447611-01	68.5	2.43	20.0	70.93
SAMP	L2447612-01	16	6.41	1.0	22.41
SAMP	L2447613-01	50.8	56.1	20.0	106.9
	L2447503-07	0.322	6.6	1.0	6.922

Calculations of Total Nitrogen

Calculate the concentration value based on results for TKN-N and N03/NO2-N.

Aqueous samples:

mgTN-N/L = TKN-N(mg/l) + NO3/NO2-N (mg/l)

Soil samples:

mgTN-N/Kg = TKN-N(mg/Kg) + NO3/NO2-N(mg/Kg)

Total Kjeldahl Nitrogen Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:37
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	3.12	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:38
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.346	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.240	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:40
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.112	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	ND	0.300	0.066	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:42
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	1.70	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.322	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:44
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.288	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 09:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.109	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963015-1	**Date Collected**	: NA
Client ID	: WG1963015-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/26/24 09:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.096	0.300	0.022	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963015-3	**Date Collected**	: 08/20/24 00:00
Client ID	: DUPDUP	**Date Received**	: 08/20/24
Sample Location	:	**Date Analyzed**	: 08/26/24 09:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320240826-A	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/23/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.443	0.300	0.066	

Sample Raw Data

Original Run Filename: OM_8-26-2024_08-44-09AM.OMN Created: 8/26/2024 8:44:09 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_08-44-09AM.OMN Last Modified: 8/26/2024 9:12:05 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A
CURVE ONLY

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	STD 1	1	S1	10.00000				
	STD 2	1	S2	8.00000				
	STD 3	1	S3	4.00000				
	STD 4	1	S4	2.00000				
	STD 5	1	S5	1.00000				
	STD 6	1	S6	0.40000				
	STD 7	1	S7	0.20000				
	STD 8	1	S8	0.10000				
	STD 9	1	S9	0.05000				
	STD 10	1	S10	0.00000				
	CCV 0.4000	1	S6	0.37302				93%
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCV 4.0000	1	S3	3.87142				97%
			Known Conc:	100.00000				
	CCB	1	S10	0.03199				
			Known Conc:	100.00000				
X	HI ICV 8.0	1	1	8.21270				
	LO ICV 1.0	1	2	1.01376				
	ICB	1	3	0.01909				
RERUN	WG1963015-1 T	1	4	0.02865				
	WG1963015-2 T	1	5	36.61927		15.00		
	LCS LO T	1	6	4.03711		3.00		
	L2447161-01 T	1	7	2.57070		3.00		
	L2447432-02 T	1	8	4.75202		3.00		
	L2447433-01 T	1	9	13.75241		15.00		
	L2447433-02 T	1	10	3.79717		3.00		
	CCV 0.4000	1	S6	0.45410				114%
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	3.93721				
			Known Conc:	100.00000				
	CCB	1	S10	0.03998				
			Known Conc:	100.00000				
	L2447476-01 T	1	11	0.05510		3.00		

Channel 2 (Ammonia High) - Current View

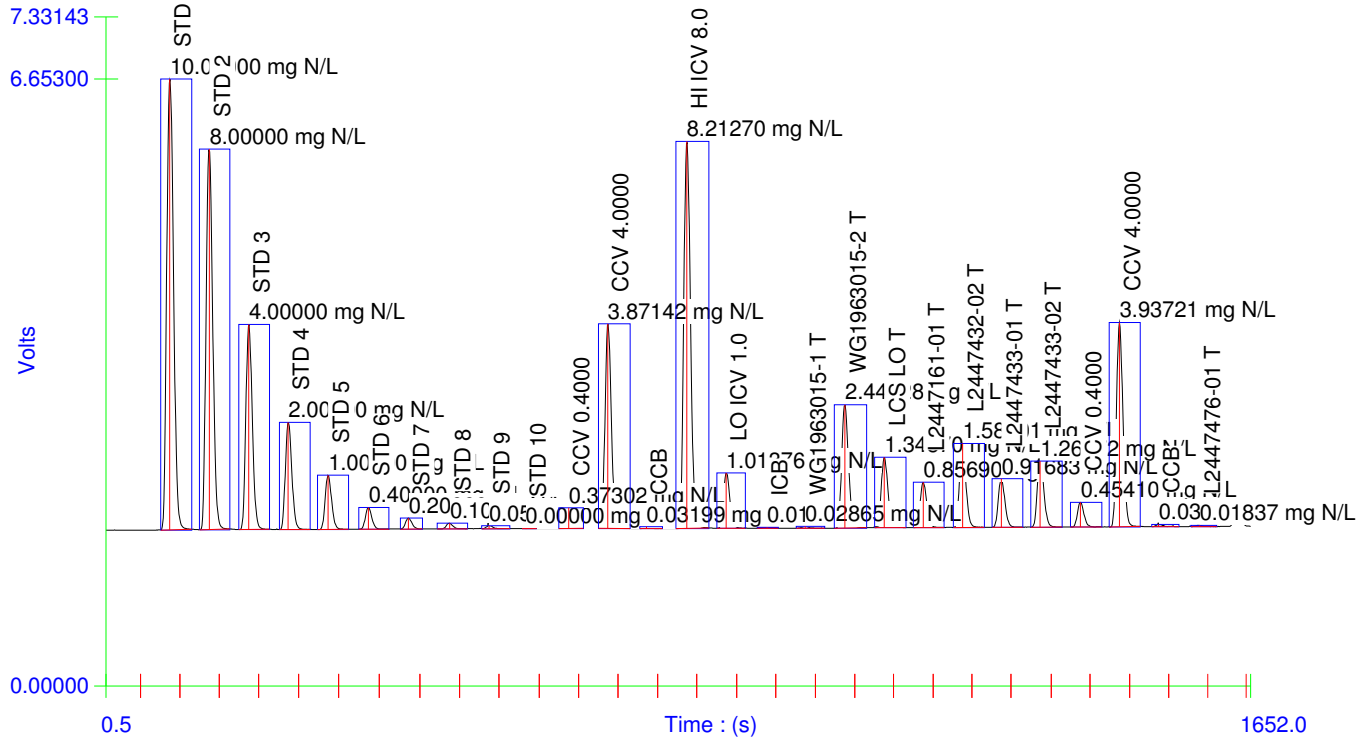
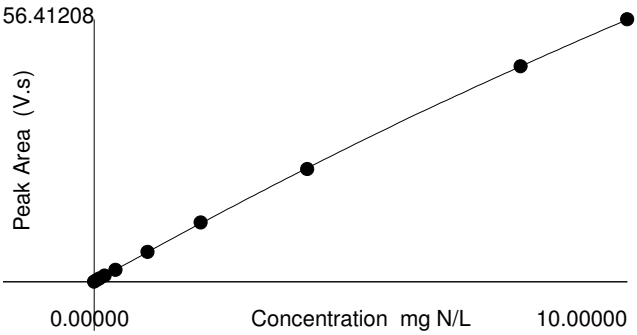


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Original Run Filename: OM_8-26-2024_09-12-58AM.OMN Created: 8/26/2024 9:12:58 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_09-12-58AM.OMN Last Modified: 8/26/2024 9:29:20 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY A
	CCV 0.4000	1	S6	0.38357				96%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.93447				98%
		Known Conc:		100.00000				
	CCB	1	S10	-0.00635				
		Known Conc:		100.00000				
	HI ICV 8.0	1	1	8.21517				103%
	LO ICV 1.0	1	2	1.01817				102%
	ICB	1	3	0.02237				
	WG1963015-1 T	1	4	0.03199				
	WG1963015-2 T	1	5	36.60983		15.00		92%
	LCS LO T	1	6	4.04404		3.00		101%
	L2447161-01 T	1	7	2.58040		3.00		
	L2447432-02 T	1	8	4.75755		3.00		
	L2447433-01 T	1	9	13.65107		15.00		
	L2447433-02 T	1	10	3.73265		3.00		
X	CCV 0.4000	1	S6	0.45078				113%, RERUN OK
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

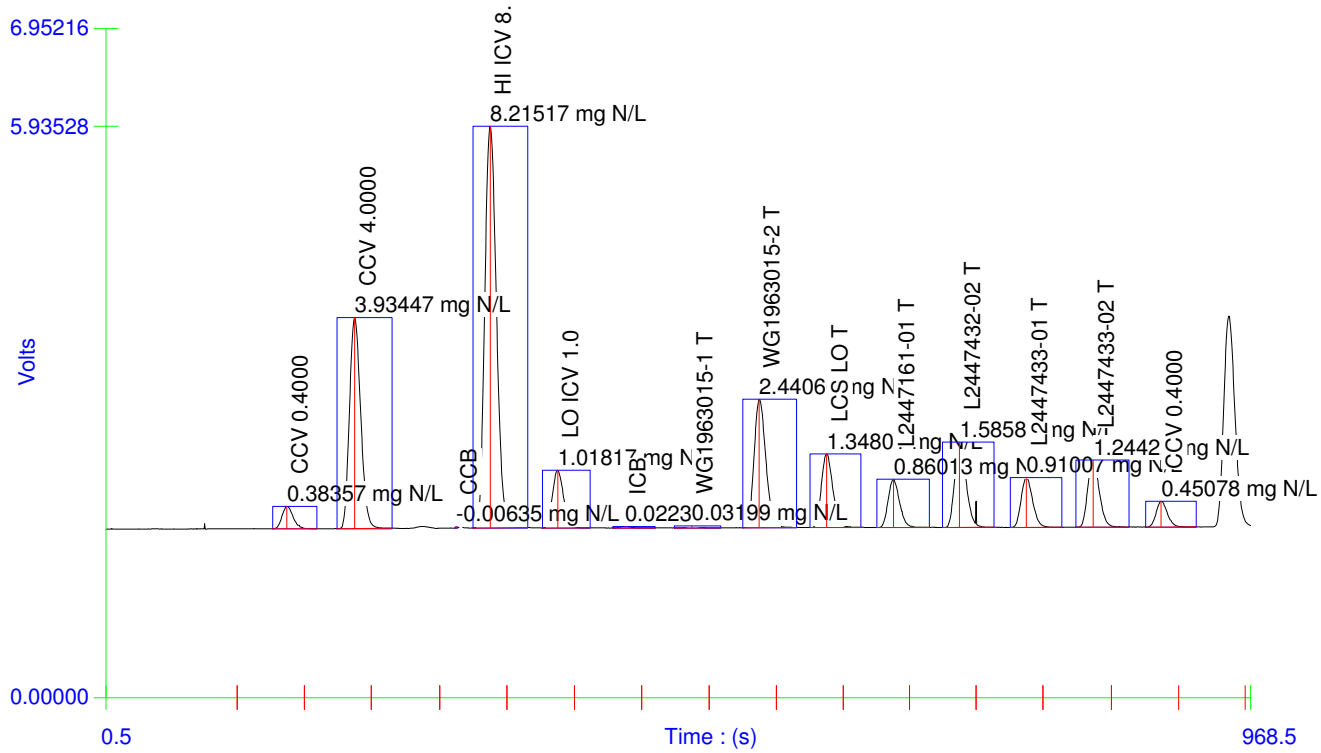
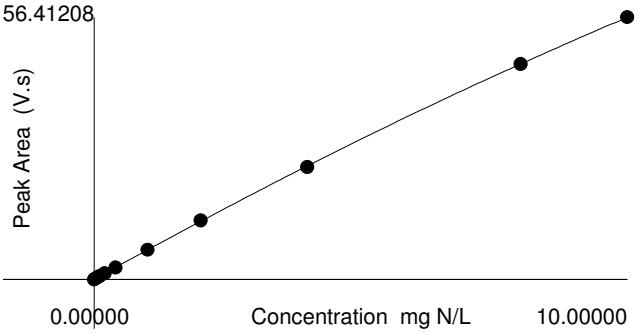


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_8-26-2024_09-32-06AM.OMN Created: 8/26/2024 9:32:06 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_09-32-06AM.OMN Last Modified: 8/26/2024 9:56:51 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY A
CCV 0.4000	1	S6	0.38478				96%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.93012				98%
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCB	1	S10	0.03387				
	Known Conc:		100.00000				
L2447476-01 T	1	11	0.05070		3.00		
L2447476-02 T	1	12	0.77575		3.00		
L2447503-01 T	1	13	3.11572		3.00		
L2447503-02 T	1	14	0.34599		3.00		
L2447503-03 T	1	15	0.24031		3.00		
L2447503-04 T	1	16	0.11228		3.00		
L2447503-05 T	1	17	0.05550		3.00		
L2447503-06 T	1	18	1.70054		3.00		
L2447503-07 T	1	19	0.32154		3.00		
L2447503-08 T	1	20	0.28849		3.00		
CCV 0.4000	1	S6	0.38411				96%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.91687				98%
	Known Conc:		100.00000				
CCB	1	S10	0.03062				
	Known Conc:		100.00000				
L2447503-09 T	1	21	0.10866		3.00		
WG1963015-4 T	1	22	7.60431		3.00		95%
WG1963015-3 T	1	23	0.44346		3.00		RPD=NC
CCV 0.4000	1	S6	0.38547				96%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.92170				98%
	Known Conc:		100.00000				
CCB	1	S10	0.04020				
	Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Channel 2 (Ammonia High) - Current View

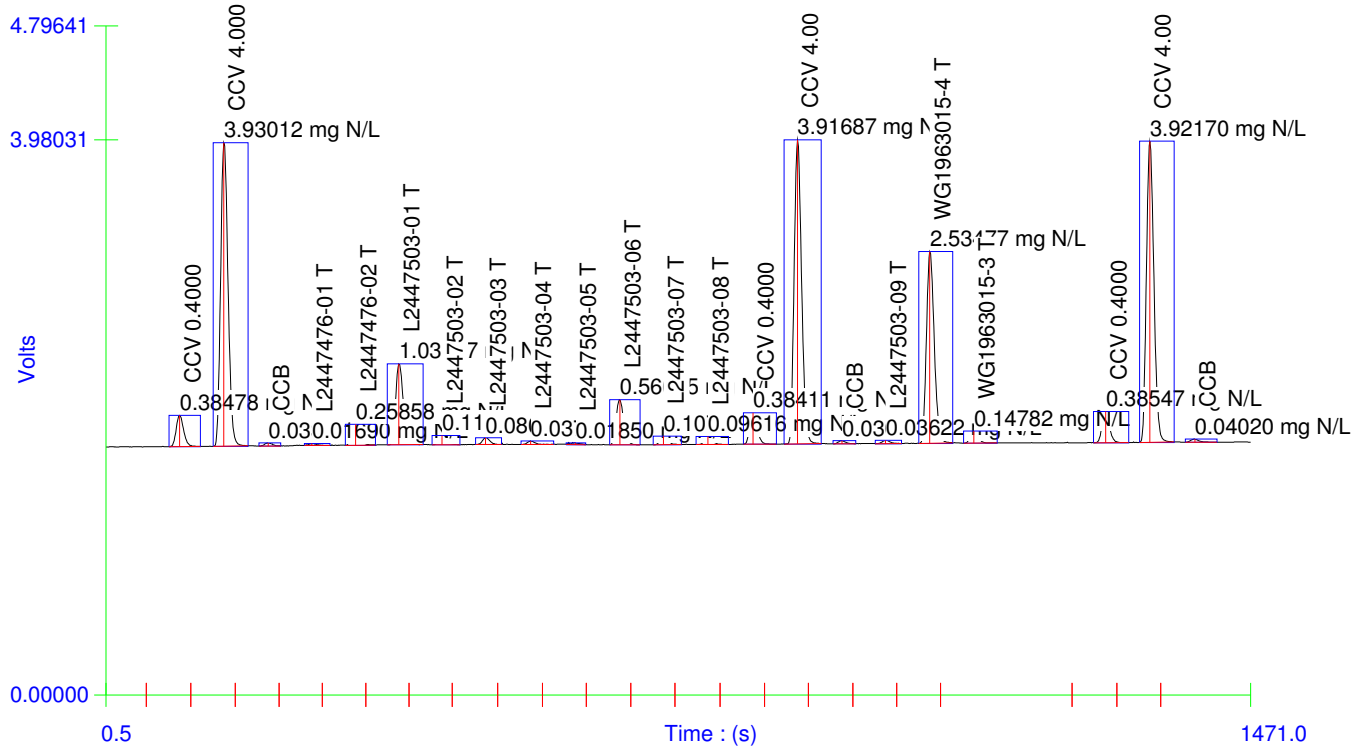
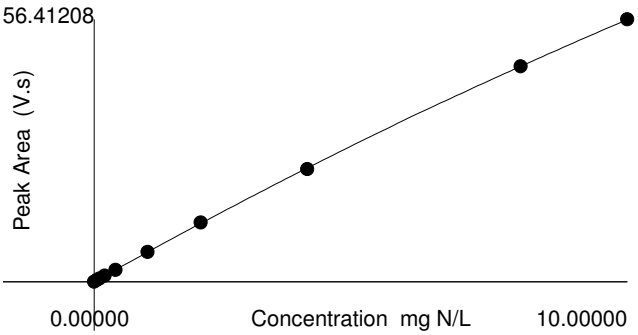


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: DUP	**Matrix**	: WATER
Lab Sample ID	: L2447503-09		
Matrix Spike	: WG1963015-4	**MS Analysis Date**	: 08/26/24 09:49
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	0.109J	8	7.60	95					77-111	24

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: DUP	**Matrix**	: WATER
Lab Sample ID	: L2447503-09	**Analysis Date**	: 08/26/24 09:48
Dup Sample ID	: WG1963015-3	**DUP Analysis Date**	: 08/26/24 09:50

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.109J	0.443	NC	24

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963015-2	**LCS Analysis Date**	: 08/26/24 09:21
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Nitrogen, Total Kjeldahl	**40.0**	**36.6**	**92.**					**78-122**	**24**

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Nitrogen, Total Kjeldahl	NONE	0.3	0.066	mg/l	78-122		77-111	24	24	4500NH3-H	28 days	1 - Plastic 500ml H2SO4 preserved
Nitrogen, Total Kjeldahl	NONE	0.3	0.066	mg/l	78-122		77-111	24	24	351.1	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Nitrogen, Total Kjeldahl	NONE	150	31.5	mg/kg	81-115	26	43-160	26	26	4500NH3-H	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Calculations of Nitrogen in TKN

Aqueous samples:

Compute sample TKN –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

TKN-N mg/L = mg/L direct reading x dilution factor

Sequence Logs

Tray A(18-44-09AM, 09-12-58AM, 09-32-06AM)
prep 8/23/24 @12:10

1	Hi ICV 8.0
2	Lo ICV 1.0
3	ICB
4	WG1963015-1T, Blk
5	-2T, LCS Hi, 5X
6	LCS Lo T
7	47161-01T
8	47432 02T
9	47433 01T (5X)
10	02T
11	47476 01T
12	02T
13	47503 01T
14	02T
15	03T
16	04T
17	05T
18	06T
19	07T
20	08T
21	09T
22	09T MS
23	09T Dup

Tray B
prep 8/24/24 @10:15

1	WG1963323-1T, Blk
2	-2T, LCS Hi, 5X
3	LCS Lo T
4	46680 01T (5X)
5	47294 01T (5X)
6	47295 02T, 20X 0.5+10
7	47296 01T (10X)
8	47297 01T
9	02T
10	47386 01T
11	47388 01T
12	47427 01T
13	47428 01T
14	02T
15	02T MS
16	02T Dup
17	47429 01T
18	02T
19	47675 01T
20	47732 01T

Date: 8/26/24
Sodium Phenolate: 7/29/24 R-4065
Sodium Hypochlorate: 7/29/24 stoptshop
Sodium Nitropruisside: 7/29/24 R-3969
Borric Acid Soln.: 7/29/24 R-4019
ICV 1.0: 8/20/24 WC-3448
ICV 8.0:
Cal. Std: 8/1/24 WC-3372
See Front Page for Instructions:

VEP

tnessed & Understood by me, | Date | Invented by: | Date
Recorded by:

Sample Preparation

[redacted]

Project No. _____ 27

TLE _____ Book No. _____ Confidentia

om Page No. ____ WG1963015

Sample	Dilution	Volume	Final Vol.
Blank	1x	50mL	150mL
Low			
High			
L2447161-01			
47432-02			
47433-01	N = 20	5 X (10+5) SNB 083024	
-02		1X	
47476-01			
-02			
47503-01			
-02			
-03			
-04			
-05			
-06			
-07			
-08			
-09 Pt			
-09 Dup			
-09 MS			

Same Std's 08 23 24 @ 12:10 SAD

# of Reagents

as previous

pg # 26

Nitrates checked

To Page No. ____

tnessed & Understood by me, | Date | Invented by: | Date

Ammonia Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 11:49
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240826-C	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	2.83	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 11:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240826-C	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.093	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 11:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240826-C	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.161	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 11:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240826-C	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.076	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 11:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240826-C	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.030	0.075	0.024	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240827-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	1.99	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240827-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.174	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240827-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.169	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240827-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.038	0.075	0.024	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963694-1	**Date Collected**	: NA
Client ID	: WG1963694-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/26/24 11:03
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240826-C	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963694-4	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5SDUP	**Date Received**	: 08/20/24
Sample Location	:	**Date Analyzed**	: 08/26/24 11:33
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240826-C	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/26/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.220	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1964148-1	**Date Collected**	: NA
Client ID	: WG1964148-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/27/24 11:12
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240827-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1964148-4	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8SDUP	**Date Received**	: 08/20/24
Sample Location	:	**Date Analyzed**	: 08/27/24 11:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320240827-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.301	0.075	0.024	

Sample Raw Data

Original Run Filename: OM_8-27-2024_07-56-04AM.OMN Created: 8/27/2024 7:56:04 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-27-2024_07-56-04AM.OMN Last Modified: 8/27/2024 8:43:36 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY A
STD 1	1	S1	10.00000				
STD 2	1	S2	8.00000				
STD 3	1	S3	4.00000				
STD 4	1	S4	2.00000				
STD 5	1	S5	1.00000				
STD 6	1	S6	0.40000				
STD 7	1	S7	0.20000				
STD 8	1	S8	0.10000				
STD 9	1	S9	0.05000				
STD 10	1	S10	0.00000				
CCV 0.4000	1	S6	0.40260				101%
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCV 4.0000	1	S3	3.97604				99%
	Known Conc:		100.00000				
CCB	1	S10	0.03373				
	Known Conc:		100.00000				
HI ICV 8.0	1	1	8.39116				105%
LO ICV 1.0	1	2	1.04503				105%
ICB	1	3	0.02117				
WG1963673-1 T	1	4	0.03043				
WG1963673-2 T	1	5	37.57527		15.00		94%
LCS LO T	1	6	4.23066		3.00		106%
L2445995-01 T	1	7	0.55993		3.00		
L2445995-02 T	1	8	0.31586		3.00		
L2445995-03 T	1	9	1.34212		3.00		
L2445995-04 T	1	10	3.42800		6.00		
CCV 0.4000	1	S6	0.41983				105%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.02048				101%
	Known Conc:		100.00000				
CCB	1	S10	0.03875				
	Known Conc:		100.00000				
L2445995-05 T	1	11	0.79209		3.00		
L2445995-06 T	1	12	0.34402		3.00		
L2445995-07 T	1	13	0.39293		3.00		
WG1963673-4 T	1	14	9.09986		3.00		109%
WG1963673-3 T	1	15	0.86000		3.00		RPD=75%
L2446017-01 T	1	16	10.84328		3.00		
L2446017-02 T	1	17	10.24177		3.00		
L2447553-01 T	1	18	8.13672		15.00		
L2447553-02 T	1	19	5.59961		15.00		
L2447553-03 T	1	20	4.27398		15.00		
CCV 0.4000	1	S6	0.40816				102%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.03122				101%
	Known Conc:		100.00000				
CCB	1	S10	0.03181				
	Known Conc:		100.00000				
L2447553-04 T	1	21	4.80209		15.00		
L2447553-05 T	1	22	6.44547		15.00		
L2447553-06 T	1	23	5.28287		15.00		
CCV 0.4000	1	S6	0.39920				100%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.01766				100%
	Known Conc:		100.00000				
CCB	1	S10	0.03600				
	Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

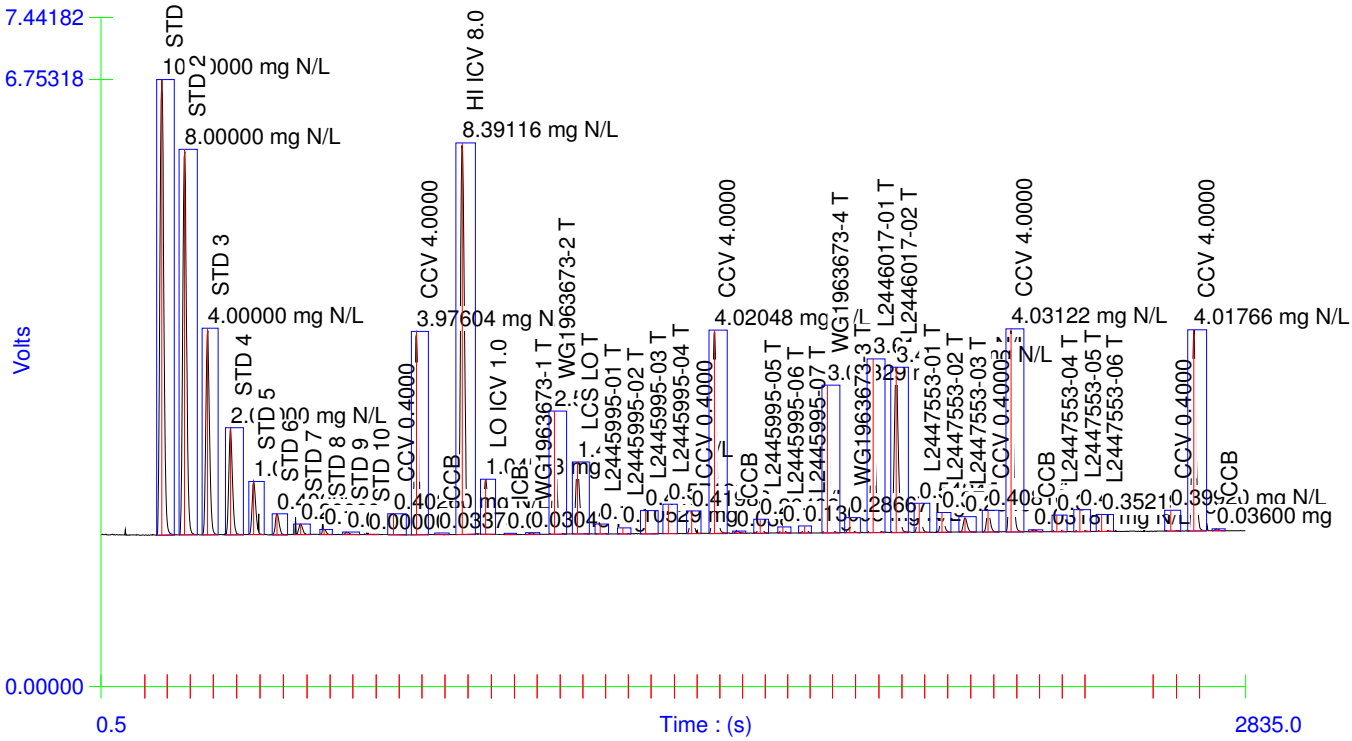
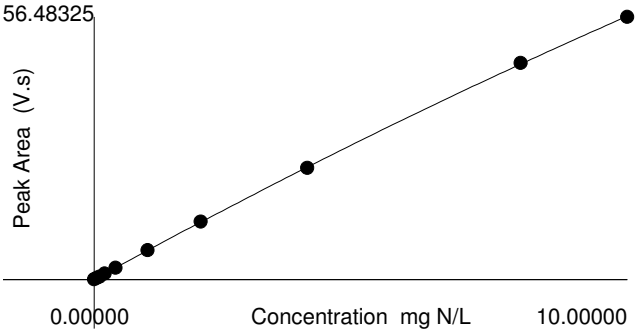


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.48325	5.06670	0.0	0.3	9.95687	8/27/2024	7:58:03 AM
2	8.00000	1	46.58753	4.28981	0.0	-0.5	8.05805	8/27/2024	7:58:59 AM
3	4.00000	1	24.04231	2.30151	0.0	0.8	3.97525	8/27/2024	7:59:56 AM
4	2.00000	1	12.52994	1.19029	0.0	-1.1	2.02083	8/27/2024	8:00:53 AM
5	1.00000	1	6.31600	0.59297	0.0	-0.6	1.00254	8/27/2024	8:01:51 AM
6	0.40000	1	2.52125	0.23552	0.0	1.2	0.39332	8/27/2024	8:02:49 AM
7	0.20000	1	1.29752	0.11649	0.0	0.2	0.19890	8/27/2024	8:03:47 AM
8	0.10000	1	0.61559	0.05781	0.0	8.3	0.09100	8/27/2024	8:04:46 AM
9	0.05000	1	0.36216	0.02907	0.0	-1.5	0.05097	8/27/2024	8:05:42 AM
10	0.00000	1	0.06537	0.00481			0.00415	8/27/2024	8:06:39 AM

Author: A1WETCHEMINSTRUMENT Date : 8/27/2024

Figure : 1 (Ammonia)



Area = - 0.06439 * Conc^2 + 6.30310 * Conc + 0.04188
Conc = 0.00033 * Area^2 + 0.15760 * Area - 0.00615
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/27/2024

Original Run Filename: OM_8-27-2024_08-44-50AM.OMN Created: 8/27/2024 8:44:50 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-27-2024_08-44-50AM.OMN Last Modified: 8/27/2024 9:00:10 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY B
	CCV 0.4000	1	S6	0.38980				97%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.97468				99%
		Known Conc:		100.00000				
	CCB	1	S10	0.03593				
		Known Conc:		100.00000				
	WG1963675-1 T	1	1	0.03387				
	WG1963675-2 T	1	2	38.39532		15.00		96%
	LCS LO T	1	3	4.28757		3.00		107%
	L2447553-07 T	1	4	6.40822		15.00		
	L2447589-01 T	1	5	54.15923		15.00		
	L2447589-02 T	1	6	7.63828		30.00		
	L2447590-01 T	1	7	9.77601		6.00		
	L2447590-02 T	1	8	5.16881		3.00		
	L2447600-01 T	1	9	10.23221		30.00		
X	L2447601-01 T	1	10	36.85458		3.00		
X	CCV 0.4000	1	S6	0.86024				215%, RERUN OK
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

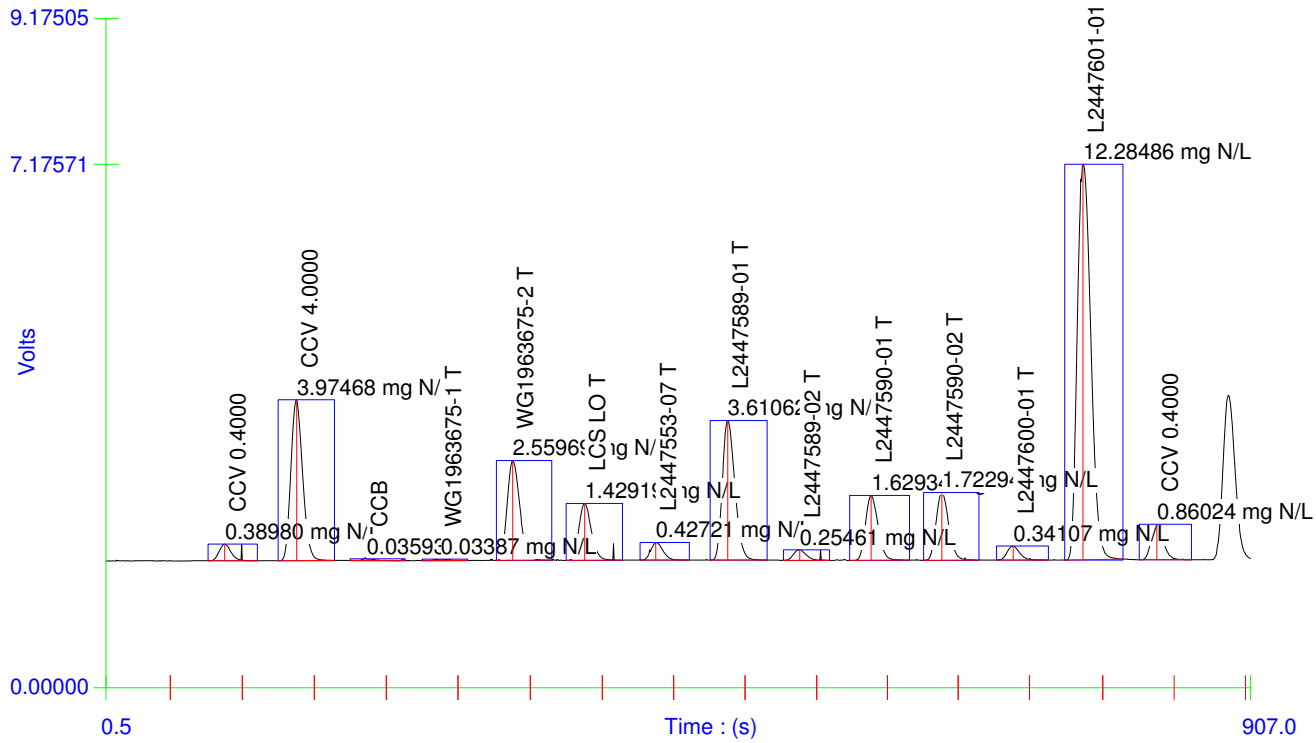
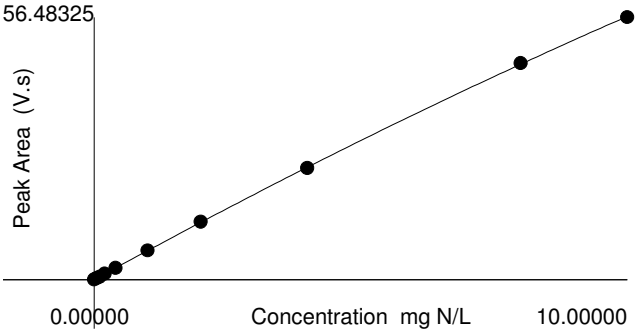


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.48325	5.06670	0.0	0.3	9.95687	8/27/2024	7:58:03 AM
2	8.00000	1	46.58753	4.28981	0.0	-0.5	8.05805	8/27/2024	7:58:59 AM
3	4.00000	1	24.04231	2.30151	0.0	0.8	3.97525	8/27/2024	7:59:56 AM
4	2.00000	1	12.52994	1.19029	0.0	-1.1	2.02083	8/27/2024	8:00:53 AM
5	1.00000	1	6.31600	0.59297	0.0	-0.6	1.00254	8/27/2024	8:01:51 AM
6	0.40000	1	2.52125	0.23552	0.0	1.2	0.39332	8/27/2024	8:02:49 AM
7	0.20000	1	1.29752	0.11649	0.0	0.2	0.19890	8/27/2024	8:03:47 AM
8	0.10000	1	0.61559	0.05781	0.0	8.3	0.09100	8/27/2024	8:04:46 AM
9	0.05000	1	0.36216	0.02907	0.0	-1.5	0.05097	8/27/2024	8:05:42 AM
10	0.00000	1	0.06537	0.00481			0.00415	8/27/2024	8:06:39 AM

Figure : 1 (Ammonia)



Area = - 0.06439 * Conc^2 + 6.30310 * Conc + 0.04188
Conc = 0.00033 * Area^2 + 0.15760 * Area - 0.00615
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_8-27-2024_09-06-26AM.OMN Created: 8/27/2024 9:06:26 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-27-2024_09-06-26AM.OMN Last Modified: 8/27/2024 9:31:06 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY B
	CCV 0.4000	1	S6	0.39782				99%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.99106				100%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.03362				
		Known Conc:		100.00000				
	L2447610-01 T	1	11	39.84799		15.00		
X	L2447611-01 T	1	12	49.34182		3.00		
X	L2447612-01 T	1	13	17.40214		3.00		
	L2447613-01 T	1	14	50.80532		60.00		
	L2447624-01 T	1	15	8.59894		3.00		
	L2447624-02 T	1	16	1.21881		3.00		
	WG1963675-4 T	1	17	8.55526		3.00		92%
	WG1963675-3 T	1	18	1.19222		3.00		RPD=2%
	L2447669-01 T	1	19	1.27032		15.00		
	L2447735-01 T	1	20	1.04475		3.00		
	CCV 0.4000	1	S6	0.42056				105%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.02104				101%
		Known Conc:		100.00000				
	CCB	1	S10	0.04204				
		Known Conc:		100.00000				
	L2447601-01 T; 10X	1	10	35.40182		30.00		
	L2447612-01 T	1	13	16.05857		3.00		
	L2447611-01 T; 20X	1	12	68.52055		60.00		
	CCV 0.4000	1	S6	0.41830				105%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.02941				101%
		Known Conc:		100.00000				
	CCB	1	S10	0.04104				
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 8/27/2024

Channel 2 (Ammonia High) - Current View

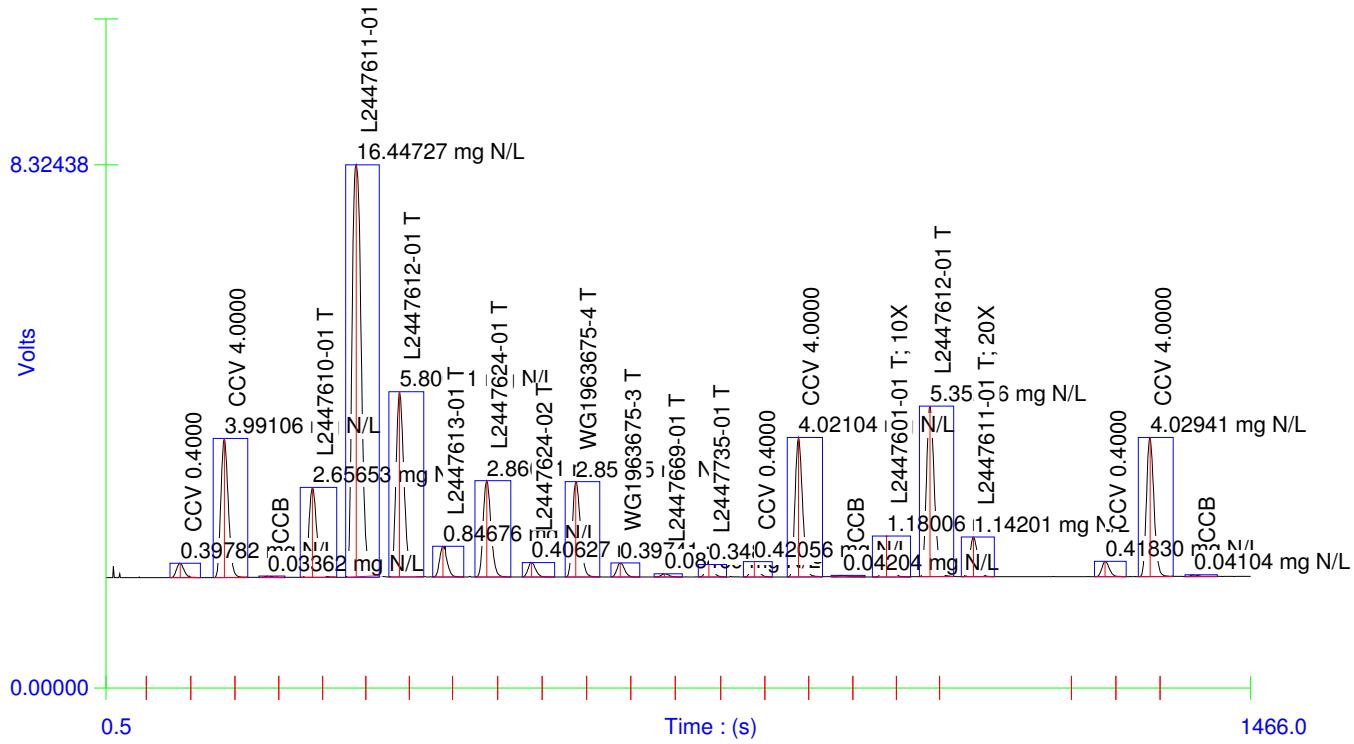
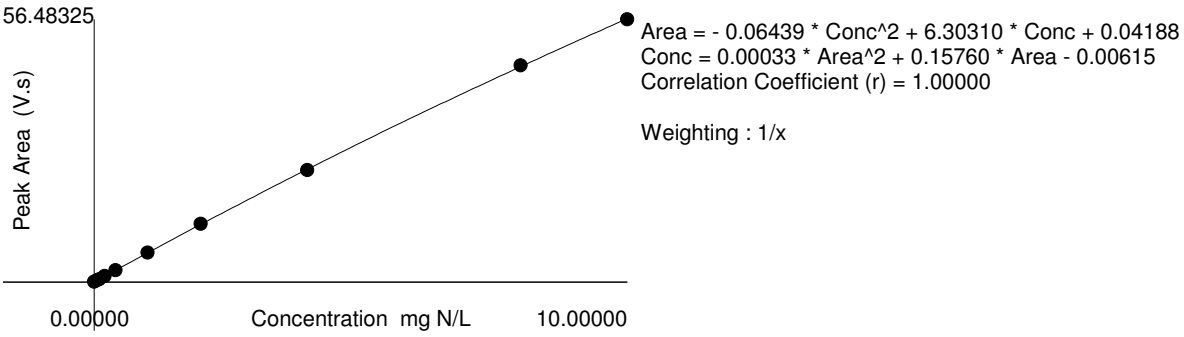


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.48325	5.06670	0.0	0.3	9.95687	8/27/2024	7:58:03 AM
2	8.00000	1	46.58753	4.28981	0.0	-0.5	8.05805	8/27/2024	7:58:59 AM
3	4.00000	1	24.04231	2.30151	0.0	0.8	3.97525	8/27/2024	7:59:56 AM
4	2.00000	1	12.52994	1.19029	0.0	-1.1	2.02083	8/27/2024	8:00:53 AM
5	1.00000	1	6.31600	0.59297	0.0	-0.6	1.00254	8/27/2024	8:01:51 AM
6	0.40000	1	2.52125	0.23552	0.0	1.2	0.39332	8/27/2024	8:02:49 AM
7	0.20000	1	1.29752	0.11649	0.0	0.2	0.19890	8/27/2024	8:03:47 AM
8	0.10000	1	0.61559	0.05781	0.0	8.3	0.09100	8/27/2024	8:04:46 AM
9	0.05000	1	0.36216	0.02907	0.0	-1.5	0.05097	8/27/2024	8:05:42 AM
10	0.00000	1	0.06537	0.00481			0.00415	8/27/2024	8:06:39 AM

Figure : 1 (Ammonia)



Original Run Filename: OM_8-27-2024_09-53-57AM.OMN Created: 8/27/2024 9:53:57 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-27-2024_09-53-57AM.OMN Last Modified: 8/27/2024 10:29:05 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY C
	CCV 0.4000	1	S6	0.38456				96%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.98936				100%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.02589				
		Known Conc:		100.00000				
	WG1964151-1	1	1	-0.01018		1.50		
	WG1964151-2	1	2	18.78248		7.50		94%
	LCS LO	1	3	2.10351		1.50		105%
	L2445995-01	1	4	0.16015		1.50		
	L2445995-02	1	5	0.02369		1.50		
	L2445995-03	1	6	0.03329		1.50		
	L2445995-04	1	7	0.13557		3.00		
	L2445995-05	1	8	0.03949		1.50		
	L2445995-06	1	9	0.04927		1.50		
	WG1964151-3	1	10	0.04020		1.50		RPD=NC
	CCV 0.4000	1	S6	0.40166				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.03293				
		Known Conc:		100.00000				
	CCB	1	S10	0.03750				
		Known Conc:		100.00000				
	WG1964151-4	1	11	4.29310		1.50		104%
	L2445995-07	1	12	0.23140		1.50		
	L2446081-01	1	13	10.51927		3.00		
	L2446081-02	1	14	0.31295		1.50		
	L2447382-01	1	15	0.03899		1.50		
	L2447382-02	1	16	0.03078		1.50		
	L2447432-01	1	17	3.28616		3.00		
	L2447433-01	1	18	0.69918		7.50		
	L2447471-01	1	19	0.18636		1.50		
	L2447596-01	1	20	0.07941		1.50		
	CCV 0.4000	1	S6	0.39691				99%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.00016				100%
		Known Conc:		100.00000				
	CCB	1	S10	0.03422				
		Known Conc:		100.00000				
X	L2447601-01	1	21	25.79253		3.00		
RERUN ↓	L2447613-01	1	22	24.19991		7.50		
	L2448458-01	1	23	32.04029		1.50		
	L2448458-03	1	24	32.28745		1.50		

Channel 2 (Ammonia High) - Current View

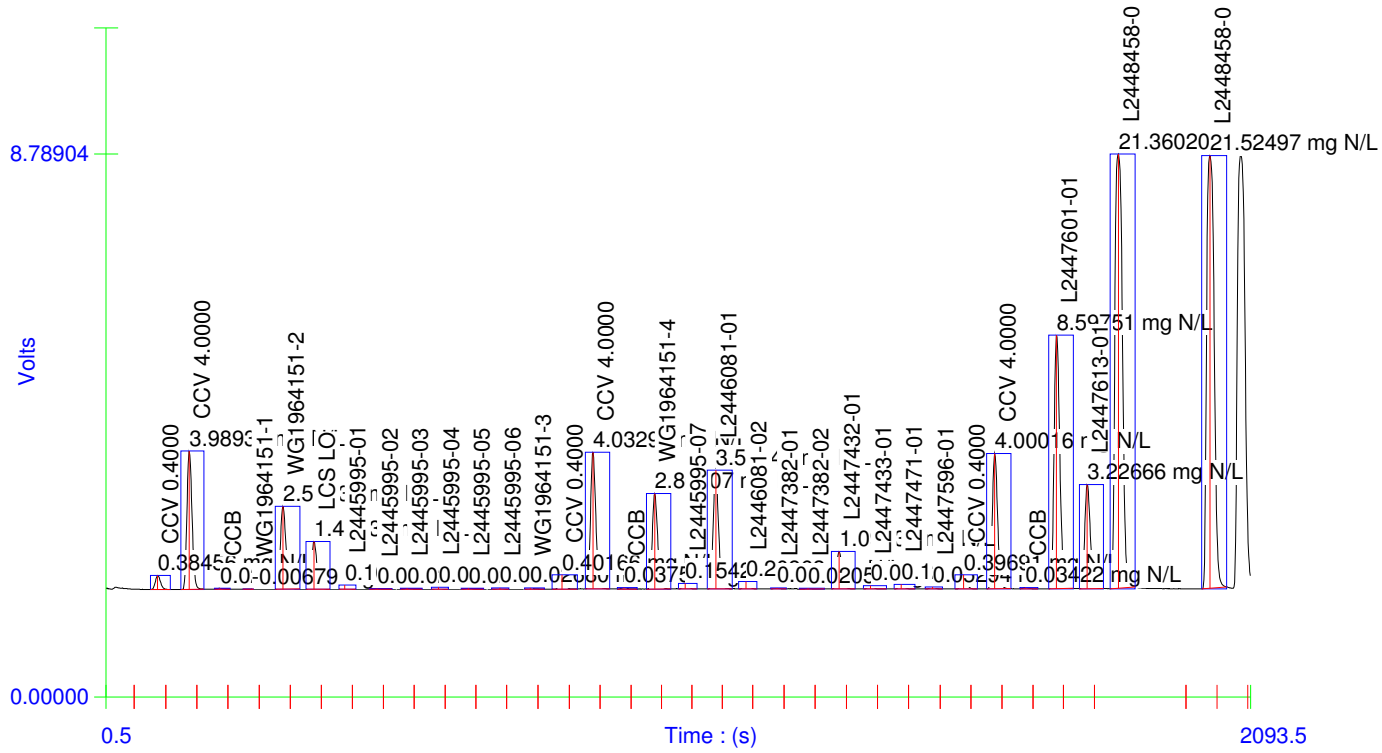
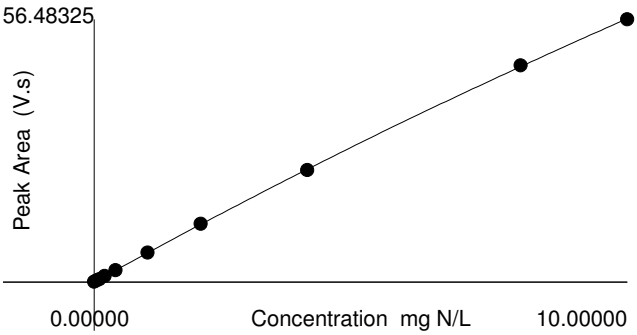


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.48325	5.06670	0.0	0.3	9.95687	8/27/2024	7:58:03 AM
2	8.00000	1	46.58753	4.28981	0.0	-0.5	8.05805	8/27/2024	7:58:59 AM
3	4.00000	1	24.04231	2.30151	0.0	0.8	3.97525	8/27/2024	7:59:56 AM
4	2.00000	1	12.52994	1.19029	0.0	-1.1	2.02083	8/27/2024	8:00:53 AM
5	1.00000	1	6.31600	0.59297	0.0	-0.6	1.00254	8/27/2024	8:01:51 AM
6	0.40000	1	2.52125	0.23552	0.0	1.2	0.39332	8/27/2024	8:02:49 AM
7	0.20000	1	1.29752	0.11649	0.0	0.2	0.19890	8/27/2024	8:03:47 AM
8	0.10000	1	0.61559	0.05781	0.0	8.3	0.09100	8/27/2024	8:04:46 AM
9	0.05000	1	0.36216	0.02907	0.0	-1.5	0.05097	8/27/2024	8:05:42 AM
10	0.00000	1	0.06537	0.00481			0.00415	8/27/2024	8:06:39 AM

Figure : 1 (Ammonia)



Area = - 0.06439 * Conc^2 + 6.30310 * Conc + 0.04188
Conc = 0.00033 * Area^2 + 0.15760 * Area - 0.00615
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/27/2024

Original Run Filename: OM_8-27-2024_10-41-53AM.OMN Created: 8/27/2024 10:41:53 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-27-2024_10-41-53AM.OMN Last Modified: 8/27/2024 10:55:32 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
								TRAY C
	CCV 0.4000	1	S6	0.42563				106%
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	3.98726				100%
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCB	1	S10	0.04786				
			Known Conc:	100.00000				
	L2447601-01	1	21	25.77444		3.00		
	L2447613-01	1	22	24.14324		7.50		
	L2448458-01; 20X	1	23	44.48938		30.00		
	L2448458-03; 20X	1	24	38.80942		30.00		
	L2448458-05; 20X	1	25	42.00940		30.00		
X	CCV 0.4000	1	S6	0.51534				129%, RERUN OK
			Known Conc:	100.00000				

Channel 2 (Ammonia High) - Current View

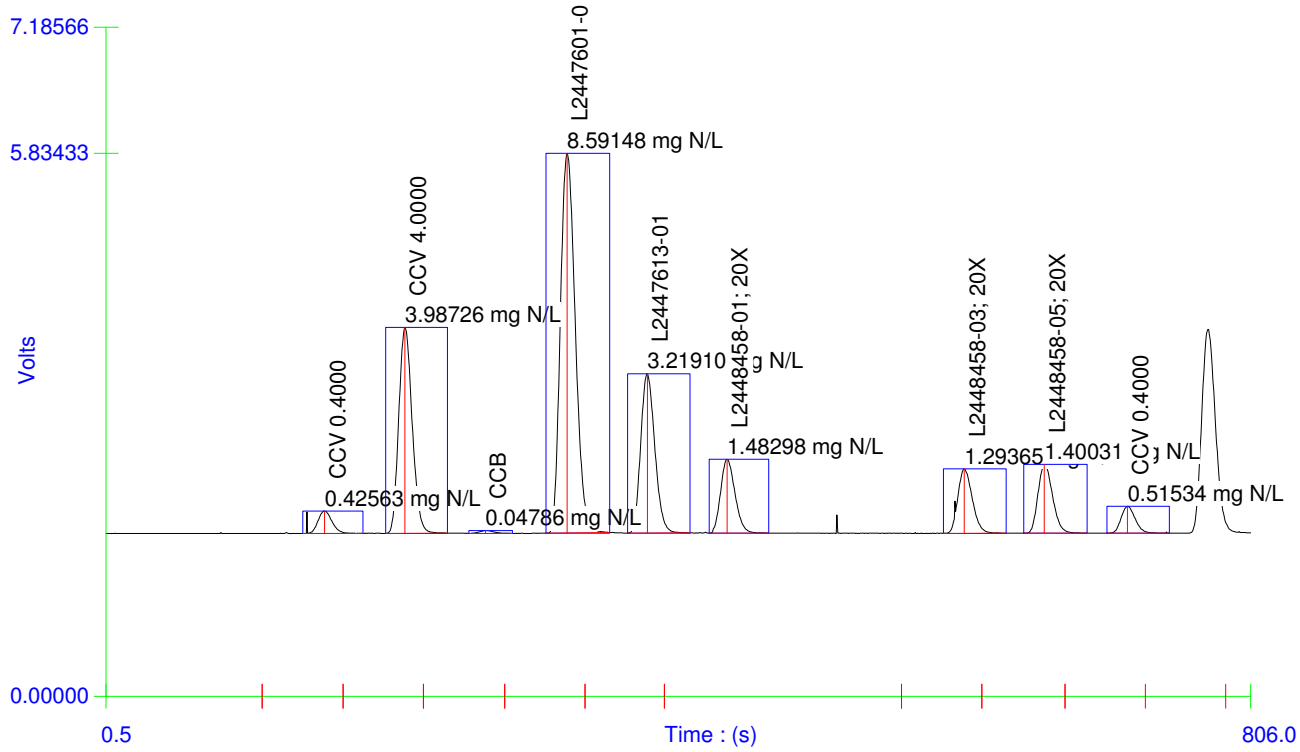
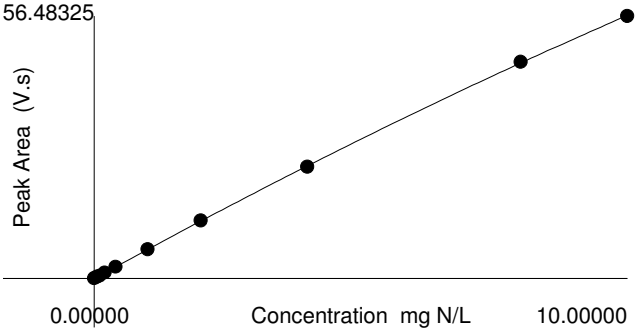


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.48325	5.06670	0.0	0.3	9.95687	8/27/2024	7:58:03 AM
2	8.00000	1	46.58753	4.28981	0.0	-0.5	8.05805	8/27/2024	7:58:59 AM
3	4.00000	1	24.04231	2.30151	0.0	0.8	3.97525	8/27/2024	7:59:56 AM
4	2.00000	1	12.52994	1.19029	0.0	-1.1	2.02083	8/27/2024	8:00:53 AM
5	1.00000	1	6.31600	0.59297	0.0	-0.6	1.00254	8/27/2024	8:01:51 AM
6	0.40000	1	2.52125	0.23552	0.0	1.2	0.39332	8/27/2024	8:02:49 AM
7	0.20000	1	1.29752	0.11649	0.0	0.2	0.19890	8/27/2024	8:03:47 AM
8	0.10000	1	0.61559	0.05781	0.0	8.3	0.09100	8/27/2024	8:04:46 AM
9	0.05000	1	0.36216	0.02907	0.0	-1.5	0.05097	8/27/2024	8:05:42 AM
10	0.00000	1	0.06537	0.00481			0.00415	8/27/2024	8:06:39 AM

Figure : 1 (Ammonia)



Area = - 0.06439 * Conc^2 + 6.30310 * Conc + 0.04188
Conc = 0.00033 * Area^2 + 0.15760 * Area - 0.00615
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/27/2024

Original Run Filename: OM_8-27-2024_11-01-14AM.OMN Created: 8/27/2024 11:01:14 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-27-2024_11-01-14AM.OMN Last Modified: 8/27/2024 11:06:06 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.41319			
		Known Conc:	100.00000			
		Calibration:	Table/Fig. : 1			
CCV 4.0000	1	S3	4.04550			
		Known Conc:	100.00000			
CCB	1	S10	0.03749			
		Known Conc:	100.00000			

TRAY C

103%

101%

Channel 2 (Ammonia High) - Current View

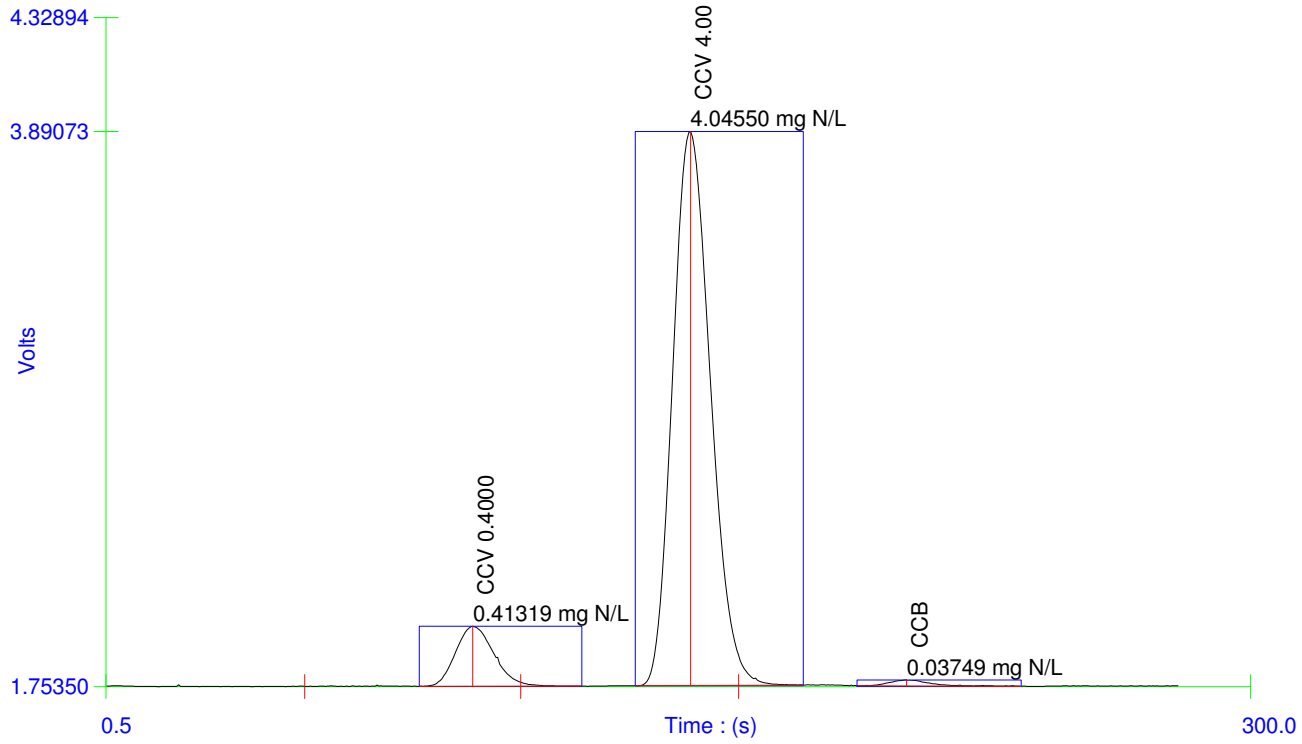
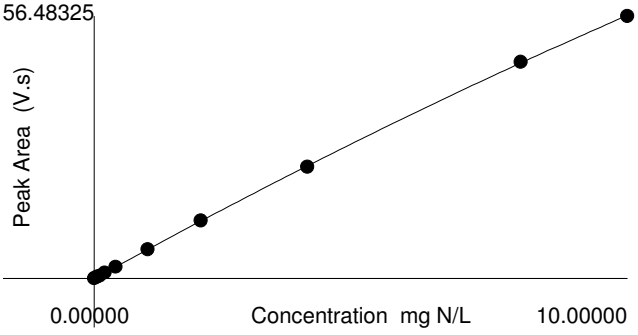


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.48325	5.06670	0.0	0.3	9.95687	8/27/2024	7:58:03 AM
2	8.00000	1	46.58753	4.28981	0.0	-0.5	8.05805	8/27/2024	7:58:59 AM
3	4.00000	1	24.04231	2.30151	0.0	0.8	3.97525	8/27/2024	7:59:56 AM
4	2.00000	1	12.52994	1.19029	0.0	-1.1	2.02083	8/27/2024	8:00:53 AM
5	1.00000	1	6.31600	0.59297	0.0	-0.6	1.00254	8/27/2024	8:01:51 AM
6	0.40000	1	2.52125	0.23552	0.0	1.2	0.39332	8/27/2024	8:02:49 AM
7	0.20000	1	1.29752	0.11649	0.0	0.2	0.19890	8/27/2024	8:03:47 AM
8	0.10000	1	0.61559	0.05781	0.0	8.3	0.09100	8/27/2024	8:04:46 AM
9	0.05000	1	0.36216	0.02907	0.0	-1.5	0.05097	8/27/2024	8:05:42 AM
10	0.00000	1	0.06537	0.00481			0.00415	8/27/2024	8:06:39 AM

Figure : 1 (Ammonia)



Area = - 0.06439 * Conc^2 + 6.30310 * Conc + 0.04188
Conc = 0.00033 * Area^2 + 0.15760 * Area - 0.00615
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_8-27-2024_11-08-28AM.OMN Created: 8/27/2024 11:08:28 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-27-2024_11-08-28AM.OMN Last Modified: 8/27/2024 11:36:55 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY D
	CCV 0.4000	1	S6	0.40926				102%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	4.06230				102%
		Known Conc:		100.00000				
	CCB	1	S10	0.03639				
		Known Conc:		100.00000				
	WG1964148-1	1	1	0.01548		1.50		
X	WG1964148-2	1	2	~~0.17497~~		~~7.50~~	1.5	0.03499
	WG1964148-3	1	3	~~3.71472~~		~~1.50~~	7.5	18.5736, 93%
	LCS LO	1	4	2.12997		1.50		106%
	L2447503-06	1	5	1.99025		1.50		
	L2447503-07	1	6	0.17432		1.50		
	L2447503-08	1	7	0.16902		1.50		
	WG1964148-5	1	8	4.12494		1.50		99%
	WG1964148-4	1	9	0.30097		1.50		RPD=56%
	L2447503-09	1	10	0.03814		1.50		
	CCV 0.4000	1	S6	0.41420				104%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.04509				101%
		Known Conc:		100.00000				
	CCB	1	S10	0.03863				
		Known Conc:		100.00000				
	L2447589-01	1	11	28.61041		15.00		
	L2447589-02	1	12	2.41640		1.50		
	L2447590-01	1	13	4.23935		3.00		
	L2447590-02	1	14	2.83003		1.50		
	L2447726-01	1	15	0.16743		1.50		
	L2447726-02	1	16	0.62223		7.50		
	WG1964148-2	1	2	0.04428		1.50		59%
	CCV 0.4000	1	S6	0.38987				97%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.86094				97%
		Known Conc:		100.00000				
	CCB	1	S10	0.03412				
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 8/27/2024

Channel 2 (Ammonia High) - Current View

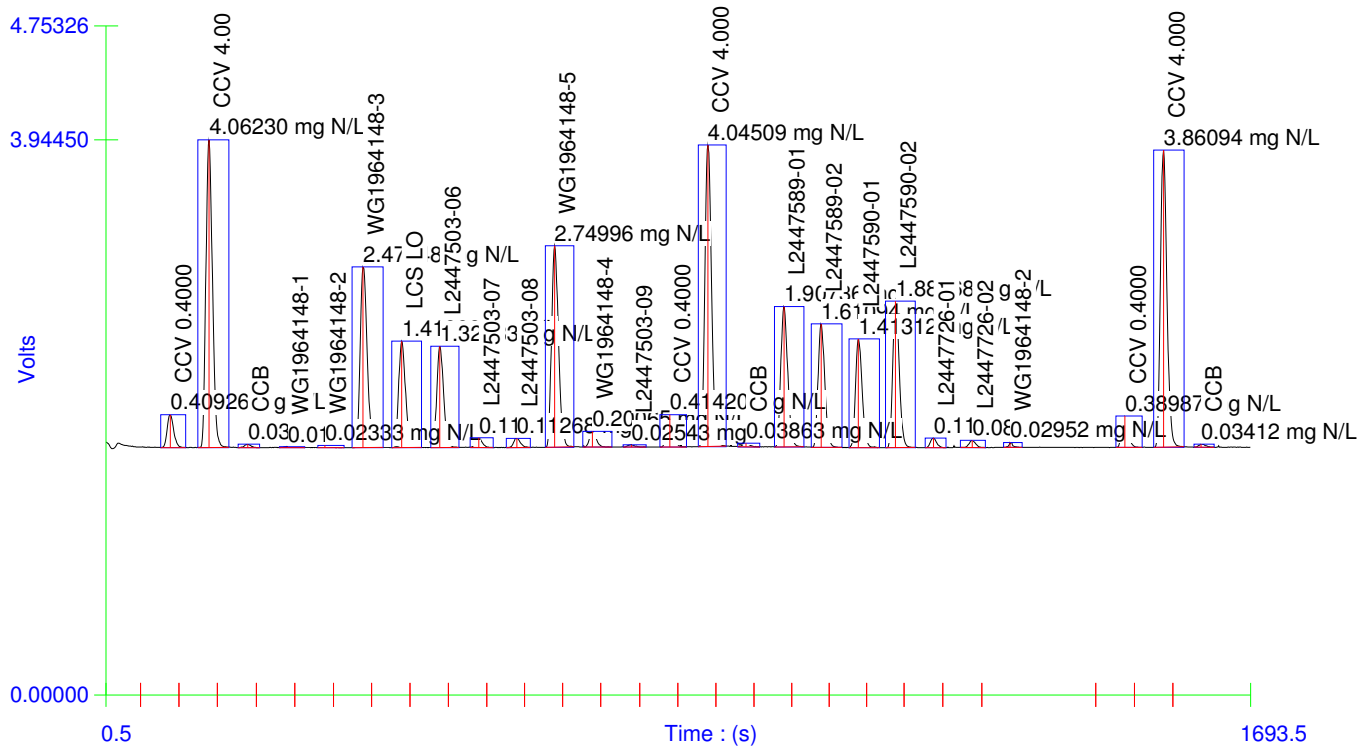
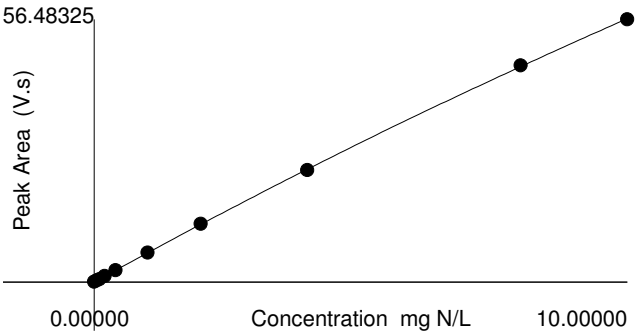


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.48325	5.06670	0.0	0.3	9.95687	8/27/2024	7:58:03 AM
2	8.00000	1	46.58753	4.28981	0.0	-0.5	8.05805	8/27/2024	7:58:59 AM
3	4.00000	1	24.04231	2.30151	0.0	0.8	3.97525	8/27/2024	7:59:56 AM
4	2.00000	1	12.52994	1.19029	0.0	-1.1	2.02083	8/27/2024	8:00:53 AM
5	1.00000	1	6.31600	0.59297	0.0	-0.6	1.00254	8/27/2024	8:01:51 AM
6	0.40000	1	2.52125	0.23552	0.0	1.2	0.39332	8/27/2024	8:02:49 AM
7	0.20000	1	1.29752	0.11649	0.0	0.2	0.19890	8/27/2024	8:03:47 AM
8	0.10000	1	0.61559	0.05781	0.0	8.3	0.09100	8/27/2024	8:04:46 AM
9	0.05000	1	0.36216	0.02907	0.0	-1.5	0.05097	8/27/2024	8:05:42 AM
10	0.00000	1	0.06537	0.00481			0.00415	8/27/2024	8:06:39 AM

Figure : 1 (Ammonia)



Area = - 0.06439 * Conc^2 + 6.30310 * Conc + 0.04188
Conc = 0.00033 * Area^2 + 0.15760 * Area - 0.00615
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_8-26-2024_08-44-09AM.OMN Created: 8/26/2024 8:44:09 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_08-44-09AM.OMN Last Modified: 8/26/2024 9:12:05 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A
CURVE ONLY

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	STD 1	1	S1	10.00000				
	STD 2	1	S2	8.00000				
	STD 3	1	S3	4.00000				
	STD 4	1	S4	2.00000				
	STD 5	1	S5	1.00000				
	STD 6	1	S6	0.40000				
	STD 7	1	S7	0.20000				
	STD 8	1	S8	0.10000				
	STD 9	1	S9	0.05000				
	STD 10	1	S10	0.00000				
	CCV 0.4000	1	S6	0.37302				93%
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCV 4.0000	1	S3	3.87142				97%
			Known Conc:	100.00000				
	CCB	1	S10	0.03199				
			Known Conc:	100.00000				
X	HI ICV 8.0	1	1	8.21270				
	LO ICV 1.0	1	2	1.01376				
	ICB	1	3	0.01909				
RERUN	WG1963015-1 T	1	4	0.02865				
	WG1963015-2 T	1	5	36.61927		15.00		
	LCS LO T	1	6	4.03711		3.00		
	L2447161-01 T	1	7	2.57070		3.00		
	L2447432-02 T	1	8	4.75202		3.00		
	L2447433-01 T	1	9	13.75241		15.00		
	L2447433-02 T	1	10	3.79717		3.00		
	CCV 0.4000	1	S6	0.45410				114%
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	3.93721				
			Known Conc:	100.00000				
	CCB	1	S10	0.03998				
			Known Conc:	100.00000				
	L2447476-01 T	1	11	0.05510		3.00		

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Channel 2 (Ammonia High) - Current View

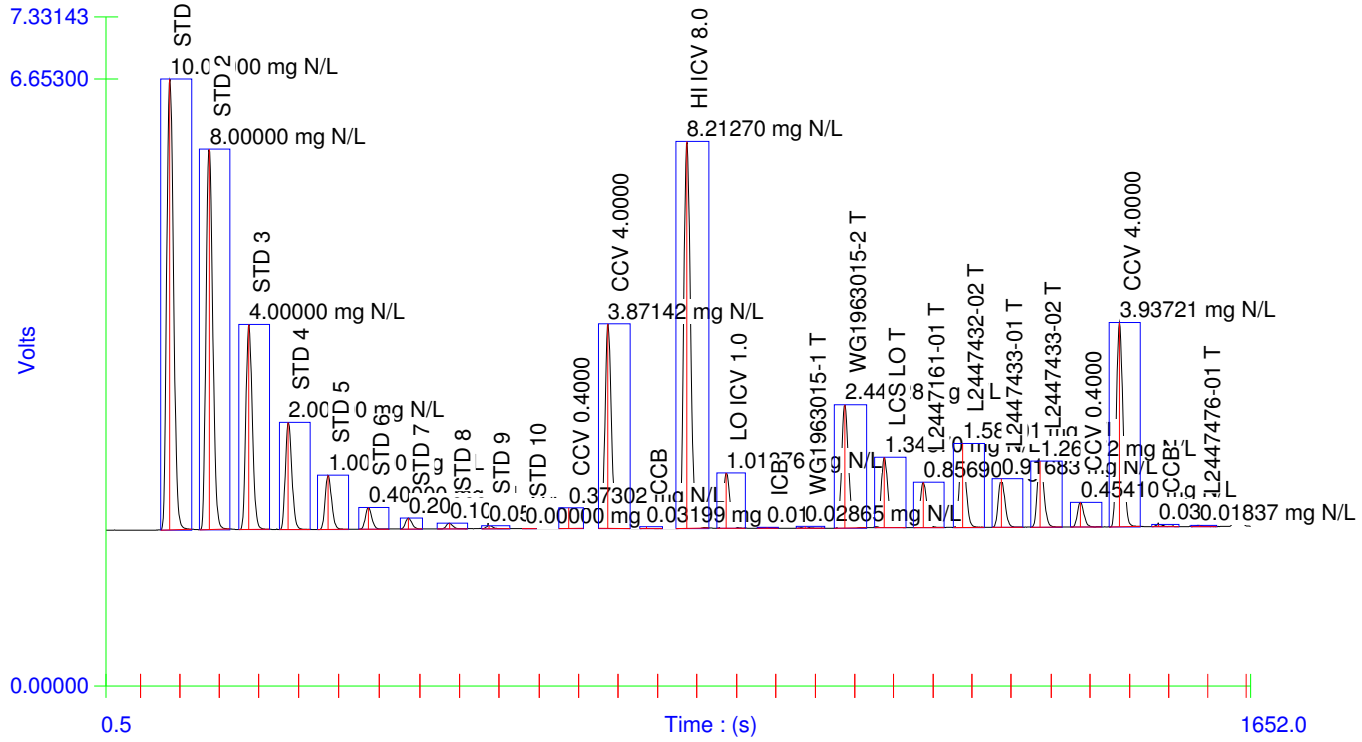
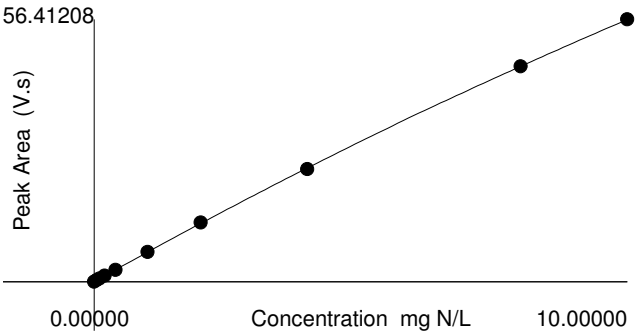


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Original Run Filename: OM_8-26-2024_09-12-58AM.OMN Created: 8/26/2024 9:12:58 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_09-12-58AM.OMN Last Modified: 8/26/2024 9:29:20 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.38357				TRAY A
		Known Conc:		100.00000				96%
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.93447				98%
		Known Conc:		100.00000				
	CCB	1	S10	-0.00635				
		Known Conc:		100.00000				
	HI ICV 8.0	1	1	8.21517				103%
	LO ICV 1.0	1	2	1.01817				102%
	ICB	1	3	0.02237				
	WG1963015-1 T	1	4	0.03199				
	WG1963015-2 T	1	5	36.60983		15.00		92%
	LCS LO T	1	6	4.04404		3.00		101%
	L2447161-01 T	1	7	2.58040		3.00		
	L2447432-02 T	1	8	4.75755		3.00		
	L2447433-01 T	1	9	13.65107		15.00		
	L2447433-02 T	1	10	3.73265		3.00		
X	CCV 0.4000	1	S6	0.45078				113%, RERUN OK
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

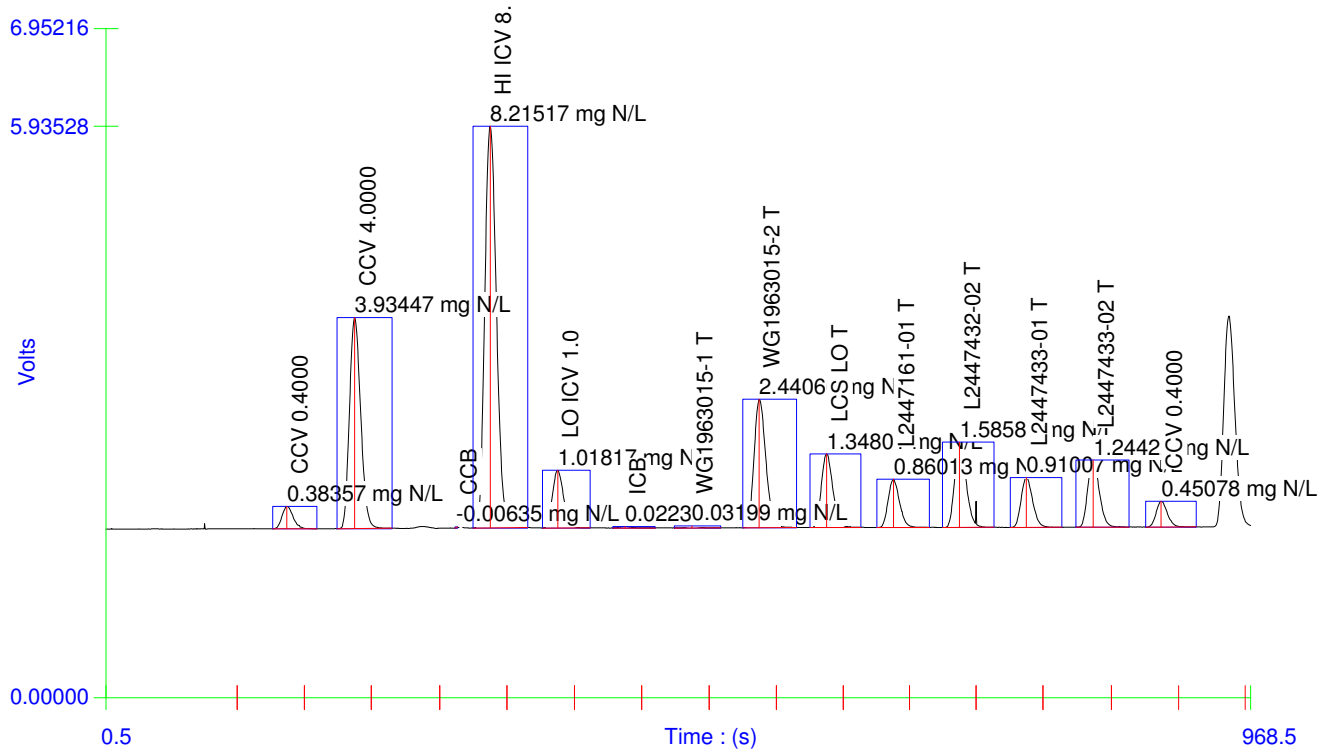
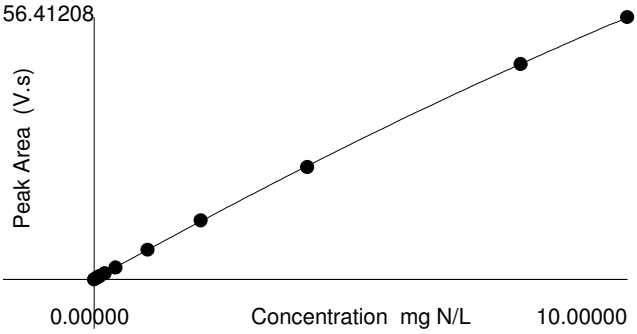


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_8-26-2024_09-32-06AM.OMN Created: 8/26/2024 9:32:06 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_09-32-06AM.OMN Last Modified: 8/26/2024 9:56:51 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY A
CCV 0.4000	1	S6	0.38478				96%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.93012				98%
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCB	1	S10	0.03387				
	Known Conc:		100.00000				
L2447476-01 T	1	11	0.05070		3.00		
L2447476-02 T	1	12	0.77575		3.00		
L2447503-01 T	1	13	3.11572		3.00		
L2447503-02 T	1	14	0.34599		3.00		
L2447503-03 T	1	15	0.24031		3.00		
L2447503-04 T	1	16	0.11228		3.00		
L2447503-05 T	1	17	0.05550		3.00		
L2447503-06 T	1	18	1.70054		3.00		
L2447503-07 T	1	19	0.32154		3.00		
L2447503-08 T	1	20	0.28849		3.00		
CCV 0.4000	1	S6	0.38411				96%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.91687				98%
	Known Conc:		100.00000				
CCB	1	S10	0.03062				
	Known Conc:		100.00000				
L2447503-09 T	1	21	0.10866		3.00		
WG1963015-4 T	1	22	7.60431		3.00		95%
WG1963015-3 T	1	23	0.44346		3.00		RPD=NC
CCV 0.4000	1	S6	0.38547				96%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.92170				98%
	Known Conc:		100.00000				
CCB	1	S10	0.04020				
	Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Channel 2 (Ammonia High) - Current View

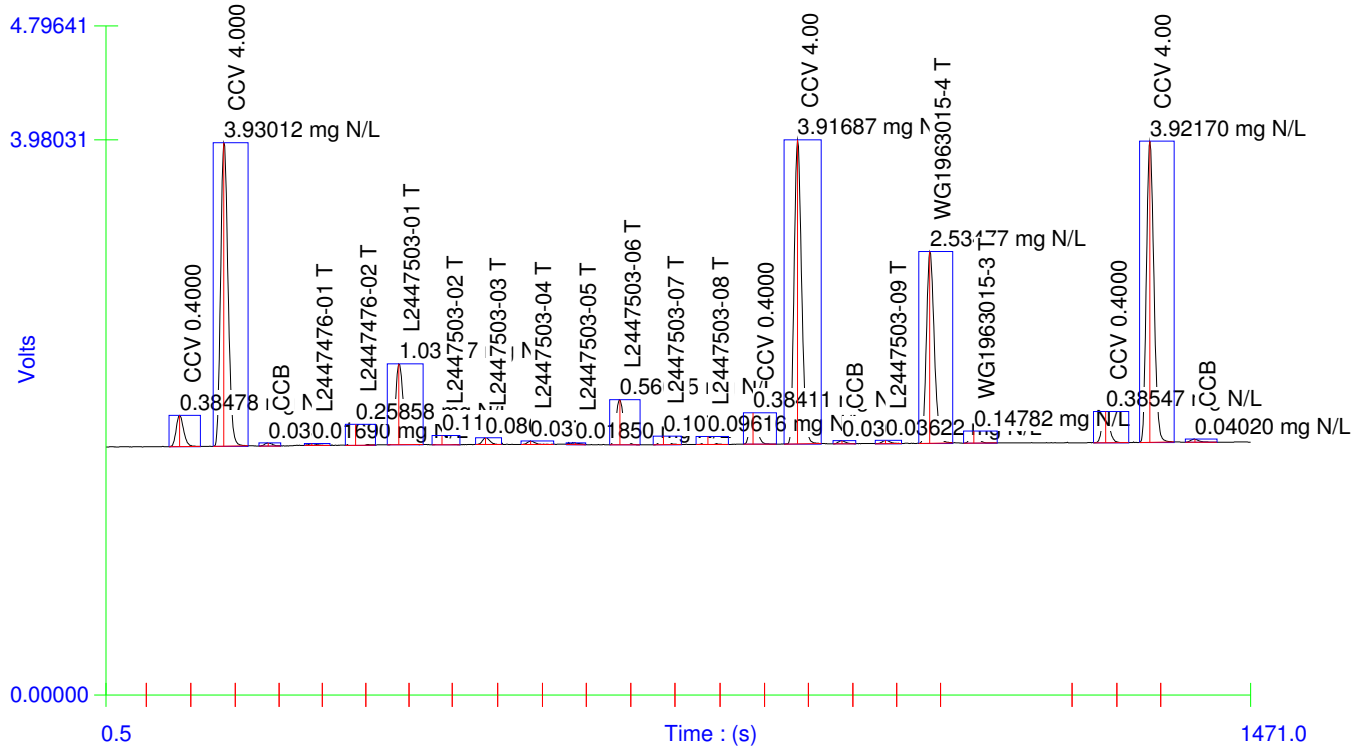
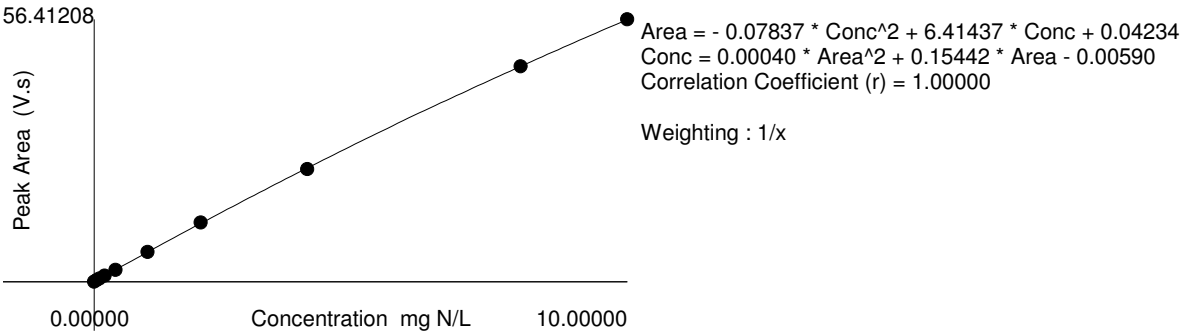


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Original Run Filename: OM_8-26-2024_10-02-32AM.OMN Created: 8/26/2024 10:02:32 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_10-02-32AM.OMN Last Modified: 8/26/2024 10:30:13 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY B

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.37666				94%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.89221				97%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.03115				
		Known Conc:		100.00000				
	WG1963323-1 T	1	1	0.02898				
	WG1963323-2 T	1	2	37.65437		15.00		94%
	LCS LO T	1	3	4.09101		3.00		102%
	L2446680-01 T	1	4	17.52179		15.00		
	L2447294-01 T	1	5	6.26409		15.00		
X	L2447295-02 T	1	6	56.50614		3.00		
X	L2447296-01 T	1	7	32.72560		30.00		
	L2447297-01 T	1	8	0.51617		3.00		
	L2447297-02 T	1	9	1.13297		3.00		
	L2447386-01 T	1	10	2.35407		3.00		
	CCV 0.4000	1	S6	0.43641				109%
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.94161				99%
		Known Conc:		100.00000				
	CCB	1	S10	0.04362				
		Known Conc:		100.00000				
	L2447388-01 T	1	11	1.79415		3.00		
	L2447427-01 T	1	12	2.02052		3.00		
	L2447428-01 T	1	13	0.45006		3.00		
	L2447428-02 T	1	14	0.73730		3.00		
	WG1963323-4 T	1	15	8.31457		3.00		98%
	WG1963323-3 T	1	16	0.79294		3.00		RPD=7%
	L2447429-01 T	1	17	0.54162		3.00		
	L2447429-02 T	1	18	0.52642		3.00		
	L2447675-01 T	1	19	1.08472		3.00		
X	L2447732-01 T	1	20	70.36862		3.00		
X	CCV 0.4000	1	S6	1.03813				260%, RERUN OK
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Channel 2 (Ammonia High) - Current View

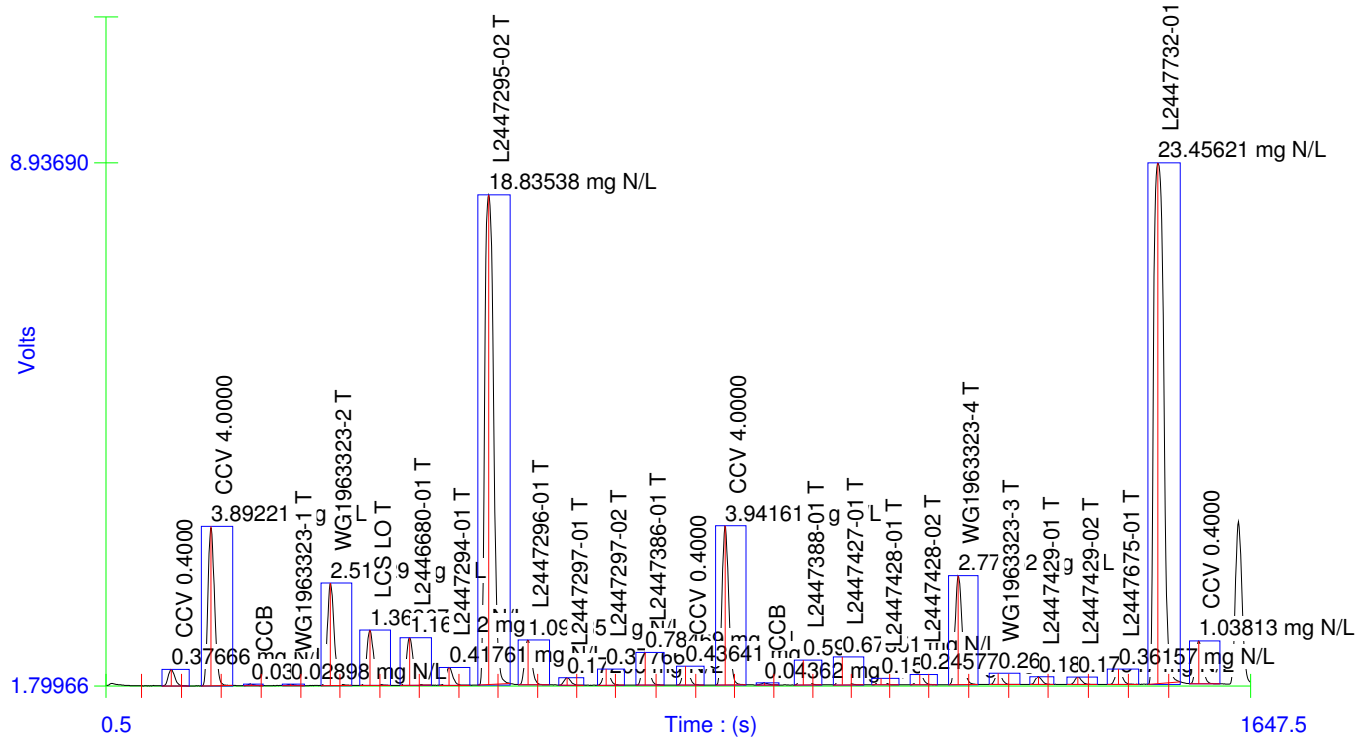
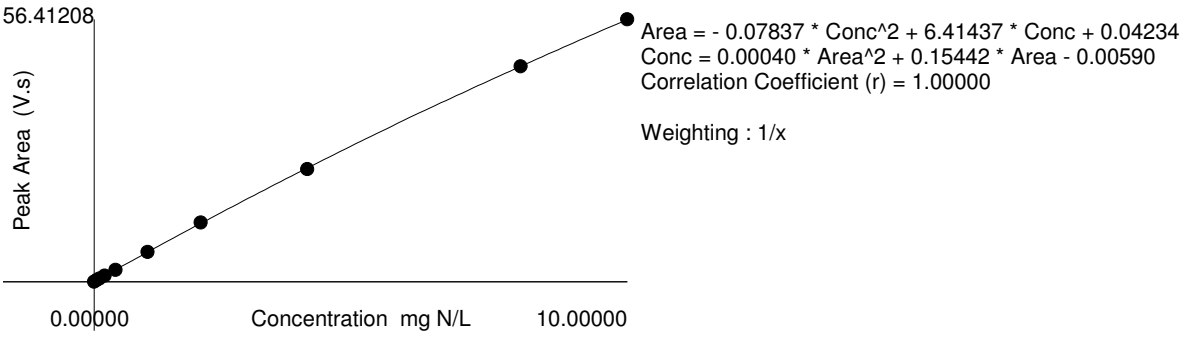


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Original Run Filename: OM_8-26-2024_10-43-24AM.OMN Created: 8/26/2024 10:43:24 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_10-43-24AM.OMN Last Modified: 8/26/2024 10:55:50 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY B

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
CCV 0.4000	1	S6	0.39938				100%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.91760				98%
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCB	1	S10	0.02994				
	Known Conc:		100.00000				
L2447732-01 T; 20X	1	20	96.12701		60.00		
L2447295-02 T; 20X	1	6	65.09776		60.00		
L2447296-01 T	1	7	17.89786		30.00		
CCV 0.4000	1	S6	0.40246				101%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.90362				98%
	Known Conc:		100.00000				
CCB	1	S10	0.02913				
	Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

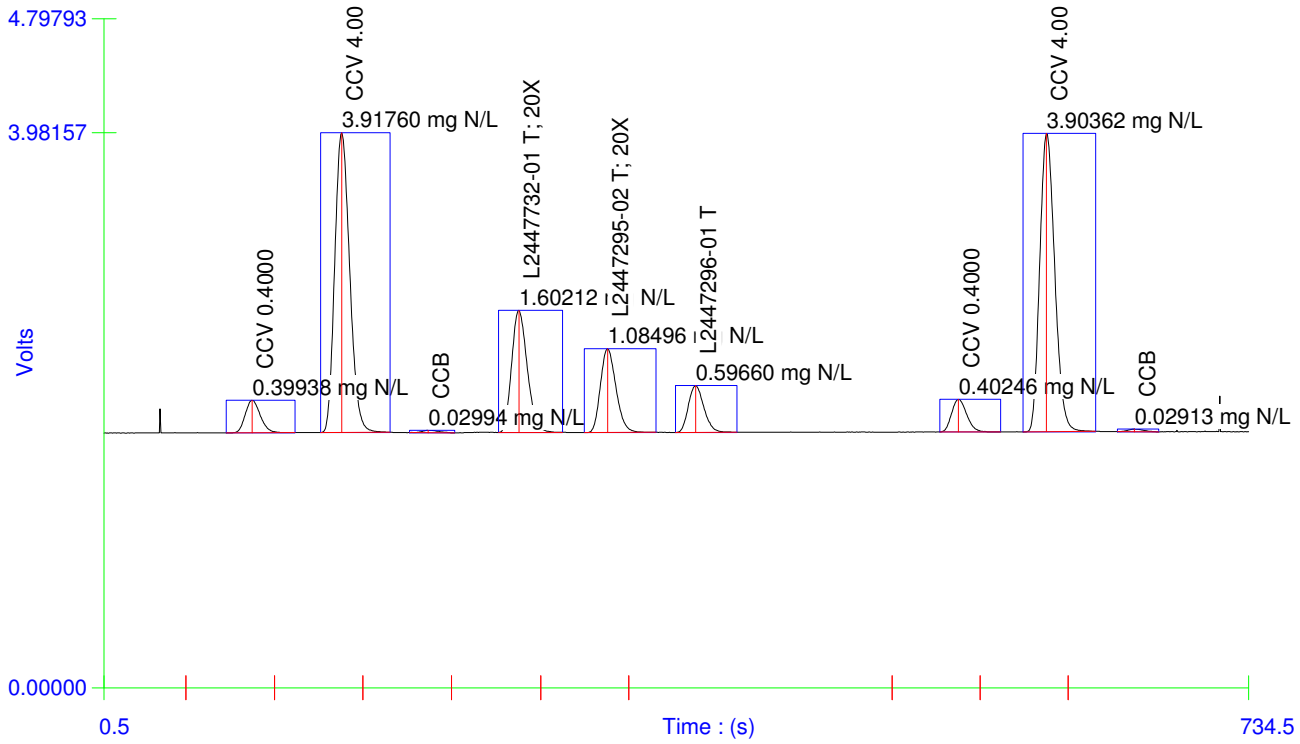
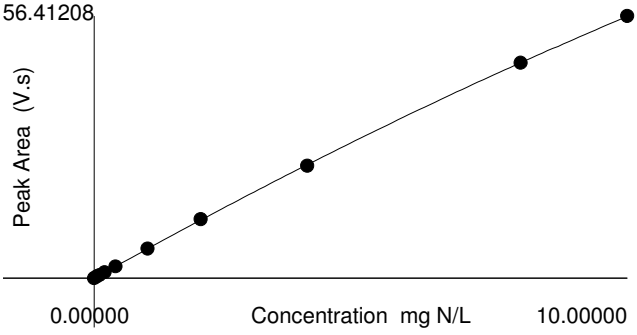


