LONGHORN ARMY AMMUNITION PLANT KARNACK, TEXAS

ADMINISTRATIVE RECORD

Volume 14

2024

Bate Stamp Numbers
01236110 – 01238086

Prepared for

Department of the Army
Longhorn Army Ammunition Plant

1976–2024

LONGHORN ARMY AMMUNITION PLANT
KARNACK, TEXAS
ADMINISTRATIVE RECORD – CHRONOLOGICAL INDEX

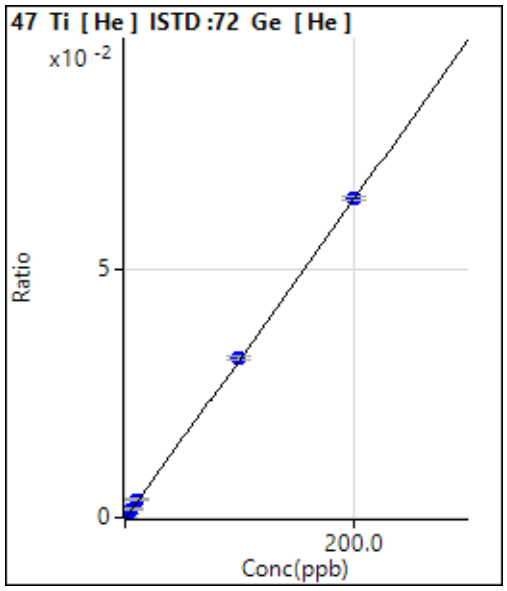
VOLUME 14

2024

A.	Title:	Report (Cont'd) – Appendix C, File 1 to Draft Final Third Annual Remedial Action Operation Report, LHAAP-16 Landfill, Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas, May 2024
	Author(s):	Department of the Army
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	May 9, 2024
	Bate Stamp:	01236110–01237360

B.	Title:	Report (Cont'd) – Appendix C, File 2 to Draft Final Third Annual Remedial Action Operation Report, LHAAP-16 Landfill, Longhorn Army Ammunition Plant (LHAAP), Karnack, Texas, May 2024
	Author(s):	Department of the Army
	Recipient:	Environmental Protection Agency and Texas Commission on Environmental Quality
	Date:	May 9, 2024
	Bate Stamp:	01237361–01238086

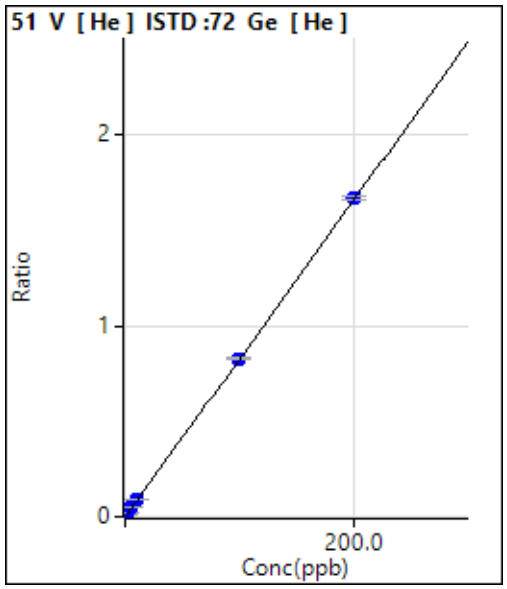
Calibration for 212_ICV.d



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3	☐	5.000	5.246	573.35	0.0017	P	6.7	4.9
4	☐	10.000	11.030	1196.74	0.0036	P	7.3	10.3
5	☐	100.000	100.092	11014.61	0.0323	P	2.9	0.1
6	☐	200.000	199.898	21346.85	0.0645	P	0.9	-0.1

y = 3.2269E-004 * x + 1.9625E-005
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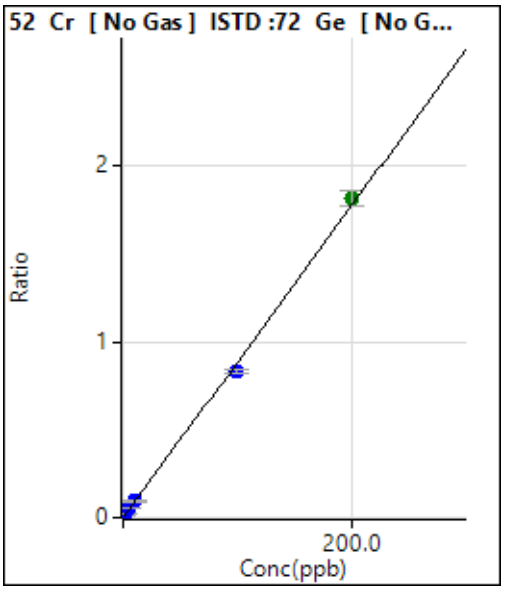


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3	☐	5.000	4.857	15659.00	0.0468	P	1.7	-2.9
4	☐	10.000	9.831	29430.44	0.0880	P	1.0	-1.7
5	☐	100.000	99.158	282718.06	0.8296	P	1.3	-0.8
6	☐	200.000	200.434	552559.77	1.6703	P	1.2	0.2

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BEC = 0.7756 ppb

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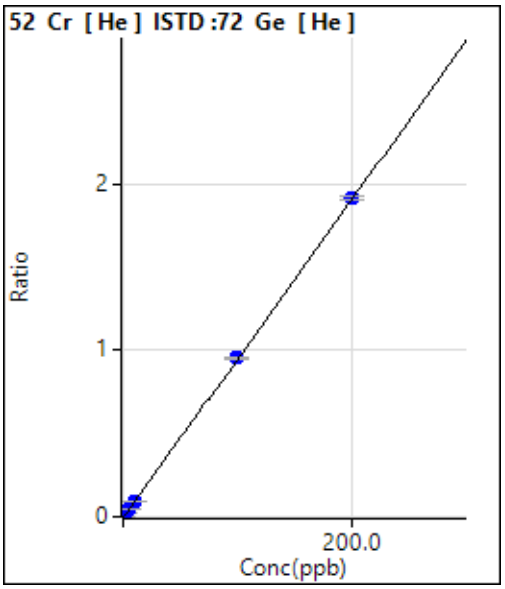
Calibration for 212_ICV.d



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3	☐	5.000	4.553	54097.07	0.0494	P	0.5	-8.9
4	☐	10.000	9.565	98986.12	0.0939	P	4.9	-4.3
5	☐	100.000	92.775	914108.08	0.8320	P	3.1	-7.2
6	☐	200.000	203.648	1843297.47	1.8155	A	4.6	1.8

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R = 0.9991
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BEC = 1.015 ppb

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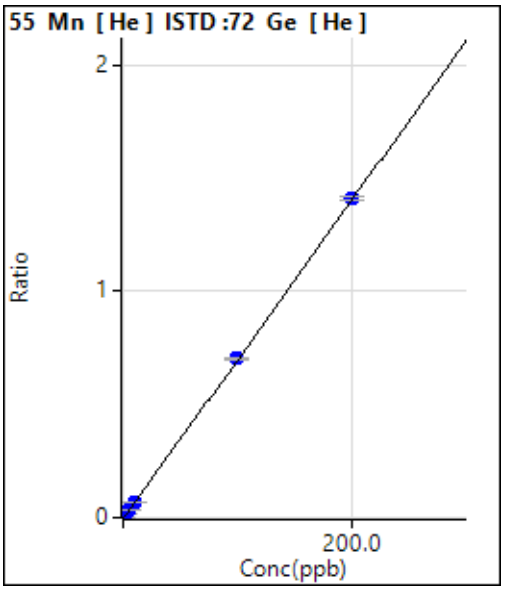


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2	☐	2.000	1.875	7188.67	0.0210	P	1.5	-6.2
3	☐	5.000	4.847	16540.17	0.0494	P	1.7	-3.1
4	☐	10.000	9.852	32505.55	0.0972	P	1.0	-1.5
5	☐	100.000	99.641	325728.96	0.9558	P	1.1	-0.4
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BEC = 0.318 ppb

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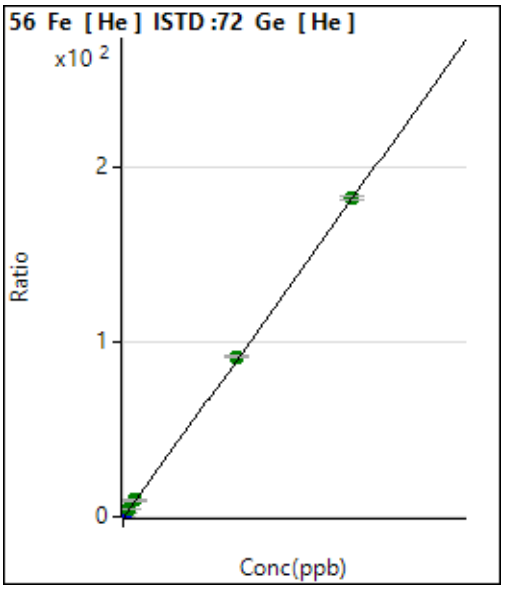
Calibration for 212_ICV.d



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2	☐	2.000	1.970	5177.73	0.0151	P	3.5	-1.5
3	☐	5.000	4.968	12132.26	0.0362	P	3.1	-0.6
4	☐	10.000	9.881	23674.17	0.0708	P	2.0	-1.2
5	☐	100.000	99.510	239273.13	0.7021	P	1.3	-0.5
6	☐	200.000	200.252	467009.84	1.4117	P	0.8	0.1

y = 0.0070 * x + 0.0012
R = 1.0000
DL = 0.1049 ppb
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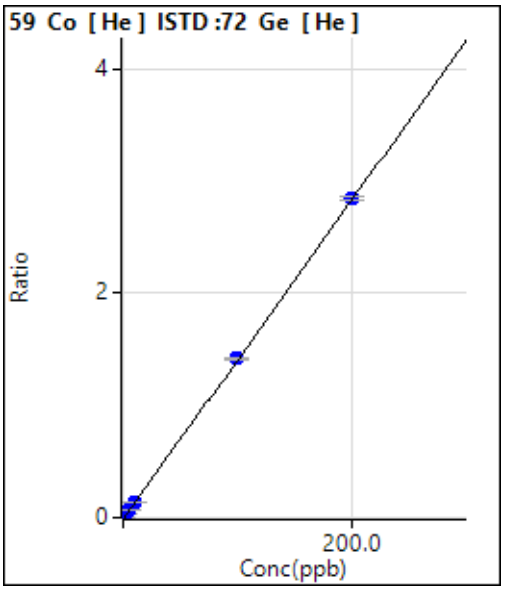


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3	☐	500.000	515.097	1587020.24	4.7390	A	0.9	3.0
4	☐	1000.000	1023.570	3137494.12	9.3870	A	1.6	2.4
5	☐	10000.00	10021.25	31228539.5	91.6358	A	1.4	0.2
6	☐	20000.00	19987.95	60455059.1	182.742	A	0.8	-0.1

y = 0.0091 * x + 0.0305
R = 1.0000
DL = 0.2263 ppb
BEC = 3.334 ppb

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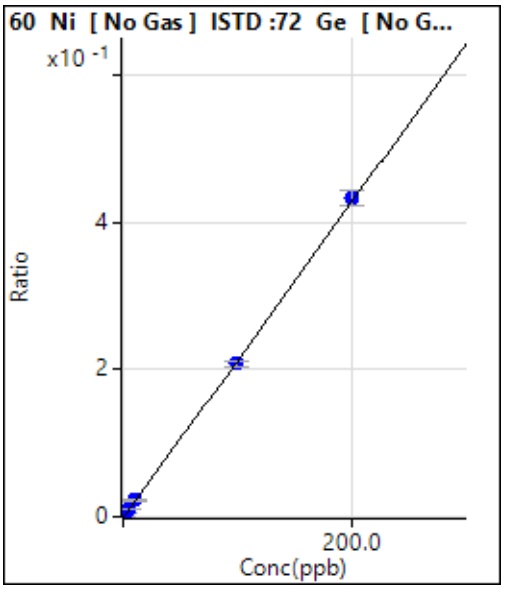
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
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2	☐	2.000	1.911	9340.01	0.0272	P	4.3	-4.5
3	☐	5.000	4.844	23099.87	0.0690	P	2.4	-3.1
4	☐	10.000	9.801	46626.79	0.1395	P	1.2	-2.0
5	☐	100.000	99.591	482836.23	1.4168	P	1.0	-0.4
6	☐	200.000	200.219	942255.48	2.8483	P	0.8	0.1

y = 0.0142 * x + 5.9088E-005
R = 1.0000
DL = 0.006253 ppb
BEC = 0.004154 ppb

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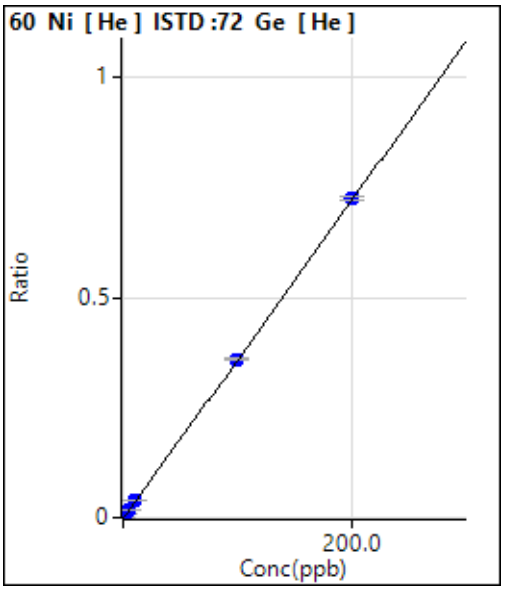


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2	☐	2.000	1.742	5004.34	0.0045	P	2.0	-12.9
3	☐	5.000	4.680	11785.28	0.0108	P	3.3	-6.4
4	☐	10.000	10.021	23437.21	0.0222	P	3.0	0.2
5	☐	100.000	96.565	228288.69	0.2078	P	2.8	-3.4
6	☐	200.000	201.727	439871.02	0.4332	P	4.6	0.9

y = 0.0021 * x + 7.2578E-004
R = 0.9998
DL = 0.08832 ppb
BEC = 0.3385 ppb

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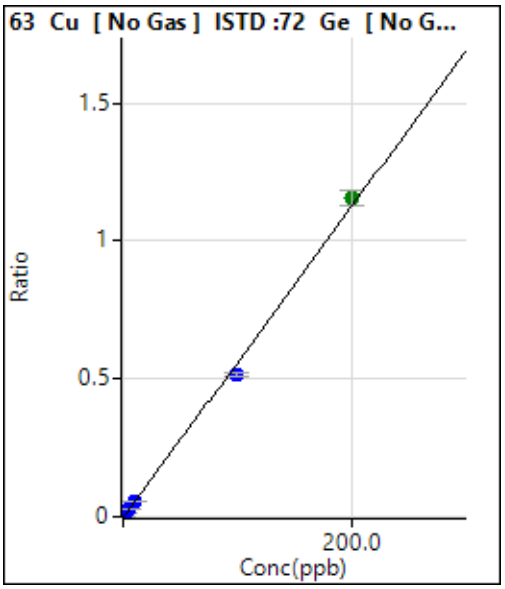
Calibration for 212_ICV.d



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3	☐	5.000	4.958	6221.53	0.0186	P	4.5	-0.8
4	☐	10.000	10.179	12515.95	0.0374	P	1.0	1.8
5	☐	100.000	99.145	122328.82	0.3589	P	0.8	-0.9
6	☐	200.000	200.421	239817.44	0.7249	P	1.2	0.2

y = 0.0036 * x + 6.5930E-004
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DL = 0.1022 ppb
BEC = 0.1824 ppb

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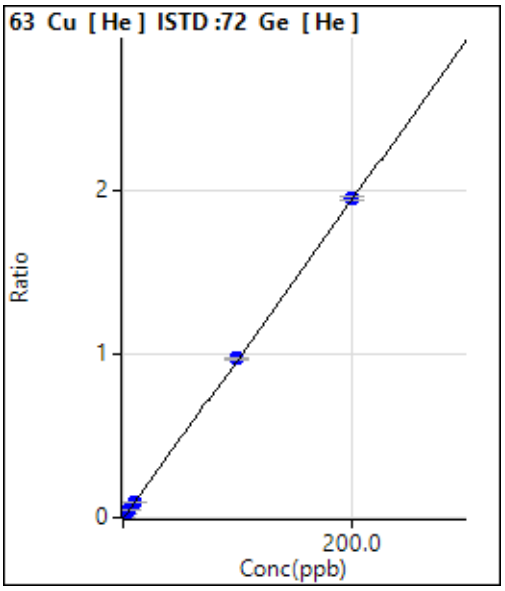


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3	☐	5.000	4.456	29629.29	0.0270	P	1.6	-10.9
4	☐	10.000	9.287	57324.30	0.0543	P	2.5	-7.1
5	☐	100.000	91.199	567641.61	0.5166	P	3.0	-8.8
6	☐	200.000	204.450	1173628.76	1.1558	A	4.3	2.2

y = 0.0056 * x + 0.0019
R = 0.9987
DL = 0.05259 ppb
BEC = 0.3368 ppb

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Min Conc: <None>

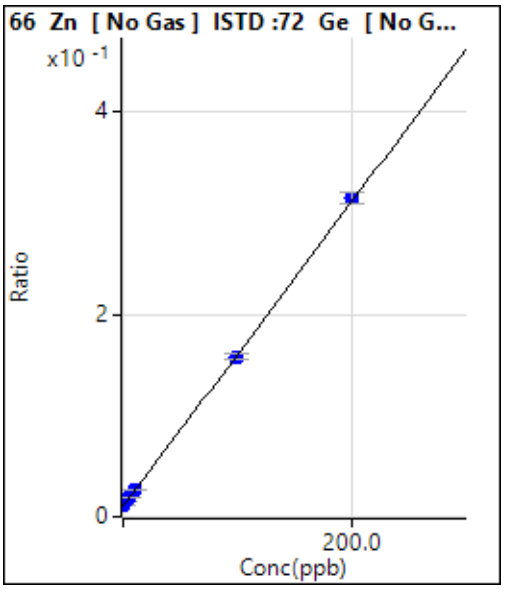
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
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2	☐	2.000	1.961	7555.57	0.0220	P	3.1	-2.0
3	☐	5.000	4.816	16720.57	0.0499	P	0.5	-3.7
4	☐	10.000	9.869	33184.16	0.0993	P	0.5	-1.3
5	☐	100.000	99.522	332226.26	0.9748	P	0.9	-0.5
6	☐	200.000	200.251	647925.77	1.9586	P	0.9	0.1

y = 0.0098 * x + 0.0029
R = 1.0000
DL = 0.1364 ppb
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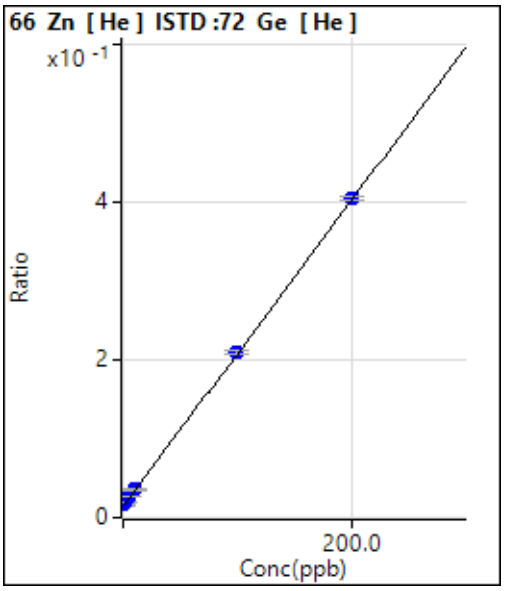


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2	☐	2.000	1.971	16506.93	0.0147	P	0.6	-1.5
3	☐	5.000	4.571	20402.35	0.0186	P	2.4	-8.6
4	☐	10.000	9.903	28119.50	0.0266	P	3.3	-1.0
5	☐	100.000	97.093	173345.95	0.1578	P	3.2	-2.9
6	☐	200.000	201.469	319618.79	0.3148	P	4.1	0.7

y = 0.0015 * x + 0.0118
R = 0.9999
DL = 0.7632 ppb
BEC = 7.815 ppb

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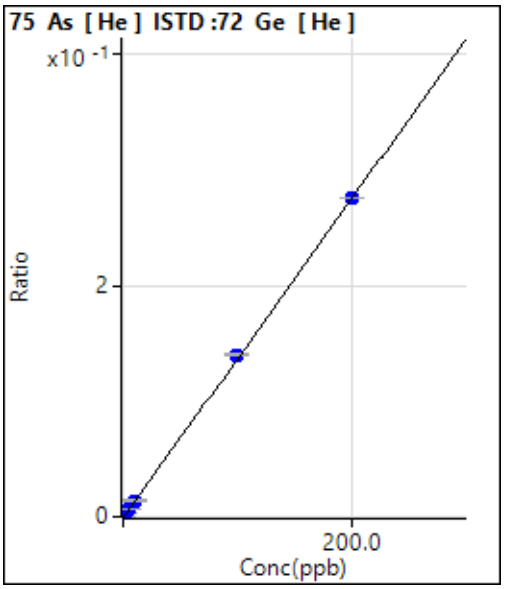
Calibration for 212_ICV.d



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1	☐	0.000	0.000	5517.90	0.0163	P	6.4	
2	☐	2.000	1.584	6638.42	0.0194	P	6.3	-20.8
3	☐	5.000	4.932	8666.24	0.0259	P	1.3	-1.4
4	☐	10.000	9.972	11922.08	0.0357	P	4.2	-0.3
5	☐	100.000	99.664	71571.93	0.2100	P	1.3	-0.3
6	☐	200.000	200.175	134111.09	0.4054	P	1.3	0.1

y = 0.0019 * x + 0.0163
R = 1.0000
DL = 1.609 ppb
BEC = 8.381 ppb

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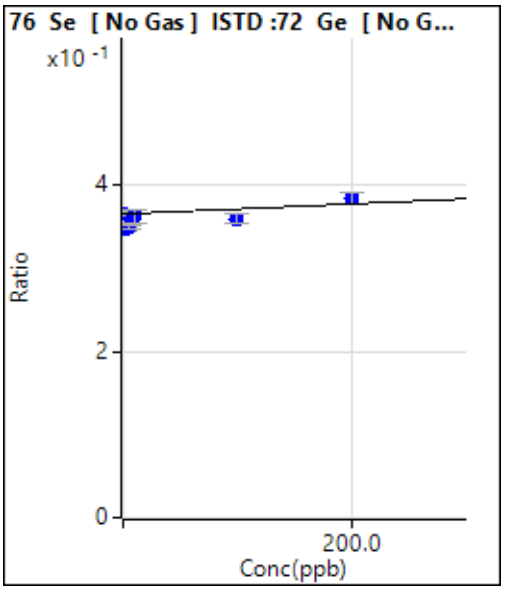


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3	☐	5.000	4.974	2413.56	0.0072	P	0.8	-0.5
4	☐	10.000	9.849	4657.49	0.0139	P	2.7	-1.5
5	☐	100.000	100.976	47613.54	0.1397	P	1.1	1.0
6	☐	200.000	199.521	91219.13	0.2757	P	0.3	-0.2

y = 0.0014 * x + 3.4123E-004
R = 1.0000
DL = 0.1324 ppb
BEC = 0.2472 ppb

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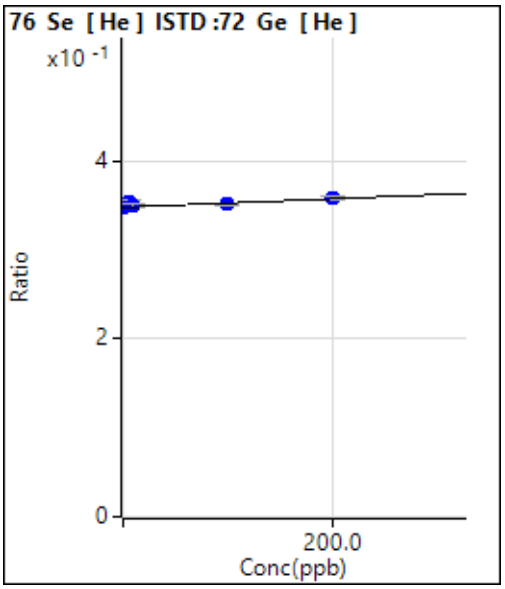
Calibration for 212_ICV.d



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1	☐	0.000	0.000	389615.57	0.3659	P	1.5	
2	☐	2.000	-307.857	389148.84	0.3470	P	1.2	-15492.
3	☐	5.000	-261.349	383167.95	0.3498	P	1.3	-5327.0
4	☐	10.000	-43.103	383238.18	0.3633	P	4.1	-531.0
5	☐	100.000	-90.749	395932.68	0.3604	P	3.0	-190.7
6	☐	200.000	307.787	390915.79	0.3849	P	3.3	53.9

y = 6.1562E-005 * x + 0.3659
R = 0.7903
DL = 265.8 ppb
BEC = 5944 ppb

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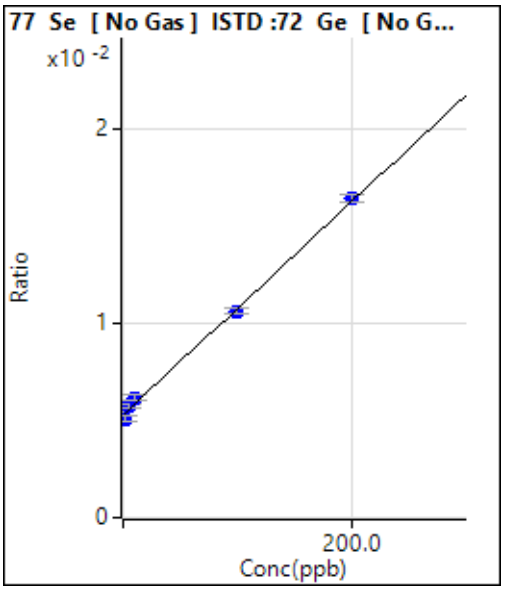


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2	☐	2.000	79.129	120602.08	0.3518	P	0.9	3856.5
3	☐	5.000	130.345	118651.35	0.3543	P	1.3	2506.9
4	☐	10.000	24.896	116728.09	0.3492	P	1.0	149.0
5	☐	100.000	81.283	119939.62	0.3519	P	0.6	-18.7
6	☐	200.000	204.709	118396.13	0.3579	P	1.2	2.4

y = 4.8025E-005 * x + 0.3480
R = 0.7505
DL = 123.2 ppb
BEC = 7247 ppb

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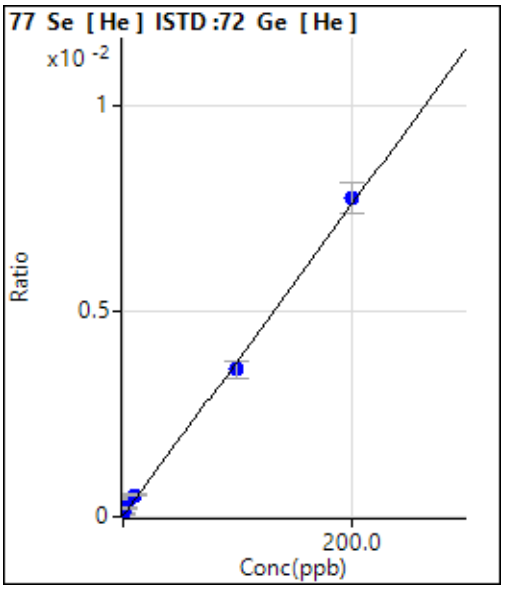
Calibration for 212_ICV.d



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2	☐	2.000	-5.873	5678.00	0.0051	P	6.1	-393.7
3	☐	5.000	6.968	6314.92	0.0058	P	3.7	39.4
4	☐	10.000	14.585	6521.70	0.0062	P	5.1	45.8
5	☐	100.000	95.968	11695.24	0.0106	P	2.0	-4.0
6	☐	200.000	201.816	16697.29	0.0164	P	2.6	0.9

y = 5.4750E-005 * x + 0.0054
R = 0.9985
DL = 19.4 ppb
BEC = 98.36 ppb

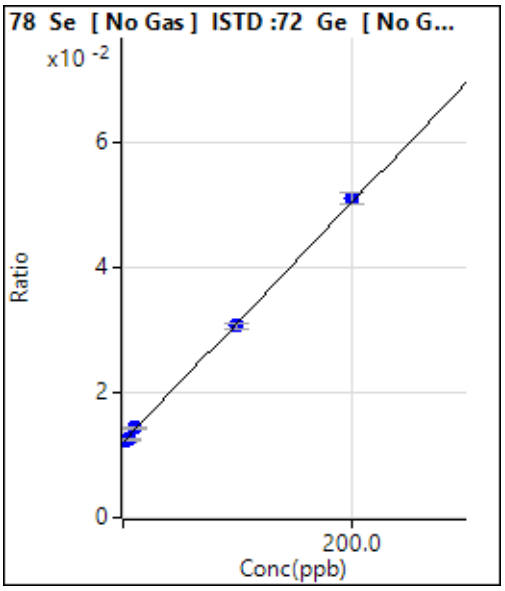
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.1	
2	☐	2.000	3.832	70.00	0.0002	P	14.3	91.6
3	☐	5.000	10.010	146.67	0.0004	P	16.2	100.2
4	☐	10.000	12.126	173.33	0.0005	P	8.2	21.3
5	☐	100.000	92.962	1220.08	0.0036	P	10.8	-7.0
6	☐	200.000	203.269	2566.96	0.0078	P	9.1	1.6

y = 3.7879E-005 * x + 5.9053E-005
R = 0.9987
DL = 2.344 ppb
BEC = 1.559 ppb

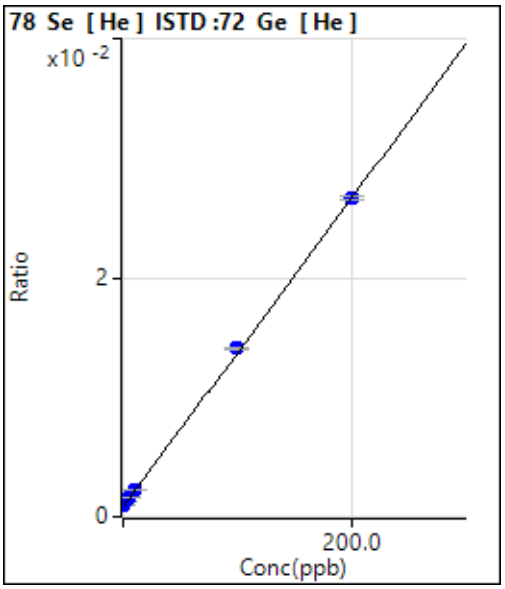
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13160.00	0.0124	P	6.2	
2	☐	2.000	-1.167	13610.42	0.0121	P	3.7	-158.3
3	☐	5.000	0.648	13673.81	0.0125	P	2.2	-87.0
4	☐	10.000	10.616	15182.08	0.0144	P	2.8	6.2
5	☐	100.000	95.448	33599.01	0.0306	P	3.4	-4.6
6	☐	200.000	202.386	51789.70	0.0510	P	4.1	1.2

y = 1.9091E-004 * x + 0.0124
R = 0.9995
DL = 12.11 ppb
BEC = 64.74 ppb

Weight: <None>
Min Conc: <None>

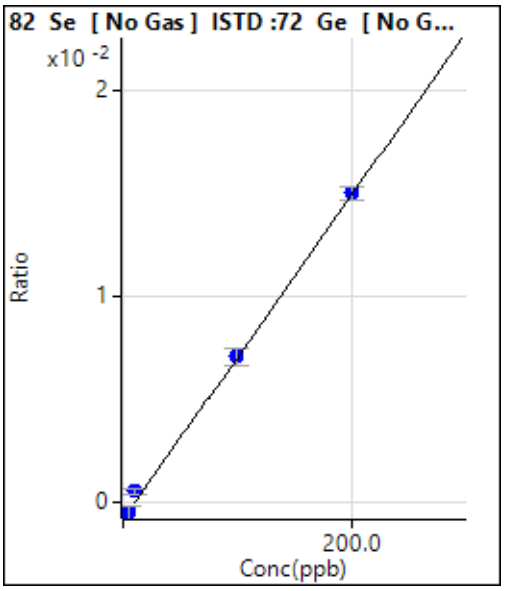


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	327.34	0.0010	P	7.1	
2	☐	2.000	2.067	422.68	0.0012	P	1.9	3.3
3	☐	5.000	5.223	549.34	0.0016	P	3.4	4.5
4	☐	10.000	10.128	760.02	0.0023	P	0.8	1.3
5	☐	100.000	101.812	4808.87	0.0141	P	1.3	1.8
6	☐	200.000	199.081	8822.23	0.0267	P	0.7	-0.5

y = 1.2910E-004 * x + 9.6621E-004
R = 0.9999
DL = 1.586 ppb
BEC = 7.484 ppb

Weight: <None>
Min Conc: <None>

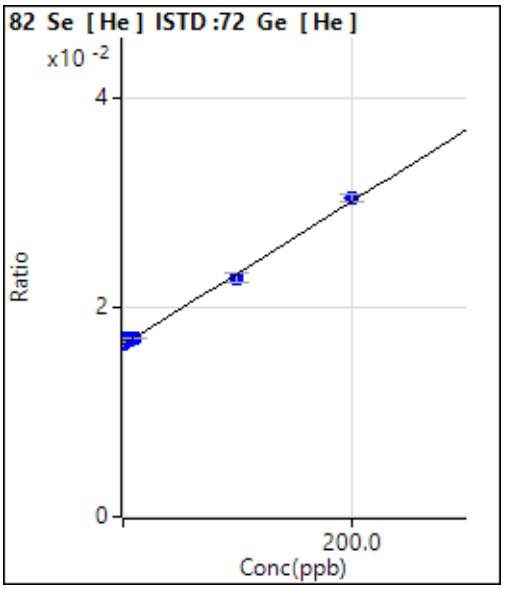
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-796.78	-0.0007	P	-54.8	
2	☐	2.000	2.169	-649.43	-0.0006	P	-141.	8.4
3	☐	5.000	3.266	-537.49	-0.0005	P	-106.	-34.7
4	☐	10.000	16.138	560.90	0.0005	P	51.3	61.4
5	☐	100.000	99.273	7795.94	0.0071	P	12.3	-0.7
6	☐	200.000	200.098	15287.09	0.0150	P	4.1	0.0

y = 7.8863E-005 * x - 7.4756E-004
R = 0.9994
DL = 15.58 ppb
BEC = -9.479 ppb

Weight: <None>
Min Conc: <None>

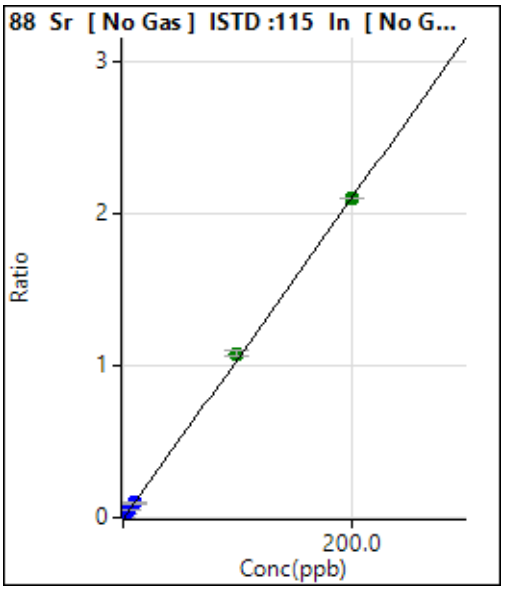


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5591.27	0.0165	P	2.3	
2	☐	2.000	8.706	5861.43	0.0171	P	2.1	335.3
3	☐	5.000	4.702	5634.62	0.0168	P	2.3	-6.0
4	☐	10.000	8.208	5704.63	0.0171	P	0.5	-17.9
5	☐	100.000	92.368	7775.73	0.0228	P	4.3	-7.6
6	☐	200.000	203.846	10070.59	0.0304	P	3.0	1.9

y = 6.8344E-005 * x + 0.0165
R = 0.9982
DL = 16.75 ppb
BEC = 241.5 ppb

Weight: <None>
Min Conc: <None>

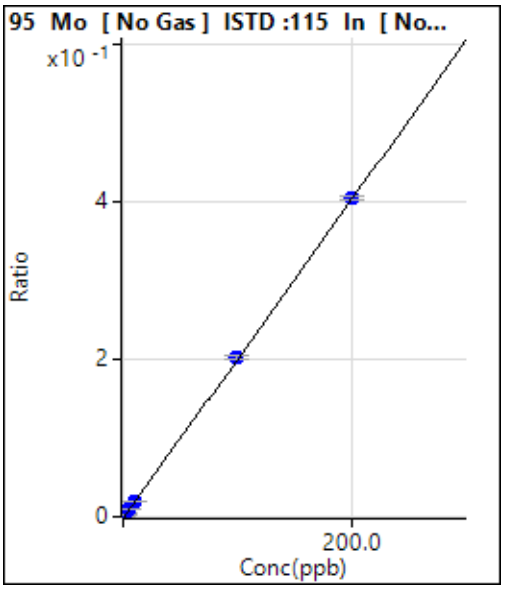
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	653.36	0.0005	P	5.1	
2	☐	2.000	1.822	27207.87	0.0197	P	2.5	-8.9
3	☐	5.000	4.819	69945.90	0.0514	P	2.4	-3.6
4	☐	10.000	8.984	130545.50	0.0954	P	1.1	-10.2
5	☐	100.000	102.284	1444761.23	1.0809	A	2.9	2.3
6	☐	200.000	198.915	2753242.46	2.1016	A	0.6	-0.5

y = 0.0106 * x + 4.8044E-004
R = 0.9999
DL = 0.007022 ppb
BEC = 0.04548 ppb

Weight: <None>
Min Conc: <None>

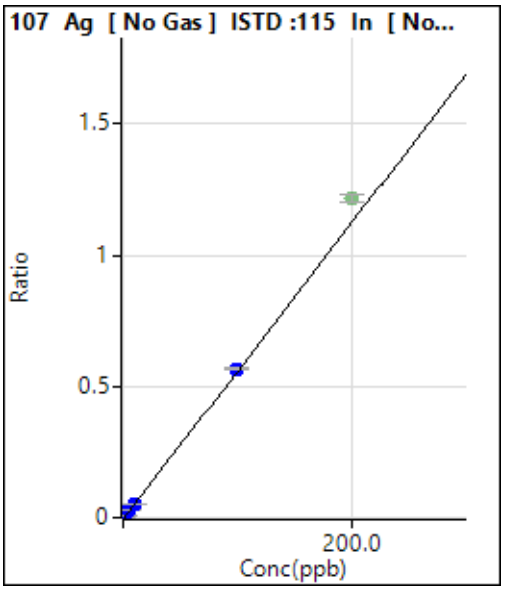


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.824	5111.09	0.0037	P	6.3	-8.8
3	☐	5.000	4.794	13236.83	0.0097	P	1.3	-4.1
4	☐	10.000	9.496	26353.07	0.0193	P	2.0	-5.0
5	☐	100.000	100.004	270914.09	0.2027	P	1.4	0.0
6	☐	200.000	200.030	531001.28	0.4053	P	1.3	0.0

y = 0.0020 * x + 9.7236E-006
R = 1.0000
DL = 0.01247 ppb
BEC = 0.004799 ppb

Weight: <None>
Min Conc: <None>

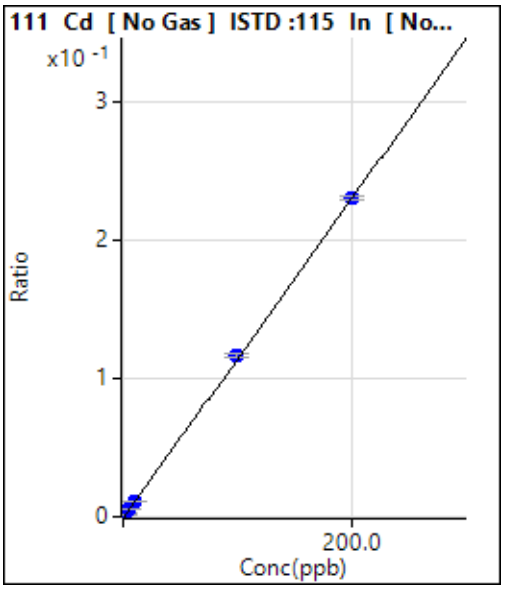
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	40.0	
2	☐	2.000	1.859	14704.99	0.0107	P	3.3	-7.1
3	☐	5.000	4.657	36009.26	0.0265	P	2.0	-6.9
4	☐	10.000	9.403	72890.65	0.0533	P	1.4	-6.0
5	☐	100.000	100.080	755480.59	0.5652	P	1.4	0.1
6	☑	200.000		1593637.32	1.2165	A	2.1	

y = 0.0056 * x + 1.6899E-004
R = 1.0000
DL = 0.03594 ppb
BEC = 0.02993 ppb

Weight: <None>
Min Conc: <None>

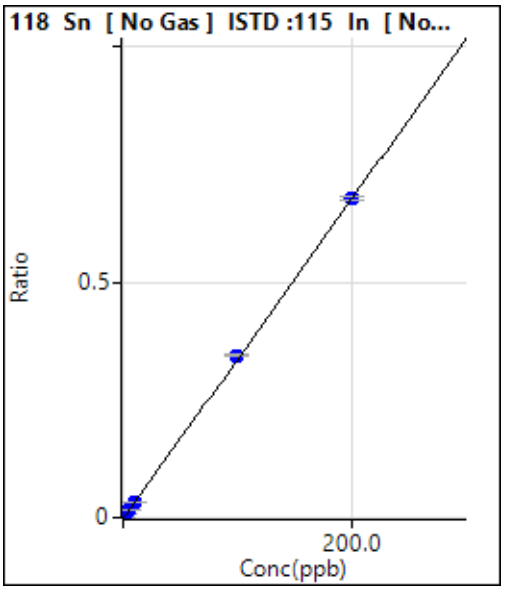


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.906	3040.41	0.0022	P	13.7	-4.7
3	☐	5.000	4.614	7268.79	0.0053	P	7.6	-7.7
4	☐	10.000	9.821	15559.44	0.0114	P	4.7	-1.8
5	☐	100.000	101.002	156297.13	0.1169	P	2.0	1.0
6	☐	200.000	199.518	302586.33	0.2310	P	1.0	-0.2

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

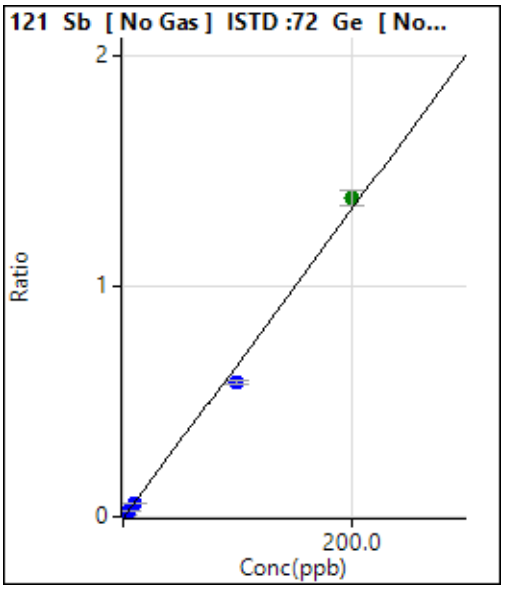
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1216.75	0.0009	P	5.3	
2	☐	2.000	1.889	10077.34	0.0073	P	3.3	-5.5
3	☐	5.000	4.597	22459.55	0.0165	P	0.2	-8.1
4	☐	10.000	9.190	43923.72	0.0321	P	0.9	-8.1
5	☐	100.000	101.196	460443.38	0.3444	P	1.3	1.2
6	☐	200.000	199.454	888216.26	0.6780	P	0.7	-0.3

y = 0.0034 * x + 8.9381E-004
R = 1.0000
DL = 0.0416 ppb
BEC = 0.2633 ppb

Weight: <None>
Min Conc: <None>

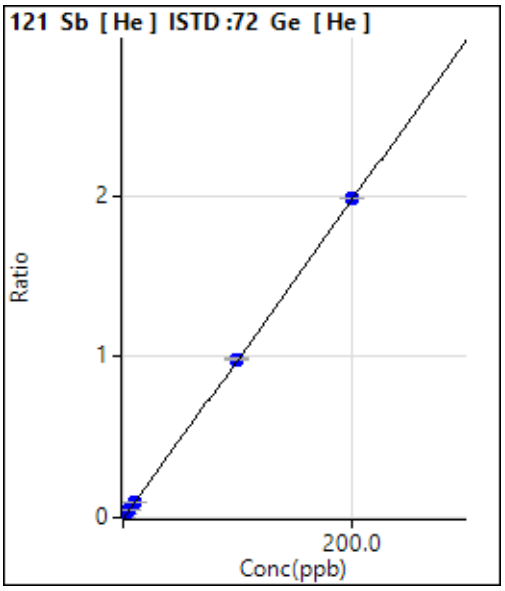


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	300.01	0.0003	P	28.5	
2	☐	2.000	1.647	12686.36	0.0113	P	7.0	-17.7
3	☐	5.000	4.146	30726.32	0.0281	P	2.0	-17.1
4	☐	10.000	8.698	61785.72	0.0586	P	3.6	-13.0
5	☐	100.000	87.172	642005.95	0.5843	P	2.7	-12.8
6	☐	200.000	206.504	1404987.27	1.3837	A	4.7	3.3

y = 0.0067 * x + 2.8121E-004
R = 0.9972
DL = 0.03585 ppb
BEC = 0.04198 ppb

Weight: <None>
Min Conc: <None>

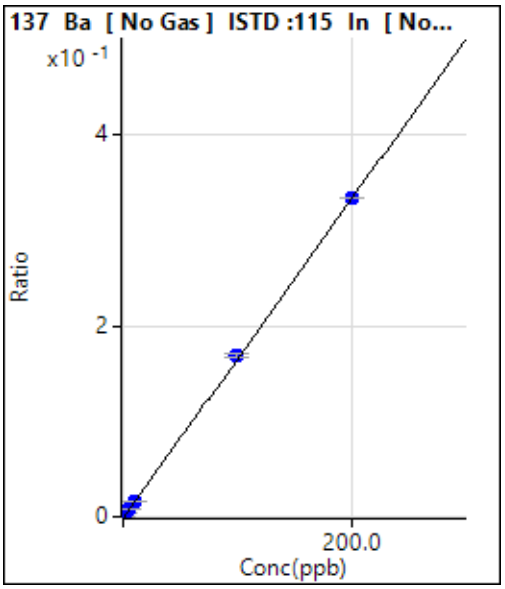
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0006	P	14.8	
2	☐	2.000	1.825	6388.34	0.0186	P	3.3	-8.7
3	☐	5.000	4.739	15899.89	0.0475	P	2.2	-5.2
4	☐	10.000	9.532	31718.67	0.0949	P	3.8	-4.7
5	☐	100.000	99.483	335743.37	0.9852	P	1.5	-0.5
6	☐	200.000	200.290	655992.92	1.9829	P	0.5	0.1

y = 0.0099 * x + 5.7065E-004
R = 1.0000
DL = 0.02556 ppb
BEC = 0.05766 ppb

Weight: <None>
Min Conc: <None>

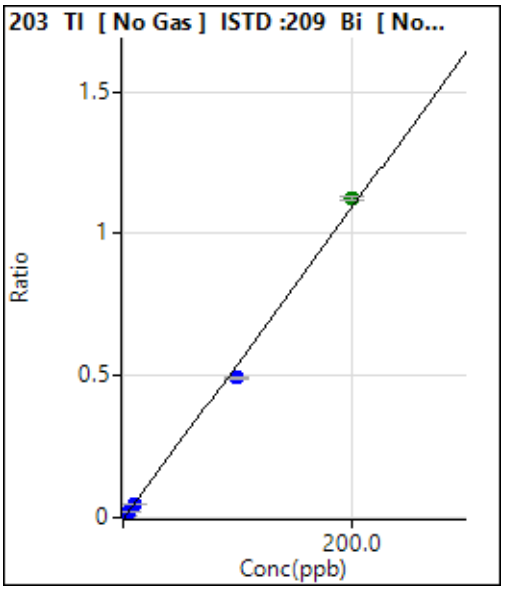


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.01	0.0001	P	26.4	
2	☐	2.000	1.942	4614.25	0.0033	P	5.1	-2.9
3	☐	5.000	4.948	11401.88	0.0084	P	4.2	-1.0
4	☐	10.000	9.331	21508.06	0.0157	P	2.6	-6.7
5	☐	100.000	100.886	225869.41	0.1690	P	2.0	0.9
6	☐	200.000	199.592	437828.10	0.3342	P	0.6	-0.2

y = 0.0017 * x + 9.5502E-005
R = 1.0000
DL = 0.0452 ppb
BEC = 0.05705 ppb

Weight: <None>
Min Conc: <None>

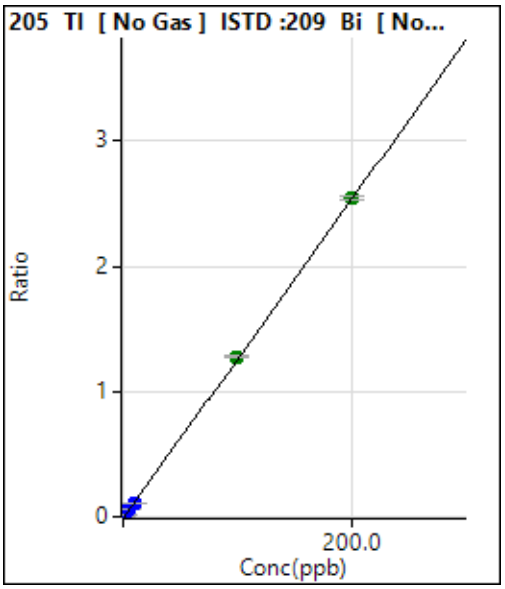
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.7	
2	☐	2.000	1.658	12923.58	0.0091	P	4.3	-17.1
3	☐	5.000	4.180	32135.16	0.0229	P	2.2	-16.4
4	☐	10.000	8.226	63789.30	0.0451	P	0.3	-17.7
5	☐	100.000	89.840	681766.19	0.4925	P	1.5	-10.2
6	☐	200.000	205.193	1501543.00	1.1249	A	1.1	2.6

y = 0.0055 * x + 1.4469E-005
R = 0.9983
DL = 0.004018 ppb
BEC = 0.002639 ppb

Weight: <None>
Min Conc: <None>

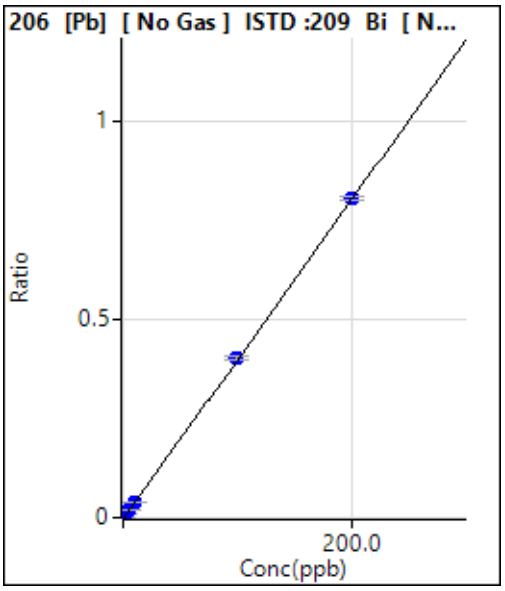


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	17.5	
2	☐	2.000	1.717	31082.39	0.0219	P	1.7	-14.1
3	☐	5.000	4.271	76266.31	0.0544	P	1.3	-14.6
4	☐	10.000	8.723	157097.24	0.1111	P	0.9	-12.8
5	☐	100.000	100.336	1768441.07	1.2776	A	1.6	0.3
6	☐	200.000	199.917	3397792.45	2.5456	A	1.1	0.0

y = 0.0127 * x + 2.6458E-005
R = 1.0000
DL = 0.001088 ppb
BEC = 0.002078 ppb

Weight: <None>
Min Conc: <None>

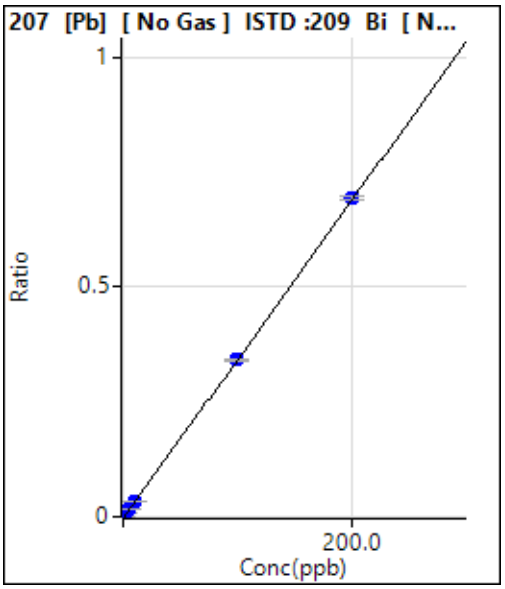
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	24.5	
2	☐	2.000	1.937	11248.57	0.0079	P	3.4	-3.1
3	☐	5.000	4.636	26374.87	0.0188	P	2.3	-7.3
4	☐	10.000	9.490	54321.79	0.0384	P	0.5	-5.1
5	☐	100.000	100.315	560714.52	0.4051	P	2.0	0.3
6	☐	200.000	199.878	1077258.21	0.8071	P	1.3	-0.1

y = 0.0040 * x + 1.0074E-004
R = 1.0000
DL = 0.0183 ppb
BEC = 0.02495 ppb

Weight: <None>
Min Conc: <None>

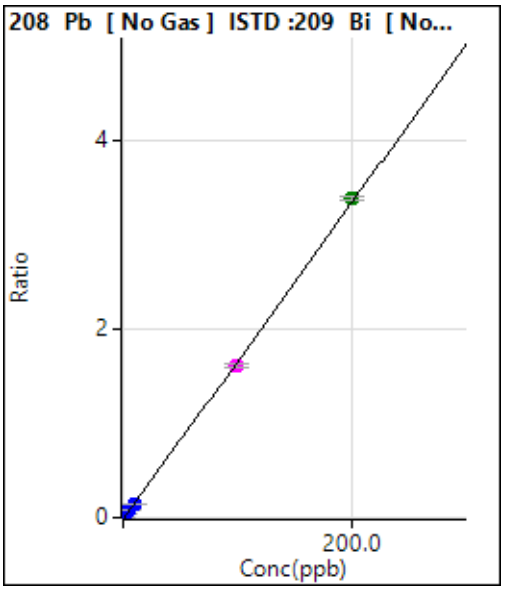


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	21.4	
2	☐	2.000	1.915	9507.12	0.0067	P	4.8	-4.2
3	☐	5.000	4.602	22397.17	0.0160	P	2.9	-8.0
4	☐	10.000	9.393	46005.05	0.0325	P	1.9	-6.1
5	☐	100.000	98.683	472119.56	0.3411	P	1.4	-1.3
6	☐	200.000	200.700	925798.76	0.6936	P	1.1	0.3

y = 0.0035 * x + 7.6762E-005
R = 1.0000
DL = 0.01423 ppb
BEC = 0.02221 ppb

Weight: <None>
Min Conc: <None>

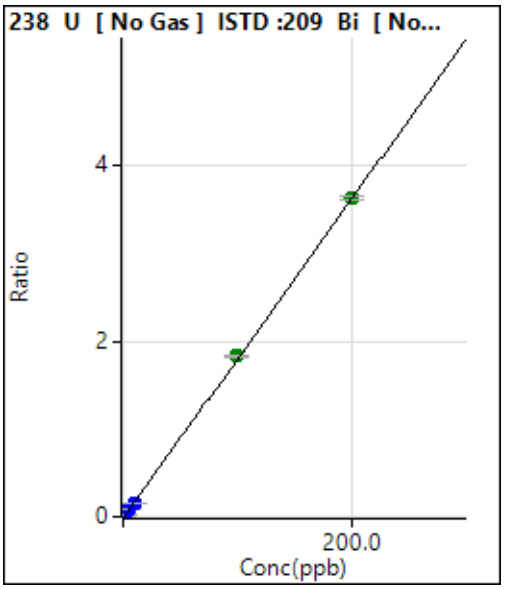
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	616.68	0.0004	P	7.6	
2	☐	2.000	1.819	43937.56	0.0309	P	2.1	-9.0
3	☐	5.000	4.478	105849.36	0.0755	P	1.4	-10.4
4	☐	10.000	9.050	215189.95	0.1522	P	0.6	-9.5
5	☐	100.000	96.161	2232387.98	1.6127	M	1.5	-3.8
6	☐	200.000	201.982	4520443.14	3.3868	A	1.6	1.0

y = 0.0168 * x + 4.4394E-004
R = 0.9998
DL = 0.006029 ppb
BEC = 0.02648 ppb

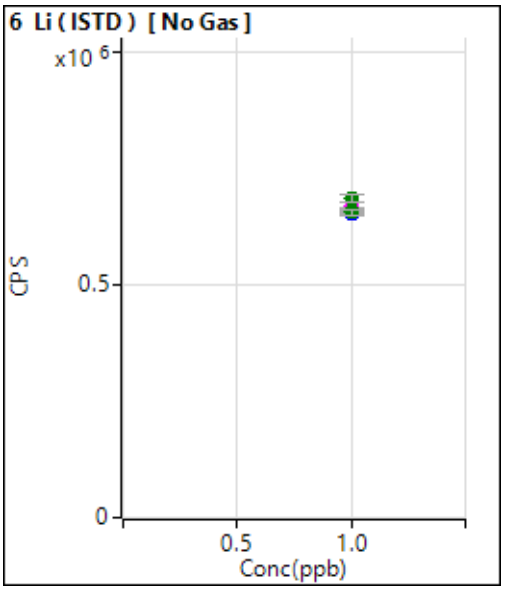
Weight: <None>
Min Conc: <None>



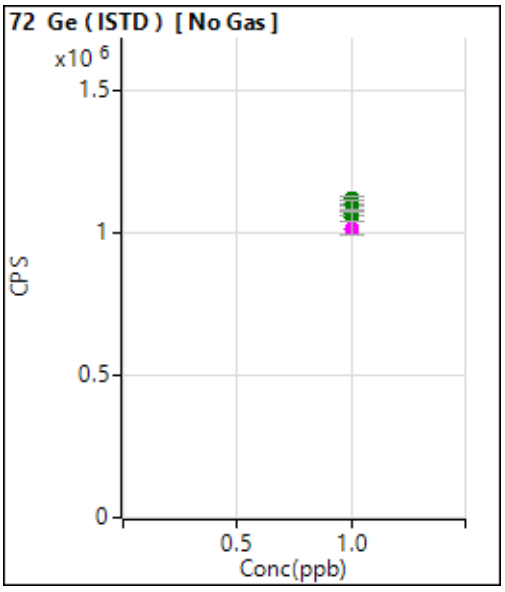
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	44.9	
2	☐	2.000	1.746	45053.23	0.0317	P	1.3	-12.7
3	☐	5.000	4.392	111879.02	0.0798	P	1.9	-12.2
4	☐	10.000	8.879	228172.47	0.1614	P	0.6	-11.2
5	☐	100.000	100.790	2535315.64	1.8316	A	1.1	0.8
6	☐	200.000	199.679	4843356.07	3.6286	A	1.4	-0.2

y = 0.0182 * x + 9.6416E-006
R = 1.0000
DL = 0.0007149 ppb
BEC = 0.0005306 ppb

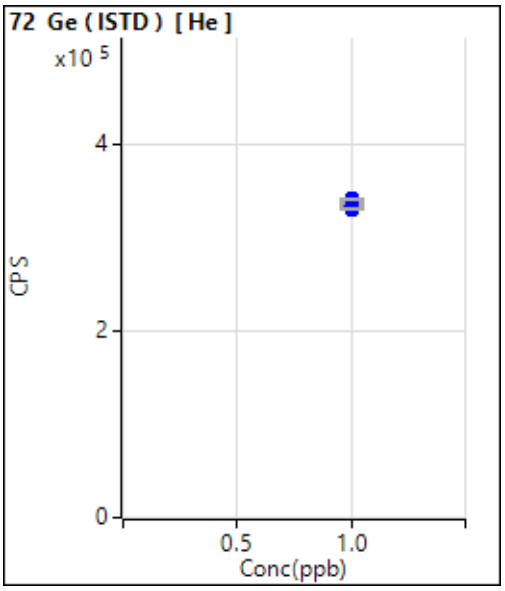
Weight: <None>
Min Conc: <None>



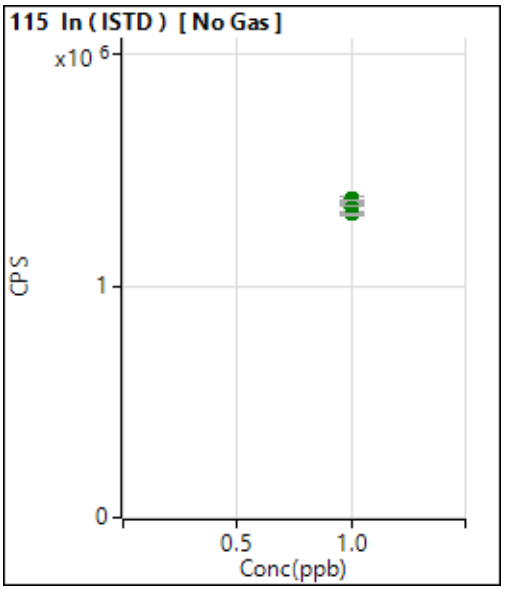
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		670806.57		M	2.3	
2	☐	1.000		685146.84		M	2.9	
3	☐	1.000		658640.95		P	0.1	
4	☐	1.000		653287.19		P	0.6	
5	☐	1.000		685499.72		A	2.0	
6	☐	1.000		655435.47		A	2.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1064832.80		A	1.3	
2	☐	1.000		1121595.69		A	0.9	
3	☐	1.000		1095296.75		A	0.7	
4	☐	1.000		1055891.36		A	3.4	
5	☐	1.000		1099376.75		A	3.0	
6	☐	1.000		1016593.71		M	4.1	

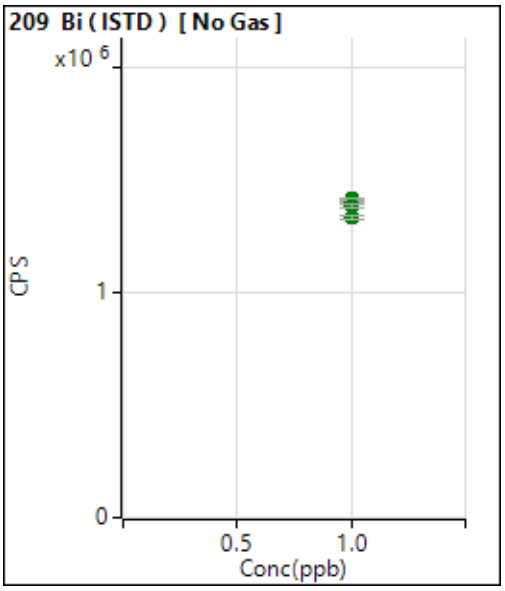


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		338750.20		P	0.3	
2	☐	1.000		342790.06		P	0.5	
3	☐	1.000		334894.32		P	0.6	
4	☐	1.000		334264.68		P	0.9	
5	☐	1.000		340806.65		P	0.6	
6	☐	1.000		330825.84		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360629.72		A	1.9	
2	☐	1.000		1379610.82		A	1.6	
3	☐	1.000		1361230.28		A	1.2	
4	☐	1.000		1368776.61		A	0.7	
5	☐	1.000		1336992.47		A	1.7	
6	☐	1.000		1310100.00		A	0.9	

Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1388985.61		A	2.0	
2	☐	1.000		1419790.14		A	0.4	
3	☐	1.000		1401715.45		A	1.3	
4	☐	1.000		1414056.38		A	0.8	
5	☐	1.000		1384389.30		A	1.6	
6	☐	1.000		1334929.82		A	1.6	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	213LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:23:51-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.881	1.881	3.93	51596	0.00	2	
Be	9	1	No Gas	1.960	1.960	2.61	3487	0.06	2	
V	51	2	He	1.550	1.550	4.86	6454	0.02	2	
Cr	52	2	He	1.794	1.794	3.17	6752	0.03	2	
Fe	56	2	He	187.314	187.314	1.72	582642	0.03	200	
Se	78	2	He	2.198	2.198	22.84	418	0.53	2	
As	75	2	He	1.797	1.797	2.77	943	0.19	2	
Ca	44	2	He	188.080	188.080	6.71	3831	4.91	200	
Na	23	2	He	141.007	141.007	2.92	313235	0.05	200	
Mg	24	2	He	187.566	187.566	2.34	63237	0.30	200	
K	39	2	He	167.279	167.279	3.09	151451	0.11	200	
Mn	55	2	He	1.979	1.979	0.29	5071	0.04	2	
Co	59	2	He	1.945	1.945	1.78	9270	0.02	2	
Ni	60	2	He	1.848	1.848	8.12	2454	0.08	2	
Cu	63	2	He	2.086	2.086	4.13	7779	0.03	2	
Zn	66	2	He	2.129	2.129	26.98	6829	0.03	2	
Al	27	2	He	1.784	1.784	35.20	787	0.23	2	
B	11	1	No Gas	41.103	41.103	10.46	45815	0.09	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.694	1.694	10.15	31543	0.01	2	
Si	28	1	No Gas	15.990	15.990	13.55	202528	0.01	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.835	1.835	1.13	14431	0.01	2	
Cd	111	1	No Gas	1.981	1.981	2.84	3144	0.06	2	
Sr	88	1	No Gas	1.769	1.769	3.41	26266	0.01	2	
Mo	95	1	No Gas	1.895	1.895	3.00	5274	0.04	2	
Sn	118	1	No Gas	1.942	1.942	4.46	10261	0.02	2	
Sb	121	1	No Gas	1.823	1.823	1.71	12810	0.01	2	
Ba	137	1	No Gas	1.922	1.922	1.42	4541	0.04	2	
Tl	205	1	No Gas	1.736	1.736	0.49	31072	0.01	2	
Tl	203	1	No Gas	1.726	1.726	1.79	13307	0.01	2	
Pb	208	1	No Gas	1.832	1.832	2.10	43741	0.00	2	
U	238	1	No Gas	1.776	1.776	3.04	45307	0.00	2	
Ca	43	2	He	149.765	149.765	9.26	183	81.69	200	
Sb	121	2	He	1.893	1.893	2.16	6455	0.03	2	
Ti	47	2	He	1.917	1.917	26.69	213	0.90	200	
Cu	63	1	No Gas	2.000	2.000	3.57	13520	0.01	2	
Se	82	1	No Gas	2.934	2.934	244.67	-532	-0.55	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	648081	0.61	670807	96.61	70	120	
Ge	72	2	He	334353	0.79	338750	98.70	70	120	
Ge	72	1	No Gas	1025387	1.69	1064833	96.30	70	120	
In	115	1	No Gas	1370670	1.56	1360630	100.74	70	120	
Bi	209	1	No Gas	1404141	2.01	1388986	101.09	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	214LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:25:50-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.880	4.880	1.99	75952	0.01	5	
Be	9	1	No Gas	5.018	5.018	0.92	8900	0.06	5	
V	51	2	He	4.284	4.284	4.19	13992	0.03	5	
Cr	52	2	He	4.791	4.791	1.96	16273	0.03	5	
Fe	56	2	He	509.353	509.353	0.55	1560980	0.03	500	
Se	78	2	He	3.947	3.947	23.29	491	0.80	5	
As	75	2	He	4.870	4.870	2.00	2352	0.21	5	
Ca	44	2	He	515.797	515.797	3.09	9727	5.30	500	
Na	23	2	He	412.525	412.525	0.85	475966	0.09	500	
Mg	24	2	He	470.488	470.488	0.62	157562	0.30	500	
K	39	2	He	439.407	439.407	1.82	252263	0.17	500	
Mn	55	2	He	4.849	4.849	0.84	11785	0.04	5	
Co	59	2	He	4.807	4.807	2.51	22799	0.02	5	
Ni	60	2	He	4.887	4.887	7.16	6101	0.08	5	
Cu	63	2	He	4.803	4.803	1.72	16587	0.03	5	
Zn	66	2	He	4.725	4.725	8.21	8486	0.06	5	
Al	27	2	He	5.873	5.873	13.90	1503	0.39	5	
B	11	1	No Gas	36.554	36.554	0.73	42255	0.09	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	5.277	5.277	6.80	57516	0.01	5	
Si	28	1	No Gas	29.499	29.499	8.53	246889	0.01	25	
Ag	107	1	No Gas	4.655	4.655	0.95	36434	0.01	5	
Cd	111	1	No Gas	4.773	4.773	6.72	7609	0.06	5	
Sr	88	1	No Gas	4.755	4.755	2.85	69842	0.01	5	
Mo	95	1	No Gas	4.686	4.686	2.15	13093	0.04	5	
Sn	118	1	No Gas	4.679	4.679	2.81	23107	0.02	5	
Sb	121	1	No Gas	4.305	4.305	6.93	30325	0.01	5	
Ba	137	1	No Gas	4.773	4.773	3.01	11138	0.04	5	
Tl	205	1	No Gas	4.254	4.254	1.18	77121	0.01	5	
Tl	203	1	No Gas	4.061	4.061	1.85	31707	0.01	5	
Pb	208	1	No Gas	4.456	4.456	0.20	106948	0.00	5	
U	238	1	No Gas	4.405	4.405	0.85	113917	0.00	5	
Ca	43	2	He	539.875	539.875	2.19	590	91.50	500	
Sb	121	2	He	4.828	4.828	1.96	16107	0.03	5	
Ti	47	2	He	4.720	4.720	15.90	513	0.92	5	
Cu	63	1	No Gas	4.572	4.572	1.15	28881	0.02	5	
Se	82	1	No Gas	2.189	2.189	433.91	-584	-0.37	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	649964	0.43	670807	96.89	70	120	
Ge	72	2	He	333073	0.89	338750	98.32	70	120	
Ge	72	1	No Gas	1042611	2.96	1064833	97.91	70	120	
In	115	1	No Gas	1377482	1.00	1360630	101.24	70	120	
Bi	209	1	No Gas	1423133	0.85	1388986	102.46	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	215_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:27:49-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.071	134.1	36622	1.6	0.5	
Be	9	1	No Gas	0.009	116.0	50	34.6	0.5	
V	51	2	He	-0.372	-5.4	1099	4.4	2.5	
Cr	52	2	He	0.019	107.3	1057	6.3	2.5	
Fe	56	2	He	0.906	8.1	12709	1.9	100	
Se	78	2	He	0.043	694.2	319	4.7	1	
As	75	2	He	-0.097	-42.8	68	27.1	2.5	
Ca	44	2	He	2.287	63.6	460	5.8	100	
Na	23	2	He	-36.080	-9.8	201935	0.3	100	
Mg	24	2	He	0.516	45.3	477	17.0	100	
K	39	2	He	-20.298	-8.6	79730	0.2	100	
Mn	55	2	He	0.065	32.6	553	8.5	2.5	
Co	59	2	He	0.002	158.2	27	43.3	2.5	
Ni	60	2	He	-0.036	-85.0	173	20.3	2.5	
Cu	63	2	He	0.044	95.4	1090	11.5	1	
Zn	66	2	He	-0.221	-66.7	5201	2.5	2.5	
Al	27	2	He	-0.450	-100.5	383	20.9	5	
B	11	1	No Gas	8.519	12.1	19156	4.6	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.754	-6.3	14141	2.1	5	
Si	28	1	No Gas	3.592	3.5	162166	0.3	10	
Ag	107	1	No Gas	0.005	183.5	270	28.0	2.5	
Cd	111	1	No Gas	0.008	43.3	13	43.3	1	
Sr	88	1	No Gas	-0.010	-76.3	513	20.0	2.5	
Mo	95	1	No Gas	0.001	593.2	17	124.9	2.5	
Sn	118	1	No Gas	0.146	8.0	1887	3.4	5	
Sb	121	1	No Gas	0.035	45.4	517	20.9	2.5	
Ba	137	1	No Gas	-0.001	-424.2	127	9.1	2.5	
Tl	205	1	No Gas	0.004	22.4	103	14.8	1	
Tl	203	1	No Gas	0.009	34.5	87	26.6	1	
Pb	208	1	No Gas	0.005	79.4	737	12.6	2.5	
U	238	1	No Gas	0.001	27.6	50	20.0	2.5	
Ca	43	2	He	-18.620	-30.2	7	86.6	100	
Sb	121	2	He	0.012	41.8	227	6.7	2.5	
Ti	47	2	He	-0.030	-182.7	3	173.2	2.5	
Se	82	1	No Gas	-1.560	-824.1	-875	-116.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	641000	0.65	670807	95.56	70	120	
Ge	72	2	He	327887	0.93	338750	96.79	70	120	
Ge	72	1	No Gas	1004356	0.29	1064833	94.32	70	120	
In	115	1	No Gas	1357052	0.60	1360630	99.74	70	120	
Bi	209	1	No Gas	1396485	0.36	1388986	100.54	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	217_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:31:46-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.176	3.017	929572	1.96	100	102.2	90	110	
Be	9	1	No Gas	99.602	2.676	189954	1.33	100	99.6	90	110	
V	51	2	He	99.546	0.218	282507	1.23	100	99.5	90	110	
Cr	52	2	He	100.602	0.873	327327	0.90	100	100.6	90	110	
Fe	56	2	He	10025.554	0.204	31097720	1.11	10000	100.3	90	110	
Se	78	2	He	102.009	1.922	4796	2.86	100	102.0	90	110	
As	75	2	He	103.876	1.028	48748	0.12	100	103.9	90	110	
Ca	44	2	He	9935.752	0.833	182879	1.87	10000	99.4	90	110	
Na	23	2	He	9912.553	0.464	6325851	1.52	10000	99.1	90	110	
Mg	24	2	He	9981.454	1.808	3398343	2.90	10000	99.8	90	110	
K	39	2	He	10030.341	0.417	3895863	1.35	10000	100.3	90	110	
Mn	55	2	He	101.057	1.030	241848	0.08	100	101.1	90	110	
Co	59	2	He	100.945	0.382	487138	1.26	100	100.9	90	110	
Ni	60	2	He	100.848	0.673	123856	1.72	100	100.8	90	110	
Cu	63	2	He	101.044	1.181	335742	2.04	100	101.0	90	110	
Zn	66	2	He	101.331	1.125	72346	2.13	100	101.3	90	110	
Al	27	2	He	112.678	1.694	20712	2.05	100	112.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	497.655	1.617	451008	1.76	500	99.5	90	110	
Al	27	1	No Gas	101.056	0.253	808022	0.42	100	101.1	90	110	
Si	28	1	No Gas	502.702	0.193	1842824	0.46	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.867	1.421	780257	0.83	100	100.9	90	110	
Cd	111	1	No Gas	101.227	0.907	160534	0.66	100	101.2	90	110	
Sr	88	1	No Gas	102.386	2.051	1482219	2.05	100	102.4	90	110	
Mo	95	1	No Gas	100.021	0.874	277661	0.47	100	100.0	90	110	
Sn	118	1	No Gas	101.472	0.709	473139	1.04	100	101.5	90	110	
Sb	121	1	No Gas	88.587	0.947	677257	0.47	100	88.6	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	102.044	1.285	234126	0.72	100	102.0	90	110	
Tl	205	1	No Gas	106.011	0.659	1874886	0.63	100	106.0	90	110	
Tl	203	1	No Gas	93.807	1.705	714255	0.60	100	93.8	90	110	
Pb	208	1	No Gas	102.726	1.540	2392662	1.14	100	102.7	90	110	
U	238	1	No Gas	104.583	3.027	2639189	1.94	100	104.6	90	110	
Ca	43	2	He	10203.202	0.530	10878	1.54	10000	102.0	90	110	
Sb	121	2	He	102.569	0.116	344558	1.19	100	102.6	90	110	
Ti	47	2	He	94.289	3.525	10327	3.54	100	94.3	90	110	
Cu	63	1	No Gas	90.632	1.094	585642	1.13	100	90.6	90	110	
Se	82	1	No Gas	93.903	8.382	7592	8.86	100	93.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	701714	1.41	670807	104.61	70	120	
Ge	72	2	He	339217	1.10	338750	100.14	70	120	
Ge	72	1	No Gas	1140642	0.49	1064833	107.12	70	120	
In	115	1	No Gas	1369921	0.59	1360630	100.68	70	120	
Bi	209	1	No Gas	1388991	1.10	1388986	100.00	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	218_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:33:41-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.066	139.3	35762	1.5	0.5	
Be	9	1	No Gas	0.011	80.5	53	28.6	0.5	
V	51	2	He	-0.381	-8.3	1062	9.2	2.5	
Cr	52	2	He	0.029	83.3	1073	6.3	2.5	
Fe	56	2	He	0.236	2.9	10574	1.8	100	
Se	78	2	He	0.692	42.5	342	4.1	2	
As	75	2	He	-0.079	-36.3	76	18.4	2.5	
Ca	44	2	He	-5.207	-27.0	323	8.9	100	
Na	23	2	He	-41.796	-6.6	196180	0.9	100	
Mg	24	2	He	0.020	528.4	310	12.9	100	
K	39	2	He	-15.768	-15.9	80424	1.2	100	
Mn	55	2	He	0.057	78.5	530	21.0	2.5	
Co	59	2	He	0.007	91.9	53	60.3	2.5	
Ni	60	2	He	-0.100	-26.5	97	31.6	2.5	
Cu	63	2	He	-0.047	-8.1	790	1.3	2	
Zn	66	2	He	-0.319	-36.6	5078	2.9	2.5	
Al	27	2	He	-0.641	-64.6	347	21.8	5	
B	11	1	No Gas	24.538	14.6	31293	8.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.016	-2.2	12072	1.8	5	
Si	28	1	No Gas	9.699	4.0	175948	0.4	10	
Ag	107	1	No Gas	0.008	70.0	283	14.3	2.5	
Cd	111	1	No Gas	0.015	26.3	23	24.7	1	
Sr	88	1	No Gas	-0.005	-128.9	567	14.4	2.5	
Mo	95	1	No Gas	0.016	14.4	57	10.2	2.5	
Sn	118	1	No Gas	0.051	44.5	1413	5.7	5	
Sb	121	1	No Gas	0.051	15.2	613	8.2	2.5	
Ba	137	1	No Gas	-0.003	-371.3	120	22.0	2.5	
Tl	205	1	No Gas	0.020	29.9	377	29.1	1	
Tl	203	1	No Gas	0.012	26.5	107	19.5	1	
Pb	208	1	No Gas	0.016	27.7	957	12.1	2.5	
U	238	1	No Gas	0.009	8.4	230	8.7	2.5	
Ca	43	2	He	-8.806	-125.3	17	69.3	100	
Sb	121	2	He	0.010	74.2	217	9.6	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	-0.053	-10.0	1570	2.5	2.5	
Se	82	1	No Gas	8.317	112.7	-93	-776.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	626509	0.52	670807	93.40	70	120	
Ge	72	2	He	324001	1.67	338750	95.65	70	120	
Ge	72	1	No Gas	981567	0.77	1064833	92.18	70	120	
In	115	1	No Gas	1327261	1.45	1360630	97.55	70	120	
Bi	209	1	No Gas	1356885	2.11	1388986	97.69	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	226_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:49:21-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	115.019	0.744	891361	0.97	100	115.0	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	109.920	1.017	179413	0.12	100	109.9	90	110	
V	51	2	He	101.982	1.033	281156	0.81	100	102.0	90	110	
Cr	52	2	He	101.358	1.080	320432	0.45	100	101.4	90	110	
Fe	56	2	He	10093.623	1.088	30420104	0.31	10000	100.9	90	110	
Se	78	2	He	103.924	2.204	4740	1.56	100	103.9	90	110	
As	75	2	He	106.332	1.217	48484	0.16	100	106.3	90	110	
Ca	44	2	He	10052.209	1.362	179763	1.36	10000	100.5	90	110	
Na	23	2	He	9933.636	2.065	6158389	1.18	10000	99.3	90	110	
Mg	24	2	He	10029.725	1.268	3317552	1.36	10000	100.3	90	110	
K	39	2	He	10184.399	1.397	3841965	0.65	10000	101.8	90	110	
Mn	55	2	He	101.909	0.719	237002	1.53	100	101.9	90	110	
Co	59	2	He	102.017	0.653	478354	0.91	100	102.0	90	110	
Ni	60	2	He	101.555	0.959	121179	0.57	100	101.6	90	110	
Cu	63	2	He	103.717	1.629	334795	1.03	100	103.7	90	110	
Zn	66	2	He	103.734	1.093	71827	0.12	100	103.7	90	110	
Al	27	2	He	113.780	1.739	20318	2.16	100	113.8	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	544.009	1.813	420819	1.88	500	108.8	90	110	
Al	27	1	No Gas	110.181	0.475	765761	0.73	100	110.2	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	569.880	0.401	1799969	1.23	5000	11.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.364	1.530	750856	1.23	100	101.4	90	110	
Cd	111	1	No Gas	102.100	2.482	155026	0.95	100	102.1	90	110	
Sr	88	1	No Gas	103.220	1.315	1430921	1.42	100	103.2	90	110	
Mo	95	1	No Gas	100.267	1.077	266544	1.06	100	100.3	90	110	
Sn	118	1	No Gas	102.735	1.551	458654	0.47	100	102.7	90	110	
Sb	121	1	No Gas	99.004	0.898	659348	0.24	100	99.0	90	110	
Ba	137	1	No Gas	103.333	2.036	227004	0.32	100	103.3	90	110	
Tl	205	1	No Gas	104.390	1.420	1781670	0.52	100	104.4	90	110	
Tl	203	1	No Gas	93.831	1.039	689545	0.78	100	93.8	90	110	
Pb	208	1	No Gas	100.468	4.216	2257635	2.55	100	100.5	90	110	
U	238	1	No Gas	105.591	1.200	2572095	1.38	100	105.6	90	110	
Ca	43	2	He	10021.940	3.065	10384	3.97	10000	100.2	90	110	
Sb	121	2	He	104.415	1.784	340786	1.01	100	104.4	90	110	
Ti	47	2	He	95.688	4.129	10187	5.19	100	95.7	90	110	
Cu	63	1	No Gas	100.324	0.417	564585	1.44	100	100.3	90	110	
Se	82	1	No Gas	103.834	8.679	7395	9.65	100	103.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600474	1.14	670807	89.52	70	120	
Ge	72	2	He	329614	1.10	338750	97.30	70	120	
Ge	72	1	No Gas	993720	1.04	1064833	93.32	70	120	
In	115	1	No Gas	1311963	1.94	1360630	96.42	70	120	
Bi	209	1	No Gas	1340578	1.73	1388986	96.51	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	227_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:51:17-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.168	41.8	34905	1.5	0.5	
Be	9	1	No Gas	0.021	30.7	67	15.6	0.5	
V	51	2	He	-0.011	-139.7	1993	1.9	2.5	
Cr	52	2	He	0.027	84.0	1037	7.0	2.5	
Fe	56	2	He	0.767	20.1	11779	3.7	100	
Se	78	2	He	0.650	115.7	330	9.6	2	
As	75	2	He	0.009	168.3	111	6.2	2.5	
Ca	44	2	He	-2.470	-177.5	360	21.0	100	
Na	23	2	He	-43.437	-5.0	189324	0.3	100	
Mg	24	2	He	0.653	34.1	500	14.4	100	
K	39	2	He	-12.229	-36.8	79240	2.0	100	
Mn	55	2	He	0.096	11.4	600	4.4	2.5	
Co	59	2	He	0.012	45.5	73	34.3	2.5	
Ni	60	2	He	-0.083	-33.7	113	28.4	2.5	
Cu	63	2	He	-0.015	-250.6	863	12.9	2	
Zn	66	2	He	-0.246	-93.5	4968	2.5	2.5	
Al	27	2	He	-0.613	-43.1	340	12.8	5	
B	11	1	No Gas	21.830	15.4	27853	9.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.980	-1.5	11925	0.6	5	
Si	28	1	No Gas	16.106	3.5	188216	0.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.016	46.2	333	17.1	2.5	
Cd	111	1	No Gas	0.002	173.2	3	173.2	1	
Sr	88	1	No Gas	-0.009	-109.1	493	27.5	2.5	
Mo	95	1	No Gas	0.017	13.7	57	10.2	2.5	
Sn	118	1	No Gas	0.046	53.6	1347	9.0	5	
Sb	121	1	No Gas	0.078	12.2	763	7.9	2.5	
Ba	137	1	No Gas	-0.004	-668.7	113	50.2	2.5	
Tl	205	1	No Gas	0.021	14.5	390	13.6	1	
Tl	203	1	No Gas	0.021	28.1	167	25.0	1	
Pb	208	1	No Gas	0.023	28.0	1073	12.4	2.5	
U	238	1	No Gas	0.005	74.7	120	66.7	2.5	
Ca	43	2	He	-1.388	-849.5	23	49.5	100	
Sb	121	2	He	0.052	19.5	340	8.8	2.5	
Ti	47	2	He	-0.028	-205.5	3	173.2	2.5	
Cu	63	1	No Gas	-0.014	-72.3	1730	3.6	2.5	
Se	82	1	No Gas	-1.591	-114.9	-830	-16.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	598205	0.07	670807	89.18	70	120	
Ge	72	2	He	314199	0.43	338750	92.75	70	120	
Ge	72	1	No Gas	950978	0.57	1064833	89.31	70	120	
In	115	1	No Gas	1279976	1.01	1360630	94.07	70	120	
Bi	209	1	No Gas	1301424	0.60	1388986	93.70	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	236_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:09:55-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	104.609	2.247	959386	1.19	100	104.6	90	110	
Be	9	1	No Gas	103.532	2.777	199216	0.58	100	103.5	90	110	
V	51	2	He	98.408	1.439	314550	0.62	100	98.4	90	110	
Cr	52	2	He	98.765	1.439	361943	0.69	100	98.8	90	110	
Fe	56	2	He	9824.155	1.355	34319484	0.62	10000	98.2	90	110	
Se	78	2	He	98.781	3.655	5240	2.64	100	98.8	90	110	
As	75	2	He	103.506	2.243	54707	1.52	100	103.5	90	110	
Ca	44	2	He	9801.631	1.061	203183	0.77	10000	98.0	90	110	
Na	23	2	He	10069.766	1.118	7233081	0.60	10000	100.7	90	110	
Mg	24	2	He	9833.854	1.796	3770098	1.06	10000	98.3	90	110	
K	39	2	He	10034.888	2.611	4389167	1.74	10000	100.3	90	110	
Mn	55	2	He	99.698	1.554	268735	0.76	100	99.7	90	110	
Co	59	2	He	99.465	1.813	540578	1.39	100	99.5	90	110	
Ni	60	2	He	99.265	1.091	137304	1.15	100	99.3	90	110	
Cu	63	2	He	99.140	1.415	371002	1.00	100	99.1	90	110	
Zn	66	2	He	99.296	1.663	79962	1.28	100	99.3	90	110	
Al	27	2	He	108.711	3.494	22522	2.70	100	108.7	90	110	
B	11	1	No Gas	554.418	4.369	505293	3.22	500	110.9	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	107.617	2.169	951483	1.86	100	107.6	90	110	
Si	28	1	No Gas	513.791	2.486	2082435	3.43	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.625	0.559	853086	1.01	100	98.6	90	110	
Cd	111	1	No Gas	99.415	1.595	176269	0.39	100	99.4	90	110	
Sr	88	1	No Gas	102.014	2.127	1651338	2.47	100	102.0	90	110	
Mo	95	1	No Gas	97.078	1.870	301295	0.69	100	97.1	90	110	
Sn	118	1	No Gas	99.102	0.721	516681	0.59	100	99.1	90	110	
Sb	121	1	No Gas	87.458	1.385	740567	0.17	100	87.5	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	99.448	1.173	255132	1.13	100	99.4	90	110	
Tl	205	1	No Gas	102.178	0.736	2010039	0.46	100	102.2	90	110	
Tl	203	1	No Gas	90.950	1.323	770329	1.03	100	91.0	90	110	
Pb	208	1	No Gas	100.551	0.358	2605186	0.70	100	100.6	90	110	
U	238	1	No Gas	99.390	0.606	2790380	0.96	100	99.4	90	110	
Ca	43	2	He	9845.111	1.109	11822	0.93	10000	98.5	90	110	
Sb	121	2	He	98.733	2.098	373527	1.29	100	98.7	90	110	
Ti	47	2	He	92.985	0.668	11472	1.20	100	93.0	90	110	
Cu	63	1	No Gas	88.541	0.604	633764	0.70	100	88.5	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	94.548	3.206	8476	3.39	100	94.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	708196	2.89	670807	105.57	70	120	
Ge	72	2	He	382059	0.82	338750	112.78	70	120	
Ge	72	1	No Gas	1263469	1.26	1064833	118.65	70	120	
In	115	1	No Gas	1531784	1.29	1360630	112.58	70	120	
Bi	209	1	No Gas	1544935	0.37	1388986	111.23	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	237_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:11:50-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.333	34.8	38288	2.1	0.5	
Be	9	1	No Gas	0.052	206.5	123	148.7	0.5	
V	51	2	He	-0.538	-5.5	708	11.6	2.5	
Cr	52	2	He	0.023	92.4	1173	5.5	2.5	
Fe	56	2	He	1.053	7.2	14421	1.6	100	
Se	78	2	He	1.121	43.8	399	4.5	2	
As	75	2	He	-0.082	-59.7	82	29.3	2.5	
Ca	44	2	He	5.166	68.3	560	11.2	100	
Na	23	2	He	83.882	7.3	299647	0.1	100	
Mg	24	2	He	4.232	1.2	1863	2.2	100	
K	39	2	He	-6.588	-53.7	92952	0.4	100	
Mn	55	2	He	0.498	7.4	1703	4.4	2.5	
Co	59	2	He	0.005	21.0	47	12.4	2.5	
Ni	60	2	He	-0.087	-21.6	123	18.7	2.5	
Cu	63	2	He	0.015	168.4	1093	8.7	2	
Zn	66	2	He	-0.219	-178.2	5705	4.8	2.5	
Al	27	2	He	-0.507	-86.9	410	21.3	5	
B	11	1	No Gas	23.974	13.1	31229	8.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.015	-36.5	14182	19.7	5	
Si	28	1	No Gas	10.444	55.2	209312	8.5	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.030	110.6	490	55.6	2.5	
Cd	111	1	No Gas	0.028	118.1	47	118.0	1	
Sr	88	1	No Gas	0.566	134.2	9277	124.1	2.5	
Mo	95	1	No Gas	0.053	121.2	167	110.9	2.5	
Sn	118	1	No Gas	0.017	172.2	1367	10.0	5	
Sb	121	1	No Gas	0.037	45.5	607	20.6	2.5	
Ba	137	1	No Gas	0.098	134.8	373	85.1	2.5	
Tl	205	1	No Gas	0.035	106.0	697	100.3	1	
Tl	203	1	No Gas	0.035	92.5	307	86.4	1	
Pb	208	1	No Gas	0.045	118.0	1768	74.5	2.5	
U	238	1	No Gas	0.040	144.0	1086	142.2	2.5	
Ca	43	2	He	-10.254	-132.4	17	91.7	100	
Sb	121	2	He	-0.001	-612.2	200	15.0	2.5	
Ti	47	2	He	0.026	334.8	10	100.0	2.5	
Cu	63	1	No Gas	0.060	114.1	2584	16.4	2.5	
Se	82	1	No Gas	-0.185	-2150.1	-878	-40.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	634004	0.29	670807	94.51	70	120	
Ge	72	2	He	359613	1.19	338750	106.16	70	120	
Ge	72	1	No Gas	1154248	0.91	1064833	108.40	70	120	
In	115	1	No Gas	1437865	0.70	1360630	105.68	70	120	
Bi	209	1	No Gas	1477001	0.79	1388986	106.34	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	241_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:25:43-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	104.242	1.308	931527	1.31	100	104.2	90	110	
Be	9	1	No Gas	104.008	0.158	195002	0.37	100	104.0	90	110	
V	51	2	He	100.892	0.552	317684	0.57	100	100.9	90	110	
Cr	52	2	He	100.760	1.249	363794	1.13	100	100.8	90	110	
Fe	56	2	He	10113.440	0.866	34809860	0.88	10000	101.1	90	110	
Se	78	2	He	99.862	1.972	5216	1.88	100	99.9	90	110	
As	75	2	He	106.026	1.199	55213	1.17	100	106.0	90	110	
Ca	44	2	He	10075.604	0.979	205768	0.83	10000	100.8	90	110	
Na	23	2	He	10228.556	0.664	7234798	0.56	10000	102.3	90	110	
Mg	24	2	He	10124.490	1.715	3824364	1.43	10000	101.2	90	110	
K	39	2	He	10225.829	0.250	4405287	0.51	10000	102.3	90	110	
Mn	55	2	He	101.212	1.791	268789	1.53	100	101.2	90	110	
Co	59	2	He	102.660	0.557	549732	0.76	100	102.7	90	110	
Ni	60	2	He	102.114	0.051	139151	0.33	100	102.1	90	110	
Cu	63	2	He	101.817	0.533	375379	0.51	100	101.8	90	110	
Zn	66	2	He	104.276	1.588	82426	1.37	100	104.3	90	110	
Al	27	2	He	111.640	2.058	22776	1.78	100	111.6	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	526.078	3.004	467835	2.65	500	105.2	90	110	
Al	27	1	No Gas	111.144	4.138	939429	2.29	100	111.1	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	495.703	1.578	1929048	2.00	5000	9.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.664	0.190	835875	0.77	100	100.7	90	110	
Cd	111	1	No Gas	102.505	0.508	174496	1.14	100	102.5	90	110	
Sr	88	1	No Gas	102.577	1.121	1593912	0.99	100	102.6	90	110	
Mo	95	1	No Gas	99.802	0.124	297389	0.66	100	99.8	90	110	
Sn	118	1	No Gas	102.588	1.254	513407	1.05	100	102.6	90	110	
Sb	121	1	No Gas	90.528	2.365	733569	0.54	100	90.5	90	110	
Ba	137	1	No Gas	102.998	0.911	253656	0.47	100	103.0	90	110	
Tl	205	1	No Gas	105.830	2.579	2015030	1.26	100	105.8	90	110	
Tl	203	1	No Gas	92.911	2.515	761643	0.13	100	92.9	90	110	
Pb	208	1	No Gas	103.026	2.932	2583304	1.03	100	103.0	90	110	
U	238	1	No Gas	103.183	1.726	2804150	1.40	100	103.2	90	110	
Ca	43	2	He	10213.729	1.743	12082	1.46	10000	102.1	90	110	
Sb	121	2	He	102.165	1.084	380823	0.82	100	102.2	90	110	
Ti	47	2	He	96.876	3.531	11775	3.80	100	96.9	90	110	
Cu	63	1	No Gas	91.850	2.296	629048	0.53	100	91.8	90	110	
Se	82	1	No Gas	97.413	2.415	8384	0.98	100	97.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	689686	0.27	670807	102.81	70	120	
Ge	72	2	He	376411	0.29	338750	111.12	70	120	
Ge	72	1	No Gas	1209328	1.83	1064833	113.57	70	120	
In	115	1	No Gas	1470443	0.78	1360630	108.07	70	120	
Bi	209	1	No Gas	1495897	2.60	1388986	107.70	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	242_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:27:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.200	13.9	37152	0.1	0.5	
Be	9	1	No Gas	-0.010	-43.5	17	45.8	0.5	
V	51	2	He	-0.482	-7.5	864	12.5	2.5	
Cr	52	2	He	-0.002	-959.8	1073	4.4	2.5	
Fe	56	2	He	0.397	15.7	12099	1.7	100	
Se	78	2	He	0.333	145.2	358	6.2	2	
As	75	2	He	-0.079	-58.9	82	27.6	2.5	
Ca	44	2	He	0.672	215.5	467	6.2	100	
Na	23	2	He	12.449	54.9	249677	1.6	100	
Mg	24	2	He	0.304	16.9	440	3.9	100	
K	39	2	He	-7.781	-15.6	91227	0.3	100	
Mn	55	2	He	0.188	44.0	907	22.7	2.5	
Co	59	2	He	0.005	22.3	47	12.4	2.5	
Ni	60	2	He	-0.115	-10.3	87	17.6	2.5	
Cu	63	2	He	-0.039	-114.4	890	17.7	2	
Zn	66	2	He	-0.325	-160.5	5555	6.4	2.5	
Al	27	2	He	-0.758	-14.8	357	5.8	5	
B	11	1	No Gas	20.242	18.2	28205	11.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.384	-1.4	11468	0.5	5	
Si	28	1	No Gas	1.110	109.5	180712	1.9	10	
Ag	107	1	No Gas	0.007	109.7	297	18.6	2.5	
Cd	111	1	No Gas	0.002	173.2	3	173.2	1	
Sr	88	1	No Gas	-0.013	-38.6	500	13.9	2.5	
Mo	95	1	No Gas	0.012	1.7	50	0.0	2.5	
Sn	118	1	No Gas	0.009	117.9	1333	2.6	5	
Sb	121	1	No Gas	0.012	39.9	420	8.6	2.5	
Ba	137	1	No Gas	-0.017	-87.0	97	36.3	2.5	
Tl	205	1	No Gas	0.011	31.4	253	26.3	1	
Tl	203	1	No Gas	0.013	65.5	123	54.0	1	
Pb	208	1	No Gas	0.009	13.3	863	2.4	2.5	
U	238	1	No Gas	0.007	2.1	203	2.8	2.5	
Ca	43	2	He	-10.126	-135.7	17	91.7	100	
Sb	121	2	He	0.004	423.7	217	27.8	2.5	
Ti	47	2	He	-0.032	-159.5	3	173.2	2.5	
Cu	63	1	No Gas	-0.036	-53.0	1990	7.4	2.5	
Se	82	1	No Gas	1.522	242.6	-737	-47.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	632525	0.63	670807	94.29	70	120	
Ge	72	2	He	354729	0.22	338750	104.72	70	120	
Ge	72	1	No Gas	1171783	1.03	1064833	110.04	70	120	
In	115	1	No Gas	1443608	1.23	1360630	106.10	70	120	
Bi	209	1	No Gas	1470004	0.93	1388986	105.83	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	250_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:43:17-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.789	2.865	905697	0.17	100	101.8	90	110	
Be	9	1	No Gas	99.945	2.797	186395	0.45	100	99.9	90	110	
V	51	2	He	101.181	0.281	305806	1.15	100	101.2	90	110	
Cr	52	2	He	101.133	0.587	350490	1.08	100	101.1	90	110	
Fe	56	2	He	10033.784	0.597	33150000	1.15	10000	100.3	90	110	
Se	78	2	He	102.270	1.441	5119	0.82	100	102.3	90	110	
As	75	2	He	106.003	1.264	52982	0.28	100	106.0	90	110	
Ca	44	2	He	10037.535	0.461	196764	0.78	10000	100.4	90	110	
Na	23	2	He	10178.738	1.123	6911964	1.56	10000	101.8	90	110	
Mg	24	2	He	10120.088	0.884	3669328	0.99	10000	101.2	90	110	
K	39	2	He	10244.809	1.007	4235957	0.68	10000	102.4	90	110	
Mn	55	2	He	100.769	0.190	256885	1.01	100	100.8	90	110	
Co	59	2	He	101.927	0.365	523892	0.64	100	101.9	90	110	
Ni	60	2	He	101.970	0.928	133382	1.50	100	102.0	90	110	
Cu	63	2	He	101.087	0.666	357731	0.77	100	101.1	90	110	
Zn	66	2	He	101.712	1.277	77320	1.70	100	101.7	90	110	
Al	27	2	He	112.041	1.368	21941	2.31	100	112.0	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	483.620	2.971	429028	3.29	500	96.7	90	110	
Al	27	1	No Gas	99.474	1.275	820603	0.47	100	99.5	90	110	
Si	28	1	No Gas	529.399	1.000	1992029	0.76	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.106	2.697	795391	0.66	100	100.1	90	110	
Cd	111	1	No Gas	101.243	2.373	164931	1.41	100	101.2	90	110	
Sr	88	1	No Gas	101.698	4.091	1511819	1.86	100	101.7	90	110	
Mo	95	1	No Gas	99.689	3.573	284207	1.40	100	99.7	90	110	
Sn	118	1	No Gas	101.460	2.365	485916	0.11	100	101.5	90	110	
Sb	121	1	No Gas	92.112	0.945	726247	0.41	100	92.1	90	110	
Ba	137	1	No Gas	101.168	2.858	238409	0.61	100	101.2	90	110	
Tl	205	1	No Gas	103.887	1.351	1898711	0.59	100	103.9	90	110	
Tl	203	1	No Gas	91.277	1.936	718217	0.36	100	91.3	90	110	
Pb	208	1	No Gas	100.659	1.688	2423109	1.87	100	100.7	90	110	
U	238	1	No Gas	102.435	2.350	2671519	0.86	100	102.4	90	110	
Ca	43	2	He	10004.957	0.921	11362	1.60	10000	100.0	90	110	
Sb	121	2	He	104.897	0.599	375309	0.64	100	104.9	90	110	
Ti	47	2	He	95.153	1.210	11101	1.69	100	95.2	90	110	
Cu	63	1	No Gas	90.406	1.841	602439	1.03	100	90.4	90	110	
Se	82	1	No Gas	92.871	3.559	7735	3.39	100	92.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	686393	2.86	670807	102.32	70	120	
Ge	72	2	He	361307	0.99	338750	106.66	70	120	
Ge	72	1	No Gas	1176393	0.80	1064833	110.48	70	120	
In	115	1	No Gas	1407610	2.36	1360630	103.45	70	120	
Bi	209	1	No Gas	1435539	1.69	1388986	103.35	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	251_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:45:11-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.163	29.8	36335	0.4	0.5	
Be	9	1	No Gas	0.001	1309.9	35	37.8	0.5	
V	51	2	He	-0.453	-3.5	918	4.2	2.5	
Cr	52	2	He	0.023	126.0	1117	8.5	2.5	
Fe	56	2	He	0.471	16.8	11912	0.8	100	
Se	78	2	He	1.210	51.1	385	8.3	2	
As	75	2	He	-0.066	-73.0	86	25.4	2.5	
Ca	44	2	He	3.693	25.1	507	4.1	100	
Na	23	2	He	29.162	13.9	251451	0.4	100	
Mg	24	2	He	0.311	89.3	427	21.3	100	
K	39	2	He	-3.024	-105.0	89908	1.3	100	
Mn	55	2	He	0.143	25.0	767	11.8	2.5	
Co	59	2	He	0.011	27.5	73	20.8	2.5	
Ni	60	2	He	-0.123	-14.1	73	28.4	2.5	
Cu	63	2	He	-0.013	-405.6	947	16.8	2	
Zn	66	2	He	-0.360	-83.4	5341	4.7	2.5	
Al	27	2	He	-1.407	-13.3	227	14.2	5	
B	11	1	No Gas	42.183	13.5	44936	10.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.217	-4.3	11378	2.7	5	
Si	28	1	No Gas	17.108	13.3	209213	2.1	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.005	-321.3	197	63.6	2.5	
Cd	111	1	No Gas	0.017	43.8	27	43.3	1	
Sr	88	1	No Gas	0.013	23.1	847	4.5	2.5	
Mo	95	1	No Gas	0.016	97.5	60	76.4	2.5	
Sn	118	1	No Gas	-0.041	-49.9	1040	7.6	5	
Sb	121	1	No Gas	2.531	3.5	17956	2.4	2.5	CCB Main CR1 Failed
Ba	137	1	No Gas	0.069	46.1	290	24.9	2.5	
Tl	205	1	No Gas	0.011	5.8	233	4.9	1	
Tl	203	1	No Gas	0.006	48.7	63	32.9	1	
Pb	208	1	No Gas	0.242	1.1	6267	0.9	2.5	
U	238	1	No Gas	0.005	31.4	130	27.7	2.5	
Ca	43	2	He	-9.557	-57.3	17	34.6	100	
Sb	121	2	He	2.412	5.5	8373	5.7	2.5	
Ti	47	2	He	-0.030	-175.9	3	173.2	2.5	
Cu	63	1	No Gas	0.025	74.3	2130	6.5	2.5	
Se	82	1	No Gas	3.546	553.6	-477	-335.7	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	623489	0.60	670807	92.95	70	120	
Ge	72	2	He	342535	1.38	338750	101.12	70	120	
Ge	72	1	No Gas	1042103	2.46	1064833	97.87	70	120	
In	115	1	No Gas	1379227	1.81	1360630	101.37	70	120	
Bi	209	1	No Gas	1392156	0.68	1388986	100.23	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	259_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:00:47-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	108.502	4.004	872339	0.45	100	108.5	90	110	
Be	9	1	No Gas	106.543	4.550	179980	0.91	100	106.5	90	110	
V	51	2	He	100.243	0.461	291737	0.96	100	100.2	90	110	
Cr	52	2	He	99.942	0.546	333503	0.59	100	99.9	90	110	
Fe	56	2	He	9945.662	0.693	31638336	1.04	10000	99.5	90	110	
Se	78	2	He	99.524	1.869	4806	1.24	100	99.5	90	110	
As	75	2	He	105.902	1.635	50969	1.67	100	105.9	90	110	
Ca	44	2	He	9839.111	0.637	185724	1.13	10000	98.4	90	110	
Na	23	2	He	10160.746	0.363	6643785	0.82	10000	101.6	90	110	
Mg	24	2	He	10027.155	0.534	3500578	0.27	10000	100.3	90	110	
K	39	2	He	10051.665	1.262	4003488	0.95	10000	100.5	90	110	
Mn	55	2	He	100.430	0.120	246512	0.77	100	100.4	90	110	
Co	59	2	He	101.816	0.110	503889	0.55	100	101.8	90	110	
Ni	60	2	He	100.501	2.148	126578	2.26	100	100.5	90	110	
Cu	63	2	He	101.146	0.858	344654	1.21	100	101.1	90	110	
Zn	66	2	He	101.636	0.633	74393	0.45	100	101.6	90	110	
Al	27	2	He	109.230	0.964	20606	0.39	100	109.2	90	110	
B	11	1	No Gas	602.151	3.993	480858	0.63	500	120.4	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	97.368	2.372	780655	0.71	100	97.4	90	110	
Si	28	1	No Gas	532.476	1.110	1945598	2.12	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.655	0.288	778754	1.21	100	98.7	90	110	
Cd	111	1	No Gas	101.326	1.512	163952	0.23	100	101.3	90	110	
Sr	88	1	No Gas	99.947	1.726	1476236	0.45	100	99.9	90	110	
Mo	95	1	No Gas	96.855	1.871	274323	0.73	100	96.9	90	110	
Sn	118	1	No Gas	100.292	1.638	477119	0.29	100	100.3	90	110	
Sb	121	1	No Gas	89.616	1.711	686349	0.64	100	89.6	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.516	2.487	235284	1.04	100	100.5	90	110	
Tl	205	1	No Gas	102.920	0.846	1888703	1.24	100	102.9	90	110	
Tl	203	1	No Gas	91.250	2.217	720857	0.58	100	91.2	90	110	
Pb	208	1	No Gas	99.013	2.325	2392618	0.79	100	99.0	90	110	
U	238	1	No Gas	100.406	1.508	2629323	0.32	100	100.4	90	110	
Ca	43	2	He	10197.953	3.220	11148	2.55	10000	102.0	90	110	
Sb	121	2	He	102.625	0.423	353547	0.39	100	102.6	90	110	
Ti	47	2	He	96.874	3.272	10881	3.04	100	96.9	90	110	
Cu	63	1	No Gas	89.016	0.758	576319	1.12	100	89.0	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	99.863	11.002	8138	10.93	100	99.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	622112	3.73	670807	92.74	70	120	
Ge	72	2	He	347883	0.65	338750	102.70	70	120	
Ge	72	1	No Gas	1142872	1.73	1064833	107.33	70	120	
In	115	1	No Gas	1397885	1.46	1360630	102.74	70	120	
Bi	209	1	No Gas	1441303	1.76	1388986	103.77	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	260_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:02:42-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.189	11.6	35909	0.6	0.5	
Be	9	1	No Gas	0.001	315.4	35	14.3	0.5	
V	51	2	He	-0.432	-2.2	966	3.3	2.5	
Cr	52	2	He	0.041	121.4	1160	13.5	2.5	
Fe	56	2	He	0.363	21.2	11428	2.0	100	
Se	78	2	He	1.067	53.6	373	6.9	2	
As	75	2	He	-0.057	-42.0	89	13.2	2.5	
Ca	44	2	He	3.665	144.6	500	20.0	100	
Na	23	2	He	6.976	39.2	234651	0.8	100	
Mg	24	2	He	0.602	45.4	520	17.1	100	
K	39	2	He	-5.650	-40.0	87765	0.5	100	
Mn	55	2	He	0.102	44.0	660	16.9	2.5	
Co	59	2	He	0.005	66.7	43	35.3	2.5	
Ni	60	2	He	-0.095	-72.5	107	78.6	2.5	
Cu	63	2	He	-0.033	-117.3	870	13.9	2	
Zn	66	2	He	-0.208	-139.0	5371	2.9	2.5	
Al	27	2	He	-0.796	-9.6	333	4.6	5	
B	11	1	No Gas	50.680	10.5	50670	7.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.329	-4.3	10678	0.5	5	
Si	28	1	No Gas	14.751	24.7	203676	1.2	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.000	-2038.7	223	27.4	2.5	
Cd	111	1	No Gas	0.004	86.6	7	86.6	1	
Sr	88	1	No Gas	0.006	57.1	733	7.5	2.5	
Mo	95	1	No Gas	0.022	65.8	73	55.1	2.5	
Sn	118	1	No Gas	0.047	279.3	1414	42.2	5	
Sb	121	1	No Gas	0.414	12.7	3207	10.9	2.5	
Ba	137	1	No Gas	0.013	119.6	157	20.5	2.5	
Tl	205	1	No Gas	0.017	13.2	337	10.4	1	
Tl	203	1	No Gas	0.015	28.2	140	24.7	1	
Pb	208	1	No Gas	0.047	15.7	1757	11.0	2.5	
U	238	1	No Gas	0.006	29.6	170	27.0	2.5	
Ca	43	2	He	-6.274	-259.1	20	86.6	100	
Sb	121	2	He	0.398	14.3	1527	13.1	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	0.006	713.3	2027	8.0	2.5	
Se	82	1	No Gas	1.519	893.5	-634	-176.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	612686	0.20	670807	91.34	70	120	
Ge	72	2	He	338143	0.70	338750	99.82	70	120	
Ge	72	1	No Gas	1051636	4.26	1064833	98.76	70	120	
In	115	1	No Gas	1343467	1.66	1360630	98.74	70	120	
Bi	209	1	No Gas	1418403	1.58	1388986	102.12	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	271_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:24:13-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	111.114	2.364	862992	2.25	100	111.1	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	107.483	1.206	175597	1.16	100	107.5	90	110	
V	51	2	He	98.882	0.926	278646	0.91	100	98.9	90	110	
Cr	52	2	He	98.621	1.290	318633	1.08	100	98.6	90	110	
Fe	56	2	He	9863.261	0.915	30378721	1.35	10000	98.6	90	110	
Se	78	2	He	98.653	2.015	4615	1.43	100	98.7	90	110	
As	75	2	He	103.150	1.458	48074	2.38	100	103.1	90	110	
Ca	44	2	He	9787.164	1.086	178869	1.36	10000	97.9	90	110	
Na	23	2	He	9924.783	1.189	6288465	1.44	10000	99.2	90	110	
Mg	24	2	He	9973.486	0.514	3371436	1.75	10000	99.7	90	110	
K	39	2	He	9942.370	1.026	3834983	0.65	10000	99.4	90	110	
Mn	55	2	He	98.726	0.570	234625	0.82	100	98.7	90	110	
Co	59	2	He	100.409	1.594	481087	0.92	100	100.4	90	110	
Ni	60	2	He	99.875	0.280	121795	1.29	100	99.9	90	110	
Cu	63	2	He	99.814	1.222	329300	1.11	100	99.8	90	110	
Zn	66	2	He	101.219	0.844	71763	2.07	100	101.2	90	110	
Al	27	2	He	111.698	0.872	20392	1.59	100	111.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	579.106	1.151	447622	1.38	500	115.8	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	103.893	2.176	760186	0.88	100	103.9	90	110	
Si	28	1	No Gas	552.760	2.037	1840070	1.11	5000	11.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.345	0.835	750999	0.51	100	98.3	90	110	
Cd	111	1	No Gas	98.978	1.760	154946	1.31	100	99.0	90	110	
Sr	88	1	No Gas	100.330	1.944	1433727	1.44	100	100.3	90	110	
Mo	95	1	No Gas	97.352	0.850	266780	0.34	100	97.4	90	110	
Sn	118	1	No Gas	99.762	1.321	459185	0.81	100	99.8	90	110	
Sb	121	1	No Gas	93.558	1.564	655074	0.89	100	93.6	90	110	
Ba	137	1	No Gas	100.569	0.908	227783	0.40	100	100.6	90	110	
Tl	205	1	No Gas	103.680	2.298	1818895	2.67	100	103.7	90	110	
Tl	203	1	No Gas	92.180	1.388	696182	0.27	100	92.2	90	110	
Pb	208	1	No Gas	97.770	4.815	2258246	3.85	100	97.8	90	110	
U	238	1	No Gas	101.989	0.358	2553341	0.81	100	102.0	90	110	
Ca	43	2	He	9557.849	2.599	10117	1.33	10000	95.6	90	110	
Sb	121	2	He	100.964	1.168	336789	1.84	100	101.0	90	110	
Ti	47	2	He	97.710	4.647	10624	3.96	100	97.7	90	110	
Cu	63	1	No Gas	94.005	1.850	556223	0.51	100	94.0	90	110	
Se	82	1	No Gas	102.567	6.952	7662	5.45	100	102.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600981	0.40	670807	89.59	70	120	
Ge	72	2	He	336834	1.35	338750	99.43	70	120	
Ge	72	1	No Gas	1044887	2.24	1064833	98.13	70	120	
In	115	1	No Gas	1352316	0.51	1360630	99.39	70	120	
Bi	209	1	No Gas	1377715	1.13	1388986	99.19	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	272_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:26:09-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.191	37.3	34754	1.1	0.5	
Be	9	1	No Gas	-0.005	-67.0	25	20.0	0.5	
V	51	2	He	-0.017	-47.5	2025	0.9	2.5	
Cr	52	2	He	0.024	140.2	1050	9.7	2.5	
Fe	56	2	He	0.368	18.2	10874	1.9	100	
Se	78	2	He	0.633	44.5	337	3.3	2	
As	75	2	He	0.031	168.7	123	18.9	2.5	
Ca	44	2	He	-2.168	-239.1	373	24.3	100	
Na	23	2	He	-0.522	-353.9	218591	0.3	100	
Mg	24	2	He	0.381	20.1	423	5.9	100	
K	39	2	He	-7.800	-48.2	82620	1.4	100	
Mn	55	2	He	0.043	85.8	493	16.9	2.5	
Co	59	2	He	0.003	145.1	33	62.4	2.5	
Ni	60	2	He	-0.082	-40.1	117	32.5	2.5	
Cu	63	2	He	-0.051	-12.0	770	2.6	2	
Zn	66	2	He	-0.079	-590.2	5184	5.5	2.5	
Al	27	2	He	-1.129	-32.6	260	24.0	5	
B	11	1	No Gas	57.956	6.0	54428	4.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.252	-9.7	10414	7.9	5	
Si	28	1	No Gas	15.689	7.0	191657	1.9	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.004	-78.4	190	13.9	2.5	
Cd	111	1	No Gas	0.009	86.6	13	86.6	1	
Sr	88	1	No Gas	0.017	211.5	870	57.8	2.5	
Mo	95	1	No Gas	0.015	36.5	53	28.6	2.5	
Sn	118	1	No Gas	-0.012	-162.9	1123	8.4	5	
Sb	121	1	No Gas	0.269	16.3	2030	14.3	2.5	
Ba	137	1	No Gas	0.016	227.6	160	48.8	2.5	
Tl	205	1	No Gas	0.012	21.9	247	18.7	1	
Tl	203	1	No Gas	0.012	37.8	113	31.0	1	
Pb	208	1	No Gas	0.033	58.8	1387	32.7	2.5	
U	238	1	No Gas	0.005	21.6	147	19.7	2.5	
Ca	43	2	He	-8.560	-67.0	17	34.6	100	
Sb	121	2	He	0.203	10.9	830	8.7	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	-0.035	-80.1	1660	9.0	2.5	
Se	82	1	No Gas	-0.130	-5855.2	-738	-79.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592791	0.47	670807	88.37	70	120	
Ge	72	2	He	321292	0.23	338750	94.85	70	120	
Ge	72	1	No Gas	974288	0.28	1064833	91.50	70	120	
In	115	1	No Gas	1314040	0.90	1360630	96.58	70	120	
Bi	209	1	No Gas	1387537	0.80	1388986	99.90	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	294_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:09:22-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	113.868	3.273	860002	2.63	100	113.9	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	112.290	0.051	178583	0.95	100	112.3	90	110	CCV Main CR1-2 Failed
V	51	2	He	102.213	1.281	290902	2.18	100	102.2	90	110	
Cr	52	2	He	101.149	0.737	330115	1.78	100	101.1	90	110	
Fe	56	2	He	10143.364	1.872	31560265	2.76	10000	101.4	90	110	
Se	78	2	He	101.031	3.028	4766	2.88	100	101.0	90	110	
As	75	2	He	104.463	0.737	49174	1.48	100	104.5	90	110	
Ca	44	2	He	10230.814	1.830	188830	1.18	10000	102.3	90	110	
Na	23	2	He	10708.195	5.654	6832721	4.46	10000	107.1	90	110	
Mg	24	2	He	10218.420	1.492	3488656	0.94	10000	102.2	90	110	
K	39	2	He	10289.593	1.321	4005738	0.33	10000	102.9	90	110	
Mn	55	2	He	100.807	0.644	241985	0.98	100	100.8	90	110	
Co	59	2	He	101.643	1.445	492001	2.29	100	101.6	90	110	
Ni	60	2	He	101.135	0.359	124570	0.75	100	101.1	90	110	
Cu	63	2	He	101.794	0.557	339225	1.36	100	101.8	90	110	
Zn	66	2	He	102.044	1.447	73033	2.22	100	102.0	90	110	
Al	27	2	He	103.512	2.247	19120	1.10	100	103.5	90	110	
B	11	1	No Gas	581.579	3.132	437543	3.10	500	116.3	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	95.627	2.896	692318	0.15	100	95.6	90	110	
Si	28	1	No Gas	533.448	3.228	1758558	1.84	5000	10.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.586	1.648	751055	0.67	100	100.6	90	110	
Cd	111	1	No Gas	101.833	2.077	155872	0.58	100	101.8	90	110	
Sr	88	1	No Gas	103.111	2.077	1440788	1.36	100	103.1	90	110	
Mo	95	1	No Gas	101.564	1.585	272144	0.52	100	101.6	90	110	
Sn	118	1	No Gas	101.647	1.281	457478	0.70	100	101.6	90	110	
Sb	121	1	No Gas	95.149	3.422	657557	0.73	100	95.1	90	110	
Ba	137	1	No Gas	102.213	2.358	226345	0.67	100	102.2	90	110	
Tl	205	1	No Gas	100.111	1.685	1715403	0.47	100	100.1	90	110	
Tl	203	1	No Gas	89.697	1.971	661729	0.40	100	89.7	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	99.217	5.161	2237980	3.00	100	99.2	90	110	
U	238	1	No Gas	102.453	2.013	2505262	0.14	100	102.5	90	110	
Ca	43	2	He	10343.483	2.201	11058	1.24	10000	103.4	90	110	
Sb	121	2	He	100.621	0.958	339044	1.86	100	100.6	90	110	
Ti	47	2	He	97.265	4.288	10688	5.12	100	97.3	90	110	
Cu	63	1	No Gas	97.508	2.577	569504	0.53	100	97.5	90	110	
Se	82	1	No Gas	104.138	8.704	7689	7.01	100	104.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585035	0.90	670807	87.21	70	120	
Ge	72	2	He	340231	1.09	338750	100.44	70	120	
Ge	72	1	No Gas	1031730	2.72	1064833	96.89	70	120	
In	115	1	No Gas	1322527	1.95	1360630	97.20	70	120	
Bi	209	1	No Gas	1346004	2.13	1388986	96.91	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	295_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:11:18-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.231	53.2	35335	2.2	0.5	
Be	9	1	No Gas	0.025	111.8	73	61.9	0.5	
V	51	2	He	0.191	10.3	2726	1.8	2.5	
Cr	52	2	He	0.054	85.7	1210	12.2	2.5	
Fe	56	2	He	0.380	13.7	11538	1.7	100	
Se	78	2	He	0.478	98.7	349	5.8	2	
As	75	2	He	0.127	35.8	176	12.2	2.5	
Ca	44	2	He	-2.789	-83.1	383	10.9	100	
Na	23	2	He	1.007	94.4	232164	0.2	100	
Mg	24	2	He	0.466	45.1	477	14.9	100	
K	39	2	He	-6.057	-93.6	88056	2.4	100	
Mn	55	2	He	0.090	46.4	633	15.6	2.5	
Co	59	2	He	0.002	100.6	30	33.3	2.5	
Ni	60	2	He	-0.093	-14.9	110	15.7	2.5	
Cu	63	2	He	-0.089	-35.4	687	14.9	2	
Zn	66	2	He	-0.396	-44.6	5274	1.9	2.5	
Al	27	2	He	-1.176	-7.0	267	5.7	5	
B	11	1	No Gas	34.675	12.1	37438	8.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.147	-11.1	11496	7.4	5	
Si	28	1	No Gas	2.636	48.0	159984	2.2	10	
Ag	107	1	No Gas	-0.001	-45.1	220	0.0	2.5	
Cd	111	1	No Gas	0.033	139.3	50	138.6	1	
Sr	88	1	No Gas	0.279	178.8	4526	153.3	2.5	
Mo	95	1	No Gas	0.025	104.9	80	86.6	2.5	
Sn	118	1	No Gas	0.074	96.1	1533	19.9	5	
Sb	121	1	No Gas	0.210	18.2	1704	14.9	2.5	
Ba	137	1	No Gas	0.228	194.8	631	155.4	2.5	
Tl	205	1	No Gas	0.018	38.6	343	34.0	1	
Tl	203	1	No Gas	0.024	56.8	200	50.7	1	
Pb	208	1	No Gas	0.124	149.4	3422	122.8	2.5	
U	238	1	No Gas	0.020	133.1	514	129.4	2.5	
Ca	43	2	He	-18.841	-28.8	7	86.6	100	
Sb	121	2	He	0.146	4.4	683	3.0	2.5	
Ti	47	2	He	0.030	520.4	10	173.2	2.5	
Cu	63	1	No Gas	-0.017	-179.0	1820	9.1	2.5	
Se	82	1	No Gas	-5.000	-127.6	-1150	-43.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	597589	0.39	670807	89.09	70	120	
Ge	72	2	He	339856	0.32	338750	100.33	70	120	
Ge	72	1	No Gas	1008259	0.37	1064833	94.69	70	120	
In	115	1	No Gas	1341064	1.34	1360630	98.56	70	120	
Bi	209	1	No Gas	1360186	0.72	1388986	97.93	70	120	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	297LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:15:16-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.991	1.991	2.84	49657	0.00	2	
Be	9	1	No Gas	2.202	2.202	4.29	3704	0.06	2	
V	51	2	He	2.222	2.222	1.43	8550	0.03	2	
Cr	52	2	He	1.933	1.933	3.05	7395	0.03	2	
Fe	56	2	He	193.921	193.921	0.43	619618	0.03	200	
Se	78	2	He	3.004	3.004	11.33	465	0.65	2	NewName Main CR1 Failed
As	75	2	He	2.077	2.077	6.82	1102	0.19	2	
Ca	44	2	He	210.289	210.289	1.76	4351	4.83	200	
Na	23	2	He	164.060	164.060	4.18	336283	0.05	200	
Mg	24	2	He	196.865	196.865	0.50	68207	0.29	200	
K	39	2	He	182.037	182.037	1.82	161338	0.11	200	
Mn	55	2	He	1.980	1.980	4.91	5214	0.04	2	
Co	59	2	He	2.046	2.046	6.53	10021	0.02	2	
Ni	60	2	He	2.066	2.066	12.90	2790	0.07	2	
Cu	63	2	He	2.098	2.098	6.36	8036	0.03	2	
Zn	66	2	He	1.687	1.687	3.69	6725	0.03	2	
Al	27	2	He	2.107	2.107	18.04	867	0.24	2	
B	11	1	No Gas	19.876	19.876	0.47	27051	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.513	1.513	9.19	31733	0.00	2	
Si	28	1	No Gas	9.150	9.150	8.06	190943	0.00	10	
Ag	107	1	No Gas	1.904	1.904	2.70	14889	0.01	2	
Cd	111	1	No Gas	1.985	1.985	8.14	3134	0.06	2	
Sr	88	1	No Gas	1.865	1.865	0.43	27525	0.01	2	
Mo	95	1	No Gas	2.009	2.009	4.26	5565	0.04	2	
Sn	118	1	No Gas	1.886	1.886	3.94	9951	0.02	2	
Sb	121	1	No Gas	1.945	1.945	2.12	14301	0.01	2	
Ba	137	1	No Gas	2.005	2.005	5.53	4708	0.04	2	
Tl	205	1	No Gas	1.758	1.758	3.05	31711	0.01	2	
Tl	203	1	No Gas	1.756	1.756	4.71	13641	0.01	2	
Pb	208	1	No Gas	1.834	1.834	0.89	44148	0.00	2	
U	238	1	No Gas	1.825	1.825	0.76	46944	0.00	2	
Ca	43	2	He	154.201	154.201	22.07	193	79.76	200	
Sb	121	2	He	2.155	2.155	2.30	7526	0.03	2	
Ti	47	2	He	1.744	1.744	19.21	200	0.87	200	
Cu	63	1	No Gas	1.974	1.974	6.09	14011	0.01	2	
Se	82	1	No Gas	-1.041	-1.041	-262.62	-886	0.12	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	613209	0.12	670807	91.41	70	120	
Ge	72	2	He	343638	0.79	338750	101.44	70	120	
Ge	72	1	No Gas	1075012	4.27	1064833	100.96	70	120	
In	115	1	No Gas	1364043	1.76	1360630	100.25	70	120	
Bi	209	1	No Gas	1415507	1.18	1388986	101.91	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	298LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:17:15-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.949	4.949	1.97	71567	0.01	5	
Be	9	1	No Gas	5.302	5.302	2.52	8794	0.06	5	
V	51	2	He	5.193	5.193	2.04	16941	0.03	5	
Cr	52	2	He	4.820	4.820	3.67	16797	0.03	5	
Fe	56	2	He	512.133	512.133	1.65	1611065	0.03	500	
Se	78	2	He	5.922	5.922	36.83	592	1.00	5	
As	75	2	He	5.046	5.046	0.28	2498	0.20	5	
Ca	44	2	He	506.261	506.261	3.84	9807	5.16	500	
Na	23	2	He	427.827	427.827	0.59	498055	0.09	500	
Mg	24	2	He	484.469	484.469	1.76	166539	0.29	500	
K	39	2	He	459.477	459.477	2.78	266620	0.17	500	
Mn	55	2	He	4.872	4.872	3.71	12152	0.04	5	
Co	59	2	He	4.900	4.900	2.00	23851	0.02	5	
Ni	60	2	He	4.867	4.867	4.43	6238	0.08	5	
Cu	63	2	He	4.912	4.912	0.52	17391	0.03	5	
Zn	66	2	He	4.850	4.850	4.84	8793	0.06	5	
Al	27	2	He	6.239	6.239	8.03	1610	0.39	5	
B	11	1	No Gas	33.076	33.076	2.30	36875	0.09	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	4.980	4.980	4.67	58681	0.01	5	
Si	28	1	No Gas	22.634	22.634	6.73	239380	0.01	25	
Ag	107	1	No Gas	4.642	4.642	0.96	36554	0.01	5	
Cd	111	1	No Gas	4.940	4.940	3.16	7926	0.06	5	
Sr	88	1	No Gas	4.917	4.917	0.33	72647	0.01	5	
Mo	95	1	No Gas	4.702	4.702	4.50	13217	0.04	5	
Sn	118	1	No Gas	4.710	4.710	1.14	23398	0.02	5	
Sb	121	1	No Gas	4.473	4.473	2.51	33379	0.01	5	
Ba	137	1	No Gas	4.851	4.851	3.07	11385	0.04	5	
Tl	205	1	No Gas	4.291	4.291	2.48	78704	0.01	5	
Tl	203	1	No Gas	4.195	4.195	0.31	33144	0.01	5	
Pb	208	1	No Gas	4.551	4.551	2.80	110492	0.00	5	
U	238	1	No Gas	4.402	4.402	1.95	115199	0.00	5	
Ca	43	2	He	540.898	540.898	8.10	607	89.16	500	
Sb	121	2	He	4.980	4.980	0.53	17048	0.03	5	
Ti	47	2	He	3.927	3.927	8.93	440	0.89	5	
Cu	63	1	No Gas	4.431	4.431	2.02	29700	0.01	5	
Se	82	1	No Gas	8.993	8.993	38.90	-44	-20.27	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	607993	0.38	670807	90.64	70	120	
Ge	72	2	He	341894	0.51	338750	100.93	70	120	
Ge	72	1	No Gas	1103735	2.11	1064833	103.65	70	120	
In	115	1	No Gas	1385867	0.53	1360630	101.85	70	120	
Bi	209	1	No Gas	1440129	1.51	1388986	103.68	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	299ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:19:14-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.172	40.1	34972	1.7	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.010	-36.1	17	34.6	0	ICSA Main CR1 Failed
V	51	2	He	-0.067	-227.9	2045	22.7	0	ICSA Main CR1 Failed
Cr	52	2	He	1.409	10.2	5735	9.4	0	ICSA Main CR1 Failed
Fe	56	2	He	100348.958	1.3	318449329	0.4	0	
Se	78	2	He	0.807	176.2	371	16.5	0	ICSA Main CR1 Failed
As	75	2	He	0.374	26.8	298	17.1	0	ICSA Main CR1 Failed
Ca	44	2	He	103422.026	1.3	1944098	2.1	0	
Na	23	2	He	101552.908	1.2	64135157	0.7	0	
Mg	24	2	He	99609.647	1.8	34697657	0.8	0	
K	39	2	He	100778.128	1.1	39223273	0.6	0	
Mn	55	2	He	1.304	95.6	3635	85.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.293	39.3	1474	39.9	0	ICSA Main CR1 Failed
Ni	60	2	He	0.877	20.6	1330	18.1	0	ICSA Main CR1 Failed
Cu	63	2	He	0.216	54.6	1740	24.1	0	ICSA Main CR1 Failed
Zn	66	2	He	3.583	20.8	8076	7.0	0	ICSA Main CR1 Failed
Al	27	2	He	101499.212	1.5	18654161	1.0	0	
B	11	1	No Gas	10.200	9.4	19156	3.6	0	
Al	27	1	No Gas	91119.660	0.6	700985403	0.5	0	
Si	28	1	No Gas	12.645	1.9	211889	0.5	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.148	4.7	1380	3.6	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.242	4.9	1974	4.4	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.362	2.8	63903	2.0	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2211.633	0.8	6152314	0.3	0	
Sn	118	1	No Gas	0.210	15.9	2204	6.6	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.455	1.7	3754	1.5	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.648	8.1	1620	7.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.017	19.8	340	19.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.015	35.1	137	29.6	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.178	4.2	4724	4.6	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.006	39.3	153	37.1	0	ICSA Main CR1 Failed
Ca	43	2	He	98227.783	1.6	106933	1.2	0	
Sb	121	2	He	0.537	42.3	2050	39.3	0	ICSA Main CR1 Failed
Ti	47	2	He	2008.433	1.1	225008	1.2	0	
Se	82	1	No Gas	1.587	234.2	-701	-46.6	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	598860	0.23	670807	89.27	70	120	
Ge	72	2	He	347176	1.01	338750	102.49	70	120	
Ge	72	1	No Gas	1128046	0.56	1064833	105.94	70	120	
In	115	1	No Gas	1372848	0.84	1360630	100.90	70	120	
Bi	209	1	No Gas	1379602	1.62	1388986	99.32	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	300ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:21:14-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	104.396	2.504	774196	2.46	100	104.4	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	105.675	0.419	164431	0.38	100	105.7	80	120	
V	51	2	He	98.114	0.473	284125	0.10	100	98.1	80	120	
Cr	52	2	He	98.496	1.039	327008	0.67	100	98.5	80	120	
Fe	56	2	He	101930.521	0.679	322491609	0.29	100	101930.5	80	120	ICSB Main CR1 Failed
Se	78	2	He	94.321	1.306	4549	1.22	100	94.3	80	120	
As	75	2	He	100.359	1.055	48060	0.56	100	100.4	80	120	
Ca	44	2	He	102183.177	1.074	1914733	0.71	100	102183.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	102720.456	0.962	64672559	0.57	100	102720.5	80	120	ICSB Main CR1 Failed
Mg	24	2	He	100801.831	0.787	35009295	1.03	100	100801.8	80	120	ICSB Main CR1 Failed
K	39	2	He	101332.621	0.464	39319923	0.86	100	101332.6	80	120	ICSB Main CR1 Failed
Mn	55	2	He	97.433	0.454	237946	0.75	100	97.4	80	120	
Co	59	2	He	97.939	0.655	482219	0.28	100	97.9	80	120	
Ni	60	2	He	97.102	1.402	121674	0.86	100	97.1	80	120	
Cu	63	2	He	96.281	0.666	326444	0.75	100	96.3	80	120	
Zn	66	2	He	97.362	1.740	71143	2.10	100	97.4	80	120	
Al	27	2	He	92958.970	0.257	17033133	0.36	100	92959.0	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	609.447	1.596	448080	1.61	100	609.4	80	120	
Al	27	1	No Gas	85682.848	4.353	623127804	0.45	100	85682.8	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	484.563	2.859	1667236	1.38	100	484.6	80	120	
Ag	107	1	No Gas	95.973	0.387	720813	0.28	100	96.0	80	120	
Cd	111	1	No Gas	97.927	0.791	150777	0.36	100	97.9	80	120	
Sr	88	1	No Gas	107.802	0.870	1515095	0.39	100	107.8	80	120	
Mo	95	1	No Gas	2143.727	0.669	5777484	0.32	100	2143.7	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	99.723	1.303	451440	0.93	100	99.7	80	120	
Sb	121	1	No Gas	89.190	4.079	637523	0.17	100	89.2	80	120	
Ba	137	1	No Gas	100.876	1.456	224707	1.05	100	100.9	80	120	
Tl	205	1	No Gas	98.432	4.327	1699320	2.46	100	98.4	80	120	
Tl	203	1	No Gas	88.691	2.029	659440	0.31	100	88.7	80	120	
Pb	208	1	No Gas	95.109	2.267	2163090	0.54	100	95.1	80	120	
U	238	1	No Gas	103.302	1.748	2546047	1.02	100	103.3	80	120	
Ca	43	2	He	98484.423	0.946	106886	0.41	100	98484.4	80	120	ICSB Main CR1 Failed
Sb	121	2	He	97.286	0.745	333456	0.79	100	97.3	80	120	
Ti	47	2	He	1918.429	0.582	214266	0.12	100	1918.4	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	87.973	3.696	531597	0.32	100	88.0	80	120	
Se	82	1	No Gas	96.822	7.951	7352	9.43	100	96.8	80	120	

QC ISTD Table

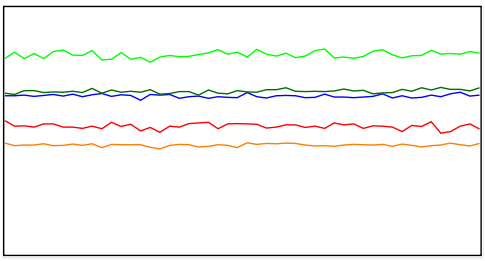
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	572387	0.06	670807	85.33	70	120	
Ge	72	2	He	346108	0.57	338750	102.17	70	120	
Ge	72	1	No Gas	1067560	3.86	1064833	100.26	70	120	
In	115	1	No Gas	1330016	0.54	1360630	97.75	70	120	
Bi	209	1	No Gas	1356539	1.91	1388986	97.66	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq. Date-Time	07/20/2022 10:23:44
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2595	25951.54		
24	10000	8092	80916.13		
59	20000	12835	128349.78		
115	50000	22132	221323.10		
208	20000	13222	132220.38		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.163	5.000	
24	1.584	5.000	
59	1.014	5.000	
115	1.219	5.000	
208	1.108	5.000	

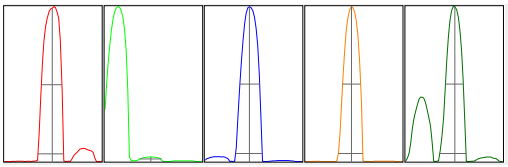
Mass	Background	Background (Required)	Background (Flag)
9	1.900		
24	0.600		
59	1.000		
115	0.500		
208	1.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.464 %
Doubly Charged	70 / 140 1.552 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2541.87	9.00	8.90 - 9.10	
24	8046.35	23.95	23.90 - 24.10	
59	13297.39	58.90	58.90 - 59.10	
115	22153.30	114.95	114.90 - 115.10	
208	13089.29	208.05	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.782		
24	0.65			
59	0.61	0.814		
115	0.55	0.744		
208	0.55	0.803		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.1 V	Deflect	13.2 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

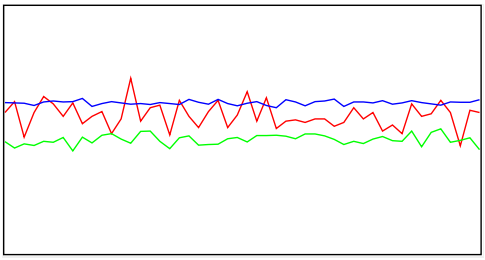
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	112	1118.04		
24	1000	460	4604.36		
59	10000	6101	61008.47		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

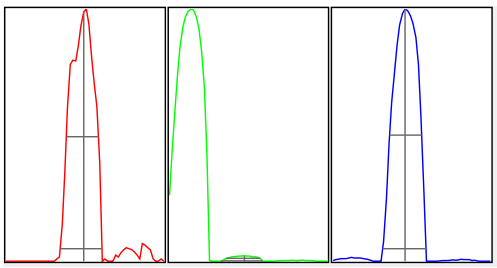
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.239	5.000	Fail
24	4.522	5.000	
59	1.374	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.000		
59	0.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.295 %
Doubly Charged	70 / 140 0.906 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	120.01	9.00	8.90 - 9.10	
24	482.11	23.95	23.90 - 24.10	
59	6125.38	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.781		
24	0.63	0.783		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.809		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	-0.2 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

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WorkOrder: HS22070087

LHAAP 16 June 2022

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21-Jul-2022

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HS22070087 LHAAP 16 June 2022 Final

ALS WO# HS22070087

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July 20, 2022

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS22070087**

Laboratory Results for: **LHAAP 16 June 2022**

Dear Vicki Graves ,

ALS Environmental received 3 sample(s) on Jul 01, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,



Generated By: JUMOKE.LAWAL
Dane J. Wacasey

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070087

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22070087-01	16WW25-220630-M	Groundwater		30-Jun-2022 12:00	01-Jul-2022 09:25	☐
HS22070087-02	16WW25-220630-M-FD	Groundwater		30-Jun-2022 12:00	01-Jul-2022 09:25	☐
HS22070087-03	16WW26-220630-M	Groundwater		30-Jun-2022 12:50	01-Jul-2022 09:25	☐

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070087

CASE NARRATIVE

Metals by Method SW6020A

Batch ID: 181294

Sample ID: HS22070086-01MS

- MS and MSD are for an unrelated sample

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW25-220630-M
Collection Date: 30-Jun-2022 12:00

ANALYTICAL REPORT
WorkOrder:HS22070087
Lab ID:HS22070087-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Arsenic	0.0125	U	0.00400	0.0125	0.0500	mg/L	1	19-Jul-2022 14:57
Manganese	**11.5**		**0.00700**	**0.0250**	**0.0500**	**mg/L**	1	19-Jul-2022 14:57
Thallium	0.00500	U	0.00200	0.00500	0.0200	mg/L	1	19-Jul-2022 14:57

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW25-220630-M-FD
Collection Date: 30-Jun-2022 12:00

ANALYTICAL REPORT
WorkOrder:HS22070087
Lab ID:HS22070087-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Arsenic	0.0125	U	0.00400	0.0125	0.0500	mg/L	1	19-Jul-2022 15:45
Manganese	**11.5**		**0.00700**	**0.0250**	**0.0500**	**mg/L**	1	19-Jul-2022 15:45
Thallium	0.00500	U	0.00200	0.00500	0.0200	mg/L	1	19-Jul-2022 15:45

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW26-220630-M
Collection Date: 30-Jun-2022 12:50

ANALYTICAL REPORT
WorkOrder:HS22070087
Lab ID:HS22070087-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Manganese	**1.19**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	19-Jul-2022 15:49
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 15:49

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

Batch ID: 181294 **Start Date:** 16 Jul 2022 08:30 **End Date:** 16 Jul 2022 12:30
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22070087-01		1 (mL)	10 (mL)	10	120 plastic HNO3
HS22070087-02		1 (mL)	10 (mL)	10	120 plastic HNO3
HS22070087-03		10 (mL)	10 (mL)	1	120 plastic HNO3

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 181294 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS22070087-01	16WW25-220630-M	30 Jun 2022 12:00		16 Jul 2022 08:30	19 Jul 2022 14:57	1
HS22070087-02	16WW25-220630-M-FD	30 Jun 2022 12:00		16 Jul 2022 08:30	19 Jul 2022 15:45	1
HS22070087-03	16WW26-220630-M	30 Jun 2022 12:50		16 Jul 2022 08:30	19 Jul 2022 15:49	1

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-181294** Units: **mg/L** Analysis Date: **19-Jul-2022 12:09**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754521** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.00125	0.00500								U
Manganese	0.00250	0.00500								U
Thallium	0.000500	0.00200								U

LCS Sample ID: **LCS-181294** Units: **mg/L** Analysis Date: **19-Jul-2022 12:11**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754522** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05714	0.00500	0.05	0	114	84 - 116				
Manganese	0.05664	0.00500	0.05	0	113	87 - 115				
Thallium	0.0513	0.00200	0.05	0	103	82 - 116				

MS Sample ID: **HS22070086-01MS** Units: **mg/L** Analysis Date: **19-Jul-2022 12:18**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754525** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05329	0.00500	0.05	0.000267	106	84 - 116				
Manganese	1.124	0.00500	0.05	1.137	-26.3	87 - 115				SO
Thallium	0.04945	0.00200	0.05	0.000007	98.9	82 - 116				

MSD Sample ID: **HS22070086-01MSD** Units: **mg/L** Analysis Date: **19-Jul-2022 12:20**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754526** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05502	0.00500	0.05	0.000267	110	84 - 116	0.05329	3.2	20	
Manganese	1.149	0.00500	0.05	1.137	23.0	87 - 115	1.124	2.17	20	SO
Thallium	0.05101	0.00200	0.05	0.000007	102	82 - 116	0.04945	3.11	20	

ALS Houston, US Date: 20-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

PDS Sample ID: **HS22070086-01PDS** Units: **mg/L** Analysis Date: **19-Jul-2022 15:26**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754554** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1076	0.00500	0.1	0	108	80 - 120				
Manganese	1.195	0.00500	0.1	1.137	58.2	80 - 120				SO
Thallium	0.1077	0.00200	0.1	0	108	80 - 120				

SD Sample ID: **HS22070086-01SD** Units: **mg/L** Analysis Date: **19-Jul-2022 12:16**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754524** PrepDate: **16-Jul-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.00625	0.0250					0.000267	0	10	U
Manganese	1.089	0.0250					1.137	4.28	10	
Thallium	0.00250	0.0100					0.000007	0	10	U

The following samples were analyzed in this batch: HS22070087-01 HS22070087-02 HS22070087-03

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: **HS22070087**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

ALS Houston, US Date: 20-Jul-22

Sample Receipt Checklist

Work Order ID: HS22070087 **Date/Time Received:** 01-Jul-2022 09:25

Client Name: CBI-Houston **Received by:** Pablo Marinez

Completed By:	/S/ Nilesh D. Ranchod	01-Jul-2022 18:23	**Reviewed by:**	/S/ Dane J. Wacasey	18-Jul-2022 14:02
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.1uc/2.6c	IR31	
Cooler(s)/Kit(s):	Md Blue		
Date/Time sample(s) sent to storage:	7/1/2022		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. 501032

Job: **LHAAP 16 June 2022**

Prepared By: Scott Beesinger

P.O. Number

HS22070087

Aptim Environmental & Infrastructure, Inc.
LHAAP 16 June 2022

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	Analyses: As, Cr, Mn, Tl, Ni by 6020A	As, Mn, Tl by 6020A	Cr, Tl by SW 6020A	Cr, Mn, Tl by SW6020A	Cr, Ni, Tl by SW6020A	Mn, Tl by SW6020A	Ni, Tl by Sw6020A	Tl by Sw6020A			Remarks (Preservative etc.)
16WW25-220630-M	WG	6/30/22 1200		1		X									
16WW25-220630-M-FD	WG	6/30/22 1200		1		X									
16WW26-220630-M	WG	6/30/22 1250		1						X					

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	6/30/22	1430		7/1/22	9:25						

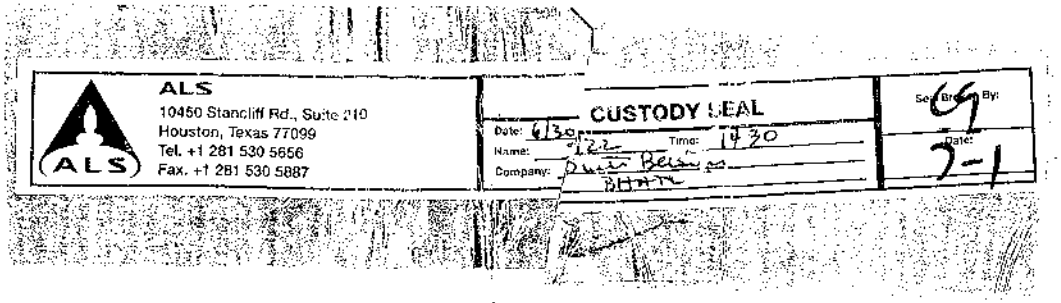
For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

Blue 2.1C

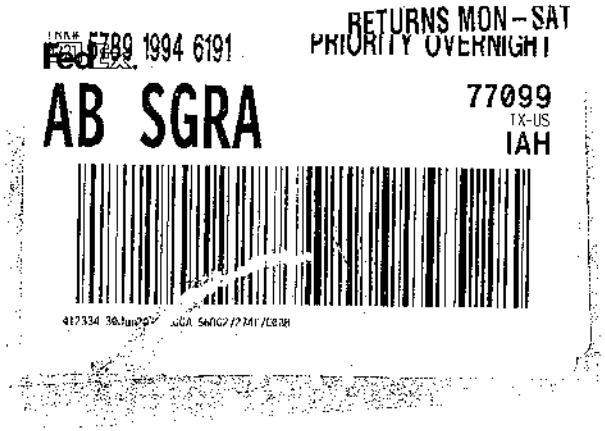
(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly



ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

CUSTODY SEAL
Date: 6/30/22 Time: 1430
Name:
Company:

Sc Br By:
Date: 7-1



FedEx 5789 1994 6191

RETURNS MON-SAT
PRIORITY OVERNIGHT

AB SGRA

77099
TX-US
IAH

HS22070087 - ME - ICP_W_DOD

ALS WO# HS22070087

ALS Houston, US Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087
Start Date: 19-Jul-2022 End Date: 19-Jul-2022

Run ID:ICPMS07_413228
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413228_Tune	1	19-Jul-2022 00:00	ICPMS07_413228_Tune_1	
CAL BLK	1	19-Jul-2022 11:24	007CALB.d_6753688	AS MN TL
2/10/200	1	19-Jul-2022 11:26	008CALS.d_6753689	AS MN TL
5/25/500	1	19-Jul-2022 11:29	009CALS.d_6753690	AS MN TL
10/50/100	1	19-Jul-2022 11:31	010CALS.d_6753691	AS MN TL
100/500/10K	1	19-Jul-2022 11:33	011CALS.d_6753692	AS MN TL
200/1000/20K	1	19-Jul-2022 11:35	012CALS.d_6753693	AS MN TL
ICV	1	19-Jul-2022 11:42	014_ICV.d_6753695	AS MN TL
LLICV2	1	19-Jul-2022 11:44	015LCV2.d_6753696	AS MN TL
LLICV5	1	19-Jul-2022 11:46	016LCV5.d_6753697	AS MN TL
ICB	1	19-Jul-2022 11:48	017_ICB.d_6753698	AS MN TL
ICSA	1	19-Jul-2022 11:53	019ICSA.d_6753700	AS MN TL
ICSAB	1	19-Jul-2022 11:55	020ICSB.d_6753701	AS MN TL
CCV 1	1	19-Jul-2022 12:04	023_CCV.d_6754519	AS MN TL
CCB 1	1	19-Jul-2022 12:06	024_CCB.d_6754520	AS MN TL
MBLK-181294	1	19-Jul-2022 12:09	025SMPL.d_6754521	AS MN TL
LCS-181294	1	19-Jul-2022 12:11	026SMPL.d_6754522	AS MN TL
ZZZZZZSD	5	19-Jul-2022 12:16	028SMPL.d_6754524	AS MN TL
ZZZZZZMS	1	19-Jul-2022 12:18	029SMPL.d_6754525	AS MN TL
ZZZZZZMSD	1	19-Jul-2022 12:20	030SMPL.d_6754526	AS MN TL
CCV 2	1	19-Jul-2022 12:35	035_CCV.d_6754531	AS MN TL
CCB 2	1	19-Jul-2022 12:37	036_CCB.d_6754532	AS MN TL
CCV 3	1	19-Jul-2022 13:01	047_CCV.d_6754539	AS MN TL
CCB 3	1	19-Jul-2022 13:03	048_CCB.d_6754540	AS MN TL
CCV 4	1	19-Jul-2022 14:46	085_CCV.d_6754541	AS MN TL
CCB 4	1	19-Jul-2022 14:48	086_CCB.d_6754542	AS MN TL
16WW25-220630-M	1	19-Jul-2022 14:57	090SMPL.d_6754543	AS MN TL
CCB 5	1	19-Jul-2022 15:13	097_CCB.d_6754550	AS MN TL
CCV 5	1	19-Jul-2022 15:20	099_CCV.d_6754552	AS MN TL
CCV 6	1	19-Jul-2022 15:24	100_CCV.d_6754553	AS MN TL
ZZZZZZPDS	1	19-Jul-2022 15:26	101SMPL.d_6754554	AS MN TL
16WW25-220630-M-FD	1	19-Jul-2022 15:45	107SMPL.d_6754560	AS MN TL
16WW26-220630-M	1	19-Jul-2022 15:49	108SMPL.d_6754561	MN TL
CCV 7	1	19-Jul-2022 15:56	111_CCV.d_6754564	AS MN TL
CCB 6	1	19-Jul-2022 15:58	112_CCB.d_6754565	AS MN TL
CCV 8	1	19-Jul-2022 16:24	123_CCV.d_6754571	AS MN TL
CCV 9	1	19-Jul-2022 16:24	123_CCV.d_6755962	AS MN TL
CCB 7	1	19-Jul-2022 16:26	124_CCB.d_6754572	AS MN TL
CCB 8	1	19-Jul-2022 16:26	124_CCB.d_6755963	AS MN TL
CCB 9	1	19-Jul-2022 16:52	136_CCB.d_6755967	AS MN TL
CCV 10	1	19-Jul-2022 16:57	138_CCV.d_6755969	AS MN TL
CCV 11	1	19-Jul-2022 16:59	139_CCV.d_6755970	AS MN TL

ALS Houston, US

Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087
Start Date: 20-Jul-2022 End Date: 20-Jul-2022

Run ID:ICPMS07_413348
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413348_Tune	1	20-Jul-2022 00:00	ICPMS07_413348_Tune_1	

ALS Houston, US Date: 22-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070087 Method: SW6020A

ICV	Date: 19-Jul-2022 11:42		Seq: 6753695	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	109.027	109	90-110	
Manganese	100	105.311	105	90-110	
Thallium	100	107.757	108	90-110	

CCV1	Date: 19-Jul-2022 12:04		Seq: 6754519	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	100.186	100	90-110	
Manganese	100	99.946	100	90-110	
Thallium	100	100.536	101	90-110	

CCV2	Date: 19-Jul-2022 12:35		Seq: 6754531	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.101	101	90-110	
Manganese	100	101.148	101	90-110	
Thallium	100	98.807	99	90-110	

CCV3	Date: 19-Jul-2022 13:01		Seq: 6754539	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.08	101	90-110	
Manganese	100	103.293	103	90-110	
Thallium	100	102.393	102	90-110	

CCV4	Date: 19-Jul-2022 14:46		Seq: 6754541	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	108.005	108	90-110	
Manganese	100	105.951	106	90-110	
Thallium	100	109.848	110	90-110	

CCV5	Date: 19-Jul-2022 15:20		Seq: 6754552	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.765	102	90-110	
Manganese	100	100.301	100	90-110	
Thallium	100	104.916	105	90-110	

CCV6	Date: 19-Jul-2022 15:24		Seq: 6754553	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.91	102	90-110	
Manganese	100	100.241	100	90-110	
Thallium	100	104.405	104	90-110	

CCV7	Date: 19-Jul-2022 15:56		Seq: 6754564	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	103.223	103	90-110	
Manganese	100	106.515	107	90-110	
Thallium	100	103.393	103	90-110	

CCV9	Date: 19-Jul-2022 16:24		Seq: 6755962	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	107.785	108	90-110	
Manganese	100	105.016	105	90-110	
Thallium	100	109.393	109	90-110	

CCV8	Date: 19-Jul-2022 16:24		Seq: 6754571	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	107.785	108	90-110	

ALS Houston, US Date: 22-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070087 Method: SW6020A

CCV8	Date: 19-Jul-2022 16:24		Seq: 6754571	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	105.016	105	90-110	
Thallium	100	109.393	109	90-110	

CCV10	Date: 19-Jul-2022 16:57		Seq: 6755969	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	98.485	99	90-110	
Manganese	100	97.306	97	90-110	
Thallium	100	102.59	103	90-110	

CCV11	Date: 19-Jul-2022 16:59		Seq: 6755970	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	101.465	101	90-110	
Manganese	100	99.632	100	90-110	
Thallium	100	103.934	104	90-110	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

Run ID: ICPMS07_413228
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 19-Jul-2022 11:48		Seq: 6753698	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 19-Jul-2022 12:06		Seq: 6754520	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

MBLK-181294	Date: 19-Jul-2022 12:09		Seq: 6754521	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB2	Date: 19-Jul-2022 12:37		Seq: 6754532	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB3	Date: 19-Jul-2022 13:03		Seq: 6754540	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB4	Date: 19-Jul-2022 14:48		Seq: 6754542	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB5	Date: 19-Jul-2022 15:13		Seq: 6754550	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB6	Date: 19-Jul-2022 15:58		Seq: 6754565	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	2.324	0.7	5	J	
Thallium	2	0.2	2	U	

CCB8	Date: 19-Jul-2022 16:26		Seq: 6755963	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB7	Date: 19-Jul-2022 16:26		Seq: 6754572	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	

ALS Houston, US

Date: 22-Jul-22

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

Run ID: ICPMS07_413228
Instrument: ICPMS07
Method: SW6020A

CCB7	Date: 19-Jul-2022 16:26		Seq: 6754572	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Thallium	2	0.2	2	U	

CCB9	Date: 19-Jul-2022 16:52		Seq: 6755967	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

ALS Houston, US Date: 22-Jul-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID:ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument:ICPMS07
WorkOrder: HS22070087 Method:SW6020A

ICSA	Date: 19-Jul-2022 11:53	Seq: 6753700	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.253	0	
Manganese		0.288	0	
Thallium		0.005	0	

ICSAB	Date: 19-Jul-2022 11:55	Seq: 6753701	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	102.6	103	
Manganese	100	103	103	
Thallium	100	103.3	103	

ALS Houston, US

Date: 22-Jul-22

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

Date Analyzed: 19-Jul-2022 12:20
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Matrix Spike: HS22070086-01MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	5.000	53.29	50.00	106	55.02	50.00	110	84-116	3.20	20
Manganese	1137	1124	50.00	-26.3	1149	50.00	23.0	87-115	2.17	20
Thallium	2.000	49.45	50.00	98.9	51.01	50.00	102	82-116	3.11	20

ALS Houston, US Date: 22-Jul-22

Form 5B - Post Digest Sample Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

Date Analyzed: 19-Jul-2022 15:26
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0	107.6	100	108	80-120
Manganese	1137	1195	100	58	80-120
Thallium	0	107.7	100	108	80-120

ALS Houston, US Date: 22-Jul-22

Form 7 - Laboratory Control Sample

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

Date Analyzed: 19-Jul-2022 12:11
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: LCS-181294 Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Arsenic	50	57.14	114	84-116
Manganese	50	56.64	113	87-115
Thallium	50	51.3	103	82-116

ALS Houston, US

Date: 22-Jul-22

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070087

Date Analyzed: 19-Jul-2022 12:16
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01SD
Client Sample ID:

Analysis Method: SW6020A

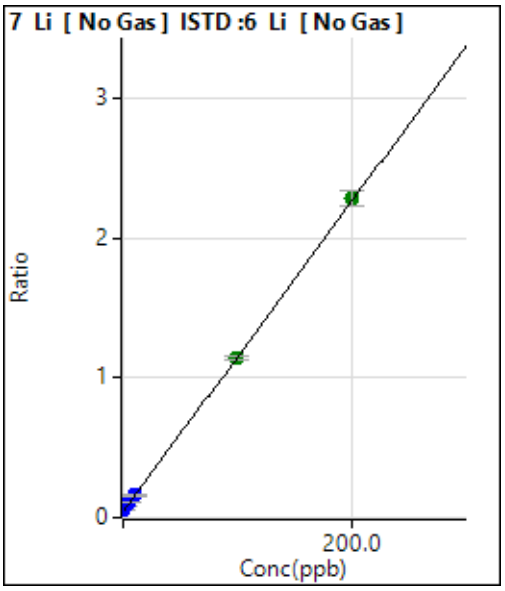
Analyte	Sample Result	C	SD Result	C	RPD	Q
Arsenic	0	U	0	U	0	
Manganese	1137		1089		4	
Thallium	0	U	0	U	0	

Calibration for 250_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	243CALB.d	CAL BLK	07/19/2022 22:06:24
2	244CALS.d	2/10/200	07/19/2022 22:08:29
3	245CALS.d	5/25/500	07/19/2022 22:10:35
4	246CALS.d	10/50/100	07/19/2022 22:12:40
5	247CALS.d	100/500/10K	07/19/2022 22:14:44
6	248CALS.d	200/1000/20K	07/19/2022 22:16:46

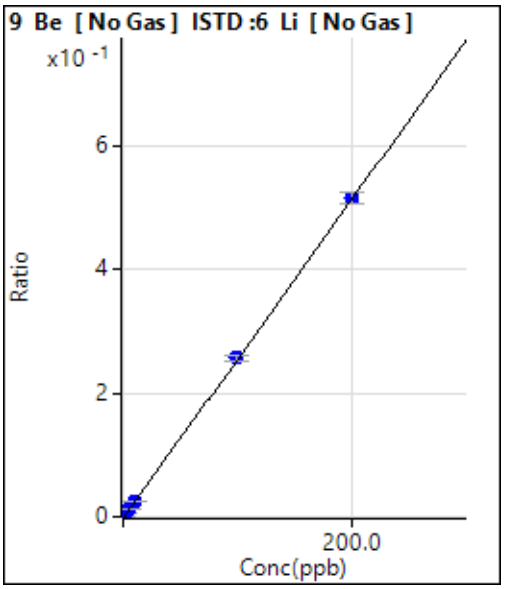
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	44822.95	0.0550	P	3.2	
2	☐	2.000	1.995	62431.13	0.0772	P	1.5	-0.2
3	☐	5.000	4.545	85947.71	0.1054	P	2.4	-9.1
4	☐	10.000	9.381	127793.69	0.1591	P	2.3	-6.2
5	☐	100.000	98.063	936020.56	1.1429	A	2.3	-1.9
6	☐	200.000	201.011	1821521.64	2.2850	A	4.4	0.5

y = 0.0111 * x + 0.0550
R = 0.9999
DL = 0.4811 ppb
BEC = 4.959 ppb

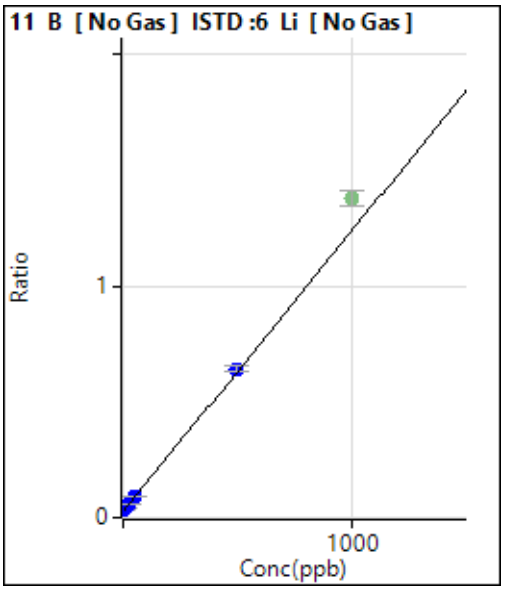
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1.67	0.0000	P	173.2	
2	☐	2.000	1.882	3920.57	0.0048	P	2.7	-5.9
3	☐	5.000	4.844	10165.41	0.0125	P	2.6	-3.1
4	☐	10.000	9.959	20590.14	0.0256	P	1.7	-0.4
5	☐	100.000	99.875	210415.85	0.2570	P	3.4	-0.1
6	☐	200.000	200.069	410520.46	0.5149	P	3.4	0.0

y = 0.0026 * x + 2.0560E-006
R = 1.0000
DL = 0.004152 ppb
BEC = 0.000799 ppb

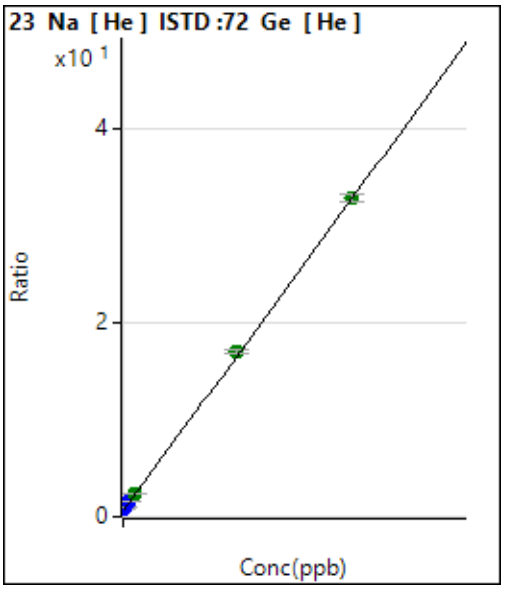
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	27971.22	0.0343	P	1.7	
2	☐	10.000	8.743	36332.27	0.0449	P	2.2	-12.6
3	☐	25.000	20.674	48384.80	0.0594	P	1.9	-17.3
4	☐	50.000	46.164	72487.96	0.0902	P	0.8	-7.7
5	☐	500.000	500.625	524402.34	0.6406	P	4.0	0.1
6	☑	1000.000		1100013.19	1.3800	A	5.0	

y = 0.0012 * x + 0.0343
R = 1.0000
DL = 1.47 ppb
BEC = 28.34 ppb

Weight: <None>
Min Conc: <None>

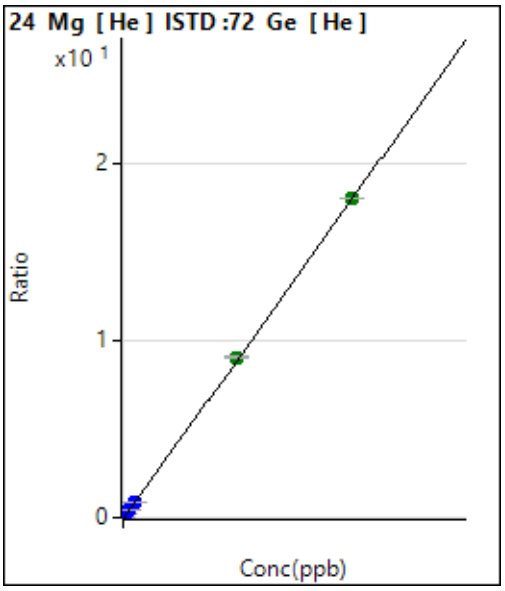


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	344079.90	0.7542	P	1.7	
2	☐	200.000	178.993	483177.30	1.0422	P	0.5	-10.5
3	☐	500.000	461.630	688616.97	1.4970	P	0.7	-7.7
4	☐	1000.000	1022.751	1111439.36	2.3998	A	1.6	2.3
5	☐	10000.00	10077.79	7915658.22	16.9693	A	2.0	0.8
6	☐	20000.00	19961.13	15086284.7	32.8715	A	2.0	-0.2

y = 0.0016 * x + 0.7542
R = 1.0000
DL = 23.48 ppb
BEC = 468.7 ppb

Weight: <None>
Min Conc: <None>

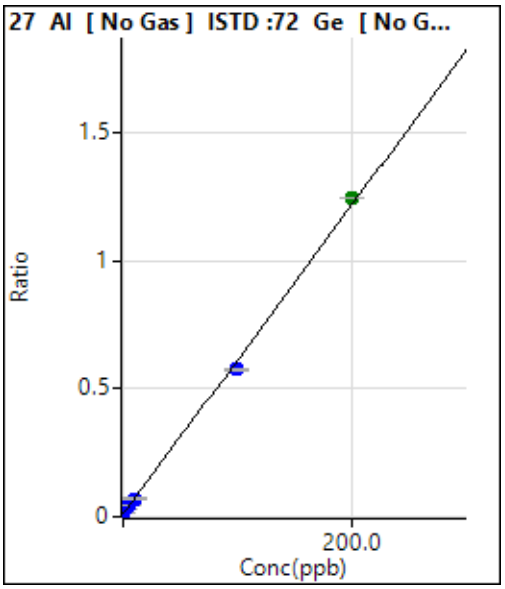
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306.68	0.0007	P	13.4	
2	☐	200.000	195.983	82288.79	0.1775	P	0.2	-2.0
3	☐	500.000	484.870	201547.31	0.4381	P	0.7	-3.0
4	☐	1000.000	966.841	404314.34	0.8730	P	1.1	-3.3
5	☐	10000.00	10043.64	4227639.42	9.0625	A	1.1	0.4
6	☐	20000.00	19980.25	8274144.46	18.0277	A	0.3	-0.1

y = 9.0224E-004 * x + 6.7274E-004
R = 1.0000
DL = 0.2991 ppb
BEC = 0.7456 ppb

Weight: <None>
Min Conc: <None>

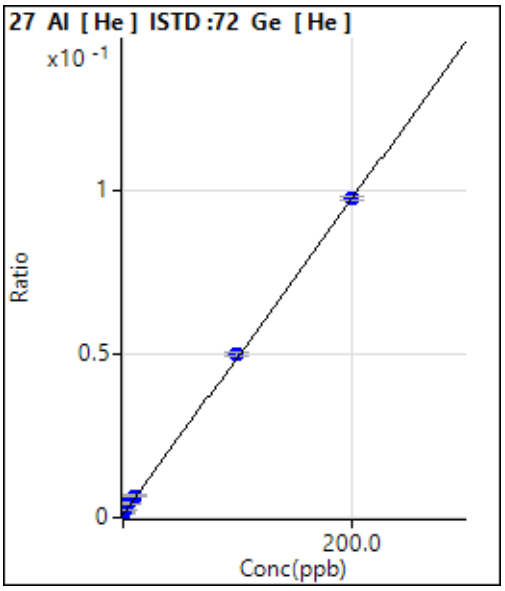


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	22849.11	0.0162	P	1.8	
2	☐	2.000	1.739	37851.98	0.0267	P	1.4	-13.1
3	☐	5.000	5.255	68484.94	0.0479	P	1.0	5.1
4	☐	10.000	9.056	100397.64	0.0708	P	3.4	-9.4
5	☐	100.000	92.815	818236.32	0.5756	P	1.2	-7.2
6	☐	200.000	203.636	1708167.74	1.2436	A	0.5	1.8

y = 0.0060 * x + 0.0162
R = 0.9991
DL = 0.1437 ppb
BEC = 2.691 ppb

Weight: <None>
Min Conc: <None>

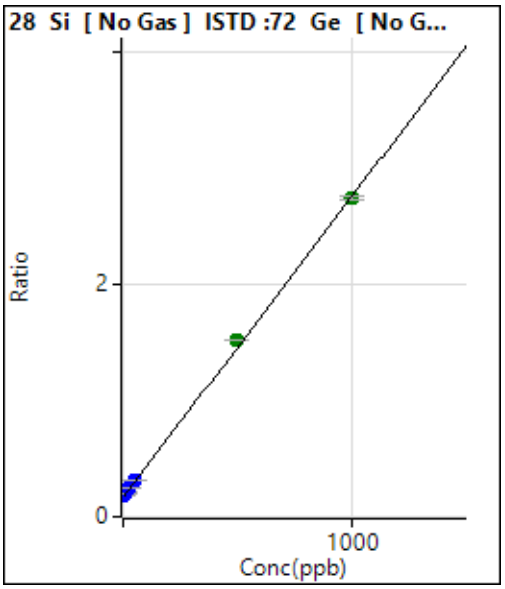
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	663.36	0.0015	P	7.9	
2	☐	2.000	2.015	1123.40	0.0024	P	5.3	0.7
3	☐	5.000	6.269	2056.85	0.0045	P	6.3	25.4
4	☐	10.000	10.571	3030.40	0.0065	P	9.5	5.7
5	☐	100.000	100.876	23336.50	0.0500	P	2.3	0.9
6	☐	200.000	199.501	44752.26	0.0975	P	0.9	-0.2

y = 4.8147E-004 * x + 0.0015
R = 1.0000
DL = 0.7111 ppb
BEC = 3.018 ppb

Weight: <None>
Min Conc: <None>

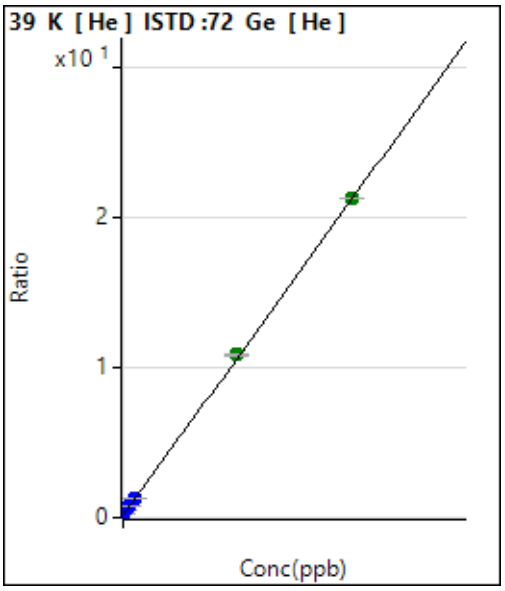


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	257048.87	0.1825	P	0.2	
2	☐	10.000	9.227	292484.42	0.2063	P	0.6	-7.7
3	☐	25.000	26.928	360453.52	0.2521	P	0.7	7.7
4	☐	50.000	50.917	445428.48	0.3141	P	1.5	1.8
5	☐	500.000	517.345	2160706.37	1.5201	A	0.9	3.5
6	☐	1000.000	991.241	3770939.53	2.7454	A	1.0	-0.9

y = 0.0026 * x + 0.1825
R = 0.9998
DL = 0.4787 ppb
BEC = 70.56 ppb

Weight: <None>
Min Conc: <None>

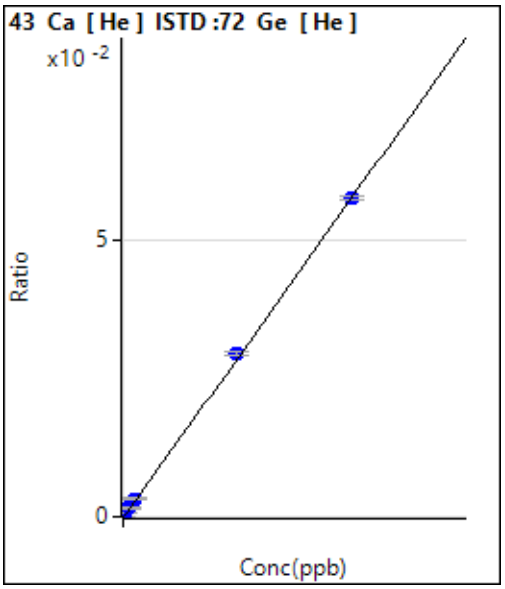
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115731.71	0.2536	P	0.4	
2	☐	200.000	191.246	211023.06	0.4552	P	0.6	-4.4
3	☐	500.000	479.979	349355.14	0.7594	P	1.8	-4.0
4	☐	1000.000	968.791	590267.85	1.2745	P	1.5	-3.1
5	☐	10000.00	10069.79	5068398.47	10.8651	A	1.5	0.7
6	☐	20000.00	19967.25	9773781.31	21.2950	A	0.6	-0.2

y = 0.0011 * x + 0.2536
R = 1.0000
DL = 2.961 ppb
BEC = 240.7 ppb

Weight: <None>
Min Conc: <None>

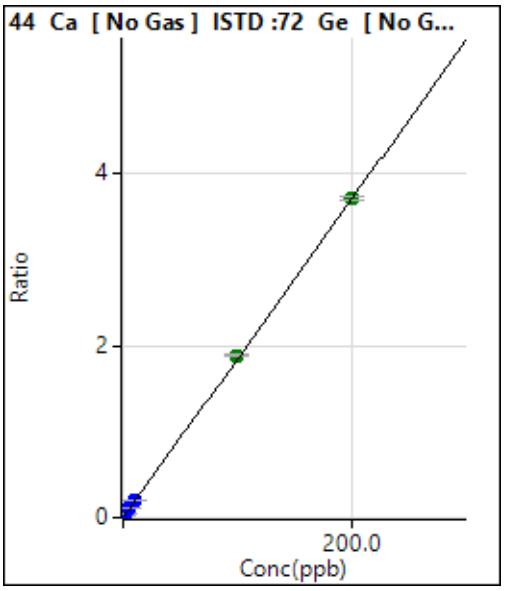


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.0	
2	☐	200.000	218.094	310.01	0.0007	P	23.2	9.0
3	☐	500.000	537.576	733.37	0.0016	P	11.1	7.5
4	☐	1000.000	1095.662	1486.77	0.0032	P	10.6	9.6
5	☐	10000.00	10199.68	13807.14	0.0296	P	2.8	2.0
6	☐	20000.00	19894.25	26479.10	0.0577	P	1.7	-0.5

y = 2.8982E-006 * x + 3.6456E-005
R = 0.9999
DL = 12.83 ppb
BEC = 12.58 ppb

Weight: <None>
Min Conc: <None>

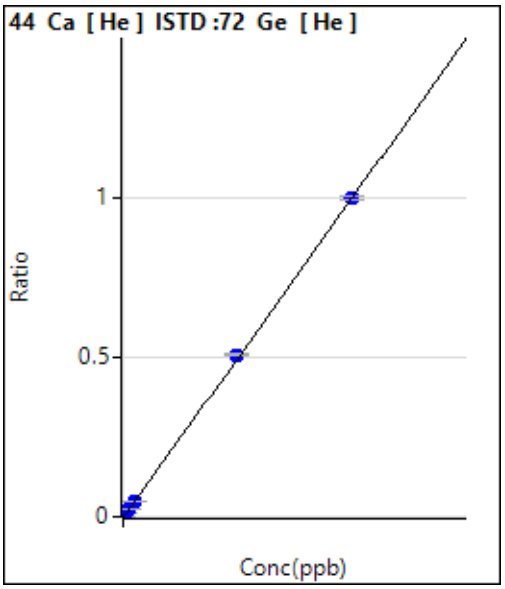
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25640.88	0.0182	P	1.6	
2	☐	2.000	1.958	77283.02	0.0545	P	1.1	-2.1
3	☐	5.000	4.918	156447.88	0.1094	P	0.6	-1.6
4	☐	10.000	9.600	278296.38	0.1962	P	0.8	-4.0
5	☐	100.000	100.872	2684970.17	1.8889	A	1.5	0.9
6	☐	200.000	199.586	5109400.65	3.7196	A	1.2	-0.2

y = 0.0185 * x + 0.0182
R = 1.0000
DL = 0.04623 ppb
BEC = 0.9814 ppb

Weight: <None>
Min Conc: <None>

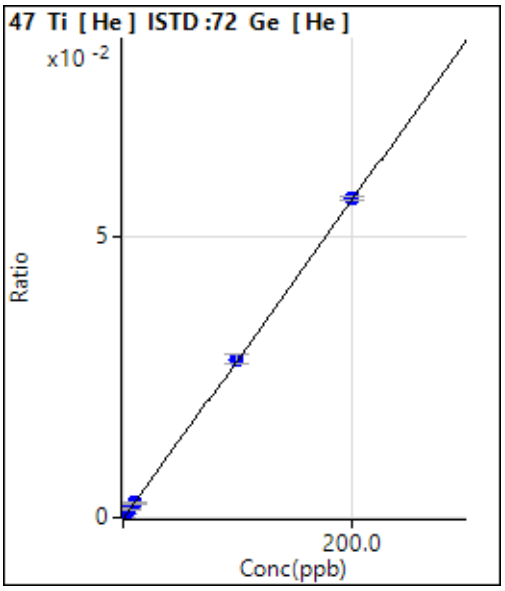


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0014	P	6.7	
2	☐	200.000	195.338	5167.72	0.0111	P	3.1	-2.3
3	☐	500.000	504.872	12245.63	0.0266	P	2.8	1.0
4	☐	1000.000	974.811	23213.23	0.0501	P	2.0	-2.5
5	☐	10000.00	10126.45	236799.15	0.5076	P	1.2	1.3
6	☐	20000.00	19937.95	458106.31	0.9981	P	1.1	-0.3

y = 4.9991E-005 * x + 0.0014
R = 1.0000
DL = 5.586 ppb
BEC = 27.62 ppb

Weight: <None>
Min Conc: <None>

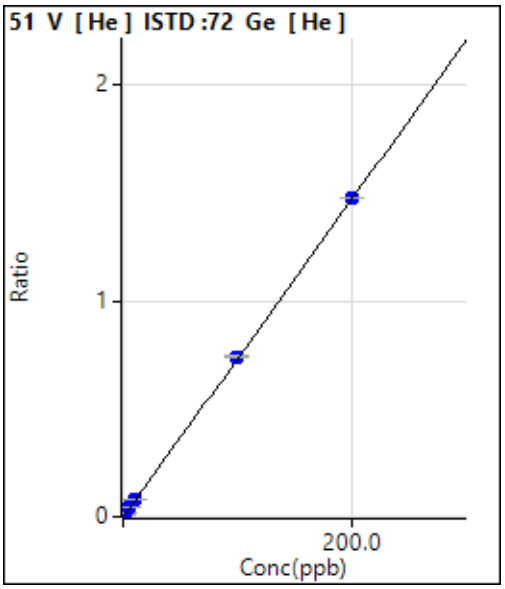
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	99.5	
2	☐	2.000	2.210	300.01	0.0006	P	40.8	10.5
3	☐	5.000	5.299	700.03	0.0015	P	13.8	6.0
4	☐	10.000	9.331	1233.41	0.0027	P	7.9	-6.7
5	☐	100.000	99.302	13126.44	0.0281	P	5.7	-0.7
6	☐	200.000	200.373	26048.30	0.0568	P	0.6	0.2

y = 2.8313E-004 * x + 2.1756E-005
R = 1.0000
DL = 0.2295 ppb
BEC = 0.07684 ppb

Weight: <None>
Min Conc: <None>

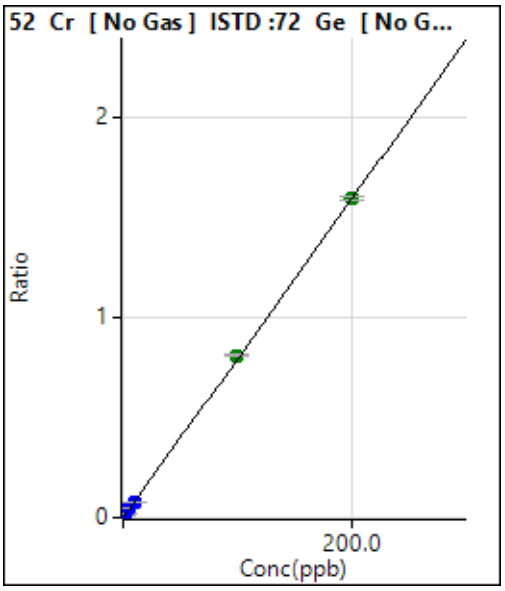


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2094.62	0.0046	P	3.1	
2	☐	2.000	1.939	8750.61	0.0189	P	0.8	-3.1
3	☐	5.000	4.914	18768.41	0.0408	P	1.8	-1.7
4	☐	10.000	9.745	35379.99	0.0764	P	0.7	-2.5
5	☐	100.000	100.104	346190.00	0.7421	P	1.3	0.1
6	☐	200.000	199.963	678282.18	1.4779	P	0.5	0.0

y = 0.0074 * x + 0.0046
R = 1.0000
DL = 0.05749 ppb
BEC = 0.6232 ppb

Weight: <None>
Min Conc: <None>

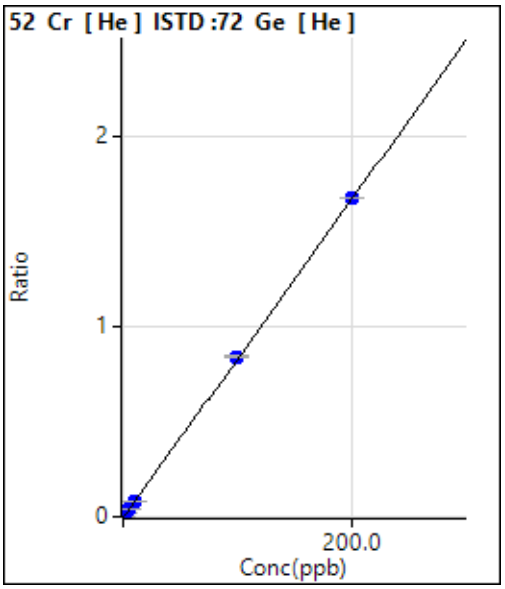
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10564.28	0.0075	P	3.1	
2	☐	2.000	1.892	31940.94	0.0225	P	2.0	-5.4
3	☐	5.000	4.581	62764.13	0.0439	P	1.5	-8.4
4	☐	10.000	9.199	114274.49	0.0806	P	1.4	-8.0
5	☐	100.000	101.063	1151864.93	0.8104	A	2.2	1.1
6	☐	200.000	199.520	2187482.21	1.5925	A	1.5	-0.2

y = 0.0079 * x + 0.0075
R = 1.0000
DL = 0.08831 ppb
BEC = 0.9439 ppb

Weight: <None>
Min Conc: <None>

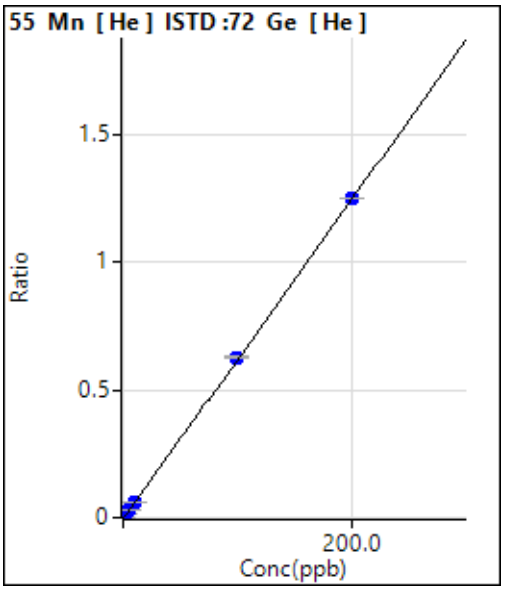


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1193.41	0.0026	P	3.7	
2	☐	2.000	1.969	8869.69	0.0191	P	4.7	-1.6
3	☐	5.000	4.820	19807.92	0.0431	P	3.1	-3.6
4	☐	10.000	9.785	39233.32	0.0847	P	2.2	-2.1
5	☐	100.000	100.167	393276.37	0.8431	P	1.5	0.2
6	☐	200.000	199.932	771132.20	1.6801	P	0.2	0.0

y = 0.0084 * x + 0.0026
R = 1.0000
DL = 0.0346 ppb
BEC = 0.3118 ppb

Weight: <None>
Min Conc: <None>

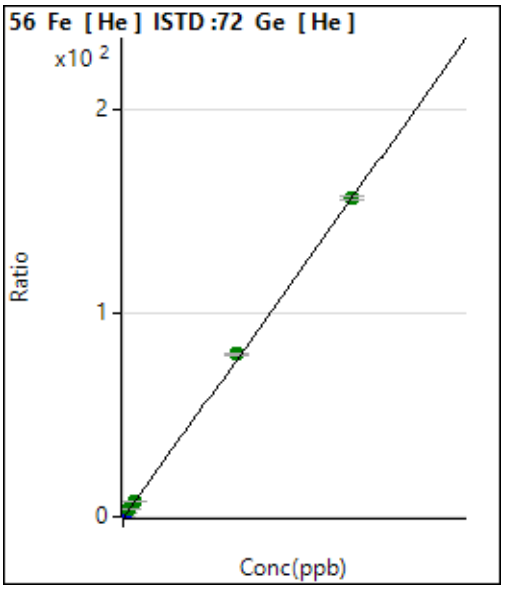
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	296.68	0.0007	P	14.7	
2	☐	2.000	1.866	5721.31	0.0123	P	5.4	-6.7
3	☐	5.000	4.836	14234.27	0.0309	P	3.3	-3.3
4	☐	10.000	9.743	28560.21	0.0617	P	2.4	-2.6
5	☐	100.000	100.390	293607.03	0.6294	P	1.7	0.4
6	☐	200.000	199.824	574719.89	1.2522	P	0.2	-0.1

y = 0.0063 * x + 6.5092E-004
R = 1.0000
DL = 0.04586 ppb
BEC = 0.1039 ppb

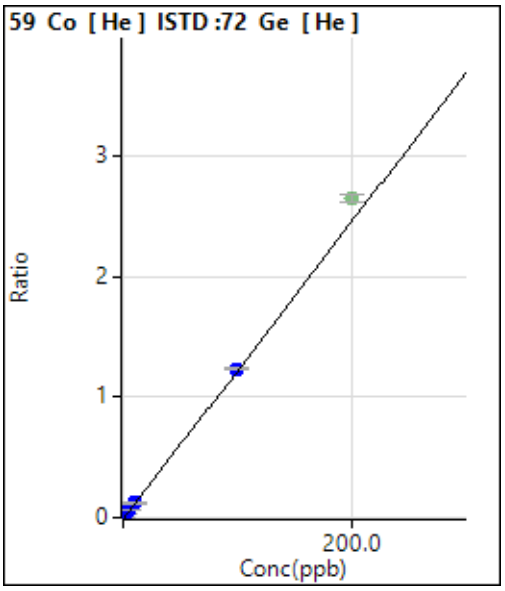
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12592.67	0.0276	P	2.4	
2	☐	200.000	195.490	726461.42	1.5670	P	1.6	-2.3
3	☐	500.000	519.372	1894119.35	4.1175	A	1.9	3.9
4	☐	1000.000	1008.121	3689506.82	7.9663	A	1.0	0.8
5	☐	10000.00	10150.57	37301026.9	79.9605	A	1.0	1.5
6	☐	20000.00	19923.87	72021503.9	156.922	A	0.8	-0.4

y = 0.0079 * x + 0.0276
R = 1.0000
DL = 0.2499 ppb
BEC = 3.505 ppb

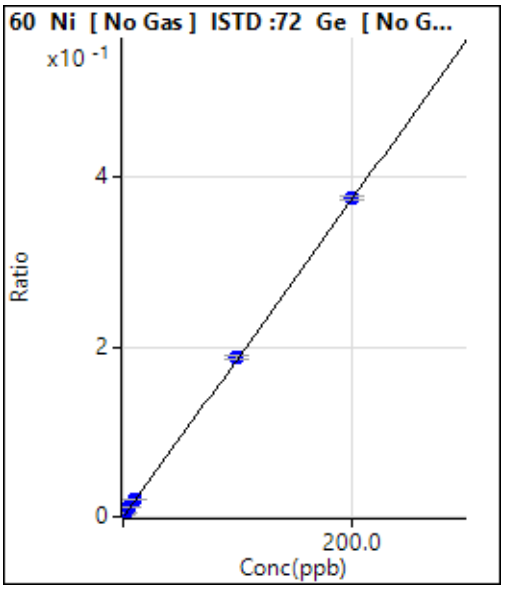
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	26.0	
2	☐	2.000	1.966	11274.84	0.0243	P	2.0	-1.7
3	☐	5.000	4.802	27267.62	0.0593	P	1.8	-4.0
4	☐	10.000	9.703	55429.72	0.1197	P	2.4	-3.0
5	☐	100.000	100.040	575310.47	1.2333	P	1.2	0.0
6	☑	200.000		1214610.50	2.6465	A	2.2	

y = 0.0123 * x + 8.7838E-005
R = 1.0000
DL = 0.005568 ppb
BEC = 0.007126 ppb

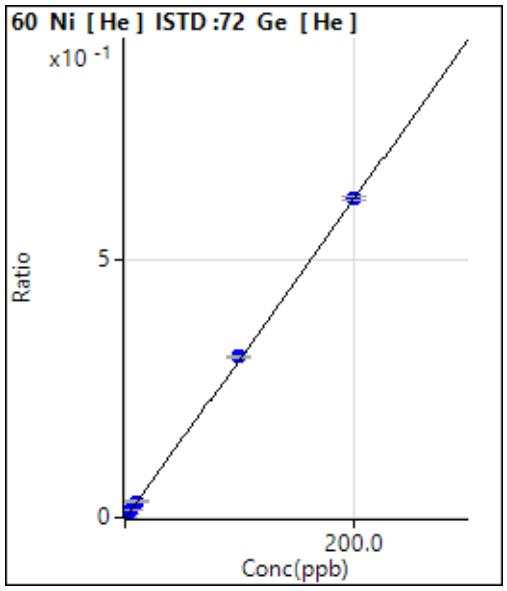
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.52	0.0014	P	4.8	
2	☐	2.000	2.064	7505.51	0.0053	P	4.1	3.2
3	☐	5.000	5.080	15632.51	0.0109	P	1.6	1.6
4	☐	10.000	10.094	28794.18	0.0203	P	1.9	0.9
5	☐	100.000	99.751	267074.93	0.1879	P	1.7	-0.2
6	☐	200.000	200.117	515783.16	0.3755	P	1.3	0.1

y = 0.0019 * x + 0.0014
R = 1.0000
DL = 0.1116 ppb
BEC = 0.7683 ppb

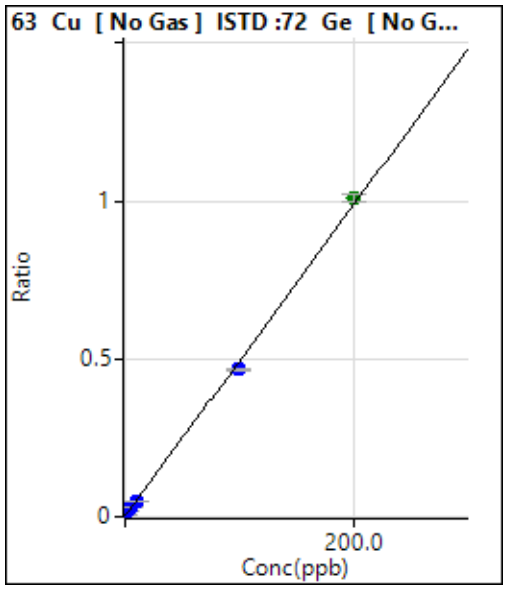
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0005	P	18.8	
2	☐	2.000	2.003	3100.41	0.0067	P	5.1	0.2
3	☐	5.000	4.919	7225.38	0.0157	P	3.1	-1.6
4	☐	10.000	9.989	14541.33	0.0314	P	2.2	-0.1
5	☐	100.000	100.440	145173.98	0.3112	P	1.1	0.4
6	☐	200.000	199.782	283876.15	0.6185	P	0.8	-0.1

y = 0.0031 * x + 4.9001E-004
R = 1.0000
DL = 0.08928 ppb
BEC = 0.1584 ppb

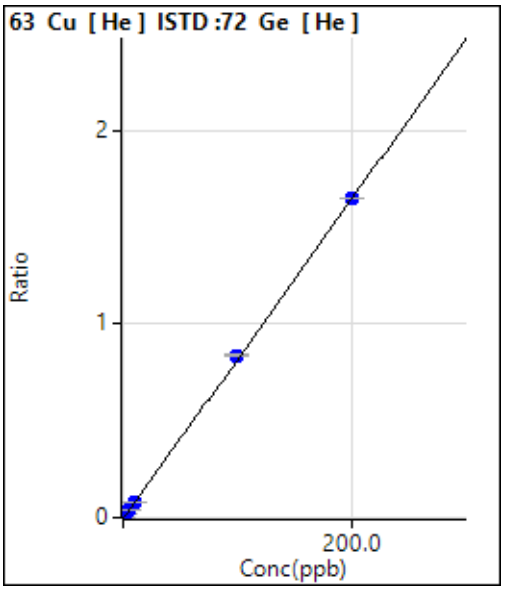
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9783.68	0.0069	P	1.7	
2	☐	2.000	1.764	22178.35	0.0156	P	1.8	-11.8
3	☐	5.000	4.313	40346.63	0.0282	P	2.2	-13.7
4	☐	10.000	8.935	72335.68	0.0510	P	1.5	-10.7
5	☐	100.000	93.388	664510.33	0.4675	P	1.5	-6.6
6	☐	200.000	203.379	1387150.55	1.0099	A	1.8	1.7

y = 0.0049 * x + 0.0069
R = 0.9993
DL = 0.07331 ppb
BEC = 1.408 ppb

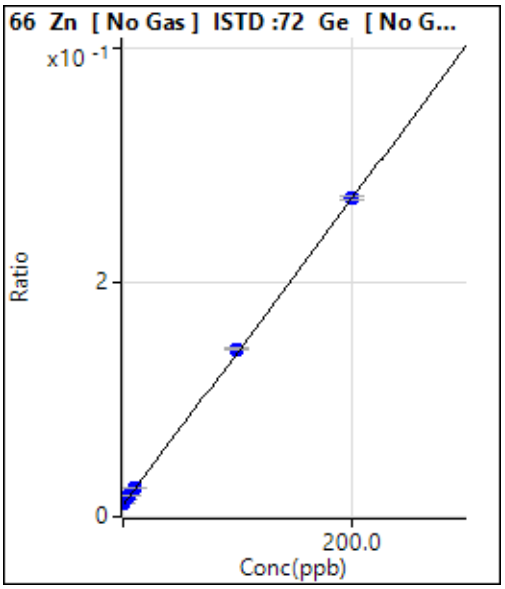
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	553.36	0.0012	P	19.2	
2	☐	2.000	2.004	8245.99	0.0178	P	1.1	0.2
3	☐	5.000	5.010	19621.10	0.0427	P	2.0	0.2
4	☐	10.000	9.690	37682.53	0.0814	P	2.1	-3.1
5	☐	100.000	101.056	390512.44	0.8371	P	1.4	1.1
6	☐	200.000	199.487	757934.41	1.6514	P	0.6	-0.3

y = 0.0083 * x + 0.0012
R = 1.0000
DL = 0.08451 ppb
BEC = 0.1466 ppb

Weight: <None>
Min Conc: <None>

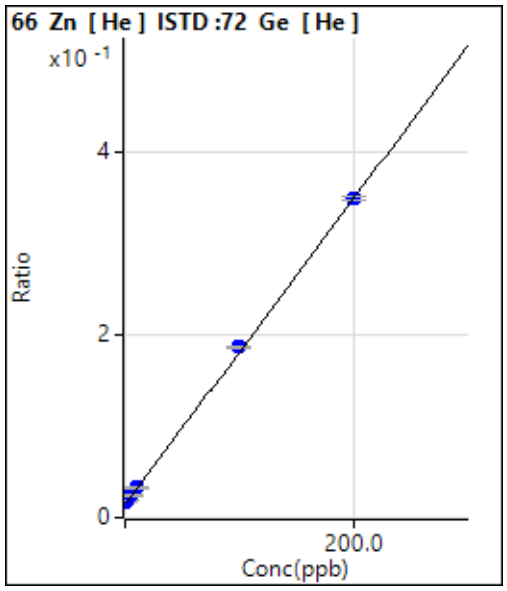


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16123.15	0.0114	P	4.4	
2	☐	2.000	2.360	20589.33	0.0145	P	3.0	18.0
3	☐	5.000	4.678	25086.86	0.0175	P	0.8	-6.4
4	☐	10.000	10.066	34838.30	0.0246	P	3.3	0.7
5	☐	100.000	100.809	203098.84	0.1429	P	1.5	0.8
6	☐	200.000	199.597	373198.70	0.2717	P	1.0	-0.2

y = 0.0013 * x + 0.0114
R = 1.0000
DL = 1.153 ppb
BEC = 8.776 ppb

Weight: <None>
Min Conc: <None>

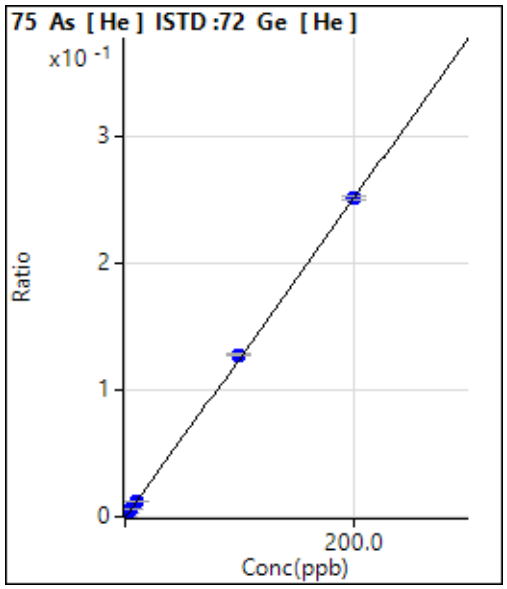
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7302.09	0.0160	P	0.6	
2	☐	2.000	1.494	8579.54	0.0185	P	3.1	-25.3
3	☐	5.000	5.041	11244.87	0.0244	P	2.3	0.8
4	☐	10.000	9.967	15142.02	0.0327	P	2.9	-0.3
5	☐	100.000	101.746	86947.41	0.1864	P	1.0	1.7
6	☐	200.000	199.133	160399.41	0.3495	P	1.3	-0.4

y = 0.0017 * x + 0.0160
R = 0.9999
DL = 0.1708 ppb
BEC = 9.557 ppb

Weight: <None>
Min Conc: <None>

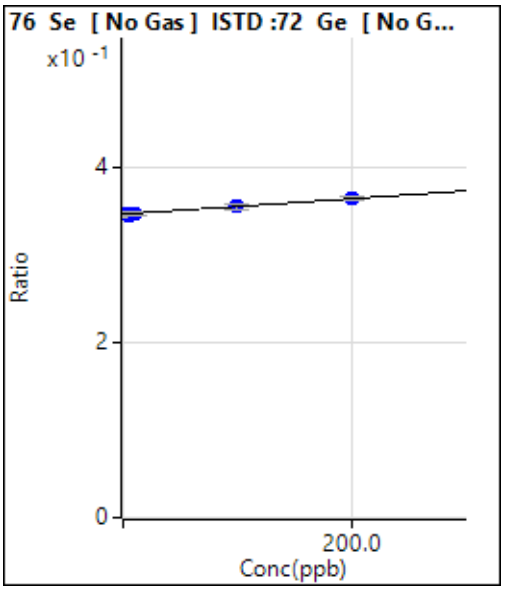


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0002	P	13.8	
2	☐	2.000	2.080	1330.07	0.0029	P	2.3	4.0
3	☐	5.000	5.051	3041.47	0.0066	P	0.7	1.0
4	☐	10.000	9.866	5871.30	0.0127	P	0.7	-1.3
5	☐	100.000	101.329	59661.05	0.1279	P	1.1	1.3
6	☐	200.000	199.340	115363.99	0.2514	P	1.2	-0.3

y = 0.0013 * x + 2.4862E-004
R = 1.0000
DL = 0.08194 ppb
BEC = 0.1974 ppb

Weight: <None>
Min Conc: <None>

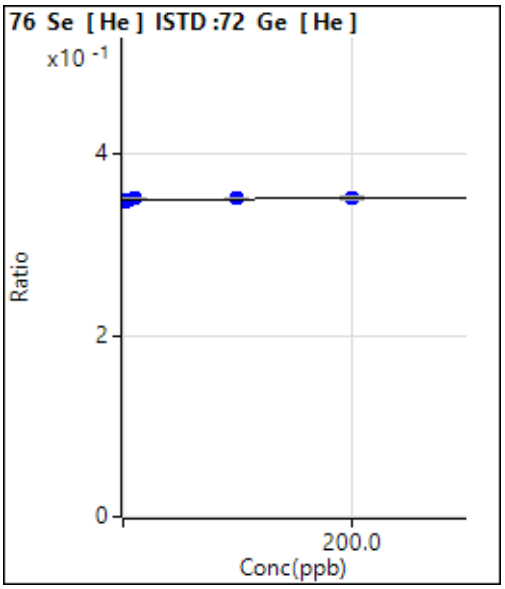
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	488547.58	0.3468	P	0.6	
2	☐	2.000	0.676	491690.06	0.3468	P	0.8	-66.2
3	☐	5.000	-23.031	492906.35	0.3447	P	0.9	-560.6
4	☐	10.000	8.392	492803.20	0.3475	P	1.6	-16.1
5	☐	100.000	94.950	504915.88	0.3552	P	1.5	-5.1
6	☐	200.000	203.320	501198.48	0.3649	P	1.4	1.7

y = 8.9213E-005 * x + 0.3468
R = 0.9925
DL = 67.5 ppb
BEC = 3887 ppb

Weight: <None>
Min Conc: <None>

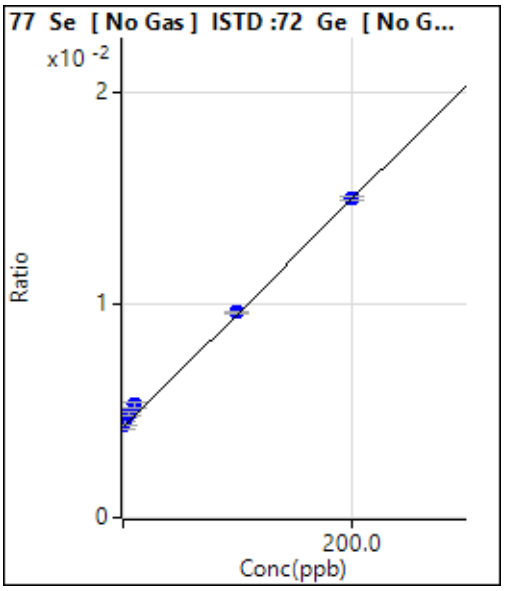


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	159660.32	0.3499	P	0.6	
2	☐	2.000	-164.239	161484.84	0.3483	P	0.4	-8311.
3	☐	5.000	41.296	161160.94	0.3503	P	0.5	725.9
4	☐	10.000	116.218	162604.06	0.3511	P	0.6	1062.2
5	☐	100.000	221.537	164270.81	0.3521	P	0.1	121.5
6	☐	200.000	134.675	161218.47	0.3513	P	1.2	-32.7

y = 9.8443E-006 * x + 0.3499
R = 0.5808
DL = 622.6 ppb
BEC = 3.555E+04 ppb

Weight: <None>
Min Conc: <None>

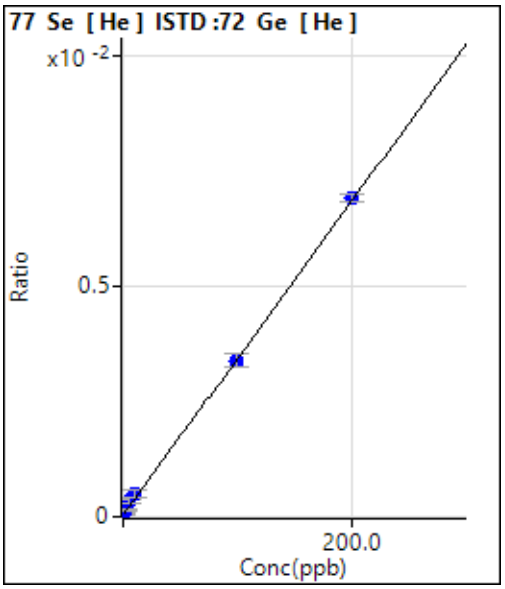
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6064.80	0.0043	P	8.4	
2	☐	2.000	4.380	6435.00	0.0045	P	7.9	119.0
3	☐	5.000	10.062	6925.22	0.0048	P	4.1	101.2
4	☐	10.000	18.571	7515.56	0.0053	P	5.1	85.7
5	☐	100.000	99.458	13690.54	0.0096	P	0.4	-0.5
6	☐	200.000	199.692	20602.66	0.0150	P	1.5	-0.2

y = 5.3552E-005 * x + 0.0043
R = 0.9993
DL = 20.32 ppb
BEC = 80.38 ppb

Weight: <None>
Min Conc: <None>

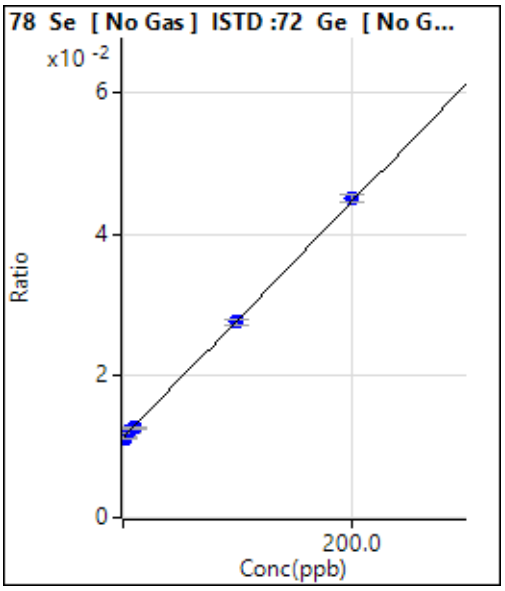


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	61.9	
2	☐	2.000	2.090	66.67	0.0001	P	31.4	4.5
3	☐	5.000	7.656	153.33	0.0003	P	26.2	53.1
4	☐	10.000	12.905	236.67	0.0005	P	31.5	29.1
5	☐	100.000	97.434	1580.12	0.0034	P	8.8	-2.6
6	☐	200.000	201.071	3173.77	0.0069	P	2.7	0.5

y = 3.4027E-005 * x + 7.2749E-005
R = 0.9997
DL = 3.968 ppb
BEC = 2.138 ppb

Weight: <None>
Min Conc: <None>

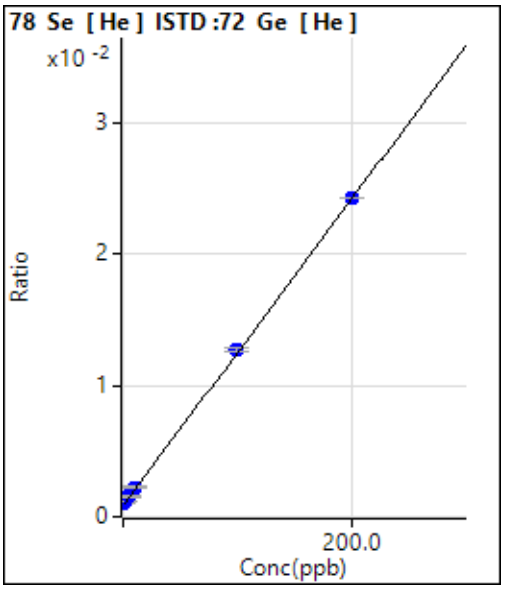
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16253.35	0.0115	P	1.4	
2	☐	2.000	-2.212	15832.86	0.0112	P	2.9	-210.6
3	☐	5.000	3.519	17331.41	0.0121	P	4.7	-29.6
4	☐	10.000	7.052	18028.96	0.0127	P	2.9	-29.5
5	☐	100.000	96.695	39250.78	0.0276	P	3.1	-3.3
6	☐	200.000	201.879	61962.37	0.0451	P	2.2	0.9

y = 1.6631E-004 * x + 0.0115
R = 0.9997
DL = 2.99 ppb
BEC = 69.37 ppb

Weight: <None>
Min Conc: <None>

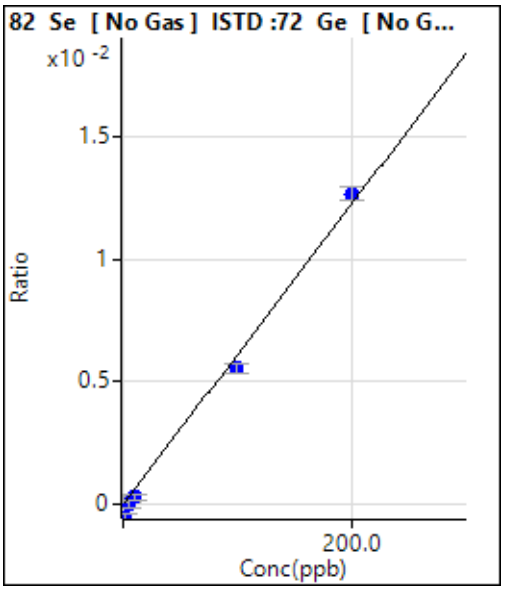


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.01	0.0010	P	4.3	
2	☐	2.000	1.719	546.01	0.0012	P	3.6	-14.0
3	☐	5.000	5.206	728.69	0.0016	P	6.6	4.1
4	☐	10.000	10.995	1046.04	0.0023	P	2.0	9.9
5	☐	100.000	100.629	5927.98	0.0127	P	1.5	0.6
6	☐	200.000	199.633	11127.94	0.0242	P	0.4	-0.2

y = 1.1655E-004 * x + 9.7729E-004
R = 1.0000
DL = 1.074 ppb
BEC = 8.385 ppb

Weight: <None>
Min Conc: <None>

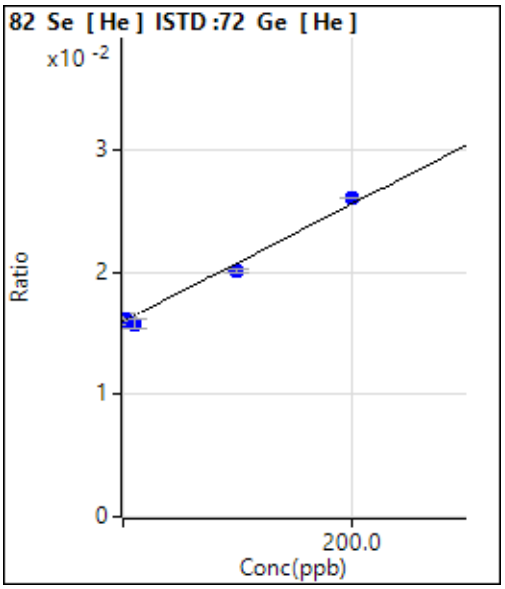
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	32.40	0.0000	P	1910.	
2	☐	2.000	-9.950	-835.26	-0.0006	P	-63.4	-597.5
3	☐	5.000	-1.430	-95.37	-0.0001	P	-430.	-128.6
4	☐	10.000	3.764	363.13	0.0003	P	77.6	-62.4
5	☐	100.000	89.442	7862.82	0.0055	P	6.4	-10.6
6	☐	200.000	205.871	17445.67	0.0127	P	5.0	2.9

y = 6.1585E-005 * x + 2.2822E-005
R = 0.9979
DL = 21.24 ppb
BEC = 0.3706 ppb

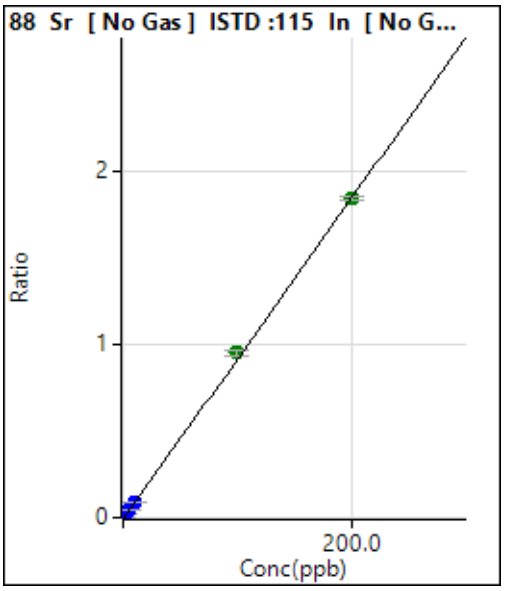
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7322.13	0.0161	P	7.3	
2	☐	2.000	3.221	7515.58	0.0162	P	1.2	61.1
3	☐	5.000	-3.199	7315.44	0.0159	P	2.6	-164.0
4	☐	10.000	-5.813	7305.46	0.0158	P	4.6	-158.1
5	☐	100.000	83.765	9366.73	0.0201	P	1.3	-16.2
6	☐	200.000	209.101	11978.86	0.0261	P	0.3	4.6

y = 4.8031E-005 * x + 0.0161
R = 0.9940
DL = 73.39 ppb
BEC = 334.3 ppb

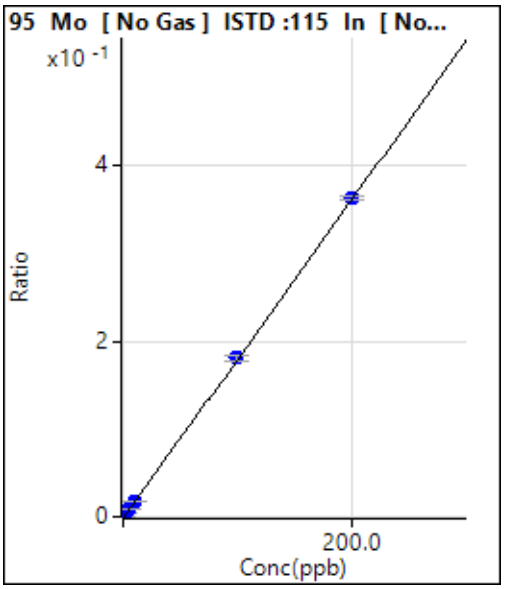
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.04	0.0004	P	13.1	
2	☐	2.000	1.891	29903.67	0.0179	P	1.7	-5.4
3	☐	5.000	4.990	79261.21	0.0466	P	2.1	-0.2
4	☐	10.000	9.272	145077.38	0.0863	P	1.3	-7.3
5	☐	100.000	102.440	1609026.54	0.9487	A	2.8	2.4
6	☐	200.000	198.818	3048031.72	1.8409	A	0.8	-0.6

y = 0.0093 * x + 4.3648E-004
R = 0.9999
DL = 0.01848 ppb
BEC = 0.04715 ppb

Weight: <None>
Min Conc: <None>

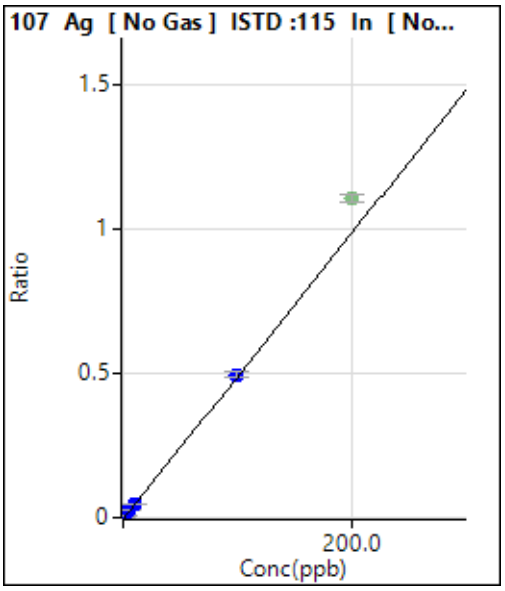


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	49.8	
2	☐	2.000	1.873	5684.65	0.0034	P	1.6	-6.3
3	☐	5.000	4.764	14715.06	0.0087	P	3.3	-4.7
4	☐	10.000	9.545	29158.90	0.0173	P	1.5	-4.5
5	☐	100.000	99.592	306523.71	0.1808	P	3.6	-0.4
6	☐	200.000	200.234	601711.31	0.3634	P	1.4	0.1

y = 0.0018 * x + 1.1959E-005
R = 1.0000
DL = 0.00984 ppb
BEC = 0.006589 ppb

Weight: <None>
Min Conc: <None>

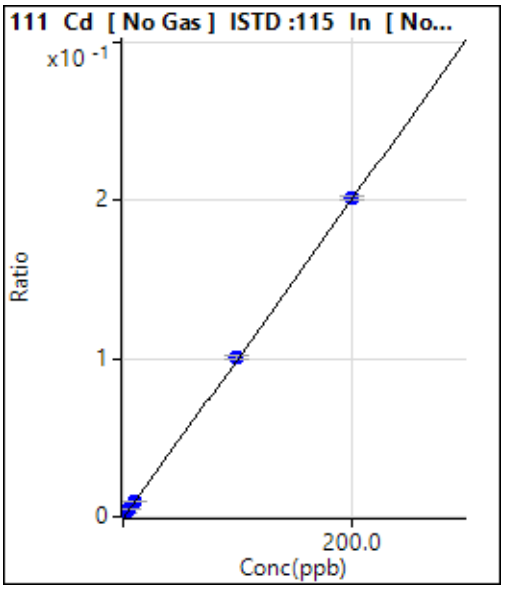
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	28.7	
2	☐	2.000	1.967	16353.74	0.0098	P	2.6	-1.7
3	☐	5.000	4.820	40652.89	0.0239	P	2.5	-3.6
4	☐	10.000	9.836	81926.53	0.0487	P	1.4	-1.6
5	☐	100.000	100.026	838721.89	0.4946	P	3.6	0.0
6	☑	200.000		1829217.26	1.1047	A	2.1	

y = 0.0049 * x + 8.9654E-005
R = 1.0000
DL = 0.01559 ppb
BEC = 0.01813 ppb

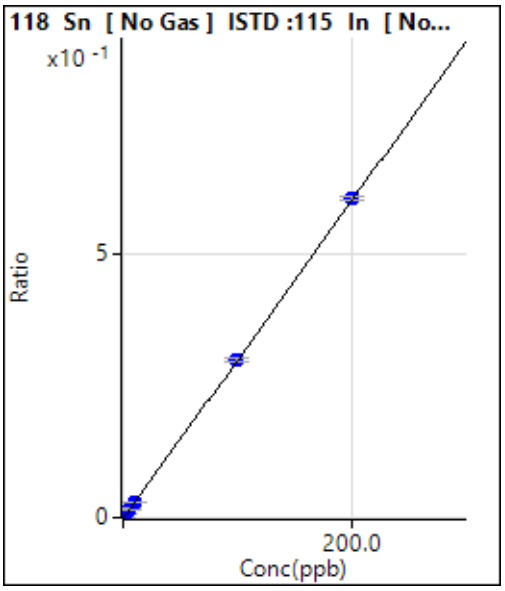
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.018	3383.84	0.0020	P	3.4	0.9
3	☐	5.000	4.700	8039.25	0.0047	P	2.3	-6.0
4	☐	10.000	9.642	16313.67	0.0097	P	2.3	-3.6
5	☐	100.000	99.923	170524.87	0.1005	P	2.2	-0.1
6	☐	200.000	200.064	333276.88	0.2013	P	1.1	0.0

y = 0.0010 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

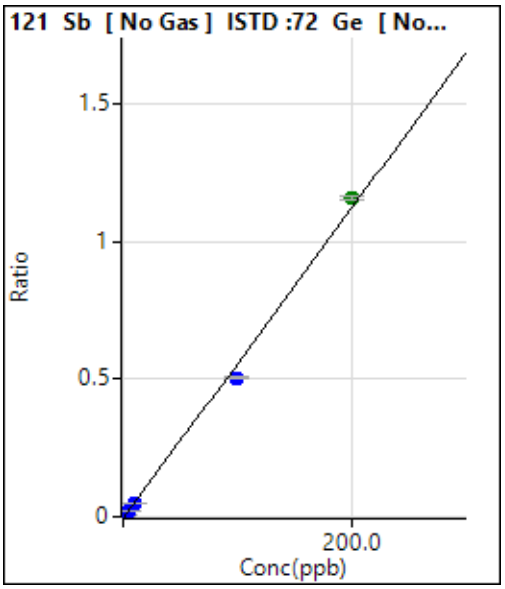
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1463.44	0.0009	P	8.7	
2	☐	2.000	1.927	11164.92	0.0067	P	5.2	-3.7
3	☐	5.000	5.050	27457.28	0.0161	P	13.0	1.0
4	☐	10.000	9.332	48928.03	0.0291	P	0.6	-6.7
5	☐	100.000	98.896	508658.85	0.2999	P	2.6	-1.1
6	☐	200.000	200.585	1005629.46	0.6074	P	1.4	0.3

y = 0.0030 * x + 8.7555E-004
R = 1.0000
DL = 0.07537 ppb
BEC = 0.2896 ppb

Weight: <None>
Min Conc: <None>

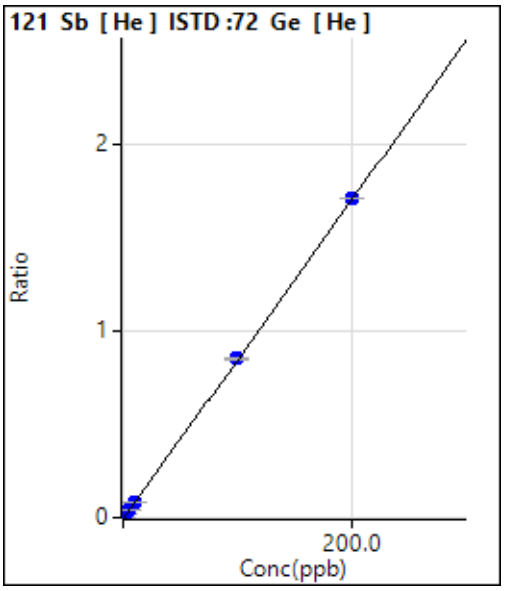


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	7.9	
2	☐	2.000	1.695	13804.22	0.0097	P	3.4	-15.2
3	☐	5.000	4.243	34452.20	0.0241	P	1.4	-15.1
4	☐	10.000	8.675	69581.10	0.0491	P	2.5	-13.2
5	☐	100.000	89.173	714440.98	0.5026	P	1.4	-10.8
6	☐	200.000	205.502	1590742.89	1.1581	A	1.4	2.8

y = 0.0056 * x + 1.8457E-004
R = 0.9980
DL = 0.00775 ppb
BEC = 0.03276 ppb

Weight: <None>
Min Conc: <None>

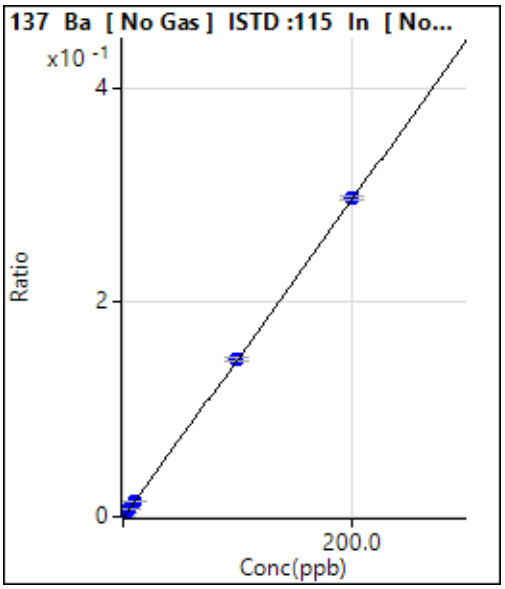
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0003	P	27.9	
2	☐	2.000	1.985	8015.91	0.0173	P	2.6	-0.7
3	☐	5.000	4.898	19401.31	0.0422	P	3.9	-2.0
4	☐	10.000	9.575	38035.45	0.0821	P	4.2	-4.2
5	☐	100.000	99.803	397920.03	0.8530	P	1.2	-0.2
6	☐	200.000	200.122	784879.23	1.7101	P	0.5	0.1

y = 0.0085 * x + 3.2809E-004
R = 1.0000
DL = 0.03212 ppb
BEC = 0.0384 ppb

Weight: <None>
Min Conc: <None>

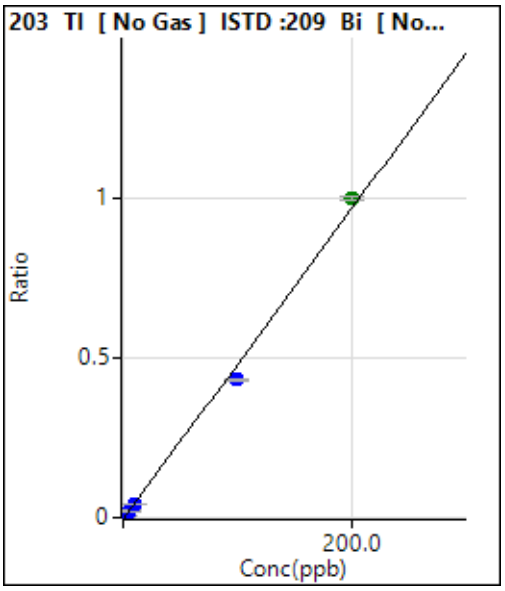


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	9.7	
2	☐	2.000	2.003	5081.09	0.0030	P	1.7	0.2
3	☐	5.000	4.716	12029.09	0.0071	P	1.0	-5.7
4	☐	10.000	9.578	24035.79	0.0143	P	2.5	-4.2
5	☐	100.000	99.336	250207.93	0.1475	P	2.9	-0.7
6	☐	200.000	200.360	492578.05	0.2975	P	0.9	0.2

y = 0.0015 * x + 7.5785E-005
R = 1.0000
DL = 0.01479 ppb
BEC = 0.05105 ppb

Weight: <None>
Min Conc: <None>

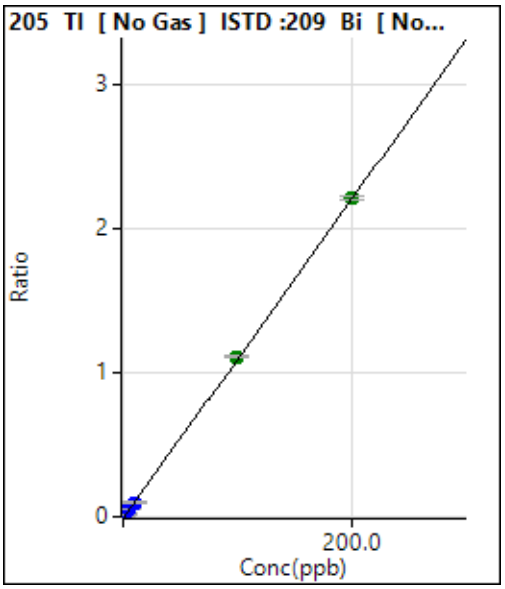
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.4	
2	☐	2.000	1.714	13604.35	0.0083	P	2.3	-14.3
3	☐	5.000	4.258	33592.33	0.0207	P	4.8	-14.8
4	☐	10.000	8.522	67502.47	0.0413	P	3.5	-14.8
5	☐	100.000	88.781	700088.76	0.4306	P	0.6	-11.2
6	☐	200.000	205.705	1590313.99	0.9977	A	0.7	2.9

y = 0.0048 * x + 1.0237E-005
R = 0.9979
DL = 0.002181 ppb
BEC = 0.002111 ppb

Weight: <None>
Min Conc: <None>

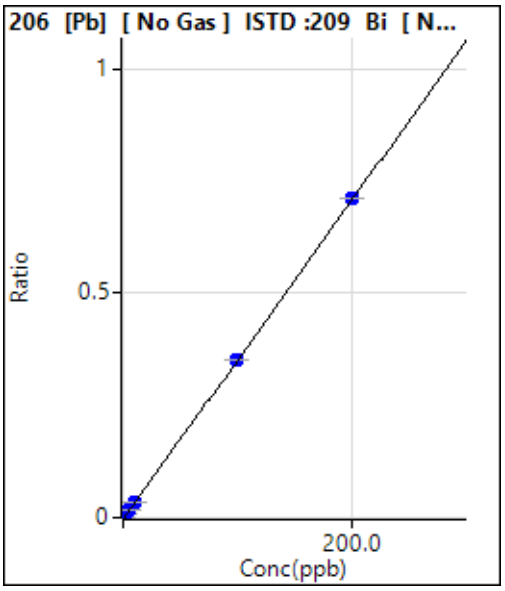


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	35.6	
2	☐	2.000	1.799	32626.34	0.0200	P	2.8	-10.1
3	☐	5.000	4.404	79415.67	0.0488	P	2.8	-11.9
4	☐	10.000	8.956	162175.43	0.0993	P	2.5	-10.4
5	☐	100.000	100.447	1810404.35	1.1136	A	1.4	0.4
6	☐	200.000	199.845	3531256.82	2.2155	A	1.6	-0.1

y = 0.0111 * x + 2.6648E-005
R = 1.0000
DL = 0.00257 ppb
BEC = 0.002404 ppb

Weight: <None>
Min Conc: <None>

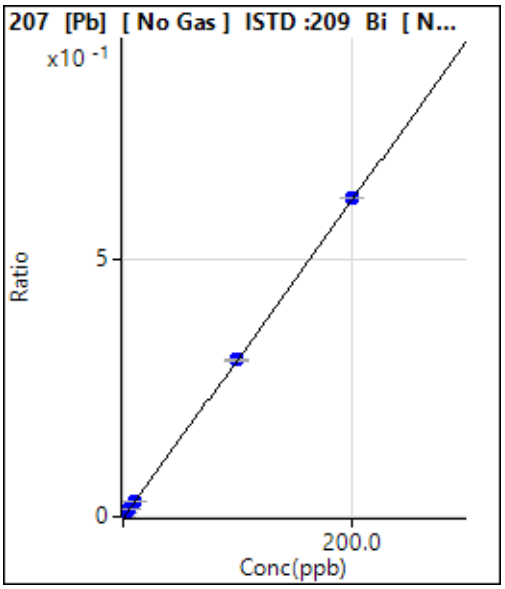
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	123.34	0.0001	P	44.0	
2	☐	2.000	1.929	11315.35	0.0069	P	4.2	-3.6
3	☐	5.000	4.767	27651.13	0.0170	P	2.4	-4.7
4	☐	10.000	9.639	56029.10	0.0343	P	1.2	-3.6
5	☐	100.000	99.274	573304.55	0.3526	P	0.6	-0.7
6	☐	200.000	200.388	1134431.18	0.7117	P	0.3	0.2

y = 0.0036 * x + 7.5662E-005
R = 1.0000
DL = 0.02812 ppb
BEC = 0.02131 ppb

Weight: <None>
Min Conc: <None>

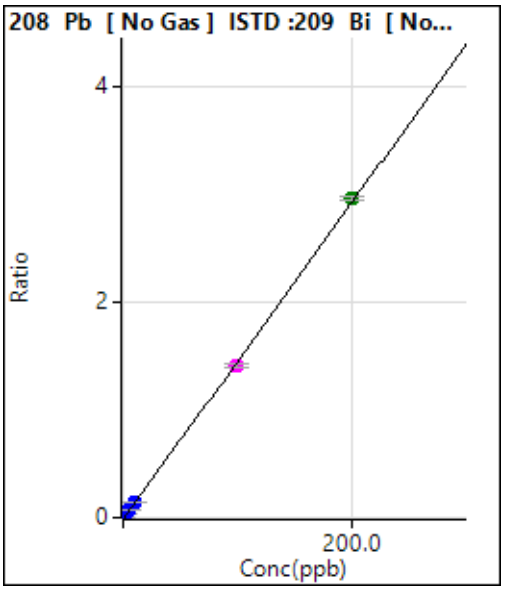


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	146.67	0.0001	P	4.7	
2	☐	2.000	1.934	9867.42	0.0060	P	1.1	-3.3
3	☐	5.000	4.665	23472.45	0.0144	P	0.8	-6.7
4	☐	10.000	9.556	48139.79	0.0295	P	1.2	-4.4
5	☐	100.000	98.632	493258.59	0.3034	P	0.2	-1.4
6	☐	200.000	200.715	983940.29	0.6173	P	0.4	0.4

y = 0.0031 * x + 9.0159E-005
R = 1.0000
DL = 0.004108 ppb
BEC = 0.02932 ppb

Weight: <None>
Min Conc: <None>

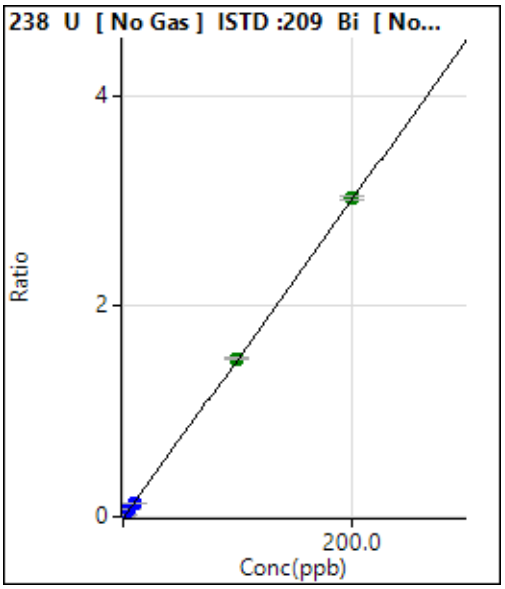
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	526.68	0.0003	P	6.8	
2	☐	2.000	1.847	44929.09	0.0275	P	3.4	-7.6
3	☐	5.000	4.547	109299.24	0.0672	P	1.2	-9.1
4	☐	10.000	9.203	221619.65	0.1357	P	1.5	-8.0
5	☐	100.000	96.377	2305350.51	1.4180	M	2.1	-3.6
6	☐	200.000	201.864	4733726.33	2.9698	A	0.6	0.9

y = 0.0147 * x + 3.2379E-004
R = 0.9998
DL = 0.004493 ppb
BEC = 0.02201 ppb

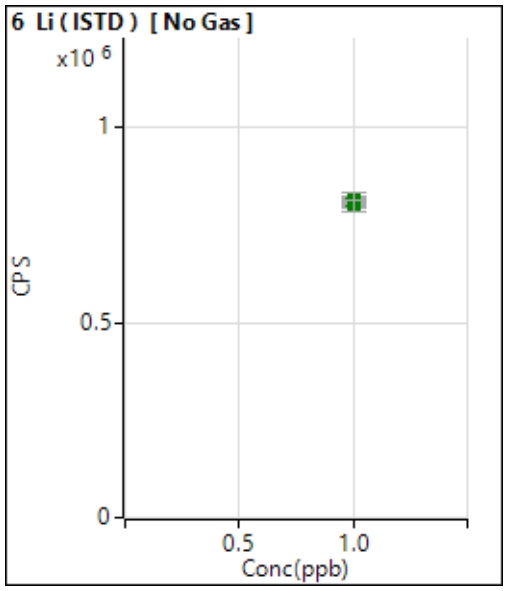
Weight: <None>
Min Conc: <None>



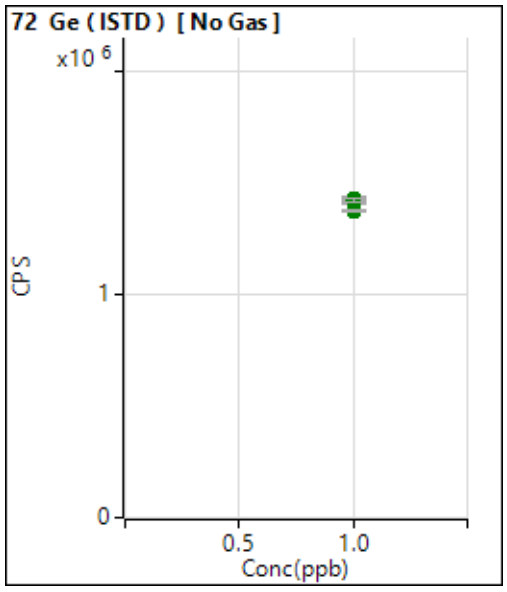
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.4	
2	☐	2.000	1.775	43882.52	0.0269	P	2.7	-11.2
3	☐	5.000	4.437	109137.98	0.0671	P	1.2	-11.3
4	☐	10.000	8.968	221537.58	0.1356	P	1.4	-10.3
5	☐	100.000	99.415	2444703.14	1.5037	A	0.9	-0.6
6	☐	200.000	200.360	4830317.53	3.0305	A	1.4	0.2

y = 0.0151 * x + 6.1417E-006
R = 1.0000
DL = 0.001223 ppb
BEC = 0.0004061 ppb

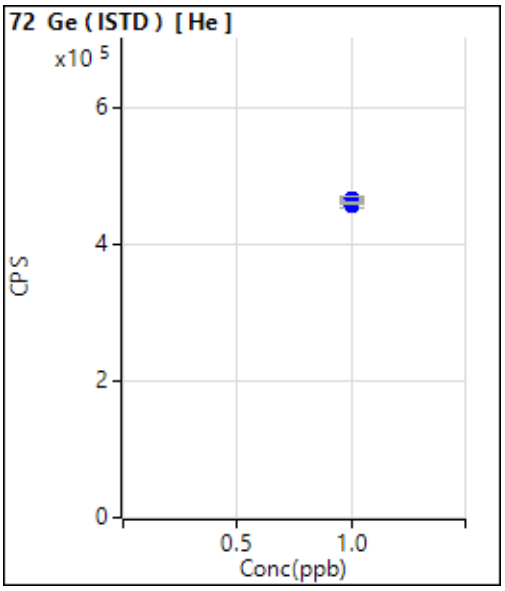
Weight: <None>
Min Conc: <None>



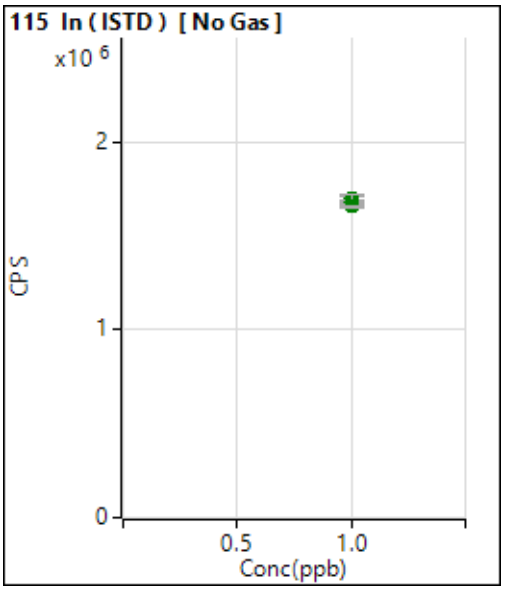
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		815144.87		A	2.4	
2	☐	1.000		809344.41		A	2.1	
3	☐	1.000		815260.28		A	0.9	
4	☐	1.000		803487.31		A	1.7	
5	☐	1.000		819312.87		A	3.4	
6	☐	1.000		797992.96		A	3.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1408872.38		A	0.2	
2	☐	1.000		1417753.73		A	0.7	
3	☐	1.000		1429994.46		A	0.8	
4	☐	1.000		1418258.52		A	1.1	
5	☐	1.000		1421543.00		A	1.3	
6	☐	1.000		1373592.43		A	0.7	

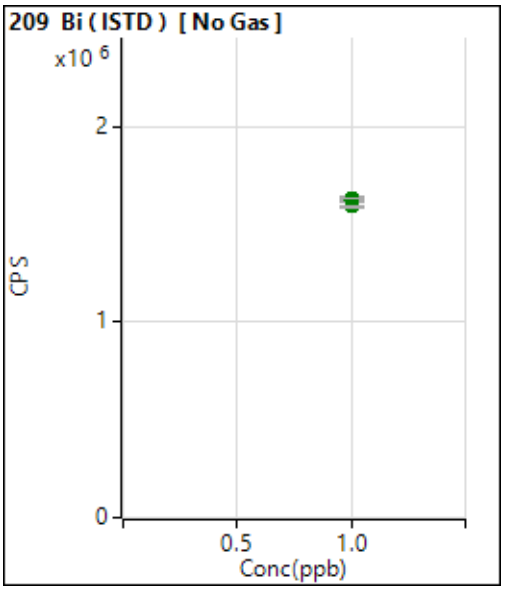


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		456267.27		P	1.1	
2	☐	1.000		463609.48		P	0.4	
3	☐	1.000		460006.44		P	0.2	
4	☐	1.000		463164.94		P	1.0	
5	☐	1.000		466519.77		P	0.8	
6	☐	1.000		458970.39		P	0.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1671941.00		A	0.5	
2	☐	1.000		1666469.60		A	0.6	
3	☐	1.000		1699936.61		A	0.8	
4	☐	1.000		1681940.19		A	1.5	
5	☐	1.000		1696924.17		A	3.0	
6	☐	1.000		1655831.27		A	0.9	

Calibration for 250_ICV.d



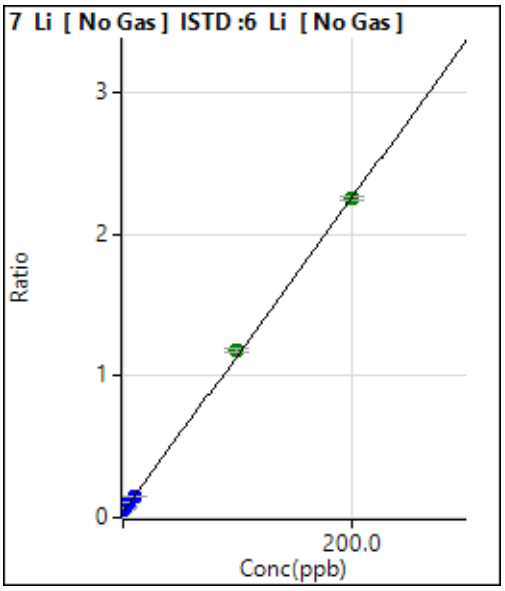
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1627139.04		A	0.8	
2	☐	1.000		1634344.40		A	0.9	
3	☐	1.000		1626259.35		A	1.2	
4	☐	1.000		1633500.97		A	1.8	
5	☐	1.000		1625904.67		A	0.9	
6	☐	1.000		1593996.69		A	0.6	

Calibration for 180_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	173CALB.d	CAL BLK	07/19/2022 19:42:23
2	174CALS.d	2/10/200	07/19/2022 19:44:29
3	175CALS.d	5/25/500	07/19/2022 19:46:35
4	176CALS.d	10/50/100	07/19/2022 19:48:41
5	177CALS.d	100/500/10K	07/19/2022 19:50:47
6	178CALS.d	200/1000/20K	07/19/2022 19:52:49

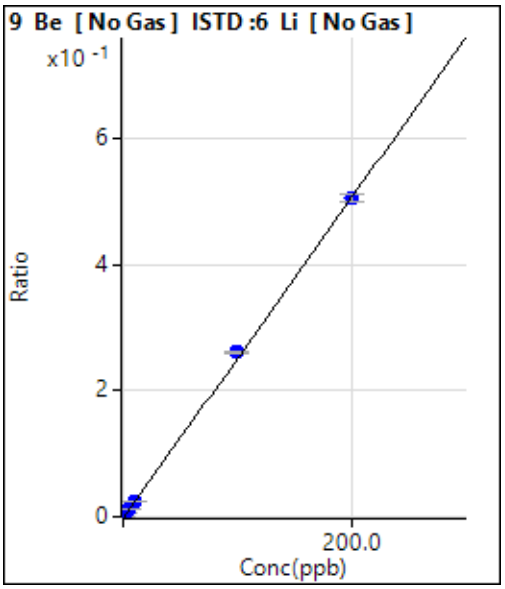
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	42473.94	0.0516	P	0.8	
2	☐	2.000	2.007	60119.31	0.0738	P	2.9	0.3
3	☐	5.000	4.826	84682.83	0.1051	P	1.9	-3.5
4	☐	10.000	9.316	125475.61	0.1549	P	0.6	-6.8
5	☐	100.000	102.400	935293.74	1.1872	A	1.9	2.4
6	☐	200.000	198.839	1737046.02	2.2568	A	1.5	-0.6

y = 0.0111 * x + 0.0516
R = 0.9999
DL = 0.1096 ppb
BEC = 4.651 ppb

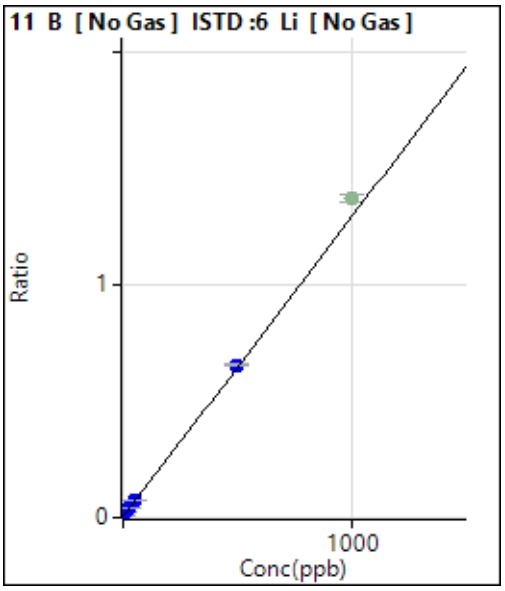
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18.33	0.0000	P	15.7	
2	☐	2.000	1.929	4020.61	0.0049	P	2.7	-3.6
3	☐	5.000	4.822	9916.88	0.0123	P	2.6	-3.6
4	☐	10.000	9.668	19975.93	0.0247	P	0.6	-3.3
5	☐	100.000	102.460	205670.52	0.2611	P	1.6	2.5
6	☐	200.000	198.792	389818.64	0.5066	P	2.3	-0.6

y = 0.0025 * x + 2.2261E-005
R = 0.9999
DL = 0.004106 ppb
BEC = 0.008736 ppb

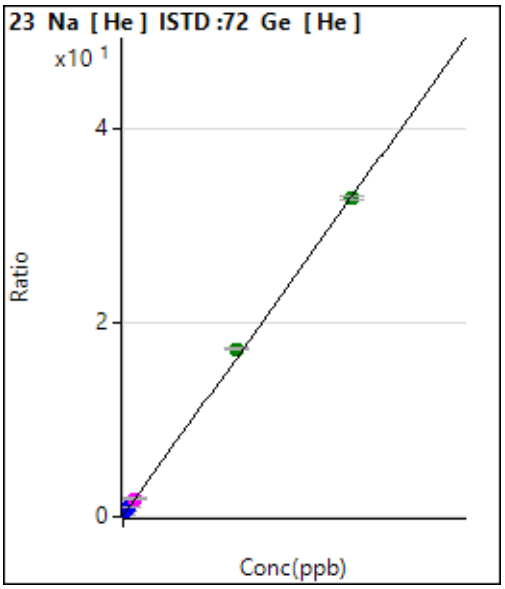
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8554.34	0.0104	P	1.3	
2	☐	10.000	9.134	18063.31	0.0222	P	0.9	-8.7
3	☐	25.000	23.923	33255.97	0.0413	P	1.2	-4.3
4	☐	50.000	47.709	58315.47	0.0720	P	0.5	-4.6
5	☐	500.000	500.300	516987.22	0.6563	P	0.7	0.1
6	☑	1000.000		1057851.83	1.3747	A	2.5	

y = 0.0013 * x + 0.0104
R = 1.0000
DL = 0.3052 ppb
BEC = 8.045 ppb

Weight: <None>
Min Conc: <None>

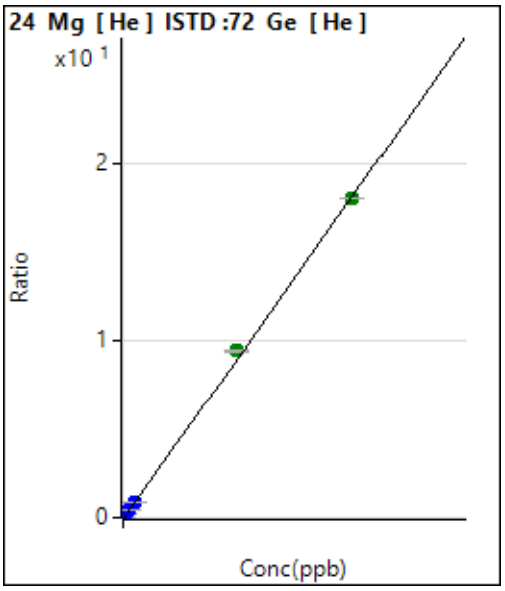


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	109366.02	0.2557	P	1.5	
2	☐	200.000	192.418	245596.27	0.5722	P	0.5	-3.8
3	☐	500.000	477.420	443648.69	1.0409	P	0.4	-4.5
4	☐	1000.000	986.580	801852.04	1.8784	M	5.3	-1.3
5	☐	10000.00	10356.22	7351344.68	17.2898	A	1.1	3.6
6	☐	20000.00	19823.19	13859601.0	32.8613	A	1.7	-0.9

y = 0.0016 * x + 0.2557
R = 0.9998
DL = 7.139 ppb
BEC = 155.4 ppb

Weight: <None>
Min Conc: <None>

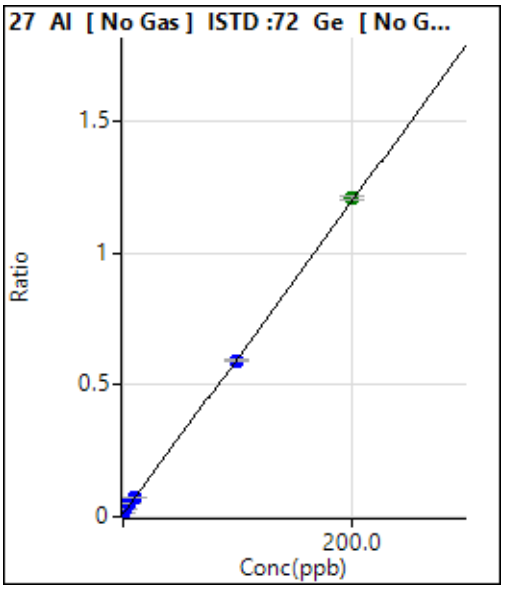
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	256.68	0.0006	P	12.9	
2	☐	200.000	199.530	78225.71	0.1822	P	1.7	-0.2
3	☐	500.000	488.542	189791.67	0.4453	P	0.2	-2.3
4	☐	1000.000	980.218	381094.81	0.8929	P	0.9	-2.0
5	☐	10000.00	10336.49	4000796.81	9.4097	A	1.6	3.4
6	☐	20000.00	19833.03	7615284.89	18.0543	A	0.6	-0.8

y = 9.1028E-004 * x + 6.0020E-004
R = 0.9998
DL = 0.2542 ppb
BEC = 0.6594 ppb

Weight: <None>
Min Conc: <None>

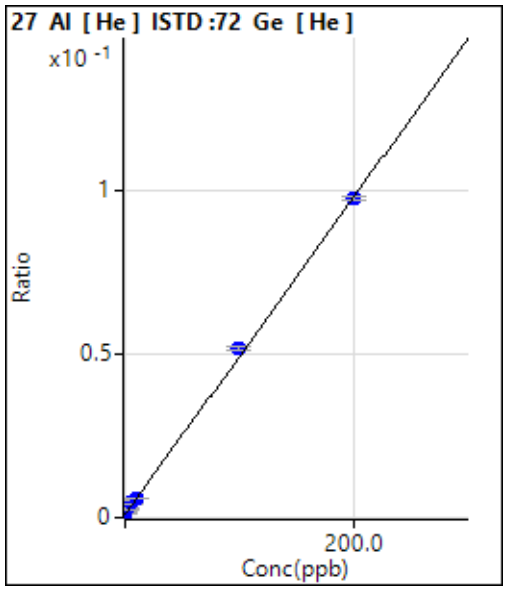


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21848.46	0.0161	P	4.0	
2	☐	2.000	1.867	36628.59	0.0271	P	1.1	-6.7
3	☐	5.000	5.441	65383.58	0.0483	P	1.7	8.8
4	☐	10.000	9.232	94623.62	0.0708	P	0.1	-7.7
5	☐	100.000	97.336	787213.04	0.5933	P	0.5	-2.7
6	☐	200.000	201.360	1579516.80	1.2102	A	1.6	0.7

y = 0.0059 * x + 0.0161
R = 0.9999
DL = 0.3283 ppb
BEC = 2.708 ppb

Weight: <None>
Min Conc: <None>

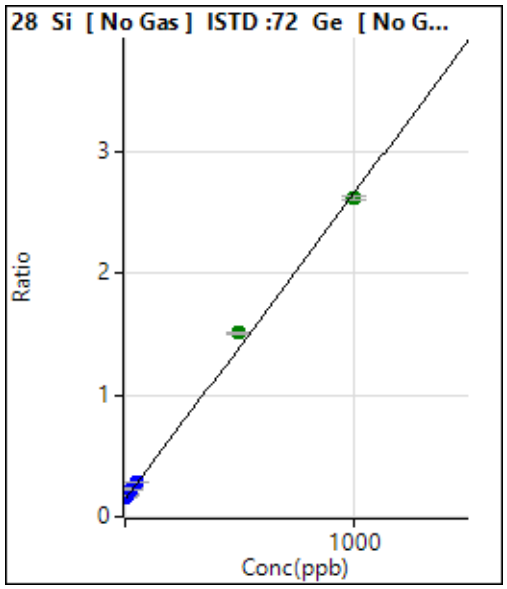
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610.02	0.0014	P	14.7	
2	☐	2.000	2.571	1146.74	0.0027	P	4.7	28.5
3	☐	5.000	6.560	1960.36	0.0046	P	19.2	31.2
4	☐	10.000	9.233	2516.95	0.0059	P	5.8	-7.7
5	☐	100.000	103.207	21857.46	0.0514	P	2.3	3.2
6	☐	200.000	198.390	41127.65	0.0975	P	0.8	-0.8

y = 4.8429E-004 * x + 0.0014
R = 0.9998
DL = 1.295 ppb
BEC = 2.944 ppb

Weight: <None>
Min Conc: <None>

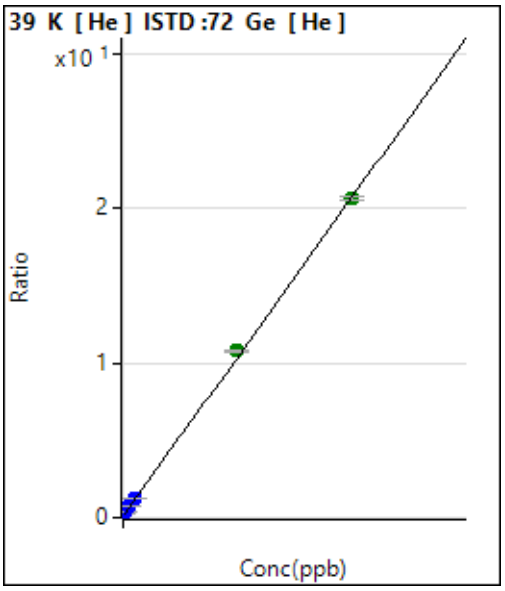


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	210874.53	0.1550	P	2.2	
2	☐	10.000	10.281	244093.50	0.1808	P	1.4	2.8
3	☐	25.000	28.106	305153.17	0.2256	P	2.9	12.4
4	☐	50.000	52.799	384312.83	0.2876	P	1.7	5.6
5	☐	500.000	538.279	1998792.89	1.5064	A	0.8	7.7
6	☐	1000.000	980.640	3415753.80	2.6169	A	1.3	-1.9

y = 0.0025 * x + 0.1550
R = 0.9990
DL = 4.143 ppb
BEC = 61.75 ppb

Weight: <None>
Min Conc: <None>

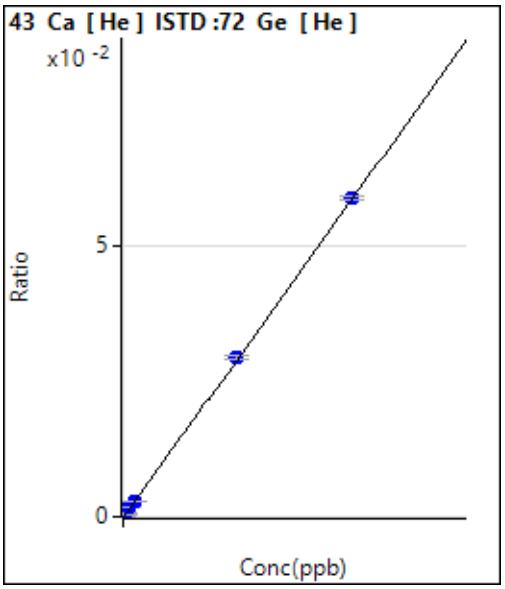
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	87331.88	0.2042	P	1.7	
2	☐	200.000	190.632	171858.75	0.4004	P	1.3	-4.7
3	☐	500.000	482.825	298834.26	0.7012	P	0.6	-3.4
4	☐	1000.000	962.307	509902.27	1.1947	P	1.8	-3.8
5	☐	10000.00	10298.11	4593966.08	10.8047	A	1.4	3.0
6	☐	20000.00	19853.35	8705619.87	20.6405	A	1.4	-0.7

y = 0.0010 * x + 0.2042
R = 0.9998
DL = 10.41 ppb
BEC = 198.3 ppb

Weight: <None>
Min Conc: <None>

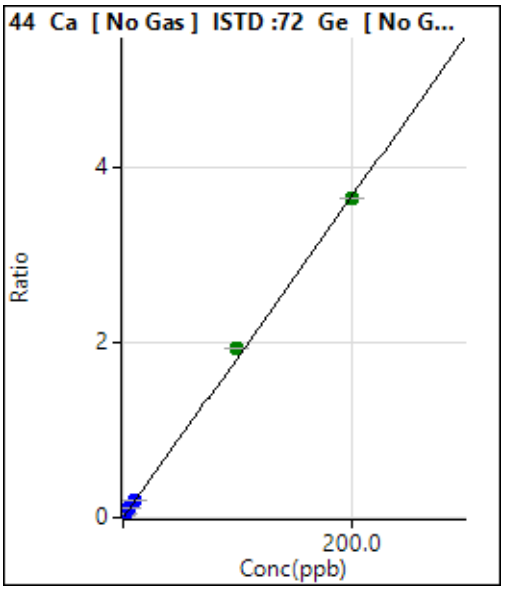


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	66.3	
2	☐	200.000	157.785	240.01	0.0006	P	24.5	-21.1
3	☐	500.000	575.762	763.37	0.0018	P	10.1	15.2
4	☐	1000.000	932.810	1213.41	0.0028	P	5.7	-6.7
5	☐	10000.00	9973.947	12535.93	0.0295	P	2.7	-0.3
6	☐	20000.00	20014.91	24919.48	0.0591	P	1.4	0.1

y = 2.9468E-006 * x + 9.3651E-005
R = 1.0000
DL = 63.25 ppb
BEC = 31.78 ppb

Weight: <None>
Min Conc: <None>

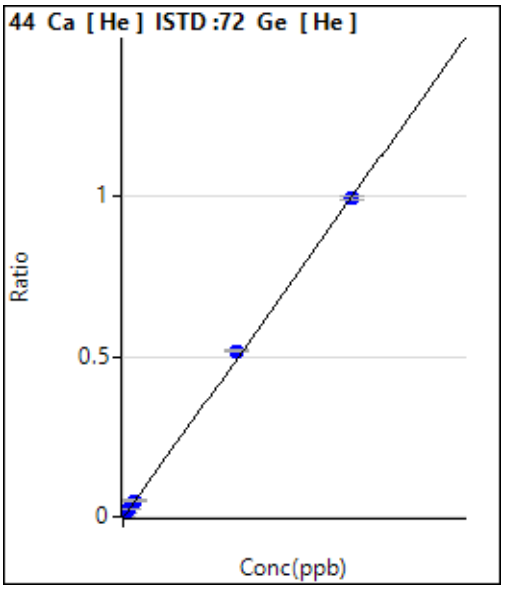
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21941.04	0.0161	P	2.5	
2	☐	2.000	1.980	70801.44	0.0525	P	2.3	-1.0
3	☐	5.000	5.028	146614.56	0.1084	P	3.0	0.6
4	☐	10.000	9.919	264738.93	0.1981	P	0.7	-0.8
5	☐	100.000	104.149	2556946.11	1.9270	A	0.3	4.1
6	☐	200.000	197.929	4761101.08	3.6477	A	0.4	-1.0

y = 0.0183 * x + 0.0161
R = 0.9997
DL = 0.06482 ppb
BEC = 0.8791 ppb

Weight: <None>
Min Conc: <None>

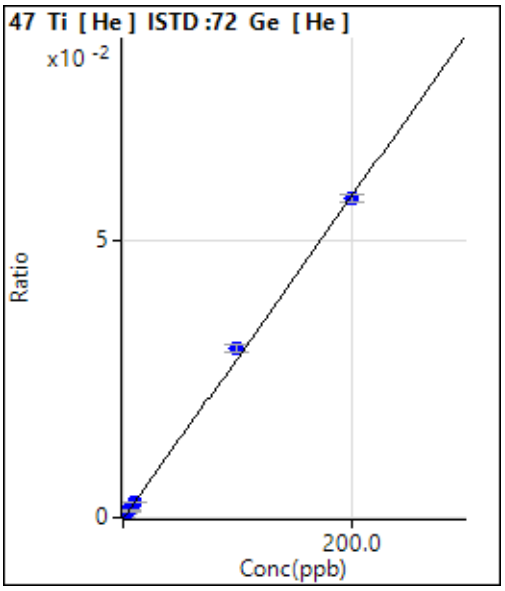


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	486.69	0.0011	P	10.9	
2	☐	200.000	203.128	4850.94	0.0113	P	7.3	1.6
3	☐	500.000	492.852	10997.91	0.0258	P	1.3	-1.4
4	☐	1000.000	993.640	21710.78	0.0509	P	2.1	-0.6
5	☐	10000.00	10302.94	219719.66	0.5168	P	1.5	3.0
6	☐	20000.00	19848.99	419492.78	0.9945	P	0.8	-0.8

y = 5.0048E-005 * x + 0.0011
R = 0.9998
DL = 7.45 ppb
BEC = 22.74 ppb

Weight: <None>
Min Conc: <None>

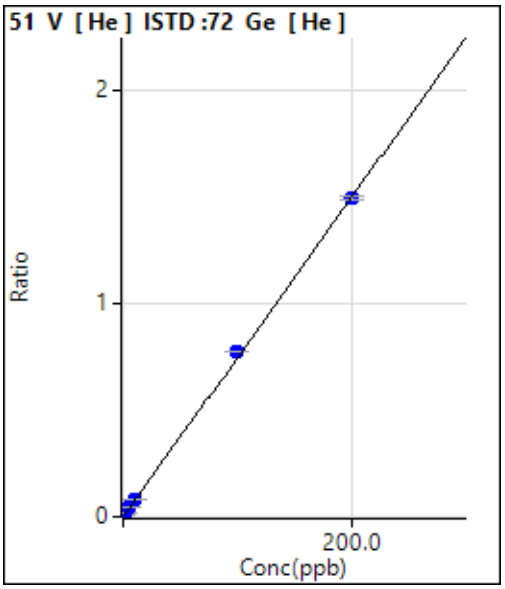
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	69.0	
2	☐	2.000	2.072	276.68	0.0006	P	26.9	3.6
3	☐	5.000	4.394	563.35	0.0013	P	22.2	-12.1
4	☐	10.000	9.499	1200.07	0.0028	P	0.9	-5.0
5	☐	100.000	104.562	12993.02	0.0306	P	4.9	4.6
6	☐	200.000	197.759	24368.64	0.0578	P	2.1	-1.1

y = 2.9192E-004 * x + 3.8911E-005
R = 0.9996
DL = 0.2758 ppb
BEC = 0.1333 ppb

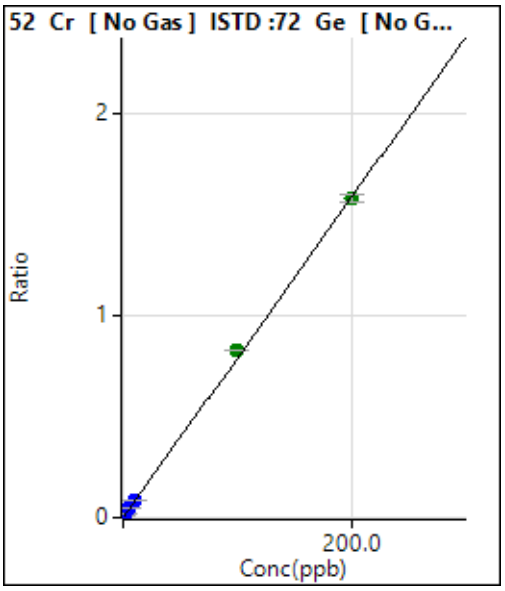
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2791.41	0.0065	P	3.5	
2	☐	2.000	1.904	8914.04	0.0208	P	1.6	-4.8
3	☐	5.000	4.878	18334.51	0.0430	P	1.1	-2.4
4	☐	10.000	9.727	33843.82	0.0793	P	1.4	-2.7
5	☐	100.000	102.879	330048.23	0.7762	P	0.3	2.9
6	☐	200.000	198.578	629379.69	1.4922	P	1.2	-0.7

y = 0.0075 * x + 0.0065
R = 0.9998
DL = 0.09221 ppb
BEC = 0.8721 ppb

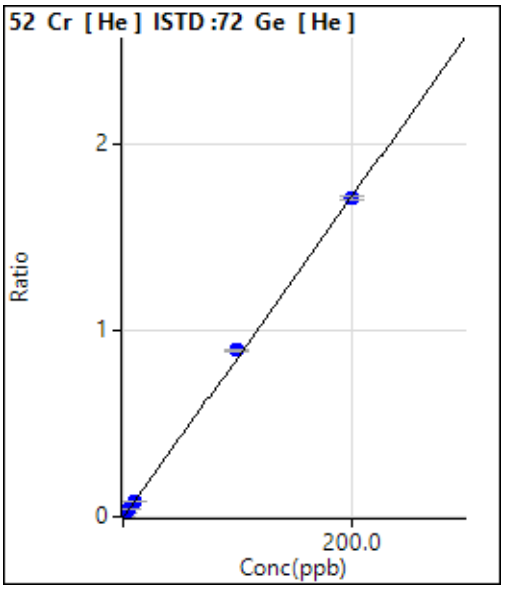
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10314.06	0.0076	P	2.6	
2	☐	2.000	1.890	30497.63	0.0226	P	2.4	-5.5
3	☐	5.000	4.647	60188.73	0.0445	P	3.4	-7.1
4	☐	10.000	9.398	109888.53	0.0822	P	1.0	-6.0
5	☐	100.000	103.536	1101350.56	0.8300	A	1.0	3.5
6	☐	200.000	198.272	2065652.47	1.5826	A	2.7	-0.9

y = 0.0079 * x + 0.0076
R = 0.9998
DL = 0.07463 ppb
BEC = 0.9546 ppb

Weight: <None>
Min Conc: <None>

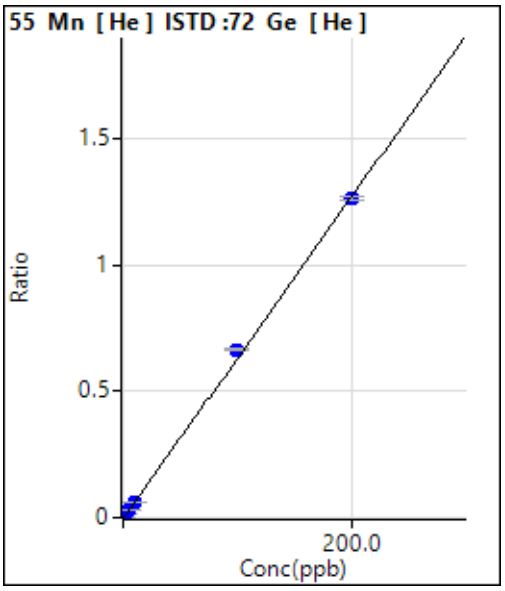


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0027	P	3.3	
2	☐	2.000	1.956	8406.03	0.0196	P	0.3	-2.2
3	☐	5.000	4.964	19387.35	0.0455	P	1.8	-0.7
4	☐	10.000	9.788	37147.34	0.0870	P	1.1	-2.1
5	☐	100.000	103.481	380102.90	0.8939	P	0.6	3.5
6	☐	200.000	198.271	721344.73	1.7103	P	1.4	-0.9

y = 0.0086 * x + 0.0027
R = 0.9998
DL = 0.03116 ppb
BEC = 0.3176 ppb

Weight: <None>
Min Conc: <None>

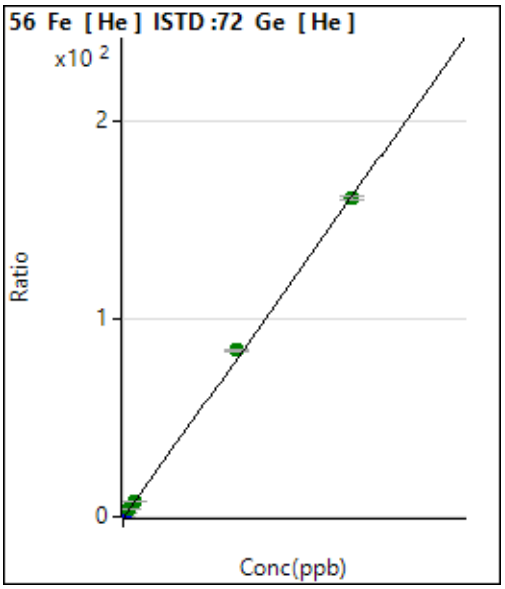
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	420.01	0.0010	P	15.3	
2	☐	2.000	2.044	6024.76	0.0140	P	3.4	2.2
3	☐	5.000	5.017	14074.09	0.0330	P	1.7	0.3
4	☐	10.000	9.882	27354.34	0.0641	P	1.5	-1.2
5	☐	100.000	104.043	282937.08	0.6654	P	0.8	4.0
6	☐	200.000	197.984	533699.03	1.2654	P	1.3	-1.0

y = 0.0064 * x + 9.8228E-004
R = 0.9997
DL = 0.07077 ppb
BEC = 0.1538 ppb

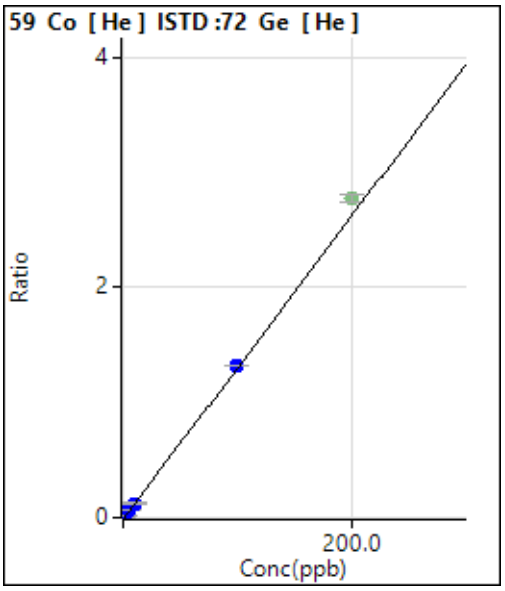
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11054.68	0.0258	P	1.9	
2	☐	200.000	193.848	686832.73	1.6001	P	0.8	-3.1
3	☐	500.000	520.191	1811651.01	4.2505	A	1.3	4.0
4	☐	1000.000	1004.511	3492905.68	8.1838	A	1.1	0.5
5	☐	10000.00	10347.18	35741262.8	84.0591	A	0.6	3.5
6	☐	20000.00	19825.73	67919897.3	161.037	A	1.6	-0.9

y = 0.0081 * x + 0.0258
R = 0.9998
DL = 0.1838 ppb
BEC = 3.182 ppb

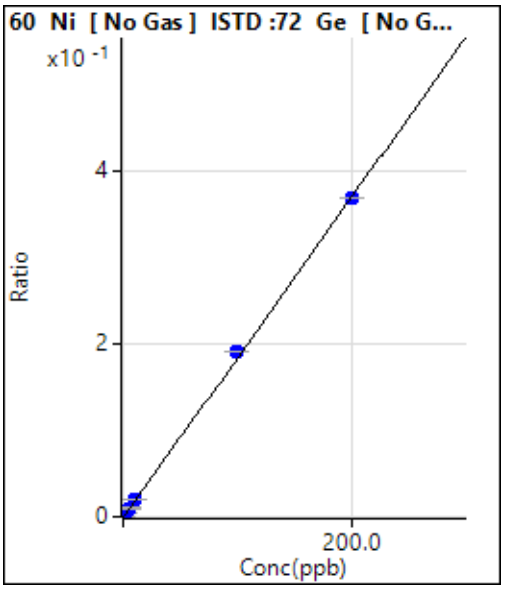
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.8	
2	☐	2.000	1.878	10627.62	0.0248	P	2.1	-6.1
3	☐	5.000	4.834	27137.30	0.0637	P	1.3	-3.3
4	☐	10.000	9.496	53367.86	0.1250	P	1.2	-5.0
5	☐	100.000	100.061	560062.95	1.3172	P	0.5	0.1
6	☑	200.000		1169340.37	2.7727	A	2.5	

y = 0.0132 * x + 3.8987E-005
R = 1.0000
DL = 0.003096 ppb
BEC = 0.002962 ppb

Weight: <None>
Min Conc: <None>

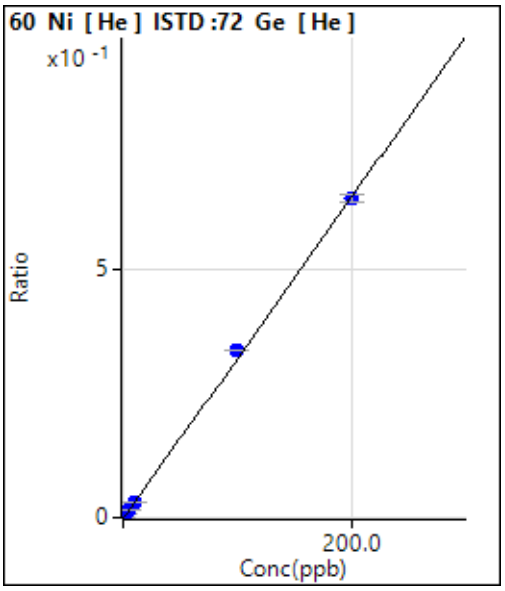


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	863.38	0.0006	P	5.0	
2	☐	2.000	1.901	5621.26	0.0042	P	7.2	-5.0
3	☐	5.000	4.963	13333.39	0.0099	P	4.2	-0.7
4	☐	10.000	10.118	25971.82	0.0194	P	3.6	1.2
5	☐	100.000	103.063	254971.40	0.1922	P	0.2	3.1
6	☐	200.000	198.465	482215.37	0.3694	P	0.3	-0.8

y = 0.0019 * x + 6.3465E-004
R = 0.9998
DL = 0.05081 ppb
BEC = 0.3415 ppb

Weight: <None>
Min Conc: <None>

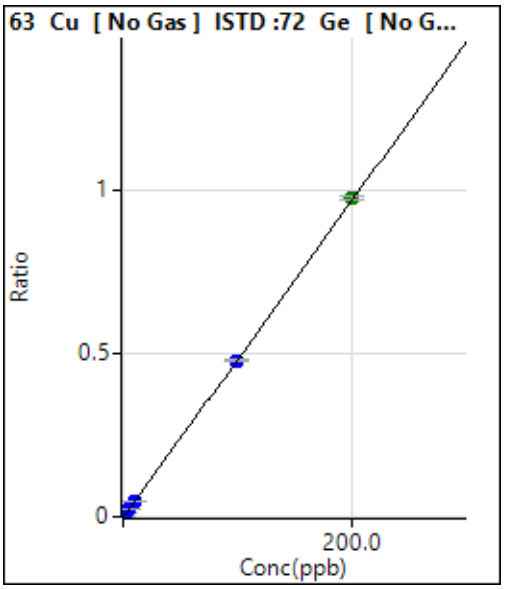
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0006	P	6.8	
2	☐	2.000	1.938	2933.70	0.0068	P	9.1	-3.1
3	☐	5.000	4.875	6968.55	0.0164	P	2.6	-2.5
4	☐	10.000	9.642	13573.70	0.0318	P	3.2	-3.6
5	☐	100.000	103.648	143054.52	0.3364	P	0.7	3.6
6	☐	200.000	198.197	271130.07	0.6429	P	1.8	-0.9

y = 0.0032 * x + 5.5335E-004
R = 0.9998
DL = 0.03473 ppb
BEC = 0.1707 ppb

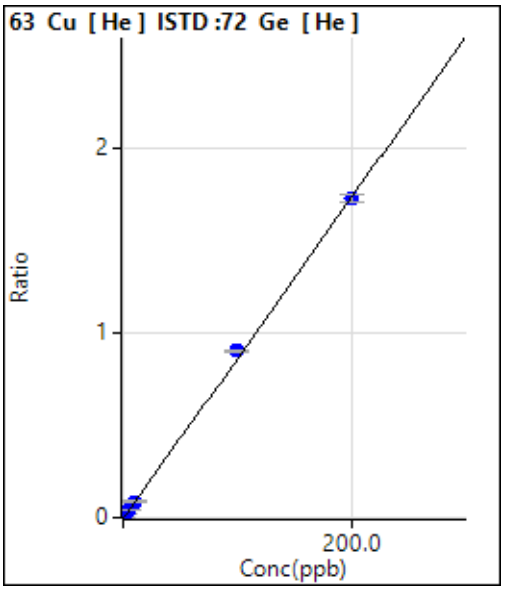
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1933.51	0.0014	P	9.9	
2	☐	2.000	1.847	13984.12	0.0104	P	2.3	-7.7
3	☐	5.000	4.577	31894.35	0.0236	P	2.0	-8.5
4	☐	10.000	9.415	62798.40	0.0470	P	0.3	-5.8
5	☐	100.000	98.311	633266.76	0.4773	P	0.5	-1.7
6	☐	200.000	200.886	1270962.43	0.9737	A	1.2	0.4

y = 0.0048 * x + 0.0014
R = 1.0000
DL = 0.08686 ppb
BEC = 0.2935 ppb

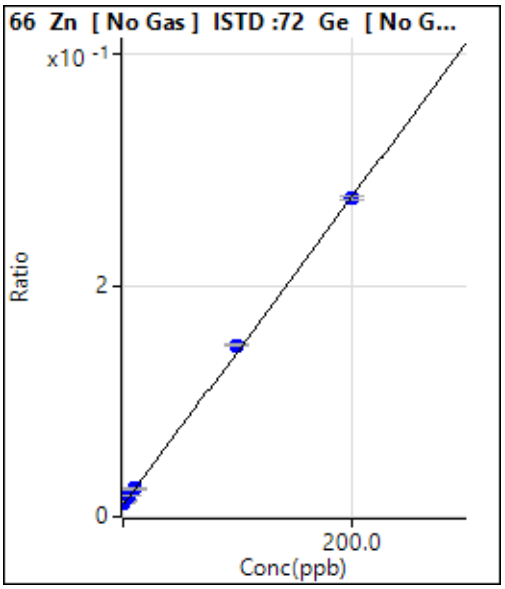
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	870.05	0.0020	P	12.2	
2	☐	2.000	1.953	8189.28	0.0191	P	2.7	-2.4
3	☐	5.000	4.819	18789.88	0.0441	P	1.2	-3.6
4	☐	10.000	9.877	37659.20	0.0882	P	2.8	-1.2
5	☐	100.000	103.339	384291.74	0.9038	P	1.1	3.3
6	☐	200.000	198.342	730835.04	1.7329	P	2.3	-0.8

y = 0.0087 * x + 0.0020
R = 0.9998
DL = 0.0855 ppb
BEC = 0.2331 ppb

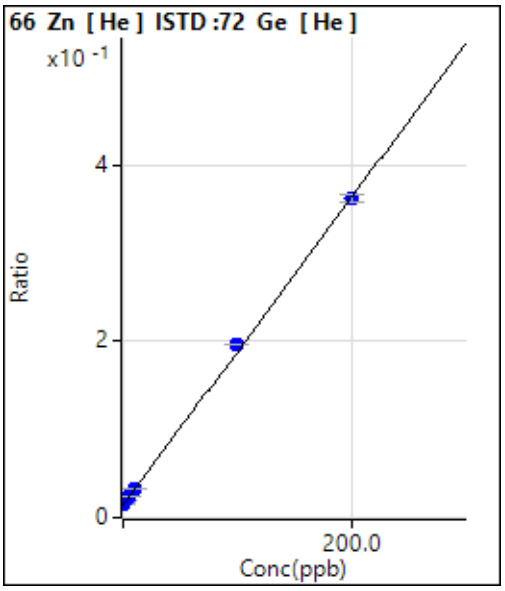
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15555.81	0.0114	P	0.6	
2	☐	2.000	2.062	19130.45	0.0142	P	3.5	3.1
3	☐	5.000	4.915	24308.69	0.0180	P	4.2	-1.7
4	☐	10.000	9.623	32385.60	0.0242	P	1.7	-3.8
5	☐	100.000	102.983	196973.34	0.1484	P	0.2	3.0
6	☐	200.000	198.529	359681.86	0.2756	P	0.9	-0.7

y = 0.0013 * x + 0.0114
R = 0.9998
DL = 0.1501 ppb
BEC = 8.594 ppb

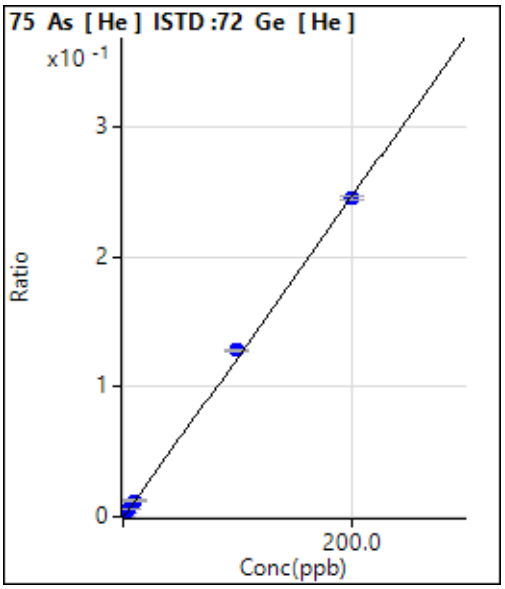
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6881.86	0.0161	P	3.8	
2	☐	2.000	1.761	8225.95	0.0192	P	0.9	-12.0
3	☐	5.000	4.604	10284.07	0.0241	P	2.7	-7.9
4	☐	10.000	9.781	14160.95	0.0332	P	1.3	-2.2
5	☐	100.000	103.403	83670.58	0.1968	P	0.8	3.4
6	☐	200.000	198.322	152941.42	0.3627	P	2.8	-0.8

y = 0.0017 * x + 0.0161
R = 0.9998
DL = 1.042 ppb
BEC = 9.206 ppb

Weight: <None>
Min Conc: <None>

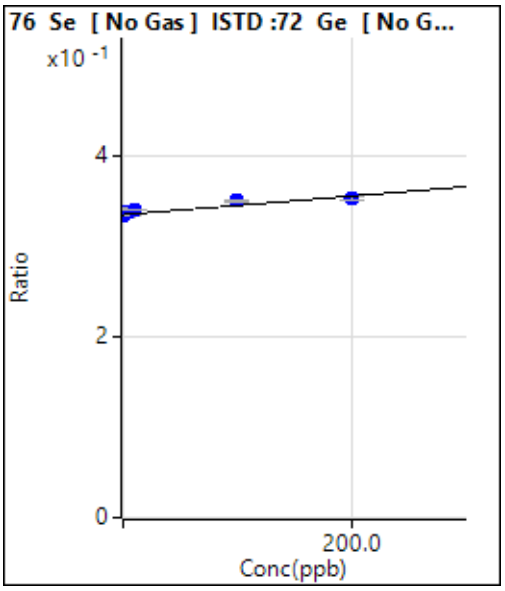


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	14.4	
2	☐	2.000	2.092	1226.73	0.0029	P	4.3	4.6
3	☐	5.000	4.778	2633.60	0.0062	P	1.6	-4.4
4	☐	10.000	9.861	5319.96	0.0125	P	1.9	-1.4
5	☐	100.000	103.585	54579.70	0.1284	P	1.3	3.6
6	☐	200.000	198.219	103502.20	0.2454	P	1.3	-0.9

y = 0.0012 * x + 2.7011E-004
R = 0.9998
DL = 0.09423 ppb
BEC = 0.2184 ppb

Weight: <None>
Min Conc: <None>

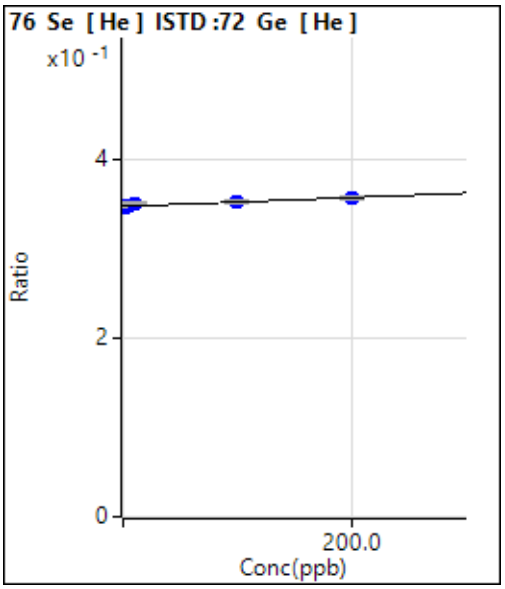
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	456499.10	0.3356	P	1.9	
2	☐	2.000	22.173	456071.89	0.3379	P	1.7	1008.7
3	☐	5.000	23.329	457260.05	0.3380	P	2.6	366.6
4	☐	10.000	50.966	455524.92	0.3409	P	0.5	409.7
5	☐	100.000	146.009	465412.68	0.3508	P	0.7	46.0
6	☐	200.000	174.287	461661.64	0.3537	P	0.9	-12.9

y = 1.0393E-004 * x + 0.3356
R = 0.9473
DL = 186.2 ppb
BEC = 3229 ppb

Weight: <None>
Min Conc: <None>

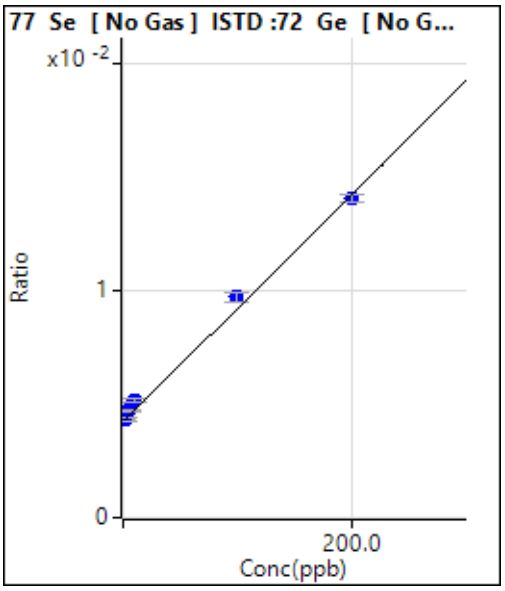


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	148565.04	0.3473	P	0.9	
2	☐	2.000	-16.642	148705.62	0.3465	P	1.9	-932.1
3	☐	5.000	35.723	148793.77	0.3491	P	1.2	614.5
4	☐	10.000	74.649	149835.17	0.3511	P	0.5	646.5
5	☐	100.000	112.739	150081.21	0.3530	P	1.1	12.7
6	☐	200.000	189.817	150523.03	0.3569	P	0.9	-5.1

y = 5.0382E-005 * x + 0.3473
R = 0.9272
DL = 192 ppb
BEC = 6893 ppb

Weight: <None>
Min Conc: <None>

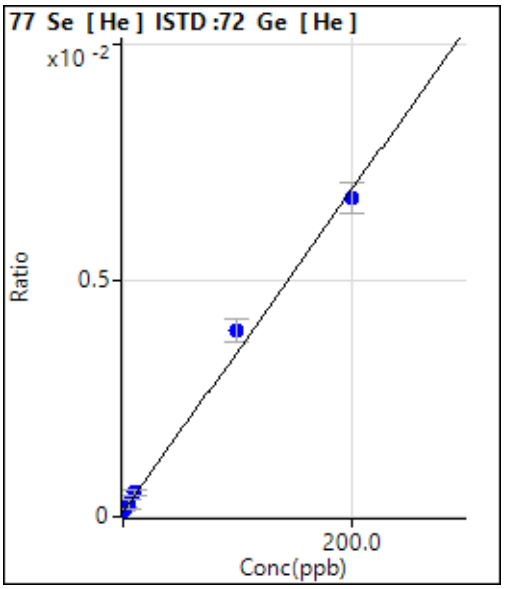
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5868.04	0.0043	P	1.3	
2	☐	2.000	0.383	5848.03	0.0043	P	2.6	-80.9
3	☐	5.000	7.892	6368.29	0.0047	P	3.1	57.8
4	☐	10.000	17.406	6925.21	0.0052	P	2.5	74.1
5	☐	100.000	108.537	12913.07	0.0097	P	4.2	8.5
6	☐	200.000	195.305	18356.08	0.0141	P	2.0	-2.3

y = 4.9921E-005 * x + 0.0043
R = 0.9981
DL = 3.441 ppb
BEC = 86.4 ppb

Weight: <None>
Min Conc: <None>

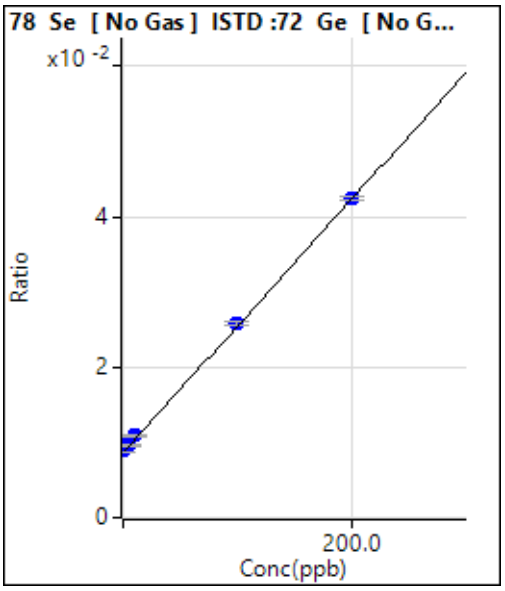


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	27.3	
2	☐	2.000	1.350	76.67	0.0002	P	7.0	-32.5
3	☐	5.000	4.353	120.00	0.0003	P	73.7	-12.9
4	☐	10.000	11.018	216.67	0.0005	P	24.1	10.2
5	☐	100.000	111.885	1676.80	0.0039	P	11.9	11.9
6	☐	200.000	194.029	2843.68	0.0067	P	10.2	-3.0

y = 3.4079E-005 * x + 1.3254E-004
R = 0.9974
DL = 3.182 ppb
BEC = 3.889 ppb

Weight: <None>
Min Conc: <None>

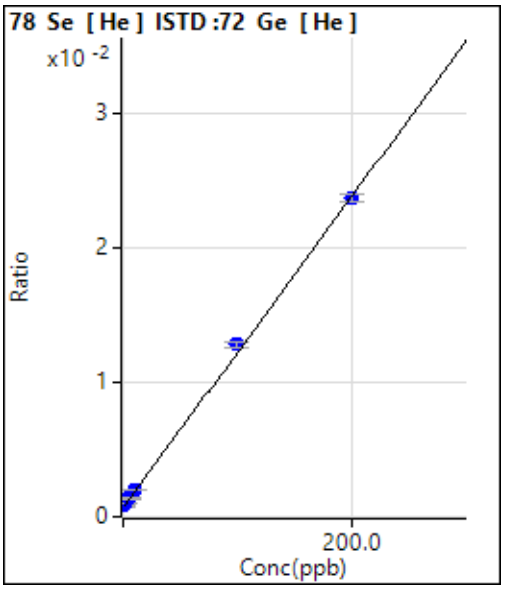
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12062.28	0.0089	P	5.0	
2	☐	2.000	5.664	13260.09	0.0098	P	0.3	183.2
3	☐	5.000	4.696	13069.88	0.0097	P	1.5	-6.1
4	☐	10.000	12.289	14614.76	0.0109	P	2.3	22.9
5	☐	100.000	100.772	34277.24	0.0258	P	1.2	0.8
6	☐	200.000	199.470	55404.12	0.0424	P	1.0	-0.3

y = 1.6834E-004 * x + 0.0089
R = 0.9998
DL = 7.943 ppb
BEC = 52.68 ppb

Weight: <None>
Min Conc: <None>

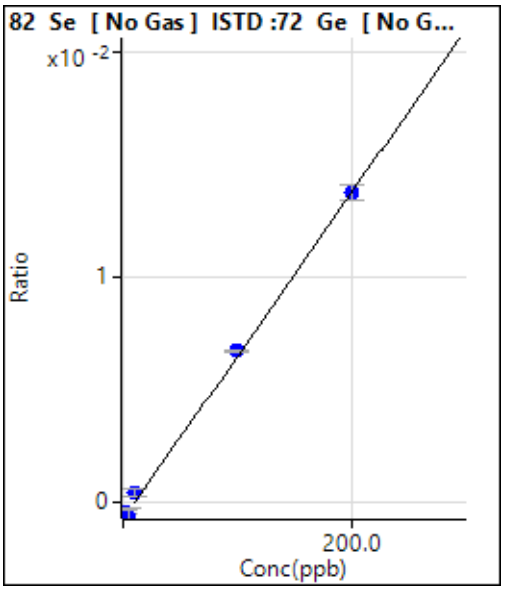


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.67	0.0008	P	13.6	
2	☐	2.000	2.016	442.01	0.0010	P	6.8	0.8
3	☐	5.000	5.070	589.35	0.0014	P	5.5	1.4
4	☐	10.000	10.245	846.03	0.0020	P	2.8	2.4
5	☐	100.000	103.806	5446.45	0.0128	P	3.6	3.8
6	☐	200.000	198.083	10005.73	0.0237	P	2.2	-1.0

y = 1.1575E-004 * x + 7.9630E-004
R = 0.9997
DL = 2.815 ppb
BEC = 6.88 ppb

Weight: <None>
Min Conc: <None>

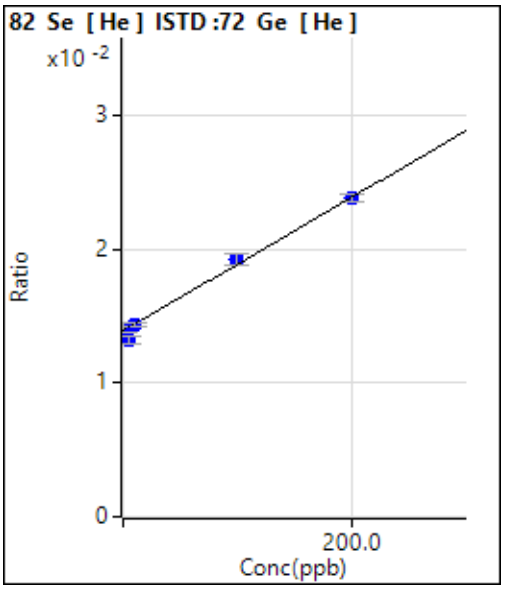
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-959.88	-0.0007	P	-101.	
2	☐	2.000	3.105	-641.01	-0.0005	P	-40.1	55.2
3	☐	5.000	0.564	-905.95	-0.0007	P	-110.	-88.7
4	☐	10.000	15.248	542.69	0.0004	P	92.4	52.5
5	☐	100.000	102.295	8914.76	0.0067	P	1.4	2.3
6	☐	200.000	198.690	17897.37	0.0137	P	5.0	-0.7

y = 7.2540E-005 * x - 7.0195E-004
R = 0.9992
DL = 29.48 ppb
BEC = -9.677 ppb

Weight: <None>
Min Conc: <None>

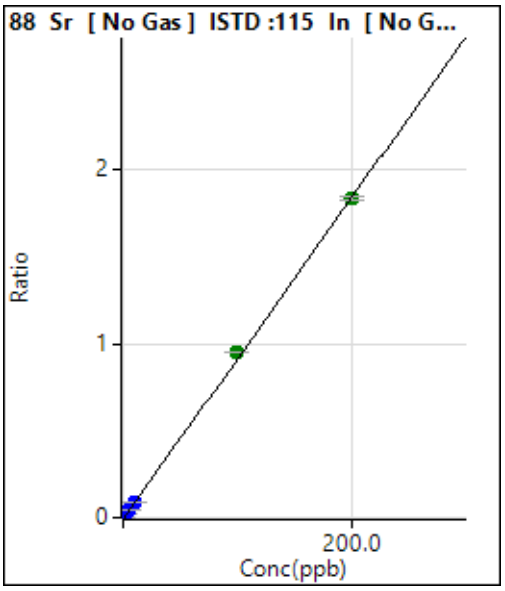


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5984.77	0.0140	P	7.3	
2	☐	2.000	-12.539	5737.98	0.0134	P	5.6	-726.9
3	☐	5.000	-15.133	5641.28	0.0132	P	5.1	-402.7
4	☐	10.000	7.348	6128.18	0.0144	P	1.6	-26.5
5	☐	100.000	105.961	8196.01	0.0193	P	4.3	6.0
6	☐	200.000	197.801	10063.90	0.0239	P	2.1	-1.1

y = 4.9906E-005 * x + 0.0140
R = 0.9949
DL = 61.28 ppb
BEC = 280.3 ppb

Weight: <None>
Min Conc: <None>

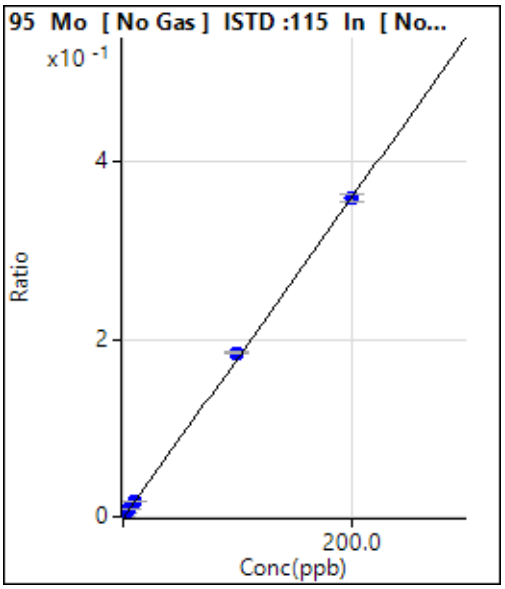
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	770.04	0.0005	P	14.5	
2	☐	2.000	1.855	29506.13	0.0176	P	1.8	-7.3
3	☐	5.000	5.004	78358.81	0.0467	P	1.1	0.1
4	☐	10.000	9.315	143873.55	0.0866	P	0.4	-6.9
5	☐	100.000	102.950	1582968.21	0.9523	A	0.8	3.0
6	☐	200.000	198.560	3011111.73	1.8363	A	1.4	-0.7

y = 0.0092 * x + 4.5957E-004
R = 0.9998
DL = 0.02162 ppb
BEC = 0.04971 ppb

Weight: <None>
Min Conc: <None>

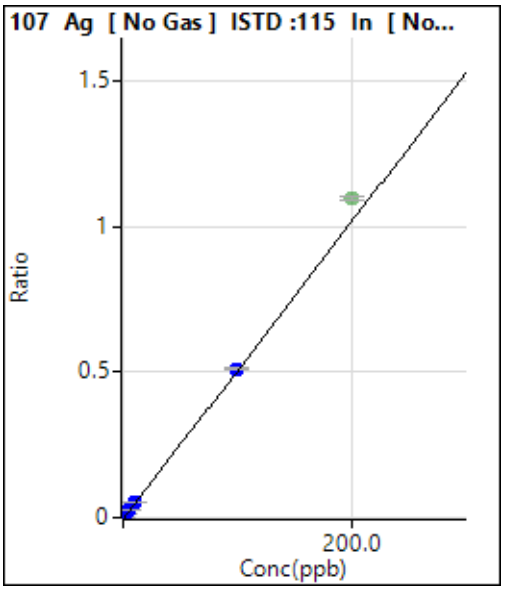


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	93.9	
2	☐	2.000	1.876	5714.68	0.0034	P	9.2	-6.2
3	☐	5.000	4.638	14101.07	0.0084	P	5.1	-7.2
4	☐	10.000	9.703	29202.28	0.0176	P	1.8	-3.0
5	☐	100.000	102.383	307985.10	0.1853	P	1.2	2.4
6	☐	200.000	198.834	590027.33	0.3598	P	1.8	-0.6

y = 0.0018 * x + 1.5875E-005
R = 0.9999
DL = 0.0247 ppb
BEC = 0.008772 ppb

Weight: <None>
Min Conc: <None>

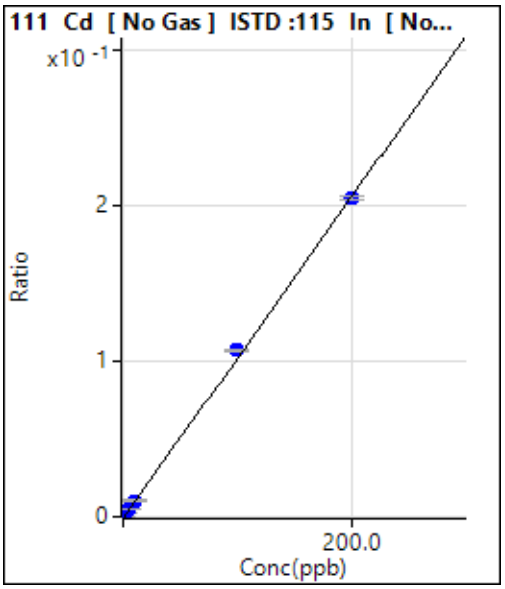
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0002	P	25.5	
2	☐	2.000	1.943	17027.82	0.0102	P	1.5	-2.8
3	☐	5.000	4.725	40880.08	0.0244	P	1.4	-5.5
4	☐	10.000	9.731	82995.82	0.0499	P	1.4	-2.7
5	☐	100.000	100.042	849931.50	0.5114	P	1.2	0.0
6	☑	200.000		1798850.34	1.0970	A	1.7	

y = 0.0051 * x + 2.3325E-004
R = 1.0000
DL = 0.03492 ppb
BEC = 0.04566 ppb

Weight: <None>
Min Conc: <None>

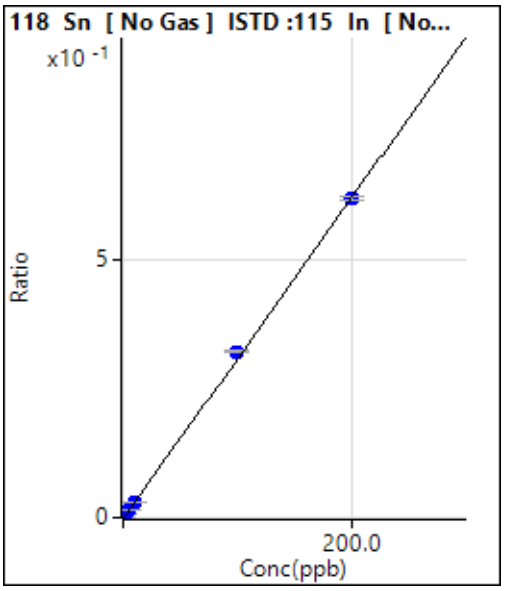


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.973	3427.16	0.0020	P	5.2	-1.3
3	☐	5.000	4.854	8429.53	0.0050	P	6.5	-2.9
4	☐	10.000	10.115	17401.70	0.0105	P	2.9	1.1
5	☐	100.000	103.451	177938.84	0.1071	P	1.3	3.5
6	☐	200.000	198.273	336472.20	0.2052	P	0.7	-0.9

y = 0.0010 * x + 3.9874E-006
R = 0.9998
DL = 0.02002 ppb
BEC = 0.003853 ppb

Weight: <None>
Min Conc: <None>

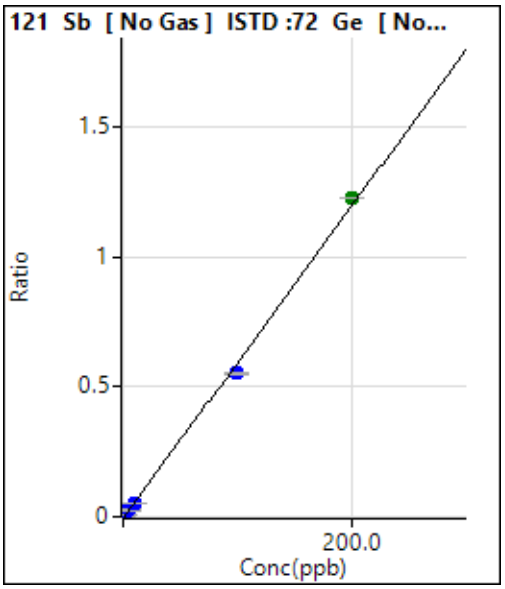
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1280.09	0.0008	P	6.3	
2	☐	2.000	1.947	11418.44	0.0068	P	3.5	-2.7
3	☐	5.000	4.729	25932.60	0.0155	P	0.6	-5.4
4	☐	10.000	9.705	51393.99	0.0309	P	1.3	-3.0
5	☐	100.000	102.832	532511.64	0.3204	P	1.1	2.8
6	☐	200.000	198.606	1013496.57	0.6181	P	1.3	-0.7

y = 0.0031 * x + 7.6438E-004
R = 0.9999
DL = 0.04672 ppb
BEC = 0.2459 ppb

Weight: <None>
Min Conc: <None>

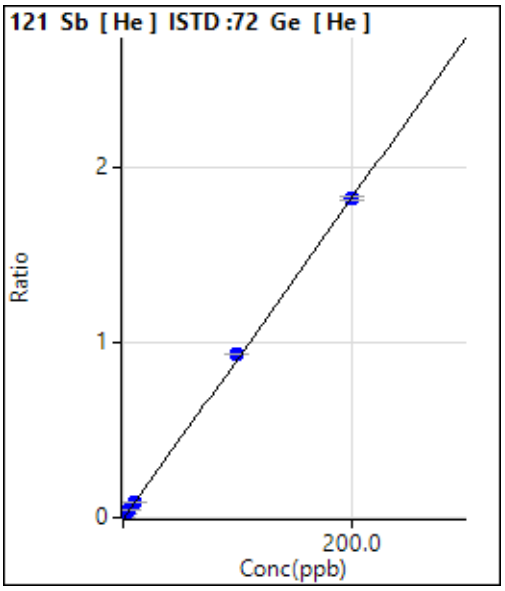


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	263.34	0.0002	P	18.4	
2	☐	2.000	1.736	14378.10	0.0106	P	4.1	-13.2
3	☐	5.000	4.327	35514.91	0.0263	P	3.0	-13.5
4	☐	10.000	8.720	70425.42	0.0527	P	1.4	-12.8
5	☐	100.000	91.906	734600.04	0.5536	P	0.8	-8.1
6	☐	200.000	204.131	1604672.84	1.2294	A	0.5	2.1

y = 0.0060 * x + 1.9351E-004
R = 0.9989
DL = 0.01776 ppb
BEC = 0.03214 ppb

Weight: <None>
Min Conc: <None>

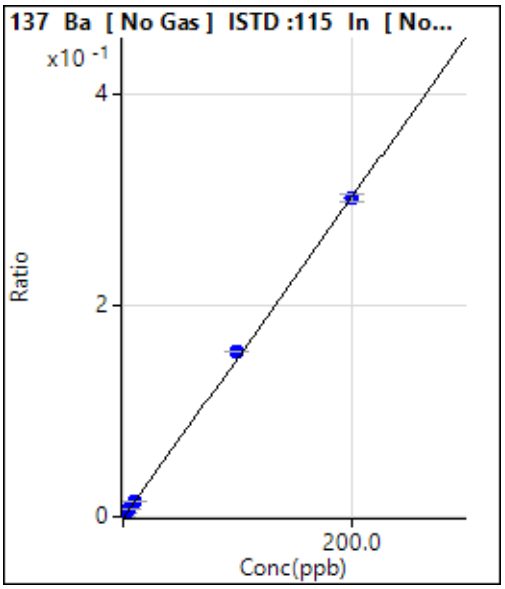
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0004	P	3.2	
2	☐	2.000	1.927	7735.76	0.0180	P	1.0	-3.6
3	☐	5.000	4.893	19254.39	0.0452	P	5.5	-2.1
4	☐	10.000	9.751	38279.57	0.0897	P	0.3	-2.5
5	☐	100.000	102.191	398176.52	0.9364	P	0.2	2.2
6	☐	200.000	198.920	768649.05	1.8225	P	1.6	-0.5

y = 0.0092 * x + 3.6620E-004
R = 0.9999
DL = 0.003877 ppb
BEC = 0.03998 ppb

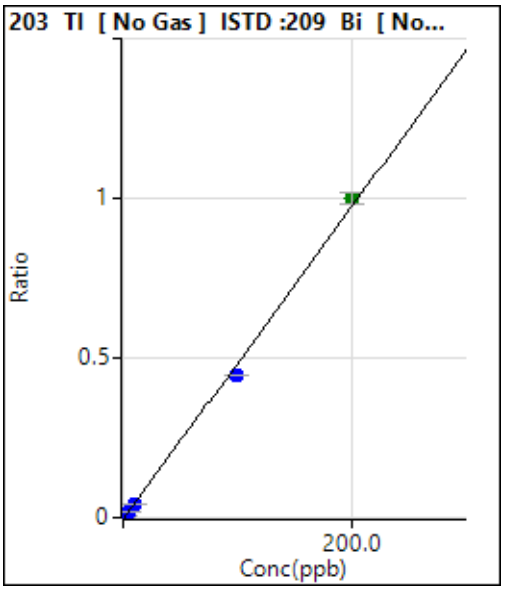
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	65.7	
2	☐	2.000	1.991	5174.45	0.0031	P	1.6	-0.4
3	☐	5.000	4.905	12609.63	0.0075	P	0.5	-1.9
4	☐	10.000	9.951	25241.56	0.0152	P	2.0	-0.5
5	☐	100.000	102.700	259688.76	0.1562	P	0.5	2.7
6	☐	200.000	198.655	495410.98	0.3021	P	2.0	-0.7

y = 0.0015 * x + 5.9844E-005
R = 0.9999
DL = 0.07758 ppb
BEC = 0.03935 ppb

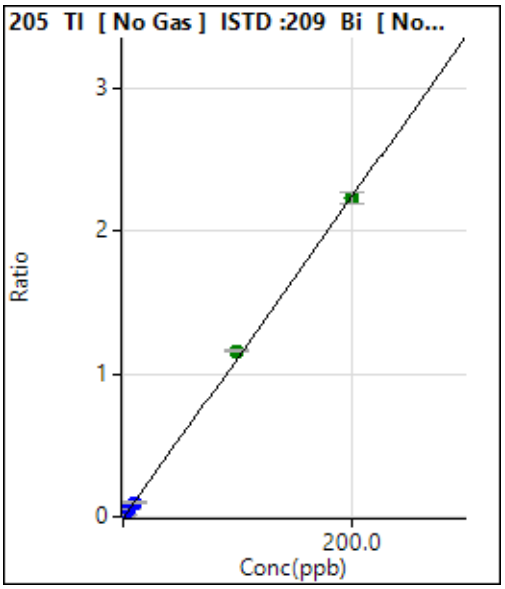
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	50.4	
2	☐	2.000	1.714	15139.42	0.0084	P	1.4	-14.3
3	☐	5.000	4.273	37175.74	0.0209	P	1.1	-14.5
4	☐	10.000	8.553	75054.87	0.0419	P	1.1	-14.5
5	☐	100.000	91.266	782605.87	0.4464	P	0.6	-8.7
6	☐	200.000	204.460	1724221.80	1.0001	A	3.7	2.2

y = 0.0049 * x + 1.3471E-005
R = 0.9987
DL = 0.004167 ppb
BEC = 0.002754 ppb

Weight: <None>
Min Conc: <None>

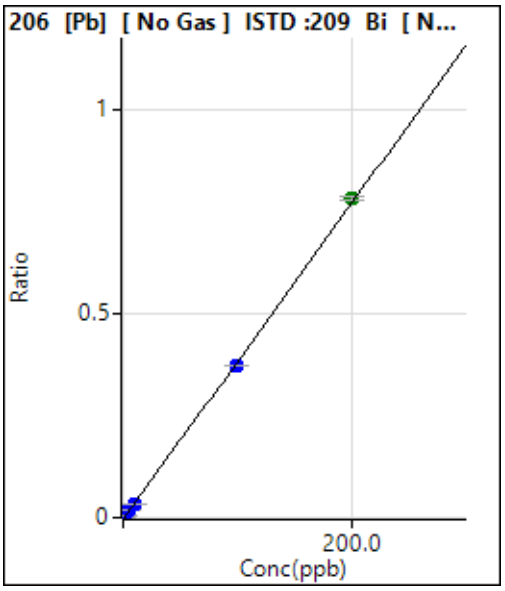


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	33.5	
2	☐	2.000	1.758	35708.19	0.0198	P	2.0	-12.1
3	☐	5.000	4.415	88388.67	0.0497	P	1.2	-11.7
4	☐	10.000	8.943	180586.02	0.1007	P	0.6	-10.6
5	☐	100.000	103.272	2038068.93	1.1626	A	1.8	3.3
6	☐	200.000	198.434	3851091.71	2.2339	A	3.3	-0.8

y = 0.0113 * x + 2.1130E-005
R = 0.9998
DL = 0.001887 ppb
BEC = 0.001877 ppb

Weight: <None>
Min Conc: <None>

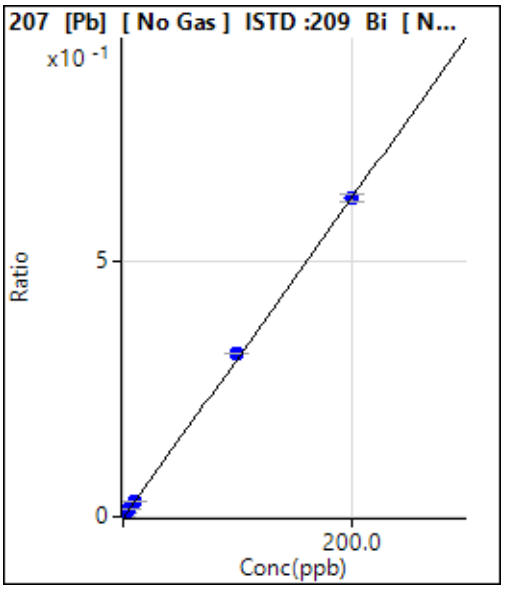
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0001	P	22.3	
2	☐	2.000	1.725	12249.56	0.0068	P	1.7	-13.7
3	☐	5.000	4.381	30354.13	0.0171	P	0.4	-12.4
4	☐	10.000	8.854	61665.76	0.0344	P	0.6	-11.5
5	☐	100.000	95.839	650442.45	0.3710	P	0.5	-4.2
6	☐	200.000	202.156	1349302.69	0.7825	A	1.7	1.1

y = 0.0039 * x + 1.1863E-004
R = 0.9997
DL = 0.02051 ppb
BEC = 0.03065 ppb

Weight: <None>
Min Conc: <None>

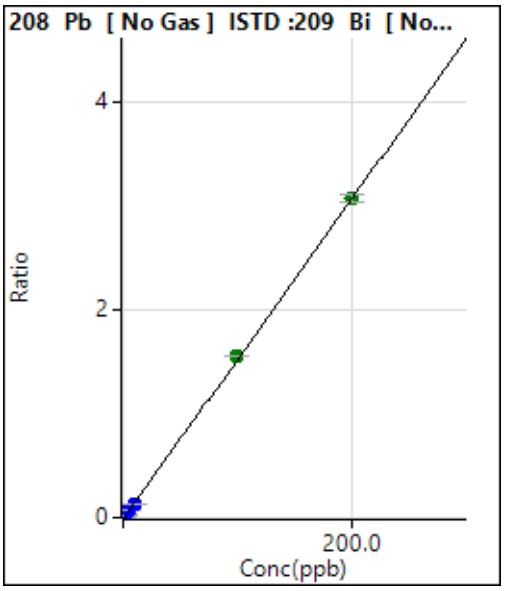


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	186.67	0.0001	P	12.4	
2	☐	2.000	1.919	11058.45	0.0061	P	1.2	-4.1
3	☐	5.000	4.695	26411.77	0.0149	P	1.7	-6.1
4	☐	10.000	9.376	53019.63	0.0296	P	1.8	-6.2
5	☐	100.000	101.963	561759.53	0.3204	P	0.8	2.0
6	☐	200.000	199.058	1078541.08	0.6255	P	1.9	-0.5

y = 0.0031 * x + 1.0704E-004
R = 0.9999
DL = 0.01273 ppb
BEC = 0.03407 ppb

Weight: <None>
Min Conc: <None>

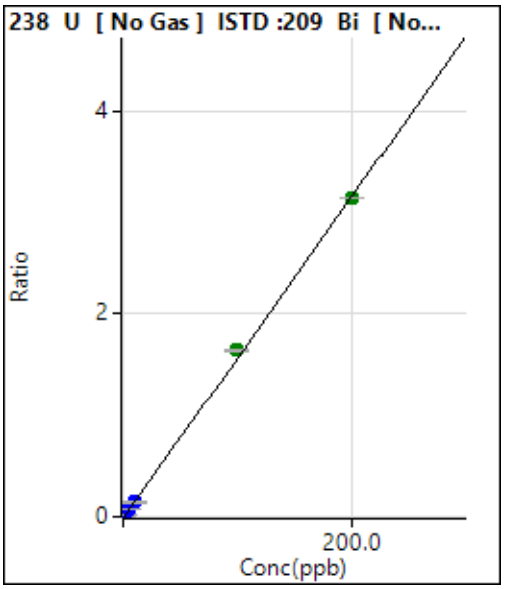
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	743.35	0.0004	P	11.6	
2	☐	2.000	1.786	50280.83	0.0279	P	2.1	-10.7
3	☐	5.000	4.427	121775.33	0.0685	P	0.5	-11.5
4	☐	10.000	8.914	246565.39	0.1375	P	1.0	-10.9
5	☐	100.000	101.073	2725259.98	1.5546	A	0.7	1.1
6	☐	200.000	199.534	5290886.22	3.0685	A	2.1	-0.2

y = 0.0154 * x + 4.2645E-004
R = 1.0000
DL = 0.009623 ppb
BEC = 0.02773 ppb

Weight: <None>
Min Conc: <None>

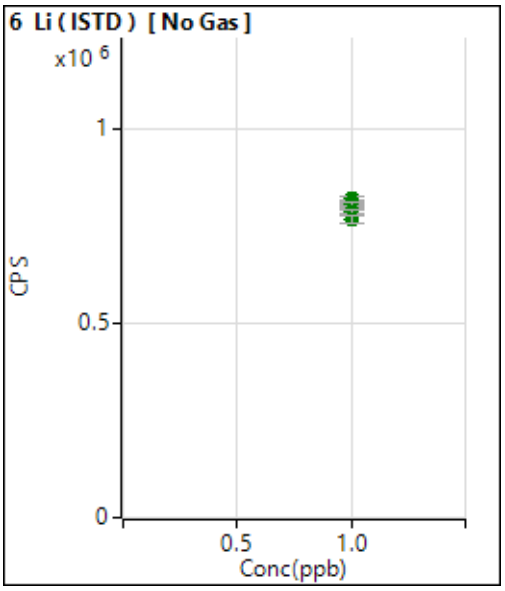


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.8	
2	☐	2.000	1.762	50330.29	0.0279	P	1.4	-11.9
3	☐	5.000	4.469	125835.57	0.0708	P	1.5	-10.6
4	☐	10.000	8.987	255277.89	0.1423	P	0.9	-10.1
5	☐	100.000	103.559	2875475.37	1.6402	A	1.4	3.6
6	☐	200.000	198.287	5416236.59	3.1405	A	0.6	-0.9

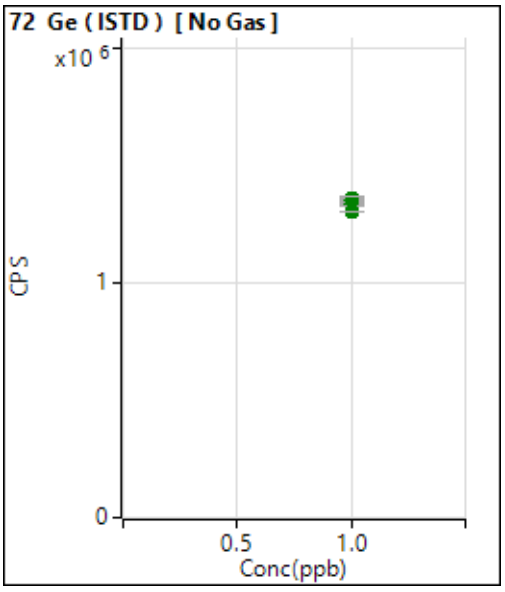
y = 0.0158 * x + 9.5705E-006
R = 0.9997
DL = 0.0006309 ppb
BEC = 0.0006043 ppb

Weight: <None>
Min Conc: <None>

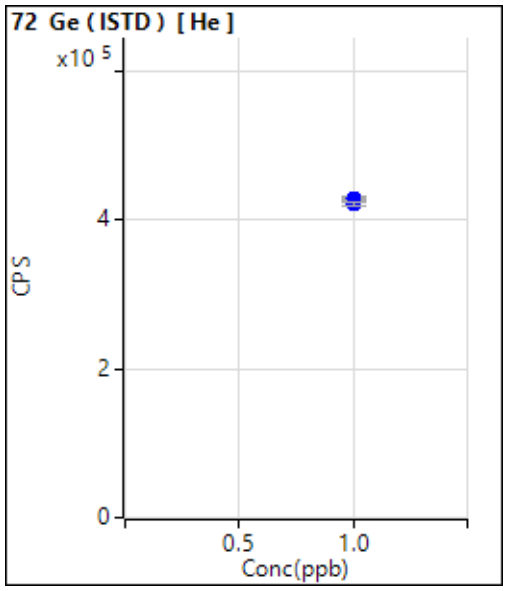
Calibration for 180_ICV.d



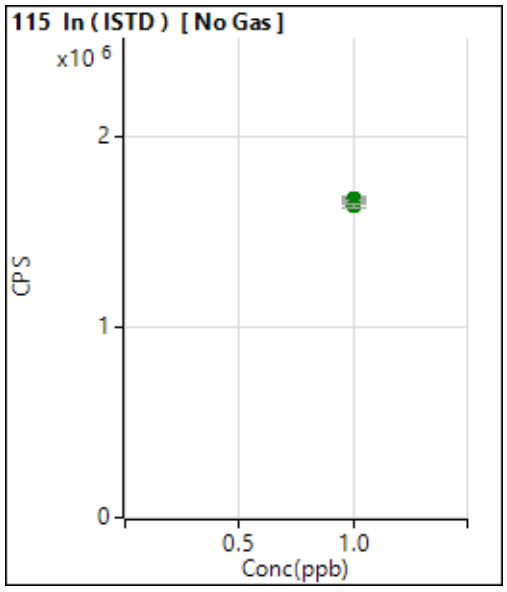
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		823507.32		A	0.9	
2	☐	1.000		814400.80		A	1.4	
3	☐	1.000		805882.28		A	1.9	
4	☐	1.000		810112.67		A	1.4	
5	☐	1.000		787773.03		A	1.3	
6	☐	1.000		769756.40		A	2.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360587.69		A	1.5	
2	☐	1.000		1350055.71		A	1.9	
3	☐	1.000		1353328.37		A	2.3	
4	☐	1.000		1336358.21		A	0.9	
5	☐	1.000		1326885.50		A	0.1	
6	☐	1.000		1305240.45		A	0.2	

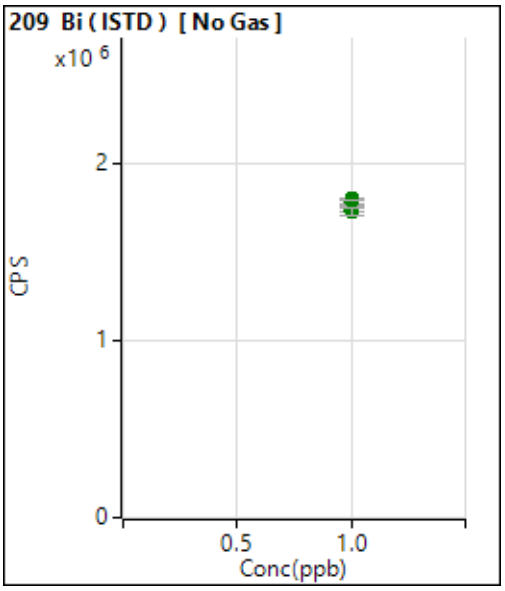


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		427779.66		P	0.5	
2	☐	1.000		429243.38		P	0.6	
3	☐	1.000		426201.89		P	0.7	
4	☐	1.000		426809.25		P	0.5	
5	☐	1.000		425204.34		P	0.8	
6	☐	1.000		421817.61		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1674672.94		A	0.9	
2	☐	1.000		1675687.62		A	0.7	
3	☐	1.000		1677188.96		A	0.7	
4	☐	1.000		1661695.51		A	0.7	
5	☐	1.000		1662239.18		A	1.0	
6	☐	1.000		1639966.44		A	1.4	

Calibration for 180_ICV.d



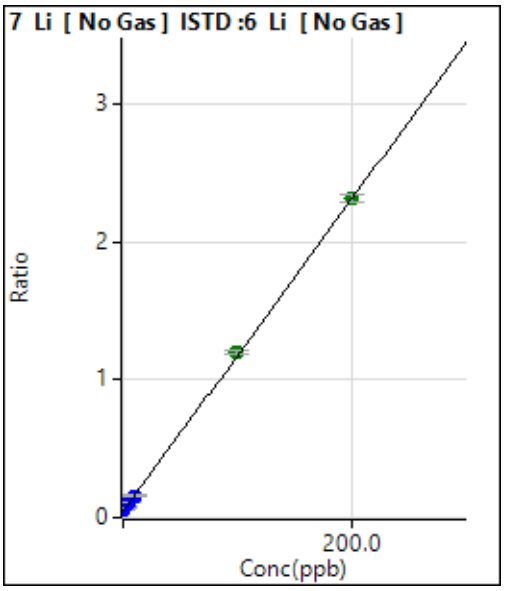
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1742359.04		A	2.0	
2	☐	1.000		1802525.91		A	0.2	
3	☐	1.000		1777837.73		A	1.2	
4	☐	1.000		1793436.17		A	0.2	
5	☐	1.000		1753083.31		A	0.5	
6	☐	1.000		1724796.80		A	2.3	

Calibration for 014_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	CAL BLK	07/19/2022 11:24:40
2	008CALS.d	2/10/200	07/19/2022 11:26:55
3	009CALS.d	5/25/500	07/19/2022 11:29:09
4	010CALS.d	10/50/100	07/19/2022 11:31:23
5	011CALS.d	100/500/10K	07/19/2022 11:33:36
6	012CALS.d	200/1000/20K	07/19/2022 11:35:45