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Original Run Filename: OM_8-26-2024_10-59-30AM.OMN Created: 8/26/2024 10:59:30 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_10-59-30AM.OMN Last Modified: 8/26/2024 11:14:51 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.38743				97%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.85571				96%
		Known Conc:		100.00000				
	CCB	1	S10	0.02834				
		Known Conc:		100.00000				
	WG1963694-1	1	1	0.01941		1.50		
	WG1963694-2	1	2	0.03743		1.50		50%
	WG1963694-3	1	3	18.03410		7.50		90%
	LCS LO	1	4	1.97345		1.50		99%
	L2446680-01	1	5	4.48827		3.00		
X	L2447417-01	1	6	819.86951		30.00		
X	L2447417-04	1	7	698.36450		30.00		
X	L2447417-09	1	8	798.56183		30.00		
X	L2447417-10	1	9	757.66162		30.00		
X	L2447503-01	1	10	4.32391		1.50		
X	CCV 0.4000	1	S6	0.67135				168%, RERUN OK
		Known Conc:		100.00000				

TRAY C

Channel 2 (Ammonia High) - Current View

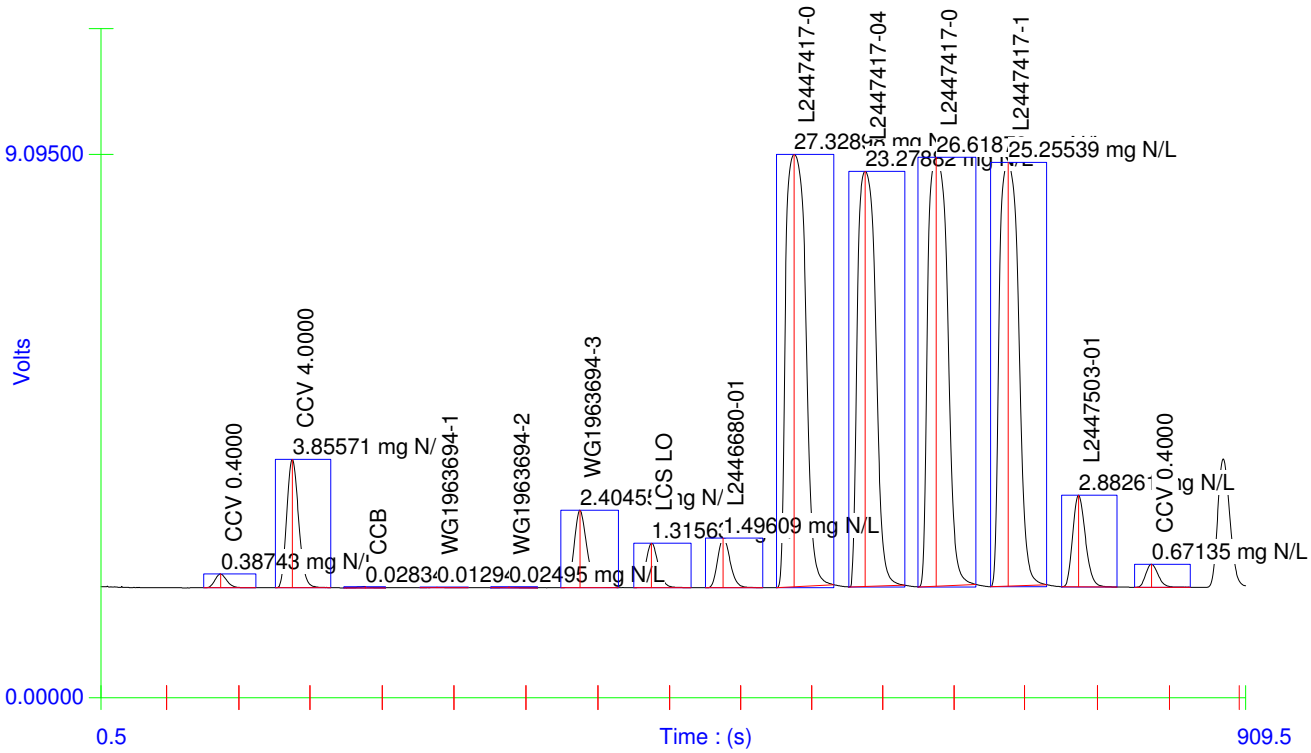
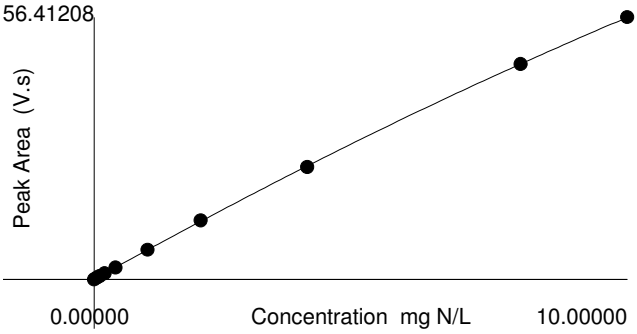


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Original Run Filename: OM_8-26-2024_11-24-26AM.OMN Created: 8/26/2024 11:24:26 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_11-24-26AM.OMN Last Modified: 8/26/2024 11:39:54 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
								TRAY C
	CCV 0.4000	1	S6	0.40290				101%
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.84374				96%
		Known Conc:		100.00000				
	CCB	1	S10	0.03351				
		Known Conc:		100.00000				
	L2447503-02	1	11	0.09327		1.50		
	L2447503-03	1	12	0.16149		1.50		
	L2447503-04	1	13	0.07599		1.50		
	L2447503-05	1	14	0.02998		1.50		
	WG1963694-5	1	15	4.09035		1.50		102%
	WG1963694-4	1	16	0.22054		1.50		RPD=NC
	L2447417-01; 30X	1	6	~~994.38409~~		~~600.00~~	900	1491.5761
	L2447417-04; 20X	1	7	~~694.37811~~		~~400.00~~	600	1041.5671
	L2447417-09; 30X	1	8	~~960.59052~~		~~600.00~~	900	1440.8857
	L2447417-10; 30X	1	9	~~851.00903~~		~~600.00~~	900	1276.5134
X	CCV 0.4000	1	S6	0.48682				122%, RERUN OK
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

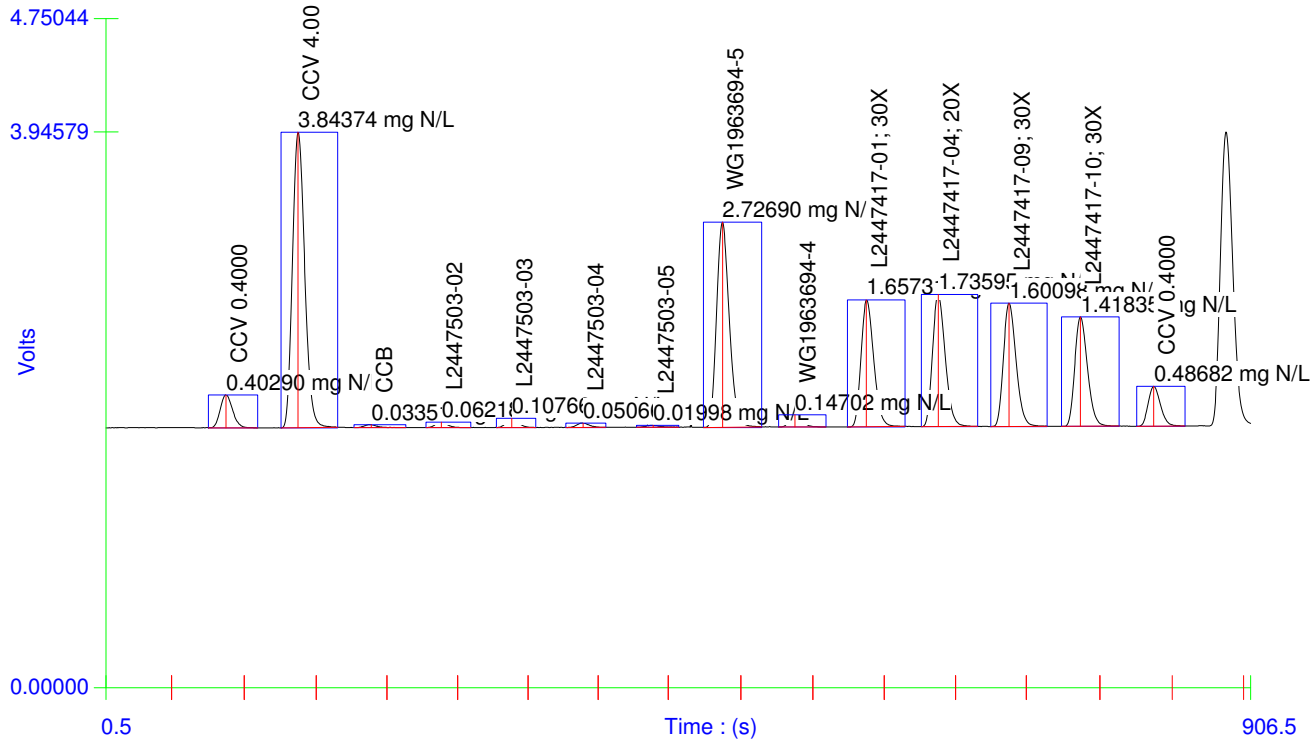
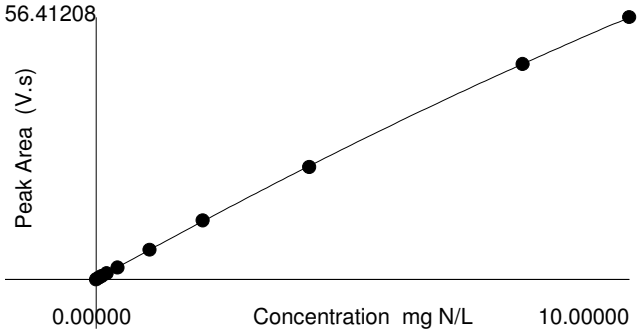


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

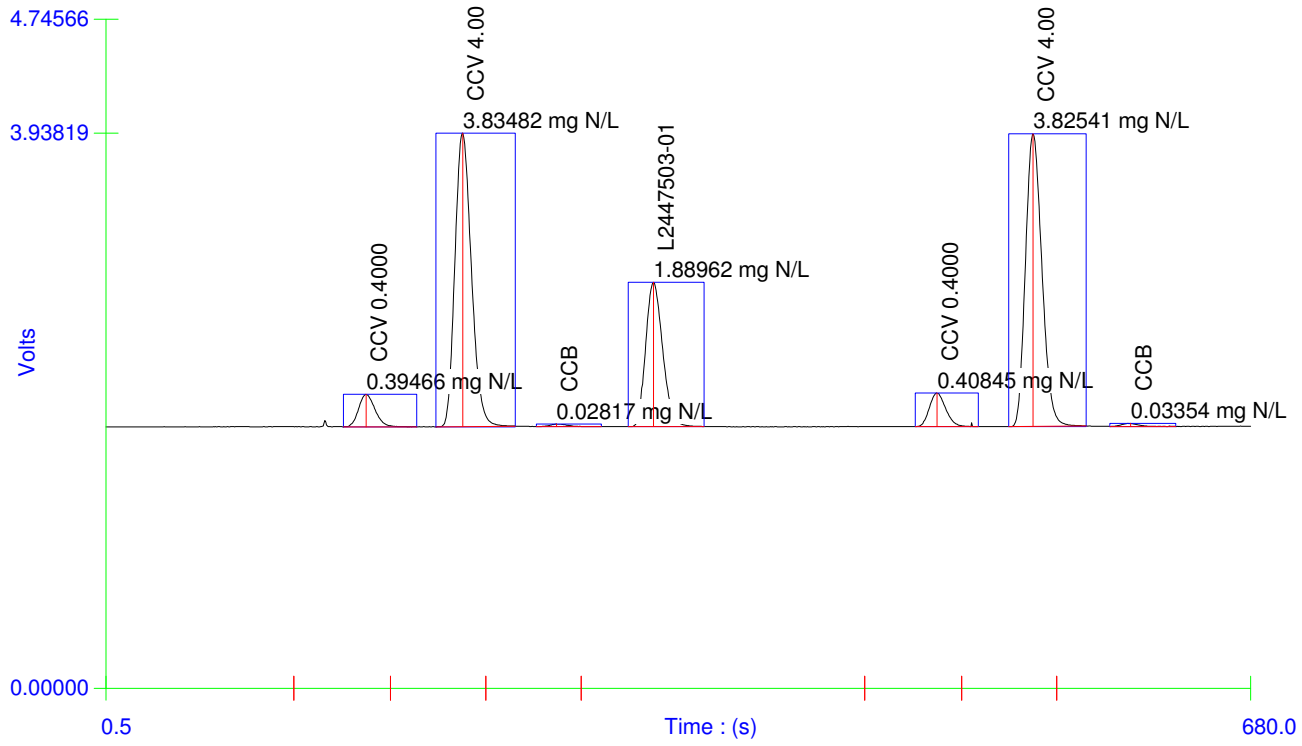
Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Original Run Filename: OM_8-26-2024_11-44-40AM.OMN Created: 8/26/2024 11:44:40 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_8-26-2024_11-44-40AM.OMN Last Modified: 8/26/2024 11:56:11 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	TRAY C
CCV 0.4000	1	S6	0.39466				99%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.83482				96%
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCB	1	S10	0.02817				
	Known Conc:		100.00000				
L2447503-01	1	10	2.83443		1.50		
CCV 0.4000	1	S6	0.40845				102%
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.82541				96%
	Known Conc:		100.00000				
CCB	1	S10	0.03354				
	Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

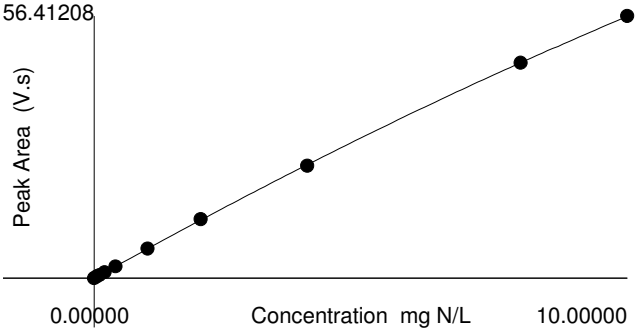


Author: A1WETCHEMINSTRUMENT Date : 8/26/2024

Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.41208	4.94093	0.0	-0.1	9.99284	8/26/2024	8:45:10 AM
2	8.00000	1	46.33123	4.17077	0.0	0.0	8.01710	8/26/2024	8:46:07 AM
3	4.00000	1	24.22923	2.24785	0.0	0.9	3.97312	8/26/2024	8:47:04 AM
4	2.00000	1	12.71126	1.17841	0.0	-1.2	2.02236	8/26/2024	8:48:01 AM
5	1.00000	1	6.39890	0.59263	0.0	-0.3	0.99879	8/26/2024	8:48:59 AM
6	0.40000	1	2.56410	0.23673	0.0	1.2	0.39271	8/26/2024	8:49:57 AM
7	0.20000	1	1.31326	0.12034	0.0	0.7	0.19759	8/26/2024	8:50:55 AM
8	0.10000	1	0.69477	0.06338	0.0	-1.7	0.10158	8/26/2024	8:51:54 AM
9	0.05000	1	0.38069	0.03357	0.0	-4.9	0.05294	8/26/2024	8:52:52 AM
10	0.00000	1	0.02234	0.00213			-0.00245	8/26/2024	8:53:48 AM

Figure : 1 (Ammonia)



Area = - 0.07837 * Conc^2 + 6.41437 * Conc + 0.04234
Conc = 0.00040 * Area^2 + 0.15442 * Area - 0.00590
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2447503-05		
Matrix Spike	: WG1963694-5	**MS Analysis Date**	: 08/26/24 11:32
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Ammonia	0.030J	4	4.09	102					90-110	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2447503-08		
Matrix Spike	: WG1964148-5	**MS Analysis Date**	: 08/27/24 11:18
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Ammonia	0.169	4	4.12	99					90-110	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2447503-05	**Analysis Date**	: 08/26/24 11:31
Dup Sample ID	: WG1963694-4	**DUP Analysis Date**	: 08/26/24 11:33

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Ammonia	0.030J	0.220	NC	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2447503-08	**Analysis Date**	: 08/27/24 11:18
Dup Sample ID	: WG1964148-4	**DUP Analysis Date**	: 08/27/24 11:19

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Ammonia	0.169	0.301	56 Q	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963694-3	**LCS Analysis Date**	: 08/26/24 11:05
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Ammonia	20.0	18.0	90.					90-110	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1964148-3	**LCS Analysis Date**	: 08/27/24 11:14
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Nitrogen, Ammonia	**20.0**	**18.6**	**93.**					**90-110**	**20**

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Ammonia	7664-41-7	0.075	0.024	mg/l	80-120	20	80-120	20	20	4500NH3-BH	28 days	1 - Plastic 500ml H2SO4 preserved
Nitrogen, Ammonia	7664-41-7	0.075	0.024	mg/l	90-110	20	90-110	20	20	350.1	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Nitrogen, Ammonia	7664-41-7	7.5	2.79	mg/kg	83-115	20	55-144	20	20	4500NH3-BH	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Nitrogen in Ammonia

Aqueous samples:

Compute sample NH_3 –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

NH_3-N mg/L = mg/L direct reading x dilution factor

Sequence Logs

Tray A(18-44-09AM, 09-12-58AM, 09-32-04AM)
prep 8/23/24 @12:10

1	Hi ICV 8.0
2	Lo ICV 1.0
3	ICB
4	WG1963015-1T, Blk
5	-2T, LCS Hi, 5X
6	LCS Lo T
7	47161-01T
8	47432 02T
9	47433 01T (5X)
10	02T
11	47476 01T
12	02T
13	47503 01T
14	02T
15	03T
16	04T
17	05T
18	06T
19	07T
20	08T
21	09T
22	09T MS
23	09T Dup

Tray B(10-02-32AM, 10-43-24AM)
prep 8/24/24 @10:15

1	WG1963323-1T, Blk
2	-2T, LCS Hi, 5X
3	LCS Lo T
4	46680 01T (5X)
5	47294 01T (5X)
⊗ 6	47295 02T, 20X 0.5→10
⊗ 7	47296 01T (10X)
8	47297 01T
9	02T
10	47386 01T
11	47388 01T
12	47427 01T
13	47428 01T
14	02T
15	02T MS
16	02T Dup
17	47429 01T
18	02T
19	47675 01T
⊗ 20	47732 01T, 20X 0.5→10

Date: 8/26/24
Sodium Phenolate: 7/29/24 R-4065
Sodium Hypochlorate: 7/29/24 stoptshop
Sodium Nitropruisside: 7/29/24 R-3969
Borric Acid Soln.: 7/29/24 R-409
ICV 1.0: 8/20/24 WC-3348
ICV 8.0:
Cal. Std: 8/1/24 WC-3372
See Front Page for Instructions:

VEP

VEP

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Tray C(10-59-30AM, 11-24-26AM, 11-44-40AM)
prep 8/26/24 @ 5:21

1 WG1963694-1, Blk
2 -2, LOQ
3 -3, LCS Hi, 5X
4 LCS Lo
5 46680-01 (2x)
6 47417-01 (20x); 30x 1↑30
7 -04 (20x); 20x 0.5↑30 ~~1↑30~~ ↑10
8 -09 (20x); 30x 1↑30
9 -10 (20x); 30x 1↑30
10 47503-01
11 -02
12 -03
13 -04
14 -05
15 -05 MS
16 -05 Dup
17 KEP

Tray D(11-56-53AM,
prep 8/26/24 @00:43

1 WG1963669-1T, Blk (STKN)
2 -2T, LCS Hi, 5X
3 LCS Lo
4 47428-01
5 -02
6 -02 MS
7 -02 Dup
8 WG1963670-1T, Blk
9 -2T, LCS Hi, 5X
10 LCS Lo T
11 47288-01T
12 -02T
13 -02T MS
14 -02T Dup

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Tray A (07-56-04AM)
prep 8/26/24 @ 2:05

1	Hi ICV 8.0
2	Lo ICV 1.0
3	ICB
4	WG1963673-1T, Blk
5	-2T; LCS Hi, 5x
6	LCS Lo T
7	45995-01T
8	-02T
9	-03T
10	-04T (2x)
11	-05T
12	-06T
13	-07T
14	-07T MS
15	-07T Dup
16	46017-01T
17	-02T
18	47553-01T (5x)
19	-02T (5x)
20	-03T (5x)
21	-04T (5x)
22	-05T (5x)
23	-06T (5x)

Tray B (08-44-50AM, 09-06-26AM)
prep 8/26/24 @ 3:37

1	WG1963675-1T, Blk
2	-2T; LCS Hi, 5x
3	LCS Lo T
4	47553-07T (5x)
5	47589-01T (5x)
6	-02T (10x)
7	47590-01T (2x)
8	-02T
9	47600-01T (10x)
⊗ 10	47601-01T; 10x 1T10
11	47610-01T (5x)
⊗ 12	47611-01T; 20x 0.5T10
⊗ 13	47612-01T
14	47613-01T (20x)
15	47624-01T
16	-02T
17	-02T MS
18	-02T Dup
19	47669-01T (5x)
20	47735-01T

Date: 8/27/24
Sodium Phenolate: 7/29/24 R-4065
Sodium Hypochlorate: 7/29/24 stop shop
Sodium Nitropruisside: 7/29/24 R-3969
Borric Acid Soln.: 7/29/24 R-4019
ICV 1.0: 8/20/24 WC-3448
ICV 8.0:
Cal. Std: 8/1/24 WC-3392
See Front Page for Instructions:

KTP

KTP

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Tray C (09-53-57AM, 10-41-53AM, 11-01-14AM)
prep 8127124 @1:51

1 WG196415 1-1; Blk
2 -2; LCS Hi; 5x
3 LCS Lo
4 45995-01
5 -02
6 -03
7 -04 (2x)
8 -05
9 -06
10 -06 Dup
11 -06 MS
12 -07
13 46081-01 (2x)
14 -02
15 47382-01 ~~(2x)~~ KEP
16 -02
17 47432-01 (2x)
18 47433-01 (5x)
19 47471-01
20 47596-01
21 47601-01 (2x)
22 47613-01 (5x)
23 48458-01; 20x 0.5+10
24 -03; 20x 0.5+10
25 -05; 20x 0.5+10

KEP

Tray D (11-08-28AM)
prep 8127124 @1:51

1 WG196414 8-1; Blk
2 -2; LOQ; remn
3 -3; LCS Hi; 5x
4 LCS Lo
5 47503-06
6 -07
7 -08
8 -08 MS
9 -08 Dup
10 -09
11 47589-01 (10x)
12 -02
13 47590-01 (2x)
14 -02
15 47726-01
16 -02 (5x)
17 KEP
18

KEP

Tray E
prep 8127124 @1:51

1 WG196414 9-1D; Blk (SNH3)
2 -2D; LCS Hi; 5x
3 LCS Lo D
4 47428-01D
5 -02D
6 -02D MS
7 -02D Dup

KEP

nessed & Understood by me, Date Invented by: Date
Recorded by:

Sample Preparation

Sample	Volume	Dilution	Int. pH	Adj. pH	Final Volume
	100mL	1x	<2	~9.5	150mL

WG1964149

Blank (Liquid)
Low
High
47428-1
-2 PA
-2 DUP
-2 MS

Sample

WG1964148

Blank
LOQ2
Low
High
47503-6
-7
-8 PA
-8 DUP
-8 MS
-9
47589-1 — 10x (10/100) Matrix
-2 — 1x
47590-1 — 2x (50/100) Matrix
-2 — 1x
47726-1 — 5x (20/100) Matrix
-2

Same standards and reagents as pg. #164

08/27/24 @ 01:51 AJC

To Page No. ____

nessed & Understood by me, | Date | Invented by: | Date
Recorded by:

Sample	Volume 100 ml	Dilution 1x	Int. pH <2	Adj. pH ~9.5	Final Volume 150 ml
Blank	↓	↓	↓	↓	↓
LOQ1	↓	↓	↓	↓	↓
Low	↓	↓	↓	↓	↓
High	↓	↓	↓	↓	↓
46680-1	↓	2x(50*100) matrix	↓	↓	↓
47417-1	↓	2.0x(5*100) matrix	↓	↓	↓
-4	↓	↓	↓	↓	↓
-9	↓	↓	↓	↓	↓
-10	↓	↓	↓	↓	↓
47503-1	↓	1x	↓	↓	↓
-2	↓	↓	↓	↓	↓
-3	↓	↓	↓	↓	↓
-4	↓	↓	↓	↓	↓
-5 PA	↓	↓	↓	↓	↓
-5 DUP	↓	↓	↓	↓	↓
-5 MS	↓	↓	↓	↓	↓

Same standards and reagents as pg. #162

08/26/24 @ 05:21 AJC

To Page No

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

Nitrate and Nitrite Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 05:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	ND	0.10	0.046	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 05:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	1.6	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 05:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	3.0	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 05:53
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	0.55	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 05:54
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	1.2	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 05:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	0.61	0.10	0.046	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-07**	**Date Collected**	:	**08/19/24 15:55**
Client ID	:	**MW-7S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/24/24 06:00**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3240824-A1**	**Instrument ID**	:	**FIA1**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**6.6**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 06:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	0.65	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 06:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	1.2	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963316-1	**Date Collected**	: NA
Client ID	: WG1963316-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/24/24 03:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	ND	0.10	0.046	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963316-3	**Date Collected**	: 08/20/24 06:26
Client ID	: WG1963316-3 DUP	**Date Received**	: 08/20/24
Sample Location	:	**Date Analyzed**	: 08/24/24 05:42
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3240824-A1	**Instrument ID**	: FIA1
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	ND	0.10	0.05	U

Sample Raw Data

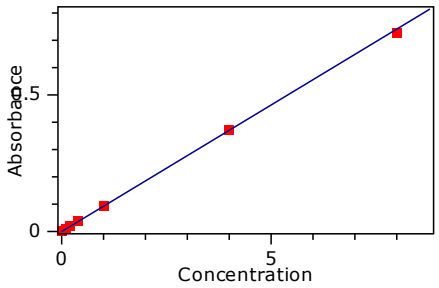
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-08-24 07:22:36
Data file (.dat): C:\FIAlab\Autosave Data\2024-08-24-072209.dat

Dataset Notes:

Analyst	

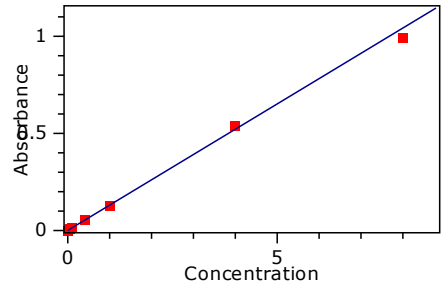
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:



Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: -0.00024
B: 0.09267
R^2: 0.99989
RSE(%): 1.15595
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
2	NOx 8.0ppm	0.72800	8.00000	7.85820	1.77	2024-08-24T02:51:02
3	NOx 4.0ppm	0.37210	4.00000	4.01800	0.45	2024-08-24T02:52:11
4	NOx 1.0ppm	0.09320	1.00000	1.00830	0.83	2024-08-24T02:53:19
5	NOx 0.4ppm	0.03720	0.40000	0.40430	1.09	2024-08-24T02:54:27
6	NOx 0.2ppm	0.01820	0.20000	0.19940	0.32	2024-08-24T02:55:37
7	NOx 0.1ppm	0.00900	0.10000	0.09980	0.16	2024-08-24T02:56:47
8	NOx 0.0ppm	0.00000	0.00000	0.00310	NA	2024-08-24T02:58:00



Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00060
B: 0.13024
R^2: 0.99853
RSE(%): 4.02330
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
9	Nitrite 8.0ppm	0.99070	8.00000	7.60220	4.97	2024-08-24T02:58:54
10	Nitrite 4.0ppm	0.53670	4.00000	4.11670	2.92	2024-08-24T03:00:04
11	Nitrite 1.0ppm	0.12850	1.00000	0.98210	1.79	2024-08-24T03:01:10
12	Nitrite 0.4ppm	0.05490	0.40000	0.41700	4.25	2024-08-24T03:02:20
13	Nitrite 0.1ppm	0.01400	0.10000	0.10270	2.66	2024-08-24T03:03:30
14	Nitrite 0.05ppm	0.00700	0.05000	0.04910	1.78	2024-08-24T03:04:41
15	Nitrite 0.0ppm	0.00010	0.00000	-0.00400	NA	2024-08-24T03:05:52

Results:

Channel: 1-NOx

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0004	1	1	1	0.0069		2024-08-24T02:49:48
NOx 8.0ppm	2	Standard	8	0.7280	1	1	1	7.8582		2024-08-24T02:51:02
NOx 4.0ppm	3	Standard	4	0.3721	1	1	1	4.0180		2024-08-24T02:52:11
NOx 1.0ppm	4	Standard	1	0.0932	1	1	1	1.0083		2024-08-24T02:53:19
NOx 0.4ppm	5	Standard	0.4	0.0372	1	1	1	0.4043		2024-08-24T02:54:27
NOx 0.2ppm	6	Standard	0.2	0.0182	1	1	1	0.1994		2024-08-24T02:55:37
NOx 0.1ppm	7	Standard	0.1	0.0090	1	1	1	0.0998		2024-08-24T02:56:47
NOx 0.0ppm	8	Standard	0	0.0000	1	1	1	0.0031		2024-08-24T02:58:00
Nitrite 8.0ppm	9	Standard	?	0.7156	1	1	1	7.7249		2024-08-24T02:59:07
Nitrite 4.0ppm	10	Standard	?	0.3750	1	1	1	4.0495		2024-08-24T03:00:18
Nitrite 1.0ppm	11	Standard	?	0.0879	1	1	1	0.9512		2024-08-24T03:01:25
Nitrite 0.4ppm	12	Standard	?	0.0375	1	1	1	0.4073		2024-08-24T03:02:33
Nitrite 0.1ppm	13	Standard	?	0.0090	1	1	1	0.1002		2024-08-24T03:03:43
Nitrite 0.05ppm	14	Standard	?	0.0046	1	1	1	0.0518		2024-08-24T03:04:54
Nitrite 0.0ppm	15	Standard	?	0.0001	1	1	1	0.0034		2024-08-24T03:06:07
CCV NO3	16	QC	1	0.0943	1	1	1	1.0200		2024-08-24T03:07:12
CCV NO2	17	QC	?	0.0890	1	1	1	0.9630		2024-08-24T03:08:18
CCB	18	QC	0	0.0000	1	1	1	0.0026		2024-08-24T03:09:01
ICV NO3 5.0	19	QC	5	0.4627	1	1	1	4.9959		2024-08-24T03:10:36
ICV NO2 5.0	20	QC	?	0.4655	1	1	1	5.0254		2024-08-24T03:11:45
ICV NO3 0.5	21	QC	0.5	0.0473	1	1	1	0.5134		2024-08-24T03:12:54
ICV NO2 0.5	22	QC	?	0.0468	1	1	1	0.5079		2024-08-24T03:14:03
ICB	23	QC	0	0.0000	1	1	1	0.0025		2024-08-24T03:14:45
BLANK NO3	24	Unknown	?	0.0001	1	1	1	0.0035		2024-08-24T03:16:18
LCS NO3	25	Unknown	?	0.4618	1	1	1	4.9855		2024-08-24T03:17:28
BLANK NO2	26	Unknown	?	-0.0002	1	1	1	0.0007		2024-08-24T03:18:06
LCS NO2	27	Unknown	?	0.4680	1	1	1	5.0530		2024-08-24T03:19:41
CCV NO3	28	QC	1	0.0928	1	1	1	1.0037		2024-08-24T03:20:46
CCV NO2	29	QC	?	0.0890	1	1	1	0.9633		2024-08-24T03:21:53
CCB	30	QC	0	0.0000	1	1	1	0.0029		2024-08-24T03:22:38
WG1963307-1	31	Unknown	?	0.0001	1	1	1	0.0034		2024-08-24T03:24:19
WG1963307-2	32	Unknown	?	0.4694	1	1	1	5.0680		2024-08-24T03:25:19

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
WG1963308-1; WG1963309-1	33	Unknown	?	-0.0002	1	1	1	0.0000		2024-08-24T03:25:56
WG1963308-2; WG1963309-2	34	Unknown	?	0.4673	1	1	1	5.0453		2024-08-24T03:27:30
WG1963310-1	35	Unknown	?	-0.0002	1	1	1	0.0008		2024-08-24T03:28:08
WG1963310-2	36	Unknown	?	0.4670	1	1	1	5.0415		2024-08-24T03:29:42
WG1963311-1	37	Unknown	?	-0.0001	1	1	1	0.0016		2024-08-24T03:30:22
WG1963311-2	38	Unknown	?	0.5124	1	1	1	5.5314		2024-08-24T03:31:57
WG1963312-1	39	Unknown	?	-0.0002	1	1	1	0.0007		2024-08-24T03:32:36
WG1963312-2	40	Unknown	?	0.4977	1	1	1	5.3734		2024-08-24T03:34:11
CCV NO3	41	QC	1	0.0928	1	1	1	1.0044		2024-08-24T03:35:17
CCV NO2	42	QC	?	0.0889	1	1	1	0.9615		2024-08-24T03:36:22
CCB	43	QC	0	0.0000	1	1	1	0.0023		2024-08-24T03:37:06
WG1963313-1	44	Unknown	?	0.0001	1	1	1	0.0035		2024-08-24T03:38:44
WG1963313-2	45	Unknown	?	0.4914	1	1	1	5.3058		2024-08-24T03:39:49
WG1963314-1	46	Unknown	?	-0.0002	1	1	1	0.0008		2024-08-24T03:40:26
WG1963314-2	47	Unknown	?	0.4910	1	1	1	5.3006		2024-08-24T03:42:00
WG1963315-1; WG1963316-1	48	Unknown	?	-0.0002	1	1	1	0.0004		2024-08-24T03:42:37
WG1963315-2; WG1963316-2	49	Unknown	?	0.4930	1	1	1	5.3229		2024-08-24T03:44:12
L2448247-01	50	Unknown	?	0.0515	1	1	1	0.5585		2024-08-24T03:45:16
WG1963312-3	51	Unknown	?	0.0534	1	1	1	0.5790		2024-08-24T03:46:22
WG1963312-4	52	Unknown	?	0.4289	1	1	1	4.6307		2024-08-24T03:47:26
L2448247-02	53	Unknown	?	0.0961	1	1	1	1.0392		2024-08-24T03:48:30
CCV NO3	54	QC	1	0.0946	1	1	1	1.0239		2024-08-24T03:49:35
CCV NO2	55	QC	?	0.0889	1	1	1	0.9618		2024-08-24T03:50:41
CCB	56	QC	0	0.0000	1	1	1	0.0031		2024-08-24T03:51:52
WG1963311-2	57	Unknown	?	0.4905	1	1	1	5.2961		2024-08-24T03:53:02
WG1963312-2	58	Unknown	?	0.4916	1	1	1	5.3080		2024-08-24T03:54:10
L2448247-03	59	Unknown	?	0.0000	1	1	1	0.0023		2024-08-24T03:55:16
L2448247-04	60	Unknown	?	0.0020	1	1	1	0.0243		2024-08-24T03:56:24
L2448247-05	61	Unknown	?	0.0032	1	1	1	0.0373		2024-08-24T03:57:32
L2448247-06	62	Unknown	?	0.2497	1	1	1	2.6969		2024-08-24T03:58:38

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2448247-07	63	Unknown	?	0.4150	1	1	1	4.4808		2024-08-24T03:59:45
L2448247-08	64	Unknown	?	0.0014	1	1	1	0.0181		2024-08-24T04:00:51
L2448247-09	65	Unknown	?	0.1005	1	1	1	1.0873		2024-08-24T04:01:57
L2448247-10	66	Unknown	?	0.0041	1	1	1	0.0471		2024-08-24T04:03:03
CCV NO3	67	QC	1	0.0953	1	1	1	1.0307		2024-08-24T04:04:09
CCV NO2	68	QC	?	0.0895	1	1	1	0.9688		2024-08-24T04:05:14
CCB	69	QC	0	0.0000	1	1	1	0.0027		2024-08-24T04:06:04
L2448247-11	70	Unknown	?	0.0031	1	1	1	0.0357		2024-08-24T04:07:35
L2448247-12	71	Unknown	?	0.0084	1	1	1	0.0935		2024-08-24T04:08:42
L2448247-13	72	Unknown	?	0.0957	1	1	1	1.0355		2024-08-24T04:09:47
L2448083-01	73	Unknown	?	0.0228	1	1	1	0.2483		2024-08-24T04:10:52
L2448083-02	74	Unknown	?	0.0308	1	1	1	0.3348		2024-08-24T04:11:57
L2448083-03	75	Unknown	?	0.0012	1	1	1	0.0160		2024-08-24T04:13:02
L2448083-04	76	Unknown	?	0.0494	1	1	1	0.5354		2024-08-24T04:14:06
L2448083-05	77	Unknown	?	0.0434	1	1	1	0.4707		2024-08-24T04:15:12
L2448083-06	78	Unknown	?	0.0609	1	1	1	0.6603		2024-08-24T04:16:19
L2448083-07	79	Unknown	?	0.0100	1	1	1	0.1105		2024-08-24T04:17:26
CCV NO3	80	QC	1	0.0951	1	1	1	1.0291		2024-08-24T04:18:32
CCV NO2	81	QC	?	0.0899	1	1	1	0.9730		2024-08-24T04:19:37
CCB	82	QC	0	0.0000	1	1	1	0.0025		2024-08-24T04:20:54
L2448219-01	83	Unknown	?	0.0008	1	1	1	0.0113		2024-08-24T04:21:57
WG1963311-3	84	Unknown	?	0.0001	1	1	1	0.0037		2024-08-24T04:23:02
WG1963311-4	85	Unknown	?	0.3771	1	1	1	4.0718		2024-08-24T04:24:11
WG1963308-3	86	Unknown	?	-0.0001	1	1	1	0.0013		2024-08-24T04:24:48
WG1963308-4	87	Unknown	?	0.4173	1	1	1	4.5053		2024-08-24T04:26:23
L2448219-02	88	Unknown	?	-0.0002	1	1	1	0.0005		2024-08-24T04:27:00
L2448219-03	89	Unknown	?	0.0008	1	1	1	0.0112		2024-08-24T04:28:34
L2448219-04	90	Unknown	?	0.0007	1	1	1	0.0100		2024-08-24T04:29:40
L2448219-05	91	Unknown	?	0.0007	1	1	1	0.0097		2024-08-24T04:30:45
L2448219-06	92	Unknown	?	0.0008	1	1	1	0.0114		2024-08-24T04:31:50
CCV NO3	93	QC	1	0.0952	1	1	1	1.0295		2024-08-24T04:32:54
CCV NO2	94	QC	?	0.0893	1	1	1	0.9666		2024-08-24T04:33:59
CCB	95	QC	0	0.0000	1	1	1	0.0025		2024-08-24T04:34:44

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2448233-01	96	Unknown	?	0.0031	1	1	1	0.0361		2024-08-24T04:36:18
L2448233-02	97	Unknown	?	0.0031	1	1	1	0.0364		2024-08-24T04:37:23
L2447413-01	98	Unknown	?	0.0135	1	1	1	0.1479		2024-08-24T04:38:30
L2448218-01	99	Unknown	?	0.1318	1	1	1	1.4251		2024-08-24T04:39:37
WG1963310-3	100	Unknown	?	0.1312	1	1	1	1.4181		2024-08-24T04:40:44
WG1963310-4	101	Unknown	?	0.4994	1	1	1	5.3922		2024-08-24T04:41:51
WG1963307-3	102	Unknown	?	0.1303	1	1	1	1.4089		2024-08-24T04:42:57
WG1963307-4	103	Unknown	?	0.5407	1	1	1	5.8374		2024-08-24T04:44:03
L2448260-01	104	Unknown	?	0.3027	1	1	1	3.2689		2024-08-24T04:45:09
WG1963310-5	105	Unknown	?	0.3041	1	1	1	3.2837		2024-08-24T04:46:15
CCV NO3	106	QC	1	0.0936	1	1	1	1.0132		2024-08-24T04:47:21
CCV NO2	107	QC	?	0.0896	1	1	1	0.9691		2024-08-24T04:48:26
CCB	108	QC	0	0.0000	1	1	1	0.0026		2024-08-24T04:49:09
WG1963310-6	109	Unknown	?	0.6548	1	1	1	7.0681		2024-08-24T04:50:44
WG1963307-5	110	Unknown	?	0.3027	1	1	1	3.2695		2024-08-24T04:51:50
WG1963307-6	111	Unknown	?	0.6951	1	1	1	7.5035		2024-08-24T04:52:56
L2448261-01	112	Unknown	?	1.3175	1	1	1	14.2201	OVR	2024-08-24T04:54:09
L2448262-01	113	Unknown	?	0.0378	1	1	1	0.4102		2024-08-24T04:55:05
L2448335-01	114	Unknown	?	0.0012	1	1	1	0.0154		2024-08-24T04:56:09
L2448335-02	115	Unknown	?	0.0574	1	1	1	0.6219		2024-08-24T04:57:15
L2448365-01	116	Unknown	?	1.3229	1	1	1	14.2777	OVR	2024-08-24T04:58:24
L2448370-01	117	Unknown	?	0.0222	1	1	1	0.2420		2024-08-24T04:59:28
L2448370-02	118	Unknown	?	0.0251	1	1	1	0.2730		2024-08-24T05:00:35
CCV NO3	119	QC	1	0.0957	1	1	1	1.0350		2024-08-24T05:01:41
CCV NO2	120	QC	?	0.0896	1	1	1	0.9699		2024-08-24T05:02:47
CCB	121	QC	0	0.0000	1	1	1	0.0024		2024-08-24T05:03:30
L2447485-17	122	Unknown	?	0.0029	1	1	1	0.0339		2024-08-24T05:05:11
WG1963313-3	123	Unknown	?	0.0025	1	1	1	0.0301		2024-08-24T05:06:18
WG1963313-4	124	Unknown	?	0.2149	1	1	1	2.3217		2024-08-24T05:07:18
WG1963309-3	125	Unknown	?	0.0019	1	1	1	0.0231		2024-08-24T05:08:30
WG1963309-4	126	Unknown	?	0.2410	1	1	1	2.6037		2024-08-24T05:09:31
L2447485-18	127	Unknown	?	0.0019	1	1	1	0.0235		2024-08-24T05:10:41
L2447485-19	128	Unknown	?	0.0008	1	1	1	0.0116		2024-08-24T05:11:41

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2447485-22	129	Unknown	?	0.1247	1	1	1	1.3480		2024-08-24T05:12:47
L2447032-01	130	Unknown	?	0.0633	1	1	1	0.6859		2024-08-24T05:13:52
L2447032-03	131	Unknown	?	0.0457	1	1	1	0.4959		2024-08-24T05:14:57
CCV NO3	132	QC	1	0.0951	1	1	1	1.0294		2024-08-24T05:16:02
CCV NO2	133	QC	?	0.0891	1	1	1	0.9643		2024-08-24T05:17:08
CCB	134	QC	0	0.0000	1	1	1	0.0025		2024-08-24T05:17:50
L2447032-05	135	Unknown	?	0.0424	1	1	1	0.4597		2024-08-24T05:19:25
L2447032-07	136	Unknown	?	0.0006	1	1	1	0.0089		2024-08-24T05:20:31
L2447032-09	137	Unknown	?	0.0485	1	1	1	0.5259		2024-08-24T05:21:37
L2447032-11	138	Unknown	?	0.0917	1	1	1	0.9919		2024-08-24T05:22:44
L2447063-01	139	Unknown	?	0.1887	1	1	1	2.0385		2024-08-24T05:23:52
WG1963314-3	140	Unknown	?	0.1886	1	1	1	2.0375		2024-08-24T05:24:58
WG1963314-4	141	Unknown	?	0.5511	1	1	1	5.9498		2024-08-24T05:26:04
L2447064-01	142	Unknown	?	0.1599	1	1	1	1.7278		2024-08-24T05:27:10
L2447165-02	143	Unknown	?	0.0028	1	1	1	0.0330		2024-08-24T05:28:16
L2447288-01	144	Unknown	?	0.0243	1	1	1	0.2651		2024-08-24T05:29:22
CCV NO3	145	QC	1	0.0941	1	1	1	1.0177		2024-08-24T05:30:27
CCV NO2	146	QC	?	0.0891	1	1	1	0.9636		2024-08-24T05:31:33
CCB	147	QC	0	0.0000	1	1	1	0.0028		2024-08-24T05:32:15
WG1963315-3	148	Unknown	?	0.0236	1	1	1	0.2572		2024-08-24T05:33:50
WG1963315-4	149	Unknown	?	0.4036	1	1	1	4.3581		2024-08-24T05:34:56
L2447288-02	150	Unknown	?	0.0341	1	1	1	0.3701		2024-08-24T05:36:02
L2448262-01	151	Unknown	?	0.0535	1	1	1	0.5804		2024-08-24T05:37:07
L2448370-01	152	Unknown	?	0.0267	1	1	1	0.2908		2024-08-24T05:38:13
L2448261-01; 1 UP TO 5	153	Unknown	?	0.6820	5	1	1	36.8105		2024-08-24T05:39:20
L2448365-01; 1 UP TO 5	154	Unknown	?	0.4873	5	1	1	26.3030		2024-08-24T05:40:27
L2447249-01	155	Unknown	?	0.0016	1	1	1	0.0196		2024-08-24T05:41:34
WG1963316-3	156	Unknown	?	0.0030	1	1	1	0.0347		2024-08-24T05:42:40
WG1963316-4	157	Unknown	?	0.3822	1	1	1	4.1275		2024-08-24T05:43:45
CCV NO3	158	QC	1	0.0927	1	1	1	1.0030		2024-08-24T05:44:51
CCV NO2	159	QC	?	0.0892	1	1	1	0.9656		2024-08-24T05:45:56
CCB	160	QC	0	0.0000	1	1	1	0.0024		2024-08-24T05:47:06

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2447249-02	161	Unknown	?	0.3907	1	1	1	4.2189		2024-08-24T05:48:15
L2447259-02	162	Unknown	?	0.1767	1	1	1	1.9092		2024-08-24T05:49:22
L2447503-01	163	Unknown	?	0.0031	1	1	1	0.0362		2024-08-24T05:50:29
L2447503-02	164	Unknown	?	0.1493	1	1	1	1.6141		2024-08-24T05:51:36
L2447503-03	165	Unknown	?	0.2735	1	1	1	2.9538		2024-08-24T05:52:43
L2447503-04	166	Unknown	?	0.0504	1	1	1	0.5469		2024-08-24T05:53:49
L2447503-05	167	Unknown	?	0.1106	1	1	1	1.1956		2024-08-24T05:54:55
CCV NO3	168	QC	1	0.0938	1	1	1	1.0153		2024-08-24T05:56:01
CCV NO2	169	QC	?	0.0881	1	1	1	0.9533		2024-08-24T05:57:06
CCB	170	QC	0	0.0000	1	1	1	0.0024		2024-08-24T05:57:49
L2447503-06	171	Unknown	?	0.0565	1	1	1	0.6127		2024-08-24T05:59:24
L2447503-07	172	Unknown	?	0.6116	1	1	1	6.6021		2024-08-24T06:00:30
L2447503-08	173	Unknown	?	0.0596	1	1	1	0.6461		2024-08-24T06:01:36
L2447503-09	174	Unknown	?	0.1094	1	1	1	1.1830		2024-08-24T06:02:42
CCV NO3	175	QC	1	0.0939	1	1	1	1.0160		2024-08-24T06:03:47
CCV NO2	176	QC	?	0.0889	1	1	1	0.9618		2024-08-24T06:04:53
CCB	177	QC	0	0.0000	1	1	1	0.0025		2024-08-24T06:05:36

Channel: 2-NO2

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0001	1	1	1	-0.0042		2024-08-24T02:49:28
NOx 8.0ppm	2	Standard	?	0.0001	1	1	1	-0.0040		2024-08-24T02:50:49
NOx 4.0ppm	3	Standard	?	0.0001	1	1	1	-0.0041		2024-08-24T02:52:01
NOx 1.0ppm	4	Standard	?	0.0001	1	1	1	-0.0038		2024-08-24T02:53:05
NOx 0.4ppm	5	Standard	?	0.0000	1	1	1	-0.0043		2024-08-24T02:54:56
NOx 0.2ppm	6	Standard	?	0.0001	1	1	1	-0.0042		2024-08-24T02:55:18
NOx 0.1ppm	7	Standard	?	0.0000	1	1	1	-0.0043		2024-08-24T02:56:37
NOx 0.0ppm	8	Standard	?	0.0001	1	1	1	-0.0040		2024-08-24T02:57:46
Nitrite 8.0ppm	9	Standard	8	0.9907	1	1	1	7.6022		2024-08-24T02:58:54
Nitrite 4.0ppm	10	Standard	4	0.5367	1	1	1	4.1167		2024-08-24T03:00:04
Nitrite 1.0ppm	11	Standard	1	0.1285	1	1	1	0.9821		2024-08-24T03:01:10
Nitrite 0.4ppm	12	Standard	0.4	0.0549	1	1	1	0.4170		2024-08-24T03:02:20
Nitrite 0.1ppm	13	Standard	0.1	0.0140	1	1	1	0.1027		2024-08-24T03:03:30
Nitrite	14	Standard	0.05	0.0070	1	1	1	0.0491		2024-08-

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
0.05ppm										24T03:04:41
Nitrite 0.0ppm	15	Standard	0	0.0001	1	1	1	-0.0040		2024-08-24T03:05:52
CCV NO3	16	QC	?	0.0001	1	1	1	-0.0037		2024-08-24T03:06:59
CCV NO2	17	QC	1	0.1283	1	1	1	0.9807		2024-08-24T03:08:03
CCB	18	QC	0	0.0001	1	1	1	-0.0039		2024-08-24T03:09:17
ICV NO3 5.0	19	QC	?	0.0001	1	1	1	-0.0039		2024-08-24T03:10:28
ICV NO2 5.0	20	QC	5	0.6619	1	1	1	5.0775		2024-08-24T03:11:31
ICV NO3 0.5	21	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T03:12:39
ICV NO2 0.5	22	QC	0.5	0.0692	1	1	1	0.5265		2024-08-24T03:13:49
ICB	23	QC	0	0.0001	1	1	1	-0.0040		2024-08-24T03:15:05
BLANK NO3	24	Unknown	?	0.0001	1	1	1	-0.0042		2024-08-24T03:16:23
LCS NO3	25	Unknown	?	0.0001	1	1	1	-0.0038		2024-08-24T03:17:14
BLANK NO2	26	Unknown	?	0.0001	1	1	1	-0.0039		2024-08-24T03:18:28
LCS NO2	27	Unknown	?	0.6635	1	1	1	5.0902		2024-08-24T03:19:26
CCV NO3	28	QC	?	0.0001	1	1	1	-0.0040		2024-08-24T03:20:31
CCV NO2	29	QC	1	0.1291	1	1	1	0.9867		2024-08-24T03:21:38
CCB	30	QC	0	0.0001	1	1	1	-0.0040		2024-08-24T03:22:56
WG1963307-1	31	Unknown	?	0.0001	1	1	1	-0.0041		2024-08-24T03:24:00
WG1963307-2	32	Unknown	?	0.6659	1	1	1	5.1084		2024-08-24T03:25:04
WG1963308-1; WG1963309-1	33	Unknown	?	0.0000	1	1	1	-0.0047		2024-08-24T03:26:13
WG1963308-2; WG1963309-2	34	Unknown	?	0.6625	1	1	1	5.0823		2024-08-24T03:27:15
WG1963310-1	35	Unknown	?	0.0001	1	1	1	-0.0036		2024-08-24T03:28:23
WG1963310-2	36	Unknown	?	0.0002	1	1	1	-0.0034		2024-08-24T03:29:32
WG1963311-1	37	Unknown	?	0.0001	1	1	1	-0.0039		2024-08-24T03:30:47
WG1963311-2	38	Unknown	?	0.0354	1	1	1	0.2671		2024-08-24T03:31:42
WG1963312-1	39	Unknown	?	0.0000	1	1	1	-0.0043		2024-08-24T03:32:54
WG1963312-2	40	Unknown	?	0.0094	1	1	1	0.0674		2024-08-24T03:33:56
CCV NO3	41	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T03:34:58
CCV NO2	42	QC	1	0.1297	1	1	1	0.9910		2024-08-24T03:36:07
CCB	43	QC	0	0.0000	1	1	1	-0.0042		2024-08-24T03:37:19
WG1963313-1	44	Unknown	?	0.0001	1	1	1	-0.0042		2024-08-24T03:38:25
WG1963313-2	45	Unknown	?	0.0003	1	1	1	-0.0022		2024-08-24T03:39:33

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
WG1963314-1	46	Unknown	?	0.0000	1	1	1	-0.0043		2024-08-24T03:40:50
WG1963314-2	47	Unknown	?	0.0002	1	1	1	-0.0028		2024-08-24T03:41:46
WG1963315-1; WG1963316-1	48	Unknown	?	0.0001	1	1	1	-0.0040		2024-08-24T03:43:00
WG1963315-2; WG1963316-2	49	Unknown	?	0.0002	1	1	1	-0.0028		2024-08-24T03:43:56
L2448247-01	50	Unknown	?	0.0005	1	1	1	-0.0004		2024-08-24T03:45:01
WG1963312-3	51	Unknown	?	0.0006	1	1	1	-0.0002		2024-08-24T03:46:06
WG1963312-4	52	Unknown	?	0.0007	1	1	1	0.0005		2024-08-24T03:47:11
L2448247-02	53	Unknown	?	0.0008	1	1	1	0.0017		2024-08-24T03:48:14
CCV NO3	54	QC	?	0.0001	1	1	1	-0.0039		2024-08-24T03:49:24
CCV NO2	55	QC	1	0.1287	1	1	1	0.9836		2024-08-24T03:50:26
CCB	56	QC	0	0.0001	1	1	1	-0.0040		2024-08-24T03:51:38
WG1963311-2	57	Unknown	?	0.0001	1	1	1	-0.0038		2024-08-24T03:52:47
WG1963312-2	58	Unknown	?	0.0002	1	1	1	-0.0030		2024-08-24T03:53:55
L2448247-03	59	Unknown	?	0.0007	1	1	1	0.0009		2024-08-24T03:55:03
L2448247-04	60	Unknown	?	0.0019	1	1	1	0.0102		2024-08-24T03:56:10
L2448247-05	61	Unknown	?	0.0033	1	1	1	0.0208		2024-08-24T03:57:17
L2448247-06	62	Unknown	?	0.0074	1	1	1	0.0519		2024-08-24T03:58:24
L2448247-07	63	Unknown	?	0.0042	1	1	1	0.0275		2024-08-24T03:59:30
L2448247-08	64	Unknown	?	0.0028	1	1	1	0.0172		2024-08-24T04:00:36
L2448247-09	65	Unknown	?	0.0023	1	1	1	0.0134		2024-08-24T04:01:42
L2448247-10	66	Unknown	?	0.0016	1	1	1	0.0073		2024-08-24T04:02:48
CCV NO3	67	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T04:03:51
CCV NO2	68	QC	1	0.1283	1	1	1	0.9803		2024-08-24T04:04:59
CCB	69	QC	0	0.0001	1	1	1	-0.0041		2024-08-24T04:06:12
L2448247-11	70	Unknown	?	0.0027	1	1	1	0.0162		2024-08-24T04:07:19
L2448247-12	71	Unknown	?	0.0015	1	1	1	0.0067		2024-08-24T04:08:26
L2448247-13	72	Unknown	?	0.0009	1	1	1	0.0022		2024-08-24T04:09:31
L2448083-01	73	Unknown	?	0.0009	1	1	1	0.0022		2024-08-24T04:10:37
L2448083-02	74	Unknown	?	0.0008	1	1	1	0.0012		2024-08-24T04:11:41
L2448083-03	75	Unknown	?	0.0008	1	1	1	0.0016		2024-08-24T04:12:45
L2448083-04	76	Unknown	?	0.0008	1	1	1	0.0014		2024-08-24T04:13:50

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2448083-05	77	Unknown	?	0.0008	1	1	1	0.0015		2024-08-24T04:14:57
L2448083-06	78	Unknown	?	0.0007	1	1	1	0.0011		2024-08-24T04:16:04
L2448083-07	79	Unknown	?	0.0008	1	1	1	0.0014		2024-08-24T04:17:11
CCV NO3	80	QC	?	0.0001	1	1	1	-0.0036		2024-08-24T04:18:18
CCV NO2	81	QC	1	0.1296	1	1	1	0.9908		2024-08-24T04:19:22
CCB	82	QC	0	0.0001	1	1	1	-0.0036		2024-08-24T04:20:35
L2448219-01	83	Unknown	?	0.0009	1	1	1	0.0022		2024-08-24T04:21:43
WG1963311-3	84	Unknown	?	0.0001	1	1	1	-0.0037		2024-08-24T04:22:47
WG1963311-4	85	Unknown	?	0.0001	1	1	1	-0.0036		2024-08-24T04:23:55
WG1963308-3	86	Unknown	?	0.0001	1	1	1	-0.0039		2024-08-24T04:25:12
WG1963308-4	87	Unknown	?	0.5885	1	1	1	4.5145		2024-08-24T04:26:08
L2448219-02	88	Unknown	?	0.0008	1	1	1	0.0017		2024-08-24T04:27:14
L2448219-03	89	Unknown	?	0.0009	1	1	1	0.0025		2024-08-24T04:28:19
L2448219-04	90	Unknown	?	0.0007	1	1	1	0.0011		2024-08-24T04:29:23
L2448219-05	91	Unknown	?	0.0007	1	1	1	0.0007		2024-08-24T04:30:28
L2448219-06	92	Unknown	?	0.0008	1	1	1	0.0017		2024-08-24T04:31:33
CCV NO3	93	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T04:32:40
CCV NO2	94	QC	1	0.1303	1	1	1	0.9956		2024-08-24T04:33:44
CCB	95	QC	0	0.0001	1	1	1	-0.0039		2024-08-24T04:35:07
L2448233-01	96	Unknown	?	0.0012	1	1	1	0.0042		2024-08-24T04:36:02
L2448233-02	97	Unknown	?	0.0011	1	1	1	0.0040		2024-08-24T04:37:07
L2447413-01	98	Unknown	?	0.0008	1	1	1	0.0017		2024-08-24T04:38:15
L2448218-01	99	Unknown	?	0.0347	1	1	1	0.2615		2024-08-24T04:39:22
WG1963310-3	100	Unknown	?	0.0342	1	1	1	0.2579		2024-08-24T04:40:29
WG1963310-4	101	Unknown	?	0.0357	1	1	1	0.2695		2024-08-24T04:41:35
WG1963307-3	102	Unknown	?	0.0340	1	1	1	0.2566		2024-08-24T04:42:42
WG1963307-4	103	Unknown	?	0.6193	1	1	1	4.7507		2024-08-24T04:43:48
L2448260-01	104	Unknown	?	0.3656	1	1	1	2.8029		2024-08-24T04:44:54
WG1963310-5	105	Unknown	?	0.3724	1	1	1	2.8546		2024-08-24T04:46:00
CCV NO3	106	QC	?	0.0001	1	1	1	-0.0037		2024-08-24T04:47:07
CCV NO2	107	QC	1	0.1334	1	1	1	1.0196		2024-08-24T04:48:11
CCB	108	QC	0	0.0001	1	1	1	-0.0038		2024-08-24T04:49:23
WG1963310-6	109	Unknown	?	0.3711	1	1	1	2.8448		2024-08-24T04:50:28

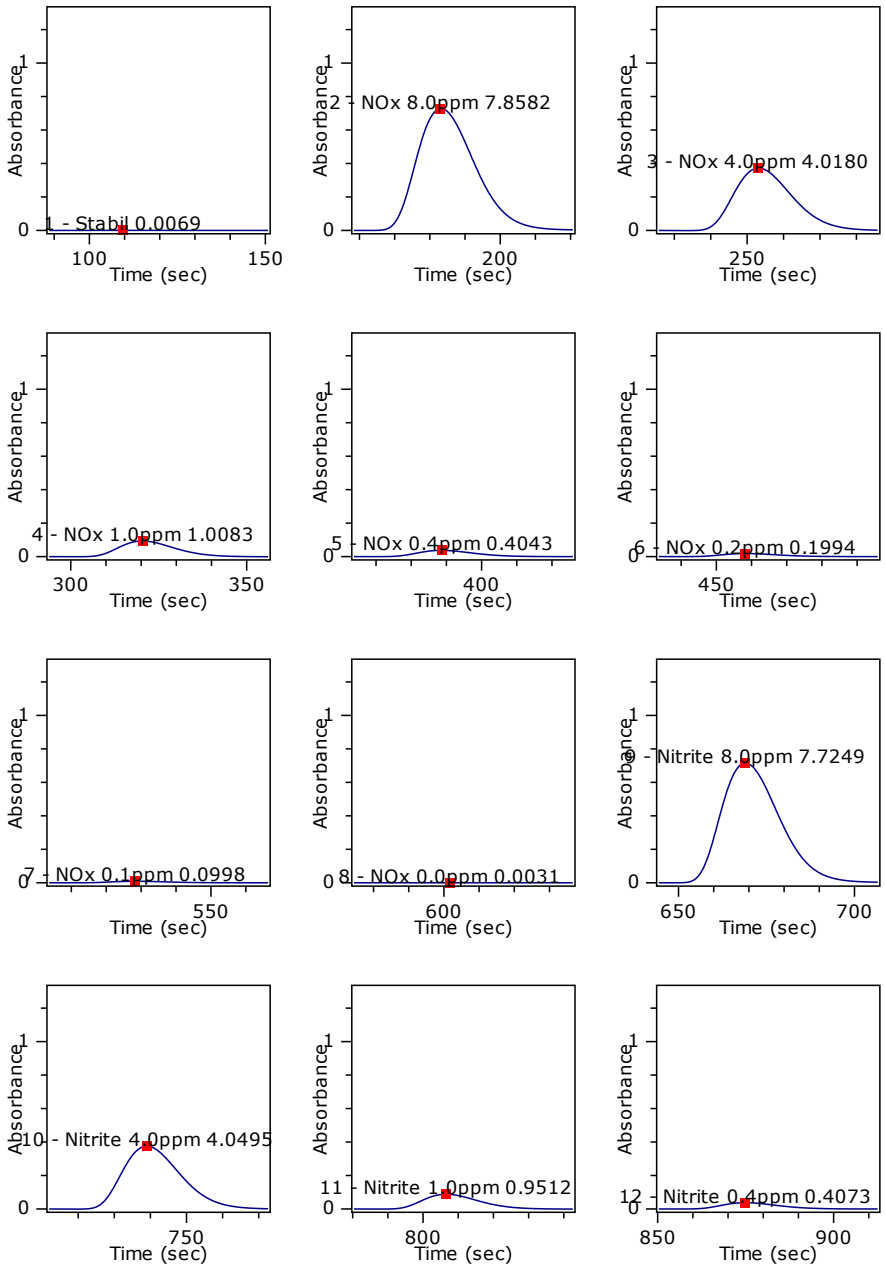
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
WG1963307-5	110	Unknown	?	0.3787	1	1	1	2.9034		2024-08-24T04:51:35
WG1963307-6	111	Unknown	?	0.9405	1	1	1	7.2166		2024-08-24T04:52:40
L2448261-01	112	Unknown	?	0.0086	1	1	1	0.0618		2024-08-24T04:53:44
L2448262-01	113	Unknown	?	0.0362	1	1	1	0.2736		2024-08-24T04:54:49
L2448335-01	114	Unknown	?	0.0030	1	1	1	0.0186		2024-08-24T04:55:53
L2448335-02	115	Unknown	?	0.0152	1	1	1	0.1119		2024-08-24T04:56:59
L2448365-01	116	Unknown	?	0.2551	1	1	1	1.9538		2024-08-24T04:58:06
L2448370-01	117	Unknown	?	0.0185	1	1	1	0.1371		2024-08-24T04:59:13
L2448370-02	118	Unknown	?	0.0182	1	1	1	0.1355		2024-08-24T05:00:20
CCV NO3	119	QC	?	0.0001	1	1	1	-0.0036		2024-08-24T05:01:30
CCV NO2	120	QC	1	0.1360	1	1	1	1.0395		2024-08-24T05:02:32
CCB	121	QC	0	0.0001	1	1	1	-0.0041		2024-08-24T05:03:46
L2447485-17	122	Unknown	?	0.0051	1	1	1	0.0345		2024-08-24T05:04:50
WG1963313-3	123	Unknown	?	0.0045	1	1	1	0.0299		2024-08-24T05:05:56
WG1963313-4	124	Unknown	?	0.0065	1	1	1	0.0455		2024-08-24T05:07:03
WG1963309-3	125	Unknown	?	0.0043	1	1	1	0.0282		2024-08-24T05:08:09
WG1963309-4	126	Unknown	?	0.4225	1	1	1	3.2394		2024-08-24T05:09:15
L2447485-18	127	Unknown	?	0.0048	1	1	1	0.0322		2024-08-24T05:10:21
L2447485-19	128	Unknown	?	0.0009	1	1	1	0.0023		2024-08-24T05:11:24
L2447485-22	129	Unknown	?	0.0044	1	1	1	0.0291		2024-08-24T05:12:31
L2447032-01	130	Unknown	?	0.0008	1	1	1	0.0019		2024-08-24T05:13:36
L2447032-03	131	Unknown	?	0.0000	1	1	1	-0.0044		2024-08-24T05:14:59
CCV NO3	132	QC	?	0.0001	1	1	1	-0.0037		2024-08-24T05:15:47
CCV NO2	133	QC	1	0.1302	1	1	1	0.9953		2024-08-24T05:16:53
CCB	134	QC	0	0.0001	1	1	1	-0.0039		2024-08-24T05:18:04
L2447032-05	135	Unknown	?	0.0008	1	1	1	0.0014		2024-08-24T05:19:10
L2447032-07	136	Unknown	?	0.0007	1	1	1	0.0008		2024-08-24T05:20:15
L2447032-09	137	Unknown	?	0.0008	1	1	1	0.0016		2024-08-24T05:21:22
L2447032-11	138	Unknown	?	0.0008	1	1	1	0.0016		2024-08-24T05:22:29
L2447063-01	139	Unknown	?	0.0011	1	1	1	0.0036		2024-08-24T05:23:37
WG1963314-3	140	Unknown	?	0.0002	1	1	1	-0.0032		2024-08-24T05:24:43
WG1963314-4	141	Unknown	?	0.0034	1	1	1	0.0216		2024-08-24T05:25:49
L2447064-01	142	Unknown	?	0.0009	1	1	1	0.0022		2024-08-24T05:26:55

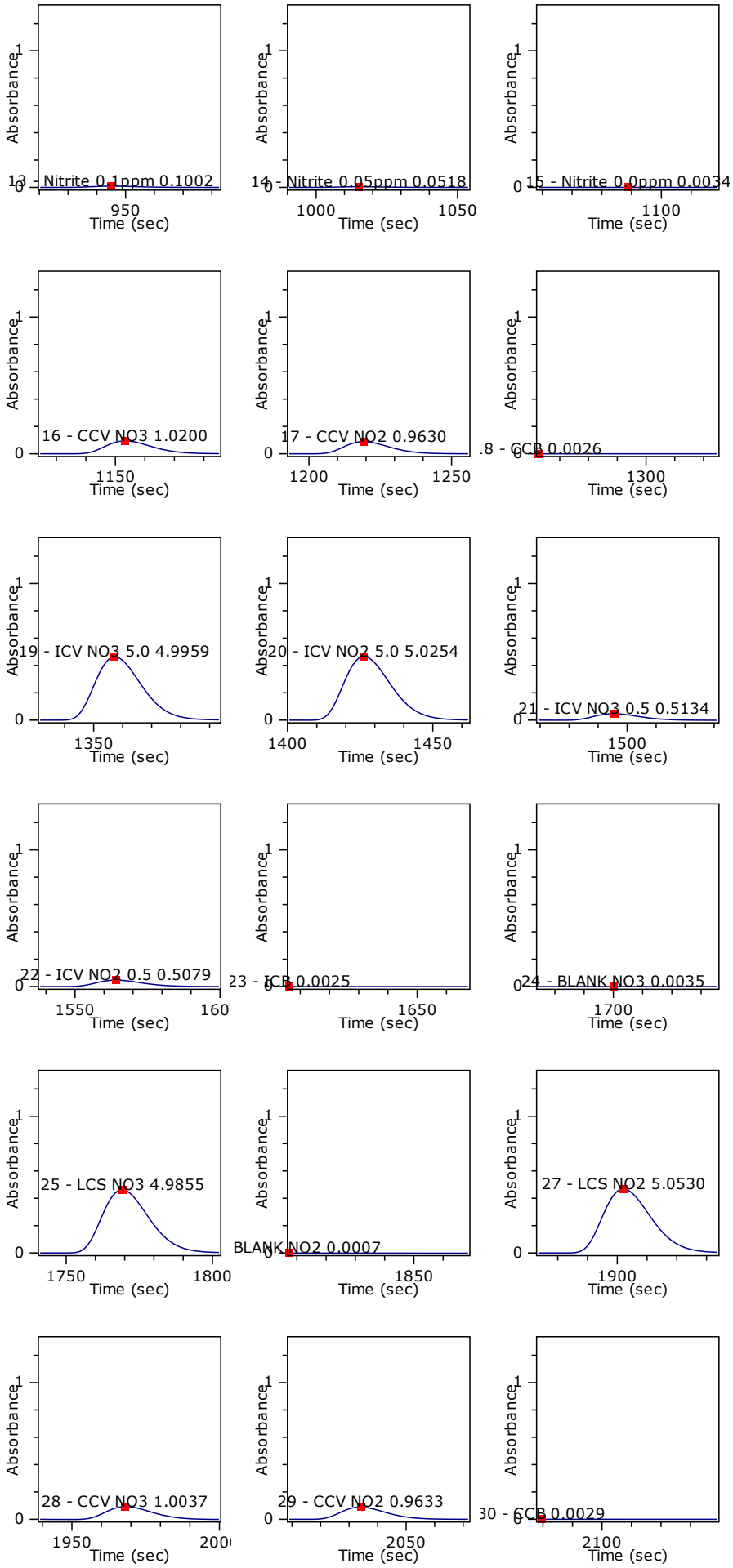
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2447165-02	143	Unknown	?	0.0017	1	1	1	0.0083		2024-08-24T05:28:01
L2447288-01	144	Unknown	?	0.0011	1	1	1	0.0035		2024-08-24T05:29:07
CCV NO3	145	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T05:30:10
CCV NO2	146	QC	1	0.1295	1	1	1	0.9894		2024-08-24T05:31:17
CCB	147	QC	0	0.0001	1	1	1	-0.0040		2024-08-24T05:32:36
WG1963315-3	148	Unknown	?	0.0003	1	1	1	-0.0024		2024-08-24T05:33:35
WG1963315-4	149	Unknown	?	0.0004	1	1	1	-0.0012		2024-08-24T05:34:39
L2447288-02	150	Unknown	?	0.0008	1	1	1	0.0017		2024-08-24T05:35:46
L2448262-01	151	Unknown	?	0.0348	1	1	1	0.2629		2024-08-24T05:36:51
L2448370-01	152	Unknown	?	0.0178	1	1	1	0.1318		2024-08-24T05:37:58
L2448261-01; 1 UP TO 5	153	Unknown	?	0.0017	5	1	1	0.0420		2024-08-24T05:39:05
L2448365-01; 1 UP TO 5	154	Unknown	?	0.0493	5	1	1	1.8709		2024-08-24T05:40:13
L2447249-01	155	Unknown	?	0.0022	1	1	1	0.0125		2024-08-24T05:41:18
WG1963316-3	156	Unknown	?	0.0022	1	1	1	0.0120		2024-08-24T05:42:25
WG1963316-4	157	Unknown	?	0.0025	1	1	1	0.0148		2024-08-24T05:43:30
CCV NO3	158	QC	?	0.0001	1	1	1	-0.0037		2024-08-24T05:44:38
CCV NO2	159	QC	1	0.1303	1	1	1	0.9962		2024-08-24T05:45:41
CCB	160	QC	0	0.0001	1	1	1	-0.0040		2024-08-24T05:46:43
L2447249-02	161	Unknown	?	0.0040	1	1	1	0.0258		2024-08-24T05:48:00
L2447259-02	162	Unknown	?	0.0009	1	1	1	0.0026		2024-08-24T05:49:08
L2447503-01	163	Unknown	?	0.0012	1	1	1	0.0043		2024-08-24T05:50:14
L2447503-02	164	Unknown	?	0.0008	1	1	1	0.0016		2024-08-24T05:51:21
L2447503-03	165	Unknown	?	0.0014	1	1	1	0.0065		2024-08-24T05:52:28
L2447503-04	166	Unknown	?	0.0011	1	1	1	0.0035		2024-08-24T05:53:33
L2447503-05	167	Unknown	?	0.0009	1	1	1	0.0024		2024-08-24T05:54:40
CCV NO3	168	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T05:55:43
CCV NO2	169	QC	1	0.1307	1	1	1	0.9986		2024-08-24T05:56:51
CCB	170	QC	0	0.0001	1	1	1	-0.0041		2024-08-24T05:58:03
L2447503-06	171	Unknown	?	0.0010	1	1	1	0.0034		2024-08-24T05:59:09
L2447503-07	172	Unknown	?	0.0009	1	1	1	0.0022		2024-08-24T06:00:14
L2447503-08	173	Unknown	?	0.0009	1	1	1	0.0025		2024-08-24T06:01:20
L2447503-09	174	Unknown	?	0.0013	1	1	1	0.0054		2024-08-24T06:02:26

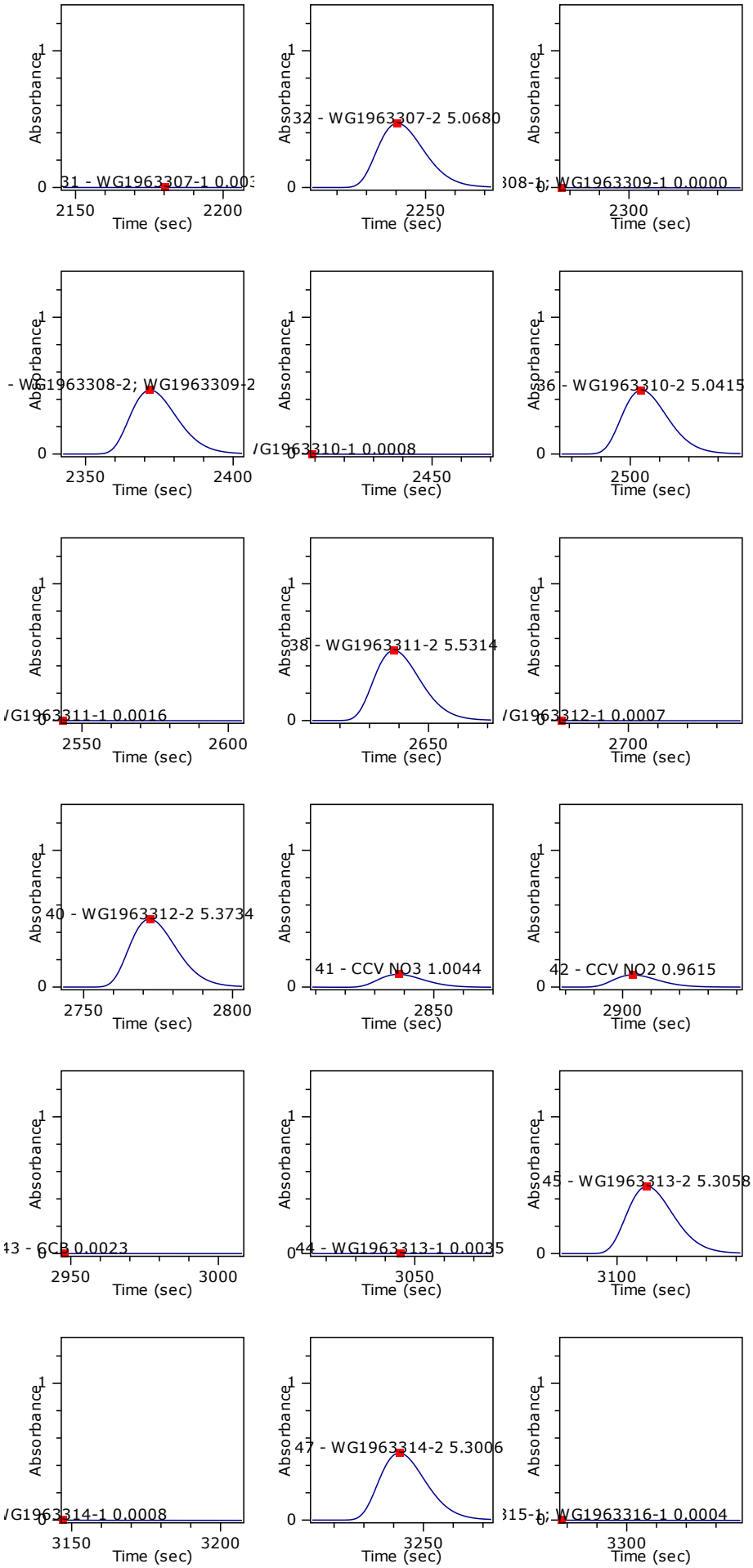
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
CCV NO3	175	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T06:03:32
CCV NO2	176	QC	1	0.1288	1	1	1	0.9846		2024-08-24T06:04:38
CCB	177	QC	0	0.0000	1	1	1	-0.0043		2024-08-24T06:05:51

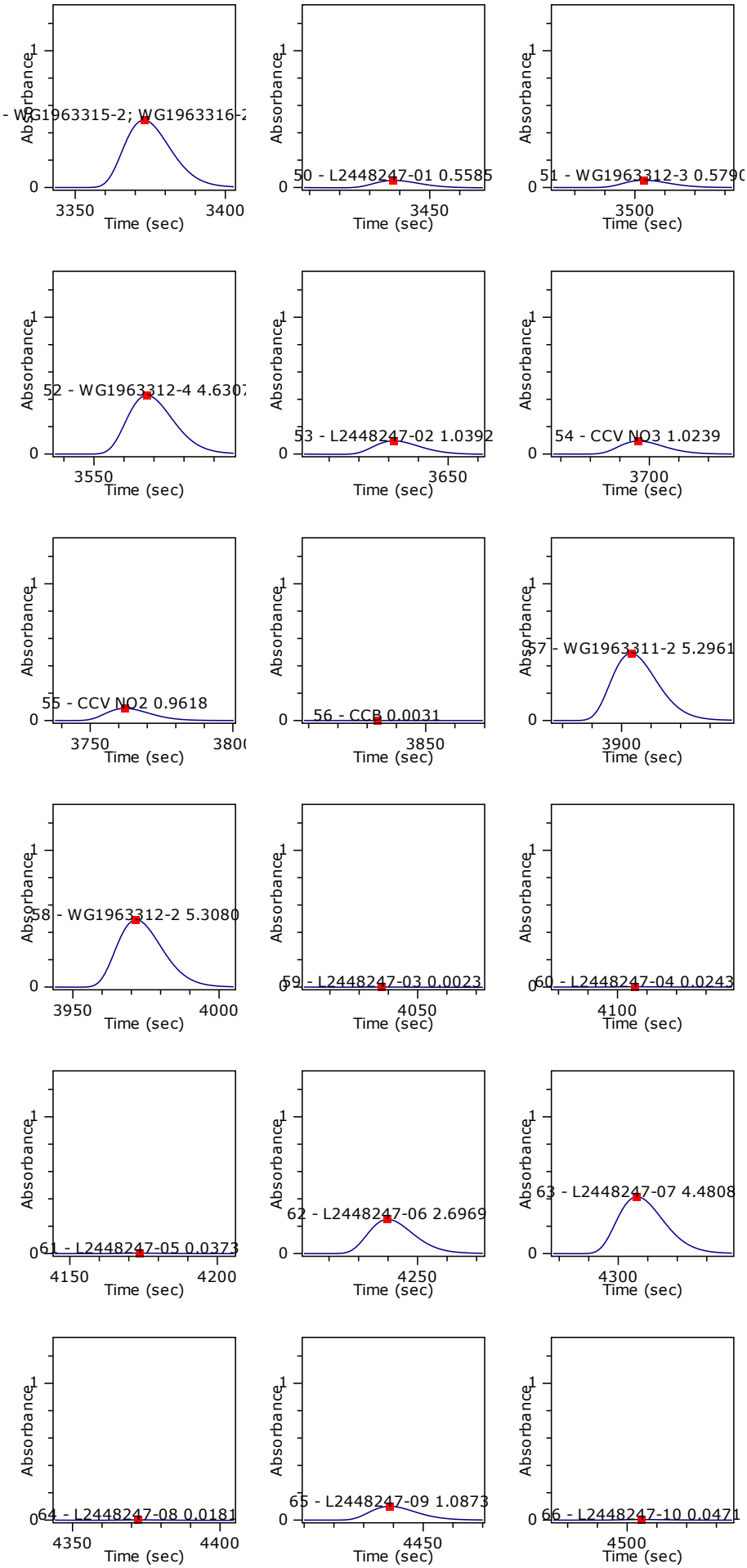
Peaks:

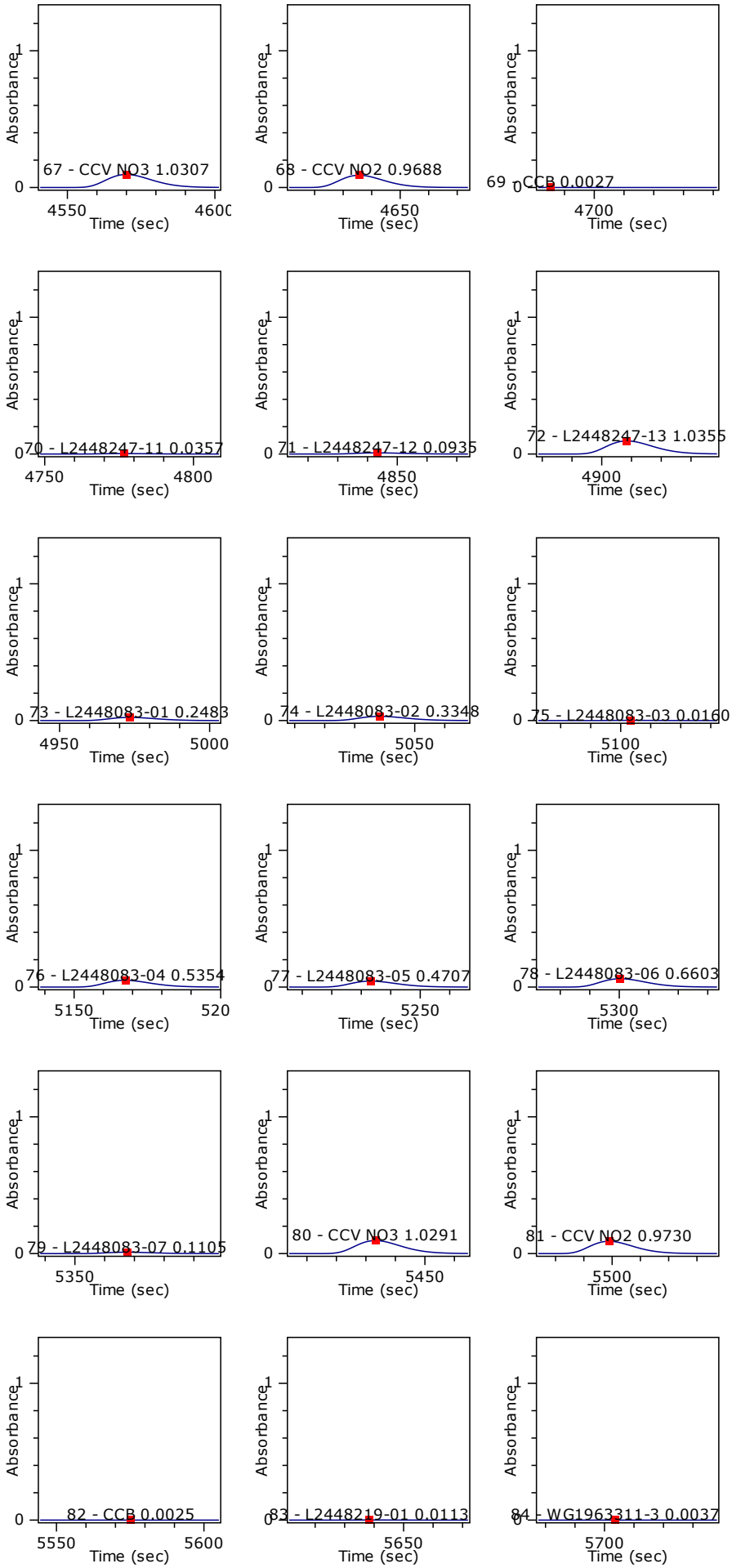
Channel: 1-NOx

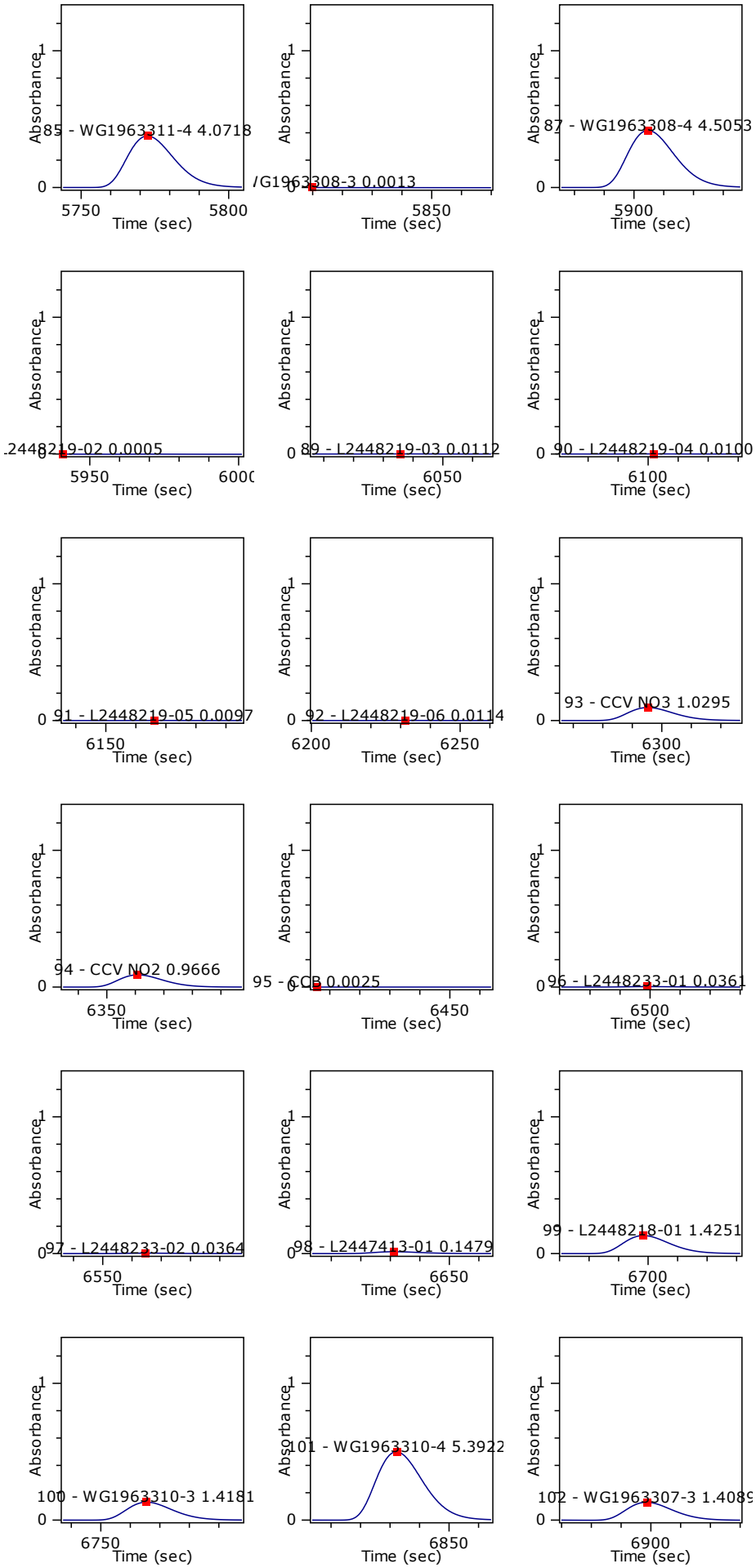


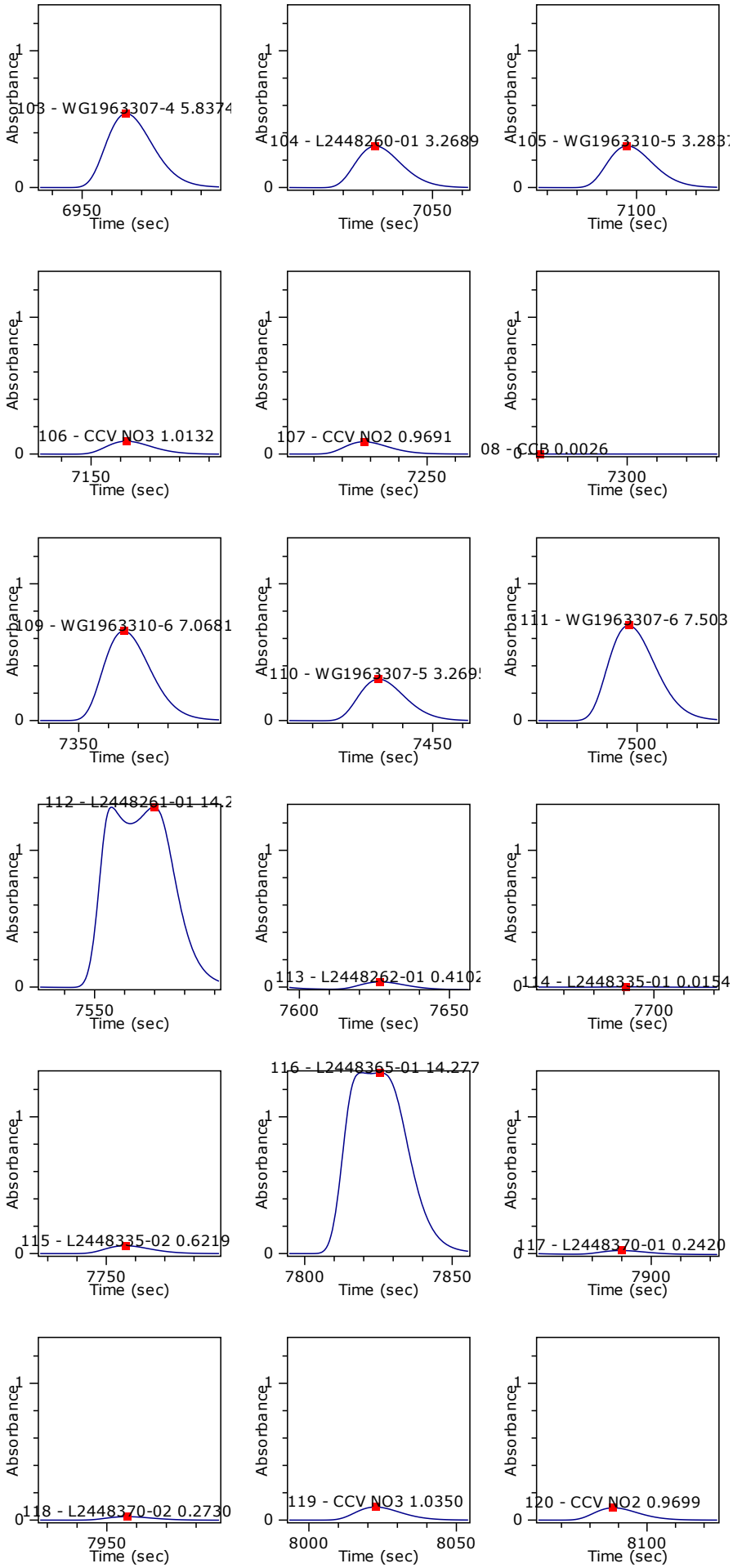

13 - Nitrite 0.1ppm 0.1002
14 - Nitrite 0.05ppm 0.0518
15 - Nitrite 0.0ppm 0.0034
16 - CCV NO3 1.0200
17 - CCV NO2 0.9630
18 - CCB 0.0026
19 - ICV NO3 5.0 4.9959
20 - ICV NO2 5.0 5.0254
21 - ICV NO3 0.5 0.5134
22 - ICV NO2 0.5 0.5079
23 - ICB 0.0025
24 - BLANK NO3 0.0035
25 - LCS NO3 4.9855
BLANK NO2 0.0007
27 - LCS NO2 5.0530
28 - CCV NO3 1.0037
29 - CCV NO2 0.9633
30 - CCB 0.0029
Absorbance
Time (sec)

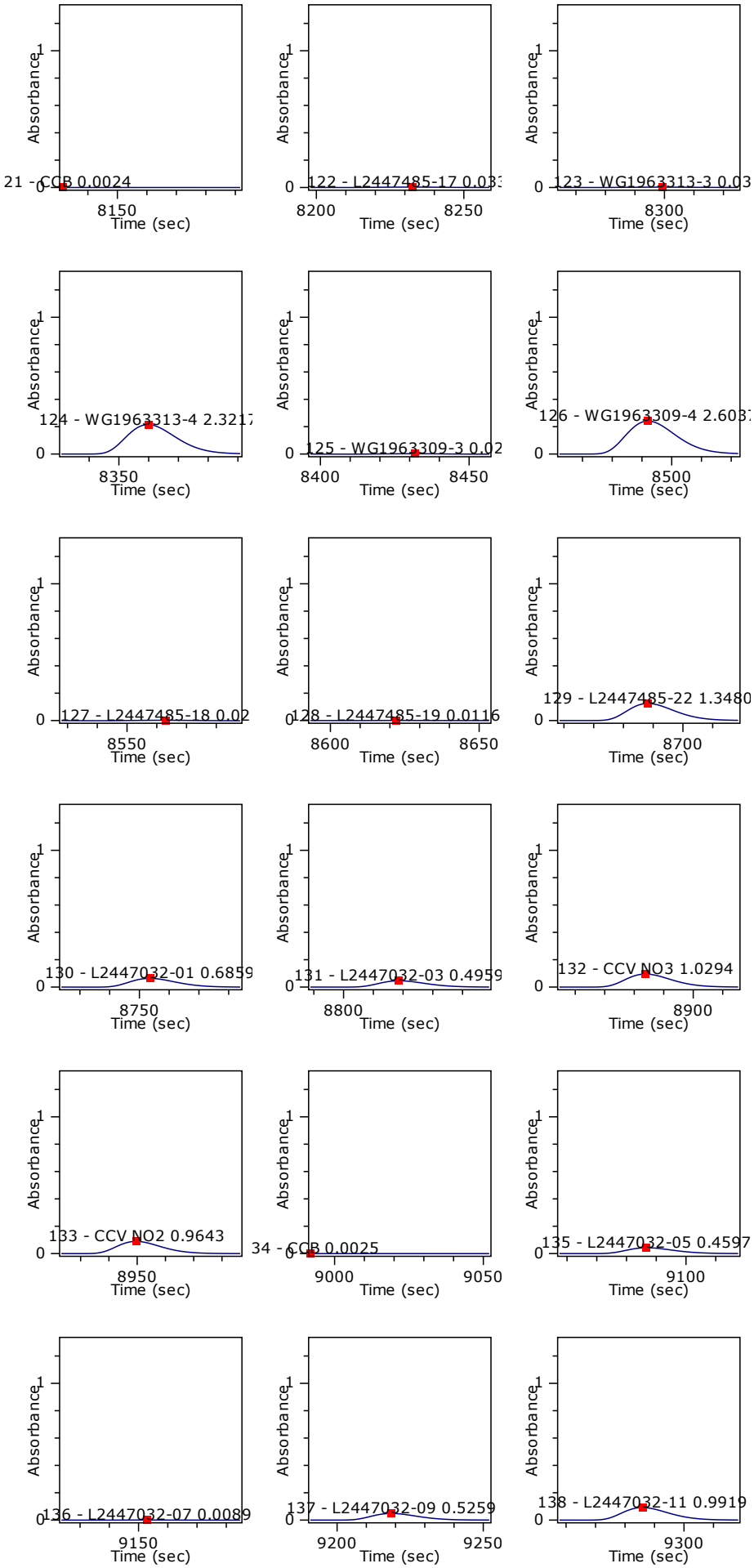

Absorbance
Time (sec)
31 - WG1963307-1 0.00
32 - WG1963307-2 5.0680
308-1; WG1963309-1 0.0000
- WG1963308-2; WG1963309-2
/G1963310-1 0.0008
36 - WG1963310-2 5.0415
/G1963311-1 0.0016
38 - WG1963311-2 5.5314
/G1963312-1 0.0007
40 - WG1963312-2 5.3734
41 - CCV NO3 1.0044
42 - CCV NO2 0.9615
43 - CCB 0.0023
44 - WG1963313-1 0.0035
45 - WG1963313-2 5.3058
/G1963314-1 0.0008
47 - WG1963314-2 5.3006
315-1; WG1963316-1 0.0004

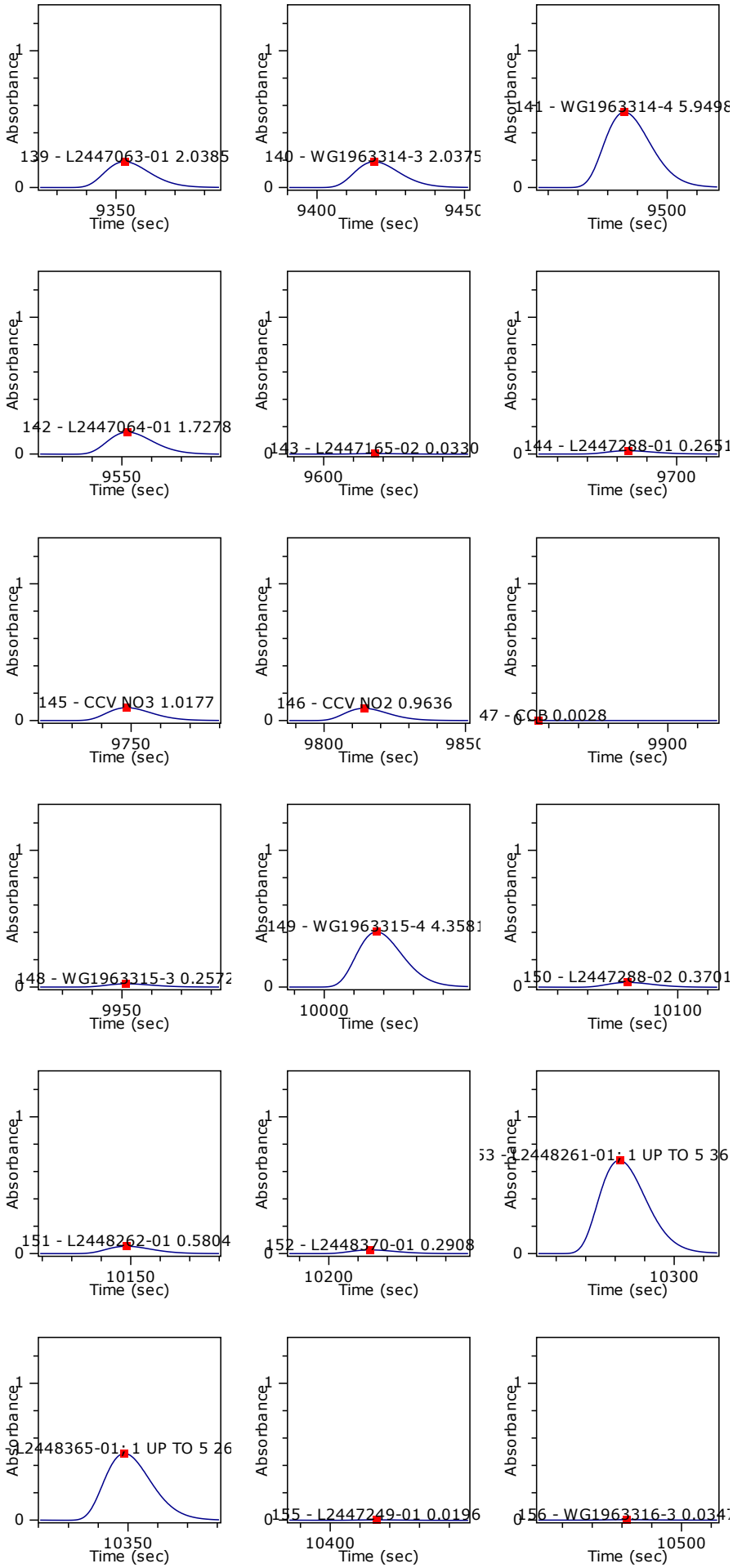

- WG1963315-2; WG1963316-2
50 - L2448247-01 0.5585
51 - WG1963312-3 0.5790
52 - WG1963312-4 4.6307
53 - L2448247-02 1.0392
54 - CCV NO3 1.0239
55 - CCV NO2 0.9618
56 - CCB 0.0031
57 - WG1963311-2 5.2961
58 - WG1963312-2 5.3080
59 - L2448247-03 0.0023
60 - L2448247-04 0.0243
61 - L2448247-05 0.0373
62 - L2448247-06 2.6969
63 - L2448247-07 4.4808
64 - L2448247-08 0.0181
65 - L2448247-09 1.0873
66 - L2448247-10 0.0471
Absorbance
Time (sec)

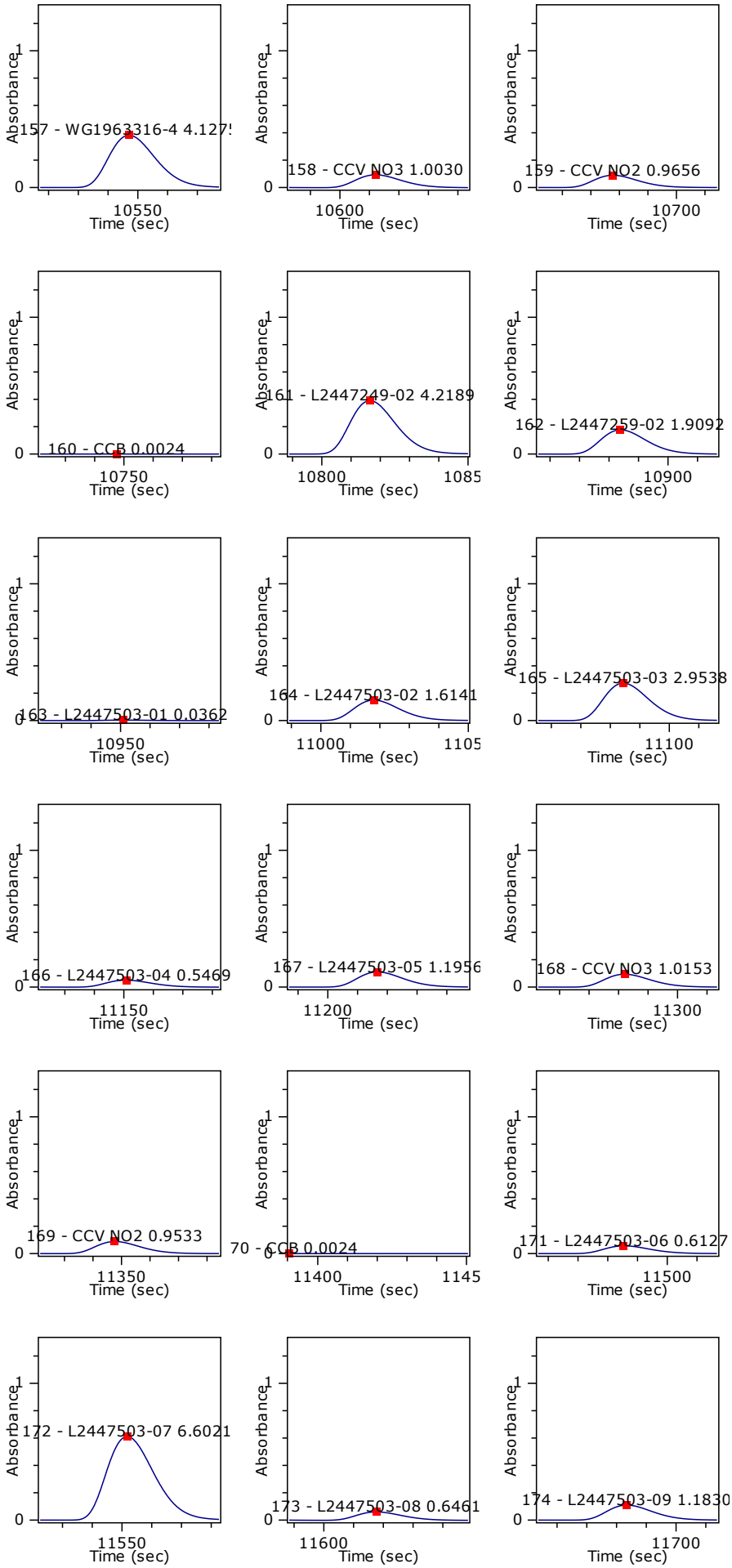

Absorbance
1
0
67 - CCV NO3 1.0307
4550
4600
Time (sec)
Absorbance
1
0
68 - CCV NO2 0.9688
4650
Time (sec)
Absorbance
1
0
69 - CCB 0.0027
4700
Time (sec)
Absorbance
1
0
70 - L2448247-11 0.0357
4750
4800
Time (sec)
Absorbance
1
0
71 - L2448247-12 0.0935
4850
Time (sec)
Absorbance
1
0
72 - L2448247-13 1.0355
4900
Time (sec)
Absorbance
1
0
73 - L2448083-01 0.2483
4950
5000
Time (sec)
Absorbance
1
0
74 - L2448083-02 0.3348
5050
Time (sec)
Absorbance
1
0
75 - L2448083-03 0.0160
5100
Time (sec)
Absorbance
1
0
76 - L2448083-04 0.5354
5150
520
Time (sec)
Absorbance
1
0
77 - L2448083-05 0.4707
5250
Time (sec)
Absorbance
1
0
78 - L2448083-06 0.6603
5300
Time (sec)
Absorbance
1
0
79 - L2448083-07 0.1105
5350
Time (sec)
Absorbance
1
0
80 - CCV NO3 1.0291
5450
Time (sec)
Absorbance
1
0
81 - CCV NO2 0.9730
5500
Time (sec)
Absorbance
1
0
82 - CCB 0.0025
5550
5600
Time (sec)
Absorbance
1
0
83 - L2448219-01 0.0113
5650
Time (sec)
Absorbance
1
0
84 - WG1963311-3 0.0037
5700
Time (sec)

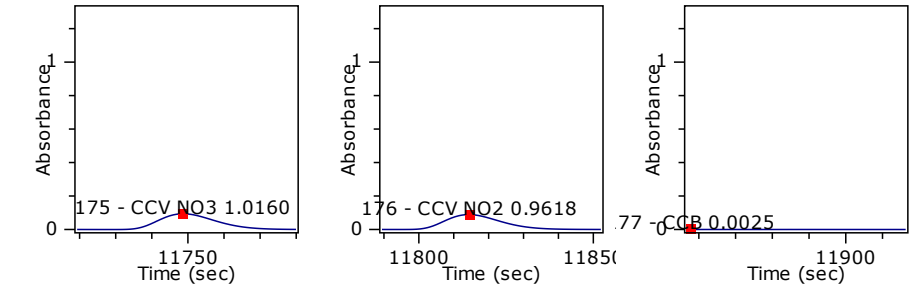

Absorbance
Time (sec)
85 - WG1963311-4 4.0718
/G1963308-3 0.0013
87 - WG1963308-4 4.5053
.2448219-02 0.0005
89 - L2448219-03 0.0112
90 - L2448219-04 0.0100
91 - L2448219-05 0.0097
92 - L2448219-06 0.0114
93 - CCV NO3 1.0295
94 - CCV NO2 0.9666
95 - CCB 0.0025
96 - L2448233-01 0.0361
97 - L2448233-02 0.0364
98 - L2447413-01 0.1479
99 - L2448218-01 1.4251
100 - WG1963310-3 1.4181
101 - WG1963310-4 5.3922
102 - WG1963307-3 1.4089


103 - WG1963307-4 5.8374
104 - L2448260-01 3.2689
105 - WG1963310-5 3.283
106 - CCV NO3 1.0132
107 - CCV NO2 0.9691
08 - CCB 0.0026
109 - WG1963310-6 7.0681
110 - WG1963307-5 3.269
111 - WG1963307-6 7.503
112 - L2448261-01 14.2
113 - L2448262-01 0.4102
114 - L2448335-01 0.0154
115 - L2448335-02 0.6219
116 - L2448365-01 14.277
117 - L2448370-01 0.2420
118 - L2448370-02 0.2730
119 - CCV NO3 1.0350
120 - CCV NO2 0.9699
Absorbance
Time (sec)

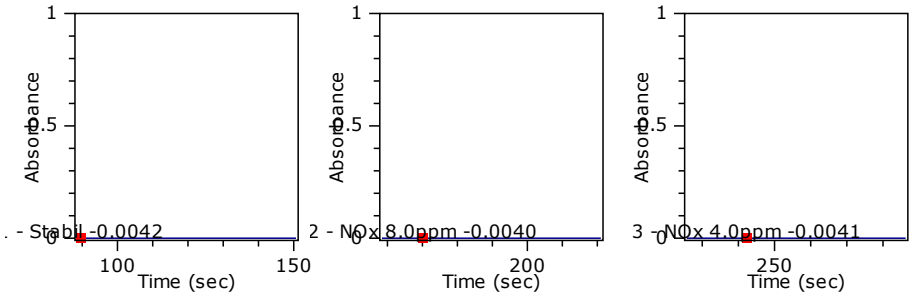

Absorbance
Time (sec)
21 - CCB 0.0024
122 - L2447485-17 0.03
123 - WG1963313-3 0.03
124 - WG1963313-4 2.3217
125 - WG1963309-3 0.02
126 - WG1963309-4 2.603
127 - L2447485-18 0.02
128 - L2447485-19 0.0116
129 - L2447485-22 1.3480
130 - L2447032-01 0.6859
131 - L2447032-03 0.4959
132 - CCV NO3 1.0294
133 - CCV NO2 0.9643
34 - CCB 0.0025
135 - L2447032-05 0.4597
136 - L2447032-07 0.0089
137 - L2447032-09 0.5259
138 - L2447032-11 0.9919

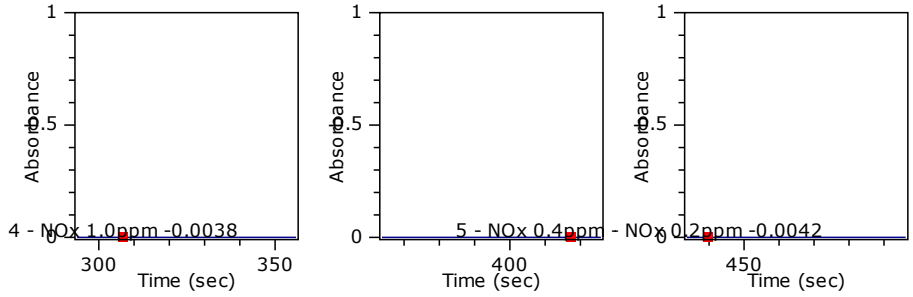

Absorbance
1
0
139 - L2447063-01 2.0385
9350
Time (sec)
Absorbance
1
0
140 - WG1963314-3 2.0375
9400
9450
Time (sec)
Absorbance
1
0
141 - WG1963314-4 5.9498
9500
Time (sec)
Absorbance
1
0
142 - L2447064-01 1.7278
9550
Time (sec)
Absorbance
1
0
143 - L2447165-02 0.0330
9600
Time (sec)
Absorbance
1
0
144 - L2447288-01 0.2651
9700
Time (sec)
Absorbance
1
0
145 - CCV NO3 1.0177
9750
Time (sec)
Absorbance
1
0
146 - CCV NO2 0.9636
9800
9850
Time (sec)
Absorbance
1
0
47 - CCB 0.0028
9900
Time (sec)
Absorbance
1
0
148 - WG1963315-3 0.2572
9950
Time (sec)
Absorbance
1
0
149 - WG1963315-4 4.3581
10000
Time (sec)
Absorbance
1
0
150 - L2447288-02 0.3701
10100
Time (sec)
Absorbance
1
0
151 - L2448262-01 0.5804
10150
Time (sec)
Absorbance
1
0
152 - L2448370-01 0.2908
10200
Time (sec)
Absorbance
1
0
53 - L2448261-01: 1 UP TO 5 36
10300
Time (sec)
Absorbance
1
0
54 - L2448365-01: 1 UP TO 5 26
10350
Time (sec)
Absorbance
1
0
155 - L2447249-01 0.0196
10400
Time (sec)
Absorbance
1
0
156 - WG1963316-3 0.034
10500
Time (sec)

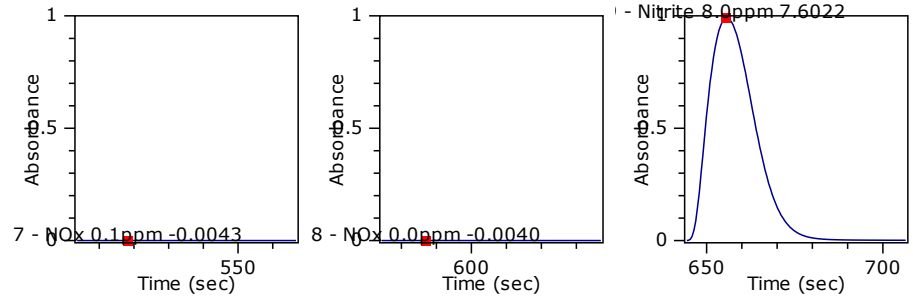

157 - WG1963316-4 4.127
158 - CCV NO3 1.0030
159 - CCV NO2 0.9656
160 - CCB 0.0024
161 - L2447249-02 4.2189
162 - L2447259-02 1.9092
163 - L2447503-01 0.0362
164 - L2447503-02 1.6141
165 - L2447503-03 2.9538
166 - L2447503-04 0.5469
167 - L2447503-05 1.1956
168 - CCV NO3 1.0153
169 - CCV NO2 0.9533
170 - CCB 0.0024
171 - L2447503-06 0.6127
172 - L2447503-07 6.6021
173 - L2447503-08 0.6461
174 - L2447503-09 1.1830
Absorbance
Time (sec)

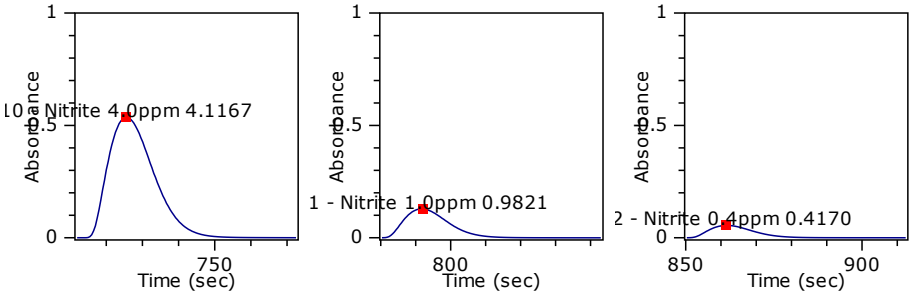


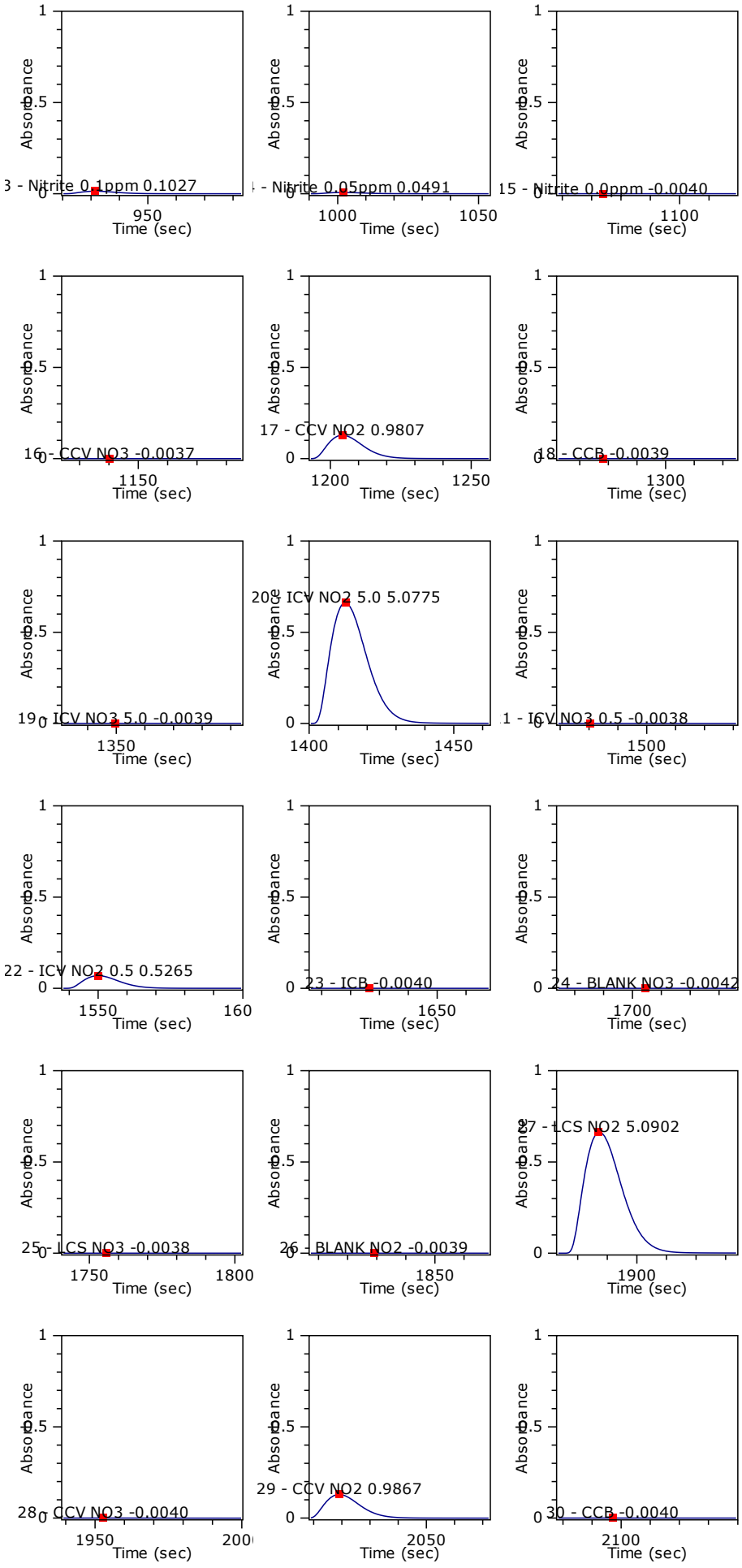
Channel: 2-NO2

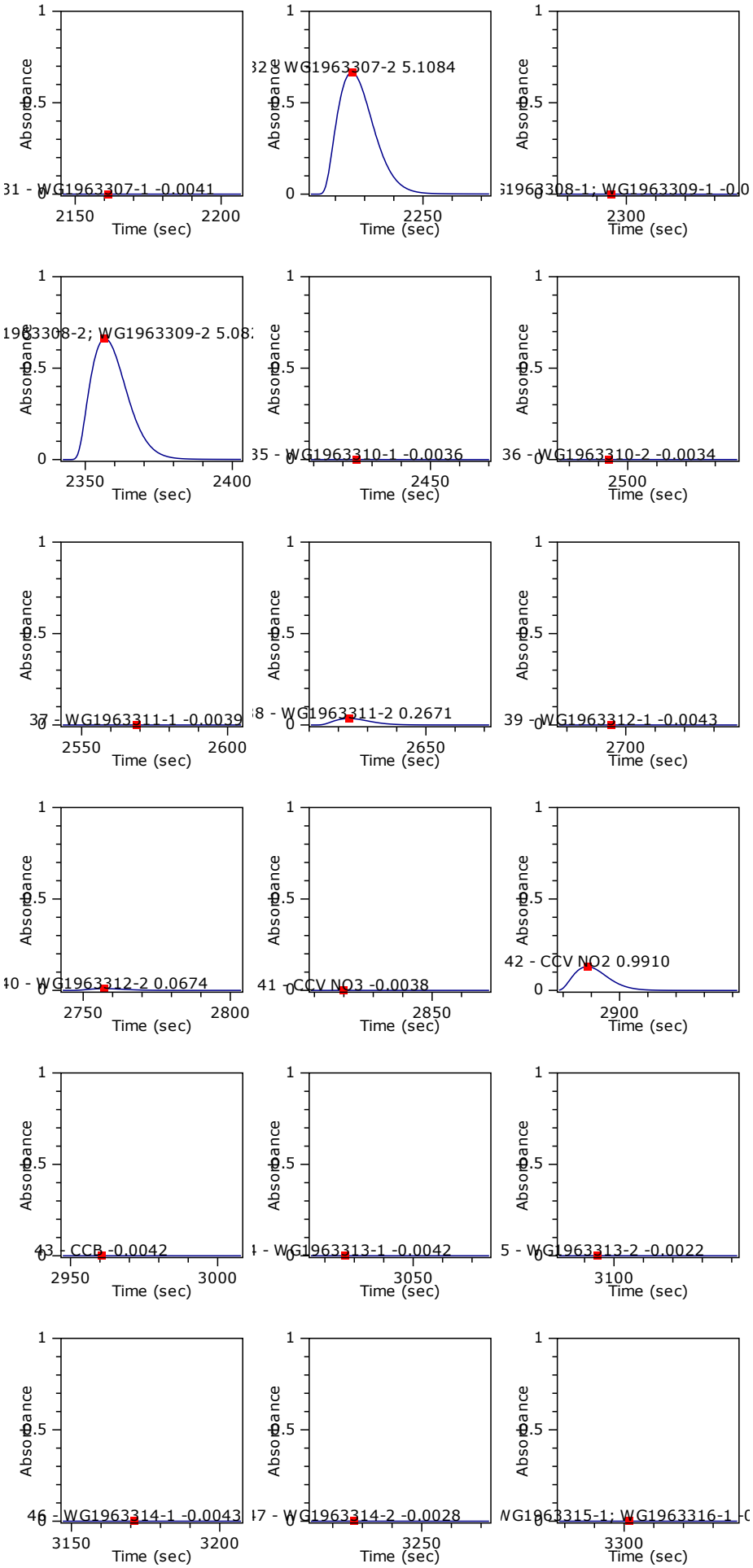


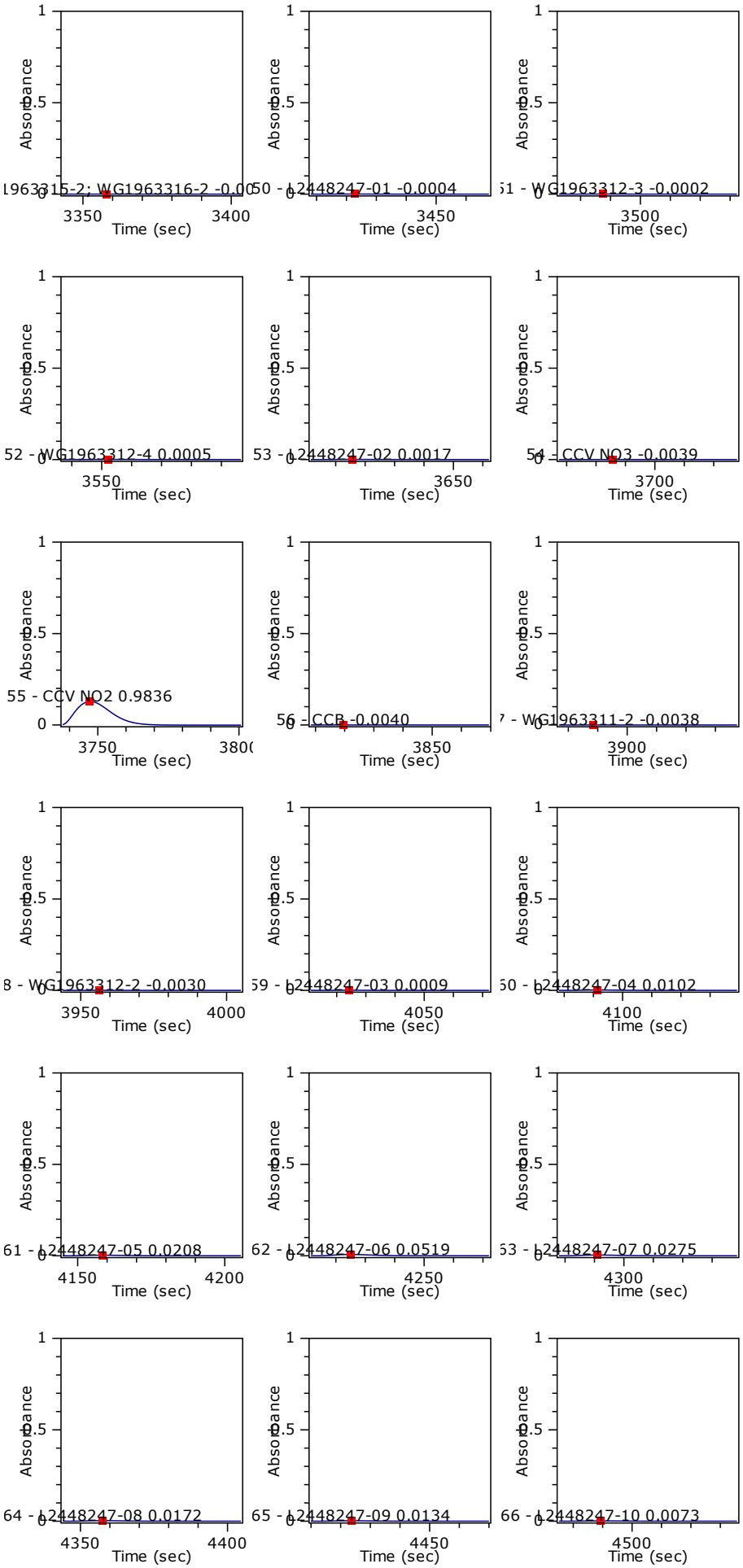


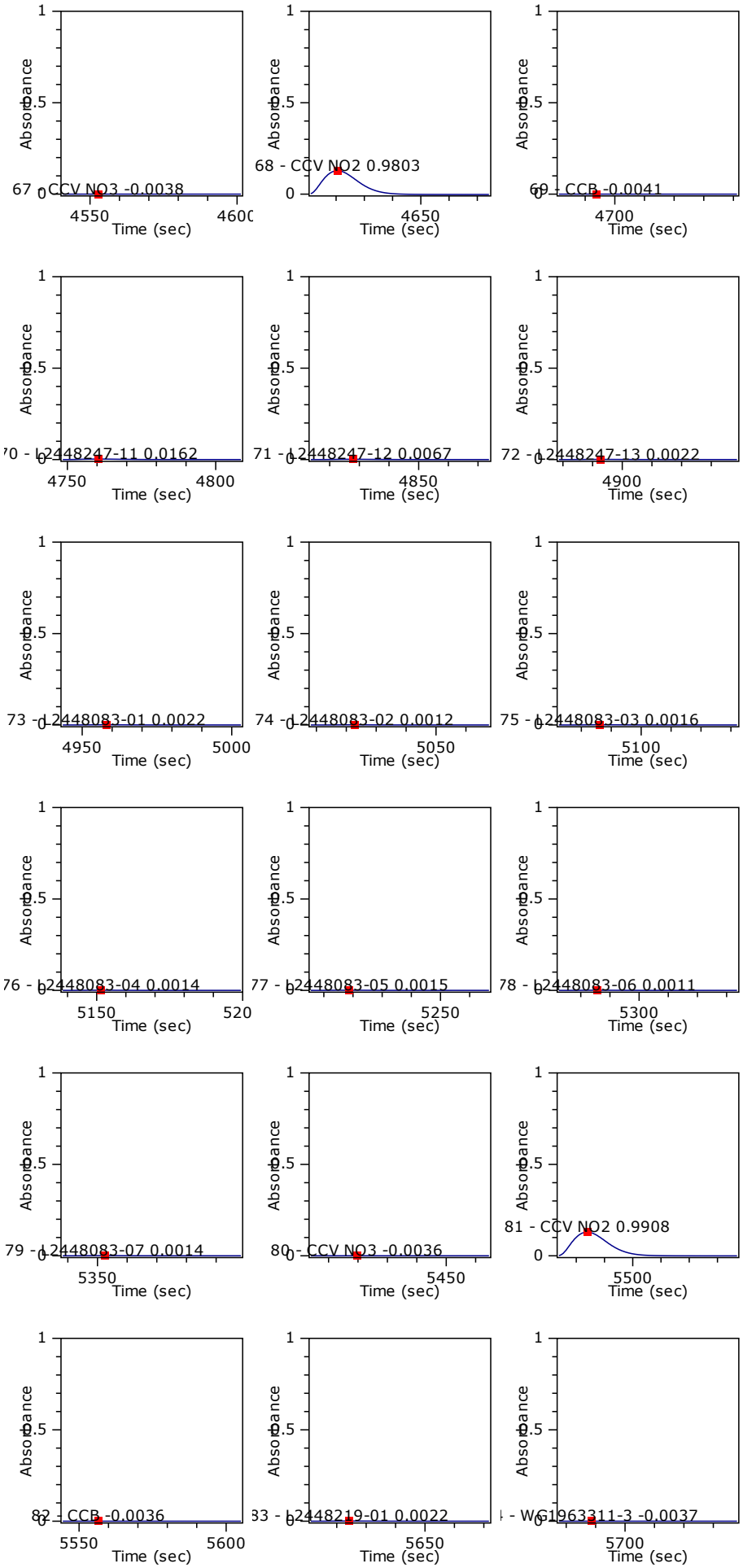


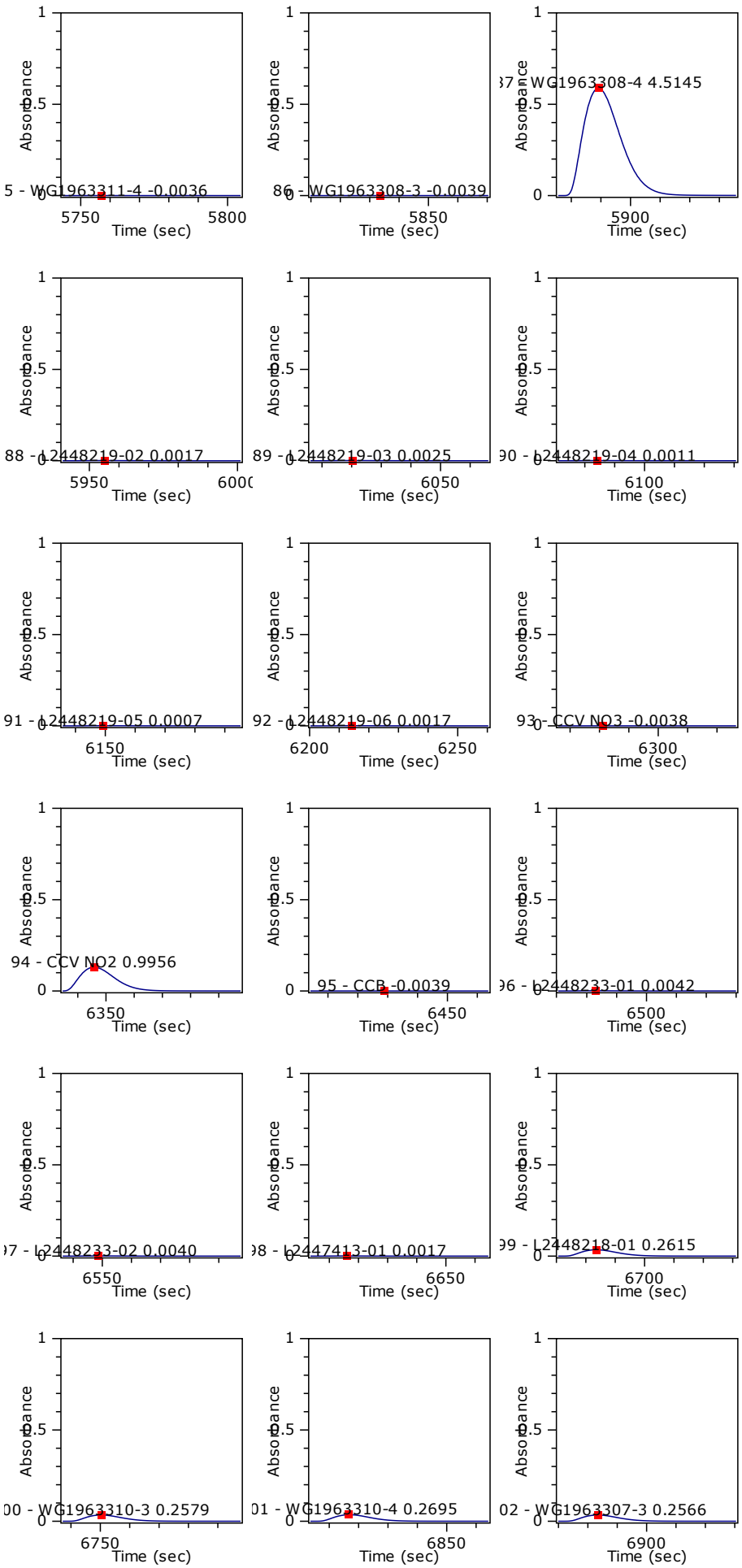


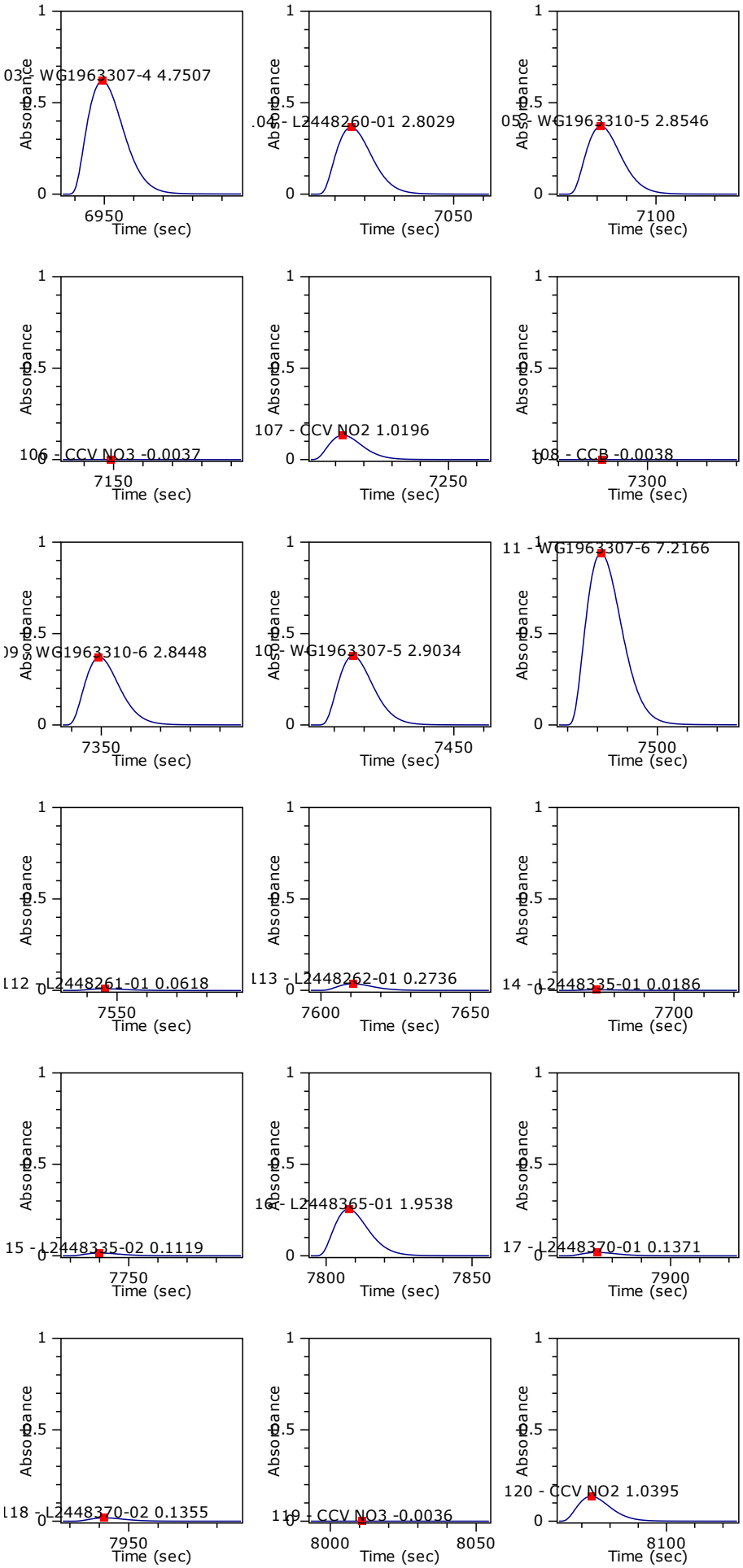

3 - Nitrite 0.1ppm 0.1027
4 - Nitrite 0.05ppm 0.0491
15 - Nitrite 0.0ppm -0.0040
16 - CCV NO3 -0.0037
17 - CCV NO2 0.9807
18 - CCB -0.0039
19 - ICV NO3 5.0 -0.0039
20 - ICV NO2 5.0 5.0775
21 - ICV NO3 0.5 -0.0038
22 - ICV NO2 0.5 0.5265
23 - ICB -0.0040
24 - BLANK NO3 -0.0042
25 - LCS NO3 -0.0038
26 - BLANK NO2 -0.0039
27 - LCS NO2 5.0902
28 - CCV NO3 -0.0040
29 - CCV NO2 0.9867
30 - CCB -0.0040
Absorbance
Time (sec)

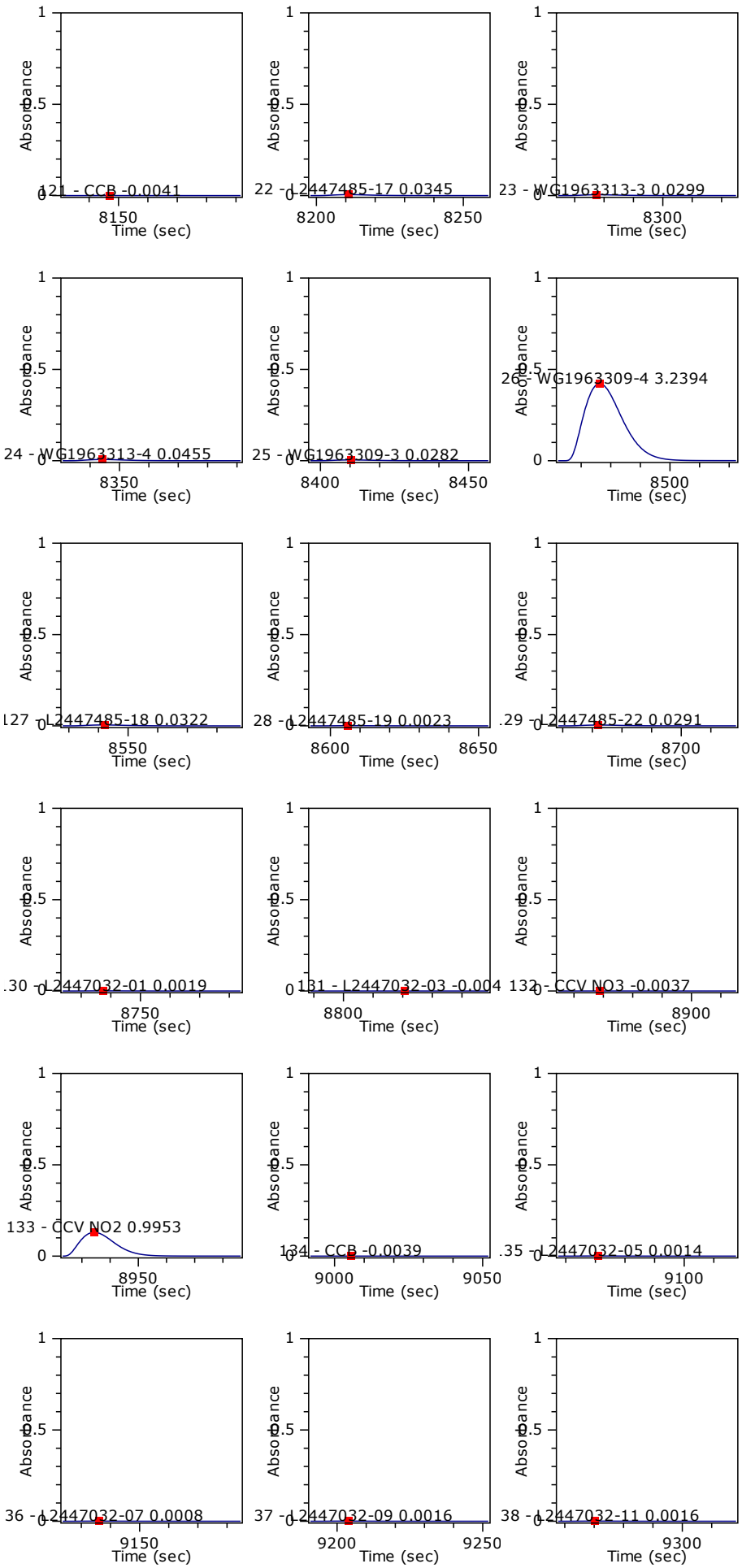

31 - WG1963307-1 -0.0041
32 - WG1963307-2 5.1084
33 - WG1963308-1; WG1963309-1 -0.0
34 - WG1963308-2; WG1963309-2 5.08
35 - WG1963310-1 -0.0036
36 - WG1963310-2 -0.0034
37 - WG1963311-1 -0.0039
38 - WG1963311-2 0.2671
39 - WG1963312-1 -0.0043
40 - WG1963312-2 0.0674
41 - CCV NO3 -0.0038
42 - CCV NO2 0.9910
43 - CCB -0.0042
44 - WG1963313-1 -0.0042
45 - WG1963313-2 -0.0022
46 - WG1963314-1 -0.0043
47 - WG1963314-2 -0.0028
48 - WG1963315-1; WG1963316-1 -0
Absorbance
Time (sec)

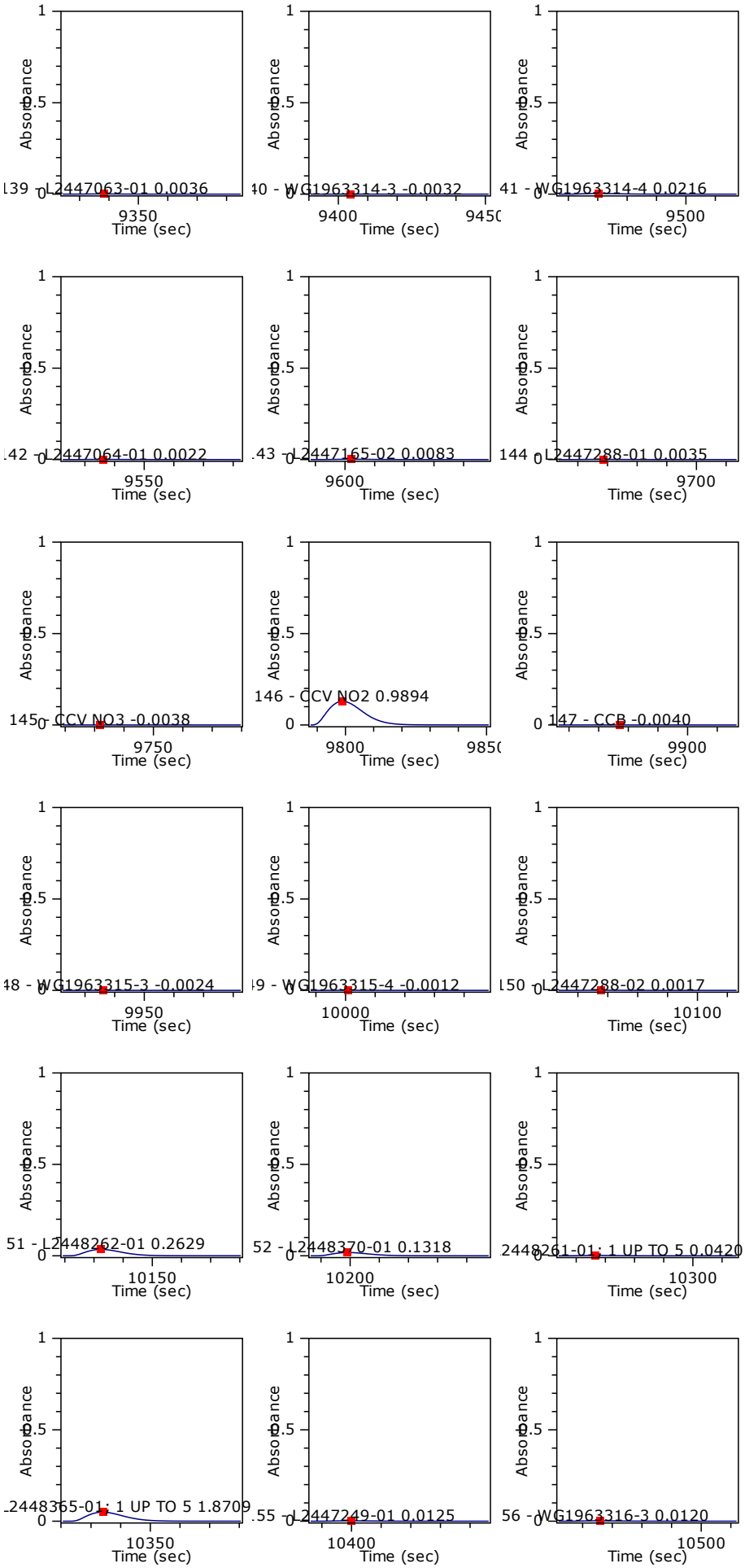

1963315-2; WG1963316-2 -0.00
50 - L2448247-01 -0.0004
51 - WG1963312-3 -0.0002
52 - WG1963312-4 0.0005
53 - L2448247-02 0.0017
54 - CCV NO3 -0.0039
55 - CCV NO2 0.9836
56 - CCB -0.0040
7 - WG1963311-2 -0.0038
8 - WG1963312-2 -0.0030
59 - L2448247-03 0.0009
60 - L2448247-04 0.0102
61 - L2448247-05 0.0208
62 - L2448247-06 0.0519
63 - L2448247-07 0.0275
64 - L2448247-08 0.0172
65 - L2448247-09 0.0134
66 - L2448247-10 0.0073
Absorbance
Time (sec)

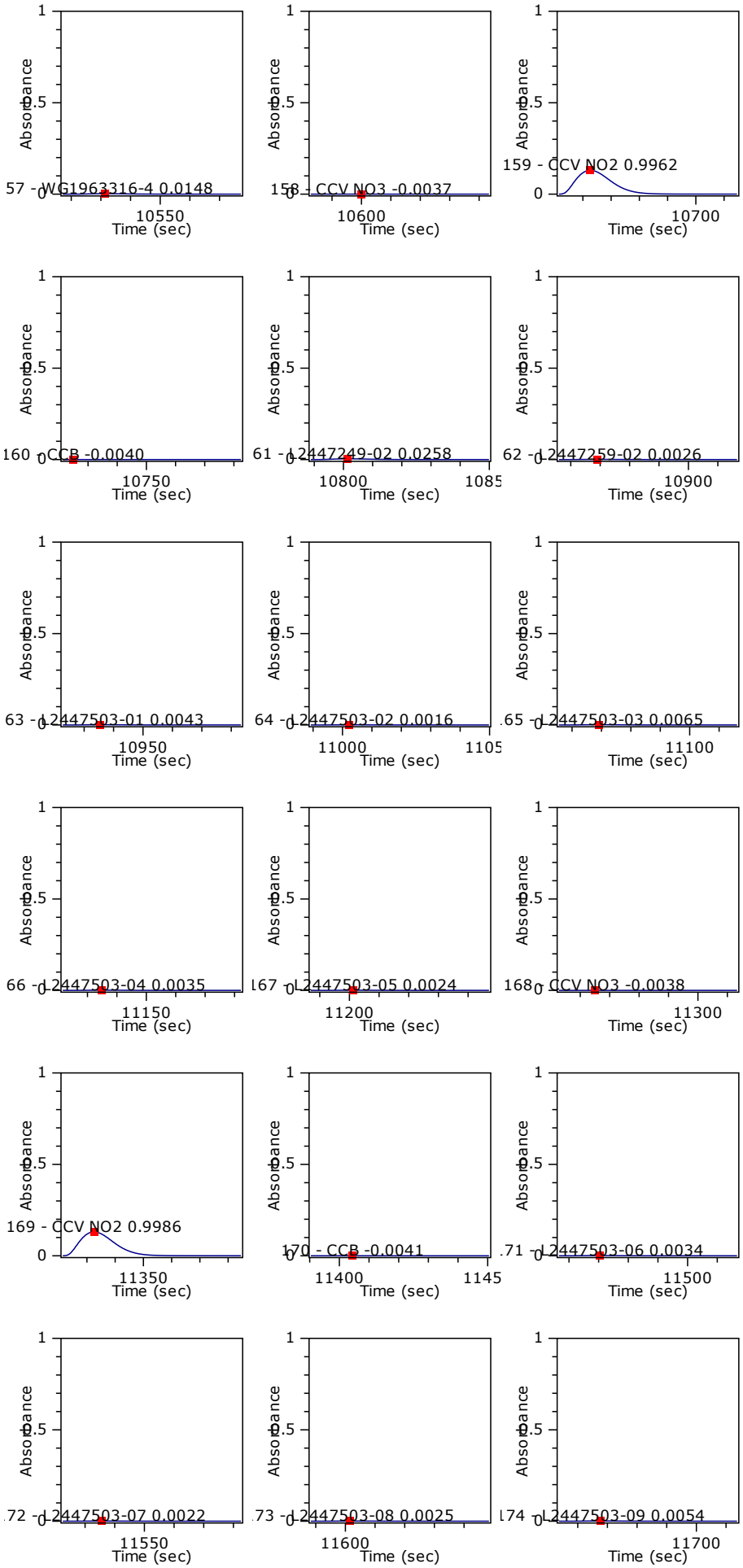

67 - CCV NO3 -0.0038
68 - CCV NO2 0.9803
69 - CCB -0.0041
70 - L2448247-11 0.0162
71 - L2448247-12 0.0067
72 - L2448247-13 0.0022
73 - L2448083-01 0.0022
74 - L2448083-02 0.0012
75 - L2448083-03 0.0016
76 - L2448083-04 0.0014
77 - L2448083-05 0.0015
78 - L2448083-06 0.0011
79 - L2448083-07 0.0014
80 - CCV NO3 -0.0036
81 - CCV NO2 0.9908
82 - CCB -0.0036
83 - L2448219-01 0.0022
- WG1963311-3 -0.0037
Absorbance
Time (sec)

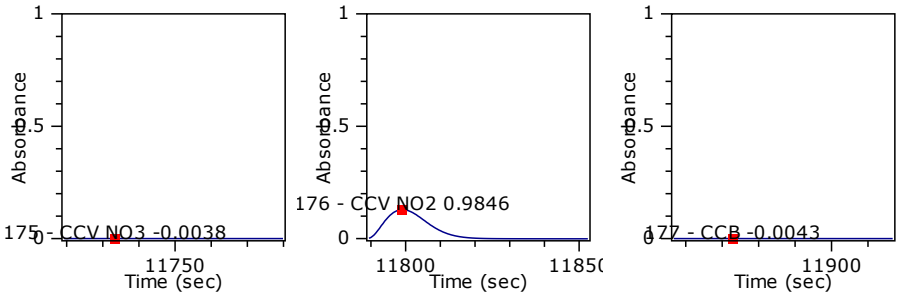

5 - WG1963311-4 -0.0036
86 - WG1963308-3 -0.0039
37 - WG1963308-4 4.5145
88 - L2448219-02 0.0017
89 - L2448219-03 0.0025
90 - L2448219-04 0.0011
91 - L2448219-05 0.0007
92 - L2448219-06 0.0017
93 - CCV NO3 -0.0038
94 - CCV NO2 0.9956
95 - CCB -0.0039
96 - L2448233-01 0.0042
97 - L2448233-02 0.0040
98 - L2447413-01 0.0017
99 - L2448218-01 0.2615
00 - WG1963310-3 0.2579
01 - WG1963310-4 0.2695
02 - WG1963307-3 0.2566
Absorbance
Time (sec)


03 - WG1963307-4 4.7507
04 - L2448260-01 2.8029
05 - WG1963310-5 2.8546
06 - CCV NO3 -0.0037
107 - CCV NO2 1.0196
108 - CCB -0.0038
09 - WG1963310-6 2.8448
10 - WG1963307-5 2.9034
11 - WG1963307-6 7.2166
112 - L2448261-01 0.0618
113 - L2448262-01 0.2736
14 - L2448335-01 0.0186
15 - L2448335-02 0.1119
16 - L2448365-01 1.9538
17 - L2448370-01 0.1371
118 - L2448370-02 0.1355
119 - CCV NO3 -0.0036
120 - CCV NO2 1.0395
Absorbance
Time (sec)


121 - CCB -0.0041
22 - L2447485-17 0.0345
23 - WG1963313-3 0.0299
24 - WG1963313-4 0.0455
25 - WG1963309-3 0.0282
26 - WG1963309-4 3.2394
127 - L2447485-18 0.0322
28 - L2447485-19 0.0023
29 - L2447485-22 0.0291
30 - L2447032-01 0.0019
131 - L2447032-03 -0.004
132 - CCV NO3 -0.0037
133 - CCV NO2 0.9953
134 - CCB -0.0039
35 - L2447032-05 0.0014
36 - L2447032-07 0.0008
37 - L2447032-09 0.0016
38 - L2447032-11 0.0016
Absorbance
Time (sec)


139 - L2447063-01 0.0036
140 - WG1963314-3 -0.0032
141 - WG1963314-4 0.0216
142 - L2447064-01 0.0022
143 - L2447165-02 0.0083
144 - L2447288-01 0.0035
145 - CCV NO3 -0.0038
146 - CCV NO2 0.9894
147 - CCB -0.0040
148 - WG1963315-3 -0.0024
149 - WG1963315-4 -0.0012
150 - L2447288-02 0.0017
151 - L2448262-01 0.2629
152 - L2448370-01 0.1318
2448261-01 : 1 UP TO 5 0.0420
2448365-01 : 1 UP TO 5 1.8709
155 - L2447249-01 0.0125
156 - WG1963316-3 0.0120
Absorbance
Time (sec)


57 - WG1963316-4 0.0148
158 - CCV NO3 -0.0037
159 - CCV NO2 0.9962
160 - CCB -0.0040
61 - L2447249-02 0.0258
62 - L2447259-02 0.0026
63 - L2447503-01 0.0043
64 - L2447503-02 0.0016
65 - L2447503-03 0.0065
66 - L2447503-04 0.0035
167 - L2447503-05 0.0024
168 - CCV NO3 -0.0038
169 - CCV NO2 0.9986
170 - CCB -0.0041
71 - L2447503-06 0.0034
72 - L2447503-07 0.0022
73 - L2447503-08 0.0025
74 - L2447503-09 0.0054
Absorbance
Time (sec)



Data Processing Parameters:

Channel: 1-NOx

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Channel: 2-NO2

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
```

```
Integration Time: 27.5
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 2.6
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-08-24T02:47:59

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.
```

```
    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

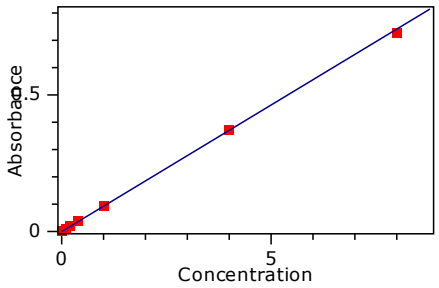
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-08-24 07:59:46
Data file (.dat): C:\FIAlab\Autosave Data\2024-08-24-075922.dat

Dataset Notes:

Analyst	

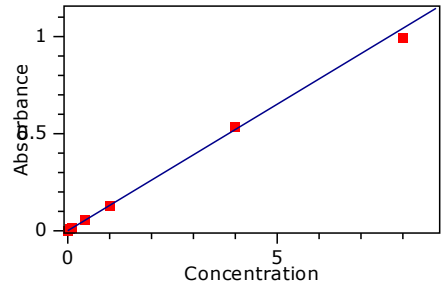
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:



Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: -0.00024
B: 0.09267
R^2: 0.99989
RSE(%): 1.15595
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	NOx 8.0ppm	0.72800	8.00000	7.85820	1.77	N/A
10002	NOx 4.0ppm	0.37210	4.00000	4.01800	0.45	N/A
10003	NOx 1.0ppm	0.09320	1.00000	1.00830	0.83	N/A
10004	NOx 0.4ppm	0.03720	0.40000	0.40430	1.09	N/A
10005	NOx 0.2ppm	0.01820	0.20000	0.19940	0.32	N/A
10006	NOx 0.1ppm	0.00900	0.10000	0.09980	0.16	N/A
10007	NOx 0.0ppm	0.00000	0.00000	0.00310	NA	N/A



Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00060
B: 0.13024
R^2: 0.99853
RSE(%): 4.02330
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	Nitrite 8.0ppm	0.99070	8.00000	7.60220	4.97	N/A
10002	Nitrite 4.0ppm	0.53670	4.00000	4.11670	2.92	N/A
10003	Nitrite 1.0ppm	0.12850	1.00000	0.98210	1.79	N/A
10004	Nitrite 0.4ppm	0.05490	0.40000	0.41700	4.25	N/A
10005	Nitrite 0.1ppm	0.01400	0.10000	0.10270	2.66	N/A
10006	Nitrite 0.05ppm	0.00700	0.05000	0.04910	1.78	N/A
10007	Nitrite 0.0ppm	0.00010	0.00000	-0.00400	NA	N/A

Results:

Channel: 1-NOx

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0001	1	1	1	0.0036		2024-08-24T07:30:58
CCV NO3	2	QC	1	0.0960	1	1	1	1.0381		2024-08-24T07:32:10
CCV NO2	3	QC	?	0.0900	1	1	1	0.9736		2024-08-24T07:33:16
CCB	4	QC	0	0.0000	1	1	1	0.0028		2024-08-24T07:33:58

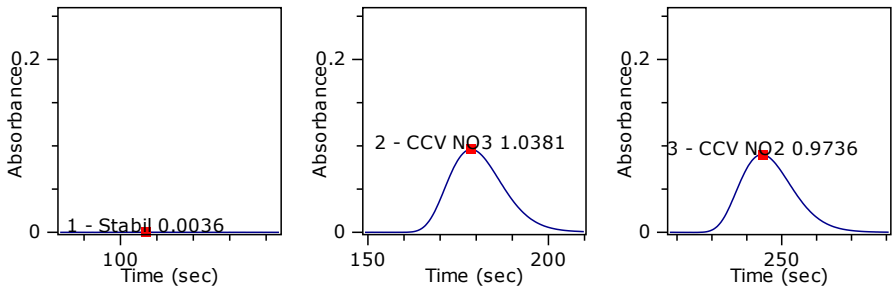
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2448339-01	5	Unknown	?	0.1357	1	1	1	1.4668		2024-08-24T07:35:33
L2448414-01	6	Unknown	?	0.0013	1	1	1	0.0169		2024-08-24T07:36:39
L2448414-02	7	Unknown	?	0.2574	1	1	1	2.7797		2024-08-24T07:37:46
L2448414-03	8	Unknown	?	0.0019	1	1	1	0.0229		2024-08-24T07:38:51
L2448279-01	9	Unknown	?	0.0000	1	1	1	0.0027		2024-08-24T07:39:56
CCV NO3	10	QC	1	0.0955	1	1	1	1.0329		2024-08-24T07:41:04
CCV NO2	11	QC	?	0.0891	1	1	1	0.9645		2024-08-24T07:42:10
CCB	12	QC	0	0.0000	1	1	1	0.0022		2024-08-24T07:42:50

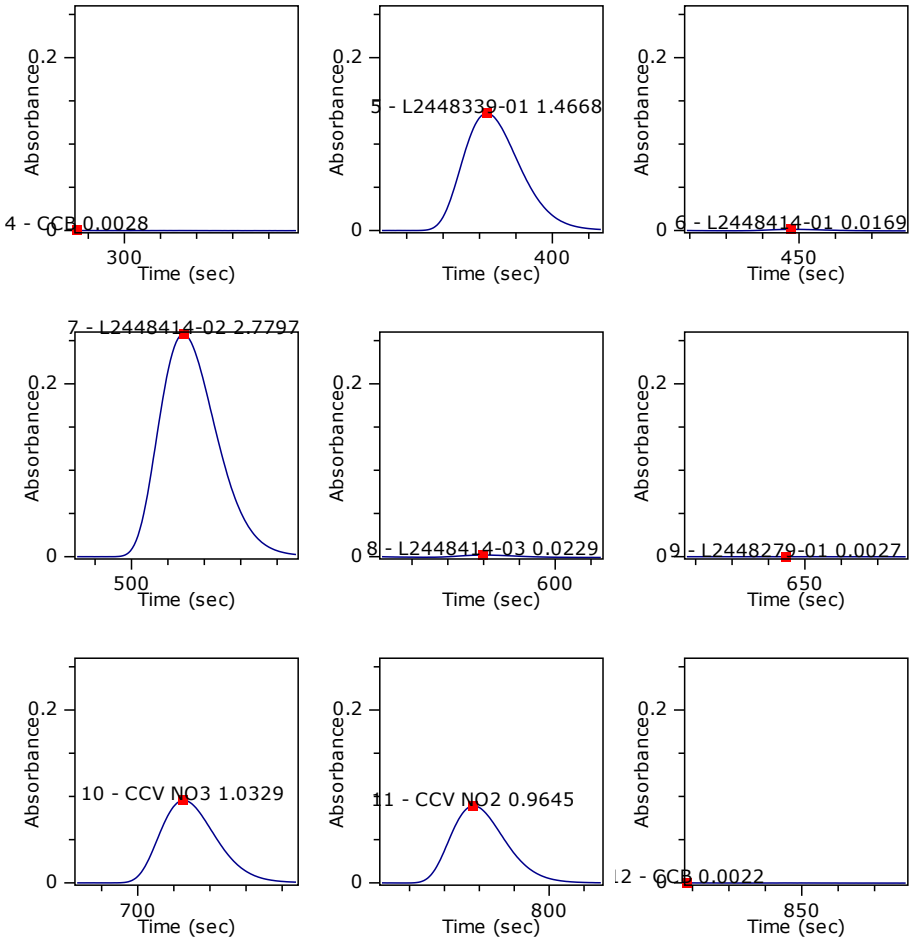
Channel: 2-NO2

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0001	1	1	1	-0.0040		2024-08-24T07:30:45
CCV NO3	2	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T07:31:57
CCV NO2	3	QC	1	0.1308	1	1	1	0.9996		2024-08-24T07:33:01
CCB	4	QC	0	0.0001	1	1	1	-0.0041		2024-08-24T07:34:12
L2448339-01	5	Unknown	?	0.0158	1	1	1	0.1166		2024-08-24T07:35:18
L2448414-01	6	Unknown	?	0.0009	1	1	1	0.0024		2024-08-24T07:36:24
L2448414-02	7	Unknown	?	0.0022	1	1	1	0.0120		2024-08-24T07:37:30
L2448414-03	8	Unknown	?	0.0008	1	1	1	0.0012		2024-08-24T07:38:36
L2448279-01	9	Unknown	?	0.0000	1	1	1	-0.0043		2024-08-24T07:39:44
CCV NO3	10	QC	?	0.0001	1	1	1	-0.0038		2024-08-24T07:40:49
CCV NO2	11	QC	1	0.1314	1	1	1	1.0040		2024-08-24T07:41:55
CCB	12	QC	0	0.0001	1	1	1	-0.0039		2024-08-24T07:43:04

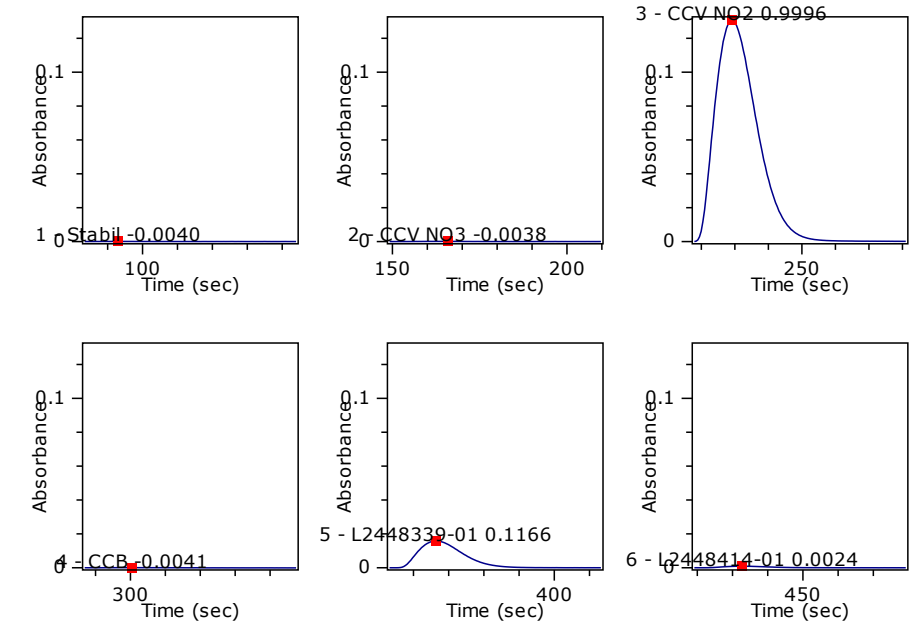
Peaks:

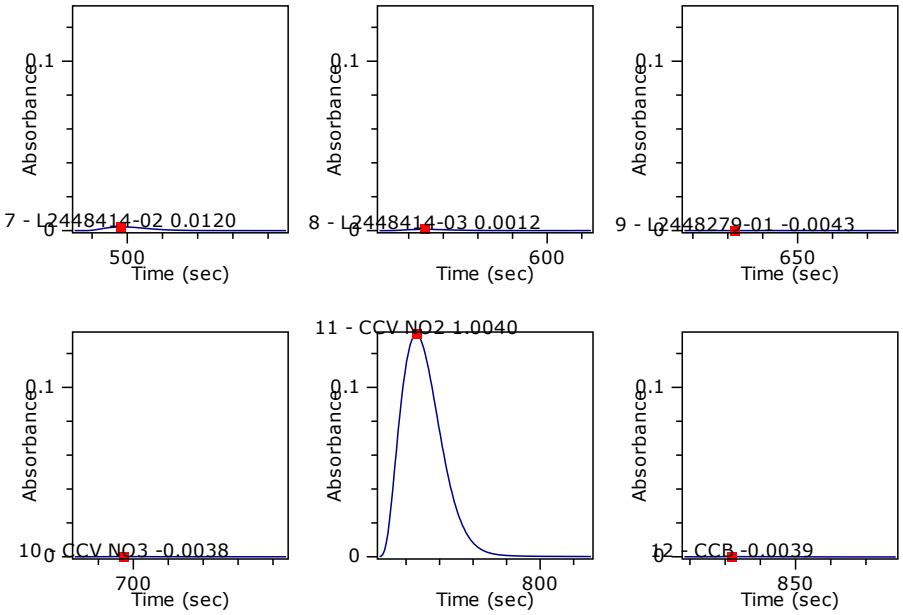
Channel: 1-NOx





Channel: 2-NO2





Data Processing Parameters:

Channel: 1-NOx

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Channel: 2-NO2

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
Integration Time: 27.5
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 2.6
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-08-24T07:29:12

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.
```

```
    FIAlab1 Injection Valve Sample Inject
    Autosampler Probe Up
    Delay (sec) 5
    Autosampler Position (#) Rinse
    FIAlab2 Injection Valve Sample Inject

    Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

    Autosampler Probe Up

    Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.

    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

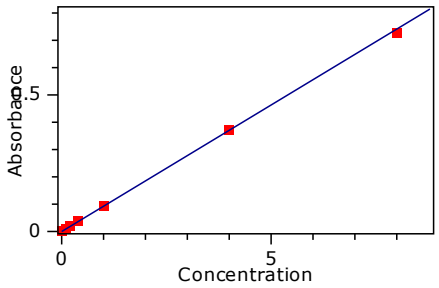
Graphical report generated by FIAsoft v3.1.10
Report generated on 2024-08-24 09:17:52
Data file (.dat): C:\FIAlab\Autosave Data\2024-08-24-091723.dat

Dataset Notes:

Analyst	

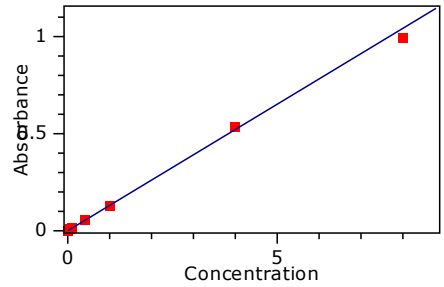
Dataset Notes Table Location: C:\FIAlab\FIAlab User Files\Tables\Dataset Notes\Analyst.csv

Calibrations:



Channel: 1-NOx
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: -0.00024
B: 0.09267
R^2: 0.99989
RSE(%): 1.15595
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	NOx 8.0ppm	0.72800	8.00000	7.85820	1.77	N/A
10002	NOx 4.0ppm	0.37210	4.00000	4.01800	0.45	N/A
10003	NOx 1.0ppm	0.09320	1.00000	1.00830	0.83	N/A
10004	NOx 0.4ppm	0.03720	0.40000	0.40430	1.09	N/A
10005	NOx 0.2ppm	0.01820	0.20000	0.19940	0.32	N/A
10006	NOx 0.1ppm	0.00900	0.10000	0.09980	0.16	N/A
10007	NOx 0.0ppm	0.00000	0.00000	0.00310	NA	N/A



Channel: 2-NO2
Fit_Order: 1
Weighting: 1/response
Standard relation
Coefficients:
A: 0.00060
B: 0.13024
R^2: 0.99853
RSE(%): 4.02330
% Max. for OVR: 100

InjNo	Name	Response	Known Conc. mg/L	Calc. Conc. mg/L	% Error	Time
10001	Nitrite 8.0ppm	0.99070	8.00000	7.60220	4.97	N/A
10002	Nitrite 4.0ppm	0.53670	4.00000	4.11670	2.92	N/A
10003	Nitrite 1.0ppm	0.12850	1.00000	0.98210	1.79	N/A
10004	Nitrite 0.4ppm	0.05490	0.40000	0.41700	4.25	N/A
10005	Nitrite 0.1ppm	0.01400	0.10000	0.10270	2.66	N/A
10006	Nitrite 0.05ppm	0.00700	0.05000	0.04910	1.78	N/A
10007	Nitrite 0.0ppm	0.00010	0.00000	-0.00400	NA	N/A

Results:

Channel: 1-NOx

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0001	1	1	1	0.0039		2024-08-24T08:11:12
CCV NO3	2	QC	1	0.0962	1	1	1	1.0409		2024-08-24T08:12:27
CCV NO2	3	QC	?	0.0898	1	1	1	0.9711		2024-08-24T08:13:33
CCB	4	QC	0	0.0000	1	1	1	0.0021		2024-08-24T08:14:16

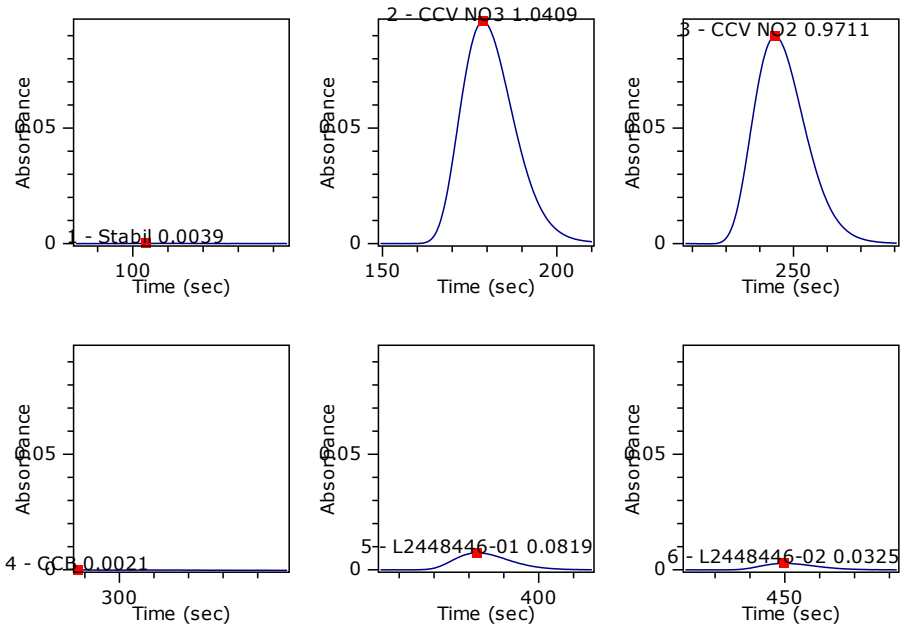
Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
L2448446-01	5	Unknown	?	0.0073	1	1	1	0.0819		2024-08-24T08:15:51
L2448446-02	6	Unknown	?	0.0028	1	1	1	0.0325		2024-08-24T08:16:58
L2448446-04	7	Unknown	?	0.0047	1	1	1	0.0533		2024-08-24T08:18:05
CCV NO3	8	QC	1	0.0951	1	1	1	1.0289		2024-08-24T08:19:11
CCV NO2	9	QC	?	0.0893	1	1	1	0.9665		2024-08-24T08:20:16
CCB	10	QC	0	0.0000	1	1	1	0.0024		2024-08-24T08:20:57

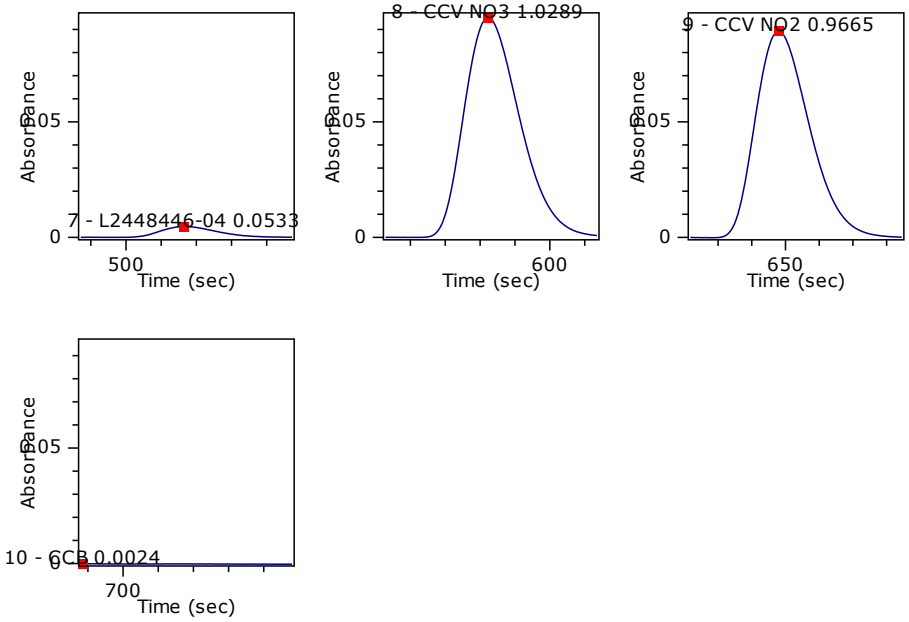
Channel: 2-NO2

Name	Inj. No.	Type	Known Conc. mg/L	Response	MDF	ADF	Weight	Calc. Conc. mg/L	Flags	Time
Stabil	1	Unknown	?	0.0001	1	1	1	-0.0041		2024-08-24T08:11:03
CCV NO3	2	QC	?	0.0001	1	1	1	-0.0037		2024-08-24T08:12:12
CCV NO2	3	QC	1	0.1300	1	1	1	0.9937		2024-08-24T08:13:18
CCB	4	QC	0	0.0001	1	1	1	-0.0039		2024-08-24T08:14:29
L2448446-01	5	Unknown	?	0.0015	1	1	1	0.0072		2024-08-24T08:15:36
L2448446-02	6	Unknown	?	0.0014	1	1	1	0.0059		2024-08-24T08:16:44
L2448446-04	7	Unknown	?	0.0014	1	1	1	0.0058		2024-08-24T08:17:50
CCV NO3	8	QC	?	0.0001	1	1	1	-0.0036		2024-08-24T08:18:55
CCV NO2	9	QC	1	0.1285	1	1	1	0.9822		2024-08-24T08:20:01
CCB	10	QC	0	0.0001	1	1	1	-0.0040		2024-08-24T08:21:15

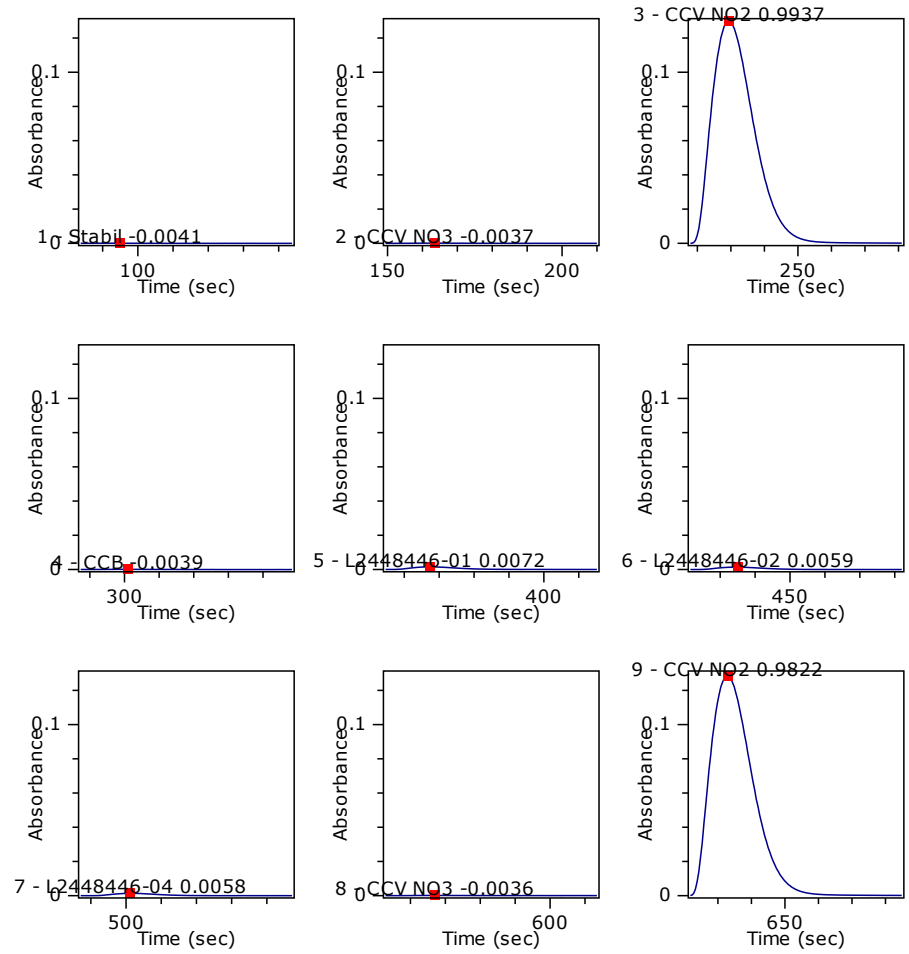
Peaks:

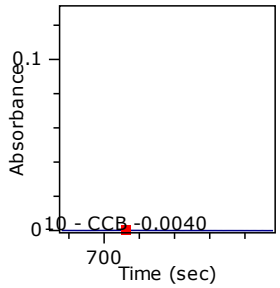
Channel: 1-NOx





Channel: 2-NO2





Data Processing Parameters:

Channel: 1-NOx

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Channel: 2-NO2

Response parameter	Peak Height
Filter Type	None
Filter Window	3
Enable Peak Window	False
Peak Window Start	0
Peak Window Stop	0
Enable Baseline Correction	False
Enable 2 Point Correction	False
Baseline Start	0
Baseline Stop	0
Point 2 Baseline Start	0
Point 2 Baseline Stop	0
Background Correction	Single Wavelength
Ref Wavelength 1	600
Ref Wavelength 2	0

Method Log:

```
FIAsoft FIAsoft v3.1.10

FIAlyzer Settings
------------
FIAlab1 Serial Number: FIA31428
FIAlab2 Serial Number: FIA31429
Pump: Connected on COM8

Spectrometer Settings
Spectrometer1
------------
Spectrometer Type: tec5
```

```
Integration Time: 27.5
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Spectrometer2
------------
Spectrometer Type: tec5
Integration Time: 2.6
Bandwidth: 2
Data Acq Rate: 2
Use Full Spectrum: False
        |---  Low: 500nm
        |--- High: 650nm
Reduce to Boxcar: True

Start Time
------------
2024-08-24T08:09:29

Method
------------
' Method Script for NOx-NO2

Autosave Data C:\FIAlab\Autosave Data\DateTime
FIAlab Injection Valve Sample Load
Message Cadmium Column on for NOx
FIAlab Peristaltic Pump Clockwise(%) 55

Autosampler Wash
Delay (sec) 2
Next Sample
Delay (sec) 35  'StartDelay2 - Controls initial sample introduction.

FIAlab1 Injection Valve Sample Inject
Autosampler Probe Up
Delay (sec) 2
Autosampler Position (#) Rinse
FIAlab2 Injection Valve Sample Inject
Delay (sec) 15   'StartDelay3 - Should be set equal to LoopDelay3

Autosampler Probe Up
Delay (sec) 5   'StartDelay4 - Should be set equal to LoopDelay4

Loop Start

   Analyte New Sample
   Delay (sec) 1
   Next Sample
   Autosampler Probe Force Down

   Spectrometer Reference Scan
   Spectrometer Absorbance Scanning

   Delay (sec) 3   ' LoopDelay1 - Controls sample transit & loop empty. Controls back baseline.

   FIAlab Injection Valve Sample Load

   Delay (sec) 35   ' LoopDelay2 - Controls sample transit & loop fill. Controls back baseline.

   FIAlab1 Injection Valve Sample Inject
   Autosampler Probe Up
   Delay (sec) 5
   Autosampler Position (#) Rinse
   FIAlab2 Injection Valve Sample Inject

   Delay (sec) 10   ' LoopDelay3 - Controls loop empty & probe rinse time. Inverse controls front baseline.

   Autosampler Probe Up

   Delay (sec) 3   ' LoopDelay4 - Controls loop empty. Inverse controls front baseline.
```

```
    Spectrometer Stop Scanning

Loop End

Autosampler Position (#) Rinse
Delay (sec) 20
Autosampler Probe Up
Delay (sec) 30
FIAlab Peristaltic Pump Clockwise(%) 5
Autoexport Report C:\FIAlab\autoreport\NOxNO2\DateTime
Message Run is Complete
```

Method File Location: C:\FIAlab\FIAlab User Files\Methods\Method_NOx+NO2.fia

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2447249-01		
Matrix Spike	: WG1963316-4	**MS Analysis Date**	: 08/24/24 05:43
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Nitrate/Nitrite	ND	4	4.1	102					80-120	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 08/24/24 05:41
Dup Sample ID	: WG1963316-3	**DUP Analysis Date**	: 08/24/24 05:42

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Nitrate/Nitrite	ND	ND	NC	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963316-2	**LCS Analysis Date**	: 08/24/24 03:43
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Nitrogen, Nitrate/Nitrite	**5.00**	**5.30**	**106.**					**90-110**	**20**

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Nitrate	14797-55-8	0.1	0.0228	mg/l	90-110		83-113	6	6	353.2	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.1	0.0228	mg/l	90-110		83-113	17	17	4500NO3-F	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrite	NONE	0.05	0.0143	mg/l	90-110	20	80-120	20	20	353.2	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrite	NONE	0.05	0.0143	mg/l	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Plastic 250ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Nitrate	14797-55-8	1	0.261	mg/kg	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Glass 250ml/8oz unpreserved
Nitrogen, Nitrite	NONE	1	0.282	mg/kg	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Nitrogen, Nitrate

Aqueous Samples:
Compute sample N in NO3 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 1 (NO3+NO2) and Channel 2 (NO2)

$$NO3\ mg/I = (NO3+NO2)\ mg/L - (NO2)\ mg/L$$

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO3)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

Calculations of Nitrogen, Nitrite

Aqueous Samples:
Compute sample N in NO2 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (NO2)

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO2)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

Sequence Logs

Date:	Initals:	Syringe Lot:	Syringe Lot: 20230620
082424	KAF	Filter Lot:	Filter Lot: 18048470A

Injection #	Rack #	Sample ID:	Comments:
19	RA1	ICV NO3 5	*Buffer: NO3NO2_081524_BUFFER*
20	RA2	ICV NO2 5	*Color: NO3NO2_081524_COLOR*
21	RA3	ICV NO3 0.5	*NO3 MS: NO3_080224_200PPM_CAL*
22	RA4	ICV NO2 0.5	*NO2 MS: NO2_062024_200PPM_CAL*
23	RA5	ICB	*ICV NO3 5: NO3_082424_5PPM_ICV*
X	RA6	5X DILUTER CHECK	*ICV NO2 5: NO2_082324_5PPM_ICV*
24	RA7	BLANK NO3	*ICV NO3 0.5: NO3_082424_0.5PPM_ICV*
25	RA8	LCS NO3	*ICV NO2 0.5: NO2_082424_0.5PPM_ICV*
26	RA9	BLANK NO2	
27	RA10	LCS NO2	
31	RA11	WG1963307-1; NO2	*OOH*
32	RA12	WG1963307-2; NO2	*DW*
33	RA13	WG1963308/309-1; NO2	GOING OOH
34	RA14	WG1963308/309-2; NO2	FIELD BLANK
35	RA15	WG1963310-1; NO3	
36	RA16	WG1963310-2; NO3	
37	RA17	WG1963311-1; NO3	
38; 57	RA18	WG1963311-2; NO3	
39	RA19	WG1963312-1; NO3	
40; 58	RA20	WG1963312-2; NO3	
44	RA21	WG1963313-1; NO3	
45	RA22	WG1963313-2; NO3	
46	RA23	WG1963314-1; CNO3	
47	RA24	WG1963314-2; CNO3	
48	RA25	WG1963315/316-1; CNO3	
49	RA26	WG1963315/316-2; CNO3	
50	RA27	L2448247-01	
51	RA28	WG1963312-3; NO3	
52	RA29	WG1963312-4; NO3	
53	RA30	L2448247-02	
59	RA31	L2448247-03	
60	RA32	L2448247-04	
61	RA33	L2448247-05	
62	RA34	L2448247-06	
63	RA35	L2448247-07	
64	RA36	L2448247-08	
65	RA37	L2448247-09	
66	RA38	L2448247-10	
70	RA39	L2448247-11	
71	RA40	L2448247-12	
72	RA41	L2448247-13	
73	RA42	L2448083-01	
74	RA43	L2448083-02	

Injection #	Rack #	Sample ID:	Comments:
75	RA44	L2448083-03	
76	RA45	L2448083-04	
77	RA46	L2448083-05	
78	RA47	L2448083-06	
79	RA48	L2448083-07	
83	RA49	L2448219-01	
84	RA50	WG1963311-3; NO3	
85	RA51	WG1963311-4; NO3	
86	RA52	WG1963308-3; NO2	
87	RA53	WG1963308-4; NO2	
88	RA54	L2448219-02	
89	RA55	L2448219-03	
90	RA56	L2448219-04	
91	RA57	L2448219-05	
92	RA58	L2448219-06	
96	RA59	L2448233-01	
97	RA60	L2448233-02	
98	RA61	L2447413-01	
99	RA62	L2448218-01	
100	RA63	WG1963310-3; NO3	
101	RA64	WG1963310-4; NO3	
102	RA65	WG1963307-3; NO2	
103	RA66	WG1963307-4; NO2	
104	RA67	L2448260-01	
105	RA68	WG1963310-5; NO3	
109	RA69	WG1963310-6; NO3	
110	RA70	WG1963307-5; NO2	
111	RA71	WG1963307-6; NO2	
112	RA72	L2448261-01	
113; 151	RA73	L2448262-01	
114	RA74	L2448335-01	
115	RA75	L2448335-02	
116	RA76	L2448365-01	
117; 152	RA77	L2448370-01	
118	RA78	L2448370-02	
122	RA79	L2447485-17	
123	RA80	WG1963313-3; NO3	
124	RA81	WG1963313-4; NO3	
125	RA82	WG1963309-3; NO3	
126	RA83	WG1963309-4; NO3	
127	RA84	L2447485-18	
128	RA85	L2447485-19	
129	RA86	L2447485-22	
130	RA87	L2447032-01	
131	RA88	L2447032-03	
135	RA89	L2447032-05	

Injection #	Rack #	Sample ID:	Comments:
136	RA90	L2447032-07	
137	RB1	L2447032-09	
138	RB2	L2447032-11	
X	RB3	L2447032-13	
139	RB4	L2447063-01	
140	RB5	WG1963314-3; CNO3	
141	RB6	WG1963314-4; CNO3	
142	RB7	L2447064-01	
143	RB8	L2447165-02	
144	RB9	L2447288-01	
148	RB10	WG1963315-3; CNO3	
149	RB11	WG1963315-4; CNO3	
150	RB12	L2447288-02	
155	RB13	L2447249-01	
156	RB14	WG1963316-3; CNO3	
157	RB15	WG1963316-4; CNO3	
161	RB16	L2447249-02	
162	RB17	L2447259-02	
163	RB18	L2447503-01	
164	RB19	L2447503-02	
165	RB20	L2447503-03	
166	RB21	L2447503-04	
167	RB22	L2447503-05	
171	RB23	L2447503-06	
172	RB24	L2447503-07	
173	RB25	L2447503-08	
174	RB26	L2447503-09	
5	RB27	L2448339-01A	
6	RB28	L2448414-01L	
7	RB29	L2448414-02H	
8	RB30	L2448414-03M	
9	RB31	L2448279-01S	
5	RB32	L2448446-01H	
6	RB33	L2448446-02H	
7	RB34	L2448446-04H	
153	RC1	L2448261-01	
154	RC2	L2448365-01	