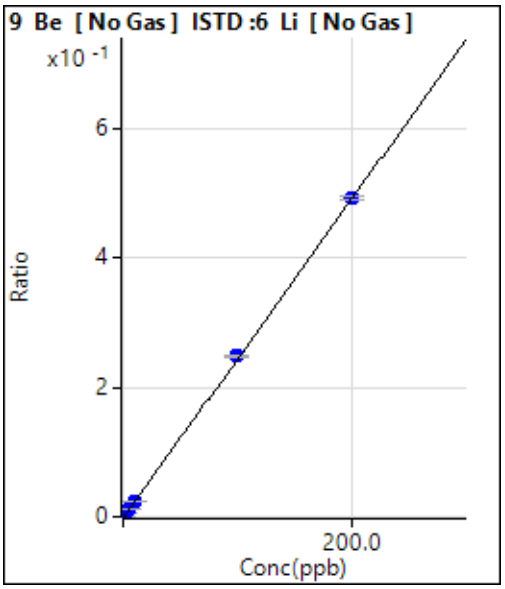
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38948.74	0.0577	P	1.5	
2	☐	2.000	1.730	53618.19	0.0773	P	1.8	-13.5
3	☐	5.000	4.427	74264.40	0.1079	P	3.7	-11.5
4	☐	10.000	8.970	109740.26	0.1594	P	2.6	-10.3
5	☐	100.000	101.177	847629.96	1.2053	A	2.1	1.2
6	☐	200.000	199.480	1570775.08	2.3204	A	1.9	-0.3

y = 0.0113 * x + 0.0577
R = 1.0000
DL = 0.2249 ppb
BEC = 5.084 ppb

Weight: <None>
Min Conc: <None>

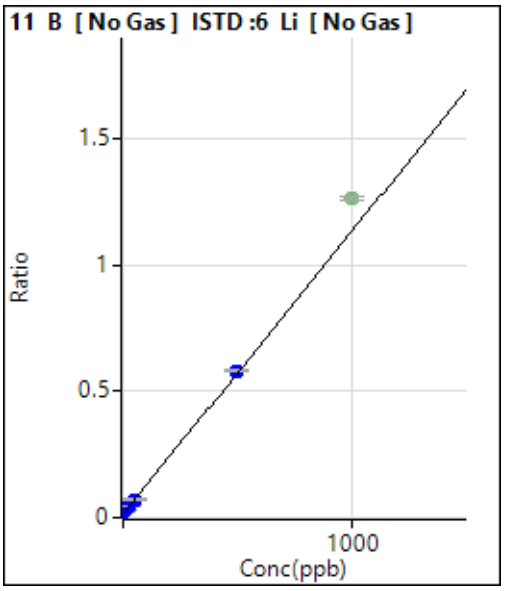


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	69.8	
2	☐	2.000	1.931	3355.43	0.0048	P	6.4	-3.4
3	☐	5.000	4.650	7950.65	0.0115	P	3.8	-7.0
4	☐	10.000	9.687	16509.74	0.0240	P	3.8	-3.1
5	☐	100.000	100.586	174680.97	0.2484	P	1.3	0.6
6	☐	200.000	199.732	333876.47	0.4932	P	1.6	-0.1

y = 0.0025 * x + 6.8572E-005
R = 1.0000
DL = 0.05817 ppb
BEC = 0.02777 ppb

Weight: <None>
Min Conc: <None>

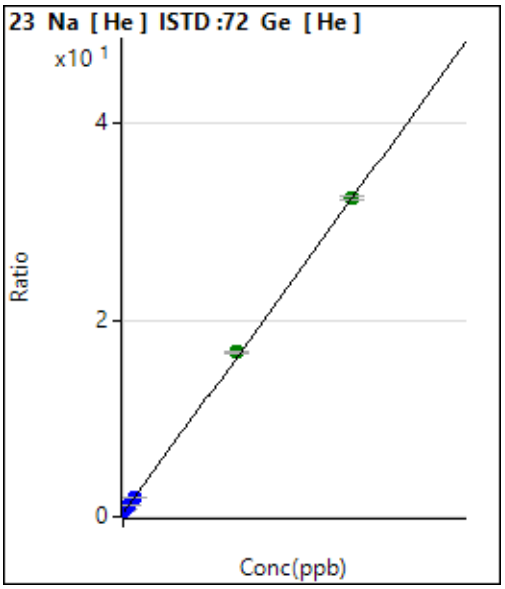
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14602.65	0.0216	P	2.3	
2	☐	10.000	6.418	19974.40	0.0288	P	1.8	-35.8
3	☐	25.000	20.478	30621.74	0.0445	P	3.6	-18.1
4	☐	50.000	45.296	49685.84	0.0722	P	3.7	-9.4
5	☐	500.000	500.768	408374.24	0.5807	P	1.7	0.2
6	☑	1000.000		855291.13	1.2633	A	1.1	

y = 0.0011 * x + 0.0216
R = 1.0000
DL = 1.351 ppb
BEC = 19.37 ppb

Weight: <None>
Min Conc: <None>

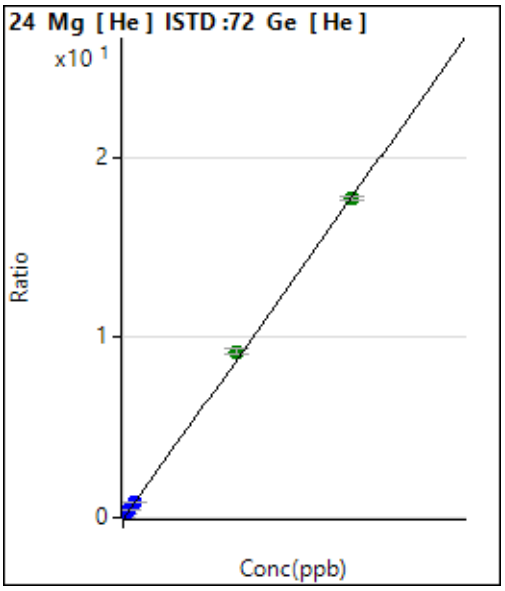


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182657.37	0.5325	P	1.2	
2	☐	200.000	172.344	280188.69	0.8079	P	0.8	-13.8
3	☐	500.000	433.562	426412.31	1.2252	P	0.3	-13.3
4	☐	1000.000	907.615	685888.14	1.9825	P	0.6	-9.2
5	☐	10000.00	10115.85	5852425.54	16.6927	A	0.8	1.2
6	☐	20000.00	19948.62	11158848.5	32.4007	A	0.7	-0.3

y = 0.0016 * x + 0.5325
R = 1.0000
DL = 12.35 ppb
BEC = 333.4 ppb

Weight: <None>
Min Conc: <None>

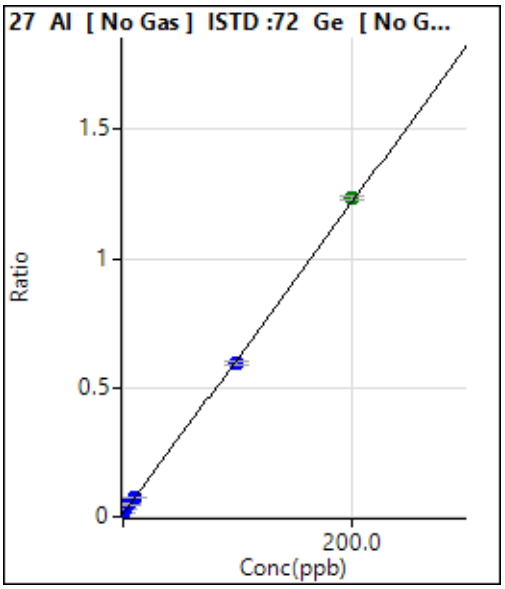
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	226.68	0.0007	P	24.2	
2	☐	200.000	189.977	59072.04	0.1703	P	0.5	-5.0
3	☐	500.000	474.699	147776.62	0.4246	P	0.3	-5.1
4	☐	1000.000	966.612	298878.84	0.8639	P	1.3	-3.3
5	☐	10000.00	10327.62	3233371.10	9.2236	A	2.7	3.3
6	☐	20000.00	19838.59	6101545.95	17.7172	A	0.8	-0.8

y = 8.9304E-004 * x + 6.5999E-004
R = 0.9998
DL = 0.5369 ppb
BEC = 0.739 ppb

Weight: <None>
Min Conc: <None>

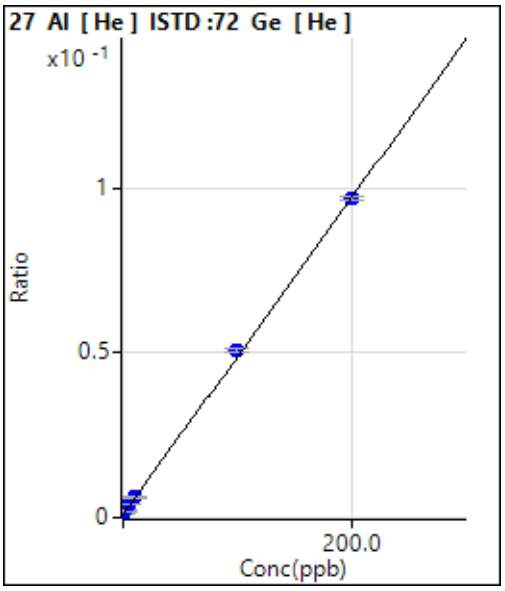


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18328.96	0.0169	P	4.7	
2	☐	2.000	1.578	29404.64	0.0265	P	1.5	-21.1
3	☐	5.000	5.310	53492.87	0.0490	P	4.3	6.2
4	☐	10.000	9.140	78256.04	0.0721	P	2.2	-8.6
5	☐	100.000	96.213	648535.02	0.5974	P	2.9	-3.8
6	☐	200.000	201.933	1344175.50	1.2353	A	1.3	1.0

y = 0.0060 * x + 0.0169
R = 0.9997
DL = 0.3973 ppb
BEC = 2.806 ppb

Weight: <None>
Min Conc: <None>

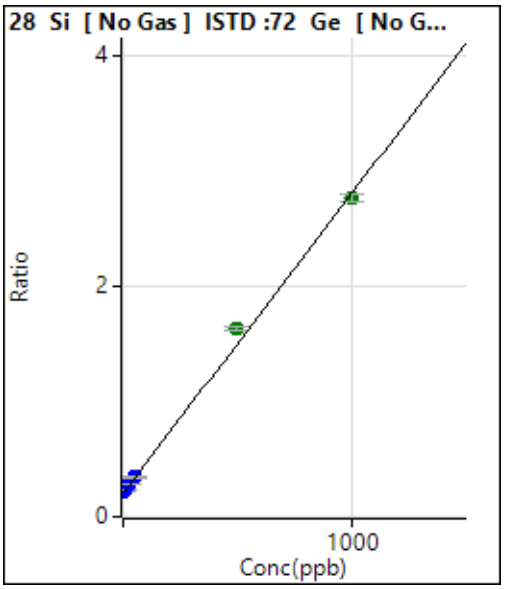
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0014	P	1.5	
2	☐	2.000	1.653	770.03	0.0022	P	26.6	-17.3
3	☐	5.000	5.392	1400.10	0.0040	P	2.7	7.8
4	☐	10.000	9.871	2136.87	0.0062	P	7.4	-1.3
5	☐	100.000	102.850	17845.02	0.0509	P	2.5	2.9
6	☐	200.000	198.575	33390.50	0.0970	P	1.5	-0.7

y = 4.8106E-004 * x + 0.0014
R = 0.9998
DL = 0.1295 ppb
BEC = 2.969 ppb

Weight: <None>
Min Conc: <None>

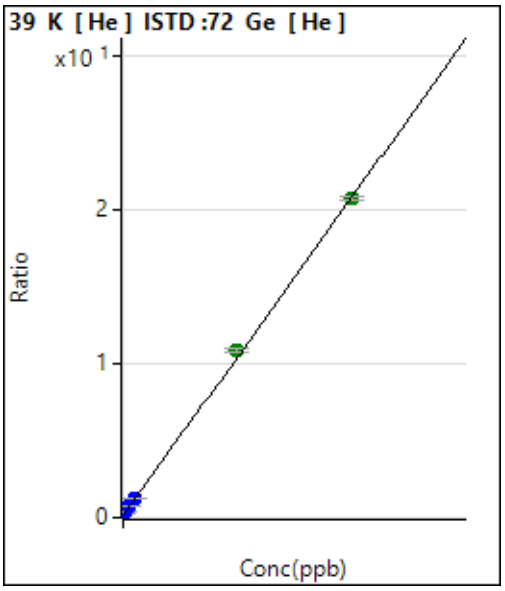


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	235702.45	0.2177	P	2.2	
2	☐	10.000	7.279	262999.99	0.2366	P	2.1	-27.2
3	☐	25.000	24.851	308479.02	0.2824	P	3.6	-0.6
4	☐	50.000	48.308	372801.53	0.3434	P	2.5	-3.4
5	☐	500.000	541.205	1765765.96	1.6264	A	1.9	8.2
6	☐	1000.000	979.513	3010511.00	2.7673	A	2.3	-2.0

y = 0.0026 * x + 0.2177
R = 0.9988
DL = 5.636 ppb
BEC = 83.63 ppb

Weight: <None>
Min Conc: <None>

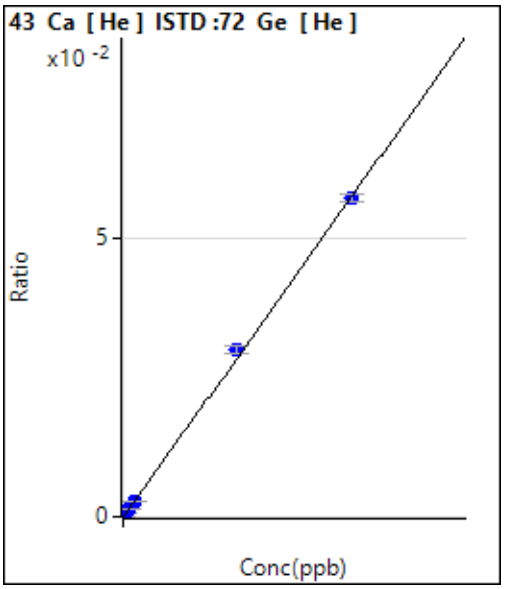
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	79897.00	0.2329	P	1.2	
2	☐	200.000	180.430	145462.91	0.4194	P	1.0	-9.8
3	☐	500.000	462.806	247549.48	0.7112	P	0.1	-7.4
4	☐	1000.000	949.531	420121.95	1.2143	P	0.4	-5.0
5	☐	10000.00	10315.33	3819073.49	10.8940	A	2.2	3.2
6	☐	20000.00	19845.98	7143831.98	20.7441	A	0.7	-0.8

y = 0.0010 * x + 0.2329
R = 0.9998
DL = 8 ppb
BEC = 225.4 ppb

Weight: <None>
Min Conc: <None>

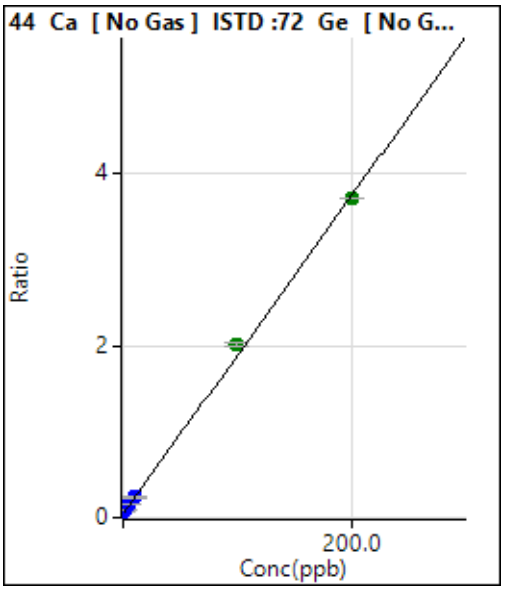


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	23.8	
2	☐	200.000	153.355	200.01	0.0006	P	10.7	-23.3
3	☐	500.000	425.678	473.35	0.0014	P	5.4	-14.9
4	☐	1000.000	960.937	1003.39	0.0029	P	1.7	-3.9
5	☐	10000.00	10376.20	10510.86	0.0300	P	4.4	3.8
6	☐	20000.00	19816.17	19674.36	0.0571	P	2.2	-0.9

y = 2.8764E-006 * x + 1.3586E-004
R = 0.9997
DL = 33.73 ppb
BEC = 47.23 ppb

Weight: <None>
Min Conc: <None>

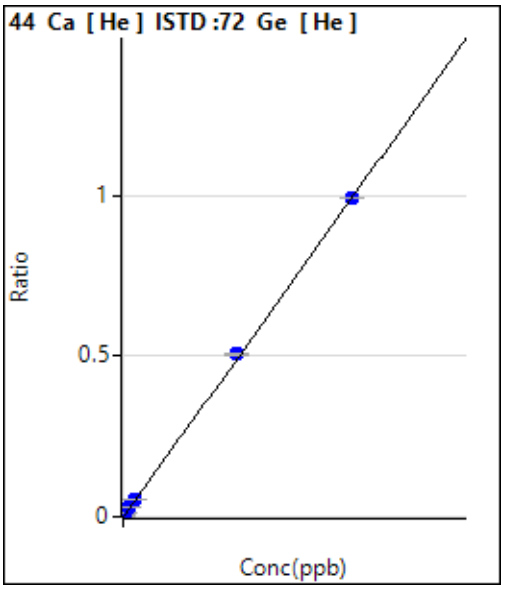
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	67441.89	0.0623	P	0.5	
2	☐	2.000	1.674	103728.82	0.0933	P	0.9	-16.3
3	☐	5.000	4.724	163671.47	0.1498	P	4.3	-5.5
4	☐	10.000	9.385	256489.66	0.2362	P	1.2	-6.2
5	☐	100.000	105.550	2191619.03	2.0189	A	2.9	5.6
6	☐	200.000	197.266	4046921.19	3.7191	A	0.5	-1.4

y = 0.0185 * x + 0.0623
R = 0.9994
DL = 0.05448 ppb
BEC = 3.359 ppb

Weight: <None>
Min Conc: <None>

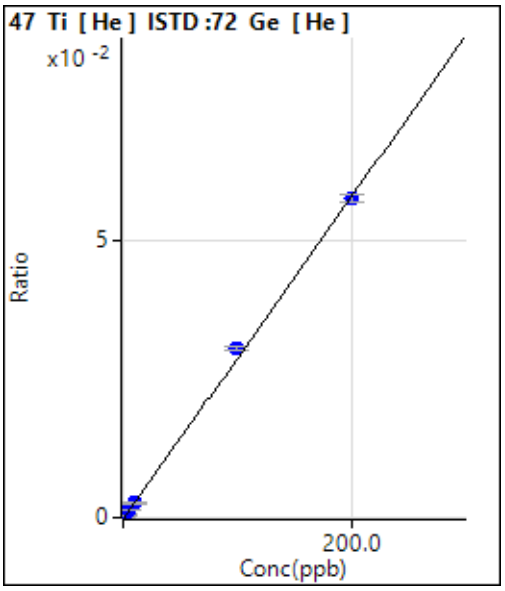


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1023.40	0.0030	P	8.6	
2	☐	200.000	193.928	4380.79	0.0126	P	0.5	-3.0
3	☐	500.000	505.752	9793.65	0.0281	P	2.8	1.2
4	☐	1000.000	988.648	18045.46	0.0522	P	2.7	-1.1
5	☐	10000.00	10161.77	178255.88	0.5085	P	1.3	1.6
6	☐	20000.00	19919.59	342262.23	0.9938	P	0.3	-0.4

y = 4.9742E-005 * x + 0.0030
R = 1.0000
DL = 15.5 ppb
BEC = 59.99 ppb

Weight: <None>
Min Conc: <None>

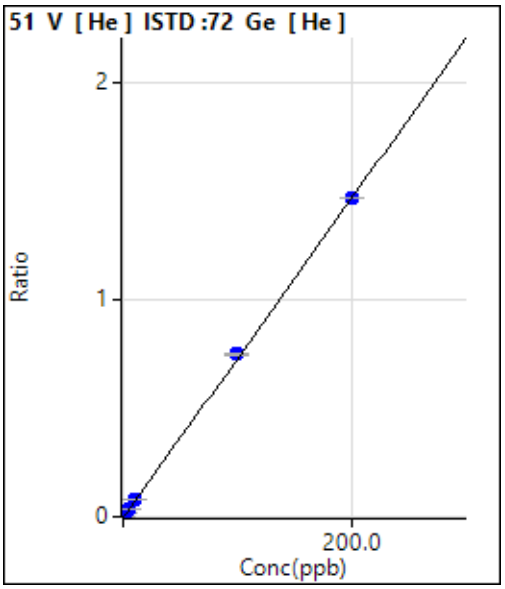
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.879	193.34	0.0006	P	31.9	-6.1
3	☐	5.000	4.797	490.02	0.0014	P	13.3	-4.1
4	☐	10.000	9.285	940.05	0.0027	P	11.2	-7.2
5	☐	100.000	104.324	10670.94	0.0304	P	2.3	4.3
6	☐	200.000	197.880	19877.99	0.0577	P	2.5	-1.1

y = 2.9161E-004 * x + 9.7550E-006
R = 0.9996
DL = 0.1738 ppb
BEC = 0.03345 ppb

Weight: <None>
Min Conc: <None>

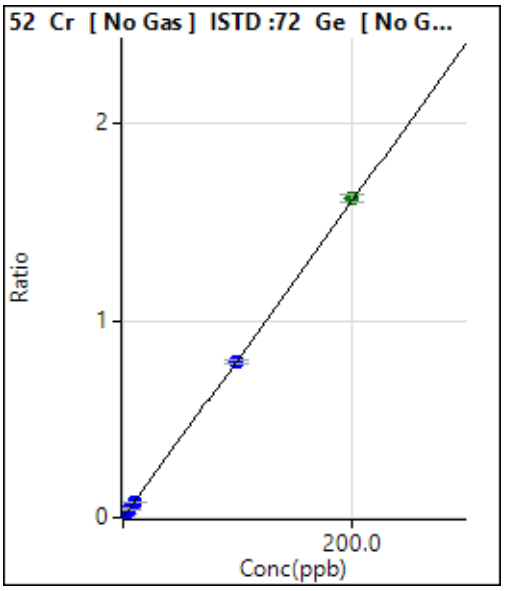


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	602.24	0.0018	P	5.0	
2	☐	2.000	1.979	5660.08	0.0163	P	4.4	-1.1
3	☐	5.000	4.851	13041.80	0.0375	P	0.9	-3.0
4	☐	10.000	9.995	26066.99	0.0753	P	0.3	0.0
5	☐	100.000	101.665	263019.47	0.7502	P	1.3	1.7
6	☐	200.000	199.171	505587.17	1.4681	P	0.1	-0.4

y = 0.0074 * x + 0.0018
R = 0.9999
DL = 0.03596 ppb
BEC = 0.2384 ppb

Weight: <None>
Min Conc: <None>

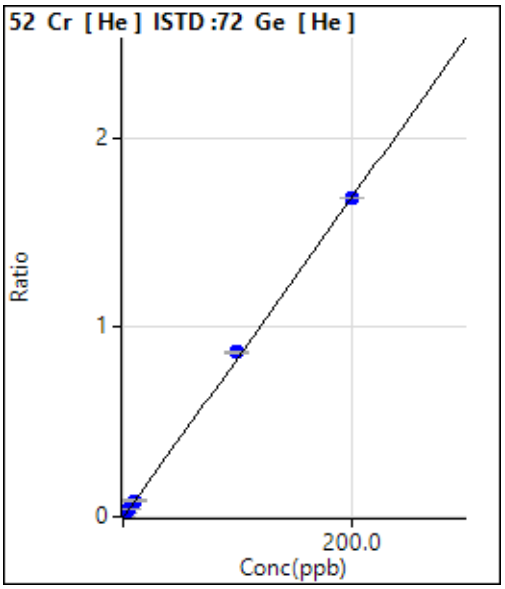
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7612.22	0.0070	P	5.6	
2	☐	2.000	1.765	23530.55	0.0212	P	2.8	-11.7
3	☐	5.000	4.561	47609.52	0.0436	P	4.1	-8.8
4	☐	10.000	9.211	87760.46	0.0808	P	3.1	-7.9
5	☐	100.000	97.613	857042.62	0.7894	P	2.0	-2.4
6	☐	200.000	201.246	1762477.58	1.6200	A	2.2	0.6

y = 0.0080 * x + 0.0070
R = 0.9999
DL = 0.1473 ppb
BEC = 0.8766 ppb

Weight: <None>
Min Conc: <None>

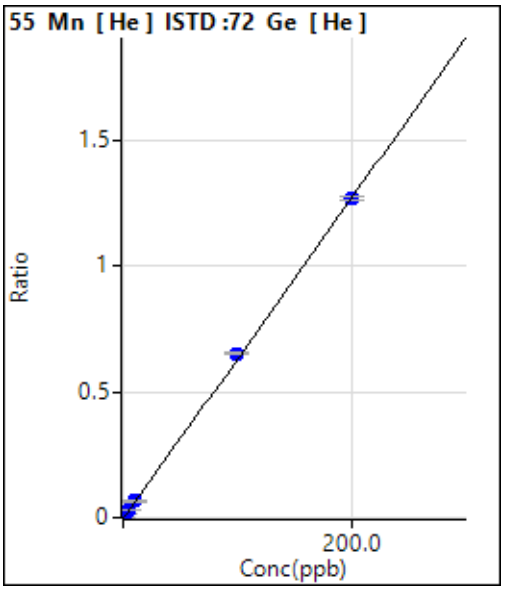


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0027	P	11.9	
2	☐	2.000	1.917	6545.05	0.0189	P	8.2	-4.2
3	☐	5.000	4.846	15185.31	0.0436	P	0.5	-3.1
4	☐	10.000	9.738	29405.25	0.0850	P	3.1	-2.6
5	☐	100.000	102.356	304386.17	0.8682	P	1.7	2.4
6	☐	200.000	198.840	579983.27	1.6841	P	0.2	-0.6

y = 0.0085 * x + 0.0027
R = 0.9999
DL = 0.1117 ppb
BEC = 0.3139 ppb

Weight: <None>
Min Conc: <None>

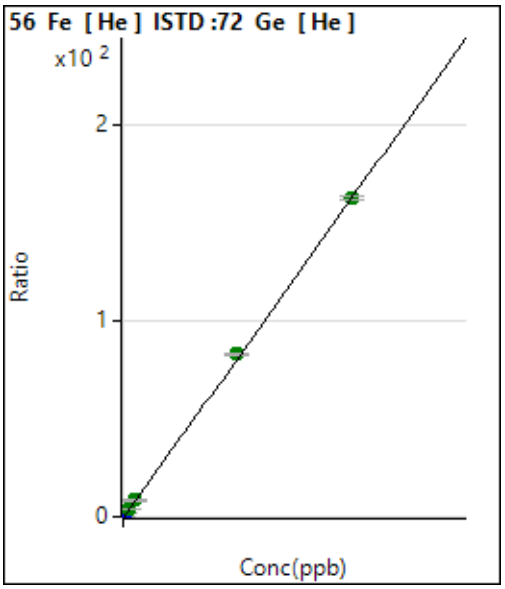
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	373.35	0.0011	P	21.5	
2	☐	2.000	1.962	4724.25	0.0136	P	0.4	-1.9
3	☐	5.000	4.931	11341.56	0.0326	P	3.9	-1.4
4	☐	10.000	10.037	22562.15	0.0652	P	1.6	0.4
5	☐	100.000	102.308	229519.59	0.6547	P	1.9	2.3
6	☐	200.000	198.846	437870.90	1.2715	P	0.8	-0.6

y = 0.0064 * x + 0.0011
R = 0.9999
DL = 0.1098 ppb
BEC = 0.1703 ppb

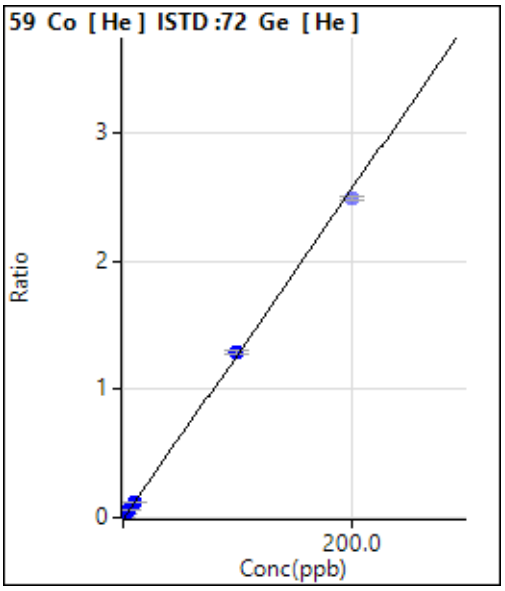
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8232.63	0.0240	P	2.2	
2	☐	200.000	189.606	545517.96	1.5728	P	0.9	-5.2
3	☐	500.000	500.902	1432373.00	4.1157	A	1.8	0.2
4	☐	1000.000	1017.047	2882654.54	8.3319	A	1.2	1.7
5	☐	10000.00	10179.61	29161372.0	83.1780	A	1.4	1.8
6	☐	20000.00	19909.42	56016162.5	162.657	A	0.7	-0.5

y = 0.0082 * x + 0.0240
R = 0.9999
DL = 0.1932 ppb
BEC = 2.938 ppb

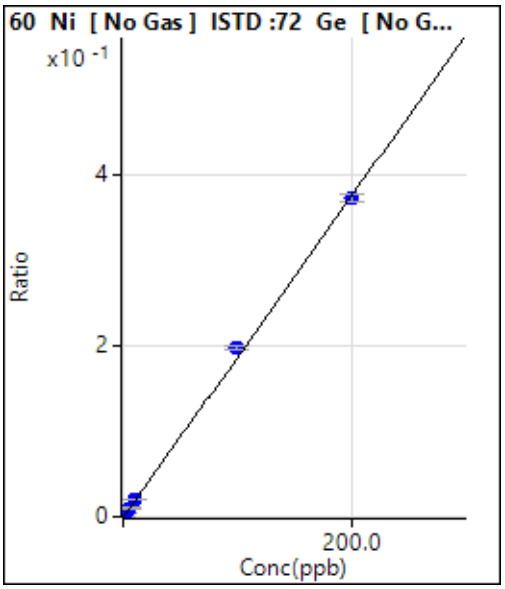
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	25.7	
2	☐	2.000	1.986	8913.05	0.0257	P	5.5	-0.7
3	☐	5.000	4.635	20822.84	0.0598	P	0.3	-7.3
4	☐	10.000	9.649	43048.20	0.1244	P	1.3	-3.5
5	☐	100.000	100.054	451906.71	1.2890	P	1.6	0.1
6	☑	200.000		858149.42	2.4919	P	0.7	

y = 0.0129 * x + 1.1677E-004
R = 1.0000
DL = 0.006992 ppb
BEC = 0.009065 ppb

Weight: <None>
Min Conc: <None>

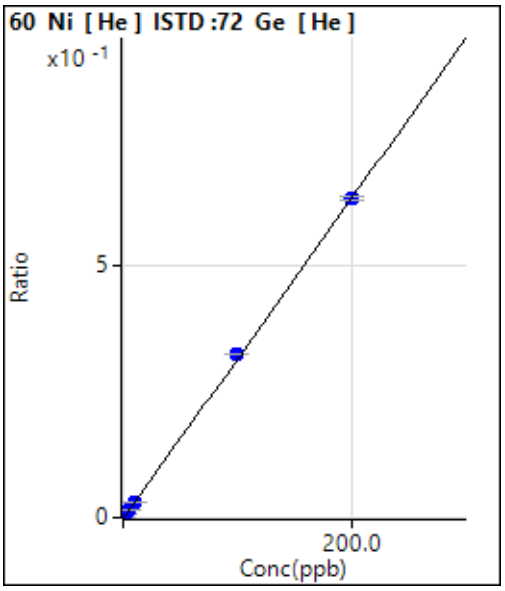


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0007	P	14.3	
2	☐	2.000	2.011	4991.01	0.0045	P	1.1	0.5
3	☐	5.000	4.883	10804.48	0.0099	P	4.8	-2.3
4	☐	10.000	10.333	21864.53	0.0201	P	2.0	3.3
5	☐	100.000	104.611	214336.74	0.1974	P	2.5	4.6
6	☐	200.000	197.681	405216.95	0.3725	P	2.1	-1.2

y = 0.0019 * x + 7.0743E-004
R = 0.9996
DL = 0.161 ppb
BEC = 0.3762 ppb

Weight: <None>
Min Conc: <None>

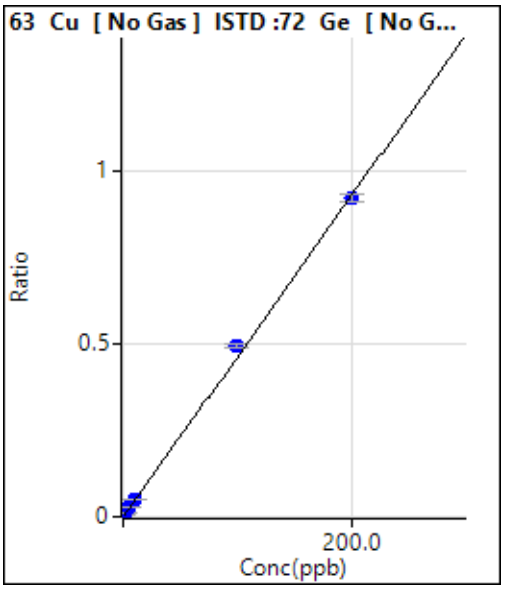
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0006	P	19.2	
2	☐	2.000	1.939	2353.59	0.0068	P	4.4	-3.0
3	☐	5.000	5.014	5757.97	0.0165	P	5.7	0.3
4	☐	10.000	9.852	11034.65	0.0319	P	1.7	-1.5
5	☐	100.000	102.060	113778.93	0.3245	P	0.3	2.1
6	☐	200.000	198.978	217667.62	0.6321	P	0.8	-0.5

y = 0.0032 * x + 6.3159E-004
R = 0.9999
DL = 0.1146 ppb
BEC = 0.199 ppb

Weight: <None>
Min Conc: <None>

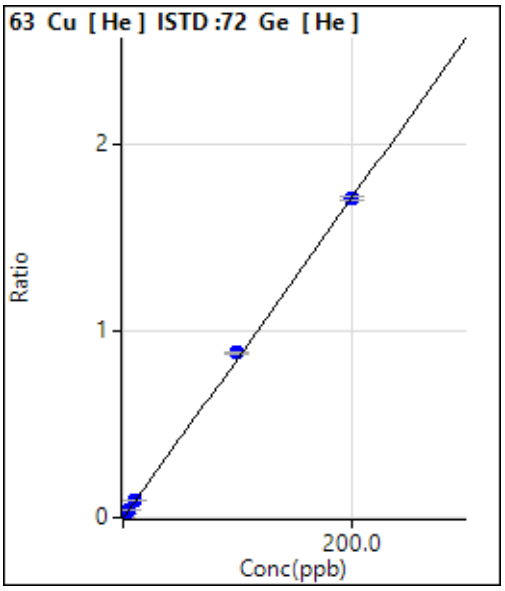


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3927.31	0.0036	P	4.0	
2	☐	2.000	1.888	13780.54	0.0124	P	4.3	-5.6
3	☐	5.000	4.797	28319.77	0.0259	P	4.2	-4.1
4	☐	10.000	10.042	54612.87	0.0503	P	2.4	0.4
5	☐	100.000	105.098	534355.41	0.4922	P	2.4	5.1
6	☐	200.000	197.455	1002571.73	0.9216	P	2.3	-1.3

y = 0.0046 * x + 0.0036
R = 0.9995
DL = 0.09288 ppb
BEC = 0.7803 ppb

Weight: <None>
Min Conc: <None>

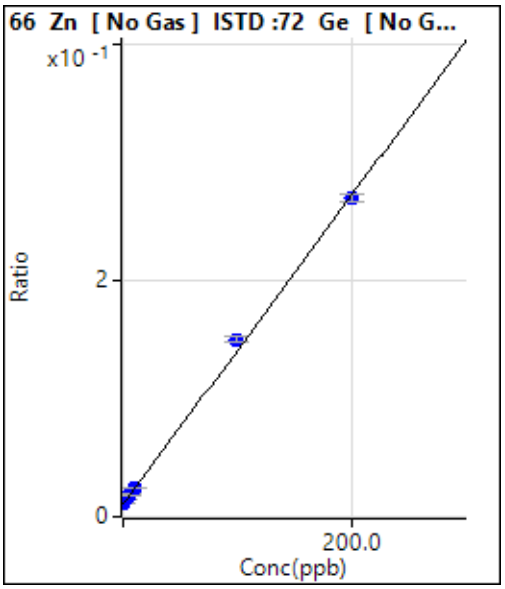
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0046	P	2.8	
2	☐	2.000	2.006	7548.87	0.0218	P	3.1	0.3
3	☐	5.000	4.770	15829.44	0.0455	P	2.2	-4.6
4	☐	10.000	9.972	31179.36	0.0901	P	1.0	-0.3
5	☐	100.000	102.222	309058.71	0.8816	P	2.2	2.2
6	☐	200.000	198.896	589236.08	1.7110	P	0.7	-0.6

y = 0.0086 * x + 0.0046
R = 0.9999
DL = 0.04449 ppb
BEC = 0.5313 ppb

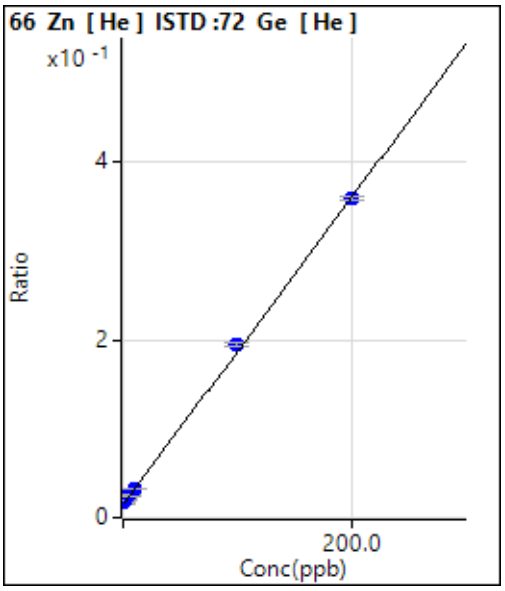
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12836.29	0.0119	P	3.6	
2	☐	2.000	2.135	16280.02	0.0146	P	2.2	6.8
3	☐	5.000	5.122	20275.39	0.0186	P	4.2	2.4
4	☐	10.000	9.846	26866.99	0.0247	P	1.5	-1.5
5	☐	100.000	105.563	162939.00	0.1501	P	3.0	5.6
6	☐	200.000	197.222	293912.36	0.2702	P	1.9	-1.4

y = 0.0013 * x + 0.0119
R = 0.9994
DL = 0.9655 ppb
BEC = 9.049 ppb

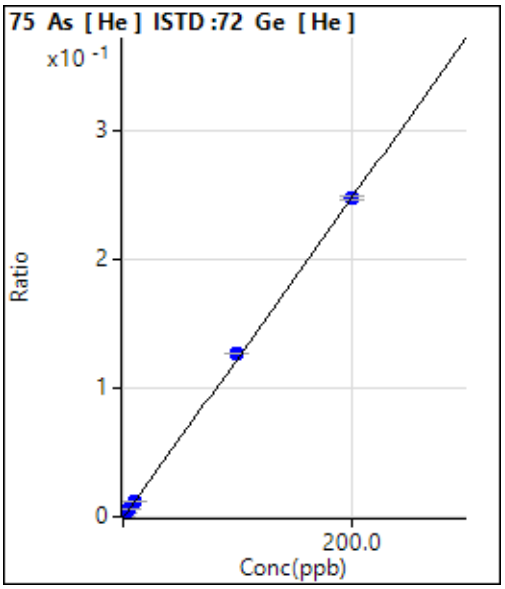
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5651.29	0.0165	P	3.0	
2	☐	2.000	2.255	7068.64	0.0204	P	2.5	12.7
3	☐	5.000	5.031	8766.31	0.0252	P	2.9	0.6
4	☐	10.000	9.481	11378.28	0.0329	P	2.5	-5.2
5	☐	100.000	103.328	68459.10	0.1953	P	2.2	3.3
6	☐	200.000	198.359	123891.52	0.3597	P	0.8	-0.8

y = 0.0017 * x + 0.0165
R = 0.9998
DL = 0.8671 ppb
BEC = 9.522 ppb

Weight: <None>
Min Conc: <None>

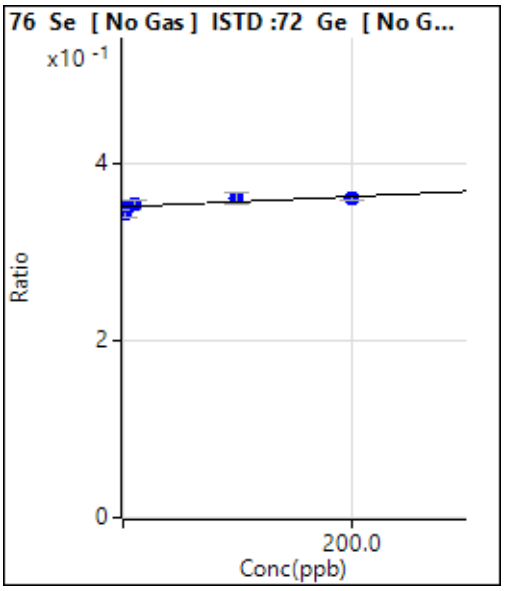


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	62.22	0.0002	P	38.0	
2	☐	2.000	1.953	903.37	0.0026	P	2.1	-2.3
3	☐	5.000	4.630	2062.39	0.0059	P	3.4	-7.4
4	☐	10.000	9.662	4209.57	0.0122	P	1.1	-3.4
5	☐	100.000	101.853	44359.24	0.1265	P	1.1	1.9
6	☐	200.000	199.100	85112.96	0.2472	P	1.0	-0.4

y = 0.0012 * x + 1.8149E-004
R = 0.9999
DL = 0.1667 ppb
BEC = 0.1463 ppb

Weight: <None>
Min Conc: <None>

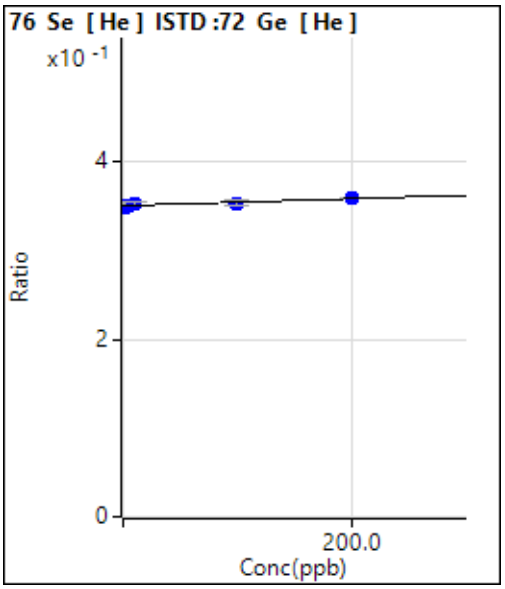
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	380438.43	0.3513	P	1.7	
2	☐	2.000	-117.667	382783.11	0.3444	P	2.6	-5983.
3	☐	5.000	20.941	385215.68	0.3526	P	3.0	318.8
4	☐	10.000	70.894	385931.01	0.3555	P	1.9	608.9
5	☐	100.000	164.373	391811.07	0.3610	P	3.5	64.4
6	☐	200.000	165.567	392855.58	0.3610	P	0.9	-17.2

y = 5.8649E-005 * x + 0.3513
R = 0.7719
DL = 302.2 ppb
BEC = 5991 ppb

Weight: <None>
Min Conc: <None>

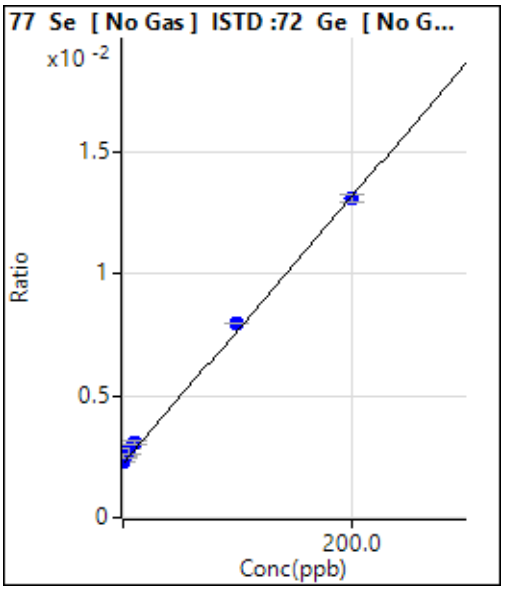


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120215.19	0.3504	P	1.0	
2	☐	2.000	-58.011	120743.26	0.3481	P	1.2	-3000.
3	☐	5.000	11.913	122139.41	0.3509	P	0.7	138.3
4	☐	10.000	48.379	121916.90	0.3524	P	0.8	383.8
5	☐	100.000	60.483	123710.31	0.3529	P	1.9	-39.5
6	☐	200.000	218.267	123689.62	0.3592	P	0.5	9.1

y = 3.9954E-005 * x + 0.3504
R = 0.9208
DL = 270.1 ppb
BEC = 8771 ppb

Weight: <None>
Min Conc: <None>

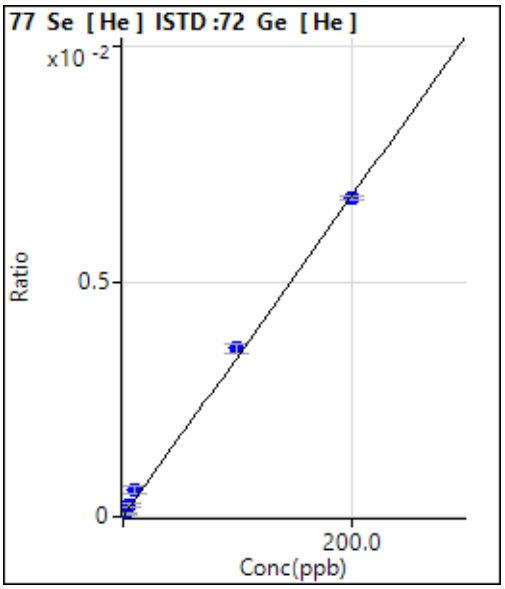
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2490.27	0.0023	P	2.0	
2	☐	2.000	3.600	2773.67	0.0025	P	5.1	80.0
3	☐	5.000	8.068	2990.38	0.0027	P	8.9	61.4
4	☐	10.000	14.400	3350.47	0.0031	P	4.7	44.0
5	☐	100.000	104.032	8676.29	0.0080	P	0.6	4.0
6	☐	200.000	197.671	14264.39	0.0131	P	2.2	-1.2

y = 5.4694E-005 * x + 0.0023
R = 0.9996
DL = 2.585 ppb
BEC = 42.04 ppb

Weight: <None>
Min Conc: <None>

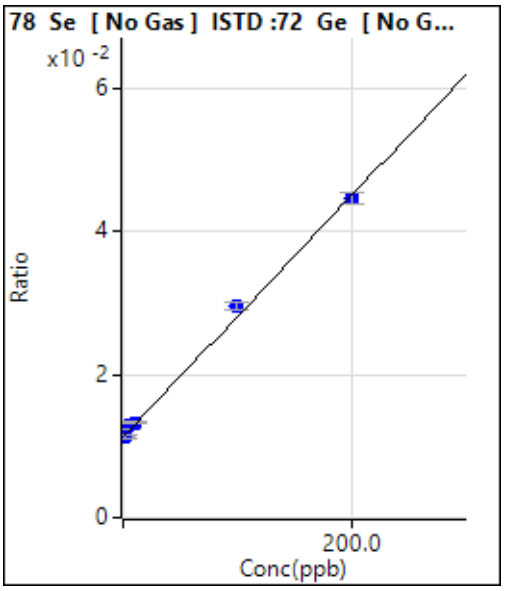


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.118	26.67	0.0001	P	57.5	-44.1
3	☐	5.000	5.610	80.00	0.0002	P	33.1	12.2
4	☐	10.000	15.532	196.67	0.0006	P	27.3	55.3
5	☐	100.000	103.841	1253.42	0.0036	P	6.2	3.8
6	☐	200.000	197.797	2333.58	0.0068	P	1.7	-1.1

y = 3.4063E-005 * x + 3.8756E-005
R = 0.9994
DL = 2.956 ppb
BEC = 1.138 ppb

Weight: <None>
Min Conc: <None>

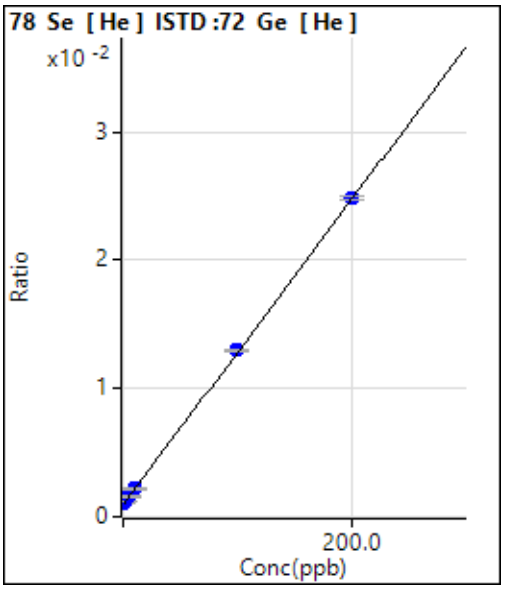
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12469.31	0.0115	P	2.8	
2	☐	2.000	-0.702	12666.18	0.0114	P	4.4	-135.1
3	☐	5.000	8.019	14040.85	0.0129	P	8.6	60.4
4	☐	10.000	10.496	14424.63	0.0133	P	3.7	5.0
5	☐	100.000	107.136	32091.84	0.0296	P	4.1	7.1
6	☐	200.000	196.359	48510.66	0.0446	P	3.9	-1.8

y = 1.6847E-004 * x + 0.0115
R = 0.9988
DL = 5.843 ppb
BEC = 68.36 ppb

Weight: <None>
Min Conc: <None>

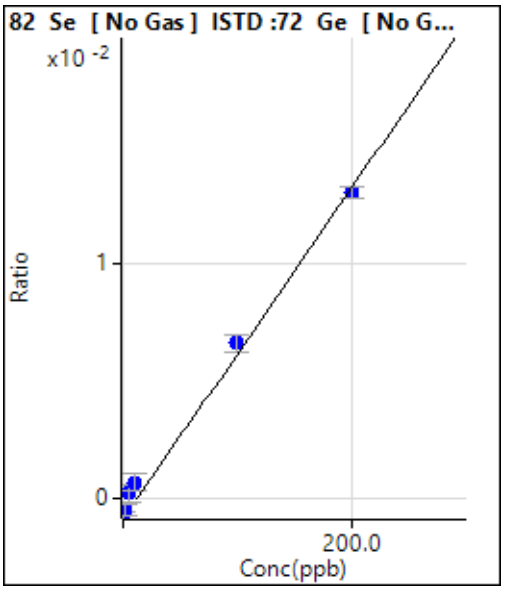


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.01	0.0011	P	8.4	
2	☐	2.000	0.979	410.68	0.0012	P	9.3	-51.1
3	☐	5.000	4.804	570.68	0.0016	P	9.3	-3.9
4	☐	10.000	9.554	762.69	0.0022	P	9.1	-4.5
5	☐	100.000	100.145	4551.45	0.0130	P	0.6	0.1
6	☐	200.000	199.965	8560.07	0.0249	P	1.1	0.0

y = 1.1896E-004 * x + 0.0011
R = 1.0000
DL = 2.256 ppb
BEC = 8.974 ppb

Weight: <None>
Min Conc: <None>

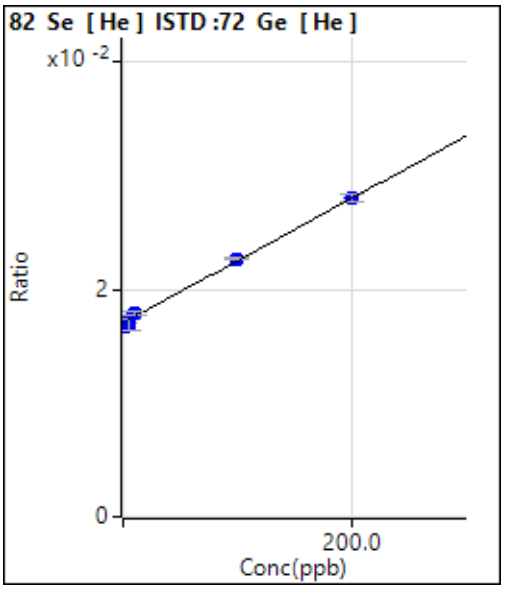
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-878.83	-0.0008	P	-51.0	
2	☐	2.000	4.622	-546.33	-0.0005	P	-96.0	131.1
3	☐	5.000	14.723	257.81	0.0002	P	319.7	194.5
4	☐	10.000	21.230	735.78	0.0007	P	114.6	112.3
5	☐	100.000	105.304	7176.40	0.0066	P	11.4	5.3
6	☐	200.000	196.517	14180.45	0.0130	P	3.8	-1.7

y = 7.0423E-005 * x - 8.1373E-004
R = 0.9983
DL = 17.68 ppb
BEC = -11.55 ppb

Weight: <None>
Min Conc: <None>

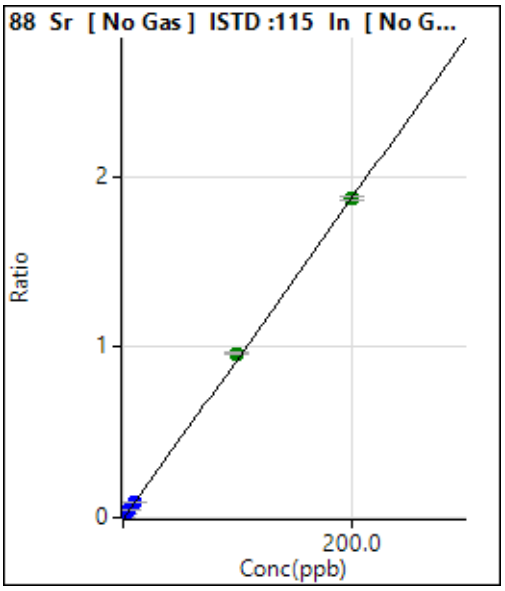


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5881.39	0.0171	P	2.4	
2	☐	2.000	-7.213	5808.02	0.0167	P	3.1	-460.6
3	☐	5.000	-3.854	5894.73	0.0169	P	6.6	-177.1
4	☐	10.000	15.448	6224.88	0.0180	P	1.7	54.5
5	☐	100.000	101.513	7962.49	0.0227	P	0.9	1.5
6	☐	200.000	199.285	9666.96	0.0281	P	2.8	-0.4

y = 5.4839E-005 * x + 0.0171
R = 0.9977
DL = 22.31 ppb
BEC = 312.6 ppb

Weight: <None>
Min Conc: <None>

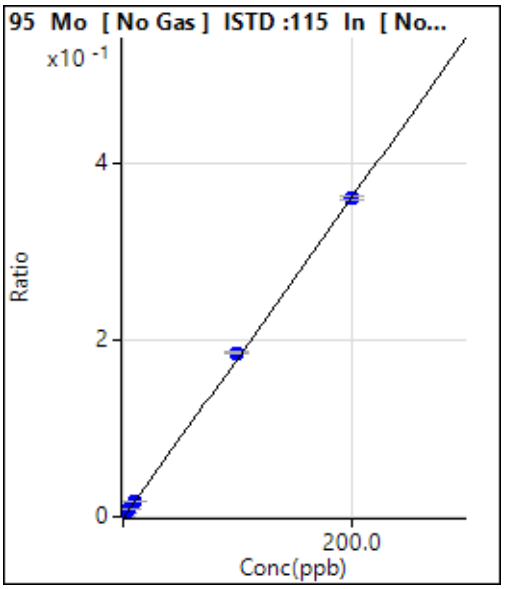
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0004	P	20.5	
2	☐	2.000	1.797	23574.41	0.0173	P	2.1	-10.2
3	☐	5.000	4.742	61363.99	0.0450	P	2.6	-5.2
4	☐	10.000	9.067	116373.30	0.0858	P	1.0	-9.3
5	☐	100.000	102.089	1305412.22	0.9617	A	1.4	2.1
6	☐	200.000	199.011	2501477.41	1.8744	A	1.3	-0.5

y = 0.0094 * x + 3.9902E-004
R = 0.9999
DL = 0.0261 ppb
BEC = 0.04237 ppb

Weight: <None>
Min Conc: <None>

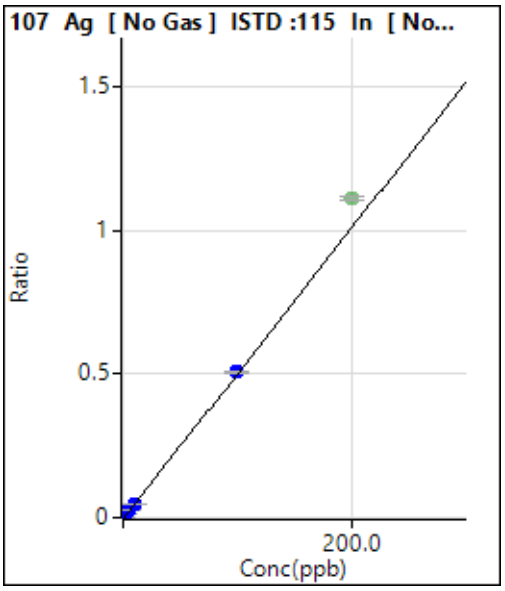


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	49.6	
2	☐	2.000	1.940	4817.62	0.0035	P	2.1	-3.0
3	☐	5.000	4.755	11788.73	0.0086	P	3.1	-4.9
4	☐	10.000	9.770	24078.79	0.0178	P	2.8	-2.3
5	☐	100.000	102.145	251688.35	0.1854	P	1.7	2.1
6	☐	200.000	198.946	481963.60	0.3611	P	0.7	-0.5

y = 0.0018 * x + 1.7243E-005
R = 0.9999
DL = 0.01414 ppb
BEC = 0.0095 ppb

Weight: <None>
Min Conc: <None>

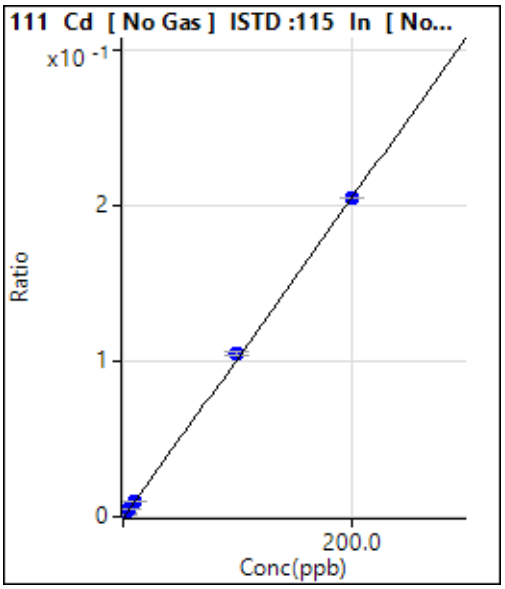
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0009	P	3.5	
2	☐	2.000	1.896	14241.18	0.0105	P	0.6	-5.2
3	☐	5.000	4.651	33242.17	0.0244	P	2.2	-7.0
4	☐	10.000	9.638	67347.89	0.0496	P	0.8	-3.6
5	☐	100.000	100.056	688593.45	0.5073	P	1.4	0.1
6	☑	200.000		1482101.18	1.1105	A	0.9	

y = 0.0051 * x + 8.6408E-004
R = 1.0000
DL = 0.01769 ppb
BEC = 0.1707 ppb

Weight: <None>
Min Conc: <None>

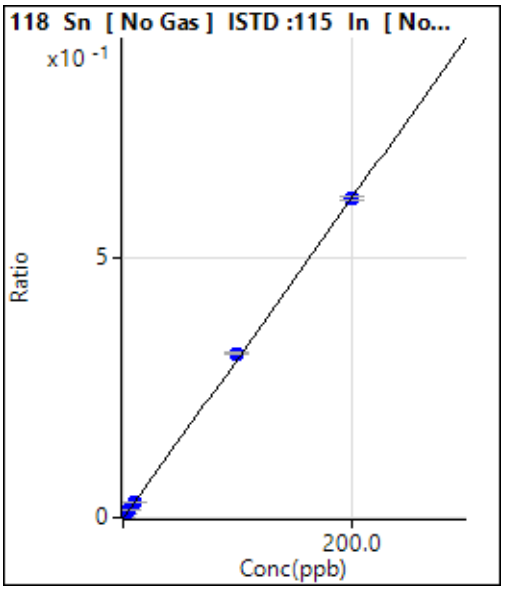


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.852	2590.29	0.0019	P	8.7	-7.4
3	☐	5.000	4.973	6958.65	0.0051	P	5.0	-0.5
4	☐	10.000	9.671	13483.79	0.0099	P	2.2	-3.3
5	☐	100.000	101.915	142160.00	0.1047	P	1.6	1.9
6	☐	200.000	199.061	273011.37	0.2046	P	0.6	-0.5

y = 0.0010 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

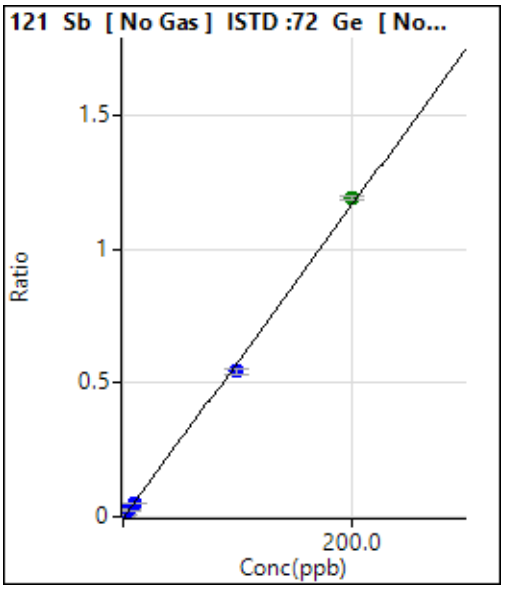
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0010	P	7.6	
2	☐	2.000	1.816	8943.20	0.0066	P	2.7	-9.2
3	☐	5.000	4.733	21220.81	0.0156	P	1.7	-5.3
4	☐	10.000	9.531	41225.11	0.0304	P	1.9	-4.7
5	☐	100.000	102.023	428899.26	0.3160	P	0.7	2.0
6	☐	200.000	199.021	821380.64	0.6155	P	0.7	-0.5

y = 0.0031 * x + 9.6492E-004
R = 0.9999
DL = 0.07146 ppb
BEC = 0.3125 ppb

Weight: <None>
Min Conc: <None>

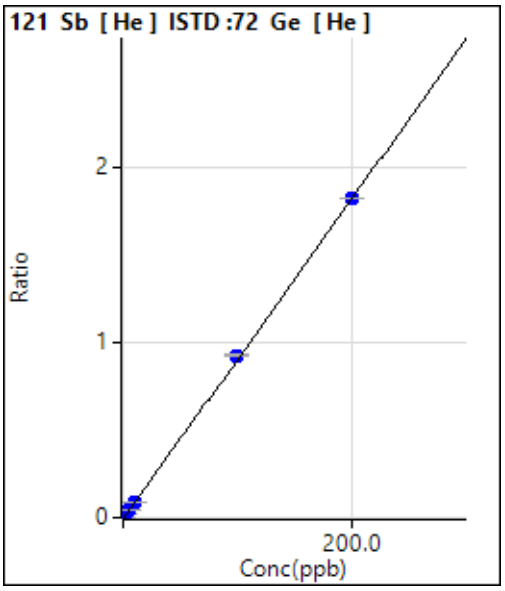


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	346.68	0.0003	P	17.9	
2	☐	2.000	1.715	11495.23	0.0103	P	1.7	-14.2
3	☐	5.000	4.285	27706.25	0.0254	P	3.0	-14.3
4	☐	10.000	8.851	56481.54	0.0520	P	4.1	-11.5
5	☐	100.000	92.703	588387.05	0.5420	P	3.0	-7.3
6	☐	200.000	203.727	1295667.40	1.1908	A	1.3	1.9

y = 0.0058 * x + 3.1991E-004
R = 0.9991
DL = 0.02933 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

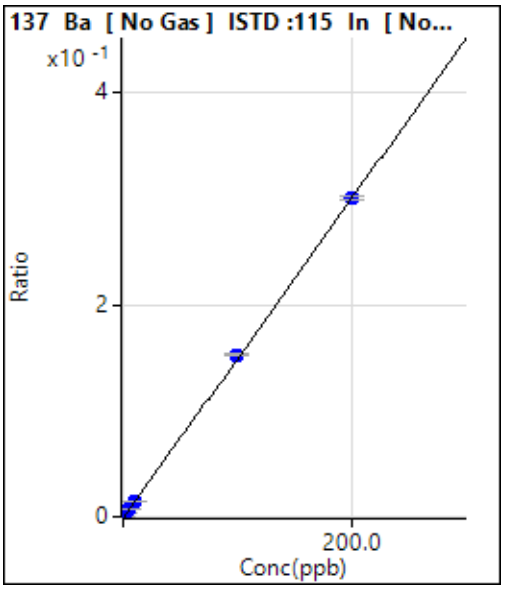
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	213.34	0.0006	P	15.7	
2	☐	2.000	1.839	6038.17	0.0174	P	0.7	-8.1
3	☐	5.000	4.794	15446.07	0.0444	P	3.7	-4.1
4	☐	10.000	9.617	30585.99	0.0884	P	0.9	-3.8
5	☐	100.000	101.109	323783.82	0.9236	P	1.4	1.1
6	☐	200.000	199.471	627288.82	1.8215	P	0.1	-0.3

y = 0.0091 * x + 6.2149E-004
R = 1.0000
DL = 0.03208 ppb
BEC = 0.06808 ppb

Weight: <None>
Min Conc: <None>

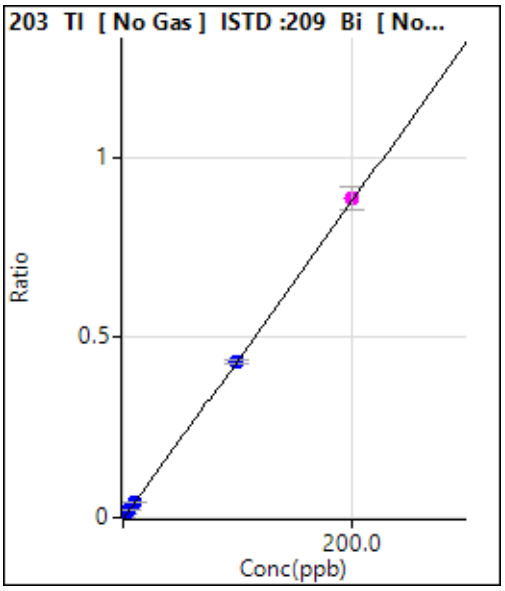


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	15.3	
2	☐	2.000	1.954	4147.41	0.0030	P	4.3	-2.3
3	☐	5.000	4.746	9897.29	0.0073	P	2.4	-5.1
4	☐	10.000	9.788	20179.32	0.0149	P	2.3	-2.1
5	☐	100.000	101.367	207894.24	0.1532	P	0.9	1.4
6	☐	200.000	199.334	401827.22	0.3011	P	0.7	-0.3

y = 0.0015 * x + 9.5995E-005
R = 1.0000
DL = 0.02926 ppb
BEC = 0.06358 ppb

Weight: <None>
Min Conc: <None>

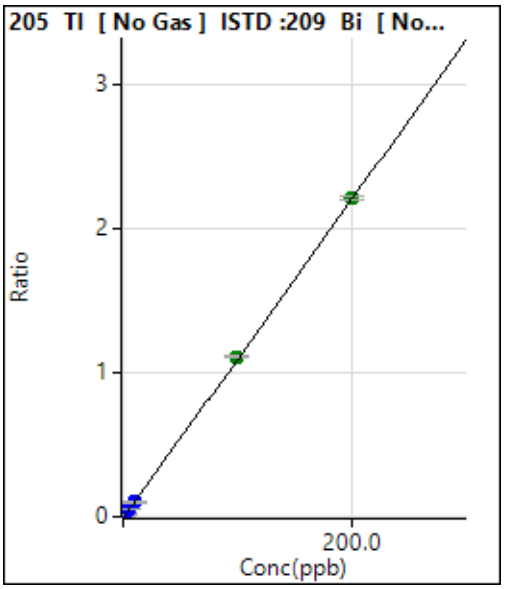
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	60.1	
2	☐	2.000	1.849	11725.68	0.0082	P	2.1	-7.5
3	☐	5.000	4.698	29615.46	0.0207	P	1.0	-6.0
4	☐	10.000	9.440	59016.19	0.0416	P	1.6	-5.6
5	☐	100.000	98.003	622041.54	0.4318	P	1.6	-2.0
6	☐	200.000	201.036	1235026.13	0.8857	M	6.6	0.5

y = 0.0044 * x + 3.2899E-005
R = 0.9999
DL = 0.01346 ppb
BEC = 0.007468 ppb

Weight: <None>
Min Conc: <None>

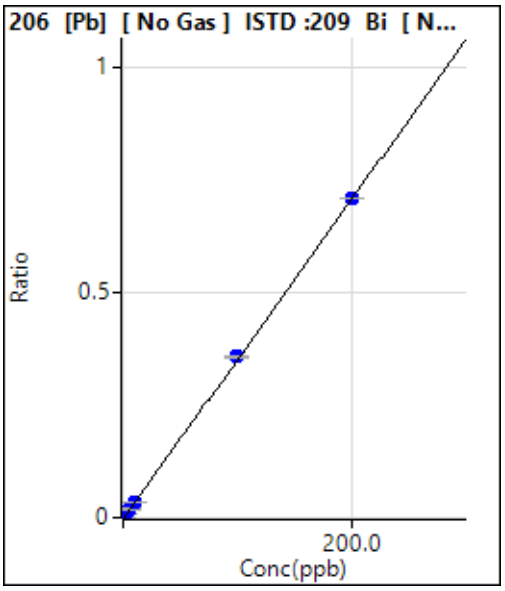


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	42.3	
2	☐	2.000	1.794	28552.99	0.0199	P	2.7	-10.3
3	☐	5.000	4.419	69895.69	0.0489	P	0.5	-11.6
4	☐	10.000	9.086	142456.70	0.1005	P	2.0	-9.1
5	☐	100.000	100.093	1592900.39	1.1058	A	1.4	0.1
6	☐	200.000	200.016	3082087.97	2.2095	A	0.6	0.0

y = 0.0110 * x + 1.0689E-004
R = 1.0000
DL = 0.01228 ppb
BEC = 0.009676 ppb

Weight: <None>
Min Conc: <None>

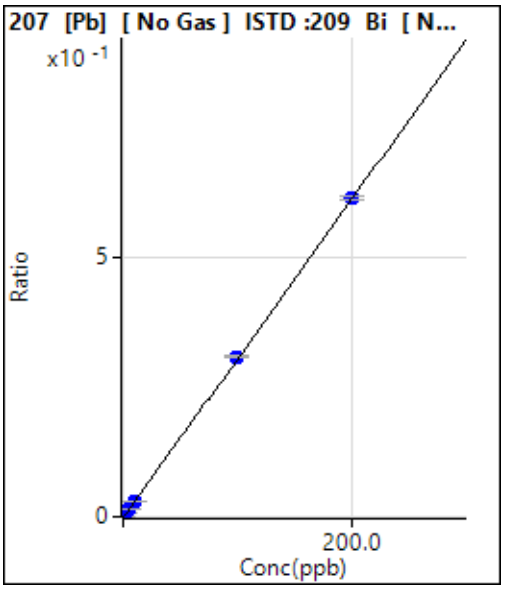
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0003	P	14.0	
2	☐	2.000	1.898	10077.56	0.0070	P	2.9	-5.1
3	☐	5.000	5.163	26620.54	0.0186	P	14.3	3.3
4	☐	10.000	9.678	49163.87	0.0347	P	1.7	-3.2
5	☐	100.000	100.627	515422.74	0.3578	P	1.0	0.6
6	☐	200.000	199.700	990041.73	0.7098	P	0.3	-0.2

y = 0.0036 * x + 2.8808E-004
R = 1.0000
DL = 0.03408 ppb
BEC = 0.08109 ppb

Weight: <None>
Min Conc: <None>

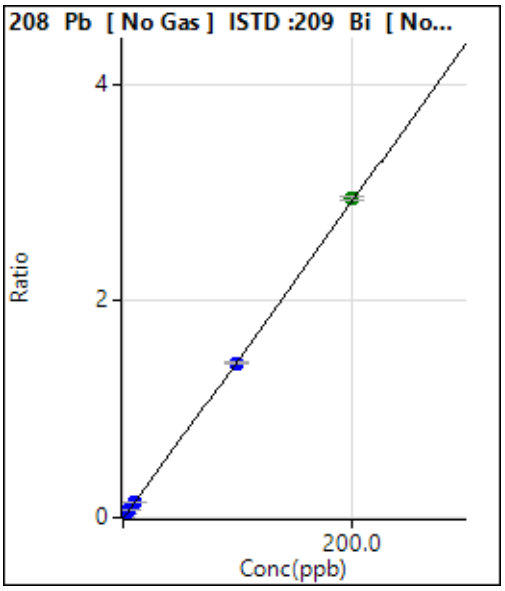


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1315.40	0.0009	P	133.0	
2	☐	2.000	1.702	8829.94	0.0062	P	6.5	-14.9
3	☐	5.000	4.585	21455.43	0.0150	P	2.7	-8.3
4	☐	10.000	9.487	42641.24	0.0301	P	4.6	-5.1
5	☐	100.000	100.287	445102.60	0.3090	P	1.0	0.3
6	☐	200.000	199.896	857710.85	0.6149	P	1.2	-0.1

y = 0.0031 * x + 9.3361E-004
R = 1.0000
DL = 1.213 ppb
BEC = 0.3039 ppb

Weight: <None>
Min Conc: <None>

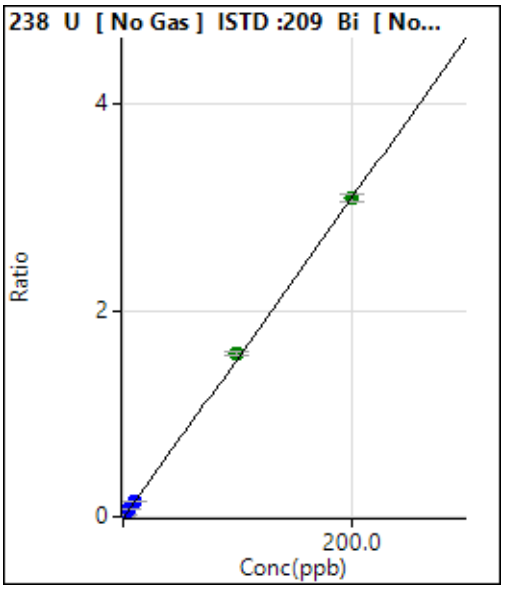
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2692.14	0.0019	P	65.4	
2	☐	2.000	1.777	40005.75	0.0279	P	1.8	-11.1
3	☐	5.000	4.695	100867.38	0.0706	P	4.0	-6.1
4	☐	10.000	9.303	195702.69	0.1380	P	1.5	-7.0
5	☐	100.000	97.385	2055255.19	1.4267	P	1.2	-2.6
6	☐	200.000	201.352	4111625.20	2.9478	A	1.3	0.7

y = 0.0146 * x + 0.0019
R = 0.9999
DL = 0.2564 ppb
BEC = 0.1306 ppb

Weight: <None>
Min Conc: <None>

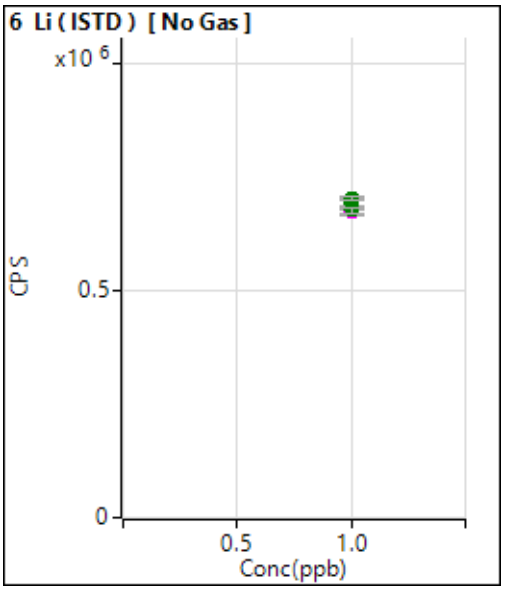


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	21.8	
2	☐	2.000	1.790	39888.68	0.0278	P	0.6	-10.5
3	☐	5.000	4.372	97086.58	0.0680	P	0.4	-12.6
4	☐	10.000	9.172	202118.54	0.1425	P	1.0	-8.3
5	☐	100.000	101.930	2281576.37	1.5838	A	1.9	1.9
6	☐	200.000	199.094	4314718.79	3.0936	A	1.9	-0.5

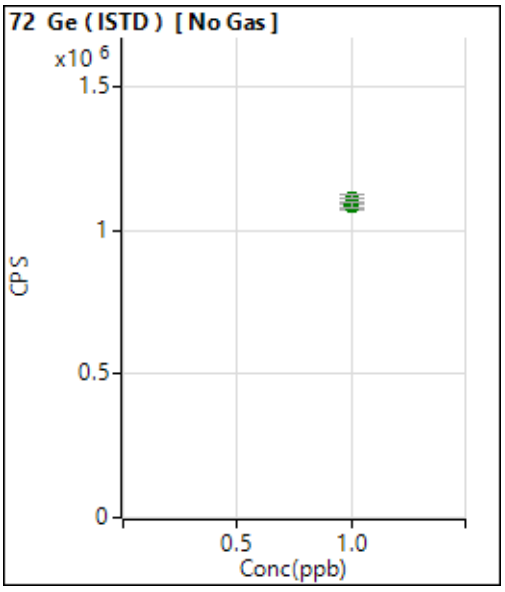
y = 0.0155 * x + 1.8924E-005
R = 0.9999
DL = 0.0007947 ppb
BEC = 0.001218 ppb

Weight: <None>
Min Conc: <None>

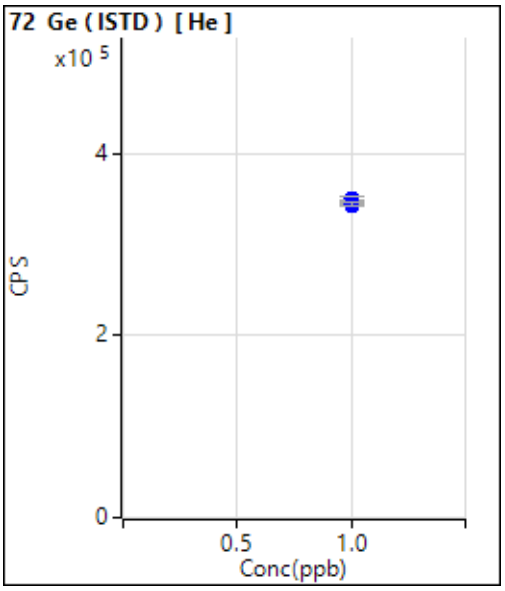
Calibration for 014_ICV.d



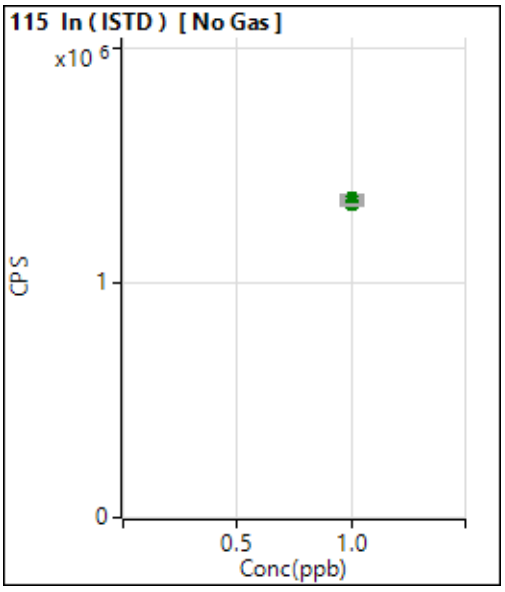
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		675584.15		M	3.0	
2	☐	1.000		693865.26		A	2.1	
3	☐	1.000		688986.54		A	3.8	
4	☐	1.000		688753.63		A	3.0	
5	☐	1.000		703252.47		A	0.8	
6	☐	1.000		677097.48		A	1.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1083013.81		A	1.6	
2	☐	1.000		1111763.63		A	2.3	
3	☐	1.000		1093395.24		A	3.7	
4	☐	1.000		1085869.80		A	1.9	
5	☐	1.000		1086061.18		A	2.6	
6	☐	1.000		1088193.97		A	1.7	

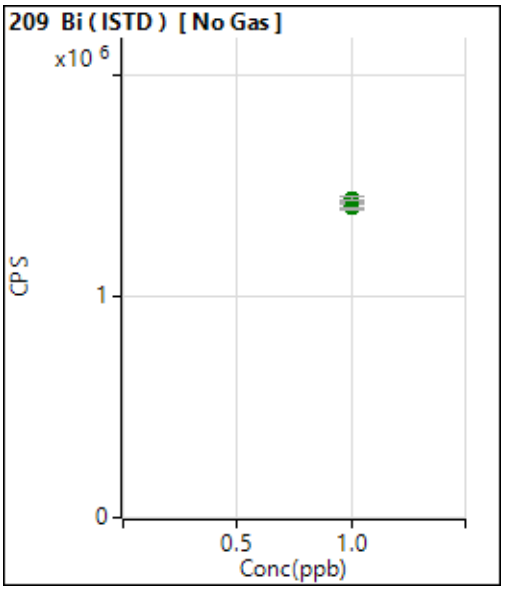


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		343019.46		P	0.9	
2	☐	1.000		346848.23		P	0.9	
3	☐	1.000		348051.02		P	0.6	
4	☐	1.000		345988.56		P	0.6	
5	☐	1.000		350617.54		P	1.2	
6	☐	1.000		344392.03		P	0.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1354248.87		A	0.5	
2	☐	1.000		1361364.67		A	1.1	
3	☐	1.000		1362632.26		A	2.2	
4	☐	1.000		1356637.78		A	0.9	
5	☐	1.000		1357464.77		A	0.7	
6	☐	1.000		1334627.37		A	0.5	

Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1409442.95		A	1.8	
2	☐	1.000		1433446.60		A	0.1	
3	☐	1.000		1428734.77		A	0.5	
4	☐	1.000		1418036.44		A	0.8	
5	☐	1.000		1440655.40		A	0.8	
6	☐	1.000		1394896.96		A	0.9	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	007CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:24:40-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	38949	0.00
Be	9	1	No Gas	47	152.87
V	51	2	He	602	0.97
Cr	52	2	He	910	1.23
Fe	56	2	He	8233	0.02
Se	78	2	He	366	2.07
As	75	2	He	62	60.47
Ca	44	2	He	1023	0.80
Na	23	2	He	182657	0.00
Mg	24	2	He	227	11.07
K	39	2	He	79897	0.00
Mn	55	2	He	373	5.84
Co	59	2	He	40	62.50
Ni	60	2	He	217	8.87
Cu	63	2	He	1563	0.13
Zn	66	2	He	5651	0.04
Al	27	2	He	490	0.42
B	11	1	No Gas	14603	0.01
Al	27	1	No Gas	18329	0.02
Si	28	1	No Gas	235702	0.00
Ag	107	1	No Gas	1170	0.26
Sr	88	1	No Gas	540	3.71
Mo	95	1	No Gas	23	212.09
Sn	118	1	No Gas	1307	0.59
Sb	121	1	No Gas	347	5.35
Ba	137	1	No Gas	130	11.83
Tl	205	1	No Gas	150	27.04
Tl	203	1	No Gas	47	132.55
Pb	208	1	No Gas	2692	2.43
U	238	1	No Gas	27	81.19
Ca	43	2	He	47	53.02
Sb	121	2	He	213	7.72
Ti	47	2	He	3	5196.15
Cu	63	1	No Gas	3927	0.08

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	675584	3.03

Calibration Blank Report

Ge	72	2	He	343019	0.86
Ge	72	1	No Gas	1083014	1.59
In	115	1	No Gas	1354249	0.48
Bi	209	1	No Gas	1409443	1.85

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	008CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:26:55-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3355	0.18
V	51	2	He	5660	0.07
Cr	52	2	He	6545	0.13
Fe	56	2	He	545518	0.00
Se	78	2	He	411	2.27
As	75	2	He	903	0.25
Ca	44	2	He	4381	0.01
Na	23	2	He	280189	0.00
Mg	24	2	He	59072	0.00
K	39	2	He	145463	0.00
Mn	55	2	He	4724	0.02
Co	59	2	He	8913	0.05
Ni	60	2	He	2354	0.18
Cu	63	2	He	7549	0.04
Zn	66	2	He	7069	0.04
Al	27	2	He	770	3.36
B	11	1	No Gas	19974	0.01
Al	27	1	No Gas	29405	0.00
Si	28	1	No Gas	263000	0.00
Ag	107	1	No Gas	14241	0.00
Cd	111	1	No Gas	2590	0.33
Sr	88	1	No Gas	23574	0.01
Mo	95	1	No Gas	4818	0.02
Sn	118	1	No Gas	8943	0.02
Sb	121	1	No Gas	11495	0.01
Ba	137	1	No Gas	4147	0.11
Tl	205	1	No Gas	28553	0.01
Tl	203	1	No Gas	11726	0.02
Pb	208	1	No Gas	40006	0.00
U	238	1	No Gas	39889	0.00
Ca	43	2	He	200	5.00
Sb	121	2	He	6038	0.03
Cu	63	1	No Gas	13781	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	693865	2.11	675584	102.71	70	120	
Ge	72	2	He	346848	0.92	343019	101.12	70	120	
Ge	72	1	No Gas	1111764	2.26	1083014	102.65	70	120	

Calibration Standard Report

In	115	1	No Gas	1361365	1.14	1354249	100.53	70	120	
Bi	209	1	No Gas	1433447	0.08	1409443	101.70	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	009CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:29:09-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7951	0.02
V	51	2	He	13042	0.01
Cr	52	2	He	15185	0.00
Fe	56	2	He	1432373	0.00
Se	78	2	He	571	1.74
As	75	2	He	2062	0.20
Ca	44	2	He	9794	0.02
Na	23	2	He	426412	0.00
Mg	24	2	He	147777	0.00
K	39	2	He	247549	0.00
Mn	55	2	He	11342	0.03
Co	59	2	He	20823	0.00
Ni	60	2	He	5758	0.10
Cu	63	2	He	15829	0.01
Zn	66	2	He	8766	0.04
Al	27	2	He	1400	0.22
B	11	1	No Gas	30622	0.00
Al	27	1	No Gas	53493	0.00
Si	28	1	No Gas	308479	0.00
Ag	107	1	No Gas	33242	0.00
Cd	111	1	No Gas	6959	0.04
Sr	88	1	No Gas	61364	0.00
Mo	95	1	No Gas	11789	0.04
Sn	118	1	No Gas	21221	0.00
Sb	121	1	No Gas	27706	0.00
Ba	137	1	No Gas	9897	0.04
Tl	205	1	No Gas	69896	0.00
Tl	203	1	No Gas	29615	0.00
Pb	208	1	No Gas	100867	0.00
U	238	1	No Gas	97087	0.00
Ca	43	2	He	473	1.03
Sb	121	2	He	15446	0.02
Cu	63	1	No Gas	28320	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	688987	3.77	675584	101.98	70	120	
Ge	72	2	He	348051	0.65	343019	101.47	70	120	
Ge	72	1	No Gas	1093395	3.66	1083014	100.96	70	120	

Calibration Standard Report

In	115	1	No Gas	1362632	2.16	1354249	100.62	70	120	
Bi	209	1	No Gas	1428735	0.51	1409443	101.37	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	010CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:31:23-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16510	0.01
V	51	2	He	26067	0.00
Cr	52	2	He	29405	0.01
Fe	56	2	He	2882655	0.00
Se	78	2	He	763	1.23
As	75	2	He	4210	0.02
Ca	44	2	He	18045	0.01
Na	23	2	He	685888	0.00
Mg	24	2	He	298879	0.00
K	39	2	He	420122	0.00
Mn	55	2	He	22562	0.01
Co	59	2	He	43048	0.00
Ni	60	2	He	11035	0.01
Cu	63	2	He	31179	0.01
Zn	66	2	He	11378	0.02
Al	27	2	He	2137	0.33
B	11	1	No Gas	49686	0.00
Al	27	1	No Gas	78256	0.00
Si	28	1	No Gas	372802	0.00
Ag	107	1	No Gas	67348	0.00
Cd	111	1	No Gas	13484	0.02
Sr	88	1	No Gas	116373	0.00
Mo	95	1	No Gas	24079	0.01
Sn	118	1	No Gas	41225	0.00
Sb	121	1	No Gas	56482	0.00
Ba	137	1	No Gas	20179	0.01
Tl	205	1	No Gas	142457	0.00
Tl	203	1	No Gas	59016	0.00
Pb	208	1	No Gas	195703	0.00
U	238	1	No Gas	202119	0.00
Ca	43	2	He	1003	0.23
Sb	121	2	He	30586	0.00
Cu	63	1	No Gas	54613	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	688754	2.96	675584	101.95	70	120	
Ge	72	2	He	345989	0.65	343019	100.87	70	120	
Ge	72	1	No Gas	1085870	1.89	1083014	100.26	70	120	

Calibration Standard Report

In	115	1	No Gas	1356638	0.87	1354249	100.18	70	120	
Bi	209	1	No Gas	1418036	0.77	1409443	100.61	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	011CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:33:36-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	174681	0.00
V	51	2	He	263019	0.00
Cr	52	2	He	304386	0.00
Fe	56	2	He	29161372	0.00
Se	78	2	He	4551	0.04
As	75	2	He	44359	0.00
Ca	44	2	He	178256	0.00
Na	23	2	He	5852426	0.00
Mg	24	2	He	3233371	0.00
K	39	2	He	3819073	0.00
Mn	55	2	He	229520	0.00
Co	59	2	He	451907	0.00
Ni	60	2	He	113779	0.00
Cu	63	2	He	309059	0.00
Zn	66	2	He	68459	0.00
Al	27	2	He	17845	0.01
B	11	1	No Gas	408374	0.00
Al	27	1	No Gas	648535	0.00
Si	28	1	No Gas	1765766	0.00
Ag	107	1	No Gas	688593	0.00
Cd	111	1	No Gas	142160	0.00
Sr	88	1	No Gas	1305412	0.00
Mo	95	1	No Gas	251688	0.00
Sn	118	1	No Gas	428899	0.00
Sb	121	1	No Gas	588387	0.00
Ba	137	1	No Gas	207894	0.00
Tl	205	1	No Gas	1592900	0.00
Tl	203	1	No Gas	622042	0.00
Pb	208	1	No Gas	2055255	0.00
U	238	1	No Gas	2281576	0.00
Ca	43	2	He	10511	0.04
Sb	121	2	He	323784	0.00
Cu	63	1	No Gas	534355	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	703252	0.78	675584	104.10	70	120	
Ge	72	2	He	350618	1.18	343019	102.22	70	120	
Ge	72	1	No Gas	1086061	2.61	1083014	100.28	70	120	

Calibration Standard Report

In	115	1	No Gas	1357465	0.68	1354249	100.24	70	120	
Bi	209	1	No Gas	1440655	0.85	1409443	102.21	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	012CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:35:45-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	333876	0.00
V	51	2	He	505587	0.00
Cr	52	2	He	579983	0.00
Fe	56	2	He	56016162	0.00
Se	78	2	He	8560	0.02
As	75	2	He	85113	0.00
Ca	44	2	He	342262	0.00
Na	23	2	He	11158849	0.00
Mg	24	2	He	6101546	0.00
K	39	2	He	7143832	0.00
Mn	55	2	He	437871	0.00
Co	59	2	He	858149	0.00
Ni	60	2	He	217668	0.00
Cu	63	2	He	589236	0.00
Zn	66	2	He	123892	0.00
Al	27	2	He	33390	0.00
B	11	1	No Gas	855291	0.00
Al	27	1	No Gas	1344176	0.00
Si	28	1	No Gas	3010511	0.00
Ag	107	1	No Gas	1482101	0.00
Cd	111	1	No Gas	273011	0.00
Sr	88	1	No Gas	2501477	0.00
Mo	95	1	No Gas	481964	0.00
Sn	118	1	No Gas	821381	0.00
Sb	121	1	No Gas	1295667	0.00
Ba	137	1	No Gas	401827	0.00
Tl	205	1	No Gas	3082088	0.00
Tl	203	1	No Gas	1235026	0.00
Pb	208	1	No Gas	4111625	0.00
U	238	1	No Gas	4314719	0.00
Ca	43	2	He	19674	0.01
Sb	121	2	He	627289	0.00
Cu	63	1	No Gas	1002572	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	677097	1.75	675584	100.22	70	120	
Ge	72	2	He	344392	0.78	343019	100.40	70	120	
Ge	72	1	No Gas	1088194	1.75	1083014	100.48	70	120	

Calibration Standard Report

In	115	1	No Gas	1334627	0.46	1354249	98.55	70	120	
Bi	209	1	No Gas	1394897	0.92	1409443	98.97	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	014_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:42:21-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.616	0.426	882315	0.91	100	102.6	90	110	
Be	9	1	No Gas	101.876	0.854	181700	0.27	100	101.9	90	110	
V	51	2	He	103.768	0.813	272783	0.53	100	103.8	90	110	
Cr	52	2	He	105.084	0.436	317528	0.67	100	105.1	90	110	
Fe	56	2	He	10306.582	0.215	30002672	0.32	10000	103.1	90	110	
Se	78	2	He	103.818	0.554	4780	0.65	100	103.8	90	110	
As	75	2	He	109.027	0.272	48246	0.55	100	109.0	90	110	
Ca	44	2	He	10279.425	0.309	183227	0.25	10000	102.8	90	110	
Na	23	2	He	10417.892	0.349	6118928	0.63	10000	104.2	90	110	
Mg	24	2	He	10597.080	0.736	3371725	0.61	10000	106.0	90	110	
K	39	2	He	10457.365	1.977	3933287	1.69	10000	104.6	90	110	
Mn	55	2	He	105.311	0.266	240088	0.56	100	105.3	90	110	
Co	59	2	He	104.897	0.374	468829	0.07	100	104.9	90	110	
Ni	60	2	He	105.711	0.391	119736	0.08	100	105.7	90	110	
Cu	63	2	He	104.829	0.436	322043	0.72	100	104.8	90	110	
Zn	66	2	He	106.886	1.256	71766	0.94	100	106.9	90	110	
Al	27	2	He	103.801	0.698	18299	0.91	100	103.8	90	110	
B	11	1	No Gas	447.444	3.059	408698	3.15	500	89.5	90	110	ICV Main CR1 Failed
Al	27	1	No Gas	98.331	0.496	677290	1.05	100	98.3	90	110	
Si	28	1	No Gas	540.048	1.118	1801809	1.50	500	108.0	90	110	
Ag	107	1	No Gas	95.456	1.493	721776	0.14	100	95.5	90	110	
Cd	111	1	No Gas	103.563	1.497	147416	0.22	100	103.6	90	110	
Sr	88	1	No Gas	103.249	1.310	1347288	0.50	100	103.2	90	110	
Mo	95	1	No Gas	101.341	1.406	254828	0.65	100	101.3	90	110	
Sn	118	1	No Gas	103.966	1.081	445993	0.49	100	104.0	90	110	
Sb	121	1	No Gas	96.612	0.674	626944	0.55	100	96.6	90	110	
Ba	137	1	No Gas	104.125	0.879	217929	0.89	100	104.1	90	110	
Tl	205	1	No Gas	107.757	3.694	1682263	1.62	100	107.8	90	110	
Tl	203	1	No Gas	106.418	2.164	662731	0.39	100	106.4	90	110	
Pb	208	1	No Gas	102.511	2.022	2122676	0.86	100	102.5	90	110	
U	238	1	No Gas	108.183	2.271	2376215	1.84	100	108.2	90	110	
Ca	43	2	He	10850.588	3.360	11168	3.59	10000	108.5	90	110	
Sb	121	2	He	106.862	0.717	347738	0.50	100	106.9	90	110	
Ti	47	2	He	101.811	1.419	10581	1.66	100	101.8	90	110	
Cu	63	1	No Gas	106.038	0.532	551137	0.70	100	106.0	90	110	
Se	82	1	No Gas	103.658	8.161	7204	10.36	100	103.7	90	110	

QC ISTD Table

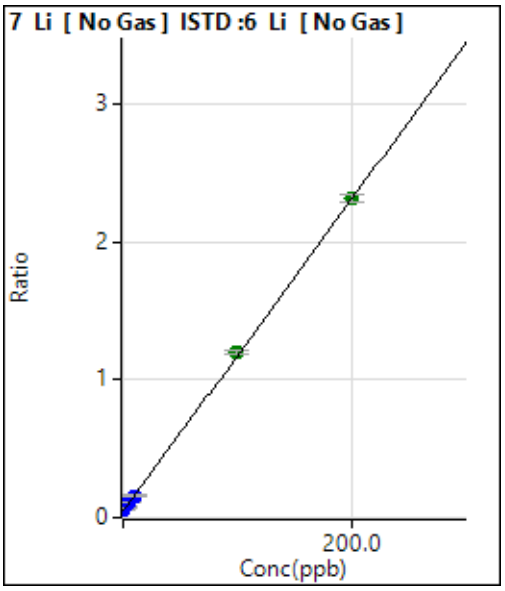
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722234	0.82	675584	106.91	70	120	
Ge	72	2	He	356263	0.32	343019	103.86	70	120	
Ge	72	1	No Gas	1109918	1.20	1083014	102.48	70	120	
In	115	1	No Gas	1385353	1.37	1354249	102.30	70	120	
Bi	209	1	No Gas	1413882	2.11	1409443	100.31	70	120	

Calibration for 014_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	CAL BLK	07/19/2022 11:24:40
2	008CALS.d	2/10/200	07/19/2022 11:26:55
3	009CALS.d	5/25/500	07/19/2022 11:29:09
4	010CALS.d	10/50/100	07/19/2022 11:31:23
5	011CALS.d	100/500/10K	07/19/2022 11:33:36
6	012CALS.d	200/1000/20K	07/19/2022 11:35:45

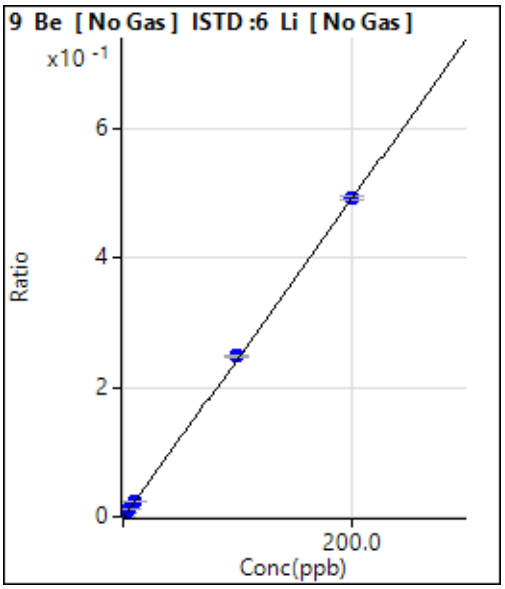
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38948.74	0.0577	P	1.5	
2	☐	2.000	1.730	53618.19	0.0773	P	1.8	-13.5
3	☐	5.000	4.427	74264.40	0.1079	P	3.7	-11.5
4	☐	10.000	8.970	109740.26	0.1594	P	2.6	-10.3
5	☐	100.000	101.177	847629.96	1.2053	A	2.1	1.2
6	☐	200.000	199.480	1570775.08	2.3204	A	1.9	-0.3

y = 0.0113 * x + 0.0577
R = 1.0000
DL = 0.2249 ppb
BEC = 5.084 ppb

Weight: <None>
Min Conc: <None>

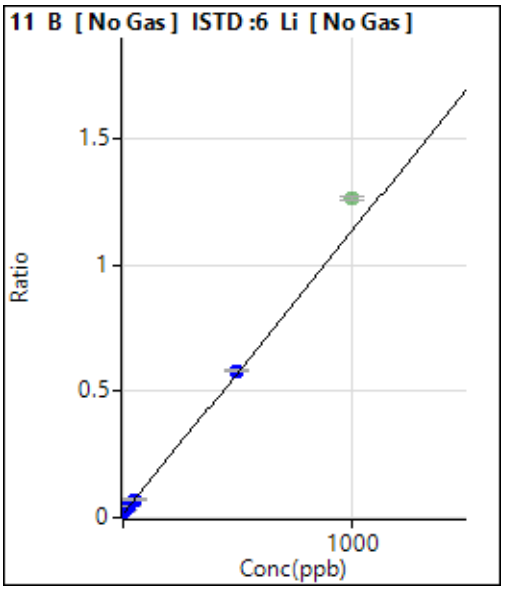


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	69.8	
2	☐	2.000	1.931	3355.43	0.0048	P	6.4	-3.4
3	☐	5.000	4.650	7950.65	0.0115	P	3.8	-7.0
4	☐	10.000	9.687	16509.74	0.0240	P	3.8	-3.1
5	☐	100.000	100.586	174680.97	0.2484	P	1.3	0.6
6	☐	200.000	199.732	333876.47	0.4932	P	1.6	-0.1

y = 0.0025 * x + 6.8572E-005
R = 1.0000
DL = 0.05817 ppb
BEC = 0.02777 ppb

Weight: <None>
Min Conc: <None>

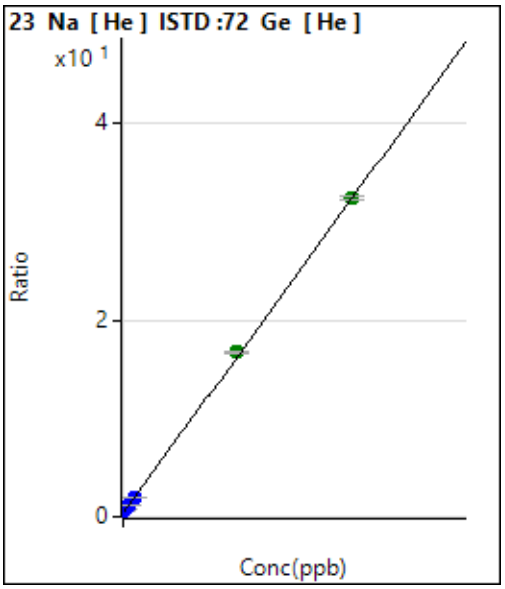
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14602.65	0.0216	P	2.3	
2	☐	10.000	6.418	19974.40	0.0288	P	1.8	-35.8
3	☐	25.000	20.478	30621.74	0.0445	P	3.6	-18.1
4	☐	50.000	45.296	49685.84	0.0722	P	3.7	-9.4
5	☐	500.000	500.768	408374.24	0.5807	P	1.7	0.2
6	☑	1000.000		855291.13	1.2633	A	1.1	

y = 0.0011 * x + 0.0216
R = 1.0000
DL = 1.351 ppb
BEC = 19.37 ppb

Weight: <None>
Min Conc: <None>

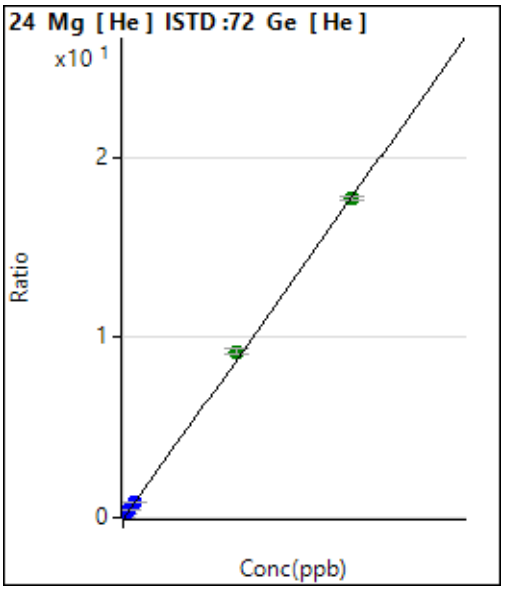


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182657.37	0.5325	P	1.2	
2	☐	200.000	172.344	280188.69	0.8079	P	0.8	-13.8
3	☐	500.000	433.562	426412.31	1.2252	P	0.3	-13.3
4	☐	1000.000	907.615	685888.14	1.9825	P	0.6	-9.2
5	☐	10000.00	10115.85	5852425.54	16.6927	A	0.8	1.2
6	☐	20000.00	19948.62	11158848.5	32.4007	A	0.7	-0.3

y = 0.0016 * x + 0.5325
R = 1.0000
DL = 12.35 ppb
BEC = 333.4 ppb

Weight: <None>
Min Conc: <None>

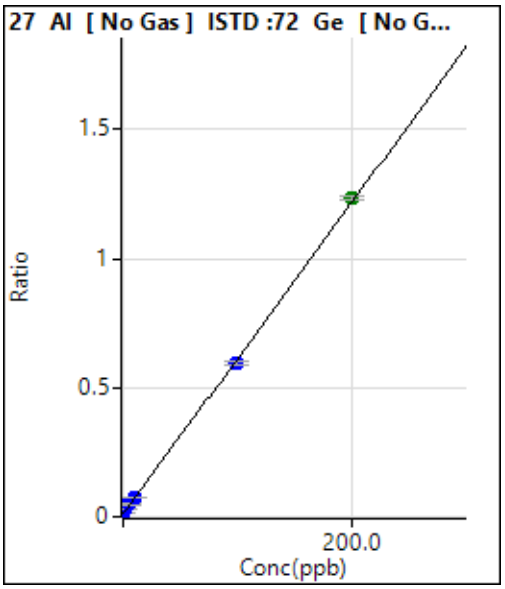
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	226.68	0.0007	P	24.2	
2	☐	200.000	189.977	59072.04	0.1703	P	0.5	-5.0
3	☐	500.000	474.699	147776.62	0.4246	P	0.3	-5.1
4	☐	1000.000	966.612	298878.84	0.8639	P	1.3	-3.3
5	☐	10000.00	10327.62	3233371.10	9.2236	A	2.7	3.3
6	☐	20000.00	19838.59	6101545.95	17.7172	A	0.8	-0.8

y = 8.9304E-004 * x + 6.5999E-004
R = 0.9998
DL = 0.5369 ppb
BEC = 0.739 ppb

Weight: <None>
Min Conc: <None>

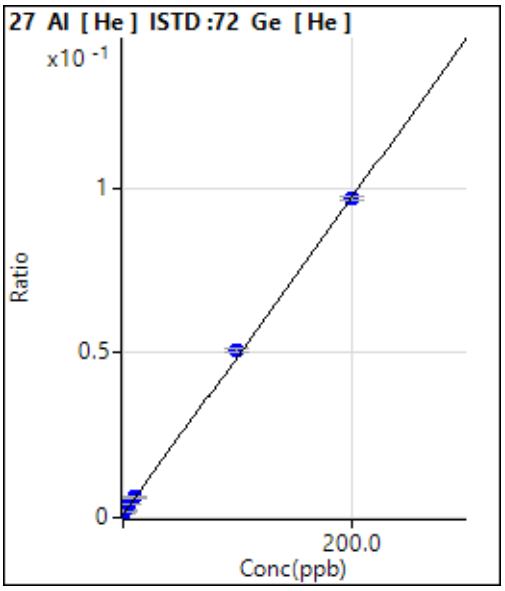


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18328.96	0.0169	P	4.7	
2	☐	2.000	1.578	29404.64	0.0265	P	1.5	-21.1
3	☐	5.000	5.310	53492.87	0.0490	P	4.3	6.2
4	☐	10.000	9.140	78256.04	0.0721	P	2.2	-8.6
5	☐	100.000	96.213	648535.02	0.5974	P	2.9	-3.8
6	☐	200.000	201.933	1344175.50	1.2353	A	1.3	1.0

y = 0.0060 * x + 0.0169
R = 0.9997
DL = 0.3973 ppb
BEC = 2.806 ppb

Weight: <None>
Min Conc: <None>

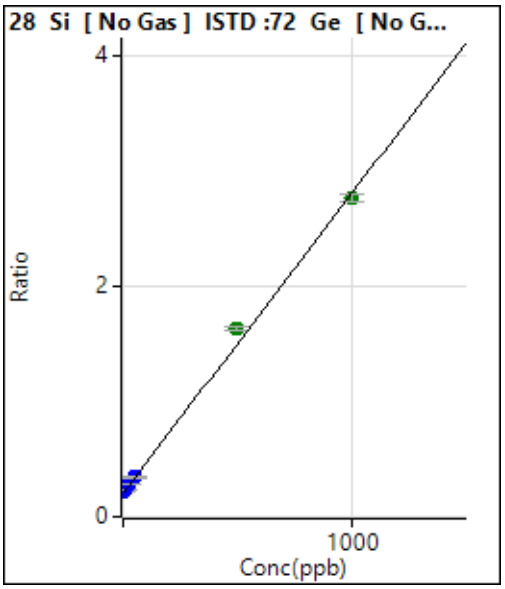
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0014	P	1.5	
2	☐	2.000	1.653	770.03	0.0022	P	26.6	-17.3
3	☐	5.000	5.392	1400.10	0.0040	P	2.7	7.8
4	☐	10.000	9.871	2136.87	0.0062	P	7.4	-1.3
5	☐	100.000	102.850	17845.02	0.0509	P	2.5	2.9
6	☐	200.000	198.575	33390.50	0.0970	P	1.5	-0.7

y = 4.8106E-004 * x + 0.0014
R = 0.9998
DL = 0.1295 ppb
BEC = 2.969 ppb

Weight: <None>
Min Conc: <None>

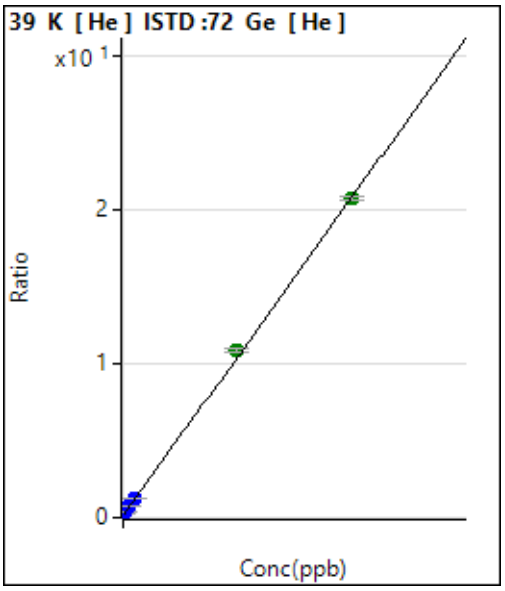


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	235702.45	0.2177	P	2.2	
2	☐	10.000	7.279	262999.99	0.2366	P	2.1	-27.2
3	☐	25.000	24.851	308479.02	0.2824	P	3.6	-0.6
4	☐	50.000	48.308	372801.53	0.3434	P	2.5	-3.4
5	☐	500.000	541.205	1765765.96	1.6264	A	1.9	8.2
6	☐	1000.000	979.513	3010511.00	2.7673	A	2.3	-2.0

y = 0.0026 * x + 0.2177
R = 0.9988
DL = 5.636 ppb
BEC = 83.63 ppb

Weight: <None>
Min Conc: <None>

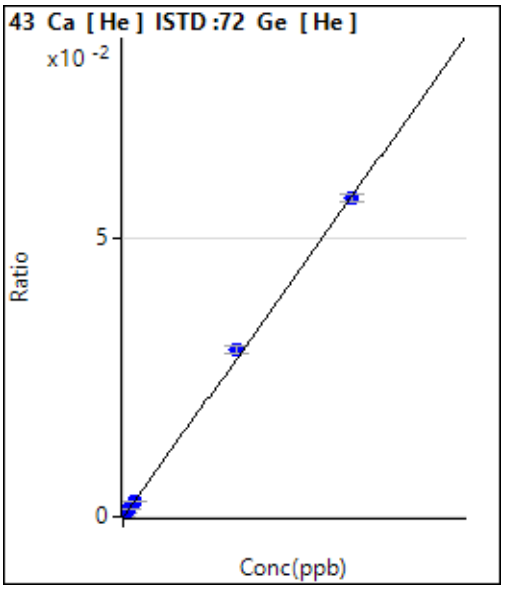
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	79897.00	0.2329	P	1.2	
2	☐	200.000	180.430	145462.91	0.4194	P	1.0	-9.8
3	☐	500.000	462.806	247549.48	0.7112	P	0.1	-7.4
4	☐	1000.000	949.531	420121.95	1.2143	P	0.4	-5.0
5	☐	10000.00	10315.33	3819073.49	10.8940	A	2.2	3.2
6	☐	20000.00	19845.98	7143831.98	20.7441	A	0.7	-0.8

y = 0.0010 * x + 0.2329
R = 0.9998
DL = 8 ppb
BEC = 225.4 ppb

Weight: <None>
Min Conc: <None>

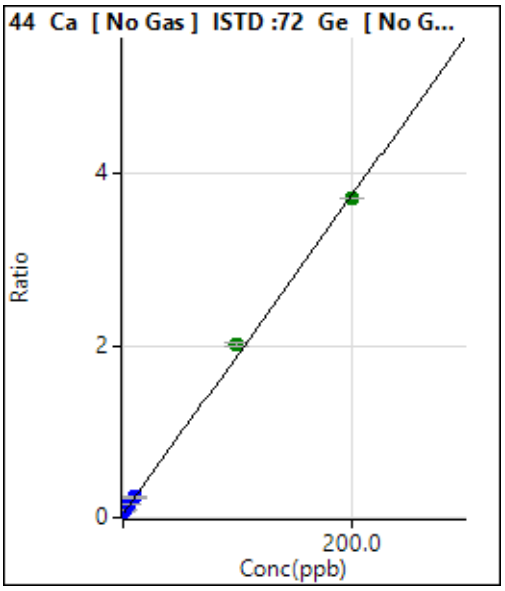


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	23.8	
2	☐	200.000	153.355	200.01	0.0006	P	10.7	-23.3
3	☐	500.000	425.678	473.35	0.0014	P	5.4	-14.9
4	☐	1000.000	960.937	1003.39	0.0029	P	1.7	-3.9
5	☐	10000.00	10376.20	10510.86	0.0300	P	4.4	3.8
6	☐	20000.00	19816.17	19674.36	0.0571	P	2.2	-0.9

y = 2.8764E-006 * x + 1.3586E-004
R = 0.9997
DL = 33.73 ppb
BEC = 47.23 ppb

Weight: <None>
Min Conc: <None>

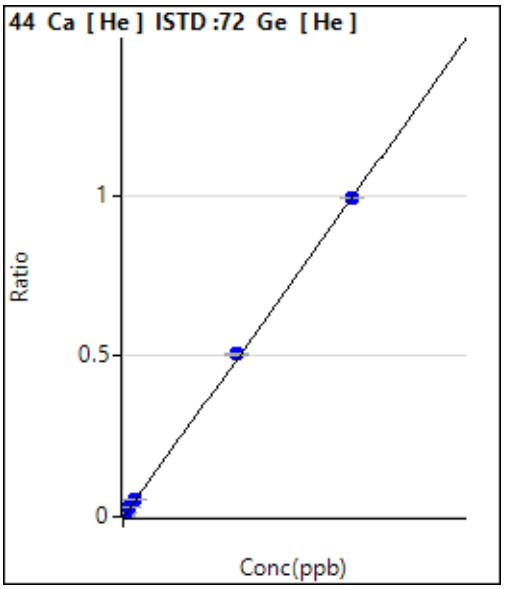
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	67441.89	0.0623	P	0.5	
2	☐	2.000	1.674	103728.82	0.0933	P	0.9	-16.3
3	☐	5.000	4.724	163671.47	0.1498	P	4.3	-5.5
4	☐	10.000	9.385	256489.66	0.2362	P	1.2	-6.2
5	☐	100.000	105.550	2191619.03	2.0189	A	2.9	5.6
6	☐	200.000	197.266	4046921.19	3.7191	A	0.5	-1.4

y = 0.0185 * x + 0.0623
R = 0.9994
DL = 0.05448 ppb
BEC = 3.359 ppb

Weight: <None>
Min Conc: <None>

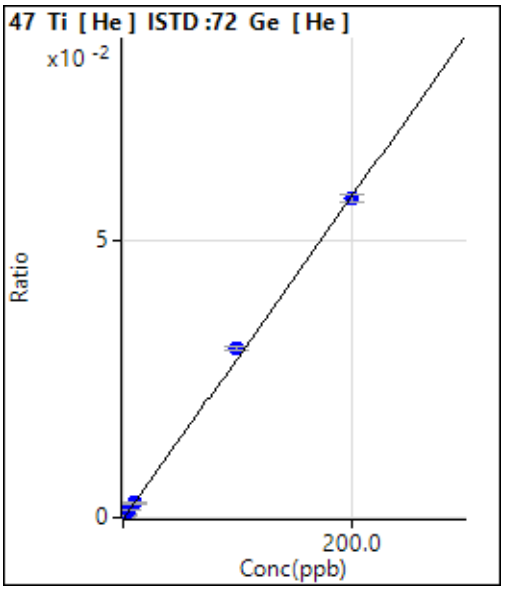


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1023.40	0.0030	P	8.6	
2	☐	200.000	193.928	4380.79	0.0126	P	0.5	-3.0
3	☐	500.000	505.752	9793.65	0.0281	P	2.8	1.2
4	☐	1000.000	988.648	18045.46	0.0522	P	2.7	-1.1
5	☐	10000.00	10161.77	178255.88	0.5085	P	1.3	1.6
6	☐	20000.00	19919.59	342262.23	0.9938	P	0.3	-0.4

y = 4.9742E-005 * x + 0.0030
R = 1.0000
DL = 15.5 ppb
BEC = 59.99 ppb

Weight: <None>
Min Conc: <None>

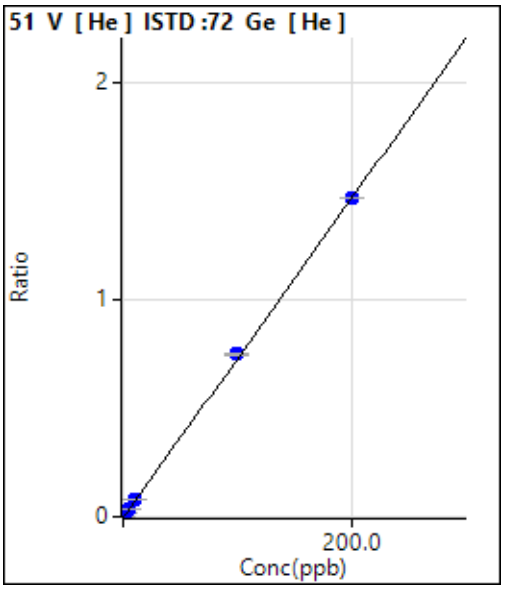
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.879	193.34	0.0006	P	31.9	-6.1
3	☐	5.000	4.797	490.02	0.0014	P	13.3	-4.1
4	☐	10.000	9.285	940.05	0.0027	P	11.2	-7.2
5	☐	100.000	104.324	10670.94	0.0304	P	2.3	4.3
6	☐	200.000	197.880	19877.99	0.0577	P	2.5	-1.1

y = 2.9161E-004 * x + 9.7550E-006
R = 0.9996
DL = 0.1738 ppb
BEC = 0.03345 ppb

Weight: <None>
Min Conc: <None>

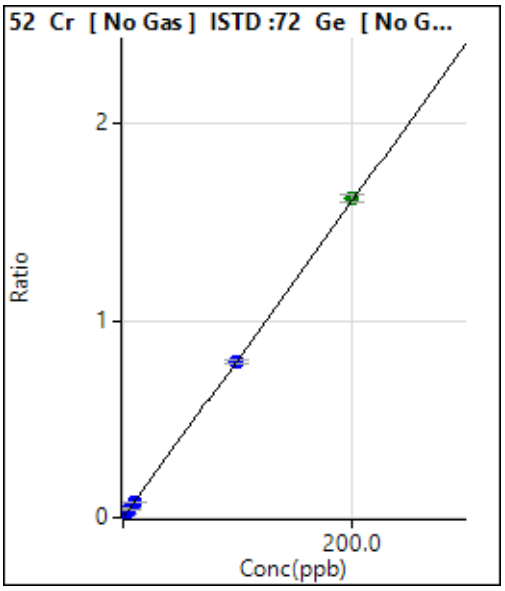


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	602.24	0.0018	P	5.0	
2	☐	2.000	1.979	5660.08	0.0163	P	4.4	-1.1
3	☐	5.000	4.851	13041.80	0.0375	P	0.9	-3.0
4	☐	10.000	9.995	26066.99	0.0753	P	0.3	0.0
5	☐	100.000	101.665	263019.47	0.7502	P	1.3	1.7
6	☐	200.000	199.171	505587.17	1.4681	P	0.1	-0.4

y = 0.0074 * x + 0.0018
R = 0.9999
DL = 0.03596 ppb
BEC = 0.2384 ppb

Weight: <None>
Min Conc: <None>

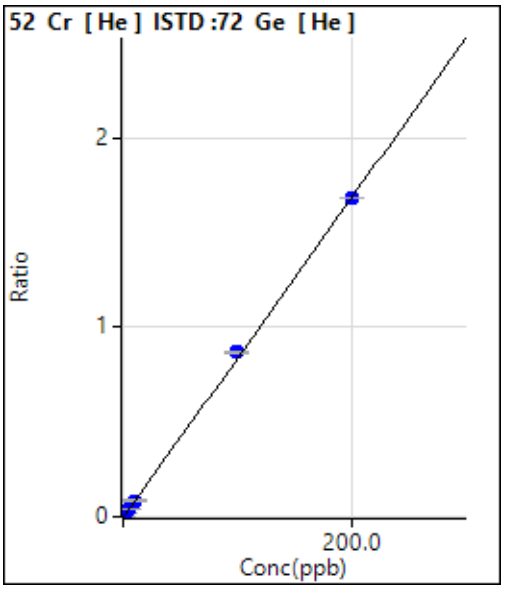
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7612.22	0.0070	P	5.6	
2	☐	2.000	1.765	23530.55	0.0212	P	2.8	-11.7
3	☐	5.000	4.561	47609.52	0.0436	P	4.1	-8.8
4	☐	10.000	9.211	87760.46	0.0808	P	3.1	-7.9
5	☐	100.000	97.613	857042.62	0.7894	P	2.0	-2.4
6	☐	200.000	201.246	1762477.58	1.6200	A	2.2	0.6

y = 0.0080 * x + 0.0070
R = 0.9999
DL = 0.1473 ppb
BEC = 0.8766 ppb

Weight: <None>
Min Conc: <None>

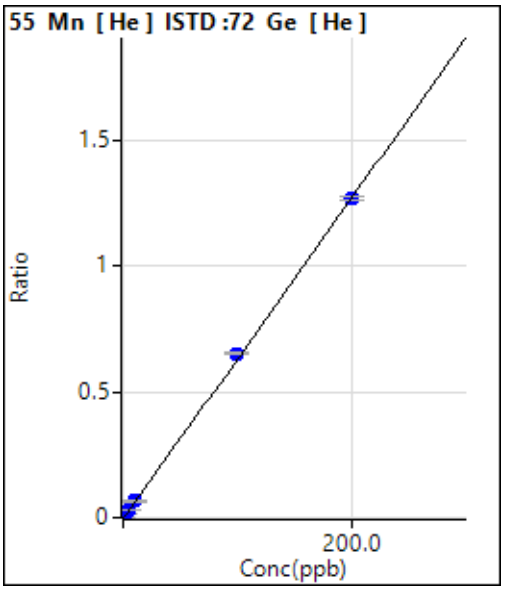


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0027	P	11.9	
2	☐	2.000	1.917	6545.05	0.0189	P	8.2	-4.2
3	☐	5.000	4.846	15185.31	0.0436	P	0.5	-3.1
4	☐	10.000	9.738	29405.25	0.0850	P	3.1	-2.6
5	☐	100.000	102.356	304386.17	0.8682	P	1.7	2.4
6	☐	200.000	198.840	579983.27	1.6841	P	0.2	-0.6

y = 0.0085 * x + 0.0027
R = 0.9999
DL = 0.1117 ppb
BEC = 0.3139 ppb

Weight: <None>
Min Conc: <None>

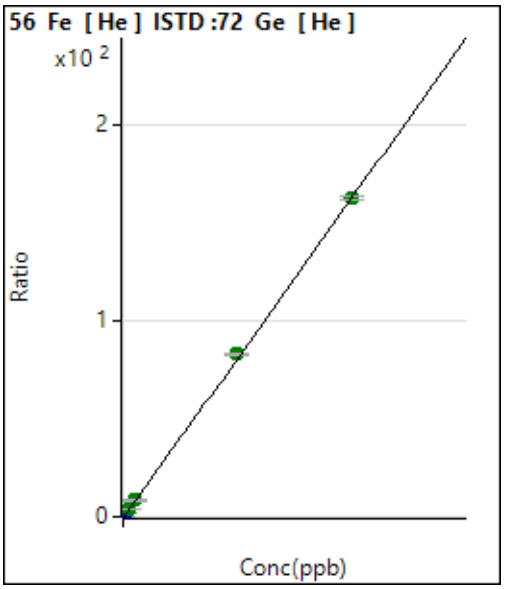
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	373.35	0.0011	P	21.5	
2	☐	2.000	1.962	4724.25	0.0136	P	0.4	-1.9
3	☐	5.000	4.931	11341.56	0.0326	P	3.9	-1.4
4	☐	10.000	10.037	22562.15	0.0652	P	1.6	0.4
5	☐	100.000	102.308	229519.59	0.6547	P	1.9	2.3
6	☐	200.000	198.846	437870.90	1.2715	P	0.8	-0.6

y = 0.0064 * x + 0.0011
R = 0.9999
DL = 0.1098 ppb
BEC = 0.1703 ppb

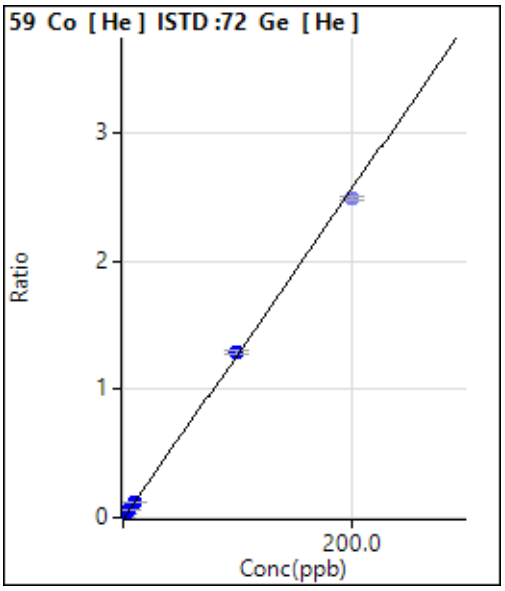
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8232.63	0.0240	P	2.2	
2	☐	200.000	189.606	545517.96	1.5728	P	0.9	-5.2
3	☐	500.000	500.902	1432373.00	4.1157	A	1.8	0.2
4	☐	1000.000	1017.047	2882654.54	8.3319	A	1.2	1.7
5	☐	10000.00	10179.61	29161372.0	83.1780	A	1.4	1.8
6	☐	20000.00	19909.42	56016162.5	162.657	A	0.7	-0.5

y = 0.0082 * x + 0.0240
R = 0.9999
DL = 0.1932 ppb
BEC = 2.938 ppb

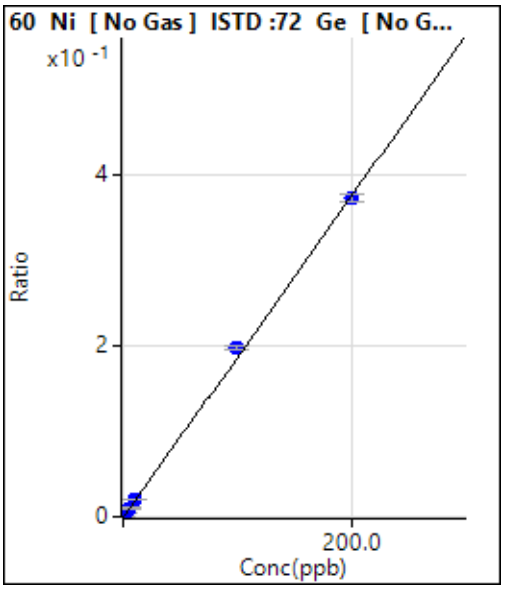
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	25.7	
2	☐	2.000	1.986	8913.05	0.0257	P	5.5	-0.7
3	☐	5.000	4.635	20822.84	0.0598	P	0.3	-7.3
4	☐	10.000	9.649	43048.20	0.1244	P	1.3	-3.5
5	☐	100.000	100.054	451906.71	1.2890	P	1.6	0.1
6	☑	200.000		858149.42	2.4919	P	0.7	

y = 0.0129 * x + 1.1677E-004
R = 1.0000
DL = 0.006992 ppb
BEC = 0.009065 ppb

Weight: <None>
Min Conc: <None>

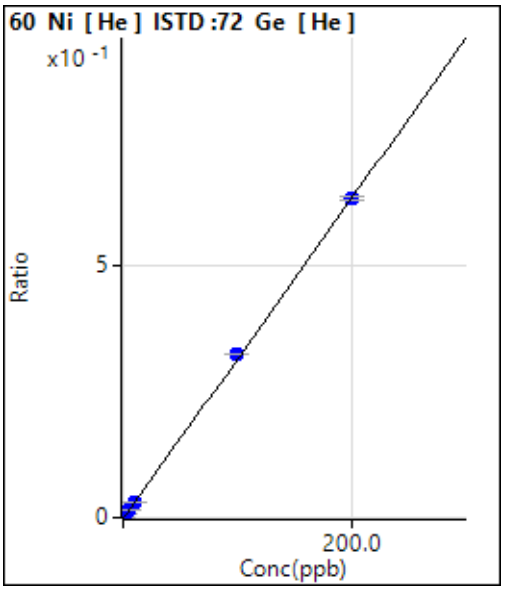


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0007	P	14.3	
2	☐	2.000	2.011	4991.01	0.0045	P	1.1	0.5
3	☐	5.000	4.883	10804.48	0.0099	P	4.8	-2.3
4	☐	10.000	10.333	21864.53	0.0201	P	2.0	3.3
5	☐	100.000	104.611	214336.74	0.1974	P	2.5	4.6
6	☐	200.000	197.681	405216.95	0.3725	P	2.1	-1.2

y = 0.0019 * x + 7.0743E-004
R = 0.9996
DL = 0.161 ppb
BEC = 0.3762 ppb

Weight: <None>
Min Conc: <None>

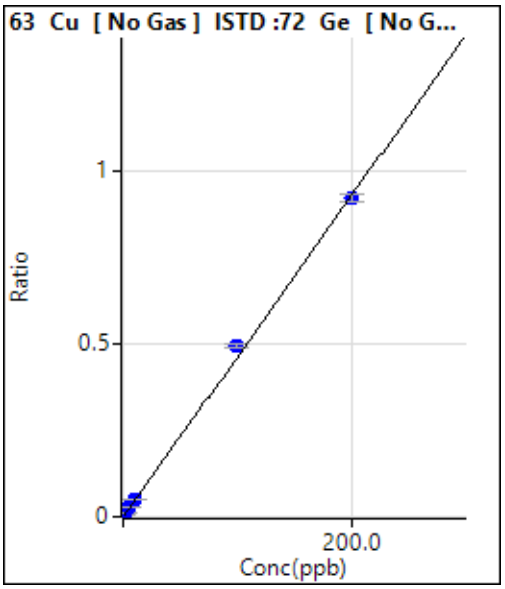
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0006	P	19.2	
2	☐	2.000	1.939	2353.59	0.0068	P	4.4	-3.0
3	☐	5.000	5.014	5757.97	0.0165	P	5.7	0.3
4	☐	10.000	9.852	11034.65	0.0319	P	1.7	-1.5
5	☐	100.000	102.060	113778.93	0.3245	P	0.3	2.1
6	☐	200.000	198.978	217667.62	0.6321	P	0.8	-0.5

y = 0.0032 * x + 6.3159E-004
R = 0.9999
DL = 0.1146 ppb
BEC = 0.199 ppb

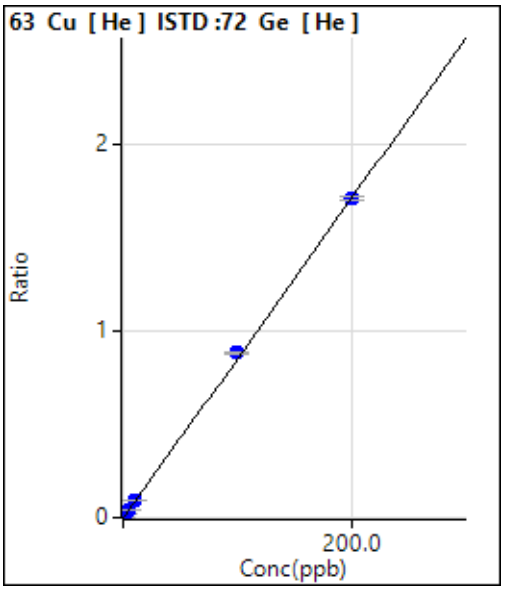
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3927.31	0.0036	P	4.0	
2	☐	2.000	1.888	13780.54	0.0124	P	4.3	-5.6
3	☐	5.000	4.797	28319.77	0.0259	P	4.2	-4.1
4	☐	10.000	10.042	54612.87	0.0503	P	2.4	0.4
5	☐	100.000	105.098	534355.41	0.4922	P	2.4	5.1
6	☐	200.000	197.455	1002571.73	0.9216	P	2.3	-1.3

y = 0.0046 * x + 0.0036
R = 0.9995
DL = 0.09288 ppb
BEC = 0.7803 ppb

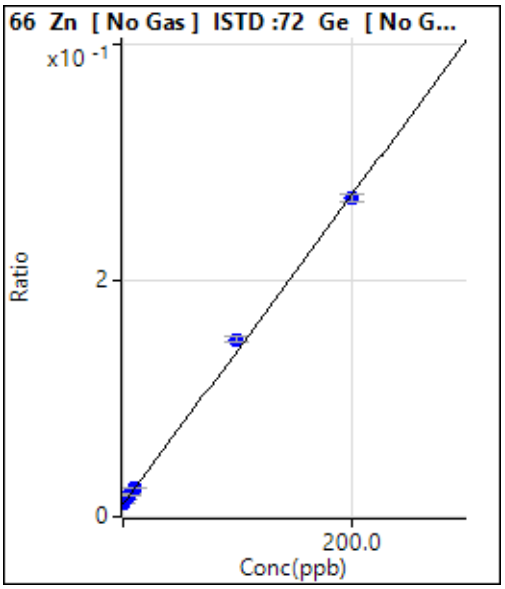
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0046	P	2.8	
2	☐	2.000	2.006	7548.87	0.0218	P	3.1	0.3
3	☐	5.000	4.770	15829.44	0.0455	P	2.2	-4.6
4	☐	10.000	9.972	31179.36	0.0901	P	1.0	-0.3
5	☐	100.000	102.222	309058.71	0.8816	P	2.2	2.2
6	☐	200.000	198.896	589236.08	1.7110	P	0.7	-0.6

y = 0.0086 * x + 0.0046
R = 0.9999
DL = 0.04449 ppb
BEC = 0.5313 ppb

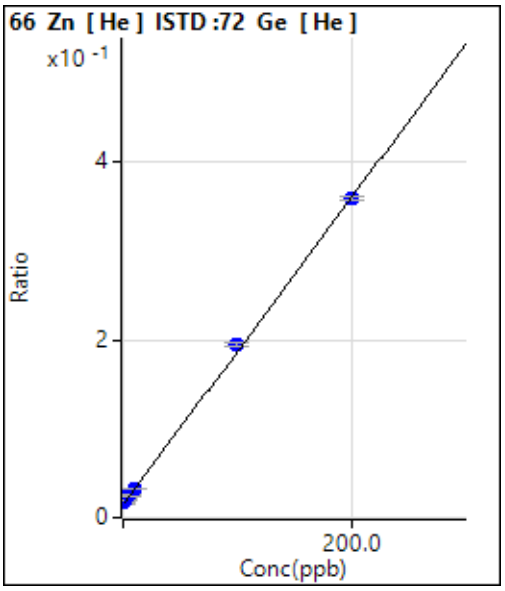
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12836.29	0.0119	P	3.6	
2	☐	2.000	2.135	16280.02	0.0146	P	2.2	6.8
3	☐	5.000	5.122	20275.39	0.0186	P	4.2	2.4
4	☐	10.000	9.846	26866.99	0.0247	P	1.5	-1.5
5	☐	100.000	105.563	162939.00	0.1501	P	3.0	5.6
6	☐	200.000	197.222	293912.36	0.2702	P	1.9	-1.4

y = 0.0013 * x + 0.0119
R = 0.9994
DL = 0.9655 ppb
BEC = 9.049 ppb

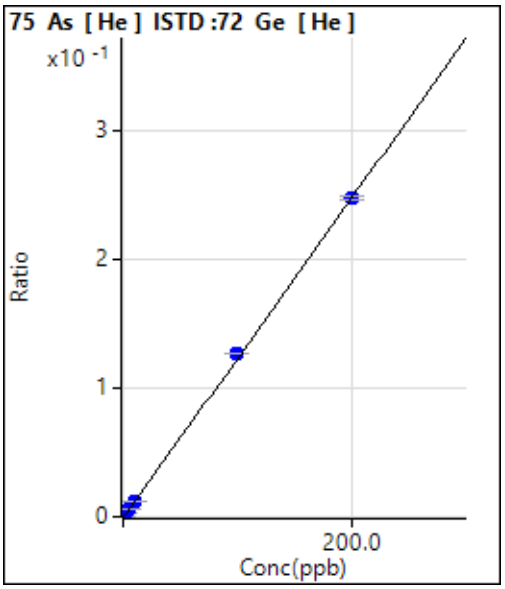
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5651.29	0.0165	P	3.0	
2	☐	2.000	2.255	7068.64	0.0204	P	2.5	12.7
3	☐	5.000	5.031	8766.31	0.0252	P	2.9	0.6
4	☐	10.000	9.481	11378.28	0.0329	P	2.5	-5.2
5	☐	100.000	103.328	68459.10	0.1953	P	2.2	3.3
6	☐	200.000	198.359	123891.52	0.3597	P	0.8	-0.8

y = 0.0017 * x + 0.0165
R = 0.9998
DL = 0.8671 ppb
BEC = 9.522 ppb

Weight: <None>
Min Conc: <None>

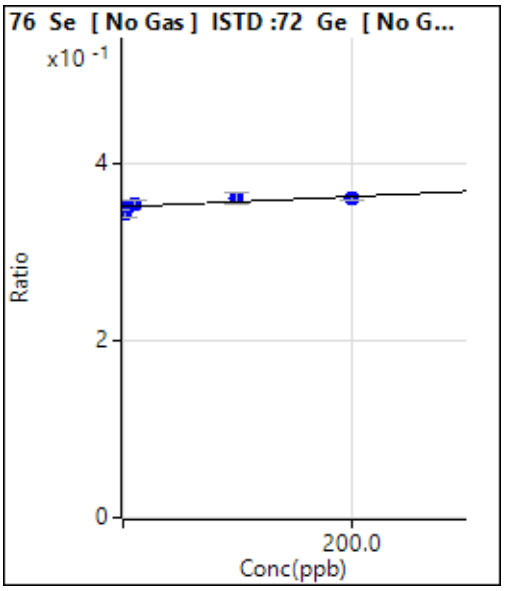


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	62.22	0.0002	P	38.0	
2	☐	2.000	1.953	903.37	0.0026	P	2.1	-2.3
3	☐	5.000	4.630	2062.39	0.0059	P	3.4	-7.4
4	☐	10.000	9.662	4209.57	0.0122	P	1.1	-3.4
5	☐	100.000	101.853	44359.24	0.1265	P	1.1	1.9
6	☐	200.000	199.100	85112.96	0.2472	P	1.0	-0.4

y = 0.0012 * x + 1.8149E-004
R = 0.9999
DL = 0.1667 ppb
BEC = 0.1463 ppb

Weight: <None>
Min Conc: <None>

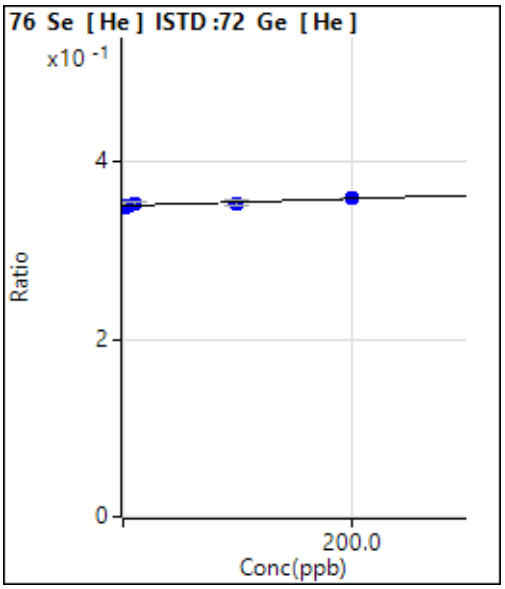
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	380438.43	0.3513	P	1.7	
2	☐	2.000	-117.667	382783.11	0.3444	P	2.6	-5983.
3	☐	5.000	20.941	385215.68	0.3526	P	3.0	318.8
4	☐	10.000	70.894	385931.01	0.3555	P	1.9	608.9
5	☐	100.000	164.373	391811.07	0.3610	P	3.5	64.4
6	☐	200.000	165.567	392855.58	0.3610	P	0.9	-17.2

y = 5.8649E-005 * x + 0.3513
R = 0.7719
DL = 302.2 ppb
BEC = 5991 ppb

Weight: <None>
Min Conc: <None>

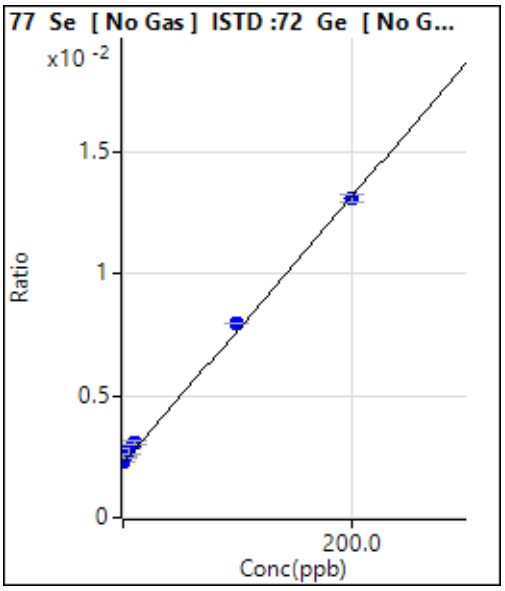


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120215.19	0.3504	P	1.0	
2	☐	2.000	-58.011	120743.26	0.3481	P	1.2	-3000.
3	☐	5.000	11.913	122139.41	0.3509	P	0.7	138.3
4	☐	10.000	48.379	121916.90	0.3524	P	0.8	383.8
5	☐	100.000	60.483	123710.31	0.3529	P	1.9	-39.5
6	☐	200.000	218.267	123689.62	0.3592	P	0.5	9.1

y = 3.9954E-005 * x + 0.3504
R = 0.9208
DL = 270.1 ppb
BEC = 8771 ppb

Weight: <None>
Min Conc: <None>

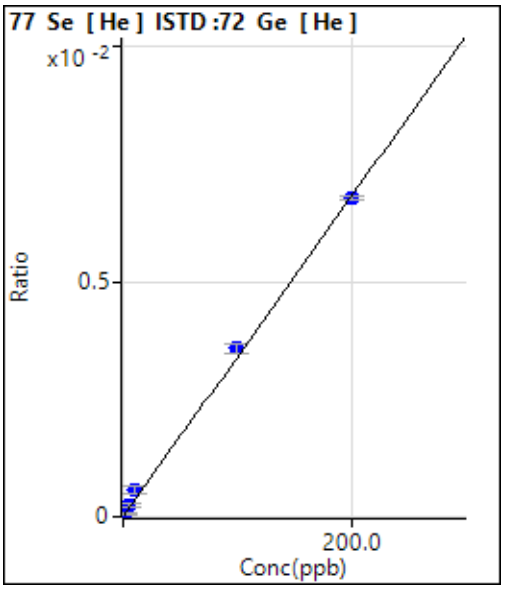
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2490.27	0.0023	P	2.0	
2	☐	2.000	3.600	2773.67	0.0025	P	5.1	80.0
3	☐	5.000	8.068	2990.38	0.0027	P	8.9	61.4
4	☐	10.000	14.400	3350.47	0.0031	P	4.7	44.0
5	☐	100.000	104.032	8676.29	0.0080	P	0.6	4.0
6	☐	200.000	197.671	14264.39	0.0131	P	2.2	-1.2

y = 5.4694E-005 * x + 0.0023
R = 0.9996
DL = 2.585 ppb
BEC = 42.04 ppb

Weight: <None>
Min Conc: <None>

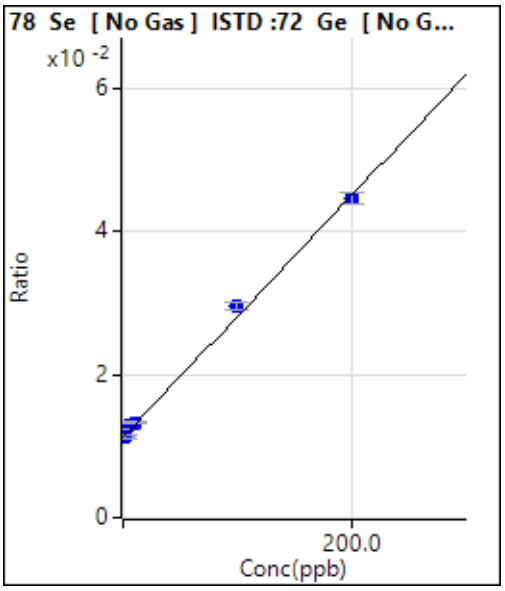


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.118	26.67	0.0001	P	57.5	-44.1
3	☐	5.000	5.610	80.00	0.0002	P	33.1	12.2
4	☐	10.000	15.532	196.67	0.0006	P	27.3	55.3
5	☐	100.000	103.841	1253.42	0.0036	P	6.2	3.8
6	☐	200.000	197.797	2333.58	0.0068	P	1.7	-1.1

y = 3.4063E-005 * x + 3.8756E-005
R = 0.9994
DL = 2.956 ppb
BEC = 1.138 ppb

Weight: <None>
Min Conc: <None>

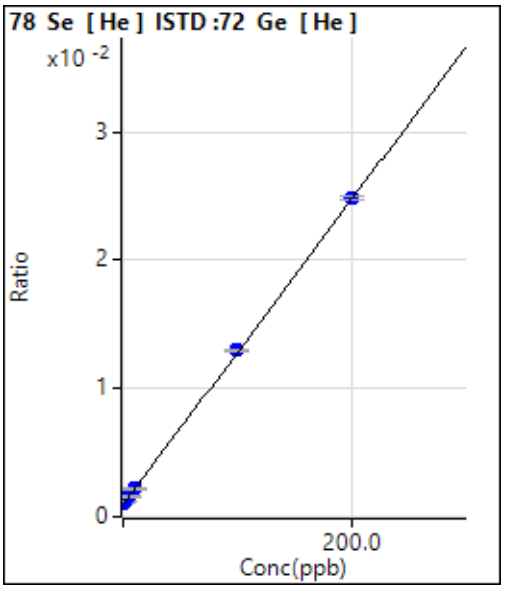
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12469.31	0.0115	P	2.8	
2	☐	2.000	-0.702	12666.18	0.0114	P	4.4	-135.1
3	☐	5.000	8.019	14040.85	0.0129	P	8.6	60.4
4	☐	10.000	10.496	14424.63	0.0133	P	3.7	5.0
5	☐	100.000	107.136	32091.84	0.0296	P	4.1	7.1
6	☐	200.000	196.359	48510.66	0.0446	P	3.9	-1.8

y = 1.6847E-004 * x + 0.0115
R = 0.9988
DL = 5.843 ppb
BEC = 68.36 ppb

Weight: <None>
Min Conc: <None>

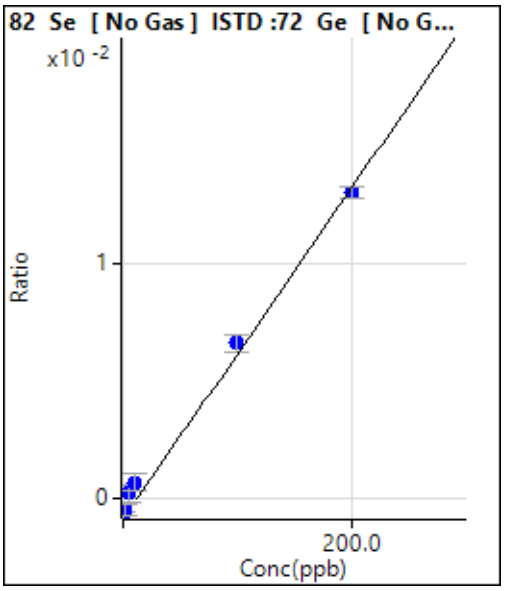


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.01	0.0011	P	8.4	
2	☐	2.000	0.979	410.68	0.0012	P	9.3	-51.1
3	☐	5.000	4.804	570.68	0.0016	P	9.3	-3.9
4	☐	10.000	9.554	762.69	0.0022	P	9.1	-4.5
5	☐	100.000	100.145	4551.45	0.0130	P	0.6	0.1
6	☐	200.000	199.965	8560.07	0.0249	P	1.1	0.0

y = 1.1896E-004 * x + 0.0011
R = 1.0000
DL = 2.256 ppb
BEC = 8.974 ppb

Weight: <None>
Min Conc: <None>

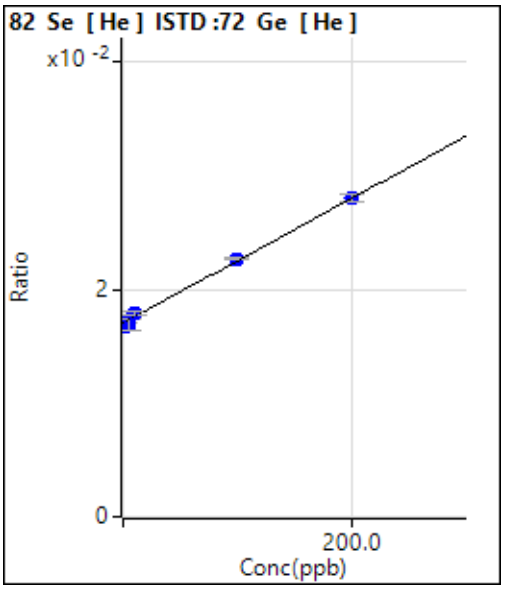
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-878.83	-0.0008	P	-51.0	
2	☐	2.000	4.622	-546.33	-0.0005	P	-96.0	131.1
3	☐	5.000	14.723	257.81	0.0002	P	319.7	194.5
4	☐	10.000	21.230	735.78	0.0007	P	114.6	112.3
5	☐	100.000	105.304	7176.40	0.0066	P	11.4	5.3
6	☐	200.000	196.517	14180.45	0.0130	P	3.8	-1.7

y = 7.0423E-005 * x - 8.1373E-004
R = 0.9983
DL = 17.68 ppb
BEC = -11.55 ppb

Weight: <None>
Min Conc: <None>

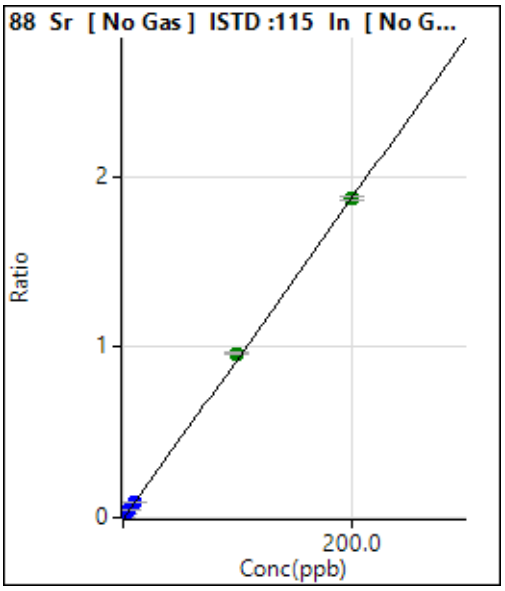


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5881.39	0.0171	P	2.4	
2	☐	2.000	-7.213	5808.02	0.0167	P	3.1	-460.6
3	☐	5.000	-3.854	5894.73	0.0169	P	6.6	-177.1
4	☐	10.000	15.448	6224.88	0.0180	P	1.7	54.5
5	☐	100.000	101.513	7962.49	0.0227	P	0.9	1.5
6	☐	200.000	199.285	9666.96	0.0281	P	2.8	-0.4

y = 5.4839E-005 * x + 0.0171
R = 0.9977
DL = 22.31 ppb
BEC = 312.6 ppb

Weight: <None>
Min Conc: <None>

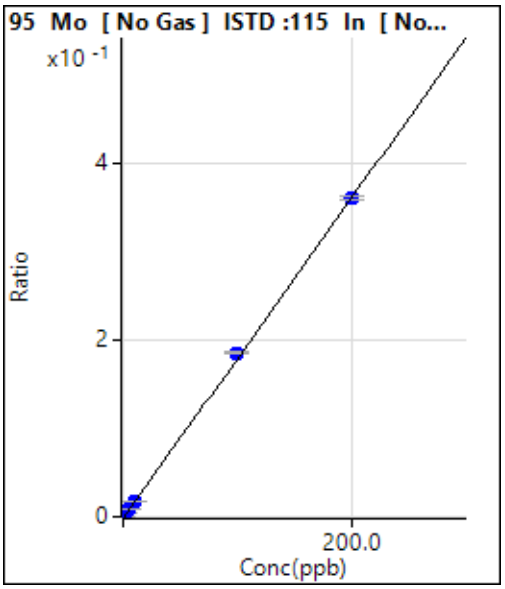
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0004	P	20.5	
2	☐	2.000	1.797	23574.41	0.0173	P	2.1	-10.2
3	☐	5.000	4.742	61363.99	0.0450	P	2.6	-5.2
4	☐	10.000	9.067	116373.30	0.0858	P	1.0	-9.3
5	☐	100.000	102.089	1305412.22	0.9617	A	1.4	2.1
6	☐	200.000	199.011	2501477.41	1.8744	A	1.3	-0.5

y = 0.0094 * x + 3.9902E-004
R = 0.9999
DL = 0.0261 ppb
BEC = 0.04237 ppb

Weight: <None>
Min Conc: <None>

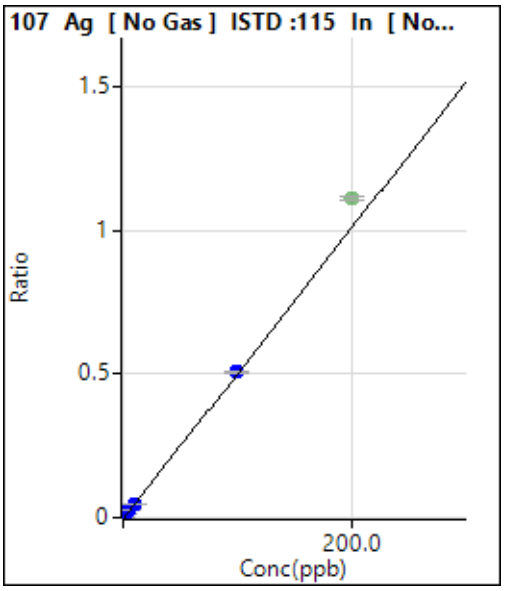


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	49.6	
2	☐	2.000	1.940	4817.62	0.0035	P	2.1	-3.0
3	☐	5.000	4.755	11788.73	0.0086	P	3.1	-4.9
4	☐	10.000	9.770	24078.79	0.0178	P	2.8	-2.3
5	☐	100.000	102.145	251688.35	0.1854	P	1.7	2.1
6	☐	200.000	198.946	481963.60	0.3611	P	0.7	-0.5

y = 0.0018 * x + 1.7243E-005
R = 0.9999
DL = 0.01414 ppb
BEC = 0.0095 ppb

Weight: <None>
Min Conc: <None>

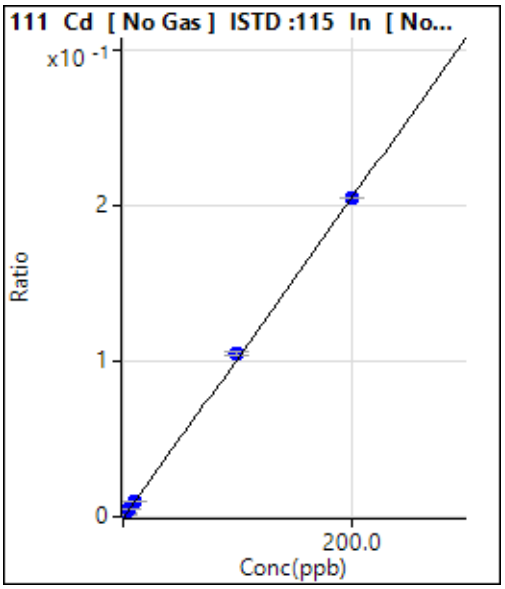
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0009	P	3.5	
2	☐	2.000	1.896	14241.18	0.0105	P	0.6	-5.2
3	☐	5.000	4.651	33242.17	0.0244	P	2.2	-7.0
4	☐	10.000	9.638	67347.89	0.0496	P	0.8	-3.6
5	☐	100.000	100.056	688593.45	0.5073	P	1.4	0.1
6	☑	200.000		1482101.18	1.1105	A	0.9	

y = 0.0051 * x + 8.6408E-004
R = 1.0000
DL = 0.01769 ppb
BEC = 0.1707 ppb

Weight: <None>
Min Conc: <None>

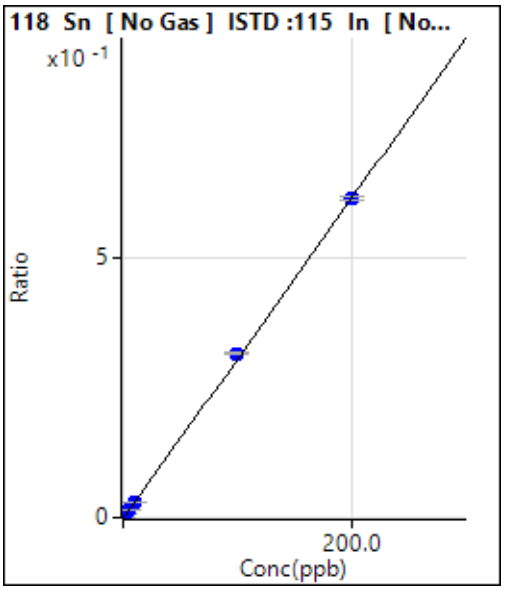


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.852	2590.29	0.0019	P	8.7	-7.4
3	☐	5.000	4.973	6958.65	0.0051	P	5.0	-0.5
4	☐	10.000	9.671	13483.79	0.0099	P	2.2	-3.3
5	☐	100.000	101.915	142160.00	0.1047	P	1.6	1.9
6	☐	200.000	199.061	273011.37	0.2046	P	0.6	-0.5

y = 0.0010 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

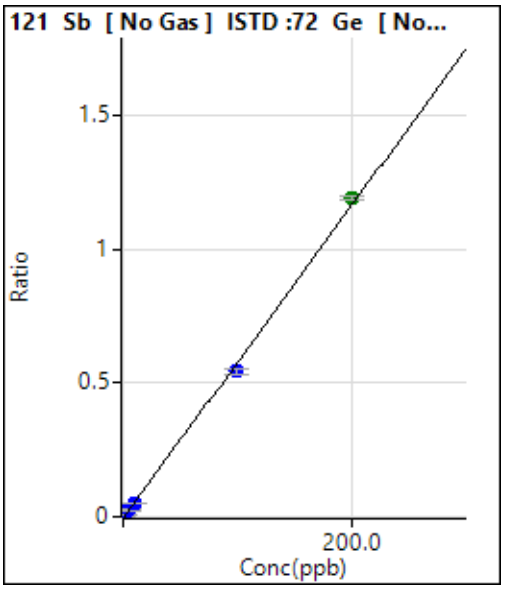
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0010	P	7.6	
2	☐	2.000	1.816	8943.20	0.0066	P	2.7	-9.2
3	☐	5.000	4.733	21220.81	0.0156	P	1.7	-5.3
4	☐	10.000	9.531	41225.11	0.0304	P	1.9	-4.7
5	☐	100.000	102.023	428899.26	0.3160	P	0.7	2.0
6	☐	200.000	199.021	821380.64	0.6155	P	0.7	-0.5

y = 0.0031 * x + 9.6492E-004
R = 0.9999
DL = 0.07146 ppb
BEC = 0.3125 ppb

Weight: <None>
Min Conc: <None>

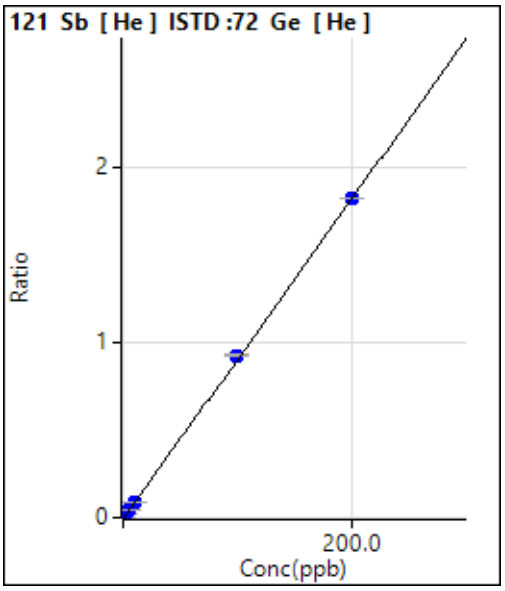


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	346.68	0.0003	P	17.9	
2	☐	2.000	1.715	11495.23	0.0103	P	1.7	-14.2
3	☐	5.000	4.285	27706.25	0.0254	P	3.0	-14.3
4	☐	10.000	8.851	56481.54	0.0520	P	4.1	-11.5
5	☐	100.000	92.703	588387.05	0.5420	P	3.0	-7.3
6	☐	200.000	203.727	1295667.40	1.1908	A	1.3	1.9

y = 0.0058 * x + 3.1991E-004
R = 0.9991
DL = 0.02933 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

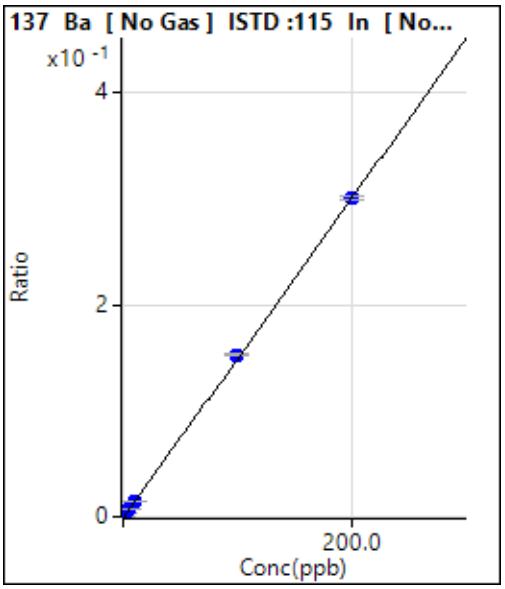
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	213.34	0.0006	P	15.7	
2	☐	2.000	1.839	6038.17	0.0174	P	0.7	-8.1
3	☐	5.000	4.794	15446.07	0.0444	P	3.7	-4.1
4	☐	10.000	9.617	30585.99	0.0884	P	0.9	-3.8
5	☐	100.000	101.109	323783.82	0.9236	P	1.4	1.1
6	☐	200.000	199.471	627288.82	1.8215	P	0.1	-0.3

y = 0.0091 * x + 6.2149E-004
R = 1.0000
DL = 0.03208 ppb
BEC = 0.06808 ppb

Weight: <None>
Min Conc: <None>

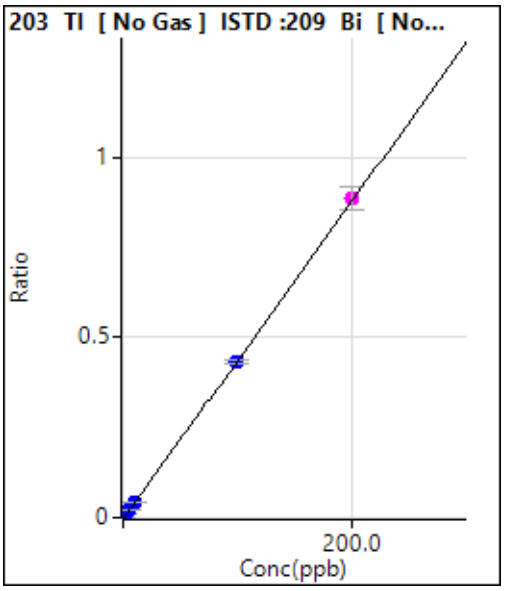


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	15.3	
2	☐	2.000	1.954	4147.41	0.0030	P	4.3	-2.3
3	☐	5.000	4.746	9897.29	0.0073	P	2.4	-5.1
4	☐	10.000	9.788	20179.32	0.0149	P	2.3	-2.1
5	☐	100.000	101.367	207894.24	0.1532	P	0.9	1.4
6	☐	200.000	199.334	401827.22	0.3011	P	0.7	-0.3

y = 0.0015 * x + 9.5995E-005
R = 1.0000
DL = 0.02926 ppb
BEC = 0.06358 ppb

Weight: <None>
Min Conc: <None>

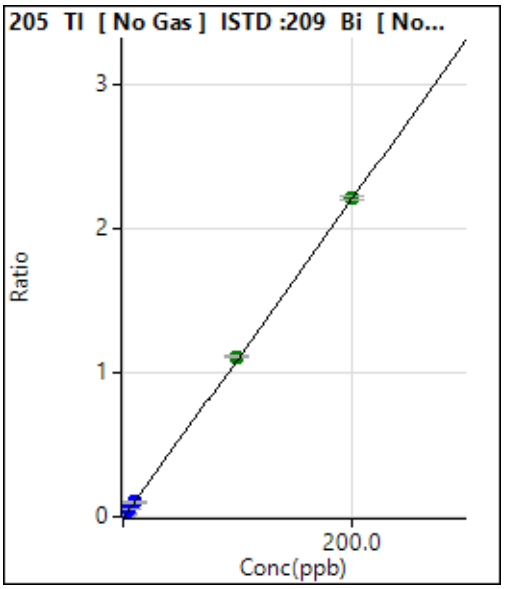
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	60.1	
2	☐	2.000	1.849	11725.68	0.0082	P	2.1	-7.5
3	☐	5.000	4.698	29615.46	0.0207	P	1.0	-6.0
4	☐	10.000	9.440	59016.19	0.0416	P	1.6	-5.6
5	☐	100.000	98.003	622041.54	0.4318	P	1.6	-2.0
6	☐	200.000	201.036	1235026.13	0.8857	M	6.6	0.5

y = 0.0044 * x + 3.2899E-005
R = 0.9999
DL = 0.01346 ppb
BEC = 0.007468 ppb

Weight: <None>
Min Conc: <None>

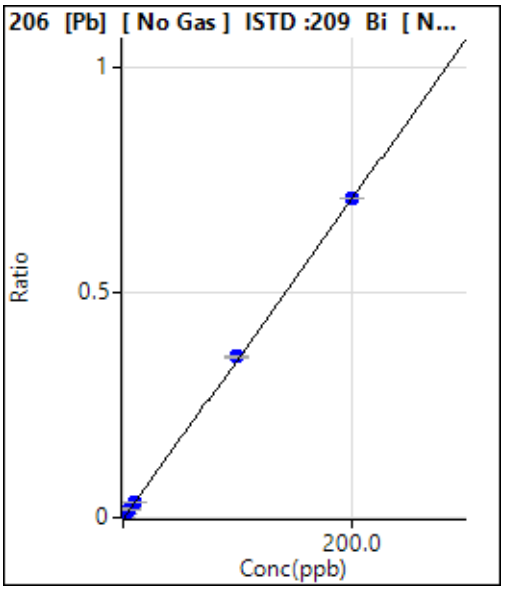


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	42.3	
2	☐	2.000	1.794	28552.99	0.0199	P	2.7	-10.3
3	☐	5.000	4.419	69895.69	0.0489	P	0.5	-11.6
4	☐	10.000	9.086	142456.70	0.1005	P	2.0	-9.1
5	☐	100.000	100.093	1592900.39	1.1058	A	1.4	0.1
6	☐	200.000	200.016	3082087.97	2.2095	A	0.6	0.0

y = 0.0110 * x + 1.0689E-004
R = 1.0000
DL = 0.01228 ppb
BEC = 0.009676 ppb

Weight: <None>
Min Conc: <None>

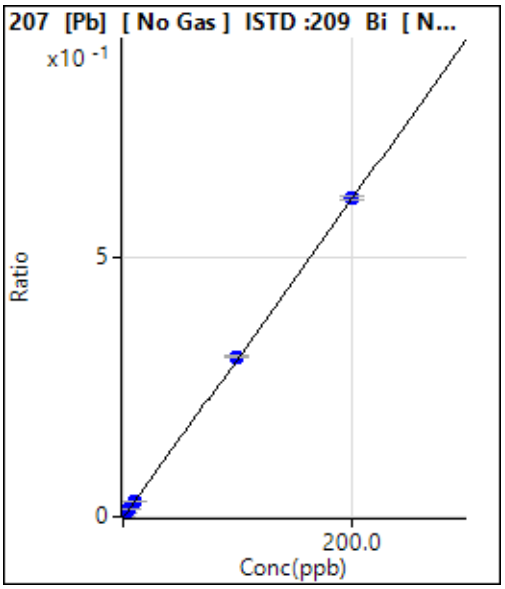
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0003	P	14.0	
2	☐	2.000	1.898	10077.56	0.0070	P	2.9	-5.1
3	☐	5.000	5.163	26620.54	0.0186	P	14.3	3.3
4	☐	10.000	9.678	49163.87	0.0347	P	1.7	-3.2
5	☐	100.000	100.627	515422.74	0.3578	P	1.0	0.6
6	☐	200.000	199.700	990041.73	0.7098	P	0.3	-0.2

y = 0.0036 * x + 2.8808E-004
R = 1.0000
DL = 0.03408 ppb
BEC = 0.08109 ppb

Weight: <None>
Min Conc: <None>

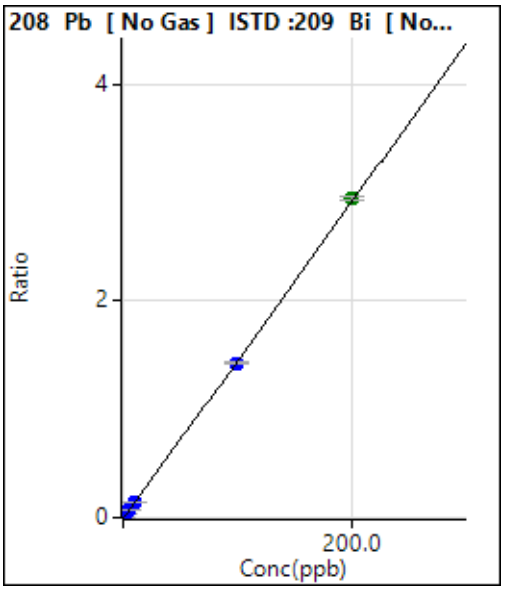


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1315.40	0.0009	P	133.0	
2	☐	2.000	1.702	8829.94	0.0062	P	6.5	-14.9
3	☐	5.000	4.585	21455.43	0.0150	P	2.7	-8.3
4	☐	10.000	9.487	42641.24	0.0301	P	4.6	-5.1
5	☐	100.000	100.287	445102.60	0.3090	P	1.0	0.3
6	☐	200.000	199.896	857710.85	0.6149	P	1.2	-0.1

y = 0.0031 * x + 9.3361E-004
R = 1.0000
DL = 1.213 ppb
BEC = 0.3039 ppb

Weight: <None>
Min Conc: <None>

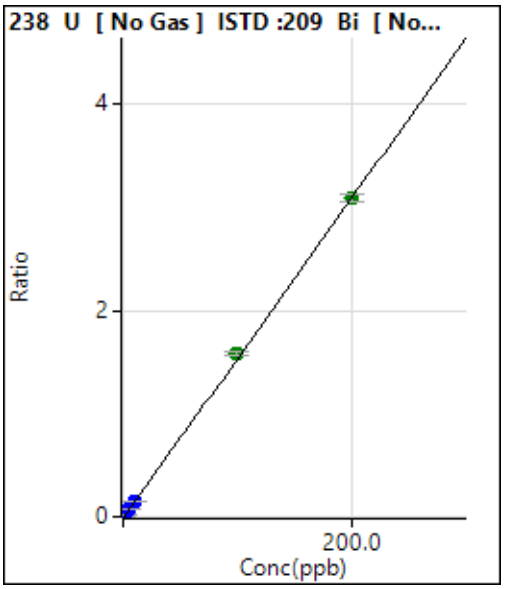
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2692.14	0.0019	P	65.4	
2	☐	2.000	1.777	40005.75	0.0279	P	1.8	-11.1
3	☐	5.000	4.695	100867.38	0.0706	P	4.0	-6.1
4	☐	10.000	9.303	195702.69	0.1380	P	1.5	-7.0
5	☐	100.000	97.385	2055255.19	1.4267	P	1.2	-2.6
6	☐	200.000	201.352	4111625.20	2.9478	A	1.3	0.7

y = 0.0146 * x + 0.0019
R = 0.9999
DL = 0.2564 ppb
BEC = 0.1306 ppb

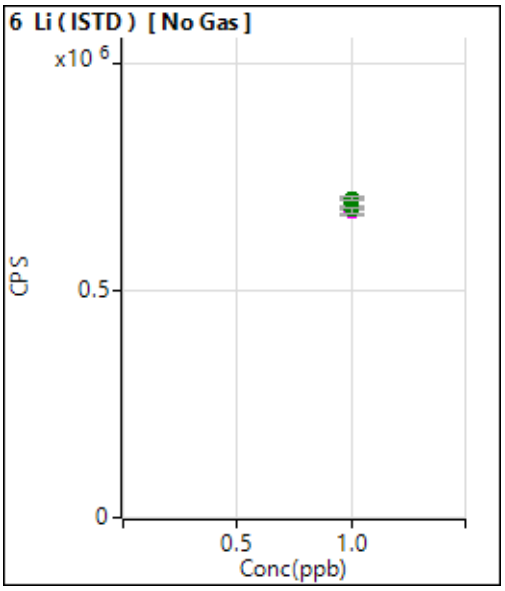
Weight: <None>
Min Conc: <None>



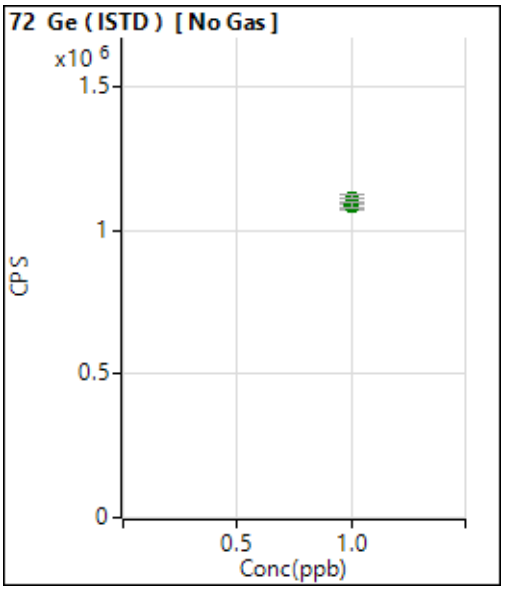
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	21.8	
2	☐	2.000	1.790	39888.68	0.0278	P	0.6	-10.5
3	☐	5.000	4.372	97086.58	0.0680	P	0.4	-12.6
4	☐	10.000	9.172	202118.54	0.1425	P	1.0	-8.3
5	☐	100.000	101.930	2281576.37	1.5838	A	1.9	1.9
6	☐	200.000	199.094	4314718.79	3.0936	A	1.9	-0.5

y = 0.0155 * x + 1.8924E-005
R = 0.9999
DL = 0.0007947 ppb
BEC = 0.001218 ppb

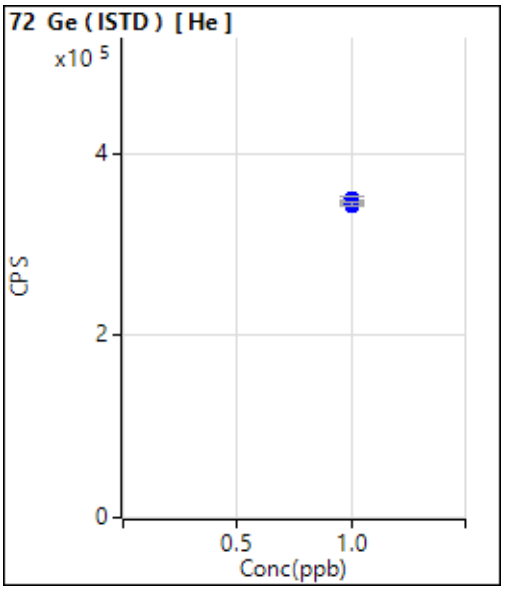
Weight: <None>
Min Conc: <None>



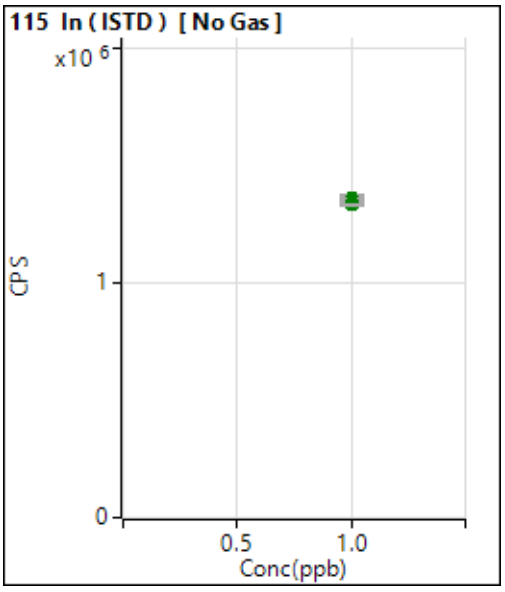
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		675584.15		M	3.0	
2	☐	1.000		693865.26		A	2.1	
3	☐	1.000		688986.54		A	3.8	
4	☐	1.000		688753.63		A	3.0	
5	☐	1.000		703252.47		A	0.8	
6	☐	1.000		677097.48		A	1.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1083013.81		A	1.6	
2	☐	1.000		1111763.63		A	2.3	
3	☐	1.000		1093395.24		A	3.7	
4	☐	1.000		1085869.80		A	1.9	
5	☐	1.000		1086061.18		A	2.6	
6	☐	1.000		1088193.97		A	1.7	

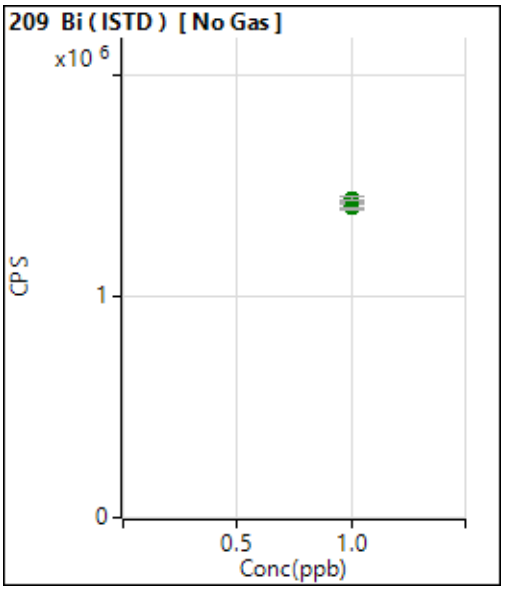


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		343019.46		P	0.9	
2	☐	1.000		346848.23		P	0.9	
3	☐	1.000		348051.02		P	0.6	
4	☐	1.000		345988.56		P	0.6	
5	☐	1.000		350617.54		P	1.2	
6	☐	1.000		344392.03		P	0.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1354248.87		A	0.5	
2	☐	1.000		1361364.67		A	1.1	
3	☐	1.000		1362632.26		A	2.2	
4	☐	1.000		1356637.78		A	0.9	
5	☐	1.000		1357464.77		A	0.7	
6	☐	1.000		1334627.37		A	0.5	

Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1409442.95		A	1.8	
2	☐	1.000		1433446.60		A	0.1	
3	☐	1.000		1428734.77		A	0.5	
4	☐	1.000		1418036.44		A	0.8	
5	☐	1.000		1440655.40		A	0.8	
6	☐	1.000		1394896.96		A	0.9	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	015LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:44:16-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.738	1.738	6.11	53971	0.00	2	
Be	9	1	No Gas	1.914	1.914	5.45	3345	0.06	2	
V	51	2	He	1.931	1.931	2.15	5479	0.04	2	
Cr	52	2	He	1.959	1.959	3.07	6595	0.03	2	
Fe	56	2	He	191.912	191.912	0.65	546119	0.04	200	
Se	78	2	He	1.203	1.203	24.60	415	0.29	2	NewName Main CR1 Failed
As	75	2	He	1.948	1.948	1.68	891	0.22	2	
Ca	44	2	He	182.415	182.415	1.76	4137	4.41	200	
Na	23	2	He	118.776	118.776	4.91	247807	0.05	200	NewName Main CR1 Failed
Mg	24	2	He	196.187	196.187	1.28	60337	0.33	200	
K	39	2	He	193.649	193.649	0.97	148592	0.13	200	
Mn	55	2	He	2.000	2.000	9.95	4758	0.04	2	
Co	59	2	He	2.004	2.004	2.47	8666	0.02	2	
Ni	60	2	He	1.816	1.816	5.39	2194	0.08	2	
Cu	63	2	He	1.932	1.932	5.52	7252	0.03	2	
Zn	66	2	He	1.609	1.609	18.19	6608	0.02	2	
Al	27	2	He	1.112	1.112	43.37	673	0.17	2	NewName Main CR1 Failed
B	11	1	No Gas	38.285	38.285	9.29	47577	0.08	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.821	1.821	19.34	29291	0.01	2	
Si	28	1	No Gas	22.376	22.376	19.88	289713	0.01	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.717	1.717	3.55	13734	0.01	2	
Cd	111	1	No Gas	1.946	1.946	4.55	2687	0.07	2	
Sr	88	1	No Gas	1.865	1.865	1.85	24125	0.01	2	
Mo	95	1	No Gas	2.030	2.030	4.66	4974	0.04	2	
Sn	118	1	No Gas	1.933	1.933	5.42	9313	0.02	2	
Sb	121	1	No Gas	1.852	1.852	3.66	11709	0.02	2	
Ba	137	1	No Gas	1.955	1.955	2.21	4094	0.05	2	
Tl	205	1	No Gas	1.806	1.806	1.65	28352	0.01	2	
Tl	203	1	No Gas	1.856	1.856	1.93	11609	0.02	2	
Pb	208	1	No Gas	1.820	1.820	1.96	40343	0.00	2	
U	238	1	No Gas	1.824	1.824	0.22	40099	0.00	2	
Ca	43	2	He	195.982	195.982	10.52	240	81.66	200	
Sb	121	2	He	1.937	1.937	3.77	6282	0.03	2	
Ti	47	2	He	2.100	2.100	16.09	213	0.98	200	
Cu	63	1	No Gas	1.964	1.964	9.32	13390	0.01	2	
Se	82	1	No Gas	-2.546	-2.546	-246.07	-1035	0.25	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697561	1.52	675584	103.25	70	120	
Ge	72	2	He	343113	0.72	343019	100.03	70	120	
Ge	72	1	No Gas	1050997	3.58	1083014	97.04	70	120	
In	115	1	No Gas	1343429	0.50	1354249	99.20	70	120	
Bi	209	1	No Gas	1413622	0.65	1409443	100.30	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	016LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:46:15-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.152	4.152	0.93	73867	0.01	5	
Be	9	1	No Gas	4.703	4.703	3.07	8236	0.06	5	
V	51	2	He	4.748	4.748	1.82	12722	0.04	5	
Cr	52	2	He	4.779	4.779	2.97	14925	0.03	5	
Fe	56	2	He	506.367	506.367	1.23	1441766	0.04	500	
Se	78	2	He	4.123	4.123	16.79	540	0.76	5	
As	75	2	He	4.980	4.980	1.80	2204	0.23	5	
Ca	44	2	He	501.993	501.993	1.79	9687	5.18	500	
Na	23	2	He	383.878	383.878	0.56	397057	0.10	500	
Mg	24	2	He	479.989	479.989	1.38	148777	0.32	500	
K	39	2	He	463.525	463.525	1.41	246729	0.19	500	
Mn	55	2	He	4.767	4.767	1.87	10931	0.04	5	
Co	59	2	He	4.805	4.805	0.24	20930	0.02	5	
Ni	60	2	He	4.801	4.801	7.34	5498	0.09	5	
Cu	63	2	He	4.741	4.741	2.61	15676	0.03	5	
Zn	66	2	He	4.651	4.651	10.40	8499	0.05	5	
Al	27	2	He	5.190	5.190	5.98	1360	0.38	5	
B	11	1	No Gas	28.772	28.772	1.61	39923	0.07	25	
Al	27	1	No Gas	5.510	5.510	4.04	53530	0.01	5	
Si	28	1	No Gas	30.784	30.784	6.92	317717	0.01	25	
Ag	107	1	No Gas	4.248	4.248	2.02	33199	0.01	5	
Cd	111	1	No Gas	4.846	4.846	5.88	6882	0.07	5	
Sr	88	1	No Gas	4.666	4.666	1.92	61280	0.01	5	
Mo	95	1	No Gas	4.878	4.878	1.44	12263	0.04	5	
Sn	118	1	No Gas	4.569	4.569	5.38	20830	0.02	5	
Sb	121	1	No Gas	4.375	4.375	3.95	27609	0.02	5	
Ba	137	1	No Gas	4.740	4.740	1.09	10027	0.05	5	
Tl	205	1	No Gas	4.390	4.390	1.73	69939	0.01	5	
Tl	203	1	No Gas	4.593	4.593	2.97	29168	0.02	5	
Pb	208	1	No Gas	4.500	4.500	2.50	97484	0.00	5	
U	238	1	No Gas	4.376	4.376	2.99	97876	0.00	5	
Ca	43	2	He	447.493	447.493	14.66	493	90.70	500	
Sb	121	2	He	4.973	4.973	0.89	15947	0.03	5	
Ti	47	2	He	5.476	5.476	3.88	557	0.98	5	
Cu	63	1	No Gas	4.807	4.807	4.50	27702	0.02	5	
Se	82	1	No Gas	9.134	9.134	85.22	-176	-5.19	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	705094	0.61	675584	104.37	70	120	
Ge	72	2	He	346538	0.56	343019	101.03	70	120	
Ge	72	1	No Gas	1067080	1.89	1083014	98.53	70	120	
In	115	1	No Gas	1382496	1.10	1354249	102.09	70	120	
Bi	209	1	No Gas	1439273	1.24	1409443	102.12	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	017_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:48:13-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.119	12.6	38367	1.1	0.5	
Be	9	1	No Gas	0.000	2802.6	45	29.4	0.5	
V	51	2	He	0.018	90.7	642	5.1	2.5	
Cr	52	2	He	0.022	127.5	967	7.3	2.5	
Fe	56	2	He	0.872	3.5	10594	1.7	100	
Se	78	2	He	-1.137	-9.5	317	1.9	1	
As	75	2	He	-0.001	-953.4	61	8.3	2.5	
Ca	44	2	He	-8.426	-48.4	873	8.6	100	
Na	23	2	He	-77.769	-5.7	138966	1.7	100	
Mg	24	2	He	0.632	40.8	417	18.6	100	
K	39	2	He	-6.671	-41.2	76937	1.6	100	
Mn	55	2	He	0.033	110.9	443	19.2	2.5	
Co	59	2	He	-0.005	-25.4	17	34.6	2.5	
Ni	60	2	He	-0.116	-15.2	90	22.2	2.5	
Cu	63	2	He	-0.104	-123.9	1250	31.0	1	
Zn	66	2	He	-0.201	-282.2	5488	4.8	2.5	
Al	27	2	He	-0.387	-97.6	423	15.7	5	
B	11	1	No Gas	4.608	16.9	17705	4.3	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.542	-9.3	13537	2.3	5	
Si	28	1	No Gas	9.433	5.9	239977	0.5	10	
Ag	107	1	No Gas	-0.051	-13.1	783	5.2	2.5	
Cd	111	1	No Gas	0.007	99.4	10	100.0	1	
Sr	88	1	No Gas	-0.004	-74.3	483	8.4	2.5	
Mo	95	1	No Gas	-0.007	-35.2	7	86.6	2.5	
Sn	118	1	No Gas	0.090	43.2	1657	9.4	5	
Sb	121	1	No Gas	0.040	33.3	547	13.9	2.5	
Ba	137	1	No Gas	0.004	298.1	137	18.4	2.5	
Tl	205	1	No Gas	-0.003	-60.1	103	24.4	1	
Tl	203	1	No Gas	0.001	241.4	50	20.0	1	
Pb	208	1	No Gas	-0.080	-4.7	1037	9.0	2.5	
U	238	1	No Gas	0.000	-274.2	20	86.6	2.5	
Ca	43	2	He	-43.850	-13.4	3	173.2	100	
Sb	121	2	He	0.022	79.8	280	19.9	2.5	
Ti	47	2	He	0.101	151.6	13	114.6	2.5	
Se	82	1	No Gas	6.257	285.8	-375	-335.1	1	ICB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	650100	0.78	675584	96.23	70	120	
Ge	72	2	He	340379	1.24	343019	99.23	70	120	
Ge	72	1	No Gas	990700	1.09	1083014	91.48	70	120	
In	115	1	No Gas	1333117	1.06	1354249	98.44	70	120	
Bi	209	1	No Gas	1387521	1.93	1409443	98.44	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	019ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:53:16-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.086	-199.6	39721	1.5	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.014	-28.2	23	32.7	0	ICSA Main CR1 Failed
V	51	2	He	0.106	21.2	888	7.2	0	ICSA Main CR1 Failed
Cr	52	2	He	1.420	3.6	5134	2.3	0	ICSA Main CR1 Failed
Fe	56	2	He	103050.438	0.8	294773769	0.7	0	
Se	78	2	He	-0.173	-153.8	367	3.6	0	ICSA Main CR1 Failed
As	75	2	He	0.253	28.6	173	17.6	0	ICSA Main CR1 Failed
Ca	44	2	He	105462.082	1.3	1837998	1.2	0	
Na	23	2	He	104498.060	1.1	58640442	0.4	0	
Mg	24	2	He	104529.400	0.8	32687566	0.5	0	
K	39	2	He	102966.126	1.8	37343818	1.4	0	
Mn	55	2	He	0.288	20.1	1027	13.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.260	7.9	1183	7.6	0	ICSA Main CR1 Failed
Ni	60	2	He	0.791	12.4	1100	9.6	0	ICSA Main CR1 Failed
Cu	63	2	He	0.113	7.0	1937	1.7	0	ICSA Main CR1 Failed
Zn	66	2	He	1.459	22.7	6655	3.6	0	ICSA Main CR1 Failed
Al	27	2	He	109267.562	1.4	18406437	1.1	0	
B	11	1	No Gas	-0.522	-196.8	14736	2.3	0	ICSA Main CR1 Failed
Al	27	1	No Gas	105269.173	4.8	679232817	0.2	0	
Si	28	1	No Gas	40.557	13.8	345704	0.1	0	
Ag	107	1	No Gas	0.100	29.9	1810	9.2	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.414	9.7	1917	7.6	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.425	2.5	55552	1.1	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2305.493	2.1	5526088	0.0	0	
Sn	118	1	No Gas	0.282	18.8	2420	7.0	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.294	19.3	2180	16.3	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.613	3.6	1350	3.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.005	31.1	223	10.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.011	54.2	110	31.5	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.193	48.2	6552	28.5	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.006	37.0	163	30.8	0	ICSA Main CR1 Failed
Ca	43	2	He	102381.821	0.5	103167	0.4	0	
Sb	121	2	He	0.256	14.8	1037	12.1	0	ICSA Main CR1 Failed
Ti	47	2	He	2078.772	1.3	212264	0.6	0	
Se	82	1	No Gas	0.939	1666.3	-821	-147.4	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	701123	3.12	675584	103.78	70	120	
Ge	72	2	He	350175	0.73	343019	102.09	70	120	
Ge	72	1	No Gas	1070892	4.48	1083014	98.88	70	120	
In	115	1	No Gas	1320930	2.20	1354249	97.54	70	120	
Bi	209	1	No Gas	1385348	0.34	1409443	98.29	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	020ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:55:37-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	99.193	2.030	836312	1.41	100	99.2	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	97.902	1.837	170948	1.09	100	97.9	80	120	
V	51	2	He	103.402	1.021	261672	0.68	100	103.4	80	120	
Cr	52	2	He	102.941	1.004	299449	0.68	100	102.9	80	120	
Fe	56	2	He	107155.437	1.571	300196329	1.24	100	107155.4	80	120	ICSB Main CR1 Failed
Se	78	2	He	102.950	1.680	4566	1.29	100	102.9	80	120	
As	75	2	He	102.580	1.261	43700	0.93	100	102.6	80	120	
Ca	44	2	He	112182.242	2.466	1914697	2.13	100	112182.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	108804.237	1.765	59792082	1.43	100	108804.2	80	120	ICSB Main CR1 Failed
Mg	24	2	He	109214.456	1.366	33448890	1.03	100	109214.5	80	120	ICSB Main CR1 Failed
K	39	2	He	107840.835	1.420	38303324	1.10	100	107840.8	80	120	ICSB Main CR1 Failed
Mn	55	2	He	103.036	1.219	226130	0.88	100	103.0	80	120	
Co	59	2	He	102.878	1.097	442629	0.76	100	102.9	80	120	
Ni	60	2	He	100.954	0.251	110089	0.48	100	101.0	80	120	
Cu	63	2	He	100.665	2.212	297751	1.98	100	100.7	80	120	
Zn	66	2	He	100.604	1.451	65357	1.07	100	100.6	80	120	
Al	27	2	He	103319.841	1.414	17046116	1.08	100	103319.8	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	527.051	3.432	431262	2.60	100	527.1	80	120	
Al	27	1	No Gas	98591.878	4.264	620724337	1.07	100	98591.9	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	579.729	4.222	1801988	1.45	100	579.7	80	120	
Ag	107	1	No Gas	97.792	1.067	649073	1.66	100	97.8	80	120	
Cd	111	1	No Gas	101.961	1.092	137154	1.10	100	102.0	80	120	
Sr	88	1	No Gas	106.143	1.621	1308747	0.89	100	106.1	80	120	
Mo	95	1	No Gas	2220.502	1.928	5275250	0.49	100	2220.5	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	103.169	1.443	418212	1.09	100	103.2	80	120	
Sb	121	1	No Gas	93.781	3.899	572200	0.70	100	93.8	80	120	
Ba	137	1	No Gas	103.945	3.133	205509	1.07	100	103.9	80	120	
Tl	205	1	No Gas	103.313	1.590	1547157	2.24	100	103.3	80	120	
Tl	203	1	No Gas	100.250	0.988	598731	1.59	100	100.2	80	120	
Pb	208	1	No Gas	99.905	0.348	1983847	0.72	100	99.9	80	120	
U	238	1	No Gas	107.708	0.970	2268524	1.14	100	107.7	80	120	
Ca	43	2	He	107970.810	0.264	106557	0.27	100	107970.8	80	120	ICSB Main CR1 Failed
Sb	121	2	He	101.432	1.285	317751	0.95	100	101.4	80	120	
Ti	47	2	He	2074.155	0.383	207441	0.43	100	2074.2	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	101.952	4.472	498319	1.48	100	102.0	80	120	
Se	82	1	No Gas	100.757	27.341	6566	30.63	100	100.8	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	707105	0.82	675584	104.67	70	120	
Ge	72	2	He	342960	0.34	343019	99.98	70	120	
Ge	72	1	No Gas	1044736	4.54	1083014	96.47	70	120	
In	115	1	No Gas	1309173	2.13	1354249	96.67	70	120	
Bi	209	1	No Gas	1355485	0.71	1409443	96.17	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:04:21-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.078	6.192	839660	4.44	100	101.1	90	110	
Be	9	1	No Gas	100.017	1.656	172302	0.69	100	100.0	90	110	
V	51	2	He	100.161	0.839	260518	0.87	100	100.2	90	110	
Cr	52	2	He	100.148	0.813	299426	0.87	100	100.1	90	110	
Fe	56	2	He	10008.236	0.491	28823557	0.55	10000	100.1	90	110	
Se	78	2	He	100.949	2.360	4609	2.12	100	100.9	90	110	
As	75	2	He	100.186	0.865	43865	0.91	100	100.2	90	110	
Ca	44	2	He	10026.834	1.579	176845	1.62	10000	100.3	90	110	
Na	23	2	He	9837.958	0.665	5727044	0.65	10000	98.4	90	110	
Mg	24	2	He	10168.419	1.386	3200857	1.44	10000	101.7	90	110	
K	39	2	He	10108.695	0.633	3764432	0.68	10000	101.1	90	110	
Mn	55	2	He	99.946	0.201	225442	0.26	100	99.9	90	110	
Co	59	2	He	99.885	0.454	441669	0.51	100	99.9	90	110	
Ni	60	2	He	100.659	1.618	112808	1.56	100	100.7	90	110	
Cu	63	2	He	99.528	0.613	302573	0.66	100	99.5	90	110	
Zn	66	2	He	100.302	1.825	66985	1.62	100	100.3	90	110	
Al	27	2	He	102.636	8.951	17906	8.70	100	102.6	90	110	
B	11	1	No Gas	480.136	1.150	389083	2.53	500	96.0	90	110	
Al	27	1	No Gas	112.910	20.317	741090	21.81	100	112.9	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	543.982	3.228	1729295	0.88	5000	10.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.589	2.596	685218	0.41	100	99.6	90	110	
Cd	111	1	No Gas	100.440	1.125	140101	1.21	100	100.4	90	110	
Sr	88	1	No Gas	100.689	1.813	1287355	0.71	100	100.7	90	110	
Mo	95	1	No Gas	100.358	2.594	247229	0.50	100	100.4	90	110	
Sn	118	1	No Gas	99.685	2.076	419017	0.24	100	99.7	90	110	
Sb	121	1	No Gas	91.673	3.359	567346	0.59	100	91.7	90	110	
Ba	137	1	No Gas	99.847	2.666	204721	0.45	100	99.8	90	110	
Tl	205	1	No Gas	100.536	2.038	1580259	0.63	100	100.5	90	110	
Tl	203	1	No Gas	97.596	2.873	611725	0.27	100	97.6	90	110	
Pb	208	1	No Gas	96.457	2.164	2010576	0.53	100	96.5	90	110	
U	238	1	No Gas	101.582	2.162	2245764	0.79	100	101.6	90	110	
Ca	43	2	He	10109.998	4.849	10297	4.82	10000	101.1	90	110	
Sb	121	2	He	98.421	0.620	316875	0.68	100	98.4	90	110	
Ti	47	2	He	95.999	4.178	9870	4.20	100	96.0	90	110	
Cu	63	1	No Gas	105.321	3.283	522077	0.42	100	105.3	90	110	
Se	82	1	No Gas	102.057	5.477	6743	3.46	100	102.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697746	2.22	675584	103.28	70	120	
Ge	72	2	He	352460	0.06	343019	102.75	70	120	
Ge	72	1	No Gas	1059099	2.81	1083014	97.79	70	120	
In	115	1	No Gas	1357574	2.26	1354249	100.25	70	120	
Bi	209	1	No Gas	1423316	2.61	1409443	100.98	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:06:17-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.124	146.9	39681	0.9	0.5	
Be	9	1	No Gas	-0.012	-58.9	27	47.2	0.5	
V	51	2	He	0.165	8.6	1011	4.5	2.5	
Cr	52	2	He	0.160	45.7	1363	14.7	2.5	
Fe	56	2	He	0.972	9.0	10868	2.0	100	
Se	78	2	He	-0.062	-1214.8	361	8.5	2	
As	75	2	He	0.035	63.6	77	11.5	2.5	
Ca	44	2	He	-17.068	-15.4	727	6.8	100	
Na	23	2	He	-95.614	-4.1	129208	1.0	100	
Mg	24	2	He	0.511	9.3	380	4.6	100	
K	39	2	He	-1.242	-229.3	78811	0.7	100	
Mn	55	2	He	0.023	32.4	420	4.8	2.5	
Co	59	2	He	-0.001	-358.6	37	31.5	2.5	
Ni	60	2	He	-0.134	-12.4	70	24.7	2.5	
Cu	63	2	He	-0.229	-12.6	883	9.6	2	
Zn	66	2	He	-0.331	-121.7	5411	4.1	2.5	
Al	27	2	He	-0.768	-50.8	360	16.9	5	
B	11	1	No Gas	23.623	21.9	32182	9.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.489	-12.6	14117	2.8	5	
Si	28	1	No Gas	2.581	38.3	226546	0.2	10	
Ag	107	1	No Gas	-0.090	-18.5	547	21.1	2.5	
Cd	111	1	No Gas	0.005	86.6	7	86.6	1	
Sr	88	1	No Gas	-0.011	-76.8	390	28.9	2.5	
Mo	95	1	No Gas	0.017	36.1	63	24.1	2.5	
Sn	118	1	No Gas	0.076	35.4	1607	8.3	5	
Sb	121	1	No Gas	0.173	24.1	1340	17.6	2.5	
Ba	137	1	No Gas	-0.027	-29.6	73	20.8	2.5	
Tl	205	1	No Gas	0.000	-559.0	143	10.7	1	
Tl	203	1	No Gas	0.007	22.5	90	11.1	1	
Pb	208	1	No Gas	-0.072	-8.6	1177	10.4	2.5	
U	238	1	No Gas	0.002	55.4	63	32.9	2.5	
Ca	43	2	He	-37.016	-0.3	10	0.0	100	
Sb	121	2	He	0.092	45.2	497	26.8	2.5	
Ti	47	2	He	0.135	44.0	17	34.6	2.5	
Cu	63	1	No Gas	-0.247	-22.8	2500	9.7	2.5	
Se	82	1	No Gas	4.223	163.0	-518	-93.9	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672233	3.47	675584	99.50	70	120	
Ge	72	2	He	340241	0.92	343019	99.19	70	120	
Ge	72	1	No Gas	1009602	0.91	1083014	93.22	70	120	
In	115	1	No Gas	1338881	1.43	1354249	98.87	70	120	
Bi	209	1	No Gas	1366811	0.22	1409443	96.98	70	120	

Sample Report

Sample Table

Sample Name	MBLK-181294
Data File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:09:56-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.083	0.083	47.03	39392	0.00	2000	
Be	9	1	No Gas	0.007	0.007	334.56	58	0.01	2000	
V	51	2	He	0.167	0.167	11.53	1020	0.02	2000	
Cr	52	2	He	0.067	0.067	61.20	1103	0.01	2000	
Fe	56	2	He	0.557	0.557	25.70	9767	0.01	200000	
Se	78	2	He	-0.416	-0.416	-359.06	348	-0.12	2000	
As	75	2	He	0.050	0.050	33.31	83	0.06	2000	
Ca	44	2	He	-3.187	-3.187	-205.02	967	-0.33	200000	
Na	23	2	He	-109.331	-109.331	-1.07	122407	-0.09	200000	
Mg	24	2	He	0.548	0.548	29.58	393	0.14	200000	
K	39	2	He	-4.979	-4.979	-67.61	77909	-0.01	200000	
Mn	55	2	He	-0.016	-0.016	-183.46	337	0.00	2000	
Co	59	2	He	-0.003	-0.003	-158.75	27	-0.01	2000	
Ni	60	2	He	-0.085	-0.085	-5.58	123	-0.07	2000	
Cu	63	2	He	-0.219	-0.219	-4.01	917	-0.02	2000	
Zn	66	2	He	-0.909	-0.909	-43.75	5098	-0.02	2000	
Al	27	2	He	2.741	2.741	35.42	940	0.29	2000	
B	11	1	No Gas	-0.415	-0.415	-201.37	14212	0.00	2000	
Al	27	1	No Gas	4.900	4.900	64.63	46875	0.01	2000	
Si	28	1	No Gas	-0.583	-0.583	-93.70	217207	0.00	2000	
Ag	107	1	No Gas	-0.063	-0.063	-42.34	717	-0.01	2000	
Cd	111	1	No Gas	0.025	0.025	120.43	33	0.07	2000	
Sr	88	1	No Gas	0.055	0.055	31.59	1210	0.00	2000	
Mo	95	1	No Gas	0.028	0.028	140.62	90	0.03	2000	
Sn	118	1	No Gas	0.010	0.010	315.54	1307	0.00	2000	
Sb	121	1	No Gas	0.076	0.076	28.35	767	0.01	2000	
Ba	137	1	No Gas	-0.002	-0.002	-2119.09	123	0.00	2000	
Tl	205	1	No Gas	0.009	0.009	218.54	290	0.00	2000	
Tl	203	1	No Gas	0.008	0.008	269.50	93	0.01	2000	
Pb	208	1	No Gas	-0.086	-0.086	-24.55	910	-0.01	2000	
U	238	1	No Gas	0.013	0.013	165.25	313	0.00	2000	
Ca	43	2	He	-20.041	-20.041	-128.20	27	-75.15	200000	
Sb	121	2	He	0.034	0.034	16.41	320	0.01	2000	
Ti	47	2	He	-0.033	-0.033	0.00	0	#DIV/0!	2000	
Cu	63	1	No Gas	-0.252	-0.252	-7.77	2467	-0.01	2000	
Zn	66	1	No Gas	0.340	0.340	86.57	12359	0.00	2000	
Se	82	1	No Gas	4.492	4.492	123.67	-502	-0.89	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672143	2.45	675584	99.49	70	120	
Ge	72	2	He	342040	0.52	343019	99.71	70	120	
Ge	72	1	No Gas	1004845	1.28	1083014	92.78	70	120	
In	115	1	No Gas	1311520	1.16	1354249	96.84	70	120	

Sample Report

Bi	209	1	No Gas	1405683	0.52	1409443	99.73	70	120	

Sample Report

Sample Table

Sample Name	LCS-181294
Data File Name	026SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:11:55-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.189	-0.189	-41.96	42611	0.00	2000	
Be	9	1	No Gas	54.209	54.209	2.01	102764	0.05	2000	
V	51	2	He	56.050	56.050	1.36	153935	0.04	2000	
Cr	52	2	He	55.494	55.494	1.12	175308	0.03	2000	
Fe	56	2	He	5590.404	5590.404	1.13	16972733	0.03	200000	
Se	78	2	He	56.399	56.399	1.49	2889	1.95	2000	
As	75	2	He	57.139	57.139	0.87	26399	0.22	2000	
Ca	44	2	He	5555.011	5555.011	2.24	103749	5.35	200000	
Na	23	2	He	5564.802	5564.802	0.81	3500358	0.16	200000	
Mg	24	2	He	5784.473	5784.473	2.41	1919090	0.30	200000	
K	39	2	He	5748.713	5748.713	0.68	2293659	0.25	200000	
Mn	55	2	He	56.641	56.641	1.43	134827	0.04	2000	
Co	59	2	He	56.474	56.474	1.08	263216	0.02	2000	
Ni	60	2	He	56.062	56.062	0.89	66324	0.08	2000	
Cu	63	2	He	57.139	57.139	1.33	183801	0.03	2000	
Zn	66	2	He	57.840	57.840	2.66	43306	0.13	2000	
Al	27	2	He	63.012	63.012	1.03	11792	0.53	2000	
B	11	1	No Gas	-6.462	-6.462	-6.58	11058	-0.06	2000	
Al	27	1	No Gas	56.759	56.759	1.82	424398	0.01	2000	
Si	28	1	No Gas	99.455	99.455	2.88	562756	0.02	2000	
Ag	107	1	No Gas	54.188	54.188	0.54	399409	0.01	2000	
Cd	111	1	No Gas	56.429	56.429	1.00	84181	0.07	2000	
Sr	88	1	No Gas	0.042	0.042	11.56	1160	0.00	2000	
Mo	95	1	No Gas	56.196	56.196	0.72	148103	0.04	2000	
Sn	118	1	No Gas	0.097	0.097	6.05	1833	0.01	2000	
Sb	121	1	No Gas	50.809	50.809	0.85	351017	0.01	2000	
Ba	137	1	No Gas	55.258	55.258	0.99	121262	0.05	2000	
Tl	205	1	No Gas	51.302	51.302	1.42	868783	0.01	2000	
Tl	203	1	No Gas	53.734	53.734	1.06	362937	0.01	2000	
Pb	208	1	No Gas	53.245	53.245	1.22	1196997	0.00	2000	
U	238	1	No Gas	-0.001	-0.001	-46.42	17	0.00	2000	
Ca	43	2	He	5659.322	5659.322	1.21	6098	92.80	200000	
Sb	121	2	He	56.814	56.814	1.90	192875	0.03	2000	
Ti	47	2	He	53.672	53.672	1.48	5818	0.92	2000	
Cu	63	1	No Gas	56.503	56.503	1.55	314471	0.02	2000	
Zn	66	1	No Gas	57.621	57.621	1.49	103113	0.06	2000	
Se	82	1	No Gas	53.689	53.689	5.77	3504	1.53	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	767589	1.57	675584	113.62	70	120	
Ge	72	2	He	371494	0.75	343019	108.30	70	120	
Ge	72	1	No Gas	1181044	1.45	1083014	109.05	70	120	
In	115	1	No Gas	1451706	0.34	1354249	107.20	70	120	

Sample Report

Bi	209	1	No Gas	1532947	1.13	1409443	108.76	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01SD
Data File Name	028SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:16:08-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.230	21.151	2.45	81945	0.01	2000	
Be	9	1	No Gas	-0.002	-0.008	-2429.61	50	0.00	2000	
V	51	2	He	0.407	2.037	5.77	1752	0.02	2000	
Cr	52	2	He	55.809	279.045	1.29	174912	0.03	2000	
Fe	56	2	He	1307.591	6537.956	0.74	3945392	0.03	200000	
Se	78	2	He	-0.796	-3.978	-95.64	359	-0.22	2000	
As	75	2	He	0.101	0.507	74.94	113	0.09	2000	
Ca	44	2	He	21604.250	108021.252	0.94	397165	5.44	200000	
Na	23	2	He	88929.802	444649.011	0.63	52554938	0.17	200000	
Mg	24	2	He	16198.095	80990.477	0.96	5331192	0.30	200000	
K	39	2	He	212.272	1061.358	1.71	166703	0.13	200000	
Mn	55	2	He	217.715	1088.573	0.08	513022	0.04	2000	
Co	59	2	He	6.134	30.669	1.29	28400	0.02	2000	
Ni	60	2	He	423.713	2118.566	0.43	495780	0.09	2000	
Cu	63	2	He	2.308	11.540	4.46	8976	0.03	2000	
Zn	66	2	He	1.871	9.356	17.90	7265	0.03	2000	
Al	27	2	He	3.179	15.893	13.77	1090	0.29	2000	
B	11	1	No Gas	-4.416	-22.078	-15.74	12944	-0.03	2000	
Al	27	1	No Gas	2.474	12.370	25.15	37324	0.01	2000	
Si	28	1	No Gas	3425.866	17129.330	2.34	10695076	0.03	2000	>LDR
Ag	107	1	No Gas	-0.058	-0.288	-81.36	813	-0.01	2000	
Cd	111	1	No Gas	0.075	0.377	40.68	110	0.07	2000	
Sr	88	1	No Gas	334.574	1672.870	0.90	4464876	0.01	2000	
Mo	95	1	No Gas	0.408	2.042	23.83	1077	0.04	2000	
Sn	118	1	No Gas	0.048	0.240	18.90	1577	0.00	2000	
Sb	121	1	No Gas	0.041	0.203	73.87	653	0.01	2000	
Ba	137	1	No Gas	13.190	65.948	1.54	28358	0.05	2000	
Tl	205	1	No Gas	0.011	0.053	209.59	324	0.00	2000	
Tl	203	1	No Gas	0.011	0.057	215.61	120	0.01	2000	
Pb	208	1	No Gas	-0.077	-0.385	-21.74	1137	-0.01	2000	
U	238	1	No Gas	0.036	0.181	25.86	840	0.00	2000	
Ca	43	2	He	22260.166	111300.829	1.99	23647	94.13	200000	
Sb	121	2	He	0.016	0.081	181.60	283	0.01	2000	
Ti	47	2	He	0.028	0.141	378.31	7	0.42	2000	
Cu	63	1	No Gas	2.480	12.399	2.78	17745	0.01	2000	
Zn	66	1	No Gas	2.295	11.475	21.30	17388	0.01	2000	
Se	82	1	No Gas	-1.578	-7.888	-452.40	-1093	0.14	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	775699	1.42	675584	114.82	70	120	
Ge	72	2	He	368542	0.59	343019	107.44	70	120	
Ge	72	1	No Gas	1171238	2.66	1083014	108.15	70	120	
In	115	1	No Gas	1416934	1.11	1354249	104.63	70	120	

Sample Report

Bi	209	1	No Gas	1451118	1.51	1409443	102.96	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01MS
Data File Name	029SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:18:05-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.700	19.700	2.81	222007	0.01	2000	
Be	9	1	No Gas	51.024	51.024	2.31	99532	0.05	2000	
V	51	2	He	53.590	53.590	0.74	155638	0.03	2000	
Cr	52	2	He	330.521	330.521	0.96	1098748	0.03	2000	
Fe	56	2	He	10919.205	10919.205	1.02	35040285	0.03	200000	
Se	78	2	He	51.351	51.351	3.17	2818	1.82	2000	
As	75	2	He	53.291	53.291	2.50	26034	0.20	2000	
Ca	44	2	He	110903.044	110903.044	0.62	2167779	5.12	200000	
Na	23	2	He	416007.651	416007.651	0.65	261218663	0.16	200000	>LDR
Mg	24	2	He	79683.778	79683.778	1.43	27948320	0.29	200000	
K	39	2	He	6468.547	6468.547	1.08	2717174	0.24	200000	
Mn	55	2	He	1124.029	1124.029	0.74	2820870	0.04	2000	
Co	59	2	He	78.503	78.503	1.13	386808	0.02	2000	
Ni	60	2	He	2137.190	2137.190	0.64	2663888	0.08	2000	>LDR
Cu	63	2	He	60.707	60.707	0.97	206344	0.03	2000	
Zn	66	2	He	57.365	57.365	1.20	45460	0.13	2000	
Al	27	2	He	64.033	64.033	1.08	12659	0.51	2000	
B	11	1	No Gas	6.327	6.327	9.82	22660	0.03	2000	
Al	27	1	No Gas	58.349	58.349	1.33	447839	0.01	2000	
Si	28	1	No Gas	15931.286	15931.286	0.60	50593658	0.03	2000	>LDR
Ag	107	1	No Gas	49.124	49.124	2.11	361257	0.01	2000	
Cd	111	1	No Gas	51.263	51.263	2.00	76276	0.07	2000	
Sr	88	1	No Gas	1575.966	1575.966	2.35	21486919	0.01	2000	
Mo	95	1	No Gas	55.893	55.893	2.35	146913	0.04	2000	
Sn	118	1	No Gas	0.118	0.118	7.76	1924	0.01	2000	
Sb	121	1	No Gas	46.866	46.866	0.83	332781	0.01	2000	
Ba	137	1	No Gas	114.232	114.232	1.45	249897	0.05	2000	
Tl	205	1	No Gas	49.448	49.448	2.27	791463	0.01	2000	
Tl	203	1	No Gas	51.644	51.644	1.51	329708	0.02	2000	
Pb	208	1	No Gas	51.421	51.421	2.11	1092698	0.00	2000	
U	238	1	No Gas	0.193	0.193	9.30	4371	0.00	2000	
Ca	43	2	He	109148.140	109148.140	1.18	123355	88.48	200000	
Sb	121	2	He	52.748	52.748	1.14	189348	0.03	2000	
Ti	47	2	He	52.280	52.280	5.17	5991	0.87	2000	
Cu	63	1	No Gas	61.681	61.681	0.84	352428	0.02	2000	
Zn	66	1	No Gas	57.256	57.256	1.85	105393	0.05	2000	
Se	82	1	No Gas	53.089	53.089	24.18	3551	1.50	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	789970	2.39	675584	116.93	70	120	
Ge	72	2	He	392751	0.31	343019	114.50	70	120	
Ge	72	1	No Gas	1213736	0.56	1083014	112.07	70	120	
In	115	1	No Gas	1448285	1.99	1354249	106.94	70	120	
Bi	209	1	No Gas	1449270	2.58	1409443	102.83	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01MSD
Data File Name	030SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:20:01-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.557	19.557	1.92	240113	0.01	2000	
Be	9	1	No Gas	51.336	51.336	1.31	108943	0.05	2000	
V	51	2	He	54.450	54.450	0.81	164822	0.03	2000	
Cr	52	2	He	341.126	341.126	0.45	1182003	0.03	2000	
Fe	56	2	He	11194.689	11194.689	0.54	37445757	0.03	200000	
Se	78	2	He	50.908	50.908	2.64	2916	1.75	2000	
As	75	2	He	55.022	55.022	1.39	28015	0.20	2000	
Ca	44	2	He	112544.267	112544.267	0.73	2293046	4.91	200000	
Na	23	2	He	424778.380	424778.380	0.27	278019143	0.15	200000	>LDR
Mg	24	2	He	81617.243	81617.243	1.17	29838935	0.27	200000	
K	39	2	He	6710.098	6710.098	0.26	2934413	0.23	200000	
Mn	55	2	He	1148.675	1148.675	1.37	3004703	0.04	2000	
Co	59	2	He	80.588	80.588	0.44	413901	0.02	2000	
Ni	60	2	He	2193.839	2193.839	0.26	2850322	0.08	2000	>LDR
Cu	63	2	He	62.185	62.185	0.58	220281	0.03	2000	
Zn	66	2	He	58.967	58.967	2.32	48520	0.12	2000	
Al	27	2	He	68.156	68.156	1.35	14007	0.49	2000	
B	11	1	No Gas	5.481	5.481	8.13	23832	0.02	2000	
Al	27	1	No Gas	60.757	60.757	0.25	488232	0.01	2000	
Si	28	1	No Gas	16485.931	16485.931	0.81	54902946	0.03	2000	>LDR
Ag	107	1	No Gas	49.155	49.155	0.92	377755	0.01	2000	
Cd	111	1	No Gas	53.142	53.142	1.54	82625	0.06	2000	
Sr	88	1	No Gas	1623.738	1623.738	0.99	23134345	0.01	2000	
Mo	95	1	No Gas	57.821	57.821	0.64	158825	0.04	2000	
Sn	118	1	No Gas	0.085	0.085	61.36	1857	0.00	2000	
Sb	121	1	No Gas	47.641	47.641	0.98	354805	0.01	2000	
Ba	137	1	No Gas	118.899	118.899	1.11	271776	0.04	2000	
Tl	205	1	No Gas	51.009	51.009	0.84	858512	0.01	2000	
Tl	203	1	No Gas	53.255	53.255	1.13	357460	0.01	2000	
Pb	208	1	No Gas	52.951	52.951	1.13	1183033	0.00	2000	
U	238	1	No Gas	0.195	0.195	0.57	4651	0.00	2000	
Ca	43	2	He	111299.399	111299.399	1.49	131113	84.89	200000	
Sb	121	2	He	53.198	53.198	0.67	199052	0.03	2000	
Ti	47	2	He	51.889	51.889	5.16	6198	0.84	2000	
Cu	63	1	No Gas	63.827	63.827	1.36	382333	0.02	2000	
Zn	66	1	No Gas	58.842	58.842	1.50	113189	0.05	2000	
Se	82	1	No Gas	62.633	62.633	8.42	4581	1.37	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	859200	1.45	675584	127.18	70	120	ISTD Failed
Ge	72	2	He	409382	0.26	343019	119.35	70	120	
Ge	72	1	No Gas	1273030	0.54	1083014	117.55	70	120	
In	115	1	No Gas	1513122	1.03	1354249	111.73	70	120	
Bi	209	1	No Gas	1523459	1.21	1409443	108.09	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	035_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:35:54-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.243	5.088	857079	1.02	100	96.2	90	110	
Be	9	1	No Gas	96.100	3.201	177060	1.19	100	96.1	90	110	
V	51	2	He	101.193	2.340	267277	1.15	100	101.2	90	110	
Cr	52	2	He	101.563	1.202	308394	1.17	100	101.6	90	110	
Fe	56	2	He	10095.176	1.595	29526705	0.71	10000	101.0	90	110	
Se	78	2	He	100.705	4.150	4669	2.72	100	100.7	90	110	
As	75	2	He	101.101	2.325	44952	1.27	100	101.1	90	110	
Ca	44	2	He	10201.672	0.805	182738	1.74	10000	102.0	90	110	
Na	23	2	He	10388.639	1.768	6131424	1.49	10000	103.9	90	110	
Mg	24	2	He	10361.707	1.662	3312621	1.38	10000	103.6	90	110	
K	39	2	He	10347.785	1.106	3911789	1.12	10000	103.5	90	110	
Mn	55	2	He	101.148	1.366	231710	0.78	100	101.1	90	110	
Co	59	2	He	100.854	1.456	452928	1.37	100	100.9	90	110	
Ni	60	2	He	101.544	1.841	115574	1.51	100	101.5	90	110	
Cu	63	2	He	100.512	1.868	310298	0.64	100	100.5	90	110	
Zn	66	2	He	101.675	1.885	68877	0.51	100	101.7	90	110	
Al	27	2	He	105.256	4.286	18633	3.15	100	105.3	90	110	
B	11	1	No Gas	459.963	2.402	399321	2.15	500	92.0	90	110	
Al	27	1	No Gas	96.066	4.123	664452	1.24	100	96.1	90	110	
Si	28	1	No Gas	557.026	6.671	1862379	10.17	5000	11.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.989	1.783	683137	1.01	100	99.0	90	110	
Cd	111	1	No Gas	99.510	1.837	139184	0.47	100	99.5	90	110	
Sr	88	1	No Gas	103.646	3.052	1329688	4.90	100	103.6	90	110	
Mo	95	1	No Gas	100.249	2.049	247712	1.84	100	100.2	90	110	
Sn	118	1	No Gas	99.016	1.043	417462	1.17	100	99.0	90	110	
Sb	121	1	No Gas	87.246	4.624	568085	0.27	100	87.2	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.032	0.124	205755	1.88	100	100.0	90	110	
Tl	205	1	No Gas	98.807	5.946	1553431	2.40	100	98.8	90	110	
Tl	203	1	No Gas	96.112	4.929	602769	1.01	100	96.1	90	110	
Pb	208	1	No Gas	94.739	5.060	1975540	0.40	100	94.7	90	110	
U	238	1	No Gas	98.998	4.245	2190018	0.72	100	99.0	90	110	
Ca	43	2	He	10233.040	3.113	10591	5.10	10000	102.3	90	110	
Sb	121	2	He	98.342	2.138	321548	1.49	100	98.3	90	110	
Ti	47	2	He	99.852	4.612	10427	4.71	100	99.9	90	110	
Cu	63	1	No Gas	101.987	5.059	531928	0.25	100	102.0	90	110	
Se	82	1	No Gas	108.659	14.504	7587	11.57	100	108.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	746651	3.96	675584	110.52	70	120	
Ge	72	2	He	358022	1.99	343019	104.37	70	120	
Ge	72	1	No Gas	1115230	4.89	1083014	102.97	70	120	
In	115	1	No Gas	1361391	1.95	1354249	100.53	70	120	
Bi	209	1	No Gas	1425641	4.88	1409443	101.15	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	036_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:37:50-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.116	-47.0	40966	0.6	0.5	
Be	9	1	No Gas	0.015	250.8	77	88.1	0.5	
V	51	2	He	0.071	70.3	789	15.6	2.5	
Cr	52	2	He	0.104	36.7	1223	8.7	2.5	
Fe	56	2	He	1.202	10.2	11719	2.9	100	
Se	78	2	He	-0.208	-112.2	361	3.2	2	
As	75	2	He	0.017	191.4	70	19.0	2.5	
Ca	44	2	He	-14.744	-25.9	780	9.0	100	
Na	23	2	He	-42.126	-5.4	161180	0.2	100	
Mg	24	2	He	0.737	8.1	457	3.3	100	
K	39	2	He	3.932	46.5	82107	0.3	100	
Mn	55	2	He	0.027	41.4	437	4.8	2.5	
Co	59	2	He	-0.003	-154.5	27	78.1	2.5	
Ni	60	2	He	-0.117	-40.2	90	58.8	2.5	
Cu	63	2	He	-0.163	-30.9	1093	12.9	2	
Zn	66	2	He	-0.430	-25.5	5451	1.6	2.5	
Al	27	2	He	-0.771	-38.5	367	14.0	5	
B	11	1	No Gas	17.751	19.2	30126	9.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.765	-9.1	12996	4.6	5	
Si	28	1	No Gas	0.834	207.2	231853	0.9	10	
Ag	107	1	No Gas	-0.054	-14.6	783	7.5	2.5	
Cd	111	1	No Gas	0.032	73.4	43	74.2	1	
Sr	88	1	No Gas	0.185	27.9	2837	23.5	2.5	
Mo	95	1	No Gas	0.040	37.8	120	30.0	2.5	
Sn	118	1	No Gas	0.072	67.8	1573	12.1	5	
Sb	121	1	No Gas	0.206	9.2	1607	9.9	2.5	
Ba	137	1	No Gas	0.046	55.2	220	24.1	2.5	
Tl	205	1	No Gas	0.025	41.4	520	29.6	1	
Tl	203	1	No Gas	0.019	57.9	157	41.0	1	
Pb	208	1	No Gas	-0.059	-10.4	1420	8.1	2.5	
U	238	1	No Gas	0.019	36.0	427	33.9	2.5	
Ca	43	2	He	-27.100	-37.7	20	50.0	100	
Sb	121	2	He	0.101	31.7	537	19.9	2.5	
Ti	47	2	He	0.065	151.0	10	100.0	2.5	
Cu	63	1	No Gas	-0.089	-27.3	3387	0.9	2.5	
Se	82	1	No Gas	-10.672	-61.9	-1651	-29.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	726996	0.51	675584	107.61	70	120	
Ge	72	2	He	346466	0.95	343019	101.00	70	120	
Ge	72	1	No Gas	1054963	2.89	1083014	97.41	70	120	
In	115	1	No Gas	1325839	0.80	1354249	97.90	70	120	
Bi	209	1	No Gas	1359532	0.56	1409443	96.46	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T13:01:29-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	100.478	6.559	946225	0.71	100	100.5	90	110	
Be	9	1	No Gas	98.841	5.609	192954	1.46	100	98.8	90	110	
V	51	2	He	104.291	0.263	288799	0.33	100	104.3	90	110	
Cr	52	2	He	104.073	0.074	331276	0.58	100	104.1	90	110	
Fe	56	2	He	10254.300	0.439	31444269	0.17	10000	102.5	90	110	
Se	78	2	He	101.148	3.765	4917	4.03	100	101.1	90	110	
As	75	2	He	101.080	0.966	47123	1.13	100	101.1	90	110	
Ca	44	2	He	10465.265	0.354	196484	0.80	10000	104.7	90	110	
Na	23	2	He	10603.162	0.566	6556874	1.09	10000	106.0	90	110	
Mg	24	2	He	10552.745	0.293	3536930	0.27	10000	105.5	90	110	
K	39	2	He	10534.260	0.837	4173215	0.54	10000	105.3	90	110	
Mn	55	2	He	103.293	0.224	248071	0.79	100	103.3	90	110	
Co	59	2	He	103.785	0.383	488646	0.93	100	103.8	90	110	
Ni	60	2	He	103.082	0.743	123001	1.07	100	103.1	90	110	
Cu	63	2	He	103.837	0.888	336045	1.02	100	103.8	90	110	
Zn	66	2	He	102.428	0.316	72704	0.31	100	102.4	90	110	
Al	27	2	He	105.559	0.814	19594	1.35	100	105.6	90	110	
B	11	1	No Gas	510.589	3.912	468088	3.36	500	102.1	90	110	
Al	27	1	No Gas	95.670	2.806	722376	1.15	100	95.7	90	110	
Si	28	1	No Gas	519.966	4.694	1910016	2.96	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.386	1.126	749320	1.50	100	100.4	90	110	
Cd	111	1	No Gas	100.679	1.549	152312	1.32	100	100.7	90	110	
Sr	88	1	No Gas	103.879	2.107	1440796	2.81	100	103.9	90	110	
Mo	95	1	No Gas	101.900	0.633	272367	2.22	100	101.9	90	110	
Sn	118	1	No Gas	100.827	1.927	459676	0.66	100	100.8	90	110	
Sb	121	1	No Gas	87.960	2.624	625288	0.54	100	88.0	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	101.033	0.867	224799	3.17	100	101.0	90	110	
Tl	205	1	No Gas	102.393	0.709	1710807	0.37	100	102.4	90	110	
Tl	203	1	No Gas	99.313	0.627	661837	1.56	100	99.3	90	110	
Pb	208	1	No Gas	99.194	2.015	2198015	2.54	100	99.2	90	110	
U	238	1	No Gas	102.896	1.284	2418015	0.45	100	102.9	90	110	
Ca	43	2	He	10421.580	2.526	11301	2.94	10000	104.2	90	110	
Sb	121	2	He	99.631	0.325	341547	0.86	100	99.6	90	110	
Ti	47	2	He	101.867	1.399	11151	1.01	100	101.9	90	110	
Cu	63	1	No Gas	101.861	3.113	580065	0.86	100	101.9	90	110	
Se	82	1	No Gas	101.700	4.934	7714	3.00	100	101.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	792193	5.96	675584	117.26	70	120	
Ge	72	2	He	375289	0.56	343019	109.41	70	120	
Ge	72	1	No Gas	1216317	2.74	1083014	112.31	70	120	
In	115	1	No Gas	1472488	2.46	1354249	108.73	70	120	
Bi	209	1	No Gas	1512479	0.93	1409443	107.31	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T13:03:24-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.204	-34.3	43144	1.1	0.5	
Be	9	1	No Gas	-0.010	-138.1	33	82.6	0.5	
V	51	2	He	0.445	2.0	1862	1.0	2.5	
Cr	52	2	He	0.076	53.2	1220	10.5	2.5	
Fe	56	2	He	1.712	46.9	14061	17.3	100	
Se	78	2	He	0.217	201.6	405	5.0	2	
As	75	2	He	0.154	26.3	138	13.3	2.5	
Ca	44	2	He	-18.895	-10.3	757	5.0	100	
Na	23	2	He	2.819	572.3	198756	4.8	100	
Mg	24	2	He	2.308	80.2	1007	60.7	100	
K	39	2	He	-10.258	-46.1	82285	2.2	100	
Mn	55	2	He	0.005	463.5	413	12.2	2.5	
Co	59	2	He	0.006	194.7	73	79.9	2.5	
Ni	60	2	He	-0.117	-15.4	97	21.5	2.5	
Cu	63	2	He	-0.153	-17.9	1200	7.6	2	
Zn	66	2	He	-0.307	-82.6	5901	2.5	2.5	
Al	27	2	He	-0.460	-104.7	447	19.0	5	
B	11	1	No Gas	40.543	12.5	52139	8.6	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.804	-6.7	14207	2.6	5	
Si	28	1	No Gas	-8.121	-10.5	231145	1.1	10	
Ag	107	1	No Gas	-0.087	-46.1	610	48.5	2.5	
Cd	111	1	No Gas	0.031	121.8	47	121.9	1	
Sr	88	1	No Gas	0.180	157.2	3024	127.5	2.5	
Mo	95	1	No Gas	0.034	115.2	113	90.1	2.5	
Sn	118	1	No Gas	0.058	26.9	1650	4.4	5	
Sb	121	1	No Gas	0.156	44.6	1450	33.0	2.5	
Ba	137	1	No Gas	0.030	316.8	203	100.8	2.5	
Tl	205	1	No Gas	0.017	152.0	443	97.1	1	
Tl	203	1	No Gas	0.021	141.4	187	103.9	1	
Pb	208	1	No Gas	-0.037	-179.9	2059	70.9	2.5	
U	238	1	No Gas	0.020	144.3	484	135.7	2.5	
Ca	43	2	He	-12.802	-41.6	37	15.7	100	
Sb	121	2	He	0.097	20.9	557	12.0	2.5	
Ti	47	2	He	0.059	156.8	10	100.0	2.5	
Cu	63	1	No Gas	-0.202	-19.0	3160	6.6	2.5	
Se	82	1	No Gas	5.121	141.3	-533	-112.4	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	779631	2.37	675584	115.40	70	120	
Ge	72	2	He	370103	0.37	343019	107.90	70	120	
Ge	72	1	No Gas	1176022	0.07	1083014	108.59	70	120	
In	115	1	No Gas	1442691	0.62	1354249	106.53	70	120	
Bi	209	1	No Gas	1494638	0.63	1409443	106.04	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	085_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T14:46:30-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.040	2.504	966972	0.93	100	105.0	90	110	
Be	9	1	No Gas	103.468	2.258	197802	0.72	100	103.5	90	110	
V	51	2	He	104.782	1.460	303979	0.73	100	104.8	90	110	
Cr	52	2	He	105.081	0.902	350422	0.80	100	105.1	90	110	
Fe	56	2	He	10322.508	0.469	33163115	0.26	10000	103.2	90	110	
Se	78	2	He	105.060	2.500	5334	2.41	100	105.1	90	110	
As	75	2	He	108.005	1.374	52745	0.70	100	108.0	90	110	
Ca	44	2	He	10339.071	0.191	203386	0.59	10000	103.4	90	110	
Na	23	2	He	10505.426	0.898	6807913	0.54	10000	105.1	90	110	
Mg	24	2	He	10662.899	1.746	3744082	1.12	10000	106.6	90	110	
K	39	2	He	10535.961	0.364	4373046	0.63	10000	105.4	90	110	
Mn	55	2	He	105.951	1.263	266571	1.02	100	106.0	90	110	
Co	59	2	He	105.264	1.603	519201	0.87	100	105.3	90	110	
Ni	60	2	He	104.896	1.420	131123	0.69	100	104.9	90	110	
Cu	63	2	He	104.845	1.259	355454	0.55	100	104.8	90	110	
Zn	66	2	He	104.559	1.652	77618	0.98	100	104.6	90	110	
Al	27	2	He	109.632	1.798	21297	1.02	100	109.6	90	110	
B	11	1	No Gas	490.021	5.768	439980	3.22	500	98.0	90	110	
Al	27	1	No Gas	98.827	0.979	752812	0.32	100	98.8	90	110	
Si	28	1	No Gas	559.359	2.097	2054530	1.18	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.173	1.203	791300	0.50	100	104.2	90	110	
Cd	111	1	No Gas	104.235	1.377	160494	1.12	100	104.2	90	110	
Sr	88	1	No Gas	104.629	2.912	1476816	2.92	100	104.6	90	110	
Mo	95	1	No Gas	103.210	0.918	280725	0.77	100	103.2	90	110	
Sn	118	1	No Gas	106.049	0.552	492048	0.20	100	106.0	90	110	
Sb	121	1	No Gas	96.116	1.458	689900	0.91	100	96.1	90	110	
Ba	137	1	No Gas	106.082	1.694	240132	1.03	100	106.1	90	110	
Tl	205	1	No Gas	109.848	0.351	1875481	0.41	100	109.8	90	110	
Tl	203	1	No Gas	105.892	2.005	721012	1.53	100	105.9	90	110	
Pb	208	1	No Gas	106.036	2.529	2400373	2.01	100	106.0	90	110	
U	238	1	No Gas	106.763	0.683	2563797	0.31	100	106.8	90	110	
Ca	43	2	He	10586.706	3.313	12025	2.92	10000	105.9	90	110	
Sb	121	2	He	104.104	0.831	373876	0.23	100	104.1	90	110	
Ti	47	2	He	103.896	1.885	11915	1.18	100	103.9	90	110	
Cu	63	1	No Gas	103.825	0.982	596984	0.34	100	103.8	90	110	
Se	82	1	No Gas	105.690	3.960	8138	4.06	100	105.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	774409	2.62	675584	114.63	70	120	
Ge	72	2	He	393192	0.73	343019	114.63	70	120	
Ge	72	1	No Gas	1227679	0.66	1083014	113.36	70	120	
In	115	1	No Gas	1498380	0.71	1354249	110.64	70	120	
Bi	209	1	No Gas	1545501	0.58	1409443	109.65	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	086_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T14:48:24-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.230	-37.3	42163	0.8	0.5	
Be	9	1	No Gas	-0.012	-78.2	30	57.7	0.5	
V	51	2	He	0.215	1.7	1266	1.0	2.5	
Cr	52	2	He	0.099	20.0	1323	5.0	2.5	
Fe	56	2	He	1.509	13.7	13774	4.5	100	
Se	78	2	He	-0.948	-4.2	362	0.6	2	
As	75	2	He	0.017	212.9	77	21.7	2.5	
Ca	44	2	He	-18.979	-38.4	773	17.6	100	
Na	23	2	He	-92.019	-3.9	146173	1.2	100	
Mg	24	2	He	0.974	6.3	580	3.4	100	
K	39	2	He	15.961	8.6	94572	0.6	100	
Mn	55	2	He	0.059	91.4	557	23.9	2.5	
Co	59	2	He	-0.003	-70.3	30	33.3	2.5	
Ni	60	2	He	-0.127	-10.1	87	17.6	2.5	
Cu	63	2	He	-0.271	-9.7	847	10.3	2	
Zn	66	2	He	-0.264	-126.0	6075	3.8	2.5	
Al	27	2	He	-0.684	-77.0	417	22.8	5	
B	11	1	No Gas	48.398	13.9	57874	8.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.815	-10.1	14224	2.3	5	
Si	28	1	No Gas	15.562	28.0	305613	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.113	-10.6	433	20.2	2.5	
Cd	111	1	No Gas	0.007	1.3	10	0.0	1	
Sr	88	1	No Gas	0.009	42.1	720	7.7	2.5	
Mo	95	1	No Gas	0.018	42.2	73	28.4	2.5	
Sn	118	1	No Gas	0.071	77.8	1743	13.2	5	
Sb	121	1	No Gas	0.259	15.2	2167	10.7	2.5	
Ba	137	1	No Gas	-0.013	-129.6	113	31.0	2.5	
Tl	205	1	No Gas	0.001	285.7	187	32.7	1	
Tl	203	1	No Gas	0.008	45.8	103	24.4	1	
Pb	208	1	No Gas	-0.096	-1.1	777	3.0	2.5	
U	238	1	No Gas	0.003	29.0	97	21.5	2.5	
Ca	43	2	He	-25.838	-20.5	23	24.7	100	
Sb	121	2	He	0.253	8.2	1110	6.3	2.5	
Ti	47	2	He	0.027	390.4	7	173.2	2.5	
Cu	63	1	No Gas	-0.367	-6.1	2277	7.0	2.5	
Se	82	1	No Gas	2.279	479.5	-760	-119.1	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	766039	2.17	675584	113.39	70	120	
Ge	72	2	He	379158	0.26	343019	110.54	70	120	
Ge	72	1	No Gas	1184422	2.26	1083014	109.36	70	120	
In	115	1	No Gas	1474969	1.32	1354249	108.91	70	120	
Bi	209	1	No Gas	1546406	1.44	1409443	109.72	70	120	

Sample Report

Sample Table

Sample Name	HS22070087-01
Data File Name	090SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T14:57:50-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	10.768	10.768	2.43	142411	0.01	2000	
Be	9	1	No Gas	-0.008	-0.008	-100.14	38	-0.02	2000	
V	51	2	He	-0.026	-0.026	-62.61	630	0.00	2000	
Cr	52	2	He	0.808	0.808	5.19	3821	0.02	2000	
Fe	56	2	He	39118.351	39118.351	1.27	128676108	0.03	200000	
Se	78	2	He	-1.771	-1.771	-48.99	345	-0.51	2000	
As	75	2	He	0.047	0.047	113.22	97	0.05	2000	
Ca	44	2	He	63628.432	63628.432	0.43	1275679	4.99	200000	
Na	23	2	He	133018.776	133018.776	0.59	85780795	0.16	200000	
Mg	24	2	He	33812.566	33812.566	1.50	12159206	0.28	200000	
K	39	2	He	893.091	893.091	0.78	465460	0.19	200000	
Mn	55	2	He	1149.270	1149.270	1.82	2956767	0.04	2000	
Co	59	2	He	0.030	0.030	16.74	197	0.02	2000	
Ni	60	2	He	0.030	0.030	164.70	293	0.01	2000	
Cu	63	2	He	-0.057	-0.057	-69.68	1637	0.00	2000	
Zn	66	2	He	0.194	0.194	265.34	6768	0.00	2000	
Al	27	2	He	6.761	6.761	16.27	1884	0.36	2000	
B	11	1	No Gas	8.284	8.284	10.34	24446	0.03	2000	
Al	27	1	No Gas	5.239	5.239	4.22	62886	0.01	2000	
Si	28	1	No Gas	1713.389	1713.389	3.34	6058707	0.03	2000	
Ag	107	1	No Gas	-0.116	-0.116	-4.99	437	-0.03	2000	
Cd	111	1	No Gas	0.006	0.006	100.11	10	0.06	2000	
Sr	88	1	No Gas	1518.257	1518.257	1.29	22352494	0.01	2000	
Mo	95	1	No Gas	0.019	0.019	50.18	80	0.02	2000	
Sn	118	1	No Gas	-0.064	-0.064	-11.77	1200	-0.01	2000	
Sb	121	1	No Gas	0.369	0.369	13.13	3207	0.01	2000	
Ba	137	1	No Gas	1.553	1.553	3.88	3817	0.04	2000	
Tl	205	1	No Gas	0.003	0.003	92.61	220	0.00	2000	
Tl	203	1	No Gas	0.003	0.003	141.96	77	0.00	2000	
Pb	208	1	No Gas	-0.065	-0.065	-2.55	1567	0.00	2000	
U	238	1	No Gas	0.001	0.001	96.26	60	0.00	2000	
Ca	43	2	He	62598.995	62598.995	0.41	72561	86.27	200000	
Sb	121	2	He	0.216	0.216	12.74	1043	0.02	2000	
Ti	47	2	He	0.223	0.223	77.64	30	0.74	2000	
Cu	63	1	No Gas	0.148	0.148	62.97	5585	0.00	2000	
Zn	66	1	No Gas	1.029	1.029	11.79	17108	0.01	2000	
Se	82	1	No Gas	11.137	11.137	16.70	-38	-29.10	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	792135	1.56	675584	117.25	70	120	
Ge	72	2	He	402679	1.07	343019	117.39	70	120	
Ge	72	1	No Gas	1295988	2.56	1083014	119.66	70	120	
In	115	1	No Gas	1563462	0.18	1354249	115.45	70	120	
Bi	209	1	No Gas	1630551	3.11	1409443	115.69	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	097_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:13:28-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.157	134.8	38898	4.8	0.5	
Be	9	1	No Gas	0.111	194.6	227	156.0	0.5	
V	51	2	He	-0.094	-4.0	367	2.4	2.5	
Cr	52	2	He	0.078	29.4	1143	5.7	2.5	
Fe	56	2	He	2.851	2.6	16323	1.1	100	
Se	78	2	He	-0.464	-178.4	349	9.5	2	
As	75	2	He	0.017	371.1	70	39.0	2.5	
Ca	44	2	He	-24.278	-33.3	613	22.8	100	
Na	23	2	He	-106.043	-0.8	125329	0.4	100	
Mg	24	2	He	1.132	26.3	577	16.0	100	
K	39	2	He	5.106	35.4	82214	0.6	100	
Mn	55	2	He	0.199	18.2	813	9.9	2.5	
Co	59	2	He	0.001	825.2	43	58.1	2.5	
Ni	60	2	He	-0.120	-11.7	87	17.6	2.5	
Cu	63	2	He	-0.296	-10.1	697	12.9	2	
Zn	66	2	He	-0.679	-45.0	5281	3.2	2.5	
Al	27	2	He	-0.801	-26.6	360	9.6	5	
B	11	1	No Gas	37.530	14.7	41571	10.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.654	-32.6	13552	10.2	5	
Si	28	1	No Gas	16.631	66.4	272263	10.9	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.016	-1138.4	1072	118.3	2.5	
Cd	111	1	No Gas	0.144	160.3	203	160.5	1	
Sr	88	1	No Gas	0.893	168.8	12086	161.2	2.5	
Mo	95	1	No Gas	0.102	144.5	277	132.5	2.5	
Sn	118	1	No Gas	0.167	168.8	2025	59.5	5	
Sb	121	1	No Gas	0.220	136.0	1674	109.3	2.5	
Ba	137	1	No Gas	0.160	197.7	464	141.7	2.5	
Tl	205	1	No Gas	0.150	168.8	2594	158.9	1	
Tl	203	1	No Gas	0.142	161.2	970	153.6	1	
Pb	208	1	No Gas	0.039	593.2	3638	136.1	2.5	
U	238	1	No Gas	0.132	169.8	3044	168.4	2.5	
Ca	43	2	He	-27.099	-37.0	20	50.0	100	
Sb	121	2	He	0.026	63.0	297	17.3	2.5	
Ti	47	2	He	0.000	-13771.0	3	173.2	2.5	
Cu	63	1	No Gas	-0.169	-72.0	2967	20.6	2.5	
Se	82	1	No Gas	6.590	148.9	-352	-200.6	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	654166	0.89	675584	96.83	70	120	
Ge	72	2	He	345138	0.22	343019	100.62	70	120	
Ge	72	1	No Gas	1043630	2.63	1083014	96.36	70	120	
In	115	1	No Gas	1363695	1.87	1354249	100.70	70	120	
Bi	209	1	No Gas	1451312	1.45	1409443	102.97	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	099_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:20:33-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.658	1.075	843729	0.77	100	101.7	90	110	
Be	9	1	No Gas	99.106	1.480	170545	0.34	100	99.1	90	110	
V	51	2	He	100.281	1.190	263131	0.73	100	100.3	90	110	
Cr	52	2	He	101.060	0.825	304815	0.34	100	101.1	90	110	
Fe	56	2	He	9883.293	1.079	28715029	0.58	10000	98.8	90	110	
Se	78	2	He	101.135	3.310	4657	3.00	100	101.1	90	110	
As	75	2	He	101.765	0.163	44951	0.70	100	101.8	90	110	
Ca	44	2	He	9965.367	1.509	177318	1.22	10000	99.7	90	110	
Na	23	2	He	10027.189	1.167	5885138	0.85	10000	100.3	90	110	
Mg	24	2	He	10091.182	1.632	3204704	1.75	10000	100.9	90	110	
K	39	2	He	9960.401	0.629	3743385	1.17	10000	99.6	90	110	
Mn	55	2	He	100.301	1.762	228235	1.29	100	100.3	90	110	
Co	59	2	He	101.297	1.548	451857	1.00	100	101.3	90	110	
Ni	60	2	He	100.236	2.694	113322	2.27	100	100.2	90	110	
Cu	63	2	He	100.878	0.950	309366	0.69	100	100.9	90	110	
Zn	66	2	He	100.892	3.176	67936	2.48	100	100.9	90	110	
Al	27	2	He	99.878	3.063	17591	2.59	100	99.9	90	110	
B	11	1	No Gas	468.799	1.980	379820	2.84	500	93.8	90	110	
Al	27	1	No Gas	94.912	0.783	651475	0.58	100	94.9	90	110	
Si	28	1	No Gas	515.830	1.565	1724183	1.82	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.748	0.775	701879	0.04	100	100.7	90	110	
Cd	111	1	No Gas	101.530	1.193	143365	0.65	100	101.5	90	110	
Sr	88	1	No Gas	101.209	1.940	1310033	1.46	100	101.2	90	110	
Mo	95	1	No Gas	98.503	0.880	245704	0.14	100	98.5	90	110	
Sn	118	1	No Gas	101.781	1.194	433129	0.65	100	101.8	90	110	
Sb	121	1	No Gas	93.638	0.347	604976	0.80	100	93.6	90	110	
Ba	137	1	No Gas	102.067	0.765	211901	0.66	100	102.1	90	110	
Tl	205	1	No Gas	104.916	2.369	1673035	0.73	100	104.9	90	110	
Tl	203	1	No Gas	102.670	1.733	653022	0.71	100	102.7	90	110	
Pb	208	1	No Gas	98.845	1.857	2090374	0.47	100	98.8	90	110	
U	238	1	No Gas	104.208	2.290	2337299	0.60	100	104.2	90	110	
Ca	43	2	He	9978.011	4.916	10254	4.99	10000	99.8	90	110	
Sb	121	2	He	101.017	1.014	328102	0.68	100	101.0	90	110	
Ti	47	2	He	97.602	4.047	10124	4.03	100	97.6	90	110	
Cu	63	1	No Gas	101.207	0.258	523883	0.53	100	101.2	90	110	
Se	82	1	No Gas	105.567	9.623	7313	10.44	100	105.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	696927	1.77	675584	103.16	70	120	
Ge	72	2	He	355585	0.56	343019	103.66	70	120	
Ge	72	1	No Gas	1104958	0.48	1083014	102.03	70	120	
In	115	1	No Gas	1374138	0.79	1354249	101.47	70	120	
Bi	209	1	No Gas	1443870	1.80	1409443	102.44	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	100_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:24:11-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.416	7.198	825638	0.23	100	98.4	90	110	
Be	9	1	No Gas	97.605	4.909	169675	2.03	100	97.6	90	110	
V	51	2	He	99.417	0.543	258916	0.94	100	99.4	90	110	
Cr	52	2	He	99.869	0.898	298974	1.20	100	99.9	90	110	
Fe	56	2	He	9828.677	0.589	28343555	1.45	10000	98.3	90	110	
Se	78	2	He	101.814	3.653	4650	2.49	100	101.8	90	110	
As	75	2	He	101.910	0.999	44674	0.56	100	101.9	90	110	
Ca	44	2	He	9861.010	0.786	174178	2.19	10000	98.6	90	110	
Na	23	2	He	10026.319	1.635	5840138	1.12	10000	100.3	90	110	
Mg	24	2	He	10167.194	0.939	3204387	0.52	10000	101.7	90	110	
K	39	2	He	10049.463	0.653	3747694	1.34	10000	100.5	90	110	
Mn	55	2	He	100.241	1.272	226417	2.30	100	100.2	90	110	
Co	59	2	He	100.663	1.166	445646	0.43	100	100.7	90	110	
Ni	60	2	He	99.301	0.491	111440	1.82	100	99.3	90	110	
Cu	63	2	He	98.882	1.106	300990	0.91	100	98.9	90	110	
Zn	66	2	He	102.545	1.964	68432	0.36	100	102.5	90	110	
Al	27	2	He	101.139	2.393	17675	2.54	100	101.1	90	110	
B	11	1	No Gas	481.674	5.747	393661	2.32	500	96.3	90	110	
Al	27	1	No Gas	95.218	5.285	649313	1.44	100	95.2	90	110	
Si	28	1	No Gas	519.590	5.445	1724058	1.82	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.254	1.457	688799	0.72	100	99.3	90	110	
Cd	111	1	No Gas	100.090	1.001	140802	1.88	100	100.1	90	110	
Sr	88	1	No Gas	98.530	2.509	1270274	0.72	100	98.5	90	110	
Mo	95	1	No Gas	98.089	2.160	243706	1.20	100	98.1	90	110	
Sn	118	1	No Gas	100.138	1.488	424504	0.70	100	100.1	90	110	
Sb	121	1	No Gas	93.022	5.630	596989	0.94	100	93.0	90	110	
Ba	137	1	No Gas	101.162	1.373	209206	0.74	100	101.2	90	110	
Tl	205	1	No Gas	104.405	2.084	1660631	1.42	100	104.4	90	110	
Tl	203	1	No Gas	100.180	1.594	635515	0.98	100	100.2	90	110	
Pb	208	1	No Gas	96.461	2.385	2034472	0.58	100	96.5	90	110	
U	238	1	No Gas	100.843	2.224	2255839	0.24	100	100.8	90	110	
Ca	43	2	He	10374.833	2.223	10578	0.76	10000	103.7	90	110	
Sb	121	2	He	99.767	1.091	321616	1.43	100	99.8	90	110	
Ti	47	2	He	98.075	6.653	10097	6.85	100	98.1	90	110	
Cu	63	1	No Gas	100.090	5.955	514633	0.82	100	100.1	90	110	
Se	82	1	No Gas	96.441	9.796	6558	8.43	100	96.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	705526	7.03	675584	104.43	70	120	
Ge	72	2	He	352925	1.46	343019	102.89	70	120	
Ge	72	1	No Gas	1100311	6.61	1083014	101.60	70	120	
In	115	1	No Gas	1369008	2.10	1354249	101.09	70	120	
Bi	209	1	No Gas	1440098	2.10	1409443	102.17	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01PDS
Data File Name	101SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:26:09-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.845	19.845	1.78	220547	0.01	2000	
Be	9	1	No Gas	100.696	100.696	1.46	193953	0.05	2000	
V	51	2	He	107.828	107.828	0.48	305021	0.04	2000	
Cr	52	2	He	443.818	443.818	1.30	1439892	0.03	2000	
Fe	56	2	He	16304.667	16304.667	0.47	51072413	0.03	200000	
Se	78	2	He	102.091	102.091	2.08	5066	2.02	2000	
As	75	2	He	107.619	107.619	1.11	51250	0.21	2000	
Ca	44	2	He	117906.195	117906.195	0.33	2249715	5.24	200000	
Na	23	2	He	436901.014	436901.014	0.70	267793076	0.16	200000	>LDR
Mg	24	2	He	87194.203	87194.203	1.38	29853621	0.29	200000	
K	39	2	He	11679.110	11679.110	0.61	4717062	0.25	200000	
Mn	55	2	He	1195.430	1195.430	1.05	2928571	0.04	2000	
Co	59	2	He	132.079	132.079	0.70	635264	0.02	2000	
Ni	60	2	He	2252.169	2252.169	1.11	2740355	0.08	2000	>LDR
Cu	63	2	He	112.941	112.941	0.45	373247	0.03	2000	
Zn	66	2	He	110.624	110.624	1.28	79713	0.14	2000	
Al	27	2	He	132.691	132.691	2.92	25020	0.53	2000	
B	11	1	No Gas	47.787	47.787	7.78	58466	0.08	2000	
Al	27	1	No Gas	133.341	133.341	2.43	984671	0.01	2000	
Si	28	1	No Gas	15874.885	15874.885	2.75	49787116	0.03	2000	>LDR
Ag	107	1	No Gas	101.475	101.475	1.00	748524	0.01	2000	
Cd	111	1	No Gas	104.358	104.358	2.32	156010	0.07	2000	
Sr	88	1	No Gas	1594.529	1594.529	1.44	21845427	0.01	2000	
Mo	95	1	No Gas	110.292	110.292	1.37	291284	0.04	2000	
Sn	118	1	No Gas	0.070	0.070	23.82	1720	0.00	2000	
Sb	121	1	No Gas	93.845	93.845	2.70	657694	0.01	2000	
Ba	137	1	No Gas	170.566	170.566	1.04	374843	0.05	2000	
Tl	205	1	No Gas	107.688	107.688	1.94	1752630	0.01	2000	
Tl	203	1	No Gas	105.502	105.502	1.34	684805	0.02	2000	
Pb	208	1	No Gas	104.216	104.216	0.76	2249257	0.00	2000	
U	238	1	No Gas	0.201	0.201	1.33	4631	0.00	2000	
Ca	43	2	He	115755.645	115755.645	1.49	127702	90.65	200000	
Sb	121	2	He	103.628	103.628	0.74	362904	0.03	2000	
Ti	47	2	He	105.203	105.203	2.11	11765	0.89	2000	
Cu	63	1	No Gas	113.311	113.311	1.68	635825	0.02	2000	
Zn	66	1	No Gas	110.490	110.490	2.70	187656	0.06	2000	
Se	82	1	No Gas	107.711	107.711	6.52	8121	1.33	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	780051	1.57	675584	115.46	70	120	
Ge	72	2	He	383396	0.30	343019	111.77	70	120	
Ge	72	1	No Gas	1199105	2.40	1083014	110.72	70	120	
In	115	1	No Gas	1455040	1.45	1354249	107.44	70	120	
Bi	209	1	No Gas	1473455	1.86	1409443	104.54	70	120	

Sample Report

Sample Table

Sample Name	HS22070087-02
Data File Name	107SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:45:53-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	10.546	10.546	1.89	144351	0.01	2000	
Be	9	1	No Gas	-0.022	-0.022	-17.18	12	-0.19	2000	
V	51	2	He	-0.002	-0.002	-587.78	706	0.00	2000	
Cr	52	2	He	1.007	1.007	8.63	4534	0.02	2000	
Fe	56	2	He	40352.374	40352.374	0.89	133773928	0.03	200000	
Se	78	2	He	-1.116	-1.116	-9.60	379	-0.29	2000	
As	75	2	He	0.066	0.066	28.76	107	0.06	2000	
Ca	44	2	He	62186.552	62186.552	0.44	1256512	4.95	200000	
Na	23	2	He	132323.064	132323.064	0.91	85998972	0.15	200000	
Mg	24	2	He	33689.034	33689.034	1.83	12208592	0.28	200000	
K	39	2	He	869.282	869.282	2.41	459084	0.19	200000	
Mn	55	2	He	1150.328	1150.328	1.46	2982724	0.04	2000	
Co	59	2	He	0.037	0.037	15.61	233	0.02	2000	
Ni	60	2	He	0.125	0.125	5.96	417	0.03	2000	
Cu	63	2	He	0.278	0.278	25.58	2817	0.01	2000	
Zn	66	2	He	0.305	0.305	216.45	6902	0.00	2000	
Al	27	2	He	6.666	6.666	22.03	1880	0.35	2000	
B	11	1	No Gas	2.557	2.557	16.20	19928	0.01	2000	
Al	27	1	No Gas	5.723	5.723	3.36	65832	0.01	2000	
Si	28	1	No Gas	1759.505	1759.505	1.39	6136115	0.03	2000	
Ag	107	1	No Gas	-0.137	-0.137	-4.14	270	-0.05	2000	
Cd	111	1	No Gas	0.021	0.021	62.14	33	0.06	2000	
Sr	88	1	No Gas	1489.525	1489.525	1.01	22120310	0.01	2000	
Mo	95	1	No Gas	0.060	0.060	15.56	200	0.03	2000	
Sn	118	1	No Gas	-0.061	-0.061	-29.92	1227	0.00	2000	
Sb	121	1	No Gas	0.050	0.050	10.47	787	0.01	2000	
Ba	137	1	No Gas	1.520	1.520	1.77	3771	0.04	2000	
Tl	205	1	No Gas	-0.008	-0.008	-7.64	23	-0.04	2000	
Tl	203	1	No Gas	-0.006	-0.006	-22.91	10	-0.06	2000	
Pb	208	1	No Gas	-0.065	-0.065	-6.54	1557	0.00	2000	
U	238	1	No Gas	0.002	0.002	56.22	73	0.00	2000	
Ca	43	2	He	61445.686	61445.686	3.30	71770	85.61	200000	
Sb	121	2	He	0.007	0.007	131.00	277	0.00	2000	
Ti	47	2	He	0.079	0.079	163.05	13	0.59	2000	
Cu	63	1	No Gas	0.773	0.773	6.76	9237	0.01	2000	
Zn	66	1	No Gas	0.416	0.416	52.27	15856	0.00	2000	
Se	82	1	No Gas	0.793	0.793	971.81	-966	-0.08	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	814157	0.67	675584	120.51	70	120	ISTD Failed
Ge	72	2	He	405821	0.69	343019	118.31	70	120	
Ge	72	1	No Gas	1279103	0.91	1083014	118.11	70	120	
In	115	1	No Gas	1577044	0.61	1354249	116.45	70	120	
Bi	209	1	No Gas	1632436	1.14	1409443	115.82	70	120	

Sample Report

Sample Table

Sample Name	HS22070087-03
Data File Name	108SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:49:01-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	38.418	38.418	0.62	388914	0.01	2000	
Be	9	1	No Gas	1.068	1.068	2.21	2132	0.05	2000	
V	51	2	He	1.069	1.069	3.16	3897	0.03	2000	
Cr	52	2	He	4.450	4.450	2.66	16317	0.03	2000	
Fe	56	2	He	12725.019	12725.019	1.00	42108278	0.03	200000	
Se	78	2	He	-1.528	-1.528	-33.17	359	-0.43	2000	
As	75	2	He	2.528	2.528	10.31	1343	0.19	2000	
Ca	44	2	He	30212.467	30212.467	0.71	609863	4.95	200000	
Na	23	2	He	134910.432	134910.432	0.70	87503075	0.15	200000	
Mg	24	2	He	33296.820	33296.820	0.65	12043464	0.28	200000	
K	39	2	He	1180.576	1180.576	0.31	588505	0.20	200000	
Mn	55	2	He	1194.469	1194.469	1.25	3091206	0.04	2000	
Co	59	2	He	41.566	41.566	1.35	211223	0.02	2000	
Ni	60	2	He	44.140	44.140	1.01	56986	0.08	2000	
Cu	63	2	He	0.108	0.108	51.32	2220	0.00	2000	
Zn	66	2	He	34.089	34.089	1.53	30565	0.11	2000	
Al	27	2	He	83.387	83.387	3.93	16824	0.50	2000	
B	11	1	No Gas	11.991	11.991	1.41	27594	0.04	2000	
Al	27	1	No Gas	77.131	77.131	0.79	610312	0.01	2000	
Si	28	1	No Gas	21868.500	21868.500	1.13	72302881	0.03	2000	>LDR
Ag	107	1	No Gas	-0.129	-0.129	-5.42	320	-0.04	2000	
Cd	111	1	No Gas	0.210	0.210	13.36	330	0.06	2000	
Sr	88	1	No Gas	662.777	662.777	0.55	9535353	0.01	2000	
Mo	95	1	No Gas	0.370	0.370	7.34	1053	0.04	2000	
Sn	118	1	No Gas	0.015	0.015	164.32	1547	0.00	2000	
Sb	121	1	No Gas	0.120	0.120	6.36	1293	0.01	2000	
Ba	137	1	No Gas	14.713	14.713	1.36	34085	0.04	2000	
Tl	205	1	No Gas	0.004	0.004	162.24	253	0.00	2000	
Tl	203	1	No Gas	0.008	0.008	30.91	107	0.01	2000	
Pb	208	1	No Gas	0.199	0.199	5.70	7781	0.00	2000	
U	238	1	No Gas	0.315	0.315	3.30	7936	0.00	2000	
Ca	43	2	He	31509.708	31509.708	0.51	36763	85.71	200000	
Sb	121	2	He	0.078	0.078	29.47	540	0.01	2000	
Ti	47	2	He	0.277	0.277	46.49	37	0.76	2000	
Cu	63	1	No Gas	0.617	0.617	4.12	8219	0.01	2000	
Zn	66	1	No Gas	34.101	34.101	1.12	71508	0.05	2000	
Se	82	1	No Gas	2.388	2.388	125.40	-816	-0.29	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	788182	0.87	675584	116.67	70	120	
Ge	72	2	He	405008	0.32	343019	118.07	70	120	
Ge	72	1	No Gas	1265360	0.30	1083014	116.84	70	120	
In	115	1	No Gas	1527802	0.78	1354249	112.82	70	120	
Bi	209	1	No Gas	1613519	1.30	1409443	114.48	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	111_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:56:42-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.456	4.954	820077	2.00	100	99.5	90	110	
Be	9	1	No Gas	98.546	3.049	168362	0.84	100	98.5	90	110	
V	51	2	He	101.167	0.878	264822	0.38	100	101.2	90	110	
Cr	52	2	He	101.993	1.101	306887	0.73	100	102.0	90	110	
Fe	56	2	He	10126.735	0.996	29352278	0.52	10000	101.3	90	110	
Se	78	2	He	99.296	0.755	4569	0.29	100	99.3	90	110	
As	75	2	He	103.223	1.224	45484	0.91	100	103.2	90	110	
Ca	44	2	He	10027.689	1.240	177997	0.99	10000	100.3	90	110	
Na	23	2	He	10309.633	1.001	6031447	1.26	10000	103.1	90	110	
Mg	24	2	He	10378.704	0.321	3288118	0.20	10000	103.8	90	110	
K	39	2	He	10143.257	0.673	3801350	0.20	10000	101.4	90	110	
Mn	55	2	He	106.515	3.010	241789	3.07	100	106.5	90	110	
Co	59	2	He	103.530	1.409	460724	0.90	100	103.5	90	110	
Ni	60	2	He	102.204	1.538	115271	1.07	100	102.2	90	110	
Cu	63	2	He	101.995	1.049	312025	0.56	100	102.0	90	110	
Zn	66	2	He	102.735	1.072	68911	1.01	100	102.7	90	110	
Al	27	2	He	102.385	2.239	17979	2.14	100	102.4	90	110	
B	11	1	No Gas	467.440	2.947	375998	1.62	500	93.5	90	110	
Al	27	1	No Gas	92.951	2.053	647009	0.23	100	93.0	90	110	
Si	28	1	No Gas	545.290	7.494	1835432	8.72	5000	10.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.875	2.004	703037	0.85	100	98.9	90	110	
Cd	111	1	No Gas	99.911	1.807	143992	1.08	100	99.9	90	110	
Sr	88	1	No Gas	103.087	7.278	1362833	8.47	100	103.1	90	110	
Mo	95	1	No Gas	97.157	1.849	247340	0.69	100	97.2	90	110	
Sn	118	1	No Gas	99.836	1.396	433656	0.25	100	99.8	90	110	
Sb	121	1	No Gas	92.488	1.864	605608	0.36	100	92.5	90	110	
Ba	137	1	No Gas	100.195	1.516	212307	0.37	100	100.2	90	110	
Tl	205	1	No Gas	103.393	1.578	1680930	1.64	100	103.4	90	110	
Tl	203	1	No Gas	101.065	1.338	655261	0.12	100	101.1	90	110	
Pb	208	1	No Gas	96.972	2.081	2090444	0.80	100	97.0	90	110	
U	238	1	No Gas	101.301	0.725	2316439	0.85	100	101.3	90	110	
Ca	43	2	He	10012.052	1.047	10264	1.12	10000	100.1	90	110	
Sb	121	2	He	102.284	0.565	331424	0.06	100	102.3	90	110	
Ti	47	2	He	100.744	2.888	10424	2.45	100	100.7	90	110	
Cu	63	1	No Gas	98.911	2.467	518956	0.50	100	98.9	90	110	
Se	82	1	No Gas	100.980	0.638	7054	2.27	100	101.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	692209	3.03	675584	102.46	70	120	
Ge	72	2	He	354739	0.52	343019	103.42	70	120	
Ge	72	1	No Gas	1120173	2.24	1083014	103.43	70	120	
In	115	1	No Gas	1402599	1.17	1354249	103.57	70	120	
Bi	209	1	No Gas	1471717	1.31	1409443	104.42	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	112_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:58:52-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.195	69.0	39349	3.9	0.5	
Be	9	1	No Gas	0.143	74.3	278	63.4	0.5	
V	51	2	He	-0.043	-44.9	492	10.2	2.5	
Cr	52	2	He	0.149	24.0	1340	7.5	2.5	
Fe	56	2	He	40.607	31.7	121827	29.9	100	
Se	78	2	He	-0.265	-148.3	355	4.8	2	
As	75	2	He	0.032	79.0	76	14.2	2.5	
Ca	44	2	He	13.016	151.7	1244	27.3	100	
Na	23	2	He	-23.597	-98.7	169403	7.8	100	
Mg	24	2	He	26.710	50.5	8398	49.4	100	
K	39	2	He	13.963	45.7	84673	2.7	100	
Mn	55	2	He	2.324	42.5	5459	39.9	2.5	
Co	59	2	He	0.046	32.3	237	27.2	2.5	
Ni	60	2	He	-0.058	-96.3	153	39.9	2.5	
Cu	63	2	He	-0.301	-8.8	677	11.5	2	
Zn	66	2	He	-0.280	-65.9	5475	2.0	2.5	
Al	27	2	He	-0.359	-82.8	430	11.6	5	
B	11	1	No Gas	29.461	15.0	35836	10.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.486	-85.0	15420	19.2	5	
Si	28	1	No Gas	18.755	54.2	293342	11.0	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.024	424.1	1357	52.9	2.5	
Cd	111	1	No Gas	0.144	39.0	203	40.1	1	
Sr	88	1	No Gas	1.787	72.0	23792	70.7	2.5	
Mo	95	1	No Gas	0.138	74.8	370	70.4	2.5	
Sn	118	1	No Gas	0.128	46.6	1867	14.7	5	
Sb	121	1	No Gas	0.207	48.8	1687	39.8	2.5	
Ba	137	1	No Gas	0.196	63.2	540	48.6	2.5	
Tl	205	1	No Gas	0.179	69.9	3060	68.2	1	
Tl	203	1	No Gas	0.177	60.3	1191	60.0	1	
Pb	208	1	No Gas	0.074	164.9	4392	61.8	2.5	
U	238	1	No Gas	0.167	67.1	3836	68.6	2.5	
Ca	43	2	He	13.723	75.1	60	16.7	100	
Sb	121	2	He	0.102	38.4	530	22.9	2.5	
Ti	47	2	He	0.033	346.4	7	173.2	2.5	
Cu	63	1	No Gas	0.084	127.1	4424	13.3	2.5	
Se	82	1	No Gas	6.726	104.8	-374	-145.9	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	657001	1.83	675584	97.25	70	120	
Ge	72	2	He	342300	0.29	343019	99.79	70	120	
Ge	72	1	No Gas	1099869	1.34	1083014	101.56	70	120	
In	115	1	No Gas	1370956	1.57	1354249	101.23	70	120	
Bi	209	1	No Gas	1454154	2.53	1409443	103.17	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	123_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:24:40-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.057	0.579	903173	0.25	100	105.1	90	110	
Be	9	1	No Gas	104.567	0.630	186683	0.28	100	104.6	90	110	
V	51	2	He	105.123	1.781	290621	0.84	100	105.1	90	110	
Cr	52	2	He	106.033	2.281	336928	1.28	100	106.0	90	110	
Fe	56	2	He	10349.219	1.631	31683806	0.73	10000	103.5	90	110	
Se	78	2	He	103.978	2.401	5034	1.59	100	104.0	90	110	
As	75	2	He	107.785	0.288	50167	0.99	100	107.8	90	110	
Ca	44	2	He	10263.717	1.072	192411	0.26	10000	102.6	90	110	
Na	23	2	He	10591.629	1.380	6539288	0.68	10000	105.9	90	110	
Mg	24	2	He	10681.802	1.653	3574512	1.38	10000	106.8	90	110	
K	39	2	He	10539.663	1.863	4168522	0.92	10000	105.4	90	110	
Mn	55	2	He	105.016	0.798	251808	1.03	100	105.0	90	110	
Co	59	2	He	105.239	0.688	494702	0.61	100	105.2	90	110	
Ni	60	2	He	104.721	1.303	124750	0.28	100	104.7	90	110	
Cu	63	2	He	105.338	1.205	340329	0.32	100	105.3	90	110	
Zn	66	2	He	105.509	1.485	74588	1.25	100	105.5	90	110	
Al	27	2	He	110.242	0.770	20409	1.74	100	110.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	516.509	2.646	432457	2.28	500	103.3	90	110	
Al	27	1	No Gas	96.355	1.862	716241	0.04	100	96.4	90	110	
Si	28	1	No Gas	513.584	2.347	1860893	0.87	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.845	0.950	771632	0.25	100	104.8	90	110	
Cd	111	1	No Gas	106.190	1.268	158433	1.87	100	106.2	90	110	
Sr	88	1	No Gas	104.393	1.829	1427604	1.53	100	104.4	90	110	
Mo	95	1	No Gas	103.055	0.697	271584	0.47	100	103.1	90	110	
Sn	118	1	No Gas	106.015	0.561	476593	0.39	100	106.0	90	110	
Sb	121	1	No Gas	95.303	1.511	667100	0.47	100	95.3	90	110	
Ba	137	1	No Gas	106.912	1.437	234485	0.88	100	106.9	90	110	
Tl	205	1	No Gas	109.393	0.250	1860371	0.66	100	109.4	90	110	
Tl	203	1	No Gas	105.832	1.855	717745	1.09	100	105.8	90	110	
Pb	208	1	No Gas	102.158	2.622	2303503	1.90	100	102.2	90	110	
U	238	1	No Gas	105.328	0.433	2519500	1.14	100	105.3	90	110	
Ca	43	2	He	10614.079	2.187	11492	2.77	10000	106.1	90	110	
Sb	121	2	He	105.110	1.613	359728	0.94	100	105.1	90	110	
Ti	47	2	He	101.535	0.838	11098	0.70	100	101.5	90	110	
Cu	63	1	No Gas	102.069	2.151	572346	0.30	100	102.1	90	110	
Se	82	1	No Gas	103.590	5.101	7765	7.25	100	103.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722932	0.45	675584	107.01	70	120	
Ge	72	2	He	374717	1.11	343019	109.24	70	120	
Ge	72	1	No Gas	1197369	1.81	1083014	110.56	70	120	
In	115	1	No Gas	1451769	0.70	1354249	107.20	70	120	
Bi	209	1	No Gas	1539422	0.78	1409443	109.22	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	123_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:24:40-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.057	0.579	903173	0.25	100	105.1	90	110	
Be	9	1	No Gas	104.567	0.630	186683	0.28	100	104.6	90	110	
V	51	2	He	105.123	1.781	290621	0.84	100	105.1	90	110	
Cr	52	2	He	106.033	2.281	336928	1.28	100	106.0	90	110	
Fe	56	2	He	10349.219	1.631	31683806	0.73	10000	103.5	90	110	
Se	78	2	He	103.978	2.401	5034	1.59	100	104.0	90	110	
As	75	2	He	107.785	0.288	50167	0.99	100	107.8	90	110	
Ca	44	2	He	10263.717	1.072	192411	0.26	10000	102.6	90	110	
Na	23	2	He	10591.629	1.380	6539288	0.68	10000	105.9	90	110	
Mg	24	2	He	10681.802	1.653	3574512	1.38	10000	106.8	90	110	
K	39	2	He	10539.663	1.863	4168522	0.92	10000	105.4	90	110	
Mn	55	2	He	105.016	0.798	251808	1.03	100	105.0	90	110	
Co	59	2	He	105.239	0.688	494702	0.61	100	105.2	90	110	
Ni	60	2	He	104.721	1.303	124750	0.28	100	104.7	90	110	
Cu	63	2	He	105.338	1.205	340329	0.32	100	105.3	90	110	
Zn	66	2	He	105.509	1.485	74588	1.25	100	105.5	90	110	
Al	27	2	He	110.242	0.770	20409	1.74	100	110.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	516.509	2.646	432457	2.28	500	103.3	90	110	
Al	27	1	No Gas	96.355	1.862	716241	0.04	100	96.4	90	110	
Si	28	1	No Gas	513.584	2.347	1860893	0.87	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.845	0.950	771632	0.25	100	104.8	90	110	
Cd	111	1	No Gas	106.190	1.268	158433	1.87	100	106.2	90	110	
Sr	88	1	No Gas	104.393	1.829	1427604	1.53	100	104.4	90	110	
Mo	95	1	No Gas	103.055	0.697	271584	0.47	100	103.1	90	110	
Sn	118	1	No Gas	106.015	0.561	476593	0.39	100	106.0	90	110	
Sb	121	1	No Gas	95.303	1.511	667100	0.47	100	95.3	90	110	
Ba	137	1	No Gas	106.912	1.437	234485	0.88	100	106.9	90	110	
Tl	205	1	No Gas	109.393	0.250	1860371	0.66	100	109.4	90	110	
Tl	203	1	No Gas	105.832	1.855	717745	1.09	100	105.8	90	110	
Pb	208	1	No Gas	102.158	2.622	2303503	1.90	100	102.2	90	110	
U	238	1	No Gas	105.328	0.433	2519500	1.14	100	105.3	90	110	
Ca	43	2	He	10614.079	2.187	11492	2.77	10000	106.1	90	110	
Sb	121	2	He	105.110	1.613	359728	0.94	100	105.1	90	110	
Ti	47	2	He	101.535	0.838	11098	0.70	100	101.5	90	110	
Cu	63	1	No Gas	102.069	2.151	572346	0.30	100	102.1	90	110	
Se	82	1	No Gas	103.590	5.101	7765	7.25	100	103.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722932	0.45	675584	107.01	70	120	
Ge	72	2	He	374717	1.11	343019	109.24	70	120	
Ge	72	1	No Gas	1197369	1.81	1083014	110.56	70	120	
In	115	1	No Gas	1451769	0.70	1354249	107.20	70	120	
Bi	209	1	No Gas	1539422	0.78	1409443	109.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	124_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:26:35-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.202	-129.9	39350	1.6	0.5	
Be	9	1	No Gas	-0.012	-59.0	28	40.8	0.5	
V	51	2	He	-0.049	-21.4	501	5.1	2.5	
Cr	52	2	He	0.052	45.6	1113	6.1	2.5	
Fe	56	2	He	0.701	20.7	10711	4.3	100	
Se	78	2	He	-0.995	-34.1	342	4.8	2	
As	75	2	He	-0.005	-901.8	63	29.3	2.5	
Ca	44	2	He	-38.036	-7.1	393	11.7	100	
Na	23	2	He	-80.129	-4.0	145732	1.0	100	
Mg	24	2	He	0.473	31.5	390	12.8	100	
K	39	2	He	1.554	305.1	84491	1.7	100	
Mn	55	2	He	0.022	105.8	443	12.4	2.5	
Co	59	2	He	-0.003	-167.0	30	66.7	2.5	
Ni	60	2	He	-0.135	-3.9	73	7.9	2.5	
Cu	63	2	He	-0.365	-5.8	513	13.0	2	
Zn	66	2	He	-0.296	-90.6	5751	2.6	2.5	
Al	27	2	He	-1.661	-31.6	227	40.0	5	
B	11	1	No Gas	23.924	18.1	34361	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.661	-9.2	7886	13.6	5	
Si	28	1	No Gas	-2.757	-49.8	240085	1.6	10	
Ag	107	1	No Gas	-0.111	-23.3	427	43.9	2.5	
Cd	111	1	No Gas	0.014	132.0	20	132.3	1	
Sr	88	1	No Gas	0.019	399.7	811	122.0	2.5	
Mo	95	1	No Gas	0.028	172.5	97	129.3	2.5	
Sn	118	1	No Gas	0.102	191.9	1798	46.7	5	
Sb	121	1	No Gas	0.054	50.9	727	25.5	2.5	
Ba	137	1	No Gas	-0.031	-54.4	70	51.5	2.5	
Tl	205	1	No Gas	0.009	146.6	313	71.0	1	
Tl	203	1	No Gas	0.012	76.5	130	46.8	1	
Pb	208	1	No Gas	-0.090	-12.9	903	27.6	2.5	
U	238	1	No Gas	0.007	141.7	200	121.3	2.5	
Ca	43	2	He	-34.320	-43.2	13	114.6	100	
Sb	121	2	He	0.021	85.2	293	20.0	2.5	
Ti	47	2	He	0.030	183.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.065	-125.7	3791	11.8	2.5	
Se	82	1	No Gas	7.082	53.1	-359	-84.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711467	3.74	675584	105.31	70	120	
Ge	72	2	He	360266	0.53	343019	105.03	70	120	
Ge	72	1	No Gas	1140508	0.47	1083014	105.31	70	120	
In	115	1	No Gas	1406131	0.76	1354249	103.83	70	120	
Bi	209	1	No Gas	1504783	1.01	1409443	106.76	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	124_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:26:35-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.202	-129.9	39350	1.6	0.5	
Be	9	1	No Gas	-0.012	-59.0	28	40.8	0.5	
V	51	2	He	-0.049	-21.4	501	5.1	2.5	
Cr	52	2	He	0.052	45.6	1113	6.1	2.5	
Fe	56	2	He	0.701	20.7	10711	4.3	100	
Se	78	2	He	-0.995	-34.1	342	4.8	2	
As	75	2	He	-0.005	-901.8	63	29.3	2.5	
Ca	44	2	He	-38.036	-7.1	393	11.7	100	
Na	23	2	He	-80.129	-4.0	145732	1.0	100	
Mg	24	2	He	0.473	31.5	390	12.8	100	
K	39	2	He	1.554	305.1	84491	1.7	100	
Mn	55	2	He	0.022	105.8	443	12.4	2.5	
Co	59	2	He	-0.003	-167.0	30	66.7	2.5	
Ni	60	2	He	-0.135	-3.9	73	7.9	2.5	
Cu	63	2	He	-0.365	-5.8	513	13.0	2	
Zn	66	2	He	-0.296	-90.6	5751	2.6	2.5	
Al	27	2	He	-1.661	-31.6	227	40.0	5	
B	11	1	No Gas	23.924	18.1	34361	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.661	-9.2	7886	13.6	5	
Si	28	1	No Gas	-2.757	-49.8	240085	1.6	10	
Ag	107	1	No Gas	-0.111	-23.3	427	43.9	2.5	
Cd	111	1	No Gas	0.014	132.0	20	132.3	1	
Sr	88	1	No Gas	0.019	399.7	811	122.0	2.5	
Mo	95	1	No Gas	0.028	172.5	97	129.3	2.5	
Sn	118	1	No Gas	0.102	191.9	1798	46.7	5	
Sb	121	1	No Gas	0.054	50.9	727	25.5	2.5	
Ba	137	1	No Gas	-0.031	-54.4	70	51.5	2.5	
Tl	205	1	No Gas	0.009	146.6	313	71.0	1	
Tl	203	1	No Gas	0.012	76.5	130	46.8	1	
Pb	208	1	No Gas	-0.090	-12.9	903	27.6	2.5	
U	238	1	No Gas	0.007	141.7	200	121.3	2.5	
Ca	43	2	He	-34.320	-43.2	13	114.6	100	
Sb	121	2	He	0.021	85.2	293	20.0	2.5	
Ti	47	2	He	0.030	183.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.065	-125.7	3791	11.8	2.5	
Se	82	1	No Gas	7.082	53.1	-359	-84.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711467	3.74	675584	105.31	70	120	
Ge	72	2	He	360266	0.53	343019	105.03	70	120	
Ge	72	1	No Gas	1140508	0.47	1083014	105.31	70	120	
In	115	1	No Gas	1406131	0.76	1354249	103.83	70	120	
Bi	209	1	No Gas	1504783	1.01	1409443	106.76	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	136_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:52:38-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.326	-34.4	41006	0.8	0.5	
Be	9	1	No Gas	-0.010	-16.2	33	8.7	0.5	
V	51	2	He	-0.012	-93.1	684	4.8	2.5	
Cr	52	2	He	-0.023	-105.2	1010	7.7	2.5	
Fe	56	2	He	0.912	9.0	12910	2.6	100	
Se	78	2	He	-0.550	-109.4	411	7.4	2	
As	75	2	He	-0.031	-12.8	59	3.3	2.5	
Ca	44	2	He	-30.093	-22.4	610	22.1	100	
Na	23	2	He	92.572	1.6	279265	0.2	100	
Mg	24	2	He	1.025	21.5	647	12.6	100	
K	39	2	He	6.403	43.6	98319	1.2	100	
Mn	55	2	He	-0.014	-178.7	410	15.2	2.5	
Co	59	2	He	-0.001	-631.1	43	66.6	2.5	
Ni	60	2	He	-0.158	-12.4	53	47.2	2.5	
Cu	63	2	He	-0.364	-4.1	590	9.4	2	
Zn	66	2	He	-0.645	-23.7	6305	1.2	2.5	
Al	27	2	He	-1.821	-1.9	227	2.5	5	
B	11	1	No Gas	18.643	21.2	32222	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.690	-2.6	8633	4.5	5	
Si	28	1	No Gas	-6.571	-36.2	257043	1.8	10	
Ag	107	1	No Gas	-0.125	-6.0	367	15.0	2.5	
Cd	111	1	No Gas	0.006	100.9	10	100.0	1	
Sr	88	1	No Gas	-0.007	-64.2	527	12.1	2.5	
Mo	95	1	No Gas	0.005	91.5	43	35.3	2.5	
Sn	118	1	No Gas	-0.044	-69.6	1317	12.4	5	
Sb	121	1	No Gas	0.066	22.9	907	10.9	2.5	
Ba	137	1	No Gas	-0.039	-9.9	60	16.7	2.5	
Tl	205	1	No Gas	0.004	22.2	243	6.3	1	
Tl	203	1	No Gas	0.007	42.1	103	20.1	1	
Pb	208	1	No Gas	-0.093	-3.6	913	9.6	2.5	
U	238	1	No Gas	0.003	42.5	113	31.0	2.5	
Ca	43	2	He	-41.603	-11.7	7	86.6	100	
Sb	121	2	He	0.040	63.5	403	23.6	2.5	
Ti	47	2	He	-0.006	-856.6	3	173.2	2.5	
Cu	63	1	No Gas	1.537	7.3	13801	3.1	2.5	
Se	82	1	No Gas	0.524	483.7	-998	-24.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	759917	1.62	675584	112.48	70	120	
Ge	72	2	He	410437	0.53	343019	119.65	70	120	
Ge	72	1	No Gas	1281870	1.77	1083014	118.36	70	120	
In	115	1	No Gas	1586553	1.71	1354249	117.15	70	120	
Bi	209	1	No Gas	1653123	0.78	1409443	117.29	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	138_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:57:15-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.780	4.205	849568	2.93	100	98.8	90	110	
Be	9	1	No Gas	101.964	1.382	181625	1.24	100	102.0	90	110	
V	51	2	He	97.932	1.676	301509	0.58	100	97.9	90	110	
Cr	52	2	He	98.160	2.029	347389	0.93	100	98.2	90	110	
Fe	56	2	He	9550.083	1.478	32555639	0.50	10000	95.5	90	110	
Se	78	2	He	92.447	1.820	5034	1.55	100	92.4	90	110	
As	75	2	He	98.485	3.162	51035	2.06	100	98.5	90	110	
Ca	44	2	He	9555.238	1.252	199541	0.76	10000	95.6	90	110	
Na	23	2	He	10118.390	1.772	6965574	0.62	10000	101.2	90	110	
Mg	24	2	He	9911.985	1.591	3693198	1.04	10000	99.1	90	110	
K	39	2	He	9755.104	1.376	4303332	0.27	10000	97.6	90	110	
Mn	55	2	He	97.306	2.024	259798	0.92	100	97.3	90	110	
Co	59	2	He	98.640	1.503	516262	0.44	100	98.6	90	110	
Ni	60	2	He	98.829	2.135	131096	1.06	100	98.8	90	110	
Cu	63	2	He	98.013	1.488	352716	0.39	100	98.0	90	110	
Zn	66	2	He	97.629	2.876	77353	1.81	100	97.6	90	110	
Al	27	2	He	96.734	2.805	20008	1.63	100	96.7	90	110	
B	11	1	No Gas	514.161	3.400	429531	2.33	500	102.8	90	110	
Al	27	1	No Gas	89.337	1.680	720125	0.38	100	89.3	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	468.111	1.575	1860395	1.60	5000	9.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	97.242	1.773	780699	0.56	100	97.2	90	110	
Cd	111	1	No Gas	97.431	1.620	158536	0.13	100	97.4	90	110	
Sr	88	1	No Gas	96.588	1.630	1440753	0.21	100	96.6	90	110	
Mo	95	1	No Gas	95.722	1.544	275145	0.04	100	95.7	90	110	
Sn	118	1	No Gas	97.858	2.039	479919	0.55	100	97.9	90	110	
Sb	121	1	No Gas	88.817	2.350	672623	0.54	100	88.8	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	98.163	1.172	234856	0.55	100	98.2	90	110	
Tl	205	1	No Gas	102.590	1.017	1851975	1.14	100	102.6	90	110	
Tl	203	1	No Gas	99.074	0.929	713320	1.45	100	99.1	90	110	
Pb	208	1	No Gas	98.394	2.275	2355513	2.44	100	98.4	90	110	
U	238	1	No Gas	99.274	0.628	2520599	0.32	100	99.3	90	110	
Ca	43	2	He	9795.181	4.262	11809	3.20	10000	98.0	90	110	
Sb	121	2	He	95.663	1.465	364566	0.38	100	95.7	90	110	
Ti	47	2	He	97.145	2.975	11822	2.34	100	97.1	90	110	
Cu	63	1	No Gas	96.035	1.577	582979	0.35	100	96.0	90	110	
Se	82	1	No Gas	101.716	5.376	8223	5.48	100	101.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	721328	1.20	675584	106.77	70	120	
Ge	72	2	He	417233	1.09	343019	121.64	70	120	ISTD Failed
Ge	72	1	No Gas	1295528	1.80	1083014	119.62	70	120	
In	115	1	No Gas	1583674	1.55	1354249	116.94	70	120	
Bi	209	1	No Gas	1634088	0.66	1409443	115.94	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	139_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:59:10-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.399	0.812	859822	0.82	100	98.4	90	110	
Be	9	1	No Gas	101.962	0.865	184442	0.51	100	102.0	90	110	
V	51	2	He	99.492	0.799	303638	0.43	100	99.5	90	110	
Cr	52	2	He	100.399	1.068	352200	0.48	100	100.4	90	110	
Fe	56	2	He	9795.305	1.076	33099899	0.61	10000	98.0	90	110	
Se	78	2	He	98.367	2.256	5280	1.44	100	98.4	90	110	
As	75	2	He	101.465	0.691	52126	0.64	100	101.5	90	110	
Ca	44	2	He	9743.883	0.621	201677	0.36	10000	97.4	90	110	
Na	23	2	He	10233.426	0.966	6980933	0.37	10000	102.3	90	110	
Mg	24	2	He	10201.186	0.971	3767728	0.52	10000	102.0	90	110	
K	39	2	He	10070.784	0.491	4400757	0.19	10000	100.7	90	110	
Mn	55	2	He	99.632	0.269	263696	0.70	100	99.6	90	110	
Co	59	2	He	100.577	1.470	521800	0.90	100	100.6	90	110	
Ni	60	2	He	100.024	1.070	131527	0.50	100	100.0	90	110	
Cu	63	2	He	99.616	0.634	355333	0.15	100	99.6	90	110	
Zn	66	2	He	99.677	1.517	78148	0.98	100	99.7	90	110	
Al	27	2	He	102.303	2.502	20943	2.18	100	102.3	90	110	
B	11	1	No Gas	542.559	0.766	459560	2.04	500	108.5	90	110	
Al	27	1	No Gas	91.069	2.229	727190	0.39	100	91.1	90	110	
Si	28	1	No Gas	487.531	1.756	1908888	1.08	5000	9.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.842	1.051	793999	0.29	100	99.8	90	110	
Cd	111	1	No Gas	99.267	1.193	160004	0.71	100	99.3	90	110	
Sr	88	1	No Gas	98.893	1.349	1461236	0.84	100	98.9	90	110	
Mo	95	1	No Gas	97.126	1.557	276540	0.58	100	97.1	90	110	
Sn	118	1	No Gas	100.542	1.449	488407	0.42	100	100.5	90	110	
Sb	121	1	No Gas	91.447	2.268	686469	0.29	100	91.4	90	110	
Ba	137	1	No Gas	100.347	1.658	237801	0.84	100	100.3	90	110	
Tl	205	1	No Gas	103.934	1.718	1893565	0.36	100	103.9	90	110	
Tl	203	1	No Gas	100.173	1.758	727886	0.99	100	100.2	90	110	
Pb	208	1	No Gas	100.211	3.257	2420612	1.51	100	100.2	90	110	
U	238	1	No Gas	99.248	2.046	2543142	0.27	100	99.2	90	110	
Ca	43	2	He	9459.594	2.499	11308	2.09	10000	94.6	90	110	
Sb	121	2	He	98.599	1.186	372464	0.57	100	98.6	90	110	
Ti	47	2	He	93.517	2.615	11281	2.28	100	93.5	90	110	
Cu	63	1	No Gas	98.686	1.978	593677	0.74	100	98.7	90	110	
Se	82	1	No Gas	108.336	10.450	8736	9.06	100	108.3	90	110	

QC ISTD Table

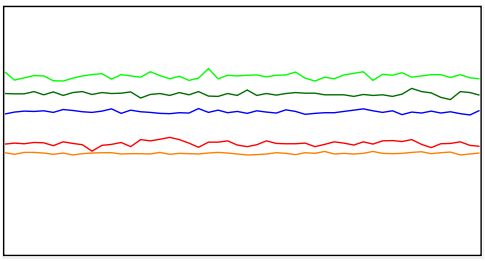
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	732542	1.31	675584	108.43	70	120	
Ge	72	2	He	413565	0.62	343019	120.57	70	120	ISTD Failed
Ge	72	1	No Gas	1284307	2.49	1083014	118.59	70	120	
In	115	1	No Gas	1568623	1.06	1354249	115.83	70	120	
Bi	209	1	No Gas	1649536	1.99	1409443	117.03	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq. Date-Time	07/19/2022 10:41:44
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2249	22485.22		
24	10000	7221	72206.42		
59	20000	11544	115443.75		
115	50000	20455	204549.19		
208	20000	13002	130021.40		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.282	5.000	
24	1.526	5.000	
59	1.054	5.000	
115	0.866	5.000	
208	1.260	5.000	

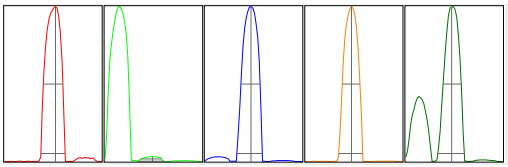
Mass	Background	Background (Required)	Background (Flag)
9	1.200		
24	0.100		
59	0.600		
115	0.400		
208	1.300		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.490 %
Doubly Charged	70 / 140 1.312 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2272.64	9.10	8.90 - 9.10	
24	7193.72	24.00	23.90 - 24.10	
59	11630.21	58.95	58.90 - 59.10	
115	20541.10	114.95	114.90 - 115.10	
208	12764.72	207.95	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.739		
24	0.63	0.783		
59	0.59	0.776		
115	0.54	0.733		
208	0.55	0.811		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	13.2 V
Extract 2	-185.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-75 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.06		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

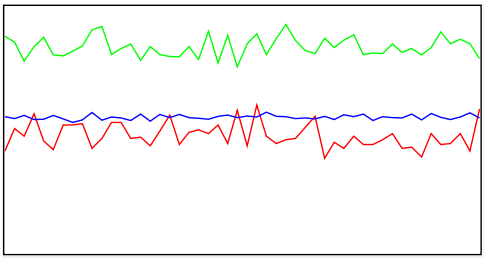
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	95	953.63		
24	500	419	4187.43		
59	10000	5515	55149.97		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

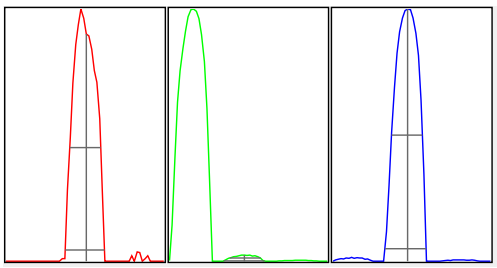
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	10.652	5.000	Fail
24	4.822	5.000	
59	1.741	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.300		
24	0.000		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.310 %
Doubly Charged	70 / 140 1.001 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	85.76	9.05	8.90 - 9.10	
24	438.08	23.95	23.90 - 24.10	
59	5505.47	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.736		
24	0.58	0.768		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.58	0.771		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.4 V	Deflect	-0.4 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.06		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

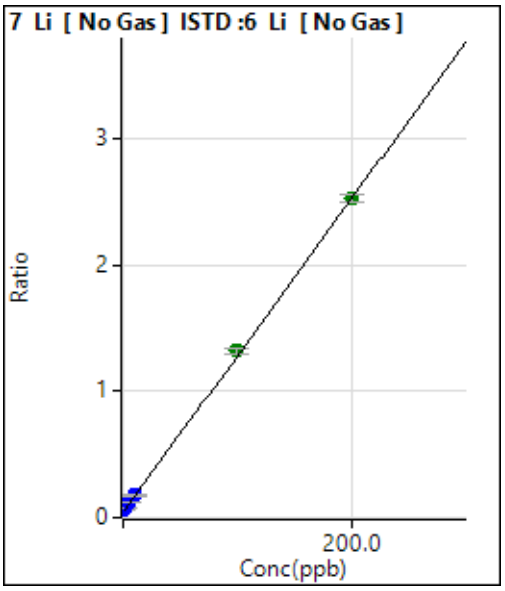
Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

Calibration for 212_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	205CALB.d	CAL BLK	07/20/2022 21:07:27
2	206CALS.d	2/10/200	07/20/2022 21:09:34
3	207CALS.d	5/25/500	07/20/2022 21:11:40
4	208CALS.d	10/50/100	07/20/2022 21:13:47
5	209CALS.d	100/500/10K	07/20/2022 21:15:53
6	210CALS.d	200/1000/20K	07/20/2022 21:17:56

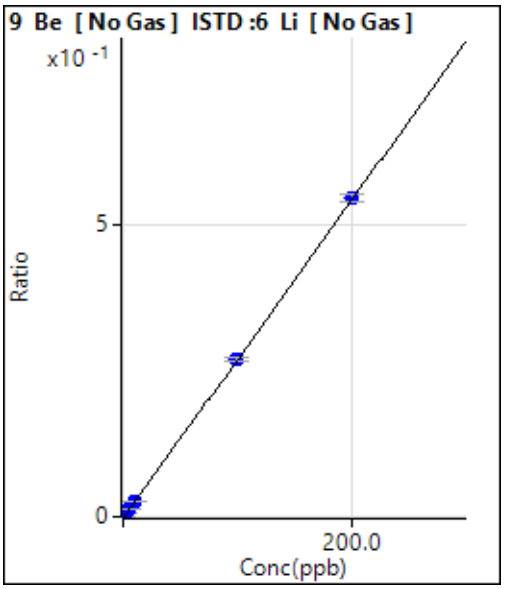
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37730.40	0.0563	P	1.9	
2	☐	2.000	1.799	53819.05	0.0786	P	3.0	-10.1
3	☐	5.000	4.755	75939.85	0.1153	P	1.5	-4.9
4	☐	10.000	9.629	114860.54	0.1758	P	1.2	-3.7
5	☐	100.000	101.747	904309.91	1.3197	A	2.8	1.7
6	☐	200.000	199.153	1657050.03	2.5292	A	3.0	-0.4

y = 0.0124 * x + 0.0563
R = 0.9999
DL = 0.2614 ppb
BEC = 4.531 ppb

Weight: <None>
Min Conc: <None>

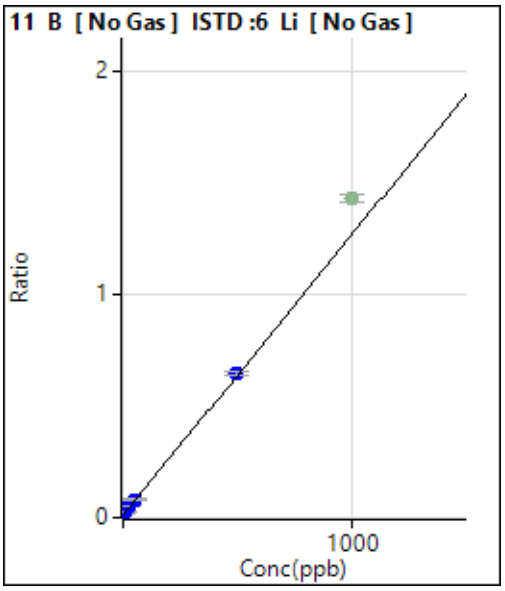


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	18.6	
2	☐	2.000	1.879	3535.47	0.0052	P	1.1	-6.1
3	☐	5.000	4.894	8796.16	0.0134	P	1.4	-2.1
4	☐	10.000	9.957	17716.22	0.0271	P	1.6	-0.4
5	☐	100.000	99.132	184695.47	0.2695	P	1.6	-0.9
6	☐	200.000	200.440	356998.94	0.5448	P	2.2	0.2

y = 0.0027 * x + 5.4519E-005
R = 1.0000
DL = 0.01118 ppb
BEC = 0.02006 ppb

Weight: <None>
Min Conc: <None>

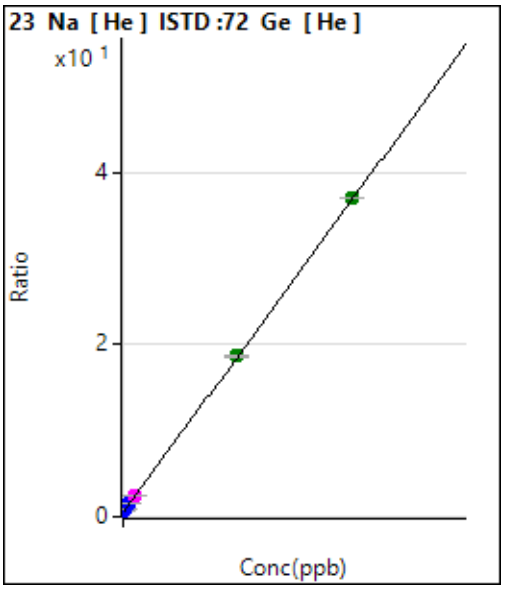
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12882.64	0.0192	P	2.5	
2	☐	10.000	8.415	20378.20	0.0298	P	1.9	-15.9
3	☐	25.000	23.533	32073.39	0.0487	P	1.5	-5.9
4	☐	50.000	49.599	53143.66	0.0814	P	2.7	-0.8
5	☐	500.000	500.145	442611.22	0.6459	P	2.9	0.0
6	☑	1000.000		936140.51	1.4288	A	2.8	

y = 0.0013 * x + 0.0192
R = 1.0000
DL = 1.172 ppb
BEC = 15.33 ppb

Weight: <None>
Min Conc: <None>

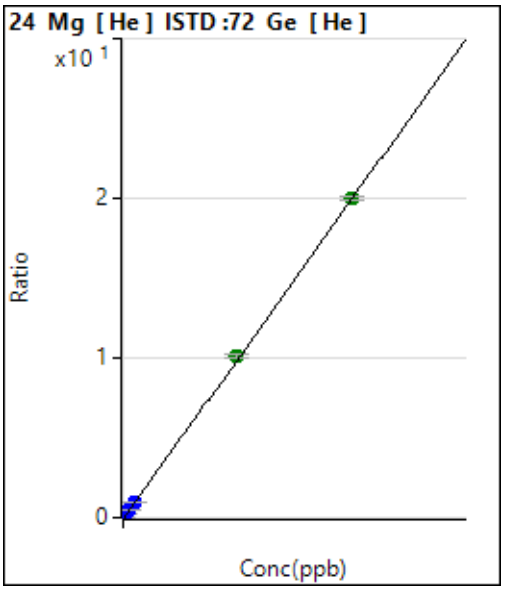


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230791.51	0.6813	P	0.4	
2	☐	200.000	171.583	340140.44	0.9923	P	1.2	-14.2
3	☐	500.000	450.459	501570.40	1.4978	P	1.1	-9.9
4	☐	1000.000	977.912	820148.48	2.4538	M	4.0	-2.2
5	☐	10000.00	9911.818	6354689.07	18.6465	A	1.1	-0.9
6	☐	20000.00	20046.71	12245754.4	37.0160	A	0.3	0.2

y = 0.0018 * x + 0.6813
R = 1.0000
DL = 4.646 ppb
BEC = 375.9 ppb

Weight: <None>
Min Conc: <None>

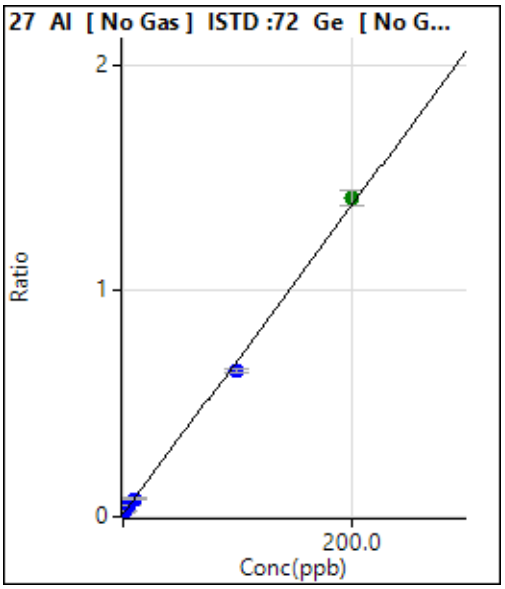
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0009	P	28.7	
2	☐	200.000	185.497	64120.90	0.1871	P	2.8	-7.3
3	☐	500.000	476.543	160455.53	0.4791	P	0.5	-4.7
4	☐	1000.000	964.807	323922.24	0.9691	P	0.3	-3.5
5	☐	10000.00	10078.69	3446959.22	10.1144	A	2.1	0.8
6	☐	20000.00	19963.14	6627218.86	20.0330	A	0.8	-0.2

y = 0.0010 * x + 9.3527E-004
R = 1.0000
DL = 0.8024 ppb
BEC = 0.9321 ppb

Weight: <None>
Min Conc: <None>

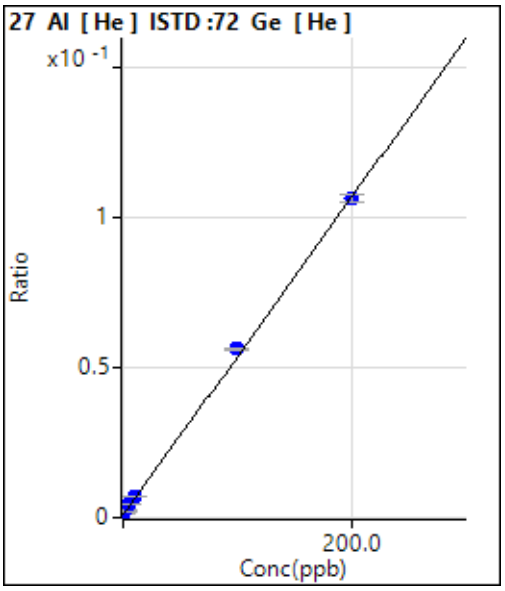


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20477.54	0.0192	P	4.4	
2	☐	2.000	1.454	32678.76	0.0291	P	3.1	-27.3
3	☐	5.000	4.925	57836.94	0.0528	P	2.3	-1.5
4	☐	10.000	8.945	84676.96	0.0802	P	2.8	-10.5
5	☐	100.000	92.157	711609.81	0.6477	P	3.3	-7.8
6	☐	200.000	203.981	1431879.93	1.4103	A	4.7	2.0

y = 0.0068 * x + 0.0192
R = 0.9990
DL = 0.3722 ppb
BEC = 2.819 ppb

Weight: <None>
Min Conc: <None>

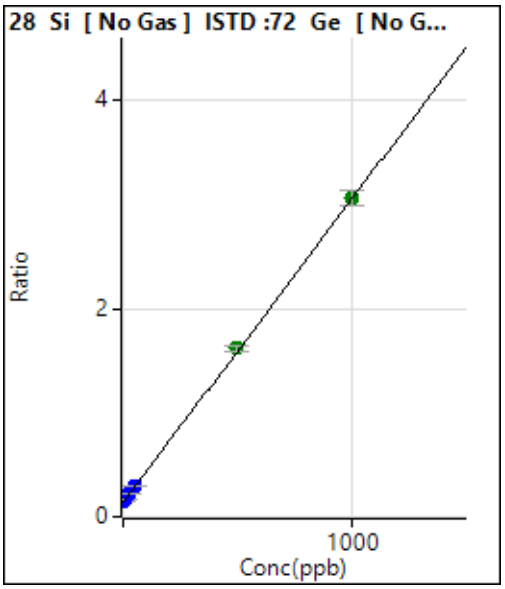
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0014	P	10.6	
2	☐	2.000	1.716	793.37	0.0023	P	14.6	-14.2
3	☐	5.000	6.009	1536.78	0.0046	P	6.2	20.2
4	☐	10.000	10.921	2403.58	0.0072	P	4.3	9.2
5	☐	100.000	103.387	19133.39	0.0561	P	1.1	3.4
6	☐	200.000	198.238	35184.74	0.1064	P	2.3	-0.9

y = 5.2940E-004 * x + 0.0014
R = 0.9998
DL = 0.8476 ppb
BEC = 2.658 ppb

Weight: <None>
Min Conc: <None>

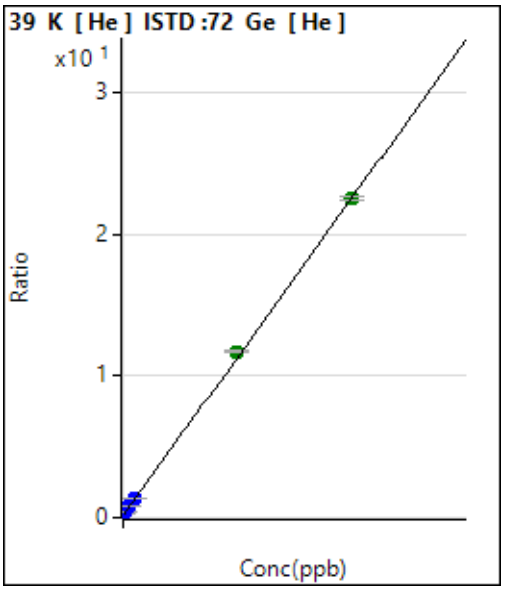


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160765.18	0.1510	P	1.7	
2	☐	10.000	7.008	192241.55	0.1714	P	1.7	-29.9
3	☐	25.000	24.458	243444.90	0.2223	P	0.9	-2.2
4	☐	50.000	49.712	312162.91	0.2958	P	2.9	-0.6
5	☐	500.000	502.219	1773451.01	1.6142	A	3.3	0.4
6	☐	1000.000	998.948	3108594.33	3.0614	A	4.3	-0.1

y = 0.0029 * x + 0.1510
R = 1.0000
DL = 2.655 ppb
BEC = 51.83 ppb

Weight: <None>
Min Conc: <None>

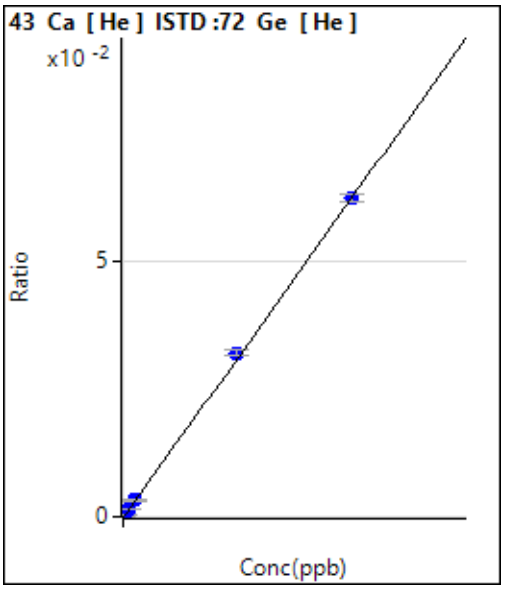
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90065.66	0.2659	P	1.5	
2	☐	200.000	179.450	159937.67	0.4666	P	1.0	-10.3
3	☐	500.000	466.082	263610.33	0.7872	P	1.3	-6.8
4	☐	1000.000	950.000	444023.30	1.3284	P	1.1	-5.0
5	☐	10000.00	10209.39	3982095.46	11.6850	A	1.4	2.1
6	☐	20000.00	19898.85	7450688.22	22.5225	A	1.1	-0.5

y = 0.0011 * x + 0.2659
R = 0.9999
DL = 10.56 ppb
BEC = 237.7 ppb

Weight: <None>
Min Conc: <None>

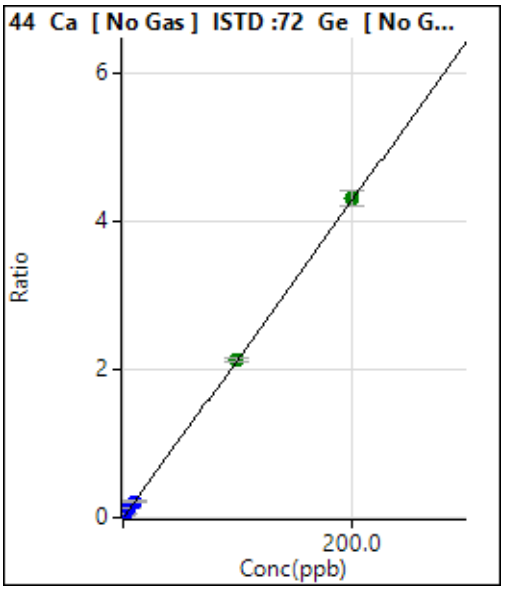


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.6	
2	☐	200.000	136.175	173.34	0.0005	P	14.4	-31.9
3	☐	500.000	479.578	530.02	0.0016	P	7.7	-4.1
4	☐	1000.000	1025.028	1100.05	0.0033	P	6.5	2.5
5	☐	10000.00	10191.35	10914.54	0.0320	P	3.7	1.9
6	☐	20000.00	19904.21	20669.11	0.0625	P	1.9	-0.5

y = 3.1351E-006 * x + 7.8713E-005
R = 0.9999
DL = 16.27 ppb
BEC = 25.11 ppb

Weight: <None>
Min Conc: <None>

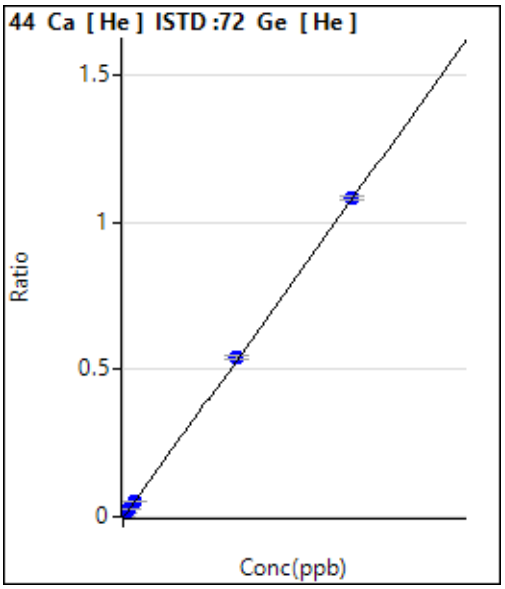
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18158.91	0.0171	P	1.7	
2	☐	2.000	1.796	62237.36	0.0555	P	1.7	-10.2
3	☐	5.000	4.718	129292.65	0.1180	P	0.7	-5.6
4	☐	10.000	9.490	232342.67	0.2202	P	3.3	-5.1
5	☐	100.000	98.755	2341846.01	2.1310	A	2.1	-1.2
6	☐	200.000	200.657	4378805.25	4.3124	A	4.2	0.3

y = 0.0214 * x + 0.0171
R = 1.0000
DL = 0.04012 ppb
BEC = 0.7967 ppb

Weight: <None>
Min Conc: <None>

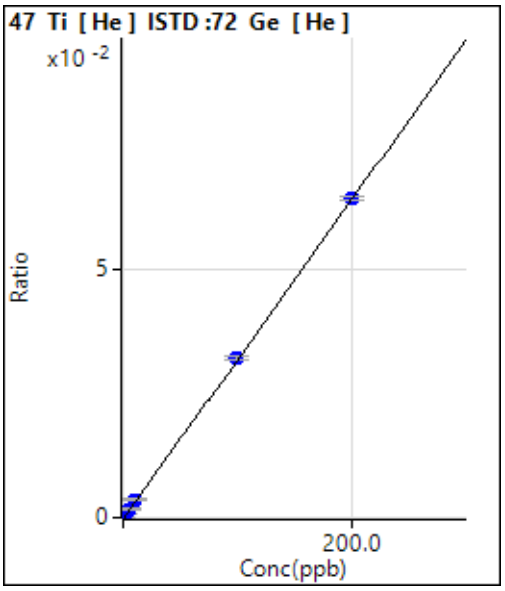


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0013	P	5.6	
2	☐	200.000	194.347	4044.00	0.0118	P	5.8	-2.8
3	☐	500.000	493.274	9369.97	0.0280	P	0.7	-1.3
4	☐	1000.000	990.018	18339.14	0.0549	P	2.2	-1.0
5	☐	10000.00	9990.860	184733.80	0.5421	P	1.5	-0.1
6	☐	20000.00	20005.29	358652.37	1.0841	P	0.8	0.0

y = 5.4129E-005 * x + 0.0013
R = 1.0000
DL = 3.939 ppb
BEC = 23.63 ppb

Weight: <None>
Min Conc: <None>

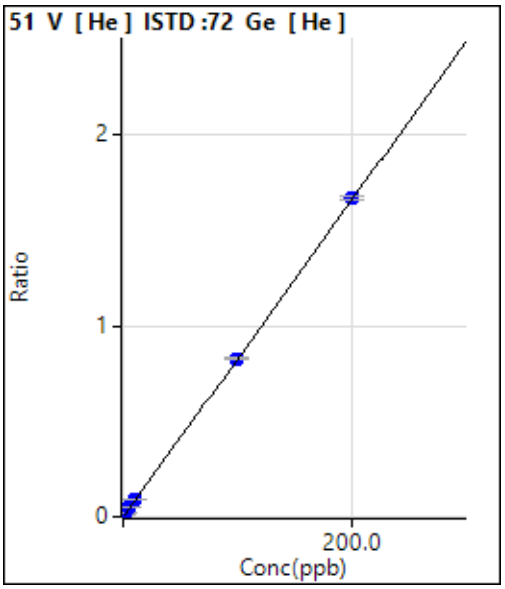
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.838	210.01	0.0006	P	4.7	-8.1
3	☐	5.000	5.246	573.35	0.0017	P	6.7	4.9
4	☐	10.000	11.030	1196.74	0.0036	P	7.3	10.3
5	☐	100.000	100.092	11014.61	0.0323	P	2.9	0.1
6	☐	200.000	199.898	21346.85	0.0645	P	0.9	-0.1

y = 3.2269E-004 * x + 1.9625E-005
R = 1.0000
DL = 0.316 ppb
BEC = 0.06082 ppb

Weight: <None>
Min Conc: <None>

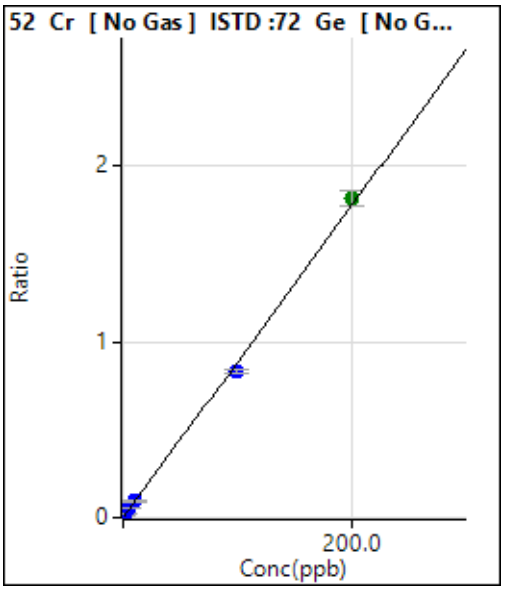


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2181.30	0.0064	P	4.8	
2	☐	2.000	1.908	7637.72	0.0223	P	1.6	-4.6
3	☐	5.000	4.857	15659.00	0.0468	P	1.7	-2.9
4	☐	10.000	9.831	29430.44	0.0880	P	1.0	-1.7
5	☐	100.000	99.158	282718.06	0.8296	P	1.3	-0.8
6	☐	200.000	200.434	552559.77	1.6703	P	1.2	0.2

y = 0.0083 * x + 0.0064
R = 1.0000
DL = 0.1123 ppb
BEC = 0.7756 ppb

Weight: <None>
Min Conc: <None>

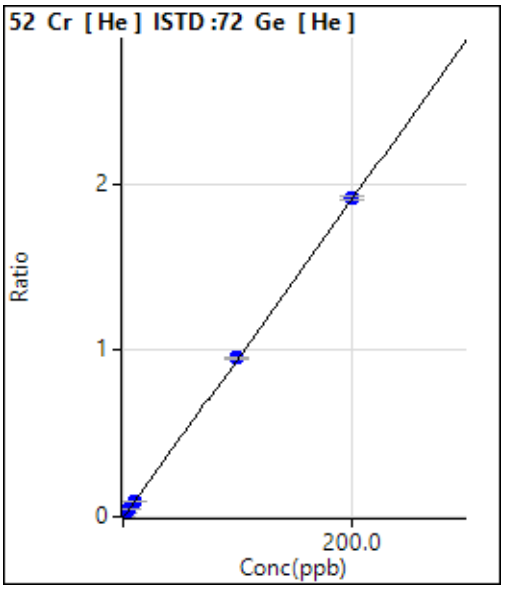
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9583.51	0.0090	P	6.6	
2	☐	2.000	1.761	27614.72	0.0246	P	2.5	-12.0
3	☐	5.000	4.553	54097.07	0.0494	P	0.5	-8.9
4	☐	10.000	9.565	98986.12	0.0939	P	4.9	-4.3
5	☐	100.000	92.775	914108.08	0.8320	P	3.1	-7.2
6	☐	200.000	203.648	1843297.47	1.8155	A	4.6	1.8

y = 0.0089 * x + 0.0090
R = 0.9991
DL = 0.2016 ppb
BEC = 1.015 ppb

Weight: <None>
Min Conc: <None>

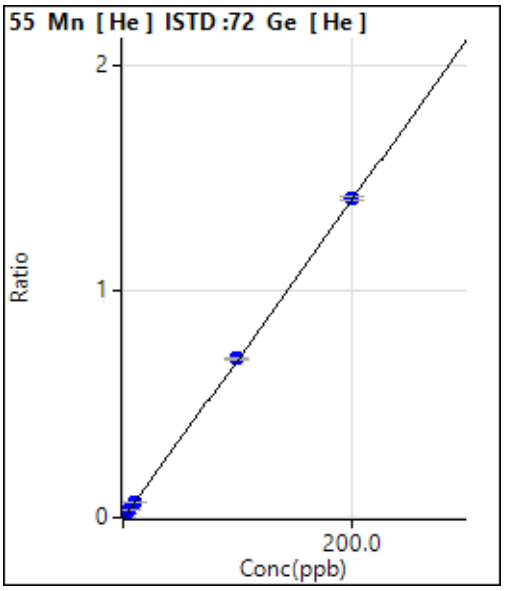


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1030.06	0.0030	P	2.4	
2	☐	2.000	1.875	7188.67	0.0210	P	1.5	-6.2
3	☐	5.000	4.847	16540.17	0.0494	P	1.7	-3.1
4	☐	10.000	9.852	32505.55	0.0972	P	1.0	-1.5
5	☐	100.000	99.641	325728.96	0.9558	P	1.1	-0.4
6	☐	200.000	200.192	634243.84	1.9173	P	1.2	0.1

y = 0.0096 * x + 0.0030
R = 1.0000
DL = 0.02331 ppb
BEC = 0.318 ppb

Weight: <None>
Min Conc: <None>

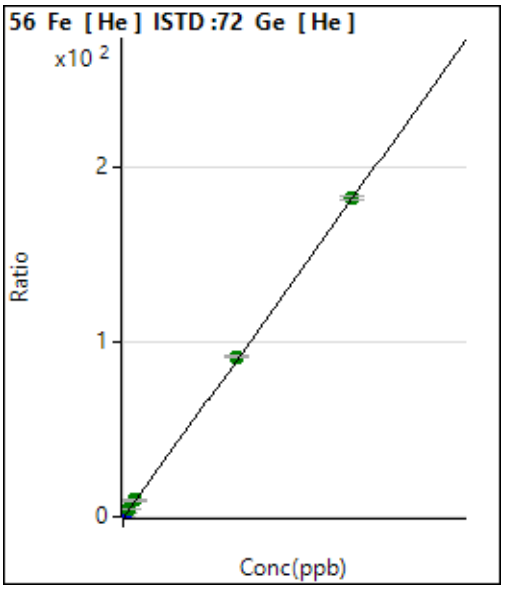
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	416.68	0.0012	P	20.0	
2	☐	2.000	1.970	5177.73	0.0151	P	3.5	-1.5
3	☐	5.000	4.968	12132.26	0.0362	P	3.1	-0.6
4	☐	10.000	9.881	23674.17	0.0708	P	2.0	-1.2
5	☐	100.000	99.510	239273.13	0.7021	P	1.3	-0.5
6	☐	200.000	200.252	467009.84	1.4117	P	0.8	0.1

y = 0.0070 * x + 0.0012
R = 1.0000
DL = 0.1049 ppb
BEC = 0.1746 ppb

Weight: <None>
Min Conc: <None>

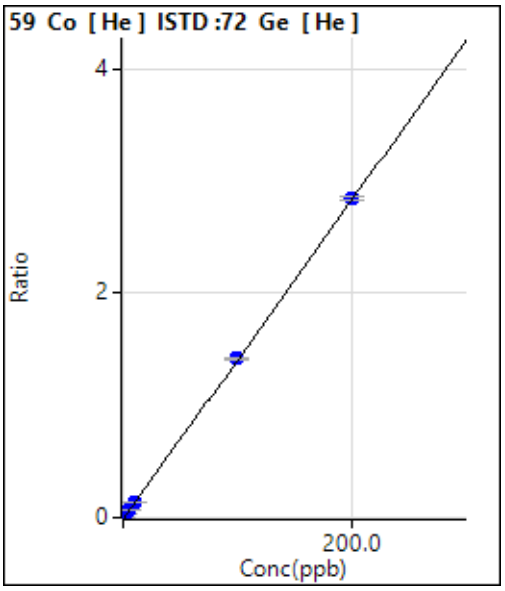


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10324.05	0.0305	P	2.3	
2	☐	200.000	186.331	594274.42	1.7337	P	1.9	-6.8
3	☐	500.000	515.097	1587020.24	4.7390	A	0.9	3.0
4	☐	1000.000	1023.570	3137494.12	9.3870	A	1.6	2.4
5	☐	10000.00	10021.25	31228539.5	91.6358	A	1.4	0.2
6	☐	20000.00	19987.95	60455059.1	182.742	A	0.8	-0.1

y = 0.0091 * x + 0.0305
R = 1.0000
DL = 0.2263 ppb
BEC = 3.334 ppb

Weight: <None>
Min Conc: <None>

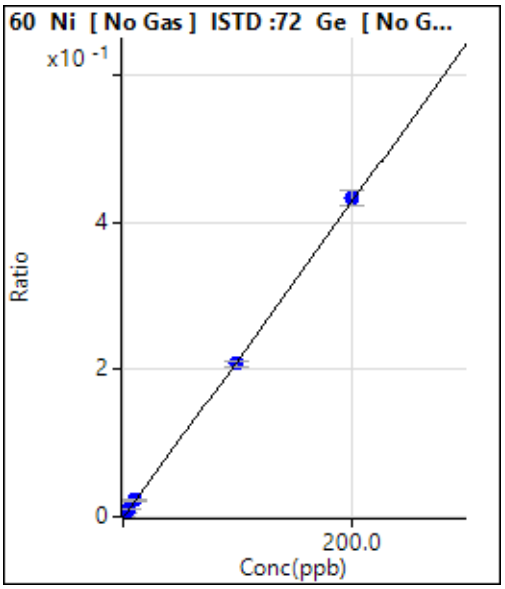
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.2	
2	☐	2.000	1.911	9340.01	0.0272	P	4.3	-4.5
3	☐	5.000	4.844	23099.87	0.0690	P	2.4	-3.1
4	☐	10.000	9.801	46626.79	0.1395	P	1.2	-2.0
5	☐	100.000	99.591	482836.23	1.4168	P	1.0	-0.4
6	☐	200.000	200.219	942255.48	2.8483	P	0.8	0.1

y = 0.0142 * x + 5.9088E-005
R = 1.0000
DL = 0.006253 ppb
BEC = 0.004154 ppb

Weight: <None>
Min Conc: <None>

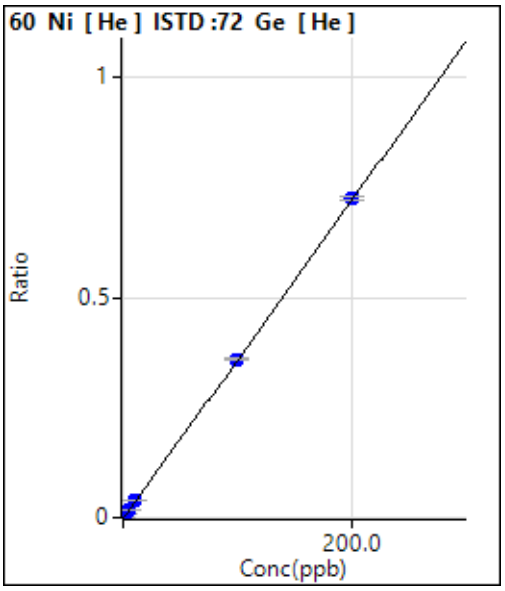


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	773.37	0.0007	P	8.7	
2	☐	2.000	1.742	5004.34	0.0045	P	2.0	-12.9
3	☐	5.000	4.680	11785.28	0.0108	P	3.3	-6.4
4	☐	10.000	10.021	23437.21	0.0222	P	3.0	0.2
5	☐	100.000	96.565	228288.69	0.2078	P	2.8	-3.4
6	☐	200.000	201.727	439871.02	0.4332	P	4.6	0.9

y = 0.0021 * x + 7.2578E-004
R = 0.9998
DL = 0.08832 ppb
BEC = 0.3385 ppb

Weight: <None>
Min Conc: <None>

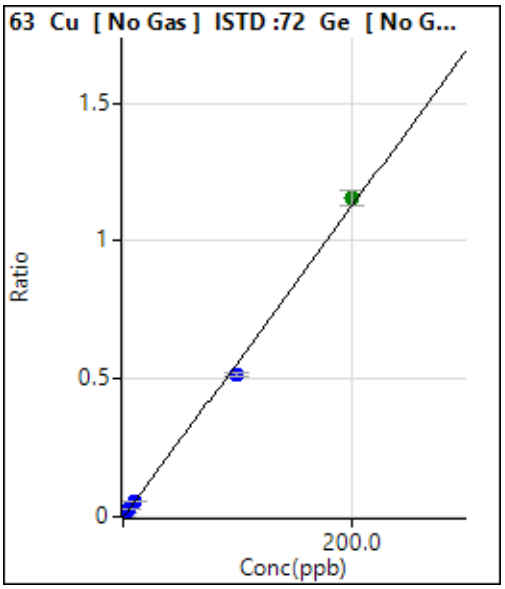
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0007	P	18.7	
2	☐	2.000	1.925	2610.30	0.0076	P	2.6	-3.8
3	☐	5.000	4.958	6221.53	0.0186	P	4.5	-0.8
4	☐	10.000	10.179	12515.95	0.0374	P	1.0	1.8
5	☐	100.000	99.145	122328.82	0.3589	P	0.8	-0.9
6	☐	200.000	200.421	239817.44	0.7249	P	1.2	0.2

y = 0.0036 * x + 6.5930E-004
R = 1.0000
DL = 0.1022 ppb
BEC = 0.1824 ppb

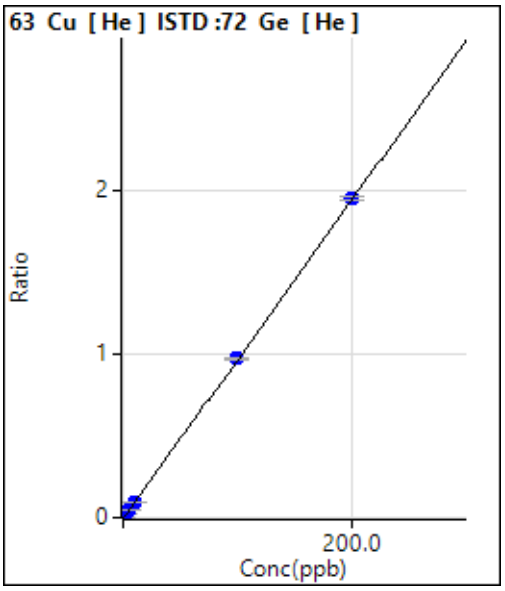
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.53	0.0019	P	5.2	
2	☐	2.000	1.909	14214.29	0.0127	P	4.1	-4.5
3	☐	5.000	4.456	29629.29	0.0270	P	1.6	-10.9
4	☐	10.000	9.287	57324.30	0.0543	P	2.5	-7.1
5	☐	100.000	91.199	567641.61	0.5166	P	3.0	-8.8
6	☐	200.000	204.450	1173628.76	1.1558	A	4.3	2.2

y = 0.0056 * x + 0.0019
R = 0.9987
DL = 0.05259 ppb
BEC = 0.3368 ppb

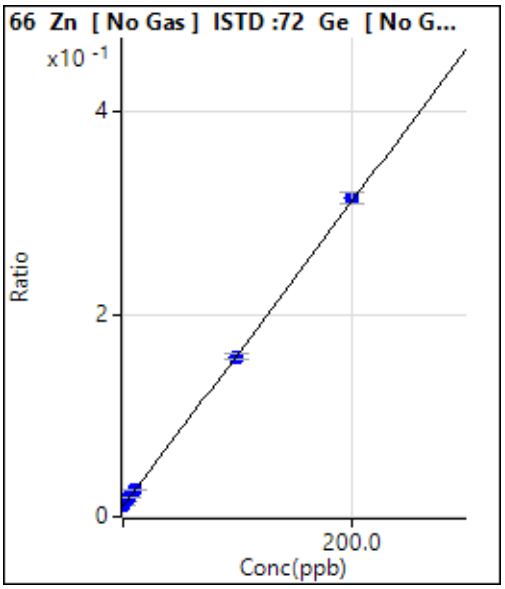
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	980.06	0.0029	P	15.3	
2	☐	2.000	1.961	7555.57	0.0220	P	3.1	-2.0
3	☐	5.000	4.816	16720.57	0.0499	P	0.5	-3.7
4	☐	10.000	9.869	33184.16	0.0993	P	0.5	-1.3
5	☐	100.000	99.522	332226.26	0.9748	P	0.9	-0.5
6	☐	200.000	200.251	647925.77	1.9586	P	0.9	0.1

y = 0.0098 * x + 0.0029
R = 1.0000
DL = 0.1364 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

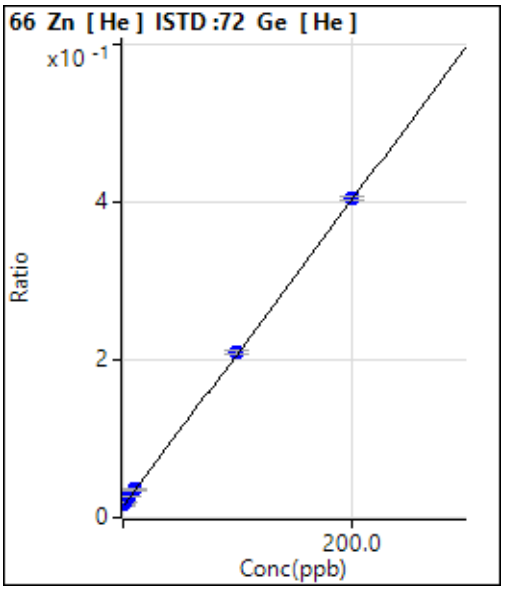


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12515.97	0.0118	P	3.3	
2	☐	2.000	1.971	16506.93	0.0147	P	0.6	-1.5
3	☐	5.000	4.571	20402.35	0.0186	P	2.4	-8.6
4	☐	10.000	9.903	28119.50	0.0266	P	3.3	-1.0
5	☐	100.000	97.093	173345.95	0.1578	P	3.2	-2.9
6	☐	200.000	201.469	319618.79	0.3148	P	4.1	0.7

y = 0.0015 * x + 0.0118
R = 0.9999
DL = 0.7632 ppb
BEC = 7.815 ppb

Weight: <None>
Min Conc: <None>

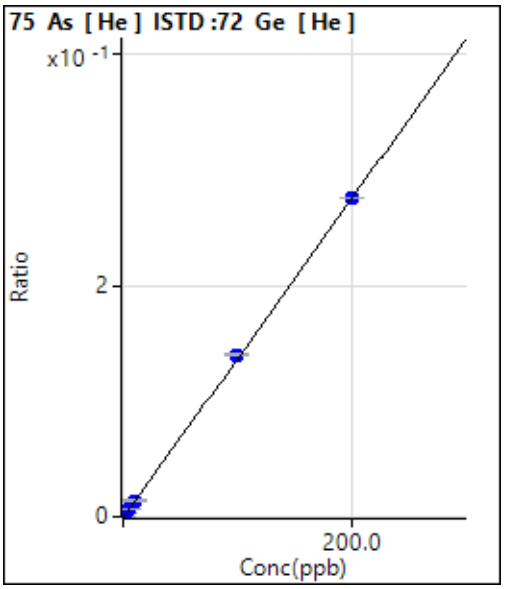
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5517.90	0.0163	P	6.4	
2	☐	2.000	1.584	6638.42	0.0194	P	6.3	-20.8
3	☐	5.000	4.932	8666.24	0.0259	P	1.3	-1.4
4	☐	10.000	9.972	11922.08	0.0357	P	4.2	-0.3
5	☐	100.000	99.664	71571.93	0.2100	P	1.3	-0.3
6	☐	200.000	200.175	134111.09	0.4054	P	1.3	0.1

y = 0.0019 * x + 0.0163
R = 1.0000
DL = 1.609 ppb
BEC = 8.381 ppb

Weight: <None>
Min Conc: <None>

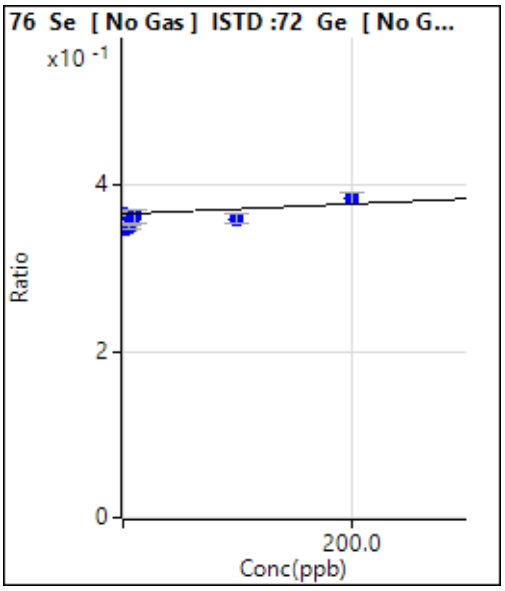


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	17.9	
2	☐	2.000	1.982	1054.49	0.0031	P	3.9	-0.9
3	☐	5.000	4.974	2413.56	0.0072	P	0.8	-0.5
4	☐	10.000	9.849	4657.49	0.0139	P	2.7	-1.5
5	☐	100.000	100.976	47613.54	0.1397	P	1.1	1.0
6	☐	200.000	199.521	91219.13	0.2757	P	0.3	-0.2

y = 0.0014 * x + 3.4123E-004
R = 1.0000
DL = 0.1324 ppb
BEC = 0.2472 ppb

Weight: <None>
Min Conc: <None>

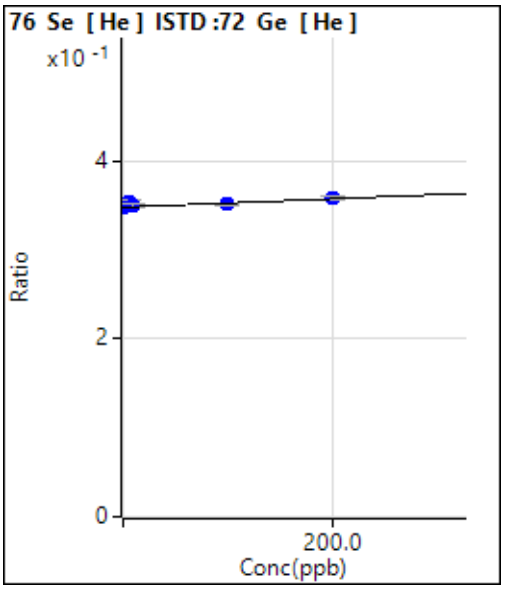
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	389615.57	0.3659	P	1.5	
2	☐	2.000	-307.857	389148.84	0.3470	P	1.2	-15492.
3	☐	5.000	-261.349	383167.95	0.3498	P	1.3	-5327.0
4	☐	10.000	-43.103	383238.18	0.3633	P	4.1	-531.0
5	☐	100.000	-90.749	395932.68	0.3604	P	3.0	-190.7
6	☐	200.000	307.787	390915.79	0.3849	P	3.3	53.9

y = 6.1562E-005 * x + 0.3659
R = 0.7903
DL = 265.8 ppb
BEC = 5944 ppb

Weight: <None>
Min Conc: <None>

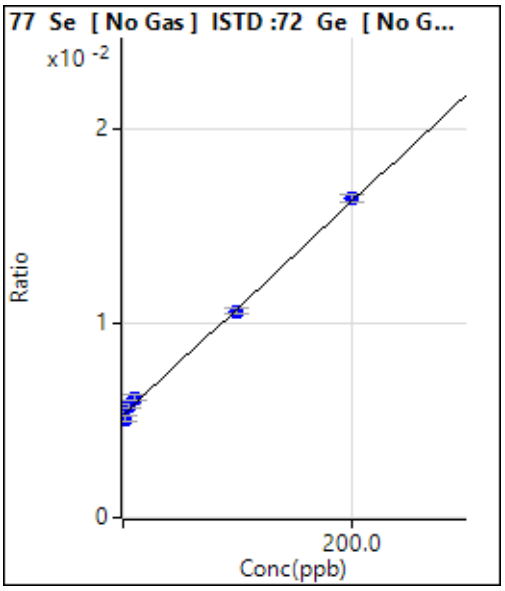


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	117895.22	0.3480	P	0.6	
2	☐	2.000	79.129	120602.08	0.3518	P	0.9	3856.5
3	☐	5.000	130.345	118651.35	0.3543	P	1.3	2506.9
4	☐	10.000	24.896	116728.09	0.3492	P	1.0	149.0
5	☐	100.000	81.283	119939.62	0.3519	P	0.6	-18.7
6	☐	200.000	204.709	118396.13	0.3579	P	1.2	2.4

y = 4.8025E-005 * x + 0.3480
R = 0.7505
DL = 123.2 ppb
BEC = 7247 ppb

Weight: <None>
Min Conc: <None>

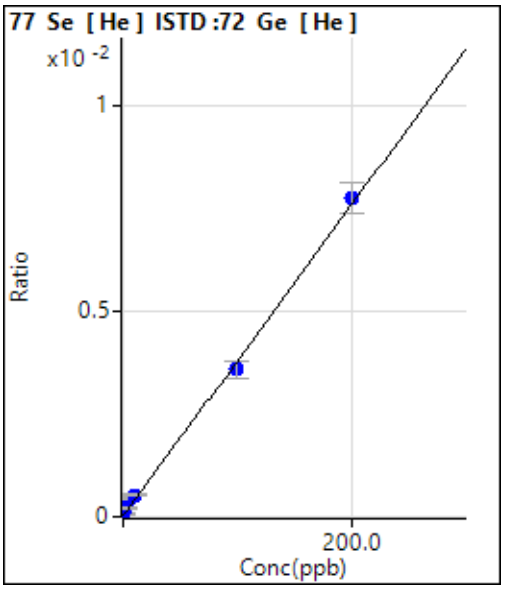
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5731.34	0.0054	P	6.6	
2	☐	2.000	-5.873	5678.00	0.0051	P	6.1	-393.7
3	☐	5.000	6.968	6314.92	0.0058	P	3.7	39.4
4	☐	10.000	14.585	6521.70	0.0062	P	5.1	45.8
5	☐	100.000	95.968	11695.24	0.0106	P	2.0	-4.0
6	☐	200.000	201.816	16697.29	0.0164	P	2.6	0.9

y = 5.4750E-005 * x + 0.0054
R = 0.9985
DL = 19.4 ppb
BEC = 98.36 ppb

Weight: <None>
Min Conc: <None>

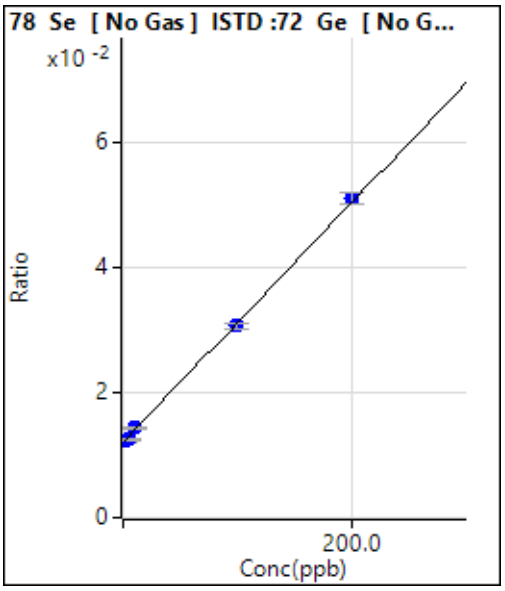


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.1	
2	☐	2.000	3.832	70.00	0.0002	P	14.3	91.6
3	☐	5.000	10.010	146.67	0.0004	P	16.2	100.2
4	☐	10.000	12.126	173.33	0.0005	P	8.2	21.3
5	☐	100.000	92.962	1220.08	0.0036	P	10.8	-7.0
6	☐	200.000	203.269	2566.96	0.0078	P	9.1	1.6

y = 3.7879E-005 * x + 5.9053E-005
R = 0.9987
DL = 2.344 ppb
BEC = 1.559 ppb

Weight: <None>
Min Conc: <None>

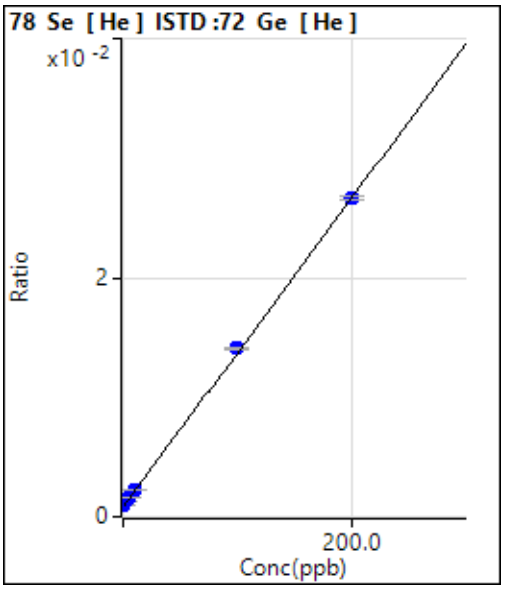
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13160.00	0.0124	P	6.2	
2	☐	2.000	-1.167	13610.42	0.0121	P	3.7	-158.3
3	☐	5.000	0.648	13673.81	0.0125	P	2.2	-87.0
4	☐	10.000	10.616	15182.08	0.0144	P	2.8	6.2
5	☐	100.000	95.448	33599.01	0.0306	P	3.4	-4.6
6	☐	200.000	202.386	51789.70	0.0510	P	4.1	1.2

y = 1.9091E-004 * x + 0.0124
R = 0.9995
DL = 12.11 ppb
BEC = 64.74 ppb

Weight: <None>
Min Conc: <None>

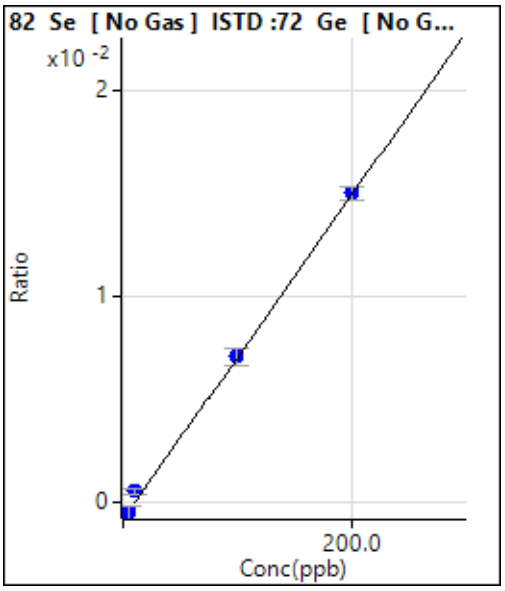


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	327.34	0.0010	P	7.1	
2	☐	2.000	2.067	422.68	0.0012	P	1.9	3.3
3	☐	5.000	5.223	549.34	0.0016	P	3.4	4.5
4	☐	10.000	10.128	760.02	0.0023	P	0.8	1.3
5	☐	100.000	101.812	4808.87	0.0141	P	1.3	1.8
6	☐	200.000	199.081	8822.23	0.0267	P	0.7	-0.5

y = 1.2910E-004 * x + 9.6621E-004
R = 0.9999
DL = 1.586 ppb
BEC = 7.484 ppb

Weight: <None>
Min Conc: <None>

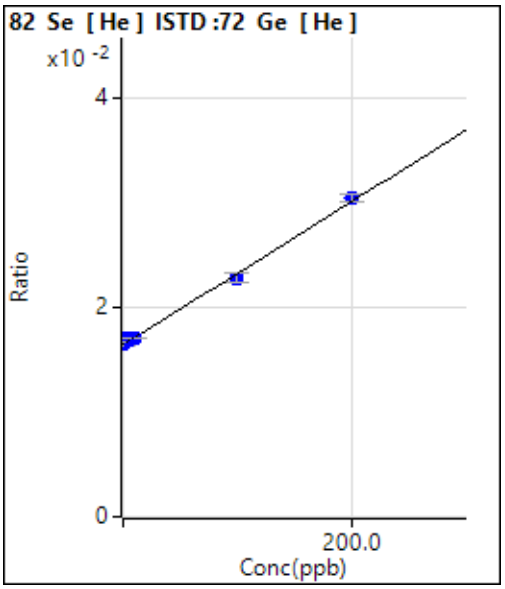
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-796.78	-0.0007	P	-54.8	
2	☐	2.000	2.169	-649.43	-0.0006	P	-141.	8.4
3	☐	5.000	3.266	-537.49	-0.0005	P	-106.	-34.7
4	☐	10.000	16.138	560.90	0.0005	P	51.3	61.4
5	☐	100.000	99.273	7795.94	0.0071	P	12.3	-0.7
6	☐	200.000	200.098	15287.09	0.0150	P	4.1	0.0

y = 7.8863E-005 * x - 7.4756E-004
R = 0.9994
DL = 15.58 ppb
BEC = -9.479 ppb

Weight: <None>
Min Conc: <None>

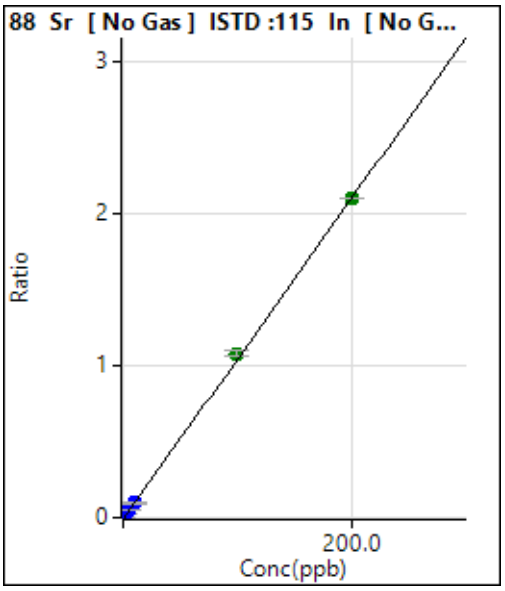


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5591.27	0.0165	P	2.3	
2	☐	2.000	8.706	5861.43	0.0171	P	2.1	335.3
3	☐	5.000	4.702	5634.62	0.0168	P	2.3	-6.0
4	☐	10.000	8.208	5704.63	0.0171	P	0.5	-17.9
5	☐	100.000	92.368	7775.73	0.0228	P	4.3	-7.6
6	☐	200.000	203.846	10070.59	0.0304	P	3.0	1.9

y = 6.8344E-005 * x + 0.0165
R = 0.9982
DL = 16.75 ppb
BEC = 241.5 ppb

Weight: <None>
Min Conc: <None>

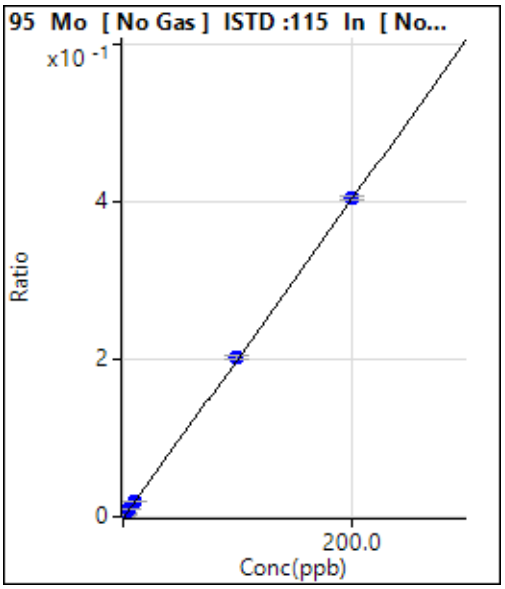
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	653.36	0.0005	P	5.1	
2	☐	2.000	1.822	27207.87	0.0197	P	2.5	-8.9
3	☐	5.000	4.819	69945.90	0.0514	P	2.4	-3.6
4	☐	10.000	8.984	130545.50	0.0954	P	1.1	-10.2
5	☐	100.000	102.284	1444761.23	1.0809	A	2.9	2.3
6	☐	200.000	198.915	2753242.46	2.1016	A	0.6	-0.5

y = 0.0106 * x + 4.8044E-004
R = 0.9999
DL = 0.007022 ppb
BEC = 0.04548 ppb

Weight: <None>
Min Conc: <None>

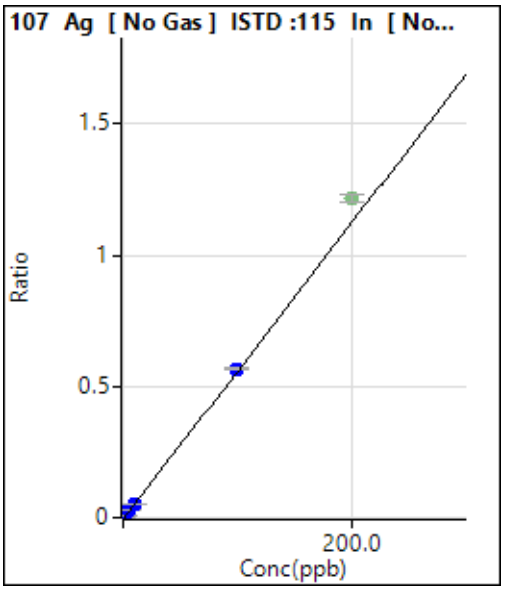


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.824	5111.09	0.0037	P	6.3	-8.8
3	☐	5.000	4.794	13236.83	0.0097	P	1.3	-4.1
4	☐	10.000	9.496	26353.07	0.0193	P	2.0	-5.0
5	☐	100.000	100.004	270914.09	0.2027	P	1.4	0.0
6	☐	200.000	200.030	531001.28	0.4053	P	1.3	0.0

y = 0.0020 * x + 9.7236E-006
R = 1.0000
DL = 0.01247 ppb
BEC = 0.004799 ppb

Weight: <None>
Min Conc: <None>

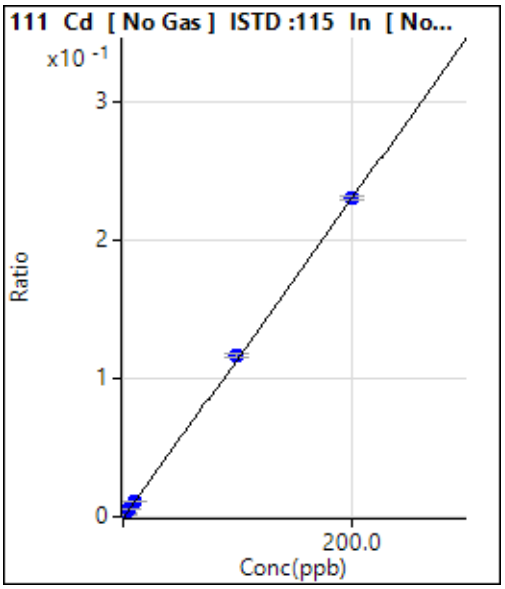
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	40.0	
2	☐	2.000	1.859	14704.99	0.0107	P	3.3	-7.1
3	☐	5.000	4.657	36009.26	0.0265	P	2.0	-6.9
4	☐	10.000	9.403	72890.65	0.0533	P	1.4	-6.0
5	☐	100.000	100.080	755480.59	0.5652	P	1.4	0.1
6	☑	200.000		1593637.32	1.2165	A	2.1	

y = 0.0056 * x + 1.6899E-004
R = 1.0000
DL = 0.03594 ppb
BEC = 0.02993 ppb

Weight: <None>
Min Conc: <None>

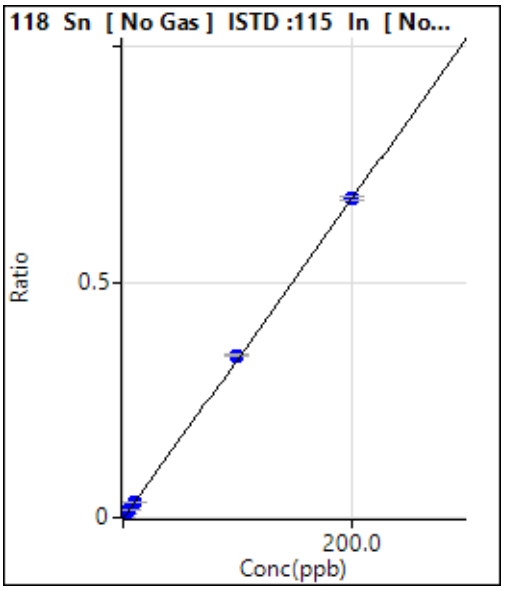


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.906	3040.41	0.0022	P	13.7	-4.7
3	☐	5.000	4.614	7268.79	0.0053	P	7.6	-7.7
4	☐	10.000	9.821	15559.44	0.0114	P	4.7	-1.8
5	☐	100.000	101.002	156297.13	0.1169	P	2.0	1.0
6	☐	200.000	199.518	302586.33	0.2310	P	1.0	-0.2

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

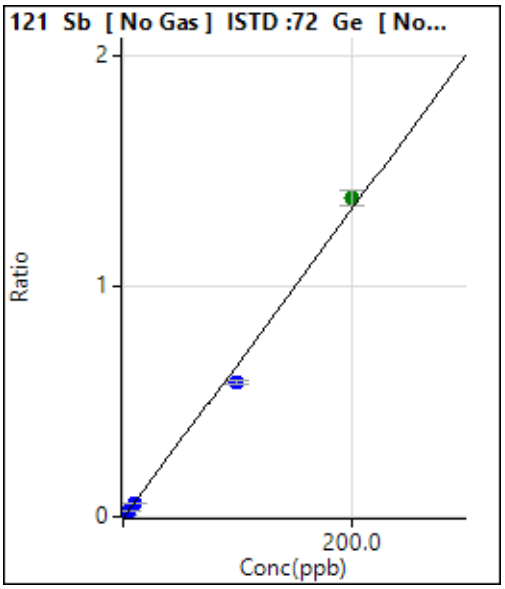
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1216.75	0.0009	P	5.3	
2	☐	2.000	1.889	10077.34	0.0073	P	3.3	-5.5
3	☐	5.000	4.597	22459.55	0.0165	P	0.2	-8.1
4	☐	10.000	9.190	43923.72	0.0321	P	0.9	-8.1
5	☐	100.000	101.196	460443.38	0.3444	P	1.3	1.2
6	☐	200.000	199.454	888216.26	0.6780	P	0.7	-0.3

y = 0.0034 * x + 8.9381E-004
R = 1.0000
DL = 0.0416 ppb
BEC = 0.2633 ppb

Weight: <None>
Min Conc: <None>

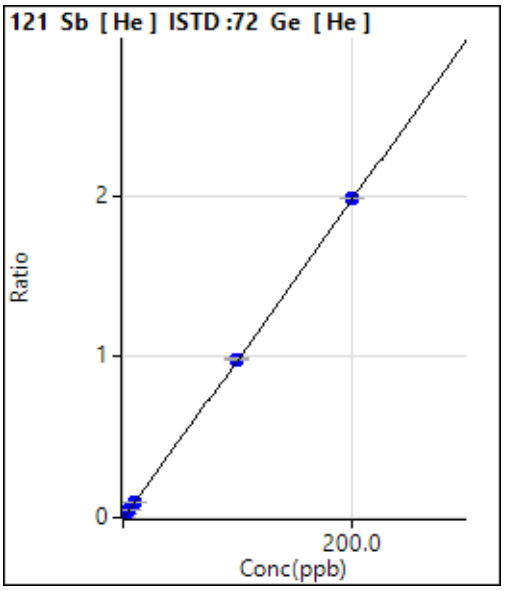


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	300.01	0.0003	P	28.5	
2	☐	2.000	1.647	12686.36	0.0113	P	7.0	-17.7
3	☐	5.000	4.146	30726.32	0.0281	P	2.0	-17.1
4	☐	10.000	8.698	61785.72	0.0586	P	3.6	-13.0
5	☐	100.000	87.172	642005.95	0.5843	P	2.7	-12.8
6	☐	200.000	206.504	1404987.27	1.3837	A	4.7	3.3

y = 0.0067 * x + 2.8121E-004
R = 0.9972
DL = 0.03585 ppb
BEC = 0.04198 ppb

Weight: <None>
Min Conc: <None>

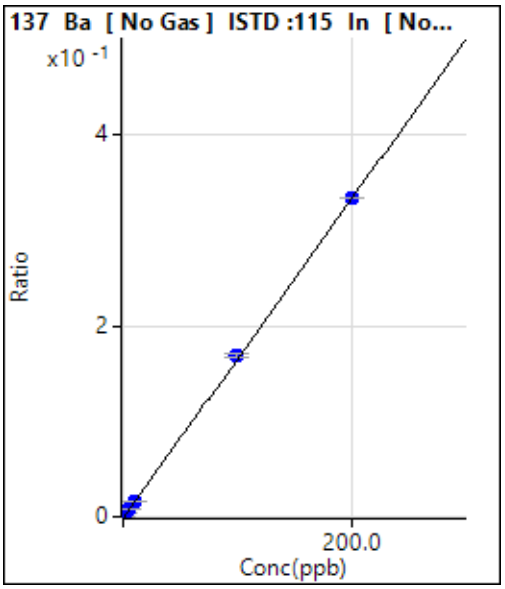
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0006	P	14.8	
2	☐	2.000	1.825	6388.34	0.0186	P	3.3	-8.7
3	☐	5.000	4.739	15899.89	0.0475	P	2.2	-5.2
4	☐	10.000	9.532	31718.67	0.0949	P	3.8	-4.7
5	☐	100.000	99.483	335743.37	0.9852	P	1.5	-0.5
6	☐	200.000	200.290	655992.92	1.9829	P	0.5	0.1

y = 0.0099 * x + 5.7065E-004
R = 1.0000
DL = 0.02556 ppb
BEC = 0.05766 ppb

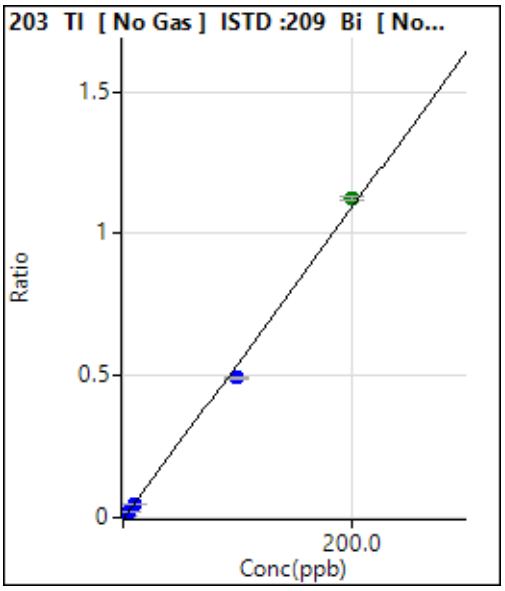
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.01	0.0001	P	26.4	
2	☐	2.000	1.942	4614.25	0.0033	P	5.1	-2.9
3	☐	5.000	4.948	11401.88	0.0084	P	4.2	-1.0
4	☐	10.000	9.331	21508.06	0.0157	P	2.6	-6.7
5	☐	100.000	100.886	225869.41	0.1690	P	2.0	0.9
6	☐	200.000	199.592	437828.10	0.3342	P	0.6	-0.2

y = 0.0017 * x + 9.5502E-005
R = 1.0000
DL = 0.0452 ppb
BEC = 0.05705 ppb

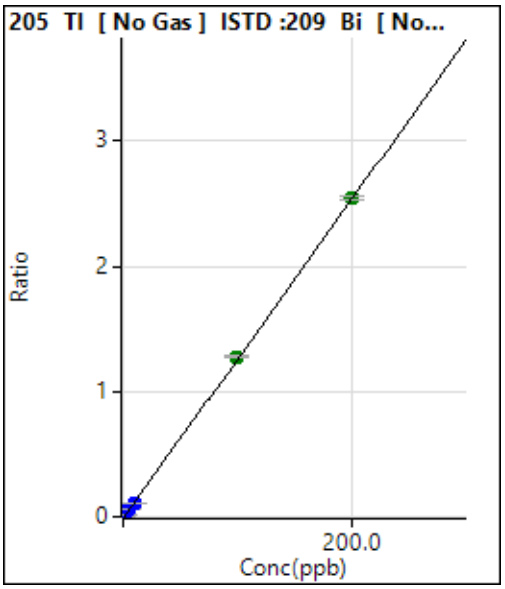
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.7	
2	☐	2.000	1.658	12923.58	0.0091	P	4.3	-17.1
3	☐	5.000	4.180	32135.16	0.0229	P	2.2	-16.4
4	☐	10.000	8.226	63789.30	0.0451	P	0.3	-17.7
5	☐	100.000	89.840	681766.19	0.4925	P	1.5	-10.2
6	☐	200.000	205.193	1501543.00	1.1249	A	1.1	2.6

y = 0.0055 * x + 1.4469E-005
R = 0.9983
DL = 0.004018 ppb
BEC = 0.002639 ppb

Weight: <None>
Min Conc: <None>

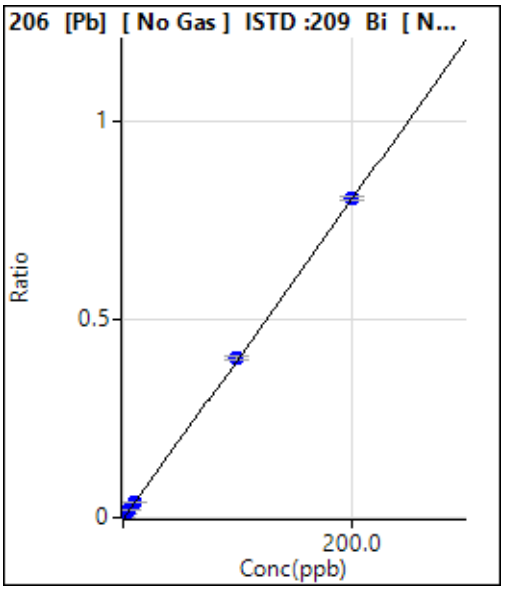


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	17.5	
2	☐	2.000	1.717	31082.39	0.0219	P	1.7	-14.1
3	☐	5.000	4.271	76266.31	0.0544	P	1.3	-14.6
4	☐	10.000	8.723	157097.24	0.1111	P	0.9	-12.8
5	☐	100.000	100.336	1768441.07	1.2776	A	1.6	0.3
6	☐	200.000	199.917	3397792.45	2.5456	A	1.1	0.0

y = 0.0127 * x + 2.6458E-005
R = 1.0000
DL = 0.001088 ppb
BEC = 0.002078 ppb

Weight: <None>
Min Conc: <None>

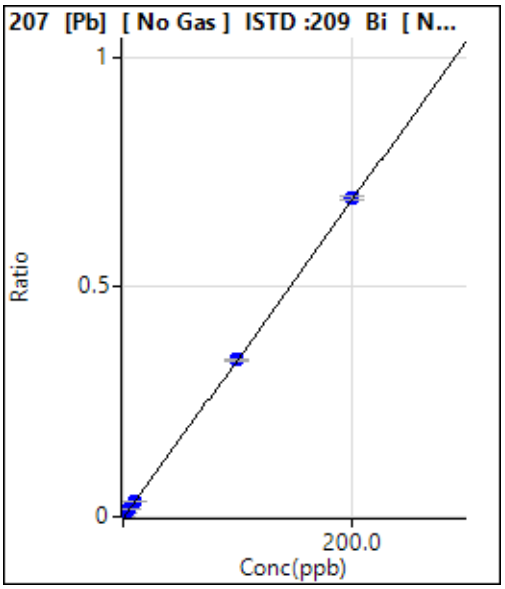
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	24.5	
2	☐	2.000	1.937	11248.57	0.0079	P	3.4	-3.1
3	☐	5.000	4.636	26374.87	0.0188	P	2.3	-7.3
4	☐	10.000	9.490	54321.79	0.0384	P	0.5	-5.1
5	☐	100.000	100.315	560714.52	0.4051	P	2.0	0.3
6	☐	200.000	199.878	1077258.21	0.8071	P	1.3	-0.1

y = 0.0040 * x + 1.0074E-004
R = 1.0000
DL = 0.0183 ppb
BEC = 0.02495 ppb

Weight: <None>
Min Conc: <None>

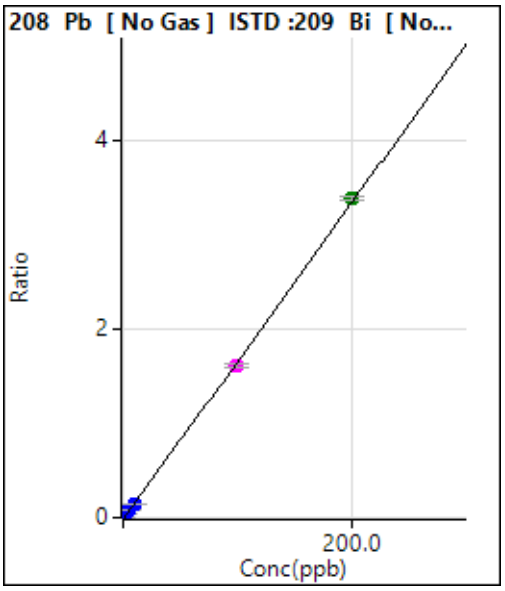


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	21.4	
2	☐	2.000	1.915	9507.12	0.0067	P	4.8	-4.2
3	☐	5.000	4.602	22397.17	0.0160	P	2.9	-8.0
4	☐	10.000	9.393	46005.05	0.0325	P	1.9	-6.1
5	☐	100.000	98.683	472119.56	0.3411	P	1.4	-1.3
6	☐	200.000	200.700	925798.76	0.6936	P	1.1	0.3

y = 0.0035 * x + 7.6762E-005
R = 1.0000
DL = 0.01423 ppb
BEC = 0.02221 ppb

Weight: <None>
Min Conc: <None>

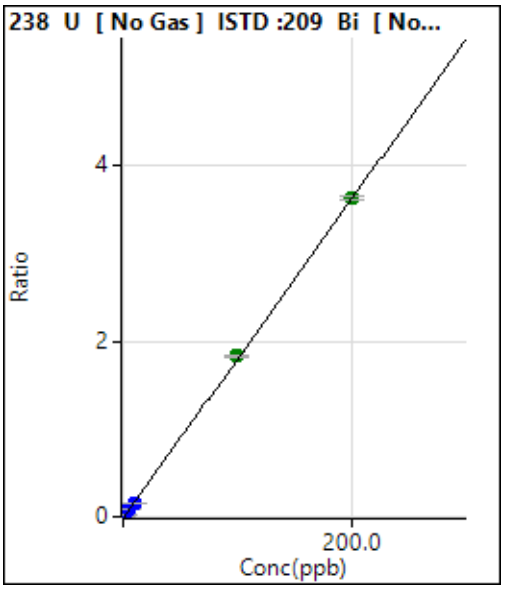
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	616.68	0.0004	P	7.6	
2	☐	2.000	1.819	43937.56	0.0309	P	2.1	-9.0
3	☐	5.000	4.478	105849.36	0.0755	P	1.4	-10.4
4	☐	10.000	9.050	215189.95	0.1522	P	0.6	-9.5
5	☐	100.000	96.161	2232387.98	1.6127	M	1.5	-3.8
6	☐	200.000	201.982	4520443.14	3.3868	A	1.6	1.0

y = 0.0168 * x + 4.4394E-004
R = 0.9998
DL = 0.006029 ppb
BEC = 0.02648 ppb

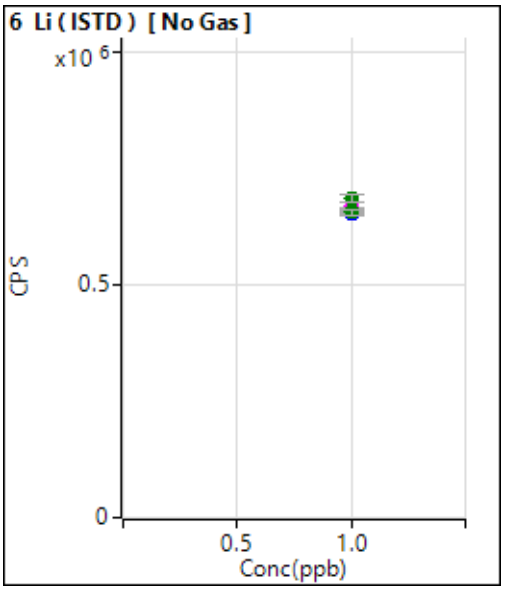
Weight: <None>
Min Conc: <None>



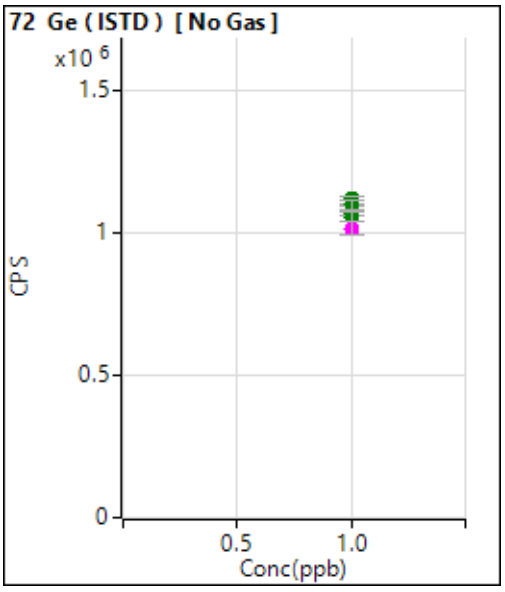
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	44.9	
2	☐	2.000	1.746	45053.23	0.0317	P	1.3	-12.7
3	☐	5.000	4.392	111879.02	0.0798	P	1.9	-12.2
4	☐	10.000	8.879	228172.47	0.1614	P	0.6	-11.2
5	☐	100.000	100.790	2535315.64	1.8316	A	1.1	0.8
6	☐	200.000	199.679	4843356.07	3.6286	A	1.4	-0.2

y = 0.0182 * x + 9.6416E-006
R = 1.0000
DL = 0.0007149 ppb
BEC = 0.0005306 ppb

Weight: <None>
Min Conc: <None>

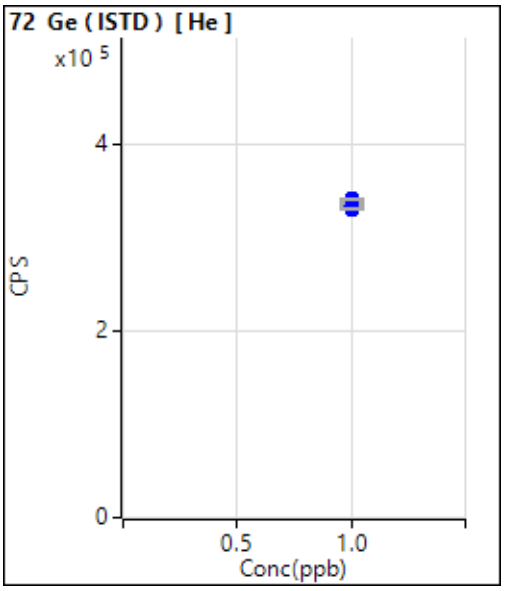


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		670806.57		M	2.3	
2	☐	1.000		685146.84		M	2.9	
3	☐	1.000		658640.95		P	0.1	
4	☐	1.000		653287.19		P	0.6	
5	☐	1.000		685499.72		A	2.0	
6	☐	1.000		655435.47		A	2.1	

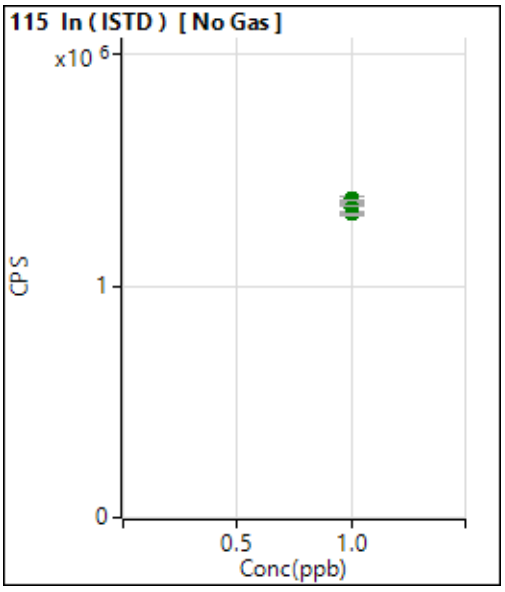


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1064832.80		A	1.3	
2	☐	1.000		1121595.69		A	0.9	
3	☐	1.000		1095296.75		A	0.7	
4	☐	1.000		1055891.36		A	3.4	
5	☐	1.000		1099376.75		A	3.0	
6	☐	1.000		1016593.71		M	4.1	

Calibration for 212_ICV.d

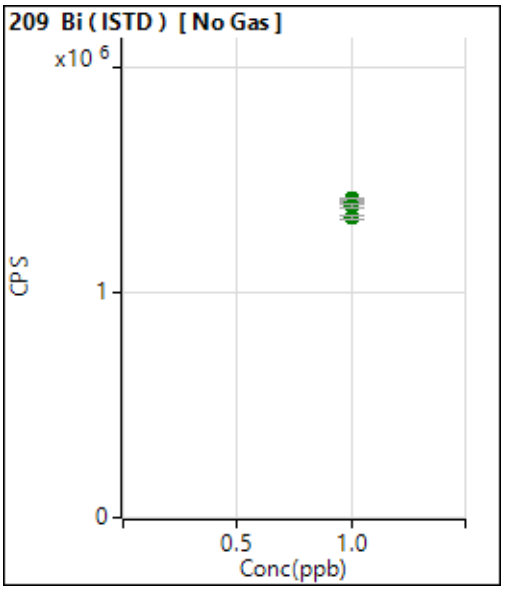


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		338750.20		P	0.3	
2	☐	1.000		342790.06		P	0.5	
3	☐	1.000		334894.32		P	0.6	
4	☐	1.000		334264.68		P	0.9	
5	☐	1.000		340806.65		P	0.6	
6	☐	1.000		330825.84		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360629.72		A	1.9	
2	☐	1.000		1379610.82		A	1.6	
3	☐	1.000		1361230.28		A	1.2	
4	☐	1.000		1368776.61		A	0.7	
5	☐	1.000		1336992.47		A	1.7	
6	☐	1.000		1310100.00		A	0.9	

Calibration for 212_ICV.d



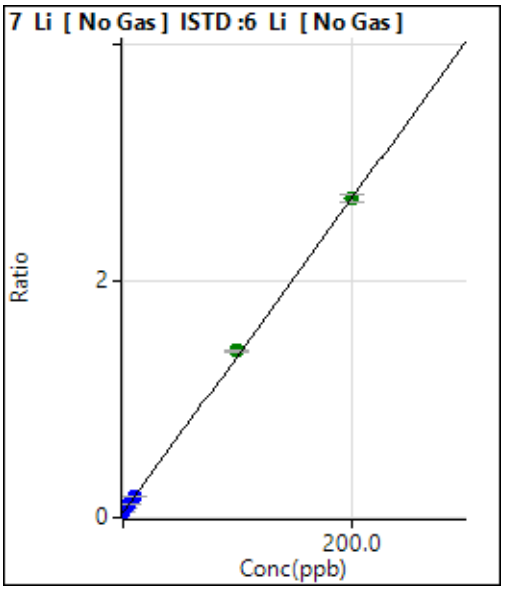
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1388985.61		A	2.0	
2	☐	1.000		1419790.14		A	0.4	
3	☐	1.000		1401715.45		A	1.3	
4	☐	1.000		1414056.38		A	0.8	
5	☐	1.000		1384389.30		A	1.6	
6	☐	1.000		1334929.82		A	1.6	

Calibration for 183_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	175CALB.d	CAL BLK	07/20/2022 20:02:19
2	176CALS.d	2/10/200	07/20/2022 20:04:27
3	177CALS.d	5/25/500	07/20/2022 20:06:34
4	178CALS.d	10/50/100	07/20/2022 20:08:41
5	179CALS.d	100/500/10K	07/20/2022 20:10:48
6	180CALS.d	200/1000/20K	07/20/2022 20:12:52

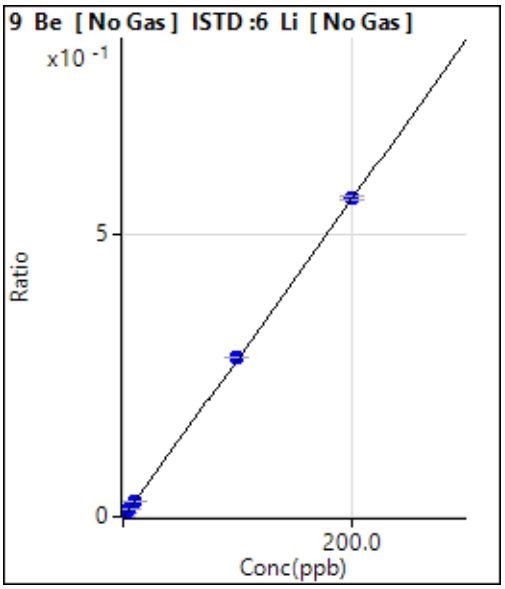
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	32400.55	0.0562	P	1.5	
2	☐	2.000	1.874	46659.10	0.0810	P	1.2	-6.3
3	☐	5.000	4.515	66482.54	0.1161	P	1.4	-9.7
4	☐	10.000	8.805	100094.32	0.1730	P	0.6	-12.0
5	☐	100.000	101.913	791055.69	1.4079	A	1.0	1.9
6	☐	200.000	199.117	1471629.87	2.6972	A	2.3	-0.4

y = 0.0133 * x + 0.0562
R = 0.9999
DL = 0.1948 ppb
BEC = 4.236 ppb

Weight: <None>
Min Conc: <None>

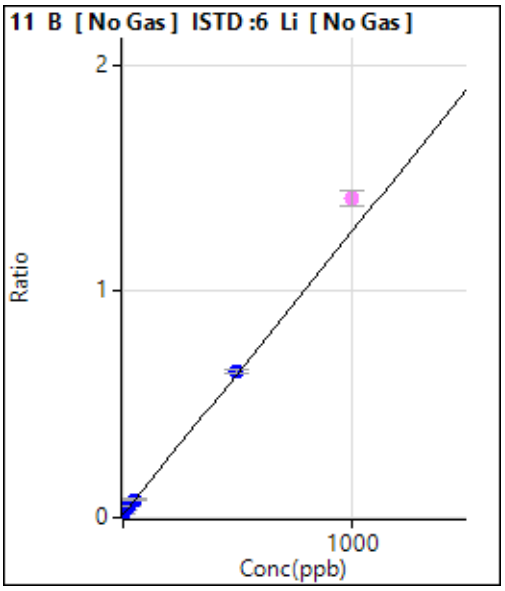


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	45.00	0.0001	P	29.8	
2	☐	2.000	1.936	3177.05	0.0055	P	7.1	-3.2
3	☐	5.000	4.928	7988.99	0.0139	P	2.3	-1.4
4	☐	10.000	9.507	15526.97	0.0268	P	1.7	-4.9
5	☐	100.000	100.070	158283.55	0.2817	P	1.0	0.1
6	☐	200.000	199.992	307173.38	0.5629	P	1.0	0.0

y = 0.0028 * x + 7.8120E-005
R = 1.0000
DL = 0.02484 ppb
BEC = 0.02776 ppb

Weight: <None>
Min Conc: <None>

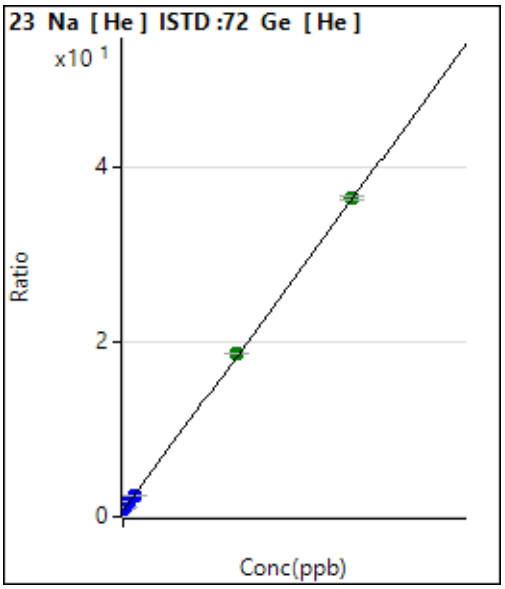
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12008.55	0.0208	P	1.5	
2	☐	10.000	9.121	18517.26	0.0322	P	5.8	-8.8
3	☐	25.000	23.286	28569.01	0.0499	P	2.8	-6.9
4	☐	50.000	47.784	46555.25	0.0805	P	1.6	-4.4
5	☐	500.000	500.325	362514.61	0.6452	P	2.4	0.1
6	☑	1000.000		769508.32	1.4099	M	4.8	

y = 0.0012 * x + 0.0208
R = 1.0000
DL = 0.7435 ppb
BEC = 16.69 ppb

Weight: <None>
Min Conc: <None>

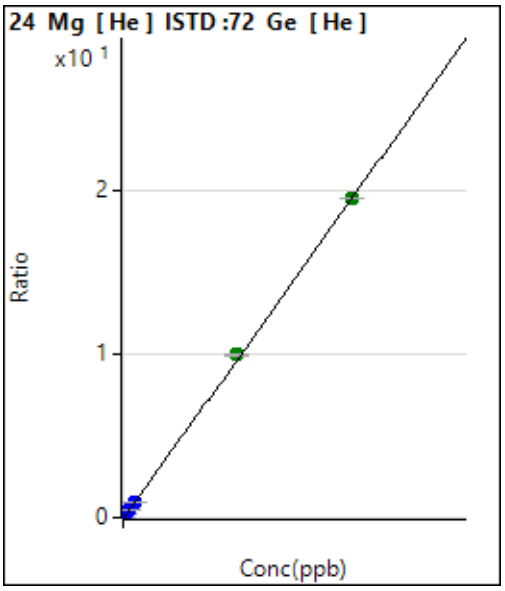


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252696.92	0.8829	P	0.7	
2	☐	200.000	163.149	347772.14	1.1727	P	0.2	-18.4
3	☐	500.000	443.361	491404.16	1.6704	P	0.7	-11.3
4	☐	1000.000	903.850	729680.49	2.4884	P	1.2	-9.6
5	☐	10000.00	9985.203	5509348.25	18.6191	A	0.4	-0.1
6	☐	20000.00	20013.99	10472014.0	36.4327	A	1.2	0.1

y = 0.0018 * x + 0.8829
R = 1.0000
DL = 9.805 ppb
BEC = 497.1 ppb

Weight: <None>
Min Conc: <None>

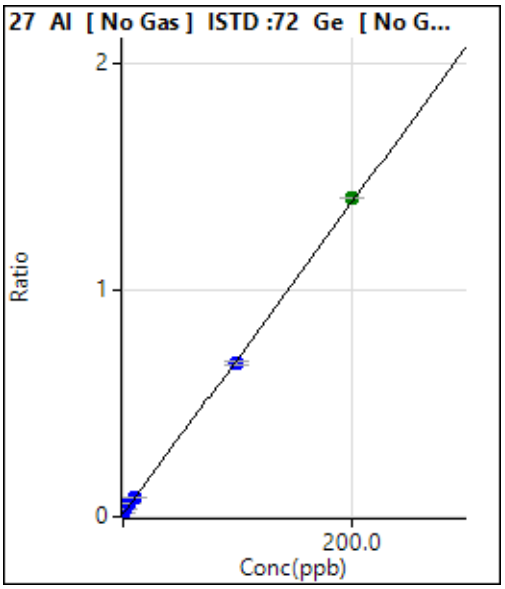
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0008	P	32.8	
2	☐	200.000	191.979	55942.34	0.1886	P	0.8	-4.0
3	☐	500.000	487.274	140492.19	0.4775	P	0.8	-2.5
4	☐	1000.000	964.952	277070.40	0.9449	P	1.6	-3.5
5	☐	10000.00	10150.59	2938814.85	9.9319	A	1.2	1.5
6	☐	20000.00	19926.85	5604571.58	19.4967	A	0.6	-0.4

y = 9.7837E-004 * x + 8.0352E-004
R = 1.0000
DL = 0.807 ppb
BEC = 0.8213 ppb

Weight: <None>
Min Conc: <None>

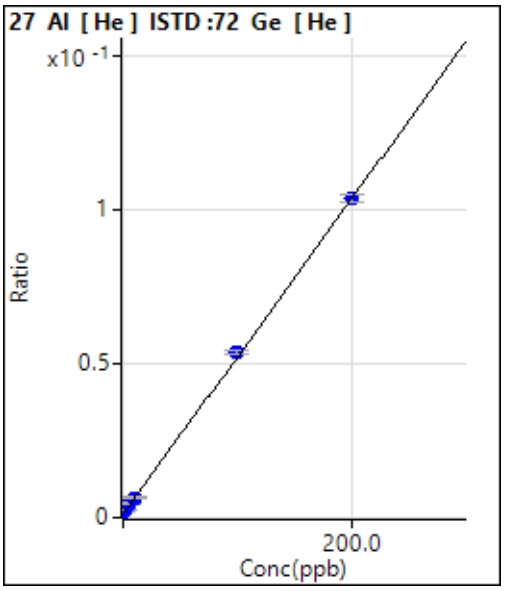


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16523.35	0.0186	P	0.7	
2	☐	2.000	2.018	28719.92	0.0325	P	4.3	0.9
3	☐	5.000	5.645	50786.00	0.0574	P	0.8	12.9
4	☐	10.000	9.256	73349.72	0.0822	P	1.4	-7.4
5	☐	100.000	95.956	611430.42	0.6775	P	1.7	-4.0
6	☐	200.000	202.043	1228066.10	1.4059	A	0.2	1.0

y = 0.0069 * x + 0.0186
R = 0.9997
DL = 0.05702 ppb
BEC = 2.708 ppb

Weight: <None>
Min Conc: <None>

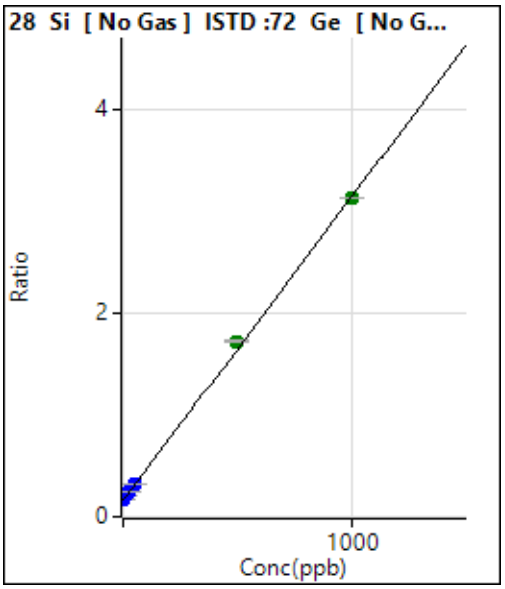
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0017	P	3.6	
2	☐	2.000	1.523	740.03	0.0025	P	20.6	-23.8
3	☐	5.000	5.626	1353.42	0.0046	P	12.2	12.5
4	☐	10.000	9.191	1883.50	0.0064	P	10.6	-8.1
5	☐	100.000	101.467	15906.04	0.0537	P	2.1	1.5
6	☐	200.000	199.296	29872.31	0.1039	P	2.6	-0.4

y = 5.1284E-004 * x + 0.0017
R = 0.9999
DL = 0.3635 ppb
BEC = 3.338 ppb

Weight: <None>
Min Conc: <None>

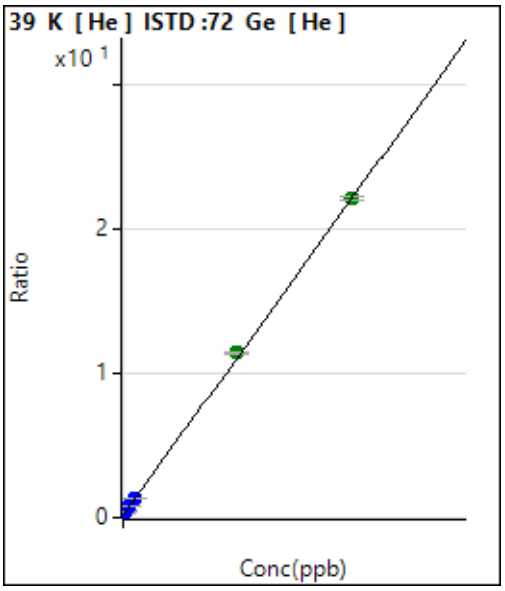


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	155957.23	0.1756	P	1.5	
2	☐	10.000	9.095	179401.96	0.2027	P	3.0	-9.0
3	☐	25.000	26.206	224623.56	0.2537	P	0.4	4.8
4	☐	50.000	46.795	281301.25	0.3151	P	0.4	-6.4
5	☐	500.000	518.365	1553215.92	1.7210	A	1.1	3.7
6	☐	1000.000	990.957	2733937.98	3.1299	A	0.2	-0.9

y = 0.0030 * x + 0.1756
R = 0.9997
DL = 2.598 ppb
BEC = 58.89 ppb

Weight: <None>
Min Conc: <None>

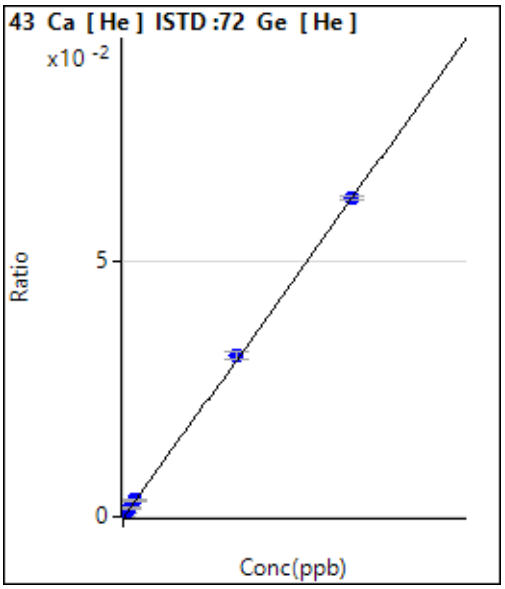
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78358.37	0.2738	P	0.4	
2	☐	200.000	175.283	138233.21	0.4661	P	0.6	-12.4
3	☐	500.000	459.530	228902.97	0.7781	P	0.2	-8.1
4	☐	1000.000	933.607	380709.80	1.2983	P	1.4	-6.6
5	☐	10000.00	10163.56	3381123.91	11.4272	A	1.6	1.6
6	☐	20000.00	19922.79	6362828.45	22.1370	A	1.4	-0.4

y = 0.0011 * x + 0.2738
R = 0.9999
DL = 2.729 ppb
BEC = 249.5 ppb

Weight: <None>
Min Conc: <None>

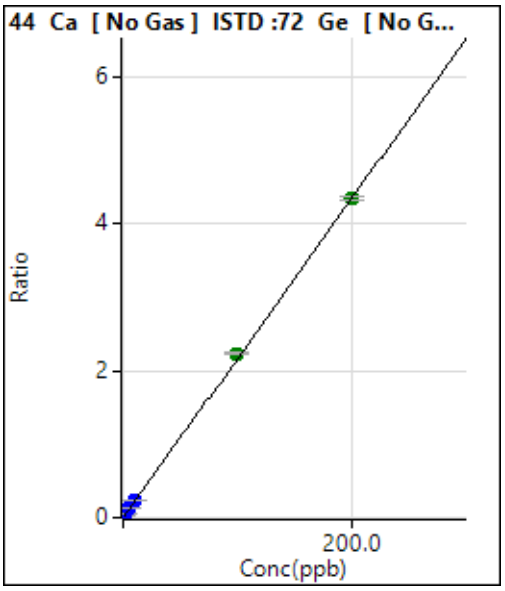


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	200.000	208.469	200.00	0.0007	P	12.7	4.2
3	☐	500.000	529.607	493.35	0.0017	P	8.9	5.9
4	☐	1000.000	1023.363	943.38	0.0032	P	8.3	2.3
5	☐	10000.00	10118.62	9353.35	0.0316	P	4.3	1.2
6	☐	20000.00	19938.69	17898.51	0.0623	P	1.2	-0.3

y = 3.1219E-006 * x + 2.3305E-005
R = 1.0000
DL = 19.39 ppb
BEC = 7.465 ppb

Weight: <None>
Min Conc: <None>

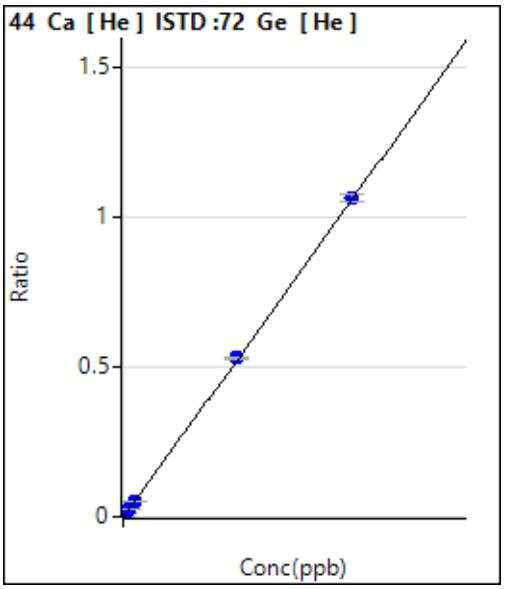
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	17978.69	0.0202	P	0.1	
2	☐	2.000	1.926	54963.13	0.0621	P	3.6	-3.7
3	☐	5.000	4.976	113669.61	0.1284	P	1.9	-0.5
4	☐	10.000	9.544	203270.60	0.2277	P	0.3	-4.6
5	☐	100.000	101.743	2014161.63	2.2316	A	0.8	1.7
6	☐	200.000	199.152	3798625.25	4.3488	A	0.9	-0.4

y = 0.0217 * x + 0.0202
R = 0.9999
DL = 0.004126 ppb
BEC = 0.9311 ppb

Weight: <None>
Min Conc: <None>

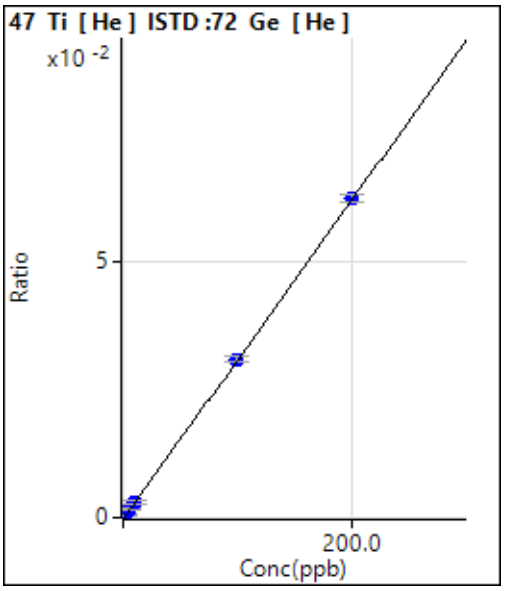


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0014	P	2.8	
2	☐	200.000	195.603	3497.17	0.0118	P	2.3	-2.2
3	☐	500.000	504.055	8282.64	0.0281	P	4.7	0.8
4	☐	1000.000	953.775	15245.35	0.0520	P	1.7	-4.6
5	☐	10000.00	9943.887	156424.86	0.5287	P	0.5	-0.6
6	☐	20000.00	20030.31	305657.11	1.0635	P	1.9	0.2

y = 5.3021E-005 * x + 0.0014
R = 1.0000
DL = 2.267 ppb
BEC = 26.8 ppb

Weight: <None>
Min Conc: <None>

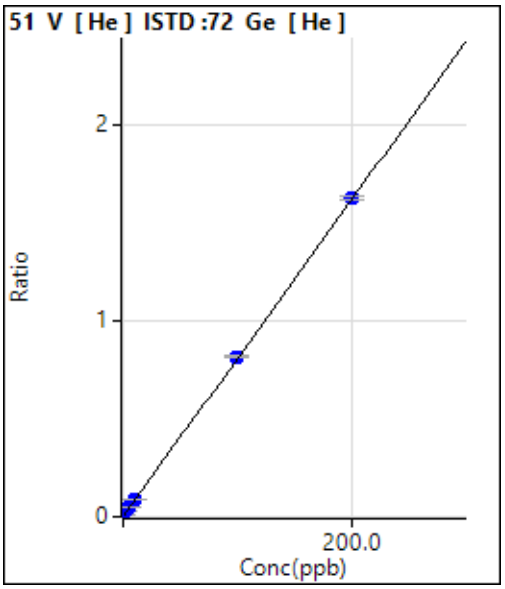
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.770	163.34	0.0006	P	31.1	-11.5
3	☐	5.000	5.306	486.69	0.0017	P	26.6	6.1
4	☐	10.000	9.868	900.05	0.0031	P	21.5	-1.3
5	☐	100.000	99.450	9159.88	0.0310	P	2.8	-0.6
6	☐	200.000	200.276	17921.91	0.0624	P	1.9	0.1

y = 3.1133E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

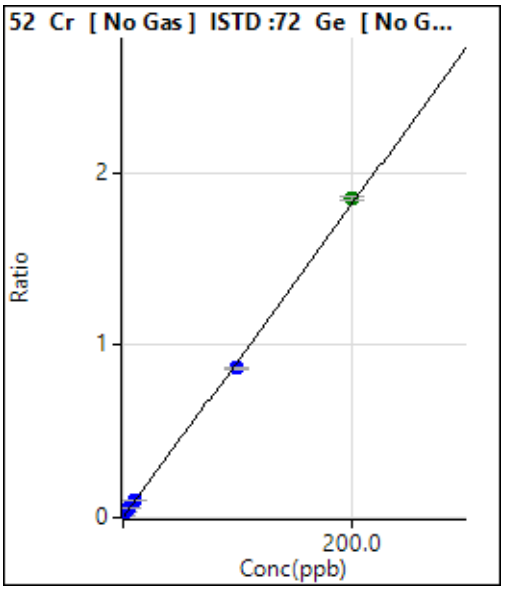


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2833.64	0.0099	P	1.6	
2	☐	2.000	1.895	7488.76	0.0252	P	4.0	-5.3
3	☐	5.000	4.994	14812.48	0.0504	P	0.6	-0.1
4	☐	10.000	9.697	25932.28	0.0884	P	2.3	-3.0
5	☐	100.000	99.852	242234.11	0.8187	P	1.0	-0.1
6	☐	200.000	200.090	468692.95	1.6305	P	0.6	0.0

y = 0.0081 * x + 0.0099
R = 1.0000
DL = 0.06046 ppb
BEC = 1.222 ppb

Weight: <None>
Min Conc: <None>

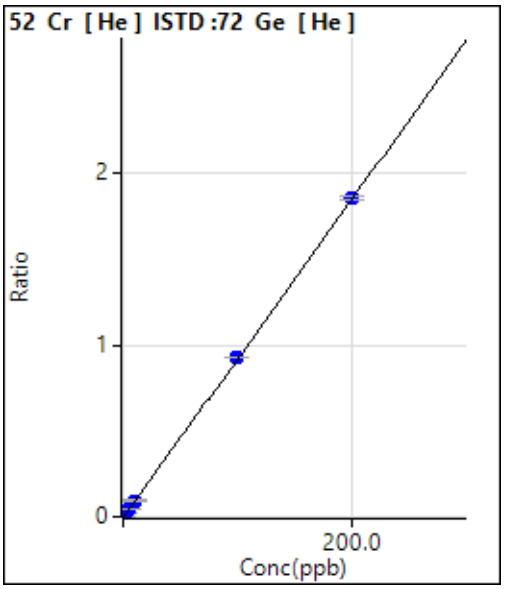
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9493.42	0.0107	P	1.5	
2	☐	2.000	2.022	25717.86	0.0291	P	4.1	1.1
3	☐	5.000	4.781	47920.69	0.0541	P	0.9	-4.4
4	☐	10.000	9.354	85421.98	0.0957	P	0.9	-6.5
5	☐	100.000	94.186	781966.73	0.8664	P	0.7	-5.8
6	☐	200.000	202.945	1619946.64	1.8546	A	1.1	1.5

y = 0.0091 * x + 0.0107
R = 0.9994
DL = 0.05237 ppb
BEC = 1.176 ppb

Weight: <None>
Min Conc: <None>

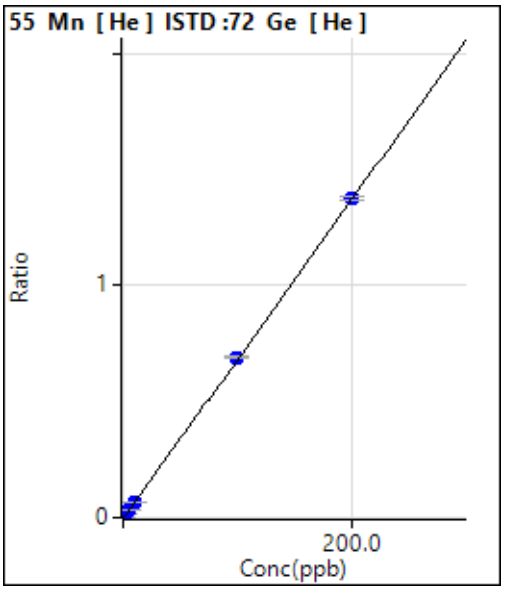


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	850.04	0.0030	P	4.6	
2	☐	2.000	1.922	6168.17	0.0208	P	2.4	-3.9
3	☐	5.000	5.060	14678.08	0.0499	P	1.6	1.2
4	☐	10.000	9.785	27481.18	0.0937	P	3.1	-2.2
5	☐	100.000	99.901	275042.22	0.9296	P	1.0	-0.1
6	☐	200.000	200.059	534208.00	1.8585	P	1.1	0.0

y = 0.0093 * x + 0.0030
R = 1.0000
DL = 0.04446 ppb
BEC = 0.3202 ppb

Weight: <None>
Min Conc: <None>

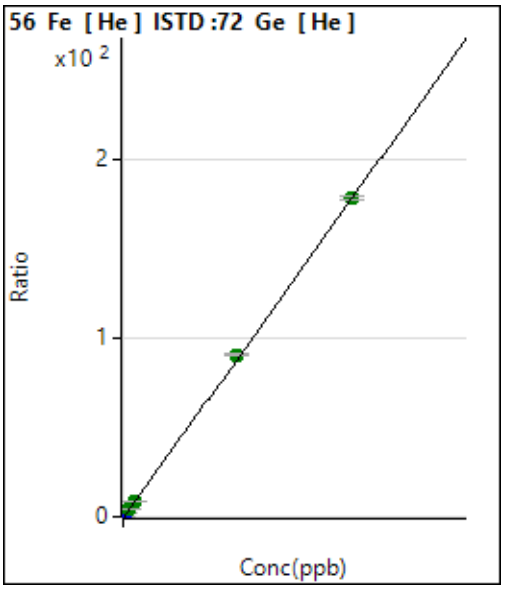
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	580.02	0.0020	P	9.7	
2	☐	2.000	1.945	4564.18	0.0154	P	4.1	-2.8
3	☐	5.000	5.107	10917.86	0.0371	P	0.5	2.1
4	☐	10.000	9.812	20362.13	0.0694	P	2.2	-1.9
5	☐	100.000	100.216	204312.75	0.6905	P	0.9	0.2
6	☐	200.000	199.899	395319.29	1.3753	P	1.0	-0.1

y = 0.0069 * x + 0.0020
R = 1.0000
DL = 0.08599 ppb
BEC = 0.295 ppb

Weight: <None>
Min Conc: <None>

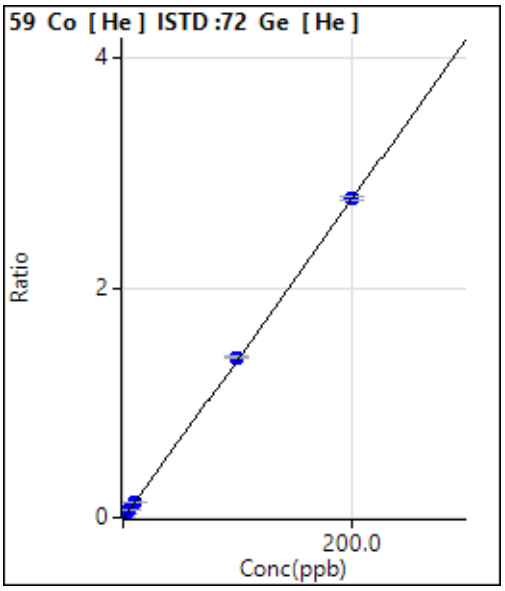


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8926.41	0.0312	P	4.3	
2	☐	200.000	189.317	511590.06	1.7250	P	1.3	-5.3
3	☐	500.000	525.244	1391702.79	4.7305	A	0.6	5.0
4	☐	1000.000	1012.785	2666298.40	9.0925	A	0.8	1.3
5	☐	10000.00	10105.49	26761250.4	90.4439	A	1.1	1.1
6	☐	20000.00	19946.08	51304722.5	178.486	A	0.9	-0.3

y = 0.0089 * x + 0.0312
R = 1.0000
DL = 0.4454 ppb
BEC = 3.486 ppb

Weight: <None>
Min Conc: <None>

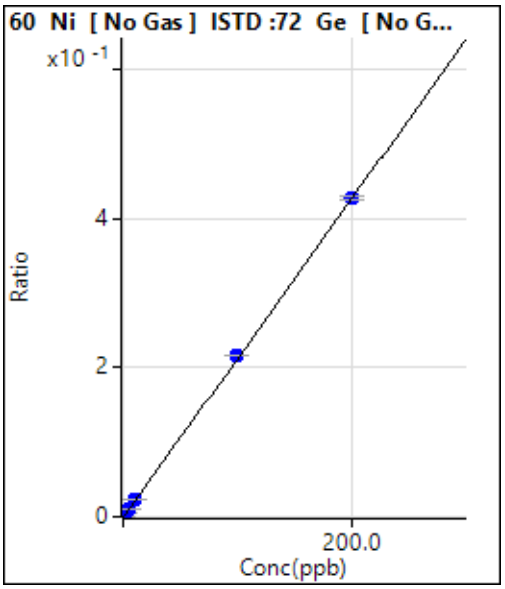
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.4	
2	☐	2.000	1.943	8039.20	0.0271	P	0.7	-2.8
3	☐	5.000	4.825	19774.59	0.0672	P	1.2	-3.5
4	☐	10.000	9.862	40276.54	0.1373	P	2.9	-1.4
5	☐	100.000	100.430	413673.34	1.3980	P	0.5	0.4
6	☐	200.000	199.797	799431.66	2.7812	P	0.9	-0.1

y = 0.0139 * x + 5.8263E-005
R = 1.0000
DL = 0.008716 ppb
BEC = 0.004186 ppb

Weight: <None>
Min Conc: <None>

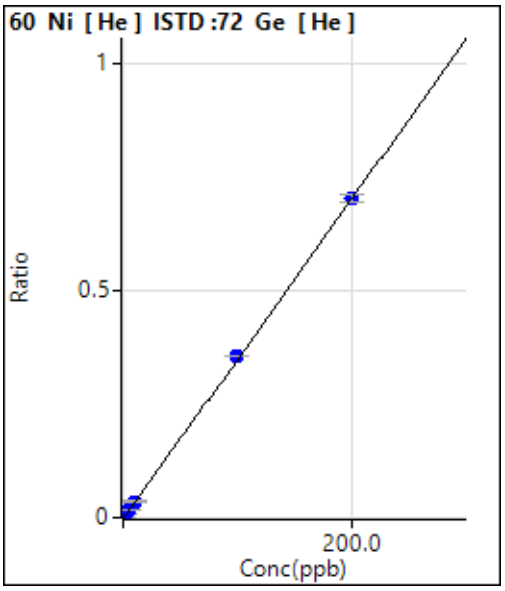


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.03	0.0009	P	2.9	
2	☐	2.000	1.864	4330.77	0.0049	P	3.4	-6.8
3	☐	5.000	4.954	10183.92	0.0115	P	0.6	-0.9
4	☐	10.000	10.124	20148.44	0.0226	P	2.9	1.2
5	☐	100.000	100.910	195716.29	0.2169	P	0.8	0.9
6	☐	200.000	199.541	373785.31	0.4279	P	0.9	-0.2

y = 0.0021 * x + 9.0069E-004
R = 1.0000
DL = 0.03652 ppb
BEC = 0.4209 ppb

Weight: <None>
Min Conc: <None>

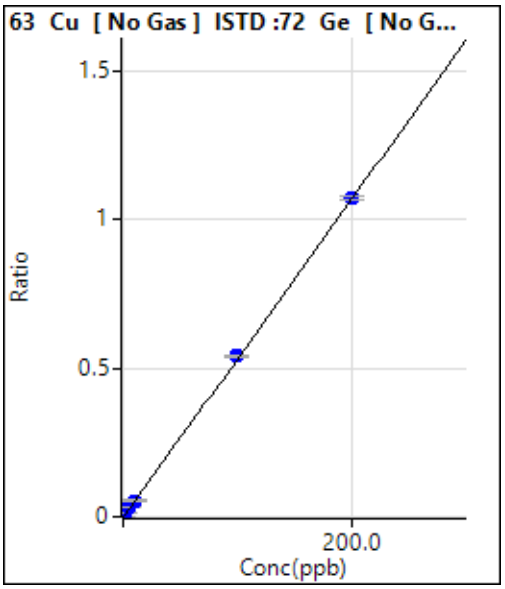
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	37.1	
2	☐	2.000	1.855	2090.19	0.0070	P	8.7	-7.3
3	☐	5.000	4.828	5147.71	0.0175	P	3.3	-3.4
4	☐	10.000	10.037	10500.89	0.0358	P	5.0	0.4
5	☐	100.000	100.974	105210.56	0.3556	P	0.2	1.0
6	☐	200.000	199.517	201780.90	0.7020	P	1.9	-0.2

y = 0.0035 * x + 5.2406E-004
R = 1.0000
DL = 0.1658 ppb
BEC = 0.149 ppb

Weight: <None>
Min Conc: <None>

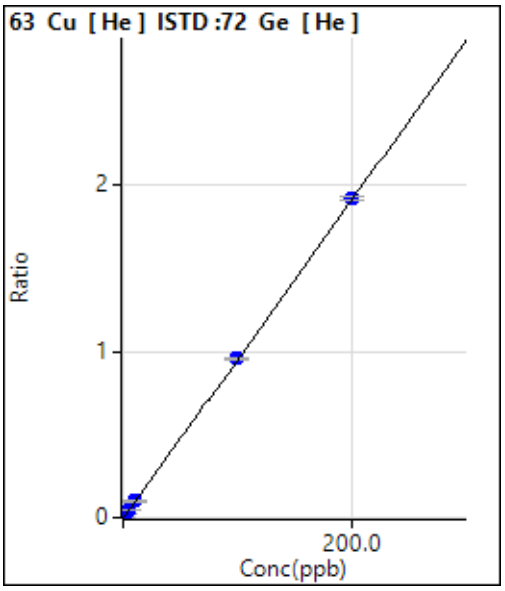


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2210.22	0.0025	P	1.3	
2	☐	2.000	2.130	12289.10	0.0139	P	5.2	6.5
3	☐	5.000	5.047	26115.39	0.0295	P	0.9	0.9
4	☐	10.000	9.728	48700.57	0.0545	P	1.6	-2.7
5	☐	100.000	100.344	486895.44	0.5395	P	0.4	0.3
6	☐	200.000	199.839	936316.57	1.0719	P	0.8	-0.1

y = 0.0054 * x + 0.0025
R = 1.0000
DL = 0.01816 ppb
BEC = 0.4648 ppb

Weight: <None>
Min Conc: <None>

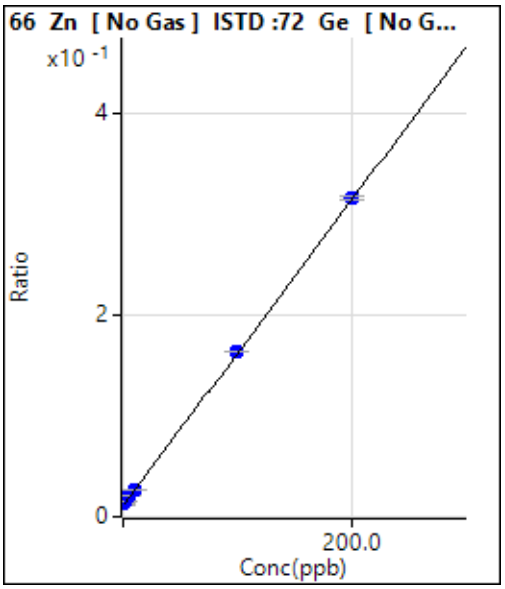
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	916.71	0.0032	P	4.5	
2	☐	2.000	2.059	6795.15	0.0229	P	1.2	2.9
3	☐	5.000	4.834	14558.01	0.0495	P	2.3	-3.3
4	☐	10.000	9.978	28951.21	0.0987	P	3.4	-0.2
5	☐	100.000	99.593	283075.45	0.9567	P	1.0	-0.4
6	☐	200.000	200.208	551899.64	1.9200	P	0.8	0.1

y = 0.0096 * x + 0.0032
R = 1.0000
DL = 0.04519 ppb
BEC = 0.3345 ppb

Weight: <None>
Min Conc: <None>

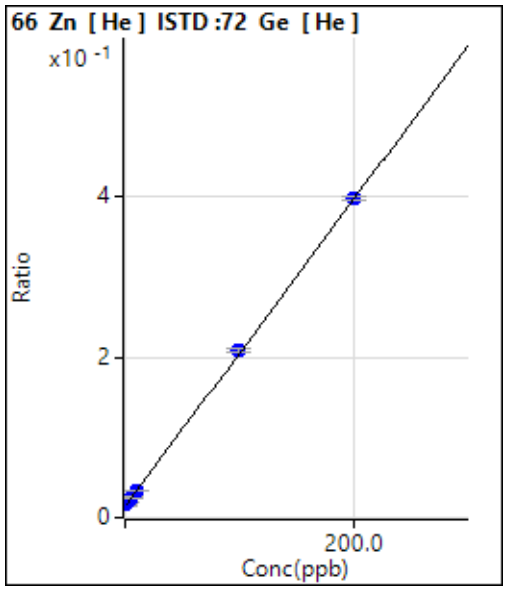


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11098.03	0.0125	P	3.2	
2	☐	2.000	1.896	13623.78	0.0154	P	3.4	-5.2
3	☐	5.000	5.342	18245.84	0.0206	P	1.7	6.8
4	☐	10.000	9.725	24338.79	0.0273	P	2.9	-2.8
5	☐	100.000	99.459	147620.21	0.1636	P	0.5	-0.5
6	☐	200.000	200.277	276624.55	0.3167	P	1.0	0.1

y = 0.0015 * x + 0.0125
R = 1.0000
DL = 0.7849 ppb
BEC = 8.224 ppb

Weight: <None>
Min Conc: <None>

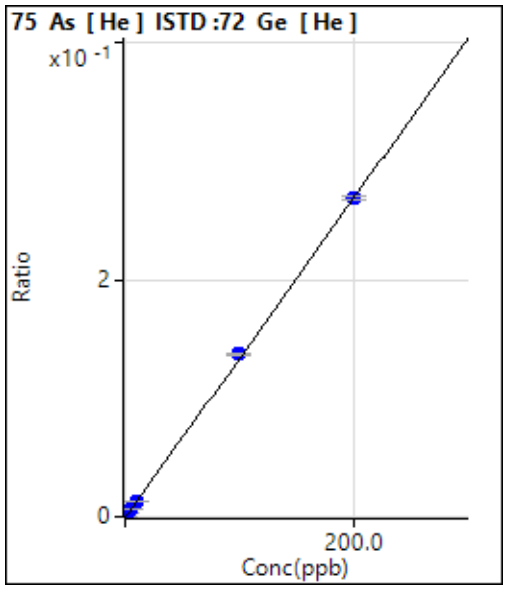
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4607.54	0.0161	P	6.4	
2	☐	2.000	1.916	5861.37	0.0198	P	2.5	-4.2
3	☐	5.000	4.688	7375.46	0.0251	P	3.4	-6.2
4	☐	10.000	9.487	10043.90	0.0342	P	1.3	-5.1
5	☐	100.000	100.730	61783.87	0.2088	P	1.6	0.7
6	☐	200.000	199.669	114436.50	0.3981	P	0.8	-0.2

y = 0.0019 * x + 0.0161
R = 1.0000
DL = 1.627 ppb
BEC = 8.415 ppb

Weight: <None>
Min Conc: <None>

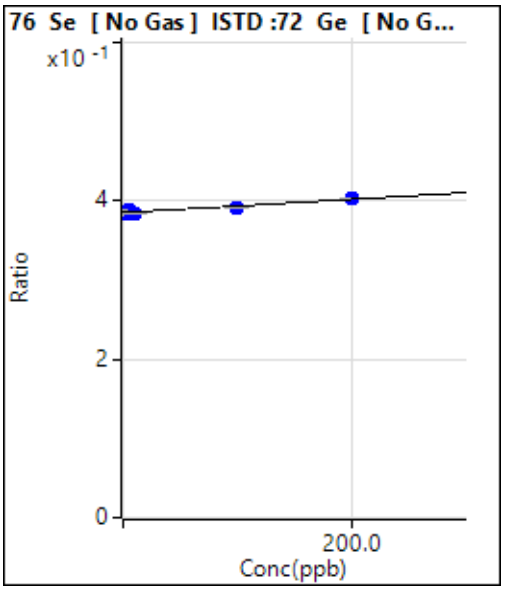


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	108.89	0.0004	P	12.4	
2	☐	2.000	1.783	825.59	0.0028	P	3.7	-10.9
3	☐	5.000	4.828	2026.83	0.0069	P	5.6	-3.4
4	☐	10.000	9.387	3821.68	0.0130	P	7.8	-6.1
5	☐	100.000	101.716	40686.59	0.1375	P	1.1	1.7
6	☐	200.000	199.179	77294.16	0.2689	P	1.1	-0.4

y = 0.0013 * x + 3.8045E-004
R = 0.9999
DL = 0.105 ppb
BEC = 0.2822 ppb

Weight: <None>
Min Conc: <None>

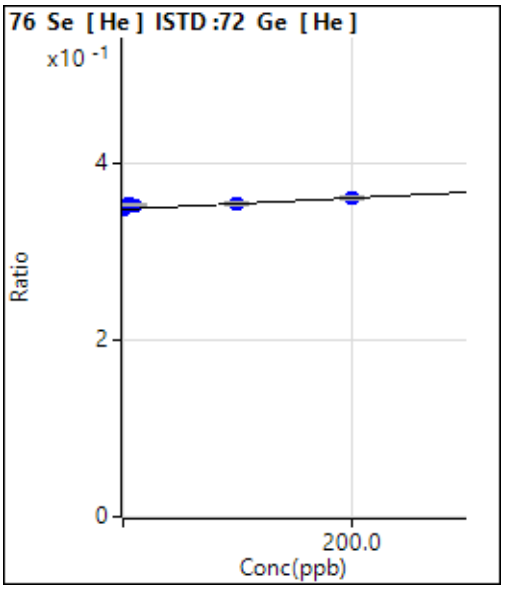
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	341723.99	0.3847	P	0.5	
2	☐	2.000	-7.579	340087.17	0.3840	P	1.4	-479.0
3	☐	5.000	29.037	342766.67	0.3871	P	0.3	480.7
4	☐	10.000	-3.747	343148.41	0.3844	P	0.6	-137.5
5	☐	100.000	73.836	352797.40	0.3909	P	0.6	-26.2
6	☐	200.000	213.264	351716.27	0.4027	P	0.5	6.6

y = 8.4380E-005 * x + 0.3847
R = 0.9766
DL = 74.01 ppb
BEC = 4559 ppb

Weight: <None>
Min Conc: <None>

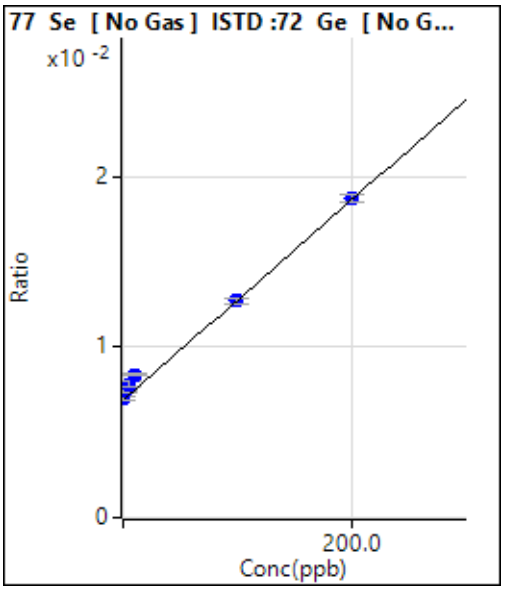


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99341.21	0.3471	P	0.8	
2	☐	2.000	77.928	104425.35	0.3521	P	1.1	3796.4
3	☐	5.000	87.403	103767.09	0.3527	P	1.0	1648.1
4	☐	10.000	75.096	103202.80	0.3519	P	0.8	651.0
5	☐	100.000	99.838	104613.79	0.3535	P	0.9	-0.2
6	☐	200.000	194.007	103364.08	0.3596	P	1.3	-3.0

y = 6.4557E-005 * x + 0.3471
R = 0.8610
DL = 123.9 ppb
BEC = 5376 ppb

Weight: <None>
Min Conc: <None>

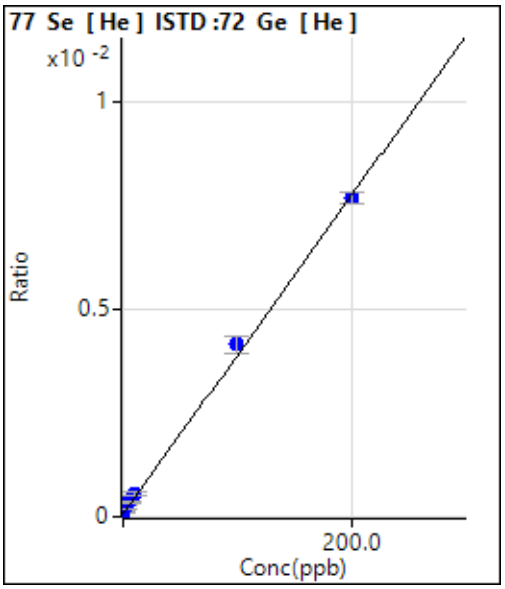
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6208.21	0.0070	P	3.3	
2	☐	2.000	7.199	6561.72	0.0074	P	1.4	259.9
3	☐	5.000	14.106	6918.57	0.0078	P	3.8	182.1
4	☐	10.000	23.786	7485.53	0.0084	P	0.8	137.9
5	☐	100.000	97.501	11471.73	0.0127	P	2.2	-2.5
6	☐	200.000	200.281	16373.56	0.0187	P	2.0	0.1

y = 5.8701E-005 * x + 0.0070
R = 0.9977
DL = 11.93 ppb
BEC = 119 ppb

Weight: <None>
Min Conc: <None>

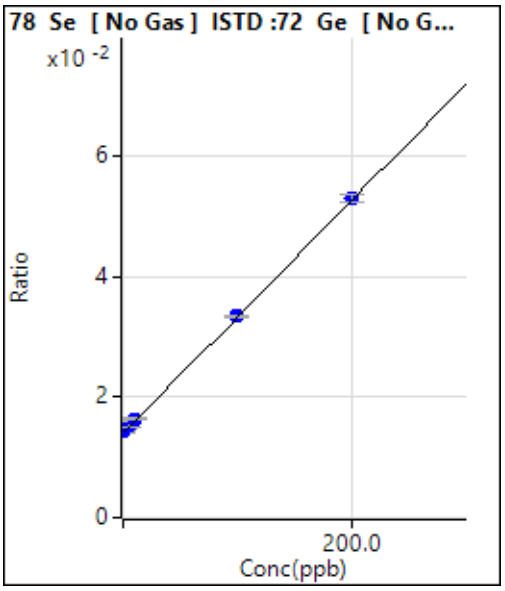


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.6	
2	☐	2.000	3.118	66.67	0.0002	P	48.0	55.9
3	☐	5.000	6.429	103.33	0.0004	P	20.9	28.6
4	☐	10.000	11.790	163.34	0.0006	P	19.4	17.9
5	☐	100.000	105.243	1226.75	0.0041	P	10.1	5.2
6	☐	200.000	197.242	2206.88	0.0077	P	3.5	-1.4

y = 3.8400E-005 * x + 1.0478E-004
R = 0.9995
DL = 5.455 ppb
BEC = 2.729 ppb

Weight: <None>
Min Conc: <None>

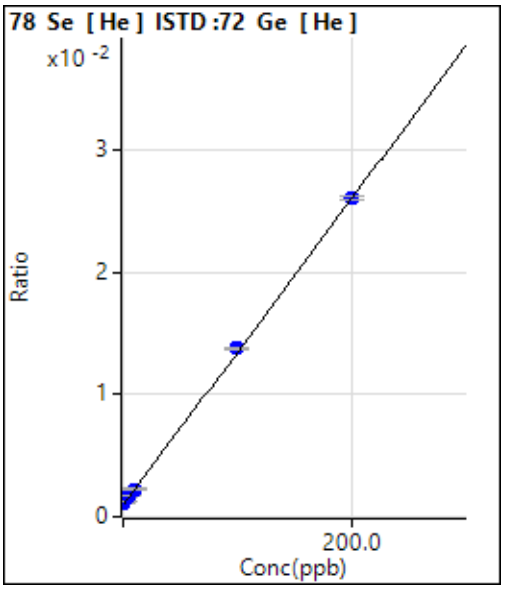
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12699.46	0.0143	P	2.7	
2	☐	2.000	3.169	13193.30	0.0149	P	4.1	58.5
3	☐	5.000	5.536	13597.11	0.0154	P	6.3	10.7
4	☐	10.000	10.707	14608.14	0.0164	P	1.5	7.1
5	☐	100.000	98.837	30110.64	0.0334	P	1.0	-1.2
6	☐	200.000	200.521	46272.98	0.0530	P	2.2	0.3

y = 1.9289E-004 * x + 0.0143
R = 1.0000
DL = 5.923 ppb
BEC = 74.11 ppb

Weight: <None>
Min Conc: <None>

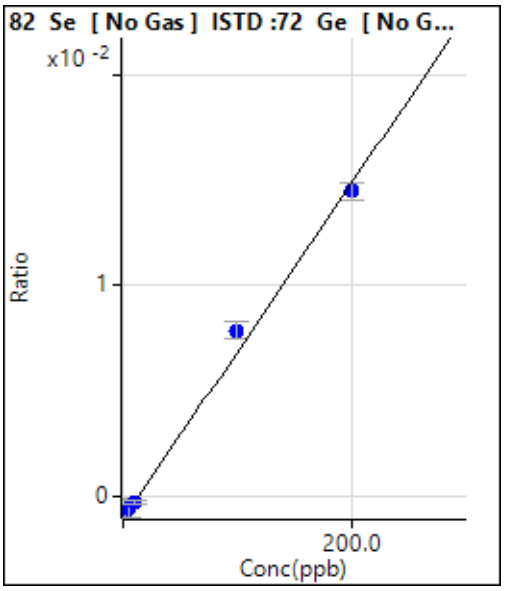


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	312.00	0.0011	P	5.0	
2	☐	2.000	2.641	421.34	0.0014	P	12.5	32.1
3	☐	5.000	5.396	519.34	0.0018	P	2.5	7.9
4	☐	10.000	9.142	655.35	0.0022	P	4.0	-8.6
5	☐	100.000	101.275	4073.29	0.0138	P	1.6	1.3
6	☐	200.000	199.389	7487.43	0.0260	P	0.8	-0.3

y = 1.2517E-004 * x + 0.0011
R = 1.0000
DL = 1.312 ppb
BEC = 8.709 ppb

Weight: <None>
Min Conc: <None>

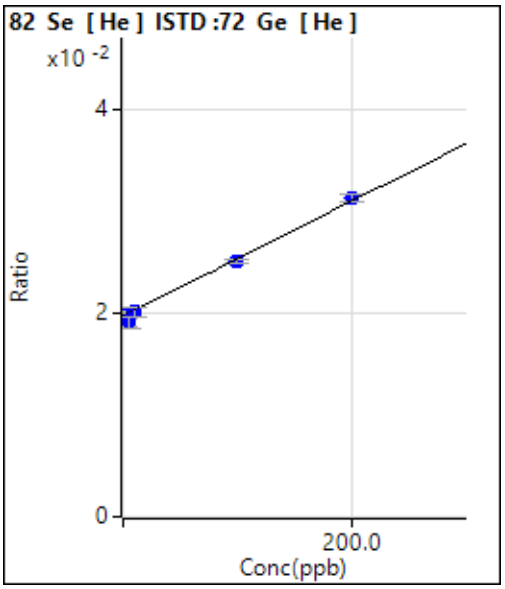
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-910.52	-0.0010	P	-63.2	
2	☐	2.000	1.459	-808.29	-0.0009	P	-96.8	-27.1
3	☐	5.000	6.008	-487.94	-0.0005	P	-162.	20.2
4	☐	10.000	8.949	-278.60	-0.0003	P	-55.0	-10.5
5	☐	100.000	111.559	7106.92	0.0079	P	9.9	11.6
6	☐	200.000	194.253	12641.63	0.0145	P	5.7	-2.9

y = 7.9788E-005 * x - 0.0010
R = 0.9975
DL = 24.37 ppb
BEC = -12.85 ppb

Weight: <None>
Min Conc: <None>

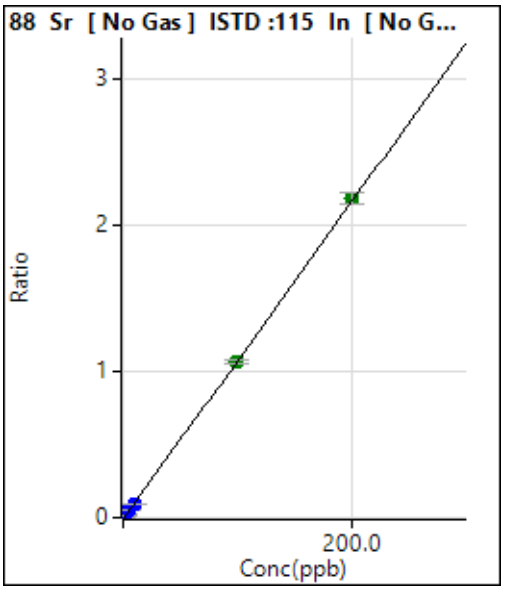


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5667.98	0.0198	P	3.2	
2	☐	2.000	-13.433	5647.95	0.0190	P	3.9	-771.6
3	☐	5.000	-10.277	5657.96	0.0192	P	7.3	-305.5
4	☐	10.000	4.765	5884.72	0.0201	P	5.5	-52.3
5	☐	100.000	93.343	7412.18	0.0251	P	2.1	-6.7
6	☐	200.000	204.126	8989.81	0.0313	P	2.9	2.1

y = 5.6216E-005 * x + 0.0198
R = 0.9975
DL = 34.08 ppb
BEC = 352.3 ppb

Weight: <None>
Min Conc: <None>

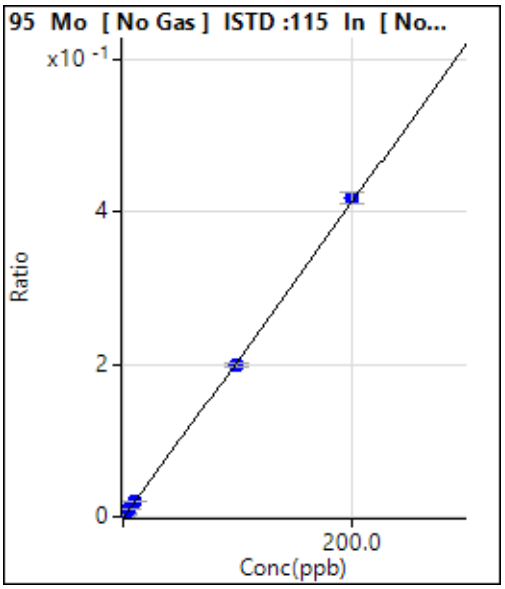
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	533.36	0.0005	P	16.8	
2	☐	2.000	1.773	22796.43	0.0197	P	7.4	-11.3
3	☐	5.000	4.764	60081.29	0.0521	P	4.3	-4.7
4	☐	10.000	8.591	109945.84	0.0936	P	0.8	-14.1
5	☐	100.000	97.754	1239005.79	1.0600	A	2.4	-2.2
6	☐	200.000	201.201	2390900.95	2.1812	A	3.3	0.6

y = 0.0108 * x + 4.7291E-004
R = 0.9999
DL = 0.02193 ppb
BEC = 0.04363 ppb

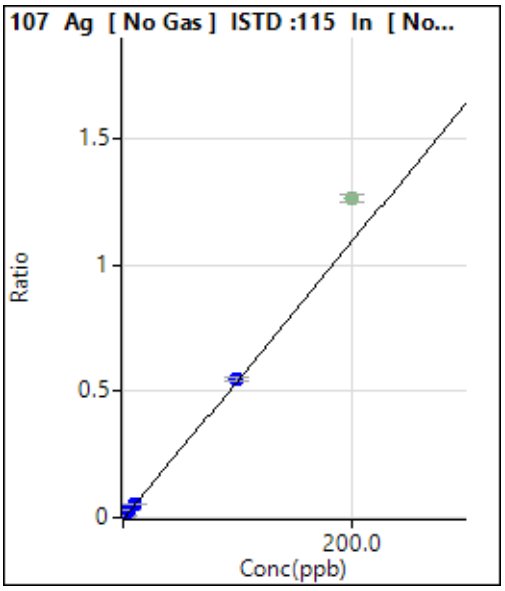
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	116.7	
2	☐	2.000	1.864	4474.18	0.0039	P	7.8	-6.8
3	☐	5.000	4.667	11134.83	0.0097	P	6.6	-6.7
4	☐	10.000	9.440	22936.82	0.0195	P	4.4	-5.6
5	☐	100.000	96.142	232427.38	0.1988	P	1.6	-3.9
6	☐	200.000	201.967	457832.82	0.4177	P	3.2	1.0

y = 0.0021 * x + 1.2122E-005
R = 0.9997
DL = 0.02053 ppb
BEC = 0.005862 ppb

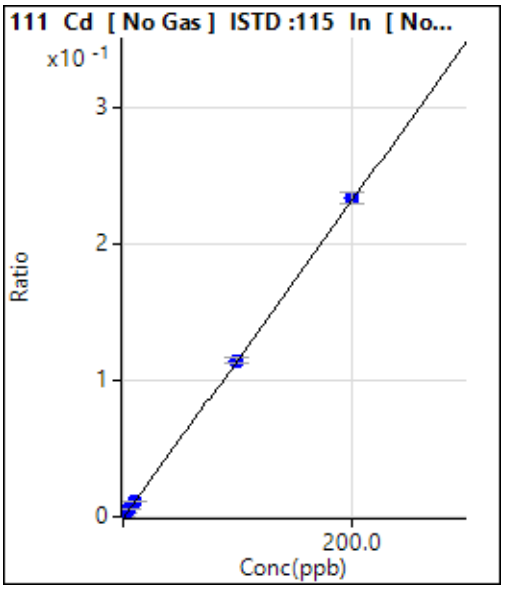
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.01	0.0003	P	32.4	
2	☐	2.000	1.948	12756.33	0.0110	P	2.3	-2.6
3	☐	5.000	4.904	31427.71	0.0273	P	3.7	-1.9
4	☐	10.000	9.559	62065.47	0.0528	P	0.9	-4.4
5	☐	100.000	100.050	642894.18	0.5501	P	2.9	0.0
6	☑	200.000		1388303.78	1.2662	A	2.3	

y = 0.0055 * x + 3.0087E-004
R = 1.0000
DL = 0.05319 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

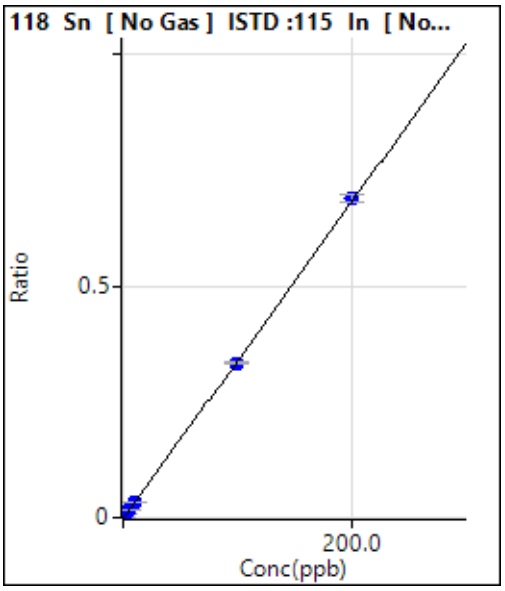


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.7	
2	☐	2.000	1.947	2633.65	0.0023	P	5.9	-2.6
3	☐	5.000	4.749	6381.66	0.0055	P	7.2	-5.0
4	☐	10.000	9.400	12863.13	0.0110	P	3.6	-6.0
5	☐	100.000	98.170	133638.66	0.1143	P	3.6	-1.8
6	☐	200.000	200.952	256559.04	0.2341	P	3.2	0.5

y = 0.0012 * x + 5.9730E-006
R = 0.9999
DL = 0.01334 ppb
BEC = 0.005128 ppb

Weight: <None>
Min Conc: <None>

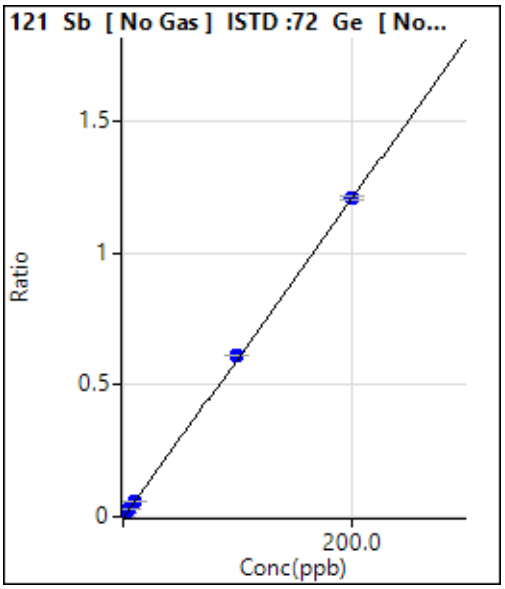
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1013.40	0.0009	P	6.3	
2	☐	2.000	1.872	8456.20	0.0073	P	5.2	-6.4
3	☐	5.000	4.528	18893.79	0.0164	P	4.0	-9.4
4	☐	10.000	9.238	38162.26	0.0325	P	2.8	-7.6
5	☐	100.000	97.418	390521.07	0.3341	P	2.0	-2.6
6	☐	200.000	201.342	755976.42	0.6896	P	2.5	0.7

y = 0.0034 * x + 8.9620E-004
R = 0.9999
DL = 0.04942 ppb
BEC = 0.262 ppb

Weight: <None>
Min Conc: <None>

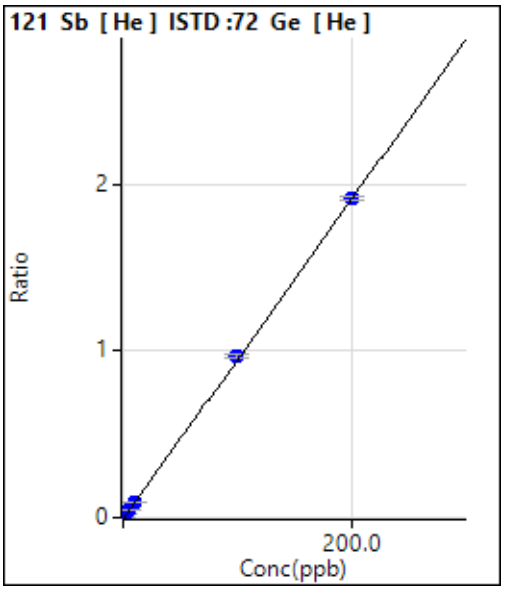


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	430.02	0.0005	P	25.0	
2	☐	2.000	1.984	11054.84	0.0125	P	6.0	-0.8
3	☐	5.000	4.766	25979.29	0.0293	P	2.2	-4.7
4	☐	10.000	9.712	52919.95	0.0593	P	1.4	-2.9
5	☐	100.000	100.655	550366.46	0.6098	P	0.4	0.7
6	☐	200.000	199.693	1056321.21	1.2093	P	0.7	-0.2

y = 0.0061 * x + 4.8336E-004
R = 1.0000
DL = 0.05999 ppb
BEC = 0.07985 ppb

Weight: <None>
Min Conc: <None>

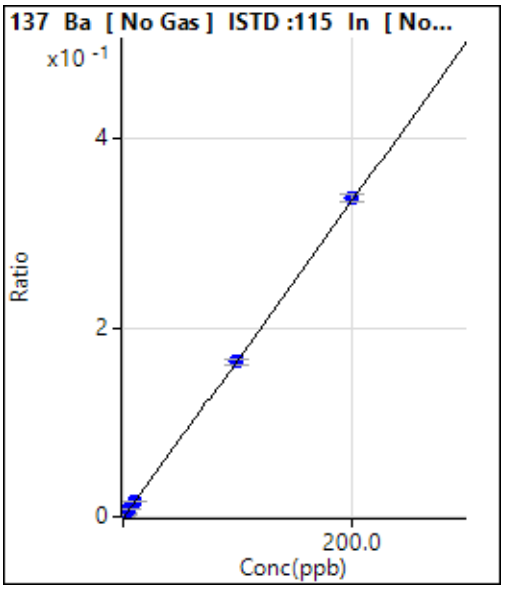
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	13.5	
2	☐	2.000	1.858	5444.58	0.0184	P	6.7	-7.1
3	☐	5.000	4.934	14077.79	0.0479	P	4.8	-1.3
4	☐	10.000	9.765	27626.03	0.0942	P	2.4	-2.3
5	☐	100.000	100.772	286224.44	0.9674	P	1.8	0.8
6	☐	200.000	199.629	550667.42	1.9158	P	1.4	-0.2

y = 0.0096 * x + 5.2414E-004
R = 1.0000
DL = 0.02206 ppb
BEC = 0.05463 ppb

Weight: <None>
Min Conc: <None>

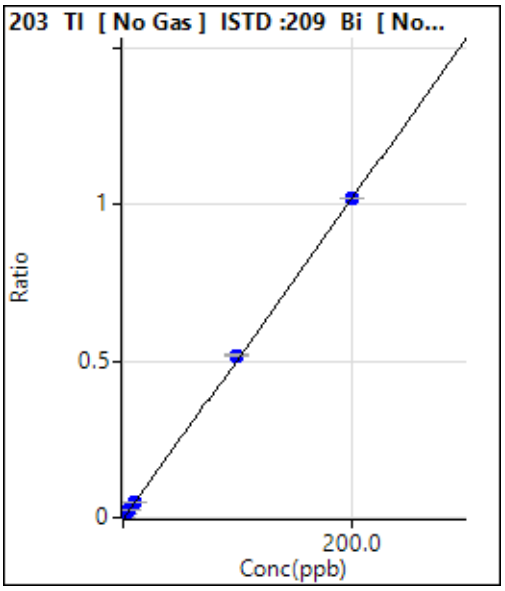


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90.00	0.0001	P	35.9	
2	☐	2.000	1.818	3620.57	0.0031	P	10.4	-9.1
3	☐	5.000	4.816	9420.23	0.0082	P	3.1	-3.7
4	☐	10.000	9.487	18800.51	0.0160	P	3.0	-5.1
5	☐	100.000	97.787	191989.41	0.1643	P	3.1	-2.2
6	☐	200.000	201.138	370325.82	0.3378	P	2.8	0.6

y = 0.0017 * x + 7.9058E-005
R = 0.9999
DL = 0.05068 ppb
BEC = 0.04708 ppb

Weight: <None>
Min Conc: <None>

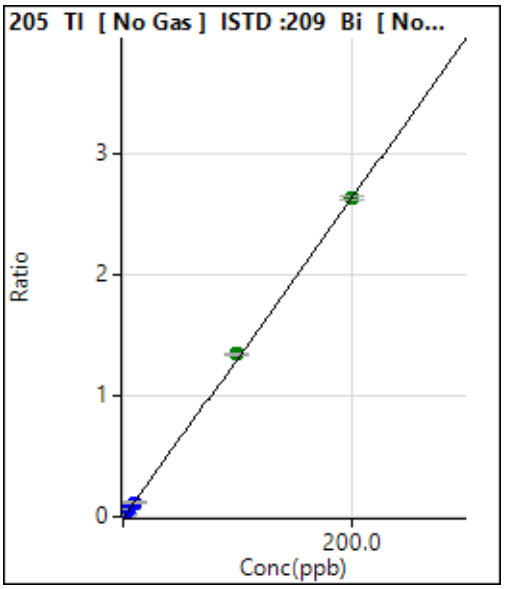
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	91.7	
2	☐	2.000	1.876	10998.33	0.0096	P	3.1	-6.2
3	☐	5.000	4.789	27293.47	0.0245	P	0.8	-4.2
4	☐	10.000	9.602	55285.62	0.0491	P	1.4	-4.0
5	☐	100.000	101.199	581924.12	0.5178	P	1.2	1.2
6	☐	200.000	199.427	1121561.73	1.0204	P	0.3	-0.3

y = 0.0051 * x + 1.4965E-005
R = 1.0000
DL = 0.008042 ppb
BEC = 0.002925 ppb

Weight: <None>
Min Conc: <None>

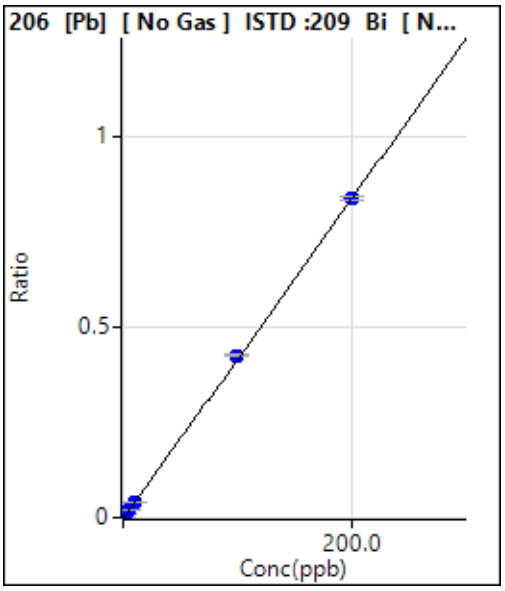


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	53.33	0.0000	P	39.1	
2	☐	2.000	1.787	27136.44	0.0237	P	1.7	-10.6
3	☐	5.000	4.550	67100.34	0.0603	P	3.0	-9.0
4	☐	10.000	8.995	134014.08	0.1191	P	1.7	-10.1
5	☐	100.000	101.591	1511712.11	1.3452	A	1.9	1.6
6	☐	200.000	199.268	2899905.89	2.6384	A	0.8	-0.4

y = 0.0132 * x + 4.8151E-005
R = 0.9999
DL = 0.004265 ppb
BEC = 0.003637 ppb

Weight: <None>
Min Conc: <None>

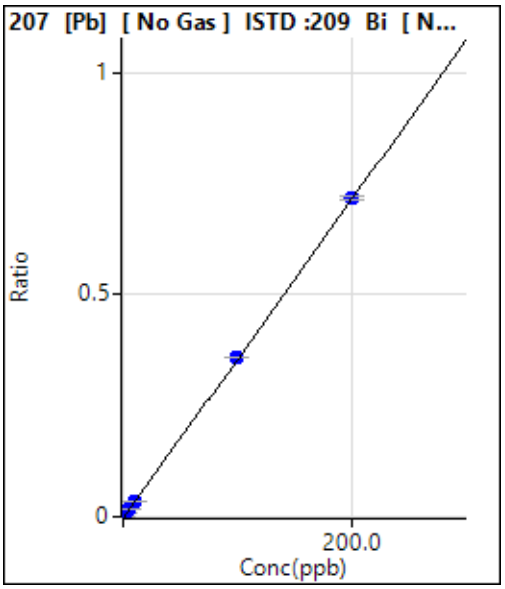
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	25.2	
2	☐	2.000	1.907	9310.33	0.0081	P	4.5	-4.7
3	☐	5.000	4.908	23081.61	0.0207	P	0.5	-1.8
4	☐	10.000	9.794	46383.25	0.0412	P	3.1	-2.1
5	☐	100.000	101.353	478095.80	0.4254	P	0.8	1.4
6	☐	200.000	199.337	919448.29	0.8366	P	0.8	-0.3

y = 0.0042 * x + 1.4120E-004
R = 1.0000
DL = 0.02544 ppb
BEC = 0.03365 ppb

Weight: <None>
Min Conc: <None>

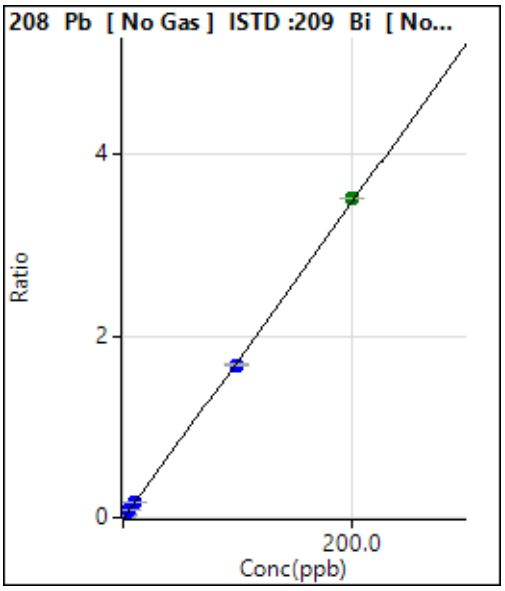


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	25.8	
2	☐	2.000	1.925	8012.70	0.0070	P	6.1	-3.8
3	☐	5.000	4.728	18998.07	0.0171	P	1.9	-5.4
4	☐	10.000	9.875	39974.39	0.0355	P	0.6	-1.3
5	☐	100.000	99.975	403266.05	0.3588	P	1.1	0.0
6	☐	200.000	200.027	788987.28	0.7179	P	0.7	0.0

y = 0.0036 * x + 1.0233E-004
R = 1.0000
DL = 0.0221 ppb
BEC = 0.02852 ppb

Weight: <None>
Min Conc: <None>

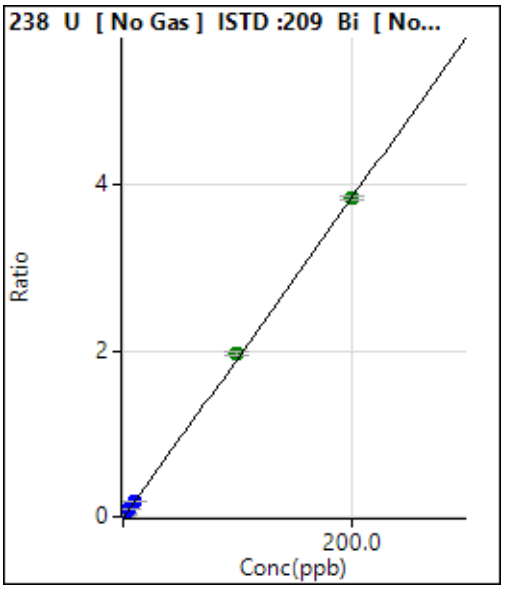
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.01	0.0005	P	2.6	
2	☐	2.000	1.836	37189.13	0.0325	P	5.2	-8.2
3	☐	5.000	4.612	90025.70	0.0809	P	0.9	-7.8
4	☐	10.000	9.380	184428.67	0.1640	P	0.5	-6.2
5	☐	100.000	96.575	1891499.72	1.6831	P	0.7	-3.4
6	☐	200.000	201.755	3863905.80	3.5155	A	0.6	0.9

y = 0.0174 * x + 5.4130E-004
R = 0.9998
DL = 0.002465 ppb
BEC = 0.03107 ppb

Weight: <None>
Min Conc: <None>

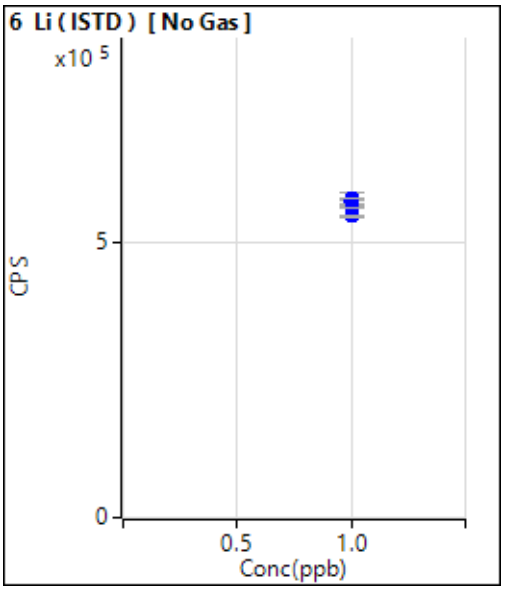


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.797	39764.88	0.0347	P	0.8	-10.1
3	☐	5.000	4.441	95577.94	0.0859	P	1.0	-11.2
4	☐	10.000	9.141	198814.87	0.1767	P	0.8	-8.6
5	☐	100.000	102.013	2216456.68	1.9723	A	1.4	2.0
6	☐	200.000	199.052	4230081.81	3.8485	A	1.3	-0.5

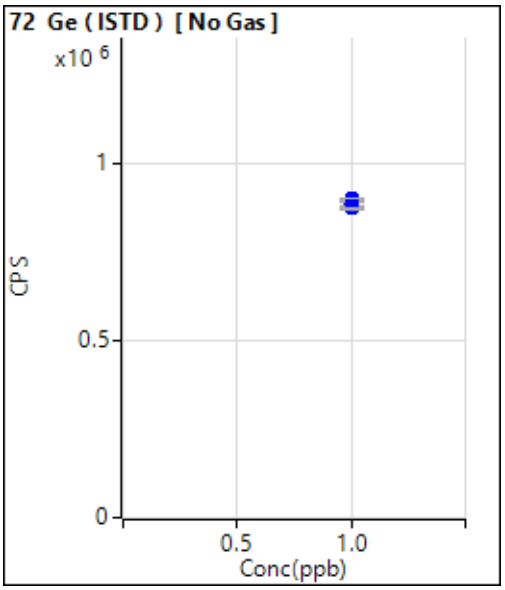
y = 0.0193 * x + 2.9930E-006
R = 0.9999
DL = 0.0008044 ppb
BEC = 0.0001548 ppb

Weight: <None>
Min Conc: <None>

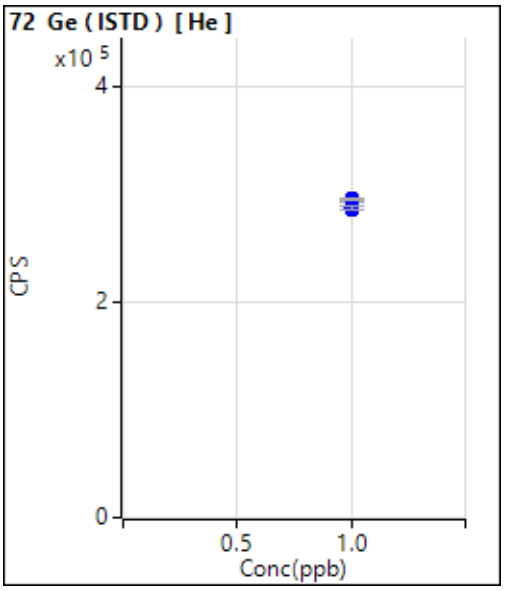
Calibration for 183_ICV.d



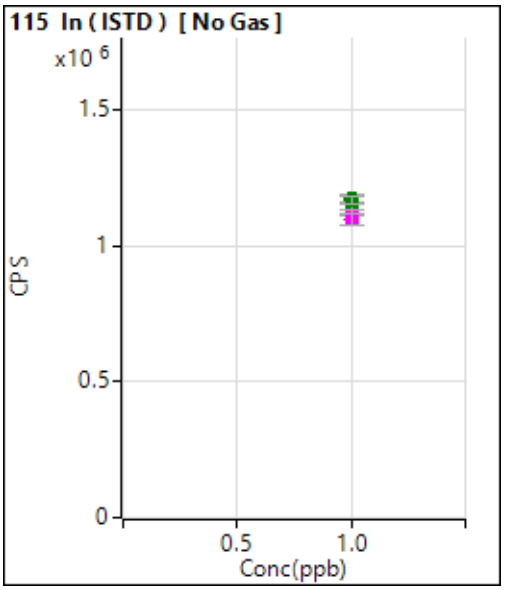
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		576643.55		P	0.5	
2	☐	1.000		575864.55		P	4.3	
3	☐	1.000		572855.46		P	1.5	
4	☐	1.000		578665.84		P	0.4	
5	☐	1.000		561866.75		P	0.1	
6	☐	1.000		545706.79		P	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		888395.66		P	1.1	
2	☐	1.000		885701.16		P	3.1	
3	☐	1.000		885457.90		P	1.3	
4	☐	1.000		892814.54		P	0.5	
5	☐	1.000		902536.57		P	0.4	
6	☐	1.000		873483.32		P	0.2	

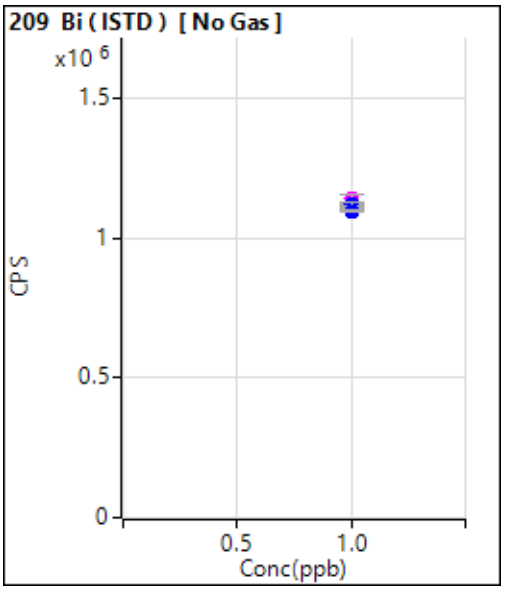


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		286216.33		P	0.1	
2	☐	1.000		296563.41		P	0.6	
3	☐	1.000		294194.42		P	0.8	
4	☐	1.000		293253.73		P	0.7	
5	☐	1.000		295899.88		P	0.9	
6	☐	1.000		287462.19		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1132545.80		M	3.7	
2	☐	1.000		1160229.98		A	5.3	
3	☐	1.000		1154459.69		A	4.2	
4	☐	1.000		1174927.58		A	2.4	
5	☐	1.000		1169173.58		A	2.1	
6	☐	1.000		1096948.53		M	3.6	

Calibration for 183_ICV.d



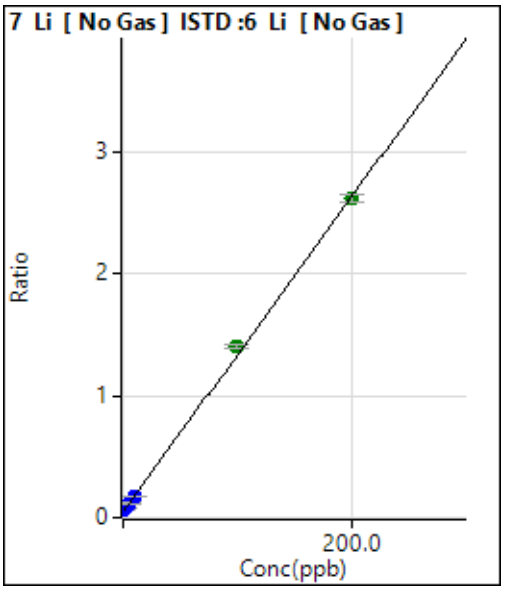
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1108342.67		P	0.8	
2	☐	1.000		1144508.68		M	2.9	
3	☐	1.000		1113087.30		P	1.1	
4	☐	1.000		1124894.31		P	0.7	
5	☐	1.000		1123868.45		P	1.0	
6	☐	1.000		1099099.36		P	0.5	

Calibration for 020_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	07/20/2022 11:26:20
2	010CALS.d	2/10/200	07/20/2022 11:28:36
3	011CALS.d	5/25/500	07/20/2022 11:30:51
4	012CALS.d	10/50/100	07/20/2022 11:33:05
5	017CALS.d	100/500/10K	07/20/2022 11:47:02
6	018CALS.d	200/1000/20K	07/20/2022 11:49:06

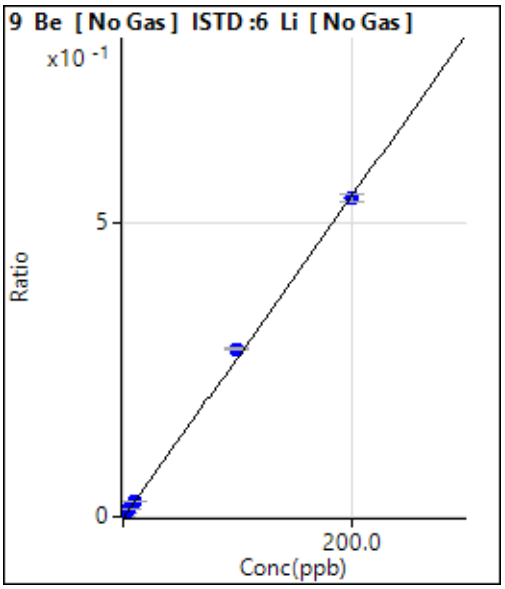
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35467.95	0.0612	P	0.1	
2	☐	2.000	1.703	49218.97	0.0832	P	0.9	-14.9
3	☐	5.000	4.388	70828.54	0.1179	P	0.9	-12.2
4	☐	10.000	9.097	107555.43	0.1788	P	0.9	-9.0
5	☐	100.000	104.181	814513.56	1.4081	A	2.5	4.2
6	☐	200.000	197.973	1565047.74	2.6206	A	2.6	-1.0

y = 0.0129 * x + 0.0612
R = 0.9997
DL = 0.01504 ppb
BEC = 4.732 ppb

Weight: <None>
Min Conc: <None>

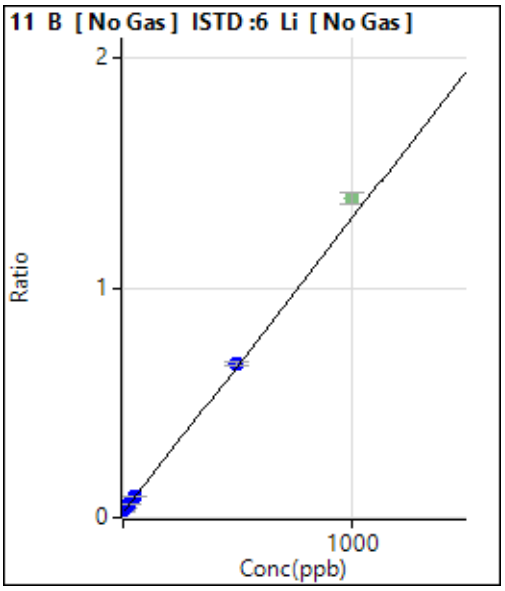


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	31.3	
2	☐	2.000	1.954	3218.73	0.0054	P	5.3	-2.3
3	☐	5.000	4.761	7878.93	0.0131	P	2.1	-4.8
4	☐	10.000	9.860	16276.14	0.0271	P	1.7	-1.4
5	☐	100.000	104.279	165019.88	0.2852	P	0.2	4.3
6	☐	200.000	197.874	323198.11	0.5411	P	1.9	-1.1

y = 0.0027 * x + 9.7830E-005
R = 0.9997
DL = 0.03356 ppb
BEC = 0.03578 ppb

Weight: <None>
Min Conc: <None>

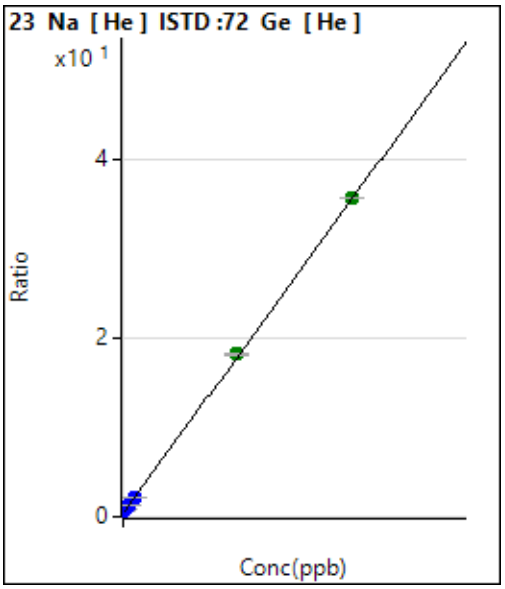
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16990.38	0.0293	P	0.5	
2	☐	10.000	9.158	24263.21	0.0410	P	8.6	-8.4
3	☐	25.000	21.051	33757.20	0.0562	P	1.8	-15.8
4	☐	50.000	46.725	53538.25	0.0890	P	1.3	-6.6
5	☐	500.000	500.542	386818.68	0.6687	P	3.1	0.1
6	☑	1000.000		829455.56	1.3893	A	4.0	

y = 0.0013 * x + 0.0293
R = 1.0000
DL = 0.3122 ppb
BEC = 22.94 ppb

Weight: <None>
Min Conc: <None>

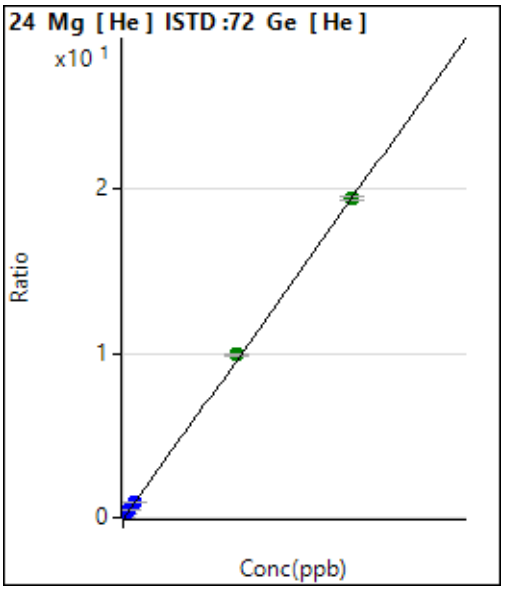


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	164287.96	0.5766	P	0.6	
2	☐	200.000	170.842	258803.67	0.8774	P	0.4	-14.6
3	☐	500.000	436.915	397312.47	1.3460	P	0.3	-12.6
4	☐	1000.000	897.715	641621.27	2.1575	P	1.1	-10.2
5	☐	10000.00	10027.13	5319771.80	18.2355	A	1.2	0.3
6	☐	20000.00	19993.41	10199744.8	35.7873	A	0.2	0.0

y = 0.0018 * x + 0.5766
R = 1.0000
DL = 6.195 ppb
BEC = 327.4 ppb

Weight: <None>
Min Conc: <None>

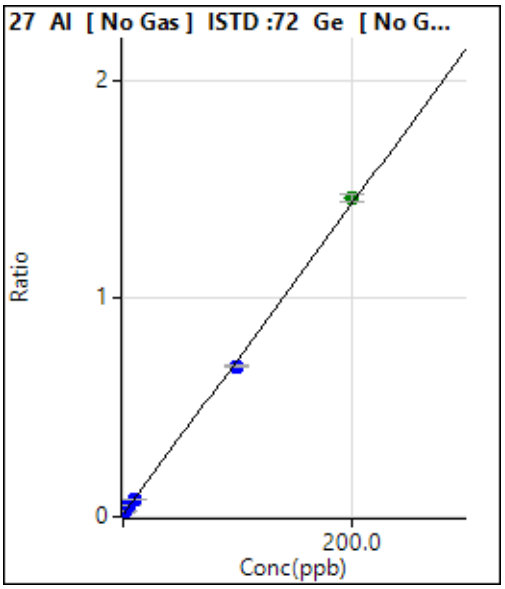
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0007	P	29.1	
2	☐	200.000	186.480	53974.67	0.1830	P	1.6	-6.8
3	☐	500.000	466.818	134914.35	0.4571	P	0.4	-6.6
4	☐	1000.000	942.843	274324.60	0.9225	P	1.5	-5.7
5	☐	10000.00	10180.72	2903811.94	9.9539	A	1.1	1.8
6	☐	20000.00	19913.46	5548942.63	19.4692	A	1.4	-0.4

y = 9.7766E-004 * x + 6.7814E-004
R = 0.9999
DL = 0.6062 ppb
BEC = 0.6936 ppb

Weight: <None>
Min Conc: <None>

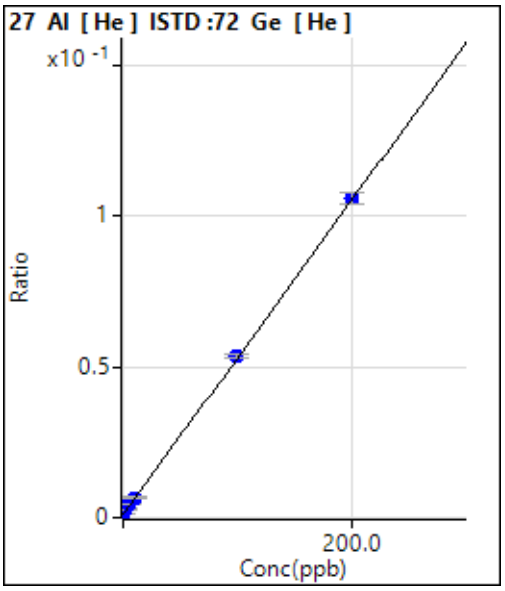


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15916.03	0.0181	P	2.5	
2	☐	2.000	1.769	27494.07	0.0307	P	0.9	-11.6
3	☐	5.000	5.317	51134.28	0.0559	P	0.9	6.3
4	☐	10.000	8.983	74894.19	0.0820	P	1.2	-10.2
5	☐	100.000	94.129	614947.07	0.6876	P	1.4	-5.9
6	☐	200.000	202.981	1280085.01	1.4619	A	2.7	1.5

y = 0.0071 * x + 0.0181
R = 0.9994
DL = 0.193 ppb
BEC = 2.542 ppb

Weight: <None>
Min Conc: <None>

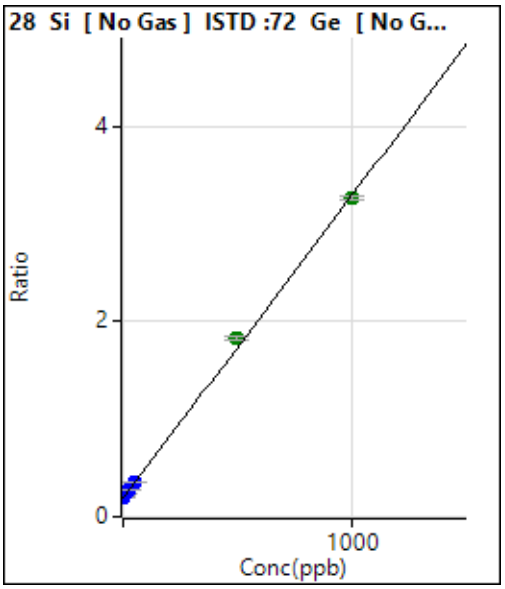
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0015	P	9.1	
2	☐	2.000	2.218	790.04	0.0027	P	22.9	10.9
3	☐	5.000	5.746	1333.42	0.0045	P	7.0	14.9
4	☐	10.000	9.681	1953.51	0.0066	P	11.0	-3.2
5	☐	100.000	99.502	15582.26	0.0534	P	2.1	-0.5
6	☐	200.000	200.244	30193.05	0.1059	P	3.3	0.1

y = 5.2148E-004 * x + 0.0015
R = 1.0000
DL = 0.7965 ppb
BEC = 2.917 ppb

Weight: <None>
Min Conc: <None>

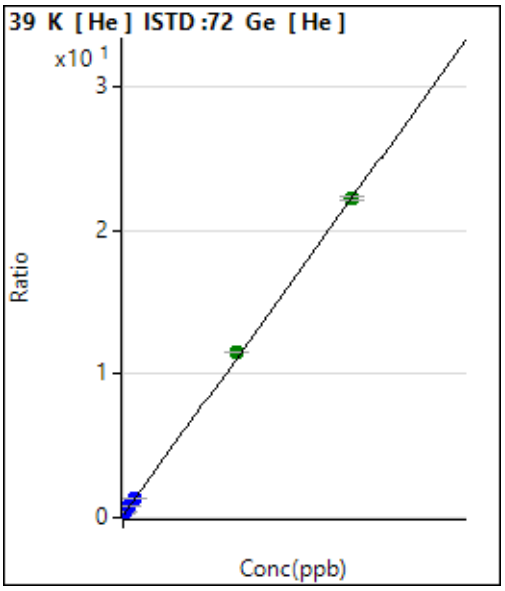


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181850.04	0.2066	P	1.1	
2	☐	10.000	8.691	209425.99	0.2336	P	0.2	-13.1
3	☐	25.000	24.176	257545.31	0.2816	P	0.2	-3.3
4	☐	50.000	45.754	318398.39	0.3485	P	1.1	-8.5
5	☐	500.000	525.756	1642990.96	1.8372	A	1.9	5.2
6	☐	1000.000	987.368	2862369.75	3.2688	A	0.6	-1.3

y = 0.0031 * x + 0.2066
R = 0.9995
DL = 2.133 ppb
BEC = 66.61 ppb

Weight: <None>
Min Conc: <None>

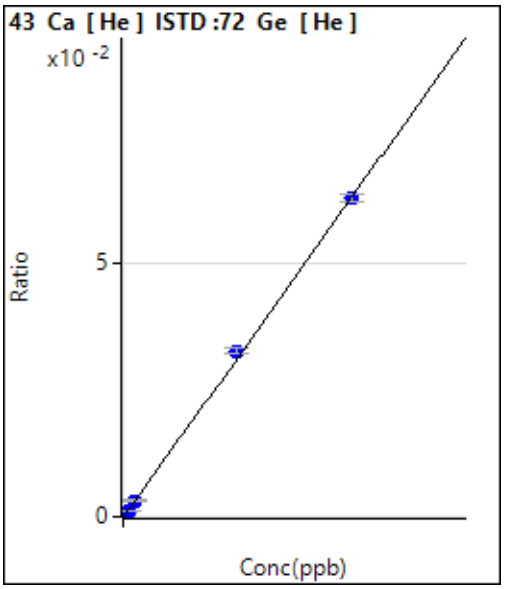
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77058.22	0.2704	P	2.0	
2	☐	200.000	177.477	137586.80	0.4665	P	0.6	-11.3
3	☐	500.000	455.224	228252.37	0.7733	P	0.9	-9.0
4	☐	1000.000	924.398	384086.02	1.2915	P	1.0	-7.6
5	☐	10000.00	10210.47	3369392.76	11.5491	A	0.7	2.1
6	☐	20000.00	19899.88	6342019.70	22.2522	A	0.7	-0.5

y = 0.0011 * x + 0.2704
R = 0.9999
DL = 14.82 ppb
BEC = 244.8 ppb

Weight: <None>
Min Conc: <None>

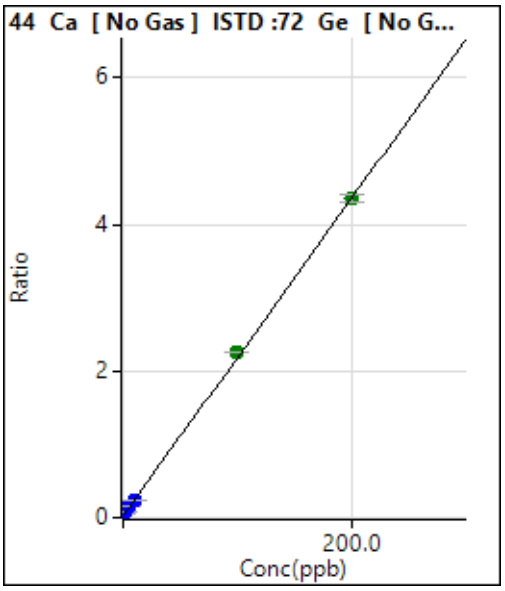


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.3	
2	☐	200.000	185.006	203.34	0.0007	P	15.7	-7.5
3	☐	500.000	385.158	390.01	0.0013	P	0.2	-23.0
4	☐	1000.000	953.240	926.72	0.0031	P	11.1	-4.7
5	☐	10000.00	10282.31	9503.44	0.0326	P	3.4	2.8
6	☐	20000.00	19864.20	17905.27	0.0628	P	2.5	-0.7

y = 3.1576E-006 * x + 1.0512E-004
R = 0.9998
DL = 66.27 ppb
BEC = 33.29 ppb

Weight: <None>
Min Conc: <None>

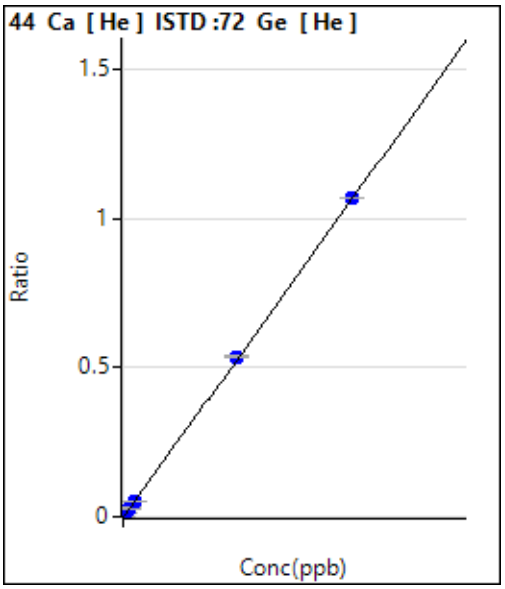
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41308.90	0.0469	P	2.2	
2	☐	2.000	1.809	77229.47	0.0861	P	1.0	-9.5
3	☐	5.000	4.736	136766.87	0.1495	P	0.6	-5.3
4	☐	10.000	9.305	227066.14	0.2485	P	0.4	-7.0
5	☐	100.000	102.208	2022467.89	2.2613	A	0.7	2.2
6	☐	200.000	198.939	3815297.13	4.3570	A	2.2	-0.5

y = 0.0217 * x + 0.0469
R = 0.9999
DL = 0.1436 ppb
BEC = 2.166 ppb

Weight: <None>
Min Conc: <None>

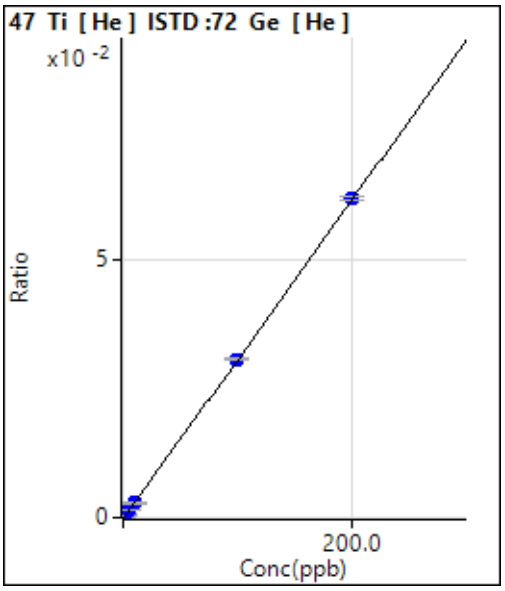


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0026	P	11.7	
2	☐	200.000	180.459	3597.20	0.0122	P	3.1	-9.8
3	☐	500.000	490.097	8479.41	0.0287	P	5.2	-2.0
4	☐	1000.000	953.108	15892.78	0.0534	P	3.2	-4.7
5	☐	10000.00	10000.76	156495.16	0.5364	P	1.1	0.0
6	☐	20000.00	20002.40	305064.14	1.0704	P	0.3	0.0

y = 5.3384E-005 * x + 0.0026
R = 1.0000
DL = 16.78 ppb
BEC = 47.99 ppb

Weight: <None>
Min Conc: <None>

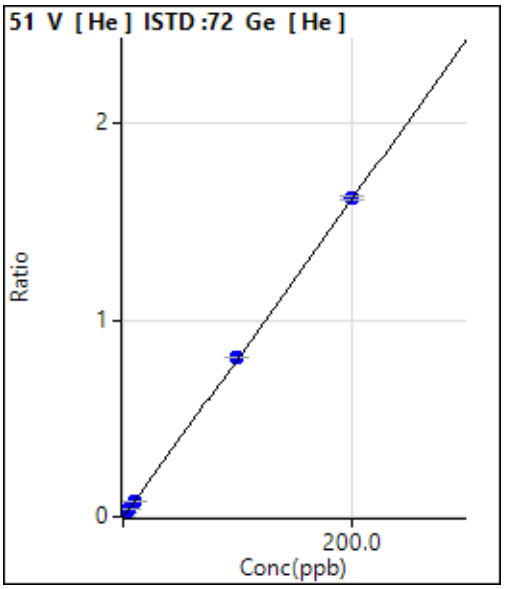
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	2.000	1.745	170.00	0.0006	P	36.6	-12.8
3	☐	5.000	4.329	406.68	0.0014	P	6.1	-13.4
4	☐	10.000	9.251	863.37	0.0029	P	13.5	-7.5
5	☐	100.000	99.487	9013.10	0.0309	P	1.9	-0.5
6	☐	200.000	200.313	17718.37	0.0622	P	1.7	0.2

y = 3.1016E-004 * x + 3.5087E-005
R = 1.0000
DL = 0.3401 ppb
BEC = 0.1131 ppb

Weight: <None>
Min Conc: <None>

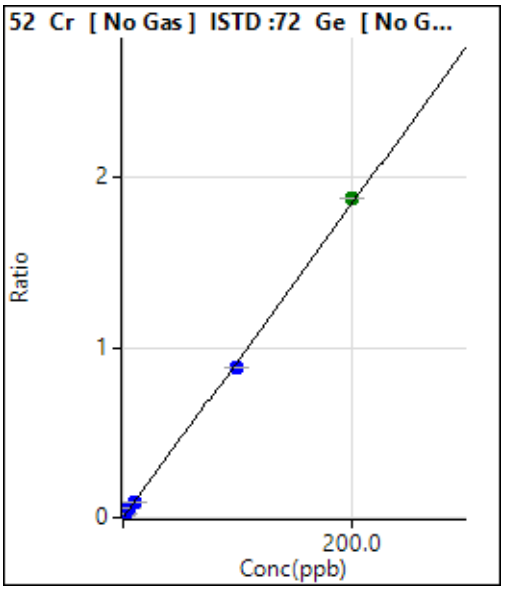


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0033	P	2.1	
2	☐	2.000	1.952	5642.30	0.0191	P	0.9	-2.4
3	☐	5.000	4.758	12342.27	0.0418	P	2.1	-4.8
4	☐	10.000	9.449	23711.62	0.0797	P	1.7	-5.5
5	☐	100.000	99.946	236700.40	0.8114	P	0.6	-0.1
6	☐	200.000	200.061	461921.18	1.6207	P	0.9	0.0

y = 0.0081 * x + 0.0033
R = 1.0000
DL = 0.02611 ppb
BEC = 0.4139 ppb

Weight: <None>
Min Conc: <None>

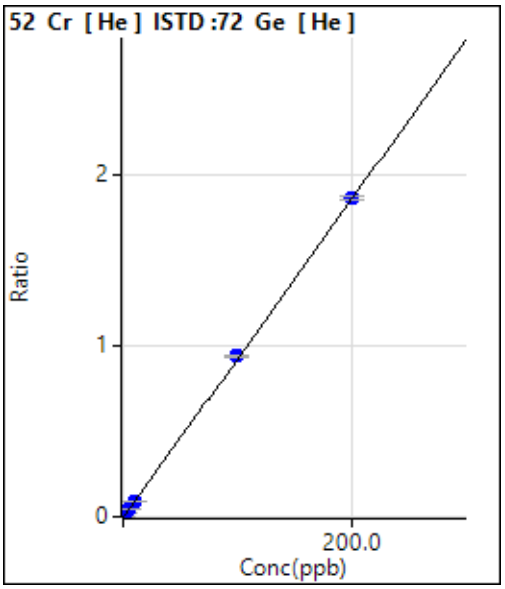
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8329.32	0.0095	P	1.6	
2	☐	2.000	1.851	23804.31	0.0265	P	1.4	-7.5
3	☐	5.000	4.539	46974.04	0.0514	P	0.7	-9.2
4	☐	10.000	9.282	86924.70	0.0951	P	1.1	-7.2
5	☐	100.000	94.709	790317.41	0.8837	P	1.0	-5.3
6	☐	200.000	202.694	1646629.61	1.8804	A	0.6	1.3

y = 0.0092 * x + 0.0095
R = 0.9995
DL = 0.04824 ppb
BEC = 1.025 ppb

Weight: <None>
Min Conc: <None>

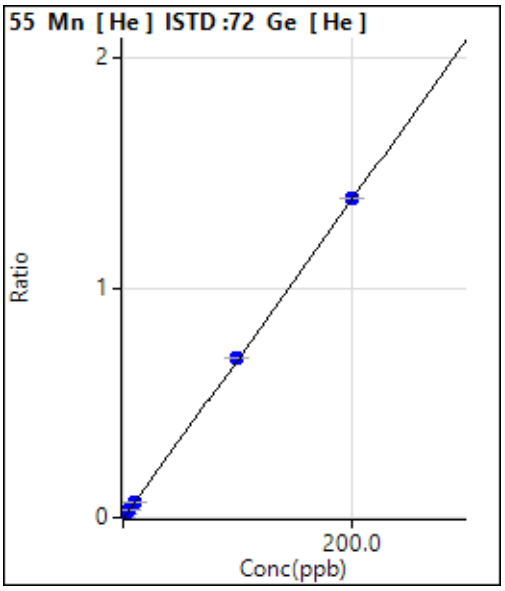


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.39	0.0033	P	8.5	
2	☐	2.000	1.949	6331.58	0.0215	P	3.6	-2.5
3	☐	5.000	4.854	14307.70	0.0485	P	4.1	-2.9
4	☐	10.000	9.562	27431.03	0.0922	P	3.7	-4.4
5	☐	100.000	100.390	273272.72	0.9367	P	0.7	0.4
6	☐	200.000	199.831	530453.74	1.8612	P	0.8	-0.1

y = 0.0093 * x + 0.0033
R = 1.0000
DL = 0.092 ppb
BEC = 0.3598 ppb

Weight: <None>
Min Conc: <None>

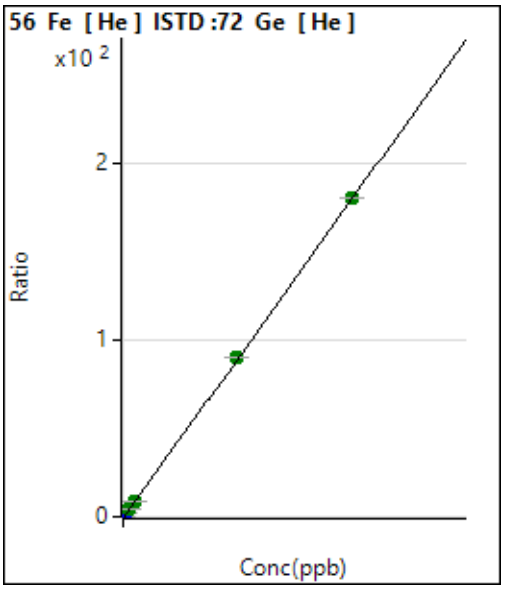
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0007	P	17.0	
2	☐	2.000	1.935	4180.71	0.0142	P	6.3	-3.3
3	☐	5.000	4.711	9880.40	0.0335	P	4.4	-5.8
4	☐	10.000	9.483	19817.99	0.0666	P	2.8	-5.2
5	☐	100.000	99.872	202736.91	0.6949	P	0.6	-0.1
6	☐	200.000	200.098	396621.28	1.3916	P	0.3	0.0

y = 0.0070 * x + 7.2528E-004
R = 1.0000
DL = 0.05311 ppb
BEC = 0.1043 ppb

Weight: <None>
Min Conc: <None>

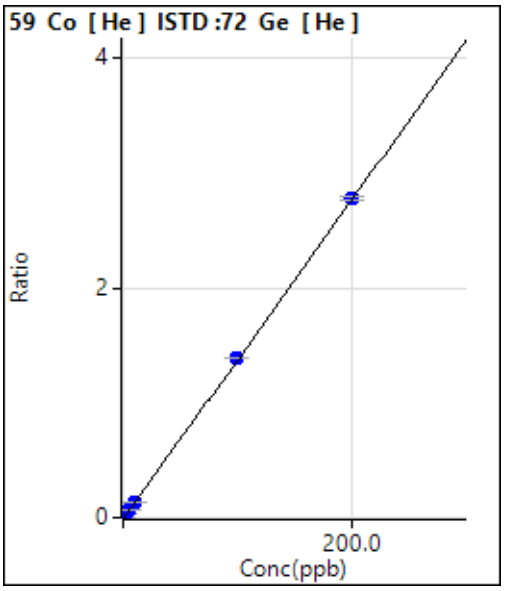


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7572.23	0.0266	P	3.2	
2	☐	200.000	185.551	502271.21	1.7029	P	1.2	-7.2
3	☐	500.000	497.258	1333887.04	4.5190	A	2.8	-0.5
4	☐	1000.000	1004.027	2705286.94	9.0973	A	2.6	0.4
5	☐	10000.00	10020.34	26418121.2	90.5541	A	0.2	0.2
6	☐	20000.00	19989.84	51478757.5	180.622	A	0.3	-0.1

y = 0.0090 * x + 0.0266
R = 1.0000
DL = 0.2834 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

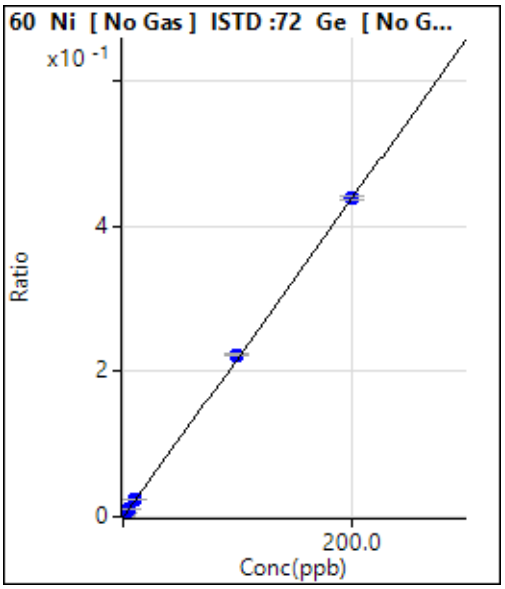
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.5	
2	☐	2.000	1.905	7822.37	0.0265	P	2.8	-4.8
3	☐	5.000	4.793	19674.44	0.0667	P	1.8	-4.1
4	☐	10.000	9.529	39387.22	0.1324	P	1.1	-4.7
5	☐	100.000	99.749	404311.58	1.3859	P	0.3	-0.3
6	☐	200.000	200.155	792549.88	2.7808	P	0.6	0.1

y = 0.0139 * x + 5.8556E-005
R = 1.0000
DL = 0.008792 ppb
BEC = 0.004215 ppb

Weight: <None>
Min Conc: <None>

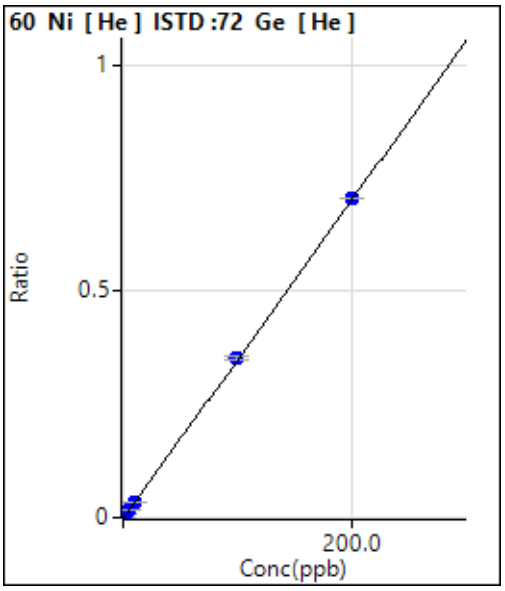


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1130.07	0.0013	P	10.5	
2	☐	2.000	1.832	4757.58	0.0053	P	1.4	-8.4
3	☐	5.000	4.747	10704.41	0.0117	P	1.7	-5.1
4	☐	10.000	10.125	21480.57	0.0235	P	1.4	1.2
5	☐	100.000	100.793	199037.86	0.2226	P	1.3	0.8
6	☐	200.000	199.605	384835.58	0.4395	P	1.4	-0.2

y = 0.0022 * x + 0.0013
R = 1.0000
DL = 0.1836 ppb
BEC = 0.5849 ppb

Weight: <None>
Min Conc: <None>

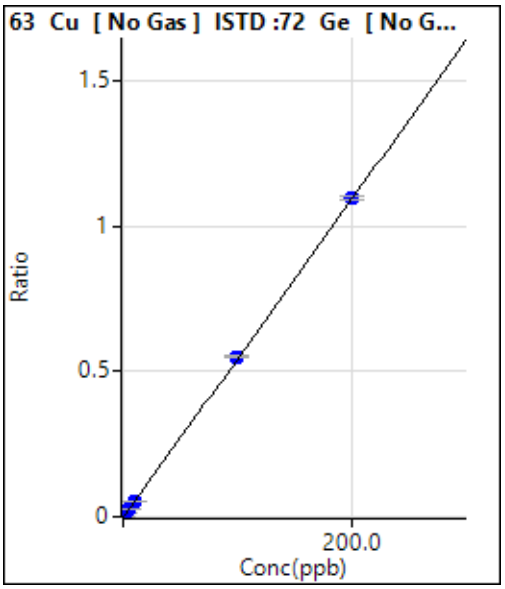
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0006	P	25.7	
2	☐	2.000	1.915	2173.55	0.0074	P	8.2	-4.2
3	☐	5.000	4.890	5264.45	0.0178	P	4.2	-2.2
4	☐	10.000	9.867	10510.87	0.0353	P	1.9	-1.3
5	☐	100.000	99.522	102336.12	0.3507	P	2.3	-0.5
6	☐	200.000	200.249	200962.18	0.7051	P	0.2	0.1

y = 0.0035 * x + 6.3203E-004
R = 1.0000
DL = 0.1386 ppb
BEC = 0.1797 ppb

Weight: <None>
Min Conc: <None>

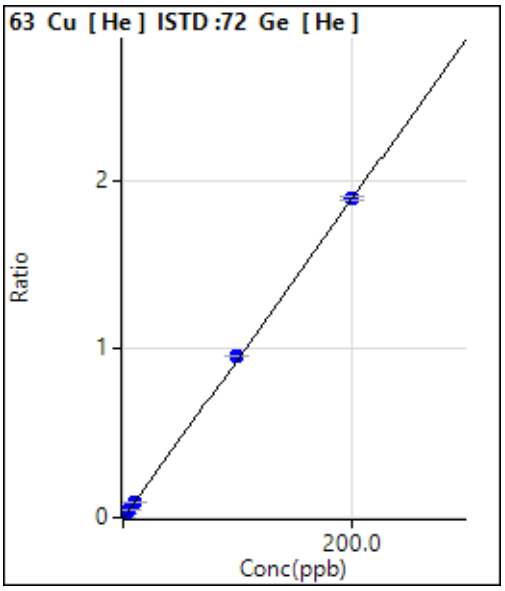


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2093.54	0.0024	P	6.6	
2	☐	2.000	1.971	11828.66	0.0132	P	1.8	-1.4
3	☐	5.000	4.869	26592.94	0.0291	P	3.2	-2.6
4	☐	10.000	9.764	51096.06	0.0559	P	0.7	-2.4
5	☐	100.000	100.224	493755.01	0.5520	P	0.3	0.2
6	☐	200.000	199.903	962106.18	1.0987	P	1.3	0.0

y = 0.0055 * x + 0.0024
R = 1.0000
DL = 0.0858 ppb
BEC = 0.4337 ppb

Weight: <None>
Min Conc: <None>

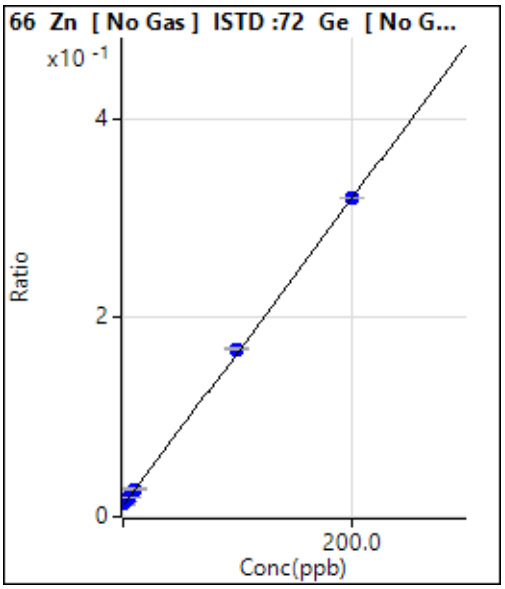
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0028	P	4.5	
2	☐	2.000	2.028	6498.33	0.0220	P	3.8	1.4
3	☐	5.000	4.949	14674.83	0.0497	P	4.8	-1.0
4	☐	10.000	9.513	27645.12	0.0930	P	1.6	-4.9
5	☐	100.000	100.709	279268.86	0.9572	P	0.7	0.7
6	☐	200.000	199.671	540113.27	1.8951	P	0.8	-0.2

y = 0.0095 * x + 0.0028
R = 1.0000
DL = 0.0398 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

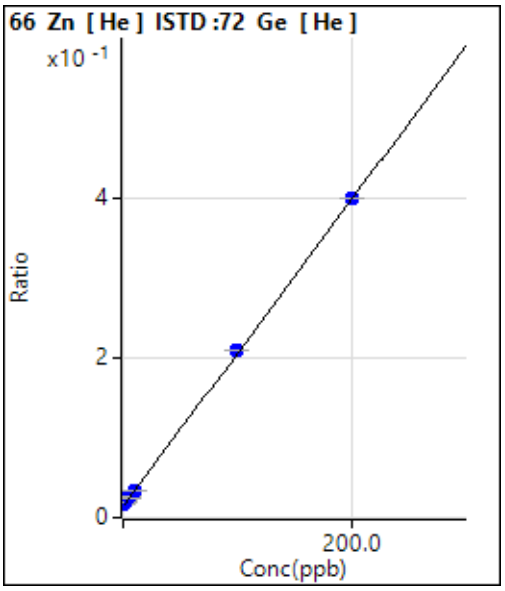


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11048.02	0.0126	P	2.7	
2	☐	2.000	2.150	14227.66	0.0159	P	2.3	7.5
3	☐	5.000	4.606	17975.47	0.0197	P	1.1	-7.9
4	☐	10.000	9.941	25474.27	0.0279	P	0.7	-0.6
5	☐	100.000	101.092	150652.98	0.1684	P	1.5	1.1
6	☐	200.000	199.465	280339.10	0.3202	P	0.5	-0.3

y = 0.0015 * x + 0.0126
R = 1.0000
DL = 0.6626 ppb
BEC = 8.139 ppb

Weight: <None>
Min Conc: <None>

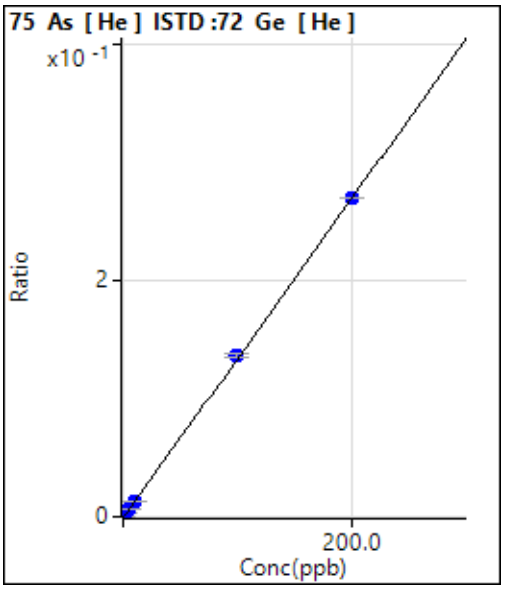
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4614.18	0.0162	P	3.3	
2	☐	2.000	2.179	6008.07	0.0204	P	3.6	9.0
3	☐	5.000	4.740	7462.18	0.0253	P	1.7	-5.2
4	☐	10.000	9.278	10103.97	0.0340	P	4.1	-7.2
5	☐	100.000	100.648	61007.10	0.2091	P	1.1	0.6
6	☐	200.000	199.717	113720.52	0.3990	P	0.5	-0.1

y = 0.0019 * x + 0.0162
R = 1.0000
DL = 0.8439 ppb
BEC = 8.448 ppb

Weight: <None>
Min Conc: <None>

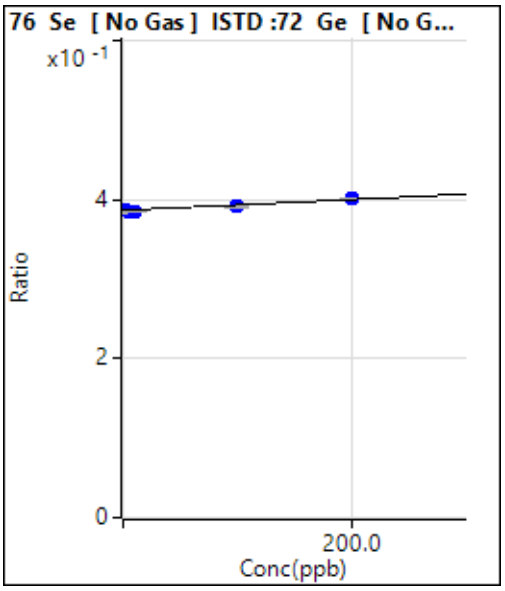


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.11	0.0003	P	13.5	
2	☐	2.000	1.809	806.70	0.0027	P	1.3	-9.6
3	☐	5.000	4.709	1966.82	0.0067	P	3.2	-5.8
4	☐	10.000	9.769	4019.52	0.0135	P	3.5	-2.3
5	☐	100.000	101.197	40073.77	0.1374	P	2.0	1.2
6	☐	200.000	199.422	77064.01	0.2704	P	0.5	-0.3

y = 0.0014 * x + 2.8473E-004
R = 1.0000
DL = 0.08512 ppb
BEC = 0.2102 ppb

Weight: <None>
Min Conc: <None>

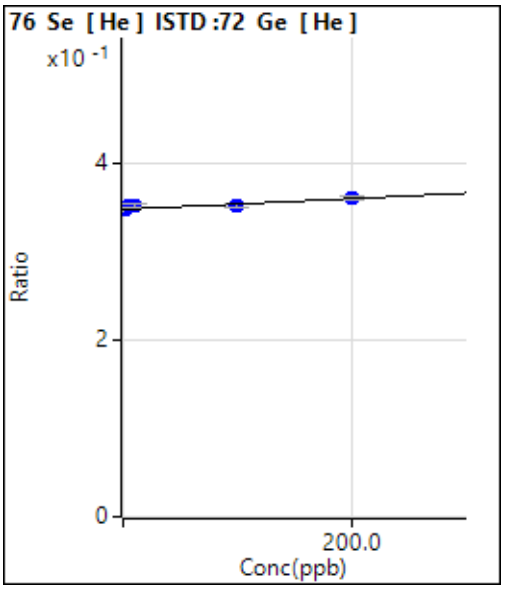
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340135.53	0.3864	P	0.2	
2	☐	2.000	1.615	346593.28	0.3865	P	0.5	-19.3
3	☐	5.000	-39.591	350968.52	0.3837	P	0.3	-891.8
4	☐	10.000	-22.074	351671.41	0.3849	P	0.4	-320.7
5	☐	100.000	63.515	349470.53	0.3907	P	0.6	-36.5
6	☐	200.000	220.965	351535.49	0.4014	P	0.5	10.5

y = 6.8039E-005 * x + 0.3864
R = 0.9712
DL = 37.32 ppb
BEC = 5679 ppb

Weight: <None>
Min Conc: <None>

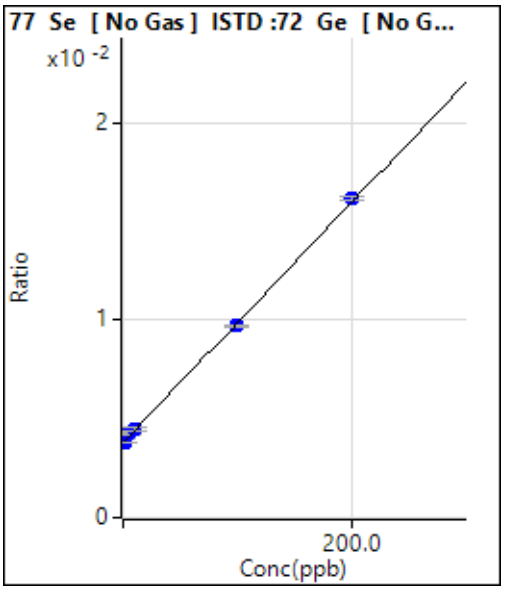


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99327.45	0.3486	P	1.2	
2	☐	2.000	-5.827	102715.53	0.3482	P	1.0	-391.3
3	☐	5.000	74.808	104271.14	0.3533	P	0.8	1396.2
4	☐	10.000	72.449	105006.20	0.3531	P	1.6	624.5
5	☐	100.000	70.638	102978.72	0.3530	P	1.2	-29.4
6	☐	200.000	209.892	103068.85	0.3616	P	1.2	4.9

y = 6.2131E-005 * x + 0.3486
R = 0.8760
DL = 203.6 ppb
BEC = 5611 ppb

Weight: <None>
Min Conc: <None>

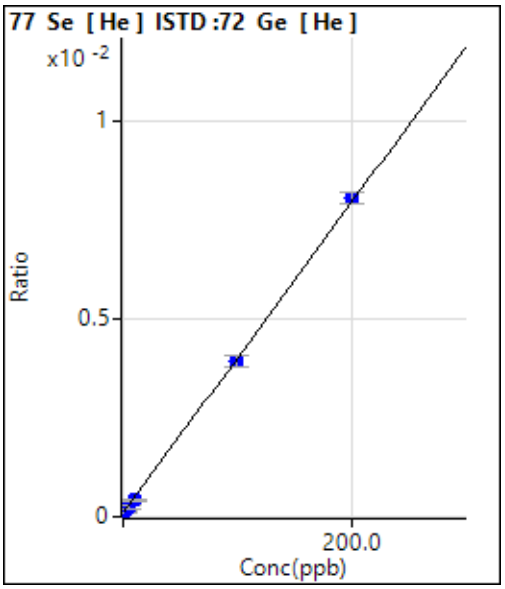
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3427.16	0.0039	P	2.8	
2	☐	2.000	-1.542	3407.17	0.0038	P	0.4	-177.1
3	☐	5.000	6.114	3900.64	0.0043	P	1.6	22.3
4	☐	10.000	9.802	4100.70	0.0045	P	3.5	-2.0
5	☐	100.000	95.699	8682.93	0.0097	P	1.6	-4.3
6	☐	200.000	202.168	14164.29	0.0162	P	1.2	1.1

y = 6.0750E-005 * x + 0.0039
R = 0.9995
DL = 5.321 ppb
BEC = 64.09 ppb

Weight: <None>
Min Conc: <None>

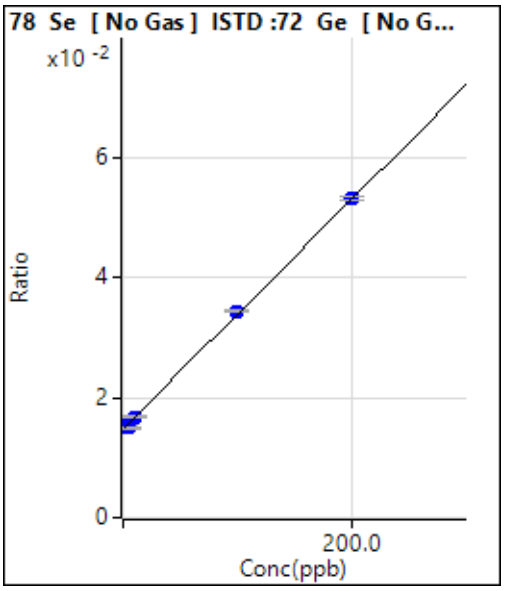


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	43.2	
2	☐	2.000	-0.121	40.00	0.0001	P	24.8	-106.0
3	☐	5.000	2.175	66.67	0.0002	P	37.7	-56.5
4	☐	10.000	7.270	126.67	0.0004	P	12.5	-27.3
5	☐	100.000	97.034	1153.40	0.0040	P	7.6	-3.0
6	☐	200.000	201.712	2300.24	0.0081	P	3.7	0.9

y = 3.9311E-005 * x + 1.4032E-004
R = 0.9998
DL = 4.626 ppb
BEC = 3.569 ppb

Weight: <None>
Min Conc: <None>

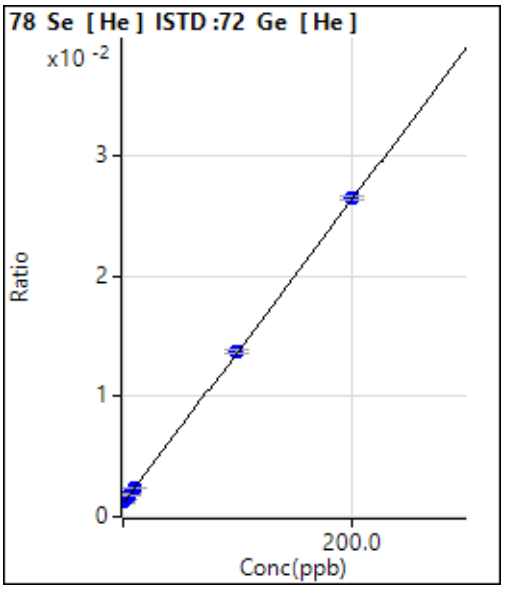
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13283.44	0.0151	P	2.3	
2	☐	2.000	2.487	13957.43	0.0156	P	2.0	24.4
3	☐	5.000	-0.649	13687.13	0.0150	P	3.1	-113.0
4	☐	10.000	8.805	15322.31	0.0168	P	3.0	-11.9
5	☐	100.000	101.061	30732.06	0.0344	P	0.7	1.1
6	☐	200.000	199.665	46550.52	0.0532	P	1.3	-0.2

y = 1.9066E-004 * x + 0.0151
R = 0.9996
DL = 5.56 ppb
BEC = 79.15 ppb

Weight: <None>
Min Conc: <None>

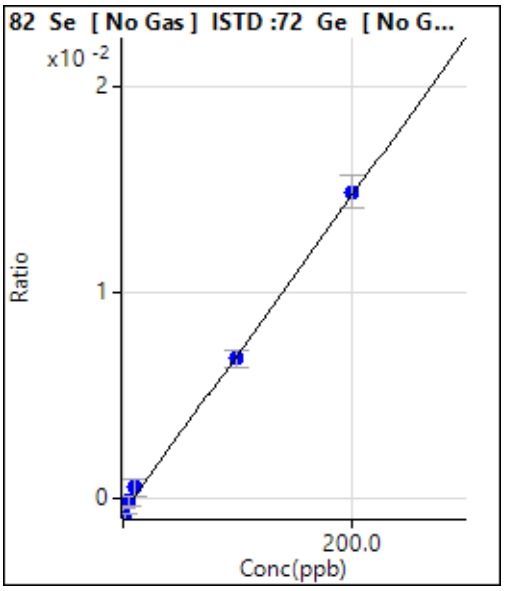


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	352.67	0.0012	P	9.8	
2	☐	2.000	1.441	418.68	0.0014	P	5.3	-27.9
3	☐	5.000	4.382	528.68	0.0018	P	8.7	-12.4
4	☐	10.000	9.045	708.02	0.0024	P	2.5	-9.5
5	☐	100.000	99.468	4028.61	0.0138	P	2.5	-0.5
6	☐	200.000	200.335	7568.81	0.0266	P	1.2	0.2

y = 1.2639E-004 * x + 0.0012
R = 1.0000
DL = 2.878 ppb
BEC = 9.791 ppb

Weight: <None>
Min Conc: <None>

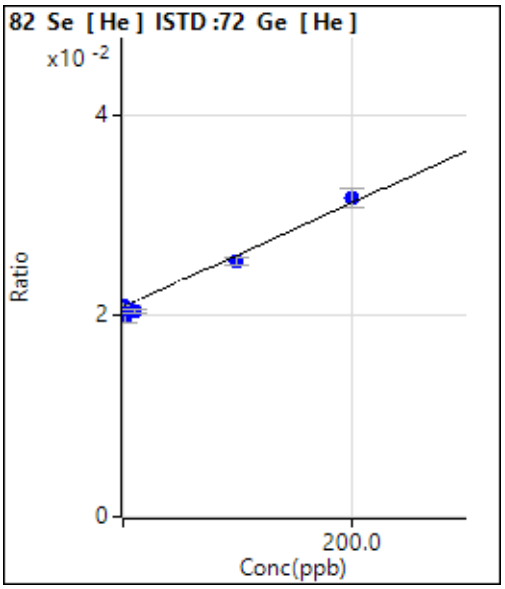
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-569.55	-0.0006	P	-53.0	
2	☐	2.000	-4.186	-869.28	-0.0010	P	-41.1	-309.3
3	☐	5.000	6.179	-158.52	-0.0002	P	-267.	23.6
4	☐	10.000	14.660	439.73	0.0005	P	172.7	46.6
5	☐	100.000	96.139	6030.53	0.0067	P	11.9	-3.9
6	☐	200.000	201.730	13022.02	0.0149	P	10.7	0.9

y = 7.6906E-005 * x - 6.4740E-004
R = 0.9988
DL = 13.39 ppb
BEC = -8.418 ppb

Weight: <None>
Min Conc: <None>

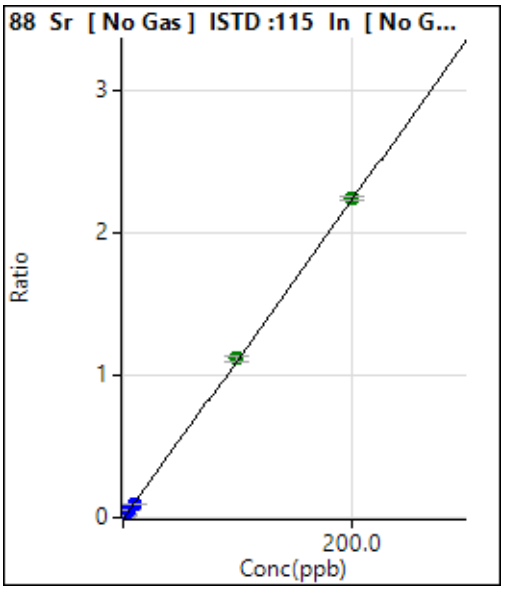


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5978.09	0.0210	P	2.4	
2	☐	2.000	-21.384	5861.38	0.0199	P	5.6	-1169.2
3	☐	5.000	-6.198	6098.18	0.0207	P	3.9	-224.0
4	☐	10.000	-10.045	6084.81	0.0205	P	2.2	-200.4
5	☐	100.000	86.340	7422.19	0.0254	P	2.6	-13.7
6	☐	200.000	208.346	9049.87	0.0318	P	5.5	4.2

y = 5.1708E-005 * x + 0.0210
R = 0.9947
DL = 29.27 ppb
BEC = 405.7 ppb

Weight: <None>
Min Conc: <None>

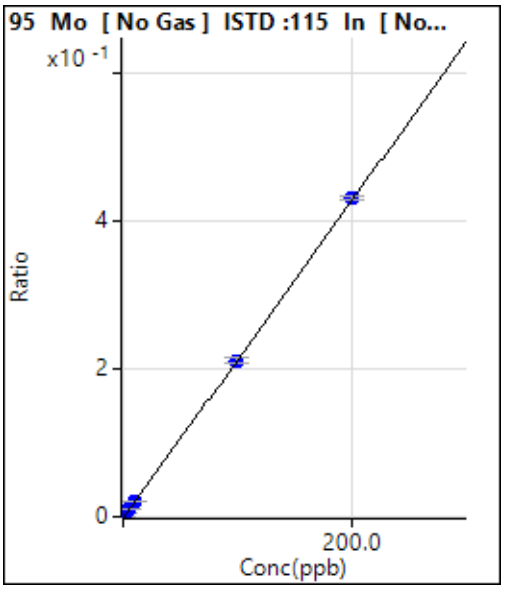
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0005	P	9.2	
2	☐	2.000	1.766	22041.72	0.0203	P	2.2	-11.7
3	☐	5.000	4.509	60037.98	0.0509	P	3.0	-9.8
4	☐	10.000	8.456	112859.20	0.0951	P	1.3	-15.4
5	☐	100.000	99.649	1223557.59	1.1148	A	3.3	-0.4
6	☐	200.000	200.267	2379611.89	2.2400	A	1.7	0.1

y = 0.0112 * x + 5.1424E-004
R = 1.0000
DL = 0.01272 ppb
BEC = 0.04599 ppb

Weight: <None>
Min Conc: <None>

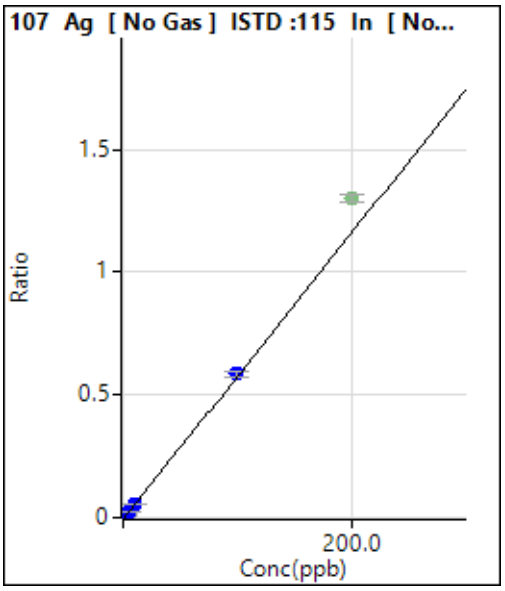


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	86.6	
2	☐	2.000	1.899	4464.16	0.0041	P	1.3	-5.0
3	☐	5.000	4.351	11054.78	0.0094	P	5.6	-13.0
4	☐	10.000	9.095	23247.31	0.0196	P	0.6	-9.0
5	☐	100.000	98.509	232519.11	0.2119	P	4.0	-1.5
6	☐	200.000	200.808	458857.01	0.4319	P	0.7	0.4

y = 0.0022 * x + 1.8921E-005
R = 1.0000
DL = 0.02285 ppb
BEC = 0.008796 ppb

Weight: <None>
Min Conc: <None>

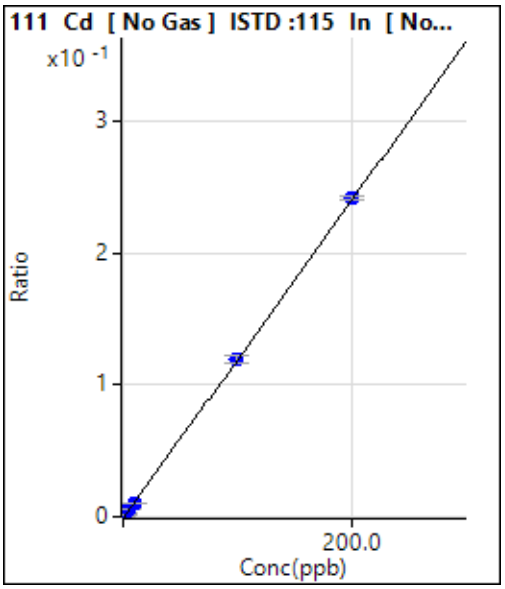
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	650.03	0.0006	P	7.8	
2	☐	2.000	1.941	12976.54	0.0119	P	3.1	-3.0
3	☐	5.000	4.524	31811.93	0.0270	P	2.5	-9.5
4	☐	10.000	9.123	63870.56	0.0538	P	0.7	-8.8
5	☐	100.000	100.113	641179.73	0.5843	P	3.8	0.1
6	☑	200.000		1381627.32	1.3006	A	2.1	

y = 0.0058 * x + 6.1152E-004
R = 1.0000
DL = 0.02442 ppb
BEC = 0.1049 ppb

Weight: <None>
Min Conc: <None>

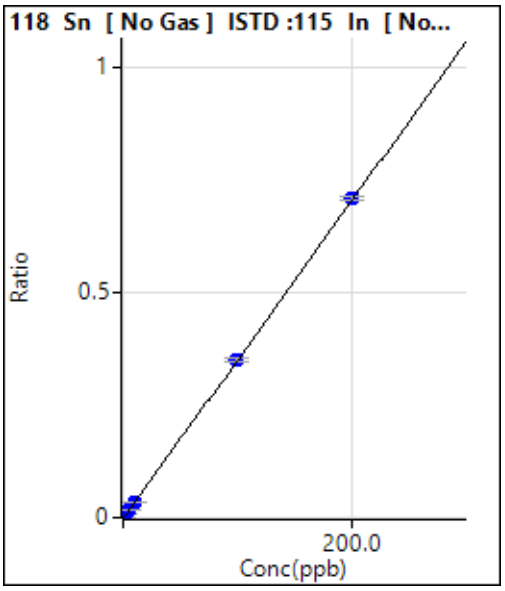


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.822	2396.93	0.0022	P	11.0	-8.9
3	☐	5.000	4.572	6511.73	0.0055	P	3.0	-8.6
4	☐	10.000	8.913	12773.06	0.0108	P	2.1	-10.9
5	☐	100.000	99.005	131086.48	0.1194	P	3.8	-1.0
6	☐	200.000	200.564	257048.49	0.2420	P	1.1	0.3

y = 0.0012 * x + 6.2649E-006
R = 1.0000
DL = 0.01349 ppb
BEC = 0.005193 ppb

Weight: <None>
Min Conc: <None>

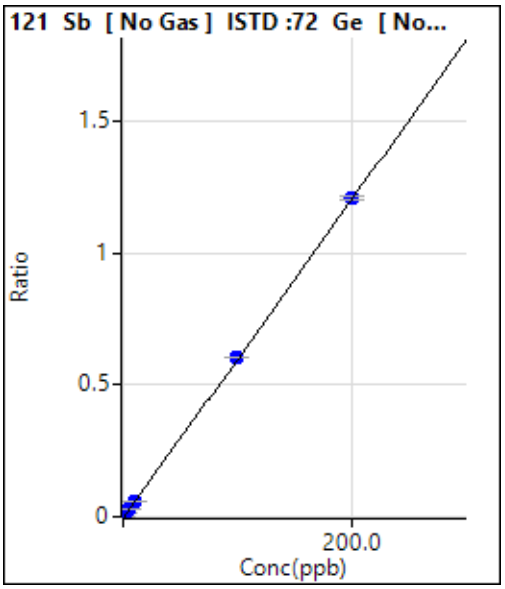
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.08	0.0011	P	8.4	
2	☐	2.000	1.972	8783.07	0.0081	P	1.1	-1.4
3	☐	5.000	4.359	19471.41	0.0165	P	0.6	-12.8
4	☐	10.000	8.959	38917.93	0.0328	P	1.7	-10.4
5	☐	100.000	98.962	385279.17	0.3510	P	3.4	-1.0
6	☐	200.000	200.588	754690.04	0.7104	P	0.7	0.3

y = 0.0035 * x + 0.0011
R = 1.0000
DL = 0.07837 ppb
BEC = 0.3116 ppb

Weight: <None>
Min Conc: <None>

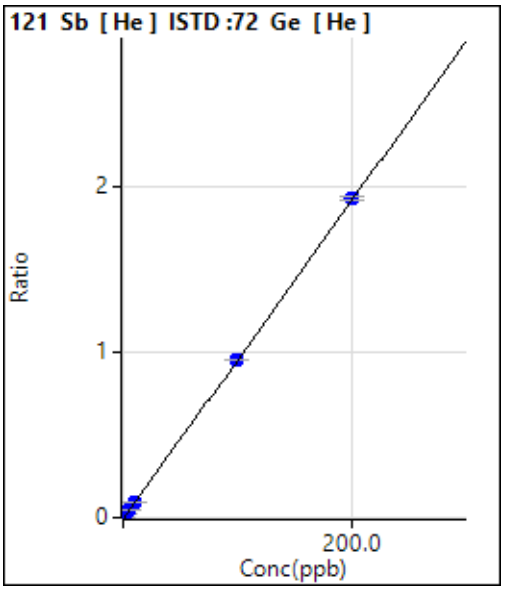


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	363.35	0.0004	P	22.2	
2	☐	2.000	1.926	10791.31	0.0120	P	4.2	-3.7
3	☐	5.000	4.795	26841.05	0.0293	P	2.2	-4.1
4	☐	10.000	9.720	53967.66	0.0591	P	0.6	-2.8
5	☐	100.000	99.844	539271.95	0.6029	P	0.6	-0.2
6	☐	200.000	200.098	1057720.85	1.2079	P	0.7	0.0

y = 0.0060 * x + 4.1282E-004
R = 1.0000
DL = 0.04548 ppb
BEC = 0.06841 ppb

Weight: <None>
Min Conc: <None>

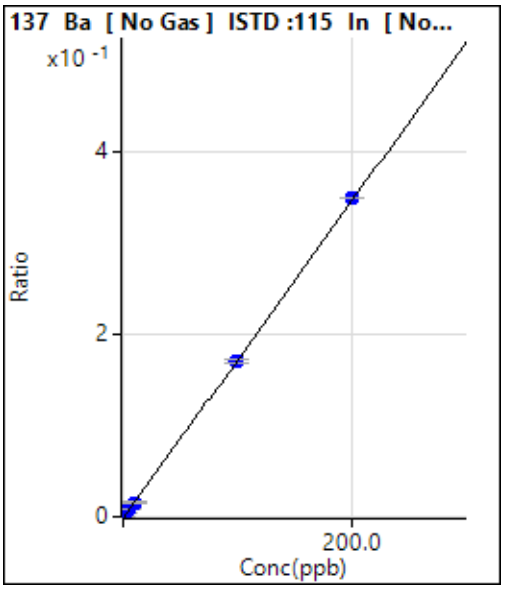
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0009	P	36.9	
2	☐	2.000	1.901	5651.32	0.0192	P	2.5	-4.9
3	☐	5.000	4.747	13717.39	0.0465	P	1.7	-5.1
4	☐	10.000	9.436	27205.20	0.0915	P	0.7	-5.6
5	☐	100.000	99.125	277821.51	0.9523	P	0.6	-0.9
6	☐	200.000	200.473	548641.67	1.9250	P	0.8	0.2

y = 0.0096 * x + 9.1294E-004
R = 1.0000
DL = 0.1052 ppb
BEC = 0.09512 ppb

Weight: <None>
Min Conc: <None>

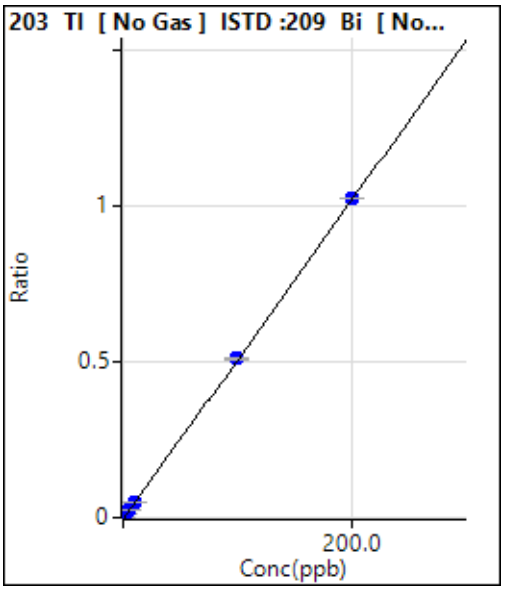


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	54.3	
2	☐	2.000	1.946	3817.31	0.0035	P	3.1	-2.7
3	☐	5.000	4.437	9243.50	0.0078	P	4.3	-11.3
4	☐	10.000	8.950	18636.96	0.0157	P	3.0	-10.5
5	☐	100.000	98.095	187481.52	0.1708	P	3.3	-1.9
6	☐	200.000	201.020	371723.32	0.3499	P	0.4	0.5

y = 0.0017 * x + 1.2276E-004
R = 0.9999
DL = 0.115 ppb
BEC = 0.07055 ppb

Weight: <None>
Min Conc: <None>

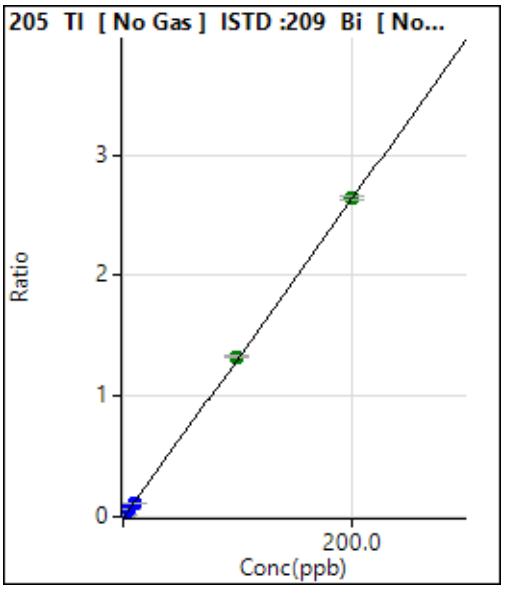
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	45.4	
2	☐	2.000	1.939	10898.26	0.0100	P	3.0	-3.0
3	☐	5.000	4.692	26605.35	0.0241	P	1.7	-6.2
4	☐	10.000	9.670	55027.94	0.0495	P	1.7	-3.3
5	☐	100.000	99.603	553811.97	0.5093	P	0.4	-0.4
6	☐	200.000	200.223	1098394.77	1.0237	P	0.4	0.1

y = 0.0051 * x + 7.8411E-005
R = 1.0000
DL = 0.02088 ppb
BEC = 0.01534 ppb

Weight: <None>
Min Conc: <None>

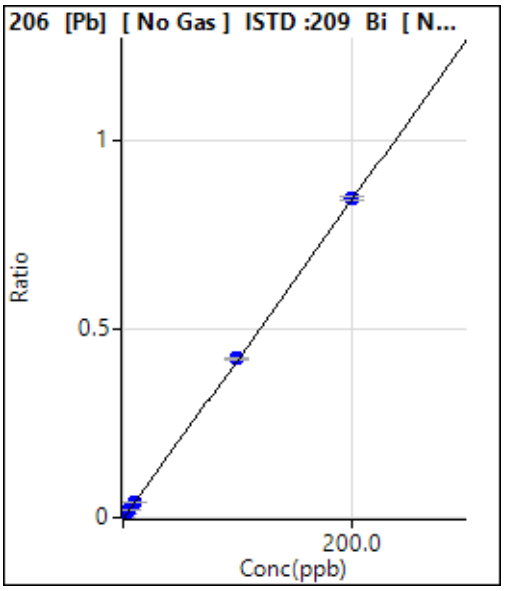


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	13.8	
2	☐	2.000	1.771	25793.72	0.0236	P	1.9	-11.5
3	☐	5.000	4.405	64643.90	0.0585	P	1.8	-11.9
4	☐	10.000	8.896	130928.72	0.1178	P	1.3	-11.0
5	☐	100.000	100.333	1442239.09	1.3262	A	0.7	0.3
6	☐	200.000	199.906	2835298.50	2.6422	A	1.4	0.0

y = 0.0132 * x + 2.4470E-004
R = 1.0000
DL = 0.007651 ppb
BEC = 0.01852 ppb

Weight: <None>
Min Conc: <None>

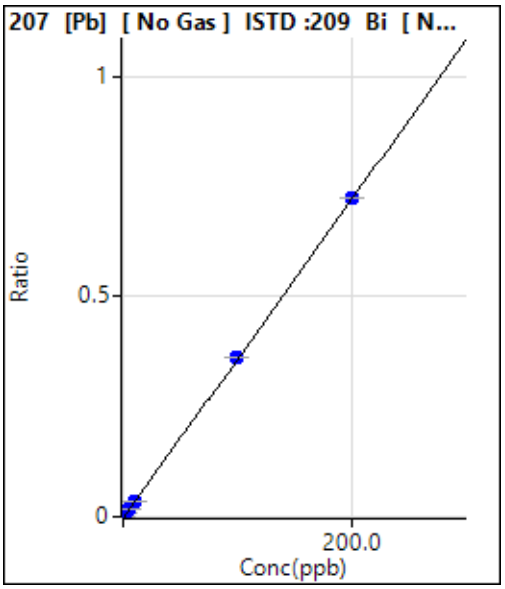
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0004	P	11.9	
2	☐	2.000	1.968	9493.79	0.0087	P	0.9	-1.6
3	☐	5.000	4.820	22981.48	0.0208	P	2.1	-3.6
4	☐	10.000	9.618	45687.35	0.0411	P	2.6	-3.8
5	☐	100.000	99.592	459195.54	0.4223	P	0.4	-0.4
6	☐	200.000	200.228	910503.61	0.8486	P	0.8	0.1

y = 0.0042 * x + 3.6711E-004
R = 1.0000
DL = 0.03081 ppb
BEC = 0.08666 ppb

Weight: <None>
Min Conc: <None>

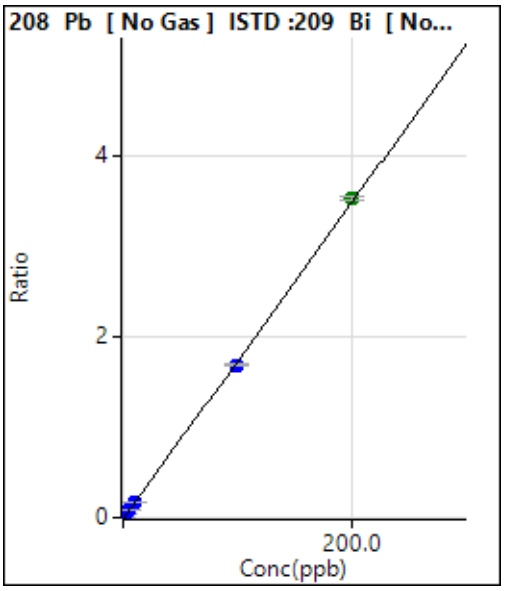


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	310.01	0.0003	P	11.1	
2	☐	2.000	1.955	8039.41	0.0074	P	2.8	-2.2
3	☐	5.000	4.776	19442.19	0.0176	P	3.7	-4.5
4	☐	10.000	9.521	38626.70	0.0348	P	2.9	-4.8
5	☐	100.000	100.149	394588.86	0.3628	P	0.3	0.1
6	☐	200.000	199.955	777014.99	0.7241	P	0.4	0.0

y = 0.0036 * x + 2.9176E-004
R = 1.0000
DL = 0.02677 ppb
BEC = 0.0806 ppb

Weight: <None>
Min Conc: <None>

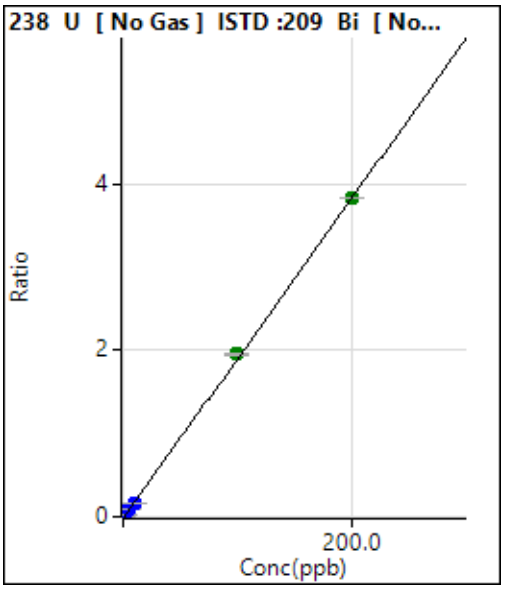
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1806.77	0.0017	P	9.4	
2	☐	2.000	1.840	36975.29	0.0339	P	2.6	-8.0
3	☐	5.000	4.624	91346.61	0.0826	P	1.7	-7.5
4	☐	10.000	9.247	181722.84	0.1635	P	1.4	-7.5
5	☐	100.000	96.337	1835045.95	1.6874	P	0.7	-3.7
6	☐	200.000	201.880	3792152.63	3.5343	A	0.9	0.9

y = 0.0175 * x + 0.0017
R = 0.9998
DL = 0.02748 ppb
BEC = 0.09719 ppb

Weight: <None>
Min Conc: <None>

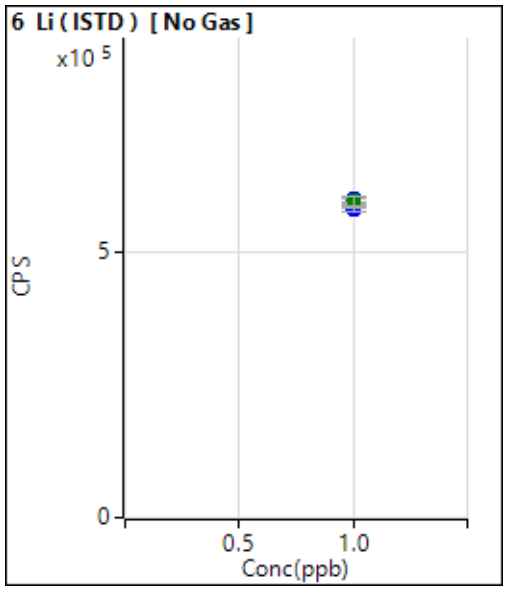


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.3	
2	☐	2.000	1.739	36464.68	0.0334	P	1.6	-13.1
3	☐	5.000	4.461	94795.56	0.0857	P	1.9	-10.8
4	☐	10.000	8.954	191259.99	0.1721	P	1.0	-10.5
5	☐	100.000	101.548	2122369.40	1.9517	A	1.0	1.5
6	☐	200.000	199.294	4109980.57	3.8303	A	0.6	-0.4

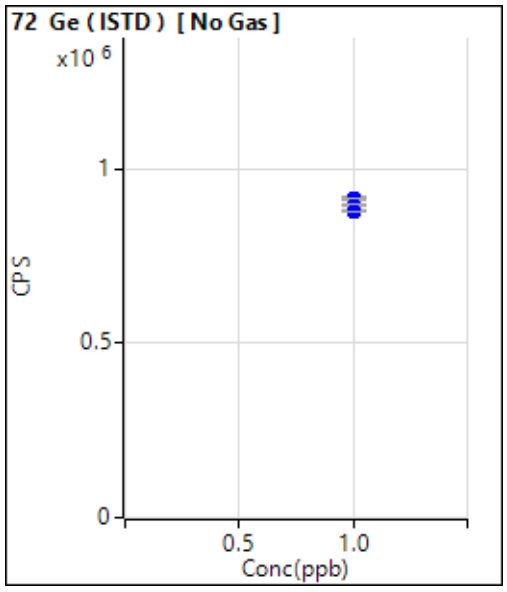
y = 0.0192 * x + 1.2550E-005
R = 0.9999
DL = 0.0008486 ppb
BEC = 0.000653 ppb

Weight: <None>
Min Conc: <None>

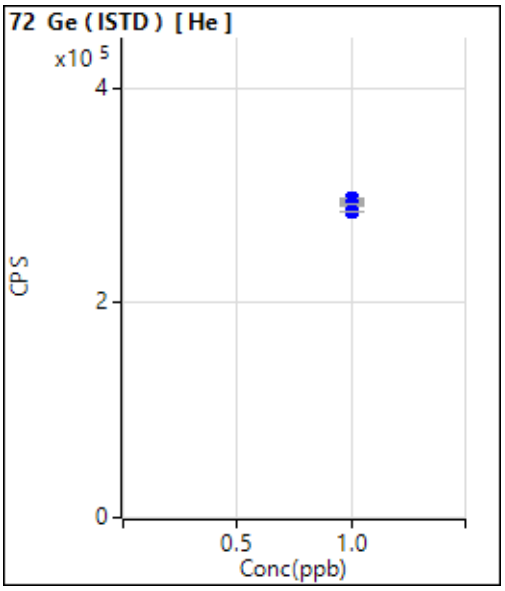
Calibration for 020_ICV.d



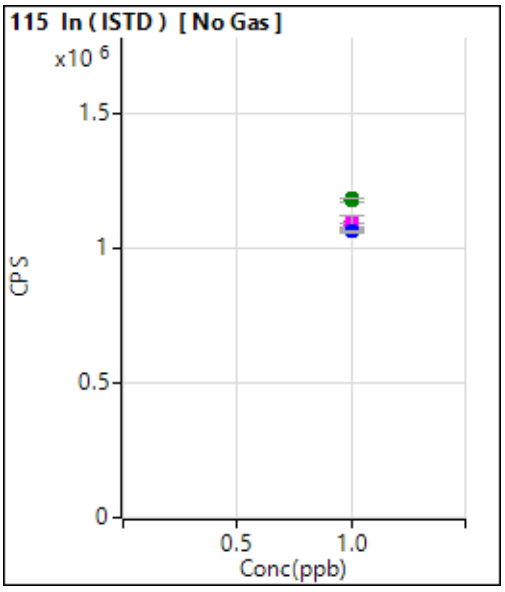
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		579730.97		P	0.8	
2	☐	1.000		591607.00		P	0.4	
3	☐	1.000		600682.49		P	0.2	
4	☐	1.000		601569.39		P	0.1	
5	☐	1.000		578595.56		P	1.4	
6	☐	1.000		597498.66		A	3.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		880231.97		P	0.3	
2	☐	1.000		896698.53		P	0.3	
3	☐	1.000		914660.95		P	1.0	
4	☐	1.000		913650.06		P	0.6	
5	☐	1.000		894402.64		P	1.0	
6	☐	1.000		875652.64		P	0.5	

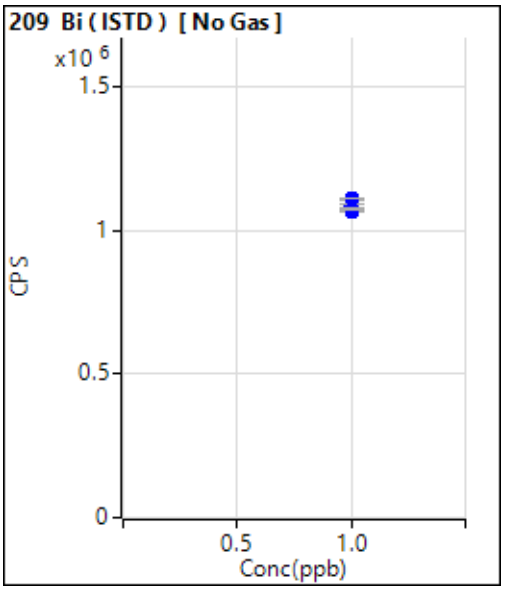


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		284935.68		P	0.4	
2	☐	1.000		294953.58		P	0.2	
3	☐	1.000		295174.68		P	0.2	
4	☐	1.000		297392.47		P	0.5	
5	☐	1.000		291738.45		P	0.6	
6	☐	1.000		285009.21		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062541.78		P	0.9	
2	☐	1.000		1087771.37		M	1.2	
3	☐	1.000		1178962.77		A	1.2	
4	☐	1.000		1187157.58		A	0.5	
5	☐	1.000		1098599.80		M	4.4	
6	☐	1.000		1062301.36		P	0.6	

Calibration for 020_ICV.d



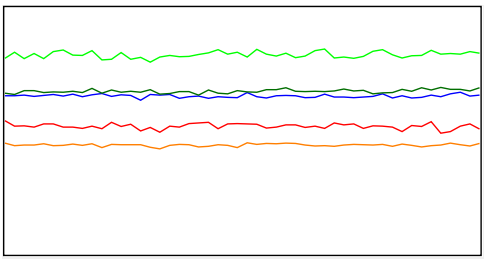
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062489.72		P	0.1	
2	☐	1.000		1090754.44		P	0.4	
3	☐	1.000		1105631.68		P	0.5	
4	☐	1.000		1111356.65		P	0.1	
5	☐	1.000		1087495.79		P	1.3	
6	☐	1.000		1073017.12		P	0.8	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq. Date-Time	07/20/2022 10:23:44
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2595	25951.54		
24	10000	8092	80916.13		
59	20000	12835	128349.78		
115	50000	22132	221323.10		
208	20000	13222	132220.38		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.163	5.000	
24	1.584	5.000	
59	1.014	5.000	
115	1.219	5.000	
208	1.108	5.000	

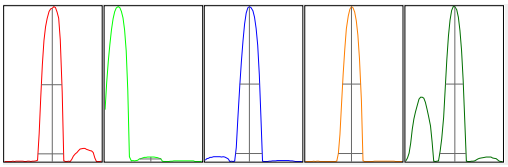
Mass	Background	Background (Required)	Background (Flag)
9	1.900		
24	0.600		
59	1.000		
115	0.500		
208	1.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.464 %
Doubly Charged	70 / 140 1.552 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2541.87	9.00	8.90 - 9.10	
24	8046.35	23.95	23.90 - 24.10	
59	13297.39	58.90	58.90 - 59.10	
115	22153.30	114.95	114.90 - 115.10	
208	13089.29	208.05	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.782		
24	0.65			
59	0.61	0.814		
115	0.55	0.744		
208	0.55	0.803		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.1 V	Deflect	13.2 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

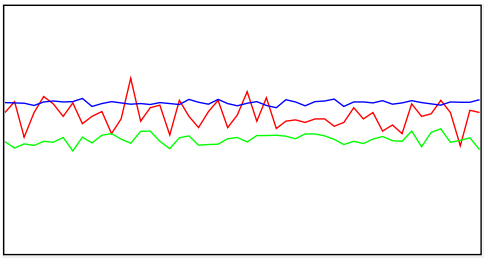
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	112	1118.04		
24	1000	460	4604.36		
59	10000	6101	61008.47		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

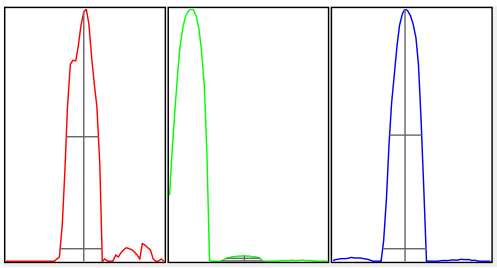
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.239	5.000	Fail
24	4.522	5.000	
59	1.374	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.000		
59	0.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.295 %
Doubly Charged	70 / 140 0.906 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	120.01	9.00	8.90 - 9.10	
24	482.11	23.95	23.90 - 24.10	
59	6125.38	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.781		
24	0.63	0.783		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.809		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	-0.2 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

10450 Stancliff Rd. Suite 210
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alsglobal.com

WorkOrder: HS22070088

LHAAP 16 June 2022

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

21-Jul-2022

ALS Environmental
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HS22070088 LHAAP 16 June 2022 Final

ALS WO# HS22070088

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October 13, 2022

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS22070088**

Laboratory Results for: **LHAAP 16 June 2022**

Dear Vicki Graves ,

ALS Environmental received 7 sample(s) on Jul 01, 2022 for the analysis presented in the following report.

This is a REVISED REPORT. Please see the Case Narrative for discussion concerning this revision.

Regards,

Generated By: DANE.WACASEY
Dane J. Wacasey

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070088

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22070088-01	16WW23-220627-M	Groundwater		27-Jun-2022 07:25	01-Jul-2022 09:25	☐
HS22070088-02	16WW24-220627-M	Groundwater		27-Jun-2022 08:10	01-Jul-2022 09:25	☐
HS22070088-03	16WW24-220627-M-FD	Groundwater		27-Jun-2022 08:10	01-Jul-2022 09:25	☐
HS22070088-04	16WW28-220627-M	Groundwater		27-Jun-2022 09:20	01-Jul-2022 09:25	☐
HS22070088-05	16WW27-220627-M	Groundwater		27-Jun-2022 10:00	01-Jul-2022 09:25	☐
HS22070088-06	16WW43-220627-M	Groundwater		27-Jun-2022 10:40	01-Jul-2022 09:25	☐
HS22070088-07	16WW41-220627-M	Groundwater		27-Jun-2022 09:30	01-Jul-2022 09:25	☑

Revision:1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 June 2022
Work Order: HS22070088

Work Order Comments

- This report was revised October 13, 2022 in order to replace results of magnesium with manganese for samples 16WW-24-220627-M and 16WW-24-220627-M-FD

Metals by Method SW6020A

Batch ID: 181294

Sample ID: HS22070086-01MS

- MS and MSD are for an unrelated sample

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW23-220627-M
Collection Date: 27-Jun-2022 07:25

ANALYTICAL REPORT
WorkOrder:HS22070088
Lab ID:HS22070088-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Manganese	**19.7**		**0.0700**	**0.250**	**0.500**	**mg/L**	100	20-Jul-2022 12:57
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 15:51

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW24-220627-M
Collection Date: 27-Jun-2022 08:10

ANALYTICAL REPORT
WorkOrder:HS22070088
Lab ID:HS22070088-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Chromium	**0.386**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	19-Jul-2022 16:17
Manganese	**9.37**	E	**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	19-Jul-2022 16:17
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 16:17

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW24-220627-M-FD
Collection Date: 27-Jun-2022 08:10

ANALYTICAL REPORT
WorkOrder:HS22070088
Lab ID:HS22070088-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Chromium	**0.334**		**0.00400**	**0.0125**	**0.0500**	**mg/L**	10	20-Jul-2022 12:38
Manganese	**9.18**	E	**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	19-Jul-2022 16:29
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 16:29

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW28-220627-M
Collection Date: 27-Jun-2022 09:20

ANALYTICAL REPORT
WorkOrder:HS22070088
Lab ID:HS22070088-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Manganese	**8.56**		**0.0700**	**0.250**	**0.500**	**mg/L**	100	20-Jul-2022 12:40
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 16:31

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW27-220627-M
Collection Date: 27-Jun-2022 10:00

ANALYTICAL REPORT
WorkOrder:HS22070088
Lab ID:HS22070088-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Manganese	**18.0**		**0.140**	**0.500**	**1.00**	**mg/L**	200	20-Jul-2022 12:44
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 12:42

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW43-220627-M
Collection Date: 27-Jun-2022 10:40

ANALYTICAL REPORT
WorkOrder:HS22070088
Lab ID:HS22070088-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 16-Jul-2022		Analyst: JHD
Arsenic	**0.00868**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 12:46
Chromium	**0.00108**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 12:46
Manganese	**0.689**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	20-Jul-2022 12:46
Nickel	**0.0127**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 12:46
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	19-Jul-2022 16:35

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Revision: 1

ALS Houston, US Date: 13-Oct-22

Weight / Prep Log

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Batch ID: 181294 **Start Date:** 16 Jul 2022 08:30 **End Date:** 16 Jul 2022 12:30
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22070088-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070088-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070088-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070088-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070088-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070088-06		10 (mL)	10 (mL)	1	120 plastic HNO3

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 181294 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS22070088-01	16WW23-220627-M	27 Jun 2022 07:25		16 Jul 2022 08:30	20 Jul 2022 12:57	100
HS22070088-01	16WW23-220627-M	27 Jun 2022 07:25		16 Jul 2022 08:30	19 Jul 2022 15:51	1
HS22070088-02	16WW24-220627-M	27 Jun 2022 08:10		16 Jul 2022 08:30	19 Jul 2022 16:17	1
HS22070088-03	16WW24-220627-M-FD	27 Jun 2022 08:10		16 Jul 2022 08:30	20 Jul 2022 12:38	10
HS22070088-03	16WW24-220627-M-FD	27 Jun 2022 08:10		16 Jul 2022 08:30	19 Jul 2022 16:29	1
HS22070088-04	16WW28-220627-M	27 Jun 2022 09:20		16 Jul 2022 08:30	20 Jul 2022 12:40	100
HS22070088-04	16WW28-220627-M	27 Jun 2022 09:20		16 Jul 2022 08:30	19 Jul 2022 16:31	1
HS22070088-05	16WW27-220627-M	27 Jun 2022 10:00		16 Jul 2022 08:30	20 Jul 2022 12:44	200
HS22070088-05	16WW27-220627-M	27 Jun 2022 10:00		16 Jul 2022 08:30	20 Jul 2022 12:42	1
HS22070088-06	16WW43-220627-M	27 Jun 2022 10:40		16 Jul 2022 08:30	20 Jul 2022 12:46	1
HS22070088-06	16WW43-220627-M	27 Jun 2022 10:40		16 Jul 2022 08:30	19 Jul 2022 16:35	1

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-181294** Units: **mg/L** Analysis Date: **19-Jul-2022 12:09**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754521** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.00125	0.00500								U
Chromium	0.00125	0.00500								U
Manganese	0.00250	0.00500								U
Nickel	0.00125	0.00500								U
Thallium	0.000500	0.00200								U

LCS Sample ID: **LCS-181294** Units: **mg/L** Analysis Date: **19-Jul-2022 12:11**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754522** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05714	0.00500	0.05	0	114	84 - 116				
Chromium	0.05549	0.00500	0.05	0	111	85 - 116				
Manganese	0.05664	0.00500	0.05	0	113	87 - 115				
Nickel	0.05606	0.00500	0.05	0	112	85 - 117				
Thallium	0.0513	0.00200	0.05	0	103	82 - 116				

MS Sample ID: **HS22070086-01MS** Units: **mg/L** Analysis Date: **19-Jul-2022 12:18**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754525** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05329	0.00500	0.05	0.000267	106	84 - 116				
Chromium	0.3305	0.00500	0.05	0.2701	121	85 - 116				SO
Manganese	1.124	0.00500	0.05	1.137	-26.3	87 - 115				SO
Nickel	2.137	0.00500	0.05	2.196	-118	85 - 117				SEO
Thallium	0.04945	0.00200	0.05	0.000007	98.9	82 - 116				

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MSD Sample ID: **HS22070086-01MSD** Units: **mg/L** Analysis Date: **19-Jul-2022 12:20**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754526** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05502	0.00500	0.05	0.000267	110	84 - 116	0.05329	3.2	20	
Chromium	0.3411	0.00500	0.05	0.2701	142	85 - 116	0.3305	3.16	20	SO
Manganese	1.149	0.00500	0.05	1.137	23.0	87 - 115	1.124	2.17	20	SO
Nickel	2.194	0.00500	0.05	2.196	-4.77	85 - 117	2.137	2.62	20	SEO
Thallium	0.05101	0.00200	0.05	0.000007	102	82 - 116	0.04945	3.11	20	

PDS Sample ID: **HS22070086-01PDS** Units: **mg/L** Analysis Date: **19-Jul-2022 15:26**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754554** PrepDate: **16-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1076	0.00500	0.1	0	108	80 - 120				
Manganese	1.195	0.00500	0.1	1.137	58.2	80 - 120				SO
Thallium	0.1077	0.00200	0.1	0	108	80 - 120				

PDS Sample ID: **HS22070086-01PDS** Units: **mg/L** Analysis Date: **20-Jul-2022 12:55**
Client ID: Run ID: **ICPMS07_413348** SeqNo: **6756103** PrepDate: **16-Jul-2022** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Chromium	2.647	0.100	2	0.2796	118	80 - 120				

PDS Sample ID: **HS22070086-01PDS** Units: **mg/L** Analysis Date: **20-Jul-2022 13:38**
Client ID: Run ID: **ICPMS07_413348** SeqNo: **6756119** PrepDate: **16-Jul-2022** DF: **20**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Nickel	3.828	0.100	2	2.1	86.4	80 - 120				

SD Sample ID: **HS22070086-01SD** Units: **mg/L** Analysis Date: **19-Jul-2022 12:16**
Client ID: Run ID: **ICPMS07_413228** SeqNo: **6754524** PrepDate: **16-Jul-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.00625	0.0250					0.000267	0	10	U
Manganese	1.089	0.0250					1.137	4.28	10	
Thallium	0.00250	0.0100					0.000007	0	10	U

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

QC BATCH REPORT

Batch ID: 181294 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

SD Sample ID: **HS22070086-01SD** Units: **mg/L** Analysis Date: **20-Jul-2022 12:53**
Client ID: Run ID: **ICPMS07_413348** SeqNo: **6756102** PrepDate: **16-Jul-2022** DF: **100**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Chromium	0.2974	0.500					0.2796	0	10	J
Nickel	2.102	0.500					2.1	0.104	10	

The following samples were analyzed in this batch: HS22070088-01 HS22070088-02 HS22070088-03 HS22070088-04 HS22070088-05 HS22070088-06

Revision: 1

ALS Houston, US Date: 13-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: **HS22070088**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US Date: 13-Oct-22

Sample Receipt Checklist

Work Order ID: HS22070088 **Date/Time Received:** 01-Jul-2022 09:25

Client Name: CBI-Houston **Received by:** Pablo Marinez

Completed By:	/S/ Nilesh D. Ranchod	01-Jul-2022 18:23	**Reviewed by:**	/S/ Dane J. Wacasey	18-Jul-2022 14:04
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	1 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	
Temperature(s)/Thermometer(s):	2.1uc/2.6c	IR31	
Cooler(s)/Kit(s):	Md Blue		
Date/Time sample(s) sent to storage:	7/1/2022		
Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. 501032

Job: **LHAAP 16 June 2022**

Prepared By: Scott Beesinger

P.O. Number

HS22070088

Aptim Environmental & Infrastructure, Inc.
LHAAP 16 June 2022

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	Analyses: As, Cr, Mn, Tl, Ni by 6020A	As, Mn, Tl by 6020A	Cr, Tl by SW 6020A	Cr, Mn, Tl by SW6020A	Cr, Ni, Tl by SW6020A	Mn, Tl by SW6020A	Ni, Tl by Sw6020A	Tl by Sw6020A			Remarks (Pr etc.)
16WW23-220627-M	WG	6/27/22 0725		1						X					
16WW24-220627-M	WG	6/27/22 0810		1				X							
16WW24-220627-M-FD	WG	6/27/22 0810		1				X							
16WW28-220627-M	WG	6/27/22 0920		1						X					
16WW27-220627-M	WG	6/27/22 1000		1						X					
16WW43-220627-M	WG	6/27/22 1040		1	X										
16WW41-220629-M	WG	6/29/22 0930		1	X										
16WW41-220629-M-MS	WG	6/29/22 0930		1	X										

Additional Remarks: **Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com**

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	6/30/22	1430		7/1/22	0725						

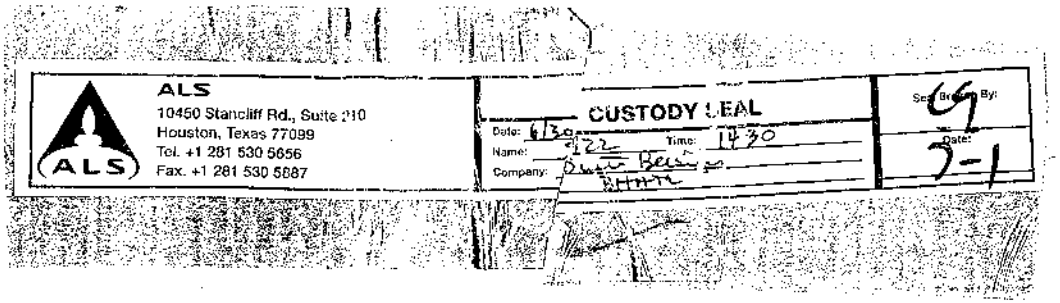
For Lab Use Only

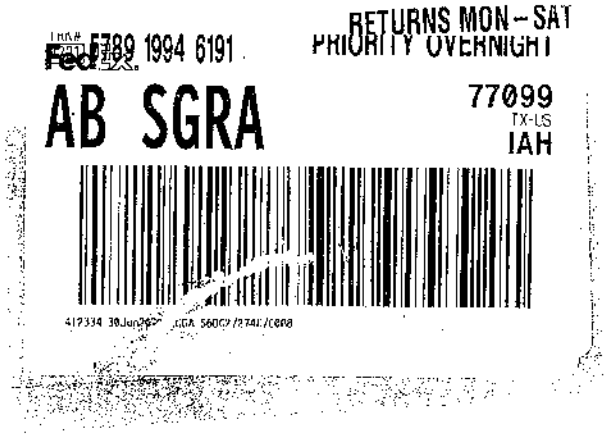
Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

Blue Ice

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly


ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887
CUSTODY SEAL
Date: 6/30
Time: 1430
Name:
Company:
Seq Broken By:
Date:
6
7-1


TRK# 5789 1994 6191
RETURNS MON-SAT
PRIORITY OVERNIGHT
AB SGRA
77099
TX-US
IAH

HS22070088 - ME - ICP_W_DOD

ALS WO# HS22070088

ALS Houston, US Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088
Start Date: 19-Jul-2022 End Date: 19-Jul-2022

Run ID:ICPMS07_413228
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413228_Tune	1	19-Jul-2022 00:00	ICPMS07_413228_Tune_1	
CAL BLK	1	19-Jul-2022 11:24	007CALB.d_6753688	AS CR MG MN NI TL
2/10/200	1	19-Jul-2022 11:26	008CALS.d_6753689	AS CR MG MN NI TL
5/25/500	1	19-Jul-2022 11:29	009CALS.d_6753690	AS CR MG MN NI TL
10/50/100	1	19-Jul-2022 11:31	010CALS.d_6753691	AS CR MG MN NI TL
100/500/10K	1	19-Jul-2022 11:33	011CALS.d_6753692	AS CR MG MN NI TL
200/1000/20K	1	19-Jul-2022 11:35	012CALS.d_6753693	AS CR MG MN NI TL
ICV	1	19-Jul-2022 11:42	014_ICV.d_6753695	AS CR MG MN NI TL
LLICV2	1	19-Jul-2022 11:44	015LCV2.d_6753696	AS CR MG MN NI TL
LLICV5	1	19-Jul-2022 11:46	016LCV5.d_6753697	AS CR MG MN NI TL
ICB	1	19-Jul-2022 11:48	017_ICB.d_6753698	AS CR MG MN NI TL
ICSA	1	19-Jul-2022 11:53	019ICSA.d_6753700	AS CR MG MN NI TL
ICSAB	1	19-Jul-2022 11:55	020ICSB.d_6753701	AS CR MG MN NI TL
CCV 1	1	19-Jul-2022 12:04	023_CCV.d_6754519	AS CR MG MN NI TL
CCB 1	1	19-Jul-2022 12:06	024_CCB.d_6754520	AS CR MG MN NI TL
MBLK-181294	1	19-Jul-2022 12:09	025SMPL.d_6754521	AS CR MG MN NI TL
LCS-181294	1	19-Jul-2022 12:11	026SMPL.d_6754522	AS CR MG MN NI TL
ZZZZZZSD	5	19-Jul-2022 12:16	028SMPL.d_6754524	AS MG MN TL
ZZZZZZMS	1	19-Jul-2022 12:18	029SMPL.d_6754525	AS CR MG MN NI TL
ZZZZZZMSD	1	19-Jul-2022 12:20	030SMPL.d_6754526	AS CR MG MN NI TL
CCV 2	1	19-Jul-2022 12:35	035_CCV.d_6754531	AS CR MG MN NI TL
CCB 2	1	19-Jul-2022 12:37	036_CCB.d_6754532	AS CR MG MN NI TL
CCV 3	1	19-Jul-2022 13:01	047_CCV.d_6754539	AS CR MG MN NI TL
CCB 3	1	19-Jul-2022 13:03	048_CCB.d_6754540	AS CR MG MN NI TL
CCV 4	1	19-Jul-2022 14:46	085_CCV.d_6754541	AS CR MG MN NI TL
CCB 4	1	19-Jul-2022 14:48	086_CCB.d_6754542	AS CR MG MN NI TL
CCB 5	1	19-Jul-2022 15:13	097_CCB.d_6754550	AS CR MG MN NI TL
CCV 5	1	19-Jul-2022 15:20	099_CCV.d_6754552	AS CR MG MN NI TL
CCV 6	1	19-Jul-2022 15:24	100_CCV.d_6754553	AS CR MG MN NI TL
ZZZZZZPDS	1	19-Jul-2022 15:26	101SMPL.d_6754554	AS MG MN TL
16WW23-220627-M	1	19-Jul-2022 15:51	109SMPL.d_6754562	TL
CCV 7	1	19-Jul-2022 15:56	111_CCV.d_6754564	AS CR MG MN NI TL
CCB 6	1	19-Jul-2022 15:58	112_CCB.d_6754565	AS CR MG MN NI TL
16WW24-220627-M	1	19-Jul-2022 16:17	121SMPL.d_6754569	CR MG TL
CCV 8	1	19-Jul-2022 16:24	123_CCV.d_6754571	AS CR MG MN NI TL
CCV 9	1	19-Jul-2022 16:24	123_CCV.d_6755962	AS CR MG MN NI TL
CCB 7	1	19-Jul-2022 16:26	124_CCB.d_6754572	AS CR MG MN NI TL
CCB 8	1	19-Jul-2022 16:26	124_CCB.d_6755963	AS CR MG MN NI TL
16WW24-220627-M-FD	1	19-Jul-2022 16:29	125SMPL.d_6756272	TL
16WW28-220627-M	1	19-Jul-2022 16:31	126SMPL.d_6756273	TL
16WW43-220627-M	1	19-Jul-2022 16:35	128SMPL.d_6755964	TL
CCB 9	1	19-Jul-2022 16:52	136_CCB.d_6755967	AS CR MG MN NI TL
CCV 10	1	19-Jul-2022 16:57	138_CCV.d_6755969	AS CR MG MN NI TL
CCV 11	1	19-Jul-2022 16:59	139_CCV.d_6755970	AS CR MG MN NI TL

ALS Houston, US Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088
Start Date: 20-Jul-2022 End Date: 21-Jul-2022

Run ID:ICPMS07_413348
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413348_Tune	1	20-Jul-2022 00:00	ICPMS07_413348_Tune_1	
CAL BLK	1	20-Jul-2022 11:26	009CALB.d_6756047	AS CR MG MN NI TL
2/10/200	1	20-Jul-2022 11:28	010CALS.d_6756048	AS CR MG MN NI TL
5/25/500	1	20-Jul-2022 11:30	011CALS.d_6756049	AS CR MG MN NI TL
10/50/100	1	20-Jul-2022 11:33	012CALS.d_6756050	AS CR MG MN NI TL
100/500/10K	1	20-Jul-2022 11:35	013CALS.d_6756051	AS CR MG MN NI TL
200/1000/20K	1	20-Jul-2022 11:37	014CALS.d_6756052	AS CR MG MN NI TL
100/500/10K	1	20-Jul-2022 11:47	017CALS.d_6756055	AS CR MG MN NI TL
200/1000/20K	1	20-Jul-2022 11:49	018CALS.d_6756056	AS CR MG MN NI TL
ICV	1	20-Jul-2022 11:53	020_ICV.d_6756058	AS CR MG MN NI TL
LLICV2	1	20-Jul-2022 11:55	021LCV2.d_6756059	AS CR MG MN NI TL
LLICV5	1	20-Jul-2022 11:57	022LCV5.d_6756060	AS CR MG MN NI TL
ICB	1	20-Jul-2022 11:59	023_ICB.d_6756061	AS CR MG MN NI TL
LLICV5	1	20-Jul-2022 12:05	024LCV5.d_6756062	AS CR MG MN NI TL
ICSA	1	20-Jul-2022 12:07	025ICSA.d_6756063	AS CR MG MN NI TL
ICSAB	1	20-Jul-2022 12:09	026ICSB.d_6756064	AS CR MG MN NI TL
CCV 1	1	20-Jul-2022 12:27	029_CCV.d_6756093	AS CR MG MN NI TL
CCB 1	1	20-Jul-2022 12:29	030_CCB.d_6756094	AS CR MG MN NI TL
16WW24-220627-M-FD	10	20-Jul-2022 12:38	031SMPL.d_6756095	CR MG
16WW28-220627-M	100	20-Jul-2022 12:40	032SMPL.d_6756096	MN
16WW27-220627-M	1	20-Jul-2022 12:42	033SMPL.d_6756097	TL
16WW27-220627-M	200	20-Jul-2022 12:44	034SMPL.d_6756098	MN
16WW43-220627-M	1	20-Jul-2022 12:46	035SMPL.d_6756099	AS CR MN NI
ZZZZZZSD	100	20-Jul-2022 12:53	038SMPL.d_6756102	CR NI
ZZZZZZPDS	20	20-Jul-2022 12:55	039SMPL.d_6756103	CR
16WW23-220627-M	100	20-Jul-2022 12:57	040SMPL.d_6756104	MN
CCV 2	1	20-Jul-2022 12:59	041_CCV.d_6756105	AS CR MG MN NI TL
CCV 3	1	20-Jul-2022 12:59	041_CCV.d_6756114	AS CR MG MN NI TL
CCB 2	1	20-Jul-2022 13:01	042_CCB.d_6756106	AS CR MG MN NI TL
CCB 3	1	20-Jul-2022 13:01	042_CCB.d_6756115	AS CR MG MN NI TL
CCV 4	1	20-Jul-2022 13:29	053_CCV.d_6756117	AS CR MG MN NI TL
CCB 4	1	20-Jul-2022 13:31	054_CCB.d_6756118	AS CR MG MN NI TL
ZZZZZZPDS	20	20-Jul-2022 13:38	056SMPL.d_6756119	NI
CCV 5	1	20-Jul-2022 13:56	065_CCV.d_6756806	AS CR MG MN NI TL
CCB 5	1	20-Jul-2022 13:58	066_CCB.d_6756807	AS CR MG MN NI TL
CAL BLK	1	20-Jul-2022 21:07	205CALB.d_6756878	AS CR MG MN NI TL
2/10/200	1	20-Jul-2022 21:09	206CALS.d_6756879	AS CR MG MN NI TL
5/25/500	1	20-Jul-2022 21:11	207CALS.d_6756880	AS CR MG MN NI TL
10/50/100	1	20-Jul-2022 21:13	208CALS.d_6756881	AS CR MG MN NI TL
100/500/10K	1	20-Jul-2022 21:15	209CALS.d_6756882	AS CR MG MN NI TL
200/1000/20K	1	20-Jul-2022 21:17	210CALS.d_6756883	AS CR MG MN NI TL
ICCV 6	1	20-Jul-2022 21:21	212_ICV.d_6756885	AS CR MG MN NI TL
LLCCV2	1	20-Jul-2022 21:23	213LCV2.d_6756886	AS CR MG MN NI TL
LLCCV5	1	20-Jul-2022 21:25	214LCV5.d_6756887	AS CR MG MN NI TL
ICCB 6	1	20-Jul-2022 21:27	215_ICB.d_6756888	AS CR MG MN NI TL
CCV 7	1	20-Jul-2022 21:31	217_CCV.d_6756890	AS CR MG MN NI TL
CCB 7	1	20-Jul-2022 21:33	218_CCB.d_6756891	AS CR MG MN NI TL
CCV 8	1	20-Jul-2022 21:49	226_CCV.d_6756900	AS CR MG MN NI TL
CCB 8	1	20-Jul-2022 21:51	227_CCB.d_6756901	AS CR MG MN NI TL
CCV 9	1	20-Jul-2022 22:09	236_CCV.d_6756911	AS CR MG MN NI TL

ALS Houston, US

Date: 22-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088
Start Date: 20-Jul-2022 End Date: 21-Jul-2022

Run ID:ICPMS07_413348
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
CCB 9	1	20-Jul-2022 22:11	237_CCB.d_6756912	AS CR MG MN NI TL
CCV 10	1	20-Jul-2022 22:25	241_CCV.d_6756946	AS CR MG MN NI TL
CCB 10	1	20-Jul-2022 22:27	242_CCB.d_6756947	AS CR MG MN NI TL
CCV 11	1	20-Jul-2022 22:43	250_CCV.d_6756955	AS CR MG MN NI TL
CCB 11	1	20-Jul-2022 22:45	251_CCB.d_6756956	AS CR MG MN NI TL
CCV 12	1	20-Jul-2022 23:00	259_CCV.d_6756964	AS CR MG MN NI TL
CCB 12	1	20-Jul-2022 23:02	260_CCB.d_6756965	AS CR MG MN NI TL
CCV 13	1	20-Jul-2022 23:24	271_CCV.d_6756976	AS CR MG MN NI TL
CCB 13	1	20-Jul-2022 23:26	272_CCB.d_6756977	AS CR MG MN NI TL
CCV 14	1	21-Jul-2022 00:09	294_CCV.d_6757652	AS CR MG MN NI TL
CCB 14	1	21-Jul-2022 00:11	295_CCB.d_6757653	AS CR MG MN NI TL
LLCCV2	1	21-Jul-2022 00:15	297LCV2.d_6757655	AS CR MG MN NI TL
LLCCV5	1	21-Jul-2022 00:17	298LCV5.d_6757656	AS CR MG MN NI TL
ICSA	1	21-Jul-2022 00:19	299ICSA.d_6757657	AS CR MG MN NI TL
ICSAB	1	21-Jul-2022 00:21	300ICSB.d_6757658	AS CR MG MN NI TL

ALS Houston, US Date: 22-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070088 Method: SW6020A

ICV Date: 19-Jul-2022 11:42 Seq: 6753695 ICV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	109.027	109	90-110	
Chromium	100	105.084	105	90-110	
Magnesium	10000	10597.08	106	90-110	
Manganese	100	105.311	105	90-110	
Nickel	100	105.711	106	90-110	
Thallium	100	107.757	108	90-110	

CCV1 Date: 19-Jul-2022 12:04 Seq: 6754519 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	100.186	100	90-110	
Chromium	100	100.148	100	90-110	
Magnesium	10000	10168.419	102	90-110	
Manganese	100	99.946	100	90-110	
Nickel	100	100.659	101	90-110	
Thallium	100	100.536	101	90-110	

CCV2 Date: 19-Jul-2022 12:35 Seq: 6754531 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	101.101	101	90-110	
Chromium	100	101.563	102	90-110	
Magnesium	10000	10361.707	104	90-110	
Manganese	100	101.148	101	90-110	
Nickel	100	101.544	102	90-110	
Thallium	100	98.807	99	90-110	

CCV3 Date: 19-Jul-2022 13:01 Seq: 6754539 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	101.08	101	90-110	
Chromium	100	104.073	104	90-110	
Magnesium	10000	10552.745	106	90-110	
Manganese	100	103.293	103	90-110	
Nickel	100	103.082	103	90-110	
Thallium	100	102.393	102	90-110	

CCV4 Date: 19-Jul-2022 14:46 Seq: 6754541 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	108.005	108	90-110	
Chromium	100	105.081	105	90-110	
Magnesium	10000	10662.899	107	90-110	
Manganese	100	105.951	106	90-110	
Nickel	100	104.896	105	90-110	
Thallium	100	109.848	110	90-110	

CCV5 Date: 19-Jul-2022 15:20 Seq: 6754552 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	101.765	102	90-110	
Chromium	100	101.06	101	90-110	
Magnesium	10000	10091.182	101	90-110	
Manganese	100	100.301	100	90-110	
Nickel	100	100.236	100	90-110	
Thallium	100	104.916	105	90-110	

CCV6 Date: 19-Jul-2022 15:24 Seq: 6754553 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	101.91	102	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070088 Method: SW6020A

CCV6 Date: 19-Jul-2022 15:24 Seq: 6754553 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Chromium	100	99.869	100	90-110	
Magnesium	10000	10167.194	102	90-110	
Manganese	100	100.241	100	90-110	
Nickel	100	99.301	99	90-110	
Thallium	100	104.405	104	90-110	

CCV7 Date: 19-Jul-2022 15:56 Seq: 6754564 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	103.223	103	90-110	
Chromium	100	101.993	102	90-110	
Magnesium	10000	10378.704	104	90-110	
Manganese	100	106.515	107	90-110	
Nickel	100	102.204	102	90-110	
Thallium	100	103.393	103	90-110	

CCV9 Date: 19-Jul-2022 16:24 Seq: 6755962 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	107.785	108	90-110	
Chromium	100	106.033	106	90-110	
Magnesium	10000	10681.802	107	90-110	
Manganese	100	105.016	105	90-110	
Nickel	100	104.721	105	90-110	
Thallium	100	109.393	109	90-110	

CCV8 Date: 19-Jul-2022 16:24 Seq: 6754571 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	107.785	108	90-110	
Chromium	100	106.033	106	90-110	
Magnesium	10000	10681.802	107	90-110	
Manganese	100	105.016	105	90-110	
Nickel	100	104.721	105	90-110	
Thallium	100	109.393	109	90-110	

CCV10 Date: 19-Jul-2022 16:57 Seq: 6755969 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	98.485	99	90-110	
Chromium	100	98.16	98	90-110	
Magnesium	10000	9911.985	99	90-110	
Manganese	100	97.306	97	90-110	
Nickel	100	98.829	99	90-110	
Thallium	100	102.59	103	90-110	

CCV11 Date: 19-Jul-2022 16:59 Seq: 6755970 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	101.465	101	90-110	
Chromium	100	100.399	100	90-110	
Magnesium	10000	10201.186	102	90-110	
Manganese	100	99.632	100	90-110	
Nickel	100	100.024	100	90-110	
Thallium	100	103.934	104	90-110	

ALS Houston, US Date: 22-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070088 Method: SW6020A

ICV	Date: 20-Jul-2022 11:53		Seq: 6756058	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	102.334	102	90-110	
Chromium	100	100.558	101	90-110	
Magnesium	10000	10222.15	102	90-110	
Manganese	100	100.499	100	90-110	
Nickel	100	102.068	102	90-110	
Thallium	100	99.988	100	90-110	

CCV1	Date: 20-Jul-2022 12:27		Seq: 6756093	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.109	105	90-110	
Chromium	100	100.477	100	90-110	
Magnesium	10000	10166.691	102	90-110	
Manganese	100	101.051	101	90-110	
Nickel	100	101.637	102	90-110	
Thallium	100	104.481	104	90-110	

CCV3	Date: 20-Jul-2022 12:59		Seq: 6756114	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.92	106	90-110	
Chromium	100	101.143	101	90-110	
Magnesium	10000	10140.138	101	90-110	
Manganese	100	100.23	100	90-110	
Nickel	100	100.661	101	90-110	
Thallium	100	105.016	105	90-110	

CCV2	Date: 20-Jul-2022 12:59		Seq: 6756105	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.92	106	90-110	
Chromium	100	101.143	101	90-110	
Magnesium	10000	10140.138	101	90-110	
Manganese	100	100.23	100	90-110	
Nickel	100	100.661	101	90-110	
Thallium	100	105.016	105	90-110	

CCV4	Date: 20-Jul-2022 13:29		Seq: 6756117	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.57	106	90-110	
Chromium	100	101.738	102	90-110	
Magnesium	10000	10528.651	105	90-110	
Manganese	100	101.38	101	90-110	
Nickel	100	101.541	102	90-110	
Thallium	100	106.379	106	90-110	

CCV5	Date: 20-Jul-2022 13:56		Seq: 6756806	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	106.029	106	90-110	
Chromium	100	102.018	102	90-110	
Magnesium	10000	10761.837	108	90-110	
Manganese	100	102.581	103	90-110	
Nickel	100	103.211	103	90-110	
Thallium	100	105.63	106	90-110	

ICCV6	Date: 20-Jul-2022 21:21		Seq: 6756885	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	98.899	99	90-110	

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070088 Method: SW6020A

ICCV6 Date: 20-Jul-2022 21:21 Seq: 6756885 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Chromium	100	96.638	97	90-110	
Magnesium	10000	9722.73	97	90-110	
Manganese	100	96.979	97	90-110	
Nickel	100	96.976	97	90-110	
Thallium	100	96.938	97	90-110	

CCV7 Date: 20-Jul-2022 21:31 Seq: 6756890 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	103.876	104	90-110	
Chromium	100	100.602	101	90-110	
Magnesium	10000	9981.454	100	90-110	
Manganese	100	101.057	101	90-110	
Nickel	100	100.848	101	90-110	
Thallium	100	106.011	106	90-110	

CCV8 Date: 20-Jul-2022 21:49 Seq: 6756900 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	106.332	106	90-110	
Chromium	100	101.358	101	90-110	
Magnesium	10000	10029.725	100	90-110	
Manganese	100	101.909	102	90-110	
Nickel	100	101.555	102	90-110	
Thallium	100	104.39	104	90-110	

CCV9 Date: 20-Jul-2022 22:09 Seq: 6756911 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	103.506	104	90-110	
Chromium	100	98.765	99	90-110	
Magnesium	10000	9833.854	98	90-110	
Manganese	100	99.698	100	90-110	
Nickel	100	99.265	99	90-110	
Thallium	100	102.178	102	90-110	

CCV10 Date: 20-Jul-2022 22:25 Seq: 6756946 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	106.026	106	90-110	
Chromium	100	100.76	101	90-110	
Magnesium	10000	10124.49	101	90-110	
Manganese	100	101.212	101	90-110	
Nickel	100	102.114	102	90-110	
Thallium	100	105.83	106	90-110	

CCV11 Date: 20-Jul-2022 22:43 Seq: 6756955 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	106.003	106	90-110	
Chromium	100	101.133	101	90-110	
Magnesium	10000	10120.088	101	90-110	
Manganese	100	100.769	101	90-110	
Nickel	100	101.97	102	90-110	
Thallium	100	103.887	104	90-110	

CCV12 Date: 20-Jul-2022 23:00 Seq: 6756964 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	105.902	106	90-110	
Chromium	100	99.942	100	90-110	

ALS Houston, US Date: 22-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070088 Method: SW6020A

CCV12	Date: 20-Jul-2022 23:00		Seq: 6756964	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Magnesium	10000	10027.155	100	90-110	
Manganese	100	100.43	100	90-110	
Nickel	100	100.501	101	90-110	
Thallium	100	102.92	103	90-110	

CCV13	Date: 20-Jul-2022 23:24		Seq: 6756976	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	103.15	103	90-110	
Chromium	100	98.621	99	90-110	
Magnesium	10000	9973.486	100	90-110	
Manganese	100	98.726	99	90-110	
Nickel	100	99.875	100	90-110	
Thallium	100	103.68	104	90-110	

CCV14	Date: 21-Jul-2022 00:09		Seq: 6757652	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	104.463	104	90-110	
Chromium	100	101.149	101	90-110	
Magnesium	10000	10218.42	102	90-110	
Manganese	100	100.807	101	90-110	
Nickel	100	101.135	101	90-110	
Thallium	100	100.111	100	90-110	

ALS Houston, US Date: 22-Jul-22

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Run ID: ICPMS07_413228
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 19-Jul-2022 11:48		Seq: 6753698	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 19-Jul-2022 12:06		Seq: 6754520	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

MBLK-181294	Date: 19-Jul-2022 12:09		Seq: 6754521	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB2	Date: 19-Jul-2022 12:37		Seq: 6754532	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB3	Date: 19-Jul-2022 13:03		Seq: 6754540	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB4	Date: 19-Jul-2022 14:48		Seq: 6754542	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB5	Date: 19-Jul-2022 15:13		Seq: 6754550	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Run ID: ICPMS07_413228
Instrument: ICPMS07
Method: SW6020A

CCB5	Date: 19-Jul-2022 15:13		Seq: 6754550	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB6	Date: 19-Jul-2022 15:58		Seq: 6754565	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	26.71	10	200	J	
Manganese	2.324	0.7	5	J	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB8	Date: 19-Jul-2022 16:26		Seq: 6755963	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB7	Date: 19-Jul-2022 16:26		Seq: 6754572	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB9	Date: 19-Jul-2022 16:52		Seq: 6755967	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 20-Jul-2022 11:59		Seq: 6756061	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 20-Jul-2022 12:29		Seq: 6756094	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB3	Date: 20-Jul-2022 13:01		Seq: 6756115	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB2	Date: 20-Jul-2022 13:01		Seq: 6756106	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB4	Date: 20-Jul-2022 13:31		Seq: 6756118	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB5	Date: 20-Jul-2022 13:58		Seq: 6756807	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

ICCB6	Date: 20-Jul-2022 21:27		Seq: 6756888	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

ICCB6	Date: 20-Jul-2022 21:27		Seq: 6756888	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB7	Date: 20-Jul-2022 21:33		Seq: 6756891	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB8	Date: 20-Jul-2022 21:51		Seq: 6756901	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB9	Date: 20-Jul-2022 22:11		Seq: 6756912	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB10	Date: 20-Jul-2022 22:27		Seq: 6756947	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB11	Date: 20-Jul-2022 22:45		Seq: 6756956	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB12	Date: 20-Jul-2022 23:02		Seq: 6756965	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	

ALS Houston, US Date: 22-Jul-22

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

CCB12	Date: 20-Jul-2022 23:02		Seq: 6756965	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB13	Date: 20-Jul-2022 23:26		Seq: 6756977	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB14	Date: 21-Jul-2022 00:11		Seq: 6757653	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Magnesium	200	10	200	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

ALS Houston, US Date: 22-Jul-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID:ICPMS07_413228
Project: LHAAP 16 June 2022 Instrument:ICPMS07
WorkOrder: HS22070088 Method:SW6020A

ICSA	Date: 19-Jul-2022 11:53	Seq: 6753700	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.253	0	
Chromium		1.42	0	
Magnesium	100000	104500	105	
Manganese		0.288	0	
Nickel		0.791	0	
Thallium		0.005	0	

ICSAB	Date: 19-Jul-2022 11:55	Seq: 6753701	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	102.6	103	
Chromium	100	102.9	103	
Magnesium	110000	109200	99.3	
Manganese	100	103	103	
Nickel	100	101	101	
Thallium	100	103.3	103	

ALS Houston, US Date: 22-Jul-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID:ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument:ICPMS07
WorkOrder: HS22070088 Method:SW6020A

ICSA	Date: 20-Jul-2022 12:07	Seq: 6756063	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.203	0	
Chromium		1.193	0	
Magnesium	100000	99380	99.4	
Manganese		0.478	0	
Nickel		0.867	0	
Thallium		0.006	0	

ICSAB	Date: 20-Jul-2022 12:09	Seq: 6756064	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	99.48	99.5	
Chromium	100	98.21	98.2	
Magnesium	110000	103700	94.3	
Manganese	100	97.79	97.8	
Nickel	100	95.42	95.4	
Thallium	100	99.97	100.0	

ICSA	Date: 21-Jul-2022 00:19	Seq: 6757657	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.374	0	
Chromium		1.409	0	
Magnesium	100000	99610	99.6	
Manganese		1.304	0	
Nickel		0.877	0	
Thallium		0.017	0	

ICSAB	Date: 21-Jul-2022 00:21	Seq: 6757658	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	100.4	100	
Chromium	100	98.5	98.5	
Magnesium	110000	100800	91.6	
Manganese	100	97.43	97.4	
Nickel	100	97.1	97.1	
Thallium	100	98.43	98.4	

ALS Houston, US

Date: 22-Jul-22

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Date Analyzed: 19-Jul-2022 12:20
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Matrix Spike: HS22070086-01MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	5.000	53.29	50.00	106	55.02	50.00	110	84-116	3.20	20
Chromium	270.1	330.5	50.00	121	341.1	50.00	142	85-116	3.16	20
Magnesium	78080	79680	5000	32.1	81620	5000	70.8	83-118	2.40	20
Manganese	1137	1124	50.00	-26.3	1149	50.00	23.0	87-115	2.17	20
Nickel	2196	2137	50.00	-118	2194	50.00	-4.77	85-117	2.62	20
Thallium	2.000	49.45	50.00	98.9	51.01	50.00	102	82-116	3.11	20

ALS Houston, US Date: 22-Jul-22

Form 5B - Post Digest Sample Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Date Analyzed: 19-Jul-2022 15:26
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Arsenic	0	107.6	100	108	80-120
Magnesium	78080	87190	10000	91	80-120
Manganese	1137	1195	100	58	80-120
Thallium	0	107.7	100	108	80-120

ALS Houston, US Date: 22-Jul-22

Form 5B - Post Digest Sample Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Date Analyzed: 20-Jul-2022 12:55
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01PDS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Chromium	279.6	2647	2000	118	80-120
Nickel	2100	3828	2000	86	80-120

ALS Houston, US Date: 22-Jul-22

Form 7 - Laboratory Control Sample

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Date Analyzed: 19-Jul-2022 12:11
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: LCS-181294 Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Arsenic	50	57.14	114	84-116
Chromium	50	55.49	111	85-116
Magnesium	5000	5784	116	83-118
Manganese	50	56.64	113	87-115
Nickel	50	56.06	112	85-117
Thallium	50	51.3	103	82-116

ALS Houston, US Date: 22-Jul-22

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Date Analyzed: 19-Jul-2022 12:16
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01SD
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	C	SD Result	C	RPD	Q
Arsenic	0	U	0	U	0	
Magnesium	78080		80990		4	
Manganese	1137		1089		4	
Thallium	0	U	0	U	0	

ALS Houston, US Date: 22-Jul-22

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070088

Date Analyzed: 20-Jul-2022 12:53
Date Extracted: 16-Jul-2022 08:30
Units: ug/L

Lab Sample ID: HS22070086-01SD
Client Sample ID:

Analysis Method: SW6020A

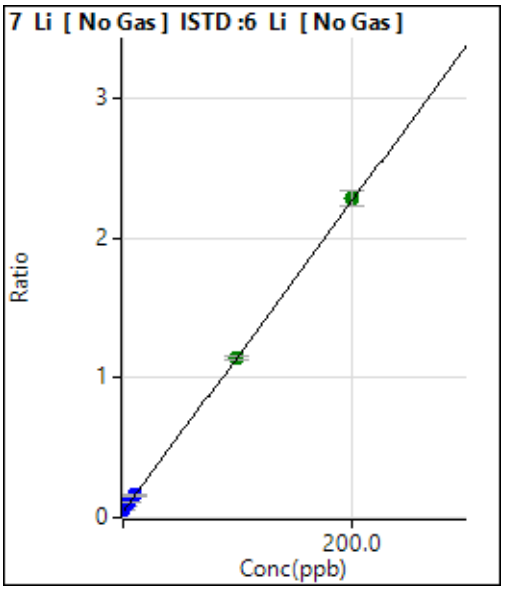
Analyte	Sample Result	C	SD Result	C	RPD	Q
Chromium	279.6		297.4	J	6	
Nickel	2100		2102		0	

Calibration for 250_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	243CALB.d	CAL BLK	07/19/2022 22:06:24
2	244CALS.d	2/10/200	07/19/2022 22:08:29
3	245CALS.d	5/25/500	07/19/2022 22:10:35
4	246CALS.d	10/50/100	07/19/2022 22:12:40
5	247CALS.d	100/500/10K	07/19/2022 22:14:44
6	248CALS.d	200/1000/20K	07/19/2022 22:16:46

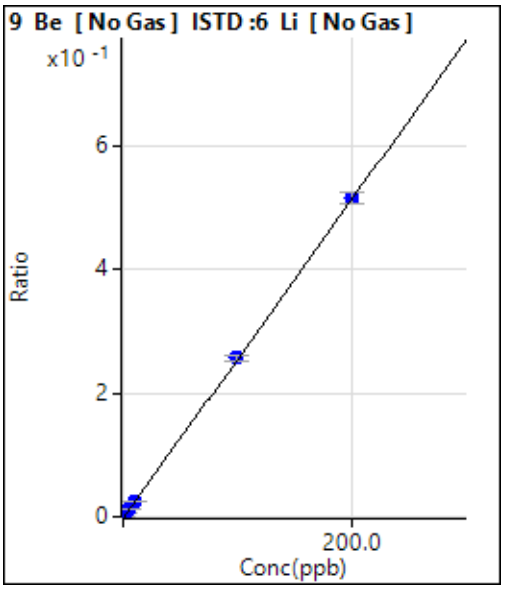
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	44822.95	0.0550	P	3.2	
2	☐	2.000	1.995	62431.13	0.0772	P	1.5	-0.2
3	☐	5.000	4.545	85947.71	0.1054	P	2.4	-9.1
4	☐	10.000	9.381	127793.69	0.1591	P	2.3	-6.2
5	☐	100.000	98.063	936020.56	1.1429	A	2.3	-1.9
6	☐	200.000	201.011	1821521.64	2.2850	A	4.4	0.5

y = 0.0111 * x + 0.0550
R = 0.9999
DL = 0.4811 ppb
BEC = 4.959 ppb

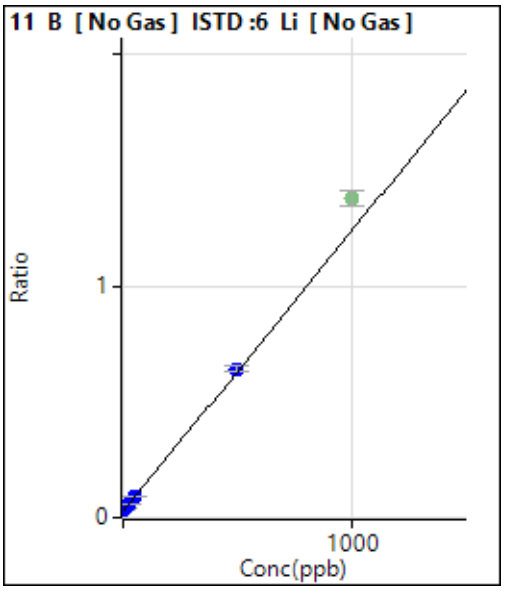
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1.67	0.0000	P	173.2	
2	☐	2.000	1.882	3920.57	0.0048	P	2.7	-5.9
3	☐	5.000	4.844	10165.41	0.0125	P	2.6	-3.1
4	☐	10.000	9.959	20590.14	0.0256	P	1.7	-0.4
5	☐	100.000	99.875	210415.85	0.2570	P	3.4	-0.1
6	☐	200.000	200.069	410520.46	0.5149	P	3.4	0.0

y = 0.0026 * x + 2.0560E-006
R = 1.0000
DL = 0.004152 ppb
BEC = 0.000799 ppb

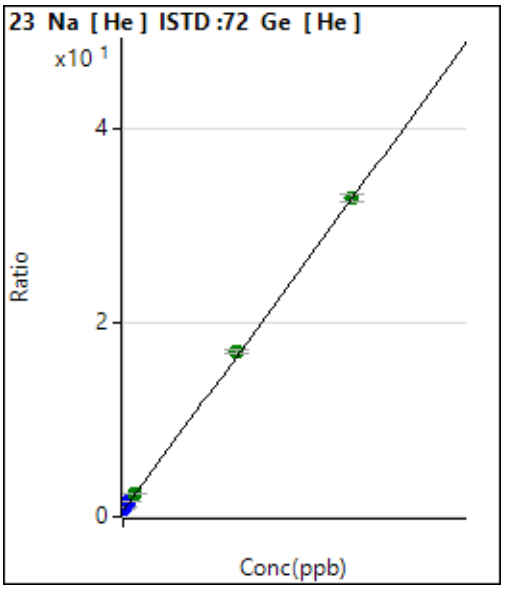
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	27971.22	0.0343	P	1.7	
2	☐	10.000	8.743	36332.27	0.0449	P	2.2	-12.6
3	☐	25.000	20.674	48384.80	0.0594	P	1.9	-17.3
4	☐	50.000	46.164	72487.96	0.0902	P	0.8	-7.7
5	☐	500.000	500.625	524402.34	0.6406	P	4.0	0.1
6	☑	1000.000		1100013.19	1.3800	A	5.0	

y = 0.0012 * x + 0.0343
R = 1.0000
DL = 1.47 ppb
BEC = 28.34 ppb

Weight: <None>
Min Conc: <None>

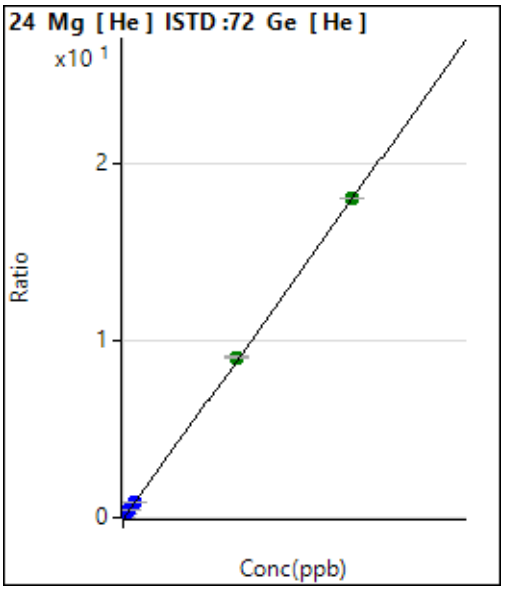


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	344079.90	0.7542	P	1.7	
2	☐	200.000	178.993	483177.30	1.0422	P	0.5	-10.5
3	☐	500.000	461.630	688616.97	1.4970	P	0.7	-7.7
4	☐	1000.000	1022.751	1111439.36	2.3998	A	1.6	2.3
5	☐	10000.00	10077.79	7915658.22	16.9693	A	2.0	0.8
6	☐	20000.00	19961.13	15086284.7	32.8715	A	2.0	-0.2

y = 0.0016 * x + 0.7542
R = 1.0000
DL = 23.48 ppb
BEC = 468.7 ppb

Weight: <None>
Min Conc: <None>

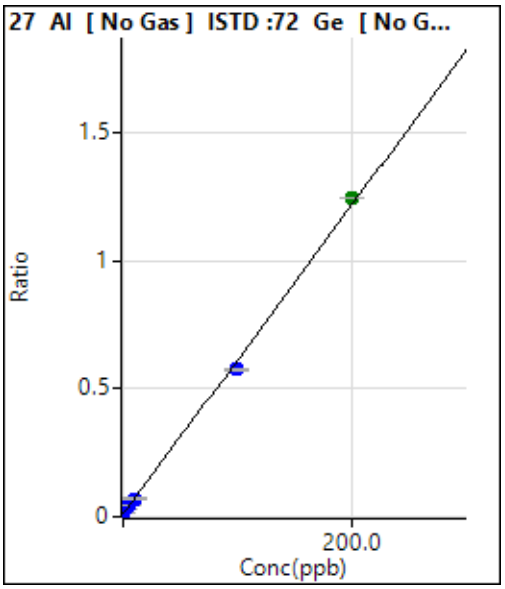
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	306.68	0.0007	P	13.4	
2	☐	200.000	195.983	82288.79	0.1775	P	0.2	-2.0
3	☐	500.000	484.870	201547.31	0.4381	P	0.7	-3.0
4	☐	1000.000	966.841	404314.34	0.8730	P	1.1	-3.3
5	☐	10000.00	10043.64	4227639.42	9.0625	A	1.1	0.4
6	☐	20000.00	19980.25	8274144.46	18.0277	A	0.3	-0.1

y = 9.0224E-004 * x + 6.7274E-004
R = 1.0000
DL = 0.2991 ppb
BEC = 0.7456 ppb

Weight: <None>
Min Conc: <None>

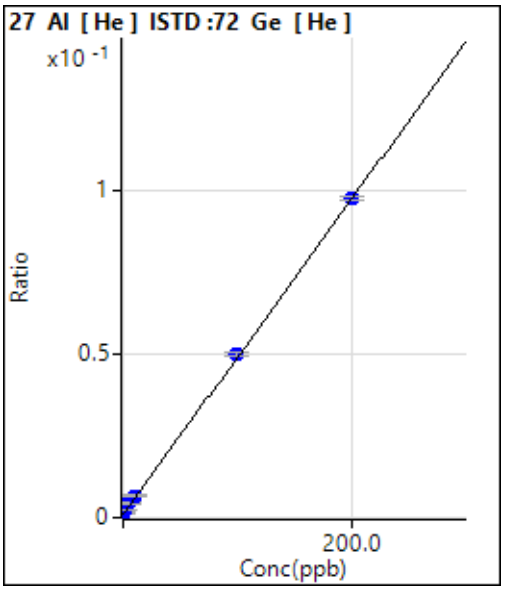


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	22849.11	0.0162	P	1.8	
2	☐	2.000	1.739	37851.98	0.0267	P	1.4	-13.1
3	☐	5.000	5.255	68484.94	0.0479	P	1.0	5.1
4	☐	10.000	9.056	100397.64	0.0708	P	3.4	-9.4
5	☐	100.000	92.815	818236.32	0.5756	P	1.2	-7.2
6	☐	200.000	203.636	1708167.74	1.2436	A	0.5	1.8

y = 0.0060 * x + 0.0162
R = 0.9991
DL = 0.1437 ppb
BEC = 2.691 ppb

Weight: <None>
Min Conc: <None>

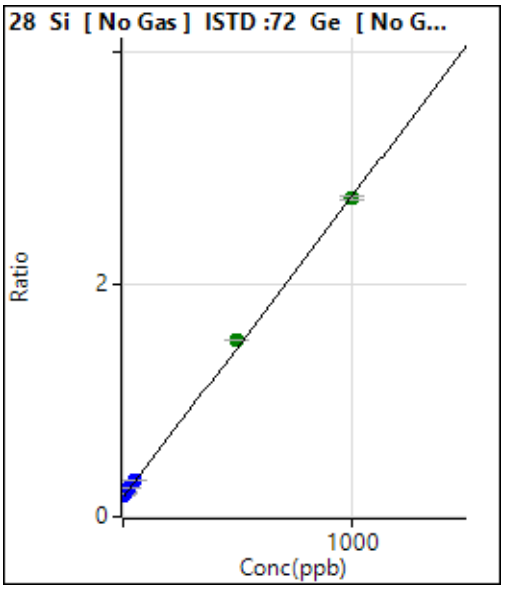
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	663.36	0.0015	P	7.9	
2	☐	2.000	2.015	1123.40	0.0024	P	5.3	0.7
3	☐	5.000	6.269	2056.85	0.0045	P	6.3	25.4
4	☐	10.000	10.571	3030.40	0.0065	P	9.5	5.7
5	☐	100.000	100.876	23336.50	0.0500	P	2.3	0.9
6	☐	200.000	199.501	44752.26	0.0975	P	0.9	-0.2

y = 4.8147E-004 * x + 0.0015
R = 1.0000
DL = 0.7111 ppb
BEC = 3.018 ppb

Weight: <None>
Min Conc: <None>

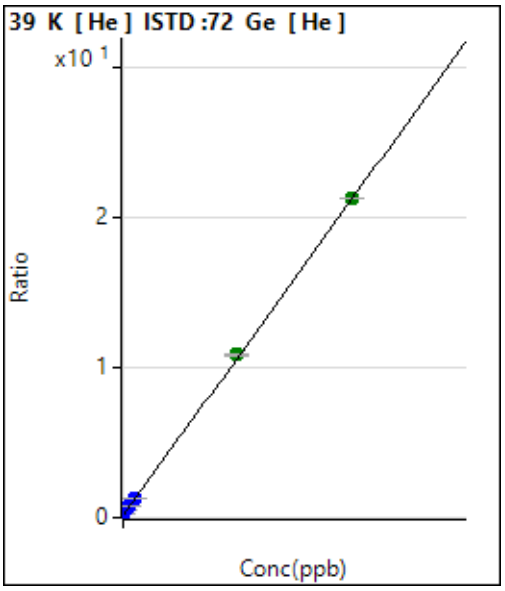


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	257048.87	0.1825	P	0.2	
2	☐	10.000	9.227	292484.42	0.2063	P	0.6	-7.7
3	☐	25.000	26.928	360453.52	0.2521	P	0.7	7.7
4	☐	50.000	50.917	445428.48	0.3141	P	1.5	1.8
5	☐	500.000	517.345	2160706.37	1.5201	A	0.9	3.5
6	☐	1000.000	991.241	3770939.53	2.7454	A	1.0	-0.9

y = 0.0026 * x + 0.1825
R = 0.9998
DL = 0.4787 ppb
BEC = 70.56 ppb

Weight: <None>
Min Conc: <None>

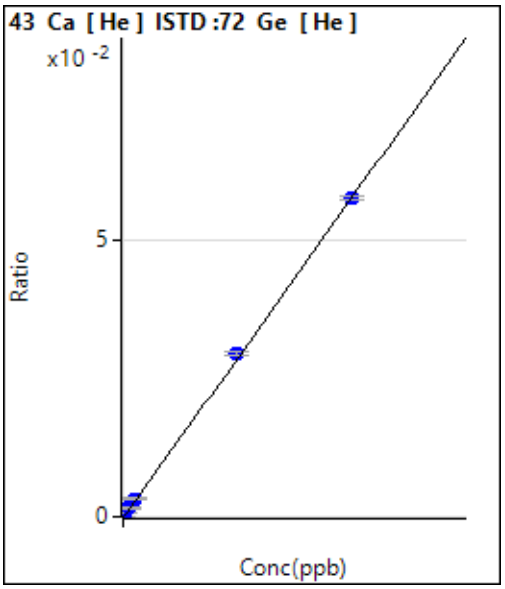
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115731.71	0.2536	P	0.4	
2	☐	200.000	191.246	211023.06	0.4552	P	0.6	-4.4
3	☐	500.000	479.979	349355.14	0.7594	P	1.8	-4.0
4	☐	1000.000	968.791	590267.85	1.2745	P	1.5	-3.1
5	☐	10000.00	10069.79	5068398.47	10.8651	A	1.5	0.7
6	☐	20000.00	19967.25	9773781.31	21.2950	A	0.6	-0.2

y = 0.0011 * x + 0.2536
R = 1.0000
DL = 2.961 ppb
BEC = 240.7 ppb

Weight: <None>
Min Conc: <None>

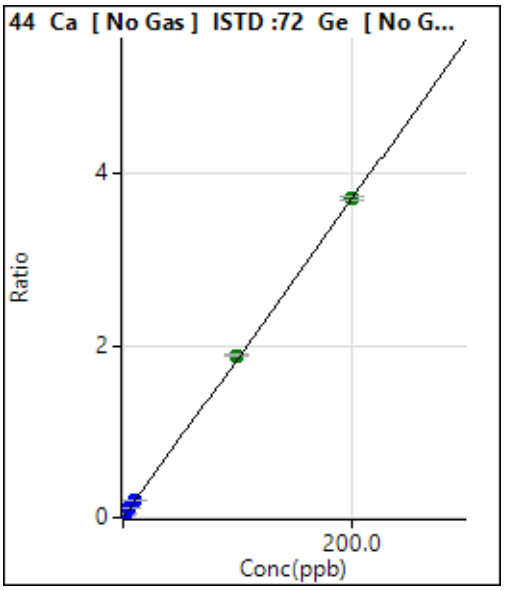


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.0	
2	☐	200.000	218.094	310.01	0.0007	P	23.2	9.0
3	☐	500.000	537.576	733.37	0.0016	P	11.1	7.5
4	☐	1000.000	1095.662	1486.77	0.0032	P	10.6	9.6
5	☐	10000.00	10199.68	13807.14	0.0296	P	2.8	2.0
6	☐	20000.00	19894.25	26479.10	0.0577	P	1.7	-0.5

y = 2.8982E-006 * x + 3.6456E-005
R = 0.9999
DL = 12.83 ppb
BEC = 12.58 ppb

Weight: <None>
Min Conc: <None>

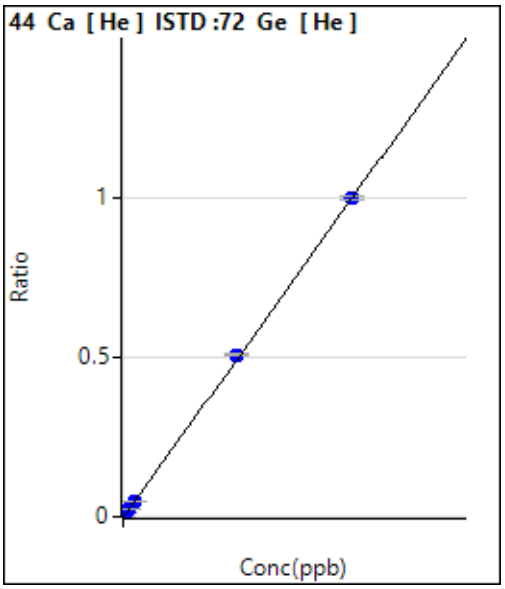
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25640.88	0.0182	P	1.6	
2	☐	2.000	1.958	77283.02	0.0545	P	1.1	-2.1
3	☐	5.000	4.918	156447.88	0.1094	P	0.6	-1.6
4	☐	10.000	9.600	278296.38	0.1962	P	0.8	-4.0
5	☐	100.000	100.872	2684970.17	1.8889	A	1.5	0.9
6	☐	200.000	199.586	5109400.65	3.7196	A	1.2	-0.2

y = 0.0185 * x + 0.0182
R = 1.0000
DL = 0.04623 ppb
BEC = 0.9814 ppb

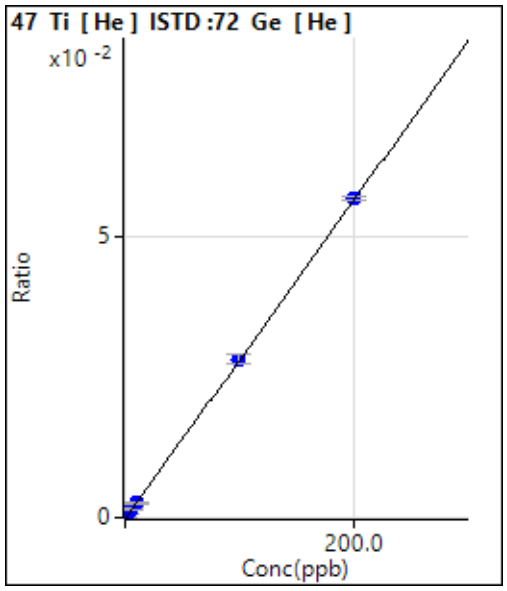
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	630.03	0.0014	P	6.7	
2	☐	200.000	195.338	5167.72	0.0111	P	3.1	-2.3
3	☐	500.000	504.872	12245.63	0.0266	P	2.8	1.0
4	☐	1000.000	974.811	23213.23	0.0501	P	2.0	-2.5
5	☐	10000.00	10126.45	236799.15	0.5076	P	1.2	1.3
6	☐	20000.00	19937.95	458106.31	0.9981	P	1.1	-0.3

y = 4.9991E-005 * x + 0.0014
R = 1.0000
DL = 5.586 ppb
BEC = 27.62 ppb

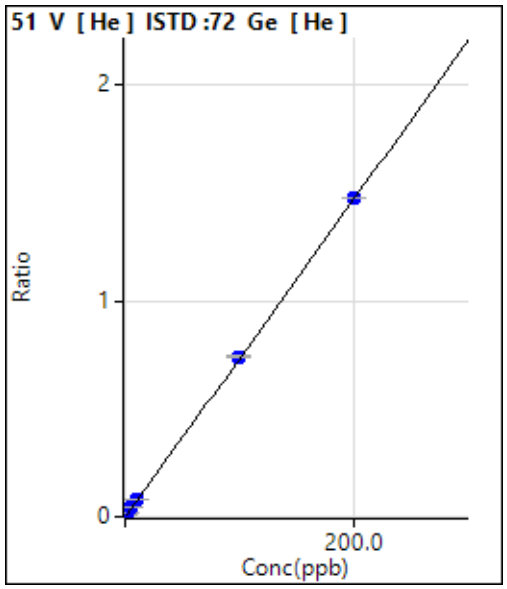
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	99.5	
2	☐	2.000	2.210	300.01	0.0006	P	40.8	10.5
3	☐	5.000	5.299	700.03	0.0015	P	13.8	6.0
4	☐	10.000	9.331	1233.41	0.0027	P	7.9	-6.7
5	☐	100.000	99.302	13126.44	0.0281	P	5.7	-0.7
6	☐	200.000	200.373	26048.30	0.0568	P	0.6	0.2

y = 2.8313E-004 * x + 2.1756E-005
R = 1.0000
DL = 0.2295 ppb
BEC = 0.07684 ppb

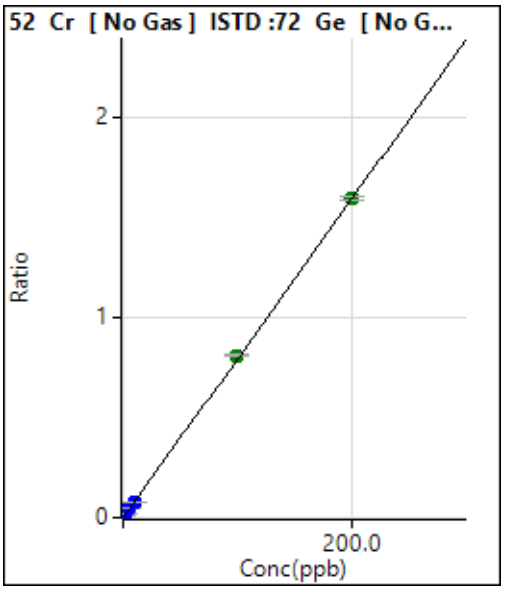
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2094.62	0.0046	P	3.1	
2	☐	2.000	1.939	8750.61	0.0189	P	0.8	-3.1
3	☐	5.000	4.914	18768.41	0.0408	P	1.8	-1.7
4	☐	10.000	9.745	35379.99	0.0764	P	0.7	-2.5
5	☐	100.000	100.104	346190.00	0.7421	P	1.3	0.1
6	☐	200.000	199.963	678282.18	1.4779	P	0.5	0.0

y = 0.0074 * x + 0.0046
R = 1.0000
DL = 0.05749 ppb
BEC = 0.6232 ppb

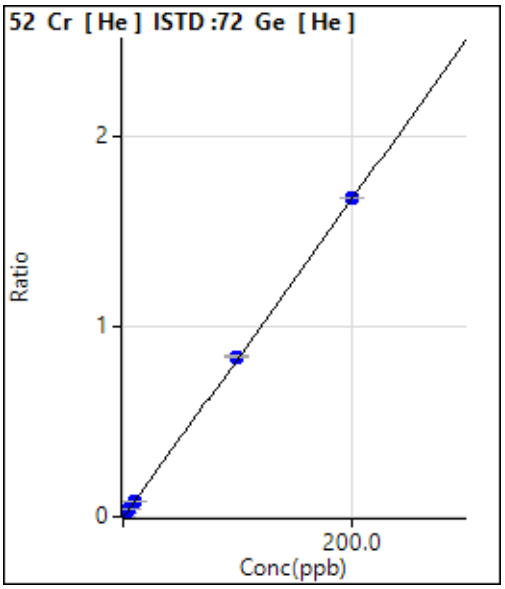
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10564.28	0.0075	P	3.1	
2	☐	2.000	1.892	31940.94	0.0225	P	2.0	-5.4
3	☐	5.000	4.581	62764.13	0.0439	P	1.5	-8.4
4	☐	10.000	9.199	114274.49	0.0806	P	1.4	-8.0
5	☐	100.000	101.063	1151864.93	0.8104	A	2.2	1.1
6	☐	200.000	199.520	2187482.21	1.5925	A	1.5	-0.2

y = 0.0079 * x + 0.0075
R = 1.0000
DL = 0.08831 ppb
BEC = 0.9439 ppb

Weight: <None>
Min Conc: <None>

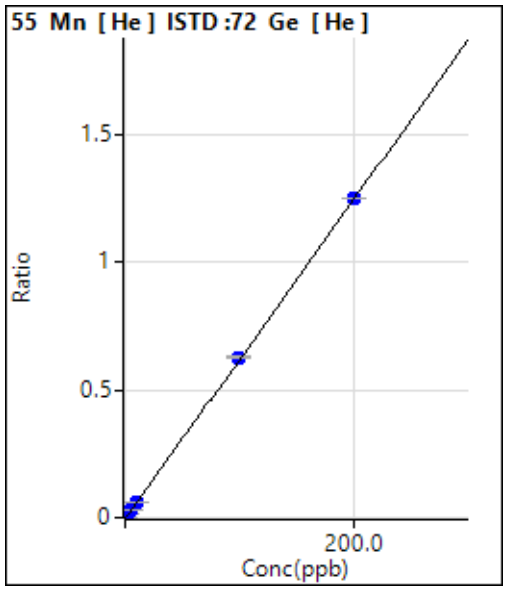


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1193.41	0.0026	P	3.7	
2	☐	2.000	1.969	8869.69	0.0191	P	4.7	-1.6
3	☐	5.000	4.820	19807.92	0.0431	P	3.1	-3.6
4	☐	10.000	9.785	39233.32	0.0847	P	2.2	-2.1
5	☐	100.000	100.167	393276.37	0.8431	P	1.5	0.2
6	☐	200.000	199.932	771132.20	1.6801	P	0.2	0.0

y = 0.0084 * x + 0.0026
R = 1.0000
DL = 0.0346 ppb
BEC = 0.3118 ppb

Weight: <None>
Min Conc: <None>

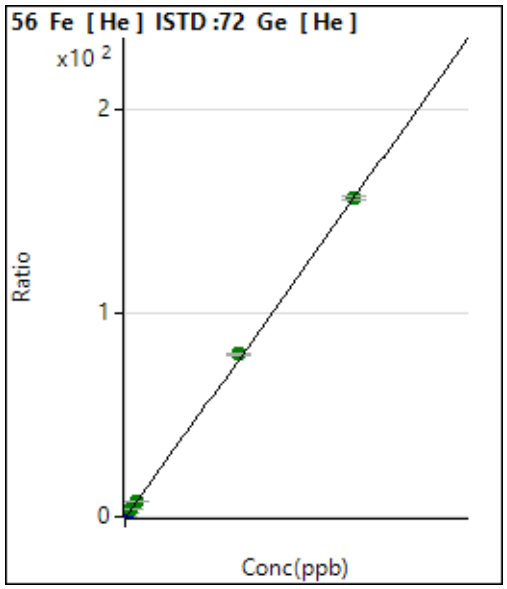
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	296.68	0.0007	P	14.7	
2	☐	2.000	1.866	5721.31	0.0123	P	5.4	-6.7
3	☐	5.000	4.836	14234.27	0.0309	P	3.3	-3.3
4	☐	10.000	9.743	28560.21	0.0617	P	2.4	-2.6
5	☐	100.000	100.390	293607.03	0.6294	P	1.7	0.4
6	☐	200.000	199.824	574719.89	1.2522	P	0.2	-0.1

y = 0.0063 * x + 6.5092E-004
R = 1.0000
DL = 0.04586 ppb
BEC = 0.1039 ppb

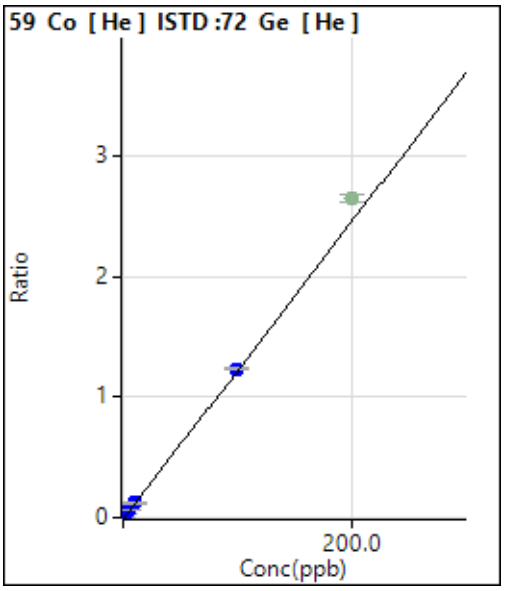
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12592.67	0.0276	P	2.4	
2	☐	200.000	195.490	726461.42	1.5670	P	1.6	-2.3
3	☐	500.000	519.372	1894119.35	4.1175	A	1.9	3.9
4	☐	1000.000	1008.121	3689506.82	7.9663	A	1.0	0.8
5	☐	10000.00	10150.57	37301026.9	79.9605	A	1.0	1.5
6	☐	20000.00	19923.87	72021503.9	156.922	A	0.8	-0.4

y = 0.0079 * x + 0.0276
R = 1.0000
DL = 0.2499 ppb
BEC = 3.505 ppb

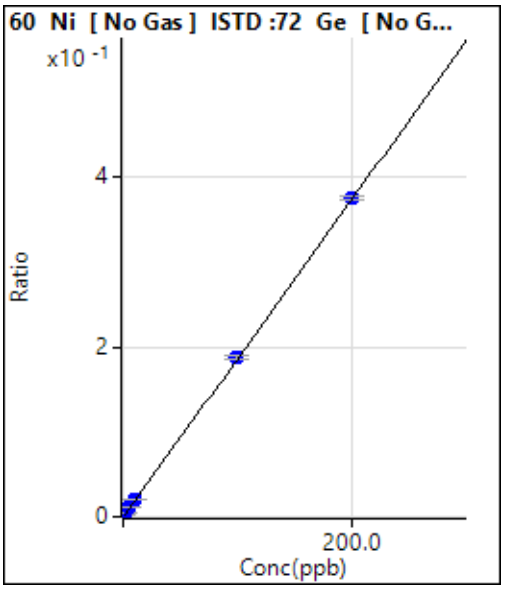
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	26.0	
2	☐	2.000	1.966	11274.84	0.0243	P	2.0	-1.7
3	☐	5.000	4.802	27267.62	0.0593	P	1.8	-4.0
4	☐	10.000	9.703	55429.72	0.1197	P	2.4	-3.0
5	☐	100.000	100.040	575310.47	1.2333	P	1.2	0.0
6	☑	200.000		1214610.50	2.6465	A	2.2	

y = 0.0123 * x + 8.7838E-005
R = 1.0000
DL = 0.005568 ppb
BEC = 0.007126 ppb

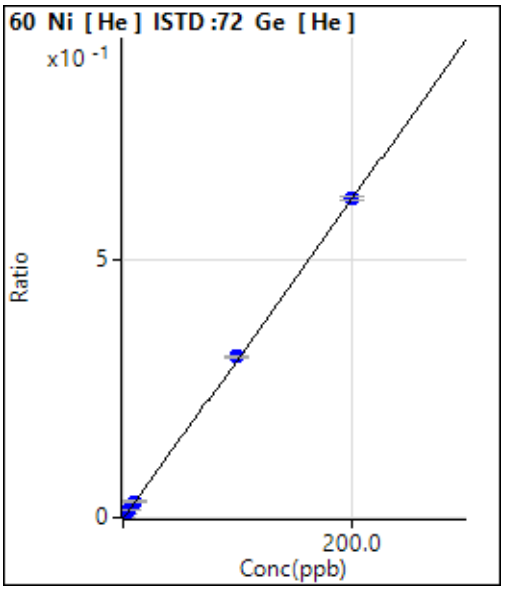
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.52	0.0014	P	4.8	
2	☐	2.000	2.064	7505.51	0.0053	P	4.1	3.2
3	☐	5.000	5.080	15632.51	0.0109	P	1.6	1.6
4	☐	10.000	10.094	28794.18	0.0203	P	1.9	0.9
5	☐	100.000	99.751	267074.93	0.1879	P	1.7	-0.2
6	☐	200.000	200.117	515783.16	0.3755	P	1.3	0.1

y = 0.0019 * x + 0.0014
R = 1.0000
DL = 0.1116 ppb
BEC = 0.7683 ppb

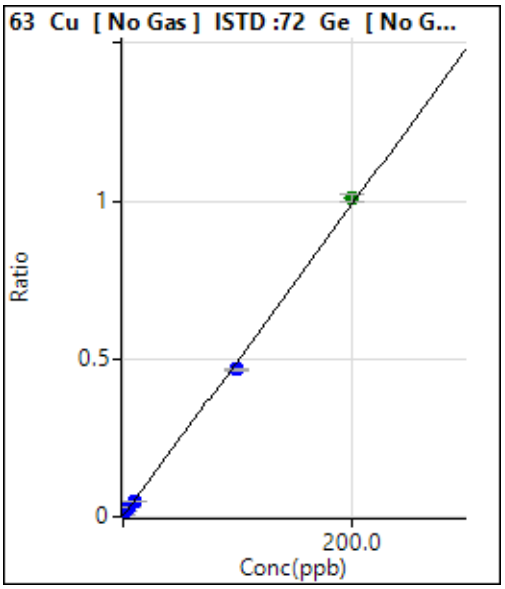
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0005	P	18.8	
2	☐	2.000	2.003	3100.41	0.0067	P	5.1	0.2
3	☐	5.000	4.919	7225.38	0.0157	P	3.1	-1.6
4	☐	10.000	9.989	14541.33	0.0314	P	2.2	-0.1
5	☐	100.000	100.440	145173.98	0.3112	P	1.1	0.4
6	☐	200.000	199.782	283876.15	0.6185	P	0.8	-0.1

y = 0.0031 * x + 4.9001E-004
R = 1.0000
DL = 0.08928 ppb
BEC = 0.1584 ppb

Weight: <None>
Min Conc: <None>

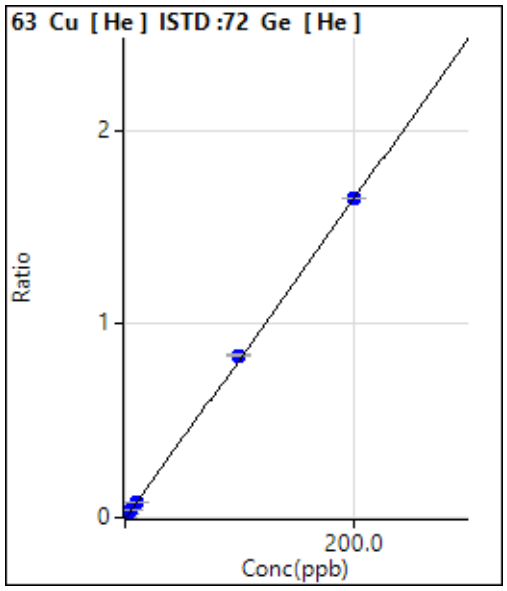


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9783.68	0.0069	P	1.7	
2	☐	2.000	1.764	22178.35	0.0156	P	1.8	-11.8
3	☐	5.000	4.313	40346.63	0.0282	P	2.2	-13.7
4	☐	10.000	8.935	72335.68	0.0510	P	1.5	-10.7
5	☐	100.000	93.388	664510.33	0.4675	P	1.5	-6.6
6	☐	200.000	203.379	1387150.55	1.0099	A	1.8	1.7

y = 0.0049 * x + 0.0069
R = 0.9993
DL = 0.07331 ppb
BEC = 1.408 ppb

Weight: <None>
Min Conc: <None>

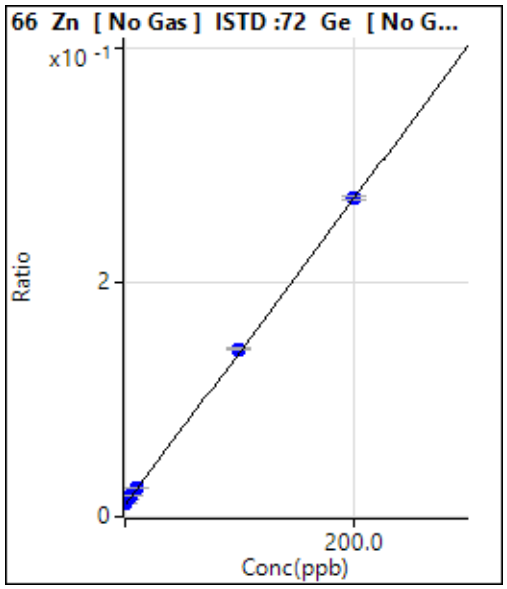
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	553.36	0.0012	P	19.2	
2	☐	2.000	2.004	8245.99	0.0178	P	1.1	0.2
3	☐	5.000	5.010	19621.10	0.0427	P	2.0	0.2
4	☐	10.000	9.690	37682.53	0.0814	P	2.1	-3.1
5	☐	100.000	101.056	390512.44	0.8371	P	1.4	1.1
6	☐	200.000	199.487	757934.41	1.6514	P	0.6	-0.3

y = 0.0083 * x + 0.0012
R = 1.0000
DL = 0.08451 ppb
BEC = 0.1466 ppb

Weight: <None>
Min Conc: <None>

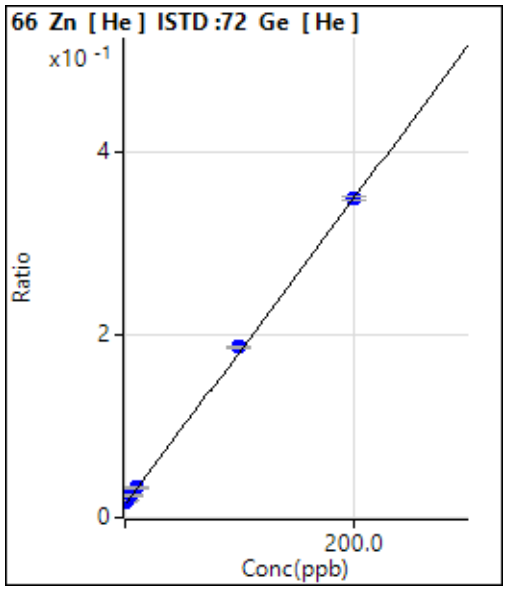


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16123.15	0.0114	P	4.4	
2	☐	2.000	2.360	20589.33	0.0145	P	3.0	18.0
3	☐	5.000	4.678	25086.86	0.0175	P	0.8	-6.4
4	☐	10.000	10.066	34838.30	0.0246	P	3.3	0.7
5	☐	100.000	100.809	203098.84	0.1429	P	1.5	0.8
6	☐	200.000	199.597	373198.70	0.2717	P	1.0	-0.2

y = 0.0013 * x + 0.0114
R = 1.0000
DL = 1.153 ppb
BEC = 8.776 ppb

Weight: <None>
Min Conc: <None>

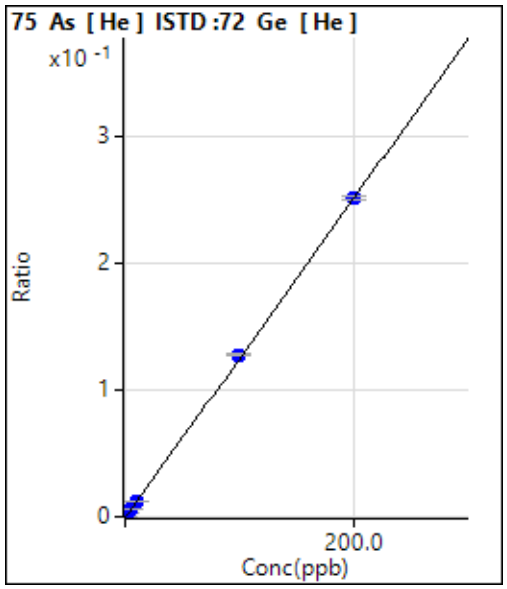
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7302.09	0.0160	P	0.6	
2	☐	2.000	1.494	8579.54	0.0185	P	3.1	-25.3
3	☐	5.000	5.041	11244.87	0.0244	P	2.3	0.8
4	☐	10.000	9.967	15142.02	0.0327	P	2.9	-0.3
5	☐	100.000	101.746	86947.41	0.1864	P	1.0	1.7
6	☐	200.000	199.133	160399.41	0.3495	P	1.3	-0.4

y = 0.0017 * x + 0.0160
R = 0.9999
DL = 0.1708 ppb
BEC = 9.557 ppb

Weight: <None>
Min Conc: <None>

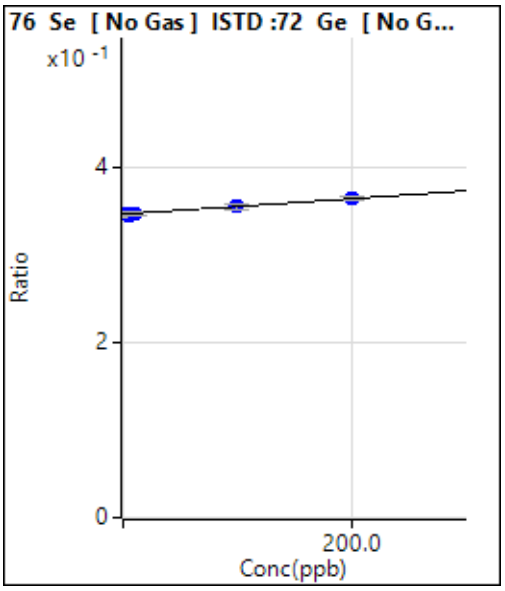


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0002	P	13.8	
2	☐	2.000	2.080	1330.07	0.0029	P	2.3	4.0
3	☐	5.000	5.051	3041.47	0.0066	P	0.7	1.0
4	☐	10.000	9.866	5871.30	0.0127	P	0.7	-1.3
5	☐	100.000	101.329	59661.05	0.1279	P	1.1	1.3
6	☐	200.000	199.340	115363.99	0.2514	P	1.2	-0.3

y = 0.0013 * x + 2.4862E-004
R = 1.0000
DL = 0.08194 ppb
BEC = 0.1974 ppb

Weight: <None>
Min Conc: <None>

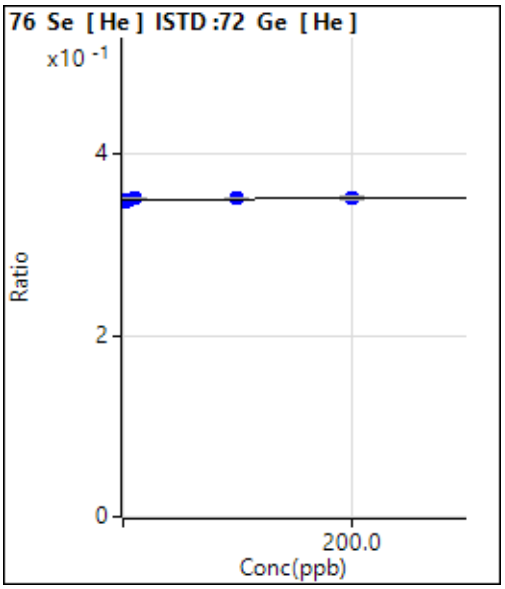
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	488547.58	0.3468	P	0.6	
2	☐	2.000	0.676	491690.06	0.3468	P	0.8	-66.2
3	☐	5.000	-23.031	492906.35	0.3447	P	0.9	-560.6
4	☐	10.000	8.392	492803.20	0.3475	P	1.6	-16.1
5	☐	100.000	94.950	504915.88	0.3552	P	1.5	-5.1
6	☐	200.000	203.320	501198.48	0.3649	P	1.4	1.7

y = 8.9213E-005 * x + 0.3468
R = 0.9925
DL = 67.5 ppb
BEC = 3887 ppb

Weight: <None>
Min Conc: <None>

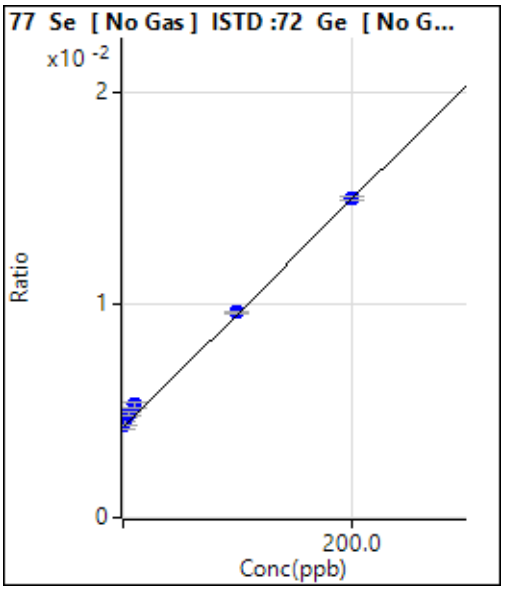


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	159660.32	0.3499	P	0.6	
2	☐	2.000	-164.239	161484.84	0.3483	P	0.4	-8311.
3	☐	5.000	41.296	161160.94	0.3503	P	0.5	725.9
4	☐	10.000	116.218	162604.06	0.3511	P	0.6	1062.2
5	☐	100.000	221.537	164270.81	0.3521	P	0.1	121.5
6	☐	200.000	134.675	161218.47	0.3513	P	1.2	-32.7

y = 9.8443E-006 * x + 0.3499
R = 0.5808
DL = 622.6 ppb
BEC = 3.555E+04 ppb

Weight: <None>
Min Conc: <None>

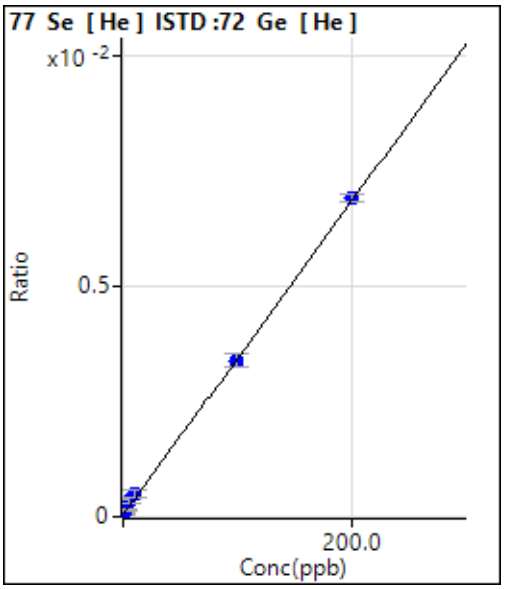
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6064.80	0.0043	P	8.4	
2	☐	2.000	4.380	6435.00	0.0045	P	7.9	119.0
3	☐	5.000	10.062	6925.22	0.0048	P	4.1	101.2
4	☐	10.000	18.571	7515.56	0.0053	P	5.1	85.7
5	☐	100.000	99.458	13690.54	0.0096	P	0.4	-0.5
6	☐	200.000	199.692	20602.66	0.0150	P	1.5	-0.2

y = 5.3552E-005 * x + 0.0043
R = 0.9993
DL = 20.32 ppb
BEC = 80.38 ppb

Weight: <None>
Min Conc: <None>

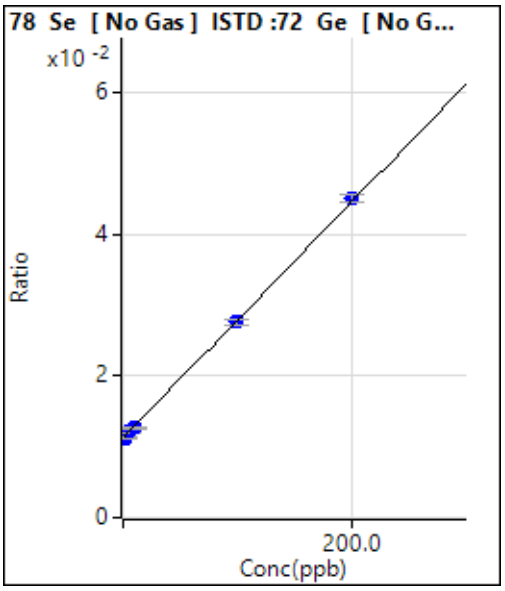


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33.33	0.0001	P	61.9	
2	☐	2.000	2.090	66.67	0.0001	P	31.4	4.5
3	☐	5.000	7.656	153.33	0.0003	P	26.2	53.1
4	☐	10.000	12.905	236.67	0.0005	P	31.5	29.1
5	☐	100.000	97.434	1580.12	0.0034	P	8.8	-2.6
6	☐	200.000	201.071	3173.77	0.0069	P	2.7	0.5

y = 3.4027E-005 * x + 7.2749E-005
R = 0.9997
DL = 3.968 ppb
BEC = 2.138 ppb

Weight: <None>
Min Conc: <None>

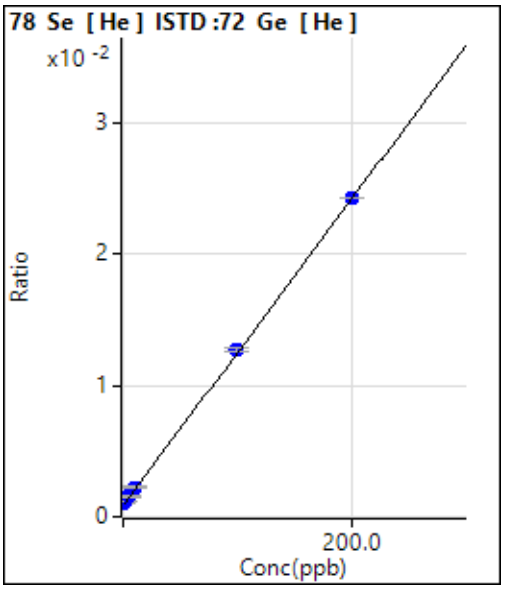
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16253.35	0.0115	P	1.4	
2	☐	2.000	-2.212	15832.86	0.0112	P	2.9	-210.6
3	☐	5.000	3.519	17331.41	0.0121	P	4.7	-29.6
4	☐	10.000	7.052	18028.96	0.0127	P	2.9	-29.5
5	☐	100.000	96.695	39250.78	0.0276	P	3.1	-3.3
6	☐	200.000	201.879	61962.37	0.0451	P	2.2	0.9

y = 1.6631E-004 * x + 0.0115
R = 0.9997
DL = 2.99 ppb
BEC = 69.37 ppb

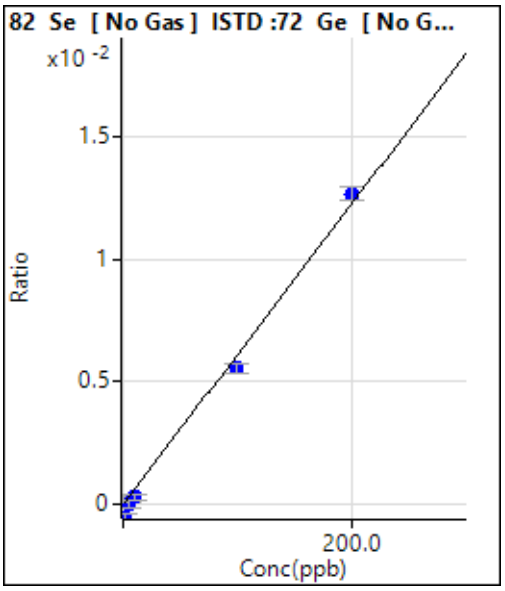
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	446.01	0.0010	P	4.3	
2	☐	2.000	1.719	546.01	0.0012	P	3.6	-14.0
3	☐	5.000	5.206	728.69	0.0016	P	6.6	4.1
4	☐	10.000	10.995	1046.04	0.0023	P	2.0	9.9
5	☐	100.000	100.629	5927.98	0.0127	P	1.5	0.6
6	☐	200.000	199.633	11127.94	0.0242	P	0.4	-0.2

y = 1.1655E-004 * x + 9.7729E-004
R = 1.0000
DL = 1.074 ppb
BEC = 8.385 ppb

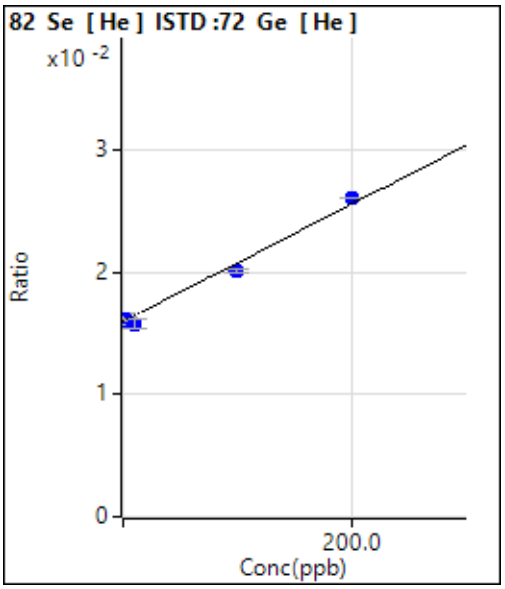
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	32.40	0.0000	P	1910.	
2	☐	2.000	-9.950	-835.26	-0.0006	P	-63.4	-597.5
3	☐	5.000	-1.430	-95.37	-0.0001	P	-430.	-128.6
4	☐	10.000	3.764	363.13	0.0003	P	77.6	-62.4
5	☐	100.000	89.442	7862.82	0.0055	P	6.4	-10.6
6	☐	200.000	205.871	17445.67	0.0127	P	5.0	2.9

y = 6.1585E-005 * x + 2.2822E-005
R = 0.9979
DL = 21.24 ppb
BEC = 0.3706 ppb

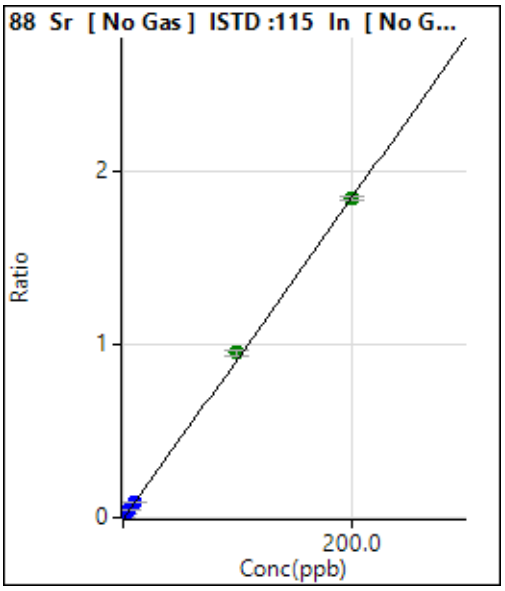
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7322.13	0.0161	P	7.3	
2	☐	2.000	3.221	7515.58	0.0162	P	1.2	61.1
3	☐	5.000	-3.199	7315.44	0.0159	P	2.6	-164.0
4	☐	10.000	-5.813	7305.46	0.0158	P	4.6	-158.1
5	☐	100.000	83.765	9366.73	0.0201	P	1.3	-16.2
6	☐	200.000	209.101	11978.86	0.0261	P	0.3	4.6

y = 4.8031E-005 * x + 0.0161
R = 0.9940
DL = 73.39 ppb
BEC = 334.3 ppb

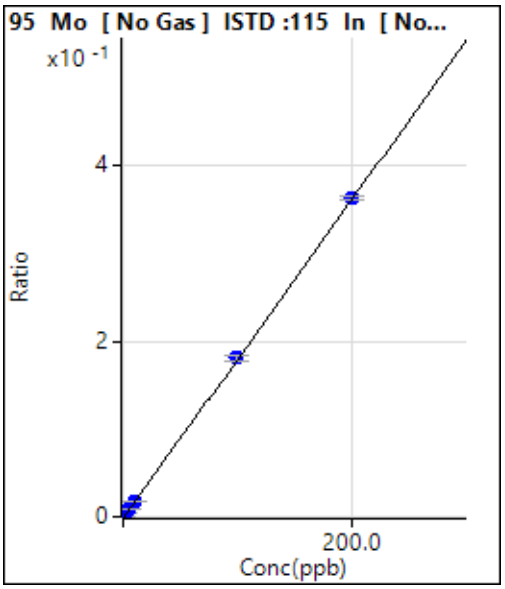
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.04	0.0004	P	13.1	
2	☐	2.000	1.891	29903.67	0.0179	P	1.7	-5.4
3	☐	5.000	4.990	79261.21	0.0466	P	2.1	-0.2
4	☐	10.000	9.272	145077.38	0.0863	P	1.3	-7.3
5	☐	100.000	102.440	1609026.54	0.9487	A	2.8	2.4
6	☐	200.000	198.818	3048031.72	1.8409	A	0.8	-0.6

y = 0.0093 * x + 4.3648E-004
R = 0.9999
DL = 0.01848 ppb
BEC = 0.04715 ppb

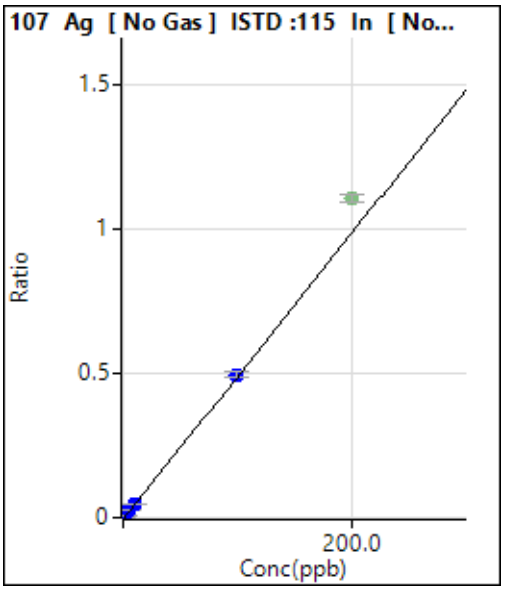
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	49.8	
2	☐	2.000	1.873	5684.65	0.0034	P	1.6	-6.3
3	☐	5.000	4.764	14715.06	0.0087	P	3.3	-4.7
4	☐	10.000	9.545	29158.90	0.0173	P	1.5	-4.5
5	☐	100.000	99.592	306523.71	0.1808	P	3.6	-0.4
6	☐	200.000	200.234	601711.31	0.3634	P	1.4	0.1

y = 0.0018 * x + 1.1959E-005
R = 1.0000
DL = 0.00984 ppb
BEC = 0.006589 ppb

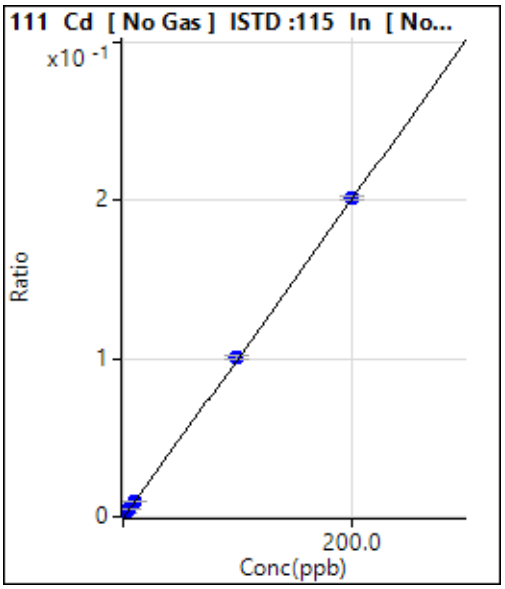
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	28.7	
2	☐	2.000	1.967	16353.74	0.0098	P	2.6	-1.7
3	☐	5.000	4.820	40652.89	0.0239	P	2.5	-3.6
4	☐	10.000	9.836	81926.53	0.0487	P	1.4	-1.6
5	☐	100.000	100.026	838721.89	0.4946	P	3.6	0.0
6	☑	200.000		1829217.26	1.1047	A	2.1	

y = 0.0049 * x + 8.9654E-005
R = 1.0000
DL = 0.01559 ppb
BEC = 0.01813 ppb

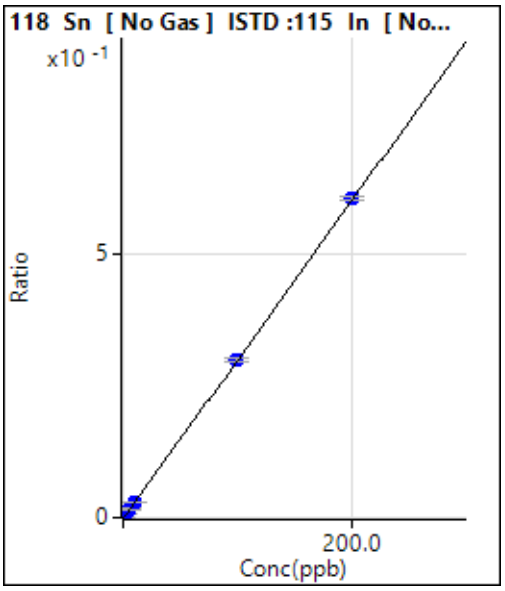
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.018	3383.84	0.0020	P	3.4	0.9
3	☐	5.000	4.700	8039.25	0.0047	P	2.3	-6.0
4	☐	10.000	9.642	16313.67	0.0097	P	2.3	-3.6
5	☐	100.000	99.923	170524.87	0.1005	P	2.2	-0.1
6	☐	200.000	200.064	333276.88	0.2013	P	1.1	0.0

y = 0.0010 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

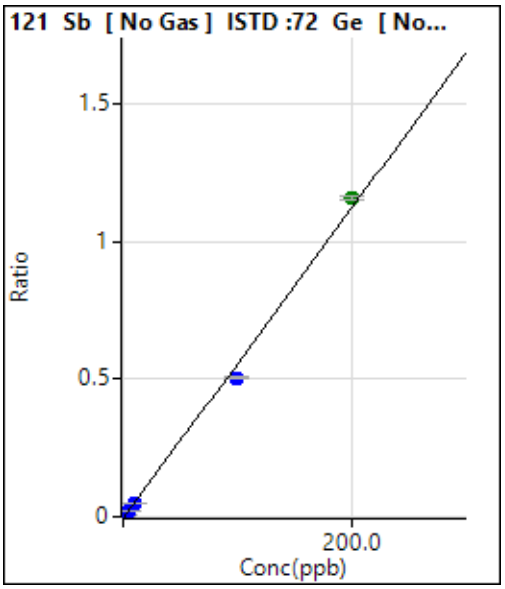
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1463.44	0.0009	P	8.7	
2	☐	2.000	1.927	11164.92	0.0067	P	5.2	-3.7
3	☐	5.000	5.050	27457.28	0.0161	P	13.0	1.0
4	☐	10.000	9.332	48928.03	0.0291	P	0.6	-6.7
5	☐	100.000	98.896	508658.85	0.2999	P	2.6	-1.1
6	☐	200.000	200.585	1005629.46	0.6074	P	1.4	0.3

y = 0.0030 * x + 8.7555E-004
R = 1.0000
DL = 0.07537 ppb
BEC = 0.2896 ppb

Weight: <None>
Min Conc: <None>

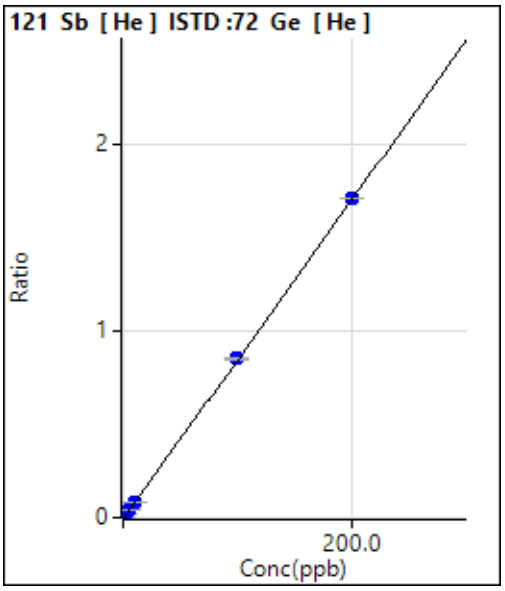


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	7.9	
2	☐	2.000	1.695	13804.22	0.0097	P	3.4	-15.2
3	☐	5.000	4.243	34452.20	0.0241	P	1.4	-15.1
4	☐	10.000	8.675	69581.10	0.0491	P	2.5	-13.2
5	☐	100.000	89.173	714440.98	0.5026	P	1.4	-10.8
6	☐	200.000	205.502	1590742.89	1.1581	A	1.4	2.8

y = 0.0056 * x + 1.8457E-004
R = 0.9980
DL = 0.00775 ppb
BEC = 0.03276 ppb

Weight: <None>
Min Conc: <None>

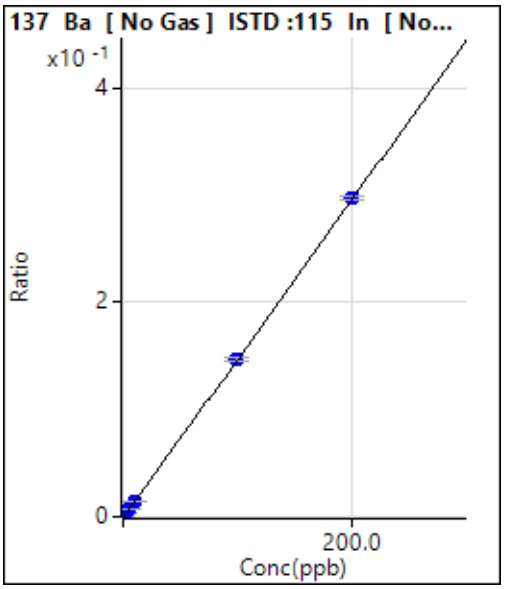
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0003	P	27.9	
2	☐	2.000	1.985	8015.91	0.0173	P	2.6	-0.7
3	☐	5.000	4.898	19401.31	0.0422	P	3.9	-2.0
4	☐	10.000	9.575	38035.45	0.0821	P	4.2	-4.2
5	☐	100.000	99.803	397920.03	0.8530	P	1.2	-0.2
6	☐	200.000	200.122	784879.23	1.7101	P	0.5	0.1

y = 0.0085 * x + 3.2809E-004
R = 1.0000
DL = 0.03212 ppb
BEC = 0.0384 ppb

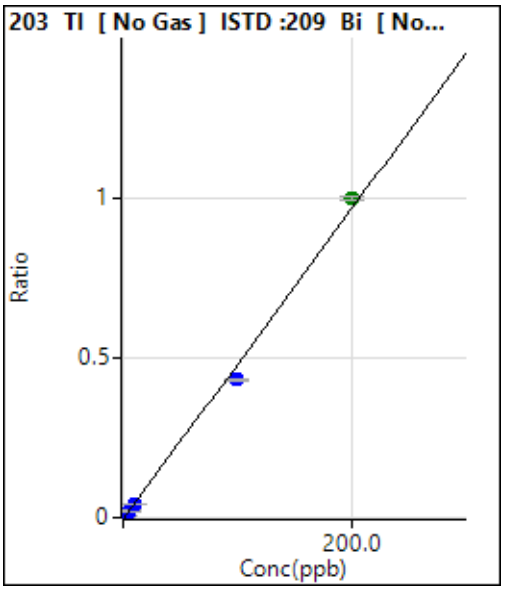
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	9.7	
2	☐	2.000	2.003	5081.09	0.0030	P	1.7	0.2
3	☐	5.000	4.716	12029.09	0.0071	P	1.0	-5.7
4	☐	10.000	9.578	24035.79	0.0143	P	2.5	-4.2
5	☐	100.000	99.336	250207.93	0.1475	P	2.9	-0.7
6	☐	200.000	200.360	492578.05	0.2975	P	0.9	0.2

y = 0.0015 * x + 7.5785E-005
R = 1.0000
DL = 0.01479 ppb
BEC = 0.05105 ppb

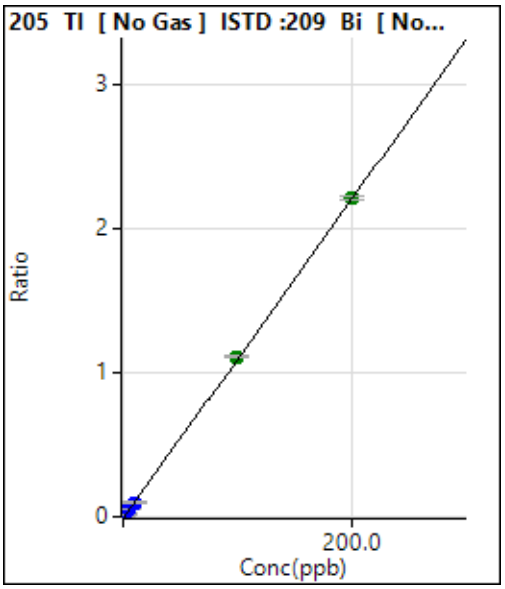
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.4	
2	☐	2.000	1.714	13604.35	0.0083	P	2.3	-14.3
3	☐	5.000	4.258	33592.33	0.0207	P	4.8	-14.8
4	☐	10.000	8.522	67502.47	0.0413	P	3.5	-14.8
5	☐	100.000	88.781	700088.76	0.4306	P	0.6	-11.2
6	☐	200.000	205.705	1590313.99	0.9977	A	0.7	2.9

y = 0.0048 * x + 1.0237E-005
R = 0.9979
DL = 0.002181 ppb
BEC = 0.002111 ppb

Weight: <None>
Min Conc: <None>

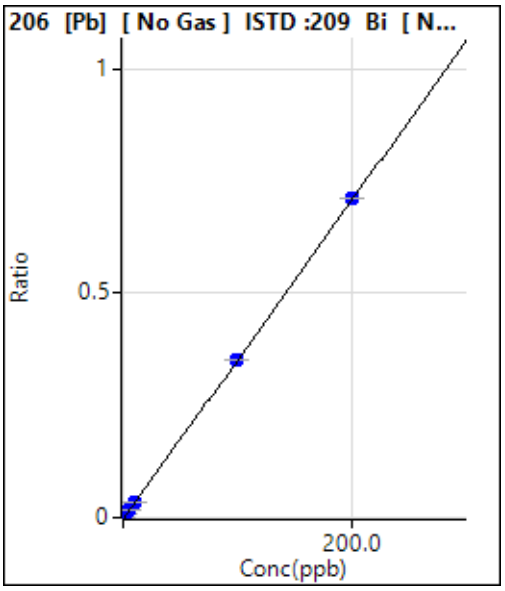


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	35.6	
2	☐	2.000	1.799	32626.34	0.0200	P	2.8	-10.1
3	☐	5.000	4.404	79415.67	0.0488	P	2.8	-11.9
4	☐	10.000	8.956	162175.43	0.0993	P	2.5	-10.4
5	☐	100.000	100.447	1810404.35	1.1136	A	1.4	0.4
6	☐	200.000	199.845	3531256.82	2.2155	A	1.6	-0.1

y = 0.0111 * x + 2.6648E-005
R = 1.0000
DL = 0.00257 ppb
BEC = 0.002404 ppb

Weight: <None>
Min Conc: <None>

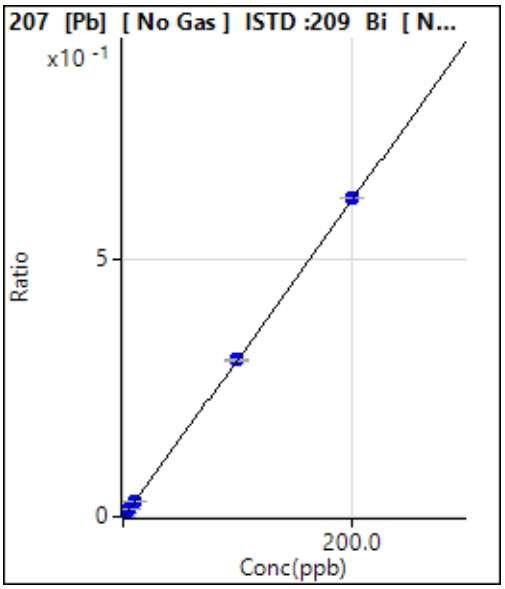
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	123.34	0.0001	P	44.0	
2	☐	2.000	1.929	11315.35	0.0069	P	4.2	-3.6
3	☐	5.000	4.767	27651.13	0.0170	P	2.4	-4.7
4	☐	10.000	9.639	56029.10	0.0343	P	1.2	-3.6
5	☐	100.000	99.274	573304.55	0.3526	P	0.6	-0.7
6	☐	200.000	200.388	1134431.18	0.7117	P	0.3	0.2

y = 0.0036 * x + 7.5662E-005
R = 1.0000
DL = 0.02812 ppb
BEC = 0.02131 ppb

Weight: <None>
Min Conc: <None>

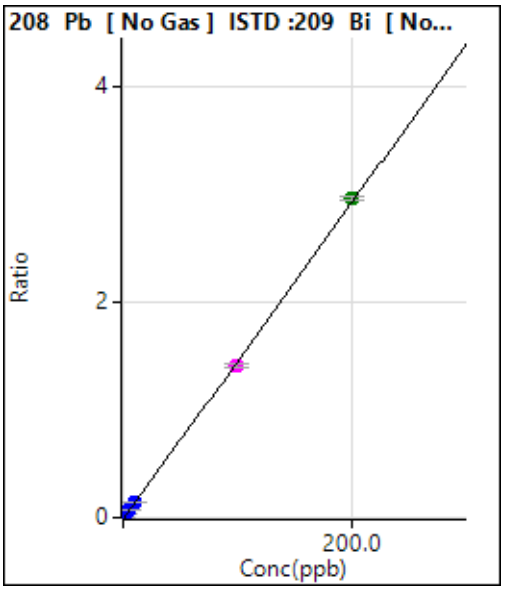


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	146.67	0.0001	P	4.7	
2	☐	2.000	1.934	9867.42	0.0060	P	1.1	-3.3
3	☐	5.000	4.665	23472.45	0.0144	P	0.8	-6.7
4	☐	10.000	9.556	48139.79	0.0295	P	1.2	-4.4
5	☐	100.000	98.632	493258.59	0.3034	P	0.2	-1.4
6	☐	200.000	200.715	983940.29	0.6173	P	0.4	0.4

y = 0.0031 * x + 9.0159E-005
R = 1.0000
DL = 0.004108 ppb
BEC = 0.02932 ppb

Weight: <None>
Min Conc: <None>

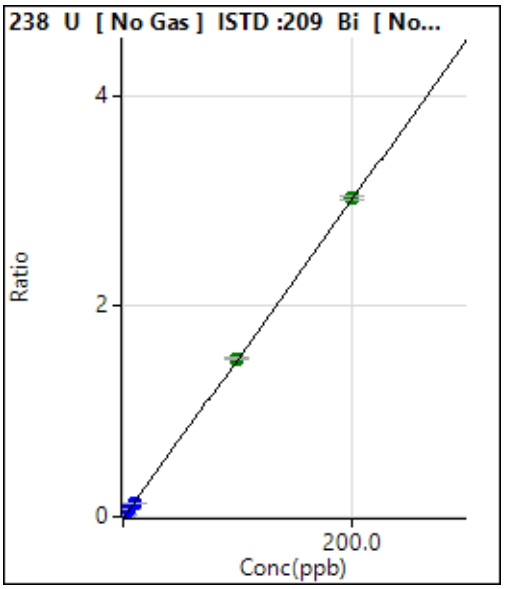
Calibration for 250_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	526.68	0.0003	P	6.8	
2	☐	2.000	1.847	44929.09	0.0275	P	3.4	-7.6
3	☐	5.000	4.547	109299.24	0.0672	P	1.2	-9.1
4	☐	10.000	9.203	221619.65	0.1357	P	1.5	-8.0
5	☐	100.000	96.377	2305350.51	1.4180	M	2.1	-3.6
6	☐	200.000	201.864	4733726.33	2.9698	A	0.6	0.9

y = 0.0147 * x + 3.2379E-004
R = 0.9998
DL = 0.004493 ppb
BEC = 0.02201 ppb

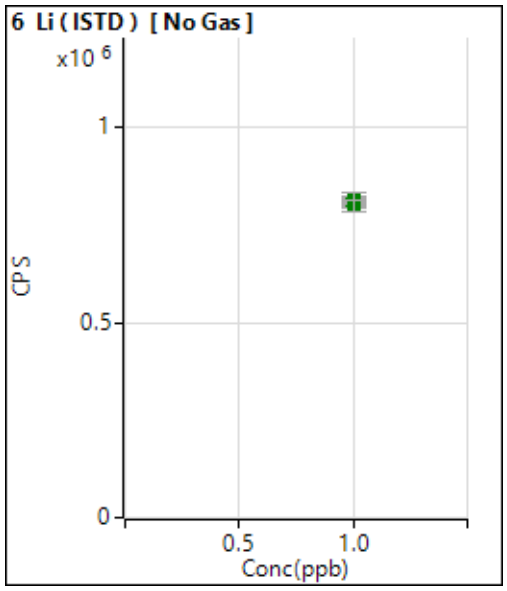
Weight: <None>
Min Conc: <None>



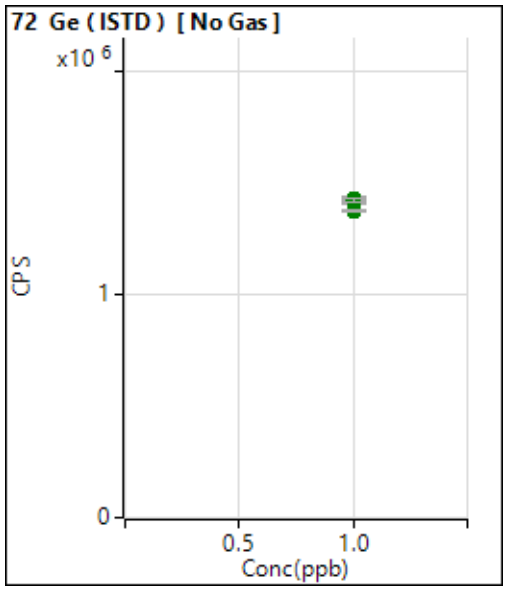
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.4	
2	☐	2.000	1.775	43882.52	0.0269	P	2.7	-11.2
3	☐	5.000	4.437	109137.98	0.0671	P	1.2	-11.3
4	☐	10.000	8.968	221537.58	0.1356	P	1.4	-10.3
5	☐	100.000	99.415	2444703.14	1.5037	A	0.9	-0.6
6	☐	200.000	200.360	4830317.53	3.0305	A	1.4	0.2

y = 0.0151 * x + 6.1417E-006
R = 1.0000
DL = 0.001223 ppb
BEC = 0.0004061 ppb

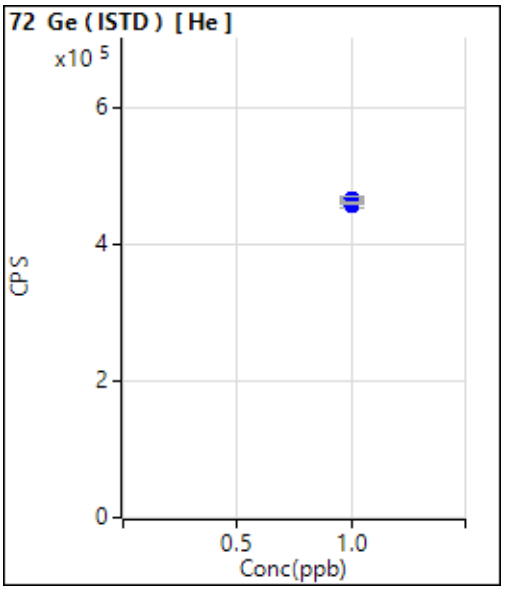
Weight: <None>
Min Conc: <None>



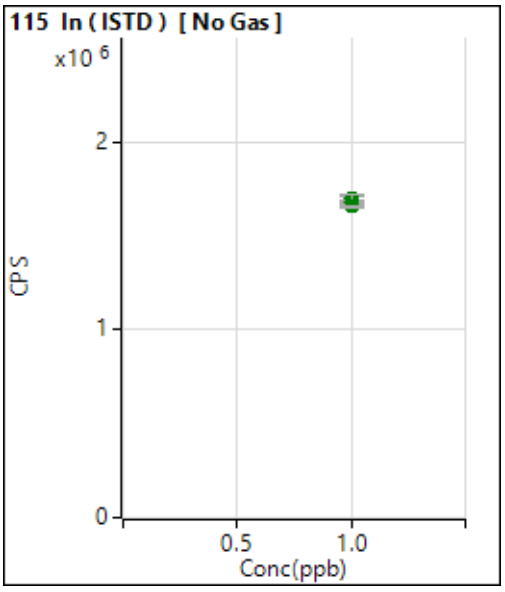
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		815144.87		A	2.4	
2	☐	1.000		809344.41		A	2.1	
3	☐	1.000		815260.28		A	0.9	
4	☐	1.000		803487.31		A	1.7	
5	☐	1.000		819312.87		A	3.4	
6	☐	1.000		797992.96		A	3.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1408872.38		A	0.2	
2	☐	1.000		1417753.73		A	0.7	
3	☐	1.000		1429994.46		A	0.8	
4	☐	1.000		1418258.52		A	1.1	
5	☐	1.000		1421543.00		A	1.3	
6	☐	1.000		1373592.43		A	0.7	

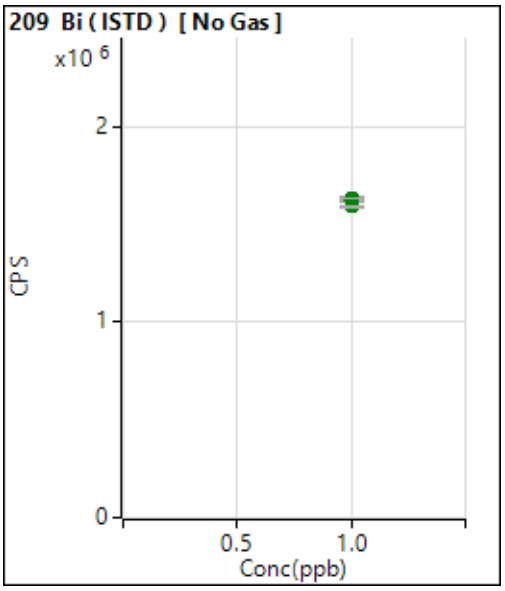


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		456267.27		P	1.1	
2	☐	1.000		463609.48		P	0.4	
3	☐	1.000		460006.44		P	0.2	
4	☐	1.000		463164.94		P	1.0	
5	☐	1.000		466519.77		P	0.8	
6	☐	1.000		458970.39		P	0.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1671941.00		A	0.5	
2	☐	1.000		1666469.60		A	0.6	
3	☐	1.000		1699936.61		A	0.8	
4	☐	1.000		1681940.19		A	1.5	
5	☐	1.000		1696924.17		A	3.0	
6	☐	1.000		1655831.27		A	0.9	

Calibration for 250_ICV.d



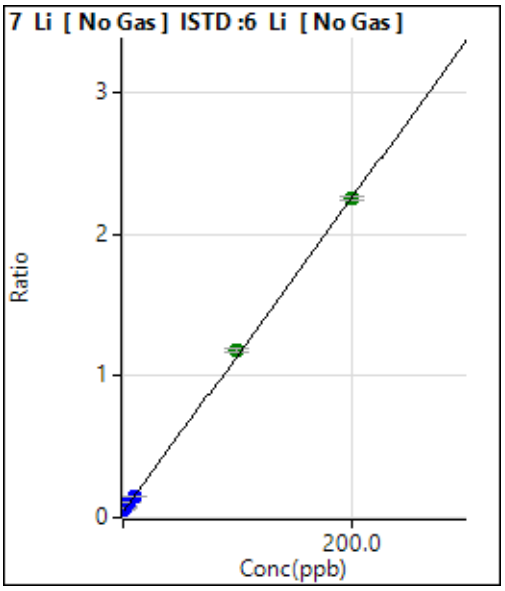
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1627139.04		A	0.8	
2	☐	1.000		1634344.40		A	0.9	
3	☐	1.000		1626259.35		A	1.2	
4	☐	1.000		1633500.97		A	1.8	
5	☐	1.000		1625904.67		A	0.9	
6	☐	1.000		1593996.69		A	0.6	

Calibration for 180_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	173CALB.d	CAL BLK	07/19/2022 19:42:23
2	174CALS.d	2/10/200	07/19/2022 19:44:29
3	175CALS.d	5/25/500	07/19/2022 19:46:35
4	176CALS.d	10/50/100	07/19/2022 19:48:41
5	177CALS.d	100/500/10K	07/19/2022 19:50:47
6	178CALS.d	200/1000/20K	07/19/2022 19:52:49

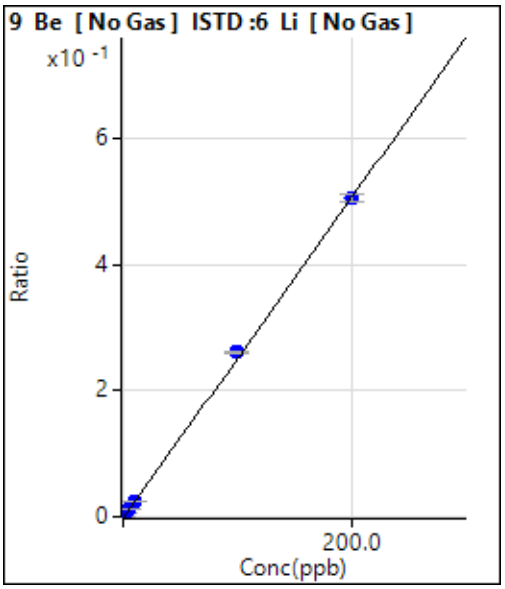
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	42473.94	0.0516	P	0.8	
2	☐	2.000	2.007	60119.31	0.0738	P	2.9	0.3
3	☐	5.000	4.826	84682.83	0.1051	P	1.9	-3.5
4	☐	10.000	9.316	125475.61	0.1549	P	0.6	-6.8
5	☐	100.000	102.400	935293.74	1.1872	A	1.9	2.4
6	☐	200.000	198.839	1737046.02	2.2568	A	1.5	-0.6

y = 0.0111 * x + 0.0516
R = 0.9999
DL = 0.1096 ppb
BEC = 4.651 ppb

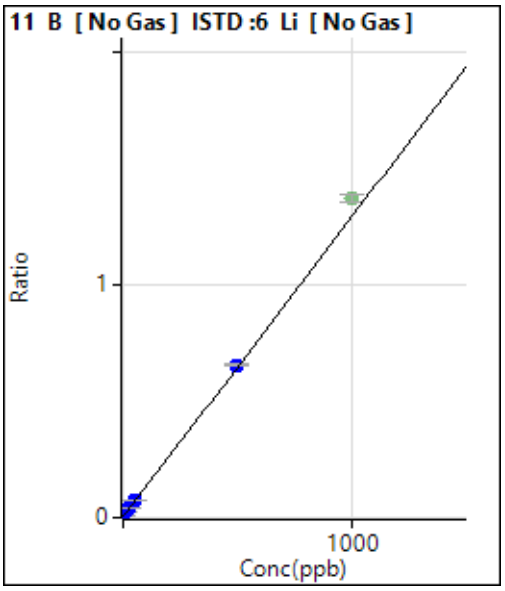
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18.33	0.0000	P	15.7	
2	☐	2.000	1.929	4020.61	0.0049	P	2.7	-3.6
3	☐	5.000	4.822	9916.88	0.0123	P	2.6	-3.6
4	☐	10.000	9.668	19975.93	0.0247	P	0.6	-3.3
5	☐	100.000	102.460	205670.52	0.2611	P	1.6	2.5
6	☐	200.000	198.792	389818.64	0.5066	P	2.3	-0.6

y = 0.0025 * x + 2.2261E-005
R = 0.9999
DL = 0.004106 ppb
BEC = 0.008736 ppb

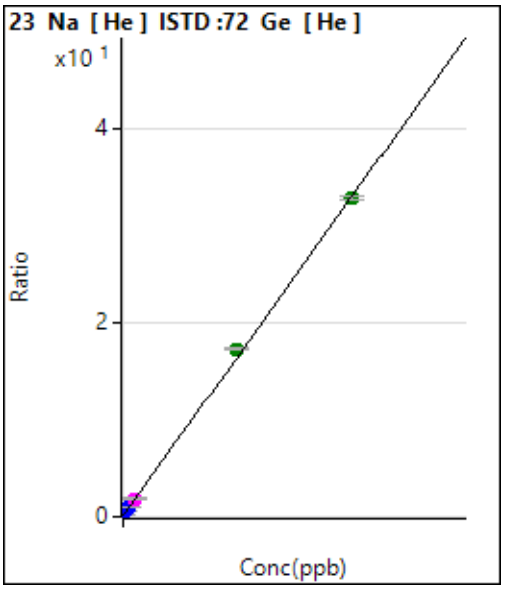
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8554.34	0.0104	P	1.3	
2	☐	10.000	9.134	18063.31	0.0222	P	0.9	-8.7
3	☐	25.000	23.923	33255.97	0.0413	P	1.2	-4.3
4	☐	50.000	47.709	58315.47	0.0720	P	0.5	-4.6
5	☐	500.000	500.300	516987.22	0.6563	P	0.7	0.1
6	☑	1000.000		1057851.83	1.3747	A	2.5	

y = 0.0013 * x + 0.0104
R = 1.0000
DL = 0.3052 ppb
BEC = 8.045 ppb

Weight: <None>
Min Conc: <None>

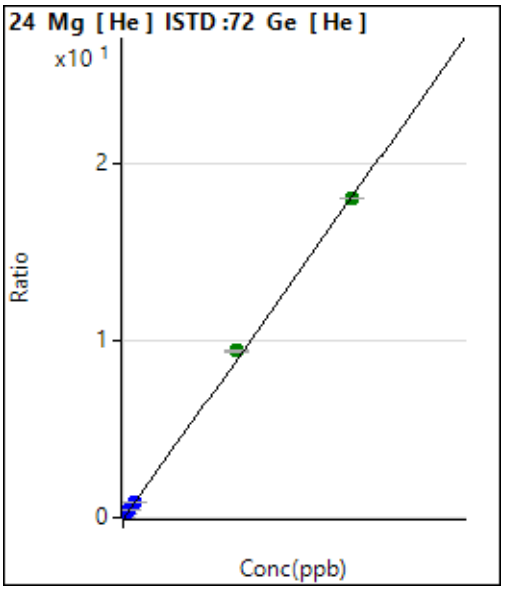


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	109366.02	0.2557	P	1.5	
2	☐	200.000	192.418	245596.27	0.5722	P	0.5	-3.8
3	☐	500.000	477.420	443648.69	1.0409	P	0.4	-4.5
4	☐	1000.000	986.580	801852.04	1.8784	M	5.3	-1.3
5	☐	10000.00	10356.22	7351344.68	17.2898	A	1.1	3.6
6	☐	20000.00	19823.19	13859601.0	32.8613	A	1.7	-0.9

y = 0.0016 * x + 0.2557
R = 0.9998
DL = 7.139 ppb
BEC = 155.4 ppb

Weight: <None>
Min Conc: <None>

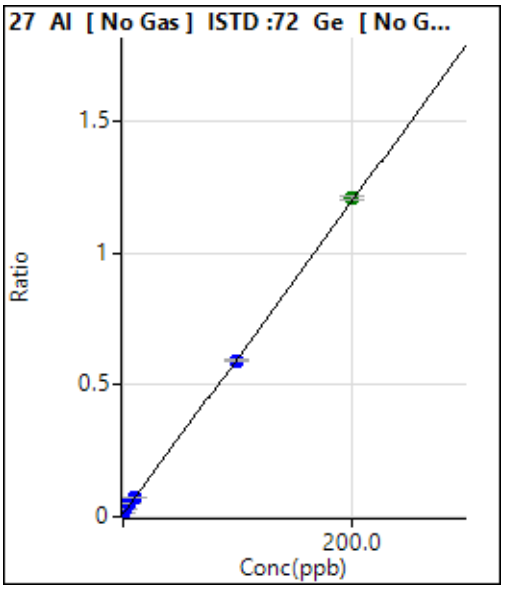
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	256.68	0.0006	P	12.9	
2	☐	200.000	199.530	78225.71	0.1822	P	1.7	-0.2
3	☐	500.000	488.542	189791.67	0.4453	P	0.2	-2.3
4	☐	1000.000	980.218	381094.81	0.8929	P	0.9	-2.0
5	☐	10000.00	10336.49	4000796.81	9.4097	A	1.6	3.4
6	☐	20000.00	19833.03	7615284.89	18.0543	A	0.6	-0.8

y = 9.1028E-004 * x + 6.0020E-004
R = 0.9998
DL = 0.2542 ppb
BEC = 0.6594 ppb

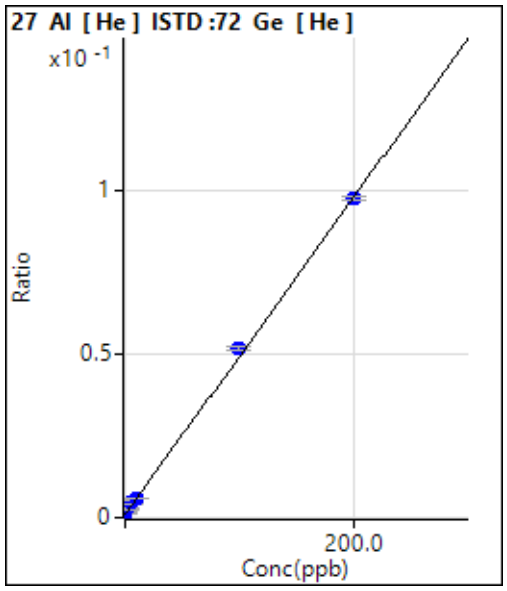
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21848.46	0.0161	P	4.0	
2	☐	2.000	1.867	36628.59	0.0271	P	1.1	-6.7
3	☐	5.000	5.441	65383.58	0.0483	P	1.7	8.8
4	☐	10.000	9.232	94623.62	0.0708	P	0.1	-7.7
5	☐	100.000	97.336	787213.04	0.5933	P	0.5	-2.7
6	☐	200.000	201.360	1579516.80	1.2102	A	1.6	0.7

y = 0.0059 * x + 0.0161
R = 0.9999
DL = 0.3283 ppb
BEC = 2.708 ppb

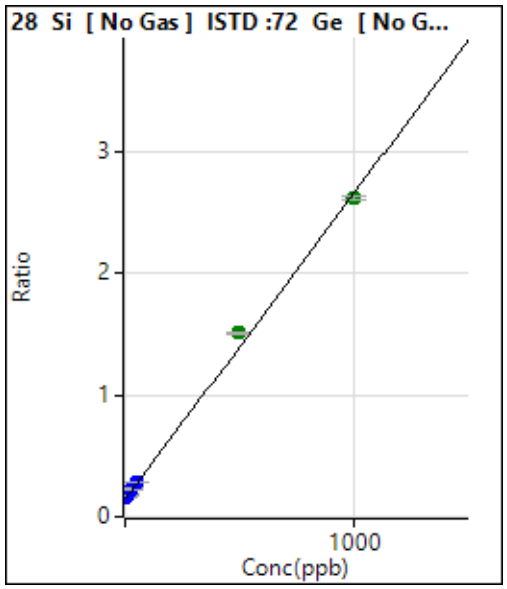
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610.02	0.0014	P	14.7	
2	☐	2.000	2.571	1146.74	0.0027	P	4.7	28.5
3	☐	5.000	6.560	1960.36	0.0046	P	19.2	31.2
4	☐	10.000	9.233	2516.95	0.0059	P	5.8	-7.7
5	☐	100.000	103.207	21857.46	0.0514	P	2.3	3.2
6	☐	200.000	198.390	41127.65	0.0975	P	0.8	-0.8

y = 4.8429E-004 * x + 0.0014
R = 0.9998
DL = 1.295 ppb
BEC = 2.944 ppb

Weight: <None>
Min Conc: <None>

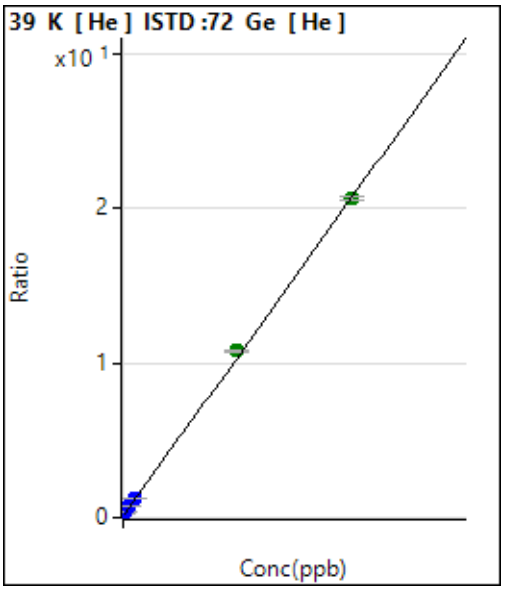


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	210874.53	0.1550	P	2.2	
2	☐	10.000	10.281	244093.50	0.1808	P	1.4	2.8
3	☐	25.000	28.106	305153.17	0.2256	P	2.9	12.4
4	☐	50.000	52.799	384312.83	0.2876	P	1.7	5.6
5	☐	500.000	538.279	1998792.89	1.5064	A	0.8	7.7
6	☐	1000.000	980.640	3415753.80	2.6169	A	1.3	-1.9

y = 0.0025 * x + 0.1550
R = 0.9990
DL = 4.143 ppb
BEC = 61.75 ppb

Weight: <None>
Min Conc: <None>

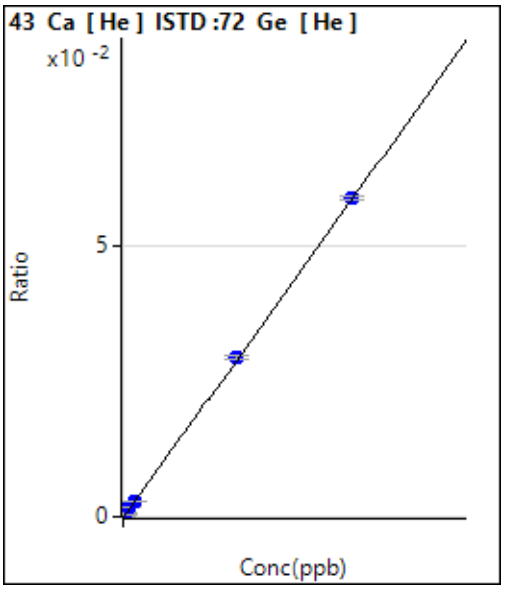
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	87331.88	0.2042	P	1.7	
2	☐	200.000	190.632	171858.75	0.4004	P	1.3	-4.7
3	☐	500.000	482.825	298834.26	0.7012	P	0.6	-3.4
4	☐	1000.000	962.307	509902.27	1.1947	P	1.8	-3.8
5	☐	10000.00	10298.11	4593966.08	10.8047	A	1.4	3.0
6	☐	20000.00	19853.35	8705619.87	20.6405	A	1.4	-0.7

y = 0.0010 * x + 0.2042
R = 0.9998
DL = 10.41 ppb
BEC = 198.3 ppb

Weight: <None>
Min Conc: <None>

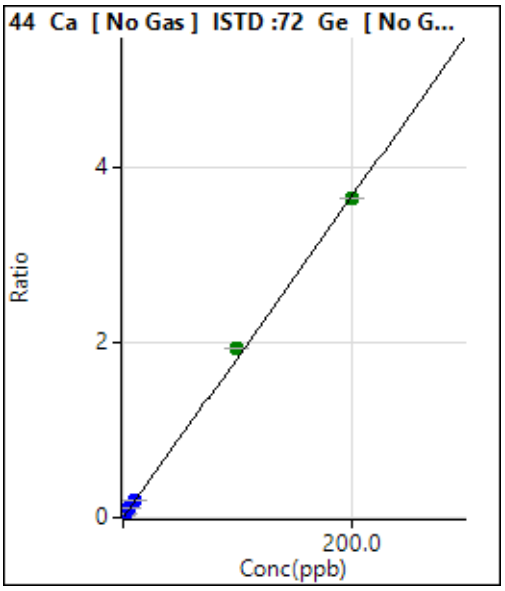


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	66.3	
2	☐	200.000	157.785	240.01	0.0006	P	24.5	-21.1
3	☐	500.000	575.762	763.37	0.0018	P	10.1	15.2
4	☐	1000.000	932.810	1213.41	0.0028	P	5.7	-6.7
5	☐	10000.00	9973.947	12535.93	0.0295	P	2.7	-0.3
6	☐	20000.00	20014.91	24919.48	0.0591	P	1.4	0.1

y = 2.9468E-006 * x + 9.3651E-005
R = 1.0000
DL = 63.25 ppb
BEC = 31.78 ppb

Weight: <None>
Min Conc: <None>

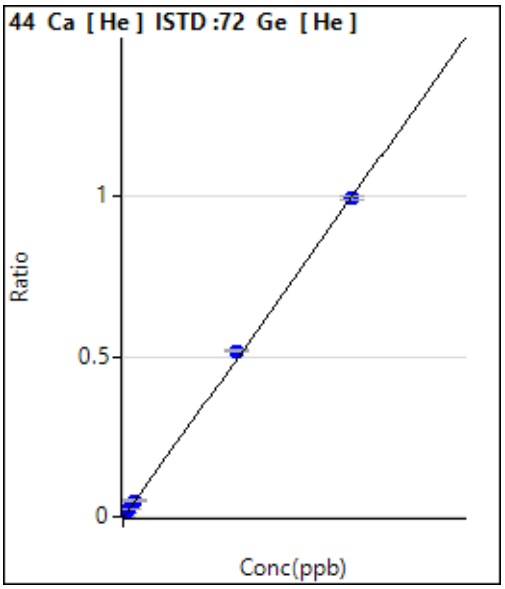
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21941.04	0.0161	P	2.5	
2	☐	2.000	1.980	70801.44	0.0525	P	2.3	-1.0
3	☐	5.000	5.028	146614.56	0.1084	P	3.0	0.6
4	☐	10.000	9.919	264738.93	0.1981	P	0.7	-0.8
5	☐	100.000	104.149	2556946.11	1.9270	A	0.3	4.1
6	☐	200.000	197.929	4761101.08	3.6477	A	0.4	-1.0

y = 0.0183 * x + 0.0161
R = 0.9997
DL = 0.06482 ppb
BEC = 0.8791 ppb

Weight: <None>
Min Conc: <None>

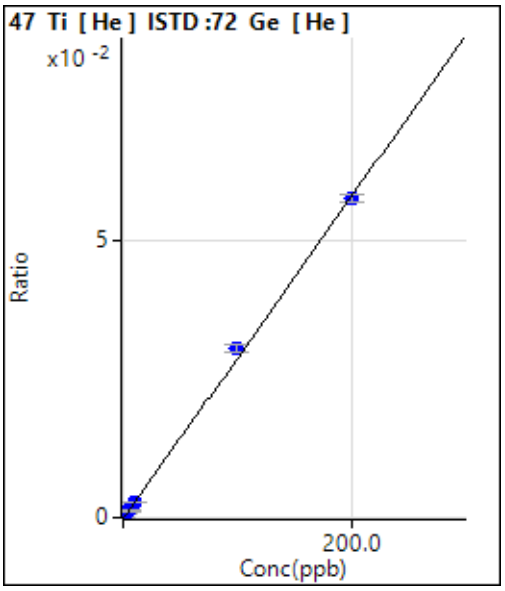


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	486.69	0.0011	P	10.9	
2	☐	200.000	203.128	4850.94	0.0113	P	7.3	1.6
3	☐	500.000	492.852	10997.91	0.0258	P	1.3	-1.4
4	☐	1000.000	993.640	21710.78	0.0509	P	2.1	-0.6
5	☐	10000.00	10302.94	219719.66	0.5168	P	1.5	3.0
6	☐	20000.00	19848.99	419492.78	0.9945	P	0.8	-0.8

y = 5.0048E-005 * x + 0.0011
R = 0.9998
DL = 7.45 ppb
BEC = 22.74 ppb

Weight: <None>
Min Conc: <None>

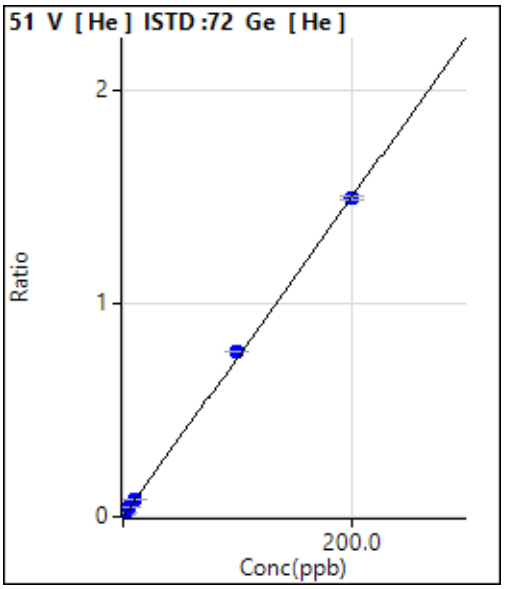
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	69.0	
2	☐	2.000	2.072	276.68	0.0006	P	26.9	3.6
3	☐	5.000	4.394	563.35	0.0013	P	22.2	-12.1
4	☐	10.000	9.499	1200.07	0.0028	P	0.9	-5.0
5	☐	100.000	104.562	12993.02	0.0306	P	4.9	4.6
6	☐	200.000	197.759	24368.64	0.0578	P	2.1	-1.1

y = 2.9192E-004 * x + 3.8911E-005
R = 0.9996
DL = 0.2758 ppb
BEC = 0.1333 ppb

Weight: <None>
Min Conc: <None>

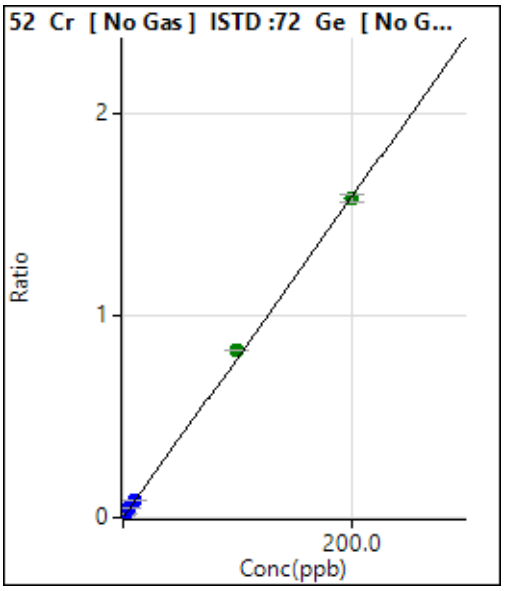


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2791.41	0.0065	P	3.5	
2	☐	2.000	1.904	8914.04	0.0208	P	1.6	-4.8
3	☐	5.000	4.878	18334.51	0.0430	P	1.1	-2.4
4	☐	10.000	9.727	33843.82	0.0793	P	1.4	-2.7
5	☐	100.000	102.879	330048.23	0.7762	P	0.3	2.9
6	☐	200.000	198.578	629379.69	1.4922	P	1.2	-0.7

y = 0.0075 * x + 0.0065
R = 0.9998
DL = 0.09221 ppb
BEC = 0.8721 ppb

Weight: <None>
Min Conc: <None>

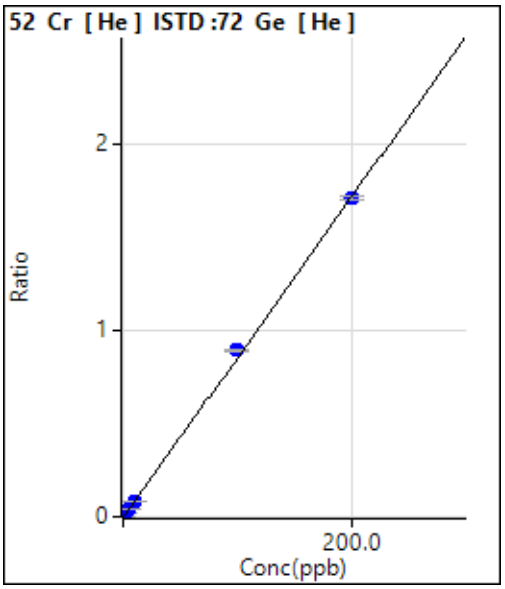
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10314.06	0.0076	P	2.6	
2	☐	2.000	1.890	30497.63	0.0226	P	2.4	-5.5
3	☐	5.000	4.647	60188.73	0.0445	P	3.4	-7.1
4	☐	10.000	9.398	109888.53	0.0822	P	1.0	-6.0
5	☐	100.000	103.536	1101350.56	0.8300	A	1.0	3.5
6	☐	200.000	198.272	2065652.47	1.5826	A	2.7	-0.9

y = 0.0079 * x + 0.0076
R = 0.9998
DL = 0.07463 ppb
BEC = 0.9546 ppb

Weight: <None>
Min Conc: <None>

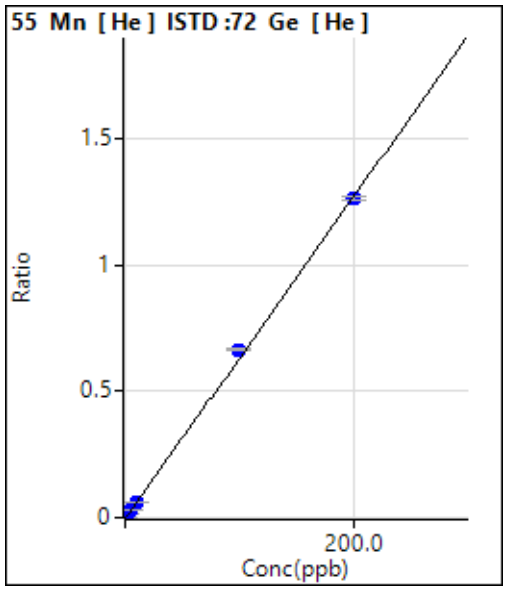


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0027	P	3.3	
2	☐	2.000	1.956	8406.03	0.0196	P	0.3	-2.2
3	☐	5.000	4.964	19387.35	0.0455	P	1.8	-0.7
4	☐	10.000	9.788	37147.34	0.0870	P	1.1	-2.1
5	☐	100.000	103.481	380102.90	0.8939	P	0.6	3.5
6	☐	200.000	198.271	721344.73	1.7103	P	1.4	-0.9

y = 0.0086 * x + 0.0027
R = 0.9998
DL = 0.03116 ppb
BEC = 0.3176 ppb

Weight: <None>
Min Conc: <None>

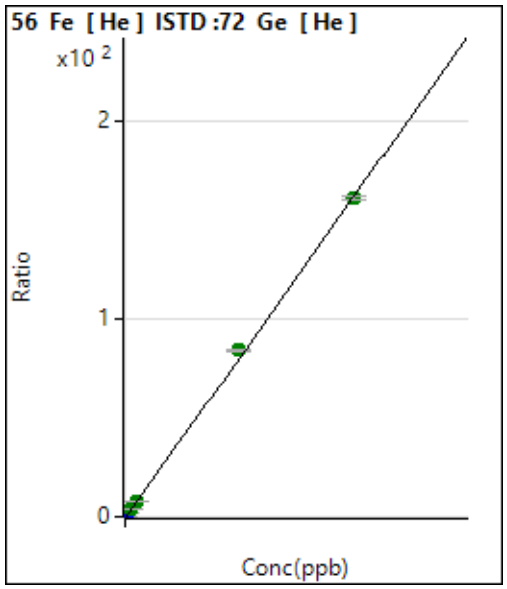
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	420.01	0.0010	P	15.3	
2	☐	2.000	2.044	6024.76	0.0140	P	3.4	2.2
3	☐	5.000	5.017	14074.09	0.0330	P	1.7	0.3
4	☐	10.000	9.882	27354.34	0.0641	P	1.5	-1.2
5	☐	100.000	104.043	282937.08	0.6654	P	0.8	4.0
6	☐	200.000	197.984	533699.03	1.2654	P	1.3	-1.0

y = 0.0064 * x + 9.8228E-004
R = 0.9997
DL = 0.07077 ppb
BEC = 0.1538 ppb

Weight: <None>
Min Conc: <None>

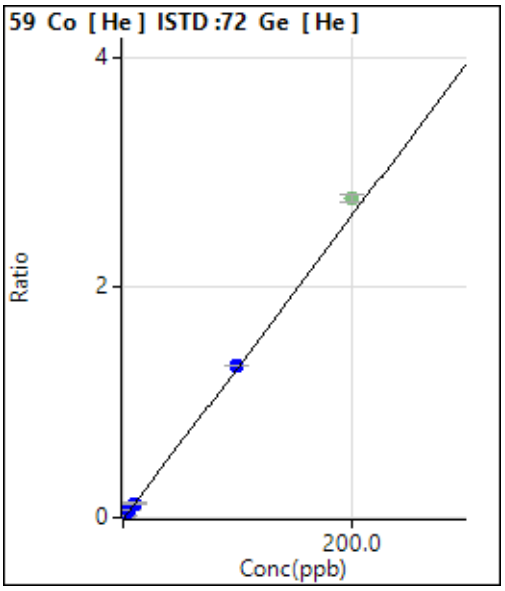


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11054.68	0.0258	P	1.9	
2	☐	200.000	193.848	686832.73	1.6001	P	0.8	-3.1
3	☐	500.000	520.191	1811651.01	4.2505	A	1.3	4.0
4	☐	1000.000	1004.511	3492905.68	8.1838	A	1.1	0.5
5	☐	10000.00	10347.18	35741262.8	84.0591	A	0.6	3.5
6	☐	20000.00	19825.73	67919897.3	161.037	A	1.6	-0.9

y = 0.0081 * x + 0.0258
R = 0.9998
DL = 0.1838 ppb
BEC = 3.182 ppb

Weight: <None>
Min Conc: <None>

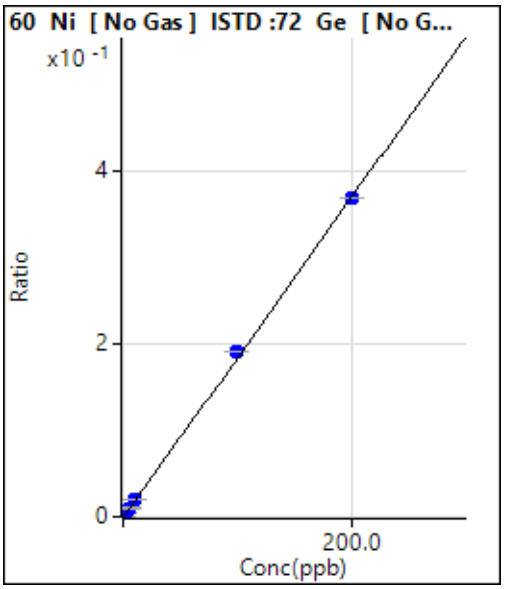
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.8	
2	☐	2.000	1.878	10627.62	0.0248	P	2.1	-6.1
3	☐	5.000	4.834	27137.30	0.0637	P	1.3	-3.3
4	☐	10.000	9.496	53367.86	0.1250	P	1.2	-5.0
5	☐	100.000	100.061	560062.95	1.3172	P	0.5	0.1
6	☑	200.000		1169340.37	2.7727	A	2.5	

y = 0.0132 * x + 3.8987E-005
R = 1.0000
DL = 0.003096 ppb
BEC = 0.002962 ppb

Weight: <None>
Min Conc: <None>

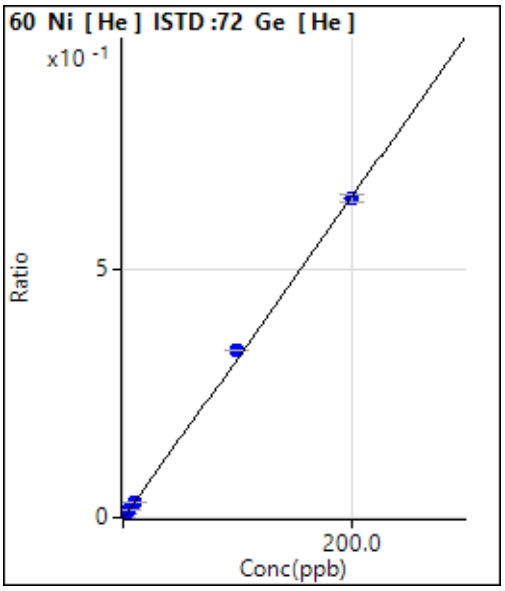


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	863.38	0.0006	P	5.0	
2	☐	2.000	1.901	5621.26	0.0042	P	7.2	-5.0
3	☐	5.000	4.963	13333.39	0.0099	P	4.2	-0.7
4	☐	10.000	10.118	25971.82	0.0194	P	3.6	1.2
5	☐	100.000	103.063	254971.40	0.1922	P	0.2	3.1
6	☐	200.000	198.465	482215.37	0.3694	P	0.3	-0.8

y = 0.0019 * x + 6.3465E-004
R = 0.9998
DL = 0.05081 ppb
BEC = 0.3415 ppb

Weight: <None>
Min Conc: <None>

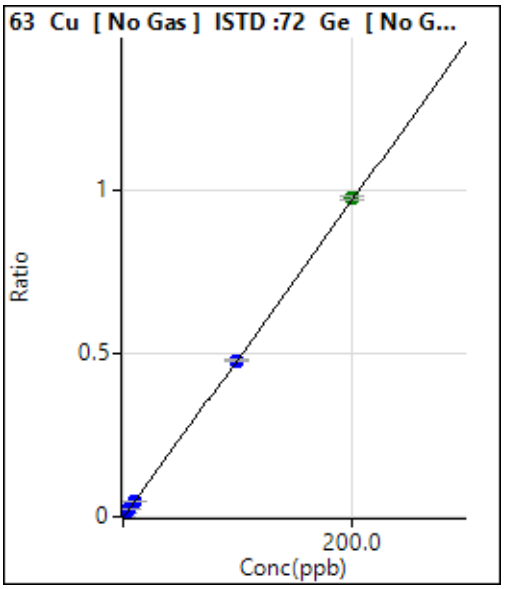
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0006	P	6.8	
2	☐	2.000	1.938	2933.70	0.0068	P	9.1	-3.1
3	☐	5.000	4.875	6968.55	0.0164	P	2.6	-2.5
4	☐	10.000	9.642	13573.70	0.0318	P	3.2	-3.6
5	☐	100.000	103.648	143054.52	0.3364	P	0.7	3.6
6	☐	200.000	198.197	271130.07	0.6429	P	1.8	-0.9

y = 0.0032 * x + 5.5335E-004
R = 0.9998
DL = 0.03473 ppb
BEC = 0.1707 ppb

Weight: <None>
Min Conc: <None>

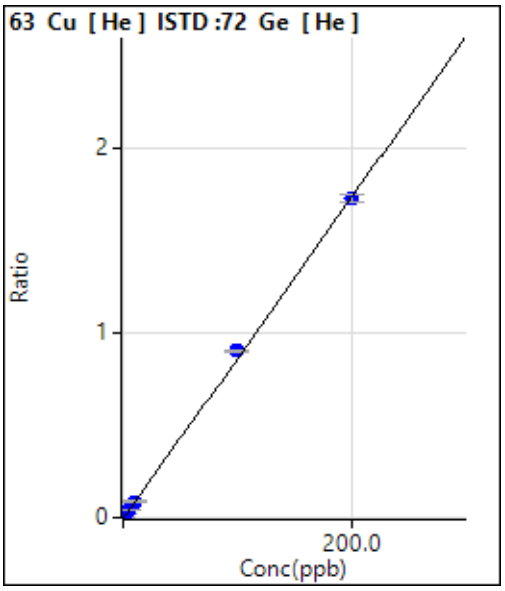


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1933.51	0.0014	P	9.9	
2	☐	2.000	1.847	13984.12	0.0104	P	2.3	-7.7
3	☐	5.000	4.577	31894.35	0.0236	P	2.0	-8.5
4	☐	10.000	9.415	62798.40	0.0470	P	0.3	-5.8
5	☐	100.000	98.311	633266.76	0.4773	P	0.5	-1.7
6	☐	200.000	200.886	1270962.43	0.9737	A	1.2	0.4

y = 0.0048 * x + 0.0014
R = 1.0000
DL = 0.08686 ppb
BEC = 0.2935 ppb

Weight: <None>
Min Conc: <None>

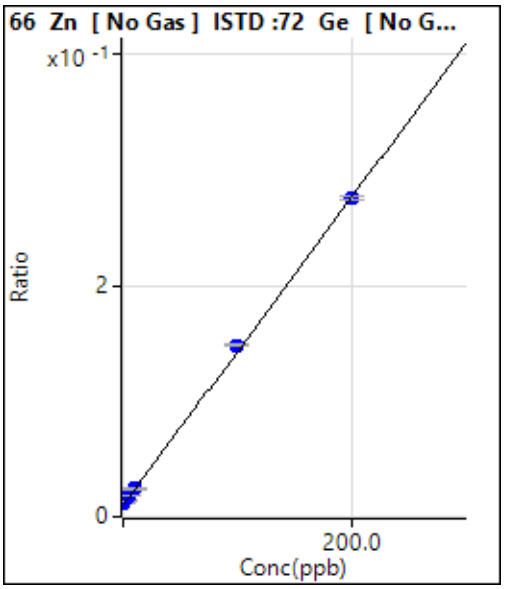
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	870.05	0.0020	P	12.2	
2	☐	2.000	1.953	8189.28	0.0191	P	2.7	-2.4
3	☐	5.000	4.819	18789.88	0.0441	P	1.2	-3.6
4	☐	10.000	9.877	37659.20	0.0882	P	2.8	-1.2
5	☐	100.000	103.339	384291.74	0.9038	P	1.1	3.3
6	☐	200.000	198.342	730835.04	1.7329	P	2.3	-0.8

y = 0.0087 * x + 0.0020
R = 0.9998
DL = 0.0855 ppb
BEC = 0.2331 ppb

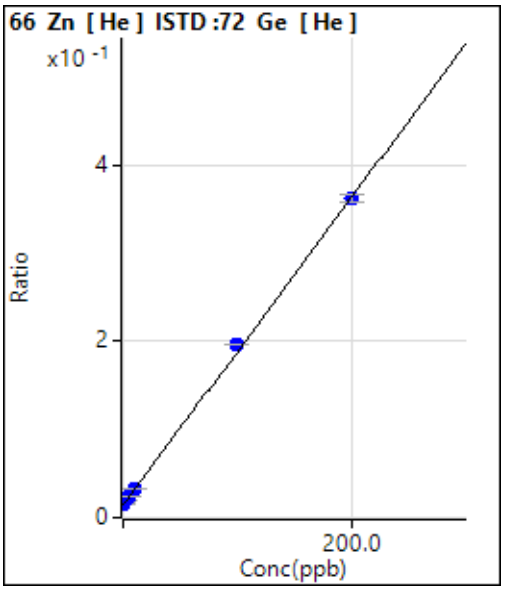
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15555.81	0.0114	P	0.6	
2	☐	2.000	2.062	19130.45	0.0142	P	3.5	3.1
3	☐	5.000	4.915	24308.69	0.0180	P	4.2	-1.7
4	☐	10.000	9.623	32385.60	0.0242	P	1.7	-3.8
5	☐	100.000	102.983	196973.34	0.1484	P	0.2	3.0
6	☐	200.000	198.529	359681.86	0.2756	P	0.9	-0.7

y = 0.0013 * x + 0.0114
R = 0.9998
DL = 0.1501 ppb
BEC = 8.594 ppb

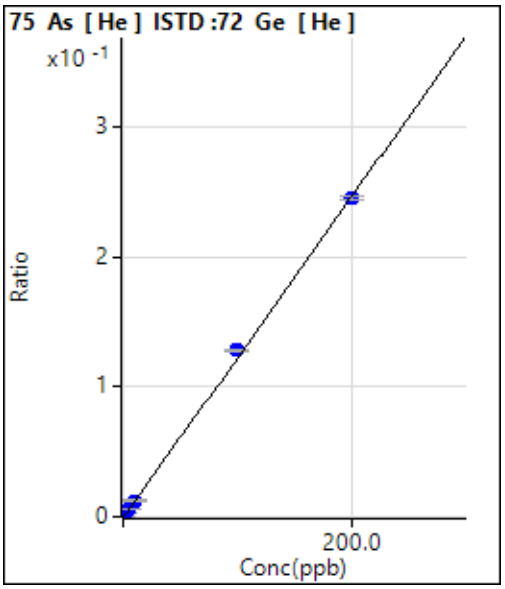
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6881.86	0.0161	P	3.8	
2	☐	2.000	1.761	8225.95	0.0192	P	0.9	-12.0
3	☐	5.000	4.604	10284.07	0.0241	P	2.7	-7.9
4	☐	10.000	9.781	14160.95	0.0332	P	1.3	-2.2
5	☐	100.000	103.403	83670.58	0.1968	P	0.8	3.4
6	☐	200.000	198.322	152941.42	0.3627	P	2.8	-0.8

y = 0.0017 * x + 0.0161
R = 0.9998
DL = 1.042 ppb
BEC = 9.206 ppb

Weight: <None>
Min Conc: <None>

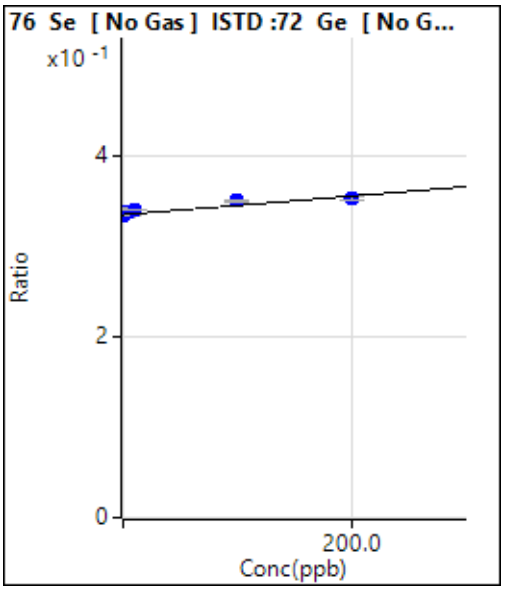


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	14.4	
2	☐	2.000	2.092	1226.73	0.0029	P	4.3	4.6
3	☐	5.000	4.778	2633.60	0.0062	P	1.6	-4.4
4	☐	10.000	9.861	5319.96	0.0125	P	1.9	-1.4
5	☐	100.000	103.585	54579.70	0.1284	P	1.3	3.6
6	☐	200.000	198.219	103502.20	0.2454	P	1.3	-0.9

y = 0.0012 * x + 2.7011E-004
R = 0.9998
DL = 0.09423 ppb
BEC = 0.2184 ppb

Weight: <None>
Min Conc: <None>

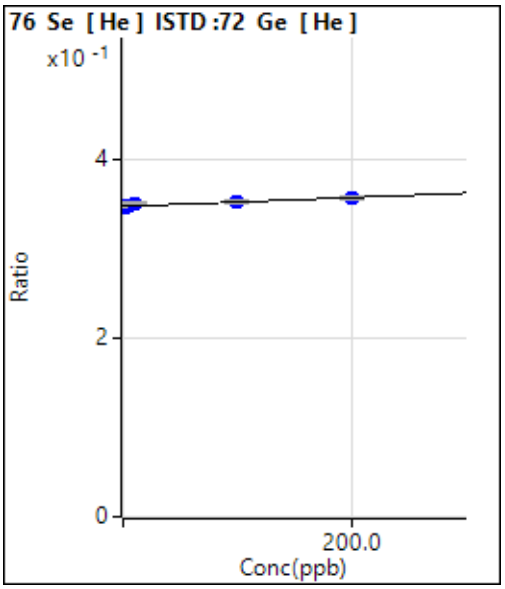
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	456499.10	0.3356	P	1.9	
2	☐	2.000	22.173	456071.89	0.3379	P	1.7	1008.7
3	☐	5.000	23.329	457260.05	0.3380	P	2.6	366.6
4	☐	10.000	50.966	455524.92	0.3409	P	0.5	409.7
5	☐	100.000	146.009	465412.68	0.3508	P	0.7	46.0
6	☐	200.000	174.287	461661.64	0.3537	P	0.9	-12.9

y = 1.0393E-004 * x + 0.3356
R = 0.9473
DL = 186.2 ppb
BEC = 3229 ppb

Weight: <None>
Min Conc: <None>

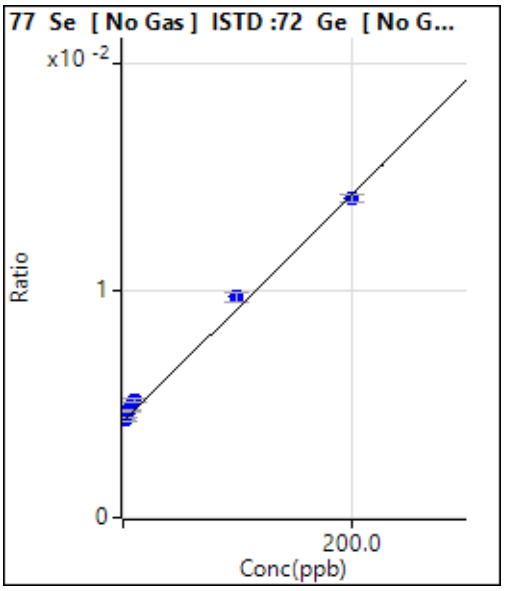


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	148565.04	0.3473	P	0.9	
2	☐	2.000	-16.642	148705.62	0.3465	P	1.9	-932.1
3	☐	5.000	35.723	148793.77	0.3491	P	1.2	614.5
4	☐	10.000	74.649	149835.17	0.3511	P	0.5	646.5
5	☐	100.000	112.739	150081.21	0.3530	P	1.1	12.7
6	☐	200.000	189.817	150523.03	0.3569	P	0.9	-5.1

y = 5.0382E-005 * x + 0.3473
R = 0.9272
DL = 192 ppb
BEC = 6893 ppb

Weight: <None>
Min Conc: <None>

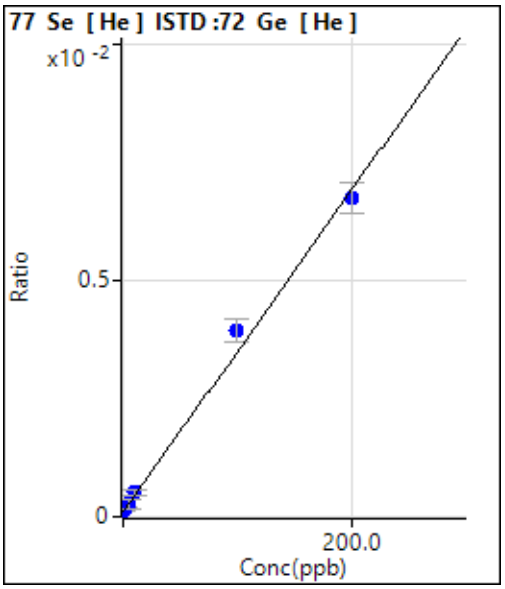
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5868.04	0.0043	P	1.3	
2	☐	2.000	0.383	5848.03	0.0043	P	2.6	-80.9
3	☐	5.000	7.892	6368.29	0.0047	P	3.1	57.8
4	☐	10.000	17.406	6925.21	0.0052	P	2.5	74.1
5	☐	100.000	108.537	12913.07	0.0097	P	4.2	8.5
6	☐	200.000	195.305	18356.08	0.0141	P	2.0	-2.3

y = 4.9921E-005 * x + 0.0043
R = 0.9981
DL = 3.441 ppb
BEC = 86.4 ppb

Weight: <None>
Min Conc: <None>

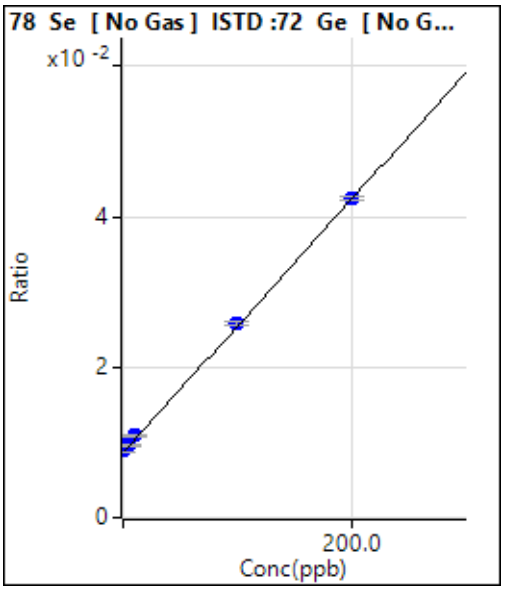


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	27.3	
2	☐	2.000	1.350	76.67	0.0002	P	7.0	-32.5
3	☐	5.000	4.353	120.00	0.0003	P	73.7	-12.9
4	☐	10.000	11.018	216.67	0.0005	P	24.1	10.2
5	☐	100.000	111.885	1676.80	0.0039	P	11.9	11.9
6	☐	200.000	194.029	2843.68	0.0067	P	10.2	-3.0

y = 3.4079E-005 * x + 1.3254E-004
R = 0.9974
DL = 3.182 ppb
BEC = 3.889 ppb

Weight: <None>
Min Conc: <None>

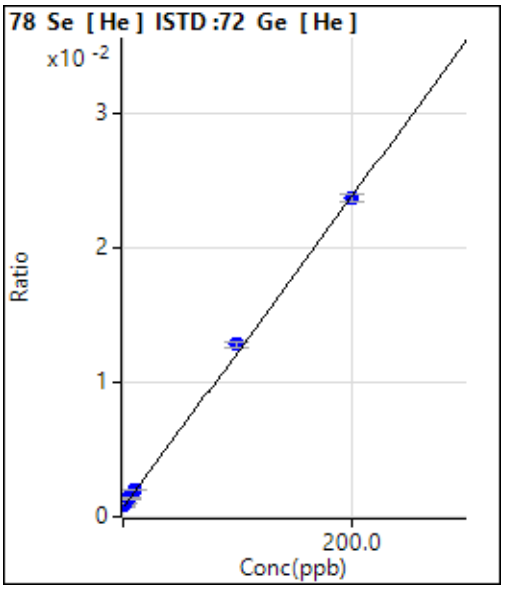
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12062.28	0.0089	P	5.0	
2	☐	2.000	5.664	13260.09	0.0098	P	0.3	183.2
3	☐	5.000	4.696	13069.88	0.0097	P	1.5	-6.1
4	☐	10.000	12.289	14614.76	0.0109	P	2.3	22.9
5	☐	100.000	100.772	34277.24	0.0258	P	1.2	0.8
6	☐	200.000	199.470	55404.12	0.0424	P	1.0	-0.3

y = 1.6834E-004 * x + 0.0089
R = 0.9998
DL = 7.943 ppb
BEC = 52.68 ppb

Weight: <None>
Min Conc: <None>

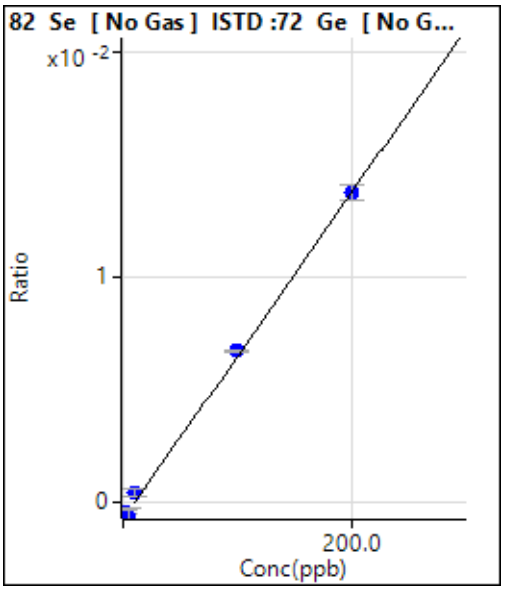


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.67	0.0008	P	13.6	
2	☐	2.000	2.016	442.01	0.0010	P	6.8	0.8
3	☐	5.000	5.070	589.35	0.0014	P	5.5	1.4
4	☐	10.000	10.245	846.03	0.0020	P	2.8	2.4
5	☐	100.000	103.806	5446.45	0.0128	P	3.6	3.8
6	☐	200.000	198.083	10005.73	0.0237	P	2.2	-1.0

y = 1.1575E-004 * x + 7.9630E-004
R = 0.9997
DL = 2.815 ppb
BEC = 6.88 ppb

Weight: <None>
Min Conc: <None>

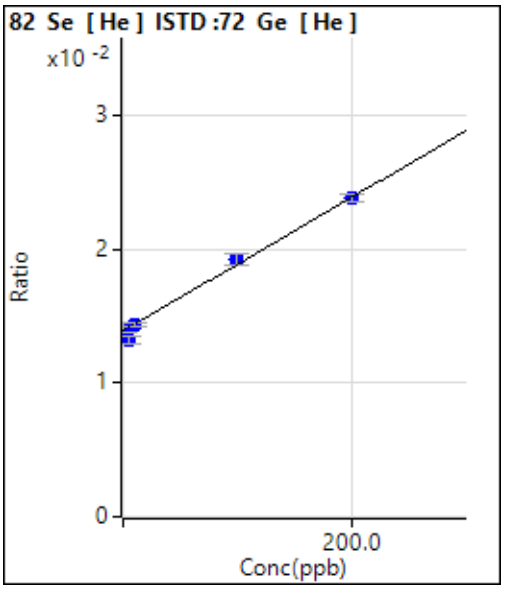
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-959.88	-0.0007	P	-101.	
2	☐	2.000	3.105	-641.01	-0.0005	P	-40.1	55.2
3	☐	5.000	0.564	-905.95	-0.0007	P	-110.	-88.7
4	☐	10.000	15.248	542.69	0.0004	P	92.4	52.5
5	☐	100.000	102.295	8914.76	0.0067	P	1.4	2.3
6	☐	200.000	198.690	17897.37	0.0137	P	5.0	-0.7

y = 7.2540E-005 * x - 7.0195E-004
R = 0.9992
DL = 29.48 ppb
BEC = -9.677 ppb

Weight: <None>
Min Conc: <None>

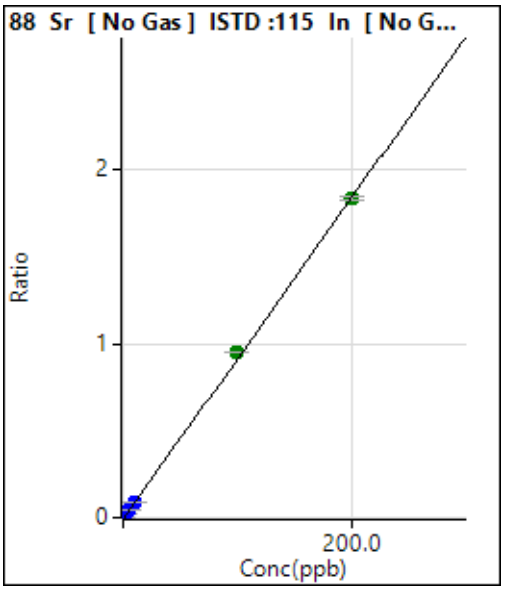


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5984.77	0.0140	P	7.3	
2	☐	2.000	-12.539	5737.98	0.0134	P	5.6	-726.9
3	☐	5.000	-15.133	5641.28	0.0132	P	5.1	-402.7
4	☐	10.000	7.348	6128.18	0.0144	P	1.6	-26.5
5	☐	100.000	105.961	8196.01	0.0193	P	4.3	6.0
6	☐	200.000	197.801	10063.90	0.0239	P	2.1	-1.1

y = 4.9906E-005 * x + 0.0140
R = 0.9949
DL = 61.28 ppb
BEC = 280.3 ppb

Weight: <None>
Min Conc: <None>

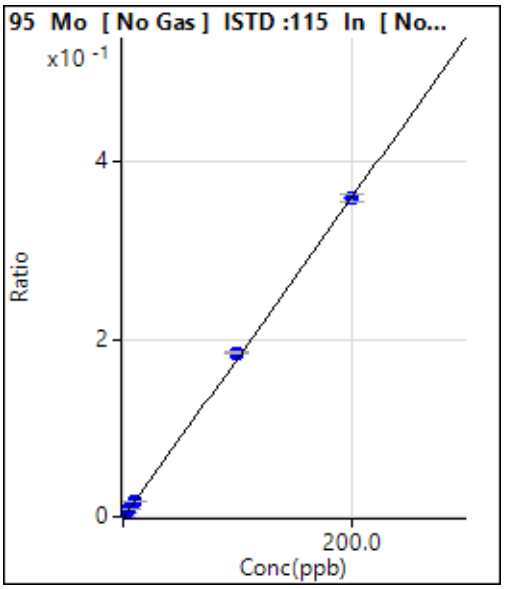
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	770.04	0.0005	P	14.5	
2	☐	2.000	1.855	29506.13	0.0176	P	1.8	-7.3
3	☐	5.000	5.004	78358.81	0.0467	P	1.1	0.1
4	☐	10.000	9.315	143873.55	0.0866	P	0.4	-6.9
5	☐	100.000	102.950	1582968.21	0.9523	A	0.8	3.0
6	☐	200.000	198.560	3011111.73	1.8363	A	1.4	-0.7

y = 0.0092 * x + 4.5957E-004
R = 0.9998
DL = 0.02162 ppb
BEC = 0.04971 ppb

Weight: <None>
Min Conc: <None>

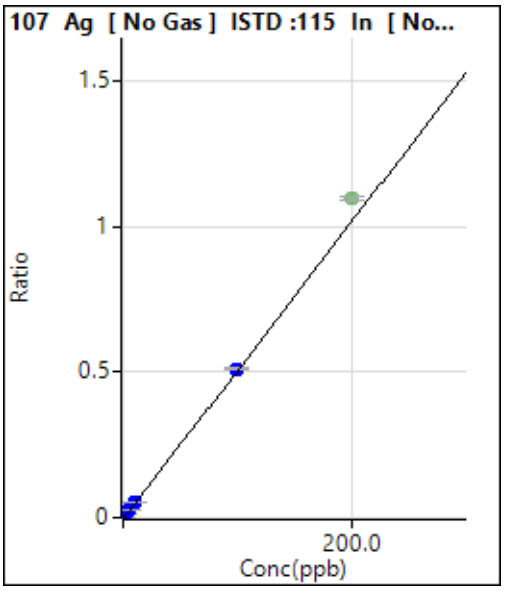


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	93.9	
2	☐	2.000	1.876	5714.68	0.0034	P	9.2	-6.2
3	☐	5.000	4.638	14101.07	0.0084	P	5.1	-7.2
4	☐	10.000	9.703	29202.28	0.0176	P	1.8	-3.0
5	☐	100.000	102.383	307985.10	0.1853	P	1.2	2.4
6	☐	200.000	198.834	590027.33	0.3598	P	1.8	-0.6

y = 0.0018 * x + 1.5875E-005
R = 0.9999
DL = 0.0247 ppb
BEC = 0.008772 ppb

Weight: <None>
Min Conc: <None>

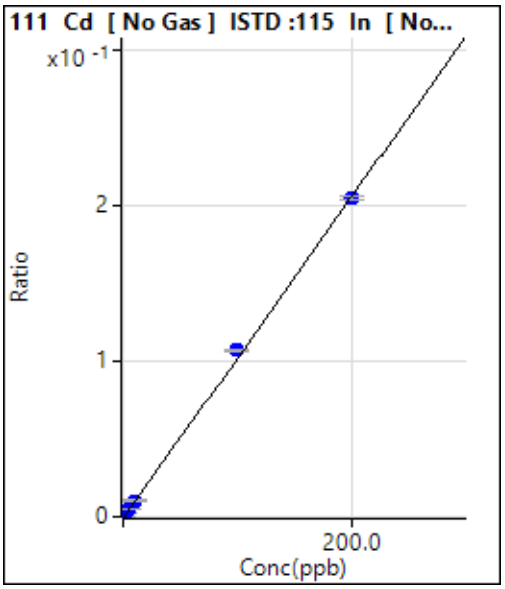
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0002	P	25.5	
2	☐	2.000	1.943	17027.82	0.0102	P	1.5	-2.8
3	☐	5.000	4.725	40880.08	0.0244	P	1.4	-5.5
4	☐	10.000	9.731	82995.82	0.0499	P	1.4	-2.7
5	☐	100.000	100.042	849931.50	0.5114	P	1.2	0.0
6	☑	200.000		1798850.34	1.0970	A	1.7	

y = 0.0051 * x + 2.3325E-004
R = 1.0000
DL = 0.03492 ppb
BEC = 0.04566 ppb

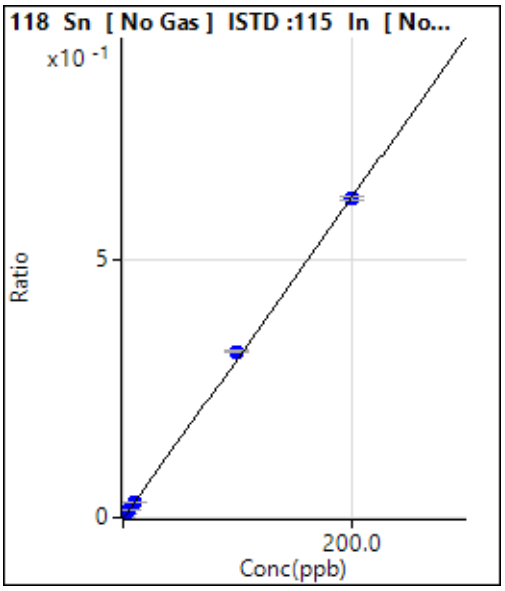
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.973	3427.16	0.0020	P	5.2	-1.3
3	☐	5.000	4.854	8429.53	0.0050	P	6.5	-2.9
4	☐	10.000	10.115	17401.70	0.0105	P	2.9	1.1
5	☐	100.000	103.451	177938.84	0.1071	P	1.3	3.5
6	☐	200.000	198.273	336472.20	0.2052	P	0.7	-0.9

y = 0.0010 * x + 3.9874E-006
R = 0.9998
DL = 0.02002 ppb
BEC = 0.003853 ppb

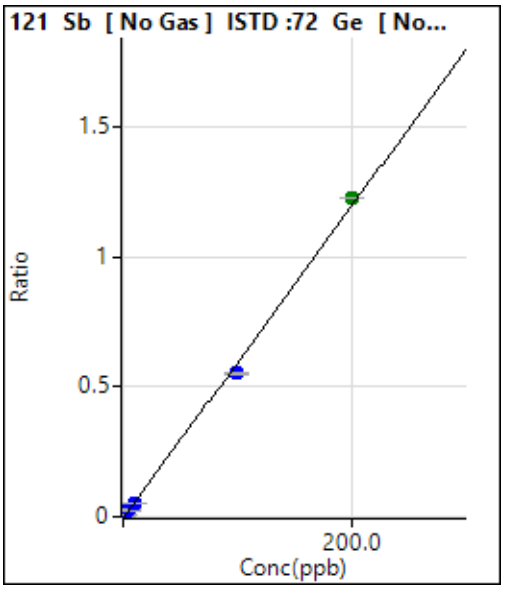
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1280.09	0.0008	P	6.3	
2	☐	2.000	1.947	11418.44	0.0068	P	3.5	-2.7
3	☐	5.000	4.729	25932.60	0.0155	P	0.6	-5.4
4	☐	10.000	9.705	51393.99	0.0309	P	1.3	-3.0
5	☐	100.000	102.832	532511.64	0.3204	P	1.1	2.8
6	☐	200.000	198.606	1013496.57	0.6181	P	1.3	-0.7

y = 0.0031 * x + 7.6438E-004
R = 0.9999
DL = 0.04672 ppb
BEC = 0.2459 ppb

Weight: <None>
Min Conc: <None>

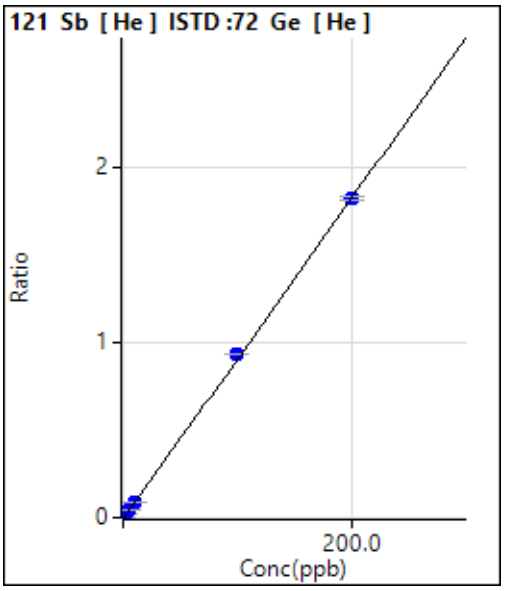


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	263.34	0.0002	P	18.4	
2	☐	2.000	1.736	14378.10	0.0106	P	4.1	-13.2
3	☐	5.000	4.327	35514.91	0.0263	P	3.0	-13.5
4	☐	10.000	8.720	70425.42	0.0527	P	1.4	-12.8
5	☐	100.000	91.906	734600.04	0.5536	P	0.8	-8.1
6	☐	200.000	204.131	1604672.84	1.2294	A	0.5	2.1

y = 0.0060 * x + 1.9351E-004
R = 0.9989
DL = 0.01776 ppb
BEC = 0.03214 ppb

Weight: <None>
Min Conc: <None>

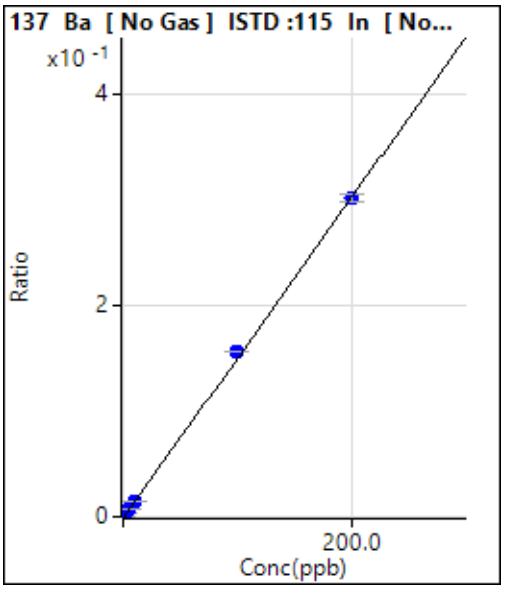
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0004	P	3.2	
2	☐	2.000	1.927	7735.76	0.0180	P	1.0	-3.6
3	☐	5.000	4.893	19254.39	0.0452	P	5.5	-2.1
4	☐	10.000	9.751	38279.57	0.0897	P	0.3	-2.5
5	☐	100.000	102.191	398176.52	0.9364	P	0.2	2.2
6	☐	200.000	198.920	768649.05	1.8225	P	1.6	-0.5

y = 0.0092 * x + 3.6620E-004
R = 0.9999
DL = 0.003877 ppb
BEC = 0.03998 ppb

Weight: <None>
Min Conc: <None>

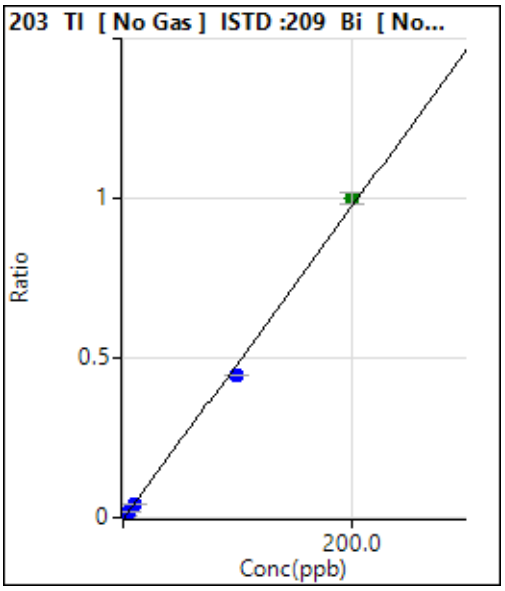


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	65.7	
2	☐	2.000	1.991	5174.45	0.0031	P	1.6	-0.4
3	☐	5.000	4.905	12609.63	0.0075	P	0.5	-1.9
4	☐	10.000	9.951	25241.56	0.0152	P	2.0	-0.5
5	☐	100.000	102.700	259688.76	0.1562	P	0.5	2.7
6	☐	200.000	198.655	495410.98	0.3021	P	2.0	-0.7

y = 0.0015 * x + 5.9844E-005
R = 0.9999
DL = 0.07758 ppb
BEC = 0.03935 ppb

Weight: <None>
Min Conc: <None>

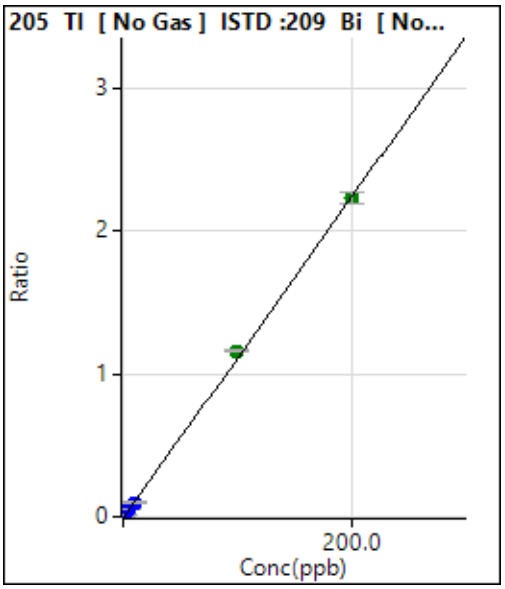
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	50.4	
2	☐	2.000	1.714	15139.42	0.0084	P	1.4	-14.3
3	☐	5.000	4.273	37175.74	0.0209	P	1.1	-14.5
4	☐	10.000	8.553	75054.87	0.0419	P	1.1	-14.5
5	☐	100.000	91.266	782605.87	0.4464	P	0.6	-8.7
6	☐	200.000	204.460	1724221.80	1.0001	A	3.7	2.2

y = 0.0049 * x + 1.3471E-005
R = 0.9987
DL = 0.004167 ppb
BEC = 0.002754 ppb

Weight: <None>
Min Conc: <None>

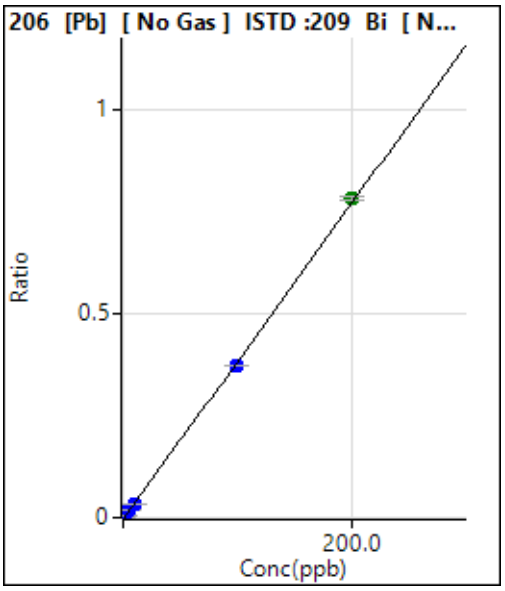


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	33.5	
2	☐	2.000	1.758	35708.19	0.0198	P	2.0	-12.1
3	☐	5.000	4.415	88388.67	0.0497	P	1.2	-11.7
4	☐	10.000	8.943	180586.02	0.1007	P	0.6	-10.6
5	☐	100.000	103.272	2038068.93	1.1626	A	1.8	3.3
6	☐	200.000	198.434	3851091.71	2.2339	A	3.3	-0.8

y = 0.0113 * x + 2.1130E-005
R = 0.9998
DL = 0.001887 ppb
BEC = 0.001877 ppb

Weight: <None>
Min Conc: <None>

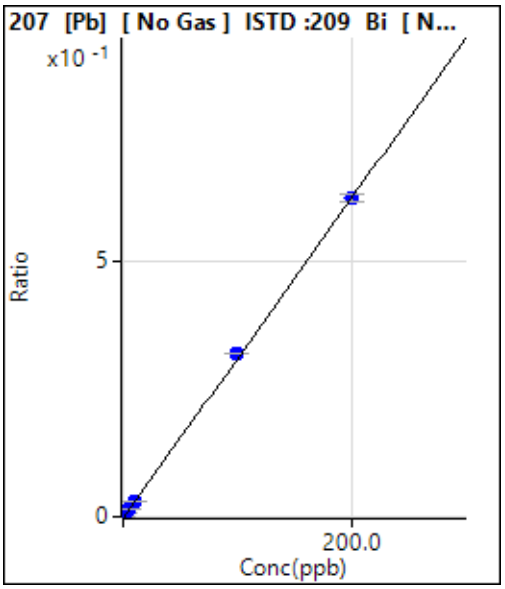
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0001	P	22.3	
2	☐	2.000	1.725	12249.56	0.0068	P	1.7	-13.7
3	☐	5.000	4.381	30354.13	0.0171	P	0.4	-12.4
4	☐	10.000	8.854	61665.76	0.0344	P	0.6	-11.5
5	☐	100.000	95.839	650442.45	0.3710	P	0.5	-4.2
6	☐	200.000	202.156	1349302.69	0.7825	A	1.7	1.1

y = 0.0039 * x + 1.1863E-004
R = 0.9997
DL = 0.02051 ppb
BEC = 0.03065 ppb

Weight: <None>
Min Conc: <None>

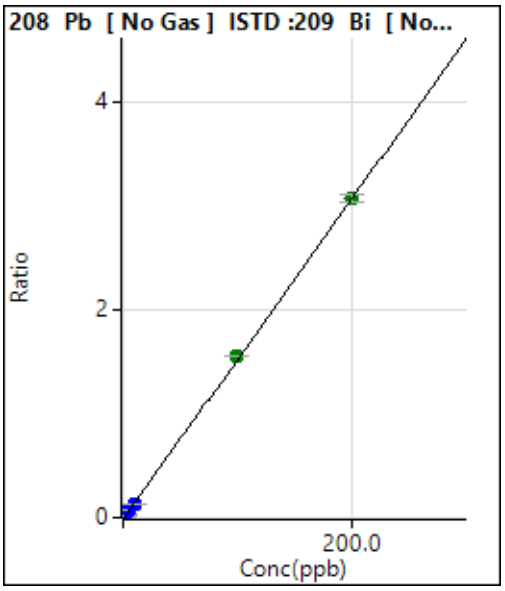


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	186.67	0.0001	P	12.4	
2	☐	2.000	1.919	11058.45	0.0061	P	1.2	-4.1
3	☐	5.000	4.695	26411.77	0.0149	P	1.7	-6.1
4	☐	10.000	9.376	53019.63	0.0296	P	1.8	-6.2
5	☐	100.000	101.963	561759.53	0.3204	P	0.8	2.0
6	☐	200.000	199.058	1078541.08	0.6255	P	1.9	-0.5

y = 0.0031 * x + 1.0704E-004
R = 0.9999
DL = 0.01273 ppb
BEC = 0.03407 ppb

Weight: <None>
Min Conc: <None>

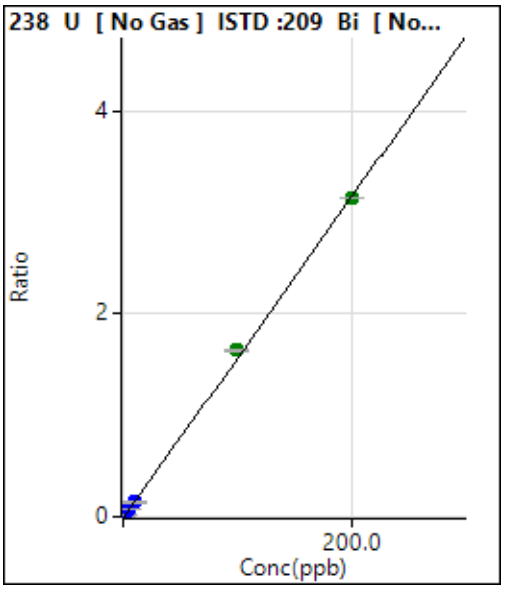
Calibration for 180_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	743.35	0.0004	P	11.6	
2	☐	2.000	1.786	50280.83	0.0279	P	2.1	-10.7
3	☐	5.000	4.427	121775.33	0.0685	P	0.5	-11.5
4	☐	10.000	8.914	246565.39	0.1375	P	1.0	-10.9
5	☐	100.000	101.073	2725259.98	1.5546	A	0.7	1.1
6	☐	200.000	199.534	5290886.22	3.0685	A	2.1	-0.2

y = 0.0154 * x + 4.2645E-004
R = 1.0000
DL = 0.009623 ppb
BEC = 0.02773 ppb

Weight: <None>
Min Conc: <None>

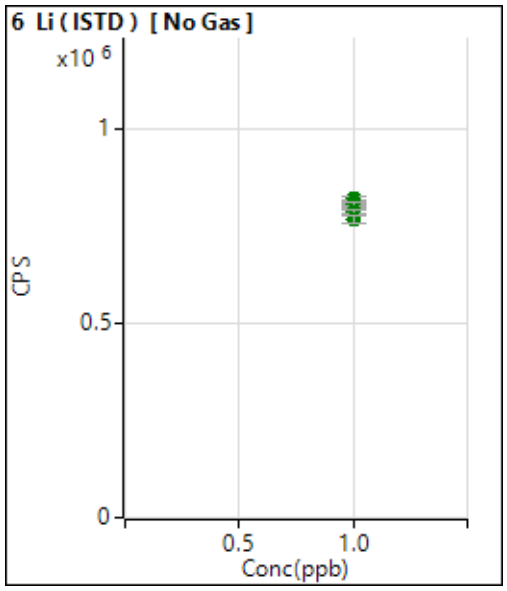


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	34.8	
2	☐	2.000	1.762	50330.29	0.0279	P	1.4	-11.9
3	☐	5.000	4.469	125835.57	0.0708	P	1.5	-10.6
4	☐	10.000	8.987	255277.89	0.1423	P	0.9	-10.1
5	☐	100.000	103.559	2875475.37	1.6402	A	1.4	3.6
6	☐	200.000	198.287	5416236.59	3.1405	A	0.6	-0.9