Total Dissolved Solids Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 2
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	390	20	6.1	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	340	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	470	13	4.0	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-04**	**Date Collected**	:	**08/20/24 09:55**
Client ID	:	**MW-4D**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/26/24 04:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG1963687.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**310**	**13**	**4.0**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-05**	**Date Collected**	:	**08/20/24 08:30**
Client ID	:	**MW-5S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/26/24 04:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG1963687.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**38.**	**13**	**4.0**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	580	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	530	13	4.0	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-08**	**Date Collected**	:	**08/20/24 11:50**
Client ID	:	**MW-8S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/26/24 04:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG1963687.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**220**	**13**	**4.0**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	18.	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963687-1	**Date Collected**	: NA
Client ID	: WG1963687-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	ND	10	3.1	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963687-3	**Date Collected**	: 08/20/24 14:25
Client ID	: WG1963687-3 DUP	**Date Received**	: 08/21/24
Sample Location	:	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 2
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	2800	20	6.1	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963687-4	**Date Collected**	: 08/20/24 11:55
Client ID	: WG1963687-4 DUP	**Date Received**	: 08/21/24
Sample Location	:	**Date Analyzed**	: 08/26/24 04:25
Sample Matrix	: WATER	**Dilution Factor**	: 2
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1963687.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	980	20	6.1	

Sample Raw Data

Wet Chemistry Gravimetric ELN

Printed: AUG-27-24 10:17:11

WorkGroup	WG1963687	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**					
Title	Solids, Total Dissolved	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**					
Method	SM2540C	**Time In**	27-AUG-24 00:55	**Time In**	27-AUG-24 04:38	**Time In**	27-AUG-24 07:36	**Time In**	27-AUG-24 09:41	**Time In**					
Instrument	BALANCE#22	**Time Out**	27-AUG-24 03:38	**Time Out**	27-AUG-24 07:34	**Time Out**	27-AUG-24 09:40	**Time Out**	27-AUG-24 10:15	**Time Out**					

Evaporation	**Temp In (C)**	**Time In**	**LCS Lot #**	**TrueValue**	**Units**
	90	26-AUG-24 10:03	071124D	500	mg/l

Sample #	Analysis Date	Analyst	Cup ID	Filter Lot	Tare Weight (gm)	Sample Volume (ml)	Net Weight (1) (gm)	Net Weight (2) (gm)	Net Weight (3) (gm)	Net Weight (4) (gm)	Net Weight (5) (gm)	Result mg/L	Dil	Comment
L2447503-01	26-AUG-24 04:25	DEB WHELAN	BF	71910422	103.6173	50	103.637	103.6371				394.00	2	
L2447503-02	26-AUG-24 04:25	DEB WHELAN	BS	71910422	107.1651	80	107.1926	107.1926				343.75	1.3	
L2447503-03	26-AUG-24 04:25	DEB WHELAN	BB	71910422	61.3198	80	61.3571	61.3575				466.25	1.3	
L2447503-04	26-AUG-24 04:25	DEB WHELAN	EG	71910422	62.8437	80	62.8692	62.8688				313.75	1.3	
L2447503-05	26-AUG-24 04:25	DEB WHELAN	BI	71910422	106.545	80	106.5483	106.548				37.50	1.3	
L2447503-06	26-AUG-24 04:25	DEB WHELAN	BQ	71910422	110.8464	80	110.8931	110.893				582.50	1.3	
L2447503-07	26-AUG-24 04:25	DEB WHELAN	CA	71910422	58.9257	80	58.9681	58.968				528.75	1.3	
L2447503-08	26-AUG-24 04:25	DEB WHELAN	EZ	71910422	66.4994	80	66.5171	66.5168				217.50	1.3	
L2447503-09	26-AUG-24 04:25	DEB WHELAN	AA3	71910422	60.3067	80	60.3099	60.312	60.3081			17.50	1.3	T4
L2447657-01	26-AUG-24 04:25	DEB WHELAN	S	71910422	69.9415	50	70.0851	70.085				2870.00	2	
L2447657-02	26-AUG-24 04:25	DEB WHELAN	M	71910422	63.595	50	63.6453	63.6452				1004.00	2	
L2447657-03	26-AUG-24 04:25	DEB WHELAN	P3	71910422	66.9384	50	68.7189	68.7133	68.7059			35350.00	2	
L2447657-04	26-AUG-24 04:25	DEB WHELAN	AA2	71910422	64.1526	50	65.7471	65.744	65.7413			31774.00	2	
L2447718-01	26-AUG-24 04:25	DEB WHELAN	X9	71910422	65.7246	80	65.7325	65.7324				97.50	1.3	
L2447718-02	26-AUG-24 04:25	DEB WHELAN	FD	71910422	66.1867	80	66.1939	66.194				90.00	1.3	
L2447726-01	26-AUG-24 04:25	DEB WHELAN	EX	71910422	66.3289	80	66.3487	66.3483				242.50	1.3	
L2447726-02	26-AUG-24 04:25	DEB WHELAN	CF	71910422	62.2151	80	62.2302	62.2301				187.50	1.3	
L2447726-03	26-AUG-24 04:25	DEB WHELAN	FR	71910422	59.2132	80	59.2299	59.2299				208.75	1.3	
L2447726-04	26-AUG-24 04:25	DEB WHELAN	X	71910422	65.5415	80	65.5593	65.559				218.75	1.3	
L2447804-01	26-AUG-24 04:25	DEB WHELAN	FX	71910422	61.5294	50	62.1172	62.1101	62.112			11614.00	2	
WG1963687-1	26-AUG-24 04:25	DEB WHELAN	EJ	71910422	57.7026	100	57.7026	57.7022				-4.00	1	T3
WG1963687-2	26-AUG-24 04:25	DEB WHELAN	RR	71910422	65.3282	50	65.3522	65.3522				480.00	2	
WG1963687-3	26-AUG-24 04:25	DEB WHELAN	CH	71910422	67.2709	50	67.4255	67.4216	67.412			2822.00	2	

Alpha Analytical

Wet Chemistry Gravimetric ELN

Printed: AUG-27-24 10:17:11

WorkGroup	WG1963687	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**					
Title	Solids, Total Dissolved	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**					
Method	SM2540C	**Time In**	27-AUG-24 00:55	**Time In**	27-AUG-24 04:38	**Time In**	27-AUG-24 07:36	**Time In**	27-AUG-24 09:41	**Time In**					
Instrument	BALANCE#22	**Time Out**	27-AUG-24 03:38	**Time Out**	27-AUG-24 07:34	**Time Out**	27-AUG-24 09:40	**Time Out**	27-AUG-24 10:15	**Time Out**					

Temp In (C)	**Time In**
90	26-AUG-24 10:03

LCS Lot #	**TrueValue**	**Units**
071124D	500	mg/l

Sample #	**Analysis Date**	**Analyst**	**Cup ID**			**Sample Volume (ml)**					**Result mg/L**	**Dil**	**Comment**
WG1963687-4	26-AUG-24 04:25	DEB WHELAN	A5	71910422	64.0994	50	64.1489	64.1485			982.00	2	

Quality Control

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 08/26/24 04:25
Dup Sample ID	: WG1963687-3	**DUP Analysis Date**	: 08/26/24 04:25

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Solids, Total Dissolved	2900	2800	4	10

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 08/26/24 04:25
Dup Sample ID	: WG1963687-4	**DUP Analysis Date**	: 08/26/24 04:25

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Solids, Total Dissolved	1000	980	2	10

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963687-2	**LCS Analysis Date**	: 08/26/24 04:25
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Solids, Total Dissolved	**500.**	**480.**	**96.**					**80-120**	**10**

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Solids, Total Dissolved	NONE	10	3.07	mg/l	80-120			10	10	2540C	7 days	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of TDS

$$\text{mgTDS/L} = \frac{(A - B) \times 1000}{\text{Sample volume, (L)}}$$

Where:

A = Final weight (weight of dish + dried residue, g)
B = Initial weight (weight of clean dish, g)

Alkalinity Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 10:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	253.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 10:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	127.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 11:02
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	48.9	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 11:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	10.5	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 11:05
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	278.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 11:13
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	277.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 11:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	76.4	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 11:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	14.1	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963435-1	**Date Collected**	: NA
Client ID	: WG1963435-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/24/24 11:35
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963435-2	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8SDUP	**Date Received**	: 08/20/24
Sample Location	:	**Date Analyzed**	: 08/24/24 11:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: 240824-1	**Instrument ID**	: TITR5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	77.9	2.00	NA	
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 07:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG1963432.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	21.2	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963432-3	**Date Collected**	: NA
Client ID	: WG1963432-3BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/24/24 07:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG1963432.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963432-4	**Date Collected**	: 03/12/24 00:00
Client ID	: WG1963432-4 DUP	**Date Received**	: 03/12/24
Sample Location	:	**Date Analyzed**	: 08/24/24 07:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG1963432.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/24/24 07:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG1963433.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	55.6	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963433-3	**Date Collected**	: NA
Client ID	: WG1963433-3BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/24/24 07:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG1963433.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963433-4	**Date Collected**	: 03/12/24 00:00
Client ID	: WG1963433-4 DUP	**Date Received**	: 03/12/24
Sample Location	:	**Date Analyzed**	: 08/24/24 07:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRM
Lab File ID	: WG1963433.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	77.9	2.00	NA	

Sample Raw Data

Titration report

Method

Method ID	pH Cal. 7 4 10	**Release state**	Released
Name	Calibration	**Modified by**	SystemInternal
Modified on	10/3/2023 12:47:09 PM		

Summary

Samples

	Sample ID	Name	Result	State
1	METTLER TOLEDO (Ref. 25°C) pH	pH	7.00	
2	METTLER TOLEDO (Ref. 25°C) pH	pH	4.01	
3	METTLER TOLEDO (Ref. 25°C) pH	pH	10.00	

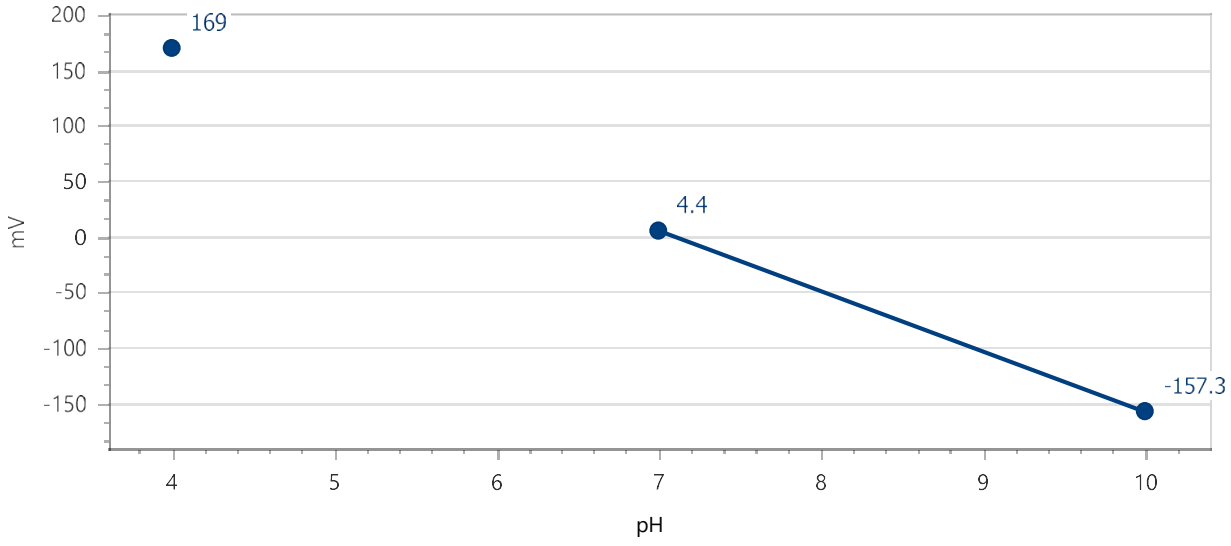
Results

Zero point 1 Cal1.Z1	7.102 pH
Slope 1 Cal1.S1	-54.47 mV/pH

Calibration

Sensor	Sensor DG111-SC
Creation time	8/24/2024 7:16:51 AM
Overall state	OK
Successful	Yes
Calib. temperature	25.0 °C
SLOPECal	-54.47 mV/pH
ZEROCal	7.102 pH

Calibration Curve



Used Instruments

Titration report

Name	T7 Excellence Titrator	**Serial number**	C329519495

Responsible User

Time	Login name	Full name
8/24/2024 7:12:23 AM	SystemInternal	System internal account

Titration report

Method

Method ID	pH Measure	**Release state**	Released
Name	Measure	**Modified by**	SystemInternal
Modified on	2/23/2024 9:31:05 AM		

Summary

Samples

	Sample ID	Name	Result	State
1	--	Sample size	0 mL	
		Potential R1	7.00 pH	OK

Used Instruments

Name	T7 Excellence Titrator	**Serial number**	C329519495

Responsible User

Time	Login name	Full name
8/24/2024 7:19:03 AM	SystemInternal	System internal account

Titration report

LabX

Method

Method ID	Alk Total (2)	**Release state**	Released
Name	EP/EP	**Modified by**	SystemInternal
Modified on	10/14/2023 11:44:43 AM		

Summary

Samples

	Sample ID	Name	Result	State
1	Rinse,MRM	Sample size	50 mL	
		Potential R4	7.55 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.133 mL	OK
		Consumption 4.2 R3	1.139 mL	OK
		Content R5	22.660 mg/L	OK
		ALK LOW R6	22.540 mg/L	OK
2	Rinse,MRM	Sample size	50 mL	
		Potential R4	4.96 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.046 mL	OK
		Consumption 4.2 R3	0.056 mL	OK
		Content R5	0.920 mg/L	OK
		ALK LOW R6	0.720 mg/L	OK
3	Rinse,MRM	Sample size	50 mL	
		Potential R4	5.24 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.069 mL	OK
		Consumption 4.2 R3	0.073 mL	OK
		Content R5	1.380 mg/L	OK
		ALK LOW R6	1.300 mg/L	OK
4	WG1963341-1	Sample size	50 mL	
		Potential R4	5.15 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.059 mL	OK
		Consumption 4.2 R3	0.069 mL	OK
		Content R5	1.180 mg/L	OK
		ALK LOW R6	0.980 mg/L	OK
5	WG1963341-2	Sample size	50 mL	
		Potential R4	10.98 pH	OK
		Consumption 8.3 R1	4.900 mL	OK
		Consumption 4.5 R2	5.293 mL	OK
		Consumption 4.2 R3	5.294 mL	OK
		Content R5	105.860 mg/L	OK
		ALK LOW R6	105.840 mg/L	OK
6	L2447017-01	Sample size	50 mL	

Titration report

		Potential R4	6.94 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	9.839 mL	OK
		Consumption 4.2 R3	9.888 mL	OK
		Content R5	196.780 mg/L	OK
		ALK LOW R6	195.800 mg/L	OK
7	WG1963341-3	Sample size	50 mL	
		Potential R4	7.46 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	10.010 mL	OK
		Consumption 4.2 R3	10.073 mL	OK
		Content R5	200.200 mg/L	OK
		ALK LOW R6	198.940 mg/L	OK
8	WG1963341-4	Sample size	50 mL	
		Potential R4	9.78 pH	OK
		Consumption 8.3 R1	5.270 mL	OK
		Consumption 4.5 R2	15.492 mL	OK
		Consumption 4.2 R3	15.568 mL	OK
		Content R5	309.840 mg/L	OK
		ALK LOW R6	308.320 mg/L	OK
9	L2447018-01	Sample size	50 mL	
		Potential R4	5.91 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	14.547 mL	OK
		Consumption 4.2 R3	14.706 mL	OK
		Content R5	290.940 mg/L	OK
		ALK LOW R6	287.760 mg/L	OK
10	L2447019-01	Sample size	50 mL	
		Potential R4	5.77 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.454 mL	OK
		Consumption 4.2 R3	6.517 mL	OK
		Content R5	129.080 mg/L	OK
		ALK LOW R6	127.820 mg/L	OK
11	L2447175-01 5x	Sample size	50 mL	
		Potential R4	7.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
12	L2447175-04 5x	Sample size	50 mL	
		Potential R4	8.74 pH	OK
		Consumption 8.3 R1	8.916 mL	OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK

Titration report

		ALK LOW R6	NaN mg/L	Not OK
13	L2447417-01 5x	Sample size	50 mL	
		Potential R4	8.06 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
14	L2447417-04 5x	Sample size	50 mL	
		Potential R4	8.58 pH	OK
		Consumption 8.3 R1	5.120 mL	OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
15	L2447417-09 5x	Sample size	50 mL	
		Potential R4	8.80 pH	OK
		Consumption 8.3 R1	10.163 mL	OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
16	L2447417-10 5x	Sample size	50 mL	
		Potential R4	8.75 pH	OK
		Consumption 8.3 R1	8.297 mL	OK
		Consumption 4.5 R2	NaN mL	Not OK
		Consumption 4.2 R3	NaN mL	Not OK
		Content R5	NaN mg/L	Not OK
		ALK LOW R6	NaN mg/L	Not OK
17	L2447429-01	Sample size	50 mL	
		Potential R4	7.88 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.302 mL	OK
		Consumption 4.2 R3	6.331 mL	OK
		Content R5	126.040 mg/L	OK
		ALK LOW R6	125.460 mg/L	OK
18	L2447429-02	Sample size	50 mL	
		Potential R4	6.12 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.366 mL	OK
		Consumption 4.2 R3	6.412 mL	OK
		Content R5	127.320 mg/L	OK
		ALK LOW R6	126.400 mg/L	OK
19	L2447497-01	Sample size	50 mL	
		Potential R4	5.81 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.571 mL	OK

Titration report

		Consumption 4.2 R3	7.654 mL	OK
		Content R5	151.420 mg/L	OK
		ALK LOW R6	149.760 mg/L	OK
20	L2447497-02	Sample size	50 mL	
		Potential R4	5.78 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.964 mL	OK
		Consumption 4.2 R3	8.054 mL	OK
		Content R5	159.280 mg/L	OK
		ALK LOW R6	157.480 mg/L	OK
21	L2447497-03	Sample size	50 mL	
		Potential R4	5.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.912 mL	OK
		Consumption 4.2 R3	7.990 mL	OK
		Content R5	158.240 mg/L	OK
		ALK LOW R6	156.680 mg/L	OK
22	L2447497-04	Sample size	50 mL	
		Potential R4	5.78 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.814 mL	OK
		Consumption 4.2 R3	7.890 mL	OK
		Content R5	156.280 mg/L	OK
		ALK LOW R6	154.760 mg/L	OK
23	L2445995-01	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.635 mL	OK
		Consumption 4.2 R3	5.674 mL	OK
		Content R5	112.700 mg/L	OK
		ALK LOW R6	111.920 mg/L	OK
24	WG1963342-3	Sample size	50 mL	
		Potential R4	5.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.859 mL	OK
		Consumption 4.2 R3	5.905 mL	OK
		Content R5	117.180 mg/L	OK
		ALK LOW R6	116.260 mg/L	OK
25	WG1963342-4	Sample size	50 mL	
		Potential R4	9.87 pH	OK
		Consumption 8.3 R1	4.362 mL	OK
		Consumption 4.5 R2	9.582 mL	OK
		Consumption 4.2 R3	9.609 mL	OK
		Content R5	191.640 mg/L	OK
		ALK LOW R6	191.100 mg/L	OK
26	L2445995-02	Sample size	50 mL	
		Potential R4	5.78 pH	OK

Titration report

		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.717 mL	OK
		Consumption 4.2 R3	4.748 mL	OK
		Content R5	94.340 mg/L	OK
		ALK LOW R6	93.720 mg/L	OK
27	L2445995-03	Sample size	50 mL	
		Potential R4	5.63 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	4.191 mL	OK
		Consumption 4.2 R3	4.240 mL	OK
		Content R5	83.820 mg/L	OK
		ALK LOW R6	82.840 mg/L	OK
28	L2445995-04	Sample size	50 mL	
		Potential R4	6.14 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	8.025 mL	OK
		Consumption 4.2 R3	8.090 mL	OK
		Content R5	160.500 mg/L	OK
		ALK LOW R6	159.200 mg/L	OK
29	L2445995-05	Sample size	50 mL	
		Potential R4	5.56 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.670 mL	OK
		Consumption 4.2 R3	2.705 mL	OK
		Content R5	53.400 mg/L	OK
		ALK LOW R6	52.700 mg/L	OK
30	L2445995-06	Sample size	50 mL	
		Potential R4	6.07 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.031 mL	OK
		Consumption 4.2 R3	6.076 mL	OK
		Content R5	120.620 mg/L	OK
		ALK LOW R6	119.720 mg/L	OK
31	L2445995-07	Sample size	50 mL	
		Potential R4	5.96 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	5.918 mL	OK
		Consumption 4.2 R3	5.964 mL	OK
		Content R5	118.360 mg/L	OK
		ALK LOW R6	117.440 mg/L	OK
32	WG1963342-2	Sample size	50 mL	
		Potential R4	10.86 pH	OK
		Consumption 8.3 R1	4.716 mL	OK
		Consumption 4.5 R2	5.112 mL	OK
		Consumption 4.2 R3	5.116 mL	OK
		Content R5	102.240 mg/L	OK
		ALK LOW R6	102.160 mg/L	OK

Titration report

33	WG1963342-1	Sample size	50 mL	
		Potential R4	5.06 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.046 mL	OK
		Consumption 4.2 R3	0.052 mL	OK
		Content R5	0.920 mg/L	OK
		ALK LOW R6	0.800 mg/L	OK
34	L2447478-01	Sample size	50 mL	
		Potential R4	5.72 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.977 mL	OK
		Consumption 4.2 R3	8.056 mL	OK
		Content R5	159.540 mg/L	OK
		ALK LOW R6	157.960 mg/L	OK
35	L2447478-03	Sample size	50 mL	
		Potential R4	5.63 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.398 mL	OK
		Consumption 4.2 R3	7.511 mL	OK
		Content R5	147.960 mg/L	OK
		ALK LOW R6	145.700 mg/L	OK
36	L2447478-05	Sample size	50 mL	
		Potential R4	5.87 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	6.172 mL	OK
		Consumption 4.2 R3	6.246 mL	OK
		Content R5	123.440 mg/L	OK
		ALK LOW R6	121.960 mg/L	OK
37	L2447478-07	Sample size	50 mL	
		Potential R4	6.22 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.188 mL	OK
		Consumption 4.2 R3	7.261 mL	OK
		Content R5	143.760 mg/L	OK
		ALK LOW R6	142.300 mg/L	OK
38	L2447478-09	Sample size	50 mL	
		Potential R4	5.60 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	7.631 mL	OK
		Consumption 4.2 R3	7.786 mL	OK
		Content R5	152.620 mg/L	OK
		ALK LOW R6	149.520 mg/L	OK
39	L2447478-11	Sample size	50 mL	
		Potential R4	5.38 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.348 mL	OK
		Consumption 4.2 R3	1.403 mL	OK

Titration report

		Content R5	26.960 mg/L	OK
		ALK LOW R6	25.860 mg/L	OK
40	L2447478-13	Sample size	50 mL	
		Potential R4	5.40 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.104 mL	OK
		Consumption 4.2 R3	0.120 mL	OK
		Content R5	2.080 mg/L	OK
		ALK LOW R6	1.760 mg/L	OK
41	L2447478-13	Sample size	50 mL	
		Potential R4	5.12 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.141 mL	OK
		Consumption 4.2 R3	0.155 mL	OK
		Content R5	2.820 mg/L	OK
		ALK LOW R6	2.540 mg/L	OK
42	L2447478-15	Sample size	50 mL	
		Potential R4	5.90 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	1.787 mL	OK
		Consumption 4.2 R3	1.803 mL	OK
		Content R5	35.740 mg/L	OK
		ALK LOW R6	35.420 mg/L	OK
43	L2447478-17	Sample size	50 mL	
		Potential R4	6.95 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.991 mL	OK
		Consumption 4.2 R3	3.000 mL	OK
		Content R5	59.820 mg/L	OK
		ALK LOW R6	59.640 mg/L	OK
44	L2447503-01	Sample size	50 mL	
		Potential R4	8.28 pH	OK
		Consumption 8.3 R1	0.529 mL	OK
		Consumption 4.5 R2	3.838 mL	OK
		Consumption 4.2 R3	3.859 mL	OK
		Content R5	76.760 mg/L	OK
		ALK LOW R6	76.340 mg/L	OK
45	L2447503-02	Sample size	50 mL	
		Potential R4	6.02 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	12.642 mL	OK
		Consumption 4.2 R3	12.764 mL	OK
		Content R5	252.840 mg/L	OK
		ALK LOW R6	250.400 mg/L	OK
46	L2447503-03	Sample size	50 mL	
		Potential R4	5.74 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK

Titration report

		Consumption 4.5 R2	6.336 mL	OK
		Consumption 4.2 R3	6.412 mL	OK
		Content R5	126.720 mg/L	OK
		ALK LOW R6	125.200 mg/L	OK
47	L2447503-04	Sample size	50 mL	
		Potential R4	5.51 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	2.444 mL	OK
		Consumption 4.2 R3	2.471 mL	OK
		Content R5	48.880 mg/L	OK
		ALK LOW R6	48.340 mg/L	OK
48	L2447503-05	Sample size	50 mL	
		Potential R4	5.15 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.545 mL	OK
		Consumption 4.2 R3	0.564 mL	OK
		Content R5	10.900 mg/L	OK
		ALK LOW R6	10.520 mg/L	OK
49	L2447503-06	Sample size	50 mL	
		Potential R4	5.84 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.904 mL	OK
		Consumption 4.2 R3	14.082 mL	OK
		Content R5	278.080 mg/L	OK
		ALK LOW R6	274.520 mg/L	OK
50	L2447503-07	Sample size	50 mL	
		Potential R4	5.90 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.874 mL	OK
		Consumption 4.2 R3	14.033 mL	OK
		Content R5	277.480 mg/L	OK
		ALK LOW R6	274.300 mg/L	OK
51	L2447503-08	Sample size	50 mL	
		Potential R4	5.68 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.818 mL	OK
		Consumption 4.2 R3	3.842 mL	OK
		Content R5	76.360 mg/L	OK
		ALK LOW R6	75.880 mg/L	OK
52	WG1963344-3	Sample size	50 mL	
		Potential R4	5.65 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	3.896 mL	OK
		Consumption 4.2 R3	3.933 mL	OK
		Content R5	77.920 mg/L	OK
		ALK LOW R6	77.180 mg/L	OK
53	WG1963344-4	Sample size	50 mL	

Titration report

		Potential R4	10.04 pH	OK
		Consumption 8.3 R1	4.732 mL	OK
		Consumption 4.5 R2	8.622 mL	OK
		Consumption 4.2 R3	8.641 mL	OK
		Content R5	172.440 mg/L	OK
		ALK LOW R6	172.060 mg/L	OK
54	L2447503-09	Sample size	50 mL	
		Potential R4	5.20 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.721 mL	OK
		Consumption 4.2 R3	0.737 mL	OK
		Content R5	14.420 mg/L	OK
		ALK LOW R6	14.100 mg/L	OK
55	WG1963344-2	Sample size	50 mL	
		Potential R4	10.92 pH	OK
		Consumption 8.3 R1	4.755 mL	OK
		Consumption 4.5 R2	5.097 mL	OK
		Consumption 4.2 R3	5.097 mL	OK
		Content R5	101.940 mg/L	OK
		ALK LOW R6	101.940 mg/L	OK
56	WG1963344-1	Sample size	50 mL	
		Potential R4	5.00 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.045 mL	OK
		Consumption 4.2 R3	0.054 mL	OK
		Content R5	0.900 mg/L	OK
		ALK LOW R6	0.720 mg/L	OK
57	L2447175-01 25x	Sample size	50 mL	
		Potential R4	7.85 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	13.331 mL	OK
		Consumption 4.2 R3	13.592 mL	OK
		Content R5	266.620 mg/L	OK
		ALK LOW R6	261.400 mg/L	OK
58	L2447175-04 25x	Sample size	50 mL	
		Potential R4	8.62 pH	OK
		Consumption 8.3 R1	1.662 mL	OK
		Consumption 4.5 R2	12.420 mL	OK
		Consumption 4.2 R3	12.641 mL	OK
		Content R5	248.400 mg/L	OK
		ALK LOW R6	243.980 mg/L	OK
59	L2447417-01 25x	Sample size	50 mL	
		Potential R4	7.86 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	12.724 mL	OK
		Consumption 4.2 R3	12.960 mL	OK
		Content R5	254.480 mg/L	OK

Titration report

		ALK LOW R6	249.760 mg/L	OK
60	L2447417-04 25x	Sample size	50 mL	
		Potential R4	8.45 pH	OK
		Consumption 8.3 R1	0.937 mL	OK
		Consumption 4.5 R2	12.943 mL	OK
		Consumption 4.2 R3	13.157 mL	OK
		Content R5	258.860 mg/L	OK
		ALK LOW R6	254.580 mg/L	OK
61	L2447417-09 25x	Sample size	50 mL	
		Potential R4	8.66 pH	OK
		Consumption 8.3 R1	1.815 mL	OK
		Consumption 4.5 R2	12.524 mL	OK
		Consumption 4.2 R3	12.719 mL	OK
		Content R5	250.480 mg/L	OK
		ALK LOW R6	246.580 mg/L	OK
62	L2447417-10 25x	Sample size	50 mL	
		Potential R4	8.59 pH	OK
		Consumption 8.3 R1	1.527 mL	OK
		Consumption 4.5 R2	12.385 mL	OK
		Consumption 4.2 R3	12.619 mL	OK
		Content R5	247.700 mg/L	OK
		ALK LOW R6	243.020 mg/L	OK
63	CCV	Sample size	50 mL	
		Potential R4	10.76 pH	OK
		Consumption 8.3 R1	4.671 mL	OK
		Consumption 4.5 R2	5.033 mL	OK
		Consumption 4.2 R3	5.039 mL	OK
		Content R5	100.660 mg/L	OK
		ALK LOW R6	100.540 mg/L	OK
64	CCB	Sample size	50 mL	
		Potential R4	5.07 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.036 mL	OK
		Consumption 4.2 R3	0.046 mL	OK
		Content R5	0.720 mg/L	OK
		ALK LOW R6	0.520 mg/L	OK
65	CCV	Sample size	50 mL	
		Potential R4	10.96 pH	OK
		Consumption 8.3 R1	4.924 mL	OK
		Consumption 4.5 R2	5.311 mL	OK
		Consumption 4.2 R3	5.315 mL	OK
		Content R5	106.220 mg/L	OK
		ALK LOW R6	106.140 mg/L	OK
66	CCB	Sample size	50 mL	
		Potential R4	4.98 pH	OK
		Consumption 8.3 R1	NaN mL	Not OK
		Consumption 4.5 R2	0.040 mL	OK

Titration report

Consumption 4.2 R3	0.049 mL	OK
Content R5	0.800 mg/L	OK
ALK LOW R6	0.620 mg/L	OK

Statistics

R1

Mean	NaN mL		
Maximum	10.163 mL	**Minimum**	0.529 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	66	**Samples excluded**	0

R2

Mean	NaN mL		
Maximum	15.492 mL	**Minimum**	0.036 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	66	**Samples excluded**	0

R3

Mean	NaN mL		
Maximum	15.568 mL	**Minimum**	0.046 mL
Standard deviation	NaN mL	**Rel. standard deviation**	NaN %
Total samples	66	**Samples excluded**	0

R4

Mean	6.90 pH		
Maximum	10.98 pH	**Minimum**	4.96 pH
Standard deviation	1.79 pH	**Rel. standard deviation**	26.010 %
Total samples	66	**Samples excluded**	0

R5

Mean	NaN mg/L		
Maximum	309.840 mg/L	**Minimum**	0.720 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	66	**Samples excluded**	0

R6

Mean	NaN mg/L		
Maximum	308.320 mg/L	**Minimum**	0.520 mg/L
Standard deviation	NaN mg/L	**Rel. standard deviation**	NaN %
Total samples	66	**Samples excluded**	0

Used Instruments

Titration report

Name	T7 Excellence Titrator	**Serial number**	C329519495

Responsible User

Time	Login name	Full name
8/24/2024 7:15:07 AM	SystemInternal	System internal account

Quality Control

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2447503-08	**Analysis Date**	: 08/24/24 11:20
Dup Sample ID	: WG1963435-2	**DUP Analysis Date**	: 08/24/24 11:22

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Carbonate	ND	ND	NC	10
Alkalinity, Bicarbonate	76.4	77.9	2	9

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 08/24/24 07:15
Dup Sample ID	: WG1963432-4	**DUP Analysis Date**	: 08/24/24 07:15

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Carbonate	ND	ND	NC	10

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 08/24/24 07:15
Dup Sample ID	: WG1963433-4	**DUP Analysis Date**	: 08/24/24 07:15

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Bicarbonate	76.4	77.9	2	9

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Alkalinity, Total	471-34-1	2		mg CaCO3/L	90-110	10	86-116	10	10	2320B	14 days	1 - Plastic 250ml unpreserved/No Headspace

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Alkalinity

$$\text{Alkalinity, mg } CaCO_3/L = \frac{A \times N \times 50{,}000}{\text{mL Sample}}$$

Where:

A = mL of the standard acid titrated

N = normality of the standard acid

Results are calculated using Mettler Toledo software.

Standard sample size is 50mL, 0.02N Sulfuric acid for titration

Sequence Logs

CAL	240823	LCS 7.0	7.00	INT:	MRM
pH 4	3295	Titrant:	4193		
pH 7	3386	LCS:	3257		
pH 10	3298	MS:	3255		
LCS	3409				

1	Rinse,MRM	
2	Rinse,MRM	
3	Rinse,MRM	
4	WG1963341-1	
5	WG1963341-2	
6	L2447017-01	
7	WG1963341-3	
8	WG1963341-4	
9	L2447018-01	
10	L2447019-01	
11	L2447175-01 5x	
12	L2447175-04 5x	
13	L2447417-01 5x	5 x = 10 mL
14	L2447417-04 5x	
15	L2447417-09 5x	
16	L2447417-10 5x	
17	L2447429-01	
18	L2447429-02	
19	L2447497-01	
20	L2447497-02	
21	L2447497-03	
22	L2447497-04	
23	L2445995-01	
24	WG1963342-3	
25	WG1963342-4	
26	L2445995-02	
27	L2445995-03	
28	L2445995-04	
29	L2445995-05	
30	L2445995-06	
31	L2445995-07	
32	WG1963342-2	
33	WG1963342-1	
34	L2447478-01	
35	L2447478-03	
36	L2447478-05	
37	L2447478-07	
38	L2447478-09	
39	L2447478-11	
40	L2447478-13	
41	L2447478-13	

42	L2447478-15	
43	L2447478-17	
44	L2447503-01	
45	L2447503-02	
46	L2447503-03	
47	L2447503-04	
48	L2447503-05	
49	L2447503-06	
50	L2447503-07	
51	L2447503-08	L2447023-20/21
52	WG1963344-3	WG1963434/35
53	WG1963344-4	NR
54	L2447503-09	
55	WG1963344-2	NR
56	WG1963344-1	WG1963434/35
57	L2447175-01 25x	
58	L2447175-04 25x	
59	L2447417-01 25x	25 x = 2 mL
60	L2447417-04 25x	
61	L2447417-09 25x	
62	L2447417-10 25x	
63	CCV	
64	CCB	
65	CCV	
66	CCB	

Phosphates Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.055	0.031	0.012	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2447503
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2447503-02	**Date Collected**	:	08/20/24 10:10
Client ID	:	MW-2S	**Date Received**	:	08/20/24
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	08/27/24 11:28
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	EYA
Lab File ID	:	PHOS082724-WG1963968.csv	**Instrument ID**	:	SEAL2
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.025	0.031	0.012	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-03	**Date Collected**	: 08/20/24 08:40
Client ID	: MW-3S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.037	0.031	0.012	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:30
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.031	0.031	0.012	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.012	0.031	0.012	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.058	0.031	0.012	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.022	0.031	0.012	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:37
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.015	0.031	0.012	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/27/24 11:38
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.012	0.031	0.012	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963968-1	**Date Collected**	: NA
Client ID	: WG1963968-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/27/24 11:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963968-3	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6DDUP	**Date Received**	: 08/20/24
Sample Location	:	**Date Analyzed**	: 08/27/24 11:33
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: EYA
Lab File ID	: PHOS082724-WG1963968.csv	**Instrument ID**	: SEAL2
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/27/24

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.061	0.031	0.012	

Sample Raw Data

AQ400Tray Report

Software version : 2.4.5
Report requested by : easamoah
Date \ Time : 27-Aug-2024 12:08:44
Tray number : 1
Tray name : WG1963968

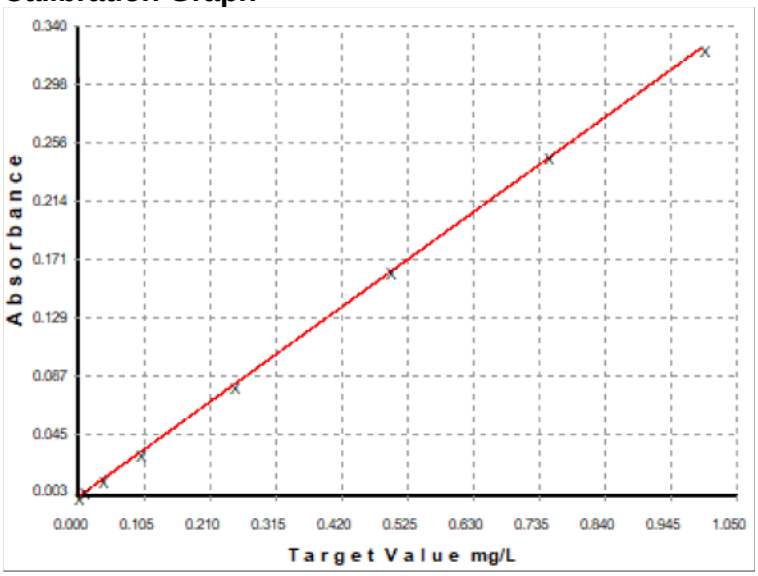
T-Phos 1

Calibration Chart

Type	Absorbance	Calc mg/L	Target mg/L	% Error
S1	0.0026	0.003	0.000	
S90	0.0054	0.012	0.010	16.70
S91	0.0138	0.038	0.040	-6.22
S92	0.0328	0.096	0.100	-3.81
S93	0.0820	0.248	0.250	-0.85
S94	0.1644	0.502	0.500	0.42
S95	0.2469	0.757	0.750	0.88
S96	0.3241	0.995	1.000	-0.50
S0	0.0026	0.003	0.000	

Polynomial Order :	1
Correlation Coefficient :	0.9999
Carryover(%) :	-0.0
Calibration equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured absorbance
a =:	-5.083504E-03
b =:	3.085199E+00
Date & Time :	27-Aug-2024 11:22:54

Calibration Graph



Reagents

Reagent Name	Batch Number	Operator	Expiry Date
TP Working Color			
TP Ascorbic			

Test Results

Cup	Type	ID	Sample Details	Result	Units	QC Pro	Auto Dil.	Man Dil.	User	Time & Date
	S1	Standard 1		0.003					EYA	27-Aug-2024 11:15:26
	S90	Standard 90		0.005					EYA	27-Aug-2024 11:16:22
	S91	Standard 91		0.014					EYA	27-Aug-2024 11:17:18
	S92	Standard 92		0.033					EYA	27-Aug-2024 11:18:13
	S93	Standard 93		0.082					EYA	27-Aug-2024 11:19:10
	S94	Standard 94		0.164					EYA	27-Aug-2024 11:20:05
	S95	Standard 95		0.247					EYA	27-Aug-2024 11:21:02
	S96	Standard 96		0.324					EYA	27-Aug-2024 11:21:58
	S0	Standard 0		0.003					EYA	27-Aug-2024 11:22:54
2	ICV	ICV	27-AUG-24 06-13	0.482	mg/L				EYA	27-Aug-2024 11:23:50
3	ICB	ICB	27-AUG-24 06-13	0.003	mg/L				EYA	27-Aug-2024 11:24:46
4	U1	WG1963968-1O	27-AUG-24 06-13	0.003	mg/L				EYA	27-Aug-2024 11:25:42
5	U2	WG1963968-2O	27-AUG-24 06-13	0.475	mg/L				EYA	27-Aug-2024 11:26:38
6	U3	L2447503-01O	27-AUG-24 06-13	0.018	mg/L				EYA	27-Aug-2024 11:27:34
7	U4	L2447503-02O	27-AUG-24 06-13	0.008	mg/L				EYA	27-Aug-2024 11:28:30
8	U5	L2447503-03O	27-AUG-24 06-13	0.012	mg/L				EYA	27-Aug-2024 11:29:26
9	U6	L2447503-04O	27-AUG-24 06-13	0.010	mg/L				EYA	27-Aug-2024 11:30:22
10	U7	L2447503-05O	27-AUG-24 06-13	0.004	mg/L				EYA	27-Aug-2024 11:31:18
11	U8	L2447503-06O	27-AUG-24 06-13	0.019	mg/L				EYA	27-Aug-2024 11:32:14

12	U9	WG1963968-3O	27-AUG-24 06-13	0.020	mg/L			EYA	27-Aug-2024 11:33:10
13	U10	WG1963968-4O	27-AUG-24 06-13	0.502	mg/L			EYA	27-Aug-2024 11:34:06
	CCV	CCV		0.471	mg/L			EYA	27-Aug-2024 11:35:02
	CCB	CCB		0.003	mg/L			EYA	27-Aug-2024 11:35:57
14	U11	L2447503-07O	27-AUG-24 06-13	0.007	mg/L			EYA	27-Aug-2024 11:36:54
15	U12	L2447503-08O	27-AUG-24 06-13	0.005	mg/L			EYA	27-Aug-2024 11:37:50
16	U13	L2447503-09O	27-AUG-24 06-13	0.004	mg/L			EYA	27-Aug-2024 11:38:46
17	U14	L2447288-01	27-AUG-24 06-13	0.050	mg/L			EYA	27-Aug-2024 11:39:40
18	U15	L2447288-02	27-AUG-24 06-13	0.133	mg/L			EYA	27-Aug-2024 11:40:36
19	U16	L2447379-01	27-AUG-24 06-13	0.100	mg/L			EYA	27-Aug-2024 11:41:32
20	U17	WG1963969-3	27-AUG-24 06-13	0.097	mg/L			EYA	27-Aug-2024 11:42:28
21	U18	WG1963969-4	27-AUG-24 06-13	0.588	mg/L			EYA	27-Aug-2024 11:43:24
22	U19	L2447998-01-5	27-AUG-24 06-13	7.415	mg/L	x5.0000	x5.0000	EYA	27-Aug-2024 12:03:02
23	U20	L2448003-01-5	27-AUG-24 06-13	4.646	mg/L		x5.0000	EYA	27-Aug-2024 11:45:16
	CCV	CCV		0.478	mg/L			EYA	27-Aug-2024 11:46:13
	CCB	CCB		0.005	mg/L			EYA	27-Aug-2024 11:47:08
	CCV	CCV		0.472	mg/L			EYA	27-Aug-2024 12:01:10
	CCB	CCB		0.005	mg/L			EYA	27-Aug-2024 12:02:06
	CCV	CCV		0.480	mg/L			EYA	27-Aug-2024 12:03:58
	CCB	CCB		0.006	mg/L			EYA	27-Aug-2024 12:04:54

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2447503-06		
Matrix Spike	: WG1963968-4	**MS Analysis Date**	: 08/27/24 11:34
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Phosphate, Total	0.058	1.53	1.54	97					80-120	15

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2447503-06	**Analysis Date**	: 08/27/24 11:32
Dup Sample ID	: WG1963968-3	**DUP Analysis Date**	: 08/27/24 11:33

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Phosphate, Total	0.058	0.061	5	15

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963968-2	**LCS Analysis Date**	: 08/27/24 11:26
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Phosphate, Total	**1.53**	**1.46**	**95.**					**84-118**	**15**

Date Created: 11/11/21
Created By: Jason Hebert
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WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Total	7723-14-0	0.01	0.004	mg/l	80-120		75-125	20	20	4500P-E	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
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WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Phosphorus, Total	7723-14-0	5	1.67	mg/kg	52-148	20	75-125	20	20	4500P-E	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Created By: Jason Hebert
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WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Orthophosphate	7723-14-0	0.005	0.001	mg/l	90-110		80-120	20	20	4500P-E	48 hours	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container / Sample Preservation
Phosphorus, Orthophosphate	7723-14-0	0.05	0.05	mg/kg						4500P-E	48 hours	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of TPhosphorus

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve. All calculations are done by SEAL (segmant flow spectrometer).

$$\text{Mg TPhosphorus/L} = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

Wet Chemistry
By
IC Methods

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 13:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.121	0.050	0.013	
16887-00-6	Chloride	49.0	0.500	0.083	
16984-48-8	Fluoride	0.093	0.050	0.037	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-01	**Date Collected**	: 08/19/24 17:00
Client ID	: MW-1S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 17:41
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	171.	10.0	4.54	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-02	**Date Collected**	: 08/20/24 10:10
Client ID	: MW-2S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 14:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	4.44	0.500	0.083	
16984-48-8	Fluoride	0.084	0.050	0.037	
14808-79-8	Sulfate	30.9	1.00	0.454	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-03**	**Date Collected**	:	**08/20/24 08:40**
Client ID	:	**MW-3S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/23/24 17:53**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**10**
Analytical Method	:	**44,300.0**	**Analyst**	:	**CVN,**
Lab File ID	:	**WG1963098-100-294-295-296**	**Instrument ID**	:	**IC3**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	**Chloride**	**53.2**	**5.00**	**0.839**	
14808-79-8	**Sulfate**	**154.**	**10.0**	**4.54**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-03**	**Date Collected**	:	**08/20/24 08:40**
Client ID	:	**MW-3S**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/23/24 14:16**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,300.0**	**Analyst**	:	**CVN,**
Lab File ID	:	**WG1963098-100-294-295-296**	**Instrument ID**	:	**IC3**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	**Bromide**	**0.103**	**0.050**	**0.013**	
16984-48-8	**Fluoride**	**0.139**	**0.050**	**0.037**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2447503**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2447503-04**	**Date Collected**	:	**08/20/24 09:55**
Client ID	:	**MW-4D**	**Date Received**	:	**08/20/24**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/23/24 18:22**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**10**
Analytical Method	:	**44,300.0**	**Analyst**	:	**CVN,**
Lab File ID	:	**WG1963098-100-294-295-296**	**Instrument ID**	:	**IC3**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	**Chloride**	**139.**	**5.00**	**0.839**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-04	**Date Collected**	: 08/20/24 09:55
Client ID	: MW-4D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 14:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16984-48-8	Fluoride	0.043	0.050	0.037	J
14808-79-8	Sulfate	9.92	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-05	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 17:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	8.12	0.500	0.083	
16984-48-8	Fluoride	ND	0.050	0.037	U
14808-79-8	Sulfate	7.95	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 14:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.148	0.050	0.013	
16984-48-8	Fluoride	0.044	0.050	0.037	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-06	**Date Collected**	: 08/19/24 17:20
Client ID	: MW-6D	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 19:23
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	Chloride	60.5	5.00	0.839	
14808-79-8	Sulfate	123.	10.0	4.54	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-07	**Date Collected**	: 08/19/24 15:55
Client ID	: MW-7S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 15:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.117	0.050	0.013	
16887-00-6	Chloride	25.2	0.500	0.083	
16984-48-8	Fluoride	0.040	0.050	0.037	J
14808-79-8	Sulfate	98.6	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-08	**Date Collected**	: 08/20/24 11:50
Client ID	: MW-8S	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 15:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.075	0.050	0.013	
16887-00-6	Chloride	24.2	0.500	0.083	
16984-48-8	Fluoride	0.051	0.050	0.037	
14808-79-8	Sulfate	48.3	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2447503-09	**Date Collected**	: 08/20/24 00:00
Client ID	: DUP	**Date Received**	: 08/20/24
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/23/24 15:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	8.28	0.500	0.083	
16984-48-8	Fluoride	ND	0.050	0.037	U
14808-79-8	Sulfate	8.14	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963098-1	**Date Collected**	: NA
Client ID	: WG1963098-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/23/24 18:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	0.141	0.500	0.083	J
16984-48-8	Fluoride	ND	0.050	0.037	U
14808-79-8	Sulfate	ND	1.00	0.454	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1963098-4	**Date Collected**	: 08/20/24 08:30
Client ID	: MW-5SDUP	**Date Received**	: 08/20/24
Sample Location	:	**Date Analyzed**	: 08/23/24 17:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1963098-100-294-295-296	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	8.07	1.00	0.454	
16887-00-6	Chloride	8.27	0.500	0.084	
24959-67-9	Bromide	ND	0.050	0.013	U
16984-48-8	Fluoride	ND	0.050	0.037	U

Sample Raw Data

Peak Integration Report

Sample Name:	**BLANK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 21:02**	*Run Time:*	**10.00**

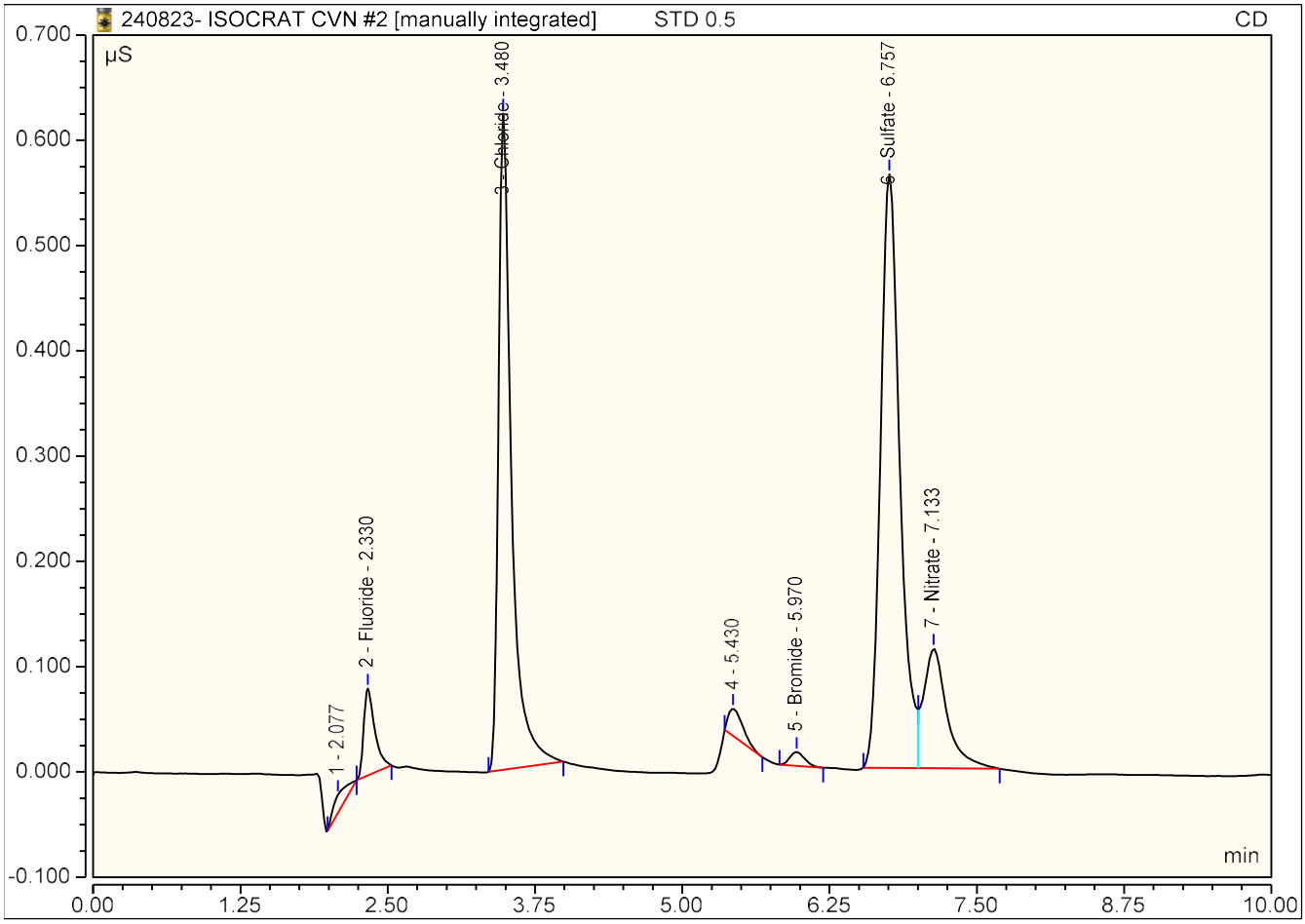
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.50	**Fluoride**	BMB	0.010	0.003	0.0447
2	3.48	**Chloride**	BMB	0.001	0.008	0.1306
4	6.76	**Sulfate**	BMB	0.001	0.005	0.1437
TOTAL:				0.01	0.02	0.32



Peak Integration Report

Sample Name:	**STD 0.5**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 21:14**	*Run Time:*	**10.00**

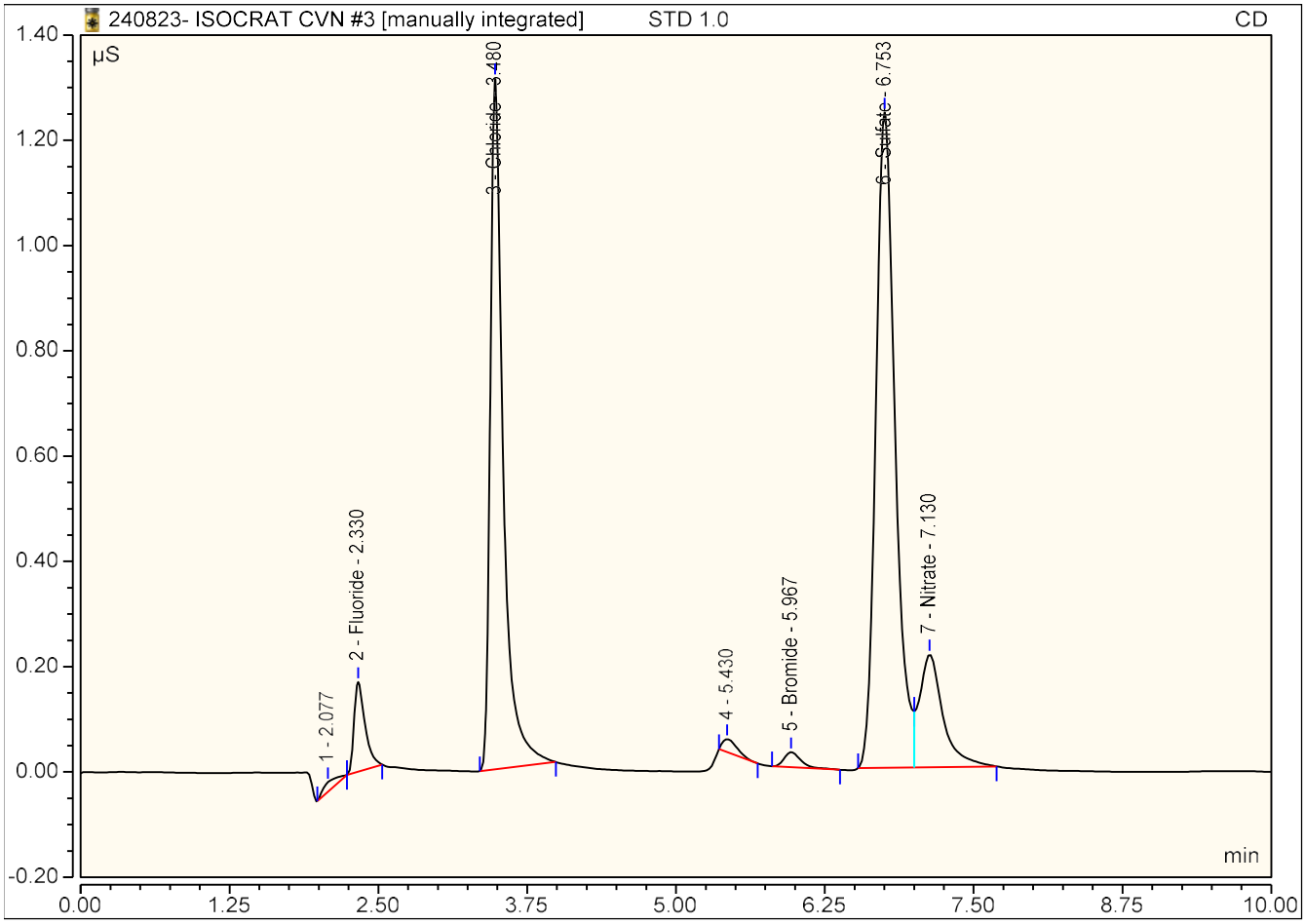
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.009	0.083	0.0437
3	3.48	**Chloride**	BMB*	0.080	0.624	0.3214
5	5.97	**Bromide**	BMB	0.002	0.013	0.0485
6	6.76	**Sulfate**	BM *	0.107	0.564	0.5065
7	7.13	**Nitrate**	MB*	0.026	0.114	0.0422
TOTAL:				0.22	1.40	0.96



Peak Integration Report

Sample Name:	**STD 1.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 21:26**	*Run Time:*	**10.00**

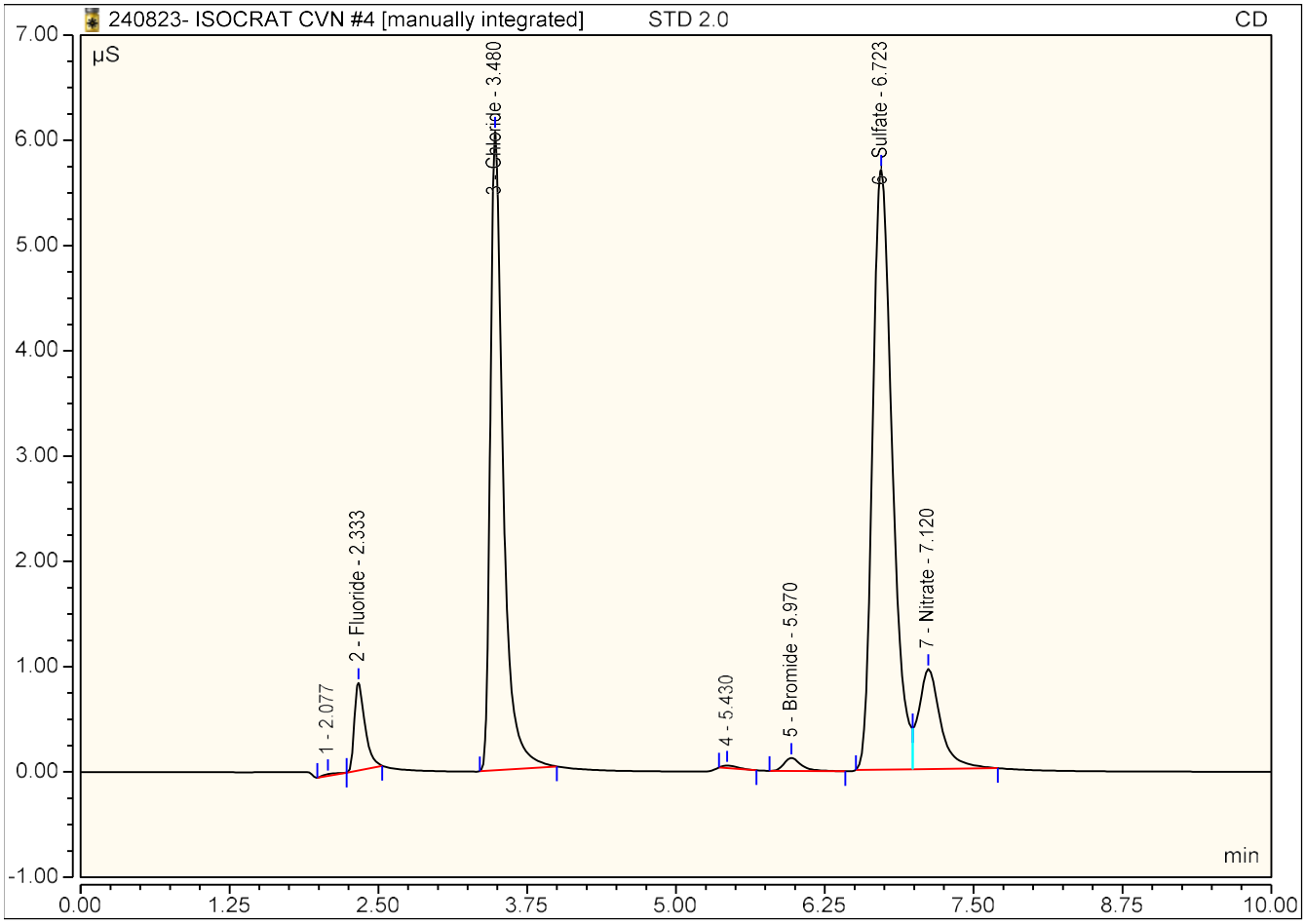
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.018	0.171	0.0600
3	3.48	**Chloride**	BMB*	0.165	1.313	0.5266
5	5.97	**Bromide**	BMB	0.005	0.029	0.0695
6	6.75	**Sulfate**	BM *	0.231	1.245	0.9336
7	7.13	**Nitrate**	MB*	0.049	0.214	0.0607
TOTAL:				0.47	2.97	1.65



Peak Integration Report

Sample Name:	**STD 2.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 21:38**	*Run Time:*	**10.00**

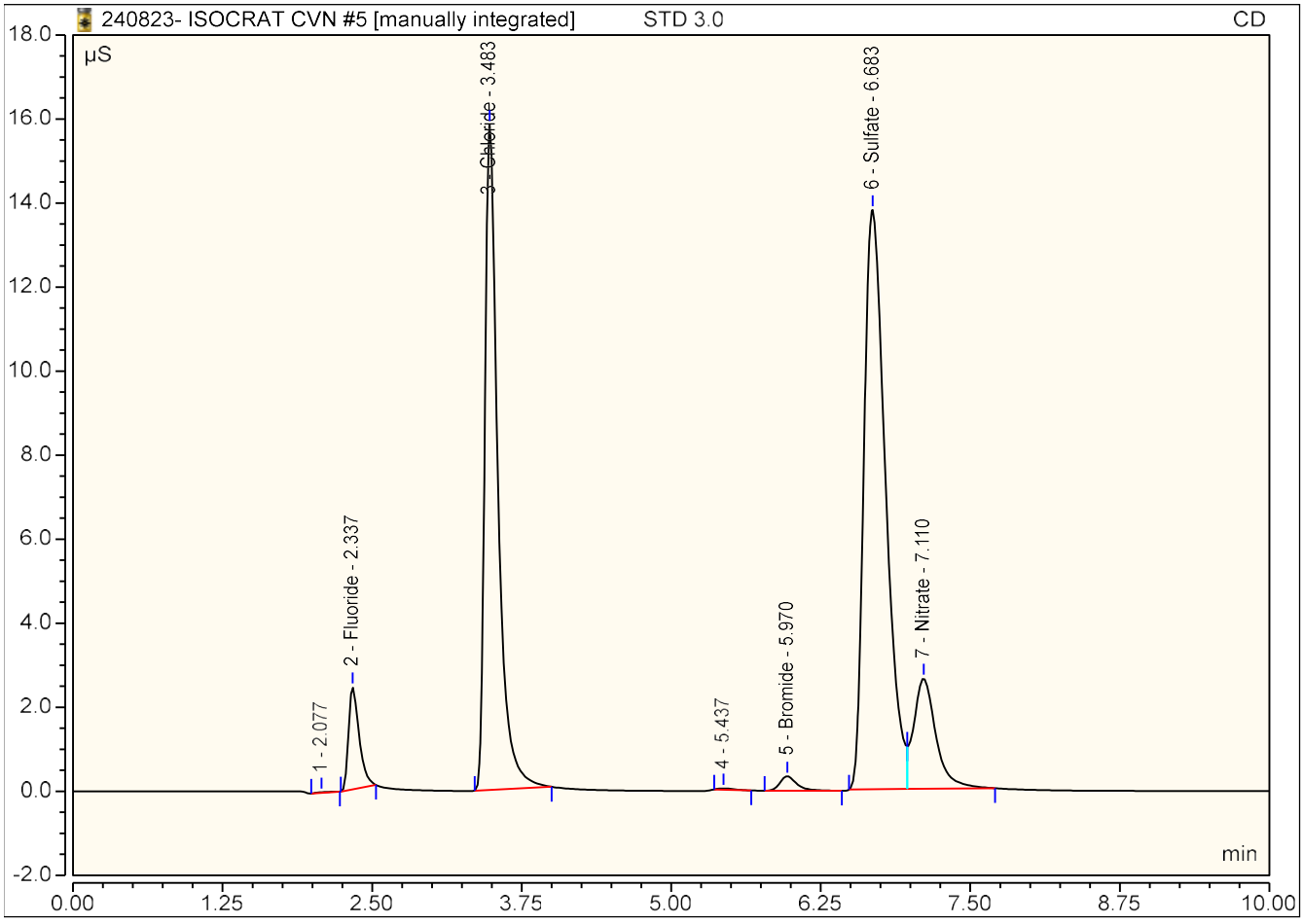
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.086	0.831	0.1787
3	3.48	**Chloride**	BMB*	0.757	6.068	1.9618
5	5.97	**Bromide**	BMB	0.021	0.124	0.1898
6	6.72	**Sulfate**	BM *	1.091	5.700	3.8785
7	7.12	**Nitrate**	MB*	0.204	0.950	0.1861
TOTAL:				2.16	13.67	6.39



Peak Integration Report

Sample Name:	**STD 3.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 21:50**	*Run Time:*	**10.00**

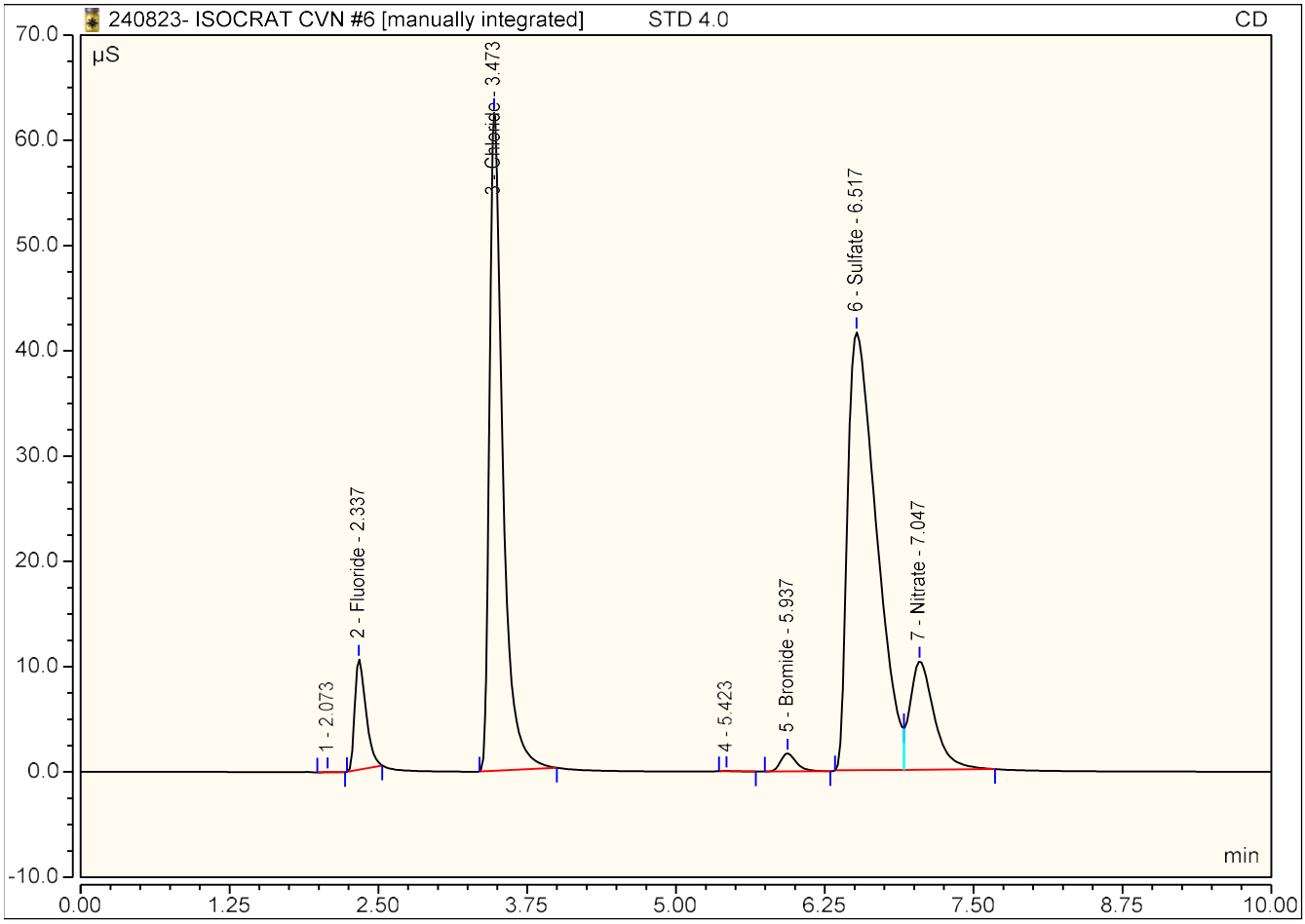
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.34	**Fluoride**	BMB	0.251	2.433	0.4696
3	3.48	**Chloride**	BMB*	2.000	15.829	4.9722
5	5.97	**Bromide**	BMB	0.057	0.343	0.4559
6	6.68	**Sulfate**	BM *	2.875	13.786	9.9947
7	7.11	**Nitrate**	MB*	0.568	2.632	0.4800
TOTAL:				5.75	35.02	16.37



Peak Integration Report

Sample Name:	**STD 4.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 22:02**	*Run Time:*	**10.00**

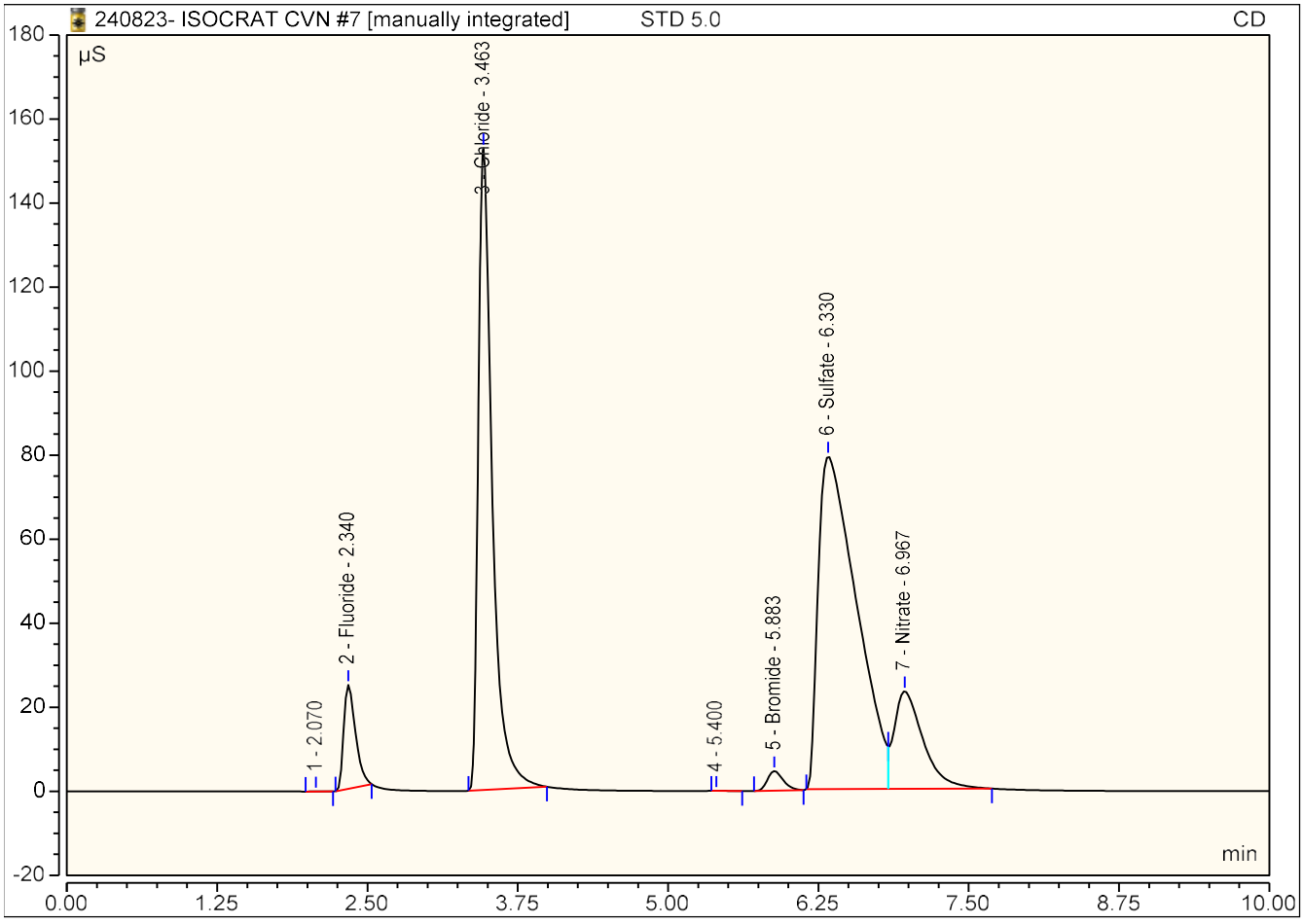
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.34	**Fluoride**	BMB	1.137	10.480	2.0320
3	3.47	**Chloride**	BMB*	8.179	62.483	19.9406
5	5.94	**Bromide**	BMB	0.267	1.717	2.0113
6	6.52	**Sulfate**	BM *	11.719	41.601	40.3013
7	7.05	**Nitrate**	MB*	2.458	10.297	2.0059
TOTAL:				23.76	126.58	66.29



Peak Integration Report

Sample Name:	**STD 5.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 22:14**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.34	**Fluoride**	BMB	2.815	24.696	4.9909
3	3.46	**Chloride**	BMB*	20.600	152.752	50.0274
5	5.88	**Bromide**	BMB	0.703	4.665	5.2423
6	6.33	**Sulfate**	BM *	29.105	79.210	99.8855
7	6.97	**Nitrate**	MB*	6.519	23.232	5.2847
TOTAL:				59.74	284.56	165.43



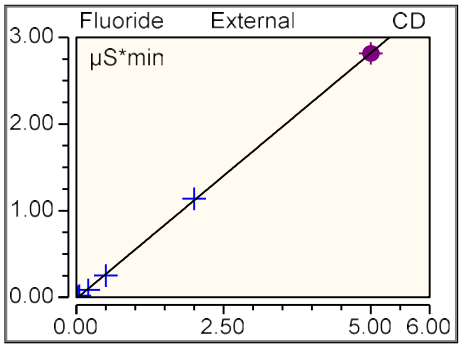
Calibration Batch Report

Sequence:	**240823- ISOCRAT CVN**	*Injection Volume:*	**25.00**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**18-Jul-2024 / 22:14**	*Run Time:*	**10**

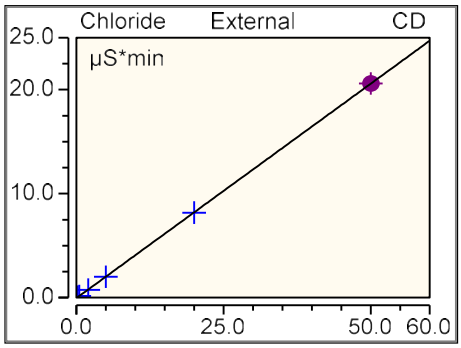
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
Fluoride	Area	in, WithOffse	6.000	-0.016	0.567	0.000	99.9847
Chloride	Area	in, WithOffse	6.000	-0.053	0.413	0.000	99.9994
Bromide	Area	in, WithOffse	5.000	-0.005	0.135	0.000	99.8872
Sulfate	Area	in, WithOffse	6.000	-0.041	0.292	0.000	99.9984
Nitrate	Area	in, WithOffse	5.000	-0.026	1.238	0.000	99.9623
		AVERAGE:		-0.0281	0.5291	0.0000	99.9664

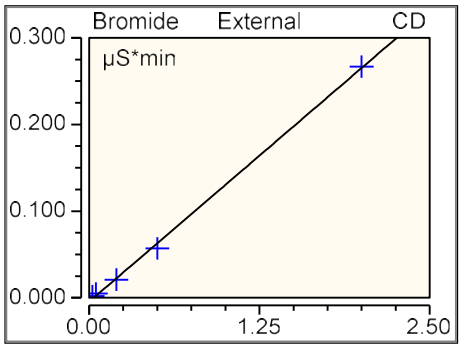
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Fluoride	Fluoride	Fluoride	Fluoride
STD 0.5	2.330	0.0090	0.083	0.044
STD 1.0	2.330	0.0182	0.171	0.060
STD 2.0	2.333	0.0856	0.831	0.179
STD 3.0	2.337	0.2506	2.433	0.470
STD 4.0	2.337	1.1369	10.480	2.032
STD 5.0	2.340	2.8153	24.696	4.991
Average	2.334			
Rel. Std. Dev.	0.173 %			



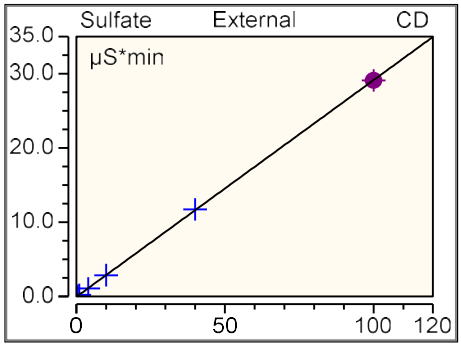
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Chloride	Chloride	Chloride	Chloride
STD 0.5	3.480	0.0798	0.624	0.321
STD 1.0	3.480	0.1645	1.313	0.527
STD 2.0	3.480	0.7570	6.068	1.962
STD 3.0	3.483	1.9998	15.829	4.972
STD 4.0	3.473	8.1791	62.483	19.941
STD 5.0	3.463	20.5997	152.752	50.027
Average	3.477			
Rel. Std. Dev.	0.210 %			



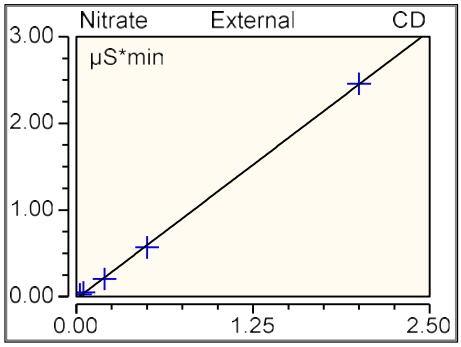
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Bromide	Bromide	Bromide	Bromide
STD 0.5	5.970	0.0019	0.013	0.049
STD 1.0	5.967	0.0047	0.029	0.070
STD 2.0	5.970	0.0210	0.124	0.190
STD 3.0	5.970	0.0569	0.343	0.456
STD 4.0	5.937	0.2668	1.717	2.011
STD 5.0	5.883	0.7028	4.665	5.242
Average	5.949			
Rel. Std. Dev.	0.587 %			



Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Sulfate	Sulfate	Sulfate	Sulfate
STD 0.5	6.757	0.1068	0.564	0.506
STD 1.0	6.753	0.2314	1.245	0.934
STD 2.0	6.723	1.0907	5.700	3.878
STD 3.0	6.683	2.8754	13.786	9.995
STD 4.0	6.517	11.7185	41.601	40.301
STD 5.0	6.330	29.1046	79.210	99.886
Average	6.627			
Rel. Std. Dev.	2.575 %			



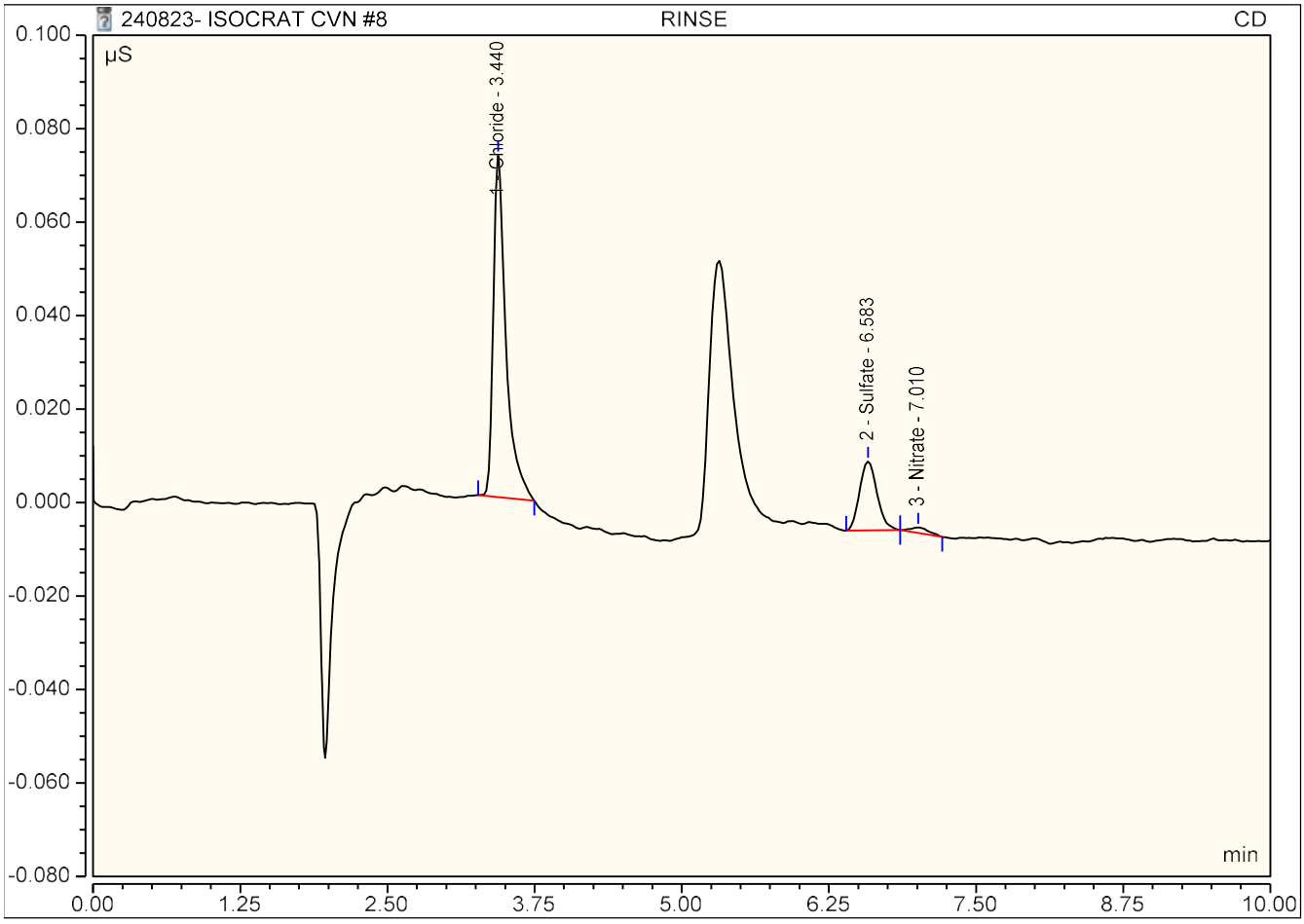
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Nitrate	Nitrate	Nitrate	Nitrate
STD 0.5	7.133	0.0262	0.114	0.042
STD 1.0	7.130	0.0491	0.214	0.061
STD 2.0	7.120	0.2045	0.950	0.186
STD 3.0	7.110	0.5684	2.632	0.480
STD 4.0	7.047	2.4581	10.297	2.006
STD 5.0	6.967	6.5187	23.232	5.285
Average	7.084			
Rel. Std. Dev.	0.930 %			



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 08:49**	*Run Time:*	**10.00**

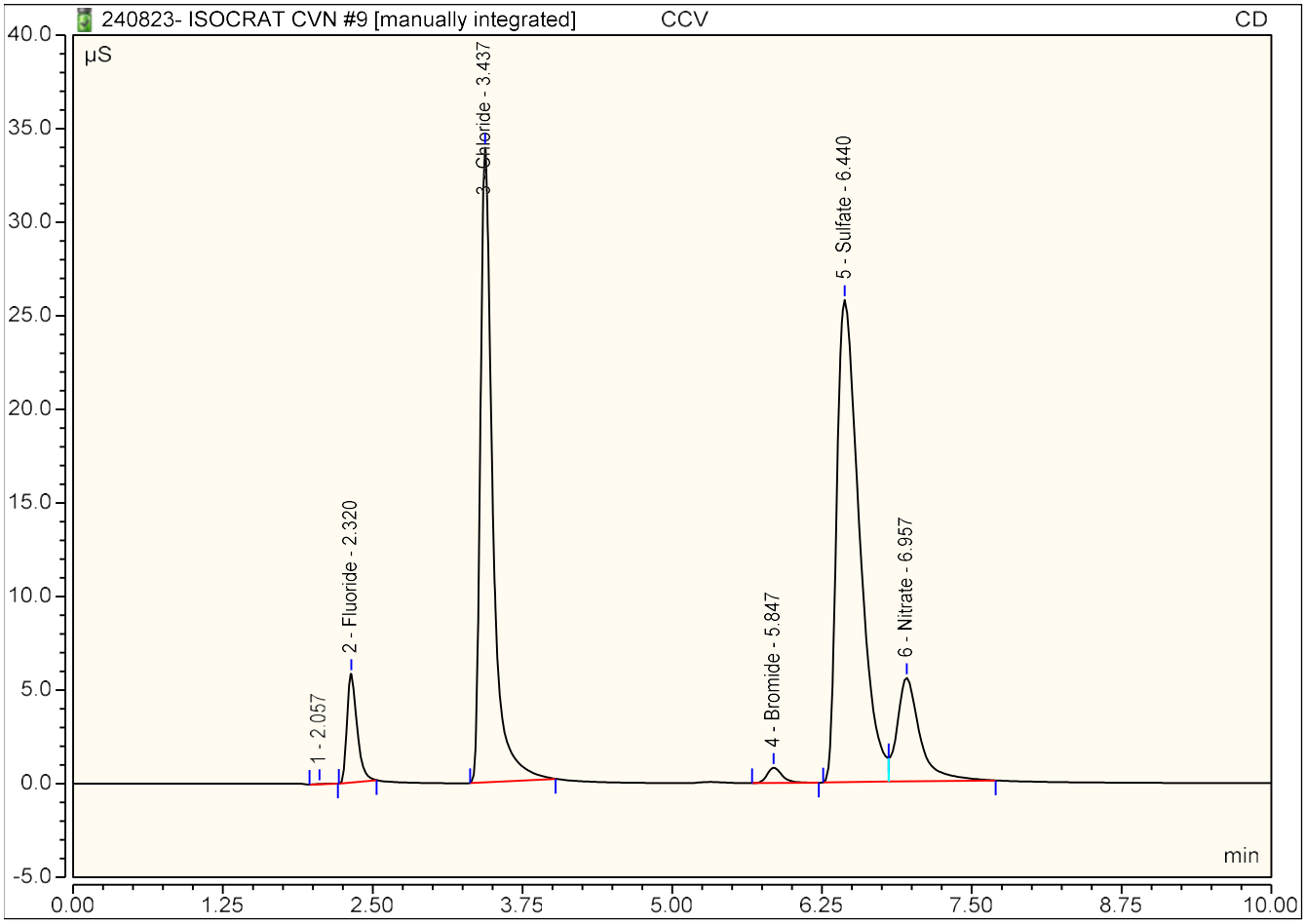
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	3.44	**Chloride**	BMB	0.009	0.073	0.1501
2	6.58	**Sulfate**	BMB	0.003	0.015	0.1492
3	7.01	**Nitrate**	BMB	0.000	0.001	0.0212
TOTAL:				0.01	0.09	0.32



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 09:01**	*Run Time:*	**10.00**

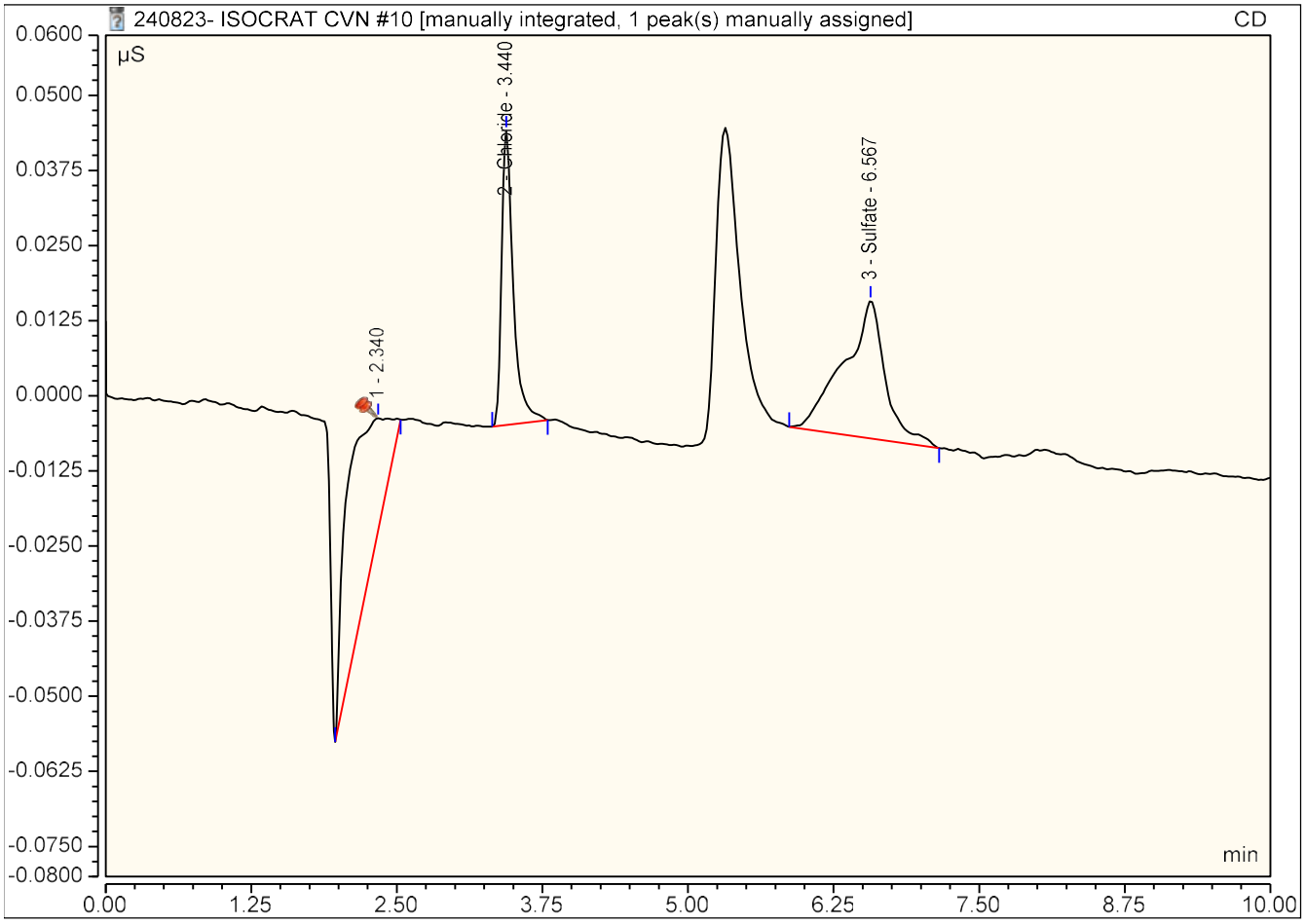
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.561	5.805	1.0174
3	3.44	**Chloride**	BMB*	4.073	33.906	9.9940
4	5.85	**Bromide**	BMB	0.121	0.822	0.9285
5	6.44	**Sulfate**	BM *	5.662	25.763	19.5452
6	6.96	**Nitrate**	MB*	1.222	5.532	1.0074
TOTAL:				11.64	71.83	32.49



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 09:14**	*Run Time:*	**10.00**

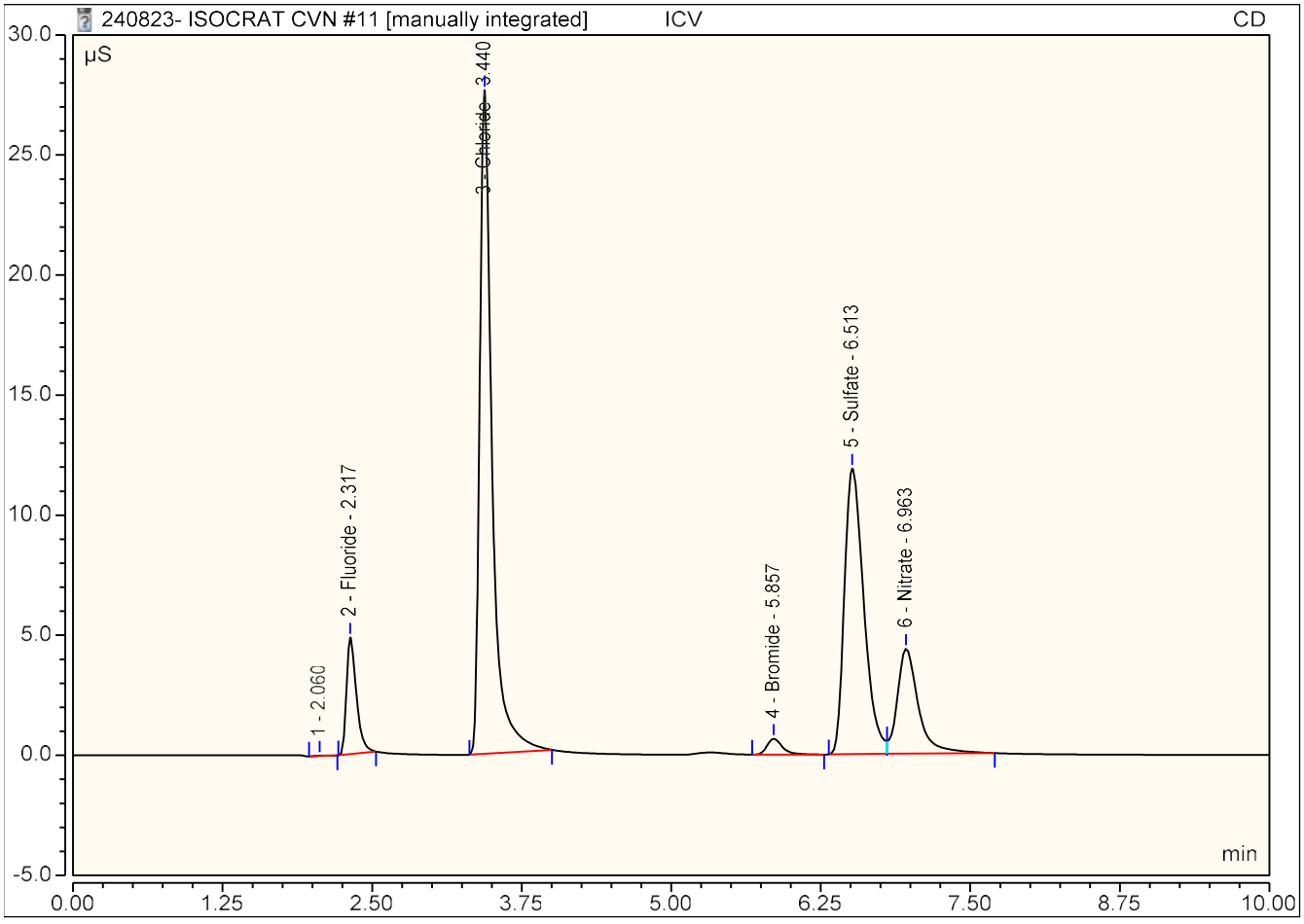
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.006	0.049	0.1418
3	6.57	**Sulfate**	BMB	0.009	0.023	0.1730
TOTAL:				0.02	0.07	0.31



Peak Integration Report

Sample Name:	**ICV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 09:26**	*Run Time:*	**10.00**

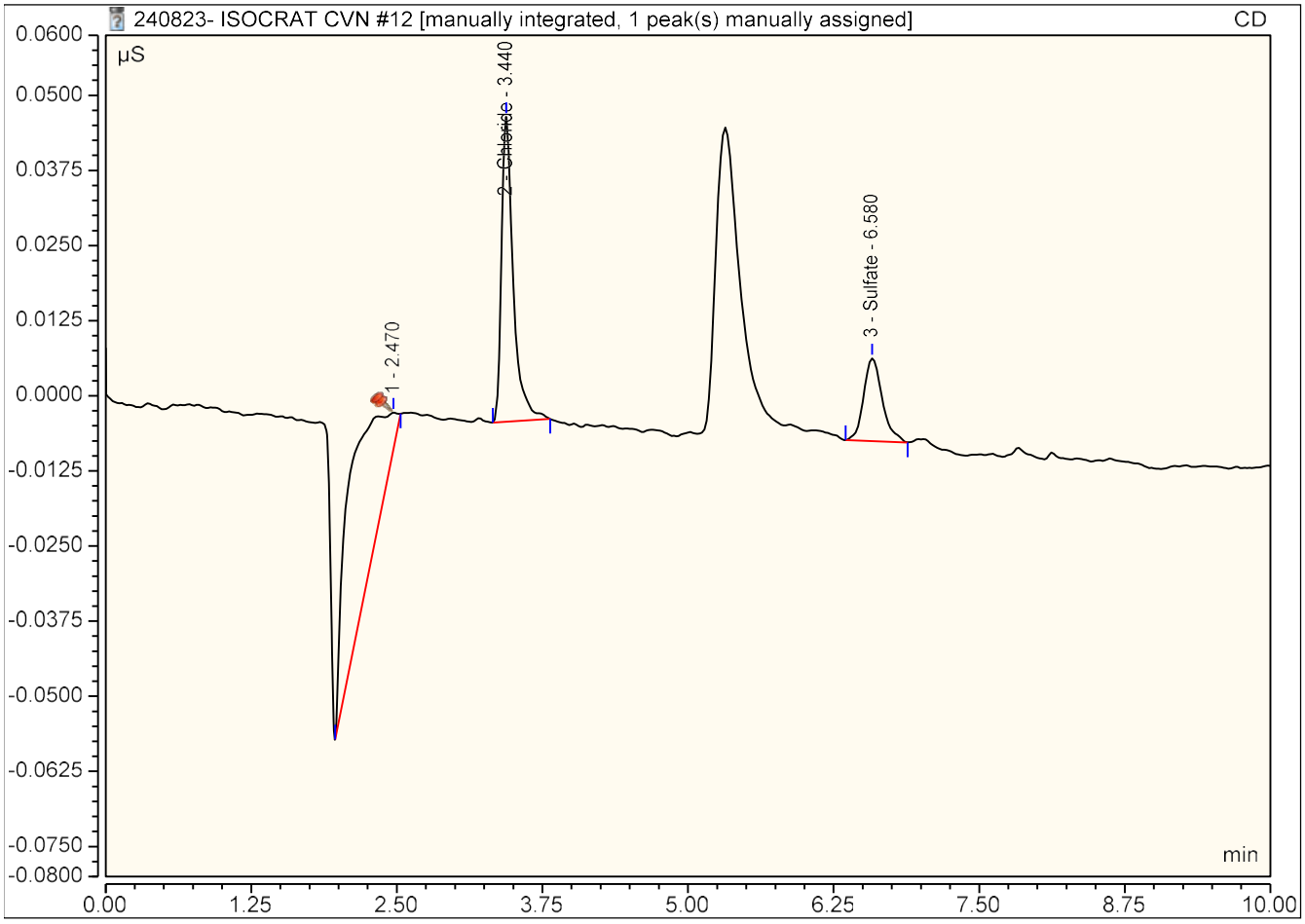
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.464	4.857	0.8466
3	3.44	**Chloride**	BMB*	3.305	27.635	8.1341
4	5.86	**Bromide**	BMB	0.099	0.665	0.7695
5	6.51	**Sulfate**	BM *	2.240	11.894	7.8181
6	6.96	**Nitrate**	MB*	0.891	4.372	0.7409
TOTAL:				7.00	49.42	18.31



Peak Integration Report

Sample Name:	**ICB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 09:38**	*Run Time:*	**10.00**

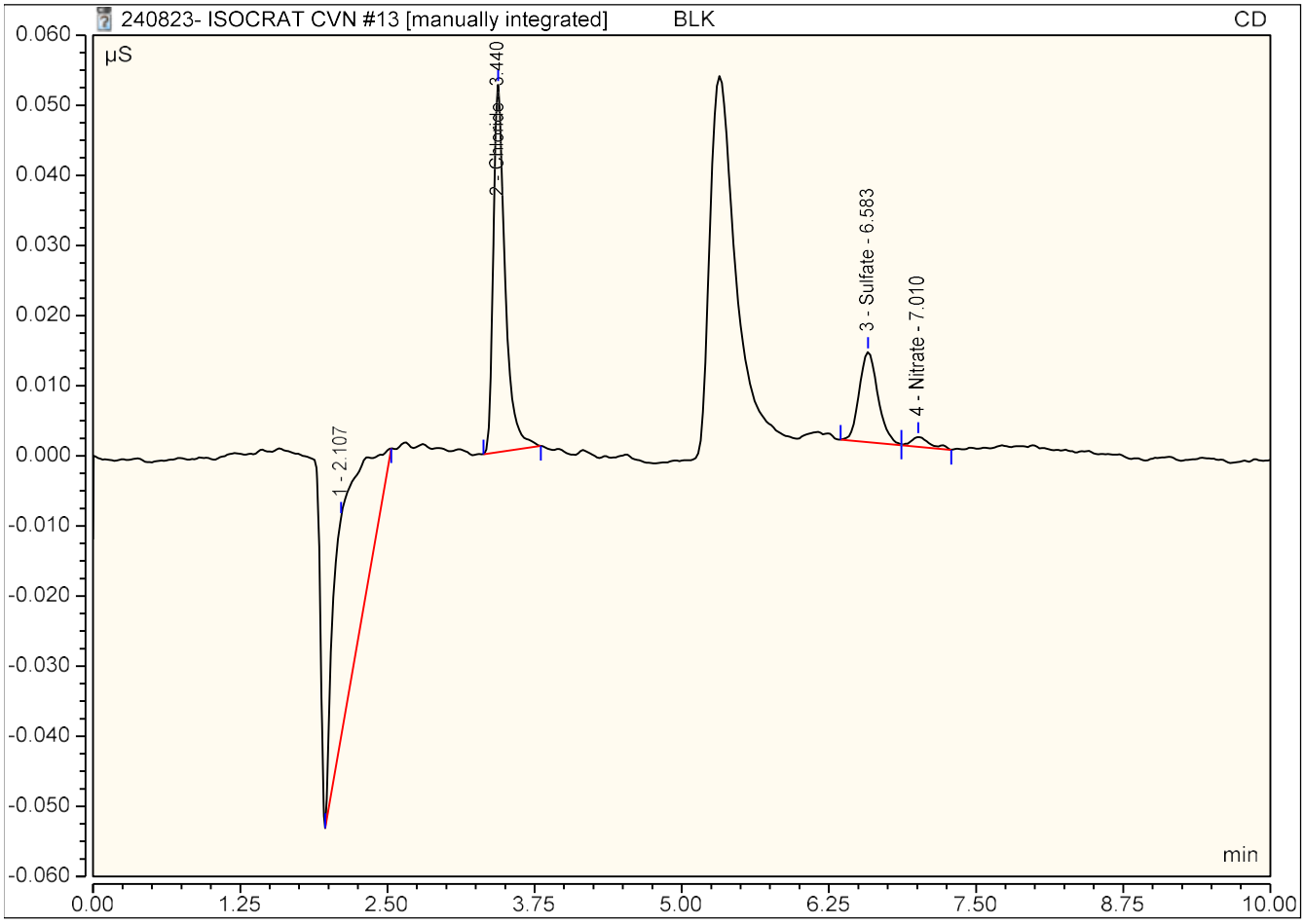
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.006	0.051	0.1423
3	6.58	**Sulfate**	BMB	0.003	0.014	0.1492
TOTAL:				0.01	0.06	0.29



Peak Integration Report

Sample Name:	**BLK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 09:50**	*Run Time:*	**10.00**

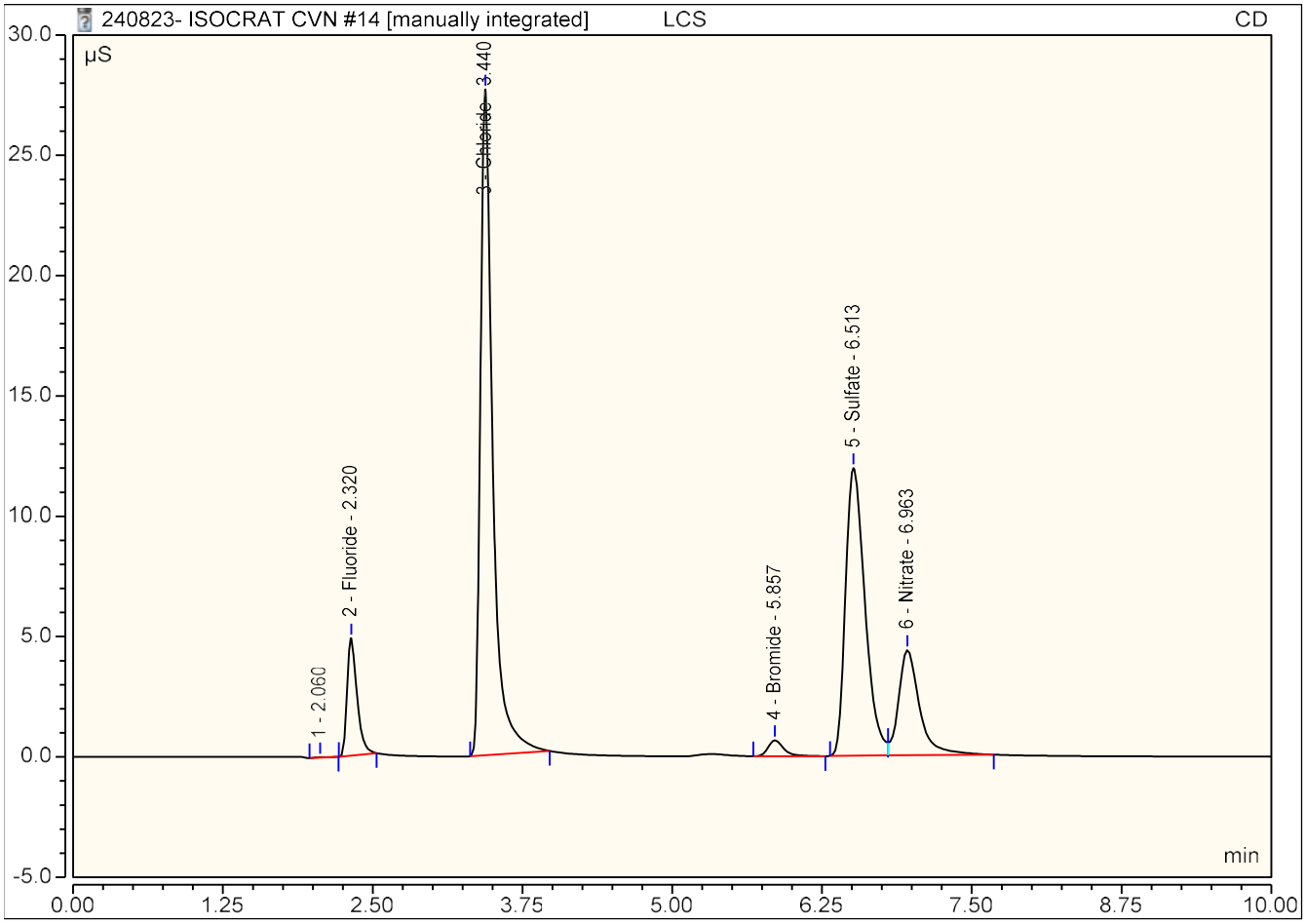
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.006	0.052	0.1428
3	6.58	**Sulfate**	BM *	0.002	0.013	0.1486
4	7.01	**Nitrate**	MB*	0.000	0.001	0.0213
TOTAL:				0.01	0.07	0.31



Peak Integration Report

Sample Name:	**LCS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 10:02**	*Run Time:*	**10.00**

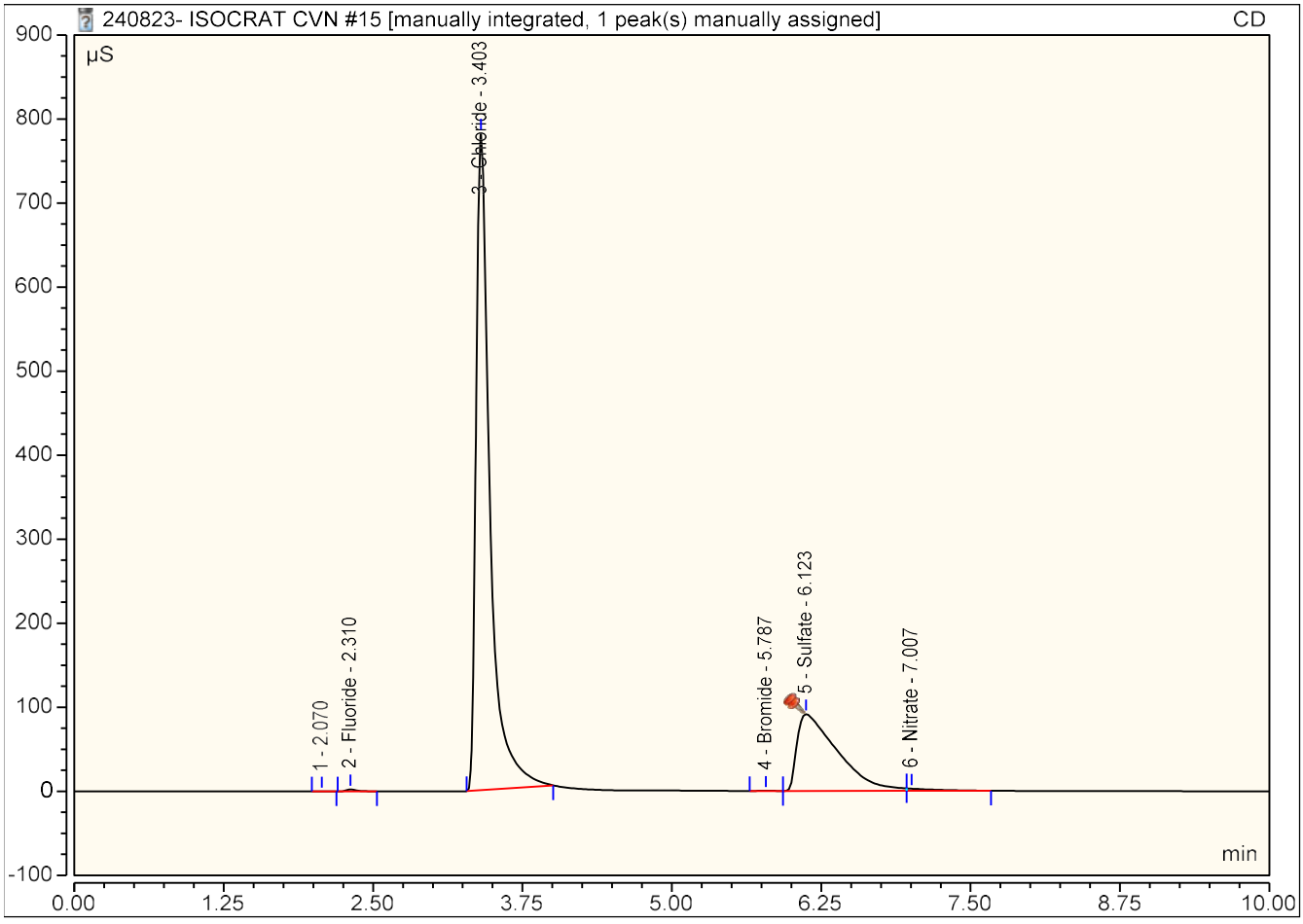
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.468	4.880	0.8522
3	3.44	**Chloride**	BMB*	3.303	27.671	8.1297
4	5.86	**Bromide**	BMB	0.099	0.666	0.7717
5	6.51	**Sulfate**	BM *	2.253	11.950	7.8625
6	6.96	**Nitrate**	MB*	0.889	4.374	0.7389
TOTAL:				7.01	49.54	18.35



Peak Integration Report

Sample Name:	**L2448084-01 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 10:14**	*Run Time:*	**10.00**

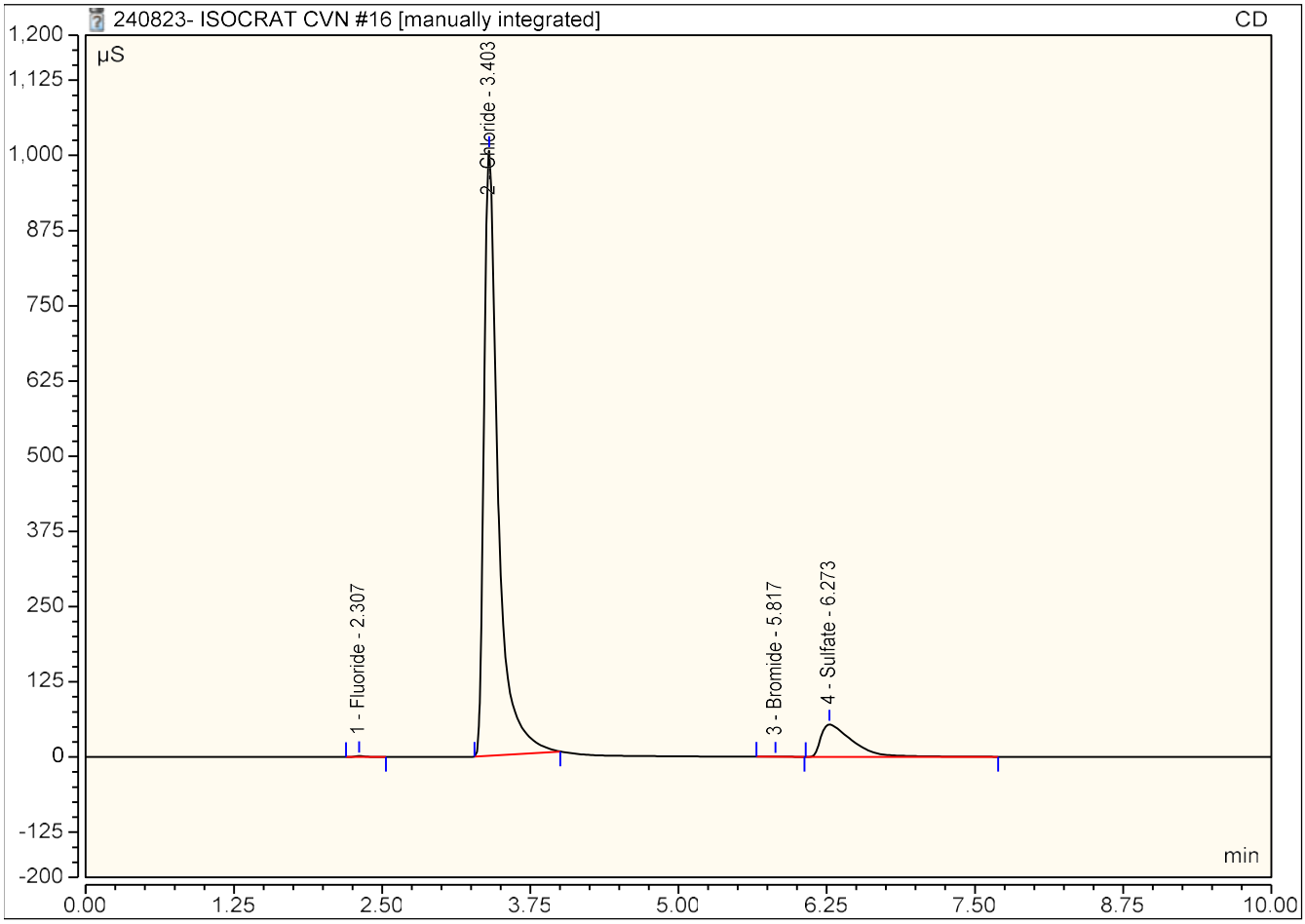
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.233	2.358	0.4390
3	3.40	**Chloride**	BMB*	105.625	781.399	255.9879
4	5.79	**Bromide**	BMb*	0.039	0.311	0.3243
5	6.12	**Sulfate**	bM *^	35.644	91.346	122.2977
6	7.01	**Nitrate**	MB*	0.726	2.591	0.6073
TOTAL:				142.27	878.01	379.66



Peak Integration Report

Sample Name:	**L2448084-02 SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 10:26**	*Run Time:*	**10.00**

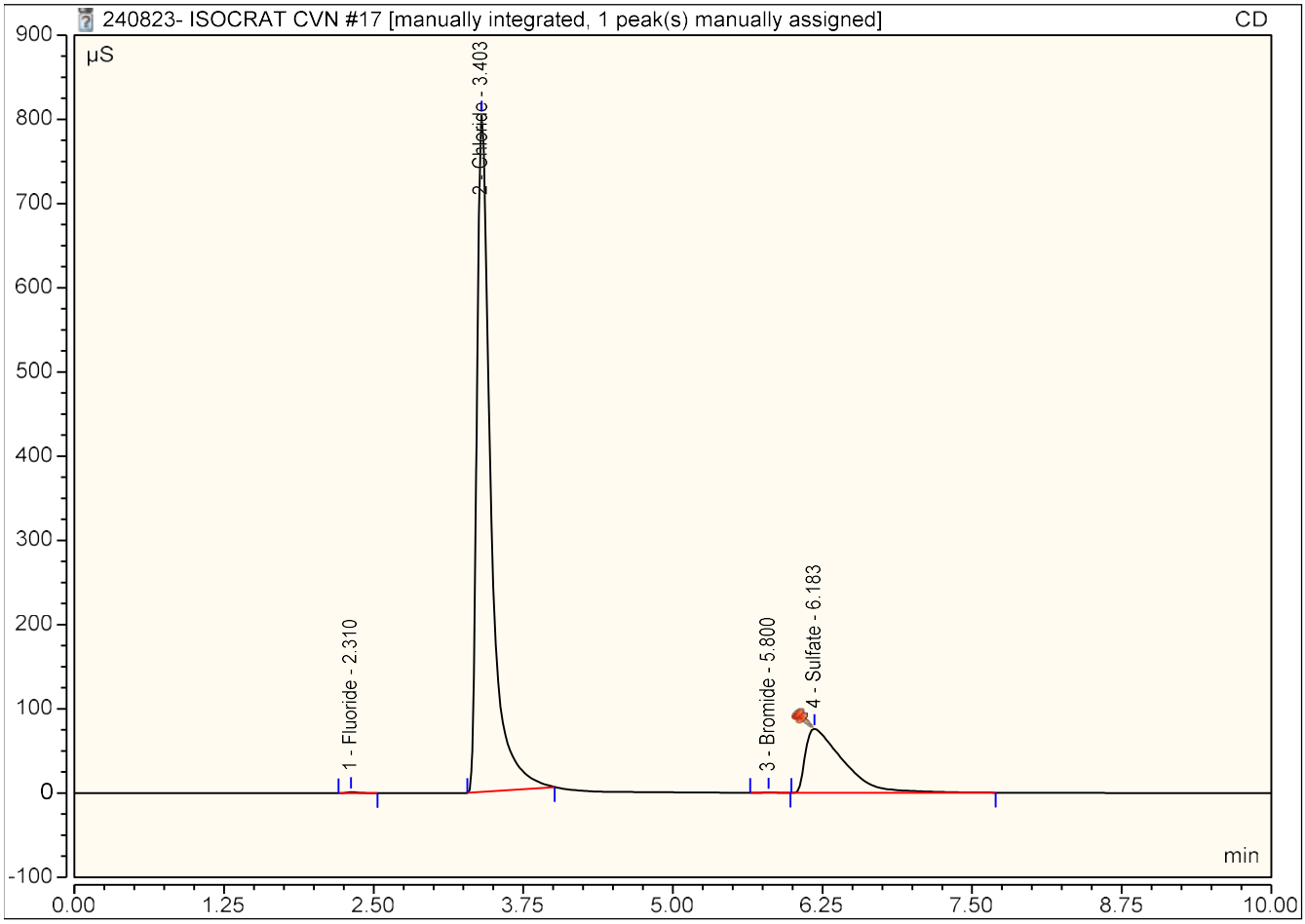
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.162	1.525	0.3139
2	3.40	**Chloride**	BMB*	139.139	1005.736	337.1695
3	5.82	**Bromide**	BMB	0.057	0.397	0.4558
4	6.27	**Sulfate**	BMB	16.515	53.758	56.7390
TOTAL:				155.87	1061.42	394.68



Peak Integration Report

Sample Name:	**L2448084-03 SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 10:38**	*Run Time:*	**10.00**

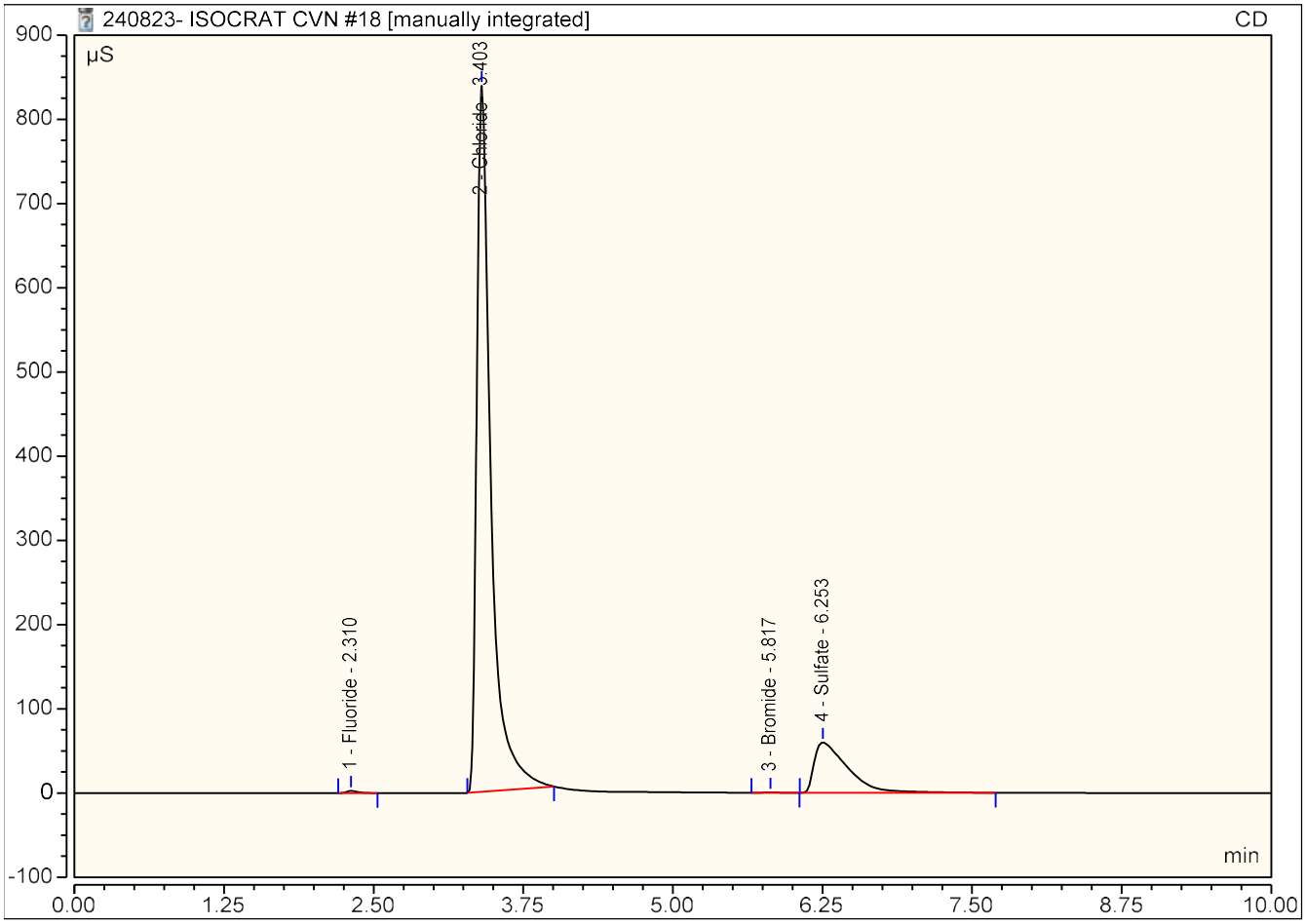
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.136	1.340	0.2682
2	3.40	**Chloride**	BMB*	109.523	803.279	265.4305
3	5.80	**Bromide**	BMB	0.054	0.395	0.4380
4	6.18	**Sulfate**	BMB^	27.757	76.104	95.2676
TOTAL:				137.47	881.12	361.40



Peak Integration Report

Sample Name:	**L2448084-04 SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 10:50**	*Run Time:*	**10.00**

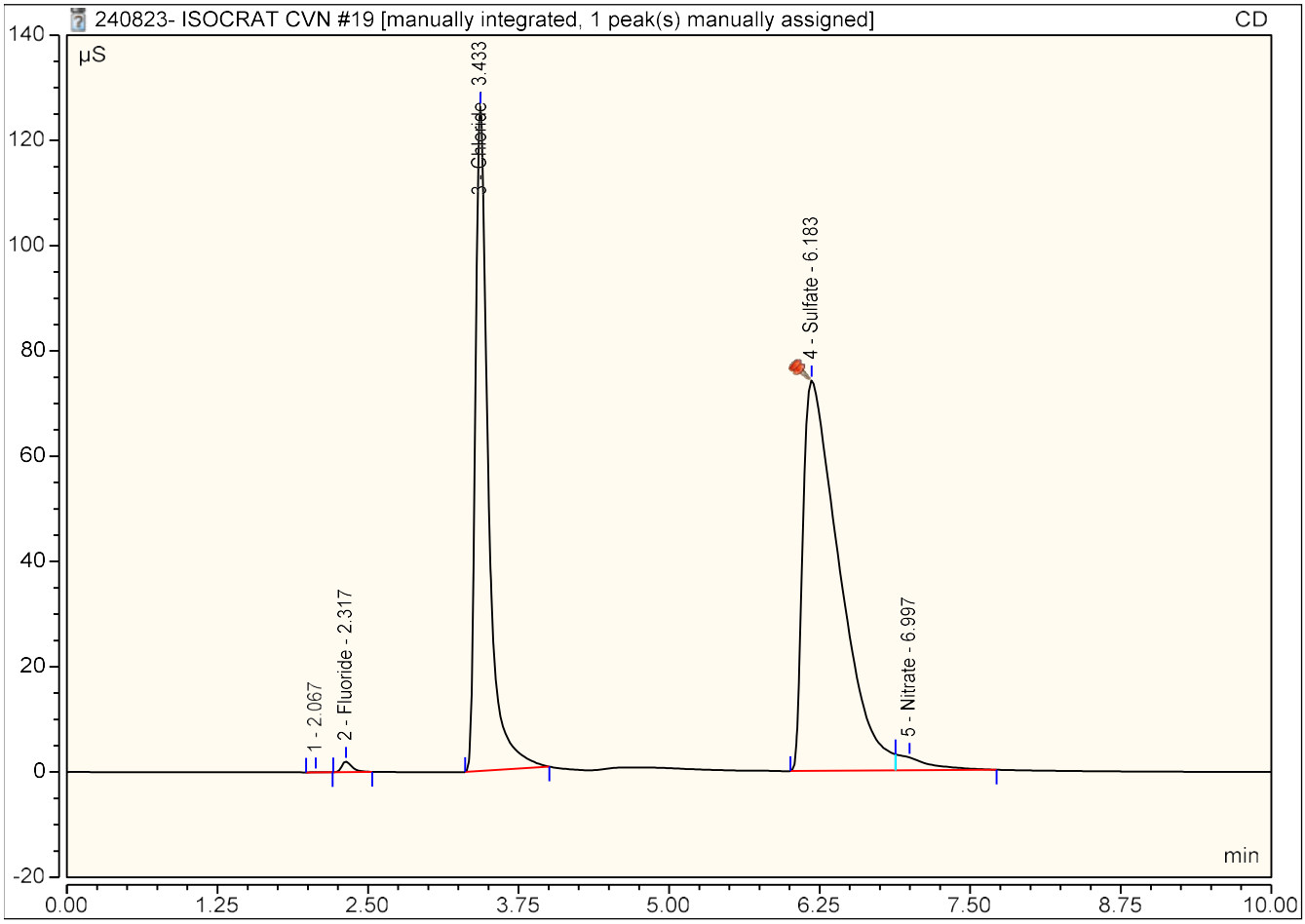
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.290	2.837	0.5397
2	3.40	**Chloride**	BMB*	114.498	838.402	277.4814
3	5.82	**Bromide**	BMB	0.068	0.456	0.5372
4	6.25	**Sulfate**	BMB	19.359	59.753	66.4848
TOTAL:				134.21	901.45	345.04



Peak Integration Report

Sample Name:	**L2448084-05 CL SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 11:02**	*Run Time:*	**10.00**

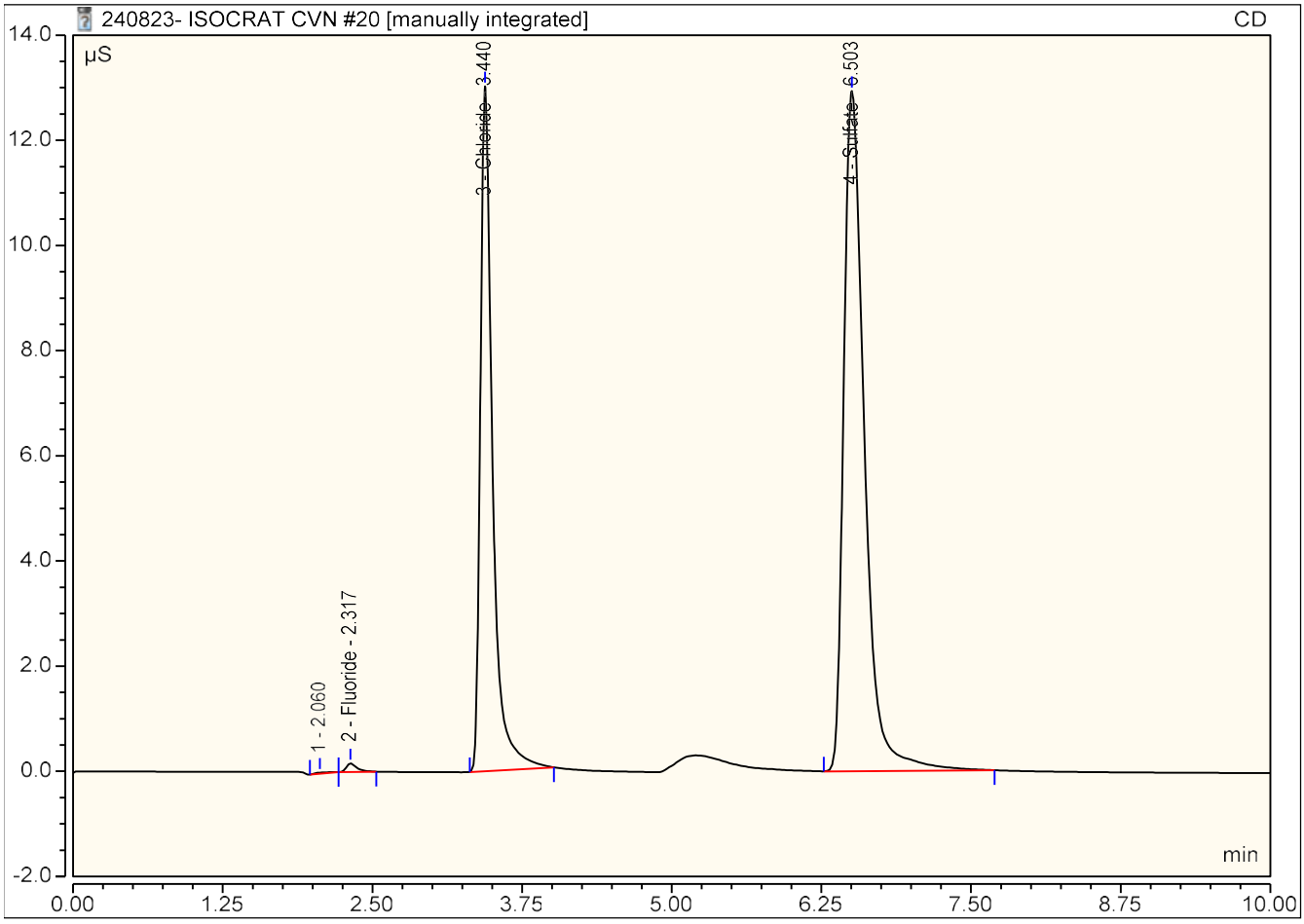
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.195	1.989	0.3713
3	3.43	**Chloride**	BMB*	15.746	126.125	38.2704
4	6.18	**Sulfate**	BM *^	25.985	74.211	89.1955
5	7.00	**Nitrate**	MB*	0.828	2.426	0.6900
TOTAL:				42.75	204.75	128.53



Peak Integration Report

Sample Name:	**XL2448084-05; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 11:14**	*Run Time:*	**10.00**

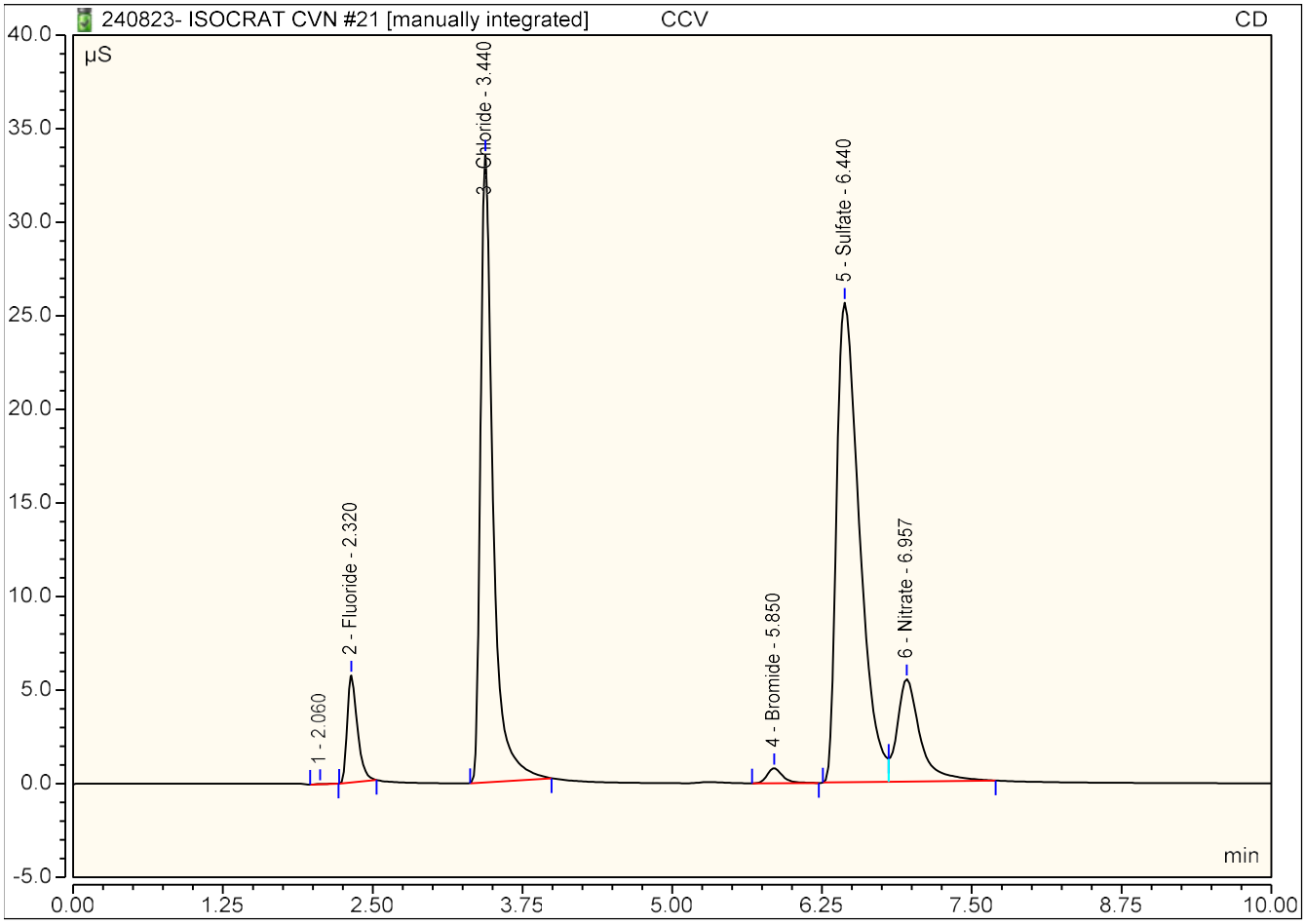
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.017	0.164	0.5698
3	3.44	**Chloride**	BMB*	1.532	13.025	38.3901
4	6.50	**Sulfate**	BMB	2.591	12.932	90.2177
TOTAL:				4.14	26.12	129.18



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 11:27**	*Run Time:*	**10.00**

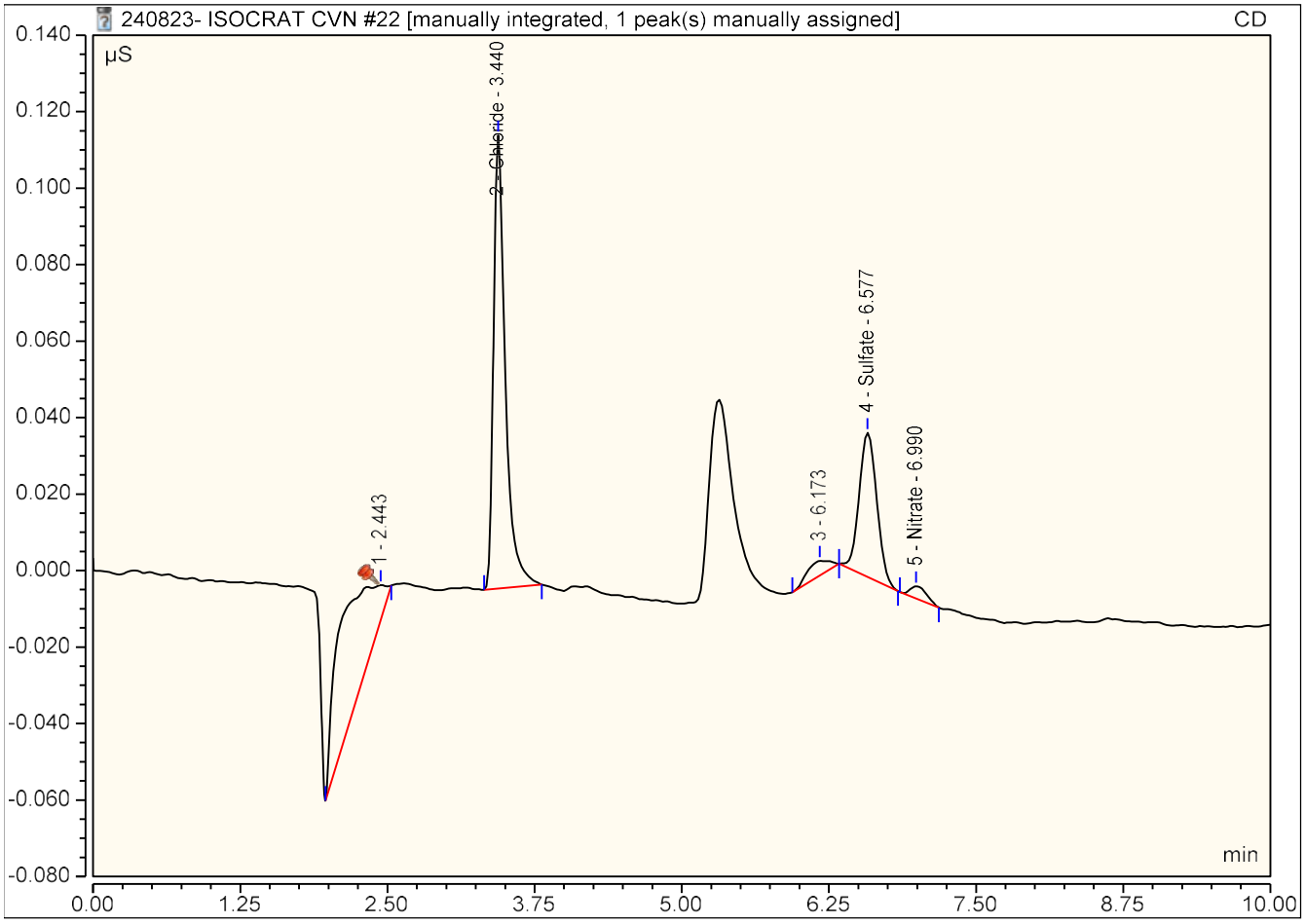
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.561	5.718	1.0171
3	3.44	**Chloride**	BMB*	4.067	33.529	9.9792
4	5.85	**Bromide**	BMB	0.119	0.801	0.9183
5	6.44	**Sulfate**	BM *	5.684	25.623	19.6205
6	6.96	**Nitrate**	MB*	1.215	5.476	1.0020
TOTAL:				11.65	71.15	32.54



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 11:39**	*Run Time:*	**10.00**

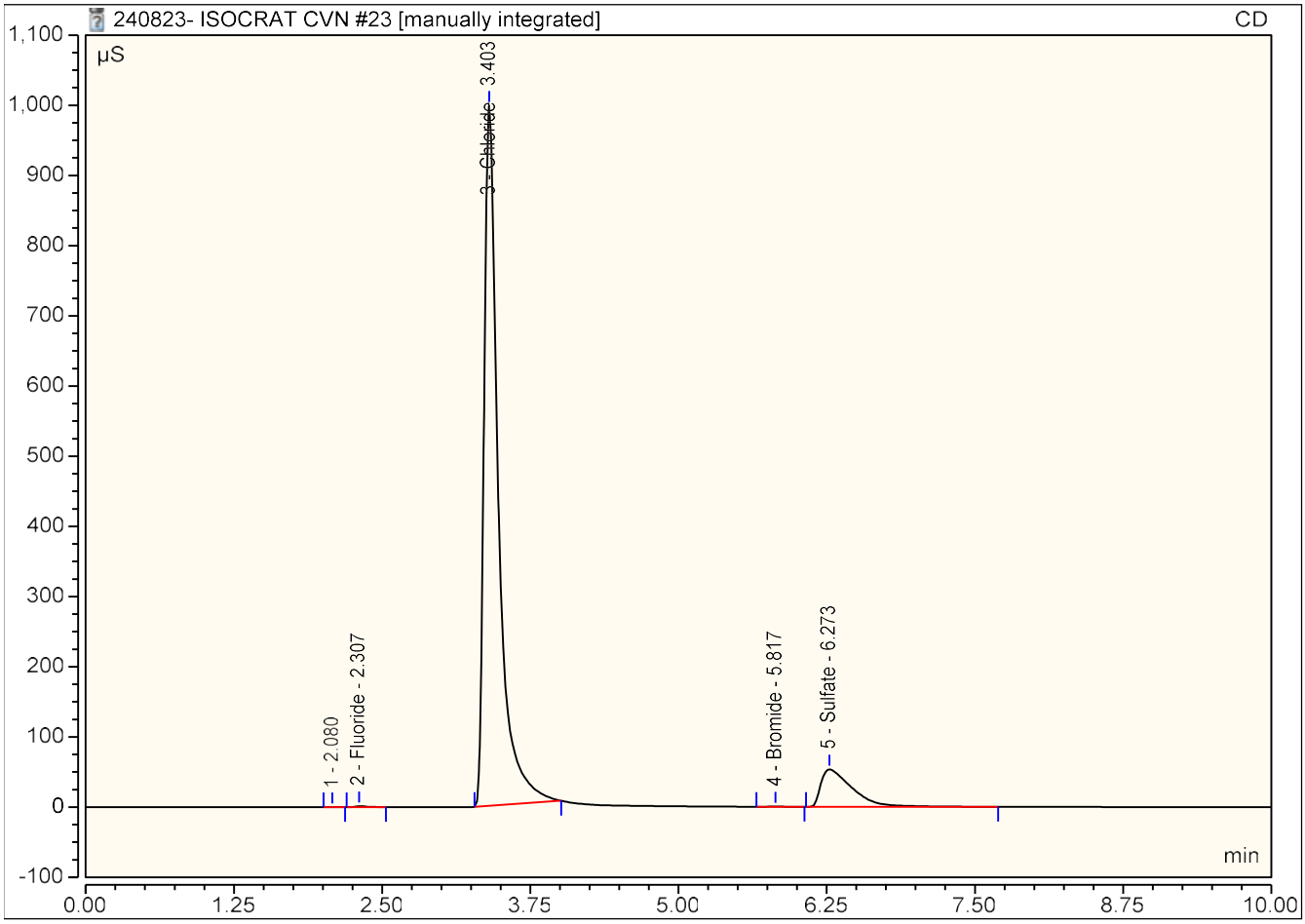
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.014	0.118	0.1613
4	6.58	**Sulfate**	BMB	0.007	0.038	0.1630
5	6.99	**Nitrate**	BMB	0.001	0.003	0.0215
TOTAL:				0.02	0.16	0.35



Peak Integration Report

Sample Name:	**L2448084-06 SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 11:51**	*Run Time:*	**10.00**

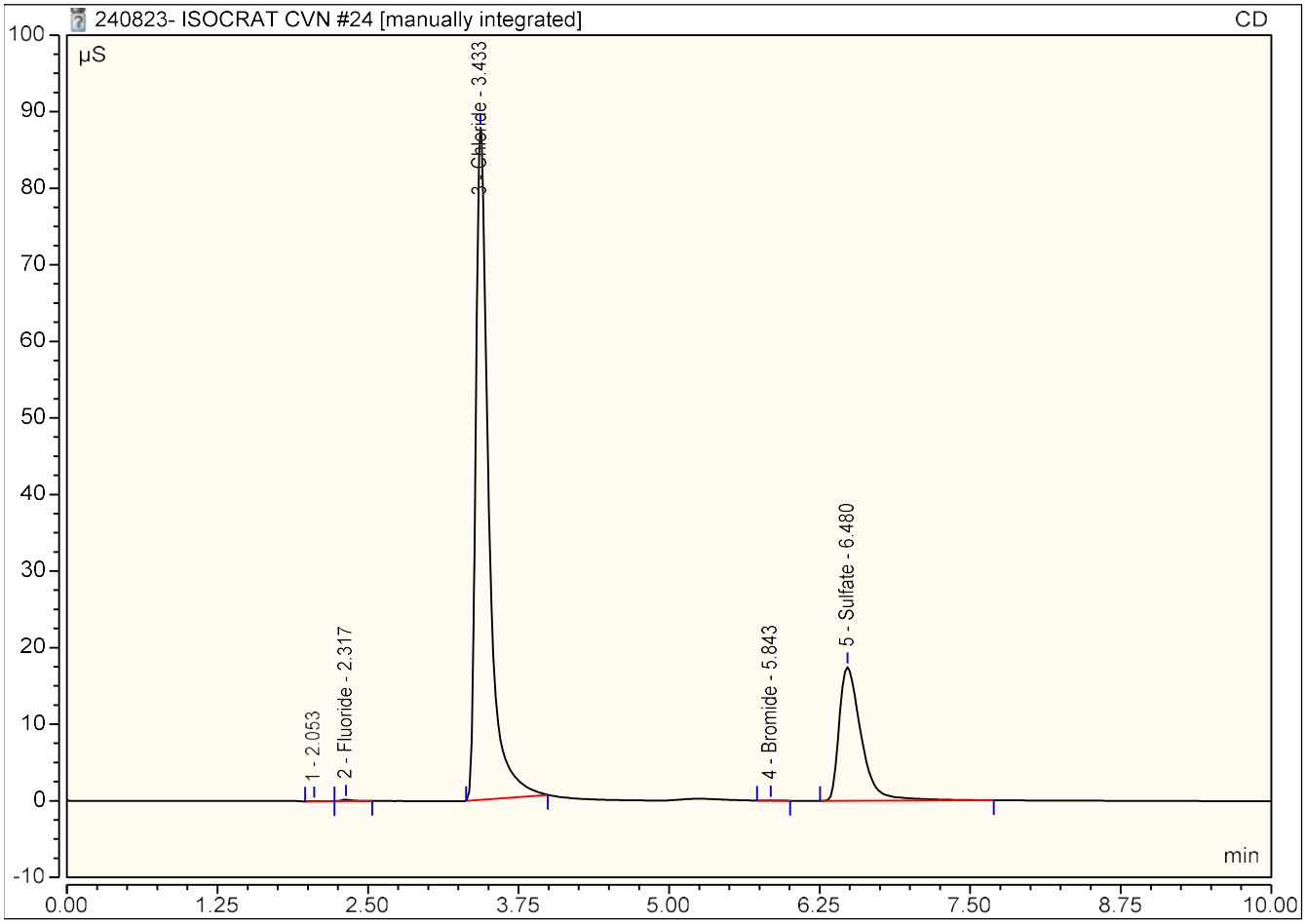
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.157	1.462	0.3042
3	3.40	**Chloride**	BMB*	139.732	997.681	338.6068
4	5.82	**Bromide**	BMB	0.058	0.398	0.4623
5	6.27	**Sulfate**	BMB	16.397	53.377	56.3344
TOTAL:				156.34	1052.92	395.71



Peak Integration Report

Sample Name:	**L2448084-01; 10X CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 12:03**	*Run Time:*	**10.00**

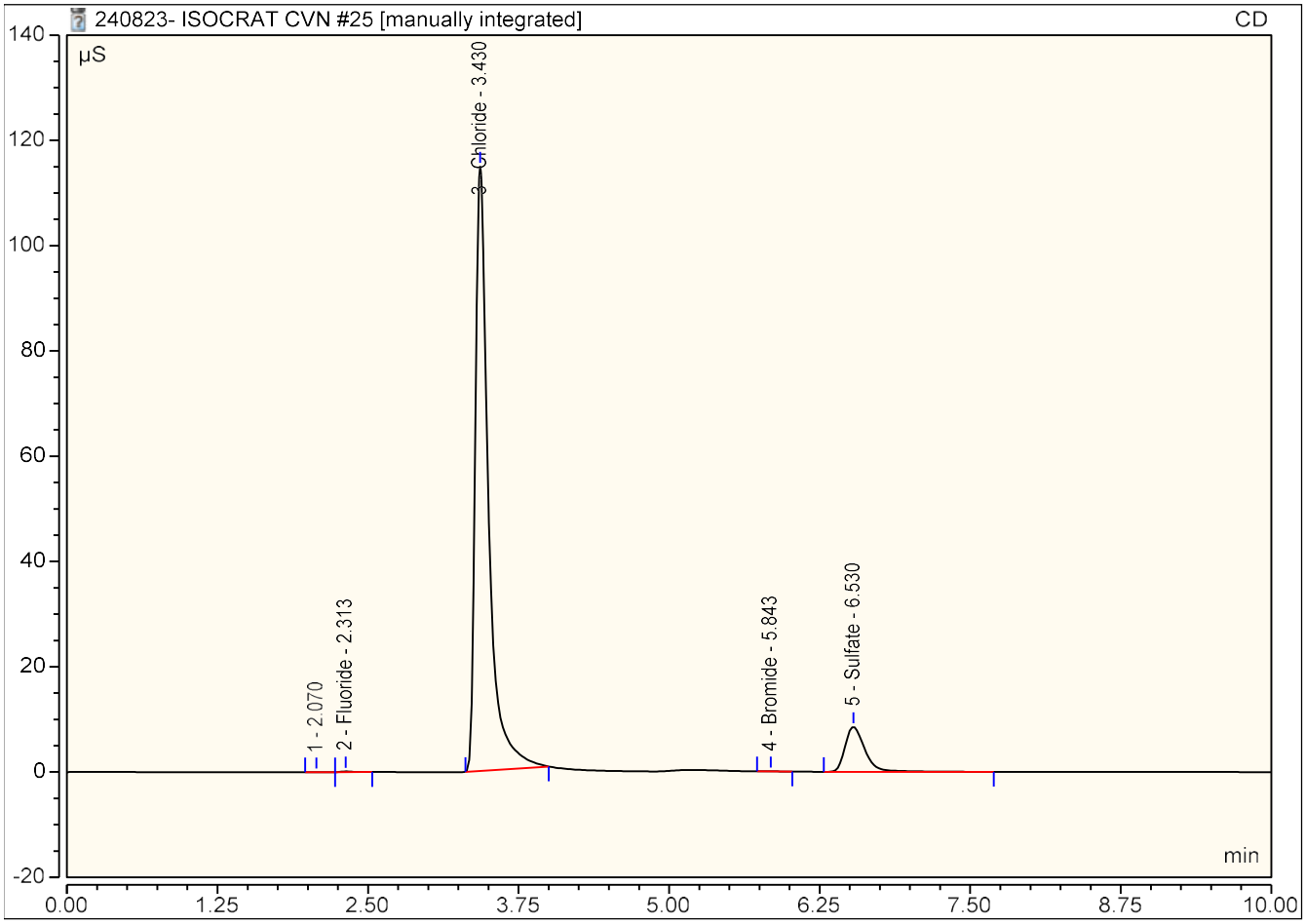
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.020	0.197	0.6340
3	3.43	**Chloride**	BMB*	10.990	87.753	267.4983
4	5.84	**Bromide**	BMB	0.003	0.024	0.5609
5	6.48	**Sulfate**	BMB	3.715	17.470	128.7332
TOTAL:				14.73	105.44	397.43



Peak Integration Report

Sample Name:	**L2448084-02; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 12:15**	*Run Time:*	**10.00**

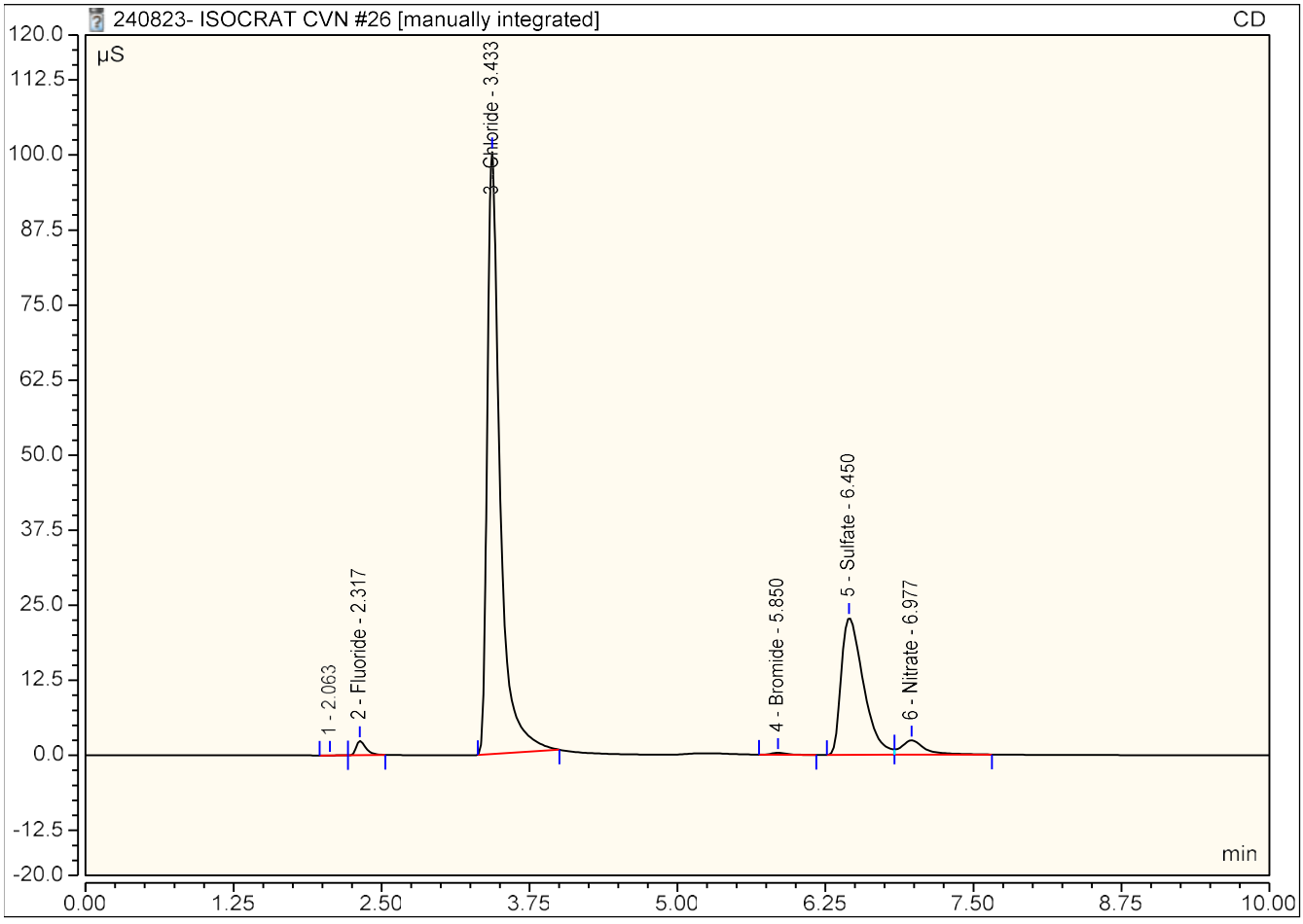
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.014	0.132	0.5187
3	3.43	**Chloride**	BMB*	14.522	114.824	353.0630
4	5.84	**Bromide**	BMB	0.004	0.027	0.6106
5	6.53	**Sulfate**	BMB	1.636	8.517	57.4675
TOTAL:				16.18	123.50	411.66



Peak Integration Report

Sample Name:	**L2448084-03 MS; 10X CL SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 12:27**	*Run Time:*	**10.00**

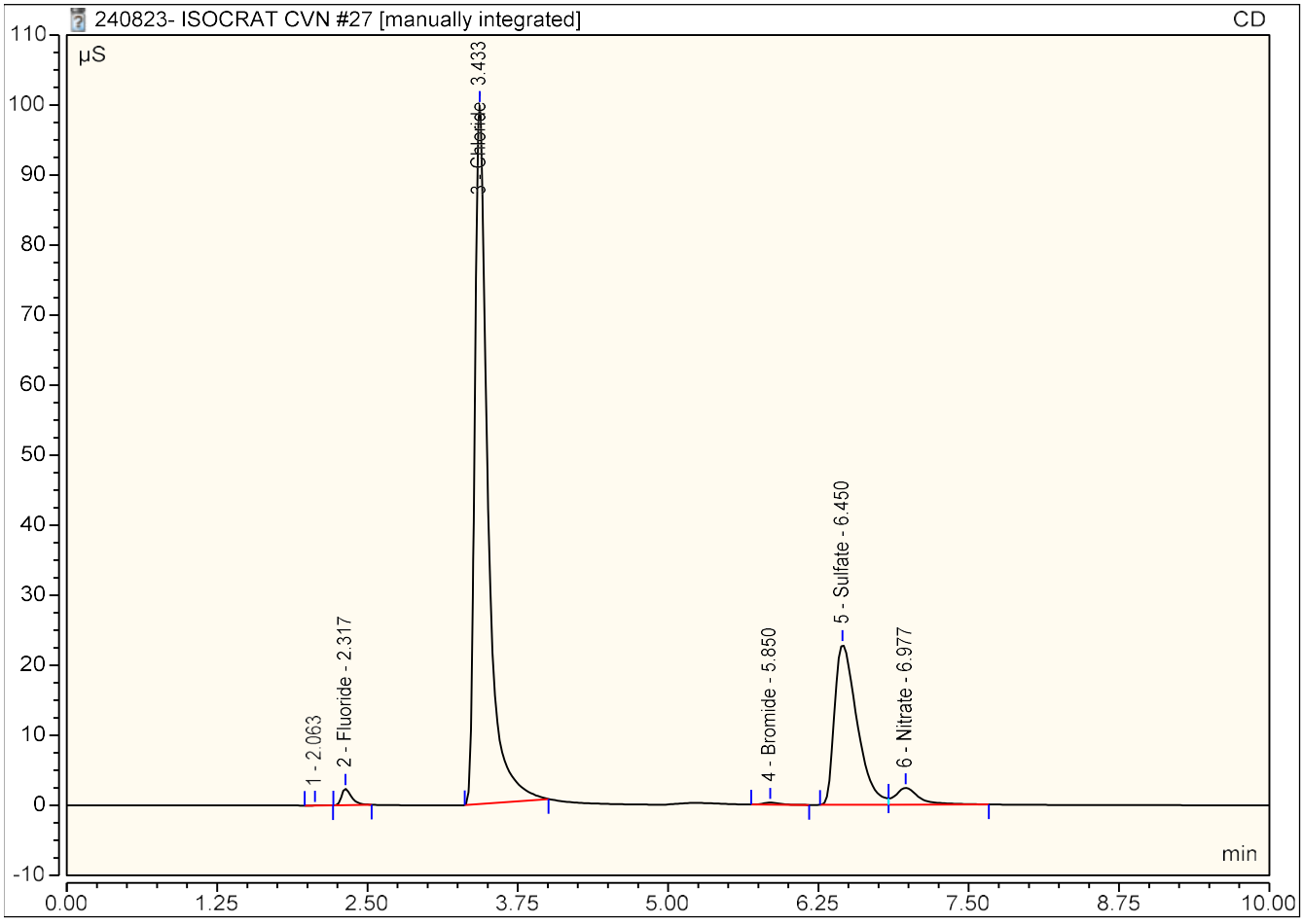
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.229	2.394	4.3123
3	3.43	**Chloride**	BMB*	12.659	100.289	307.9297
4	5.85	**Bromide**	BMB	0.047	0.321	3.8176
5	6.45	**Sulfate**	BM *	4.974	22.848	171.8627
6	6.98	**Nitrate**	MB*	0.549	2.406	4.6471
TOTAL:				18.46	128.26	492.57



Peak Integration Report

Sample Name:	**L2448084-03 MSD; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 12:39**	*Run Time:*	**10.00**

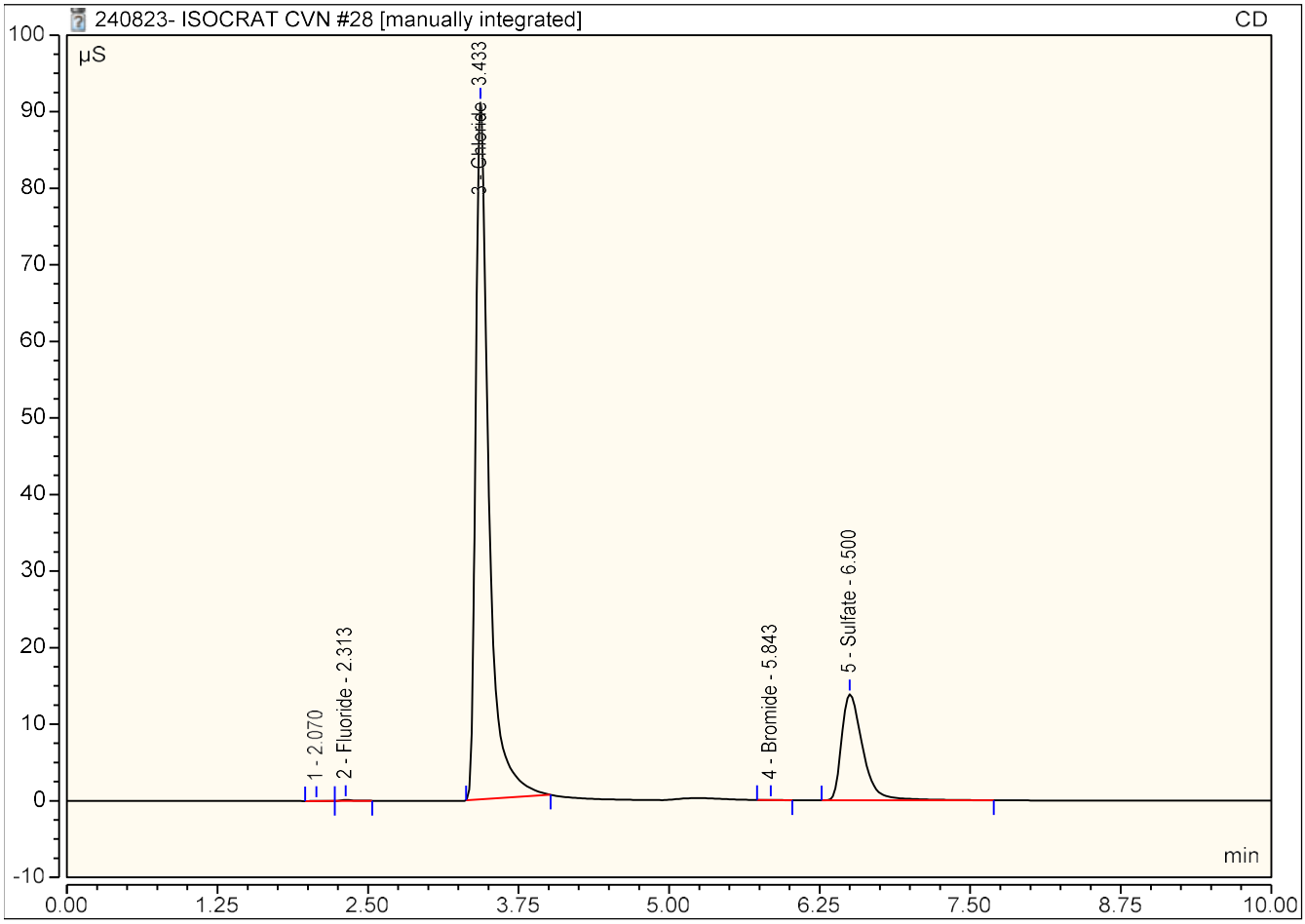
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.228	2.355	4.3044
3	3.43	**Chloride**	BMB*	12.685	99.709	308.5468
4	5.85	**Bromide**	BMB	0.047	0.321	3.8017
5	6.45	**Sulfate**	BM *	4.980	22.841	172.0822
6	6.98	**Nitrate**	MB*	0.549	2.404	4.6402
TOTAL:				18.49	127.63	493.38



Peak Integration Report

Sample Name:	**L2448084-03; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 12:51**	*Run Time:*	**10.00**

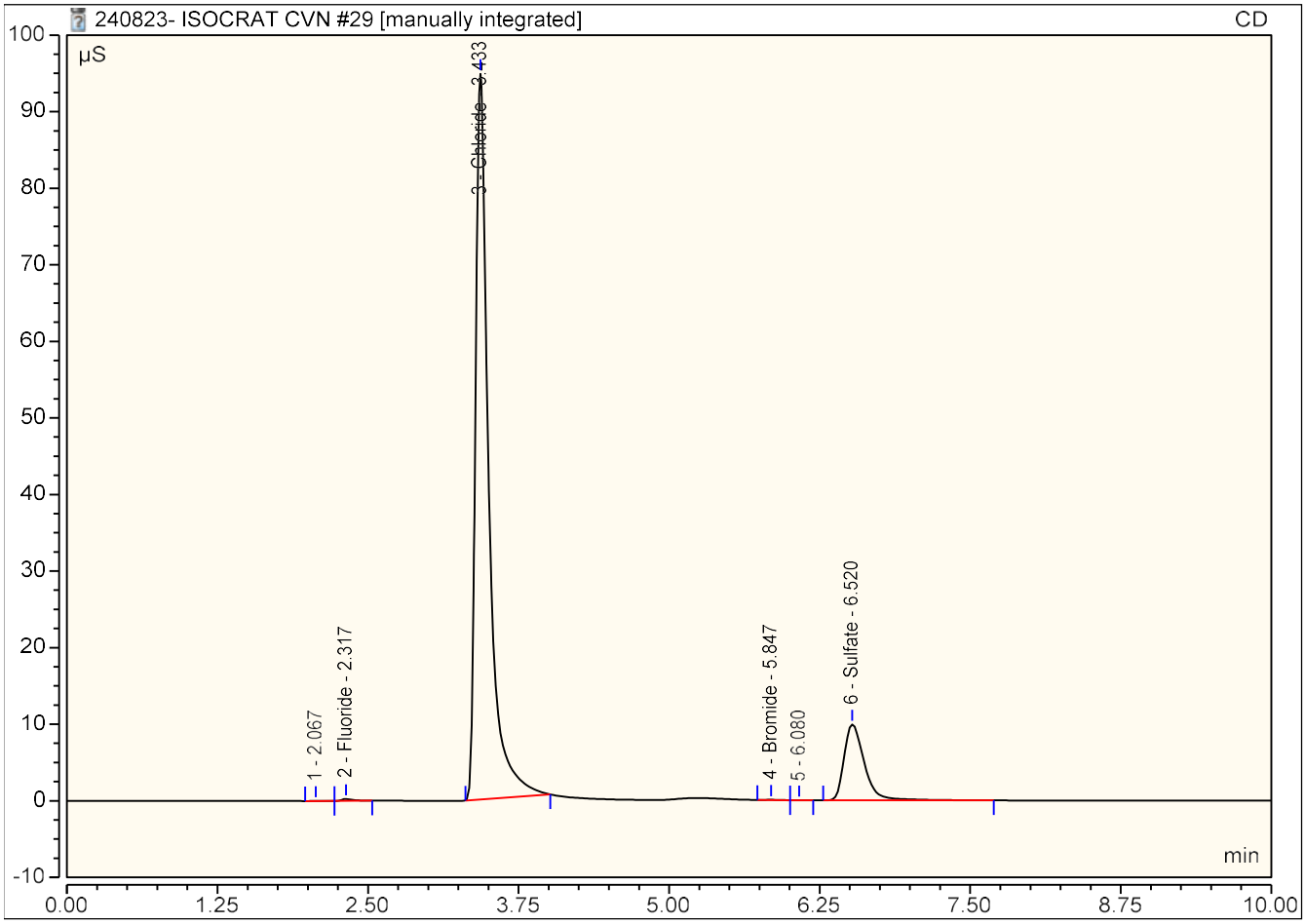
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.012	0.115	0.4896
3	3.43	**Chloride**	BMB*	11.557	91.004	281.2342
4	5.84	**Bromide**	BMB	0.004	0.029	0.6248
5	6.50	**Sulfate**	BMB	2.834	13.877	98.5462
TOTAL:				14.41	105.02	380.89



Peak Integration Report

Sample Name:	**L2448084-04; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 13:03**	*Run Time:*	**10.00**

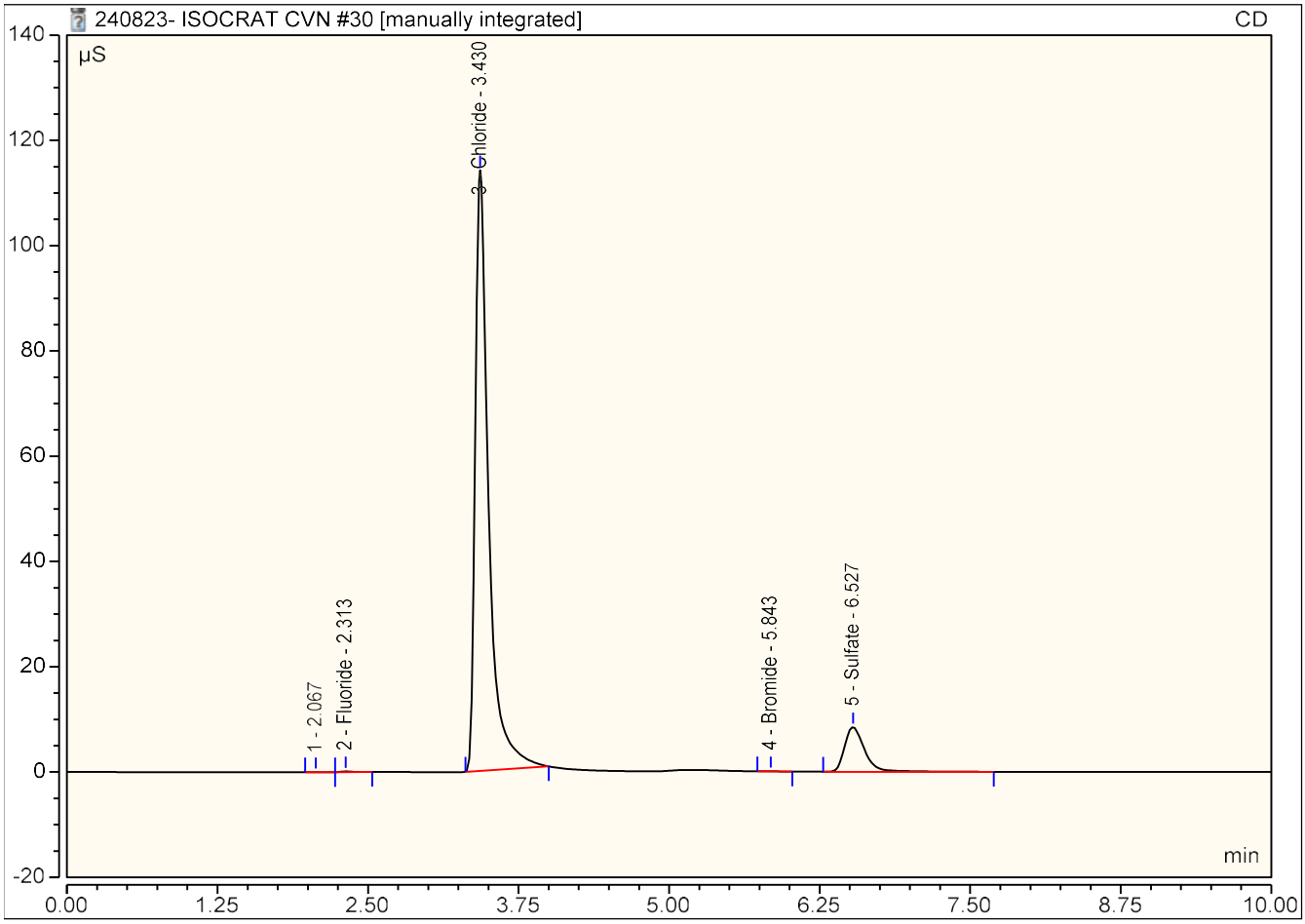
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.025	0.238	0.7109
3	3.43	**Chloride**	BMB*	12.040	94.763	292.9414
4	5.85	**Bromide**	BMB	0.004	0.031	0.6251
6	6.52	**Sulfate**	BMB	1.943	9.917	67.9854
TOTAL:				14.01	104.95	362.26



Peak Integration Report

Sample Name:	**L2448084-06; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 13:15**	*Run Time:*	**10.00**

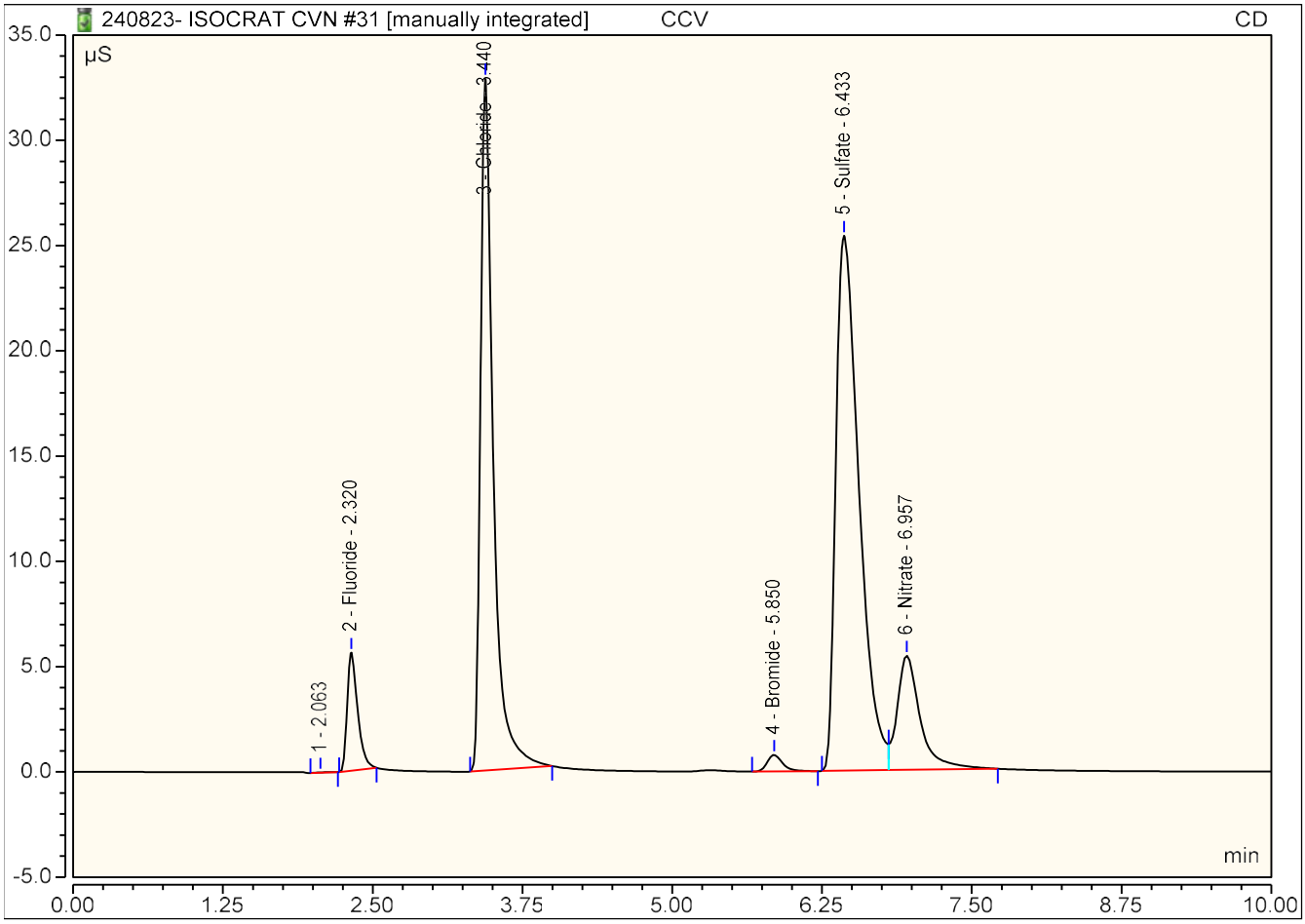
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.014	0.128	0.5250
3	3.43	**Chloride**	BMB*	14.614	114.095	355.2901
4	5.84	**Bromide**	BMB	0.004	0.027	0.6079
5	6.53	**Sulfate**	BMB	1.636	8.461	57.4562
TOTAL:				16.27	122.71	413.88



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 13:27**	*Run Time:*	**10.00**

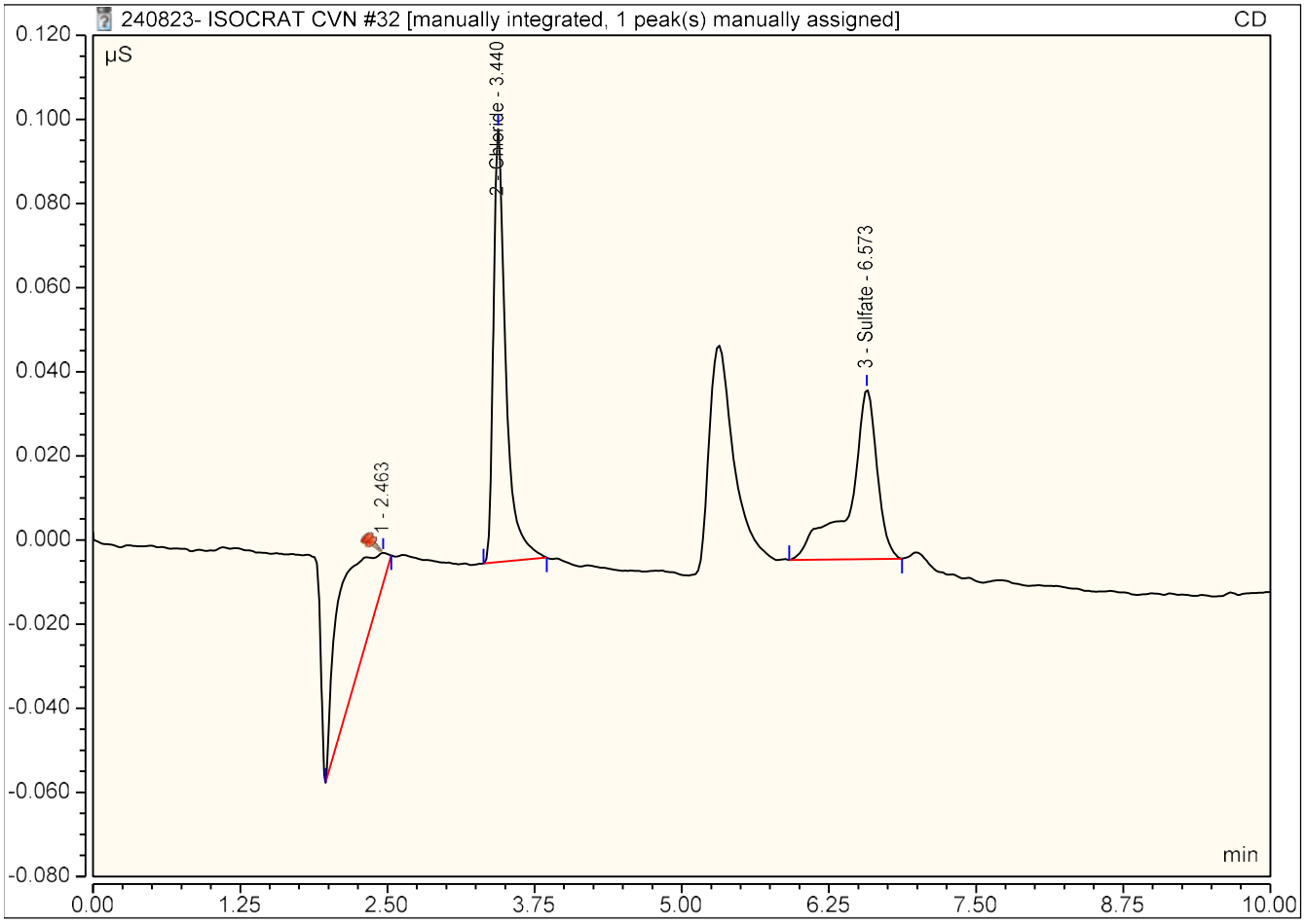
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.561	5.609	1.0177
3	3.44	**Chloride**	BMB*	4.063	32.876	9.9700
4	5.85	**Bromide**	BMB	0.119	0.790	0.9134
5	6.43	**Sulfate**	BM *	5.702	25.395	19.6822
6	6.96	**Nitrate**	MB*	1.212	5.424	0.9998
TOTAL:				11.66	70.09	32.58



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 13:40**	*Run Time:*	**10.00**

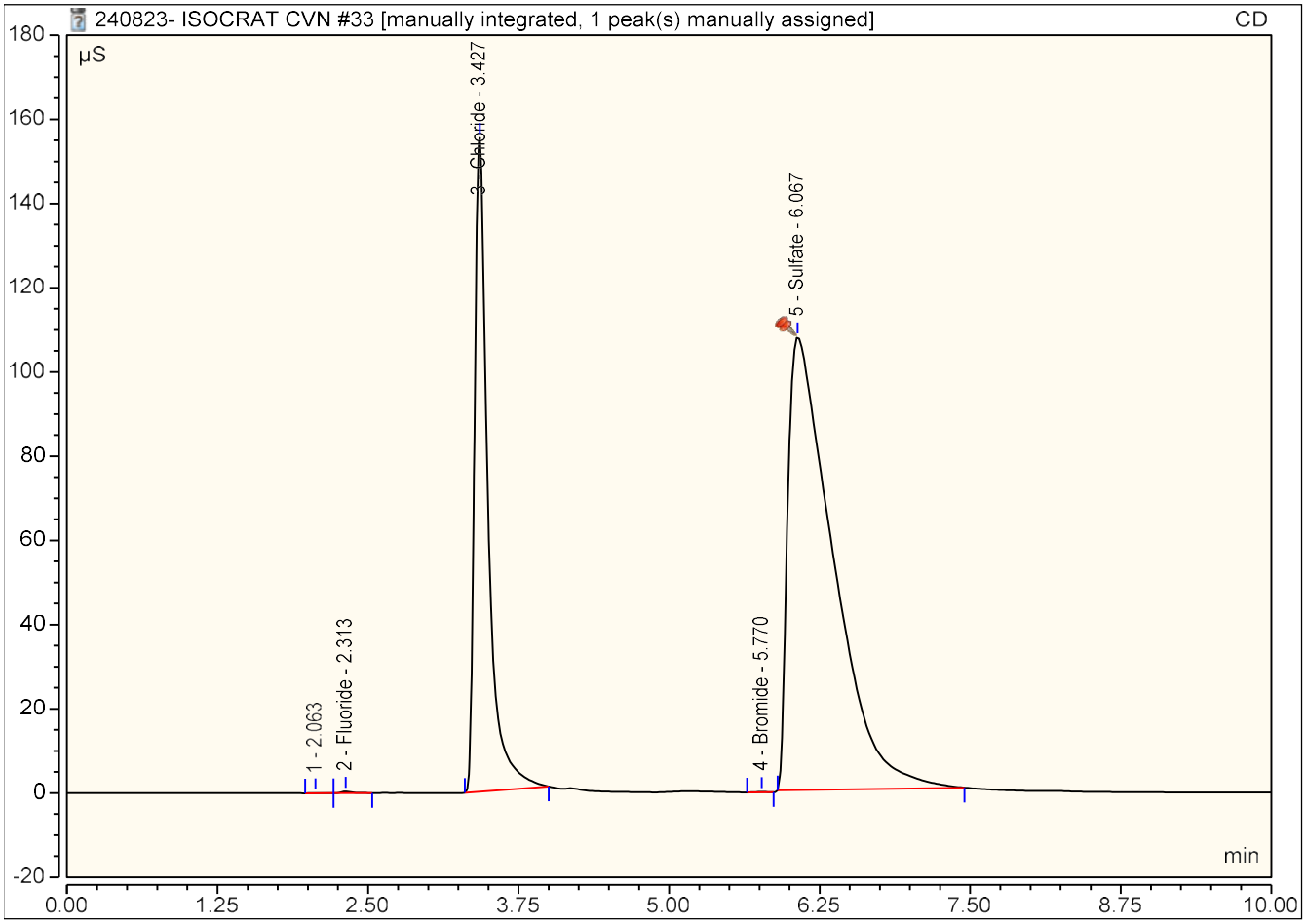
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.012	0.103	0.1583
3	6.57	**Sulfate**	BMB	0.011	0.040	0.1784
TOTAL:				0.02	0.14	0.34



Peak Integration Report

Sample Name:	**L2447503-01**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 13:52**	*Run Time:*	**10.00**

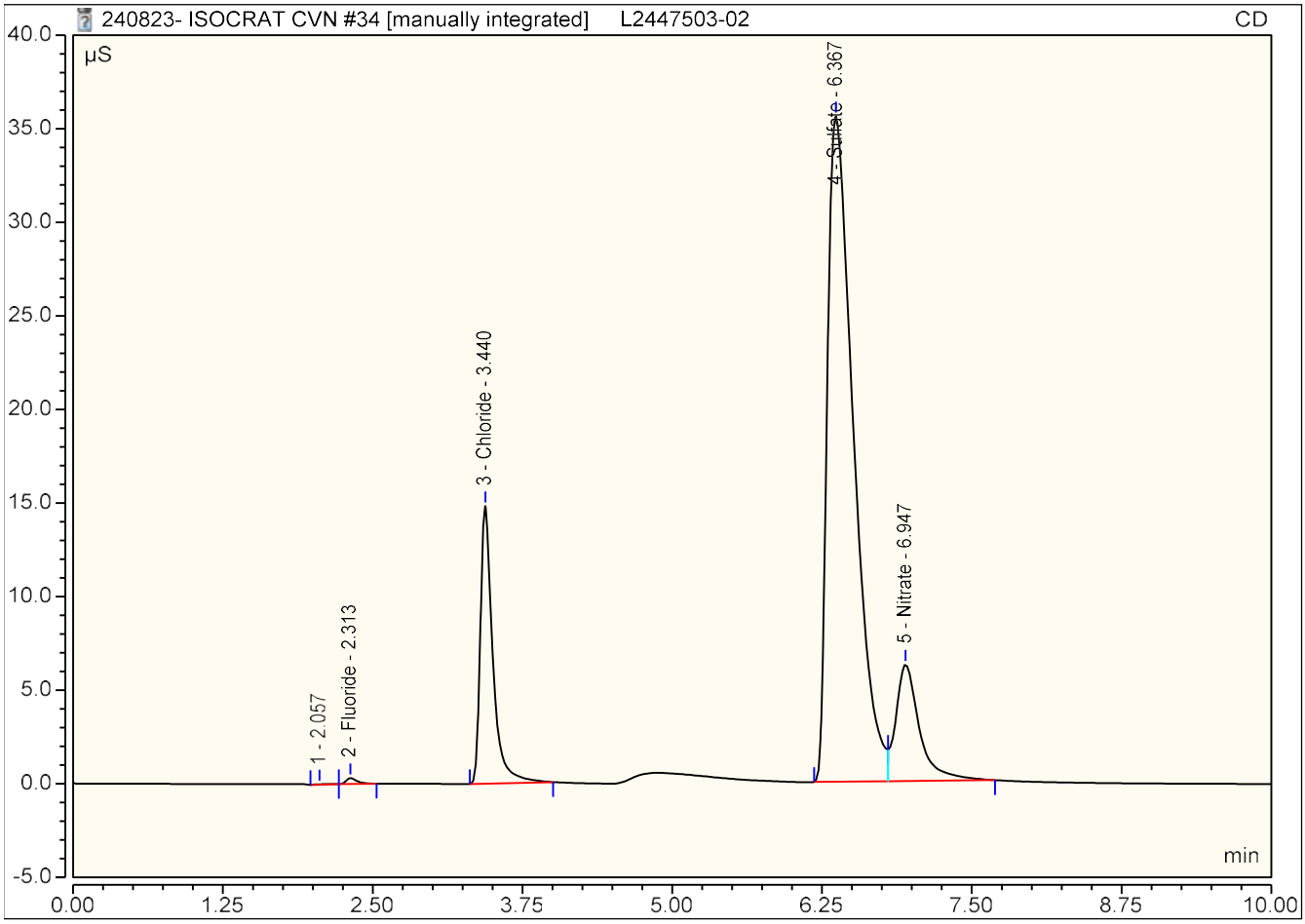
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.037	0.359	0.0932
3	3.43	**Chloride**	BMB*	20.171	155.357	48.9889
4	5.77	**Bromide**	BMB	0.012	0.108	0.1212
5	6.07	**Sulfate**	BMB*^	46.772	107.547	160.4342
TOTAL:				66.99	263.37	209.64