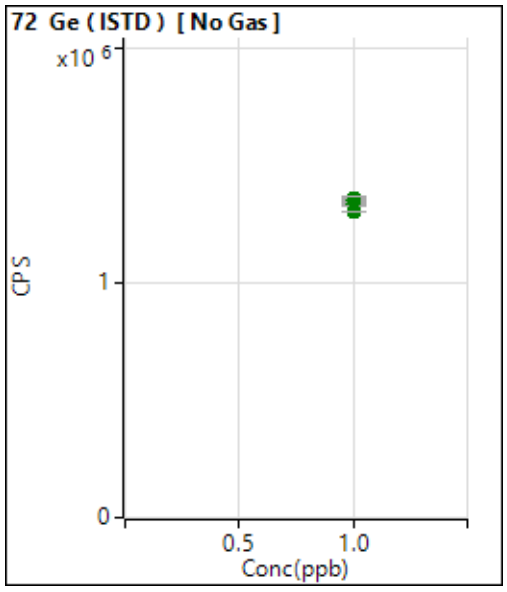
y = 0.0158 * x + 9.5705E-006
R = 0.9997
DL = 0.0006309 ppb
BEC = 0.0006043 ppb

Weight: <None>
Min Conc: <None>

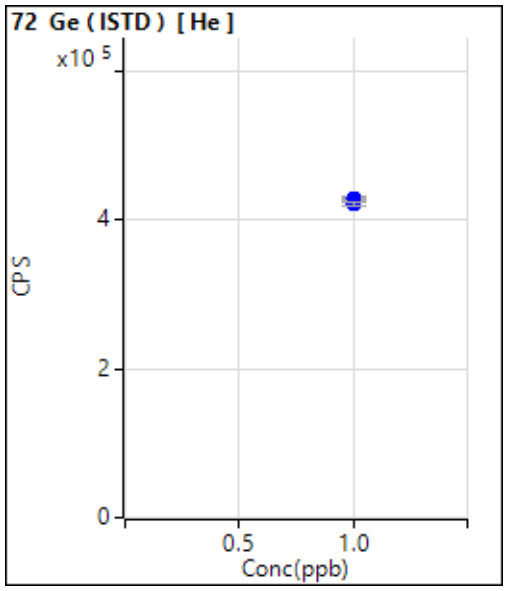
Calibration for 180_ICV.d



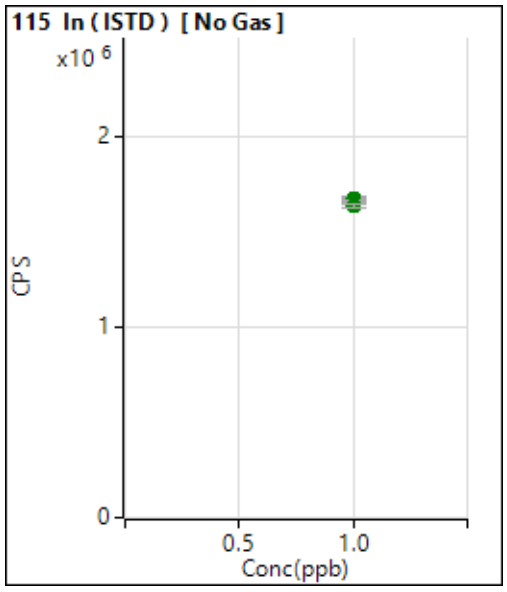
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		823507.32		A	0.9	
2	☐	1.000		814400.80		A	1.4	
3	☐	1.000		805882.28		A	1.9	
4	☐	1.000		810112.67		A	1.4	
5	☐	1.000		787773.03		A	1.3	
6	☐	1.000		769756.40		A	2.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360587.69		A	1.5	
2	☐	1.000		1350055.71		A	1.9	
3	☐	1.000		1353328.37		A	2.3	
4	☐	1.000		1336358.21		A	0.9	
5	☐	1.000		1326885.50		A	0.1	
6	☐	1.000		1305240.45		A	0.2	

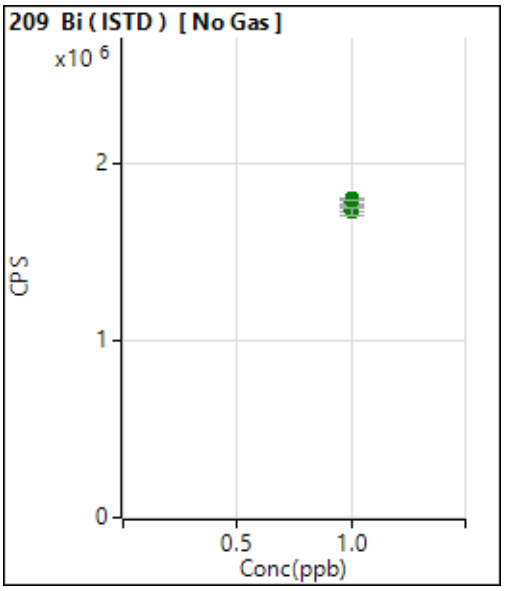


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		427779.66		P	0.5	
2	☐	1.000		429243.38		P	0.6	
3	☐	1.000		426201.89		P	0.7	
4	☐	1.000		426809.25		P	0.5	
5	☐	1.000		425204.34		P	0.8	
6	☐	1.000		421817.61		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1674672.94		A	0.9	
2	☐	1.000		1675687.62		A	0.7	
3	☐	1.000		1677188.96		A	0.7	
4	☐	1.000		1661695.51		A	0.7	
5	☐	1.000		1662239.18		A	1.0	
6	☐	1.000		1639966.44		A	1.4	

Calibration for 180_ICV.d



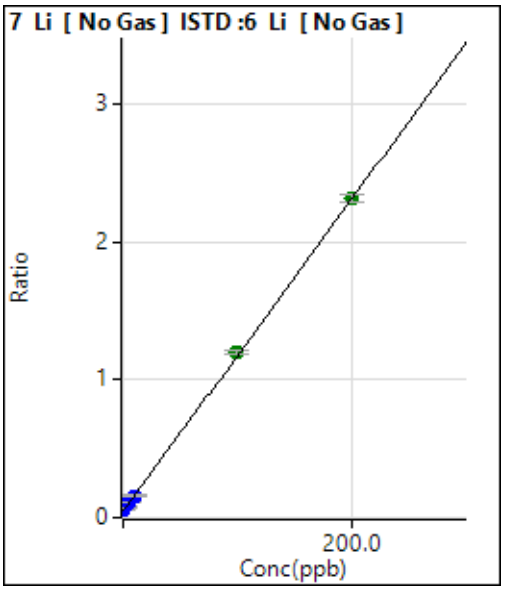
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1742359.04		A	2.0	
2	☐	1.000		1802525.91		A	0.2	
3	☐	1.000		1777837.73		A	1.2	
4	☐	1.000		1793436.17		A	0.2	
5	☐	1.000		1753083.31		A	0.5	
6	☐	1.000		1724796.80		A	2.3	

Calibration for 014_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	CAL BLK	07/19/2022 11:24:40
2	008CALS.d	2/10/200	07/19/2022 11:26:55
3	009CALS.d	5/25/500	07/19/2022 11:29:09
4	010CALS.d	10/50/100	07/19/2022 11:31:23
5	011CALS.d	100/500/10K	07/19/2022 11:33:36
6	012CALS.d	200/1000/20K	07/19/2022 11:35:45

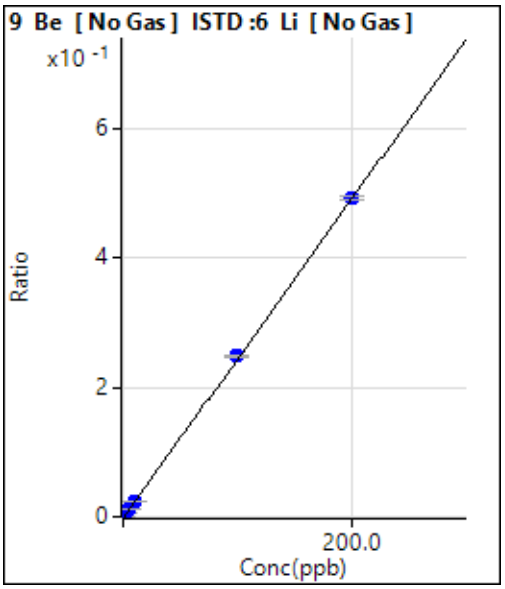
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38948.74	0.0577	P	1.5	
2	☐	2.000	1.730	53618.19	0.0773	P	1.8	-13.5
3	☐	5.000	4.427	74264.40	0.1079	P	3.7	-11.5
4	☐	10.000	8.970	109740.26	0.1594	P	2.6	-10.3
5	☐	100.000	101.177	847629.96	1.2053	A	2.1	1.2
6	☐	200.000	199.480	1570775.08	2.3204	A	1.9	-0.3

y = 0.0113 * x + 0.0577
R = 1.0000
DL = 0.2249 ppb
BEC = 5.084 ppb

Weight: <None>
Min Conc: <None>

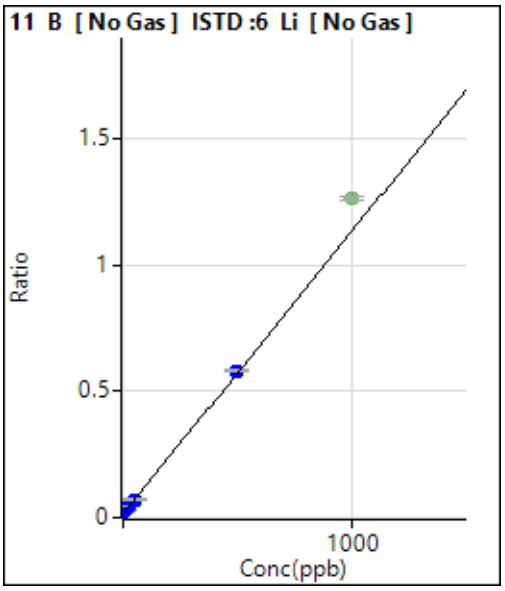


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	69.8	
2	☐	2.000	1.931	3355.43	0.0048	P	6.4	-3.4
3	☐	5.000	4.650	7950.65	0.0115	P	3.8	-7.0
4	☐	10.000	9.687	16509.74	0.0240	P	3.8	-3.1
5	☐	100.000	100.586	174680.97	0.2484	P	1.3	0.6
6	☐	200.000	199.732	333876.47	0.4932	P	1.6	-0.1

y = 0.0025 * x + 6.8572E-005
R = 1.0000
DL = 0.05817 ppb
BEC = 0.02777 ppb

Weight: <None>
Min Conc: <None>

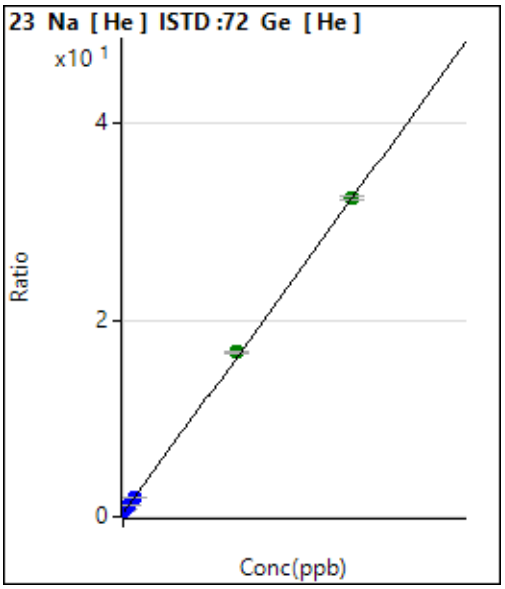
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14602.65	0.0216	P	2.3	
2	☐	10.000	6.418	19974.40	0.0288	P	1.8	-35.8
3	☐	25.000	20.478	30621.74	0.0445	P	3.6	-18.1
4	☐	50.000	45.296	49685.84	0.0722	P	3.7	-9.4
5	☐	500.000	500.768	408374.24	0.5807	P	1.7	0.2
6	☑	1000.000		855291.13	1.2633	A	1.1	

y = 0.0011 * x + 0.0216
R = 1.0000
DL = 1.351 ppb
BEC = 19.37 ppb

Weight: <None>
Min Conc: <None>

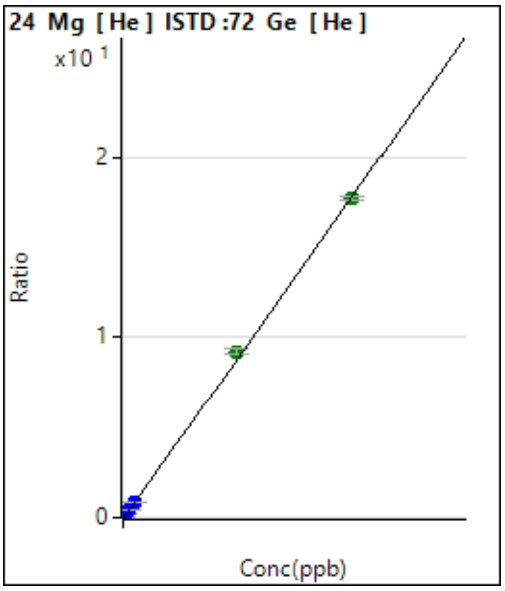


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182657.37	0.5325	P	1.2	
2	☐	200.000	172.344	280188.69	0.8079	P	0.8	-13.8
3	☐	500.000	433.562	426412.31	1.2252	P	0.3	-13.3
4	☐	1000.000	907.615	685888.14	1.9825	P	0.6	-9.2
5	☐	10000.00	10115.85	5852425.54	16.6927	A	0.8	1.2
6	☐	20000.00	19948.62	11158848.5	32.4007	A	0.7	-0.3

y = 0.0016 * x + 0.5325
R = 1.0000
DL = 12.35 ppb
BEC = 333.4 ppb

Weight: <None>
Min Conc: <None>

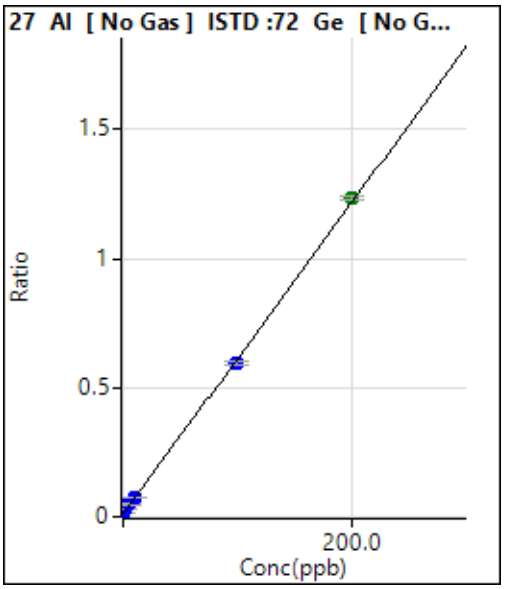
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	226.68	0.0007	P	24.2	
2	☐	200.000	189.977	59072.04	0.1703	P	0.5	-5.0
3	☐	500.000	474.699	147776.62	0.4246	P	0.3	-5.1
4	☐	1000.000	966.612	298878.84	0.8639	P	1.3	-3.3
5	☐	10000.00	10327.62	3233371.10	9.2236	A	2.7	3.3
6	☐	20000.00	19838.59	6101545.95	17.7172	A	0.8	-0.8

y = 8.9304E-004 * x + 6.5999E-004
R = 0.9998
DL = 0.5369 ppb
BEC = 0.739 ppb

Weight: <None>
Min Conc: <None>

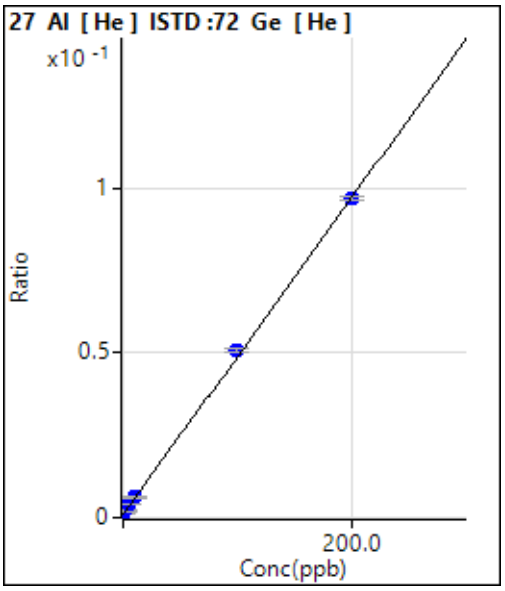


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18328.96	0.0169	P	4.7	
2	☐	2.000	1.578	29404.64	0.0265	P	1.5	-21.1
3	☐	5.000	5.310	53492.87	0.0490	P	4.3	6.2
4	☐	10.000	9.140	78256.04	0.0721	P	2.2	-8.6
5	☐	100.000	96.213	648535.02	0.5974	P	2.9	-3.8
6	☐	200.000	201.933	1344175.50	1.2353	A	1.3	1.0

y = 0.0060 * x + 0.0169
R = 0.9997
DL = 0.3973 ppb
BEC = 2.806 ppb

Weight: <None>
Min Conc: <None>

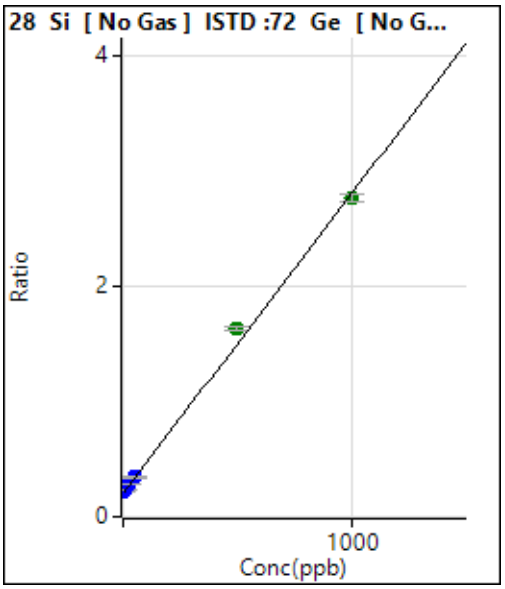
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0014	P	1.5	
2	☐	2.000	1.653	770.03	0.0022	P	26.6	-17.3
3	☐	5.000	5.392	1400.10	0.0040	P	2.7	7.8
4	☐	10.000	9.871	2136.87	0.0062	P	7.4	-1.3
5	☐	100.000	102.850	17845.02	0.0509	P	2.5	2.9
6	☐	200.000	198.575	33390.50	0.0970	P	1.5	-0.7

y = 4.8106E-004 * x + 0.0014
R = 0.9998
DL = 0.1295 ppb
BEC = 2.969 ppb

Weight: <None>
Min Conc: <None>

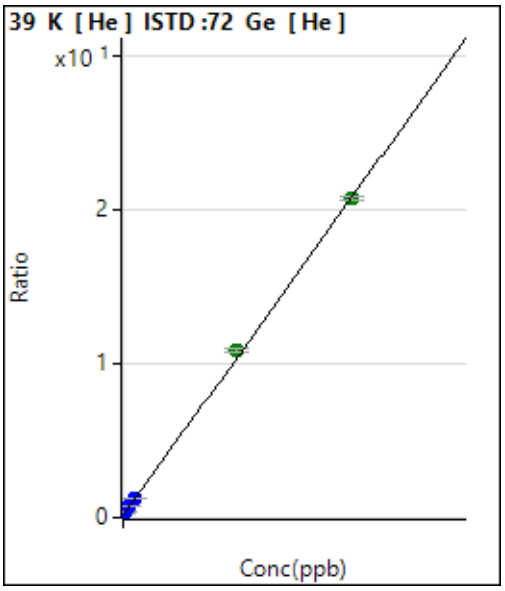


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	235702.45	0.2177	P	2.2	
2	☐	10.000	7.279	262999.99	0.2366	P	2.1	-27.2
3	☐	25.000	24.851	308479.02	0.2824	P	3.6	-0.6
4	☐	50.000	48.308	372801.53	0.3434	P	2.5	-3.4
5	☐	500.000	541.205	1765765.96	1.6264	A	1.9	8.2
6	☐	1000.000	979.513	3010511.00	2.7673	A	2.3	-2.0

y = 0.0026 * x + 0.2177
R = 0.9988
DL = 5.636 ppb
BEC = 83.63 ppb

Weight: <None>
Min Conc: <None>

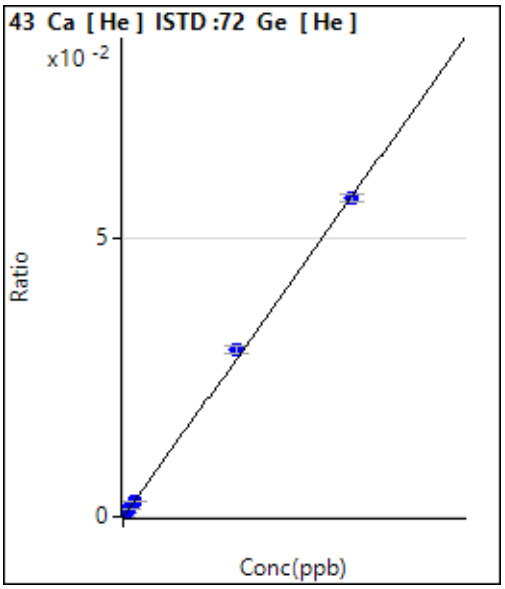
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	79897.00	0.2329	P	1.2	
2	☐	200.000	180.430	145462.91	0.4194	P	1.0	-9.8
3	☐	500.000	462.806	247549.48	0.7112	P	0.1	-7.4
4	☐	1000.000	949.531	420121.95	1.2143	P	0.4	-5.0
5	☐	10000.00	10315.33	3819073.49	10.8940	A	2.2	3.2
6	☐	20000.00	19845.98	7143831.98	20.7441	A	0.7	-0.8

y = 0.0010 * x + 0.2329
R = 0.9998
DL = 8 ppb
BEC = 225.4 ppb

Weight: <None>
Min Conc: <None>

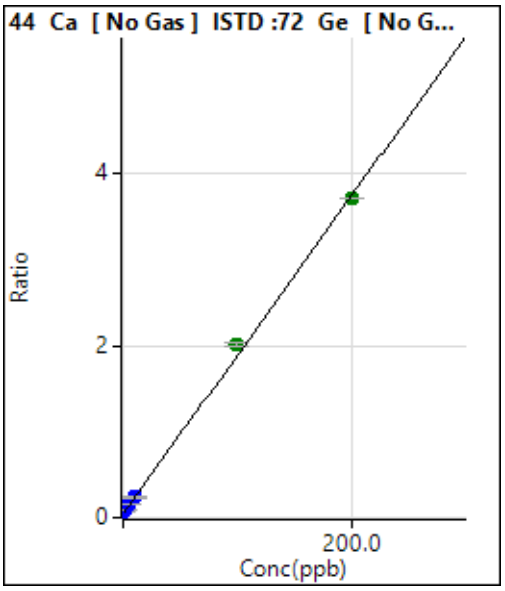


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	23.8	
2	☐	200.000	153.355	200.01	0.0006	P	10.7	-23.3
3	☐	500.000	425.678	473.35	0.0014	P	5.4	-14.9
4	☐	1000.000	960.937	1003.39	0.0029	P	1.7	-3.9
5	☐	10000.00	10376.20	10510.86	0.0300	P	4.4	3.8
6	☐	20000.00	19816.17	19674.36	0.0571	P	2.2	-0.9

y = 2.8764E-006 * x + 1.3586E-004
R = 0.9997
DL = 33.73 ppb
BEC = 47.23 ppb

Weight: <None>
Min Conc: <None>

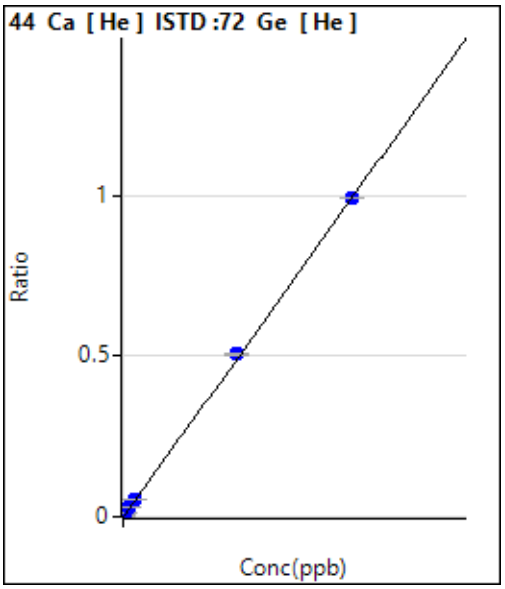
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	67441.89	0.0623	P	0.5	
2	☐	2.000	1.674	103728.82	0.0933	P	0.9	-16.3
3	☐	5.000	4.724	163671.47	0.1498	P	4.3	-5.5
4	☐	10.000	9.385	256489.66	0.2362	P	1.2	-6.2
5	☐	100.000	105.550	2191619.03	2.0189	A	2.9	5.6
6	☐	200.000	197.266	4046921.19	3.7191	A	0.5	-1.4

y = 0.0185 * x + 0.0623
R = 0.9994
DL = 0.05448 ppb
BEC = 3.359 ppb

Weight: <None>
Min Conc: <None>

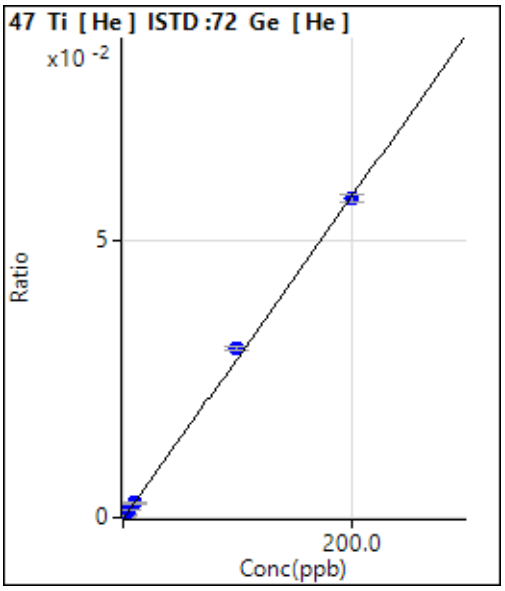


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1023.40	0.0030	P	8.6	
2	☐	200.000	193.928	4380.79	0.0126	P	0.5	-3.0
3	☐	500.000	505.752	9793.65	0.0281	P	2.8	1.2
4	☐	1000.000	988.648	18045.46	0.0522	P	2.7	-1.1
5	☐	10000.00	10161.77	178255.88	0.5085	P	1.3	1.6
6	☐	20000.00	19919.59	342262.23	0.9938	P	0.3	-0.4

y = 4.9742E-005 * x + 0.0030
R = 1.0000
DL = 15.5 ppb
BEC = 59.99 ppb

Weight: <None>
Min Conc: <None>

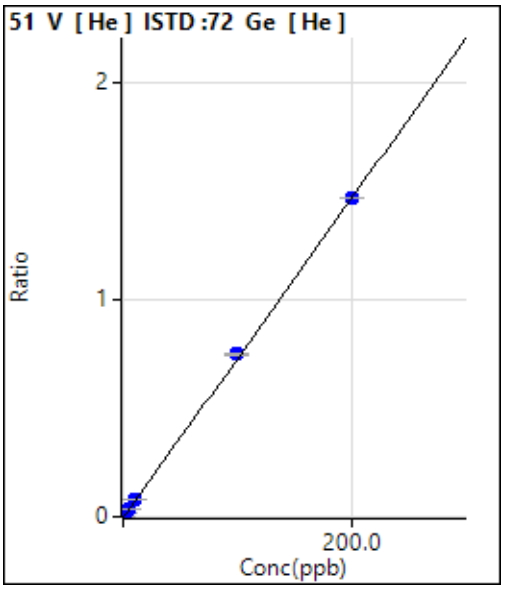
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.879	193.34	0.0006	P	31.9	-6.1
3	☐	5.000	4.797	490.02	0.0014	P	13.3	-4.1
4	☐	10.000	9.285	940.05	0.0027	P	11.2	-7.2
5	☐	100.000	104.324	10670.94	0.0304	P	2.3	4.3
6	☐	200.000	197.880	19877.99	0.0577	P	2.5	-1.1

y = 2.9161E-004 * x + 9.7550E-006
R = 0.9996
DL = 0.1738 ppb
BEC = 0.03345 ppb

Weight: <None>
Min Conc: <None>

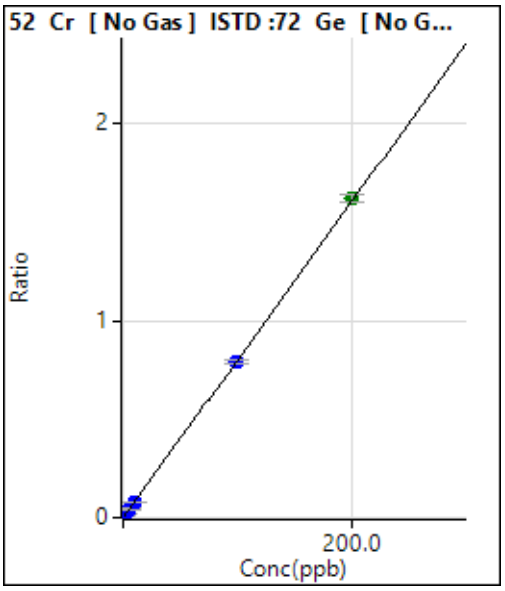


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	602.24	0.0018	P	5.0	
2	☐	2.000	1.979	5660.08	0.0163	P	4.4	-1.1
3	☐	5.000	4.851	13041.80	0.0375	P	0.9	-3.0
4	☐	10.000	9.995	26066.99	0.0753	P	0.3	0.0
5	☐	100.000	101.665	263019.47	0.7502	P	1.3	1.7
6	☐	200.000	199.171	505587.17	1.4681	P	0.1	-0.4

y = 0.0074 * x + 0.0018
R = 0.9999
DL = 0.03596 ppb
BEC = 0.2384 ppb

Weight: <None>
Min Conc: <None>

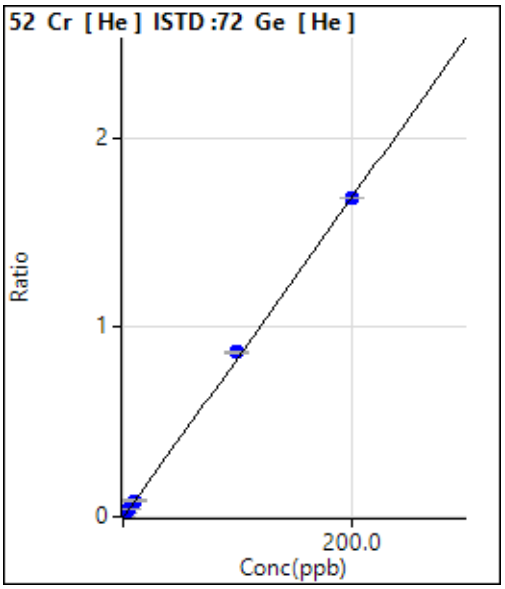
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7612.22	0.0070	P	5.6	
2	☐	2.000	1.765	23530.55	0.0212	P	2.8	-11.7
3	☐	5.000	4.561	47609.52	0.0436	P	4.1	-8.8
4	☐	10.000	9.211	87760.46	0.0808	P	3.1	-7.9
5	☐	100.000	97.613	857042.62	0.7894	P	2.0	-2.4
6	☐	200.000	201.246	1762477.58	1.6200	A	2.2	0.6

y = 0.0080 * x + 0.0070
R = 0.9999
DL = 0.1473 ppb
BEC = 0.8766 ppb

Weight: <None>
Min Conc: <None>

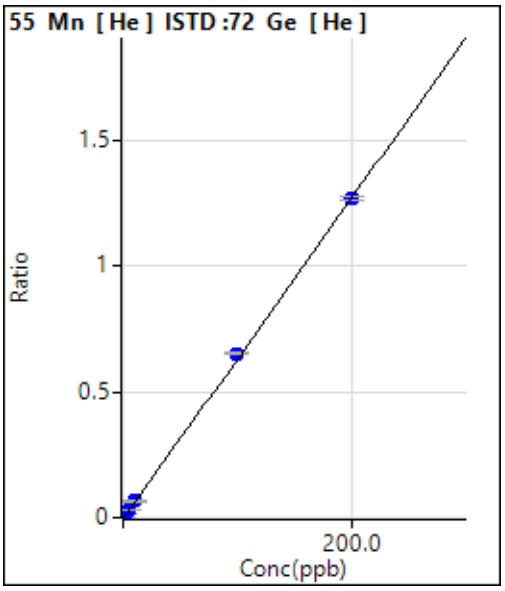


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0027	P	11.9	
2	☐	2.000	1.917	6545.05	0.0189	P	8.2	-4.2
3	☐	5.000	4.846	15185.31	0.0436	P	0.5	-3.1
4	☐	10.000	9.738	29405.25	0.0850	P	3.1	-2.6
5	☐	100.000	102.356	304386.17	0.8682	P	1.7	2.4
6	☐	200.000	198.840	579983.27	1.6841	P	0.2	-0.6

y = 0.0085 * x + 0.0027
R = 0.9999
DL = 0.1117 ppb
BEC = 0.3139 ppb

Weight: <None>
Min Conc: <None>

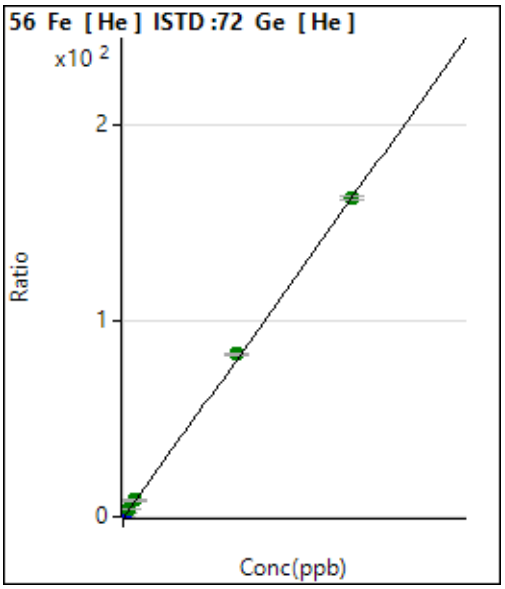
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	373.35	0.0011	P	21.5	
2	☐	2.000	1.962	4724.25	0.0136	P	0.4	-1.9
3	☐	5.000	4.931	11341.56	0.0326	P	3.9	-1.4
4	☐	10.000	10.037	22562.15	0.0652	P	1.6	0.4
5	☐	100.000	102.308	229519.59	0.6547	P	1.9	2.3
6	☐	200.000	198.846	437870.90	1.2715	P	0.8	-0.6

y = 0.0064 * x + 0.0011
R = 0.9999
DL = 0.1098 ppb
BEC = 0.1703 ppb

Weight: <None>
Min Conc: <None>

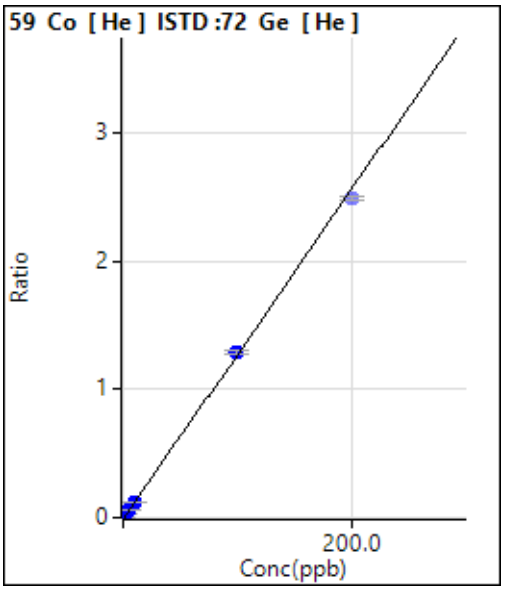


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8232.63	0.0240	P	2.2	
2	☐	200.000	189.606	545517.96	1.5728	P	0.9	-5.2
3	☐	500.000	500.902	1432373.00	4.1157	A	1.8	0.2
4	☐	1000.000	1017.047	2882654.54	8.3319	A	1.2	1.7
5	☐	10000.00	10179.61	29161372.0	83.1780	A	1.4	1.8
6	☐	20000.00	19909.42	56016162.5	162.657	A	0.7	-0.5

y = 0.0082 * x + 0.0240
R = 0.9999
DL = 0.1932 ppb
BEC = 2.938 ppb

Weight: <None>
Min Conc: <None>

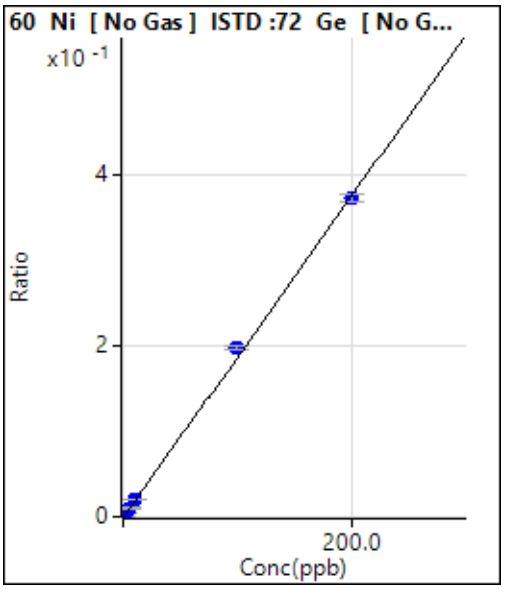
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	25.7	
2	☐	2.000	1.986	8913.05	0.0257	P	5.5	-0.7
3	☐	5.000	4.635	20822.84	0.0598	P	0.3	-7.3
4	☐	10.000	9.649	43048.20	0.1244	P	1.3	-3.5
5	☐	100.000	100.054	451906.71	1.2890	P	1.6	0.1
6	☑	200.000		858149.42	2.4919	P	0.7	

y = 0.0129 * x + 1.1677E-004
R = 1.0000
DL = 0.006992 ppb
BEC = 0.009065 ppb

Weight: <None>
Min Conc: <None>

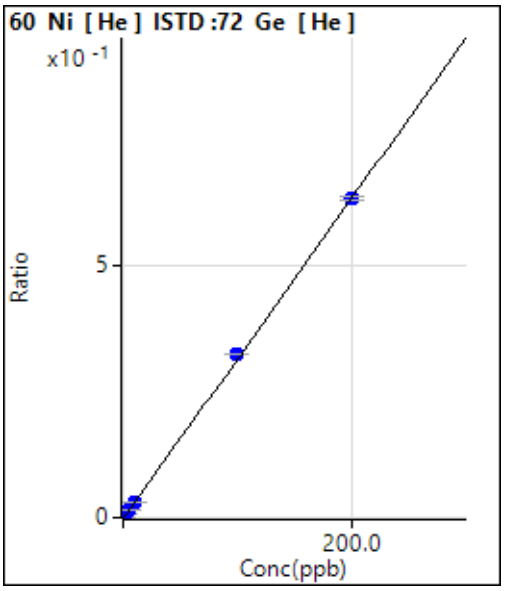


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0007	P	14.3	
2	☐	2.000	2.011	4991.01	0.0045	P	1.1	0.5
3	☐	5.000	4.883	10804.48	0.0099	P	4.8	-2.3
4	☐	10.000	10.333	21864.53	0.0201	P	2.0	3.3
5	☐	100.000	104.611	214336.74	0.1974	P	2.5	4.6
6	☐	200.000	197.681	405216.95	0.3725	P	2.1	-1.2

y = 0.0019 * x + 7.0743E-004
R = 0.9996
DL = 0.161 ppb
BEC = 0.3762 ppb

Weight: <None>
Min Conc: <None>

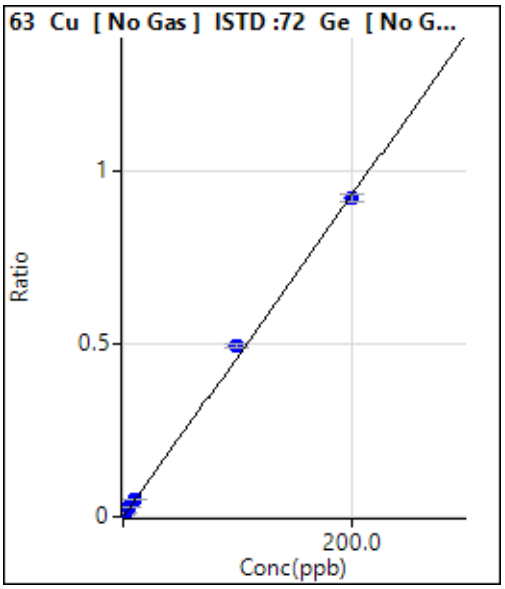
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0006	P	19.2	
2	☐	2.000	1.939	2353.59	0.0068	P	4.4	-3.0
3	☐	5.000	5.014	5757.97	0.0165	P	5.7	0.3
4	☐	10.000	9.852	11034.65	0.0319	P	1.7	-1.5
5	☐	100.000	102.060	113778.93	0.3245	P	0.3	2.1
6	☐	200.000	198.978	217667.62	0.6321	P	0.8	-0.5

y = 0.0032 * x + 6.3159E-004
R = 0.9999
DL = 0.1146 ppb
BEC = 0.199 ppb

Weight: <None>
Min Conc: <None>

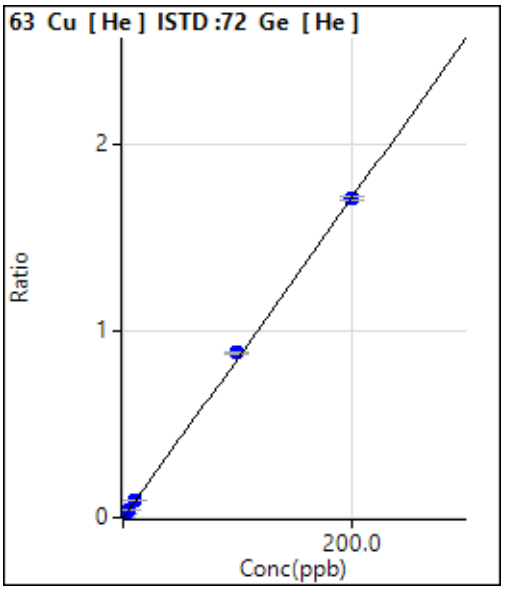


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3927.31	0.0036	P	4.0	
2	☐	2.000	1.888	13780.54	0.0124	P	4.3	-5.6
3	☐	5.000	4.797	28319.77	0.0259	P	4.2	-4.1
4	☐	10.000	10.042	54612.87	0.0503	P	2.4	0.4
5	☐	100.000	105.098	534355.41	0.4922	P	2.4	5.1
6	☐	200.000	197.455	1002571.73	0.9216	P	2.3	-1.3

y = 0.0046 * x + 0.0036
R = 0.9995
DL = 0.09288 ppb
BEC = 0.7803 ppb

Weight: <None>
Min Conc: <None>

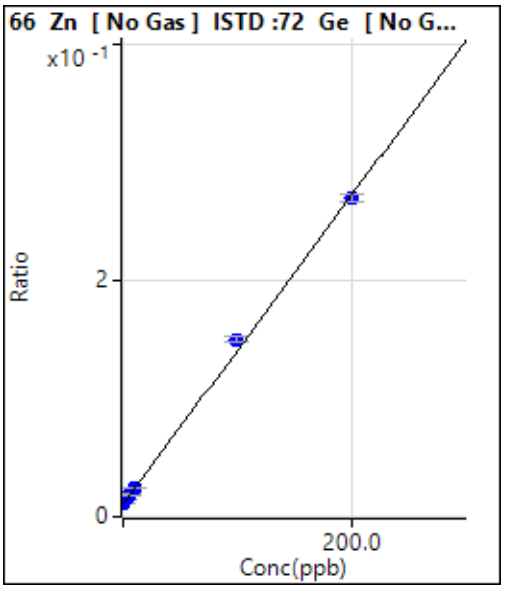
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0046	P	2.8	
2	☐	2.000	2.006	7548.87	0.0218	P	3.1	0.3
3	☐	5.000	4.770	15829.44	0.0455	P	2.2	-4.6
4	☐	10.000	9.972	31179.36	0.0901	P	1.0	-0.3
5	☐	100.000	102.222	309058.71	0.8816	P	2.2	2.2
6	☐	200.000	198.896	589236.08	1.7110	P	0.7	-0.6

y = 0.0086 * x + 0.0046
R = 0.9999
DL = 0.04449 ppb
BEC = 0.5313 ppb

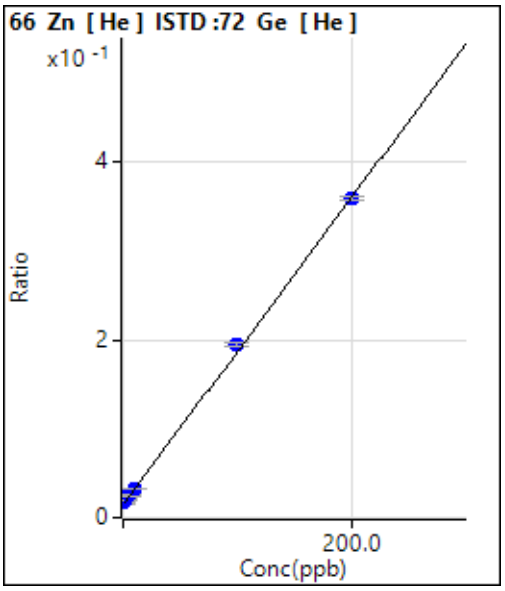
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12836.29	0.0119	P	3.6	
2	☐	2.000	2.135	16280.02	0.0146	P	2.2	6.8
3	☐	5.000	5.122	20275.39	0.0186	P	4.2	2.4
4	☐	10.000	9.846	26866.99	0.0247	P	1.5	-1.5
5	☐	100.000	105.563	162939.00	0.1501	P	3.0	5.6
6	☐	200.000	197.222	293912.36	0.2702	P	1.9	-1.4

y = 0.0013 * x + 0.0119
R = 0.9994
DL = 0.9655 ppb
BEC = 9.049 ppb

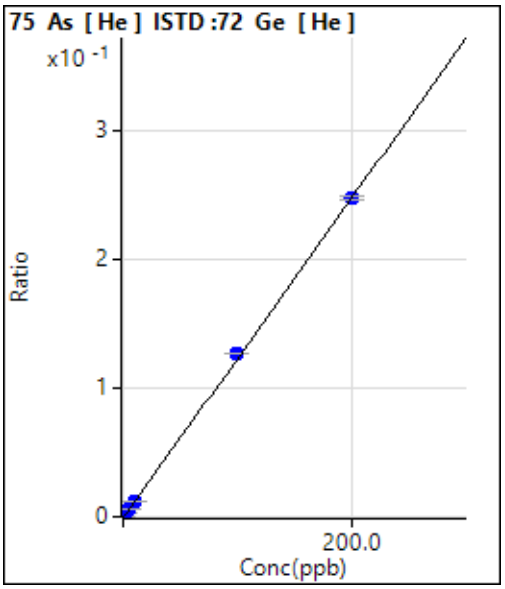
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5651.29	0.0165	P	3.0	
2	☐	2.000	2.255	7068.64	0.0204	P	2.5	12.7
3	☐	5.000	5.031	8766.31	0.0252	P	2.9	0.6
4	☐	10.000	9.481	11378.28	0.0329	P	2.5	-5.2
5	☐	100.000	103.328	68459.10	0.1953	P	2.2	3.3
6	☐	200.000	198.359	123891.52	0.3597	P	0.8	-0.8

y = 0.0017 * x + 0.0165
R = 0.9998
DL = 0.8671 ppb
BEC = 9.522 ppb

Weight: <None>
Min Conc: <None>

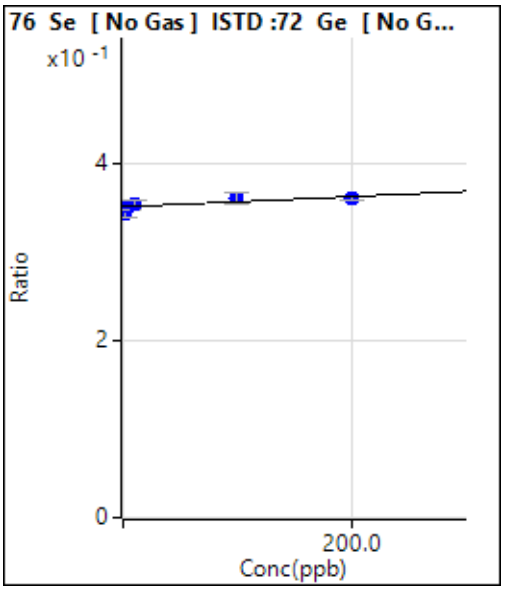


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	62.22	0.0002	P	38.0	
2	☐	2.000	1.953	903.37	0.0026	P	2.1	-2.3
3	☐	5.000	4.630	2062.39	0.0059	P	3.4	-7.4
4	☐	10.000	9.662	4209.57	0.0122	P	1.1	-3.4
5	☐	100.000	101.853	44359.24	0.1265	P	1.1	1.9
6	☐	200.000	199.100	85112.96	0.2472	P	1.0	-0.4

y = 0.0012 * x + 1.8149E-004
R = 0.9999
DL = 0.1667 ppb
BEC = 0.1463 ppb

Weight: <None>
Min Conc: <None>

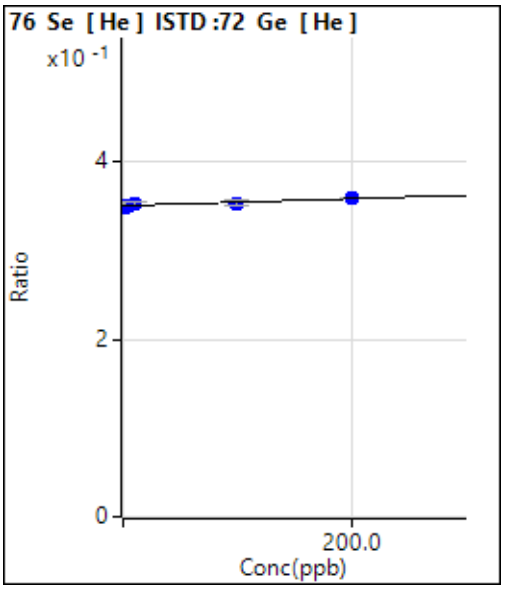
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	380438.43	0.3513	P	1.7	
2	☐	2.000	-117.667	382783.11	0.3444	P	2.6	-5983.
3	☐	5.000	20.941	385215.68	0.3526	P	3.0	318.8
4	☐	10.000	70.894	385931.01	0.3555	P	1.9	608.9
5	☐	100.000	164.373	391811.07	0.3610	P	3.5	64.4
6	☐	200.000	165.567	392855.58	0.3610	P	0.9	-17.2

y = 5.8649E-005 * x + 0.3513
R = 0.7719
DL = 302.2 ppb
BEC = 5991 ppb

Weight: <None>
Min Conc: <None>

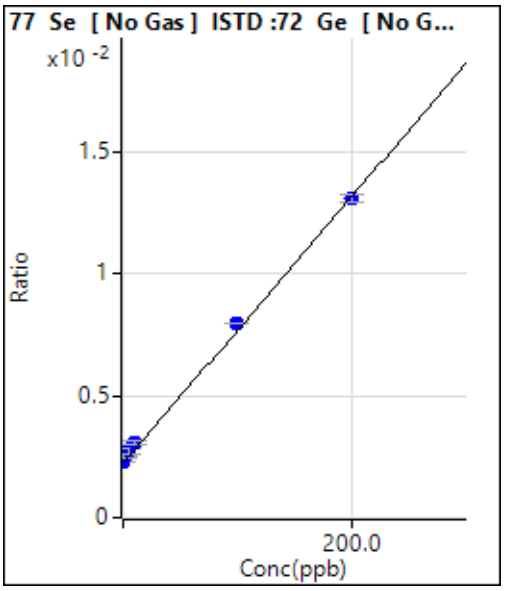


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120215.19	0.3504	P	1.0	
2	☐	2.000	-58.011	120743.26	0.3481	P	1.2	-3000.
3	☐	5.000	11.913	122139.41	0.3509	P	0.7	138.3
4	☐	10.000	48.379	121916.90	0.3524	P	0.8	383.8
5	☐	100.000	60.483	123710.31	0.3529	P	1.9	-39.5
6	☐	200.000	218.267	123689.62	0.3592	P	0.5	9.1

y = 3.9954E-005 * x + 0.3504
R = 0.9208
DL = 270.1 ppb
BEC = 8771 ppb

Weight: <None>
Min Conc: <None>

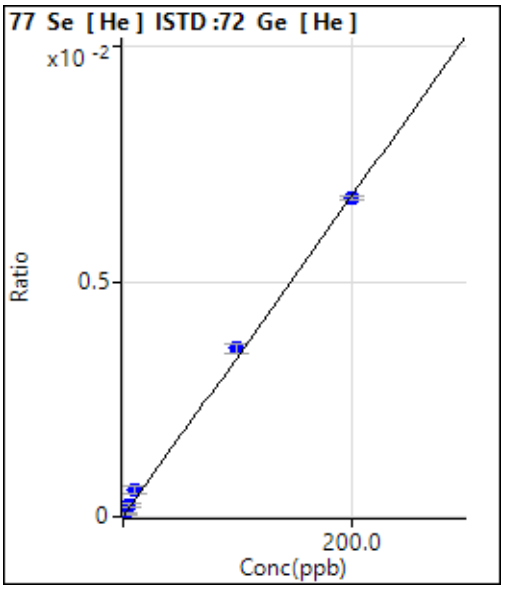
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2490.27	0.0023	P	2.0	
2	☐	2.000	3.600	2773.67	0.0025	P	5.1	80.0
3	☐	5.000	8.068	2990.38	0.0027	P	8.9	61.4
4	☐	10.000	14.400	3350.47	0.0031	P	4.7	44.0
5	☐	100.000	104.032	8676.29	0.0080	P	0.6	4.0
6	☐	200.000	197.671	14264.39	0.0131	P	2.2	-1.2

y = 5.4694E-005 * x + 0.0023
R = 0.9996
DL = 2.585 ppb
BEC = 42.04 ppb

Weight: <None>
Min Conc: <None>

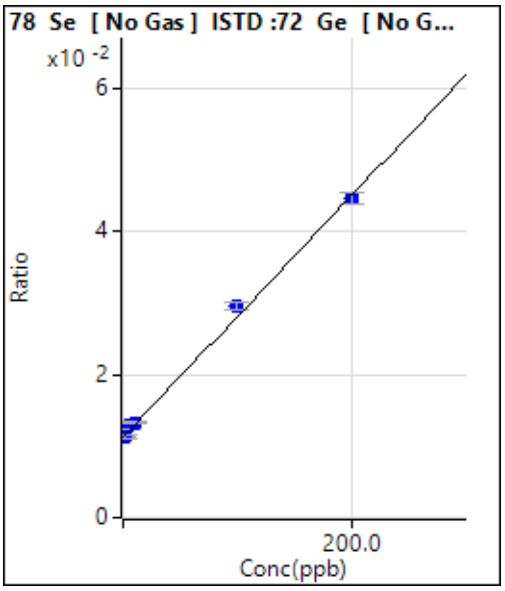


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.118	26.67	0.0001	P	57.5	-44.1
3	☐	5.000	5.610	80.00	0.0002	P	33.1	12.2
4	☐	10.000	15.532	196.67	0.0006	P	27.3	55.3
5	☐	100.000	103.841	1253.42	0.0036	P	6.2	3.8
6	☐	200.000	197.797	2333.58	0.0068	P	1.7	-1.1

y = 3.4063E-005 * x + 3.8756E-005
R = 0.9994
DL = 2.956 ppb
BEC = 1.138 ppb

Weight: <None>
Min Conc: <None>

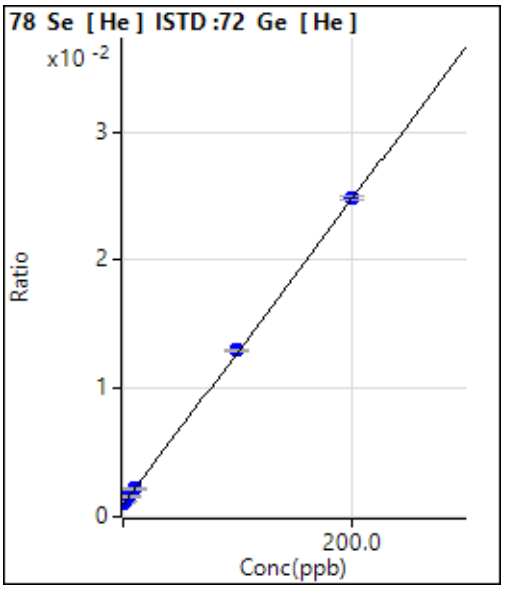
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12469.31	0.0115	P	2.8	
2	☐	2.000	-0.702	12666.18	0.0114	P	4.4	-135.1
3	☐	5.000	8.019	14040.85	0.0129	P	8.6	60.4
4	☐	10.000	10.496	14424.63	0.0133	P	3.7	5.0
5	☐	100.000	107.136	32091.84	0.0296	P	4.1	7.1
6	☐	200.000	196.359	48510.66	0.0446	P	3.9	-1.8

y = 1.6847E-004 * x + 0.0115
R = 0.9988
DL = 5.843 ppb
BEC = 68.36 ppb

Weight: <None>
Min Conc: <None>

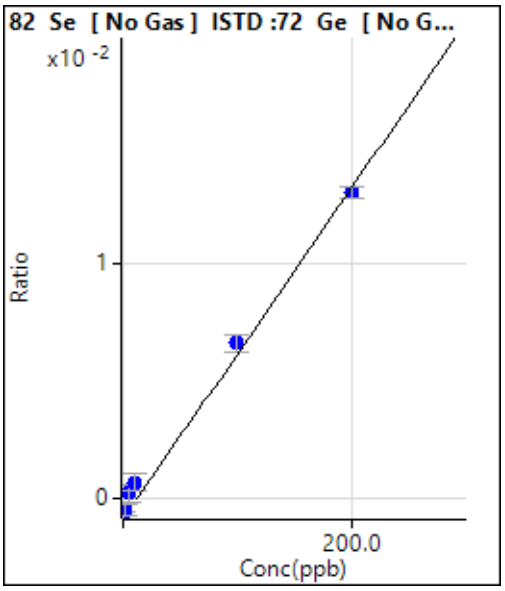


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.01	0.0011	P	8.4	
2	☐	2.000	0.979	410.68	0.0012	P	9.3	-51.1
3	☐	5.000	4.804	570.68	0.0016	P	9.3	-3.9
4	☐	10.000	9.554	762.69	0.0022	P	9.1	-4.5
5	☐	100.000	100.145	4551.45	0.0130	P	0.6	0.1
6	☐	200.000	199.965	8560.07	0.0249	P	1.1	0.0

y = 1.1896E-004 * x + 0.0011
R = 1.0000
DL = 2.256 ppb
BEC = 8.974 ppb

Weight: <None>
Min Conc: <None>

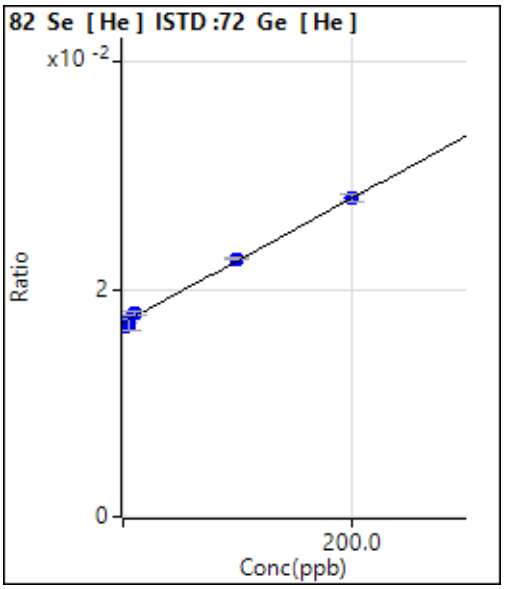
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-878.83	-0.0008	P	-51.0	
2	☐	2.000	4.622	-546.33	-0.0005	P	-96.0	131.1
3	☐	5.000	14.723	257.81	0.0002	P	319.7	194.5
4	☐	10.000	21.230	735.78	0.0007	P	114.6	112.3
5	☐	100.000	105.304	7176.40	0.0066	P	11.4	5.3
6	☐	200.000	196.517	14180.45	0.0130	P	3.8	-1.7

y = 7.0423E-005 * x - 8.1373E-004
R = 0.9983
DL = 17.68 ppb
BEC = -11.55 ppb

Weight: <None>
Min Conc: <None>

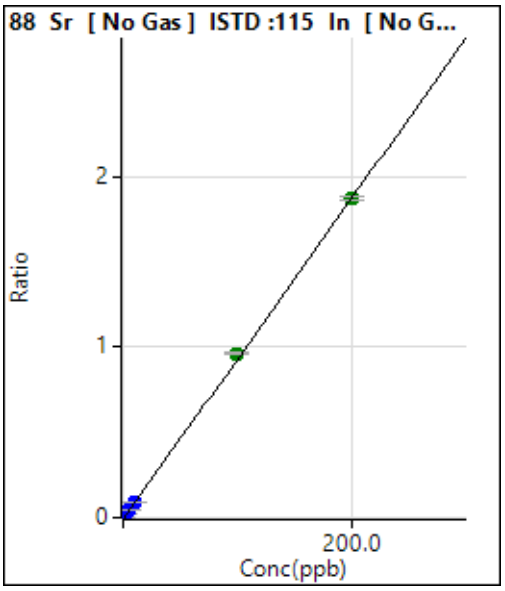


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5881.39	0.0171	P	2.4	
2	☐	2.000	-7.213	5808.02	0.0167	P	3.1	-460.6
3	☐	5.000	-3.854	5894.73	0.0169	P	6.6	-177.1
4	☐	10.000	15.448	6224.88	0.0180	P	1.7	54.5
5	☐	100.000	101.513	7962.49	0.0227	P	0.9	1.5
6	☐	200.000	199.285	9666.96	0.0281	P	2.8	-0.4

y = 5.4839E-005 * x + 0.0171
R = 0.9977
DL = 22.31 ppb
BEC = 312.6 ppb

Weight: <None>
Min Conc: <None>

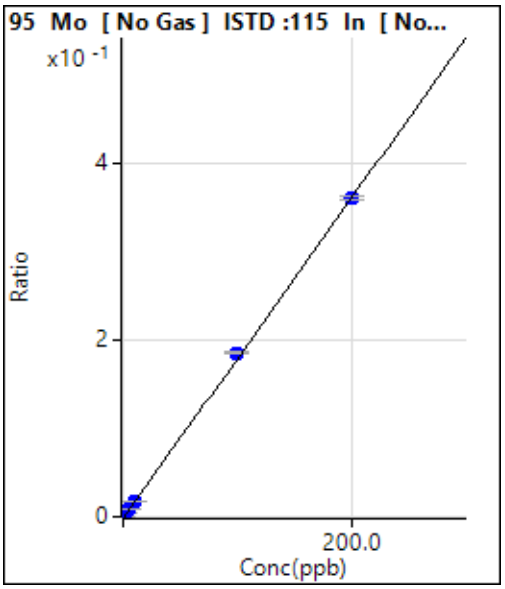
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0004	P	20.5	
2	☐	2.000	1.797	23574.41	0.0173	P	2.1	-10.2
3	☐	5.000	4.742	61363.99	0.0450	P	2.6	-5.2
4	☐	10.000	9.067	116373.30	0.0858	P	1.0	-9.3
5	☐	100.000	102.089	1305412.22	0.9617	A	1.4	2.1
6	☐	200.000	199.011	2501477.41	1.8744	A	1.3	-0.5

y = 0.0094 * x + 3.9902E-004
R = 0.9999
DL = 0.0261 ppb
BEC = 0.04237 ppb

Weight: <None>
Min Conc: <None>

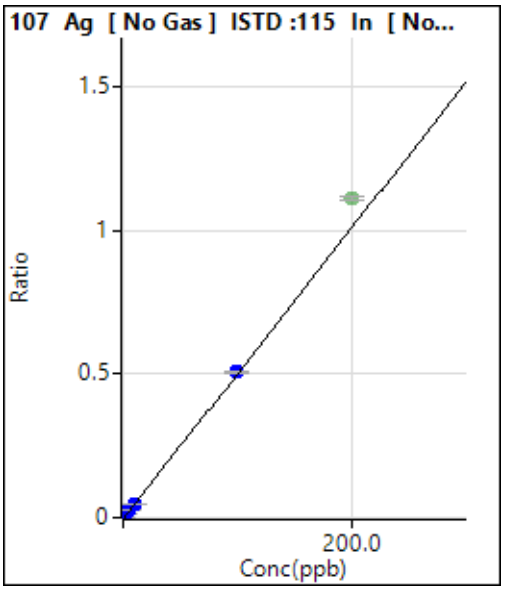


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	49.6	
2	☐	2.000	1.940	4817.62	0.0035	P	2.1	-3.0
3	☐	5.000	4.755	11788.73	0.0086	P	3.1	-4.9
4	☐	10.000	9.770	24078.79	0.0178	P	2.8	-2.3
5	☐	100.000	102.145	251688.35	0.1854	P	1.7	2.1
6	☐	200.000	198.946	481963.60	0.3611	P	0.7	-0.5

y = 0.0018 * x + 1.7243E-005
R = 0.9999
DL = 0.01414 ppb
BEC = 0.0095 ppb

Weight: <None>
Min Conc: <None>

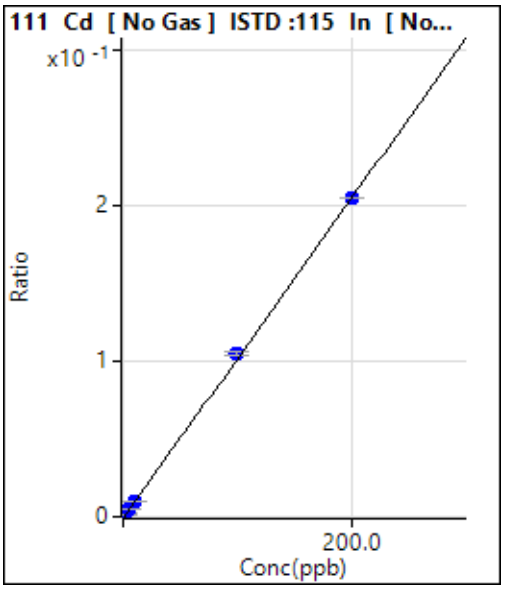
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0009	P	3.5	
2	☐	2.000	1.896	14241.18	0.0105	P	0.6	-5.2
3	☐	5.000	4.651	33242.17	0.0244	P	2.2	-7.0
4	☐	10.000	9.638	67347.89	0.0496	P	0.8	-3.6
5	☐	100.000	100.056	688593.45	0.5073	P	1.4	0.1
6	☑	200.000		1482101.18	1.1105	A	0.9	

y = 0.0051 * x + 8.6408E-004
R = 1.0000
DL = 0.01769 ppb
BEC = 0.1707 ppb

Weight: <None>
Min Conc: <None>

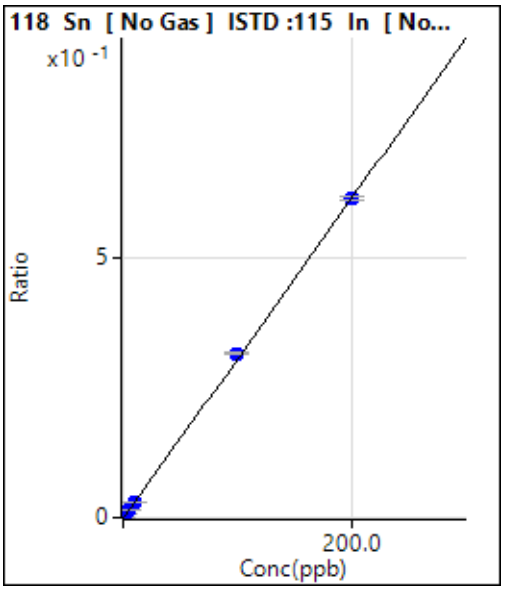


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.852	2590.29	0.0019	P	8.7	-7.4
3	☐	5.000	4.973	6958.65	0.0051	P	5.0	-0.5
4	☐	10.000	9.671	13483.79	0.0099	P	2.2	-3.3
5	☐	100.000	101.915	142160.00	0.1047	P	1.6	1.9
6	☐	200.000	199.061	273011.37	0.2046	P	0.6	-0.5

y = 0.0010 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

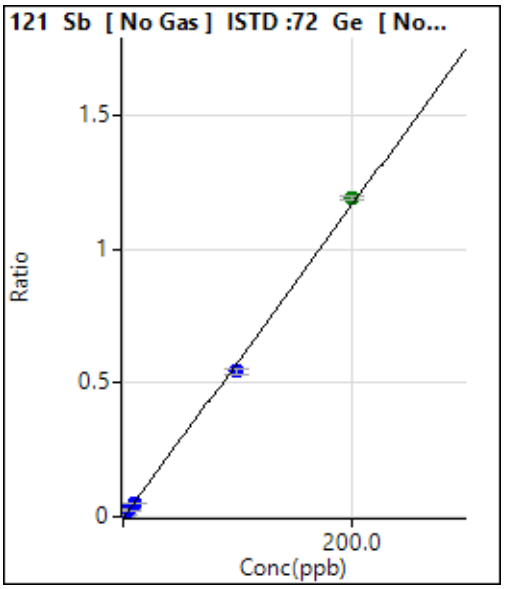
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0010	P	7.6	
2	☐	2.000	1.816	8943.20	0.0066	P	2.7	-9.2
3	☐	5.000	4.733	21220.81	0.0156	P	1.7	-5.3
4	☐	10.000	9.531	41225.11	0.0304	P	1.9	-4.7
5	☐	100.000	102.023	428899.26	0.3160	P	0.7	2.0
6	☐	200.000	199.021	821380.64	0.6155	P	0.7	-0.5

y = 0.0031 * x + 9.6492E-004
R = 0.9999
DL = 0.07146 ppb
BEC = 0.3125 ppb

Weight: <None>
Min Conc: <None>

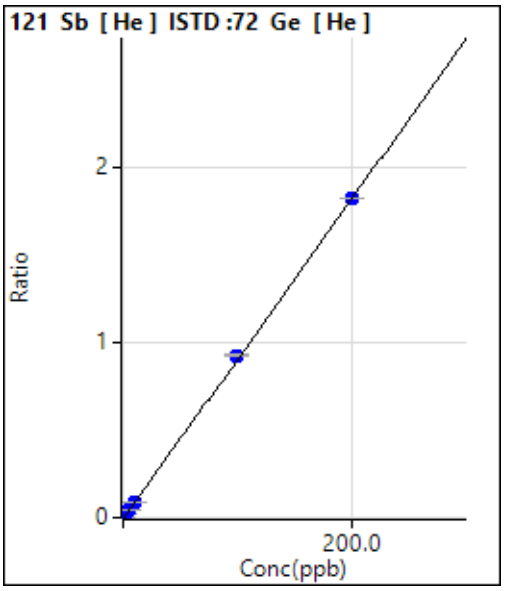


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	346.68	0.0003	P	17.9	
2	☐	2.000	1.715	11495.23	0.0103	P	1.7	-14.2
3	☐	5.000	4.285	27706.25	0.0254	P	3.0	-14.3
4	☐	10.000	8.851	56481.54	0.0520	P	4.1	-11.5
5	☐	100.000	92.703	588387.05	0.5420	P	3.0	-7.3
6	☐	200.000	203.727	1295667.40	1.1908	A	1.3	1.9

y = 0.0058 * x + 3.1991E-004
R = 0.9991
DL = 0.02933 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

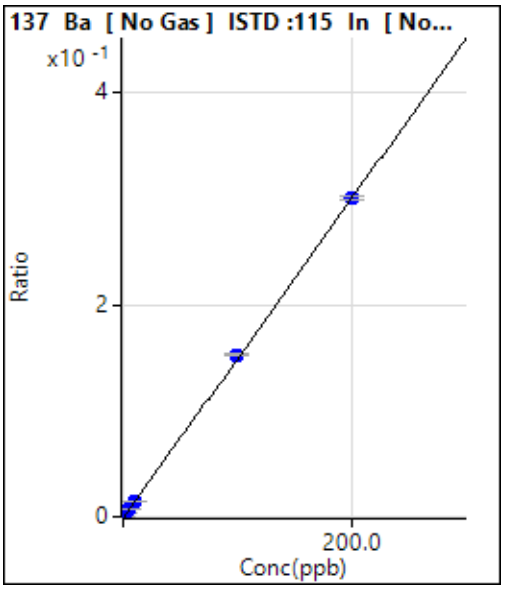
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	213.34	0.0006	P	15.7	
2	☐	2.000	1.839	6038.17	0.0174	P	0.7	-8.1
3	☐	5.000	4.794	15446.07	0.0444	P	3.7	-4.1
4	☐	10.000	9.617	30585.99	0.0884	P	0.9	-3.8
5	☐	100.000	101.109	323783.82	0.9236	P	1.4	1.1
6	☐	200.000	199.471	627288.82	1.8215	P	0.1	-0.3

y = 0.0091 * x + 6.2149E-004
R = 1.0000
DL = 0.03208 ppb
BEC = 0.06808 ppb

Weight: <None>
Min Conc: <None>

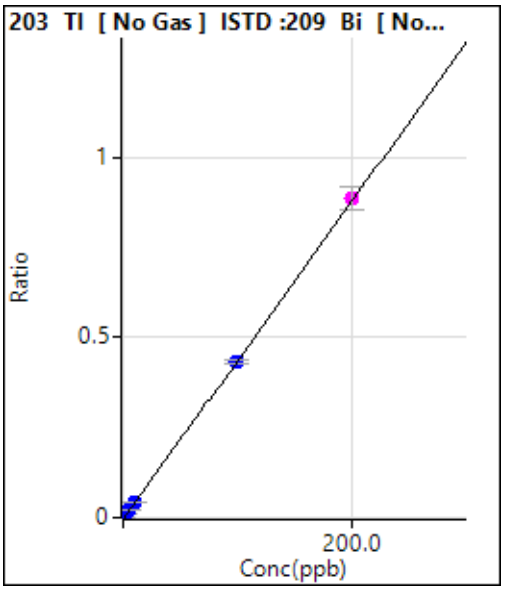


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	15.3	
2	☐	2.000	1.954	4147.41	0.0030	P	4.3	-2.3
3	☐	5.000	4.746	9897.29	0.0073	P	2.4	-5.1
4	☐	10.000	9.788	20179.32	0.0149	P	2.3	-2.1
5	☐	100.000	101.367	207894.24	0.1532	P	0.9	1.4
6	☐	200.000	199.334	401827.22	0.3011	P	0.7	-0.3

y = 0.0015 * x + 9.5995E-005
R = 1.0000
DL = 0.02926 ppb
BEC = 0.06358 ppb

Weight: <None>
Min Conc: <None>

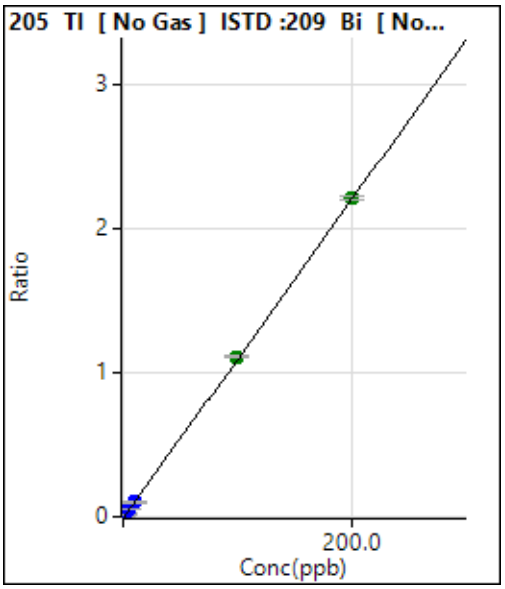
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	60.1	
2	☐	2.000	1.849	11725.68	0.0082	P	2.1	-7.5
3	☐	5.000	4.698	29615.46	0.0207	P	1.0	-6.0
4	☐	10.000	9.440	59016.19	0.0416	P	1.6	-5.6
5	☐	100.000	98.003	622041.54	0.4318	P	1.6	-2.0
6	☐	200.000	201.036	1235026.13	0.8857	M	6.6	0.5

y = 0.0044 * x + 3.2899E-005
R = 0.9999
DL = 0.01346 ppb
BEC = 0.007468 ppb

Weight: <None>
Min Conc: <None>

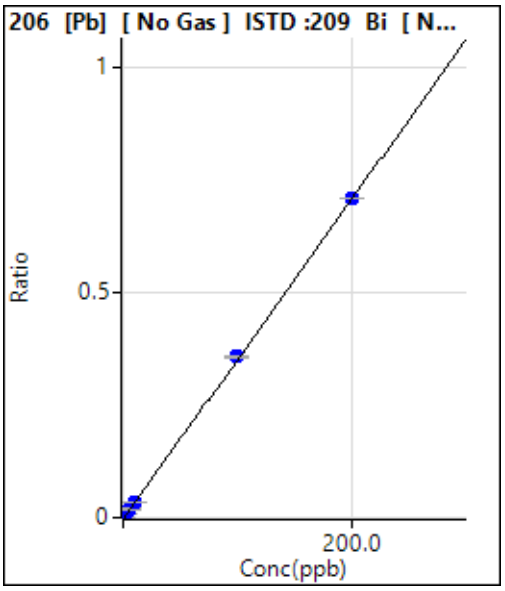


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	42.3	
2	☐	2.000	1.794	28552.99	0.0199	P	2.7	-10.3
3	☐	5.000	4.419	69895.69	0.0489	P	0.5	-11.6
4	☐	10.000	9.086	142456.70	0.1005	P	2.0	-9.1
5	☐	100.000	100.093	1592900.39	1.1058	A	1.4	0.1
6	☐	200.000	200.016	3082087.97	2.2095	A	0.6	0.0

y = 0.0110 * x + 1.0689E-004
R = 1.0000
DL = 0.01228 ppb
BEC = 0.009676 ppb

Weight: <None>
Min Conc: <None>

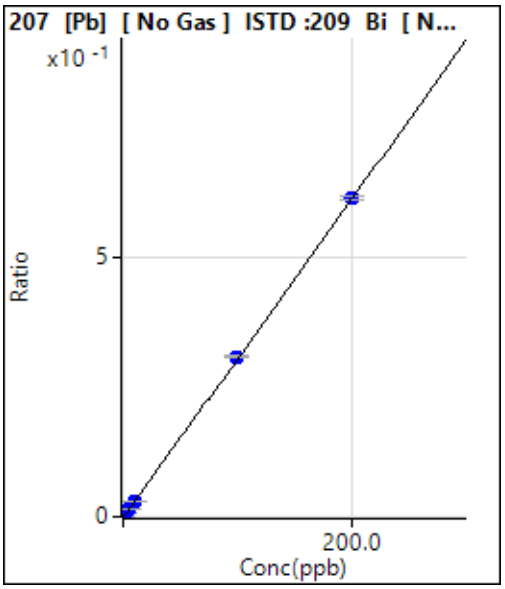
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0003	P	14.0	
2	☐	2.000	1.898	10077.56	0.0070	P	2.9	-5.1
3	☐	5.000	5.163	26620.54	0.0186	P	14.3	3.3
4	☐	10.000	9.678	49163.87	0.0347	P	1.7	-3.2
5	☐	100.000	100.627	515422.74	0.3578	P	1.0	0.6
6	☐	200.000	199.700	990041.73	0.7098	P	0.3	-0.2

y = 0.0036 * x + 2.8808E-004
R = 1.0000
DL = 0.03408 ppb
BEC = 0.08109 ppb

Weight: <None>
Min Conc: <None>

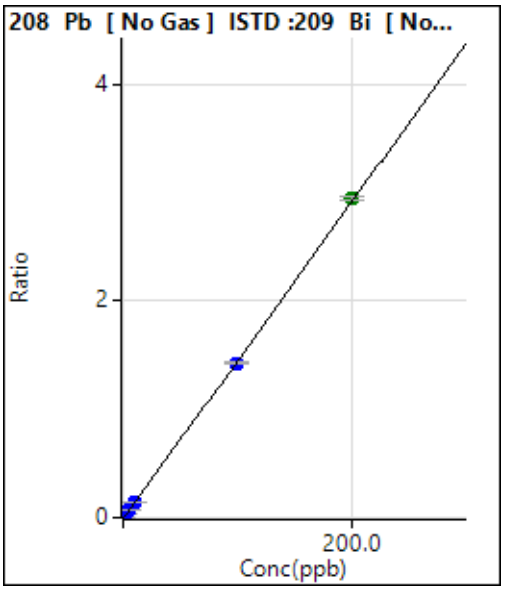


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1315.40	0.0009	P	133.0	
2	☐	2.000	1.702	8829.94	0.0062	P	6.5	-14.9
3	☐	5.000	4.585	21455.43	0.0150	P	2.7	-8.3
4	☐	10.000	9.487	42641.24	0.0301	P	4.6	-5.1
5	☐	100.000	100.287	445102.60	0.3090	P	1.0	0.3
6	☐	200.000	199.896	857710.85	0.6149	P	1.2	-0.1

y = 0.0031 * x + 9.3361E-004
R = 1.0000
DL = 1.213 ppb
BEC = 0.3039 ppb

Weight: <None>
Min Conc: <None>

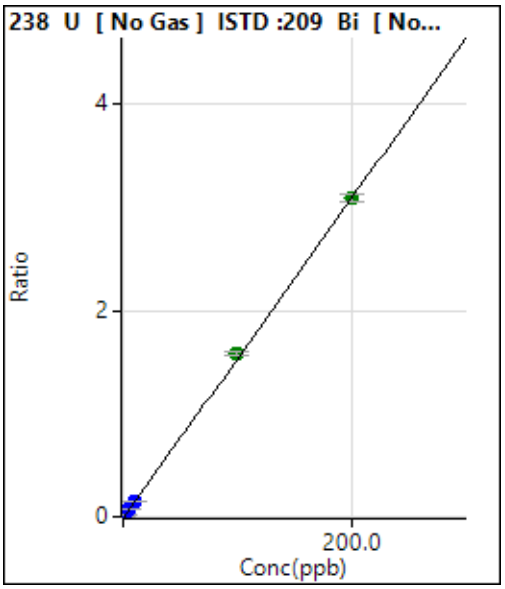
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2692.14	0.0019	P	65.4	
2	☐	2.000	1.777	40005.75	0.0279	P	1.8	-11.1
3	☐	5.000	4.695	100867.38	0.0706	P	4.0	-6.1
4	☐	10.000	9.303	195702.69	0.1380	P	1.5	-7.0
5	☐	100.000	97.385	2055255.19	1.4267	P	1.2	-2.6
6	☐	200.000	201.352	4111625.20	2.9478	A	1.3	0.7

y = 0.0146 * x + 0.0019
R = 0.9999
DL = 0.2564 ppb
BEC = 0.1306 ppb

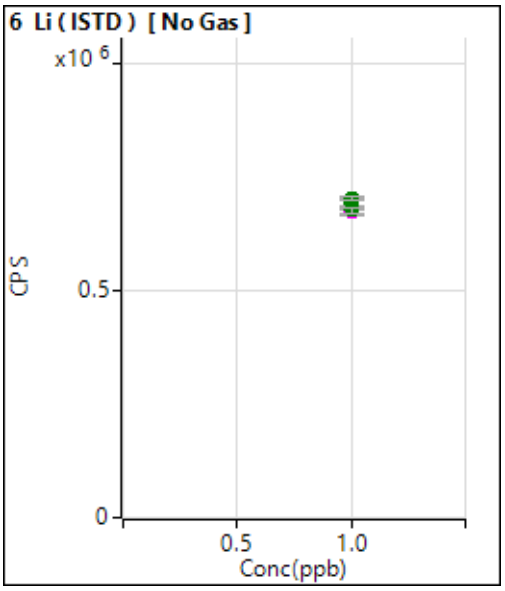
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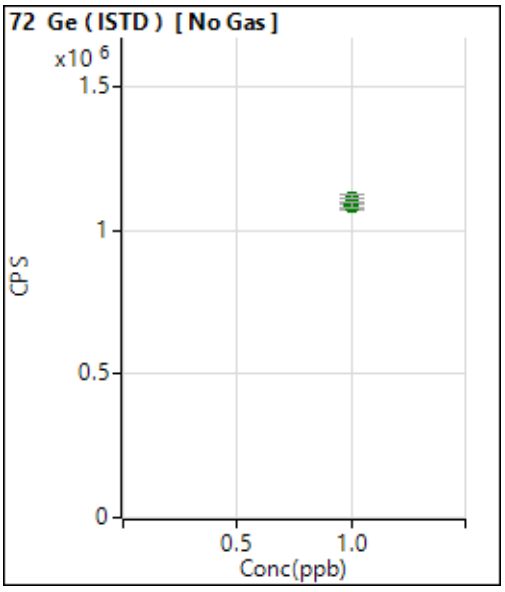
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	21.8	
2	☐	2.000	1.790	39888.68	0.0278	P	0.6	-10.5
3	☐	5.000	4.372	97086.58	0.0680	P	0.4	-12.6
4	☐	10.000	9.172	202118.54	0.1425	P	1.0	-8.3
5	☐	100.000	101.930	2281576.37	1.5838	A	1.9	1.9
6	☐	200.000	199.094	4314718.79	3.0936	A	1.9	-0.5

y = 0.0155 * x + 1.8924E-005
R = 0.9999
DL = 0.0007947 ppb
BEC = 0.001218 ppb

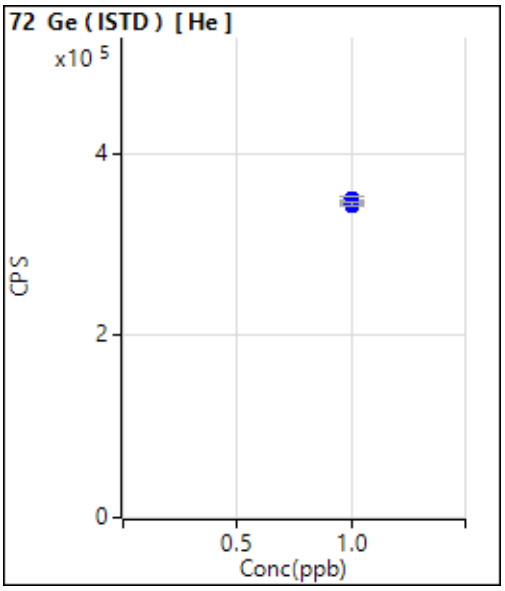
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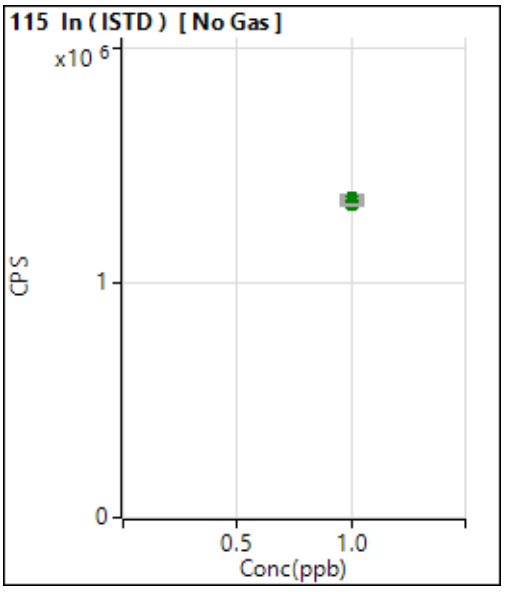
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		675584.15		M	3.0	
2	☐	1.000		693865.26		A	2.1	
3	☐	1.000		688986.54		A	3.8	
4	☐	1.000		688753.63		A	3.0	
5	☐	1.000		703252.47		A	0.8	
6	☐	1.000		677097.48		A	1.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1083013.81		A	1.6	
2	☐	1.000		1111763.63		A	2.3	
3	☐	1.000		1093395.24		A	3.7	
4	☐	1.000		1085869.80		A	1.9	
5	☐	1.000		1086061.18		A	2.6	
6	☐	1.000		1088193.97		A	1.7	

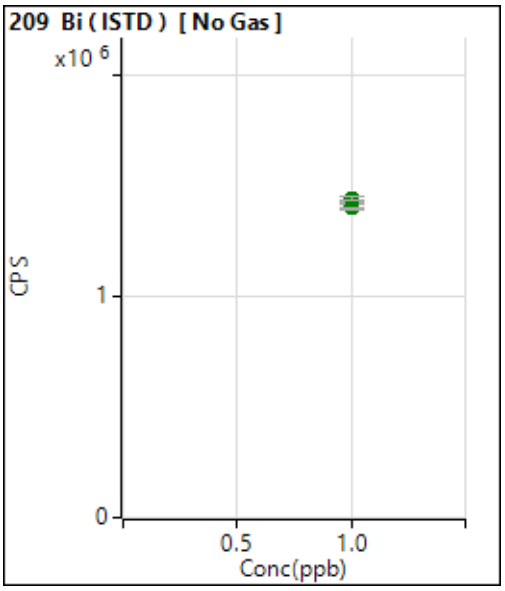


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		343019.46		P	0.9	
2	☐	1.000		346848.23		P	0.9	
3	☐	1.000		348051.02		P	0.6	
4	☐	1.000		345988.56		P	0.6	
5	☐	1.000		350617.54		P	1.2	
6	☐	1.000		344392.03		P	0.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1354248.87		A	0.5	
2	☐	1.000		1361364.67		A	1.1	
3	☐	1.000		1362632.26		A	2.2	
4	☐	1.000		1356637.78		A	0.9	
5	☐	1.000		1357464.77		A	0.7	
6	☐	1.000		1334627.37		A	0.5	

Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1409442.95		A	1.8	
2	☐	1.000		1433446.60		A	0.1	
3	☐	1.000		1428734.77		A	0.5	
4	☐	1.000		1418036.44		A	0.8	
5	☐	1.000		1440655.40		A	0.8	
6	☐	1.000		1394896.96		A	0.9	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	007CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:24:40-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	38949	0.00
Be	9	1	No Gas	47	152.87
V	51	2	He	602	0.97
Cr	52	2	He	910	1.23
Fe	56	2	He	8233	0.02
Se	78	2	He	366	2.07
As	75	2	He	62	60.47
Ca	44	2	He	1023	0.80
Na	23	2	He	182657	0.00
Mg	24	2	He	227	11.07
K	39	2	He	79897	0.00
Mn	55	2	He	373	5.84
Co	59	2	He	40	62.50
Ni	60	2	He	217	8.87
Cu	63	2	He	1563	0.13
Zn	66	2	He	5651	0.04
Al	27	2	He	490	0.42
B	11	1	No Gas	14603	0.01
Al	27	1	No Gas	18329	0.02
Si	28	1	No Gas	235702	0.00
Ag	107	1	No Gas	1170	0.26
Sr	88	1	No Gas	540	3.71
Mo	95	1	No Gas	23	212.09
Sn	118	1	No Gas	1307	0.59
Sb	121	1	No Gas	347	5.35
Ba	137	1	No Gas	130	11.83
Tl	205	1	No Gas	150	27.04
Tl	203	1	No Gas	47	132.55
Pb	208	1	No Gas	2692	2.43
U	238	1	No Gas	27	81.19
Ca	43	2	He	47	53.02
Sb	121	2	He	213	7.72
Ti	47	2	He	3	5196.15
Cu	63	1	No Gas	3927	0.08

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	675584	3.03

Calibration Blank Report

Ge	72	2	He	343019	0.86
Ge	72	1	No Gas	1083014	1.59
In	115	1	No Gas	1354249	0.48
Bi	209	1	No Gas	1409443	1.85

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	008CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:26:55-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3355	0.18
V	51	2	He	5660	0.07
Cr	52	2	He	6545	0.13
Fe	56	2	He	545518	0.00
Se	78	2	He	411	2.27
As	75	2	He	903	0.25
Ca	44	2	He	4381	0.01
Na	23	2	He	280189	0.00
Mg	24	2	He	59072	0.00
K	39	2	He	145463	0.00
Mn	55	2	He	4724	0.02
Co	59	2	He	8913	0.05
Ni	60	2	He	2354	0.18
Cu	63	2	He	7549	0.04
Zn	66	2	He	7069	0.04
Al	27	2	He	770	3.36
B	11	1	No Gas	19974	0.01
Al	27	1	No Gas	29405	0.00
Si	28	1	No Gas	263000	0.00
Ag	107	1	No Gas	14241	0.00
Cd	111	1	No Gas	2590	0.33
Sr	88	1	No Gas	23574	0.01
Mo	95	1	No Gas	4818	0.02
Sn	118	1	No Gas	8943	0.02
Sb	121	1	No Gas	11495	0.01
Ba	137	1	No Gas	4147	0.11
Tl	205	1	No Gas	28553	0.01
Tl	203	1	No Gas	11726	0.02
Pb	208	1	No Gas	40006	0.00
U	238	1	No Gas	39889	0.00
Ca	43	2	He	200	5.00
Sb	121	2	He	6038	0.03
Cu	63	1	No Gas	13781	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	693865	2.11	675584	102.71	70	120	
Ge	72	2	He	346848	0.92	343019	101.12	70	120	
Ge	72	1	No Gas	1111764	2.26	1083014	102.65	70	120	

Calibration Standard Report

In	115	1	No Gas	1361365	1.14	1354249	100.53	70	120	
Bi	209	1	No Gas	1433447	0.08	1409443	101.70	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	009CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:29:09-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7951	0.02
V	51	2	He	13042	0.01
Cr	52	2	He	15185	0.00
Fe	56	2	He	1432373	0.00
Se	78	2	He	571	1.74
As	75	2	He	2062	0.20
Ca	44	2	He	9794	0.02
Na	23	2	He	426412	0.00
Mg	24	2	He	147777	0.00
K	39	2	He	247549	0.00
Mn	55	2	He	11342	0.03
Co	59	2	He	20823	0.00
Ni	60	2	He	5758	0.10
Cu	63	2	He	15829	0.01
Zn	66	2	He	8766	0.04
Al	27	2	He	1400	0.22
B	11	1	No Gas	30622	0.00
Al	27	1	No Gas	53493	0.00
Si	28	1	No Gas	308479	0.00
Ag	107	1	No Gas	33242	0.00
Cd	111	1	No Gas	6959	0.04
Sr	88	1	No Gas	61364	0.00
Mo	95	1	No Gas	11789	0.04
Sn	118	1	No Gas	21221	0.00
Sb	121	1	No Gas	27706	0.00
Ba	137	1	No Gas	9897	0.04
Tl	205	1	No Gas	69896	0.00
Tl	203	1	No Gas	29615	0.00
Pb	208	1	No Gas	100867	0.00
U	238	1	No Gas	97087	0.00
Ca	43	2	He	473	1.03
Sb	121	2	He	15446	0.02
Cu	63	1	No Gas	28320	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	688987	3.77	675584	101.98	70	120	
Ge	72	2	He	348051	0.65	343019	101.47	70	120	
Ge	72	1	No Gas	1093395	3.66	1083014	100.96	70	120	

Calibration Standard Report

In	115	1	No Gas	1362632	2.16	1354249	100.62	70	120	
Bi	209	1	No Gas	1428735	0.51	1409443	101.37	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	010CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:31:23-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16510	0.01
V	51	2	He	26067	0.00
Cr	52	2	He	29405	0.01
Fe	56	2	He	2882655	0.00
Se	78	2	He	763	1.23
As	75	2	He	4210	0.02
Ca	44	2	He	18045	0.01
Na	23	2	He	685888	0.00
Mg	24	2	He	298879	0.00
K	39	2	He	420122	0.00
Mn	55	2	He	22562	0.01
Co	59	2	He	43048	0.00
Ni	60	2	He	11035	0.01
Cu	63	2	He	31179	0.01
Zn	66	2	He	11378	0.02
Al	27	2	He	2137	0.33
B	11	1	No Gas	49686	0.00
Al	27	1	No Gas	78256	0.00
Si	28	1	No Gas	372802	0.00
Ag	107	1	No Gas	67348	0.00
Cd	111	1	No Gas	13484	0.02
Sr	88	1	No Gas	116373	0.00
Mo	95	1	No Gas	24079	0.01
Sn	118	1	No Gas	41225	0.00
Sb	121	1	No Gas	56482	0.00
Ba	137	1	No Gas	20179	0.01
Tl	205	1	No Gas	142457	0.00
Tl	203	1	No Gas	59016	0.00
Pb	208	1	No Gas	195703	0.00
U	238	1	No Gas	202119	0.00
Ca	43	2	He	1003	0.23
Sb	121	2	He	30586	0.00
Cu	63	1	No Gas	54613	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	688754	2.96	675584	101.95	70	120	
Ge	72	2	He	345989	0.65	343019	100.87	70	120	
Ge	72	1	No Gas	1085870	1.89	1083014	100.26	70	120	

Calibration Standard Report

In	115	1	No Gas	1356638	0.87	1354249	100.18	70	120	
Bi	209	1	No Gas	1418036	0.77	1409443	100.61	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	011CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:33:36-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	174681	0.00
V	51	2	He	263019	0.00
Cr	52	2	He	304386	0.00
Fe	56	2	He	29161372	0.00
Se	78	2	He	4551	0.04
As	75	2	He	44359	0.00
Ca	44	2	He	178256	0.00
Na	23	2	He	5852426	0.00
Mg	24	2	He	3233371	0.00
K	39	2	He	3819073	0.00
Mn	55	2	He	229520	0.00
Co	59	2	He	451907	0.00
Ni	60	2	He	113779	0.00
Cu	63	2	He	309059	0.00
Zn	66	2	He	68459	0.00
Al	27	2	He	17845	0.01
B	11	1	No Gas	408374	0.00
Al	27	1	No Gas	648535	0.00
Si	28	1	No Gas	1765766	0.00
Ag	107	1	No Gas	688593	0.00
Cd	111	1	No Gas	142160	0.00
Sr	88	1	No Gas	1305412	0.00
Mo	95	1	No Gas	251688	0.00
Sn	118	1	No Gas	428899	0.00
Sb	121	1	No Gas	588387	0.00
Ba	137	1	No Gas	207894	0.00
Tl	205	1	No Gas	1592900	0.00
Tl	203	1	No Gas	622042	0.00
Pb	208	1	No Gas	2055255	0.00
U	238	1	No Gas	2281576	0.00
Ca	43	2	He	10511	0.04
Sb	121	2	He	323784	0.00
Cu	63	1	No Gas	534355	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	703252	0.78	675584	104.10	70	120	
Ge	72	2	He	350618	1.18	343019	102.22	70	120	
Ge	72	1	No Gas	1086061	2.61	1083014	100.28	70	120	

Calibration Standard Report

In	115	1	No Gas	1357465	0.68	1354249	100.24	70	120	
Bi	209	1	No Gas	1440655	0.85	1409443	102.21	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	012CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:35:45-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	333876	0.00
V	51	2	He	505587	0.00
Cr	52	2	He	579983	0.00
Fe	56	2	He	56016162	0.00
Se	78	2	He	8560	0.02
As	75	2	He	85113	0.00
Ca	44	2	He	342262	0.00
Na	23	2	He	11158849	0.00
Mg	24	2	He	6101546	0.00
K	39	2	He	7143832	0.00
Mn	55	2	He	437871	0.00
Co	59	2	He	858149	0.00
Ni	60	2	He	217668	0.00
Cu	63	2	He	589236	0.00
Zn	66	2	He	123892	0.00
Al	27	2	He	33390	0.00
B	11	1	No Gas	855291	0.00
Al	27	1	No Gas	1344176	0.00
Si	28	1	No Gas	3010511	0.00
Ag	107	1	No Gas	1482101	0.00
Cd	111	1	No Gas	273011	0.00
Sr	88	1	No Gas	2501477	0.00
Mo	95	1	No Gas	481964	0.00
Sn	118	1	No Gas	821381	0.00
Sb	121	1	No Gas	1295667	0.00
Ba	137	1	No Gas	401827	0.00
Tl	205	1	No Gas	3082088	0.00
Tl	203	1	No Gas	1235026	0.00
Pb	208	1	No Gas	4111625	0.00
U	238	1	No Gas	4314719	0.00
Ca	43	2	He	19674	0.01
Sb	121	2	He	627289	0.00
Cu	63	1	No Gas	1002572	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	677097	1.75	675584	100.22	70	120	
Ge	72	2	He	344392	0.78	343019	100.40	70	120	
Ge	72	1	No Gas	1088194	1.75	1083014	100.48	70	120	

Calibration Standard Report

In	115	1	No Gas	1334627	0.46	1354249	98.55	70	120	
Bi	209	1	No Gas	1394897	0.92	1409443	98.97	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	014_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:42:21-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.616	0.426	882315	0.91	100	102.6	90	110	
Be	9	1	No Gas	101.876	0.854	181700	0.27	100	101.9	90	110	
V	51	2	He	103.768	0.813	272783	0.53	100	103.8	90	110	
Cr	52	2	He	105.084	0.436	317528	0.67	100	105.1	90	110	
Fe	56	2	He	10306.582	0.215	30002672	0.32	10000	103.1	90	110	
Se	78	2	He	103.818	0.554	4780	0.65	100	103.8	90	110	
As	75	2	He	109.027	0.272	48246	0.55	100	109.0	90	110	
Ca	44	2	He	10279.425	0.309	183227	0.25	10000	102.8	90	110	
Na	23	2	He	10417.892	0.349	6118928	0.63	10000	104.2	90	110	
Mg	24	2	He	10597.080	0.736	3371725	0.61	10000	106.0	90	110	
K	39	2	He	10457.365	1.977	3933287	1.69	10000	104.6	90	110	
Mn	55	2	He	105.311	0.266	240088	0.56	100	105.3	90	110	
Co	59	2	He	104.897	0.374	468829	0.07	100	104.9	90	110	
Ni	60	2	He	105.711	0.391	119736	0.08	100	105.7	90	110	
Cu	63	2	He	104.829	0.436	322043	0.72	100	104.8	90	110	
Zn	66	2	He	106.886	1.256	71766	0.94	100	106.9	90	110	
Al	27	2	He	103.801	0.698	18299	0.91	100	103.8	90	110	
B	11	1	No Gas	447.444	3.059	408698	3.15	500	89.5	90	110	ICV Main CR1 Failed
Al	27	1	No Gas	98.331	0.496	677290	1.05	100	98.3	90	110	
Si	28	1	No Gas	540.048	1.118	1801809	1.50	500	108.0	90	110	
Ag	107	1	No Gas	95.456	1.493	721776	0.14	100	95.5	90	110	
Cd	111	1	No Gas	103.563	1.497	147416	0.22	100	103.6	90	110	
Sr	88	1	No Gas	103.249	1.310	1347288	0.50	100	103.2	90	110	
Mo	95	1	No Gas	101.341	1.406	254828	0.65	100	101.3	90	110	
Sn	118	1	No Gas	103.966	1.081	445993	0.49	100	104.0	90	110	
Sb	121	1	No Gas	96.612	0.674	626944	0.55	100	96.6	90	110	
Ba	137	1	No Gas	104.125	0.879	217929	0.89	100	104.1	90	110	
Tl	205	1	No Gas	107.757	3.694	1682263	1.62	100	107.8	90	110	
Tl	203	1	No Gas	106.418	2.164	662731	0.39	100	106.4	90	110	
Pb	208	1	No Gas	102.511	2.022	2122676	0.86	100	102.5	90	110	
U	238	1	No Gas	108.183	2.271	2376215	1.84	100	108.2	90	110	
Ca	43	2	He	10850.588	3.360	11168	3.59	10000	108.5	90	110	
Sb	121	2	He	106.862	0.717	347738	0.50	100	106.9	90	110	
Ti	47	2	He	101.811	1.419	10581	1.66	100	101.8	90	110	
Cu	63	1	No Gas	106.038	0.532	551137	0.70	100	106.0	90	110	
Se	82	1	No Gas	103.658	8.161	7204	10.36	100	103.7	90	110	

QC ISTD Table

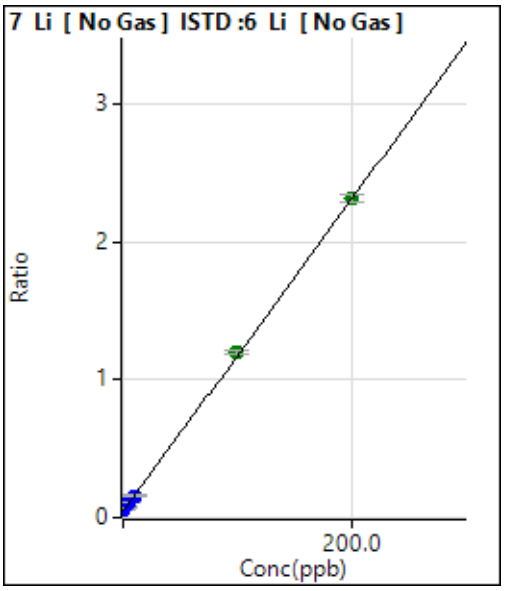
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722234	0.82	675584	106.91	70	120	
Ge	72	2	He	356263	0.32	343019	103.86	70	120	
Ge	72	1	No Gas	1109918	1.20	1083014	102.48	70	120	
In	115	1	No Gas	1385353	1.37	1354249	102.30	70	120	
Bi	209	1	No Gas	1413882	2.11	1409443	100.31	70	120	

Calibration for 014_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\071922A.b\
Analysis File: 071922A.batch.bin
DA Date-Time: 07/19/2022 22:23:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	CAL BLK	07/19/2022 11:24:40
2	008CALS.d	2/10/200	07/19/2022 11:26:55
3	009CALS.d	5/25/500	07/19/2022 11:29:09
4	010CALS.d	10/50/100	07/19/2022 11:31:23
5	011CALS.d	100/500/10K	07/19/2022 11:33:36
6	012CALS.d	200/1000/20K	07/19/2022 11:35:45

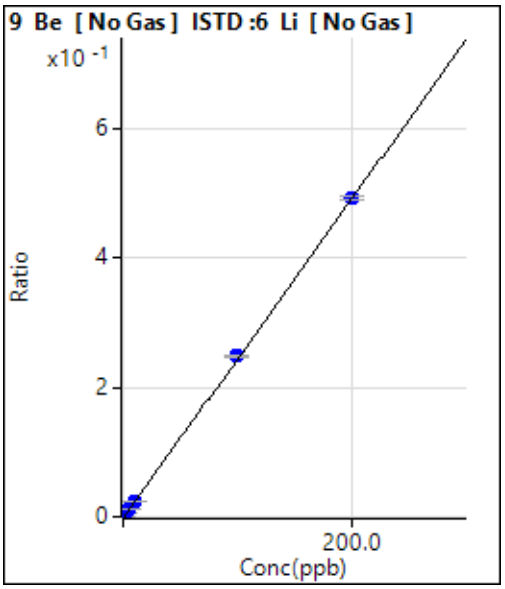
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38948.74	0.0577	P	1.5	
2	☐	2.000	1.730	53618.19	0.0773	P	1.8	-13.5
3	☐	5.000	4.427	74264.40	0.1079	P	3.7	-11.5
4	☐	10.000	8.970	109740.26	0.1594	P	2.6	-10.3
5	☐	100.000	101.177	847629.96	1.2053	A	2.1	1.2
6	☐	200.000	199.480	1570775.08	2.3204	A	1.9	-0.3

y = 0.0113 * x + 0.0577
R = 1.0000
DL = 0.2249 ppb
BEC = 5.084 ppb

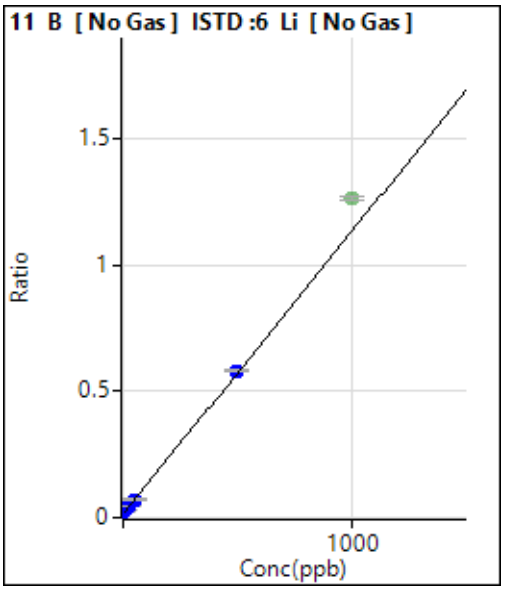
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Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	69.8	
2	☐	2.000	1.931	3355.43	0.0048	P	6.4	-3.4
3	☐	5.000	4.650	7950.65	0.0115	P	3.8	-7.0
4	☐	10.000	9.687	16509.74	0.0240	P	3.8	-3.1
5	☐	100.000	100.586	174680.97	0.2484	P	1.3	0.6
6	☐	200.000	199.732	333876.47	0.4932	P	1.6	-0.1

y = 0.0025 * x + 6.8572E-005
R = 1.0000
DL = 0.05817 ppb
BEC = 0.02777 ppb

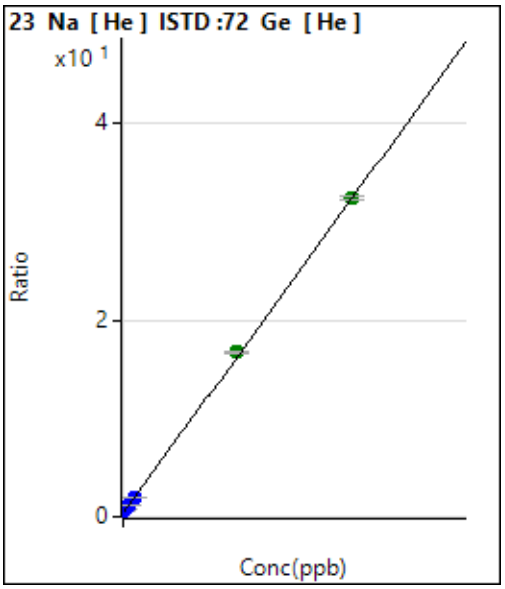
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14602.65	0.0216	P	2.3	
2	☐	10.000	6.418	19974.40	0.0288	P	1.8	-35.8
3	☐	25.000	20.478	30621.74	0.0445	P	3.6	-18.1
4	☐	50.000	45.296	49685.84	0.0722	P	3.7	-9.4
5	☐	500.000	500.768	408374.24	0.5807	P	1.7	0.2
6	☑	1000.000		855291.13	1.2633	A	1.1	

y = 0.0011 * x + 0.0216
R = 1.0000
DL = 1.351 ppb
BEC = 19.37 ppb

Weight: <None>
Min Conc: <None>

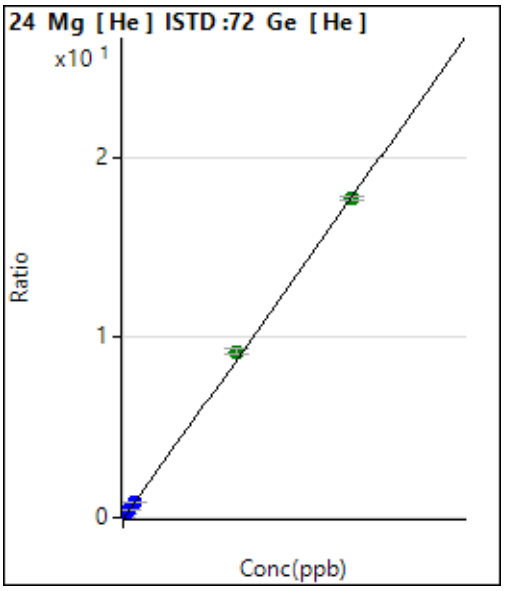


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	182657.37	0.5325	P	1.2	
2	☐	200.000	172.344	280188.69	0.8079	P	0.8	-13.8
3	☐	500.000	433.562	426412.31	1.2252	P	0.3	-13.3
4	☐	1000.000	907.615	685888.14	1.9825	P	0.6	-9.2
5	☐	10000.00	10115.85	5852425.54	16.6927	A	0.8	1.2
6	☐	20000.00	19948.62	11158848.5	32.4007	A	0.7	-0.3

y = 0.0016 * x + 0.5325
R = 1.0000
DL = 12.35 ppb
BEC = 333.4 ppb

Weight: <None>
Min Conc: <None>

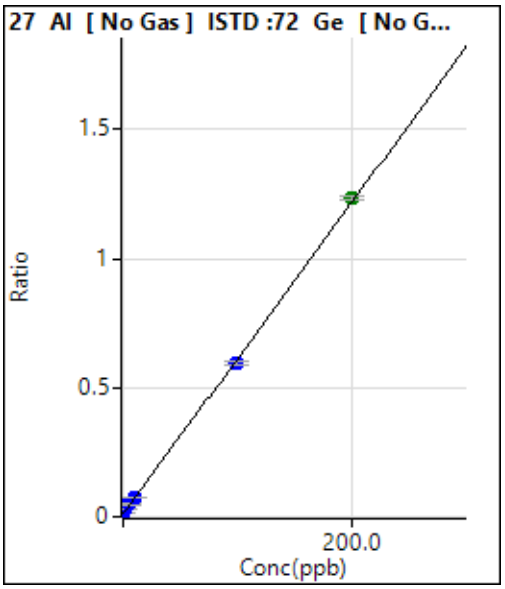
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	226.68	0.0007	P	24.2	
2	☐	200.000	189.977	59072.04	0.1703	P	0.5	-5.0
3	☐	500.000	474.699	147776.62	0.4246	P	0.3	-5.1
4	☐	1000.000	966.612	298878.84	0.8639	P	1.3	-3.3
5	☐	10000.00	10327.62	3233371.10	9.2236	A	2.7	3.3
6	☐	20000.00	19838.59	6101545.95	17.7172	A	0.8	-0.8

y = 8.9304E-004 * x + 6.5999E-004
R = 0.9998
DL = 0.5369 ppb
BEC = 0.739 ppb

Weight: <None>
Min Conc: <None>

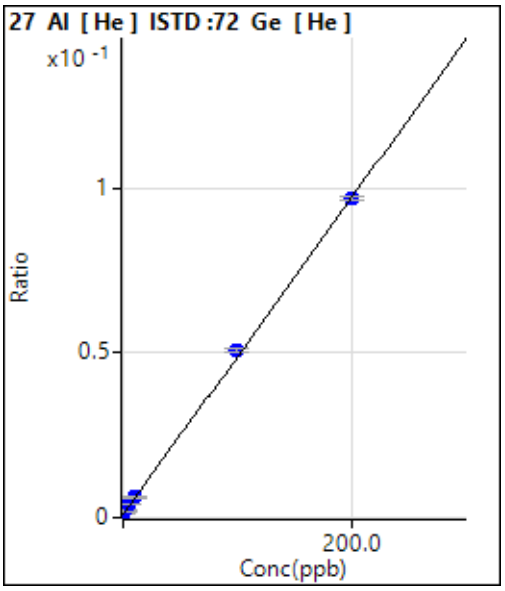


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18328.96	0.0169	P	4.7	
2	☐	2.000	1.578	29404.64	0.0265	P	1.5	-21.1
3	☐	5.000	5.310	53492.87	0.0490	P	4.3	6.2
4	☐	10.000	9.140	78256.04	0.0721	P	2.2	-8.6
5	☐	100.000	96.213	648535.02	0.5974	P	2.9	-3.8
6	☐	200.000	201.933	1344175.50	1.2353	A	1.3	1.0

y = 0.0060 * x + 0.0169
R = 0.9997
DL = 0.3973 ppb
BEC = 2.806 ppb

Weight: <None>
Min Conc: <None>

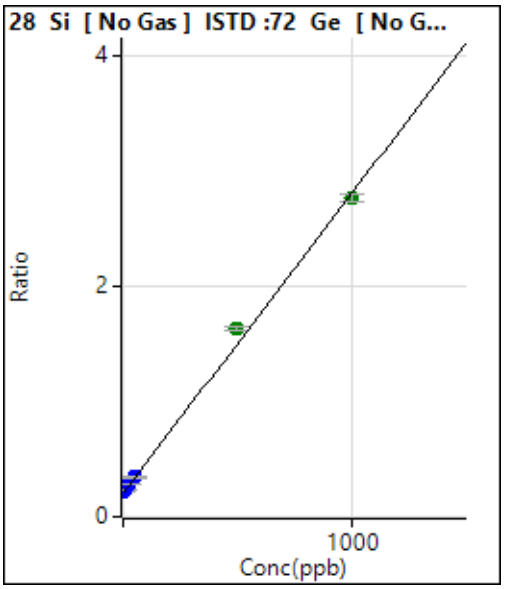
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0014	P	1.5	
2	☐	2.000	1.653	770.03	0.0022	P	26.6	-17.3
3	☐	5.000	5.392	1400.10	0.0040	P	2.7	7.8
4	☐	10.000	9.871	2136.87	0.0062	P	7.4	-1.3
5	☐	100.000	102.850	17845.02	0.0509	P	2.5	2.9
6	☐	200.000	198.575	33390.50	0.0970	P	1.5	-0.7

y = 4.8106E-004 * x + 0.0014
R = 0.9998
DL = 0.1295 ppb
BEC = 2.969 ppb

Weight: <None>
Min Conc: <None>

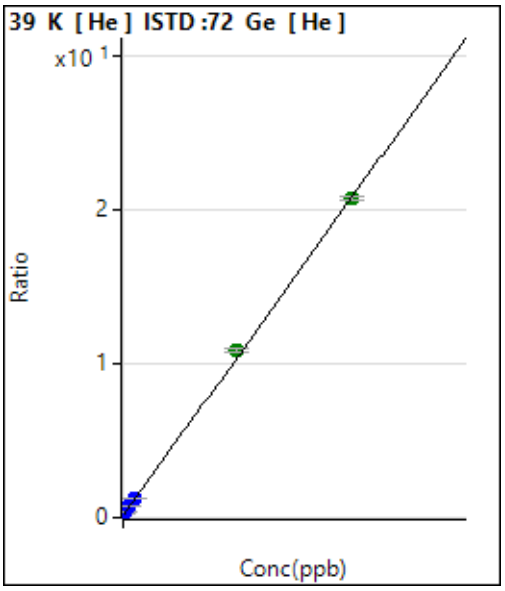


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	235702.45	0.2177	P	2.2	
2	☐	10.000	7.279	262999.99	0.2366	P	2.1	-27.2
3	☐	25.000	24.851	308479.02	0.2824	P	3.6	-0.6
4	☐	50.000	48.308	372801.53	0.3434	P	2.5	-3.4
5	☐	500.000	541.205	1765765.96	1.6264	A	1.9	8.2
6	☐	1000.000	979.513	3010511.00	2.7673	A	2.3	-2.0

y = 0.0026 * x + 0.2177
R = 0.9988
DL = 5.636 ppb
BEC = 83.63 ppb

Weight: <None>
Min Conc: <None>

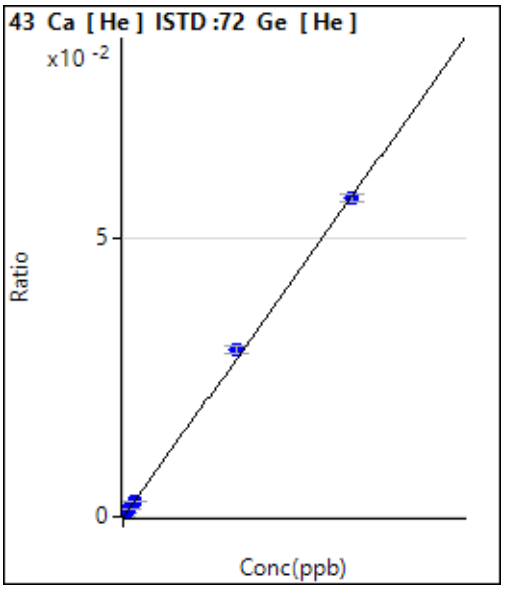
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	79897.00	0.2329	P	1.2	
2	☐	200.000	180.430	145462.91	0.4194	P	1.0	-9.8
3	☐	500.000	462.806	247549.48	0.7112	P	0.1	-7.4
4	☐	1000.000	949.531	420121.95	1.2143	P	0.4	-5.0
5	☐	10000.00	10315.33	3819073.49	10.8940	A	2.2	3.2
6	☐	20000.00	19845.98	7143831.98	20.7441	A	0.7	-0.8

y = 0.0010 * x + 0.2329
R = 0.9998
DL = 8 ppb
BEC = 225.4 ppb

Weight: <None>
Min Conc: <None>

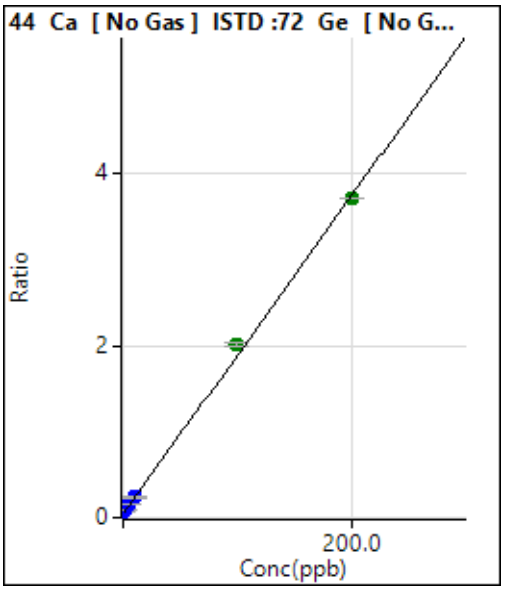


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0001	P	23.8	
2	☐	200.000	153.355	200.01	0.0006	P	10.7	-23.3
3	☐	500.000	425.678	473.35	0.0014	P	5.4	-14.9
4	☐	1000.000	960.937	1003.39	0.0029	P	1.7	-3.9
5	☐	10000.00	10376.20	10510.86	0.0300	P	4.4	3.8
6	☐	20000.00	19816.17	19674.36	0.0571	P	2.2	-0.9

y = 2.8764E-006 * x + 1.3586E-004
R = 0.9997
DL = 33.73 ppb
BEC = 47.23 ppb

Weight: <None>
Min Conc: <None>

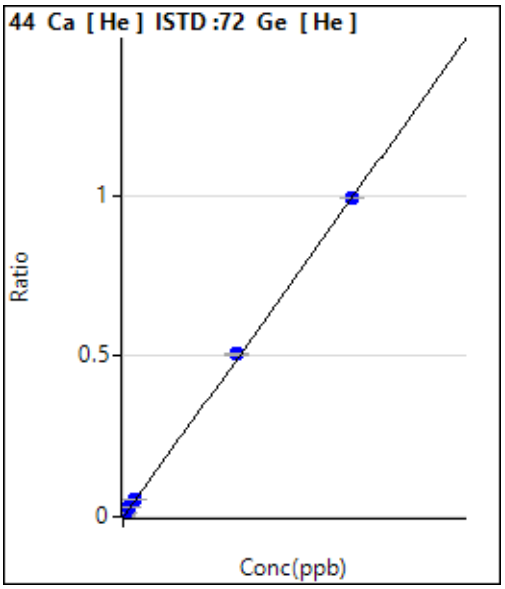
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	67441.89	0.0623	P	0.5	
2	☐	2.000	1.674	103728.82	0.0933	P	0.9	-16.3
3	☐	5.000	4.724	163671.47	0.1498	P	4.3	-5.5
4	☐	10.000	9.385	256489.66	0.2362	P	1.2	-6.2
5	☐	100.000	105.550	2191619.03	2.0189	A	2.9	5.6
6	☐	200.000	197.266	4046921.19	3.7191	A	0.5	-1.4

y = 0.0185 * x + 0.0623
R = 0.9994
DL = 0.05448 ppb
BEC = 3.359 ppb

Weight: <None>
Min Conc: <None>

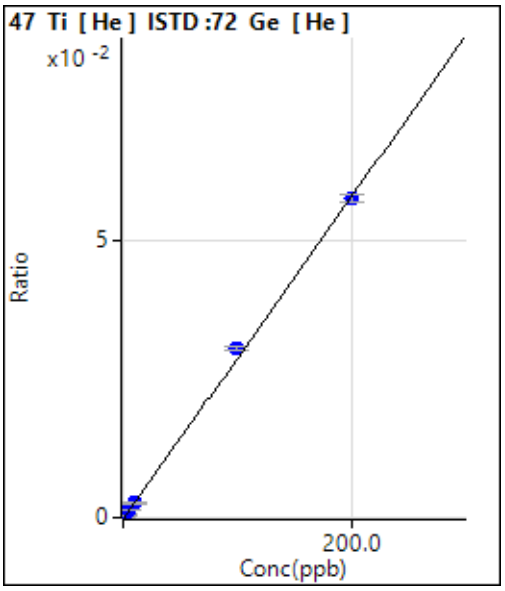


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1023.40	0.0030	P	8.6	
2	☐	200.000	193.928	4380.79	0.0126	P	0.5	-3.0
3	☐	500.000	505.752	9793.65	0.0281	P	2.8	1.2
4	☐	1000.000	988.648	18045.46	0.0522	P	2.7	-1.1
5	☐	10000.00	10161.77	178255.88	0.5085	P	1.3	1.6
6	☐	20000.00	19919.59	342262.23	0.9938	P	0.3	-0.4

y = 4.9742E-005 * x + 0.0030
R = 1.0000
DL = 15.5 ppb
BEC = 59.99 ppb

Weight: <None>
Min Conc: <None>

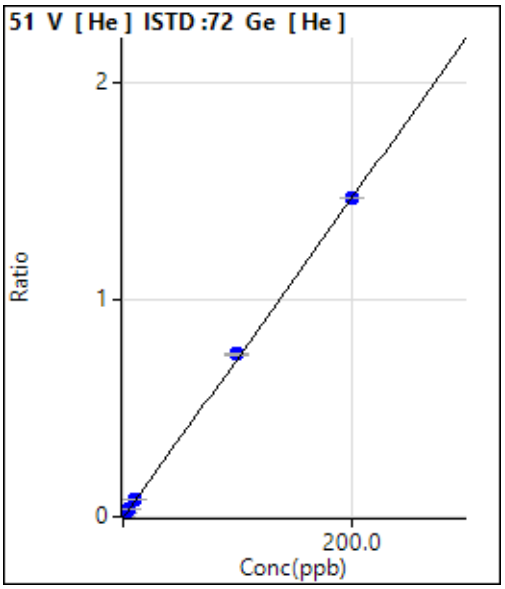
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.879	193.34	0.0006	P	31.9	-6.1
3	☐	5.000	4.797	490.02	0.0014	P	13.3	-4.1
4	☐	10.000	9.285	940.05	0.0027	P	11.2	-7.2
5	☐	100.000	104.324	10670.94	0.0304	P	2.3	4.3
6	☐	200.000	197.880	19877.99	0.0577	P	2.5	-1.1

y = 2.9161E-004 * x + 9.7550E-006
R = 0.9996
DL = 0.1738 ppb
BEC = 0.03345 ppb

Weight: <None>
Min Conc: <None>

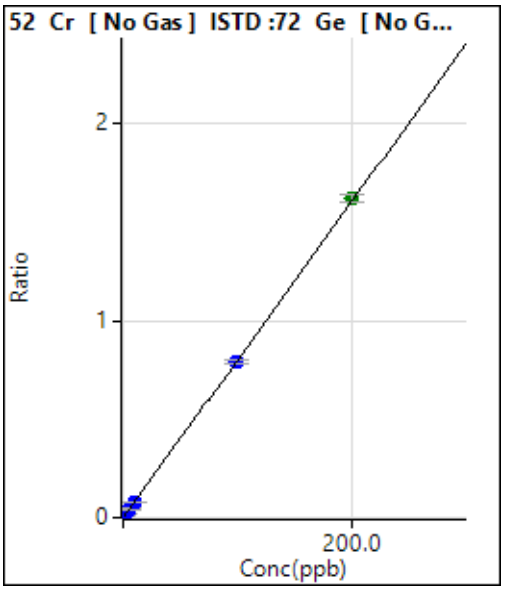


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	602.24	0.0018	P	5.0	
2	☐	2.000	1.979	5660.08	0.0163	P	4.4	-1.1
3	☐	5.000	4.851	13041.80	0.0375	P	0.9	-3.0
4	☐	10.000	9.995	26066.99	0.0753	P	0.3	0.0
5	☐	100.000	101.665	263019.47	0.7502	P	1.3	1.7
6	☐	200.000	199.171	505587.17	1.4681	P	0.1	-0.4

y = 0.0074 * x + 0.0018
R = 0.9999
DL = 0.03596 ppb
BEC = 0.2384 ppb

Weight: <None>
Min Conc: <None>

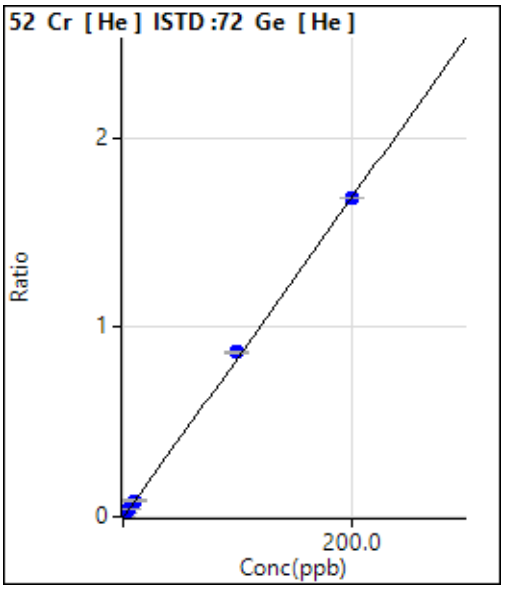
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7612.22	0.0070	P	5.6	
2	☐	2.000	1.765	23530.55	0.0212	P	2.8	-11.7
3	☐	5.000	4.561	47609.52	0.0436	P	4.1	-8.8
4	☐	10.000	9.211	87760.46	0.0808	P	3.1	-7.9
5	☐	100.000	97.613	857042.62	0.7894	P	2.0	-2.4
6	☐	200.000	201.246	1762477.58	1.6200	A	2.2	0.6

y = 0.0080 * x + 0.0070
R = 0.9999
DL = 0.1473 ppb
BEC = 0.8766 ppb

Weight: <None>
Min Conc: <None>

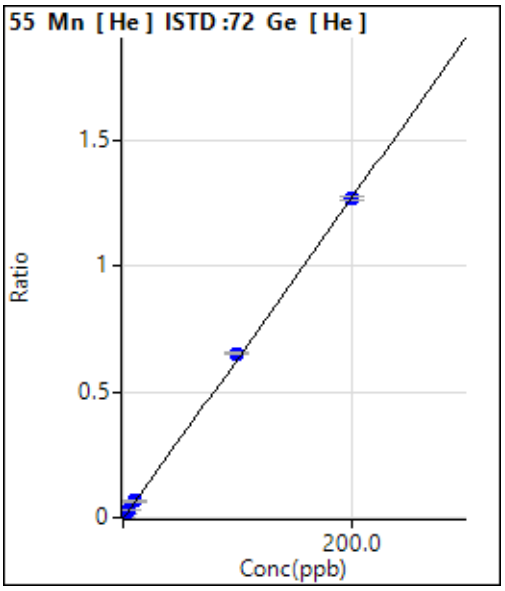


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0027	P	11.9	
2	☐	2.000	1.917	6545.05	0.0189	P	8.2	-4.2
3	☐	5.000	4.846	15185.31	0.0436	P	0.5	-3.1
4	☐	10.000	9.738	29405.25	0.0850	P	3.1	-2.6
5	☐	100.000	102.356	304386.17	0.8682	P	1.7	2.4
6	☐	200.000	198.840	579983.27	1.6841	P	0.2	-0.6

y = 0.0085 * x + 0.0027
R = 0.9999
DL = 0.1117 ppb
BEC = 0.3139 ppb

Weight: <None>
Min Conc: <None>

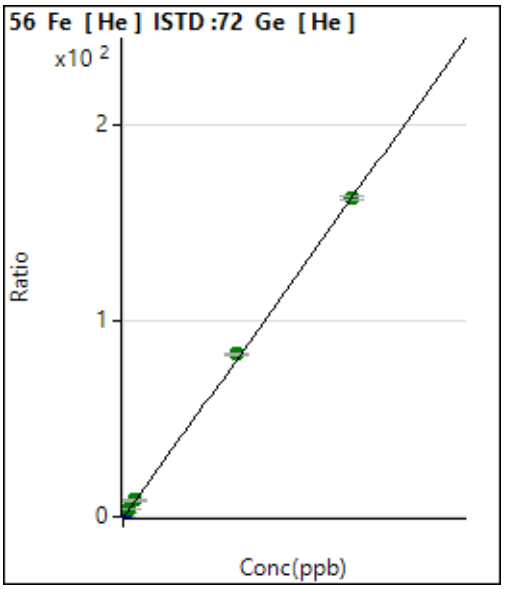
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	373.35	0.0011	P	21.5	
2	☐	2.000	1.962	4724.25	0.0136	P	0.4	-1.9
3	☐	5.000	4.931	11341.56	0.0326	P	3.9	-1.4
4	☐	10.000	10.037	22562.15	0.0652	P	1.6	0.4
5	☐	100.000	102.308	229519.59	0.6547	P	1.9	2.3
6	☐	200.000	198.846	437870.90	1.2715	P	0.8	-0.6

y = 0.0064 * x + 0.0011
R = 0.9999
DL = 0.1098 ppb
BEC = 0.1703 ppb

Weight: <None>
Min Conc: <None>

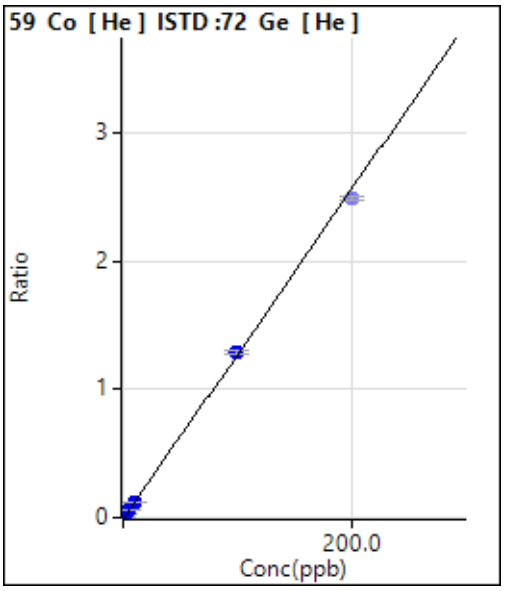


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8232.63	0.0240	P	2.2	
2	☐	200.000	189.606	545517.96	1.5728	P	0.9	-5.2
3	☐	500.000	500.902	1432373.00	4.1157	A	1.8	0.2
4	☐	1000.000	1017.047	2882654.54	8.3319	A	1.2	1.7
5	☐	10000.00	10179.61	29161372.0	83.1780	A	1.4	1.8
6	☐	20000.00	19909.42	56016162.5	162.657	A	0.7	-0.5

y = 0.0082 * x + 0.0240
R = 0.9999
DL = 0.1932 ppb
BEC = 2.938 ppb

Weight: <None>
Min Conc: <None>

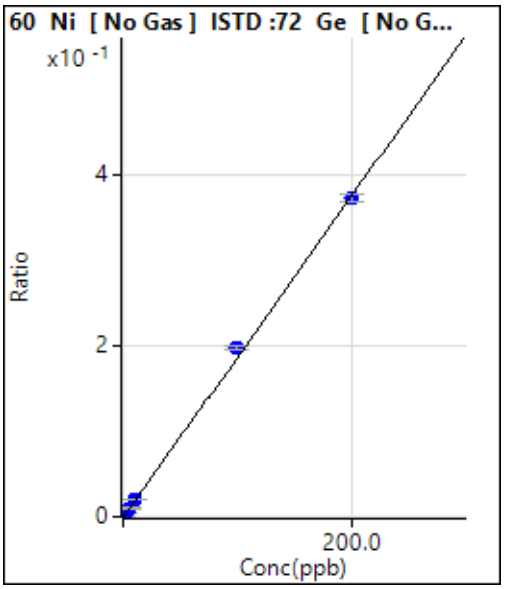
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	25.7	
2	☐	2.000	1.986	8913.05	0.0257	P	5.5	-0.7
3	☐	5.000	4.635	20822.84	0.0598	P	0.3	-7.3
4	☐	10.000	9.649	43048.20	0.1244	P	1.3	-3.5
5	☐	100.000	100.054	451906.71	1.2890	P	1.6	0.1
6	☑	200.000		858149.42	2.4919	P	0.7	

y = 0.0129 * x + 1.1677E-004
R = 1.0000
DL = 0.006992 ppb
BEC = 0.009065 ppb

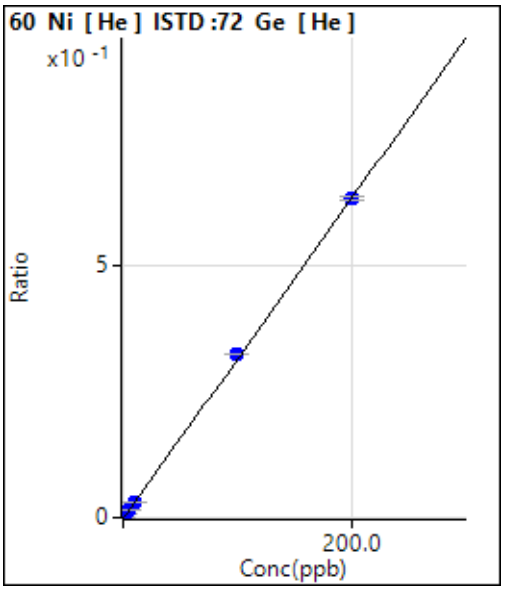
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0007	P	14.3	
2	☐	2.000	2.011	4991.01	0.0045	P	1.1	0.5
3	☐	5.000	4.883	10804.48	0.0099	P	4.8	-2.3
4	☐	10.000	10.333	21864.53	0.0201	P	2.0	3.3
5	☐	100.000	104.611	214336.74	0.1974	P	2.5	4.6
6	☐	200.000	197.681	405216.95	0.3725	P	2.1	-1.2

y = 0.0019 * x + 7.0743E-004
R = 0.9996
DL = 0.161 ppb
BEC = 0.3762 ppb

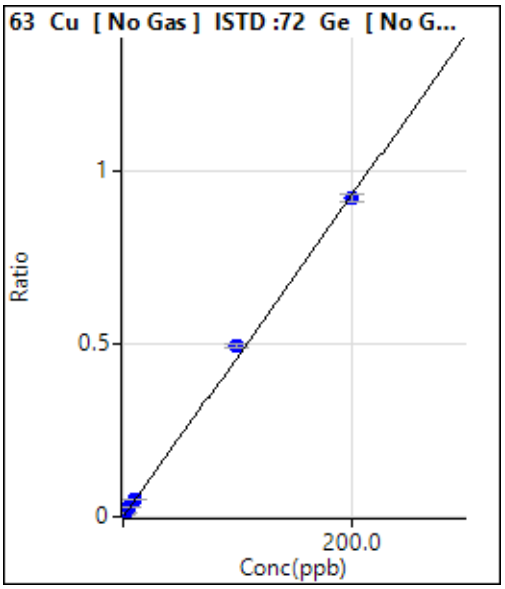
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	216.67	0.0006	P	19.2	
2	☐	2.000	1.939	2353.59	0.0068	P	4.4	-3.0
3	☐	5.000	5.014	5757.97	0.0165	P	5.7	0.3
4	☐	10.000	9.852	11034.65	0.0319	P	1.7	-1.5
5	☐	100.000	102.060	113778.93	0.3245	P	0.3	2.1
6	☐	200.000	198.978	217667.62	0.6321	P	0.8	-0.5

y = 0.0032 * x + 6.3159E-004
R = 0.9999
DL = 0.1146 ppb
BEC = 0.199 ppb

Weight: <None>
Min Conc: <None>

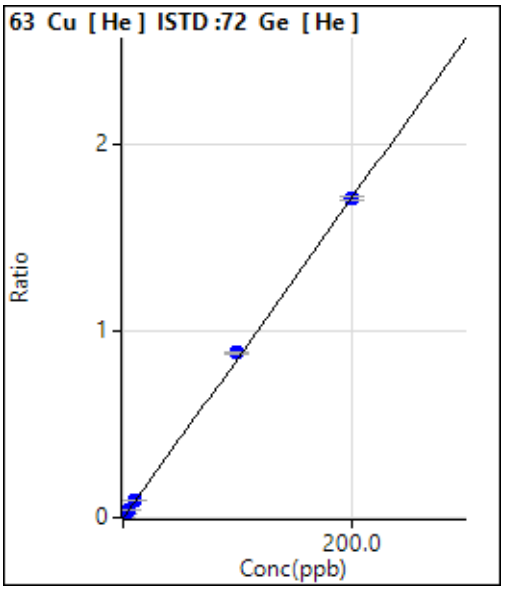


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3927.31	0.0036	P	4.0	
2	☐	2.000	1.888	13780.54	0.0124	P	4.3	-5.6
3	☐	5.000	4.797	28319.77	0.0259	P	4.2	-4.1
4	☐	10.000	10.042	54612.87	0.0503	P	2.4	0.4
5	☐	100.000	105.098	534355.41	0.4922	P	2.4	5.1
6	☐	200.000	197.455	1002571.73	0.9216	P	2.3	-1.3

y = 0.0046 * x + 0.0036
R = 0.9995
DL = 0.09288 ppb
BEC = 0.7803 ppb

Weight: <None>
Min Conc: <None>

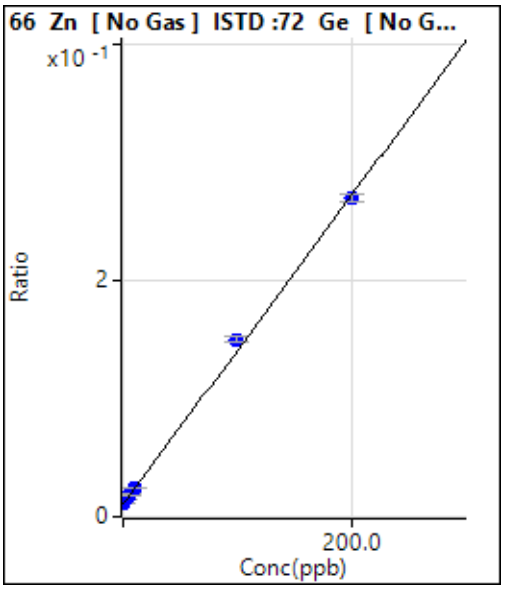
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1563.45	0.0046	P	2.8	
2	☐	2.000	2.006	7548.87	0.0218	P	3.1	0.3
3	☐	5.000	4.770	15829.44	0.0455	P	2.2	-4.6
4	☐	10.000	9.972	31179.36	0.0901	P	1.0	-0.3
5	☐	100.000	102.222	309058.71	0.8816	P	2.2	2.2
6	☐	200.000	198.896	589236.08	1.7110	P	0.7	-0.6

y = 0.0086 * x + 0.0046
R = 0.9999
DL = 0.04449 ppb
BEC = 0.5313 ppb

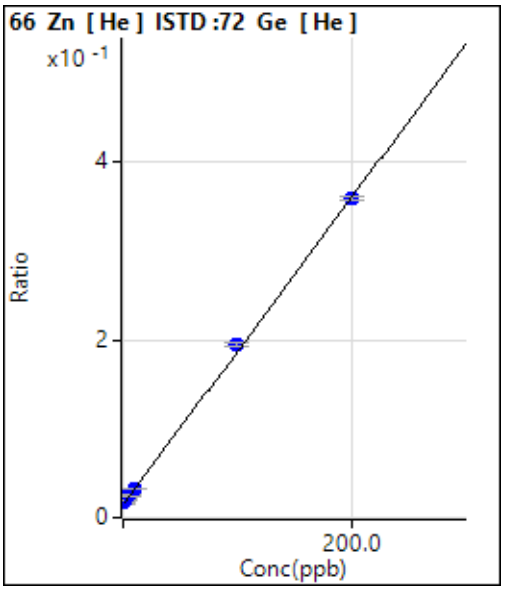
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12836.29	0.0119	P	3.6	
2	☐	2.000	2.135	16280.02	0.0146	P	2.2	6.8
3	☐	5.000	5.122	20275.39	0.0186	P	4.2	2.4
4	☐	10.000	9.846	26866.99	0.0247	P	1.5	-1.5
5	☐	100.000	105.563	162939.00	0.1501	P	3.0	5.6
6	☐	200.000	197.222	293912.36	0.2702	P	1.9	-1.4

y = 0.0013 * x + 0.0119
R = 0.9994
DL = 0.9655 ppb
BEC = 9.049 ppb

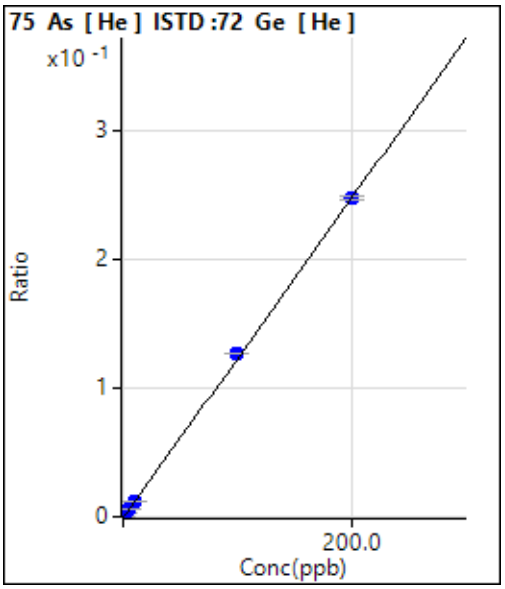
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5651.29	0.0165	P	3.0	
2	☐	2.000	2.255	7068.64	0.0204	P	2.5	12.7
3	☐	5.000	5.031	8766.31	0.0252	P	2.9	0.6
4	☐	10.000	9.481	11378.28	0.0329	P	2.5	-5.2
5	☐	100.000	103.328	68459.10	0.1953	P	2.2	3.3
6	☐	200.000	198.359	123891.52	0.3597	P	0.8	-0.8

y = 0.0017 * x + 0.0165
R = 0.9998
DL = 0.8671 ppb
BEC = 9.522 ppb

Weight: <None>
Min Conc: <None>

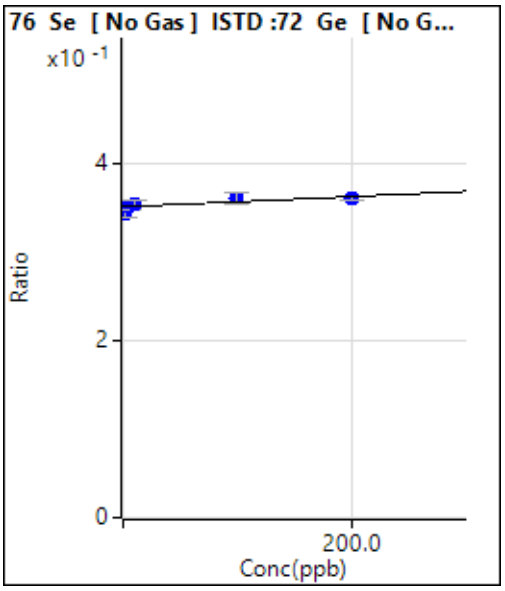


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	62.22	0.0002	P	38.0	
2	☐	2.000	1.953	903.37	0.0026	P	2.1	-2.3
3	☐	5.000	4.630	2062.39	0.0059	P	3.4	-7.4
4	☐	10.000	9.662	4209.57	0.0122	P	1.1	-3.4
5	☐	100.000	101.853	44359.24	0.1265	P	1.1	1.9
6	☐	200.000	199.100	85112.96	0.2472	P	1.0	-0.4

y = 0.0012 * x + 1.8149E-004
R = 0.9999
DL = 0.1667 ppb
BEC = 0.1463 ppb

Weight: <None>
Min Conc: <None>

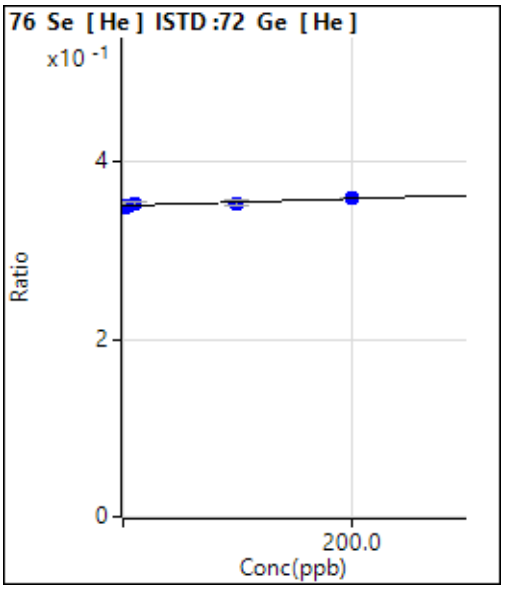
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	380438.43	0.3513	P	1.7	
2	☐	2.000	-117.667	382783.11	0.3444	P	2.6	-5983.
3	☐	5.000	20.941	385215.68	0.3526	P	3.0	318.8
4	☐	10.000	70.894	385931.01	0.3555	P	1.9	608.9
5	☐	100.000	164.373	391811.07	0.3610	P	3.5	64.4
6	☐	200.000	165.567	392855.58	0.3610	P	0.9	-17.2

y = 5.8649E-005 * x + 0.3513
R = 0.7719
DL = 302.2 ppb
BEC = 5991 ppb

Weight: <None>
Min Conc: <None>

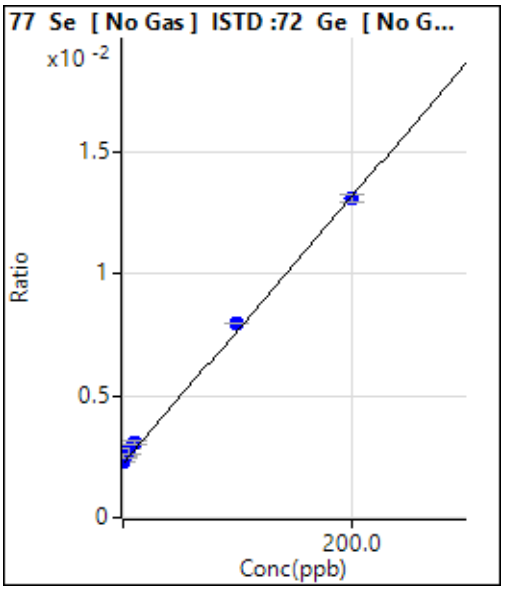


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120215.19	0.3504	P	1.0	
2	☐	2.000	-58.011	120743.26	0.3481	P	1.2	-3000.
3	☐	5.000	11.913	122139.41	0.3509	P	0.7	138.3
4	☐	10.000	48.379	121916.90	0.3524	P	0.8	383.8
5	☐	100.000	60.483	123710.31	0.3529	P	1.9	-39.5
6	☐	200.000	218.267	123689.62	0.3592	P	0.5	9.1

y = 3.9954E-005 * x + 0.3504
R = 0.9208
DL = 270.1 ppb
BEC = 8771 ppb

Weight: <None>
Min Conc: <None>

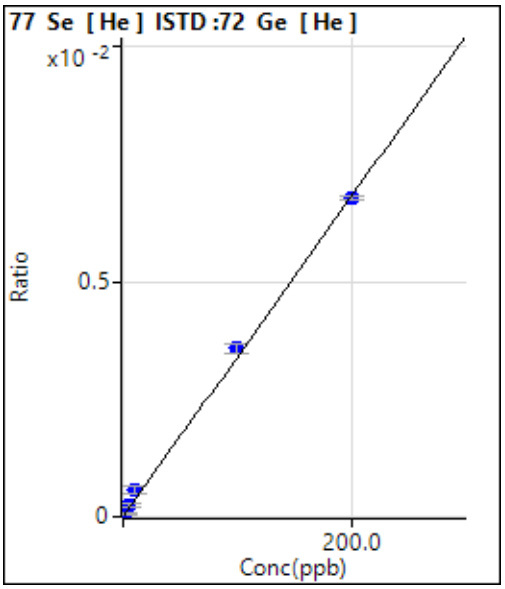
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2490.27	0.0023	P	2.0	
2	☐	2.000	3.600	2773.67	0.0025	P	5.1	80.0
3	☐	5.000	8.068	2990.38	0.0027	P	8.9	61.4
4	☐	10.000	14.400	3350.47	0.0031	P	4.7	44.0
5	☐	100.000	104.032	8676.29	0.0080	P	0.6	4.0
6	☐	200.000	197.671	14264.39	0.0131	P	2.2	-1.2

y = 5.4694E-005 * x + 0.0023
R = 0.9996
DL = 2.585 ppb
BEC = 42.04 ppb

Weight: <None>
Min Conc: <None>

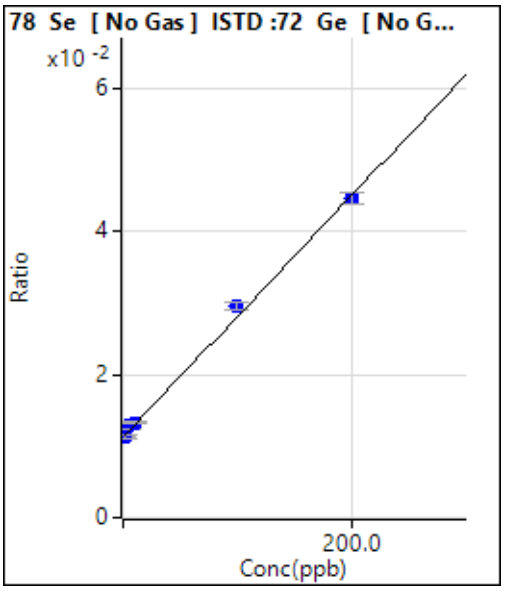


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.118	26.67	0.0001	P	57.5	-44.1
3	☐	5.000	5.610	80.00	0.0002	P	33.1	12.2
4	☐	10.000	15.532	196.67	0.0006	P	27.3	55.3
5	☐	100.000	103.841	1253.42	0.0036	P	6.2	3.8
6	☐	200.000	197.797	2333.58	0.0068	P	1.7	-1.1

y = 3.4063E-005 * x + 3.8756E-005
R = 0.9994
DL = 2.956 ppb
BEC = 1.138 ppb

Weight: <None>
Min Conc: <None>

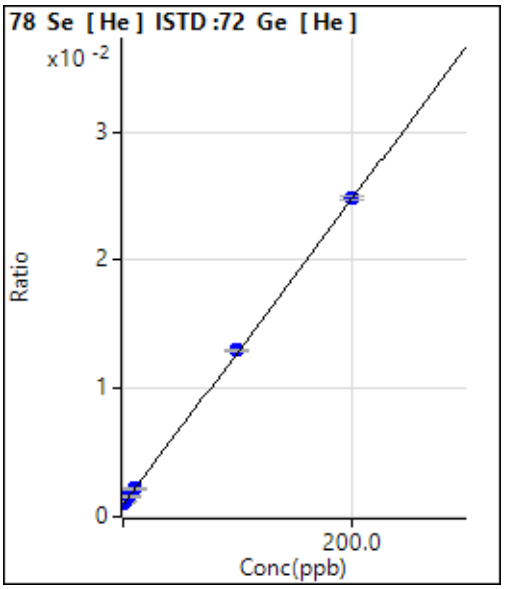
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12469.31	0.0115	P	2.8	
2	☐	2.000	-0.702	12666.18	0.0114	P	4.4	-135.1
3	☐	5.000	8.019	14040.85	0.0129	P	8.6	60.4
4	☐	10.000	10.496	14424.63	0.0133	P	3.7	5.0
5	☐	100.000	107.136	32091.84	0.0296	P	4.1	7.1
6	☐	200.000	196.359	48510.66	0.0446	P	3.9	-1.8

y = 1.6847E-004 * x + 0.0115
R = 0.9988
DL = 5.843 ppb
BEC = 68.36 ppb

Weight: <None>
Min Conc: <None>

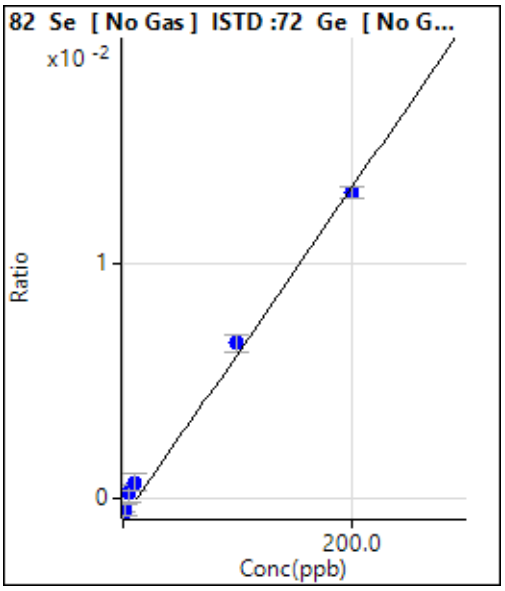


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	366.01	0.0011	P	8.4	
2	☐	2.000	0.979	410.68	0.0012	P	9.3	-51.1
3	☐	5.000	4.804	570.68	0.0016	P	9.3	-3.9
4	☐	10.000	9.554	762.69	0.0022	P	9.1	-4.5
5	☐	100.000	100.145	4551.45	0.0130	P	0.6	0.1
6	☐	200.000	199.965	8560.07	0.0249	P	1.1	0.0

y = 1.1896E-004 * x + 0.0011
R = 1.0000
DL = 2.256 ppb
BEC = 8.974 ppb

Weight: <None>
Min Conc: <None>

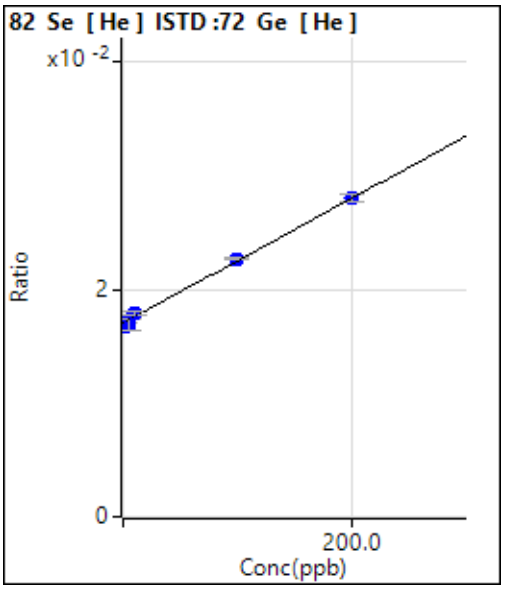
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-878.83	-0.0008	P	-51.0	
2	☐	2.000	4.622	-546.33	-0.0005	P	-96.0	131.1
3	☐	5.000	14.723	257.81	0.0002	P	319.7	194.5
4	☐	10.000	21.230	735.78	0.0007	P	114.6	112.3
5	☐	100.000	105.304	7176.40	0.0066	P	11.4	5.3
6	☐	200.000	196.517	14180.45	0.0130	P	3.8	-1.7

y = 7.0423E-005 * x - 8.1373E-004
R = 0.9983
DL = 17.68 ppb
BEC = -11.55 ppb

Weight: <None>
Min Conc: <None>

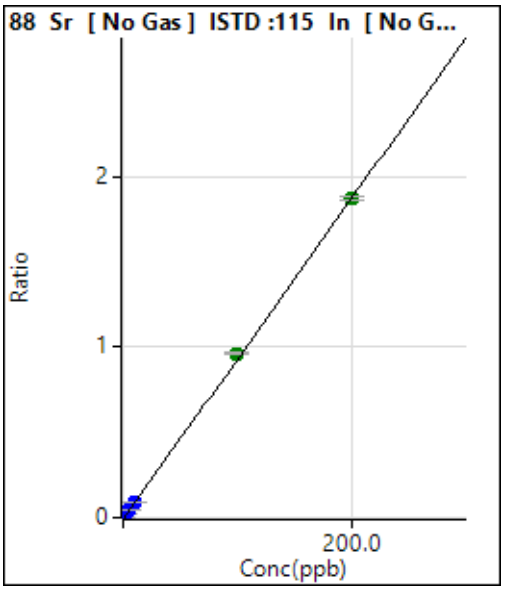


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5881.39	0.0171	P	2.4	
2	☐	2.000	-7.213	5808.02	0.0167	P	3.1	-460.6
3	☐	5.000	-3.854	5894.73	0.0169	P	6.6	-177.1
4	☐	10.000	15.448	6224.88	0.0180	P	1.7	54.5
5	☐	100.000	101.513	7962.49	0.0227	P	0.9	1.5
6	☐	200.000	199.285	9666.96	0.0281	P	2.8	-0.4

y = 5.4839E-005 * x + 0.0171
R = 0.9977
DL = 22.31 ppb
BEC = 312.6 ppb

Weight: <None>
Min Conc: <None>

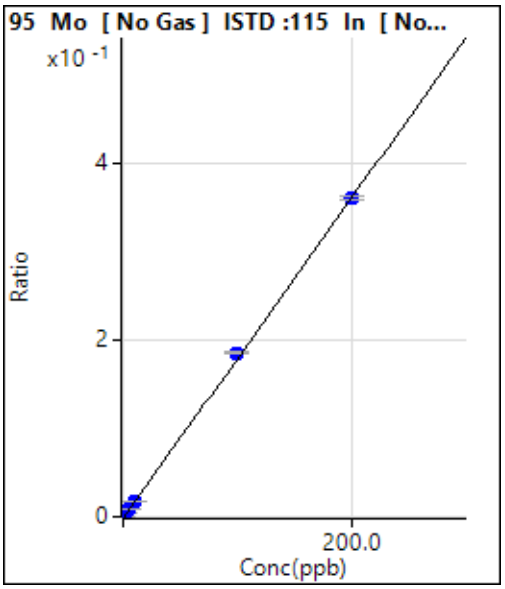
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	540.02	0.0004	P	20.5	
2	☐	2.000	1.797	23574.41	0.0173	P	2.1	-10.2
3	☐	5.000	4.742	61363.99	0.0450	P	2.6	-5.2
4	☐	10.000	9.067	116373.30	0.0858	P	1.0	-9.3
5	☐	100.000	102.089	1305412.22	0.9617	A	1.4	2.1
6	☐	200.000	199.011	2501477.41	1.8744	A	1.3	-0.5

y = 0.0094 * x + 3.9902E-004
R = 0.9999
DL = 0.0261 ppb
BEC = 0.04237 ppb

Weight: <None>
Min Conc: <None>

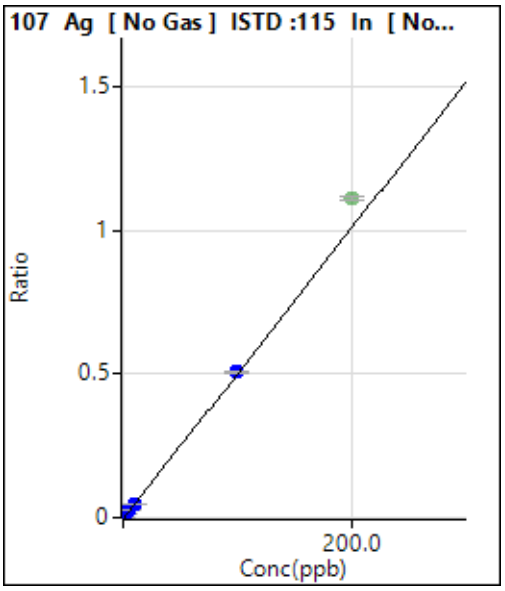


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	49.6	
2	☐	2.000	1.940	4817.62	0.0035	P	2.1	-3.0
3	☐	5.000	4.755	11788.73	0.0086	P	3.1	-4.9
4	☐	10.000	9.770	24078.79	0.0178	P	2.8	-2.3
5	☐	100.000	102.145	251688.35	0.1854	P	1.7	2.1
6	☐	200.000	198.946	481963.60	0.3611	P	0.7	-0.5

y = 0.0018 * x + 1.7243E-005
R = 0.9999
DL = 0.01414 ppb
BEC = 0.0095 ppb

Weight: <None>
Min Conc: <None>

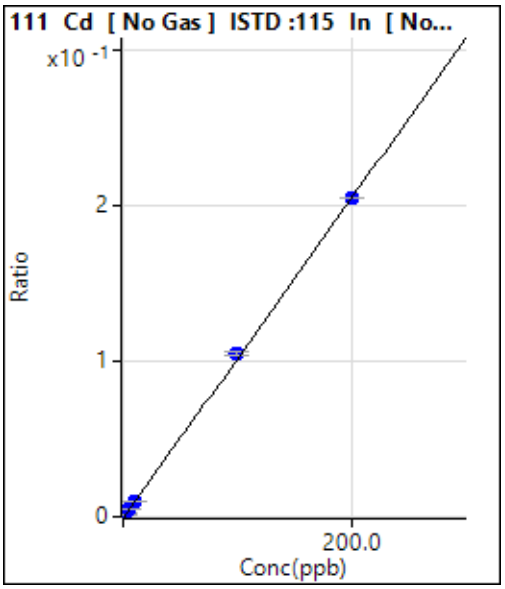
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0009	P	3.5	
2	☐	2.000	1.896	14241.18	0.0105	P	0.6	-5.2
3	☐	5.000	4.651	33242.17	0.0244	P	2.2	-7.0
4	☐	10.000	9.638	67347.89	0.0496	P	0.8	-3.6
5	☐	100.000	100.056	688593.45	0.5073	P	1.4	0.1
6	☑	200.000		1482101.18	1.1105	A	0.9	

y = 0.0051 * x + 8.6408E-004
R = 1.0000
DL = 0.01769 ppb
BEC = 0.1707 ppb

Weight: <None>
Min Conc: <None>

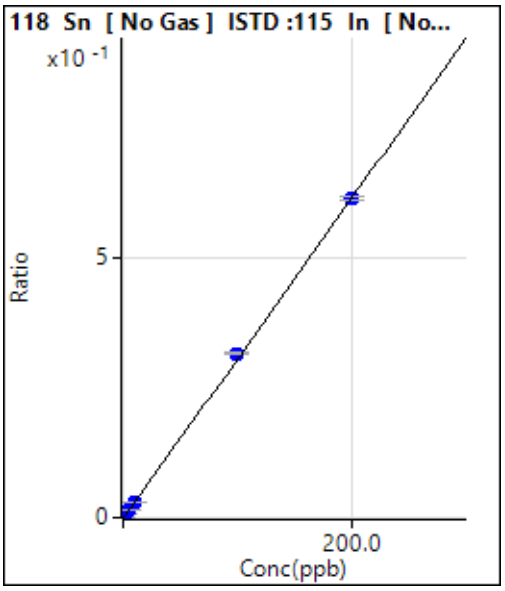


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.852	2590.29	0.0019	P	8.7	-7.4
3	☐	5.000	4.973	6958.65	0.0051	P	5.0	-0.5
4	☐	10.000	9.671	13483.79	0.0099	P	2.2	-3.3
5	☐	100.000	101.915	142160.00	0.1047	P	1.6	1.9
6	☐	200.000	199.061	273011.37	0.2046	P	0.6	-0.5

y = 0.0010 * x + 0.0000E+000
R = 0.9999
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

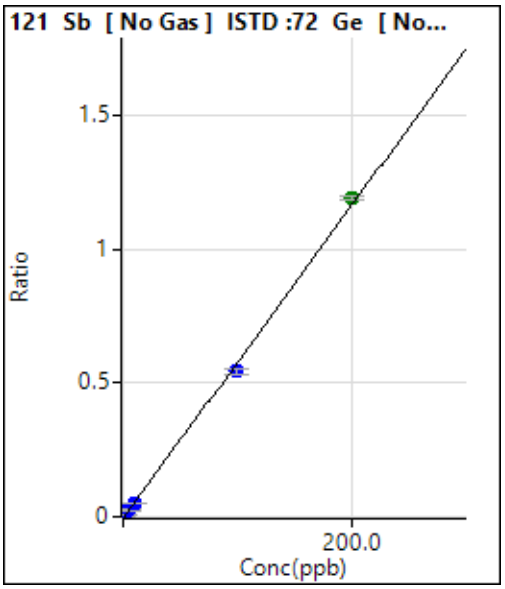
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0010	P	7.6	
2	☐	2.000	1.816	8943.20	0.0066	P	2.7	-9.2
3	☐	5.000	4.733	21220.81	0.0156	P	1.7	-5.3
4	☐	10.000	9.531	41225.11	0.0304	P	1.9	-4.7
5	☐	100.000	102.023	428899.26	0.3160	P	0.7	2.0
6	☐	200.000	199.021	821380.64	0.6155	P	0.7	-0.5

y = 0.0031 * x + 9.6492E-004
R = 0.9999
DL = 0.07146 ppb
BEC = 0.3125 ppb

Weight: <None>
Min Conc: <None>

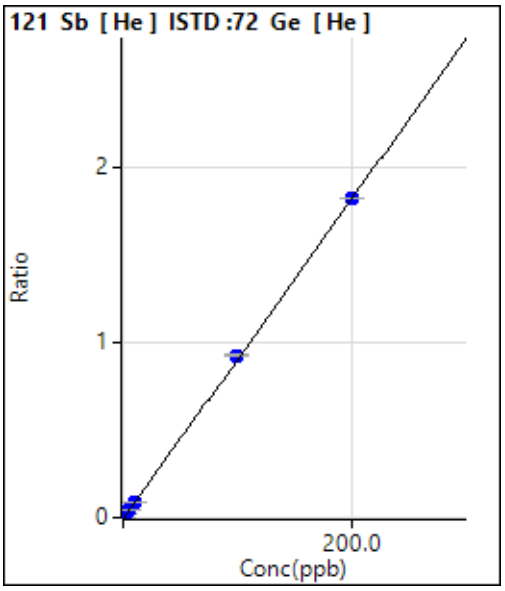


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	346.68	0.0003	P	17.9	
2	☐	2.000	1.715	11495.23	0.0103	P	1.7	-14.2
3	☐	5.000	4.285	27706.25	0.0254	P	3.0	-14.3
4	☐	10.000	8.851	56481.54	0.0520	P	4.1	-11.5
5	☐	100.000	92.703	588387.05	0.5420	P	3.0	-7.3
6	☐	200.000	203.727	1295667.40	1.1908	A	1.3	1.9

y = 0.0058 * x + 3.1991E-004
R = 0.9991
DL = 0.02933 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

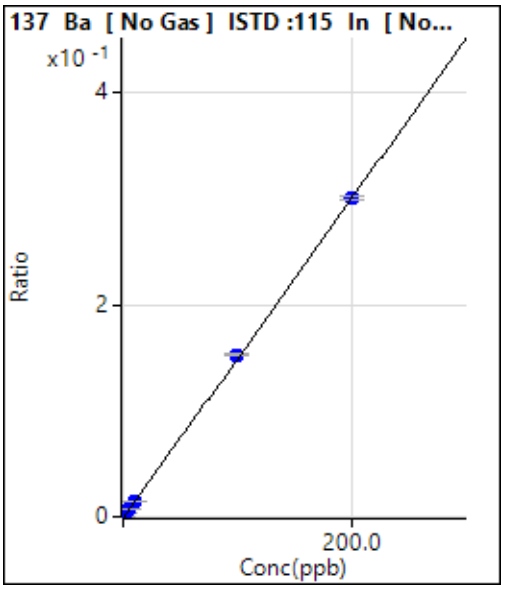
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	213.34	0.0006	P	15.7	
2	☐	2.000	1.839	6038.17	0.0174	P	0.7	-8.1
3	☐	5.000	4.794	15446.07	0.0444	P	3.7	-4.1
4	☐	10.000	9.617	30585.99	0.0884	P	0.9	-3.8
5	☐	100.000	101.109	323783.82	0.9236	P	1.4	1.1
6	☐	200.000	199.471	627288.82	1.8215	P	0.1	-0.3

y = 0.0091 * x + 6.2149E-004
R = 1.0000
DL = 0.03208 ppb
BEC = 0.06808 ppb

Weight: <None>
Min Conc: <None>

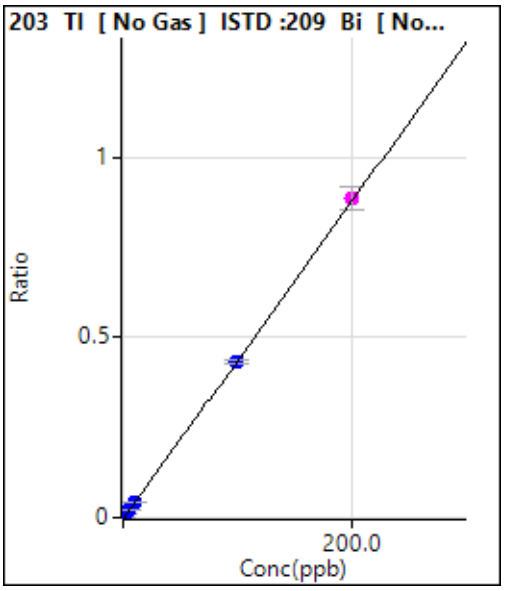


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	15.3	
2	☐	2.000	1.954	4147.41	0.0030	P	4.3	-2.3
3	☐	5.000	4.746	9897.29	0.0073	P	2.4	-5.1
4	☐	10.000	9.788	20179.32	0.0149	P	2.3	-2.1
5	☐	100.000	101.367	207894.24	0.1532	P	0.9	1.4
6	☐	200.000	199.334	401827.22	0.3011	P	0.7	-0.3

y = 0.0015 * x + 9.5995E-005
R = 1.0000
DL = 0.02926 ppb
BEC = 0.06358 ppb

Weight: <None>
Min Conc: <None>

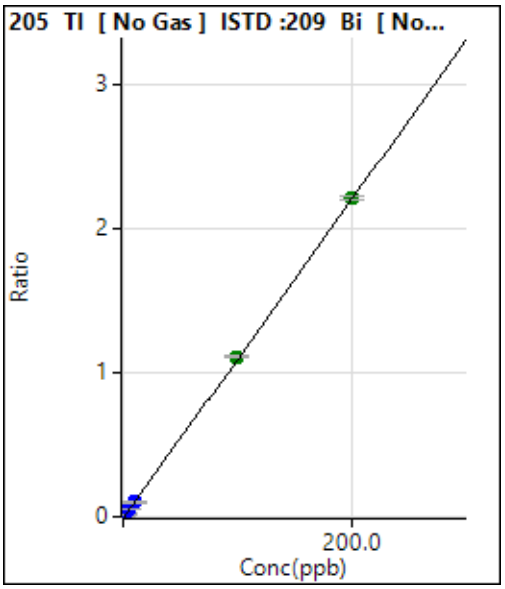
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	60.1	
2	☐	2.000	1.849	11725.68	0.0082	P	2.1	-7.5
3	☐	5.000	4.698	29615.46	0.0207	P	1.0	-6.0
4	☐	10.000	9.440	59016.19	0.0416	P	1.6	-5.6
5	☐	100.000	98.003	622041.54	0.4318	P	1.6	-2.0
6	☐	200.000	201.036	1235026.13	0.8857	M	6.6	0.5

y = 0.0044 * x + 3.2899E-005
R = 0.9999
DL = 0.01346 ppb
BEC = 0.007468 ppb

Weight: <None>
Min Conc: <None>

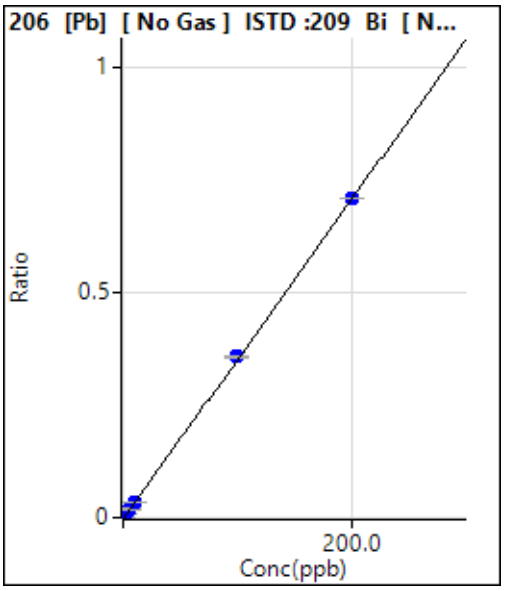


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0001	P	42.3	
2	☐	2.000	1.794	28552.99	0.0199	P	2.7	-10.3
3	☐	5.000	4.419	69895.69	0.0489	P	0.5	-11.6
4	☐	10.000	9.086	142456.70	0.1005	P	2.0	-9.1
5	☐	100.000	100.093	1592900.39	1.1058	A	1.4	0.1
6	☐	200.000	200.016	3082087.97	2.2095	A	0.6	0.0

y = 0.0110 * x + 1.0689E-004
R = 1.0000
DL = 0.01228 ppb
BEC = 0.009676 ppb

Weight: <None>
Min Conc: <None>

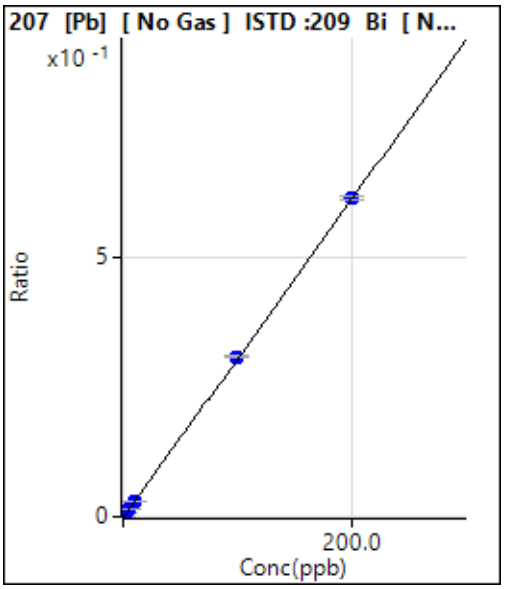
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0003	P	14.0	
2	☐	2.000	1.898	10077.56	0.0070	P	2.9	-5.1
3	☐	5.000	5.163	26620.54	0.0186	P	14.3	3.3
4	☐	10.000	9.678	49163.87	0.0347	P	1.7	-3.2
5	☐	100.000	100.627	515422.74	0.3578	P	1.0	0.6
6	☐	200.000	199.700	990041.73	0.7098	P	0.3	-0.2

y = 0.0036 * x + 2.8808E-004
R = 1.0000
DL = 0.03408 ppb
BEC = 0.08109 ppb

Weight: <None>
Min Conc: <None>

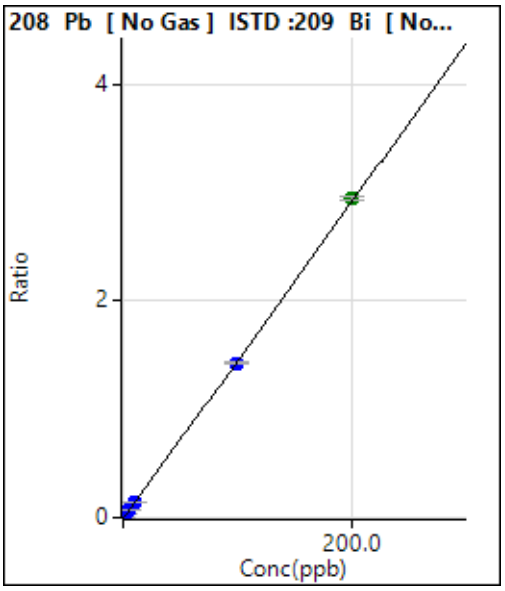


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1315.40	0.0009	P	133.0	
2	☐	2.000	1.702	8829.94	0.0062	P	6.5	-14.9
3	☐	5.000	4.585	21455.43	0.0150	P	2.7	-8.3
4	☐	10.000	9.487	42641.24	0.0301	P	4.6	-5.1
5	☐	100.000	100.287	445102.60	0.3090	P	1.0	0.3
6	☐	200.000	199.896	857710.85	0.6149	P	1.2	-0.1

y = 0.0031 * x + 9.3361E-004
R = 1.0000
DL = 1.213 ppb
BEC = 0.3039 ppb

Weight: <None>
Min Conc: <None>

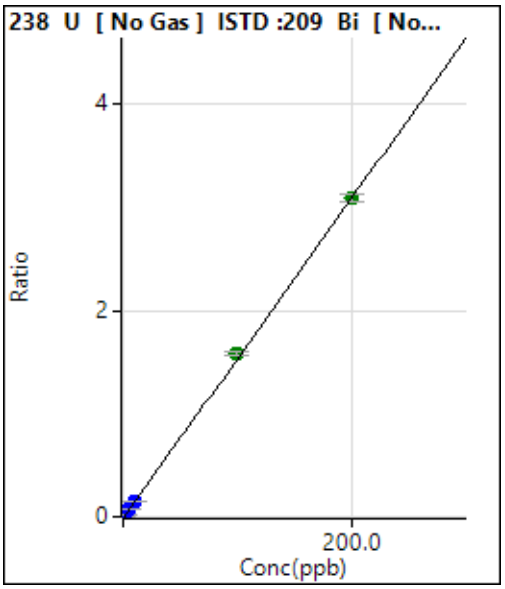
Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2692.14	0.0019	P	65.4	
2	☐	2.000	1.777	40005.75	0.0279	P	1.8	-11.1
3	☐	5.000	4.695	100867.38	0.0706	P	4.0	-6.1
4	☐	10.000	9.303	195702.69	0.1380	P	1.5	-7.0
5	☐	100.000	97.385	2055255.19	1.4267	P	1.2	-2.6
6	☐	200.000	201.352	4111625.20	2.9478	A	1.3	0.7

y = 0.0146 * x + 0.0019
R = 0.9999
DL = 0.2564 ppb
BEC = 0.1306 ppb

Weight: <None>
Min Conc: <None>

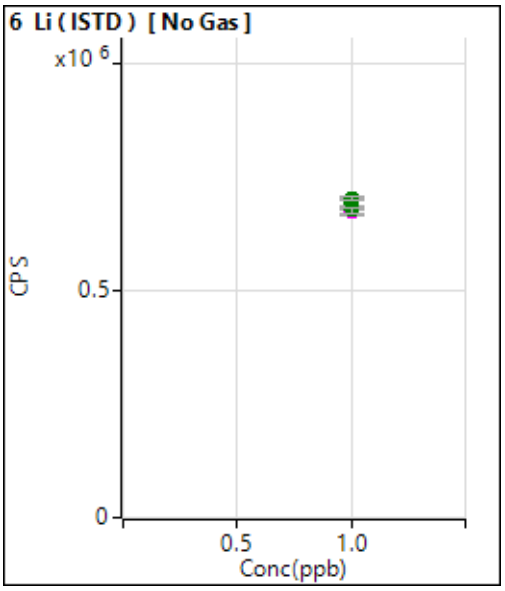


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0000	P	21.8	
2	☐	2.000	1.790	39888.68	0.0278	P	0.6	-10.5
3	☐	5.000	4.372	97086.58	0.0680	P	0.4	-12.6
4	☐	10.000	9.172	202118.54	0.1425	P	1.0	-8.3
5	☐	100.000	101.930	2281576.37	1.5838	A	1.9	1.9
6	☐	200.000	199.094	4314718.79	3.0936	A	1.9	-0.5

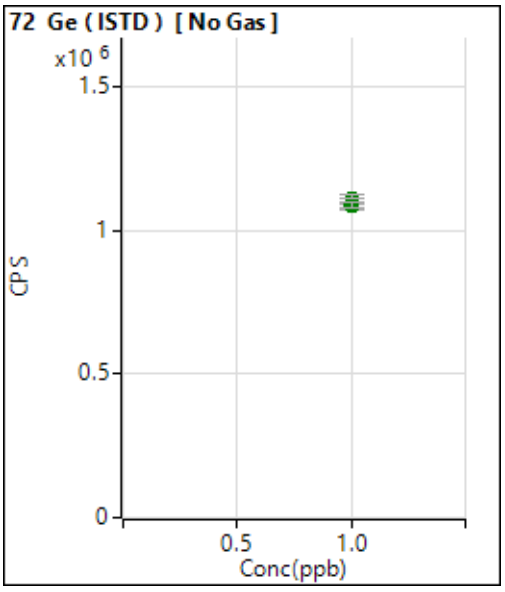
y = 0.0155 * x + 1.8924E-005
R = 0.9999
DL = 0.0007947 ppb
BEC = 0.001218 ppb

Weight: <None>
Min Conc: <None>

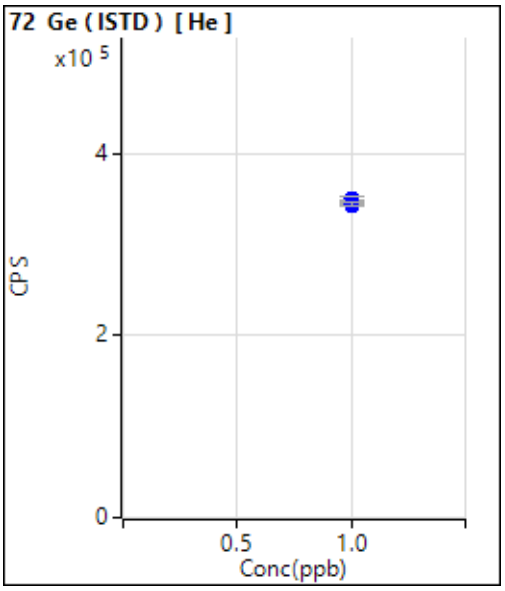
Calibration for 014_ICV.d



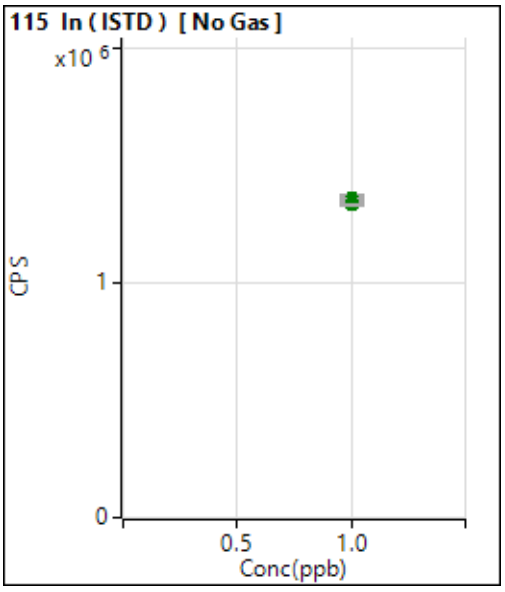
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		675584.15		M	3.0	
2	☐	1.000		693865.26		A	2.1	
3	☐	1.000		688986.54		A	3.8	
4	☐	1.000		688753.63		A	3.0	
5	☐	1.000		703252.47		A	0.8	
6	☐	1.000		677097.48		A	1.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1083013.81		A	1.6	
2	☐	1.000		1111763.63		A	2.3	
3	☐	1.000		1093395.24		A	3.7	
4	☐	1.000		1085869.80		A	1.9	
5	☐	1.000		1086061.18		A	2.6	
6	☐	1.000		1088193.97		A	1.7	

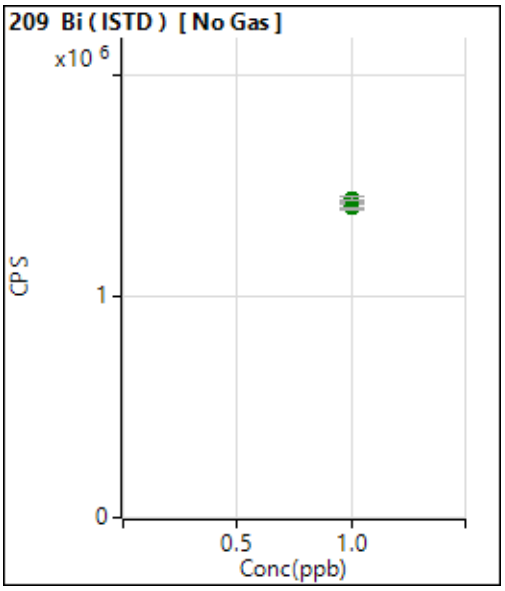


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		343019.46		P	0.9	
2	☐	1.000		346848.23		P	0.9	
3	☐	1.000		348051.02		P	0.6	
4	☐	1.000		345988.56		P	0.6	
5	☐	1.000		350617.54		P	1.2	
6	☐	1.000		344392.03		P	0.8	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1354248.87		A	0.5	
2	☐	1.000		1361364.67		A	1.1	
3	☐	1.000		1362632.26		A	2.2	
4	☐	1.000		1356637.78		A	0.9	
5	☐	1.000		1357464.77		A	0.7	
6	☐	1.000		1334627.37		A	0.5	

Calibration for 014_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1409442.95		A	1.8	
2	☐	1.000		1433446.60		A	0.1	
3	☐	1.000		1428734.77		A	0.5	
4	☐	1.000		1418036.44		A	0.8	
5	☐	1.000		1440655.40		A	0.8	
6	☐	1.000		1394896.96		A	0.9	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	015LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:44:16-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.738	1.738	6.11	53971	0.00	2	
Be	9	1	No Gas	1.914	1.914	5.45	3345	0.06	2	
V	51	2	He	1.931	1.931	2.15	5479	0.04	2	
Cr	52	2	He	1.959	1.959	3.07	6595	0.03	2	
Fe	56	2	He	191.912	191.912	0.65	546119	0.04	200	
Se	78	2	He	1.203	1.203	24.60	415	0.29	2	NewName Main CR1 Failed
As	75	2	He	1.948	1.948	1.68	891	0.22	2	
Ca	44	2	He	182.415	182.415	1.76	4137	4.41	200	
Na	23	2	He	118.776	118.776	4.91	247807	0.05	200	NewName Main CR1 Failed
Mg	24	2	He	196.187	196.187	1.28	60337	0.33	200	
K	39	2	He	193.649	193.649	0.97	148592	0.13	200	
Mn	55	2	He	2.000	2.000	9.95	4758	0.04	2	
Co	59	2	He	2.004	2.004	2.47	8666	0.02	2	
Ni	60	2	He	1.816	1.816	5.39	2194	0.08	2	
Cu	63	2	He	1.932	1.932	5.52	7252	0.03	2	
Zn	66	2	He	1.609	1.609	18.19	6608	0.02	2	
Al	27	2	He	1.112	1.112	43.37	673	0.17	2	NewName Main CR1 Failed
B	11	1	No Gas	38.285	38.285	9.29	47577	0.08	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.821	1.821	19.34	29291	0.01	2	
Si	28	1	No Gas	22.376	22.376	19.88	289713	0.01	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.717	1.717	3.55	13734	0.01	2	
Cd	111	1	No Gas	1.946	1.946	4.55	2687	0.07	2	
Sr	88	1	No Gas	1.865	1.865	1.85	24125	0.01	2	
Mo	95	1	No Gas	2.030	2.030	4.66	4974	0.04	2	
Sn	118	1	No Gas	1.933	1.933	5.42	9313	0.02	2	
Sb	121	1	No Gas	1.852	1.852	3.66	11709	0.02	2	
Ba	137	1	No Gas	1.955	1.955	2.21	4094	0.05	2	
Tl	205	1	No Gas	1.806	1.806	1.65	28352	0.01	2	
Tl	203	1	No Gas	1.856	1.856	1.93	11609	0.02	2	
Pb	208	1	No Gas	1.820	1.820	1.96	40343	0.00	2	
U	238	1	No Gas	1.824	1.824	0.22	40099	0.00	2	
Ca	43	2	He	195.982	195.982	10.52	240	81.66	200	
Sb	121	2	He	1.937	1.937	3.77	6282	0.03	2	
Ti	47	2	He	2.100	2.100	16.09	213	0.98	200	
Cu	63	1	No Gas	1.964	1.964	9.32	13390	0.01	2	
Se	82	1	No Gas	-2.546	-2.546	-246.07	-1035	0.25	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697561	1.52	675584	103.25	70	120	
Ge	72	2	He	343113	0.72	343019	100.03	70	120	
Ge	72	1	No Gas	1050997	3.58	1083014	97.04	70	120	
In	115	1	No Gas	1343429	0.50	1354249	99.20	70	120	
Bi	209	1	No Gas	1413622	0.65	1409443	100.30	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	016LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:46:15-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.152	4.152	0.93	73867	0.01	5	
Be	9	1	No Gas	4.703	4.703	3.07	8236	0.06	5	
V	51	2	He	4.748	4.748	1.82	12722	0.04	5	
Cr	52	2	He	4.779	4.779	2.97	14925	0.03	5	
Fe	56	2	He	506.367	506.367	1.23	1441766	0.04	500	
Se	78	2	He	4.123	4.123	16.79	540	0.76	5	
As	75	2	He	4.980	4.980	1.80	2204	0.23	5	
Ca	44	2	He	501.993	501.993	1.79	9687	5.18	500	
Na	23	2	He	383.878	383.878	0.56	397057	0.10	500	
Mg	24	2	He	479.989	479.989	1.38	148777	0.32	500	
K	39	2	He	463.525	463.525	1.41	246729	0.19	500	
Mn	55	2	He	4.767	4.767	1.87	10931	0.04	5	
Co	59	2	He	4.805	4.805	0.24	20930	0.02	5	
Ni	60	2	He	4.801	4.801	7.34	5498	0.09	5	
Cu	63	2	He	4.741	4.741	2.61	15676	0.03	5	
Zn	66	2	He	4.651	4.651	10.40	8499	0.05	5	
Al	27	2	He	5.190	5.190	5.98	1360	0.38	5	
B	11	1	No Gas	28.772	28.772	1.61	39923	0.07	25	
Al	27	1	No Gas	5.510	5.510	4.04	53530	0.01	5	
Si	28	1	No Gas	30.784	30.784	6.92	317717	0.01	25	
Ag	107	1	No Gas	4.248	4.248	2.02	33199	0.01	5	
Cd	111	1	No Gas	4.846	4.846	5.88	6882	0.07	5	
Sr	88	1	No Gas	4.666	4.666	1.92	61280	0.01	5	
Mo	95	1	No Gas	4.878	4.878	1.44	12263	0.04	5	
Sn	118	1	No Gas	4.569	4.569	5.38	20830	0.02	5	
Sb	121	1	No Gas	4.375	4.375	3.95	27609	0.02	5	
Ba	137	1	No Gas	4.740	4.740	1.09	10027	0.05	5	
Tl	205	1	No Gas	4.390	4.390	1.73	69939	0.01	5	
Tl	203	1	No Gas	4.593	4.593	2.97	29168	0.02	5	
Pb	208	1	No Gas	4.500	4.500	2.50	97484	0.00	5	
U	238	1	No Gas	4.376	4.376	2.99	97876	0.00	5	
Ca	43	2	He	447.493	447.493	14.66	493	90.70	500	
Sb	121	2	He	4.973	4.973	0.89	15947	0.03	5	
Ti	47	2	He	5.476	5.476	3.88	557	0.98	5	
Cu	63	1	No Gas	4.807	4.807	4.50	27702	0.02	5	
Se	82	1	No Gas	9.134	9.134	85.22	-176	-5.19	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	705094	0.61	675584	104.37	70	120	
Ge	72	2	He	346538	0.56	343019	101.03	70	120	
Ge	72	1	No Gas	1067080	1.89	1083014	98.53	70	120	
In	115	1	No Gas	1382496	1.10	1354249	102.09	70	120	
Bi	209	1	No Gas	1439273	1.24	1409443	102.12	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	017_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:48:13-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.119	12.6	38367	1.1	0.5	
Be	9	1	No Gas	0.000	2802.6	45	29.4	0.5	
V	51	2	He	0.018	90.7	642	5.1	2.5	
Cr	52	2	He	0.022	127.5	967	7.3	2.5	
Fe	56	2	He	0.872	3.5	10594	1.7	100	
Se	78	2	He	-1.137	-9.5	317	1.9	1	
As	75	2	He	-0.001	-953.4	61	8.3	2.5	
Ca	44	2	He	-8.426	-48.4	873	8.6	100	
Na	23	2	He	-77.769	-5.7	138966	1.7	100	
Mg	24	2	He	0.632	40.8	417	18.6	100	
K	39	2	He	-6.671	-41.2	76937	1.6	100	
Mn	55	2	He	0.033	110.9	443	19.2	2.5	
Co	59	2	He	-0.005	-25.4	17	34.6	2.5	
Ni	60	2	He	-0.116	-15.2	90	22.2	2.5	
Cu	63	2	He	-0.104	-123.9	1250	31.0	1	
Zn	66	2	He	-0.201	-282.2	5488	4.8	2.5	
Al	27	2	He	-0.387	-97.6	423	15.7	5	
B	11	1	No Gas	4.608	16.9	17705	4.3	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.542	-9.3	13537	2.3	5	
Si	28	1	No Gas	9.433	5.9	239977	0.5	10	
Ag	107	1	No Gas	-0.051	-13.1	783	5.2	2.5	
Cd	111	1	No Gas	0.007	99.4	10	100.0	1	
Sr	88	1	No Gas	-0.004	-74.3	483	8.4	2.5	
Mo	95	1	No Gas	-0.007	-35.2	7	86.6	2.5	
Sn	118	1	No Gas	0.090	43.2	1657	9.4	5	
Sb	121	1	No Gas	0.040	33.3	547	13.9	2.5	
Ba	137	1	No Gas	0.004	298.1	137	18.4	2.5	
Tl	205	1	No Gas	-0.003	-60.1	103	24.4	1	
Tl	203	1	No Gas	0.001	241.4	50	20.0	1	
Pb	208	1	No Gas	-0.080	-4.7	1037	9.0	2.5	
U	238	1	No Gas	0.000	-274.2	20	86.6	2.5	
Ca	43	2	He	-43.850	-13.4	3	173.2	100	
Sb	121	2	He	0.022	79.8	280	19.9	2.5	
Ti	47	2	He	0.101	151.6	13	114.6	2.5	
Se	82	1	No Gas	6.257	285.8	-375	-335.1	1	ICB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	650100	0.78	675584	96.23	70	120	
Ge	72	2	He	340379	1.24	343019	99.23	70	120	
Ge	72	1	No Gas	990700	1.09	1083014	91.48	70	120	
In	115	1	No Gas	1333117	1.06	1354249	98.44	70	120	
Bi	209	1	No Gas	1387521	1.93	1409443	98.44	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	019ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:53:16-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.086	-199.6	39721	1.5	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.014	-28.2	23	32.7	0	ICSA Main CR1 Failed
V	51	2	He	0.106	21.2	888	7.2	0	ICSA Main CR1 Failed
Cr	52	2	He	1.420	3.6	5134	2.3	0	ICSA Main CR1 Failed
Fe	56	2	He	103050.438	0.8	294773769	0.7	0	
Se	78	2	He	-0.173	-153.8	367	3.6	0	ICSA Main CR1 Failed
As	75	2	He	0.253	28.6	173	17.6	0	ICSA Main CR1 Failed
Ca	44	2	He	105462.082	1.3	1837998	1.2	0	
Na	23	2	He	104498.060	1.1	58640442	0.4	0	
Mg	24	2	He	104529.400	0.8	32687566	0.5	0	
K	39	2	He	102966.126	1.8	37343818	1.4	0	
Mn	55	2	He	0.288	20.1	1027	13.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.260	7.9	1183	7.6	0	ICSA Main CR1 Failed
Ni	60	2	He	0.791	12.4	1100	9.6	0	ICSA Main CR1 Failed
Cu	63	2	He	0.113	7.0	1937	1.7	0	ICSA Main CR1 Failed
Zn	66	2	He	1.459	22.7	6655	3.6	0	ICSA Main CR1 Failed
Al	27	2	He	109267.562	1.4	18406437	1.1	0	
B	11	1	No Gas	-0.522	-196.8	14736	2.3	0	ICSA Main CR1 Failed
Al	27	1	No Gas	105269.173	4.8	679232817	0.2	0	
Si	28	1	No Gas	40.557	13.8	345704	0.1	0	
Ag	107	1	No Gas	0.100	29.9	1810	9.2	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.414	9.7	1917	7.6	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.425	2.5	55552	1.1	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2305.493	2.1	5526088	0.0	0	
Sn	118	1	No Gas	0.282	18.8	2420	7.0	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.294	19.3	2180	16.3	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.613	3.6	1350	3.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.005	31.1	223	10.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.011	54.2	110	31.5	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.193	48.2	6552	28.5	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.006	37.0	163	30.8	0	ICSA Main CR1 Failed
Ca	43	2	He	102381.821	0.5	103167	0.4	0	
Sb	121	2	He	0.256	14.8	1037	12.1	0	ICSA Main CR1 Failed
Ti	47	2	He	2078.772	1.3	212264	0.6	0	
Se	82	1	No Gas	0.939	1666.3	-821	-147.4	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	701123	3.12	675584	103.78	70	120	
Ge	72	2	He	350175	0.73	343019	102.09	70	120	
Ge	72	1	No Gas	1070892	4.48	1083014	98.88	70	120	
In	115	1	No Gas	1320930	2.20	1354249	97.54	70	120	
Bi	209	1	No Gas	1385348	0.34	1409443	98.29	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	020ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T11:55:37-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	99.193	2.030	836312	1.41	100	99.2	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	97.902	1.837	170948	1.09	100	97.9	80	120	
V	51	2	He	103.402	1.021	261672	0.68	100	103.4	80	120	
Cr	52	2	He	102.941	1.004	299449	0.68	100	102.9	80	120	
Fe	56	2	He	107155.437	1.571	300196329	1.24	100	107155.4	80	120	ICSB Main CR1 Failed
Se	78	2	He	102.950	1.680	4566	1.29	100	102.9	80	120	
As	75	2	He	102.580	1.261	43700	0.93	100	102.6	80	120	
Ca	44	2	He	112182.242	2.466	1914697	2.13	100	112182.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	108804.237	1.765	59792082	1.43	100	108804.2	80	120	ICSB Main CR1 Failed
Mg	24	2	He	109214.456	1.366	33448890	1.03	100	109214.5	80	120	ICSB Main CR1 Failed
K	39	2	He	107840.835	1.420	38303324	1.10	100	107840.8	80	120	ICSB Main CR1 Failed
Mn	55	2	He	103.036	1.219	226130	0.88	100	103.0	80	120	
Co	59	2	He	102.878	1.097	442629	0.76	100	102.9	80	120	
Ni	60	2	He	100.954	0.251	110089	0.48	100	101.0	80	120	
Cu	63	2	He	100.665	2.212	297751	1.98	100	100.7	80	120	
Zn	66	2	He	100.604	1.451	65357	1.07	100	100.6	80	120	
Al	27	2	He	103319.841	1.414	17046116	1.08	100	103319.8	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	527.051	3.432	431262	2.60	100	527.1	80	120	
Al	27	1	No Gas	98591.878	4.264	620724337	1.07	100	98591.9	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	579.729	4.222	1801988	1.45	100	579.7	80	120	
Ag	107	1	No Gas	97.792	1.067	649073	1.66	100	97.8	80	120	
Cd	111	1	No Gas	101.961	1.092	137154	1.10	100	102.0	80	120	
Sr	88	1	No Gas	106.143	1.621	1308747	0.89	100	106.1	80	120	
Mo	95	1	No Gas	2220.502	1.928	5275250	0.49	100	2220.5	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	103.169	1.443	418212	1.09	100	103.2	80	120	
Sb	121	1	No Gas	93.781	3.899	572200	0.70	100	93.8	80	120	
Ba	137	1	No Gas	103.945	3.133	205509	1.07	100	103.9	80	120	
Tl	205	1	No Gas	103.313	1.590	1547157	2.24	100	103.3	80	120	
Tl	203	1	No Gas	100.250	0.988	598731	1.59	100	100.2	80	120	
Pb	208	1	No Gas	99.905	0.348	1983847	0.72	100	99.9	80	120	
U	238	1	No Gas	107.708	0.970	2268524	1.14	100	107.7	80	120	
Ca	43	2	He	107970.810	0.264	106557	0.27	100	107970.8	80	120	ICSB Main CR1 Failed
Sb	121	2	He	101.432	1.285	317751	0.95	100	101.4	80	120	
Ti	47	2	He	2074.155	0.383	207441	0.43	100	2074.2	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	101.952	4.472	498319	1.48	100	102.0	80	120	
Se	82	1	No Gas	100.757	27.341	6566	30.63	100	100.8	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	707105	0.82	675584	104.67	70	120	
Ge	72	2	He	342960	0.34	343019	99.98	70	120	
Ge	72	1	No Gas	1044736	4.54	1083014	96.47	70	120	
In	115	1	No Gas	1309173	2.13	1354249	96.67	70	120	
Bi	209	1	No Gas	1355485	0.71	1409443	96.17	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	023_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:04:21-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.078	6.192	839660	4.44	100	101.1	90	110	
Be	9	1	No Gas	100.017	1.656	172302	0.69	100	100.0	90	110	
V	51	2	He	100.161	0.839	260518	0.87	100	100.2	90	110	
Cr	52	2	He	100.148	0.813	299426	0.87	100	100.1	90	110	
Fe	56	2	He	10008.236	0.491	28823557	0.55	10000	100.1	90	110	
Se	78	2	He	100.949	2.360	4609	2.12	100	100.9	90	110	
As	75	2	He	100.186	0.865	43865	0.91	100	100.2	90	110	
Ca	44	2	He	10026.834	1.579	176845	1.62	10000	100.3	90	110	
Na	23	2	He	9837.958	0.665	5727044	0.65	10000	98.4	90	110	
Mg	24	2	He	10168.419	1.386	3200857	1.44	10000	101.7	90	110	
K	39	2	He	10108.695	0.633	3764432	0.68	10000	101.1	90	110	
Mn	55	2	He	99.946	0.201	225442	0.26	100	99.9	90	110	
Co	59	2	He	99.885	0.454	441669	0.51	100	99.9	90	110	
Ni	60	2	He	100.659	1.618	112808	1.56	100	100.7	90	110	
Cu	63	2	He	99.528	0.613	302573	0.66	100	99.5	90	110	
Zn	66	2	He	100.302	1.825	66985	1.62	100	100.3	90	110	
Al	27	2	He	102.636	8.951	17906	8.70	100	102.6	90	110	
B	11	1	No Gas	480.136	1.150	389083	2.53	500	96.0	90	110	
Al	27	1	No Gas	112.910	20.317	741090	21.81	100	112.9	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	543.982	3.228	1729295	0.88	5000	10.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.589	2.596	685218	0.41	100	99.6	90	110	
Cd	111	1	No Gas	100.440	1.125	140101	1.21	100	100.4	90	110	
Sr	88	1	No Gas	100.689	1.813	1287355	0.71	100	100.7	90	110	
Mo	95	1	No Gas	100.358	2.594	247229	0.50	100	100.4	90	110	
Sn	118	1	No Gas	99.685	2.076	419017	0.24	100	99.7	90	110	
Sb	121	1	No Gas	91.673	3.359	567346	0.59	100	91.7	90	110	
Ba	137	1	No Gas	99.847	2.666	204721	0.45	100	99.8	90	110	
Tl	205	1	No Gas	100.536	2.038	1580259	0.63	100	100.5	90	110	
Tl	203	1	No Gas	97.596	2.873	611725	0.27	100	97.6	90	110	
Pb	208	1	No Gas	96.457	2.164	2010576	0.53	100	96.5	90	110	
U	238	1	No Gas	101.582	2.162	2245764	0.79	100	101.6	90	110	
Ca	43	2	He	10109.998	4.849	10297	4.82	10000	101.1	90	110	
Sb	121	2	He	98.421	0.620	316875	0.68	100	98.4	90	110	
Ti	47	2	He	95.999	4.178	9870	4.20	100	96.0	90	110	
Cu	63	1	No Gas	105.321	3.283	522077	0.42	100	105.3	90	110	
Se	82	1	No Gas	102.057	5.477	6743	3.46	100	102.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	697746	2.22	675584	103.28	70	120	
Ge	72	2	He	352460	0.06	343019	102.75	70	120	
Ge	72	1	No Gas	1059099	2.81	1083014	97.79	70	120	
In	115	1	No Gas	1357574	2.26	1354249	100.25	70	120	
Bi	209	1	No Gas	1423316	2.61	1409443	100.98	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	024_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:06:17-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.124	146.9	39681	0.9	0.5	
Be	9	1	No Gas	-0.012	-58.9	27	47.2	0.5	
V	51	2	He	0.165	8.6	1011	4.5	2.5	
Cr	52	2	He	0.160	45.7	1363	14.7	2.5	
Fe	56	2	He	0.972	9.0	10868	2.0	100	
Se	78	2	He	-0.062	-1214.8	361	8.5	2	
As	75	2	He	0.035	63.6	77	11.5	2.5	
Ca	44	2	He	-17.068	-15.4	727	6.8	100	
Na	23	2	He	-95.614	-4.1	129208	1.0	100	
Mg	24	2	He	0.511	9.3	380	4.6	100	
K	39	2	He	-1.242	-229.3	78811	0.7	100	
Mn	55	2	He	0.023	32.4	420	4.8	2.5	
Co	59	2	He	-0.001	-358.6	37	31.5	2.5	
Ni	60	2	He	-0.134	-12.4	70	24.7	2.5	
Cu	63	2	He	-0.229	-12.6	883	9.6	2	
Zn	66	2	He	-0.331	-121.7	5411	4.1	2.5	
Al	27	2	He	-0.768	-50.8	360	16.9	5	
B	11	1	No Gas	23.623	21.9	32182	9.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.489	-12.6	14117	2.8	5	
Si	28	1	No Gas	2.581	38.3	226546	0.2	10	
Ag	107	1	No Gas	-0.090	-18.5	547	21.1	2.5	
Cd	111	1	No Gas	0.005	86.6	7	86.6	1	
Sr	88	1	No Gas	-0.011	-76.8	390	28.9	2.5	
Mo	95	1	No Gas	0.017	36.1	63	24.1	2.5	
Sn	118	1	No Gas	0.076	35.4	1607	8.3	5	
Sb	121	1	No Gas	0.173	24.1	1340	17.6	2.5	
Ba	137	1	No Gas	-0.027	-29.6	73	20.8	2.5	
Tl	205	1	No Gas	0.000	-559.0	143	10.7	1	
Tl	203	1	No Gas	0.007	22.5	90	11.1	1	
Pb	208	1	No Gas	-0.072	-8.6	1177	10.4	2.5	
U	238	1	No Gas	0.002	55.4	63	32.9	2.5	
Ca	43	2	He	-37.016	-0.3	10	0.0	100	
Sb	121	2	He	0.092	45.2	497	26.8	2.5	
Ti	47	2	He	0.135	44.0	17	34.6	2.5	
Cu	63	1	No Gas	-0.247	-22.8	2500	9.7	2.5	
Se	82	1	No Gas	4.223	163.0	-518	-93.9	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672233	3.47	675584	99.50	70	120	
Ge	72	2	He	340241	0.92	343019	99.19	70	120	
Ge	72	1	No Gas	1009602	0.91	1083014	93.22	70	120	
In	115	1	No Gas	1338881	1.43	1354249	98.87	70	120	
Bi	209	1	No Gas	1366811	0.22	1409443	96.98	70	120	

Sample Report

Sample Table

Sample Name	MBLK-181294
Data File Name	025SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:09:56-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.083	0.083	47.03	39392	0.00	2000	
Be	9	1	No Gas	0.007	0.007	334.56	58	0.01	2000	
V	51	2	He	0.167	0.167	11.53	1020	0.02	2000	
Cr	52	2	He	0.067	0.067	61.20	1103	0.01	2000	
Fe	56	2	He	0.557	0.557	25.70	9767	0.01	200000	
Se	78	2	He	-0.416	-0.416	-359.06	348	-0.12	2000	
As	75	2	He	0.050	0.050	33.31	83	0.06	2000	
Ca	44	2	He	-3.187	-3.187	-205.02	967	-0.33	200000	
Na	23	2	He	-109.331	-109.331	-1.07	122407	-0.09	200000	
Mg	24	2	He	0.548	0.548	29.58	393	0.14	200000	
K	39	2	He	-4.979	-4.979	-67.61	77909	-0.01	200000	
Mn	55	2	He	-0.016	-0.016	-183.46	337	0.00	2000	
Co	59	2	He	-0.003	-0.003	-158.75	27	-0.01	2000	
Ni	60	2	He	-0.085	-0.085	-5.58	123	-0.07	2000	
Cu	63	2	He	-0.219	-0.219	-4.01	917	-0.02	2000	
Zn	66	2	He	-0.909	-0.909	-43.75	5098	-0.02	2000	
Al	27	2	He	2.741	2.741	35.42	940	0.29	2000	
B	11	1	No Gas	-0.415	-0.415	-201.37	14212	0.00	2000	
Al	27	1	No Gas	4.900	4.900	64.63	46875	0.01	2000	
Si	28	1	No Gas	-0.583	-0.583	-93.70	217207	0.00	2000	
Ag	107	1	No Gas	-0.063	-0.063	-42.34	717	-0.01	2000	
Cd	111	1	No Gas	0.025	0.025	120.43	33	0.07	2000	
Sr	88	1	No Gas	0.055	0.055	31.59	1210	0.00	2000	
Mo	95	1	No Gas	0.028	0.028	140.62	90	0.03	2000	
Sn	118	1	No Gas	0.010	0.010	315.54	1307	0.00	2000	
Sb	121	1	No Gas	0.076	0.076	28.35	767	0.01	2000	
Ba	137	1	No Gas	-0.002	-0.002	-2119.09	123	0.00	2000	
Tl	205	1	No Gas	0.009	0.009	218.54	290	0.00	2000	
Tl	203	1	No Gas	0.008	0.008	269.50	93	0.01	2000	
Pb	208	1	No Gas	-0.086	-0.086	-24.55	910	-0.01	2000	
U	238	1	No Gas	0.013	0.013	165.25	313	0.00	2000	
Ca	43	2	He	-20.041	-20.041	-128.20	27	-75.15	200000	
Sb	121	2	He	0.034	0.034	16.41	320	0.01	2000	
Ti	47	2	He	-0.033	-0.033	0.00	0	#DIV/0!	2000	
Cu	63	1	No Gas	-0.252	-0.252	-7.77	2467	-0.01	2000	
Zn	66	1	No Gas	0.340	0.340	86.57	12359	0.00	2000	
Se	82	1	No Gas	4.492	4.492	123.67	-502	-0.89	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	672143	2.45	675584	99.49	70	120	
Ge	72	2	He	342040	0.52	343019	99.71	70	120	
Ge	72	1	No Gas	1004845	1.28	1083014	92.78	70	120	
In	115	1	No Gas	1311520	1.16	1354249	96.84	70	120	

Sample Report

Bi	209	1	No Gas	1405683	0.52	1409443	99.73	70	120	

Sample Report

Sample Table

Sample Name	LCS-181294
Data File Name	026SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:11:55-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.189	-0.189	-41.96	42611	0.00	2000	
Be	9	1	No Gas	54.209	54.209	2.01	102764	0.05	2000	
V	51	2	He	56.050	56.050	1.36	153935	0.04	2000	
Cr	52	2	He	55.494	55.494	1.12	175308	0.03	2000	
Fe	56	2	He	5590.404	5590.404	1.13	16972733	0.03	200000	
Se	78	2	He	56.399	56.399	1.49	2889	1.95	2000	
As	75	2	He	57.139	57.139	0.87	26399	0.22	2000	
Ca	44	2	He	5555.011	5555.011	2.24	103749	5.35	200000	
Na	23	2	He	5564.802	5564.802	0.81	3500358	0.16	200000	
Mg	24	2	He	5784.473	5784.473	2.41	1919090	0.30	200000	
K	39	2	He	5748.713	5748.713	0.68	2293659	0.25	200000	
Mn	55	2	He	56.641	56.641	1.43	134827	0.04	2000	
Co	59	2	He	56.474	56.474	1.08	263216	0.02	2000	
Ni	60	2	He	56.062	56.062	0.89	66324	0.08	2000	
Cu	63	2	He	57.139	57.139	1.33	183801	0.03	2000	
Zn	66	2	He	57.840	57.840	2.66	43306	0.13	2000	
Al	27	2	He	63.012	63.012	1.03	11792	0.53	2000	
B	11	1	No Gas	-6.462	-6.462	-6.58	11058	-0.06	2000	
Al	27	1	No Gas	56.759	56.759	1.82	424398	0.01	2000	
Si	28	1	No Gas	99.455	99.455	2.88	562756	0.02	2000	
Ag	107	1	No Gas	54.188	54.188	0.54	399409	0.01	2000	
Cd	111	1	No Gas	56.429	56.429	1.00	84181	0.07	2000	
Sr	88	1	No Gas	0.042	0.042	11.56	1160	0.00	2000	
Mo	95	1	No Gas	56.196	56.196	0.72	148103	0.04	2000	
Sn	118	1	No Gas	0.097	0.097	6.05	1833	0.01	2000	
Sb	121	1	No Gas	50.809	50.809	0.85	351017	0.01	2000	
Ba	137	1	No Gas	55.258	55.258	0.99	121262	0.05	2000	
Tl	205	1	No Gas	51.302	51.302	1.42	868783	0.01	2000	
Tl	203	1	No Gas	53.734	53.734	1.06	362937	0.01	2000	
Pb	208	1	No Gas	53.245	53.245	1.22	1196997	0.00	2000	
U	238	1	No Gas	-0.001	-0.001	-46.42	17	0.00	2000	
Ca	43	2	He	5659.322	5659.322	1.21	6098	92.80	200000	
Sb	121	2	He	56.814	56.814	1.90	192875	0.03	2000	
Ti	47	2	He	53.672	53.672	1.48	5818	0.92	2000	
Cu	63	1	No Gas	56.503	56.503	1.55	314471	0.02	2000	
Zn	66	1	No Gas	57.621	57.621	1.49	103113	0.06	2000	
Se	82	1	No Gas	53.689	53.689	5.77	3504	1.53	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	767589	1.57	675584	113.62	70	120	
Ge	72	2	He	371494	0.75	343019	108.30	70	120	
Ge	72	1	No Gas	1181044	1.45	1083014	109.05	70	120	
In	115	1	No Gas	1451706	0.34	1354249	107.20	70	120	

Sample Report

Bi	209	1	No Gas	1532947	1.13	1409443	108.76	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01SD
Data File Name	028SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:16:08-05:00
Sample Type	Sample
Dilution	5
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.230	21.151	2.45	81945	0.01	2000	
Be	9	1	No Gas	-0.002	-0.008	-2429.61	50	0.00	2000	
V	51	2	He	0.407	2.037	5.77	1752	0.02	2000	
Cr	52	2	He	55.809	279.045	1.29	174912	0.03	2000	
Fe	56	2	He	1307.591	6537.956	0.74	3945392	0.03	200000	
Se	78	2	He	-0.796	-3.978	-95.64	359	-0.22	2000	
As	75	2	He	0.101	0.507	74.94	113	0.09	2000	
Ca	44	2	He	21604.250	108021.252	0.94	397165	5.44	200000	
Na	23	2	He	88929.802	444649.011	0.63	52554938	0.17	200000	
Mg	24	2	He	16198.095	80990.477	0.96	5331192	0.30	200000	
K	39	2	He	212.272	1061.358	1.71	166703	0.13	200000	
Mn	55	2	He	217.715	1088.573	0.08	513022	0.04	2000	
Co	59	2	He	6.134	30.669	1.29	28400	0.02	2000	
Ni	60	2	He	423.713	2118.566	0.43	495780	0.09	2000	
Cu	63	2	He	2.308	11.540	4.46	8976	0.03	2000	
Zn	66	2	He	1.871	9.356	17.90	7265	0.03	2000	
Al	27	2	He	3.179	15.893	13.77	1090	0.29	2000	
B	11	1	No Gas	-4.416	-22.078	-15.74	12944	-0.03	2000	
Al	27	1	No Gas	2.474	12.370	25.15	37324	0.01	2000	
Si	28	1	No Gas	3425.866	17129.330	2.34	10695076	0.03	2000	>LDR
Ag	107	1	No Gas	-0.058	-0.288	-81.36	813	-0.01	2000	
Cd	111	1	No Gas	0.075	0.377	40.68	110	0.07	2000	
Sr	88	1	No Gas	334.574	1672.870	0.90	4464876	0.01	2000	
Mo	95	1	No Gas	0.408	2.042	23.83	1077	0.04	2000	
Sn	118	1	No Gas	0.048	0.240	18.90	1577	0.00	2000	
Sb	121	1	No Gas	0.041	0.203	73.87	653	0.01	2000	
Ba	137	1	No Gas	13.190	65.948	1.54	28358	0.05	2000	
Tl	205	1	No Gas	0.011	0.053	209.59	324	0.00	2000	
Tl	203	1	No Gas	0.011	0.057	215.61	120	0.01	2000	
Pb	208	1	No Gas	-0.077	-0.385	-21.74	1137	-0.01	2000	
U	238	1	No Gas	0.036	0.181	25.86	840	0.00	2000	
Ca	43	2	He	22260.166	111300.829	1.99	23647	94.13	200000	
Sb	121	2	He	0.016	0.081	181.60	283	0.01	2000	
Ti	47	2	He	0.028	0.141	378.31	7	0.42	2000	
Cu	63	1	No Gas	2.480	12.399	2.78	17745	0.01	2000	
Zn	66	1	No Gas	2.295	11.475	21.30	17388	0.01	2000	
Se	82	1	No Gas	-1.578	-7.888	-452.40	-1093	0.14	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	775699	1.42	675584	114.82	70	120	
Ge	72	2	He	368542	0.59	343019	107.44	70	120	
Ge	72	1	No Gas	1171238	2.66	1083014	108.15	70	120	
In	115	1	No Gas	1416934	1.11	1354249	104.63	70	120	

Sample Report

Bi	209	1	No Gas	1451118	1.51	1409443	102.96	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01MS
Data File Name	029SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:18:05-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.700	19.700	2.81	222007	0.01	2000	
Be	9	1	No Gas	51.024	51.024	2.31	99532	0.05	2000	
V	51	2	He	53.590	53.590	0.74	155638	0.03	2000	
Cr	52	2	He	330.521	330.521	0.96	1098748	0.03	2000	
Fe	56	2	He	10919.205	10919.205	1.02	35040285	0.03	200000	
Se	78	2	He	51.351	51.351	3.17	2818	1.82	2000	
As	75	2	He	53.291	53.291	2.50	26034	0.20	2000	
Ca	44	2	He	110903.044	110903.044	0.62	2167779	5.12	200000	
Na	23	2	He	416007.651	416007.651	0.65	261218663	0.16	200000	>LDR
Mg	24	2	He	79683.778	79683.778	1.43	27948320	0.29	200000	
K	39	2	He	6468.547	6468.547	1.08	2717174	0.24	200000	
Mn	55	2	He	1124.029	1124.029	0.74	2820870	0.04	2000	
Co	59	2	He	78.503	78.503	1.13	386808	0.02	2000	
Ni	60	2	He	2137.190	2137.190	0.64	2663888	0.08	2000	>LDR
Cu	63	2	He	60.707	60.707	0.97	206344	0.03	2000	
Zn	66	2	He	57.365	57.365	1.20	45460	0.13	2000	
Al	27	2	He	64.033	64.033	1.08	12659	0.51	2000	
B	11	1	No Gas	6.327	6.327	9.82	22660	0.03	2000	
Al	27	1	No Gas	58.349	58.349	1.33	447839	0.01	2000	
Si	28	1	No Gas	15931.286	15931.286	0.60	50593658	0.03	2000	>LDR
Ag	107	1	No Gas	49.124	49.124	2.11	361257	0.01	2000	
Cd	111	1	No Gas	51.263	51.263	2.00	76276	0.07	2000	
Sr	88	1	No Gas	1575.966	1575.966	2.35	21486919	0.01	2000	
Mo	95	1	No Gas	55.893	55.893	2.35	146913	0.04	2000	
Sn	118	1	No Gas	0.118	0.118	7.76	1924	0.01	2000	
Sb	121	1	No Gas	46.866	46.866	0.83	332781	0.01	2000	
Ba	137	1	No Gas	114.232	114.232	1.45	249897	0.05	2000	
Tl	205	1	No Gas	49.448	49.448	2.27	791463	0.01	2000	
Tl	203	1	No Gas	51.644	51.644	1.51	329708	0.02	2000	
Pb	208	1	No Gas	51.421	51.421	2.11	1092698	0.00	2000	
U	238	1	No Gas	0.193	0.193	9.30	4371	0.00	2000	
Ca	43	2	He	109148.140	109148.140	1.18	123355	88.48	200000	
Sb	121	2	He	52.748	52.748	1.14	189348	0.03	2000	
Ti	47	2	He	52.280	52.280	5.17	5991	0.87	2000	
Cu	63	1	No Gas	61.681	61.681	0.84	352428	0.02	2000	
Zn	66	1	No Gas	57.256	57.256	1.85	105393	0.05	2000	
Se	82	1	No Gas	53.089	53.089	24.18	3551	1.50	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	789970	2.39	675584	116.93	70	120	
Ge	72	2	He	392751	0.31	343019	114.50	70	120	
Ge	72	1	No Gas	1213736	0.56	1083014	112.07	70	120	
In	115	1	No Gas	1448285	1.99	1354249	106.94	70	120	
Bi	209	1	No Gas	1449270	2.58	1409443	102.83	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01MSD
Data File Name	030SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:20:01-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.557	19.557	1.92	240113	0.01	2000	
Be	9	1	No Gas	51.336	51.336	1.31	108943	0.05	2000	
V	51	2	He	54.450	54.450	0.81	164822	0.03	2000	
Cr	52	2	He	341.126	341.126	0.45	1182003	0.03	2000	
Fe	56	2	He	11194.689	11194.689	0.54	37445757	0.03	200000	
Se	78	2	He	50.908	50.908	2.64	2916	1.75	2000	
As	75	2	He	55.022	55.022	1.39	28015	0.20	2000	
Ca	44	2	He	112544.267	112544.267	0.73	2293046	4.91	200000	
Na	23	2	He	424778.380	424778.380	0.27	278019143	0.15	200000	>LDR
Mg	24	2	He	81617.243	81617.243	1.17	29838935	0.27	200000	
K	39	2	He	6710.098	6710.098	0.26	2934413	0.23	200000	
Mn	55	2	He	1148.675	1148.675	1.37	3004703	0.04	2000	
Co	59	2	He	80.588	80.588	0.44	413901	0.02	2000	
Ni	60	2	He	2193.839	2193.839	0.26	2850322	0.08	2000	>LDR
Cu	63	2	He	62.185	62.185	0.58	220281	0.03	2000	
Zn	66	2	He	58.967	58.967	2.32	48520	0.12	2000	
Al	27	2	He	68.156	68.156	1.35	14007	0.49	2000	
B	11	1	No Gas	5.481	5.481	8.13	23832	0.02	2000	
Al	27	1	No Gas	60.757	60.757	0.25	488232	0.01	2000	
Si	28	1	No Gas	16485.931	16485.931	0.81	54902946	0.03	2000	>LDR
Ag	107	1	No Gas	49.155	49.155	0.92	377755	0.01	2000	
Cd	111	1	No Gas	53.142	53.142	1.54	82625	0.06	2000	
Sr	88	1	No Gas	1623.738	1623.738	0.99	23134345	0.01	2000	
Mo	95	1	No Gas	57.821	57.821	0.64	158825	0.04	2000	
Sn	118	1	No Gas	0.085	0.085	61.36	1857	0.00	2000	
Sb	121	1	No Gas	47.641	47.641	0.98	354805	0.01	2000	
Ba	137	1	No Gas	118.899	118.899	1.11	271776	0.04	2000	
Tl	205	1	No Gas	51.009	51.009	0.84	858512	0.01	2000	
Tl	203	1	No Gas	53.255	53.255	1.13	357460	0.01	2000	
Pb	208	1	No Gas	52.951	52.951	1.13	1183033	0.00	2000	
U	238	1	No Gas	0.195	0.195	0.57	4651	0.00	2000	
Ca	43	2	He	111299.399	111299.399	1.49	131113	84.89	200000	
Sb	121	2	He	53.198	53.198	0.67	199052	0.03	2000	
Ti	47	2	He	51.889	51.889	5.16	6198	0.84	2000	
Cu	63	1	No Gas	63.827	63.827	1.36	382333	0.02	2000	
Zn	66	1	No Gas	58.842	58.842	1.50	113189	0.05	2000	
Se	82	1	No Gas	62.633	62.633	8.42	4581	1.37	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	859200	1.45	675584	127.18	70	120	ISTD Failed
Ge	72	2	He	409382	0.26	343019	119.35	70	120	
Ge	72	1	No Gas	1273030	0.54	1083014	117.55	70	120	
In	115	1	No Gas	1513122	1.03	1354249	111.73	70	120	
Bi	209	1	No Gas	1523459	1.21	1409443	108.09	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	035_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:35:54-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	96.243	5.088	857079	1.02	100	96.2	90	110	
Be	9	1	No Gas	96.100	3.201	177060	1.19	100	96.1	90	110	
V	51	2	He	101.193	2.340	267277	1.15	100	101.2	90	110	
Cr	52	2	He	101.563	1.202	308394	1.17	100	101.6	90	110	
Fe	56	2	He	10095.176	1.595	29526705	0.71	10000	101.0	90	110	
Se	78	2	He	100.705	4.150	4669	2.72	100	100.7	90	110	
As	75	2	He	101.101	2.325	44952	1.27	100	101.1	90	110	
Ca	44	2	He	10201.672	0.805	182738	1.74	10000	102.0	90	110	
Na	23	2	He	10388.639	1.768	6131424	1.49	10000	103.9	90	110	
Mg	24	2	He	10361.707	1.662	3312621	1.38	10000	103.6	90	110	
K	39	2	He	10347.785	1.106	3911789	1.12	10000	103.5	90	110	
Mn	55	2	He	101.148	1.366	231710	0.78	100	101.1	90	110	
Co	59	2	He	100.854	1.456	452928	1.37	100	100.9	90	110	
Ni	60	2	He	101.544	1.841	115574	1.51	100	101.5	90	110	
Cu	63	2	He	100.512	1.868	310298	0.64	100	100.5	90	110	
Zn	66	2	He	101.675	1.885	68877	0.51	100	101.7	90	110	
Al	27	2	He	105.256	4.286	18633	3.15	100	105.3	90	110	
B	11	1	No Gas	459.963	2.402	399321	2.15	500	92.0	90	110	
Al	27	1	No Gas	96.066	4.123	664452	1.24	100	96.1	90	110	
Si	28	1	No Gas	557.026	6.671	1862379	10.17	5000	11.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.989	1.783	683137	1.01	100	99.0	90	110	
Cd	111	1	No Gas	99.510	1.837	139184	0.47	100	99.5	90	110	
Sr	88	1	No Gas	103.646	3.052	1329688	4.90	100	103.6	90	110	
Mo	95	1	No Gas	100.249	2.049	247712	1.84	100	100.2	90	110	
Sn	118	1	No Gas	99.016	1.043	417462	1.17	100	99.0	90	110	
Sb	121	1	No Gas	87.246	4.624	568085	0.27	100	87.2	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.032	0.124	205755	1.88	100	100.0	90	110	
Tl	205	1	No Gas	98.807	5.946	1553431	2.40	100	98.8	90	110	
Tl	203	1	No Gas	96.112	4.929	602769	1.01	100	96.1	90	110	
Pb	208	1	No Gas	94.739	5.060	1975540	0.40	100	94.7	90	110	
U	238	1	No Gas	98.998	4.245	2190018	0.72	100	99.0	90	110	
Ca	43	2	He	10233.040	3.113	10591	5.10	10000	102.3	90	110	
Sb	121	2	He	98.342	2.138	321548	1.49	100	98.3	90	110	
Ti	47	2	He	99.852	4.612	10427	4.71	100	99.9	90	110	
Cu	63	1	No Gas	101.987	5.059	531928	0.25	100	102.0	90	110	
Se	82	1	No Gas	108.659	14.504	7587	11.57	100	108.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	746651	3.96	675584	110.52	70	120	
Ge	72	2	He	358022	1.99	343019	104.37	70	120	
Ge	72	1	No Gas	1115230	4.89	1083014	102.97	70	120	
In	115	1	No Gas	1361391	1.95	1354249	100.53	70	120	
Bi	209	1	No Gas	1425641	4.88	1409443	101.15	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	036_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T12:37:50-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.116	-47.0	40966	0.6	0.5	
Be	9	1	No Gas	0.015	250.8	77	88.1	0.5	
V	51	2	He	0.071	70.3	789	15.6	2.5	
Cr	52	2	He	0.104	36.7	1223	8.7	2.5	
Fe	56	2	He	1.202	10.2	11719	2.9	100	
Se	78	2	He	-0.208	-112.2	361	3.2	2	
As	75	2	He	0.017	191.4	70	19.0	2.5	
Ca	44	2	He	-14.744	-25.9	780	9.0	100	
Na	23	2	He	-42.126	-5.4	161180	0.2	100	
Mg	24	2	He	0.737	8.1	457	3.3	100	
K	39	2	He	3.932	46.5	82107	0.3	100	
Mn	55	2	He	0.027	41.4	437	4.8	2.5	
Co	59	2	He	-0.003	-154.5	27	78.1	2.5	
Ni	60	2	He	-0.117	-40.2	90	58.8	2.5	
Cu	63	2	He	-0.163	-30.9	1093	12.9	2	
Zn	66	2	He	-0.430	-25.5	5451	1.6	2.5	
Al	27	2	He	-0.771	-38.5	367	14.0	5	
B	11	1	No Gas	17.751	19.2	30126	9.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.765	-9.1	12996	4.6	5	
Si	28	1	No Gas	0.834	207.2	231853	0.9	10	
Ag	107	1	No Gas	-0.054	-14.6	783	7.5	2.5	
Cd	111	1	No Gas	0.032	73.4	43	74.2	1	
Sr	88	1	No Gas	0.185	27.9	2837	23.5	2.5	
Mo	95	1	No Gas	0.040	37.8	120	30.0	2.5	
Sn	118	1	No Gas	0.072	67.8	1573	12.1	5	
Sb	121	1	No Gas	0.206	9.2	1607	9.9	2.5	
Ba	137	1	No Gas	0.046	55.2	220	24.1	2.5	
Tl	205	1	No Gas	0.025	41.4	520	29.6	1	
Tl	203	1	No Gas	0.019	57.9	157	41.0	1	
Pb	208	1	No Gas	-0.059	-10.4	1420	8.1	2.5	
U	238	1	No Gas	0.019	36.0	427	33.9	2.5	
Ca	43	2	He	-27.100	-37.7	20	50.0	100	
Sb	121	2	He	0.101	31.7	537	19.9	2.5	
Ti	47	2	He	0.065	151.0	10	100.0	2.5	
Cu	63	1	No Gas	-0.089	-27.3	3387	0.9	2.5	
Se	82	1	No Gas	-10.672	-61.9	-1651	-29.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	726996	0.51	675584	107.61	70	120	
Ge	72	2	He	346466	0.95	343019	101.00	70	120	
Ge	72	1	No Gas	1054963	2.89	1083014	97.41	70	120	
In	115	1	No Gas	1325839	0.80	1354249	97.90	70	120	
Bi	209	1	No Gas	1359532	0.56	1409443	96.46	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	047_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T13:01:29-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	100.478	6.559	946225	0.71	100	100.5	90	110	
Be	9	1	No Gas	98.841	5.609	192954	1.46	100	98.8	90	110	
V	51	2	He	104.291	0.263	288799	0.33	100	104.3	90	110	
Cr	52	2	He	104.073	0.074	331276	0.58	100	104.1	90	110	
Fe	56	2	He	10254.300	0.439	31444269	0.17	10000	102.5	90	110	
Se	78	2	He	101.148	3.765	4917	4.03	100	101.1	90	110	
As	75	2	He	101.080	0.966	47123	1.13	100	101.1	90	110	
Ca	44	2	He	10465.265	0.354	196484	0.80	10000	104.7	90	110	
Na	23	2	He	10603.162	0.566	6556874	1.09	10000	106.0	90	110	
Mg	24	2	He	10552.745	0.293	3536930	0.27	10000	105.5	90	110	
K	39	2	He	10534.260	0.837	4173215	0.54	10000	105.3	90	110	
Mn	55	2	He	103.293	0.224	248071	0.79	100	103.3	90	110	
Co	59	2	He	103.785	0.383	488646	0.93	100	103.8	90	110	
Ni	60	2	He	103.082	0.743	123001	1.07	100	103.1	90	110	
Cu	63	2	He	103.837	0.888	336045	1.02	100	103.8	90	110	
Zn	66	2	He	102.428	0.316	72704	0.31	100	102.4	90	110	
Al	27	2	He	105.559	0.814	19594	1.35	100	105.6	90	110	
B	11	1	No Gas	510.589	3.912	468088	3.36	500	102.1	90	110	
Al	27	1	No Gas	95.670	2.806	722376	1.15	100	95.7	90	110	
Si	28	1	No Gas	519.966	4.694	1910016	2.96	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.386	1.126	749320	1.50	100	100.4	90	110	
Cd	111	1	No Gas	100.679	1.549	152312	1.32	100	100.7	90	110	
Sr	88	1	No Gas	103.879	2.107	1440796	2.81	100	103.9	90	110	
Mo	95	1	No Gas	101.900	0.633	272367	2.22	100	101.9	90	110	
Sn	118	1	No Gas	100.827	1.927	459676	0.66	100	100.8	90	110	
Sb	121	1	No Gas	87.960	2.624	625288	0.54	100	88.0	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	101.033	0.867	224799	3.17	100	101.0	90	110	
Tl	205	1	No Gas	102.393	0.709	1710807	0.37	100	102.4	90	110	
Tl	203	1	No Gas	99.313	0.627	661837	1.56	100	99.3	90	110	
Pb	208	1	No Gas	99.194	2.015	2198015	2.54	100	99.2	90	110	
U	238	1	No Gas	102.896	1.284	2418015	0.45	100	102.9	90	110	
Ca	43	2	He	10421.580	2.526	11301	2.94	10000	104.2	90	110	
Sb	121	2	He	99.631	0.325	341547	0.86	100	99.6	90	110	
Ti	47	2	He	101.867	1.399	11151	1.01	100	101.9	90	110	
Cu	63	1	No Gas	101.861	3.113	580065	0.86	100	101.9	90	110	
Se	82	1	No Gas	101.700	4.934	7714	3.00	100	101.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	792193	5.96	675584	117.26	70	120	
Ge	72	2	He	375289	0.56	343019	109.41	70	120	
Ge	72	1	No Gas	1216317	2.74	1083014	112.31	70	120	
In	115	1	No Gas	1472488	2.46	1354249	108.73	70	120	
Bi	209	1	No Gas	1512479	0.93	1409443	107.31	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	048_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T13:03:24-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.204	-34.3	43144	1.1	0.5	
Be	9	1	No Gas	-0.010	-138.1	33	82.6	0.5	
V	51	2	He	0.445	2.0	1862	1.0	2.5	
Cr	52	2	He	0.076	53.2	1220	10.5	2.5	
Fe	56	2	He	1.712	46.9	14061	17.3	100	
Se	78	2	He	0.217	201.6	405	5.0	2	
As	75	2	He	0.154	26.3	138	13.3	2.5	
Ca	44	2	He	-18.895	-10.3	757	5.0	100	
Na	23	2	He	2.819	572.3	198756	4.8	100	
Mg	24	2	He	2.308	80.2	1007	60.7	100	
K	39	2	He	-10.258	-46.1	82285	2.2	100	
Mn	55	2	He	0.005	463.5	413	12.2	2.5	
Co	59	2	He	0.006	194.7	73	79.9	2.5	
Ni	60	2	He	-0.117	-15.4	97	21.5	2.5	
Cu	63	2	He	-0.153	-17.9	1200	7.6	2	
Zn	66	2	He	-0.307	-82.6	5901	2.5	2.5	
Al	27	2	He	-0.460	-104.7	447	19.0	5	
B	11	1	No Gas	40.543	12.5	52139	8.6	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.804	-6.7	14207	2.6	5	
Si	28	1	No Gas	-8.121	-10.5	231145	1.1	10	
Ag	107	1	No Gas	-0.087	-46.1	610	48.5	2.5	
Cd	111	1	No Gas	0.031	121.8	47	121.9	1	
Sr	88	1	No Gas	0.180	157.2	3024	127.5	2.5	
Mo	95	1	No Gas	0.034	115.2	113	90.1	2.5	
Sn	118	1	No Gas	0.058	26.9	1650	4.4	5	
Sb	121	1	No Gas	0.156	44.6	1450	33.0	2.5	
Ba	137	1	No Gas	0.030	316.8	203	100.8	2.5	
Tl	205	1	No Gas	0.017	152.0	443	97.1	1	
Tl	203	1	No Gas	0.021	141.4	187	103.9	1	
Pb	208	1	No Gas	-0.037	-179.9	2059	70.9	2.5	
U	238	1	No Gas	0.020	144.3	484	135.7	2.5	
Ca	43	2	He	-12.802	-41.6	37	15.7	100	
Sb	121	2	He	0.097	20.9	557	12.0	2.5	
Ti	47	2	He	0.059	156.8	10	100.0	2.5	
Cu	63	1	No Gas	-0.202	-19.0	3160	6.6	2.5	
Se	82	1	No Gas	5.121	141.3	-533	-112.4	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	779631	2.37	675584	115.40	70	120	
Ge	72	2	He	370103	0.37	343019	107.90	70	120	
Ge	72	1	No Gas	1176022	0.07	1083014	108.59	70	120	
In	115	1	No Gas	1442691	0.62	1354249	106.53	70	120	
Bi	209	1	No Gas	1494638	0.63	1409443	106.04	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	085_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T14:46:30-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.040	2.504	966972	0.93	100	105.0	90	110	
Be	9	1	No Gas	103.468	2.258	197802	0.72	100	103.5	90	110	
V	51	2	He	104.782	1.460	303979	0.73	100	104.8	90	110	
Cr	52	2	He	105.081	0.902	350422	0.80	100	105.1	90	110	
Fe	56	2	He	10322.508	0.469	33163115	0.26	10000	103.2	90	110	
Se	78	2	He	105.060	2.500	5334	2.41	100	105.1	90	110	
As	75	2	He	108.005	1.374	52745	0.70	100	108.0	90	110	
Ca	44	2	He	10339.071	0.191	203386	0.59	10000	103.4	90	110	
Na	23	2	He	10505.426	0.898	6807913	0.54	10000	105.1	90	110	
Mg	24	2	He	10662.899	1.746	3744082	1.12	10000	106.6	90	110	
K	39	2	He	10535.961	0.364	4373046	0.63	10000	105.4	90	110	
Mn	55	2	He	105.951	1.263	266571	1.02	100	106.0	90	110	
Co	59	2	He	105.264	1.603	519201	0.87	100	105.3	90	110	
Ni	60	2	He	104.896	1.420	131123	0.69	100	104.9	90	110	
Cu	63	2	He	104.845	1.259	355454	0.55	100	104.8	90	110	
Zn	66	2	He	104.559	1.652	77618	0.98	100	104.6	90	110	
Al	27	2	He	109.632	1.798	21297	1.02	100	109.6	90	110	
B	11	1	No Gas	490.021	5.768	439980	3.22	500	98.0	90	110	
Al	27	1	No Gas	98.827	0.979	752812	0.32	100	98.8	90	110	
Si	28	1	No Gas	559.359	2.097	2054530	1.18	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.173	1.203	791300	0.50	100	104.2	90	110	
Cd	111	1	No Gas	104.235	1.377	160494	1.12	100	104.2	90	110	
Sr	88	1	No Gas	104.629	2.912	1476816	2.92	100	104.6	90	110	
Mo	95	1	No Gas	103.210	0.918	280725	0.77	100	103.2	90	110	
Sn	118	1	No Gas	106.049	0.552	492048	0.20	100	106.0	90	110	
Sb	121	1	No Gas	96.116	1.458	689900	0.91	100	96.1	90	110	
Ba	137	1	No Gas	106.082	1.694	240132	1.03	100	106.1	90	110	
Tl	205	1	No Gas	109.848	0.351	1875481	0.41	100	109.8	90	110	
Tl	203	1	No Gas	105.892	2.005	721012	1.53	100	105.9	90	110	
Pb	208	1	No Gas	106.036	2.529	2400373	2.01	100	106.0	90	110	
U	238	1	No Gas	106.763	0.683	2563797	0.31	100	106.8	90	110	
Ca	43	2	He	10586.706	3.313	12025	2.92	10000	105.9	90	110	
Sb	121	2	He	104.104	0.831	373876	0.23	100	104.1	90	110	
Ti	47	2	He	103.896	1.885	11915	1.18	100	103.9	90	110	
Cu	63	1	No Gas	103.825	0.982	596984	0.34	100	103.8	90	110	
Se	82	1	No Gas	105.690	3.960	8138	4.06	100	105.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	774409	2.62	675584	114.63	70	120	
Ge	72	2	He	393192	0.73	343019	114.63	70	120	
Ge	72	1	No Gas	1227679	0.66	1083014	113.36	70	120	
In	115	1	No Gas	1498380	0.71	1354249	110.64	70	120	
Bi	209	1	No Gas	1545501	0.58	1409443	109.65	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	086_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T14:48:24-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.230	-37.3	42163	0.8	0.5	
Be	9	1	No Gas	-0.012	-78.2	30	57.7	0.5	
V	51	2	He	0.215	1.7	1266	1.0	2.5	
Cr	52	2	He	0.099	20.0	1323	5.0	2.5	
Fe	56	2	He	1.509	13.7	13774	4.5	100	
Se	78	2	He	-0.948	-4.2	362	0.6	2	
As	75	2	He	0.017	212.9	77	21.7	2.5	
Ca	44	2	He	-18.979	-38.4	773	17.6	100	
Na	23	2	He	-92.019	-3.9	146173	1.2	100	
Mg	24	2	He	0.974	6.3	580	3.4	100	
K	39	2	He	15.961	8.6	94572	0.6	100	
Mn	55	2	He	0.059	91.4	557	23.9	2.5	
Co	59	2	He	-0.003	-70.3	30	33.3	2.5	
Ni	60	2	He	-0.127	-10.1	87	17.6	2.5	
Cu	63	2	He	-0.271	-9.7	847	10.3	2	
Zn	66	2	He	-0.264	-126.0	6075	3.8	2.5	
Al	27	2	He	-0.684	-77.0	417	22.8	5	
B	11	1	No Gas	48.398	13.9	57874	8.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.815	-10.1	14224	2.3	5	
Si	28	1	No Gas	15.562	28.0	305613	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.113	-10.6	433	20.2	2.5	
Cd	111	1	No Gas	0.007	1.3	10	0.0	1	
Sr	88	1	No Gas	0.009	42.1	720	7.7	2.5	
Mo	95	1	No Gas	0.018	42.2	73	28.4	2.5	
Sn	118	1	No Gas	0.071	77.8	1743	13.2	5	
Sb	121	1	No Gas	0.259	15.2	2167	10.7	2.5	
Ba	137	1	No Gas	-0.013	-129.6	113	31.0	2.5	
Tl	205	1	No Gas	0.001	285.7	187	32.7	1	
Tl	203	1	No Gas	0.008	45.8	103	24.4	1	
Pb	208	1	No Gas	-0.096	-1.1	777	3.0	2.5	
U	238	1	No Gas	0.003	29.0	97	21.5	2.5	
Ca	43	2	He	-25.838	-20.5	23	24.7	100	
Sb	121	2	He	0.253	8.2	1110	6.3	2.5	
Ti	47	2	He	0.027	390.4	7	173.2	2.5	
Cu	63	1	No Gas	-0.367	-6.1	2277	7.0	2.5	
Se	82	1	No Gas	2.279	479.5	-760	-119.1	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	766039	2.17	675584	113.39	70	120	
Ge	72	2	He	379158	0.26	343019	110.54	70	120	
Ge	72	1	No Gas	1184422	2.26	1083014	109.36	70	120	
In	115	1	No Gas	1474969	1.32	1354249	108.91	70	120	
Bi	209	1	No Gas	1546406	1.44	1409443	109.72	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	097_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:13:28-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.157	134.8	38898	4.8	0.5	
Be	9	1	No Gas	0.111	194.6	227	156.0	0.5	
V	51	2	He	-0.094	-4.0	367	2.4	2.5	
Cr	52	2	He	0.078	29.4	1143	5.7	2.5	
Fe	56	2	He	2.851	2.6	16323	1.1	100	
Se	78	2	He	-0.464	-178.4	349	9.5	2	
As	75	2	He	0.017	371.1	70	39.0	2.5	
Ca	44	2	He	-24.278	-33.3	613	22.8	100	
Na	23	2	He	-106.043	-0.8	125329	0.4	100	
Mg	24	2	He	1.132	26.3	577	16.0	100	
K	39	2	He	5.106	35.4	82214	0.6	100	
Mn	55	2	He	0.199	18.2	813	9.9	2.5	
Co	59	2	He	0.001	825.2	43	58.1	2.5	
Ni	60	2	He	-0.120	-11.7	87	17.6	2.5	
Cu	63	2	He	-0.296	-10.1	697	12.9	2	
Zn	66	2	He	-0.679	-45.0	5281	3.2	2.5	
Al	27	2	He	-0.801	-26.6	360	9.6	5	
B	11	1	No Gas	37.530	14.7	41571	10.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.654	-32.6	13552	10.2	5	
Si	28	1	No Gas	16.631	66.4	272263	10.9	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.016	-1138.4	1072	118.3	2.5	
Cd	111	1	No Gas	0.144	160.3	203	160.5	1	
Sr	88	1	No Gas	0.893	168.8	12086	161.2	2.5	
Mo	95	1	No Gas	0.102	144.5	277	132.5	2.5	
Sn	118	1	No Gas	0.167	168.8	2025	59.5	5	
Sb	121	1	No Gas	0.220	136.0	1674	109.3	2.5	
Ba	137	1	No Gas	0.160	197.7	464	141.7	2.5	
Tl	205	1	No Gas	0.150	168.8	2594	158.9	1	
Tl	203	1	No Gas	0.142	161.2	970	153.6	1	
Pb	208	1	No Gas	0.039	593.2	3638	136.1	2.5	
U	238	1	No Gas	0.132	169.8	3044	168.4	2.5	
Ca	43	2	He	-27.099	-37.0	20	50.0	100	
Sb	121	2	He	0.026	63.0	297	17.3	2.5	
Ti	47	2	He	0.000	-13771.0	3	173.2	2.5	
Cu	63	1	No Gas	-0.169	-72.0	2967	20.6	2.5	
Se	82	1	No Gas	6.590	148.9	-352	-200.6	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	654166	0.89	675584	96.83	70	120	
Ge	72	2	He	345138	0.22	343019	100.62	70	120	
Ge	72	1	No Gas	1043630	2.63	1083014	96.36	70	120	
In	115	1	No Gas	1363695	1.87	1354249	100.70	70	120	
Bi	209	1	No Gas	1451312	1.45	1409443	102.97	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	099_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:20:33-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.658	1.075	843729	0.77	100	101.7	90	110	
Be	9	1	No Gas	99.106	1.480	170545	0.34	100	99.1	90	110	
V	51	2	He	100.281	1.190	263131	0.73	100	100.3	90	110	
Cr	52	2	He	101.060	0.825	304815	0.34	100	101.1	90	110	
Fe	56	2	He	9883.293	1.079	28715029	0.58	10000	98.8	90	110	
Se	78	2	He	101.135	3.310	4657	3.00	100	101.1	90	110	
As	75	2	He	101.765	0.163	44951	0.70	100	101.8	90	110	
Ca	44	2	He	9965.367	1.509	177318	1.22	10000	99.7	90	110	
Na	23	2	He	10027.189	1.167	5885138	0.85	10000	100.3	90	110	
Mg	24	2	He	10091.182	1.632	3204704	1.75	10000	100.9	90	110	
K	39	2	He	9960.401	0.629	3743385	1.17	10000	99.6	90	110	
Mn	55	2	He	100.301	1.762	228235	1.29	100	100.3	90	110	
Co	59	2	He	101.297	1.548	451857	1.00	100	101.3	90	110	
Ni	60	2	He	100.236	2.694	113322	2.27	100	100.2	90	110	
Cu	63	2	He	100.878	0.950	309366	0.69	100	100.9	90	110	
Zn	66	2	He	100.892	3.176	67936	2.48	100	100.9	90	110	
Al	27	2	He	99.878	3.063	17591	2.59	100	99.9	90	110	
B	11	1	No Gas	468.799	1.980	379820	2.84	500	93.8	90	110	
Al	27	1	No Gas	94.912	0.783	651475	0.58	100	94.9	90	110	
Si	28	1	No Gas	515.830	1.565	1724183	1.82	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.748	0.775	701879	0.04	100	100.7	90	110	
Cd	111	1	No Gas	101.530	1.193	143365	0.65	100	101.5	90	110	
Sr	88	1	No Gas	101.209	1.940	1310033	1.46	100	101.2	90	110	
Mo	95	1	No Gas	98.503	0.880	245704	0.14	100	98.5	90	110	
Sn	118	1	No Gas	101.781	1.194	433129	0.65	100	101.8	90	110	
Sb	121	1	No Gas	93.638	0.347	604976	0.80	100	93.6	90	110	
Ba	137	1	No Gas	102.067	0.765	211901	0.66	100	102.1	90	110	
Tl	205	1	No Gas	104.916	2.369	1673035	0.73	100	104.9	90	110	
Tl	203	1	No Gas	102.670	1.733	653022	0.71	100	102.7	90	110	
Pb	208	1	No Gas	98.845	1.857	2090374	0.47	100	98.8	90	110	
U	238	1	No Gas	104.208	2.290	2337299	0.60	100	104.2	90	110	
Ca	43	2	He	9978.011	4.916	10254	4.99	10000	99.8	90	110	
Sb	121	2	He	101.017	1.014	328102	0.68	100	101.0	90	110	
Ti	47	2	He	97.602	4.047	10124	4.03	100	97.6	90	110	
Cu	63	1	No Gas	101.207	0.258	523883	0.53	100	101.2	90	110	
Se	82	1	No Gas	105.567	9.623	7313	10.44	100	105.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	696927	1.77	675584	103.16	70	120	
Ge	72	2	He	355585	0.56	343019	103.66	70	120	
Ge	72	1	No Gas	1104958	0.48	1083014	102.03	70	120	
In	115	1	No Gas	1374138	0.79	1354249	101.47	70	120	
Bi	209	1	No Gas	1443870	1.80	1409443	102.44	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	100_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:24:11-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.416	7.198	825638	0.23	100	98.4	90	110	
Be	9	1	No Gas	97.605	4.909	169675	2.03	100	97.6	90	110	
V	51	2	He	99.417	0.543	258916	0.94	100	99.4	90	110	
Cr	52	2	He	99.869	0.898	298974	1.20	100	99.9	90	110	
Fe	56	2	He	9828.677	0.589	28343555	1.45	10000	98.3	90	110	
Se	78	2	He	101.814	3.653	4650	2.49	100	101.8	90	110	
As	75	2	He	101.910	0.999	44674	0.56	100	101.9	90	110	
Ca	44	2	He	9861.010	0.786	174178	2.19	10000	98.6	90	110	
Na	23	2	He	10026.319	1.635	5840138	1.12	10000	100.3	90	110	
Mg	24	2	He	10167.194	0.939	3204387	0.52	10000	101.7	90	110	
K	39	2	He	10049.463	0.653	3747694	1.34	10000	100.5	90	110	
Mn	55	2	He	100.241	1.272	226417	2.30	100	100.2	90	110	
Co	59	2	He	100.663	1.166	445646	0.43	100	100.7	90	110	
Ni	60	2	He	99.301	0.491	111440	1.82	100	99.3	90	110	
Cu	63	2	He	98.882	1.106	300990	0.91	100	98.9	90	110	
Zn	66	2	He	102.545	1.964	68432	0.36	100	102.5	90	110	
Al	27	2	He	101.139	2.393	17675	2.54	100	101.1	90	110	
B	11	1	No Gas	481.674	5.747	393661	2.32	500	96.3	90	110	
Al	27	1	No Gas	95.218	5.285	649313	1.44	100	95.2	90	110	
Si	28	1	No Gas	519.590	5.445	1724058	1.82	5000	10.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.254	1.457	688799	0.72	100	99.3	90	110	
Cd	111	1	No Gas	100.090	1.001	140802	1.88	100	100.1	90	110	
Sr	88	1	No Gas	98.530	2.509	1270274	0.72	100	98.5	90	110	
Mo	95	1	No Gas	98.089	2.160	243706	1.20	100	98.1	90	110	
Sn	118	1	No Gas	100.138	1.488	424504	0.70	100	100.1	90	110	
Sb	121	1	No Gas	93.022	5.630	596989	0.94	100	93.0	90	110	
Ba	137	1	No Gas	101.162	1.373	209206	0.74	100	101.2	90	110	
Tl	205	1	No Gas	104.405	2.084	1660631	1.42	100	104.4	90	110	
Tl	203	1	No Gas	100.180	1.594	635515	0.98	100	100.2	90	110	
Pb	208	1	No Gas	96.461	2.385	2034472	0.58	100	96.5	90	110	
U	238	1	No Gas	100.843	2.224	2255839	0.24	100	100.8	90	110	
Ca	43	2	He	10374.833	2.223	10578	0.76	10000	103.7	90	110	
Sb	121	2	He	99.767	1.091	321616	1.43	100	99.8	90	110	
Ti	47	2	He	98.075	6.653	10097	6.85	100	98.1	90	110	
Cu	63	1	No Gas	100.090	5.955	514633	0.82	100	100.1	90	110	
Se	82	1	No Gas	96.441	9.796	6558	8.43	100	96.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	705526	7.03	675584	104.43	70	120	
Ge	72	2	He	352925	1.46	343019	102.89	70	120	
Ge	72	1	No Gas	1100311	6.61	1083014	101.60	70	120	
In	115	1	No Gas	1369008	2.10	1354249	101.09	70	120	
Bi	209	1	No Gas	1440098	2.10	1409443	102.17	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01PDS
Data File Name	101SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:26:09-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	19.845	19.845	1.78	220547	0.01	2000	
Be	9	1	No Gas	100.696	100.696	1.46	193953	0.05	2000	
V	51	2	He	107.828	107.828	0.48	305021	0.04	2000	
Cr	52	2	He	443.818	443.818	1.30	1439892	0.03	2000	
Fe	56	2	He	16304.667	16304.667	0.47	51072413	0.03	200000	
Se	78	2	He	102.091	102.091	2.08	5066	2.02	2000	
As	75	2	He	107.619	107.619	1.11	51250	0.21	2000	
Ca	44	2	He	117906.195	117906.195	0.33	2249715	5.24	200000	
Na	23	2	He	436901.014	436901.014	0.70	267793076	0.16	200000	>LDR
Mg	24	2	He	87194.203	87194.203	1.38	29853621	0.29	200000	
K	39	2	He	11679.110	11679.110	0.61	4717062	0.25	200000	
Mn	55	2	He	1195.430	1195.430	1.05	2928571	0.04	2000	
Co	59	2	He	132.079	132.079	0.70	635264	0.02	2000	
Ni	60	2	He	2252.169	2252.169	1.11	2740355	0.08	2000	>LDR
Cu	63	2	He	112.941	112.941	0.45	373247	0.03	2000	
Zn	66	2	He	110.624	110.624	1.28	79713	0.14	2000	
Al	27	2	He	132.691	132.691	2.92	25020	0.53	2000	
B	11	1	No Gas	47.787	47.787	7.78	58466	0.08	2000	
Al	27	1	No Gas	133.341	133.341	2.43	984671	0.01	2000	
Si	28	1	No Gas	15874.885	15874.885	2.75	49787116	0.03	2000	>LDR
Ag	107	1	No Gas	101.475	101.475	1.00	748524	0.01	2000	
Cd	111	1	No Gas	104.358	104.358	2.32	156010	0.07	2000	
Sr	88	1	No Gas	1594.529	1594.529	1.44	21845427	0.01	2000	
Mo	95	1	No Gas	110.292	110.292	1.37	291284	0.04	2000	
Sn	118	1	No Gas	0.070	0.070	23.82	1720	0.00	2000	
Sb	121	1	No Gas	93.845	93.845	2.70	657694	0.01	2000	
Ba	137	1	No Gas	170.566	170.566	1.04	374843	0.05	2000	
Tl	205	1	No Gas	107.688	107.688	1.94	1752630	0.01	2000	
Tl	203	1	No Gas	105.502	105.502	1.34	684805	0.02	2000	
Pb	208	1	No Gas	104.216	104.216	0.76	2249257	0.00	2000	
U	238	1	No Gas	0.201	0.201	1.33	4631	0.00	2000	
Ca	43	2	He	115755.645	115755.645	1.49	127702	90.65	200000	
Sb	121	2	He	103.628	103.628	0.74	362904	0.03	2000	
Ti	47	2	He	105.203	105.203	2.11	11765	0.89	2000	
Cu	63	1	No Gas	113.311	113.311	1.68	635825	0.02	2000	
Zn	66	1	No Gas	110.490	110.490	2.70	187656	0.06	2000	
Se	82	1	No Gas	107.711	107.711	6.52	8121	1.33	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	780051	1.57	675584	115.46	70	120	
Ge	72	2	He	383396	0.30	343019	111.77	70	120	
Ge	72	1	No Gas	1199105	2.40	1083014	110.72	70	120	
In	115	1	No Gas	1455040	1.45	1354249	107.44	70	120	
Bi	209	1	No Gas	1473455	1.86	1409443	104.54	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-01
Data File Name	109SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:51:50-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	49.632	49.632	0.85	434116	0.01	2000	
Be	9	1	No Gas	0.072	0.072	10.44	172	0.04	2000	
V	51	2	He	0.676	0.676	2.40	2416	0.03	2000	
Cr	52	2	He	27.731	27.731	0.50	85141	0.03	2000	
Fe	56	2	He	302130.403	302130.403	0.45	886010733	0.03	200000	>LDR
Se	78	2	He	-1.758	-1.758	-50.64	308	-0.57	2000	
As	75	2	He	0.814	0.814	1.80	428	0.19	2000	
Ca	44	2	He	227902.882	227902.882	0.67	4070703	5.60	200000	>LDR
Na	23	2	He	275330.064	275330.064	0.34	158097614	0.17	200000	>LDR
Mg	24	2	He	121210.900	121210.900	0.69	38859316	0.31	200000	
K	39	2	He	6626.980	6626.980	1.42	2542309	0.26	200000	
Mn	55	2	He	19451.964	19451.964	0.13	44615106	0.04	2000	>LDR
Co	59	2	He	0.324	0.324	4.52	1500	0.02	2000	
Ni	60	2	He	4.445	4.445	5.78	5291	0.08	2000	
Cu	63	2	He	0.705	0.705	9.31	3807	0.02	2000	
Zn	66	2	He	2.841	2.841	26.18	7682	0.04	2000	
Al	27	2	He	59.599	59.599	5.82	10804	0.55	2000	
B	11	1	No Gas	26.607	26.607	7.35	35893	0.07	2000	
Al	27	1	No Gas	53.692	53.692	0.37	390970	0.01	2000	
Si	28	1	No Gas	15795.348	15795.348	0.71	47401219	0.03	2000	>LDR
Ag	107	1	No Gas	-0.147	-0.147	-0.98	170	-0.09	2000	
Cd	111	1	No Gas	0.147	0.147	28.57	210	0.07	2000	
Sr	88	1	No Gas	3277.078	3277.078	1.08	42895663	0.01	2000	>LDR
Mo	95	1	No Gas	0.124	0.124	12.83	337	0.04	2000	
Sn	118	1	No Gas	-0.058	-0.058	-37.46	1093	-0.01	2000	
Sb	121	1	No Gas	0.105	0.105	8.18	1070	0.01	2000	
Ba	137	1	No Gas	74.238	74.238	1.47	155943	0.05	2000	
Tl	205	1	No Gas	-0.007	-0.007	-8.65	40	-0.02	2000	
Tl	203	1	No Gas	-0.005	-0.005	-49.90	17	-0.03	2000	
Pb	208	1	No Gas	0.395	0.395	1.93	11125	0.00	2000	
U	238	1	No Gas	0.049	0.049	11.85	1120	0.00	2000	
Ca	43	2	He	230319.935	230319.935	0.67	237885	96.82	200000	>LDR
Sb	121	2	He	0.054	0.054	44.52	400	0.01	2000	
Ti	47	2	He	0.507	0.507	38.52	57	0.90	2000	
Cu	63	1	No Gas	1.962	1.962	3.65	14621	0.01	2000	
Zn	66	1	No Gas	3.968	3.968	2.07	19551	0.02	2000	
Se	82	1	No Gas	-0.456	-0.456	-1963.78	-967	0.05	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	699459	0.79	675584	103.53	70	120	
Ge	72	2	He	359000	0.86	343019	104.66	70	120	
Ge	72	1	No Gas	1146886	1.11	1083014	105.90	70	120	
In	115	1	No Gas	1390051	0.72	1354249	102.64	70	120	
Bi	209	1	No Gas	1445653	1.40	1409443	102.57	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	111_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:56:42-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.456	4.954	820077	2.00	100	99.5	90	110	
Be	9	1	No Gas	98.546	3.049	168362	0.84	100	98.5	90	110	
V	51	2	He	101.167	0.878	264822	0.38	100	101.2	90	110	
Cr	52	2	He	101.993	1.101	306887	0.73	100	102.0	90	110	
Fe	56	2	He	10126.735	0.996	29352278	0.52	10000	101.3	90	110	
Se	78	2	He	99.296	0.755	4569	0.29	100	99.3	90	110	
As	75	2	He	103.223	1.224	45484	0.91	100	103.2	90	110	
Ca	44	2	He	10027.689	1.240	177997	0.99	10000	100.3	90	110	
Na	23	2	He	10309.633	1.001	6031447	1.26	10000	103.1	90	110	
Mg	24	2	He	10378.704	0.321	3288118	0.20	10000	103.8	90	110	
K	39	2	He	10143.257	0.673	3801350	0.20	10000	101.4	90	110	
Mn	55	2	He	106.515	3.010	241789	3.07	100	106.5	90	110	
Co	59	2	He	103.530	1.409	460724	0.90	100	103.5	90	110	
Ni	60	2	He	102.204	1.538	115271	1.07	100	102.2	90	110	
Cu	63	2	He	101.995	1.049	312025	0.56	100	102.0	90	110	
Zn	66	2	He	102.735	1.072	68911	1.01	100	102.7	90	110	
Al	27	2	He	102.385	2.239	17979	2.14	100	102.4	90	110	
B	11	1	No Gas	467.440	2.947	375998	1.62	500	93.5	90	110	
Al	27	1	No Gas	92.951	2.053	647009	0.23	100	93.0	90	110	
Si	28	1	No Gas	545.290	7.494	1835432	8.72	5000	10.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.875	2.004	703037	0.85	100	98.9	90	110	
Cd	111	1	No Gas	99.911	1.807	143992	1.08	100	99.9	90	110	
Sr	88	1	No Gas	103.087	7.278	1362833	8.47	100	103.1	90	110	
Mo	95	1	No Gas	97.157	1.849	247340	0.69	100	97.2	90	110	
Sn	118	1	No Gas	99.836	1.396	433656	0.25	100	99.8	90	110	
Sb	121	1	No Gas	92.488	1.864	605608	0.36	100	92.5	90	110	
Ba	137	1	No Gas	100.195	1.516	212307	0.37	100	100.2	90	110	
Tl	205	1	No Gas	103.393	1.578	1680930	1.64	100	103.4	90	110	
Tl	203	1	No Gas	101.065	1.338	655261	0.12	100	101.1	90	110	
Pb	208	1	No Gas	96.972	2.081	2090444	0.80	100	97.0	90	110	
U	238	1	No Gas	101.301	0.725	2316439	0.85	100	101.3	90	110	
Ca	43	2	He	10012.052	1.047	10264	1.12	10000	100.1	90	110	
Sb	121	2	He	102.284	0.565	331424	0.06	100	102.3	90	110	
Ti	47	2	He	100.744	2.888	10424	2.45	100	100.7	90	110	
Cu	63	1	No Gas	98.911	2.467	518956	0.50	100	98.9	90	110	
Se	82	1	No Gas	100.980	0.638	7054	2.27	100	101.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	692209	3.03	675584	102.46	70	120	
Ge	72	2	He	354739	0.52	343019	103.42	70	120	
Ge	72	1	No Gas	1120173	2.24	1083014	103.43	70	120	
In	115	1	No Gas	1402599	1.17	1354249	103.57	70	120	
Bi	209	1	No Gas	1471717	1.31	1409443	104.42	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	112_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T15:58:52-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.195	69.0	39349	3.9	0.5	
Be	9	1	No Gas	0.143	74.3	278	63.4	0.5	
V	51	2	He	-0.043	-44.9	492	10.2	2.5	
Cr	52	2	He	0.149	24.0	1340	7.5	2.5	
Fe	56	2	He	40.607	31.7	121827	29.9	100	
Se	78	2	He	-0.265	-148.3	355	4.8	2	
As	75	2	He	0.032	79.0	76	14.2	2.5	
Ca	44	2	He	13.016	151.7	1244	27.3	100	
Na	23	2	He	-23.597	-98.7	169403	7.8	100	
Mg	24	2	He	26.710	50.5	8398	49.4	100	
K	39	2	He	13.963	45.7	84673	2.7	100	
Mn	55	2	He	2.324	42.5	5459	39.9	2.5	
Co	59	2	He	0.046	32.3	237	27.2	2.5	
Ni	60	2	He	-0.058	-96.3	153	39.9	2.5	
Cu	63	2	He	-0.301	-8.8	677	11.5	2	
Zn	66	2	He	-0.280	-65.9	5475	2.0	2.5	
Al	27	2	He	-0.359	-82.8	430	11.6	5	
B	11	1	No Gas	29.461	15.0	35836	10.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.486	-85.0	15420	19.2	5	
Si	28	1	No Gas	18.755	54.2	293342	11.0	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.024	424.1	1357	52.9	2.5	
Cd	111	1	No Gas	0.144	39.0	203	40.1	1	
Sr	88	1	No Gas	1.787	72.0	23792	70.7	2.5	
Mo	95	1	No Gas	0.138	74.8	370	70.4	2.5	
Sn	118	1	No Gas	0.128	46.6	1867	14.7	5	
Sb	121	1	No Gas	0.207	48.8	1687	39.8	2.5	
Ba	137	1	No Gas	0.196	63.2	540	48.6	2.5	
Tl	205	1	No Gas	0.179	69.9	3060	68.2	1	
Tl	203	1	No Gas	0.177	60.3	1191	60.0	1	
Pb	208	1	No Gas	0.074	164.9	4392	61.8	2.5	
U	238	1	No Gas	0.167	67.1	3836	68.6	2.5	
Ca	43	2	He	13.723	75.1	60	16.7	100	
Sb	121	2	He	0.102	38.4	530	22.9	2.5	
Ti	47	2	He	0.033	346.4	7	173.2	2.5	
Cu	63	1	No Gas	0.084	127.1	4424	13.3	2.5	
Se	82	1	No Gas	6.726	104.8	-374	-145.9	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	657001	1.83	675584	97.25	70	120	
Ge	72	2	He	342300	0.29	343019	99.79	70	120	
Ge	72	1	No Gas	1099869	1.34	1083014	101.56	70	120	
In	115	1	No Gas	1370956	1.57	1354249	101.23	70	120	
Bi	209	1	No Gas	1454154	2.53	1409443	103.17	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-02
Data File Name	121SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:17:55-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	144.881	144.881	4.72	1272591	0.01	2000	
Be	9	1	No Gas	9.169	9.169	2.14	16992	0.05	2000	
V	51	2	He	0.317	0.317	14.90	1586	0.02	2000	
Cr	52	2	He	386.179	386.179	2.38	1267832	0.03	2000	
Fe	56	2	He	46034.713	46034.713	1.36	145888111	0.03	200000	
Se	78	2	He	3.235	3.235	19.62	563	0.57	2000	
As	75	2	He	1.565	1.565	7.56	823	0.19	2000	
Ca	44	2	He	36679.614	36679.614	1.35	708949	5.17	200000	
Na	23	2	He	568203.974	568203.974	1.49	352334168	0.16	200000	>LDR
Mg	24	2	He	55731.397	55731.397	0.74	19308323	0.29	200000	
K	39	2	He	3630.590	3630.590	3.15	1545866	0.23	200000	
Mn	55	2	He	9366.298	9366.298	1.19	23214298	0.04	2000	>LDR
Co	59	2	He	366.211	366.211	3.87	1781938	0.02	2000	
Ni	60	2	He	1097.485	1097.485	3.05	1351184	0.08	2000	
Cu	63	2	He	2.933	2.933	3.07	11528	0.03	2000	
Zn	66	2	He	327.819	327.819	1.25	226465	0.14	2000	
Al	27	2	He	3572.819	3572.819	1.04	667323	0.54	2000	>LDR
B	11	1	No Gas	21.862	21.862	5.10	34442	0.06	2000	
Al	27	1	No Gas	3458.247	3458.247	2.76	25296376	0.01	2000	>LDR
Si	28	1	No Gas	35362.914	35362.914	1.82	111773968	0.03	2000	>LDR
Ag	107	1	No Gas	-0.136	-0.136	-5.32	260	-0.05	2000	
Cd	111	1	No Gas	0.961	0.961	9.51	1463	0.07	2000	
Sr	88	1	No Gas	783.657	783.657	1.66	10932190	0.01	2000	
Mo	95	1	No Gas	0.553	0.553	5.11	1513	0.04	2000	
Sn	118	1	No Gas	0.024	0.024	173.61	1537	0.00	2000	
Sb	121	1	No Gas	0.047	0.047	42.48	720	0.01	2000	
Ba	137	1	No Gas	11.777	11.777	2.15	26484	0.04	2000	
Tl	205	1	No Gas	0.137	0.137	1.54	2520	0.01	2000	
Tl	203	1	No Gas	0.137	0.137	4.01	990	0.01	2000	
Pb	208	1	No Gas	0.763	0.763	3.69	20360	0.00	2000	
U	238	1	No Gas	0.961	0.961	2.74	23303	0.00	2000	
Ca	43	2	He	38305.527	38305.527	0.85	42797	89.51	200000	
Sb	121	2	He	0.027	0.027	59.82	337	0.01	2000	
Ti	47	2	He	0.291	0.291	35.41	37	0.79	2000	
Cu	63	1	No Gas	5.323	5.323	1.22	34380	0.02	2000	
Zn	66	1	No Gas	327.132	327.132	1.90	533396	0.06	2000	
Se	82	1	No Gas	2.803	2.803	322.51	-754	-0.37	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	748415	1.39	675584	110.78	70	120	
Ge	72	2	He	387960	0.81	343019	113.10	70	120	
Ge	72	1	No Gas	1211675	1.49	1083014	111.88	70	120	
In	115	1	No Gas	1481381	0.47	1354249	109.39	70	120	
Bi	209	1	No Gas	1558134	0.78	1409443	110.55	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	123_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:24:40-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.057	0.579	903173	0.25	100	105.1	90	110	
Be	9	1	No Gas	104.567	0.630	186683	0.28	100	104.6	90	110	
V	51	2	He	105.123	1.781	290621	0.84	100	105.1	90	110	
Cr	52	2	He	106.033	2.281	336928	1.28	100	106.0	90	110	
Fe	56	2	He	10349.219	1.631	31683806	0.73	10000	103.5	90	110	
Se	78	2	He	103.978	2.401	5034	1.59	100	104.0	90	110	
As	75	2	He	107.785	0.288	50167	0.99	100	107.8	90	110	
Ca	44	2	He	10263.717	1.072	192411	0.26	10000	102.6	90	110	
Na	23	2	He	10591.629	1.380	6539288	0.68	10000	105.9	90	110	
Mg	24	2	He	10681.802	1.653	3574512	1.38	10000	106.8	90	110	
K	39	2	He	10539.663	1.863	4168522	0.92	10000	105.4	90	110	
Mn	55	2	He	105.016	0.798	251808	1.03	100	105.0	90	110	
Co	59	2	He	105.239	0.688	494702	0.61	100	105.2	90	110	
Ni	60	2	He	104.721	1.303	124750	0.28	100	104.7	90	110	
Cu	63	2	He	105.338	1.205	340329	0.32	100	105.3	90	110	
Zn	66	2	He	105.509	1.485	74588	1.25	100	105.5	90	110	
Al	27	2	He	110.242	0.770	20409	1.74	100	110.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	516.509	2.646	432457	2.28	500	103.3	90	110	
Al	27	1	No Gas	96.355	1.862	716241	0.04	100	96.4	90	110	
Si	28	1	No Gas	513.584	2.347	1860893	0.87	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.845	0.950	771632	0.25	100	104.8	90	110	
Cd	111	1	No Gas	106.190	1.268	158433	1.87	100	106.2	90	110	
Sr	88	1	No Gas	104.393	1.829	1427604	1.53	100	104.4	90	110	
Mo	95	1	No Gas	103.055	0.697	271584	0.47	100	103.1	90	110	
Sn	118	1	No Gas	106.015	0.561	476593	0.39	100	106.0	90	110	
Sb	121	1	No Gas	95.303	1.511	667100	0.47	100	95.3	90	110	
Ba	137	1	No Gas	106.912	1.437	234485	0.88	100	106.9	90	110	
Tl	205	1	No Gas	109.393	0.250	1860371	0.66	100	109.4	90	110	
Tl	203	1	No Gas	105.832	1.855	717745	1.09	100	105.8	90	110	
Pb	208	1	No Gas	102.158	2.622	2303503	1.90	100	102.2	90	110	
U	238	1	No Gas	105.328	0.433	2519500	1.14	100	105.3	90	110	
Ca	43	2	He	10614.079	2.187	11492	2.77	10000	106.1	90	110	
Sb	121	2	He	105.110	1.613	359728	0.94	100	105.1	90	110	
Ti	47	2	He	101.535	0.838	11098	0.70	100	101.5	90	110	
Cu	63	1	No Gas	102.069	2.151	572346	0.30	100	102.1	90	110	
Se	82	1	No Gas	103.590	5.101	7765	7.25	100	103.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722932	0.45	675584	107.01	70	120	
Ge	72	2	He	374717	1.11	343019	109.24	70	120	
Ge	72	1	No Gas	1197369	1.81	1083014	110.56	70	120	
In	115	1	No Gas	1451769	0.70	1354249	107.20	70	120	
Bi	209	1	No Gas	1539422	0.78	1409443	109.22	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	123_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:24:40-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	105.057	0.579	903173	0.25	100	105.1	90	110	
Be	9	1	No Gas	104.567	0.630	186683	0.28	100	104.6	90	110	
V	51	2	He	105.123	1.781	290621	0.84	100	105.1	90	110	
Cr	52	2	He	106.033	2.281	336928	1.28	100	106.0	90	110	
Fe	56	2	He	10349.219	1.631	31683806	0.73	10000	103.5	90	110	
Se	78	2	He	103.978	2.401	5034	1.59	100	104.0	90	110	
As	75	2	He	107.785	0.288	50167	0.99	100	107.8	90	110	
Ca	44	2	He	10263.717	1.072	192411	0.26	10000	102.6	90	110	
Na	23	2	He	10591.629	1.380	6539288	0.68	10000	105.9	90	110	
Mg	24	2	He	10681.802	1.653	3574512	1.38	10000	106.8	90	110	
K	39	2	He	10539.663	1.863	4168522	0.92	10000	105.4	90	110	
Mn	55	2	He	105.016	0.798	251808	1.03	100	105.0	90	110	
Co	59	2	He	105.239	0.688	494702	0.61	100	105.2	90	110	
Ni	60	2	He	104.721	1.303	124750	0.28	100	104.7	90	110	
Cu	63	2	He	105.338	1.205	340329	0.32	100	105.3	90	110	
Zn	66	2	He	105.509	1.485	74588	1.25	100	105.5	90	110	
Al	27	2	He	110.242	0.770	20409	1.74	100	110.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	516.509	2.646	432457	2.28	500	103.3	90	110	
Al	27	1	No Gas	96.355	1.862	716241	0.04	100	96.4	90	110	
Si	28	1	No Gas	513.584	2.347	1860893	0.87	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	104.845	0.950	771632	0.25	100	104.8	90	110	
Cd	111	1	No Gas	106.190	1.268	158433	1.87	100	106.2	90	110	
Sr	88	1	No Gas	104.393	1.829	1427604	1.53	100	104.4	90	110	
Mo	95	1	No Gas	103.055	0.697	271584	0.47	100	103.1	90	110	
Sn	118	1	No Gas	106.015	0.561	476593	0.39	100	106.0	90	110	
Sb	121	1	No Gas	95.303	1.511	667100	0.47	100	95.3	90	110	
Ba	137	1	No Gas	106.912	1.437	234485	0.88	100	106.9	90	110	
Tl	205	1	No Gas	109.393	0.250	1860371	0.66	100	109.4	90	110	
Tl	203	1	No Gas	105.832	1.855	717745	1.09	100	105.8	90	110	
Pb	208	1	No Gas	102.158	2.622	2303503	1.90	100	102.2	90	110	
U	238	1	No Gas	105.328	0.433	2519500	1.14	100	105.3	90	110	
Ca	43	2	He	10614.079	2.187	11492	2.77	10000	106.1	90	110	
Sb	121	2	He	105.110	1.613	359728	0.94	100	105.1	90	110	
Ti	47	2	He	101.535	0.838	11098	0.70	100	101.5	90	110	
Cu	63	1	No Gas	102.069	2.151	572346	0.30	100	102.1	90	110	
Se	82	1	No Gas	103.590	5.101	7765	7.25	100	103.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	722932	0.45	675584	107.01	70	120	
Ge	72	2	He	374717	1.11	343019	109.24	70	120	
Ge	72	1	No Gas	1197369	1.81	1083014	110.56	70	120	
In	115	1	No Gas	1451769	0.70	1354249	107.20	70	120	
Bi	209	1	No Gas	1539422	0.78	1409443	109.22	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	124_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:26:35-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.202	-129.9	39350	1.6	0.5	
Be	9	1	No Gas	-0.012	-59.0	28	40.8	0.5	
V	51	2	He	-0.049	-21.4	501	5.1	2.5	
Cr	52	2	He	0.052	45.6	1113	6.1	2.5	
Fe	56	2	He	0.701	20.7	10711	4.3	100	
Se	78	2	He	-0.995	-34.1	342	4.8	2	
As	75	2	He	-0.005	-901.8	63	29.3	2.5	
Ca	44	2	He	-38.036	-7.1	393	11.7	100	
Na	23	2	He	-80.129	-4.0	145732	1.0	100	
Mg	24	2	He	0.473	31.5	390	12.8	100	
K	39	2	He	1.554	305.1	84491	1.7	100	
Mn	55	2	He	0.022	105.8	443	12.4	2.5	
Co	59	2	He	-0.003	-167.0	30	66.7	2.5	
Ni	60	2	He	-0.135	-3.9	73	7.9	2.5	
Cu	63	2	He	-0.365	-5.8	513	13.0	2	
Zn	66	2	He	-0.296	-90.6	5751	2.6	2.5	
Al	27	2	He	-1.661	-31.6	227	40.0	5	
B	11	1	No Gas	23.924	18.1	34361	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.661	-9.2	7886	13.6	5	
Si	28	1	No Gas	-2.757	-49.8	240085	1.6	10	
Ag	107	1	No Gas	-0.111	-23.3	427	43.9	2.5	
Cd	111	1	No Gas	0.014	132.0	20	132.3	1	
Sr	88	1	No Gas	0.019	399.7	811	122.0	2.5	
Mo	95	1	No Gas	0.028	172.5	97	129.3	2.5	
Sn	118	1	No Gas	0.102	191.9	1798	46.7	5	
Sb	121	1	No Gas	0.054	50.9	727	25.5	2.5	
Ba	137	1	No Gas	-0.031	-54.4	70	51.5	2.5	
Tl	205	1	No Gas	0.009	146.6	313	71.0	1	
Tl	203	1	No Gas	0.012	76.5	130	46.8	1	
Pb	208	1	No Gas	-0.090	-12.9	903	27.6	2.5	
U	238	1	No Gas	0.007	141.7	200	121.3	2.5	
Ca	43	2	He	-34.320	-43.2	13	114.6	100	
Sb	121	2	He	0.021	85.2	293	20.0	2.5	
Ti	47	2	He	0.030	183.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.065	-125.7	3791	11.8	2.5	
Se	82	1	No Gas	7.082	53.1	-359	-84.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711467	3.74	675584	105.31	70	120	
Ge	72	2	He	360266	0.53	343019	105.03	70	120	
Ge	72	1	No Gas	1140508	0.47	1083014	105.31	70	120	
In	115	1	No Gas	1406131	0.76	1354249	103.83	70	120	
Bi	209	1	No Gas	1504783	1.01	1409443	106.76	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	124_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:26:35-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.202	-129.9	39350	1.6	0.5	
Be	9	1	No Gas	-0.012	-59.0	28	40.8	0.5	
V	51	2	He	-0.049	-21.4	501	5.1	2.5	
Cr	52	2	He	0.052	45.6	1113	6.1	2.5	
Fe	56	2	He	0.701	20.7	10711	4.3	100	
Se	78	2	He	-0.995	-34.1	342	4.8	2	
As	75	2	He	-0.005	-901.8	63	29.3	2.5	
Ca	44	2	He	-38.036	-7.1	393	11.7	100	
Na	23	2	He	-80.129	-4.0	145732	1.0	100	
Mg	24	2	He	0.473	31.5	390	12.8	100	
K	39	2	He	1.554	305.1	84491	1.7	100	
Mn	55	2	He	0.022	105.8	443	12.4	2.5	
Co	59	2	He	-0.003	-167.0	30	66.7	2.5	
Ni	60	2	He	-0.135	-3.9	73	7.9	2.5	
Cu	63	2	He	-0.365	-5.8	513	13.0	2	
Zn	66	2	He	-0.296	-90.6	5751	2.6	2.5	
Al	27	2	He	-1.661	-31.6	227	40.0	5	
B	11	1	No Gas	23.924	18.1	34361	9.8	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.661	-9.2	7886	13.6	5	
Si	28	1	No Gas	-2.757	-49.8	240085	1.6	10	
Ag	107	1	No Gas	-0.111	-23.3	427	43.9	2.5	
Cd	111	1	No Gas	0.014	132.0	20	132.3	1	
Sr	88	1	No Gas	0.019	399.7	811	122.0	2.5	
Mo	95	1	No Gas	0.028	172.5	97	129.3	2.5	
Sn	118	1	No Gas	0.102	191.9	1798	46.7	5	
Sb	121	1	No Gas	0.054	50.9	727	25.5	2.5	
Ba	137	1	No Gas	-0.031	-54.4	70	51.5	2.5	
Tl	205	1	No Gas	0.009	146.6	313	71.0	1	
Tl	203	1	No Gas	0.012	76.5	130	46.8	1	
Pb	208	1	No Gas	-0.090	-12.9	903	27.6	2.5	
U	238	1	No Gas	0.007	141.7	200	121.3	2.5	
Ca	43	2	He	-34.320	-43.2	13	114.6	100	
Sb	121	2	He	0.021	85.2	293	20.0	2.5	
Ti	47	2	He	0.030	183.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.065	-125.7	3791	11.8	2.5	
Se	82	1	No Gas	7.082	53.1	-359	-84.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	711467	3.74	675584	105.31	70	120	
Ge	72	2	He	360266	0.53	343019	105.03	70	120	
Ge	72	1	No Gas	1140508	0.47	1083014	105.31	70	120	
In	115	1	No Gas	1406131	0.76	1354249	103.83	70	120	
Bi	209	1	No Gas	1504783	1.01	1409443	106.76	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-03
Data File Name	125SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:29:27-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	144.742	144.742	3.26	1279145	0.01	2000	
Be	9	1	No Gas	8.981	8.981	2.96	16742	0.05	2000	
V	51	2	He	0.319	0.319	6.26	1585	0.02	2000	
Cr	52	2	He	373.786	373.786	2.51	1220466	0.03	2000	
Fe	56	2	He	45367.400	45367.400	0.68	142985345	0.03	200000	
Se	78	2	He	2.868	2.868	44.38	543	0.53	2000	
As	75	2	He	1.588	1.588	8.74	830	0.19	2000	
Ca	44	2	He	35935.079	35935.079	1.04	690772	5.20	200000	
Na	23	2	He	555466.642	555466.642	0.81	342555142	0.16	200000	>LDR
Mg	24	2	He	54982.692	54982.692	1.07	18944154	0.29	200000	
K	39	2	He	3581.874	3581.874	1.18	1518129	0.24	200000	
Mn	55	2	He	9177.607	9177.607	1.03	22621825	0.04	2000	>LDR
Co	59	2	He	352.142	352.142	0.69	1704293	0.02	2000	
Ni	60	2	He	1080.248	1080.248	1.37	1322765	0.08	2000	
Cu	63	2	He	3.026	3.026	4.53	11775	0.03	2000	
Zn	66	2	He	324.210	324.210	1.33	222810	0.15	2000	
Al	27	2	He	3520.795	3520.795	1.05	653996	0.54	2000	>LDR
B	11	1	No Gas	25.901	25.901	4.42	38045	0.07	2000	
Al	27	1	No Gas	3389.207	3389.207	1.96	25115625	0.01	2000	>LDR
Si	28	1	No Gas	34711.228	34711.228	1.99	111140585	0.03	2000	>LDR
Ag	107	1	No Gas	-0.132	-0.132	-5.08	290	-0.05	2000	
Cd	111	1	No Gas	0.939	0.939	4.07	1420	0.07	2000	
Sr	88	1	No Gas	784.291	784.291	3.24	10871239	0.01	2000	
Mo	95	1	No Gas	0.577	0.577	3.28	1567	0.04	2000	
Sn	118	1	No Gas	0.036	0.036	49.11	1583	0.00	2000	
Sb	121	1	No Gas	0.081	0.081	11.56	973	0.01	2000	
Ba	137	1	No Gas	11.834	11.834	3.00	26447	0.04	2000	
Tl	205	1	No Gas	0.117	0.117	12.41	2210	0.01	2000	
Tl	203	1	No Gas	0.118	0.118	8.15	870	0.01	2000	
Pb	208	1	No Gas	0.713	0.713	2.09	19423	0.00	2000	
U	238	1	No Gas	0.968	0.968	3.04	23687	0.00	2000	
Ca	43	2	He	37823.283	37823.283	2.15	42024	90.00	200000	
Sb	121	2	He	0.054	0.054	32.04	430	0.01	2000	
Ti	47	2	He	0.145	0.145	61.96	20	0.72	2000	
Cu	63	1	No Gas	6.047	6.047	1.00	38949	0.02	2000	
Zn	66	1	No Gas	319.874	319.874	2.06	528626	0.06	2000	
Se	82	1	No Gas	3.975	3.975	94.02	-657	-0.60	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	753235	3.69	675584	111.49	70	120	
Ge	72	2	He	385812	0.40	343019	112.48	70	120	
Ge	72	1	No Gas	1227366	1.79	1083014	113.33	70	120	
In	115	1	No Gas	1472640	2.55	1354249	108.74	70	120	
Bi	209	1	No Gas	1573102	2.62	1409443	111.61	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-04
Data File Name	126SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:31:24-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	47.918	47.918	2.51	433171	0.01	2000	
Be	9	1	No Gas	0.025	0.025	26.61	93	0.03	2000	
V	51	2	He	0.963	0.963	3.39	3409	0.03	2000	
Cr	52	2	He	200.696	200.696	1.75	655245	0.03	2000	
Fe	56	2	He	251671.184	251671.184	1.23	792532602	0.03	200000	>LDR
Se	78	2	He	-1.502	-1.502	-62.44	343	-0.44	2000	
As	75	2	He	3.199	3.199	6.40	1599	0.20	2000	
Ca	44	2	He	161855.171	161855.171	1.19	3104782	5.21	200000	
Na	23	2	He	219506.308	219506.308	0.75	135388711	0.16	200000	>LDR
Mg	24	2	He	98808.352	98808.352	1.56	34016154	0.29	200000	
K	39	2	He	3981.536	3981.536	1.74	1676086	0.24	200000	
Mn	55	2	He	8902.335	8902.335	1.90	21924623	0.04	2000	>LDR
Co	59	2	He	3.644	3.644	3.39	17668	0.02	2000	
Ni	60	2	He	150.873	150.873	1.19	184814	0.08	2000	
Cu	63	2	He	0.887	0.887	11.04	4691	0.02	2000	
Zn	66	2	He	2.743	2.743	34.16	8179	0.03	2000	
Al	27	2	He	18.129	18.129	6.58	3914	0.46	2000	
B	11	1	No Gas	34.377	34.377	2.99	43243	0.08	2000	
Al	27	1	No Gas	14.557	14.557	0.90	126334	0.01	2000	
Si	28	1	No Gas	17837.191	17837.191	1.43	56248039	0.03	2000	>LDR
Ag	107	1	No Gas	-0.146	-0.146	-6.04	180	-0.08	2000	
Cd	111	1	No Gas	0.424	0.424	17.87	640	0.07	2000	
Sr	88	1	No Gas	2681.527	2681.527	1.66	37053968	0.01	2000	>LDR
Mo	95	1	No Gas	0.451	0.451	8.73	1227	0.04	2000	
Sn	118	1	No Gas	0.016	0.016	28.08	1487	0.00	2000	
Sb	121	1	No Gas	0.037	0.037	33.81	643	0.01	2000	
Ba	137	1	No Gas	41.901	41.901	2.67	92975	0.05	2000	
Tl	205	1	No Gas	-0.007	-0.007	-18.03	53	-0.01	2000	
Tl	203	1	No Gas	-0.001	-0.001	-417.58	47	0.00	2000	
Pb	208	1	No Gas	0.054	0.054	11.72	4280	0.00	2000	
U	238	1	No Gas	0.031	0.031	12.57	787	0.00	2000	
Ca	43	2	He	161966.605	161966.605	2.00	179653	90.16	200000	
Sb	121	2	He	0.009	0.009	186.36	270	0.00	2000	
Ti	47	2	He	0.175	0.175	59.58	23	0.75	2000	
Cu	63	1	No Gas	2.767	2.767	4.63	19885	0.01	2000	
Zn	66	1	No Gas	3.073	3.073	10.34	19144	0.02	2000	
Se	82	1	No Gas	6.303	6.303	99.06	-443	-1.42	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	720700	1.87	675584	106.68	70	120	
Ge	72	2	He	385524	0.97	343019	112.39	70	120	
Ge	72	1	No Gas	1205960	1.17	1083014	111.35	70	120	
In	115	1	No Gas	1467674	1.67	1354249	108.38	70	120	
Bi	209	1	No Gas	1580732	0.83	1409443	112.15	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-06
Data File Name	128SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:35:21-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	6.019	6.019	2.59	93361	0.01	2000	
Be	9	1	No Gas	0.198	0.198	9.75	413	0.05	2000	
V	51	2	He	1.646	1.646	1.51	5456	0.03	2000	
Cr	52	2	He	1.261	1.261	8.25	5238	0.02	2000	
Fe	56	2	He	14282.321	14282.321	1.14	45883444	0.03	200000	
Se	78	2	He	-1.248	-1.248	-25.03	361	-0.35	2000	
As	75	2	He	9.327	9.327	0.53	4621	0.20	2000	
Ca	44	2	He	21869.932	21869.932	0.85	428929	5.10	200000	
Na	23	2	He	104932.343	104932.343	0.92	66123372	0.16	200000	
Mg	24	2	He	7340.463	7340.463	2.22	2577625	0.28	200000	
K	39	2	He	1130.535	1130.535	1.17	551026	0.21	200000	
Mn	55	2	He	725.530	725.530	1.22	1823016	0.04	2000	
Co	59	2	He	21.933	21.933	1.06	108230	0.02	2000	
Ni	60	2	He	13.290	13.290	0.74	16834	0.08	2000	
Cu	63	2	He	1.031	1.031	8.00	5274	0.02	2000	
Zn	66	2	He	23.783	23.783	4.50	22663	0.10	2000	
Al	27	2	He	132.625	132.625	0.35	25651	0.52	2000	
B	11	1	No Gas	73.493	73.493	3.35	76839	0.10	2000	
Al	27	1	No Gas	126.763	126.763	3.50	980510	0.01	2000	
Si	28	1	No Gas	12264.236	12264.236	0.53	40309021	0.03	2000	>LDR
Ag	107	1	No Gas	-0.145	-0.145	-1.14	203	-0.07	2000	
Cd	111	1	No Gas	0.676	0.676	10.02	1067	0.06	2000	
Sr	88	1	No Gas	364.997	364.997	1.58	5272634	0.01	2000	
Mo	95	1	No Gas	0.382	0.382	13.94	1090	0.04	2000	
Sn	118	1	No Gas	-0.033	-0.033	-14.80	1323	0.00	2000	
Sb	121	1	No Gas	0.088	0.088	24.73	1050	0.01	2000	
Ba	137	1	No Gas	136.098	136.098	0.94	315391	0.04	2000	
Tl	205	1	No Gas	0.018	0.018	3.93	507	0.00	2000	
Tl	203	1	No Gas	0.020	0.020	13.03	200	0.01	2000	
Pb	208	1	No Gas	0.569	0.569	1.70	17165	0.00	2000	
U	238	1	No Gas	0.359	0.359	3.79	9377	0.00	2000	
Ca	43	2	He	22241.735	22241.735	1.21	25210	88.23	200000	
Sb	121	2	He	0.054	0.054	31.45	440	0.01	2000	
Ti	47	2	He	0.956	0.956	23.31	113	0.84	2000	
Cu	63	1	No Gas	2.376	2.376	3.35	18403	0.01	2000	
Zn	66	1	No Gas	23.544	23.544	2.33	53536	0.04	2000	
Se	82	1	No Gas	6.866	6.866	21.06	-414	-1.66	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	741405	1.64	675584	109.74	70	120	
Ge	72	2	He	393234	1.11	343019	114.64	70	120	
Ge	72	1	No Gas	1254149	0.45	1083014	115.80	70	120	
In	115	1	No Gas	1534042	0.73	1354249	113.28	70	120	
Bi	209	1	No Gas	1676091	1.30	1409443	118.92	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	136_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:52:38-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.326	-34.4	41006	0.8	0.5	
Be	9	1	No Gas	-0.010	-16.2	33	8.7	0.5	
V	51	2	He	-0.012	-93.1	684	4.8	2.5	
Cr	52	2	He	-0.023	-105.2	1010	7.7	2.5	
Fe	56	2	He	0.912	9.0	12910	2.6	100	
Se	78	2	He	-0.550	-109.4	411	7.4	2	
As	75	2	He	-0.031	-12.8	59	3.3	2.5	
Ca	44	2	He	-30.093	-22.4	610	22.1	100	
Na	23	2	He	92.572	1.6	279265	0.2	100	
Mg	24	2	He	1.025	21.5	647	12.6	100	
K	39	2	He	6.403	43.6	98319	1.2	100	
Mn	55	2	He	-0.014	-178.7	410	15.2	2.5	
Co	59	2	He	-0.001	-631.1	43	66.6	2.5	
Ni	60	2	He	-0.158	-12.4	53	47.2	2.5	
Cu	63	2	He	-0.364	-4.1	590	9.4	2	
Zn	66	2	He	-0.645	-23.7	6305	1.2	2.5	
Al	27	2	He	-1.821	-1.9	227	2.5	5	
B	11	1	No Gas	18.643	21.2	32222	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.690	-2.6	8633	4.5	5	
Si	28	1	No Gas	-6.571	-36.2	257043	1.8	10	
Ag	107	1	No Gas	-0.125	-6.0	367	15.0	2.5	
Cd	111	1	No Gas	0.006	100.9	10	100.0	1	
Sr	88	1	No Gas	-0.007	-64.2	527	12.1	2.5	
Mo	95	1	No Gas	0.005	91.5	43	35.3	2.5	
Sn	118	1	No Gas	-0.044	-69.6	1317	12.4	5	
Sb	121	1	No Gas	0.066	22.9	907	10.9	2.5	
Ba	137	1	No Gas	-0.039	-9.9	60	16.7	2.5	
Tl	205	1	No Gas	0.004	22.2	243	6.3	1	
Tl	203	1	No Gas	0.007	42.1	103	20.1	1	
Pb	208	1	No Gas	-0.093	-3.6	913	9.6	2.5	
U	238	1	No Gas	0.003	42.5	113	31.0	2.5	
Ca	43	2	He	-41.603	-11.7	7	86.6	100	
Sb	121	2	He	0.040	63.5	403	23.6	2.5	
Ti	47	2	He	-0.006	-856.6	3	173.2	2.5	
Cu	63	1	No Gas	1.537	7.3	13801	3.1	2.5	
Se	82	1	No Gas	0.524	483.7	-998	-24.0	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	759917	1.62	675584	112.48	70	120	
Ge	72	2	He	410437	0.53	343019	119.65	70	120	
Ge	72	1	No Gas	1281870	1.77	1083014	118.36	70	120	
In	115	1	No Gas	1586553	1.71	1354249	117.15	70	120	
Bi	209	1	No Gas	1653123	0.78	1409443	117.29	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	138_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:57:15-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.780	4.205	849568	2.93	100	98.8	90	110	
Be	9	1	No Gas	101.964	1.382	181625	1.24	100	102.0	90	110	
V	51	2	He	97.932	1.676	301509	0.58	100	97.9	90	110	
Cr	52	2	He	98.160	2.029	347389	0.93	100	98.2	90	110	
Fe	56	2	He	9550.083	1.478	32555639	0.50	10000	95.5	90	110	
Se	78	2	He	92.447	1.820	5034	1.55	100	92.4	90	110	
As	75	2	He	98.485	3.162	51035	2.06	100	98.5	90	110	
Ca	44	2	He	9555.238	1.252	199541	0.76	10000	95.6	90	110	
Na	23	2	He	10118.390	1.772	6965574	0.62	10000	101.2	90	110	
Mg	24	2	He	9911.985	1.591	3693198	1.04	10000	99.1	90	110	
K	39	2	He	9755.104	1.376	4303332	0.27	10000	97.6	90	110	
Mn	55	2	He	97.306	2.024	259798	0.92	100	97.3	90	110	
Co	59	2	He	98.640	1.503	516262	0.44	100	98.6	90	110	
Ni	60	2	He	98.829	2.135	131096	1.06	100	98.8	90	110	
Cu	63	2	He	98.013	1.488	352716	0.39	100	98.0	90	110	
Zn	66	2	He	97.629	2.876	77353	1.81	100	97.6	90	110	
Al	27	2	He	96.734	2.805	20008	1.63	100	96.7	90	110	
B	11	1	No Gas	514.161	3.400	429531	2.33	500	102.8	90	110	
Al	27	1	No Gas	89.337	1.680	720125	0.38	100	89.3	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	468.111	1.575	1860395	1.60	5000	9.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	97.242	1.773	780699	0.56	100	97.2	90	110	
Cd	111	1	No Gas	97.431	1.620	158536	0.13	100	97.4	90	110	
Sr	88	1	No Gas	96.588	1.630	1440753	0.21	100	96.6	90	110	
Mo	95	1	No Gas	95.722	1.544	275145	0.04	100	95.7	90	110	
Sn	118	1	No Gas	97.858	2.039	479919	0.55	100	97.9	90	110	
Sb	121	1	No Gas	88.817	2.350	672623	0.54	100	88.8	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	98.163	1.172	234856	0.55	100	98.2	90	110	
Tl	205	1	No Gas	102.590	1.017	1851975	1.14	100	102.6	90	110	
Tl	203	1	No Gas	99.074	0.929	713320	1.45	100	99.1	90	110	
Pb	208	1	No Gas	98.394	2.275	2355513	2.44	100	98.4	90	110	
U	238	1	No Gas	99.274	0.628	2520599	0.32	100	99.3	90	110	
Ca	43	2	He	9795.181	4.262	11809	3.20	10000	98.0	90	110	
Sb	121	2	He	95.663	1.465	364566	0.38	100	95.7	90	110	
Ti	47	2	He	97.145	2.975	11822	2.34	100	97.1	90	110	
Cu	63	1	No Gas	96.035	1.577	582979	0.35	100	96.0	90	110	
Se	82	1	No Gas	101.716	5.376	8223	5.48	100	101.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	721328	1.20	675584	106.77	70	120	
Ge	72	2	He	417233	1.09	343019	121.64	70	120	ISTD Failed
Ge	72	1	No Gas	1295528	1.80	1083014	119.62	70	120	
In	115	1	No Gas	1583674	1.55	1354249	116.94	70	120	
Bi	209	1	No Gas	1634088	0.66	1409443	115.94	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	139_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq Date Time	2022-07-19T16:59:10-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	007CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	98.399	0.812	859822	0.82	100	98.4	90	110	
Be	9	1	No Gas	101.962	0.865	184442	0.51	100	102.0	90	110	
V	51	2	He	99.492	0.799	303638	0.43	100	99.5	90	110	
Cr	52	2	He	100.399	1.068	352200	0.48	100	100.4	90	110	
Fe	56	2	He	9795.305	1.076	33099899	0.61	10000	98.0	90	110	
Se	78	2	He	98.367	2.256	5280	1.44	100	98.4	90	110	
As	75	2	He	101.465	0.691	52126	0.64	100	101.5	90	110	
Ca	44	2	He	9743.883	0.621	201677	0.36	10000	97.4	90	110	
Na	23	2	He	10233.426	0.966	6980933	0.37	10000	102.3	90	110	
Mg	24	2	He	10201.186	0.971	3767728	0.52	10000	102.0	90	110	
K	39	2	He	10070.784	0.491	4400757	0.19	10000	100.7	90	110	
Mn	55	2	He	99.632	0.269	263696	0.70	100	99.6	90	110	
Co	59	2	He	100.577	1.470	521800	0.90	100	100.6	90	110	
Ni	60	2	He	100.024	1.070	131527	0.50	100	100.0	90	110	
Cu	63	2	He	99.616	0.634	355333	0.15	100	99.6	90	110	
Zn	66	2	He	99.677	1.517	78148	0.98	100	99.7	90	110	
Al	27	2	He	102.303	2.502	20943	2.18	100	102.3	90	110	
B	11	1	No Gas	542.559	0.766	459560	2.04	500	108.5	90	110	
Al	27	1	No Gas	91.069	2.229	727190	0.39	100	91.1	90	110	
Si	28	1	No Gas	487.531	1.756	1908888	1.08	5000	9.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	99.842	1.051	793999	0.29	100	99.8	90	110	
Cd	111	1	No Gas	99.267	1.193	160004	0.71	100	99.3	90	110	
Sr	88	1	No Gas	98.893	1.349	1461236	0.84	100	98.9	90	110	
Mo	95	1	No Gas	97.126	1.557	276540	0.58	100	97.1	90	110	
Sn	118	1	No Gas	100.542	1.449	488407	0.42	100	100.5	90	110	
Sb	121	1	No Gas	91.447	2.268	686469	0.29	100	91.4	90	110	
Ba	137	1	No Gas	100.347	1.658	237801	0.84	100	100.3	90	110	
Tl	205	1	No Gas	103.934	1.718	1893565	0.36	100	103.9	90	110	
Tl	203	1	No Gas	100.173	1.758	727886	0.99	100	100.2	90	110	
Pb	208	1	No Gas	100.211	3.257	2420612	1.51	100	100.2	90	110	
U	238	1	No Gas	99.248	2.046	2543142	0.27	100	99.2	90	110	
Ca	43	2	He	9459.594	2.499	11308	2.09	10000	94.6	90	110	
Sb	121	2	He	98.599	1.186	372464	0.57	100	98.6	90	110	
Ti	47	2	He	93.517	2.615	11281	2.28	100	93.5	90	110	
Cu	63	1	No Gas	98.686	1.978	593677	0.74	100	98.7	90	110	
Se	82	1	No Gas	108.336	10.450	8736	9.06	100	108.3	90	110	

QC ISTD Table

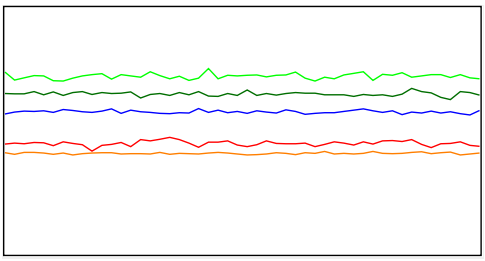
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	732542	1.31	675584	108.43	70	120	
Ge	72	2	He	413565	0.62	343019	120.57	70	120	ISTD Failed
Ge	72	1	No Gas	1284307	2.49	1083014	118.59	70	120	
In	115	1	No Gas	1568623	1.06	1354249	115.83	70	120	
Bi	209	1	No Gas	1649536	1.99	1409443	117.03	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\071922A.b
Acq. Date-Time	07/19/2022 10:41:44
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2249	22485.22		
24	10000	7221	72206.42		
59	20000	11544	115443.75		
115	50000	20455	204549.19		
208	20000	13002	130021.40		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.282	5.000	
24	1.526	5.000	
59	1.054	5.000	
115	0.866	5.000	
208	1.260	5.000	

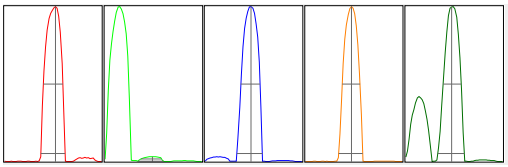
Mass	Background	Background (Required)	Background (Flag)
9	1.200		
24	0.100		
59	0.600		
115	0.400		
208	1.300		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.490 %
Doubly Charged	70 / 140 1.312 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2272.64	9.10	8.90 - 9.10	
24	7193.72	24.00	23.90 - 24.10	
59	11630.21	58.95	58.90 - 59.10	
115	20541.10	114.95	114.90 - 115.10	
208	12764.72	207.95	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.59	0.739		
24	0.63	0.783		
59	0.59	0.776		
115	0.54	0.733		
208	0.55	0.811		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.7 V	Deflect	13.2 V
Extract 2	-185.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-75 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-3.0 V
Mass Offset	126	Axis Offset	0.06		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

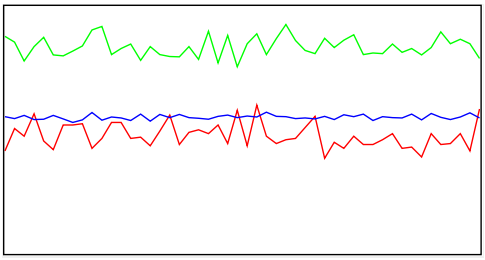
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	95	953.63		
24	500	419	4187.43		
59	10000	5515	55149.97		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

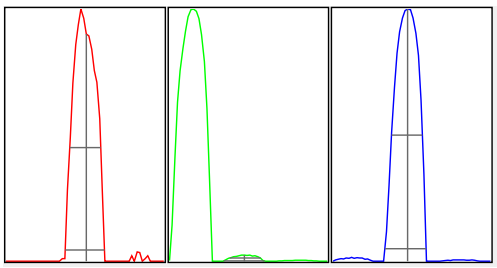
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	10.652	5.000	Fail
24	4.822	5.000	
59	1.741	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.300		
24	0.000		
59	0.000		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.310 %
Doubly Charged	70 / 140 1.001 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	85.76	9.05	8.90 - 9.10	
24	438.08	23.95	23.90 - 24.10	
59	5505.47	58.95	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.736		
24	0.58	0.768		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.58	0.771		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.4 V	Deflect	-0.4 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9991	QP Bias	-15.0 V
Mass Offset	126	Axis Offset	0.06		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

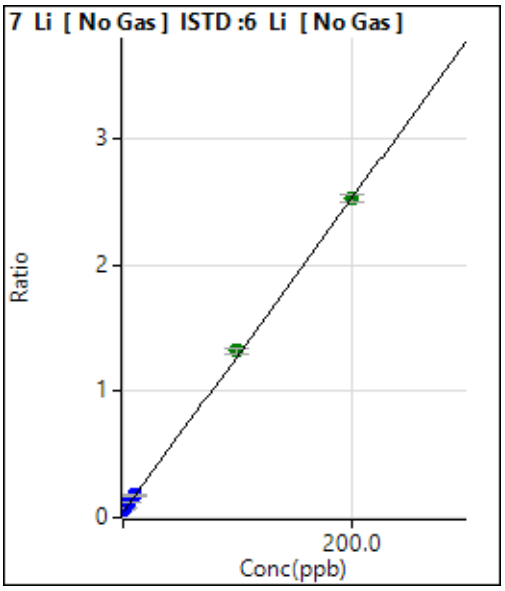
Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

Calibration for 212_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	205CALB.d	CAL BLK	07/20/2022 21:07:27
2	206CALS.d	2/10/200	07/20/2022 21:09:34
3	207CALS.d	5/25/500	07/20/2022 21:11:40
4	208CALS.d	10/50/100	07/20/2022 21:13:47
5	209CALS.d	100/500/10K	07/20/2022 21:15:53
6	210CALS.d	200/1000/20K	07/20/2022 21:17:56

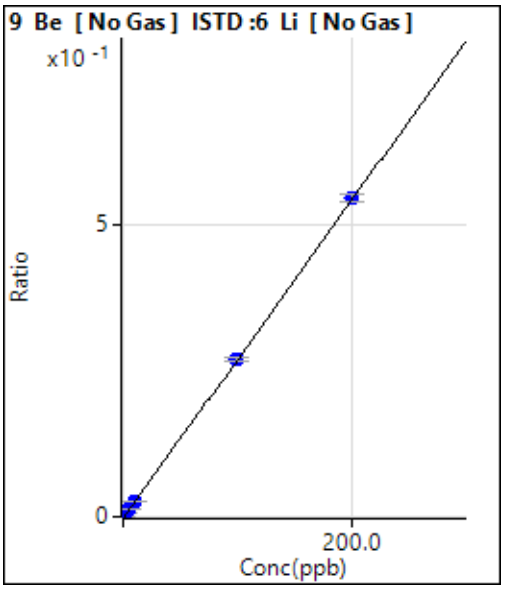
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37730.40	0.0563	P	1.9	
2	☐	2.000	1.799	53819.05	0.0786	P	3.0	-10.1
3	☐	5.000	4.755	75939.85	0.1153	P	1.5	-4.9
4	☐	10.000	9.629	114860.54	0.1758	P	1.2	-3.7
5	☐	100.000	101.747	904309.91	1.3197	A	2.8	1.7
6	☐	200.000	199.153	1657050.03	2.5292	A	3.0	-0.4

y = 0.0124 * x + 0.0563
R = 0.9999
DL = 0.2614 ppb
BEC = 4.531 ppb

Weight: <None>
Min Conc: <None>

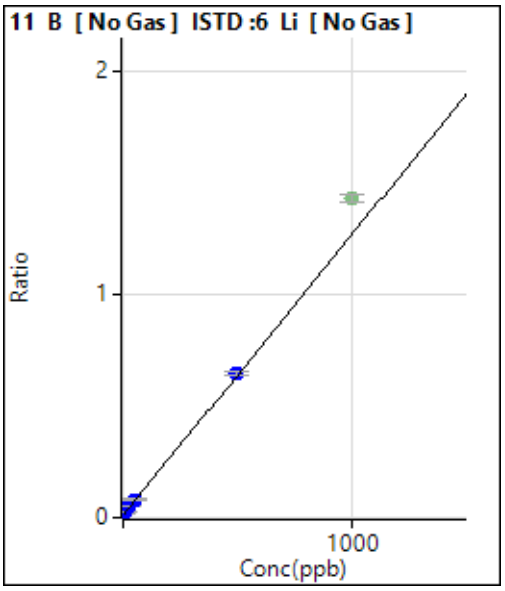


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	18.6	
2	☐	2.000	1.879	3535.47	0.0052	P	1.1	-6.1
3	☐	5.000	4.894	8796.16	0.0134	P	1.4	-2.1
4	☐	10.000	9.957	17716.22	0.0271	P	1.6	-0.4
5	☐	100.000	99.132	184695.47	0.2695	P	1.6	-0.9
6	☐	200.000	200.440	356998.94	0.5448	P	2.2	0.2

y = 0.0027 * x + 5.4519E-005
R = 1.0000
DL = 0.01118 ppb
BEC = 0.02006 ppb

Weight: <None>
Min Conc: <None>

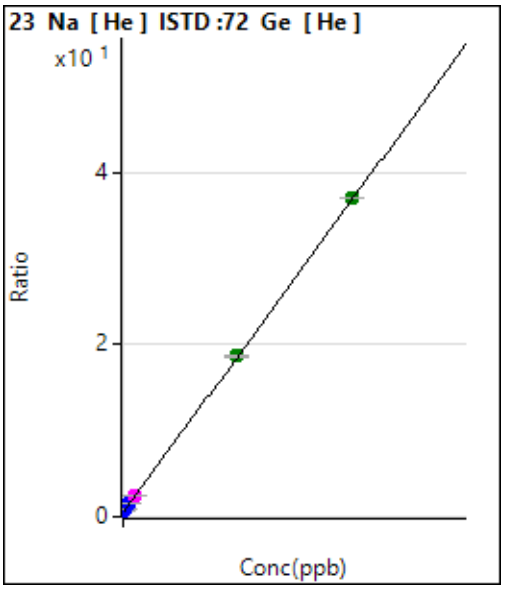
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12882.64	0.0192	P	2.5	
2	☐	10.000	8.415	20378.20	0.0298	P	1.9	-15.9
3	☐	25.000	23.533	32073.39	0.0487	P	1.5	-5.9
4	☐	50.000	49.599	53143.66	0.0814	P	2.7	-0.8
5	☐	500.000	500.145	442611.22	0.6459	P	2.9	0.0
6	☑	1000.000		936140.51	1.4288	A	2.8	

y = 0.0013 * x + 0.0192
R = 1.0000
DL = 1.172 ppb
BEC = 15.33 ppb

Weight: <None>
Min Conc: <None>

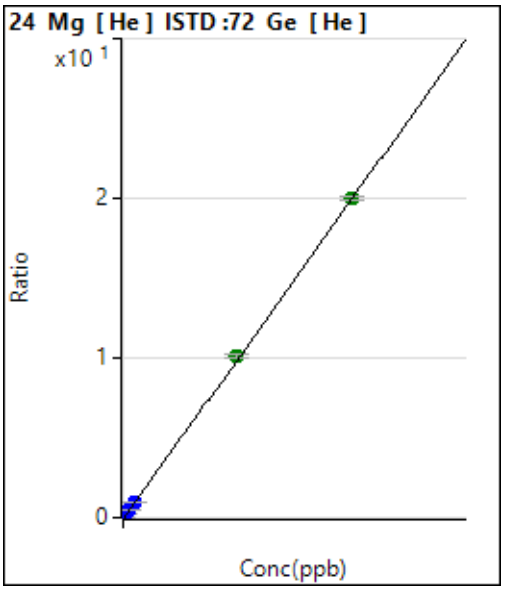


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230791.51	0.6813	P	0.4	
2	☐	200.000	171.583	340140.44	0.9923	P	1.2	-14.2
3	☐	500.000	450.459	501570.40	1.4978	P	1.1	-9.9
4	☐	1000.000	977.912	820148.48	2.4538	M	4.0	-2.2
5	☐	10000.00	9911.818	6354689.07	18.6465	A	1.1	-0.9
6	☐	20000.00	20046.71	12245754.4	37.0160	A	0.3	0.2

y = 0.0018 * x + 0.6813
R = 1.0000
DL = 4.646 ppb
BEC = 375.9 ppb

Weight: <None>
Min Conc: <None>

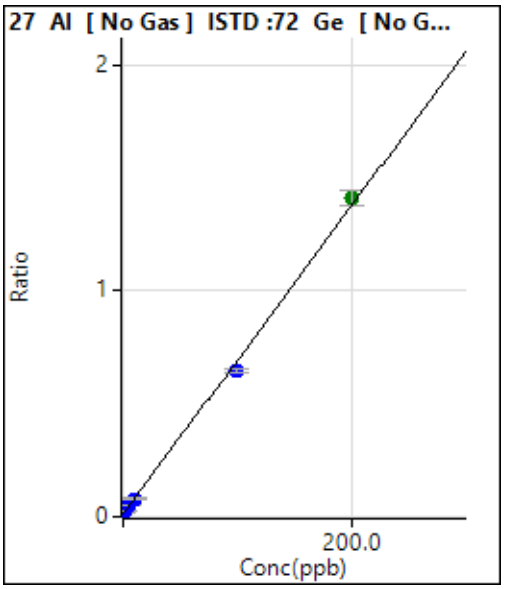
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0009	P	28.7	
2	☐	200.000	185.497	64120.90	0.1871	P	2.8	-7.3
3	☐	500.000	476.543	160455.53	0.4791	P	0.5	-4.7
4	☐	1000.000	964.807	323922.24	0.9691	P	0.3	-3.5
5	☐	10000.00	10078.69	3446959.22	10.1144	A	2.1	0.8
6	☐	20000.00	19963.14	6627218.86	20.0330	A	0.8	-0.2

y = 0.0010 * x + 9.3527E-004
R = 1.0000
DL = 0.8024 ppb
BEC = 0.9321 ppb

Weight: <None>
Min Conc: <None>

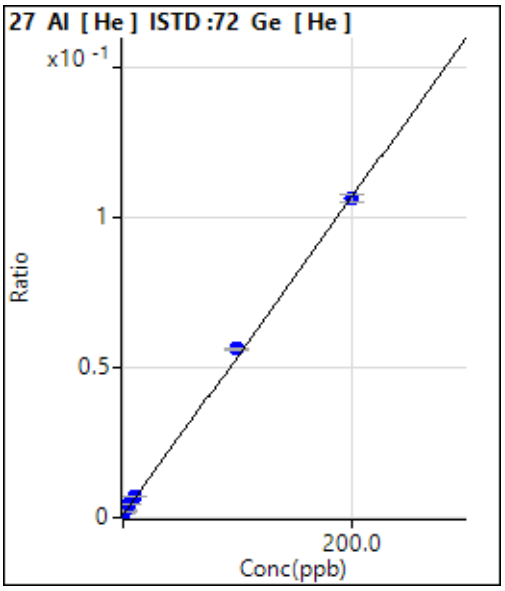


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20477.54	0.0192	P	4.4	
2	☐	2.000	1.454	32678.76	0.0291	P	3.1	-27.3
3	☐	5.000	4.925	57836.94	0.0528	P	2.3	-1.5
4	☐	10.000	8.945	84676.96	0.0802	P	2.8	-10.5
5	☐	100.000	92.157	711609.81	0.6477	P	3.3	-7.8
6	☐	200.000	203.981	1431879.93	1.4103	A	4.7	2.0

y = 0.0068 * x + 0.0192
R = 0.9990
DL = 0.3722 ppb
BEC = 2.819 ppb

Weight: <None>
Min Conc: <None>

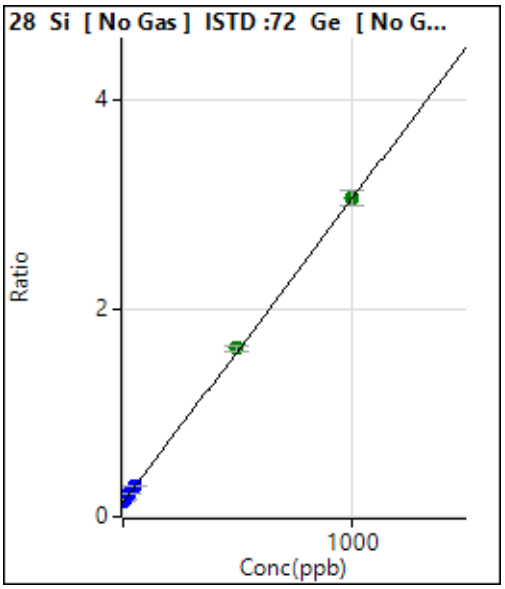
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0014	P	10.6	
2	☐	2.000	1.716	793.37	0.0023	P	14.6	-14.2
3	☐	5.000	6.009	1536.78	0.0046	P	6.2	20.2
4	☐	10.000	10.921	2403.58	0.0072	P	4.3	9.2
5	☐	100.000	103.387	19133.39	0.0561	P	1.1	3.4
6	☐	200.000	198.238	35184.74	0.1064	P	2.3	-0.9

y = 5.2940E-004 * x + 0.0014
R = 0.9998
DL = 0.8476 ppb
BEC = 2.658 ppb

Weight: <None>
Min Conc: <None>

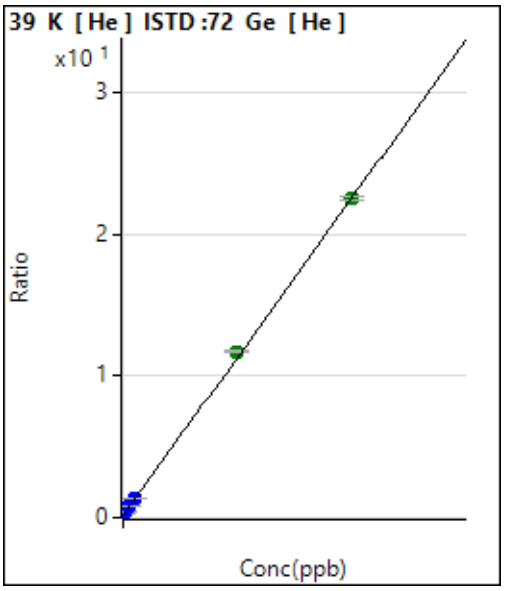


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160765.18	0.1510	P	1.7	
2	☐	10.000	7.008	192241.55	0.1714	P	1.7	-29.9
3	☐	25.000	24.458	243444.90	0.2223	P	0.9	-2.2
4	☐	50.000	49.712	312162.91	0.2958	P	2.9	-0.6
5	☐	500.000	502.219	1773451.01	1.6142	A	3.3	0.4
6	☐	1000.000	998.948	3108594.33	3.0614	A	4.3	-0.1

y = 0.0029 * x + 0.1510
R = 1.0000
DL = 2.655 ppb
BEC = 51.83 ppb

Weight: <None>
Min Conc: <None>

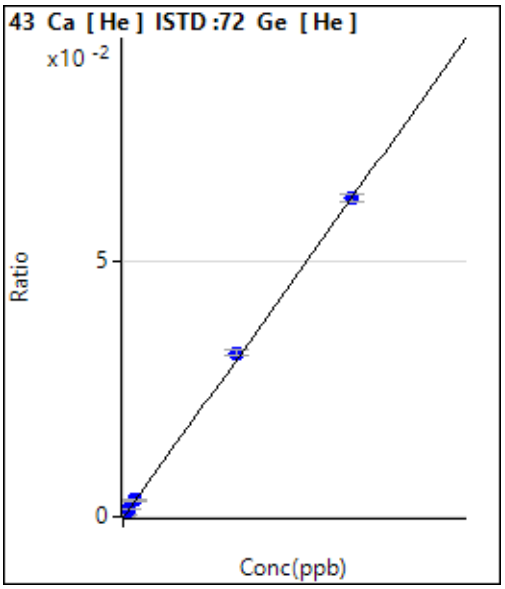
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90065.66	0.2659	P	1.5	
2	☐	200.000	179.450	159937.67	0.4666	P	1.0	-10.3
3	☐	500.000	466.082	263610.33	0.7872	P	1.3	-6.8
4	☐	1000.000	950.000	444023.30	1.3284	P	1.1	-5.0
5	☐	10000.00	10209.39	3982095.46	11.6850	A	1.4	2.1
6	☐	20000.00	19898.85	7450688.22	22.5225	A	1.1	-0.5

y = 0.0011 * x + 0.2659
R = 0.9999
DL = 10.56 ppb
BEC = 237.7 ppb

Weight: <None>
Min Conc: <None>

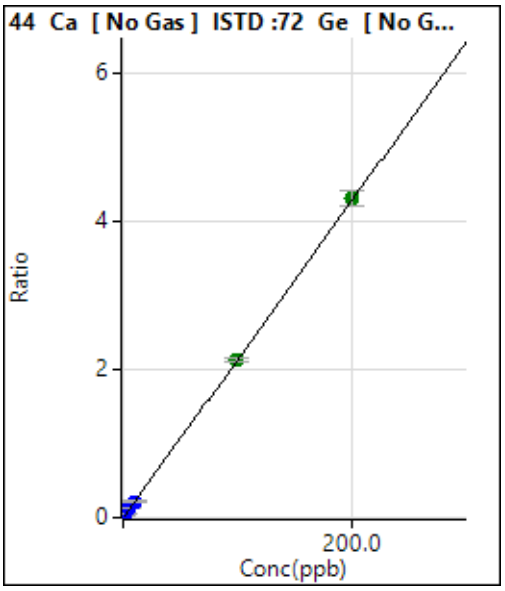


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.6	
2	☐	200.000	136.175	173.34	0.0005	P	14.4	-31.9
3	☐	500.000	479.578	530.02	0.0016	P	7.7	-4.1
4	☐	1000.000	1025.028	1100.05	0.0033	P	6.5	2.5
5	☐	10000.00	10191.35	10914.54	0.0320	P	3.7	1.9
6	☐	20000.00	19904.21	20669.11	0.0625	P	1.9	-0.5

y = 3.1351E-006 * x + 7.8713E-005
R = 0.9999
DL = 16.27 ppb
BEC = 25.11 ppb

Weight: <None>
Min Conc: <None>

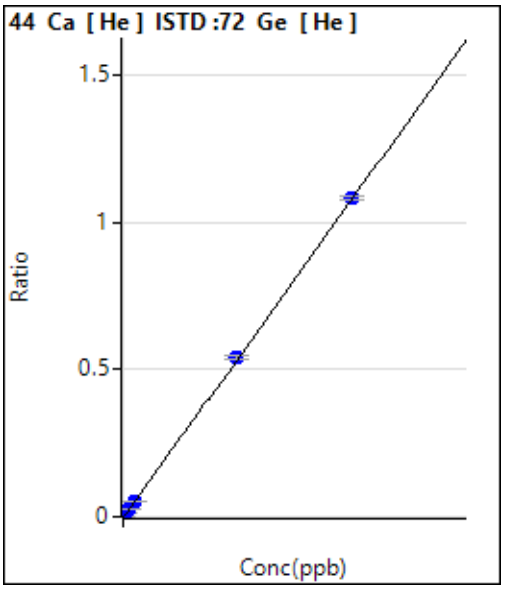
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18158.91	0.0171	P	1.7	
2	☐	2.000	1.796	62237.36	0.0555	P	1.7	-10.2
3	☐	5.000	4.718	129292.65	0.1180	P	0.7	-5.6
4	☐	10.000	9.490	232342.67	0.2202	P	3.3	-5.1
5	☐	100.000	98.755	2341846.01	2.1310	A	2.1	-1.2
6	☐	200.000	200.657	4378805.25	4.3124	A	4.2	0.3

y = 0.0214 * x + 0.0171
R = 1.0000
DL = 0.04012 ppb
BEC = 0.7967 ppb

Weight: <None>
Min Conc: <None>

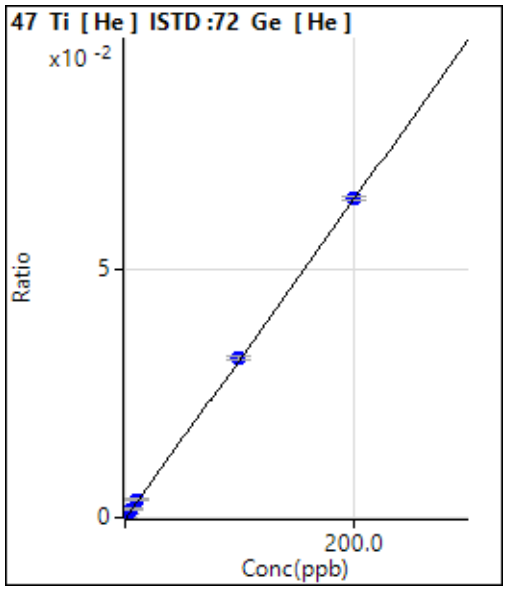


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0013	P	5.6	
2	☐	200.000	194.347	4044.00	0.0118	P	5.8	-2.8
3	☐	500.000	493.274	9369.97	0.0280	P	0.7	-1.3
4	☐	1000.000	990.018	18339.14	0.0549	P	2.2	-1.0
5	☐	10000.00	9990.860	184733.80	0.5421	P	1.5	-0.1
6	☐	20000.00	20005.29	358652.37	1.0841	P	0.8	0.0

y = 5.4129E-005 * x + 0.0013
R = 1.0000
DL = 3.939 ppb
BEC = 23.63 ppb

Weight: <None>
Min Conc: <None>

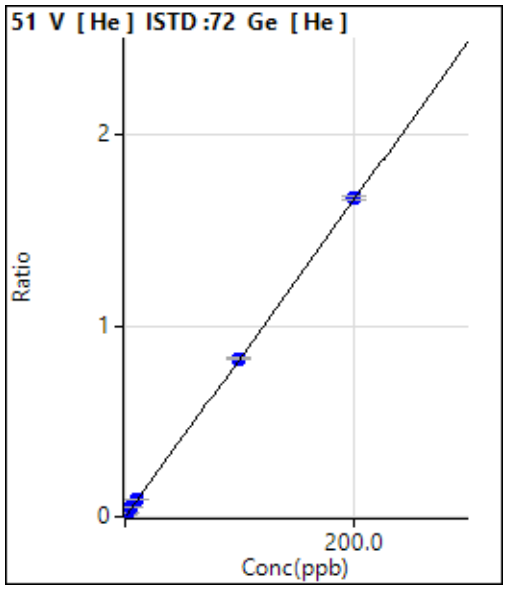
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.838	210.01	0.0006	P	4.7	-8.1
3	☐	5.000	5.246	573.35	0.0017	P	6.7	4.9
4	☐	10.000	11.030	1196.74	0.0036	P	7.3	10.3
5	☐	100.000	100.092	11014.61	0.0323	P	2.9	0.1
6	☐	200.000	199.898	21346.85	0.0645	P	0.9	-0.1

y = 3.2269E-004 * x + 1.9625E-005
R = 1.0000
DL = 0.316 ppb
BEC = 0.06082 ppb

Weight: <None>
Min Conc: <None>

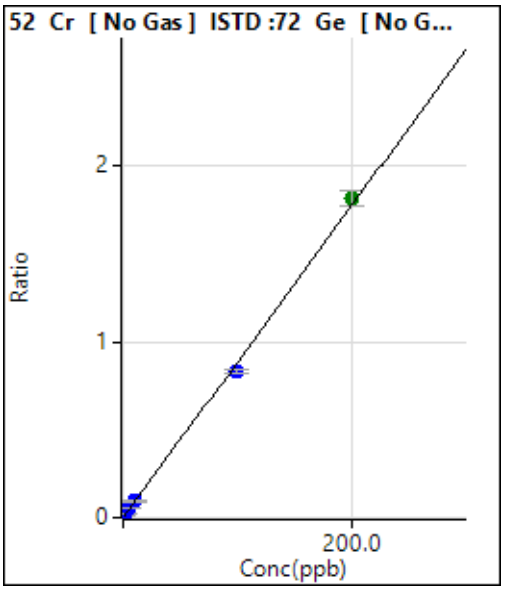


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2181.30	0.0064	P	4.8	
2	☐	2.000	1.908	7637.72	0.0223	P	1.6	-4.6
3	☐	5.000	4.857	15659.00	0.0468	P	1.7	-2.9
4	☐	10.000	9.831	29430.44	0.0880	P	1.0	-1.7
5	☐	100.000	99.158	282718.06	0.8296	P	1.3	-0.8
6	☐	200.000	200.434	552559.77	1.6703	P	1.2	0.2

y = 0.0083 * x + 0.0064
R = 1.0000
DL = 0.1123 ppb
BEC = 0.7756 ppb

Weight: <None>
Min Conc: <None>

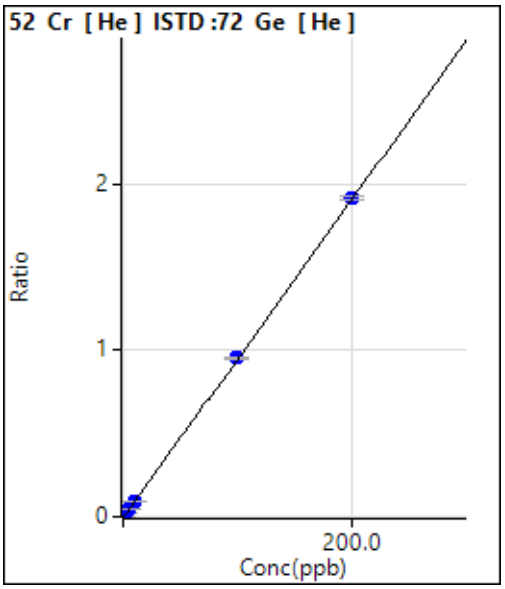
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9583.51	0.0090	P	6.6	
2	☐	2.000	1.761	27614.72	0.0246	P	2.5	-12.0
3	☐	5.000	4.553	54097.07	0.0494	P	0.5	-8.9
4	☐	10.000	9.565	98986.12	0.0939	P	4.9	-4.3
5	☐	100.000	92.775	914108.08	0.8320	P	3.1	-7.2
6	☐	200.000	203.648	1843297.47	1.8155	A	4.6	1.8

y = 0.0089 * x + 0.0090
R = 0.9991
DL = 0.2016 ppb
BEC = 1.015 ppb

Weight: <None>
Min Conc: <None>

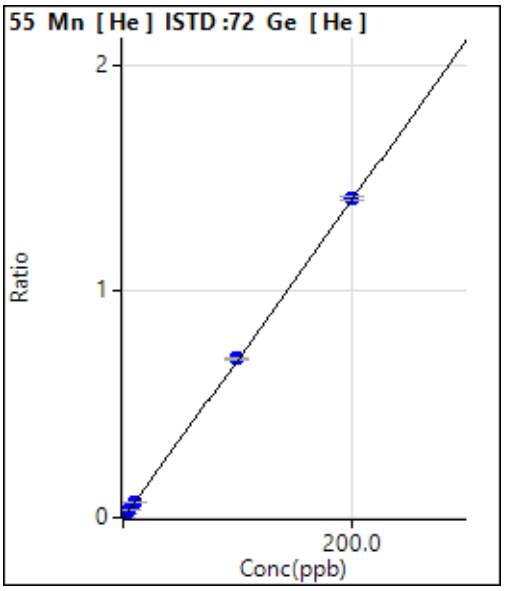


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1030.06	0.0030	P	2.4	
2	☐	2.000	1.875	7188.67	0.0210	P	1.5	-6.2
3	☐	5.000	4.847	16540.17	0.0494	P	1.7	-3.1
4	☐	10.000	9.852	32505.55	0.0972	P	1.0	-1.5
5	☐	100.000	99.641	325728.96	0.9558	P	1.1	-0.4
6	☐	200.000	200.192	634243.84	1.9173	P	1.2	0.1

y = 0.0096 * x + 0.0030
R = 1.0000
DL = 0.02331 ppb
BEC = 0.318 ppb

Weight: <None>
Min Conc: <None>

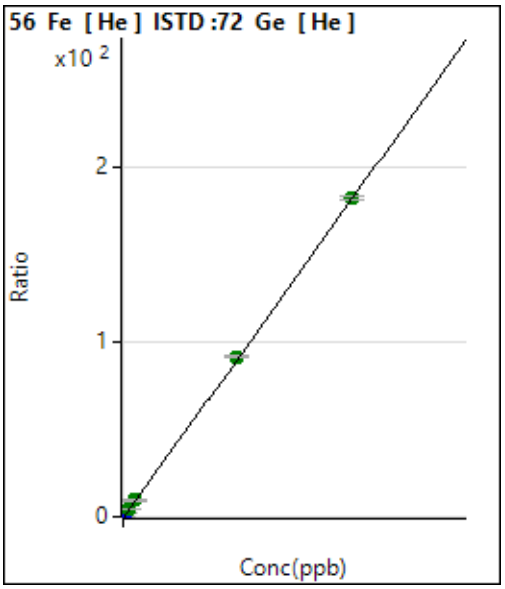
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	416.68	0.0012	P	20.0	
2	☐	2.000	1.970	5177.73	0.0151	P	3.5	-1.5
3	☐	5.000	4.968	12132.26	0.0362	P	3.1	-0.6
4	☐	10.000	9.881	23674.17	0.0708	P	2.0	-1.2
5	☐	100.000	99.510	239273.13	0.7021	P	1.3	-0.5
6	☐	200.000	200.252	467009.84	1.4117	P	0.8	0.1

y = 0.0070 * x + 0.0012
R = 1.0000
DL = 0.1049 ppb
BEC = 0.1746 ppb

Weight: <None>
Min Conc: <None>

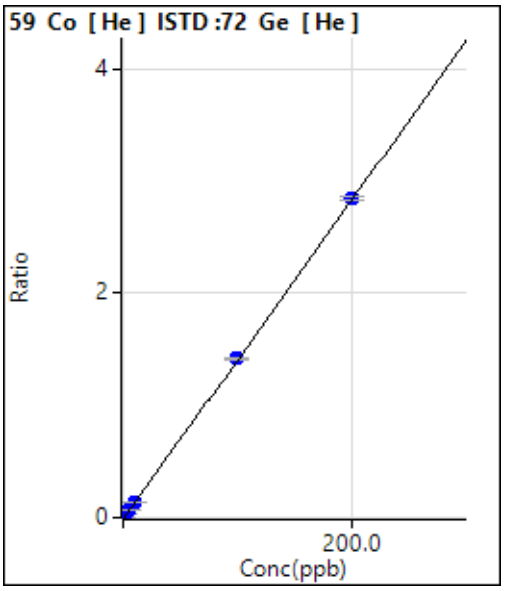


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10324.05	0.0305	P	2.3	
2	☐	200.000	186.331	594274.42	1.7337	P	1.9	-6.8
3	☐	500.000	515.097	1587020.24	4.7390	A	0.9	3.0
4	☐	1000.000	1023.570	3137494.12	9.3870	A	1.6	2.4
5	☐	10000.00	10021.25	31228539.5	91.6358	A	1.4	0.2
6	☐	20000.00	19987.95	60455059.1	182.742	A	0.8	-0.1

y = 0.0091 * x + 0.0305
R = 1.0000
DL = 0.2263 ppb
BEC = 3.334 ppb

Weight: <None>
Min Conc: <None>

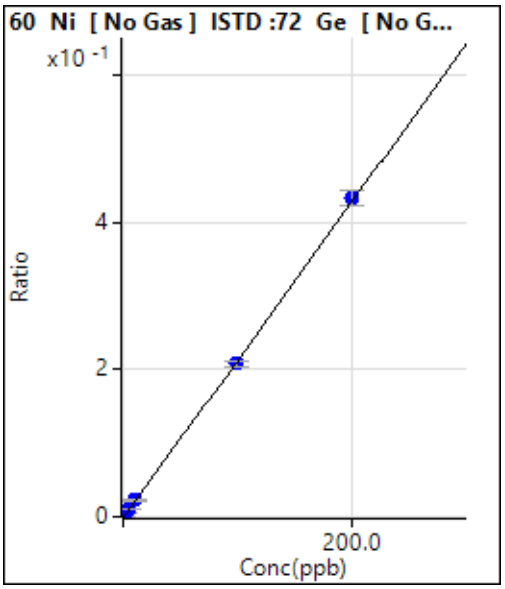
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.2	
2	☐	2.000	1.911	9340.01	0.0272	P	4.3	-4.5
3	☐	5.000	4.844	23099.87	0.0690	P	2.4	-3.1
4	☐	10.000	9.801	46626.79	0.1395	P	1.2	-2.0
5	☐	100.000	99.591	482836.23	1.4168	P	1.0	-0.4
6	☐	200.000	200.219	942255.48	2.8483	P	0.8	0.1

y = 0.0142 * x + 5.9088E-005
R = 1.0000
DL = 0.006253 ppb
BEC = 0.004154 ppb

Weight: <None>
Min Conc: <None>

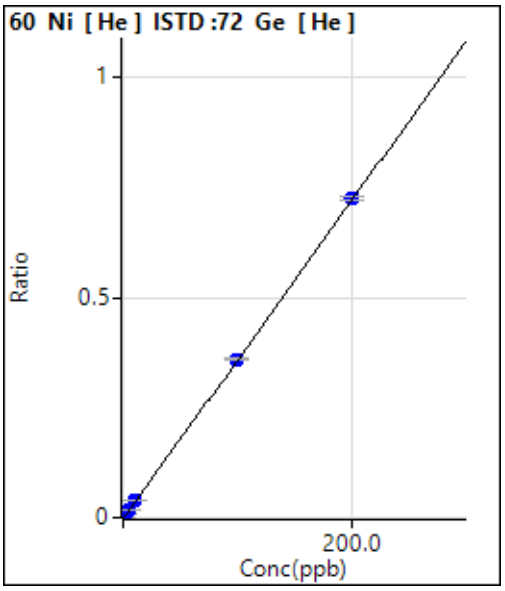


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	773.37	0.0007	P	8.7	
2	☐	2.000	1.742	5004.34	0.0045	P	2.0	-12.9
3	☐	5.000	4.680	11785.28	0.0108	P	3.3	-6.4
4	☐	10.000	10.021	23437.21	0.0222	P	3.0	0.2
5	☐	100.000	96.565	228288.69	0.2078	P	2.8	-3.4
6	☐	200.000	201.727	439871.02	0.4332	P	4.6	0.9

y = 0.0021 * x + 7.2578E-004
R = 0.9998
DL = 0.08832 ppb
BEC = 0.3385 ppb

Weight: <None>
Min Conc: <None>

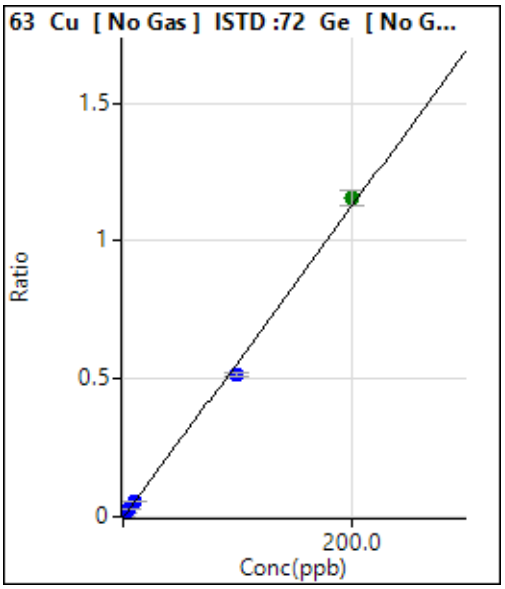
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0007	P	18.7	
2	☐	2.000	1.925	2610.30	0.0076	P	2.6	-3.8
3	☐	5.000	4.958	6221.53	0.0186	P	4.5	-0.8
4	☐	10.000	10.179	12515.95	0.0374	P	1.0	1.8
5	☐	100.000	99.145	122328.82	0.3589	P	0.8	-0.9
6	☐	200.000	200.421	239817.44	0.7249	P	1.2	0.2

y = 0.0036 * x + 6.5930E-004
R = 1.0000
DL = 0.1022 ppb
BEC = 0.1824 ppb

Weight: <None>
Min Conc: <None>

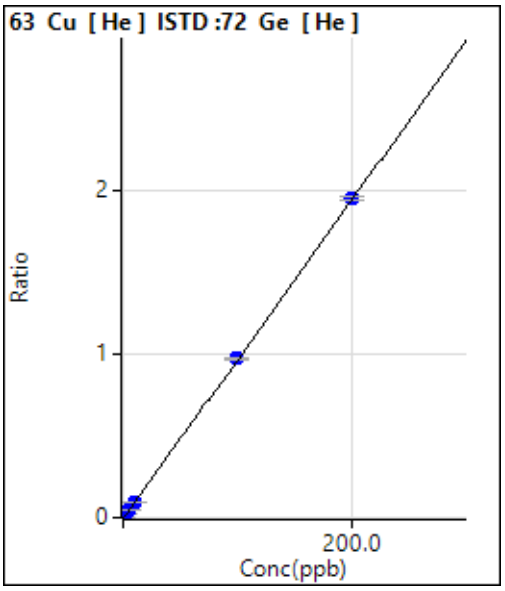


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.53	0.0019	P	5.2	
2	☐	2.000	1.909	14214.29	0.0127	P	4.1	-4.5
3	☐	5.000	4.456	29629.29	0.0270	P	1.6	-10.9
4	☐	10.000	9.287	57324.30	0.0543	P	2.5	-7.1
5	☐	100.000	91.199	567641.61	0.5166	P	3.0	-8.8
6	☐	200.000	204.450	1173628.76	1.1558	A	4.3	2.2

y = 0.0056 * x + 0.0019
R = 0.9987
DL = 0.05259 ppb
BEC = 0.3368 ppb

Weight: <None>
Min Conc: <None>

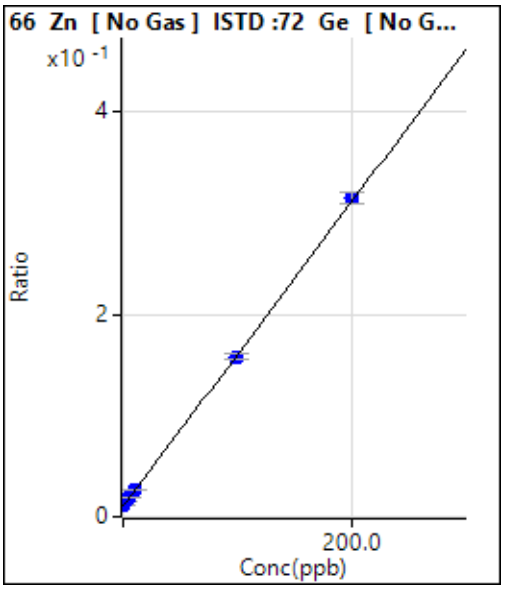
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	980.06	0.0029	P	15.3	
2	☐	2.000	1.961	7555.57	0.0220	P	3.1	-2.0
3	☐	5.000	4.816	16720.57	0.0499	P	0.5	-3.7
4	☐	10.000	9.869	33184.16	0.0993	P	0.5	-1.3
5	☐	100.000	99.522	332226.26	0.9748	P	0.9	-0.5
6	☐	200.000	200.251	647925.77	1.9586	P	0.9	0.1

y = 0.0098 * x + 0.0029
R = 1.0000
DL = 0.1364 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