Peak Integration Report

Sample Name:	**L2447503-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 14:04**	*Run Time:*	**10.00**

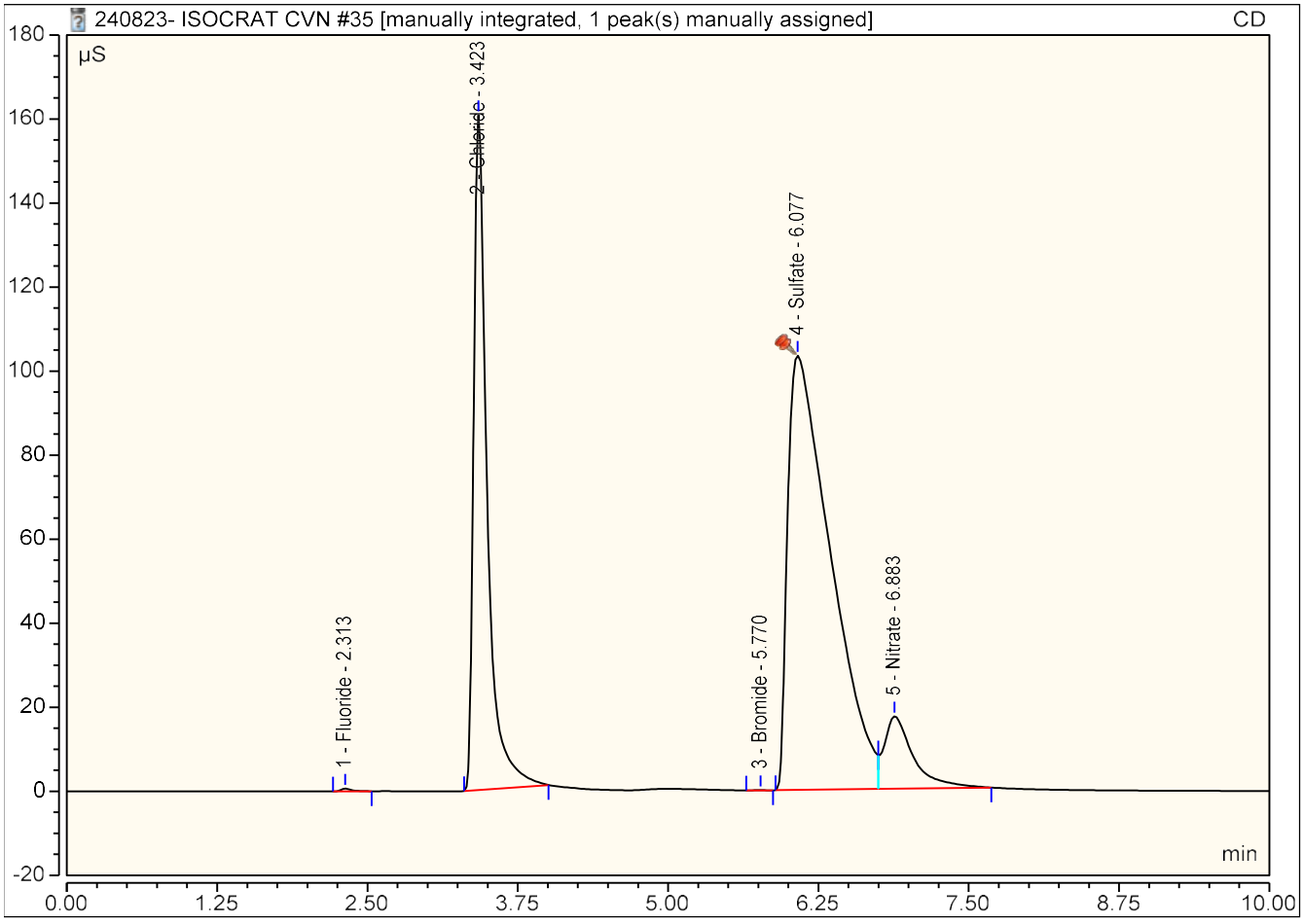
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.032	0.318	0.0849
3	3.44	**Chloride**	BMB*	1.781	14.822	4.4425
4	6.37	**Sulfate**	BM *	8.985	35.549	30.9344
5	6.95	**Nitrate**	MB*	1.429	6.223	1.1748
TOTAL:				12.23	56.91	36.64



Peak Integration Report

Sample Name:	**L2447503-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 14:16**	*Run Time:*	**10.00**

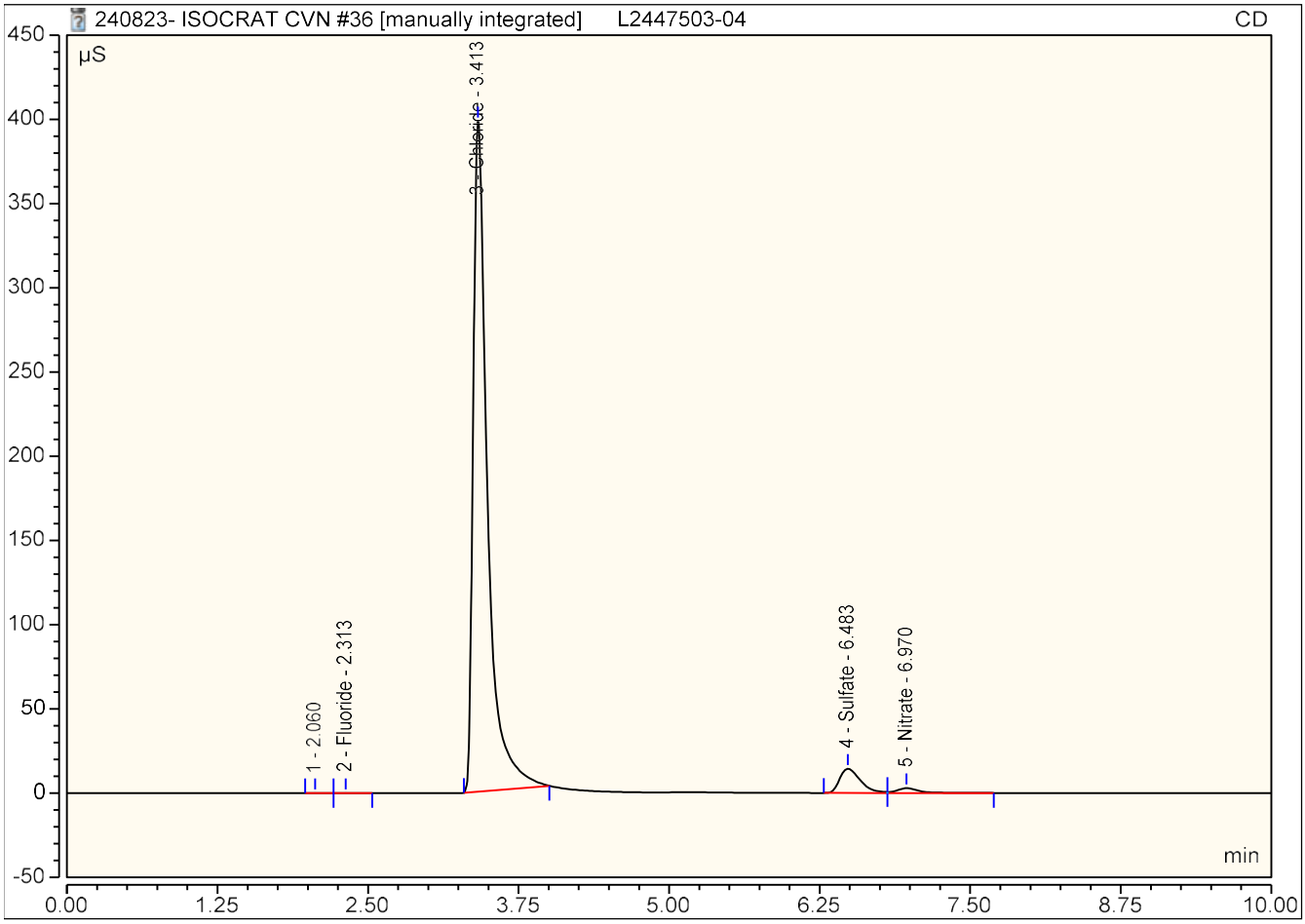
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.063	0.637	0.1392
2	3.42	**Chloride**	BMB*	20.777	160.621	50.4570
3	5.77	**Bromide**	BMB	0.009	0.085	0.1033
4	6.08	**Sulfate**	BM *^	42.647	103.378	146.2971
5	6.88	**Nitrate**	MB*	4.863	17.229	3.9478
TOTAL:				68.36	281.95	200.94



Peak Integration Report

Sample Name:	**L2447503-04**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 14:28**	*Run Time:*	**10.00**

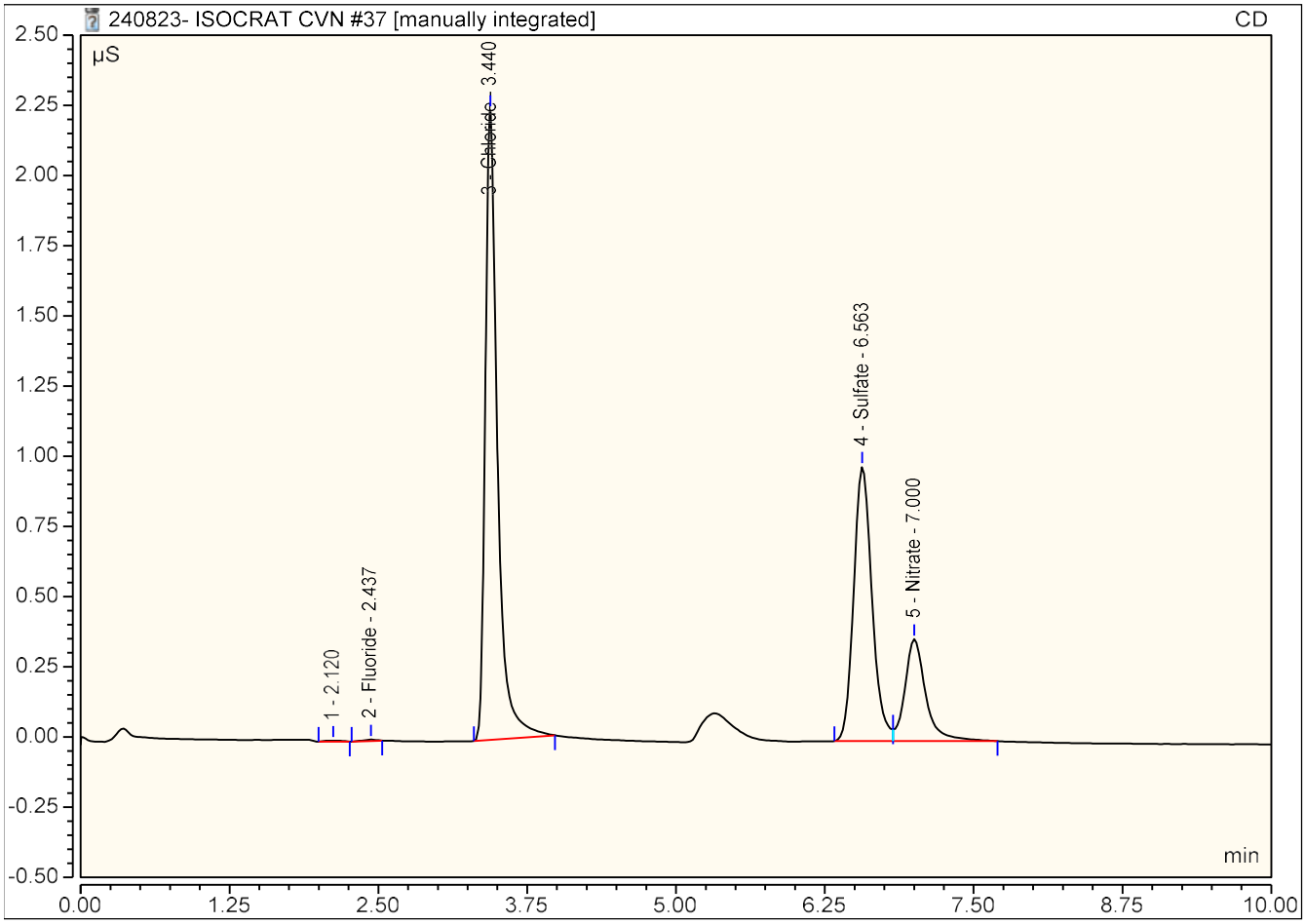
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.009	0.085	0.0439
3	3.41	**Chloride**	BMB*	54.510	397.954	132.1709
4	6.48	**Sulfate**	BM *	2.855	14.379	9.9246
5	6.97	**Nitrate**	MB*	0.605	2.845	0.5096
TOTAL:				57.98	415.26	142.65



Peak Integration Report

Sample Name:	**XL2447503-05**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 14:40**	*Run Time:*	**10.00**

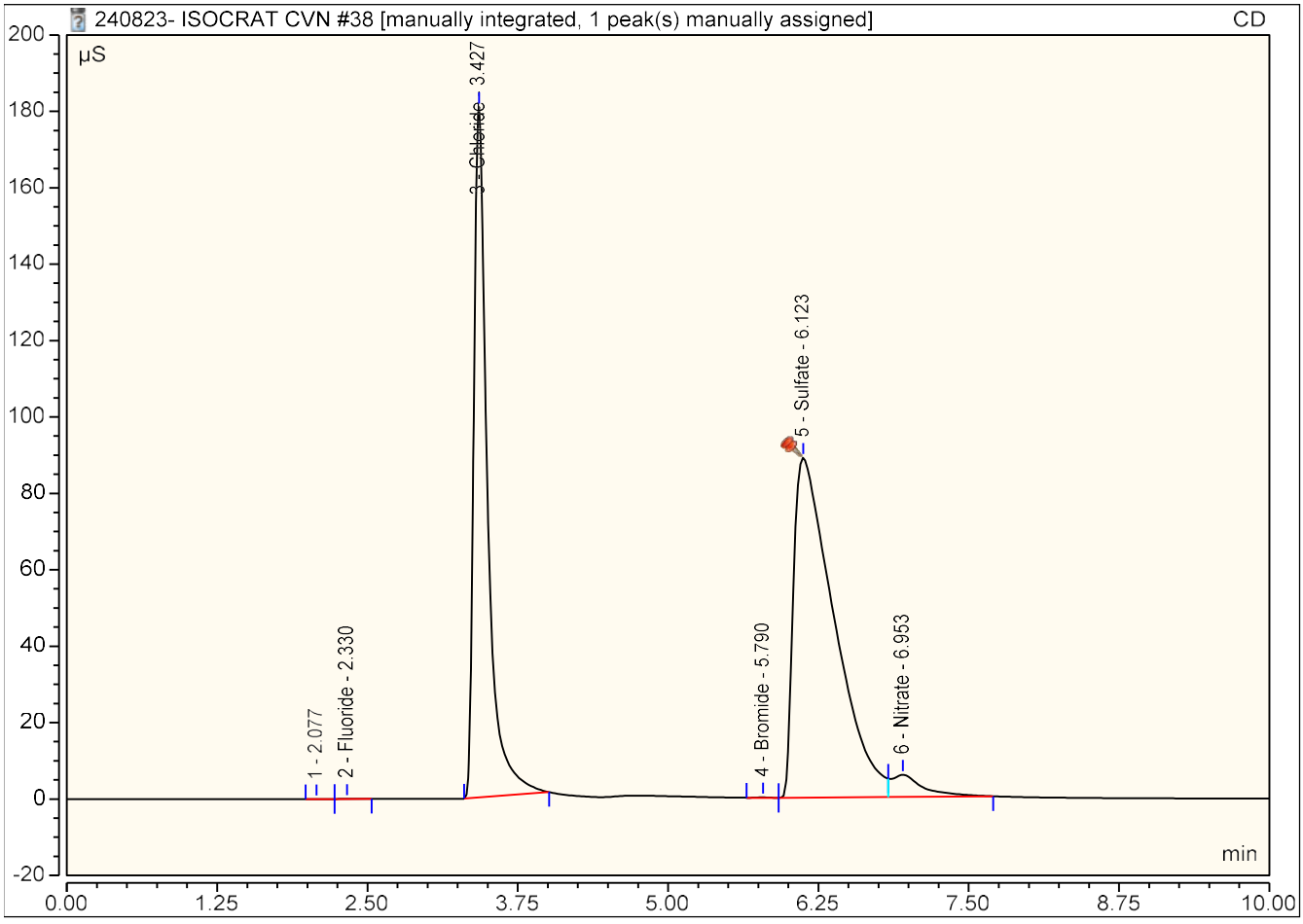
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.44	**Fluoride**	BMB	0.001	0.005	0.0290
3	3.44	**Chloride**	BMB*	0.267	2.244	0.7759
4	6.56	**Sulfate**	BM *	0.174	0.978	0.7368
5	7.00	**Nitrate**	MB*	0.073	0.363	0.0802
TOTAL:				0.52	3.59	1.62



Peak Integration Report

Sample Name:	**L2447503-06**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 14:52**	*Run Time:*	**10.00**

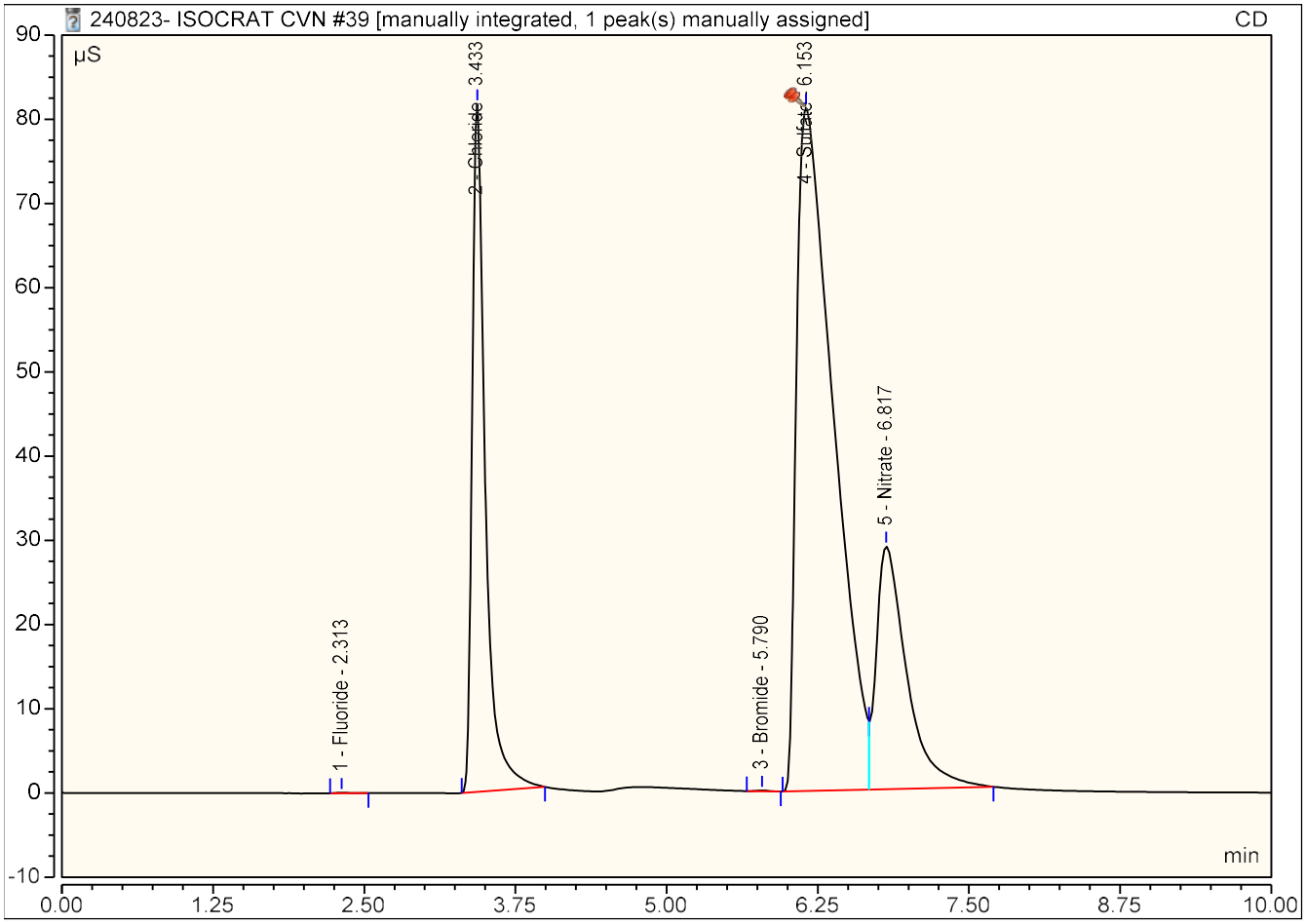
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.009	0.067	0.0445
3	3.43	**Chloride**	BMB*	23.831	180.729	57.8554
4	5.79	**Bromide**	BMb*	0.015	0.124	0.1477
5	6.12	**Sulfate**	bM *^	34.685	89.012	119.0090
6	6.95	**Nitrate**	MB*	1.807	5.827	1.4805
TOTAL:				60.35	275.76	178.54



Peak Integration Report

Sample Name:	**L2447503-07**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 15:04**	*Run Time:*	**10.00**

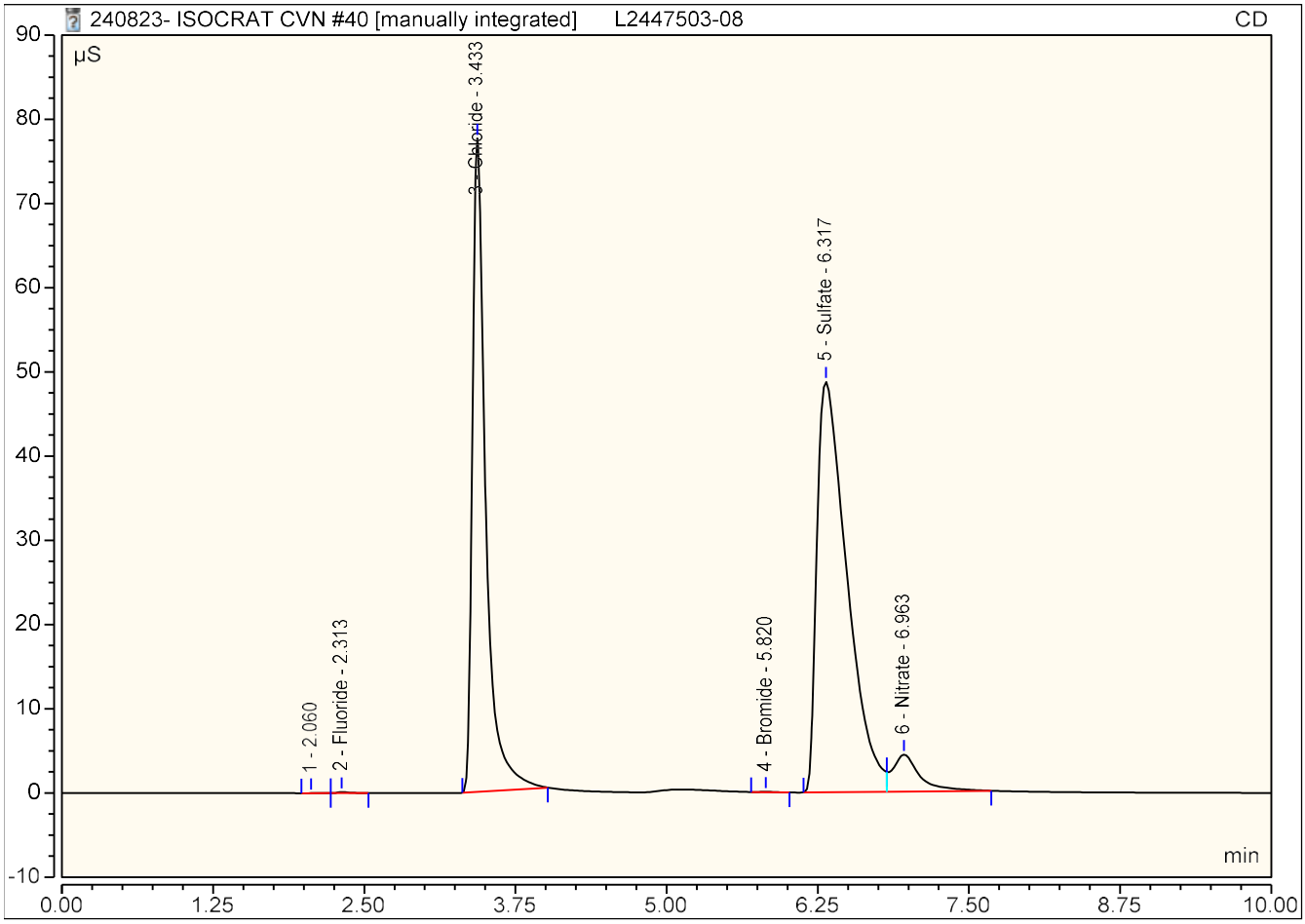
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.007	0.062	0.0404
2	3.43	**Chloride**	BMB*	10.331	81.667	25.1522
3	5.79	**Bromide**	BMB	0.011	0.087	0.1173
4	6.15	**Sulfate**	BM *^	28.737	81.073	98.6244
5	6.82	**Nitrate**	MB*	8.397	28.834	6.8014
TOTAL:				47.48	191.72	130.74



Peak Integration Report

Sample Name:	**L2447503-08**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 15:16**	*Run Time:*	**10.00**

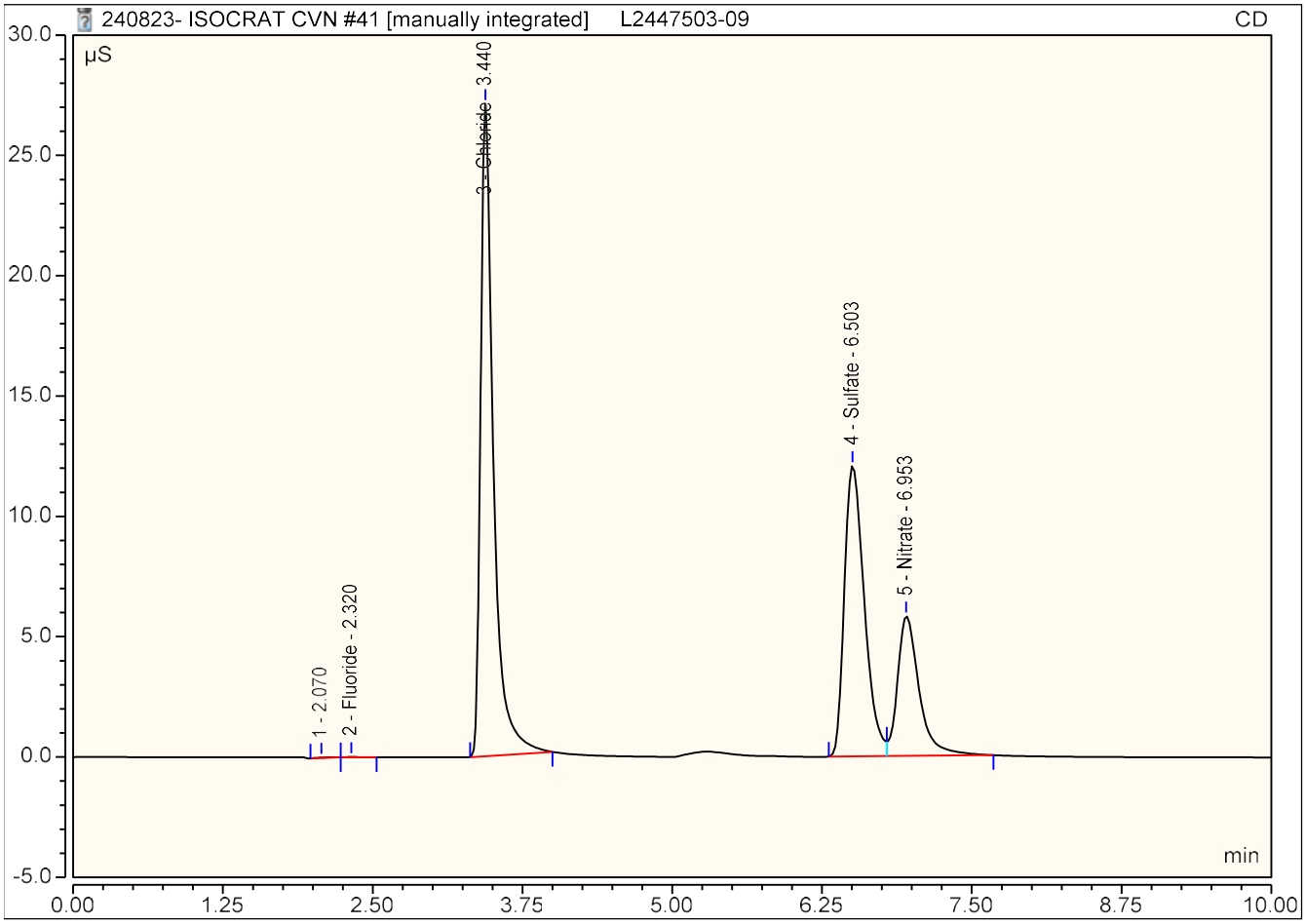
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.013	0.125	0.0511
3	3.43	**Chloride**	BMB*	9.921	77.587	24.1608
4	5.82	**Bromide**	BMB	0.006	0.041	0.0755
5	6.32	**Sulfate**	BM *	14.059	48.749	48.3228
6	6.96	**Nitrate**	MB*	1.141	4.375	0.9427
TOTAL:				25.14	130.88	73.55



Peak Integration Report

Sample Name:	**L2447503-09**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 15:28**	*Run Time:*	**10.00**

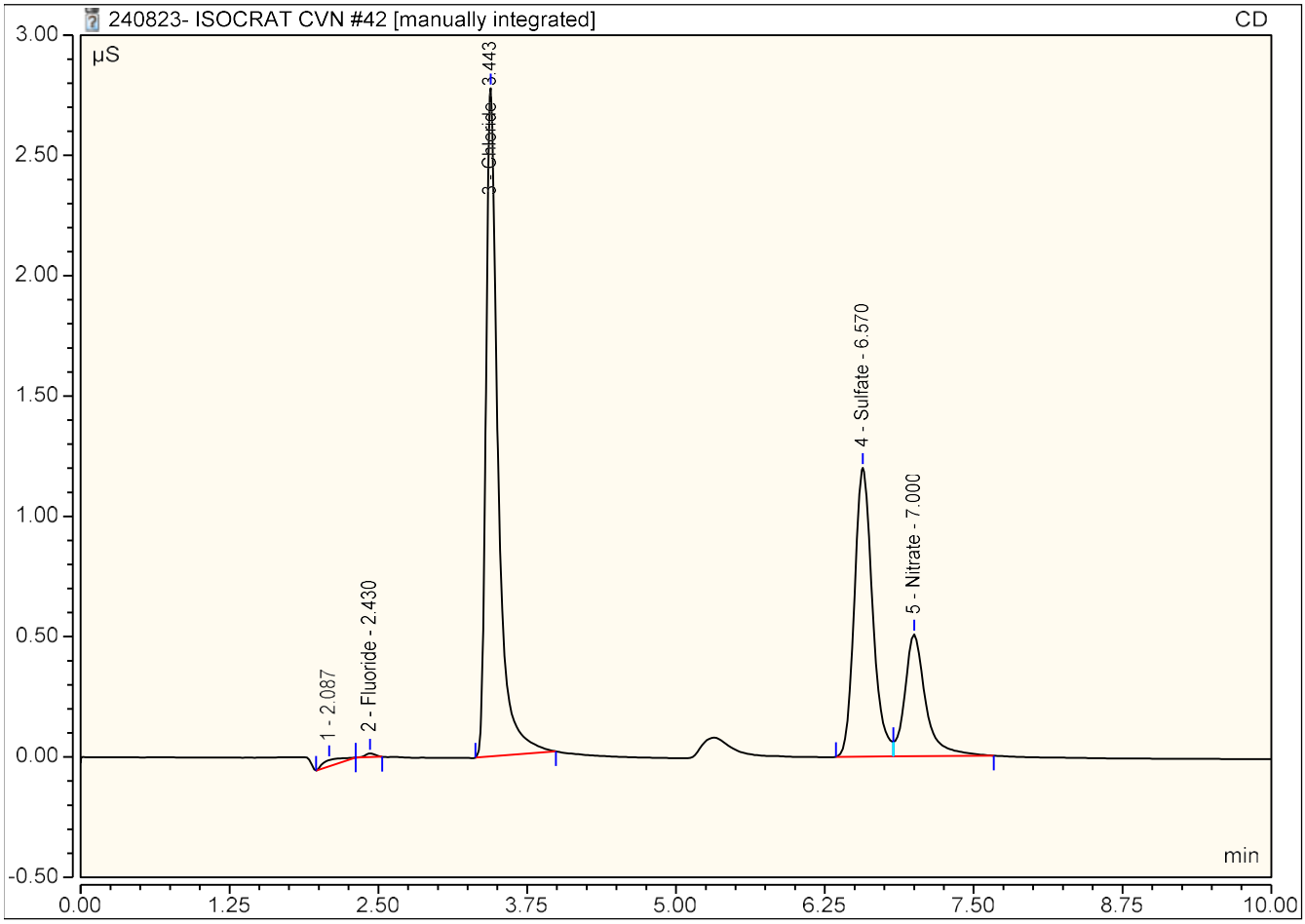
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.013	0.0308
3	3.44	**Chloride**	BMB*	3.367	27.106	8.2841
4	6.50	**Sulfate**	BM *	2.334	12.073	8.1386
5	6.95	**Nitrate**	MB*	1.217	5.803	1.0038
TOTAL:				6.92	44.99	17.46



Peak Integration Report

Sample Name:	**XL2447503-09; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 15:40**	*Run Time:*	**10.00**

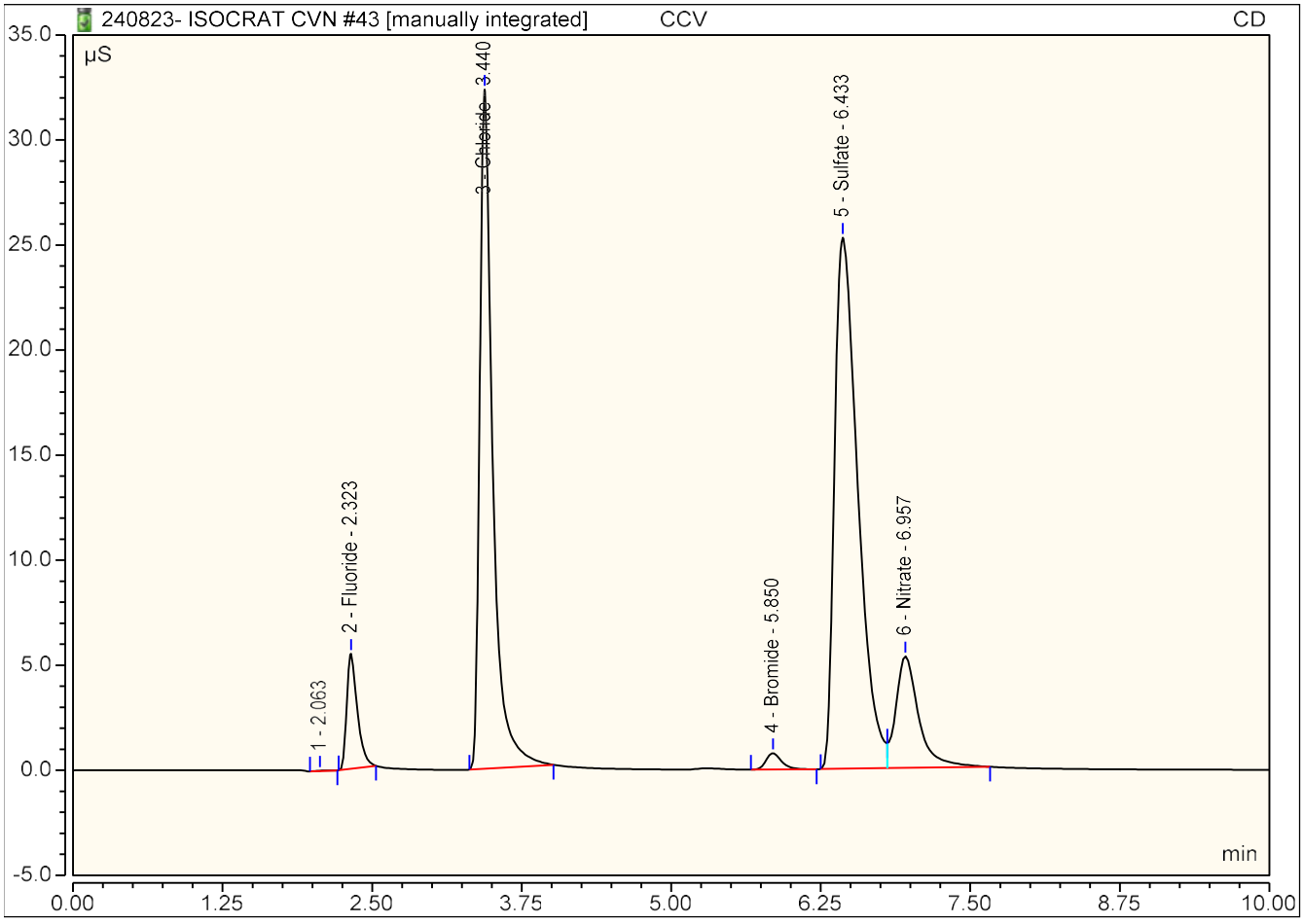
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.43	**Fluoride**	BMB	0.001	0.015	0.3049
3	3.44	**Chloride**	BMB*	0.329	2.777	9.2380
4	6.57	**Sulfate**	BM *	0.212	1.201	8.6679
5	7.00	**Nitrate**	MB*	0.102	0.507	1.0371
TOTAL:				0.64	4.50	19.25



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 15:53**	*Run Time:*	**10.00**

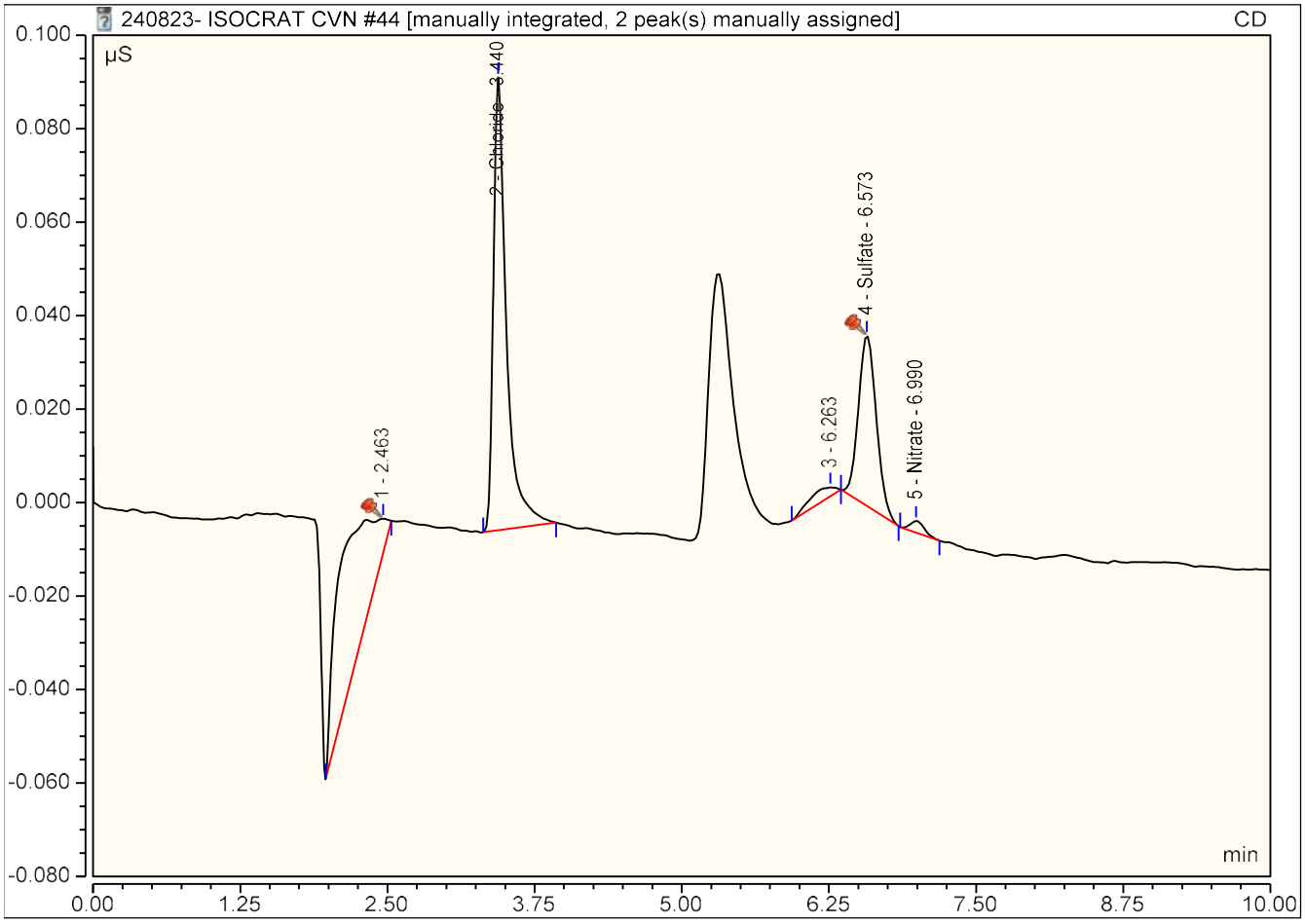
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.557	5.479	1.0105
3	3.44	**Chloride**	BMB*	4.074	32.335	9.9956
4	5.85	**Bromide**	BMB	0.119	0.783	0.9196
5	6.43	**Sulfate**	BM *	5.715	25.269	19.7267
6	6.96	**Nitrate**	MB*	1.177	5.306	0.9712
TOTAL:				11.64	69.17	32.62



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 16:05**	*Run Time:*	**10.00**

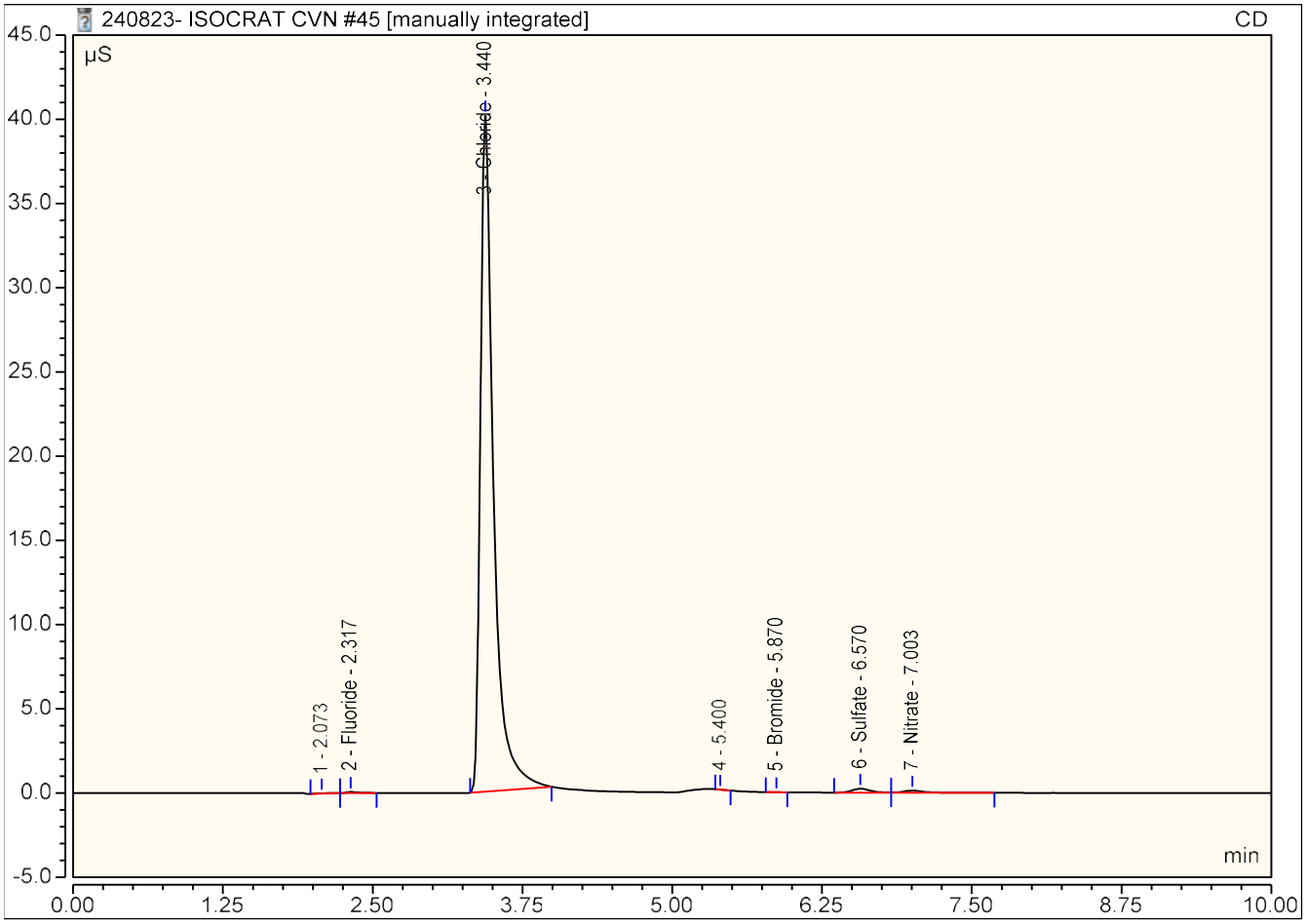
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.012	0.097	0.1580
4	6.57	**Sulfate**	BMB^	0.006	0.036	0.1625
5	6.99	**Nitrate**	BMB	0.000	0.002	0.0213
TOTAL:				0.02	0.14	0.34



Peak Integration Report

Sample Name:	**L2447672-01 CL; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 16:17**	*Run Time:*	**10.00**

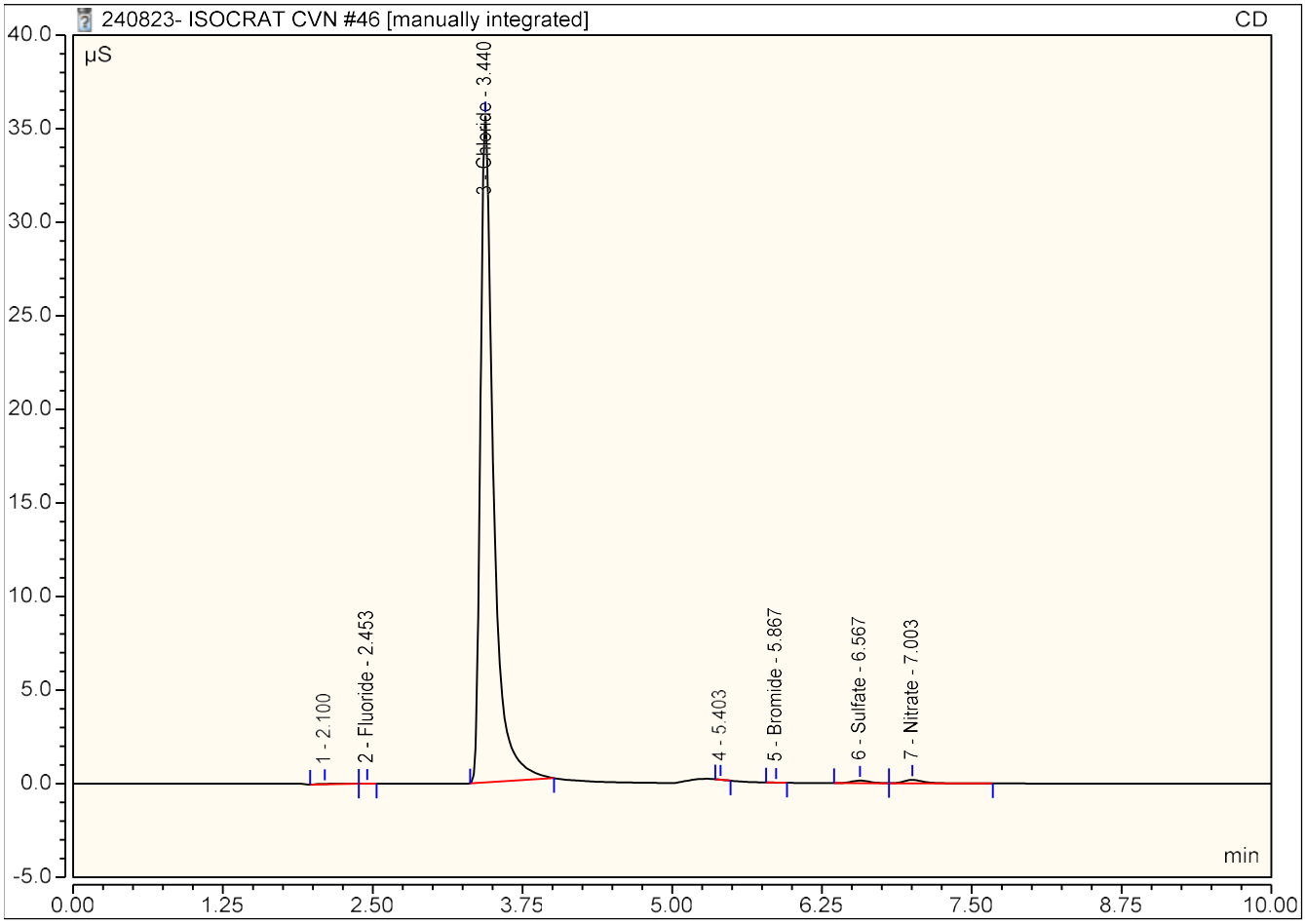
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.007	0.068	0.4088
3	3.44	**Chloride**	BMB*	5.100	40.156	124.8246
5	5.87	**Bromide**	BMB	0.000	0.002	0.3579
6	6.57	**Sulfate**	BM *	0.042	0.233	2.8452
7	7.00	**Nitrate**	MB*	0.025	0.126	0.4123
TOTAL:				5.17	40.59	128.85



Peak Integration Report

Sample Name:	**L2447672-02; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 16:29**	*Run Time:*	**10.00**

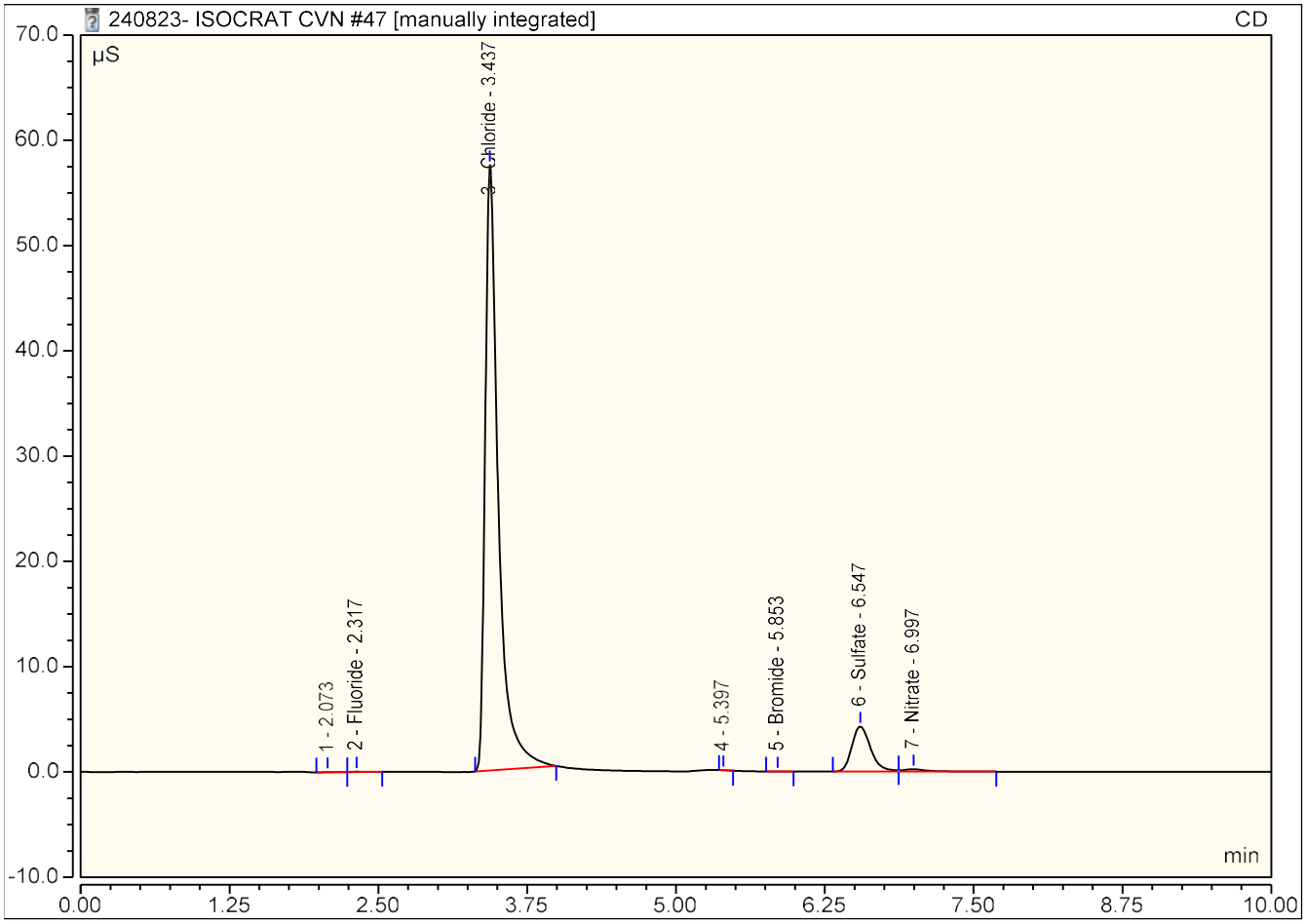
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.45	**Fluoride**	BMB	0.000	0.002	0.2814
3	3.44	**Chloride**	BMB*	4.510	35.599	110.5169
5	5.87	**Bromide**	BMB	0.000	0.002	0.3551
6	6.57	**Sulfate**	BM *	0.026	0.144	2.2803
7	7.00	**Nitrate**	MB*	0.036	0.189	0.5018
TOTAL:				4.57	35.94	113.94



Peak Integration Report

Sample Name:	**L2447939-01 CL; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 16:41**	*Run Time:*	**10.00**

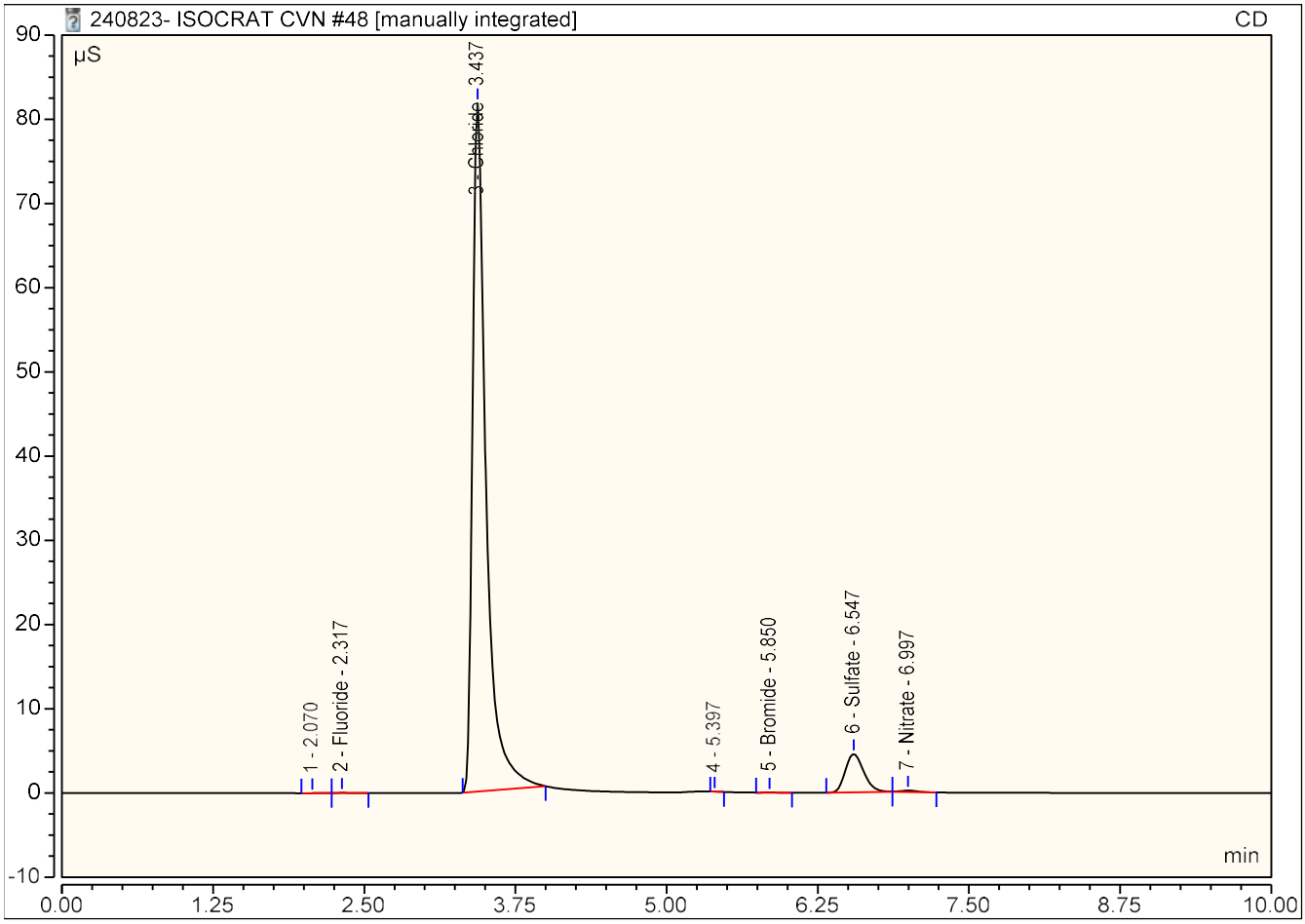
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.004	0.031	0.8659
3	3.44	**Chloride**	BMB*	7.394	57.504	450.9740
5	5.85	**Bromide**	BMB	0.001	0.006	0.9898
6	6.55	**Sulfate**	BM *	0.782	4.277	70.4715
7	7.00	**Nitrate**	MB*	0.052	0.219	1.5831
TOTAL:				8.23	62.04	524.88



Peak Integration Report

Sample Name:	**L2447944-01 CL; 25X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 16:53**	*Run Time:*	**10.00**

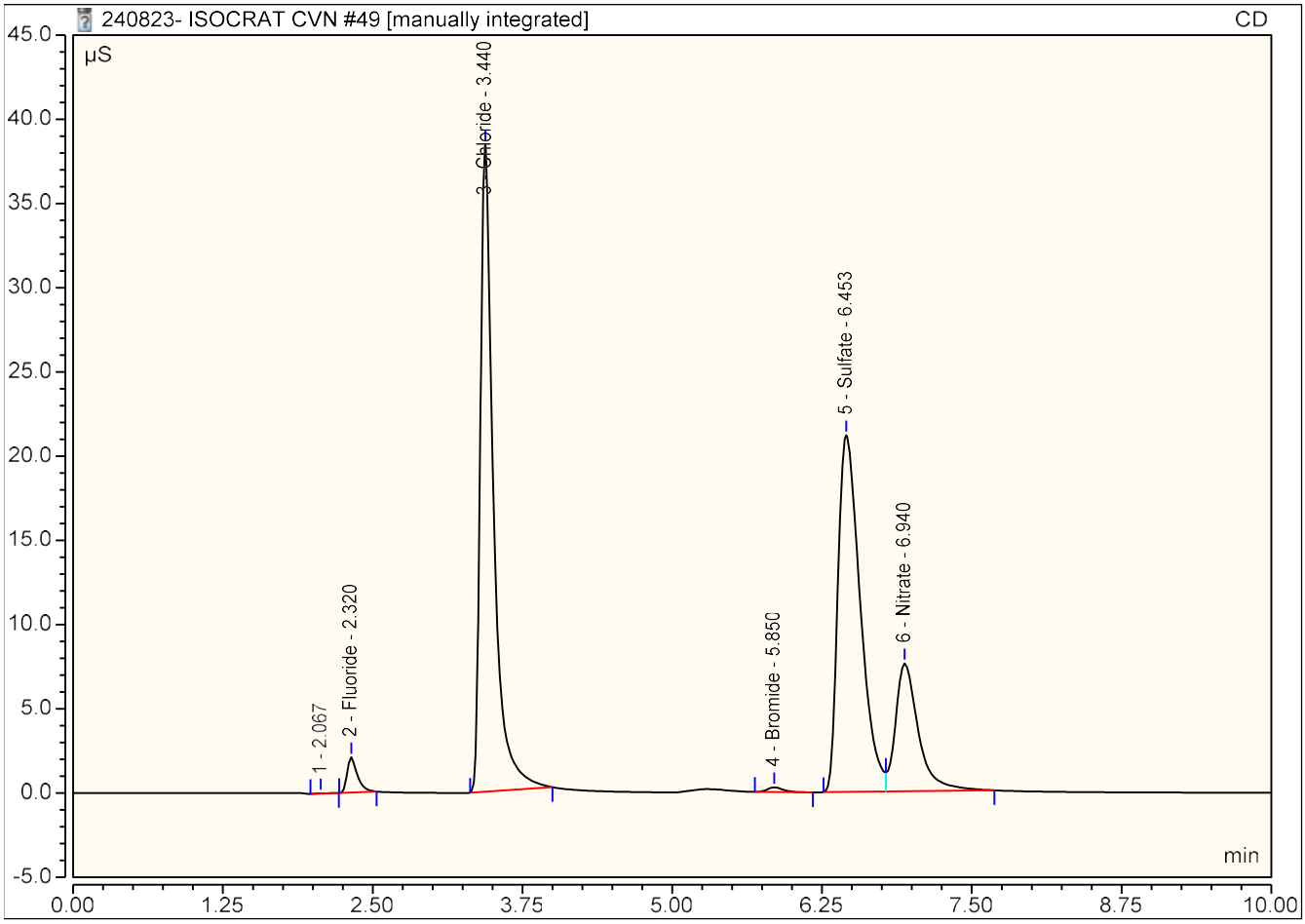
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.004	0.033	0.8604
3	3.44	**Chloride**	BMB*	10.607	81.726	645.5474
5	5.85	**Bromide**	BMB	0.002	0.013	1.1725
6	6.55	**Sulfate**	BMB	0.802	4.536	72.2005
7	7.00	**Nitrate**	BMB	0.024	0.157	1.0106
TOTAL:				11.44	86.46	720.79



Peak Integration Report

Sample Name:	**L2447503-05 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 17:05**	*Run Time:*	**10.00**

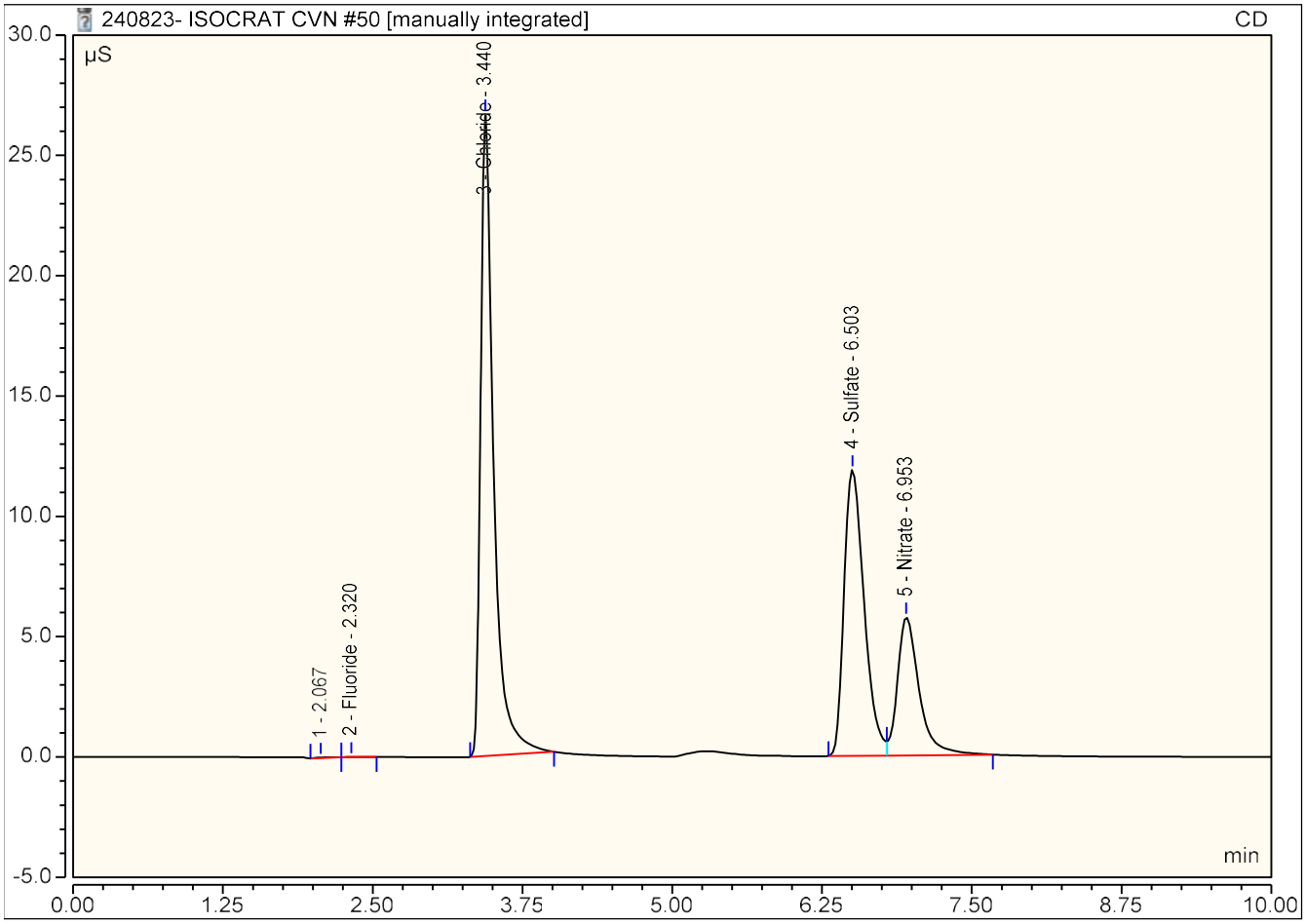
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.207	2.095	0.3931
3	3.44	**Chloride**	BMB*	4.896	38.425	11.9887
4	5.85	**Bromide**	BMB	0.043	0.286	0.3518
5	6.45	**Sulfate**	BM *	4.563	21.162	15.7778
6	6.94	**Nitrate**	MB*	1.684	7.595	1.3807
TOTAL:				11.39	69.56	29.89



Peak Integration Report

Sample Name:	**L2447503-05 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 17:17**	*Run Time:*	**10.00**

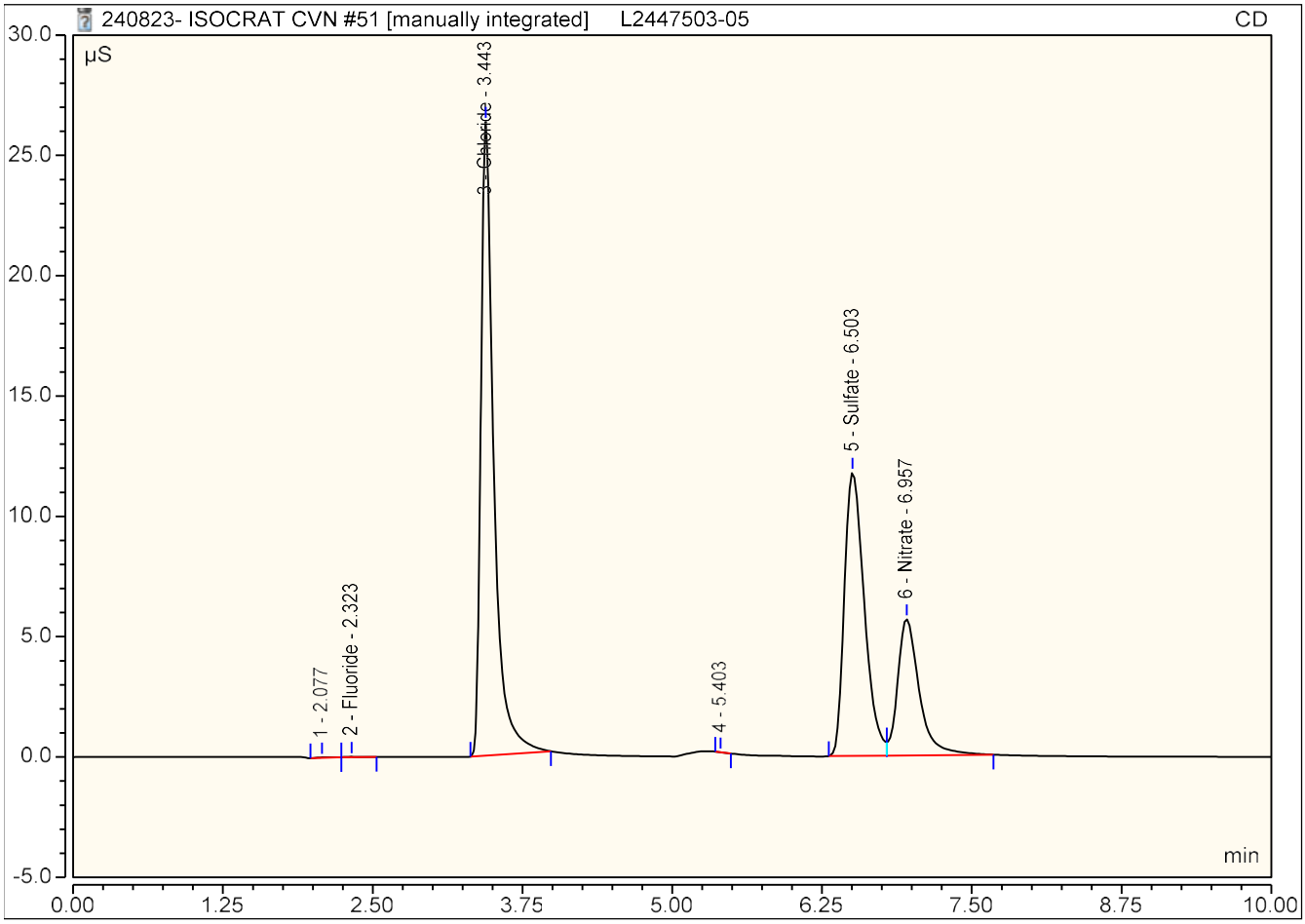
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.014	0.0308
3	3.44	**Chloride**	BMB*	3.361	26.666	8.2701
4	6.50	**Sulfate**	BM *	2.314	11.881	8.0700
5	6.95	**Nitrate**	MB*	1.207	5.736	0.9953
TOTAL:				6.88	44.30	17.37



Peak Integration Report

Sample Name:	**L2447503-05**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 17:29**	*Run Time:*	**10.00**

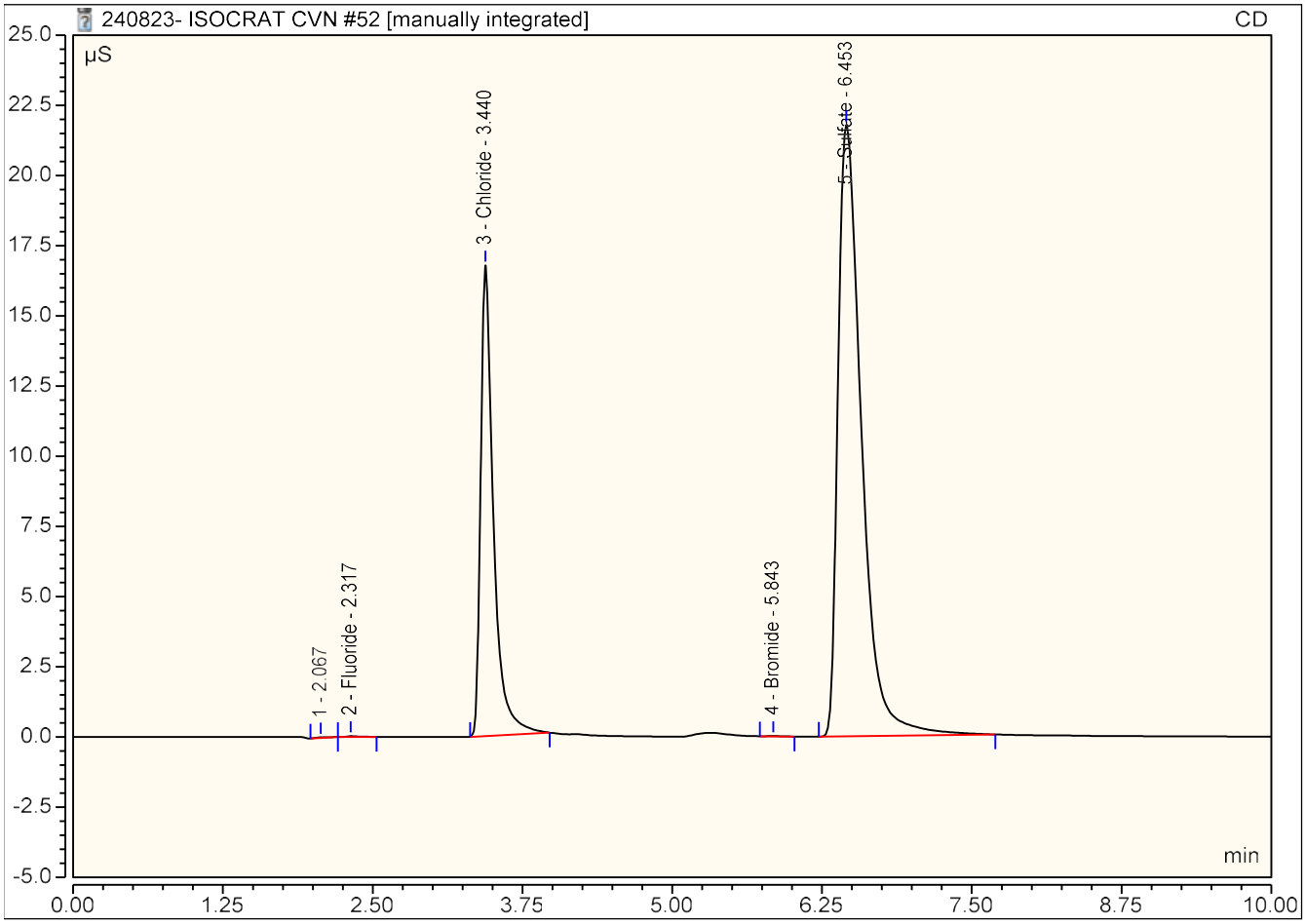
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.013	0.0307
3	3.44	**Chloride**	BMB*	3.297	26.350	8.1151
5	6.50	**Sulfate**	BM *	2.280	11.776	7.9536
6	6.96	**Nitrate**	MB*	1.185	5.664	0.9779
TOTAL:				6.76	43.80	17.08



Peak Integration Report

Sample Name:	**L2447503-01; 10X SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 17:41**	*Run Time:*	**10.00**

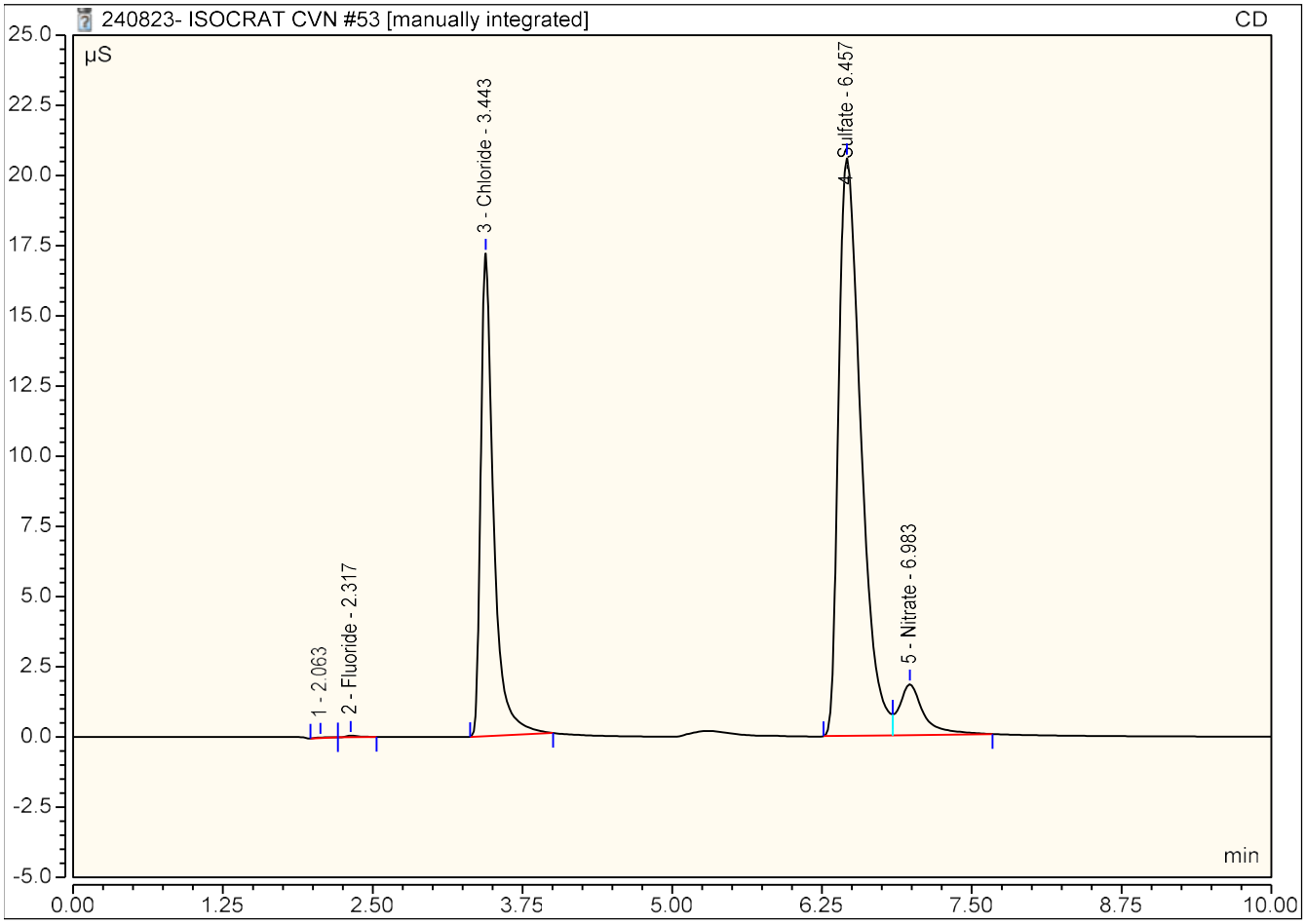
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.004	0.033	0.3448
3	3.44	**Chloride**	BMB*	2.078	16.763	51.6105
4	5.84	**Bromide**	BMB	0.001	0.011	0.4504
5	6.45	**Sulfate**	BMB	4.958	21.778	171.3258
TOTAL:				7.04	38.58	223.73



Peak Integration Report

Sample Name:	**L2447503-03; 10X CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 17:53**	*Run Time:*	**10.00**

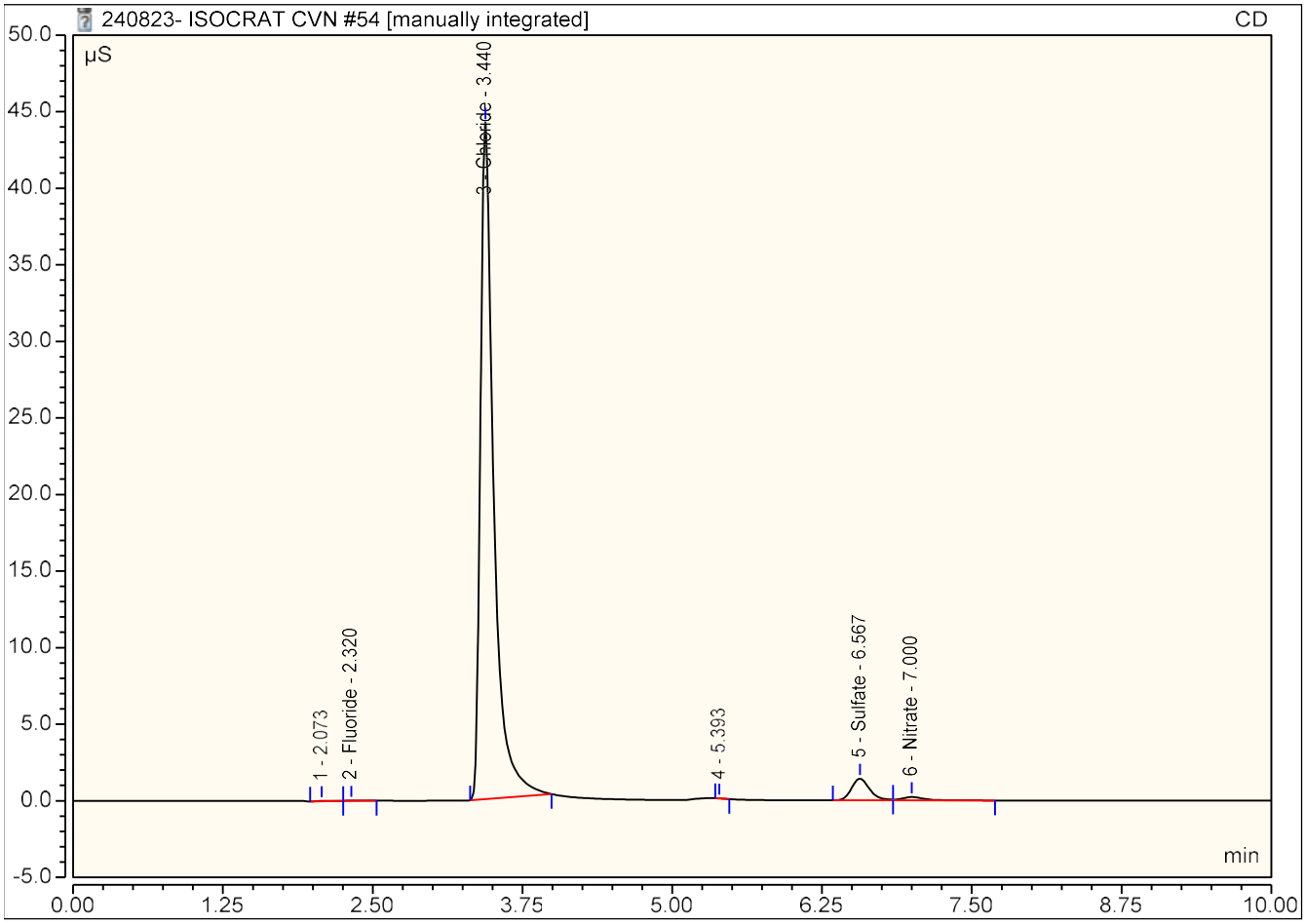
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.006	0.054	0.3844
3	3.44	**Chloride**	BMB*	2.141	17.190	53.1541
4	6.46	**Sulfate**	BM *	4.460	20.573	154.2488
5	6.98	**Nitrate**	MB*	0.426	1.809	3.6539
TOTAL:				7.03	39.63	211.44



Peak Integration Report

Sample Name:	**L2447503-04; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 18:22**	*Run Time:*	**10.00**

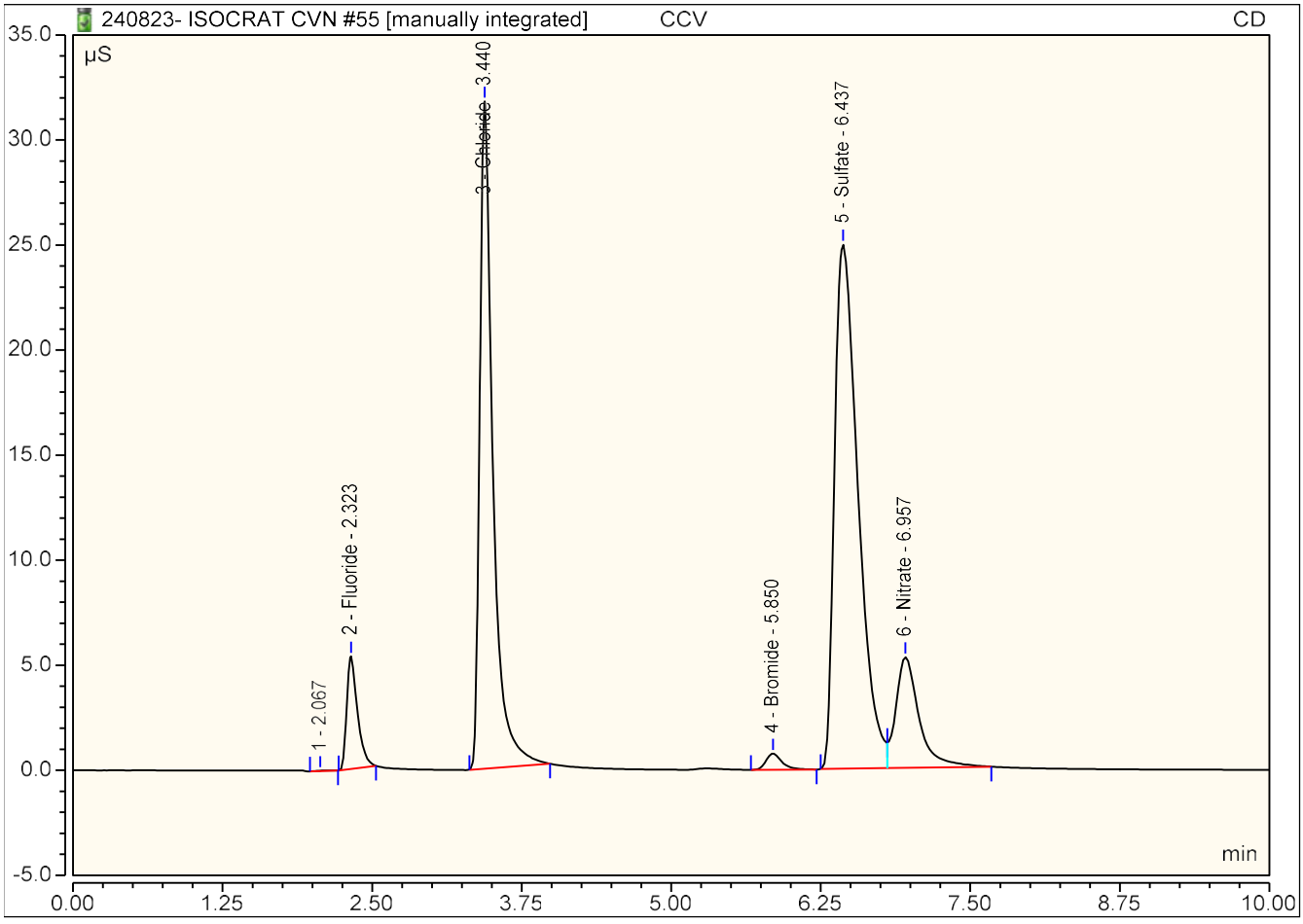
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.001	0.008	0.2965
3	3.44	**Chloride**	BMB*	5.701	44.184	139.3865
5	6.57	**Sulfate**	BM *	0.254	1.426	10.0938
6	7.00	**Nitrate**	MB*	0.050	0.228	0.6137
TOTAL:				6.01	45.85	150.39



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 18:34**	*Run Time:*	**10.00**

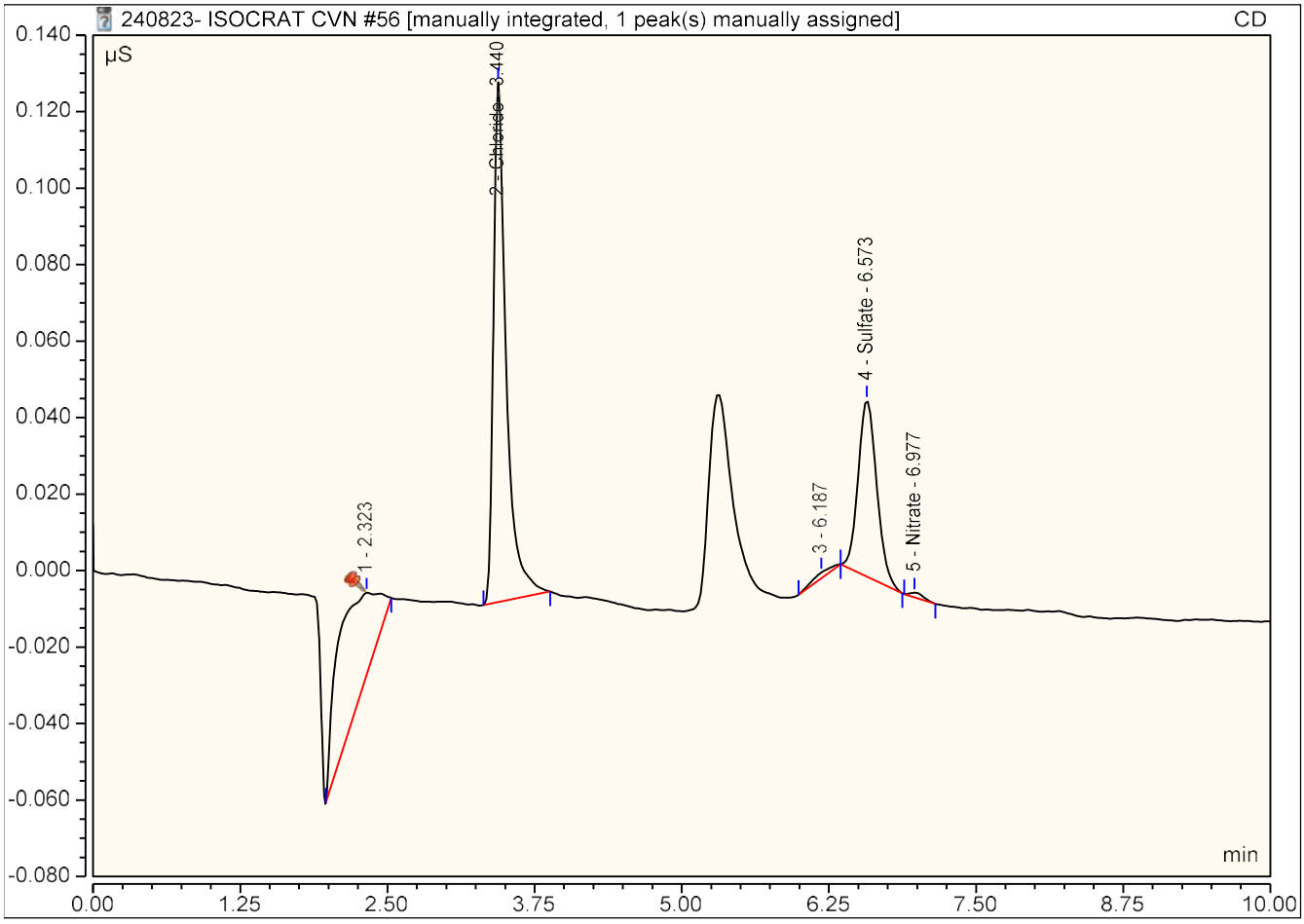
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.551	5.351	0.9993
3	3.44	**Chloride**	BMB*	4.042	31.758	9.9203
4	5.85	**Bromide**	BMB	0.118	0.770	0.9082
5	6.44	**Sulfate**	BM *	5.691	24.955	19.6429
6	6.96	**Nitrate**	MB*	1.186	5.271	0.9791
TOTAL:				11.59	68.10	32.45



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 18:46**	*Run Time:*	**10.00**

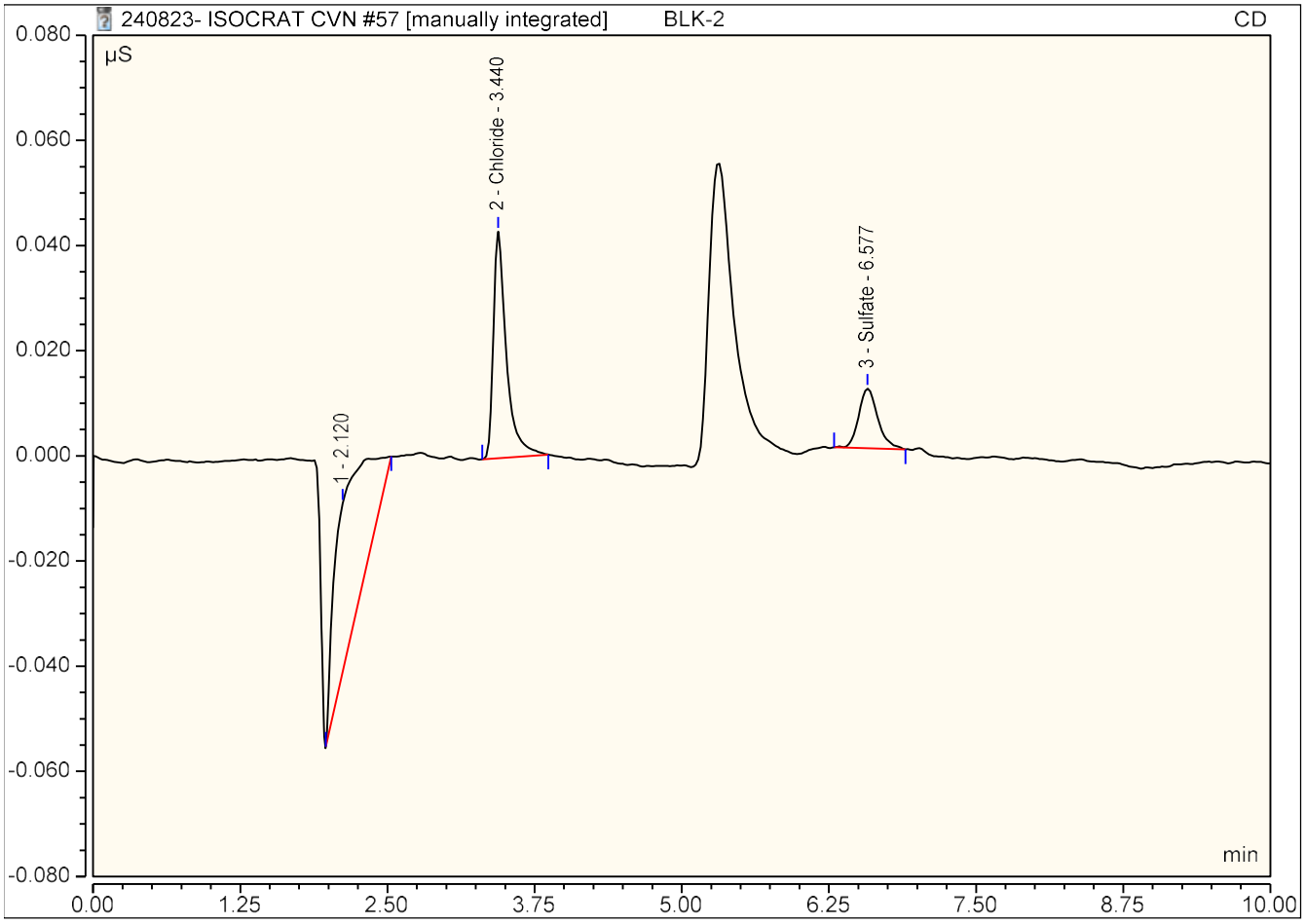
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.017	0.136	0.1691
4	6.57	**Sulfate**	BMB	0.008	0.046	0.1694
5	6.98	**Nitrate**	BMB	0.000	0.001	0.0212
TOTAL:				0.03	0.18	0.36