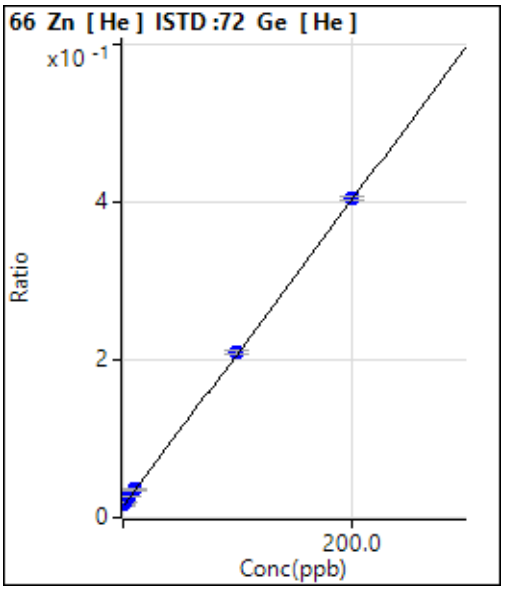


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12515.97	0.0118	P	3.3	
2	☐	2.000	1.971	16506.93	0.0147	P	0.6	-1.5
3	☐	5.000	4.571	20402.35	0.0186	P	2.4	-8.6
4	☐	10.000	9.903	28119.50	0.0266	P	3.3	-1.0
5	☐	100.000	97.093	173345.95	0.1578	P	3.2	-2.9
6	☐	200.000	201.469	319618.79	0.3148	P	4.1	0.7

y = 0.0015 * x + 0.0118
R = 0.9999
DL = 0.7632 ppb
BEC = 7.815 ppb

Weight: <None>
Min Conc: <None>

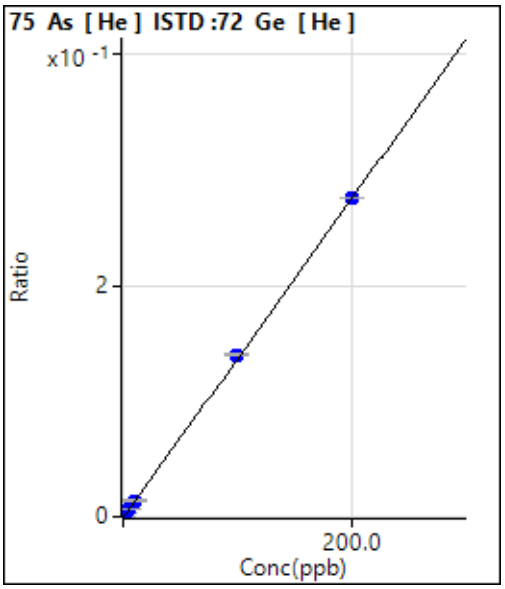
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5517.90	0.0163	P	6.4	
2	☐	2.000	1.584	6638.42	0.0194	P	6.3	-20.8
3	☐	5.000	4.932	8666.24	0.0259	P	1.3	-1.4
4	☐	10.000	9.972	11922.08	0.0357	P	4.2	-0.3
5	☐	100.000	99.664	71571.93	0.2100	P	1.3	-0.3
6	☐	200.000	200.175	134111.09	0.4054	P	1.3	0.1

y = 0.0019 * x + 0.0163
R = 1.0000
DL = 1.609 ppb
BEC = 8.381 ppb

Weight: <None>
Min Conc: <None>

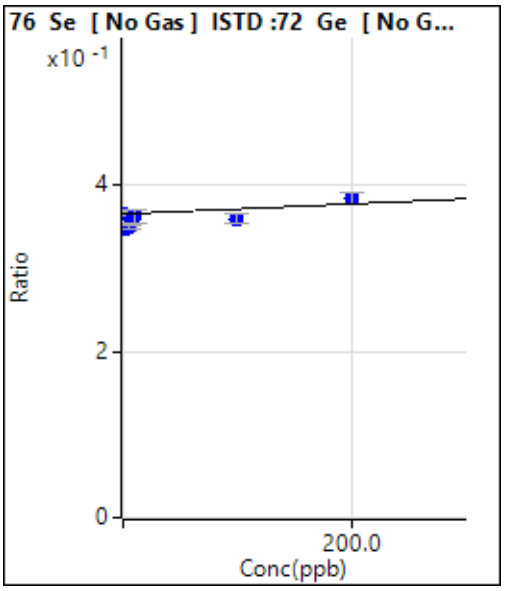


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	17.9	
2	☐	2.000	1.982	1054.49	0.0031	P	3.9	-0.9
3	☐	5.000	4.974	2413.56	0.0072	P	0.8	-0.5
4	☐	10.000	9.849	4657.49	0.0139	P	2.7	-1.5
5	☐	100.000	100.976	47613.54	0.1397	P	1.1	1.0
6	☐	200.000	199.521	91219.13	0.2757	P	0.3	-0.2

y = 0.0014 * x + 3.4123E-004
R = 1.0000
DL = 0.1324 ppb
BEC = 0.2472 ppb

Weight: <None>
Min Conc: <None>

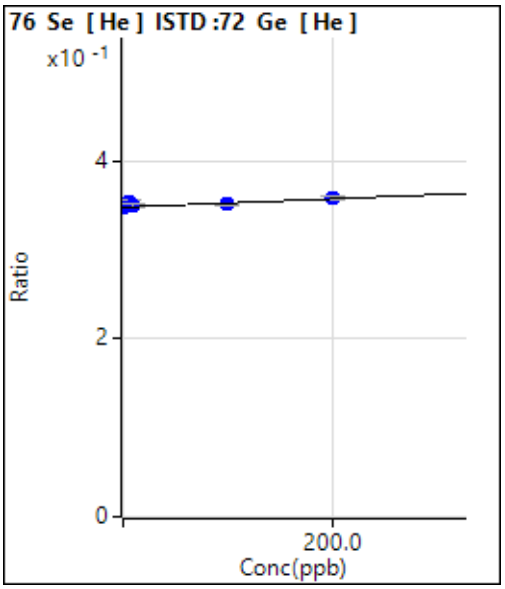
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	389615.57	0.3659	P	1.5	
2	☐	2.000	-307.857	389148.84	0.3470	P	1.2	-15492.
3	☐	5.000	-261.349	383167.95	0.3498	P	1.3	-5327.0
4	☐	10.000	-43.103	383238.18	0.3633	P	4.1	-531.0
5	☐	100.000	-90.749	395932.68	0.3604	P	3.0	-190.7
6	☐	200.000	307.787	390915.79	0.3849	P	3.3	53.9

y = 6.1562E-005 * x + 0.3659
R = 0.7903
DL = 265.8 ppb
BEC = 5944 ppb

Weight: <None>
Min Conc: <None>

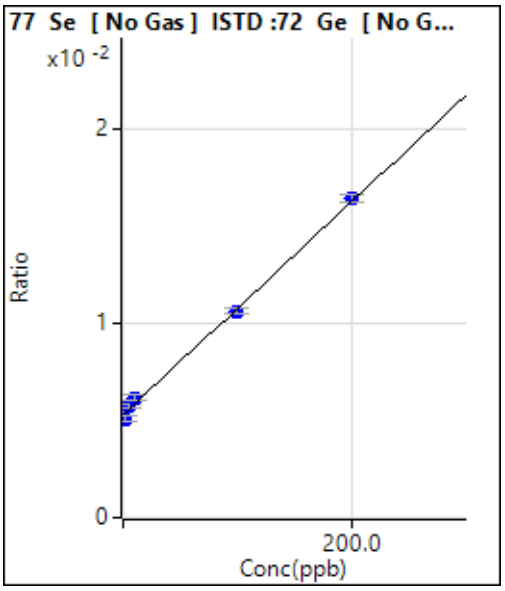


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	117895.22	0.3480	P	0.6	
2	☐	2.000	79.129	120602.08	0.3518	P	0.9	3856.5
3	☐	5.000	130.345	118651.35	0.3543	P	1.3	2506.9
4	☐	10.000	24.896	116728.09	0.3492	P	1.0	149.0
5	☐	100.000	81.283	119939.62	0.3519	P	0.6	-18.7
6	☐	200.000	204.709	118396.13	0.3579	P	1.2	2.4

y = 4.8025E-005 * x + 0.3480
R = 0.7505
DL = 123.2 ppb
BEC = 7247 ppb

Weight: <None>
Min Conc: <None>

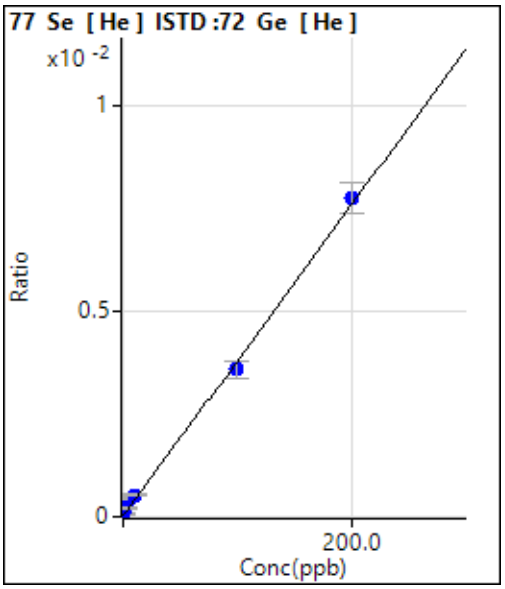
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5731.34	0.0054	P	6.6	
2	☐	2.000	-5.873	5678.00	0.0051	P	6.1	-393.7
3	☐	5.000	6.968	6314.92	0.0058	P	3.7	39.4
4	☐	10.000	14.585	6521.70	0.0062	P	5.1	45.8
5	☐	100.000	95.968	11695.24	0.0106	P	2.0	-4.0
6	☐	200.000	201.816	16697.29	0.0164	P	2.6	0.9

y = 5.4750E-005 * x + 0.0054
R = 0.9985
DL = 19.4 ppb
BEC = 98.36 ppb

Weight: <None>
Min Conc: <None>

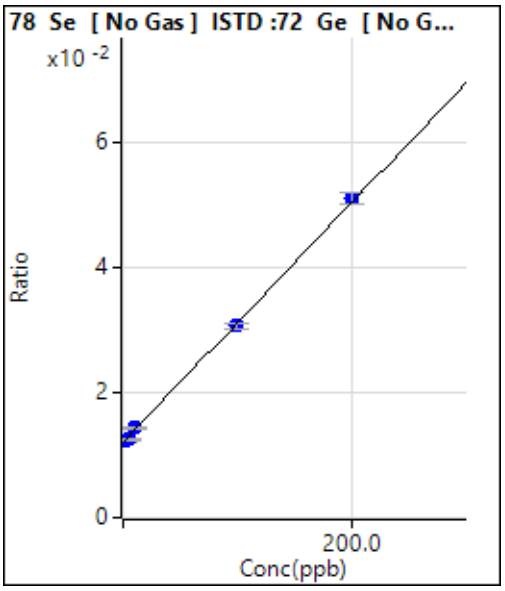


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.1	
2	☐	2.000	3.832	70.00	0.0002	P	14.3	91.6
3	☐	5.000	10.010	146.67	0.0004	P	16.2	100.2
4	☐	10.000	12.126	173.33	0.0005	P	8.2	21.3
5	☐	100.000	92.962	1220.08	0.0036	P	10.8	-7.0
6	☐	200.000	203.269	2566.96	0.0078	P	9.1	1.6

y = 3.7879E-005 * x + 5.9053E-005
R = 0.9987
DL = 2.344 ppb
BEC = 1.559 ppb

Weight: <None>
Min Conc: <None>

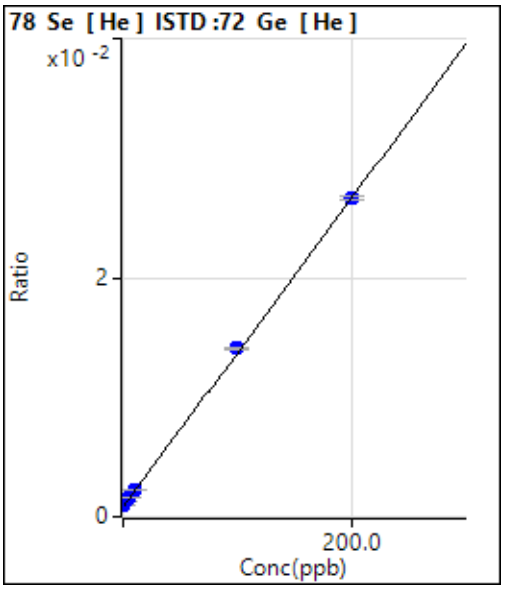
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13160.00	0.0124	P	6.2	
2	☐	2.000	-1.167	13610.42	0.0121	P	3.7	-158.3
3	☐	5.000	0.648	13673.81	0.0125	P	2.2	-87.0
4	☐	10.000	10.616	15182.08	0.0144	P	2.8	6.2
5	☐	100.000	95.448	33599.01	0.0306	P	3.4	-4.6
6	☐	200.000	202.386	51789.70	0.0510	P	4.1	1.2

y = 1.9091E-004 * x + 0.0124
R = 0.9995
DL = 12.11 ppb
BEC = 64.74 ppb

Weight: <None>
Min Conc: <None>

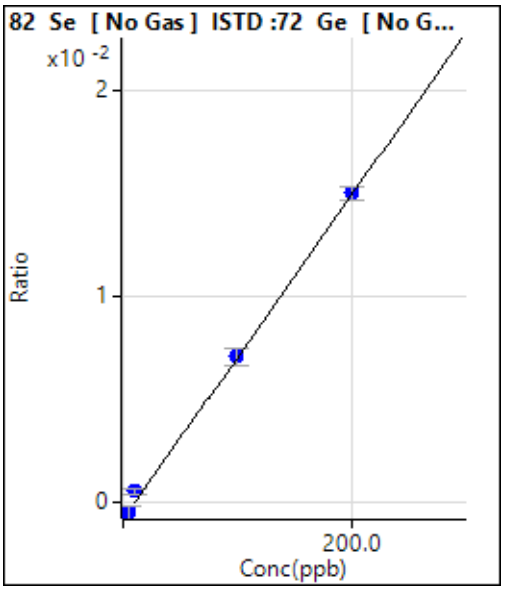


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	327.34	0.0010	P	7.1	
2	☐	2.000	2.067	422.68	0.0012	P	1.9	3.3
3	☐	5.000	5.223	549.34	0.0016	P	3.4	4.5
4	☐	10.000	10.128	760.02	0.0023	P	0.8	1.3
5	☐	100.000	101.812	4808.87	0.0141	P	1.3	1.8
6	☐	200.000	199.081	8822.23	0.0267	P	0.7	-0.5

y = 1.2910E-004 * x + 9.6621E-004
R = 0.9999
DL = 1.586 ppb
BEC = 7.484 ppb

Weight: <None>
Min Conc: <None>

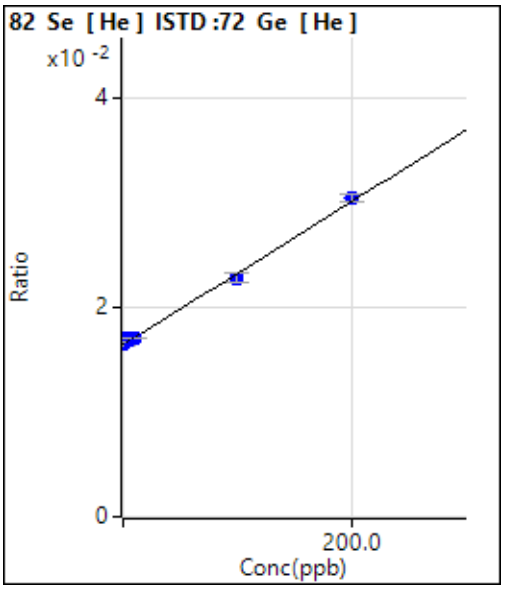
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-796.78	-0.0007	P	-54.8	
2	☐	2.000	2.169	-649.43	-0.0006	P	-141.	8.4
3	☐	5.000	3.266	-537.49	-0.0005	P	-106.	-34.7
4	☐	10.000	16.138	560.90	0.0005	P	51.3	61.4
5	☐	100.000	99.273	7795.94	0.0071	P	12.3	-0.7
6	☐	200.000	200.098	15287.09	0.0150	P	4.1	0.0

y = 7.8863E-005 * x - 7.4756E-004
R = 0.9994
DL = 15.58 ppb
BEC = -9.479 ppb

Weight: <None>
Min Conc: <None>

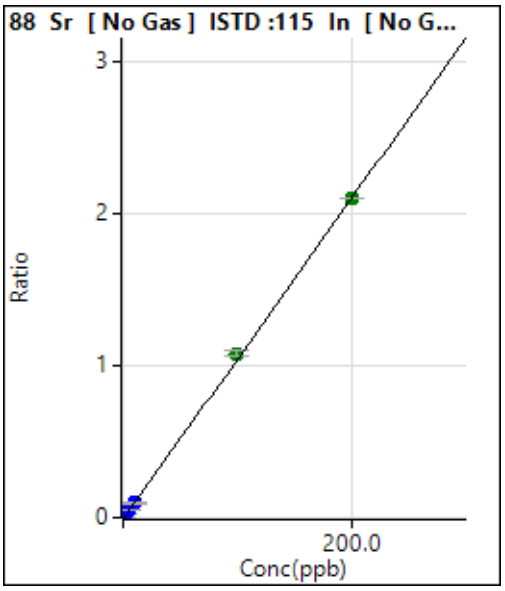


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5591.27	0.0165	P	2.3	
2	☐	2.000	8.706	5861.43	0.0171	P	2.1	335.3
3	☐	5.000	4.702	5634.62	0.0168	P	2.3	-6.0
4	☐	10.000	8.208	5704.63	0.0171	P	0.5	-17.9
5	☐	100.000	92.368	7775.73	0.0228	P	4.3	-7.6
6	☐	200.000	203.846	10070.59	0.0304	P	3.0	1.9

y = 6.8344E-005 * x + 0.0165
R = 0.9982
DL = 16.75 ppb
BEC = 241.5 ppb

Weight: <None>
Min Conc: <None>

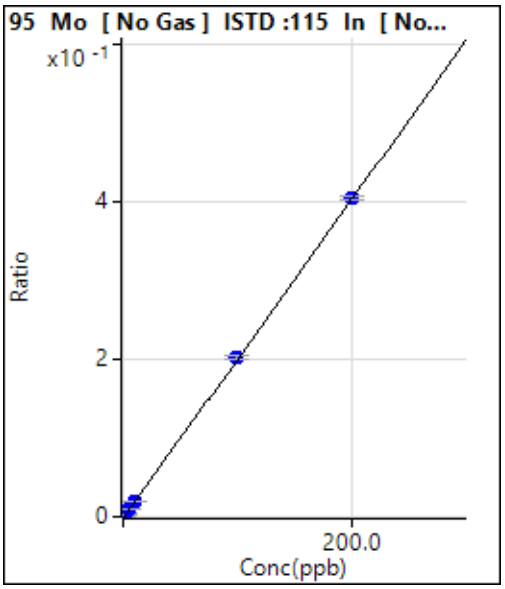
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	653.36	0.0005	P	5.1	
2	☐	2.000	1.822	27207.87	0.0197	P	2.5	-8.9
3	☐	5.000	4.819	69945.90	0.0514	P	2.4	-3.6
4	☐	10.000	8.984	130545.50	0.0954	P	1.1	-10.2
5	☐	100.000	102.284	1444761.23	1.0809	A	2.9	2.3
6	☐	200.000	198.915	2753242.46	2.1016	A	0.6	-0.5

y = 0.0106 * x + 4.8044E-004
R = 0.9999
DL = 0.007022 ppb
BEC = 0.04548 ppb

Weight: <None>
Min Conc: <None>

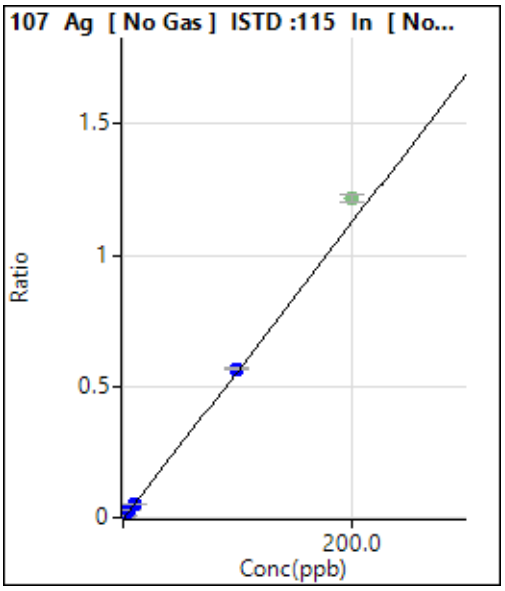


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.824	5111.09	0.0037	P	6.3	-8.8
3	☐	5.000	4.794	13236.83	0.0097	P	1.3	-4.1
4	☐	10.000	9.496	26353.07	0.0193	P	2.0	-5.0
5	☐	100.000	100.004	270914.09	0.2027	P	1.4	0.0
6	☐	200.000	200.030	531001.28	0.4053	P	1.3	0.0

y = 0.0020 * x + 9.7236E-006
R = 1.0000
DL = 0.01247 ppb
BEC = 0.004799 ppb

Weight: <None>
Min Conc: <None>

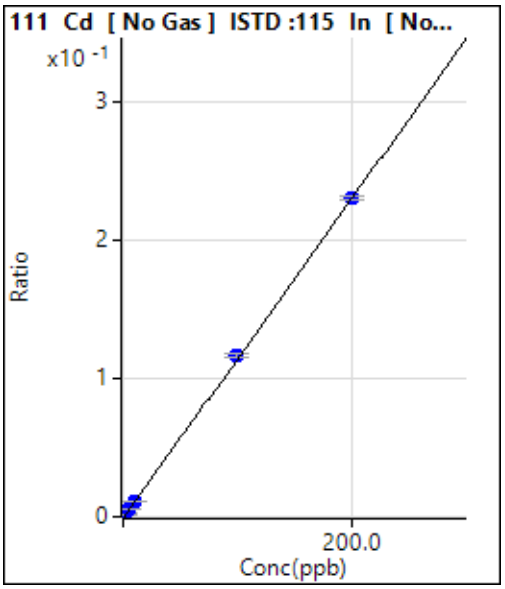
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	40.0	
2	☐	2.000	1.859	14704.99	0.0107	P	3.3	-7.1
3	☐	5.000	4.657	36009.26	0.0265	P	2.0	-6.9
4	☐	10.000	9.403	72890.65	0.0533	P	1.4	-6.0
5	☐	100.000	100.080	755480.59	0.5652	P	1.4	0.1
6	☑	200.000		1593637.32	1.2165	A	2.1	

y = 0.0056 * x + 1.6899E-004
R = 1.0000
DL = 0.03594 ppb
BEC = 0.02993 ppb

Weight: <None>
Min Conc: <None>

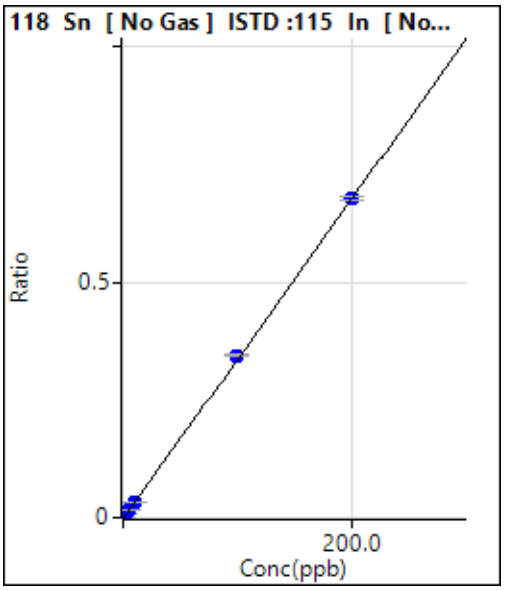


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.906	3040.41	0.0022	P	13.7	-4.7
3	☐	5.000	4.614	7268.79	0.0053	P	7.6	-7.7
4	☐	10.000	9.821	15559.44	0.0114	P	4.7	-1.8
5	☐	100.000	101.002	156297.13	0.1169	P	2.0	1.0
6	☐	200.000	199.518	302586.33	0.2310	P	1.0	-0.2

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

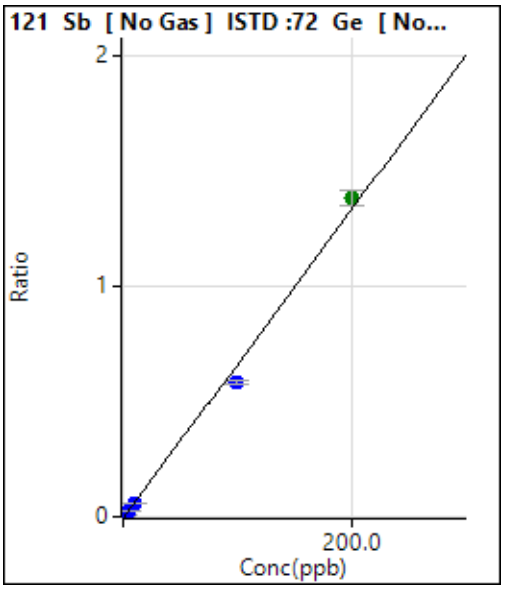
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1216.75	0.0009	P	5.3	
2	☐	2.000	1.889	10077.34	0.0073	P	3.3	-5.5
3	☐	5.000	4.597	22459.55	0.0165	P	0.2	-8.1
4	☐	10.000	9.190	43923.72	0.0321	P	0.9	-8.1
5	☐	100.000	101.196	460443.38	0.3444	P	1.3	1.2
6	☐	200.000	199.454	888216.26	0.6780	P	0.7	-0.3

y = 0.0034 * x + 8.9381E-004
R = 1.0000
DL = 0.0416 ppb
BEC = 0.2633 ppb

Weight: <None>
Min Conc: <None>

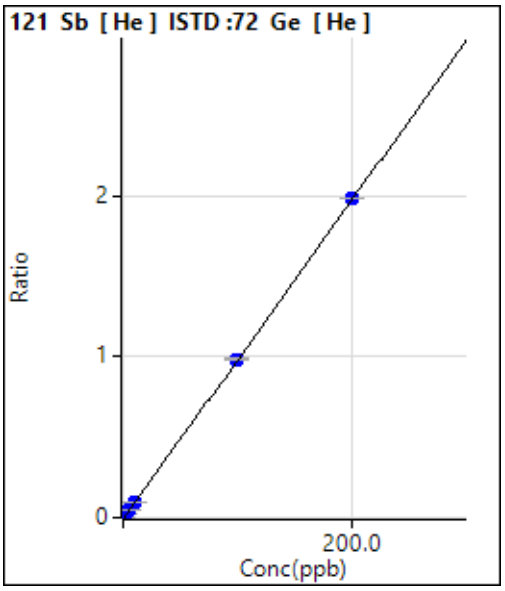


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	300.01	0.0003	P	28.5	
2	☐	2.000	1.647	12686.36	0.0113	P	7.0	-17.7
3	☐	5.000	4.146	30726.32	0.0281	P	2.0	-17.1
4	☐	10.000	8.698	61785.72	0.0586	P	3.6	-13.0
5	☐	100.000	87.172	642005.95	0.5843	P	2.7	-12.8
6	☐	200.000	206.504	1404987.27	1.3837	A	4.7	3.3

y = 0.0067 * x + 2.8121E-004
R = 0.9972
DL = 0.03585 ppb
BEC = 0.04198 ppb

Weight: <None>
Min Conc: <None>

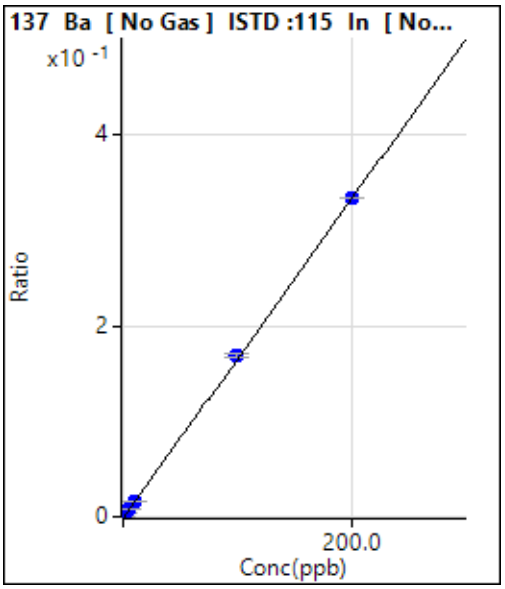
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0006	P	14.8	
2	☐	2.000	1.825	6388.34	0.0186	P	3.3	-8.7
3	☐	5.000	4.739	15899.89	0.0475	P	2.2	-5.2
4	☐	10.000	9.532	31718.67	0.0949	P	3.8	-4.7
5	☐	100.000	99.483	335743.37	0.9852	P	1.5	-0.5
6	☐	200.000	200.290	655992.92	1.9829	P	0.5	0.1

y = 0.0099 * x + 5.7065E-004
R = 1.0000
DL = 0.02556 ppb
BEC = 0.05766 ppb

Weight: <None>
Min Conc: <None>

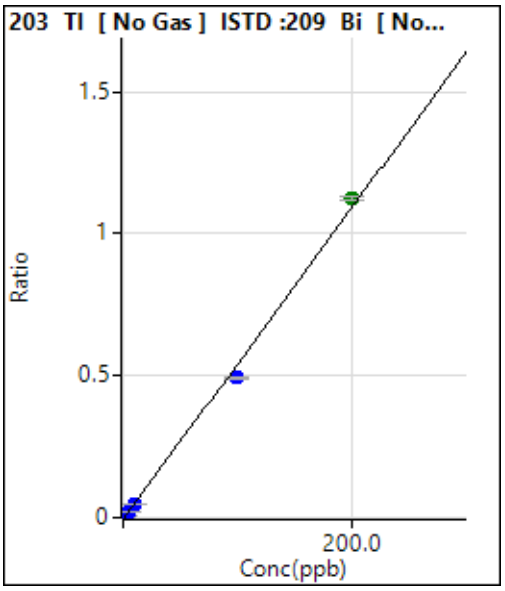


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.01	0.0001	P	26.4	
2	☐	2.000	1.942	4614.25	0.0033	P	5.1	-2.9
3	☐	5.000	4.948	11401.88	0.0084	P	4.2	-1.0
4	☐	10.000	9.331	21508.06	0.0157	P	2.6	-6.7
5	☐	100.000	100.886	225869.41	0.1690	P	2.0	0.9
6	☐	200.000	199.592	437828.10	0.3342	P	0.6	-0.2

y = 0.0017 * x + 9.5502E-005
R = 1.0000
DL = 0.0452 ppb
BEC = 0.05705 ppb

Weight: <None>
Min Conc: <None>

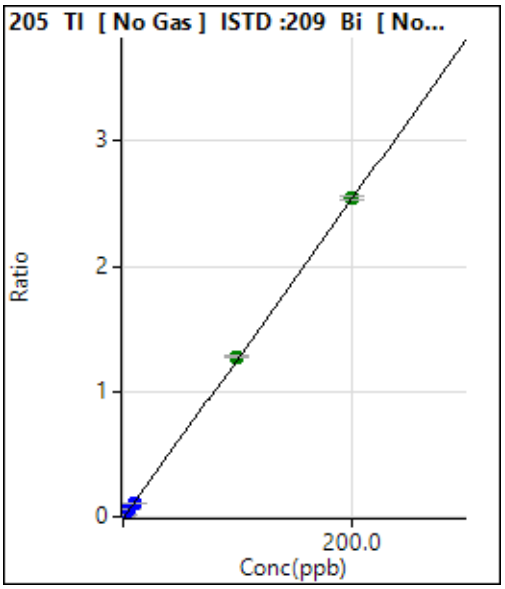
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.7	
2	☐	2.000	1.658	12923.58	0.0091	P	4.3	-17.1
3	☐	5.000	4.180	32135.16	0.0229	P	2.2	-16.4
4	☐	10.000	8.226	63789.30	0.0451	P	0.3	-17.7
5	☐	100.000	89.840	681766.19	0.4925	P	1.5	-10.2
6	☐	200.000	205.193	1501543.00	1.1249	A	1.1	2.6

y = 0.0055 * x + 1.4469E-005
R = 0.9983
DL = 0.004018 ppb
BEC = 0.002639 ppb

Weight: <None>
Min Conc: <None>

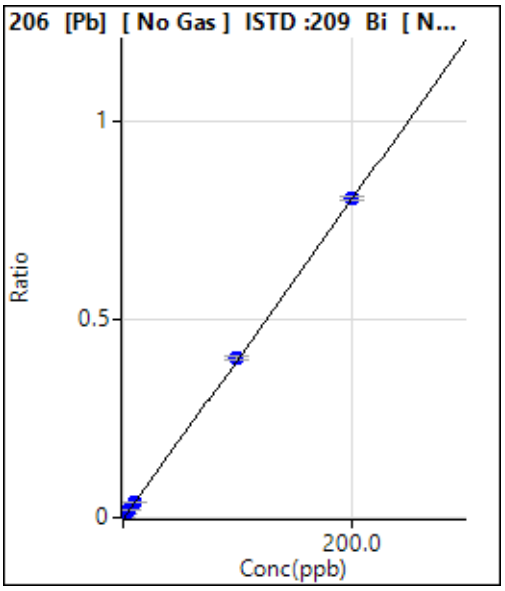


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	17.5	
2	☐	2.000	1.717	31082.39	0.0219	P	1.7	-14.1
3	☐	5.000	4.271	76266.31	0.0544	P	1.3	-14.6
4	☐	10.000	8.723	157097.24	0.1111	P	0.9	-12.8
5	☐	100.000	100.336	1768441.07	1.2776	A	1.6	0.3
6	☐	200.000	199.917	3397792.45	2.5456	A	1.1	0.0

y = 0.0127 * x + 2.6458E-005
R = 1.0000
DL = 0.001088 ppb
BEC = 0.002078 ppb

Weight: <None>
Min Conc: <None>

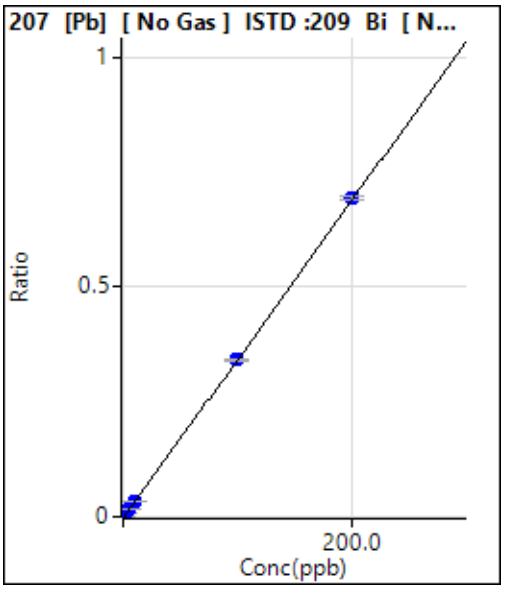
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	24.5	
2	☐	2.000	1.937	11248.57	0.0079	P	3.4	-3.1
3	☐	5.000	4.636	26374.87	0.0188	P	2.3	-7.3
4	☐	10.000	9.490	54321.79	0.0384	P	0.5	-5.1
5	☐	100.000	100.315	560714.52	0.4051	P	2.0	0.3
6	☐	200.000	199.878	1077258.21	0.8071	P	1.3	-0.1

y = 0.0040 * x + 1.0074E-004
R = 1.0000
DL = 0.0183 ppb
BEC = 0.02495 ppb

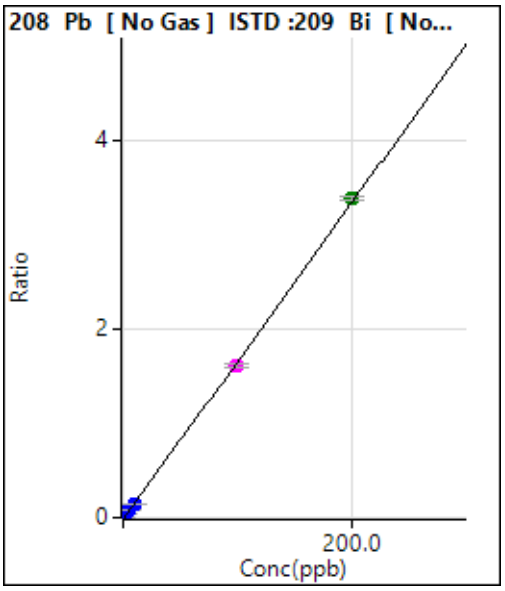
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	21.4	
2	☐	2.000	1.915	9507.12	0.0067	P	4.8	-4.2
3	☐	5.000	4.602	22397.17	0.0160	P	2.9	-8.0
4	☐	10.000	9.393	46005.05	0.0325	P	1.9	-6.1
5	☐	100.000	98.683	472119.56	0.3411	P	1.4	-1.3
6	☐	200.000	200.700	925798.76	0.6936	P	1.1	0.3

y = 0.0035 * x + 7.6762E-005
R = 1.0000
DL = 0.01423 ppb
BEC = 0.02221 ppb

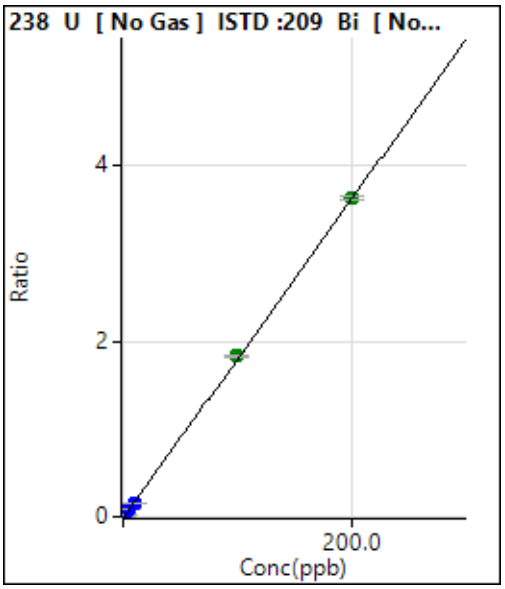
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	616.68	0.0004	P	7.6	
2	☐	2.000	1.819	43937.56	0.0309	P	2.1	-9.0
3	☐	5.000	4.478	105849.36	0.0755	P	1.4	-10.4
4	☐	10.000	9.050	215189.95	0.1522	P	0.6	-9.5
5	☐	100.000	96.161	2232387.98	1.6127	M	1.5	-3.8
6	☐	200.000	201.982	4520443.14	3.3868	A	1.6	1.0

y = 0.0168 * x + 4.4394E-004
R = 0.9998
DL = 0.006029 ppb
BEC = 0.02648 ppb

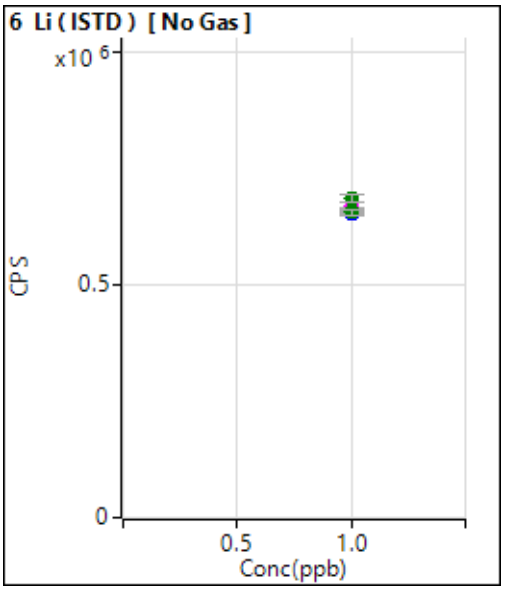
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Min Conc: <None>



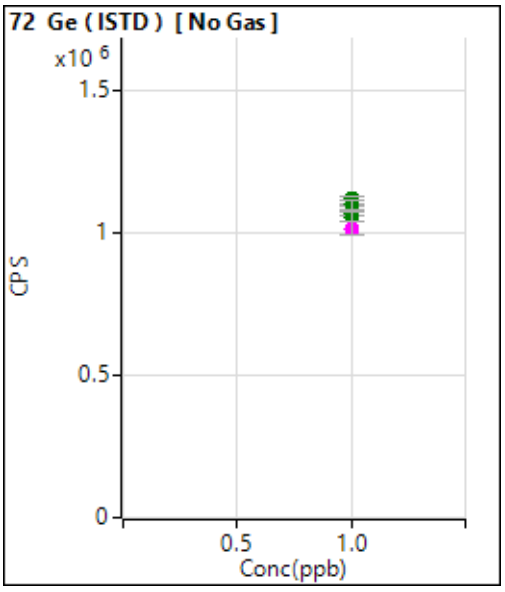
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	44.9	
2	☐	2.000	1.746	45053.23	0.0317	P	1.3	-12.7
3	☐	5.000	4.392	111879.02	0.0798	P	1.9	-12.2
4	☐	10.000	8.879	228172.47	0.1614	P	0.6	-11.2
5	☐	100.000	100.790	2535315.64	1.8316	A	1.1	0.8
6	☐	200.000	199.679	4843356.07	3.6286	A	1.4	-0.2

y = 0.0182 * x + 9.6416E-006
R = 1.0000
DL = 0.0007149 ppb
BEC = 0.0005306 ppb

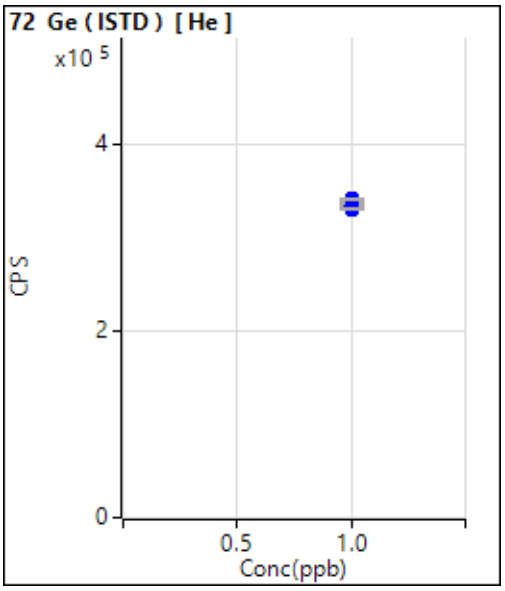
Weight: <None>
Min Conc: <None>



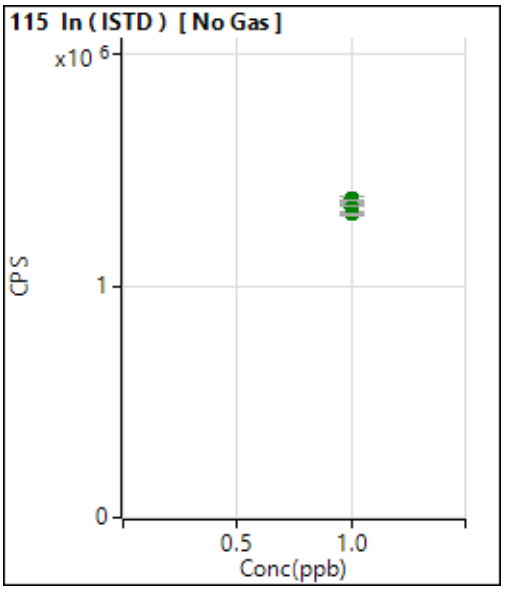
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		670806.57		M	2.3	
2	☐	1.000		685146.84		M	2.9	
3	☐	1.000		658640.95		P	0.1	
4	☐	1.000		653287.19		P	0.6	
5	☐	1.000		685499.72		A	2.0	
6	☐	1.000		655435.47		A	2.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1064832.80		A	1.3	
2	☐	1.000		1121595.69		A	0.9	
3	☐	1.000		1095296.75		A	0.7	
4	☐	1.000		1055891.36		A	3.4	
5	☐	1.000		1099376.75		A	3.0	
6	☐	1.000		1016593.71		M	4.1	

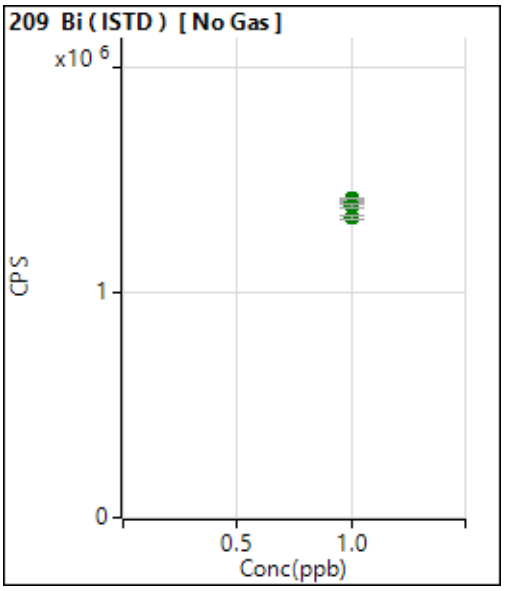


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		338750.20		P	0.3	
2	☐	1.000		342790.06		P	0.5	
3	☐	1.000		334894.32		P	0.6	
4	☐	1.000		334264.68		P	0.9	
5	☐	1.000		340806.65		P	0.6	
6	☐	1.000		330825.84		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360629.72		A	1.9	
2	☐	1.000		1379610.82		A	1.6	
3	☐	1.000		1361230.28		A	1.2	
4	☐	1.000		1368776.61		A	0.7	
5	☐	1.000		1336992.47		A	1.7	
6	☐	1.000		1310100.00		A	0.9	

Calibration for 212_ICV.d



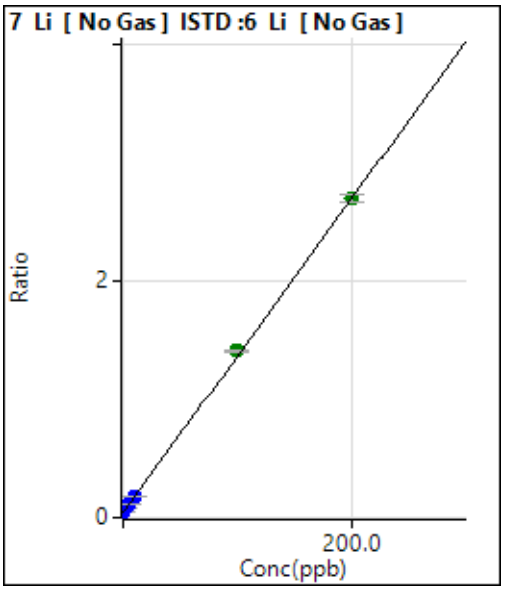
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1388985.61		A	2.0	
2	☐	1.000		1419790.14		A	0.4	
3	☐	1.000		1401715.45		A	1.3	
4	☐	1.000		1414056.38		A	0.8	
5	☐	1.000		1384389.30		A	1.6	
6	☐	1.000		1334929.82		A	1.6	

Calibration for 183_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	175CALB.d	CAL BLK	07/20/2022 20:02:19
2	176CALS.d	2/10/200	07/20/2022 20:04:27
3	177CALS.d	5/25/500	07/20/2022 20:06:34
4	178CALS.d	10/50/100	07/20/2022 20:08:41
5	179CALS.d	100/500/10K	07/20/2022 20:10:48
6	180CALS.d	200/1000/20K	07/20/2022 20:12:52

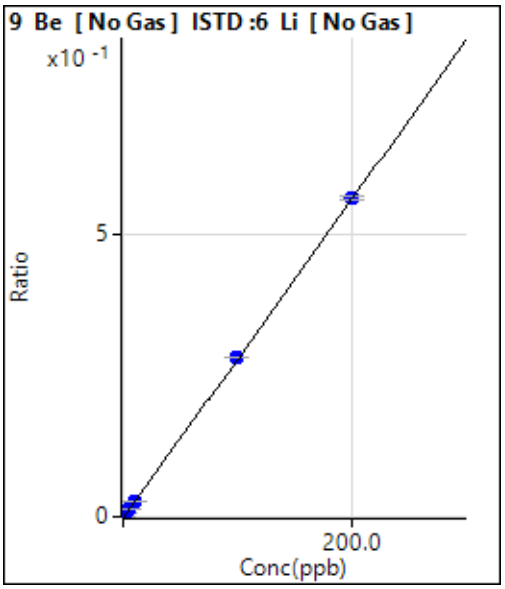
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	32400.55	0.0562	P	1.5	
2	☐	2.000	1.874	46659.10	0.0810	P	1.2	-6.3
3	☐	5.000	4.515	66482.54	0.1161	P	1.4	-9.7
4	☐	10.000	8.805	100094.32	0.1730	P	0.6	-12.0
5	☐	100.000	101.913	791055.69	1.4079	A	1.0	1.9
6	☐	200.000	199.117	1471629.87	2.6972	A	2.3	-0.4

y = 0.0133 * x + 0.0562
R = 0.9999
DL = 0.1948 ppb
BEC = 4.236 ppb

Weight: <None>
Min Conc: <None>

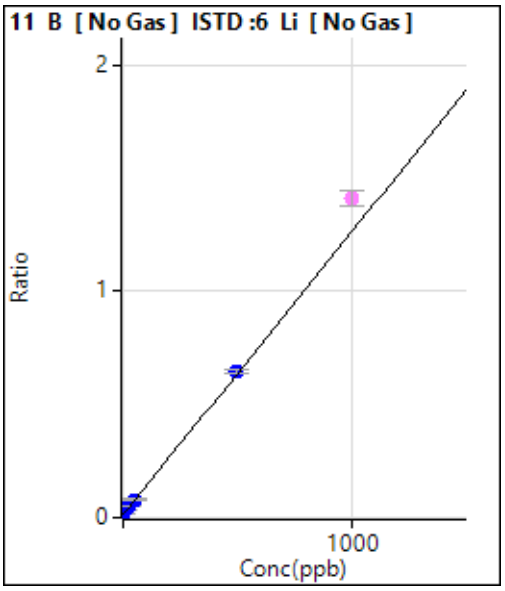


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	45.00	0.0001	P	29.8	
2	☐	2.000	1.936	3177.05	0.0055	P	7.1	-3.2
3	☐	5.000	4.928	7988.99	0.0139	P	2.3	-1.4
4	☐	10.000	9.507	15526.97	0.0268	P	1.7	-4.9
5	☐	100.000	100.070	158283.55	0.2817	P	1.0	0.1
6	☐	200.000	199.992	307173.38	0.5629	P	1.0	0.0

y = 0.0028 * x + 7.8120E-005
R = 1.0000
DL = 0.02484 ppb
BEC = 0.02776 ppb

Weight: <None>
Min Conc: <None>

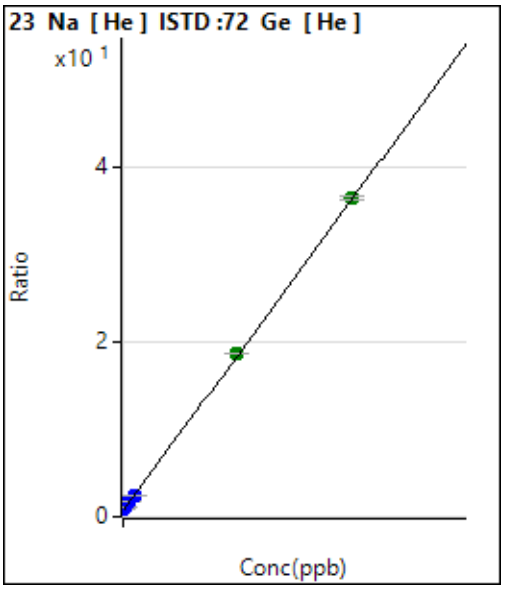
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12008.55	0.0208	P	1.5	
2	☐	10.000	9.121	18517.26	0.0322	P	5.8	-8.8
3	☐	25.000	23.286	28569.01	0.0499	P	2.8	-6.9
4	☐	50.000	47.784	46555.25	0.0805	P	1.6	-4.4
5	☐	500.000	500.325	362514.61	0.6452	P	2.4	0.1
6	☑	1000.000		769508.32	1.4099	M	4.8	

y = 0.0012 * x + 0.0208
R = 1.0000
DL = 0.7435 ppb
BEC = 16.69 ppb

Weight: <None>
Min Conc: <None>

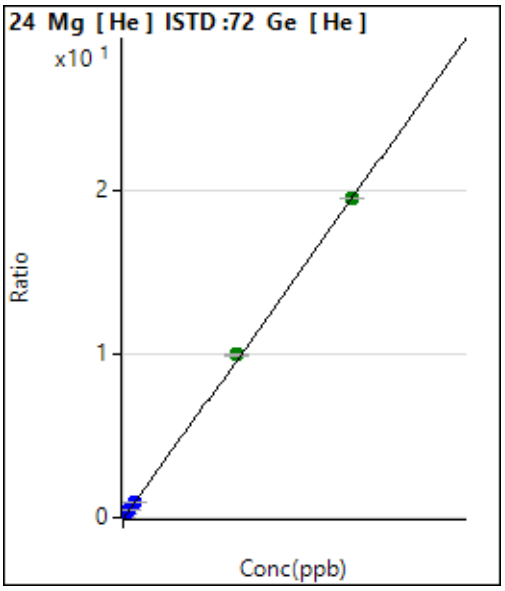


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252696.92	0.8829	P	0.7	
2	☐	200.000	163.149	347772.14	1.1727	P	0.2	-18.4
3	☐	500.000	443.361	491404.16	1.6704	P	0.7	-11.3
4	☐	1000.000	903.850	729680.49	2.4884	P	1.2	-9.6
5	☐	10000.00	9985.203	5509348.25	18.6191	A	0.4	-0.1
6	☐	20000.00	20013.99	10472014.0	36.4327	A	1.2	0.1

y = 0.0018 * x + 0.8829
R = 1.0000
DL = 9.805 ppb
BEC = 497.1 ppb

Weight: <None>
Min Conc: <None>

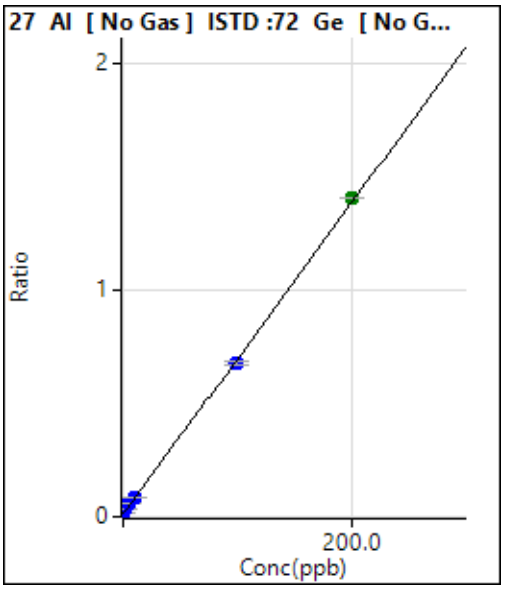
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0008	P	32.8	
2	☐	200.000	191.979	55942.34	0.1886	P	0.8	-4.0
3	☐	500.000	487.274	140492.19	0.4775	P	0.8	-2.5
4	☐	1000.000	964.952	277070.40	0.9449	P	1.6	-3.5
5	☐	10000.00	10150.59	2938814.85	9.9319	A	1.2	1.5
6	☐	20000.00	19926.85	5604571.58	19.4967	A	0.6	-0.4

y = 9.7837E-004 * x + 8.0352E-004
R = 1.0000
DL = 0.807 ppb
BEC = 0.8213 ppb

Weight: <None>
Min Conc: <None>

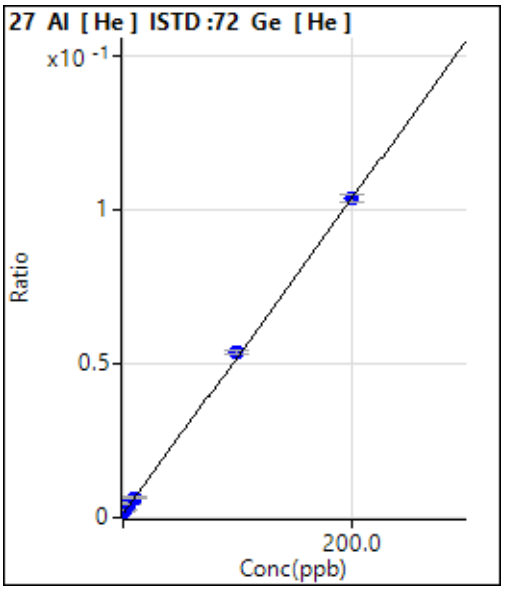


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16523.35	0.0186	P	0.7	
2	☐	2.000	2.018	28719.92	0.0325	P	4.3	0.9
3	☐	5.000	5.645	50786.00	0.0574	P	0.8	12.9
4	☐	10.000	9.256	73349.72	0.0822	P	1.4	-7.4
5	☐	100.000	95.956	611430.42	0.6775	P	1.7	-4.0
6	☐	200.000	202.043	1228066.10	1.4059	A	0.2	1.0

y = 0.0069 * x + 0.0186
R = 0.9997
DL = 0.05702 ppb
BEC = 2.708 ppb

Weight: <None>
Min Conc: <None>

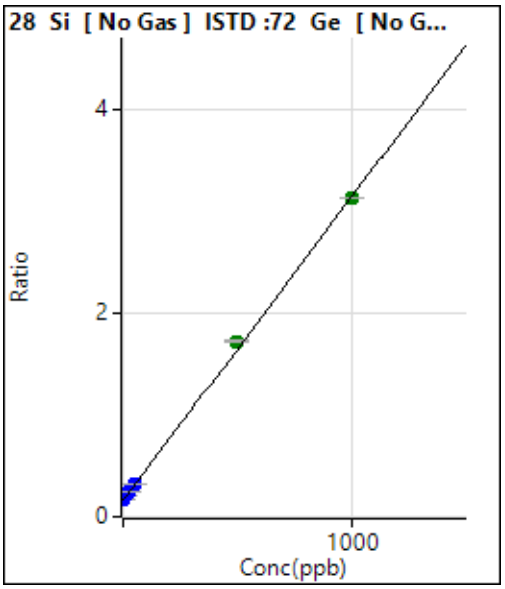
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0017	P	3.6	
2	☐	2.000	1.523	740.03	0.0025	P	20.6	-23.8
3	☐	5.000	5.626	1353.42	0.0046	P	12.2	12.5
4	☐	10.000	9.191	1883.50	0.0064	P	10.6	-8.1
5	☐	100.000	101.467	15906.04	0.0537	P	2.1	1.5
6	☐	200.000	199.296	29872.31	0.1039	P	2.6	-0.4

y = 5.1284E-004 * x + 0.0017
R = 0.9999
DL = 0.3635 ppb
BEC = 3.338 ppb

Weight: <None>
Min Conc: <None>

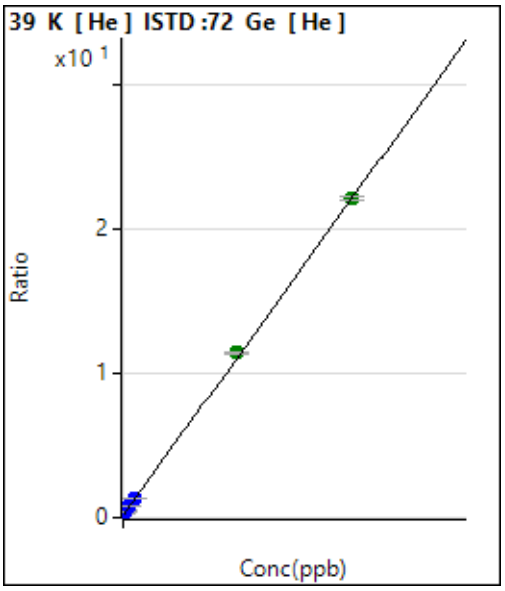


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	155957.23	0.1756	P	1.5	
2	☐	10.000	9.095	179401.96	0.2027	P	3.0	-9.0
3	☐	25.000	26.206	224623.56	0.2537	P	0.4	4.8
4	☐	50.000	46.795	281301.25	0.3151	P	0.4	-6.4
5	☐	500.000	518.365	1553215.92	1.7210	A	1.1	3.7
6	☐	1000.000	990.957	2733937.98	3.1299	A	0.2	-0.9

y = 0.0030 * x + 0.1756
R = 0.9997
DL = 2.598 ppb
BEC = 58.89 ppb

Weight: <None>
Min Conc: <None>

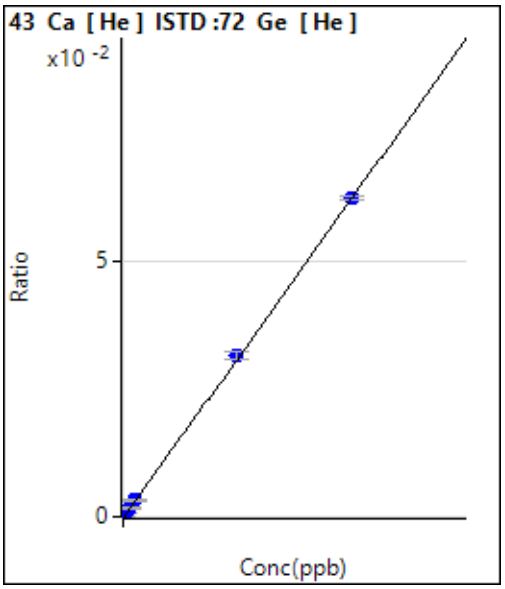
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78358.37	0.2738	P	0.4	
2	☐	200.000	175.283	138233.21	0.4661	P	0.6	-12.4
3	☐	500.000	459.530	228902.97	0.7781	P	0.2	-8.1
4	☐	1000.000	933.607	380709.80	1.2983	P	1.4	-6.6
5	☐	10000.00	10163.56	3381123.91	11.4272	A	1.6	1.6
6	☐	20000.00	19922.79	6362828.45	22.1370	A	1.4	-0.4

y = 0.0011 * x + 0.2738
R = 0.9999
DL = 2.729 ppb
BEC = 249.5 ppb

Weight: <None>
Min Conc: <None>

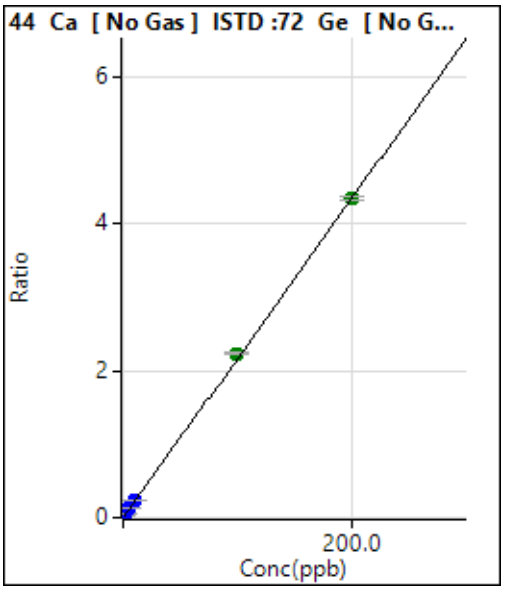


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	200.000	208.469	200.00	0.0007	P	12.7	4.2
3	☐	500.000	529.607	493.35	0.0017	P	8.9	5.9
4	☐	1000.000	1023.363	943.38	0.0032	P	8.3	2.3
5	☐	10000.00	10118.62	9353.35	0.0316	P	4.3	1.2
6	☐	20000.00	19938.69	17898.51	0.0623	P	1.2	-0.3

y = 3.1219E-006 * x + 2.3305E-005
R = 1.0000
DL = 19.39 ppb
BEC = 7.465 ppb

Weight: <None>
Min Conc: <None>

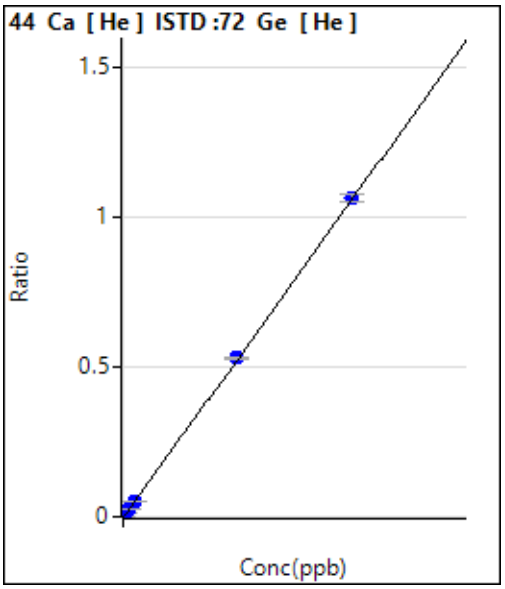
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	17978.69	0.0202	P	0.1	
2	☐	2.000	1.926	54963.13	0.0621	P	3.6	-3.7
3	☐	5.000	4.976	113669.61	0.1284	P	1.9	-0.5
4	☐	10.000	9.544	203270.60	0.2277	P	0.3	-4.6
5	☐	100.000	101.743	2014161.63	2.2316	A	0.8	1.7
6	☐	200.000	199.152	3798625.25	4.3488	A	0.9	-0.4

y = 0.0217 * x + 0.0202
R = 0.9999
DL = 0.004126 ppb
BEC = 0.9311 ppb

Weight: <None>
Min Conc: <None>

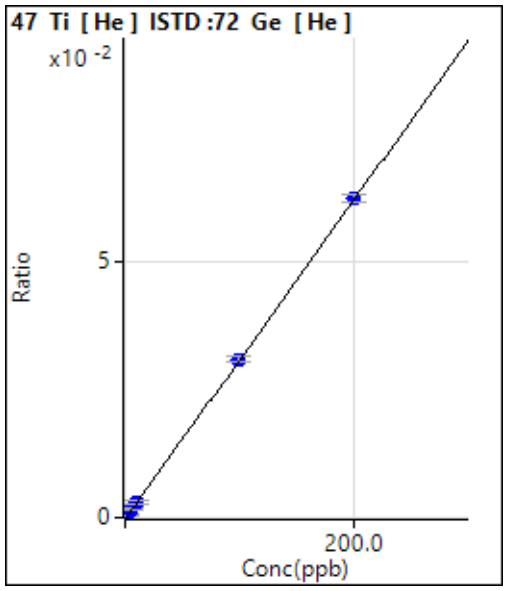


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0014	P	2.8	
2	☐	200.000	195.603	3497.17	0.0118	P	2.3	-2.2
3	☐	500.000	504.055	8282.64	0.0281	P	4.7	0.8
4	☐	1000.000	953.775	15245.35	0.0520	P	1.7	-4.6
5	☐	10000.00	9943.887	156424.86	0.5287	P	0.5	-0.6
6	☐	20000.00	20030.31	305657.11	1.0635	P	1.9	0.2

y = 5.3021E-005 * x + 0.0014
R = 1.0000
DL = 2.267 ppb
BEC = 26.8 ppb

Weight: <None>
Min Conc: <None>

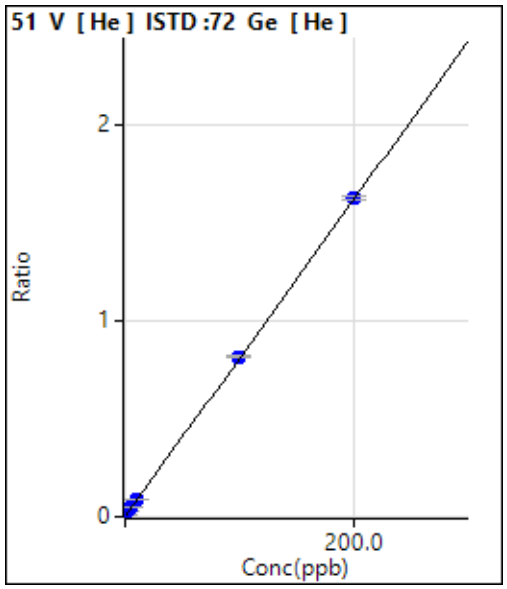
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.770	163.34	0.0006	P	31.1	-11.5
3	☐	5.000	5.306	486.69	0.0017	P	26.6	6.1
4	☐	10.000	9.868	900.05	0.0031	P	21.5	-1.3
5	☐	100.000	99.450	9159.88	0.0310	P	2.8	-0.6
6	☐	200.000	200.276	17921.91	0.0624	P	1.9	0.1

y = 3.1133E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

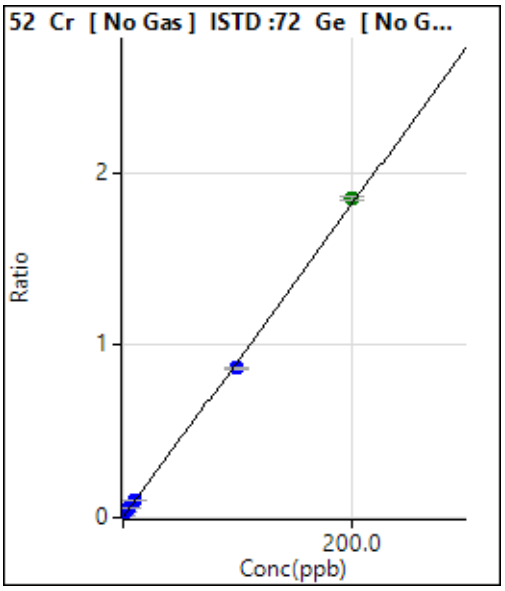


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2833.64	0.0099	P	1.6	
2	☐	2.000	1.895	7488.76	0.0252	P	4.0	-5.3
3	☐	5.000	4.994	14812.48	0.0504	P	0.6	-0.1
4	☐	10.000	9.697	25932.28	0.0884	P	2.3	-3.0
5	☐	100.000	99.852	242234.11	0.8187	P	1.0	-0.1
6	☐	200.000	200.090	468692.95	1.6305	P	0.6	0.0

y = 0.0081 * x + 0.0099
R = 1.0000
DL = 0.06046 ppb
BEC = 1.222 ppb

Weight: <None>
Min Conc: <None>

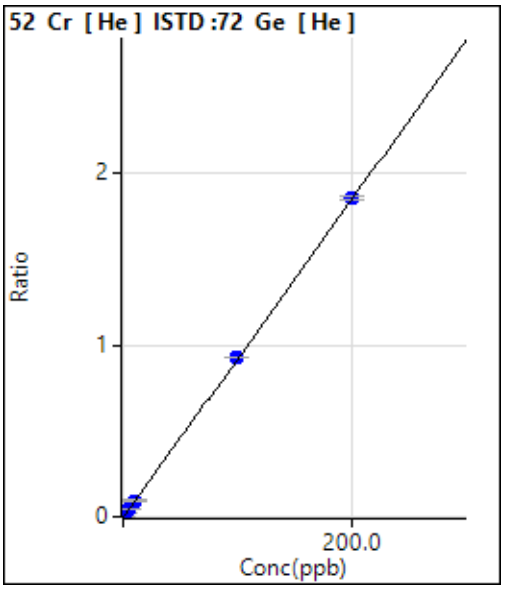
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9493.42	0.0107	P	1.5	
2	☐	2.000	2.022	25717.86	0.0291	P	4.1	1.1
3	☐	5.000	4.781	47920.69	0.0541	P	0.9	-4.4
4	☐	10.000	9.354	85421.98	0.0957	P	0.9	-6.5
5	☐	100.000	94.186	781966.73	0.8664	P	0.7	-5.8
6	☐	200.000	202.945	1619946.64	1.8546	A	1.1	1.5

y = 0.0091 * x + 0.0107
R = 0.9994
DL = 0.05237 ppb
BEC = 1.176 ppb

Weight: <None>
Min Conc: <None>

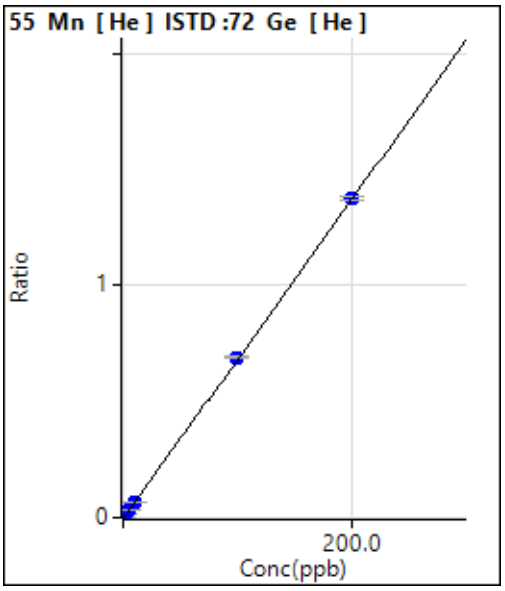


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	850.04	0.0030	P	4.6	
2	☐	2.000	1.922	6168.17	0.0208	P	2.4	-3.9
3	☐	5.000	5.060	14678.08	0.0499	P	1.6	1.2
4	☐	10.000	9.785	27481.18	0.0937	P	3.1	-2.2
5	☐	100.000	99.901	275042.22	0.9296	P	1.0	-0.1
6	☐	200.000	200.059	534208.00	1.8585	P	1.1	0.0

y = 0.0093 * x + 0.0030
R = 1.0000
DL = 0.04446 ppb
BEC = 0.3202 ppb

Weight: <None>
Min Conc: <None>

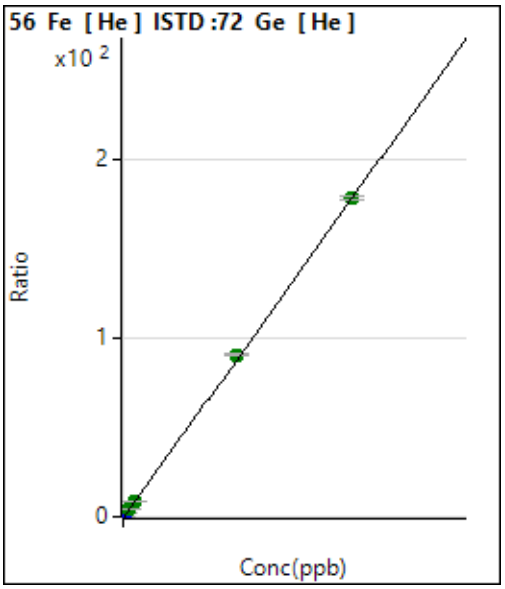
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	580.02	0.0020	P	9.7	
2	☐	2.000	1.945	4564.18	0.0154	P	4.1	-2.8
3	☐	5.000	5.107	10917.86	0.0371	P	0.5	2.1
4	☐	10.000	9.812	20362.13	0.0694	P	2.2	-1.9
5	☐	100.000	100.216	204312.75	0.6905	P	0.9	0.2
6	☐	200.000	199.899	395319.29	1.3753	P	1.0	-0.1

y = 0.0069 * x + 0.0020
R = 1.0000
DL = 0.08599 ppb
BEC = 0.295 ppb

Weight: <None>
Min Conc: <None>

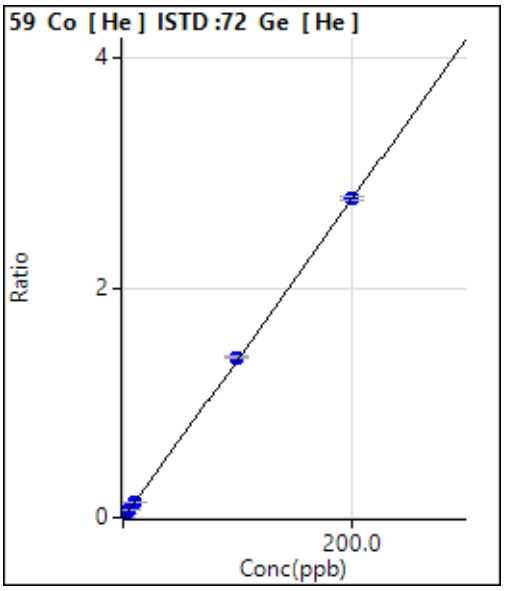


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8926.41	0.0312	P	4.3	
2	☐	200.000	189.317	511590.06	1.7250	P	1.3	-5.3
3	☐	500.000	525.244	1391702.79	4.7305	A	0.6	5.0
4	☐	1000.000	1012.785	2666298.40	9.0925	A	0.8	1.3
5	☐	10000.00	10105.49	26761250.4	90.4439	A	1.1	1.1
6	☐	20000.00	19946.08	51304722.5	178.486	A	0.9	-0.3

y = 0.0089 * x + 0.0312
R = 1.0000
DL = 0.4454 ppb
BEC = 3.486 ppb

Weight: <None>
Min Conc: <None>

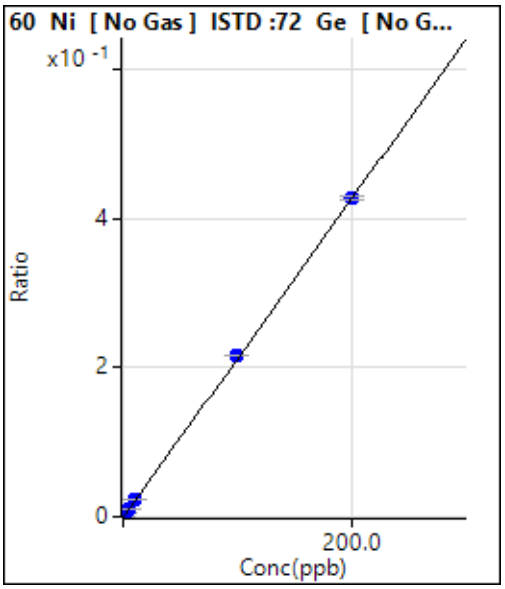
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.4	
2	☐	2.000	1.943	8039.20	0.0271	P	0.7	-2.8
3	☐	5.000	4.825	19774.59	0.0672	P	1.2	-3.5
4	☐	10.000	9.862	40276.54	0.1373	P	2.9	-1.4
5	☐	100.000	100.430	413673.34	1.3980	P	0.5	0.4
6	☐	200.000	199.797	799431.66	2.7812	P	0.9	-0.1

y = 0.0139 * x + 5.8263E-005
R = 1.0000
DL = 0.008716 ppb
BEC = 0.004186 ppb

Weight: <None>
Min Conc: <None>

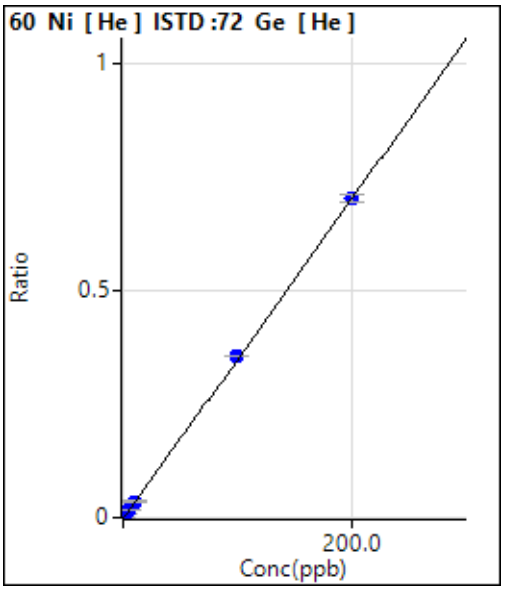


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.03	0.0009	P	2.9	
2	☐	2.000	1.864	4330.77	0.0049	P	3.4	-6.8
3	☐	5.000	4.954	10183.92	0.0115	P	0.6	-0.9
4	☐	10.000	10.124	20148.44	0.0226	P	2.9	1.2
5	☐	100.000	100.910	195716.29	0.2169	P	0.8	0.9
6	☐	200.000	199.541	373785.31	0.4279	P	0.9	-0.2

y = 0.0021 * x + 9.0069E-004
R = 1.0000
DL = 0.03652 ppb
BEC = 0.4209 ppb

Weight: <None>
Min Conc: <None>

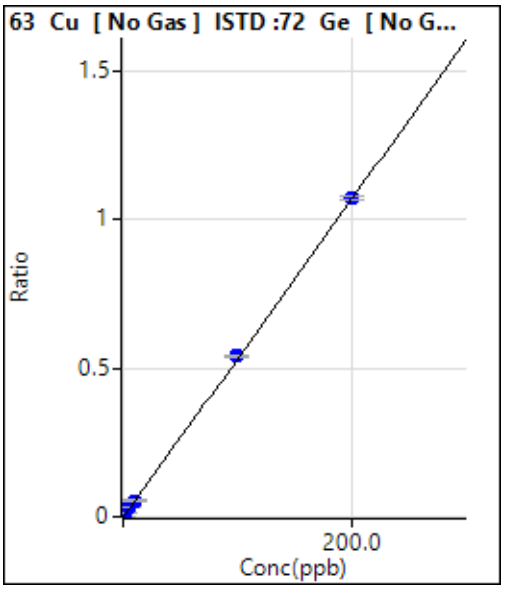
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	37.1	
2	☐	2.000	1.855	2090.19	0.0070	P	8.7	-7.3
3	☐	5.000	4.828	5147.71	0.0175	P	3.3	-3.4
4	☐	10.000	10.037	10500.89	0.0358	P	5.0	0.4
5	☐	100.000	100.974	105210.56	0.3556	P	0.2	1.0
6	☐	200.000	199.517	201780.90	0.7020	P	1.9	-0.2

y = 0.0035 * x + 5.2406E-004
R = 1.0000
DL = 0.1658 ppb
BEC = 0.149 ppb

Weight: <None>
Min Conc: <None>

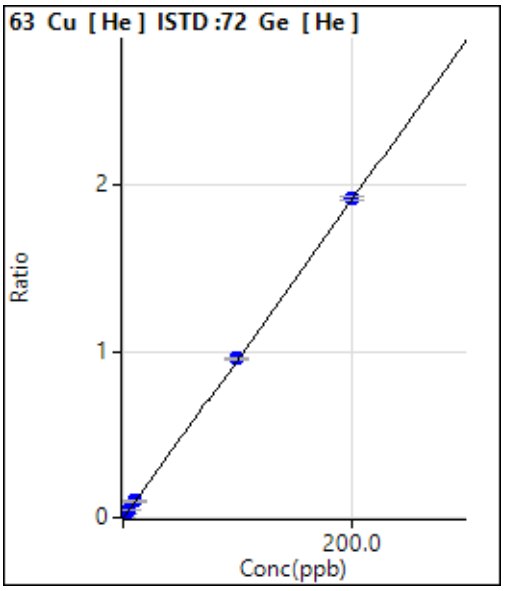


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2210.22	0.0025	P	1.3	
2	☐	2.000	2.130	12289.10	0.0139	P	5.2	6.5
3	☐	5.000	5.047	26115.39	0.0295	P	0.9	0.9
4	☐	10.000	9.728	48700.57	0.0545	P	1.6	-2.7
5	☐	100.000	100.344	486895.44	0.5395	P	0.4	0.3
6	☐	200.000	199.839	936316.57	1.0719	P	0.8	-0.1

y = 0.0054 * x + 0.0025
R = 1.0000
DL = 0.01816 ppb
BEC = 0.4648 ppb

Weight: <None>
Min Conc: <None>

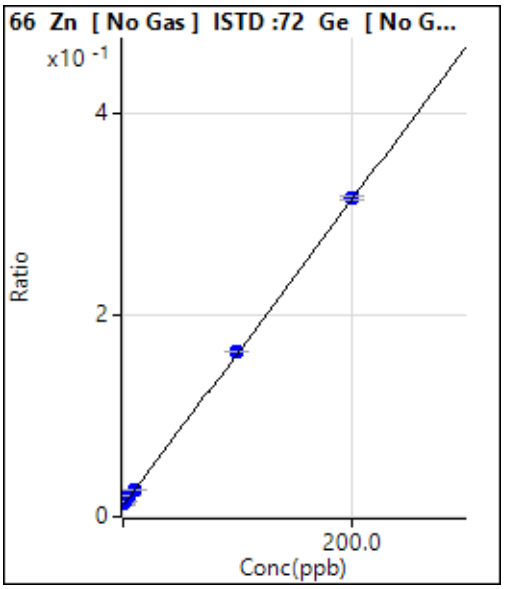
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	916.71	0.0032	P	4.5	
2	☐	2.000	2.059	6795.15	0.0229	P	1.2	2.9
3	☐	5.000	4.834	14558.01	0.0495	P	2.3	-3.3
4	☐	10.000	9.978	28951.21	0.0987	P	3.4	-0.2
5	☐	100.000	99.593	283075.45	0.9567	P	1.0	-0.4
6	☐	200.000	200.208	551899.64	1.9200	P	0.8	0.1

y = 0.0096 * x + 0.0032
R = 1.0000
DL = 0.04519 ppb
BEC = 0.3345 ppb

Weight: <None>
Min Conc: <None>

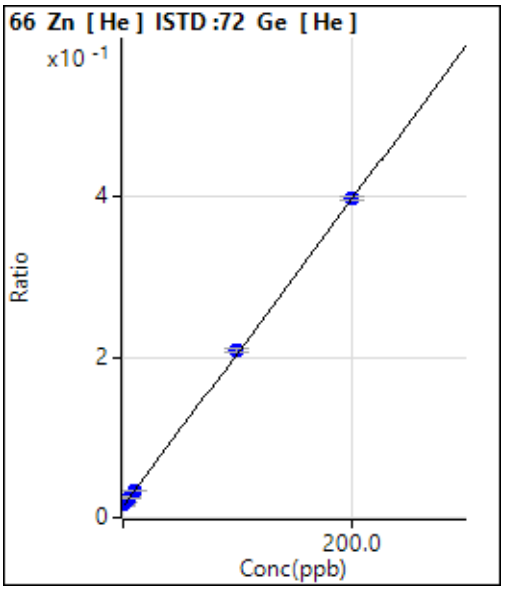


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11098.03	0.0125	P	3.2	
2	☐	2.000	1.896	13623.78	0.0154	P	3.4	-5.2
3	☐	5.000	5.342	18245.84	0.0206	P	1.7	6.8
4	☐	10.000	9.725	24338.79	0.0273	P	2.9	-2.8
5	☐	100.000	99.459	147620.21	0.1636	P	0.5	-0.5
6	☐	200.000	200.277	276624.55	0.3167	P	1.0	0.1

y = 0.0015 * x + 0.0125
R = 1.0000
DL = 0.7849 ppb
BEC = 8.224 ppb

Weight: <None>
Min Conc: <None>

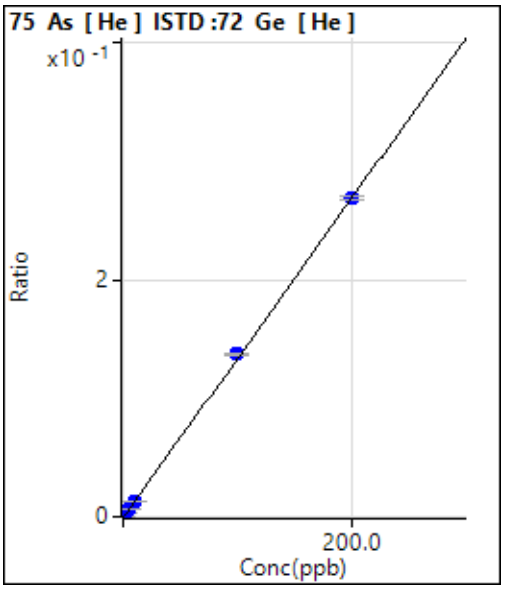
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4607.54	0.0161	P	6.4	
2	☐	2.000	1.916	5861.37	0.0198	P	2.5	-4.2
3	☐	5.000	4.688	7375.46	0.0251	P	3.4	-6.2
4	☐	10.000	9.487	10043.90	0.0342	P	1.3	-5.1
5	☐	100.000	100.730	61783.87	0.2088	P	1.6	0.7
6	☐	200.000	199.669	114436.50	0.3981	P	0.8	-0.2

y = 0.0019 * x + 0.0161
R = 1.0000
DL = 1.627 ppb
BEC = 8.415 ppb

Weight: <None>
Min Conc: <None>

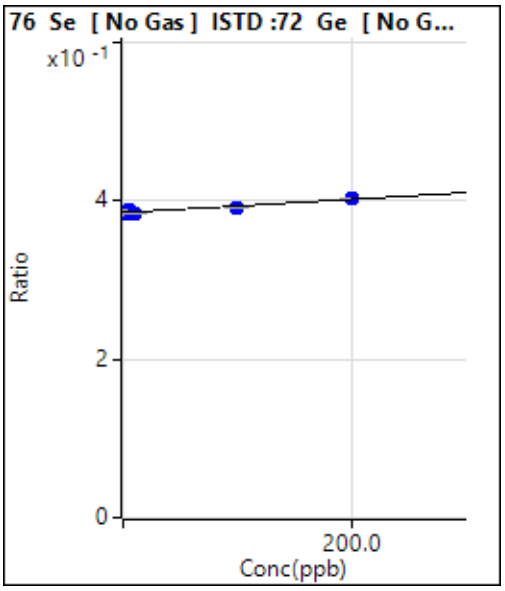


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	108.89	0.0004	P	12.4	
2	☐	2.000	1.783	825.59	0.0028	P	3.7	-10.9
3	☐	5.000	4.828	2026.83	0.0069	P	5.6	-3.4
4	☐	10.000	9.387	3821.68	0.0130	P	7.8	-6.1
5	☐	100.000	101.716	40686.59	0.1375	P	1.1	1.7
6	☐	200.000	199.179	77294.16	0.2689	P	1.1	-0.4

y = 0.0013 * x + 3.8045E-004
R = 0.9999
DL = 0.105 ppb
BEC = 0.2822 ppb

Weight: <None>
Min Conc: <None>

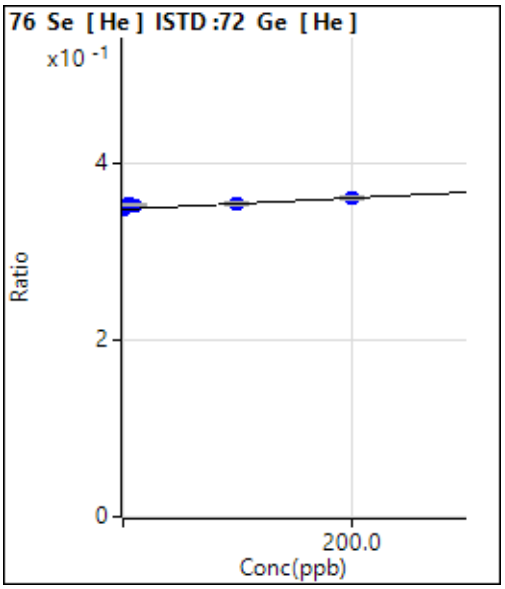
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	341723.99	0.3847	P	0.5	
2	☐	2.000	-7.579	340087.17	0.3840	P	1.4	-479.0
3	☐	5.000	29.037	342766.67	0.3871	P	0.3	480.7
4	☐	10.000	-3.747	343148.41	0.3844	P	0.6	-137.5
5	☐	100.000	73.836	352797.40	0.3909	P	0.6	-26.2
6	☐	200.000	213.264	351716.27	0.4027	P	0.5	6.6

y = 8.4380E-005 * x + 0.3847
R = 0.9766
DL = 74.01 ppb
BEC = 4559 ppb

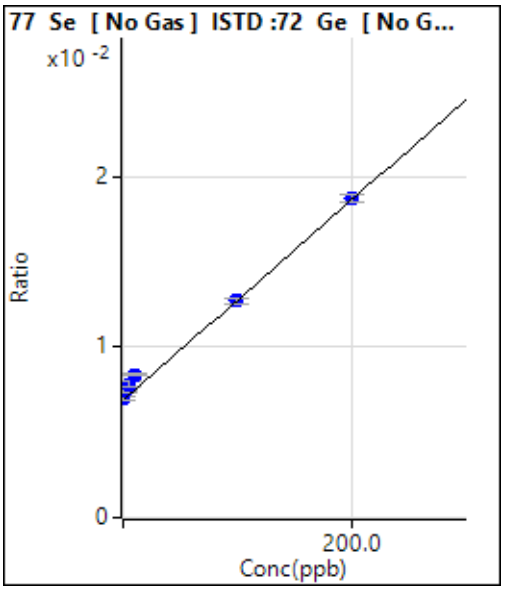
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99341.21	0.3471	P	0.8	
2	☐	2.000	77.928	104425.35	0.3521	P	1.1	3796.4
3	☐	5.000	87.403	103767.09	0.3527	P	1.0	1648.1
4	☐	10.000	75.096	103202.80	0.3519	P	0.8	651.0
5	☐	100.000	99.838	104613.79	0.3535	P	0.9	-0.2
6	☐	200.000	194.007	103364.08	0.3596	P	1.3	-3.0

y = 6.4557E-005 * x + 0.3471
R = 0.8610
DL = 123.9 ppb
BEC = 5376 ppb

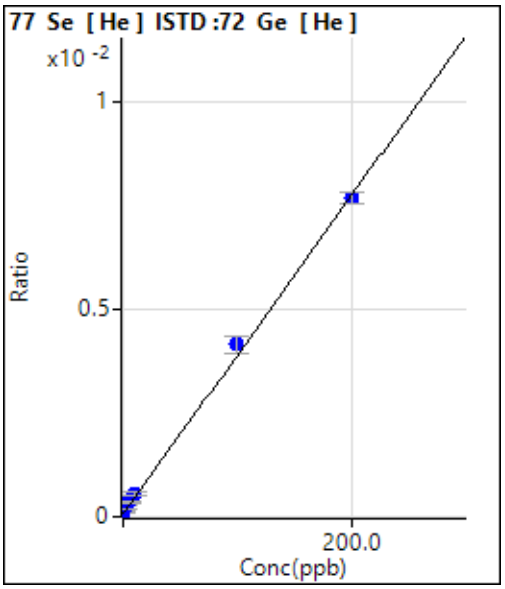
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6208.21	0.0070	P	3.3	
2	☐	2.000	7.199	6561.72	0.0074	P	1.4	259.9
3	☐	5.000	14.106	6918.57	0.0078	P	3.8	182.1
4	☐	10.000	23.786	7485.53	0.0084	P	0.8	137.9
5	☐	100.000	97.501	11471.73	0.0127	P	2.2	-2.5
6	☐	200.000	200.281	16373.56	0.0187	P	2.0	0.1

y = 5.8701E-005 * x + 0.0070
R = 0.9977
DL = 11.93 ppb
BEC = 119 ppb

Weight: <None>
Min Conc: <None>

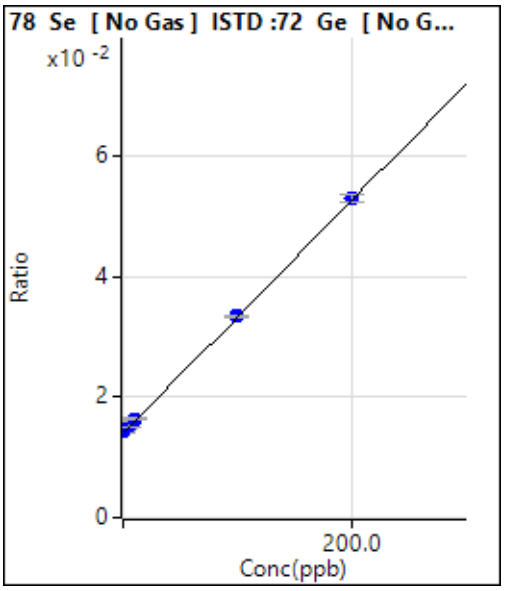


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.6	
2	☐	2.000	3.118	66.67	0.0002	P	48.0	55.9
3	☐	5.000	6.429	103.33	0.0004	P	20.9	28.6
4	☐	10.000	11.790	163.34	0.0006	P	19.4	17.9
5	☐	100.000	105.243	1226.75	0.0041	P	10.1	5.2
6	☐	200.000	197.242	2206.88	0.0077	P	3.5	-1.4

y = 3.8400E-005 * x + 1.0478E-004
R = 0.9995
DL = 5.455 ppb
BEC = 2.729 ppb

Weight: <None>
Min Conc: <None>

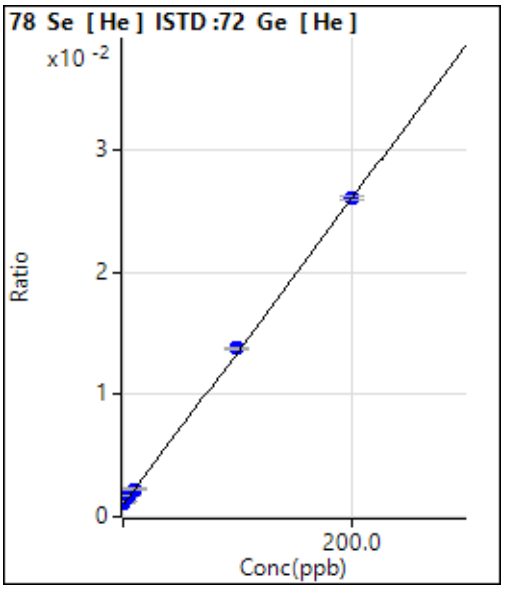
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12699.46	0.0143	P	2.7	
2	☐	2.000	3.169	13193.30	0.0149	P	4.1	58.5
3	☐	5.000	5.536	13597.11	0.0154	P	6.3	10.7
4	☐	10.000	10.707	14608.14	0.0164	P	1.5	7.1
5	☐	100.000	98.837	30110.64	0.0334	P	1.0	-1.2
6	☐	200.000	200.521	46272.98	0.0530	P	2.2	0.3

y = 1.9289E-004 * x + 0.0143
R = 1.0000
DL = 5.923 ppb
BEC = 74.11 ppb

Weight: <None>
Min Conc: <None>

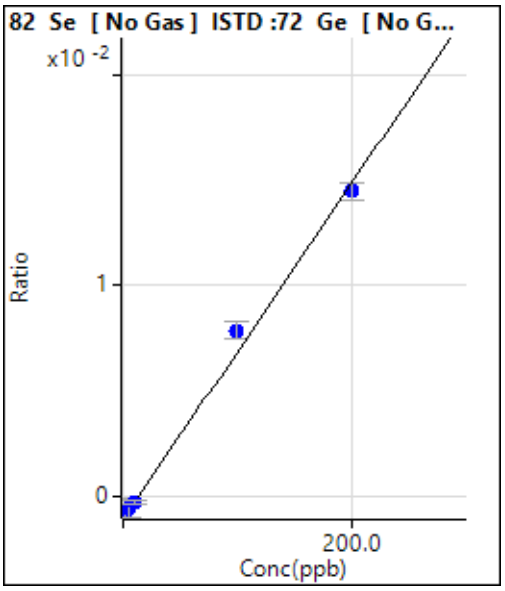


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	312.00	0.0011	P	5.0	
2	☐	2.000	2.641	421.34	0.0014	P	12.5	32.1
3	☐	5.000	5.396	519.34	0.0018	P	2.5	7.9
4	☐	10.000	9.142	655.35	0.0022	P	4.0	-8.6
5	☐	100.000	101.275	4073.29	0.0138	P	1.6	1.3
6	☐	200.000	199.389	7487.43	0.0260	P	0.8	-0.3

y = 1.2517E-004 * x + 0.0011
R = 1.0000
DL = 1.312 ppb
BEC = 8.709 ppb

Weight: <None>
Min Conc: <None>

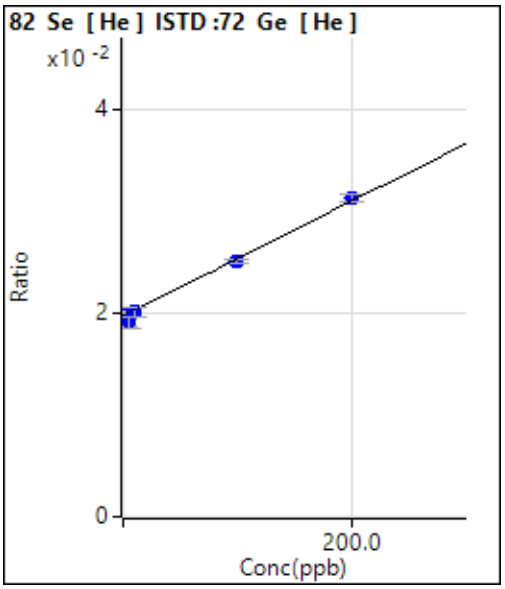
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-910.52	-0.0010	P	-63.2	
2	☐	2.000	1.459	-808.29	-0.0009	P	-96.8	-27.1
3	☐	5.000	6.008	-487.94	-0.0005	P	-162.	20.2
4	☐	10.000	8.949	-278.60	-0.0003	P	-55.0	-10.5
5	☐	100.000	111.559	7106.92	0.0079	P	9.9	11.6
6	☐	200.000	194.253	12641.63	0.0145	P	5.7	-2.9

y = 7.9788E-005 * x - 0.0010
R = 0.9975
DL = 24.37 ppb
BEC = -12.85 ppb

Weight: <None>
Min Conc: <None>

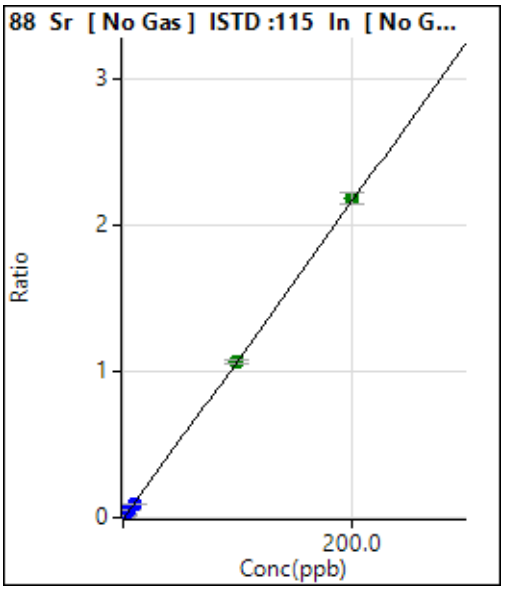


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5667.98	0.0198	P	3.2	
2	☐	2.000	-13.433	5647.95	0.0190	P	3.9	-771.6
3	☐	5.000	-10.277	5657.96	0.0192	P	7.3	-305.5
4	☐	10.000	4.765	5884.72	0.0201	P	5.5	-52.3
5	☐	100.000	93.343	7412.18	0.0251	P	2.1	-6.7
6	☐	200.000	204.126	8989.81	0.0313	P	2.9	2.1

y = 5.6216E-005 * x + 0.0198
R = 0.9975
DL = 34.08 ppb
BEC = 352.3 ppb

Weight: <None>
Min Conc: <None>

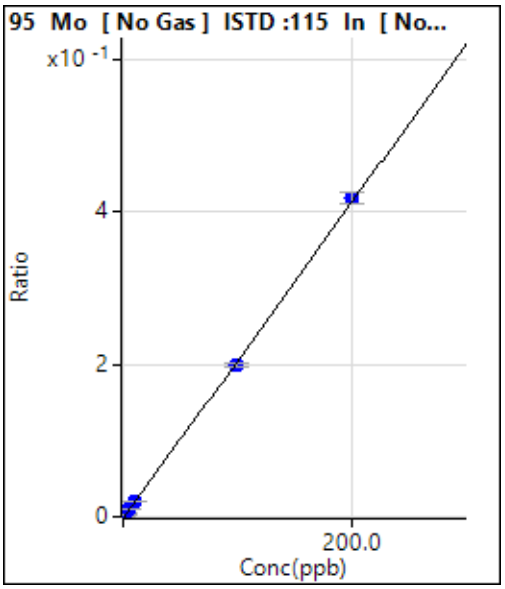
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	533.36	0.0005	P	16.8	
2	☐	2.000	1.773	22796.43	0.0197	P	7.4	-11.3
3	☐	5.000	4.764	60081.29	0.0521	P	4.3	-4.7
4	☐	10.000	8.591	109945.84	0.0936	P	0.8	-14.1
5	☐	100.000	97.754	1239005.79	1.0600	A	2.4	-2.2
6	☐	200.000	201.201	2390900.95	2.1812	A	3.3	0.6

y = 0.0108 * x + 4.7291E-004
R = 0.9999
DL = 0.02193 ppb
BEC = 0.04363 ppb

Weight: <None>
Min Conc: <None>

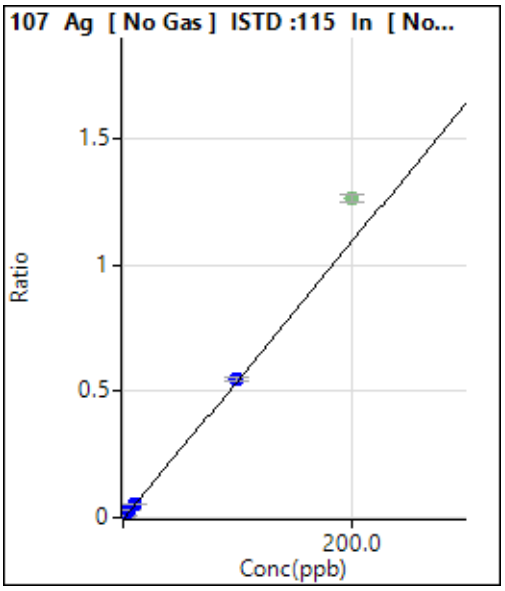


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	116.7	
2	☐	2.000	1.864	4474.18	0.0039	P	7.8	-6.8
3	☐	5.000	4.667	11134.83	0.0097	P	6.6	-6.7
4	☐	10.000	9.440	22936.82	0.0195	P	4.4	-5.6
5	☐	100.000	96.142	232427.38	0.1988	P	1.6	-3.9
6	☐	200.000	201.967	457832.82	0.4177	P	3.2	1.0

y = 0.0021 * x + 1.2122E-005
R = 0.9997
DL = 0.02053 ppb
BEC = 0.005862 ppb

Weight: <None>
Min Conc: <None>

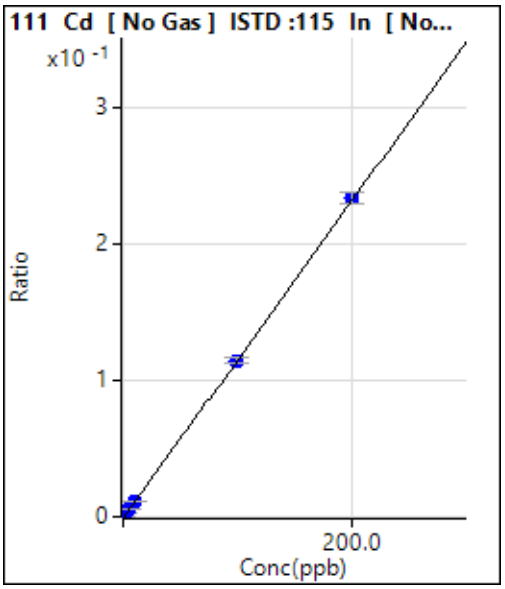
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.01	0.0003	P	32.4	
2	☐	2.000	1.948	12756.33	0.0110	P	2.3	-2.6
3	☐	5.000	4.904	31427.71	0.0273	P	3.7	-1.9
4	☐	10.000	9.559	62065.47	0.0528	P	0.9	-4.4
5	☐	100.000	100.050	642894.18	0.5501	P	2.9	0.0
6	☑	200.000		1388303.78	1.2662	A	2.3	

y = 0.0055 * x + 3.0087E-004
R = 1.0000
DL = 0.05319 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

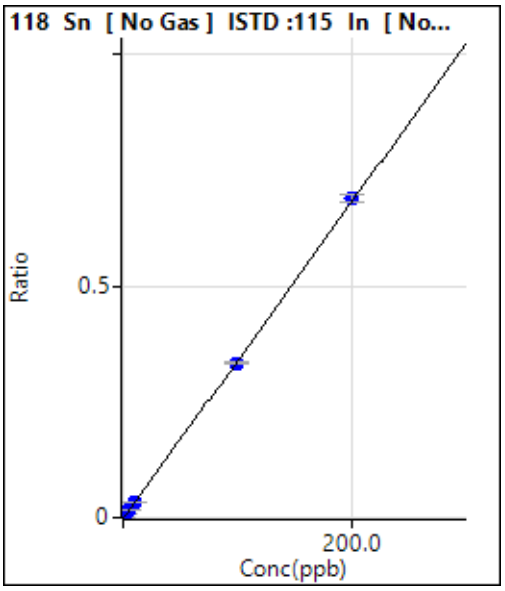


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.7	
2	☐	2.000	1.947	2633.65	0.0023	P	5.9	-2.6
3	☐	5.000	4.749	6381.66	0.0055	P	7.2	-5.0
4	☐	10.000	9.400	12863.13	0.0110	P	3.6	-6.0
5	☐	100.000	98.170	133638.66	0.1143	P	3.6	-1.8
6	☐	200.000	200.952	256559.04	0.2341	P	3.2	0.5

y = 0.0012 * x + 5.9730E-006
R = 0.9999
DL = 0.01334 ppb
BEC = 0.005128 ppb

Weight: <None>
Min Conc: <None>

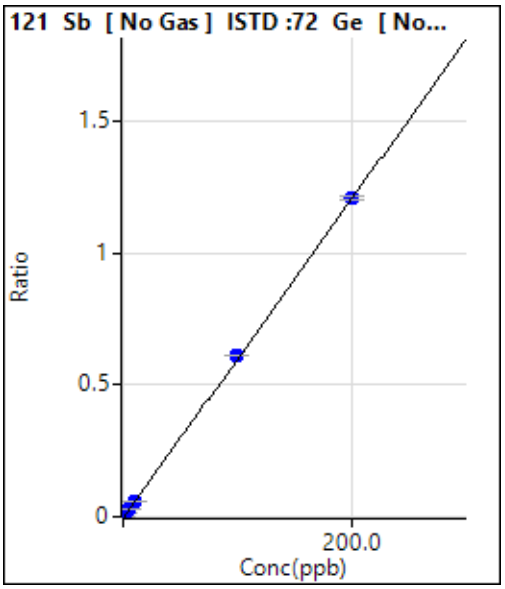
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1013.40	0.0009	P	6.3	
2	☐	2.000	1.872	8456.20	0.0073	P	5.2	-6.4
3	☐	5.000	4.528	18893.79	0.0164	P	4.0	-9.4
4	☐	10.000	9.238	38162.26	0.0325	P	2.8	-7.6
5	☐	100.000	97.418	390521.07	0.3341	P	2.0	-2.6
6	☐	200.000	201.342	755976.42	0.6896	P	2.5	0.7

y = 0.0034 * x + 8.9620E-004
R = 0.9999
DL = 0.04942 ppb
BEC = 0.262 ppb

Weight: <None>
Min Conc: <None>

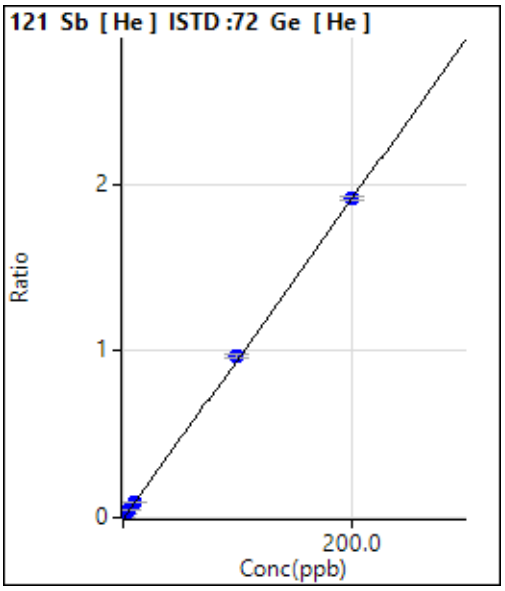


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	430.02	0.0005	P	25.0	
2	☐	2.000	1.984	11054.84	0.0125	P	6.0	-0.8
3	☐	5.000	4.766	25979.29	0.0293	P	2.2	-4.7
4	☐	10.000	9.712	52919.95	0.0593	P	1.4	-2.9
5	☐	100.000	100.655	550366.46	0.6098	P	0.4	0.7
6	☐	200.000	199.693	1056321.21	1.2093	P	0.7	-0.2

y = 0.0061 * x + 4.8336E-004
R = 1.0000
DL = 0.05999 ppb
BEC = 0.07985 ppb

Weight: <None>
Min Conc: <None>

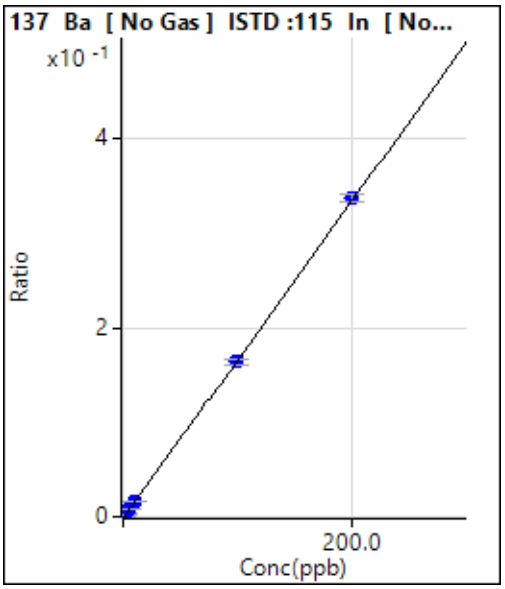
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	13.5	
2	☐	2.000	1.858	5444.58	0.0184	P	6.7	-7.1
3	☐	5.000	4.934	14077.79	0.0479	P	4.8	-1.3
4	☐	10.000	9.765	27626.03	0.0942	P	2.4	-2.3
5	☐	100.000	100.772	286224.44	0.9674	P	1.8	0.8
6	☐	200.000	199.629	550667.42	1.9158	P	1.4	-0.2

y = 0.0096 * x + 5.2414E-004
R = 1.0000
DL = 0.02206 ppb
BEC = 0.05463 ppb

Weight: <None>
Min Conc: <None>

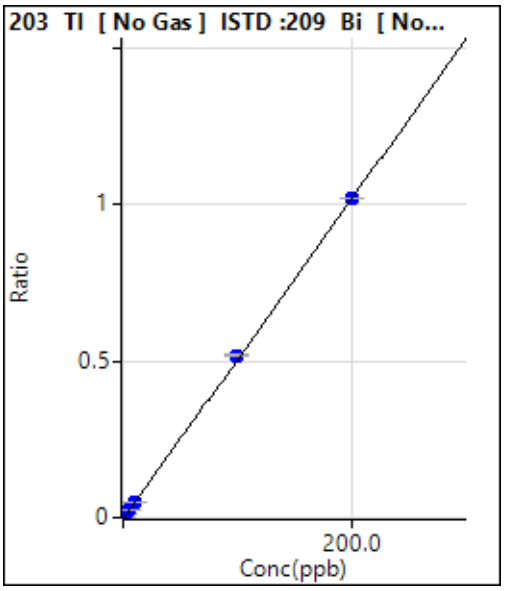


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90.00	0.0001	P	35.9	
2	☐	2.000	1.818	3620.57	0.0031	P	10.4	-9.1
3	☐	5.000	4.816	9420.23	0.0082	P	3.1	-3.7
4	☐	10.000	9.487	18800.51	0.0160	P	3.0	-5.1
5	☐	100.000	97.787	191989.41	0.1643	P	3.1	-2.2
6	☐	200.000	201.138	370325.82	0.3378	P	2.8	0.6

y = 0.0017 * x + 7.9058E-005
R = 0.9999
DL = 0.05068 ppb
BEC = 0.04708 ppb

Weight: <None>
Min Conc: <None>

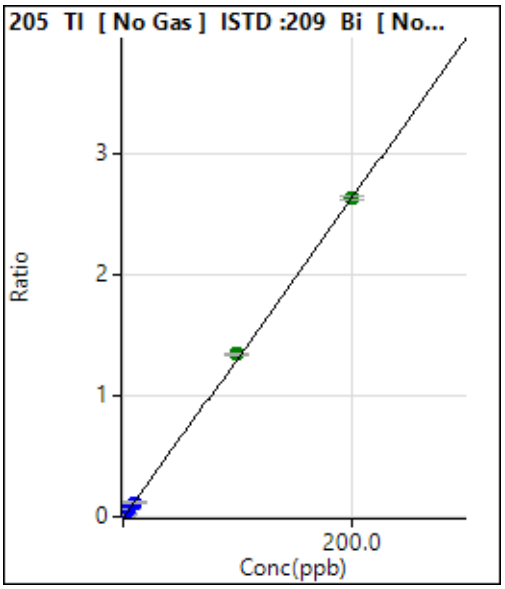
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	91.7	
2	☐	2.000	1.876	10998.33	0.0096	P	3.1	-6.2
3	☐	5.000	4.789	27293.47	0.0245	P	0.8	-4.2
4	☐	10.000	9.602	55285.62	0.0491	P	1.4	-4.0
5	☐	100.000	101.199	581924.12	0.5178	P	1.2	1.2
6	☐	200.000	199.427	1121561.73	1.0204	P	0.3	-0.3

y = 0.0051 * x + 1.4965E-005
R = 1.0000
DL = 0.008042 ppb
BEC = 0.002925 ppb

Weight: <None>
Min Conc: <None>

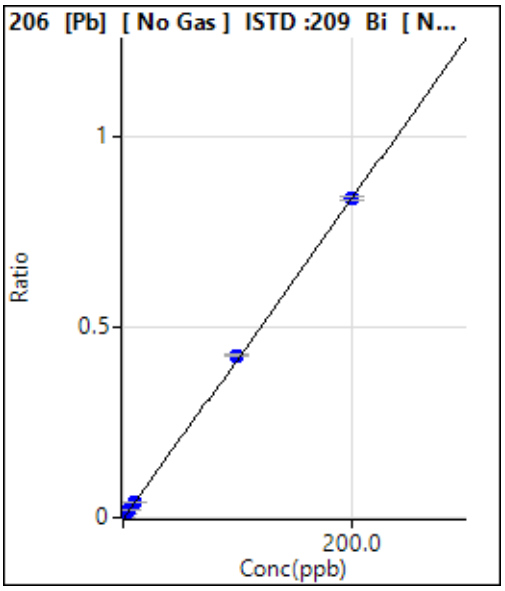


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	53.33	0.0000	P	39.1	
2	☐	2.000	1.787	27136.44	0.0237	P	1.7	-10.6
3	☐	5.000	4.550	67100.34	0.0603	P	3.0	-9.0
4	☐	10.000	8.995	134014.08	0.1191	P	1.7	-10.1
5	☐	100.000	101.591	1511712.11	1.3452	A	1.9	1.6
6	☐	200.000	199.268	2899905.89	2.6384	A	0.8	-0.4

y = 0.0132 * x + 4.8151E-005
R = 0.9999
DL = 0.004265 ppb
BEC = 0.003637 ppb

Weight: <None>
Min Conc: <None>

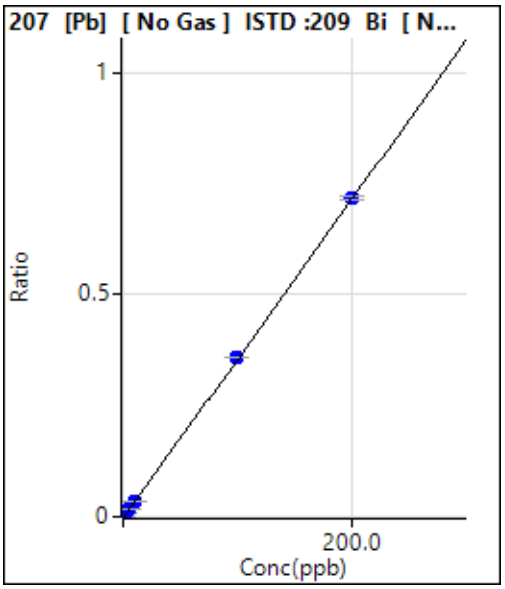
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	25.2	
2	☐	2.000	1.907	9310.33	0.0081	P	4.5	-4.7
3	☐	5.000	4.908	23081.61	0.0207	P	0.5	-1.8
4	☐	10.000	9.794	46383.25	0.0412	P	3.1	-2.1
5	☐	100.000	101.353	478095.80	0.4254	P	0.8	1.4
6	☐	200.000	199.337	919448.29	0.8366	P	0.8	-0.3

y = 0.0042 * x + 1.4120E-004
R = 1.0000
DL = 0.02544 ppb
BEC = 0.03365 ppb

Weight: <None>
Min Conc: <None>

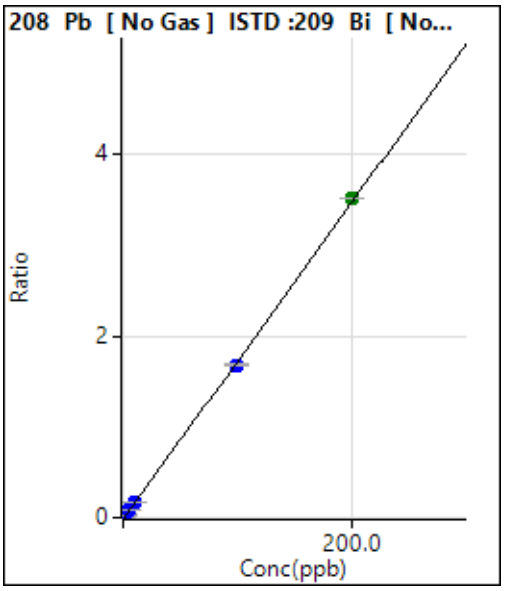


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	25.8	
2	☐	2.000	1.925	8012.70	0.0070	P	6.1	-3.8
3	☐	5.000	4.728	18998.07	0.0171	P	1.9	-5.4
4	☐	10.000	9.875	39974.39	0.0355	P	0.6	-1.3
5	☐	100.000	99.975	403266.05	0.3588	P	1.1	0.0
6	☐	200.000	200.027	788987.28	0.7179	P	0.7	0.0

y = 0.0036 * x + 1.0233E-004
R = 1.0000
DL = 0.0221 ppb
BEC = 0.02852 ppb

Weight: <None>
Min Conc: <None>

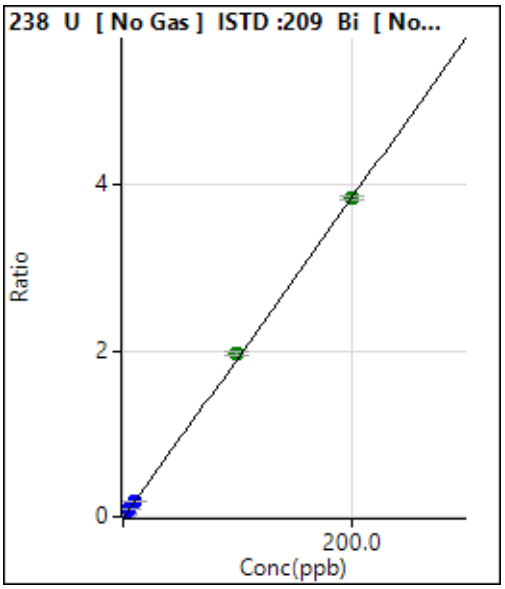
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.01	0.0005	P	2.6	
2	☐	2.000	1.836	37189.13	0.0325	P	5.2	-8.2
3	☐	5.000	4.612	90025.70	0.0809	P	0.9	-7.8
4	☐	10.000	9.380	184428.67	0.1640	P	0.5	-6.2
5	☐	100.000	96.575	1891499.72	1.6831	P	0.7	-3.4
6	☐	200.000	201.755	3863905.80	3.5155	A	0.6	0.9

y = 0.0174 * x + 5.4130E-004
R = 0.9998
DL = 0.002465 ppb
BEC = 0.03107 ppb

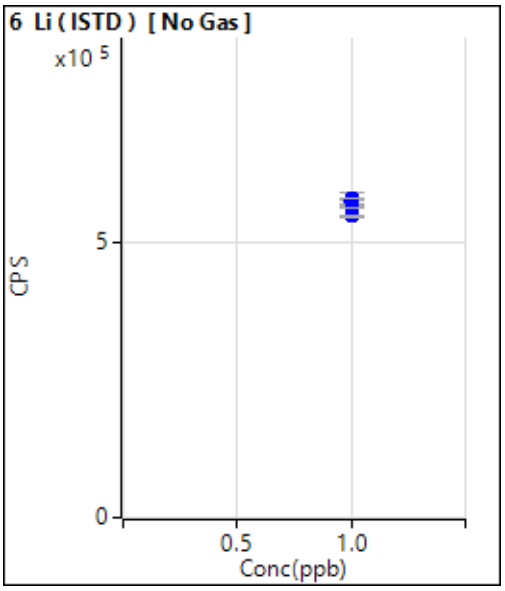
Weight: <None>
Min Conc: <None>



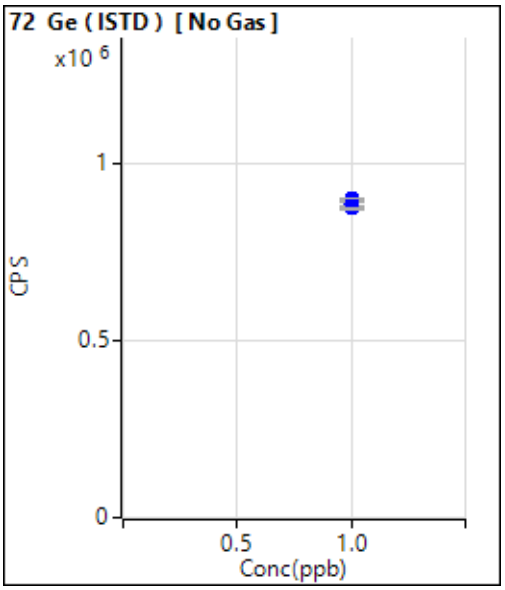
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.797	39764.88	0.0347	P	0.8	-10.1
3	☐	5.000	4.441	95577.94	0.0859	P	1.0	-11.2
4	☐	10.000	9.141	198814.87	0.1767	P	0.8	-8.6
5	☐	100.000	102.013	2216456.68	1.9723	A	1.4	2.0
6	☐	200.000	199.052	4230081.81	3.8485	A	1.3	-0.5

y = 0.0193 * x + 2.9930E-006
R = 0.9999
DL = 0.0008044 ppb
BEC = 0.0001548 ppb

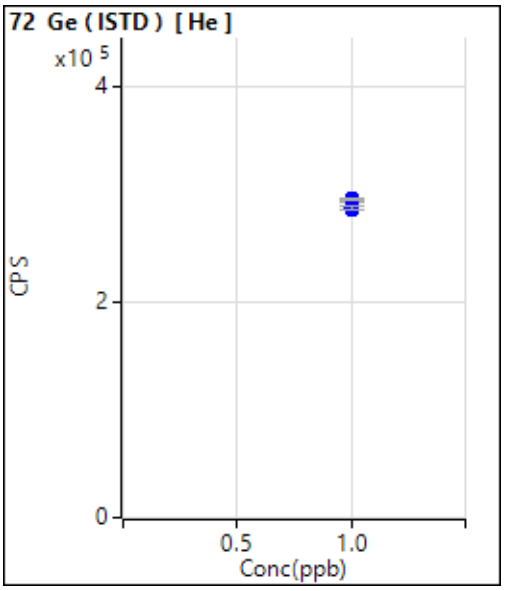
Weight: <None>
Min Conc: <None>



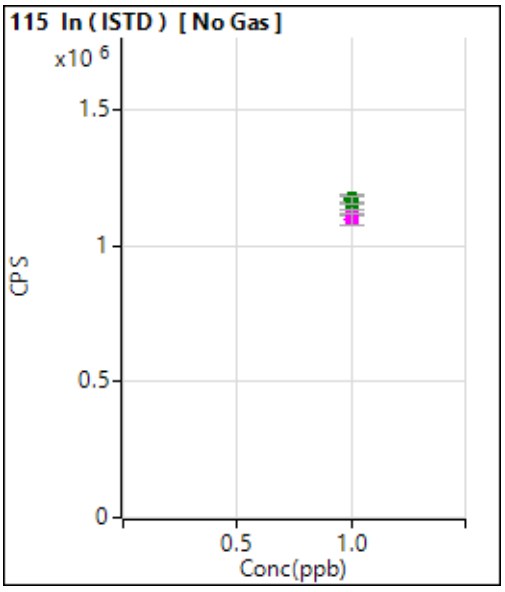
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		576643.55		P	0.5	
2	☐	1.000		575864.55		P	4.3	
3	☐	1.000		572855.46		P	1.5	
4	☐	1.000		578665.84		P	0.4	
5	☐	1.000		561866.75		P	0.1	
6	☐	1.000		545706.79		P	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		888395.66		P	1.1	
2	☐	1.000		885701.16		P	3.1	
3	☐	1.000		885457.90		P	1.3	
4	☐	1.000		892814.54		P	0.5	
5	☐	1.000		902536.57		P	0.4	
6	☐	1.000		873483.32		P	0.2	

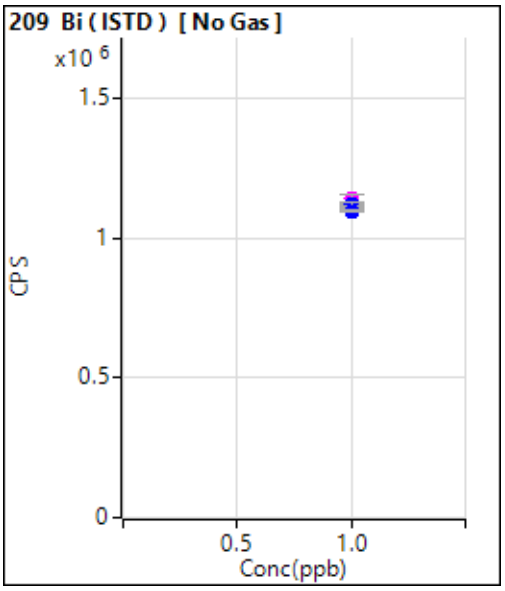


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		286216.33		P	0.1	
2	☐	1.000		296563.41		P	0.6	
3	☐	1.000		294194.42		P	0.8	
4	☐	1.000		293253.73		P	0.7	
5	☐	1.000		295899.88		P	0.9	
6	☐	1.000		287462.19		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1132545.80		M	3.7	
2	☐	1.000		1160229.98		A	5.3	
3	☐	1.000		1154459.69		A	4.2	
4	☐	1.000		1174927.58		A	2.4	
5	☐	1.000		1169173.58		A	2.1	
6	☐	1.000		1096948.53		M	3.6	

Calibration for 183_ICV.d



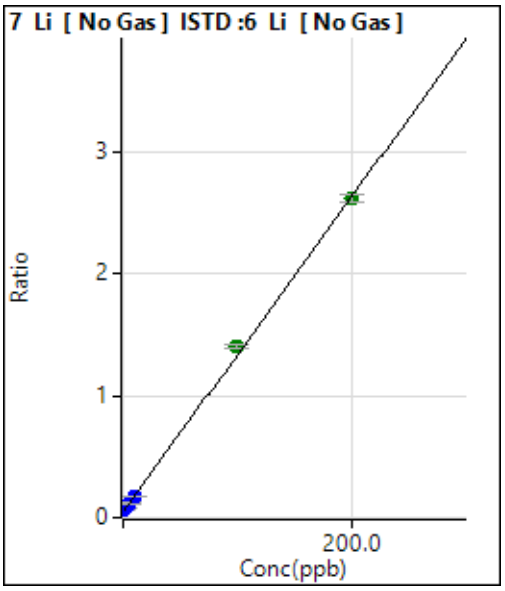
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1108342.67		P	0.8	
2	☐	1.000		1144508.68		M	2.9	
3	☐	1.000		1113087.30		P	1.1	
4	☐	1.000		1124894.31		P	0.7	
5	☐	1.000		1123868.45		P	1.0	
6	☐	1.000		1099099.36		P	0.5	

Calibration for 020_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	07/20/2022 11:26:20
2	010CALS.d	2/10/200	07/20/2022 11:28:36
3	011CALS.d	5/25/500	07/20/2022 11:30:51
4	012CALS.d	10/50/100	07/20/2022 11:33:05
5	017CALS.d	100/500/10K	07/20/2022 11:47:02
6	018CALS.d	200/1000/20K	07/20/2022 11:49:06

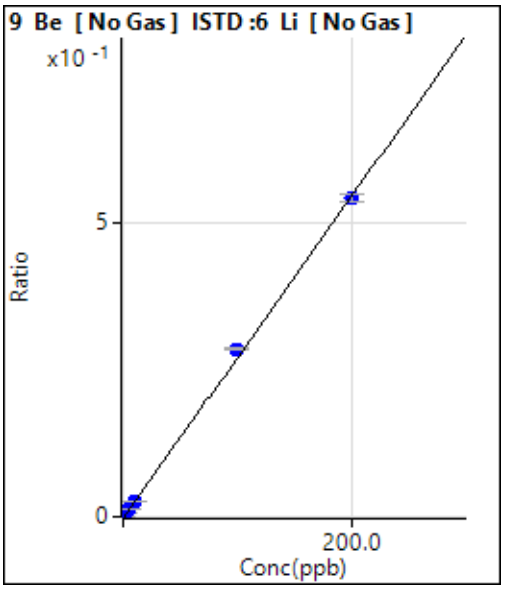
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35467.95	0.0612	P	0.1	
2	☐	2.000	1.703	49218.97	0.0832	P	0.9	-14.9
3	☐	5.000	4.388	70828.54	0.1179	P	0.9	-12.2
4	☐	10.000	9.097	107555.43	0.1788	P	0.9	-9.0
5	☐	100.000	104.181	814513.56	1.4081	A	2.5	4.2
6	☐	200.000	197.973	1565047.74	2.6206	A	2.6	-1.0

y = 0.0129 * x + 0.0612
R = 0.9997
DL = 0.01504 ppb
BEC = 4.732 ppb

Weight: <None>
Min Conc: <None>

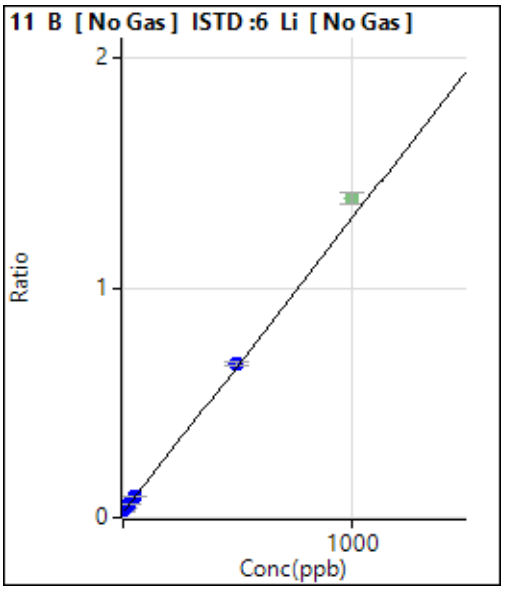


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	31.3	
2	☐	2.000	1.954	3218.73	0.0054	P	5.3	-2.3
3	☐	5.000	4.761	7878.93	0.0131	P	2.1	-4.8
4	☐	10.000	9.860	16276.14	0.0271	P	1.7	-1.4
5	☐	100.000	104.279	165019.88	0.2852	P	0.2	4.3
6	☐	200.000	197.874	323198.11	0.5411	P	1.9	-1.1

y = 0.0027 * x + 9.7830E-005
R = 0.9997
DL = 0.03356 ppb
BEC = 0.03578 ppb

Weight: <None>
Min Conc: <None>

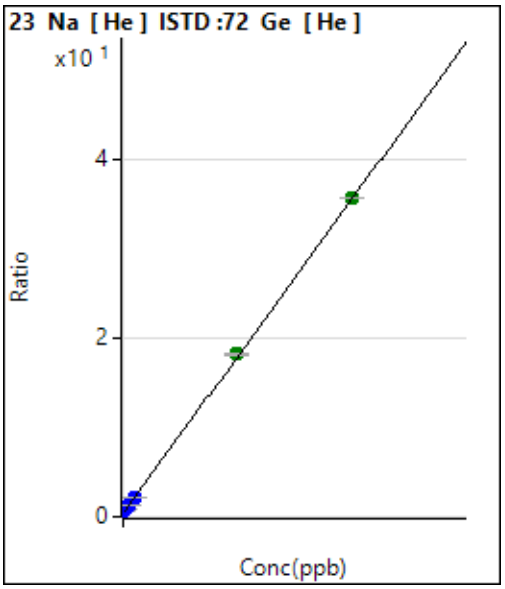
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16990.38	0.0293	P	0.5	
2	☐	10.000	9.158	24263.21	0.0410	P	8.6	-8.4
3	☐	25.000	21.051	33757.20	0.0562	P	1.8	-15.8
4	☐	50.000	46.725	53538.25	0.0890	P	1.3	-6.6
5	☐	500.000	500.542	386818.68	0.6687	P	3.1	0.1
6	☑	1000.000		829455.56	1.3893	A	4.0	

y = 0.0013 * x + 0.0293
R = 1.0000
DL = 0.3122 ppb
BEC = 22.94 ppb

Weight: <None>
Min Conc: <None>

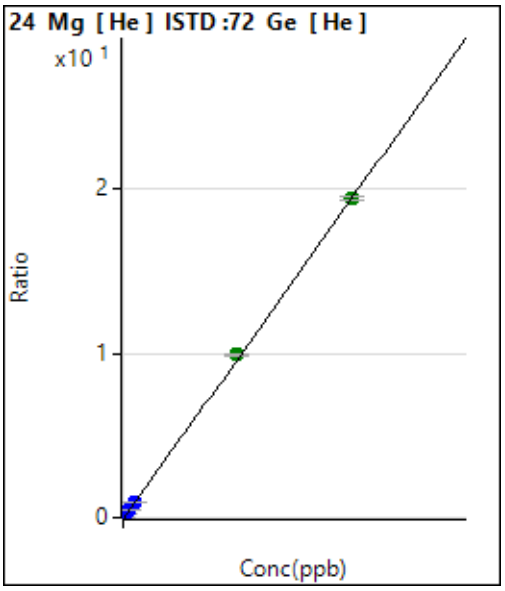


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	164287.96	0.5766	P	0.6	
2	☐	200.000	170.842	258803.67	0.8774	P	0.4	-14.6
3	☐	500.000	436.915	397312.47	1.3460	P	0.3	-12.6
4	☐	1000.000	897.715	641621.27	2.1575	P	1.1	-10.2
5	☐	10000.00	10027.13	5319771.80	18.2355	A	1.2	0.3
6	☐	20000.00	19993.41	10199744.8	35.7873	A	0.2	0.0

y = 0.0018 * x + 0.5766
R = 1.0000
DL = 6.195 ppb
BEC = 327.4 ppb

Weight: <None>
Min Conc: <None>

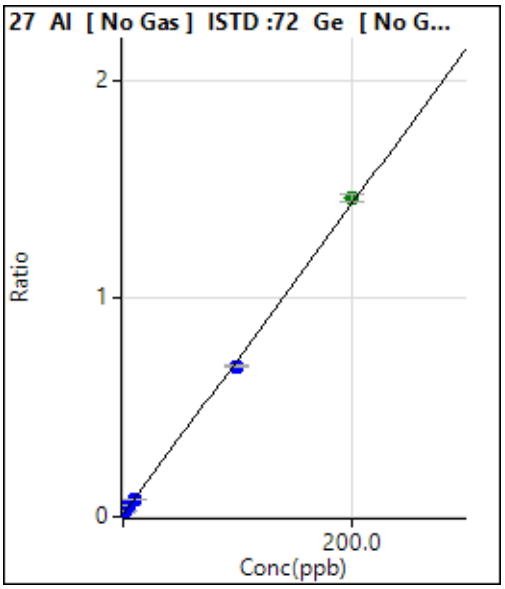
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0007	P	29.1	
2	☐	200.000	186.480	53974.67	0.1830	P	1.6	-6.8
3	☐	500.000	466.818	134914.35	0.4571	P	0.4	-6.6
4	☐	1000.000	942.843	274324.60	0.9225	P	1.5	-5.7
5	☐	10000.00	10180.72	2903811.94	9.9539	A	1.1	1.8
6	☐	20000.00	19913.46	5548942.63	19.4692	A	1.4	-0.4

y = 9.7766E-004 * x + 6.7814E-004
R = 0.9999
DL = 0.6062 ppb
BEC = 0.6936 ppb

Weight: <None>
Min Conc: <None>

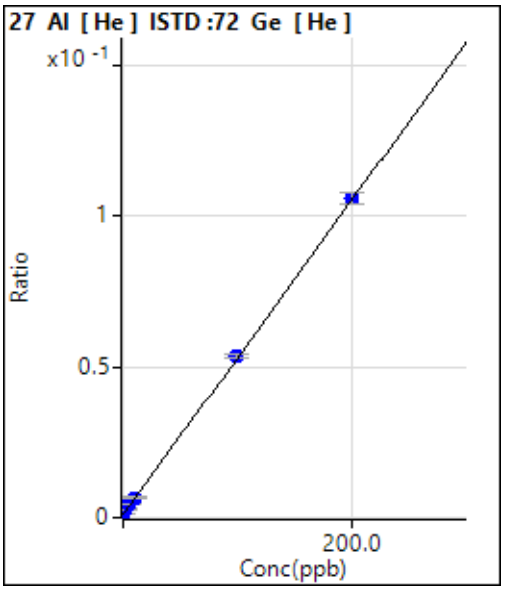


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15916.03	0.0181	P	2.5	
2	☐	2.000	1.769	27494.07	0.0307	P	0.9	-11.6
3	☐	5.000	5.317	51134.28	0.0559	P	0.9	6.3
4	☐	10.000	8.983	74894.19	0.0820	P	1.2	-10.2
5	☐	100.000	94.129	614947.07	0.6876	P	1.4	-5.9
6	☐	200.000	202.981	1280085.01	1.4619	A	2.7	1.5

y = 0.0071 * x + 0.0181
R = 0.9994
DL = 0.193 ppb
BEC = 2.542 ppb

Weight: <None>
Min Conc: <None>

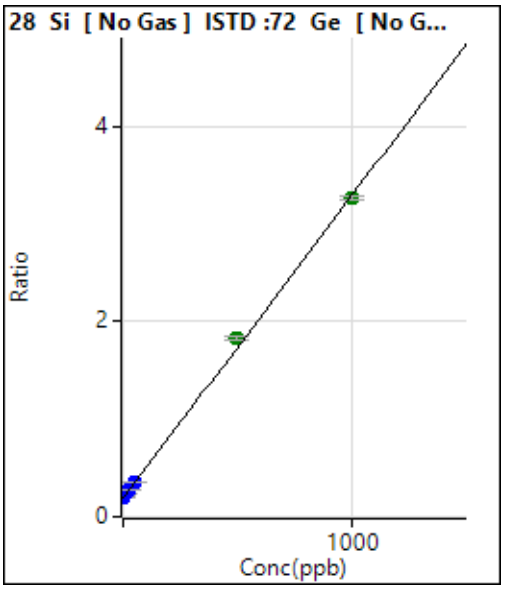
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0015	P	9.1	
2	☐	2.000	2.218	790.04	0.0027	P	22.9	10.9
3	☐	5.000	5.746	1333.42	0.0045	P	7.0	14.9
4	☐	10.000	9.681	1953.51	0.0066	P	11.0	-3.2
5	☐	100.000	99.502	15582.26	0.0534	P	2.1	-0.5
6	☐	200.000	200.244	30193.05	0.1059	P	3.3	0.1

y = 5.2148E-004 * x + 0.0015
R = 1.0000
DL = 0.7965 ppb
BEC = 2.917 ppb

Weight: <None>
Min Conc: <None>

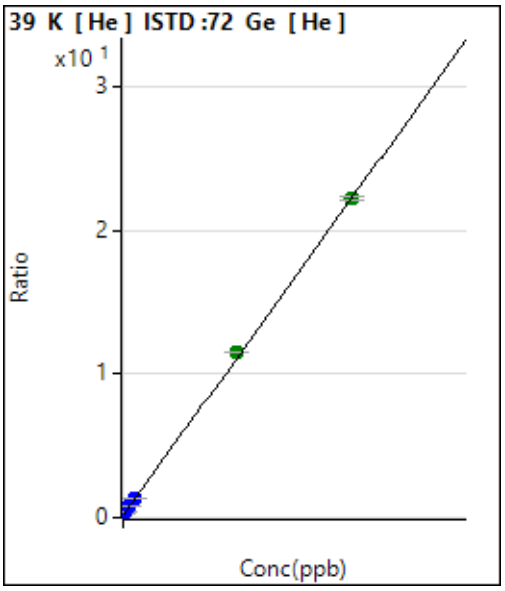


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181850.04	0.2066	P	1.1	
2	☐	10.000	8.691	209425.99	0.2336	P	0.2	-13.1
3	☐	25.000	24.176	257545.31	0.2816	P	0.2	-3.3
4	☐	50.000	45.754	318398.39	0.3485	P	1.1	-8.5
5	☐	500.000	525.756	1642990.96	1.8372	A	1.9	5.2
6	☐	1000.000	987.368	2862369.75	3.2688	A	0.6	-1.3

y = 0.0031 * x + 0.2066
R = 0.9995
DL = 2.133 ppb
BEC = 66.61 ppb

Weight: <None>
Min Conc: <None>

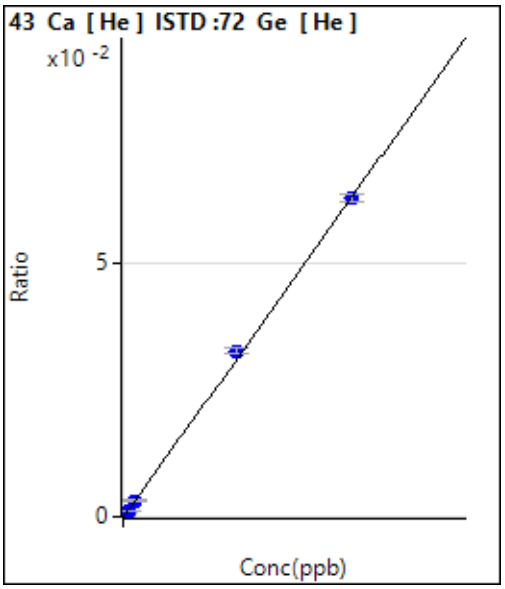
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77058.22	0.2704	P	2.0	
2	☐	200.000	177.477	137586.80	0.4665	P	0.6	-11.3
3	☐	500.000	455.224	228252.37	0.7733	P	0.9	-9.0
4	☐	1000.000	924.398	384086.02	1.2915	P	1.0	-7.6
5	☐	10000.00	10210.47	3369392.76	11.5491	A	0.7	2.1
6	☐	20000.00	19899.88	6342019.70	22.2522	A	0.7	-0.5

y = 0.0011 * x + 0.2704
R = 0.9999
DL = 14.82 ppb
BEC = 244.8 ppb

Weight: <None>
Min Conc: <None>

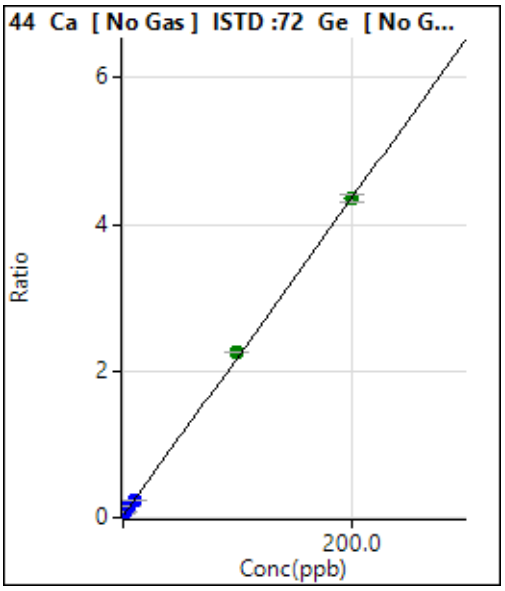


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.3	
2	☐	200.000	185.006	203.34	0.0007	P	15.7	-7.5
3	☐	500.000	385.158	390.01	0.0013	P	0.2	-23.0
4	☐	1000.000	953.240	926.72	0.0031	P	11.1	-4.7
5	☐	10000.00	10282.31	9503.44	0.0326	P	3.4	2.8
6	☐	20000.00	19864.20	17905.27	0.0628	P	2.5	-0.7

y = 3.1576E-006 * x + 1.0512E-004
R = 0.9998
DL = 66.27 ppb
BEC = 33.29 ppb

Weight: <None>
Min Conc: <None>

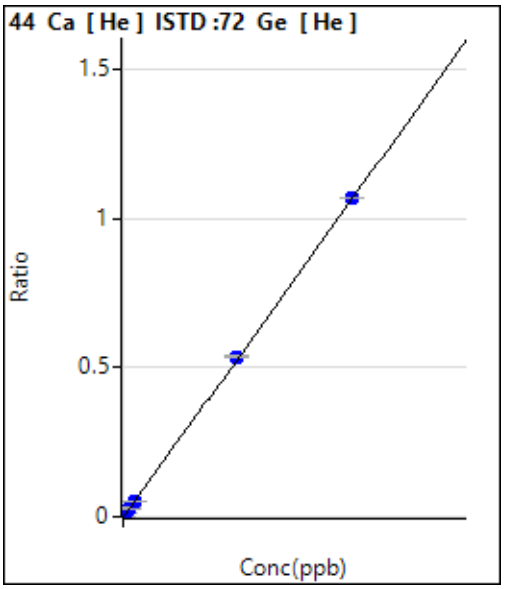
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41308.90	0.0469	P	2.2	
2	☐	2.000	1.809	77229.47	0.0861	P	1.0	-9.5
3	☐	5.000	4.736	136766.87	0.1495	P	0.6	-5.3
4	☐	10.000	9.305	227066.14	0.2485	P	0.4	-7.0
5	☐	100.000	102.208	2022467.89	2.2613	A	0.7	2.2
6	☐	200.000	198.939	3815297.13	4.3570	A	2.2	-0.5

y = 0.0217 * x + 0.0469
R = 0.9999
DL = 0.1436 ppb
BEC = 2.166 ppb

Weight: <None>
Min Conc: <None>

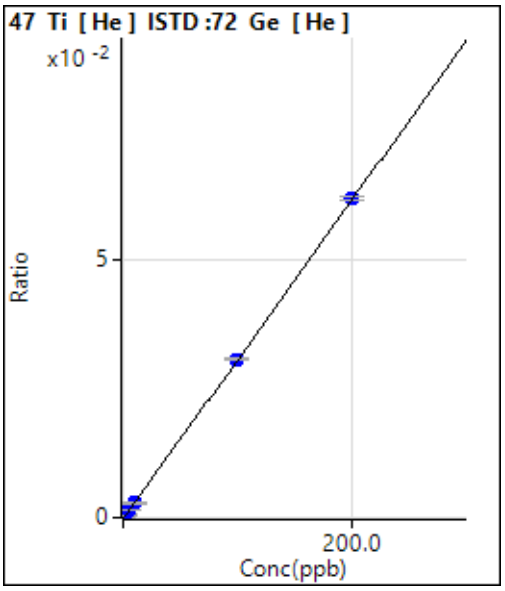


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0026	P	11.7	
2	☐	200.000	180.459	3597.20	0.0122	P	3.1	-9.8
3	☐	500.000	490.097	8479.41	0.0287	P	5.2	-2.0
4	☐	1000.000	953.108	15892.78	0.0534	P	3.2	-4.7
5	☐	10000.00	10000.76	156495.16	0.5364	P	1.1	0.0
6	☐	20000.00	20002.40	305064.14	1.0704	P	0.3	0.0

y = 5.3384E-005 * x + 0.0026
R = 1.0000
DL = 16.78 ppb
BEC = 47.99 ppb

Weight: <None>
Min Conc: <None>

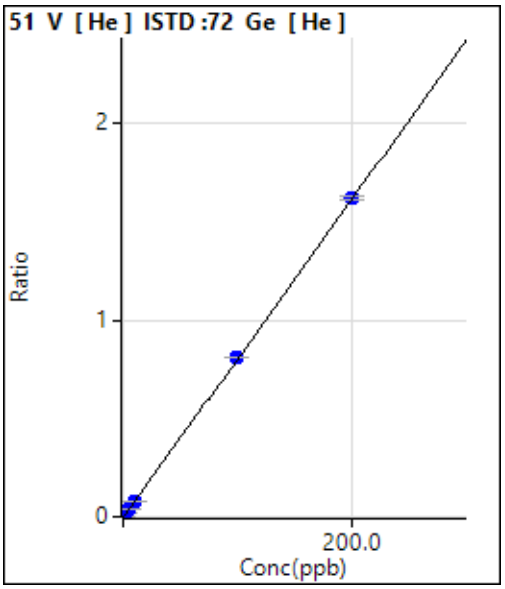
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	2.000	1.745	170.00	0.0006	P	36.6	-12.8
3	☐	5.000	4.329	406.68	0.0014	P	6.1	-13.4
4	☐	10.000	9.251	863.37	0.0029	P	13.5	-7.5
5	☐	100.000	99.487	9013.10	0.0309	P	1.9	-0.5
6	☐	200.000	200.313	17718.37	0.0622	P	1.7	0.2

y = 3.1016E-004 * x + 3.5087E-005
R = 1.0000
DL = 0.3401 ppb
BEC = 0.1131 ppb

Weight: <None>
Min Conc: <None>

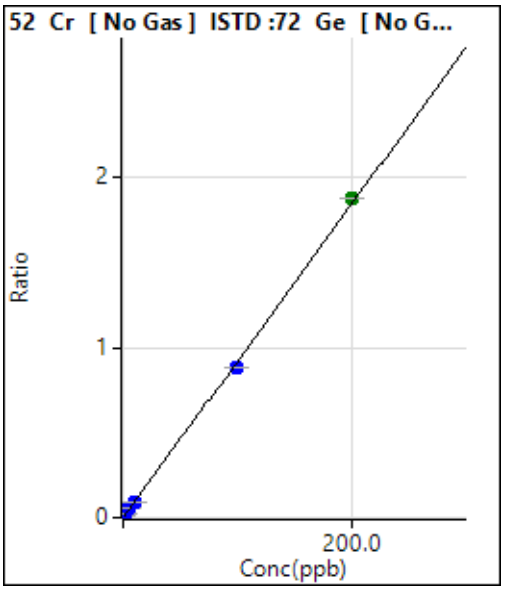


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0033	P	2.1	
2	☐	2.000	1.952	5642.30	0.0191	P	0.9	-2.4
3	☐	5.000	4.758	12342.27	0.0418	P	2.1	-4.8
4	☐	10.000	9.449	23711.62	0.0797	P	1.7	-5.5
5	☐	100.000	99.946	236700.40	0.8114	P	0.6	-0.1
6	☐	200.000	200.061	461921.18	1.6207	P	0.9	0.0

y = 0.0081 * x + 0.0033
R = 1.0000
DL = 0.02611 ppb
BEC = 0.4139 ppb

Weight: <None>
Min Conc: <None>

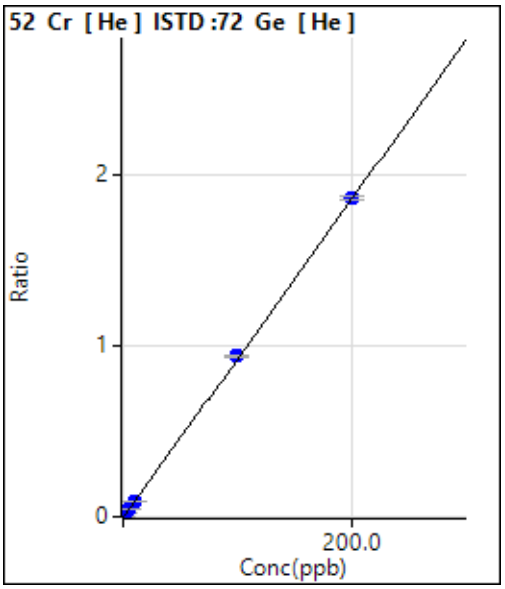
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8329.32	0.0095	P	1.6	
2	☐	2.000	1.851	23804.31	0.0265	P	1.4	-7.5
3	☐	5.000	4.539	46974.04	0.0514	P	0.7	-9.2
4	☐	10.000	9.282	86924.70	0.0951	P	1.1	-7.2
5	☐	100.000	94.709	790317.41	0.8837	P	1.0	-5.3
6	☐	200.000	202.694	1646629.61	1.8804	A	0.6	1.3

y = 0.0092 * x + 0.0095
R = 0.9995
DL = 0.04824 ppb
BEC = 1.025 ppb

Weight: <None>
Min Conc: <None>

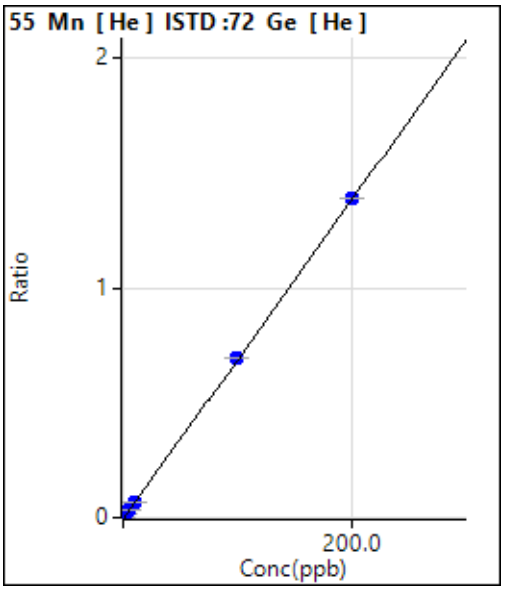


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.39	0.0033	P	8.5	
2	☐	2.000	1.949	6331.58	0.0215	P	3.6	-2.5
3	☐	5.000	4.854	14307.70	0.0485	P	4.1	-2.9
4	☐	10.000	9.562	27431.03	0.0922	P	3.7	-4.4
5	☐	100.000	100.390	273272.72	0.9367	P	0.7	0.4
6	☐	200.000	199.831	530453.74	1.8612	P	0.8	-0.1

y = 0.0093 * x + 0.0033
R = 1.0000
DL = 0.092 ppb
BEC = 0.3598 ppb

Weight: <None>
Min Conc: <None>

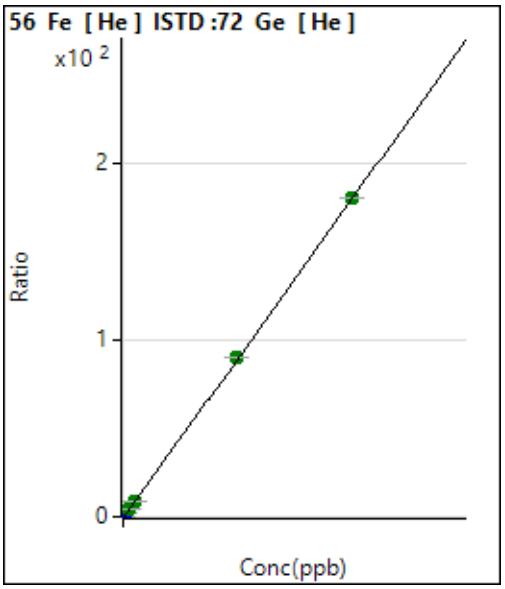
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0007	P	17.0	
2	☐	2.000	1.935	4180.71	0.0142	P	6.3	-3.3
3	☐	5.000	4.711	9880.40	0.0335	P	4.4	-5.8
4	☐	10.000	9.483	19817.99	0.0666	P	2.8	-5.2
5	☐	100.000	99.872	202736.91	0.6949	P	0.6	-0.1
6	☐	200.000	200.098	396621.28	1.3916	P	0.3	0.0

y = 0.0070 * x + 7.2528E-004
R = 1.0000
DL = 0.05311 ppb
BEC = 0.1043 ppb

Weight: <None>
Min Conc: <None>

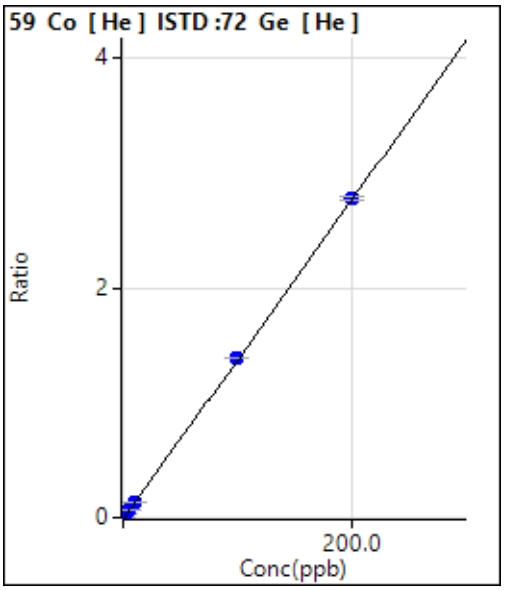


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7572.23	0.0266	P	3.2	
2	☐	200.000	185.551	502271.21	1.7029	P	1.2	-7.2
3	☐	500.000	497.258	1333887.04	4.5190	A	2.8	-0.5
4	☐	1000.000	1004.027	2705286.94	9.0973	A	2.6	0.4
5	☐	10000.00	10020.34	26418121.2	90.5541	A	0.2	0.2
6	☐	20000.00	19989.84	51478757.5	180.622	A	0.3	-0.1

y = 0.0090 * x + 0.0266
R = 1.0000
DL = 0.2834 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

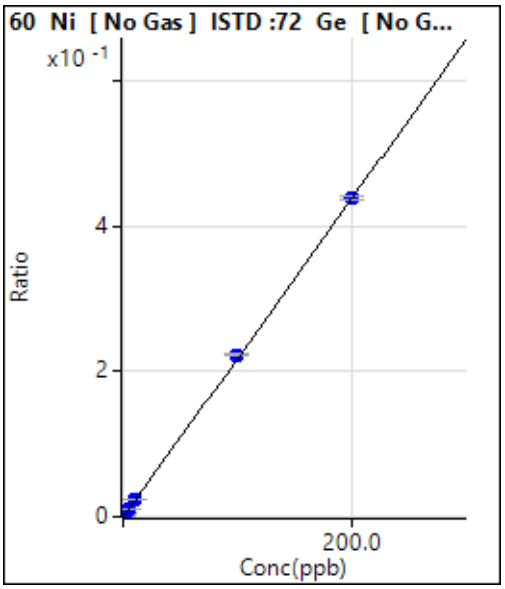
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.5	
2	☐	2.000	1.905	7822.37	0.0265	P	2.8	-4.8
3	☐	5.000	4.793	19674.44	0.0667	P	1.8	-4.1
4	☐	10.000	9.529	39387.22	0.1324	P	1.1	-4.7
5	☐	100.000	99.749	404311.58	1.3859	P	0.3	-0.3
6	☐	200.000	200.155	792549.88	2.7808	P	0.6	0.1

y = 0.0139 * x + 5.8556E-005
R = 1.0000
DL = 0.008792 ppb
BEC = 0.004215 ppb

Weight: <None>
Min Conc: <None>

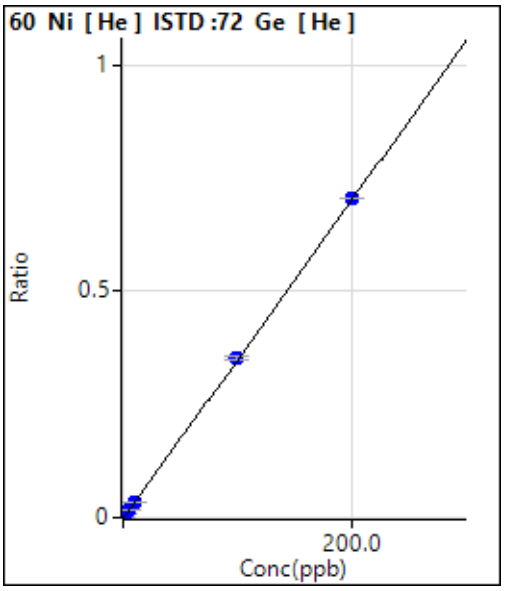


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1130.07	0.0013	P	10.5	
2	☐	2.000	1.832	4757.58	0.0053	P	1.4	-8.4
3	☐	5.000	4.747	10704.41	0.0117	P	1.7	-5.1
4	☐	10.000	10.125	21480.57	0.0235	P	1.4	1.2
5	☐	100.000	100.793	199037.86	0.2226	P	1.3	0.8
6	☐	200.000	199.605	384835.58	0.4395	P	1.4	-0.2

y = 0.0022 * x + 0.0013
R = 1.0000
DL = 0.1836 ppb
BEC = 0.5849 ppb

Weight: <None>
Min Conc: <None>

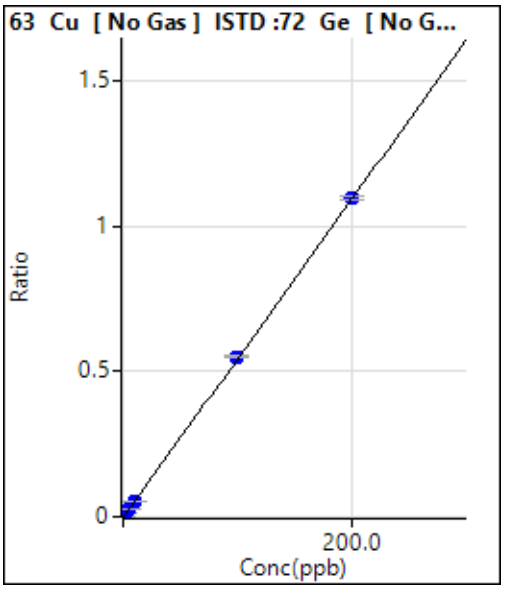
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0006	P	25.7	
2	☐	2.000	1.915	2173.55	0.0074	P	8.2	-4.2
3	☐	5.000	4.890	5264.45	0.0178	P	4.2	-2.2
4	☐	10.000	9.867	10510.87	0.0353	P	1.9	-1.3
5	☐	100.000	99.522	102336.12	0.3507	P	2.3	-0.5
6	☐	200.000	200.249	200962.18	0.7051	P	0.2	0.1

y = 0.0035 * x + 6.3203E-004
R = 1.0000
DL = 0.1386 ppb
BEC = 0.1797 ppb

Weight: <None>
Min Conc: <None>

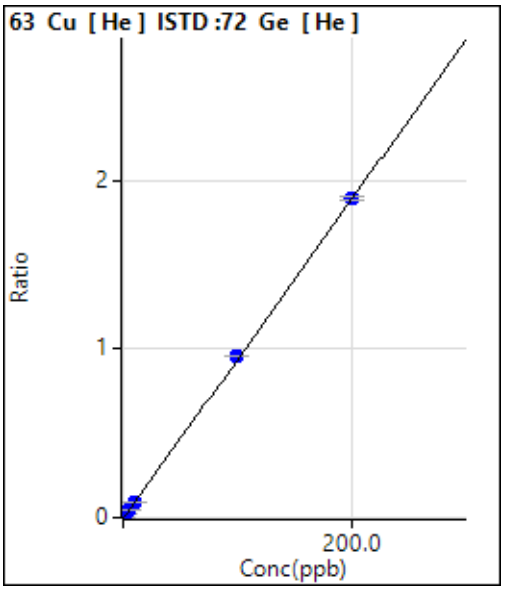


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2093.54	0.0024	P	6.6	
2	☐	2.000	1.971	11828.66	0.0132	P	1.8	-1.4
3	☐	5.000	4.869	26592.94	0.0291	P	3.2	-2.6
4	☐	10.000	9.764	51096.06	0.0559	P	0.7	-2.4
5	☐	100.000	100.224	493755.01	0.5520	P	0.3	0.2
6	☐	200.000	199.903	962106.18	1.0987	P	1.3	0.0

y = 0.0055 * x + 0.0024
R = 1.0000
DL = 0.0858 ppb
BEC = 0.4337 ppb

Weight: <None>
Min Conc: <None>

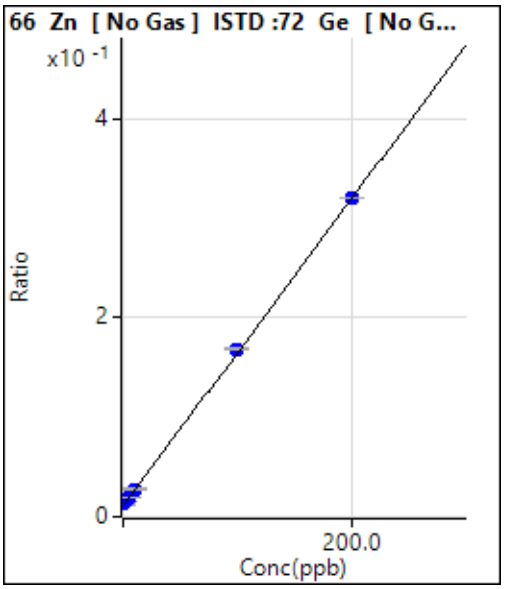
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0028	P	4.5	
2	☐	2.000	2.028	6498.33	0.0220	P	3.8	1.4
3	☐	5.000	4.949	14674.83	0.0497	P	4.8	-1.0
4	☐	10.000	9.513	27645.12	0.0930	P	1.6	-4.9
5	☐	100.000	100.709	279268.86	0.9572	P	0.7	0.7
6	☐	200.000	199.671	540113.27	1.8951	P	0.8	-0.2

y = 0.0095 * x + 0.0028
R = 1.0000
DL = 0.0398 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

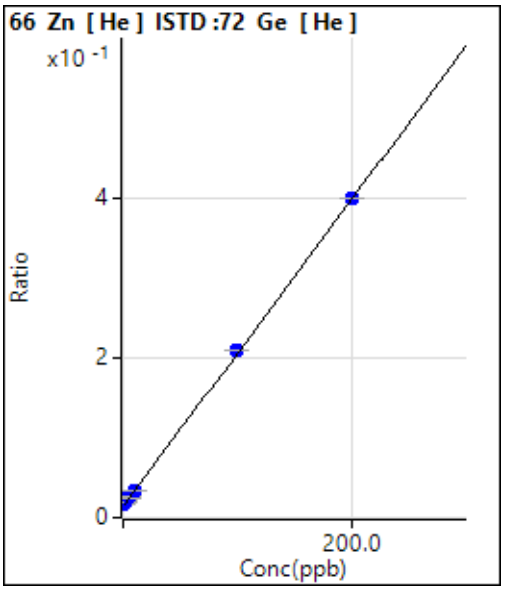


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11048.02	0.0126	P	2.7	
2	☐	2.000	2.150	14227.66	0.0159	P	2.3	7.5
3	☐	5.000	4.606	17975.47	0.0197	P	1.1	-7.9
4	☐	10.000	9.941	25474.27	0.0279	P	0.7	-0.6
5	☐	100.000	101.092	150652.98	0.1684	P	1.5	1.1
6	☐	200.000	199.465	280339.10	0.3202	P	0.5	-0.3

y = 0.0015 * x + 0.0126
R = 1.0000
DL = 0.6626 ppb
BEC = 8.139 ppb

Weight: <None>
Min Conc: <None>

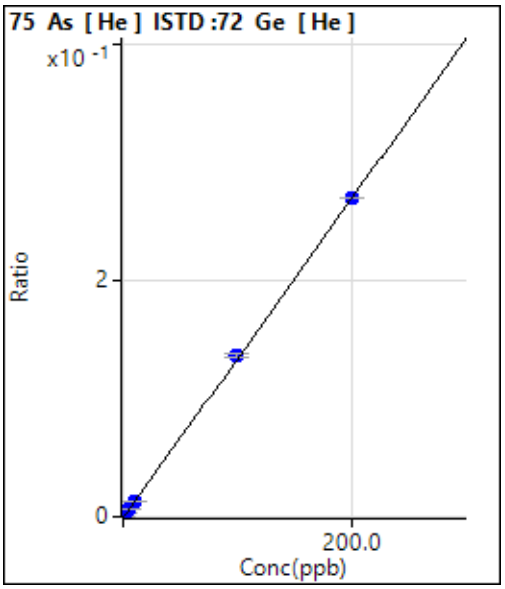
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4614.18	0.0162	P	3.3	
2	☐	2.000	2.179	6008.07	0.0204	P	3.6	9.0
3	☐	5.000	4.740	7462.18	0.0253	P	1.7	-5.2
4	☐	10.000	9.278	10103.97	0.0340	P	4.1	-7.2
5	☐	100.000	100.648	61007.10	0.2091	P	1.1	0.6
6	☐	200.000	199.717	113720.52	0.3990	P	0.5	-0.1

y = 0.0019 * x + 0.0162
R = 1.0000
DL = 0.8439 ppb
BEC = 8.448 ppb

Weight: <None>
Min Conc: <None>

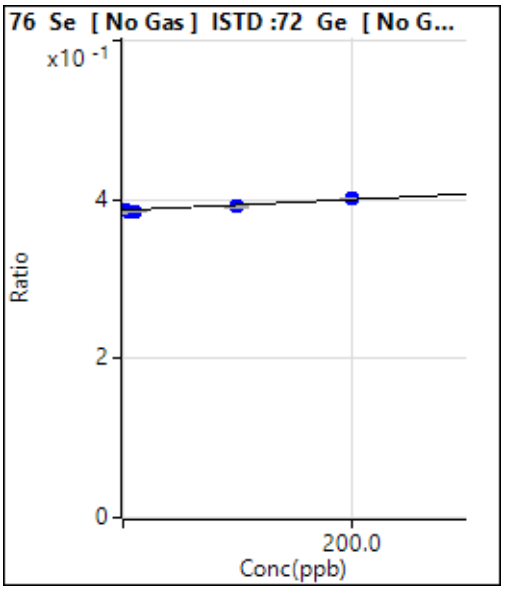


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.11	0.0003	P	13.5	
2	☐	2.000	1.809	806.70	0.0027	P	1.3	-9.6
3	☐	5.000	4.709	1966.82	0.0067	P	3.2	-5.8
4	☐	10.000	9.769	4019.52	0.0135	P	3.5	-2.3
5	☐	100.000	101.197	40073.77	0.1374	P	2.0	1.2
6	☐	200.000	199.422	77064.01	0.2704	P	0.5	-0.3

y = 0.0014 * x + 2.8473E-004
R = 1.0000
DL = 0.08512 ppb
BEC = 0.2102 ppb

Weight: <None>
Min Conc: <None>

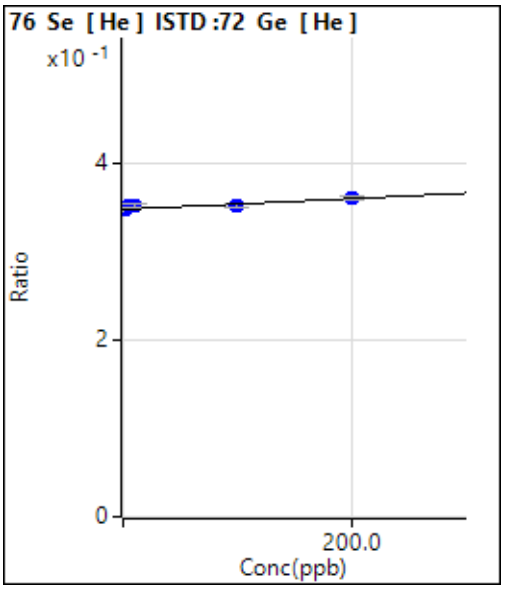
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340135.53	0.3864	P	0.2	
2	☐	2.000	1.615	346593.28	0.3865	P	0.5	-19.3
3	☐	5.000	-39.591	350968.52	0.3837	P	0.3	-891.8
4	☐	10.000	-22.074	351671.41	0.3849	P	0.4	-320.7
5	☐	100.000	63.515	349470.53	0.3907	P	0.6	-36.5
6	☐	200.000	220.965	351535.49	0.4014	P	0.5	10.5

y = 6.8039E-005 * x + 0.3864
R = 0.9712
DL = 37.32 ppb
BEC = 5679 ppb

Weight: <None>
Min Conc: <None>

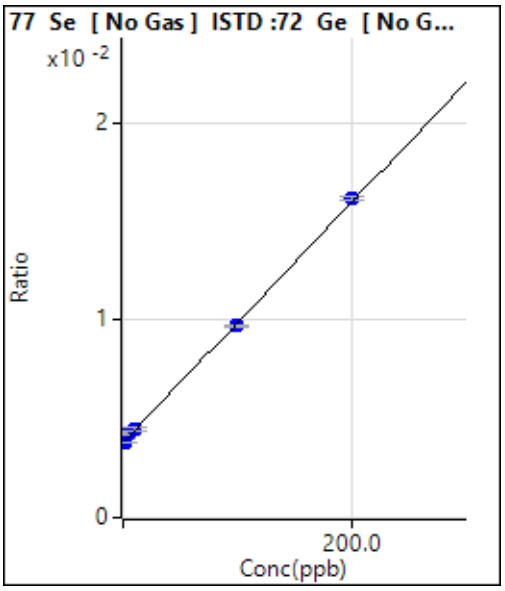


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99327.45	0.3486	P	1.2	
2	☐	2.000	-5.827	102715.53	0.3482	P	1.0	-391.3
3	☐	5.000	74.808	104271.14	0.3533	P	0.8	1396.2
4	☐	10.000	72.449	105006.20	0.3531	P	1.6	624.5
5	☐	100.000	70.638	102978.72	0.3530	P	1.2	-29.4
6	☐	200.000	209.892	103068.85	0.3616	P	1.2	4.9

y = 6.2131E-005 * x + 0.3486
R = 0.8760
DL = 203.6 ppb
BEC = 5611 ppb

Weight: <None>
Min Conc: <None>

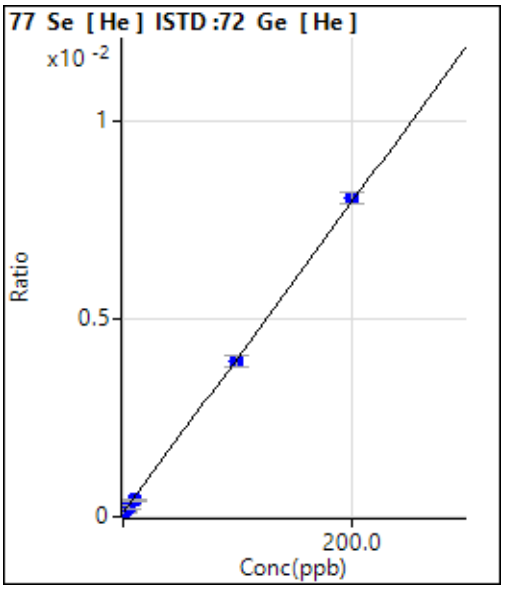
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3427.16	0.0039	P	2.8	
2	☐	2.000	-1.542	3407.17	0.0038	P	0.4	-177.1
3	☐	5.000	6.114	3900.64	0.0043	P	1.6	22.3
4	☐	10.000	9.802	4100.70	0.0045	P	3.5	-2.0
5	☐	100.000	95.699	8682.93	0.0097	P	1.6	-4.3
6	☐	200.000	202.168	14164.29	0.0162	P	1.2	1.1

y = 6.0750E-005 * x + 0.0039
R = 0.9995
DL = 5.321 ppb
BEC = 64.09 ppb

Weight: <None>
Min Conc: <None>

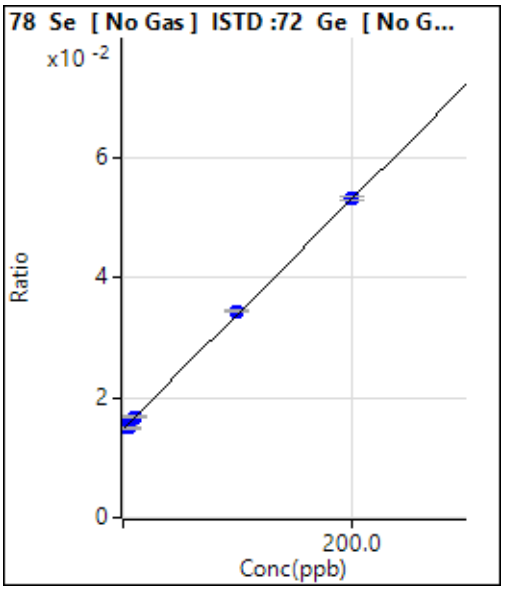


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	43.2	
2	☐	2.000	-0.121	40.00	0.0001	P	24.8	-106.0
3	☐	5.000	2.175	66.67	0.0002	P	37.7	-56.5
4	☐	10.000	7.270	126.67	0.0004	P	12.5	-27.3
5	☐	100.000	97.034	1153.40	0.0040	P	7.6	-3.0
6	☐	200.000	201.712	2300.24	0.0081	P	3.7	0.9

y = 3.9311E-005 * x + 1.4032E-004
R = 0.9998
DL = 4.626 ppb
BEC = 3.569 ppb

Weight: <None>
Min Conc: <None>

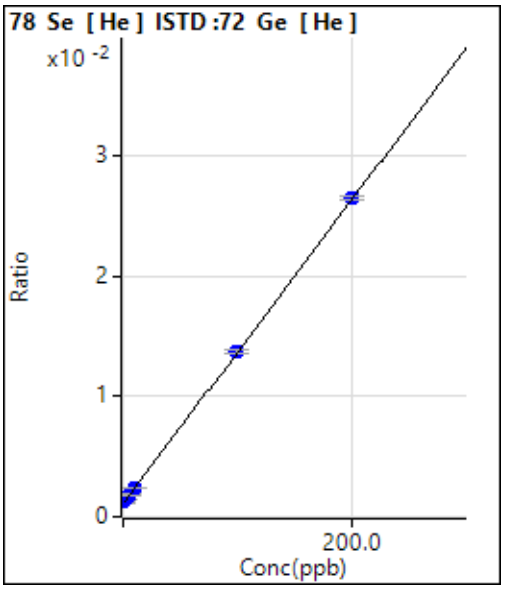
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13283.44	0.0151	P	2.3	
2	☐	2.000	2.487	13957.43	0.0156	P	2.0	24.4
3	☐	5.000	-0.649	13687.13	0.0150	P	3.1	-113.0
4	☐	10.000	8.805	15322.31	0.0168	P	3.0	-11.9
5	☐	100.000	101.061	30732.06	0.0344	P	0.7	1.1
6	☐	200.000	199.665	46550.52	0.0532	P	1.3	-0.2

y = 1.9066E-004 * x + 0.0151
R = 0.9996
DL = 5.56 ppb
BEC = 79.15 ppb

Weight: <None>
Min Conc: <None>

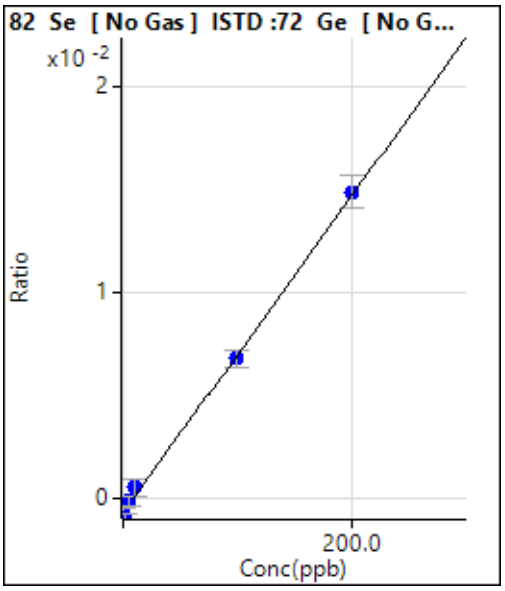


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	352.67	0.0012	P	9.8	
2	☐	2.000	1.441	418.68	0.0014	P	5.3	-27.9
3	☐	5.000	4.382	528.68	0.0018	P	8.7	-12.4
4	☐	10.000	9.045	708.02	0.0024	P	2.5	-9.5
5	☐	100.000	99.468	4028.61	0.0138	P	2.5	-0.5
6	☐	200.000	200.335	7568.81	0.0266	P	1.2	0.2

y = 1.2639E-004 * x + 0.0012
R = 1.0000
DL = 2.878 ppb
BEC = 9.791 ppb

Weight: <None>
Min Conc: <None>

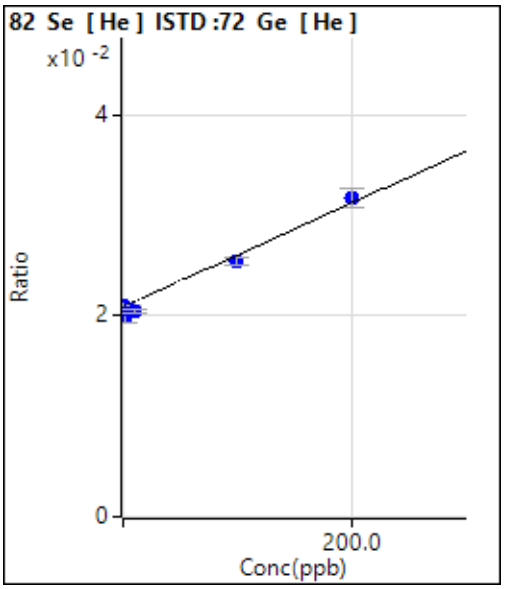
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-569.55	-0.0006	P	-53.0	
2	☐	2.000	-4.186	-869.28	-0.0010	P	-41.1	-309.3
3	☐	5.000	6.179	-158.52	-0.0002	P	-267.	23.6
4	☐	10.000	14.660	439.73	0.0005	P	172.7	46.6
5	☐	100.000	96.139	6030.53	0.0067	P	11.9	-3.9
6	☐	200.000	201.730	13022.02	0.0149	P	10.7	0.9

y = 7.6906E-005 * x - 6.4740E-004
R = 0.9988
DL = 13.39 ppb
BEC = -8.418 ppb

Weight: <None>
Min Conc: <None>

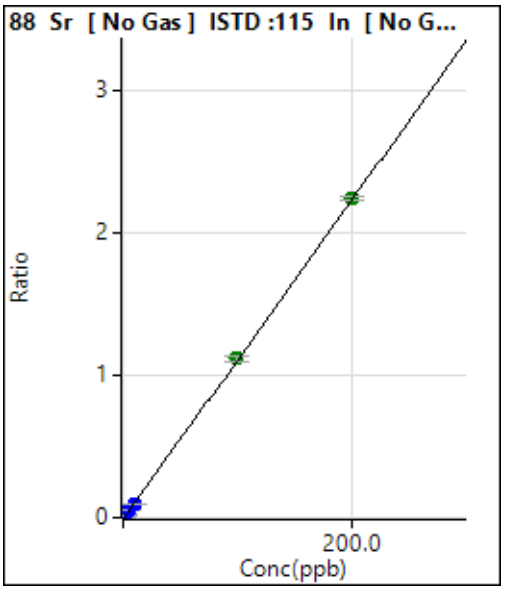


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5978.09	0.0210	P	2.4	
2	☐	2.000	-21.384	5861.38	0.0199	P	5.6	-1169.2
3	☐	5.000	-6.198	6098.18	0.0207	P	3.9	-224.0
4	☐	10.000	-10.045	6084.81	0.0205	P	2.2	-200.4
5	☐	100.000	86.340	7422.19	0.0254	P	2.6	-13.7
6	☐	200.000	208.346	9049.87	0.0318	P	5.5	4.2

y = 5.1708E-005 * x + 0.0210
R = 0.9947
DL = 29.27 ppb
BEC = 405.7 ppb

Weight: <None>
Min Conc: <None>

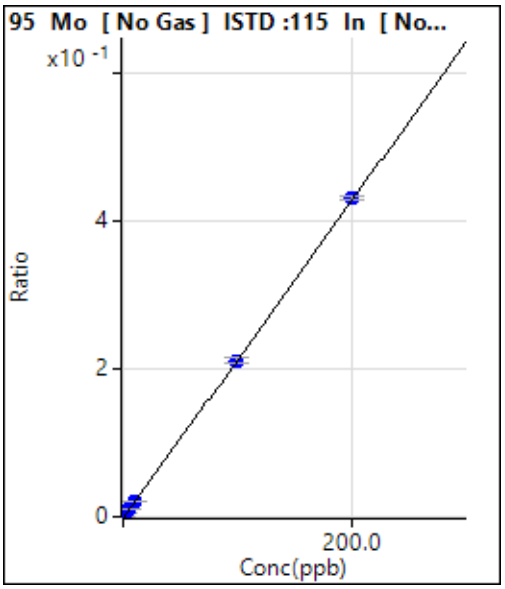
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0005	P	9.2	
2	☐	2.000	1.766	22041.72	0.0203	P	2.2	-11.7
3	☐	5.000	4.509	60037.98	0.0509	P	3.0	-9.8
4	☐	10.000	8.456	112859.20	0.0951	P	1.3	-15.4
5	☐	100.000	99.649	1223557.59	1.1148	A	3.3	-0.4
6	☐	200.000	200.267	2379611.89	2.2400	A	1.7	0.1

y = 0.0112 * x + 5.1424E-004
R = 1.0000
DL = 0.01272 ppb
BEC = 0.04599 ppb

Weight: <None>
Min Conc: <None>

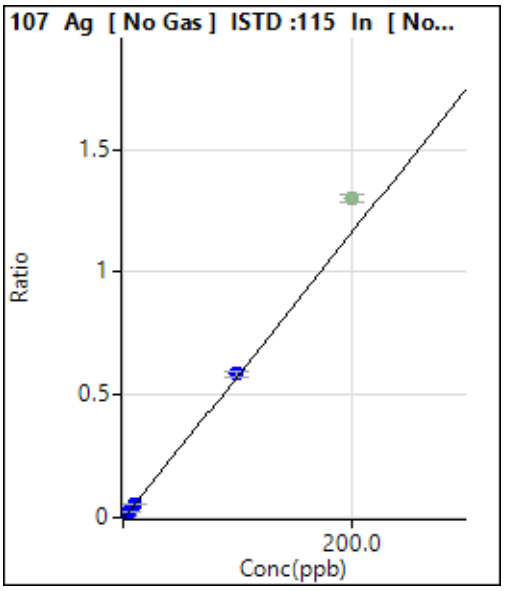


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	86.6	
2	☐	2.000	1.899	4464.16	0.0041	P	1.3	-5.0
3	☐	5.000	4.351	11054.78	0.0094	P	5.6	-13.0
4	☐	10.000	9.095	23247.31	0.0196	P	0.6	-9.0
5	☐	100.000	98.509	232519.11	0.2119	P	4.0	-1.5
6	☐	200.000	200.808	458857.01	0.4319	P	0.7	0.4

y = 0.0022 * x + 1.8921E-005
R = 1.0000
DL = 0.02285 ppb
BEC = 0.008796 ppb

Weight: <None>
Min Conc: <None>

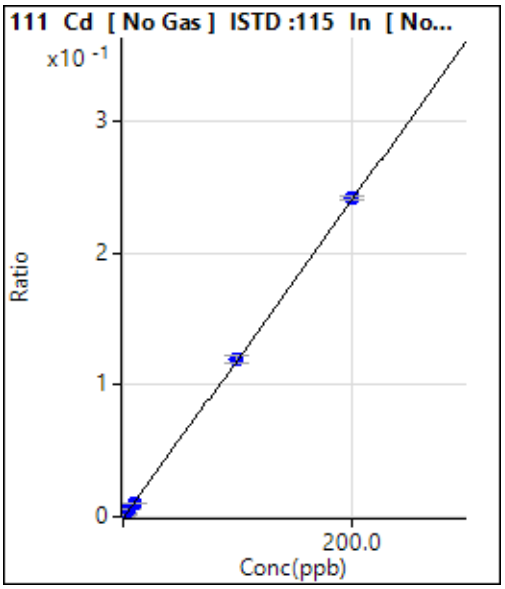
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	650.03	0.0006	P	7.8	
2	☐	2.000	1.941	12976.54	0.0119	P	3.1	-3.0
3	☐	5.000	4.524	31811.93	0.0270	P	2.5	-9.5
4	☐	10.000	9.123	63870.56	0.0538	P	0.7	-8.8
5	☐	100.000	100.113	641179.73	0.5843	P	3.8	0.1
6	☑	200.000		1381627.32	1.3006	A	2.1	

y = 0.0058 * x + 6.1152E-004
R = 1.0000
DL = 0.02442 ppb
BEC = 0.1049 ppb

Weight: <None>
Min Conc: <None>

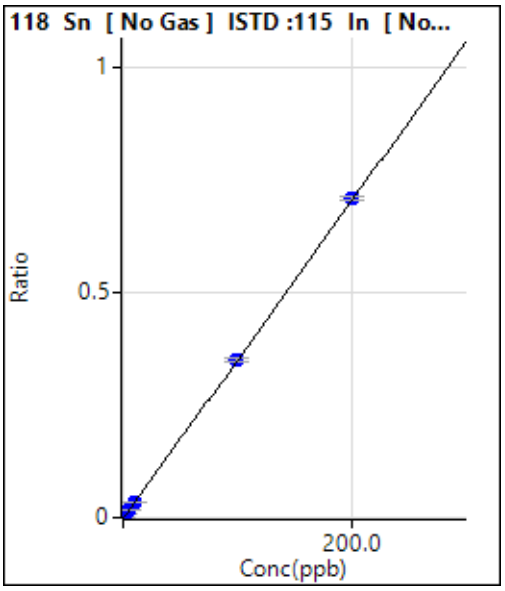


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.822	2396.93	0.0022	P	11.0	-8.9
3	☐	5.000	4.572	6511.73	0.0055	P	3.0	-8.6
4	☐	10.000	8.913	12773.06	0.0108	P	2.1	-10.9
5	☐	100.000	99.005	131086.48	0.1194	P	3.8	-1.0
6	☐	200.000	200.564	257048.49	0.2420	P	1.1	0.3

y = 0.0012 * x + 6.2649E-006
R = 1.0000
DL = 0.01349 ppb
BEC = 0.005193 ppb

Weight: <None>
Min Conc: <None>

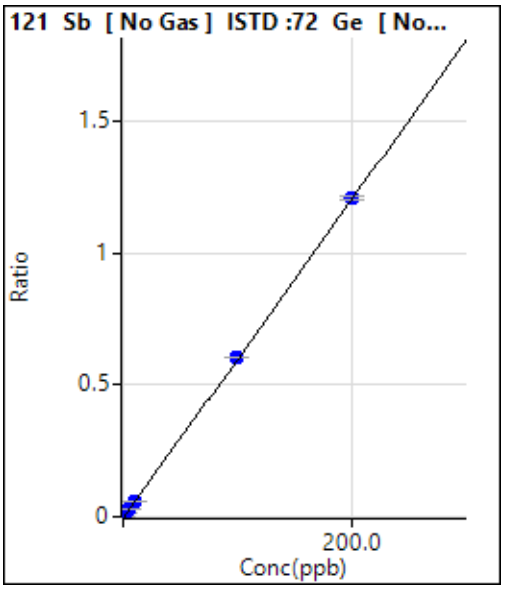
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.08	0.0011	P	8.4	
2	☐	2.000	1.972	8783.07	0.0081	P	1.1	-1.4
3	☐	5.000	4.359	19471.41	0.0165	P	0.6	-12.8
4	☐	10.000	8.959	38917.93	0.0328	P	1.7	-10.4
5	☐	100.000	98.962	385279.17	0.3510	P	3.4	-1.0
6	☐	200.000	200.588	754690.04	0.7104	P	0.7	0.3

y = 0.0035 * x + 0.0011
R = 1.0000
DL = 0.07837 ppb
BEC = 0.3116 ppb

Weight: <None>
Min Conc: <None>

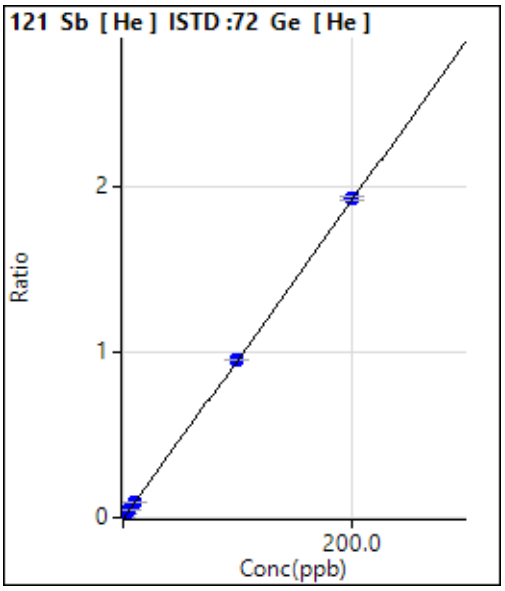


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	363.35	0.0004	P	22.2	
2	☐	2.000	1.926	10791.31	0.0120	P	4.2	-3.7
3	☐	5.000	4.795	26841.05	0.0293	P	2.2	-4.1
4	☐	10.000	9.720	53967.66	0.0591	P	0.6	-2.8
5	☐	100.000	99.844	539271.95	0.6029	P	0.6	-0.2
6	☐	200.000	200.098	1057720.85	1.2079	P	0.7	0.0

y = 0.0060 * x + 4.1282E-004
R = 1.0000
DL = 0.04548 ppb
BEC = 0.06841 ppb

Weight: <None>
Min Conc: <None>

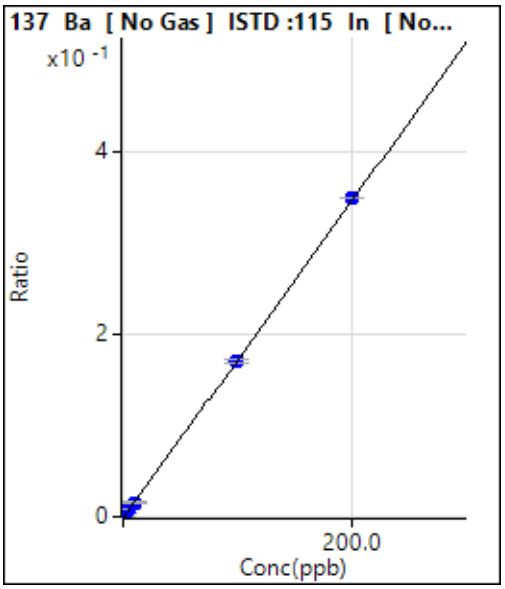
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0009	P	36.9	
2	☐	2.000	1.901	5651.32	0.0192	P	2.5	-4.9
3	☐	5.000	4.747	13717.39	0.0465	P	1.7	-5.1
4	☐	10.000	9.436	27205.20	0.0915	P	0.7	-5.6
5	☐	100.000	99.125	277821.51	0.9523	P	0.6	-0.9
6	☐	200.000	200.473	548641.67	1.9250	P	0.8	0.2

y = 0.0096 * x + 9.1294E-004
R = 1.0000
DL = 0.1052 ppb
BEC = 0.09512 ppb

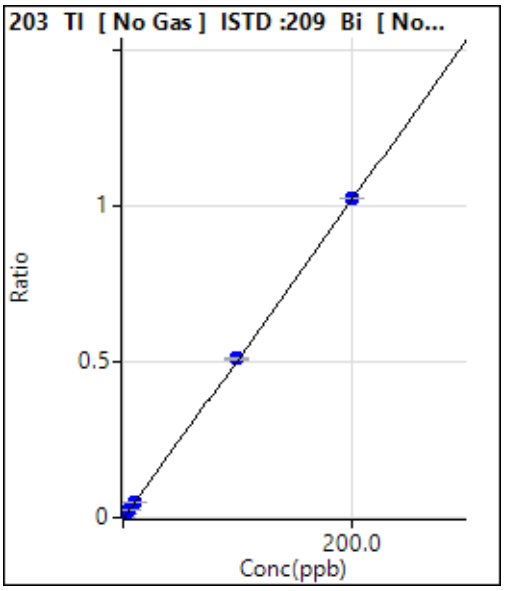
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	54.3	
2	☐	2.000	1.946	3817.31	0.0035	P	3.1	-2.7
3	☐	5.000	4.437	9243.50	0.0078	P	4.3	-11.3
4	☐	10.000	8.950	18636.96	0.0157	P	3.0	-10.5
5	☐	100.000	98.095	187481.52	0.1708	P	3.3	-1.9
6	☐	200.000	201.020	371723.32	0.3499	P	0.4	0.5

y = 0.0017 * x + 1.2276E-004
R = 0.9999
DL = 0.115 ppb
BEC = 0.07055 ppb

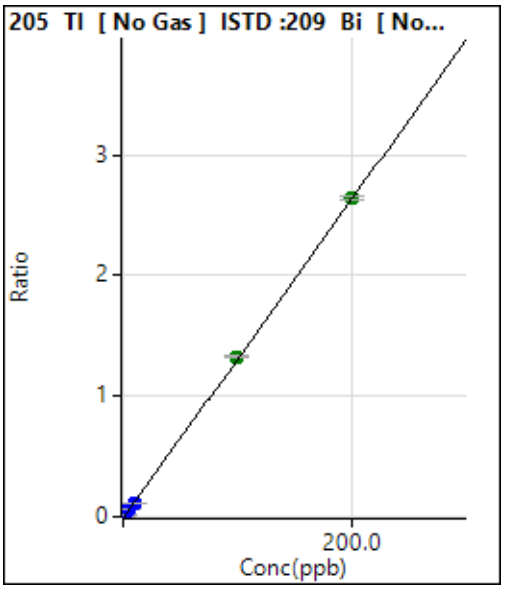
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	45.4	
2	☐	2.000	1.939	10898.26	0.0100	P	3.0	-3.0
3	☐	5.000	4.692	26605.35	0.0241	P	1.7	-6.2
4	☐	10.000	9.670	55027.94	0.0495	P	1.7	-3.3
5	☐	100.000	99.603	553811.97	0.5093	P	0.4	-0.4
6	☐	200.000	200.223	1098394.77	1.0237	P	0.4	0.1

y = 0.0051 * x + 7.8411E-005
R = 1.0000
DL = 0.02088 ppb
BEC = 0.01534 ppb

Weight: <None>
Min Conc: <None>

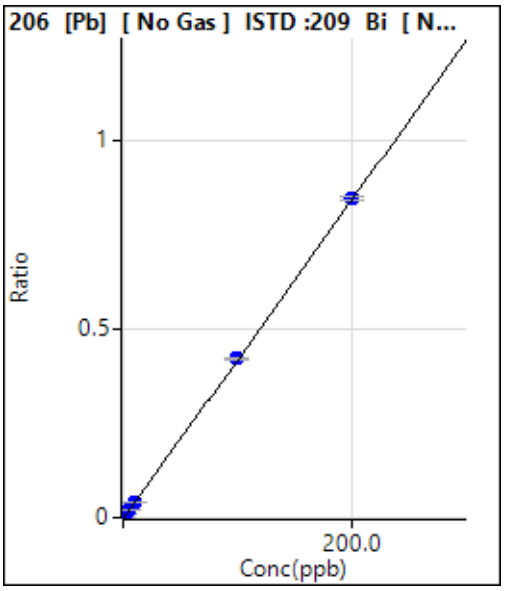


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	13.8	
2	☐	2.000	1.771	25793.72	0.0236	P	1.9	-11.5
3	☐	5.000	4.405	64643.90	0.0585	P	1.8	-11.9
4	☐	10.000	8.896	130928.72	0.1178	P	1.3	-11.0
5	☐	100.000	100.333	1442239.09	1.3262	A	0.7	0.3
6	☐	200.000	199.906	2835298.50	2.6422	A	1.4	0.0

y = 0.0132 * x + 2.4470E-004
R = 1.0000
DL = 0.007651 ppb
BEC = 0.01852 ppb

Weight: <None>
Min Conc: <None>

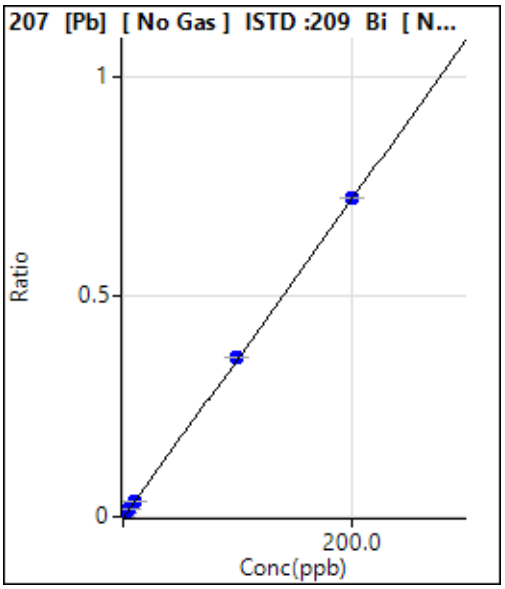
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0004	P	11.9	
2	☐	2.000	1.968	9493.79	0.0087	P	0.9	-1.6
3	☐	5.000	4.820	22981.48	0.0208	P	2.1	-3.6
4	☐	10.000	9.618	45687.35	0.0411	P	2.6	-3.8
5	☐	100.000	99.592	459195.54	0.4223	P	0.4	-0.4
6	☐	200.000	200.228	910503.61	0.8486	P	0.8	0.1

y = 0.0042 * x + 3.6711E-004
R = 1.0000
DL = 0.03081 ppb
BEC = 0.08666 ppb

Weight: <None>
Min Conc: <None>

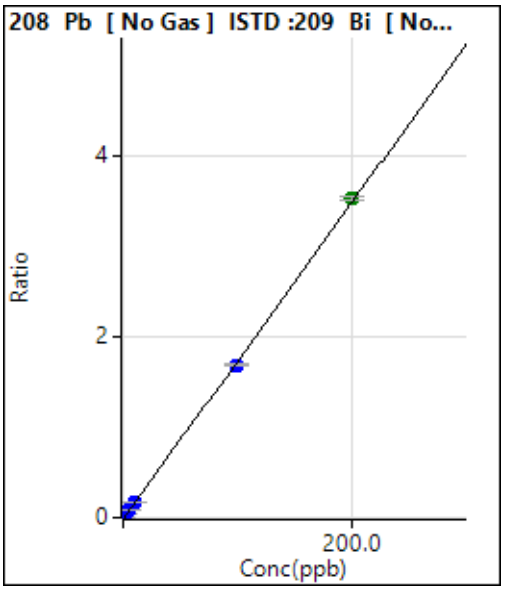


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	310.01	0.0003	P	11.1	
2	☐	2.000	1.955	8039.41	0.0074	P	2.8	-2.2
3	☐	5.000	4.776	19442.19	0.0176	P	3.7	-4.5
4	☐	10.000	9.521	38626.70	0.0348	P	2.9	-4.8
5	☐	100.000	100.149	394588.86	0.3628	P	0.3	0.1
6	☐	200.000	199.955	777014.99	0.7241	P	0.4	0.0

y = 0.0036 * x + 2.9176E-004
R = 1.0000
DL = 0.02677 ppb
BEC = 0.0806 ppb

Weight: <None>
Min Conc: <None>

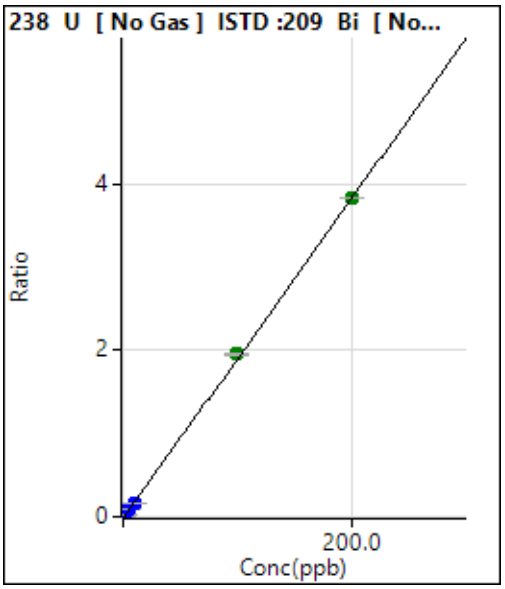
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1806.77	0.0017	P	9.4	
2	☐	2.000	1.840	36975.29	0.0339	P	2.6	-8.0
3	☐	5.000	4.624	91346.61	0.0826	P	1.7	-7.5
4	☐	10.000	9.247	181722.84	0.1635	P	1.4	-7.5
5	☐	100.000	96.337	1835045.95	1.6874	P	0.7	-3.7
6	☐	200.000	201.880	3792152.63	3.5343	A	0.9	0.9

y = 0.0175 * x + 0.0017
R = 0.9998
DL = 0.02748 ppb
BEC = 0.09719 ppb

Weight: <None>
Min Conc: <None>

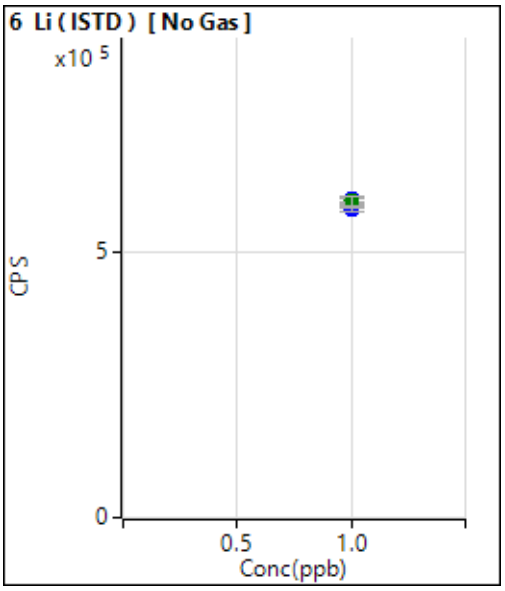


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.3	
2	☐	2.000	1.739	36464.68	0.0334	P	1.6	-13.1
3	☐	5.000	4.461	94795.56	0.0857	P	1.9	-10.8
4	☐	10.000	8.954	191259.99	0.1721	P	1.0	-10.5
5	☐	100.000	101.548	2122369.40	1.9517	A	1.0	1.5
6	☐	200.000	199.294	4109980.57	3.8303	A	0.6	-0.4

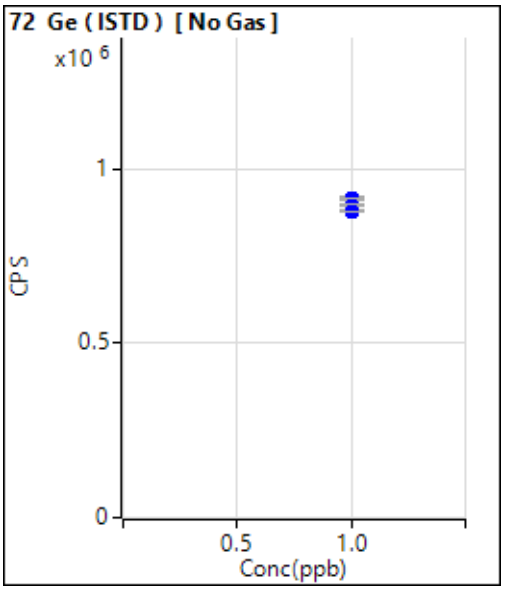
y = 0.0192 * x + 1.2550E-005
R = 0.9999
DL = 0.0008486 ppb
BEC = 0.000653 ppb

Weight: <None>
Min Conc: <None>

Calibration for 020_ICV.d

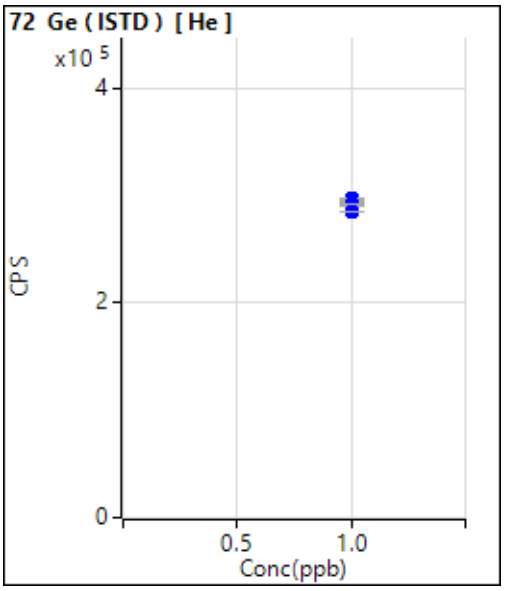


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		579730.97		P	0.8	
2	☐	1.000		591607.00		P	0.4	
3	☐	1.000		600682.49		P	0.2	
4	☐	1.000		601569.39		P	0.1	
5	☐	1.000		578595.56		P	1.4	
6	☐	1.000		597498.66		A	3.1	

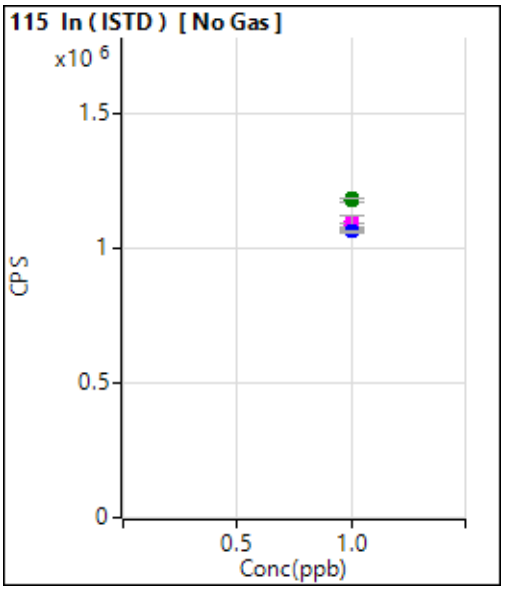


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		880231.97		P	0.3	
2	☐	1.000		896698.53		P	0.3	
3	☐	1.000		914660.95		P	1.0	
4	☐	1.000		913650.06		P	0.6	
5	☐	1.000		894402.64		P	1.0	
6	☐	1.000		875652.64		P	0.5	

Calibration for 020_ICV.d

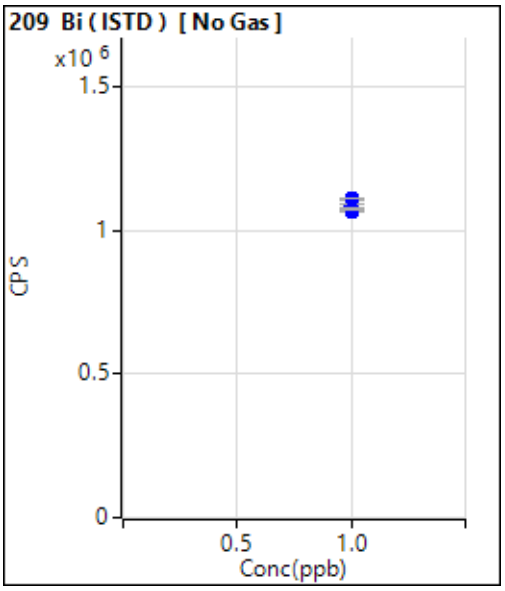


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		284935.68		P	0.4	
2	☐	1.000		294953.58		P	0.2	
3	☐	1.000		295174.68		P	0.2	
4	☐	1.000		297392.47		P	0.5	
5	☐	1.000		291738.45		P	0.6	
6	☐	1.000		285009.21		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062541.78		P	0.9	
2	☐	1.000		1087771.37		M	1.2	
3	☐	1.000		1178962.77		A	1.2	
4	☐	1.000		1187157.58		A	0.5	
5	☐	1.000		1098599.80		M	4.4	
6	☐	1.000		1062301.36		P	0.6	

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062489.72		P	0.1	
2	☐	1.000		1090754.44		P	0.4	
3	☐	1.000		1105631.68		P	0.5	
4	☐	1.000		1111356.65		P	0.1	
5	☐	1.000		1087495.79		P	1.3	
6	☐	1.000		1073017.12		P	0.8	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	009CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:26:20-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	35468	0.00
Be	9	1	No Gas	57	54.68
V	51	2	He	953	0.19
Cr	52	2	He	953	0.94
Fe	56	2	He	7572	0.05
Se	78	2	He	353	2.90
As	75	2	He	81	16.29
Ca	44	2	He	730	1.60
Na	23	2	He	164288	0.00
Mg	24	2	He	193	15.21
K	39	2	He	77058	0.00
Mn	55	2	He	207	8.22
Co	59	2	He	17	415.69
Ni	60	2	He	180	14.14
Cu	63	2	He	800	0.56
Zn	66	2	He	4614	0.07
Al	27	2	He	433	2.02
B	11	1	No Gas	16990	0.01
Al	27	1	No Gas	15916	0.02
Si	28	1	No Gas	181850	0.00
Ag	107	1	No Gas	650	1.32
Cd	111	1	No Gas	7	1299.04
Sr	88	1	No Gas	547	1.84
Mo	95	1	No Gas	20	433.01
Sn	118	1	No Gas	1170	0.65
Sb	121	1	No Gas	363	6.08
Ba	137	1	No Gas	130	41.42
Tl	205	1	No Gas	260	5.33
Tl	203	1	No Gas	83	54.52
Pb	208	1	No Gas	1807	0.52
U	238	1	No Gas	13	324.76
Ca	43	2	He	30	222.22
Sb	121	2	He	260	14.11
Ti	47	2	He	10	1000.00
Cu	63	1	No Gas	2094	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	579731	0.76
Ge	72	2	He	284936	0.40
Ge	72	1	No Gas	880232	0.27
In	115	1	No Gas	1062542	0.92

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1062490	0.11

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	010CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:28:36-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3219	0.16
V	51	2	He	5642	0.02
Cr	52	2	He	6332	0.06
Fe	56	2	He	502271	0.00
Se	78	2	He	419	1.22
As	75	2	He	807	0.18
Ca	44	2	He	3597	0.09
Na	23	2	He	258804	0.00
Mg	24	2	He	53975	0.00
K	39	2	He	137587	0.00
Mn	55	2	He	4181	0.15
Co	59	2	He	7822	0.04
Ni	60	2	He	2174	0.37
Cu	63	2	He	6498	0.06
Zn	66	2	He	6008	0.06
Al	27	2	He	790	2.92
B	11	1	No Gas	24263	0.04
Al	27	1	No Gas	27494	0.00
Si	28	1	No Gas	209426	0.00
Ag	107	1	No Gas	12977	0.03
Cd	111	1	No Gas	2397	0.43
Sr	88	1	No Gas	22042	0.00
Mo	95	1	No Gas	4464	0.05
Sn	118	1	No Gas	8783	0.01
Sb	121	1	No Gas	10791	0.04
Ba	137	1	No Gas	3817	0.08
Tl	205	1	No Gas	25794	0.01
Tl	203	1	No Gas	10898	0.03
Pb	208	1	No Gas	36975	0.01
U	238	1	No Gas	36465	0.00
Ca	43	2	He	203	7.78
Sb	121	2	He	5651	0.04
Cu	63	1	No Gas	11829	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	591607	0.39	579731	102.05	70	120	
Ge	72	2	He	294954	0.22	284936	103.52	70	120	
Ge	72	1	No Gas	896699	0.35	880232	101.87	70	120	

Calibration Standard Report

In	115	1	No Gas	1087771	1.23	1062542	102.37	70	120	
Bi	209	1	No Gas	1090754	0.36	1062490	102.66	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	011CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:30:51-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7879	0.03
V	51	2	He	12342	0.02
Cr	52	2	He	14308	0.03
Fe	56	2	He	1333887	0.00
Se	78	2	He	529	1.61
As	75	2	He	1967	0.17
Ca	44	2	He	8479	0.06
Na	23	2	He	397312	0.00
Mg	24	2	He	134914	0.00
K	39	2	He	228252	0.00
Mn	55	2	He	9880	0.04
Co	59	2	He	19674	0.01
Ni	60	2	He	5264	0.08
Cu	63	2	He	14675	0.03
Zn	66	2	He	7462	0.02
Al	27	2	He	1333	0.51
B	11	1	No Gas	33757	0.00
Al	27	1	No Gas	51134	0.00
Si	28	1	No Gas	257545	0.00
Ag	107	1	No Gas	31812	0.01
Cd	111	1	No Gas	6512	0.06
Sr	88	1	No Gas	60038	0.00
Mo	95	1	No Gas	11055	0.05
Sn	118	1	No Gas	19471	0.01
Sb	121	1	No Gas	26841	0.01
Ba	137	1	No Gas	9243	0.03
Tl	205	1	No Gas	64644	0.00
Tl	203	1	No Gas	26605	0.00
Pb	208	1	No Gas	91347	0.00
U	238	1	No Gas	94796	0.00
Ca	43	2	He	390	0.00
Sb	121	2	He	13717	0.01
Cu	63	1	No Gas	26593	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600682	0.24	579731	103.61	70	120	
Ge	72	2	He	295175	0.15	284936	103.59	70	120	
Ge	72	1	No Gas	914661	0.99	880232	103.91	70	120	

Calibration Standard Report

In	115	1	No Gas	1178963	1.24	1062542	110.96	70	120	
Bi	209	1	No Gas	1105632	0.53	1062490	104.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	012CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:33:05-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16276	0.01
V	51	2	He	23712	0.01
Cr	52	2	He	27431	0.01
Fe	56	2	He	2705287	0.00
Se	78	2	He	708	0.41
As	75	2	He	4020	0.08
Ca	44	2	He	15893	0.02
Na	23	2	He	641621	0.00
Mg	24	2	He	274325	0.00
K	39	2	He	384086	0.00
Mn	55	2	He	19818	0.01
Co	59	2	He	39387	0.00
Ni	60	2	He	10511	0.01
Cu	63	2	He	27645	0.00
Zn	66	2	He	10104	0.04
Al	27	2	He	1954	0.55
B	11	1	No Gas	53538	0.00
Al	27	1	No Gas	74894	0.00
Si	28	1	No Gas	318398	0.00
Ag	107	1	No Gas	63871	0.00
Cd	111	1	No Gas	12773	0.02
Sr	88	1	No Gas	112859	0.00
Mo	95	1	No Gas	23247	0.00
Sn	118	1	No Gas	38918	0.00
Sb	121	1	No Gas	53968	0.00
Ba	137	1	No Gas	18637	0.02
Tl	205	1	No Gas	130929	0.00
Tl	203	1	No Gas	55028	0.00
Pb	208	1	No Gas	181723	0.00
U	238	1	No Gas	191260	0.00
Ca	43	2	He	927	1.25
Sb	121	2	He	27205	0.00
Cu	63	1	No Gas	51096	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	601569	0.15	579731	103.77	70	120	
Ge	72	2	He	297392	0.48	284936	104.37	70	120	
Ge	72	1	No Gas	913650	0.55	880232	103.80	70	120	

Calibration Standard Report

In	115	1	No Gas	1187158	0.51	1062542	111.73	70	120	
Bi	209	1	No Gas	1111357	0.05	1062490	104.60	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	013CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:35:19-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	168416	0.00
V	51	2	He	233663	0.00
Cr	52	2	He	269443	0.00
Fe	56	2	He	25986130	0.00
Se	78	2	He	4051	0.07
As	75	2	He	39833	0.00
Ca	44	2	He	153165	0.00
Na	23	2	He	5291918	0.00
Mg	24	2	He	2886162	0.00
K	39	2	He	3367830	0.00
Mn	55	2	He	201618	0.00
Co	59	2	He	399751	0.00
Ni	60	2	He	101486	0.00
Cu	63	2	He	276211	0.00
Zn	66	2	He	60552	0.01
Al	27	2	He	15352	0.01
B	11	1	No Gas	404931	0.00
Al	27	1	No Gas	635368	0.00
Si	28	1	No Gas	1805218	0.00
Ag	107	1	No Gas	661091	0.00
Cd	111	1	No Gas	135423	0.00
Sr	88	1	No Gas	1259156	0.00
Mo	95	1	No Gas	238736	0.00
Sn	118	1	No Gas	399283	0.00
Sb	121	1	No Gas	556704	0.00
Ba	137	1	No Gas	194463	0.00
Tl	205	1	No Gas	1497702	0.00
Tl	203	1	No Gas	577771	0.00
Pb	208	1	No Gas	1888280	0.00
U	238	1	No Gas	2173658	0.00
Ca	43	2	He	9287	0.09
Sb	121	2	He	277954	0.00
Cu	63	1	No Gas	508345	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	623189	6.88	579731	107.50	70	120	
Ge	72	2	He	296926	1.35	284936	104.21	70	120	
Ge	72	1	No Gas	946428	0.81	880232	107.52	70	120	

Calibration Standard Report

In	115	1	No Gas	1208300	1.97	1062542	113.72	70	120	
Bi	209	1	No Gas	1137675	0.51	1062490	107.08	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	014CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:37:29-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	322422	0.00
V	51	2	He	471477	0.00
Cr	52	2	He	540667	0.00
Fe	56	2	He	52323608	0.00
Se	78	2	He	7600	0.03
As	75	2	He	78436	0.00
Ca	44	2	He	310253	0.00
Na	23	2	He	10424936	0.00
Mg	24	2	He	5682277	0.00
K	39	2	He	6472901	0.00
Mn	55	2	He	403681	0.00
Co	59	2	He	801190	0.00
Ni	60	2	He	203881	0.00
Cu	63	2	He	551854	0.00
Zn	66	2	He	115102	0.00
Al	27	2	He	30952	0.01
B	11	1	No Gas	847405	0.00
Al	27	1	No Gas	1300522	0.00
Si	28	1	No Gas	2858376	0.00
Ag	107	1	No Gas	1394118	0.00
Cd	111	1	No Gas	260698	0.00
Sr	88	1	No Gas	2409378	0.00
Mo	95	1	No Gas	463878	0.00
Sn	118	1	No Gas	761104	0.00
Sb	121	1	No Gas	1083556	0.00
Ba	137	1	No Gas	374438	0.00
Tl	205	1	No Gas	2856492	0.00
Tl	203	1	No Gas	1105447	0.00
Pb	208	1	No Gas	3813835	0.00
U	238	1	No Gas	4088712	0.00
Ca	43	2	He	18640	0.02
Sb	121	2	He	557975	0.00
Cu	63	1	No Gas	969815	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	583551	1.54	579731	100.66	70	120	
Ge	72	2	He	286007	0.89	284936	100.38	70	120	
Ge	72	1	No Gas	879973	0.37	880232	99.97	70	120	

Calibration Standard Report

In	115	1	No Gas	1061634	0.42	1062542	99.91	70	120	
Bi	209	1	No Gas	1063165	0.13	1062490	100.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	017CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:47:02-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	165020	0.00
V	51	2	He	236700	0.00
Cr	52	2	He	273273	0.00
Fe	56	2	He	26418121	0.00
Se	78	2	He	4029	0.06
As	75	2	He	40074	0.01
Ca	44	2	He	156495	0.00
Na	23	2	He	5319772	0.00
Mg	24	2	He	2903812	0.00
K	39	2	He	3369393	0.00
Mn	55	2	He	202737	0.00
Co	59	2	He	404312	0.00
Ni	60	2	He	102336	0.00
Cu	63	2	He	279269	0.00
Zn	66	2	He	61007	0.00
Al	27	2	He	15582	0.02
B	11	1	No Gas	386819	0.00
Al	27	1	No Gas	614947	0.00
Si	28	1	No Gas	1642991	0.00
Ag	107	1	No Gas	641180	0.00
Cd	111	1	No Gas	131086	0.00
Sr	88	1	No Gas	1223558	0.00
Mo	95	1	No Gas	232519	0.00
Sn	118	1	No Gas	385279	0.00
Sb	121	1	No Gas	539272	0.00
Ba	137	1	No Gas	187482	0.00
Tl	205	1	No Gas	1442239	0.00
Tl	203	1	No Gas	553812	0.00
Pb	208	1	No Gas	1835046	0.00
U	238	1	No Gas	2122369	0.00
Ca	43	2	He	9503	0.04
Sb	121	2	He	277822	0.00
Cu	63	1	No Gas	493755	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	578596	1.45	579731	99.80	70	120	
Ge	72	2	He	291738	0.63	284936	102.39	70	120	
Ge	72	1	No Gas	894403	1.01	880232	101.61	70	120	

Calibration Standard Report

In	115	1	No Gas	1098600	4.45	1062542	103.39	70	120	
Bi	209	1	No Gas	1087496	1.30	1062490	102.35	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	018CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:49:06-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	323198	0.00
V	51	2	He	461921	0.00
Cr	52	2	He	530454	0.00
Fe	56	2	He	51478758	0.00
Se	78	2	He	7569	0.01
As	75	2	He	77064	0.00
Ca	44	2	He	305064	0.00
Na	23	2	He	10199745	0.00
Mg	24	2	He	5548943	0.00
K	39	2	He	6342020	0.00
Mn	55	2	He	396621	0.00
Co	59	2	He	792550	0.00
Ni	60	2	He	200962	0.00
Cu	63	2	He	540113	0.00
Zn	66	2	He	113721	0.00
Al	27	2	He	30193	0.01
B	11	1	No Gas	829456	0.00
Al	27	1	No Gas	1280085	0.00
Si	28	1	No Gas	2862370	0.00
Ag	107	1	No Gas	1381627	0.00
Cd	111	1	No Gas	257048	0.00
Sr	88	1	No Gas	2379612	0.00
Mo	95	1	No Gas	458857	0.00
Sn	118	1	No Gas	754690	0.00
Sb	121	1	No Gas	1057721	0.00
Ba	137	1	No Gas	371723	0.00
Tl	205	1	No Gas	2835299	0.00
Tl	203	1	No Gas	1098395	0.00
Pb	208	1	No Gas	3792153	0.00
U	238	1	No Gas	4109981	0.00
Ca	43	2	He	17905	0.01
Sb	121	2	He	548642	0.00
Cu	63	1	No Gas	962106	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	597499	3.11	579731	103.06	70	120	
Ge	72	2	He	285009	0.50	284936	100.03	70	120	
Ge	72	1	No Gas	875653	0.50	880232	99.48	70	120	

Calibration Standard Report

In	115	1	No Gas	1062301	0.58	1062542	99.98	70	120	
Bi	209	1	No Gas	1073017	0.82	1062490	100.99	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	020_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:53:28-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	107.266	1.017	849002	0.68	100	107.3	90	110	
Be	9	1	No Gas	105.065	0.011	168499	0.79	100	105.1	90	110	
V	51	2	He	101.597	0.515	242358	1.50	100	101.6	90	110	
Cr	52	2	He	100.558	0.258	275725	1.25	100	100.6	90	110	
Fe	56	2	He	10118.971	0.674	26874532	1.97	10000	101.2	90	110	
Se	78	2	He	105.604	2.143	4286	2.56	100	105.6	90	110	
As	75	2	He	102.334	0.569	40818	1.82	100	102.3	90	110	
Ca	44	2	He	10094.502	0.770	159119	1.76	10000	100.9	90	110	
Na	23	2	He	10102.403	1.579	5397916	2.15	10000	101.0	90	110	
Mg	24	2	He	10222.150	1.089	2937249	2.20	10000	102.2	90	110	
K	39	2	He	10267.920	0.623	3412754	1.89	10000	102.7	90	110	
Mn	55	2	He	100.499	0.151	205505	1.31	100	100.5	90	110	
Co	59	2	He	100.969	1.106	412243	1.51	100	101.0	90	110	
Ni	60	2	He	102.068	1.655	105721	2.93	100	102.1	90	110	
Cu	63	2	He	101.980	1.143	284818	0.45	100	102.0	90	110	
Zn	66	2	He	101.968	2.382	62186	1.07	100	102.0	90	110	
Al	27	2	He	102.291	3.201	16126	4.19	100	102.3	90	110	
B	11	1	No Gas	479.476	3.224	394835	2.73	500	95.9	90	110	
Al	27	1	No Gas	95.376	0.432	628083	0.80	100	95.4	90	110	
Si	28	1	No Gas	565.233	0.520	1767177	0.73	500	113.0	90	110	ICV Main CR1 Failed
Ag	107	1	No Gas	89.649	3.450	644944	0.56	100	89.6	90	110	ICV Main CR1 Failed
Cd	111	1	No Gas	98.057	2.825	133604	1.20	100	98.1	90	110	
Sr	88	1	No Gas	97.850	4.961	1235720	2.05	100	97.8	90	110	
Mo	95	1	No Gas	95.947	3.843	233035	1.19	100	95.9	90	110	
Sn	118	1	No Gas	97.737	2.840	391564	1.33	100	97.7	90	110	
Sb	121	1	No Gas	100.819	0.543	549022	1.01	100	100.8	90	110	
Ba	137	1	No Gas	96.703	2.875	190173	1.02	100	96.7	90	110	
Tl	205	1	No Gas	99.988	1.726	1464743	1.78	100	100.0	90	110	
Tl	203	1	No Gas	100.739	0.831	570816	0.22	100	100.7	90	110	
Pb	208	1	No Gas	96.610	0.276	1875392	0.78	100	96.6	90	110	
U	238	1	No Gas	100.709	1.989	2144879	1.31	100	100.7	90	110	
Ca	43	2	He	9883.306	2.794	9200	1.76	10000	98.8	90	110	
Sb	121	2	He	102.172	1.076	288477	2.42	100	102.2	90	110	
Ti	47	2	He	100.894	0.819	9207	1.58	100	100.9	90	110	
Cu	63	1	No Gas	100.718	0.650	500269	0.84	100	100.7	90	110	
Se	82	1	No Gas	102.554	7.970	6530	9.00	100	102.6	90	110	

QC ISTD Table

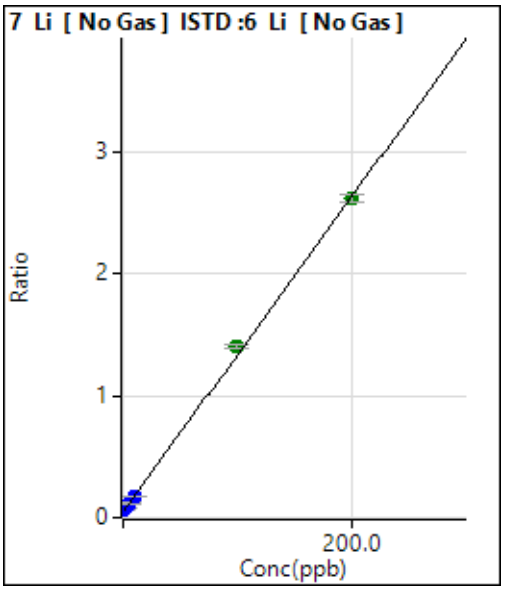
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	586369	0.79	579731	101.14	70	120	
Ge	72	2	He	293872	1.39	284936	103.14	70	120	
Ge	72	1	No Gas	901791	0.50	880232	102.45	70	120	
In	115	1	No Gas	1130124	3.84	1062542	106.36	70	120	
Bi	209	1	No Gas	1108264	1.00	1062490	104.31	70	120	

Calibration for 020_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	07/20/2022 11:26:20
2	010CALS.d	2/10/200	07/20/2022 11:28:36
3	011CALS.d	5/25/500	07/20/2022 11:30:51
4	012CALS.d	10/50/100	07/20/2022 11:33:05
5	017CALS.d	100/500/10K	07/20/2022 11:47:02
6	018CALS.d	200/1000/20K	07/20/2022 11:49:06

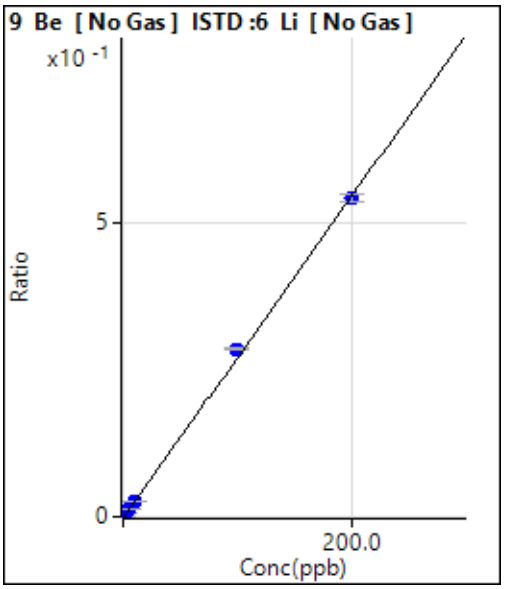
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35467.95	0.0612	P	0.1	
2	☐	2.000	1.703	49218.97	0.0832	P	0.9	-14.9
3	☐	5.000	4.388	70828.54	0.1179	P	0.9	-12.2
4	☐	10.000	9.097	107555.43	0.1788	P	0.9	-9.0
5	☐	100.000	104.181	814513.56	1.4081	A	2.5	4.2
6	☐	200.000	197.973	1565047.74	2.6206	A	2.6	-1.0

y = 0.0129 * x + 0.0612
R = 0.9997
DL = 0.01504 ppb
BEC = 4.732 ppb

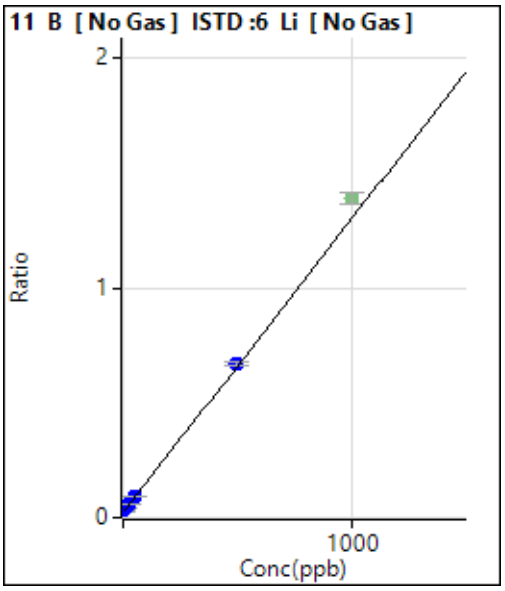
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	31.3	
2	☐	2.000	1.954	3218.73	0.0054	P	5.3	-2.3
3	☐	5.000	4.761	7878.93	0.0131	P	2.1	-4.8
4	☐	10.000	9.860	16276.14	0.0271	P	1.7	-1.4
5	☐	100.000	104.279	165019.88	0.2852	P	0.2	4.3
6	☐	200.000	197.874	323198.11	0.5411	P	1.9	-1.1

y = 0.0027 * x + 9.7830E-005
R = 0.9997
DL = 0.03356 ppb
BEC = 0.03578 ppb

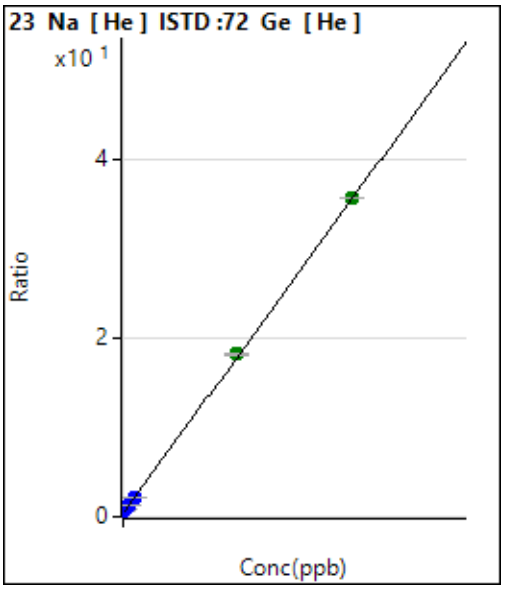
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16990.38	0.0293	P	0.5	
2	☐	10.000	9.158	24263.21	0.0410	P	8.6	-8.4
3	☐	25.000	21.051	33757.20	0.0562	P	1.8	-15.8
4	☐	50.000	46.725	53538.25	0.0890	P	1.3	-6.6
5	☐	500.000	500.542	386818.68	0.6687	P	3.1	0.1
6	☑	1000.000		829455.56	1.3893	A	4.0	

y = 0.0013 * x + 0.0293
R = 1.0000
DL = 0.3122 ppb
BEC = 22.94 ppb

Weight: <None>
Min Conc: <None>

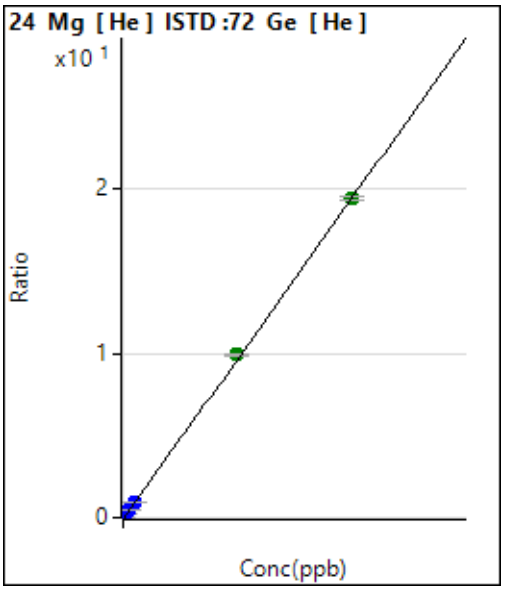


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	164287.96	0.5766	P	0.6	
2	☐	200.000	170.842	258803.67	0.8774	P	0.4	-14.6
3	☐	500.000	436.915	397312.47	1.3460	P	0.3	-12.6
4	☐	1000.000	897.715	641621.27	2.1575	P	1.1	-10.2
5	☐	10000.00	10027.13	5319771.80	18.2355	A	1.2	0.3
6	☐	20000.00	19993.41	10199744.8	35.7873	A	0.2	0.0

y = 0.0018 * x + 0.5766
R = 1.0000
DL = 6.195 ppb
BEC = 327.4 ppb

Weight: <None>
Min Conc: <None>

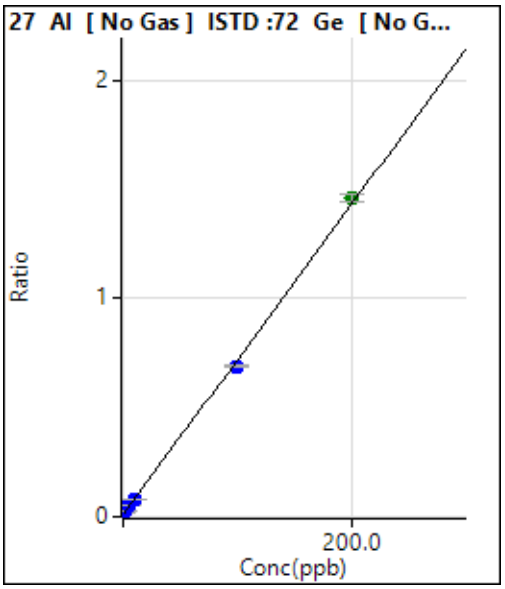
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0007	P	29.1	
2	☐	200.000	186.480	53974.67	0.1830	P	1.6	-6.8
3	☐	500.000	466.818	134914.35	0.4571	P	0.4	-6.6
4	☐	1000.000	942.843	274324.60	0.9225	P	1.5	-5.7
5	☐	10000.00	10180.72	2903811.94	9.9539	A	1.1	1.8
6	☐	20000.00	19913.46	5548942.63	19.4692	A	1.4	-0.4

y = 9.7766E-004 * x + 6.7814E-004
R = 0.9999
DL = 0.6062 ppb
BEC = 0.6936 ppb

Weight: <None>
Min Conc: <None>

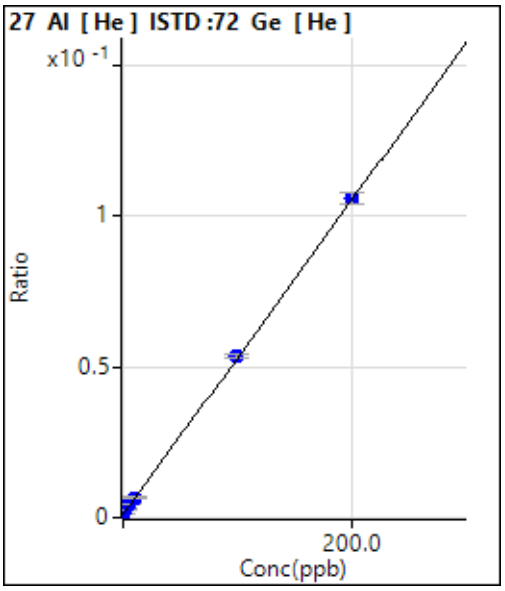


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15916.03	0.0181	P	2.5	
2	☐	2.000	1.769	27494.07	0.0307	P	0.9	-11.6
3	☐	5.000	5.317	51134.28	0.0559	P	0.9	6.3
4	☐	10.000	8.983	74894.19	0.0820	P	1.2	-10.2
5	☐	100.000	94.129	614947.07	0.6876	P	1.4	-5.9
6	☐	200.000	202.981	1280085.01	1.4619	A	2.7	1.5

y = 0.0071 * x + 0.0181
R = 0.9994
DL = 0.193 ppb
BEC = 2.542 ppb

Weight: <None>
Min Conc: <None>

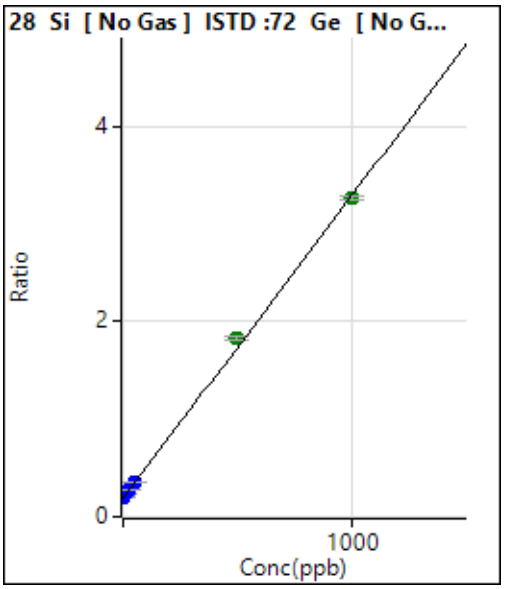
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0015	P	9.1	
2	☐	2.000	2.218	790.04	0.0027	P	22.9	10.9
3	☐	5.000	5.746	1333.42	0.0045	P	7.0	14.9
4	☐	10.000	9.681	1953.51	0.0066	P	11.0	-3.2
5	☐	100.000	99.502	15582.26	0.0534	P	2.1	-0.5
6	☐	200.000	200.244	30193.05	0.1059	P	3.3	0.1

y = 5.2148E-004 * x + 0.0015
R = 1.0000
DL = 0.7965 ppb
BEC = 2.917 ppb

Weight: <None>
Min Conc: <None>

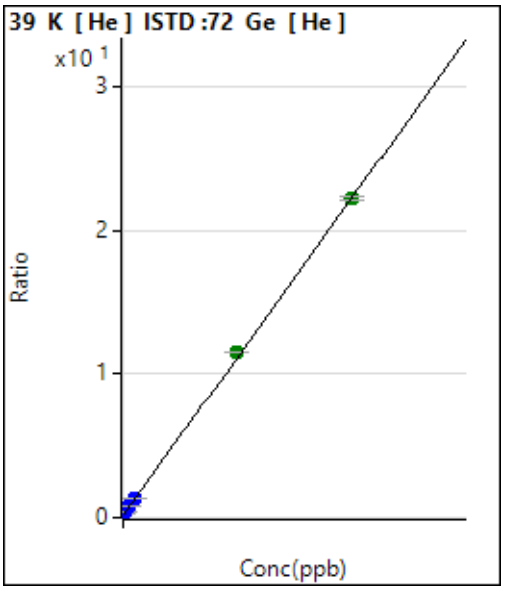


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181850.04	0.2066	P	1.1	
2	☐	10.000	8.691	209425.99	0.2336	P	0.2	-13.1
3	☐	25.000	24.176	257545.31	0.2816	P	0.2	-3.3
4	☐	50.000	45.754	318398.39	0.3485	P	1.1	-8.5
5	☐	500.000	525.756	1642990.96	1.8372	A	1.9	5.2
6	☐	1000.000	987.368	2862369.75	3.2688	A	0.6	-1.3

y = 0.0031 * x + 0.2066
R = 0.9995
DL = 2.133 ppb
BEC = 66.61 ppb

Weight: <None>
Min Conc: <None>

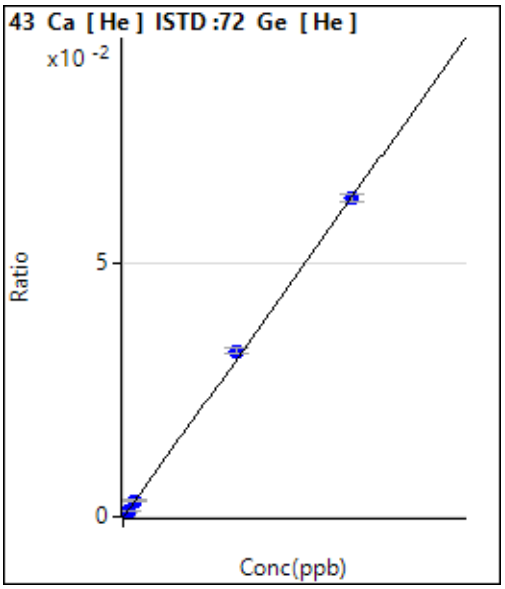
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77058.22	0.2704	P	2.0	
2	☐	200.000	177.477	137586.80	0.4665	P	0.6	-11.3
3	☐	500.000	455.224	228252.37	0.7733	P	0.9	-9.0
4	☐	1000.000	924.398	384086.02	1.2915	P	1.0	-7.6
5	☐	10000.00	10210.47	3369392.76	11.5491	A	0.7	2.1
6	☐	20000.00	19899.88	6342019.70	22.2522	A	0.7	-0.5

y = 0.0011 * x + 0.2704
R = 0.9999
DL = 14.82 ppb
BEC = 244.8 ppb

Weight: <None>
Min Conc: <None>

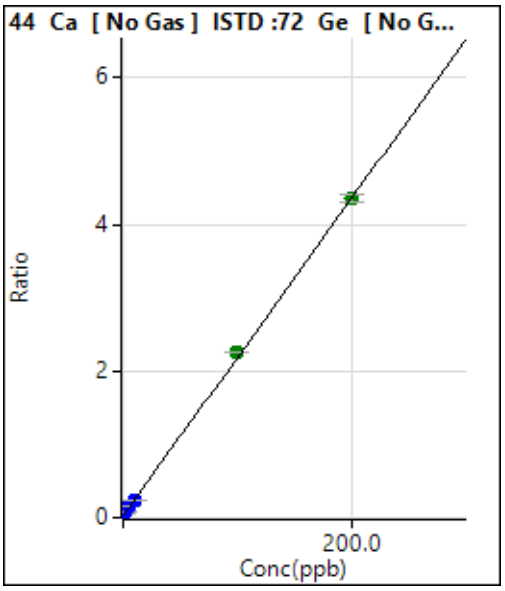


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.3	
2	☐	200.000	185.006	203.34	0.0007	P	15.7	-7.5
3	☐	500.000	385.158	390.01	0.0013	P	0.2	-23.0
4	☐	1000.000	953.240	926.72	0.0031	P	11.1	-4.7
5	☐	10000.00	10282.31	9503.44	0.0326	P	3.4	2.8
6	☐	20000.00	19864.20	17905.27	0.0628	P	2.5	-0.7

y = 3.1576E-006 * x + 1.0512E-004
R = 0.9998
DL = 66.27 ppb
BEC = 33.29 ppb

Weight: <None>
Min Conc: <None>

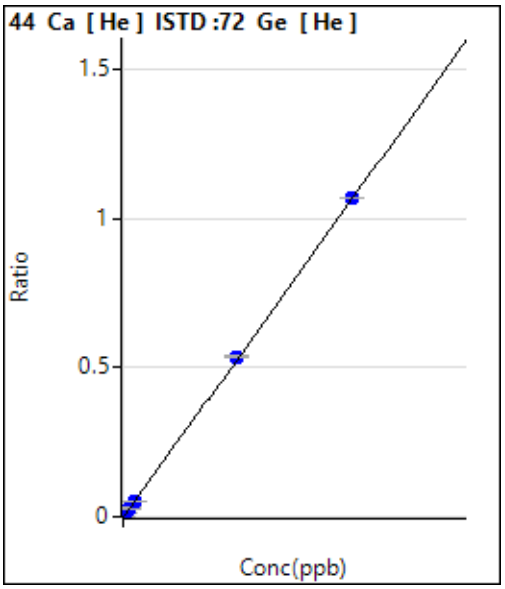
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41308.90	0.0469	P	2.2	
2	☐	2.000	1.809	77229.47	0.0861	P	1.0	-9.5
3	☐	5.000	4.736	136766.87	0.1495	P	0.6	-5.3
4	☐	10.000	9.305	227066.14	0.2485	P	0.4	-7.0
5	☐	100.000	102.208	2022467.89	2.2613	A	0.7	2.2
6	☐	200.000	198.939	3815297.13	4.3570	A	2.2	-0.5

y = 0.0217 * x + 0.0469
R = 0.9999
DL = 0.1436 ppb
BEC = 2.166 ppb

Weight: <None>
Min Conc: <None>

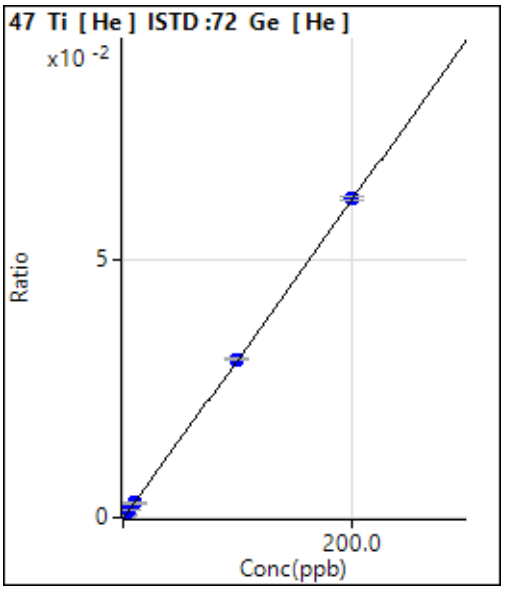


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0026	P	11.7	
2	☐	200.000	180.459	3597.20	0.0122	P	3.1	-9.8
3	☐	500.000	490.097	8479.41	0.0287	P	5.2	-2.0
4	☐	1000.000	953.108	15892.78	0.0534	P	3.2	-4.7
5	☐	10000.00	10000.76	156495.16	0.5364	P	1.1	0.0
6	☐	20000.00	20002.40	305064.14	1.0704	P	0.3	0.0

y = 5.3384E-005 * x + 0.0026
R = 1.0000
DL = 16.78 ppb
BEC = 47.99 ppb

Weight: <None>
Min Conc: <None>

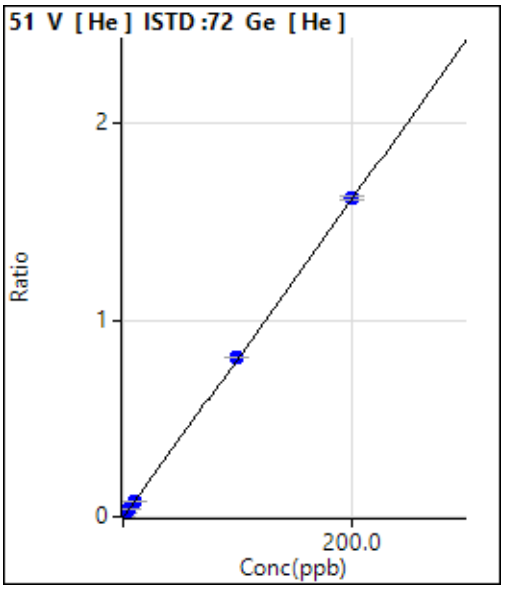
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	2.000	1.745	170.00	0.0006	P	36.6	-12.8
3	☐	5.000	4.329	406.68	0.0014	P	6.1	-13.4
4	☐	10.000	9.251	863.37	0.0029	P	13.5	-7.5
5	☐	100.000	99.487	9013.10	0.0309	P	1.9	-0.5
6	☐	200.000	200.313	17718.37	0.0622	P	1.7	0.2

y = 3.1016E-004 * x + 3.5087E-005
R = 1.0000
DL = 0.3401 ppb
BEC = 0.1131 ppb

Weight: <None>
Min Conc: <None>

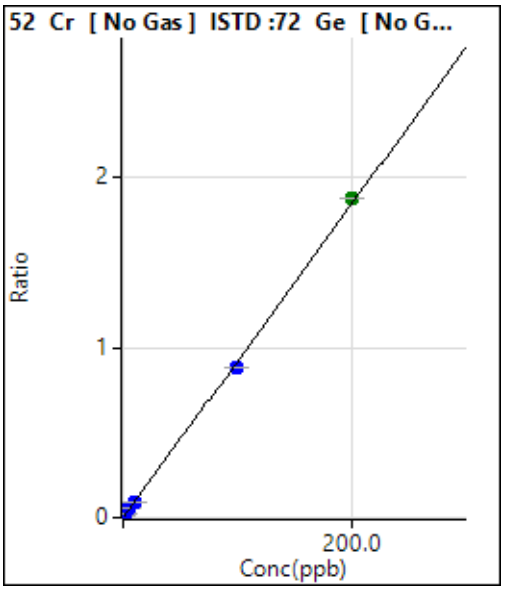


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0033	P	2.1	
2	☐	2.000	1.952	5642.30	0.0191	P	0.9	-2.4
3	☐	5.000	4.758	12342.27	0.0418	P	2.1	-4.8
4	☐	10.000	9.449	23711.62	0.0797	P	1.7	-5.5
5	☐	100.000	99.946	236700.40	0.8114	P	0.6	-0.1
6	☐	200.000	200.061	461921.18	1.6207	P	0.9	0.0

y = 0.0081 * x + 0.0033
R = 1.0000
DL = 0.02611 ppb
BEC = 0.4139 ppb

Weight: <None>
Min Conc: <None>

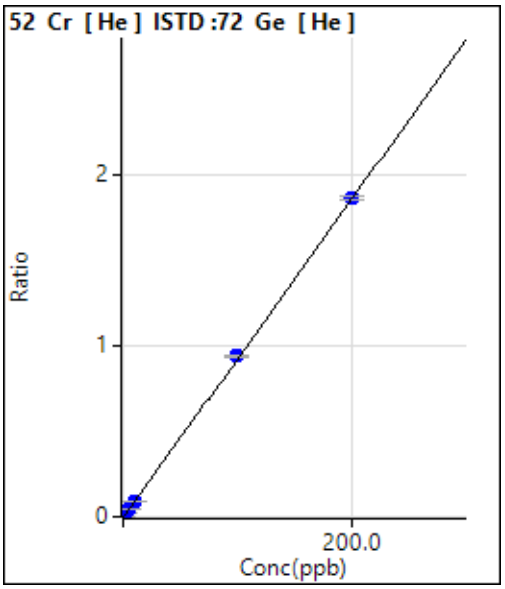
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8329.32	0.0095	P	1.6	
2	☐	2.000	1.851	23804.31	0.0265	P	1.4	-7.5
3	☐	5.000	4.539	46974.04	0.0514	P	0.7	-9.2
4	☐	10.000	9.282	86924.70	0.0951	P	1.1	-7.2
5	☐	100.000	94.709	790317.41	0.8837	P	1.0	-5.3
6	☐	200.000	202.694	1646629.61	1.8804	A	0.6	1.3

y = 0.0092 * x + 0.0095
R = 0.9995
DL = 0.04824 ppb
BEC = 1.025 ppb

Weight: <None>
Min Conc: <None>

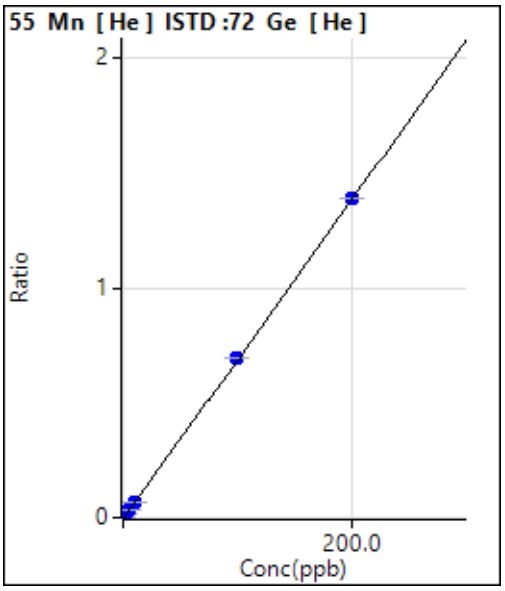


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.39	0.0033	P	8.5	
2	☐	2.000	1.949	6331.58	0.0215	P	3.6	-2.5
3	☐	5.000	4.854	14307.70	0.0485	P	4.1	-2.9
4	☐	10.000	9.562	27431.03	0.0922	P	3.7	-4.4
5	☐	100.000	100.390	273272.72	0.9367	P	0.7	0.4
6	☐	200.000	199.831	530453.74	1.8612	P	0.8	-0.1

y = 0.0093 * x + 0.0033
R = 1.0000
DL = 0.092 ppb
BEC = 0.3598 ppb

Weight: <None>
Min Conc: <None>

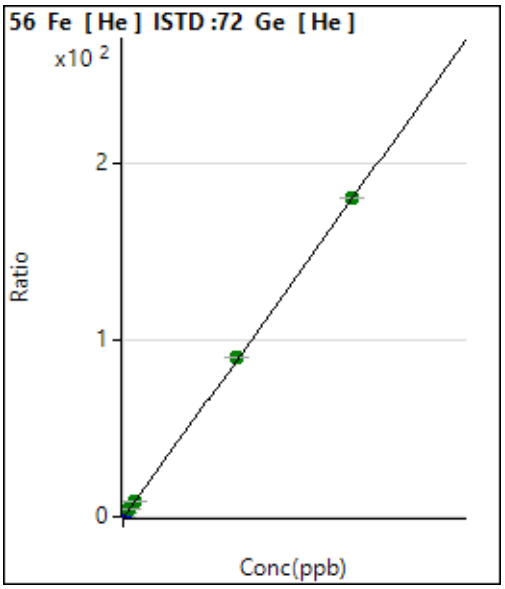
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0007	P	17.0	
2	☐	2.000	1.935	4180.71	0.0142	P	6.3	-3.3
3	☐	5.000	4.711	9880.40	0.0335	P	4.4	-5.8
4	☐	10.000	9.483	19817.99	0.0666	P	2.8	-5.2
5	☐	100.000	99.872	202736.91	0.6949	P	0.6	-0.1
6	☐	200.000	200.098	396621.28	1.3916	P	0.3	0.0

y = 0.0070 * x + 7.2528E-004
R = 1.0000
DL = 0.05311 ppb
BEC = 0.1043 ppb

Weight: <None>
Min Conc: <None>

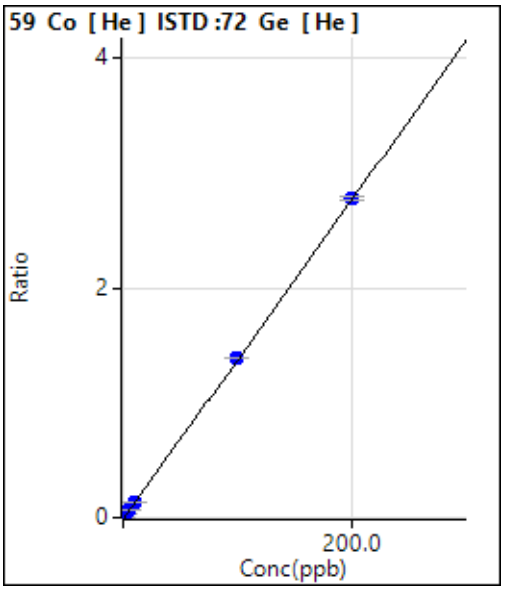


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7572.23	0.0266	P	3.2	
2	☐	200.000	185.551	502271.21	1.7029	P	1.2	-7.2
3	☐	500.000	497.258	1333887.04	4.5190	A	2.8	-0.5
4	☐	1000.000	1004.027	2705286.94	9.0973	A	2.6	0.4
5	☐	10000.00	10020.34	26418121.2	90.5541	A	0.2	0.2
6	☐	20000.00	19989.84	51478757.5	180.622	A	0.3	-0.1

y = 0.0090 * x + 0.0266
R = 1.0000
DL = 0.2834 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

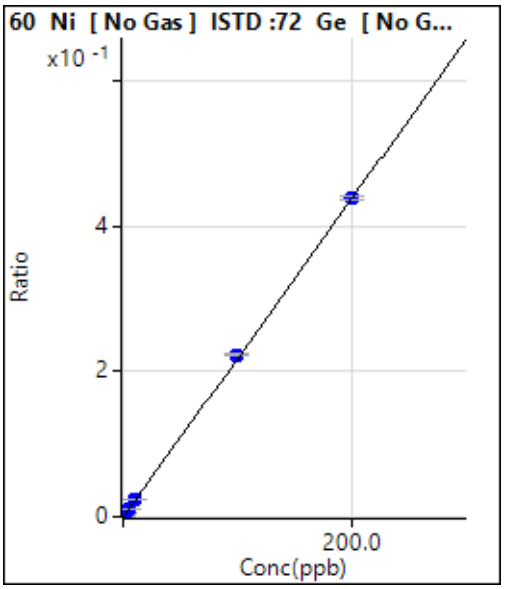
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.5	
2	☐	2.000	1.905	7822.37	0.0265	P	2.8	-4.8
3	☐	5.000	4.793	19674.44	0.0667	P	1.8	-4.1
4	☐	10.000	9.529	39387.22	0.1324	P	1.1	-4.7
5	☐	100.000	99.749	404311.58	1.3859	P	0.3	-0.3
6	☐	200.000	200.155	792549.88	2.7808	P	0.6	0.1

y = 0.0139 * x + 5.8556E-005
R = 1.0000
DL = 0.008792 ppb
BEC = 0.004215 ppb

Weight: <None>
Min Conc: <None>

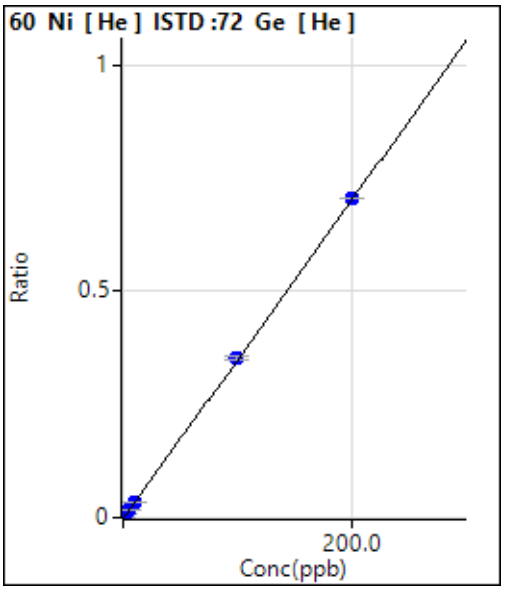


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1130.07	0.0013	P	10.5	
2	☐	2.000	1.832	4757.58	0.0053	P	1.4	-8.4
3	☐	5.000	4.747	10704.41	0.0117	P	1.7	-5.1
4	☐	10.000	10.125	21480.57	0.0235	P	1.4	1.2
5	☐	100.000	100.793	199037.86	0.2226	P	1.3	0.8
6	☐	200.000	199.605	384835.58	0.4395	P	1.4	-0.2

y = 0.0022 * x + 0.0013
R = 1.0000
DL = 0.1836 ppb
BEC = 0.5849 ppb

Weight: <None>
Min Conc: <None>

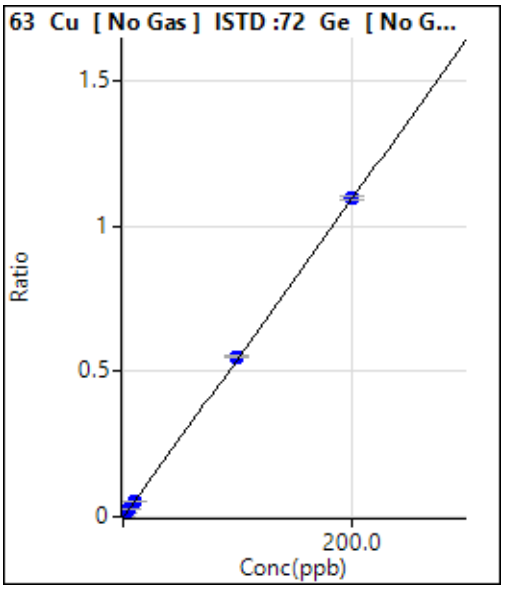
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0006	P	25.7	
2	☐	2.000	1.915	2173.55	0.0074	P	8.2	-4.2
3	☐	5.000	4.890	5264.45	0.0178	P	4.2	-2.2
4	☐	10.000	9.867	10510.87	0.0353	P	1.9	-1.3
5	☐	100.000	99.522	102336.12	0.3507	P	2.3	-0.5
6	☐	200.000	200.249	200962.18	0.7051	P	0.2	0.1

y = 0.0035 * x + 6.3203E-004
R = 1.0000
DL = 0.1386 ppb
BEC = 0.1797 ppb

Weight: <None>
Min Conc: <None>

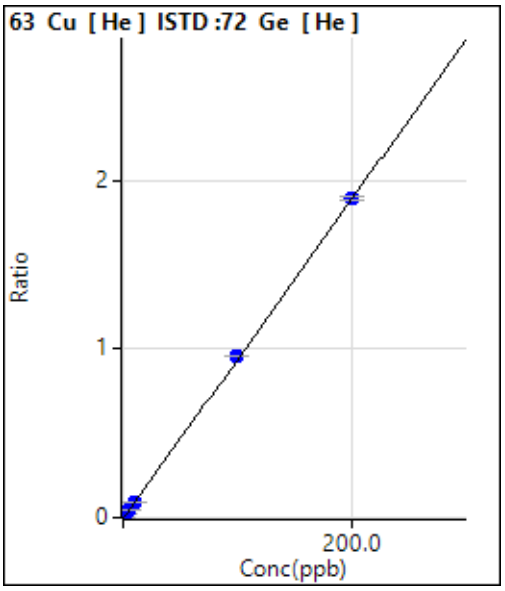


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2093.54	0.0024	P	6.6	
2	☐	2.000	1.971	11828.66	0.0132	P	1.8	-1.4
3	☐	5.000	4.869	26592.94	0.0291	P	3.2	-2.6
4	☐	10.000	9.764	51096.06	0.0559	P	0.7	-2.4
5	☐	100.000	100.224	493755.01	0.5520	P	0.3	0.2
6	☐	200.000	199.903	962106.18	1.0987	P	1.3	0.0

y = 0.0055 * x + 0.0024
R = 1.0000
DL = 0.0858 ppb
BEC = 0.4337 ppb

Weight: <None>
Min Conc: <None>

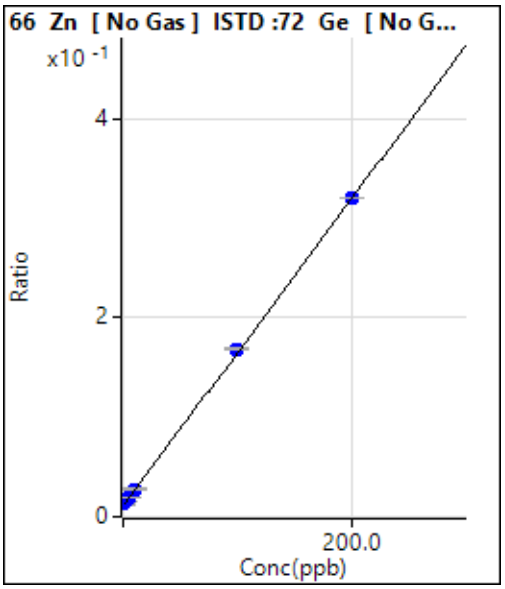
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0028	P	4.5	
2	☐	2.000	2.028	6498.33	0.0220	P	3.8	1.4
3	☐	5.000	4.949	14674.83	0.0497	P	4.8	-1.0
4	☐	10.000	9.513	27645.12	0.0930	P	1.6	-4.9
5	☐	100.000	100.709	279268.86	0.9572	P	0.7	0.7
6	☐	200.000	199.671	540113.27	1.8951	P	0.8	-0.2

y = 0.0095 * x + 0.0028
R = 1.0000
DL = 0.0398 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

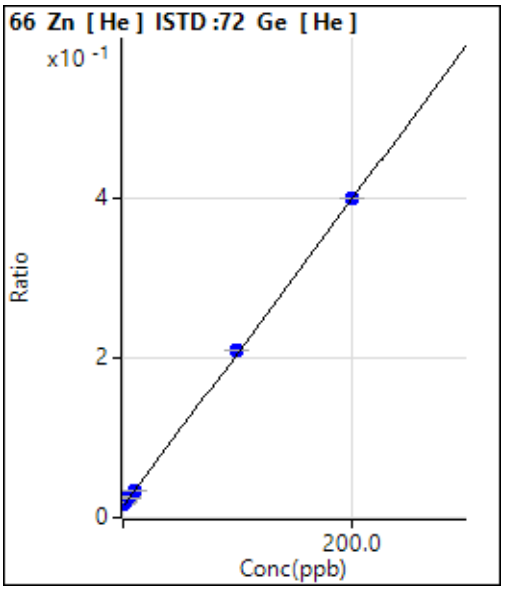


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11048.02	0.0126	P	2.7	
2	☐	2.000	2.150	14227.66	0.0159	P	2.3	7.5
3	☐	5.000	4.606	17975.47	0.0197	P	1.1	-7.9
4	☐	10.000	9.941	25474.27	0.0279	P	0.7	-0.6
5	☐	100.000	101.092	150652.98	0.1684	P	1.5	1.1
6	☐	200.000	199.465	280339.10	0.3202	P	0.5	-0.3

y = 0.0015 * x + 0.0126
R = 1.0000
DL = 0.6626 ppb
BEC = 8.139 ppb

Weight: <None>
Min Conc: <None>

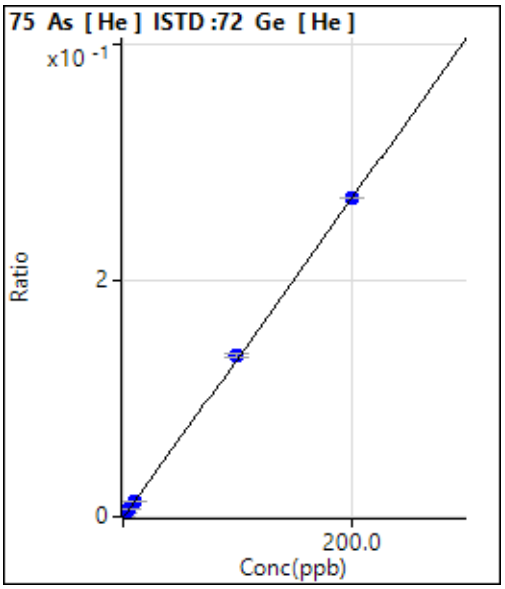
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4614.18	0.0162	P	3.3	
2	☐	2.000	2.179	6008.07	0.0204	P	3.6	9.0
3	☐	5.000	4.740	7462.18	0.0253	P	1.7	-5.2
4	☐	10.000	9.278	10103.97	0.0340	P	4.1	-7.2
5	☐	100.000	100.648	61007.10	0.2091	P	1.1	0.6
6	☐	200.000	199.717	113720.52	0.3990	P	0.5	-0.1

y = 0.0019 * x + 0.0162
R = 1.0000
DL = 0.8439 ppb
BEC = 8.448 ppb

Weight: <None>
Min Conc: <None>

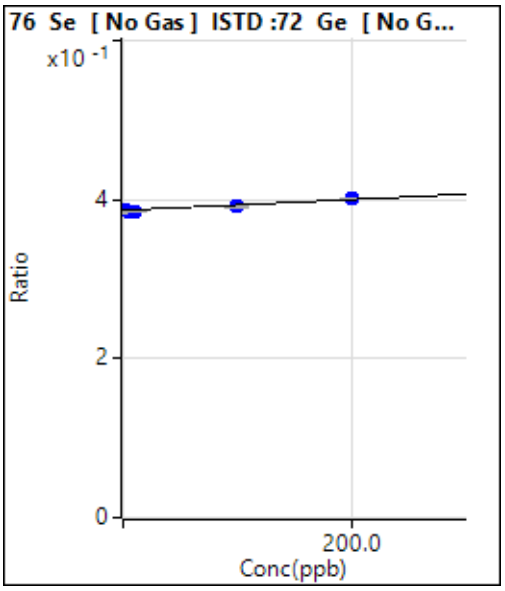


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.11	0.0003	P	13.5	
2	☐	2.000	1.809	806.70	0.0027	P	1.3	-9.6
3	☐	5.000	4.709	1966.82	0.0067	P	3.2	-5.8
4	☐	10.000	9.769	4019.52	0.0135	P	3.5	-2.3
5	☐	100.000	101.197	40073.77	0.1374	P	2.0	1.2
6	☐	200.000	199.422	77064.01	0.2704	P	0.5	-0.3

y = 0.0014 * x + 2.8473E-004
R = 1.0000
DL = 0.08512 ppb
BEC = 0.2102 ppb

Weight: <None>
Min Conc: <None>

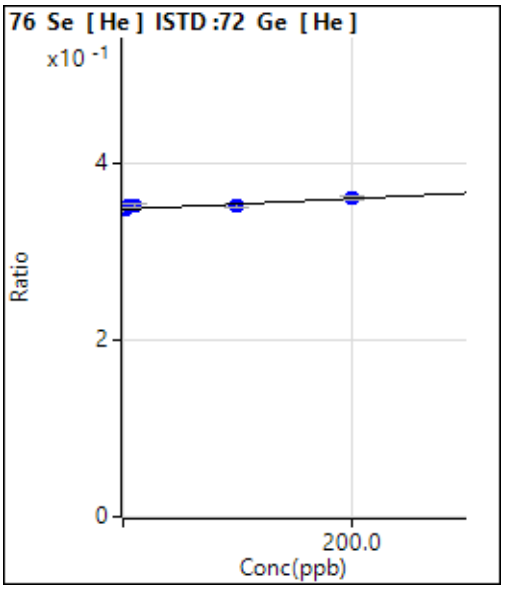
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340135.53	0.3864	P	0.2	
2	☐	2.000	1.615	346593.28	0.3865	P	0.5	-19.3
3	☐	5.000	-39.591	350968.52	0.3837	P	0.3	-891.8
4	☐	10.000	-22.074	351671.41	0.3849	P	0.4	-320.7
5	☐	100.000	63.515	349470.53	0.3907	P	0.6	-36.5
6	☐	200.000	220.965	351535.49	0.4014	P	0.5	10.5

y = 6.8039E-005 * x + 0.3864
R = 0.9712
DL = 37.32 ppb
BEC = 5679 ppb

Weight: <None>
Min Conc: <None>

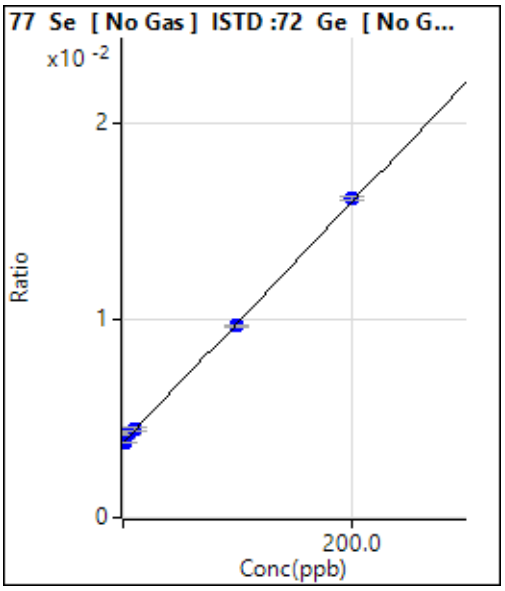


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99327.45	0.3486	P	1.2	
2	☐	2.000	-5.827	102715.53	0.3482	P	1.0	-391.3
3	☐	5.000	74.808	104271.14	0.3533	P	0.8	1396.2
4	☐	10.000	72.449	105006.20	0.3531	P	1.6	624.5
5	☐	100.000	70.638	102978.72	0.3530	P	1.2	-29.4
6	☐	200.000	209.892	103068.85	0.3616	P	1.2	4.9

y = 6.2131E-005 * x + 0.3486
R = 0.8760
DL = 203.6 ppb
BEC = 5611 ppb

Weight: <None>
Min Conc: <None>

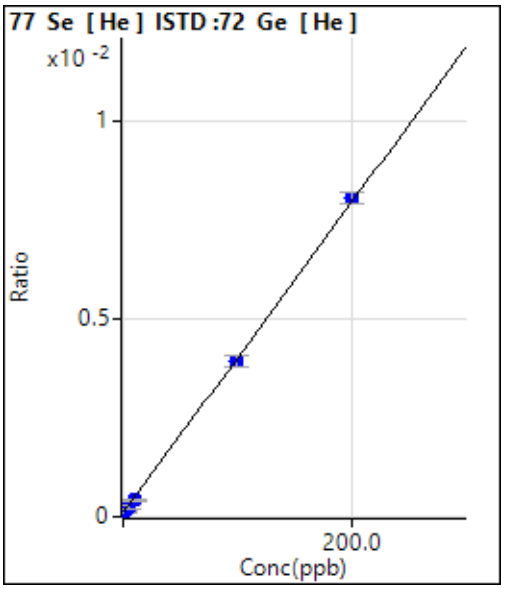
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3427.16	0.0039	P	2.8	
2	☐	2.000	-1.542	3407.17	0.0038	P	0.4	-177.1
3	☐	5.000	6.114	3900.64	0.0043	P	1.6	22.3
4	☐	10.000	9.802	4100.70	0.0045	P	3.5	-2.0
5	☐	100.000	95.699	8682.93	0.0097	P	1.6	-4.3
6	☐	200.000	202.168	14164.29	0.0162	P	1.2	1.1

y = 6.0750E-005 * x + 0.0039
R = 0.9995
DL = 5.321 ppb
BEC = 64.09 ppb

Weight: <None>
Min Conc: <None>

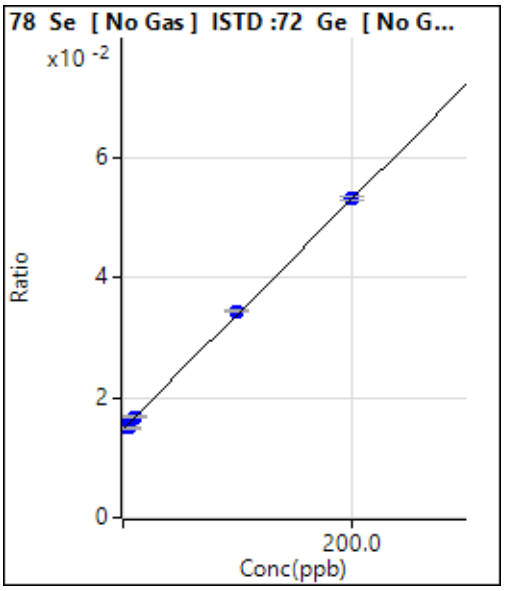


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	43.2	
2	☐	2.000	-0.121	40.00	0.0001	P	24.8	-106.0
3	☐	5.000	2.175	66.67	0.0002	P	37.7	-56.5
4	☐	10.000	7.270	126.67	0.0004	P	12.5	-27.3
5	☐	100.000	97.034	1153.40	0.0040	P	7.6	-3.0
6	☐	200.000	201.712	2300.24	0.0081	P	3.7	0.9

y = 3.9311E-005 * x + 1.4032E-004
R = 0.9998
DL = 4.626 ppb
BEC = 3.569 ppb

Weight: <None>
Min Conc: <None>

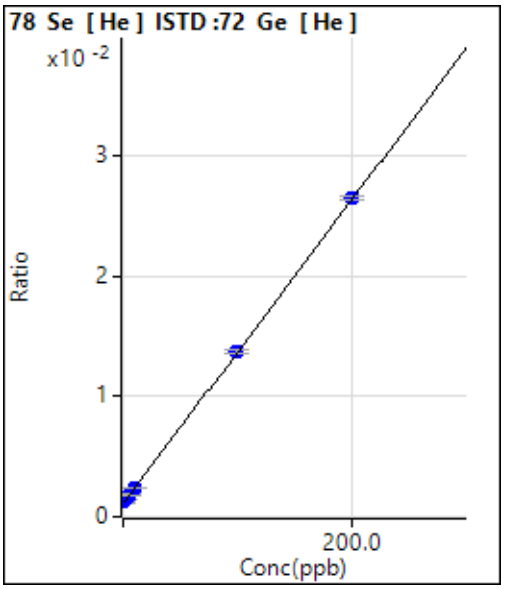
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13283.44	0.0151	P	2.3	
2	☐	2.000	2.487	13957.43	0.0156	P	2.0	24.4
3	☐	5.000	-0.649	13687.13	0.0150	P	3.1	-113.0
4	☐	10.000	8.805	15322.31	0.0168	P	3.0	-11.9
5	☐	100.000	101.061	30732.06	0.0344	P	0.7	1.1
6	☐	200.000	199.665	46550.52	0.0532	P	1.3	-0.2

y = 1.9066E-004 * x + 0.0151
R = 0.9996
DL = 5.56 ppb
BEC = 79.15 ppb

Weight: <None>
Min Conc: <None>

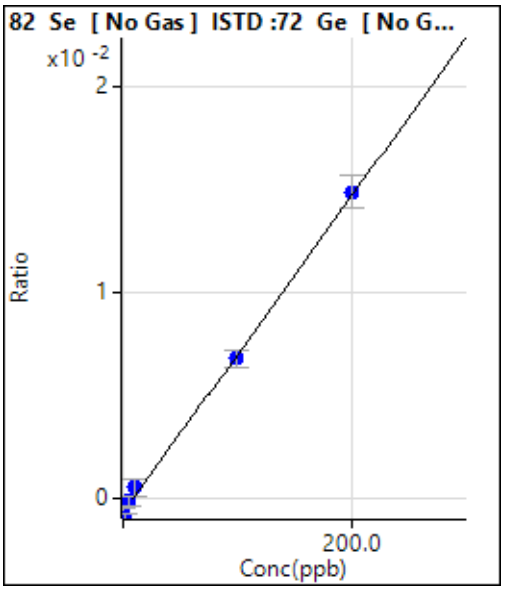


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	352.67	0.0012	P	9.8	
2	☐	2.000	1.441	418.68	0.0014	P	5.3	-27.9
3	☐	5.000	4.382	528.68	0.0018	P	8.7	-12.4
4	☐	10.000	9.045	708.02	0.0024	P	2.5	-9.5
5	☐	100.000	99.468	4028.61	0.0138	P	2.5	-0.5
6	☐	200.000	200.335	7568.81	0.0266	P	1.2	0.2

y = 1.2639E-004 * x + 0.0012
R = 1.0000
DL = 2.878 ppb
BEC = 9.791 ppb

Weight: <None>
Min Conc: <None>

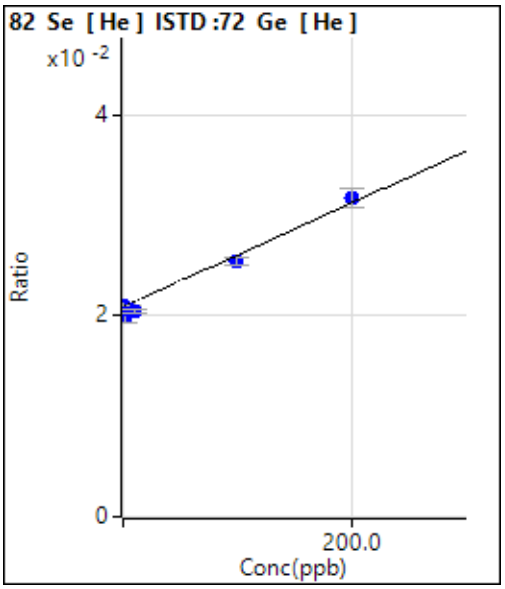
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-569.55	-0.0006	P	-53.0	
2	☐	2.000	-4.186	-869.28	-0.0010	P	-41.1	-309.3
3	☐	5.000	6.179	-158.52	-0.0002	P	-267.	23.6
4	☐	10.000	14.660	439.73	0.0005	P	172.7	46.6
5	☐	100.000	96.139	6030.53	0.0067	P	11.9	-3.9
6	☐	200.000	201.730	13022.02	0.0149	P	10.7	0.9

y = 7.6906E-005 * x - 6.4740E-004
R = 0.9988
DL = 13.39 ppb
BEC = -8.418 ppb

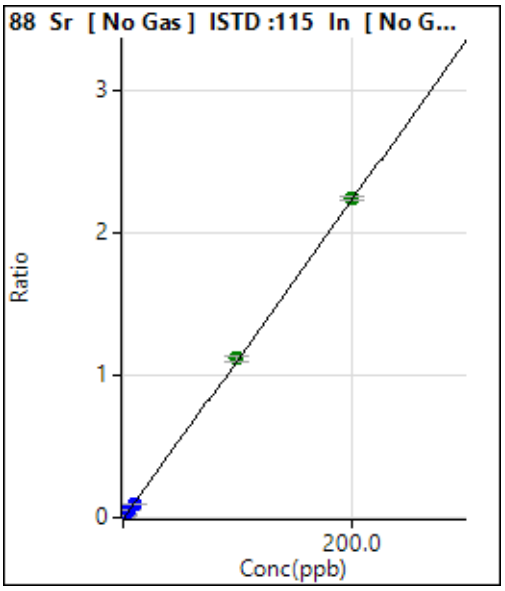
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5978.09	0.0210	P	2.4	
2	☐	2.000	-21.384	5861.38	0.0199	P	5.6	-1169.2
3	☐	5.000	-6.198	6098.18	0.0207	P	3.9	-224.0
4	☐	10.000	-10.045	6084.81	0.0205	P	2.2	-200.4
5	☐	100.000	86.340	7422.19	0.0254	P	2.6	-13.7
6	☐	200.000	208.346	9049.87	0.0318	P	5.5	4.2

y = 5.1708E-005 * x + 0.0210
R = 0.9947
DL = 29.27 ppb
BEC = 405.7 ppb

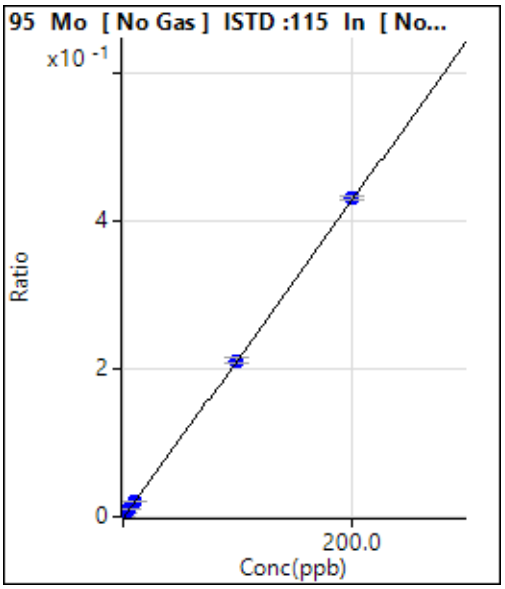
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0005	P	9.2	
2	☐	2.000	1.766	22041.72	0.0203	P	2.2	-11.7
3	☐	5.000	4.509	60037.98	0.0509	P	3.0	-9.8
4	☐	10.000	8.456	112859.20	0.0951	P	1.3	-15.4
5	☐	100.000	99.649	1223557.59	1.1148	A	3.3	-0.4
6	☐	200.000	200.267	2379611.89	2.2400	A	1.7	0.1

y = 0.0112 * x + 5.1424E-004
R = 1.0000
DL = 0.01272 ppb
BEC = 0.04599 ppb

Weight: <None>
Min Conc: <None>

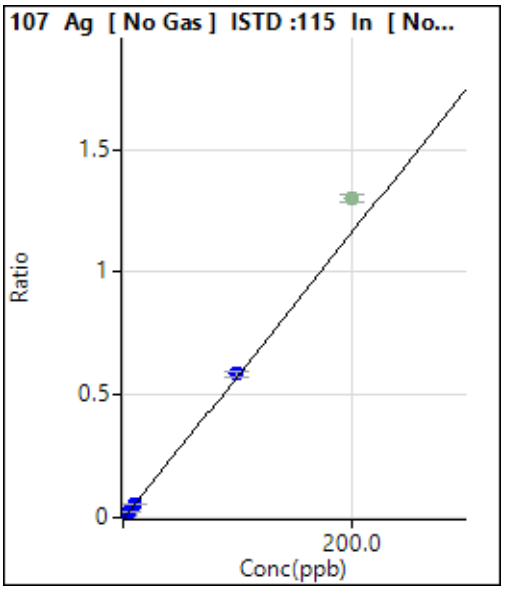


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	86.6	
2	☐	2.000	1.899	4464.16	0.0041	P	1.3	-5.0
3	☐	5.000	4.351	11054.78	0.0094	P	5.6	-13.0
4	☐	10.000	9.095	23247.31	0.0196	P	0.6	-9.0
5	☐	100.000	98.509	232519.11	0.2119	P	4.0	-1.5
6	☐	200.000	200.808	458857.01	0.4319	P	0.7	0.4

y = 0.0022 * x + 1.8921E-005
R = 1.0000
DL = 0.02285 ppb
BEC = 0.008796 ppb

Weight: <None>
Min Conc: <None>

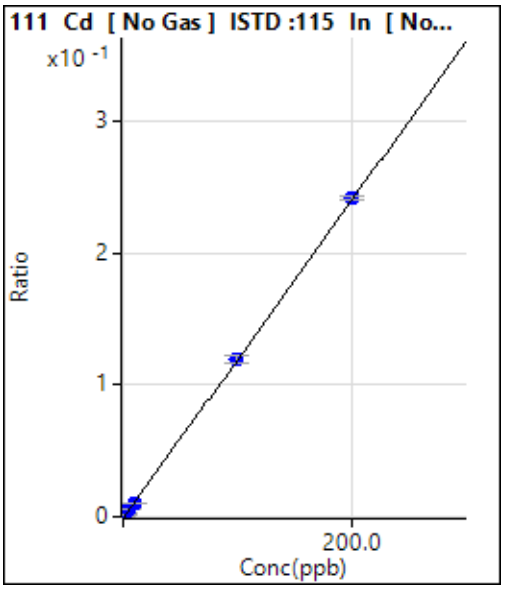
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	650.03	0.0006	P	7.8	
2	☐	2.000	1.941	12976.54	0.0119	P	3.1	-3.0
3	☐	5.000	4.524	31811.93	0.0270	P	2.5	-9.5
4	☐	10.000	9.123	63870.56	0.0538	P	0.7	-8.8
5	☐	100.000	100.113	641179.73	0.5843	P	3.8	0.1
6	☑	200.000		1381627.32	1.3006	A	2.1	

y = 0.0058 * x + 6.1152E-004
R = 1.0000
DL = 0.02442 ppb
BEC = 0.1049 ppb

Weight: <None>
Min Conc: <None>

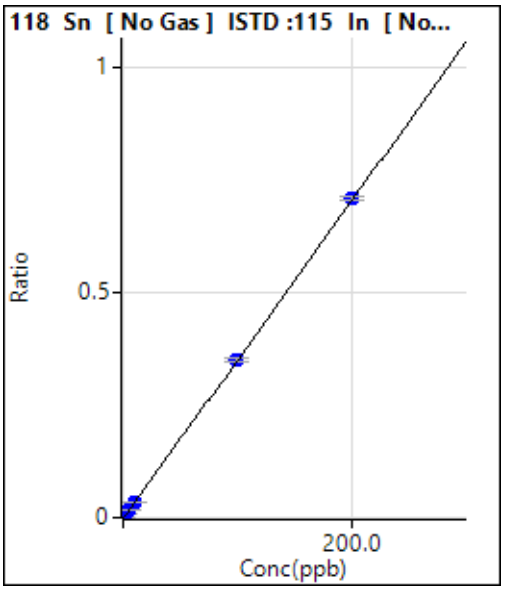


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.822	2396.93	0.0022	P	11.0	-8.9
3	☐	5.000	4.572	6511.73	0.0055	P	3.0	-8.6
4	☐	10.000	8.913	12773.06	0.0108	P	2.1	-10.9
5	☐	100.000	99.005	131086.48	0.1194	P	3.8	-1.0
6	☐	200.000	200.564	257048.49	0.2420	P	1.1	0.3

y = 0.0012 * x + 6.2649E-006
R = 1.0000
DL = 0.01349 ppb
BEC = 0.005193 ppb

Weight: <None>
Min Conc: <None>

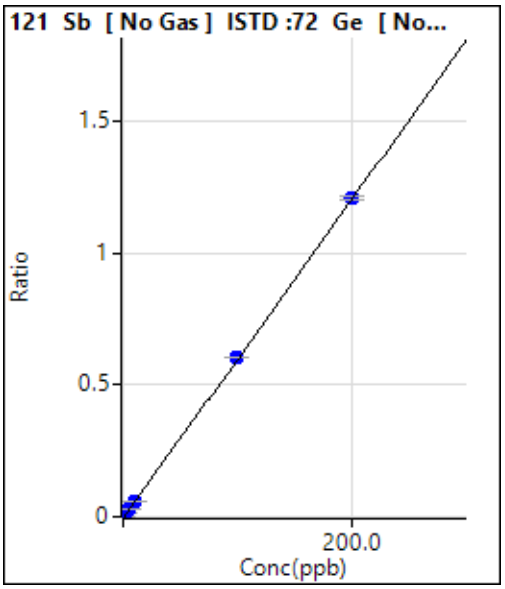
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.08	0.0011	P	8.4	
2	☐	2.000	1.972	8783.07	0.0081	P	1.1	-1.4
3	☐	5.000	4.359	19471.41	0.0165	P	0.6	-12.8
4	☐	10.000	8.959	38917.93	0.0328	P	1.7	-10.4
5	☐	100.000	98.962	385279.17	0.3510	P	3.4	-1.0
6	☐	200.000	200.588	754690.04	0.7104	P	0.7	0.3

y = 0.0035 * x + 0.0011
R = 1.0000
DL = 0.07837 ppb
BEC = 0.3116 ppb

Weight: <None>
Min Conc: <None>

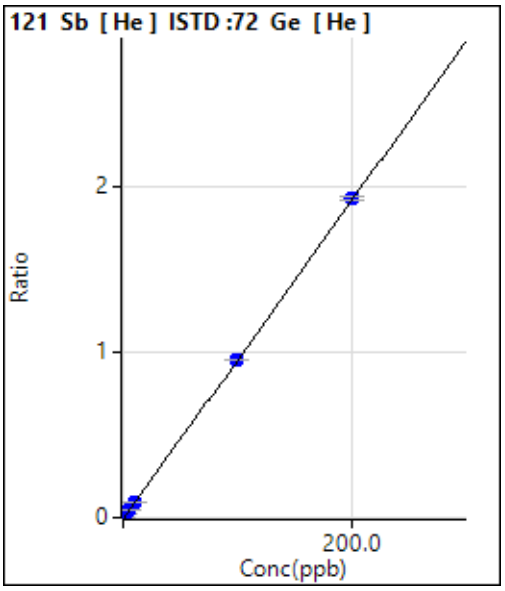


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	363.35	0.0004	P	22.2	
2	☐	2.000	1.926	10791.31	0.0120	P	4.2	-3.7
3	☐	5.000	4.795	26841.05	0.0293	P	2.2	-4.1
4	☐	10.000	9.720	53967.66	0.0591	P	0.6	-2.8
5	☐	100.000	99.844	539271.95	0.6029	P	0.6	-0.2
6	☐	200.000	200.098	1057720.85	1.2079	P	0.7	0.0

y = 0.0060 * x + 4.1282E-004
R = 1.0000
DL = 0.04548 ppb
BEC = 0.06841 ppb

Weight: <None>
Min Conc: <None>

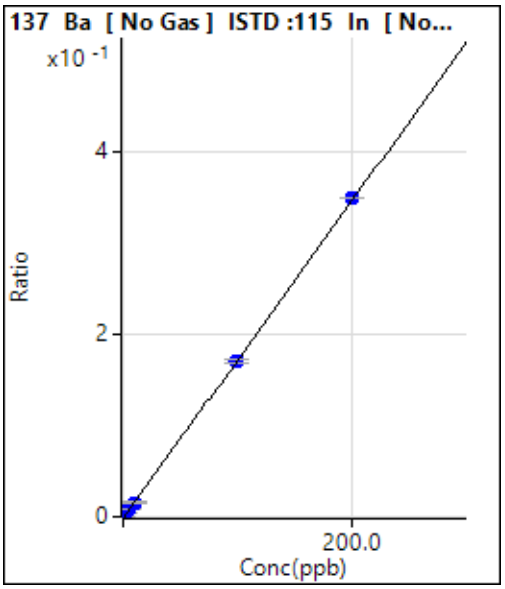
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0009	P	36.9	
2	☐	2.000	1.901	5651.32	0.0192	P	2.5	-4.9
3	☐	5.000	4.747	13717.39	0.0465	P	1.7	-5.1
4	☐	10.000	9.436	27205.20	0.0915	P	0.7	-5.6
5	☐	100.000	99.125	277821.51	0.9523	P	0.6	-0.9
6	☐	200.000	200.473	548641.67	1.9250	P	0.8	0.2

y = 0.0096 * x + 9.1294E-004
R = 1.0000
DL = 0.1052 ppb
BEC = 0.09512 ppb

Weight: <None>
Min Conc: <None>

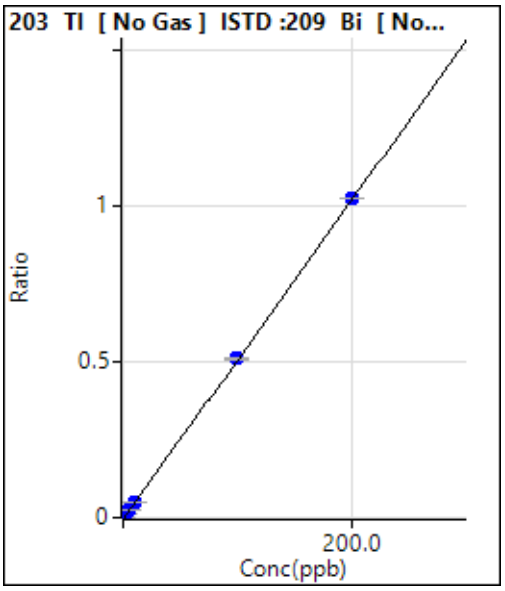


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	54.3	
2	☐	2.000	1.946	3817.31	0.0035	P	3.1	-2.7
3	☐	5.000	4.437	9243.50	0.0078	P	4.3	-11.3
4	☐	10.000	8.950	18636.96	0.0157	P	3.0	-10.5
5	☐	100.000	98.095	187481.52	0.1708	P	3.3	-1.9
6	☐	200.000	201.020	371723.32	0.3499	P	0.4	0.5

y = 0.0017 * x + 1.2276E-004
R = 0.9999
DL = 0.115 ppb
BEC = 0.07055 ppb

Weight: <None>
Min Conc: <None>

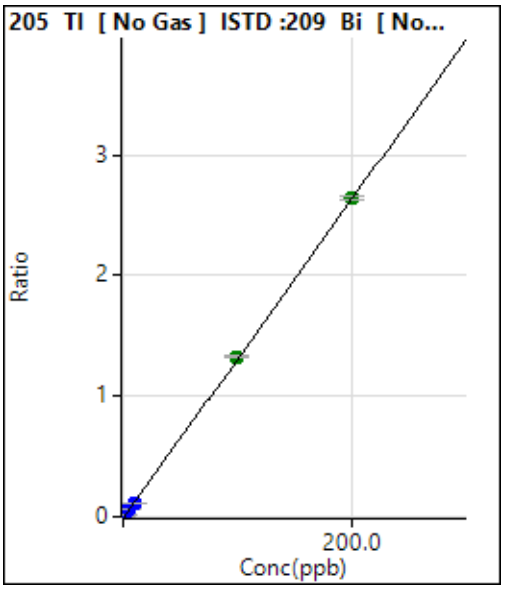
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	45.4	
2	☐	2.000	1.939	10898.26	0.0100	P	3.0	-3.0
3	☐	5.000	4.692	26605.35	0.0241	P	1.7	-6.2
4	☐	10.000	9.670	55027.94	0.0495	P	1.7	-3.3
5	☐	100.000	99.603	553811.97	0.5093	P	0.4	-0.4
6	☐	200.000	200.223	1098394.77	1.0237	P	0.4	0.1

y = 0.0051 * x + 7.8411E-005
R = 1.0000
DL = 0.02088 ppb
BEC = 0.01534 ppb

Weight: <None>
Min Conc: <None>

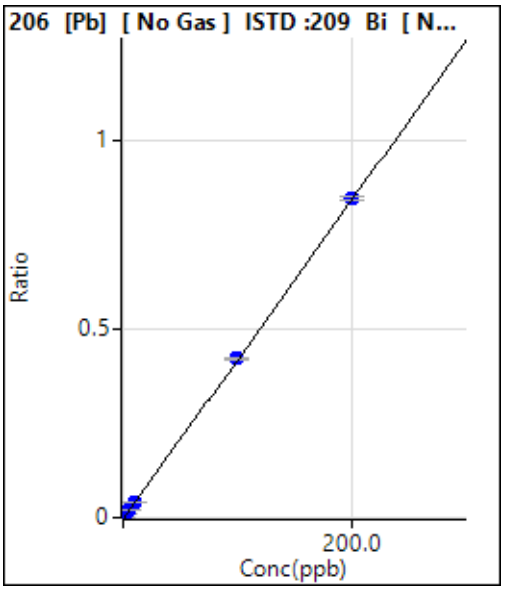


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	13.8	
2	☐	2.000	1.771	25793.72	0.0236	P	1.9	-11.5
3	☐	5.000	4.405	64643.90	0.0585	P	1.8	-11.9
4	☐	10.000	8.896	130928.72	0.1178	P	1.3	-11.0
5	☐	100.000	100.333	1442239.09	1.3262	A	0.7	0.3
6	☐	200.000	199.906	2835298.50	2.6422	A	1.4	0.0

y = 0.0132 * x + 2.4470E-004
R = 1.0000
DL = 0.007651 ppb
BEC = 0.01852 ppb

Weight: <None>
Min Conc: <None>

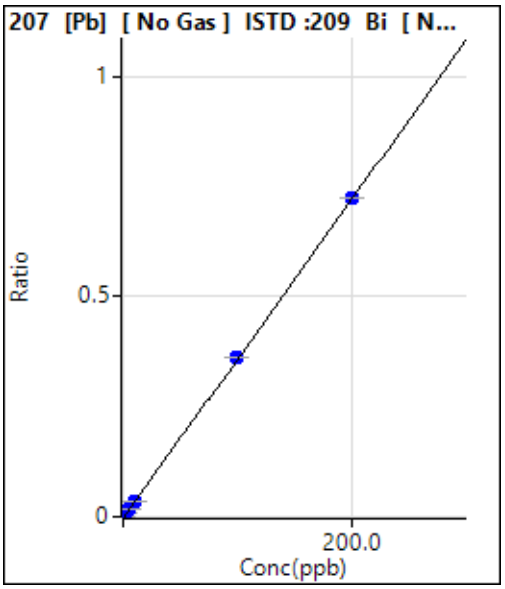
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0004	P	11.9	
2	☐	2.000	1.968	9493.79	0.0087	P	0.9	-1.6
3	☐	5.000	4.820	22981.48	0.0208	P	2.1	-3.6
4	☐	10.000	9.618	45687.35	0.0411	P	2.6	-3.8
5	☐	100.000	99.592	459195.54	0.4223	P	0.4	-0.4
6	☐	200.000	200.228	910503.61	0.8486	P	0.8	0.1

y = 0.0042 * x + 3.6711E-004
R = 1.0000
DL = 0.03081 ppb
BEC = 0.08666 ppb

Weight: <None>
Min Conc: <None>

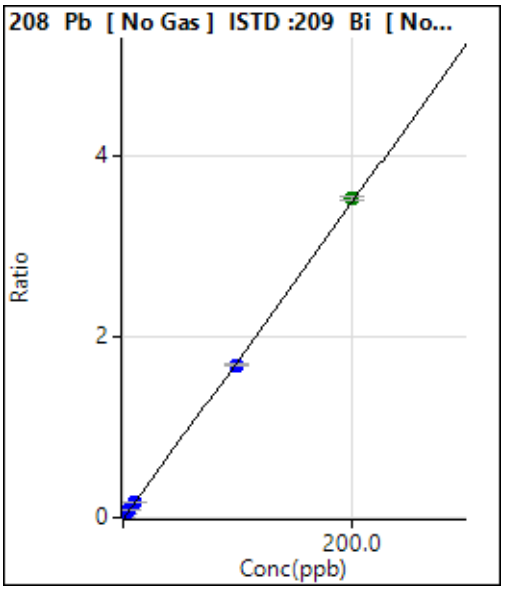


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	310.01	0.0003	P	11.1	
2	☐	2.000	1.955	8039.41	0.0074	P	2.8	-2.2
3	☐	5.000	4.776	19442.19	0.0176	P	3.7	-4.5
4	☐	10.000	9.521	38626.70	0.0348	P	2.9	-4.8
5	☐	100.000	100.149	394588.86	0.3628	P	0.3	0.1
6	☐	200.000	199.955	777014.99	0.7241	P	0.4	0.0

y = 0.0036 * x + 2.9176E-004
R = 1.0000
DL = 0.02677 ppb
BEC = 0.0806 ppb

Weight: <None>
Min Conc: <None>

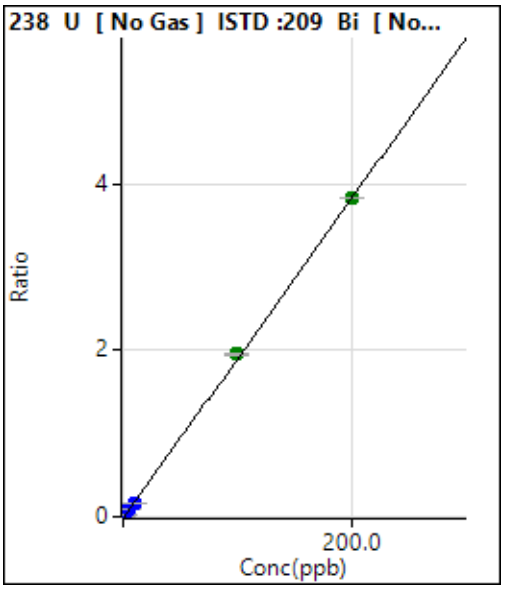
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1806.77	0.0017	P	9.4	
2	☐	2.000	1.840	36975.29	0.0339	P	2.6	-8.0
3	☐	5.000	4.624	91346.61	0.0826	P	1.7	-7.5
4	☐	10.000	9.247	181722.84	0.1635	P	1.4	-7.5
5	☐	100.000	96.337	1835045.95	1.6874	P	0.7	-3.7
6	☐	200.000	201.880	3792152.63	3.5343	A	0.9	0.9

y = 0.0175 * x + 0.0017
R = 0.9998
DL = 0.02748 ppb
BEC = 0.09719 ppb

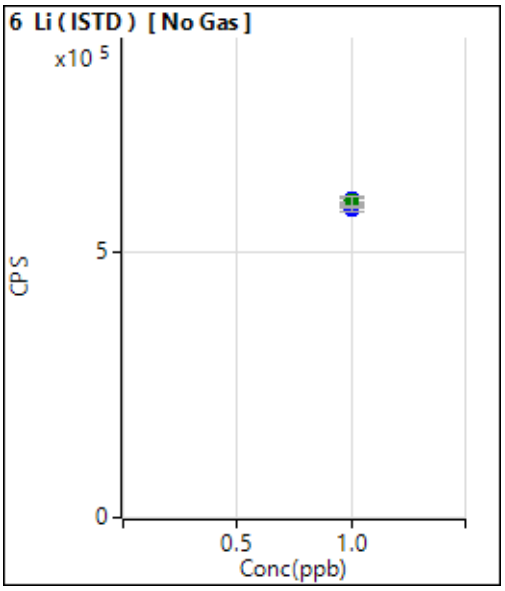
Weight: <None>
Min Conc: <None>



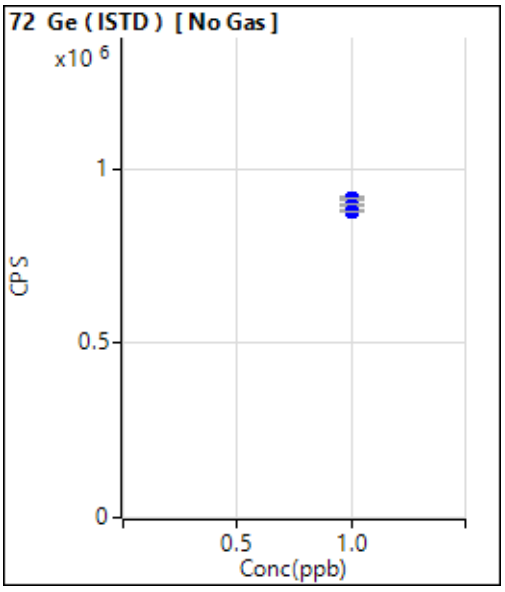
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.3	
2	☐	2.000	1.739	36464.68	0.0334	P	1.6	-13.1
3	☐	5.000	4.461	94795.56	0.0857	P	1.9	-10.8
4	☐	10.000	8.954	191259.99	0.1721	P	1.0	-10.5
5	☐	100.000	101.548	2122369.40	1.9517	A	1.0	1.5
6	☐	200.000	199.294	4109980.57	3.8303	A	0.6	-0.4

y = 0.0192 * x + 1.2550E-005
R = 0.9999
DL = 0.0008486 ppb
BEC = 0.000653 ppb

Weight: <None>
Min Conc: <None>

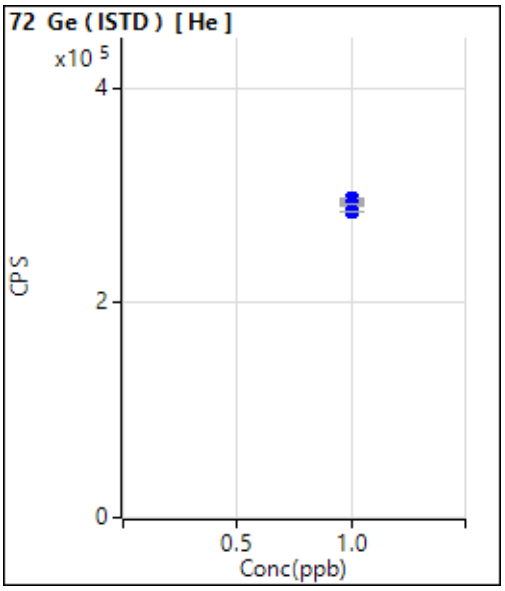


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		579730.97		P	0.8	
2	☐	1.000		591607.00		P	0.4	
3	☐	1.000		600682.49		P	0.2	
4	☐	1.000		601569.39		P	0.1	
5	☐	1.000		578595.56		P	1.4	
6	☐	1.000		597498.66		A	3.1	

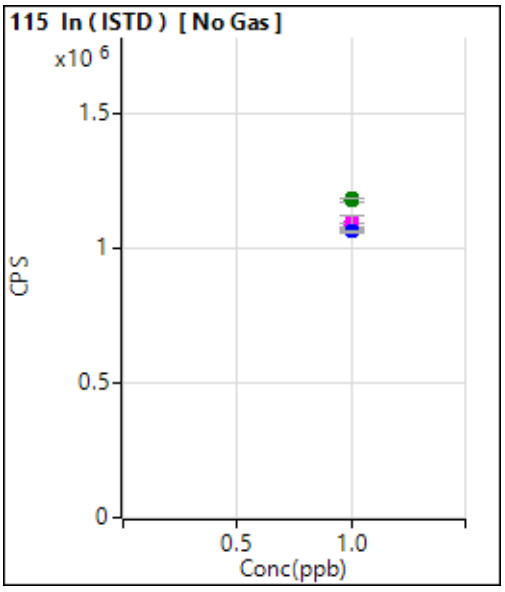


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		880231.97		P	0.3	
2	☐	1.000		896698.53		P	0.3	
3	☐	1.000		914660.95		P	1.0	
4	☐	1.000		913650.06		P	0.6	
5	☐	1.000		894402.64		P	1.0	
6	☐	1.000		875652.64		P	0.5	

Calibration for 020_ICV.d

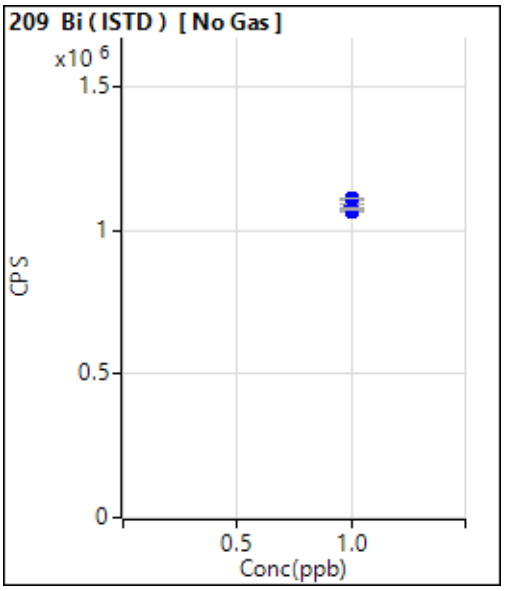


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		284935.68		P	0.4	
2	☐	1.000		294953.58		P	0.2	
3	☐	1.000		295174.68		P	0.2	
4	☐	1.000		297392.47		P	0.5	
5	☐	1.000		291738.45		P	0.6	
6	☐	1.000		285009.21		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062541.78		P	0.9	
2	☐	1.000		1087771.37		M	1.2	
3	☐	1.000		1178962.77		A	1.2	
4	☐	1.000		1187157.58		A	0.5	
5	☐	1.000		1098599.80		M	4.4	
6	☐	1.000		1062301.36		P	0.6	

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062489.72		P	0.1	
2	☐	1.000		1090754.44		P	0.4	
3	☐	1.000		1105631.68		P	0.5	
4	☐	1.000		1111356.65		P	0.1	
5	☐	1.000		1087495.79		P	1.3	
6	☐	1.000		1073017.12		P	0.8	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	021LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:55:25-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.584	1.584	4.21	47819	0.00	2	
Be	9	1	No Gas	1.931	1.931	2.05	3149	0.06	2	
V	51	2	He	1.796	1.796	4.18	5021	0.04	2	
Cr	52	2	He	1.867	1.867	3.68	5821	0.03	2	
Fe	56	2	He	188.980	188.980	1.00	487544	0.04	200	
Se	78	2	He	1.390	1.390	30.06	397	0.35	2	NewName Main CR1 Failed
As	75	2	He	1.896	1.896	2.52	802	0.24	2	
Ca	44	2	He	173.569	173.569	7.69	3327	5.22	200	
Na	23	2	He	149.861	149.861	3.14	236268	0.06	200	
Mg	24	2	He	190.281	190.281	1.80	52499	0.36	200	
K	39	2	He	170.919	170.919	2.03	129113	0.13	200	
Mn	55	2	He	1.990	1.990	3.78	4091	0.05	2	
Co	59	2	He	1.934	1.934	3.88	7576	0.03	2	
Ni	60	2	He	1.861	1.861	6.42	2020	0.09	2	
Cu	63	2	He	2.020	2.020	1.63	6171	0.03	2	
Zn	66	2	He	2.130	2.130	13.40	5701	0.04	2	
Al	27	2	He	1.696	1.696	25.46	677	0.25	2	
B	11	1	No Gas	42.362	42.362	6.91	50504	0.08	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.724	1.724	9.73	26469	0.01	2	
Si	28	1	No Gas	12.943	12.943	7.02	215220	0.01	10	
Ag	107	1	No Gas	1.901	1.901	4.85	12720	0.01	2	
Cd	111	1	No Gas	1.900	1.900	2.08	2504	0.08	2	
Sr	88	1	No Gas	1.758	1.758	3.09	21952	0.01	2	
Mo	95	1	No Gas	1.877	1.877	8.41	4404	0.04	2	
Sn	118	1	No Gas	1.995	1.995	9.83	8863	0.02	2	
Sb	121	1	No Gas	2.025	2.025	1.98	11018	0.02	2	
Ba	137	1	No Gas	1.821	1.821	9.65	3574	0.05	2	
Tl	205	1	No Gas	1.786	1.786	2.67	25690	0.01	2	
Tl	203	1	No Gas	1.990	1.990	2.92	11048	0.02	2	
Pb	208	1	No Gas	1.845	1.845	1.56	36628	0.01	2	
U	238	1	No Gas	1.813	1.813	1.00	37565	0.00	2	
Ca	43	2	He	199.445	199.445	4.76	207	96.50	200	
Sb	121	2	He	2.016	2.016	3.93	5698	0.04	2	
Ti	47	2	He	1.645	1.645	20.87	153	1.07	200	
Cu	63	1	No Gas	1.862	1.862	7.16	10978	0.02	2	
Se	82	1	No Gas	2.447	2.447	410.53	-399	-0.61	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585645	2.09	579731	101.02	70	120	
Ge	72	2	He	281146	2.20	284936	98.67	70	120	
Ge	72	1	No Gas	872384	1.87	880232	99.11	70	120	
In	115	1	No Gas	1088834	4.75	1062542	102.47	70	120	
Bi	209	1	No Gas	1077526	1.99	1062490	101.42	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	022LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:57:25-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.425	4.425	1.35	70016	0.01	5	
Be	9	1	No Gas	5.027	5.027	2.43	8187	0.06	5	
V	51	2	He	4.685	4.685	3.91	11712	0.04	5	
Cr	52	2	He	4.836	4.836	2.25	13710	0.04	5	
Fe	56	2	He	506.914	506.914	1.82	1308327	0.04	500	
Se	78	2	He	3.487	3.487	21.58	476	0.73	5	NewName2 Main CR1 Failed
As	75	2	He	4.694	4.694	4.08	1887	0.25	5	
Ca	44	2	He	499.261	499.261	2.81	8293	6.02	500	
Na	23	2	He	422.091	422.091	2.46	374686	0.11	500	
Mg	24	2	He	469.183	469.183	0.46	130447	0.36	500	
K	39	2	He	458.184	458.184	0.30	220486	0.21	500	
Mn	55	2	He	4.696	4.696	3.55	9477	0.05	5	
Co	59	2	He	4.828	4.828	2.64	19070	0.03	5	
Ni	60	2	He	4.658	4.658	8.91	4834	0.10	5	
Cu	63	2	He	4.821	4.821	1.03	13774	0.04	5	
Zn	66	2	He	4.847	4.847	3.80	7235	0.07	5	
Al	27	2	He	5.601	5.601	16.77	1263	0.44	5	
B	11	1	No Gas	33.368	33.368	0.81	43841	0.08	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	5.317	5.317	2.64	49485	0.01	5	
Si	28	1	No Gas	27.566	27.566	3.02	258524	0.01	25	
Ag	107	1	No Gas	4.653	4.653	3.79	30893	0.02	5	
Cd	111	1	No Gas	4.541	4.541	6.58	6112	0.07	5	
Sr	88	1	No Gas	4.669	4.669	3.04	58729	0.01	5	
Mo	95	1	No Gas	4.820	4.820	8.01	11552	0.04	5	
Sn	118	1	No Gas	4.662	4.662	0.38	19608	0.02	5	
Sb	121	1	No Gas	4.846	4.846	1.98	26257	0.02	5	
Ba	137	1	No Gas	4.706	4.706	5.08	9253	0.05	5	
Tl	205	1	No Gas	4.513	4.513	1.95	65170	0.01	5	
Tl	203	1	No Gas	4.802	4.802	0.80	26799	0.02	5	
Pb	208	1	No Gas	4.543	4.543	1.82	88338	0.01	5	
U	238	1	No Gas	4.470	4.470	1.18	93495	0.00	5	
Ca	43	2	He	379.812	379.812	13.73	370	102.65	500	
Sb	121	2	He	4.967	4.967	3.03	13804	0.04	5	
Ti	47	2	He	5.140	5.140	10.12	463	1.11	5	
Cu	63	1	No Gas	4.836	4.836	2.28	25584	0.02	5	
Se	82	1	No Gas	9.259	9.259	97.39	51	18.07	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	591378	1.88	579731	102.01	70	120	
Ge	72	2	He	283942	2.74	284936	99.65	70	120	
Ge	72	1	No Gas	885182	2.13	880232	100.56	70	120	
In	115	1	No Gas	1114909	4.38	1062542	104.93	70	120	
Bi	209	1	No Gas	1088136	1.78	1062490	102.41	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	023_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:59:24-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.112	-26.0	34554	2.7	0.5	
Be	9	1	No Gas	0.004	754.6	63	77.9	0.5	
V	51	2	He	-0.033	-95.6	839	7.8	2.5	
Cr	52	2	He	0.012	153.7	943	5.4	2.5	
Fe	56	2	He	1.065	1.5	9877	3.0	100	
Se	78	2	He	-0.864	-92.6	307	6.2	1	
As	75	2	He	-0.003	-2511.9	77	30.1	2.5	
Ca	44	2	He	-18.078	-20.8	437	15.2	100	
Na	23	2	He	-15.319	-70.0	149868	0.7	100	
Mg	24	2	He	0.517	26.1	323	12.9	100	
K	39	2	He	-6.626	-93.6	71759	0.9	100	
Mn	55	2	He	0.033	20.7	260	7.7	2.5	
Co	59	2	He	0.009	27.5	50	20.0	2.5	
Ni	60	2	He	-0.024	-197.1	150	33.3	2.5	
Cu	63	2	He	-0.013	-609.8	733	28.9	1	
Zn	66	2	He	-0.602	-0.8	4104	2.8	2.5	
Al	27	2	He	-0.941	-51.8	280	22.3	5	
B	11	1	No Gas	6.983	6.7	22380	2.9	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.599	-1.9	11875	3.2	5	
Si	28	1	No Gas	2.403	85.1	183819	0.5	10	
Ag	107	1	No Gas	-0.014	-174.8	563	31.8	2.5	
Cd	111	1	No Gas	0.010	125.9	20	86.6	1	
Sr	88	1	No Gas	-0.003	-283.9	513	23.1	2.5	
Mo	95	1	No Gas	0.017	37.9	60	28.9	2.5	
Sn	118	1	No Gas	0.092	37.0	1517	9.3	5	
Sb	121	1	No Gas	0.045	17.7	590	9.0	2.5	
Ba	137	1	No Gas	-0.011	-143.9	110	31.5	2.5	
Tl	205	1	No Gas	0.000	1960.6	267	43.5	1	
Tl	203	1	No Gas	0.010	117.4	140	49.5	1	
Pb	208	1	No Gas	-0.029	-40.8	1273	19.0	2.5	
U	238	1	No Gas	0.009	167.0	203	156.3	2.5	
Ca	43	2	He	-6.257	-426.3	23	99.0	100	
Sb	121	2	He	-0.009	-323.8	227	36.7	2.5	
Ti	47	2	He	-0.074	-92.0	3	173.2	2.5	
Se	82	1	No Gas	-4.099	-207.3	-825	-67.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	578437	2.13	579731	99.78	70	120	
Ge	72	2	He	272864	2.79	284936	95.76	70	120	
Ge	72	1	No Gas	859213	2.65	880232	97.61	70	120	
In	115	1	No Gas	1062394	3.65	1062542	99.99	70	120	
Bi	209	1	No Gas	1060780	2.57	1062490	99.84	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	024LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:05:40-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.299	4.299	1.60	71261	0.01	5	
Be	9	1	No Gas	4.882	4.882	3.36	8211	0.06	5	
V	51	2	He	4.659	4.659	3.55	11875	0.04	5	
Cr	52	2	He	4.640	4.640	1.27	13464	0.03	5	
Fe	56	2	He	495.413	495.413	2.70	1303805	0.04	500	
Se	78	2	He	3.934	3.934	18.46	503	0.78	5	
As	75	2	He	4.762	4.762	9.34	1951	0.24	5	
Ca	44	2	He	468.493	468.493	6.08	7982	5.87	500	
Na	23	2	He	372.426	372.426	2.18	356950	0.10	500	
Mg	24	2	He	464.750	464.750	2.00	131780	0.35	500	
K	39	2	He	451.014	451.014	2.63	222600	0.20	500	
Mn	55	2	He	4.556	4.556	4.41	9380	0.05	5	
Co	59	2	He	4.632	4.632	4.83	18650	0.02	5	
Ni	60	2	He	4.733	4.733	4.94	5004	0.09	5	
Cu	63	2	He	4.601	4.601	1.95	13440	0.03	5	
Zn	66	2	He	4.556	4.556	7.55	7219	0.06	5	
Al	27	2	He	5.576	5.576	9.63	1283	0.43	5	
B	11	1	No Gas	21.440	21.440	3.35	35454	0.06	25	
Al	27	1	No Gas	5.320	5.320	1.81	50671	0.01	5	
Si	28	1	No Gas	24.445	24.445	8.46	255753	0.01	25	
Ag	107	1	No Gas	4.492	4.492	2.01	30690	0.01	5	
Cd	111	1	No Gas	4.528	4.528	5.89	6272	0.07	5	
Sr	88	1	No Gas	4.558	4.558	1.45	58951	0.01	5	
Mo	95	1	No Gas	4.519	4.519	1.17	11155	0.04	5	
Sn	118	1	No Gas	4.511	4.511	4.16	19508	0.02	5	
Sb	121	1	No Gas	4.741	4.741	1.53	26287	0.02	5	
Ba	137	1	No Gas	4.421	4.421	5.92	8933	0.05	5	
Tl	205	1	No Gas	4.327	4.327	1.83	64345	0.01	5	
Tl	203	1	No Gas	4.591	4.591	0.43	26385	0.02	5	
Pb	208	1	No Gas	4.401	4.401	1.05	88183	0.00	5	
U	238	1	No Gas	4.285	4.285	1.58	92288	0.00	5	
Ca	43	2	He	452.233	452.233	41.95	443	102.00	500	
Sb	121	2	He	4.691	4.691	0.61	13307	0.04	5	
Ti	47	2	He	4.453	4.453	14.27	410	1.09	5	
Cu	63	1	No Gas	4.720	4.720	3.57	25598	0.02	5	
Se	82	1	No Gas	4.861	4.861	92.34	-244	-2.00	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	610263	3.43	579731	105.27	70	120	
Ge	72	2	He	289656	1.47	284936	101.66	70	120	
Ge	72	1	No Gas	906092	3.55	880232	102.94	70	120	

Sample Report

In	115	1	No Gas	1145306	5.19	1062542	107.79	70	120	
Bi	209	1	No Gas	1120309	3.59	1062490	105.44	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	025ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:07:50-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-59.1	36033	1.9	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.011	-43.3	42	18.3	0	ICSA Main CR1 Failed
V	51	2	He	-0.007	-128.1	967	3.2	0	ICSA Main CR1 Failed
Cr	52	2	He	1.193	3.1	4241	2.3	0	ICSA Main CR1 Failed
Fe	56	2	He	98327.225	0.3	260949103	1.4	0	
Se	78	2	He	-1.057	-117.7	324	13.5	0	ICSA Main CR1 Failed
As	75	2	He	0.203	14.8	164	6.5	0	ICSA Main CR1 Failed
Ca	44	2	He	102250.955	0.9	1604264	2.1	0	
Na	23	2	He	100542.189	0.6	52184261	1.9	0	
Mg	24	2	He	99377.474	1.0	28541959	2.3	0	
K	39	2	He	98754.877	0.5	32123525	1.6	0	
Mn	55	2	He	0.478	12.5	1190	11.6	0	ICSA Main CR1 Failed
Co	59	2	He	0.234	18.1	973	17.1	0	ICSA Main CR1 Failed
Ni	60	2	He	0.867	21.8	1080	17.1	0	ICSA Main CR1 Failed
Cu	63	2	He	0.155	31.8	1257	10.3	0	ICSA Main CR1 Failed
Zn	66	2	He	2.457	15.7	6138	2.3	0	ICSA Main CR1 Failed
Al	27	2	He	102968.629	0.9	15774626	2.2	0	
B	11	1	No Gas	1.559	48.6	19053	3.1	0	
Al	27	1	No Gas	97408.423	1.4	630717511	0.9	0	
Si	28	1	No Gas	22.429	2.4	251395	0.6	0	
Ag	107	1	No Gas	0.132	18.3	1603	9.4	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.256	1.0	1770	2.0	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.035	4.1	53055	3.2	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2059.047	0.4	5150101	1.0	0	
Sn	118	1	No Gas	0.229	14.5	2224	5.2	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.338	11.6	2234	9.2	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.620	4.5	1397	4.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.006	135.8	357	35.1	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.015	111.4	170	56.1	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.140	13.0	4507	8.4	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.014	56.1	297	54.1	0	ICSA Main CR1 Failed
Ca	43	2	He	93664.778	0.5	86906	1.3	0	
Sb	121	2	He	0.256	7.8	990	4.4	0	ICSA Main CR1 Failed
Ti	47	2	He	2023.583	1.4	184381	2.1	0	
Se	82	1	No Gas	5.936	132.8	-175	-315.4	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	606789	0.22	579731	104.67	70	120	
Ge	72	2	He	293744	1.34	284936	103.09	70	120	
Ge	72	1	No Gas	910343	0.54	880232	103.42	70	120	
In	115	1	No Gas	1162859	1.09	1062542	109.44	70	120	
Bi	209	1	No Gas	1086476	0.80	1062490	102.26	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	026ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:09:51-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.748	2.673	812894	2.40	100	102.7	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	101.253	1.472	162016	1.55	100	101.3	80	120	
V	51	2	He	98.779	0.790	233831	2.04	100	98.8	80	120	
Cr	52	2	He	98.209	1.047	267217	2.14	100	98.2	80	120	
Fe	56	2	He	102150.083	1.182	269105703	2.28	100	102150.1	80	120	ICSB Main CR1 Failed
Se	78	2	He	97.989	2.351	3972	2.78	100	98.0	80	120	
As	75	2	He	99.476	1.303	39369	2.03	100	99.5	80	120	
Ca	44	2	He	106212.212	2.172	1654220	3.36	100	106212.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	104335.825	0.640	53746148	1.92	100	104335.8	80	120	ICSB Main CR1 Failed
Mg	24	2	He	103744.444	0.657	29574019	1.75	100	103744.4	80	120	ICSB Main CR1 Failed
K	39	2	He	102762.077	0.891	33177840	2.08	100	102762.1	80	120	ICSB Main CR1 Failed
Mn	55	2	He	97.787	1.034	198415	2.24	100	97.8	80	120	
Co	59	2	He	96.657	0.159	391558	1.30	100	96.7	80	120	
Ni	60	2	He	95.425	0.233	98068	1.52	100	95.4	80	120	
Cu	63	2	He	95.640	0.644	265104	1.76	100	95.6	80	120	
Zn	66	2	He	96.157	1.086	58463	1.67	100	96.2	80	120	
Al	27	2	He	97163.884	0.754	14774813	1.94	100	97163.9	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	494.860	1.190	406048	1.01	100	494.9	80	120	
Al	27	1	No Gas	91018.474	0.253	580262418	0.81	100	91018.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	522.576	1.060	1637735	0.78	100	522.6	80	120	
Ag	107	1	No Gas	96.116	1.549	602133	0.87	100	96.1	80	120	
Cd	111	1	No Gas	99.146	1.807	128390	1.05	100	99.1	80	120	
Sr	88	1	No Gas	105.361	1.638	1265123	0.82	100	105.4	80	120	
Mo	95	1	No Gas	2178.144	1.493	5028621	0.67	100	2178.1	80	120	
Sn	118	1	No Gas	100.025	1.681	380824	0.80	100	100.0	80	120	
Sb	121	1	No Gas	97.448	0.876	527404	0.54	100	97.4	80	120	
Ba	137	1	No Gas	99.482	1.645	185939	0.96	100	99.5	80	120	
Tl	205	1	No Gas	99.968	2.686	1416311	2.32	100	100.0	80	120	
Tl	203	1	No Gas	99.090	1.278	543050	0.82	100	99.1	80	120	
Pb	208	1	No Gas	95.630	0.484	1795470	0.24	100	95.6	80	120	
U	238	1	No Gas	102.406	0.203	2109658	0.36	100	102.4	80	120	
Ca	43	2	He	100412.016	2.978	92499	4.28	100	100412.0	80	120	ICSB Main CR1 Failed
Sb	121	2	He	97.994	1.008	274513	2.05	100	98.0	80	120	
Ti	47	2	He	2005.693	1.601	181416	2.81	100	2005.7	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	95.031	0.592	469256	1.15	100	95.0	80	120	
Se	82	1	No Gas	103.326	21.002	6543	22.91	100	103.3	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585020	0.16	579731	100.91	70	120	
Ge	72	2	He	291570	1.29	284936	102.33	70	120	
Ge	72	1	No Gas	896272	0.77	880232	101.82	70	120	
In	115	1	No Gas	1073423	0.89	1062542	101.02	70	120	
Bi	209	1	No Gas	1071889	0.48	1062490	100.88	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:27:11-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.450	4.724	879521	0.56	100	106.4	90	110	
Be	9	1	No Gas	104.015	3.567	174135	1.68	100	104.0	90	110	
V	51	2	He	100.971	0.130	249074	1.50	100	101.0	90	110	
Cr	52	2	He	100.477	0.505	284880	1.16	100	100.5	90	110	
Fe	56	2	He	9984.350	0.302	27419215	1.67	10000	99.8	90	110	
Se	78	2	He	104.554	3.085	4392	3.68	100	104.6	90	110	
As	75	2	He	105.109	1.541	43354	2.81	100	105.1	90	110	
Ca	44	2	He	9996.877	0.414	162949	1.43	10000	100.0	90	110	
Na	23	2	He	10086.203	0.566	5572993	1.54	10000	100.9	90	110	
Mg	24	2	He	10166.691	1.571	3021024	2.93	10000	101.7	90	110	
K	39	2	He	10258.709	0.918	3525909	2.11	10000	102.6	90	110	
Mn	55	2	He	101.051	0.710	213682	2.07	100	101.1	90	110	
Co	59	2	He	100.589	0.734	424704	1.94	100	100.6	90	110	
Ni	60	2	He	101.637	1.291	108839	1.34	100	101.6	90	110	
Cu	63	2	He	101.424	0.650	292943	1.52	100	101.4	90	110	
Zn	66	2	He	101.079	1.787	63804	2.80	100	101.1	90	110	
Al	27	2	He	115.109	2.241	18699	0.88	100	115.1	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	451.796	4.453	389357	1.46	500	90.4	90	110	
Al	27	1	No Gas	107.187	0.659	720792	1.24	100	107.2	90	110	
Si	28	1	No Gas	515.199	1.354	1666400	1.34	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	96.486	2.721	660893	1.34	100	96.5	90	110	
Cd	111	1	No Gas	97.261	2.996	137707	1.51	100	97.3	90	110	
Sr	88	1	No Gas	96.533	2.694	1267462	1.57	100	96.5	90	110	
Mo	95	1	No Gas	93.934	3.452	237116	1.96	100	93.9	90	110	
Sn	118	1	No Gas	96.357	2.917	401162	1.42	100	96.4	90	110	
Sb	121	1	No Gas	102.667	0.217	572530	0.73	100	102.7	90	110	
Ba	137	1	No Gas	96.429	1.676	197088	0.69	100	96.4	90	110	
Tl	205	1	No Gas	104.481	1.707	1533285	2.25	100	104.5	90	110	
Tl	203	1	No Gas	104.883	0.764	595355	1.33	100	104.9	90	110	
Pb	208	1	No Gas	97.723	0.853	1900193	0.60	100	97.7	90	110	
U	238	1	No Gas	103.299	1.893	2203996	1.81	100	103.3	90	110	
Ca	43	2	He	9833.975	1.201	9467	0.22	10000	98.3	90	110	
Sb	121	2	He	103.104	1.057	301011	2.35	100	103.1	90	110	
Ti	47	2	He	102.557	5.103	9674	4.27	100	102.6	90	110	
Cu	63	1	No Gas	101.287	0.448	515195	0.96	100	101.3	90	110	
Se	82	1	No Gas	97.887	23.639	6360	26.33	100	97.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	612633	4.07	579731	105.68	70	120	
Ge	72	2	He	303877	1.37	284936	106.65	70	120	
Ge	72	1	No Gas	923498	0.65	880232	104.92	70	120	
In	115	1	No Gas	1173879	1.52	1062542	110.48	70	120	
Bi	209	1	No Gas	1110193	1.21	1062490	104.49	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:29:08-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.031	-38.0	35102	2.5	0.5	
Be	9	1	No Gas	-0.013	-34.1	37	20.8	0.5	
V	51	2	He	0.109	16.9	1147	5.5	2.5	
Cr	52	2	He	0.033	200.3	987	14.2	2.5	
Fe	56	2	He	0.654	26.9	8810	6.4	100	
Se	78	2	He	0.312	467.4	345	12.2	2	
As	75	2	He	-0.051	-80.5	59	27.9	2.5	
Ca	44	2	He	-18.421	-37.0	430	26.4	100	
Na	23	2	He	-4.714	-282.1	153958	0.7	100	
Mg	24	2	He	0.338	37.2	273	11.8	100	
K	39	2	He	5.683	104.1	74997	1.2	100	
Mn	55	2	He	0.000	95058.5	197	24.0	2.5	
Co	59	2	He	0.005	66.0	33	34.6	2.5	
Ni	60	2	He	-0.117	-21.7	60	44.1	2.5	
Cu	63	2	He	-0.017	-62.9	717	5.6	2	
Zn	66	2	He	-0.033	-1313.7	4377	7.9	2.5	
Al	27	2	He	-1.776	-24.4	160	34.8	5	
B	11	1	No Gas	20.233	10.4	32641	7.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.224	-9.6	8053	6.4	5	
Si	28	1	No Gas	3.880	26.3	188075	2.7	10	
Ag	107	1	No Gas	0.009	182.9	697	12.9	2.5	
Cd	111	1	No Gas	0.008	57.8	17	34.6	1	
Sr	88	1	No Gas	-0.018	-16.3	323	12.9	2.5	
Mo	95	1	No Gas	0.015	14.6	53	10.8	2.5	
Sn	118	1	No Gas	0.293	161.1	2243	78.6	5	
Sb	121	1	No Gas	0.020	51.0	460	13.2	2.5	
Ba	137	1	No Gas	-0.003	-265.1	123	12.4	2.5	
Tl	205	1	No Gas	0.001	319.9	273	15.2	1	
Tl	203	1	No Gas	0.012	61.4	150	29.1	1	
Pb	208	1	No Gas	-0.046	-9.6	953	11.0	2.5	
U	238	1	No Gas	0.006	43.0	143	35.8	2.5	
Ca	43	2	He	-6.433	-260.1	23	65.5	100	
Sb	121	2	He	-0.010	-155.3	220	15.7	2.5	
Ti	47	2	He	0.004	2737.1	10	100.0	2.5	
Cu	63	1	No Gas	-0.047	-84.9	1823	7.7	2.5	
Se	82	1	No Gas	1.131	594.1	-487	-92.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	577521	2.70	579731	99.62	70	120	
Ge	72	2	He	271186	3.51	284936	95.17	70	120	
Ge	72	1	No Gas	860304	2.67	880232	97.74	70	120	
In	115	1	No Gas	1047092	2.27	1062542	98.55	70	120	
Bi	209	1	No Gas	1056590	3.05	1062490	99.44	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-03
Data File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:38:14-05:00
Sample Type	Sample
Dilution	10
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	13.338	133.377	1.92	143371	0.01	2000	
Be	9	1	No Gas	0.970	9.695	10.22	1688	0.06	2000	
V	51	2	He	0.135	1.353	19.64	1315	0.01	2000	
Cr	52	2	He	33.427	334.273	0.49	93011	0.04	2000	
Fe	56	2	He	4471.469	44714.691	0.80	11968879	0.04	200000	
Se	78	2	He	-0.688	-6.877	-58.04	341	-0.20	2000	
As	75	2	He	0.131	1.306	36.04	137	0.10	2000	
Ca	44	2	He	3538.839	35388.394	2.07	56697	6.24	200000	
Na	23	2	He	53658.255	536582.548	0.83	28151674	0.19	200000	
Mg	24	2	He	5532.139	55321.391	1.54	1601429	0.35	200000	
K	39	2	He	317.303	3173.032	1.11	183844	0.17	200000	
Mn	55	2	He	949.430	9494.297	0.77	1954240	0.05	2000	
Co	59	2	He	32.371	323.712	1.45	133179	0.02	2000	
Ni	60	2	He	98.107	981.069	2.14	102383	0.10	2000	
Cu	63	2	He	0.480	4.796	10.78	2177	0.02	2000	
Zn	66	2	He	32.193	321.926	2.25	23063	0.14	2000	
Al	27	2	He	344.956	3449.558	2.73	53711	0.64	2000	
B	11	1	No Gas	-2.211	-22.110	-10.77	16255	-0.01	2000	
Al	27	1	No Gas	350.841	3508.412	0.63	2301106	0.02	2000	
Si	28	1	No Gas	3420.703	34207.032	0.89	9900644	0.03	2000	>LDR
Ag	107	1	No Gas	0.040	0.395	178.57	984	0.00	2000	
Cd	111	1	No Gas	0.104	1.037	49.60	153	0.07	2000	
Sr	88	1	No Gas	67.412	674.119	1.18	875056	0.01	2000	
Mo	95	1	No Gas	0.119	1.191	101.83	323	0.04	2000	
Sn	118	1	No Gas	0.012	0.116	653.76	1330	0.00	2000	
Sb	121	1	No Gas	0.158	1.579	49.33	1257	0.01	2000	
Ba	137	1	No Gas	1.053	10.534	6.10	2270	0.05	2000	
Tl	205	1	No Gas	0.045	0.449	123.65	944	0.00	2000	
Tl	203	1	No Gas	0.054	0.542	109.68	400	0.01	2000	
Pb	208	1	No Gas	0.069	0.688	73.88	3247	0.00	2000	
U	238	1	No Gas	0.118	1.182	23.32	2551	0.00	2000	
Ca	43	2	He	3624.989	36249.891	2.32	3420	105.98	200000	
Sb	121	2	He	0.005	0.046	325.25	283	0.00	2000	
Ti	47	2	He	-0.004	-0.036	-5270.02	10	-0.04	2000	
Cu	63	1	No Gas	0.588	5.882	6.66	5131	0.01	2000	
Zn	66	1	No Gas	31.545	315.448	1.30	56019	0.06	2000	
Se	82	1	No Gas	1.903	19.027	247.07	-454	-0.42	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	613807	1.86	579731	105.88	70	120	
Ge	72	2	He	296085	0.96	284936	103.91	70	120	
Ge	72	1	No Gas	915501	2.38	880232	104.01	70	120	
In	115	1	No Gas	1160214	2.18	1062542	109.19	70	120	

Sample Report

Bi	209	1	No Gas	1113514	1.96	1062490	104.80	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-04
Data File Name	032SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:40:12-05:00
Sample Type	Sample
Dilution	100
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.414	41.391	7.19	40204	0.00	2000	
Be	9	1	No Gas	-0.015	-1.454	-76.51	35	-0.04	2000	
V	51	2	He	0.127	12.727	13.03	1276	0.01	2000	
Cr	52	2	He	2.000	200.046	4.23	6398	0.03	2000	
Fe	56	2	He	2559.209	255920.901	0.45	6745573	0.04	200000	
Se	78	2	He	-0.422	-42.164	-306.69	345	-0.12	2000	
As	75	2	He	0.066	6.619	117.98	109	0.06	2000	
Ca	44	2	He	1546.407	154640.691	0.99	24803	6.23	200000	
Na	23	2	He	2237.910	223791.022	1.16	1316596	0.17	200000	
Mg	24	2	He	975.922	97592.231	0.58	278258	0.35	200000	
K	39	2	He	21.874	2187.409	35.31	85796	0.03	200000	
Mn	55	2	He	85.646	8564.643	1.00	173728	0.05	2000	
Co	59	2	He	0.036	3.627	23.15	163	0.02	2000	
Ni	60	2	He	1.475	147.454	9.39	1693	0.09	2000	
Cu	63	2	He	-0.010	-0.955	-404.34	790	0.00	2000	
Zn	66	2	He	-0.458	-45.822	-117.20	4468	-0.01	2000	
Al	27	2	He	1.261	126.099	50.08	637	0.20	2000	
B	11	1	No Gas	-6.305	-630.496	-2.54	12843	-0.05	2000	
Al	27	1	No Gas	1.714	171.364	24.82	27144	0.01	2000	
Si	28	1	No Gas	180.366	18036.613	0.63	687095	0.03	2000	
Ag	107	1	No Gas	-0.003	-0.282	-604.82	670	0.00	2000	
Cd	111	1	No Gas	0.004	0.439	189.13	13	0.03	2000	
Sr	88	1	No Gas	24.675	2467.452	2.81	311636	0.01	2000	
Mo	95	1	No Gas	0.005	0.495	97.02	33	0.01	2000	
Sn	118	1	No Gas	-0.067	-6.722	-57.84	970	-0.01	2000	
Sb	121	1	No Gas	0.018	1.783	34.42	467	0.00	2000	
Ba	137	1	No Gas	0.365	36.470	12.81	853	0.04	2000	
Tl	205	1	No Gas	-0.009	-0.865	-66.87	143	-0.01	2000	
Tl	203	1	No Gas	-0.009	-0.882	-57.72	37	-0.02	2000	
Pb	208	1	No Gas	-0.052	-5.171	-11.08	873	-0.01	2000	
U	238	1	No Gas	0.005	0.454	153.40	110	0.00	2000	
Ca	43	2	He	1459.818	145981.817	12.05	1377	106.03	200000	
Sb	121	2	He	-0.006	-0.570	-65.08	250	0.00	2000	
Ti	47	2	He	-0.042	-4.171	-296.53	7	-0.63	2000	
Cu	63	1	No Gas	0.001	0.067	3010.53	2137	0.00	2000	
Zn	66	1	No Gas	0.051	5.087	260.37	11328	0.00	2000	
Se	82	1	No Gas	4.735	473.485	153.14	-252	-1.88	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	604302	0.99	579731	104.24	70	120	
Ge	72	2	He	291404	3.01	284936	102.27	70	120	
Ge	72	1	No Gas	897017	0.56	880232	101.91	70	120	
In	115	1	No Gas	1128310	4.67	1062542	106.19	70	120	

Sample Report

Bi	209	1	No Gas	1096973	0.80	1062490	103.25	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-05
Data File Name	033SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:42:10-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	62.799	62.799	0.76	518842	0.01	2000	
Be	9	1	No Gas	0.043	0.043	28.00	128	0.03	2000	
V	51	2	He	0.103	0.103	10.48	1248	0.01	2000	
Cr	52	2	He	50.598	50.598	1.43	141380	0.04	2000	
Fe	56	2	He	402991.236	402991.236	0.52	1086506730	0.04	200000	>LDR
Se	78	2	He	-1.463	-1.463	-41.10	314	-0.47	2000	
As	75	2	He	0.326	0.326	8.11	217	0.15	2000	
Ca	44	2	He	322727.883	322727.883	1.05	5142248	6.28	200000	>LDR
Na	23	2	He	260889.862	260889.862	0.70	137288838	0.19	200000	>LDR
Mg	24	2	He	172220.486	172220.486	1.34	50250038	0.34	200000	
K	39	2	He	5283.577	5283.577	1.72	1822495	0.29	200000	
Mn	55	2	He	17134.664	17134.664	0.97	35545716	0.05	2000	>LDR
Co	59	2	He	0.126	0.126	14.86	540	0.02	2000	
Ni	60	2	He	2.163	2.163	6.26	2460	0.09	2000	
Cu	63	2	He	0.615	0.615	2.73	2577	0.02	2000	
Zn	66	2	He	2.496	2.496	15.38	6262	0.04	2000	
Al	27	2	He	44.305	44.305	5.56	7349	0.60	2000	
B	11	1	No Gas	48.809	48.809	2.31	54463	0.09	2000	
Al	27	1	No Gas	40.180	40.180	1.08	281239	0.01	2000	
Si	28	1	No Gas	15020.393	15020.393	1.46	43308743	0.03	2000	>LDR
Ag	107	1	No Gas	-0.043	-0.043	-24.83	410	-0.01	2000	
Cd	111	1	No Gas	0.217	0.217	14.83	307	0.07	2000	
Sr	88	1	No Gas	5288.510	5288.510	0.66	67573087	0.01	2000	>LDR
Mo	95	1	No Gas	0.326	0.326	10.03	823	0.04	2000	
Sn	118	1	No Gas	-0.025	-0.025	-107.49	1157	0.00	2000	
Sb	121	1	No Gas	0.025	0.025	64.60	523	0.00	2000	
Ba	137	1	No Gas	35.375	35.375	1.59	70478	0.05	2000	
Tl	205	1	No Gas	-0.012	-0.012	-13.16	93	-0.01	2000	
Tl	203	1	No Gas	-0.007	-0.007	-27.18	50	-0.01	2000	
Pb	208	1	No Gas	0.050	0.050	16.82	2880	0.00	2000	
U	238	1	No Gas	0.040	0.040	12.36	863	0.00	2000	
Ca	43	2	He	318196.569	318196.569	1.28	299874	106.11	200000	>LDR
Sb	121	2	He	-0.023	-0.023	-96.73	207	-0.01	2000	
Ti	47	2	He	0.571	0.571	57.53	63	0.90	2000	
Cu	63	1	No Gas	1.378	1.378	5.19	9197	0.01	2000	
Zn	66	1	No Gas	3.772	3.772	9.21	16998	0.02	2000	
Se	82	1	No Gas	-1.558	-1.558	-1080.98	-706	0.22	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	594245	1.01	579731	102.50	70	120	
Ge	72	2	He	298423	0.90	284936	104.73	70	120	
Ge	72	1	No Gas	925531	0.69	880232	105.15	70	120	
In	115	1	No Gas	1142666	1.99	1062542	107.54	70	120	
Bi	209	1	No Gas	1114598	0.57	1062490	104.90	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-05
Data File Name	034SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:44:11-05:00
Sample Type	Sample
Dilution	200
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.254	50.874	18.15	37831	0.00	2000	
Be	9	1	No Gas	-0.020	-4.044	-30.56	25	-0.08	2000	
V	51	2	He	-0.270	-54.088	-8.03	336	-0.08	2000	
Cr	52	2	He	0.211	42.165	18.64	1537	0.01	2000	
Fe	56	2	He	2255.064	451012.896	8.27	5913263	0.04	200000	
Se	78	2	He	-0.987	-197.398	-78.09	322	-0.31	2000	
As	75	2	He	-0.058	-11.568	-96.78	60	-0.10	2000	
Ca	44	2	He	1712.975	342595.062	8.90	27253	6.29	200000	
Na	23	2	He	1576.219	315243.764	12.04	971875	0.16	200000	
Mg	24	2	He	947.118	189423.571	11.73	268722	0.35	200000	
K	39	2	He	14.411	2882.233	27.34	82936	0.02	200000	
Mn	55	2	He	89.794	17958.786	9.14	181165	0.05	2000	
Co	59	2	He	0.002	0.305	366.95	23	0.01	2000	
Ni	60	2	He	-0.095	-18.982	-32.21	87	-0.11	2000	
Cu	63	2	He	-0.075	-15.012	-40.18	607	-0.01	2000	
Zn	66	2	He	0.045	8.942	742.57	4714	0.00	2000	
Al	27	2	He	1.699	339.884	51.77	697	0.24	2000	
B	11	1	No Gas	-5.401	-1080.151	-7.91	13150	-0.04	2000	
Al	27	1	No Gas	1.222	244.303	4.31	23677	0.01	2000	
Si	28	1	No Gas	70.125	14024.902	0.98	375074	0.02	2000	
Ag	107	1	No Gas	-0.027	-5.303	-14.93	517	-0.01	2000	
Cd	111	1	No Gas	-0.003	-0.556	-150.49	3	-0.08	2000	
Sr	88	1	No Gas	26.053	5210.668	1.08	330133	0.01	2000	
Mo	95	1	No Gas	0.005	0.984	97.47	33	0.01	2000	
Sn	118	1	No Gas	-0.060	-11.973	-6.88	1007	-0.01	2000	
Sb	121	1	No Gas	0.012	2.314	77.15	427	0.00	2000	
Ba	137	1	No Gas	0.163	32.547	29.28	460	0.04	2000	
Tl	205	1	No Gas	-0.010	-1.935	-12.11	130	-0.01	2000	
Tl	203	1	No Gas	-0.007	-1.311	-70.60	50	-0.01	2000	
Pb	208	1	No Gas	-0.063	-12.523	-6.34	673	-0.01	2000	
U	238	1	No Gas	0.000	-0.068	-79.04	7	-0.01	2000	
Ca	43	2	He	1646.867	329373.309	15.65	1537	107.16	200000	
Sb	121	2	He	-0.008	-1.541	-161.01	243	0.00	2000	
Ti	47	2	He	-0.076	-15.215	-84.34	3	-2.28	2000	
Cu	63	1	No Gas	-0.037	-7.445	-154.20	1924	0.00	2000	
Zn	66	1	No Gas	0.037	7.406	205.61	11151	0.00	2000	
Se	82	1	No Gas	-2.737	-547.456	-252.92	-756	0.36	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	586821	0.76	579731	101.22	70	120	
Ge	72	2	He	289627	1.90	284936	101.65	70	120	
Ge	72	1	No Gas	884432	1.02	880232	100.48	70	120	
In	115	1	No Gas	1131055	1.45	1062542	106.45	70	120	

Sample Report

Bi	209	1	No Gas	1112740	0.69	1062490	104.73	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-06
Data File Name	035SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:46:10-05:00
Sample Type	Sample
Dilution	1
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.897	5.897	1.67	88868	0.01	2000	
Be	9	1	No Gas	0.172	0.172	16.38	367	0.05	2000	
V	51	2	He	1.372	1.372	4.84	4622	0.03	2000	
Cr	52	2	He	1.076	1.076	7.90	4277	0.03	2000	
Fe	56	2	He	13402.998	13402.998	0.31	38782398	0.03	200000	
Se	78	2	He	-0.932	-0.932	-58.46	359	-0.26	2000	
As	75	2	He	8.677	8.677	3.65	3854	0.23	2000	
Ca	44	2	He	20649.830	20649.830	1.06	353827	5.84	200000	
Na	23	2	He	97629.261	97629.261	0.25	55239386	0.18	200000	
Mg	24	2	He	6807.318	6807.318	1.66	2131368	0.32	200000	
K	39	2	He	1051.929	1051.929	0.51	458674	0.23	200000	
Mn	55	2	He	689.349	689.349	1.51	1534758	0.04	2000	
Co	59	2	He	20.521	20.521	0.63	91314	0.02	2000	
Ni	60	2	He	12.692	12.692	1.70	14501	0.09	2000	
Cu	63	2	He	1.198	1.198	3.69	4534	0.03	2000	
Zn	66	2	He	22.775	22.775	2.65	19167	0.12	2000	
Al	27	2	He	124.025	124.025	1.75	21200	0.59	2000	
B	11	1	No Gas	61.414	61.414	1.47	69683	0.09	2000	
Al	27	1	No Gas	113.847	113.847	1.82	824128	0.01	2000	
Si	28	1	No Gas	11950.823	11950.823	0.48	37101450	0.03	2000	>LDR
Ag	107	1	No Gas	-0.040	-0.040	-11.82	490	-0.01	2000	
Cd	111	1	No Gas	0.635	0.635	13.80	993	0.06	2000	
Sr	88	1	No Gas	325.546	325.546	1.39	4680967	0.01	2000	
Mo	95	1	No Gas	0.315	0.315	1.65	897	0.04	2000	
Sn	118	1	No Gas	-0.034	-0.034	-117.47	1263	0.00	2000	
Sb	121	1	No Gas	0.061	0.061	12.26	780	0.01	2000	
Ba	137	1	No Gas	118.281	118.281	2.52	264791	0.04	2000	
Tl	205	1	No Gas	0.009	0.009	81.38	463	0.00	2000	
Tl	203	1	No Gas	0.021	0.021	31.92	240	0.01	2000	
Pb	208	1	No Gas	0.539	0.539	0.61	14380	0.00	2000	
U	238	1	No Gas	0.319	0.319	4.29	7933	0.00	2000	
Ca	43	2	He	21152.232	21152.232	1.45	21420	98.75	200000	
Sb	121	2	He	0.023	0.023	111.79	363	0.01	2000	
Ti	47	2	He	0.860	0.860	35.54	97	0.89	2000	
Cu	63	1	No Gas	1.429	1.429	3.68	10174	0.01	2000	
Zn	66	1	No Gas	22.653	22.653	1.67	47263	0.05	2000	
Se	82	1	No Gas	-4.011	-4.011	-142.42	-947	0.42	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	646669	0.61	579731	111.55	70	120	
Ge	72	2	He	320206	1.23	284936	112.38	70	120	
Ge	72	1	No Gas	995415	1.47	880232	113.09	70	120	
In	115	1	No Gas	1285657	0.36	1062542	121.00	70	120	ISTD Failed

Sample Report

Bi	209	1	No Gas	1292304	0.36	1062490	121.63	70	120	ISTD Failed

Sample Report

Sample Table

Sample Name	HS22070086-01SD
Data File Name	038SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:53:10-05:00
Sample Type	Sample
Dilution	100
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.099	9.937	87.55	38551	0.00	2000	
Be	9	1	No Gas	-0.015	-1.500	-87.08	35	-0.04	2000	
V	51	2	He	-0.175	-17.490	-14.04	579	-0.03	2000	
Cr	52	2	He	2.974	297.394	2.78	9297	0.03	2000	
Fe	56	2	He	62.358	6235.769	0.75	177003	0.04	200000	
Se	78	2	He	-1.125	-112.504	-35.25	329	-0.34	2000	
As	75	2	He	-0.049	-4.872	-57.41	66	-0.07	2000	
Ca	44	2	He	1020.772	102077.189	1.36	17121	5.96	200000	
Na	23	2	He	4468.905	446890.514	0.50	2534565	0.18	200000	
Mg	24	2	He	769.599	76959.878	0.51	225960	0.34	200000	
K	39	2	He	-12.523	-1252.325	-20.80	76984	-0.02	200000	
Mn	55	2	He	10.660	1065.977	1.75	22445	0.05	2000	
Co	59	2	He	0.304	30.359	7.44	1283	0.02	2000	
Ni	60	2	He	21.024	2102.449	1.38	22385	0.09	2000	
Cu	63	2	He	0.083	8.256	14.55	1077	0.01	2000	
Zn	66	2	He	0.298	29.842	27.16	5031	0.01	2000	
Al	27	2	He	4.351	435.083	5.15	1137	0.38	2000	
B	11	1	No Gas	-9.060	-905.967	-2.53	10944	-0.08	2000	
Al	27	1	No Gas	3.942	394.202	1.03	43695	0.01	2000	
Si	28	1	No Gas	152.517	15251.656	0.56	643877	0.02	2000	
Ag	107	1	No Gas	-0.047	-4.730	-35.76	427	-0.01	2000	
Cd	111	1	No Gas	-0.003	-0.301	-125.33	3	-0.09	2000	
Sr	88	1	No Gas	14.086	1408.638	1.54	201246	0.01	2000	
Mo	95	1	No Gas	0.014	1.441	61.43	63	0.02	2000	
Sn	118	1	No Gas	-0.069	-6.936	-25.41	1090	-0.01	2000	
Sb	121	1	No Gas	-0.001	-0.137	-465.34	383	0.00	2000	
Ba	137	1	No Gas	0.577	57.702	8.91	1437	0.04	2000	
Tl	205	1	No Gas	-0.012	-1.222	-21.08	97	-0.01	2000	
Tl	203	1	No Gas	-0.009	-0.913	-22.38	37	-0.02	2000	
Pb	208	1	No Gas	-0.063	-6.269	-0.83	700	-0.01	2000	
U	238	1	No Gas	0.002	0.175	54.25	53	0.00	2000	
Ca	43	2	He	1075.006	107500.576	3.75	1050	102.38	200000	
Sb	121	2	He	-0.044	-4.405	-26.42	147	-0.03	2000	
Ti	47	2	He	-0.078	-7.792	-78.26	3	-2.34	2000	
Cu	63	1	No Gas	0.107	10.720	15.21	2810	0.00	2000	
Zn	66	1	No Gas	0.033	3.271	879.42	11939	0.00	2000	
Se	82	1	No Gas	-7.195	-719.514	-57.00	-1138	0.63	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	617174	0.51	579731	106.46	70	120	
Ge	72	2	He	300042	2.10	284936	105.30	70	120	
Ge	72	1	No Gas	947419	0.45	880232	107.63	70	120	
In	115	1	No Gas	1273705	2.01	1062542	119.87	70	120	

Sample Report

Bi	209	1	No Gas	1159615	1.39	1062490	109.14	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01PDS
Data File Name	039SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:55:09-05:00
Sample Type	Sample
Dilution	20
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.120	22.403	4.62	47326	0.00	2000	
Be	9	1	No Gas	119.586	2391.729	0.56	204574	0.06	2000	
V	51	2	He	119.275	2385.505	0.85	301806	0.04	2000	
Cr	52	2	He	132.368	2647.359	0.90	384894	0.03	2000	
Fe	56	2	He	12042.812	240856.237	1.37	33943614	0.04	200000	
Se	78	2	He	117.759	2355.183	3.56	5029	2.34	2000	
As	75	2	He	121.372	2427.449	1.61	51363	0.24	2000	
Ca	44	2	He	17432.962	348659.235	0.51	291072	5.99	200000	
Na	23	2	He	36170.612	723412.232	0.86	20048183	0.18	200000	
Mg	24	2	He	16158.409	323168.188	1.55	4927591	0.33	200000	
K	39	2	He	12156.723	243134.459	1.79	4272301	0.28	200000	
Mn	55	2	He	177.502	3550.049	1.26	385082	0.05	2000	
Co	59	2	He	119.414	2388.287	0.95	517485	0.02	2000	
Ni	60	2	He	234.269	4685.377	1.03	257256	0.09	2000	
Cu	63	2	He	119.515	2390.295	0.86	354159	0.03	2000	
Zn	66	2	He	118.351	2367.011	1.83	75801	0.16	2000	
Al	27	2	He	116.600	2332.004	1.83	19437	0.60	2000	
B	11	1	No Gas	-9.201	-184.012	-2.18	10979	-0.08	2000	
Al	27	1	No Gas	108.823	2176.455	1.07	760630	0.01	2000	
Si	28	1	No Gas	944.801	18896.020	0.73	3012048	0.03	2000	
Ag	107	1	No Gas	108.192	2163.849	1.14	792028	0.01	2000	
Cd	111	1	No Gas	108.685	2173.692	2.02	164465	0.07	2000	
Sr	88	1	No Gas	87.674	1753.480	0.65	1230503	0.01	2000	
Mo	95	1	No Gas	109.431	2188.628	1.41	295269	0.04	2000	
Sn	118	1	No Gas	0.285	5.692	190.52	2672	0.01	2000	
Sb	121	1	No Gas	118.428	2368.560	0.39	686647	0.02	2000	
Ba	137	1	No Gas	111.784	2235.685	1.20	244165	0.05	2000	
Tl	205	1	No Gas	117.361	2347.217	0.78	1800116	0.01	2000	
Tl	203	1	No Gas	116.105	2322.101	0.85	688851	0.02	2000	
Pb	208	1	No Gas	118.605	2372.110	0.80	2410359	0.00	2000	
U	238	1	No Gas	0.011	0.223	15.12	263	0.00	2000	
Ca	43	2	He	17241.626	344832.526	2.34	17011	101.36	200000	
Sb	121	2	He	118.336	2366.722	2.31	354570	0.03	2000	
Ti	47	2	He	119.177	2383.547	4.91	11538	1.03	2000	
Cu	63	1	No Gas	117.843	2356.863	0.76	622873	0.02	2000	
Zn	66	1	No Gas	117.687	2353.739	2.48	186305	0.06	2000	
Se	82	1	No Gas	117.682	2353.648	3.42	8069	1.46	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	625487	0.32	579731	107.89	70	120	
Ge	72	2	He	311899	0.98	284936	109.46	70	120	
Ge	72	1	No Gas	960254	0.79	880232	109.09	70	120	
In	115	1	No Gas	1254538	1.75	1062542	118.07	70	120	

Sample Report

Bi	209	1	No Gas	1160443	0.98	1062490	109.22	70	120	

Sample Report

Sample Table

Sample Name	HS22070088-01
Data File Name	040SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:57:06-05:00
Sample Type	Sample
Dilution	100
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.383	38.335	16.79	40700	0.00	2000	
Be	9	1	No Gas	-0.008	-0.800	-114.75	47	-0.02	2000	
V	51	2	He	-0.173	-17.272	-22.73	592	-0.03	2000	
Cr	52	2	He	0.788	78.772	3.72	3247	0.02	2000	
Fe	56	2	He	3238.271	323827.052	0.41	8915410	0.04	200000	
Se	78	2	He	-0.642	-64.246	-140.49	353	-0.18	2000	
As	75	2	He	-0.059	-5.876	-49.91	62	-0.09	2000	
Ca	44	2	He	2279.902	227990.223	1.16	37839	6.03	200000	
Na	23	2	He	3026.535	302653.458	0.80	1798558	0.17	200000	
Mg	24	2	He	1251.602	125160.234	1.35	372802	0.34	200000	
K	39	2	He	51.884	5188.393	9.25	99748	0.05	200000	
Mn	55	2	He	197.204	19720.395	1.24	417592	0.05	2000	
Co	59	2	He	0.019	1.863	18.25	97	0.02	2000	
Ni	60	2	He	0.355	35.509	19.89	573	0.06	2000	
Cu	63	2	He	-0.046	-4.636	-38.74	720	-0.01	2000	
Zn	66	2	He	-0.347	-34.716	-100.51	4731	-0.01	2000	
Al	27	2	He	0.605	60.544	41.12	560	0.11	2000	
B	11	1	No Gas	-10.194	-1019.428	-2.69	10020	-0.10	2000	
Al	27	1	No Gas	0.796	79.631	10.21	22415	0.00	2000	
Si	28	1	No Gas	160.250	16025.011	0.94	664318	0.02	2000	
Ag	107	1	No Gas	-0.035	-3.538	-19.33	493	-0.01	2000	
Cd	111	1	No Gas	0.004	0.398	109.09	13	0.03	2000	
Sr	88	1	No Gas	30.569	3056.916	1.25	417065	0.01	2000	
Mo	95	1	No Gas	0.005	0.526	181.44	37	0.01	2000	
Sn	118	1	No Gas	-0.083	-8.337	-0.79	983	-0.01	2000	
Sb	121	1	No Gas	0.094	9.403	21.90	927	0.01	2000	
Ba	137	1	No Gas	0.796	79.591	9.58	1833	0.04	2000	
Tl	205	1	No Gas	0.001	0.065	560.81	290	0.00	2000	
Tl	203	1	No Gas	0.010	0.967	53.46	147	0.01	2000	
Pb	208	1	No Gas	-0.039	-3.942	-10.32	1157	0.00	2000	
U	238	1	No Gas	0.000	-0.019	-418.21	10	0.00	2000	
Ca	43	2	He	2501.683	250168.251	2.26	2437	102.66	200000	
Sb	121	2	He	0.013	1.310	200.47	317	0.00	2000	
Ti	47	2	He	-0.008	-0.829	-1239.46	10	-0.08	2000	
Cu	63	1	No Gas	-0.030	-3.044	-81.20	2087	0.00	2000	
Zn	66	1	No Gas	-0.074	-7.386	-675.64	11752	0.00	2000	
Se	82	1	No Gas	1.519	151.897	775.03	-500	-0.30	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	615424	1.44	579731	106.16	70	120	
Ge	72	2	He	304453	3.04	284936	106.85	70	120	
Ge	72	1	No Gas	944228	1.78	880232	107.27	70	120	
In	115	1	No Gas	1218607	3.57	1062542	114.69	70	120	

Sample Report

Bi	209	1	No Gas	1145067	1.46	1062490	107.77	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:59:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.983	5.231	872727	2.28	100	103.0	90	110	
Be	9	1	No Gas	101.314	3.575	173717	1.52	100	101.3	90	110	
V	51	2	He	100.709	0.208	250387	1.37	100	100.7	90	110	
Cr	52	2	He	101.143	0.727	289034	1.64	100	101.1	90	110	
Fe	56	2	He	9928.962	0.687	27480680	1.15	10000	99.3	90	110	
Se	78	2	He	101.879	2.646	4323	2.89	100	101.9	90	110	
As	75	2	He	105.920	0.913	44025	1.09	100	105.9	90	110	
Ca	44	2	He	9906.205	0.277	162757	1.66	10000	99.1	90	110	
Na	23	2	He	10103.559	0.533	5626099	1.03	10000	101.0	90	110	
Mg	24	2	He	10140.138	1.310	3036219	0.98	10000	101.4	90	110	
K	39	2	He	10235.056	1.098	3545181	0.38	10000	102.4	90	110	
Mn	55	2	He	100.230	1.165	213585	0.46	100	100.2	90	110	
Co	59	2	He	100.761	0.230	428763	1.29	100	100.8	90	110	
Ni	60	2	He	100.661	1.629	108637	0.21	100	100.7	90	110	
Cu	63	2	He	101.581	1.005	295689	0.90	100	101.6	90	110	
Zn	66	2	He	101.913	1.126	64784	0.66	100	101.9	90	110	
Al	27	2	He	114.433	1.705	18743	2.22	100	114.4	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	461.622	6.715	387725	2.21	500	92.3	90	110	
Al	27	1	No Gas	103.974	1.514	721276	1.49	100	104.0	90	110	
Si	28	1	No Gas	502.208	1.447	1679564	1.70	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.350	1.574	677538	0.81	100	94.4	90	110	
Cd	111	1	No Gas	94.611	2.236	140434	1.43	100	94.6	90	110	
Sr	88	1	No Gas	94.062	2.766	1294657	2.02	100	94.1	90	110	
Mo	95	1	No Gas	92.031	1.885	243571	1.41	100	92.0	90	110	
Sn	118	1	No Gas	94.002	1.597	410328	0.79	100	94.0	90	110	
Sb	121	1	No Gas	101.791	0.354	585177	0.70	100	101.8	90	110	
Ba	137	1	No Gas	93.661	1.579	200672	0.79	100	93.7	90	110	
Tl	205	1	No Gas	105.016	1.054	1600516	0.89	100	105.0	90	110	
Tl	203	1	No Gas	103.428	0.434	609757	0.90	100	103.4	90	110	
Pb	208	1	No Gas	96.664	0.756	1952278	1.17	100	96.7	90	110	
U	238	1	No Gas	100.185	1.459	2220098	1.40	100	100.2	90	110	
Ca	43	2	He	9954.162	2.289	9657	1.04	10000	99.5	90	110	
Sb	121	2	He	102.642	0.454	302003	1.42	100	102.6	90	110	
Ti	47	2	He	103.022	1.034	9797	1.38	100	103.0	90	110	
Cu	63	1	No Gas	99.794	0.847	523298	0.63	100	99.8	90	110	
Se	82	1	No Gas	101.521	8.058	6817	8.94	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627502	4.31	579731	108.24	70	120	
Ge	72	2	He	306276	1.41	284936	107.49	70	120	
Ge	72	1	No Gas	952017	0.47	880232	108.16	70	120	
In	115	1	No Gas	1230430	0.81	1062542	115.80	70	120	
Bi	209	1	No Gas	1153075	1.33	1062490	108.53	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:59:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.983	5.231	872727	2.28	100	103.0	90	110	
Be	9	1	No Gas	101.314	3.575	173717	1.52	100	101.3	90	110	
V	51	2	He	100.709	0.208	250387	1.37	100	100.7	90	110	
Cr	52	2	He	101.143	0.727	289034	1.64	100	101.1	90	110	
Fe	56	2	He	9928.962	0.687	27480680	1.15	10000	99.3	90	110	
Se	78	2	He	101.879	2.646	4323	2.89	100	101.9	90	110	
As	75	2	He	105.920	0.913	44025	1.09	100	105.9	90	110	
Ca	44	2	He	9906.205	0.277	162757	1.66	10000	99.1	90	110	
Na	23	2	He	10103.559	0.533	5626099	1.03	10000	101.0	90	110	
Mg	24	2	He	10140.138	1.310	3036219	0.98	10000	101.4	90	110	
K	39	2	He	10235.056	1.098	3545181	0.38	10000	102.4	90	110	
Mn	55	2	He	100.230	1.165	213585	0.46	100	100.2	90	110	
Co	59	2	He	100.761	0.230	428763	1.29	100	100.8	90	110	
Ni	60	2	He	100.661	1.629	108637	0.21	100	100.7	90	110	
Cu	63	2	He	101.581	1.005	295689	0.90	100	101.6	90	110	
Zn	66	2	He	101.913	1.126	64784	0.66	100	101.9	90	110	
Al	27	2	He	114.433	1.705	18743	2.22	100	114.4	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	461.622	6.715	387725	2.21	500	92.3	90	110	
Al	27	1	No Gas	103.974	1.514	721276	1.49	100	104.0	90	110	
Si	28	1	No Gas	502.208	1.447	1679564	1.70	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.350	1.574	677538	0.81	100	94.4	90	110	
Cd	111	1	No Gas	94.611	2.236	140434	1.43	100	94.6	90	110	
Sr	88	1	No Gas	94.062	2.766	1294657	2.02	100	94.1	90	110	
Mo	95	1	No Gas	92.031	1.885	243571	1.41	100	92.0	90	110	
Sn	118	1	No Gas	94.002	1.597	410328	0.79	100	94.0	90	110	
Sb	121	1	No Gas	101.791	0.354	585177	0.70	100	101.8	90	110	
Ba	137	1	No Gas	93.661	1.579	200672	0.79	100	93.7	90	110	
Tl	205	1	No Gas	105.016	1.054	1600516	0.89	100	105.0	90	110	
Tl	203	1	No Gas	103.428	0.434	609757	0.90	100	103.4	90	110	
Pb	208	1	No Gas	96.664	0.756	1952278	1.17	100	96.7	90	110	
U	238	1	No Gas	100.185	1.459	2220098	1.40	100	100.2	90	110	
Ca	43	2	He	9954.162	2.289	9657	1.04	10000	99.5	90	110	
Sb	121	2	He	102.642	0.454	302003	1.42	100	102.6	90	110	
Ti	47	2	He	103.022	1.034	9797	1.38	100	103.0	90	110	
Cu	63	1	No Gas	99.794	0.847	523298	0.63	100	99.8	90	110	
Se	82	1	No Gas	101.521	8.058	6817	8.94	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627502	4.31	579731	108.24	70	120	
Ge	72	2	He	306276	1.41	284936	107.49	70	120	
Ge	72	1	No Gas	952017	0.47	880232	108.16	70	120	
In	115	1	No Gas	1230430	0.81	1062542	115.80	70	120	
Bi	209	1	No Gas	1153075	1.33	1062490	108.53	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:01:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-15.5	35156	2.3	0.5	
Be	9	1	No Gas	0.006	554.7	67	75.9	0.5	
V	51	2	He	-0.144	-10.6	617	4.3	2.5	
Cr	52	2	He	0.004	962.0	957	12.5	2.5	
Fe	56	2	He	1.026	11.5	10121	2.6	100	
Se	78	2	He	-0.009	-7831.3	349	8.4	2	
As	75	2	He	-0.059	-19.5	58	6.7	2.5	
Ca	44	2	He	-19.037	-21.2	437	14.5	100	
Na	23	2	He	-0.333	-2785.7	162606	1.4	100	
Mg	24	2	He	0.492	48.1	327	18.5	100	
K	39	2	He	-0.514	-1252.3	76186	1.4	100	
Mn	55	2	He	0.037	47.2	277	11.6	2.5	
Co	59	2	He	0.009	18.0	53	10.8	2.5	
Ni	60	2	He	-0.099	-1.2	80	0.0	2.5	
Cu	63	2	He	-0.054	-45.6	647	8.8	2	
Zn	66	2	He	-0.043	-1044.9	4551	6.1	2.5	
Al	27	2	He	-1.489	-13.6	210	12.6	5	
B	11	1	No Gas	16.917	19.9	30158	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.379	-5.7	7426	7.1	5	
Si	28	1	No Gas	2.110	96.2	191245	1.4	10	
Ag	107	1	No Gas	-0.017	-162.1	583	25.0	2.5	
Cd	111	1	No Gas	0.015	132.7	27	94.4	1	
Sr	88	1	No Gas	-0.011	-188.5	443	51.7	2.5	
Mo	95	1	No Gas	0.028	134.4	87	96.1	2.5	
Sn	118	1	No Gas	-0.027	-112.3	1163	6.3	5	
Sb	121	1	No Gas	0.031	69.6	537	20.4	2.5	
Ba	137	1	No Gas	0.040	87.1	220	24.1	2.5	
Tl	205	1	No Gas	0.004	246.3	327	42.9	1	
Tl	203	1	No Gas	0.013	103.3	157	44.8	1	
Pb	208	1	No Gas	-0.043	-21.3	1040	14.8	2.5	
U	238	1	No Gas	0.007	60.5	160	53.4	2.5	
Ca	43	2	He	-22.074	-0.8	10	0.0	100	
Sb	121	2	He	-0.013	-67.2	223	9.3	2.5	
Ti	47	2	He	-0.038	-173.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.029	-180.4	1990	11.4	2.5	
Se	82	1	No Gas	1.213	568.9	-501	-95.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592077	2.20	579731	102.13	70	120	
Ge	72	2	He	282388	1.48	284936	99.11	70	120	
Ge	72	1	No Gas	897570	1.80	880232	101.97	70	120	
In	115	1	No Gas	1161374	6.64	1062542	109.30	70	120	
Bi	209	1	No Gas	1100009	2.33	1062490	103.53	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:01:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-15.5	35156	2.3	0.5	
Be	9	1	No Gas	0.006	554.7	67	75.9	0.5	
V	51	2	He	-0.144	-10.6	617	4.3	2.5	
Cr	52	2	He	0.004	962.0	957	12.5	2.5	
Fe	56	2	He	1.026	11.5	10121	2.6	100	
Se	78	2	He	-0.009	-7831.3	349	8.4	2	
As	75	2	He	-0.059	-19.5	58	6.7	2.5	
Ca	44	2	He	-19.037	-21.2	437	14.5	100	
Na	23	2	He	-0.333	-2785.7	162606	1.4	100	
Mg	24	2	He	0.492	48.1	327	18.5	100	
K	39	2	He	-0.514	-1252.3	76186	1.4	100	
Mn	55	2	He	0.037	47.2	277	11.6	2.5	
Co	59	2	He	0.009	18.0	53	10.8	2.5	
Ni	60	2	He	-0.099	-1.2	80	0.0	2.5	
Cu	63	2	He	-0.054	-45.6	647	8.8	2	
Zn	66	2	He	-0.043	-1044.9	4551	6.1	2.5	
Al	27	2	He	-1.489	-13.6	210	12.6	5	
B	11	1	No Gas	16.917	19.9	30158	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.379	-5.7	7426	7.1	5	
Si	28	1	No Gas	2.110	96.2	191245	1.4	10	
Ag	107	1	No Gas	-0.017	-162.1	583	25.0	2.5	
Cd	111	1	No Gas	0.015	132.7	27	94.4	1	
Sr	88	1	No Gas	-0.011	-188.5	443	51.7	2.5	
Mo	95	1	No Gas	0.028	134.4	87	96.1	2.5	
Sn	118	1	No Gas	-0.027	-112.3	1163	6.3	5	
Sb	121	1	No Gas	0.031	69.6	537	20.4	2.5	
Ba	137	1	No Gas	0.040	87.1	220	24.1	2.5	
Tl	205	1	No Gas	0.004	246.3	327	42.9	1	
Tl	203	1	No Gas	0.013	103.3	157	44.8	1	
Pb	208	1	No Gas	-0.043	-21.3	1040	14.8	2.5	
U	238	1	No Gas	0.007	60.5	160	53.4	2.5	
Ca	43	2	He	-22.074	-0.8	10	0.0	100	
Sb	121	2	He	-0.013	-67.2	223	9.3	2.5	
Ti	47	2	He	-0.038	-173.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.029	-180.4	1990	11.4	2.5	
Se	82	1	No Gas	1.213	568.9	-501	-95.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592077	2.20	579731	102.13	70	120	
Ge	72	2	He	282388	1.48	284936	99.11	70	120	
Ge	72	1	No Gas	897570	1.80	880232	101.97	70	120	
In	115	1	No Gas	1161374	6.64	1062542	109.30	70	120	
Bi	209	1	No Gas	1100009	2.33	1062490	103.53	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:29:09-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	103.362	6.651	895156	3.71	100	103.4	90	110	
Be	9	1	No Gas	98.109	4.748	171923	1.74	100	98.1	90	110	
V	51	2	He	103.085	1.096	241064	2.46	100	103.1	90	110	
Cr	52	2	He	101.738	0.741	273435	1.03	100	101.7	90	110	
Fe	56	2	He	10188.136	0.836	26523374	1.78	10000	101.9	90	110	
Se	78	2	He	100.035	2.091	3999	2.41	100	100.0	90	110	
As	75	2	He	105.570	1.693	41274	2.23	100	105.6	90	110	
Ca	44	2	He	10126.908	0.816	156486	2.19	10000	101.3	90	110	
Na	23	2	He	10804.919	0.099	5647795	1.47	10000	108.0	90	110	
Mg	24	2	He	10528.651	1.321	2965418	1.85	10000	105.3	90	110	
K	39	2	He	10593.057	1.733	3449090	2.81	10000	105.9	90	110	
Mn	55	2	He	101.380	0.719	203215	1.53	100	101.4	90	110	
Co	59	2	He	101.489	1.014	406195	1.67	100	101.5	90	110	
Ni	60	2	He	101.541	0.357	103085	1.07	100	101.5	90	110	
Cu	63	2	He	101.766	0.451	278643	1.54	100	101.8	90	110	
Zn	66	2	He	101.046	1.120	60458	1.18	100	101.0	90	110	
Al	27	2	He	115.711	1.667	17818	0.48	100	115.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	481.394	2.622	413037	2.32	500	96.3	90	110	
Al	27	1	No Gas	114.684	3.674	736542	3.73	100	114.7	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	558.936	2.037	1713580	0.97	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.938	1.458	633819	0.47	100	101.9	90	110	
Cd	111	1	No Gas	101.169	1.386	130046	1.43	100	101.2	90	110	
Sr	88	1	No Gas	103.886	2.193	1238244	2.19	100	103.9	90	110	
Mo	95	1	No Gas	98.826	0.784	226525	2.09	100	98.8	90	110	
Sn	118	1	No Gas	100.691	0.466	380543	0.87	100	100.7	90	110	
Sb	121	1	No Gas	101.597	1.439	541893	0.94	100	101.6	90	110	
Ba	137	1	No Gas	101.997	1.347	189223	0.52	100	102.0	90	110	
Tl	205	1	No Gas	106.379	1.981	1483377	1.84	100	106.4	90	110	
Tl	203	1	No Gas	105.296	0.137	567974	0.95	100	105.3	90	110	
Pb	208	1	No Gas	97.389	0.484	1799617	1.07	100	97.4	90	110	
U	238	1	No Gas	102.977	1.160	2088014	1.79	100	103.0	90	110	
Ca	43	2	He	10103.043	2.038	9220	2.29	10000	101.0	90	110	
Sb	121	2	He	102.578	0.841	283893	2.02	100	102.6	90	110	
Ti	47	2	He	103.356	2.278	9247	3.52	100	103.4	90	110	
Cu	63	1	No Gas	101.810	1.167	495288	0.38	100	101.8	90	110	
Se	82	1	No Gas	107.012	7.136	6696	7.12	100	107.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	641405	3.79	579731	110.64	70	120	
Ge	72	2	He	288073	1.39	284936	101.10	70	120	
Ge	72	1	No Gas	883343	0.97	880232	100.35	70	120	
In	115	1	No Gas	1065492	1.32	1062542	100.28	70	120	
Bi	209	1	No Gas	1054979	1.01	1062490	99.29	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:31:05-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.164	28.6	36397	1.2	0.5	
Be	9	1	No Gas	-0.018	-25.4	28	27.0	0.5	
V	51	2	He	1.188	7.1	3486	2.6	2.5	
Cr	52	2	He	-0.012	-364.2	873	16.9	2.5	
Fe	56	2	He	1.079	17.6	9777	2.0	100	
Se	78	2	He	0.717	136.5	357	7.5	2	
As	75	2	He	0.131	17.3	124	6.7	2.5	
Ca	44	2	He	-14.908	-57.8	473	23.7	100	
Na	23	2	He	240.916	8.3	269465	0.5	100	CCB Main CR1 Failed
Mg	24	2	He	0.688	26.2	363	11.1	100	
K	39	2	He	17.586	76.6	78010	1.9	100	
Mn	55	2	He	0.028	97.0	247	18.3	2.5	
Co	59	2	He	0.005	92.2	33	45.8	2.5	
Ni	60	2	He	-0.098	-27.3	77	30.1	2.5	
Cu	63	2	He	0.079	16.2	957	0.6	2	
Zn	66	2	He	-0.010	-3133.3	4354	0.3	2.5	
Al	27	2	He	-1.426	-26.0	210	26.5	5	
B	11	1	No Gas	59.968	8.7	60944	7.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.259	-3.2	7522	4.4	5	
Si	28	1	No Gas	11.832	10.8	200459	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.006	193.2	640	8.7	2.5	
Cd	111	1	No Gas	0.003	269.3	10	100.0	1	
Sr	88	1	No Gas	-0.009	-85.7	413	20.1	2.5	
Mo	95	1	No Gas	0.013	146.0	47	86.6	2.5	
Sn	118	1	No Gas	-0.037	-66.2	967	10.4	5	
Sb	121	1	No Gas	0.038	21.1	527	7.2	2.5	
Ba	137	1	No Gas	0.015	203.0	147	33.6	2.5	
Tl	205	1	No Gas	-0.004	-175.0	187	52.9	1	
Tl	203	1	No Gas	0.003	285.9	93	48.3	1	
Pb	208	1	No Gas	-0.051	-11.5	793	10.2	2.5	
U	238	1	No Gas	0.004	36.8	93	34.4	2.5	
Ca	43	2	He	-1.458	-1303.9	27	57.3	100	
Sb	121	2	He	0.023	125.8	307	26.4	2.5	
Ti	47	2	He	-0.072	-100.0	3	173.2	2.5	
Cu	63	1	No Gas	0.147	26.0	2624	8.1	2.5	
Se	82	1	No Gas	-23.025	-29.7	-1989	-20.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	575078	2.05	579731	99.20	70	120	
Ge	72	2	He	269482	3.91	284936	94.58	70	120	
Ge	72	1	No Gas	823973	1.97	880232	93.61	70	120	
In	115	1	No Gas	993831	1.66	1062542	93.53	70	120	
Bi	209	1	No Gas	990625	2.67	1062490	93.24	70	120	

Sample Report

Sample Table

Sample Name	HS22070086-01PDS
Data File Name	056SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:38:38-05:00
Sample Type	Sample
Dilution	20
Comment	TW DOD 181294
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.220	24.396	16.85	52877	0.00	2000	
Be	9	1	No Gas	93.024	1860.482	3.03	174838	0.05	2000	
V	51	2	He	95.084	1901.670	1.13	248723	0.04	2000	
Cr	52	2	He	107.300	2146.007	0.50	322464	0.03	2000	
Fe	56	2	He	9687.711	193754.210	0.97	28204780	0.03	200000	
Se	78	2	He	95.483	1909.660	1.71	4287	2.23	2000	
As	75	2	He	95.122	1902.434	2.24	41601	0.23	2000	
Ca	44	2	He	14382.424	287648.485	1.13	248189	5.79	200000	
Na	23	2	He	30834.488	616689.764	1.21	17680095	0.17	200000	
Mg	24	2	He	13360.775	267215.504	0.26	4208260	0.32	200000	
K	39	2	He	9830.972	196619.448	0.95	3585501	0.27	200000	
Mn	55	2	He	144.002	2880.041	1.05	322716	0.04	2000	
Co	59	2	He	95.125	1902.491	1.04	425777	0.02	2000	
Ni	60	2	He	191.387	3827.749	1.38	217117	0.09	2000	
Cu	63	2	He	94.406	1888.119	0.58	289130	0.03	2000	
Zn	66	2	He	94.363	1887.250	1.35	63488	0.15	2000	
Al	27	2	He	97.659	1953.172	0.84	16897	0.58	2000	
B	11	1	No Gas	47.194	943.881	6.15	61610	0.08	2000	
Al	27	1	No Gas	89.964	1799.274	0.37	643037	0.01	2000	
Si	28	1	No Gas	822.755	16455.090	0.15	2695755	0.03	2000	
Ag	107	1	No Gas	85.986	1719.715	0.19	636740	0.01	2000	
Cd	111	1	No Gas	86.512	1730.238	0.44	132413	0.07	2000	
Sr	88	1	No Gas	69.558	1391.162	0.61	987357	0.01	2000	
Mo	95	1	No Gas	87.493	1749.858	0.24	238769	0.04	2000	
Sn	118	1	No Gas	-0.098	-1.970	-29.60	957	-0.01	2000	
Sb	121	1	No Gas	89.906	1798.110	0.55	530619	0.02	2000	
Ba	137	1	No Gas	88.624	1772.487	1.02	195810	0.05	2000	
Tl	205	1	No Gas	92.218	1844.369	3.44	1455158	0.01	2000	
Tl	203	1	No Gas	90.997	1819.950	4.51	555195	0.02	2000	
Pb	208	1	No Gas	87.084	1741.677	4.99	1819986	0.00	2000	
U	238	1	No Gas	0.012	0.230	3.97	280	0.00	2000	
Ca	43	2	He	14254.233	285084.660	2.55	14531	98.09	200000	
Sb	121	2	He	90.621	1812.428	0.64	280494	0.03	2000	
Ti	47	2	He	98.001	1960.028	2.15	9804	1.00	2000	
Cu	63	1	No Gas	94.802	1896.035	1.15	510425	0.02	2000	
Zn	66	1	No Gas	94.081	1881.619	2.04	154040	0.06	2000	
Se	82	1	No Gas	99.487	1989.742	18.93	6848	1.45	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	687646	3.60	579731	118.61	70	120	
Ge	72	2	He	322152	1.00	284936	113.06	70	120	
Ge	72	1	No Gas	977317	1.15	880232	111.03	70	120	
In	115	1	No Gas	1268602	1.20	1062542	119.39	70	120	

Sample Report

Bi	209	1	No Gas	1195262	5.64	1062490	112.50	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:56:39-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.834	3.769	893387	2.01	100	99.8	90	110	
Be	9	1	No Gas	97.768	3.440	176722	1.85	100	97.8	90	110	
V	51	2	He	104.155	1.522	248441	1.47	100	104.2	90	110	
Cr	52	2	He	102.018	0.336	279730	0.89	100	102.0	90	110	
Fe	56	2	He	10222.544	1.158	27149960	1.59	10000	102.2	90	110	
Se	78	2	He	104.305	3.742	4237	2.95	100	104.3	90	110	
As	75	2	He	106.029	1.595	42290	1.92	100	106.0	90	110	
Ca	44	2	He	10424.357	1.629	164305	2.10	10000	104.2	90	110	
Na	23	2	He	10922.716	0.863	5822659	1.09	10000	109.2	90	110	
Mg	24	2	He	10761.837	1.209	3092121	0.71	10000	107.6	90	110	
K	39	2	He	10769.936	2.206	3575668	2.15	10000	107.7	90	110	
Mn	55	2	He	102.581	1.671	209775	2.10	100	102.6	90	110	
Co	59	2	He	103.536	1.621	422753	1.81	100	103.5	90	110	
Ni	60	2	He	103.211	2.031	106901	2.54	100	103.2	90	110	
Cu	63	2	He	102.501	0.750	286310	0.99	100	102.5	90	110	
Zn	66	2	He	103.594	1.946	63116	2.00	100	103.6	90	110	
Al	27	2	He	118.151	2.844	18556	3.29	100	118.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	470.123	1.978	416468	3.08	500	94.0	90	110	
Al	27	1	No Gas	107.505	0.668	706530	1.19	100	107.5	90	110	
Si	28	1	No Gas	588.215	1.073	1833046	0.54	5000	11.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.505	2.767	639315	1.37	100	100.5	90	110	
Cd	111	1	No Gas	100.274	1.707	131878	1.41	100	100.3	90	110	
Sr	88	1	No Gas	102.510	4.336	1249516	1.74	100	102.5	90	110	
Mo	95	1	No Gas	99.138	4.368	232382	2.62	100	99.1	90	110	
Sn	118	1	No Gas	100.367	2.954	388027	1.68	100	100.4	90	110	
Sb	121	1	No Gas	100.537	0.225	547997	1.21	100	100.5	90	110	
Ba	137	1	No Gas	100.372	2.161	190520	1.60	100	100.4	90	110	
Tl	205	1	No Gas	105.630	1.512	1464173	0.52	100	105.6	90	110	
Tl	203	1	No Gas	105.111	1.006	563601	0.64	100	105.1	90	110	
Pb	208	1	No Gas	98.323	0.097	1806158	1.09	100	98.3	90	110	
U	238	1	No Gas	103.827	1.255	2092942	2.25	100	103.8	90	110	
Ca	43	2	He	10064.415	0.923	9370	0.40	10000	100.6	90	110	
Sb	121	2	He	102.339	1.031	288937	1.47	100	102.3	90	110	
Ti	47	2	He	103.372	1.677	9433	2.22	100	103.4	90	110	
Cu	63	1	No Gas	103.070	0.915	512374	1.35	100	103.1	90	110	
Se	82	1	No Gas	106.555	7.889	6812	8.61	100	106.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	661106	1.61	579731	114.04	70	120	
Ge	72	2	He	293884	0.60	284936	103.14	70	120	
Ge	72	1	No Gas	902636	1.14	880232	102.55	70	120	
In	115	1	No Gas	1090348	2.54	1062542	102.62	70	120	
Bi	209	1	No Gas	1048751	1.00	1062490	98.71	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:58:34-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.015	-120.8	37284	0.5	0.5	
Be	9	1	No Gas	-0.015	-21.0	35	14.3	0.5	
V	51	2	He	0.598	13.5	2301	5.2	2.5	
Cr	52	2	He	-0.010	-300.9	917	9.8	2.5	
Fe	56	2	He	1.141	5.5	10394	2.9	100	
Se	78	2	He	-0.294	-171.3	338	3.3	2	
As	75	2	He	0.058	59.8	102	10.5	2.5	
Ca	44	2	He	-18.402	-53.7	447	35.4	100	
Na	23	2	He	286.327	6.1	304463	0.0	100	CCB Main CR1 Failed
Mg	24	2	He	0.660	27.8	373	14.8	100	
K	39	2	He	25.355	29.2	84072	1.0	100	
Mn	55	2	He	0.147	25.0	493	17.2	2.5	
Co	59	2	He	0.009	92.4	50	60.0	2.5	
Ni	60	2	He	-0.072	-44.8	107	30.1	2.5	
Cu	63	2	He	0.000	-33365.4	787	24.2	2	
Zn	66	2	He	0.372	152.8	4771	9.2	2.5	
Al	27	2	He	-1.509	-15.5	207	15.6	5	
B	11	1	No Gas	54.215	9.0	60277	6.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.995	-8.5	9637	5.1	5	
Si	28	1	No Gas	22.123	9.7	241082	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.005	-49.2	617	2.5	2.5	
Cd	111	1	No Gas	0.000	8570.3	7	86.6	1	
Sr	88	1	No Gas	-0.003	-222.7	503	17.9	2.5	
Mo	95	1	No Gas	0.007	243.4	37	110.2	2.5	
Sn	118	1	No Gas	-0.026	-129.9	1067	11.5	5	
Sb	121	1	No Gas	0.043	30.5	590	11.9	2.5	
Ba	137	1	No Gas	-0.002	-1124.6	127	27.7	2.5	
Tl	205	1	No Gas	-0.007	-12.3	163	7.1	1	
Tl	203	1	No Gas	-0.009	-51.0	33	75.5	1	
Pb	208	1	No Gas	-0.063	-1.7	623	3.3	2.5	
U	238	1	No Gas	0.004	16.0	87	13.3	2.5	
Ca	43	2	He	-14.328	-95.4	17	69.3	100	
Sb	121	2	He	-0.013	-37.0	223	6.8	2.5	
Ti	47	2	He	-0.076	-84.7	3	173.2	2.5	
Cu	63	1	No Gas	0.160	18.7	2854	5.4	2.5	
Se	82	1	No Gas	-1.455	-897.5	-664	-132.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	611395	0.92	579731	105.46	70	120	
Ge	72	2	He	281846	2.83	284936	98.92	70	120	
Ge	72	1	No Gas	876016	0.50	880232	99.52	70	120	
In	115	1	No Gas	1057425	0.67	1062542	99.52	70	120	
Bi	209	1	No Gas	1052447	0.22	1062490	99.05	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	205CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:07:27-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	37730	0.00
Be	9	1	No Gas	37	56.81
V	51	2	He	2181	0.23
Cr	52	2	He	1030	0.25
Fe	56	2	He	10324	0.02
Se	78	2	He	327	2.23
As	75	2	He	116	15.26
Ca	44	2	He	433	1.34
Na	23	2	He	230792	0.00
Mg	24	2	He	317	8.99
K	39	2	He	90066	0.00
Mn	55	2	He	417	4.80
Co	59	2	He	20	250.00
Ni	60	2	He	223	8.35
Cu	63	2	He	980	1.55
Zn	66	2	He	5518	0.11
Al	27	2	He	477	2.26
B	11	1	No Gas	12883	0.01
Al	27	1	No Gas	20478	0.03
Si	28	1	No Gas	160765	0.00
Ag	107	1	No Gas	230	17.33
Sr	88	1	No Gas	653	0.59
Mo	95	1	No Gas	13	649.52
Sn	118	1	No Gas	1217	0.56
Sb	121	1	No Gas	300	9.88
Ba	137	1	No Gas	130	20.50
Tl	205	1	No Gas	37	42.94
Tl	203	1	No Gas	20	250.00
Pb	208	1	No Gas	617	1.30
U	238	1	No Gas	13	324.76
Ca	43	2	He	27	81.19
Sb	121	2	He	193	7.72
Ti	47	2	He	7	2598.08
Cu	63	1	No Gas	2024	0.21

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	670807	2.28

Calibration Blank Report

Ge	72	2	He	338750	0.25
Ge	72	1	No Gas	1064833	1.27
In	115	1	No Gas	1360630	1.89
Bi	209	1	No Gas	1388986	2.00

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	206CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:09:34-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3535	0.06
V	51	2	He	7638	0.02
Cr	52	2	He	7189	0.02
Fe	56	2	He	594274	0.00
Se	78	2	He	423	0.47
As	75	2	He	1054	0.35
Ca	44	2	He	4044	0.14
Na	23	2	He	340140	0.00
Mg	24	2	He	64121	0.00
K	39	2	He	159938	0.00
Mn	55	2	He	5178	0.06
Co	59	2	He	9340	0.05
Ni	60	2	He	2610	0.08
Cu	63	2	He	7556	0.04
Zn	66	2	He	6638	0.09
Al	27	2	He	793	1.77
B	11	1	No Gas	20378	0.01
Al	27	1	No Gas	32679	0.01
Si	28	1	No Gas	192242	0.00
Ag	107	1	No Gas	14705	0.01
Cd	111	1	No Gas	3040	0.40
Sr	88	1	No Gas	27208	0.01
Mo	95	1	No Gas	5111	0.10
Sn	118	1	No Gas	10077	0.02
Sb	121	1	No Gas	12686	0.05
Ba	137	1	No Gas	4614	0.08
Tl	205	1	No Gas	31082	0.00
Tl	203	1	No Gas	12924	0.04
Pb	208	1	No Gas	43938	0.00
U	238	1	No Gas	45053	0.00
Ca	43	2	He	173	8.38
Sb	121	2	He	6388	0.05
Cu	63	1	No Gas	14214	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	685147	2.85	670807	102.14	70	120	
Ge	72	2	He	342790	0.50	338750	101.19	70	120	
Ge	72	1	No Gas	1121596	0.93	1064833	105.33	70	120	

Calibration Standard Report

In	115	1	No Gas	1379611	1.59	1360630	101.40	70	120	
Bi	209	1	No Gas	1419790	0.38	1388986	102.22	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	207CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:11:40-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	8796	0.02
V	51	2	He	15659	0.01
Cr	52	2	He	16540	0.01
Fe	56	2	He	1587020	0.00
Se	78	2	He	549	0.59
As	75	2	He	2414	0.01
Ca	44	2	He	9370	0.00
Na	23	2	He	501570	0.00
Mg	24	2	He	160456	0.00
K	39	2	He	263610	0.00
Mn	55	2	He	12132	0.03
Co	59	2	He	23100	0.01
Ni	60	2	He	6222	0.07
Cu	63	2	He	16721	0.01
Zn	66	2	He	8666	0.02
Al	27	2	He	1537	0.43
B	11	1	No Gas	32073	0.01
Al	27	1	No Gas	57837	0.00
Si	28	1	No Gas	243445	0.00
Ag	107	1	No Gas	36009	0.00
Cd	111	1	No Gas	7269	0.10
Sr	88	1	No Gas	69946	0.00
Mo	95	1	No Gas	13237	0.01
Sn	118	1	No Gas	22460	0.01
Sb	121	1	No Gas	30726	0.00
Ba	137	1	No Gas	11402	0.03
Tl	205	1	No Gas	76266	0.00
Tl	203	1	No Gas	32135	0.00
Pb	208	1	No Gas	105849	0.00
U	238	1	No Gas	111879	0.00
Ca	43	2	He	530	1.55
Sb	121	2	He	15900	0.01
Cu	63	1	No Gas	29629	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	658641	0.13	670807	98.19	70	120	
Ge	72	2	He	334894	0.57	338750	98.86	70	120	
Ge	72	1	No Gas	1095297	0.71	1064833	102.86	70	120	

Calibration Standard Report

In	115	1	No Gas	1361230	1.15	1360630	100.04	70	120	
Bi	209	1	No Gas	1401715	1.30	1388986	100.92	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	208CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:13:47-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	17716	0.01
V	51	2	He	29430	0.00
Cr	52	2	He	32506	0.01
Fe	56	2	He	3137494	0.00
Se	78	2	He	760	0.17
As	75	2	He	4657	0.05
Ca	44	2	He	18339	0.01
Na	23	2	He	820148	0.00
Mg	24	2	He	323922	0.00
K	39	2	He	444023	0.00
Mn	55	2	He	23674	0.01
Co	59	2	He	46627	0.00
Ni	60	2	He	12516	0.01
Cu	63	2	He	33184	0.00
Zn	66	2	He	11922	0.03
Al	27	2	He	2404	0.22
B	11	1	No Gas	53144	0.00
Al	27	1	No Gas	84677	0.00
Si	28	1	No Gas	312163	0.00
Ag	107	1	No Gas	72891	0.00
Cd	111	1	No Gas	15559	0.03
Sr	88	1	No Gas	130546	0.00
Mo	95	1	No Gas	26353	0.01
Sn	118	1	No Gas	43924	0.00
Sb	121	1	No Gas	61786	0.00
Ba	137	1	No Gas	21508	0.01
Tl	205	1	No Gas	157097	0.00
Tl	203	1	No Gas	63789	0.00
Pb	208	1	No Gas	215190	0.00
U	238	1	No Gas	228172	0.00
Ca	43	2	He	1100	0.50
Sb	121	2	He	31719	0.01
Cu	63	1	No Gas	57324	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	653287	0.60	670807	97.39	70	120	
Ge	72	2	He	334265	0.91	338750	98.68	70	120	
Ge	72	1	No Gas	1055891	3.38	1064833	99.16	70	120	

Calibration Standard Report

In	115	1	No Gas	1368777	0.68	1360630	100.60	70	120	
Bi	209	1	No Gas	1414056	0.80	1388986	101.80	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	209CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:15:53-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	184695	0.00
V	51	2	He	282718	0.00
Cr	52	2	He	325729	0.00
Fe	56	2	He	31228540	0.00
Se	78	2	He	4809	0.04
As	75	2	He	47614	0.00
Ca	44	2	He	184734	0.00
Na	23	2	He	6354689	0.00
Mg	24	2	He	3446959	0.00
K	39	2	He	3982095	0.00
Mn	55	2	He	239273	0.00
Co	59	2	He	482836	0.00
Ni	60	2	He	122329	0.00
Cu	63	2	He	332226	0.00
Zn	66	2	He	71572	0.00
Al	27	2	He	19133	0.01
B	11	1	No Gas	442611	0.00
Al	27	1	No Gas	711610	0.00
Si	28	1	No Gas	1773451	0.00
Ag	107	1	No Gas	755481	0.00
Cd	111	1	No Gas	156297	0.00
Sr	88	1	No Gas	1444761	0.00
Mo	95	1	No Gas	270914	0.00
Sn	118	1	No Gas	460443	0.00
Sb	121	1	No Gas	642006	0.00
Ba	137	1	No Gas	225869	0.00
Tl	205	1	No Gas	1768441	0.00
Tl	203	1	No Gas	681766	0.00
Pb	208	1	No Gas	2232388	0.00
U	238	1	No Gas	2535316	0.00
Ca	43	2	He	10915	0.03
Sb	121	2	He	335743	0.00
Cu	63	1	No Gas	567642	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	685500	1.95	670807	102.19	70	120	
Ge	72	2	He	340807	0.57	338750	100.61	70	120	
Ge	72	1	No Gas	1099377	2.98	1064833	103.24	70	120	

Calibration Standard Report

In	115	1	No Gas	1336992	1.71	1360630	98.26	70	120	
Bi	209	1	No Gas	1384389	1.57	1388986	99.67	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	210CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:17:56-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	356999	0.00
V	51	2	He	552560	0.00
Cr	52	2	He	634244	0.00
Fe	56	2	He	60455059	0.00
Se	78	2	He	8822	0.01
As	75	2	He	91219	0.00
Ca	44	2	He	358652	0.00
Na	23	2	He	12245754	0.00
Mg	24	2	He	6627219	0.00
K	39	2	He	7450688	0.00
Mn	55	2	He	467010	0.00
Co	59	2	He	942255	0.00
Ni	60	2	He	239817	0.00
Cu	63	2	He	647926	0.00
Zn	66	2	He	134111	0.00
Al	27	2	He	35185	0.01
B	11	1	No Gas	936141	0.00
Al	27	1	No Gas	1431880	0.00
Si	28	1	No Gas	3108594	0.00
Ag	107	1	No Gas	1593637	0.00
Cd	111	1	No Gas	302586	0.00
Sr	88	1	No Gas	2753242	0.00
Mo	95	1	No Gas	531001	0.00
Sn	118	1	No Gas	888216	0.00
Sb	121	1	No Gas	1404987	0.00
Ba	137	1	No Gas	437828	0.00
Tl	205	1	No Gas	3397792	0.00
Tl	203	1	No Gas	1501543	0.00
Pb	208	1	No Gas	4520443	0.00
U	238	1	No Gas	4843356	0.00
Ca	43	2	He	20669	0.01
Sb	121	2	He	655993	0.00
Cu	63	1	No Gas	1173629	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	655435	2.06	670807	97.71	70	120	
Ge	72	2	He	330826	0.64	338750	97.66	70	120	
Ge	72	1	No Gas	1016594	4.12	1064833	95.47	70	120	

Calibration Standard Report

In	115	1	No Gas	1310100	0.93	1360630	96.29	70	120	
Bi	209	1	No Gas	1334930	1.55	1388986	96.11	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	212_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:21:55-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	100.571	2.027	885361	1.81	100	100.6	90	110	
Be	9	1	No Gas	99.196	1.340	182933	0.25	100	99.2	90	110	
V	51	2	He	96.408	1.443	276689	0.45	100	96.4	90	110	
Cr	52	2	He	96.638	2.234	317928	0.83	100	96.6	90	110	
Fe	56	2	He	9741.657	1.308	30551281	0.22	10000	97.4	90	110	
Se	78	2	He	98.227	1.676	4681	1.76	100	98.2	90	110	
As	75	2	He	98.899	2.312	46930	1.10	100	98.9	90	110	
Ca	44	2	He	9787.796	1.508	182140	0.19	10000	97.9	90	110	
Na	23	2	He	9667.101	1.302	6243066	0.63	10000	96.7	90	110	
Mg	24	2	He	9722.730	1.394	3346399	0.58	10000	97.2	90	110	
K	39	2	He	9791.077	1.718	3846972	0.67	10000	97.9	90	110	
Mn	55	2	He	96.979	1.638	234680	0.32	100	97.0	90	110	
Co	59	2	He	97.416	1.104	475309	0.46	100	97.4	90	110	
Ni	60	2	He	96.976	1.330	120419	0.40	100	97.0	90	110	
Cu	63	2	He	97.186	1.174	326522	0.62	100	97.2	90	110	
Zn	66	2	He	98.024	3.201	70925	1.76	100	98.0	90	110	
Al	27	2	He	99.129	0.495	18482	0.99	100	99.1	90	110	
B	11	1	No Gas	513.426	0.710	449467	1.06	500	102.7	90	110	
Al	27	1	No Gas	93.530	5.444	706284	0.66	100	93.5	90	110	
Si	28	1	No Gas	511.183	5.568	1763294	0.39	500	102.2	90	110	
Ag	107	1	No Gas	97.290	0.827	746907	0.61	100	97.3	90	110	
Cd	111	1	No Gas	98.484	0.568	155016	1.83	100	98.5	90	110	
Sr	88	1	No Gas	98.150	1.292	1410184	1.66	100	98.2	90	110	
Mo	95	1	No Gas	97.843	0.745	269556	0.63	100	97.8	90	110	
Sn	118	1	No Gas	98.435	1.819	455486	0.98	100	98.4	90	110	
Sb	121	1	No Gas	88.156	4.474	635305	0.90	100	88.2	90	110	ICV Main CR1 Failed
Ba	137	1	No Gas	97.291	1.170	221530	0.19	100	97.3	90	110	
Tl	205	1	No Gas	96.938	3.269	1751156	1.67	100	96.9	90	110	
Tl	203	1	No Gas	86.046	2.279	669346	0.99	100	86.0	90	110	ICV Main CR1 Failed
Pb	208	1	No Gas	94.965	4.121	2259442	3.04	100	95.0	90	110	
U	238	1	No Gas	96.470	0.989	2487760	1.19	100	96.5	90	110	
Ca	43	2	He	10122.649	2.795	10914	3.96	10000	101.2	90	110	
Sb	121	2	He	97.381	1.623	330751	0.94	100	97.4	90	110	
Ti	47	2	He	92.732	0.405	10271	1.24	100	92.7	90	110	
Cu	63	1	No Gas	92.688	4.966	564432	0.84	100	92.7	90	110	
Se	82	1	No Gas	101.185	4.513	7777	3.14	100	101.2	90	110	

QC ISTD Table

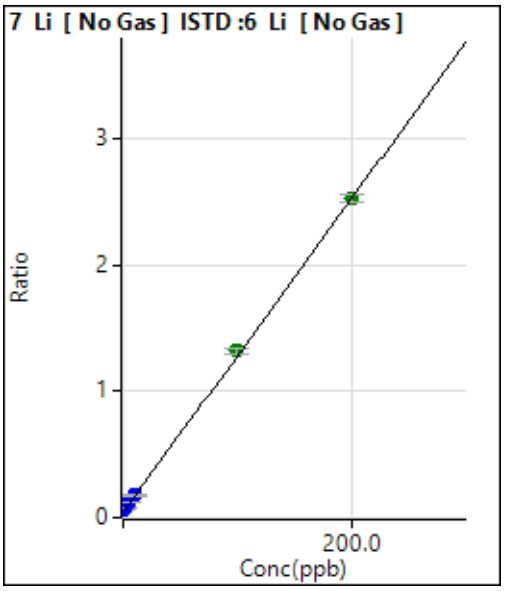
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	678469	1.57	670807	101.14	70	120	
Ge	72	2	He	343008	1.45	338750	101.26	70	120	
Ge	72	1	No Gas	1076637	4.59	1064833	101.11	70	120	
In	115	1	No Gas	1359585	1.36	1360630	99.92	70	120	
Bi	209	1	No Gas	1419194	1.63	1388986	102.17	70	120	

Calibration for 212_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	205CALB.d	CAL BLK	07/20/2022 21:07:27
2	206CALS.d	2/10/200	07/20/2022 21:09:34
3	207CALS.d	5/25/500	07/20/2022 21:11:40
4	208CALS.d	10/50/100	07/20/2022 21:13:47
5	209CALS.d	100/500/10K	07/20/2022 21:15:53
6	210CALS.d	200/1000/20K	07/20/2022 21:17:56

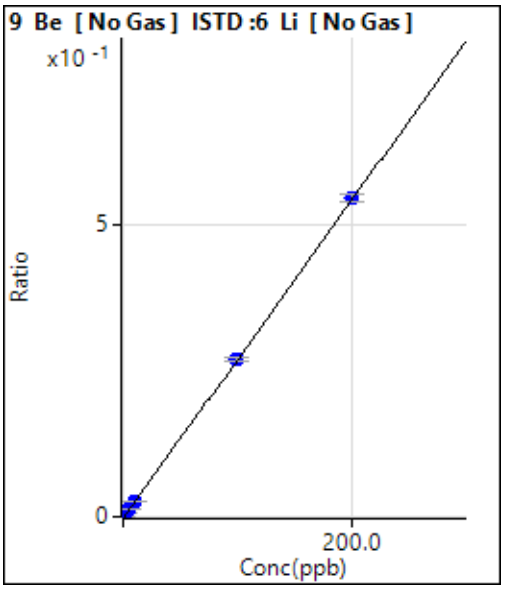
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37730.40	0.0563	P	1.9	
2	☐	2.000	1.799	53819.05	0.0786	P	3.0	-10.1
3	☐	5.000	4.755	75939.85	0.1153	P	1.5	-4.9
4	☐	10.000	9.629	114860.54	0.1758	P	1.2	-3.7
5	☐	100.000	101.747	904309.91	1.3197	A	2.8	1.7
6	☐	200.000	199.153	1657050.03	2.5292	A	3.0	-0.4

y = 0.0124 * x + 0.0563
R = 0.9999
DL = 0.2614 ppb
BEC = 4.531 ppb

Weight: <None>
Min Conc: <None>

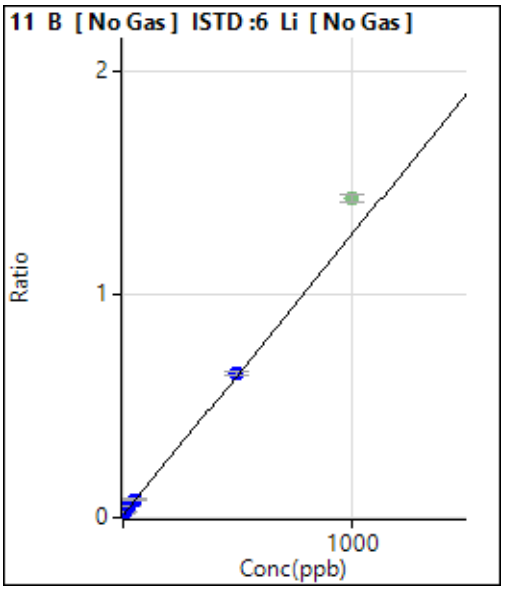


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	18.6	
2	☐	2.000	1.879	3535.47	0.0052	P	1.1	-6.1
3	☐	5.000	4.894	8796.16	0.0134	P	1.4	-2.1
4	☐	10.000	9.957	17716.22	0.0271	P	1.6	-0.4
5	☐	100.000	99.132	184695.47	0.2695	P	1.6	-0.9
6	☐	200.000	200.440	356998.94	0.5448	P	2.2	0.2

y = 0.0027 * x + 5.4519E-005
R = 1.0000
DL = 0.01118 ppb
BEC = 0.02006 ppb

Weight: <None>
Min Conc: <None>

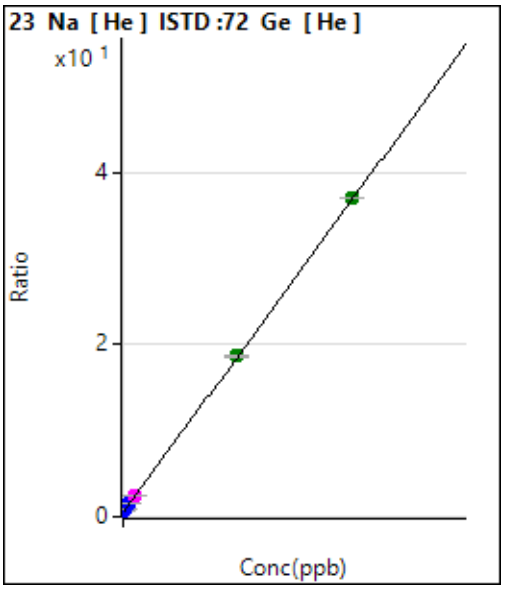
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12882.64	0.0192	P	2.5	
2	☐	10.000	8.415	20378.20	0.0298	P	1.9	-15.9
3	☐	25.000	23.533	32073.39	0.0487	P	1.5	-5.9
4	☐	50.000	49.599	53143.66	0.0814	P	2.7	-0.8
5	☐	500.000	500.145	442611.22	0.6459	P	2.9	0.0
6	☑	1000.000		936140.51	1.4288	A	2.8	

y = 0.0013 * x + 0.0192
R = 1.0000
DL = 1.172 ppb
BEC = 15.33 ppb

Weight: <None>
Min Conc: <None>

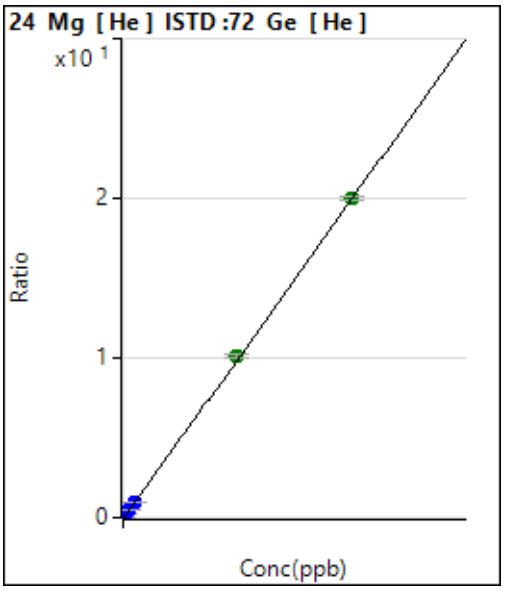


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230791.51	0.6813	P	0.4	
2	☐	200.000	171.583	340140.44	0.9923	P	1.2	-14.2
3	☐	500.000	450.459	501570.40	1.4978	P	1.1	-9.9
4	☐	1000.000	977.912	820148.48	2.4538	M	4.0	-2.2
5	☐	10000.00	9911.818	6354689.07	18.6465	A	1.1	-0.9
6	☐	20000.00	20046.71	12245754.4	37.0160	A	0.3	0.2

y = 0.0018 * x + 0.6813
R = 1.0000
DL = 4.646 ppb
BEC = 375.9 ppb

Weight: <None>
Min Conc: <None>

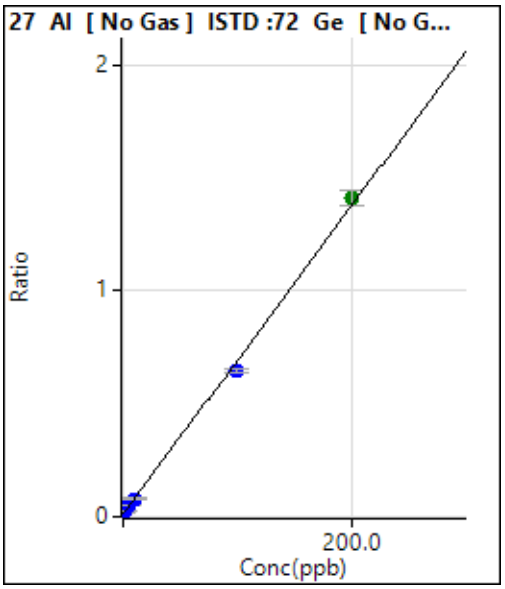
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0009	P	28.7	
2	☐	200.000	185.497	64120.90	0.1871	P	2.8	-7.3
3	☐	500.000	476.543	160455.53	0.4791	P	0.5	-4.7
4	☐	1000.000	964.807	323922.24	0.9691	P	0.3	-3.5
5	☐	10000.00	10078.69	3446959.22	10.1144	A	2.1	0.8
6	☐	20000.00	19963.14	6627218.86	20.0330	A	0.8	-0.2

y = 0.0010 * x + 9.3527E-004
R = 1.0000
DL = 0.8024 ppb
BEC = 0.9321 ppb

Weight: <None>
Min Conc: <None>

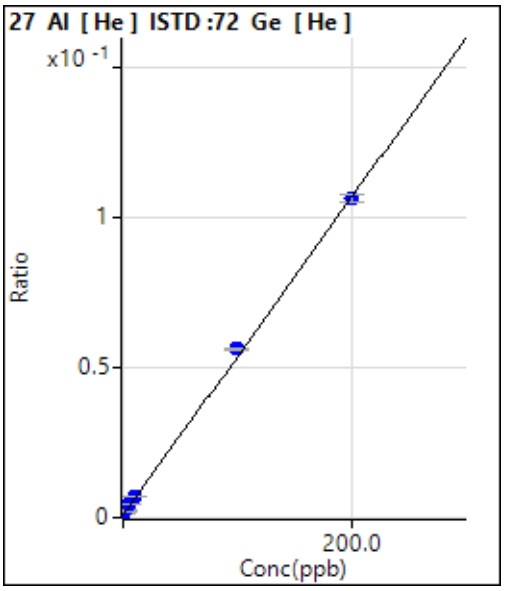


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20477.54	0.0192	P	4.4	
2	☐	2.000	1.454	32678.76	0.0291	P	3.1	-27.3
3	☐	5.000	4.925	57836.94	0.0528	P	2.3	-1.5
4	☐	10.000	8.945	84676.96	0.0802	P	2.8	-10.5
5	☐	100.000	92.157	711609.81	0.6477	P	3.3	-7.8
6	☐	200.000	203.981	1431879.93	1.4103	A	4.7	2.0

y = 0.0068 * x + 0.0192
R = 0.9990
DL = 0.3722 ppb
BEC = 2.819 ppb

Weight: <None>
Min Conc: <None>

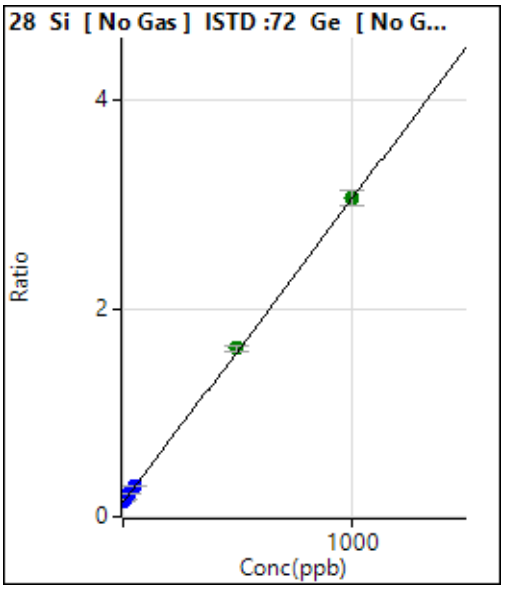
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0014	P	10.6	
2	☐	2.000	1.716	793.37	0.0023	P	14.6	-14.2
3	☐	5.000	6.009	1536.78	0.0046	P	6.2	20.2
4	☐	10.000	10.921	2403.58	0.0072	P	4.3	9.2
5	☐	100.000	103.387	19133.39	0.0561	P	1.1	3.4
6	☐	200.000	198.238	35184.74	0.1064	P	2.3	-0.9

y = 5.2940E-004 * x + 0.0014
R = 0.9998
DL = 0.8476 ppb
BEC = 2.658 ppb

Weight: <None>
Min Conc: <None>

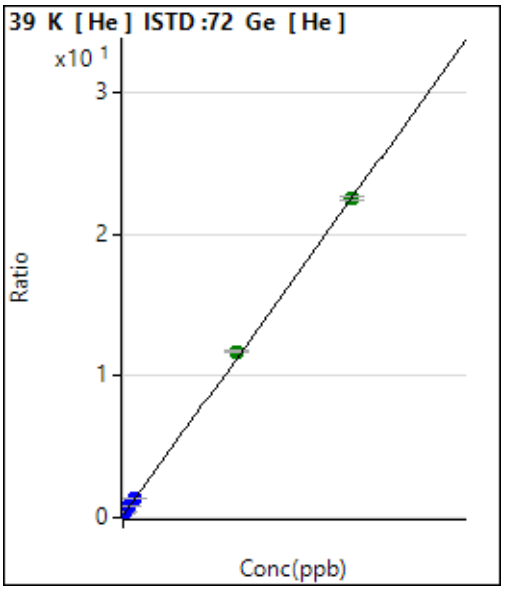


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160765.18	0.1510	P	1.7	
2	☐	10.000	7.008	192241.55	0.1714	P	1.7	-29.9
3	☐	25.000	24.458	243444.90	0.2223	P	0.9	-2.2
4	☐	50.000	49.712	312162.91	0.2958	P	2.9	-0.6
5	☐	500.000	502.219	1773451.01	1.6142	A	3.3	0.4
6	☐	1000.000	998.948	3108594.33	3.0614	A	4.3	-0.1

y = 0.0029 * x + 0.1510
R = 1.0000
DL = 2.655 ppb
BEC = 51.83 ppb

Weight: <None>
Min Conc: <None>

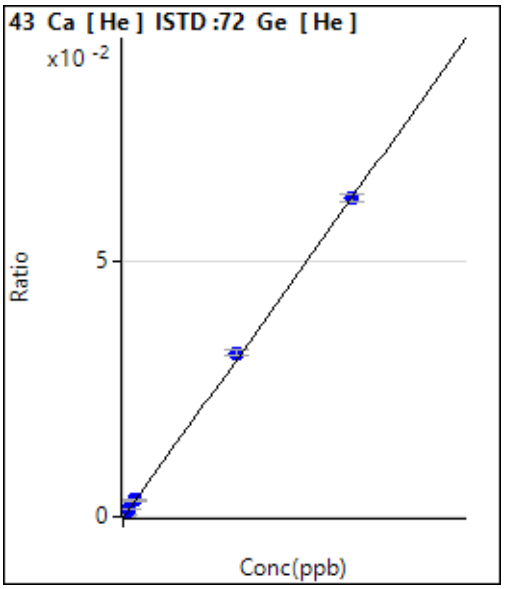
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90065.66	0.2659	P	1.5	
2	☐	200.000	179.450	159937.67	0.4666	P	1.0	-10.3
3	☐	500.000	466.082	263610.33	0.7872	P	1.3	-6.8
4	☐	1000.000	950.000	444023.30	1.3284	P	1.1	-5.0
5	☐	10000.00	10209.39	3982095.46	11.6850	A	1.4	2.1
6	☐	20000.00	19898.85	7450688.22	22.5225	A	1.1	-0.5

y = 0.0011 * x + 0.2659
R = 0.9999
DL = 10.56 ppb
BEC = 237.7 ppb

Weight: <None>
Min Conc: <None>

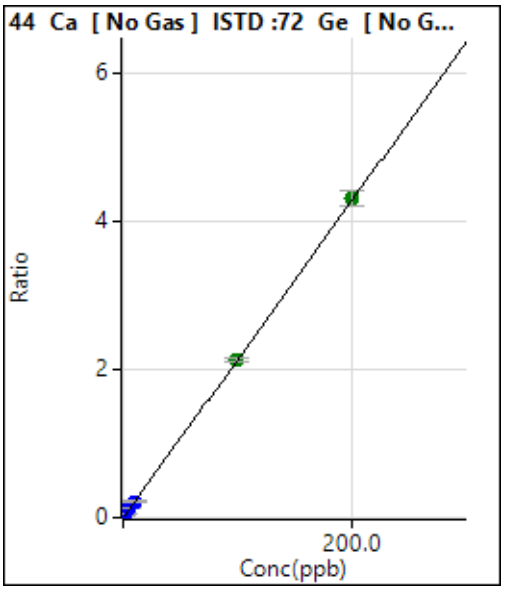


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.6	
2	☐	200.000	136.175	173.34	0.0005	P	14.4	-31.9
3	☐	500.000	479.578	530.02	0.0016	P	7.7	-4.1
4	☐	1000.000	1025.028	1100.05	0.0033	P	6.5	2.5
5	☐	10000.00	10191.35	10914.54	0.0320	P	3.7	1.9
6	☐	20000.00	19904.21	20669.11	0.0625	P	1.9	-0.5

y = 3.1351E-006 * x + 7.8713E-005
R = 0.9999
DL = 16.27 ppb
BEC = 25.11 ppb

Weight: <None>
Min Conc: <None>

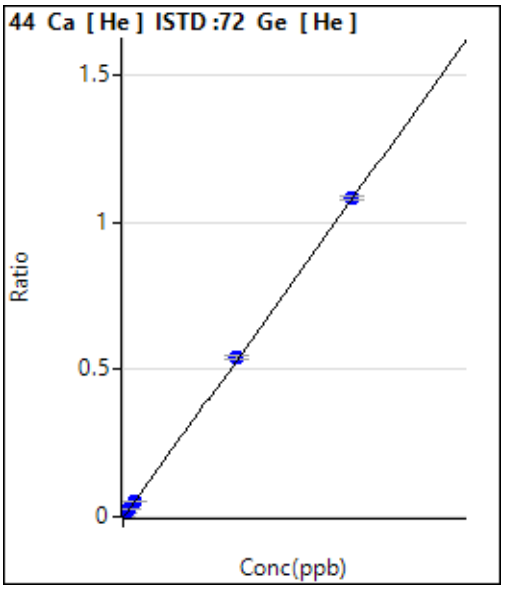
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18158.91	0.0171	P	1.7	
2	☐	2.000	1.796	62237.36	0.0555	P	1.7	-10.2
3	☐	5.000	4.718	129292.65	0.1180	P	0.7	-5.6
4	☐	10.000	9.490	232342.67	0.2202	P	3.3	-5.1
5	☐	100.000	98.755	2341846.01	2.1310	A	2.1	-1.2
6	☐	200.000	200.657	4378805.25	4.3124	A	4.2	0.3

y = 0.0214 * x + 0.0171
R = 1.0000
DL = 0.04012 ppb
BEC = 0.7967 ppb

Weight: <None>
Min Conc: <None>

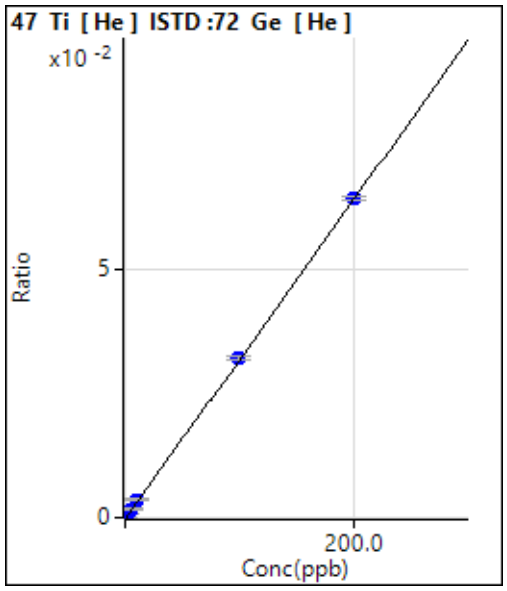


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0013	P	5.6	
2	☐	200.000	194.347	4044.00	0.0118	P	5.8	-2.8
3	☐	500.000	493.274	9369.97	0.0280	P	0.7	-1.3
4	☐	1000.000	990.018	18339.14	0.0549	P	2.2	-1.0
5	☐	10000.00	9990.860	184733.80	0.5421	P	1.5	-0.1
6	☐	20000.00	20005.29	358652.37	1.0841	P	0.8	0.0

y = 5.4129E-005 * x + 0.0013
R = 1.0000
DL = 3.939 ppb
BEC = 23.63 ppb

Weight: <None>
Min Conc: <None>

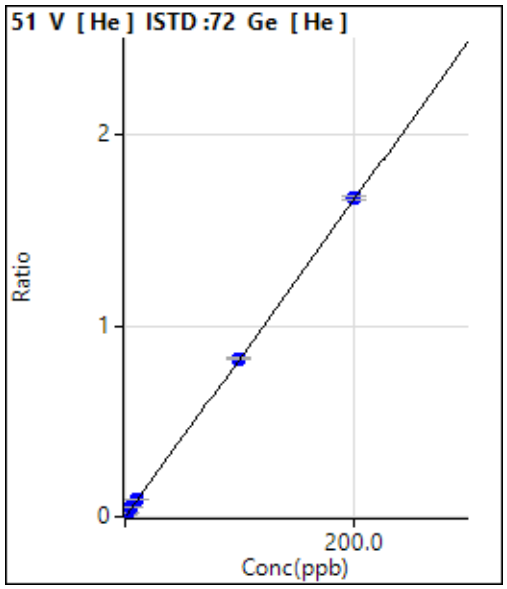
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.838	210.01	0.0006	P	4.7	-8.1
3	☐	5.000	5.246	573.35	0.0017	P	6.7	4.9
4	☐	10.000	11.030	1196.74	0.0036	P	7.3	10.3
5	☐	100.000	100.092	11014.61	0.0323	P	2.9	0.1
6	☐	200.000	199.898	21346.85	0.0645	P	0.9	-0.1

y = 3.2269E-004 * x + 1.9625E-005
R = 1.0000
DL = 0.316 ppb
BEC = 0.06082 ppb

Weight: <None>
Min Conc: <None>

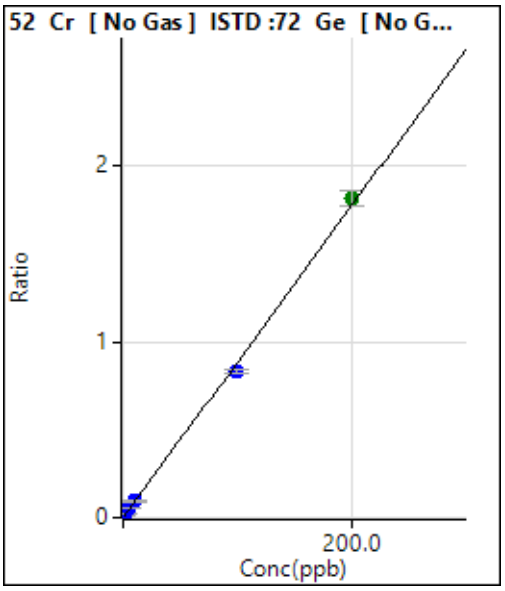


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2181.30	0.0064	P	4.8	
2	☐	2.000	1.908	7637.72	0.0223	P	1.6	-4.6
3	☐	5.000	4.857	15659.00	0.0468	P	1.7	-2.9
4	☐	10.000	9.831	29430.44	0.0880	P	1.0	-1.7
5	☐	100.000	99.158	282718.06	0.8296	P	1.3	-0.8
6	☐	200.000	200.434	552559.77	1.6703	P	1.2	0.2

y = 0.0083 * x + 0.0064
R = 1.0000
DL = 0.1123 ppb
BEC = 0.7756 ppb

Weight: <None>
Min Conc: <None>

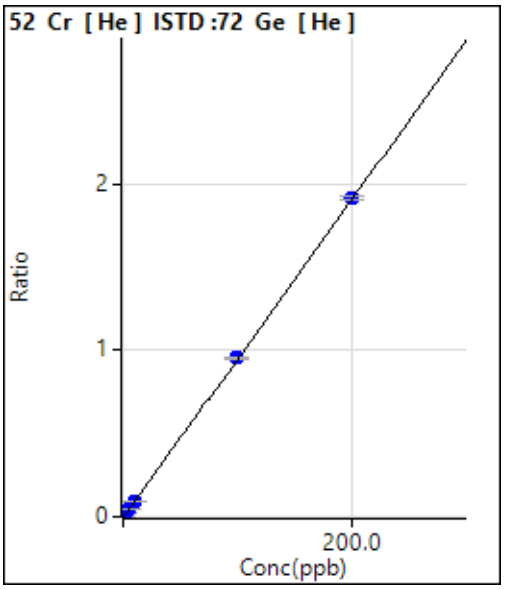
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9583.51	0.0090	P	6.6	
2	☐	2.000	1.761	27614.72	0.0246	P	2.5	-12.0
3	☐	5.000	4.553	54097.07	0.0494	P	0.5	-8.9
4	☐	10.000	9.565	98986.12	0.0939	P	4.9	-4.3
5	☐	100.000	92.775	914108.08	0.8320	P	3.1	-7.2
6	☐	200.000	203.648	1843297.47	1.8155	A	4.6	1.8

y = 0.0089 * x + 0.0090
R = 0.9991
DL = 0.2016 ppb
BEC = 1.015 ppb

Weight: <None>
Min Conc: <None>

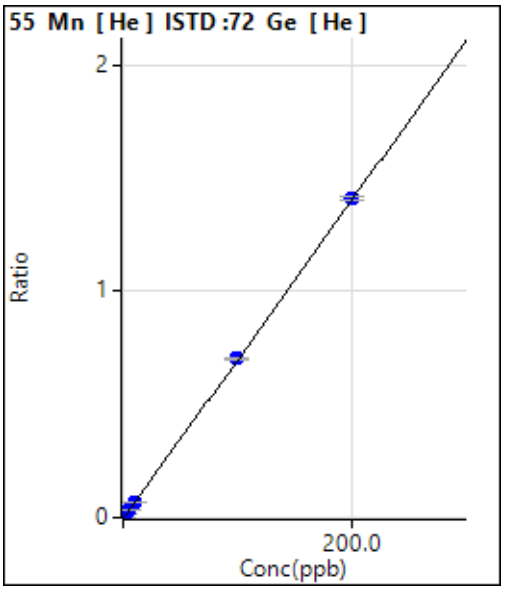


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1030.06	0.0030	P	2.4	
2	☐	2.000	1.875	7188.67	0.0210	P	1.5	-6.2
3	☐	5.000	4.847	16540.17	0.0494	P	1.7	-3.1
4	☐	10.000	9.852	32505.55	0.0972	P	1.0	-1.5
5	☐	100.000	99.641	325728.96	0.9558	P	1.1	-0.4
6	☐	200.000	200.192	634243.84	1.9173	P	1.2	0.1

y = 0.0096 * x + 0.0030
R = 1.0000
DL = 0.02331 ppb
BEC = 0.318 ppb

Weight: <None>
Min Conc: <None>

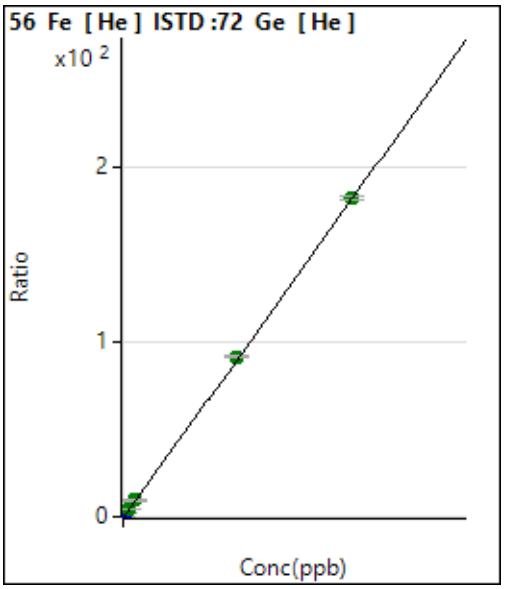
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	416.68	0.0012	P	20.0	
2	☐	2.000	1.970	5177.73	0.0151	P	3.5	-1.5
3	☐	5.000	4.968	12132.26	0.0362	P	3.1	-0.6
4	☐	10.000	9.881	23674.17	0.0708	P	2.0	-1.2
5	☐	100.000	99.510	239273.13	0.7021	P	1.3	-0.5
6	☐	200.000	200.252	467009.84	1.4117	P	0.8	0.1

y = 0.0070 * x + 0.0012
R = 1.0000
DL = 0.1049 ppb
BEC = 0.1746 ppb

Weight: <None>
Min Conc: <None>

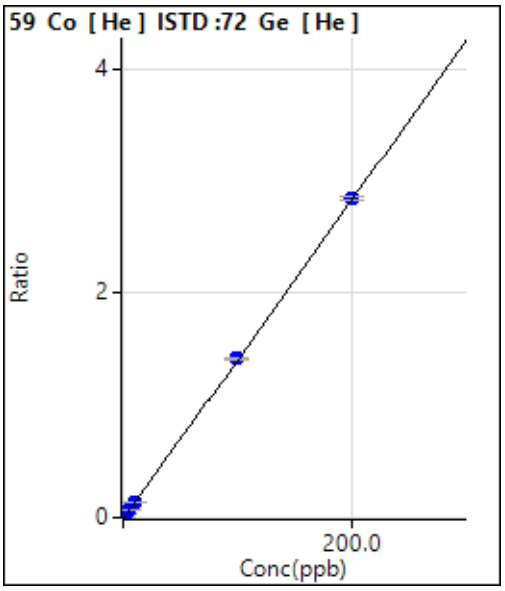


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10324.05	0.0305	P	2.3	
2	☐	200.000	186.331	594274.42	1.7337	P	1.9	-6.8
3	☐	500.000	515.097	1587020.24	4.7390	A	0.9	3.0
4	☐	1000.000	1023.570	3137494.12	9.3870	A	1.6	2.4
5	☐	10000.00	10021.25	31228539.5	91.6358	A	1.4	0.2
6	☐	20000.00	19987.95	60455059.1	182.742	A	0.8	-0.1

y = 0.0091 * x + 0.0305
R = 1.0000
DL = 0.2263 ppb
BEC = 3.334 ppb

Weight: <None>
Min Conc: <None>

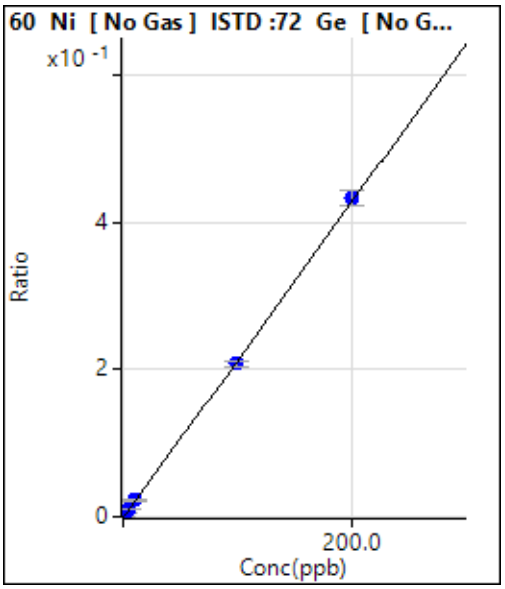
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.2	
2	☐	2.000	1.911	9340.01	0.0272	P	4.3	-4.5
3	☐	5.000	4.844	23099.87	0.0690	P	2.4	-3.1
4	☐	10.000	9.801	46626.79	0.1395	P	1.2	-2.0
5	☐	100.000	99.591	482836.23	1.4168	P	1.0	-0.4
6	☐	200.000	200.219	942255.48	2.8483	P	0.8	0.1

y = 0.0142 * x + 5.9088E-005
R = 1.0000
DL = 0.006253 ppb
BEC = 0.004154 ppb

Weight: <None>
Min Conc: <None>

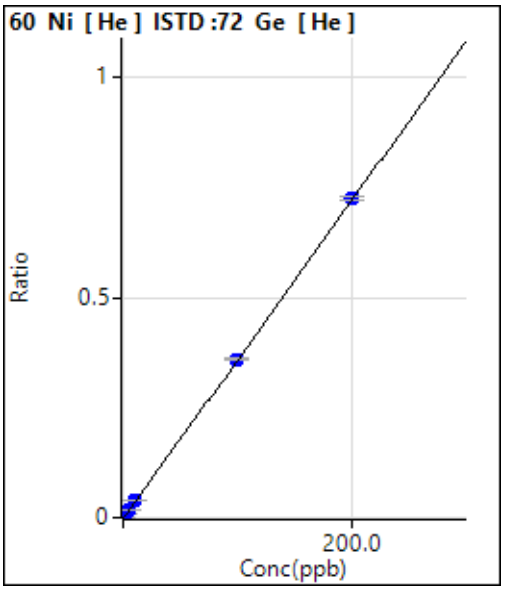


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	773.37	0.0007	P	8.7	
2	☐	2.000	1.742	5004.34	0.0045	P	2.0	-12.9
3	☐	5.000	4.680	11785.28	0.0108	P	3.3	-6.4
4	☐	10.000	10.021	23437.21	0.0222	P	3.0	0.2
5	☐	100.000	96.565	228288.69	0.2078	P	2.8	-3.4
6	☐	200.000	201.727	439871.02	0.4332	P	4.6	0.9

y = 0.0021 * x + 7.2578E-004
R = 0.9998
DL = 0.08832 ppb
BEC = 0.3385 ppb

Weight: <None>
Min Conc: <None>

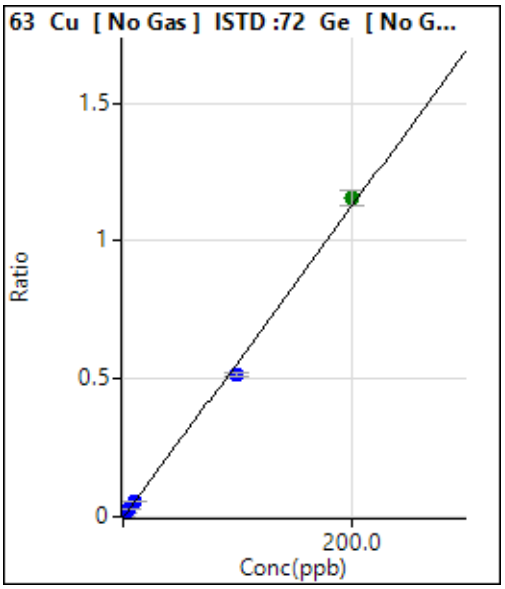
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0007	P	18.7	
2	☐	2.000	1.925	2610.30	0.0076	P	2.6	-3.8
3	☐	5.000	4.958	6221.53	0.0186	P	4.5	-0.8
4	☐	10.000	10.179	12515.95	0.0374	P	1.0	1.8
5	☐	100.000	99.145	122328.82	0.3589	P	0.8	-0.9
6	☐	200.000	200.421	239817.44	0.7249	P	1.2	0.2

y = 0.0036 * x + 6.5930E-004
R = 1.0000
DL = 0.1022 ppb
BEC = 0.1824 ppb

Weight: <None>
Min Conc: <None>

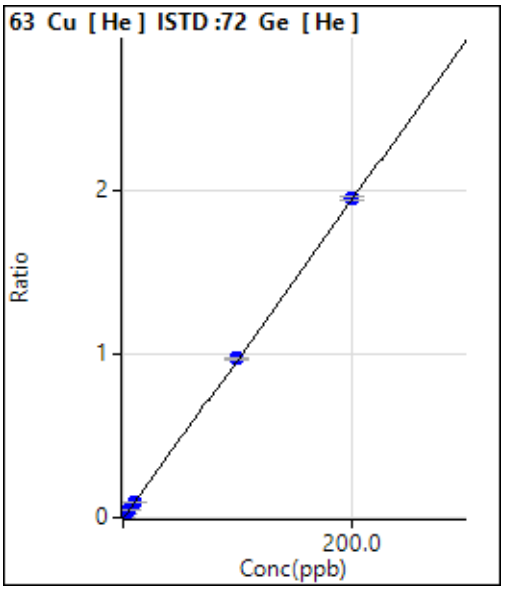


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.53	0.0019	P	5.2	
2	☐	2.000	1.909	14214.29	0.0127	P	4.1	-4.5
3	☐	5.000	4.456	29629.29	0.0270	P	1.6	-10.9
4	☐	10.000	9.287	57324.30	0.0543	P	2.5	-7.1
5	☐	100.000	91.199	567641.61	0.5166	P	3.0	-8.8
6	☐	200.000	204.450	1173628.76	1.1558	A	4.3	2.2

y = 0.0056 * x + 0.0019
R = 0.9987
DL = 0.05259 ppb
BEC = 0.3368 ppb

Weight: <None>
Min Conc: <None>

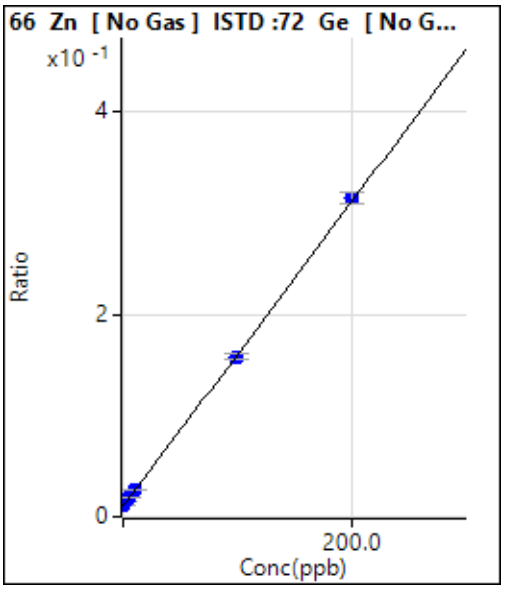
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	980.06	0.0029	P	15.3	
2	☐	2.000	1.961	7555.57	0.0220	P	3.1	-2.0
3	☐	5.000	4.816	16720.57	0.0499	P	0.5	-3.7
4	☐	10.000	9.869	33184.16	0.0993	P	0.5	-1.3
5	☐	100.000	99.522	332226.26	0.9748	P	0.9	-0.5
6	☐	200.000	200.251	647925.77	1.9586	P	0.9	0.1

y = 0.0098 * x + 0.0029
R = 1.0000
DL = 0.1364 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

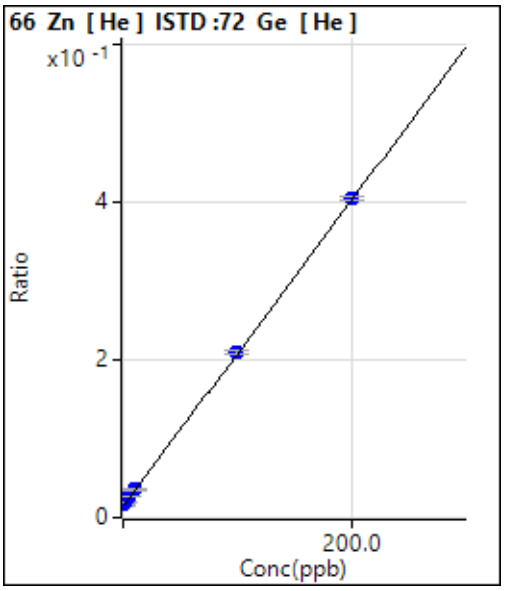


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12515.97	0.0118	P	3.3	
2	☐	2.000	1.971	16506.93	0.0147	P	0.6	-1.5
3	☐	5.000	4.571	20402.35	0.0186	P	2.4	-8.6
4	☐	10.000	9.903	28119.50	0.0266	P	3.3	-1.0
5	☐	100.000	97.093	173345.95	0.1578	P	3.2	-2.9
6	☐	200.000	201.469	319618.79	0.3148	P	4.1	0.7

y = 0.0015 * x + 0.0118
R = 0.9999
DL = 0.7632 ppb
BEC = 7.815 ppb

Weight: <None>
Min Conc: <None>

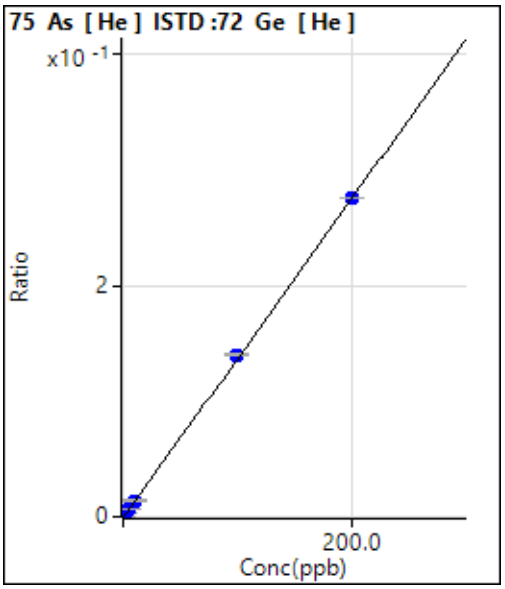
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5517.90	0.0163	P	6.4	
2	☐	2.000	1.584	6638.42	0.0194	P	6.3	-20.8
3	☐	5.000	4.932	8666.24	0.0259	P	1.3	-1.4
4	☐	10.000	9.972	11922.08	0.0357	P	4.2	-0.3
5	☐	100.000	99.664	71571.93	0.2100	P	1.3	-0.3
6	☐	200.000	200.175	134111.09	0.4054	P	1.3	0.1

y = 0.0019 * x + 0.0163
R = 1.0000
DL = 1.609 ppb
BEC = 8.381 ppb

Weight: <None>
Min Conc: <None>

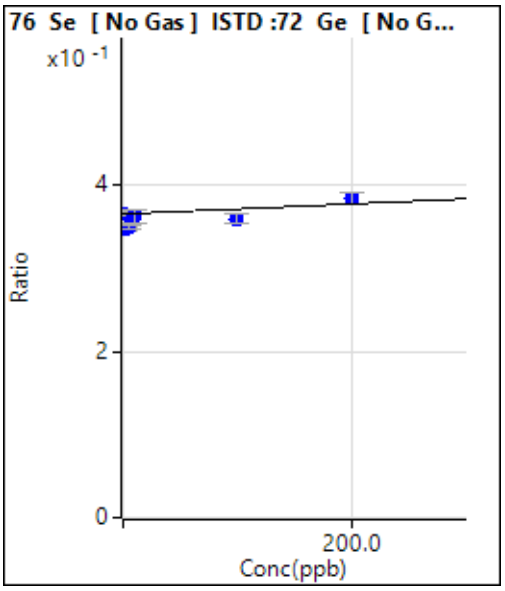


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	17.9	
2	☐	2.000	1.982	1054.49	0.0031	P	3.9	-0.9
3	☐	5.000	4.974	2413.56	0.0072	P	0.8	-0.5
4	☐	10.000	9.849	4657.49	0.0139	P	2.7	-1.5
5	☐	100.000	100.976	47613.54	0.1397	P	1.1	1.0
6	☐	200.000	199.521	91219.13	0.2757	P	0.3	-0.2

y = 0.0014 * x + 3.4123E-004
R = 1.0000
DL = 0.1324 ppb
BEC = 0.2472 ppb

Weight: <None>
Min Conc: <None>

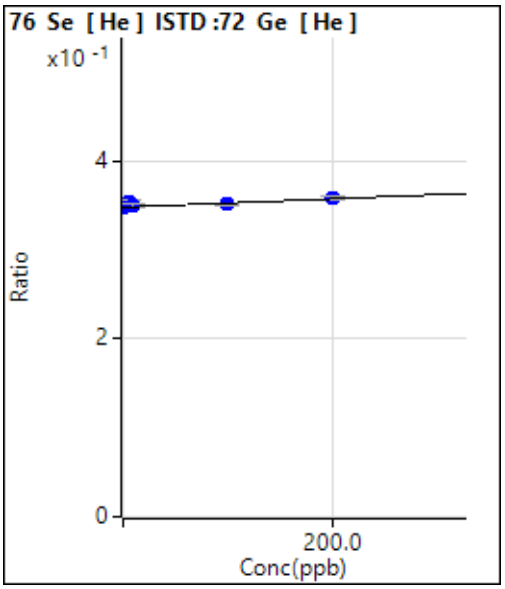
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	389615.57	0.3659	P	1.5	
2	☐	2.000	-307.857	389148.84	0.3470	P	1.2	-15492.
3	☐	5.000	-261.349	383167.95	0.3498	P	1.3	-5327.0
4	☐	10.000	-43.103	383238.18	0.3633	P	4.1	-531.0
5	☐	100.000	-90.749	395932.68	0.3604	P	3.0	-190.7
6	☐	200.000	307.787	390915.79	0.3849	P	3.3	53.9

y = 6.1562E-005 * x + 0.3659
R = 0.7903
DL = 265.8 ppb
BEC = 5944 ppb

Weight: <None>
Min Conc: <None>

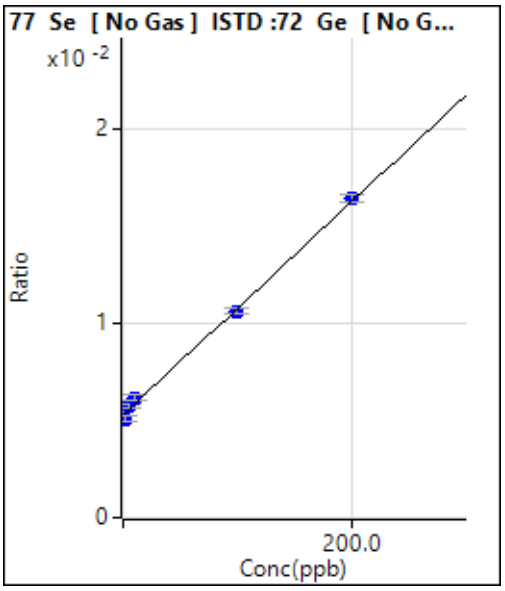


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	117895.22	0.3480	P	0.6	
2	☐	2.000	79.129	120602.08	0.3518	P	0.9	3856.5
3	☐	5.000	130.345	118651.35	0.3543	P	1.3	2506.9
4	☐	10.000	24.896	116728.09	0.3492	P	1.0	149.0
5	☐	100.000	81.283	119939.62	0.3519	P	0.6	-18.7
6	☐	200.000	204.709	118396.13	0.3579	P	1.2	2.4

y = 4.8025E-005 * x + 0.3480
R = 0.7505
DL = 123.2 ppb
BEC = 7247 ppb

Weight: <None>
Min Conc: <None>

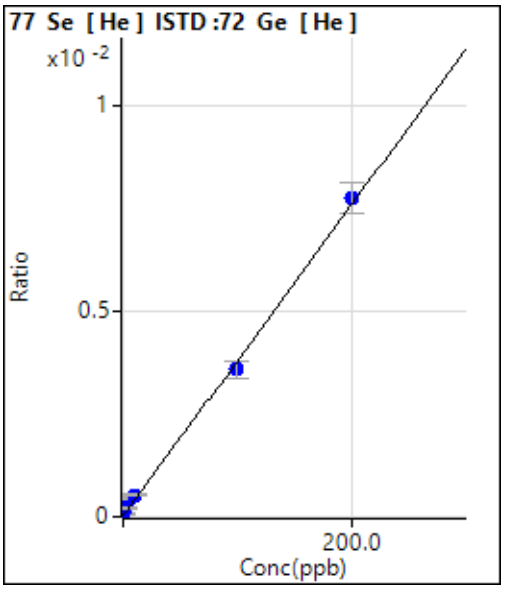
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5731.34	0.0054	P	6.6	
2	☐	2.000	-5.873	5678.00	0.0051	P	6.1	-393.7
3	☐	5.000	6.968	6314.92	0.0058	P	3.7	39.4
4	☐	10.000	14.585	6521.70	0.0062	P	5.1	45.8
5	☐	100.000	95.968	11695.24	0.0106	P	2.0	-4.0
6	☐	200.000	201.816	16697.29	0.0164	P	2.6	0.9

y = 5.4750E-005 * x + 0.0054
R = 0.9985
DL = 19.4 ppb
BEC = 98.36 ppb

Weight: <None>
Min Conc: <None>

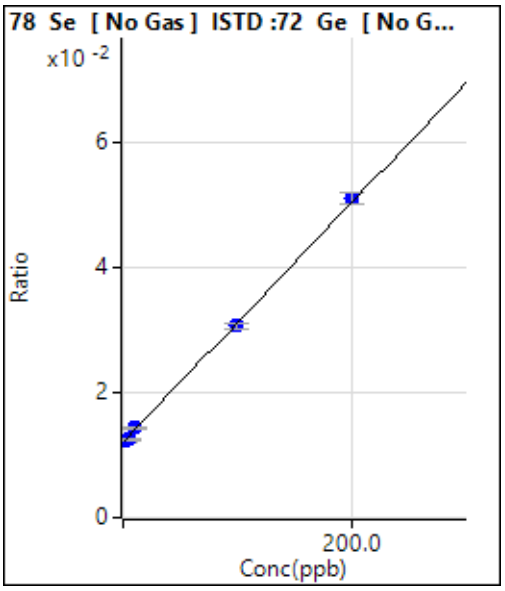


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.1	
2	☐	2.000	3.832	70.00	0.0002	P	14.3	91.6
3	☐	5.000	10.010	146.67	0.0004	P	16.2	100.2
4	☐	10.000	12.126	173.33	0.0005	P	8.2	21.3
5	☐	100.000	92.962	1220.08	0.0036	P	10.8	-7.0
6	☐	200.000	203.269	2566.96	0.0078	P	9.1	1.6

y = 3.7879E-005 * x + 5.9053E-005
R = 0.9987
DL = 2.344 ppb
BEC = 1.559 ppb

Weight: <None>
Min Conc: <None>

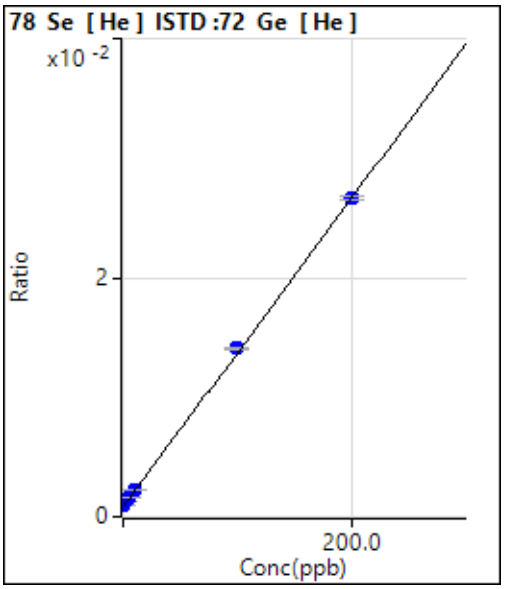
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13160.00	0.0124	P	6.2	
2	☐	2.000	-1.167	13610.42	0.0121	P	3.7	-158.3
3	☐	5.000	0.648	13673.81	0.0125	P	2.2	-87.0
4	☐	10.000	10.616	15182.08	0.0144	P	2.8	6.2
5	☐	100.000	95.448	33599.01	0.0306	P	3.4	-4.6
6	☐	200.000	202.386	51789.70	0.0510	P	4.1	1.2

y = 1.9091E-004 * x + 0.0124
R = 0.9995
DL = 12.11 ppb
BEC = 64.74 ppb

Weight: <None>
Min Conc: <None>

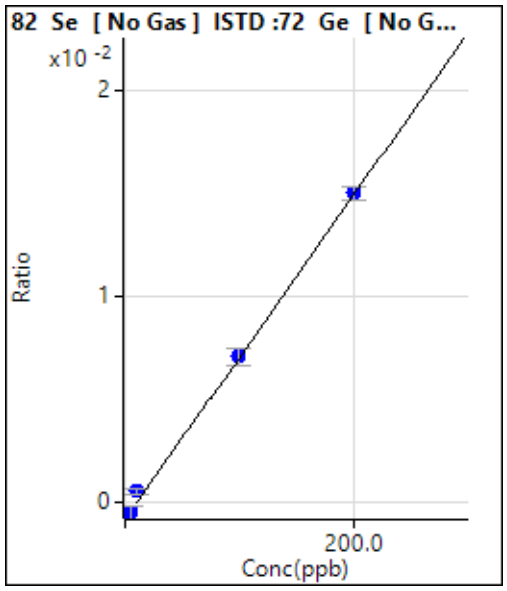


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	327.34	0.0010	P	7.1	
2	☐	2.000	2.067	422.68	0.0012	P	1.9	3.3
3	☐	5.000	5.223	549.34	0.0016	P	3.4	4.5
4	☐	10.000	10.128	760.02	0.0023	P	0.8	1.3
5	☐	100.000	101.812	4808.87	0.0141	P	1.3	1.8
6	☐	200.000	199.081	8822.23	0.0267	P	0.7	-0.5

y = 1.2910E-004 * x + 9.6621E-004
R = 0.9999
DL = 1.586 ppb
BEC = 7.484 ppb

Weight: <None>
Min Conc: <None>

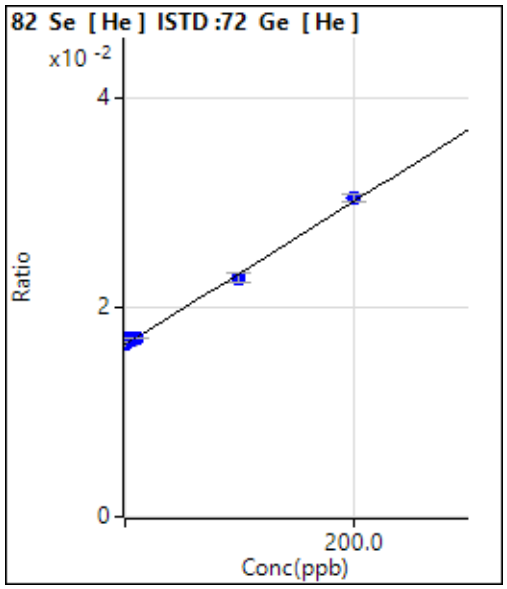
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-796.78	-0.0007	P	-54.8	
2	☐	2.000	2.169	-649.43	-0.0006	P	-141.	8.4
3	☐	5.000	3.266	-537.49	-0.0005	P	-106.	-34.7
4	☐	10.000	16.138	560.90	0.0005	P	51.3	61.4
5	☐	100.000	99.273	7795.94	0.0071	P	12.3	-0.7
6	☐	200.000	200.098	15287.09	0.0150	P	4.1	0.0

y = 7.8863E-005 * x - 7.4756E-004
R = 0.9994
DL = 15.58 ppb
BEC = -9.479 ppb

Weight: <None>
Min Conc: <None>

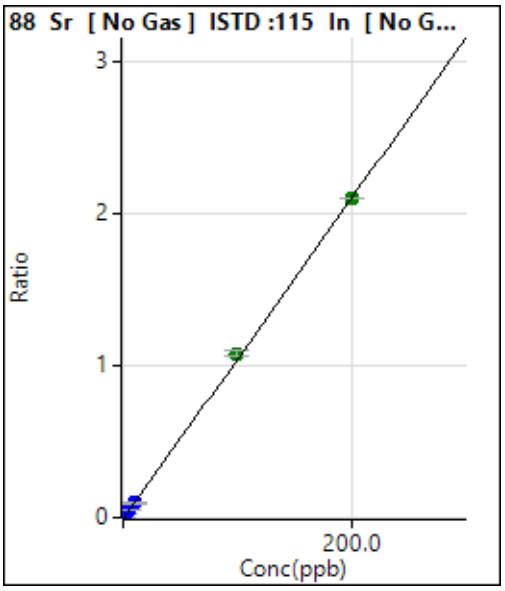


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5591.27	0.0165	P	2.3	
2	☐	2.000	8.706	5861.43	0.0171	P	2.1	335.3
3	☐	5.000	4.702	5634.62	0.0168	P	2.3	-6.0
4	☐	10.000	8.208	5704.63	0.0171	P	0.5	-17.9
5	☐	100.000	92.368	7775.73	0.0228	P	4.3	-7.6
6	☐	200.000	203.846	10070.59	0.0304	P	3.0	1.9

y = 6.8344E-005 * x + 0.0165
R = 0.9982
DL = 16.75 ppb
BEC = 241.5 ppb

Weight: <None>
Min Conc: <None>

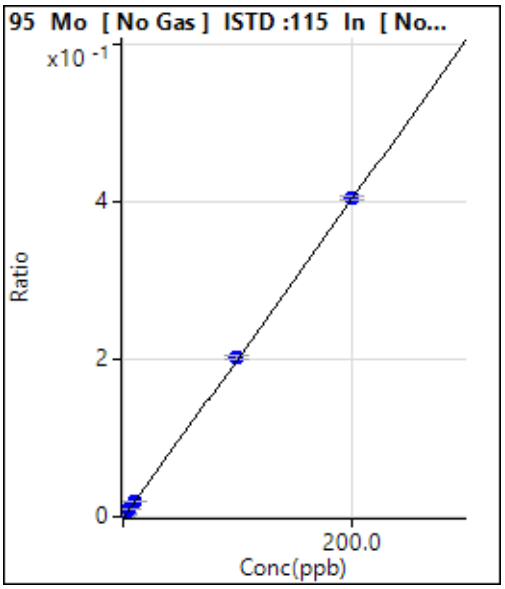
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	653.36	0.0005	P	5.1	
2	☐	2.000	1.822	27207.87	0.0197	P	2.5	-8.9
3	☐	5.000	4.819	69945.90	0.0514	P	2.4	-3.6
4	☐	10.000	8.984	130545.50	0.0954	P	1.1	-10.2
5	☐	100.000	102.284	1444761.23	1.0809	A	2.9	2.3
6	☐	200.000	198.915	2753242.46	2.1016	A	0.6	-0.5

y = 0.0106 * x + 4.8044E-004
R = 0.9999
DL = 0.007022 ppb
BEC = 0.04548 ppb

Weight: <None>
Min Conc: <None>

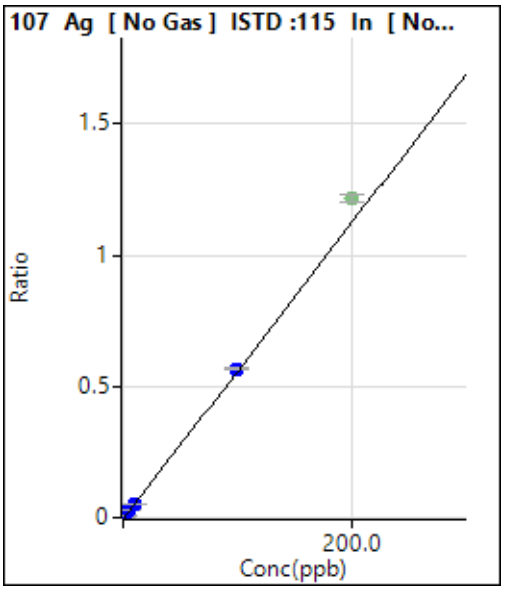


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.824	5111.09	0.0037	P	6.3	-8.8
3	☐	5.000	4.794	13236.83	0.0097	P	1.3	-4.1
4	☐	10.000	9.496	26353.07	0.0193	P	2.0	-5.0
5	☐	100.000	100.004	270914.09	0.2027	P	1.4	0.0
6	☐	200.000	200.030	531001.28	0.4053	P	1.3	0.0

y = 0.0020 * x + 9.7236E-006
R = 1.0000
DL = 0.01247 ppb
BEC = 0.004799 ppb

Weight: <None>
Min Conc: <None>

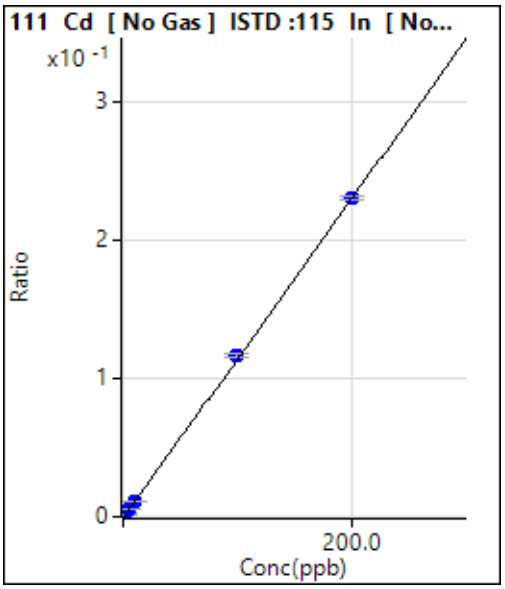
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	40.0	
2	☐	2.000	1.859	14704.99	0.0107	P	3.3	-7.1
3	☐	5.000	4.657	36009.26	0.0265	P	2.0	-6.9
4	☐	10.000	9.403	72890.65	0.0533	P	1.4	-6.0
5	☐	100.000	100.080	755480.59	0.5652	P	1.4	0.1
6	☑	200.000		1593637.32	1.2165	A	2.1	

y = 0.0056 * x + 1.6899E-004
R = 1.0000
DL = 0.03594 ppb
BEC = 0.02993 ppb

Weight: <None>
Min Conc: <None>

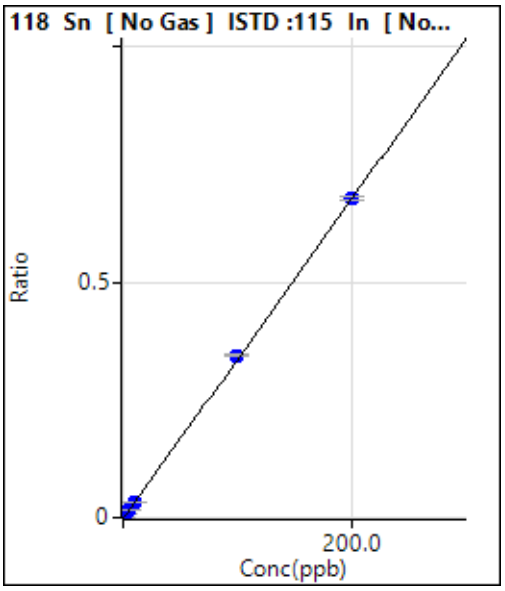


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.906	3040.41	0.0022	P	13.7	-4.7
3	☐	5.000	4.614	7268.79	0.0053	P	7.6	-7.7
4	☐	10.000	9.821	15559.44	0.0114	P	4.7	-1.8
5	☐	100.000	101.002	156297.13	0.1169	P	2.0	1.0
6	☐	200.000	199.518	302586.33	0.2310	P	1.0	-0.2

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

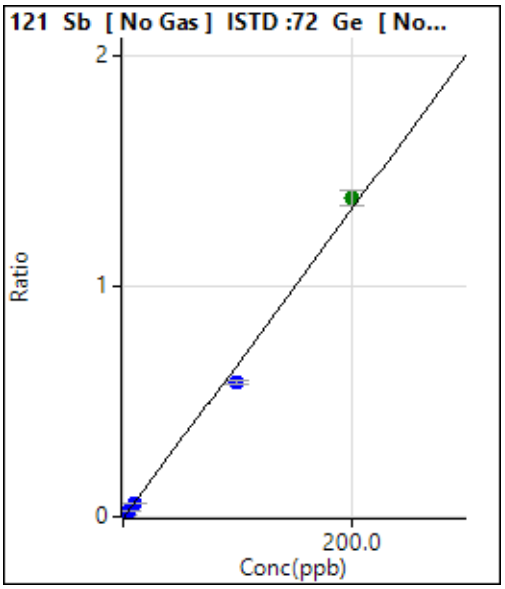
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1216.75	0.0009	P	5.3	
2	☐	2.000	1.889	10077.34	0.0073	P	3.3	-5.5
3	☐	5.000	4.597	22459.55	0.0165	P	0.2	-8.1
4	☐	10.000	9.190	43923.72	0.0321	P	0.9	-8.1
5	☐	100.000	101.196	460443.38	0.3444	P	1.3	1.2
6	☐	200.000	199.454	888216.26	0.6780	P	0.7	-0.3

y = 0.0034 * x + 8.9381E-004
R = 1.0000
DL = 0.0416 ppb
BEC = 0.2633 ppb

Weight: <None>
Min Conc: <None>

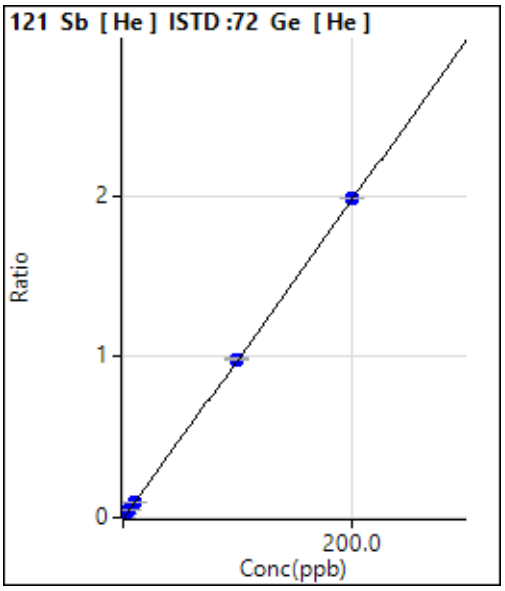


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	300.01	0.0003	P	28.5	
2	☐	2.000	1.647	12686.36	0.0113	P	7.0	-17.7
3	☐	5.000	4.146	30726.32	0.0281	P	2.0	-17.1
4	☐	10.000	8.698	61785.72	0.0586	P	3.6	-13.0
5	☐	100.000	87.172	642005.95	0.5843	P	2.7	-12.8
6	☐	200.000	206.504	1404987.27	1.3837	A	4.7	3.3

y = 0.0067 * x + 2.8121E-004
R = 0.9972
DL = 0.03585 ppb
BEC = 0.04198 ppb

Weight: <None>
Min Conc: <None>

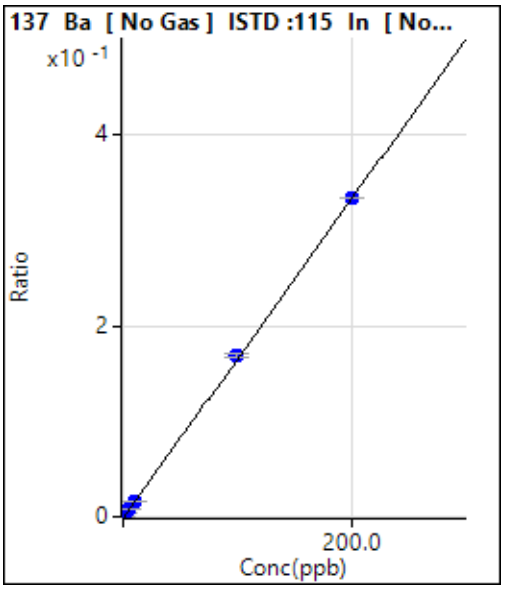
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0006	P	14.8	
2	☐	2.000	1.825	6388.34	0.0186	P	3.3	-8.7
3	☐	5.000	4.739	15899.89	0.0475	P	2.2	-5.2
4	☐	10.000	9.532	31718.67	0.0949	P	3.8	-4.7
5	☐	100.000	99.483	335743.37	0.9852	P	1.5	-0.5
6	☐	200.000	200.290	655992.92	1.9829	P	0.5	0.1

y = 0.0099 * x + 5.7065E-004
R = 1.0000
DL = 0.02556 ppb
BEC = 0.05766 ppb

Weight: <None>
Min Conc: <None>

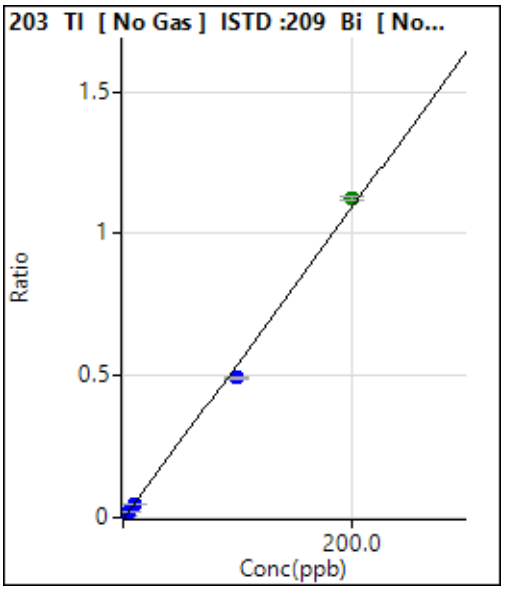


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.01	0.0001	P	26.4	
2	☐	2.000	1.942	4614.25	0.0033	P	5.1	-2.9
3	☐	5.000	4.948	11401.88	0.0084	P	4.2	-1.0
4	☐	10.000	9.331	21508.06	0.0157	P	2.6	-6.7
5	☐	100.000	100.886	225869.41	0.1690	P	2.0	0.9
6	☐	200.000	199.592	437828.10	0.3342	P	0.6	-0.2

y = 0.0017 * x + 9.5502E-005
R = 1.0000
DL = 0.0452 ppb
BEC = 0.05705 ppb

Weight: <None>
Min Conc: <None>

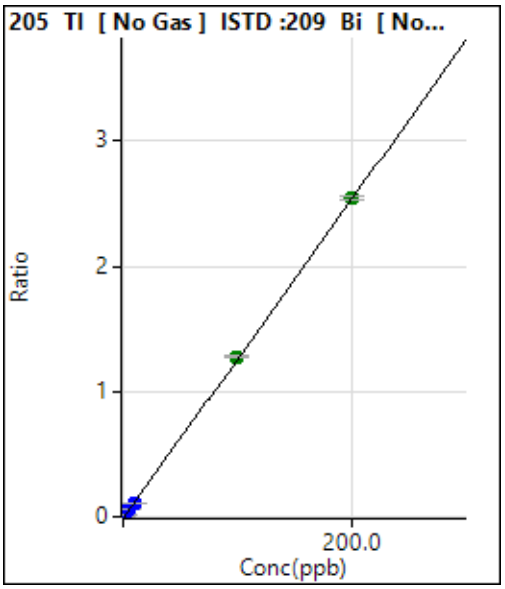
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.7	
2	☐	2.000	1.658	12923.58	0.0091	P	4.3	-17.1
3	☐	5.000	4.180	32135.16	0.0229	P	2.2	-16.4
4	☐	10.000	8.226	63789.30	0.0451	P	0.3	-17.7
5	☐	100.000	89.840	681766.19	0.4925	P	1.5	-10.2
6	☐	200.000	205.193	1501543.00	1.1249	A	1.1	2.6

y = 0.0055 * x + 1.4469E-005
R = 0.9983
DL = 0.004018 ppb
BEC = 0.002639 ppb

Weight: <None>
Min Conc: <None>

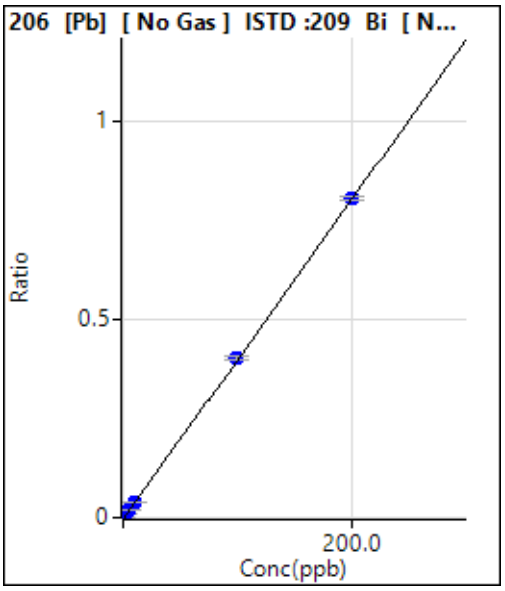


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	17.5	
2	☐	2.000	1.717	31082.39	0.0219	P	1.7	-14.1
3	☐	5.000	4.271	76266.31	0.0544	P	1.3	-14.6
4	☐	10.000	8.723	157097.24	0.1111	P	0.9	-12.8
5	☐	100.000	100.336	1768441.07	1.2776	A	1.6	0.3
6	☐	200.000	199.917	3397792.45	2.5456	A	1.1	0.0

y = 0.0127 * x + 2.6458E-005
R = 1.0000
DL = 0.001088 ppb
BEC = 0.002078 ppb

Weight: <None>
Min Conc: <None>

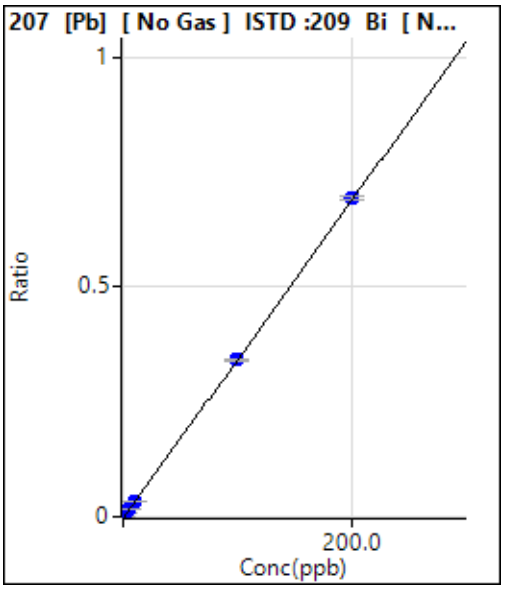
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	24.5	
2	☐	2.000	1.937	11248.57	0.0079	P	3.4	-3.1
3	☐	5.000	4.636	26374.87	0.0188	P	2.3	-7.3
4	☐	10.000	9.490	54321.79	0.0384	P	0.5	-5.1
5	☐	100.000	100.315	560714.52	0.4051	P	2.0	0.3
6	☐	200.000	199.878	1077258.21	0.8071	P	1.3	-0.1

y = 0.0040 * x + 1.0074E-004
R = 1.0000
DL = 0.0183 ppb
BEC = 0.02495 ppb

Weight: <None>
Min Conc: <None>

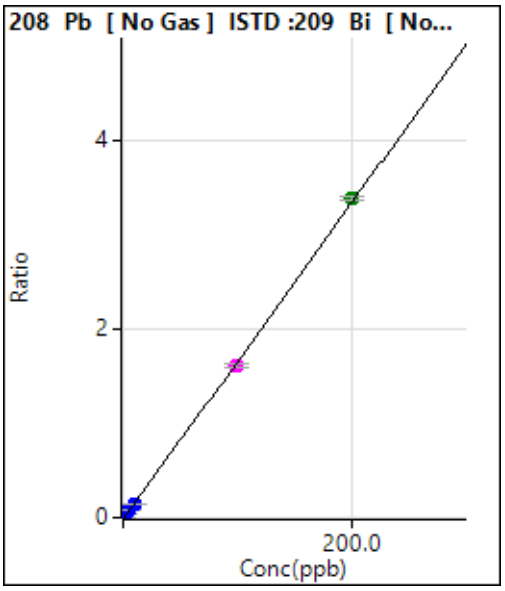


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	21.4	
2	☐	2.000	1.915	9507.12	0.0067	P	4.8	-4.2
3	☐	5.000	4.602	22397.17	0.0160	P	2.9	-8.0
4	☐	10.000	9.393	46005.05	0.0325	P	1.9	-6.1
5	☐	100.000	98.683	472119.56	0.3411	P	1.4	-1.3
6	☐	200.000	200.700	925798.76	0.6936	P	1.1	0.3

y = 0.0035 * x + 7.6762E-005
R = 1.0000
DL = 0.01423 ppb
BEC = 0.02221 ppb

Weight: <None>
Min Conc: <None>

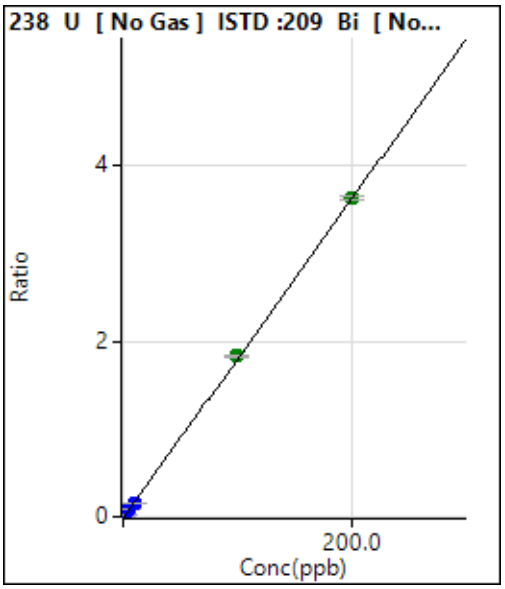
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	616.68	0.0004	P	7.6	
2	☐	2.000	1.819	43937.56	0.0309	P	2.1	-9.0
3	☐	5.000	4.478	105849.36	0.0755	P	1.4	-10.4
4	☐	10.000	9.050	215189.95	0.1522	P	0.6	-9.5
5	☐	100.000	96.161	2232387.98	1.6127	M	1.5	-3.8
6	☐	200.000	201.982	4520443.14	3.3868	A	1.6	1.0

y = 0.0168 * x + 4.4394E-004
R = 0.9998
DL = 0.006029 ppb
BEC = 0.02648 ppb

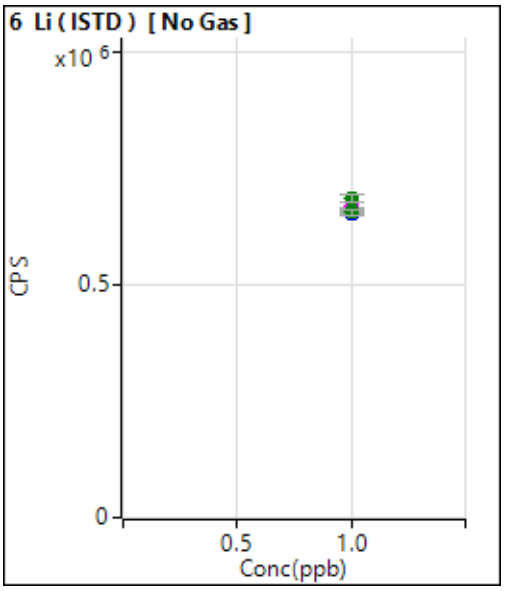
Weight: <None>
Min Conc: <None>



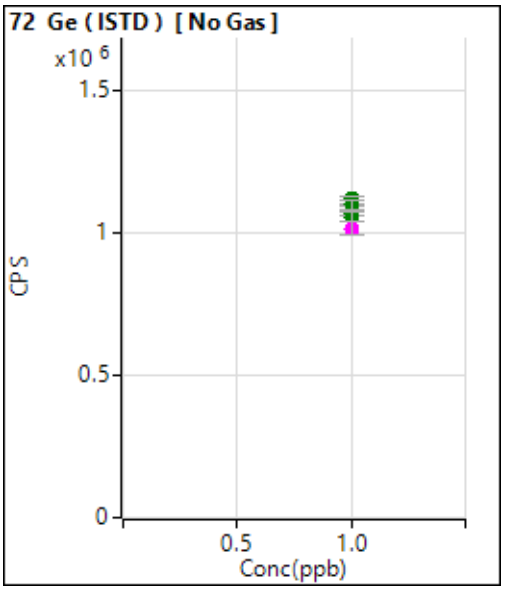
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	44.9	
2	☐	2.000	1.746	45053.23	0.0317	P	1.3	-12.7
3	☐	5.000	4.392	111879.02	0.0798	P	1.9	-12.2
4	☐	10.000	8.879	228172.47	0.1614	P	0.6	-11.2
5	☐	100.000	100.790	2535315.64	1.8316	A	1.1	0.8
6	☐	200.000	199.679	4843356.07	3.6286	A	1.4	-0.2

y = 0.0182 * x + 9.6416E-006
R = 1.0000
DL = 0.0007149 ppb
BEC = 0.0005306 ppb

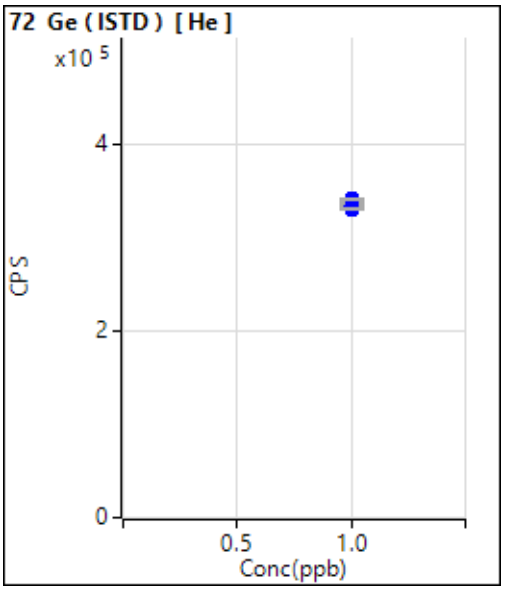
Weight: <None>
Min Conc: <None>



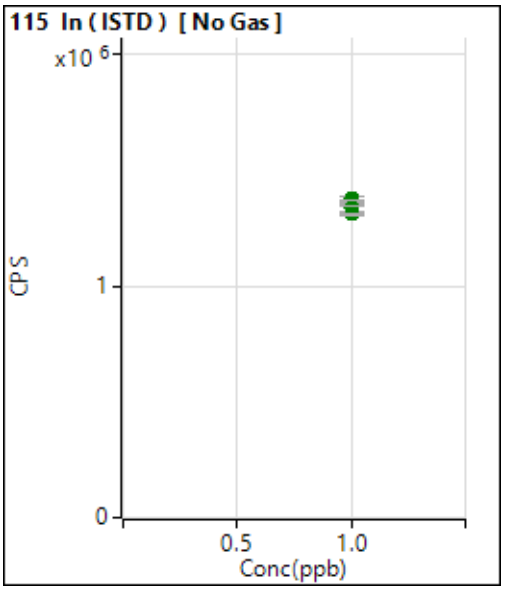
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		670806.57		M	2.3	
2	☐	1.000		685146.84		M	2.9	
3	☐	1.000		658640.95		P	0.1	
4	☐	1.000		653287.19		P	0.6	
5	☐	1.000		685499.72		A	2.0	
6	☐	1.000		655435.47		A	2.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1064832.80		A	1.3	
2	☐	1.000		1121595.69		A	0.9	
3	☐	1.000		1095296.75		A	0.7	
4	☐	1.000		1055891.36		A	3.4	
5	☐	1.000		1099376.75		A	3.0	
6	☐	1.000		1016593.71		M	4.1	

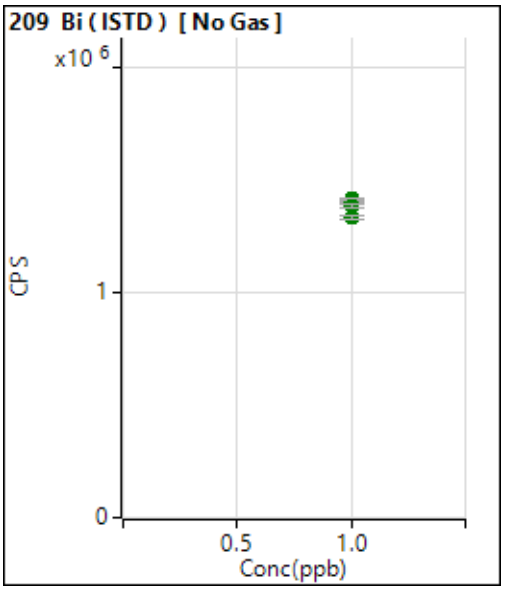


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		338750.20		P	0.3	
2	☐	1.000		342790.06		P	0.5	
3	☐	1.000		334894.32		P	0.6	
4	☐	1.000		334264.68		P	0.9	
5	☐	1.000		340806.65		P	0.6	
6	☐	1.000		330825.84		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360629.72		A	1.9	
2	☐	1.000		1379610.82		A	1.6	
3	☐	1.000		1361230.28		A	1.2	
4	☐	1.000		1368776.61		A	0.7	
5	☐	1.000		1336992.47		A	1.7	
6	☐	1.000		1310100.00		A	0.9	

Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1388985.61		A	2.0	
2	☐	1.000		1419790.14		A	0.4	
3	☐	1.000		1401715.45		A	1.3	
4	☐	1.000		1414056.38		A	0.8	
5	☐	1.000		1384389.30		A	1.6	
6	☐	1.000		1334929.82		A	1.6	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	213LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:23:51-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.881	1.881	3.93	51596	0.00	2	
Be	9	1	No Gas	1.960	1.960	2.61	3487	0.06	2	
V	51	2	He	1.550	1.550	4.86	6454	0.02	2	
Cr	52	2	He	1.794	1.794	3.17	6752	0.03	2	
Fe	56	2	He	187.314	187.314	1.72	582642	0.03	200	
Se	78	2	He	2.198	2.198	22.84	418	0.53	2	
As	75	2	He	1.797	1.797	2.77	943	0.19	2	
Ca	44	2	He	188.080	188.080	6.71	3831	4.91	200	
Na	23	2	He	141.007	141.007	2.92	313235	0.05	200	
Mg	24	2	He	187.566	187.566	2.34	63237	0.30	200	
K	39	2	He	167.279	167.279	3.09	151451	0.11	200	
Mn	55	2	He	1.979	1.979	0.29	5071	0.04	2	
Co	59	2	He	1.945	1.945	1.78	9270	0.02	2	
Ni	60	2	He	1.848	1.848	8.12	2454	0.08	2	
Cu	63	2	He	2.086	2.086	4.13	7779	0.03	2	
Zn	66	2	He	2.129	2.129	26.98	6829	0.03	2	
Al	27	2	He	1.784	1.784	35.20	787	0.23	2	
B	11	1	No Gas	41.103	41.103	10.46	45815	0.09	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.694	1.694	10.15	31543	0.01	2	
Si	28	1	No Gas	15.990	15.990	13.55	202528	0.01	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.835	1.835	1.13	14431	0.01	2	
Cd	111	1	No Gas	1.981	1.981	2.84	3144	0.06	2	
Sr	88	1	No Gas	1.769	1.769	3.41	26266	0.01	2	
Mo	95	1	No Gas	1.895	1.895	3.00	5274	0.04	2	
Sn	118	1	No Gas	1.942	1.942	4.46	10261	0.02	2	
Sb	121	1	No Gas	1.823	1.823	1.71	12810	0.01	2	
Ba	137	1	No Gas	1.922	1.922	1.42	4541	0.04	2	
Tl	205	1	No Gas	1.736	1.736	0.49	31072	0.01	2	
Tl	203	1	No Gas	1.726	1.726	1.79	13307	0.01	2	
Pb	208	1	No Gas	1.832	1.832	2.10	43741	0.00	2	
U	238	1	No Gas	1.776	1.776	3.04	45307	0.00	2	
Ca	43	2	He	149.765	149.765	9.26	183	81.69	200	
Sb	121	2	He	1.893	1.893	2.16	6455	0.03	2	
Ti	47	2	He	1.917	1.917	26.69	213	0.90	200	
Cu	63	1	No Gas	2.000	2.000	3.57	13520	0.01	2	
Se	82	1	No Gas	2.934	2.934	244.67	-532	-0.55	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	648081	0.61	670807	96.61	70	120	
Ge	72	2	He	334353	0.79	338750	98.70	70	120	
Ge	72	1	No Gas	1025387	1.69	1064833	96.30	70	120	
In	115	1	No Gas	1370670	1.56	1360630	100.74	70	120	
Bi	209	1	No Gas	1404141	2.01	1388986	101.09	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	214LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:25:50-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.880	4.880	1.99	75952	0.01	5	
Be	9	1	No Gas	5.018	5.018	0.92	8900	0.06	5	
V	51	2	He	4.284	4.284	4.19	13992	0.03	5	
Cr	52	2	He	4.791	4.791	1.96	16273	0.03	5	
Fe	56	2	He	509.353	509.353	0.55	1560980	0.03	500	
Se	78	2	He	3.947	3.947	23.29	491	0.80	5	
As	75	2	He	4.870	4.870	2.00	2352	0.21	5	
Ca	44	2	He	515.797	515.797	3.09	9727	5.30	500	
Na	23	2	He	412.525	412.525	0.85	475966	0.09	500	
Mg	24	2	He	470.488	470.488	0.62	157562	0.30	500	
K	39	2	He	439.407	439.407	1.82	252263	0.17	500	
Mn	55	2	He	4.849	4.849	0.84	11785	0.04	5	
Co	59	2	He	4.807	4.807	2.51	22799	0.02	5	
Ni	60	2	He	4.887	4.887	7.16	6101	0.08	5	
Cu	63	2	He	4.803	4.803	1.72	16587	0.03	5	
Zn	66	2	He	4.725	4.725	8.21	8486	0.06	5	
Al	27	2	He	5.873	5.873	13.90	1503	0.39	5	
B	11	1	No Gas	36.554	36.554	0.73	42255	0.09	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	5.277	5.277	6.80	57516	0.01	5	
Si	28	1	No Gas	29.499	29.499	8.53	246889	0.01	25	
Ag	107	1	No Gas	4.655	4.655	0.95	36434	0.01	5	
Cd	111	1	No Gas	4.773	4.773	6.72	7609	0.06	5	
Sr	88	1	No Gas	4.755	4.755	2.85	69842	0.01	5	
Mo	95	1	No Gas	4.686	4.686	2.15	13093	0.04	5	
Sn	118	1	No Gas	4.679	4.679	2.81	23107	0.02	5	
Sb	121	1	No Gas	4.305	4.305	6.93	30325	0.01	5	
Ba	137	1	No Gas	4.773	4.773	3.01	11138	0.04	5	
Tl	205	1	No Gas	4.254	4.254	1.18	77121	0.01	5	
Tl	203	1	No Gas	4.061	4.061	1.85	31707	0.01	5	
Pb	208	1	No Gas	4.456	4.456	0.20	106948	0.00	5	
U	238	1	No Gas	4.405	4.405	0.85	113917	0.00	5	
Ca	43	2	He	539.875	539.875	2.19	590	91.50	500	
Sb	121	2	He	4.828	4.828	1.96	16107	0.03	5	
Ti	47	2	He	4.720	4.720	15.90	513	0.92	5	
Cu	63	1	No Gas	4.572	4.572	1.15	28881	0.02	5	
Se	82	1	No Gas	2.189	2.189	433.91	-584	-0.37	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	649964	0.43	670807	96.89	70	120	
Ge	72	2	He	333073	0.89	338750	98.32	70	120	
Ge	72	1	No Gas	1042611	2.96	1064833	97.91	70	120	
In	115	1	No Gas	1377482	1.00	1360630	101.24	70	120	
Bi	209	1	No Gas	1423133	0.85	1388986	102.46	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	215_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:27:49-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.071	134.1	36622	1.6	0.5	
Be	9	1	No Gas	0.009	116.0	50	34.6	0.5	
V	51	2	He	-0.372	-5.4	1099	4.4	2.5	
Cr	52	2	He	0.019	107.3	1057	6.3	2.5	
Fe	56	2	He	0.906	8.1	12709	1.9	100	
Se	78	2	He	0.043	694.2	319	4.7	1	
As	75	2	He	-0.097	-42.8	68	27.1	2.5	
Ca	44	2	He	2.287	63.6	460	5.8	100	
Na	23	2	He	-36.080	-9.8	201935	0.3	100	
Mg	24	2	He	0.516	45.3	477	17.0	100	
K	39	2	He	-20.298	-8.6	79730	0.2	100	
Mn	55	2	He	0.065	32.6	553	8.5	2.5	
Co	59	2	He	0.002	158.2	27	43.3	2.5	
Ni	60	2	He	-0.036	-85.0	173	20.3	2.5	
Cu	63	2	He	0.044	95.4	1090	11.5	1	
Zn	66	2	He	-0.221	-66.7	5201	2.5	2.5	
Al	27	2	He	-0.450	-100.5	383	20.9	5	
B	11	1	No Gas	8.519	12.1	19156	4.6	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.754	-6.3	14141	2.1	5	
Si	28	1	No Gas	3.592	3.5	162166	0.3	10	
Ag	107	1	No Gas	0.005	183.5	270	28.0	2.5	
Cd	111	1	No Gas	0.008	43.3	13	43.3	1	
Sr	88	1	No Gas	-0.010	-76.3	513	20.0	2.5	
Mo	95	1	No Gas	0.001	593.2	17	124.9	2.5	
Sn	118	1	No Gas	0.146	8.0	1887	3.4	5	
Sb	121	1	No Gas	0.035	45.4	517	20.9	2.5	
Ba	137	1	No Gas	-0.001	-424.2	127	9.1	2.5	
Tl	205	1	No Gas	0.004	22.4	103	14.8	1	
Tl	203	1	No Gas	0.009	34.5	87	26.6	1	
Pb	208	1	No Gas	0.005	79.4	737	12.6	2.5	
U	238	1	No Gas	0.001	27.6	50	20.0	2.5	
Ca	43	2	He	-18.620	-30.2	7	86.6	100	
Sb	121	2	He	0.012	41.8	227	6.7	2.5	
Ti	47	2	He	-0.030	-182.7	3	173.2	2.5	
Se	82	1	No Gas	-1.560	-824.1	-875	-116.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	641000	0.65	670807	95.56	70	120	
Ge	72	2	He	327887	0.93	338750	96.79	70	120	
Ge	72	1	No Gas	1004356	0.29	1064833	94.32	70	120	
In	115	1	No Gas	1357052	0.60	1360630	99.74	70	120	
Bi	209	1	No Gas	1396485	0.36	1388986	100.54	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	217_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:31:46-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.176	3.017	929572	1.96	100	102.2	90	110	
Be	9	1	No Gas	99.602	2.676	189954	1.33	100	99.6	90	110	
V	51	2	He	99.546	0.218	282507	1.23	100	99.5	90	110	
Cr	52	2	He	100.602	0.873	327327	0.90	100	100.6	90	110	
Fe	56	2	He	10025.554	0.204	31097720	1.11	10000	100.3	90	110	
Se	78	2	He	102.009	1.922	4796	2.86	100	102.0	90	110	
As	75	2	He	103.876	1.028	48748	0.12	100	103.9	90	110	
Ca	44	2	He	9935.752	0.833	182879	1.87	10000	99.4	90	110	
Na	23	2	He	9912.553	0.464	6325851	1.52	10000	99.1	90	110	
Mg	24	2	He	9981.454	1.808	3398343	2.90	10000	99.8	90	110	
K	39	2	He	10030.341	0.417	3895863	1.35	10000	100.3	90	110	
Mn	55	2	He	101.057	1.030	241848	0.08	100	101.1	90	110	
Co	59	2	He	100.945	0.382	487138	1.26	100	100.9	90	110	
Ni	60	2	He	100.848	0.673	123856	1.72	100	100.8	90	110	
Cu	63	2	He	101.044	1.181	335742	2.04	100	101.0	90	110	
Zn	66	2	He	101.331	1.125	72346	2.13	100	101.3	90	110	
Al	27	2	He	112.678	1.694	20712	2.05	100	112.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	497.655	1.617	451008	1.76	500	99.5	90	110	
Al	27	1	No Gas	101.056	0.253	808022	0.42	100	101.1	90	110	
Si	28	1	No Gas	502.702	0.193	1842824	0.46	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.867	1.421	780257	0.83	100	100.9	90	110	
Cd	111	1	No Gas	101.227	0.907	160534	0.66	100	101.2	90	110	
Sr	88	1	No Gas	102.386	2.051	1482219	2.05	100	102.4	90	110	
Mo	95	1	No Gas	100.021	0.874	277661	0.47	100	100.0	90	110	
Sn	118	1	No Gas	101.472	0.709	473139	1.04	100	101.5	90	110	
Sb	121	1	No Gas	88.587	0.947	677257	0.47	100	88.6	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	102.044	1.285	234126	0.72	100	102.0	90	110	
Tl	205	1	No Gas	106.011	0.659	1874886	0.63	100	106.0	90	110	
Tl	203	1	No Gas	93.807	1.705	714255	0.60	100	93.8	90	110	
Pb	208	1	No Gas	102.726	1.540	2392662	1.14	100	102.7	90	110	
U	238	1	No Gas	104.583	3.027	2639189	1.94	100	104.6	90	110	
Ca	43	2	He	10203.202	0.530	10878	1.54	10000	102.0	90	110	
Sb	121	2	He	102.569	0.116	344558	1.19	100	102.6	90	110	
Ti	47	2	He	94.289	3.525	10327	3.54	100	94.3	90	110	
Cu	63	1	No Gas	90.632	1.094	585642	1.13	100	90.6	90	110	
Se	82	1	No Gas	93.903	8.382	7592	8.86	100	93.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	701714	1.41	670807	104.61	70	120	
Ge	72	2	He	339217	1.10	338750	100.14	70	120	
Ge	72	1	No Gas	1140642	0.49	1064833	107.12	70	120	
In	115	1	No Gas	1369921	0.59	1360630	100.68	70	120	
Bi	209	1	No Gas	1388991	1.10	1388986	100.00	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	218_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:33:41-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.066	139.3	35762	1.5	0.5	
Be	9	1	No Gas	0.011	80.5	53	28.6	0.5	
V	51	2	He	-0.381	-8.3	1062	9.2	2.5	
Cr	52	2	He	0.029	83.3	1073	6.3	2.5	
Fe	56	2	He	0.236	2.9	10574	1.8	100	
Se	78	2	He	0.692	42.5	342	4.1	2	
As	75	2	He	-0.079	-36.3	76	18.4	2.5	
Ca	44	2	He	-5.207	-27.0	323	8.9	100	
Na	23	2	He	-41.796	-6.6	196180	0.9	100	
Mg	24	2	He	0.020	528.4	310	12.9	100	
K	39	2	He	-15.768	-15.9	80424	1.2	100	
Mn	55	2	He	0.057	78.5	530	21.0	2.5	
Co	59	2	He	0.007	91.9	53	60.3	2.5	
Ni	60	2	He	-0.100	-26.5	97	31.6	2.5	
Cu	63	2	He	-0.047	-8.1	790	1.3	2	
Zn	66	2	He	-0.319	-36.6	5078	2.9	2.5	
Al	27	2	He	-0.641	-64.6	347	21.8	5	
B	11	1	No Gas	24.538	14.6	31293	8.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.016	-2.2	12072	1.8	5	
Si	28	1	No Gas	9.699	4.0	175948	0.4	10	
Ag	107	1	No Gas	0.008	70.0	283	14.3	2.5	
Cd	111	1	No Gas	0.015	26.3	23	24.7	1	
Sr	88	1	No Gas	-0.005	-128.9	567	14.4	2.5	
Mo	95	1	No Gas	0.016	14.4	57	10.2	2.5	
Sn	118	1	No Gas	0.051	44.5	1413	5.7	5	
Sb	121	1	No Gas	0.051	15.2	613	8.2	2.5	
Ba	137	1	No Gas	-0.003	-371.3	120	22.0	2.5	
Tl	205	1	No Gas	0.020	29.9	377	29.1	1	
Tl	203	1	No Gas	0.012	26.5	107	19.5	1	
Pb	208	1	No Gas	0.016	27.7	957	12.1	2.5	
U	238	1	No Gas	0.009	8.4	230	8.7	2.5	
Ca	43	2	He	-8.806	-125.3	17	69.3	100	
Sb	121	2	He	0.010	74.2	217	9.6	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	-0.053	-10.0	1570	2.5	2.5	
Se	82	1	No Gas	8.317	112.7	-93	-776.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	626509	0.52	670807	93.40	70	120	
Ge	72	2	He	324001	1.67	338750	95.65	70	120	
Ge	72	1	No Gas	981567	0.77	1064833	92.18	70	120	
In	115	1	No Gas	1327261	1.45	1360630	97.55	70	120	
Bi	209	1	No Gas	1356885	2.11	1388986	97.69	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	226_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:49:21-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	115.019	0.744	891361	0.97	100	115.0	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	109.920	1.017	179413	0.12	100	109.9	90	110	
V	51	2	He	101.982	1.033	281156	0.81	100	102.0	90	110	
Cr	52	2	He	101.358	1.080	320432	0.45	100	101.4	90	110	
Fe	56	2	He	10093.623	1.088	30420104	0.31	10000	100.9	90	110	
Se	78	2	He	103.924	2.204	4740	1.56	100	103.9	90	110	
As	75	2	He	106.332	1.217	48484	0.16	100	106.3	90	110	
Ca	44	2	He	10052.209	1.362	179763	1.36	10000	100.5	90	110	
Na	23	2	He	9933.636	2.065	6158389	1.18	10000	99.3	90	110	
Mg	24	2	He	10029.725	1.268	3317552	1.36	10000	100.3	90	110	
K	39	2	He	10184.399	1.397	3841965	0.65	10000	101.8	90	110	
Mn	55	2	He	101.909	0.719	237002	1.53	100	101.9	90	110	
Co	59	2	He	102.017	0.653	478354	0.91	100	102.0	90	110	
Ni	60	2	He	101.555	0.959	121179	0.57	100	101.6	90	110	
Cu	63	2	He	103.717	1.629	334795	1.03	100	103.7	90	110	
Zn	66	2	He	103.734	1.093	71827	0.12	100	103.7	90	110	
Al	27	2	He	113.780	1.739	20318	2.16	100	113.8	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	544.009	1.813	420819	1.88	500	108.8	90	110	
Al	27	1	No Gas	110.181	0.475	765761	0.73	100	110.2	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	569.880	0.401	1799969	1.23	5000	11.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.364	1.530	750856	1.23	100	101.4	90	110	
Cd	111	1	No Gas	102.100	2.482	155026	0.95	100	102.1	90	110	
Sr	88	1	No Gas	103.220	1.315	1430921	1.42	100	103.2	90	110	
Mo	95	1	No Gas	100.267	1.077	266544	1.06	100	100.3	90	110	
Sn	118	1	No Gas	102.735	1.551	458654	0.47	100	102.7	90	110	
Sb	121	1	No Gas	99.004	0.898	659348	0.24	100	99.0	90	110	
Ba	137	1	No Gas	103.333	2.036	227004	0.32	100	103.3	90	110	
Tl	205	1	No Gas	104.390	1.420	1781670	0.52	100	104.4	90	110	
Tl	203	1	No Gas	93.831	1.039	689545	0.78	100	93.8	90	110	
Pb	208	1	No Gas	100.468	4.216	2257635	2.55	100	100.5	90	110	
U	238	1	No Gas	105.591	1.200	2572095	1.38	100	105.6	90	110	
Ca	43	2	He	10021.940	3.065	10384	3.97	10000	100.2	90	110	
Sb	121	2	He	104.415	1.784	340786	1.01	100	104.4	90	110	
Ti	47	2	He	95.688	4.129	10187	5.19	100	95.7	90	110	
Cu	63	1	No Gas	100.324	0.417	564585	1.44	100	100.3	90	110	
Se	82	1	No Gas	103.834	8.679	7395	9.65	100	103.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600474	1.14	670807	89.52	70	120	
Ge	72	2	He	329614	1.10	338750	97.30	70	120	
Ge	72	1	No Gas	993720	1.04	1064833	93.32	70	120	
In	115	1	No Gas	1311963	1.94	1360630	96.42	70	120	
Bi	209	1	No Gas	1340578	1.73	1388986	96.51	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	227_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:51:17-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.168	41.8	34905	1.5	0.5	
Be	9	1	No Gas	0.021	30.7	67	15.6	0.5	
V	51	2	He	-0.011	-139.7	1993	1.9	2.5	
Cr	52	2	He	0.027	84.0	1037	7.0	2.5	
Fe	56	2	He	0.767	20.1	11779	3.7	100	
Se	78	2	He	0.650	115.7	330	9.6	2	
As	75	2	He	0.009	168.3	111	6.2	2.5	
Ca	44	2	He	-2.470	-177.5	360	21.0	100	
Na	23	2	He	-43.437	-5.0	189324	0.3	100	
Mg	24	2	He	0.653	34.1	500	14.4	100	
K	39	2	He	-12.229	-36.8	79240	2.0	100	
Mn	55	2	He	0.096	11.4	600	4.4	2.5	
Co	59	2	He	0.012	45.5	73	34.3	2.5	
Ni	60	2	He	-0.083	-33.7	113	28.4	2.5	
Cu	63	2	He	-0.015	-250.6	863	12.9	2	
Zn	66	2	He	-0.246	-93.5	4968	2.5	2.5	
Al	27	2	He	-0.613	-43.1	340	12.8	5	
B	11	1	No Gas	21.830	15.4	27853	9.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.980	-1.5	11925	0.6	5	
Si	28	1	No Gas	16.106	3.5	188216	0.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.016	46.2	333	17.1	2.5	
Cd	111	1	No Gas	0.002	173.2	3	173.2	1	
Sr	88	1	No Gas	-0.009	-109.1	493	27.5	2.5	
Mo	95	1	No Gas	0.017	13.7	57	10.2	2.5	
Sn	118	1	No Gas	0.046	53.6	1347	9.0	5	
Sb	121	1	No Gas	0.078	12.2	763	7.9	2.5	
Ba	137	1	No Gas	-0.004	-668.7	113	50.2	2.5	
Tl	205	1	No Gas	0.021	14.5	390	13.6	1	
Tl	203	1	No Gas	0.021	28.1	167	25.0	1	
Pb	208	1	No Gas	0.023	28.0	1073	12.4	2.5	
U	238	1	No Gas	0.005	74.7	120	66.7	2.5	
Ca	43	2	He	-1.388	-849.5	23	49.5	100	
Sb	121	2	He	0.052	19.5	340	8.8	2.5	
Ti	47	2	He	-0.028	-205.5	3	173.2	2.5	
Cu	63	1	No Gas	-0.014	-72.3	1730	3.6	2.5	
Se	82	1	No Gas	-1.591	-114.9	-830	-16.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	598205	0.07	670807	89.18	70	120	
Ge	72	2	He	314199	0.43	338750	92.75	70	120	
Ge	72	1	No Gas	950978	0.57	1064833	89.31	70	120	
In	115	1	No Gas	1279976	1.01	1360630	94.07	70	120	
Bi	209	1	No Gas	1301424	0.60	1388986	93.70	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	236_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:09:55-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	104.609	2.247	959386	1.19	100	104.6	90	110	
Be	9	1	No Gas	103.532	2.777	199216	0.58	100	103.5	90	110	
V	51	2	He	98.408	1.439	314550	0.62	100	98.4	90	110	
Cr	52	2	He	98.765	1.439	361943	0.69	100	98.8	90	110	
Fe	56	2	He	9824.155	1.355	34319484	0.62	10000	98.2	90	110	
Se	78	2	He	98.781	3.655	5240	2.64	100	98.8	90	110	
As	75	2	He	103.506	2.243	54707	1.52	100	103.5	90	110	
Ca	44	2	He	9801.631	1.061	203183	0.77	10000	98.0	90	110	
Na	23	2	He	10069.766	1.118	7233081	0.60	10000	100.7	90	110	
Mg	24	2	He	9833.854	1.796	3770098	1.06	10000	98.3	90	110	
K	39	2	He	10034.888	2.611	4389167	1.74	10000	100.3	90	110	
Mn	55	2	He	99.698	1.554	268735	0.76	100	99.7	90	110	
Co	59	2	He	99.465	1.813	540578	1.39	100	99.5	90	110	
Ni	60	2	He	99.265	1.091	137304	1.15	100	99.3	90	110	
Cu	63	2	He	99.140	1.415	371002	1.00	100	99.1	90	110	
Zn	66	2	He	99.296	1.663	79962	1.28	100	99.3	90	110	
Al	27	2	He	108.711	3.494	22522	2.70	100	108.7	90	110	
B	11	1	No Gas	554.418	4.369	505293	3.22	500	110.9	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	107.617	2.169	951483	1.86	100	107.6	90	110	
Si	28	1	No Gas	513.791	2.486	2082435	3.43	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.625	0.559	853086	1.01	100	98.6	90	110	
Cd	111	1	No Gas	99.415	1.595	176269	0.39	100	99.4	90	110	
Sr	88	1	No Gas	102.014	2.127	1651338	2.47	100	102.0	90	110	
Mo	95	1	No Gas	97.078	1.870	301295	0.69	100	97.1	90	110	
Sn	118	1	No Gas	99.102	0.721	516681	0.59	100	99.1	90	110	
Sb	121	1	No Gas	87.458	1.385	740567	0.17	100	87.5	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	99.448	1.173	255132	1.13	100	99.4	90	110	
Tl	205	1	No Gas	102.178	0.736	2010039	0.46	100	102.2	90	110	
Tl	203	1	No Gas	90.950	1.323	770329	1.03	100	91.0	90	110	
Pb	208	1	No Gas	100.551	0.358	2605186	0.70	100	100.6	90	110	
U	238	1	No Gas	99.390	0.606	2790380	0.96	100	99.4	90	110	
Ca	43	2	He	9845.111	1.109	11822	0.93	10000	98.5	90	110	
Sb	121	2	He	98.733	2.098	373527	1.29	100	98.7	90	110	
Ti	47	2	He	92.985	0.668	11472	1.20	100	93.0	90	110	
Cu	63	1	No Gas	88.541	0.604	633764	0.70	100	88.5	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	94.548	3.206	8476	3.39	100	94.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	708196	2.89	670807	105.57	70	120	
Ge	72	2	He	382059	0.82	338750	112.78	70	120	
Ge	72	1	No Gas	1263469	1.26	1064833	118.65	70	120	
In	115	1	No Gas	1531784	1.29	1360630	112.58	70	120	
Bi	209	1	No Gas	1544935	0.37	1388986	111.23	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	237_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:11:50-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.333	34.8	38288	2.1	0.5	
Be	9	1	No Gas	0.052	206.5	123	148.7	0.5	
V	51	2	He	-0.538	-5.5	708	11.6	2.5	
Cr	52	2	He	0.023	92.4	1173	5.5	2.5	
Fe	56	2	He	1.053	7.2	14421	1.6	100	
Se	78	2	He	1.121	43.8	399	4.5	2	
As	75	2	He	-0.082	-59.7	82	29.3	2.5	
Ca	44	2	He	5.166	68.3	560	11.2	100	
Na	23	2	He	83.882	7.3	299647	0.1	100	
Mg	24	2	He	4.232	1.2	1863	2.2	100	
K	39	2	He	-6.588	-53.7	92952	0.4	100	
Mn	55	2	He	0.498	7.4	1703	4.4	2.5	
Co	59	2	He	0.005	21.0	47	12.4	2.5	
Ni	60	2	He	-0.087	-21.6	123	18.7	2.5	
Cu	63	2	He	0.015	168.4	1093	8.7	2	
Zn	66	2	He	-0.219	-178.2	5705	4.8	2.5	
Al	27	2	He	-0.507	-86.9	410	21.3	5	
B	11	1	No Gas	23.974	13.1	31229	8.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.015	-36.5	14182	19.7	5	
Si	28	1	No Gas	10.444	55.2	209312	8.5	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.030	110.6	490	55.6	2.5	
Cd	111	1	No Gas	0.028	118.1	47	118.0	1	
Sr	88	1	No Gas	0.566	134.2	9277	124.1	2.5	
Mo	95	1	No Gas	0.053	121.2	167	110.9	2.5	
Sn	118	1	No Gas	0.017	172.2	1367	10.0	5	
Sb	121	1	No Gas	0.037	45.5	607	20.6	2.5	
Ba	137	1	No Gas	0.098	134.8	373	85.1	2.5	
Tl	205	1	No Gas	0.035	106.0	697	100.3	1	
Tl	203	1	No Gas	0.035	92.5	307	86.4	1	
Pb	208	1	No Gas	0.045	118.0	1768	74.5	2.5	
U	238	1	No Gas	0.040	144.0	1086	142.2	2.5	
Ca	43	2	He	-10.254	-132.4	17	91.7	100	
Sb	121	2	He	-0.001	-612.2	200	15.0	2.5	
Ti	47	2	He	0.026	334.8	10	100.0	2.5	
Cu	63	1	No Gas	0.060	114.1	2584	16.4	2.5	
Se	82	1	No Gas	-0.185	-2150.1	-878	-40.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	634004	0.29	670807	94.51	70	120	
Ge	72	2	He	359613	1.19	338750	106.16	70	120	
Ge	72	1	No Gas	1154248	0.91	1064833	108.40	70	120	
In	115	1	No Gas	1437865	0.70	1360630	105.68	70	120	
Bi	209	1	No Gas	1477001	0.79	1388986	106.34	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	241_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:25:43-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	104.242	1.308	931527	1.31	100	104.2	90	110	
Be	9	1	No Gas	104.008	0.158	195002	0.37	100	104.0	90	110	
V	51	2	He	100.892	0.552	317684	0.57	100	100.9	90	110	
Cr	52	2	He	100.760	1.249	363794	1.13	100	100.8	90	110	
Fe	56	2	He	10113.440	0.866	34809860	0.88	10000	101.1	90	110	
Se	78	2	He	99.862	1.972	5216	1.88	100	99.9	90	110	
As	75	2	He	106.026	1.199	55213	1.17	100	106.0	90	110	
Ca	44	2	He	10075.604	0.979	205768	0.83	10000	100.8	90	110	
Na	23	2	He	10228.556	0.664	7234798	0.56	10000	102.3	90	110	
Mg	24	2	He	10124.490	1.715	3824364	1.43	10000	101.2	90	110	
K	39	2	He	10225.829	0.250	4405287	0.51	10000	102.3	90	110	
Mn	55	2	He	101.212	1.791	268789	1.53	100	101.2	90	110	
Co	59	2	He	102.660	0.557	549732	0.76	100	102.7	90	110	
Ni	60	2	He	102.114	0.051	139151	0.33	100	102.1	90	110	
Cu	63	2	He	101.817	0.533	375379	0.51	100	101.8	90	110	
Zn	66	2	He	104.276	1.588	82426	1.37	100	104.3	90	110	
Al	27	2	He	111.640	2.058	22776	1.78	100	111.6	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	526.078	3.004	467835	2.65	500	105.2	90	110	
Al	27	1	No Gas	111.144	4.138	939429	2.29	100	111.1	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	495.703	1.578	1929048	2.00	5000	9.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.664	0.190	835875	0.77	100	100.7	90	110	
Cd	111	1	No Gas	102.505	0.508	174496	1.14	100	102.5	90	110	
Sr	88	1	No Gas	102.577	1.121	1593912	0.99	100	102.6	90	110	
Mo	95	1	No Gas	99.802	0.124	297389	0.66	100	99.8	90	110	
Sn	118	1	No Gas	102.588	1.254	513407	1.05	100	102.6	90	110	
Sb	121	1	No Gas	90.528	2.365	733569	0.54	100	90.5	90	110	
Ba	137	1	No Gas	102.998	0.911	253656	0.47	100	103.0	90	110	
Tl	205	1	No Gas	105.830	2.579	2015030	1.26	100	105.8	90	110	
Tl	203	1	No Gas	92.911	2.515	761643	0.13	100	92.9	90	110	
Pb	208	1	No Gas	103.026	2.932	2583304	1.03	100	103.0	90	110	
U	238	1	No Gas	103.183	1.726	2804150	1.40	100	103.2	90	110	
Ca	43	2	He	10213.729	1.743	12082	1.46	10000	102.1	90	110	
Sb	121	2	He	102.165	1.084	380823	0.82	100	102.2	90	110	
Ti	47	2	He	96.876	3.531	11775	3.80	100	96.9	90	110	
Cu	63	1	No Gas	91.850	2.296	629048	0.53	100	91.8	90	110	
Se	82	1	No Gas	97.413	2.415	8384	0.98	100	97.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	689686	0.27	670807	102.81	70	120	
Ge	72	2	He	376411	0.29	338750	111.12	70	120	
Ge	72	1	No Gas	1209328	1.83	1064833	113.57	70	120	
In	115	1	No Gas	1470443	0.78	1360630	108.07	70	120	
Bi	209	1	No Gas	1495897	2.60	1388986	107.70	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	242_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:27:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.200	13.9	37152	0.1	0.5	
Be	9	1	No Gas	-0.010	-43.5	17	45.8	0.5	
V	51	2	He	-0.482	-7.5	864	12.5	2.5	
Cr	52	2	He	-0.002	-959.8	1073	4.4	2.5	
Fe	56	2	He	0.397	15.7	12099	1.7	100	
Se	78	2	He	0.333	145.2	358	6.2	2	
As	75	2	He	-0.079	-58.9	82	27.6	2.5	
Ca	44	2	He	0.672	215.5	467	6.2	100	
Na	23	2	He	12.449	54.9	249677	1.6	100	
Mg	24	2	He	0.304	16.9	440	3.9	100	
K	39	2	He	-7.781	-15.6	91227	0.3	100	
Mn	55	2	He	0.188	44.0	907	22.7	2.5	
Co	59	2	He	0.005	22.3	47	12.4	2.5	
Ni	60	2	He	-0.115	-10.3	87	17.6	2.5	
Cu	63	2	He	-0.039	-114.4	890	17.7	2	
Zn	66	2	He	-0.325	-160.5	5555	6.4	2.5	
Al	27	2	He	-0.758	-14.8	357	5.8	5	
B	11	1	No Gas	20.242	18.2	28205	11.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.384	-1.4	11468	0.5	5	
Si	28	1	No Gas	1.110	109.5	180712	1.9	10	
Ag	107	1	No Gas	0.007	109.7	297	18.6	2.5	
Cd	111	1	No Gas	0.002	173.2	3	173.2	1	
Sr	88	1	No Gas	-0.013	-38.6	500	13.9	2.5	
Mo	95	1	No Gas	0.012	1.7	50	0.0	2.5	
Sn	118	1	No Gas	0.009	117.9	1333	2.6	5	
Sb	121	1	No Gas	0.012	39.9	420	8.6	2.5	
Ba	137	1	No Gas	-0.017	-87.0	97	36.3	2.5	
Tl	205	1	No Gas	0.011	31.4	253	26.3	1	
Tl	203	1	No Gas	0.013	65.5	123	54.0	1	
Pb	208	1	No Gas	0.009	13.3	863	2.4	2.5	
U	238	1	No Gas	0.007	2.1	203	2.8	2.5	
Ca	43	2	He	-10.126	-135.7	17	91.7	100	
Sb	121	2	He	0.004	423.7	217	27.8	2.5	
Ti	47	2	He	-0.032	-159.5	3	173.2	2.5	
Cu	63	1	No Gas	-0.036	-53.0	1990	7.4	2.5	
Se	82	1	No Gas	1.522	242.6	-737	-47.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	632525	0.63	670807	94.29	70	120	
Ge	72	2	He	354729	0.22	338750	104.72	70	120	
Ge	72	1	No Gas	1171783	1.03	1064833	110.04	70	120	
In	115	1	No Gas	1443608	1.23	1360630	106.10	70	120	
Bi	209	1	No Gas	1470004	0.93	1388986	105.83	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	250_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:43:17-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.789	2.865	905697	0.17	100	101.8	90	110	
Be	9	1	No Gas	99.945	2.797	186395	0.45	100	99.9	90	110	
V	51	2	He	101.181	0.281	305806	1.15	100	101.2	90	110	
Cr	52	2	He	101.133	0.587	350490	1.08	100	101.1	90	110	
Fe	56	2	He	10033.784	0.597	33150000	1.15	10000	100.3	90	110	
Se	78	2	He	102.270	1.441	5119	0.82	100	102.3	90	110	
As	75	2	He	106.003	1.264	52982	0.28	100	106.0	90	110	
Ca	44	2	He	10037.535	0.461	196764	0.78	10000	100.4	90	110	
Na	23	2	He	10178.738	1.123	6911964	1.56	10000	101.8	90	110	
Mg	24	2	He	10120.088	0.884	3669328	0.99	10000	101.2	90	110	
K	39	2	He	10244.809	1.007	4235957	0.68	10000	102.4	90	110	
Mn	55	2	He	100.769	0.190	256885	1.01	100	100.8	90	110	
Co	59	2	He	101.927	0.365	523892	0.64	100	101.9	90	110	
Ni	60	2	He	101.970	0.928	133382	1.50	100	102.0	90	110	
Cu	63	2	He	101.087	0.666	357731	0.77	100	101.1	90	110	
Zn	66	2	He	101.712	1.277	77320	1.70	100	101.7	90	110	
Al	27	2	He	112.041	1.368	21941	2.31	100	112.0	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	483.620	2.971	429028	3.29	500	96.7	90	110	
Al	27	1	No Gas	99.474	1.275	820603	0.47	100	99.5	90	110	
Si	28	1	No Gas	529.399	1.000	1992029	0.76	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.106	2.697	795391	0.66	100	100.1	90	110	
Cd	111	1	No Gas	101.243	2.373	164931	1.41	100	101.2	90	110	
Sr	88	1	No Gas	101.698	4.091	1511819	1.86	100	101.7	90	110	
Mo	95	1	No Gas	99.689	3.573	284207	1.40	100	99.7	90	110	
Sn	118	1	No Gas	101.460	2.365	485916	0.11	100	101.5	90	110	
Sb	121	1	No Gas	92.112	0.945	726247	0.41	100	92.1	90	110	
Ba	137	1	No Gas	101.168	2.858	238409	0.61	100	101.2	90	110	
Tl	205	1	No Gas	103.887	1.351	1898711	0.59	100	103.9	90	110	
Tl	203	1	No Gas	91.277	1.936	718217	0.36	100	91.3	90	110	
Pb	208	1	No Gas	100.659	1.688	2423109	1.87	100	100.7	90	110	
U	238	1	No Gas	102.435	2.350	2671519	0.86	100	102.4	90	110	
Ca	43	2	He	10004.957	0.921	11362	1.60	10000	100.0	90	110	
Sb	121	2	He	104.897	0.599	375309	0.64	100	104.9	90	110	
Ti	47	2	He	95.153	1.210	11101	1.69	100	95.2	90	110	
Cu	63	1	No Gas	90.406	1.841	602439	1.03	100	90.4	90	110	
Se	82	1	No Gas	92.871	3.559	7735	3.39	100	92.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	686393	2.86	670807	102.32	70	120	
Ge	72	2	He	361307	0.99	338750	106.66	70	120	
Ge	72	1	No Gas	1176393	0.80	1064833	110.48	70	120	
In	115	1	No Gas	1407610	2.36	1360630	103.45	70	120	
Bi	209	1	No Gas	1435539	1.69	1388986	103.35	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	251_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:45:11-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.163	29.8	36335	0.4	0.5	
Be	9	1	No Gas	0.001	1309.9	35	37.8	0.5	
V	51	2	He	-0.453	-3.5	918	4.2	2.5	
Cr	52	2	He	0.023	126.0	1117	8.5	2.5	
Fe	56	2	He	0.471	16.8	11912	0.8	100	
Se	78	2	He	1.210	51.1	385	8.3	2	
As	75	2	He	-0.066	-73.0	86	25.4	2.5	
Ca	44	2	He	3.693	25.1	507	4.1	100	
Na	23	2	He	29.162	13.9	251451	0.4	100	
Mg	24	2	He	0.311	89.3	427	21.3	100	
K	39	2	He	-3.024	-105.0	89908	1.3	100	
Mn	55	2	He	0.143	25.0	767	11.8	2.5	
Co	59	2	He	0.011	27.5	73	20.8	2.5	
Ni	60	2	He	-0.123	-14.1	73	28.4	2.5	
Cu	63	2	He	-0.013	-405.6	947	16.8	2	
Zn	66	2	He	-0.360	-83.4	5341	4.7	2.5	
Al	27	2	He	-1.407	-13.3	227	14.2	5	
B	11	1	No Gas	42.183	13.5	44936	10.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.217	-4.3	11378	2.7	5	
Si	28	1	No Gas	17.108	13.3	209213	2.1	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.005	-321.3	197	63.6	2.5	
Cd	111	1	No Gas	0.017	43.8	27	43.3	1	
Sr	88	1	No Gas	0.013	23.1	847	4.5	2.5	
Mo	95	1	No Gas	0.016	97.5	60	76.4	2.5	
Sn	118	1	No Gas	-0.041	-49.9	1040	7.6	5	
Sb	121	1	No Gas	2.531	3.5	17956	2.4	2.5	CCB Main CR1 Failed
Ba	137	1	No Gas	0.069	46.1	290	24.9	2.5	
Tl	205	1	No Gas	0.011	5.8	233	4.9	1	
Tl	203	1	No Gas	0.006	48.7	63	32.9	1	
Pb	208	1	No Gas	0.242	1.1	6267	0.9	2.5	
U	238	1	No Gas	0.005	31.4	130	27.7	2.5	
Ca	43	2	He	-9.557	-57.3	17	34.6	100	
Sb	121	2	He	2.412	5.5	8373	5.7	2.5	
Ti	47	2	He	-0.030	-175.9	3	173.2	2.5	
Cu	63	1	No Gas	0.025	74.3	2130	6.5	2.5	
Se	82	1	No Gas	3.546	553.6	-477	-335.7	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	623489	0.60	670807	92.95	70	120	
Ge	72	2	He	342535	1.38	338750	101.12	70	120	
Ge	72	1	No Gas	1042103	2.46	1064833	97.87	70	120	
In	115	1	No Gas	1379227	1.81	1360630	101.37	70	120	
Bi	209	1	No Gas	1392156	0.68	1388986	100.23	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	259_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:00:47-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	108.502	4.004	872339	0.45	100	108.5	90	110	
Be	9	1	No Gas	106.543	4.550	179980	0.91	100	106.5	90	110	
V	51	2	He	100.243	0.461	291737	0.96	100	100.2	90	110	
Cr	52	2	He	99.942	0.546	333503	0.59	100	99.9	90	110	
Fe	56	2	He	9945.662	0.693	31638336	1.04	10000	99.5	90	110	
Se	78	2	He	99.524	1.869	4806	1.24	100	99.5	90	110	
As	75	2	He	105.902	1.635	50969	1.67	100	105.9	90	110	
Ca	44	2	He	9839.111	0.637	185724	1.13	10000	98.4	90	110	
Na	23	2	He	10160.746	0.363	6643785	0.82	10000	101.6	90	110	
Mg	24	2	He	10027.155	0.534	3500578	0.27	10000	100.3	90	110	
K	39	2	He	10051.665	1.262	4003488	0.95	10000	100.5	90	110	
Mn	55	2	He	100.430	0.120	246512	0.77	100	100.4	90	110	
Co	59	2	He	101.816	0.110	503889	0.55	100	101.8	90	110	
Ni	60	2	He	100.501	2.148	126578	2.26	100	100.5	90	110	
Cu	63	2	He	101.146	0.858	344654	1.21	100	101.1	90	110	
Zn	66	2	He	101.636	0.633	74393	0.45	100	101.6	90	110	
Al	27	2	He	109.230	0.964	20606	0.39	100	109.2	90	110	
B	11	1	No Gas	602.151	3.993	480858	0.63	500	120.4	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	97.368	2.372	780655	0.71	100	97.4	90	110	
Si	28	1	No Gas	532.476	1.110	1945598	2.12	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.655	0.288	778754	1.21	100	98.7	90	110	
Cd	111	1	No Gas	101.326	1.512	163952	0.23	100	101.3	90	110	
Sr	88	1	No Gas	99.947	1.726	1476236	0.45	100	99.9	90	110	
Mo	95	1	No Gas	96.855	1.871	274323	0.73	100	96.9	90	110	
Sn	118	1	No Gas	100.292	1.638	477119	0.29	100	100.3	90	110	
Sb	121	1	No Gas	89.616	1.711	686349	0.64	100	89.6	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.516	2.487	235284	1.04	100	100.5	90	110	
Tl	205	1	No Gas	102.920	0.846	1888703	1.24	100	102.9	90	110	
Tl	203	1	No Gas	91.250	2.217	720857	0.58	100	91.2	90	110	
Pb	208	1	No Gas	99.013	2.325	2392618	0.79	100	99.0	90	110	
U	238	1	No Gas	100.406	1.508	2629323	0.32	100	100.4	90	110	
Ca	43	2	He	10197.953	3.220	11148	2.55	10000	102.0	90	110	
Sb	121	2	He	102.625	0.423	353547	0.39	100	102.6	90	110	
Ti	47	2	He	96.874	3.272	10881	3.04	100	96.9	90	110	
Cu	63	1	No Gas	89.016	0.758	576319	1.12	100	89.0	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	99.863	11.002	8138	10.93	100	99.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	622112	3.73	670807	92.74	70	120	
Ge	72	2	He	347883	0.65	338750	102.70	70	120	
Ge	72	1	No Gas	1142872	1.73	1064833	107.33	70	120	
In	115	1	No Gas	1397885	1.46	1360630	102.74	70	120	
Bi	209	1	No Gas	1441303	1.76	1388986	103.77	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	260_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:02:42-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.189	11.6	35909	0.6	0.5	
Be	9	1	No Gas	0.001	315.4	35	14.3	0.5	
V	51	2	He	-0.432	-2.2	966	3.3	2.5	
Cr	52	2	He	0.041	121.4	1160	13.5	2.5	
Fe	56	2	He	0.363	21.2	11428	2.0	100	
Se	78	2	He	1.067	53.6	373	6.9	2	
As	75	2	He	-0.057	-42.0	89	13.2	2.5	
Ca	44	2	He	3.665	144.6	500	20.0	100	
Na	23	2	He	6.976	39.2	234651	0.8	100	
Mg	24	2	He	0.602	45.4	520	17.1	100	
K	39	2	He	-5.650	-40.0	87765	0.5	100	
Mn	55	2	He	0.102	44.0	660	16.9	2.5	
Co	59	2	He	0.005	66.7	43	35.3	2.5	
Ni	60	2	He	-0.095	-72.5	107	78.6	2.5	
Cu	63	2	He	-0.033	-117.3	870	13.9	2	
Zn	66	2	He	-0.208	-139.0	5371	2.9	2.5	
Al	27	2	He	-0.796	-9.6	333	4.6	5	
B	11	1	No Gas	50.680	10.5	50670	7.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.329	-4.3	10678	0.5	5	
Si	28	1	No Gas	14.751	24.7	203676	1.2	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.000	-2038.7	223	27.4	2.5	
Cd	111	1	No Gas	0.004	86.6	7	86.6	1	
Sr	88	1	No Gas	0.006	57.1	733	7.5	2.5	
Mo	95	1	No Gas	0.022	65.8	73	55.1	2.5	
Sn	118	1	No Gas	0.047	279.3	1414	42.2	5	
Sb	121	1	No Gas	0.414	12.7	3207	10.9	2.5	
Ba	137	1	No Gas	0.013	119.6	157	20.5	2.5	
Tl	205	1	No Gas	0.017	13.2	337	10.4	1	
Tl	203	1	No Gas	0.015	28.2	140	24.7	1	
Pb	208	1	No Gas	0.047	15.7	1757	11.0	2.5	
U	238	1	No Gas	0.006	29.6	170	27.0	2.5	
Ca	43	2	He	-6.274	-259.1	20	86.6	100	
Sb	121	2	He	0.398	14.3	1527	13.1	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	0.006	713.3	2027	8.0	2.5	
Se	82	1	No Gas	1.519	893.5	-634	-176.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	612686	0.20	670807	91.34	70	120	
Ge	72	2	He	338143	0.70	338750	99.82	70	120	
Ge	72	1	No Gas	1051636	4.26	1064833	98.76	70	120	
In	115	1	No Gas	1343467	1.66	1360630	98.74	70	120	
Bi	209	1	No Gas	1418403	1.58	1388986	102.12	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	271_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:24:13-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	111.114	2.364	862992	2.25	100	111.1	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	107.483	1.206	175597	1.16	100	107.5	90	110	
V	51	2	He	98.882	0.926	278646	0.91	100	98.9	90	110	
Cr	52	2	He	98.621	1.290	318633	1.08	100	98.6	90	110	
Fe	56	2	He	9863.261	0.915	30378721	1.35	10000	98.6	90	110	
Se	78	2	He	98.653	2.015	4615	1.43	100	98.7	90	110	
As	75	2	He	103.150	1.458	48074	2.38	100	103.1	90	110	
Ca	44	2	He	9787.164	1.086	178869	1.36	10000	97.9	90	110	
Na	23	2	He	9924.783	1.189	6288465	1.44	10000	99.2	90	110	
Mg	24	2	He	9973.486	0.514	3371436	1.75	10000	99.7	90	110	
K	39	2	He	9942.370	1.026	3834983	0.65	10000	99.4	90	110	
Mn	55	2	He	98.726	0.570	234625	0.82	100	98.7	90	110	
Co	59	2	He	100.409	1.594	481087	0.92	100	100.4	90	110	
Ni	60	2	He	99.875	0.280	121795	1.29	100	99.9	90	110	
Cu	63	2	He	99.814	1.222	329300	1.11	100	99.8	90	110	
Zn	66	2	He	101.219	0.844	71763	2.07	100	101.2	90	110	
Al	27	2	He	111.698	0.872	20392	1.59	100	111.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	579.106	1.151	447622	1.38	500	115.8	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	103.893	2.176	760186	0.88	100	103.9	90	110	
Si	28	1	No Gas	552.760	2.037	1840070	1.11	5000	11.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.345	0.835	750999	0.51	100	98.3	90	110	
Cd	111	1	No Gas	98.978	1.760	154946	1.31	100	99.0	90	110	
Sr	88	1	No Gas	100.330	1.944	1433727	1.44	100	100.3	90	110	
Mo	95	1	No Gas	97.352	0.850	266780	0.34	100	97.4	90	110	
Sn	118	1	No Gas	99.762	1.321	459185	0.81	100	99.8	90	110	
Sb	121	1	No Gas	93.558	1.564	655074	0.89	100	93.6	90	110	
Ba	137	1	No Gas	100.569	0.908	227783	0.40	100	100.6	90	110	
Tl	205	1	No Gas	103.680	2.298	1818895	2.67	100	103.7	90	110	
Tl	203	1	No Gas	92.180	1.388	696182	0.27	100	92.2	90	110	
Pb	208	1	No Gas	97.770	4.815	2258246	3.85	100	97.8	90	110	
U	238	1	No Gas	101.989	0.358	2553341	0.81	100	102.0	90	110	
Ca	43	2	He	9557.849	2.599	10117	1.33	10000	95.6	90	110	
Sb	121	2	He	100.964	1.168	336789	1.84	100	101.0	90	110	
Ti	47	2	He	97.710	4.647	10624	3.96	100	97.7	90	110	
Cu	63	1	No Gas	94.005	1.850	556223	0.51	100	94.0	90	110	
Se	82	1	No Gas	102.567	6.952	7662	5.45	100	102.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600981	0.40	670807	89.59	70	120	
Ge	72	2	He	336834	1.35	338750	99.43	70	120	
Ge	72	1	No Gas	1044887	2.24	1064833	98.13	70	120	
In	115	1	No Gas	1352316	0.51	1360630	99.39	70	120	
Bi	209	1	No Gas	1377715	1.13	1388986	99.19	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	272_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:26:09-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.191	37.3	34754	1.1	0.5	
Be	9	1	No Gas	-0.005	-67.0	25	20.0	0.5	
V	51	2	He	-0.017	-47.5	2025	0.9	2.5	
Cr	52	2	He	0.024	140.2	1050	9.7	2.5	
Fe	56	2	He	0.368	18.2	10874	1.9	100	
Se	78	2	He	0.633	44.5	337	3.3	2	
As	75	2	He	0.031	168.7	123	18.9	2.5	
Ca	44	2	He	-2.168	-239.1	373	24.3	100	
Na	23	2	He	-0.522	-353.9	218591	0.3	100	
Mg	24	2	He	0.381	20.1	423	5.9	100	
K	39	2	He	-7.800	-48.2	82620	1.4	100	
Mn	55	2	He	0.043	85.8	493	16.9	2.5	
Co	59	2	He	0.003	145.1	33	62.4	2.5	
Ni	60	2	He	-0.082	-40.1	117	32.5	2.5	
Cu	63	2	He	-0.051	-12.0	770	2.6	2	
Zn	66	2	He	-0.079	-590.2	5184	5.5	2.5	
Al	27	2	He	-1.129	-32.6	260	24.0	5	
B	11	1	No Gas	57.956	6.0	54428	4.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.252	-9.7	10414	7.9	5	
Si	28	1	No Gas	15.689	7.0	191657	1.9	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.004	-78.4	190	13.9	2.5	
Cd	111	1	No Gas	0.009	86.6	13	86.6	1	
Sr	88	1	No Gas	0.017	211.5	870	57.8	2.5	
Mo	95	1	No Gas	0.015	36.5	53	28.6	2.5	
Sn	118	1	No Gas	-0.012	-162.9	1123	8.4	5	
Sb	121	1	No Gas	0.269	16.3	2030	14.3	2.5	
Ba	137	1	No Gas	0.016	227.6	160	48.8	2.5	
Tl	205	1	No Gas	0.012	21.9	247	18.7	1	
Tl	203	1	No Gas	0.012	37.8	113	31.0	1	
Pb	208	1	No Gas	0.033	58.8	1387	32.7	2.5	
U	238	1	No Gas	0.005	21.6	147	19.7	2.5	
Ca	43	2	He	-8.560	-67.0	17	34.6	100	
Sb	121	2	He	0.203	10.9	830	8.7	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	-0.035	-80.1	1660	9.0	2.5	
Se	82	1	No Gas	-0.130	-5855.2	-738	-79.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592791	0.47	670807	88.37	70	120	
Ge	72	2	He	321292	0.23	338750	94.85	70	120	
Ge	72	1	No Gas	974288	0.28	1064833	91.50	70	120	
In	115	1	No Gas	1314040	0.90	1360630	96.58	70	120	
Bi	209	1	No Gas	1387537	0.80	1388986	99.90	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	294_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:09:22-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	113.868	3.273	860002	2.63	100	113.9	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	112.290	0.051	178583	0.95	100	112.3	90	110	CCV Main CR1-2 Failed
V	51	2	He	102.213	1.281	290902	2.18	100	102.2	90	110	
Cr	52	2	He	101.149	0.737	330115	1.78	100	101.1	90	110	
Fe	56	2	He	10143.364	1.872	31560265	2.76	10000	101.4	90	110	
Se	78	2	He	101.031	3.028	4766	2.88	100	101.0	90	110	
As	75	2	He	104.463	0.737	49174	1.48	100	104.5	90	110	
Ca	44	2	He	10230.814	1.830	188830	1.18	10000	102.3	90	110	
Na	23	2	He	10708.195	5.654	6832721	4.46	10000	107.1	90	110	
Mg	24	2	He	10218.420	1.492	3488656	0.94	10000	102.2	90	110	
K	39	2	He	10289.593	1.321	4005738	0.33	10000	102.9	90	110	
Mn	55	2	He	100.807	0.644	241985	0.98	100	100.8	90	110	
Co	59	2	He	101.643	1.445	492001	2.29	100	101.6	90	110	
Ni	60	2	He	101.135	0.359	124570	0.75	100	101.1	90	110	
Cu	63	2	He	101.794	0.557	339225	1.36	100	101.8	90	110	
Zn	66	2	He	102.044	1.447	73033	2.22	100	102.0	90	110	
Al	27	2	He	103.512	2.247	19120	1.10	100	103.5	90	110	
B	11	1	No Gas	581.579	3.132	437543	3.10	500	116.3	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	95.627	2.896	692318	0.15	100	95.6	90	110	
Si	28	1	No Gas	533.448	3.228	1758558	1.84	5000	10.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.586	1.648	751055	0.67	100	100.6	90	110	
Cd	111	1	No Gas	101.833	2.077	155872	0.58	100	101.8	90	110	
Sr	88	1	No Gas	103.111	2.077	1440788	1.36	100	103.1	90	110	
Mo	95	1	No Gas	101.564	1.585	272144	0.52	100	101.6	90	110	
Sn	118	1	No Gas	101.647	1.281	457478	0.70	100	101.6	90	110	
Sb	121	1	No Gas	95.149	3.422	657557	0.73	100	95.1	90	110	
Ba	137	1	No Gas	102.213	2.358	226345	0.67	100	102.2	90	110	
Tl	205	1	No Gas	100.111	1.685	1715403	0.47	100	100.1	90	110	
Tl	203	1	No Gas	89.697	1.971	661729	0.40	100	89.7	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	99.217	5.161	2237980	3.00	100	99.2	90	110	
U	238	1	No Gas	102.453	2.013	2505262	0.14	100	102.5	90	110	
Ca	43	2	He	10343.483	2.201	11058	1.24	10000	103.4	90	110	
Sb	121	2	He	100.621	0.958	339044	1.86	100	100.6	90	110	
Ti	47	2	He	97.265	4.288	10688	5.12	100	97.3	90	110	
Cu	63	1	No Gas	97.508	2.577	569504	0.53	100	97.5	90	110	
Se	82	1	No Gas	104.138	8.704	7689	7.01	100	104.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585035	0.90	670807	87.21	70	120	
Ge	72	2	He	340231	1.09	338750	100.44	70	120	
Ge	72	1	No Gas	1031730	2.72	1064833	96.89	70	120	
In	115	1	No Gas	1322527	1.95	1360630	97.20	70	120	
Bi	209	1	No Gas	1346004	2.13	1388986	96.91	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	295_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:11:18-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.231	53.2	35335	2.2	0.5	
Be	9	1	No Gas	0.025	111.8	73	61.9	0.5	
V	51	2	He	0.191	10.3	2726	1.8	2.5	
Cr	52	2	He	0.054	85.7	1210	12.2	2.5	
Fe	56	2	He	0.380	13.7	11538	1.7	100	
Se	78	2	He	0.478	98.7	349	5.8	2	
As	75	2	He	0.127	35.8	176	12.2	2.5	
Ca	44	2	He	-2.789	-83.1	383	10.9	100	
Na	23	2	He	1.007	94.4	232164	0.2	100	
Mg	24	2	He	0.466	45.1	477	14.9	100	
K	39	2	He	-6.057	-93.6	88056	2.4	100	
Mn	55	2	He	0.090	46.4	633	15.6	2.5	
Co	59	2	He	0.002	100.6	30	33.3	2.5	
Ni	60	2	He	-0.093	-14.9	110	15.7	2.5	
Cu	63	2	He	-0.089	-35.4	687	14.9	2	
Zn	66	2	He	-0.396	-44.6	5274	1.9	2.5	
Al	27	2	He	-1.176	-7.0	267	5.7	5	
B	11	1	No Gas	34.675	12.1	37438	8.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.147	-11.1	11496	7.4	5	
Si	28	1	No Gas	2.636	48.0	159984	2.2	10	
Ag	107	1	No Gas	-0.001	-45.1	220	0.0	2.5	
Cd	111	1	No Gas	0.033	139.3	50	138.6	1	
Sr	88	1	No Gas	0.279	178.8	4526	153.3	2.5	
Mo	95	1	No Gas	0.025	104.9	80	86.6	2.5	
Sn	118	1	No Gas	0.074	96.1	1533	19.9	5	
Sb	121	1	No Gas	0.210	18.2	1704	14.9	2.5	
Ba	137	1	No Gas	0.228	194.8	631	155.4	2.5	
Tl	205	1	No Gas	0.018	38.6	343	34.0	1	
Tl	203	1	No Gas	0.024	56.8	200	50.7	1	
Pb	208	1	No Gas	0.124	149.4	3422	122.8	2.5	
U	238	1	No Gas	0.020	133.1	514	129.4	2.5	
Ca	43	2	He	-18.841	-28.8	7	86.6	100	
Sb	121	2	He	0.146	4.4	683	3.0	2.5	
Ti	47	2	He	0.030	520.4	10	173.2	2.5	
Cu	63	1	No Gas	-0.017	-179.0	1820	9.1	2.5	
Se	82	1	No Gas	-5.000	-127.6	-1150	-43.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	597589	0.39	670807	89.09	70	120	
Ge	72	2	He	339856	0.32	338750	100.33	70	120	
Ge	72	1	No Gas	1008259	0.37	1064833	94.69	70	120	
In	115	1	No Gas	1341064	1.34	1360630	98.56	70	120	
Bi	209	1	No Gas	1360186	0.72	1388986	97.93	70	120	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	297LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:15:16-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.991	1.991	2.84	49657	0.00	2	
Be	9	1	No Gas	2.202	2.202	4.29	3704	0.06	2	
V	51	2	He	2.222	2.222	1.43	8550	0.03	2	
Cr	52	2	He	1.933	1.933	3.05	7395	0.03	2	
Fe	56	2	He	193.921	193.921	0.43	619618	0.03	200	
Se	78	2	He	3.004	3.004	11.33	465	0.65	2	NewName Main CR1 Failed
As	75	2	He	2.077	2.077	6.82	1102	0.19	2	
Ca	44	2	He	210.289	210.289	1.76	4351	4.83	200	
Na	23	2	He	164.060	164.060	4.18	336283	0.05	200	
Mg	24	2	He	196.865	196.865	0.50	68207	0.29	200	
K	39	2	He	182.037	182.037	1.82	161338	0.11	200	
Mn	55	2	He	1.980	1.980	4.91	5214	0.04	2	
Co	59	2	He	2.046	2.046	6.53	10021	0.02	2	
Ni	60	2	He	2.066	2.066	12.90	2790	0.07	2	
Cu	63	2	He	2.098	2.098	6.36	8036	0.03	2	
Zn	66	2	He	1.687	1.687	3.69	6725	0.03	2	
Al	27	2	He	2.107	2.107	18.04	867	0.24	2	
B	11	1	No Gas	19.876	19.876	0.47	27051	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.513	1.513	9.19	31733	0.00	2	
Si	28	1	No Gas	9.150	9.150	8.06	190943	0.00	10	
Ag	107	1	No Gas	1.904	1.904	2.70	14889	0.01	2	
Cd	111	1	No Gas	1.985	1.985	8.14	3134	0.06	2	
Sr	88	1	No Gas	1.865	1.865	0.43	27525	0.01	2	
Mo	95	1	No Gas	2.009	2.009	4.26	5565	0.04	2	
Sn	118	1	No Gas	1.886	1.886	3.94	9951	0.02	2	
Sb	121	1	No Gas	1.945	1.945	2.12	14301	0.01	2	
Ba	137	1	No Gas	2.005	2.005	5.53	4708	0.04	2	
Tl	205	1	No Gas	1.758	1.758	3.05	31711	0.01	2	
Tl	203	1	No Gas	1.756	1.756	4.71	13641	0.01	2	
Pb	208	1	No Gas	1.834	1.834	0.89	44148	0.00	2	
U	238	1	No Gas	1.825	1.825	0.76	46944	0.00	2	
Ca	43	2	He	154.201	154.201	22.07	193	79.76	200	
Sb	121	2	He	2.155	2.155	2.30	7526	0.03	2	
Ti	47	2	He	1.744	1.744	19.21	200	0.87	200	
Cu	63	1	No Gas	1.974	1.974	6.09	14011	0.01	2	
Se	82	1	No Gas	-1.041	-1.041	-262.62	-886	0.12	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	613209	0.12	670807	91.41	70	120	
Ge	72	2	He	343638	0.79	338750	101.44	70	120	
Ge	72	1	No Gas	1075012	4.27	1064833	100.96	70	120	
In	115	1	No Gas	1364043	1.76	1360630	100.25	70	120	
Bi	209	1	No Gas	1415507	1.18	1388986	101.91	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	298LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:17:15-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.949	4.949	1.97	71567	0.01	5	
Be	9	1	No Gas	5.302	5.302	2.52	8794	0.06	5	
V	51	2	He	5.193	5.193	2.04	16941	0.03	5	
Cr	52	2	He	4.820	4.820	3.67	16797	0.03	5	
Fe	56	2	He	512.133	512.133	1.65	1611065	0.03	500	
Se	78	2	He	5.922	5.922	36.83	592	1.00	5	
As	75	2	He	5.046	5.046	0.28	2498	0.20	5	
Ca	44	2	He	506.261	506.261	3.84	9807	5.16	500	
Na	23	2	He	427.827	427.827	0.59	498055	0.09	500	
Mg	24	2	He	484.469	484.469	1.76	166539	0.29	500	
K	39	2	He	459.477	459.477	2.78	266620	0.17	500	
Mn	55	2	He	4.872	4.872	3.71	12152	0.04	5	
Co	59	2	He	4.900	4.900	2.00	23851	0.02	5	
Ni	60	2	He	4.867	4.867	4.43	6238	0.08	5	
Cu	63	2	He	4.912	4.912	0.52	17391	0.03	5	
Zn	66	2	He	4.850	4.850	4.84	8793	0.06	5	
Al	27	2	He	6.239	6.239	8.03	1610	0.39	5	
B	11	1	No Gas	33.076	33.076	2.30	36875	0.09	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	4.980	4.980	4.67	58681	0.01	5	
Si	28	1	No Gas	22.634	22.634	6.73	239380	0.01	25	
Ag	107	1	No Gas	4.642	4.642	0.96	36554	0.01	5	
Cd	111	1	No Gas	4.940	4.940	3.16	7926	0.06	5	
Sr	88	1	No Gas	4.917	4.917	0.33	72647	0.01	5	
Mo	95	1	No Gas	4.702	4.702	4.50	13217	0.04	5	
Sn	118	1	No Gas	4.710	4.710	1.14	23398	0.02	5	
Sb	121	1	No Gas	4.473	4.473	2.51	33379	0.01	5	
Ba	137	1	No Gas	4.851	4.851	3.07	11385	0.04	5	
Tl	205	1	No Gas	4.291	4.291	2.48	78704	0.01	5	
Tl	203	1	No Gas	4.195	4.195	0.31	33144	0.01	5	
Pb	208	1	No Gas	4.551	4.551	2.80	110492	0.00	5	
U	238	1	No Gas	4.402	4.402	1.95	115199	0.00	5	
Ca	43	2	He	540.898	540.898	8.10	607	89.16	500	
Sb	121	2	He	4.980	4.980	0.53	17048	0.03	5	
Ti	47	2	He	3.927	3.927	8.93	440	0.89	5	
Cu	63	1	No Gas	4.431	4.431	2.02	29700	0.01	5	
Se	82	1	No Gas	8.993	8.993	38.90	-44	-20.27	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	607993	0.38	670807	90.64	70	120	
Ge	72	2	He	341894	0.51	338750	100.93	70	120	
Ge	72	1	No Gas	1103735	2.11	1064833	103.65	70	120	
In	115	1	No Gas	1385867	0.53	1360630	101.85	70	120	
Bi	209	1	No Gas	1440129	1.51	1388986	103.68	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	299ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:19:14-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.172	40.1	34972	1.7	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.010	-36.1	17	34.6	0	ICSA Main CR1 Failed
V	51	2	He	-0.067	-227.9	2045	22.7	0	ICSA Main CR1 Failed
Cr	52	2	He	1.409	10.2	5735	9.4	0	ICSA Main CR1 Failed
Fe	56	2	He	100348.958	1.3	318449329	0.4	0	
Se	78	2	He	0.807	176.2	371	16.5	0	ICSA Main CR1 Failed
As	75	2	He	0.374	26.8	298	17.1	0	ICSA Main CR1 Failed
Ca	44	2	He	103422.026	1.3	1944098	2.1	0	
Na	23	2	He	101552.908	1.2	64135157	0.7	0	
Mg	24	2	He	99609.647	1.8	34697657	0.8	0	
K	39	2	He	100778.128	1.1	39223273	0.6	0	
Mn	55	2	He	1.304	95.6	3635	85.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.293	39.3	1474	39.9	0	ICSA Main CR1 Failed
Ni	60	2	He	0.877	20.6	1330	18.1	0	ICSA Main CR1 Failed
Cu	63	2	He	0.216	54.6	1740	24.1	0	ICSA Main CR1 Failed
Zn	66	2	He	3.583	20.8	8076	7.0	0	ICSA Main CR1 Failed
Al	27	2	He	101499.212	1.5	18654161	1.0	0	
B	11	1	No Gas	10.200	9.4	19156	3.6	0	
Al	27	1	No Gas	91119.660	0.6	700985403	0.5	0	
Si	28	1	No Gas	12.645	1.9	211889	0.5	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.148	4.7	1380	3.6	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.242	4.9	1974	4.4	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.362	2.8	63903	2.0	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2211.633	0.8	6152314	0.3	0	
Sn	118	1	No Gas	0.210	15.9	2204	6.6	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.455	1.7	3754	1.5	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.648	8.1	1620	7.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.017	19.8	340	19.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.015	35.1	137	29.6	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.178	4.2	4724	4.6	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.006	39.3	153	37.1	0	ICSA Main CR1 Failed
Ca	43	2	He	98227.783	1.6	106933	1.2	0	
Sb	121	2	He	0.537	42.3	2050	39.3	0	ICSA Main CR1 Failed
Ti	47	2	He	2008.433	1.1	225008	1.2	0	
Se	82	1	No Gas	1.587	234.2	-701	-46.6	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	598860	0.23	670807	89.27	70	120	
Ge	72	2	He	347176	1.01	338750	102.49	70	120	
Ge	72	1	No Gas	1128046	0.56	1064833	105.94	70	120	
In	115	1	No Gas	1372848	0.84	1360630	100.90	70	120	
Bi	209	1	No Gas	1379602	1.62	1388986	99.32	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	300ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:21:14-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	104.396	2.504	774196	2.46	100	104.4	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	105.675	0.419	164431	0.38	100	105.7	80	120	
V	51	2	He	98.114	0.473	284125	0.10	100	98.1	80	120	
Cr	52	2	He	98.496	1.039	327008	0.67	100	98.5	80	120	
Fe	56	2	He	101930.521	0.679	322491609	0.29	100	101930.5	80	120	ICSB Main CR1 Failed
Se	78	2	He	94.321	1.306	4549	1.22	100	94.3	80	120	
As	75	2	He	100.359	1.055	48060	0.56	100	100.4	80	120	
Ca	44	2	He	102183.177	1.074	1914733	0.71	100	102183.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	102720.456	0.962	64672559	0.57	100	102720.5	80	120	ICSB Main CR1 Failed
Mg	24	2	He	100801.831	0.787	35009295	1.03	100	100801.8	80	120	ICSB Main CR1 Failed
K	39	2	He	101332.621	0.464	39319923	0.86	100	101332.6	80	120	ICSB Main CR1 Failed
Mn	55	2	He	97.433	0.454	237946	0.75	100	97.4	80	120	
Co	59	2	He	97.939	0.655	482219	0.28	100	97.9	80	120	
Ni	60	2	He	97.102	1.402	121674	0.86	100	97.1	80	120	
Cu	63	2	He	96.281	0.666	326444	0.75	100	96.3	80	120	
Zn	66	2	He	97.362	1.740	71143	2.10	100	97.4	80	120	
Al	27	2	He	92958.970	0.257	17033133	0.36	100	92959.0	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	609.447	1.596	448080	1.61	100	609.4	80	120	
Al	27	1	No Gas	85682.848	4.353	623127804	0.45	100	85682.8	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	484.563	2.859	1667236	1.38	100	484.6	80	120	
Ag	107	1	No Gas	95.973	0.387	720813	0.28	100	96.0	80	120	
Cd	111	1	No Gas	97.927	0.791	150777	0.36	100	97.9	80	120	
Sr	88	1	No Gas	107.802	0.870	1515095	0.39	100	107.8	80	120	
Mo	95	1	No Gas	2143.727	0.669	5777484	0.32	100	2143.7	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	99.723	1.303	451440	0.93	100	99.7	80	120	
Sb	121	1	No Gas	89.190	4.079	637523	0.17	100	89.2	80	120	
Ba	137	1	No Gas	100.876	1.456	224707	1.05	100	100.9	80	120	
Tl	205	1	No Gas	98.432	4.327	1699320	2.46	100	98.4	80	120	
Tl	203	1	No Gas	88.691	2.029	659440	0.31	100	88.7	80	120	
Pb	208	1	No Gas	95.109	2.267	2163090	0.54	100	95.1	80	120	
U	238	1	No Gas	103.302	1.748	2546047	1.02	100	103.3	80	120	
Ca	43	2	He	98484.423	0.946	106886	0.41	100	98484.4	80	120	ICSB Main CR1 Failed
Sb	121	2	He	97.286	0.745	333456	0.79	100	97.3	80	120	
Ti	47	2	He	1918.429	0.582	214266	0.12	100	1918.4	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	87.973	3.696	531597	0.32	100	88.0	80	120	
Se	82	1	No Gas	96.822	7.951	7352	9.43	100	96.8	80	120	

QC ISTD Table

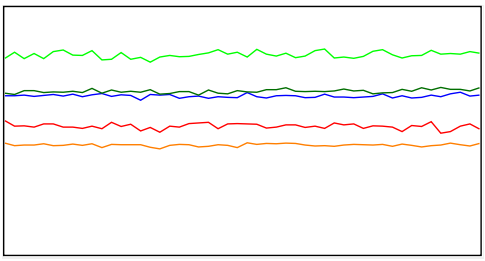
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	572387	0.06	670807	85.33	70	120	
Ge	72	2	He	346108	0.57	338750	102.17	70	120	
Ge	72	1	No Gas	1067560	3.86	1064833	100.26	70	120	
In	115	1	No Gas	1330016	0.54	1360630	97.75	70	120	
Bi	209	1	No Gas	1356539	1.91	1388986	97.66	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq. Date-Time	07/20/2022 10:23:44
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2595	25951.54		
24	10000	8092	80916.13		
59	20000	12835	128349.78		
115	50000	22132	221323.10		
208	20000	13222	132220.38		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.163	5.000	
24	1.584	5.000	
59	1.014	5.000	
115	1.219	5.000	
208	1.108	5.000	

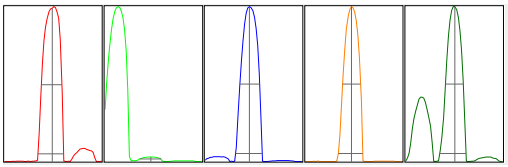
Mass	Background	Background (Required)	Background (Flag)
9	1.900		
24	0.600		
59	1.000		
115	0.500		
208	1.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.464 %
Doubly Charged	70 / 140 1.552 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2541.87	9.00	8.90 - 9.10	
24	8046.35	23.95	23.90 - 24.10	
59	13297.39	58.90	58.90 - 59.10	
115	22153.30	114.95	114.90 - 115.10	
208	13089.29	208.05	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.782		
24	0.65			
59	0.61	0.814		
115	0.55	0.744		
208	0.55	0.803		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.1 V	Deflect	13.2 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

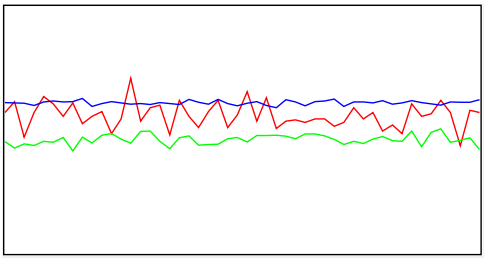
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	112	1118.04		
24	1000	460	4604.36		
59	10000	6101	61008.47		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

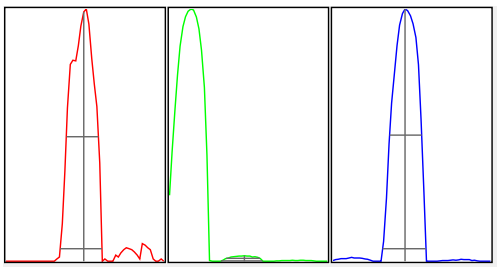
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.239	5.000	Fail
24	4.522	5.000	
59	1.374	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.000		
59	0.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.295 %
Doubly Charged	70 / 140 0.906 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	120.01	9.00	8.90 - 9.10	
24	482.11	23.95	23.90 - 24.10	
59	6125.38	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.781		
24	0.63	0.783		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.809		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	-0.2 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

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WorkOrder: HS22070320

LHAAP 16 June 2022

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

21-Jul-2022

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HS22070320 LHAAP 16 June 2022. Final

ALS WO# HS22070320

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July 22, 2022

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS22070320**

Laboratory Results for: **LHAAP 16 June 2022**

Dear Vicki Graves ,

ALS Environmental received 14 sample(s) on Jul 07, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: JUMOKE.LAWAL
Dane J. Wacasey

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070320

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22070320-01	16WW44-220705-M	Groundwater		05-Jul-2022 07:35	07-Jul-2022 09:40	☐
HS22070320-02	16WW40-220705-M	Groundwater		05-Jul-2022 10:35	07-Jul-2022 09:40	☐
HS22070320-03	16WW12-220705-M	Groundwater		05-Jul-2022 11:30	07-Jul-2022 09:40	☐
HS22070320-04	16WW12-220705-M-FD	Groundwater		05-Jul-2022 11:30	07-Jul-2022 09:40	☐
HS22070320-05	16WW13-220705-M	Groundwater		05-Jul-2022 12:15	07-Jul-2022 09:40	☐
HS22070320-06	16WW42-220705-M	Groundwater		05-Jul-2022 12:55	07-Jul-2022 09:40	☐
HS22070320-07	16WW42-220705-M-FD	Groundwater		05-Jul-2022 12:55	07-Jul-2022 09:40	☐
HS22070320-08	16WW06-220706	Groundwater		06-Jul-2022 07:20	07-Jul-2022 09:40	☐
HS22070320-09	16WW21-220706	Groundwater		06-Jul-2022 08:10	07-Jul-2022 09:40	☐
HS22070320-10	16WW19-220706	Groundwater		06-Jul-2022 09:05	07-Jul-2022 09:40	☐
HS22070320-11	16WW18-220706	Groundwater		06-Jul-2022 11:10	07-Jul-2022 09:40	☐
HS22070320-12	16WW15-220706	Groundwater		06-Jul-2022 12:15	07-Jul-2022 09:40	☐
HS22070320-13	16WW17-220706	Groundwater		06-Jul-2022 13:20	07-Jul-2022 09:40	☐
HS22070320-14	16WW30-220630	Groundwater		30-Jun-2022 10:25	07-Jul-2022 09:40	☐

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Work Order: HS22070320

CASE NARRATIVE

Metals by Method SW6020A

Batch ID: 181402

Sample ID: 16WW13-220705-M (HS22070320-05)

- Sample ran at 2x due to sample matrix.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW44-220705-M
Collection Date: 05-Jul-2022 07:35

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Arsenic	**0.0132**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 21:39
Chromium	**0.000469**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 21:39
Manganese	**0.0571**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	20-Jul-2022 21:39
Nickel	**0.00284**	J	**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 21:39
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 21:39

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW40-220705-M
Collection Date: 05-Jul-2022 10:35

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-02
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Arsenic	**0.0110**		**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 21:53
Chromium	**0.00154**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 21:53
Manganese	**2.30**		**0.0140**	**0.0500**	**0.100**	**mg/L**	20	21-Jul-2022 14:47
Nickel	**0.0247**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 21:53
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 21:53

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW12-220705-M
Collection Date: 05-Jul-2022 11:30

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-03
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Chromium	**0.578**		**0.000800**	**0.00250**	**0.0100**	**mg/L**	2	20-Jul-2022 21:55
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	21-Jul-2022 14:49

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW12-220705-M-FD
Collection Date: 05-Jul-2022 11:30

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-04
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Chromium	**0.685**		**0.000800**	**0.00250**	**0.0100**	**mg/L**	2	20-Jul-2022 21:57
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	21-Jul-2022 14:51

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW13-220705-M
Collection Date: 05-Jul-2022 12:15

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-05
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Manganese	**12.6**		**0.0140**	**0.0500**	**0.100**	**mg/L**	20	21-Jul-2022 14:55
Thallium	0.00100	U	0.000400	0.00100	0.00400	mg/L	2	20-Jul-2022 21:59

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW42-220705-M
Collection Date: 05-Jul-2022 12:55

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-06
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Arsenic	**0.00161**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 22:01
Chromium	**0.000703**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 22:01
Manganese	**32.0**		**0.350**	**1.25**	**2.50**	**mg/L**	500	21-Jul-2022 14:57
Nickel	**0.0886**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 22:01
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:01

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW42-220705-M-FD
Collection Date: 05-Jul-2022 12:55

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-07
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Arsenic	**0.00172**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 22:03
Chromium	**0.00100**	J	**0.000400**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 22:03
Manganese	**33.4**		**0.350**	**1.25**	**2.50**	**mg/L**	500	21-Jul-2022 14:59
Nickel	**0.0899**		**0.000600**	**0.00125**	**0.00500**	**mg/L**	1	20-Jul-2022 22:03
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:03

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW06-220706
Collection Date: 06-Jul-2022 07:20

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-08
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:05

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW21-220706
Collection Date: 06-Jul-2022 08:10

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-09
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:07

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW19-220706
Collection Date: 06-Jul-2022 09:05

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-10
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:29

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW18-220706
Collection Date: 06-Jul-2022 11:10

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-11
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:31

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW15-220706
Collection Date: 06-Jul-2022 12:15

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-12
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:33

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW17-220706
Collection Date: 06-Jul-2022 13:20

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-13
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:35

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
Sample ID: 16WW30-220630
Collection Date: 30-Jun-2022 10:25

ANALYTICAL REPORT
WorkOrder:HS22070320
Lab ID:HS22070320-14
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 20-Jul-2022		Analyst: JHD
Manganese	**0.844**		**0.000700**	**0.00250**	**0.00500**	**mg/L**	1	20-Jul-2022 22:37
Thallium	0.000500	U	0.000200	0.000500	0.00200	mg/L	1	20-Jul-2022 22:37

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Batch ID: 181402 **Start Date:** 20 Jul 2022 09:00 **End Date:** 20 Jul 2022 13:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22070320-01		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-02		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-03		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-04		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-05		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-06		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-07		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-08		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-09		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-10		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-11		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-12		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-13		10 (mL)	10 (mL)	1	120 plastic HNO3
HS22070320-14		10 (mL)	10 (mL)	1	120 plastic HNO3

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 181402 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS22070320-01	16WW44-220705-M	05 Jul 2022 07:35		20 Jul 2022 09:00	20 Jul 2022 21:39	1
HS22070320-02	16WW40-220705-M	05 Jul 2022 10:35		20 Jul 2022 09:00	21 Jul 2022 14:47	20
HS22070320-02	16WW40-220705-M	05 Jul 2022 10:35		20 Jul 2022 09:00	20 Jul 2022 21:53	1
HS22070320-03	16WW12-220705-M	05 Jul 2022 11:30		20 Jul 2022 09:00	21 Jul 2022 14:49	1
HS22070320-03	16WW12-220705-M	05 Jul 2022 11:30		20 Jul 2022 09:00	20 Jul 2022 21:55	2
HS22070320-04	16WW12-220705-M-FD	05 Jul 2022 11:30		20 Jul 2022 09:00	21 Jul 2022 14:51	1
HS22070320-04	16WW12-220705-M-FD	05 Jul 2022 11:30		20 Jul 2022 09:00	20 Jul 2022 21:57	2
HS22070320-05	16WW13-220705-M	05 Jul 2022 12:15		20 Jul 2022 09:00	21 Jul 2022 14:55	20
HS22070320-05	16WW13-220705-M	05 Jul 2022 12:15		20 Jul 2022 09:00	20 Jul 2022 21:59	2
HS22070320-06	16WW42-220705-M	05 Jul 2022 12:55		20 Jul 2022 09:00	21 Jul 2022 14:57	500
HS22070320-06	16WW42-220705-M	05 Jul 2022 12:55		20 Jul 2022 09:00	20 Jul 2022 22:01	1
HS22070320-07	16WW42-220705-M-FD	05 Jul 2022 12:55		20 Jul 2022 09:00	21 Jul 2022 14:59	500
HS22070320-07	16WW42-220705-M-FD	05 Jul 2022 12:55		20 Jul 2022 09:00	20 Jul 2022 22:03	1
HS22070320-08	16WW06-220706	06 Jul 2022 07:20		20 Jul 2022 09:00	20 Jul 2022 22:05	1
HS22070320-09	16WW21-220706	06 Jul 2022 08:10		20 Jul 2022 09:00	20 Jul 2022 22:07	1
HS22070320-10	16WW19-220706	06 Jul 2022 09:05		20 Jul 2022 09:00	20 Jul 2022 22:29	1
HS22070320-11	16WW18-220706	06 Jul 2022 11:10		20 Jul 2022 09:00	20 Jul 2022 22:31	1
HS22070320-12	16WW15-220706	06 Jul 2022 12:15		20 Jul 2022 09:00	20 Jul 2022 22:33	1
HS22070320-13	16WW17-220706	06 Jul 2022 13:20		20 Jul 2022 09:00	20 Jul 2022 22:35	1
HS22070320-14	16WW30-220630	30 Jun 2022 10:25		20 Jul 2022 09:00	20 Jul 2022 22:37	1

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

QC BATCH REPORT

Batch ID: 181402 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-181402** Units: **mg/L** Analysis Date: **20-Jul-2022 21:35**
Client ID: Run ID: **ICPMS07_413348** SeqNo: **6756893** PrepDate: **20-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.00125	0.00500								U
Chromium	0.00125	0.00500								U
Manganese	0.00250	0.00500								U
Nickel	0.00125	0.00500								U
Thallium	0.000500	0.00200								U

LCS Sample ID: **LCS-181402** Units: **mg/L** Analysis Date: **20-Jul-2022 21:37**
Client ID: Run ID: **ICPMS07_413348** SeqNo: **6756894** PrepDate: **20-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.05139	0.00500	0.05	0	103	84 - 116				
Chromium	0.0493	0.00500	0.05	0	98.6	85 - 116				
Manganese	0.05025	0.00500	0.05	0	100	87 - 115				
Nickel	0.05035	0.00500	0.05	0	101	85 - 117				
Thallium	0.04546	0.00200	0.05	0	90.9	82 - 116				

MS Sample ID: **HS22070320-01MS** Units: **mg/L** Analysis Date: **20-Jul-2022 21:43**
Client ID: **16WW44-220705-M** Run ID: **ICPMS07_413348** SeqNo: **6756897** PrepDate: **20-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.06205	0.00500	0.05	0.01319	97.7	84 - 116				
Chromium	0.04704	0.00500	0.05	0.000469	93.1	85 - 116				
Manganese	0.1025	0.00500	0.05	0.05714	90.8	87 - 115				
Nickel	0.05102	0.00500	0.05	0.002844	96.4	85 - 117				
Thallium	0.04461	0.00200	0.05	0.000014	89.2	82 - 116				

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

QC BATCH REPORT

Batch ID: 181402 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MSD Sample ID: **HS22070320-01MSD** Units: **mg/L** Analysis Date: **20-Jul-2022 21:45**
Client ID: **16WW44-220705-M** Run ID: **ICPMS07_413348** SeqNo: **6756898** PrepDate: **20-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.0662	0.00500	0.05	0.01319	106	84 - 116	0.06205	6.46	20	
Chromium	0.05135	0.00500	0.05	0.000469	102	85 - 116	0.04704	8.77	20	
Manganese	0.1092	0.00500	0.05	0.05714	104	87 - 115	0.1025	6.28	20	
Nickel	0.05415	0.00500	0.05	0.002844	103	85 - 117	0.05102	5.94	20	
Thallium	0.04658	0.00200	0.05	0.000014	93.1	82 - 116	0.04461	4.33	20	

PDS Sample ID: **HS22070320-01PDS** Units: **mg/L** Analysis Date: **20-Jul-2022 21:47**
Client ID: **16WW44-220705-M** Run ID: **ICPMS07_413348** SeqNo: **6756899** PrepDate: **20-Jul-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Arsenic	0.1189	0.00500	0.1	0.01319	106	80 - 120				
Chromium	0.1038	0.00500	0.1	0.000469	103	80 - 120				
Manganese	0.1638	0.00500	0.1	0.05714	107	80 - 120				
Nickel	0.1068	0.00500	0.1	0.002844	104	80 - 120				
Thallium	0.101	0.00200	0.1	0.000014	101	80 - 120				

SD Sample ID: **HS22070320-01SD** Units: **mg/L** Analysis Date: **20-Jul-2022 21:41**
Client ID: **16WW44-220705-M** Run ID: **ICPMS07_413348** SeqNo: **6756896** PrepDate: **20-Jul-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Arsenic	0.01348	0.0250					0.01319	0	10	J
Chromium	0.00625	0.0250					0.000469	0	10	U
Manganese	0.05916	0.0250					0.05714	3.53	10	
Nickel	0.00625	0.0250					0.002844	0	10	U
Thallium	0.00250	0.0100					0.000014	0	10	U

The following samples were analyzed in this batch:

HS22070320-01	HS22070320-02	HS22070320-03	HS22070320-04
HS22070320-05	HS22070320-06	HS22070320-07	HS22070320-08
HS22070320-09	HS22070320-10	HS22070320-11	HS22070320-12
HS22070320-13	HS22070320-14		

ALS Houston, US Date: 22-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: **HS22070320**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

ALS Houston, US Date: 22-Jul-22

Sample Receipt Checklist

Work Order ID: HS22070320 **Date/Time Received:** **07-Jul-2022 09:40**

Client Name: CBI-Houston **Received by:** **Pablo Marinez**

Completed By:	/S/ Nilesh D. Ranchod	07-Jul-2022 17:29	**Reviewed by:**	/S/ Ragen Giga	19-Jul-2022 18:34
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **W** Carrier name: **FedEx**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	3.2C/3.7C UC/C	IR31
Cooler(s)/Kit(s):	46936	
Date/Time sample(s) sent to storage:	07/07/2022 17:55	

Water - VOA vials have zero headspace?	Yes ☐	No ☐	No VOA vials submitted ☑
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes:

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. 501032

Job: **LHAAP 16 June 2022**

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D.	Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: As, Cr, Mn, Tl, Ni by 6020A	As, Mn, Tl by 6020A	Cr , Tl by SW 6020A	Cr, Mn, Tl by SW6020A	Cr, Ni, Tl by SW6020A	Mn, Tl by SW6020A	Ni, Tl by Sw6020A	Tl by Sw6020A			Remarks (Preservatives, etc.)	Lab I.D.#
16ww44-220705-m		wG	7/5/22 0735		1	X											
16ww40-220705-m		wG	7/5/22 1035		1	X											
16ww12-220705-m		wG	7/5/22 1130		1			X									
16ww12-220705-m-FD		wG	7/5/22 1130		1			X									
16ww13-220705-m		wG	7/5/22 1215		1						X						
16ww42-220705-m		wG	7/5/22 1255		1	X											
16ww42-220705-m-FD		wG	7/5/22 1255		1	X											
16ww06-220706		wG	7/6/22 0720		1								X				

Additional Remarks: **Standard TAT on all parameters. Please email results to** Vicki.Graves@aptim.com **and invoices to** fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	7/6/22	1430		7/7/22	08:40						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks: 46936 3.2°

HS22070320

Aptim Environmental & Infrastucture, Inc.
LHAAP 16 June 2022

(Word) S:\Forms\Chain of Custody - BiWeekly

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. 501032

Job: **LHAAP 16 June 2022**

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D. Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: As, Cr, Mn, Tl, Ni by 6020A	As, Mn, Tl by 6020A	Cr , Tl by SW 6020A	Cr, Mn, Tl by SW6020A	Cr, Ni, Tl by SW6020A	Mn, Tl by SW6020A	Ni, Tl by Sw6020A	Tl by Sw6020A			Remarks (Preservatives, etc.)	Lab I.D.#
16WW21-220706	WG	7/6/22 0810		1								X				
16WW19-220706	WG	7/6/22 0905		1								X				
16WW18-220706	WG	7/6/22 1110		1								X				
16WW15-220706	WG	7/6/22 1215		1								X				
16WW17-220706	WG	7/6/22 1320		1								X				
16WW30-220630	WG	6/30/22 1025		1						X						

Additional Remarks: **Standard TAT on all parameters. Please email results to** Vicki.Graves@aptim.com **and invoices to** fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	7/6/22	1430		7/7/22	8:40						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

HS22070320
Aptim Environmental & Infrastucture, Inc.
LHAAP 16 June 2022

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5887

46936

CUSTODY SEAL

Date: 6/16/22 Time: 1430
Name: Scott Beesinger
Company: Battelle

Seal Broken By: SBY
Date: 07/07/22

46936



HS22070320 - ME - ICP_W_DOD

ALS WO# HS22070320

ALS Houston, US

Date: 26-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320
Start Date: 20-Jul-2022 End Date: 21-Jul-2022

Run ID:ICPMS07_413348
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413348_Tune	1	20-Jul-2022 00:00	ICPMS07_413348_Tune_1	
CAL BLK	1	20-Jul-2022 11:26	009CALB.d_6756047	AS CR MN NI TL
2/10/200	1	20-Jul-2022 11:28	010CALS.d_6756048	AS CR MN NI TL
5/25/500	1	20-Jul-2022 11:30	011CALS.d_6756049	AS CR MN NI TL
10/50/100	1	20-Jul-2022 11:33	012CALS.d_6756050	AS CR MN NI TL
100/500/10K	1	20-Jul-2022 11:35	013CALS.d_6756051	AS CR MN NI TL
200/1000/20K	1	20-Jul-2022 11:37	014CALS.d_6756052	AS CR MN NI TL
100/500/10K	1	20-Jul-2022 11:47	017CALS.d_6756055	AS CR MN NI TL
200/1000/20K	1	20-Jul-2022 11:49	018CALS.d_6756056	AS CR MN NI TL
ICV	1	20-Jul-2022 11:53	020_ICV.d_6756058	AS CR MN NI TL
LLICV2	1	20-Jul-2022 11:55	021LCV2.d_6756059	AS CR MN NI TL
LLICV5	1	20-Jul-2022 11:57	022LCV5.d_6756060	AS CR MN NI TL
ICB	1	20-Jul-2022 11:59	023_ICB.d_6756061	AS CR MN NI TL
LLICV5	1	20-Jul-2022 12:05	024LCV5.d_6756062	AS CR MN NI TL
ICSA	1	20-Jul-2022 12:07	025ICSA.d_6756063	AS CR MN NI TL
ICSAB	1	20-Jul-2022 12:09	026ICSB.d_6756064	AS CR MN NI TL
CCV 1	1	20-Jul-2022 12:27	029_CCV.d_6756093	AS CR MN NI TL
CCB 1	1	20-Jul-2022 12:29	030_CCB.d_6756094	AS CR MN NI TL
CCV 2	1	20-Jul-2022 12:59	041_CCV.d_6756105	AS CR MN NI TL
CCV 3	1	20-Jul-2022 12:59	041_CCV.d_6756114	AS CR MN NI TL
CCB 2	1	20-Jul-2022 13:01	042_CCB.d_6756106	AS CR MN NI TL
CCB 3	1	20-Jul-2022 13:01	042_CCB.d_6756115	AS CR MN NI TL
CCV 4	1	20-Jul-2022 13:29	053_CCV.d_6756117	AS CR MN NI TL
CCB 4	1	20-Jul-2022 13:31	054_CCB.d_6756118	AS CR MN NI TL
CCV 5	1	20-Jul-2022 13:56	065_CCV.d_6756806	AS CR MN NI TL
CCB 5	1	20-Jul-2022 13:58	066_CCB.d_6756807	AS CR MN NI TL
CAL BLK	1	20-Jul-2022 21:07	205CALB.d_6756878	AS CR MN NI TL
2/10/200	1	20-Jul-2022 21:09	206CALS.d_6756879	AS CR MN NI TL
5/25/500	1	20-Jul-2022 21:11	207CALS.d_6756880	AS CR MN NI TL
10/50/100	1	20-Jul-2022 21:13	208CALS.d_6756881	AS CR MN NI TL
100/500/10K	1	20-Jul-2022 21:15	209CALS.d_6756882	AS CR MN NI TL
200/1000/20K	1	20-Jul-2022 21:17	210CALS.d_6756883	AS CR MN NI TL
ICCV 6	1	20-Jul-2022 21:21	212_ICV.d_6756885	AS CR MN NI TL
LLCCV2	1	20-Jul-2022 21:23	213LCV2.d_6756886	AS CR MN NI TL
LLCCV5	1	20-Jul-2022 21:25	214LCV5.d_6756887	AS CR MN NI TL
ICCB 6	1	20-Jul-2022 21:27	215_ICB.d_6756888	AS CR MN NI TL
CCV 7	1	20-Jul-2022 21:31	217_CCV.d_6756890	AS CR MN NI TL
CCB 7	1	20-Jul-2022 21:33	218_CCB.d_6756891	AS CR MN NI TL
MBLK-181402	1	20-Jul-2022 21:35	219SMPL.d_6756893	AS CR MN NI TL
LCS-181402	1	20-Jul-2022 21:37	220SMPL.d_6756894	AS CR MN NI TL
16WW44-220705-M	1	20-Jul-2022 21:39	221SMPL.d_6756895	AS CR MN NI TL
16WW44-220705-MSD	5	20-Jul-2022 21:41	222SMPL.d_6756896	AS CR MN NI TL
16WW44-220705-MMS	1	20-Jul-2022 21:43	223SMPL.d_6756897	AS CR MN NI TL
16WW44-220705-MMSD	1	20-Jul-2022 21:45	224SMPL.d_6756898	AS CR MN NI TL
16WW44-220705-MPDS	1	20-Jul-2022 21:47	225SMPL.d_6756899	AS CR MN NI TL
CCV 8	1	20-Jul-2022 21:49	226_CCV.d_6756900	AS CR MN NI TL
CCB 8	1	20-Jul-2022 21:51	227_CCB.d_6756901	AS CR MN NI TL
16WW40-220705-M	1	20-Jul-2022 21:53	228SMPL.d_6756903	AS CR NI TL
16WW12-220705-M	2	20-Jul-2022 21:55	229SMPL.d_6756904	CR
16WW12-220705-M-FD	2	20-Jul-2022 21:57	230SMPL.d_6756905	CR

ALS Houston, US

Date: 26-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320
Start Date: 20-Jul-2022 End Date: 21-Jul-2022

Run ID:ICPMS07_413348
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
16WW13-220705-M	2	20-Jul-2022 21:59	231SMPL.d_6756906	TL
16WW42-220705-M	1	20-Jul-2022 22:01	232SMPL.d_6756907	AS CR NI TL
16WW42-220705-M-FD	1	20-Jul-2022 22:03	233SMPL.d_6756908	AS CR NI TL
16WW06-220706	1	20-Jul-2022 22:05	234SMPL.d_6756909	TL
16WW21-220706	1	20-Jul-2022 22:07	235SMPL.d_6756910	TL
CCV 9	1	20-Jul-2022 22:09	236_CCV.d_6756911	AS CR MN NI TL
CCB 9	1	20-Jul-2022 22:11	237_CCB.d_6756912	AS CR MN NI TL
CCV 10	1	20-Jul-2022 22:25	241_CCV.d_6756946	AS CR MN NI TL
CCB 10	1	20-Jul-2022 22:27	242_CCB.d_6756947	AS CR MN NI TL
16WW19-220706	1	20-Jul-2022 22:29	243SMPL.d_6756948	TL
16WW18-220706	1	20-Jul-2022 22:31	244SMPL.d_6756949	TL
16WW15-220706	1	20-Jul-2022 22:33	245SMPL.d_6756950	TL
16WW17-220706	1	20-Jul-2022 22:35	246SMPL.d_6756951	TL
16WW30-220630	1	20-Jul-2022 22:37	247SMPL.d_6756952	MN TL
CCV 11	1	20-Jul-2022 22:43	250_CCV.d_6756955	AS CR MN NI TL
CCB 11	1	20-Jul-2022 22:45	251_CCB.d_6756956	AS CR MN NI TL
CCV 12	1	20-Jul-2022 23:00	259_CCV.d_6756964	AS CR MN NI TL
CCB 12	1	20-Jul-2022 23:02	260_CCB.d_6756965	AS CR MN NI TL
CCV 13	1	20-Jul-2022 23:24	271_CCV.d_6756976	AS CR MN NI TL
CCB 13	1	20-Jul-2022 23:26	272_CCB.d_6756977	AS CR MN NI TL
CCV 14	1	21-Jul-2022 00:09	294_CCV.d_6757652	AS CR MN NI TL
CCB 14	1	21-Jul-2022 00:11	295_CCB.d_6757653	AS CR MN NI TL
LLCCV2	1	21-Jul-2022 00:15	297LCV2.d_6757655	AS CR MN NI TL
LLCCV5	1	21-Jul-2022 00:17	298LCV5.d_6757656	AS CR MN NI TL
ICSA	1	21-Jul-2022 00:19	299ICSA.d_6757657	AS CR MN NI TL
ICSAB	1	21-Jul-2022 00:21	300ICSB.d_6757658	AS CR MN NI TL

ALS Houston, US

Date: 26-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320
Start Date: 21-Jul-2022 End Date: 21-Jul-2022

Run ID:ICPMS07_413480
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413480_Tune	1	21-Jul-2022 00:00	ICPMS07_413480_Tune_1	
CAL BLK	1	21-Jul-2022 13:52	011CALB.d_6758976	MN TL
2/10/200	1	21-Jul-2022 13:55	012CALS.d_6758977	MN TL
5/25/500	1	21-Jul-2022 13:57	013CALS.d_6758978	MN TL
10/50/100	1	21-Jul-2022 13:59	014CALS.d_6758979	MN TL
100/500/10K	1	21-Jul-2022 14:02	015CALS.d_6758980	MN TL
200/1000/20K	1	21-Jul-2022 14:04	016CALS.d_6758981	MN TL
ICV	1	21-Jul-2022 14:08	018_ICV.d_6758983	AS CR MN NI TL
LLICV2	1	21-Jul-2022 14:10	019LCV2.d_6758984	MN TL
LLICV5	1	21-Jul-2022 14:13	020LCV5.d_6758985	MN TL
ICB	1	21-Jul-2022 14:15	021_ICB.d_6758986	AS CR MN NI TL
ICSA	1	21-Jul-2022 14:21	023ICSA.d_6758988	MN TL
ICSAB	1	21-Jul-2022 14:23	024ICSB.d_6758989	MN TL
CCV 1	1	21-Jul-2022 14:42	027_CCV.d_6759011	MN TL
CCB 1	1	21-Jul-2022 14:44	028_CCB.d_6759012	MN TL
16WW40-220705-M	20	21-Jul-2022 14:47	029SMPL.d_6759013	MN
16WW12-220705-M	1	21-Jul-2022 14:49	030SMPL.d_6759014	TL
16WW12-220705-M-FD	1	21-Jul-2022 14:51	031SMPL.d_6759015	TL
16WW13-220705-M	20	21-Jul-2022 14:55	033SMPL.d_6759017	MN
16WW42-220705-M	500	21-Jul-2022 14:57	034SMPL.d_6759018	MN
16WW42-220705-M-FD	500	21-Jul-2022 14:59	035SMPL.d_6759019	MN
CCV 2	1	21-Jul-2022 15:09	039_CCV.d_6759023	MN TL
CCB 2	1	21-Jul-2022 15:11	040_CCB.d_6759024	MN TL

ALS Houston, US Date: 26-Jul-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320
Start Date: 22-Jul-2022 End Date: 22-Jul-2022

Run ID:ICPMS07_413548
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_413548_Tune	1	22-Jul-2022 00:00	ICPMS07_413548_Tune_1	

ALS Houston, US Date: 26-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070320 Method: SW6020A

ICV	Date: 20-Jul-2022 11:53		Seq: 6756058	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	102.334	102	90-110	
Chromium	100	100.558	101	90-110	
Manganese	100	100.499	100	90-110	
Nickel	100	102.068	102	90-110	
Thallium	100	99.988	100	90-110	

CCV1	Date: 20-Jul-2022 12:27		Seq: 6756093	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.109	105	90-110	
Chromium	100	100.477	100	90-110	
Manganese	100	101.051	101	90-110	
Nickel	100	101.637	102	90-110	
Thallium	100	104.481	104	90-110	

CCV3	Date: 20-Jul-2022 12:59		Seq: 6756114	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.92	106	90-110	
Chromium	100	101.143	101	90-110	
Manganese	100	100.23	100	90-110	
Nickel	100	100.661	101	90-110	
Thallium	100	105.016	105	90-110	

CCV2	Date: 20-Jul-2022 12:59		Seq: 6756105	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.92	106	90-110	
Chromium	100	101.143	101	90-110	
Manganese	100	100.23	100	90-110	
Nickel	100	100.661	101	90-110	
Thallium	100	105.016	105	90-110	

CCV4	Date: 20-Jul-2022 13:29		Seq: 6756117	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	105.57	106	90-110	
Chromium	100	101.738	102	90-110	
Manganese	100	101.38	101	90-110	
Nickel	100	101.541	102	90-110	
Thallium	100	106.379	106	90-110	

CCV5	Date: 20-Jul-2022 13:56		Seq: 6756806	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	106.029	106	90-110	
Chromium	100	102.018	102	90-110	
Manganese	100	102.581	103	90-110	
Nickel	100	103.211	103	90-110	
Thallium	100	105.63	106	90-110	

ICCV6	Date: 20-Jul-2022 21:21		Seq: 6756885	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Arsenic	100	98.899	99	90-110	
Chromium	100	96.638	97	90-110	
Manganese	100	96.979	97	90-110	
Nickel	100	96.976	97	90-110	
Thallium	100	96.938	97	90-110	

ALS Houston, US Date: 26-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070320 Method: SW6020A

CCV7 Date: 20-Jul-2022 21:31 Seq: 6756890 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	103.876	104	90-110	
Chromium	100	100.602	101	90-110	
Manganese	100	101.057	101	90-110	
Nickel	100	100.848	101	90-110	
Thallium	100	106.011	106	90-110	

CCV8 Date: 20-Jul-2022 21:49 Seq: 6756900 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	106.332	106	90-110	
Chromium	100	101.358	101	90-110	
Manganese	100	101.909	102	90-110	
Nickel	100	101.555	102	90-110	
Thallium	100	104.39	104	90-110	

CCV9 Date: 20-Jul-2022 22:09 Seq: 6756911 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	103.506	104	90-110	
Chromium	100	98.765	99	90-110	
Manganese	100	99.698	100	90-110	
Nickel	100	99.265	99	90-110	
Thallium	100	102.178	102	90-110	

CCV10 Date: 20-Jul-2022 22:25 Seq: 6756946 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	106.026	106	90-110	
Chromium	100	100.76	101	90-110	
Manganese	100	101.212	101	90-110	
Nickel	100	102.114	102	90-110	
Thallium	100	105.83	106	90-110	

CCV11 Date: 20-Jul-2022 22:43 Seq: 6756955 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	106.003	106	90-110	
Chromium	100	101.133	101	90-110	
Manganese	100	100.769	101	90-110	
Nickel	100	101.97	102	90-110	
Thallium	100	103.887	104	90-110	

CCV12 Date: 20-Jul-2022 23:00 Seq: 6756964 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	105.902	106	90-110	
Chromium	100	99.942	100	90-110	
Manganese	100	100.43	100	90-110	
Nickel	100	100.501	101	90-110	
Thallium	100	102.92	103	90-110	

CCV13 Date: 20-Jul-2022 23:24 Seq: 6756976 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	103.15	103	90-110	
Chromium	100	98.621	99	90-110	
Manganese	100	98.726	99	90-110	
Nickel	100	99.875	100	90-110	
Thallium	100	103.68	104	90-110	

ALS Houston, US Date: 26-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

CCV14 Date: 21-Jul-2022 00:09 Seq: 6757652 CCV Units: ug/L

Analyte	True	Found	%R	Control Limits	Flag
Arsenic	100	104.463	104	90-110	
Chromium	100	101.149	101	90-110	
Manganese	100	100.807	101	90-110	
Nickel	100	101.135	101	90-110	
Thallium	100	100.111	100	90-110	

ALS Houston, US Date: 26-Jul-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_413480
Project: LHAAP 16 June 2022 Instrument: ICPMS07
WorkOrder: HS22070320 Method: SW6020A

ICV	Date: 21-Jul-2022 14:08		Seq: 6758983	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	102.748	103	90-110	
Thallium	100	104.076	104	90-110	

CCV1	Date: 21-Jul-2022 14:42		Seq: 6759011	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	102.037	102	90-110	
Thallium	100	99.856	100	90-110	

CCV2	Date: 21-Jul-2022 15:09		Seq: 6759023	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	102.592	103	90-110	
Thallium	100	100.001	100	90-110	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 20-Jul-2022 11:59		Seq: 6756061	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 20-Jul-2022 12:29		Seq: 6756094	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB3	Date: 20-Jul-2022 13:01		Seq: 6756115	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB2	Date: 20-Jul-2022 13:01		Seq: 6756106	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB4	Date: 20-Jul-2022 13:31		Seq: 6756118	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB5	Date: 20-Jul-2022 13:58		Seq: 6756807	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

ICCB6	Date: 20-Jul-2022 21:27		Seq: 6756888	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

CCB7	Date: 20-Jul-2022 21:33		Seq: 6756891	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

MBLK-181402	Date: 20-Jul-2022 21:35		Seq: 6756893	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	5	0.4	5	U	
Chromium	5	0.4	5	U	
Manganese	5	0.7	5	U	
Nickel	5	0.6	5	U	
Thallium	2	0.2	2	U	

CCB8	Date: 20-Jul-2022 21:51		Seq: 6756901	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB9	Date: 20-Jul-2022 22:11		Seq: 6756912	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB10	Date: 20-Jul-2022 22:27		Seq: 6756947	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB11	Date: 20-Jul-2022 22:45		Seq: 6756956	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB12	Date: 20-Jul-2022 23:02		Seq: 6756965	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

ALS Houston, US

Date: 26-Jul-22

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Run ID: ICPMS07_413348
Instrument: ICPMS07
Method: SW6020A

CCB13	Date: 20-Jul-2022 23:26		Seq: 6756977	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

CCB14	Date: 21-Jul-2022 00:11		Seq: 6757653	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Arsenic	2	0.4	2	U	
Chromium	4	0.4	4	U	
Manganese	5	0.7	5	U	
Nickel	2	0.6	2	U	
Thallium	2	0.2	2	U	

ALS Houston, US

Date: 26-Jul-22

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Run ID: ICPMS07_413480
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 21-Jul-2022 14:15		Seq: 6758986	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB1	Date: 21-Jul-2022 14:44		Seq: 6759012	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

CCB2	Date: 21-Jul-2022 15:11		Seq: 6759024	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	
Thallium	2	0.2	2	U	

ALS Houston, US Date: 26-Jul-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID:ICPMS07_413348
Project: LHAAP 16 June 2022 Instrument:ICPMS07
WorkOrder: HS22070320 Method:SW6020A

ICSA	Date: 20-Jul-2022 12:07	Seq: 6756063	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.203	0	
Chromium		1.193	0	
Manganese		0.478	0	
Nickel		0.867	0	
Thallium		0.006	0	
ICSAB	Date: 20-Jul-2022 12:09	Seq: 6756064	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	99.48	99.5	
Chromium	100	98.21	98.2	
Manganese	100	97.79	97.8	
Nickel	100	95.42	95.4	
Thallium	100	99.97	100.0	
ICSA	Date: 21-Jul-2022 00:19	Seq: 6757657	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic		0.374	0	
Chromium		1.409	0	
Manganese		1.304	0	
Nickel		0.877	0	
Thallium		0.017	0	
ICSAB	Date: 21-Jul-2022 00:21	Seq: 6757658	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Arsenic	100	100.4	100	
Chromium	100	98.5	98.5	
Manganese	100	97.43	97.4	
Nickel	100	97.1	97.1	
Thallium	100	98.43	98.4	

ALS Houston, US Date: 26-Jul-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID:ICPMS07_413480
Project: LHAAP 16 June 2022 Instrument:ICPMS07
WorkOrder: HS22070320 Method:SW6020A

ICSA	Date: 21-Jul-2022 14:21	Seq: 6758988	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Manganese		0.467	0	
Thallium		0.009	0	

ICSAB	Date: 21-Jul-2022 14:23	Seq: 6758989	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Manganese	100	99.14	99.1	
Thallium	100	97.86	97.9	

ALS Houston, US

Date: 26-Jul-22

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Date Analyzed: 20-Jul-2022 21:45
Date Extracted: 20-Jul-2022 09:00
Units: ug/L

Matrix Spike: HS22070320-01MS
Client Sample ID: 16WW44-220705-M

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Arsenic	13.19	62.05	50.00	97.7	66.20	50.00	106	84-116	6.46	20
Chromium	0.4690	47.04	50.00	93.1	51.35	50.00	102	85-116	8.77	20
Manganese	57.14	102.5	50.00	90.8	109.2	50.00	104	87-115	6.28	20
Nickel	2.844	51.02	50.00	96.4	54.15	50.00	103	85-117	5.94	20
Thallium	2.000	44.61	50.00	89.2	46.58	50.00	93.1	82-116	4.33	20

ALS Houston, US Date: 26-Jul-22

Form 5B - Post Digest Sample Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Date Analyzed: 20-Jul-2022 21:47
Date Extracted: 20-Jul-2022 09:00
Units: ug/L

Lab Sample ID: HS22070320-01PDS
Client Sample ID: 16WW44-220705-M

Analysis Method: SW6020A

Analyte	Sample Result	PDS Result	Spike Amount	% Rec	% Rec Limits
Arsenic	13.19	118.9	100	106	80-120
Chromium	0.469	103.8	100	103	80-120
Manganese	57.14	163.8	100	107	80-120
Nickel	2.844	106.8	100	104	80-120
Thallium	0	101	100	101	80-120

ALS Houston, US Date: 26-Jul-22

Form 7 - Laboratory Control Sample

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Date Analyzed: 20-Jul-2022 21:37
Date Extracted: 20-Jul-2022 09:00
Units: ug/L

Lab Sample ID: LCS-181402 Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Arsenic	50	51.39	103	84-116
Chromium	50	49.3	99	85-116
Manganese	50	50.25	100	87-115
Nickel	50	50.35	101	85-117
Thallium	50	45.46	91	82-116

ALS Houston, US Date: 26-Jul-22

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022
WorkOrder: HS22070320

Date Analyzed: 20-Jul-2022 21:41
Date Extracted: 20-Jul-2022 09:00
Units: ug/L

Lab Sample ID: HS22070320-01SD
Client Sample ID:16WW44-220705-M

Analysis Method: SW6020A

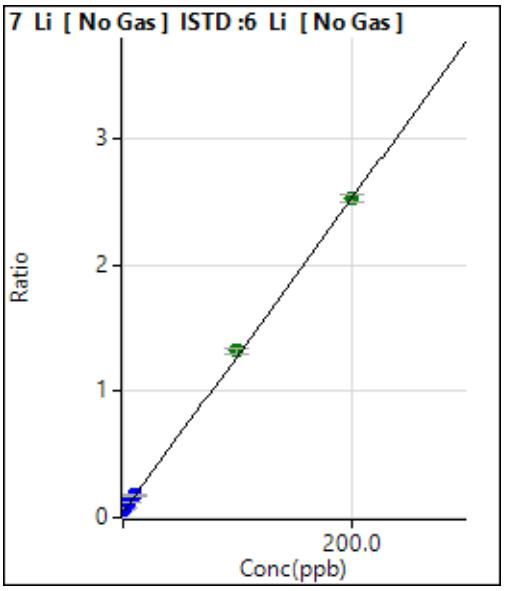
Analyte	Sample Result	C	SD Result	C	RPD	Q
Arsenic	13.19		13.48	J	2	
Chromium	0.469	J	0	U	0	
Manganese	57.14		59.16		4	
Nickel	2.844	J	0	U	0	
Thallium	0	U	0	U	0	

Calibration for 212_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	205CALB.d	CAL BLK	07/20/2022 21:07:27
2	206CALS.d	2/10/200	07/20/2022 21:09:34
3	207CALS.d	5/25/500	07/20/2022 21:11:40
4	208CALS.d	10/50/100	07/20/2022 21:13:47
5	209CALS.d	100/500/10K	07/20/2022 21:15:53
6	210CALS.d	200/1000/20K	07/20/2022 21:17:56

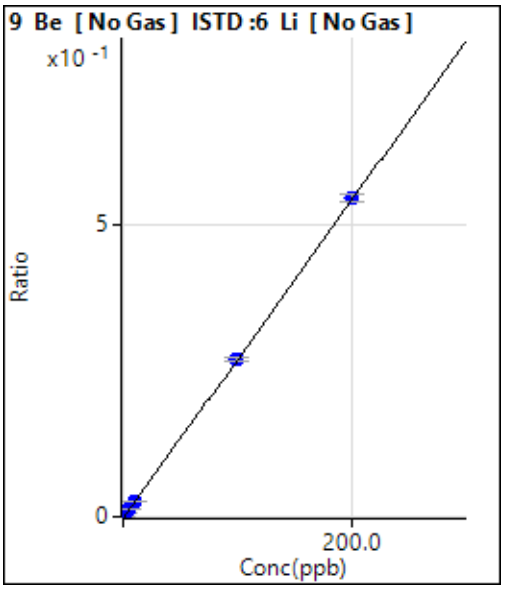
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37730.40	0.0563	P	1.9	
2	☐	2.000	1.799	53819.05	0.0786	P	3.0	-10.1
3	☐	5.000	4.755	75939.85	0.1153	P	1.5	-4.9
4	☐	10.000	9.629	114860.54	0.1758	P	1.2	-3.7
5	☐	100.000	101.747	904309.91	1.3197	A	2.8	1.7
6	☐	200.000	199.153	1657050.03	2.5292	A	3.0	-0.4

y = 0.0124 * x + 0.0563
R = 0.9999
DL = 0.2614 ppb
BEC = 4.531 ppb

Weight: <None>
Min Conc: <None>

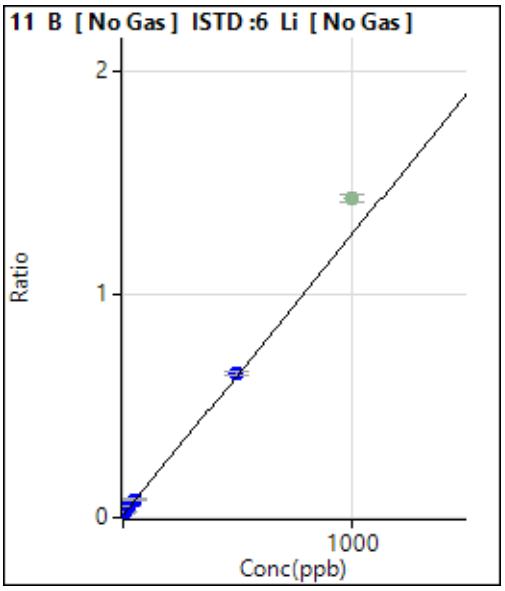


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	18.6	
2	☐	2.000	1.879	3535.47	0.0052	P	1.1	-6.1
3	☐	5.000	4.894	8796.16	0.0134	P	1.4	-2.1
4	☐	10.000	9.957	17716.22	0.0271	P	1.6	-0.4
5	☐	100.000	99.132	184695.47	0.2695	P	1.6	-0.9
6	☐	200.000	200.440	356998.94	0.5448	P	2.2	0.2

y = 0.0027 * x + 5.4519E-005
R = 1.0000
DL = 0.01118 ppb
BEC = 0.02006 ppb

Weight: <None>
Min Conc: <None>

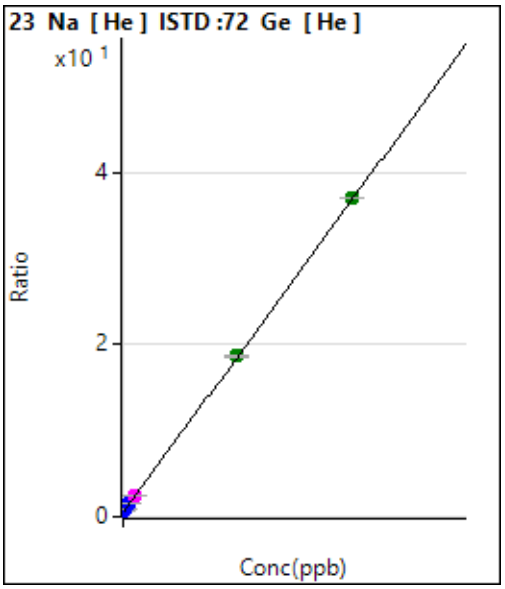
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12882.64	0.0192	P	2.5	
2	☐	10.000	8.415	20378.20	0.0298	P	1.9	-15.9
3	☐	25.000	23.533	32073.39	0.0487	P	1.5	-5.9
4	☐	50.000	49.599	53143.66	0.0814	P	2.7	-0.8
5	☐	500.000	500.145	442611.22	0.6459	P	2.9	0.0
6	☑	1000.000		936140.51	1.4288	A	2.8	

y = 0.0013 * x + 0.0192
R = 1.0000
DL = 1.172 ppb
BEC = 15.33 ppb

Weight: <None>
Min Conc: <None>

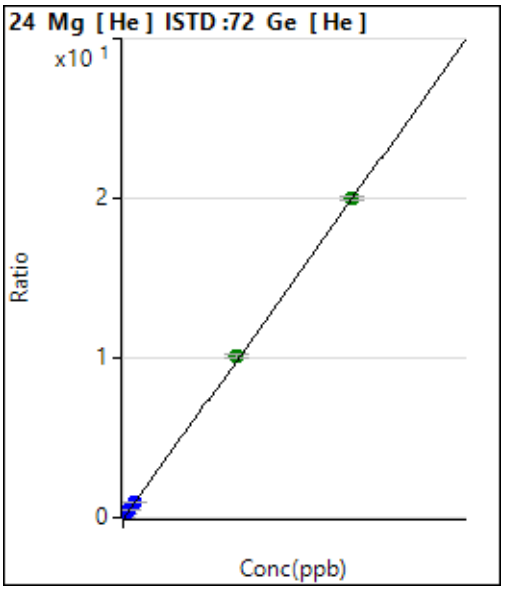


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230791.51	0.6813	P	0.4	
2	☐	200.000	171.583	340140.44	0.9923	P	1.2	-14.2
3	☐	500.000	450.459	501570.40	1.4978	P	1.1	-9.9
4	☐	1000.000	977.912	820148.48	2.4538	M	4.0	-2.2
5	☐	10000.00	9911.818	6354689.07	18.6465	A	1.1	-0.9
6	☐	20000.00	20046.71	12245754.4	37.0160	A	0.3	0.2

y = 0.0018 * x + 0.6813
R = 1.0000
DL = 4.646 ppb
BEC = 375.9 ppb

Weight: <None>
Min Conc: <None>

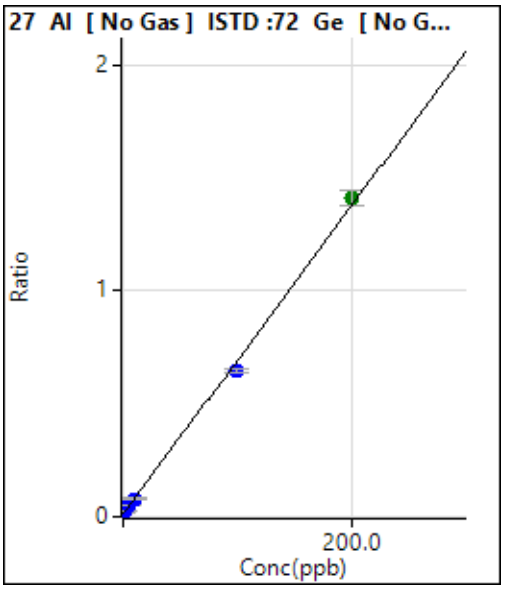
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0009	P	28.7	
2	☐	200.000	185.497	64120.90	0.1871	P	2.8	-7.3
3	☐	500.000	476.543	160455.53	0.4791	P	0.5	-4.7
4	☐	1000.000	964.807	323922.24	0.9691	P	0.3	-3.5
5	☐	10000.00	10078.69	3446959.22	10.1144	A	2.1	0.8
6	☐	20000.00	19963.14	6627218.86	20.0330	A	0.8	-0.2

y = 0.0010 * x + 9.3527E-004
R = 1.0000
DL = 0.8024 ppb
BEC = 0.9321 ppb

Weight: <None>
Min Conc: <None>

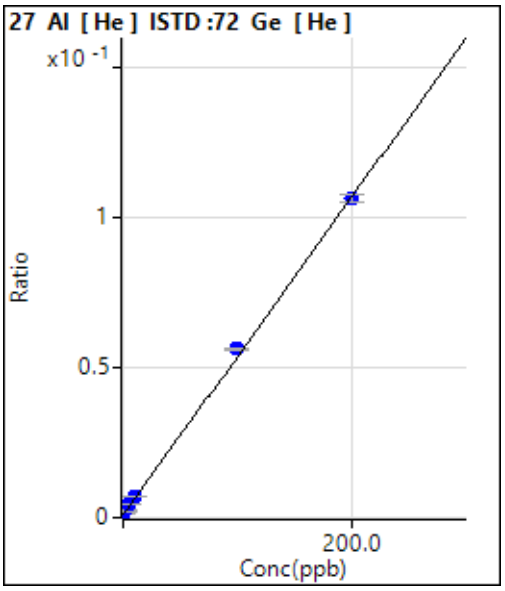


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20477.54	0.0192	P	4.4	
2	☐	2.000	1.454	32678.76	0.0291	P	3.1	-27.3
3	☐	5.000	4.925	57836.94	0.0528	P	2.3	-1.5
4	☐	10.000	8.945	84676.96	0.0802	P	2.8	-10.5
5	☐	100.000	92.157	711609.81	0.6477	P	3.3	-7.8
6	☐	200.000	203.981	1431879.93	1.4103	A	4.7	2.0

y = 0.0068 * x + 0.0192
R = 0.9990
DL = 0.3722 ppb
BEC = 2.819 ppb

Weight: <None>
Min Conc: <None>

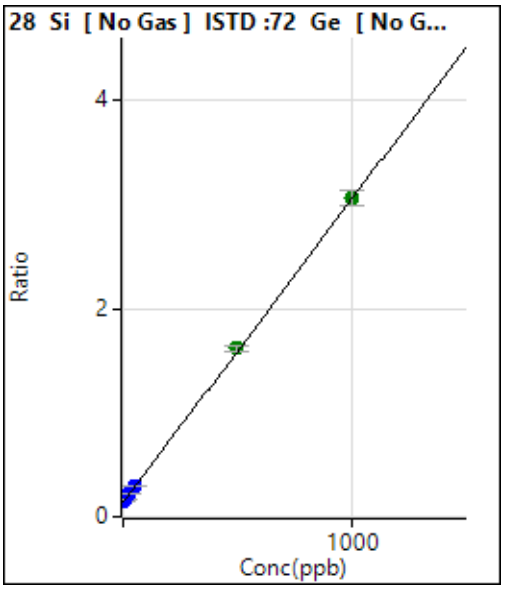
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0014	P	10.6	
2	☐	2.000	1.716	793.37	0.0023	P	14.6	-14.2
3	☐	5.000	6.009	1536.78	0.0046	P	6.2	20.2
4	☐	10.000	10.921	2403.58	0.0072	P	4.3	9.2
5	☐	100.000	103.387	19133.39	0.0561	P	1.1	3.4
6	☐	200.000	198.238	35184.74	0.1064	P	2.3	-0.9

y = 5.2940E-004 * x + 0.0014
R = 0.9998
DL = 0.8476 ppb
BEC = 2.658 ppb

Weight: <None>
Min Conc: <None>

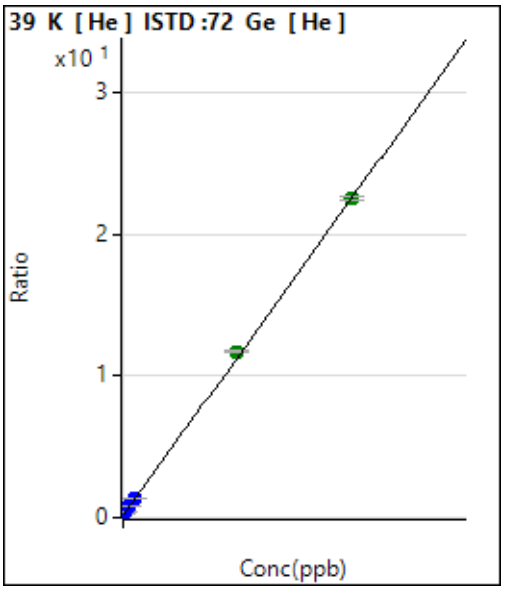


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160765.18	0.1510	P	1.7	
2	☐	10.000	7.008	192241.55	0.1714	P	1.7	-29.9
3	☐	25.000	24.458	243444.90	0.2223	P	0.9	-2.2
4	☐	50.000	49.712	312162.91	0.2958	P	2.9	-0.6
5	☐	500.000	502.219	1773451.01	1.6142	A	3.3	0.4
6	☐	1000.000	998.948	3108594.33	3.0614	A	4.3	-0.1

y = 0.0029 * x + 0.1510
R = 1.0000
DL = 2.655 ppb
BEC = 51.83 ppb

Weight: <None>
Min Conc: <None>

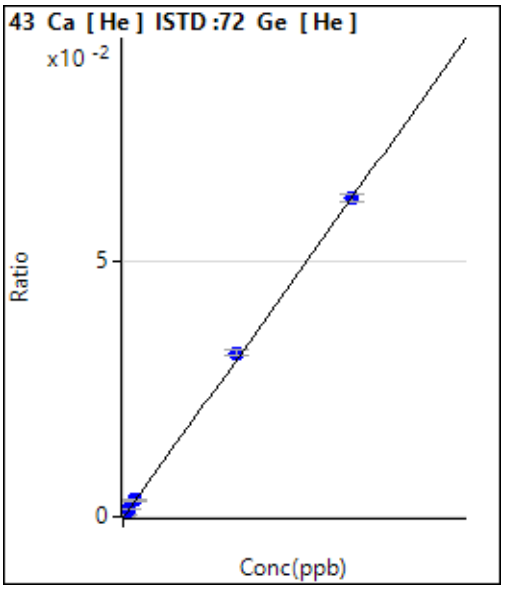
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90065.66	0.2659	P	1.5	
2	☐	200.000	179.450	159937.67	0.4666	P	1.0	-10.3
3	☐	500.000	466.082	263610.33	0.7872	P	1.3	-6.8
4	☐	1000.000	950.000	444023.30	1.3284	P	1.1	-5.0
5	☐	10000.00	10209.39	3982095.46	11.6850	A	1.4	2.1
6	☐	20000.00	19898.85	7450688.22	22.5225	A	1.1	-0.5

y = 0.0011 * x + 0.2659
R = 0.9999
DL = 10.56 ppb
BEC = 237.7 ppb

Weight: <None>
Min Conc: <None>

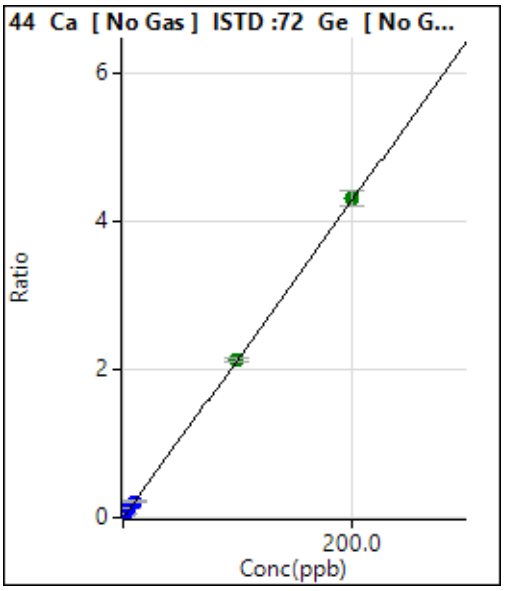


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.6	
2	☐	200.000	136.175	173.34	0.0005	P	14.4	-31.9
3	☐	500.000	479.578	530.02	0.0016	P	7.7	-4.1
4	☐	1000.000	1025.028	1100.05	0.0033	P	6.5	2.5
5	☐	10000.00	10191.35	10914.54	0.0320	P	3.7	1.9
6	☐	20000.00	19904.21	20669.11	0.0625	P	1.9	-0.5

y = 3.1351E-006 * x + 7.8713E-005
R = 0.9999
DL = 16.27 ppb
BEC = 25.11 ppb

Weight: <None>
Min Conc: <None>

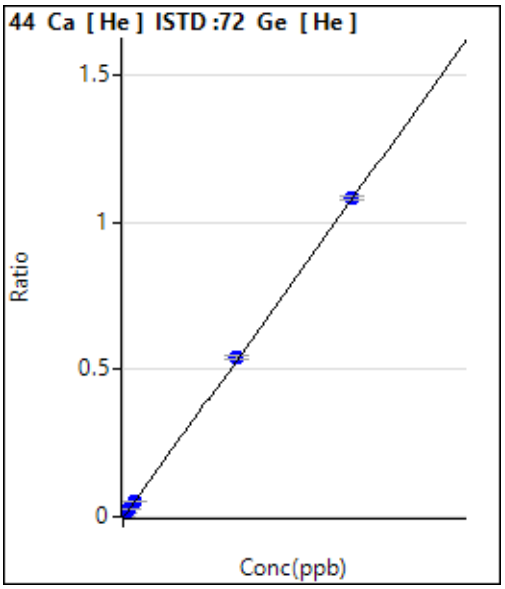
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18158.91	0.0171	P	1.7	
2	☐	2.000	1.796	62237.36	0.0555	P	1.7	-10.2
3	☐	5.000	4.718	129292.65	0.1180	P	0.7	-5.6
4	☐	10.000	9.490	232342.67	0.2202	P	3.3	-5.1
5	☐	100.000	98.755	2341846.01	2.1310	A	2.1	-1.2
6	☐	200.000	200.657	4378805.25	4.3124	A	4.2	0.3

y = 0.0214 * x + 0.0171
R = 1.0000
DL = 0.04012 ppb
BEC = 0.7967 ppb

Weight: <None>
Min Conc: <None>

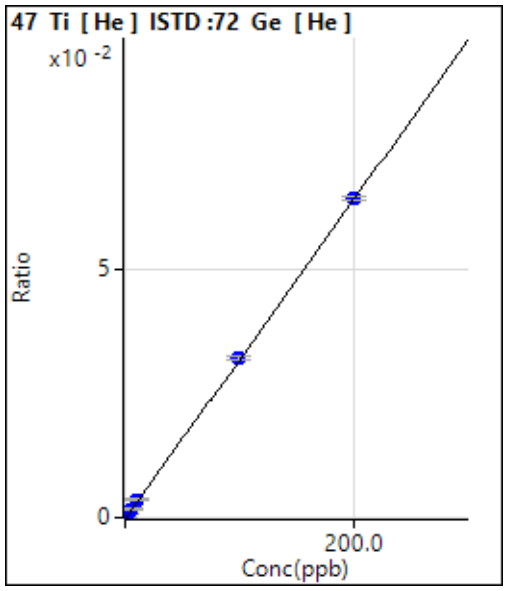


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0013	P	5.6	
2	☐	200.000	194.347	4044.00	0.0118	P	5.8	-2.8
3	☐	500.000	493.274	9369.97	0.0280	P	0.7	-1.3
4	☐	1000.000	990.018	18339.14	0.0549	P	2.2	-1.0
5	☐	10000.00	9990.860	184733.80	0.5421	P	1.5	-0.1
6	☐	20000.00	20005.29	358652.37	1.0841	P	0.8	0.0

y = 5.4129E-005 * x + 0.0013
R = 1.0000
DL = 3.939 ppb
BEC = 23.63 ppb

Weight: <None>
Min Conc: <None>

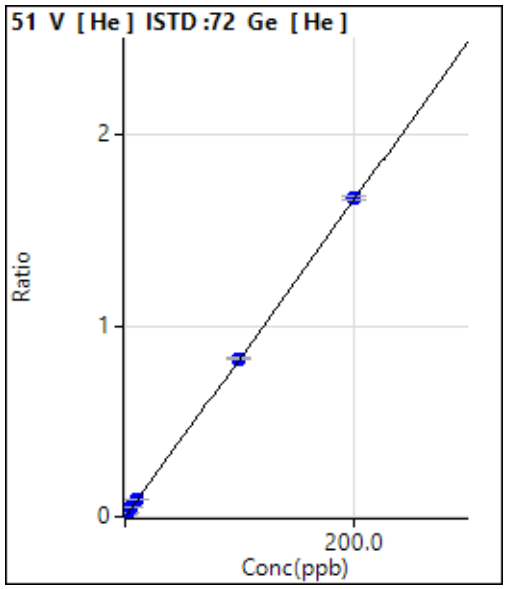
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.838	210.01	0.0006	P	4.7	-8.1
3	☐	5.000	5.246	573.35	0.0017	P	6.7	4.9
4	☐	10.000	11.030	1196.74	0.0036	P	7.3	10.3
5	☐	100.000	100.092	11014.61	0.0323	P	2.9	0.1
6	☐	200.000	199.898	21346.85	0.0645	P	0.9	-0.1

y = 3.2269E-004 * x + 1.9625E-005
R = 1.0000
DL = 0.316 ppb
BEC = 0.06082 ppb

Weight: <None>
Min Conc: <None>

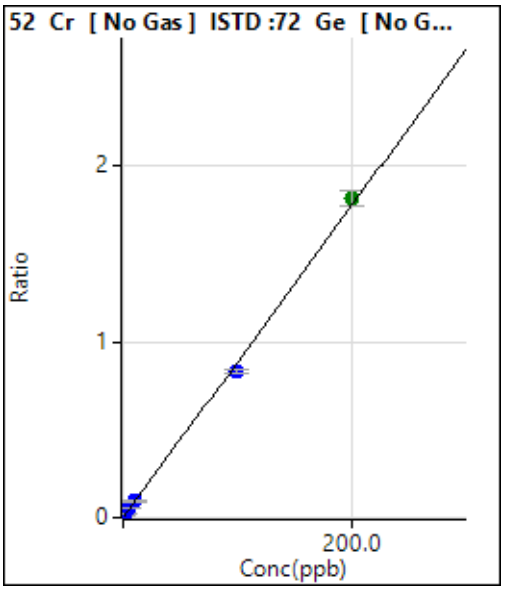


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2181.30	0.0064	P	4.8	
2	☐	2.000	1.908	7637.72	0.0223	P	1.6	-4.6
3	☐	5.000	4.857	15659.00	0.0468	P	1.7	-2.9
4	☐	10.000	9.831	29430.44	0.0880	P	1.0	-1.7
5	☐	100.000	99.158	282718.06	0.8296	P	1.3	-0.8
6	☐	200.000	200.434	552559.77	1.6703	P	1.2	0.2

y = 0.0083 * x + 0.0064
R = 1.0000
DL = 0.1123 ppb
BEC = 0.7756 ppb

Weight: <None>
Min Conc: <None>

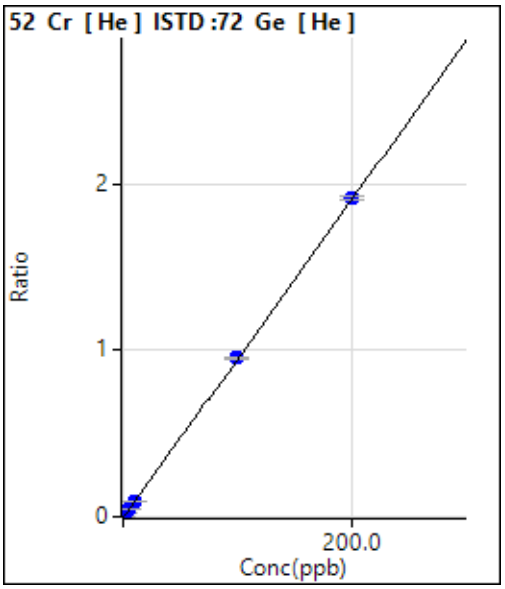
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9583.51	0.0090	P	6.6	
2	☐	2.000	1.761	27614.72	0.0246	P	2.5	-12.0
3	☐	5.000	4.553	54097.07	0.0494	P	0.5	-8.9
4	☐	10.000	9.565	98986.12	0.0939	P	4.9	-4.3
5	☐	100.000	92.775	914108.08	0.8320	P	3.1	-7.2
6	☐	200.000	203.648	1843297.47	1.8155	A	4.6	1.8

y = 0.0089 * x + 0.0090
R = 0.9991
DL = 0.2016 ppb
BEC = 1.015 ppb

Weight: <None>
Min Conc: <None>

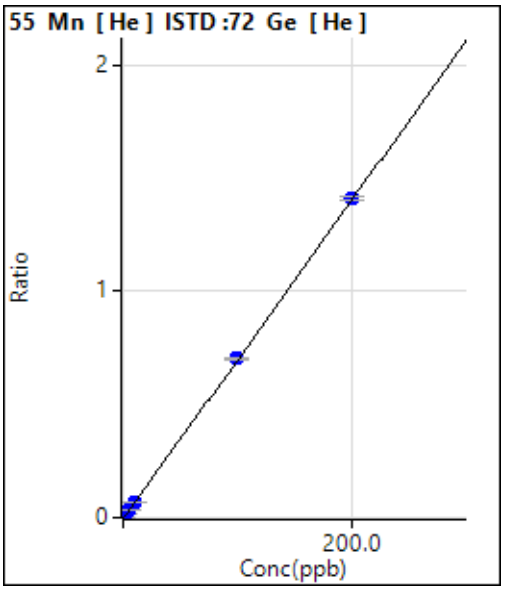


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1030.06	0.0030	P	2.4	
2	☐	2.000	1.875	7188.67	0.0210	P	1.5	-6.2
3	☐	5.000	4.847	16540.17	0.0494	P	1.7	-3.1
4	☐	10.000	9.852	32505.55	0.0972	P	1.0	-1.5
5	☐	100.000	99.641	325728.96	0.9558	P	1.1	-0.4
6	☐	200.000	200.192	634243.84	1.9173	P	1.2	0.1

y = 0.0096 * x + 0.0030
R = 1.0000
DL = 0.02331 ppb
BEC = 0.318 ppb

Weight: <None>
Min Conc: <None>

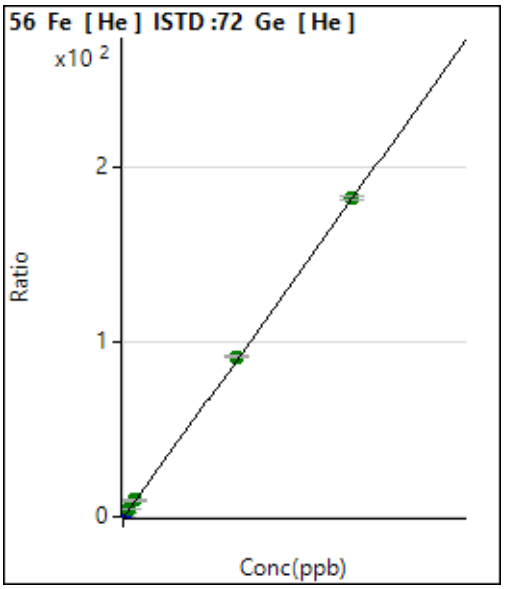
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	416.68	0.0012	P	20.0	
2	☐	2.000	1.970	5177.73	0.0151	P	3.5	-1.5
3	☐	5.000	4.968	12132.26	0.0362	P	3.1	-0.6
4	☐	10.000	9.881	23674.17	0.0708	P	2.0	-1.2
5	☐	100.000	99.510	239273.13	0.7021	P	1.3	-0.5
6	☐	200.000	200.252	467009.84	1.4117	P	0.8	0.1

y = 0.0070 * x + 0.0012
R = 1.0000
DL = 0.1049 ppb
BEC = 0.1746 ppb

Weight: <None>
Min Conc: <None>

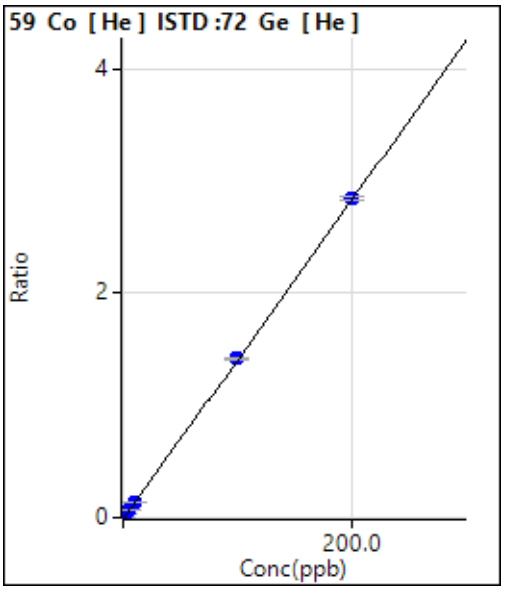


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10324.05	0.0305	P	2.3	
2	☐	200.000	186.331	594274.42	1.7337	P	1.9	-6.8
3	☐	500.000	515.097	1587020.24	4.7390	A	0.9	3.0
4	☐	1000.000	1023.570	3137494.12	9.3870	A	1.6	2.4
5	☐	10000.00	10021.25	31228539.5	91.6358	A	1.4	0.2
6	☐	20000.00	19987.95	60455059.1	182.742	A	0.8	-0.1

y = 0.0091 * x + 0.0305
R = 1.0000
DL = 0.2263 ppb
BEC = 3.334 ppb

Weight: <None>
Min Conc: <None>

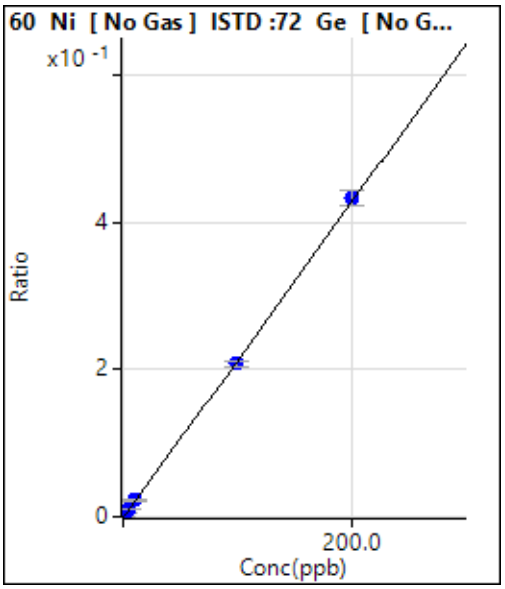
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.2	
2	☐	2.000	1.911	9340.01	0.0272	P	4.3	-4.5
3	☐	5.000	4.844	23099.87	0.0690	P	2.4	-3.1
4	☐	10.000	9.801	46626.79	0.1395	P	1.2	-2.0
5	☐	100.000	99.591	482836.23	1.4168	P	1.0	-0.4
6	☐	200.000	200.219	942255.48	2.8483	P	0.8	0.1

y = 0.0142 * x + 5.9088E-005
R = 1.0000
DL = 0.006253 ppb
BEC = 0.004154 ppb

Weight: <None>
Min Conc: <None>

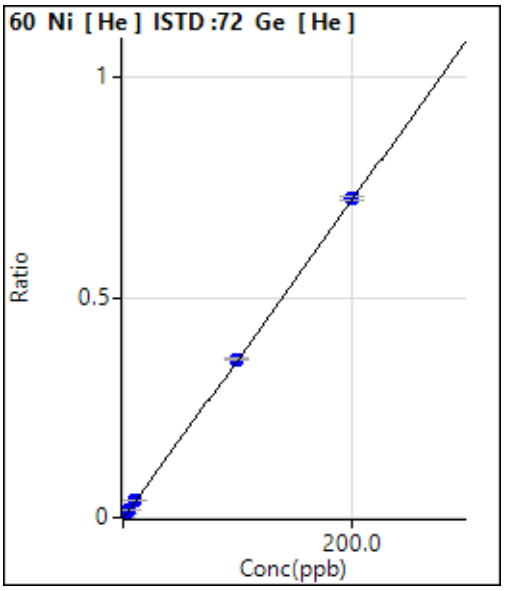


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	773.37	0.0007	P	8.7	
2	☐	2.000	1.742	5004.34	0.0045	P	2.0	-12.9
3	☐	5.000	4.680	11785.28	0.0108	P	3.3	-6.4
4	☐	10.000	10.021	23437.21	0.0222	P	3.0	0.2
5	☐	100.000	96.565	228288.69	0.2078	P	2.8	-3.4
6	☐	200.000	201.727	439871.02	0.4332	P	4.6	0.9

y = 0.0021 * x + 7.2578E-004
R = 0.9998
DL = 0.08832 ppb
BEC = 0.3385 ppb

Weight: <None>
Min Conc: <None>

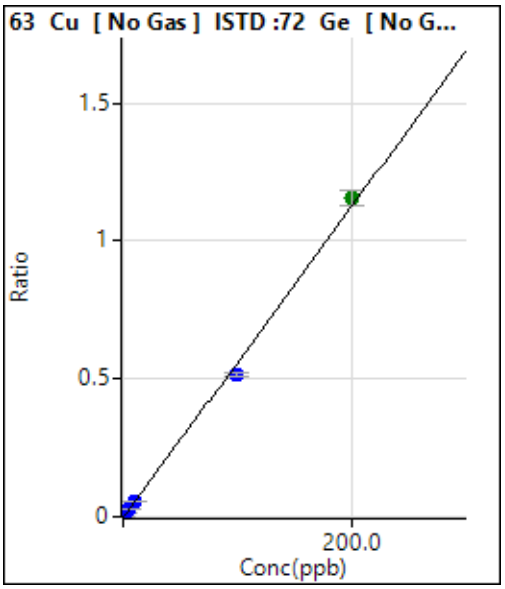
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0007	P	18.7	
2	☐	2.000	1.925	2610.30	0.0076	P	2.6	-3.8
3	☐	5.000	4.958	6221.53	0.0186	P	4.5	-0.8
4	☐	10.000	10.179	12515.95	0.0374	P	1.0	1.8
5	☐	100.000	99.145	122328.82	0.3589	P	0.8	-0.9
6	☐	200.000	200.421	239817.44	0.7249	P	1.2	0.2

y = 0.0036 * x + 6.5930E-004
R = 1.0000
DL = 0.1022 ppb
BEC = 0.1824 ppb

Weight: <None>
Min Conc: <None>

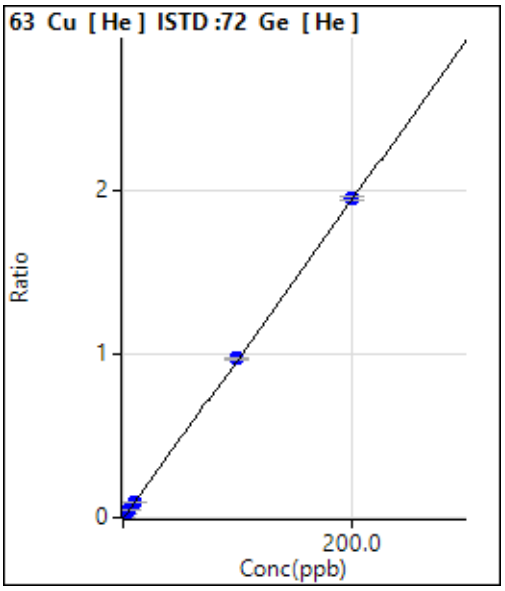


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.53	0.0019	P	5.2	
2	☐	2.000	1.909	14214.29	0.0127	P	4.1	-4.5
3	☐	5.000	4.456	29629.29	0.0270	P	1.6	-10.9
4	☐	10.000	9.287	57324.30	0.0543	P	2.5	-7.1
5	☐	100.000	91.199	567641.61	0.5166	P	3.0	-8.8
6	☐	200.000	204.450	1173628.76	1.1558	A	4.3	2.2

y = 0.0056 * x + 0.0019
R = 0.9987
DL = 0.05259 ppb
BEC = 0.3368 ppb

Weight: <None>
Min Conc: <None>

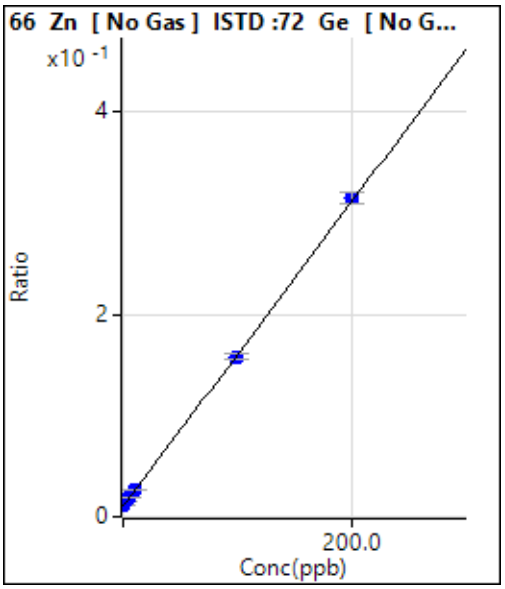
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	980.06	0.0029	P	15.3	
2	☐	2.000	1.961	7555.57	0.0220	P	3.1	-2.0
3	☐	5.000	4.816	16720.57	0.0499	P	0.5	-3.7
4	☐	10.000	9.869	33184.16	0.0993	P	0.5	-1.3
5	☐	100.000	99.522	332226.26	0.9748	P	0.9	-0.5
6	☐	200.000	200.251	647925.77	1.9586	P	0.9	0.1

y = 0.0098 * x + 0.0029
R = 1.0000
DL = 0.1364 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

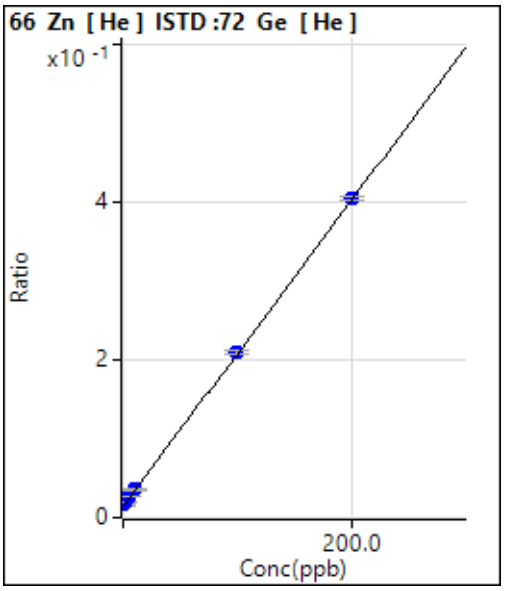


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12515.97	0.0118	P	3.3	
2	☐	2.000	1.971	16506.93	0.0147	P	0.6	-1.5
3	☐	5.000	4.571	20402.35	0.0186	P	2.4	-8.6
4	☐	10.000	9.903	28119.50	0.0266	P	3.3	-1.0
5	☐	100.000	97.093	173345.95	0.1578	P	3.2	-2.9
6	☐	200.000	201.469	319618.79	0.3148	P	4.1	0.7

y = 0.0015 * x + 0.0118
R = 0.9999
DL = 0.7632 ppb
BEC = 7.815 ppb

Weight: <None>
Min Conc: <None>

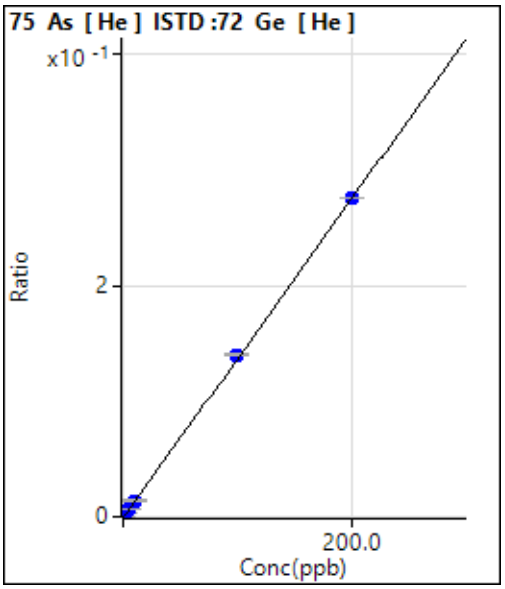
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5517.90	0.0163	P	6.4	
2	☐	2.000	1.584	6638.42	0.0194	P	6.3	-20.8
3	☐	5.000	4.932	8666.24	0.0259	P	1.3	-1.4
4	☐	10.000	9.972	11922.08	0.0357	P	4.2	-0.3
5	☐	100.000	99.664	71571.93	0.2100	P	1.3	-0.3
6	☐	200.000	200.175	134111.09	0.4054	P	1.3	0.1

y = 0.0019 * x + 0.0163
R = 1.0000
DL = 1.609 ppb
BEC = 8.381 ppb

Weight: <None>
Min Conc: <None>

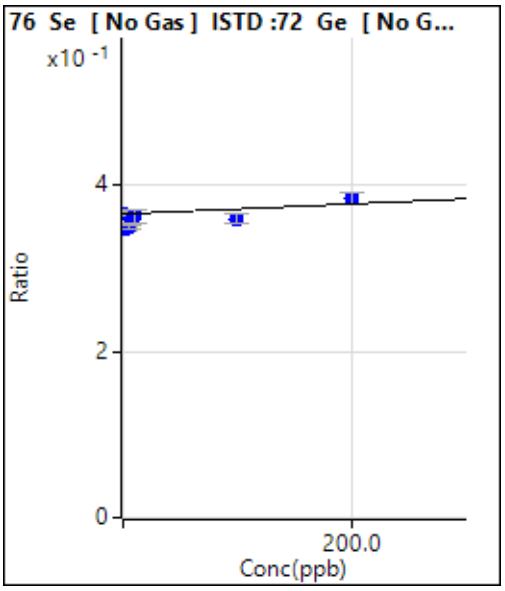


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	17.9	
2	☐	2.000	1.982	1054.49	0.0031	P	3.9	-0.9
3	☐	5.000	4.974	2413.56	0.0072	P	0.8	-0.5
4	☐	10.000	9.849	4657.49	0.0139	P	2.7	-1.5
5	☐	100.000	100.976	47613.54	0.1397	P	1.1	1.0
6	☐	200.000	199.521	91219.13	0.2757	P	0.3	-0.2

y = 0.0014 * x + 3.4123E-004
R = 1.0000
DL = 0.1324 ppb
BEC = 0.2472 ppb

Weight: <None>
Min Conc: <None>

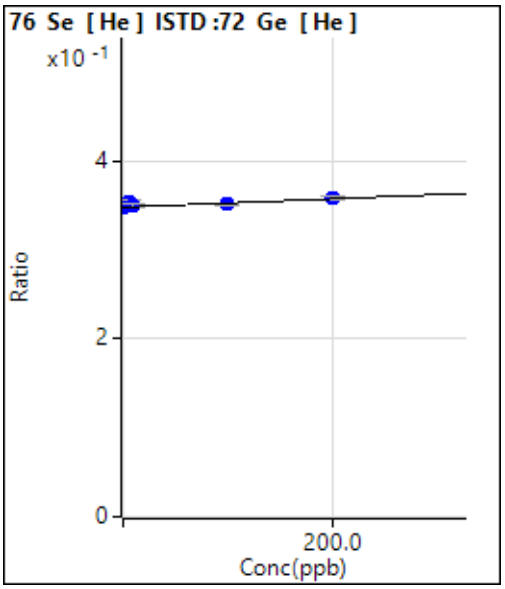
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	389615.57	0.3659	P	1.5	
2	☐	2.000	-307.857	389148.84	0.3470	P	1.2	-15492.
3	☐	5.000	-261.349	383167.95	0.3498	P	1.3	-5327.0
4	☐	10.000	-43.103	383238.18	0.3633	P	4.1	-531.0
5	☐	100.000	-90.749	395932.68	0.3604	P	3.0	-190.7
6	☐	200.000	307.787	390915.79	0.3849	P	3.3	53.9

y = 6.1562E-005 * x + 0.3659
R = 0.7903
DL = 265.8 ppb
BEC = 5944 ppb

Weight: <None>
Min Conc: <None>

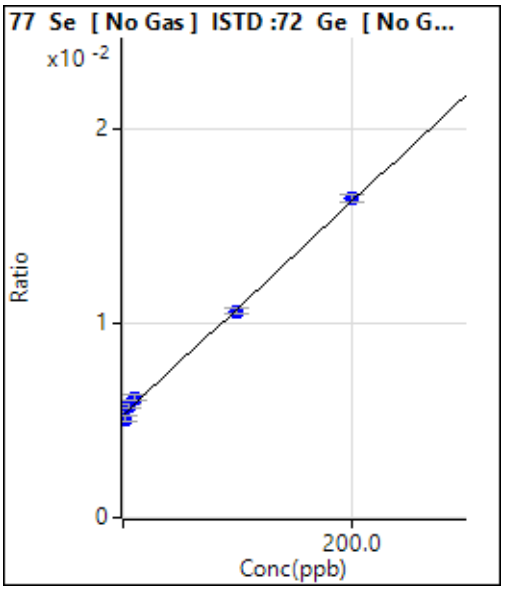


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	117895.22	0.3480	P	0.6	
2	☐	2.000	79.129	120602.08	0.3518	P	0.9	3856.5
3	☐	5.000	130.345	118651.35	0.3543	P	1.3	2506.9
4	☐	10.000	24.896	116728.09	0.3492	P	1.0	149.0
5	☐	100.000	81.283	119939.62	0.3519	P	0.6	-18.7
6	☐	200.000	204.709	118396.13	0.3579	P	1.2	2.4

y = 4.8025E-005 * x + 0.3480
R = 0.7505
DL = 123.2 ppb
BEC = 7247 ppb

Weight: <None>
Min Conc: <None>

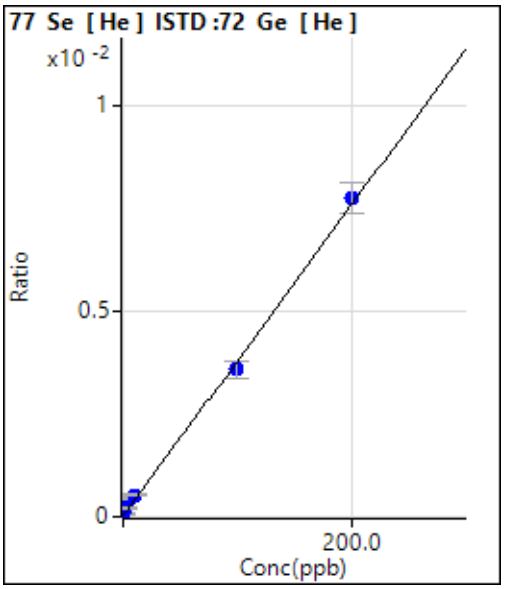
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5731.34	0.0054	P	6.6	
2	☐	2.000	-5.873	5678.00	0.0051	P	6.1	-393.7
3	☐	5.000	6.968	6314.92	0.0058	P	3.7	39.4
4	☐	10.000	14.585	6521.70	0.0062	P	5.1	45.8
5	☐	100.000	95.968	11695.24	0.0106	P	2.0	-4.0
6	☐	200.000	201.816	16697.29	0.0164	P	2.6	0.9

y = 5.4750E-005 * x + 0.0054
R = 0.9985
DL = 19.4 ppb
BEC = 98.36 ppb

Weight: <None>
Min Conc: <None>

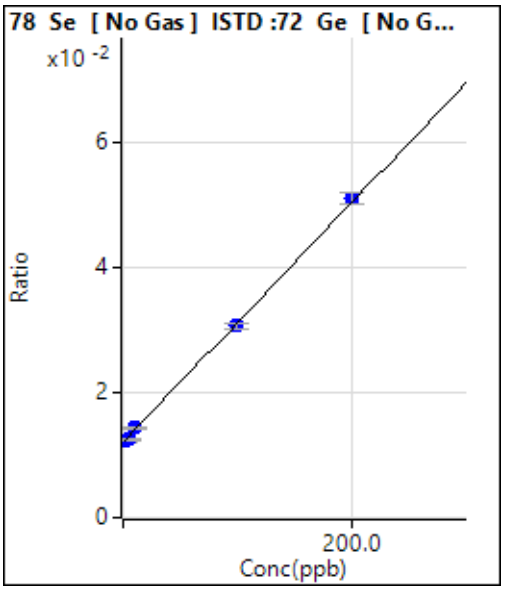


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.1	
2	☐	2.000	3.832	70.00	0.0002	P	14.3	91.6
3	☐	5.000	10.010	146.67	0.0004	P	16.2	100.2
4	☐	10.000	12.126	173.33	0.0005	P	8.2	21.3
5	☐	100.000	92.962	1220.08	0.0036	P	10.8	-7.0
6	☐	200.000	203.269	2566.96	0.0078	P	9.1	1.6

y = 3.7879E-005 * x + 5.9053E-005
R = 0.9987
DL = 2.344 ppb
BEC = 1.559 ppb

Weight: <None>
Min Conc: <None>

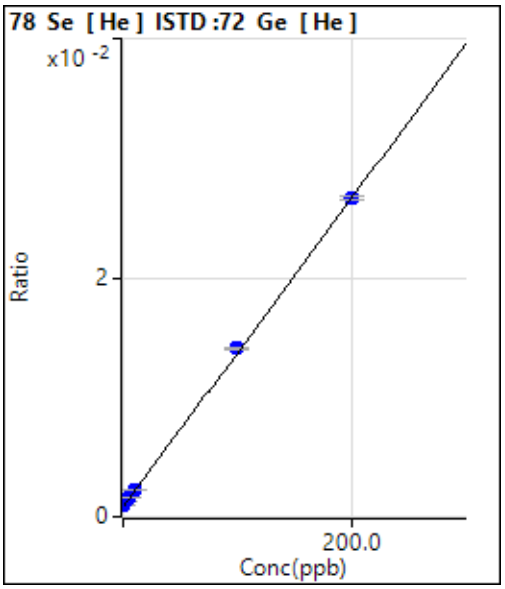
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13160.00	0.0124	P	6.2	
2	☐	2.000	-1.167	13610.42	0.0121	P	3.7	-158.3
3	☐	5.000	0.648	13673.81	0.0125	P	2.2	-87.0
4	☐	10.000	10.616	15182.08	0.0144	P	2.8	6.2
5	☐	100.000	95.448	33599.01	0.0306	P	3.4	-4.6
6	☐	200.000	202.386	51789.70	0.0510	P	4.1	1.2

y = 1.9091E-004 * x + 0.0124
R = 0.9995
DL = 12.11 ppb
BEC = 64.74 ppb

Weight: <None>
Min Conc: <None>

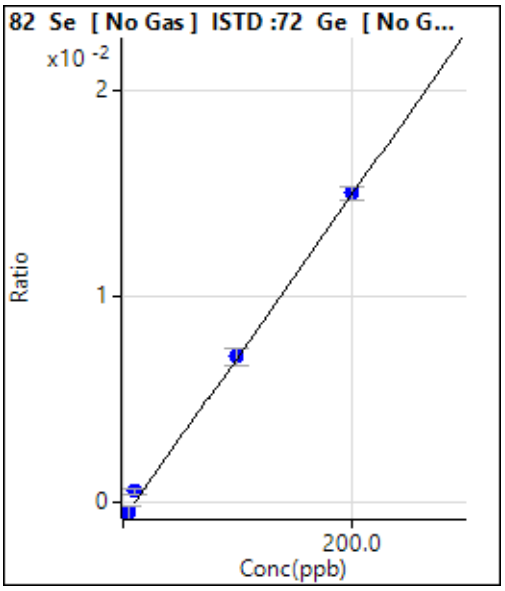


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	327.34	0.0010	P	7.1	
2	☐	2.000	2.067	422.68	0.0012	P	1.9	3.3
3	☐	5.000	5.223	549.34	0.0016	P	3.4	4.5
4	☐	10.000	10.128	760.02	0.0023	P	0.8	1.3
5	☐	100.000	101.812	4808.87	0.0141	P	1.3	1.8
6	☐	200.000	199.081	8822.23	0.0267	P	0.7	-0.5

y = 1.2910E-004 * x + 9.6621E-004
R = 0.9999
DL = 1.586 ppb
BEC = 7.484 ppb

Weight: <None>
Min Conc: <None>

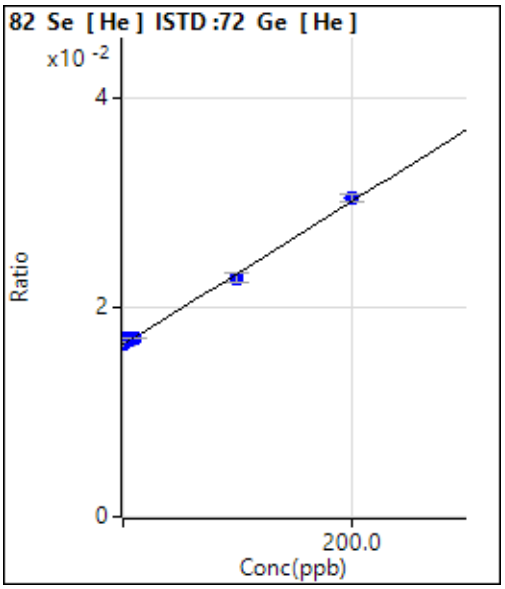
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-796.78	-0.0007	P	-54.8	
2	☐	2.000	2.169	-649.43	-0.0006	P	-141.	8.4
3	☐	5.000	3.266	-537.49	-0.0005	P	-106.	-34.7
4	☐	10.000	16.138	560.90	0.0005	P	51.3	61.4
5	☐	100.000	99.273	7795.94	0.0071	P	12.3	-0.7
6	☐	200.000	200.098	15287.09	0.0150	P	4.1	0.0

y = 7.8863E-005 * x - 7.4756E-004
R = 0.9994
DL = 15.58 ppb
BEC = -9.479 ppb

Weight: <None>
Min Conc: <None>

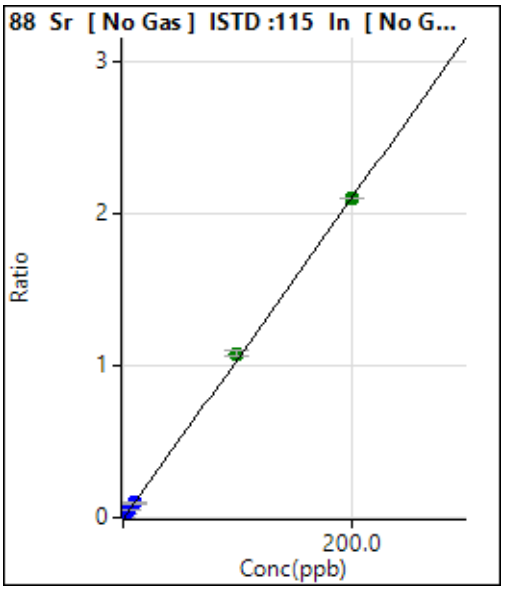


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5591.27	0.0165	P	2.3	
2	☐	2.000	8.706	5861.43	0.0171	P	2.1	335.3
3	☐	5.000	4.702	5634.62	0.0168	P	2.3	-6.0
4	☐	10.000	8.208	5704.63	0.0171	P	0.5	-17.9
5	☐	100.000	92.368	7775.73	0.0228	P	4.3	-7.6
6	☐	200.000	203.846	10070.59	0.0304	P	3.0	1.9

y = 6.8344E-005 * x + 0.0165
R = 0.9982
DL = 16.75 ppb
BEC = 241.5 ppb

Weight: <None>
Min Conc: <None>

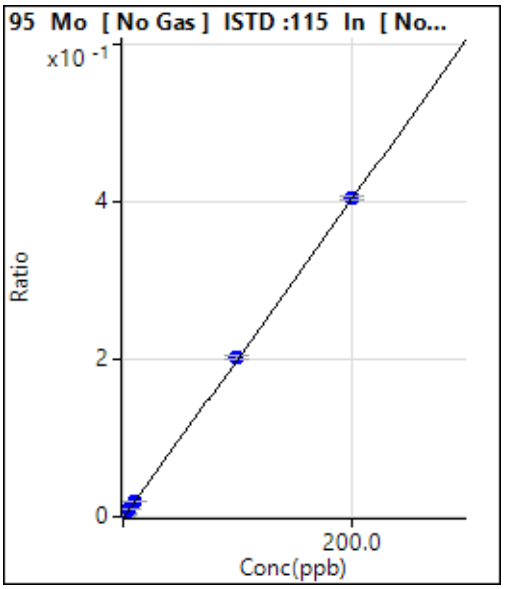
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	653.36	0.0005	P	5.1	
2	☐	2.000	1.822	27207.87	0.0197	P	2.5	-8.9
3	☐	5.000	4.819	69945.90	0.0514	P	2.4	-3.6
4	☐	10.000	8.984	130545.50	0.0954	P	1.1	-10.2
5	☐	100.000	102.284	1444761.23	1.0809	A	2.9	2.3
6	☐	200.000	198.915	2753242.46	2.1016	A	0.6	-0.5

y = 0.0106 * x + 4.8044E-004
R = 0.9999
DL = 0.007022 ppb
BEC = 0.04548 ppb

Weight: <None>
Min Conc: <None>

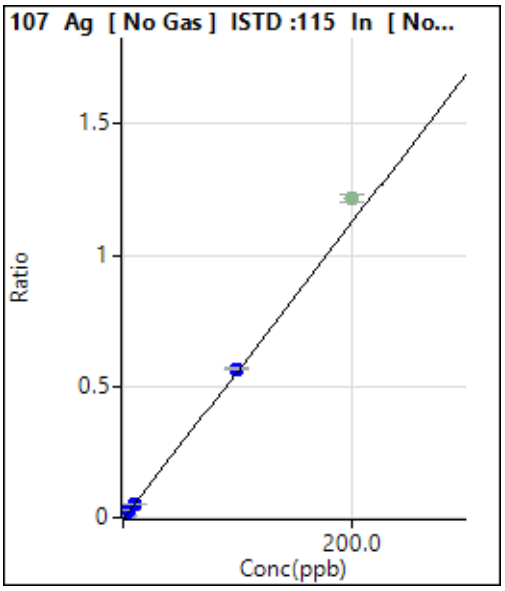


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.824	5111.09	0.0037	P	6.3	-8.8
3	☐	5.000	4.794	13236.83	0.0097	P	1.3	-4.1
4	☐	10.000	9.496	26353.07	0.0193	P	2.0	-5.0
5	☐	100.000	100.004	270914.09	0.2027	P	1.4	0.0
6	☐	200.000	200.030	531001.28	0.4053	P	1.3	0.0

y = 0.0020 * x + 9.7236E-006
R = 1.0000
DL = 0.01247 ppb
BEC = 0.004799 ppb

Weight: <None>
Min Conc: <None>

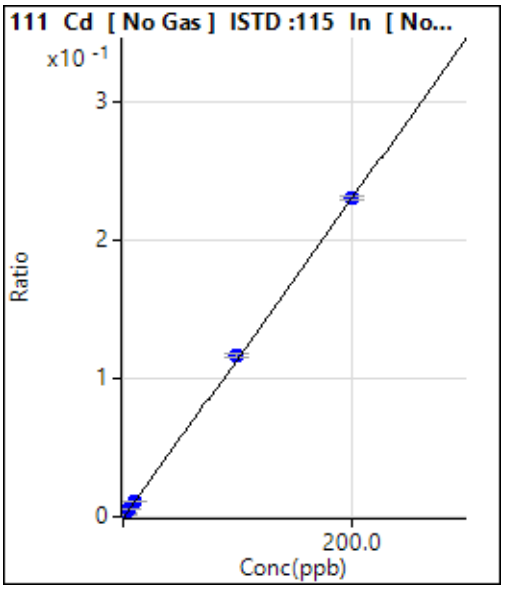
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	40.0	
2	☐	2.000	1.859	14704.99	0.0107	P	3.3	-7.1
3	☐	5.000	4.657	36009.26	0.0265	P	2.0	-6.9
4	☐	10.000	9.403	72890.65	0.0533	P	1.4	-6.0
5	☐	100.000	100.080	755480.59	0.5652	P	1.4	0.1
6	☑	200.000		1593637.32	1.2165	A	2.1	

y = 0.0056 * x + 1.6899E-004
R = 1.0000
DL = 0.03594 ppb
BEC = 0.02993 ppb

Weight: <None>
Min Conc: <None>

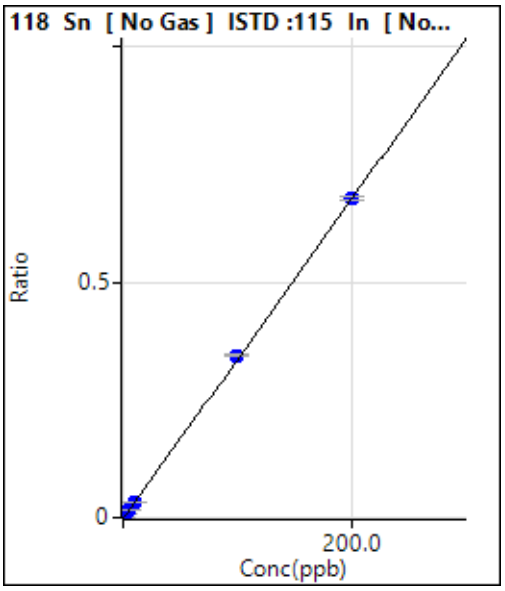


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.906	3040.41	0.0022	P	13.7	-4.7
3	☐	5.000	4.614	7268.79	0.0053	P	7.6	-7.7
4	☐	10.000	9.821	15559.44	0.0114	P	4.7	-1.8
5	☐	100.000	101.002	156297.13	0.1169	P	2.0	1.0
6	☐	200.000	199.518	302586.33	0.2310	P	1.0	-0.2

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

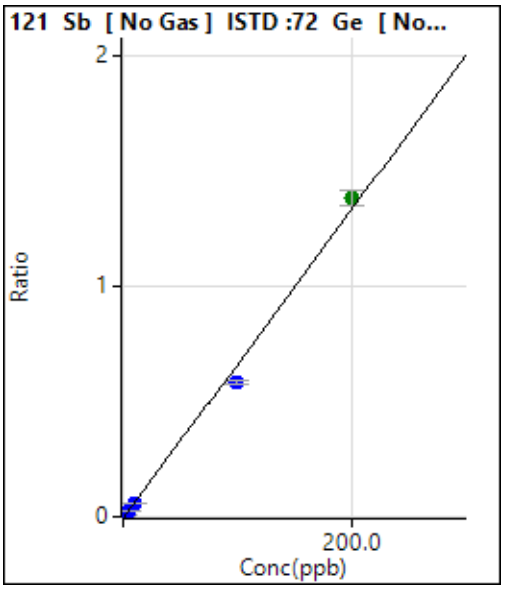
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1216.75	0.0009	P	5.3	
2	☐	2.000	1.889	10077.34	0.0073	P	3.3	-5.5
3	☐	5.000	4.597	22459.55	0.0165	P	0.2	-8.1
4	☐	10.000	9.190	43923.72	0.0321	P	0.9	-8.1
5	☐	100.000	101.196	460443.38	0.3444	P	1.3	1.2
6	☐	200.000	199.454	888216.26	0.6780	P	0.7	-0.3

y = 0.0034 * x + 8.9381E-004
R = 1.0000
DL = 0.0416 ppb
BEC = 0.2633 ppb

Weight: <None>
Min Conc: <None>

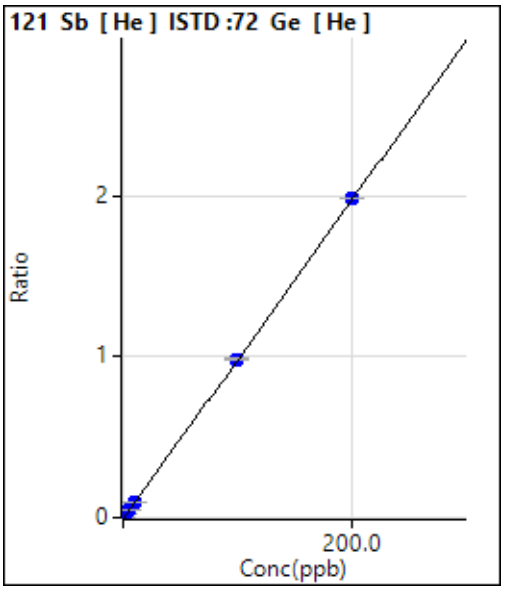


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	300.01	0.0003	P	28.5	
2	☐	2.000	1.647	12686.36	0.0113	P	7.0	-17.7
3	☐	5.000	4.146	30726.32	0.0281	P	2.0	-17.1
4	☐	10.000	8.698	61785.72	0.0586	P	3.6	-13.0
5	☐	100.000	87.172	642005.95	0.5843	P	2.7	-12.8
6	☐	200.000	206.504	1404987.27	1.3837	A	4.7	3.3

y = 0.0067 * x + 2.8121E-004
R = 0.9972
DL = 0.03585 ppb
BEC = 0.04198 ppb

Weight: <None>
Min Conc: <None>

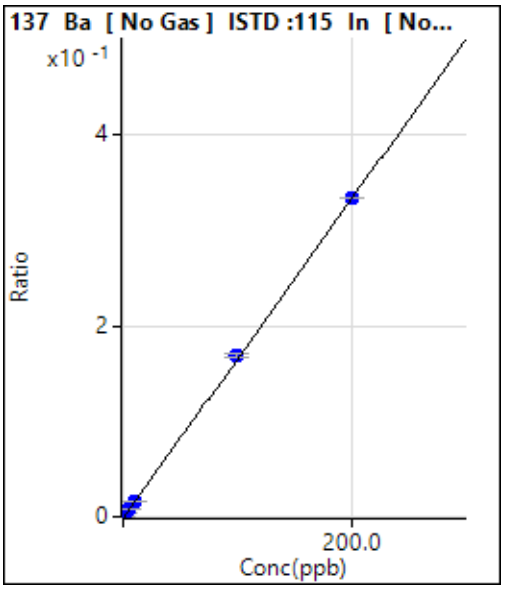
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0006	P	14.8	
2	☐	2.000	1.825	6388.34	0.0186	P	3.3	-8.7
3	☐	5.000	4.739	15899.89	0.0475	P	2.2	-5.2
4	☐	10.000	9.532	31718.67	0.0949	P	3.8	-4.7
5	☐	100.000	99.483	335743.37	0.9852	P	1.5	-0.5
6	☐	200.000	200.290	655992.92	1.9829	P	0.5	0.1

y = 0.0099 * x + 5.7065E-004
R = 1.0000
DL = 0.02556 ppb
BEC = 0.05766 ppb

Weight: <None>
Min Conc: <None>

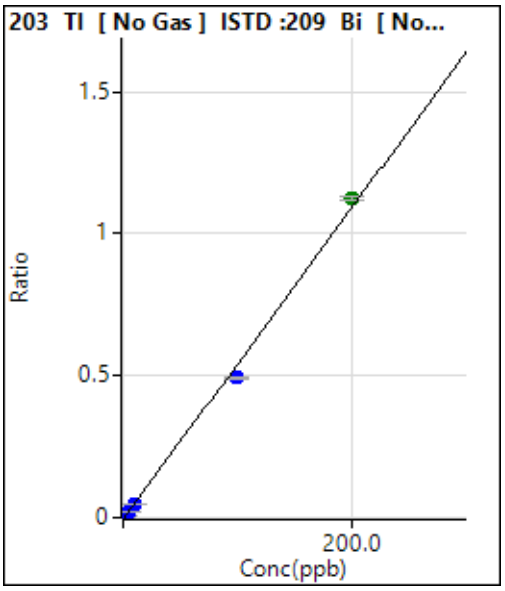


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.01	0.0001	P	26.4	
2	☐	2.000	1.942	4614.25	0.0033	P	5.1	-2.9
3	☐	5.000	4.948	11401.88	0.0084	P	4.2	-1.0
4	☐	10.000	9.331	21508.06	0.0157	P	2.6	-6.7
5	☐	100.000	100.886	225869.41	0.1690	P	2.0	0.9
6	☐	200.000	199.592	437828.10	0.3342	P	0.6	-0.2

y = 0.0017 * x + 9.5502E-005
R = 1.0000
DL = 0.0452 ppb
BEC = 0.05705 ppb

Weight: <None>
Min Conc: <None>

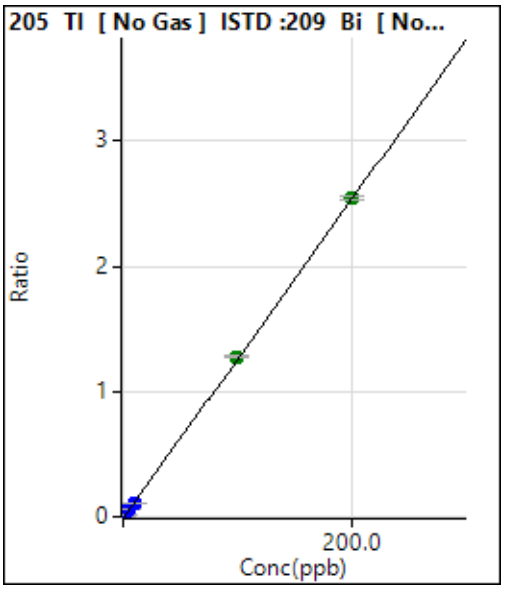
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.7	
2	☐	2.000	1.658	12923.58	0.0091	P	4.3	-17.1
3	☐	5.000	4.180	32135.16	0.0229	P	2.2	-16.4
4	☐	10.000	8.226	63789.30	0.0451	P	0.3	-17.7
5	☐	100.000	89.840	681766.19	0.4925	P	1.5	-10.2
6	☐	200.000	205.193	1501543.00	1.1249	A	1.1	2.6

y = 0.0055 * x + 1.4469E-005
R = 0.9983
DL = 0.004018 ppb
BEC = 0.002639 ppb

Weight: <None>
Min Conc: <None>

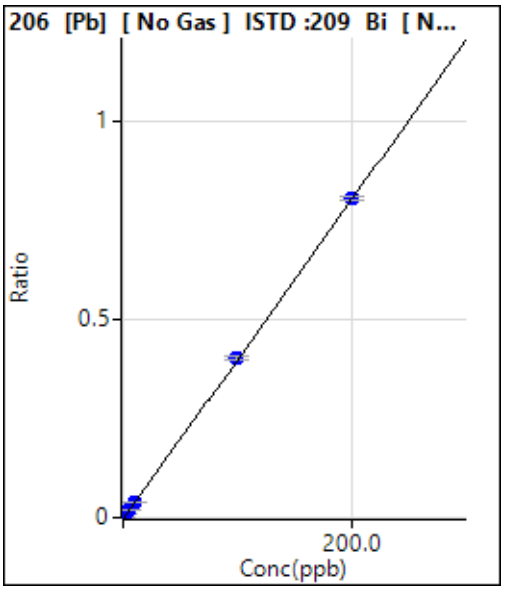


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	17.5	
2	☐	2.000	1.717	31082.39	0.0219	P	1.7	-14.1
3	☐	5.000	4.271	76266.31	0.0544	P	1.3	-14.6
4	☐	10.000	8.723	157097.24	0.1111	P	0.9	-12.8
5	☐	100.000	100.336	1768441.07	1.2776	A	1.6	0.3
6	☐	200.000	199.917	3397792.45	2.5456	A	1.1	0.0

y = 0.0127 * x + 2.6458E-005
R = 1.0000
DL = 0.001088 ppb
BEC = 0.002078 ppb

Weight: <None>
Min Conc: <None>

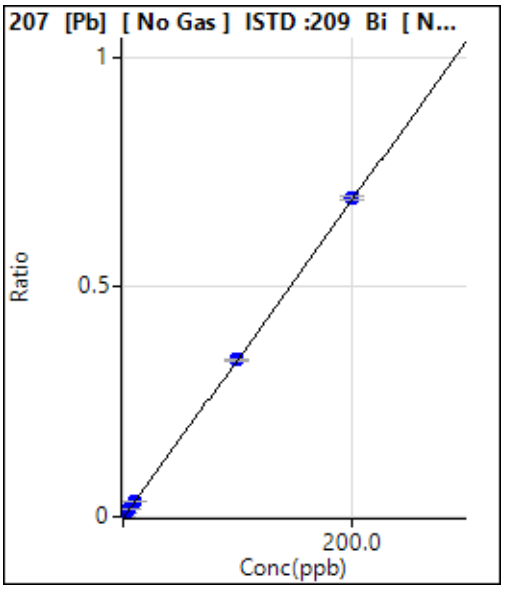
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	24.5	
2	☐	2.000	1.937	11248.57	0.0079	P	3.4	-3.1
3	☐	5.000	4.636	26374.87	0.0188	P	2.3	-7.3
4	☐	10.000	9.490	54321.79	0.0384	P	0.5	-5.1
5	☐	100.000	100.315	560714.52	0.4051	P	2.0	0.3
6	☐	200.000	199.878	1077258.21	0.8071	P	1.3	-0.1

y = 0.0040 * x + 1.0074E-004
R = 1.0000
DL = 0.0183 ppb
BEC = 0.02495 ppb

Weight: <None>
Min Conc: <None>

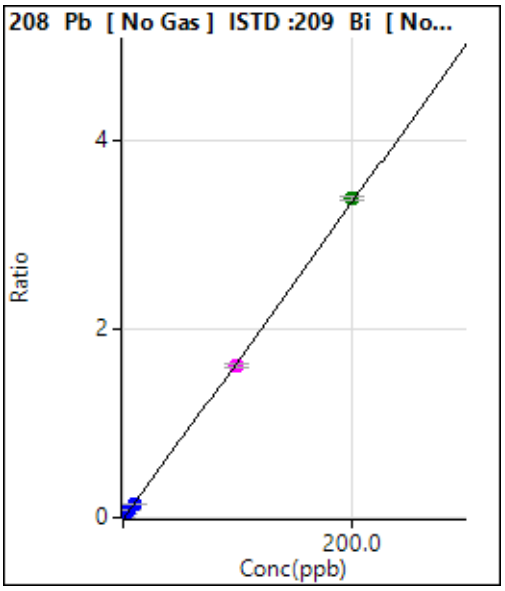


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	21.4	
2	☐	2.000	1.915	9507.12	0.0067	P	4.8	-4.2
3	☐	5.000	4.602	22397.17	0.0160	P	2.9	-8.0
4	☐	10.000	9.393	46005.05	0.0325	P	1.9	-6.1
5	☐	100.000	98.683	472119.56	0.3411	P	1.4	-1.3
6	☐	200.000	200.700	925798.76	0.6936	P	1.1	0.3

y = 0.0035 * x + 7.6762E-005
R = 1.0000
DL = 0.01423 ppb
BEC = 0.02221 ppb

Weight: <None>
Min Conc: <None>

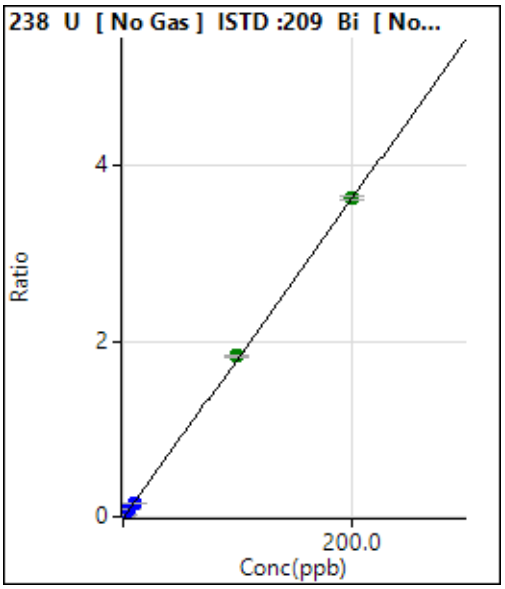
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	616.68	0.0004	P	7.6	
2	☐	2.000	1.819	43937.56	0.0309	P	2.1	-9.0
3	☐	5.000	4.478	105849.36	0.0755	P	1.4	-10.4
4	☐	10.000	9.050	215189.95	0.1522	P	0.6	-9.5
5	☐	100.000	96.161	2232387.98	1.6127	M	1.5	-3.8
6	☐	200.000	201.982	4520443.14	3.3868	A	1.6	1.0

y = 0.0168 * x + 4.4394E-004
R = 0.9998
DL = 0.006029 ppb
BEC = 0.02648 ppb

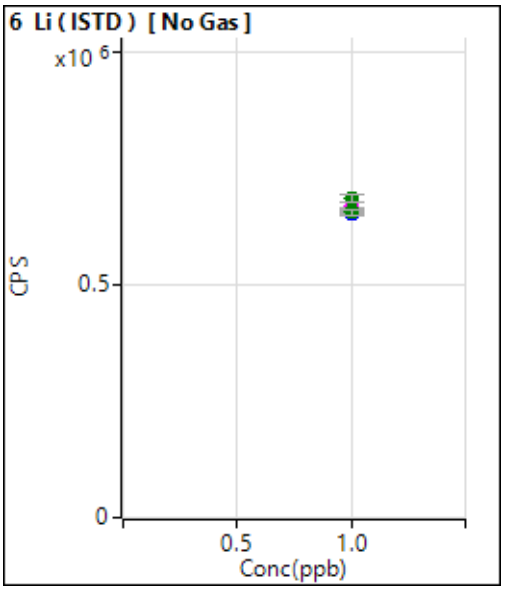
Weight: <None>
Min Conc: <None>



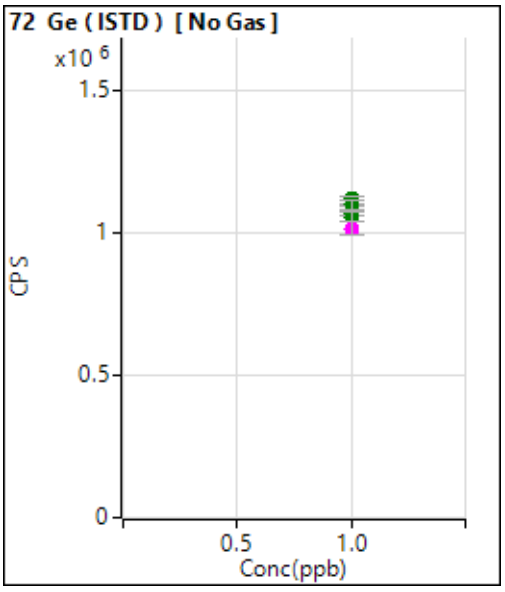
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	44.9	
2	☐	2.000	1.746	45053.23	0.0317	P	1.3	-12.7
3	☐	5.000	4.392	111879.02	0.0798	P	1.9	-12.2
4	☐	10.000	8.879	228172.47	0.1614	P	0.6	-11.2
5	☐	100.000	100.790	2535315.64	1.8316	A	1.1	0.8
6	☐	200.000	199.679	4843356.07	3.6286	A	1.4	-0.2

y = 0.0182 * x + 9.6416E-006
R = 1.0000
DL = 0.0007149 ppb
BEC = 0.0005306 ppb

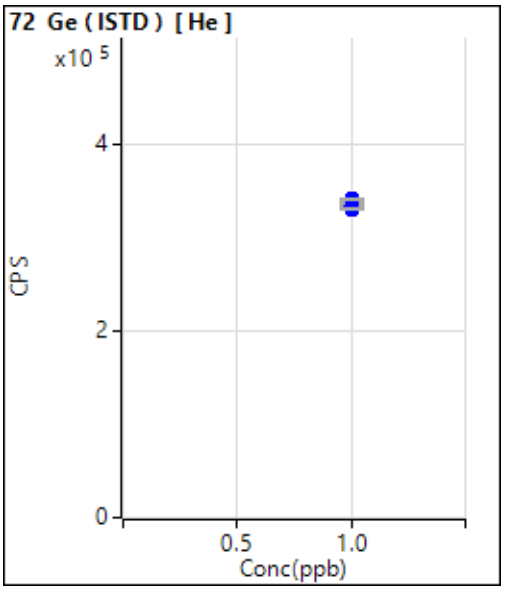
Weight: <None>
Min Conc: <None>



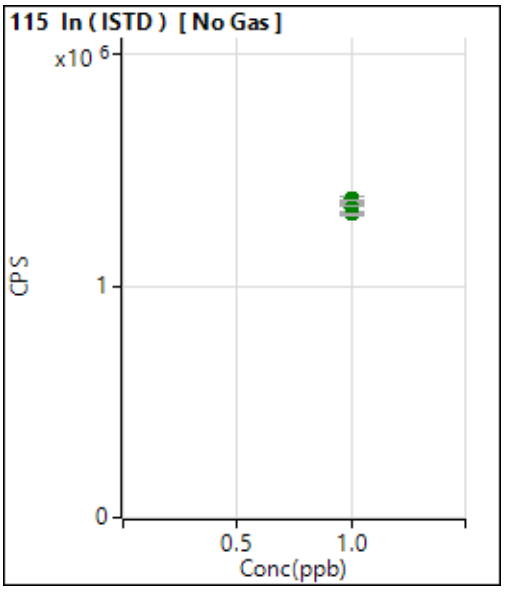
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		670806.57		M	2.3	
2	☐	1.000		685146.84		M	2.9	
3	☐	1.000		658640.95		P	0.1	
4	☐	1.000		653287.19		P	0.6	
5	☐	1.000		685499.72		A	2.0	
6	☐	1.000		655435.47		A	2.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1064832.80		A	1.3	
2	☐	1.000		1121595.69		A	0.9	
3	☐	1.000		1095296.75		A	0.7	
4	☐	1.000		1055891.36		A	3.4	
5	☐	1.000		1099376.75		A	3.0	
6	☐	1.000		1016593.71		M	4.1	

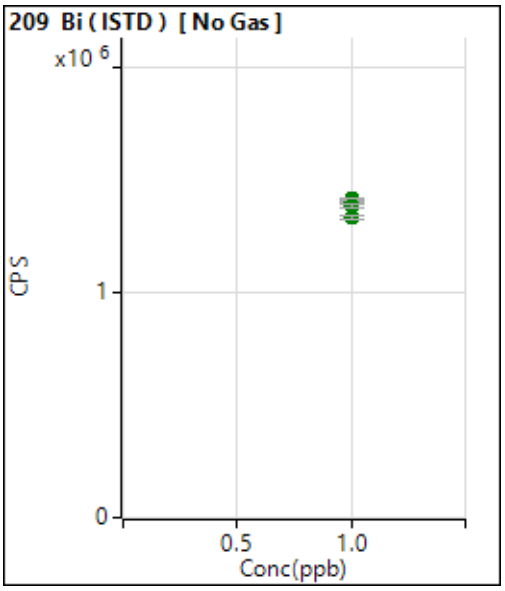


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		338750.20		P	0.3	
2	☐	1.000		342790.06		P	0.5	
3	☐	1.000		334894.32		P	0.6	
4	☐	1.000		334264.68		P	0.9	
5	☐	1.000		340806.65		P	0.6	
6	☐	1.000		330825.84		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360629.72		A	1.9	
2	☐	1.000		1379610.82		A	1.6	
3	☐	1.000		1361230.28		A	1.2	
4	☐	1.000		1368776.61		A	0.7	
5	☐	1.000		1336992.47		A	1.7	
6	☐	1.000		1310100.00		A	0.9	

Calibration for 212_ICV.d



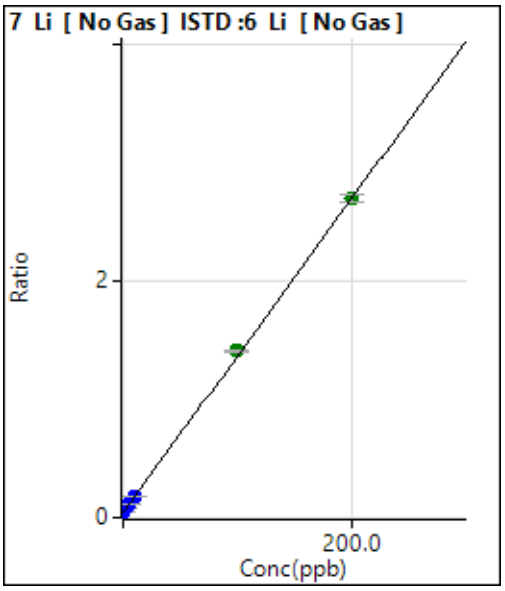
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1388985.61		A	2.0	
2	☐	1.000		1419790.14		A	0.4	
3	☐	1.000		1401715.45		A	1.3	
4	☐	1.000		1414056.38		A	0.8	
5	☐	1.000		1384389.30		A	1.6	
6	☐	1.000		1334929.82		A	1.6	

Calibration for 183_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	175CALB.d	CAL BLK	07/20/2022 20:02:19
2	176CALS.d	2/10/200	07/20/2022 20:04:27
3	177CALS.d	5/25/500	07/20/2022 20:06:34
4	178CALS.d	10/50/100	07/20/2022 20:08:41
5	179CALS.d	100/500/10K	07/20/2022 20:10:48
6	180CALS.d	200/1000/20K	07/20/2022 20:12:52