Peak Integration Report

Sample Name:	**BLK-2**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 18:59**	*Run Time:*	**10.00**

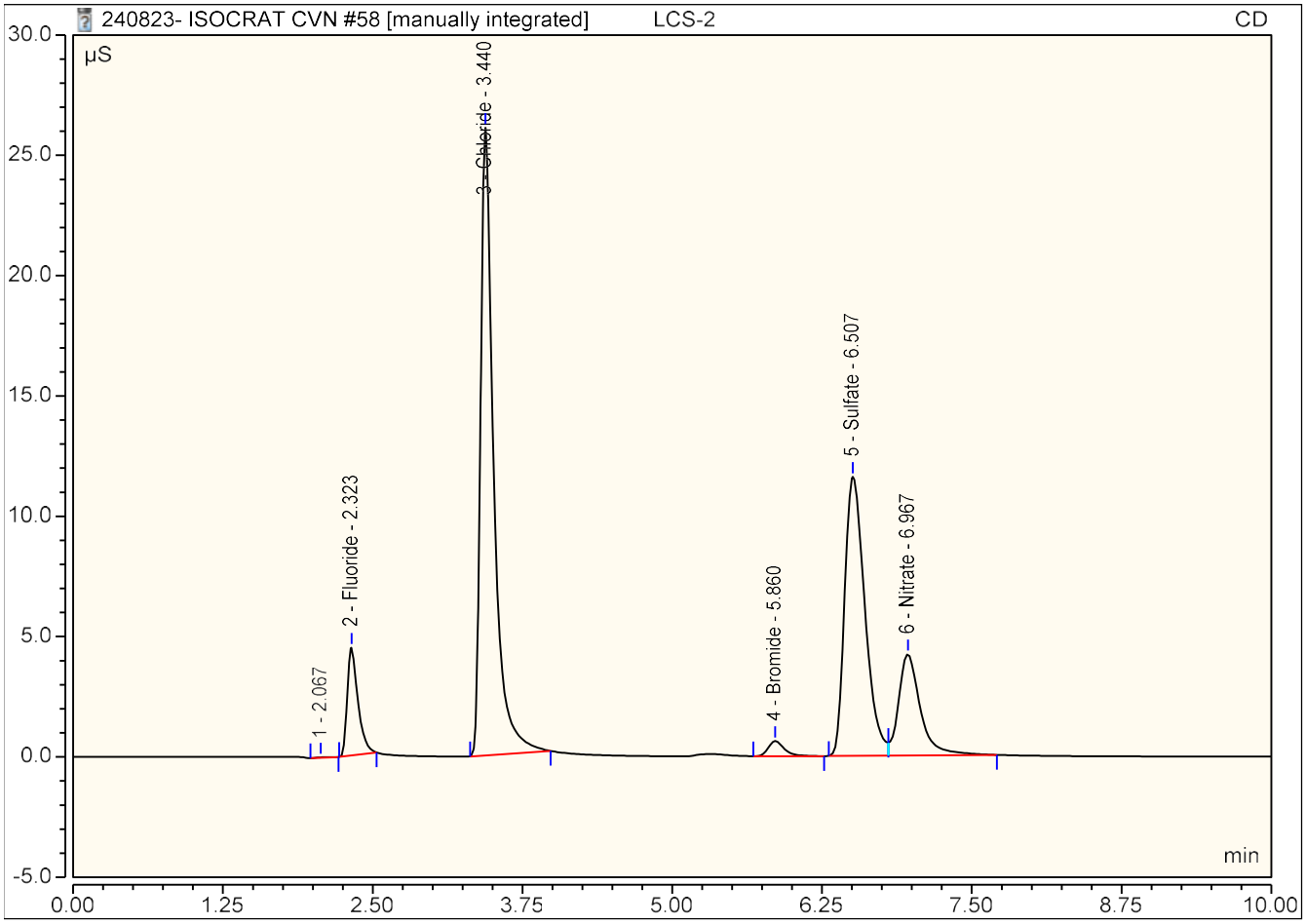
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.006	0.043	0.1414
3	6.58	**Sulfate**	BMB	0.002	0.011	0.1478
TOTAL:				0.01	0.05	0.29



Peak Integration Report

Sample Name:	**LCS-2**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 19:11**	*Run Time:*	**10.00**

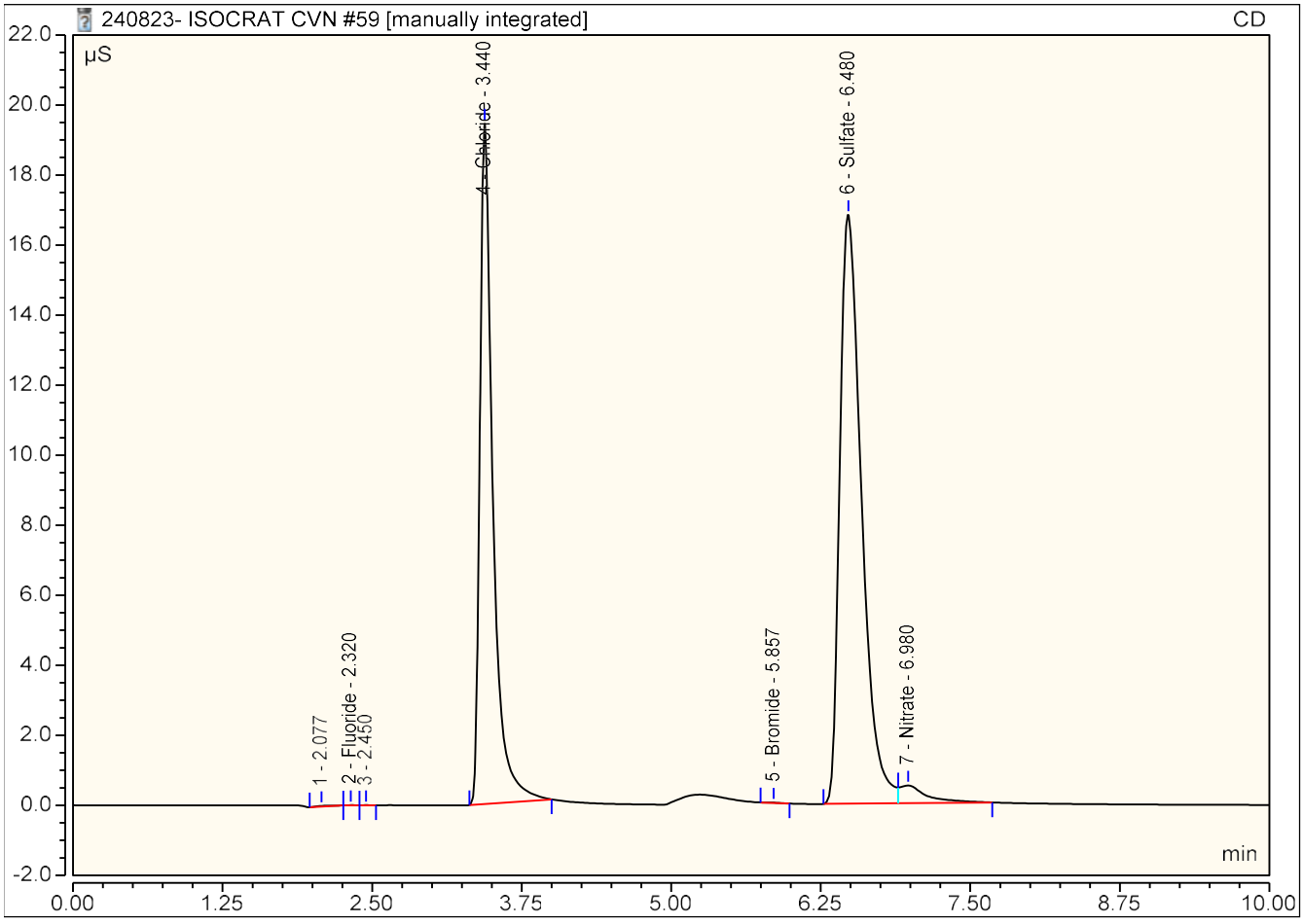
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.459	4.483	0.8368
3	3.44	**Chloride**	BMB*	3.304	26.084	8.1324
4	5.86	**Bromide**	BMB	0.098	0.629	0.7597
5	6.51	**Sulfate**	BM *	2.269	11.588	7.9181
6	6.97	**Nitrate**	MB*	0.882	4.203	0.7334
TOTAL:				7.01	46.99	18.38



Peak Integration Report

Sample Name:	**L2447503-06; 10X CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 19:23**	*Run Time:*	**10.00**

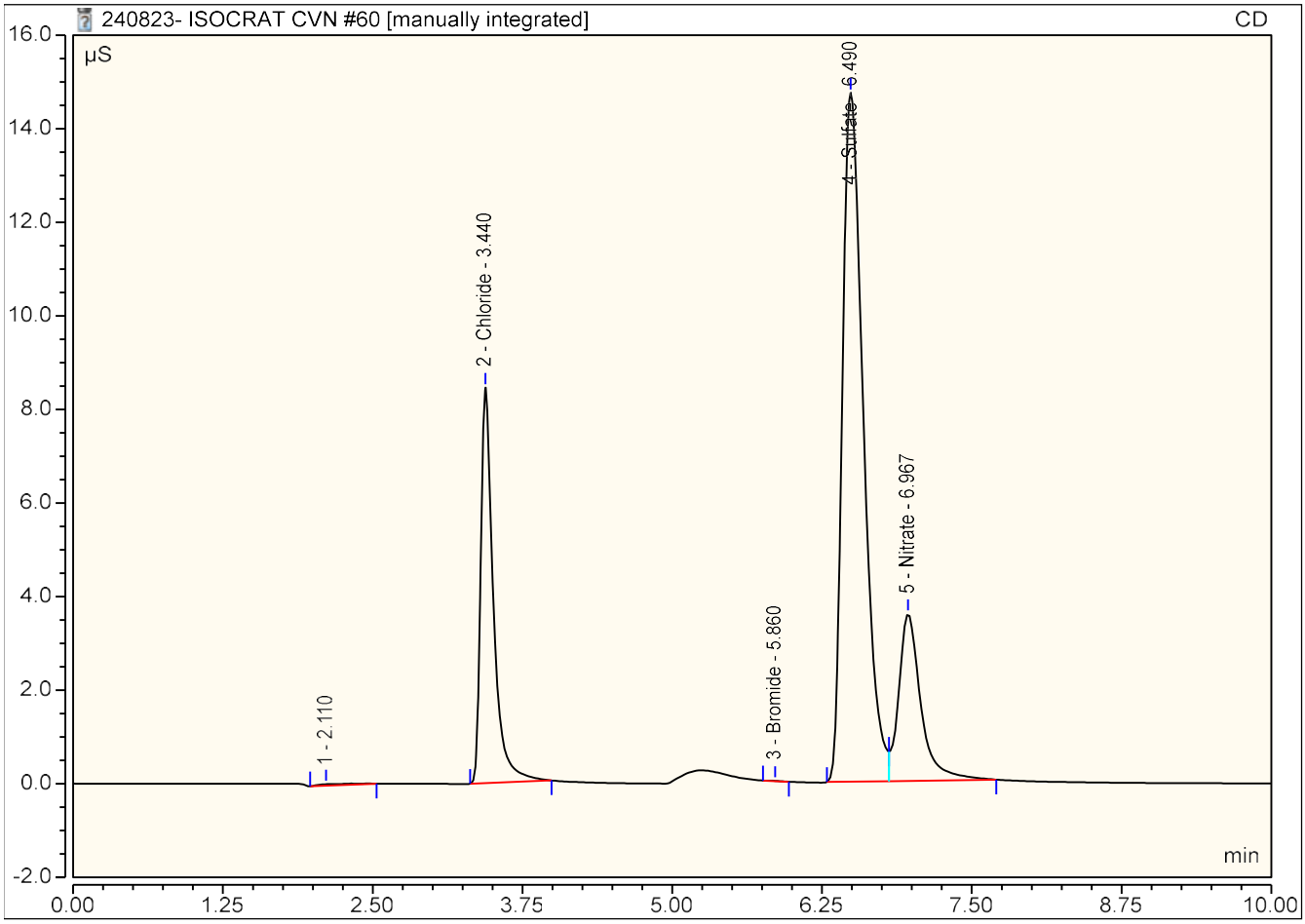
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.000	0.005	0.2856
4	3.44	**Chloride**	BMB*	2.445	19.439	60.4963
5	5.86	**Bromide**	BMB	0.001	0.009	0.4224
6	6.48	**Sulfate**	BM *	3.558	16.815	123.3476
7	6.98	**Nitrate**	MB*	0.135	0.508	1.2992
TOTAL:				6.14	36.78	185.85



Peak Integration Report

Sample Name:	**XL2447503-07; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 19:35**	*Run Time:*	**10.00**

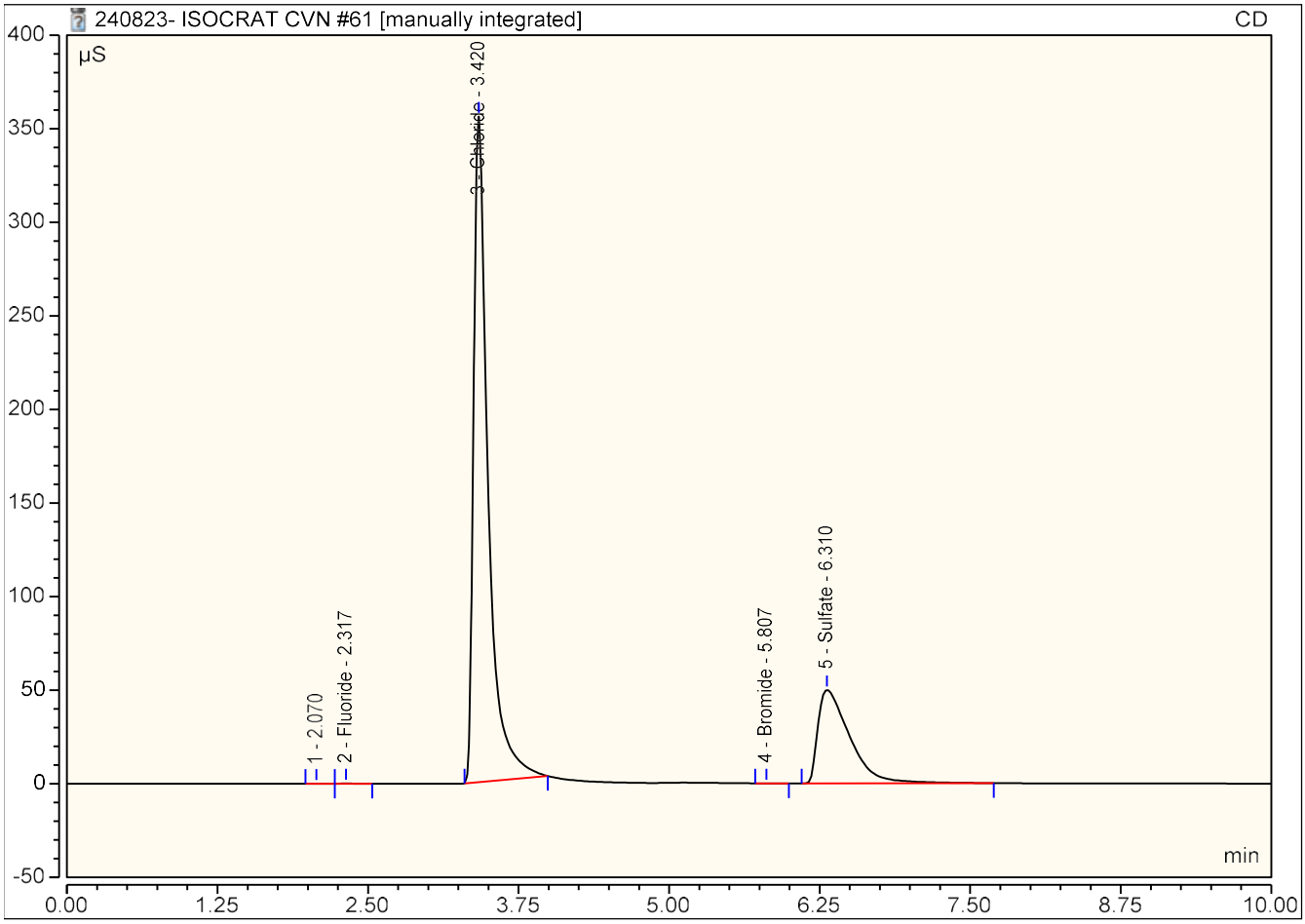
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	1.036	8.451	26.3710
3	5.86	**Bromide**	BMB	0.001	0.005	0.3878
4	6.49	**Sulfate**	BM *	2.991	14.717	103.8979
5	6.97	**Nitrate**	MB*	0.764	3.564	6.3791
TOTAL:				4.79	26.74	137.04



Peak Integration Report

Sample Name:	**L2448071-01 CL SO4 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 19:47**	*Run Time:*	**10.00**

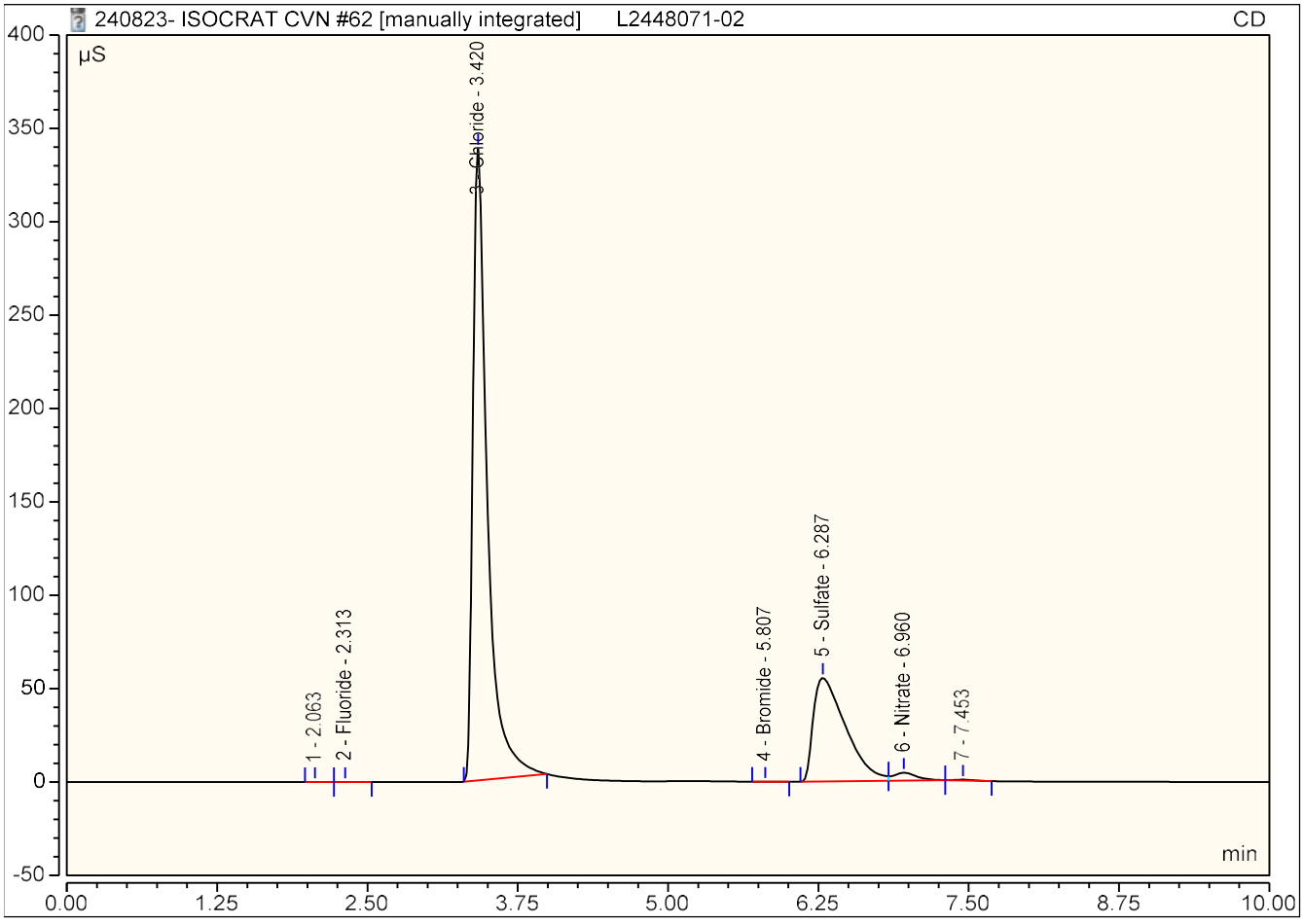
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.016	0.155	0.0569
3	3.42	**Chloride**	BMB*	49.462	355.578	119.9423
4	5.81	**Bromide**	BMB	0.003	0.023	0.0589
5	6.31	**Sulfate**	BMB	15.254	49.885	52.4195
TOTAL:				64.74	405.64	172.48



Peak Integration Report

Sample Name:	**L2448071-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 19:59**	*Run Time:*	**10.00**

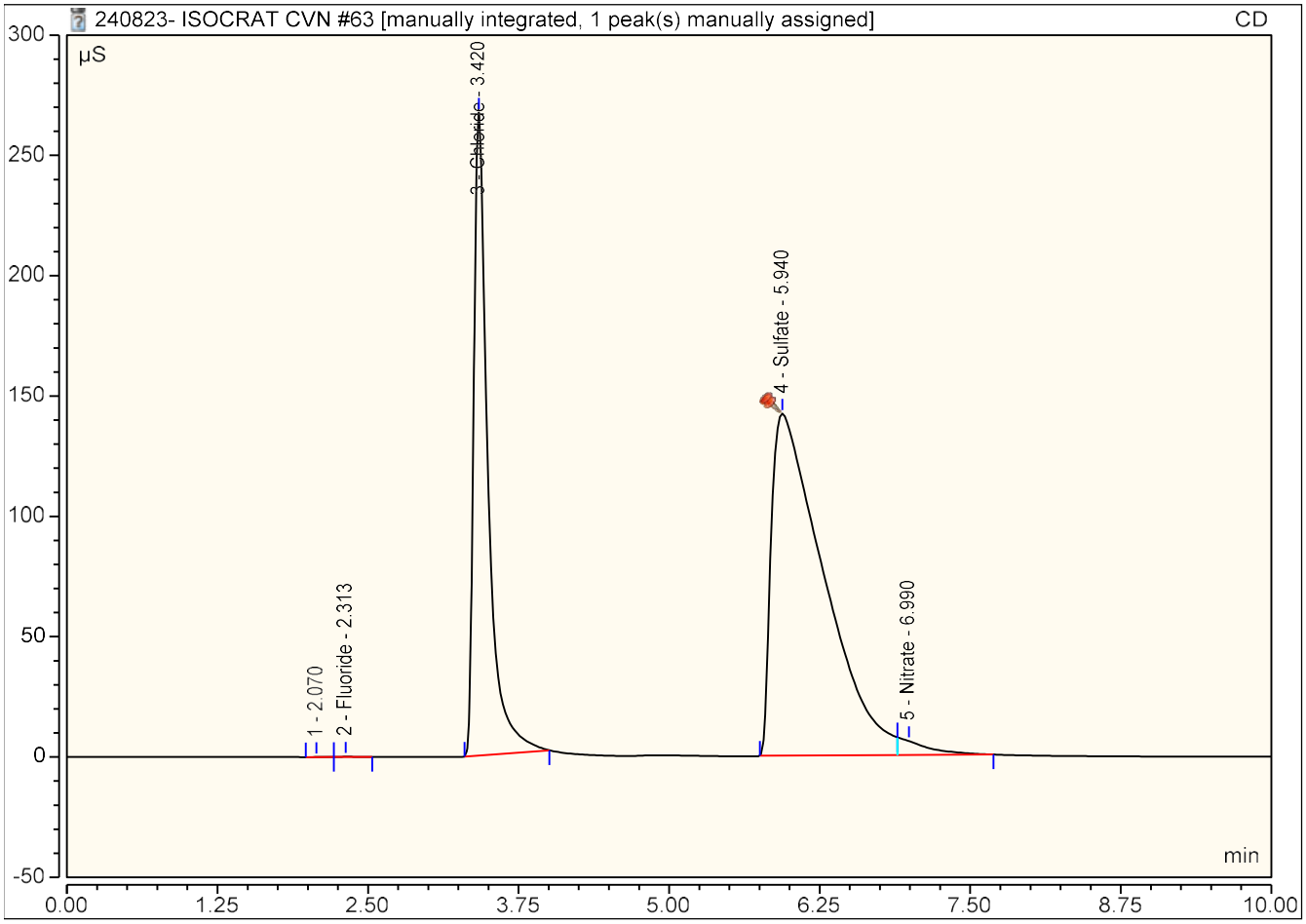
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.009	0.083	0.0438
3	3.42	**Chloride**	BMB*	47.122	338.401	114.2727
4	5.81	**Bromide**	BMB	0.005	0.034	0.0701
5	6.29	**Sulfate**	BM *	17.180	55.471	59.0185
6	6.96	**Nitrate**	Mb*	0.951	4.242	0.7889
TOTAL:				65.27	398.23	174.19



Peak Integration Report

Sample Name:	**XL2448071-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 20:11**	*Run Time:*	**10.00**

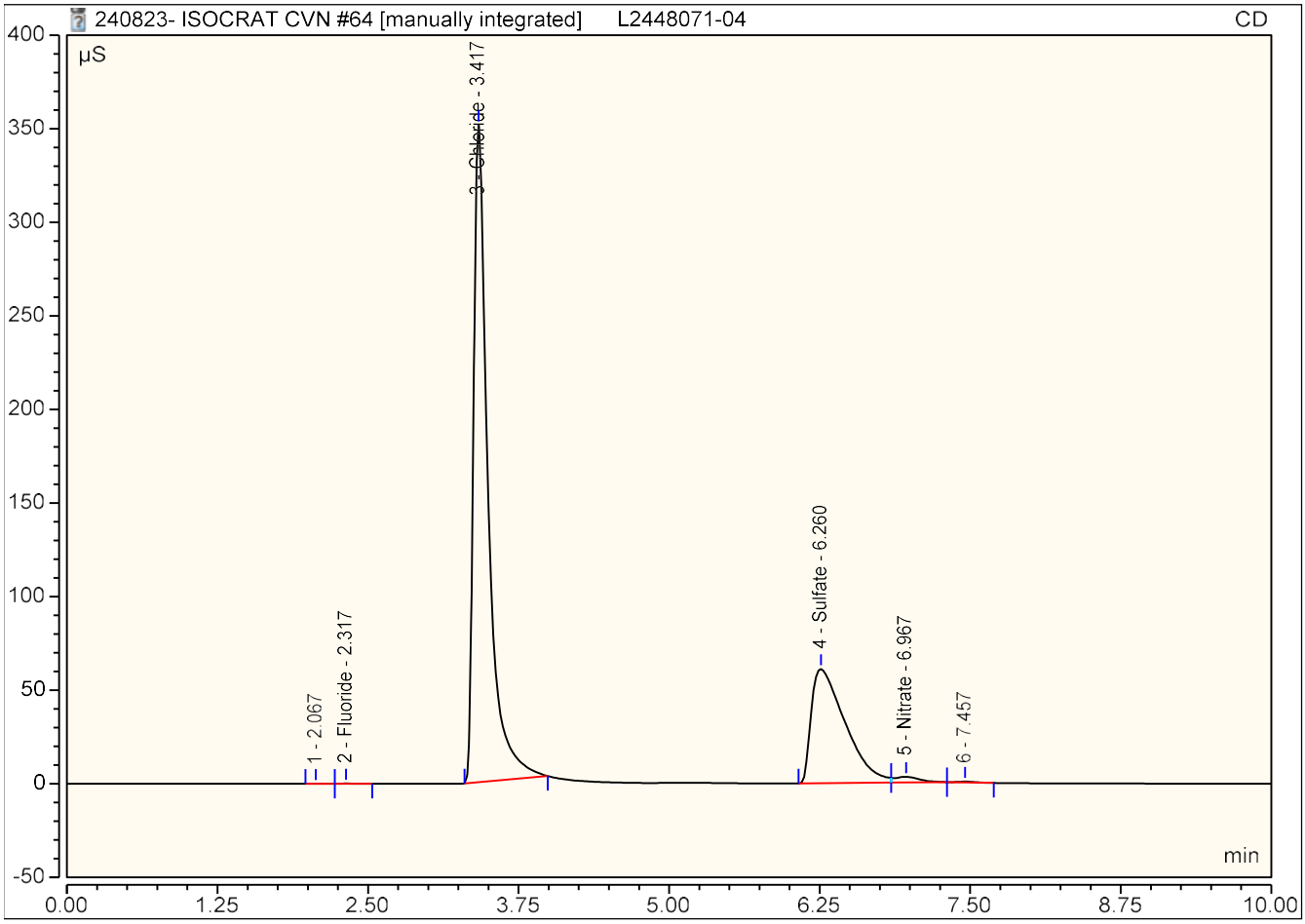
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.31	**Fluoride**	BMB	0.021	0.192	0.0644
3	3.42	**Chloride**	BMB*	36.436	267.186	88.3882
4	5.94	**Sulfate**	BM *^	71.576	142.089	245.4391
5	6.99	**Nitrate**	MB*	1.851	5.796	1.5155
TOTAL:				109.88	415.26	335.41



Peak Integration Report

Sample Name:	**L2448071-04**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 20:23**	*Run Time:*	**10.00**

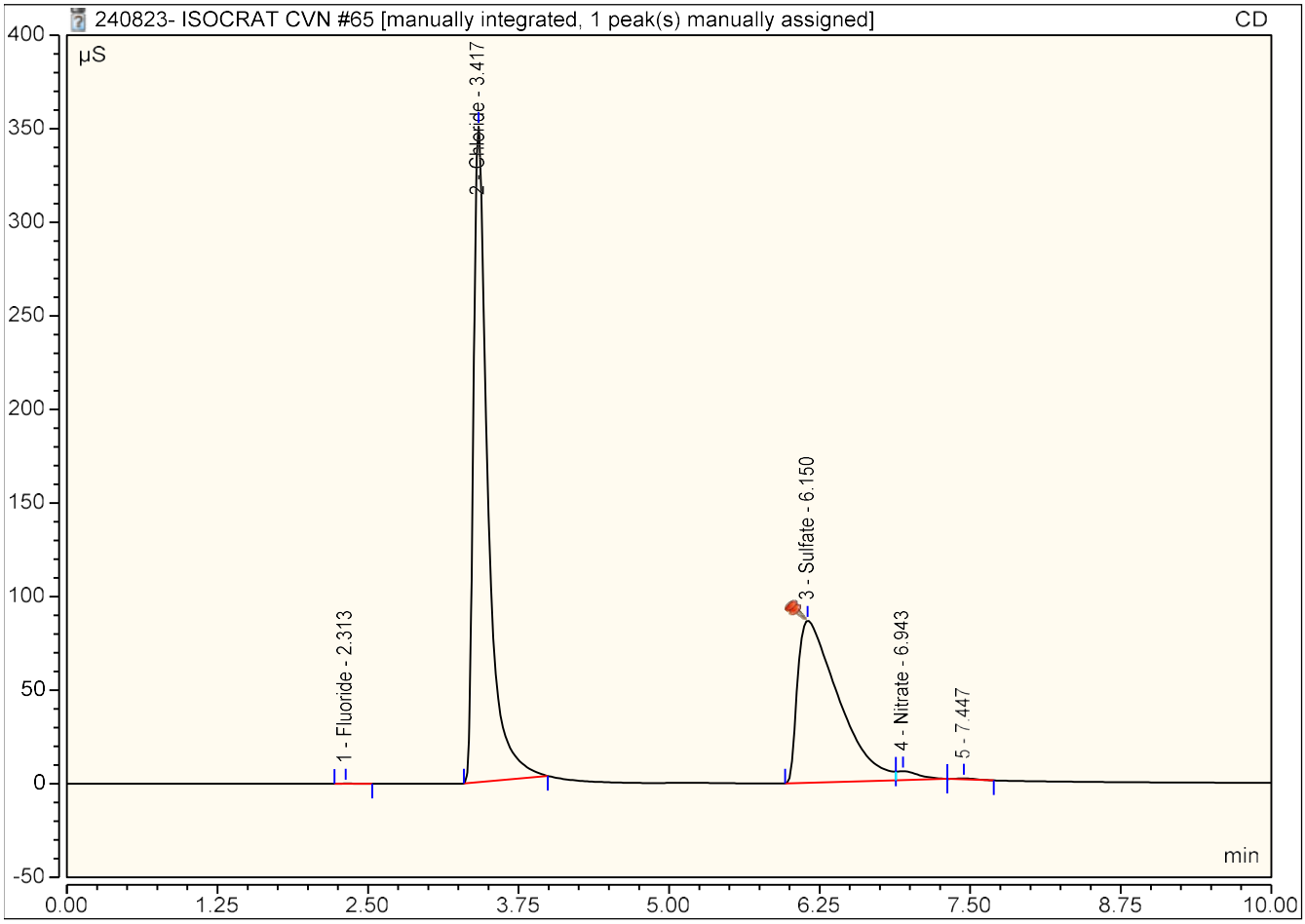
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.016	0.152	0.0565
3	3.42	**Chloride**	BMB*	48.848	351.105	118.4550
4	6.26	**Sulfate**	BM *	19.842	61.069	68.1408
5	6.97	**Nitrate**	Mb*	0.726	3.037	0.6071
TOTAL:				69.43	415.36	187.26



Peak Integration Report

Sample Name:	**L2448071-05 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 20:35**	*Run Time:*	**10.00**

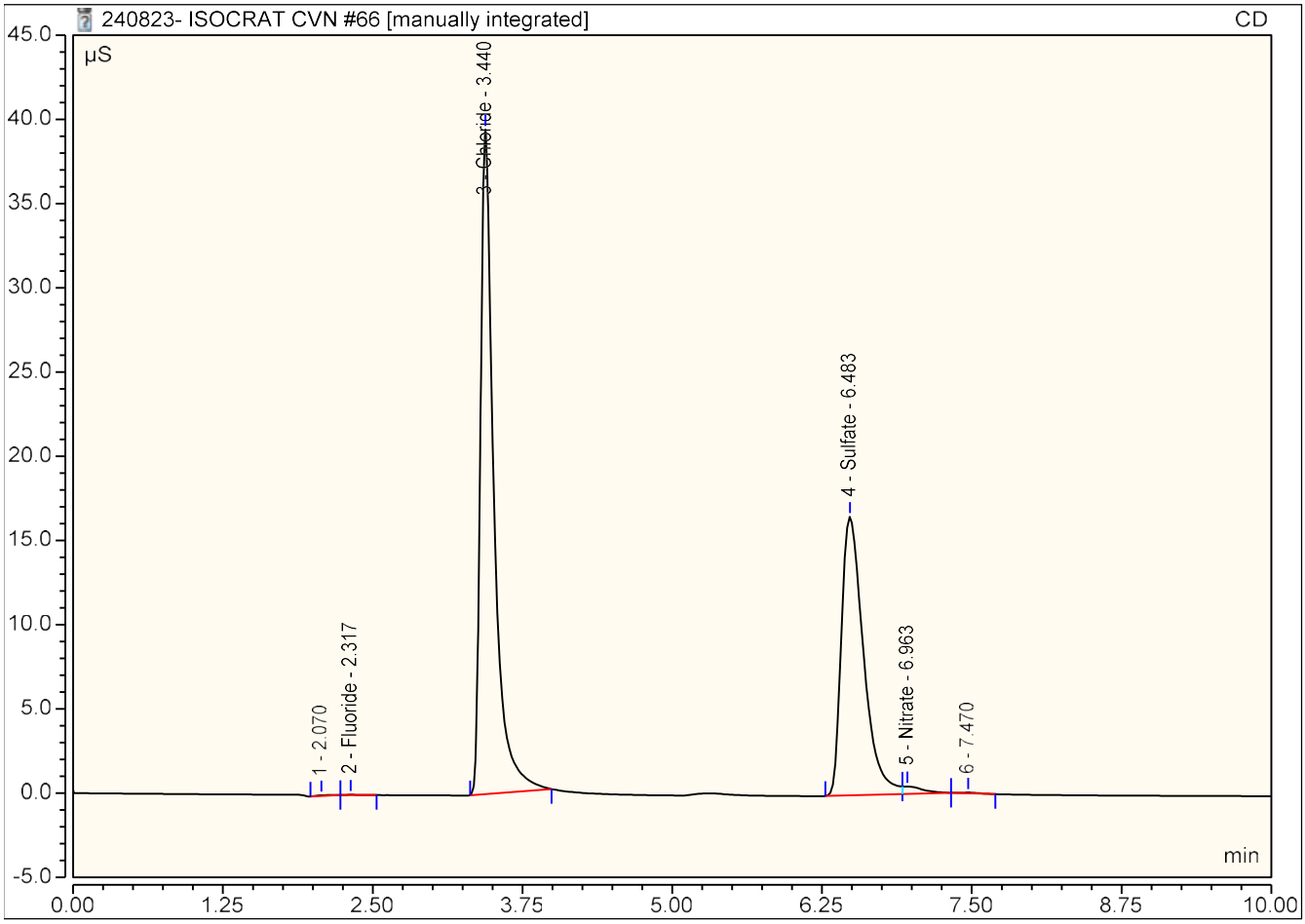
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.31	**Fluoride**	BMB	0.018	0.164	0.0602
2	3.42	**Chloride**	BMB*	48.716	350.287	118.1355
3	6.15	**Sulfate**	BM *^	33.879	86.641	116.2493
4	6.94	**Nitrate**	Mb*	0.997	4.721	0.8264
TOTAL:				83.61	441.81	235.27



Peak Integration Report

Sample Name:	**L2448071-05; 10X CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 20:47**	*Run Time:*	**10.00**

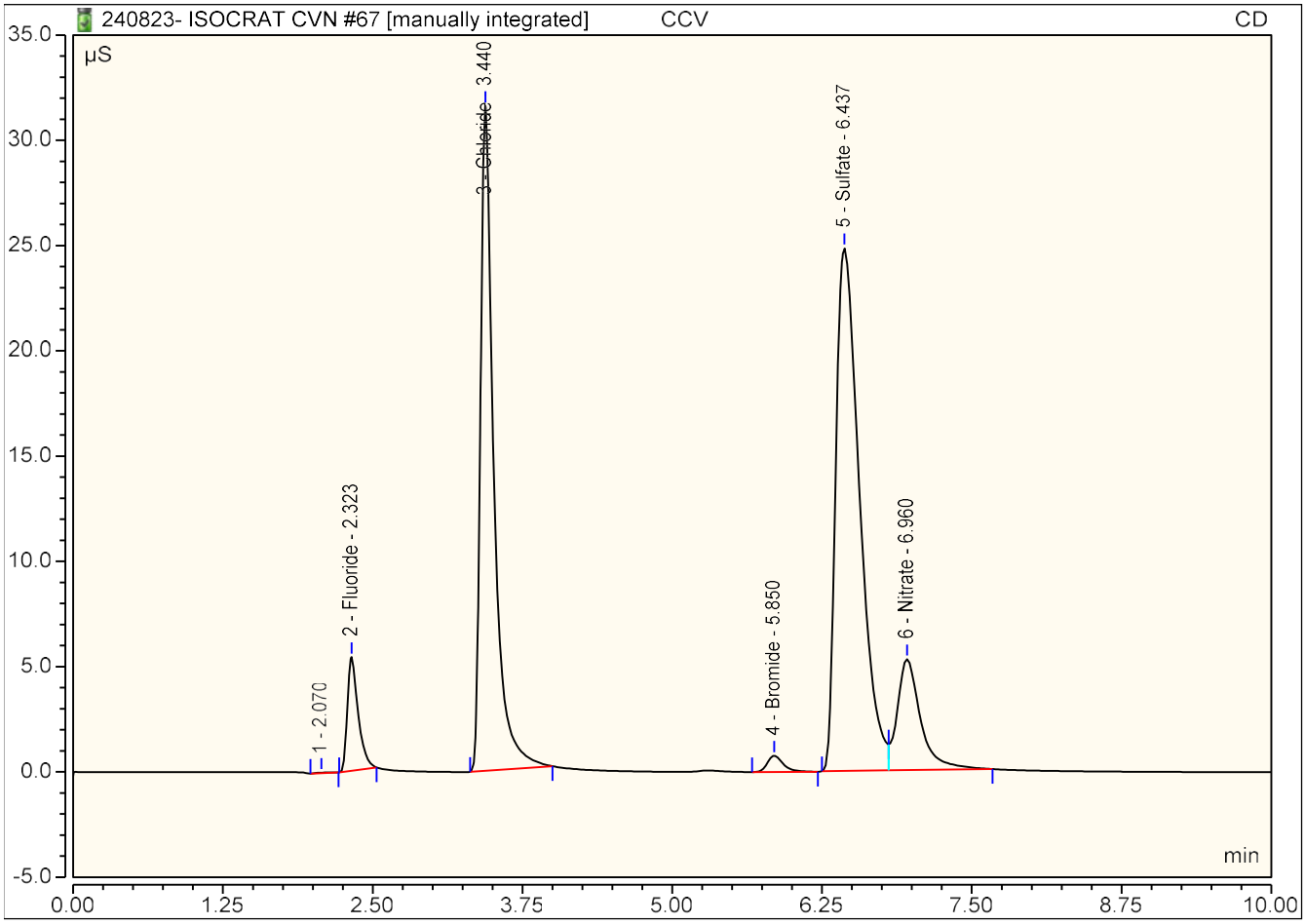
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.020	0.3221
3	3.44	**Chloride**	BMB*	5.109	39.451	125.0377
4	6.48	**Sulfate**	BM *	3.547	16.540	122.9510
5	6.96	**Nitrate**	Mb*	0.087	0.448	0.9105
TOTAL:				8.74	56.46	249.22



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 20:59**	*Run Time:*	**10.00**

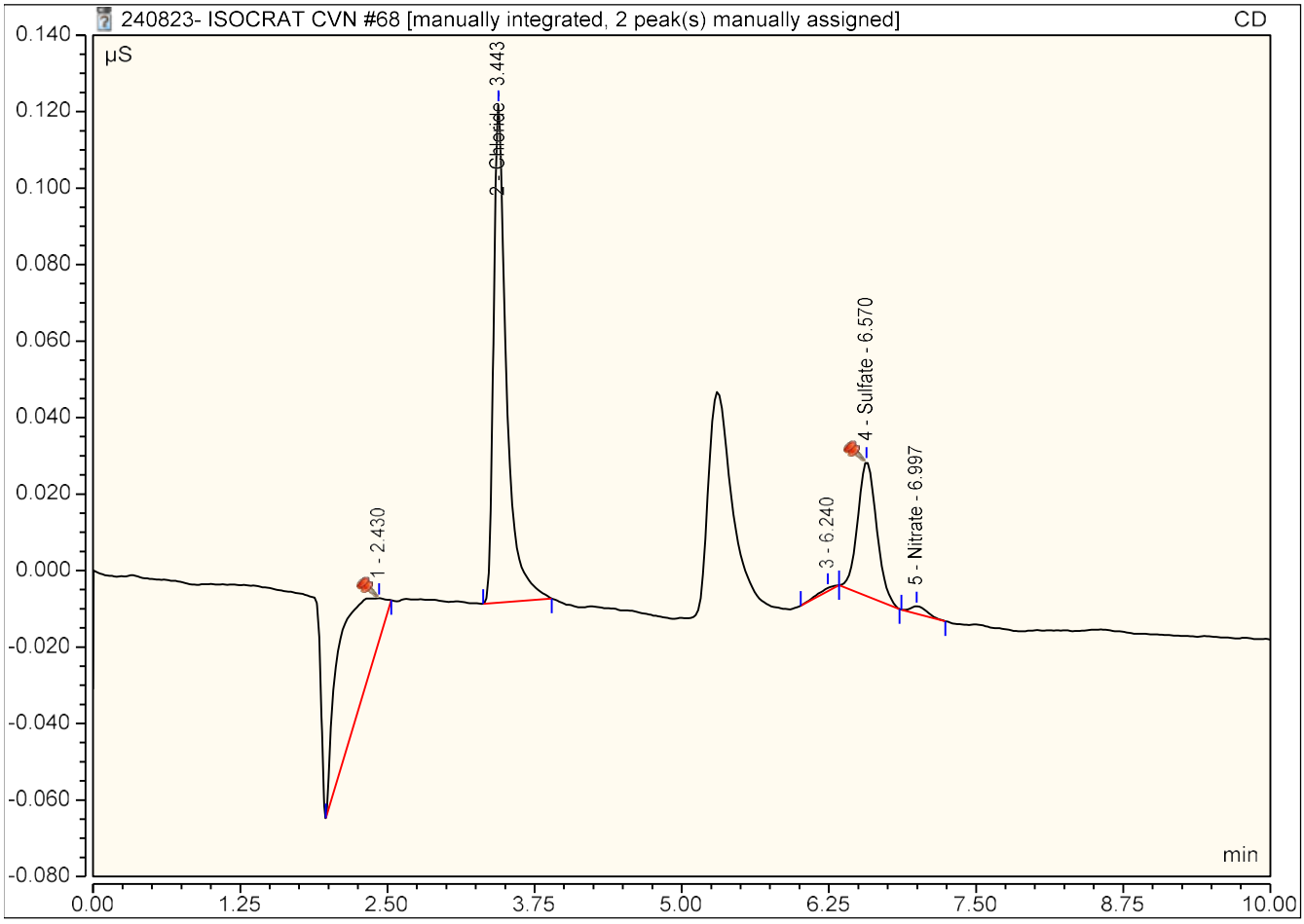
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.557	5.395	1.0101
3	3.44	**Chloride**	BMB*	4.067	31.570	9.9789
4	5.85	**Bromide**	BMB	0.119	0.772	0.9193
5	6.44	**Sulfate**	BM *	5.714	24.836	19.7226
6	6.96	**Nitrate**	MB*	1.192	5.265	0.9835
TOTAL:				11.65	67.84	32.61



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 21:12**	*Run Time:*	**10.00**

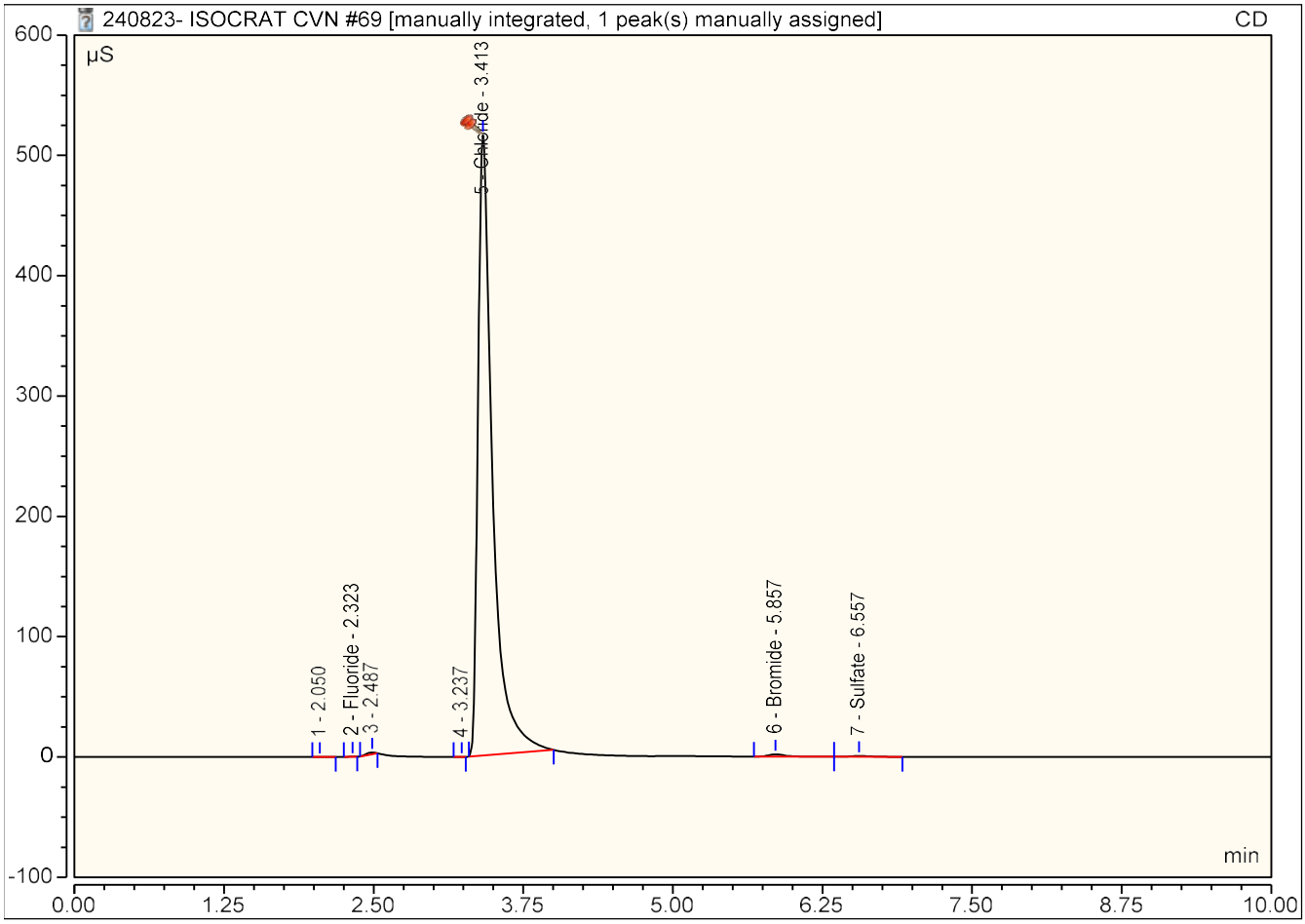
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.017	0.130	0.1681
4	6.57	**Sulfate**	BMB^	0.007	0.035	0.1629
5	7.00	**Nitrate**	BMB	0.000	0.002	0.0213
TOTAL:				0.02	0.17	0.35



Peak Integration Report

Sample Name:	**L2448136-04; 50X SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 21:24**	*Run Time:*	**10.00**

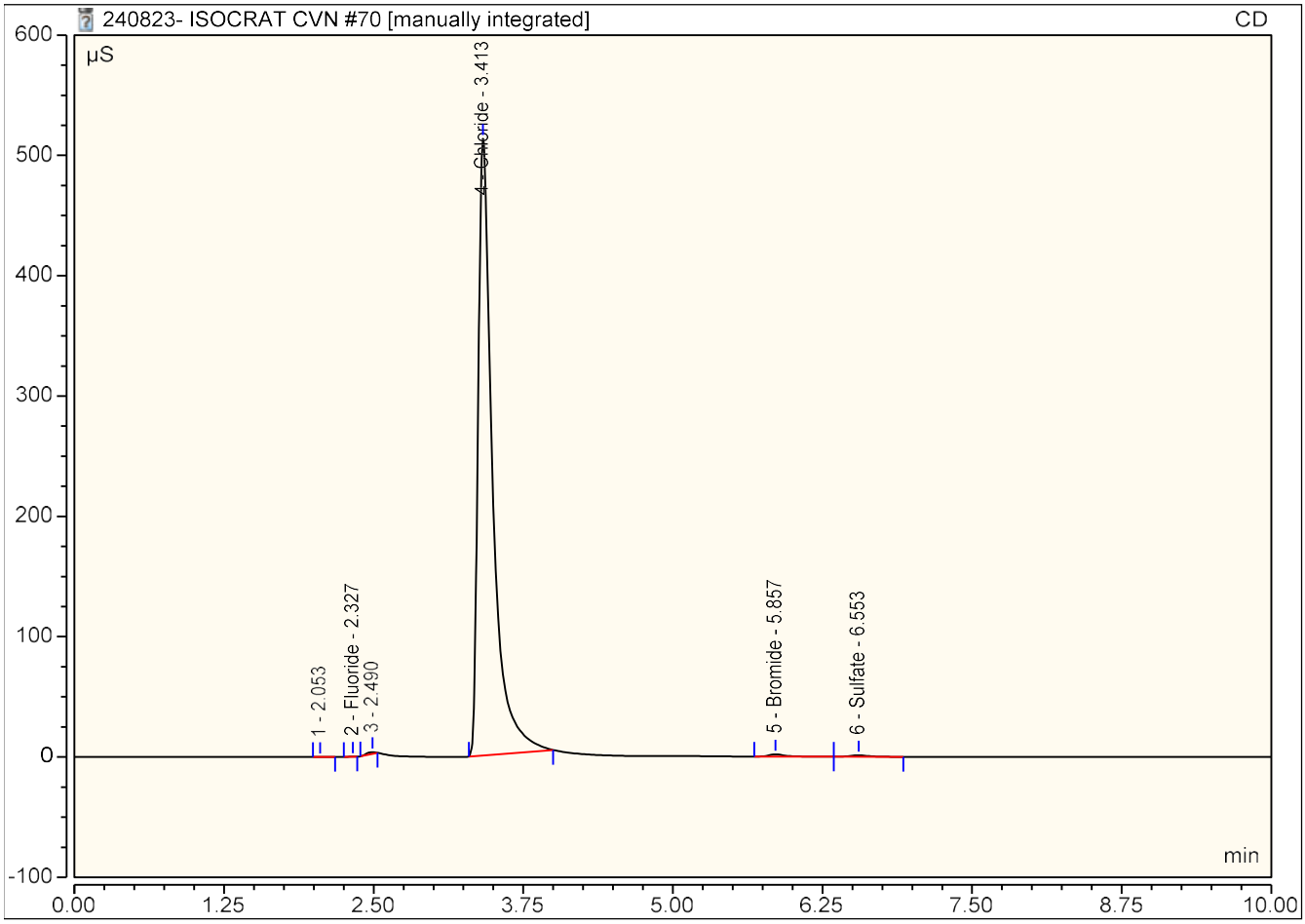
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.005	0.075	1.8297
5	3.41	**Chloride**	BMB*^	72.943	515.474	8841.1038
6	5.86	**Bromide**	BMB	0.308	1.929	115.6732
7	6.56	**Sulfate**	BMB	0.119	0.679	27.3392
TOTAL:				73.37	518.16	8985.95



Peak Integration Report

Sample Name:	**L2448136-10; 50X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 21:36**	*Run Time:*	**10.00**

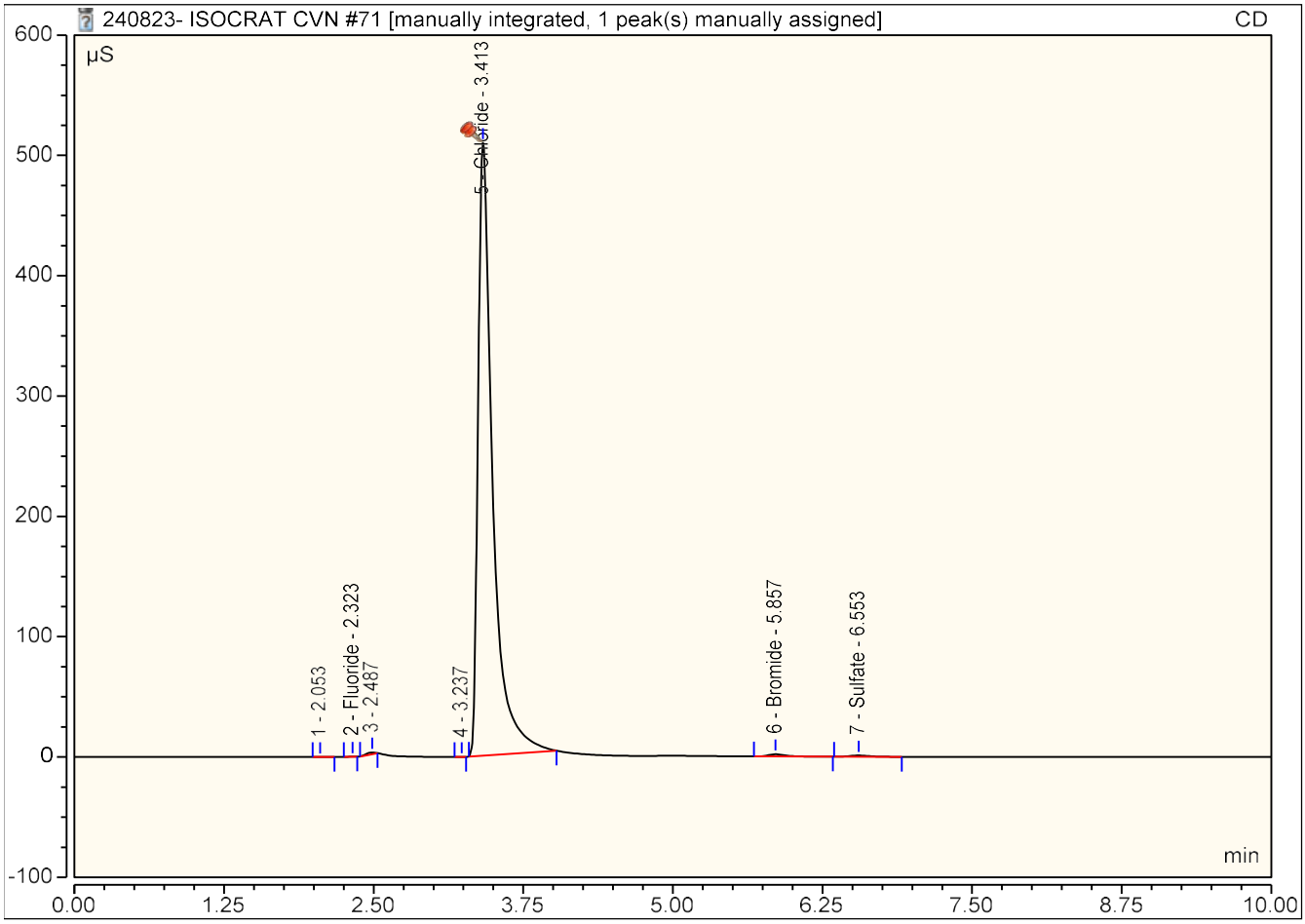
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.005	0.075	1.8485
4	3.41	**Chloride**	BMB*	72.348	512.531	8768.9443
5	5.86	**Bromide**	BMB	0.305	1.863	114.6946
6	6.55	**Sulfate**	BMB	0.201	1.146	41.4016
TOTAL:				72.86	515.61	8926.89



Peak Integration Report

Sample Name:	**L2448136-13; 50X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**50.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 21:48**	*Run Time:*	**10.00**

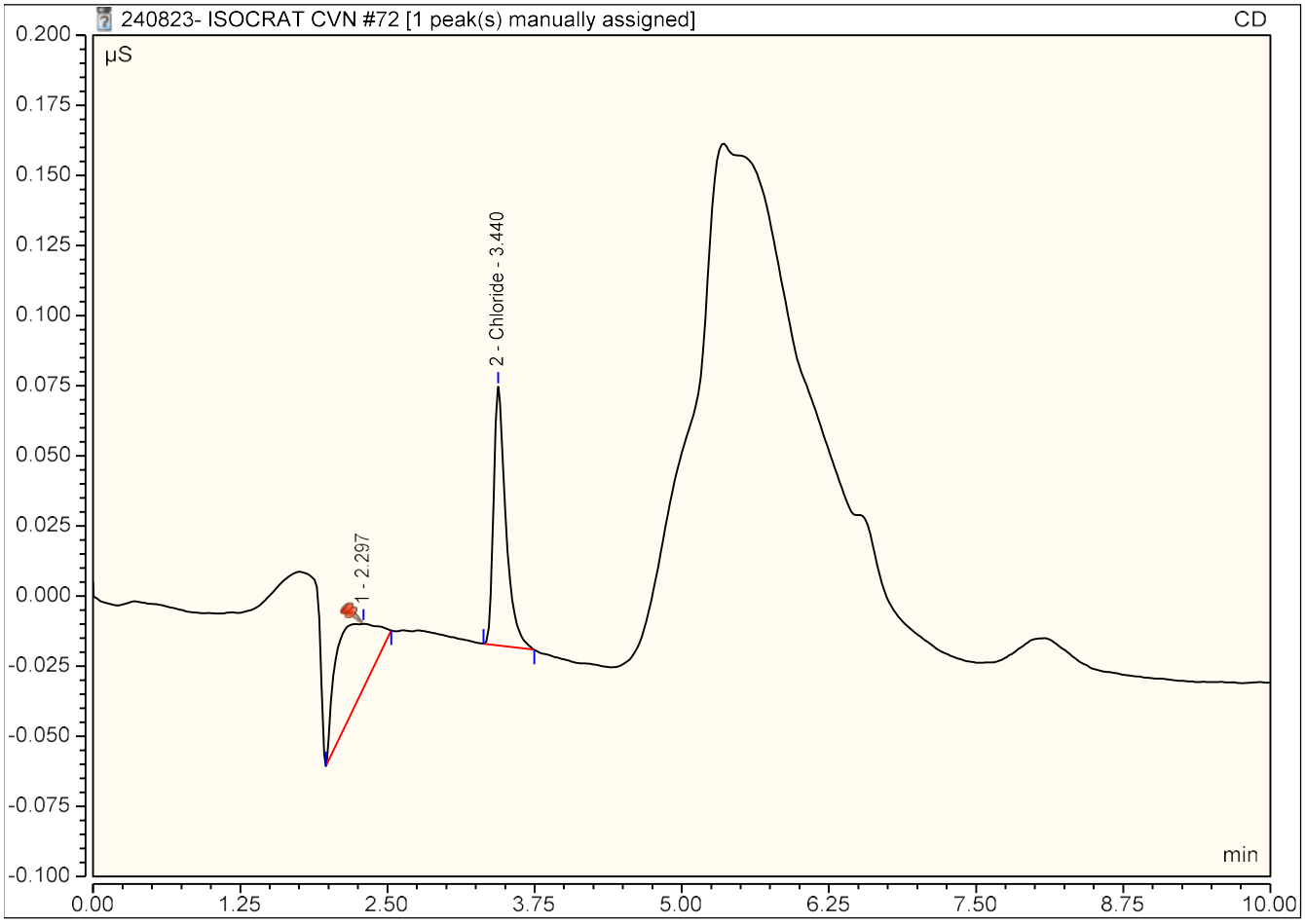
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.005	0.082	1.8652
5	3.41	**Chloride**	BMB*^	72.255	509.279	8757.7271
6	5.86	**Bromide**	BMB	0.304	1.898	114.2311
7	6.55	**Sulfate**	BMB	0.182	1.046	38.2701
TOTAL:				72.75	512.31	8912.09



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 22:00**	*Run Time:*	**10.00**

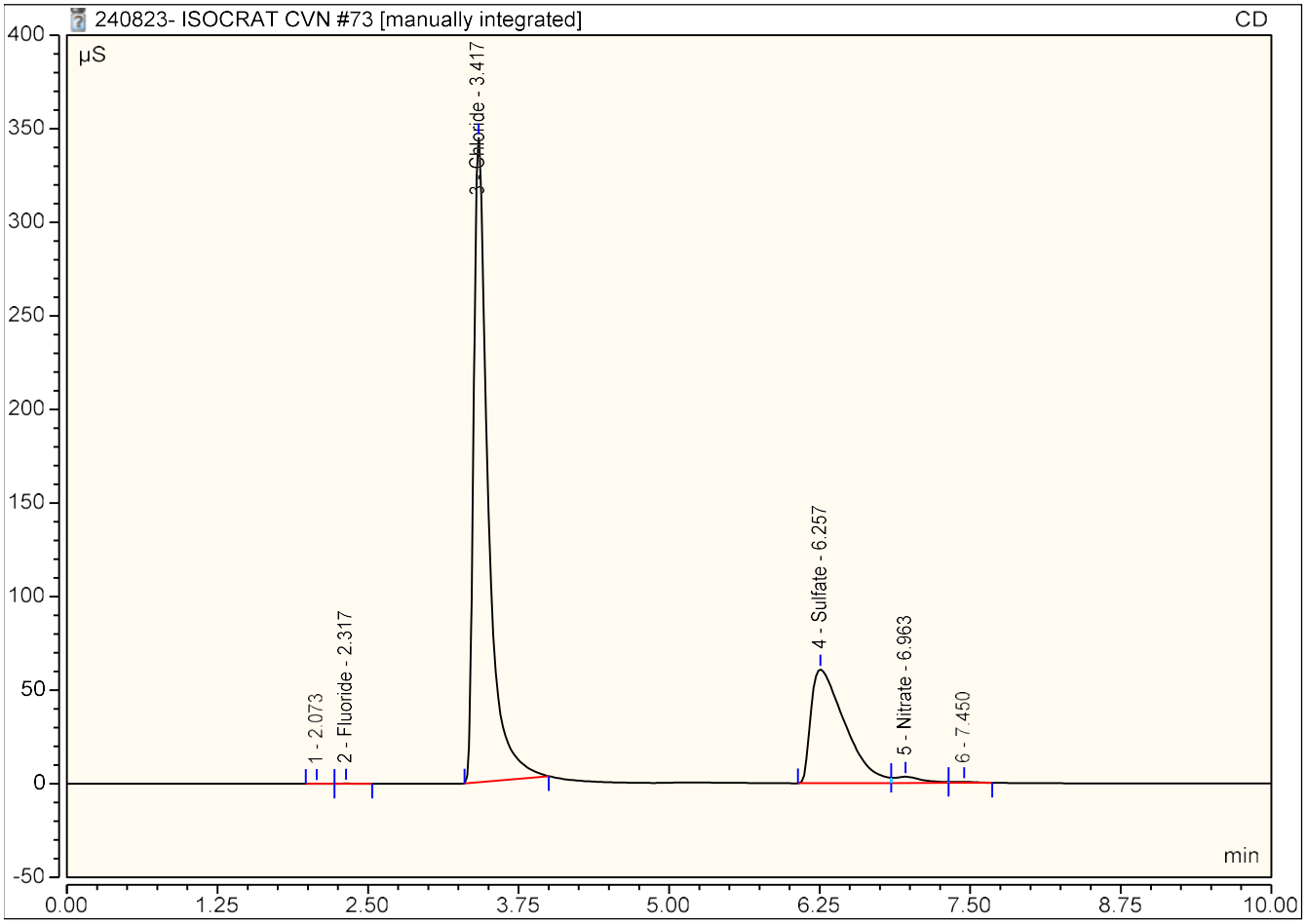
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB	0.011	0.092	0.1551
		TOTAL:		0.01	0.09	0.16



Peak Integration Report

Sample Name:	**L2448078-01 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 22:12**	*Run Time:*	**10.00**

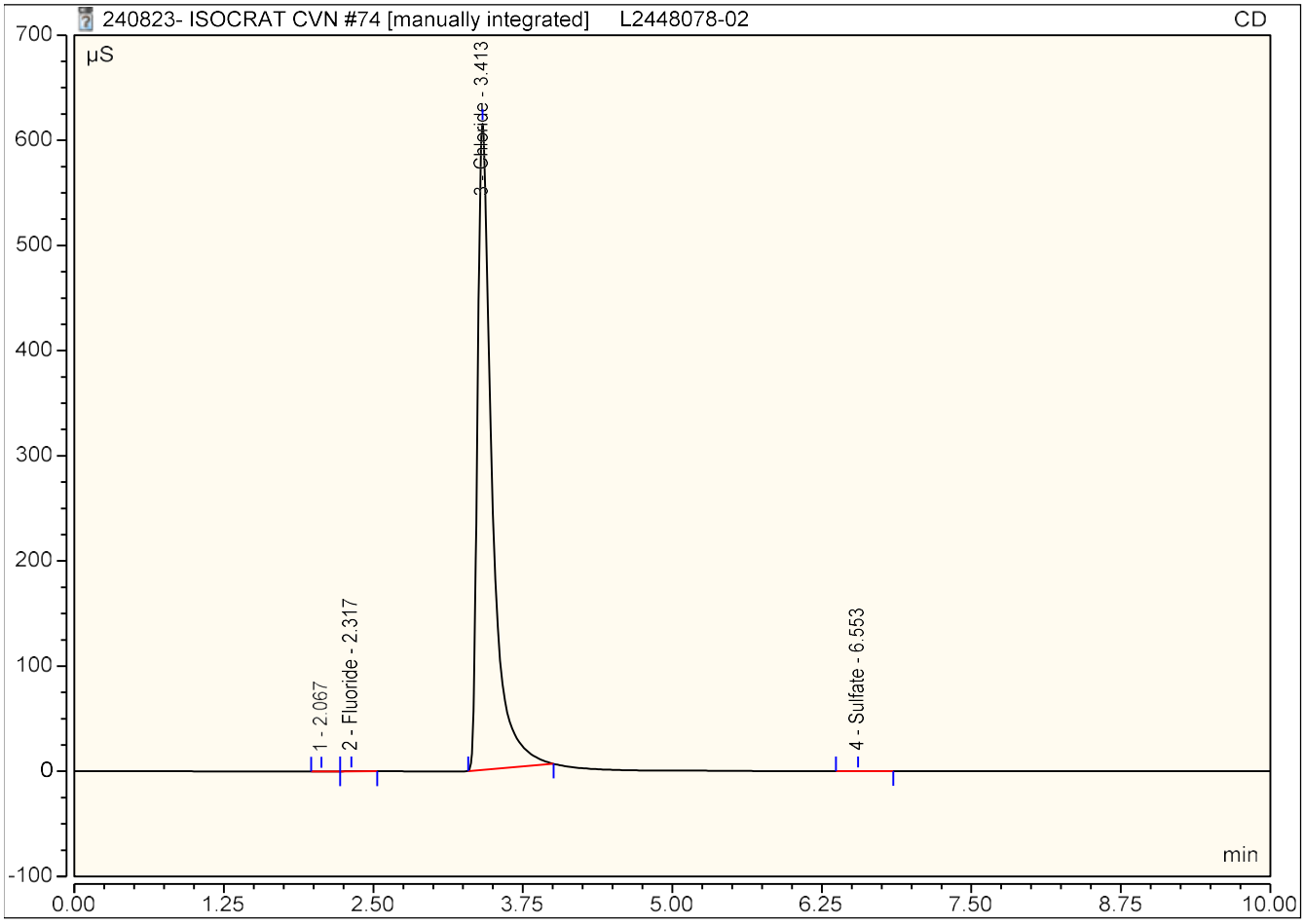
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.013	0.117	0.0500
3	3.42	**Chloride**	BMB*	47.923	344.068	116.2145
4	6.26	**Sulfate**	BM *	19.795	60.785	67.9807
5	6.96	**Nitrate**	M *	0.912	3.367	0.7571
TOTAL:				68.64	408.34	185.00



Peak Integration Report

Sample Name:	**L2448078-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 22:24**	*Run Time:*	**10.00**

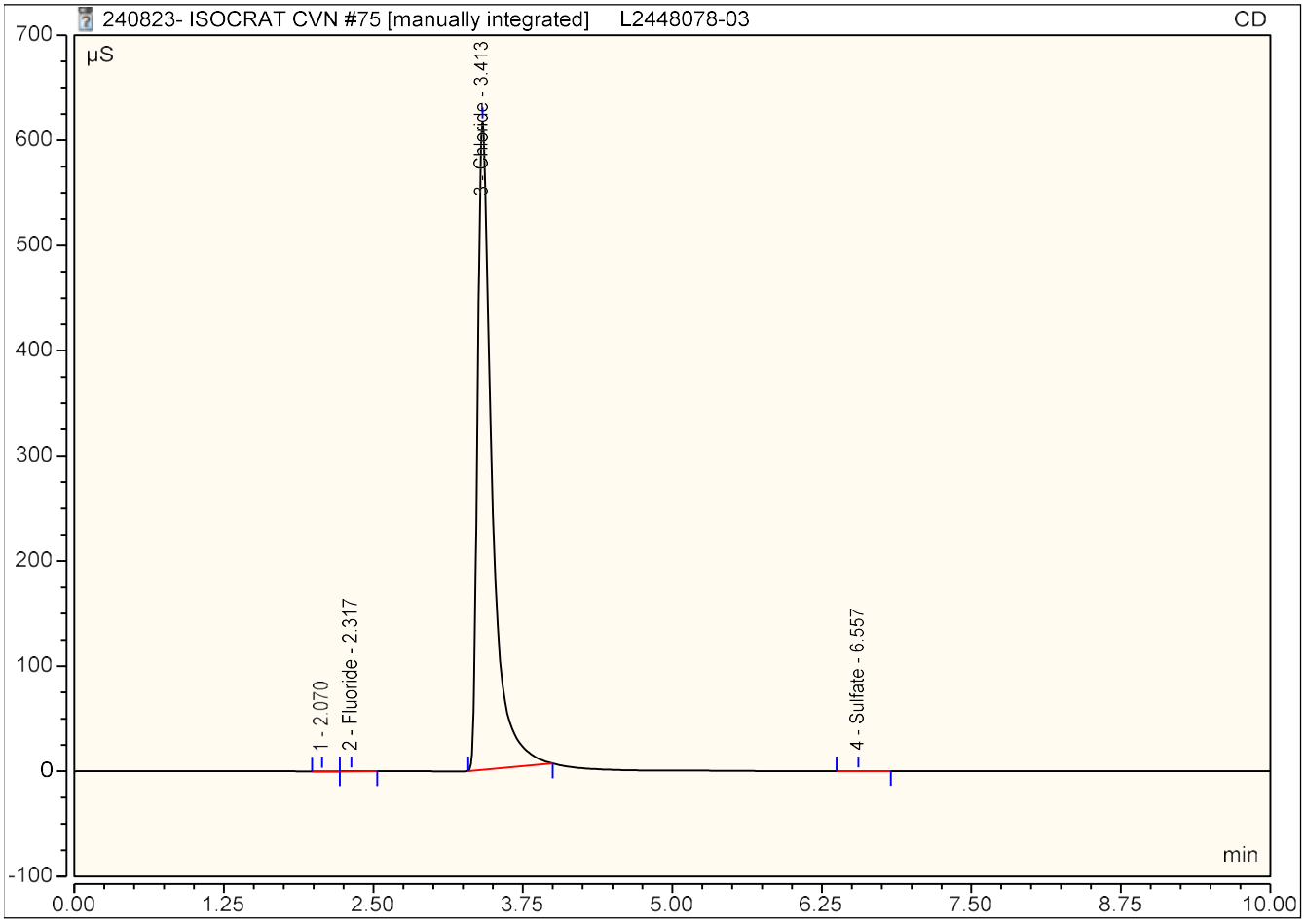
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.013	0.125	0.0516
3	3.41	**Chloride**	BMB*	87.471	614.302	212.0130
4	6.55	**Sulfate**	BMB	0.011	0.061	0.1770
TOTAL:				87.50	614.49	212.24



Peak Integration Report

Sample Name:	**L2448078-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 22:36**	*Run Time:*	**10.00**

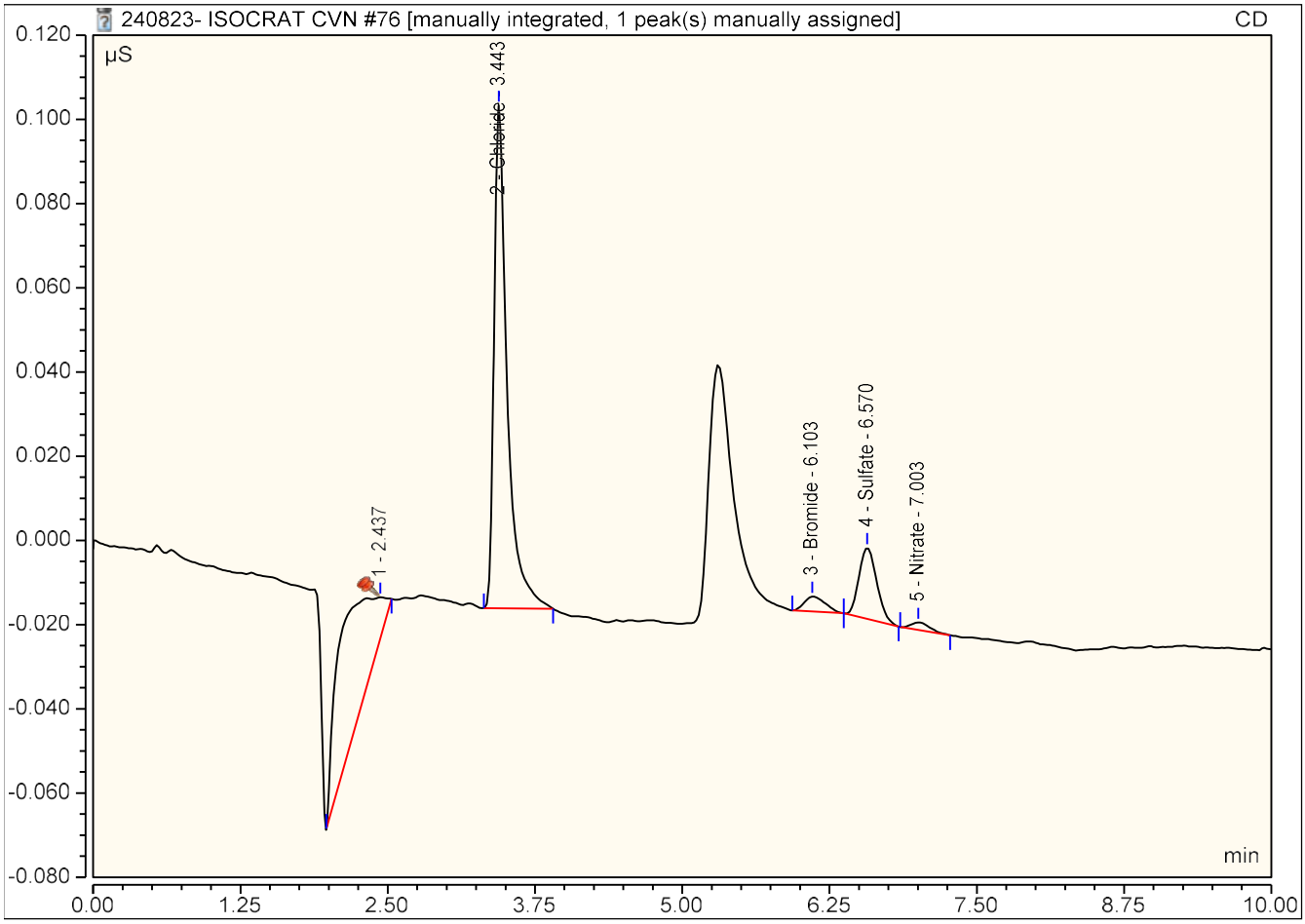
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.014	0.129	0.0528
3	3.41	**Chloride**	BMB*	87.297	615.825	211.5904
4	6.56	**Sulfate**	BMB	0.010	0.058	0.1750
TOTAL:				87.32	616.01	211.82



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 22:48**	*Run Time:*	**10.00**

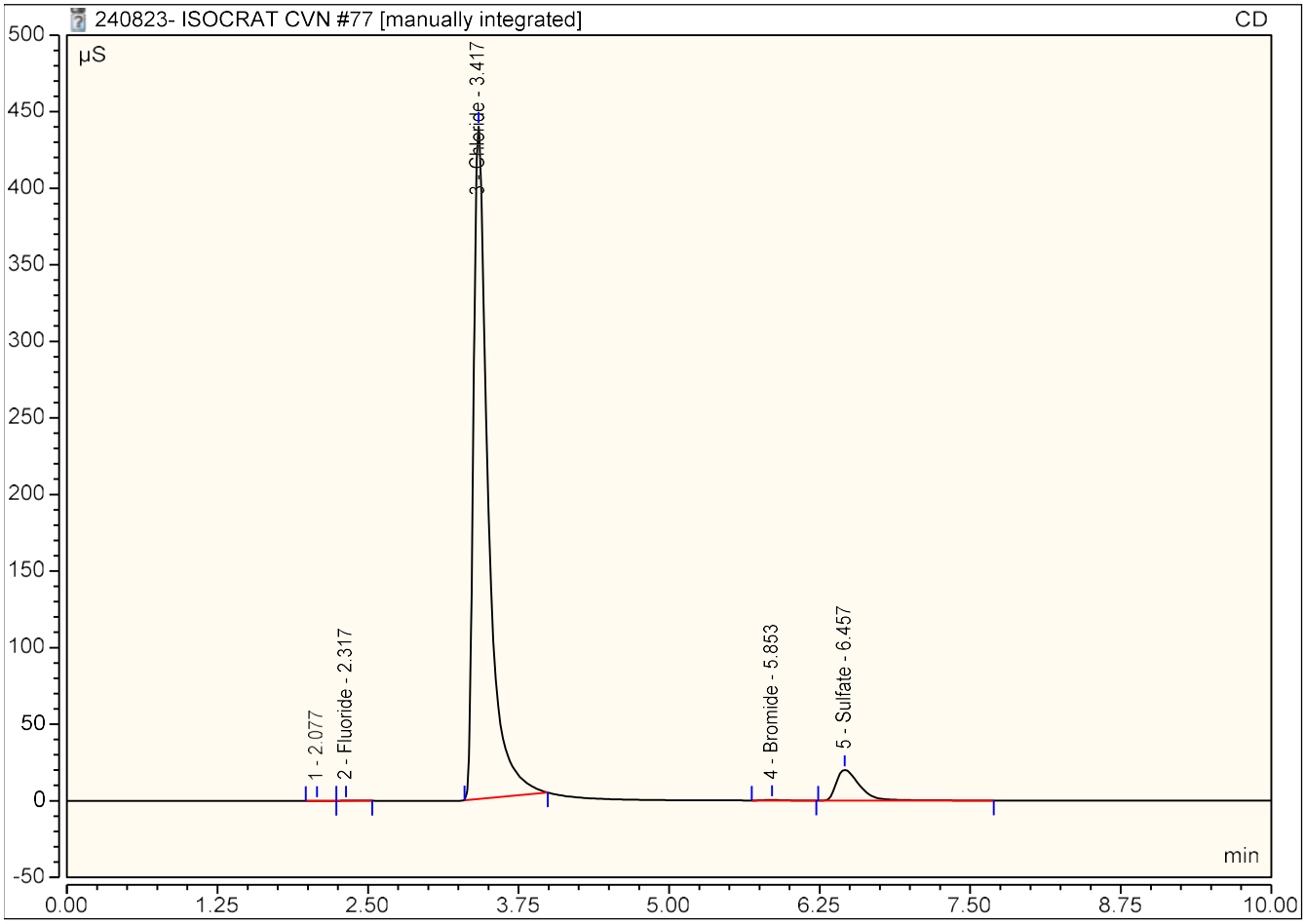
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.015	0.119	0.1651
3	6.10	**Bromide**	BMB	0.001	0.004	0.0399
4	6.57	**Sulfate**	BMB	0.003	0.017	0.1507
5	7.00	**Nitrate**	BMB	0.000	0.002	0.0213
TOTAL:				0.02	0.14	0.38



Peak Integration Report

Sample Name:	**XL2448037-01; 25X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 23:00**	*Run Time:*	**10.00**

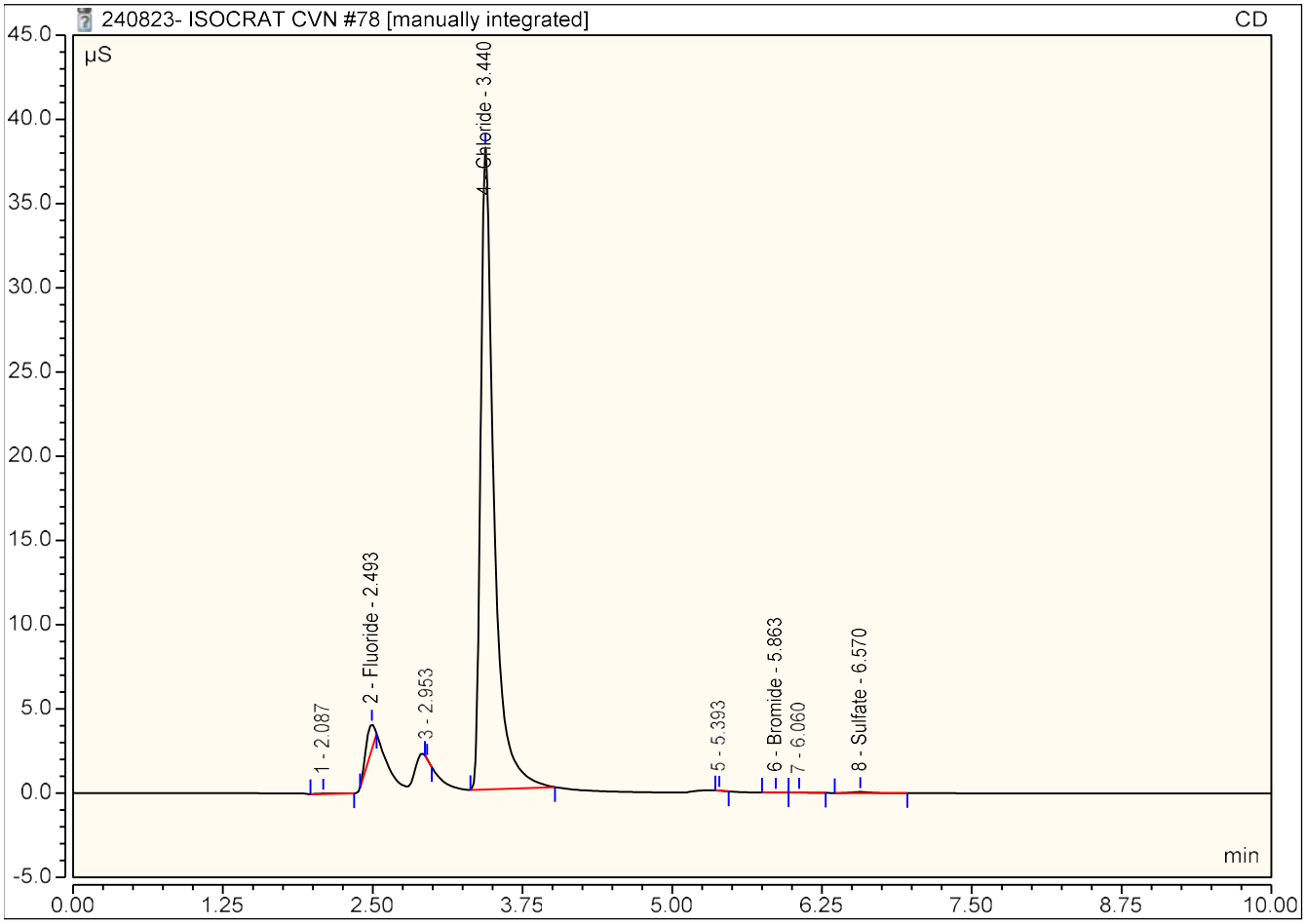
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.004	0.035	0.8818
3	3.42	**Chloride**	BMB*	62.344	439.172	3778.6764
4	5.85	**Bromide**	BMB	0.063	0.409	12.5703
5	6.46	**Sulfate**	BMB	4.499	20.027	388.9873
TOTAL:				66.91	459.64	4181.12



Peak Integration Report

Sample Name:	**XL2448054-01; 25X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 23:12**	*Run Time:*	**10.00**

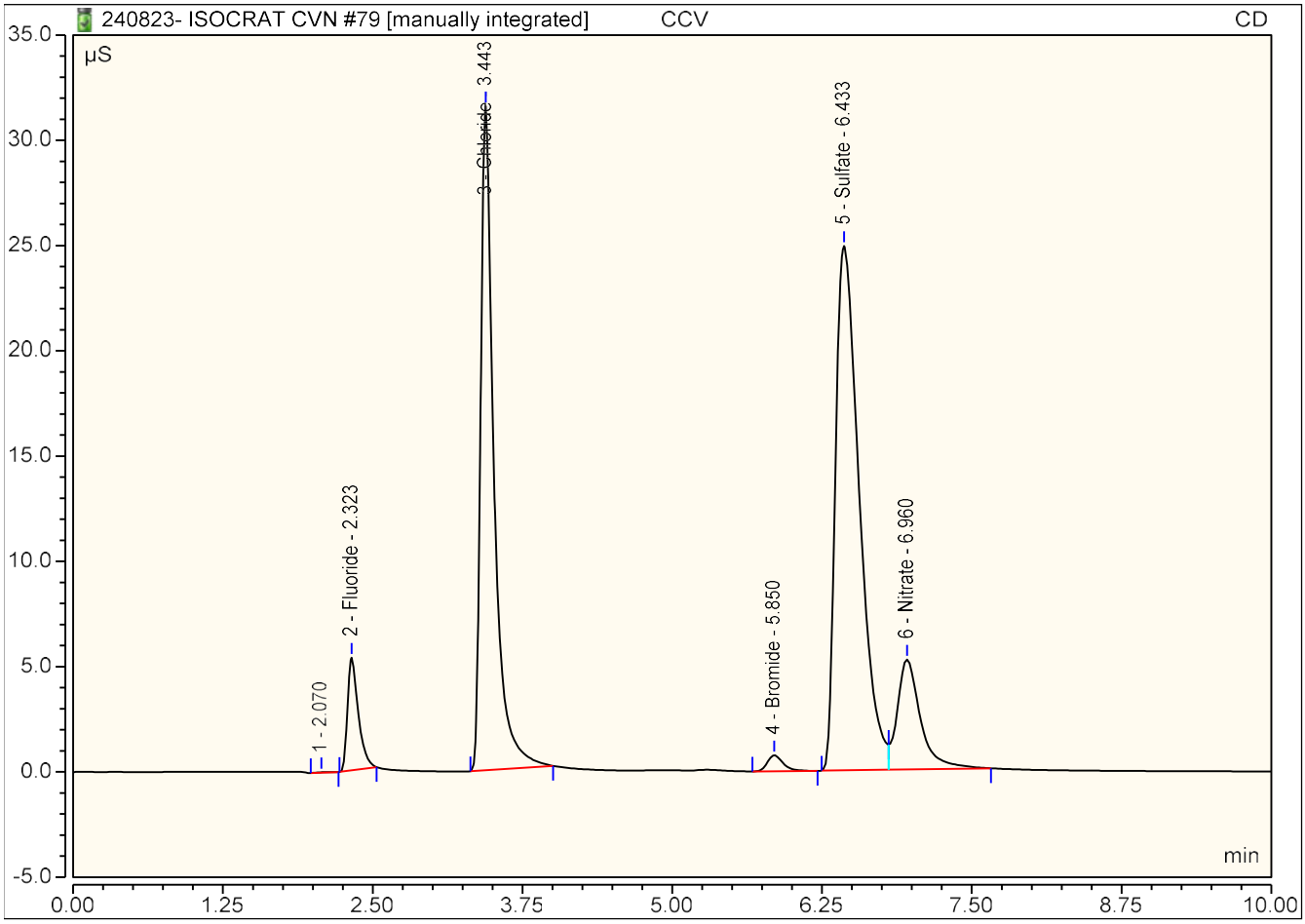
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.49	**Fluoride**	BMB	0.137	1.468	6.7252
4	3.44	**Chloride**	BMB*	4.921	38.113	301.2326
6	5.86	**Bromide**	BMB	0.001	0.014	1.1317
8	6.57	**Sulfate**	BMB	0.012	0.066	4.5330
TOTAL:				5.07	39.66	313.62



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 23:25**	*Run Time:*	**10.00**

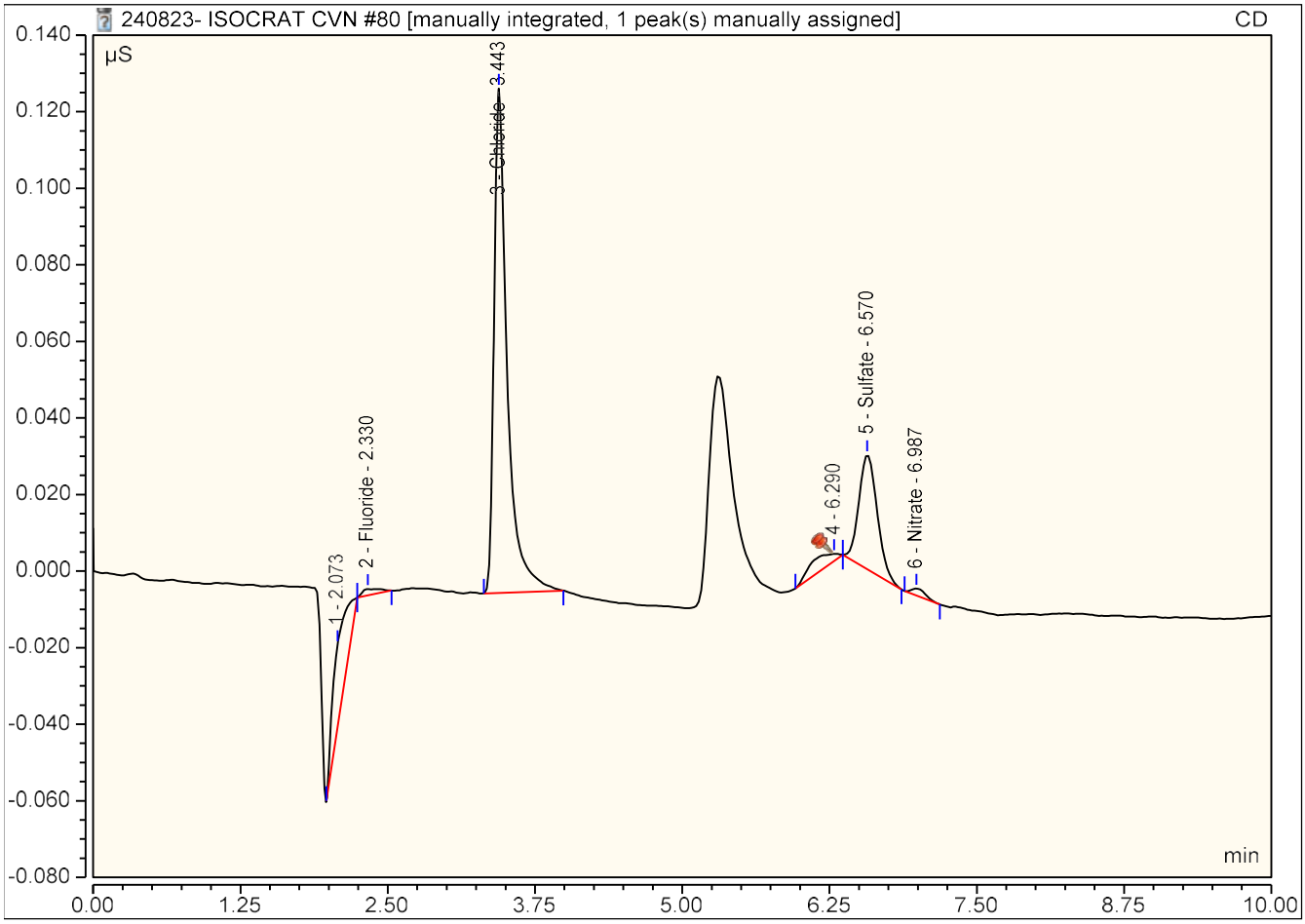
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.553	5.350	1.0033
3	3.44	**Chloride**	BMB*	4.060	31.535	9.9638
4	5.85	**Bromide**	BMB	0.118	0.762	0.9056
5	6.43	**Sulfate**	BM *	5.717	24.904	19.7334
6	6.96	**Nitrate**	MB*	1.173	5.224	0.9684
TOTAL:				11.62	67.78	32.57