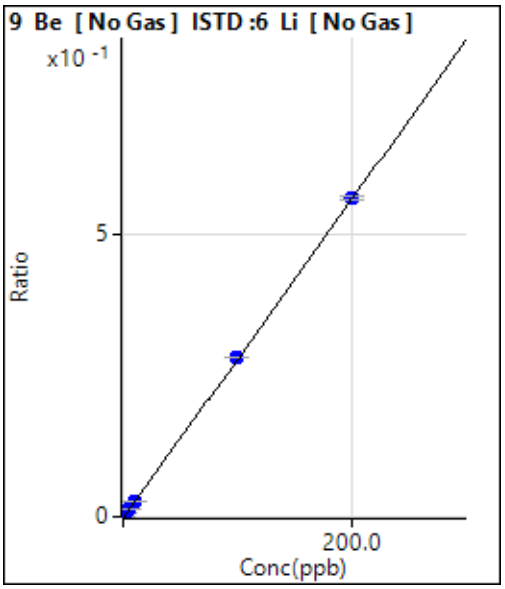
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	32400.55	0.0562	P	1.5	
2	☐	2.000	1.874	46659.10	0.0810	P	1.2	-6.3
3	☐	5.000	4.515	66482.54	0.1161	P	1.4	-9.7
4	☐	10.000	8.805	100094.32	0.1730	P	0.6	-12.0
5	☐	100.000	101.913	791055.69	1.4079	A	1.0	1.9
6	☐	200.000	199.117	1471629.87	2.6972	A	2.3	-0.4

y = 0.0133 * x + 0.0562
R = 0.9999
DL = 0.1948 ppb
BEC = 4.236 ppb

Weight: <None>
Min Conc: <None>

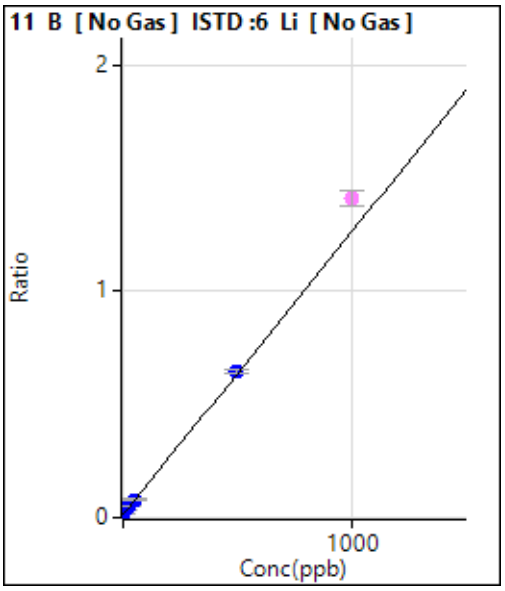


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	45.00	0.0001	P	29.8	
2	☐	2.000	1.936	3177.05	0.0055	P	7.1	-3.2
3	☐	5.000	4.928	7988.99	0.0139	P	2.3	-1.4
4	☐	10.000	9.507	15526.97	0.0268	P	1.7	-4.9
5	☐	100.000	100.070	158283.55	0.2817	P	1.0	0.1
6	☐	200.000	199.992	307173.38	0.5629	P	1.0	0.0

y = 0.0028 * x + 7.8120E-005
R = 1.0000
DL = 0.02484 ppb
BEC = 0.02776 ppb

Weight: <None>
Min Conc: <None>

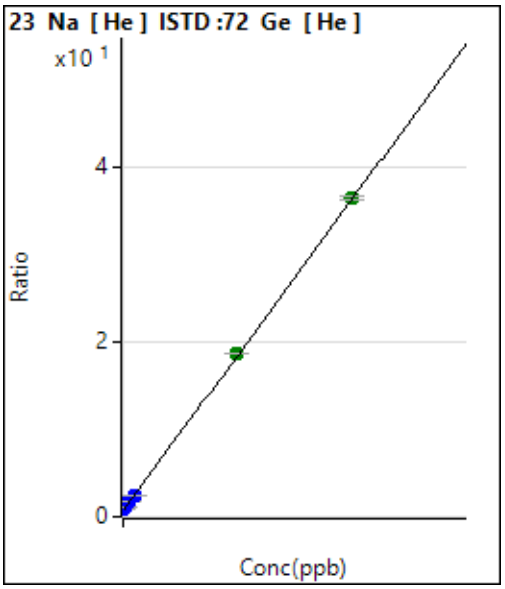
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12008.55	0.0208	P	1.5	
2	☐	10.000	9.121	18517.26	0.0322	P	5.8	-8.8
3	☐	25.000	23.286	28569.01	0.0499	P	2.8	-6.9
4	☐	50.000	47.784	46555.25	0.0805	P	1.6	-4.4
5	☐	500.000	500.325	362514.61	0.6452	P	2.4	0.1
6	☑	1000.000		769508.32	1.4099	M	4.8	

y = 0.0012 * x + 0.0208
R = 1.0000
DL = 0.7435 ppb
BEC = 16.69 ppb

Weight: <None>
Min Conc: <None>

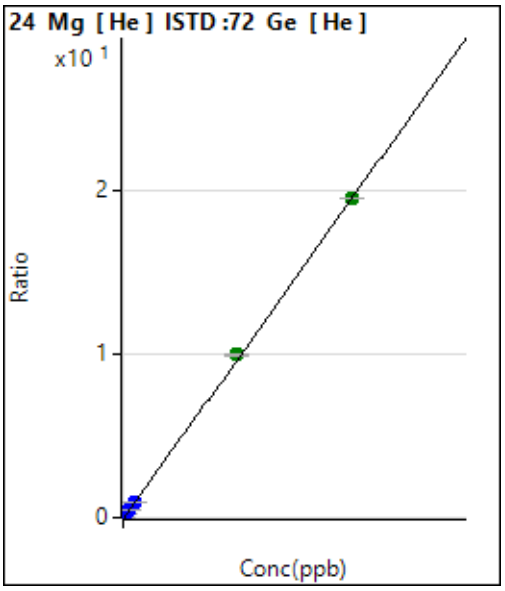


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	252696.92	0.8829	P	0.7	
2	☐	200.000	163.149	347772.14	1.1727	P	0.2	-18.4
3	☐	500.000	443.361	491404.16	1.6704	P	0.7	-11.3
4	☐	1000.000	903.850	729680.49	2.4884	P	1.2	-9.6
5	☐	10000.00	9985.203	5509348.25	18.6191	A	0.4	-0.1
6	☐	20000.00	20013.99	10472014.0	36.4327	A	1.2	0.1

y = 0.0018 * x + 0.8829
R = 1.0000
DL = 9.805 ppb
BEC = 497.1 ppb

Weight: <None>
Min Conc: <None>

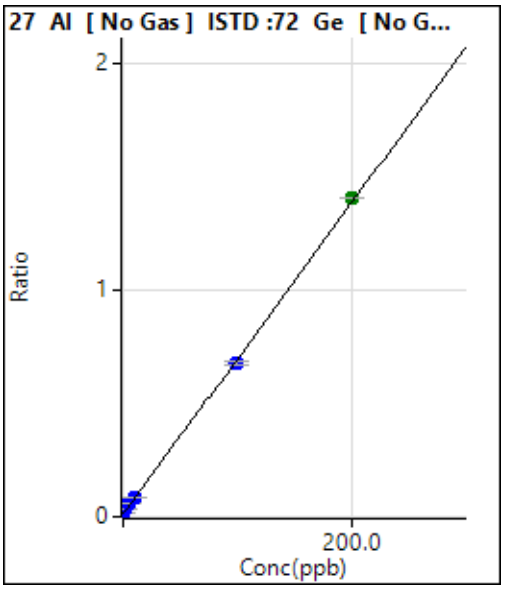
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0008	P	32.8	
2	☐	200.000	191.979	55942.34	0.1886	P	0.8	-4.0
3	☐	500.000	487.274	140492.19	0.4775	P	0.8	-2.5
4	☐	1000.000	964.952	277070.40	0.9449	P	1.6	-3.5
5	☐	10000.00	10150.59	2938814.85	9.9319	A	1.2	1.5
6	☐	20000.00	19926.85	5604571.58	19.4967	A	0.6	-0.4

y = 9.7837E-004 * x + 8.0352E-004
R = 1.0000
DL = 0.807 ppb
BEC = 0.8213 ppb

Weight: <None>
Min Conc: <None>

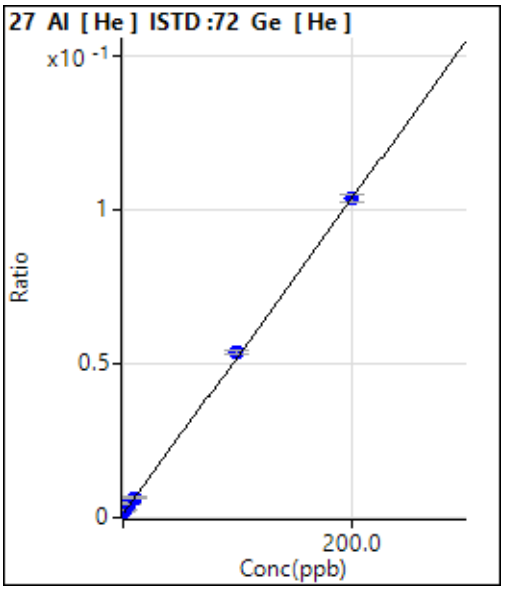


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16523.35	0.0186	P	0.7	
2	☐	2.000	2.018	28719.92	0.0325	P	4.3	0.9
3	☐	5.000	5.645	50786.00	0.0574	P	0.8	12.9
4	☐	10.000	9.256	73349.72	0.0822	P	1.4	-7.4
5	☐	100.000	95.956	611430.42	0.6775	P	1.7	-4.0
6	☐	200.000	202.043	1228066.10	1.4059	A	0.2	1.0

y = 0.0069 * x + 0.0186
R = 0.9997
DL = 0.05702 ppb
BEC = 2.708 ppb

Weight: <None>
Min Conc: <None>

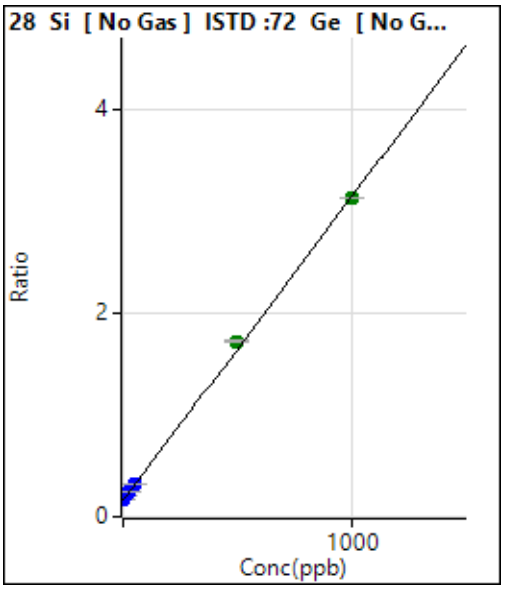
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0017	P	3.6	
2	☐	2.000	1.523	740.03	0.0025	P	20.6	-23.8
3	☐	5.000	5.626	1353.42	0.0046	P	12.2	12.5
4	☐	10.000	9.191	1883.50	0.0064	P	10.6	-8.1
5	☐	100.000	101.467	15906.04	0.0537	P	2.1	1.5
6	☐	200.000	199.296	29872.31	0.1039	P	2.6	-0.4

y = 5.1284E-004 * x + 0.0017
R = 0.9999
DL = 0.3635 ppb
BEC = 3.338 ppb

Weight: <None>
Min Conc: <None>

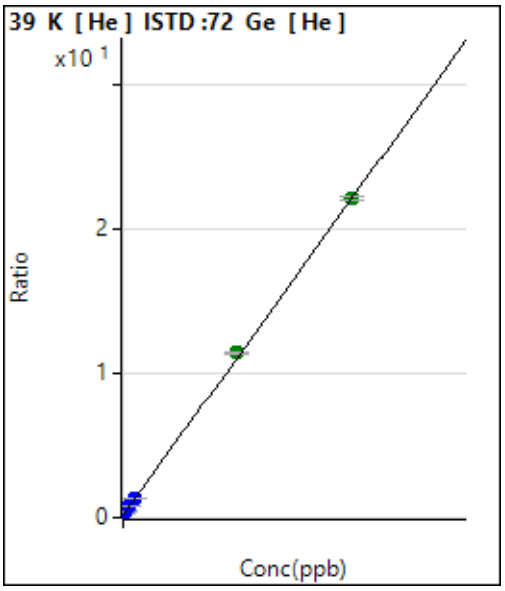


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	155957.23	0.1756	P	1.5	
2	☐	10.000	9.095	179401.96	0.2027	P	3.0	-9.0
3	☐	25.000	26.206	224623.56	0.2537	P	0.4	4.8
4	☐	50.000	46.795	281301.25	0.3151	P	0.4	-6.4
5	☐	500.000	518.365	1553215.92	1.7210	A	1.1	3.7
6	☐	1000.000	990.957	2733937.98	3.1299	A	0.2	-0.9

y = 0.0030 * x + 0.1756
R = 0.9997
DL = 2.598 ppb
BEC = 58.89 ppb

Weight: <None>
Min Conc: <None>

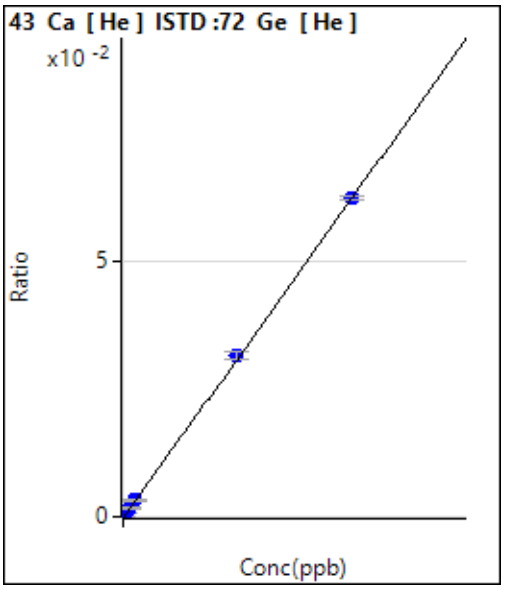
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	78358.37	0.2738	P	0.4	
2	☐	200.000	175.283	138233.21	0.4661	P	0.6	-12.4
3	☐	500.000	459.530	228902.97	0.7781	P	0.2	-8.1
4	☐	1000.000	933.607	380709.80	1.2983	P	1.4	-6.6
5	☐	10000.00	10163.56	3381123.91	11.4272	A	1.6	1.6
6	☐	20000.00	19922.79	6362828.45	22.1370	A	1.4	-0.4

y = 0.0011 * x + 0.2738
R = 0.9999
DL = 2.729 ppb
BEC = 249.5 ppb

Weight: <None>
Min Conc: <None>

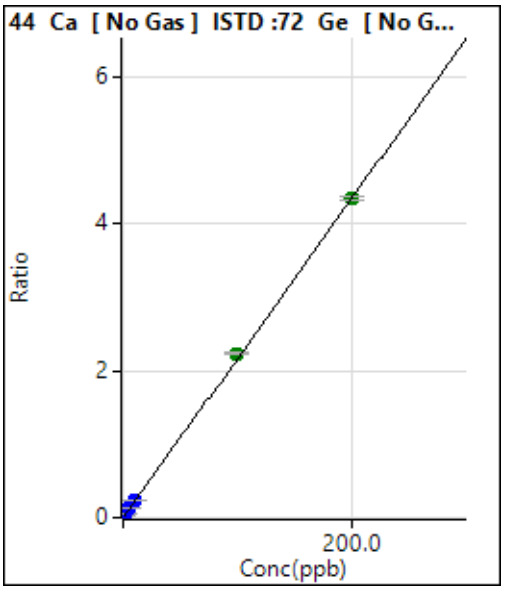


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	200.000	208.469	200.00	0.0007	P	12.7	4.2
3	☐	500.000	529.607	493.35	0.0017	P	8.9	5.9
4	☐	1000.000	1023.363	943.38	0.0032	P	8.3	2.3
5	☐	10000.00	10118.62	9353.35	0.0316	P	4.3	1.2
6	☐	20000.00	19938.69	17898.51	0.0623	P	1.2	-0.3

y = 3.1219E-006 * x + 2.3305E-005
R = 1.0000
DL = 19.39 ppb
BEC = 7.465 ppb

Weight: <None>
Min Conc: <None>

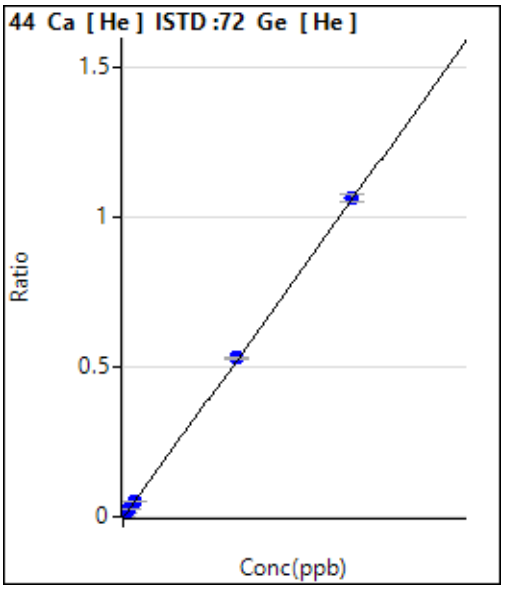
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	17978.69	0.0202	P	0.1	
2	☐	2.000	1.926	54963.13	0.0621	P	3.6	-3.7
3	☐	5.000	4.976	113669.61	0.1284	P	1.9	-0.5
4	☐	10.000	9.544	203270.60	0.2277	P	0.3	-4.6
5	☐	100.000	101.743	2014161.63	2.2316	A	0.8	1.7
6	☐	200.000	199.152	3798625.25	4.3488	A	0.9	-0.4

y = 0.0217 * x + 0.0202
R = 0.9999
DL = 0.004126 ppb
BEC = 0.9311 ppb

Weight: <None>
Min Conc: <None>

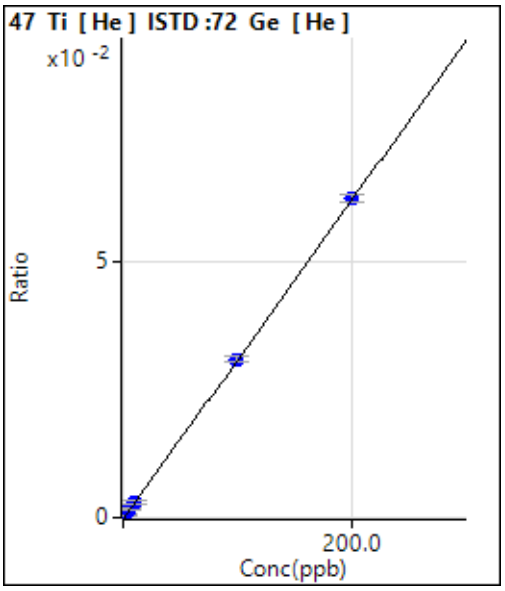


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	406.68	0.0014	P	2.8	
2	☐	200.000	195.603	3497.17	0.0118	P	2.3	-2.2
3	☐	500.000	504.055	8282.64	0.0281	P	4.7	0.8
4	☐	1000.000	953.775	15245.35	0.0520	P	1.7	-4.6
5	☐	10000.00	9943.887	156424.86	0.5287	P	0.5	-0.6
6	☐	20000.00	20030.31	305657.11	1.0635	P	1.9	0.2

y = 5.3021E-005 * x + 0.0014
R = 1.0000
DL = 2.267 ppb
BEC = 26.8 ppb

Weight: <None>
Min Conc: <None>

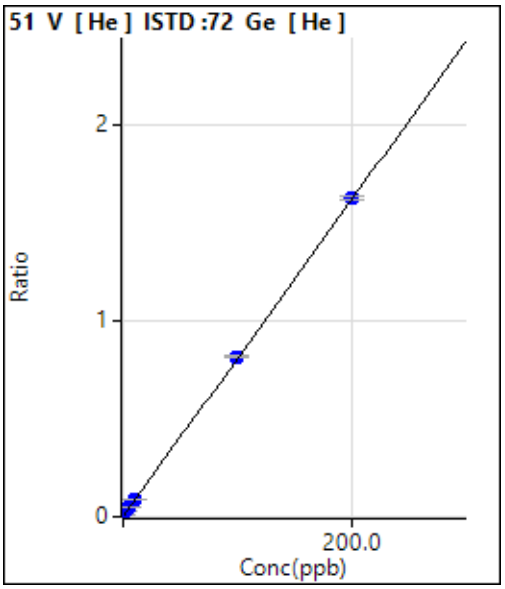
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.770	163.34	0.0006	P	31.1	-11.5
3	☐	5.000	5.306	486.69	0.0017	P	26.6	6.1
4	☐	10.000	9.868	900.05	0.0031	P	21.5	-1.3
5	☐	100.000	99.450	9159.88	0.0310	P	2.8	-0.6
6	☐	200.000	200.276	17921.91	0.0624	P	1.9	0.1

y = 3.1133E-004 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

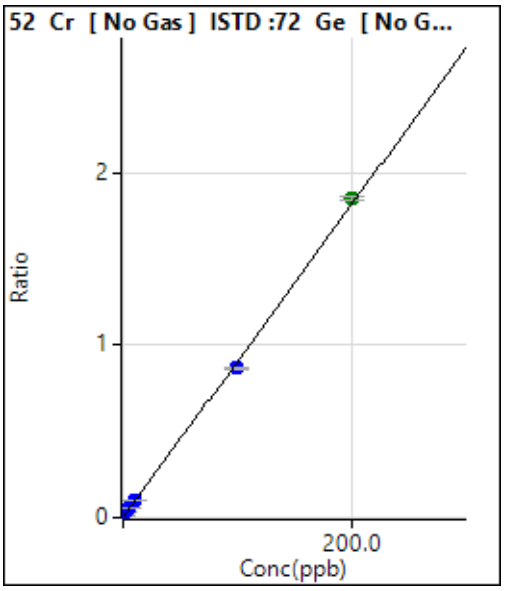


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2833.64	0.0099	P	1.6	
2	☐	2.000	1.895	7488.76	0.0252	P	4.0	-5.3
3	☐	5.000	4.994	14812.48	0.0504	P	0.6	-0.1
4	☐	10.000	9.697	25932.28	0.0884	P	2.3	-3.0
5	☐	100.000	99.852	242234.11	0.8187	P	1.0	-0.1
6	☐	200.000	200.090	468692.95	1.6305	P	0.6	0.0

y = 0.0081 * x + 0.0099
R = 1.0000
DL = 0.06046 ppb
BEC = 1.222 ppb

Weight: <None>
Min Conc: <None>

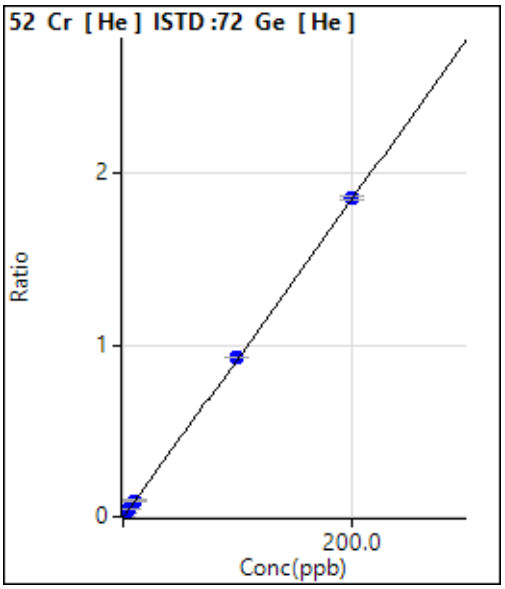
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9493.42	0.0107	P	1.5	
2	☐	2.000	2.022	25717.86	0.0291	P	4.1	1.1
3	☐	5.000	4.781	47920.69	0.0541	P	0.9	-4.4
4	☐	10.000	9.354	85421.98	0.0957	P	0.9	-6.5
5	☐	100.000	94.186	781966.73	0.8664	P	0.7	-5.8
6	☐	200.000	202.945	1619946.64	1.8546	A	1.1	1.5

y = 0.0091 * x + 0.0107
R = 0.9994
DL = 0.05237 ppb
BEC = 1.176 ppb

Weight: <None>
Min Conc: <None>

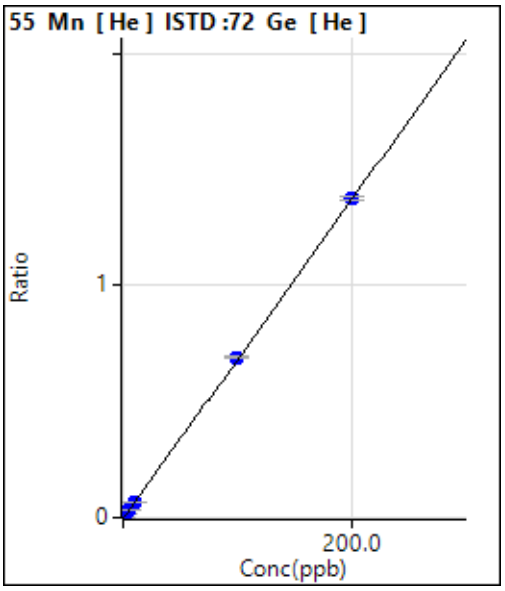


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	850.04	0.0030	P	4.6	
2	☐	2.000	1.922	6168.17	0.0208	P	2.4	-3.9
3	☐	5.000	5.060	14678.08	0.0499	P	1.6	1.2
4	☐	10.000	9.785	27481.18	0.0937	P	3.1	-2.2
5	☐	100.000	99.901	275042.22	0.9296	P	1.0	-0.1
6	☐	200.000	200.059	534208.00	1.8585	P	1.1	0.0

y = 0.0093 * x + 0.0030
R = 1.0000
DL = 0.04446 ppb
BEC = 0.3202 ppb

Weight: <None>
Min Conc: <None>

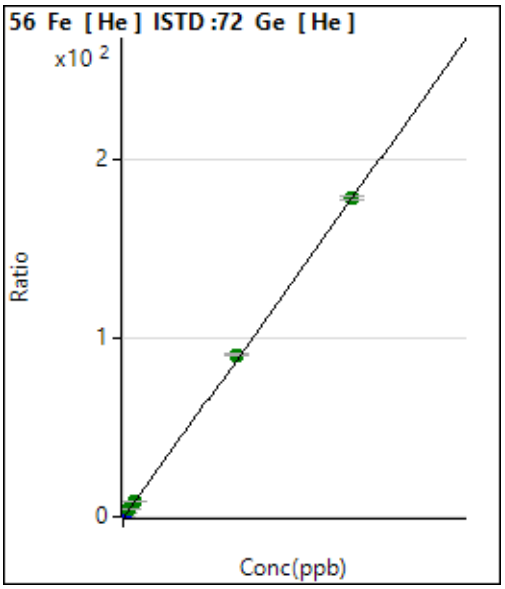
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	580.02	0.0020	P	9.7	
2	☐	2.000	1.945	4564.18	0.0154	P	4.1	-2.8
3	☐	5.000	5.107	10917.86	0.0371	P	0.5	2.1
4	☐	10.000	9.812	20362.13	0.0694	P	2.2	-1.9
5	☐	100.000	100.216	204312.75	0.6905	P	0.9	0.2
6	☐	200.000	199.899	395319.29	1.3753	P	1.0	-0.1

y = 0.0069 * x + 0.0020
R = 1.0000
DL = 0.08599 ppb
BEC = 0.295 ppb

Weight: <None>
Min Conc: <None>

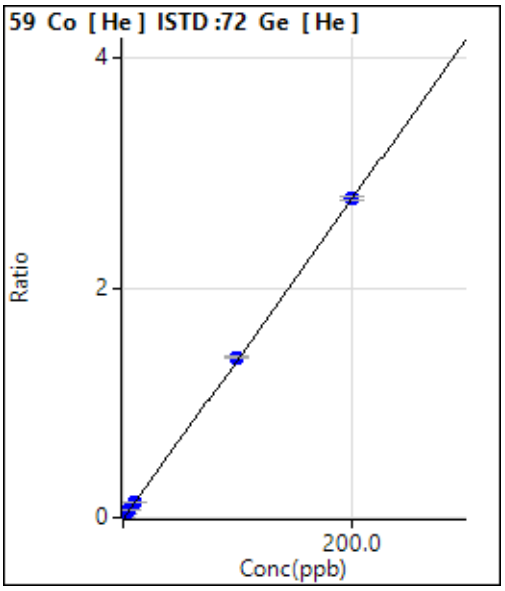


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8926.41	0.0312	P	4.3	
2	☐	200.000	189.317	511590.06	1.7250	P	1.3	-5.3
3	☐	500.000	525.244	1391702.79	4.7305	A	0.6	5.0
4	☐	1000.000	1012.785	2666298.40	9.0925	A	0.8	1.3
5	☐	10000.00	10105.49	26761250.4	90.4439	A	1.1	1.1
6	☐	20000.00	19946.08	51304722.5	178.486	A	0.9	-0.3

y = 0.0089 * x + 0.0312
R = 1.0000
DL = 0.4454 ppb
BEC = 3.486 ppb

Weight: <None>
Min Conc: <None>

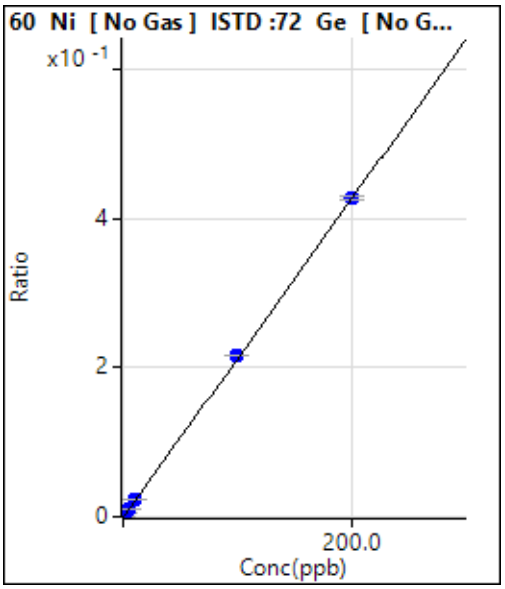
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.4	
2	☐	2.000	1.943	8039.20	0.0271	P	0.7	-2.8
3	☐	5.000	4.825	19774.59	0.0672	P	1.2	-3.5
4	☐	10.000	9.862	40276.54	0.1373	P	2.9	-1.4
5	☐	100.000	100.430	413673.34	1.3980	P	0.5	0.4
6	☐	200.000	199.797	799431.66	2.7812	P	0.9	-0.1

y = 0.0139 * x + 5.8263E-005
R = 1.0000
DL = 0.008716 ppb
BEC = 0.004186 ppb

Weight: <None>
Min Conc: <None>

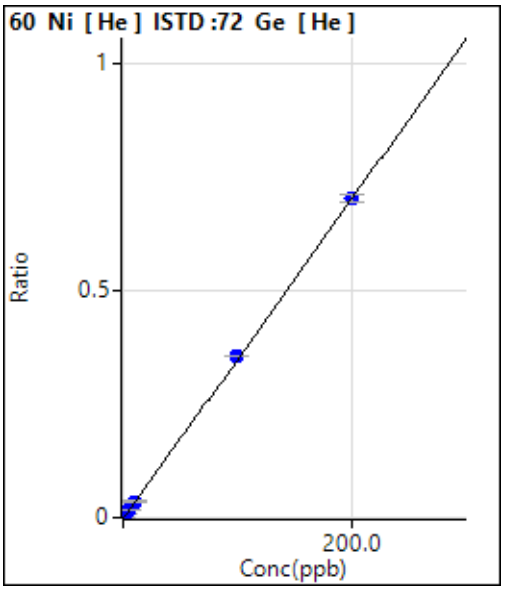


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.03	0.0009	P	2.9	
2	☐	2.000	1.864	4330.77	0.0049	P	3.4	-6.8
3	☐	5.000	4.954	10183.92	0.0115	P	0.6	-0.9
4	☐	10.000	10.124	20148.44	0.0226	P	2.9	1.2
5	☐	100.000	100.910	195716.29	0.2169	P	0.8	0.9
6	☐	200.000	199.541	373785.31	0.4279	P	0.9	-0.2

y = 0.0021 * x + 9.0069E-004
R = 1.0000
DL = 0.03652 ppb
BEC = 0.4209 ppb

Weight: <None>
Min Conc: <None>

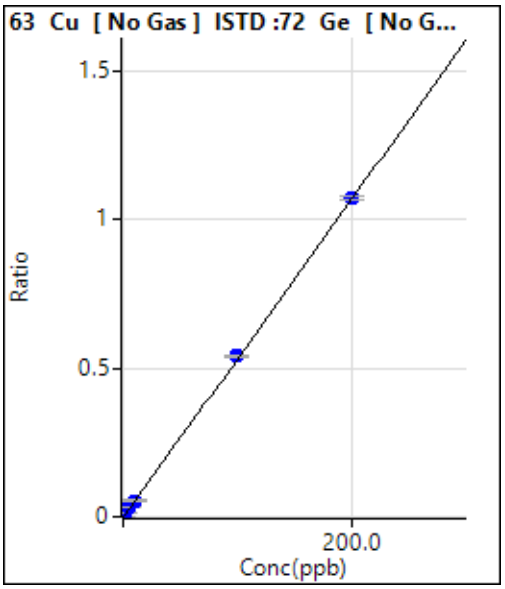
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	37.1	
2	☐	2.000	1.855	2090.19	0.0070	P	8.7	-7.3
3	☐	5.000	4.828	5147.71	0.0175	P	3.3	-3.4
4	☐	10.000	10.037	10500.89	0.0358	P	5.0	0.4
5	☐	100.000	100.974	105210.56	0.3556	P	0.2	1.0
6	☐	200.000	199.517	201780.90	0.7020	P	1.9	-0.2

y = 0.0035 * x + 5.2406E-004
R = 1.0000
DL = 0.1658 ppb
BEC = 0.149 ppb

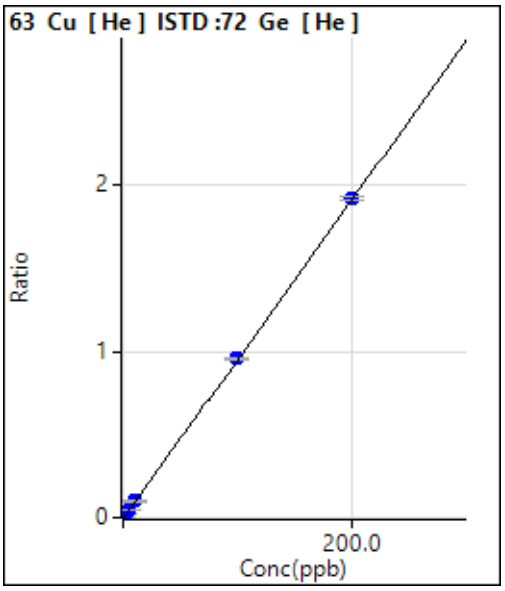
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2210.22	0.0025	P	1.3	
2	☐	2.000	2.130	12289.10	0.0139	P	5.2	6.5
3	☐	5.000	5.047	26115.39	0.0295	P	0.9	0.9
4	☐	10.000	9.728	48700.57	0.0545	P	1.6	-2.7
5	☐	100.000	100.344	486895.44	0.5395	P	0.4	0.3
6	☐	200.000	199.839	936316.57	1.0719	P	0.8	-0.1

y = 0.0054 * x + 0.0025
R = 1.0000
DL = 0.01816 ppb
BEC = 0.4648 ppb

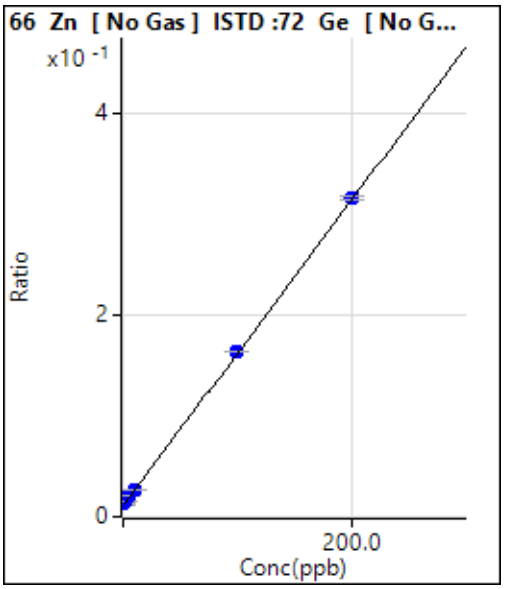
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	916.71	0.0032	P	4.5	
2	☐	2.000	2.059	6795.15	0.0229	P	1.2	2.9
3	☐	5.000	4.834	14558.01	0.0495	P	2.3	-3.3
4	☐	10.000	9.978	28951.21	0.0987	P	3.4	-0.2
5	☐	100.000	99.593	283075.45	0.9567	P	1.0	-0.4
6	☐	200.000	200.208	551899.64	1.9200	P	0.8	0.1

y = 0.0096 * x + 0.0032
R = 1.0000
DL = 0.04519 ppb
BEC = 0.3345 ppb

Weight: <None>
Min Conc: <None>

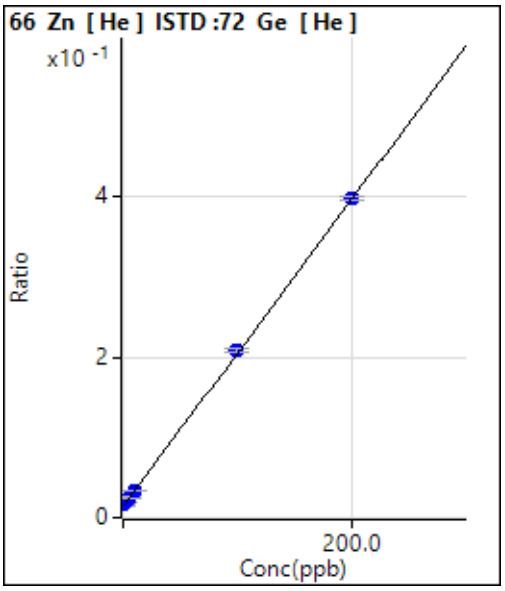


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11098.03	0.0125	P	3.2	
2	☐	2.000	1.896	13623.78	0.0154	P	3.4	-5.2
3	☐	5.000	5.342	18245.84	0.0206	P	1.7	6.8
4	☐	10.000	9.725	24338.79	0.0273	P	2.9	-2.8
5	☐	100.000	99.459	147620.21	0.1636	P	0.5	-0.5
6	☐	200.000	200.277	276624.55	0.3167	P	1.0	0.1

y = 0.0015 * x + 0.0125
R = 1.0000
DL = 0.7849 ppb
BEC = 8.224 ppb

Weight: <None>
Min Conc: <None>

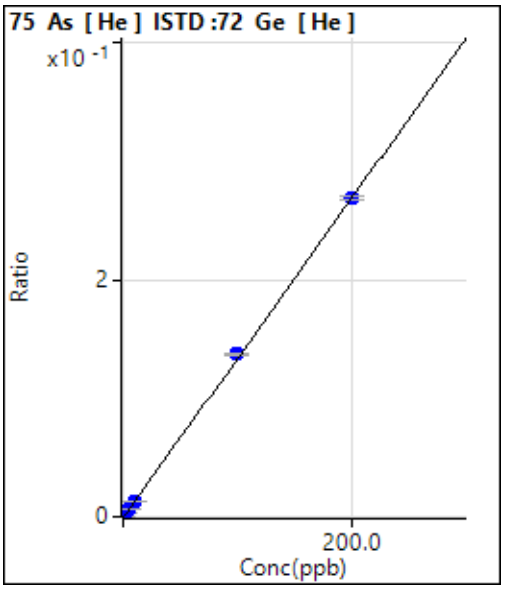
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4607.54	0.0161	P	6.4	
2	☐	2.000	1.916	5861.37	0.0198	P	2.5	-4.2
3	☐	5.000	4.688	7375.46	0.0251	P	3.4	-6.2
4	☐	10.000	9.487	10043.90	0.0342	P	1.3	-5.1
5	☐	100.000	100.730	61783.87	0.2088	P	1.6	0.7
6	☐	200.000	199.669	114436.50	0.3981	P	0.8	-0.2

y = 0.0019 * x + 0.0161
R = 1.0000
DL = 1.627 ppb
BEC = 8.415 ppb

Weight: <None>
Min Conc: <None>

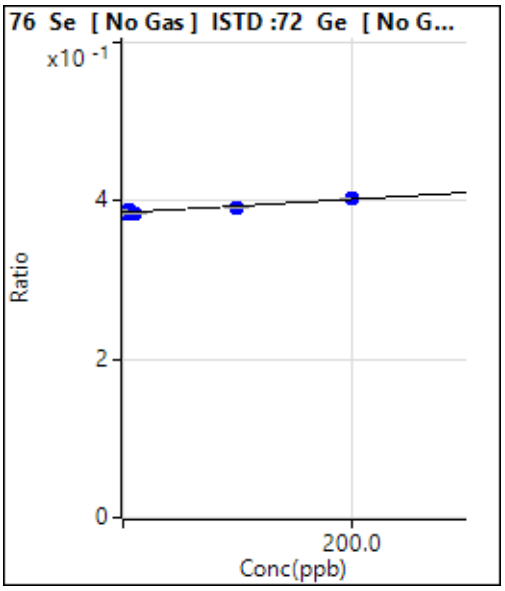


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	108.89	0.0004	P	12.4	
2	☐	2.000	1.783	825.59	0.0028	P	3.7	-10.9
3	☐	5.000	4.828	2026.83	0.0069	P	5.6	-3.4
4	☐	10.000	9.387	3821.68	0.0130	P	7.8	-6.1
5	☐	100.000	101.716	40686.59	0.1375	P	1.1	1.7
6	☐	200.000	199.179	77294.16	0.2689	P	1.1	-0.4

y = 0.0013 * x + 3.8045E-004
R = 0.9999
DL = 0.105 ppb
BEC = 0.2822 ppb

Weight: <None>
Min Conc: <None>

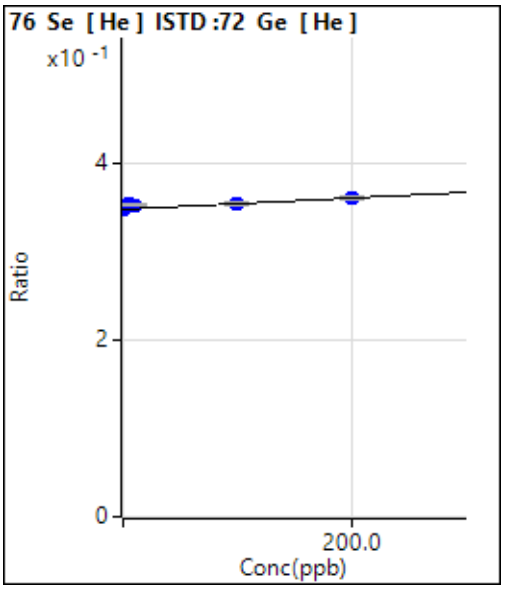
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	341723.99	0.3847	P	0.5	
2	☐	2.000	-7.579	340087.17	0.3840	P	1.4	-479.0
3	☐	5.000	29.037	342766.67	0.3871	P	0.3	480.7
4	☐	10.000	-3.747	343148.41	0.3844	P	0.6	-137.5
5	☐	100.000	73.836	352797.40	0.3909	P	0.6	-26.2
6	☐	200.000	213.264	351716.27	0.4027	P	0.5	6.6

y = 8.4380E-005 * x + 0.3847
R = 0.9766
DL = 74.01 ppb
BEC = 4559 ppb

Weight: <None>
Min Conc: <None>

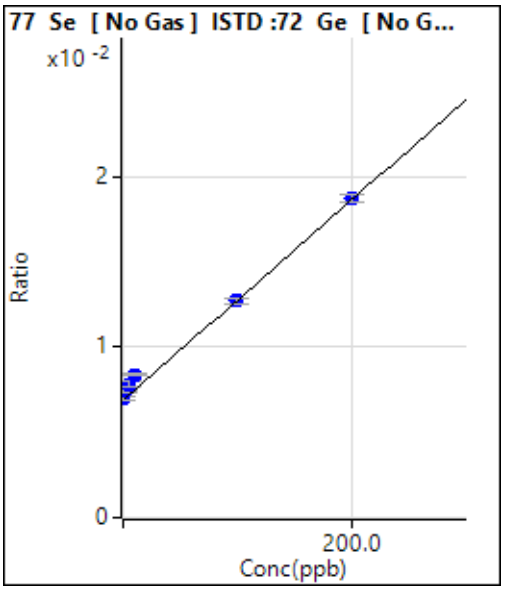


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99341.21	0.3471	P	0.8	
2	☐	2.000	77.928	104425.35	0.3521	P	1.1	3796.4
3	☐	5.000	87.403	103767.09	0.3527	P	1.0	1648.1
4	☐	10.000	75.096	103202.80	0.3519	P	0.8	651.0
5	☐	100.000	99.838	104613.79	0.3535	P	0.9	-0.2
6	☐	200.000	194.007	103364.08	0.3596	P	1.3	-3.0

y = 6.4557E-005 * x + 0.3471
R = 0.8610
DL = 123.9 ppb
BEC = 5376 ppb

Weight: <None>
Min Conc: <None>

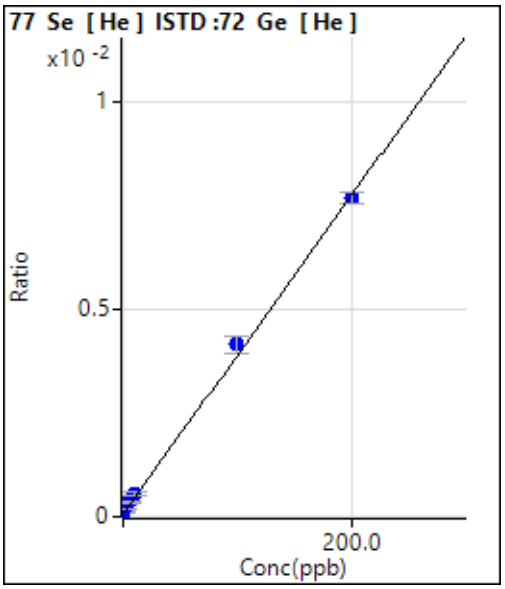
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6208.21	0.0070	P	3.3	
2	☐	2.000	7.199	6561.72	0.0074	P	1.4	259.9
3	☐	5.000	14.106	6918.57	0.0078	P	3.8	182.1
4	☐	10.000	23.786	7485.53	0.0084	P	0.8	137.9
5	☐	100.000	97.501	11471.73	0.0127	P	2.2	-2.5
6	☐	200.000	200.281	16373.56	0.0187	P	2.0	0.1

y = 5.8701E-005 * x + 0.0070
R = 0.9977
DL = 11.93 ppb
BEC = 119 ppb

Weight: <None>
Min Conc: <None>

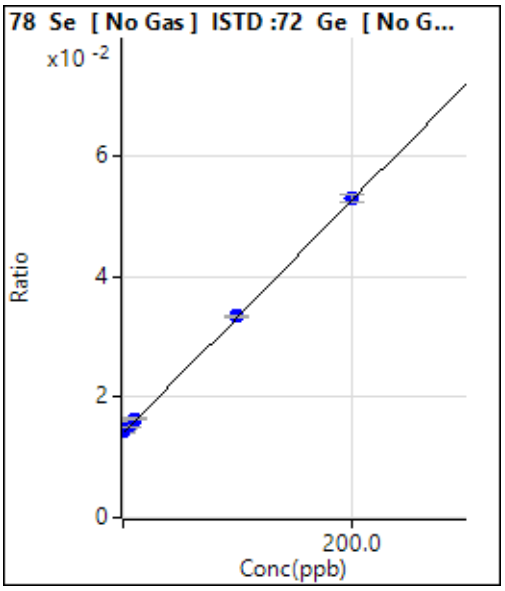


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.6	
2	☐	2.000	3.118	66.67	0.0002	P	48.0	55.9
3	☐	5.000	6.429	103.33	0.0004	P	20.9	28.6
4	☐	10.000	11.790	163.34	0.0006	P	19.4	17.9
5	☐	100.000	105.243	1226.75	0.0041	P	10.1	5.2
6	☐	200.000	197.242	2206.88	0.0077	P	3.5	-1.4

y = 3.8400E-005 * x + 1.0478E-004
R = 0.9995
DL = 5.455 ppb
BEC = 2.729 ppb

Weight: <None>
Min Conc: <None>

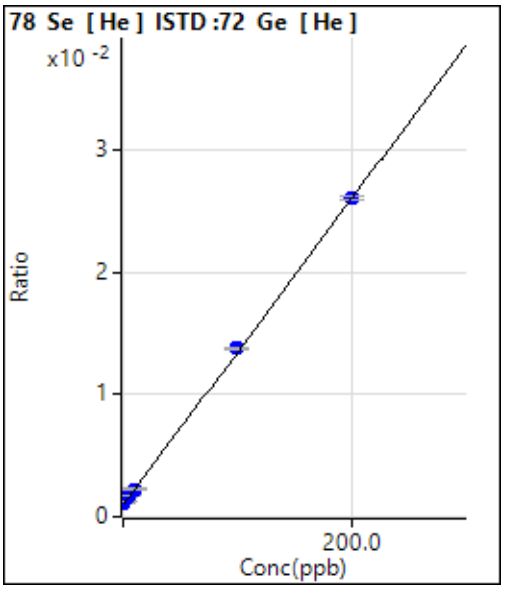
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12699.46	0.0143	P	2.7	
2	☐	2.000	3.169	13193.30	0.0149	P	4.1	58.5
3	☐	5.000	5.536	13597.11	0.0154	P	6.3	10.7
4	☐	10.000	10.707	14608.14	0.0164	P	1.5	7.1
5	☐	100.000	98.837	30110.64	0.0334	P	1.0	-1.2
6	☐	200.000	200.521	46272.98	0.0530	P	2.2	0.3

y = 1.9289E-004 * x + 0.0143
R = 1.0000
DL = 5.923 ppb
BEC = 74.11 ppb

Weight: <None>
Min Conc: <None>

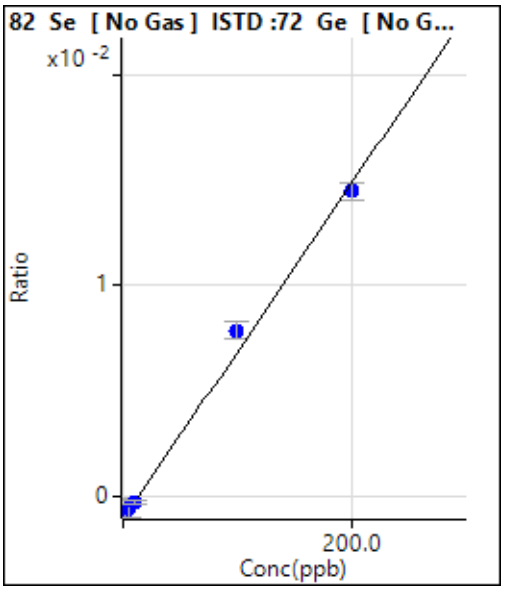


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	312.00	0.0011	P	5.0	
2	☐	2.000	2.641	421.34	0.0014	P	12.5	32.1
3	☐	5.000	5.396	519.34	0.0018	P	2.5	7.9
4	☐	10.000	9.142	655.35	0.0022	P	4.0	-8.6
5	☐	100.000	101.275	4073.29	0.0138	P	1.6	1.3
6	☐	200.000	199.389	7487.43	0.0260	P	0.8	-0.3

y = 1.2517E-004 * x + 0.0011
R = 1.0000
DL = 1.312 ppb
BEC = 8.709 ppb

Weight: <None>
Min Conc: <None>

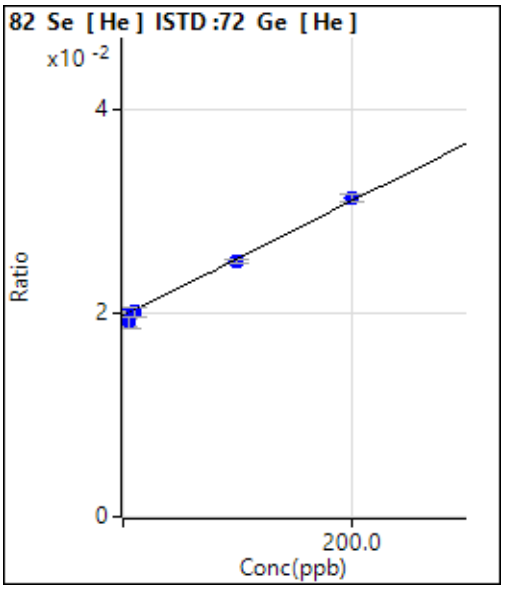
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-910.52	-0.0010	P	-63.2	
2	☐	2.000	1.459	-808.29	-0.0009	P	-96.8	-27.1
3	☐	5.000	6.008	-487.94	-0.0005	P	-162.	20.2
4	☐	10.000	8.949	-278.60	-0.0003	P	-55.0	-10.5
5	☐	100.000	111.559	7106.92	0.0079	P	9.9	11.6
6	☐	200.000	194.253	12641.63	0.0145	P	5.7	-2.9

y = 7.9788E-005 * x - 0.0010
R = 0.9975
DL = 24.37 ppb
BEC = -12.85 ppb

Weight: <None>
Min Conc: <None>

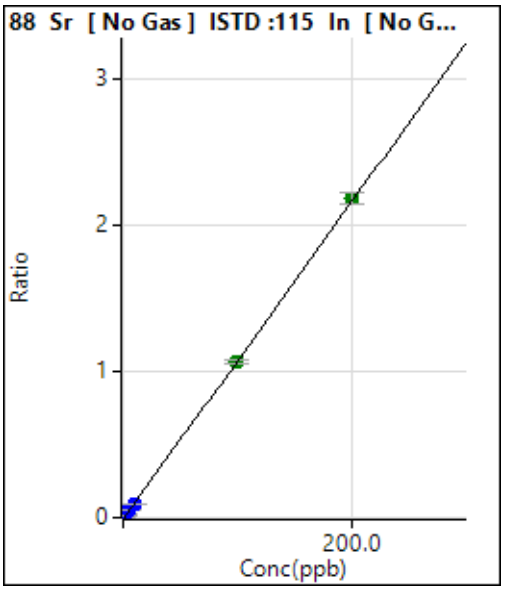


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5667.98	0.0198	P	3.2	
2	☐	2.000	-13.433	5647.95	0.0190	P	3.9	-771.6
3	☐	5.000	-10.277	5657.96	0.0192	P	7.3	-305.5
4	☐	10.000	4.765	5884.72	0.0201	P	5.5	-52.3
5	☐	100.000	93.343	7412.18	0.0251	P	2.1	-6.7
6	☐	200.000	204.126	8989.81	0.0313	P	2.9	2.1

y = 5.6216E-005 * x + 0.0198
R = 0.9975
DL = 34.08 ppb
BEC = 352.3 ppb

Weight: <None>
Min Conc: <None>

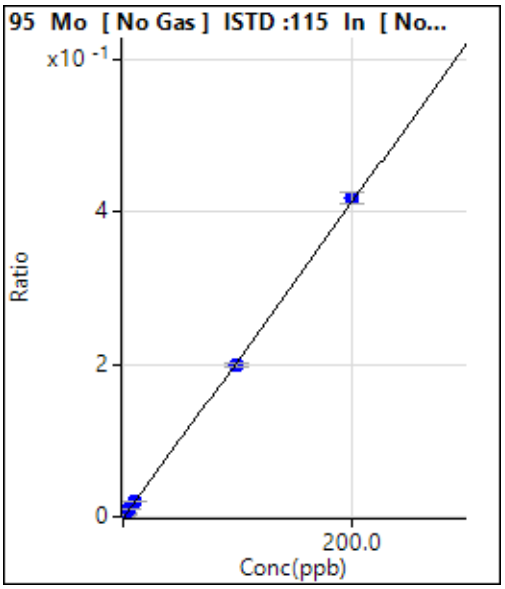
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	533.36	0.0005	P	16.8	
2	☐	2.000	1.773	22796.43	0.0197	P	7.4	-11.3
3	☐	5.000	4.764	60081.29	0.0521	P	4.3	-4.7
4	☐	10.000	8.591	109945.84	0.0936	P	0.8	-14.1
5	☐	100.000	97.754	1239005.79	1.0600	A	2.4	-2.2
6	☐	200.000	201.201	2390900.95	2.1812	A	3.3	0.6

y = 0.0108 * x + 4.7291E-004
R = 0.9999
DL = 0.02193 ppb
BEC = 0.04363 ppb

Weight: <None>
Min Conc: <None>

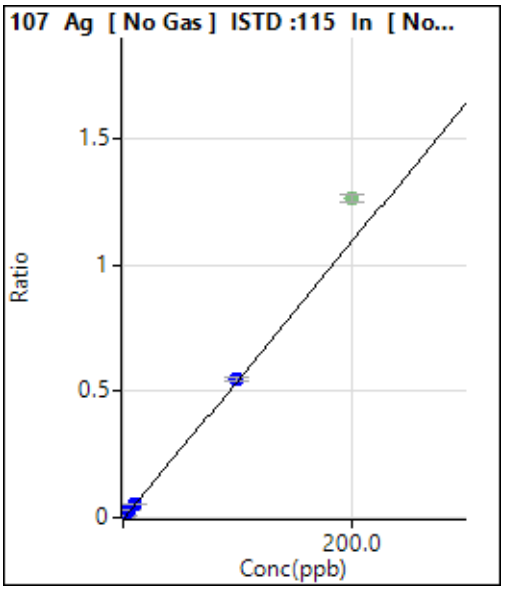


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	116.7	
2	☐	2.000	1.864	4474.18	0.0039	P	7.8	-6.8
3	☐	5.000	4.667	11134.83	0.0097	P	6.6	-6.7
4	☐	10.000	9.440	22936.82	0.0195	P	4.4	-5.6
5	☐	100.000	96.142	232427.38	0.1988	P	1.6	-3.9
6	☐	200.000	201.967	457832.82	0.4177	P	3.2	1.0

y = 0.0021 * x + 1.2122E-005
R = 0.9997
DL = 0.02053 ppb
BEC = 0.005862 ppb

Weight: <None>
Min Conc: <None>

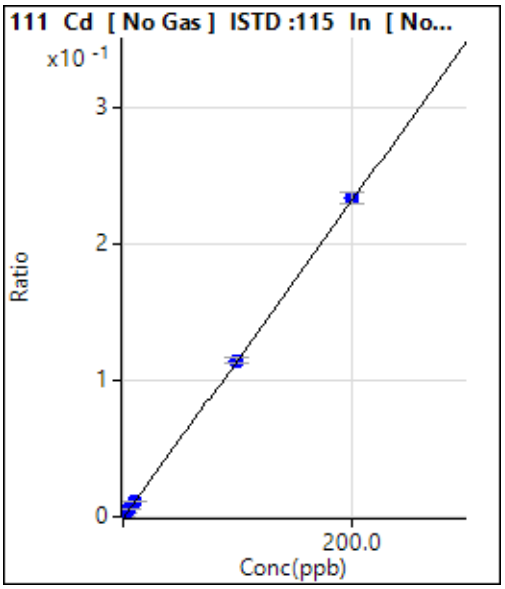
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.01	0.0003	P	32.4	
2	☐	2.000	1.948	12756.33	0.0110	P	2.3	-2.6
3	☐	5.000	4.904	31427.71	0.0273	P	3.7	-1.9
4	☐	10.000	9.559	62065.47	0.0528	P	0.9	-4.4
5	☐	100.000	100.050	642894.18	0.5501	P	2.9	0.0
6	☑	200.000		1388303.78	1.2662	A	2.3	

y = 0.0055 * x + 3.0087E-004
R = 1.0000
DL = 0.05319 ppb
BEC = 0.05475 ppb

Weight: <None>
Min Conc: <None>

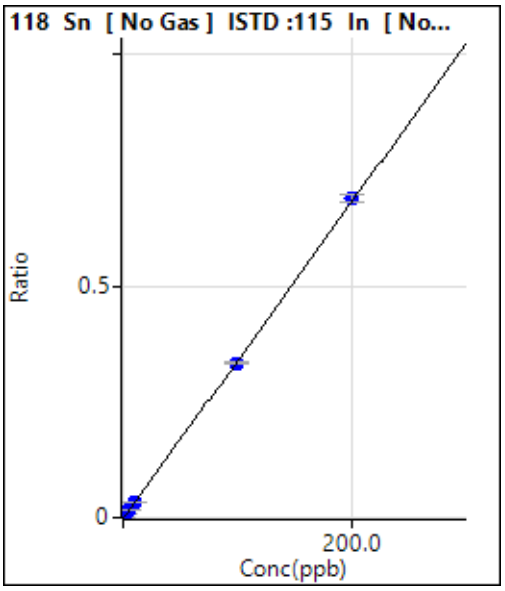


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.7	
2	☐	2.000	1.947	2633.65	0.0023	P	5.9	-2.6
3	☐	5.000	4.749	6381.66	0.0055	P	7.2	-5.0
4	☐	10.000	9.400	12863.13	0.0110	P	3.6	-6.0
5	☐	100.000	98.170	133638.66	0.1143	P	3.6	-1.8
6	☐	200.000	200.952	256559.04	0.2341	P	3.2	0.5

y = 0.0012 * x + 5.9730E-006
R = 0.9999
DL = 0.01334 ppb
BEC = 0.005128 ppb

Weight: <None>
Min Conc: <None>

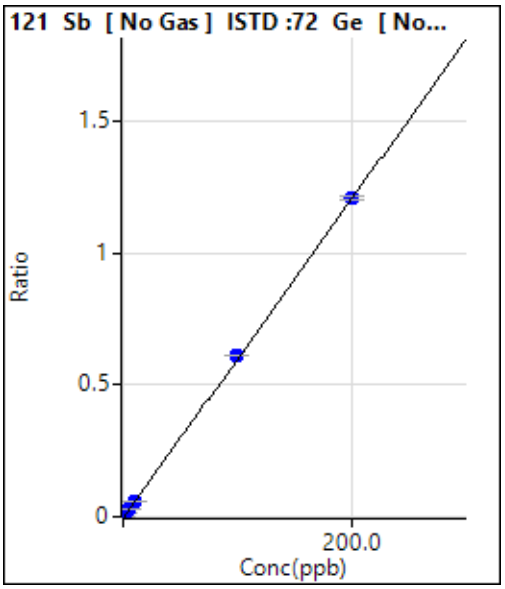
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1013.40	0.0009	P	6.3	
2	☐	2.000	1.872	8456.20	0.0073	P	5.2	-6.4
3	☐	5.000	4.528	18893.79	0.0164	P	4.0	-9.4
4	☐	10.000	9.238	38162.26	0.0325	P	2.8	-7.6
5	☐	100.000	97.418	390521.07	0.3341	P	2.0	-2.6
6	☐	200.000	201.342	755976.42	0.6896	P	2.5	0.7

y = 0.0034 * x + 8.9620E-004
R = 0.9999
DL = 0.04942 ppb
BEC = 0.262 ppb

Weight: <None>
Min Conc: <None>

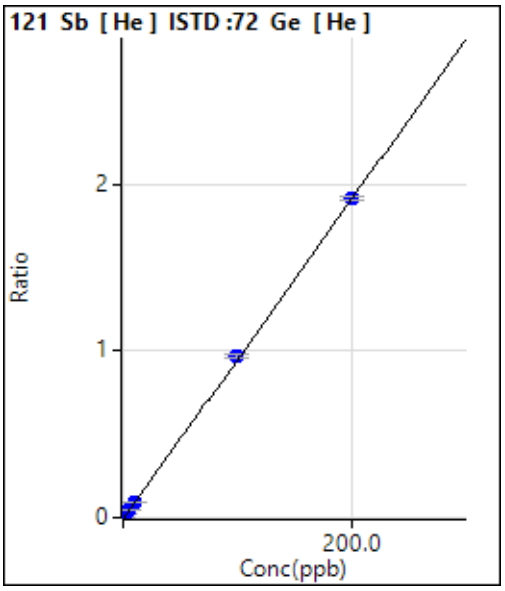


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	430.02	0.0005	P	25.0	
2	☐	2.000	1.984	11054.84	0.0125	P	6.0	-0.8
3	☐	5.000	4.766	25979.29	0.0293	P	2.2	-4.7
4	☐	10.000	9.712	52919.95	0.0593	P	1.4	-2.9
5	☐	100.000	100.655	550366.46	0.6098	P	0.4	0.7
6	☐	200.000	199.693	1056321.21	1.2093	P	0.7	-0.2

y = 0.0061 * x + 4.8336E-004
R = 1.0000
DL = 0.05999 ppb
BEC = 0.07985 ppb

Weight: <None>
Min Conc: <None>

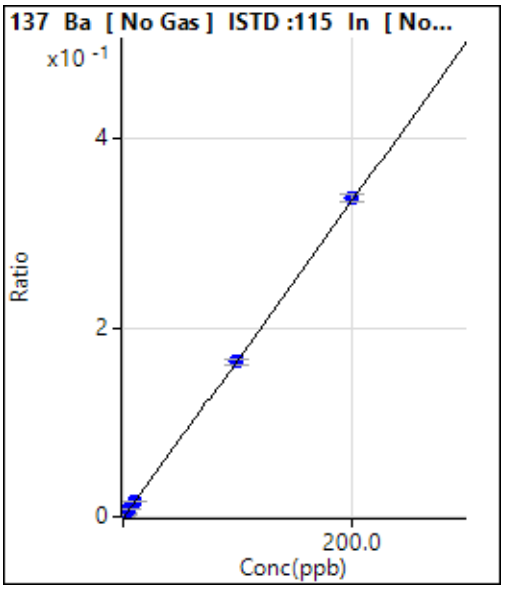
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	150.00	0.0005	P	13.5	
2	☐	2.000	1.858	5444.58	0.0184	P	6.7	-7.1
3	☐	5.000	4.934	14077.79	0.0479	P	4.8	-1.3
4	☐	10.000	9.765	27626.03	0.0942	P	2.4	-2.3
5	☐	100.000	100.772	286224.44	0.9674	P	1.8	0.8
6	☐	200.000	199.629	550667.42	1.9158	P	1.4	-0.2

y = 0.0096 * x + 5.2414E-004
R = 1.0000
DL = 0.02206 ppb
BEC = 0.05463 ppb

Weight: <None>
Min Conc: <None>

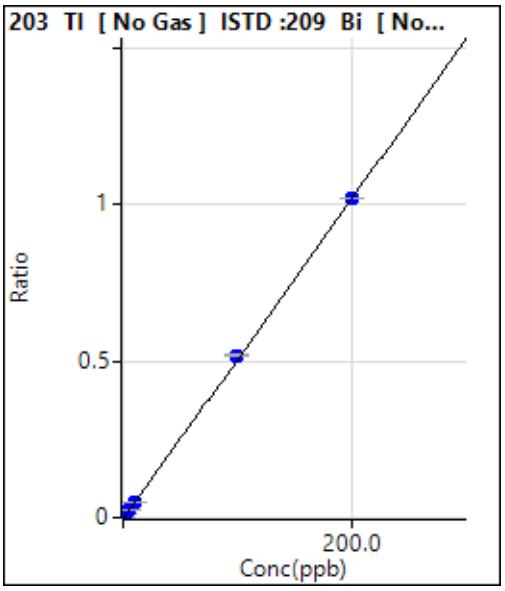


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90.00	0.0001	P	35.9	
2	☐	2.000	1.818	3620.57	0.0031	P	10.4	-9.1
3	☐	5.000	4.816	9420.23	0.0082	P	3.1	-3.7
4	☐	10.000	9.487	18800.51	0.0160	P	3.0	-5.1
5	☐	100.000	97.787	191989.41	0.1643	P	3.1	-2.2
6	☐	200.000	201.138	370325.82	0.3378	P	2.8	0.6

y = 0.0017 * x + 7.9058E-005
R = 0.9999
DL = 0.05068 ppb
BEC = 0.04708 ppb

Weight: <None>
Min Conc: <None>

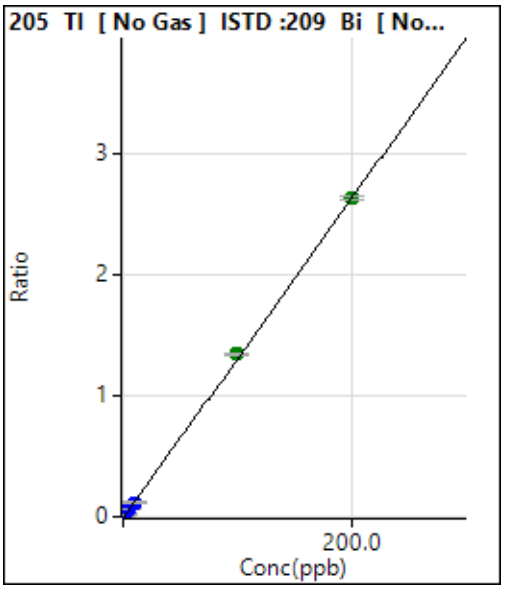
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	91.7	
2	☐	2.000	1.876	10998.33	0.0096	P	3.1	-6.2
3	☐	5.000	4.789	27293.47	0.0245	P	0.8	-4.2
4	☐	10.000	9.602	55285.62	0.0491	P	1.4	-4.0
5	☐	100.000	101.199	581924.12	0.5178	P	1.2	1.2
6	☐	200.000	199.427	1121561.73	1.0204	P	0.3	-0.3

y = 0.0051 * x + 1.4965E-005
R = 1.0000
DL = 0.008042 ppb
BEC = 0.002925 ppb

Weight: <None>
Min Conc: <None>

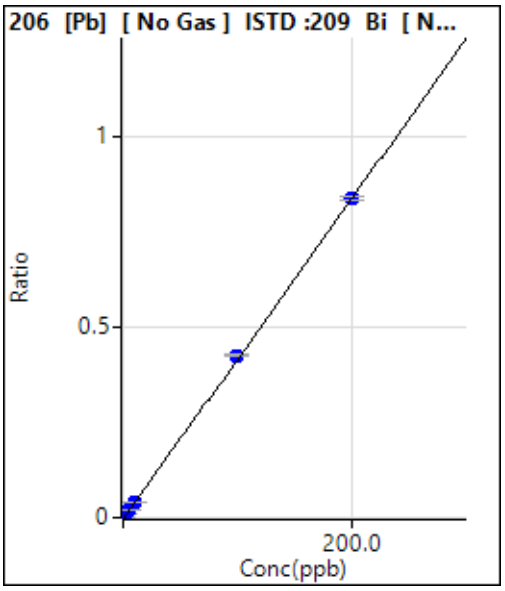


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	53.33	0.0000	P	39.1	
2	☐	2.000	1.787	27136.44	0.0237	P	1.7	-10.6
3	☐	5.000	4.550	67100.34	0.0603	P	3.0	-9.0
4	☐	10.000	8.995	134014.08	0.1191	P	1.7	-10.1
5	☐	100.000	101.591	1511712.11	1.3452	A	1.9	1.6
6	☐	200.000	199.268	2899905.89	2.6384	A	0.8	-0.4

y = 0.0132 * x + 4.8151E-005
R = 0.9999
DL = 0.004265 ppb
BEC = 0.003637 ppb

Weight: <None>
Min Conc: <None>

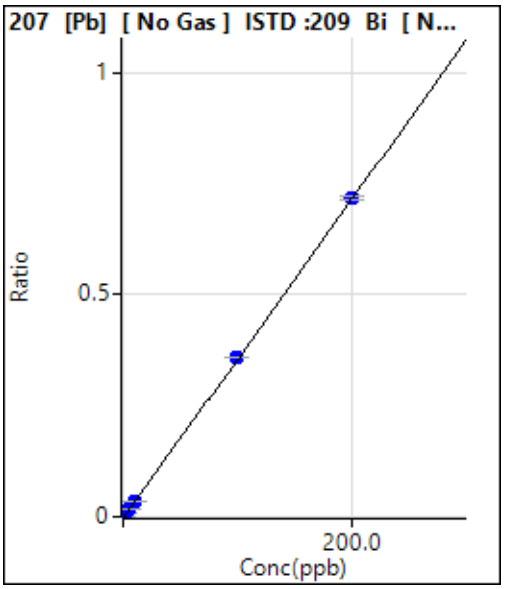
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	156.67	0.0001	P	25.2	
2	☐	2.000	1.907	9310.33	0.0081	P	4.5	-4.7
3	☐	5.000	4.908	23081.61	0.0207	P	0.5	-1.8
4	☐	10.000	9.794	46383.25	0.0412	P	3.1	-2.1
5	☐	100.000	101.353	478095.80	0.4254	P	0.8	1.4
6	☐	200.000	199.337	919448.29	0.8366	P	0.8	-0.3

y = 0.0042 * x + 1.4120E-004
R = 1.0000
DL = 0.02544 ppb
BEC = 0.03365 ppb

Weight: <None>
Min Conc: <None>

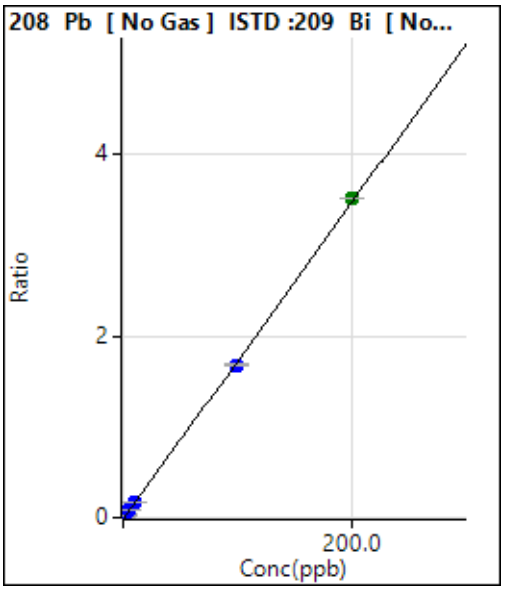


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	113.33	0.0001	P	25.8	
2	☐	2.000	1.925	8012.70	0.0070	P	6.1	-3.8
3	☐	5.000	4.728	18998.07	0.0171	P	1.9	-5.4
4	☐	10.000	9.875	39974.39	0.0355	P	0.6	-1.3
5	☐	100.000	99.975	403266.05	0.3588	P	1.1	0.0
6	☐	200.000	200.027	788987.28	0.7179	P	0.7	0.0

y = 0.0036 * x + 1.0233E-004
R = 1.0000
DL = 0.0221 ppb
BEC = 0.02852 ppb

Weight: <None>
Min Conc: <None>

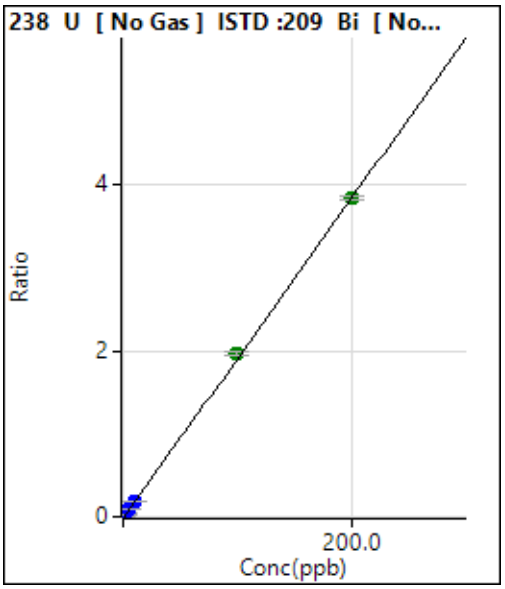
Calibration for 183_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.01	0.0005	P	2.6	
2	☐	2.000	1.836	37189.13	0.0325	P	5.2	-8.2
3	☐	5.000	4.612	90025.70	0.0809	P	0.9	-7.8
4	☐	10.000	9.380	184428.67	0.1640	P	0.5	-6.2
5	☐	100.000	96.575	1891499.72	1.6831	P	0.7	-3.4
6	☐	200.000	201.755	3863905.80	3.5155	A	0.6	0.9

y = 0.0174 * x + 5.4130E-004
R = 0.9998
DL = 0.002465 ppb
BEC = 0.03107 ppb

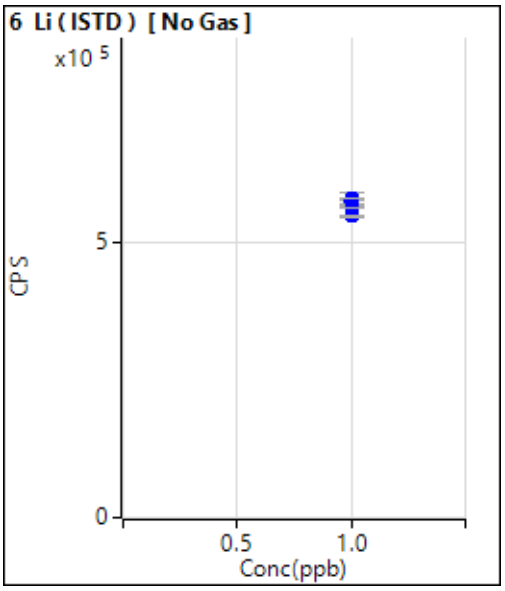
Weight: <None>
Min Conc: <None>



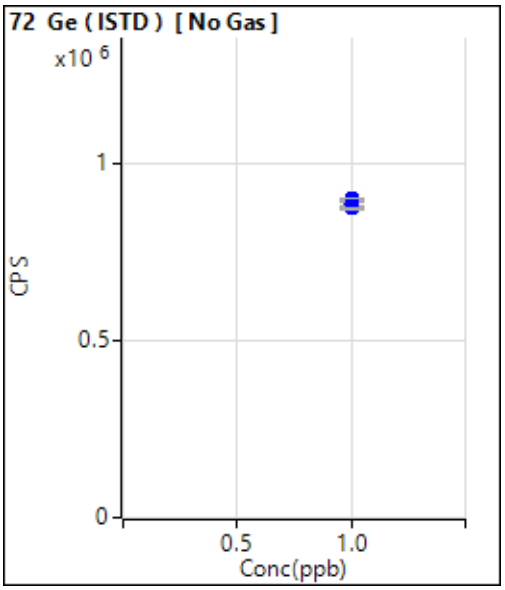
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.797	39764.88	0.0347	P	0.8	-10.1
3	☐	5.000	4.441	95577.94	0.0859	P	1.0	-11.2
4	☐	10.000	9.141	198814.87	0.1767	P	0.8	-8.6
5	☐	100.000	102.013	2216456.68	1.9723	A	1.4	2.0
6	☐	200.000	199.052	4230081.81	3.8485	A	1.3	-0.5

y = 0.0193 * x + 2.9930E-006
R = 0.9999
DL = 0.0008044 ppb
BEC = 0.0001548 ppb

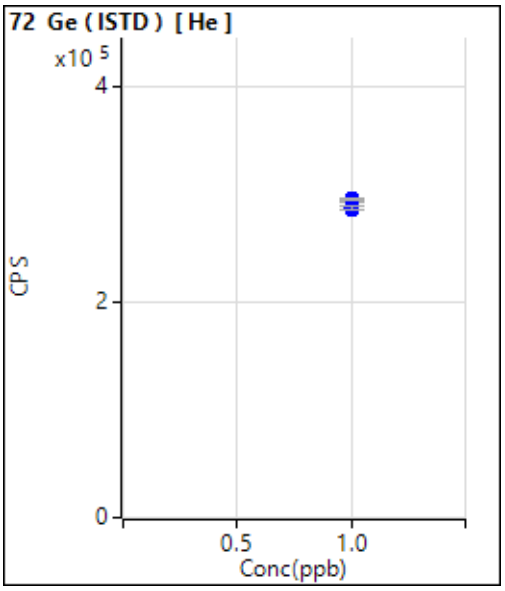
Weight: <None>
Min Conc: <None>



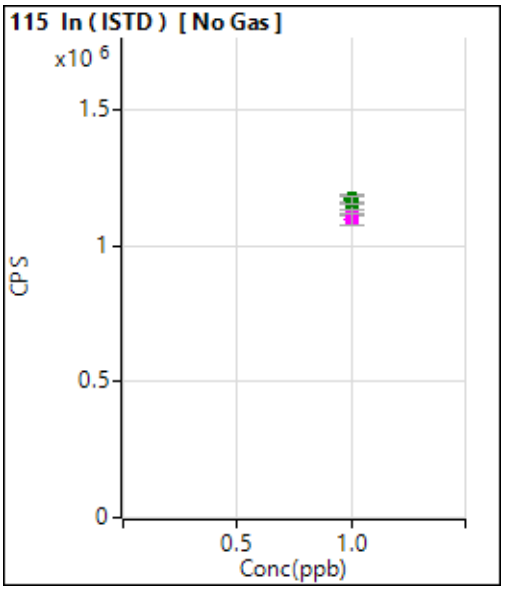
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		576643.55		P	0.5	
2	☐	1.000		575864.55		P	4.3	
3	☐	1.000		572855.46		P	1.5	
4	☐	1.000		578665.84		P	0.4	
5	☐	1.000		561866.75		P	0.1	
6	☐	1.000		545706.79		P	1.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		888395.66		P	1.1	
2	☐	1.000		885701.16		P	3.1	
3	☐	1.000		885457.90		P	1.3	
4	☐	1.000		892814.54		P	0.5	
5	☐	1.000		902536.57		P	0.4	
6	☐	1.000		873483.32		P	0.2	

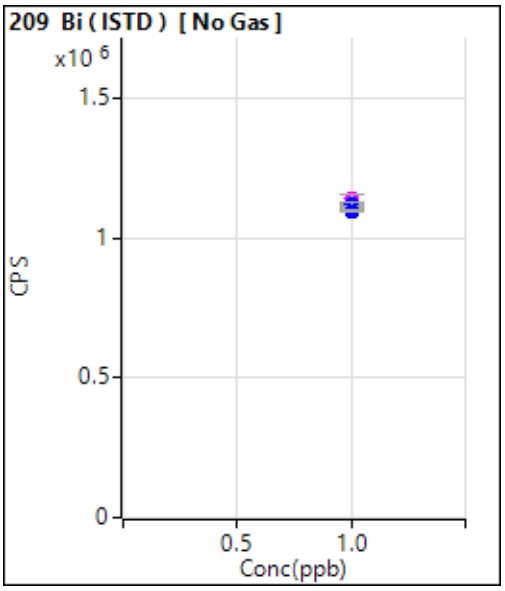


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		286216.33		P	0.1	
2	☐	1.000		296563.41		P	0.6	
3	☐	1.000		294194.42		P	0.8	
4	☐	1.000		293253.73		P	0.7	
5	☐	1.000		295899.88		P	0.9	
6	☐	1.000		287462.19		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1132545.80		M	3.7	
2	☐	1.000		1160229.98		A	5.3	
3	☐	1.000		1154459.69		A	4.2	
4	☐	1.000		1174927.58		A	2.4	
5	☐	1.000		1169173.58		A	2.1	
6	☐	1.000		1096948.53		M	3.6	

Calibration for 183_ICV.d



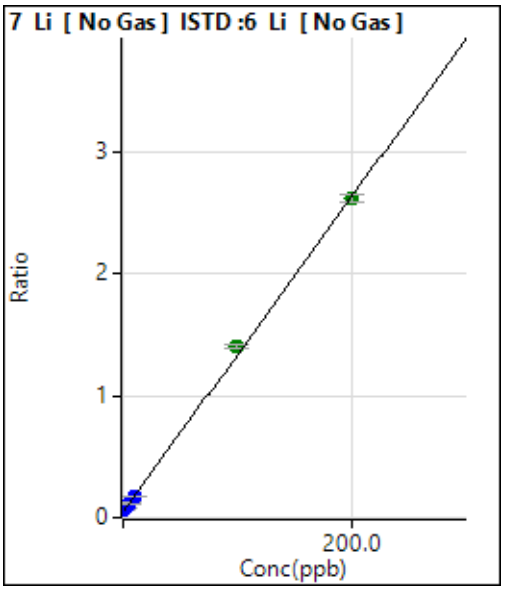
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1108342.67		P	0.8	
2	☐	1.000		1144508.68		M	2.9	
3	☐	1.000		1113087.30		P	1.1	
4	☐	1.000		1124894.31		P	0.7	
5	☐	1.000		1123868.45		P	1.0	
6	☐	1.000		1099099.36		P	0.5	

Calibration for 020_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	07/20/2022 11:26:20
2	010CALS.d	2/10/200	07/20/2022 11:28:36
3	011CALS.d	5/25/500	07/20/2022 11:30:51
4	012CALS.d	10/50/100	07/20/2022 11:33:05
5	017CALS.d	100/500/10K	07/20/2022 11:47:02
6	018CALS.d	200/1000/20K	07/20/2022 11:49:06

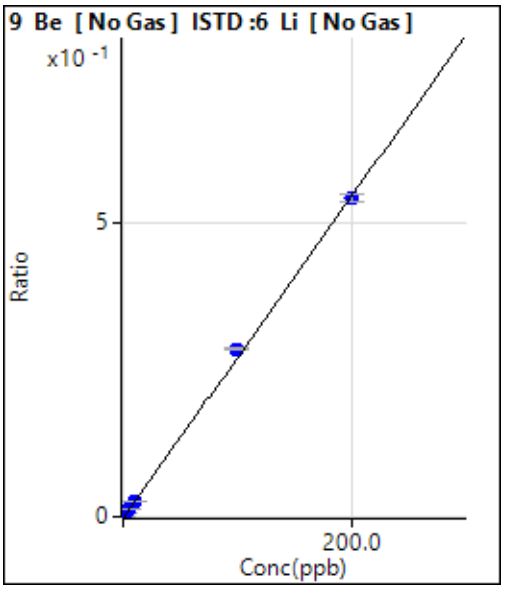
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35467.95	0.0612	P	0.1	
2	☐	2.000	1.703	49218.97	0.0832	P	0.9	-14.9
3	☐	5.000	4.388	70828.54	0.1179	P	0.9	-12.2
4	☐	10.000	9.097	107555.43	0.1788	P	0.9	-9.0
5	☐	100.000	104.181	814513.56	1.4081	A	2.5	4.2
6	☐	200.000	197.973	1565047.74	2.6206	A	2.6	-1.0

y = 0.0129 * x + 0.0612
R = 0.9997
DL = 0.01504 ppb
BEC = 4.732 ppb

Weight: <None>
Min Conc: <None>

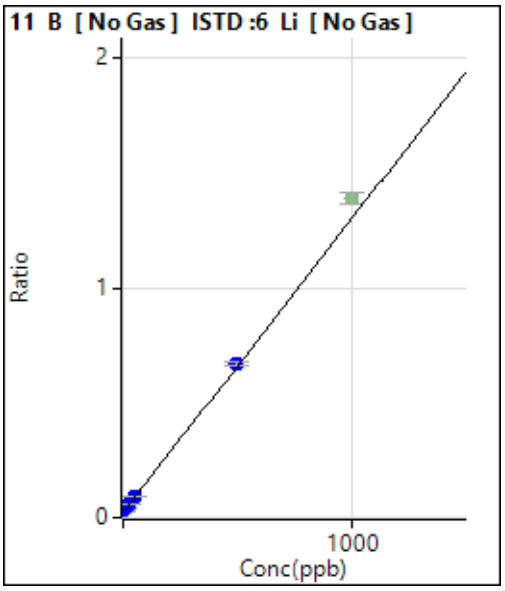


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	31.3	
2	☐	2.000	1.954	3218.73	0.0054	P	5.3	-2.3
3	☐	5.000	4.761	7878.93	0.0131	P	2.1	-4.8
4	☐	10.000	9.860	16276.14	0.0271	P	1.7	-1.4
5	☐	100.000	104.279	165019.88	0.2852	P	0.2	4.3
6	☐	200.000	197.874	323198.11	0.5411	P	1.9	-1.1

y = 0.0027 * x + 9.7830E-005
R = 0.9997
DL = 0.03356 ppb
BEC = 0.03578 ppb

Weight: <None>
Min Conc: <None>

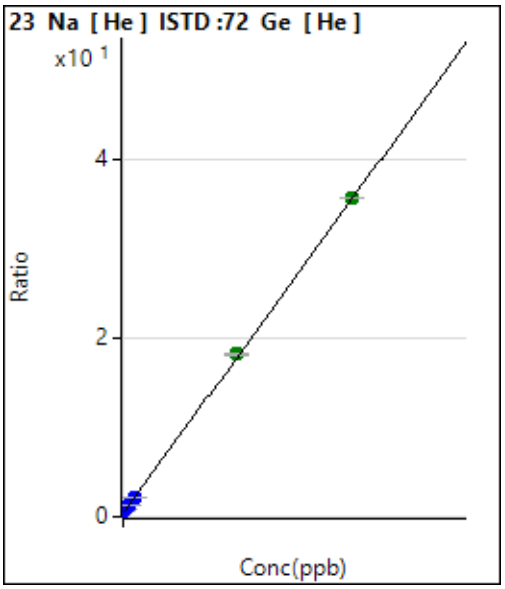
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16990.38	0.0293	P	0.5	
2	☐	10.000	9.158	24263.21	0.0410	P	8.6	-8.4
3	☐	25.000	21.051	33757.20	0.0562	P	1.8	-15.8
4	☐	50.000	46.725	53538.25	0.0890	P	1.3	-6.6
5	☐	500.000	500.542	386818.68	0.6687	P	3.1	0.1
6	☑	1000.000		829455.56	1.3893	A	4.0	

y = 0.0013 * x + 0.0293
R = 1.0000
DL = 0.3122 ppb
BEC = 22.94 ppb

Weight: <None>
Min Conc: <None>

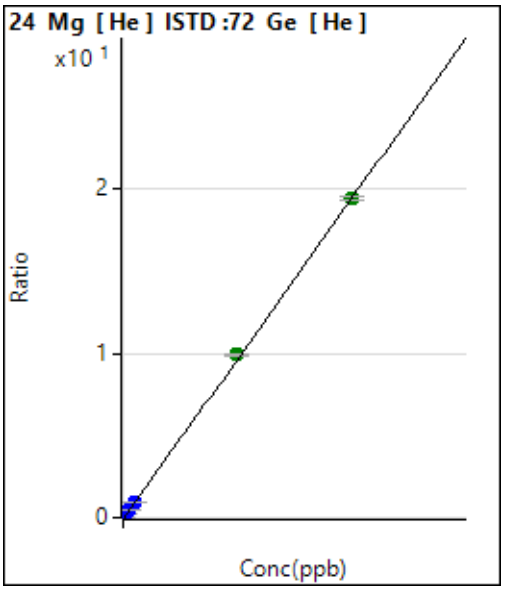


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	164287.96	0.5766	P	0.6	
2	☐	200.000	170.842	258803.67	0.8774	P	0.4	-14.6
3	☐	500.000	436.915	397312.47	1.3460	P	0.3	-12.6
4	☐	1000.000	897.715	641621.27	2.1575	P	1.1	-10.2
5	☐	10000.00	10027.13	5319771.80	18.2355	A	1.2	0.3
6	☐	20000.00	19993.41	10199744.8	35.7873	A	0.2	0.0

y = 0.0018 * x + 0.5766
R = 1.0000
DL = 6.195 ppb
BEC = 327.4 ppb

Weight: <None>
Min Conc: <None>

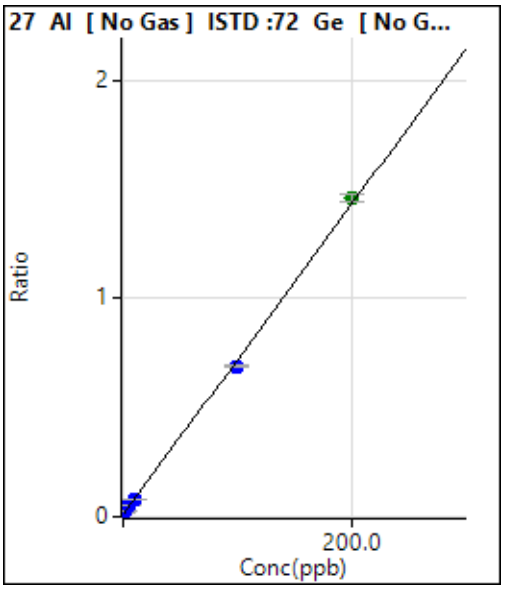
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0007	P	29.1	
2	☐	200.000	186.480	53974.67	0.1830	P	1.6	-6.8
3	☐	500.000	466.818	134914.35	0.4571	P	0.4	-6.6
4	☐	1000.000	942.843	274324.60	0.9225	P	1.5	-5.7
5	☐	10000.00	10180.72	2903811.94	9.9539	A	1.1	1.8
6	☐	20000.00	19913.46	5548942.63	19.4692	A	1.4	-0.4

y = 9.7766E-004 * x + 6.7814E-004
R = 0.9999
DL = 0.6062 ppb
BEC = 0.6936 ppb

Weight: <None>
Min Conc: <None>

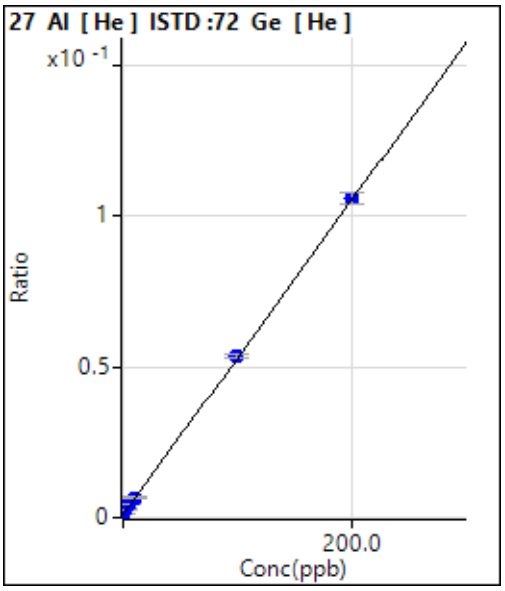


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15916.03	0.0181	P	2.5	
2	☐	2.000	1.769	27494.07	0.0307	P	0.9	-11.6
3	☐	5.000	5.317	51134.28	0.0559	P	0.9	6.3
4	☐	10.000	8.983	74894.19	0.0820	P	1.2	-10.2
5	☐	100.000	94.129	614947.07	0.6876	P	1.4	-5.9
6	☐	200.000	202.981	1280085.01	1.4619	A	2.7	1.5

y = 0.0071 * x + 0.0181
R = 0.9994
DL = 0.193 ppb
BEC = 2.542 ppb

Weight: <None>
Min Conc: <None>

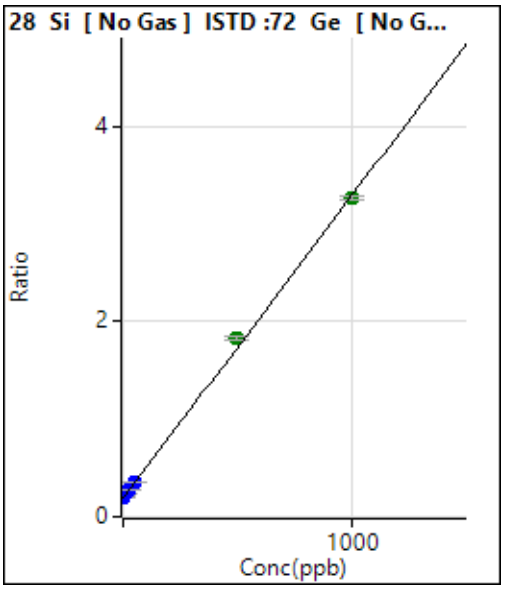
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0015	P	9.1	
2	☐	2.000	2.218	790.04	0.0027	P	22.9	10.9
3	☐	5.000	5.746	1333.42	0.0045	P	7.0	14.9
4	☐	10.000	9.681	1953.51	0.0066	P	11.0	-3.2
5	☐	100.000	99.502	15582.26	0.0534	P	2.1	-0.5
6	☐	200.000	200.244	30193.05	0.1059	P	3.3	0.1

y = 5.2148E-004 * x + 0.0015
R = 1.0000
DL = 0.7965 ppb
BEC = 2.917 ppb

Weight: <None>
Min Conc: <None>

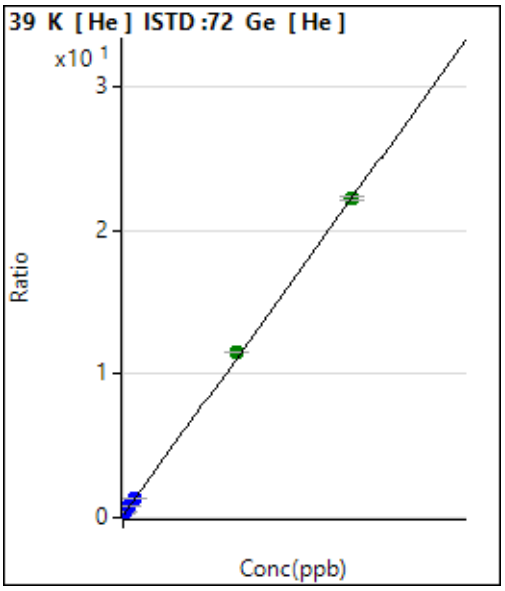


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181850.04	0.2066	P	1.1	
2	☐	10.000	8.691	209425.99	0.2336	P	0.2	-13.1
3	☐	25.000	24.176	257545.31	0.2816	P	0.2	-3.3
4	☐	50.000	45.754	318398.39	0.3485	P	1.1	-8.5
5	☐	500.000	525.756	1642990.96	1.8372	A	1.9	5.2
6	☐	1000.000	987.368	2862369.75	3.2688	A	0.6	-1.3

y = 0.0031 * x + 0.2066
R = 0.9995
DL = 2.133 ppb
BEC = 66.61 ppb

Weight: <None>
Min Conc: <None>

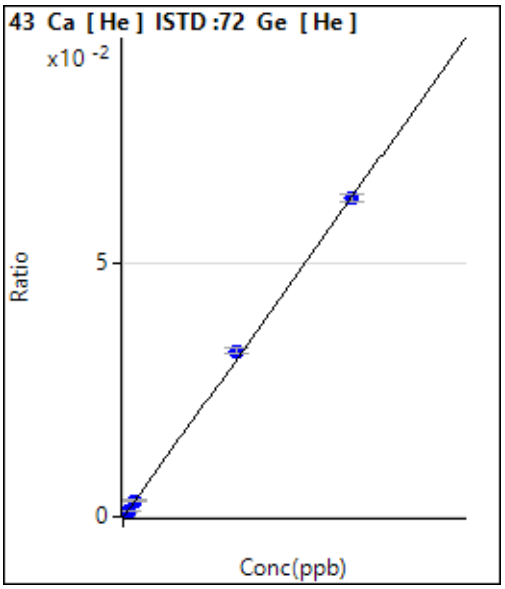
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77058.22	0.2704	P	2.0	
2	☐	200.000	177.477	137586.80	0.4665	P	0.6	-11.3
3	☐	500.000	455.224	228252.37	0.7733	P	0.9	-9.0
4	☐	1000.000	924.398	384086.02	1.2915	P	1.0	-7.6
5	☐	10000.00	10210.47	3369392.76	11.5491	A	0.7	2.1
6	☐	20000.00	19899.88	6342019.70	22.2522	A	0.7	-0.5

y = 0.0011 * x + 0.2704
R = 0.9999
DL = 14.82 ppb
BEC = 244.8 ppb

Weight: <None>
Min Conc: <None>

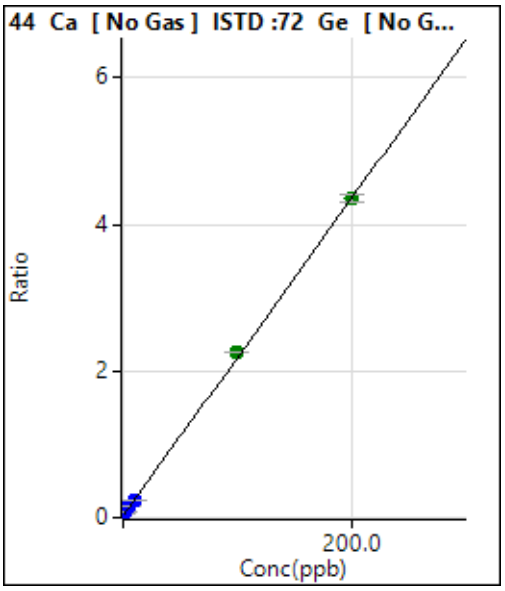


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.3	
2	☐	200.000	185.006	203.34	0.0007	P	15.7	-7.5
3	☐	500.000	385.158	390.01	0.0013	P	0.2	-23.0
4	☐	1000.000	953.240	926.72	0.0031	P	11.1	-4.7
5	☐	10000.00	10282.31	9503.44	0.0326	P	3.4	2.8
6	☐	20000.00	19864.20	17905.27	0.0628	P	2.5	-0.7

y = 3.1576E-006 * x + 1.0512E-004
R = 0.9998
DL = 66.27 ppb
BEC = 33.29 ppb

Weight: <None>
Min Conc: <None>

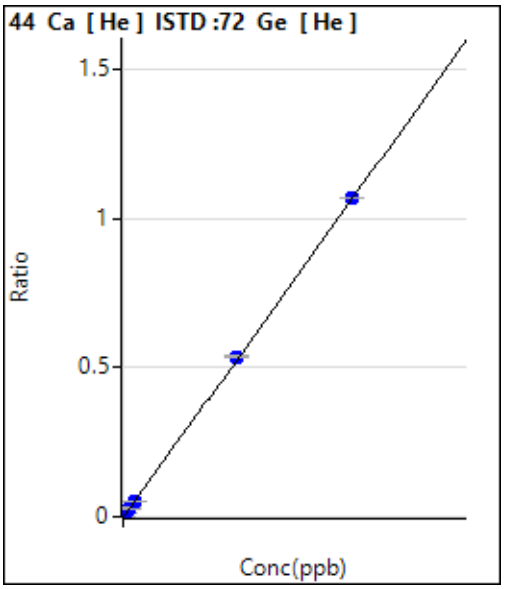
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41308.90	0.0469	P	2.2	
2	☐	2.000	1.809	77229.47	0.0861	P	1.0	-9.5
3	☐	5.000	4.736	136766.87	0.1495	P	0.6	-5.3
4	☐	10.000	9.305	227066.14	0.2485	P	0.4	-7.0
5	☐	100.000	102.208	2022467.89	2.2613	A	0.7	2.2
6	☐	200.000	198.939	3815297.13	4.3570	A	2.2	-0.5

y = 0.0217 * x + 0.0469
R = 0.9999
DL = 0.1436 ppb
BEC = 2.166 ppb

Weight: <None>
Min Conc: <None>

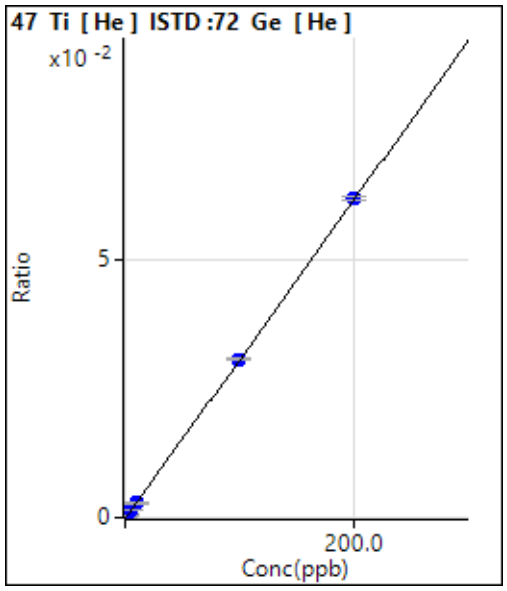


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0026	P	11.7	
2	☐	200.000	180.459	3597.20	0.0122	P	3.1	-9.8
3	☐	500.000	490.097	8479.41	0.0287	P	5.2	-2.0
4	☐	1000.000	953.108	15892.78	0.0534	P	3.2	-4.7
5	☐	10000.00	10000.76	156495.16	0.5364	P	1.1	0.0
6	☐	20000.00	20002.40	305064.14	1.0704	P	0.3	0.0

y = 5.3384E-005 * x + 0.0026
R = 1.0000
DL = 16.78 ppb
BEC = 47.99 ppb

Weight: <None>
Min Conc: <None>

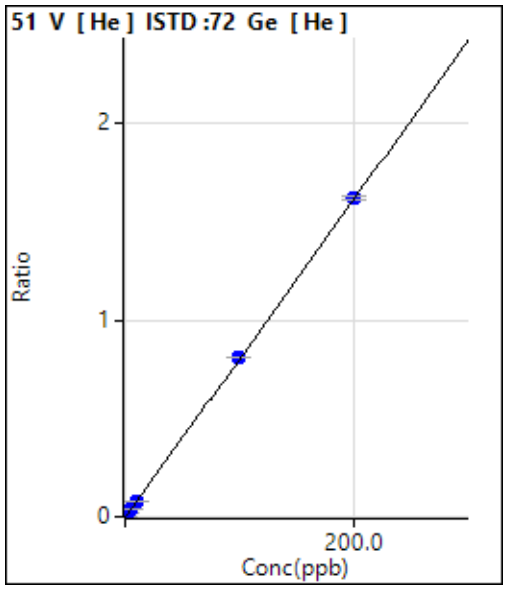
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	2.000	1.745	170.00	0.0006	P	36.6	-12.8
3	☐	5.000	4.329	406.68	0.0014	P	6.1	-13.4
4	☐	10.000	9.251	863.37	0.0029	P	13.5	-7.5
5	☐	100.000	99.487	9013.10	0.0309	P	1.9	-0.5
6	☐	200.000	200.313	17718.37	0.0622	P	1.7	0.2

y = 3.1016E-004 * x + 3.5087E-005
R = 1.0000
DL = 0.3401 ppb
BEC = 0.1131 ppb

Weight: <None>
Min Conc: <None>

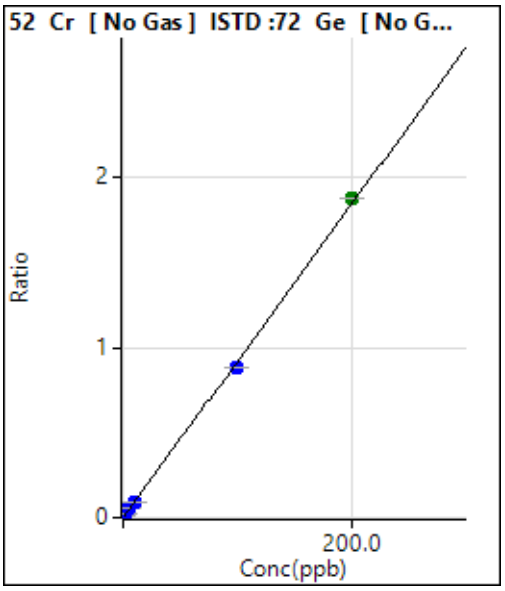


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0033	P	2.1	
2	☐	2.000	1.952	5642.30	0.0191	P	0.9	-2.4
3	☐	5.000	4.758	12342.27	0.0418	P	2.1	-4.8
4	☐	10.000	9.449	23711.62	0.0797	P	1.7	-5.5
5	☐	100.000	99.946	236700.40	0.8114	P	0.6	-0.1
6	☐	200.000	200.061	461921.18	1.6207	P	0.9	0.0

y = 0.0081 * x + 0.0033
R = 1.0000
DL = 0.02611 ppb
BEC = 0.4139 ppb

Weight: <None>
Min Conc: <None>

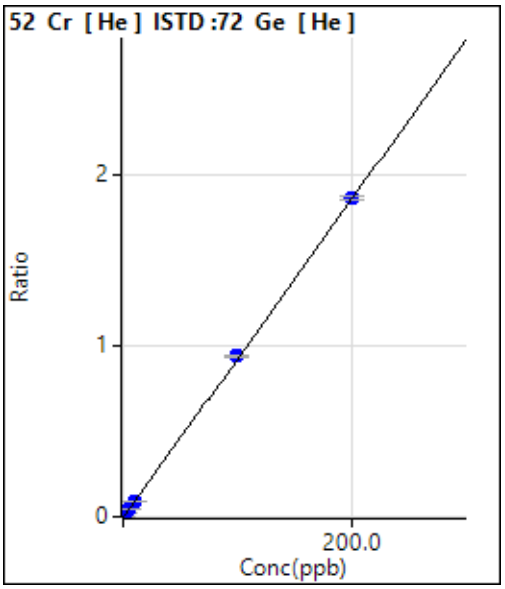
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8329.32	0.0095	P	1.6	
2	☐	2.000	1.851	23804.31	0.0265	P	1.4	-7.5
3	☐	5.000	4.539	46974.04	0.0514	P	0.7	-9.2
4	☐	10.000	9.282	86924.70	0.0951	P	1.1	-7.2
5	☐	100.000	94.709	790317.41	0.8837	P	1.0	-5.3
6	☐	200.000	202.694	1646629.61	1.8804	A	0.6	1.3

y = 0.0092 * x + 0.0095
R = 0.9995
DL = 0.04824 ppb
BEC = 1.025 ppb

Weight: <None>
Min Conc: <None>

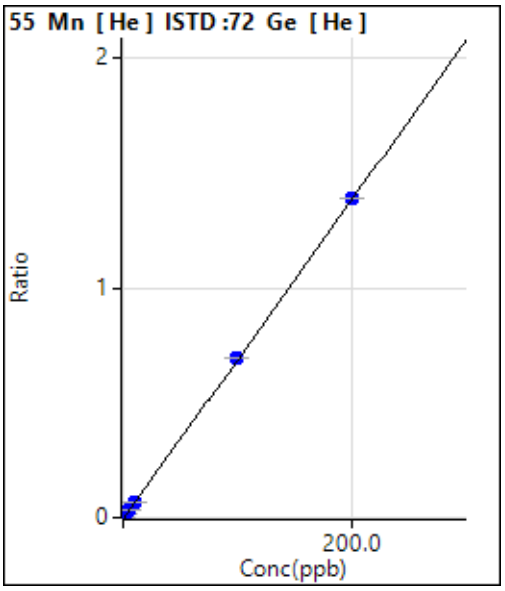


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.39	0.0033	P	8.5	
2	☐	2.000	1.949	6331.58	0.0215	P	3.6	-2.5
3	☐	5.000	4.854	14307.70	0.0485	P	4.1	-2.9
4	☐	10.000	9.562	27431.03	0.0922	P	3.7	-4.4
5	☐	100.000	100.390	273272.72	0.9367	P	0.7	0.4
6	☐	200.000	199.831	530453.74	1.8612	P	0.8	-0.1

y = 0.0093 * x + 0.0033
R = 1.0000
DL = 0.092 ppb
BEC = 0.3598 ppb

Weight: <None>
Min Conc: <None>

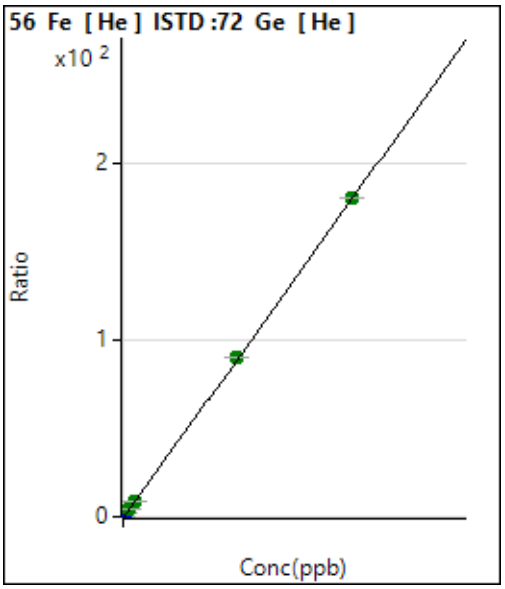
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0007	P	17.0	
2	☐	2.000	1.935	4180.71	0.0142	P	6.3	-3.3
3	☐	5.000	4.711	9880.40	0.0335	P	4.4	-5.8
4	☐	10.000	9.483	19817.99	0.0666	P	2.8	-5.2
5	☐	100.000	99.872	202736.91	0.6949	P	0.6	-0.1
6	☐	200.000	200.098	396621.28	1.3916	P	0.3	0.0

y = 0.0070 * x + 7.2528E-004
R = 1.0000
DL = 0.05311 ppb
BEC = 0.1043 ppb

Weight: <None>
Min Conc: <None>

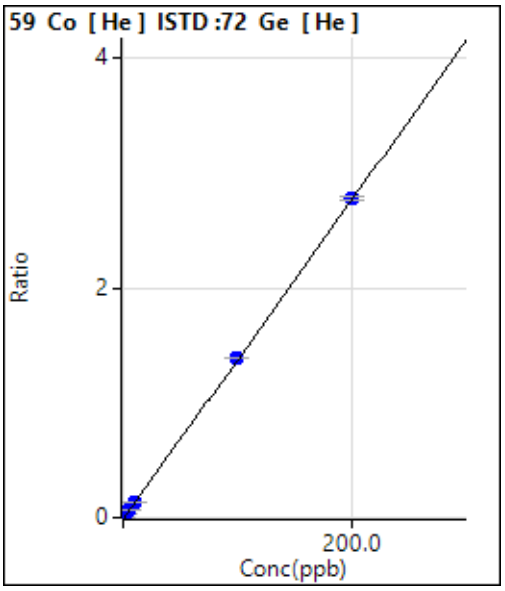


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7572.23	0.0266	P	3.2	
2	☐	200.000	185.551	502271.21	1.7029	P	1.2	-7.2
3	☐	500.000	497.258	1333887.04	4.5190	A	2.8	-0.5
4	☐	1000.000	1004.027	2705286.94	9.0973	A	2.6	0.4
5	☐	10000.00	10020.34	26418121.2	90.5541	A	0.2	0.2
6	☐	20000.00	19989.84	51478757.5	180.622	A	0.3	-0.1

y = 0.0090 * x + 0.0266
R = 1.0000
DL = 0.2834 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

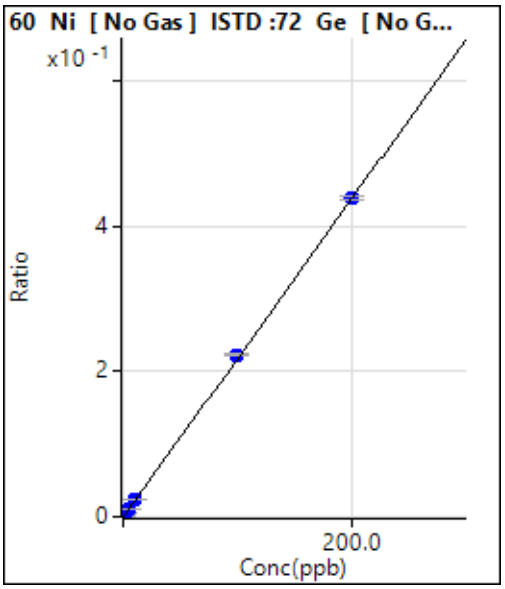
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.5	
2	☐	2.000	1.905	7822.37	0.0265	P	2.8	-4.8
3	☐	5.000	4.793	19674.44	0.0667	P	1.8	-4.1
4	☐	10.000	9.529	39387.22	0.1324	P	1.1	-4.7
5	☐	100.000	99.749	404311.58	1.3859	P	0.3	-0.3
6	☐	200.000	200.155	792549.88	2.7808	P	0.6	0.1

y = 0.0139 * x + 5.8556E-005
R = 1.0000
DL = 0.008792 ppb
BEC = 0.004215 ppb

Weight: <None>
Min Conc: <None>

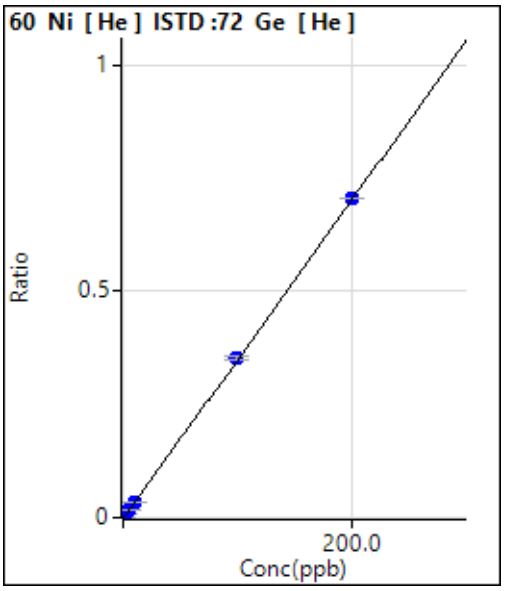


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1130.07	0.0013	P	10.5	
2	☐	2.000	1.832	4757.58	0.0053	P	1.4	-8.4
3	☐	5.000	4.747	10704.41	0.0117	P	1.7	-5.1
4	☐	10.000	10.125	21480.57	0.0235	P	1.4	1.2
5	☐	100.000	100.793	199037.86	0.2226	P	1.3	0.8
6	☐	200.000	199.605	384835.58	0.4395	P	1.4	-0.2

y = 0.0022 * x + 0.0013
R = 1.0000
DL = 0.1836 ppb
BEC = 0.5849 ppb

Weight: <None>
Min Conc: <None>

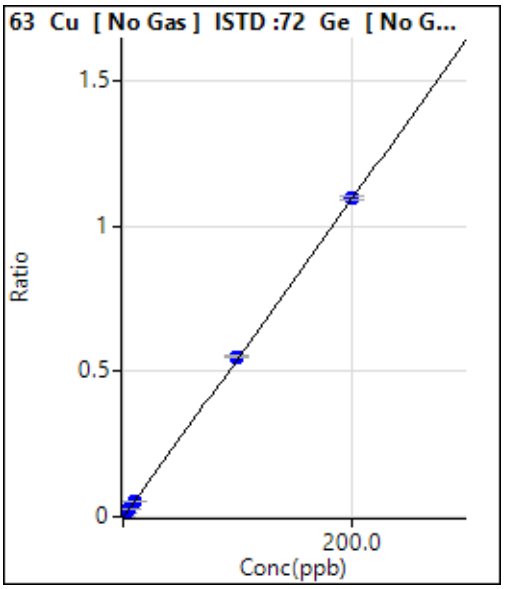
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0006	P	25.7	
2	☐	2.000	1.915	2173.55	0.0074	P	8.2	-4.2
3	☐	5.000	4.890	5264.45	0.0178	P	4.2	-2.2
4	☐	10.000	9.867	10510.87	0.0353	P	1.9	-1.3
5	☐	100.000	99.522	102336.12	0.3507	P	2.3	-0.5
6	☐	200.000	200.249	200962.18	0.7051	P	0.2	0.1

y = 0.0035 * x + 6.3203E-004
R = 1.0000
DL = 0.1386 ppb
BEC = 0.1797 ppb

Weight: <None>
Min Conc: <None>

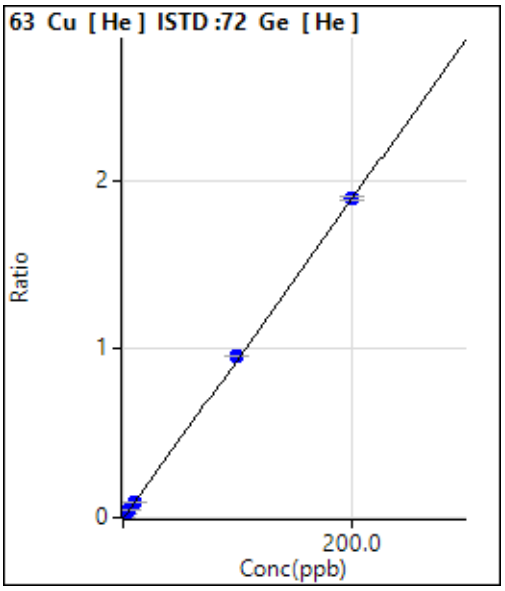


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2093.54	0.0024	P	6.6	
2	☐	2.000	1.971	11828.66	0.0132	P	1.8	-1.4
3	☐	5.000	4.869	26592.94	0.0291	P	3.2	-2.6
4	☐	10.000	9.764	51096.06	0.0559	P	0.7	-2.4
5	☐	100.000	100.224	493755.01	0.5520	P	0.3	0.2
6	☐	200.000	199.903	962106.18	1.0987	P	1.3	0.0

y = 0.0055 * x + 0.0024
R = 1.0000
DL = 0.0858 ppb
BEC = 0.4337 ppb

Weight: <None>
Min Conc: <None>

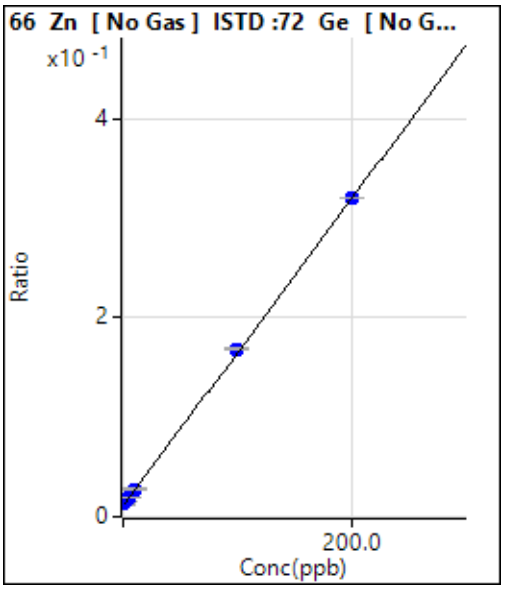
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0028	P	4.5	
2	☐	2.000	2.028	6498.33	0.0220	P	3.8	1.4
3	☐	5.000	4.949	14674.83	0.0497	P	4.8	-1.0
4	☐	10.000	9.513	27645.12	0.0930	P	1.6	-4.9
5	☐	100.000	100.709	279268.86	0.9572	P	0.7	0.7
6	☐	200.000	199.671	540113.27	1.8951	P	0.8	-0.2

y = 0.0095 * x + 0.0028
R = 1.0000
DL = 0.0398 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

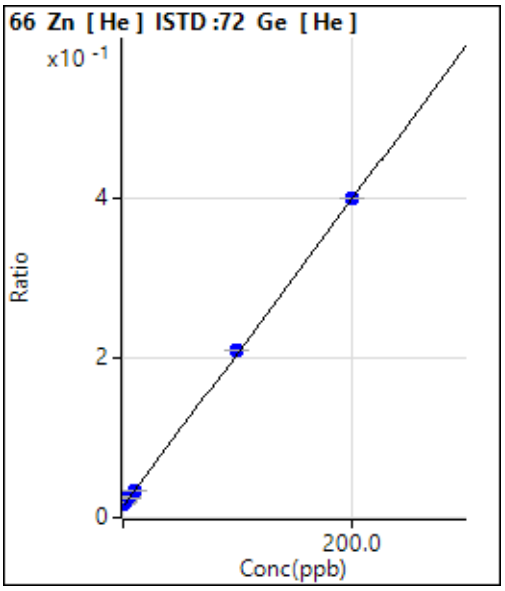


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11048.02	0.0126	P	2.7	
2	☐	2.000	2.150	14227.66	0.0159	P	2.3	7.5
3	☐	5.000	4.606	17975.47	0.0197	P	1.1	-7.9
4	☐	10.000	9.941	25474.27	0.0279	P	0.7	-0.6
5	☐	100.000	101.092	150652.98	0.1684	P	1.5	1.1
6	☐	200.000	199.465	280339.10	0.3202	P	0.5	-0.3

y = 0.0015 * x + 0.0126
R = 1.0000
DL = 0.6626 ppb
BEC = 8.139 ppb

Weight: <None>
Min Conc: <None>

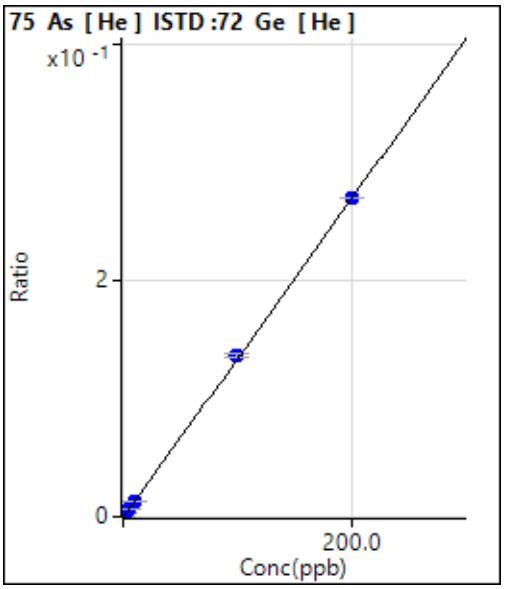
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4614.18	0.0162	P	3.3	
2	☐	2.000	2.179	6008.07	0.0204	P	3.6	9.0
3	☐	5.000	4.740	7462.18	0.0253	P	1.7	-5.2
4	☐	10.000	9.278	10103.97	0.0340	P	4.1	-7.2
5	☐	100.000	100.648	61007.10	0.2091	P	1.1	0.6
6	☐	200.000	199.717	113720.52	0.3990	P	0.5	-0.1

y = 0.0019 * x + 0.0162
R = 1.0000
DL = 0.8439 ppb
BEC = 8.448 ppb

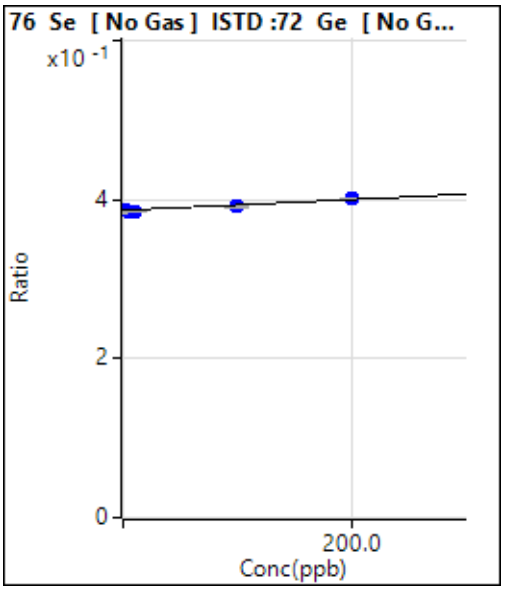
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.11	0.0003	P	13.5	
2	☐	2.000	1.809	806.70	0.0027	P	1.3	-9.6
3	☐	5.000	4.709	1966.82	0.0067	P	3.2	-5.8
4	☐	10.000	9.769	4019.52	0.0135	P	3.5	-2.3
5	☐	100.000	101.197	40073.77	0.1374	P	2.0	1.2
6	☐	200.000	199.422	77064.01	0.2704	P	0.5	-0.3

y = 0.0014 * x + 2.8473E-004
R = 1.0000
DL = 0.08512 ppb
BEC = 0.2102 ppb

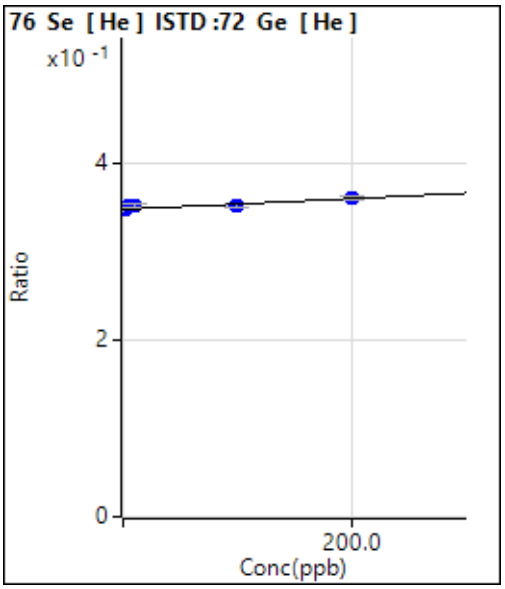
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340135.53	0.3864	P	0.2	
2	☐	2.000	1.615	346593.28	0.3865	P	0.5	-19.3
3	☐	5.000	-39.591	350968.52	0.3837	P	0.3	-891.8
4	☐	10.000	-22.074	351671.41	0.3849	P	0.4	-320.7
5	☐	100.000	63.515	349470.53	0.3907	P	0.6	-36.5
6	☐	200.000	220.965	351535.49	0.4014	P	0.5	10.5

y = 6.8039E-005 * x + 0.3864
R = 0.9712
DL = 37.32 ppb
BEC = 5679 ppb

Weight: <None>
Min Conc: <None>

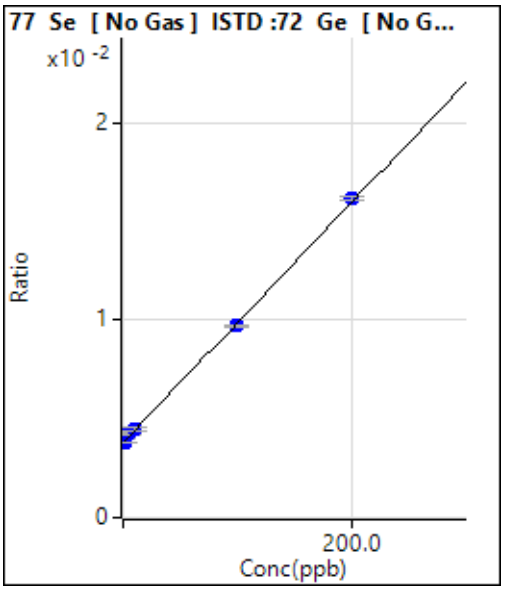


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99327.45	0.3486	P	1.2	
2	☐	2.000	-5.827	102715.53	0.3482	P	1.0	-391.3
3	☐	5.000	74.808	104271.14	0.3533	P	0.8	1396.2
4	☐	10.000	72.449	105006.20	0.3531	P	1.6	624.5
5	☐	100.000	70.638	102978.72	0.3530	P	1.2	-29.4
6	☐	200.000	209.892	103068.85	0.3616	P	1.2	4.9

y = 6.2131E-005 * x + 0.3486
R = 0.8760
DL = 203.6 ppb
BEC = 5611 ppb

Weight: <None>
Min Conc: <None>

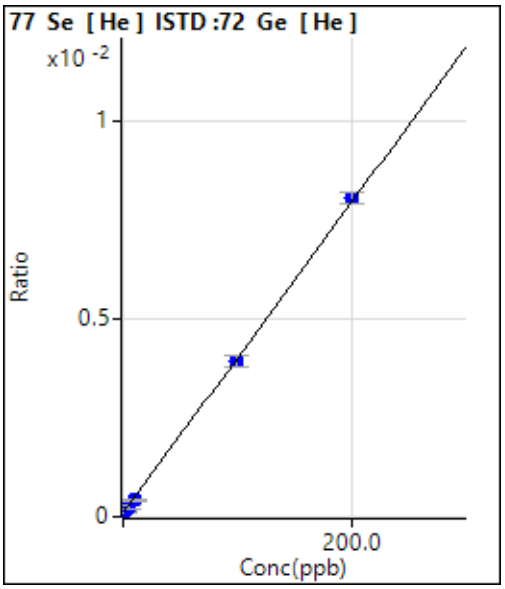
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3427.16	0.0039	P	2.8	
2	☐	2.000	-1.542	3407.17	0.0038	P	0.4	-177.1
3	☐	5.000	6.114	3900.64	0.0043	P	1.6	22.3
4	☐	10.000	9.802	4100.70	0.0045	P	3.5	-2.0
5	☐	100.000	95.699	8682.93	0.0097	P	1.6	-4.3
6	☐	200.000	202.168	14164.29	0.0162	P	1.2	1.1

y = 6.0750E-005 * x + 0.0039
R = 0.9995
DL = 5.321 ppb
BEC = 64.09 ppb

Weight: <None>
Min Conc: <None>

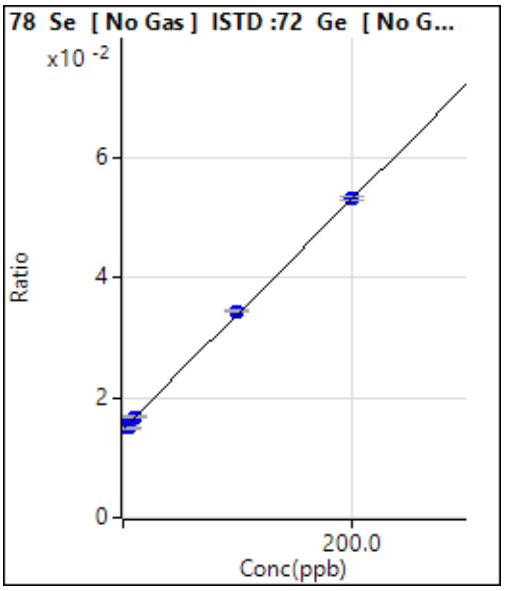


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	43.2	
2	☐	2.000	-0.121	40.00	0.0001	P	24.8	-106.0
3	☐	5.000	2.175	66.67	0.0002	P	37.7	-56.5
4	☐	10.000	7.270	126.67	0.0004	P	12.5	-27.3
5	☐	100.000	97.034	1153.40	0.0040	P	7.6	-3.0
6	☐	200.000	201.712	2300.24	0.0081	P	3.7	0.9

y = 3.9311E-005 * x + 1.4032E-004
R = 0.9998
DL = 4.626 ppb
BEC = 3.569 ppb

Weight: <None>
Min Conc: <None>

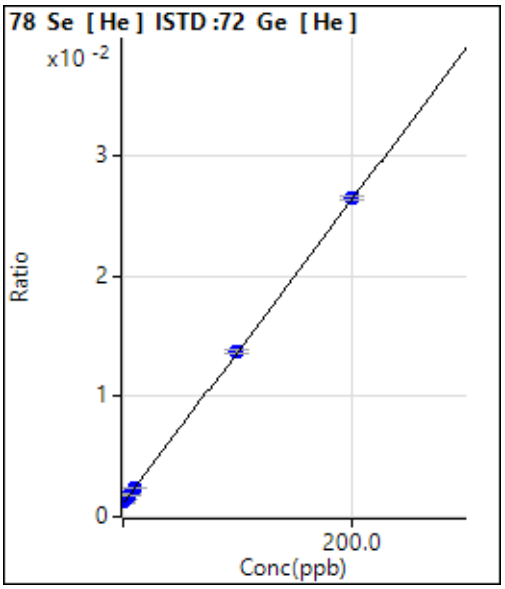
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13283.44	0.0151	P	2.3	
2	☐	2.000	2.487	13957.43	0.0156	P	2.0	24.4
3	☐	5.000	-0.649	13687.13	0.0150	P	3.1	-113.0
4	☐	10.000	8.805	15322.31	0.0168	P	3.0	-11.9
5	☐	100.000	101.061	30732.06	0.0344	P	0.7	1.1
6	☐	200.000	199.665	46550.52	0.0532	P	1.3	-0.2

y = 1.9066E-004 * x + 0.0151
R = 0.9996
DL = 5.56 ppb
BEC = 79.15 ppb

Weight: <None>
Min Conc: <None>

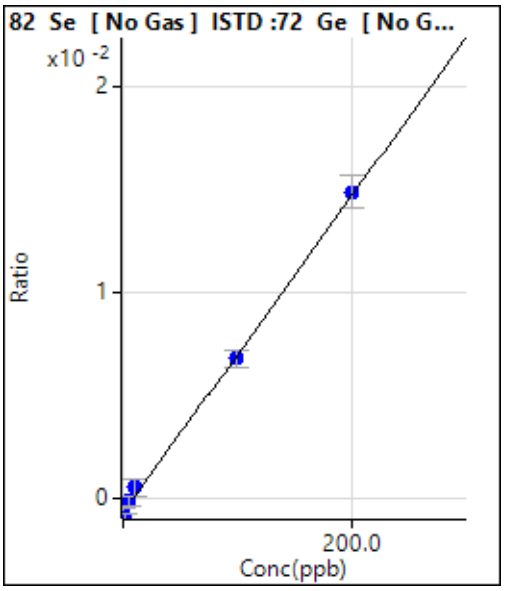


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	352.67	0.0012	P	9.8	
2	☐	2.000	1.441	418.68	0.0014	P	5.3	-27.9
3	☐	5.000	4.382	528.68	0.0018	P	8.7	-12.4
4	☐	10.000	9.045	708.02	0.0024	P	2.5	-9.5
5	☐	100.000	99.468	4028.61	0.0138	P	2.5	-0.5
6	☐	200.000	200.335	7568.81	0.0266	P	1.2	0.2

y = 1.2639E-004 * x + 0.0012
R = 1.0000
DL = 2.878 ppb
BEC = 9.791 ppb

Weight: <None>
Min Conc: <None>

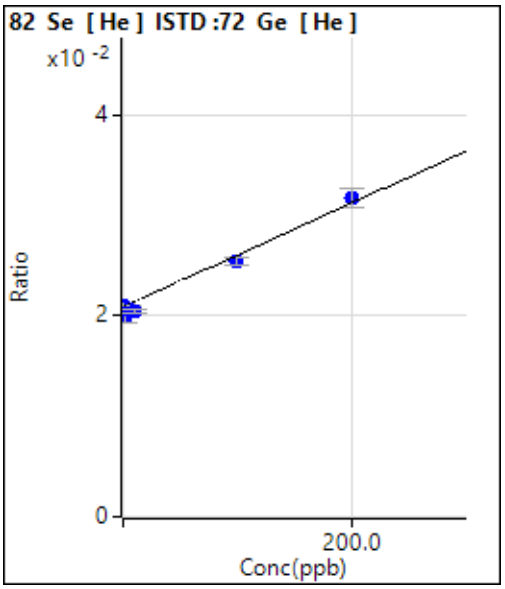
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-569.55	-0.0006	P	-53.0	
2	☐	2.000	-4.186	-869.28	-0.0010	P	-41.1	-309.3
3	☐	5.000	6.179	-158.52	-0.0002	P	-267.	23.6
4	☐	10.000	14.660	439.73	0.0005	P	172.7	46.6
5	☐	100.000	96.139	6030.53	0.0067	P	11.9	-3.9
6	☐	200.000	201.730	13022.02	0.0149	P	10.7	0.9

y = 7.6906E-005 * x - 6.4740E-004
R = 0.9988
DL = 13.39 ppb
BEC = -8.418 ppb

Weight: <None>
Min Conc: <None>

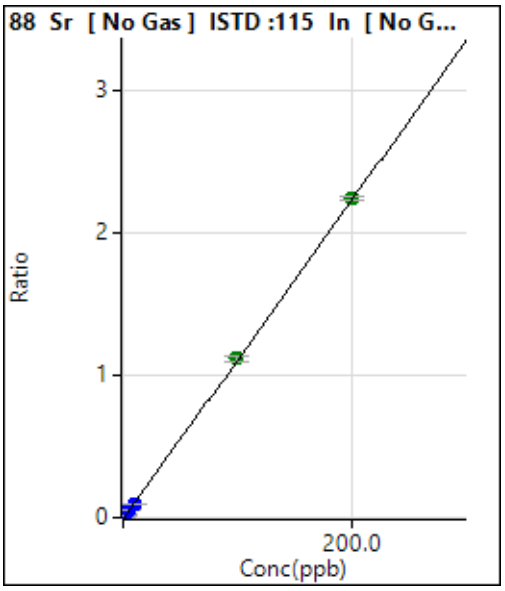


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5978.09	0.0210	P	2.4	
2	☐	2.000	-21.384	5861.38	0.0199	P	5.6	-1169.2
3	☐	5.000	-6.198	6098.18	0.0207	P	3.9	-224.0
4	☐	10.000	-10.045	6084.81	0.0205	P	2.2	-200.4
5	☐	100.000	86.340	7422.19	0.0254	P	2.6	-13.7
6	☐	200.000	208.346	9049.87	0.0318	P	5.5	4.2

y = 5.1708E-005 * x + 0.0210
R = 0.9947
DL = 29.27 ppb
BEC = 405.7 ppb

Weight: <None>
Min Conc: <None>

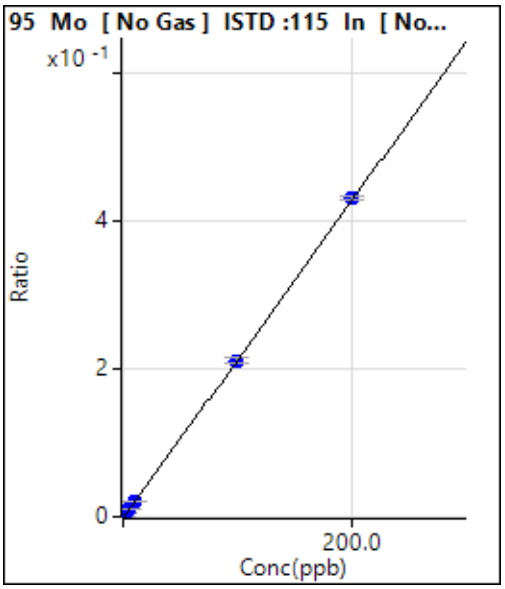
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0005	P	9.2	
2	☐	2.000	1.766	22041.72	0.0203	P	2.2	-11.7
3	☐	5.000	4.509	60037.98	0.0509	P	3.0	-9.8
4	☐	10.000	8.456	112859.20	0.0951	P	1.3	-15.4
5	☐	100.000	99.649	1223557.59	1.1148	A	3.3	-0.4
6	☐	200.000	200.267	2379611.89	2.2400	A	1.7	0.1

y = 0.0112 * x + 5.1424E-004
R = 1.0000
DL = 0.01272 ppb
BEC = 0.04599 ppb

Weight: <None>
Min Conc: <None>

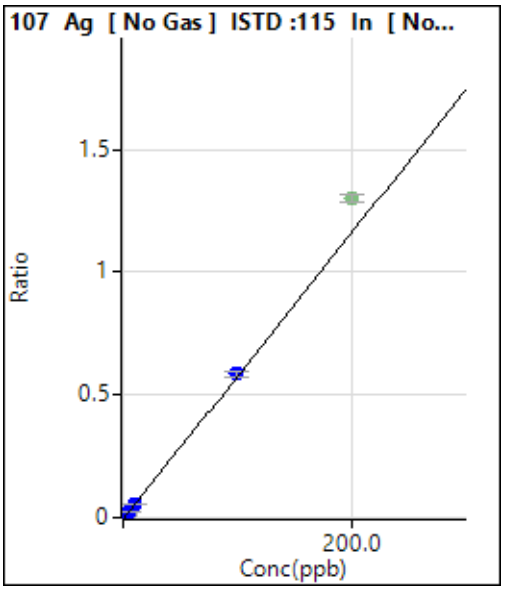


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	86.6	
2	☐	2.000	1.899	4464.16	0.0041	P	1.3	-5.0
3	☐	5.000	4.351	11054.78	0.0094	P	5.6	-13.0
4	☐	10.000	9.095	23247.31	0.0196	P	0.6	-9.0
5	☐	100.000	98.509	232519.11	0.2119	P	4.0	-1.5
6	☐	200.000	200.808	458857.01	0.4319	P	0.7	0.4

y = 0.0022 * x + 1.8921E-005
R = 1.0000
DL = 0.02285 ppb
BEC = 0.008796 ppb

Weight: <None>
Min Conc: <None>

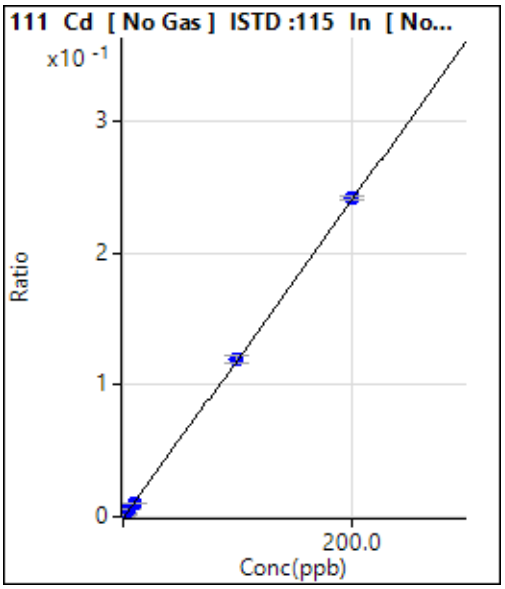
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	650.03	0.0006	P	7.8	
2	☐	2.000	1.941	12976.54	0.0119	P	3.1	-3.0
3	☐	5.000	4.524	31811.93	0.0270	P	2.5	-9.5
4	☐	10.000	9.123	63870.56	0.0538	P	0.7	-8.8
5	☐	100.000	100.113	641179.73	0.5843	P	3.8	0.1
6	☑	200.000		1381627.32	1.3006	A	2.1	

y = 0.0058 * x + 6.1152E-004
R = 1.0000
DL = 0.02442 ppb
BEC = 0.1049 ppb

Weight: <None>
Min Conc: <None>

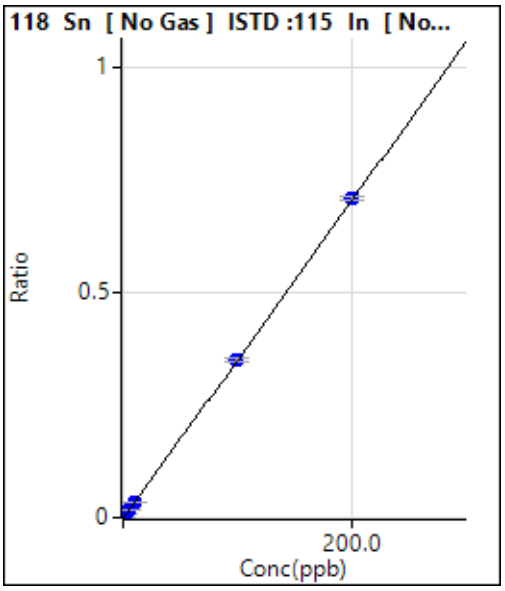


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.822	2396.93	0.0022	P	11.0	-8.9
3	☐	5.000	4.572	6511.73	0.0055	P	3.0	-8.6
4	☐	10.000	8.913	12773.06	0.0108	P	2.1	-10.9
5	☐	100.000	99.005	131086.48	0.1194	P	3.8	-1.0
6	☐	200.000	200.564	257048.49	0.2420	P	1.1	0.3

y = 0.0012 * x + 6.2649E-006
R = 1.0000
DL = 0.01349 ppb
BEC = 0.005193 ppb

Weight: <None>
Min Conc: <None>

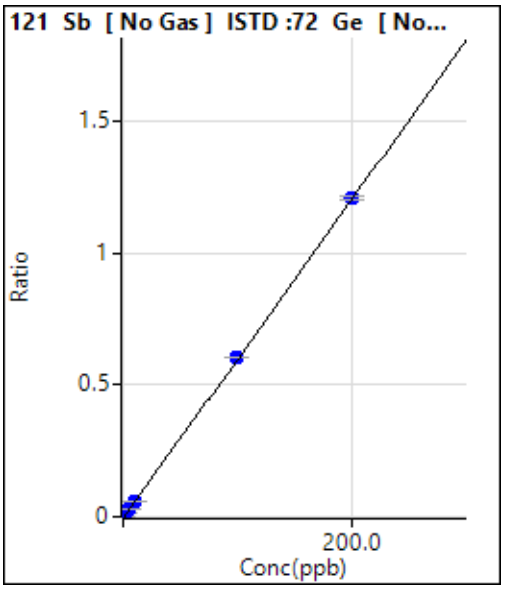
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.08	0.0011	P	8.4	
2	☐	2.000	1.972	8783.07	0.0081	P	1.1	-1.4
3	☐	5.000	4.359	19471.41	0.0165	P	0.6	-12.8
4	☐	10.000	8.959	38917.93	0.0328	P	1.7	-10.4
5	☐	100.000	98.962	385279.17	0.3510	P	3.4	-1.0
6	☐	200.000	200.588	754690.04	0.7104	P	0.7	0.3

y = 0.0035 * x + 0.0011
R = 1.0000
DL = 0.07837 ppb
BEC = 0.3116 ppb

Weight: <None>
Min Conc: <None>

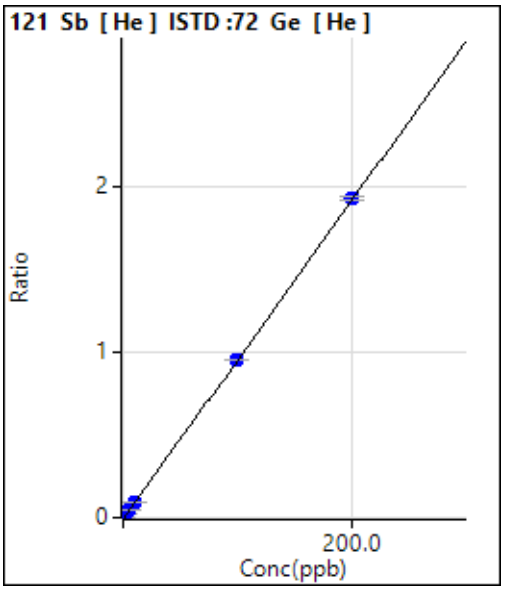


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	363.35	0.0004	P	22.2	
2	☐	2.000	1.926	10791.31	0.0120	P	4.2	-3.7
3	☐	5.000	4.795	26841.05	0.0293	P	2.2	-4.1
4	☐	10.000	9.720	53967.66	0.0591	P	0.6	-2.8
5	☐	100.000	99.844	539271.95	0.6029	P	0.6	-0.2
6	☐	200.000	200.098	1057720.85	1.2079	P	0.7	0.0

y = 0.0060 * x + 4.1282E-004
R = 1.0000
DL = 0.04548 ppb
BEC = 0.06841 ppb

Weight: <None>
Min Conc: <None>

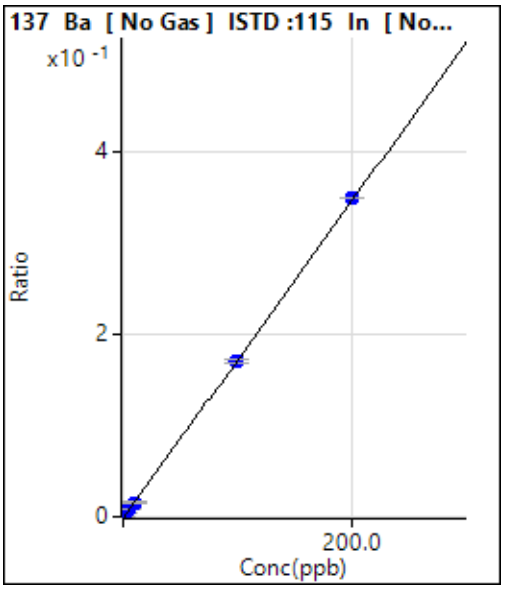
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0009	P	36.9	
2	☐	2.000	1.901	5651.32	0.0192	P	2.5	-4.9
3	☐	5.000	4.747	13717.39	0.0465	P	1.7	-5.1
4	☐	10.000	9.436	27205.20	0.0915	P	0.7	-5.6
5	☐	100.000	99.125	277821.51	0.9523	P	0.6	-0.9
6	☐	200.000	200.473	548641.67	1.9250	P	0.8	0.2

y = 0.0096 * x + 9.1294E-004
R = 1.0000
DL = 0.1052 ppb
BEC = 0.09512 ppb

Weight: <None>
Min Conc: <None>

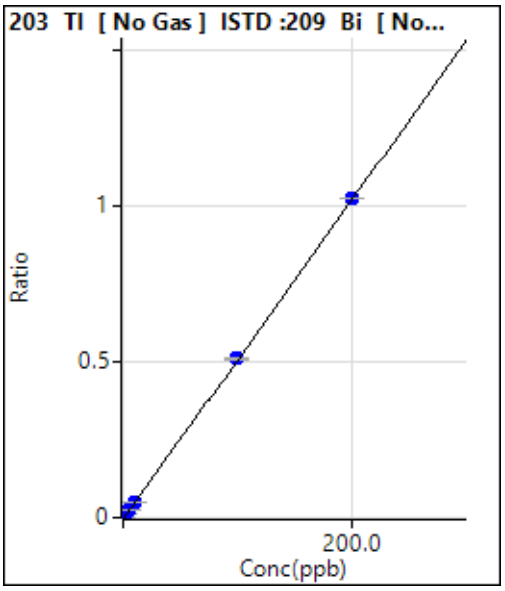


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	54.3	
2	☐	2.000	1.946	3817.31	0.0035	P	3.1	-2.7
3	☐	5.000	4.437	9243.50	0.0078	P	4.3	-11.3
4	☐	10.000	8.950	18636.96	0.0157	P	3.0	-10.5
5	☐	100.000	98.095	187481.52	0.1708	P	3.3	-1.9
6	☐	200.000	201.020	371723.32	0.3499	P	0.4	0.5

y = 0.0017 * x + 1.2276E-004
R = 0.9999
DL = 0.115 ppb
BEC = 0.07055 ppb

Weight: <None>
Min Conc: <None>

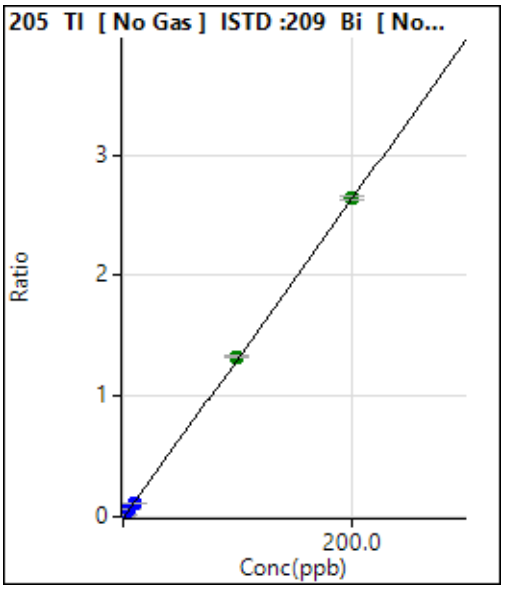
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	45.4	
2	☐	2.000	1.939	10898.26	0.0100	P	3.0	-3.0
3	☐	5.000	4.692	26605.35	0.0241	P	1.7	-6.2
4	☐	10.000	9.670	55027.94	0.0495	P	1.7	-3.3
5	☐	100.000	99.603	553811.97	0.5093	P	0.4	-0.4
6	☐	200.000	200.223	1098394.77	1.0237	P	0.4	0.1

y = 0.0051 * x + 7.8411E-005
R = 1.0000
DL = 0.02088 ppb
BEC = 0.01534 ppb

Weight: <None>
Min Conc: <None>

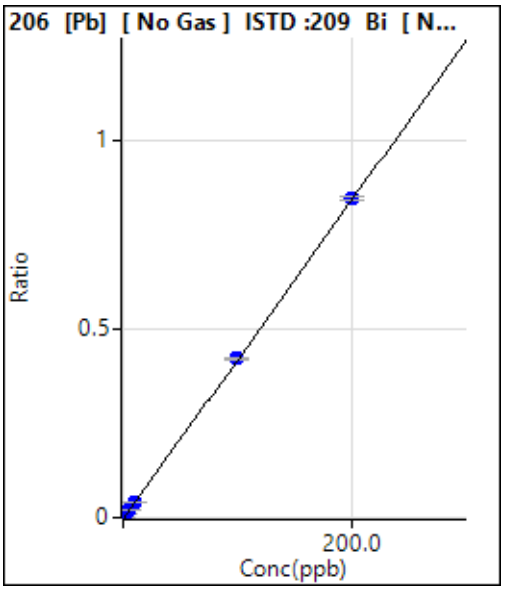


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	13.8	
2	☐	2.000	1.771	25793.72	0.0236	P	1.9	-11.5
3	☐	5.000	4.405	64643.90	0.0585	P	1.8	-11.9
4	☐	10.000	8.896	130928.72	0.1178	P	1.3	-11.0
5	☐	100.000	100.333	1442239.09	1.3262	A	0.7	0.3
6	☐	200.000	199.906	2835298.50	2.6422	A	1.4	0.0

y = 0.0132 * x + 2.4470E-004
R = 1.0000
DL = 0.007651 ppb
BEC = 0.01852 ppb

Weight: <None>
Min Conc: <None>

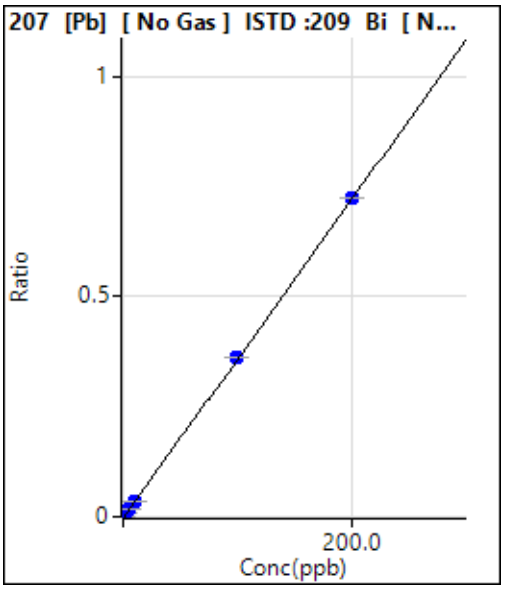
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0004	P	11.9	
2	☐	2.000	1.968	9493.79	0.0087	P	0.9	-1.6
3	☐	5.000	4.820	22981.48	0.0208	P	2.1	-3.6
4	☐	10.000	9.618	45687.35	0.0411	P	2.6	-3.8
5	☐	100.000	99.592	459195.54	0.4223	P	0.4	-0.4
6	☐	200.000	200.228	910503.61	0.8486	P	0.8	0.1

y = 0.0042 * x + 3.6711E-004
R = 1.0000
DL = 0.03081 ppb
BEC = 0.08666 ppb

Weight: <None>
Min Conc: <None>

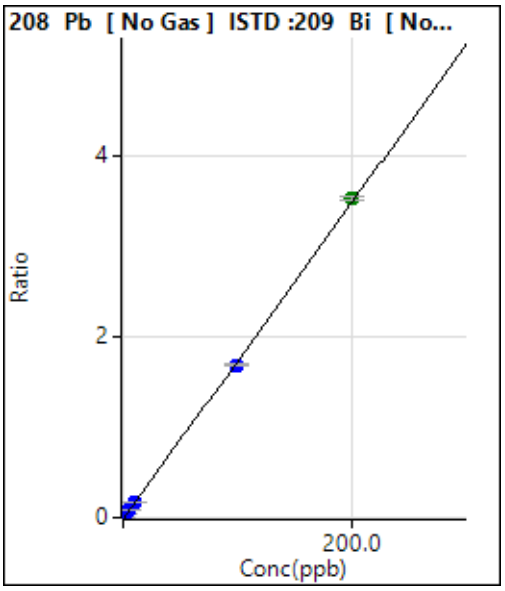


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	310.01	0.0003	P	11.1	
2	☐	2.000	1.955	8039.41	0.0074	P	2.8	-2.2
3	☐	5.000	4.776	19442.19	0.0176	P	3.7	-4.5
4	☐	10.000	9.521	38626.70	0.0348	P	2.9	-4.8
5	☐	100.000	100.149	394588.86	0.3628	P	0.3	0.1
6	☐	200.000	199.955	777014.99	0.7241	P	0.4	0.0

y = 0.0036 * x + 2.9176E-004
R = 1.0000
DL = 0.02677 ppb
BEC = 0.0806 ppb

Weight: <None>
Min Conc: <None>

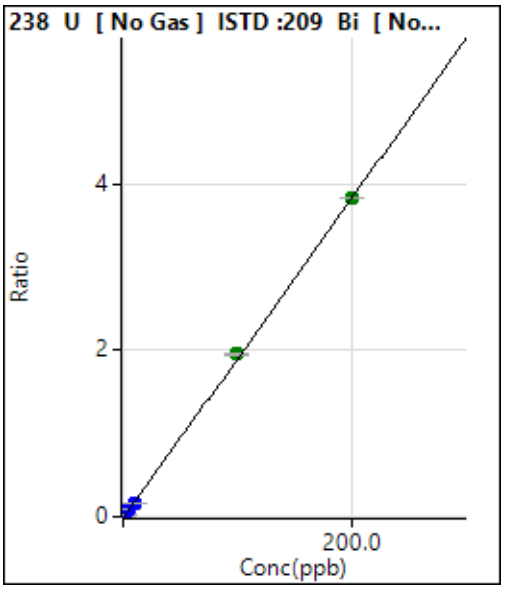
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1806.77	0.0017	P	9.4	
2	☐	2.000	1.840	36975.29	0.0339	P	2.6	-8.0
3	☐	5.000	4.624	91346.61	0.0826	P	1.7	-7.5
4	☐	10.000	9.247	181722.84	0.1635	P	1.4	-7.5
5	☐	100.000	96.337	1835045.95	1.6874	P	0.7	-3.7
6	☐	200.000	201.880	3792152.63	3.5343	A	0.9	0.9

y = 0.0175 * x + 0.0017
R = 0.9998
DL = 0.02748 ppb
BEC = 0.09719 ppb

Weight: <None>
Min Conc: <None>

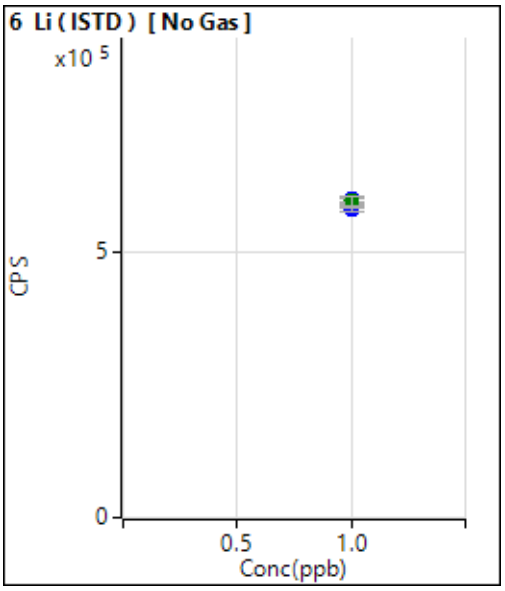


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.3	
2	☐	2.000	1.739	36464.68	0.0334	P	1.6	-13.1
3	☐	5.000	4.461	94795.56	0.0857	P	1.9	-10.8
4	☐	10.000	8.954	191259.99	0.1721	P	1.0	-10.5
5	☐	100.000	101.548	2122369.40	1.9517	A	1.0	1.5
6	☐	200.000	199.294	4109980.57	3.8303	A	0.6	-0.4

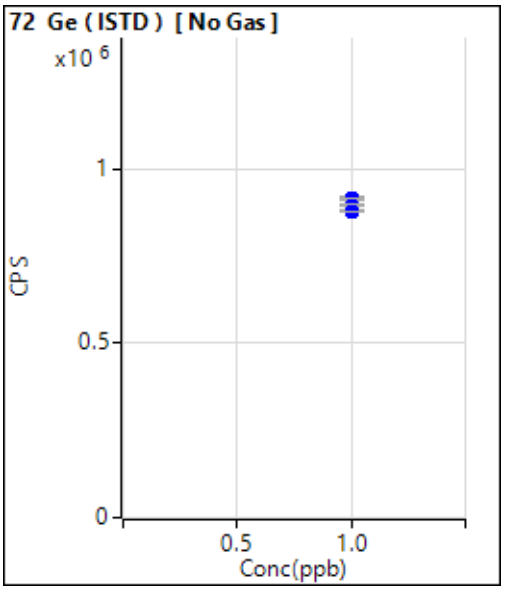
y = 0.0192 * x + 1.2550E-005
R = 0.9999
DL = 0.0008486 ppb
BEC = 0.000653 ppb

Weight: <None>
Min Conc: <None>

Calibration for 020_ICV.d

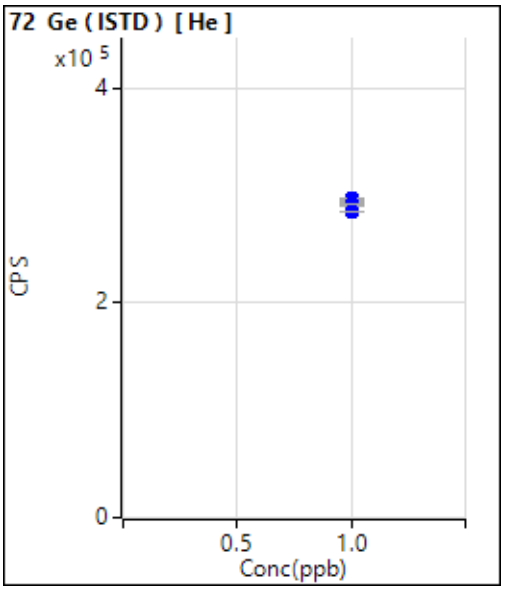


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		579730.97		P	0.8	
2	☐	1.000		591607.00		P	0.4	
3	☐	1.000		600682.49		P	0.2	
4	☐	1.000		601569.39		P	0.1	
5	☐	1.000		578595.56		P	1.4	
6	☐	1.000		597498.66		A	3.1	

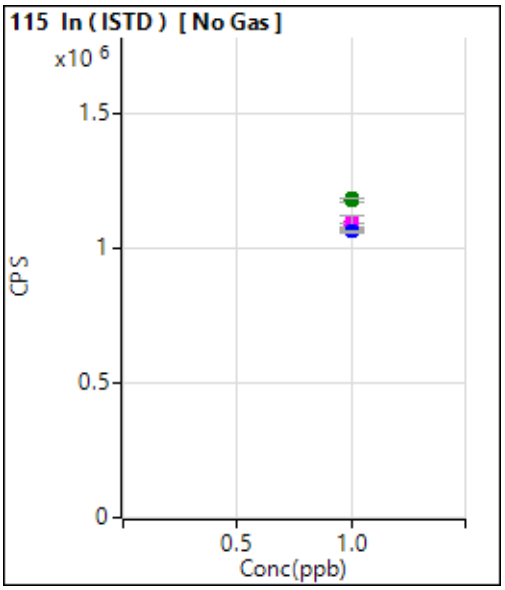


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		880231.97		P	0.3	
2	☐	1.000		896698.53		P	0.3	
3	☐	1.000		914660.95		P	1.0	
4	☐	1.000		913650.06		P	0.6	
5	☐	1.000		894402.64		P	1.0	
6	☐	1.000		875652.64		P	0.5	

Calibration for 020_ICV.d

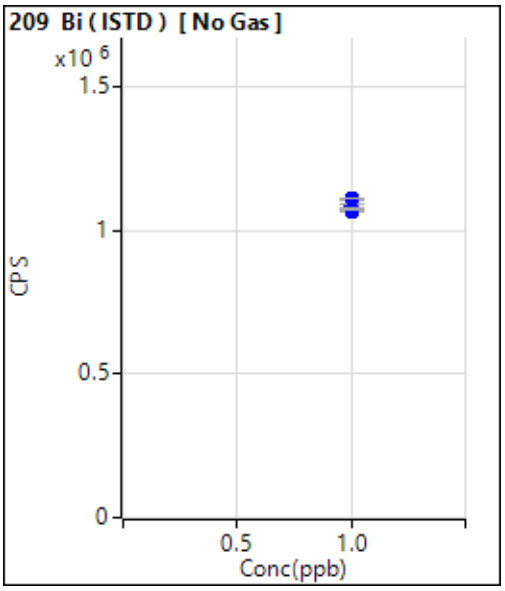


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		284935.68		P	0.4	
2	☐	1.000		294953.58		P	0.2	
3	☐	1.000		295174.68		P	0.2	
4	☐	1.000		297392.47		P	0.5	
5	☐	1.000		291738.45		P	0.6	
6	☐	1.000		285009.21		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062541.78		P	0.9	
2	☐	1.000		1087771.37		M	1.2	
3	☐	1.000		1178962.77		A	1.2	
4	☐	1.000		1187157.58		A	0.5	
5	☐	1.000		1098599.80		M	4.4	
6	☐	1.000		1062301.36		P	0.6	

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062489.72		P	0.1	
2	☐	1.000		1090754.44		P	0.4	
3	☐	1.000		1105631.68		P	0.5	
4	☐	1.000		1111356.65		P	0.1	
5	☐	1.000		1087495.79		P	1.3	
6	☐	1.000		1073017.12		P	0.8	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	009CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:26:20-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	35468	0.00
Be	9	1	No Gas	57	54.68
V	51	2	He	953	0.19
Cr	52	2	He	953	0.94
Fe	56	2	He	7572	0.05
Se	78	2	He	353	2.90
As	75	2	He	81	16.29
Ca	44	2	He	730	1.60
Na	23	2	He	164288	0.00
Mg	24	2	He	193	15.21
K	39	2	He	77058	0.00
Mn	55	2	He	207	8.22
Co	59	2	He	17	415.69
Ni	60	2	He	180	14.14
Cu	63	2	He	800	0.56
Zn	66	2	He	4614	0.07
Al	27	2	He	433	2.02
B	11	1	No Gas	16990	0.01
Al	27	1	No Gas	15916	0.02
Si	28	1	No Gas	181850	0.00
Ag	107	1	No Gas	650	1.32
Cd	111	1	No Gas	7	1299.04
Sr	88	1	No Gas	547	1.84
Mo	95	1	No Gas	20	433.01
Sn	118	1	No Gas	1170	0.65
Sb	121	1	No Gas	363	6.08
Ba	137	1	No Gas	130	41.42
Tl	205	1	No Gas	260	5.33
Tl	203	1	No Gas	83	54.52
Pb	208	1	No Gas	1807	0.52
U	238	1	No Gas	13	324.76
Ca	43	2	He	30	222.22
Sb	121	2	He	260	14.11
Ti	47	2	He	10	1000.00
Cu	63	1	No Gas	2094	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	579731	0.76
Ge	72	2	He	284936	0.40
Ge	72	1	No Gas	880232	0.27
In	115	1	No Gas	1062542	0.92

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1062490	0.11

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	010CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:28:36-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3219	0.16
V	51	2	He	5642	0.02
Cr	52	2	He	6332	0.06
Fe	56	2	He	502271	0.00
Se	78	2	He	419	1.22
As	75	2	He	807	0.18
Ca	44	2	He	3597	0.09
Na	23	2	He	258804	0.00
Mg	24	2	He	53975	0.00
K	39	2	He	137587	0.00
Mn	55	2	He	4181	0.15
Co	59	2	He	7822	0.04
Ni	60	2	He	2174	0.37
Cu	63	2	He	6498	0.06
Zn	66	2	He	6008	0.06
Al	27	2	He	790	2.92
B	11	1	No Gas	24263	0.04
Al	27	1	No Gas	27494	0.00
Si	28	1	No Gas	209426	0.00
Ag	107	1	No Gas	12977	0.03
Cd	111	1	No Gas	2397	0.43
Sr	88	1	No Gas	22042	0.00
Mo	95	1	No Gas	4464	0.05
Sn	118	1	No Gas	8783	0.01
Sb	121	1	No Gas	10791	0.04
Ba	137	1	No Gas	3817	0.08
Tl	205	1	No Gas	25794	0.01
Tl	203	1	No Gas	10898	0.03
Pb	208	1	No Gas	36975	0.01
U	238	1	No Gas	36465	0.00
Ca	43	2	He	203	7.78
Sb	121	2	He	5651	0.04
Cu	63	1	No Gas	11829	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	591607	0.39	579731	102.05	70	120	
Ge	72	2	He	294954	0.22	284936	103.52	70	120	
Ge	72	1	No Gas	896699	0.35	880232	101.87	70	120	

Calibration Standard Report

In	115	1	No Gas	1087771	1.23	1062542	102.37	70	120	
Bi	209	1	No Gas	1090754	0.36	1062490	102.66	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	011CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:30:51-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	7879	0.03
V	51	2	He	12342	0.02
Cr	52	2	He	14308	0.03
Fe	56	2	He	1333887	0.00
Se	78	2	He	529	1.61
As	75	2	He	1967	0.17
Ca	44	2	He	8479	0.06
Na	23	2	He	397312	0.00
Mg	24	2	He	134914	0.00
K	39	2	He	228252	0.00
Mn	55	2	He	9880	0.04
Co	59	2	He	19674	0.01
Ni	60	2	He	5264	0.08
Cu	63	2	He	14675	0.03
Zn	66	2	He	7462	0.02
Al	27	2	He	1333	0.51
B	11	1	No Gas	33757	0.00
Al	27	1	No Gas	51134	0.00
Si	28	1	No Gas	257545	0.00
Ag	107	1	No Gas	31812	0.01
Cd	111	1	No Gas	6512	0.06
Sr	88	1	No Gas	60038	0.00
Mo	95	1	No Gas	11055	0.05
Sn	118	1	No Gas	19471	0.01
Sb	121	1	No Gas	26841	0.01
Ba	137	1	No Gas	9243	0.03
Tl	205	1	No Gas	64644	0.00
Tl	203	1	No Gas	26605	0.00
Pb	208	1	No Gas	91347	0.00
U	238	1	No Gas	94796	0.00
Ca	43	2	He	390	0.00
Sb	121	2	He	13717	0.01
Cu	63	1	No Gas	26593	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600682	0.24	579731	103.61	70	120	
Ge	72	2	He	295175	0.15	284936	103.59	70	120	
Ge	72	1	No Gas	914661	0.99	880232	103.91	70	120	

Calibration Standard Report

In	115	1	No Gas	1178963	1.24	1062542	110.96	70	120	
Bi	209	1	No Gas	1105632	0.53	1062490	104.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	012CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:33:05-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	16276	0.01
V	51	2	He	23712	0.01
Cr	52	2	He	27431	0.01
Fe	56	2	He	2705287	0.00
Se	78	2	He	708	0.41
As	75	2	He	4020	0.08
Ca	44	2	He	15893	0.02
Na	23	2	He	641621	0.00
Mg	24	2	He	274325	0.00
K	39	2	He	384086	0.00
Mn	55	2	He	19818	0.01
Co	59	2	He	39387	0.00
Ni	60	2	He	10511	0.01
Cu	63	2	He	27645	0.00
Zn	66	2	He	10104	0.04
Al	27	2	He	1954	0.55
B	11	1	No Gas	53538	0.00
Al	27	1	No Gas	74894	0.00
Si	28	1	No Gas	318398	0.00
Ag	107	1	No Gas	63871	0.00
Cd	111	1	No Gas	12773	0.02
Sr	88	1	No Gas	112859	0.00
Mo	95	1	No Gas	23247	0.00
Sn	118	1	No Gas	38918	0.00
Sb	121	1	No Gas	53968	0.00
Ba	137	1	No Gas	18637	0.02
Tl	205	1	No Gas	130929	0.00
Tl	203	1	No Gas	55028	0.00
Pb	208	1	No Gas	181723	0.00
U	238	1	No Gas	191260	0.00
Ca	43	2	He	927	1.25
Sb	121	2	He	27205	0.00
Cu	63	1	No Gas	51096	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	601569	0.15	579731	103.77	70	120	
Ge	72	2	He	297392	0.48	284936	104.37	70	120	
Ge	72	1	No Gas	913650	0.55	880232	103.80	70	120	

Calibration Standard Report

In	115	1	No Gas	1187158	0.51	1062542	111.73	70	120	
Bi	209	1	No Gas	1111357	0.05	1062490	104.60	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	013CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:35:19-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	168416	0.00
V	51	2	He	233663	0.00
Cr	52	2	He	269443	0.00
Fe	56	2	He	25986130	0.00
Se	78	2	He	4051	0.07
As	75	2	He	39833	0.00
Ca	44	2	He	153165	0.00
Na	23	2	He	5291918	0.00
Mg	24	2	He	2886162	0.00
K	39	2	He	3367830	0.00
Mn	55	2	He	201618	0.00
Co	59	2	He	399751	0.00
Ni	60	2	He	101486	0.00
Cu	63	2	He	276211	0.00
Zn	66	2	He	60552	0.01
Al	27	2	He	15352	0.01
B	11	1	No Gas	404931	0.00
Al	27	1	No Gas	635368	0.00
Si	28	1	No Gas	1805218	0.00
Ag	107	1	No Gas	661091	0.00
Cd	111	1	No Gas	135423	0.00
Sr	88	1	No Gas	1259156	0.00
Mo	95	1	No Gas	238736	0.00
Sn	118	1	No Gas	399283	0.00
Sb	121	1	No Gas	556704	0.00
Ba	137	1	No Gas	194463	0.00
Tl	205	1	No Gas	1497702	0.00
Tl	203	1	No Gas	577771	0.00
Pb	208	1	No Gas	1888280	0.00
U	238	1	No Gas	2173658	0.00
Ca	43	2	He	9287	0.09
Sb	121	2	He	277954	0.00
Cu	63	1	No Gas	508345	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	623189	6.88	579731	107.50	70	120	
Ge	72	2	He	296926	1.35	284936	104.21	70	120	
Ge	72	1	No Gas	946428	0.81	880232	107.52	70	120	

Calibration Standard Report

In	115	1	No Gas	1208300	1.97	1062542	113.72	70	120	
Bi	209	1	No Gas	1137675	0.51	1062490	107.08	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	014CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:37:29-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	322422	0.00
V	51	2	He	471477	0.00
Cr	52	2	He	540667	0.00
Fe	56	2	He	52323608	0.00
Se	78	2	He	7600	0.03
As	75	2	He	78436	0.00
Ca	44	2	He	310253	0.00
Na	23	2	He	10424936	0.00
Mg	24	2	He	5682277	0.00
K	39	2	He	6472901	0.00
Mn	55	2	He	403681	0.00
Co	59	2	He	801190	0.00
Ni	60	2	He	203881	0.00
Cu	63	2	He	551854	0.00
Zn	66	2	He	115102	0.00
Al	27	2	He	30952	0.01
B	11	1	No Gas	847405	0.00
Al	27	1	No Gas	1300522	0.00
Si	28	1	No Gas	2858376	0.00
Ag	107	1	No Gas	1394118	0.00
Cd	111	1	No Gas	260698	0.00
Sr	88	1	No Gas	2409378	0.00
Mo	95	1	No Gas	463878	0.00
Sn	118	1	No Gas	761104	0.00
Sb	121	1	No Gas	1083556	0.00
Ba	137	1	No Gas	374438	0.00
Tl	205	1	No Gas	2856492	0.00
Tl	203	1	No Gas	1105447	0.00
Pb	208	1	No Gas	3813835	0.00
U	238	1	No Gas	4088712	0.00
Ca	43	2	He	18640	0.02
Sb	121	2	He	557975	0.00
Cu	63	1	No Gas	969815	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	583551	1.54	579731	100.66	70	120	
Ge	72	2	He	286007	0.89	284936	100.38	70	120	
Ge	72	1	No Gas	879973	0.37	880232	99.97	70	120	

Calibration Standard Report

In	115	1	No Gas	1061634	0.42	1062542	99.91	70	120	
Bi	209	1	No Gas	1063165	0.13	1062490	100.06	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	017CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:47:02-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	165020	0.00
V	51	2	He	236700	0.00
Cr	52	2	He	273273	0.00
Fe	56	2	He	26418121	0.00
Se	78	2	He	4029	0.06
As	75	2	He	40074	0.01
Ca	44	2	He	156495	0.00
Na	23	2	He	5319772	0.00
Mg	24	2	He	2903812	0.00
K	39	2	He	3369393	0.00
Mn	55	2	He	202737	0.00
Co	59	2	He	404312	0.00
Ni	60	2	He	102336	0.00
Cu	63	2	He	279269	0.00
Zn	66	2	He	61007	0.00
Al	27	2	He	15582	0.02
B	11	1	No Gas	386819	0.00
Al	27	1	No Gas	614947	0.00
Si	28	1	No Gas	1642991	0.00
Ag	107	1	No Gas	641180	0.00
Cd	111	1	No Gas	131086	0.00
Sr	88	1	No Gas	1223558	0.00
Mo	95	1	No Gas	232519	0.00
Sn	118	1	No Gas	385279	0.00
Sb	121	1	No Gas	539272	0.00
Ba	137	1	No Gas	187482	0.00
Tl	205	1	No Gas	1442239	0.00
Tl	203	1	No Gas	553812	0.00
Pb	208	1	No Gas	1835046	0.00
U	238	1	No Gas	2122369	0.00
Ca	43	2	He	9503	0.04
Sb	121	2	He	277822	0.00
Cu	63	1	No Gas	493755	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	578596	1.45	579731	99.80	70	120	
Ge	72	2	He	291738	0.63	284936	102.39	70	120	
Ge	72	1	No Gas	894403	1.01	880232	101.61	70	120	

Calibration Standard Report

In	115	1	No Gas	1098600	4.45	1062542	103.39	70	120	
Bi	209	1	No Gas	1087496	1.30	1062490	102.35	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	018CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:49:06-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	323198	0.00
V	51	2	He	461921	0.00
Cr	52	2	He	530454	0.00
Fe	56	2	He	51478758	0.00
Se	78	2	He	7569	0.01
As	75	2	He	77064	0.00
Ca	44	2	He	305064	0.00
Na	23	2	He	10199745	0.00
Mg	24	2	He	5548943	0.00
K	39	2	He	6342020	0.00
Mn	55	2	He	396621	0.00
Co	59	2	He	792550	0.00
Ni	60	2	He	200962	0.00
Cu	63	2	He	540113	0.00
Zn	66	2	He	113721	0.00
Al	27	2	He	30193	0.01
B	11	1	No Gas	829456	0.00
Al	27	1	No Gas	1280085	0.00
Si	28	1	No Gas	2862370	0.00
Ag	107	1	No Gas	1381627	0.00
Cd	111	1	No Gas	257048	0.00
Sr	88	1	No Gas	2379612	0.00
Mo	95	1	No Gas	458857	0.00
Sn	118	1	No Gas	754690	0.00
Sb	121	1	No Gas	1057721	0.00
Ba	137	1	No Gas	371723	0.00
Tl	205	1	No Gas	2835299	0.00
Tl	203	1	No Gas	1098395	0.00
Pb	208	1	No Gas	3792153	0.00
U	238	1	No Gas	4109981	0.00
Ca	43	2	He	17905	0.01
Sb	121	2	He	548642	0.00
Cu	63	1	No Gas	962106	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	597499	3.11	579731	103.06	70	120	
Ge	72	2	He	285009	0.50	284936	100.03	70	120	
Ge	72	1	No Gas	875653	0.50	880232	99.48	70	120	

Calibration Standard Report

In	115	1	No Gas	1062301	0.58	1062542	99.98	70	120	
Bi	209	1	No Gas	1073017	0.82	1062490	100.99	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	020_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:53:28-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	107.266	1.017	849002	0.68	100	107.3	90	110	
Be	9	1	No Gas	105.065	0.011	168499	0.79	100	105.1	90	110	
V	51	2	He	101.597	0.515	242358	1.50	100	101.6	90	110	
Cr	52	2	He	100.558	0.258	275725	1.25	100	100.6	90	110	
Fe	56	2	He	10118.971	0.674	26874532	1.97	10000	101.2	90	110	
Se	78	2	He	105.604	2.143	4286	2.56	100	105.6	90	110	
As	75	2	He	102.334	0.569	40818	1.82	100	102.3	90	110	
Ca	44	2	He	10094.502	0.770	159119	1.76	10000	100.9	90	110	
Na	23	2	He	10102.403	1.579	5397916	2.15	10000	101.0	90	110	
Mg	24	2	He	10222.150	1.089	2937249	2.20	10000	102.2	90	110	
K	39	2	He	10267.920	0.623	3412754	1.89	10000	102.7	90	110	
Mn	55	2	He	100.499	0.151	205505	1.31	100	100.5	90	110	
Co	59	2	He	100.969	1.106	412243	1.51	100	101.0	90	110	
Ni	60	2	He	102.068	1.655	105721	2.93	100	102.1	90	110	
Cu	63	2	He	101.980	1.143	284818	0.45	100	102.0	90	110	
Zn	66	2	He	101.968	2.382	62186	1.07	100	102.0	90	110	
Al	27	2	He	102.291	3.201	16126	4.19	100	102.3	90	110	
B	11	1	No Gas	479.476	3.224	394835	2.73	500	95.9	90	110	
Al	27	1	No Gas	95.376	0.432	628083	0.80	100	95.4	90	110	
Si	28	1	No Gas	565.233	0.520	1767177	0.73	500	113.0	90	110	ICV Main CR1 Failed
Ag	107	1	No Gas	89.649	3.450	644944	0.56	100	89.6	90	110	ICV Main CR1 Failed
Cd	111	1	No Gas	98.057	2.825	133604	1.20	100	98.1	90	110	
Sr	88	1	No Gas	97.850	4.961	1235720	2.05	100	97.8	90	110	
Mo	95	1	No Gas	95.947	3.843	233035	1.19	100	95.9	90	110	
Sn	118	1	No Gas	97.737	2.840	391564	1.33	100	97.7	90	110	
Sb	121	1	No Gas	100.819	0.543	549022	1.01	100	100.8	90	110	
Ba	137	1	No Gas	96.703	2.875	190173	1.02	100	96.7	90	110	
Tl	205	1	No Gas	99.988	1.726	1464743	1.78	100	100.0	90	110	
Tl	203	1	No Gas	100.739	0.831	570816	0.22	100	100.7	90	110	
Pb	208	1	No Gas	96.610	0.276	1875392	0.78	100	96.6	90	110	
U	238	1	No Gas	100.709	1.989	2144879	1.31	100	100.7	90	110	
Ca	43	2	He	9883.306	2.794	9200	1.76	10000	98.8	90	110	
Sb	121	2	He	102.172	1.076	288477	2.42	100	102.2	90	110	
Ti	47	2	He	100.894	0.819	9207	1.58	100	100.9	90	110	
Cu	63	1	No Gas	100.718	0.650	500269	0.84	100	100.7	90	110	
Se	82	1	No Gas	102.554	7.970	6530	9.00	100	102.6	90	110	

QC ISTD Table

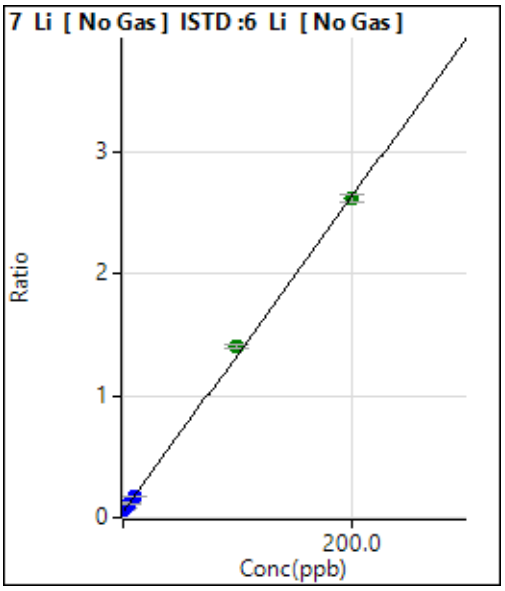
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	586369	0.79	579731	101.14	70	120	
Ge	72	2	He	293872	1.39	284936	103.14	70	120	
Ge	72	1	No Gas	901791	0.50	880232	102.45	70	120	
In	115	1	No Gas	1130124	3.84	1062542	106.36	70	120	
Bi	209	1	No Gas	1108264	1.00	1062490	104.31	70	120	

Calibration for 020_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:20:44
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	009CALB.d	CAL BLK	07/20/2022 11:26:20
2	010CALS.d	2/10/200	07/20/2022 11:28:36
3	011CALS.d	5/25/500	07/20/2022 11:30:51
4	012CALS.d	10/50/100	07/20/2022 11:33:05
5	017CALS.d	100/500/10K	07/20/2022 11:47:02
6	018CALS.d	200/1000/20K	07/20/2022 11:49:06

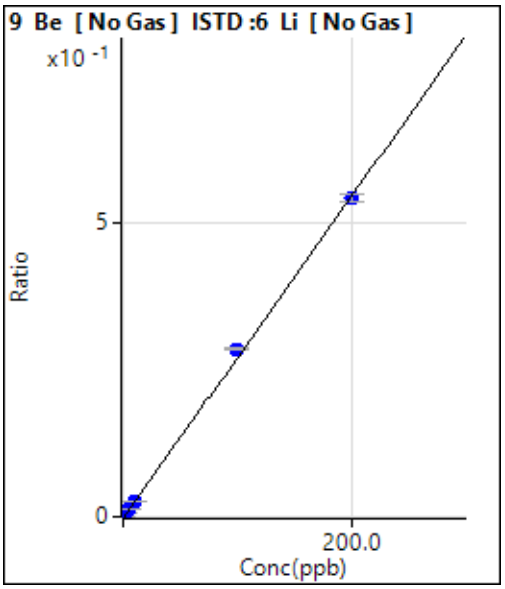
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35467.95	0.0612	P	0.1	
2	☐	2.000	1.703	49218.97	0.0832	P	0.9	-14.9
3	☐	5.000	4.388	70828.54	0.1179	P	0.9	-12.2
4	☐	10.000	9.097	107555.43	0.1788	P	0.9	-9.0
5	☐	100.000	104.181	814513.56	1.4081	A	2.5	4.2
6	☐	200.000	197.973	1565047.74	2.6206	A	2.6	-1.0

y = 0.0129 * x + 0.0612
R = 0.9997
DL = 0.01504 ppb
BEC = 4.732 ppb

Weight: <None>
Min Conc: <None>

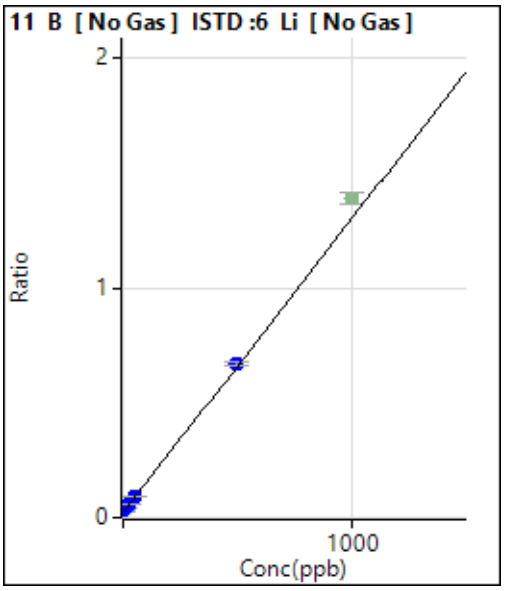


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	56.67	0.0001	P	31.3	
2	☐	2.000	1.954	3218.73	0.0054	P	5.3	-2.3
3	☐	5.000	4.761	7878.93	0.0131	P	2.1	-4.8
4	☐	10.000	9.860	16276.14	0.0271	P	1.7	-1.4
5	☐	100.000	104.279	165019.88	0.2852	P	0.2	4.3
6	☐	200.000	197.874	323198.11	0.5411	P	1.9	-1.1

y = 0.0027 * x + 9.7830E-005
R = 0.9997
DL = 0.03356 ppb
BEC = 0.03578 ppb

Weight: <None>
Min Conc: <None>

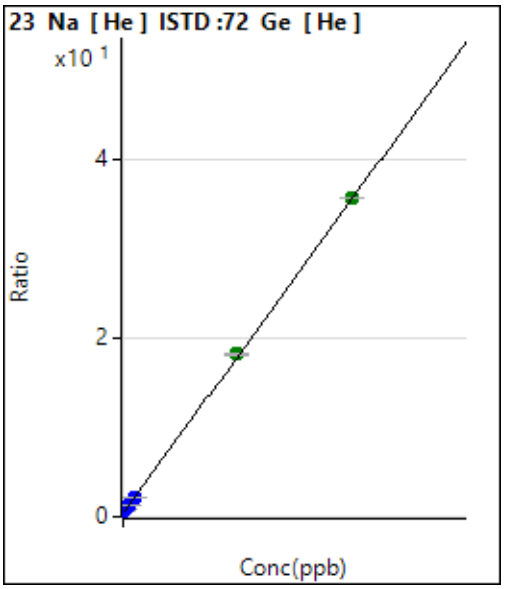
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16990.38	0.0293	P	0.5	
2	☐	10.000	9.158	24263.21	0.0410	P	8.6	-8.4
3	☐	25.000	21.051	33757.20	0.0562	P	1.8	-15.8
4	☐	50.000	46.725	53538.25	0.0890	P	1.3	-6.6
5	☐	500.000	500.542	386818.68	0.6687	P	3.1	0.1
6	☑	1000.000		829455.56	1.3893	A	4.0	

y = 0.0013 * x + 0.0293
R = 1.0000
DL = 0.3122 ppb
BEC = 22.94 ppb

Weight: <None>
Min Conc: <None>

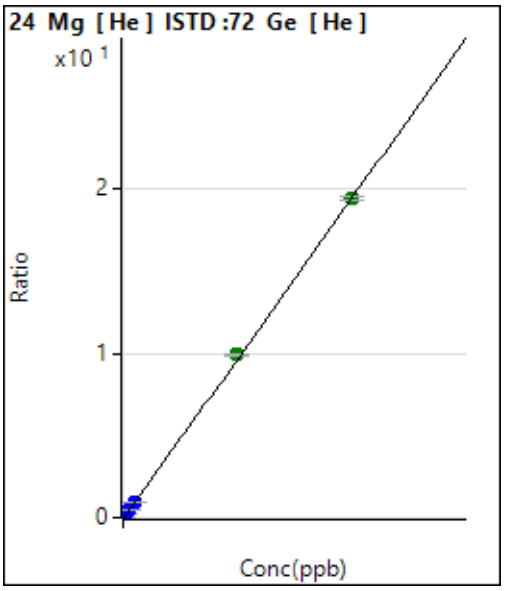


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	164287.96	0.5766	P	0.6	
2	☐	200.000	170.842	258803.67	0.8774	P	0.4	-14.6
3	☐	500.000	436.915	397312.47	1.3460	P	0.3	-12.6
4	☐	1000.000	897.715	641621.27	2.1575	P	1.1	-10.2
5	☐	10000.00	10027.13	5319771.80	18.2355	A	1.2	0.3
6	☐	20000.00	19993.41	10199744.8	35.7873	A	0.2	0.0

y = 0.0018 * x + 0.5766
R = 1.0000
DL = 6.195 ppb
BEC = 327.4 ppb

Weight: <None>
Min Conc: <None>

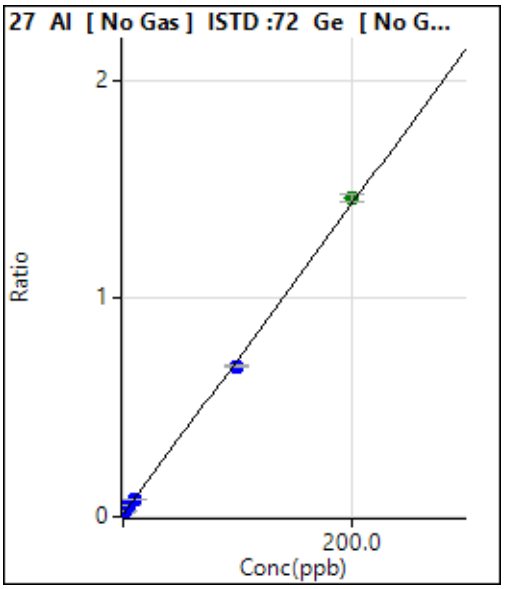
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0007	P	29.1	
2	☐	200.000	186.480	53974.67	0.1830	P	1.6	-6.8
3	☐	500.000	466.818	134914.35	0.4571	P	0.4	-6.6
4	☐	1000.000	942.843	274324.60	0.9225	P	1.5	-5.7
5	☐	10000.00	10180.72	2903811.94	9.9539	A	1.1	1.8
6	☐	20000.00	19913.46	5548942.63	19.4692	A	1.4	-0.4

y = 9.7766E-004 * x + 6.7814E-004
R = 0.9999
DL = 0.6062 ppb
BEC = 0.6936 ppb

Weight: <None>
Min Conc: <None>

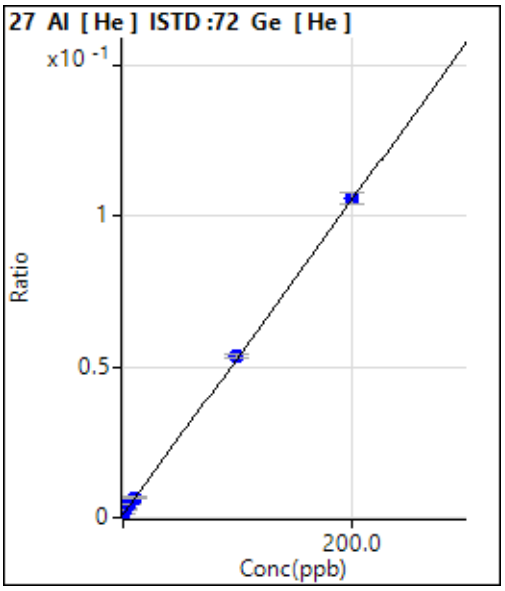


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15916.03	0.0181	P	2.5	
2	☐	2.000	1.769	27494.07	0.0307	P	0.9	-11.6
3	☐	5.000	5.317	51134.28	0.0559	P	0.9	6.3
4	☐	10.000	8.983	74894.19	0.0820	P	1.2	-10.2
5	☐	100.000	94.129	614947.07	0.6876	P	1.4	-5.9
6	☐	200.000	202.981	1280085.01	1.4619	A	2.7	1.5

y = 0.0071 * x + 0.0181
R = 0.9994
DL = 0.193 ppb
BEC = 2.542 ppb

Weight: <None>
Min Conc: <None>

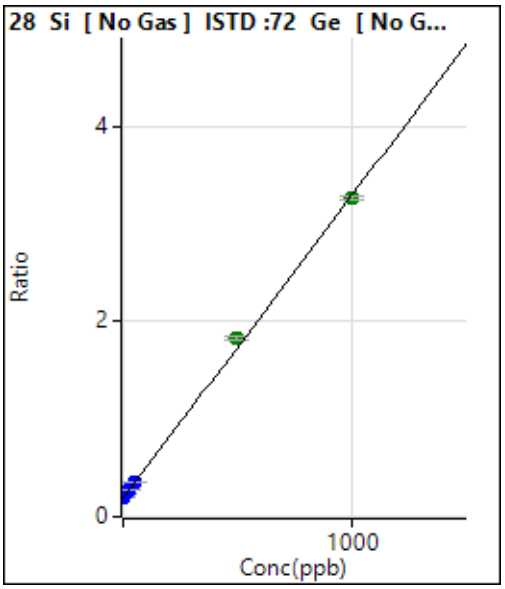
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0015	P	9.1	
2	☐	2.000	2.218	790.04	0.0027	P	22.9	10.9
3	☐	5.000	5.746	1333.42	0.0045	P	7.0	14.9
4	☐	10.000	9.681	1953.51	0.0066	P	11.0	-3.2
5	☐	100.000	99.502	15582.26	0.0534	P	2.1	-0.5
6	☐	200.000	200.244	30193.05	0.1059	P	3.3	0.1

y = 5.2148E-004 * x + 0.0015
R = 1.0000
DL = 0.7965 ppb
BEC = 2.917 ppb

Weight: <None>
Min Conc: <None>

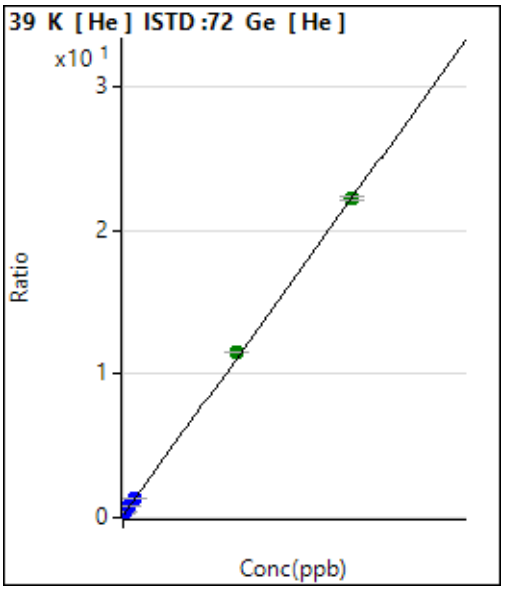


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	181850.04	0.2066	P	1.1	
2	☐	10.000	8.691	209425.99	0.2336	P	0.2	-13.1
3	☐	25.000	24.176	257545.31	0.2816	P	0.2	-3.3
4	☐	50.000	45.754	318398.39	0.3485	P	1.1	-8.5
5	☐	500.000	525.756	1642990.96	1.8372	A	1.9	5.2
6	☐	1000.000	987.368	2862369.75	3.2688	A	0.6	-1.3

y = 0.0031 * x + 0.2066
R = 0.9995
DL = 2.133 ppb
BEC = 66.61 ppb

Weight: <None>
Min Conc: <None>

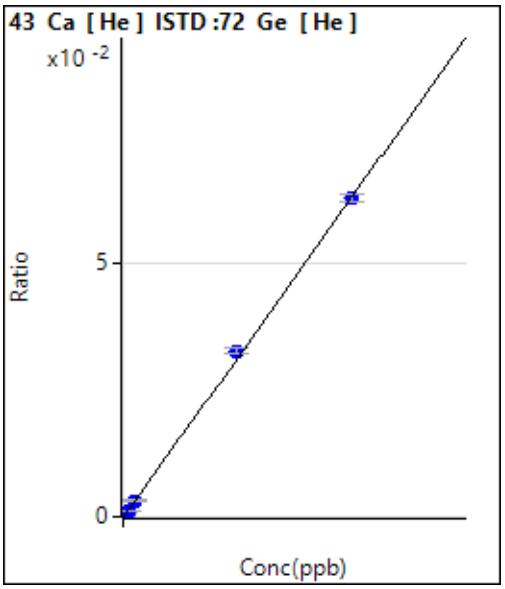
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77058.22	0.2704	P	2.0	
2	☐	200.000	177.477	137586.80	0.4665	P	0.6	-11.3
3	☐	500.000	455.224	228252.37	0.7733	P	0.9	-9.0
4	☐	1000.000	924.398	384086.02	1.2915	P	1.0	-7.6
5	☐	10000.00	10210.47	3369392.76	11.5491	A	0.7	2.1
6	☐	20000.00	19899.88	6342019.70	22.2522	A	0.7	-0.5

y = 0.0011 * x + 0.2704
R = 0.9999
DL = 14.82 ppb
BEC = 244.8 ppb

Weight: <None>
Min Conc: <None>

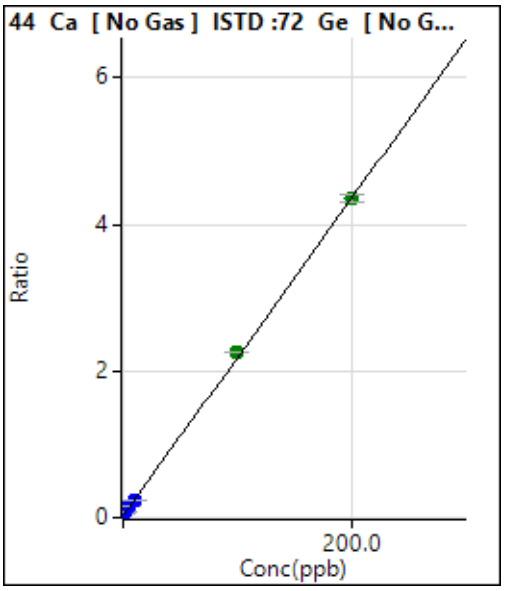


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0001	P	66.3	
2	☐	200.000	185.006	203.34	0.0007	P	15.7	-7.5
3	☐	500.000	385.158	390.01	0.0013	P	0.2	-23.0
4	☐	1000.000	953.240	926.72	0.0031	P	11.1	-4.7
5	☐	10000.00	10282.31	9503.44	0.0326	P	3.4	2.8
6	☐	20000.00	19864.20	17905.27	0.0628	P	2.5	-0.7

y = 3.1576E-006 * x + 1.0512E-004
R = 0.9998
DL = 66.27 ppb
BEC = 33.29 ppb

Weight: <None>
Min Conc: <None>

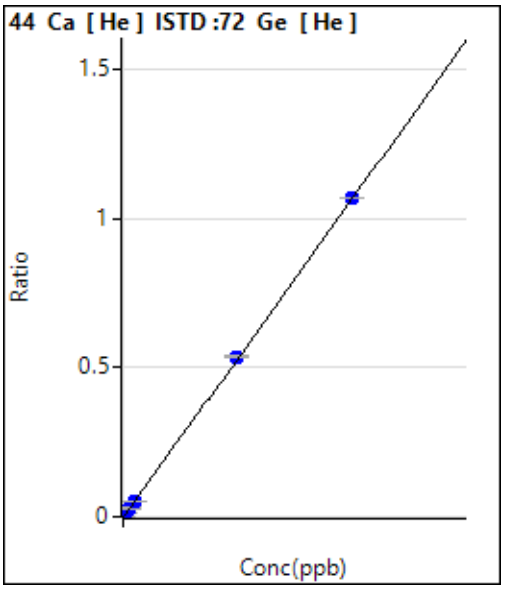
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	41308.90	0.0469	P	2.2	
2	☐	2.000	1.809	77229.47	0.0861	P	1.0	-9.5
3	☐	5.000	4.736	136766.87	0.1495	P	0.6	-5.3
4	☐	10.000	9.305	227066.14	0.2485	P	0.4	-7.0
5	☐	100.000	102.208	2022467.89	2.2613	A	0.7	2.2
6	☐	200.000	198.939	3815297.13	4.3570	A	2.2	-0.5

y = 0.0217 * x + 0.0469
R = 0.9999
DL = 0.1436 ppb
BEC = 2.166 ppb

Weight: <None>
Min Conc: <None>

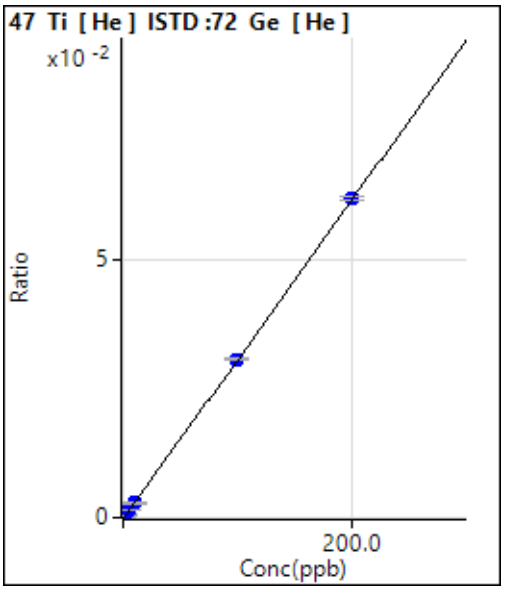


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	730.03	0.0026	P	11.7	
2	☐	200.000	180.459	3597.20	0.0122	P	3.1	-9.8
3	☐	500.000	490.097	8479.41	0.0287	P	5.2	-2.0
4	☐	1000.000	953.108	15892.78	0.0534	P	3.2	-4.7
5	☐	10000.00	10000.76	156495.16	0.5364	P	1.1	0.0
6	☐	20000.00	20002.40	305064.14	1.0704	P	0.3	0.0

y = 5.3384E-005 * x + 0.0026
R = 1.0000
DL = 16.78 ppb
BEC = 47.99 ppb

Weight: <None>
Min Conc: <None>

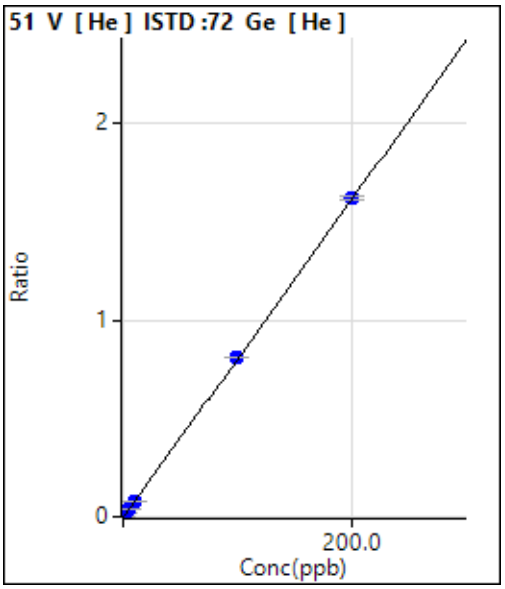
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.2	
2	☐	2.000	1.745	170.00	0.0006	P	36.6	-12.8
3	☐	5.000	4.329	406.68	0.0014	P	6.1	-13.4
4	☐	10.000	9.251	863.37	0.0029	P	13.5	-7.5
5	☐	100.000	99.487	9013.10	0.0309	P	1.9	-0.5
6	☐	200.000	200.313	17718.37	0.0622	P	1.7	0.2

y = 3.1016E-004 * x + 3.5087E-005
R = 1.0000
DL = 0.3401 ppb
BEC = 0.1131 ppb

Weight: <None>
Min Conc: <None>

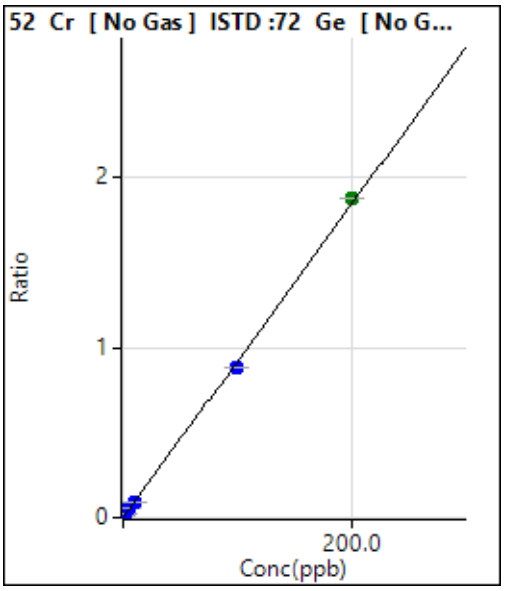


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0033	P	2.1	
2	☐	2.000	1.952	5642.30	0.0191	P	0.9	-2.4
3	☐	5.000	4.758	12342.27	0.0418	P	2.1	-4.8
4	☐	10.000	9.449	23711.62	0.0797	P	1.7	-5.5
5	☐	100.000	99.946	236700.40	0.8114	P	0.6	-0.1
6	☐	200.000	200.061	461921.18	1.6207	P	0.9	0.0

y = 0.0081 * x + 0.0033
R = 1.0000
DL = 0.02611 ppb
BEC = 0.4139 ppb

Weight: <None>
Min Conc: <None>

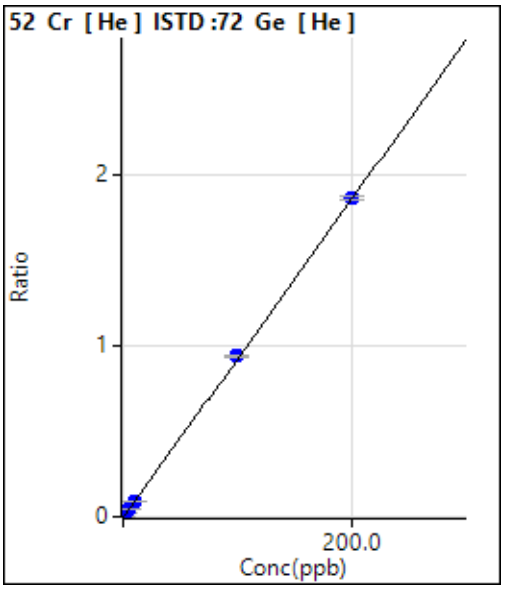
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8329.32	0.0095	P	1.6	
2	☐	2.000	1.851	23804.31	0.0265	P	1.4	-7.5
3	☐	5.000	4.539	46974.04	0.0514	P	0.7	-9.2
4	☐	10.000	9.282	86924.70	0.0951	P	1.1	-7.2
5	☐	100.000	94.709	790317.41	0.8837	P	1.0	-5.3
6	☐	200.000	202.694	1646629.61	1.8804	A	0.6	1.3

y = 0.0092 * x + 0.0095
R = 0.9995
DL = 0.04824 ppb
BEC = 1.025 ppb

Weight: <None>
Min Conc: <None>

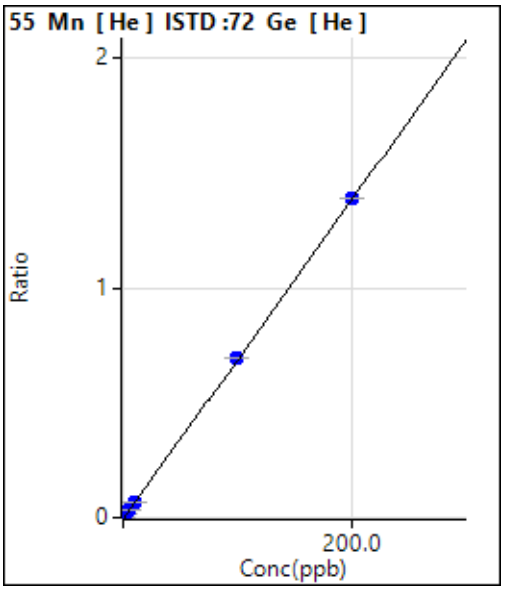


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.39	0.0033	P	8.5	
2	☐	2.000	1.949	6331.58	0.0215	P	3.6	-2.5
3	☐	5.000	4.854	14307.70	0.0485	P	4.1	-2.9
4	☐	10.000	9.562	27431.03	0.0922	P	3.7	-4.4
5	☐	100.000	100.390	273272.72	0.9367	P	0.7	0.4
6	☐	200.000	199.831	530453.74	1.8612	P	0.8	-0.1

y = 0.0093 * x + 0.0033
R = 1.0000
DL = 0.092 ppb
BEC = 0.3598 ppb

Weight: <None>
Min Conc: <None>

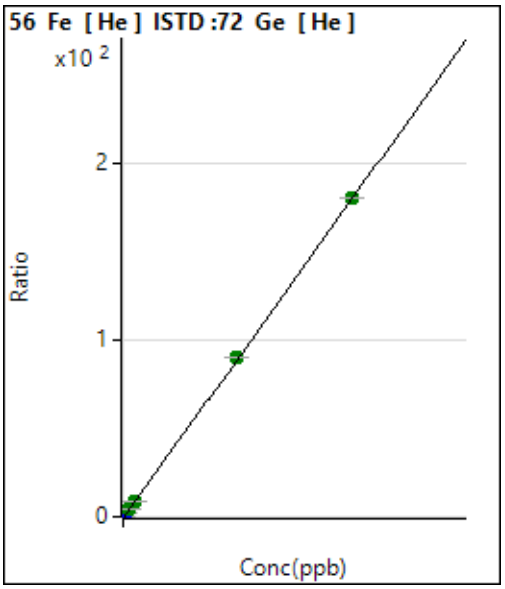
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	206.67	0.0007	P	17.0	
2	☐	2.000	1.935	4180.71	0.0142	P	6.3	-3.3
3	☐	5.000	4.711	9880.40	0.0335	P	4.4	-5.8
4	☐	10.000	9.483	19817.99	0.0666	P	2.8	-5.2
5	☐	100.000	99.872	202736.91	0.6949	P	0.6	-0.1
6	☐	200.000	200.098	396621.28	1.3916	P	0.3	0.0

y = 0.0070 * x + 7.2528E-004
R = 1.0000
DL = 0.05311 ppb
BEC = 0.1043 ppb

Weight: <None>
Min Conc: <None>

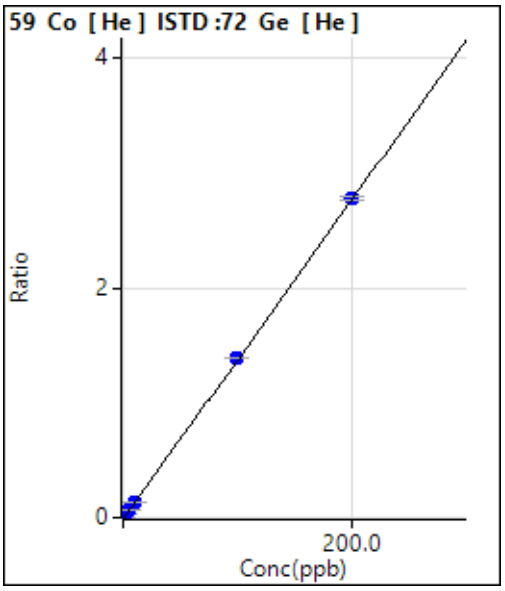


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7572.23	0.0266	P	3.2	
2	☐	200.000	185.551	502271.21	1.7029	P	1.2	-7.2
3	☐	500.000	497.258	1333887.04	4.5190	A	2.8	-0.5
4	☐	1000.000	1004.027	2705286.94	9.0973	A	2.6	0.4
5	☐	10000.00	10020.34	26418121.2	90.5541	A	0.2	0.2
6	☐	20000.00	19989.84	51478757.5	180.622	A	0.3	-0.1

y = 0.0090 * x + 0.0266
R = 1.0000
DL = 0.2834 ppb
BEC = 2.941 ppb

Weight: <None>
Min Conc: <None>

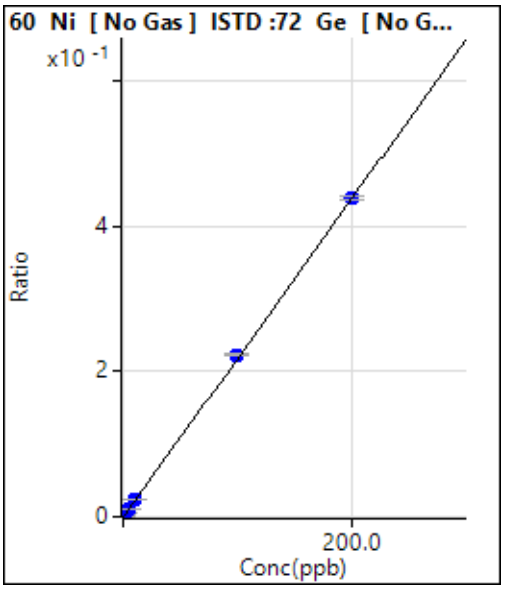
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0001	P	69.5	
2	☐	2.000	1.905	7822.37	0.0265	P	2.8	-4.8
3	☐	5.000	4.793	19674.44	0.0667	P	1.8	-4.1
4	☐	10.000	9.529	39387.22	0.1324	P	1.1	-4.7
5	☐	100.000	99.749	404311.58	1.3859	P	0.3	-0.3
6	☐	200.000	200.155	792549.88	2.7808	P	0.6	0.1

y = 0.0139 * x + 5.8556E-005
R = 1.0000
DL = 0.008792 ppb
BEC = 0.004215 ppb

Weight: <None>
Min Conc: <None>

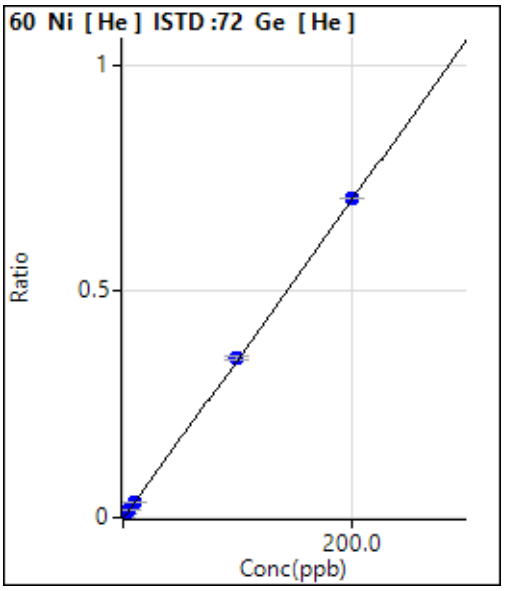


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1130.07	0.0013	P	10.5	
2	☐	2.000	1.832	4757.58	0.0053	P	1.4	-8.4
3	☐	5.000	4.747	10704.41	0.0117	P	1.7	-5.1
4	☐	10.000	10.125	21480.57	0.0235	P	1.4	1.2
5	☐	100.000	100.793	199037.86	0.2226	P	1.3	0.8
6	☐	200.000	199.605	384835.58	0.4395	P	1.4	-0.2

y = 0.0022 * x + 0.0013
R = 1.0000
DL = 0.1836 ppb
BEC = 0.5849 ppb

Weight: <None>
Min Conc: <None>

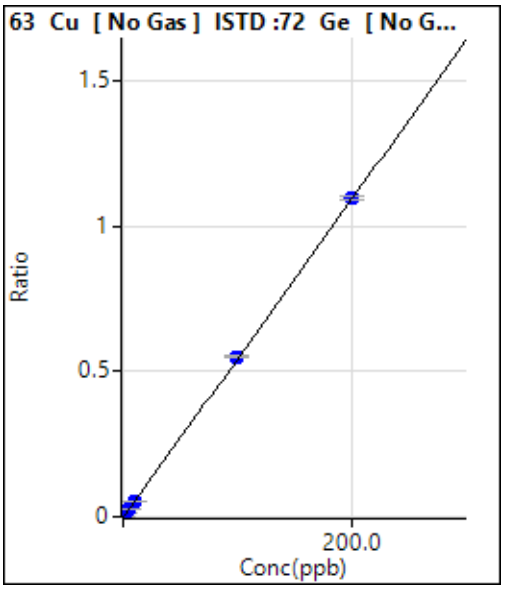
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	180.00	0.0006	P	25.7	
2	☐	2.000	1.915	2173.55	0.0074	P	8.2	-4.2
3	☐	5.000	4.890	5264.45	0.0178	P	4.2	-2.2
4	☐	10.000	9.867	10510.87	0.0353	P	1.9	-1.3
5	☐	100.000	99.522	102336.12	0.3507	P	2.3	-0.5
6	☐	200.000	200.249	200962.18	0.7051	P	0.2	0.1

y = 0.0035 * x + 6.3203E-004
R = 1.0000
DL = 0.1386 ppb
BEC = 0.1797 ppb

Weight: <None>
Min Conc: <None>

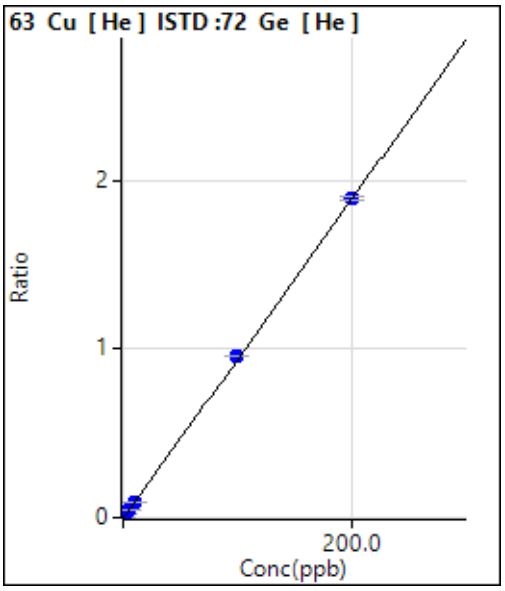


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2093.54	0.0024	P	6.6	
2	☐	2.000	1.971	11828.66	0.0132	P	1.8	-1.4
3	☐	5.000	4.869	26592.94	0.0291	P	3.2	-2.6
4	☐	10.000	9.764	51096.06	0.0559	P	0.7	-2.4
5	☐	100.000	100.224	493755.01	0.5520	P	0.3	0.2
6	☐	200.000	199.903	962106.18	1.0987	P	1.3	0.0

y = 0.0055 * x + 0.0024
R = 1.0000
DL = 0.0858 ppb
BEC = 0.4337 ppb

Weight: <None>
Min Conc: <None>

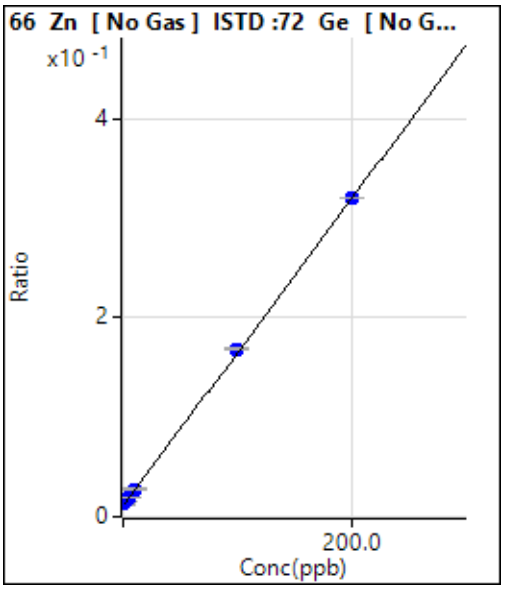
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	800.04	0.0028	P	4.5	
2	☐	2.000	2.028	6498.33	0.0220	P	3.8	1.4
3	☐	5.000	4.949	14674.83	0.0497	P	4.8	-1.0
4	☐	10.000	9.513	27645.12	0.0930	P	1.6	-4.9
5	☐	100.000	100.709	279268.86	0.9572	P	0.7	0.7
6	☐	200.000	199.671	540113.27	1.8951	P	0.8	-0.2

y = 0.0095 * x + 0.0028
R = 1.0000
DL = 0.0398 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

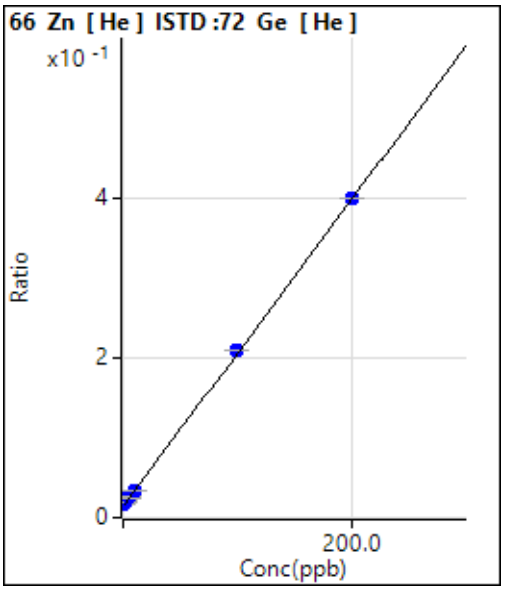


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11048.02	0.0126	P	2.7	
2	☐	2.000	2.150	14227.66	0.0159	P	2.3	7.5
3	☐	5.000	4.606	17975.47	0.0197	P	1.1	-7.9
4	☐	10.000	9.941	25474.27	0.0279	P	0.7	-0.6
5	☐	100.000	101.092	150652.98	0.1684	P	1.5	1.1
6	☐	200.000	199.465	280339.10	0.3202	P	0.5	-0.3

y = 0.0015 * x + 0.0126
R = 1.0000
DL = 0.6626 ppb
BEC = 8.139 ppb

Weight: <None>
Min Conc: <None>

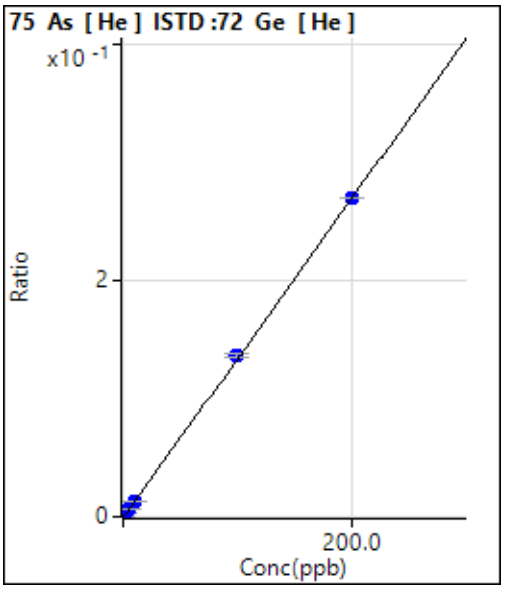
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4614.18	0.0162	P	3.3	
2	☐	2.000	2.179	6008.07	0.0204	P	3.6	9.0
3	☐	5.000	4.740	7462.18	0.0253	P	1.7	-5.2
4	☐	10.000	9.278	10103.97	0.0340	P	4.1	-7.2
5	☐	100.000	100.648	61007.10	0.2091	P	1.1	0.6
6	☐	200.000	199.717	113720.52	0.3990	P	0.5	-0.1

y = 0.0019 * x + 0.0162
R = 1.0000
DL = 0.8439 ppb
BEC = 8.448 ppb

Weight: <None>
Min Conc: <None>

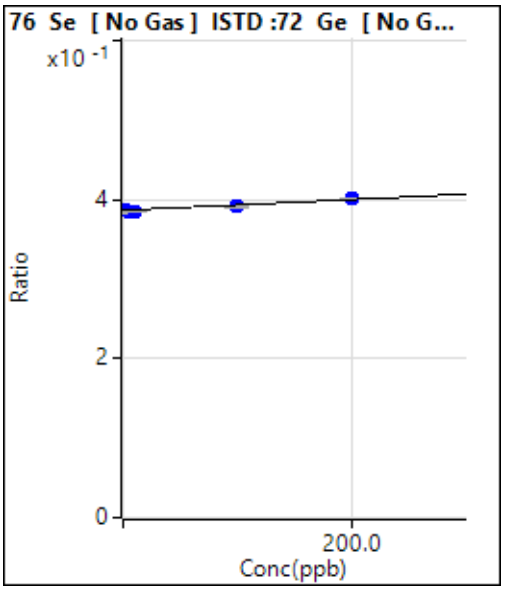


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81.11	0.0003	P	13.5	
2	☐	2.000	1.809	806.70	0.0027	P	1.3	-9.6
3	☐	5.000	4.709	1966.82	0.0067	P	3.2	-5.8
4	☐	10.000	9.769	4019.52	0.0135	P	3.5	-2.3
5	☐	100.000	101.197	40073.77	0.1374	P	2.0	1.2
6	☐	200.000	199.422	77064.01	0.2704	P	0.5	-0.3

y = 0.0014 * x + 2.8473E-004
R = 1.0000
DL = 0.08512 ppb
BEC = 0.2102 ppb

Weight: <None>
Min Conc: <None>

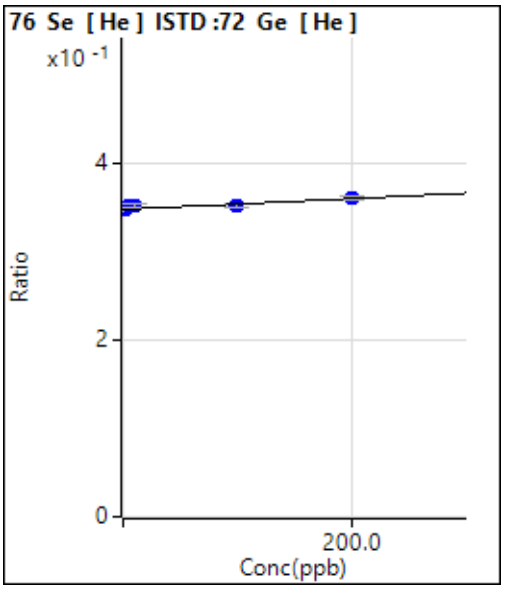
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340135.53	0.3864	P	0.2	
2	☐	2.000	1.615	346593.28	0.3865	P	0.5	-19.3
3	☐	5.000	-39.591	350968.52	0.3837	P	0.3	-891.8
4	☐	10.000	-22.074	351671.41	0.3849	P	0.4	-320.7
5	☐	100.000	63.515	349470.53	0.3907	P	0.6	-36.5
6	☐	200.000	220.965	351535.49	0.4014	P	0.5	10.5

y = 6.8039E-005 * x + 0.3864
R = 0.9712
DL = 37.32 ppb
BEC = 5679 ppb

Weight: <None>
Min Conc: <None>

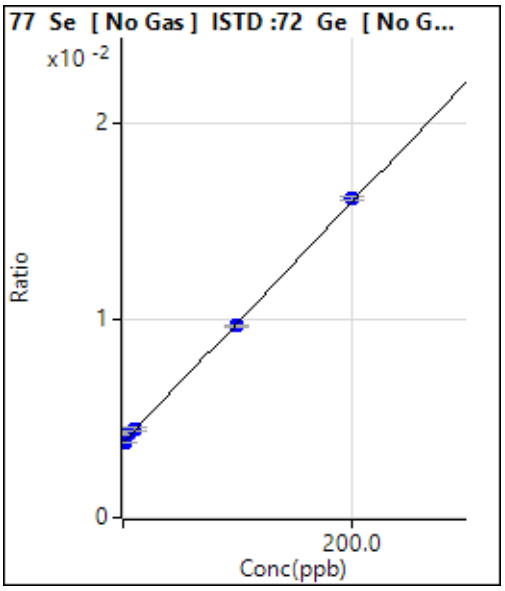


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	99327.45	0.3486	P	1.2	
2	☐	2.000	-5.827	102715.53	0.3482	P	1.0	-391.3
3	☐	5.000	74.808	104271.14	0.3533	P	0.8	1396.2
4	☐	10.000	72.449	105006.20	0.3531	P	1.6	624.5
5	☐	100.000	70.638	102978.72	0.3530	P	1.2	-29.4
6	☐	200.000	209.892	103068.85	0.3616	P	1.2	4.9

y = 6.2131E-005 * x + 0.3486
R = 0.8760
DL = 203.6 ppb
BEC = 5611 ppb

Weight: <None>
Min Conc: <None>

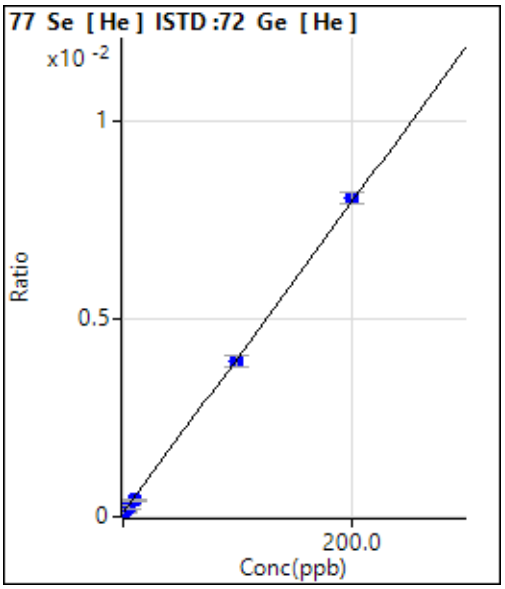
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3427.16	0.0039	P	2.8	
2	☐	2.000	-1.542	3407.17	0.0038	P	0.4	-177.1
3	☐	5.000	6.114	3900.64	0.0043	P	1.6	22.3
4	☐	10.000	9.802	4100.70	0.0045	P	3.5	-2.0
5	☐	100.000	95.699	8682.93	0.0097	P	1.6	-4.3
6	☐	200.000	202.168	14164.29	0.0162	P	1.2	1.1

y = 6.0750E-005 * x + 0.0039
R = 0.9995
DL = 5.321 ppb
BEC = 64.09 ppb

Weight: <None>
Min Conc: <None>

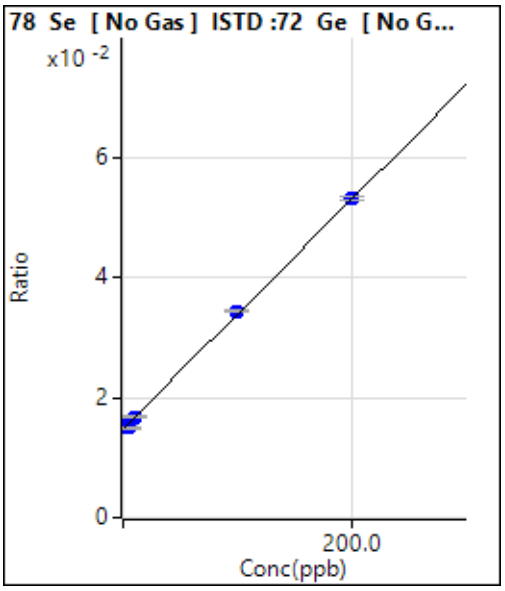


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40.00	0.0001	P	43.2	
2	☐	2.000	-0.121	40.00	0.0001	P	24.8	-106.0
3	☐	5.000	2.175	66.67	0.0002	P	37.7	-56.5
4	☐	10.000	7.270	126.67	0.0004	P	12.5	-27.3
5	☐	100.000	97.034	1153.40	0.0040	P	7.6	-3.0
6	☐	200.000	201.712	2300.24	0.0081	P	3.7	0.9

y = 3.9311E-005 * x + 1.4032E-004
R = 0.9998
DL = 4.626 ppb
BEC = 3.569 ppb

Weight: <None>
Min Conc: <None>

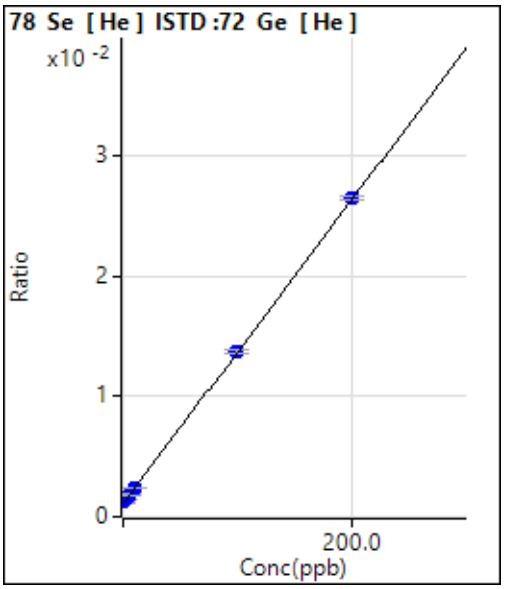
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13283.44	0.0151	P	2.3	
2	☐	2.000	2.487	13957.43	0.0156	P	2.0	24.4
3	☐	5.000	-0.649	13687.13	0.0150	P	3.1	-113.0
4	☐	10.000	8.805	15322.31	0.0168	P	3.0	-11.9
5	☐	100.000	101.061	30732.06	0.0344	P	0.7	1.1
6	☐	200.000	199.665	46550.52	0.0532	P	1.3	-0.2

y = 1.9066E-004 * x + 0.0151
R = 0.9996
DL = 5.56 ppb
BEC = 79.15 ppb

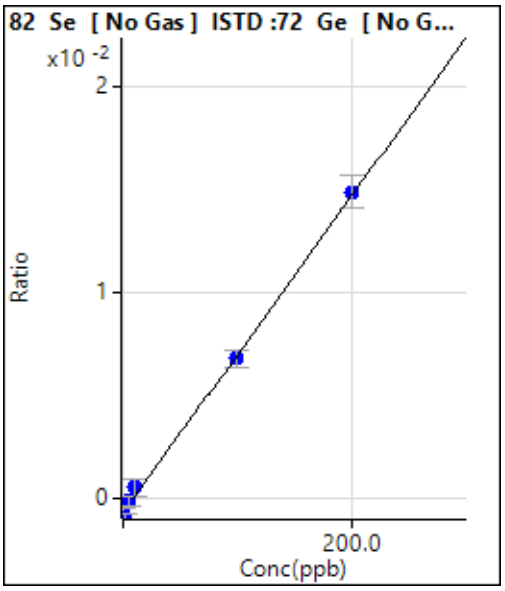
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	352.67	0.0012	P	9.8	
2	☐	2.000	1.441	418.68	0.0014	P	5.3	-27.9
3	☐	5.000	4.382	528.68	0.0018	P	8.7	-12.4
4	☐	10.000	9.045	708.02	0.0024	P	2.5	-9.5
5	☐	100.000	99.468	4028.61	0.0138	P	2.5	-0.5
6	☐	200.000	200.335	7568.81	0.0266	P	1.2	0.2

y = 1.2639E-004 * x + 0.0012
R = 1.0000
DL = 2.878 ppb
BEC = 9.791 ppb

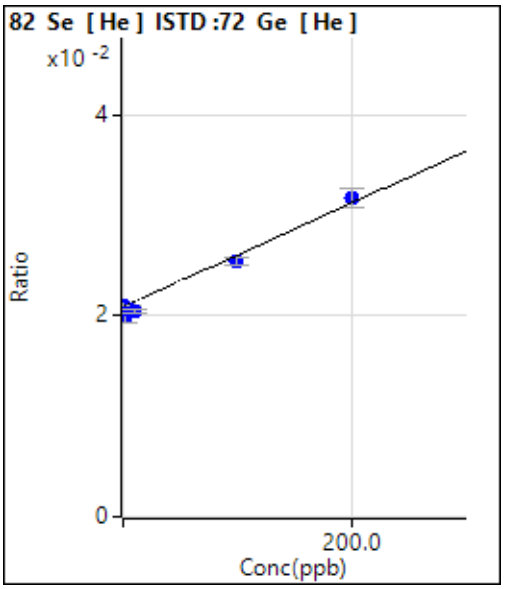
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-569.55	-0.0006	P	-53.0	
2	☐	2.000	-4.186	-869.28	-0.0010	P	-41.1	-309.3
3	☐	5.000	6.179	-158.52	-0.0002	P	-267.	23.6
4	☐	10.000	14.660	439.73	0.0005	P	172.7	46.6
5	☐	100.000	96.139	6030.53	0.0067	P	11.9	-3.9
6	☐	200.000	201.730	13022.02	0.0149	P	10.7	0.9

y = 7.6906E-005 * x - 6.4740E-004
R = 0.9988
DL = 13.39 ppb
BEC = -8.418 ppb

Weight: <None>
Min Conc: <None>

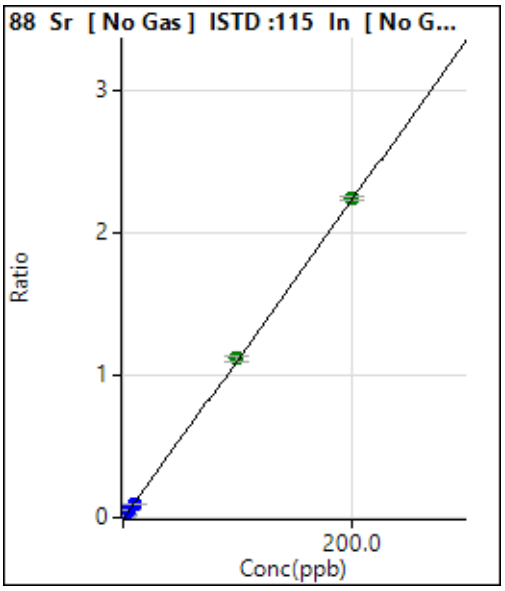


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5978.09	0.0210	P	2.4	
2	☐	2.000	-21.384	5861.38	0.0199	P	5.6	-1169.2
3	☐	5.000	-6.198	6098.18	0.0207	P	3.9	-224.0
4	☐	10.000	-10.045	6084.81	0.0205	P	2.2	-200.4
5	☐	100.000	86.340	7422.19	0.0254	P	2.6	-13.7
6	☐	200.000	208.346	9049.87	0.0318	P	5.5	4.2

y = 5.1708E-005 * x + 0.0210
R = 0.9947
DL = 29.27 ppb
BEC = 405.7 ppb

Weight: <None>
Min Conc: <None>

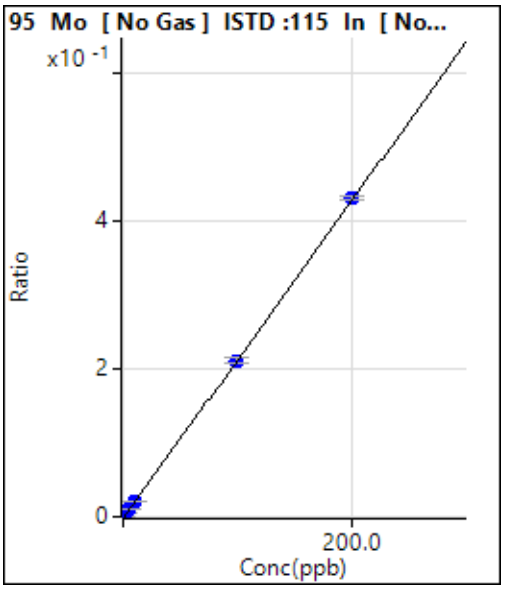
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	546.69	0.0005	P	9.2	
2	☐	2.000	1.766	22041.72	0.0203	P	2.2	-11.7
3	☐	5.000	4.509	60037.98	0.0509	P	3.0	-9.8
4	☐	10.000	8.456	112859.20	0.0951	P	1.3	-15.4
5	☐	100.000	99.649	1223557.59	1.1148	A	3.3	-0.4
6	☐	200.000	200.267	2379611.89	2.2400	A	1.7	0.1

y = 0.0112 * x + 5.1424E-004
R = 1.0000
DL = 0.01272 ppb
BEC = 0.04599 ppb

Weight: <None>
Min Conc: <None>

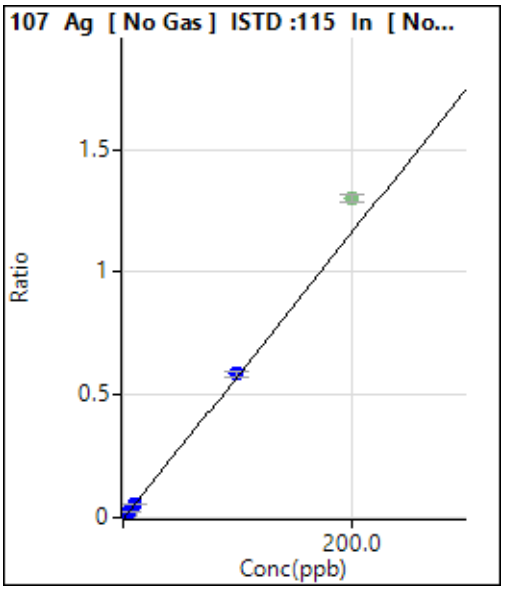


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	86.6	
2	☐	2.000	1.899	4464.16	0.0041	P	1.3	-5.0
3	☐	5.000	4.351	11054.78	0.0094	P	5.6	-13.0
4	☐	10.000	9.095	23247.31	0.0196	P	0.6	-9.0
5	☐	100.000	98.509	232519.11	0.2119	P	4.0	-1.5
6	☐	200.000	200.808	458857.01	0.4319	P	0.7	0.4

y = 0.0022 * x + 1.8921E-005
R = 1.0000
DL = 0.02285 ppb
BEC = 0.008796 ppb

Weight: <None>
Min Conc: <None>

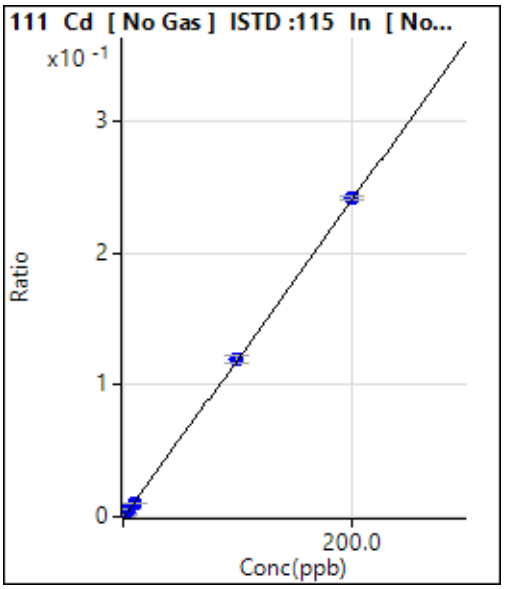
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	650.03	0.0006	P	7.8	
2	☐	2.000	1.941	12976.54	0.0119	P	3.1	-3.0
3	☐	5.000	4.524	31811.93	0.0270	P	2.5	-9.5
4	☐	10.000	9.123	63870.56	0.0538	P	0.7	-8.8
5	☐	100.000	100.113	641179.73	0.5843	P	3.8	0.1
6	☑	200.000		1381627.32	1.3006	A	2.1	

y = 0.0058 * x + 6.1152E-004
R = 1.0000
DL = 0.02442 ppb
BEC = 0.1049 ppb

Weight: <None>
Min Conc: <None>

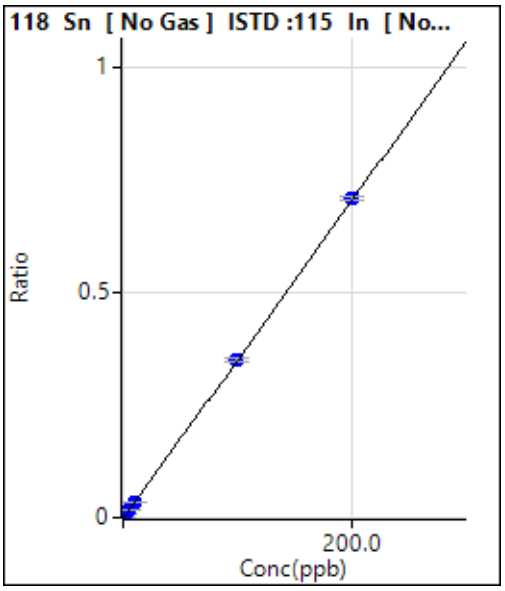


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.822	2396.93	0.0022	P	11.0	-8.9
3	☐	5.000	4.572	6511.73	0.0055	P	3.0	-8.6
4	☐	10.000	8.913	12773.06	0.0108	P	2.1	-10.9
5	☐	100.000	99.005	131086.48	0.1194	P	3.8	-1.0
6	☐	200.000	200.564	257048.49	0.2420	P	1.1	0.3

y = 0.0012 * x + 6.2649E-006
R = 1.0000
DL = 0.01349 ppb
BEC = 0.005193 ppb

Weight: <None>
Min Conc: <None>

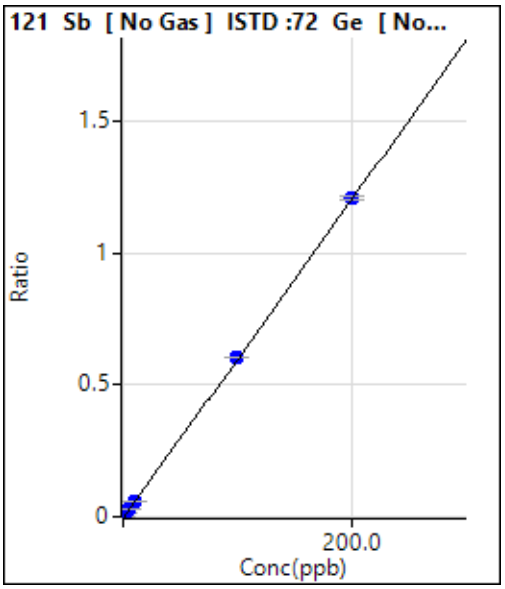
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.08	0.0011	P	8.4	
2	☐	2.000	1.972	8783.07	0.0081	P	1.1	-1.4
3	☐	5.000	4.359	19471.41	0.0165	P	0.6	-12.8
4	☐	10.000	8.959	38917.93	0.0328	P	1.7	-10.4
5	☐	100.000	98.962	385279.17	0.3510	P	3.4	-1.0
6	☐	200.000	200.588	754690.04	0.7104	P	0.7	0.3

y = 0.0035 * x + 0.0011
R = 1.0000
DL = 0.07837 ppb
BEC = 0.3116 ppb

Weight: <None>
Min Conc: <None>

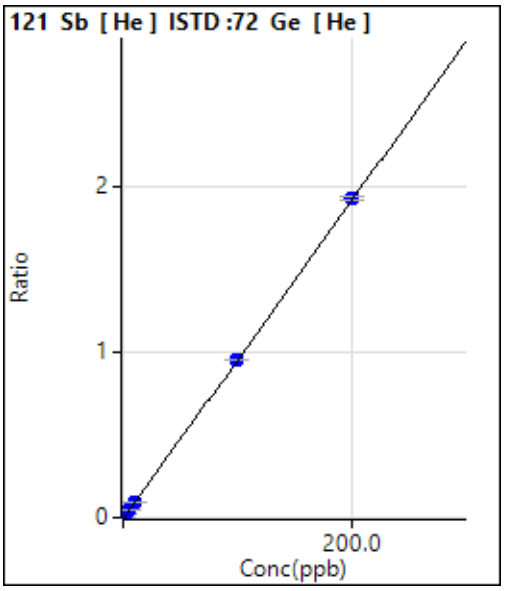


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	363.35	0.0004	P	22.2	
2	☐	2.000	1.926	10791.31	0.0120	P	4.2	-3.7
3	☐	5.000	4.795	26841.05	0.0293	P	2.2	-4.1
4	☐	10.000	9.720	53967.66	0.0591	P	0.6	-2.8
5	☐	100.000	99.844	539271.95	0.6029	P	0.6	-0.2
6	☐	200.000	200.098	1057720.85	1.2079	P	0.7	0.0

y = 0.0060 * x + 4.1282E-004
R = 1.0000
DL = 0.04548 ppb
BEC = 0.06841 ppb

Weight: <None>
Min Conc: <None>

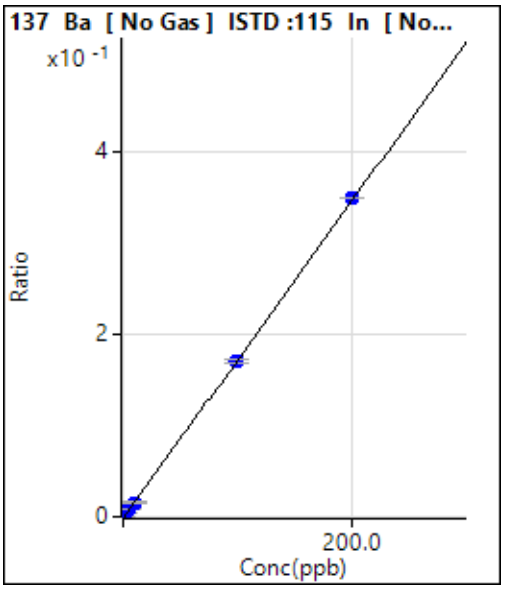
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0009	P	36.9	
2	☐	2.000	1.901	5651.32	0.0192	P	2.5	-4.9
3	☐	5.000	4.747	13717.39	0.0465	P	1.7	-5.1
4	☐	10.000	9.436	27205.20	0.0915	P	0.7	-5.6
5	☐	100.000	99.125	277821.51	0.9523	P	0.6	-0.9
6	☐	200.000	200.473	548641.67	1.9250	P	0.8	0.2

y = 0.0096 * x + 9.1294E-004
R = 1.0000
DL = 0.1052 ppb
BEC = 0.09512 ppb

Weight: <None>
Min Conc: <None>

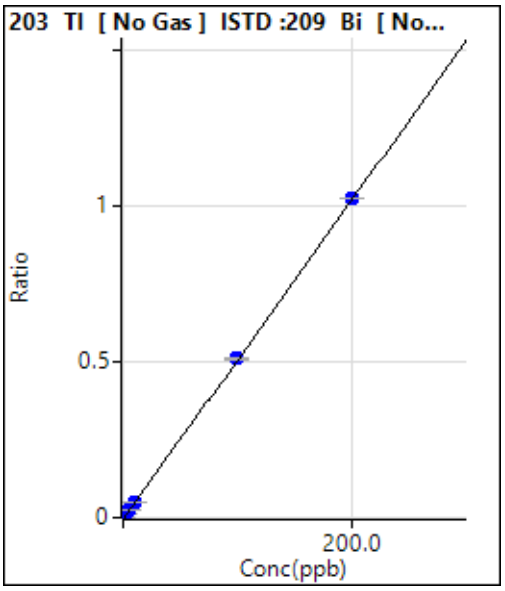


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.00	0.0001	P	54.3	
2	☐	2.000	1.946	3817.31	0.0035	P	3.1	-2.7
3	☐	5.000	4.437	9243.50	0.0078	P	4.3	-11.3
4	☐	10.000	8.950	18636.96	0.0157	P	3.0	-10.5
5	☐	100.000	98.095	187481.52	0.1708	P	3.3	-1.9
6	☐	200.000	201.020	371723.32	0.3499	P	0.4	0.5

y = 0.0017 * x + 1.2276E-004
R = 0.9999
DL = 0.115 ppb
BEC = 0.07055 ppb

Weight: <None>
Min Conc: <None>

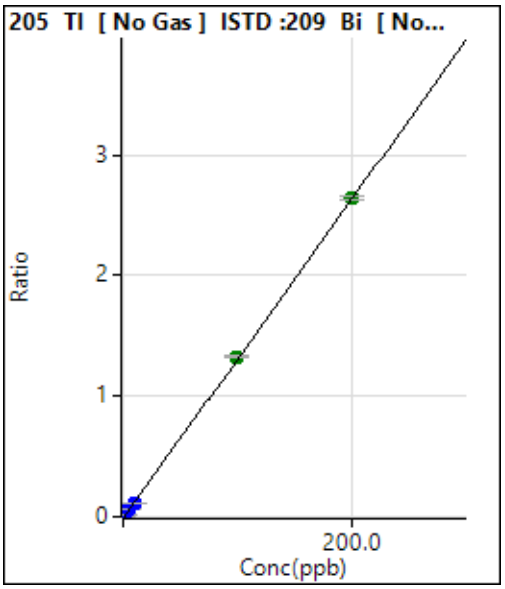
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	83.33	0.0001	P	45.4	
2	☐	2.000	1.939	10898.26	0.0100	P	3.0	-3.0
3	☐	5.000	4.692	26605.35	0.0241	P	1.7	-6.2
4	☐	10.000	9.670	55027.94	0.0495	P	1.7	-3.3
5	☐	100.000	99.603	553811.97	0.5093	P	0.4	-0.4
6	☐	200.000	200.223	1098394.77	1.0237	P	0.4	0.1

y = 0.0051 * x + 7.8411E-005
R = 1.0000
DL = 0.02088 ppb
BEC = 0.01534 ppb

Weight: <None>
Min Conc: <None>

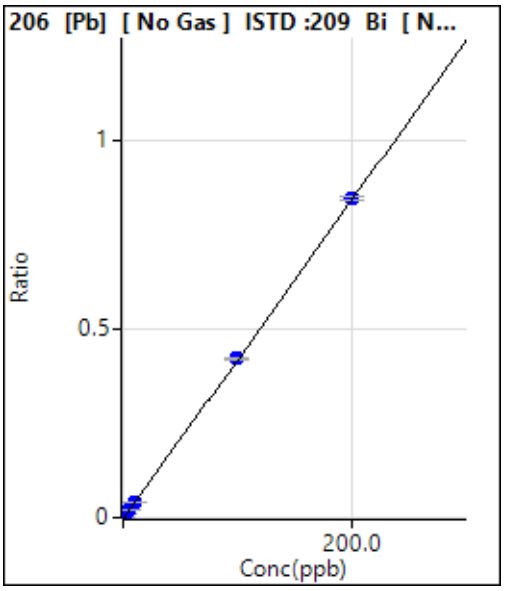


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260.01	0.0002	P	13.8	
2	☐	2.000	1.771	25793.72	0.0236	P	1.9	-11.5
3	☐	5.000	4.405	64643.90	0.0585	P	1.8	-11.9
4	☐	10.000	8.896	130928.72	0.1178	P	1.3	-11.0
5	☐	100.000	100.333	1442239.09	1.3262	A	0.7	0.3
6	☐	200.000	199.906	2835298.50	2.6422	A	1.4	0.0

y = 0.0132 * x + 2.4470E-004
R = 1.0000
DL = 0.007651 ppb
BEC = 0.01852 ppb

Weight: <None>
Min Conc: <None>

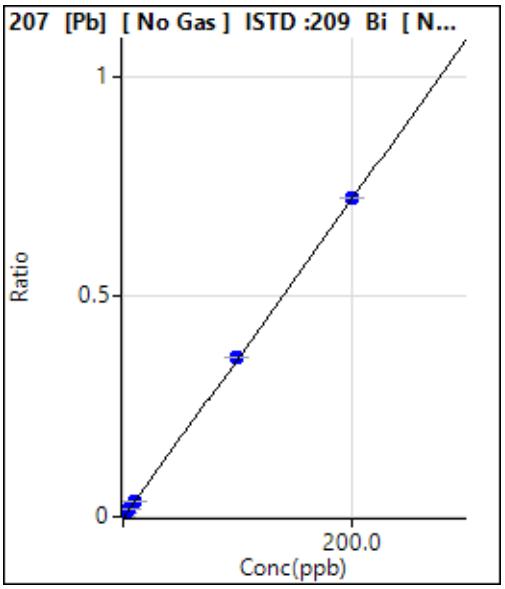
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	390.02	0.0004	P	11.9	
2	☐	2.000	1.968	9493.79	0.0087	P	0.9	-1.6
3	☐	5.000	4.820	22981.48	0.0208	P	2.1	-3.6
4	☐	10.000	9.618	45687.35	0.0411	P	2.6	-3.8
5	☐	100.000	99.592	459195.54	0.4223	P	0.4	-0.4
6	☐	200.000	200.228	910503.61	0.8486	P	0.8	0.1

y = 0.0042 * x + 3.6711E-004
R = 1.0000
DL = 0.03081 ppb
BEC = 0.08666 ppb

Weight: <None>
Min Conc: <None>

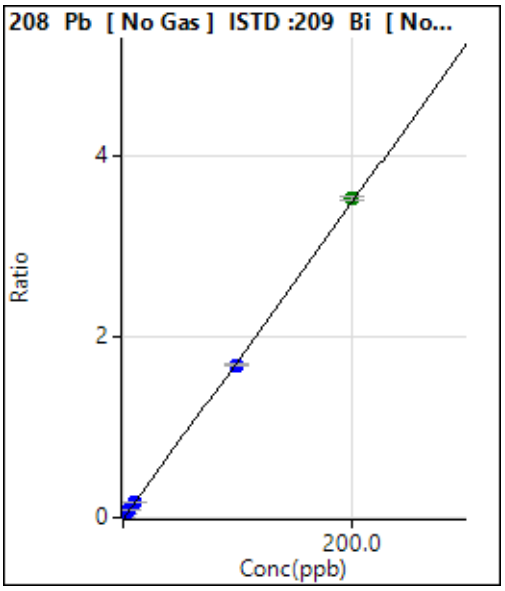


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	310.01	0.0003	P	11.1	
2	☐	2.000	1.955	8039.41	0.0074	P	2.8	-2.2
3	☐	5.000	4.776	19442.19	0.0176	P	3.7	-4.5
4	☐	10.000	9.521	38626.70	0.0348	P	2.9	-4.8
5	☐	100.000	100.149	394588.86	0.3628	P	0.3	0.1
6	☐	200.000	199.955	777014.99	0.7241	P	0.4	0.0

y = 0.0036 * x + 2.9176E-004
R = 1.0000
DL = 0.02677 ppb
BEC = 0.0806 ppb

Weight: <None>
Min Conc: <None>

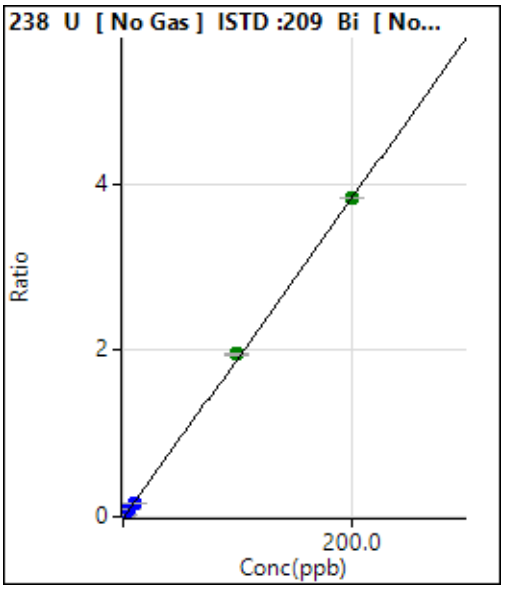
Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1806.77	0.0017	P	9.4	
2	☐	2.000	1.840	36975.29	0.0339	P	2.6	-8.0
3	☐	5.000	4.624	91346.61	0.0826	P	1.7	-7.5
4	☐	10.000	9.247	181722.84	0.1635	P	1.4	-7.5
5	☐	100.000	96.337	1835045.95	1.6874	P	0.7	-3.7
6	☐	200.000	201.880	3792152.63	3.5343	A	0.9	0.9

y = 0.0175 * x + 0.0017
R = 0.9998
DL = 0.02748 ppb
BEC = 0.09719 ppb

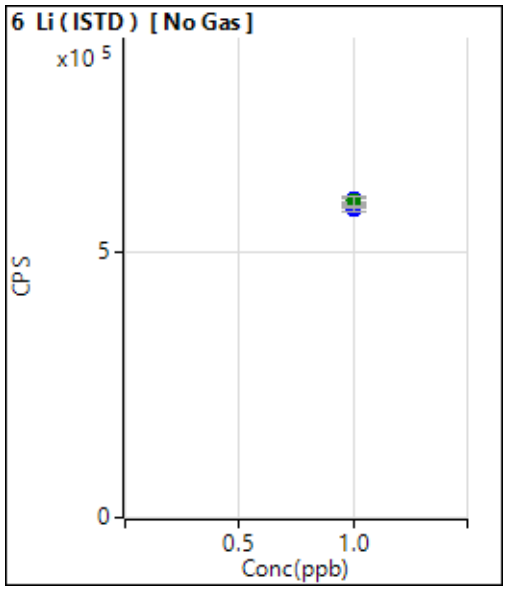
Weight: <None>
Min Conc: <None>



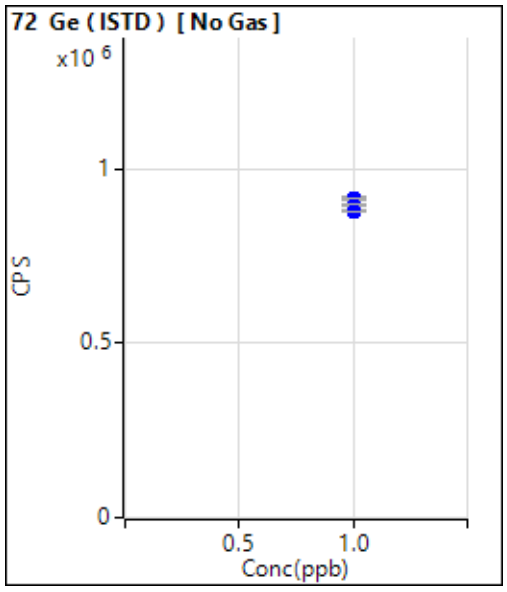
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	43.3	
2	☐	2.000	1.739	36464.68	0.0334	P	1.6	-13.1
3	☐	5.000	4.461	94795.56	0.0857	P	1.9	-10.8
4	☐	10.000	8.954	191259.99	0.1721	P	1.0	-10.5
5	☐	100.000	101.548	2122369.40	1.9517	A	1.0	1.5
6	☐	200.000	199.294	4109980.57	3.8303	A	0.6	-0.4

y = 0.0192 * x + 1.2550E-005
R = 0.9999
DL = 0.0008486 ppb
BEC = 0.000653 ppb

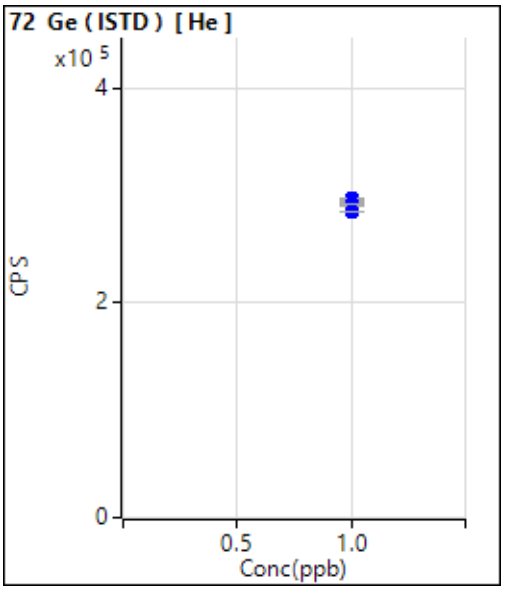
Weight: <None>
Min Conc: <None>



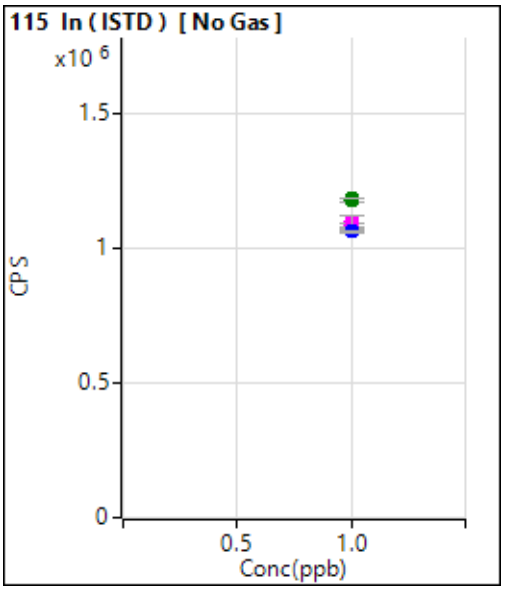
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		579730.97		P	0.8	
2	☐	1.000		591607.00		P	0.4	
3	☐	1.000		600682.49		P	0.2	
4	☐	1.000		601569.39		P	0.1	
5	☐	1.000		578595.56		P	1.4	
6	☐	1.000		597498.66		A	3.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		880231.97		P	0.3	
2	☐	1.000		896698.53		P	0.3	
3	☐	1.000		914660.95		P	1.0	
4	☐	1.000		913650.06		P	0.6	
5	☐	1.000		894402.64		P	1.0	
6	☐	1.000		875652.64		P	0.5	

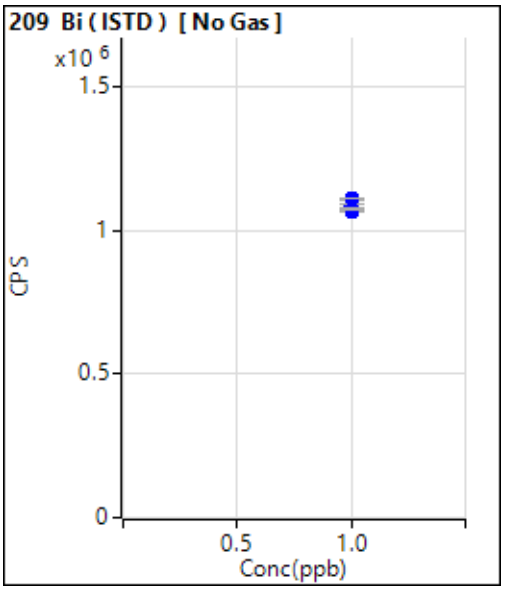


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		284935.68		P	0.4	
2	☐	1.000		294953.58		P	0.2	
3	☐	1.000		295174.68		P	0.2	
4	☐	1.000		297392.47		P	0.5	
5	☐	1.000		291738.45		P	0.6	
6	☐	1.000		285009.21		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062541.78		P	0.9	
2	☐	1.000		1087771.37		M	1.2	
3	☐	1.000		1178962.77		A	1.2	
4	☐	1.000		1187157.58		A	0.5	
5	☐	1.000		1098599.80		M	4.4	
6	☐	1.000		1062301.36		P	0.6	

Calibration for 020_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1062489.72		P	0.1	
2	☐	1.000		1090754.44		P	0.4	
3	☐	1.000		1105631.68		P	0.5	
4	☐	1.000		1111356.65		P	0.1	
5	☐	1.000		1087495.79		P	1.3	
6	☐	1.000		1073017.12		P	0.8	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	021LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:55:25-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.584	1.584	4.21	47819	0.00	2	
Be	9	1	No Gas	1.931	1.931	2.05	3149	0.06	2	
V	51	2	He	1.796	1.796	4.18	5021	0.04	2	
Cr	52	2	He	1.867	1.867	3.68	5821	0.03	2	
Fe	56	2	He	188.980	188.980	1.00	487544	0.04	200	
Se	78	2	He	1.390	1.390	30.06	397	0.35	2	NewName Main CR1 Failed
As	75	2	He	1.896	1.896	2.52	802	0.24	2	
Ca	44	2	He	173.569	173.569	7.69	3327	5.22	200	
Na	23	2	He	149.861	149.861	3.14	236268	0.06	200	
Mg	24	2	He	190.281	190.281	1.80	52499	0.36	200	
K	39	2	He	170.919	170.919	2.03	129113	0.13	200	
Mn	55	2	He	1.990	1.990	3.78	4091	0.05	2	
Co	59	2	He	1.934	1.934	3.88	7576	0.03	2	
Ni	60	2	He	1.861	1.861	6.42	2020	0.09	2	
Cu	63	2	He	2.020	2.020	1.63	6171	0.03	2	
Zn	66	2	He	2.130	2.130	13.40	5701	0.04	2	
Al	27	2	He	1.696	1.696	25.46	677	0.25	2	
B	11	1	No Gas	42.362	42.362	6.91	50504	0.08	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.724	1.724	9.73	26469	0.01	2	
Si	28	1	No Gas	12.943	12.943	7.02	215220	0.01	10	
Ag	107	1	No Gas	1.901	1.901	4.85	12720	0.01	2	
Cd	111	1	No Gas	1.900	1.900	2.08	2504	0.08	2	
Sr	88	1	No Gas	1.758	1.758	3.09	21952	0.01	2	
Mo	95	1	No Gas	1.877	1.877	8.41	4404	0.04	2	
Sn	118	1	No Gas	1.995	1.995	9.83	8863	0.02	2	
Sb	121	1	No Gas	2.025	2.025	1.98	11018	0.02	2	
Ba	137	1	No Gas	1.821	1.821	9.65	3574	0.05	2	
Tl	205	1	No Gas	1.786	1.786	2.67	25690	0.01	2	
Tl	203	1	No Gas	1.990	1.990	2.92	11048	0.02	2	
Pb	208	1	No Gas	1.845	1.845	1.56	36628	0.01	2	
U	238	1	No Gas	1.813	1.813	1.00	37565	0.00	2	
Ca	43	2	He	199.445	199.445	4.76	207	96.50	200	
Sb	121	2	He	2.016	2.016	3.93	5698	0.04	2	
Ti	47	2	He	1.645	1.645	20.87	153	1.07	200	
Cu	63	1	No Gas	1.862	1.862	7.16	10978	0.02	2	
Se	82	1	No Gas	2.447	2.447	410.53	-399	-0.61	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585645	2.09	579731	101.02	70	120	
Ge	72	2	He	281146	2.20	284936	98.67	70	120	
Ge	72	1	No Gas	872384	1.87	880232	99.11	70	120	
In	115	1	No Gas	1088834	4.75	1062542	102.47	70	120	
Bi	209	1	No Gas	1077526	1.99	1062490	101.42	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	022LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:57:25-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.425	4.425	1.35	70016	0.01	5	
Be	9	1	No Gas	5.027	5.027	2.43	8187	0.06	5	
V	51	2	He	4.685	4.685	3.91	11712	0.04	5	
Cr	52	2	He	4.836	4.836	2.25	13710	0.04	5	
Fe	56	2	He	506.914	506.914	1.82	1308327	0.04	500	
Se	78	2	He	3.487	3.487	21.58	476	0.73	5	NewName2 Main CR1 Failed
As	75	2	He	4.694	4.694	4.08	1887	0.25	5	
Ca	44	2	He	499.261	499.261	2.81	8293	6.02	500	
Na	23	2	He	422.091	422.091	2.46	374686	0.11	500	
Mg	24	2	He	469.183	469.183	0.46	130447	0.36	500	
K	39	2	He	458.184	458.184	0.30	220486	0.21	500	
Mn	55	2	He	4.696	4.696	3.55	9477	0.05	5	
Co	59	2	He	4.828	4.828	2.64	19070	0.03	5	
Ni	60	2	He	4.658	4.658	8.91	4834	0.10	5	
Cu	63	2	He	4.821	4.821	1.03	13774	0.04	5	
Zn	66	2	He	4.847	4.847	3.80	7235	0.07	5	
Al	27	2	He	5.601	5.601	16.77	1263	0.44	5	
B	11	1	No Gas	33.368	33.368	0.81	43841	0.08	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	5.317	5.317	2.64	49485	0.01	5	
Si	28	1	No Gas	27.566	27.566	3.02	258524	0.01	25	
Ag	107	1	No Gas	4.653	4.653	3.79	30893	0.02	5	
Cd	111	1	No Gas	4.541	4.541	6.58	6112	0.07	5	
Sr	88	1	No Gas	4.669	4.669	3.04	58729	0.01	5	
Mo	95	1	No Gas	4.820	4.820	8.01	11552	0.04	5	
Sn	118	1	No Gas	4.662	4.662	0.38	19608	0.02	5	
Sb	121	1	No Gas	4.846	4.846	1.98	26257	0.02	5	
Ba	137	1	No Gas	4.706	4.706	5.08	9253	0.05	5	
Tl	205	1	No Gas	4.513	4.513	1.95	65170	0.01	5	
Tl	203	1	No Gas	4.802	4.802	0.80	26799	0.02	5	
Pb	208	1	No Gas	4.543	4.543	1.82	88338	0.01	5	
U	238	1	No Gas	4.470	4.470	1.18	93495	0.00	5	
Ca	43	2	He	379.812	379.812	13.73	370	102.65	500	
Sb	121	2	He	4.967	4.967	3.03	13804	0.04	5	
Ti	47	2	He	5.140	5.140	10.12	463	1.11	5	
Cu	63	1	No Gas	4.836	4.836	2.28	25584	0.02	5	
Se	82	1	No Gas	9.259	9.259	97.39	51	18.07	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	591378	1.88	579731	102.01	70	120	
Ge	72	2	He	283942	2.74	284936	99.65	70	120	
Ge	72	1	No Gas	885182	2.13	880232	100.56	70	120	
In	115	1	No Gas	1114909	4.38	1062542	104.93	70	120	
Bi	209	1	No Gas	1088136	1.78	1062490	102.41	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	023_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T11:59:24-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.112	-26.0	34554	2.7	0.5	
Be	9	1	No Gas	0.004	754.6	63	77.9	0.5	
V	51	2	He	-0.033	-95.6	839	7.8	2.5	
Cr	52	2	He	0.012	153.7	943	5.4	2.5	
Fe	56	2	He	1.065	1.5	9877	3.0	100	
Se	78	2	He	-0.864	-92.6	307	6.2	1	
As	75	2	He	-0.003	-2511.9	77	30.1	2.5	
Ca	44	2	He	-18.078	-20.8	437	15.2	100	
Na	23	2	He	-15.319	-70.0	149868	0.7	100	
Mg	24	2	He	0.517	26.1	323	12.9	100	
K	39	2	He	-6.626	-93.6	71759	0.9	100	
Mn	55	2	He	0.033	20.7	260	7.7	2.5	
Co	59	2	He	0.009	27.5	50	20.0	2.5	
Ni	60	2	He	-0.024	-197.1	150	33.3	2.5	
Cu	63	2	He	-0.013	-609.8	733	28.9	1	
Zn	66	2	He	-0.602	-0.8	4104	2.8	2.5	
Al	27	2	He	-0.941	-51.8	280	22.3	5	
B	11	1	No Gas	6.983	6.7	22380	2.9	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.599	-1.9	11875	3.2	5	
Si	28	1	No Gas	2.403	85.1	183819	0.5	10	
Ag	107	1	No Gas	-0.014	-174.8	563	31.8	2.5	
Cd	111	1	No Gas	0.010	125.9	20	86.6	1	
Sr	88	1	No Gas	-0.003	-283.9	513	23.1	2.5	
Mo	95	1	No Gas	0.017	37.9	60	28.9	2.5	
Sn	118	1	No Gas	0.092	37.0	1517	9.3	5	
Sb	121	1	No Gas	0.045	17.7	590	9.0	2.5	
Ba	137	1	No Gas	-0.011	-143.9	110	31.5	2.5	
Tl	205	1	No Gas	0.000	1960.6	267	43.5	1	
Tl	203	1	No Gas	0.010	117.4	140	49.5	1	
Pb	208	1	No Gas	-0.029	-40.8	1273	19.0	2.5	
U	238	1	No Gas	0.009	167.0	203	156.3	2.5	
Ca	43	2	He	-6.257	-426.3	23	99.0	100	
Sb	121	2	He	-0.009	-323.8	227	36.7	2.5	
Ti	47	2	He	-0.074	-92.0	3	173.2	2.5	
Se	82	1	No Gas	-4.099	-207.3	-825	-67.7	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	578437	2.13	579731	99.78	70	120	
Ge	72	2	He	272864	2.79	284936	95.76	70	120	
Ge	72	1	No Gas	859213	2.65	880232	97.61	70	120	
In	115	1	No Gas	1062394	3.65	1062542	99.99	70	120	
Bi	209	1	No Gas	1060780	2.57	1062490	99.84	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	024LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:05:40-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	009CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.299	4.299	1.60	71261	0.01	5	
Be	9	1	No Gas	4.882	4.882	3.36	8211	0.06	5	
V	51	2	He	4.659	4.659	3.55	11875	0.04	5	
Cr	52	2	He	4.640	4.640	1.27	13464	0.03	5	
Fe	56	2	He	495.413	495.413	2.70	1303805	0.04	500	
Se	78	2	He	3.934	3.934	18.46	503	0.78	5	
As	75	2	He	4.762	4.762	9.34	1951	0.24	5	
Ca	44	2	He	468.493	468.493	6.08	7982	5.87	500	
Na	23	2	He	372.426	372.426	2.18	356950	0.10	500	
Mg	24	2	He	464.750	464.750	2.00	131780	0.35	500	
K	39	2	He	451.014	451.014	2.63	222600	0.20	500	
Mn	55	2	He	4.556	4.556	4.41	9380	0.05	5	
Co	59	2	He	4.632	4.632	4.83	18650	0.02	5	
Ni	60	2	He	4.733	4.733	4.94	5004	0.09	5	
Cu	63	2	He	4.601	4.601	1.95	13440	0.03	5	
Zn	66	2	He	4.556	4.556	7.55	7219	0.06	5	
Al	27	2	He	5.576	5.576	9.63	1283	0.43	5	
B	11	1	No Gas	21.440	21.440	3.35	35454	0.06	25	
Al	27	1	No Gas	5.320	5.320	1.81	50671	0.01	5	
Si	28	1	No Gas	24.445	24.445	8.46	255753	0.01	25	
Ag	107	1	No Gas	4.492	4.492	2.01	30690	0.01	5	
Cd	111	1	No Gas	4.528	4.528	5.89	6272	0.07	5	
Sr	88	1	No Gas	4.558	4.558	1.45	58951	0.01	5	
Mo	95	1	No Gas	4.519	4.519	1.17	11155	0.04	5	
Sn	118	1	No Gas	4.511	4.511	4.16	19508	0.02	5	
Sb	121	1	No Gas	4.741	4.741	1.53	26287	0.02	5	
Ba	137	1	No Gas	4.421	4.421	5.92	8933	0.05	5	
Tl	205	1	No Gas	4.327	4.327	1.83	64345	0.01	5	
Tl	203	1	No Gas	4.591	4.591	0.43	26385	0.02	5	
Pb	208	1	No Gas	4.401	4.401	1.05	88183	0.00	5	
U	238	1	No Gas	4.285	4.285	1.58	92288	0.00	5	
Ca	43	2	He	452.233	452.233	41.95	443	102.00	500	
Sb	121	2	He	4.691	4.691	0.61	13307	0.04	5	
Ti	47	2	He	4.453	4.453	14.27	410	1.09	5	
Cu	63	1	No Gas	4.720	4.720	3.57	25598	0.02	5	
Se	82	1	No Gas	4.861	4.861	92.34	-244	-2.00	5	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	610263	3.43	579731	105.27	70	120	
Ge	72	2	He	289656	1.47	284936	101.66	70	120	
Ge	72	1	No Gas	906092	3.55	880232	102.94	70	120	

Sample Report

In	115	1	No Gas	1145306	5.19	1062542	107.79	70	120	
Bi	209	1	No Gas	1120309	3.59	1062490	105.44	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	025ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:07:50-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-59.1	36033	1.9	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.011	-43.3	42	18.3	0	ICSA Main CR1 Failed
V	51	2	He	-0.007	-128.1	967	3.2	0	ICSA Main CR1 Failed
Cr	52	2	He	1.193	3.1	4241	2.3	0	ICSA Main CR1 Failed
Fe	56	2	He	98327.225	0.3	260949103	1.4	0	
Se	78	2	He	-1.057	-117.7	324	13.5	0	ICSA Main CR1 Failed
As	75	2	He	0.203	14.8	164	6.5	0	ICSA Main CR1 Failed
Ca	44	2	He	102250.955	0.9	1604264	2.1	0	
Na	23	2	He	100542.189	0.6	52184261	1.9	0	
Mg	24	2	He	99377.474	1.0	28541959	2.3	0	
K	39	2	He	98754.877	0.5	32123525	1.6	0	
Mn	55	2	He	0.478	12.5	1190	11.6	0	ICSA Main CR1 Failed
Co	59	2	He	0.234	18.1	973	17.1	0	ICSA Main CR1 Failed
Ni	60	2	He	0.867	21.8	1080	17.1	0	ICSA Main CR1 Failed
Cu	63	2	He	0.155	31.8	1257	10.3	0	ICSA Main CR1 Failed
Zn	66	2	He	2.457	15.7	6138	2.3	0	ICSA Main CR1 Failed
Al	27	2	He	102968.629	0.9	15774626	2.2	0	
B	11	1	No Gas	1.559	48.6	19053	3.1	0	
Al	27	1	No Gas	97408.423	1.4	630717511	0.9	0	
Si	28	1	No Gas	22.429	2.4	251395	0.6	0	
Ag	107	1	No Gas	0.132	18.3	1603	9.4	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.256	1.0	1770	2.0	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.035	4.1	53055	3.2	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2059.047	0.4	5150101	1.0	0	
Sn	118	1	No Gas	0.229	14.5	2224	5.2	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.338	11.6	2234	9.2	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.620	4.5	1397	4.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.006	135.8	357	35.1	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.015	111.4	170	56.1	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.140	13.0	4507	8.4	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.014	56.1	297	54.1	0	ICSA Main CR1 Failed
Ca	43	2	He	93664.778	0.5	86906	1.3	0	
Sb	121	2	He	0.256	7.8	990	4.4	0	ICSA Main CR1 Failed
Ti	47	2	He	2023.583	1.4	184381	2.1	0	
Se	82	1	No Gas	5.936	132.8	-175	-315.4	0	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	606789	0.22	579731	104.67	70	120	
Ge	72	2	He	293744	1.34	284936	103.09	70	120	
Ge	72	1	No Gas	910343	0.54	880232	103.42	70	120	
In	115	1	No Gas	1162859	1.09	1062542	109.44	70	120	
Bi	209	1	No Gas	1086476	0.80	1062490	102.26	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	026ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:09:51-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.748	2.673	812894	2.40	100	102.7	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	101.253	1.472	162016	1.55	100	101.3	80	120	
V	51	2	He	98.779	0.790	233831	2.04	100	98.8	80	120	
Cr	52	2	He	98.209	1.047	267217	2.14	100	98.2	80	120	
Fe	56	2	He	102150.083	1.182	269105703	2.28	100	102150.1	80	120	ICSB Main CR1 Failed
Se	78	2	He	97.989	2.351	3972	2.78	100	98.0	80	120	
As	75	2	He	99.476	1.303	39369	2.03	100	99.5	80	120	
Ca	44	2	He	106212.212	2.172	1654220	3.36	100	106212.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	104335.825	0.640	53746148	1.92	100	104335.8	80	120	ICSB Main CR1 Failed
Mg	24	2	He	103744.444	0.657	29574019	1.75	100	103744.4	80	120	ICSB Main CR1 Failed
K	39	2	He	102762.077	0.891	33177840	2.08	100	102762.1	80	120	ICSB Main CR1 Failed
Mn	55	2	He	97.787	1.034	198415	2.24	100	97.8	80	120	
Co	59	2	He	96.657	0.159	391558	1.30	100	96.7	80	120	
Ni	60	2	He	95.425	0.233	98068	1.52	100	95.4	80	120	
Cu	63	2	He	95.640	0.644	265104	1.76	100	95.6	80	120	
Zn	66	2	He	96.157	1.086	58463	1.67	100	96.2	80	120	
Al	27	2	He	97163.884	0.754	14774813	1.94	100	97163.9	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	494.860	1.190	406048	1.01	100	494.9	80	120	
Al	27	1	No Gas	91018.474	0.253	580262418	0.81	100	91018.5	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	522.576	1.060	1637735	0.78	100	522.6	80	120	
Ag	107	1	No Gas	96.116	1.549	602133	0.87	100	96.1	80	120	
Cd	111	1	No Gas	99.146	1.807	128390	1.05	100	99.1	80	120	
Sr	88	1	No Gas	105.361	1.638	1265123	0.82	100	105.4	80	120	
Mo	95	1	No Gas	2178.144	1.493	5028621	0.67	100	2178.1	80	120	
Sn	118	1	No Gas	100.025	1.681	380824	0.80	100	100.0	80	120	
Sb	121	1	No Gas	97.448	0.876	527404	0.54	100	97.4	80	120	
Ba	137	1	No Gas	99.482	1.645	185939	0.96	100	99.5	80	120	
Tl	205	1	No Gas	99.968	2.686	1416311	2.32	100	100.0	80	120	
Tl	203	1	No Gas	99.090	1.278	543050	0.82	100	99.1	80	120	
Pb	208	1	No Gas	95.630	0.484	1795470	0.24	100	95.6	80	120	
U	238	1	No Gas	102.406	0.203	2109658	0.36	100	102.4	80	120	
Ca	43	2	He	100412.016	2.978	92499	4.28	100	100412.0	80	120	ICSB Main CR1 Failed
Sb	121	2	He	97.994	1.008	274513	2.05	100	98.0	80	120	
Ti	47	2	He	2005.693	1.601	181416	2.81	100	2005.7	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	95.031	0.592	469256	1.15	100	95.0	80	120	
Se	82	1	No Gas	103.326	21.002	6543	22.91	100	103.3	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585020	0.16	579731	100.91	70	120	
Ge	72	2	He	291570	1.29	284936	102.33	70	120	
Ge	72	1	No Gas	896272	0.77	880232	101.82	70	120	
In	115	1	No Gas	1073423	0.89	1062542	101.02	70	120	
Bi	209	1	No Gas	1071889	0.48	1062490	100.88	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	029_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:27:11-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	106.450	4.724	879521	0.56	100	106.4	90	110	
Be	9	1	No Gas	104.015	3.567	174135	1.68	100	104.0	90	110	
V	51	2	He	100.971	0.130	249074	1.50	100	101.0	90	110	
Cr	52	2	He	100.477	0.505	284880	1.16	100	100.5	90	110	
Fe	56	2	He	9984.350	0.302	27419215	1.67	10000	99.8	90	110	
Se	78	2	He	104.554	3.085	4392	3.68	100	104.6	90	110	
As	75	2	He	105.109	1.541	43354	2.81	100	105.1	90	110	
Ca	44	2	He	9996.877	0.414	162949	1.43	10000	100.0	90	110	
Na	23	2	He	10086.203	0.566	5572993	1.54	10000	100.9	90	110	
Mg	24	2	He	10166.691	1.571	3021024	2.93	10000	101.7	90	110	
K	39	2	He	10258.709	0.918	3525909	2.11	10000	102.6	90	110	
Mn	55	2	He	101.051	0.710	213682	2.07	100	101.1	90	110	
Co	59	2	He	100.589	0.734	424704	1.94	100	100.6	90	110	
Ni	60	2	He	101.637	1.291	108839	1.34	100	101.6	90	110	
Cu	63	2	He	101.424	0.650	292943	1.52	100	101.4	90	110	
Zn	66	2	He	101.079	1.787	63804	2.80	100	101.1	90	110	
Al	27	2	He	115.109	2.241	18699	0.88	100	115.1	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	451.796	4.453	389357	1.46	500	90.4	90	110	
Al	27	1	No Gas	107.187	0.659	720792	1.24	100	107.2	90	110	
Si	28	1	No Gas	515.199	1.354	1666400	1.34	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	96.486	2.721	660893	1.34	100	96.5	90	110	
Cd	111	1	No Gas	97.261	2.996	137707	1.51	100	97.3	90	110	
Sr	88	1	No Gas	96.533	2.694	1267462	1.57	100	96.5	90	110	
Mo	95	1	No Gas	93.934	3.452	237116	1.96	100	93.9	90	110	
Sn	118	1	No Gas	96.357	2.917	401162	1.42	100	96.4	90	110	
Sb	121	1	No Gas	102.667	0.217	572530	0.73	100	102.7	90	110	
Ba	137	1	No Gas	96.429	1.676	197088	0.69	100	96.4	90	110	
Tl	205	1	No Gas	104.481	1.707	1533285	2.25	100	104.5	90	110	
Tl	203	1	No Gas	104.883	0.764	595355	1.33	100	104.9	90	110	
Pb	208	1	No Gas	97.723	0.853	1900193	0.60	100	97.7	90	110	
U	238	1	No Gas	103.299	1.893	2203996	1.81	100	103.3	90	110	
Ca	43	2	He	9833.975	1.201	9467	0.22	10000	98.3	90	110	
Sb	121	2	He	103.104	1.057	301011	2.35	100	103.1	90	110	
Ti	47	2	He	102.557	5.103	9674	4.27	100	102.6	90	110	
Cu	63	1	No Gas	101.287	0.448	515195	0.96	100	101.3	90	110	
Se	82	1	No Gas	97.887	23.639	6360	26.33	100	97.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	612633	4.07	579731	105.68	70	120	
Ge	72	2	He	303877	1.37	284936	106.65	70	120	
Ge	72	1	No Gas	923498	0.65	880232	104.92	70	120	
In	115	1	No Gas	1173879	1.52	1062542	110.48	70	120	
Bi	209	1	No Gas	1110193	1.21	1062490	104.49	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	030_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:29:08-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.031	-38.0	35102	2.5	0.5	
Be	9	1	No Gas	-0.013	-34.1	37	20.8	0.5	
V	51	2	He	0.109	16.9	1147	5.5	2.5	
Cr	52	2	He	0.033	200.3	987	14.2	2.5	
Fe	56	2	He	0.654	26.9	8810	6.4	100	
Se	78	2	He	0.312	467.4	345	12.2	2	
As	75	2	He	-0.051	-80.5	59	27.9	2.5	
Ca	44	2	He	-18.421	-37.0	430	26.4	100	
Na	23	2	He	-4.714	-282.1	153958	0.7	100	
Mg	24	2	He	0.338	37.2	273	11.8	100	
K	39	2	He	5.683	104.1	74997	1.2	100	
Mn	55	2	He	0.000	95058.5	197	24.0	2.5	
Co	59	2	He	0.005	66.0	33	34.6	2.5	
Ni	60	2	He	-0.117	-21.7	60	44.1	2.5	
Cu	63	2	He	-0.017	-62.9	717	5.6	2	
Zn	66	2	He	-0.033	-1313.7	4377	7.9	2.5	
Al	27	2	He	-1.776	-24.4	160	34.8	5	
B	11	1	No Gas	20.233	10.4	32641	7.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.224	-9.6	8053	6.4	5	
Si	28	1	No Gas	3.880	26.3	188075	2.7	10	
Ag	107	1	No Gas	0.009	182.9	697	12.9	2.5	
Cd	111	1	No Gas	0.008	57.8	17	34.6	1	
Sr	88	1	No Gas	-0.018	-16.3	323	12.9	2.5	
Mo	95	1	No Gas	0.015	14.6	53	10.8	2.5	
Sn	118	1	No Gas	0.293	161.1	2243	78.6	5	
Sb	121	1	No Gas	0.020	51.0	460	13.2	2.5	
Ba	137	1	No Gas	-0.003	-265.1	123	12.4	2.5	
Tl	205	1	No Gas	0.001	319.9	273	15.2	1	
Tl	203	1	No Gas	0.012	61.4	150	29.1	1	
Pb	208	1	No Gas	-0.046	-9.6	953	11.0	2.5	
U	238	1	No Gas	0.006	43.0	143	35.8	2.5	
Ca	43	2	He	-6.433	-260.1	23	65.5	100	
Sb	121	2	He	-0.010	-155.3	220	15.7	2.5	
Ti	47	2	He	0.004	2737.1	10	100.0	2.5	
Cu	63	1	No Gas	-0.047	-84.9	1823	7.7	2.5	
Se	82	1	No Gas	1.131	594.1	-487	-92.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	577521	2.70	579731	99.62	70	120	
Ge	72	2	He	271186	3.51	284936	95.17	70	120	
Ge	72	1	No Gas	860304	2.67	880232	97.74	70	120	
In	115	1	No Gas	1047092	2.27	1062542	98.55	70	120	
Bi	209	1	No Gas	1056590	3.05	1062490	99.44	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:59:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.983	5.231	872727	2.28	100	103.0	90	110	
Be	9	1	No Gas	101.314	3.575	173717	1.52	100	101.3	90	110	
V	51	2	He	100.709	0.208	250387	1.37	100	100.7	90	110	
Cr	52	2	He	101.143	0.727	289034	1.64	100	101.1	90	110	
Fe	56	2	He	9928.962	0.687	27480680	1.15	10000	99.3	90	110	
Se	78	2	He	101.879	2.646	4323	2.89	100	101.9	90	110	
As	75	2	He	105.920	0.913	44025	1.09	100	105.9	90	110	
Ca	44	2	He	9906.205	0.277	162757	1.66	10000	99.1	90	110	
Na	23	2	He	10103.559	0.533	5626099	1.03	10000	101.0	90	110	
Mg	24	2	He	10140.138	1.310	3036219	0.98	10000	101.4	90	110	
K	39	2	He	10235.056	1.098	3545181	0.38	10000	102.4	90	110	
Mn	55	2	He	100.230	1.165	213585	0.46	100	100.2	90	110	
Co	59	2	He	100.761	0.230	428763	1.29	100	100.8	90	110	
Ni	60	2	He	100.661	1.629	108637	0.21	100	100.7	90	110	
Cu	63	2	He	101.581	1.005	295689	0.90	100	101.6	90	110	
Zn	66	2	He	101.913	1.126	64784	0.66	100	101.9	90	110	
Al	27	2	He	114.433	1.705	18743	2.22	100	114.4	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	461.622	6.715	387725	2.21	500	92.3	90	110	
Al	27	1	No Gas	103.974	1.514	721276	1.49	100	104.0	90	110	
Si	28	1	No Gas	502.208	1.447	1679564	1.70	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.350	1.574	677538	0.81	100	94.4	90	110	
Cd	111	1	No Gas	94.611	2.236	140434	1.43	100	94.6	90	110	
Sr	88	1	No Gas	94.062	2.766	1294657	2.02	100	94.1	90	110	
Mo	95	1	No Gas	92.031	1.885	243571	1.41	100	92.0	90	110	
Sn	118	1	No Gas	94.002	1.597	410328	0.79	100	94.0	90	110	
Sb	121	1	No Gas	101.791	0.354	585177	0.70	100	101.8	90	110	
Ba	137	1	No Gas	93.661	1.579	200672	0.79	100	93.7	90	110	
Tl	205	1	No Gas	105.016	1.054	1600516	0.89	100	105.0	90	110	
Tl	203	1	No Gas	103.428	0.434	609757	0.90	100	103.4	90	110	
Pb	208	1	No Gas	96.664	0.756	1952278	1.17	100	96.7	90	110	
U	238	1	No Gas	100.185	1.459	2220098	1.40	100	100.2	90	110	
Ca	43	2	He	9954.162	2.289	9657	1.04	10000	99.5	90	110	
Sb	121	2	He	102.642	0.454	302003	1.42	100	102.6	90	110	
Ti	47	2	He	103.022	1.034	9797	1.38	100	103.0	90	110	
Cu	63	1	No Gas	99.794	0.847	523298	0.63	100	99.8	90	110	
Se	82	1	No Gas	101.521	8.058	6817	8.94	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627502	4.31	579731	108.24	70	120	
Ge	72	2	He	306276	1.41	284936	107.49	70	120	
Ge	72	1	No Gas	952017	0.47	880232	108.16	70	120	
In	115	1	No Gas	1230430	0.81	1062542	115.80	70	120	
Bi	209	1	No Gas	1153075	1.33	1062490	108.53	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	041_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T12:59:05-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.983	5.231	872727	2.28	100	103.0	90	110	
Be	9	1	No Gas	101.314	3.575	173717	1.52	100	101.3	90	110	
V	51	2	He	100.709	0.208	250387	1.37	100	100.7	90	110	
Cr	52	2	He	101.143	0.727	289034	1.64	100	101.1	90	110	
Fe	56	2	He	9928.962	0.687	27480680	1.15	10000	99.3	90	110	
Se	78	2	He	101.879	2.646	4323	2.89	100	101.9	90	110	
As	75	2	He	105.920	0.913	44025	1.09	100	105.9	90	110	
Ca	44	2	He	9906.205	0.277	162757	1.66	10000	99.1	90	110	
Na	23	2	He	10103.559	0.533	5626099	1.03	10000	101.0	90	110	
Mg	24	2	He	10140.138	1.310	3036219	0.98	10000	101.4	90	110	
K	39	2	He	10235.056	1.098	3545181	0.38	10000	102.4	90	110	
Mn	55	2	He	100.230	1.165	213585	0.46	100	100.2	90	110	
Co	59	2	He	100.761	0.230	428763	1.29	100	100.8	90	110	
Ni	60	2	He	100.661	1.629	108637	0.21	100	100.7	90	110	
Cu	63	2	He	101.581	1.005	295689	0.90	100	101.6	90	110	
Zn	66	2	He	101.913	1.126	64784	0.66	100	101.9	90	110	
Al	27	2	He	114.433	1.705	18743	2.22	100	114.4	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	461.622	6.715	387725	2.21	500	92.3	90	110	
Al	27	1	No Gas	103.974	1.514	721276	1.49	100	104.0	90	110	
Si	28	1	No Gas	502.208	1.447	1679564	1.70	5000	10.0	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	94.350	1.574	677538	0.81	100	94.4	90	110	
Cd	111	1	No Gas	94.611	2.236	140434	1.43	100	94.6	90	110	
Sr	88	1	No Gas	94.062	2.766	1294657	2.02	100	94.1	90	110	
Mo	95	1	No Gas	92.031	1.885	243571	1.41	100	92.0	90	110	
Sn	118	1	No Gas	94.002	1.597	410328	0.79	100	94.0	90	110	
Sb	121	1	No Gas	101.791	0.354	585177	0.70	100	101.8	90	110	
Ba	137	1	No Gas	93.661	1.579	200672	0.79	100	93.7	90	110	
Tl	205	1	No Gas	105.016	1.054	1600516	0.89	100	105.0	90	110	
Tl	203	1	No Gas	103.428	0.434	609757	0.90	100	103.4	90	110	
Pb	208	1	No Gas	96.664	0.756	1952278	1.17	100	96.7	90	110	
U	238	1	No Gas	100.185	1.459	2220098	1.40	100	100.2	90	110	
Ca	43	2	He	9954.162	2.289	9657	1.04	10000	99.5	90	110	
Sb	121	2	He	102.642	0.454	302003	1.42	100	102.6	90	110	
Ti	47	2	He	103.022	1.034	9797	1.38	100	103.0	90	110	
Cu	63	1	No Gas	99.794	0.847	523298	0.63	100	99.8	90	110	
Se	82	1	No Gas	101.521	8.058	6817	8.94	100	101.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	627502	4.31	579731	108.24	70	120	
Ge	72	2	He	306276	1.41	284936	107.49	70	120	
Ge	72	1	No Gas	952017	0.47	880232	108.16	70	120	
In	115	1	No Gas	1230430	0.81	1062542	115.80	70	120	
Bi	209	1	No Gas	1153075	1.33	1062490	108.53	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:01:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-15.5	35156	2.3	0.5	
Be	9	1	No Gas	0.006	554.7	67	75.9	0.5	
V	51	2	He	-0.144	-10.6	617	4.3	2.5	
Cr	52	2	He	0.004	962.0	957	12.5	2.5	
Fe	56	2	He	1.026	11.5	10121	2.6	100	
Se	78	2	He	-0.009	-7831.3	349	8.4	2	
As	75	2	He	-0.059	-19.5	58	6.7	2.5	
Ca	44	2	He	-19.037	-21.2	437	14.5	100	
Na	23	2	He	-0.333	-2785.7	162606	1.4	100	
Mg	24	2	He	0.492	48.1	327	18.5	100	
K	39	2	He	-0.514	-1252.3	76186	1.4	100	
Mn	55	2	He	0.037	47.2	277	11.6	2.5	
Co	59	2	He	0.009	18.0	53	10.8	2.5	
Ni	60	2	He	-0.099	-1.2	80	0.0	2.5	
Cu	63	2	He	-0.054	-45.6	647	8.8	2	
Zn	66	2	He	-0.043	-1044.9	4551	6.1	2.5	
Al	27	2	He	-1.489	-13.6	210	12.6	5	
B	11	1	No Gas	16.917	19.9	30158	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.379	-5.7	7426	7.1	5	
Si	28	1	No Gas	2.110	96.2	191245	1.4	10	
Ag	107	1	No Gas	-0.017	-162.1	583	25.0	2.5	
Cd	111	1	No Gas	0.015	132.7	27	94.4	1	
Sr	88	1	No Gas	-0.011	-188.5	443	51.7	2.5	
Mo	95	1	No Gas	0.028	134.4	87	96.1	2.5	
Sn	118	1	No Gas	-0.027	-112.3	1163	6.3	5	
Sb	121	1	No Gas	0.031	69.6	537	20.4	2.5	
Ba	137	1	No Gas	0.040	87.1	220	24.1	2.5	
Tl	205	1	No Gas	0.004	246.3	327	42.9	1	
Tl	203	1	No Gas	0.013	103.3	157	44.8	1	
Pb	208	1	No Gas	-0.043	-21.3	1040	14.8	2.5	
U	238	1	No Gas	0.007	60.5	160	53.4	2.5	
Ca	43	2	He	-22.074	-0.8	10	0.0	100	
Sb	121	2	He	-0.013	-67.2	223	9.3	2.5	
Ti	47	2	He	-0.038	-173.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.029	-180.4	1990	11.4	2.5	
Se	82	1	No Gas	1.213	568.9	-501	-95.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592077	2.20	579731	102.13	70	120	
Ge	72	2	He	282388	1.48	284936	99.11	70	120	
Ge	72	1	No Gas	897570	1.80	880232	101.97	70	120	
In	115	1	No Gas	1161374	6.64	1062542	109.30	70	120	
Bi	209	1	No Gas	1100009	2.33	1062490	103.53	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	042_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:01:02-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.139	-15.5	35156	2.3	0.5	
Be	9	1	No Gas	0.006	554.7	67	75.9	0.5	
V	51	2	He	-0.144	-10.6	617	4.3	2.5	
Cr	52	2	He	0.004	962.0	957	12.5	2.5	
Fe	56	2	He	1.026	11.5	10121	2.6	100	
Se	78	2	He	-0.009	-7831.3	349	8.4	2	
As	75	2	He	-0.059	-19.5	58	6.7	2.5	
Ca	44	2	He	-19.037	-21.2	437	14.5	100	
Na	23	2	He	-0.333	-2785.7	162606	1.4	100	
Mg	24	2	He	0.492	48.1	327	18.5	100	
K	39	2	He	-0.514	-1252.3	76186	1.4	100	
Mn	55	2	He	0.037	47.2	277	11.6	2.5	
Co	59	2	He	0.009	18.0	53	10.8	2.5	
Ni	60	2	He	-0.099	-1.2	80	0.0	2.5	
Cu	63	2	He	-0.054	-45.6	647	8.8	2	
Zn	66	2	He	-0.043	-1044.9	4551	6.1	2.5	
Al	27	2	He	-1.489	-13.6	210	12.6	5	
B	11	1	No Gas	16.917	19.9	30158	9.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.379	-5.7	7426	7.1	5	
Si	28	1	No Gas	2.110	96.2	191245	1.4	10	
Ag	107	1	No Gas	-0.017	-162.1	583	25.0	2.5	
Cd	111	1	No Gas	0.015	132.7	27	94.4	1	
Sr	88	1	No Gas	-0.011	-188.5	443	51.7	2.5	
Mo	95	1	No Gas	0.028	134.4	87	96.1	2.5	
Sn	118	1	No Gas	-0.027	-112.3	1163	6.3	5	
Sb	121	1	No Gas	0.031	69.6	537	20.4	2.5	
Ba	137	1	No Gas	0.040	87.1	220	24.1	2.5	
Tl	205	1	No Gas	0.004	246.3	327	42.9	1	
Tl	203	1	No Gas	0.013	103.3	157	44.8	1	
Pb	208	1	No Gas	-0.043	-21.3	1040	14.8	2.5	
U	238	1	No Gas	0.007	60.5	160	53.4	2.5	
Ca	43	2	He	-22.074	-0.8	10	0.0	100	
Sb	121	2	He	-0.013	-67.2	223	9.3	2.5	
Ti	47	2	He	-0.038	-173.6	7	86.6	2.5	
Cu	63	1	No Gas	-0.029	-180.4	1990	11.4	2.5	
Se	82	1	No Gas	1.213	568.9	-501	-95.6	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592077	2.20	579731	102.13	70	120	
Ge	72	2	He	282388	1.48	284936	99.11	70	120	
Ge	72	1	No Gas	897570	1.80	880232	101.97	70	120	
In	115	1	No Gas	1161374	6.64	1062542	109.30	70	120	
Bi	209	1	No Gas	1100009	2.33	1062490	103.53	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	053_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:29:09-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	103.362	6.651	895156	3.71	100	103.4	90	110	
Be	9	1	No Gas	98.109	4.748	171923	1.74	100	98.1	90	110	
V	51	2	He	103.085	1.096	241064	2.46	100	103.1	90	110	
Cr	52	2	He	101.738	0.741	273435	1.03	100	101.7	90	110	
Fe	56	2	He	10188.136	0.836	26523374	1.78	10000	101.9	90	110	
Se	78	2	He	100.035	2.091	3999	2.41	100	100.0	90	110	
As	75	2	He	105.570	1.693	41274	2.23	100	105.6	90	110	
Ca	44	2	He	10126.908	0.816	156486	2.19	10000	101.3	90	110	
Na	23	2	He	10804.919	0.099	5647795	1.47	10000	108.0	90	110	
Mg	24	2	He	10528.651	1.321	2965418	1.85	10000	105.3	90	110	
K	39	2	He	10593.057	1.733	3449090	2.81	10000	105.9	90	110	
Mn	55	2	He	101.380	0.719	203215	1.53	100	101.4	90	110	
Co	59	2	He	101.489	1.014	406195	1.67	100	101.5	90	110	
Ni	60	2	He	101.541	0.357	103085	1.07	100	101.5	90	110	
Cu	63	2	He	101.766	0.451	278643	1.54	100	101.8	90	110	
Zn	66	2	He	101.046	1.120	60458	1.18	100	101.0	90	110	
Al	27	2	He	115.711	1.667	17818	0.48	100	115.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	481.394	2.622	413037	2.32	500	96.3	90	110	
Al	27	1	No Gas	114.684	3.674	736542	3.73	100	114.7	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	558.936	2.037	1713580	0.97	5000	11.2	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.938	1.458	633819	0.47	100	101.9	90	110	
Cd	111	1	No Gas	101.169	1.386	130046	1.43	100	101.2	90	110	
Sr	88	1	No Gas	103.886	2.193	1238244	2.19	100	103.9	90	110	
Mo	95	1	No Gas	98.826	0.784	226525	2.09	100	98.8	90	110	
Sn	118	1	No Gas	100.691	0.466	380543	0.87	100	100.7	90	110	
Sb	121	1	No Gas	101.597	1.439	541893	0.94	100	101.6	90	110	
Ba	137	1	No Gas	101.997	1.347	189223	0.52	100	102.0	90	110	
Tl	205	1	No Gas	106.379	1.981	1483377	1.84	100	106.4	90	110	
Tl	203	1	No Gas	105.296	0.137	567974	0.95	100	105.3	90	110	
Pb	208	1	No Gas	97.389	0.484	1799617	1.07	100	97.4	90	110	
U	238	1	No Gas	102.977	1.160	2088014	1.79	100	103.0	90	110	
Ca	43	2	He	10103.043	2.038	9220	2.29	10000	101.0	90	110	
Sb	121	2	He	102.578	0.841	283893	2.02	100	102.6	90	110	
Ti	47	2	He	103.356	2.278	9247	3.52	100	103.4	90	110	
Cu	63	1	No Gas	101.810	1.167	495288	0.38	100	101.8	90	110	
Se	82	1	No Gas	107.012	7.136	6696	7.12	100	107.0	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	641405	3.79	579731	110.64	70	120	
Ge	72	2	He	288073	1.39	284936	101.10	70	120	
Ge	72	1	No Gas	883343	0.97	880232	100.35	70	120	
In	115	1	No Gas	1065492	1.32	1062542	100.28	70	120	
Bi	209	1	No Gas	1054979	1.01	1062490	99.29	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	054_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:31:05-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.164	28.6	36397	1.2	0.5	
Be	9	1	No Gas	-0.018	-25.4	28	27.0	0.5	
V	51	2	He	1.188	7.1	3486	2.6	2.5	
Cr	52	2	He	-0.012	-364.2	873	16.9	2.5	
Fe	56	2	He	1.079	17.6	9777	2.0	100	
Se	78	2	He	0.717	136.5	357	7.5	2	
As	75	2	He	0.131	17.3	124	6.7	2.5	
Ca	44	2	He	-14.908	-57.8	473	23.7	100	
Na	23	2	He	240.916	8.3	269465	0.5	100	CCB Main CR1 Failed
Mg	24	2	He	0.688	26.2	363	11.1	100	
K	39	2	He	17.586	76.6	78010	1.9	100	
Mn	55	2	He	0.028	97.0	247	18.3	2.5	
Co	59	2	He	0.005	92.2	33	45.8	2.5	
Ni	60	2	He	-0.098	-27.3	77	30.1	2.5	
Cu	63	2	He	0.079	16.2	957	0.6	2	
Zn	66	2	He	-0.010	-3133.3	4354	0.3	2.5	
Al	27	2	He	-1.426	-26.0	210	26.5	5	
B	11	1	No Gas	59.968	8.7	60944	7.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.259	-3.2	7522	4.4	5	
Si	28	1	No Gas	11.832	10.8	200459	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.006	193.2	640	8.7	2.5	
Cd	111	1	No Gas	0.003	269.3	10	100.0	1	
Sr	88	1	No Gas	-0.009	-85.7	413	20.1	2.5	
Mo	95	1	No Gas	0.013	146.0	47	86.6	2.5	
Sn	118	1	No Gas	-0.037	-66.2	967	10.4	5	
Sb	121	1	No Gas	0.038	21.1	527	7.2	2.5	
Ba	137	1	No Gas	0.015	203.0	147	33.6	2.5	
Tl	205	1	No Gas	-0.004	-175.0	187	52.9	1	
Tl	203	1	No Gas	0.003	285.9	93	48.3	1	
Pb	208	1	No Gas	-0.051	-11.5	793	10.2	2.5	
U	238	1	No Gas	0.004	36.8	93	34.4	2.5	
Ca	43	2	He	-1.458	-1303.9	27	57.3	100	
Sb	121	2	He	0.023	125.8	307	26.4	2.5	
Ti	47	2	He	-0.072	-100.0	3	173.2	2.5	
Cu	63	1	No Gas	0.147	26.0	2624	8.1	2.5	
Se	82	1	No Gas	-23.025	-29.7	-1989	-20.8	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	575078	2.05	579731	99.20	70	120	
Ge	72	2	He	269482	3.91	284936	94.58	70	120	
Ge	72	1	No Gas	823973	1.97	880232	93.61	70	120	
In	115	1	No Gas	993831	1.66	1062542	93.53	70	120	
Bi	209	1	No Gas	990625	2.67	1062490	93.24	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	065_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:56:39-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	99.834	3.769	893387	2.01	100	99.8	90	110	
Be	9	1	No Gas	97.768	3.440	176722	1.85	100	97.8	90	110	
V	51	2	He	104.155	1.522	248441	1.47	100	104.2	90	110	
Cr	52	2	He	102.018	0.336	279730	0.89	100	102.0	90	110	
Fe	56	2	He	10222.544	1.158	27149960	1.59	10000	102.2	90	110	
Se	78	2	He	104.305	3.742	4237	2.95	100	104.3	90	110	
As	75	2	He	106.029	1.595	42290	1.92	100	106.0	90	110	
Ca	44	2	He	10424.357	1.629	164305	2.10	10000	104.2	90	110	
Na	23	2	He	10922.716	0.863	5822659	1.09	10000	109.2	90	110	
Mg	24	2	He	10761.837	1.209	3092121	0.71	10000	107.6	90	110	
K	39	2	He	10769.936	2.206	3575668	2.15	10000	107.7	90	110	
Mn	55	2	He	102.581	1.671	209775	2.10	100	102.6	90	110	
Co	59	2	He	103.536	1.621	422753	1.81	100	103.5	90	110	
Ni	60	2	He	103.211	2.031	106901	2.54	100	103.2	90	110	
Cu	63	2	He	102.501	0.750	286310	0.99	100	102.5	90	110	
Zn	66	2	He	103.594	1.946	63116	2.00	100	103.6	90	110	
Al	27	2	He	118.151	2.844	18556	3.29	100	118.2	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	470.123	1.978	416468	3.08	500	94.0	90	110	
Al	27	1	No Gas	107.505	0.668	706530	1.19	100	107.5	90	110	
Si	28	1	No Gas	588.215	1.073	1833046	0.54	5000	11.8	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.505	2.767	639315	1.37	100	100.5	90	110	
Cd	111	1	No Gas	100.274	1.707	131878	1.41	100	100.3	90	110	
Sr	88	1	No Gas	102.510	4.336	1249516	1.74	100	102.5	90	110	
Mo	95	1	No Gas	99.138	4.368	232382	2.62	100	99.1	90	110	
Sn	118	1	No Gas	100.367	2.954	388027	1.68	100	100.4	90	110	
Sb	121	1	No Gas	100.537	0.225	547997	1.21	100	100.5	90	110	
Ba	137	1	No Gas	100.372	2.161	190520	1.60	100	100.4	90	110	
Tl	205	1	No Gas	105.630	1.512	1464173	0.52	100	105.6	90	110	
Tl	203	1	No Gas	105.111	1.006	563601	0.64	100	105.1	90	110	
Pb	208	1	No Gas	98.323	0.097	1806158	1.09	100	98.3	90	110	
U	238	1	No Gas	103.827	1.255	2092942	2.25	100	103.8	90	110	
Ca	43	2	He	10064.415	0.923	9370	0.40	10000	100.6	90	110	
Sb	121	2	He	102.339	1.031	288937	1.47	100	102.3	90	110	
Ti	47	2	He	103.372	1.677	9433	2.22	100	103.4	90	110	
Cu	63	1	No Gas	103.070	0.915	512374	1.35	100	103.1	90	110	
Se	82	1	No Gas	106.555	7.889	6812	8.61	100	106.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	661106	1.61	579731	114.04	70	120	
Ge	72	2	He	293884	0.60	284936	103.14	70	120	
Ge	72	1	No Gas	902636	1.14	880232	102.55	70	120	
In	115	1	No Gas	1090348	2.54	1062542	102.62	70	120	
Bi	209	1	No Gas	1048751	1.00	1062490	98.71	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	066_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T13:58:34-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	009CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.015	-120.8	37284	0.5	0.5	
Be	9	1	No Gas	-0.015	-21.0	35	14.3	0.5	
V	51	2	He	0.598	13.5	2301	5.2	2.5	
Cr	52	2	He	-0.010	-300.9	917	9.8	2.5	
Fe	56	2	He	1.141	5.5	10394	2.9	100	
Se	78	2	He	-0.294	-171.3	338	3.3	2	
As	75	2	He	0.058	59.8	102	10.5	2.5	
Ca	44	2	He	-18.402	-53.7	447	35.4	100	
Na	23	2	He	286.327	6.1	304463	0.0	100	CCB Main CR1 Failed
Mg	24	2	He	0.660	27.8	373	14.8	100	
K	39	2	He	25.355	29.2	84072	1.0	100	
Mn	55	2	He	0.147	25.0	493	17.2	2.5	
Co	59	2	He	0.009	92.4	50	60.0	2.5	
Ni	60	2	He	-0.072	-44.8	107	30.1	2.5	
Cu	63	2	He	0.000	-33365.4	787	24.2	2	
Zn	66	2	He	0.372	152.8	4771	9.2	2.5	
Al	27	2	He	-1.509	-15.5	207	15.6	5	
B	11	1	No Gas	54.215	9.0	60277	6.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.995	-8.5	9637	5.1	5	
Si	28	1	No Gas	22.123	9.7	241082	2.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.005	-49.2	617	2.5	2.5	
Cd	111	1	No Gas	0.000	8570.3	7	86.6	1	
Sr	88	1	No Gas	-0.003	-222.7	503	17.9	2.5	
Mo	95	1	No Gas	0.007	243.4	37	110.2	2.5	
Sn	118	1	No Gas	-0.026	-129.9	1067	11.5	5	
Sb	121	1	No Gas	0.043	30.5	590	11.9	2.5	
Ba	137	1	No Gas	-0.002	-1124.6	127	27.7	2.5	
Tl	205	1	No Gas	-0.007	-12.3	163	7.1	1	
Tl	203	1	No Gas	-0.009	-51.0	33	75.5	1	
Pb	208	1	No Gas	-0.063	-1.7	623	3.3	2.5	
U	238	1	No Gas	0.004	16.0	87	13.3	2.5	
Ca	43	2	He	-14.328	-95.4	17	69.3	100	
Sb	121	2	He	-0.013	-37.0	223	6.8	2.5	
Ti	47	2	He	-0.076	-84.7	3	173.2	2.5	
Cu	63	1	No Gas	0.160	18.7	2854	5.4	2.5	
Se	82	1	No Gas	-1.455	-897.5	-664	-132.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	611395	0.92	579731	105.46	70	120	
Ge	72	2	He	281846	2.83	284936	98.92	70	120	
Ge	72	1	No Gas	876016	0.50	880232	99.52	70	120	
In	115	1	No Gas	1057425	0.67	1062542	99.52	70	120	
Bi	209	1	No Gas	1052447	0.22	1062490	99.05	70	120	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	205CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:07:27-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	37730	0.00
Be	9	1	No Gas	37	56.81
V	51	2	He	2181	0.23
Cr	52	2	He	1030	0.25
Fe	56	2	He	10324	0.02
Se	78	2	He	327	2.23
As	75	2	He	116	15.26
Ca	44	2	He	433	1.34
Na	23	2	He	230792	0.00
Mg	24	2	He	317	8.99
K	39	2	He	90066	0.00
Mn	55	2	He	417	4.80
Co	59	2	He	20	250.00
Ni	60	2	He	223	8.35
Cu	63	2	He	980	1.55
Zn	66	2	He	5518	0.11
Al	27	2	He	477	2.26
B	11	1	No Gas	12883	0.01
Al	27	1	No Gas	20478	0.03
Si	28	1	No Gas	160765	0.00
Ag	107	1	No Gas	230	17.33
Sr	88	1	No Gas	653	0.59
Mo	95	1	No Gas	13	649.52
Sn	118	1	No Gas	1217	0.56
Sb	121	1	No Gas	300	9.88
Ba	137	1	No Gas	130	20.50
Tl	205	1	No Gas	37	42.94
Tl	203	1	No Gas	20	250.00
Pb	208	1	No Gas	617	1.30
U	238	1	No Gas	13	324.76
Ca	43	2	He	27	81.19
Sb	121	2	He	193	7.72
Ti	47	2	He	7	2598.08
Cu	63	1	No Gas	2024	0.21

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	6	1	No Gas	670807	2.28

Calibration Blank Report

Ge	72	2	He	338750	0.25
Ge	72	1	No Gas	1064833	1.27
In	115	1	No Gas	1360630	1.89
Bi	209	1	No Gas	1388986	2.00

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	206CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:09:34-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3535	0.06
V	51	2	He	7638	0.02
Cr	52	2	He	7189	0.02
Fe	56	2	He	594274	0.00
Se	78	2	He	423	0.47
As	75	2	He	1054	0.35
Ca	44	2	He	4044	0.14
Na	23	2	He	340140	0.00
Mg	24	2	He	64121	0.00
K	39	2	He	159938	0.00
Mn	55	2	He	5178	0.06
Co	59	2	He	9340	0.05
Ni	60	2	He	2610	0.08
Cu	63	2	He	7556	0.04
Zn	66	2	He	6638	0.09
Al	27	2	He	793	1.77
B	11	1	No Gas	20378	0.01
Al	27	1	No Gas	32679	0.01
Si	28	1	No Gas	192242	0.00
Ag	107	1	No Gas	14705	0.01
Cd	111	1	No Gas	3040	0.40
Sr	88	1	No Gas	27208	0.01
Mo	95	1	No Gas	5111	0.10
Sn	118	1	No Gas	10077	0.02
Sb	121	1	No Gas	12686	0.05
Ba	137	1	No Gas	4614	0.08
Tl	205	1	No Gas	31082	0.00
Tl	203	1	No Gas	12924	0.04
Pb	208	1	No Gas	43938	0.00
U	238	1	No Gas	45053	0.00
Ca	43	2	He	173	8.38
Sb	121	2	He	6388	0.05
Cu	63	1	No Gas	14214	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	685147	2.85	670807	102.14	70	120	
Ge	72	2	He	342790	0.50	338750	101.19	70	120	
Ge	72	1	No Gas	1121596	0.93	1064833	105.33	70	120	

Calibration Standard Report

In	115	1	No Gas	1379611	1.59	1360630	101.40	70	120	
Bi	209	1	No Gas	1419790	0.38	1388986	102.22	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	207CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:11:40-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	8796	0.02
V	51	2	He	15659	0.01
Cr	52	2	He	16540	0.01
Fe	56	2	He	1587020	0.00
Se	78	2	He	549	0.59
As	75	2	He	2414	0.01
Ca	44	2	He	9370	0.00
Na	23	2	He	501570	0.00
Mg	24	2	He	160456	0.00
K	39	2	He	263610	0.00
Mn	55	2	He	12132	0.03
Co	59	2	He	23100	0.01
Ni	60	2	He	6222	0.07
Cu	63	2	He	16721	0.01
Zn	66	2	He	8666	0.02
Al	27	2	He	1537	0.43
B	11	1	No Gas	32073	0.01
Al	27	1	No Gas	57837	0.00
Si	28	1	No Gas	243445	0.00
Ag	107	1	No Gas	36009	0.00
Cd	111	1	No Gas	7269	0.10
Sr	88	1	No Gas	69946	0.00
Mo	95	1	No Gas	13237	0.01
Sn	118	1	No Gas	22460	0.01
Sb	121	1	No Gas	30726	0.00
Ba	137	1	No Gas	11402	0.03
Tl	205	1	No Gas	76266	0.00
Tl	203	1	No Gas	32135	0.00
Pb	208	1	No Gas	105849	0.00
U	238	1	No Gas	111879	0.00
Ca	43	2	He	530	1.55
Sb	121	2	He	15900	0.01
Cu	63	1	No Gas	29629	0.01

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	658641	0.13	670807	98.19	70	120	
Ge	72	2	He	334894	0.57	338750	98.86	70	120	
Ge	72	1	No Gas	1095297	0.71	1064833	102.86	70	120	

Calibration Standard Report

In	115	1	No Gas	1361230	1.15	1360630	100.04	70	120	
Bi	209	1	No Gas	1401715	1.30	1388986	100.92	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	208CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:13:47-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	17716	0.01
V	51	2	He	29430	0.00
Cr	52	2	He	32506	0.01
Fe	56	2	He	3137494	0.00
Se	78	2	He	760	0.17
As	75	2	He	4657	0.05
Ca	44	2	He	18339	0.01
Na	23	2	He	820148	0.00
Mg	24	2	He	323922	0.00
K	39	2	He	444023	0.00
Mn	55	2	He	23674	0.01
Co	59	2	He	46627	0.00
Ni	60	2	He	12516	0.01
Cu	63	2	He	33184	0.00
Zn	66	2	He	11922	0.03
Al	27	2	He	2404	0.22
B	11	1	No Gas	53144	0.00
Al	27	1	No Gas	84677	0.00
Si	28	1	No Gas	312163	0.00
Ag	107	1	No Gas	72891	0.00
Cd	111	1	No Gas	15559	0.03
Sr	88	1	No Gas	130546	0.00
Mo	95	1	No Gas	26353	0.01
Sn	118	1	No Gas	43924	0.00
Sb	121	1	No Gas	61786	0.00
Ba	137	1	No Gas	21508	0.01
Tl	205	1	No Gas	157097	0.00
Tl	203	1	No Gas	63789	0.00
Pb	208	1	No Gas	215190	0.00
U	238	1	No Gas	228172	0.00
Ca	43	2	He	1100	0.50
Sb	121	2	He	31719	0.01
Cu	63	1	No Gas	57324	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	653287	0.60	670807	97.39	70	120	
Ge	72	2	He	334265	0.91	338750	98.68	70	120	
Ge	72	1	No Gas	1055891	3.38	1064833	99.16	70	120	

Calibration Standard Report

In	115	1	No Gas	1368777	0.68	1360630	100.60	70	120	
Bi	209	1	No Gas	1414056	0.80	1388986	101.80	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	209CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:15:53-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	184695	0.00
V	51	2	He	282718	0.00
Cr	52	2	He	325729	0.00
Fe	56	2	He	31228540	0.00
Se	78	2	He	4809	0.04
As	75	2	He	47614	0.00
Ca	44	2	He	184734	0.00
Na	23	2	He	6354689	0.00
Mg	24	2	He	3446959	0.00
K	39	2	He	3982095	0.00
Mn	55	2	He	239273	0.00
Co	59	2	He	482836	0.00
Ni	60	2	He	122329	0.00
Cu	63	2	He	332226	0.00
Zn	66	2	He	71572	0.00
Al	27	2	He	19133	0.01
B	11	1	No Gas	442611	0.00
Al	27	1	No Gas	711610	0.00
Si	28	1	No Gas	1773451	0.00
Ag	107	1	No Gas	755481	0.00
Cd	111	1	No Gas	156297	0.00
Sr	88	1	No Gas	1444761	0.00
Mo	95	1	No Gas	270914	0.00
Sn	118	1	No Gas	460443	0.00
Sb	121	1	No Gas	642006	0.00
Ba	137	1	No Gas	225869	0.00
Tl	205	1	No Gas	1768441	0.00
Tl	203	1	No Gas	681766	0.00
Pb	208	1	No Gas	2232388	0.00
U	238	1	No Gas	2535316	0.00
Ca	43	2	He	10915	0.03
Sb	121	2	He	335743	0.00
Cu	63	1	No Gas	567642	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	685500	1.95	670807	102.19	70	120	
Ge	72	2	He	340807	0.57	338750	100.61	70	120	
Ge	72	1	No Gas	1099377	2.98	1064833	103.24	70	120	

Calibration Standard Report

In	115	1	No Gas	1336992	1.71	1360630	98.26	70	120	
Bi	209	1	No Gas	1384389	1.57	1388986	99.67	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	210CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:17:56-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	356999	0.00
V	51	2	He	552560	0.00
Cr	52	2	He	634244	0.00
Fe	56	2	He	60455059	0.00
Se	78	2	He	8822	0.01
As	75	2	He	91219	0.00
Ca	44	2	He	358652	0.00
Na	23	2	He	12245754	0.00
Mg	24	2	He	6627219	0.00
K	39	2	He	7450688	0.00
Mn	55	2	He	467010	0.00
Co	59	2	He	942255	0.00
Ni	60	2	He	239817	0.00
Cu	63	2	He	647926	0.00
Zn	66	2	He	134111	0.00
Al	27	2	He	35185	0.01
B	11	1	No Gas	936141	0.00
Al	27	1	No Gas	1431880	0.00
Si	28	1	No Gas	3108594	0.00
Ag	107	1	No Gas	1593637	0.00
Cd	111	1	No Gas	302586	0.00
Sr	88	1	No Gas	2753242	0.00
Mo	95	1	No Gas	531001	0.00
Sn	118	1	No Gas	888216	0.00
Sb	121	1	No Gas	1404987	0.00
Ba	137	1	No Gas	437828	0.00
Tl	205	1	No Gas	3397792	0.00
Tl	203	1	No Gas	1501543	0.00
Pb	208	1	No Gas	4520443	0.00
U	238	1	No Gas	4843356	0.00
Ca	43	2	He	20669	0.01
Sb	121	2	He	655993	0.00
Cu	63	1	No Gas	1173629	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	655435	2.06	670807	97.71	70	120	
Ge	72	2	He	330826	0.64	338750	97.66	70	120	
Ge	72	1	No Gas	1016594	4.12	1064833	95.47	70	120	

Calibration Standard Report

In	115	1	No Gas	1310100	0.93	1360630	96.29	70	120	
Bi	209	1	No Gas	1334930	1.55	1388986	96.11	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICCV
Data File Name	212_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:21:55-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	100.571	2.027	885361	1.81	100	100.6	90	110	
Be	9	1	No Gas	99.196	1.340	182933	0.25	100	99.2	90	110	
V	51	2	He	96.408	1.443	276689	0.45	100	96.4	90	110	
Cr	52	2	He	96.638	2.234	317928	0.83	100	96.6	90	110	
Fe	56	2	He	9741.657	1.308	30551281	0.22	10000	97.4	90	110	
Se	78	2	He	98.227	1.676	4681	1.76	100	98.2	90	110	
As	75	2	He	98.899	2.312	46930	1.10	100	98.9	90	110	
Ca	44	2	He	9787.796	1.508	182140	0.19	10000	97.9	90	110	
Na	23	2	He	9667.101	1.302	6243066	0.63	10000	96.7	90	110	
Mg	24	2	He	9722.730	1.394	3346399	0.58	10000	97.2	90	110	
K	39	2	He	9791.077	1.718	3846972	0.67	10000	97.9	90	110	
Mn	55	2	He	96.979	1.638	234680	0.32	100	97.0	90	110	
Co	59	2	He	97.416	1.104	475309	0.46	100	97.4	90	110	
Ni	60	2	He	96.976	1.330	120419	0.40	100	97.0	90	110	
Cu	63	2	He	97.186	1.174	326522	0.62	100	97.2	90	110	
Zn	66	2	He	98.024	3.201	70925	1.76	100	98.0	90	110	
Al	27	2	He	99.129	0.495	18482	0.99	100	99.1	90	110	
B	11	1	No Gas	513.426	0.710	449467	1.06	500	102.7	90	110	
Al	27	1	No Gas	93.530	5.444	706284	0.66	100	93.5	90	110	
Si	28	1	No Gas	511.183	5.568	1763294	0.39	500	102.2	90	110	
Ag	107	1	No Gas	97.290	0.827	746907	0.61	100	97.3	90	110	
Cd	111	1	No Gas	98.484	0.568	155016	1.83	100	98.5	90	110	
Sr	88	1	No Gas	98.150	1.292	1410184	1.66	100	98.2	90	110	
Mo	95	1	No Gas	97.843	0.745	269556	0.63	100	97.8	90	110	
Sn	118	1	No Gas	98.435	1.819	455486	0.98	100	98.4	90	110	
Sb	121	1	No Gas	88.156	4.474	635305	0.90	100	88.2	90	110	ICV Main CR1 Failed
Ba	137	1	No Gas	97.291	1.170	221530	0.19	100	97.3	90	110	
Tl	205	1	No Gas	96.938	3.269	1751156	1.67	100	96.9	90	110	
Tl	203	1	No Gas	86.046	2.279	669346	0.99	100	86.0	90	110	ICV Main CR1 Failed
Pb	208	1	No Gas	94.965	4.121	2259442	3.04	100	95.0	90	110	
U	238	1	No Gas	96.470	0.989	2487760	1.19	100	96.5	90	110	
Ca	43	2	He	10122.649	2.795	10914	3.96	10000	101.2	90	110	
Sb	121	2	He	97.381	1.623	330751	0.94	100	97.4	90	110	
Ti	47	2	He	92.732	0.405	10271	1.24	100	92.7	90	110	
Cu	63	1	No Gas	92.688	4.966	564432	0.84	100	92.7	90	110	
Se	82	1	No Gas	101.185	4.513	7777	3.14	100	101.2	90	110	

QC ISTD Table

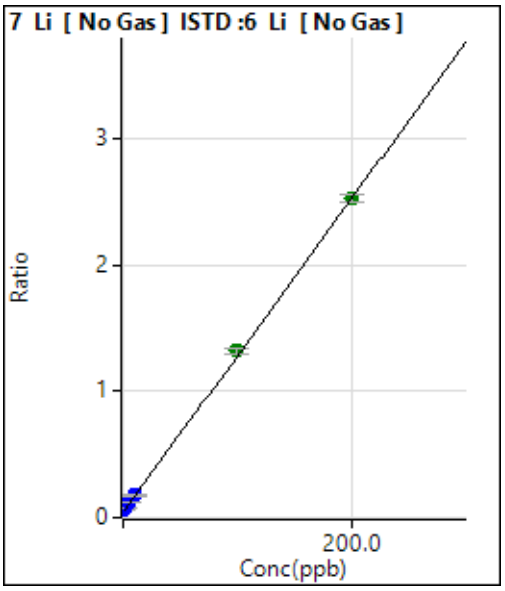
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	678469	1.57	670807	101.14	70	120	
Ge	72	2	He	343008	1.45	338750	101.26	70	120	
Ge	72	1	No Gas	1076637	4.59	1064833	101.11	70	120	
In	115	1	No Gas	1359585	1.36	1360630	99.92	70	120	
Bi	209	1	No Gas	1419194	1.63	1388986	102.17	70	120	

Calibration for 212_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072022A.b\
Analysis File: 072022A.batch.bin
DA Date-Time: 07/20/2022 21:22:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	205CALB.d	CAL BLK	07/20/2022 21:07:27
2	206CALS.d	2/10/200	07/20/2022 21:09:34
3	207CALS.d	5/25/500	07/20/2022 21:11:40
4	208CALS.d	10/50/100	07/20/2022 21:13:47
5	209CALS.d	100/500/10K	07/20/2022 21:15:53
6	210CALS.d	200/1000/20K	07/20/2022 21:17:56

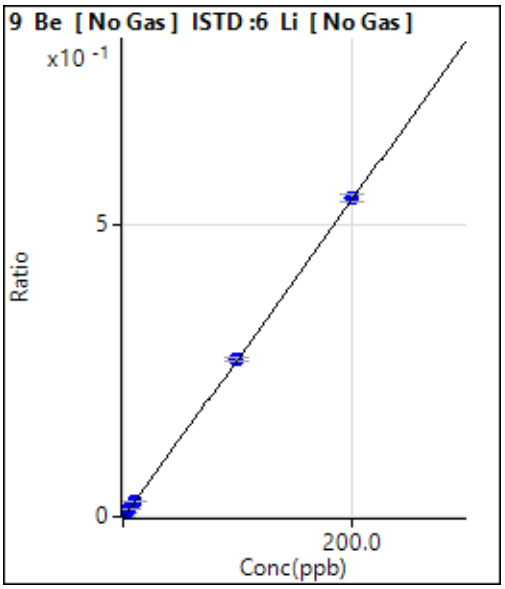
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37730.40	0.0563	P	1.9	
2	☐	2.000	1.799	53819.05	0.0786	P	3.0	-10.1
3	☐	5.000	4.755	75939.85	0.1153	P	1.5	-4.9
4	☐	10.000	9.629	114860.54	0.1758	P	1.2	-3.7
5	☐	100.000	101.747	904309.91	1.3197	A	2.8	1.7
6	☐	200.000	199.153	1657050.03	2.5292	A	3.0	-0.4

y = 0.0124 * x + 0.0563
R = 0.9999
DL = 0.2614 ppb
BEC = 4.531 ppb

Weight: <None>
Min Conc: <None>

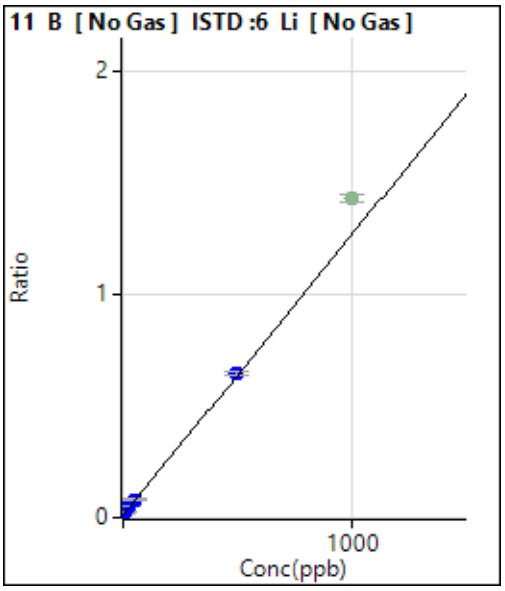


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	18.6	
2	☐	2.000	1.879	3535.47	0.0052	P	1.1	-6.1
3	☐	5.000	4.894	8796.16	0.0134	P	1.4	-2.1
4	☐	10.000	9.957	17716.22	0.0271	P	1.6	-0.4
5	☐	100.000	99.132	184695.47	0.2695	P	1.6	-0.9
6	☐	200.000	200.440	356998.94	0.5448	P	2.2	0.2

y = 0.0027 * x + 5.4519E-005
R = 1.0000
DL = 0.01118 ppb
BEC = 0.02006 ppb

Weight: <None>
Min Conc: <None>

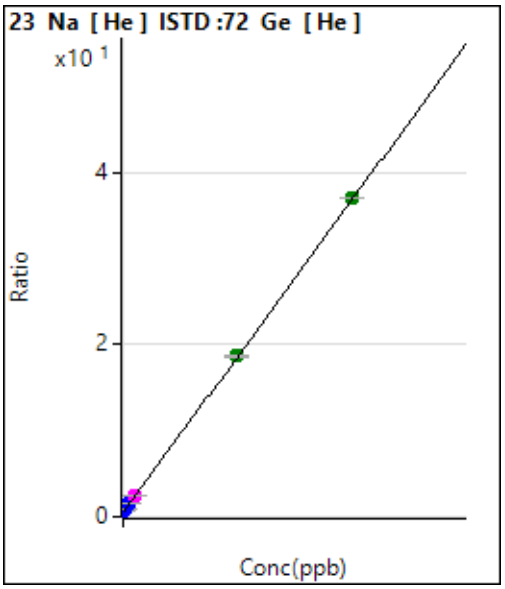
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12882.64	0.0192	P	2.5	
2	☐	10.000	8.415	20378.20	0.0298	P	1.9	-15.9
3	☐	25.000	23.533	32073.39	0.0487	P	1.5	-5.9
4	☐	50.000	49.599	53143.66	0.0814	P	2.7	-0.8
5	☐	500.000	500.145	442611.22	0.6459	P	2.9	0.0
6	☑	1000.000		936140.51	1.4288	A	2.8	

y = 0.0013 * x + 0.0192
R = 1.0000
DL = 1.172 ppb
BEC = 15.33 ppb

Weight: <None>
Min Conc: <None>

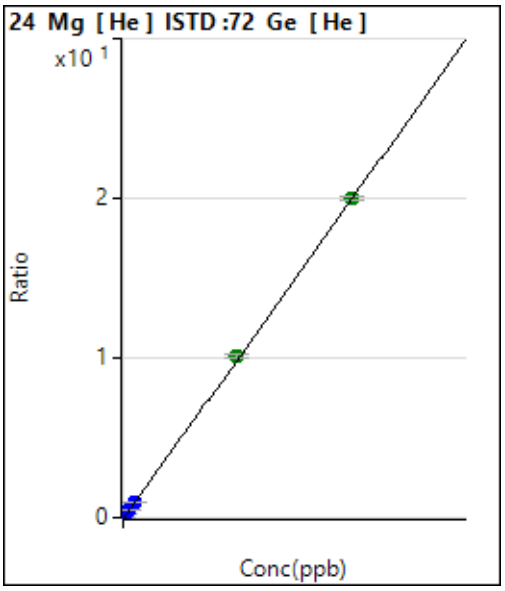


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230791.51	0.6813	P	0.4	
2	☐	200.000	171.583	340140.44	0.9923	P	1.2	-14.2
3	☐	500.000	450.459	501570.40	1.4978	P	1.1	-9.9
4	☐	1000.000	977.912	820148.48	2.4538	M	4.0	-2.2
5	☐	10000.00	9911.818	6354689.07	18.6465	A	1.1	-0.9
6	☐	20000.00	20046.71	12245754.4	37.0160	A	0.3	0.2

y = 0.0018 * x + 0.6813
R = 1.0000
DL = 4.646 ppb
BEC = 375.9 ppb

Weight: <None>
Min Conc: <None>

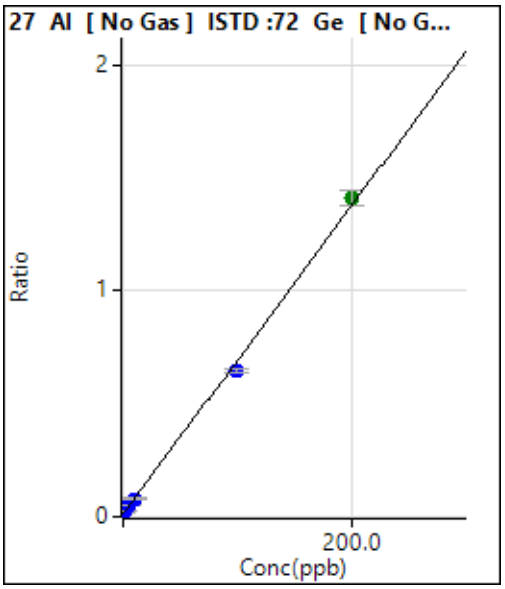
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	316.68	0.0009	P	28.7	
2	☐	200.000	185.497	64120.90	0.1871	P	2.8	-7.3
3	☐	500.000	476.543	160455.53	0.4791	P	0.5	-4.7
4	☐	1000.000	964.807	323922.24	0.9691	P	0.3	-3.5
5	☐	10000.00	10078.69	3446959.22	10.1144	A	2.1	0.8
6	☐	20000.00	19963.14	6627218.86	20.0330	A	0.8	-0.2

y = 0.0010 * x + 9.3527E-004
R = 1.0000
DL = 0.8024 ppb
BEC = 0.9321 ppb

Weight: <None>
Min Conc: <None>

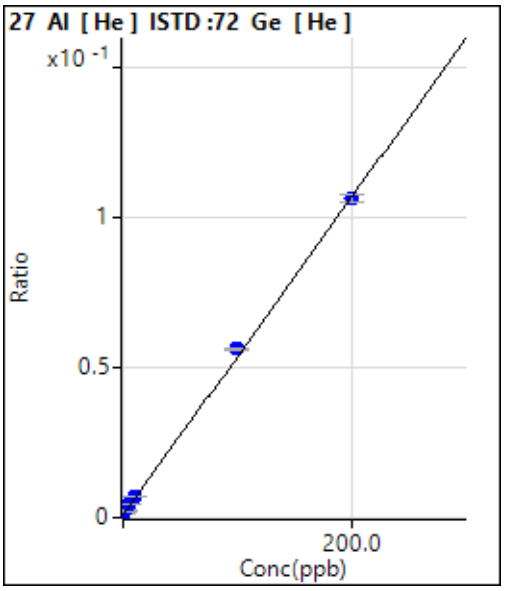


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20477.54	0.0192	P	4.4	
2	☐	2.000	1.454	32678.76	0.0291	P	3.1	-27.3
3	☐	5.000	4.925	57836.94	0.0528	P	2.3	-1.5
4	☐	10.000	8.945	84676.96	0.0802	P	2.8	-10.5
5	☐	100.000	92.157	711609.81	0.6477	P	3.3	-7.8
6	☐	200.000	203.981	1431879.93	1.4103	A	4.7	2.0

y = 0.0068 * x + 0.0192
R = 0.9990
DL = 0.3722 ppb
BEC = 2.819 ppb

Weight: <None>
Min Conc: <None>

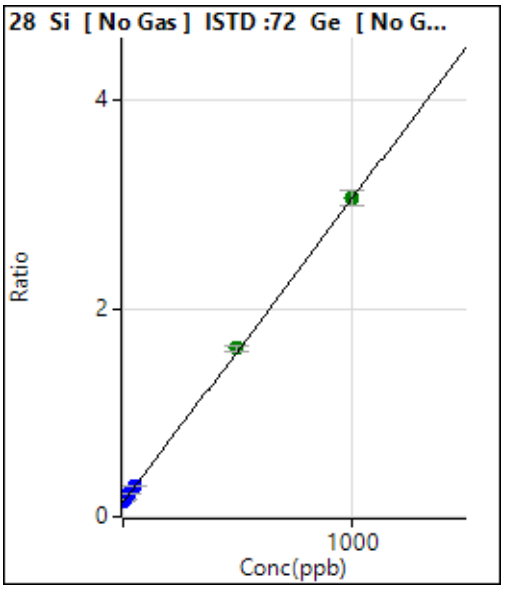
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0014	P	10.6	
2	☐	2.000	1.716	793.37	0.0023	P	14.6	-14.2
3	☐	5.000	6.009	1536.78	0.0046	P	6.2	20.2
4	☐	10.000	10.921	2403.58	0.0072	P	4.3	9.2
5	☐	100.000	103.387	19133.39	0.0561	P	1.1	3.4
6	☐	200.000	198.238	35184.74	0.1064	P	2.3	-0.9

y = 5.2940E-004 * x + 0.0014
R = 0.9998
DL = 0.8476 ppb
BEC = 2.658 ppb

Weight: <None>
Min Conc: <None>

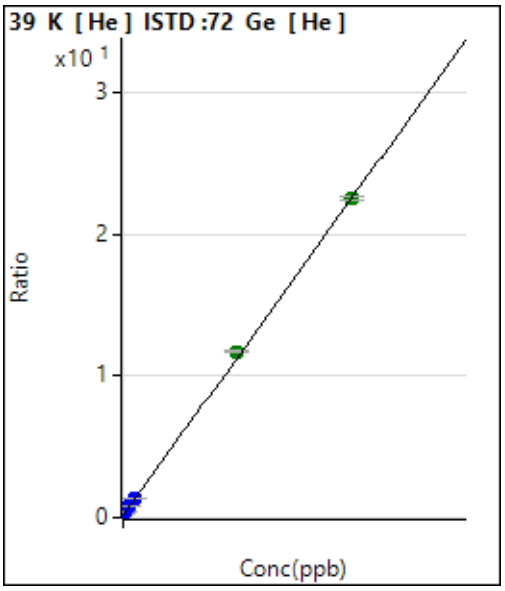


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	160765.18	0.1510	P	1.7	
2	☐	10.000	7.008	192241.55	0.1714	P	1.7	-29.9
3	☐	25.000	24.458	243444.90	0.2223	P	0.9	-2.2
4	☐	50.000	49.712	312162.91	0.2958	P	2.9	-0.6
5	☐	500.000	502.219	1773451.01	1.6142	A	3.3	0.4
6	☐	1000.000	998.948	3108594.33	3.0614	A	4.3	-0.1

y = 0.0029 * x + 0.1510
R = 1.0000
DL = 2.655 ppb
BEC = 51.83 ppb

Weight: <None>
Min Conc: <None>

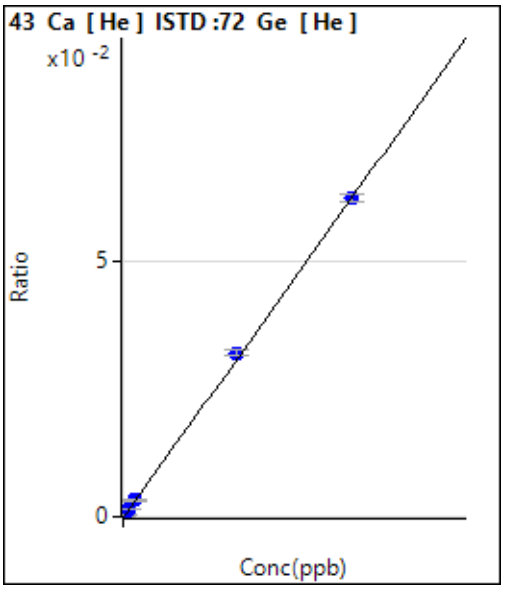
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	90065.66	0.2659	P	1.5	
2	☐	200.000	179.450	159937.67	0.4666	P	1.0	-10.3
3	☐	500.000	466.082	263610.33	0.7872	P	1.3	-6.8
4	☐	1000.000	950.000	444023.30	1.3284	P	1.1	-5.0
5	☐	10000.00	10209.39	3982095.46	11.6850	A	1.4	2.1
6	☐	20000.00	19898.85	7450688.22	22.5225	A	1.1	-0.5

y = 0.0011 * x + 0.2659
R = 0.9999
DL = 10.56 ppb
BEC = 237.7 ppb

Weight: <None>
Min Conc: <None>

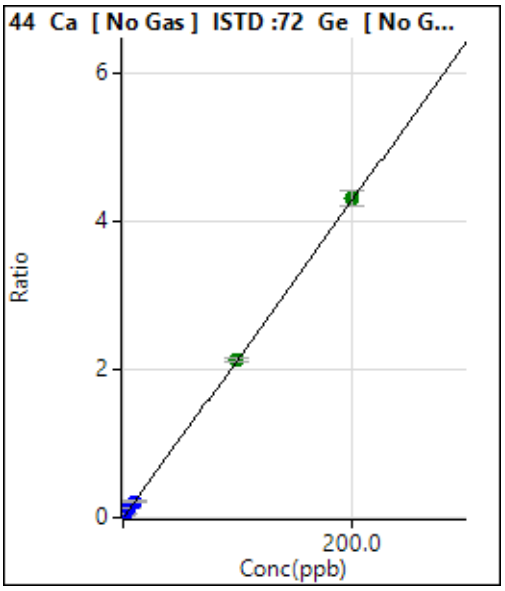


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.6	
2	☐	200.000	136.175	173.34	0.0005	P	14.4	-31.9
3	☐	500.000	479.578	530.02	0.0016	P	7.7	-4.1
4	☐	1000.000	1025.028	1100.05	0.0033	P	6.5	2.5
5	☐	10000.00	10191.35	10914.54	0.0320	P	3.7	1.9
6	☐	20000.00	19904.21	20669.11	0.0625	P	1.9	-0.5

y = 3.1351E-006 * x + 7.8713E-005
R = 0.9999
DL = 16.27 ppb
BEC = 25.11 ppb

Weight: <None>
Min Conc: <None>

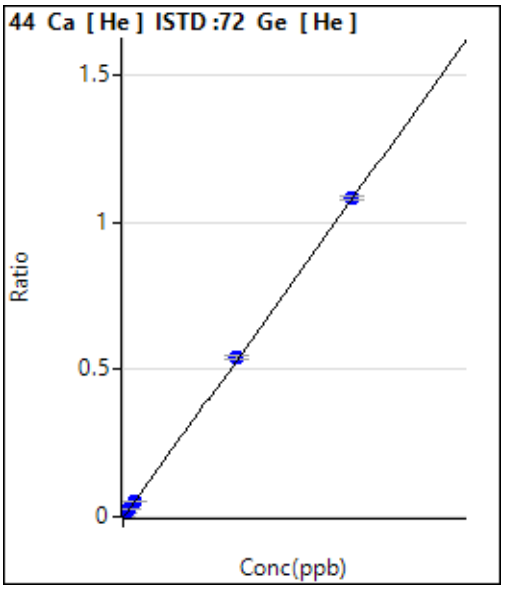
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18158.91	0.0171	P	1.7	
2	☐	2.000	1.796	62237.36	0.0555	P	1.7	-10.2
3	☐	5.000	4.718	129292.65	0.1180	P	0.7	-5.6
4	☐	10.000	9.490	232342.67	0.2202	P	3.3	-5.1
5	☐	100.000	98.755	2341846.01	2.1310	A	2.1	-1.2
6	☐	200.000	200.657	4378805.25	4.3124	A	4.2	0.3

y = 0.0214 * x + 0.0171
R = 1.0000
DL = 0.04012 ppb
BEC = 0.7967 ppb

Weight: <None>
Min Conc: <None>

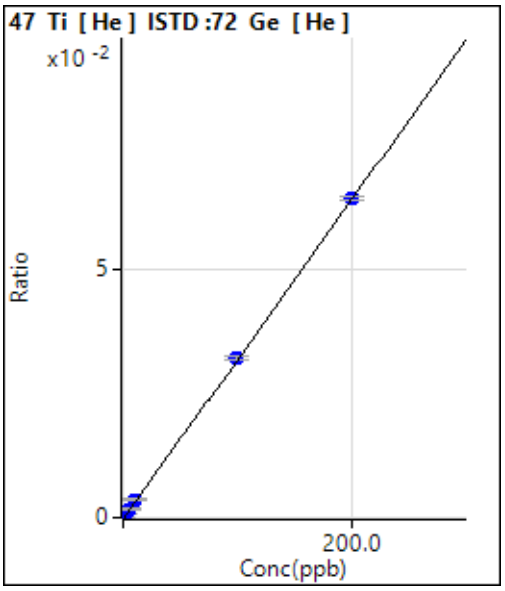


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	433.35	0.0013	P	5.6	
2	☐	200.000	194.347	4044.00	0.0118	P	5.8	-2.8
3	☐	500.000	493.274	9369.97	0.0280	P	0.7	-1.3
4	☐	1000.000	990.018	18339.14	0.0549	P	2.2	-1.0
5	☐	10000.00	9990.860	184733.80	0.5421	P	1.5	-0.1
6	☐	20000.00	20005.29	358652.37	1.0841	P	0.8	0.0

y = 5.4129E-005 * x + 0.0013
R = 1.0000
DL = 3.939 ppb
BEC = 23.63 ppb

Weight: <None>
Min Conc: <None>

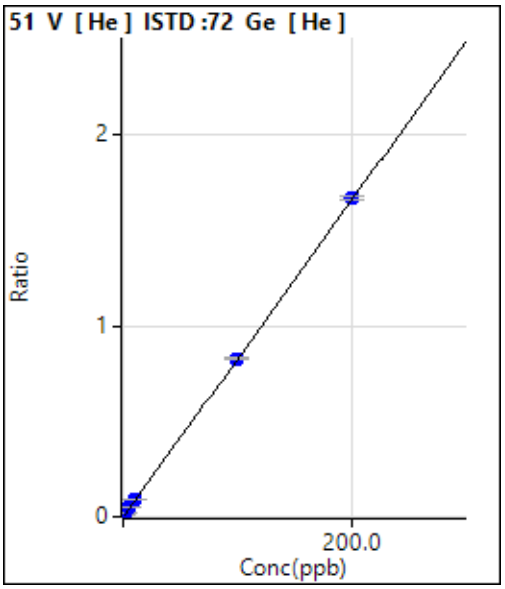
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.838	210.01	0.0006	P	4.7	-8.1
3	☐	5.000	5.246	573.35	0.0017	P	6.7	4.9
4	☐	10.000	11.030	1196.74	0.0036	P	7.3	10.3
5	☐	100.000	100.092	11014.61	0.0323	P	2.9	0.1
6	☐	200.000	199.898	21346.85	0.0645	P	0.9	-0.1

y = 3.2269E-004 * x + 1.9625E-005
R = 1.0000
DL = 0.316 ppb
BEC = 0.06082 ppb

Weight: <None>
Min Conc: <None>

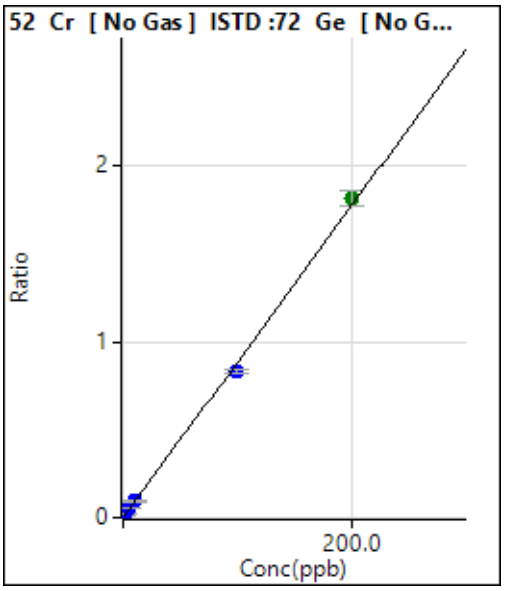


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2181.30	0.0064	P	4.8	
2	☐	2.000	1.908	7637.72	0.0223	P	1.6	-4.6
3	☐	5.000	4.857	15659.00	0.0468	P	1.7	-2.9
4	☐	10.000	9.831	29430.44	0.0880	P	1.0	-1.7
5	☐	100.000	99.158	282718.06	0.8296	P	1.3	-0.8
6	☐	200.000	200.434	552559.77	1.6703	P	1.2	0.2

y = 0.0083 * x + 0.0064
R = 1.0000
DL = 0.1123 ppb
BEC = 0.7756 ppb

Weight: <None>
Min Conc: <None>

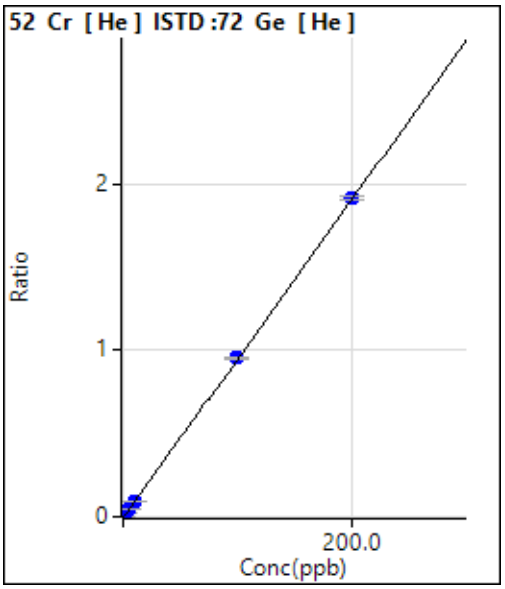
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9583.51	0.0090	P	6.6	
2	☐	2.000	1.761	27614.72	0.0246	P	2.5	-12.0
3	☐	5.000	4.553	54097.07	0.0494	P	0.5	-8.9
4	☐	10.000	9.565	98986.12	0.0939	P	4.9	-4.3
5	☐	100.000	92.775	914108.08	0.8320	P	3.1	-7.2
6	☐	200.000	203.648	1843297.47	1.8155	A	4.6	1.8

y = 0.0089 * x + 0.0090
R = 0.9991
DL = 0.2016 ppb
BEC = 1.015 ppb

Weight: <None>
Min Conc: <None>

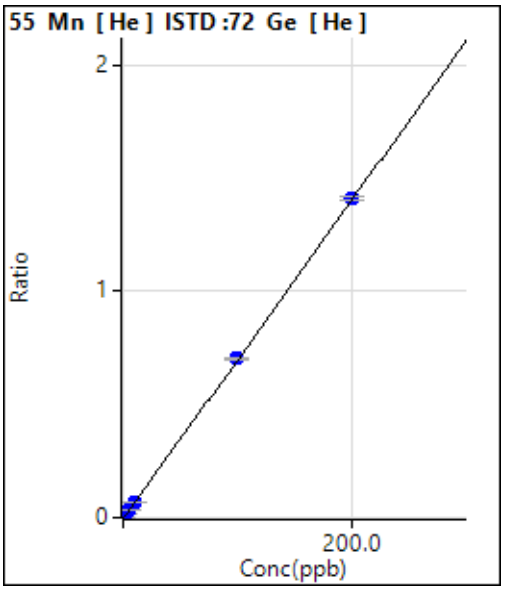


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1030.06	0.0030	P	2.4	
2	☐	2.000	1.875	7188.67	0.0210	P	1.5	-6.2
3	☐	5.000	4.847	16540.17	0.0494	P	1.7	-3.1
4	☐	10.000	9.852	32505.55	0.0972	P	1.0	-1.5
5	☐	100.000	99.641	325728.96	0.9558	P	1.1	-0.4
6	☐	200.000	200.192	634243.84	1.9173	P	1.2	0.1

y = 0.0096 * x + 0.0030
R = 1.0000
DL = 0.02331 ppb
BEC = 0.318 ppb

Weight: <None>
Min Conc: <None>

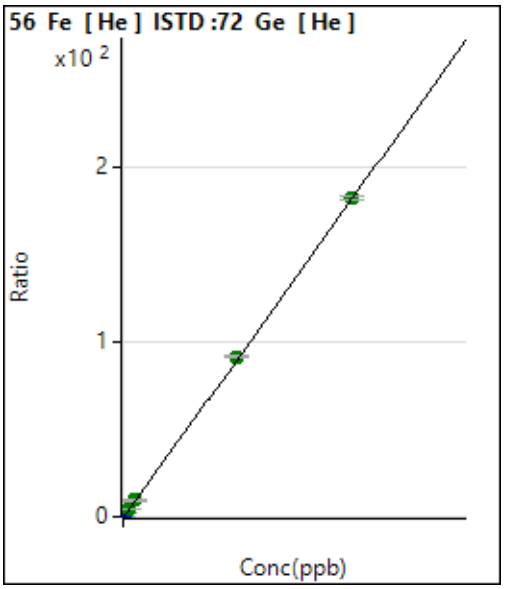
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	416.68	0.0012	P	20.0	
2	☐	2.000	1.970	5177.73	0.0151	P	3.5	-1.5
3	☐	5.000	4.968	12132.26	0.0362	P	3.1	-0.6
4	☐	10.000	9.881	23674.17	0.0708	P	2.0	-1.2
5	☐	100.000	99.510	239273.13	0.7021	P	1.3	-0.5
6	☐	200.000	200.252	467009.84	1.4117	P	0.8	0.1

y = 0.0070 * x + 0.0012
R = 1.0000
DL = 0.1049 ppb
BEC = 0.1746 ppb

Weight: <None>
Min Conc: <None>

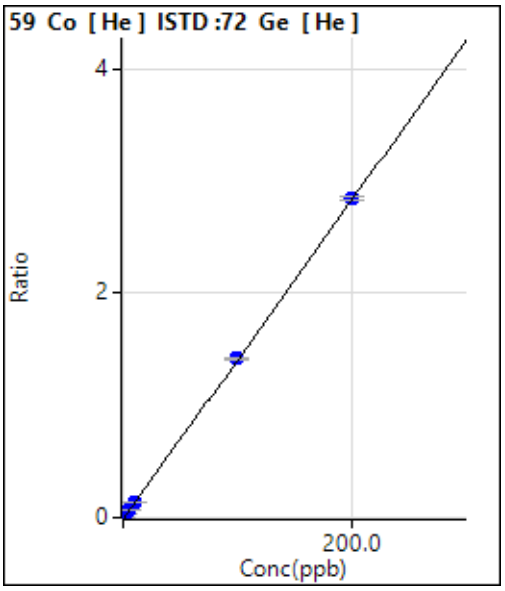


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10324.05	0.0305	P	2.3	
2	☐	200.000	186.331	594274.42	1.7337	P	1.9	-6.8
3	☐	500.000	515.097	1587020.24	4.7390	A	0.9	3.0
4	☐	1000.000	1023.570	3137494.12	9.3870	A	1.6	2.4
5	☐	10000.00	10021.25	31228539.5	91.6358	A	1.4	0.2
6	☐	20000.00	19987.95	60455059.1	182.742	A	0.8	-0.1

y = 0.0091 * x + 0.0305
R = 1.0000
DL = 0.2263 ppb
BEC = 3.334 ppb

Weight: <None>
Min Conc: <None>

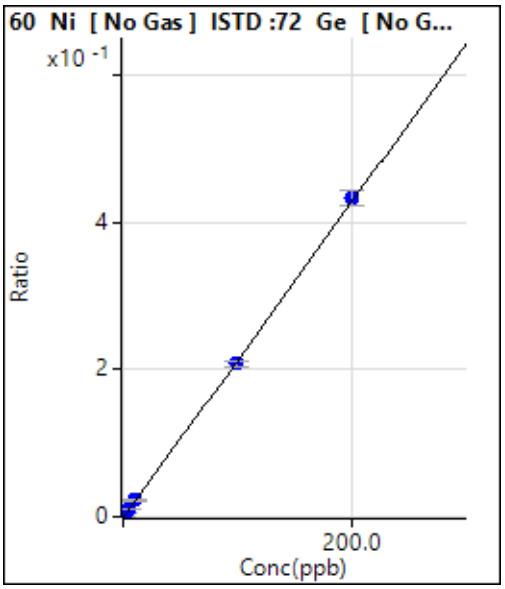
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.2	
2	☐	2.000	1.911	9340.01	0.0272	P	4.3	-4.5
3	☐	5.000	4.844	23099.87	0.0690	P	2.4	-3.1
4	☐	10.000	9.801	46626.79	0.1395	P	1.2	-2.0
5	☐	100.000	99.591	482836.23	1.4168	P	1.0	-0.4
6	☐	200.000	200.219	942255.48	2.8483	P	0.8	0.1

y = 0.0142 * x + 5.9088E-005
R = 1.0000
DL = 0.006253 ppb
BEC = 0.004154 ppb

Weight: <None>
Min Conc: <None>

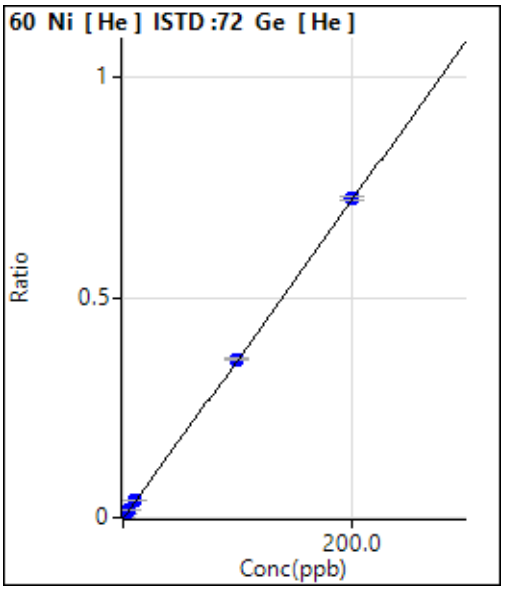


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	773.37	0.0007	P	8.7	
2	☐	2.000	1.742	5004.34	0.0045	P	2.0	-12.9
3	☐	5.000	4.680	11785.28	0.0108	P	3.3	-6.4
4	☐	10.000	10.021	23437.21	0.0222	P	3.0	0.2
5	☐	100.000	96.565	228288.69	0.2078	P	2.8	-3.4
6	☐	200.000	201.727	439871.02	0.4332	P	4.6	0.9

y = 0.0021 * x + 7.2578E-004
R = 0.9998
DL = 0.08832 ppb
BEC = 0.3385 ppb

Weight: <None>
Min Conc: <None>

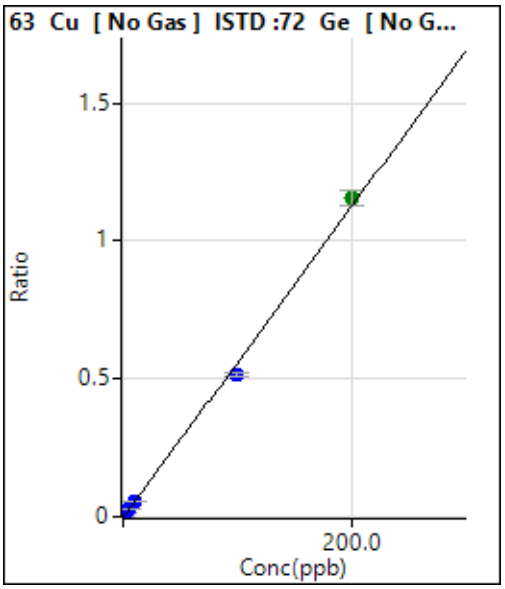
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0007	P	18.7	
2	☐	2.000	1.925	2610.30	0.0076	P	2.6	-3.8
3	☐	5.000	4.958	6221.53	0.0186	P	4.5	-0.8
4	☐	10.000	10.179	12515.95	0.0374	P	1.0	1.8
5	☐	100.000	99.145	122328.82	0.3589	P	0.8	-0.9
6	☐	200.000	200.421	239817.44	0.7249	P	1.2	0.2

y = 0.0036 * x + 6.5930E-004
R = 1.0000
DL = 0.1022 ppb
BEC = 0.1824 ppb

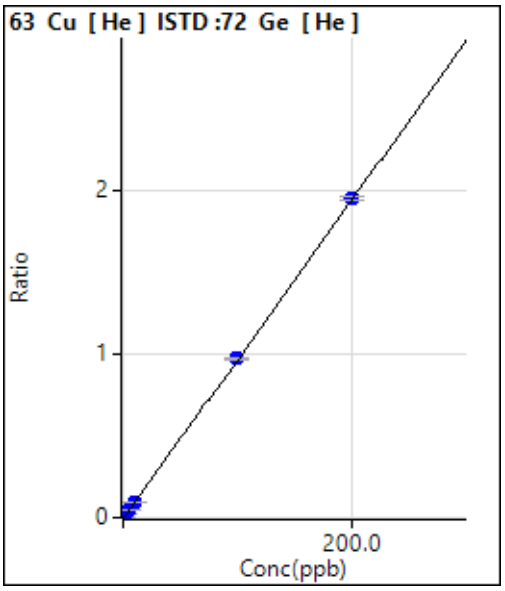
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2023.53	0.0019	P	5.2	
2	☐	2.000	1.909	14214.29	0.0127	P	4.1	-4.5
3	☐	5.000	4.456	29629.29	0.0270	P	1.6	-10.9
4	☐	10.000	9.287	57324.30	0.0543	P	2.5	-7.1
5	☐	100.000	91.199	567641.61	0.5166	P	3.0	-8.8
6	☐	200.000	204.450	1173628.76	1.1558	A	4.3	2.2

y = 0.0056 * x + 0.0019
R = 0.9987
DL = 0.05259 ppb
BEC = 0.3368 ppb

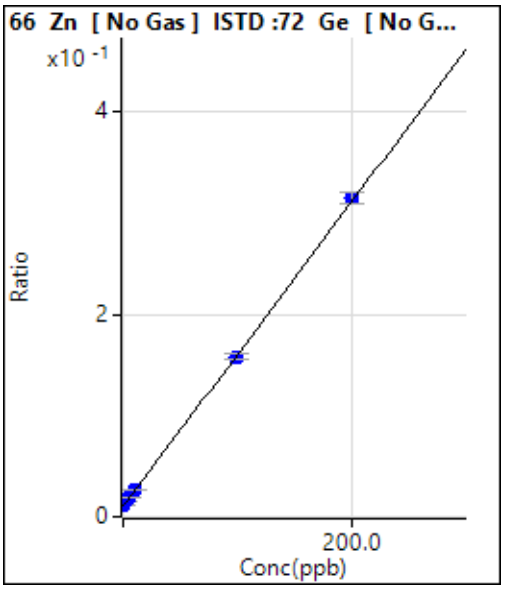
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	980.06	0.0029	P	15.3	
2	☐	2.000	1.961	7555.57	0.0220	P	3.1	-2.0
3	☐	5.000	4.816	16720.57	0.0499	P	0.5	-3.7
4	☐	10.000	9.869	33184.16	0.0993	P	0.5	-1.3
5	☐	100.000	99.522	332226.26	0.9748	P	0.9	-0.5
6	☐	200.000	200.251	647925.77	1.9586	P	0.9	0.1

y = 0.0098 * x + 0.0029
R = 1.0000
DL = 0.1364 ppb
BEC = 0.2963 ppb

Weight: <None>
Min Conc: <None>

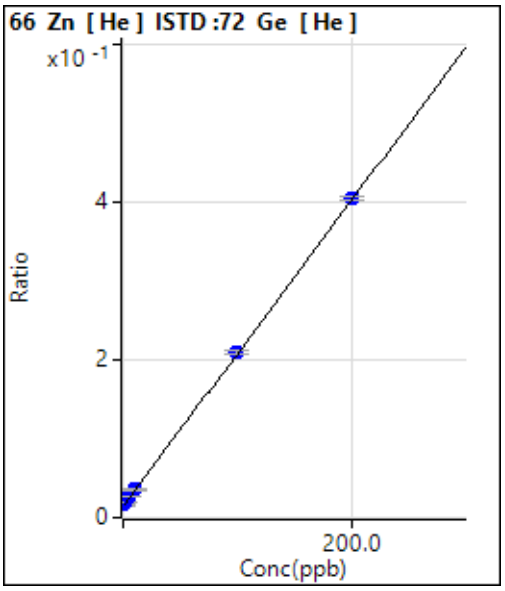


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12515.97	0.0118	P	3.3	
2	☐	2.000	1.971	16506.93	0.0147	P	0.6	-1.5
3	☐	5.000	4.571	20402.35	0.0186	P	2.4	-8.6
4	☐	10.000	9.903	28119.50	0.0266	P	3.3	-1.0
5	☐	100.000	97.093	173345.95	0.1578	P	3.2	-2.9
6	☐	200.000	201.469	319618.79	0.3148	P	4.1	0.7

y = 0.0015 * x + 0.0118
R = 0.9999
DL = 0.7632 ppb
BEC = 7.815 ppb

Weight: <None>
Min Conc: <None>

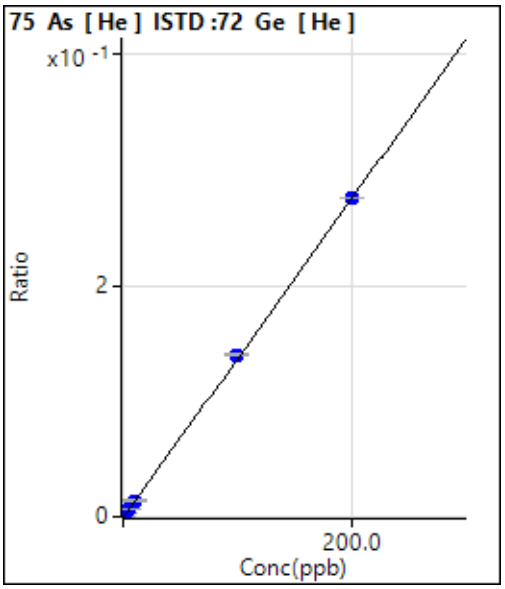
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5517.90	0.0163	P	6.4	
2	☐	2.000	1.584	6638.42	0.0194	P	6.3	-20.8
3	☐	5.000	4.932	8666.24	0.0259	P	1.3	-1.4
4	☐	10.000	9.972	11922.08	0.0357	P	4.2	-0.3
5	☐	100.000	99.664	71571.93	0.2100	P	1.3	-0.3
6	☐	200.000	200.175	134111.09	0.4054	P	1.3	0.1

y = 0.0019 * x + 0.0163
R = 1.0000
DL = 1.609 ppb
BEC = 8.381 ppb

Weight: <None>
Min Conc: <None>

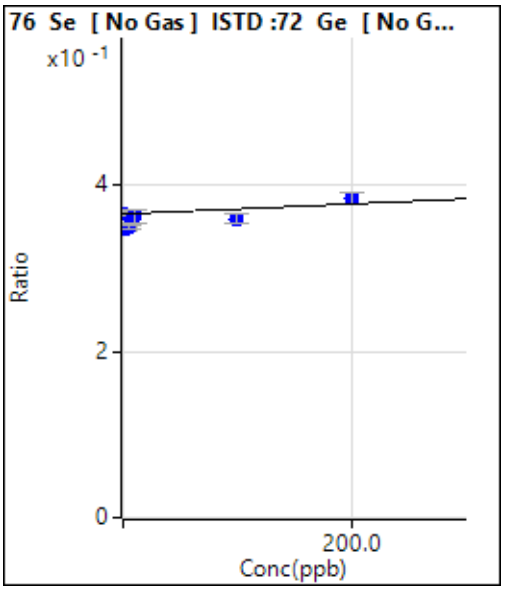


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115.56	0.0003	P	17.9	
2	☐	2.000	1.982	1054.49	0.0031	P	3.9	-0.9
3	☐	5.000	4.974	2413.56	0.0072	P	0.8	-0.5
4	☐	10.000	9.849	4657.49	0.0139	P	2.7	-1.5
5	☐	100.000	100.976	47613.54	0.1397	P	1.1	1.0
6	☐	200.000	199.521	91219.13	0.2757	P	0.3	-0.2

y = 0.0014 * x + 3.4123E-004
R = 1.0000
DL = 0.1324 ppb
BEC = 0.2472 ppb

Weight: <None>
Min Conc: <None>

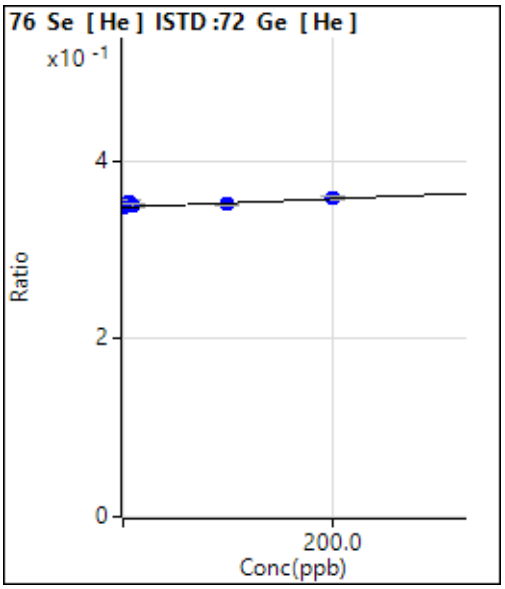
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	389615.57	0.3659	P	1.5	
2	☐	2.000	-307.857	389148.84	0.3470	P	1.2	-15492.
3	☐	5.000	-261.349	383167.95	0.3498	P	1.3	-5327.0
4	☐	10.000	-43.103	383238.18	0.3633	P	4.1	-531.0
5	☐	100.000	-90.749	395932.68	0.3604	P	3.0	-190.7
6	☐	200.000	307.787	390915.79	0.3849	P	3.3	53.9

y = 6.1562E-005 * x + 0.3659
R = 0.7903
DL = 265.8 ppb
BEC = 5944 ppb

Weight: <None>
Min Conc: <None>

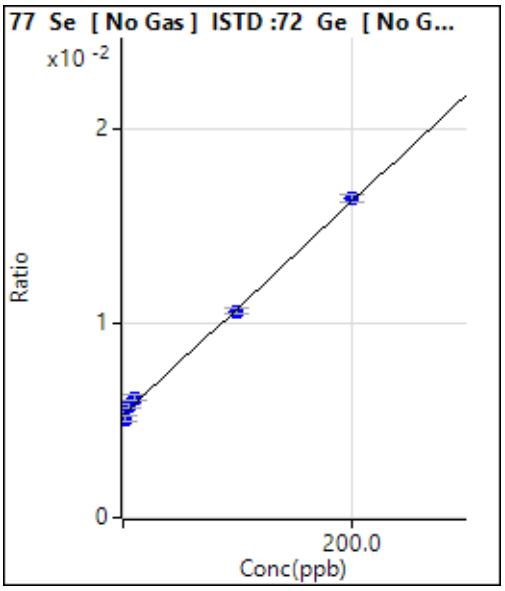


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	117895.22	0.3480	P	0.6	
2	☐	2.000	79.129	120602.08	0.3518	P	0.9	3856.5
3	☐	5.000	130.345	118651.35	0.3543	P	1.3	2506.9
4	☐	10.000	24.896	116728.09	0.3492	P	1.0	149.0
5	☐	100.000	81.283	119939.62	0.3519	P	0.6	-18.7
6	☐	200.000	204.709	118396.13	0.3579	P	1.2	2.4

y = 4.8025E-005 * x + 0.3480
R = 0.7505
DL = 123.2 ppb
BEC = 7247 ppb

Weight: <None>
Min Conc: <None>

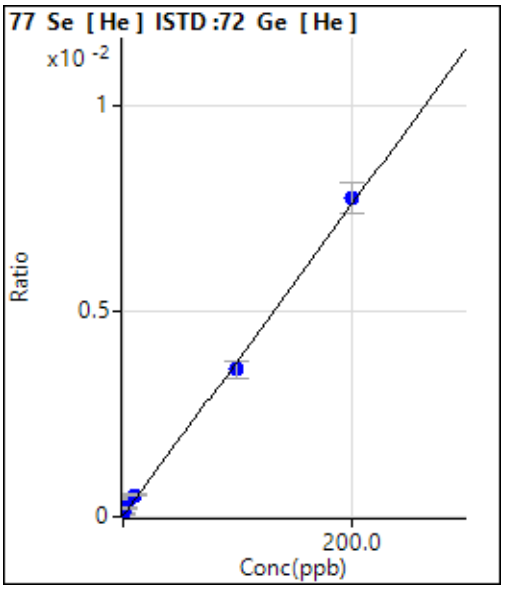
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5731.34	0.0054	P	6.6	
2	☐	2.000	-5.873	5678.00	0.0051	P	6.1	-393.7
3	☐	5.000	6.968	6314.92	0.0058	P	3.7	39.4
4	☐	10.000	14.585	6521.70	0.0062	P	5.1	45.8
5	☐	100.000	95.968	11695.24	0.0106	P	2.0	-4.0
6	☐	200.000	201.816	16697.29	0.0164	P	2.6	0.9

y = 5.4750E-005 * x + 0.0054
R = 0.9985
DL = 19.4 ppb
BEC = 98.36 ppb

Weight: <None>
Min Conc: <None>

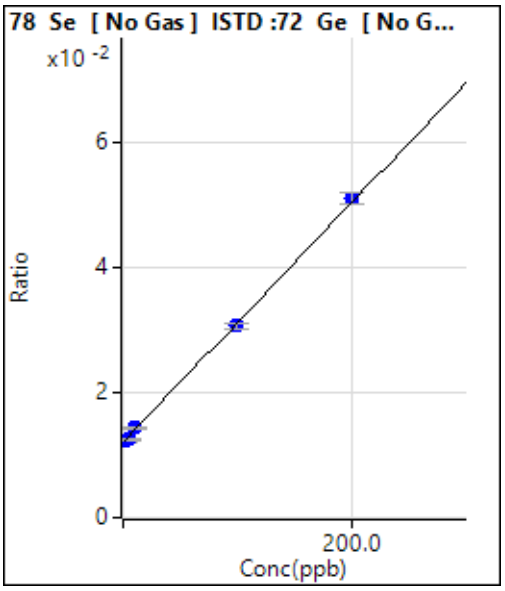


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0001	P	50.1	
2	☐	2.000	3.832	70.00	0.0002	P	14.3	91.6
3	☐	5.000	10.010	146.67	0.0004	P	16.2	100.2
4	☐	10.000	12.126	173.33	0.0005	P	8.2	21.3
5	☐	100.000	92.962	1220.08	0.0036	P	10.8	-7.0
6	☐	200.000	203.269	2566.96	0.0078	P	9.1	1.6

y = 3.7879E-005 * x + 5.9053E-005
R = 0.9987
DL = 2.344 ppb
BEC = 1.559 ppb

Weight: <None>
Min Conc: <None>

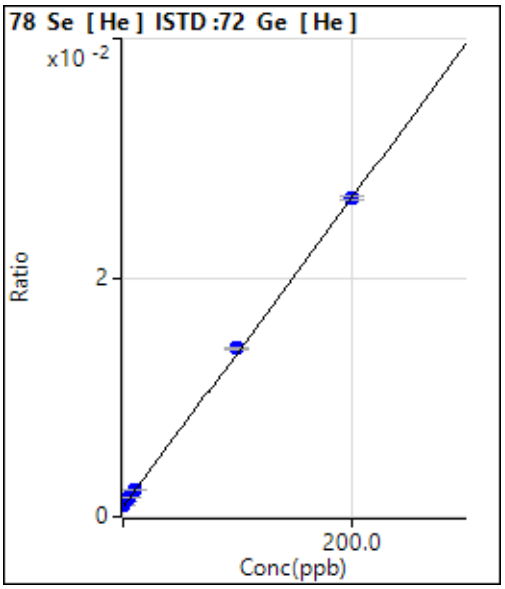
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13160.00	0.0124	P	6.2	
2	☐	2.000	-1.167	13610.42	0.0121	P	3.7	-158.3
3	☐	5.000	0.648	13673.81	0.0125	P	2.2	-87.0
4	☐	10.000	10.616	15182.08	0.0144	P	2.8	6.2
5	☐	100.000	95.448	33599.01	0.0306	P	3.4	-4.6
6	☐	200.000	202.386	51789.70	0.0510	P	4.1	1.2

y = 1.9091E-004 * x + 0.0124
R = 0.9995
DL = 12.11 ppb
BEC = 64.74 ppb

Weight: <None>
Min Conc: <None>

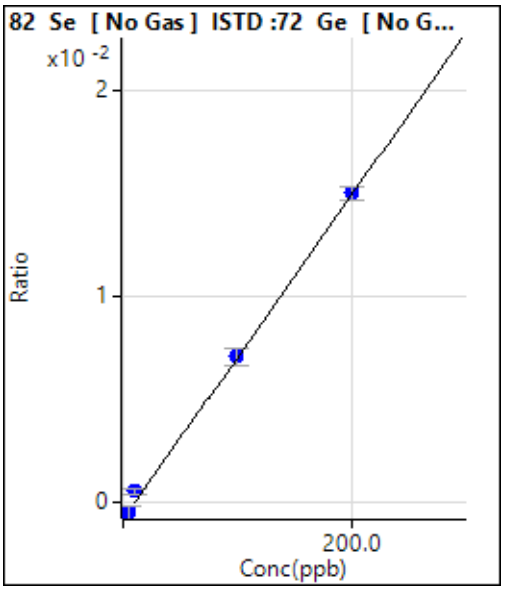


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	327.34	0.0010	P	7.1	
2	☐	2.000	2.067	422.68	0.0012	P	1.9	3.3
3	☐	5.000	5.223	549.34	0.0016	P	3.4	4.5
4	☐	10.000	10.128	760.02	0.0023	P	0.8	1.3
5	☐	100.000	101.812	4808.87	0.0141	P	1.3	1.8
6	☐	200.000	199.081	8822.23	0.0267	P	0.7	-0.5

y = 1.2910E-004 * x + 9.6621E-004
R = 0.9999
DL = 1.586 ppb
BEC = 7.484 ppb

Weight: <None>
Min Conc: <None>

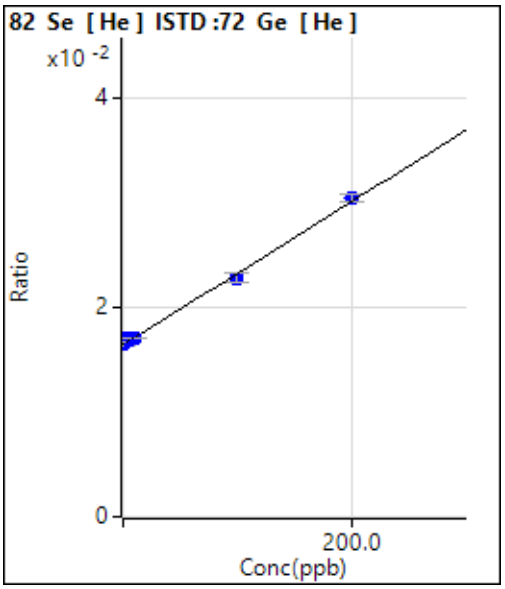
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-796.78	-0.0007	P	-54.8	
2	☐	2.000	2.169	-649.43	-0.0006	P	-141.	8.4
3	☐	5.000	3.266	-537.49	-0.0005	P	-106.	-34.7
4	☐	10.000	16.138	560.90	0.0005	P	51.3	61.4
5	☐	100.000	99.273	7795.94	0.0071	P	12.3	-0.7
6	☐	200.000	200.098	15287.09	0.0150	P	4.1	0.0

y = 7.8863E-005 * x - 7.4756E-004
R = 0.9994
DL = 15.58 ppb
BEC = -9.479 ppb

Weight: <None>
Min Conc: <None>

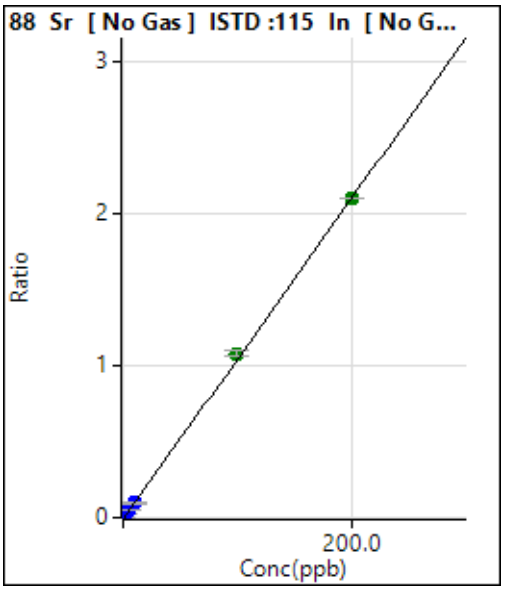


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5591.27	0.0165	P	2.3	
2	☐	2.000	8.706	5861.43	0.0171	P	2.1	335.3
3	☐	5.000	4.702	5634.62	0.0168	P	2.3	-6.0
4	☐	10.000	8.208	5704.63	0.0171	P	0.5	-17.9
5	☐	100.000	92.368	7775.73	0.0228	P	4.3	-7.6
6	☐	200.000	203.846	10070.59	0.0304	P	3.0	1.9

y = 6.8344E-005 * x + 0.0165
R = 0.9982
DL = 16.75 ppb
BEC = 241.5 ppb

Weight: <None>
Min Conc: <None>

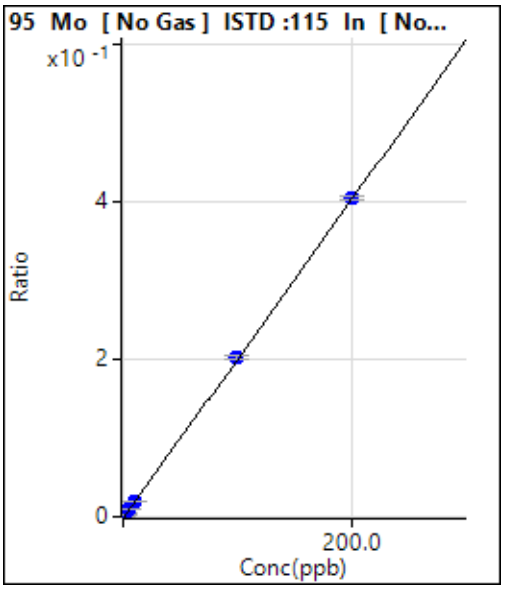
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	653.36	0.0005	P	5.1	
2	☐	2.000	1.822	27207.87	0.0197	P	2.5	-8.9
3	☐	5.000	4.819	69945.90	0.0514	P	2.4	-3.6
4	☐	10.000	8.984	130545.50	0.0954	P	1.1	-10.2
5	☐	100.000	102.284	1444761.23	1.0809	A	2.9	2.3
6	☐	200.000	198.915	2753242.46	2.1016	A	0.6	-0.5

y = 0.0106 * x + 4.8044E-004
R = 0.9999
DL = 0.007022 ppb
BEC = 0.04548 ppb

Weight: <None>
Min Conc: <None>

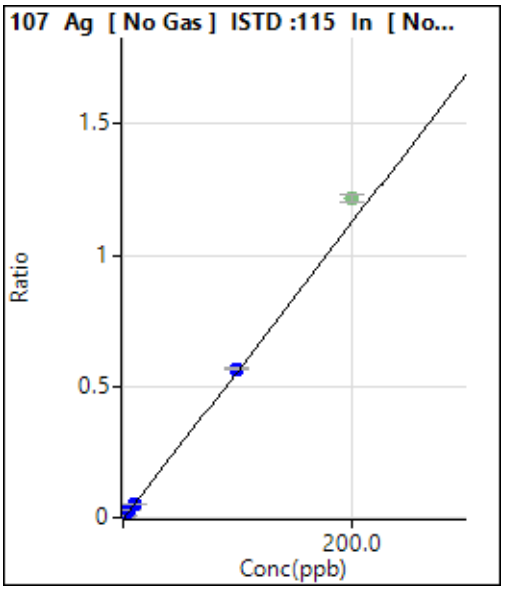


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	86.6	
2	☐	2.000	1.824	5111.09	0.0037	P	6.3	-8.8
3	☐	5.000	4.794	13236.83	0.0097	P	1.3	-4.1
4	☐	10.000	9.496	26353.07	0.0193	P	2.0	-5.0
5	☐	100.000	100.004	270914.09	0.2027	P	1.4	0.0
6	☐	200.000	200.030	531001.28	0.4053	P	1.3	0.0

y = 0.0020 * x + 9.7236E-006
R = 1.0000
DL = 0.01247 ppb
BEC = 0.004799 ppb

Weight: <None>
Min Conc: <None>

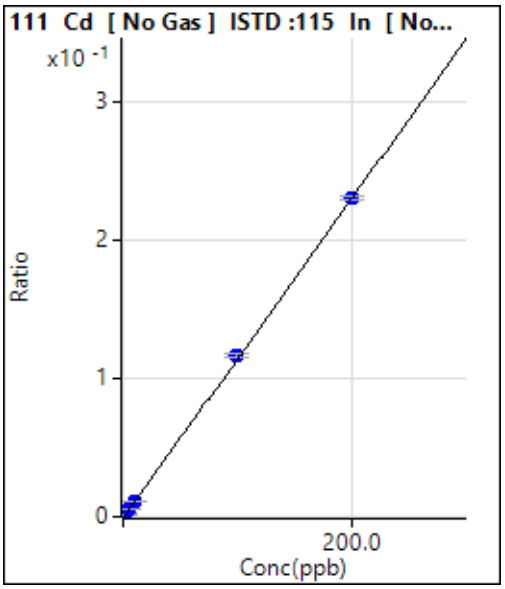
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	40.0	
2	☐	2.000	1.859	14704.99	0.0107	P	3.3	-7.1
3	☐	5.000	4.657	36009.26	0.0265	P	2.0	-6.9
4	☐	10.000	9.403	72890.65	0.0533	P	1.4	-6.0
5	☐	100.000	100.080	755480.59	0.5652	P	1.4	0.1
6	☑	200.000		1593637.32	1.2165	A	2.1	

y = 0.0056 * x + 1.6899E-004
R = 1.0000
DL = 0.03594 ppb
BEC = 0.02993 ppb

Weight: <None>
Min Conc: <None>

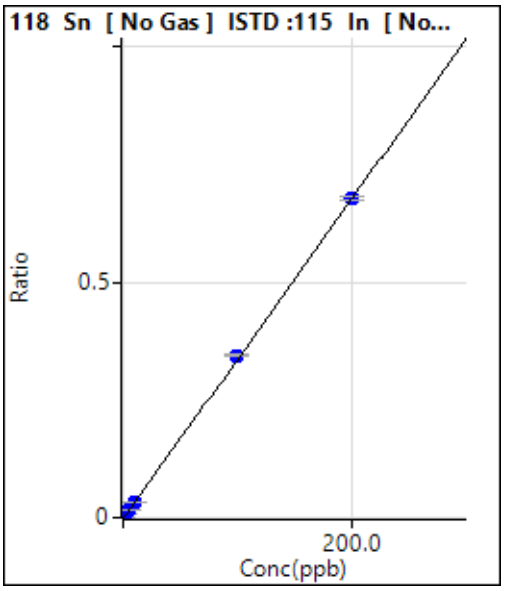


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.906	3040.41	0.0022	P	13.7	-4.7
3	☐	5.000	4.614	7268.79	0.0053	P	7.6	-7.7
4	☐	10.000	9.821	15559.44	0.0114	P	4.7	-1.8
5	☐	100.000	101.002	156297.13	0.1169	P	2.0	1.0
6	☐	200.000	199.518	302586.33	0.2310	P	1.0	-0.2