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 23:37**	*Run Time:*	**10.00**

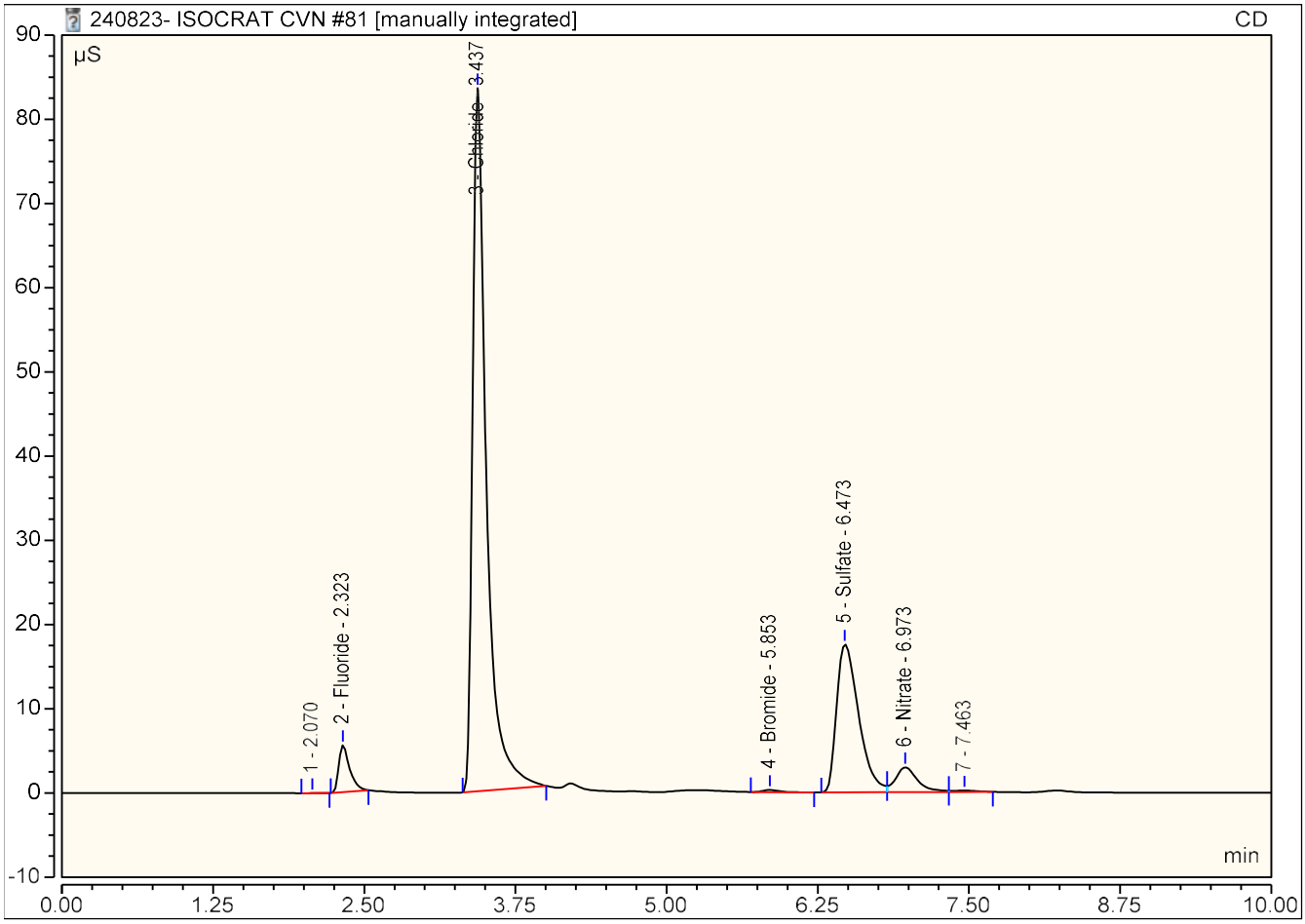
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.000	0.002	0.0284
3	3.44	**Chloride**	BMB*	0.017	0.132	0.1691
5	6.57	**Sulfate**	BMB	0.005	0.030	0.1589
6	6.99	**Nitrate**	BMB	0.000	0.002	0.0213
TOTAL:				0.02	0.17	0.38



Peak Integration Report

Sample Name:	**L2448370-01 MS CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**23-Aug-2024 / 23:49**	*Run Time:*	**10.00**

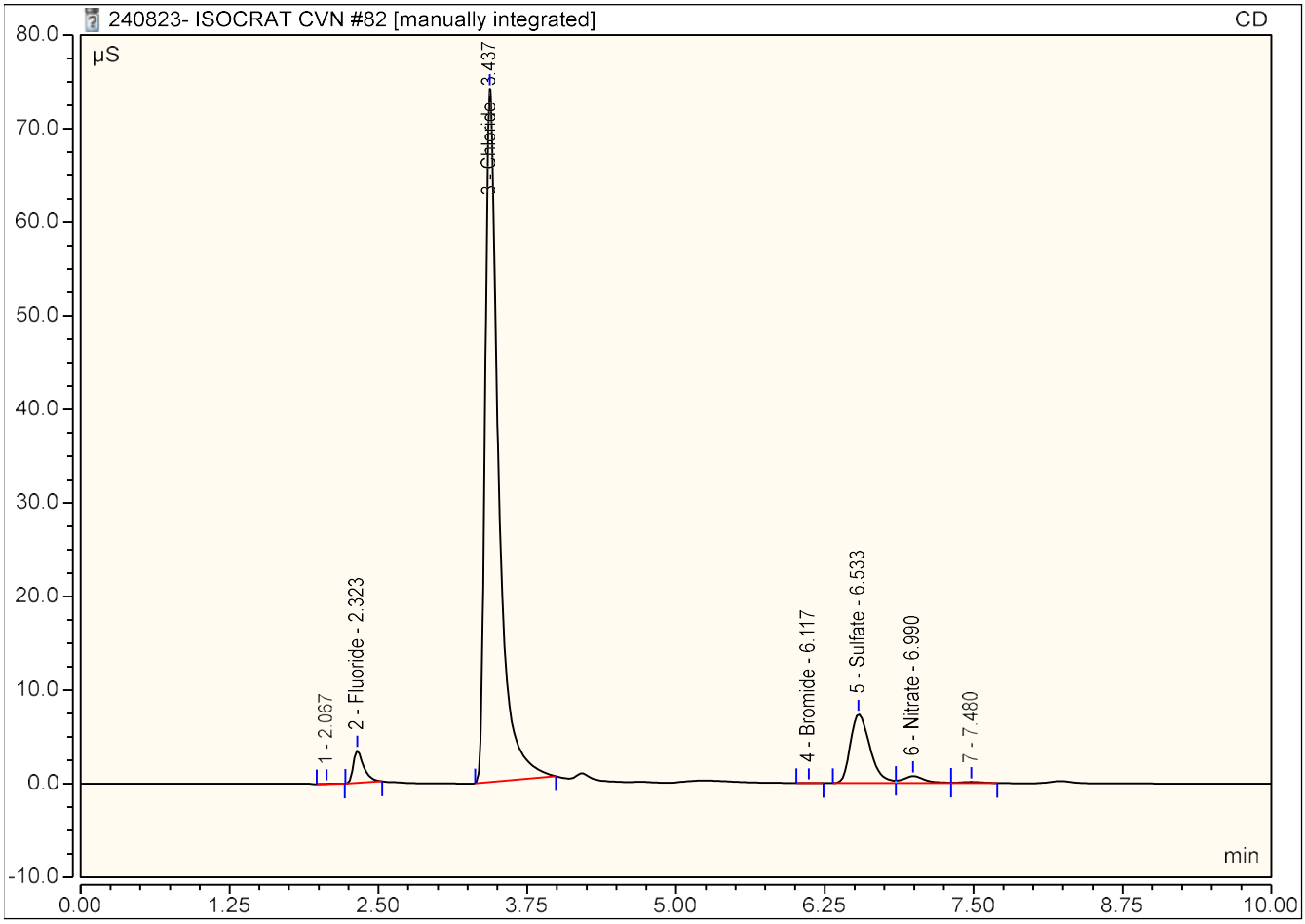
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.579	5.570	1.0486
3	3.44	**Chloride**	BMB*	11.047	83.464	26.8866
4	5.85	**Bromide**	BMB	0.040	0.268	0.3331
5	6.47	**Sulfate**	BM *	3.710	17.551	12.8542
6	6.97	**Nitrate**	M *	0.620	2.945	0.5219
TOTAL:				16.00	109.80	41.64



Peak Integration Report

Sample Name:	**L2448370-01 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 00:01**	*Run Time:*	**10.00**

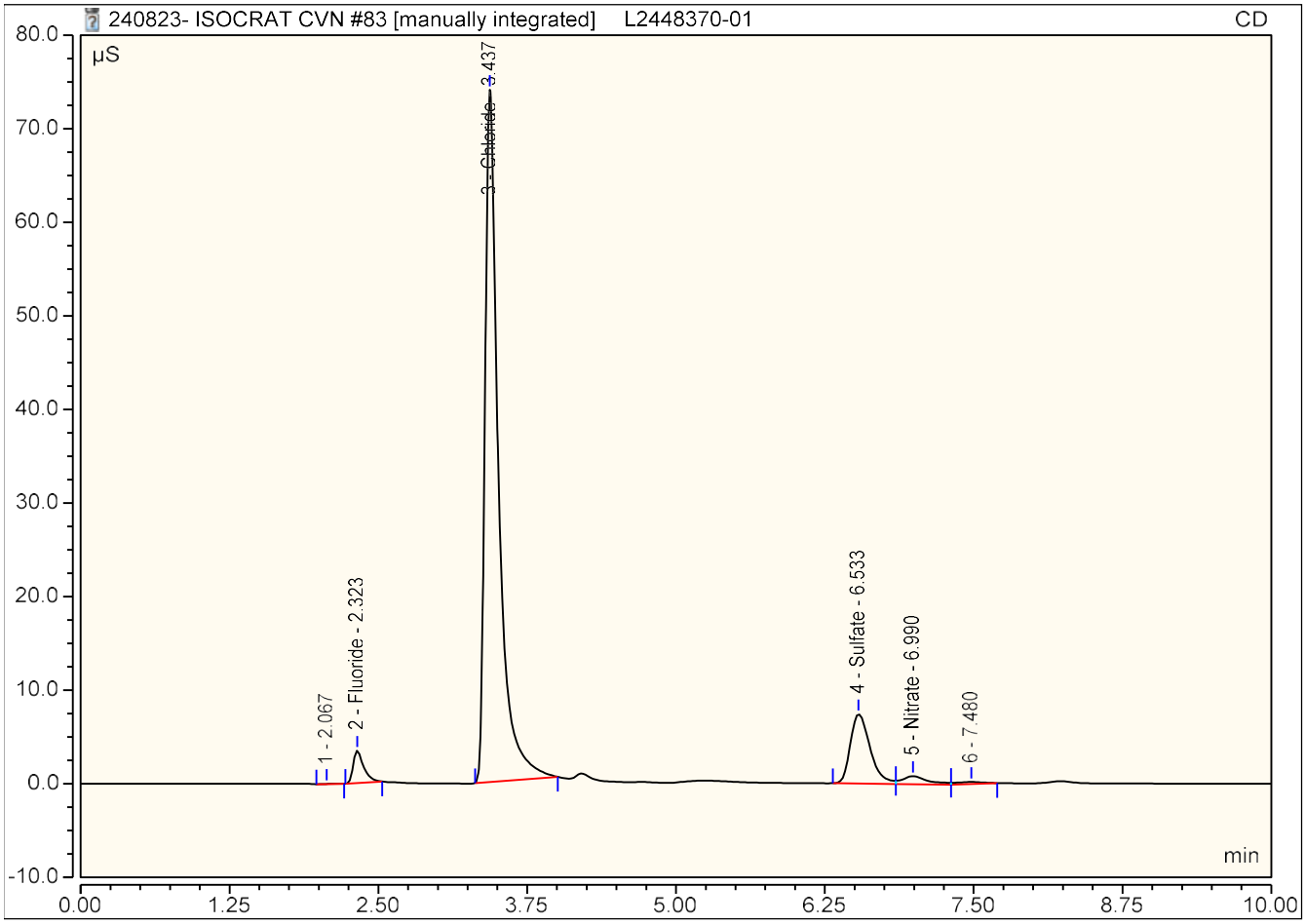
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.353	3.469	0.6498
3	3.44	**Chloride**	BMB*	9.720	74.066	23.6742
4	6.12	**Bromide**	BMB	0.000	0.003	0.0367
5	6.53	**Sulfate**	BM *	1.397	7.345	4.9271
6	6.99	**Nitrate**	M *	0.155	0.753	0.1462
TOTAL:				11.63	85.64	29.43



Peak Integration Report

Sample Name:	**L2448370-01**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 00:13**	*Run Time:*	**10.00**

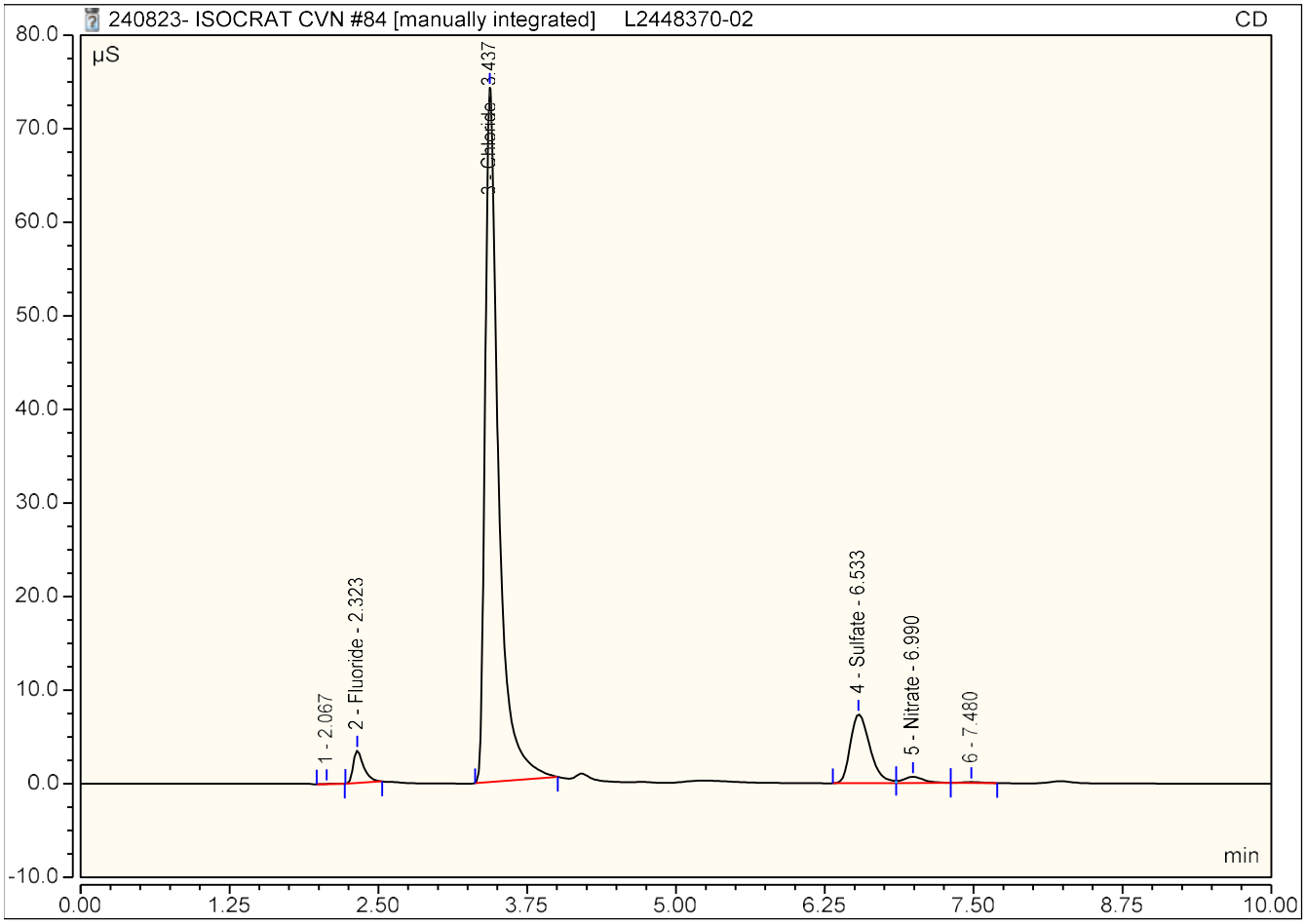
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.352	3.444	0.6492
3	3.44	**Chloride**	BMB*	9.747	73.970	23.7382
4	6.53	**Sulfate**	BM *	1.424	7.413	5.0196
5	6.99	**Nitrate**	M *	0.214	0.866	0.1940
TOTAL:				11.74	85.69	29.60



Peak Integration Report

Sample Name:	**L2448370-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 00:25**	*Run Time:*	**10.00**

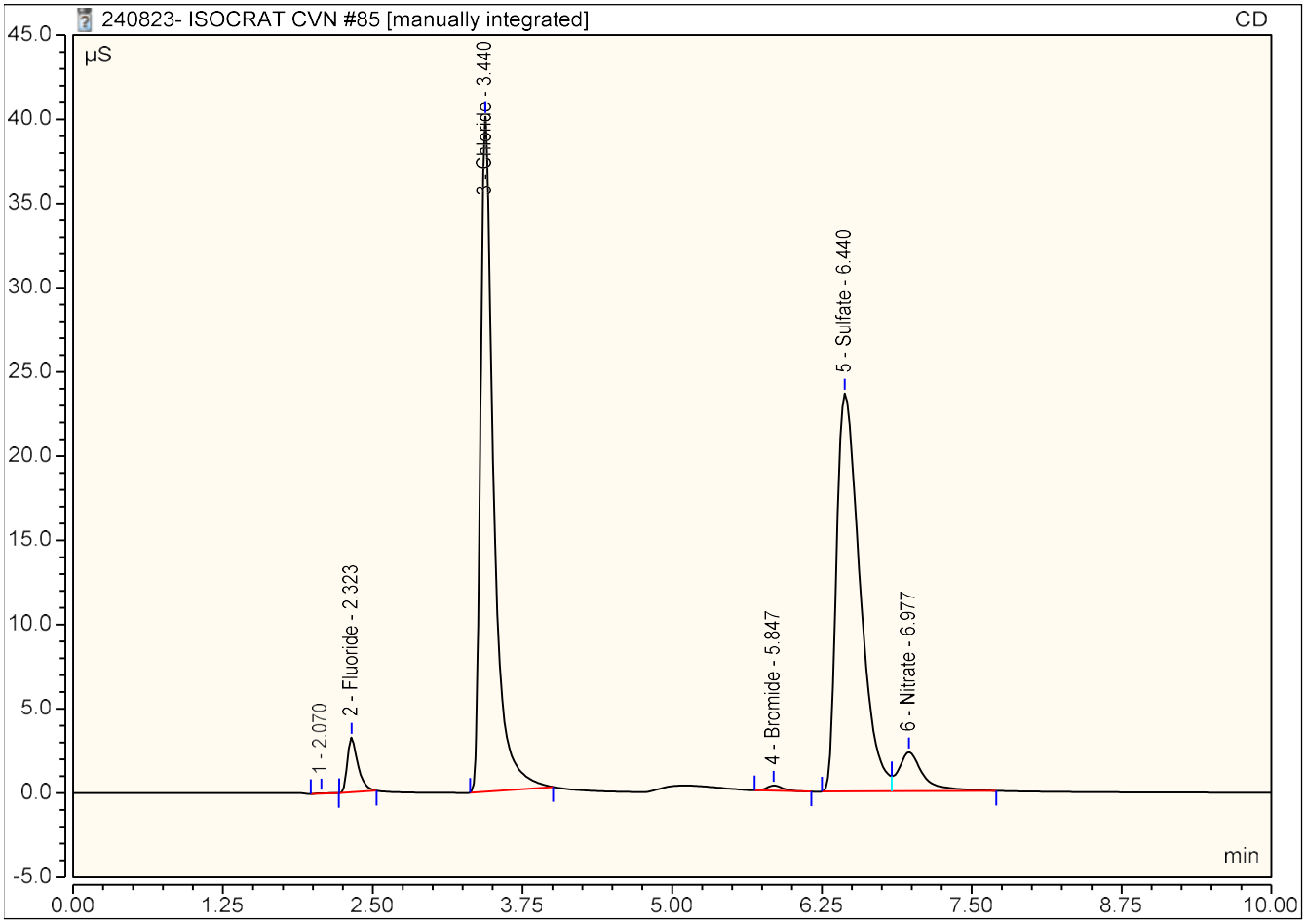
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.354	3.473	0.6512
3	3.44	**Chloride**	BMB*	9.750	74.219	23.7456
4	6.53	**Sulfate**	BM *	1.395	7.348	4.9200
5	6.99	**Nitrate**	Mb*	0.129	0.659	0.1250
TOTAL:				11.63	85.70	29.44



Peak Integration Report

Sample Name:	**L2448345-01 MS CL SO4 NO3**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 00:37**	*Run Time:*	**10.00**

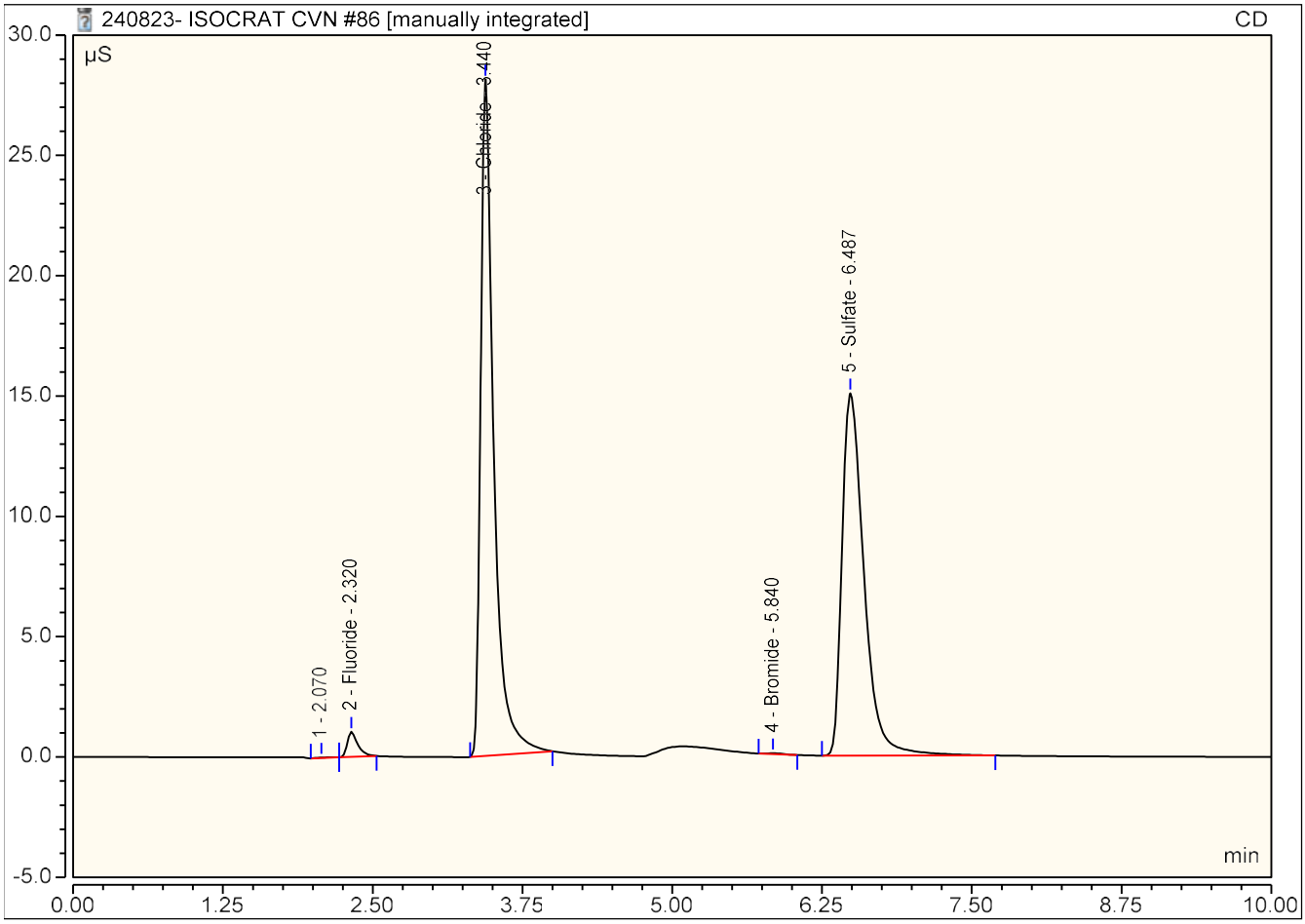
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.332	3.250	0.6137
3	3.44	**Chloride**	BMB*	5.129	40.081	12.5524
4	5.85	**Bromide**	BMB	0.046	0.310	0.3774
5	6.44	**Sulfate**	BM *	5.364	23.616	18.5228
6	6.98	**Nitrate**	MB*	0.544	2.319	0.4605
TOTAL:				11.42	69.58	32.53



Peak Integration Report

Sample Name:	**L2448345-01 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 00:49**	*Run Time:*	**10.00**

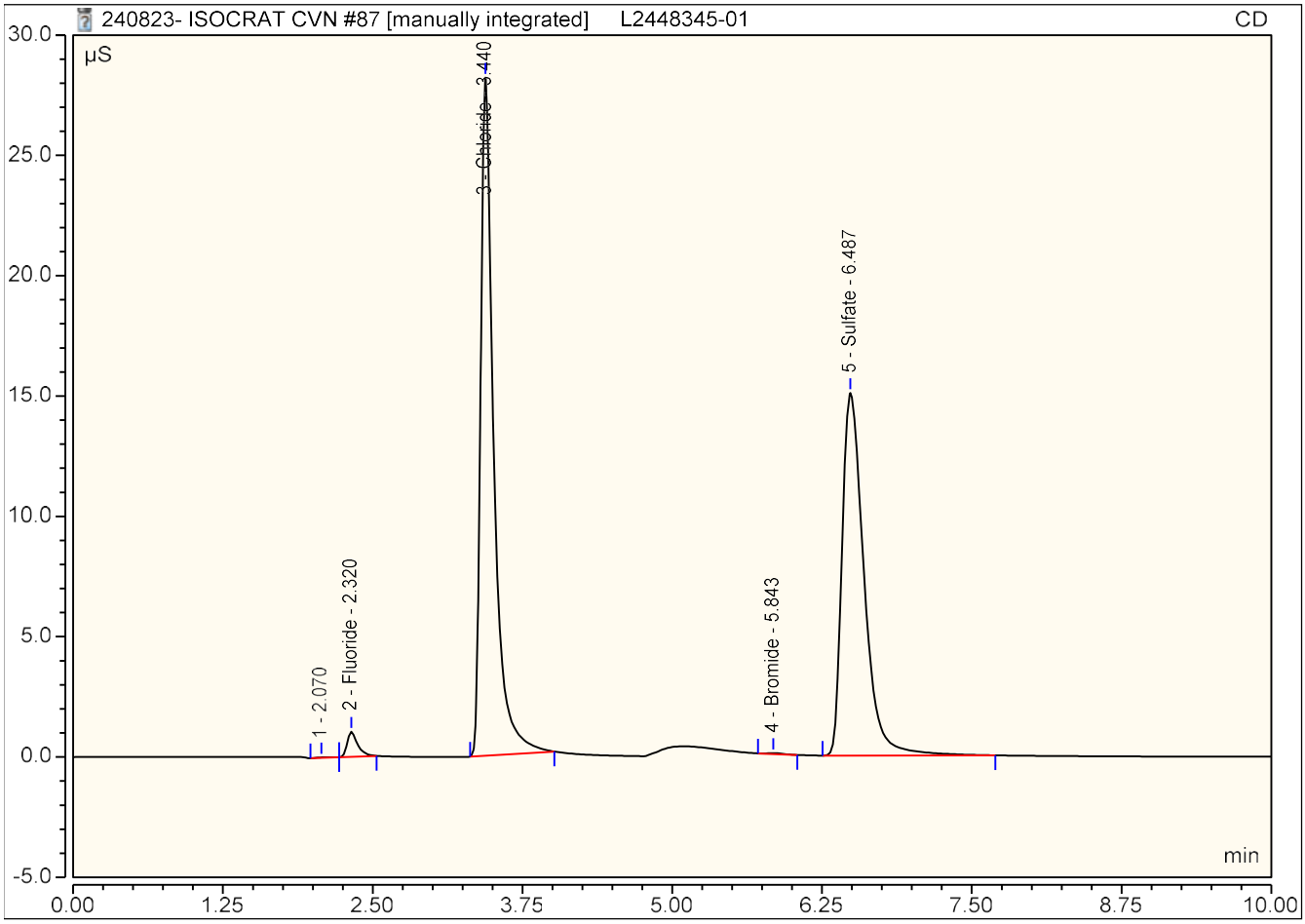
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.104	1.041	0.2119
3	3.44	**Chloride**	BMB*	3.563	28.106	8.7586
4	5.84	**Bromide**	BMB	0.005	0.039	0.0749
5	6.49	**Sulfate**	BMB	3.208	15.056	11.1338
TOTAL:				6.88	44.24	20.18



Peak Integration Report

Sample Name:	**L2448345-01**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 01:01**	*Run Time:*	**10.00**

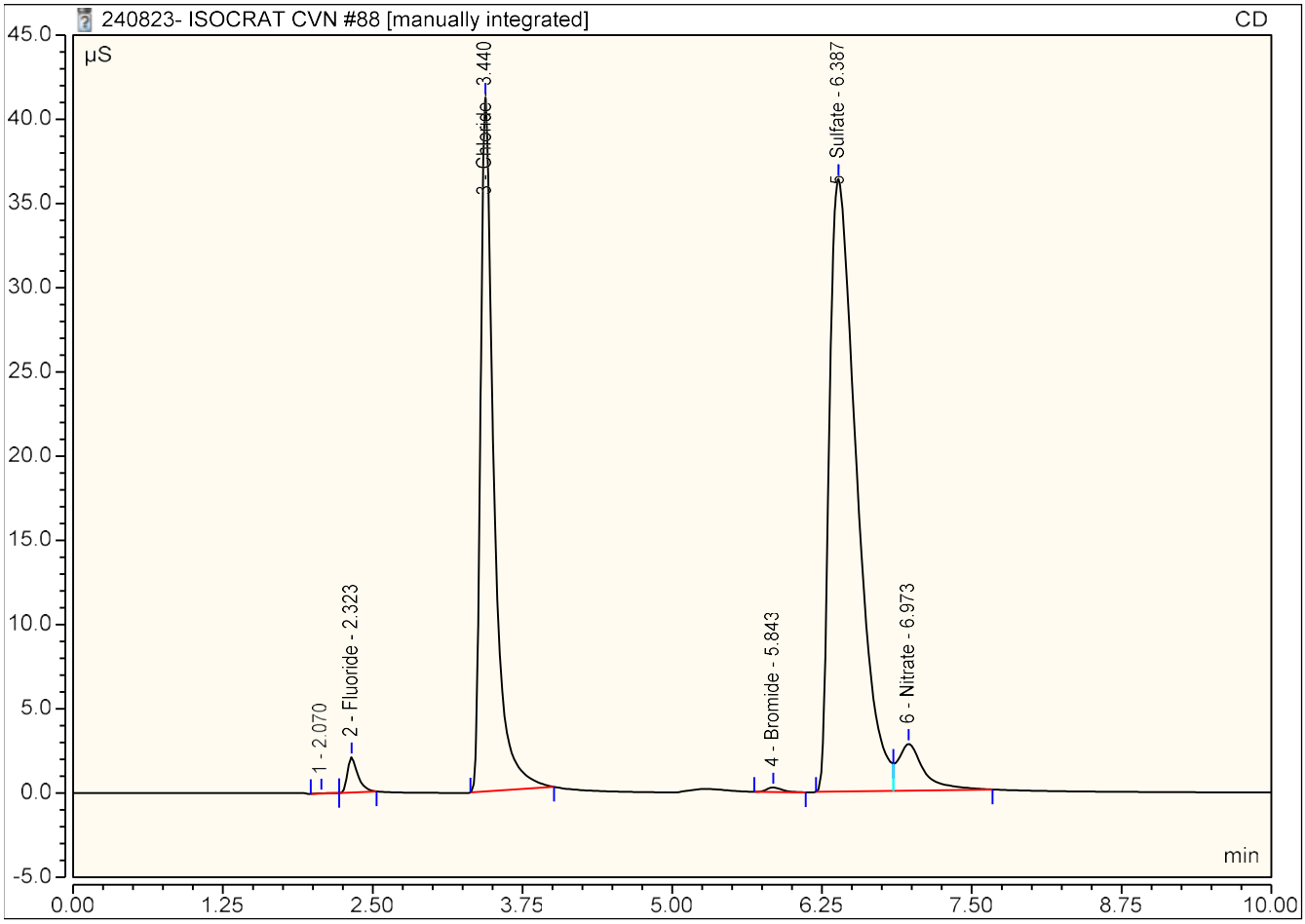
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.104	1.041	0.2113
3	3.44	**Chloride**	BMB*	3.576	28.184	8.7914
4	5.84	**Bromide**	BMB	0.006	0.040	0.0757
5	6.49	**Sulfate**	BMB	3.208	15.068	11.1344
TOTAL:				6.89	44.33	20.21



Peak Integration Report

Sample Name:	**L2448071-03 MS; 10X CL SO4 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 01:13**	*Run Time:*	**10.00**

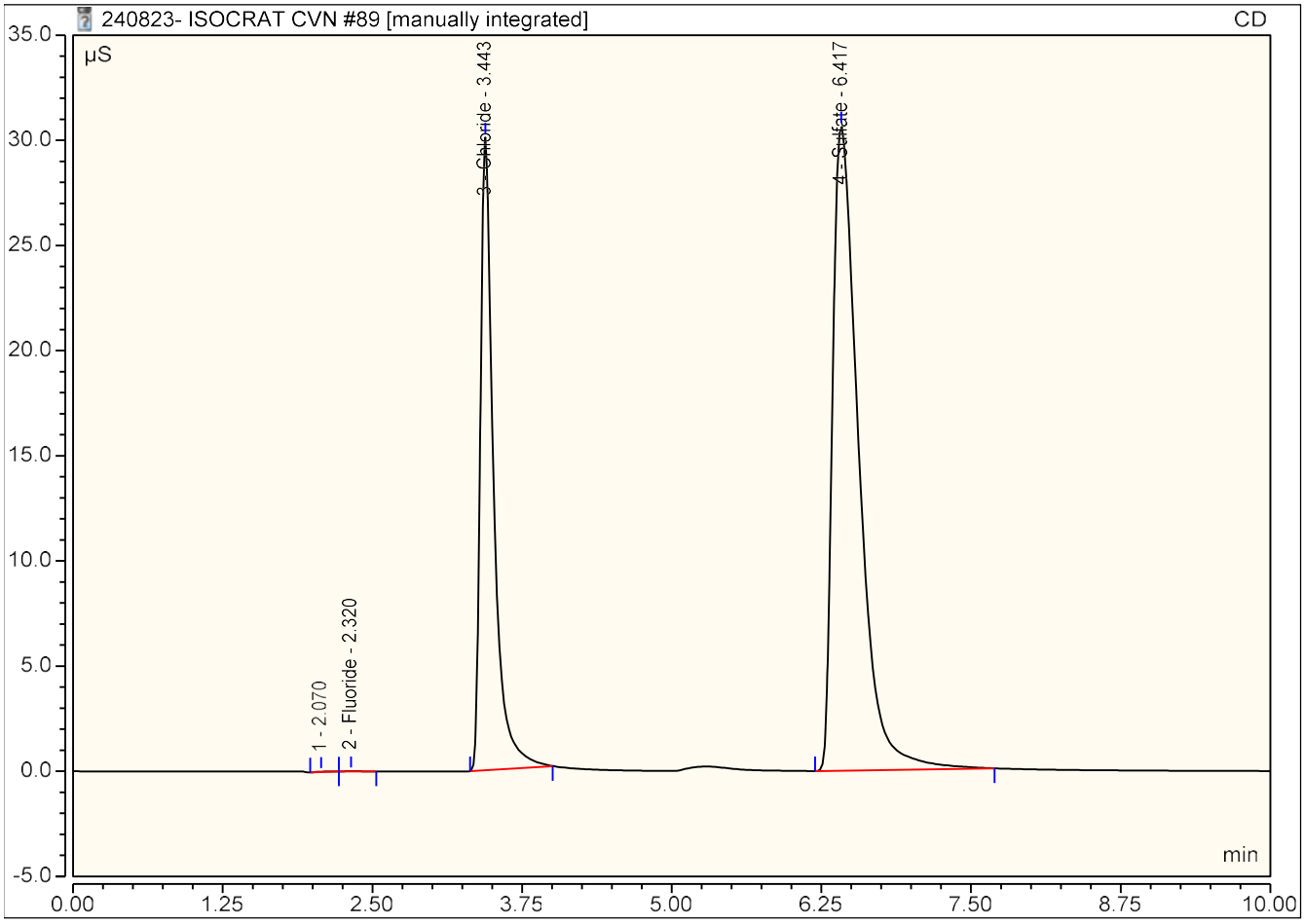
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.211	2.095	3.9972
3	3.44	**Chloride**	BMB*	5.349	41.198	130.8606
4	5.84	**Bromide**	BMB	0.040	0.271	3.3199
5	6.39	**Sulfate**	BM *	9.548	36.365	328.6188
6	6.97	**Nitrate**	MB*	0.700	2.775	5.8624
TOTAL:				15.85	82.70	472.66



Peak Integration Report

Sample Name:	**L2448071-03 DUP; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 01:25**	*Run Time:*	**10.00**

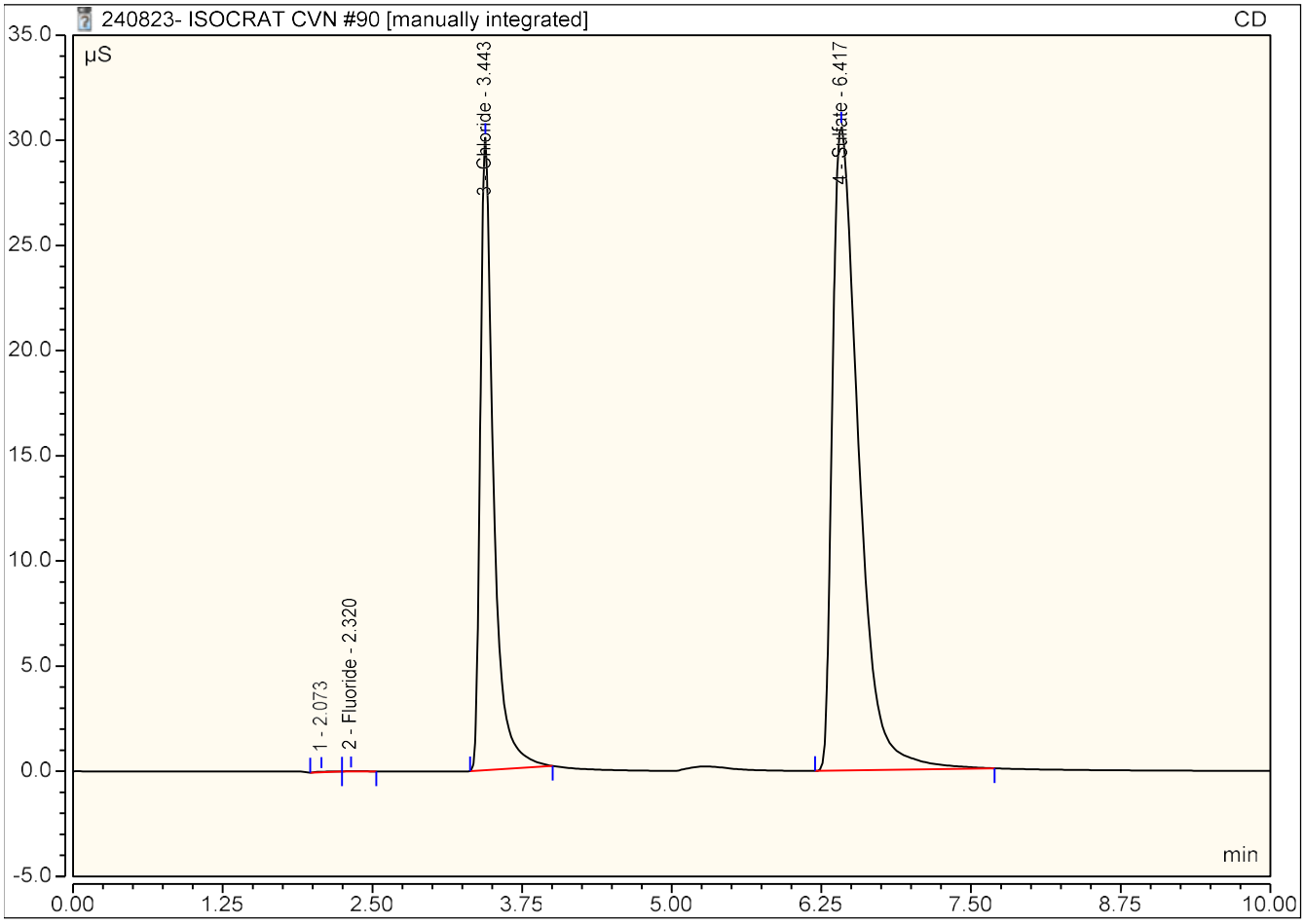
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.020	0.3216
3	3.44	**Chloride**	BMB*	3.848	30.084	94.4860
4	6.42	**Sulfate**	BMB	7.770	30.629	267.6911
TOTAL:				11.62	60.73	362.50



Peak Integration Report

Sample Name:	**L2448071-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 01:38**	*Run Time:*	**10.00**

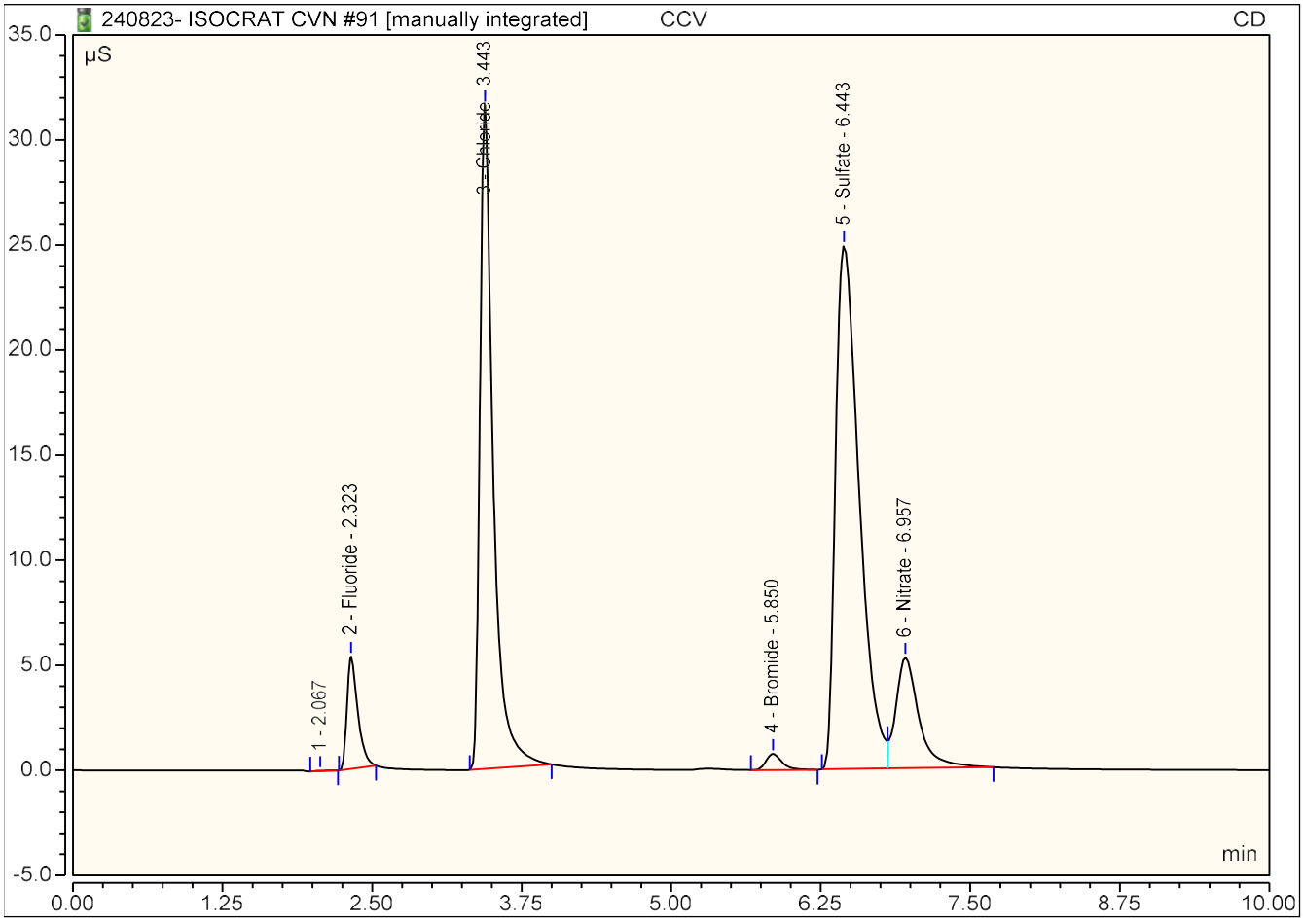
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.020	0.3224
3	3.44	**Chloride**	BMB*	3.848	30.065	94.4806
4	6.42	**Sulfate**	BMB	7.774	30.623	267.8419
TOTAL:				11.62	60.71	362.64



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 01:50**	*Run Time:*	**10.00**

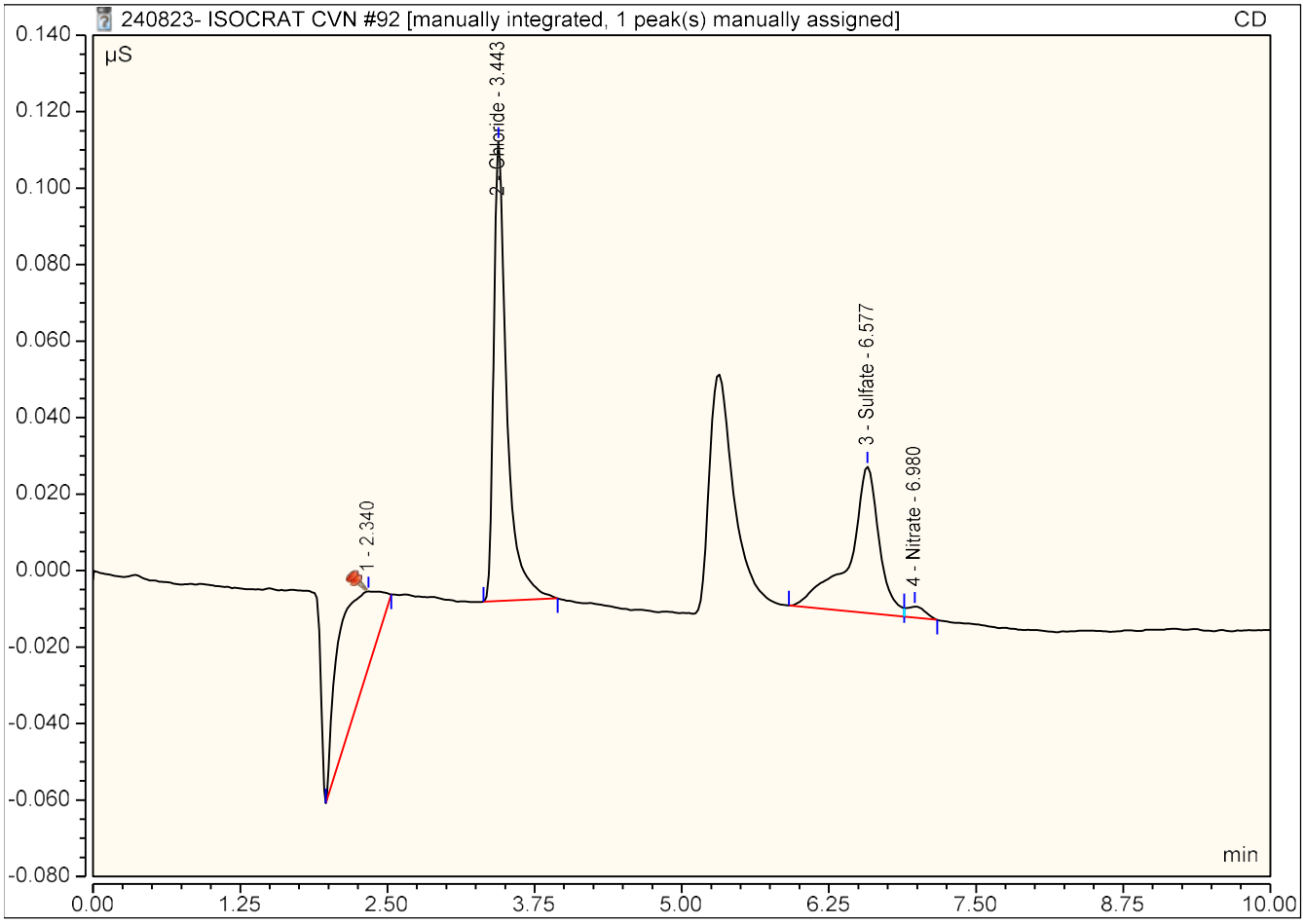
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.555	5.349	1.0061
3	3.44	**Chloride**	BMB*	4.059	31.585	9.9610
4	5.85	**Bromide**	BMB	0.118	0.766	0.9119
5	6.44	**Sulfate**	BM *	5.708	24.904	19.7011
6	6.96	**Nitrate**	MB*	1.185	5.264	0.9778
TOTAL:				11.62	67.87	32.56



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 02:02**	*Run Time:*	**10.00**

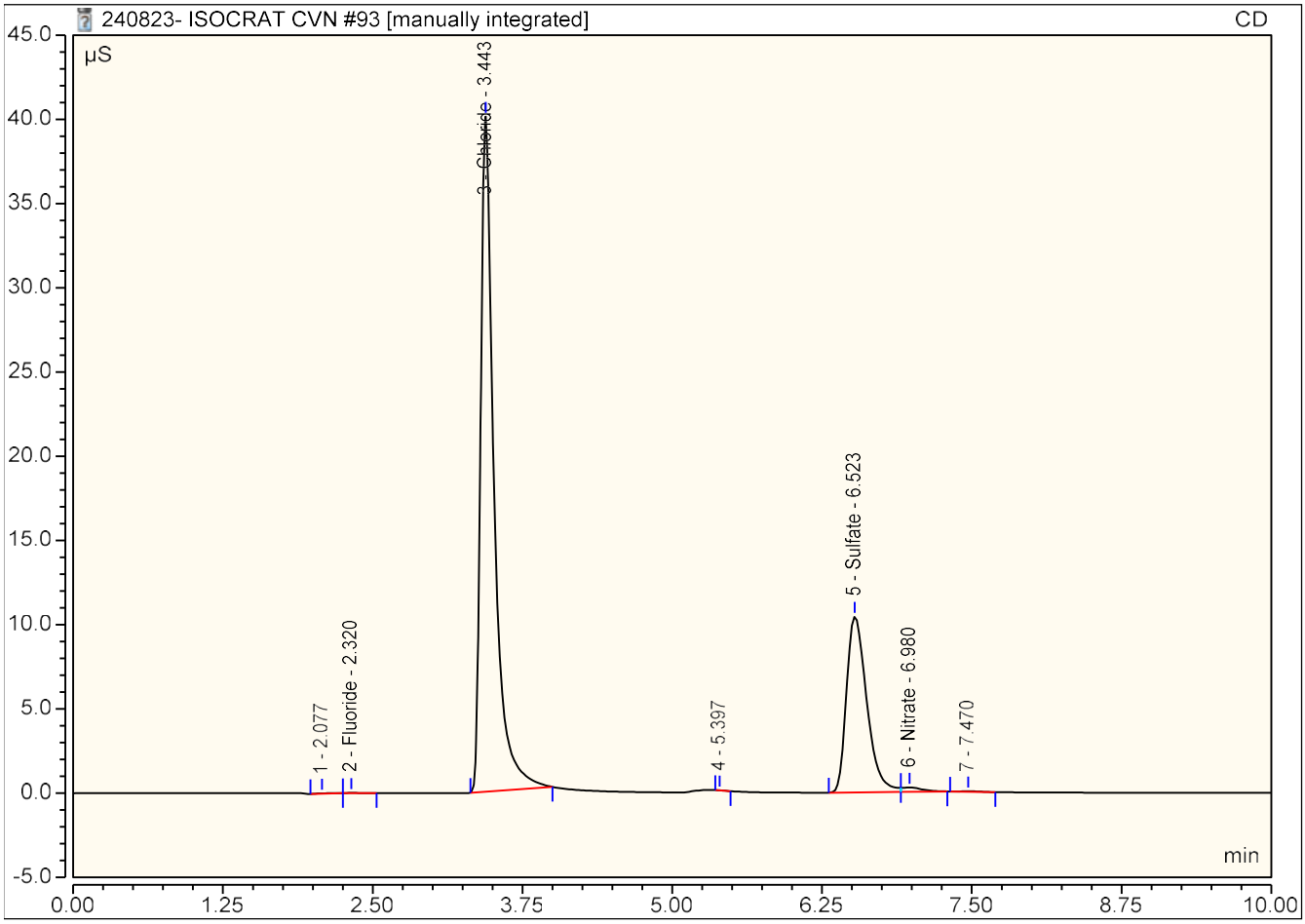
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.015	0.120	0.1655
3	6.58	**Sulfate**	BM *	0.011	0.038	0.1792
4	6.98	**Nitrate**	MB*	0.001	0.003	0.0215
TOTAL:				0.03	0.16	0.37



Peak Integration Report

Sample Name:	**L2448071-04; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 02:14**	*Run Time:*	**10.00**

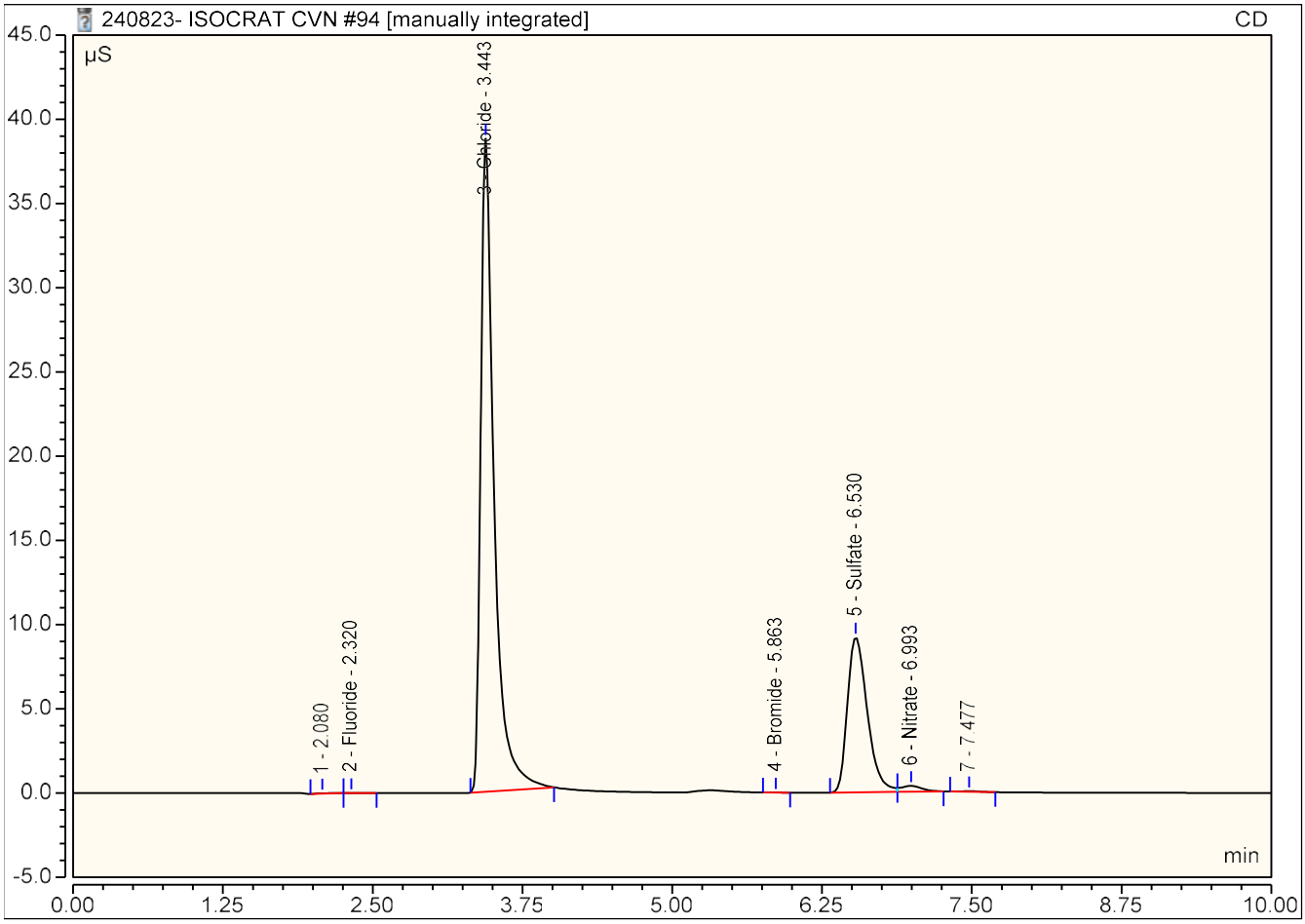
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.014	0.3105
3	3.44	**Chloride**	BMB*	5.191	40.080	127.0239
5	6.52	**Sulfate**	BM *	2.053	10.434	71.7654
6	6.98	**Nitrate**	MB*	0.051	0.258	0.6205
TOTAL:				7.30	50.79	199.72



Peak Integration Report

Sample Name:	**L2448071-02; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 02:26**	*Run Time:*	**10.00**

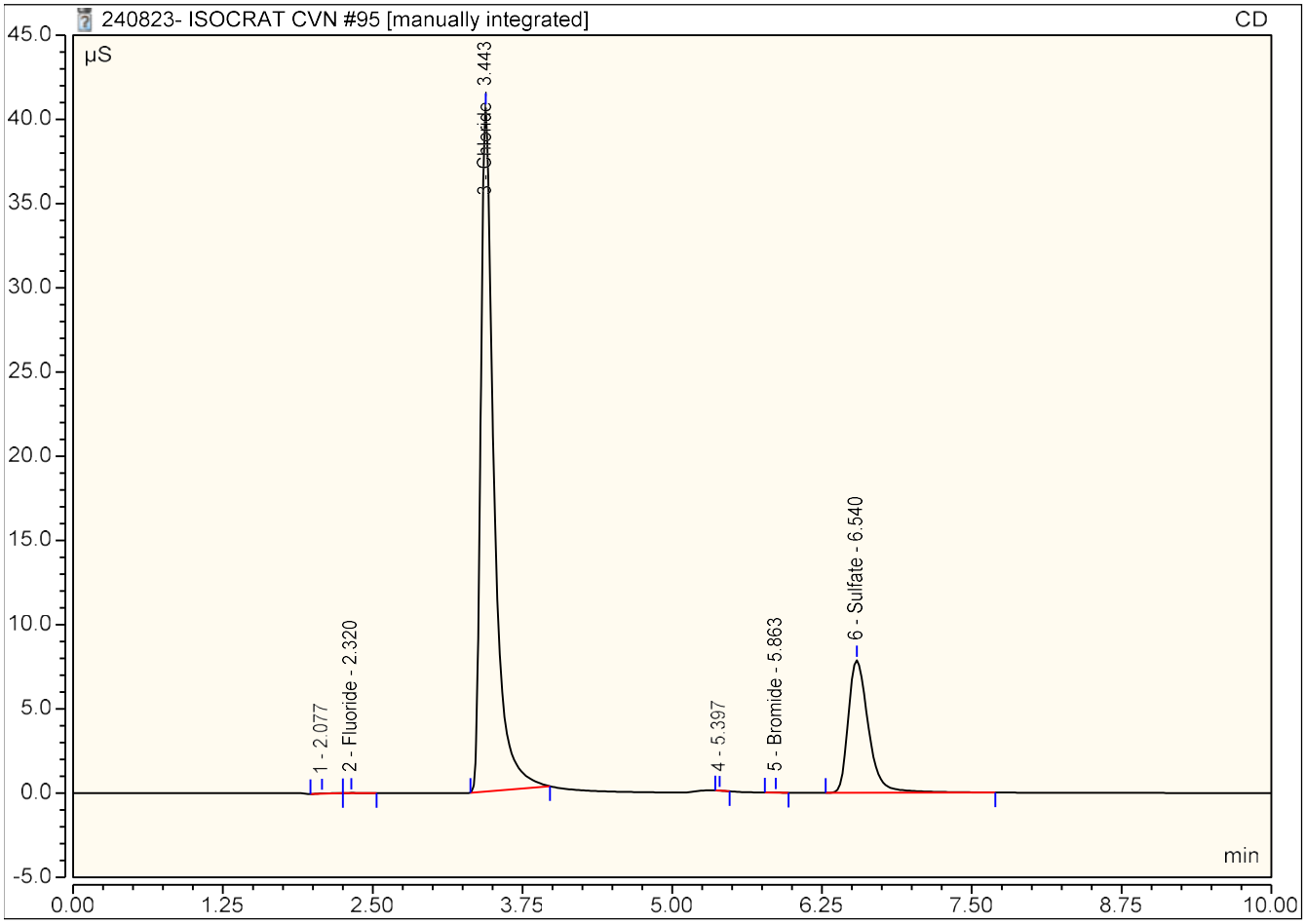
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.001	0.008	0.2977
3	3.44	**Chloride**	BMB*	5.029	38.769	123.1094
4	5.86	**Bromide**	BMB	0.000	0.003	0.3650
5	6.53	**Sulfate**	BM *	1.777	9.208	62.3169
6	6.99	**Nitrate**	MB*	0.071	0.353	0.7806
TOTAL:				6.88	48.34	186.87



Peak Integration Report

Sample Name:	**L2448071-01; 10X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 02:38**	*Run Time:*	**10.00**

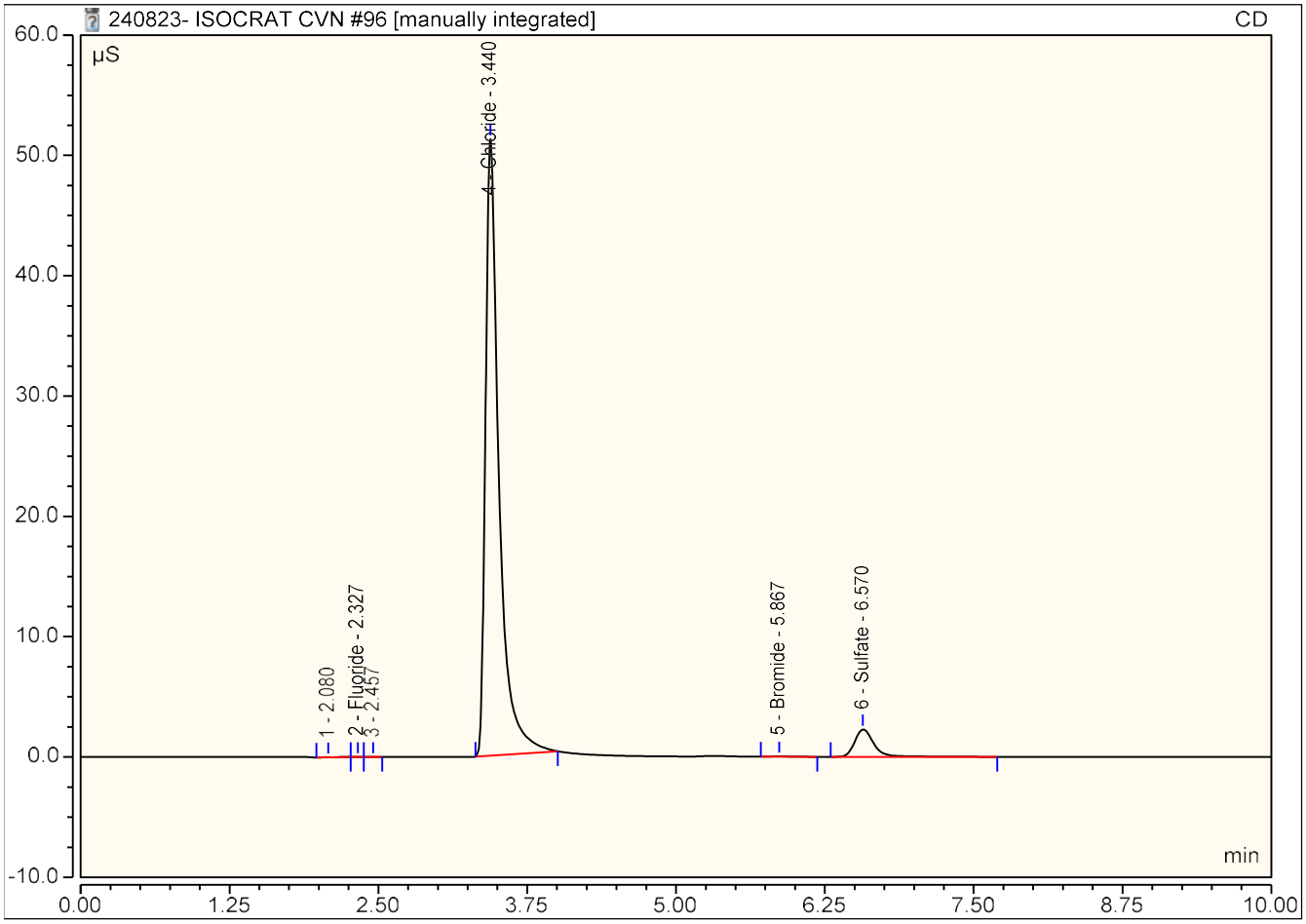
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.002	0.016	0.3122
3	3.44	**Chloride**	BMB*	5.240	40.580	128.2106
5	5.86	**Bromide**	BMB	0.000	0.001	0.3550
6	6.54	**Sulfate**	BMB	1.548	7.863	54.4620
TOTAL:				6.79	48.46	183.34



Peak Integration Report

Sample Name:	**L2448037-01; 250X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**250.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 02:50**	*Run Time:*	**10.00**

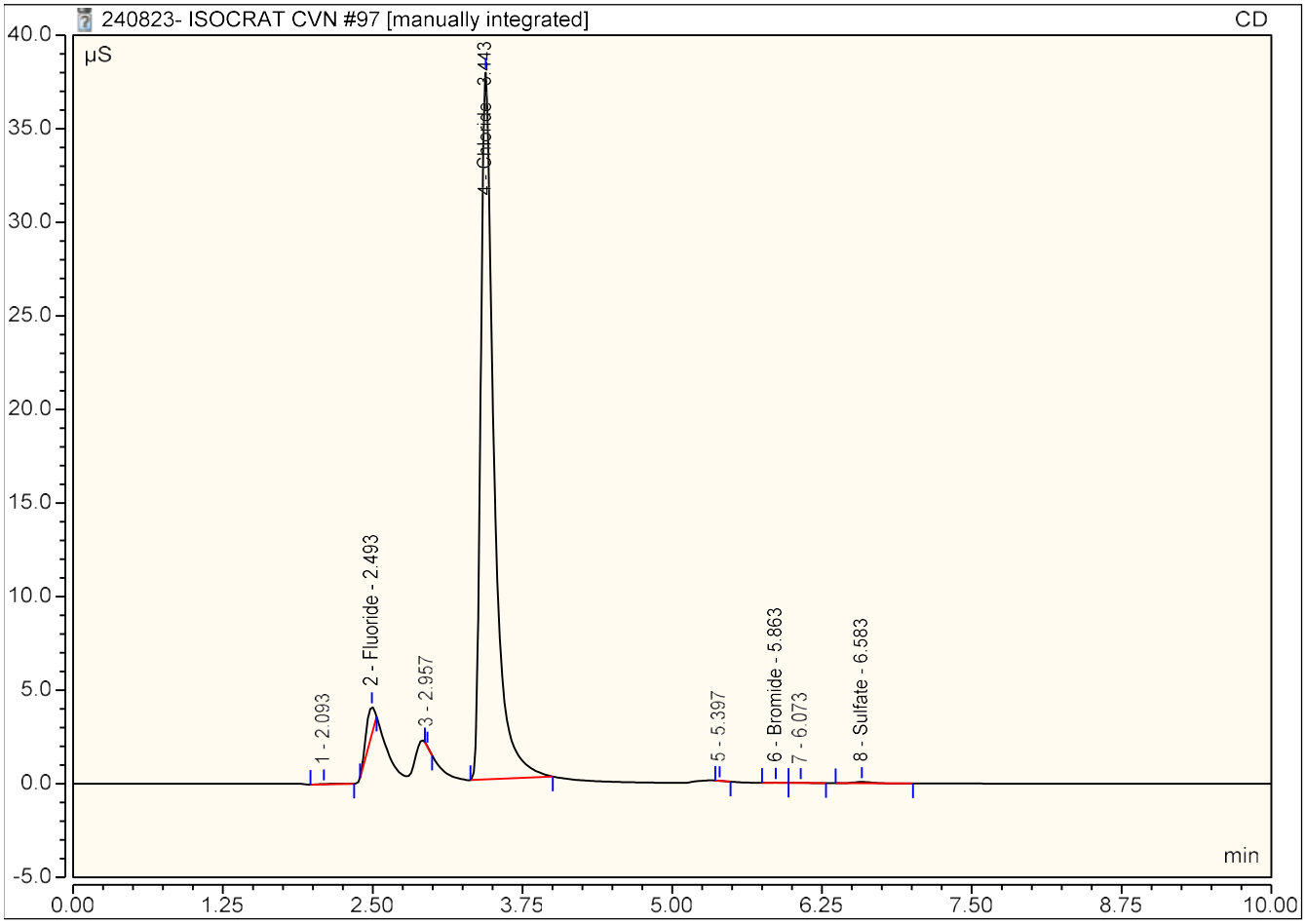
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.000	0.002	7.0303
4	3.44	**Chloride**	BMB*	6.734	51.249	4109.8735
5	5.87	**Bromide**	BMB	0.005	0.035	18.2544
6	6.57	**Sulfate**	BMB	0.428	2.285	401.9582
TOTAL:				7.17	53.57	4537.12



Peak Integration Report

Sample Name:	**L2448054-01; 25X CL**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**25.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 03:02**	*Run Time:*	**10.00**

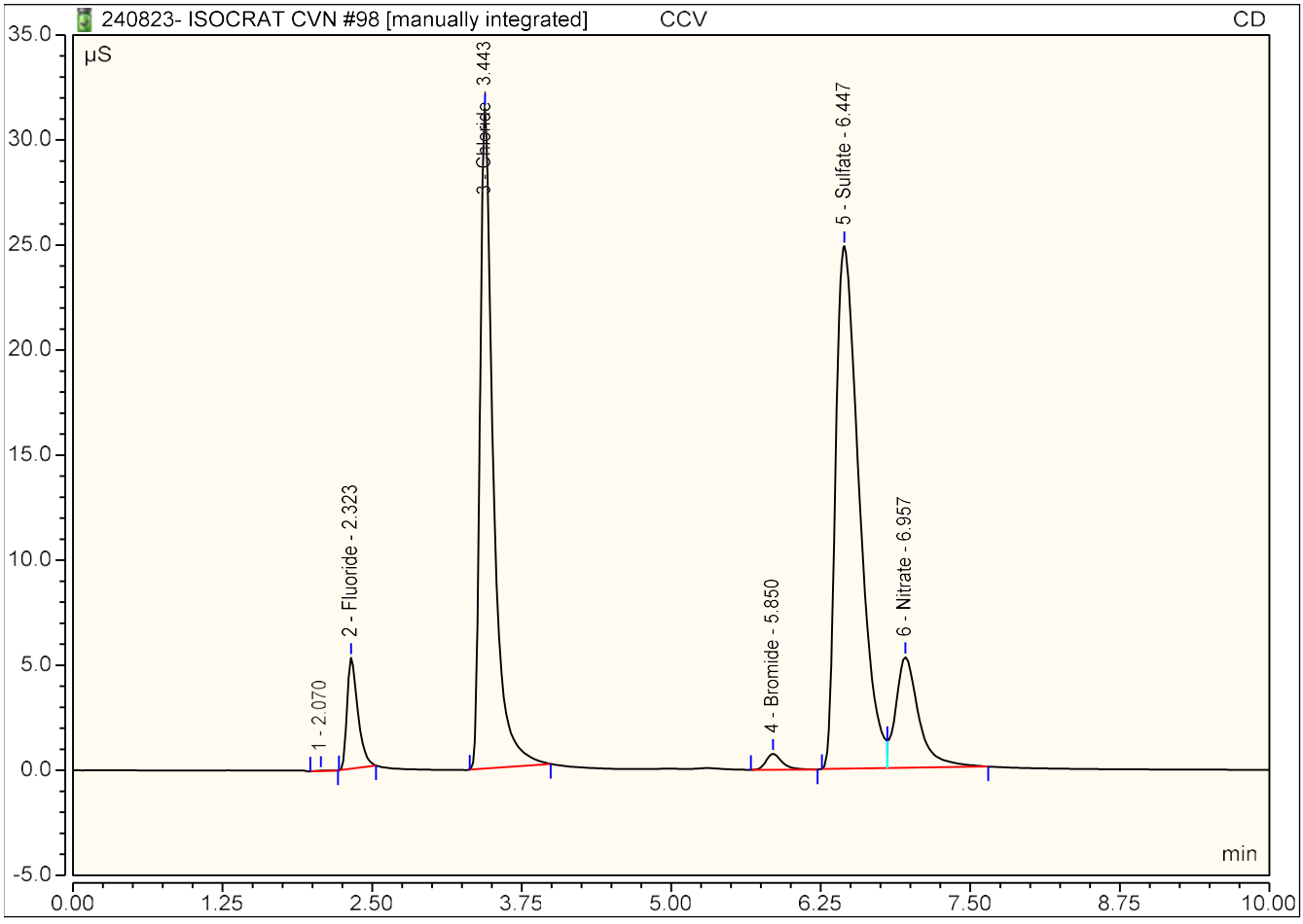
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.49	**Fluoride**	BMB	0.134	1.452	6.5921
4	3.44	**Chloride**	BMB*	4.897	37.761	299.7506
6	5.86	**Bromide**	BMB	0.002	0.014	1.1454
8	6.58	**Sulfate**	BMB	0.014	0.077	4.7318
TOTAL:				5.05	39.30	312.22



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 03:14**	*Run Time:*	**10.00**

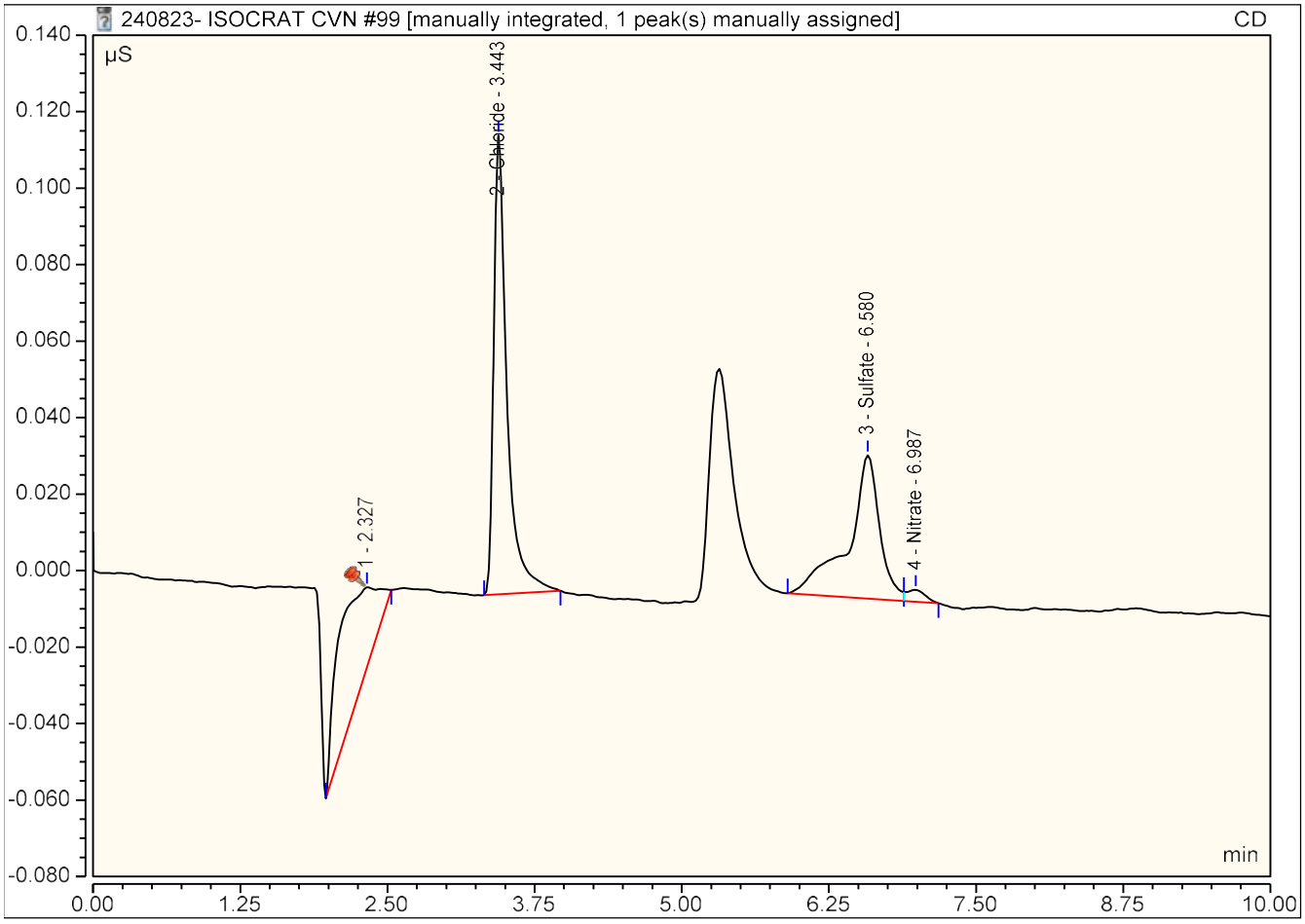
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.32	**Fluoride**	BMB	0.550	5.285	0.9976
3	3.44	**Chloride**	BMB*	4.043	31.414	9.9215
4	5.85	**Bromide**	BMB	0.117	0.760	0.9006
5	6.45	**Sulfate**	BM *	5.679	24.860	19.6034
6	6.96	**Nitrate**	MB*	1.184	5.265	0.9773
TOTAL:				11.57	67.58	32.40



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**24-Aug-2024 / 03:26**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.44	**Chloride**	BMB*	0.016	0.120	0.1657
3	6.58	**Sulfate**	BM *	0.012	0.037	0.1805
4	6.99	**Nitrate**	MB*	0.001	0.003	0.0215
TOTAL:				0.03	0.16	0.37



Anion Summary Report

No.	Name	Dilution	Amount CD Fluoride	Amount CD Chloride	Amount CD Nitrate	Amount CD Sulfate	Amount CD Bromide
1	BLANK	1.0	0.0447	0.1306	n.a.	0.1437	n.a.
2	STD 0.5	1.0	0.0437	0.3214	0.0422	0.5065	0.0485
3	STD 1.0	1.0	0.0600	0.5266	0.0607	0.9336	0.0695
4	STD 2.0	1.0	0.1787	1.9618	0.1861	3.8785	0.1898
5	STD 3.0	1.0	0.4696	4.9722	0.4800	9.9947	0.4559
6	STD 4.0	1.0	2.0320	19.9406	2.0059	40.3013	2.0113
7	STD 5.0	1.0	4.9909	50.0274	5.2847	99.8855	5.2423
8	RINSE	1.0	n.a.	0.1501	0.0212	0.1492	n.a.
9	CCV	1.0	1.0174	9.9940	1.0074	19.5452	0.9285
10	CCB	1.0	n.a.	0.1418	n.a.	0.1730	n.a.
11	ICV	1.0	0.8466	8.1341	0.7409	7.8181	0.7695
12	ICB	1.0	n.a.	0.1423	n.a.	0.1492	n.a.
13	BLK	1.0	n.a.	0.1428	0.0213	0.1486	n.a.
14	LCS	1.0	0.8522	8.1297	0.7389	7.8625	0.7717
15	L2448084-01 NO3	1.0	0.4390	255.9879	0.6073	122.2977	0.3243
16	L2448084-02 SO4 NO3	1.0	0.3139	337.1695	n.a.	56.7390	0.4558
17	L2448084-03 SO4 NO3	1.0	0.2682	265.4305	n.a.	95.2676	0.4380
18	L2448084-04 SO4 NO3	1.0	0.5397	277.4814	n.a.	66.4848	0.5372
19	L2448084-05 CL SO4 NO3	1.0	0.3713	38.2704	0.6900	89.1955	n.a.
20	XL2448084-05; 10X	10.0	0.5698	38.3901	n.a.	90.2177	n.a.
21	CCV	1.0	1.0171	9.9792	1.0020	19.6205	0.9183
22	CCB	1.0	n.a.	0.1613	0.0215	0.1630	n.a.
23	L2448084-06 SO4 NO3	1.0	0.3042	338.6068	n.a.	56.3344	0.4623
24	L2448084-01; 10X CL SO4	10.0	0.6340	267.4983	n.a.	128.7332	0.5609
25	L2448084-02; 10X CL	10.0	0.5187	353.0630	n.a.	57.4675	0.6106
26	L2448084-03 MS; 10X CL SO4 NO3	10.0	4.3123	307.9297	4.6471	171.8627	3.8176
27	L2448084-03 MSD; 10X	10.0	4.3044	308.5468	4.6402	172.0822	3.8017
28	L2448084-03; 10X CL	10.0	0.4896	281.2342	n.a.	98.5462	0.6248
29	L2448084-04; 10X CL	10.0	0.7109	292.9414	n.a.	67.9854	0.6251
30	L2448084-06; 10X CL	10.0	0.5250	355.2901	n.a.	57.4562	0.6079
31	CCV	1.0	1.0177	9.9700	0.9998	19.6822	0.9134
32	CCB	1.0	n.a.	0.1583	n.a.	0.1784	n.a.
33	L2447503-01	1.0	0.0932	48.9889	n.a.	160.4342	0.1212
34	L2447503-02	1.0	0.0849	4.4425	1.1748	30.9344	n.a.
35	L2447503-03	1.0	0.1392	50.4570	3.9478	146.2971	0.1033
36	L2447503-04	1.0	0.0439	132.1709	0.5096	9.9246	n.a.
37	XL2447503-05	1.0	0.0290	0.7759	0.0802	0.7368	n.a.
38	L2447503-06	1.0	0.0445	57.8554	1.4805	119.0090	0.1477
39	L2447503-07	1.0	0.0404	25.1522	6.8014	98.6244	0.1173
40	L2447503-08	1.0	0.0511	24.1608	0.9427	48.3228	0.0755
41	L2447503-09	1.0	0.0308	8.2841	1.0038	8.1386	n.a.
42	XL2447503-09; 10X	10.0	0.3049	9.2380	1.0371	8.6679	n.a.
43	CCV	1.0	1.0105	9.9956	0.9712	19.7267	0.9196
44	CCB	1.0	n.a.	0.1580	0.0213	0.1625	n.a.
45	L2447672-01 CL; 10X	10.0	0.4088	124.8246	0.4123	2.8452	0.3579

46	L2447672-02; 10X	10.0	0.2814	110.5169	0.5018	2.2803	0.3551
47	L2447939-01 CL; 25X	25.0	0.8659	450.9740	1.5831	70.4715	0.9898
48	L2447944-01 CL; 25X	25.0	0.8604	645.5474	1.0106	72.2005	1.1725
49	L2447503-05 MS	1.0	0.3931	11.9887	1.3807	15.7778	0.3518
50	L2447503-05 DUP	1.0	0.0308	8.2701	0.9953	8.0700	n.a.
51	L2447503-05	1.0	0.0307	8.1151	0.9779	7.9536	n.a.
52	L2447503-01; 10X SO4	10.0	0.3448	51.6105	n.a.	171.3258	0.4504
53	L2447503-03; 10X CL SO4	10.0	0.3844	53.1541	3.6539	154.2488	n.a.
54	L2447503-04; 10X CL	10.0	0.2965	139.3865	0.6137	10.0938	n.a.
55	CCV	1.0	0.9993	9.9203	0.9791	19.6429	0.9082
56	CCB	1.0	n.a.	0.1691	0.0212	0.1694	n.a.
57	BLK-2	1.0	n.a.	0.1414	n.a.	0.1478	n.a.
58	LCS-2	1.0	0.8368	8.1324	0.7334	7.9181	0.7597
59	L2447503-06; 10X CL SO4	10.0	0.2856	60.4963	1.2992	123.3476	0.4224
60	XL2447503-07; 10X	10.0	n.a.	26.3710	6.3791	103.8979	0.3878
61	L2448071-01 CL SO4 BR	1.0	0.0569	119.9423	n.a.	52.4195	0.0589
62	L2448071-02	1.0	0.0438	114.2727	0.7889	59.0185	0.0701
63	XL2448071-03	1.0	0.0644	88.3882	1.5155	245.4391	n.a.
64	L2448071-04	1.0	0.0565	118.4550	0.6071	68.1408	n.a.
65	L2448071-05 BR	1.0	0.0602	118.1355	0.8264	116.2493	n.a.
66	L2448071-05; 10X CL SO4	10.0	0.3221	125.0377	0.9105	122.9510	n.a.
67	CCV	1.0	1.0101	9.9789	0.9835	19.7226	0.9193
68	CCB	1.0	n.a.	0.1681	0.0213	0.1629	n.a.
69	L2448136-04; 50X SO4	50.0	1.8297	8841.1038	n.a.	27.3392	115.6732
70	L2448136-10; 50X	50.0	1.8485	8768.9443	n.a.	41.4016	114.6946
71	L2448136-13; 50X	50.0	1.8652	8757.7271	n.a.	38.2701	114.2311
72	RINSE	1.0	n.a.	0.1551	n.a.	n.a.	n.a.
73	L2448078-01 BR	1.0	0.0500	116.2145	0.7571	67.9807	n.a.
74	L2448078-02	1.0	0.0516	212.0130	n.a.	0.1770	n.a.
75	L2448078-03	1.0	0.0528	211.5904	n.a.	0.1750	n.a.
76	RINSE	1.0	n.a.	0.1651	0.0213	0.1507	0.0399
77	XL2448037-01; 25X CL	25.0	0.8818	3778.6764	n.a.	388.9873	12.5703
78	XL2448054-01; 25X CL	25.0	6.7252	301.2326	n.a.	4.5330	1.1317
79	CCV	1.0	1.0033	9.9638	0.9684	19.7334	0.9056
80	CCB	1.0	0.0284	0.1691	0.0213	0.1589	n.a.
81	L2448370-01 MS CL SO4	1.0	1.0486	26.8866	0.5219	12.8542	0.3331
82	L2448370-01 DUP	1.0	0.6498	23.6742	0.1462	4.9271	0.0367
83	L2448370-01	1.0	0.6492	23.7382	0.1940	5.0196	n.a.
84	L2448370-02	1.0	0.6512	23.7456	0.1250	4.9200	n.a.
85	L2448345-01 MS CL SO4 NO3	1.0	0.6137	12.5524	0.4605	18.5228	0.3774
86	L2448345-01 DUP	1.0	0.2119	8.7586	n.a.	11.1338	0.0749
87	L2448345-01	1.0	0.2113	8.7914	n.a.	11.1344	0.0757
88	L2448071-03 MS; 10X CL SO4 BR	10.0	3.9972	130.8606	5.8624	328.6188	3.3199
89	L2448071-03 DUP; 10X	10.0	0.3216	94.4860	n.a.	267.6911	n.a.
90	L2448071-03; 10X	10.0	0.3224	94.4806	n.a.	267.8419	n.a.
91	CCV	1.0	1.0061	9.9610	0.9778	19.7011	0.9119
92	CCB	1.0	n.a.	0.1655	0.0215	0.1792	n.a.

93	L2448071-04; 10X CL	10.0	0.3105	127.0239	0.6205	71.7654	n.a.
94	L2448071-02; 10X CL	10.0	0.2977	123.1094	0.7806	62.3169	0.3650
95	L2448071-01; 10X CL	10.0	0.3122	128.2106	n.a.	54.4620	0.3550
96	L2448037-01; 250X CL	250.0	7.0303	4109.8735	n.a.	401.9582	18.2544
97	L2448054-01; 25X CL	25.0	6.5921	299.7506	n.a.	4.7318	1.1454
98	CCV	1.0	0.9976	9.9215	0.9773	19.6034	0.9006
99	CCB	1.0	n.a.	0.1657	0.0215	0.1805	n.a.
	Sum:	822.000	75.9362		79.8395	5823.7463	419.2700
	Average:	8.303	0.9040		1.2097	59.4260	6.8733
	Rel.Std.Dev:	318.804 %	1.6426		1.3125	1.3951	3.6268

Inject Time	Comment
18/Jul/2024 21:02	AU
18/Jul/2024 21:14	LOT#240715-0.5
18/Jul/2024 21:26	LOT#240715-1.0
18/Jul/2024 21:38	LOT#240715-2.0
18/Jul/2024 21:50	LOT#240715-3.0
18/Jul/2024 22:02	LOT#240715-4.0
18/Jul/2024 22:14	LOT#240715-5.0
23/Aug/2024 08:49	963098-100-294-295-296
23/Aug/2024 09:01	LOT#240820-C
23/Aug/2024 09:14	CVN
23/Aug/2024 09:26	LOT#240820-I
23/Aug/2024 09:38	CVN
23/Aug/2024 09:50	CVN
23/Aug/2024 10:02	LOT#240820-I
23/Aug/2024 10:14	CVN
23/Aug/2024 10:26	CVN
23/Aug/2024 10:38	CVN
23/Aug/2024 10:50	CVN
23/Aug/2024 11:02	CVN
23/Aug/2024 11:14	CVN
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23/Aug/2024 15:04	CVN
23/Aug/2024 15:16	CVN
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23/Aug/2024 15:53	LOT#240820-C
23/Aug/2024 16:05	CVN
23/Aug/2024 16:17	CVN

23/Aug/2024 16:29	CVN
23/Aug/2024 16:41	CVN
23/Aug/2024 16:53	CVN
23/Aug/2024 17:05	CVN
23/Aug/2024 17:17	CVN
23/Aug/2024 17:29	CVN
23/Aug/2024 17:41	CVN
23/Aug/2024 17:53	CVN
23/Aug/2024 18:22	CVN
23/Aug/2024 18:34	LOT#240820-C
23/Aug/2024 18:46	CVN
23/Aug/2024 18:59	CVN
23/Aug/2024 19:11	LOT#240820-I
23/Aug/2024 19:23	CVN
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23/Aug/2024 20:35	CVN
23/Aug/2024 20:47	CVN
23/Aug/2024 20:59	LOT#240820-C
23/Aug/2024 21:12	CVN
23/Aug/2024 21:24	CVN
23/Aug/2024 21:36	CVN
23/Aug/2024 21:48	CVN
23/Aug/2024 22:00	CVN
23/Aug/2024 22:12	CVN
23/Aug/2024 22:24	CVN
23/Aug/2024 22:36	CVN
23/Aug/2024 22:48	CVN
23/Aug/2024 23:00	CVN
23/Aug/2024 23:12	CVN
23/Aug/2024 23:25	LOT#240820-C
23/Aug/2024 23:37	CVN
23/Aug/2024 23:49	CVN
24/Aug/2024 00:01	CVN
24/Aug/2024 00:13	CVN
24/Aug/2024 00:25	CVN
24/Aug/2024 00:37	CVN
24/Aug/2024 00:49	CVN
24/Aug/2024 01:01	CVN
24/Aug/2024 01:13	CVN
24/Aug/2024 01:25	CVN
24/Aug/2024 01:38	CVN
24/Aug/2024 01:50	LOT#240820-C
24/Aug/2024 02:02	CVN

24/Aug/2024 02:14	CVN
24/Aug/2024 02:26	CVN
24/Aug/2024 02:38	CVN
24/Aug/2024 02:50	CVN
24/Aug/2024 03:02	CVN
24/Aug/2024 03:14	LOT#240820-C
24/Aug/2024 03:26	CVN
	0.000
	#DIV/0!
	#DIV/0!

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2447503-05		
Matrix Spike	: WG1963098-3	**MS Analysis Date**	: 08/23/24 17:05
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Bromide	ND	0.4	0.352	88	Q					90-110	20
Chloride	8.12	4	12.0	97						90-110	18
Fluoride	ND	0.4	0.393	98						90-110	15
Sulfate	7.95	8	15.8	98						90-110	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2447503-05	**Analysis Date**	: 08/23/24 17:29
Dup Sample ID	: WG1963098-4	**DUP Analysis Date**	: 08/23/24 17:17

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Bromide	ND	ND	NC	20
Chloride	8.12	8.27	2	18
Fluoride	ND	ND	NC	15
Sulfate	7.95	8.07	1	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2447503
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1963098-2	**LCS Analysis Date**	: 08/23/24 19:11
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Bromide	0.800	0.760	95.					90-110	20
Chloride	8.00	8.13	102.					90-110	18
Fluoride	0.800	0.837	105.					90-110	15
Sulfate	8.00	7.92	99.					90-110	20

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
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WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Bromide	24959-67-9	0.05	0.0132	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		64-148	18	18	9056	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		90-110	18	18	300.0	28 days	1 - Plastic 250ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		81-124	15	15	9056	28 days	1 - Plastic 500ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		90-110	15	15	300.0	28 days	1 - Plastic 500ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		90-110	15	15	300.0	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		80-120	15	15	9056	48 hours	1 - Plastic 250ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		72-124	20	20	9056	28 days	1 - Plastic 500ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Anions by Ion Chromatography

Aqueous samples:

The Dionex calculates the area of the peaks produced by the instrument, compares them to the peak area of the calibration standard stored in its memory, and calculates result in mg/L.

If the sample was manually diluted prior to analysis, the calculated mean must be manually multiplied by the dilution factor. The Reported Detection Limit is also multiplied by the same dilution factor.

$$\text{Result, mg/L} = \frac{\text{area - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$