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

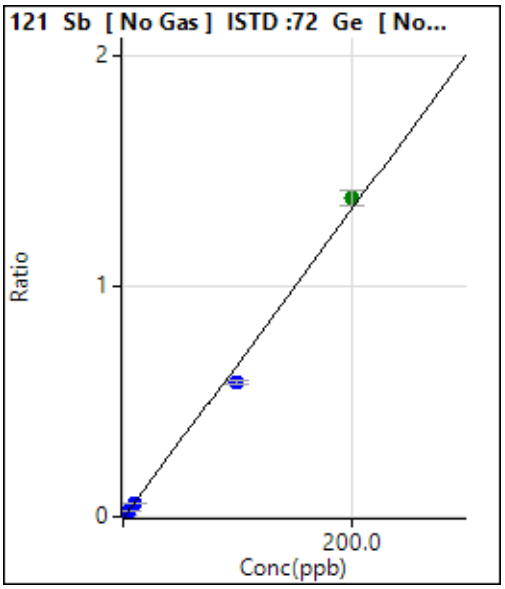
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1216.75	0.0009	P	5.3	
2	☐	2.000	1.889	10077.34	0.0073	P	3.3	-5.5
3	☐	5.000	4.597	22459.55	0.0165	P	0.2	-8.1
4	☐	10.000	9.190	43923.72	0.0321	P	0.9	-8.1
5	☐	100.000	101.196	460443.38	0.3444	P	1.3	1.2
6	☐	200.000	199.454	888216.26	0.6780	P	0.7	-0.3

y = 0.0034 * x + 8.9381E-004
R = 1.0000
DL = 0.0416 ppb
BEC = 0.2633 ppb

Weight: <None>
Min Conc: <None>

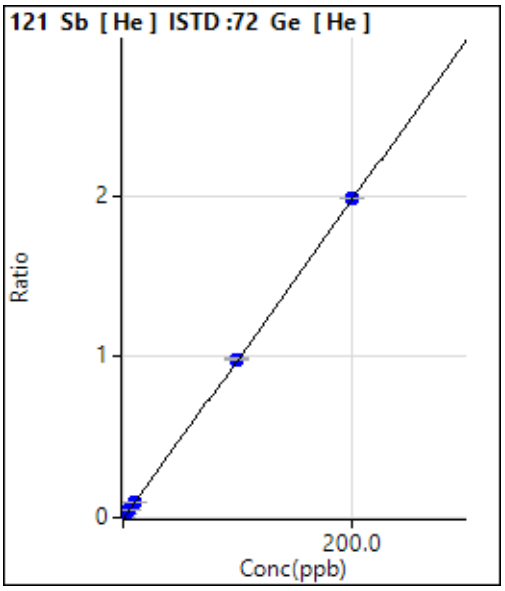


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	300.01	0.0003	P	28.5	
2	☐	2.000	1.647	12686.36	0.0113	P	7.0	-17.7
3	☐	5.000	4.146	30726.32	0.0281	P	2.0	-17.1
4	☐	10.000	8.698	61785.72	0.0586	P	3.6	-13.0
5	☐	100.000	87.172	642005.95	0.5843	P	2.7	-12.8
6	☐	200.000	206.504	1404987.27	1.3837	A	4.7	3.3

y = 0.0067 * x + 2.8121E-004
R = 0.9972
DL = 0.03585 ppb
BEC = 0.04198 ppb

Weight: <None>
Min Conc: <None>

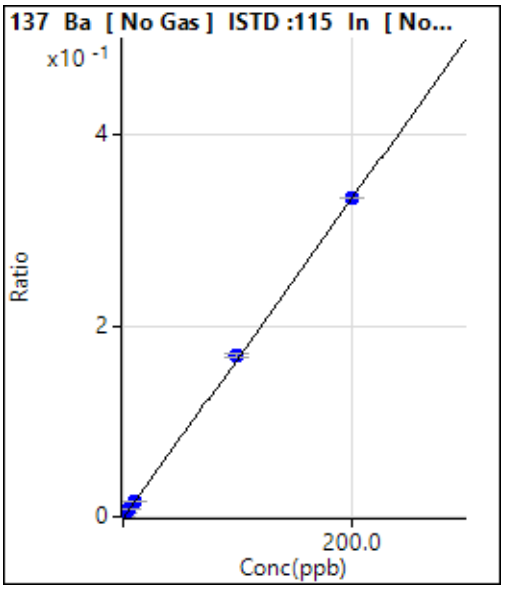
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	193.34	0.0006	P	14.8	
2	☐	2.000	1.825	6388.34	0.0186	P	3.3	-8.7
3	☐	5.000	4.739	15899.89	0.0475	P	2.2	-5.2
4	☐	10.000	9.532	31718.67	0.0949	P	3.8	-4.7
5	☐	100.000	99.483	335743.37	0.9852	P	1.5	-0.5
6	☐	200.000	200.290	655992.92	1.9829	P	0.5	0.1

y = 0.0099 * x + 5.7065E-004
R = 1.0000
DL = 0.02556 ppb
BEC = 0.05766 ppb

Weight: <None>
Min Conc: <None>

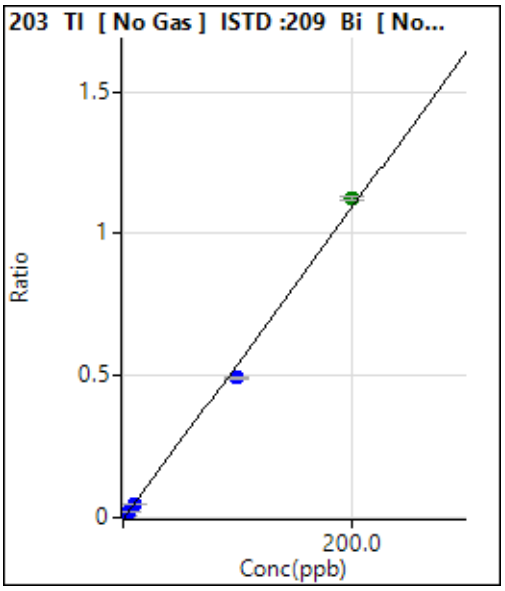


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	130.01	0.0001	P	26.4	
2	☐	2.000	1.942	4614.25	0.0033	P	5.1	-2.9
3	☐	5.000	4.948	11401.88	0.0084	P	4.2	-1.0
4	☐	10.000	9.331	21508.06	0.0157	P	2.6	-6.7
5	☐	100.000	100.886	225869.41	0.1690	P	2.0	0.9
6	☐	200.000	199.592	437828.10	0.3342	P	0.6	-0.2

y = 0.0017 * x + 9.5502E-005
R = 1.0000
DL = 0.0452 ppb
BEC = 0.05705 ppb

Weight: <None>
Min Conc: <None>

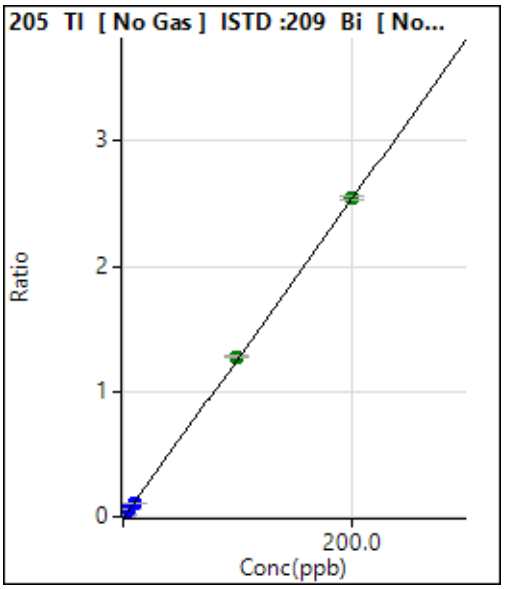
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.7	
2	☐	2.000	1.658	12923.58	0.0091	P	4.3	-17.1
3	☐	5.000	4.180	32135.16	0.0229	P	2.2	-16.4
4	☐	10.000	8.226	63789.30	0.0451	P	0.3	-17.7
5	☐	100.000	89.840	681766.19	0.4925	P	1.5	-10.2
6	☐	200.000	205.193	1501543.00	1.1249	A	1.1	2.6

y = 0.0055 * x + 1.4469E-005
R = 0.9983
DL = 0.004018 ppb
BEC = 0.002639 ppb

Weight: <None>
Min Conc: <None>

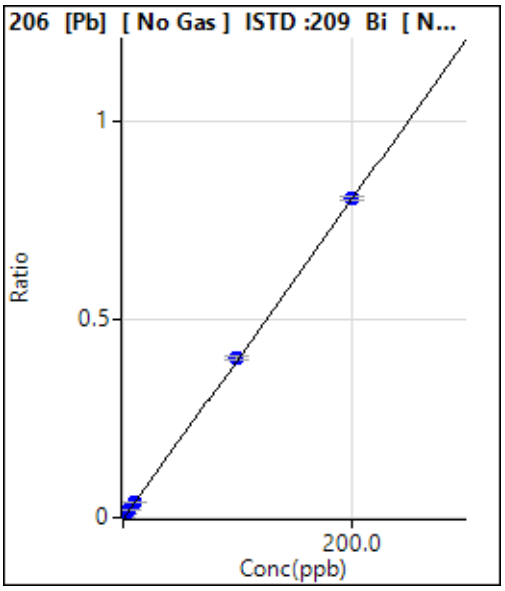


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	17.5	
2	☐	2.000	1.717	31082.39	0.0219	P	1.7	-14.1
3	☐	5.000	4.271	76266.31	0.0544	P	1.3	-14.6
4	☐	10.000	8.723	157097.24	0.1111	P	0.9	-12.8
5	☐	100.000	100.336	1768441.07	1.2776	A	1.6	0.3
6	☐	200.000	199.917	3397792.45	2.5456	A	1.1	0.0

y = 0.0127 * x + 2.6458E-005
R = 1.0000
DL = 0.001088 ppb
BEC = 0.002078 ppb

Weight: <None>
Min Conc: <None>

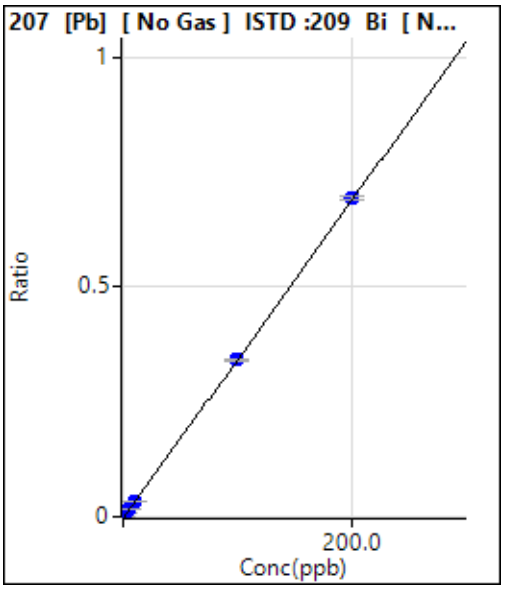
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	140.00	0.0001	P	24.5	
2	☐	2.000	1.937	11248.57	0.0079	P	3.4	-3.1
3	☐	5.000	4.636	26374.87	0.0188	P	2.3	-7.3
4	☐	10.000	9.490	54321.79	0.0384	P	0.5	-5.1
5	☐	100.000	100.315	560714.52	0.4051	P	2.0	0.3
6	☐	200.000	199.878	1077258.21	0.8071	P	1.3	-0.1

y = 0.0040 * x + 1.0074E-004
R = 1.0000
DL = 0.0183 ppb
BEC = 0.02495 ppb

Weight: <None>
Min Conc: <None>

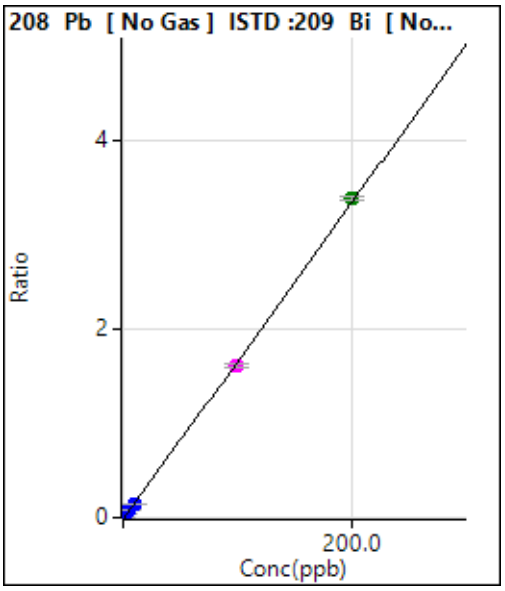


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	106.67	0.0001	P	21.4	
2	☐	2.000	1.915	9507.12	0.0067	P	4.8	-4.2
3	☐	5.000	4.602	22397.17	0.0160	P	2.9	-8.0
4	☐	10.000	9.393	46005.05	0.0325	P	1.9	-6.1
5	☐	100.000	98.683	472119.56	0.3411	P	1.4	-1.3
6	☐	200.000	200.700	925798.76	0.6936	P	1.1	0.3

y = 0.0035 * x + 7.6762E-005
R = 1.0000
DL = 0.01423 ppb
BEC = 0.02221 ppb

Weight: <None>
Min Conc: <None>

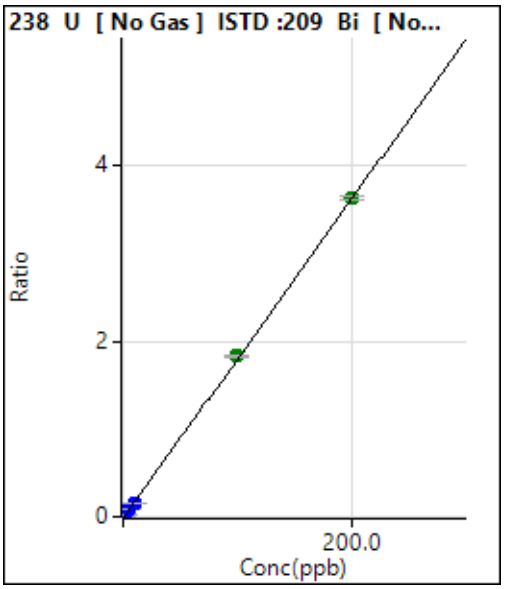
Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	616.68	0.0004	P	7.6	
2	☐	2.000	1.819	43937.56	0.0309	P	2.1	-9.0
3	☐	5.000	4.478	105849.36	0.0755	P	1.4	-10.4
4	☐	10.000	9.050	215189.95	0.1522	P	0.6	-9.5
5	☐	100.000	96.161	2232387.98	1.6127	M	1.5	-3.8
6	☐	200.000	201.982	4520443.14	3.3868	A	1.6	1.0

y = 0.0168 * x + 4.4394E-004
R = 0.9998
DL = 0.006029 ppb
BEC = 0.02648 ppb

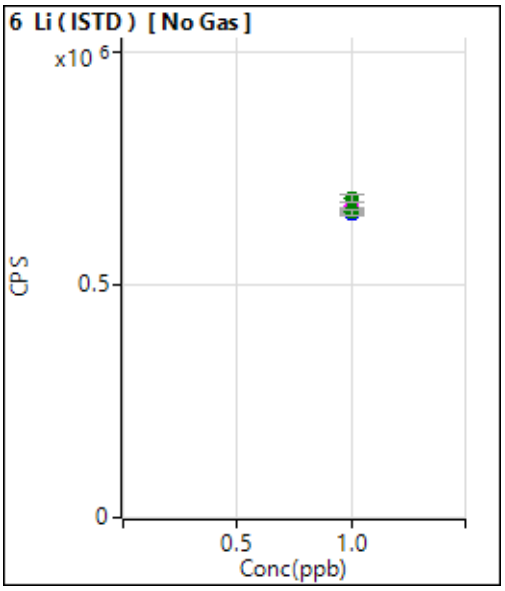
Weight: <None>
Min Conc: <None>



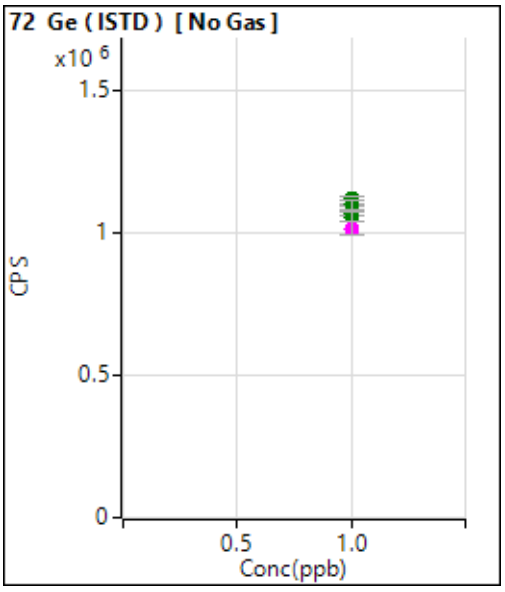
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	44.9	
2	☐	2.000	1.746	45053.23	0.0317	P	1.3	-12.7
3	☐	5.000	4.392	111879.02	0.0798	P	1.9	-12.2
4	☐	10.000	8.879	228172.47	0.1614	P	0.6	-11.2
5	☐	100.000	100.790	2535315.64	1.8316	A	1.1	0.8
6	☐	200.000	199.679	4843356.07	3.6286	A	1.4	-0.2

y = 0.0182 * x + 9.6416E-006
R = 1.0000
DL = 0.0007149 ppb
BEC = 0.0005306 ppb

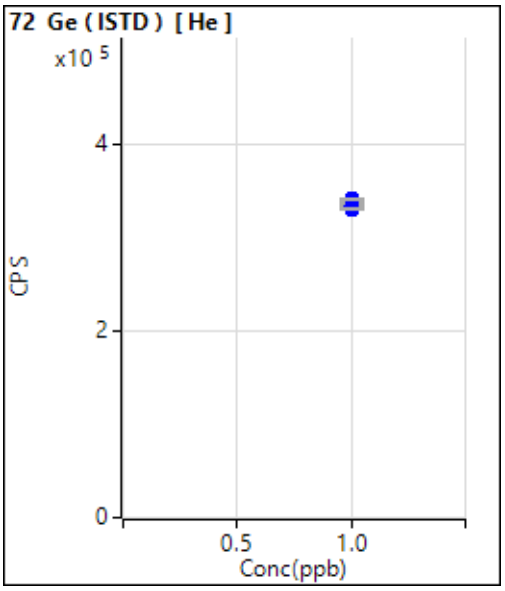
Weight: <None>
Min Conc: <None>



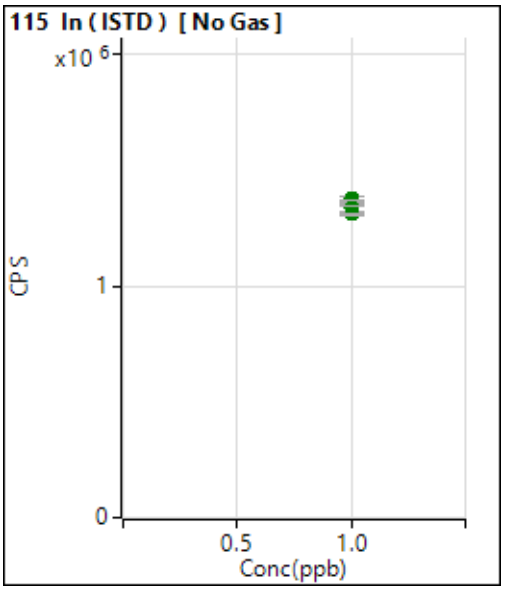
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		670806.57		M	2.3	
2	☐	1.000		685146.84		M	2.9	
3	☐	1.000		658640.95		P	0.1	
4	☐	1.000		653287.19		P	0.6	
5	☐	1.000		685499.72		A	2.0	
6	☐	1.000		655435.47		A	2.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1064832.80		A	1.3	
2	☐	1.000		1121595.69		A	0.9	
3	☐	1.000		1095296.75		A	0.7	
4	☐	1.000		1055891.36		A	3.4	
5	☐	1.000		1099376.75		A	3.0	
6	☐	1.000		1016593.71		M	4.1	

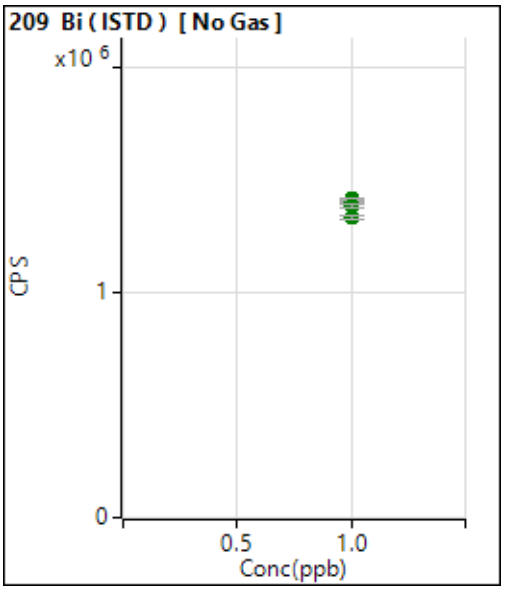


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		338750.20		P	0.3	
2	☐	1.000		342790.06		P	0.5	
3	☐	1.000		334894.32		P	0.6	
4	☐	1.000		334264.68		P	0.9	
5	☐	1.000		340806.65		P	0.6	
6	☐	1.000		330825.84		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1360629.72		A	1.9	
2	☐	1.000		1379610.82		A	1.6	
3	☐	1.000		1361230.28		A	1.2	
4	☐	1.000		1368776.61		A	0.7	
5	☐	1.000		1336992.47		A	1.7	
6	☐	1.000		1310100.00		A	0.9	

Calibration for 212_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1388985.61		A	2.0	
2	☐	1.000		1419790.14		A	0.4	
3	☐	1.000		1401715.45		A	1.3	
4	☐	1.000		1414056.38		A	0.8	
5	☐	1.000		1384389.30		A	1.6	
6	☐	1.000		1334929.82		A	1.6	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	213LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:23:51-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.881	1.881	3.93	51596	0.00	2	
Be	9	1	No Gas	1.960	1.960	2.61	3487	0.06	2	
V	51	2	He	1.550	1.550	4.86	6454	0.02	2	
Cr	52	2	He	1.794	1.794	3.17	6752	0.03	2	
Fe	56	2	He	187.314	187.314	1.72	582642	0.03	200	
Se	78	2	He	2.198	2.198	22.84	418	0.53	2	
As	75	2	He	1.797	1.797	2.77	943	0.19	2	
Ca	44	2	He	188.080	188.080	6.71	3831	4.91	200	
Na	23	2	He	141.007	141.007	2.92	313235	0.05	200	
Mg	24	2	He	187.566	187.566	2.34	63237	0.30	200	
K	39	2	He	167.279	167.279	3.09	151451	0.11	200	
Mn	55	2	He	1.979	1.979	0.29	5071	0.04	2	
Co	59	2	He	1.945	1.945	1.78	9270	0.02	2	
Ni	60	2	He	1.848	1.848	8.12	2454	0.08	2	
Cu	63	2	He	2.086	2.086	4.13	7779	0.03	2	
Zn	66	2	He	2.129	2.129	26.98	6829	0.03	2	
Al	27	2	He	1.784	1.784	35.20	787	0.23	2	
B	11	1	No Gas	41.103	41.103	10.46	45815	0.09	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.694	1.694	10.15	31543	0.01	2	
Si	28	1	No Gas	15.990	15.990	13.55	202528	0.01	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.835	1.835	1.13	14431	0.01	2	
Cd	111	1	No Gas	1.981	1.981	2.84	3144	0.06	2	
Sr	88	1	No Gas	1.769	1.769	3.41	26266	0.01	2	
Mo	95	1	No Gas	1.895	1.895	3.00	5274	0.04	2	
Sn	118	1	No Gas	1.942	1.942	4.46	10261	0.02	2	
Sb	121	1	No Gas	1.823	1.823	1.71	12810	0.01	2	
Ba	137	1	No Gas	1.922	1.922	1.42	4541	0.04	2	
Tl	205	1	No Gas	1.736	1.736	0.49	31072	0.01	2	
Tl	203	1	No Gas	1.726	1.726	1.79	13307	0.01	2	
Pb	208	1	No Gas	1.832	1.832	2.10	43741	0.00	2	
U	238	1	No Gas	1.776	1.776	3.04	45307	0.00	2	
Ca	43	2	He	149.765	149.765	9.26	183	81.69	200	
Sb	121	2	He	1.893	1.893	2.16	6455	0.03	2	
Ti	47	2	He	1.917	1.917	26.69	213	0.90	200	
Cu	63	1	No Gas	2.000	2.000	3.57	13520	0.01	2	
Se	82	1	No Gas	2.934	2.934	244.67	-532	-0.55	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	648081	0.61	670807	96.61	70	120	
Ge	72	2	He	334353	0.79	338750	98.70	70	120	
Ge	72	1	No Gas	1025387	1.69	1064833	96.30	70	120	
In	115	1	No Gas	1370670	1.56	1360630	100.74	70	120	
Bi	209	1	No Gas	1404141	2.01	1388986	101.09	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	214LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:25:50-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.880	4.880	1.99	75952	0.01	5	
Be	9	1	No Gas	5.018	5.018	0.92	8900	0.06	5	
V	51	2	He	4.284	4.284	4.19	13992	0.03	5	
Cr	52	2	He	4.791	4.791	1.96	16273	0.03	5	
Fe	56	2	He	509.353	509.353	0.55	1560980	0.03	500	
Se	78	2	He	3.947	3.947	23.29	491	0.80	5	
As	75	2	He	4.870	4.870	2.00	2352	0.21	5	
Ca	44	2	He	515.797	515.797	3.09	9727	5.30	500	
Na	23	2	He	412.525	412.525	0.85	475966	0.09	500	
Mg	24	2	He	470.488	470.488	0.62	157562	0.30	500	
K	39	2	He	439.407	439.407	1.82	252263	0.17	500	
Mn	55	2	He	4.849	4.849	0.84	11785	0.04	5	
Co	59	2	He	4.807	4.807	2.51	22799	0.02	5	
Ni	60	2	He	4.887	4.887	7.16	6101	0.08	5	
Cu	63	2	He	4.803	4.803	1.72	16587	0.03	5	
Zn	66	2	He	4.725	4.725	8.21	8486	0.06	5	
Al	27	2	He	5.873	5.873	13.90	1503	0.39	5	
B	11	1	No Gas	36.554	36.554	0.73	42255	0.09	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	5.277	5.277	6.80	57516	0.01	5	
Si	28	1	No Gas	29.499	29.499	8.53	246889	0.01	25	
Ag	107	1	No Gas	4.655	4.655	0.95	36434	0.01	5	
Cd	111	1	No Gas	4.773	4.773	6.72	7609	0.06	5	
Sr	88	1	No Gas	4.755	4.755	2.85	69842	0.01	5	
Mo	95	1	No Gas	4.686	4.686	2.15	13093	0.04	5	
Sn	118	1	No Gas	4.679	4.679	2.81	23107	0.02	5	
Sb	121	1	No Gas	4.305	4.305	6.93	30325	0.01	5	
Ba	137	1	No Gas	4.773	4.773	3.01	11138	0.04	5	
Tl	205	1	No Gas	4.254	4.254	1.18	77121	0.01	5	
Tl	203	1	No Gas	4.061	4.061	1.85	31707	0.01	5	
Pb	208	1	No Gas	4.456	4.456	0.20	106948	0.00	5	
U	238	1	No Gas	4.405	4.405	0.85	113917	0.00	5	
Ca	43	2	He	539.875	539.875	2.19	590	91.50	500	
Sb	121	2	He	4.828	4.828	1.96	16107	0.03	5	
Ti	47	2	He	4.720	4.720	15.90	513	0.92	5	
Cu	63	1	No Gas	4.572	4.572	1.15	28881	0.02	5	
Se	82	1	No Gas	2.189	2.189	433.91	-584	-0.37	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	649964	0.43	670807	96.89	70	120	
Ge	72	2	He	333073	0.89	338750	98.32	70	120	
Ge	72	1	No Gas	1042611	2.96	1064833	97.91	70	120	
In	115	1	No Gas	1377482	1.00	1360630	101.24	70	120	
Bi	209	1	No Gas	1423133	0.85	1388986	102.46	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICCB
Data File Name	215_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:27:49-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.071	134.1	36622	1.6	0.5	
Be	9	1	No Gas	0.009	116.0	50	34.6	0.5	
V	51	2	He	-0.372	-5.4	1099	4.4	2.5	
Cr	52	2	He	0.019	107.3	1057	6.3	2.5	
Fe	56	2	He	0.906	8.1	12709	1.9	100	
Se	78	2	He	0.043	694.2	319	4.7	1	
As	75	2	He	-0.097	-42.8	68	27.1	2.5	
Ca	44	2	He	2.287	63.6	460	5.8	100	
Na	23	2	He	-36.080	-9.8	201935	0.3	100	
Mg	24	2	He	0.516	45.3	477	17.0	100	
K	39	2	He	-20.298	-8.6	79730	0.2	100	
Mn	55	2	He	0.065	32.6	553	8.5	2.5	
Co	59	2	He	0.002	158.2	27	43.3	2.5	
Ni	60	2	He	-0.036	-85.0	173	20.3	2.5	
Cu	63	2	He	0.044	95.4	1090	11.5	1	
Zn	66	2	He	-0.221	-66.7	5201	2.5	2.5	
Al	27	2	He	-0.450	-100.5	383	20.9	5	
B	11	1	No Gas	8.519	12.1	19156	4.6	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.754	-6.3	14141	2.1	5	
Si	28	1	No Gas	3.592	3.5	162166	0.3	10	
Ag	107	1	No Gas	0.005	183.5	270	28.0	2.5	
Cd	111	1	No Gas	0.008	43.3	13	43.3	1	
Sr	88	1	No Gas	-0.010	-76.3	513	20.0	2.5	
Mo	95	1	No Gas	0.001	593.2	17	124.9	2.5	
Sn	118	1	No Gas	0.146	8.0	1887	3.4	5	
Sb	121	1	No Gas	0.035	45.4	517	20.9	2.5	
Ba	137	1	No Gas	-0.001	-424.2	127	9.1	2.5	
Tl	205	1	No Gas	0.004	22.4	103	14.8	1	
Tl	203	1	No Gas	0.009	34.5	87	26.6	1	
Pb	208	1	No Gas	0.005	79.4	737	12.6	2.5	
U	238	1	No Gas	0.001	27.6	50	20.0	2.5	
Ca	43	2	He	-18.620	-30.2	7	86.6	100	
Sb	121	2	He	0.012	41.8	227	6.7	2.5	
Ti	47	2	He	-0.030	-182.7	3	173.2	2.5	
Se	82	1	No Gas	-1.560	-824.1	-875	-116.3	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	641000	0.65	670807	95.56	70	120	
Ge	72	2	He	327887	0.93	338750	96.79	70	120	
Ge	72	1	No Gas	1004356	0.29	1064833	94.32	70	120	
In	115	1	No Gas	1357052	0.60	1360630	99.74	70	120	
Bi	209	1	No Gas	1396485	0.36	1388986	100.54	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	217_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:31:46-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	102.176	3.017	929572	1.96	100	102.2	90	110	
Be	9	1	No Gas	99.602	2.676	189954	1.33	100	99.6	90	110	
V	51	2	He	99.546	0.218	282507	1.23	100	99.5	90	110	
Cr	52	2	He	100.602	0.873	327327	0.90	100	100.6	90	110	
Fe	56	2	He	10025.554	0.204	31097720	1.11	10000	100.3	90	110	
Se	78	2	He	102.009	1.922	4796	2.86	100	102.0	90	110	
As	75	2	He	103.876	1.028	48748	0.12	100	103.9	90	110	
Ca	44	2	He	9935.752	0.833	182879	1.87	10000	99.4	90	110	
Na	23	2	He	9912.553	0.464	6325851	1.52	10000	99.1	90	110	
Mg	24	2	He	9981.454	1.808	3398343	2.90	10000	99.8	90	110	
K	39	2	He	10030.341	0.417	3895863	1.35	10000	100.3	90	110	
Mn	55	2	He	101.057	1.030	241848	0.08	100	101.1	90	110	
Co	59	2	He	100.945	0.382	487138	1.26	100	100.9	90	110	
Ni	60	2	He	100.848	0.673	123856	1.72	100	100.8	90	110	
Cu	63	2	He	101.044	1.181	335742	2.04	100	101.0	90	110	
Zn	66	2	He	101.331	1.125	72346	2.13	100	101.3	90	110	
Al	27	2	He	112.678	1.694	20712	2.05	100	112.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	497.655	1.617	451008	1.76	500	99.5	90	110	
Al	27	1	No Gas	101.056	0.253	808022	0.42	100	101.1	90	110	
Si	28	1	No Gas	502.702	0.193	1842824	0.46	5000	10.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.867	1.421	780257	0.83	100	100.9	90	110	
Cd	111	1	No Gas	101.227	0.907	160534	0.66	100	101.2	90	110	
Sr	88	1	No Gas	102.386	2.051	1482219	2.05	100	102.4	90	110	
Mo	95	1	No Gas	100.021	0.874	277661	0.47	100	100.0	90	110	
Sn	118	1	No Gas	101.472	0.709	473139	1.04	100	101.5	90	110	
Sb	121	1	No Gas	88.587	0.947	677257	0.47	100	88.6	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	102.044	1.285	234126	0.72	100	102.0	90	110	
Tl	205	1	No Gas	106.011	0.659	1874886	0.63	100	106.0	90	110	
Tl	203	1	No Gas	93.807	1.705	714255	0.60	100	93.8	90	110	
Pb	208	1	No Gas	102.726	1.540	2392662	1.14	100	102.7	90	110	
U	238	1	No Gas	104.583	3.027	2639189	1.94	100	104.6	90	110	
Ca	43	2	He	10203.202	0.530	10878	1.54	10000	102.0	90	110	
Sb	121	2	He	102.569	0.116	344558	1.19	100	102.6	90	110	
Ti	47	2	He	94.289	3.525	10327	3.54	100	94.3	90	110	
Cu	63	1	No Gas	90.632	1.094	585642	1.13	100	90.6	90	110	
Se	82	1	No Gas	93.903	8.382	7592	8.86	100	93.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	701714	1.41	670807	104.61	70	120	
Ge	72	2	He	339217	1.10	338750	100.14	70	120	
Ge	72	1	No Gas	1140642	0.49	1064833	107.12	70	120	
In	115	1	No Gas	1369921	0.59	1360630	100.68	70	120	
Bi	209	1	No Gas	1388991	1.10	1388986	100.00	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	218_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:33:41-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.066	139.3	35762	1.5	0.5	
Be	9	1	No Gas	0.011	80.5	53	28.6	0.5	
V	51	2	He	-0.381	-8.3	1062	9.2	2.5	
Cr	52	2	He	0.029	83.3	1073	6.3	2.5	
Fe	56	2	He	0.236	2.9	10574	1.8	100	
Se	78	2	He	0.692	42.5	342	4.1	2	
As	75	2	He	-0.079	-36.3	76	18.4	2.5	
Ca	44	2	He	-5.207	-27.0	323	8.9	100	
Na	23	2	He	-41.796	-6.6	196180	0.9	100	
Mg	24	2	He	0.020	528.4	310	12.9	100	
K	39	2	He	-15.768	-15.9	80424	1.2	100	
Mn	55	2	He	0.057	78.5	530	21.0	2.5	
Co	59	2	He	0.007	91.9	53	60.3	2.5	
Ni	60	2	He	-0.100	-26.5	97	31.6	2.5	
Cu	63	2	He	-0.047	-8.1	790	1.3	2	
Zn	66	2	He	-0.319	-36.6	5078	2.9	2.5	
Al	27	2	He	-0.641	-64.6	347	21.8	5	
B	11	1	No Gas	24.538	14.6	31293	8.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.016	-2.2	12072	1.8	5	
Si	28	1	No Gas	9.699	4.0	175948	0.4	10	
Ag	107	1	No Gas	0.008	70.0	283	14.3	2.5	
Cd	111	1	No Gas	0.015	26.3	23	24.7	1	
Sr	88	1	No Gas	-0.005	-128.9	567	14.4	2.5	
Mo	95	1	No Gas	0.016	14.4	57	10.2	2.5	
Sn	118	1	No Gas	0.051	44.5	1413	5.7	5	
Sb	121	1	No Gas	0.051	15.2	613	8.2	2.5	
Ba	137	1	No Gas	-0.003	-371.3	120	22.0	2.5	
Tl	205	1	No Gas	0.020	29.9	377	29.1	1	
Tl	203	1	No Gas	0.012	26.5	107	19.5	1	
Pb	208	1	No Gas	0.016	27.7	957	12.1	2.5	
U	238	1	No Gas	0.009	8.4	230	8.7	2.5	
Ca	43	2	He	-8.806	-125.3	17	69.3	100	
Sb	121	2	He	0.010	74.2	217	9.6	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	-0.053	-10.0	1570	2.5	2.5	
Se	82	1	No Gas	8.317	112.7	-93	-776.3	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	626509	0.52	670807	93.40	70	120	
Ge	72	2	He	324001	1.67	338750	95.65	70	120	
Ge	72	1	No Gas	981567	0.77	1064833	92.18	70	120	
In	115	1	No Gas	1327261	1.45	1360630	97.55	70	120	
Bi	209	1	No Gas	1356885	2.11	1388986	97.69	70	120	

Sample Report

Sample Table

Sample Name	MBLK-181402
Data File Name	219SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:35:40-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.053	0.053	175.10	35615	0.00	2000	
Be	9	1	No Gas	0.008	0.008	72.57	48	0.02	2000	
V	51	2	He	-0.356	-0.356	-4.96	1133	-0.03	2000	
Cr	52	2	He	0.002	0.002	337.15	997	0.00	2000	
Fe	56	2	He	-0.150	-0.150	-24.81	9477	0.00	200000	
Se	78	2	He	0.129	0.129	505.75	320	0.04	2000	
As	75	2	He	-0.077	-0.077	-10.36	77	-0.10	2000	
Ca	44	2	He	-3.586	-3.586	-80.32	353	-1.01	200000	
Na	23	2	He	-49.212	-49.212	-2.05	192790	-0.03	200000	
Mg	24	2	He	-0.269	-0.269	-36.95	217	-0.12	200000	
K	39	2	He	-21.457	-21.457	-6.73	78758	-0.03	200000	
Mn	55	2	He	0.027	0.027	9.51	463	0.01	2000	
Co	59	2	He	0.001	0.001	564.61	23	0.00	2000	
Ni	60	2	He	-0.089	-0.089	-17.06	110	-0.08	2000	
Cu	63	2	He	-0.076	-0.076	-5.07	700	-0.01	2000	
Zn	66	2	He	-0.125	-0.125	-325.65	5224	0.00	2000	
Al	27	2	He	-0.106	-0.106	-373.89	440	-0.02	2000	
B	11	1	No Gas	7.353	7.353	7.04	17785	0.04	2000	
Al	27	1	No Gas	-0.594	-0.594	-18.97	14937	0.00	2000	
Si	28	1	No Gas	3.831	3.831	17.61	159581	0.00	2000	
Ag	107	1	No Gas	0.002	0.002	232.94	243	0.00	2000	
Cd	111	1	No Gas	0.004	0.004	86.61	7	0.06	2000	
Sr	88	1	No Gas	-0.011	-0.011	-40.65	483	0.00	2000	
Mo	95	1	No Gas	0.001	0.001	153.42	17	0.01	2000	
Sn	118	1	No Gas	0.005	0.005	505.49	1210	0.00	2000	
Sb	121	1	No Gas	0.018	0.018	38.02	397	0.00	2000	
Ba	137	1	No Gas	-0.032	-0.032	-22.37	57	-0.06	2000	
Tl	205	1	No Gas	0.006	0.006	12.55	147	0.00	2000	
Tl	203	1	No Gas	0.001	0.001	97.54	30	0.00	2000	
Pb	208	1	No Gas	0.038	0.038	139.10	1453	0.00	2000	
U	238	1	No Gas	0.001	0.001	24.00	37	0.00	2000	
Ca	43	2	He	-2.313	-2.313	-878.59	23	-9.91	200000	
Sb	121	2	He	0.018	0.018	34.29	243	0.01	2000	
Ti	47	2	He	-0.029	-0.029	-190.89	3	-0.87	2000	
Cu	63	1	No Gas	-0.078	-0.078	-38.46	1440	-0.01	2000	
Zn	66	1	No Gas	0.456	0.456	70.91	12242	0.00	2000	
Se	82	1	No Gas	4.492	4.492	290.92	-383	-1.17	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	625733	0.35	670807	93.28	70	120	
Ge	72	2	He	325602	0.48	338750	96.12	70	120	
Ge	72	1	No Gas	984126	0.58	1064833	92.42	70	120	
In	115	1	No Gas	1329438	0.91	1360630	97.71	70	120	

Sample Report

Bi	209	1	No Gas	1353580	1.12	1388986	97.45	70	120	

Sample Report

Sample Table

Sample Name	LCS-181402
Data File Name	220SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:37:39-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	-0.129	-0.129	-11.30	38700	0.00	2000	
Be	9	1	No Gas	50.760	50.760	1.48	97715	0.05	2000	
V	51	2	He	49.610	49.610	1.25	148466	0.03	2000	
Cr	52	2	He	49.303	49.303	1.71	168406	0.03	2000	
Fe	56	2	He	5016.593	5016.593	0.33	16288462	0.03	200000	
Se	78	2	He	52.211	52.211	1.67	2736	1.91	2000	
As	75	2	He	51.392	51.392	1.66	25298	0.20	2000	
Ca	44	2	He	4926.041	4926.041	1.02	95104	5.18	200000	
Na	23	2	He	5029.953	5029.953	1.24	3477808	0.14	200000	
Mg	24	2	He	5124.872	5124.872	0.77	1825816	0.28	200000	
K	39	2	He	5255.314	5255.314	1.30	2180778	0.24	200000	
Mn	55	2	He	50.249	50.249	1.07	126068	0.04	2000	
Co	59	2	He	50.673	50.673	0.60	255891	0.02	2000	
Ni	60	2	He	50.351	50.351	2.23	64814	0.08	2000	
Cu	63	2	He	51.059	51.059	0.44	178030	0.03	2000	
Zn	66	2	He	51.192	51.192	0.91	41102	0.12	2000	
Al	27	2	He	57.701	57.701	2.43	11341	0.51	2000	
B	11	1	No Gas	-0.251	-0.251	-201.70	13376	0.00	2000	
Al	27	1	No Gas	50.762	50.762	0.43	426753	0.01	2000	
Si	28	1	No Gas	47.783	47.783	0.45	338934	0.01	2000	
Ag	107	1	No Gas	51.070	51.070	2.05	409761	0.01	2000	
Cd	111	1	No Gas	51.268	51.268	2.19	84305	0.06	2000	
Sr	88	1	No Gas	0.037	0.037	15.61	1240	0.00	2000	
Mo	95	1	No Gas	51.293	51.293	2.55	147651	0.03	2000	
Sn	118	1	No Gas	-0.022	-0.022	-130.01	1163	0.00	2000	
Sb	121	1	No Gas	43.557	43.557	1.28	341117	0.01	2000	
Ba	137	1	No Gas	49.919	49.919	1.17	118837	0.04	2000	
Tl	205	1	No Gas	45.459	45.459	1.97	866089	0.01	2000	
Tl	203	1	No Gas	43.605	43.605	2.16	357687	0.01	2000	
Pb	208	1	No Gas	46.995	46.995	1.64	1179560	0.00	2000	
U	238	1	No Gas	0.001	0.001	84.12	50	0.00	2000	
Ca	43	2	He	5261.206	5261.206	3.78	5885	89.40	200000	
Sb	121	2	He	50.387	50.387	1.19	177215	0.03	2000	
Ti	47	2	He	46.843	46.843	4.16	5371	0.87	2000	
Cu	63	1	No Gas	46.372	46.372	0.47	307891	0.02	2000	
Zn	66	1	No Gas	50.131	50.131	0.79	101780	0.05	2000	
Se	82	1	No Gas	50.680	50.680	8.76	3796	1.34	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	708015	0.69	670807	105.55	70	120	
Ge	72	2	He	354973	1.19	338750	104.79	70	120	
Ge	72	1	No Gas	1167886	0.44	1064833	109.68	70	120	
In	115	1	No Gas	1420612	0.94	1360630	104.41	70	120	

Sample Report

Bi	209	1	No Gas	1496537	1.81	1388986	107.74	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-01
Data File Name	221SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:39:35-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	25.087	25.087	1.16	258809	0.01	2000	
Be	9	1	No Gas	0.166	0.166	8.06	355	0.05	2000	
V	51	2	He	0.433	0.433	11.54	3506	0.01	2000	
Cr	52	2	He	0.469	0.469	9.55	2630	0.02	2000	
Fe	56	2	He	7014.967	7014.967	1.94	22426836	0.03	200000	
Se	78	2	He	0.050	0.050	828.79	340	0.01	2000	
As	75	2	He	13.186	13.186	4.25	6480	0.20	2000	
Ca	44	2	He	5251.859	5251.859	1.37	99827	5.26	200000	
Na	23	2	He	30129.393	30129.393	1.23	19329270	0.16	200000	
Mg	24	2	He	3758.469	3758.469	1.22	1318780	0.28	200000	
K	39	2	He	86.118	86.118	2.11	126630	0.07	200000	
Mn	55	2	He	57.142	57.142	1.57	141143	0.04	2000	
Co	59	2	He	2.092	2.092	5.25	10421	0.02	2000	
Ni	60	2	He	2.844	2.844	3.05	3824	0.07	2000	
Cu	63	2	He	0.456	0.456	10.11	2567	0.02	2000	
Zn	66	2	He	4.503	4.503	6.83	8756	0.05	2000	
Al	27	2	He	19.881	19.881	4.90	4171	0.48	2000	
B	11	1	No Gas	11.596	11.596	2.23	23747	0.05	2000	
Al	27	1	No Gas	18.272	18.272	9.25	166383	0.01	2000	
Si	28	1	No Gas	33518.436	33518.436	1.15	113130565	0.03	2000	>LDR
Ag	107	1	No Gas	0.004	0.004	156.38	270	0.00	2000	
Cd	111	1	No Gas	0.050	0.050	30.68	83	0.06	2000	
Sr	88	1	No Gas	92.443	92.443	0.58	1394610	0.01	2000	
Mo	95	1	No Gas	0.151	0.151	12.45	450	0.03	2000	
Sn	118	1	No Gas	0.011	0.011	359.30	1327	0.00	2000	
Sb	121	1	No Gas	0.094	0.094	12.56	1057	0.01	2000	
Ba	137	1	No Gas	173.736	173.736	0.97	415286	0.04	2000	
Tl	205	1	No Gas	0.014	0.014	4.11	317	0.00	2000	
Tl	203	1	No Gas	0.013	0.013	72.18	130	0.01	2000	
Pb	208	1	No Gas	0.082	0.082	6.64	2754	0.00	2000	
U	238	1	No Gas	0.009	0.009	7.99	273	0.00	2000	
Ca	43	2	He	5150.355	5150.355	4.34	5671	90.82	200000	
Sb	121	2	He	0.103	0.103	34.02	557	0.02	2000	
Ti	47	2	He	0.235	0.235	44.52	33	0.71	2000	
Cu	63	1	No Gas	0.398	0.398	1.29	4798	0.01	2000	
Zn	66	1	No Gas	4.705	4.705	3.93	21781	0.02	2000	
Se	82	1	No Gas	3.792	3.792	132.03	-518	-0.73	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	703782	1.45	670807	104.92	70	120	
Ge	72	2	He	349617	1.07	338750	103.21	70	120	
Ge	72	1	No Gas	1156692	0.32	1064833	108.63	70	120	
In	115	1	No Gas	1427519	0.49	1360630	104.92	70	120	

Sample Report

Bi	209	1	No Gas	1513799	0.07	1388986	108.99	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-01SD
Data File Name	222SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:41:32-05:00
Sample Type	Sample
Dilution	5
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.403	27.014	2.67	77529	0.01	2000	
Be	9	1	No Gas	0.027	0.134	11.07	80	0.03	2000	
V	51	2	He	0.001	0.006	947.83	2130	0.00	2000	
Cr	52	2	He	0.049	0.245	81.65	1160	0.00	2000	
Fe	56	2	He	1447.403	7237.014	1.47	4380062	0.03	200000	
Se	78	2	He	0.067	0.334	260.43	322	0.02	2000	
As	75	2	He	2.697	13.484	9.56	1342	0.20	2000	
Ca	44	2	He	1082.649	5413.247	2.10	19781	5.47	200000	
Na	23	2	He	6052.857	30264.285	0.99	3848841	0.16	200000	
Mg	24	2	He	726.192	3630.960	1.29	240993	0.30	200000	
K	39	2	He	-5.783	-28.917	-74.97	85692	-0.01	200000	
Mn	55	2	He	11.832	59.159	2.38	27935	0.04	2000	
Co	59	2	He	0.428	2.138	12.75	2030	0.02	2000	
Ni	60	2	He	0.544	2.718	15.76	867	0.06	2000	
Cu	63	2	He	0.142	0.710	28.75	1413	0.01	2000	
Zn	66	2	He	0.757	3.785	59.53	5865	0.01	2000	
Al	27	2	He	3.616	18.082	19.73	1097	0.33	2000	
B	11	1	No Gas	2.501	12.504	8.58	14044	0.02	2000	
Al	27	1	No Gas	3.204	16.018	18.32	41030	0.01	2000	
Si	28	1	No Gas	7274.952	36374.762	1.29	21325617	0.03	2000	>LDR
Ag	107	1	No Gas	-0.006	-0.029	-56.14	183	0.00	2000	
Cd	111	1	No Gas	0.013	0.064	50.69	20	0.06	2000	
Sr	88	1	No Gas	17.420	87.098	1.75	249076	0.01	2000	
Mo	95	1	No Gas	0.035	0.177	8.71	110	0.03	2000	
Sn	118	1	No Gas	0.025	0.127	56.33	1323	0.00	2000	
Sb	121	1	No Gas	0.045	0.224	35.65	580	0.01	2000	
Ba	137	1	No Gas	34.723	173.614	0.35	78617	0.04	2000	
Tl	205	1	No Gas	0.005	0.024	27.20	123	0.00	2000	
Tl	203	1	No Gas	0.005	0.025	28.30	60	0.01	2000	
Pb	208	1	No Gas	0.012	0.059	40.97	920	0.00	2000	
U	238	1	No Gas	0.001	0.006	97.48	43	0.00	2000	
Ca	43	2	He	1221.573	6107.864	11.01	1290	94.69	200000	
Sb	121	2	He	0.020	0.100	159.65	253	0.01	2000	
Ti	47	2	He	0.126	0.632	73.56	20	0.63	2000	
Cu	63	1	No Gas	0.142	0.711	26.28	2700	0.01	2000	
Zn	66	1	No Gas	1.936	9.681	0.61	14652	0.01	2000	
Se	82	1	No Gas	0.924	4.619	1244.59	-673	-0.14	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	628547	0.15	670807	93.70	70	120	
Ge	72	2	He	330329	1.26	338750	97.51	70	120	
Ge	72	1	No Gas	999041	0.20	1064833	93.82	70	120	
In	115	1	No Gas	1350360	1.53	1360630	99.25	70	120	

Sample Report

Bi	209	1	No Gas	1429495	2.32	1388986	102.92	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-01MS
Data File Name	223SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:43:30-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	25.090	25.090	5.13	254117	0.01	2000	
Be	9	1	No Gas	50.373	50.373	2.60	94668	0.05	2000	
V	51	2	He	48.028	48.028	1.83	142883	0.03	2000	
Cr	52	2	He	47.038	47.038	1.19	159693	0.03	2000	
Fe	56	2	He	11517.400	11517.400	1.31	37142760	0.03	200000	
Se	78	2	He	47.854	47.854	0.63	2520	1.90	2000	
As	75	2	He	62.053	62.053	1.17	30326	0.20	2000	
Ca	44	2	He	9822.423	9822.423	1.42	187960	5.23	200000	
Na	23	2	He	33730.155	33730.155	0.09	21802457	0.15	200000	
Mg	24	2	He	8316.362	8316.362	2.14	2943451	0.28	200000	
K	39	2	He	5072.269	5072.269	2.66	2094821	0.24	200000	
Mn	55	2	He	102.518	102.518	1.03	255106	0.04	2000	
Co	59	2	He	50.423	50.423	1.62	252999	0.02	2000	
Ni	60	2	He	51.024	51.024	0.93	65266	0.08	2000	
Cu	63	2	He	49.962	49.962	0.61	173109	0.03	2000	
Zn	66	2	He	55.045	55.045	1.82	43480	0.13	2000	
Al	27	2	He	68.111	68.111	5.08	13217	0.52	2000	
B	11	1	No Gas	9.374	9.374	9.08	21391	0.04	2000	
Al	27	1	No Gas	61.473	61.473	1.24	511762	0.01	2000	
Si	28	1	No Gas	32424.636	32424.636	0.87	110441922	0.03	2000	>LDR
Ag	107	1	No Gas	47.752	47.752	1.73	388196	0.01	2000	
Cd	111	1	No Gas	48.691	48.691	1.18	81136	0.06	2000	
Sr	88	1	No Gas	89.925	89.925	0.43	1367947	0.01	2000	
Mo	95	1	No Gas	47.660	47.660	1.34	139009	0.03	2000	
Sn	118	1	No Gas	0.010	0.010	180.40	1337	0.00	2000	
Sb	121	1	No Gas	41.966	41.966	1.35	328486	0.01	2000	
Ba	137	1	No Gas	217.222	217.222	2.17	523410	0.04	2000	
Tl	205	1	No Gas	44.609	44.609	1.05	829224	0.01	2000	
Tl	203	1	No Gas	43.031	43.031	1.25	344395	0.01	2000	
Pb	208	1	No Gas	46.917	46.917	0.23	1149018	0.00	2000	
U	238	1	No Gas	0.009	0.009	17.50	260	0.00	2000	
Ca	43	2	He	9735.301	9735.301	2.69	10791	90.22	200000	
Sb	121	2	He	48.808	48.808	1.84	170575	0.03	2000	
Ti	47	2	He	46.825	46.825	7.72	5334	0.88	2000	
Cu	63	1	No Gas	45.200	45.200	1.29	299981	0.02	2000	
Zn	66	1	No Gas	53.743	53.743	0.72	108065	0.05	2000	
Se	82	1	No Gas	52.093	52.093	5.90	3923	1.33	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	691626	3.75	670807	103.10	70	120	
Ge	72	2	He	352691	0.76	338750	104.12	70	120	
Ge	72	1	No Gas	1167239	0.57	1064833	109.62	70	120	
In	115	1	No Gas	1439368	1.50	1360630	105.79	70	120	

Sample Report

Bi	209	1	No Gas	1459883	0.78	1388986	105.10	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-01MSD
Data File Name	224SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:45:27-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	27.151	27.151	1.00	261077	0.01	2000	
Be	9	1	No Gas	54.598	54.598	0.91	98520	0.06	2000	
V	51	2	He	51.979	51.979	0.32	154748	0.03	2000	
Cr	52	2	He	51.354	51.354	0.66	174583	0.03	2000	
Fe	56	2	He	12301.807	12301.807	0.34	39745940	0.03	200000	
Se	78	2	He	51.201	51.201	2.81	2677	1.91	2000	
As	75	2	He	66.197	66.197	0.81	32407	0.20	2000	
Ca	44	2	He	10460.429	10460.429	0.64	200524	5.22	200000	
Na	23	2	He	35710.947	35710.947	0.48	23111932	0.15	200000	
Mg	24	2	He	8915.034	8915.034	0.88	3161324	0.28	200000	
K	39	2	He	5311.834	5311.834	0.64	2193291	0.24	200000	
Mn	55	2	He	109.164	109.164	0.16	272123	0.04	2000	
Co	59	2	He	53.532	53.532	0.87	269107	0.02	2000	
Ni	60	2	He	54.149	54.149	0.86	69379	0.08	2000	
Cu	63	2	He	52.776	52.776	0.44	183146	0.03	2000	
Zn	66	2	He	59.380	59.380	1.12	46540	0.13	2000	
Al	27	2	He	71.389	71.389	6.10	13851	0.52	2000	
B	11	1	No Gas	10.705	10.705	8.97	21645	0.05	2000	
Al	27	1	No Gas	64.951	64.951	1.10	529943	0.01	2000	
Si	28	1	No Gas	34119.646	34119.646	0.83	114144245	0.03	2000	>LDR
Ag	107	1	No Gas	50.684	50.684	0.81	408418	0.01	2000	
Cd	111	1	No Gas	51.804	51.804	0.46	85553	0.06	2000	
Sr	88	1	No Gas	93.775	93.775	0.96	1413704	0.01	2000	
Mo	95	1	No Gas	50.993	50.993	0.79	147418	0.03	2000	
Sn	118	1	No Gas	0.021	0.021	226.50	1377	0.00	2000	
Sb	121	1	No Gas	45.695	45.695	0.60	351316	0.01	2000	
Ba	137	1	No Gas	228.498	228.498	0.42	545781	0.04	2000	
Tl	205	1	No Gas	46.581	46.581	0.87	873575	0.01	2000	
Tl	203	1	No Gas	44.968	44.968	0.46	363099	0.01	2000	
Pb	208	1	No Gas	49.225	49.225	0.77	1216136	0.00	2000	
U	238	1	No Gas	0.010	0.010	22.80	283	0.00	2000	
Ca	43	2	He	10676.153	10676.153	2.52	11855	90.05	200000	
Sb	121	2	He	52.220	52.220	0.32	182831	0.03	2000	
Ti	47	2	He	47.889	47.889	6.82	5468	0.88	2000	
Cu	63	1	No Gas	48.214	48.214	0.85	314171	0.02	2000	
Zn	66	1	No Gas	56.652	56.652	0.45	111169	0.05	2000	
Se	82	1	No Gas	51.812	51.812	4.13	3829	1.35	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	663681	1.21	670807	98.94	70	120	
Ge	72	2	He	353353	0.31	338750	104.31	70	120	
Ge	72	1	No Gas	1146573	0.97	1064833	107.68	70	120	
In	115	1	No Gas	1426556	0.65	1360630	104.85	70	120	

Sample Report

Bi	209	1	No Gas	1472805	0.57	1388986	106.03	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-01PDS
Data File Name	225SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:47:25-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	27.308	27.308	0.81	257273	0.01	2000	
Be	9	1	No Gas	108.174	108.174	0.38	191360	0.06	2000	
V	51	2	He	103.502	103.502	0.43	295773	0.03	2000	
Cr	52	2	He	103.850	103.850	1.21	340330	0.03	2000	
Fe	56	2	He	17635.923	17635.923	0.79	55092661	0.03	200000	
Se	78	2	He	103.889	103.889	2.73	4912	2.11	2000	
As	75	2	He	118.925	118.925	1.31	56202	0.21	2000	
Ca	44	2	He	15654.696	15654.696	1.21	289959	5.40	200000	
Na	23	2	He	41040.248	41040.248	1.07	25648008	0.16	200000	
Mg	24	2	He	14017.160	14017.160	0.22	4806101	0.29	200000	
K	39	2	He	10326.621	10326.621	1.31	4037153	0.26	200000	
Mn	55	2	He	163.765	163.765	1.55	394537	0.04	2000	
Co	59	2	He	106.409	106.409	0.96	517202	0.02	2000	
Ni	60	2	He	106.785	106.785	0.85	132073	0.08	2000	
Cu	63	2	He	106.139	106.139	1.01	355142	0.03	2000	
Zn	66	2	He	117.143	117.143	1.28	83369	0.14	2000	
Al	27	2	He	123.445	123.445	2.33	22809	0.54	2000	
B	11	1	No Gas	10.553	10.553	4.33	21108	0.05	2000	
Al	27	1	No Gas	119.255	119.255	4.28	938181	0.01	2000	
Si	28	1	No Gas	34350.978	34350.978	0.41	112952895	0.03	2000	>LDR
Ag	107	1	No Gas	99.421	99.421	0.54	777016	0.01	2000	
Cd	111	1	No Gas	103.375	103.375	2.09	165620	0.06	2000	
Sr	88	1	No Gas	96.115	96.115	1.08	1405747	0.01	2000	
Mo	95	1	No Gas	103.344	103.344	0.98	289840	0.04	2000	
Sn	118	1	No Gas	0.063	0.063	14.07	1533	0.00	2000	
Sb	121	1	No Gas	90.466	90.466	0.57	683299	0.01	2000	
Ba	137	1	No Gas	282.976	282.976	0.94	655703	0.04	2000	
Tl	205	1	No Gas	101.031	101.031	1.99	1836704	0.01	2000	
Tl	203	1	No Gas	90.457	90.457	0.67	708050	0.01	2000	
Pb	208	1	No Gas	101.934	101.934	0.52	2440672	0.00	2000	
U	238	1	No Gas	0.012	0.012	12.86	327	0.00	2000	
Ca	43	2	He	15850.702	15850.702	2.37	17004	93.22	200000	
Sb	121	2	He	104.654	104.654	0.91	354096	0.03	2000	
Ti	47	2	He	102.532	102.532	0.68	11311	0.91	2000	
Cu	63	1	No Gas	93.957	93.957	0.61	599738	0.02	2000	
Zn	66	1	No Gas	111.826	111.826	0.81	202767	0.06	2000	
Se	82	1	No Gas	106.986	106.986	14.04	8667	1.23	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	650756	0.82	670807	97.01	70	120	
Ge	72	2	He	341671	0.60	338750	100.86	70	120	
Ge	72	1	No Gas	1126914	0.31	1064833	105.83	70	120	
In	115	1	No Gas	1384007	0.53	1360630	101.72	70	120	

Sample Report

Bi	209	1	No Gas	1427744	0.63	1388986	102.79	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	226_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:49:21-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	115.019	0.744	891361	0.97	100	115.0	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	109.920	1.017	179413	0.12	100	109.9	90	110	
V	51	2	He	101.982	1.033	281156	0.81	100	102.0	90	110	
Cr	52	2	He	101.358	1.080	320432	0.45	100	101.4	90	110	
Fe	56	2	He	10093.623	1.088	30420104	0.31	10000	100.9	90	110	
Se	78	2	He	103.924	2.204	4740	1.56	100	103.9	90	110	
As	75	2	He	106.332	1.217	48484	0.16	100	106.3	90	110	
Ca	44	2	He	10052.209	1.362	179763	1.36	10000	100.5	90	110	
Na	23	2	He	9933.636	2.065	6158389	1.18	10000	99.3	90	110	
Mg	24	2	He	10029.725	1.268	3317552	1.36	10000	100.3	90	110	
K	39	2	He	10184.399	1.397	3841965	0.65	10000	101.8	90	110	
Mn	55	2	He	101.909	0.719	237002	1.53	100	101.9	90	110	
Co	59	2	He	102.017	0.653	478354	0.91	100	102.0	90	110	
Ni	60	2	He	101.555	0.959	121179	0.57	100	101.6	90	110	
Cu	63	2	He	103.717	1.629	334795	1.03	100	103.7	90	110	
Zn	66	2	He	103.734	1.093	71827	0.12	100	103.7	90	110	
Al	27	2	He	113.780	1.739	20318	2.16	100	113.8	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	544.009	1.813	420819	1.88	500	108.8	90	110	
Al	27	1	No Gas	110.181	0.475	765761	0.73	100	110.2	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	569.880	0.401	1799969	1.23	5000	11.4	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	101.364	1.530	750856	1.23	100	101.4	90	110	
Cd	111	1	No Gas	102.100	2.482	155026	0.95	100	102.1	90	110	
Sr	88	1	No Gas	103.220	1.315	1430921	1.42	100	103.2	90	110	
Mo	95	1	No Gas	100.267	1.077	266544	1.06	100	100.3	90	110	
Sn	118	1	No Gas	102.735	1.551	458654	0.47	100	102.7	90	110	
Sb	121	1	No Gas	99.004	0.898	659348	0.24	100	99.0	90	110	
Ba	137	1	No Gas	103.333	2.036	227004	0.32	100	103.3	90	110	
Tl	205	1	No Gas	104.390	1.420	1781670	0.52	100	104.4	90	110	
Tl	203	1	No Gas	93.831	1.039	689545	0.78	100	93.8	90	110	
Pb	208	1	No Gas	100.468	4.216	2257635	2.55	100	100.5	90	110	
U	238	1	No Gas	105.591	1.200	2572095	1.38	100	105.6	90	110	
Ca	43	2	He	10021.940	3.065	10384	3.97	10000	100.2	90	110	
Sb	121	2	He	104.415	1.784	340786	1.01	100	104.4	90	110	
Ti	47	2	He	95.688	4.129	10187	5.19	100	95.7	90	110	
Cu	63	1	No Gas	100.324	0.417	564585	1.44	100	100.3	90	110	
Se	82	1	No Gas	103.834	8.679	7395	9.65	100	103.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600474	1.14	670807	89.52	70	120	
Ge	72	2	He	329614	1.10	338750	97.30	70	120	
Ge	72	1	No Gas	993720	1.04	1064833	93.32	70	120	
In	115	1	No Gas	1311963	1.94	1360630	96.42	70	120	
Bi	209	1	No Gas	1340578	1.73	1388986	96.51	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	227_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:51:17-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.168	41.8	34905	1.5	0.5	
Be	9	1	No Gas	0.021	30.7	67	15.6	0.5	
V	51	2	He	-0.011	-139.7	1993	1.9	2.5	
Cr	52	2	He	0.027	84.0	1037	7.0	2.5	
Fe	56	2	He	0.767	20.1	11779	3.7	100	
Se	78	2	He	0.650	115.7	330	9.6	2	
As	75	2	He	0.009	168.3	111	6.2	2.5	
Ca	44	2	He	-2.470	-177.5	360	21.0	100	
Na	23	2	He	-43.437	-5.0	189324	0.3	100	
Mg	24	2	He	0.653	34.1	500	14.4	100	
K	39	2	He	-12.229	-36.8	79240	2.0	100	
Mn	55	2	He	0.096	11.4	600	4.4	2.5	
Co	59	2	He	0.012	45.5	73	34.3	2.5	
Ni	60	2	He	-0.083	-33.7	113	28.4	2.5	
Cu	63	2	He	-0.015	-250.6	863	12.9	2	
Zn	66	2	He	-0.246	-93.5	4968	2.5	2.5	
Al	27	2	He	-0.613	-43.1	340	12.8	5	
B	11	1	No Gas	21.830	15.4	27853	9.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-0.980	-1.5	11925	0.6	5	
Si	28	1	No Gas	16.106	3.5	188216	0.3	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.016	46.2	333	17.1	2.5	
Cd	111	1	No Gas	0.002	173.2	3	173.2	1	
Sr	88	1	No Gas	-0.009	-109.1	493	27.5	2.5	
Mo	95	1	No Gas	0.017	13.7	57	10.2	2.5	
Sn	118	1	No Gas	0.046	53.6	1347	9.0	5	
Sb	121	1	No Gas	0.078	12.2	763	7.9	2.5	
Ba	137	1	No Gas	-0.004	-668.7	113	50.2	2.5	
Tl	205	1	No Gas	0.021	14.5	390	13.6	1	
Tl	203	1	No Gas	0.021	28.1	167	25.0	1	
Pb	208	1	No Gas	0.023	28.0	1073	12.4	2.5	
U	238	1	No Gas	0.005	74.7	120	66.7	2.5	
Ca	43	2	He	-1.388	-849.5	23	49.5	100	
Sb	121	2	He	0.052	19.5	340	8.8	2.5	
Ti	47	2	He	-0.028	-205.5	3	173.2	2.5	
Cu	63	1	No Gas	-0.014	-72.3	1730	3.6	2.5	
Se	82	1	No Gas	-1.591	-114.9	-830	-16.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	598205	0.07	670807	89.18	70	120	
Ge	72	2	He	314199	0.43	338750	92.75	70	120	
Ge	72	1	No Gas	950978	0.57	1064833	89.31	70	120	
In	115	1	No Gas	1279976	1.01	1360630	94.07	70	120	
Bi	209	1	No Gas	1301424	0.60	1388986	93.70	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-02
Data File Name	228SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:53:16-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	33.476	33.476	1.65	304209	0.01	2000	
Be	9	1	No Gas	0.083	0.083	34.91	180	0.05	2000	
V	51	2	He	0.782	0.782	10.70	4385	0.02	2000	
Cr	52	2	He	1.543	1.543	6.50	6038	0.03	2000	
Fe	56	2	He	1485.607	1485.607	1.75	4617871	0.03	200000	
Se	78	2	He	1.004	1.004	93.71	372	0.27	2000	
As	75	2	He	10.987	10.987	3.08	5261	0.21	2000	
Ca	44	2	He	217365.736	217365.736	2.08	3992731	5.44	200000	>LDR
Na	23	2	He	578327.821	578327.821	1.15	355894581	0.16	200000	>LDR
Mg	24	2	He	162110.256	162110.256	1.17	55192476	0.29	200000	
K	39	2	He	1041.269	1041.269	1.16	485374	0.21	200000	
Mn	55	2	He	2472.590	2472.590	1.71	5909457	0.04	2000	>LDR
Co	59	2	He	26.850	26.850	1.17	129618	0.02	2000	
Ni	60	2	He	24.685	24.685	0.95	30491	0.08	2000	
Cu	63	2	He	2.668	2.668	0.58	9824	0.03	2000	
Zn	66	2	He	21.356	21.356	5.39	19614	0.11	2000	
Al	27	2	He	180.693	180.693	1.60	32936	0.55	2000	
B	11	1	No Gas	17.433	17.433	3.70	26462	0.07	2000	
Al	27	1	No Gas	181.394	181.394	0.38	1393329	0.01	2000	
Si	28	1	No Gas	15046.740	15046.740	0.48	48789658	0.03	2000	>LDR
Ag	107	1	No Gas	0.011	0.011	69.41	313	0.00	2000	
Cd	111	1	No Gas	0.737	0.737	6.45	1143	0.06	2000	
Sr	88	1	No Gas	3597.208	3597.208	1.49	50962141	0.01	2000	>LDR
Mo	95	1	No Gas	0.546	0.546	10.44	1497	0.04	2000	
Sn	118	1	No Gas	0.111	0.111	22.91	1703	0.01	2000	
Sb	121	1	No Gas	0.193	0.193	12.97	1747	0.01	2000	
Ba	137	1	No Gas	31.390	31.390	0.82	70605	0.04	2000	
Tl	205	1	No Gas	0.021	0.021	18.15	390	0.01	2000	
Tl	203	1	No Gas	0.022	0.022	30.37	177	0.01	2000	
Pb	208	1	No Gas	0.709	0.709	2.24	16185	0.00	2000	
U	238	1	No Gas	10.617	10.617	0.47	253292	0.00	2000	
Ca	43	2	He	219191.638	219191.638	1.31	233179	94.00	200000	>LDR
Sb	121	2	He	0.215	0.215	11.95	917	0.02	2000	
Ti	47	2	He	4.747	4.747	8.23	527	0.90	2000	
Cu	63	1	No Gas	3.441	3.441	3.78	23648	0.01	2000	
Zn	66	1	No Gas	21.762	21.762	2.24	49333	0.04	2000	
Se	82	1	No Gas	4.516	4.516	165.50	-432	-1.05	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	644617	0.45	670807	96.10	70	120	
Ge	72	2	He	339310	0.83	338750	100.17	70	120	
Ge	72	1	No Gas	1109115	0.58	1064833	104.16	70	120	
In	115	1	No Gas	1341336	1.20	1360630	98.58	70	120	
Bi	209	1	No Gas	1312814	0.66	1388986	94.52	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-03
Data File Name	229SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:55:15-05:00
Sample Type	Sample
Dilution	2
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	30.732	61.464	0.31	279363	0.01	2000	
Be	9	1	No Gas	0.000	0.000	11561.84	35	0.00	2000	
V	51	2	He	1.187	2.375	4.13	5560	0.02	2000	
Cr	52	2	He	289.036	578.072	4.41	943986	0.03	2000	
Fe	56	2	He	2086.134	4172.269	2.26	6515822	0.03	200000	
Se	78	2	He	-0.337	-0.674	-115.93	315	-0.11	2000	
As	75	2	He	0.434	0.869	17.10	321	0.14	2000	
Ca	44	2	He	194371.188	388742.376	1.83	3589858	5.41	200000	>LDR
Na	23	2	He	368715.213	737430.425	1.39	228236937	0.16	200000	>LDR
Mg	24	2	He	139090.066	278180.133	0.30	47624421	0.29	200000	
K	39	2	He	721.563	1443.125	2.71	366037	0.20	200000	
Mn	55	2	He	709.719	1419.437	1.77	1706109	0.04	2000	
Co	59	2	He	2.197	4.394	0.92	10684	0.02	2000	
Ni	60	2	He	25.450	50.899	1.60	31604	0.08	2000	
Cu	63	2	He	4.441	8.881	2.07	15783	0.03	2000	
Zn	66	2	He	7.045	14.089	3.26	10231	0.07	2000	
Al	27	2	He	6.002	12.004	10.02	1563	0.38	2000	
B	11	1	No Gas	6.805	13.610	2.94	17696	0.04	2000	
Al	27	1	No Gas	4.965	9.930	0.80	54163	0.01	2000	
Si	28	1	No Gas	10910.785	21821.570	1.18	32583486	0.03	2000	>LDR
Ag	107	1	No Gas	0.006	0.012	154.53	267	0.00	2000	
Cd	111	1	No Gas	0.690	1.379	6.84	1047	0.07	2000	
Sr	88	1	No Gas	3226.464	6452.928	1.81	44706849	0.01	2000	>LDR
Mo	95	1	No Gas	5.295	10.591	2.31	14088	0.04	2000	
Sn	118	1	No Gas	0.187	0.375	23.97	2007	0.01	2000	
Sb	121	1	No Gas	0.048	0.096	8.24	617	0.01	2000	
Ba	137	1	No Gas	12.031	24.062	0.28	26547	0.05	2000	
Tl	205	1	No Gas	0.011	0.023	38.65	217	0.01	2000	
Tl	203	1	No Gas	0.005	0.011	33.66	57	0.01	2000	
Pb	208	1	No Gas	0.031	0.062	5.46	1220	0.00	2000	
U	238	1	No Gas	1.263	2.527	4.97	29052	0.00	2000	
Ca	43	2	He	195071.310	390142.619	2.70	208646	93.49	200000	>LDR
Sb	121	2	He	0.030	0.060	61.91	297	0.01	2000	
Ti	47	2	He	0.091	0.182	154.04	17	0.55	2000	
Cu	63	1	No Gas	4.962	9.923	3.49	30501	0.02	2000	
Zn	66	1	No Gas	8.230	16.460	7.43	24619	0.03	2000	
Se	82	1	No Gas	0.088	0.176	7400.27	-757	-0.01	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	638008	0.80	670807	95.11	70	120	
Ge	72	2	He	341222	1.57	338750	100.73	70	120	
Ge	72	1	No Gas	1020262	1.84	1064833	95.81	70	120	
In	115	1	No Gas	1311962	1.40	1360630	96.42	70	120	
Bi	209	1	No Gas	1266846	4.81	1388986	91.21	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-04
Data File Name	230SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:57:14-05:00
Sample Type	Sample
Dilution	2
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	29.285	58.569	6.82	295166	0.01	2000	
Be	9	1	No Gas	0.000	-0.001	-2400.47	38	0.00	2000	
V	51	2	He	1.342	2.683	8.16	6296	0.02	2000	
Cr	52	2	He	342.742	685.484	3.16	1175238	0.03	2000	
Fe	56	2	He	2279.670	4559.340	1.41	7478370	0.03	200000	
Se	78	2	He	-0.133	-0.265	-374.87	340	-0.04	2000	
As	75	2	He	0.470	0.939	6.72	354	0.13	2000	
Ca	44	2	He	198355.409	396710.818	1.34	3847996	5.15	200000	>LDR
Na	23	2	He	375062.063	750124.126	1.87	243834516	0.15	200000	>LDR
Mg	24	2	He	142286.212	284572.423	1.53	51163203	0.28	200000	
K	39	2	He	726.814	1453.629	3.43	386533	0.19	200000	
Mn	55	2	He	724.523	1449.046	2.54	1828989	0.04	2000	
Co	59	2	He	2.348	4.697	1.94	11992	0.02	2000	
Ni	60	2	He	26.101	52.202	3.44	34029	0.08	2000	
Cu	63	2	He	4.847	9.693	1.48	17999	0.03	2000	
Zn	66	2	He	7.231	14.463	10.13	10878	0.07	2000	
Al	27	2	He	7.489	14.979	11.04	1924	0.39	2000	
B	11	1	No Gas	3.065	6.131	31.11	16209	0.02	2000	
Al	27	1	No Gas	5.286	10.572	2.79	63344	0.01	2000	
Si	28	1	No Gas	10295.261	20590.521	3.79	34529858	0.03	2000	>LDR
Ag	107	1	No Gas	0.018	0.037	33.72	373	0.00	2000	
Cd	111	1	No Gas	0.739	1.478	8.40	1170	0.06	2000	
Sr	88	1	No Gas	3281.155	6562.309	1.91	47450781	0.01	2000	>LDR
Mo	95	1	No Gas	6.302	12.605	7.65	17482	0.04	2000	
Sn	118	1	No Gas	0.163	0.326	11.89	1984	0.01	2000	
Sb	121	1	No Gas	0.048	0.097	39.48	693	0.01	2000	
Ba	137	1	No Gas	12.013	24.026	1.40	27667	0.04	2000	
Tl	205	1	No Gas	0.009	0.018	37.16	193	0.00	2000	
Tl	203	1	No Gas	0.010	0.019	30.50	93	0.01	2000	
Pb	208	1	No Gas	0.025	0.050	9.98	1197	0.00	2000	
U	238	1	No Gas	1.241	2.481	0.64	31117	0.00	2000	
Ca	43	2	He	198280.585	396561.169	1.05	222798	89.00	200000	>LDR
Sb	121	2	He	0.029	0.058	68.81	307	0.01	2000	
Ti	47	2	He	0.141	0.282	70.72	23	0.60	2000	
Cu	63	1	No Gas	5.090	10.181	3.71	35089	0.01	2000	
Zn	66	1	No Gas	7.893	15.787	7.48	27067	0.03	2000	
Se	82	1	No Gas	-4.954	-9.907	-110.72	-1293	0.38	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	704618	6.03	670807	105.04	70	120	
Ge	72	2	He	358403	1.75	338750	105.80	70	120	
Ge	72	1	No Gas	1146488	3.71	1064833	107.67	70	120	
In	115	1	No Gas	1369462	2.37	1360630	100.65	70	120	
Bi	209	1	No Gas	1379662	0.86	1388986	99.33	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-05
Data File Name	231SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T21:59:12-05:00
Sample Type	Sample
Dilution	2
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	62.026	124.052	2.03	587184	0.01	2000	
Be	9	1	No Gas	0.422	0.844	8.29	855	0.05	2000	
V	51	2	He	0.361	0.722	11.30	3300	0.01	2000	
Cr	52	2	He	1.149	2.299	4.86	4908	0.02	2000	
Fe	56	2	He	14838.067	29676.134	1.20	47460026	0.03	200000	
Se	78	2	He	-0.453	-0.905	-143.73	317	-0.14	2000	
As	75	2	He	0.668	1.337	3.88	442	0.15	2000	
Ca	44	2	He	103894.760	207789.520	1.52	1967744	5.28	200000	
Na	23	2	He	348059.645	696119.290	1.49	220946577	0.16	200000	>LDR
Mg	24	2	He	89779.211	179558.423	1.48	31517592	0.28	200000	
K	39	2	He	1117.515	2235.030	1.50	530297	0.21	200000	
Mn	55	2	He	5698.017	11396.034	2.04	14040301	0.04	2000	>LDR
Co	59	2	He	170.317	340.633	1.45	847576	0.02	2000	
Ni	60	2	He	91.572	183.144	0.71	116001	0.08	2000	
Cu	63	2	He	0.865	1.729	5.27	3967	0.02	2000	
Zn	66	2	He	36.849	73.697	0.27	30759	0.12	2000	
Al	27	2	He	148.547	297.093	4.11	27996	0.53	2000	
B	11	1	No Gas	12.435	24.869	4.75	24718	0.05	2000	
Al	27	1	No Gas	142.126	284.251	2.86	1150230	0.01	2000	
Si	28	1	No Gas	10836.191	21672.382	0.97	36918617	0.03	2000	>LDR
Ag	107	1	No Gas	0.020	0.041	31.76	400	0.01	2000	
Cd	111	1	No Gas	0.156	0.311	1.59	253	0.06	2000	
Sr	88	1	No Gas	1851.147	3702.293	0.30	27484760	0.01	2000	>LDR
Mo	95	1	No Gas	0.132	0.264	18.11	390	0.03	2000	
Sn	118	1	No Gas	-0.012	-0.025	-77.93	1197	0.00	2000	
Sb	121	1	No Gas	0.035	0.071	31.51	603	0.01	2000	
Ba	137	1	No Gas	10.927	21.855	1.00	25846	0.04	2000	
Tl	205	1	No Gas	0.048	0.096	2.49	923	0.01	2000	
Tl	203	1	No Gas	0.036	0.072	17.14	303	0.01	2000	
Pb	208	1	No Gas	0.836	1.671	2.77	20851	0.00	2000	
U	238	1	No Gas	0.167	0.335	4.56	4401	0.00	2000	
Ca	43	2	He	101633.284	203266.569	0.70	111496	91.15	200000	
Sb	121	2	He	0.016	0.033	79.19	257	0.01	2000	
Ti	47	2	He	0.796	1.592	23.83	97	0.82	2000	
Cu	63	1	No Gas	1.540	3.080	2.73	12329	0.01	2000	
Zn	66	1	No Gas	35.036	70.072	1.48	75000	0.05	2000	
Se	82	1	No Gas	-2.153	-4.307	-296.25	-1066	0.20	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	710685	2.48	670807	105.94	70	120	
Ge	72	2	He	349858	1.32	338750	103.28	70	120	
Ge	72	1	No Gas	1163890	1.25	1064833	109.30	70	120	
In	115	1	No Gas	1405575	0.70	1360630	103.30	70	120	
Bi	209	1	No Gas	1442737	1.14	1388986	103.87	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-06
Data File Name	232SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:01:09-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	182.192	182.192	0.59	1605849	0.01	2000	
Be	9	1	No Gas	0.461	0.461	5.32	905	0.05	2000	
V	51	2	He	-0.170	-0.170	-8.02	1803	-0.01	2000	
Cr	52	2	He	0.703	0.703	3.81	3504	0.02	2000	
Fe	56	2	He	14608.789	14608.789	0.89	47927438	0.03	200000	
Se	78	2	He	0.894	0.894	53.00	388	0.23	2000	
As	75	2	He	1.613	1.613	1.03	921	0.18	2000	
Ca	44	2	He	397777.604	397777.604	0.88	7726315	5.15	200000	>LDR
Na	23	2	He	697555.982	697555.982	1.34	453916873	0.15	200000	>LDR
Mg	24	2	He	302723.238	302723.238	1.63	108996115	0.28	200000	>LDR
K	39	2	He	2026.877	2026.877	4.25	909079	0.22	200000	
Mn	55	2	He	30258.738	30258.738	1.44	76473767	0.04	2000	>LDR
Co	59	2	He	166.830	166.830	1.45	851562	0.02	2000	
Ni	60	2	He	88.593	88.593	1.26	115106	0.08	2000	
Cu	63	2	He	1.069	1.069	4.71	4784	0.02	2000	
Zn	66	2	He	52.111	52.111	0.74	42189	0.12	2000	
Al	27	2	He	32.850	32.850	8.54	6745	0.49	2000	
B	11	1	No Gas	35.078	35.078	1.81	43743	0.08	2000	
Al	27	1	No Gas	27.198	27.198	4.99	245879	0.01	2000	
Si	28	1	No Gas	23654.518	23654.518	1.83	82985315	0.03	2000	>LDR
Ag	107	1	No Gas	-0.004	-0.004	-85.59	213	0.00	2000	
Cd	111	1	No Gas	0.829	0.829	9.04	1387	0.06	2000	
Sr	88	1	No Gas	7167.903	7167.903	0.98	109420428	0.01	2000	>LDR
Mo	95	1	No Gas	0.115	0.115	11.22	350	0.03	2000	
Sn	118	1	No Gas	-0.010	-0.010	-60.25	1243	0.00	2000	
Sb	121	1	No Gas	0.111	0.111	22.87	1233	0.01	2000	
Ba	137	1	No Gas	30.549	30.549	1.16	74040	0.04	2000	
Tl	205	1	No Gas	0.069	0.069	2.91	1357	0.01	2000	
Tl	203	1	No Gas	0.079	0.079	27.59	670	0.01	2000	
Pb	208	1	No Gas	0.051	0.051	10.10	1933	0.00	2000	
U	238	1	No Gas	0.100	0.100	3.69	2724	0.00	2000	
Ca	43	2	He	401951.973	401951.973	2.03	452215	88.89	200000	>LDR
Sb	121	2	He	0.120	0.120	17.72	630	0.02	2000	
Ti	47	2	He	0.488	0.488	67.55	63	0.77	2000	
Cu	63	1	No Gas	4.118	4.118	1.80	30207	0.01	2000	
Zn	66	1	No Gas	51.267	51.267	1.94	106765	0.05	2000	
Se	82	1	No Gas	2.052	2.052	251.58	-698	-0.29	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	692633	1.25	670807	103.25	70	120	
Ge	72	2	He	358794	1.27	338750	105.92	70	120	
Ge	72	1	No Gas	1201779	1.90	1064833	112.86	70	120	
In	115	1	No Gas	1445225	0.68	1360630	106.22	70	120	
Bi	209	1	No Gas	1490474	1.55	1388986	107.31	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-07
Data File Name	233SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:03:07-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	181.733	181.733	2.25	1582227	0.01	2000	
Be	9	1	No Gas	0.461	0.461	3.32	895	0.05	2000	
V	51	2	He	-0.121	-0.121	-29.14	1923	-0.01	2000	
Cr	52	2	He	1.001	1.001	3.16	4467	0.02	2000	
Fe	56	2	He	14489.367	14489.367	0.91	46912423	0.03	200000	
Se	78	2	He	0.526	0.526	223.69	366	0.14	2000	
As	75	2	He	1.715	1.715	8.38	959	0.18	2000	
Ca	44	2	He	399061.327	399061.327	0.44	7649591	5.22	200000	>LDR
Na	23	2	He	703188.836	703188.836	1.08	451559340	0.16	200000	>LDR
Mg	24	2	He	306199.482	306199.482	0.87	108801302	0.28	200000	>LDR
K	39	2	He	2008.751	2008.751	3.56	889945	0.23	200000	
Mn	55	2	He	30429.587	30429.587	0.11	75896017	0.04	2000	>LDR
Co	59	2	He	169.090	169.090	0.40	851801	0.02	2000	
Ni	60	2	He	89.922	89.922	0.73	115308	0.08	2000	
Cu	63	2	He	1.118	1.118	5.04	4888	0.02	2000	
Zn	66	2	He	54.681	54.681	1.26	43406	0.13	2000	
Al	27	2	He	58.051	58.051	6.17	11375	0.51	2000	
B	11	1	No Gas	35.557	35.557	4.52	43607	0.08	2000	
Al	27	1	No Gas	56.683	56.683	1.92	483046	0.01	2000	
Si	28	1	No Gas	24354.370	24354.370	0.39	84664265	0.03	2000	>LDR
Ag	107	1	No Gas	0.009	0.009	45.13	317	0.00	2000	
Cd	111	1	No Gas	0.774	0.774	3.68	1287	0.06	2000	
Sr	88	1	No Gas	7284.897	7284.897	2.00	110460898	0.01	2000	>LDR
Mo	95	1	No Gas	0.125	0.125	9.46	377	0.03	2000	
Sn	118	1	No Gas	0.082	0.082	4.19	1683	0.00	2000	
Sb	121	1	No Gas	0.134	0.134	12.87	1407	0.01	2000	
Ba	137	1	No Gas	31.401	31.401	1.00	75593	0.04	2000	
Tl	205	1	No Gas	0.079	0.079	7.58	1523	0.01	2000	
Tl	203	1	No Gas	0.077	0.077	6.27	640	0.01	2000	
Pb	208	1	No Gas	0.064	0.064	1.73	2237	0.00	2000	
U	238	1	No Gas	0.108	0.108	8.23	2904	0.00	2000	
Ca	43	2	He	402368.395	402368.395	0.80	446734	90.07	200000	>LDR
Sb	121	2	He	0.123	0.123	22.93	633	0.02	2000	
Ti	47	2	He	1.483	1.483	26.61	177	0.84	2000	
Cu	63	1	No Gas	3.993	3.993	3.05	29095	0.01	2000	
Zn	66	1	No Gas	53.751	53.751	0.56	110249	0.05	2000	
Se	82	1	No Gas	8.916	8.916	90.26	-59	-15.04	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	684310	2.83	670807	102.01	70	120	
Ge	72	2	He	354108	1.24	338750	104.53	70	120	
Ge	72	1	No Gas	1190623	1.48	1064833	111.81	70	120	
In	115	1	No Gas	1435456	0.56	1360630	105.50	70	120	
Bi	209	1	No Gas	1475883	1.44	1388986	106.26	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-08
Data File Name	234SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:05:04-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	45.675	45.675	1.29	468489	0.01	2000	
Be	9	1	No Gas	0.088	0.088	11.75	222	0.04	2000	
V	51	2	He	-0.365	-0.365	-2.22	1338	-0.03	2000	
Cr	52	2	He	0.763	0.763	9.15	4057	0.02	2000	
Fe	56	2	He	13148.308	13148.308	1.01	47190573	0.03	200000	
Se	78	2	He	-0.592	-0.592	-148.37	349	-0.17	2000	
As	75	2	He	4.318	4.318	3.05	2474	0.17	2000	
Ca	44	2	He	83944.145	83944.145	0.83	1784065	4.71	200000	
Na	23	2	He	189914.708	189914.708	0.76	135385468	0.14	200000	>LDR
Mg	24	2	He	55386.940	55386.940	0.86	21816222	0.25	200000	
K	39	2	He	1598.952	1598.952	0.36	806367	0.20	200000	
Mn	55	2	He	1021.070	1021.070	1.32	2823484	0.04	2000	
Co	59	2	He	6.249	6.249	1.93	34918	0.02	2000	
Ni	60	2	He	2.302	2.302	3.58	3524	0.07	2000	
Cu	63	2	He	0.461	0.461	9.18	2904	0.02	2000	
Zn	66	2	He	5.734	5.734	14.78	10768	0.05	2000	
Al	27	2	He	10.866	10.866	4.01	2810	0.39	2000	
B	11	1	No Gas	49.179	49.179	3.66	60734	0.08	2000	
Al	27	1	No Gas	8.958	8.958	2.15	103896	0.01	2000	
Si	28	1	No Gas	16278.923	16278.923	1.75	61555781	0.03	2000	>LDR
Ag	107	1	No Gas	0.020	0.020	47.12	437	0.00	2000	
Cd	111	1	No Gas	0.061	0.061	32.99	110	0.06	2000	
Sr	88	1	No Gas	2218.362	2218.362	0.86	36255514	0.01	2000	>LDR
Mo	95	1	No Gas	0.141	0.141	10.85	457	0.03	2000	
Sn	118	1	No Gas	0.020	0.020	87.57	1490	0.00	2000	
Sb	121	1	No Gas	0.048	0.048	24.86	783	0.01	2000	
Ba	137	1	No Gas	992.929	992.929	0.69	2571776	0.04	2000	
Tl	205	1	No Gas	0.010	0.010	5.27	250	0.00	2000	
Tl	203	1	No Gas	0.006	0.006	46.15	77	0.01	2000	
Pb	208	1	No Gas	0.075	0.075	5.40	2664	0.00	2000	
U	238	1	No Gas	0.071	0.071	15.97	2037	0.00	2000	
Ca	43	2	He	82503.363	82503.363	0.72	101559	81.24	200000	
Sb	121	2	He	0.049	0.049	51.01	413	0.01	2000	
Ti	47	2	He	0.124	0.124	98.11	23	0.53	2000	
Cu	63	1	No Gas	0.873	0.873	3.66	8833	0.01	2000	
Zn	66	1	No Gas	5.224	5.224	2.83	25371	0.02	2000	
Se	82	1	No Gas	3.507	3.507	268.48	-601	-0.58	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	751527	1.22	670807	112.03	70	120	
Ge	72	2	He	392532	0.32	338750	115.88	70	120	
Ge	72	1	No Gas	1293758	1.28	1064833	121.50	70	120	ISTD Failed
In	115	1	No Gas	1547169	0.36	1360630	113.71	70	120	
Bi	209	1	No Gas	1563085	0.53	1388986	112.53	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-09
Data File Name	235SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:07:02-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	50.371	50.371	3.43	528714	0.01	2000	
Be	9	1	No Gas	0.002	0.002	88.90	47	0.00	2000	
V	51	2	He	0.396	0.396	14.66	3912	0.01	2000	
Cr	52	2	He	209.381	209.381	0.24	806265	0.03	2000	
Fe	56	2	He	10998.190	10998.190	0.37	40437928	0.03	200000	
Se	78	2	He	-0.804	-0.804	-63.82	347	-0.23	2000	
As	75	2	He	4.332	4.332	1.96	2541	0.17	2000	
Ca	44	2	He	30361.567	30361.567	0.73	661361	4.59	200000	
Na	23	2	He	101417.320	101417.320	0.78	74187801	0.14	200000	
Mg	24	2	He	14112.583	14112.583	0.54	5694627	0.25	200000	
K	39	2	He	3293.787	3293.787	1.22	1588335	0.21	200000	
Mn	55	2	He	408.612	408.612	0.43	1157755	0.04	2000	
Co	59	2	He	10.794	10.794	1.30	61770	0.02	2000	
Ni	60	2	He	859.159	859.159	1.64	1248688	0.07	2000	
Cu	63	2	He	10.209	10.209	1.06	41256	0.02	2000	
Zn	66	2	He	11.175	11.175	4.31	15286	0.07	2000	
Al	27	2	He	35.010	35.010	15.29	8015	0.44	2000	
B	11	1	No Gas	477.523	477.523	4.38	478841	0.10	2000	
Al	27	1	No Gas	17.881	17.881	5.12	183234	0.01	2000	
Si	28	1	No Gas	8075.098	8075.098	2.11	30721784	0.03	2000	>LDR
Ag	107	1	No Gas	0.011	0.011	51.03	367	0.00	2000	
Cd	111	1	No Gas	0.283	0.283	13.85	517	0.05	2000	
Sr	88	1	No Gas	1512.962	1512.962	2.23	25154140	0.01	2000	
Mo	95	1	No Gas	1.532	1.532	2.93	4901	0.03	2000	
Sn	118	1	No Gas	0.075	0.075	34.16	1807	0.00	2000	
Sb	121	1	No Gas	0.131	0.131	8.20	1500	0.01	2000	
Ba	137	1	No Gas	413.093	413.093	2.95	1088569	0.04	2000	
Tl	205	1	No Gas	0.019	0.019	18.39	420	0.00	2000	
Tl	203	1	No Gas	0.021	0.021	4.91	207	0.01	2000	
Pb	208	1	No Gas	0.193	0.193	8.53	5887	0.00	2000	
U	238	1	No Gas	0.350	0.350	1.64	10208	0.00	2000	
Ca	43	2	He	33033.499	33033.499	2.04	41677	79.26	200000	
Sb	121	2	He	0.108	0.108	6.29	660	0.02	2000	
Ti	47	2	He	0.993	0.993	59.67	137	0.73	2000	
Cu	63	1	No Gas	9.441	9.441	2.61	71605	0.01	2000	
Zn	66	1	No Gas	10.829	10.829	3.98	36386	0.03	2000	
Se	82	1	No Gas	-3.268	-3.268	-138.48	-1306	0.25	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	775874	2.20	670807	115.66	70	120	
Ge	72	2	He	402101	0.52	338750	118.70	70	120	
Ge	72	1	No Gas	1297681	1.03	1064833	121.87	70	120	ISTD Failed
In	115	1	No Gas	1574168	1.09	1360630	115.69	70	120	
Bi	209	1	No Gas	1601910	1.38	1388986	115.33	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	236_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:09:55-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	104.609	2.247	959386	1.19	100	104.6	90	110	
Be	9	1	No Gas	103.532	2.777	199216	0.58	100	103.5	90	110	
V	51	2	He	98.408	1.439	314550	0.62	100	98.4	90	110	
Cr	52	2	He	98.765	1.439	361943	0.69	100	98.8	90	110	
Fe	56	2	He	9824.155	1.355	34319484	0.62	10000	98.2	90	110	
Se	78	2	He	98.781	3.655	5240	2.64	100	98.8	90	110	
As	75	2	He	103.506	2.243	54707	1.52	100	103.5	90	110	
Ca	44	2	He	9801.631	1.061	203183	0.77	10000	98.0	90	110	
Na	23	2	He	10069.766	1.118	7233081	0.60	10000	100.7	90	110	
Mg	24	2	He	9833.854	1.796	3770098	1.06	10000	98.3	90	110	
K	39	2	He	10034.888	2.611	4389167	1.74	10000	100.3	90	110	
Mn	55	2	He	99.698	1.554	268735	0.76	100	99.7	90	110	
Co	59	2	He	99.465	1.813	540578	1.39	100	99.5	90	110	
Ni	60	2	He	99.265	1.091	137304	1.15	100	99.3	90	110	
Cu	63	2	He	99.140	1.415	371002	1.00	100	99.1	90	110	
Zn	66	2	He	99.296	1.663	79962	1.28	100	99.3	90	110	
Al	27	2	He	108.711	3.494	22522	2.70	100	108.7	90	110	
B	11	1	No Gas	554.418	4.369	505293	3.22	500	110.9	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	107.617	2.169	951483	1.86	100	107.6	90	110	
Si	28	1	No Gas	513.791	2.486	2082435	3.43	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.625	0.559	853086	1.01	100	98.6	90	110	
Cd	111	1	No Gas	99.415	1.595	176269	0.39	100	99.4	90	110	
Sr	88	1	No Gas	102.014	2.127	1651338	2.47	100	102.0	90	110	
Mo	95	1	No Gas	97.078	1.870	301295	0.69	100	97.1	90	110	
Sn	118	1	No Gas	99.102	0.721	516681	0.59	100	99.1	90	110	
Sb	121	1	No Gas	87.458	1.385	740567	0.17	100	87.5	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	99.448	1.173	255132	1.13	100	99.4	90	110	
Tl	205	1	No Gas	102.178	0.736	2010039	0.46	100	102.2	90	110	
Tl	203	1	No Gas	90.950	1.323	770329	1.03	100	91.0	90	110	
Pb	208	1	No Gas	100.551	0.358	2605186	0.70	100	100.6	90	110	
U	238	1	No Gas	99.390	0.606	2790380	0.96	100	99.4	90	110	
Ca	43	2	He	9845.111	1.109	11822	0.93	10000	98.5	90	110	
Sb	121	2	He	98.733	2.098	373527	1.29	100	98.7	90	110	
Ti	47	2	He	92.985	0.668	11472	1.20	100	93.0	90	110	
Cu	63	1	No Gas	88.541	0.604	633764	0.70	100	88.5	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	94.548	3.206	8476	3.39	100	94.5	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	708196	2.89	670807	105.57	70	120	
Ge	72	2	He	382059	0.82	338750	112.78	70	120	
Ge	72	1	No Gas	1263469	1.26	1064833	118.65	70	120	
In	115	1	No Gas	1531784	1.29	1360630	112.58	70	120	
Bi	209	1	No Gas	1544935	0.37	1388986	111.23	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	237_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:11:50-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.333	34.8	38288	2.1	0.5	
Be	9	1	No Gas	0.052	206.5	123	148.7	0.5	
V	51	2	He	-0.538	-5.5	708	11.6	2.5	
Cr	52	2	He	0.023	92.4	1173	5.5	2.5	
Fe	56	2	He	1.053	7.2	14421	1.6	100	
Se	78	2	He	1.121	43.8	399	4.5	2	
As	75	2	He	-0.082	-59.7	82	29.3	2.5	
Ca	44	2	He	5.166	68.3	560	11.2	100	
Na	23	2	He	83.882	7.3	299647	0.1	100	
Mg	24	2	He	4.232	1.2	1863	2.2	100	
K	39	2	He	-6.588	-53.7	92952	0.4	100	
Mn	55	2	He	0.498	7.4	1703	4.4	2.5	
Co	59	2	He	0.005	21.0	47	12.4	2.5	
Ni	60	2	He	-0.087	-21.6	123	18.7	2.5	
Cu	63	2	He	0.015	168.4	1093	8.7	2	
Zn	66	2	He	-0.219	-178.2	5705	4.8	2.5	
Al	27	2	He	-0.507	-86.9	410	21.3	5	
B	11	1	No Gas	23.974	13.1	31229	8.3	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.015	-36.5	14182	19.7	5	
Si	28	1	No Gas	10.444	55.2	209312	8.5	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.030	110.6	490	55.6	2.5	
Cd	111	1	No Gas	0.028	118.1	47	118.0	1	
Sr	88	1	No Gas	0.566	134.2	9277	124.1	2.5	
Mo	95	1	No Gas	0.053	121.2	167	110.9	2.5	
Sn	118	1	No Gas	0.017	172.2	1367	10.0	5	
Sb	121	1	No Gas	0.037	45.5	607	20.6	2.5	
Ba	137	1	No Gas	0.098	134.8	373	85.1	2.5	
Tl	205	1	No Gas	0.035	106.0	697	100.3	1	
Tl	203	1	No Gas	0.035	92.5	307	86.4	1	
Pb	208	1	No Gas	0.045	118.0	1768	74.5	2.5	
U	238	1	No Gas	0.040	144.0	1086	142.2	2.5	
Ca	43	2	He	-10.254	-132.4	17	91.7	100	
Sb	121	2	He	-0.001	-612.2	200	15.0	2.5	
Ti	47	2	He	0.026	334.8	10	100.0	2.5	
Cu	63	1	No Gas	0.060	114.1	2584	16.4	2.5	
Se	82	1	No Gas	-0.185	-2150.1	-878	-40.7	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	634004	0.29	670807	94.51	70	120	
Ge	72	2	He	359613	1.19	338750	106.16	70	120	
Ge	72	1	No Gas	1154248	0.91	1064833	108.40	70	120	
In	115	1	No Gas	1437865	0.70	1360630	105.68	70	120	
Bi	209	1	No Gas	1477001	0.79	1388986	106.34	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	241_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:25:43-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	104.242	1.308	931527	1.31	100	104.2	90	110	
Be	9	1	No Gas	104.008	0.158	195002	0.37	100	104.0	90	110	
V	51	2	He	100.892	0.552	317684	0.57	100	100.9	90	110	
Cr	52	2	He	100.760	1.249	363794	1.13	100	100.8	90	110	
Fe	56	2	He	10113.440	0.866	34809860	0.88	10000	101.1	90	110	
Se	78	2	He	99.862	1.972	5216	1.88	100	99.9	90	110	
As	75	2	He	106.026	1.199	55213	1.17	100	106.0	90	110	
Ca	44	2	He	10075.604	0.979	205768	0.83	10000	100.8	90	110	
Na	23	2	He	10228.556	0.664	7234798	0.56	10000	102.3	90	110	
Mg	24	2	He	10124.490	1.715	3824364	1.43	10000	101.2	90	110	
K	39	2	He	10225.829	0.250	4405287	0.51	10000	102.3	90	110	
Mn	55	2	He	101.212	1.791	268789	1.53	100	101.2	90	110	
Co	59	2	He	102.660	0.557	549732	0.76	100	102.7	90	110	
Ni	60	2	He	102.114	0.051	139151	0.33	100	102.1	90	110	
Cu	63	2	He	101.817	0.533	375379	0.51	100	101.8	90	110	
Zn	66	2	He	104.276	1.588	82426	1.37	100	104.3	90	110	
Al	27	2	He	111.640	2.058	22776	1.78	100	111.6	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	526.078	3.004	467835	2.65	500	105.2	90	110	
Al	27	1	No Gas	111.144	4.138	939429	2.29	100	111.1	90	110	CCV Main CR1-2 Failed
Si	28	1	No Gas	495.703	1.578	1929048	2.00	5000	9.9	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.664	0.190	835875	0.77	100	100.7	90	110	
Cd	111	1	No Gas	102.505	0.508	174496	1.14	100	102.5	90	110	
Sr	88	1	No Gas	102.577	1.121	1593912	0.99	100	102.6	90	110	
Mo	95	1	No Gas	99.802	0.124	297389	0.66	100	99.8	90	110	
Sn	118	1	No Gas	102.588	1.254	513407	1.05	100	102.6	90	110	
Sb	121	1	No Gas	90.528	2.365	733569	0.54	100	90.5	90	110	
Ba	137	1	No Gas	102.998	0.911	253656	0.47	100	103.0	90	110	
Tl	205	1	No Gas	105.830	2.579	2015030	1.26	100	105.8	90	110	
Tl	203	1	No Gas	92.911	2.515	761643	0.13	100	92.9	90	110	
Pb	208	1	No Gas	103.026	2.932	2583304	1.03	100	103.0	90	110	
U	238	1	No Gas	103.183	1.726	2804150	1.40	100	103.2	90	110	
Ca	43	2	He	10213.729	1.743	12082	1.46	10000	102.1	90	110	
Sb	121	2	He	102.165	1.084	380823	0.82	100	102.2	90	110	
Ti	47	2	He	96.876	3.531	11775	3.80	100	96.9	90	110	
Cu	63	1	No Gas	91.850	2.296	629048	0.53	100	91.8	90	110	
Se	82	1	No Gas	97.413	2.415	8384	0.98	100	97.4	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	689686	0.27	670807	102.81	70	120	
Ge	72	2	He	376411	0.29	338750	111.12	70	120	
Ge	72	1	No Gas	1209328	1.83	1064833	113.57	70	120	
In	115	1	No Gas	1470443	0.78	1360630	108.07	70	120	
Bi	209	1	No Gas	1495897	2.60	1388986	107.70	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	242_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:27:37-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.200	13.9	37152	0.1	0.5	
Be	9	1	No Gas	-0.010	-43.5	17	45.8	0.5	
V	51	2	He	-0.482	-7.5	864	12.5	2.5	
Cr	52	2	He	-0.002	-959.8	1073	4.4	2.5	
Fe	56	2	He	0.397	15.7	12099	1.7	100	
Se	78	2	He	0.333	145.2	358	6.2	2	
As	75	2	He	-0.079	-58.9	82	27.6	2.5	
Ca	44	2	He	0.672	215.5	467	6.2	100	
Na	23	2	He	12.449	54.9	249677	1.6	100	
Mg	24	2	He	0.304	16.9	440	3.9	100	
K	39	2	He	-7.781	-15.6	91227	0.3	100	
Mn	55	2	He	0.188	44.0	907	22.7	2.5	
Co	59	2	He	0.005	22.3	47	12.4	2.5	
Ni	60	2	He	-0.115	-10.3	87	17.6	2.5	
Cu	63	2	He	-0.039	-114.4	890	17.7	2	
Zn	66	2	He	-0.325	-160.5	5555	6.4	2.5	
Al	27	2	He	-0.758	-14.8	357	5.8	5	
B	11	1	No Gas	20.242	18.2	28205	11.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.384	-1.4	11468	0.5	5	
Si	28	1	No Gas	1.110	109.5	180712	1.9	10	
Ag	107	1	No Gas	0.007	109.7	297	18.6	2.5	
Cd	111	1	No Gas	0.002	173.2	3	173.2	1	
Sr	88	1	No Gas	-0.013	-38.6	500	13.9	2.5	
Mo	95	1	No Gas	0.012	1.7	50	0.0	2.5	
Sn	118	1	No Gas	0.009	117.9	1333	2.6	5	
Sb	121	1	No Gas	0.012	39.9	420	8.6	2.5	
Ba	137	1	No Gas	-0.017	-87.0	97	36.3	2.5	
Tl	205	1	No Gas	0.011	31.4	253	26.3	1	
Tl	203	1	No Gas	0.013	65.5	123	54.0	1	
Pb	208	1	No Gas	0.009	13.3	863	2.4	2.5	
U	238	1	No Gas	0.007	2.1	203	2.8	2.5	
Ca	43	2	He	-10.126	-135.7	17	91.7	100	
Sb	121	2	He	0.004	423.7	217	27.8	2.5	
Ti	47	2	He	-0.032	-159.5	3	173.2	2.5	
Cu	63	1	No Gas	-0.036	-53.0	1990	7.4	2.5	
Se	82	1	No Gas	1.522	242.6	-737	-47.3	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	632525	0.63	670807	94.29	70	120	
Ge	72	2	He	354729	0.22	338750	104.72	70	120	
Ge	72	1	No Gas	1171783	1.03	1064833	110.04	70	120	
In	115	1	No Gas	1443608	1.23	1360630	106.10	70	120	
Bi	209	1	No Gas	1470004	0.93	1388986	105.83	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-10
Data File Name	243SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:29:36-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	8.886	8.886	5.49	118161	0.01	2000	
Be	9	1	No Gas	0.021	0.021	33.60	78	0.03	2000	
V	51	2	He	14.767	14.767	1.46	49957	0.03	2000	
Cr	52	2	He	408.135	408.135	1.25	1512235	0.03	2000	
Fe	56	2	He	14918.037	14918.037	1.58	52809184	0.03	200000	
Se	78	2	He	0.694	0.694	92.99	409	0.17	2000	
As	75	2	He	5.940	5.940	2.77	3306	0.18	2000	
Ca	44	2	He	7719.805	7719.805	0.62	162288	4.76	200000	
Na	23	2	He	139400.047	139400.047	0.79	98087682	0.14	200000	
Mg	24	2	He	1585.789	1585.789	1.66	616454	0.26	200000	
K	39	2	He	2718.943	2718.943	2.85	1280320	0.21	200000	
Mn	55	2	He	118.234	118.234	1.81	322898	0.04	2000	
Co	59	2	He	19.057	19.057	1.39	104982	0.02	2000	
Ni	60	2	He	1616.172	1616.172	0.71	2261592	0.07	2000	
Cu	63	2	He	58.219	58.219	1.08	221255	0.03	2000	
Zn	66	2	He	4.319	4.319	6.95	9557	0.05	2000	
Al	27	2	He	511.306	511.306	1.98	105343	0.49	2000	
B	11	1	No Gas	738.934	738.934	0.76	670688	0.11	2000	
Al	27	1	No Gas	497.720	497.720	4.28	4397521	0.01	2000	
Si	28	1	No Gas	4817.223	4817.223	1.23	18278567	0.03	2000	>LDR
Ag	107	1	No Gas	0.180	0.180	5.31	1840	0.01	2000	
Cd	111	1	No Gas	0.123	0.123	7.74	220	0.06	2000	
Sr	88	1	No Gas	340.509	340.509	2.55	5573167	0.01	2000	
Mo	95	1	No Gas	18.804	18.804	3.27	59047	0.03	2000	
Sn	118	1	No Gas	0.076	0.076	15.11	1783	0.00	2000	
Sb	121	1	No Gas	1.935	1.935	3.91	17055	0.01	2000	
Ba	137	1	No Gas	109.608	109.608	1.55	284443	0.04	2000	
Tl	205	1	No Gas	0.015	0.015	31.45	337	0.00	2000	
Tl	203	1	No Gas	0.014	0.014	36.83	140	0.01	2000	
Pb	208	1	No Gas	2.819	2.819	1.46	75351	0.00	2000	
U	238	1	No Gas	1.631	1.631	0.11	46813	0.00	2000	
Ca	43	2	He	8450.433	8450.433	5.37	10287	82.14	200000	
Sb	121	2	He	2.127	2.127	2.44	8369	0.03	2000	
Ti	47	2	He	24.997	24.997	25.83	3131	0.80	2000	
Cu	63	1	No Gas	51.354	51.354	3.38	375764	0.01	2000	
Zn	66	1	No Gas	4.203	4.203	12.34	23280	0.02	2000	
Se	82	1	No Gas	-2.608	-2.608	-274.66	-1217	0.21	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	709784	3.27	670807	105.81	70	120	
Ge	72	2	He	387182	0.58	338750	114.30	70	120	
Ge	72	1	No Gas	1288719	2.73	1064833	121.03	70	120	ISTD Failed
In	115	1	No Gas	1549756	1.93	1360630	113.90	70	120	
Bi	209	1	No Gas	1579396	0.88	1388986	113.71	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-11
Data File Name	244SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:31:31-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	13.722	13.722	2.22	166553	0.01	2000	
Be	9	1	No Gas	0.049	0.049	18.80	138	0.04	2000	
V	51	2	He	-0.013	-0.013	-400.17	2482	0.00	2000	
Cr	52	2	He	3.537	3.537	1.28	14444	0.02	2000	
Fe	56	2	He	531.847	531.847	1.76	1917347	0.03	200000	
Se	78	2	He	-0.105	-0.105	-919.19	373	-0.03	2000	
As	75	2	He	0.659	0.659	9.20	490	0.13	2000	
Ca	44	2	He	625.405	625.405	7.79	13767	4.54	200000	
Na	23	2	He	208524.742	208524.742	0.50	148392368	0.14	200000	>LDR
Mg	24	2	He	201.803	201.803	0.67	79731	0.25	200000	
K	39	2	He	918.316	918.316	0.37	506753	0.18	200000	
Mn	55	2	He	15.724	15.724	1.73	43887	0.04	2000	
Co	59	2	He	0.269	0.269	4.47	1523	0.02	2000	
Ni	60	2	He	5.206	5.206	5.87	7632	0.07	2000	
Cu	63	2	He	1.231	1.231	10.81	5845	0.02	2000	
Zn	66	2	He	11.969	11.969	4.48	15502	0.08	2000	
Al	27	2	He	48.719	48.719	5.53	10659	0.46	2000	
B	11	1	No Gas	326.696	326.696	0.60	314971	0.10	2000	
Al	27	1	No Gas	39.287	39.287	5.04	363135	0.01	2000	
Si	28	1	No Gas	6013.551	6013.551	1.01	22346560	0.03	2000	>LDR
Ag	107	1	No Gas	0.001	0.001	290.88	270	0.00	2000	
Cd	111	1	No Gas	0.023	0.023	66.70	40	0.06	2000	
Sr	88	1	No Gas	39.749	39.749	1.56	640831	0.01	2000	
Mo	95	1	No Gas	7.174	7.174	2.91	22179	0.03	2000	
Sn	118	1	No Gas	-0.006	-0.006	-392.68	1333	0.00	2000	
Sb	121	1	No Gas	0.049	0.049	53.36	770	0.01	2000	
Ba	137	1	No Gas	9.740	9.740	2.94	25001	0.04	2000	
Tl	205	1	No Gas	0.004	0.004	94.25	117	0.00	2000	
Tl	203	1	No Gas	0.002	0.002	146.71	43	0.01	2000	
Pb	208	1	No Gas	0.955	0.955	2.95	25274	0.00	2000	
U	238	1	No Gas	0.040	0.040	4.89	1133	0.00	2000	
Ca	43	2	He	704.824	704.824	12.34	897	78.60	200000	
Sb	121	2	He	0.045	0.045	33.42	397	0.01	2000	
Ti	47	2	He	2.207	2.207	41.79	287	0.77	2000	
Cu	63	1	No Gas	1.600	1.600	4.64	13821	0.01	2000	
Zn	66	1	No Gas	11.206	11.206	3.57	36172	0.03	2000	
Se	82	1	No Gas	5.355	5.355	18.65	-412	-1.30	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	734967	1.37	670807	109.56	70	120	
Ge	72	2	He	391918	0.25	338750	115.70	70	120	
Ge	72	1	No Gas	1264650	1.16	1064833	118.77	70	120	
In	115	1	No Gas	1524702	1.24	1360630	112.06	70	120	
Bi	209	1	No Gas	1537332	2.69	1388986	110.68	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-12
Data File Name	245SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:33:30-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	15.598	15.598	3.75	181733	0.01	2000	
Be	9	1	No Gas	0.057	0.057	27.38	153	0.04	2000	
V	51	2	He	-0.145	-0.145	-18.64	1993	-0.01	2000	
Cr	52	2	He	3.781	3.781	4.67	14922	0.03	2000	
Fe	56	2	He	459.479	459.479	0.67	1610614	0.03	200000	
Se	78	2	He	0.246	0.246	128.66	380	0.06	2000	
As	75	2	He	1.535	1.535	5.34	937	0.16	2000	
Ca	44	2	He	700.283	700.283	1.37	14918	4.69	200000	
Na	23	2	He	254749.592	254749.592	0.64	176032811	0.14	200000	>LDR
Mg	24	2	He	200.931	200.931	2.20	77113	0.26	200000	
K	39	2	He	818.392	818.392	1.28	449658	0.18	200000	
Mn	55	2	He	12.487	12.487	0.79	33949	0.04	2000	
Co	59	2	He	0.741	0.741	4.30	4037	0.02	2000	
Ni	60	2	He	5.008	5.008	5.96	7142	0.07	2000	
Cu	63	2	He	5.819	5.819	1.60	22736	0.03	2000	
Zn	66	2	He	11.301	11.301	4.01	14561	0.08	2000	
Al	27	2	He	63.552	63.552	11.81	13355	0.48	2000	
B	11	1	No Gas	478.134	478.134	2.39	449594	0.11	2000	
Al	27	1	No Gas	55.826	55.826	5.00	501542	0.01	2000	
Si	28	1	No Gas	5655.997	5655.997	0.74	20860515	0.03	2000	>LDR
Ag	107	1	No Gas	0.007	0.007	129.06	313	0.00	2000	
Cd	111	1	No Gas	0.004	0.004	86.61	7	0.06	2000	
Sr	88	1	No Gas	47.182	47.182	0.67	750242	0.01	2000	
Mo	95	1	No Gas	5.005	5.005	2.84	15266	0.03	2000	
Sn	118	1	No Gas	-0.049	-0.049	-68.69	1093	0.00	2000	
Sb	121	1	No Gas	0.090	0.090	4.89	1113	0.01	2000	
Ba	137	1	No Gas	10.852	10.852	1.59	27466	0.04	2000	
Tl	205	1	No Gas	0.003	0.003	36.88	107	0.00	2000	
Tl	203	1	No Gas	0.005	0.005	70.90	60	0.01	2000	
Pb	208	1	No Gas	5.703	5.703	2.17	146819	0.00	2000	
U	238	1	No Gas	0.203	0.203	4.99	5665	0.00	2000	
Ca	43	2	He	798.269	798.269	11.21	983	81.18	200000	
Sb	121	2	He	0.067	0.067	9.84	470	0.01	2000	
Ti	47	2	He	2.561	2.561	70.23	323	0.79	2000	
Cu	63	1	No Gas	5.803	5.803	1.95	43470	0.01	2000	
Zn	66	1	No Gas	10.669	10.669	6.72	34872	0.03	2000	
Se	82	1	No Gas	1.620	1.620	453.63	-778	-0.21	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	727416	2.33	670807	108.44	70	120	
Ge	72	2	He	380692	1.09	338750	112.38	70	120	
Ge	72	1	No Gas	1254484	1.09	1064833	117.81	70	120	
In	115	1	No Gas	1503954	0.84	1360630	110.53	70	120	
Bi	209	1	No Gas	1528734	1.63	1388986	110.06	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-13
Data File Name	246SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:35:29-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	14.923	14.923	1.56	187964	0.01	2000	
Be	9	1	No Gas	0.057	0.057	10.65	163	0.04	2000	
V	51	2	He	0.046	0.046	36.58	2719	0.00	2000	
Cr	52	2	He	3.963	3.963	2.17	16310	0.02	2000	
Fe	56	2	He	460.148	460.148	2.71	1688206	0.03	200000	
Se	78	2	He	0.098	0.098	508.69	390	0.03	2000	
As	75	2	He	1.486	1.486	10.48	953	0.16	2000	
Ca	44	2	He	683.108	683.108	2.45	15245	4.48	200000	
Na	23	2	He	247302.688	247302.688	0.97	178886984	0.14	200000	>LDR
Mg	24	2	He	199.492	199.492	1.75	80143	0.25	200000	
K	39	2	He	786.461	786.461	1.98	456469	0.17	200000	
Mn	55	2	He	11.855	11.855	1.82	33762	0.04	2000	
Co	59	2	He	0.742	0.742	5.21	4231	0.02	2000	
Ni	60	2	He	4.856	4.856	2.38	7255	0.07	2000	
Cu	63	2	He	5.521	5.521	0.60	22639	0.02	2000	
Zn	66	2	He	10.157	10.157	5.99	14358	0.07	2000	
Al	27	2	He	68.455	68.455	3.43	15002	0.46	2000	
B	11	1	No Gas	460.625	460.625	1.78	464016	0.10	2000	
Al	27	1	No Gas	64.123	64.123	4.93	594737	0.01	2000	
Si	28	1	No Gas	5538.730	5538.730	2.71	21224477	0.03	2000	>LDR
Ag	107	1	No Gas	0.025	0.025	28.32	487	0.01	2000	
Cd	111	1	No Gas	0.009	0.009	34.17	17	0.06	2000	
Sr	88	1	No Gas	45.773	45.773	0.93	758808	0.01	2000	
Mo	95	1	No Gas	5.150	5.150	4.64	16380	0.03	2000	
Sn	118	1	No Gas	0.011	0.011	354.92	1460	0.00	2000	
Sb	121	1	No Gas	0.085	0.085	11.32	1110	0.01	2000	
Ba	137	1	No Gas	10.433	10.433	2.73	27533	0.04	2000	
Tl	205	1	No Gas	0.001	0.001	90.23	70	0.00	2000	
Tl	203	1	No Gas	0.004	0.004	46.69	60	0.01	2000	
Pb	208	1	No Gas	5.512	5.512	1.57	144073	0.00	2000	
U	238	1	No Gas	0.212	0.212	2.78	5992	0.00	2000	
Ca	43	2	He	770.318	770.318	16.48	993	77.54	200000	
Sb	121	2	He	0.078	0.078	18.19	533	0.01	2000	
Ti	47	2	He	3.854	3.854	8.47	503	0.77	2000	
Cu	63	1	No Gas	5.482	5.482	0.67	42804	0.01	2000	
Zn	66	1	No Gas	9.999	9.999	3.07	34922	0.03	2000	
Se	82	1	No Gas	4.174	4.174	198.49	-537	-0.78	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	778215	1.47	670807	116.01	70	120	
Ge	72	2	He	398495	0.38	338750	117.64	70	120	
Ge	72	1	No Gas	1303422	1.66	1064833	122.41	70	120	ISTD Failed
In	115	1	No Gas	1567947	0.91	1360630	115.24	70	120	
Bi	209	1	No Gas	1551735	0.52	1388986	111.72	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-14
Data File Name	247SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:37:30-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	14.612	14.612	3.14	179693	0.01	2000	
Be	9	1	No Gas	-0.008	-0.008	-84.97	25	-0.03	2000	
V	51	2	He	-0.086	-0.086	-25.72	2276	0.00	2000	
Cr	52	2	He	116.275	116.275	0.50	443377	0.03	2000	
Fe	56	2	He	1982.086	1982.086	1.45	7217718	0.03	200000	
Se	78	2	He	-0.292	-0.292	-258.63	369	-0.08	2000	
As	75	2	He	0.180	0.180	51.39	234	0.08	2000	
Ca	44	2	He	90767.563	90767.563	1.00	1954406	4.64	200000	
Na	23	2	He	98099.304	98099.304	0.79	70984231	0.14	200000	
Mg	24	2	He	20819.645	20819.645	0.66	8308877	0.25	200000	
K	39	2	He	3253.024	3253.024	0.76	1552773	0.21	200000	
Mn	55	2	He	843.810	843.810	0.91	2364004	0.04	2000	
Co	59	2	He	6.557	6.557	0.67	37118	0.02	2000	
Ni	60	2	He	548.038	548.038	0.24	787889	0.07	2000	
Cu	63	2	He	2.675	2.675	2.52	11542	0.02	2000	
Zn	66	2	He	4.591	4.591	9.13	10027	0.05	2000	
Al	27	2	He	17.956	17.956	5.00	4341	0.41	2000	
B	11	1	No Gas	56.198	56.198	5.64	67743	0.08	2000	
Al	27	1	No Gas	15.253	15.253	2.98	162096	0.01	2000	
Si	28	1	No Gas	5790.406	5790.406	1.88	22388096	0.03	2000	>LDR
Ag	107	1	No Gas	-0.005	-0.005	-67.15	217	0.00	2000	
Cd	111	1	No Gas	0.114	0.114	22.64	207	0.06	2000	
Sr	88	1	No Gas	2919.493	2919.493	0.78	48197873	0.01	2000	>LDR
Mo	95	1	No Gas	1.245	1.245	5.77	3957	0.03	2000	
Sn	118	1	No Gas	0.136	0.136	23.63	2117	0.01	2000	
Sb	121	1	No Gas	0.160	0.160	18.85	1773	0.01	2000	
Ba	137	1	No Gas	868.150	868.150	1.40	2271466	0.04	2000	
Tl	205	1	No Gas	0.001	0.001	301.41	57	0.00	2000	
Tl	203	1	No Gas	0.002	0.002	110.70	37	0.00	2000	
Pb	208	1	No Gas	0.033	0.033	18.73	1557	0.00	2000	
U	238	1	No Gas	0.005	0.005	33.22	143	0.00	2000	
Ca	43	2	He	90194.526	90194.526	0.58	112484	80.18	200000	
Sb	121	2	He	0.176	0.176	2.10	920	0.02	2000	
Ti	47	2	He	0.172	0.172	162.24	30	0.57	2000	
Cu	63	1	No Gas	2.650	2.650	3.75	22172	0.01	2000	
Zn	66	1	No Gas	4.257	4.257	8.53	23878	0.02	2000	
Se	82	1	No Gas	-0.028	-0.028	-11467.31	-985	0.00	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	756236	2.31	670807	112.74	70	120	
Ge	72	2	He	397692	0.65	338750	117.40	70	120	
Ge	72	1	No Gas	1315528	1.36	1064833	123.54	70	120	ISTD Failed
In	115	1	No Gas	1562925	0.54	1360630	114.87	70	120	

Sample Report

Bi	209	1	No Gas	1567526	1.87	1388986	112.85	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	250_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:43:17-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	101.789	2.865	905697	0.17	100	101.8	90	110	
Be	9	1	No Gas	99.945	2.797	186395	0.45	100	99.9	90	110	
V	51	2	He	101.181	0.281	305806	1.15	100	101.2	90	110	
Cr	52	2	He	101.133	0.587	350490	1.08	100	101.1	90	110	
Fe	56	2	He	10033.784	0.597	33150000	1.15	10000	100.3	90	110	
Se	78	2	He	102.270	1.441	5119	0.82	100	102.3	90	110	
As	75	2	He	106.003	1.264	52982	0.28	100	106.0	90	110	
Ca	44	2	He	10037.535	0.461	196764	0.78	10000	100.4	90	110	
Na	23	2	He	10178.738	1.123	6911964	1.56	10000	101.8	90	110	
Mg	24	2	He	10120.088	0.884	3669328	0.99	10000	101.2	90	110	
K	39	2	He	10244.809	1.007	4235957	0.68	10000	102.4	90	110	
Mn	55	2	He	100.769	0.190	256885	1.01	100	100.8	90	110	
Co	59	2	He	101.927	0.365	523892	0.64	100	101.9	90	110	
Ni	60	2	He	101.970	0.928	133382	1.50	100	102.0	90	110	
Cu	63	2	He	101.087	0.666	357731	0.77	100	101.1	90	110	
Zn	66	2	He	101.712	1.277	77320	1.70	100	101.7	90	110	
Al	27	2	He	112.041	1.368	21941	2.31	100	112.0	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	483.620	2.971	429028	3.29	500	96.7	90	110	
Al	27	1	No Gas	99.474	1.275	820603	0.47	100	99.5	90	110	
Si	28	1	No Gas	529.399	1.000	1992029	0.76	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.106	2.697	795391	0.66	100	100.1	90	110	
Cd	111	1	No Gas	101.243	2.373	164931	1.41	100	101.2	90	110	
Sr	88	1	No Gas	101.698	4.091	1511819	1.86	100	101.7	90	110	
Mo	95	1	No Gas	99.689	3.573	284207	1.40	100	99.7	90	110	
Sn	118	1	No Gas	101.460	2.365	485916	0.11	100	101.5	90	110	
Sb	121	1	No Gas	92.112	0.945	726247	0.41	100	92.1	90	110	
Ba	137	1	No Gas	101.168	2.858	238409	0.61	100	101.2	90	110	
Tl	205	1	No Gas	103.887	1.351	1898711	0.59	100	103.9	90	110	
Tl	203	1	No Gas	91.277	1.936	718217	0.36	100	91.3	90	110	
Pb	208	1	No Gas	100.659	1.688	2423109	1.87	100	100.7	90	110	
U	238	1	No Gas	102.435	2.350	2671519	0.86	100	102.4	90	110	
Ca	43	2	He	10004.957	0.921	11362	1.60	10000	100.0	90	110	
Sb	121	2	He	104.897	0.599	375309	0.64	100	104.9	90	110	
Ti	47	2	He	95.153	1.210	11101	1.69	100	95.2	90	110	
Cu	63	1	No Gas	90.406	1.841	602439	1.03	100	90.4	90	110	
Se	82	1	No Gas	92.871	3.559	7735	3.39	100	92.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	686393	2.86	670807	102.32	70	120	
Ge	72	2	He	361307	0.99	338750	106.66	70	120	
Ge	72	1	No Gas	1176393	0.80	1064833	110.48	70	120	
In	115	1	No Gas	1407610	2.36	1360630	103.45	70	120	
Bi	209	1	No Gas	1435539	1.69	1388986	103.35	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	251_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T22:45:11-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.163	29.8	36335	0.4	0.5	
Be	9	1	No Gas	0.001	1309.9	35	37.8	0.5	
V	51	2	He	-0.453	-3.5	918	4.2	2.5	
Cr	52	2	He	0.023	126.0	1117	8.5	2.5	
Fe	56	2	He	0.471	16.8	11912	0.8	100	
Se	78	2	He	1.210	51.1	385	8.3	2	
As	75	2	He	-0.066	-73.0	86	25.4	2.5	
Ca	44	2	He	3.693	25.1	507	4.1	100	
Na	23	2	He	29.162	13.9	251451	0.4	100	
Mg	24	2	He	0.311	89.3	427	21.3	100	
K	39	2	He	-3.024	-105.0	89908	1.3	100	
Mn	55	2	He	0.143	25.0	767	11.8	2.5	
Co	59	2	He	0.011	27.5	73	20.8	2.5	
Ni	60	2	He	-0.123	-14.1	73	28.4	2.5	
Cu	63	2	He	-0.013	-405.6	947	16.8	2	
Zn	66	2	He	-0.360	-83.4	5341	4.7	2.5	
Al	27	2	He	-1.407	-13.3	227	14.2	5	
B	11	1	No Gas	42.183	13.5	44936	10.0	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.217	-4.3	11378	2.7	5	
Si	28	1	No Gas	17.108	13.3	209213	2.1	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.005	-321.3	197	63.6	2.5	
Cd	111	1	No Gas	0.017	43.8	27	43.3	1	
Sr	88	1	No Gas	0.013	23.1	847	4.5	2.5	
Mo	95	1	No Gas	0.016	97.5	60	76.4	2.5	
Sn	118	1	No Gas	-0.041	-49.9	1040	7.6	5	
Sb	121	1	No Gas	2.531	3.5	17956	2.4	2.5	CCB Main CR1 Failed
Ba	137	1	No Gas	0.069	46.1	290	24.9	2.5	
Tl	205	1	No Gas	0.011	5.8	233	4.9	1	
Tl	203	1	No Gas	0.006	48.7	63	32.9	1	
Pb	208	1	No Gas	0.242	1.1	6267	0.9	2.5	
U	238	1	No Gas	0.005	31.4	130	27.7	2.5	
Ca	43	2	He	-9.557	-57.3	17	34.6	100	
Sb	121	2	He	2.412	5.5	8373	5.7	2.5	
Ti	47	2	He	-0.030	-175.9	3	173.2	2.5	
Cu	63	1	No Gas	0.025	74.3	2130	6.5	2.5	
Se	82	1	No Gas	3.546	553.6	-477	-335.7	2	CCB Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	623489	0.60	670807	92.95	70	120	
Ge	72	2	He	342535	1.38	338750	101.12	70	120	
Ge	72	1	No Gas	1042103	2.46	1064833	97.87	70	120	
In	115	1	No Gas	1379227	1.81	1360630	101.37	70	120	
Bi	209	1	No Gas	1392156	0.68	1388986	100.23	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	259_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:00:47-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	108.502	4.004	872339	0.45	100	108.5	90	110	
Be	9	1	No Gas	106.543	4.550	179980	0.91	100	106.5	90	110	
V	51	2	He	100.243	0.461	291737	0.96	100	100.2	90	110	
Cr	52	2	He	99.942	0.546	333503	0.59	100	99.9	90	110	
Fe	56	2	He	9945.662	0.693	31638336	1.04	10000	99.5	90	110	
Se	78	2	He	99.524	1.869	4806	1.24	100	99.5	90	110	
As	75	2	He	105.902	1.635	50969	1.67	100	105.9	90	110	
Ca	44	2	He	9839.111	0.637	185724	1.13	10000	98.4	90	110	
Na	23	2	He	10160.746	0.363	6643785	0.82	10000	101.6	90	110	
Mg	24	2	He	10027.155	0.534	3500578	0.27	10000	100.3	90	110	
K	39	2	He	10051.665	1.262	4003488	0.95	10000	100.5	90	110	
Mn	55	2	He	100.430	0.120	246512	0.77	100	100.4	90	110	
Co	59	2	He	101.816	0.110	503889	0.55	100	101.8	90	110	
Ni	60	2	He	100.501	2.148	126578	2.26	100	100.5	90	110	
Cu	63	2	He	101.146	0.858	344654	1.21	100	101.1	90	110	
Zn	66	2	He	101.636	0.633	74393	0.45	100	101.6	90	110	
Al	27	2	He	109.230	0.964	20606	0.39	100	109.2	90	110	
B	11	1	No Gas	602.151	3.993	480858	0.63	500	120.4	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	97.368	2.372	780655	0.71	100	97.4	90	110	
Si	28	1	No Gas	532.476	1.110	1945598	2.12	5000	10.6	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.655	0.288	778754	1.21	100	98.7	90	110	
Cd	111	1	No Gas	101.326	1.512	163952	0.23	100	101.3	90	110	
Sr	88	1	No Gas	99.947	1.726	1476236	0.45	100	99.9	90	110	
Mo	95	1	No Gas	96.855	1.871	274323	0.73	100	96.9	90	110	
Sn	118	1	No Gas	100.292	1.638	477119	0.29	100	100.3	90	110	
Sb	121	1	No Gas	89.616	1.711	686349	0.64	100	89.6	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	100.516	2.487	235284	1.04	100	100.5	90	110	
Tl	205	1	No Gas	102.920	0.846	1888703	1.24	100	102.9	90	110	
Tl	203	1	No Gas	91.250	2.217	720857	0.58	100	91.2	90	110	
Pb	208	1	No Gas	99.013	2.325	2392618	0.79	100	99.0	90	110	
U	238	1	No Gas	100.406	1.508	2629323	0.32	100	100.4	90	110	
Ca	43	2	He	10197.953	3.220	11148	2.55	10000	102.0	90	110	
Sb	121	2	He	102.625	0.423	353547	0.39	100	102.6	90	110	
Ti	47	2	He	96.874	3.272	10881	3.04	100	96.9	90	110	
Cu	63	1	No Gas	89.016	0.758	576319	1.12	100	89.0	90	110	CCV Main CR1-2 Failed
Se	82	1	No Gas	99.863	11.002	8138	10.93	100	99.9	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	622112	3.73	670807	92.74	70	120	
Ge	72	2	He	347883	0.65	338750	102.70	70	120	
Ge	72	1	No Gas	1142872	1.73	1064833	107.33	70	120	
In	115	1	No Gas	1397885	1.46	1360630	102.74	70	120	
Bi	209	1	No Gas	1441303	1.76	1388986	103.77	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	260_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:02:42-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.189	11.6	35909	0.6	0.5	
Be	9	1	No Gas	0.001	315.4	35	14.3	0.5	
V	51	2	He	-0.432	-2.2	966	3.3	2.5	
Cr	52	2	He	0.041	121.4	1160	13.5	2.5	
Fe	56	2	He	0.363	21.2	11428	2.0	100	
Se	78	2	He	1.067	53.6	373	6.9	2	
As	75	2	He	-0.057	-42.0	89	13.2	2.5	
Ca	44	2	He	3.665	144.6	500	20.0	100	
Na	23	2	He	6.976	39.2	234651	0.8	100	
Mg	24	2	He	0.602	45.4	520	17.1	100	
K	39	2	He	-5.650	-40.0	87765	0.5	100	
Mn	55	2	He	0.102	44.0	660	16.9	2.5	
Co	59	2	He	0.005	66.7	43	35.3	2.5	
Ni	60	2	He	-0.095	-72.5	107	78.6	2.5	
Cu	63	2	He	-0.033	-117.3	870	13.9	2	
Zn	66	2	He	-0.208	-139.0	5371	2.9	2.5	
Al	27	2	He	-0.796	-9.6	333	4.6	5	
B	11	1	No Gas	50.680	10.5	50670	7.9	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.329	-4.3	10678	0.5	5	
Si	28	1	No Gas	14.751	24.7	203676	1.2	10	CCB Main CR1 Failed
Ag	107	1	No Gas	0.000	-2038.7	223	27.4	2.5	
Cd	111	1	No Gas	0.004	86.6	7	86.6	1	
Sr	88	1	No Gas	0.006	57.1	733	7.5	2.5	
Mo	95	1	No Gas	0.022	65.8	73	55.1	2.5	
Sn	118	1	No Gas	0.047	279.3	1414	42.2	5	
Sb	121	1	No Gas	0.414	12.7	3207	10.9	2.5	
Ba	137	1	No Gas	0.013	119.6	157	20.5	2.5	
Tl	205	1	No Gas	0.017	13.2	337	10.4	1	
Tl	203	1	No Gas	0.015	28.2	140	24.7	1	
Pb	208	1	No Gas	0.047	15.7	1757	11.0	2.5	
U	238	1	No Gas	0.006	29.6	170	27.0	2.5	
Ca	43	2	He	-6.274	-259.1	20	86.6	100	
Sb	121	2	He	0.398	14.3	1527	13.1	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	0.006	713.3	2027	8.0	2.5	
Se	82	1	No Gas	1.519	893.5	-634	-176.4	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	612686	0.20	670807	91.34	70	120	
Ge	72	2	He	338143	0.70	338750	99.82	70	120	
Ge	72	1	No Gas	1051636	4.26	1064833	98.76	70	120	
In	115	1	No Gas	1343467	1.66	1360630	98.74	70	120	
Bi	209	1	No Gas	1418403	1.58	1388986	102.12	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	271_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:24:13-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	111.114	2.364	862992	2.25	100	111.1	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	107.483	1.206	175597	1.16	100	107.5	90	110	
V	51	2	He	98.882	0.926	278646	0.91	100	98.9	90	110	
Cr	52	2	He	98.621	1.290	318633	1.08	100	98.6	90	110	
Fe	56	2	He	9863.261	0.915	30378721	1.35	10000	98.6	90	110	
Se	78	2	He	98.653	2.015	4615	1.43	100	98.7	90	110	
As	75	2	He	103.150	1.458	48074	2.38	100	103.1	90	110	
Ca	44	2	He	9787.164	1.086	178869	1.36	10000	97.9	90	110	
Na	23	2	He	9924.783	1.189	6288465	1.44	10000	99.2	90	110	
Mg	24	2	He	9973.486	0.514	3371436	1.75	10000	99.7	90	110	
K	39	2	He	9942.370	1.026	3834983	0.65	10000	99.4	90	110	
Mn	55	2	He	98.726	0.570	234625	0.82	100	98.7	90	110	
Co	59	2	He	100.409	1.594	481087	0.92	100	100.4	90	110	
Ni	60	2	He	99.875	0.280	121795	1.29	100	99.9	90	110	
Cu	63	2	He	99.814	1.222	329300	1.11	100	99.8	90	110	
Zn	66	2	He	101.219	0.844	71763	2.07	100	101.2	90	110	
Al	27	2	He	111.698	0.872	20392	1.59	100	111.7	90	110	CCV Main CR1-2 Failed
B	11	1	No Gas	579.106	1.151	447622	1.38	500	115.8	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	103.893	2.176	760186	0.88	100	103.9	90	110	
Si	28	1	No Gas	552.760	2.037	1840070	1.11	5000	11.1	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.345	0.835	750999	0.51	100	98.3	90	110	
Cd	111	1	No Gas	98.978	1.760	154946	1.31	100	99.0	90	110	
Sr	88	1	No Gas	100.330	1.944	1433727	1.44	100	100.3	90	110	
Mo	95	1	No Gas	97.352	0.850	266780	0.34	100	97.4	90	110	
Sn	118	1	No Gas	99.762	1.321	459185	0.81	100	99.8	90	110	
Sb	121	1	No Gas	93.558	1.564	655074	0.89	100	93.6	90	110	
Ba	137	1	No Gas	100.569	0.908	227783	0.40	100	100.6	90	110	
Tl	205	1	No Gas	103.680	2.298	1818895	2.67	100	103.7	90	110	
Tl	203	1	No Gas	92.180	1.388	696182	0.27	100	92.2	90	110	
Pb	208	1	No Gas	97.770	4.815	2258246	3.85	100	97.8	90	110	
U	238	1	No Gas	101.989	0.358	2553341	0.81	100	102.0	90	110	
Ca	43	2	He	9557.849	2.599	10117	1.33	10000	95.6	90	110	
Sb	121	2	He	100.964	1.168	336789	1.84	100	101.0	90	110	
Ti	47	2	He	97.710	4.647	10624	3.96	100	97.7	90	110	
Cu	63	1	No Gas	94.005	1.850	556223	0.51	100	94.0	90	110	
Se	82	1	No Gas	102.567	6.952	7662	5.45	100	102.6	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	600981	0.40	670807	89.59	70	120	
Ge	72	2	He	336834	1.35	338750	99.43	70	120	
Ge	72	1	No Gas	1044887	2.24	1064833	98.13	70	120	
In	115	1	No Gas	1352316	0.51	1360630	99.39	70	120	
Bi	209	1	No Gas	1377715	1.13	1388986	99.19	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	272_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-20T23:26:09-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.191	37.3	34754	1.1	0.5	
Be	9	1	No Gas	-0.005	-67.0	25	20.0	0.5	
V	51	2	He	-0.017	-47.5	2025	0.9	2.5	
Cr	52	2	He	0.024	140.2	1050	9.7	2.5	
Fe	56	2	He	0.368	18.2	10874	1.9	100	
Se	78	2	He	0.633	44.5	337	3.3	2	
As	75	2	He	0.031	168.7	123	18.9	2.5	
Ca	44	2	He	-2.168	-239.1	373	24.3	100	
Na	23	2	He	-0.522	-353.9	218591	0.3	100	
Mg	24	2	He	0.381	20.1	423	5.9	100	
K	39	2	He	-7.800	-48.2	82620	1.4	100	
Mn	55	2	He	0.043	85.8	493	16.9	2.5	
Co	59	2	He	0.003	145.1	33	62.4	2.5	
Ni	60	2	He	-0.082	-40.1	117	32.5	2.5	
Cu	63	2	He	-0.051	-12.0	770	2.6	2	
Zn	66	2	He	-0.079	-590.2	5184	5.5	2.5	
Al	27	2	He	-1.129	-32.6	260	24.0	5	
B	11	1	No Gas	57.956	6.0	54428	4.4	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.252	-9.7	10414	7.9	5	
Si	28	1	No Gas	15.689	7.0	191657	1.9	10	CCB Main CR1 Failed
Ag	107	1	No Gas	-0.004	-78.4	190	13.9	2.5	
Cd	111	1	No Gas	0.009	86.6	13	86.6	1	
Sr	88	1	No Gas	0.017	211.5	870	57.8	2.5	
Mo	95	1	No Gas	0.015	36.5	53	28.6	2.5	
Sn	118	1	No Gas	-0.012	-162.9	1123	8.4	5	
Sb	121	1	No Gas	0.269	16.3	2030	14.3	2.5	
Ba	137	1	No Gas	0.016	227.6	160	48.8	2.5	
Tl	205	1	No Gas	0.012	21.9	247	18.7	1	
Tl	203	1	No Gas	0.012	37.8	113	31.0	1	
Pb	208	1	No Gas	0.033	58.8	1387	32.7	2.5	
U	238	1	No Gas	0.005	21.6	147	19.7	2.5	
Ca	43	2	He	-8.560	-67.0	17	34.6	100	
Sb	121	2	He	0.203	10.9	830	8.7	2.5	
Ti	47	2	He	-0.061	0.0	0	#DIV/0!	2.5	
Cu	63	1	No Gas	-0.035	-80.1	1660	9.0	2.5	
Se	82	1	No Gas	-0.130	-5855.2	-738	-79.1	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	592791	0.47	670807	88.37	70	120	
Ge	72	2	He	321292	0.23	338750	94.85	70	120	
Ge	72	1	No Gas	974288	0.28	1064833	91.50	70	120	
In	115	1	No Gas	1314040	0.90	1360630	96.58	70	120	
Bi	209	1	No Gas	1387537	0.80	1388986	99.90	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	294_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:09:22-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	113.868	3.273	860002	2.63	100	113.9	90	110	CCV Main CR1-2 Failed
Be	9	1	No Gas	112.290	0.051	178583	0.95	100	112.3	90	110	CCV Main CR1-2 Failed
V	51	2	He	102.213	1.281	290902	2.18	100	102.2	90	110	
Cr	52	2	He	101.149	0.737	330115	1.78	100	101.1	90	110	
Fe	56	2	He	10143.364	1.872	31560265	2.76	10000	101.4	90	110	
Se	78	2	He	101.031	3.028	4766	2.88	100	101.0	90	110	
As	75	2	He	104.463	0.737	49174	1.48	100	104.5	90	110	
Ca	44	2	He	10230.814	1.830	188830	1.18	10000	102.3	90	110	
Na	23	2	He	10708.195	5.654	6832721	4.46	10000	107.1	90	110	
Mg	24	2	He	10218.420	1.492	3488656	0.94	10000	102.2	90	110	
K	39	2	He	10289.593	1.321	4005738	0.33	10000	102.9	90	110	
Mn	55	2	He	100.807	0.644	241985	0.98	100	100.8	90	110	
Co	59	2	He	101.643	1.445	492001	2.29	100	101.6	90	110	
Ni	60	2	He	101.135	0.359	124570	0.75	100	101.1	90	110	
Cu	63	2	He	101.794	0.557	339225	1.36	100	101.8	90	110	
Zn	66	2	He	102.044	1.447	73033	2.22	100	102.0	90	110	
Al	27	2	He	103.512	2.247	19120	1.10	100	103.5	90	110	
B	11	1	No Gas	581.579	3.132	437543	3.10	500	116.3	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	95.627	2.896	692318	0.15	100	95.6	90	110	
Si	28	1	No Gas	533.448	3.228	1758558	1.84	5000	10.7	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	100.586	1.648	751055	0.67	100	100.6	90	110	
Cd	111	1	No Gas	101.833	2.077	155872	0.58	100	101.8	90	110	
Sr	88	1	No Gas	103.111	2.077	1440788	1.36	100	103.1	90	110	
Mo	95	1	No Gas	101.564	1.585	272144	0.52	100	101.6	90	110	
Sn	118	1	No Gas	101.647	1.281	457478	0.70	100	101.6	90	110	
Sb	121	1	No Gas	95.149	3.422	657557	0.73	100	95.1	90	110	
Ba	137	1	No Gas	102.213	2.358	226345	0.67	100	102.2	90	110	
Tl	205	1	No Gas	100.111	1.685	1715403	0.47	100	100.1	90	110	
Tl	203	1	No Gas	89.697	1.971	661729	0.40	100	89.7	90	110	CCV Main CR1-2 Failed
Pb	208	1	No Gas	99.217	5.161	2237980	3.00	100	99.2	90	110	
U	238	1	No Gas	102.453	2.013	2505262	0.14	100	102.5	90	110	
Ca	43	2	He	10343.483	2.201	11058	1.24	10000	103.4	90	110	
Sb	121	2	He	100.621	0.958	339044	1.86	100	100.6	90	110	
Ti	47	2	He	97.265	4.288	10688	5.12	100	97.3	90	110	
Cu	63	1	No Gas	97.508	2.577	569504	0.53	100	97.5	90	110	
Se	82	1	No Gas	104.138	8.704	7689	7.01	100	104.1	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585035	0.90	670807	87.21	70	120	
Ge	72	2	He	340231	1.09	338750	100.44	70	120	
Ge	72	1	No Gas	1031730	2.72	1064833	96.89	70	120	
In	115	1	No Gas	1322527	1.95	1360630	97.20	70	120	
Bi	209	1	No Gas	1346004	2.13	1388986	96.91	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	295_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:11:18-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.231	53.2	35335	2.2	0.5	
Be	9	1	No Gas	0.025	111.8	73	61.9	0.5	
V	51	2	He	0.191	10.3	2726	1.8	2.5	
Cr	52	2	He	0.054	85.7	1210	12.2	2.5	
Fe	56	2	He	0.380	13.7	11538	1.7	100	
Se	78	2	He	0.478	98.7	349	5.8	2	
As	75	2	He	0.127	35.8	176	12.2	2.5	
Ca	44	2	He	-2.789	-83.1	383	10.9	100	
Na	23	2	He	1.007	94.4	232164	0.2	100	
Mg	24	2	He	0.466	45.1	477	14.9	100	
K	39	2	He	-6.057	-93.6	88056	2.4	100	
Mn	55	2	He	0.090	46.4	633	15.6	2.5	
Co	59	2	He	0.002	100.6	30	33.3	2.5	
Ni	60	2	He	-0.093	-14.9	110	15.7	2.5	
Cu	63	2	He	-0.089	-35.4	687	14.9	2	
Zn	66	2	He	-0.396	-44.6	5274	1.9	2.5	
Al	27	2	He	-1.176	-7.0	267	5.7	5	
B	11	1	No Gas	34.675	12.1	37438	8.2	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.147	-11.1	11496	7.4	5	
Si	28	1	No Gas	2.636	48.0	159984	2.2	10	
Ag	107	1	No Gas	-0.001	-45.1	220	0.0	2.5	
Cd	111	1	No Gas	0.033	139.3	50	138.6	1	
Sr	88	1	No Gas	0.279	178.8	4526	153.3	2.5	
Mo	95	1	No Gas	0.025	104.9	80	86.6	2.5	
Sn	118	1	No Gas	0.074	96.1	1533	19.9	5	
Sb	121	1	No Gas	0.210	18.2	1704	14.9	2.5	
Ba	137	1	No Gas	0.228	194.8	631	155.4	2.5	
Tl	205	1	No Gas	0.018	38.6	343	34.0	1	
Tl	203	1	No Gas	0.024	56.8	200	50.7	1	
Pb	208	1	No Gas	0.124	149.4	3422	122.8	2.5	
U	238	1	No Gas	0.020	133.1	514	129.4	2.5	
Ca	43	2	He	-18.841	-28.8	7	86.6	100	
Sb	121	2	He	0.146	4.4	683	3.0	2.5	
Ti	47	2	He	0.030	520.4	10	173.2	2.5	
Cu	63	1	No Gas	-0.017	-179.0	1820	9.1	2.5	
Se	82	1	No Gas	-5.000	-127.6	-1150	-43.9	2	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	597589	0.39	670807	89.09	70	120	
Ge	72	2	He	339856	0.32	338750	100.33	70	120	
Ge	72	1	No Gas	1008259	0.37	1064833	94.69	70	120	
In	115	1	No Gas	1341064	1.34	1360630	98.56	70	120	
Bi	209	1	No Gas	1360186	0.72	1388986	97.93	70	120	

Sample Report

Sample Table

Sample Name	LLCCV2
Data File Name	297LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:15:16-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.991	1.991	2.84	49657	0.00	2	
Be	9	1	No Gas	2.202	2.202	4.29	3704	0.06	2	
V	51	2	He	2.222	2.222	1.43	8550	0.03	2	
Cr	52	2	He	1.933	1.933	3.05	7395	0.03	2	
Fe	56	2	He	193.921	193.921	0.43	619618	0.03	200	
Se	78	2	He	3.004	3.004	11.33	465	0.65	2	NewName Main CR1 Failed
As	75	2	He	2.077	2.077	6.82	1102	0.19	2	
Ca	44	2	He	210.289	210.289	1.76	4351	4.83	200	
Na	23	2	He	164.060	164.060	4.18	336283	0.05	200	
Mg	24	2	He	196.865	196.865	0.50	68207	0.29	200	
K	39	2	He	182.037	182.037	1.82	161338	0.11	200	
Mn	55	2	He	1.980	1.980	4.91	5214	0.04	2	
Co	59	2	He	2.046	2.046	6.53	10021	0.02	2	
Ni	60	2	He	2.066	2.066	12.90	2790	0.07	2	
Cu	63	2	He	2.098	2.098	6.36	8036	0.03	2	
Zn	66	2	He	1.687	1.687	3.69	6725	0.03	2	
Al	27	2	He	2.107	2.107	18.04	867	0.24	2	
B	11	1	No Gas	19.876	19.876	0.47	27051	0.07	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.513	1.513	9.19	31733	0.00	2	
Si	28	1	No Gas	9.150	9.150	8.06	190943	0.00	10	
Ag	107	1	No Gas	1.904	1.904	2.70	14889	0.01	2	
Cd	111	1	No Gas	1.985	1.985	8.14	3134	0.06	2	
Sr	88	1	No Gas	1.865	1.865	0.43	27525	0.01	2	
Mo	95	1	No Gas	2.009	2.009	4.26	5565	0.04	2	
Sn	118	1	No Gas	1.886	1.886	3.94	9951	0.02	2	
Sb	121	1	No Gas	1.945	1.945	2.12	14301	0.01	2	
Ba	137	1	No Gas	2.005	2.005	5.53	4708	0.04	2	
Tl	205	1	No Gas	1.758	1.758	3.05	31711	0.01	2	
Tl	203	1	No Gas	1.756	1.756	4.71	13641	0.01	2	
Pb	208	1	No Gas	1.834	1.834	0.89	44148	0.00	2	
U	238	1	No Gas	1.825	1.825	0.76	46944	0.00	2	
Ca	43	2	He	154.201	154.201	22.07	193	79.76	200	
Sb	121	2	He	2.155	2.155	2.30	7526	0.03	2	
Ti	47	2	He	1.744	1.744	19.21	200	0.87	200	
Cu	63	1	No Gas	1.974	1.974	6.09	14011	0.01	2	
Se	82	1	No Gas	-1.041	-1.041	-262.62	-886	0.12	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	613209	0.12	670807	91.41	70	120	
Ge	72	2	He	343638	0.79	338750	101.44	70	120	
Ge	72	1	No Gas	1075012	4.27	1064833	100.96	70	120	
In	115	1	No Gas	1364043	1.76	1360630	100.25	70	120	
Bi	209	1	No Gas	1415507	1.18	1388986	101.91	70	120	

Sample Report

Sample Table

Sample Name	LLCCV5
Data File Name	298LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:17:15-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.949	4.949	1.97	71567	0.01	5	
Be	9	1	No Gas	5.302	5.302	2.52	8794	0.06	5	
V	51	2	He	5.193	5.193	2.04	16941	0.03	5	
Cr	52	2	He	4.820	4.820	3.67	16797	0.03	5	
Fe	56	2	He	512.133	512.133	1.65	1611065	0.03	500	
Se	78	2	He	5.922	5.922	36.83	592	1.00	5	
As	75	2	He	5.046	5.046	0.28	2498	0.20	5	
Ca	44	2	He	506.261	506.261	3.84	9807	5.16	500	
Na	23	2	He	427.827	427.827	0.59	498055	0.09	500	
Mg	24	2	He	484.469	484.469	1.76	166539	0.29	500	
K	39	2	He	459.477	459.477	2.78	266620	0.17	500	
Mn	55	2	He	4.872	4.872	3.71	12152	0.04	5	
Co	59	2	He	4.900	4.900	2.00	23851	0.02	5	
Ni	60	2	He	4.867	4.867	4.43	6238	0.08	5	
Cu	63	2	He	4.912	4.912	0.52	17391	0.03	5	
Zn	66	2	He	4.850	4.850	4.84	8793	0.06	5	
Al	27	2	He	6.239	6.239	8.03	1610	0.39	5	
B	11	1	No Gas	33.076	33.076	2.30	36875	0.09	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	4.980	4.980	4.67	58681	0.01	5	
Si	28	1	No Gas	22.634	22.634	6.73	239380	0.01	25	
Ag	107	1	No Gas	4.642	4.642	0.96	36554	0.01	5	
Cd	111	1	No Gas	4.940	4.940	3.16	7926	0.06	5	
Sr	88	1	No Gas	4.917	4.917	0.33	72647	0.01	5	
Mo	95	1	No Gas	4.702	4.702	4.50	13217	0.04	5	
Sn	118	1	No Gas	4.710	4.710	1.14	23398	0.02	5	
Sb	121	1	No Gas	4.473	4.473	2.51	33379	0.01	5	
Ba	137	1	No Gas	4.851	4.851	3.07	11385	0.04	5	
Tl	205	1	No Gas	4.291	4.291	2.48	78704	0.01	5	
Tl	203	1	No Gas	4.195	4.195	0.31	33144	0.01	5	
Pb	208	1	No Gas	4.551	4.551	2.80	110492	0.00	5	
U	238	1	No Gas	4.402	4.402	1.95	115199	0.00	5	
Ca	43	2	He	540.898	540.898	8.10	607	89.16	500	
Sb	121	2	He	4.980	4.980	0.53	17048	0.03	5	
Ti	47	2	He	3.927	3.927	8.93	440	0.89	5	
Cu	63	1	No Gas	4.431	4.431	2.02	29700	0.01	5	
Se	82	1	No Gas	8.993	8.993	38.90	-44	-20.27	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	607993	0.38	670807	90.64	70	120	
Ge	72	2	He	341894	0.51	338750	100.93	70	120	
Ge	72	1	No Gas	1103735	2.11	1064833	103.65	70	120	
In	115	1	No Gas	1385867	0.53	1360630	101.85	70	120	
Bi	209	1	No Gas	1440129	1.51	1388986	103.68	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	299ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:19:14-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.172	40.1	34972	1.7	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.010	-36.1	17	34.6	0	ICSA Main CR1 Failed
V	51	2	He	-0.067	-227.9	2045	22.7	0	ICSA Main CR1 Failed
Cr	52	2	He	1.409	10.2	5735	9.4	0	ICSA Main CR1 Failed
Fe	56	2	He	100348.958	1.3	318449329	0.4	0	
Se	78	2	He	0.807	176.2	371	16.5	0	ICSA Main CR1 Failed
As	75	2	He	0.374	26.8	298	17.1	0	ICSA Main CR1 Failed
Ca	44	2	He	103422.026	1.3	1944098	2.1	0	
Na	23	2	He	101552.908	1.2	64135157	0.7	0	
Mg	24	2	He	99609.647	1.8	34697657	0.8	0	
K	39	2	He	100778.128	1.1	39223273	0.6	0	
Mn	55	2	He	1.304	95.6	3635	85.3	0	ICSA Main CR1 Failed
Co	59	2	He	0.293	39.3	1474	39.9	0	ICSA Main CR1 Failed
Ni	60	2	He	0.877	20.6	1330	18.1	0	ICSA Main CR1 Failed
Cu	63	2	He	0.216	54.6	1740	24.1	0	ICSA Main CR1 Failed
Zn	66	2	He	3.583	20.8	8076	7.0	0	ICSA Main CR1 Failed
Al	27	2	He	101499.212	1.5	18654161	1.0	0	
B	11	1	No Gas	10.200	9.4	19156	3.6	0	
Al	27	1	No Gas	91119.660	0.6	700985403	0.5	0	
Si	28	1	No Gas	12.645	1.9	211889	0.5	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.148	4.7	1380	3.6	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.242	4.9	1974	4.4	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.362	2.8	63903	2.0	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2211.633	0.8	6152314	0.3	0	
Sn	118	1	No Gas	0.210	15.9	2204	6.6	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.455	1.7	3754	1.5	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.648	8.1	1620	7.9	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.017	19.8	340	19.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.015	35.1	137	29.6	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.178	4.2	4724	4.6	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.006	39.3	153	37.1	0	ICSA Main CR1 Failed
Ca	43	2	He	98227.783	1.6	106933	1.2	0	
Sb	121	2	He	0.537	42.3	2050	39.3	0	ICSA Main CR1 Failed
Ti	47	2	He	2008.433	1.1	225008	1.2	0	
Se	82	1	No Gas	1.587	234.2	-701	-46.6	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	598860	0.23	670807	89.27	70	120	
Ge	72	2	He	347176	1.01	338750	102.49	70	120	
Ge	72	1	No Gas	1128046	0.56	1064833	105.94	70	120	
In	115	1	No Gas	1372848	0.84	1360630	100.90	70	120	
Bi	209	1	No Gas	1379602	1.62	1388986	99.32	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	300ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq Date Time	2022-07-21T00:21:14-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	205CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	104.396	2.504	774196	2.46	100	104.4	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	105.675	0.419	164431	0.38	100	105.7	80	120	
V	51	2	He	98.114	0.473	284125	0.10	100	98.1	80	120	
Cr	52	2	He	98.496	1.039	327008	0.67	100	98.5	80	120	
Fe	56	2	He	101930.521	0.679	322491609	0.29	100	101930.5	80	120	ICSB Main CR1 Failed
Se	78	2	He	94.321	1.306	4549	1.22	100	94.3	80	120	
As	75	2	He	100.359	1.055	48060	0.56	100	100.4	80	120	
Ca	44	2	He	102183.177	1.074	1914733	0.71	100	102183.2	80	120	ICSB Main CR1 Failed
Na	23	2	He	102720.456	0.962	64672559	0.57	100	102720.5	80	120	ICSB Main CR1 Failed
Mg	24	2	He	100801.831	0.787	35009295	1.03	100	100801.8	80	120	ICSB Main CR1 Failed
K	39	2	He	101332.621	0.464	39319923	0.86	100	101332.6	80	120	ICSB Main CR1 Failed
Mn	55	2	He	97.433	0.454	237946	0.75	100	97.4	80	120	
Co	59	2	He	97.939	0.655	482219	0.28	100	97.9	80	120	
Ni	60	2	He	97.102	1.402	121674	0.86	100	97.1	80	120	
Cu	63	2	He	96.281	0.666	326444	0.75	100	96.3	80	120	
Zn	66	2	He	97.362	1.740	71143	2.10	100	97.4	80	120	
Al	27	2	He	92958.970	0.257	17033133	0.36	100	92959.0	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	609.447	1.596	448080	1.61	100	609.4	80	120	
Al	27	1	No Gas	85682.848	4.353	623127804	0.45	100	85682.8	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	484.563	2.859	1667236	1.38	100	484.6	80	120	
Ag	107	1	No Gas	95.973	0.387	720813	0.28	100	96.0	80	120	
Cd	111	1	No Gas	97.927	0.791	150777	0.36	100	97.9	80	120	
Sr	88	1	No Gas	107.802	0.870	1515095	0.39	100	107.8	80	120	
Mo	95	1	No Gas	2143.727	0.669	5777484	0.32	100	2143.7	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	99.723	1.303	451440	0.93	100	99.7	80	120	
Sb	121	1	No Gas	89.190	4.079	637523	0.17	100	89.2	80	120	
Ba	137	1	No Gas	100.876	1.456	224707	1.05	100	100.9	80	120	
Tl	205	1	No Gas	98.432	4.327	1699320	2.46	100	98.4	80	120	
Tl	203	1	No Gas	88.691	2.029	659440	0.31	100	88.7	80	120	
Pb	208	1	No Gas	95.109	2.267	2163090	0.54	100	95.1	80	120	
U	238	1	No Gas	103.302	1.748	2546047	1.02	100	103.3	80	120	
Ca	43	2	He	98484.423	0.946	106886	0.41	100	98484.4	80	120	ICSB Main CR1 Failed
Sb	121	2	He	97.286	0.745	333456	0.79	100	97.3	80	120	
Ti	47	2	He	1918.429	0.582	214266	0.12	100	1918.4	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	87.973	3.696	531597	0.32	100	88.0	80	120	
Se	82	1	No Gas	96.822	7.951	7352	9.43	100	96.8	80	120	

QC ISTD Table

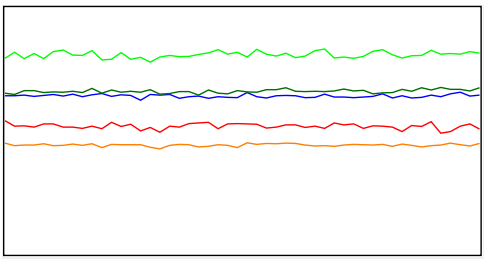
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	572387	0.06	670807	85.33	70	120	
Ge	72	2	He	346108	0.57	338750	102.17	70	120	
Ge	72	1	No Gas	1067560	3.86	1064833	100.26	70	120	
In	115	1	No Gas	1330016	0.54	1360630	97.75	70	120	
Bi	209	1	No Gas	1356539	1.91	1388986	97.66	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\072022A.b
Acq. Date-Time	07/20/2022 10:23:44
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2595	25951.54		
24	10000	8092	80916.13		
59	20000	12835	128349.78		
115	50000	22132	221323.10		
208	20000	13222	132220.38		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.163	5.000	
24	1.584	5.000	
59	1.014	5.000	
115	1.219	5.000	
208	1.108	5.000	

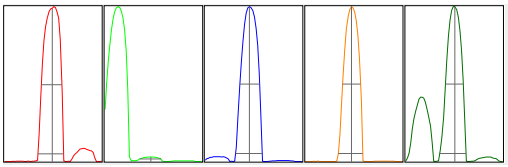
Mass	Background	Background (Required)	Background (Flag)
9	1.900		
24	0.600		
59	1.000		
115	0.500		
208	1.400		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.464 %
Doubly Charged	70 / 140 1.552 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2541.87	9.00	8.90 - 9.10	
24	8046.35	23.95	23.90 - 24.10	
59	13297.39	58.90	58.90 - 59.10	
115	22153.30	114.95	114.90 - 115.10	
208	13089.29	208.05	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.782		
24	0.65			
59	0.61	0.814		
115	0.55	0.744		
208	0.55	0.803		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.1 V	Deflect	13.2 V
Extract 2	-195.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

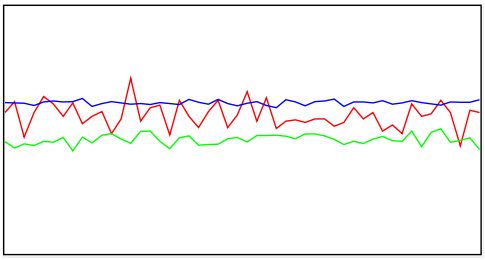
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	112	1118.04		
24	1000	460	4604.36		
59	10000	6101	61008.47		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

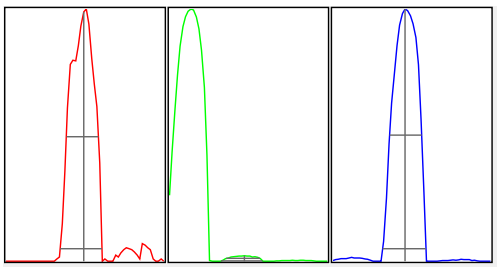
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	9.239	5.000	Fail
24	4.522	5.000	
59	1.374	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.000		
59	0.200		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.295 %
Doubly Charged	70 / 140 0.906 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	120.01	9.00	8.90 - 9.10	
24	482.11	23.95	23.90 - 24.10	
59	6125.38	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.781		
24	0.63	0.783		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.809		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.6 V	Deflect	-0.2 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.8 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9996	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

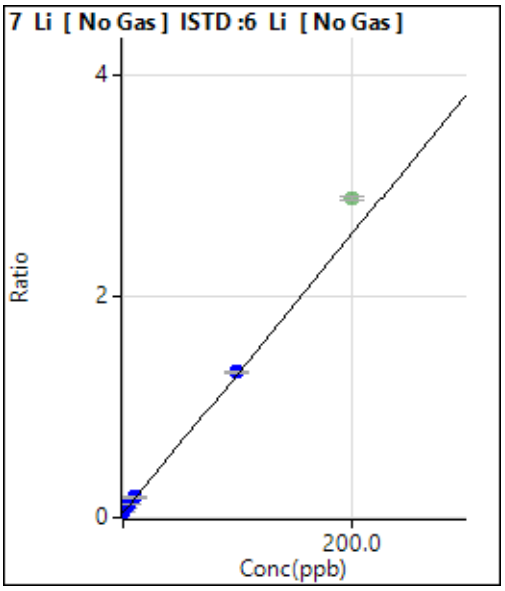
Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

Calibration for 108_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072122A.b\
Analysis File: 072122A.batch.bin
DA Date-Time: 07/21/2022 20:31:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	101CALB.d	CAL BLK	07/21/2022 19:49:13
2	102CALS.d	2/10/200	07/21/2022 19:51:27
3	103CALS.d	5/25/500	07/21/2022 19:53:41
4	104CALS.d	10/50/100	07/21/2022 19:55:55
5	105CALS.d	100/500/10K	07/21/2022 19:58:08
6	106CALS.d	200/1000/20K	07/21/2022 20:00:21

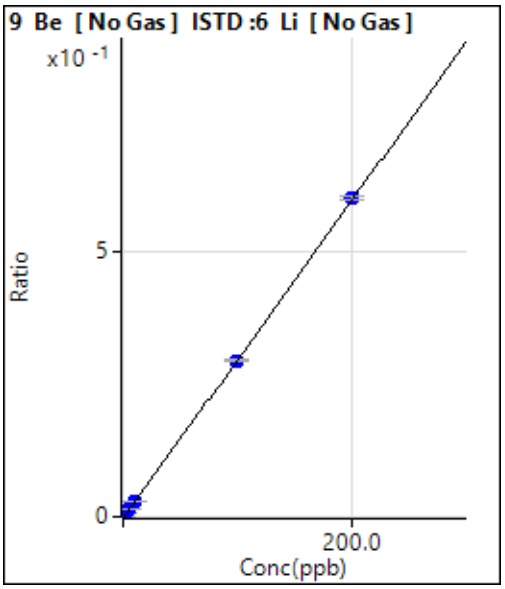
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	24130.76	0.0570	P	1.1	
2	☐	2.000	1.977	34455.44	0.0819	P	1.5	-1.2
3	☐	5.000	5.162	51456.91	0.1220	P	0.9	3.2
4	☐	10.000	10.032	76804.66	0.1833	P	1.1	0.3
5	☐	100.000	99.989	542499.35	1.3161	P	1.2	0.0
6	☑	200.000		1146874.13	2.8881	A	0.8	

y = 0.0126 * x + 0.0570
R = 1.0000
DL = 0.1536 ppb
BEC = 4.526 ppb

Weight: <None>
Min Conc: <None>

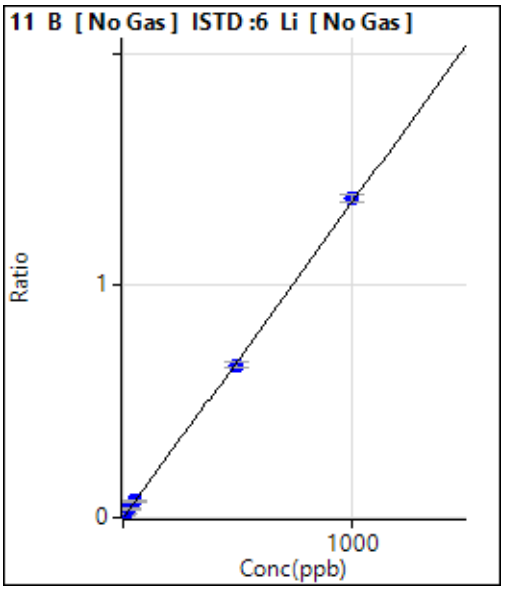


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11.67	0.0000	P	25.2	
2	☐	2.000	1.919	2433.57	0.0058	P	0.7	-4.0
3	☐	5.000	4.941	6263.11	0.0148	P	5.8	-1.2
4	☐	10.000	9.771	12287.08	0.0293	P	2.9	-2.3
5	☐	100.000	98.465	121738.04	0.2953	P	1.2	-1.5
6	☐	200.000	200.781	239119.16	0.6022	P	1.3	0.4

y = 0.0030 * x + 2.7577E-005
R = 1.0000
DL = 0.006954 ppb
BEC = 0.009195 ppb

Weight: <None>
Min Conc: <None>

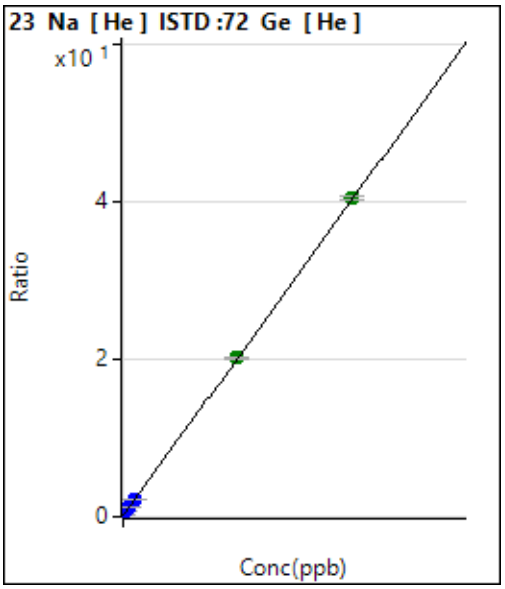
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2248.53	0.0053	P	1.0	
2	☐	10.000	9.198	7492.05	0.0178	P	6.3	-8.0
3	☐	25.000	23.678	15814.01	0.0375	P	2.6	-5.3
4	☐	50.000	48.917	30063.83	0.0718	P	6.2	-2.2
5	☐	500.000	480.645	271426.83	0.6584	P	3.8	-3.9
6	☐	1000.000	1009.772	547008.77	1.3774	P	2.5	1.0

y = 0.0014 * x + 0.0053
R = 0.9997
DL = 0.1123 ppb
BEC = 3.908 ppb

Weight: <None>
Min Conc: <None>

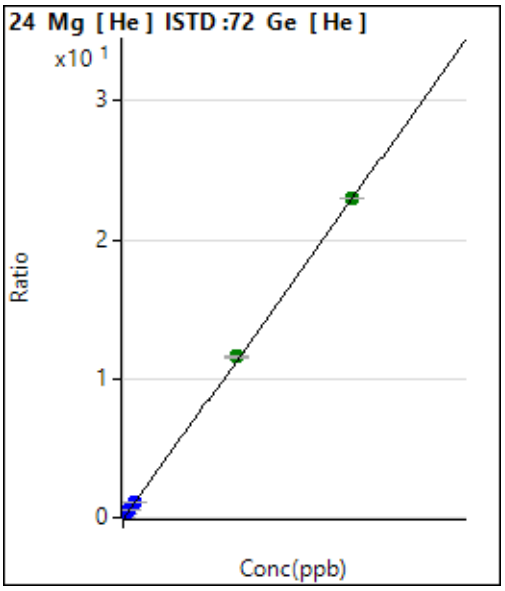


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	82533.45	0.3568	P	0.7	
2	☐	200.000	183.987	169631.63	0.7249	P	1.0	-8.0
3	☐	500.000	471.323	300161.86	1.2999	P	0.0	-5.7
4	☐	1000.000	962.719	525557.52	2.2832	P	0.8	-3.7
5	☐	10000.00	9913.138	4693626.49	20.1927	A	1.5	-0.9
6	☐	20000.00	20046.17	9064939.86	40.4686	A	0.7	0.2

y = 0.0020 * x + 0.3568
R = 1.0000
DL = 3.543 ppb
BEC = 178.3 ppb

Weight: <None>
Min Conc: <None>

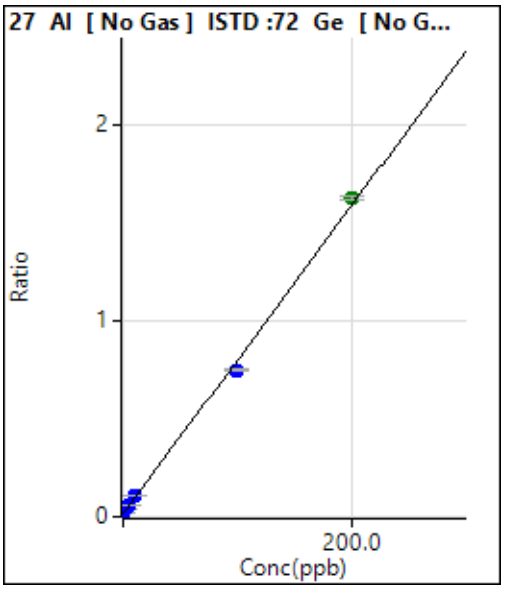
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	256.67	0.0011	P	53.1	
2	☐	200.000	191.197	51752.68	0.2212	P	1.9	-4.4
3	☐	500.000	487.726	129884.68	0.5625	P	0.6	-2.5
4	☐	1000.000	992.795	263288.91	1.1438	P	1.6	-0.7
5	☐	10000.00	10067.12	2693982.35	11.5886	A	1.3	0.7
6	☐	20000.00	19967.19	5148306.49	22.9839	A	0.4	-0.2

y = 0.0012 * x + 0.0011
R = 1.0000
DL = 1.538 ppb
BEC = 0.9644 ppb

Weight: <None>
Min Conc: <None>

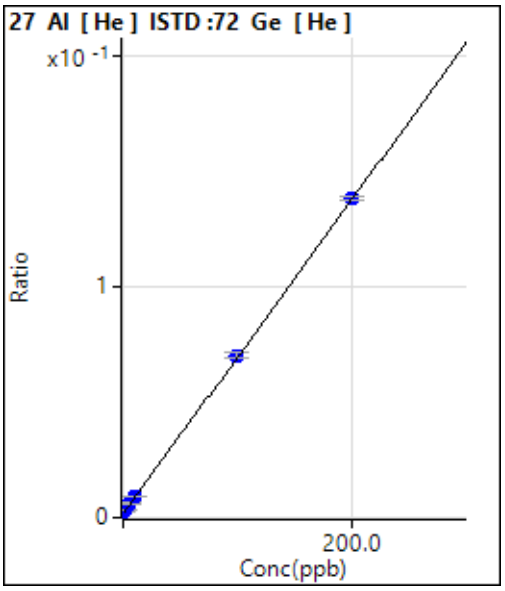


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14290.88	0.0229	P	1.6	
2	☐	2.000	1.857	23396.62	0.0375	P	2.3	-7.1
3	☐	5.000	4.946	38921.56	0.0618	P	1.5	-1.1
4	☐	10.000	10.318	64650.03	0.1041	P	0.2	3.2
5	☐	100.000	92.317	465731.09	0.7499	P	1.5	-7.7
6	☐	200.000	203.828	990527.49	1.6280	A	0.7	1.9

y = 0.0079 * x + 0.0229
R = 0.9990
DL = 0.1432 ppb
BEC = 2.906 ppb

Weight: <None>
Min Conc: <None>

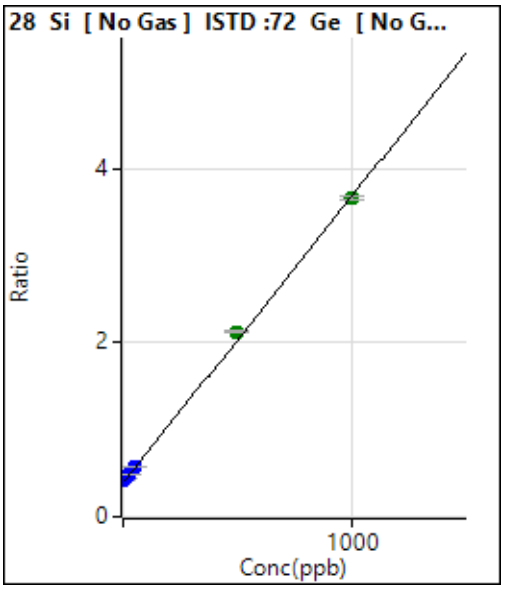
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0024	P	6.9	
2	☐	2.000	1.660	826.71	0.0035	P	10.1	-17.0
3	☐	5.000	5.539	1423.43	0.0062	P	7.3	10.8
4	☐	10.000	10.065	2126.87	0.0092	P	6.8	0.7
5	☐	100.000	99.980	16333.20	0.0703	P	4.2	0.0
6	☐	200.000	199.997	30944.82	0.1382	P	1.7	0.0

y = 6.7876E-004 * x + 0.0024
R = 1.0000
DL = 0.7337 ppb
BEC = 3.546 ppb

Weight: <None>
Min Conc: <None>

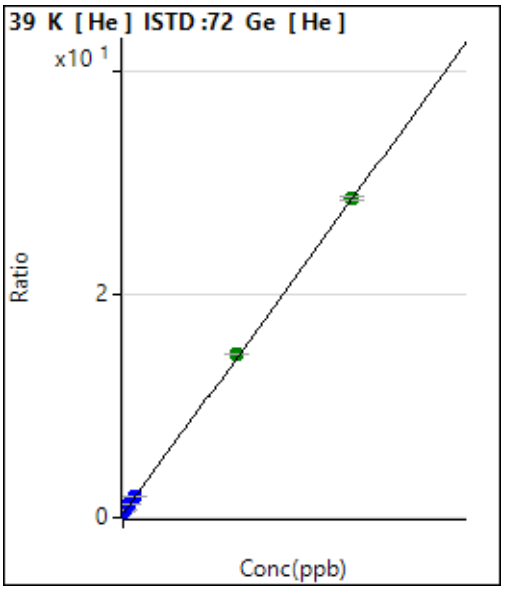


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	256174.04	0.4103	P	0.7	
2	☐	10.000	9.746	275893.93	0.4423	P	1.5	-2.5
3	☐	25.000	21.652	303042.84	0.4815	P	1.5	-13.4
4	☐	50.000	47.804	352269.07	0.5675	P	1.0	-4.4
5	☐	500.000	521.743	1320496.39	2.1261	A	1.4	4.3
6	☐	1000.000	989.324	2229197.31	3.6638	A	0.7	-1.1

y = 0.0033 * x + 0.4103
R = 0.9996
DL = 2.681 ppb
BEC = 124.7 ppb

Weight: <None>
Min Conc: <None>

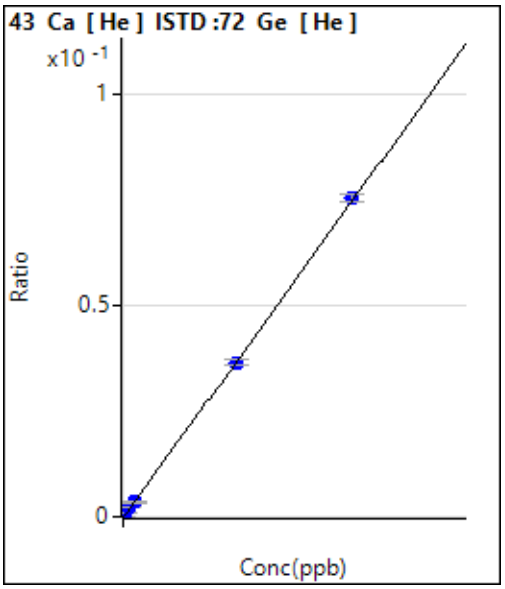
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	115291.66	0.4984	P	0.9	
2	☐	200.000	180.947	176111.27	0.7526	P	0.5	-9.5
3	☐	500.000	454.217	262435.07	1.1365	P	0.8	-9.2
4	☐	1000.000	939.515	418536.91	1.8182	P	0.7	-6.0
5	☐	10000.00	10047.17	3396760.47	14.6128	A	0.6	0.5
6	☐	20000.00	19980.77	6399138.45	28.5677	A	0.8	-0.1

y = 0.0014 * x + 0.4984
R = 1.0000
DL = 10.07 ppb
BEC = 354.8 ppb

Weight: <None>
Min Conc: <None>

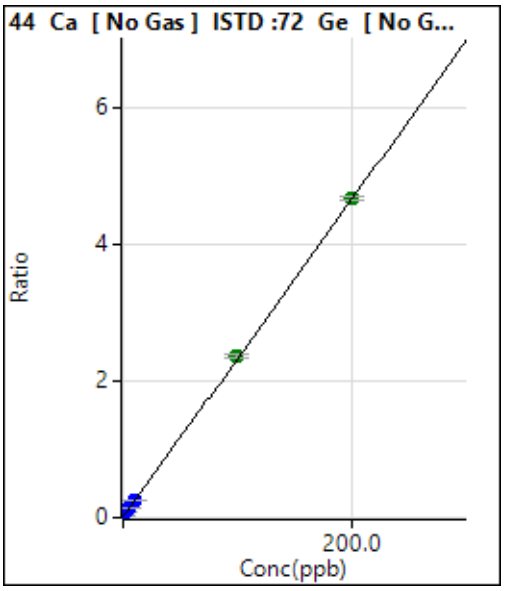


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	43.4	
2	☐	200.000	190.067	193.34	0.0008	P	27.7	-5.0
3	☐	500.000	533.636	486.69	0.0021	P	3.6	6.7
4	☐	1000.000	911.364	810.04	0.0035	P	8.3	-8.9
5	☐	10000.00	9727.958	8469.42	0.0364	P	4.2	-2.7
6	☐	20000.00	20139.71	16870.57	0.0753	P	2.7	0.7

y = 3.7340E-006 * x + 1.1531E-004
R = 0.9999
DL = 40.22 ppb
BEC = 30.88 ppb

Weight: <None>
Min Conc: <None>

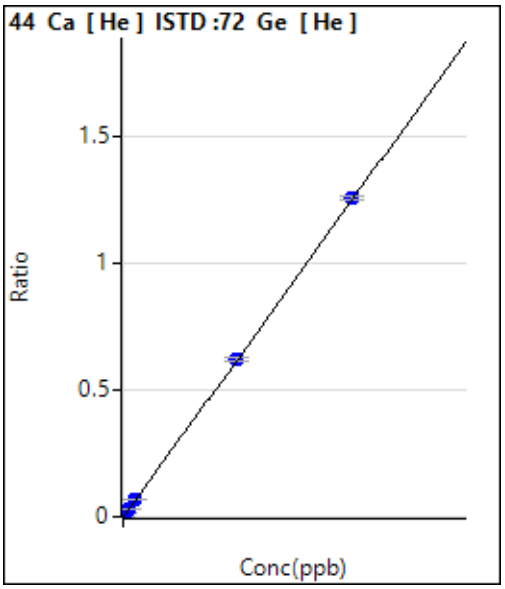
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	19781.18	0.0317	P	2.2	
2	☐	2.000	1.920	47575.67	0.0763	P	0.9	-4.0
3	☐	5.000	4.801	90140.63	0.1432	P	1.5	-4.0
4	☐	10.000	9.660	158959.70	0.2560	P	0.9	-3.4
5	☐	100.000	100.531	1469907.48	2.3667	A	1.4	0.5
6	☐	200.000	199.757	2842212.25	4.6714	A	1.4	-0.1

y = 0.0232 * x + 0.0317
R = 1.0000
DL = 0.0915 ppb
BEC = 1.364 ppb

Weight: <None>
Min Conc: <None>

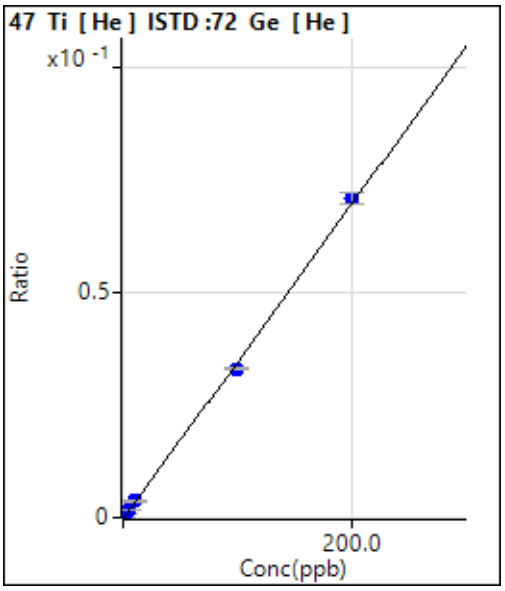


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	670.03	0.0029	P	2.9	
2	☐	200.000	209.643	3753.92	0.0160	P	0.5	4.8
3	☐	500.000	489.447	7755.65	0.0336	P	2.1	-2.1
4	☐	1000.000	1002.141	15131.89	0.0657	P	1.0	0.2
5	☐	10000.00	9880.413	144681.05	0.6224	P	1.4	-1.2
6	☐	20000.00	20059.85	282393.42	1.2607	P	1.0	0.3

y = 6.2704E-005 * x + 0.0029
R = 1.0000
DL = 4.053 ppb
BEC = 46.19 ppb

Weight: <None>
Min Conc: <None>

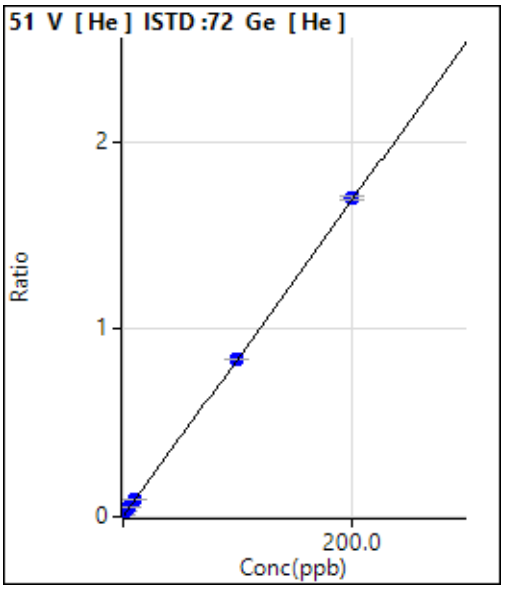
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	173.2	
2	☐	2.000	1.990	173.34	0.0007	P	8.1	-0.5
3	☐	5.000	4.985	413.35	0.0018	P	9.7	-0.3
4	☐	10.000	10.699	873.38	0.0038	P	10.9	7.0
5	☐	100.000	94.471	7705.60	0.0331	P	0.6	-5.5
6	☐	200.000	202.730	15922.80	0.0711	P	3.0	1.4

y = 3.5043E-004 * x + 4.3224E-005
R = 0.9994
DL = 0.6409 ppb
BEC = 0.1233 ppb

Weight: <None>
Min Conc: <None>

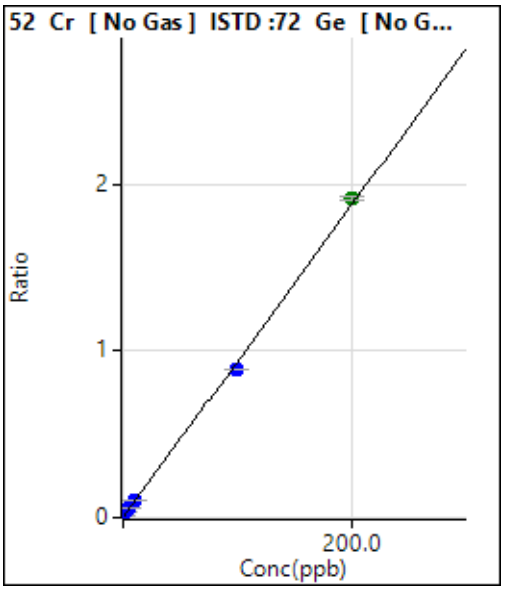


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2203.52	0.0095	P	0.6	
2	☐	2.000	1.991	6150.30	0.0263	P	3.6	-0.5
3	☐	5.000	4.967	11855.16	0.0513	P	1.1	-0.7
4	☐	10.000	10.242	22042.20	0.0957	P	1.6	2.4
5	☐	100.000	98.449	194862.44	0.8383	P	0.7	-1.6
6	☐	200.000	200.764	380698.73	1.6996	P	0.9	0.4

y = 0.0084 * x + 0.0095
R = 1.0000
DL = 0.02184 ppb
BEC = 1.132 ppb

Weight: <None>
Min Conc: <None>

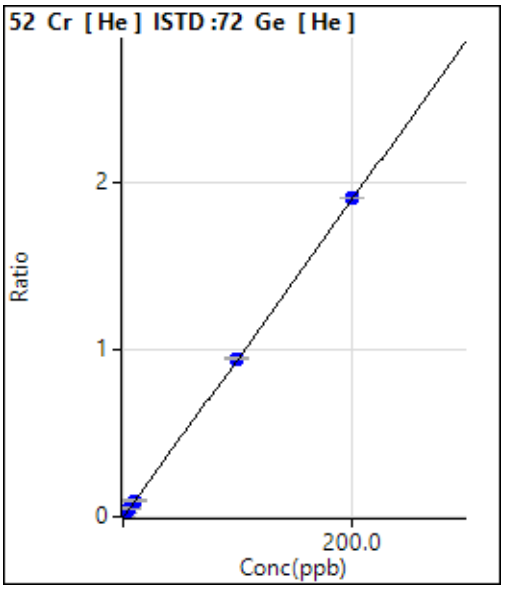
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7708.96	0.0123	P	2.2	
2	☐	2.000	1.906	18826.52	0.0302	P	1.1	-4.7
3	☐	5.000	4.798	36027.65	0.0572	P	1.8	-4.0
4	☐	10.000	9.687	63929.04	0.1030	P	0.4	-3.1
5	☐	100.000	93.523	551150.30	0.8874	P	1.0	-6.5
6	☐	200.000	203.260	1164576.44	1.9141	A	1.5	1.6

y = 0.0094 * x + 0.0123
R = 0.9993
DL = 0.08904 ppb
BEC = 1.32 ppb

Weight: <None>
Min Conc: <None>

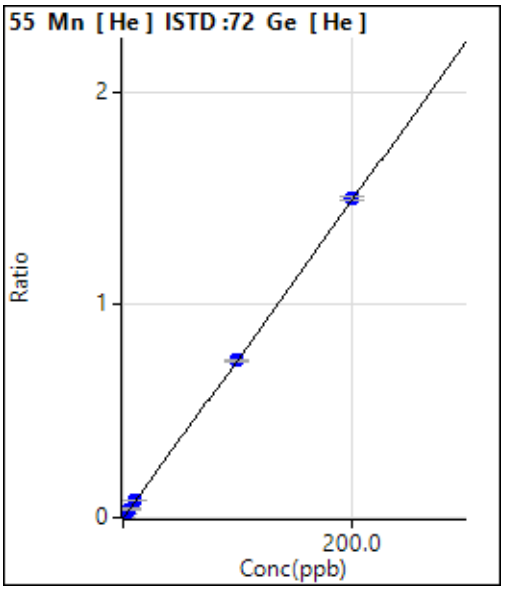


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	763.36	0.0033	P	10.7	
2	☐	2.000	1.814	4800.92	0.0205	P	4.8	-9.3
3	☐	5.000	5.038	11805.28	0.0511	P	2.2	0.8
4	☐	10.000	9.928	22455.34	0.0975	P	4.2	-0.7
5	☐	100.000	99.217	219694.29	0.9451	P	1.0	-0.8
6	☐	200.000	200.396	426842.00	1.9056	P	0.5	0.2

y = 0.0095 * x + 0.0033
R = 1.0000
DL = 0.1116 ppb
BEC = 0.3476 ppb

Weight: <None>
Min Conc: <None>

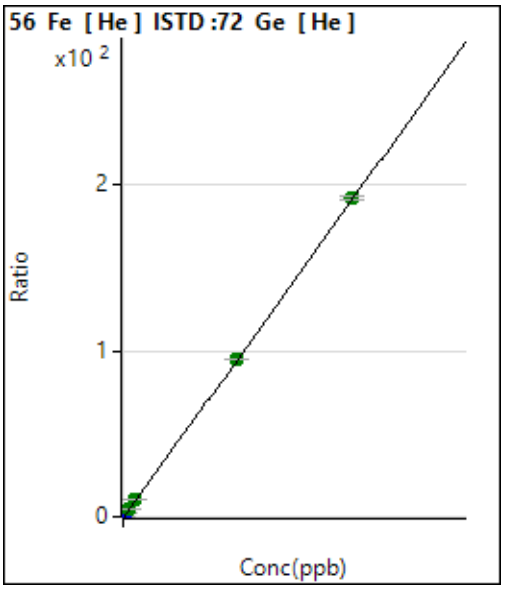
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	743.37	0.0032	P	8.2	
2	☐	2.000	2.002	4244.09	0.0181	P	5.4	0.1
3	☐	5.000	5.009	9370.02	0.0406	P	4.6	0.2
4	☐	10.000	10.250	18335.88	0.0797	P	1.9	2.5
5	☐	100.000	98.734	171900.80	0.7395	P	1.2	-1.3
6	☐	200.000	200.620	335840.83	1.4994	P	0.9	0.3

y = 0.0075 * x + 0.0032
R = 1.0000
DL = 0.1054 ppb
BEC = 0.4309 ppb

Weight: <None>
Min Conc: <None>

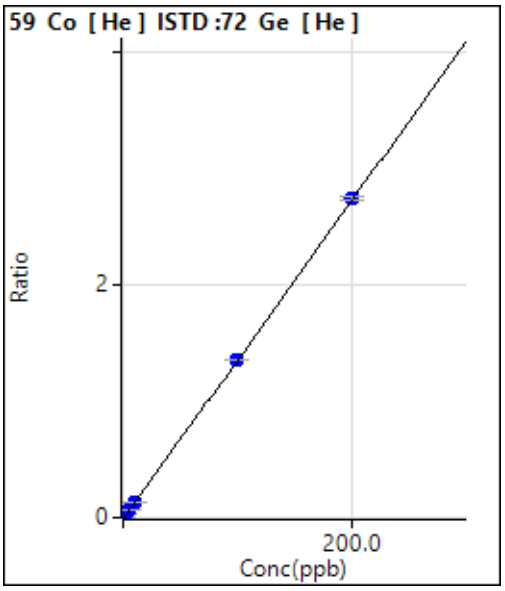


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11254.84	0.0487	P	2.0	
2	☐	200.000	187.171	431217.97	1.8428	P	0.2	-6.4
3	☐	500.000	527.924	1179686.21	5.1091	A	1.9	5.6
4	☐	1000.000	1066.084	2363448.25	10.2676	A	0.9	6.6
5	☐	10000.00	9886.022	22038852.1	94.8111	A	0.7	-1.1
6	☐	20000.00	20053.11	43066967.6	192.267	A	0.6	0.3

y = 0.0096 * x + 0.0487
R = 1.0000
DL = 0.3049 ppb
BEC = 5.076 ppb

Weight: <None>
Min Conc: <None>

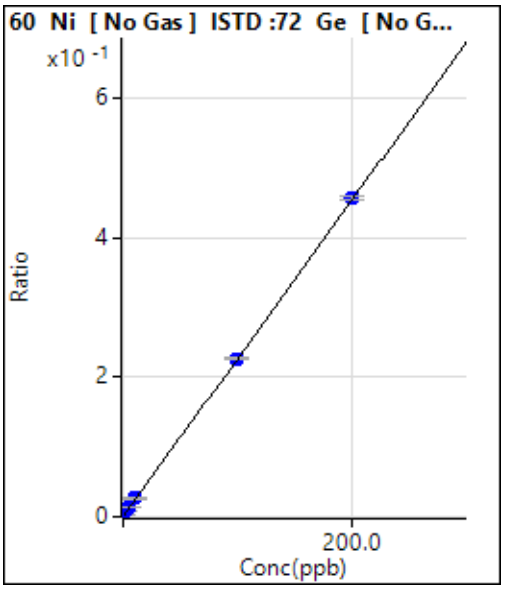
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0002	P	12.3	
2	☐	2.000	1.955	6301.57	0.0269	P	8.0	-2.3
3	☐	5.000	5.025	15916.24	0.0689	P	3.6	0.5
4	☐	10.000	10.106	31860.97	0.1384	P	0.6	1.1
5	☐	100.000	98.906	314461.34	1.3528	P	0.6	-1.1
6	☐	200.000	200.541	614347.45	2.7427	P	1.0	0.3

y = 0.0137 * x + 2.0172E-004
R = 1.0000
DL = 0.005435 ppb
BEC = 0.01475 ppb

Weight: <None>
Min Conc: <None>

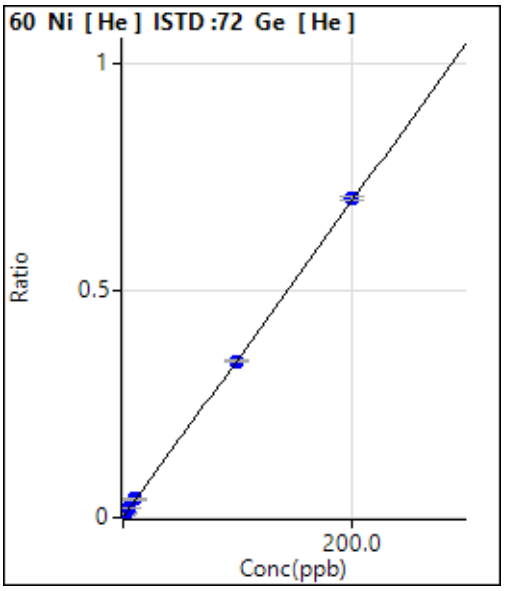


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1800.16	0.0029	P	10.0	
2	☐	2.000	1.932	4527.49	0.0073	P	1.3	-3.4
3	☐	5.000	5.133	9139.90	0.0145	P	5.2	2.7
4	☐	10.000	10.318	16299.99	0.0263	P	1.7	3.2
5	☐	100.000	98.673	140636.63	0.2264	P	1.5	-1.3
6	☐	200.000	200.645	278339.77	0.4575	P	1.0	0.3

y = 0.0023 * x + 0.0029
R = 1.0000
DL = 0.3829 ppb
BEC = 1.272 ppb

Weight: <None>
Min Conc: <None>

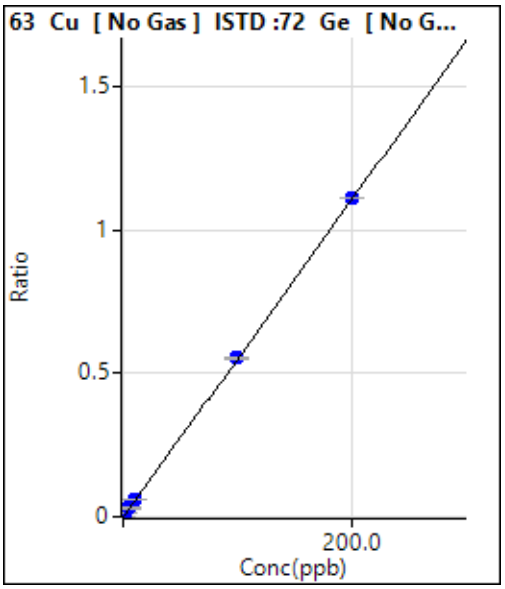
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1000.05	0.0043	P	14.2	
2	☐	2.000	1.743	2430.26	0.0104	P	6.5	-12.8
3	☐	5.000	5.182	5161.08	0.0224	P	4.3	3.6
4	☐	10.000	10.443	9360.07	0.0407	P	3.6	4.4
5	☐	100.000	97.939	80215.41	0.3451	P	1.2	-2.1
6	☐	200.000	201.006	157624.02	0.7037	P	0.8	0.5

y = 0.0035 * x + 0.0043
R = 0.9999
DL = 0.528 ppb
BEC = 1.243 ppb

Weight: <None>
Min Conc: <None>

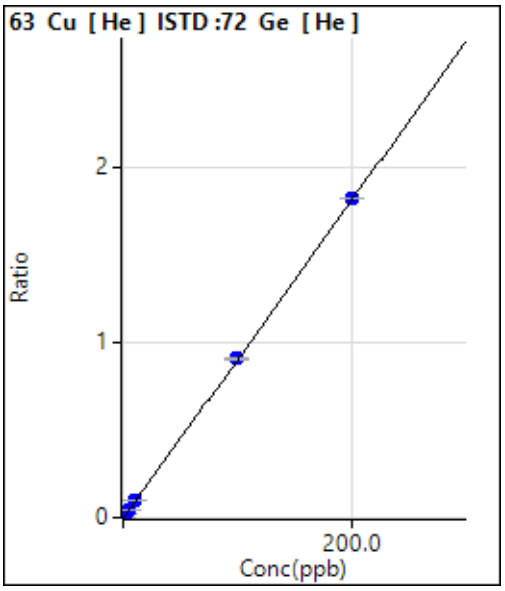


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1960.19	0.0031	P	6.4	
2	☐	2.000	1.940	8656.23	0.0139	P	3.6	-3.0
3	☐	5.000	4.924	19130.37	0.0304	P	2.4	-1.5
4	☐	10.000	10.059	36509.38	0.0588	P	2.2	0.6
5	☐	100.000	99.642	344495.15	0.5547	P	1.4	-0.4
6	☐	200.000	200.179	676039.68	1.1111	P	0.2	0.1

y = 0.0055 * x + 0.0031
R = 1.0000
DL = 0.1086 ppb
BEC = 0.5672 ppb

Weight: <None>
Min Conc: <None>

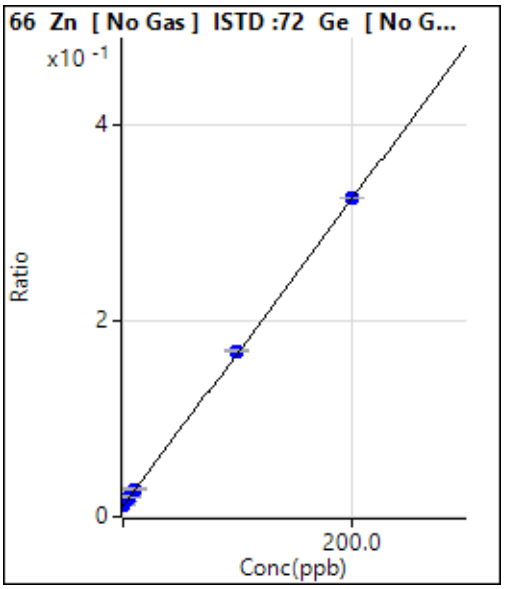
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1096.73	0.0047	P	6.7	
2	☐	2.000	2.034	5444.51	0.0233	P	0.8	1.7
3	☐	5.000	4.877	11351.64	0.0492	P	1.4	-2.5
4	☐	10.000	10.349	22785.99	0.0990	P	3.6	3.5
5	☐	100.000	99.388	211492.70	0.9099	P	1.1	-0.6
6	☐	200.000	200.291	409633.72	1.8288	P	0.3	0.1

y = 0.0091 * x + 0.0047
R = 1.0000
DL = 0.1052 ppb
BEC = 0.5206 ppb

Weight: <None>
Min Conc: <None>

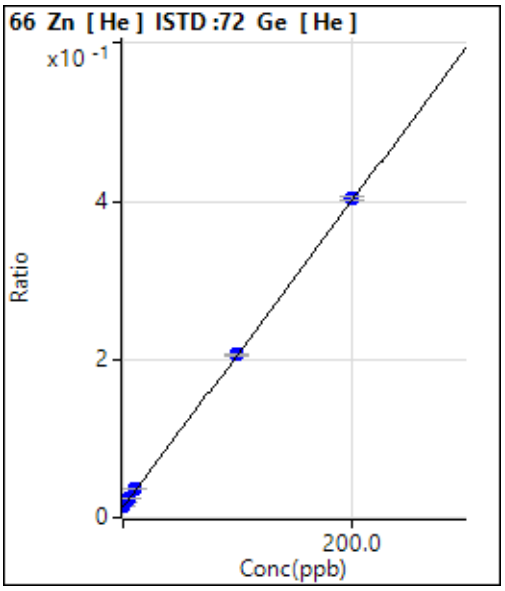


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7832.37	0.0125	P	4.3	
2	☐	2.000	2.048	9823.75	0.0157	P	1.3	2.4
3	☐	5.000	4.943	12762.86	0.0203	P	3.3	-1.1
4	☐	10.000	10.129	17621.68	0.0284	P	1.2	1.3
5	☐	100.000	100.160	105094.61	0.1692	P	1.3	0.2
6	☐	200.000	199.914	197878.80	0.3252	P	0.5	0.0

y = 0.0016 * x + 0.0125
R = 1.0000
DL = 1.035 ppb
BEC = 8.02 ppb

Weight: <None>
Min Conc: <None>

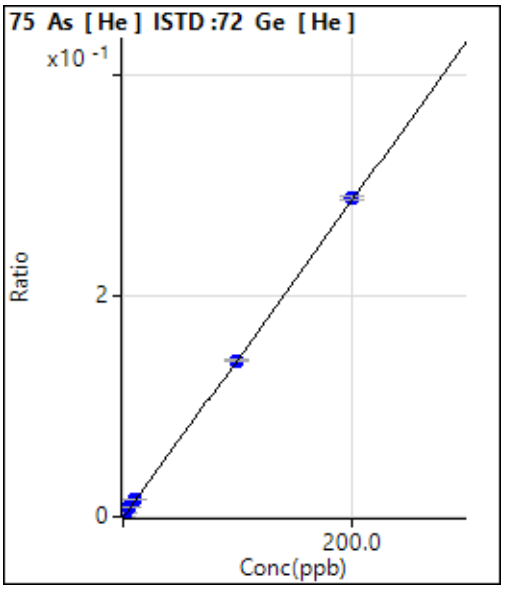
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3460.50	0.0150	P	2.8	
2	☐	2.000	1.955	4387.45	0.0187	P	1.0	-2.3
3	☐	5.000	5.131	5751.32	0.0249	P	1.8	2.6
4	☐	10.000	10.974	8339.39	0.0362	P	3.7	9.7
5	☐	100.000	98.478	47851.21	0.2059	P	0.3	-1.5
6	☐	200.000	200.709	90496.96	0.4040	P	1.0	0.4

y = 0.0019 * x + 0.0150
R = 0.9999
DL = 0.6503 ppb
BEC = 7.718 ppb

Weight: <None>
Min Conc: <None>

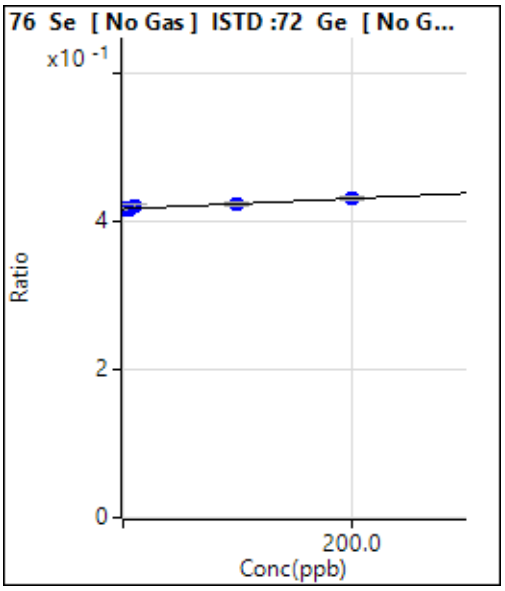


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	105.55	0.0005	P	6.6	
2	☐	2.000	1.989	774.47	0.0033	P	4.1	-0.6
3	☐	5.000	5.286	1855.69	0.0080	P	3.7	5.7
4	☐	10.000	10.584	3598.28	0.0156	P	8.7	5.8
5	☐	100.000	98.178	32839.84	0.1413	P	0.9	-1.8
6	☐	200.000	200.875	64637.19	0.2886	P	0.8	0.4

y = 0.0014 * x + 4.5631E-004
R = 0.9999
DL = 0.06284 ppb
BEC = 0.3181 ppb

Weight: <None>
Min Conc: <None>

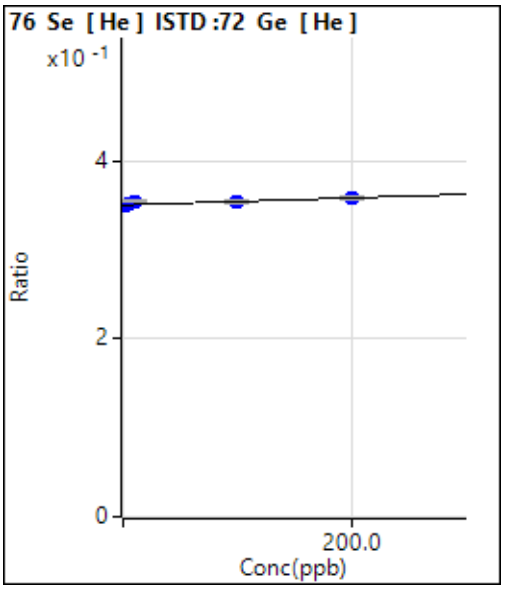
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	260254.42	0.4168	P	0.3	
2	☐	2.000	32.290	261420.21	0.4191	P	0.5	1514.5
3	☐	5.000	-0.865	262328.59	0.4167	P	0.7	-117.3
4	☐	10.000	64.862	261590.93	0.4214	P	1.0	548.6
5	☐	100.000	88.377	262772.22	0.4231	P	0.8	-11.6
6	☐	200.000	202.912	262354.74	0.4312	P	0.6	1.5

y = 7.1002E-005 * x + 0.4168
R = 0.9498
DL = 60.96 ppb
BEC = 5870 ppb

Weight: <None>
Min Conc: <None>

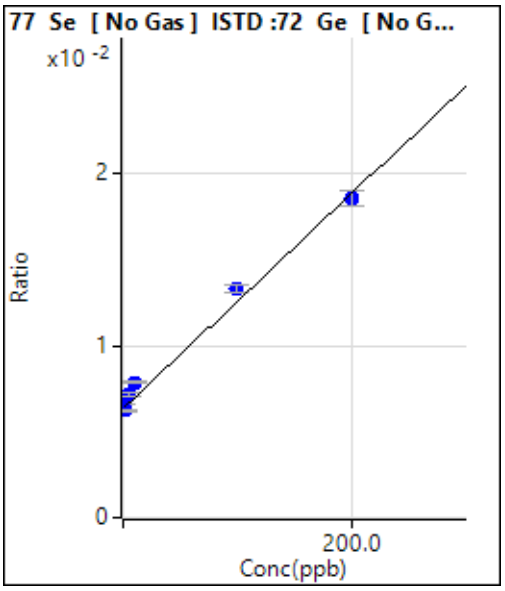


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81143.00	0.3508	P	1.2	
2	☐	2.000	7.729	82159.28	0.3511	P	0.6	286.5
3	☐	5.000	47.422	81441.78	0.3527	P	1.0	848.4
4	☐	10.000	109.981	81773.79	0.3552	P	1.0	999.8
5	☐	100.000	96.171	82444.45	0.3547	P	1.5	-3.8
6	☐	200.000	195.798	80355.32	0.3587	P	1.0	-2.1

y = 4.0599E-005 * x + 0.3508
R = 0.8627
DL = 321.1 ppb
BEC = 8640 ppb

Weight: <None>
Min Conc: <None>

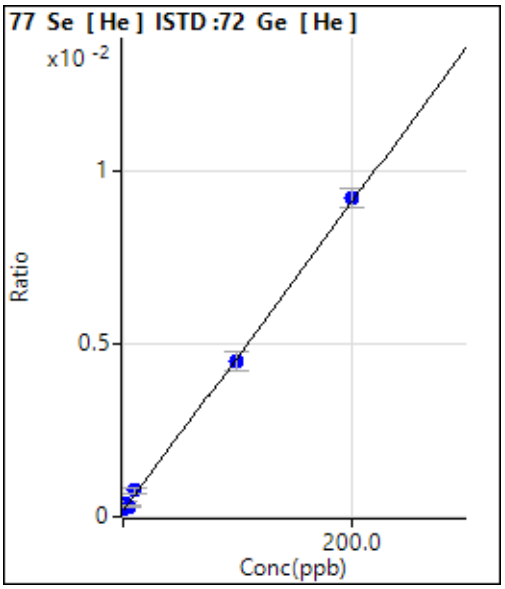
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4027.35	0.0064	P	6.3	
2	☐	2.000	-3.487	3887.30	0.0062	P	2.9	-274.4
3	☐	5.000	11.514	4510.86	0.0072	P	4.5	130.3
4	☐	10.000	22.797	4887.63	0.0079	P	1.8	128.0
5	☐	100.000	110.165	8279.31	0.0133	P	3.9	10.2
6	☐	200.000	194.170	11304.95	0.0186	P	4.5	-2.9

y = 6.2482E-005 * x + 0.0064
R = 0.9954
DL = 19.49 ppb
BEC = 103.2 ppb

Weight: <None>
Min Conc: <None>

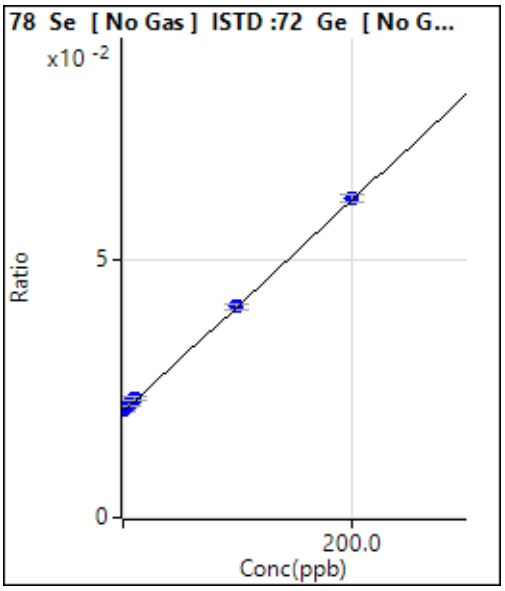


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	50.00	0.0002	P	52.9	
2	☐	2.000	3.469	86.67	0.0004	P	24.5	73.4
3	☐	5.000	1.962	70.00	0.0003	P	29.2	-60.8
4	☐	10.000	12.063	173.33	0.0008	P	17.8	20.6
5	☐	100.000	96.327	1046.73	0.0045	P	12.8	-3.7
6	☐	200.000	201.795	2060.19	0.0092	P	6.5	0.9

y = 4.4517E-005 * x + 2.1616E-004
R = 0.9995
DL = 7.707 ppb
BEC = 4.856 ppb

Weight: <None>
Min Conc: <None>

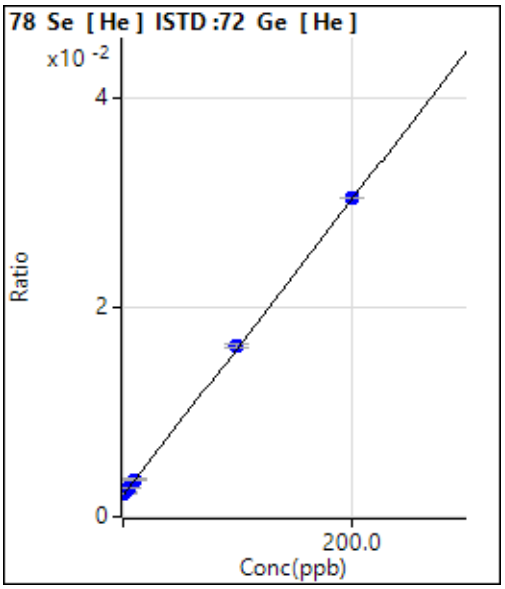
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12993.12	0.0208	P	2.3	
2	☐	2.000	2.351	13280.02	0.0213	P	0.8	17.5
3	☐	5.000	5.971	13864.03	0.0220	P	5.3	19.4
4	☐	10.000	11.046	14317.81	0.0231	P	4.1	10.5
5	☐	100.000	98.372	25430.92	0.0409	P	2.7	-1.6
6	☐	200.000	200.734	37659.56	0.0619	P	1.9	0.4

y = 2.0469E-004 * x + 0.0208
R = 0.9999
DL = 7.015 ppb
BEC = 101.7 ppb

Weight: <None>
Min Conc: <None>

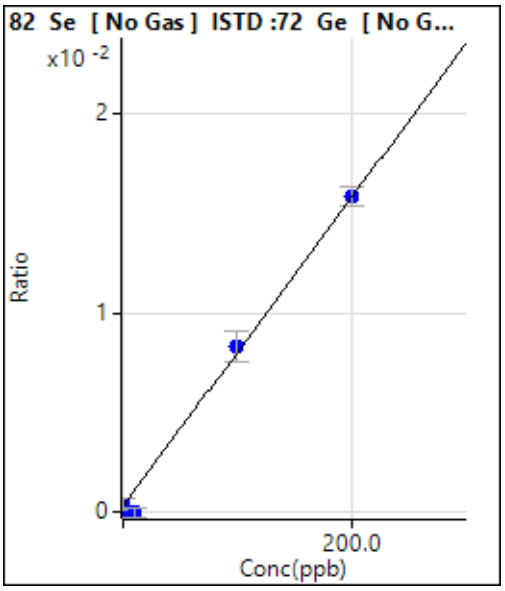


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	506.68	0.0022	P	3.8	
2	☐	2.000	0.879	541.35	0.0023	P	9.3	-56.1
3	☐	5.000	4.243	644.02	0.0028	P	2.0	-15.1
4	☐	10.000	9.316	806.69	0.0035	P	4.1	-6.8
5	☐	100.000	99.723	3779.87	0.0163	P	2.6	-0.3
6	☐	200.000	200.203	6818.41	0.0304	P	0.4	0.1

y = 1.4111E-004 * x + 0.0022
R = 1.0000
DL = 1.765 ppb
BEC = 15.52 ppb

Weight: <None>
Min Conc: <None>

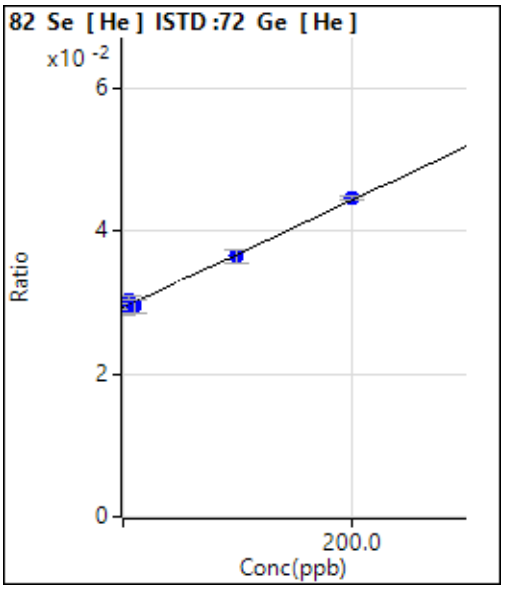
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	219.34	0.0003	P	167.2	
2	☐	2.000	-8.662	-201.52	-0.0003	P	-38.4	-533.1
3	☐	5.000	-7.637	-158.16	-0.0002	P	-259.	-252.7
4	☐	10.000	-5.216	-35.17	-0.0001	P	-882.	-152.2
5	☐	100.000	102.614	5174.99	0.0083	P	18.5	2.6
6	☐	200.000	199.876	9666.88	0.0159	P	6.1	-0.1

y = 7.7738E-005 * x + 3.4975E-004
R = 0.9975
DL = 22.57 ppb
BEC = 4.499 ppb

Weight: <None>
Min Conc: <None>

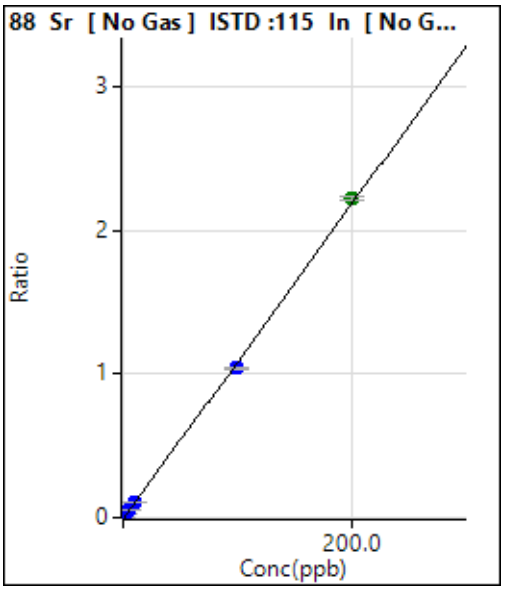


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6791.83	0.0294	P	8.4	
2	☐	2.000	0.218	6875.20	0.0294	P	2.7	-89.1
3	☐	5.000	14.723	7035.29	0.0305	P	3.7	194.5
4	☐	10.000	1.271	6781.84	0.0295	P	6.0	-87.3
5	☐	100.000	94.070	8466.17	0.0364	P	4.7	-5.9
6	☐	200.000	203.176	9990.53	0.0446	P	1.2	1.6

y = 7.5012E-005 * x + 0.0294
R = 0.9968
DL = 98.34 ppb
BEC = 391.4 ppb

Weight: <None>
Min Conc: <None>

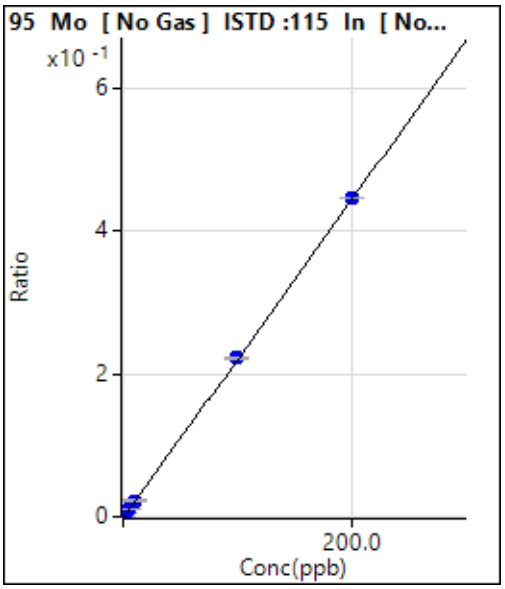
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	476.68	0.0006	P	13.6	
2	☐	2.000	1.880	16330.19	0.0213	P	2.4	-6.0
3	☐	5.000	4.737	40672.18	0.0527	P	1.3	-5.3
4	☐	10.000	9.578	81336.27	0.1058	P	1.8	-4.2
5	☐	100.000	94.674	794344.76	1.0406	P	1.0	-5.3
6	☐	200.000	202.692	1683241.59	2.2272	A	0.7	1.3

y = 0.0110 * x + 6.2819E-004
R = 0.9995
DL = 0.02328 ppb
BEC = 0.05719 ppb

Weight: <None>
Min Conc: <None>

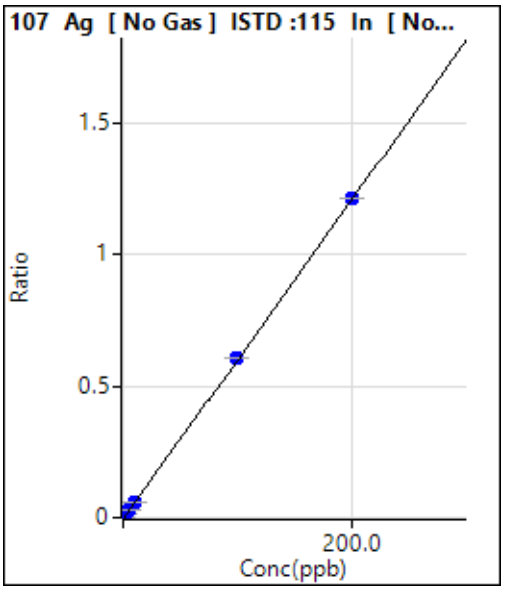


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	173.2	
2	☐	2.000	1.982	3400.51	0.0044	P	6.9	-0.9
3	☐	5.000	4.917	8482.86	0.0110	P	1.6	-1.7
4	☐	10.000	10.136	17391.63	0.0226	P	4.2	1.4
5	☐	100.000	99.606	169679.35	0.2223	P	0.9	-0.4
6	☐	200.000	200.192	337645.93	0.4468	P	0.1	0.1

y = 0.0022 * x + 8.7060E-006
R = 1.0000
DL = 0.02027 ppb
BEC = 0.003901 ppb

Weight: <None>
Min Conc: <None>

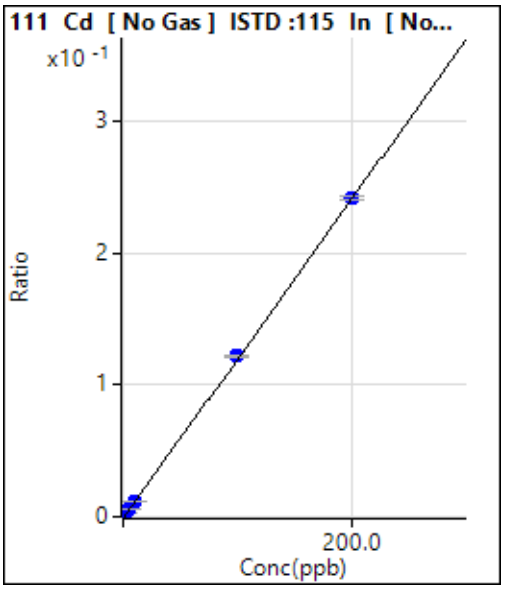
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	380.01	0.0005	P	25.6	
2	☐	2.000	2.002	9713.73	0.0127	P	4.0	0.1
3	☐	5.000	4.919	23457.76	0.0304	P	1.1	-1.6
4	☐	10.000	10.087	47458.73	0.0618	P	1.2	0.9
5	☐	100.000	99.847	463213.73	0.6068	P	0.1	-0.2
6	☐	200.000	200.074	918590.32	1.2154	P	0.3	0.0

y = 0.0061 * x + 4.9977E-004
R = 1.0000
DL = 0.06309 ppb
BEC = 0.0823 ppb

Weight: <None>
Min Conc: <None>

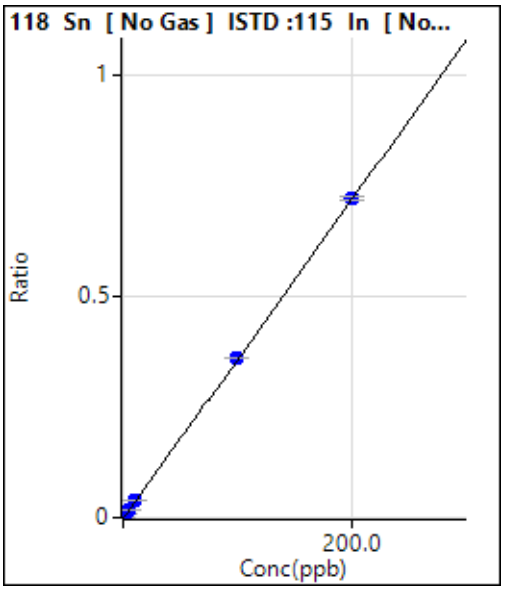


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	1.939	1803.49	0.0024	P	1.7	-3.1
3	☐	5.000	4.840	4530.87	0.0059	P	4.0	-3.2
4	☐	10.000	9.665	9003.20	0.0117	P	3.5	-3.4
5	☐	100.000	100.545	93043.20	0.1219	P	1.4	0.5
6	☐	200.000	199.749	183026.01	0.2422	P	0.6	-0.1

y = 0.0012 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

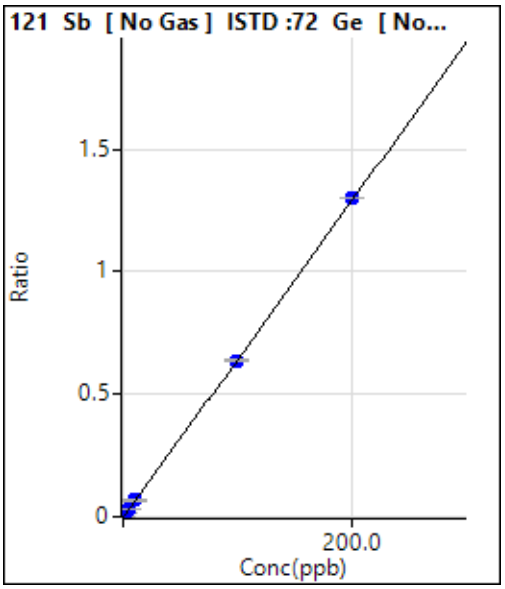
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	626.70	0.0008	P	16.3	
2	☐	2.000	1.920	5941.44	0.0077	P	5.0	-4.0
3	☐	5.000	4.880	14214.55	0.0184	P	1.0	-2.4
4	☐	10.000	10.110	28624.86	0.0372	P	1.3	1.1
5	☐	100.000	100.001	275658.65	0.3611	P	0.7	0.0
6	☐	200.000	199.998	545190.31	0.7214	P	1.1	0.0

y = 0.0036 * x + 8.2520E-004
R = 1.0000
DL = 0.112 ppb
BEC = 0.229 ppb

Weight: <None>
Min Conc: <None>

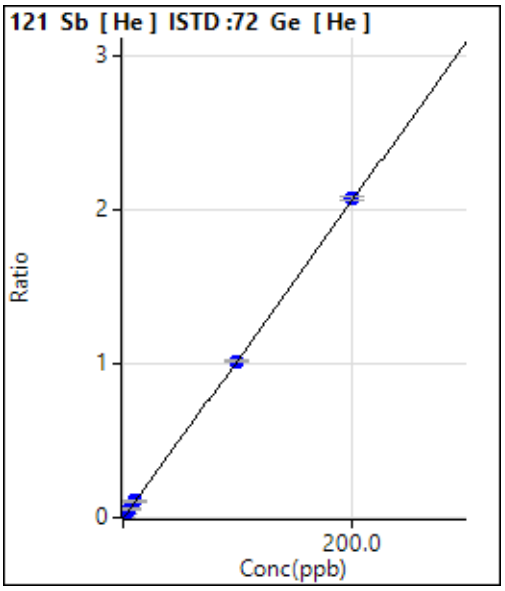


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1506.78	0.0024	P	9.7	
2	☐	2.000	1.998	9560.28	0.0153	P	2.6	-0.1
3	☐	5.000	4.852	21267.45	0.0338	P	0.8	-3.0
4	☐	10.000	9.998	41622.95	0.0671	P	2.0	0.0
5	☐	100.000	98.172	395697.87	0.6371	P	1.6	-1.8
6	☐	200.000	200.918	791790.19	1.3014	P	0.3	0.5

y = 0.0065 * x + 0.0024
R = 0.9999
DL = 0.1085 ppb
BEC = 0.3733 ppb

Weight: <None>
Min Conc: <None>

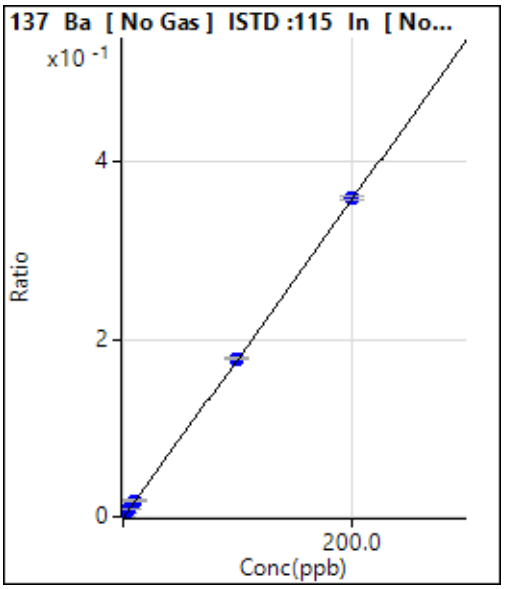
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	780.04	0.0034	P	16.8	
2	☐	2.000	2.015	5661.33	0.0242	P	3.2	0.8
3	☐	5.000	5.090	12923.28	0.0560	P	1.7	1.8
4	☐	10.000	10.050	24680.17	0.1072	P	2.5	0.5
5	☐	100.000	98.292	236872.85	1.0190	P	0.3	-1.7
6	☐	200.000	200.849	465603.04	2.0787	P	1.0	0.4

y = 0.0103 * x + 0.0034
R = 0.9999
DL = 0.1642 ppb
BEC = 0.3264 ppb

Weight: <None>
Min Conc: <None>

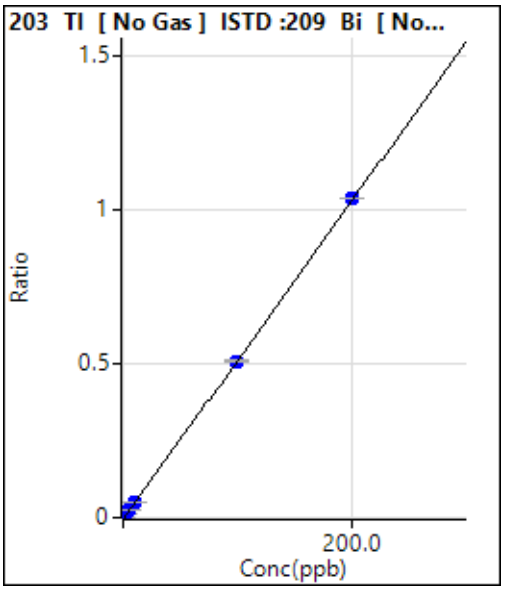


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	133.33	0.0002	P	16.2	
2	☐	2.000	1.790	2596.98	0.0034	P	7.4	-10.5
3	☐	5.000	5.126	7232.14	0.0094	P	1.6	2.5
4	☐	10.000	10.110	14061.21	0.0183	P	3.5	1.1
5	☐	100.000	99.410	136148.55	0.1784	P	1.6	-0.6
6	☐	200.000	200.289	271455.55	0.3592	P	0.8	0.1

y = 0.0018 * x + 1.7571E-004
R = 1.0000
DL = 0.04755 ppb
BEC = 0.09803 ppb

Weight: <None>
Min Conc: <None>

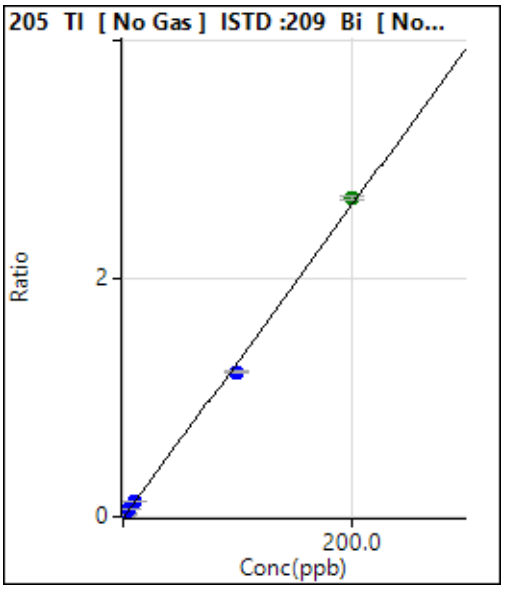
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30.00	0.0000	P	32.8	
2	☐	2.000	2.048	8149.51	0.0106	P	3.8	2.4
3	☐	5.000	4.931	19762.58	0.0255	P	1.7	-1.4
4	☐	10.000	9.998	40191.70	0.0517	P	2.0	0.0
5	☐	100.000	98.464	396536.04	0.5092	P	0.3	-1.5
6	☐	200.000	200.769	792887.98	1.0382	P	0.3	0.4

y = 0.0052 * x + 3.9088E-005
R = 1.0000
DL = 0.007446 ppb
BEC = 0.007559 ppb

Weight: <None>
Min Conc: <None>

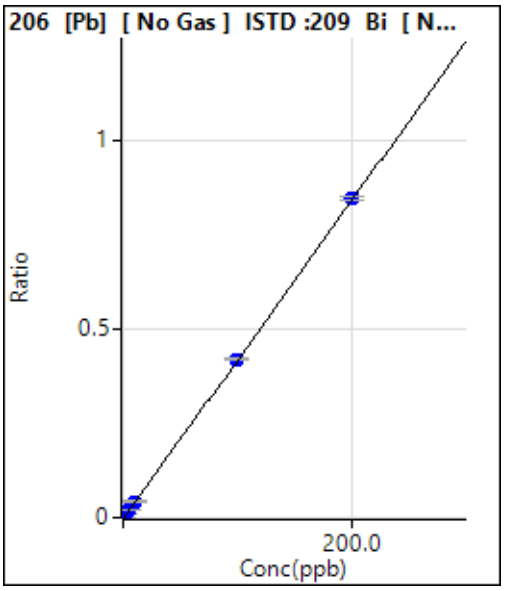


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0000	P	41.4	
2	☐	2.000	1.829	18430.53	0.0240	P	3.2	-8.5
3	☐	5.000	4.721	47945.73	0.0620	P	2.9	-5.6
4	☐	10.000	9.355	95352.44	0.1227	P	0.8	-6.4
5	☐	100.000	92.632	946196.81	1.2150	P	0.8	-7.4
6	☐	200.000	203.725	2040627.68	2.6721	A	1.2	1.9

y = 0.0131 * x + 4.7795E-005
R = 0.9991
DL = 0.004523 ppb
BEC = 0.003644 ppb

Weight: <None>
Min Conc: <None>

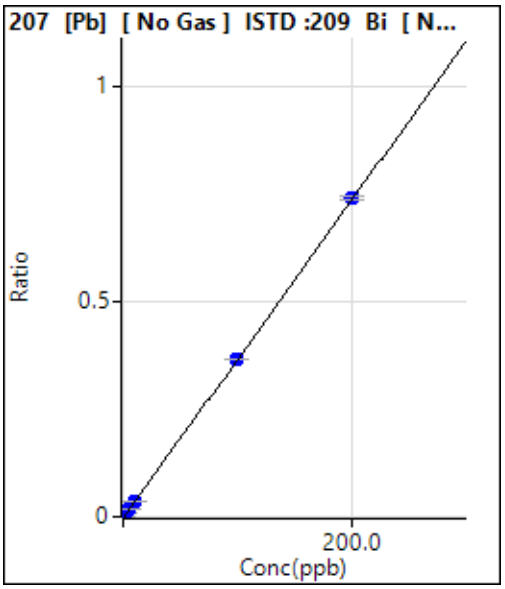
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	213.34	0.0003	P	16.7	
2	☐	2.000	1.935	6481.80	0.0085	P	7.1	-3.3
3	☐	5.000	5.110	16931.74	0.0219	P	1.0	2.2
4	☐	10.000	10.149	33545.43	0.0432	P	1.6	1.5
5	☐	100.000	99.095	326454.91	0.4192	P	1.1	-0.9
6	☐	200.000	200.443	647333.49	0.8477	P	0.9	0.2

y = 0.0042 * x + 2.7838E-004
R = 1.0000
DL = 0.03306 ppb
BEC = 0.06585 ppb

Weight: <None>
Min Conc: <None>

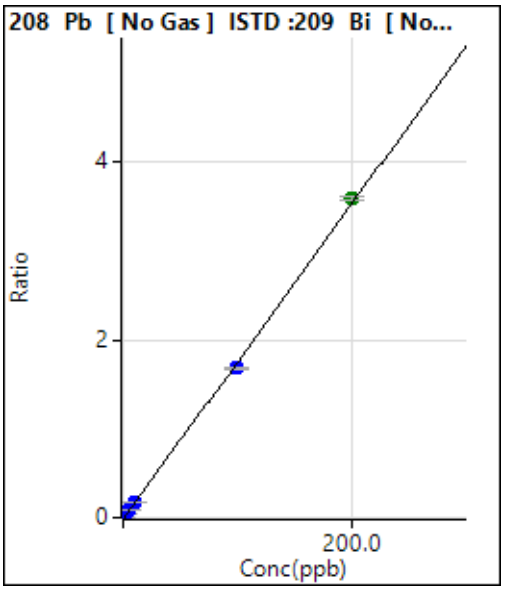


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0004	P	20.9	
2	☐	2.000	1.996	5911.51	0.0077	P	4.8	-0.2
3	☐	5.000	5.088	14788.93	0.0191	P	1.6	1.8
4	☐	10.000	10.001	28920.52	0.0372	P	0.8	0.0
5	☐	100.000	99.104	284843.64	0.3658	P	0.9	-0.9
6	☐	200.000	200.446	564684.30	0.7394	P	1.2	0.2

y = 0.0037 * x + 3.5235E-004
R = 1.0000
DL = 0.05979 ppb
BEC = 0.09556 ppb

Weight: <None>
Min Conc: <None>

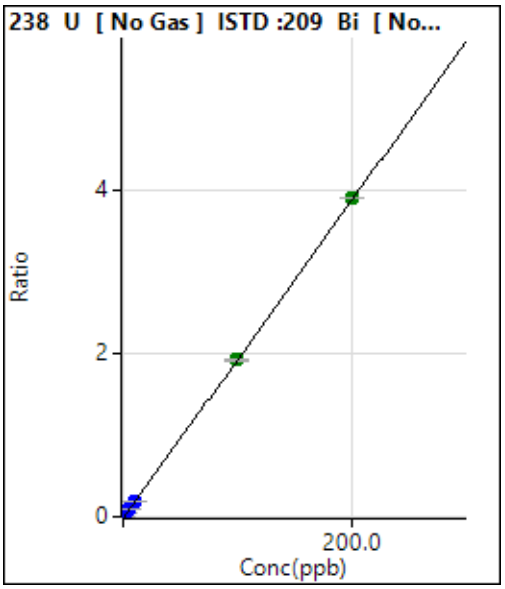
Calibration for 108_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1103.38	0.0014	P	4.7	
2	☐	2.000	1.903	26938.72	0.0351	P	3.0	-4.9
3	☐	5.000	4.783	66680.00	0.0862	P	0.5	-4.3
4	☐	10.000	9.589	133055.45	0.1713	P	0.7	-4.1
5	☐	100.000	94.815	1308953.59	1.6808	P	0.9	-5.2
6	☐	200.000	202.619	2741798.40	3.5903	A	1.1	1.3

y = 0.0177 * x + 0.0014
R = 0.9995
DL = 0.01152 ppb
BEC = 0.08127 ppb

Weight: <None>
Min Conc: <None>

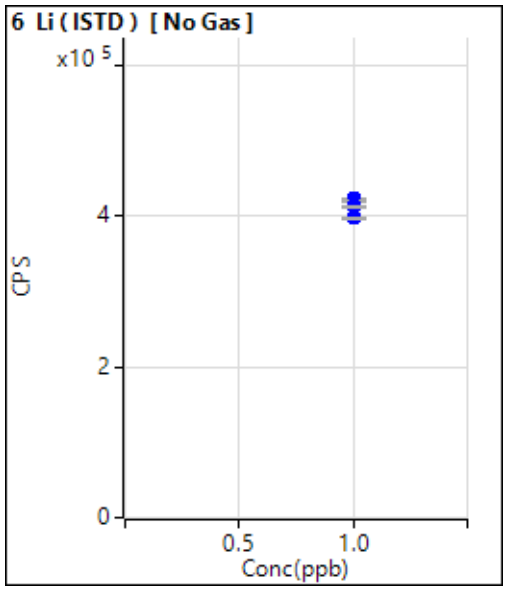


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.826	27277.42	0.0356	P	0.8	-8.7
3	☐	5.000	4.550	68625.32	0.0887	P	0.2	-9.0
4	☐	10.000	9.221	139609.18	0.1797	P	0.7	-7.8
5	☐	100.000	98.898	1500993.36	1.9275	A	1.5	-1.1
6	☐	200.000	200.603	2985751.52	3.9097	A	0.5	0.3

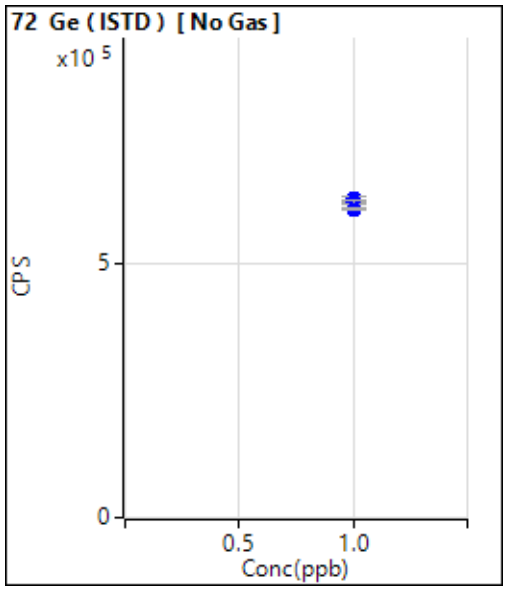
y = 0.0195 * x + 4.3529E-006
R = 1.0000
DL = 0.001161 ppb
BEC = 0.0002233 ppb

Weight: <None>
Min Conc: <None>

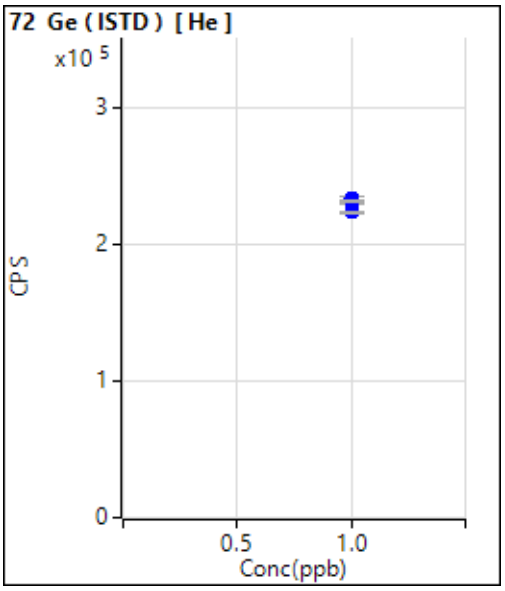
Calibration for 108_ICV.d



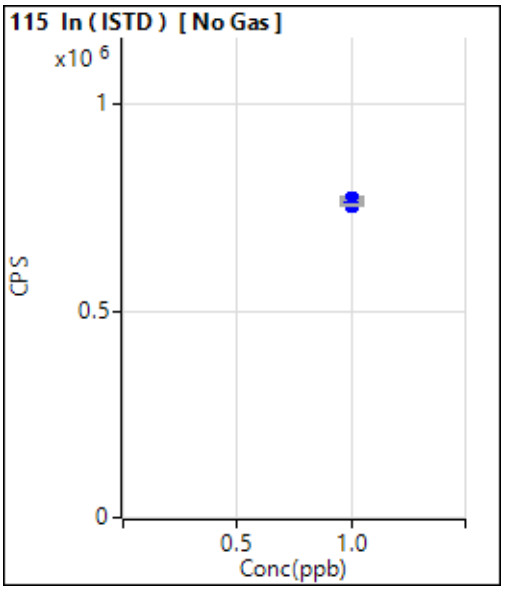
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		423363.45		P	0.5	
2	☐	1.000		420740.73		P	0.5	
3	☐	1.000		421805.10		P	0.9	
4	☐	1.000		418943.85		P	0.8	
5	☐	1.000		412209.17		P	0.8	
6	☐	1.000		397100.73		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		624423.14		P	0.4	
2	☐	1.000		623798.45		P	0.7	
3	☐	1.000		629530.37		P	1.7	
4	☐	1.000		620795.93		P	0.7	
5	☐	1.000		621142.98		P	1.1	
6	☐	1.000		608430.76		P	0.1	

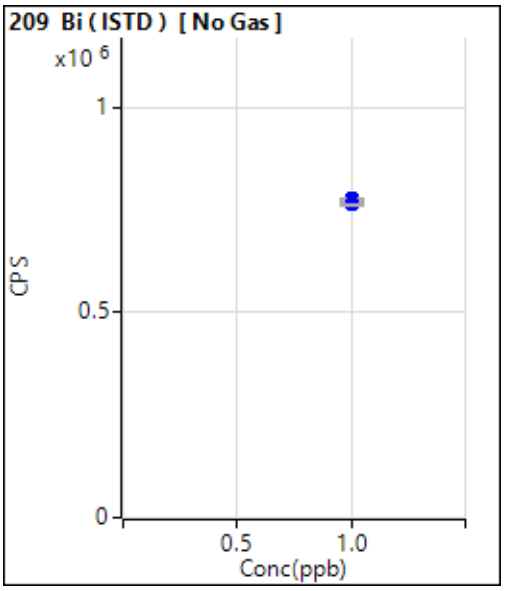


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		231320.98		P	0.1	
2	☐	1.000		234005.45		P	0.8	
3	☐	1.000		230912.46		P	0.6	
4	☐	1.000		230193.64		P	0.6	
5	☐	1.000		232455.91		P	0.6	
6	☐	1.000		223996.95		P	0.6	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		759360.15		P	0.8	
2	☐	1.000		767381.81		P	0.1	
3	☐	1.000		772311.56		P	1.4	
4	☐	1.000		768491.11		P	0.8	
5	☐	1.000		763352.91		P	0.9	
6	☐	1.000		755780.47		P	0.3	

Calibration for 108_ICV.d



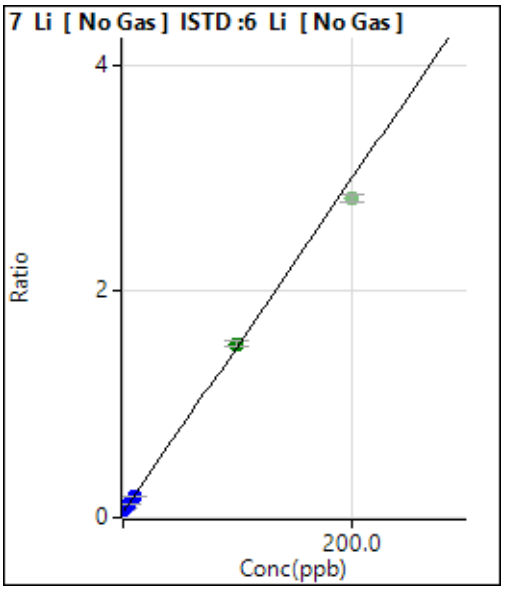
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		766621.47		P	0.5	
2	☐	1.000		766547.75		P	0.5	
3	☐	1.000		773893.45		P	1.2	
4	☐	1.000		776803.14		P	0.2	
5	☐	1.000		778743.38		P	0.3	
6	☐	1.000		763684.41		P	0.4	

Calibration for 018_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072122A.b\
Analysis File: 072122A.batch.bin
DA Date-Time: 07/21/2022 20:31:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	011CALB.d	CAL BLK	07/21/2022 13:52:51
2	012CALS.d	2/10/200	07/21/2022 13:55:14
3	013CALS.d	5/25/500	07/21/2022 13:57:35
4	014CALS.d	10/50/100	07/21/2022 13:59:57
5	015CALS.d	100/500/10K	07/21/2022 14:02:18
6	016CALS.d	200/1000/20K	07/21/2022 14:04:34

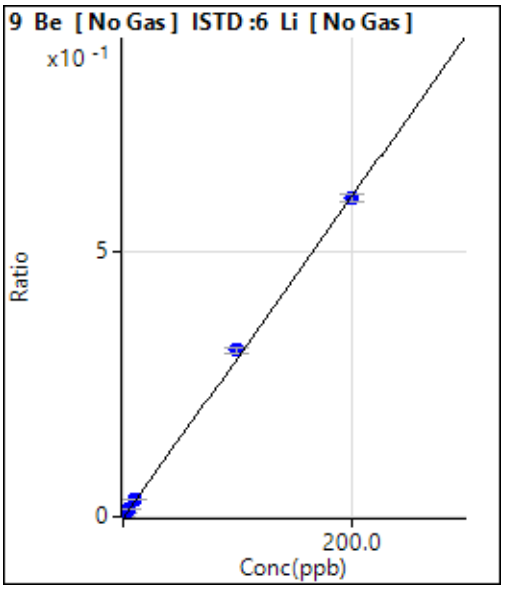
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36769.57	0.0603	P	0.8	
2	☐	2.000	1.700	52055.70	0.0854	P	0.4	-15.0
3	☐	5.000	4.390	78088.23	0.1250	P	0.4	-12.2
4	☐	10.000	9.126	117975.86	0.1948	P	0.6	-8.7
5	☐	100.000	100.124	912530.51	1.5359	A	3.9	0.1
6	☑	200.000		1700771.69	2.8207	A	2.5	

y = 0.0147 * x + 0.0603
R = 1.0000
DL = 0.09995 ppb
BEC = 4.094 ppb

Weight: <None>
Min Conc: <None>

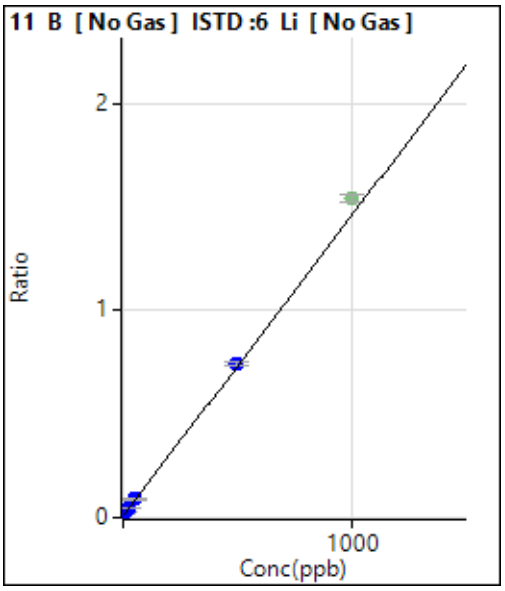


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0001	P	1.3	
2	☐	2.000	1.982	3737.19	0.0061	P	1.3	-0.9
3	☐	5.000	4.792	9154.70	0.0147	P	0.9	-4.2
4	☐	10.000	10.256	18917.77	0.0312	P	1.2	2.6
5	☐	100.000	103.555	186792.51	0.3144	P	3.9	3.6
6	☐	200.000	198.215	362805.89	0.6017	P	2.3	-0.9

y = 0.0030 * x + 1.1487E-004
R = 0.9998
DL = 0.001424 ppb
BEC = 0.03785 ppb

Weight: <None>
Min Conc: <None>

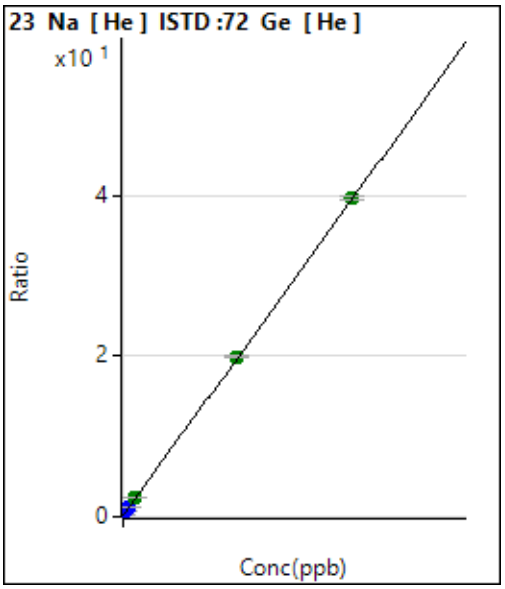
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9566.64	0.0157	P	1.0	
2	☐	10.000	8.908	17449.23	0.0286	P	2.2	-10.9
3	☐	25.000	22.710	30382.90	0.0486	P	3.6	-9.2
4	☐	50.000	50.212	53621.82	0.0886	P	1.0	0.4
5	☐	500.000	500.115	440710.36	0.7413	P	2.5	0.0
6	☑	1000.000		930119.21	1.5422	A	1.9	

y = 0.0015 * x + 0.0157
R = 1.0000
DL = 0.3348 ppb
BEC = 10.82 ppb

Weight: <None>
Min Conc: <None>

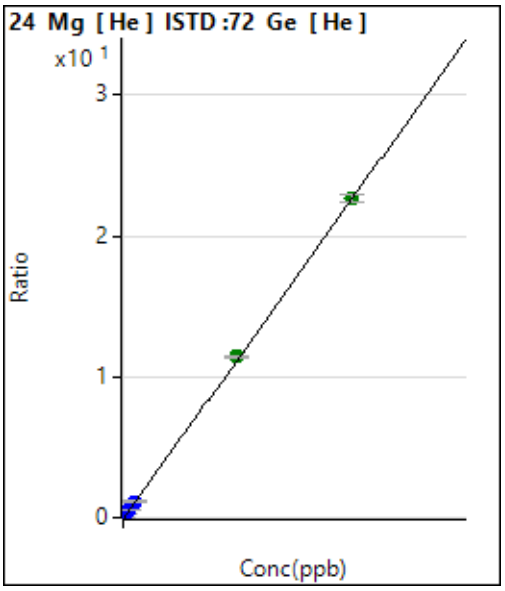


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120294.93	0.3520	P	1.8	
2	☐	200.000	198.600	247349.63	0.7430	P	1.5	-0.7
3	☐	500.000	478.331	444358.27	1.2936	P	0.5	-4.3
4	☐	1000.000	1057.324	826630.25	2.4333	A	1.1	5.7
5	☐	10000.00	9973.583	6930206.35	19.9839	A	1.0	-0.3
6	☐	20000.00	20010.89	13485545.2	39.7412	A	0.9	0.1

y = 0.0020 * x + 0.3520
R = 1.0000
DL = 9.729 ppb
BEC = 178.8 ppb

Weight: <None>
Min Conc: <None>

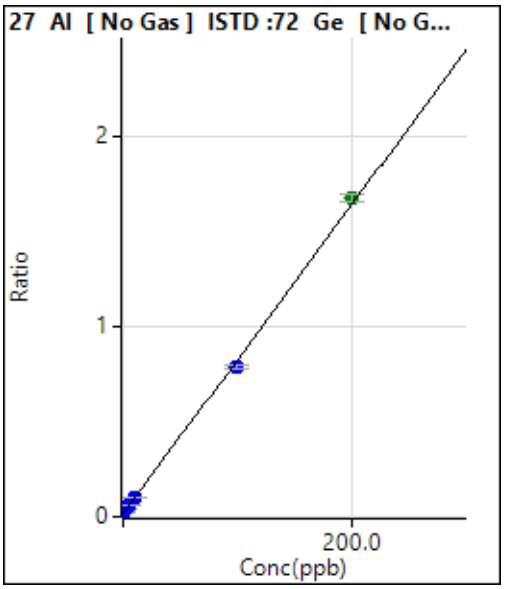
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	240.01	0.0007	P	19.9	
2	☐	200.000	202.362	76703.76	0.2304	P	1.9	1.2
3	☐	500.000	493.407	192616.64	0.5607	P	1.0	-1.3
4	☐	1000.000	1018.652	392987.17	1.1569	P	1.5	1.9
5	☐	10000.00	10060.69	3960552.54	11.4201	A	0.8	0.6
6	☐	20000.00	19968.86	7691138.43	22.6664	A	1.8	-0.2

y = 0.0011 * x + 7.0311E-004
R = 1.0000
DL = 0.3689 ppb
BEC = 0.6195 ppb

Weight: <None>
Min Conc: <None>

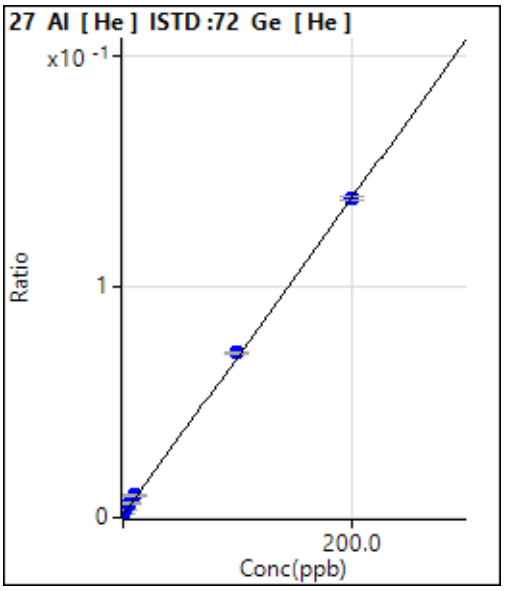


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21791.89	0.0239	P	23.9	
2	☐	2.000	1.610	33554.09	0.0370	P	1.2	-19.5
3	☐	5.000	4.467	56374.27	0.0603	P	1.1	-10.7
4	☐	10.000	9.934	94979.12	0.1048	P	0.3	-0.7
5	☐	100.000	93.383	711105.04	0.7839	P	2.6	-6.6
6	☐	200.000	203.329	1473106.91	1.6787	A	2.1	1.7

y = 0.0081 * x + 0.0239
R = 0.9993
DL = 2.108 ppb
BEC = 2.942 ppb

Weight: <None>
Min Conc: <None>

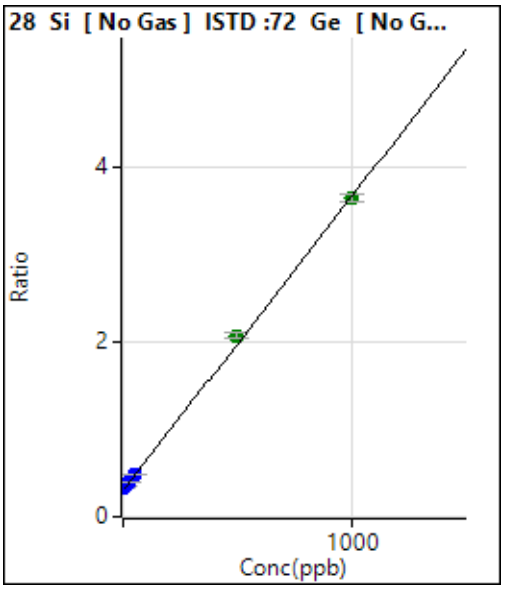
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610.03	0.0018	P	7.4	
2	☐	2.000	2.574	1183.40	0.0036	P	8.1	28.7
3	☐	5.000	6.285	2096.87	0.0061	P	7.6	25.7
4	☐	10.000	11.684	3333.80	0.0098	P	4.9	16.8
5	☐	100.000	101.713	24862.49	0.0717	P	1.4	1.7
6	☐	200.000	199.021	47019.69	0.1386	P	1.0	-0.5

y = 6.8726E-004 * x + 0.0018
R = 0.9999
DL = 0.5794 ppb
BEC = 2.597 ppb

Weight: <None>
Min Conc: <None>

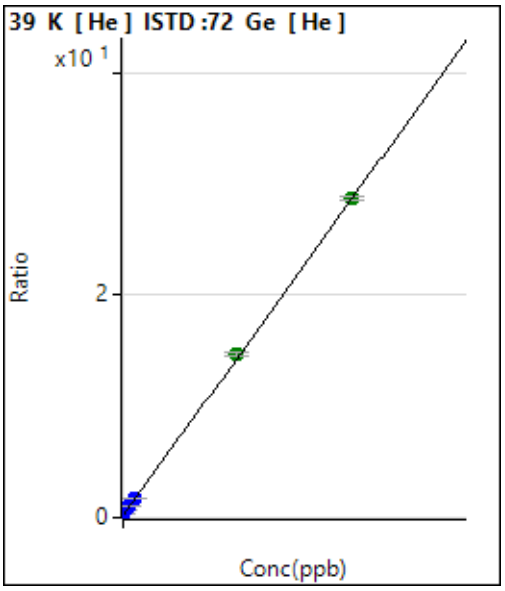


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	291952.32	0.3212	P	0.5	
2	☐	10.000	11.120	324857.87	0.3587	P	1.6	11.2
3	☐	25.000	20.037	363436.05	0.3887	P	0.2	-19.9
4	☐	50.000	49.712	442979.07	0.4888	P	1.6	-0.6
5	☐	500.000	520.487	1882867.06	2.0757	A	2.8	4.1
6	☐	1000.000	989.884	3210026.31	3.6580	A	2.1	-1.0

y = 0.0034 * x + 0.3212
R = 0.9997
DL = 1.346 ppb
BEC = 95.28 ppb

Weight: <None>
Min Conc: <None>

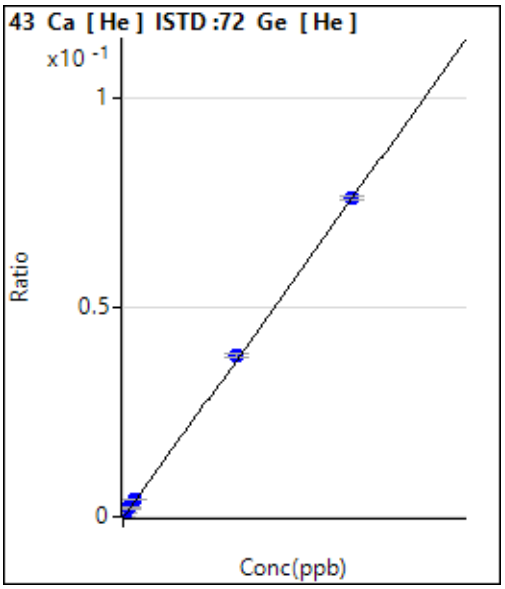
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	112199.76	0.3283	P	0.7	
2	☐	200.000	197.257	202717.44	0.6089	P	0.8	-1.4
3	☐	500.000	464.527	339748.82	0.9890	P	0.6	-7.1
4	☐	1000.000	955.856	573376.54	1.6879	P	0.3	-4.4
5	☐	10000.00	10099.83	5095244.09	14.6935	A	1.9	1.0
6	☐	20000.00	19953.20	9741391.31	28.7081	A	1.2	-0.2

y = 0.0014 * x + 0.3283
R = 1.0000
DL = 4.643 ppb
BEC = 230.8 ppb

Weight: <None>
Min Conc: <None>

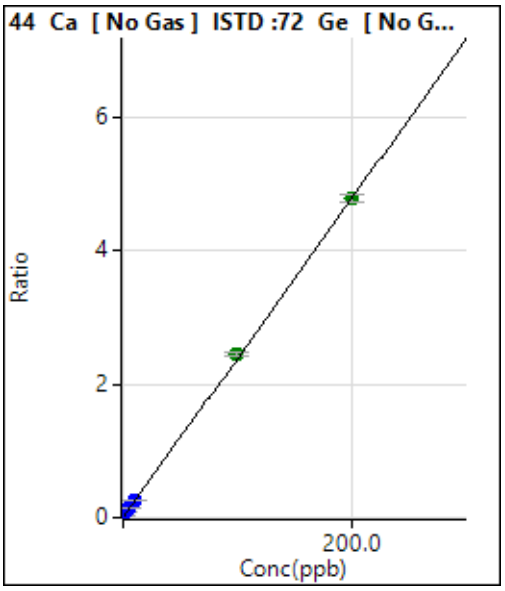


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	88.9	
2	☐	200.000	208.122	286.68	0.0009	P	19.9	4.1
3	☐	500.000	524.615	710.03	0.0021	P	8.9	4.9
4	☐	1000.000	1030.282	1356.75	0.0040	P	3.0	3.0
5	☐	10000.00	10080.91	13346.70	0.0385	P	2.7	0.8
6	☐	20000.00	19957.33	25831.08	0.0761	P	1.3	-0.2

y = 3.8110E-006 * x + 6.8028E-005
R = 1.0000
DL = 47.63 ppb
BEC = 17.85 ppb

Weight: <None>
Min Conc: <None>

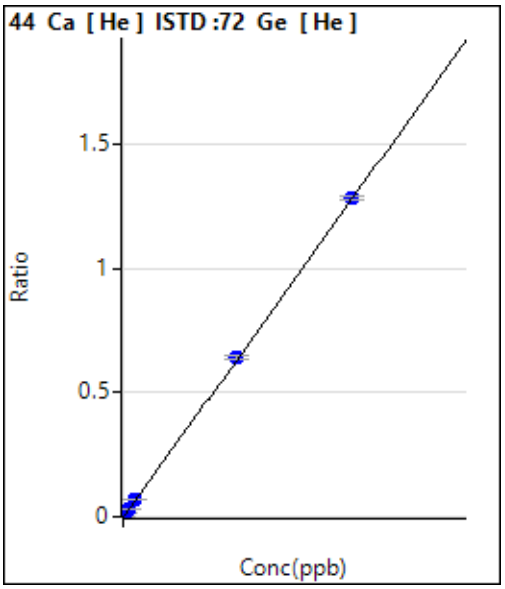
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25964.83	0.0286	P	1.3	
2	☐	2.000	1.887	66728.30	0.0737	P	0.7	-5.7
3	☐	5.000	4.568	128794.71	0.1378	P	0.8	-8.6
4	☐	10.000	9.948	241426.87	0.2664	P	1.2	-0.5
5	☐	100.000	101.665	2230132.10	2.4586	A	3.0	1.7
6	☐	200.000	199.182	4203021.40	4.7896	A	2.1	-0.4

y = 0.0239 * x + 0.0286
R = 0.9999
DL = 0.04666 ppb
BEC = 1.195 ppb

Weight: <None>
Min Conc: <None>

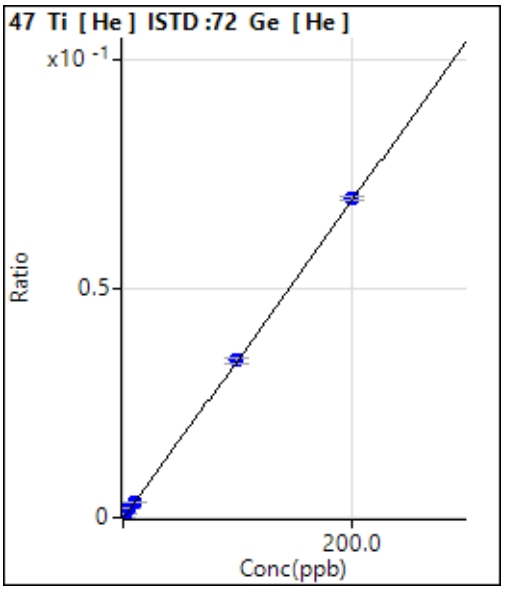


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	796.70	0.0023	P	7.0	
2	☐	200.000	193.446	4897.63	0.0147	P	4.7	-3.3
3	☐	500.000	500.162	11795.19	0.0343	P	1.3	0.0
4	☐	1000.000	1021.629	22999.51	0.0677	P	1.7	2.2
5	☐	10000.00	10005.86	222845.58	0.6426	P	2.1	0.1
6	☐	20000.00	19996.04	434980.58	1.2819	P	1.5	0.0

y = 6.3992E-005 * x + 0.0023
R = 1.0000
DL = 7.708 ppb
BEC = 36.44 ppb

Weight: <None>
Min Conc: <None>

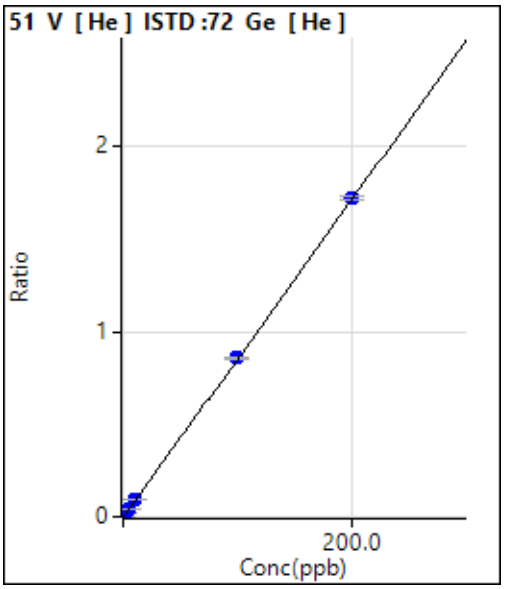
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	114.0	
2	☐	2.000	2.313	280.01	0.0008	P	28.6	15.7
3	☐	5.000	5.623	683.37	0.0020	P	6.9	12.5
4	☐	10.000	9.453	1126.73	0.0033	P	2.7	-5.5
5	☐	100.000	98.540	11861.96	0.0342	P	3.4	-1.5
6	☐	200.000	200.738	23633.94	0.0696	P	0.9	0.4

y = 3.4677E-004 * x + 3.8764E-005
R = 0.9999
DL = 0.3823 ppb
BEC = 0.1118 ppb

Weight: <None>
Min Conc: <None>

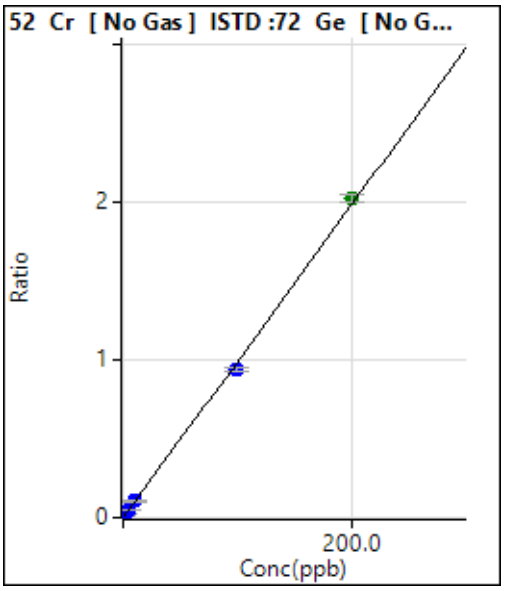


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1128.94	0.0033	P	3.7	
2	☐	2.000	2.058	6986.26	0.0210	P	1.2	2.9
3	☐	5.000	4.967	15793.57	0.0460	P	2.8	-0.7
4	☐	10.000	10.355	31343.53	0.0923	P	0.5	3.5
5	☐	100.000	99.604	297908.46	0.8591	P	1.3	-0.4
6	☐	200.000	200.180	584719.70	1.7232	P	1.4	0.1

y = 0.0086 * x + 0.0033
R = 1.0000
DL = 0.04312 ppb
BEC = 0.3846 ppb

Weight: <None>
Min Conc: <None>

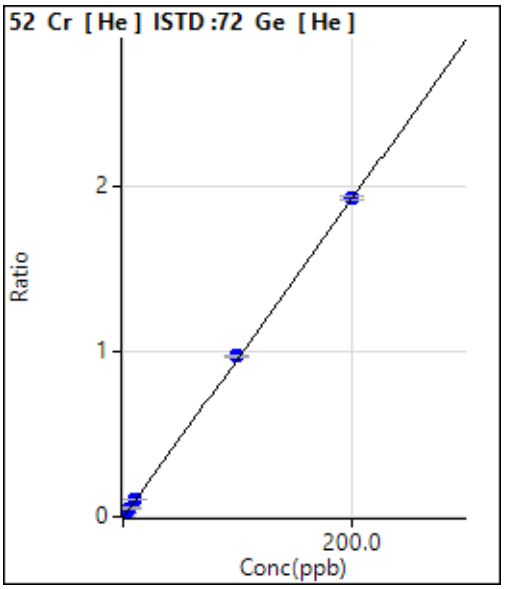
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8409.39	0.0093	P	3.1	
2	☐	2.000	1.903	25517.33	0.0282	P	3.2	-4.8
3	☐	5.000	4.509	50560.27	0.0541	P	1.2	-9.8
4	☐	10.000	9.517	94132.06	0.1039	P	2.0	-4.8
5	☐	100.000	94.023	856229.18	0.9439	P	2.7	-6.0
6	☐	200.000	203.026	1779026.53	2.0275	A	3.0	1.5

y = 0.0099 * x + 0.0093
R = 0.9994
DL = 0.08699 ppb
BEC = 0.9308 ppb

Weight: <None>
Min Conc: <None>

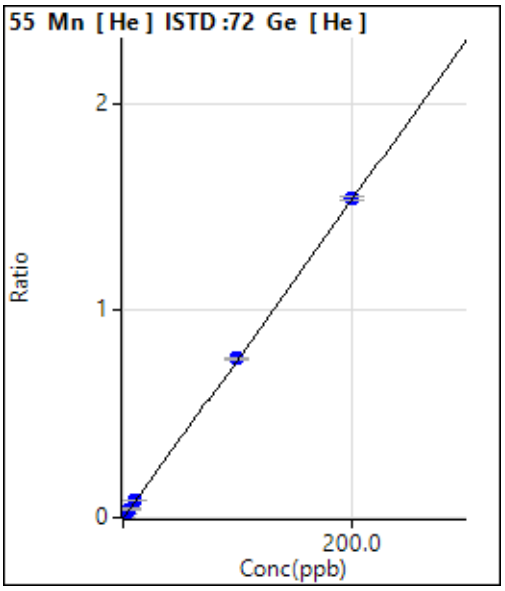


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0034	P	2.0	
2	☐	2.000	2.168	8082.53	0.0243	P	1.5	8.4
3	☐	5.000	5.056	17881.92	0.0521	P	4.0	1.1
4	☐	10.000	10.361	35015.07	0.1031	P	2.5	3.6
5	☐	100.000	100.428	336166.26	0.9694	P	1.2	0.4
6	☐	200.000	199.765	653138.45	1.9248	P	1.4	-0.1

y = 0.0096 * x + 0.0034
R = 1.0000
DL = 0.0218 ppb
BEC = 0.3559 ppb

Weight: <None>
Min Conc: <None>

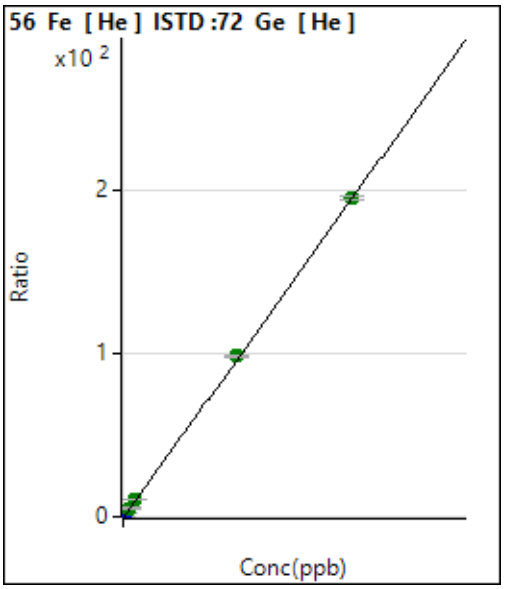
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1046.73	0.0031	P	9.2	
2	☐	2.000	2.093	6371.61	0.0191	P	5.3	4.7
3	☐	5.000	5.000	14244.27	0.0415	P	1.8	0.0
4	☐	10.000	10.205	27668.26	0.0814	P	1.7	2.1
5	☐	100.000	99.551	266212.19	0.7677	P	1.2	-0.4
6	☐	200.000	200.213	522817.42	1.5408	P	1.6	0.1

y = 0.0077 * x + 0.0031
R = 1.0000
DL = 0.1106 ppb
BEC = 0.3987 ppb

Weight: <None>
Min Conc: <None>

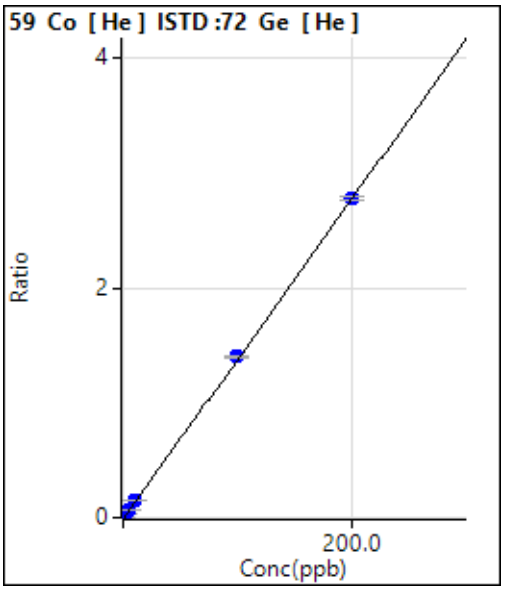


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13056.45	0.0382	P	2.8	
2	☐	200.000	197.283	655342.93	1.9684	P	0.5	-1.4
3	☐	500.000	536.685	1816787.73	5.2891	A	1.8	7.3
4	☐	1000.000	1074.128	3582913.69	10.5475	A	0.7	7.4
5	☐	10000.00	10058.21	34137712.8	98.4477	A	2.0	0.6
6	☐	20000.00	19966.29	66300264.0	195.388	A	1.5	-0.2

y = 0.0098 * x + 0.0382
R = 1.0000
DL = 0.3329 ppb
BEC = 3.905 ppb

Weight: <None>
Min Conc: <None>

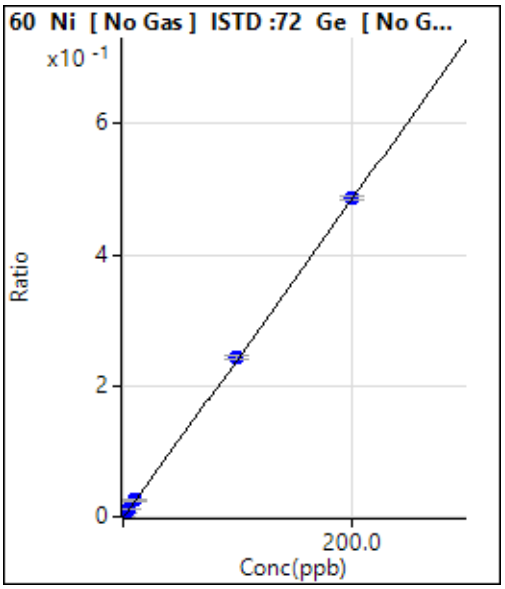
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	50.00	0.0001	P	53.4	
2	☐	2.000	1.963	9163.23	0.0275	P	1.5	-1.9
3	☐	5.000	5.090	24432.17	0.0711	P	4.7	1.8
4	☐	10.000	10.582	50179.17	0.1477	P	1.3	5.8
5	☐	100.000	100.755	487354.46	1.4053	P	0.8	0.8
6	☐	200.000	199.592	944586.47	2.7837	P	1.5	-0.2

y = 0.0139 * x + 1.4662E-004
R = 1.0000
DL = 0.01685 ppb
BEC = 0.01051 ppb

Weight: <None>
Min Conc: <None>

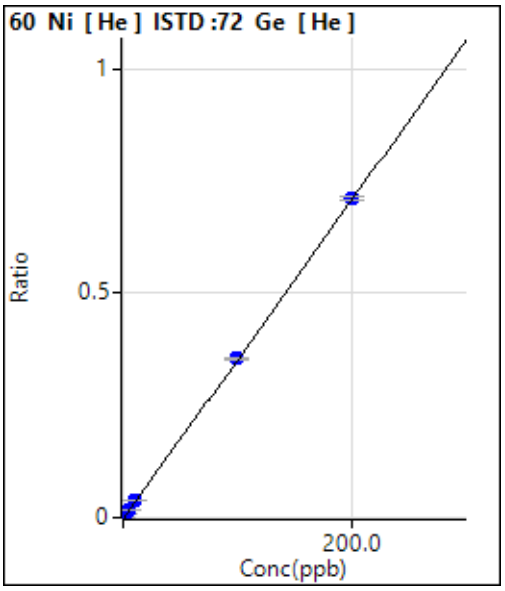


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	303.34	0.0003	P	10.4	
2	☐	2.000	1.918	4524.16	0.0050	P	0.7	-4.1
3	☐	5.000	4.819	11261.54	0.0120	P	0.7	-3.6
4	☐	10.000	10.267	22916.22	0.0253	P	5.0	2.7
5	☐	100.000	99.682	220044.58	0.2426	P	2.7	-0.3
6	☐	200.000	200.151	427156.45	0.4867	P	1.6	0.1

y = 0.0024 * x + 3.3393E-004
R = 1.0000
DL = 0.04303 ppb
BEC = 0.1374 ppb

Weight: <None>
Min Conc: <None>

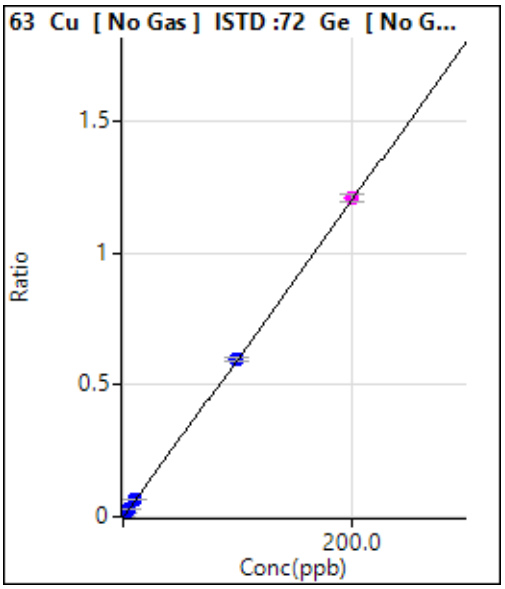
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0003	P	15.5	
2	☐	2.000	2.044	2520.28	0.0076	P	1.9	2.2
3	☐	5.000	4.946	6144.82	0.0179	P	2.5	-1.1
4	☐	10.000	10.532	12822.90	0.0378	P	3.0	5.3
5	☐	100.000	99.624	122944.42	0.3545	P	1.7	-0.4
6	☐	200.000	200.162	241613.25	0.7120	P	1.0	0.1

y = 0.0036 * x + 3.0260E-004
R = 1.0000
DL = 0.03946 ppb
BEC = 0.0851 ppb

Weight: <None>
Min Conc: <None>

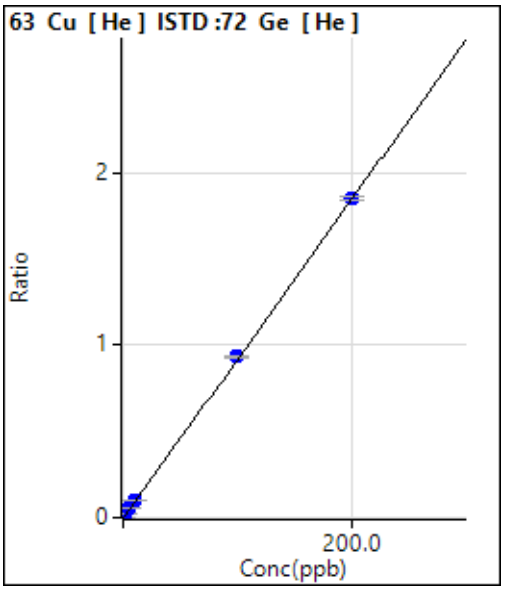


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2863.68	0.0032	P	9.8	
2	☐	2.000	1.987	13653.68	0.0151	P	1.8	-0.6
3	☐	5.000	4.748	29572.38	0.0316	P	0.9	-5.0
4	☐	10.000	10.038	57421.08	0.0634	P	2.6	0.4
5	☐	100.000	98.471	538634.41	0.5938	P	2.5	-1.5
6	☐	200.000	200.769	1059787.33	1.2073	M	2.4	0.4

y = 0.0060 * x + 0.0032
R = 1.0000
DL = 0.1542 ppb
BEC = 0.5257 ppb

Weight: <None>
Min Conc: <None>

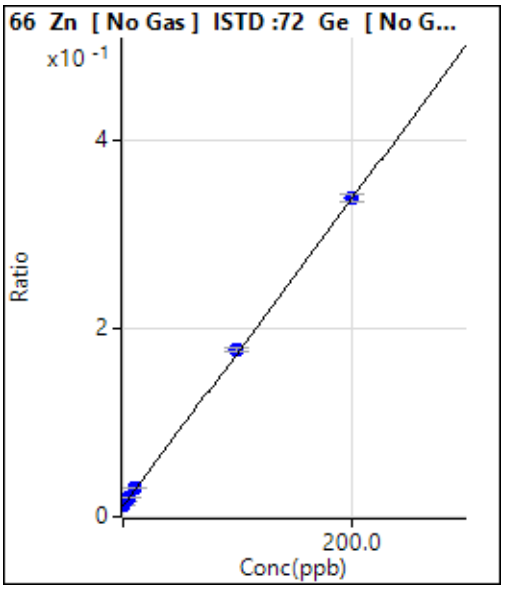
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1416.78	0.0041	P	10.0	
2	☐	2.000	2.114	7899.10	0.0237	P	1.8	5.7
3	☐	5.000	5.126	17735.22	0.0516	P	1.2	2.5
4	☐	10.000	10.648	34908.43	0.1028	P	1.9	6.5
5	☐	100.000	100.486	324169.71	0.9348	P	1.5	0.5
6	☐	200.000	199.720	629072.50	1.8539	P	1.3	-0.1

y = 0.0093 * x + 0.0041
R = 1.0000
DL = 0.1345 ppb
BEC = 0.4478 ppb

Weight: <None>
Min Conc: <None>

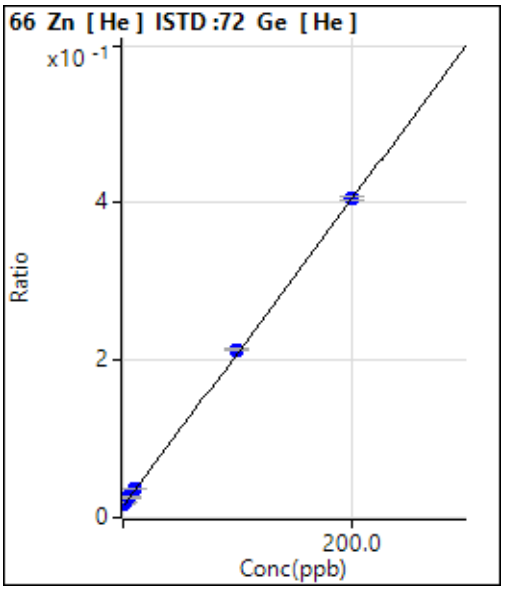


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11811.97	0.0130	P	3.9	
2	☐	2.000	1.984	14694.89	0.0162	P	1.1	-0.8
3	☐	5.000	4.940	19671.30	0.0210	P	2.6	-1.2
4	☐	10.000	10.360	27080.68	0.0299	P	1.7	3.6
5	☐	100.000	100.746	160719.11	0.1772	P	2.8	0.7
6	☐	200.000	199.610	296865.13	0.3383	P	2.0	-0.2

y = 0.0016 * x + 0.0130
R = 1.0000
DL = 0.922 ppb
BEC = 7.971 ppb

Weight: <None>
Min Conc: <None>

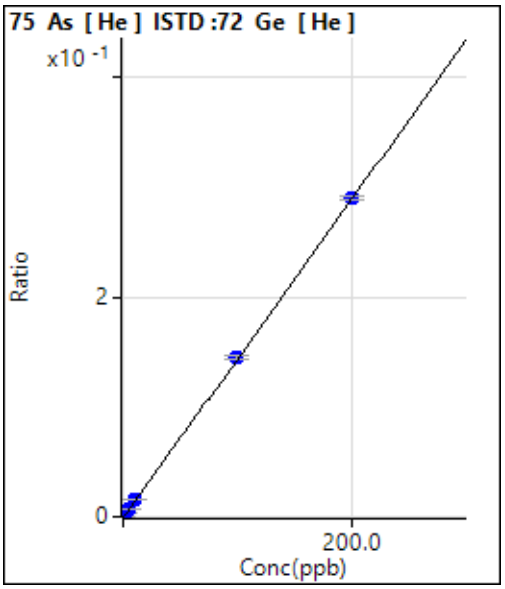
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5641.27	0.0165	P	3.1	
2	☐	2.000	1.688	6591.69	0.0198	P	0.5	-15.6
3	☐	5.000	4.771	8869.73	0.0258	P	3.2	-4.6
4	☐	10.000	10.566	12612.68	0.0371	P	2.0	5.7
5	☐	100.000	100.835	73987.82	0.2133	P	0.8	0.8
6	☐	200.000	199.563	137783.43	0.4060	P	0.7	-0.2

y = 0.0020 * x + 0.0165
R = 1.0000
DL = 0.7896 ppb
BEC = 8.456 ppb

Weight: <None>
Min Conc: <None>

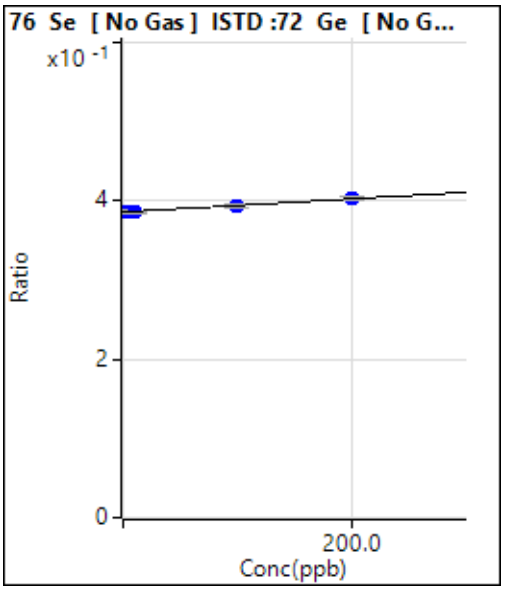


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.66	0.0003	P	26.9	
2	☐	2.000	1.976	1067.83	0.0032	P	2.9	-1.2
3	☐	5.000	4.992	2604.71	0.0076	P	2.5	-0.2
4	☐	10.000	10.374	5227.70	0.0154	P	2.8	3.7
5	☐	100.000	100.210	50519.60	0.1457	P	2.1	0.2
6	☐	200.000	199.877	98490.73	0.2903	P	1.3	-0.1

y = 0.0015 * x + 3.4191E-004
R = 1.0000
DL = 0.1902 ppb
BEC = 0.2357 ppb

Weight: <None>
Min Conc: <None>

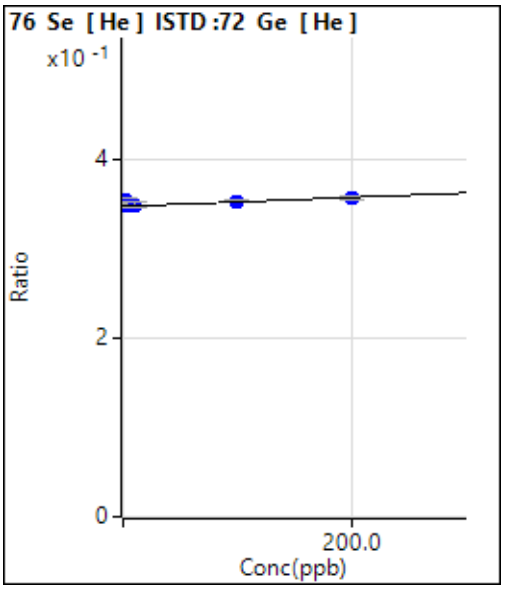
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	350854.36	0.3860	P	0.4	
2	☐	2.000	16.215	350820.19	0.3873	P	1.3	710.7
3	☐	5.000	3.327	361115.80	0.3862	P	0.8	-33.5
4	☐	10.000	-7.823	349248.20	0.3853	P	0.6	-178.2
5	☐	100.000	87.529	356872.77	0.3933	P	1.1	-12.5
6	☐	200.000	207.026	353963.92	0.4033	P	0.8	3.5

y = 8.3643E-005 * x + 0.3860
R = 0.9900
DL = 59.61 ppb
BEC = 4614 ppb

Weight: <None>
Min Conc: <None>

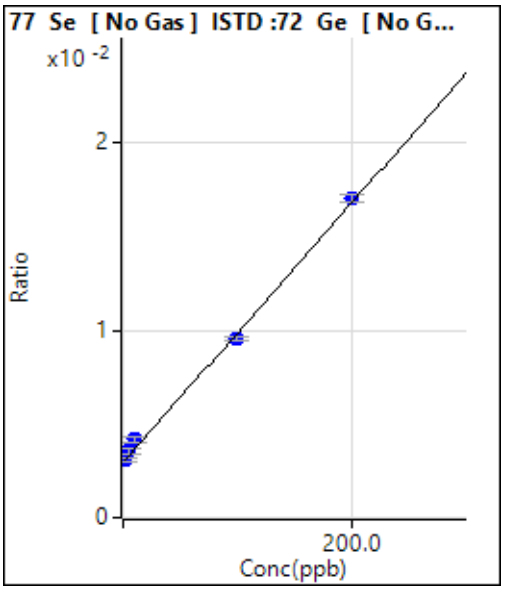


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	118826.42	0.3477	P	0.9	
2	☐	2.000	136.952	118093.22	0.3547	P	0.9	6747.6
3	☐	5.000	37.024	120094.50	0.3496	P	0.9	640.5
4	☐	10.000	31.626	118671.87	0.3493	P	1.6	216.3
5	☐	100.000	120.825	122730.98	0.3539	P	0.5	20.8
6	☐	200.000	186.356	121244.77	0.3572	P	1.5	-6.8

y = 5.1015E-005 * x + 0.3477
R = 0.7727
DL = 174.4 ppb
BEC = 6816 ppb

Weight: <None>
Min Conc: <None>

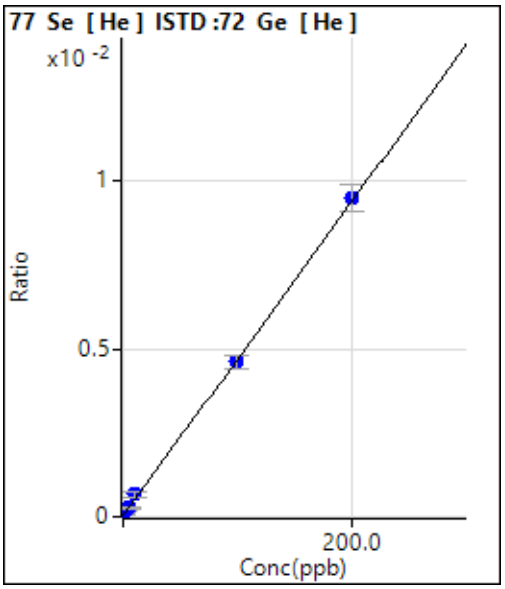
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2773.66	0.0031	P	6.6	
2	☐	2.000	0.554	2800.35	0.0031	P	4.5	-72.3
3	☐	5.000	7.462	3337.14	0.0036	P	7.3	49.2
4	☐	10.000	16.218	3783.94	0.0042	P	6.5	62.2
5	☐	100.000	94.356	8702.95	0.0096	P	2.6	-5.6
6	☐	200.000	202.464	14985.21	0.0171	P	2.0	1.2

y = 6.9227E-005 * x + 0.0031
R = 0.9988
DL = 8.78 ppb
BEC = 44.1 ppb

Weight: <None>
Min Conc: <None>

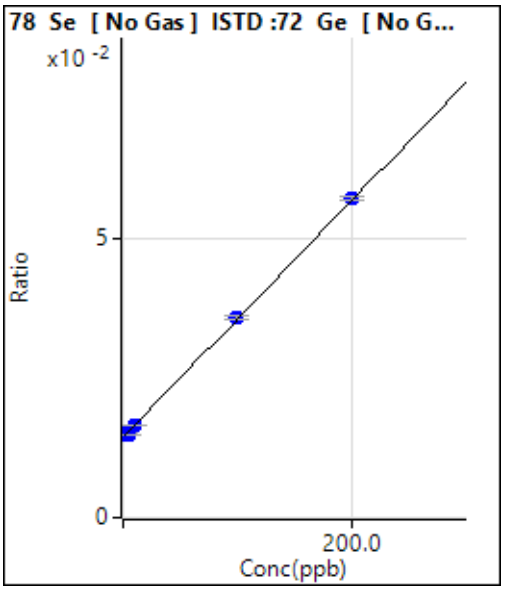


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.3	
2	☐	2.000	2.188	60.00	0.0002	P	33.4	9.4
3	☐	5.000	3.944	90.00	0.0003	P	33.9	-21.1
4	☐	10.000	12.591	226.67	0.0007	P	23.7	25.9
5	☐	100.000	96.947	1600.12	0.0046	P	8.4	-3.1
6	☐	200.000	201.421	3220.45	0.0095	P	9.0	0.7

y = 4.6752E-005 * x + 7.7986E-005
R = 0.9997
DL = 1.065 ppb
BEC = 1.668 ppb

Weight: <None>
Min Conc: <None>

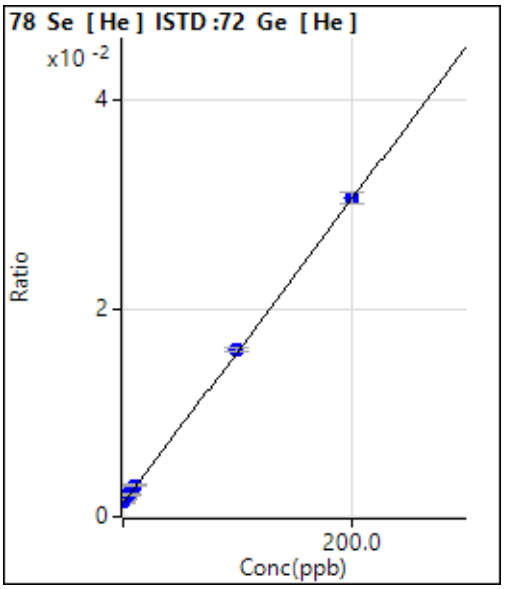
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13400.22	0.0147	P	1.7	
2	☐	2.000	1.788	13693.83	0.0151	P	0.7	-10.6
3	☐	5.000	0.669	13914.06	0.0149	P	0.9	-86.6
4	☐	10.000	8.196	14931.88	0.0165	P	1.4	-18.0
5	☐	100.000	99.096	32379.14	0.0357	P	2.2	-0.9
6	☐	200.000	200.652	50163.62	0.0572	P	1.6	0.3

y = 2.1140E-004 * x + 0.0147
R = 0.9998
DL = 3.645 ppb
BEC = 69.73 ppb

Weight: <None>
Min Conc: <None>

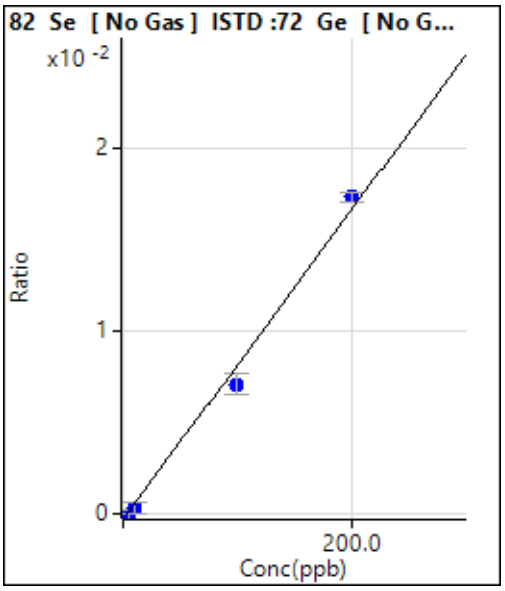


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	486.68	0.0014	P	7.6	
2	☐	2.000	2.382	590.01	0.0018	P	6.8	19.1
3	☐	5.000	4.999	740.02	0.0022	P	3.3	0.0
4	☐	10.000	10.782	1018.71	0.0030	P	4.6	7.8
5	☐	100.000	100.225	5571.83	0.0161	P	2.0	0.2
6	☐	200.000	199.844	10388.68	0.0306	P	4.0	-0.1

y = 1.4610E-004 * x + 0.0014
R = 1.0000
DL = 2.236 ppb
BEC = 9.748 ppb

Weight: <None>
Min Conc: <None>

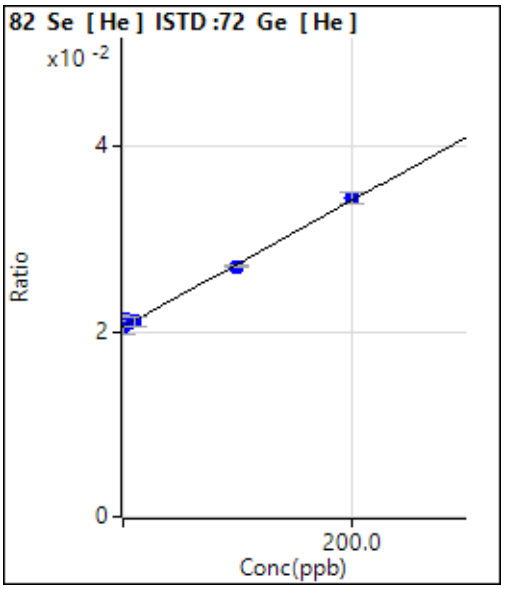
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-197.63	-0.0002	P	-153.	
2	☐	2.000	0.528	-160.30	-0.0002	P	-283.	-73.6
3	☐	5.000	1.157	-115.27	-0.0001	P	-524.	-76.9
4	☐	10.000	5.904	249.67	0.0003	P	209.5	-41.0
5	☐	100.000	86.268	6422.21	0.0071	P	15.5	-13.7
6	☐	200.000	207.182	15179.76	0.0173	P	3.1	3.6

y = 8.4547E-005 * x - 2.2014E-004
R = 0.9970
DL = 12.01 ppb
BEC = -2.604 ppb

Weight: <None>
Min Conc: <None>

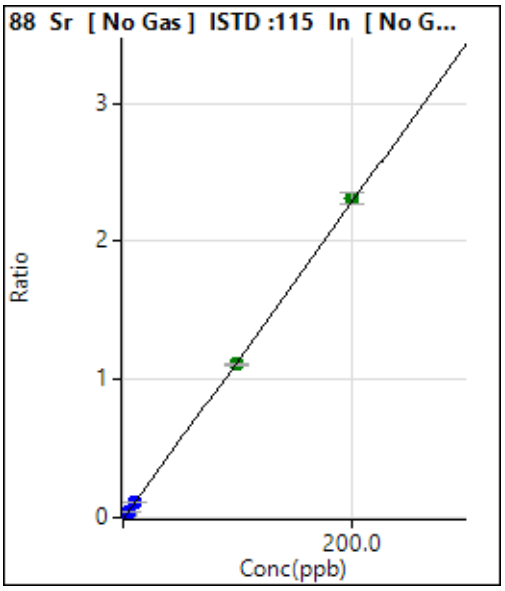


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7048.65	0.0206	P	9.4	
2	☐	2.000	12.446	7152.03	0.0215	P	2.2	522.3
3	☐	5.000	3.790	7175.37	0.0209	P	3.2	-24.2
4	☐	10.000	7.207	7175.38	0.0211	P	4.9	-27.9
5	☐	100.000	94.470	9393.42	0.0271	P	0.9	-5.5
6	☐	200.000	202.830	11705.28	0.0345	P	3.8	1.4

y = 6.8312E-005 * x + 0.0206
R = 0.9977
DL = 84.9 ppb
BEC = 302 ppb

Weight: <None>
Min Conc: <None>

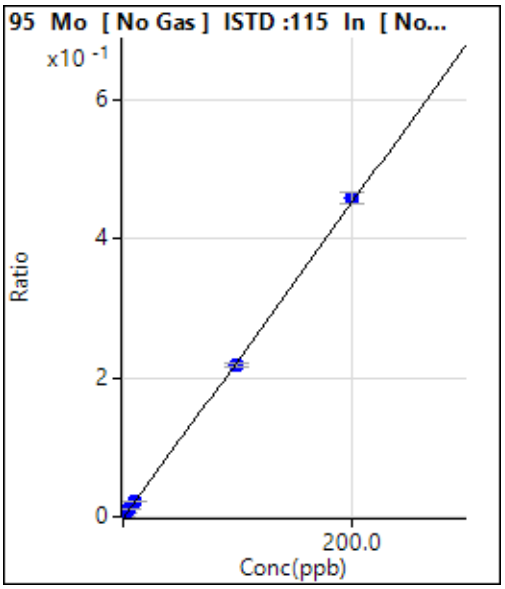
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	573.36	0.0005	P	20.2	
2	☐	2.000	1.790	25160.64	0.0210	P	4.7	-10.5
3	☐	5.000	4.160	60861.54	0.0481	P	1.4	-16.8
4	☐	10.000	9.249	124786.68	0.1064	P	0.8	-7.5
5	☐	100.000	96.666	1313783.00	1.1077	A	1.4	-3.3
6	☐	200.000	201.727	2550317.88	2.3111	A	3.9	0.9

y = 0.0115 * x + 4.7408E-004
R = 0.9998
DL = 0.02513 ppb
BEC = 0.04139 ppb

Weight: <None>
Min Conc: <None>

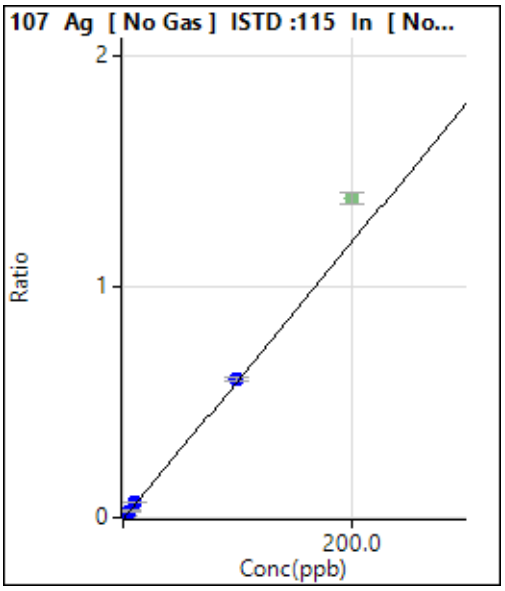


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	42.4	
2	☐	2.000	1.923	5284.49	0.0044	P	8.6	-3.9
3	☐	5.000	4.455	12859.72	0.0102	P	3.1	-10.9
4	☐	10.000	9.967	26623.51	0.0227	P	1.6	-0.3
5	☐	100.000	95.840	258390.00	0.2179	P	2.8	-4.2
6	☐	200.000	202.096	507067.92	0.4595	P	3.8	1.0

y = 0.0023 * x + 3.8228E-005
R = 0.9997
DL = 0.02138 ppb
BEC = 0.01681 ppb

Weight: <None>
Min Conc: <None>

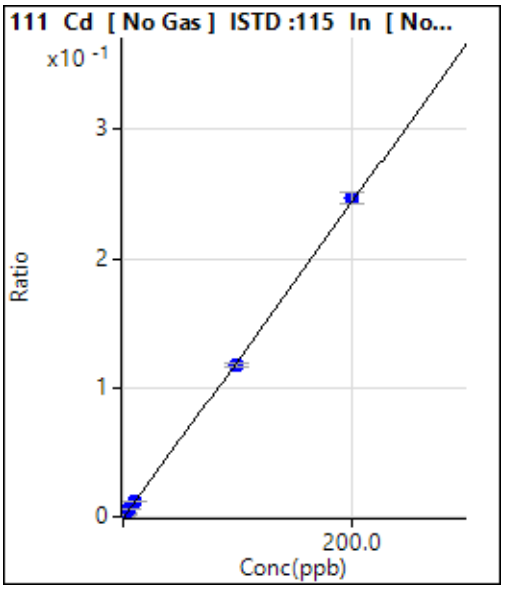
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	840.04	0.0007	P	2.4	
2	☐	2.000	1.900	14461.43	0.0121	P	3.3	-5.0
3	☐	5.000	4.704	36450.50	0.0288	P	4.1	-5.9
4	☐	10.000	10.570	74928.30	0.0639	P	2.7	5.7
5	☐	100.000	99.960	709762.36	0.5986	P	1.9	0.0
6	☑	200.000		1523760.97	1.3807	A	3.7	

y = 0.0060 * x + 6.9271E-004
R = 1.0000
DL = 0.008278 ppb
BEC = 0.1158 ppb

Weight: <None>
Min Conc: <None>

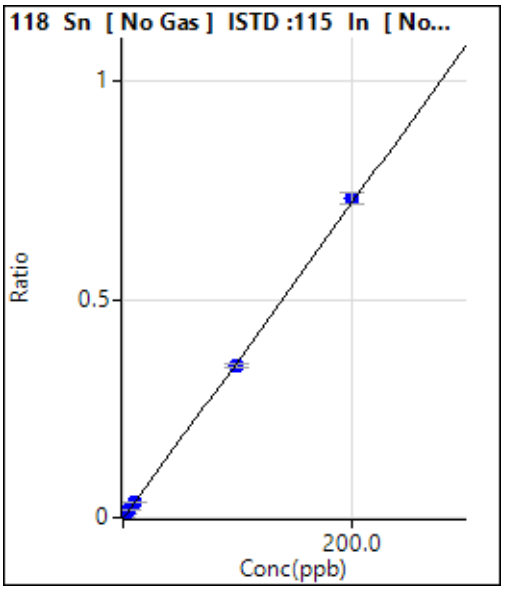


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	173.2	
2	☐	2.000	1.895	2783.68	0.0023	P	11.8	-5.3
3	☐	5.000	4.378	6778.49	0.0054	P	4.5	-12.4
4	☐	10.000	10.013	14361.36	0.0123	P	4.4	0.1
5	☐	100.000	96.217	139511.34	0.1177	P	2.7	-3.8
6	☐	200.000	201.907	272424.91	0.2469	P	4.1	1.0

y = 0.0012 * x + 8.2256E-006
R = 0.9998
DL = 0.03495 ppb
BEC = 0.006727 ppb

Weight: <None>
Min Conc: <None>

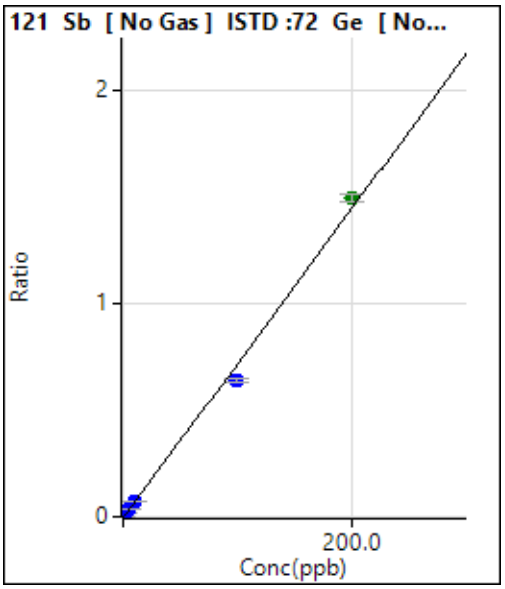
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1186.74	0.0010	P	10.4	
2	☐	2.000	1.877	9320.13	0.0078	P	2.3	-6.1
3	☐	5.000	4.395	21341.02	0.0169	P	1.3	-12.1
4	☐	10.000	9.823	42786.64	0.0365	P	4.8	-1.8
5	☐	100.000	95.700	411527.57	0.3471	P	2.3	-4.3
6	☐	200.000	202.175	807820.67	0.7321	P	4.0	1.1

y = 0.0036 * x + 9.7983E-004
R = 0.9997
DL = 0.08431 ppb
BEC = 0.2709 ppb

Weight: <None>
Min Conc: <None>

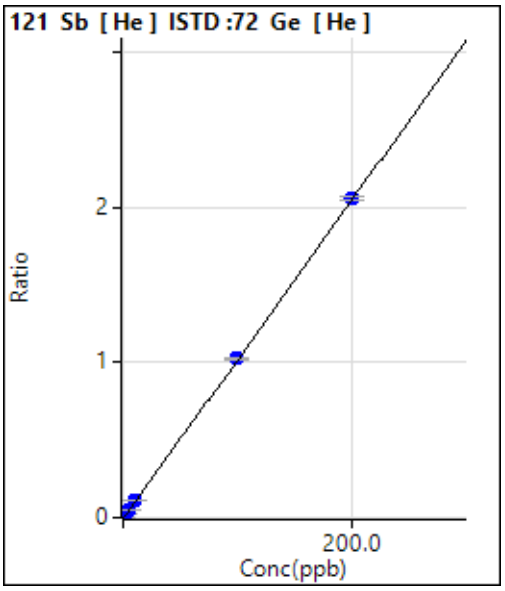


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1450.11	0.0016	P	4.3	
2	☐	2.000	1.745	12926.59	0.0143	P	2.2	-12.8
3	☐	5.000	4.438	31641.64	0.0338	P	1.7	-11.2
4	☐	10.000	9.231	62237.58	0.0687	P	1.8	-7.7
5	☐	100.000	88.234	582958.44	0.6427	P	3.0	-11.8
6	☐	200.000	205.938	1314527.77	1.4979	A	1.8	3.0

y = 0.0073 * x + 0.0016
R = 0.9977
DL = 0.02799 ppb
BEC = 0.2195 ppb

Weight: <None>
Min Conc: <None>

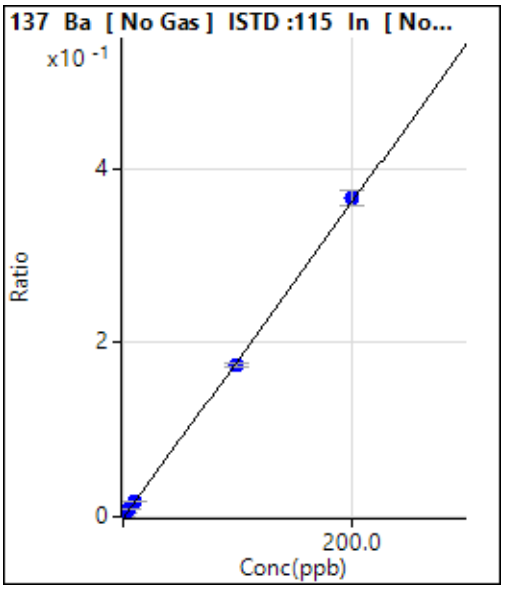
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	723.37	0.0021	P	12.7	
2	☐	2.000	2.106	7909.20	0.0238	P	2.3	5.3
3	☐	5.000	4.935	18139.45	0.0528	P	5.4	-1.3
4	☐	10.000	10.375	36925.61	0.1087	P	0.4	3.8
5	☐	100.000	99.454	355017.26	1.0238	P	1.7	-0.5
6	☐	200.000	200.255	698782.83	2.0593	P	1.1	0.1

y = 0.0103 * x + 0.0021
R = 1.0000
DL = 0.07859 ppb
BEC = 0.206 ppb

Weight: <None>
Min Conc: <None>

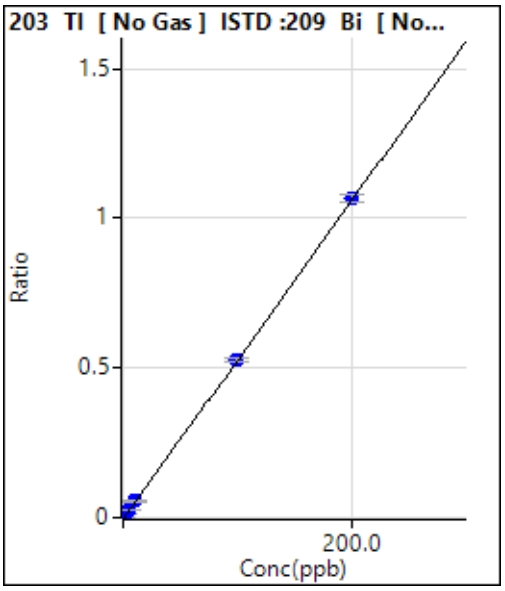


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120.00	0.0001	P	7.3	
2	☐	2.000	1.881	4210.77	0.0035	P	8.3	-6.0
3	☐	5.000	4.416	10264.23	0.0081	P	2.8	-11.7
4	☐	10.000	10.058	21528.15	0.0184	P	3.8	0.6
5	☐	100.000	96.229	207267.91	0.1748	P	2.6	-3.8
6	☐	200.000	201.898	404549.16	0.3667	P	4.2	0.9

y = 0.0018 * x + 9.8878E-005
R = 0.9998
DL = 0.01194 ppb
BEC = 0.05446 ppb

Weight: <None>
Min Conc: <None>

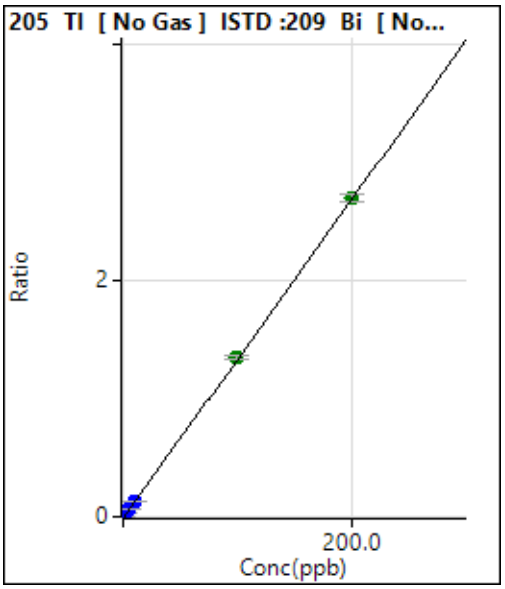
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	24.7	
2	☐	2.000	1.932	11348.66	0.0104	P	1.1	-3.4
3	☐	5.000	4.789	28846.92	0.0256	P	0.2	-4.2
4	☐	10.000	10.329	60382.61	0.0551	P	2.0	3.3
5	☐	100.000	98.991	582560.81	0.5267	P	2.6	-1.0
6	☐	200.000	200.494	1145093.65	1.0667	P	1.8	0.2

y = 0.0053 * x + 1.1648E-004
R = 1.0000
DL = 0.01619 ppb
BEC = 0.0219 ppb

Weight: <None>
Min Conc: <None>

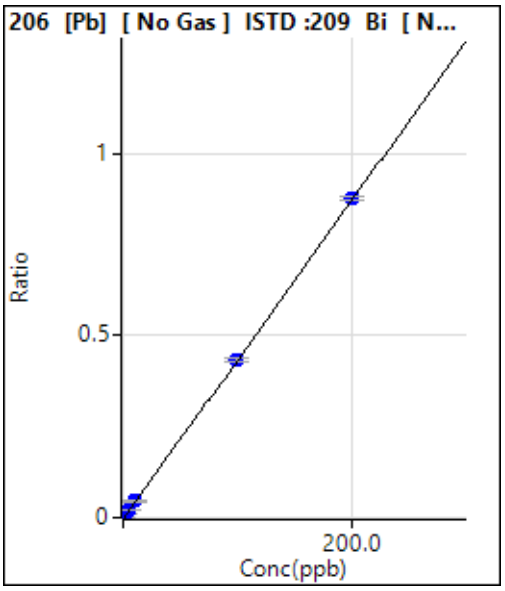


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0002	P	16.7	
2	☐	2.000	1.877	27911.58	0.0256	P	1.4	-6.2
3	☐	5.000	4.547	69436.09	0.0616	P	0.9	-9.1
4	☐	10.000	9.522	141172.24	0.1287	P	1.3	-4.8
5	☐	100.000	100.001	1492409.46	1.3494	A	3.1	0.0
6	☐	200.000	200.036	2897494.02	2.6991	A	2.1	0.0

y = 0.0135 * x + 2.4856E-004
R = 1.0000
DL = 0.009249 ppb
BEC = 0.01842 ppb

Weight: <None>
Min Conc: <None>

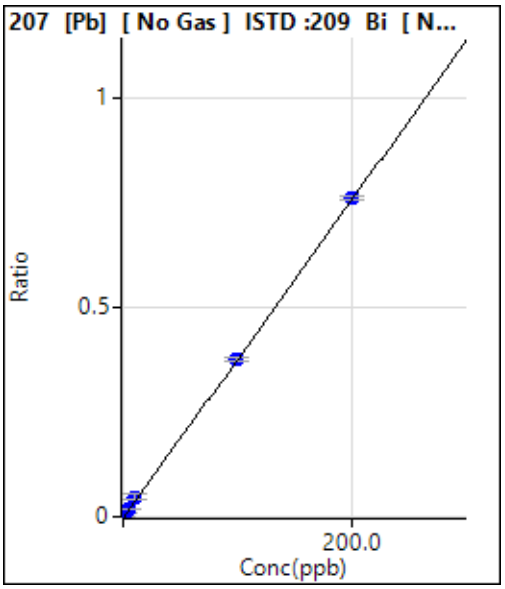
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	19.1	
2	☐	2.000	2.024	9897.40	0.0091	P	3.7	1.2
3	☐	5.000	4.881	24310.72	0.0216	P	2.0	-2.4
4	☐	10.000	10.230	49324.47	0.0450	P	1.4	2.3
5	☐	100.000	99.139	479979.56	0.4340	P	2.6	-0.9
6	☐	200.000	200.422	941647.33	0.8771	P	1.7	0.2

y = 0.0044 * x + 2.1156E-004
R = 1.0000
DL = 0.02769 ppb
BEC = 0.04835 ppb

Weight: <None>
Min Conc: <None>

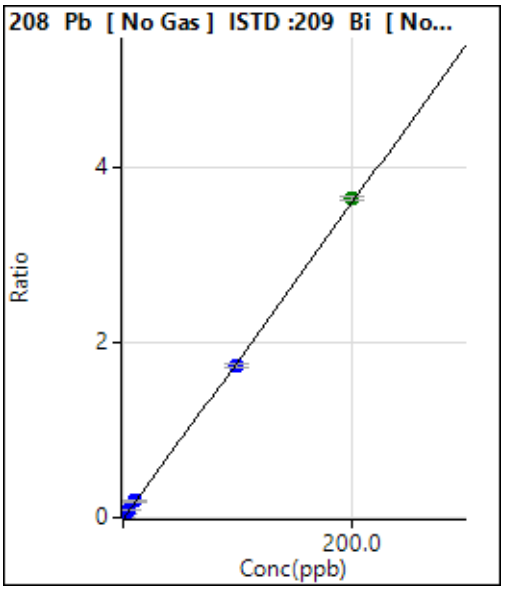


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.67	0.0002	P	19.1	
2	☐	2.000	2.011	8589.76	0.0079	P	2.9	0.5
3	☐	5.000	4.890	21214.97	0.0188	P	3.2	-2.2
4	☐	10.000	12.504	52489.54	0.0478	P	24.7	25.0
5	☐	100.000	99.093	417277.42	0.3773	P	2.3	-0.9
6	☐	200.000	200.331	818590.98	0.7625	P	1.1	0.2

y = 0.0038 * x + 2.1770E-004
R = 0.9999
DL = 0.03273 ppb
BEC = 0.05722 ppb

Weight: <None>
Min Conc: <None>

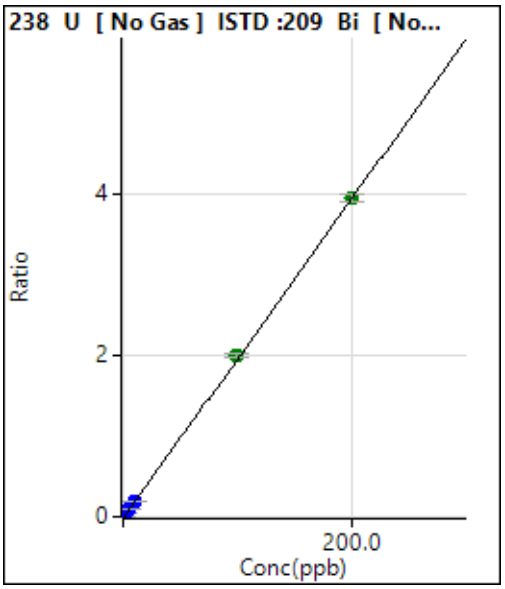
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1106.71	0.0010	P	8.2	
2	☐	2.000	1.933	39258.04	0.0360	P	0.7	-3.4
3	☐	5.000	4.692	96761.53	0.0859	P	2.2	-6.2
4	☐	10.000	10.372	206821.22	0.1885	P	5.1	3.7
5	☐	100.000	95.846	1917711.42	1.7339	P	2.5	-4.2
6	☐	200.000	202.067	3923129.37	3.6543	A	1.5	1.0

y = 0.0181 * x + 0.0010
R = 0.9997
DL = 0.01381 ppb
BEC = 0.05634 ppb

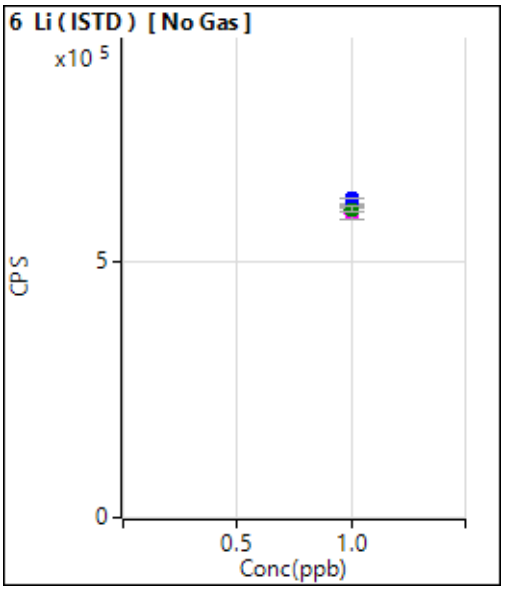
Weight: <None>
Min Conc: <None>



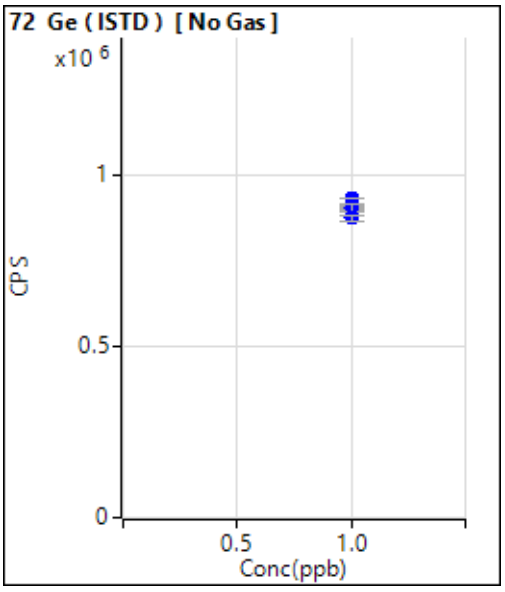
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	138.0	
2	☐	2.000	1.872	40574.34	0.0372	P	1.0	-6.4
3	☐	5.000	4.544	101629.08	0.0902	P	1.0	-9.1
4	☐	10.000	9.534	207452.89	0.1892	P	1.2	-4.7
5	☐	100.000	100.843	2212867.26	2.0007	A	2.6	0.8
6	☐	200.000	199.615	4251477.33	3.9604	A	2.3	-0.2

y = 0.0198 * x + 2.1657E-005
R = 1.0000
DL = 0.00452 ppb
BEC = 0.001092 ppb

Weight: <None>
Min Conc: <None>

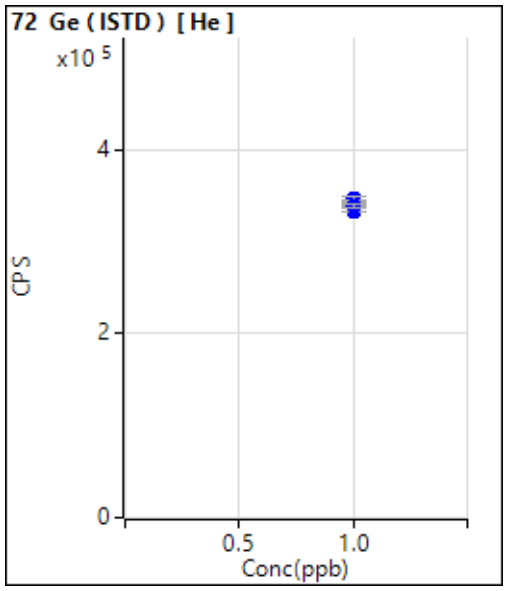


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		609454.62		P	1.2	
2	☐	1.000		609696.57		P	0.9	
3	☐	1.000		624584.54		P	0.3	
4	☐	1.000		605555.24		P	0.4	
5	☐	1.000		594653.43		M	3.4	
6	☐	1.000		603186.57		A	2.1	

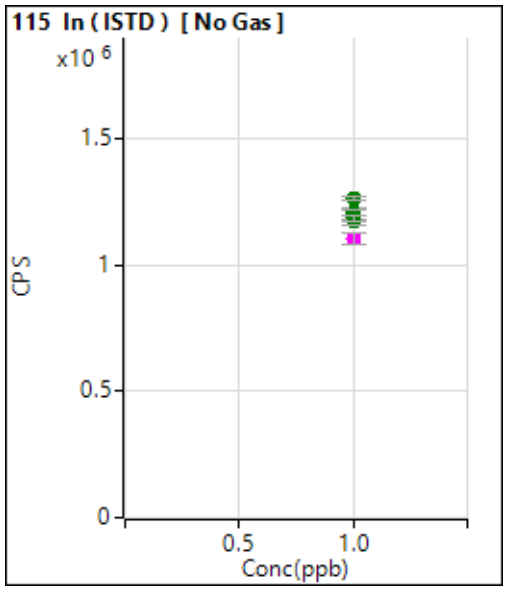


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		909044.28		P	1.3	
2	☐	1.000		905782.82		P	0.5	
3	☐	1.000		934952.25		P	0.3	
4	☐	1.000		906433.32		P	0.9	
5	☐	1.000		907566.08		P	2.8	
6	☐	1.000		877750.33		P	1.8	

Calibration for 018_ICV.d

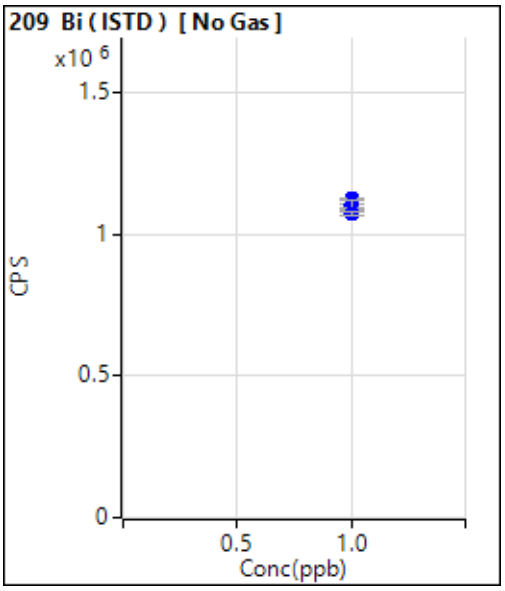


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		341738.04		P	0.9	
2	☐	1.000		332927.20		P	0.2	
3	☐	1.000		343516.27		P	0.7	
4	☐	1.000		339705.30		P	0.7	
5	☐	1.000		346817.93		P	1.3	
6	☐	1.000		339358.17		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1213150.40		A	2.4	
2	☐	1.000		1200208.90		A	3.0	
3	☐	1.000		1264830.84		A	1.5	
4	☐	1.000		1172708.42		A	1.9	
5	☐	1.000		1186094.38		A	2.1	
6	☐	1.000		1104809.50		M	4.7	

Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1085973.92		P	0.9	
2	☐	1.000		1091638.37		P	0.1	
3	☐	1.000		1127161.13		P	0.4	
4	☐	1.000		1096758.63		P	1.5	
5	☐	1.000		1106524.72		P	2.6	
6	☐	1.000		1073748.99		P	1.6	

Calibration Blank Report

Sample Table

Sample Name	CAL BLK
Data File Name	011CALB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T13:52:51-05:00
Sample Type	CalBlk
Level	1
Dilution	1
Comment	

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Li	7	1	No Gas	36770	0.00
Be	9	1	No Gas	70	0.00
V	51	2	He	1129	0.26
Cr	52	2	He	1170	0.25
Fe	56	2	He	13056	0.02
Se	78	2	He	487	1.57
As	75	2	He	117	22.45
Ca	44	2	He	797	0.79
Na	23	2	He	120295	0.00
Mg	24	2	He	240	7.96
K	39	2	He	112200	0.00
Mn	55	2	He	1047	0.93
Co	59	2	He	50	105.83
Ni	60	2	He	103	14.31
Cu	63	2	He	1417	0.66
Zn	66	2	He	5641	0.07
Al	27	2	He	610	1.23
B	11	1	No Gas	9567	0.00
Al	27	1	No Gas	21792	0.11
Si	28	1	No Gas	291952	0.00
Ag	107	1	No Gas	840	0.00
Cd	111	1	No Gas	10	1732.05
Sr	88	1	No Gas	573	3.11
Mo	95	1	No Gas	47	95.59
Sn	118	1	No Gas	1187	0.67
Sb	121	1	No Gas	1450	0.38
Ba	137	1	No Gas	120	6.94
Tl	205	1	No Gas	270	6.29
Tl	203	1	No Gas	127	20.04
Pb	208	1	No Gas	1107	0.82
U	238	1	No Gas	23	590.43
Ca	43	2	He	23	382.35
Sb	121	2	He	723	1.78
Ti	47	2	He	13	859.23
Cu	63	1	No Gas	2864	0.30

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD

Calibration Blank Report

Li	6	1	No Gas	609455	1.25
Ge	72	2	He	341738	0.91
Ge	72	1	No Gas	909044	1.34
In	115	1	No Gas	1213150	2.37

Calibration Blank Report

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Bi	209	1	No Gas	1085974	0.91

Calibration Standard Report

Sample Table

Sample Name	2/10/200
Data File Name	012CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T13:55:14-05:00
Sample Type	CalStd
Level	2
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	3737	0.06
V	51	2	He	6986	0.02
Cr	52	2	He	8083	0.02
Fe	56	2	He	655343	0.00
Se	78	2	He	590	1.15
As	75	2	He	1068	0.27
Ca	44	2	He	4898	0.09
Na	23	2	He	247350	0.00
Mg	24	2	He	76704	0.00
K	39	2	He	202717	0.00
Mn	55	2	He	6372	0.08
Co	59	2	He	9163	0.02
Ni	60	2	He	2520	0.08
Cu	63	2	He	7899	0.02
Zn	66	2	He	6592	0.01
Al	27	2	He	1183	0.69
B	11	1	No Gas	17449	0.01
Al	27	1	No Gas	33554	0.00
Si	28	1	No Gas	324858	0.00
Ag	107	1	No Gas	14461	0.01
Cd	111	1	No Gas	2784	0.32
Sr	88	1	No Gas	25161	0.01
Mo	95	1	No Gas	5284	0.12
Sn	118	1	No Gas	9320	0.01
Sb	121	1	No Gas	12927	0.01
Ba	137	1	No Gas	4211	0.14
Tl	205	1	No Gas	27912	0.01
Tl	203	1	No Gas	11349	0.01
Pb	208	1	No Gas	39258	0.00
U	238	1	No Gas	40574	0.00
Ca	43	2	He	287	6.92
Sb	121	2	He	7909	0.03
Cu	63	1	No Gas	13654	0.02

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	609697	0.94	609455	100.04	70	120	
Ge	72	2	He	332927	0.16	341738	97.42	70	120	
Ge	72	1	No Gas	905783	0.46	909044	99.64	70	120	

Calibration Standard Report

In	115	1	No Gas	1200209	3.04	1213150	98.93	70	120	
Bi	209	1	No Gas	1091638	0.07	1085974	100.52	70	120	

Calibration Standard Report

Sample Table

Sample Name	5/25/500
Data File Name	013CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T13:57:35-05:00
Sample Type	CalStd
Level	3
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	9155	0.01
V	51	2	He	15794	0.01
Cr	52	2	He	17882	0.02
Fe	56	2	He	1816788	0.00
Se	78	2	He	740	0.40
As	75	2	He	2605	0.10
Ca	44	2	He	11795	0.01
Na	23	2	He	444358	0.00
Mg	24	2	He	192617	0.00
K	39	2	He	339749	0.00
Mn	55	2	He	14244	0.01
Co	59	2	He	24432	0.02
Ni	60	2	He	6145	0.04
Cu	63	2	He	17735	0.01
Zn	66	2	He	8870	0.04
Al	27	2	He	2097	0.36
B	11	1	No Gas	30383	0.01
Al	27	1	No Gas	56374	0.00
Si	28	1	No Gas	363436	0.00
Ag	107	1	No Gas	36450	0.01
Cd	111	1	No Gas	6778	0.05
Sr	88	1	No Gas	60862	0.00
Mo	95	1	No Gas	12860	0.03
Sn	118	1	No Gas	21341	0.01
Sb	121	1	No Gas	31642	0.00
Ba	137	1	No Gas	10264	0.02
Tl	205	1	No Gas	69436	0.00
Tl	203	1	No Gas	28847	0.00
Pb	208	1	No Gas	96762	0.00
U	238	1	No Gas	101629	0.00
Ca	43	2	He	710	1.21
Sb	121	2	He	18139	0.03
Cu	63	1	No Gas	29572	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	624585	0.33	609455	102.48	70	120	
Ge	72	2	He	343516	0.69	341738	100.52	70	120	
Ge	72	1	No Gas	934952	0.25	909044	102.85	70	120	

Calibration Standard Report

In	115	1	No Gas	1264831	1.48	1213150	104.26	70	120	
Bi	209	1	No Gas	1127161	0.45	1085974	103.79	70	120	

Calibration Standard Report

Sample Table

Sample Name	10/50/100
Data File Name	014CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T13:59:57-05:00
Sample Type	CalStd
Level	4
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	18918	0.01
V	51	2	He	31344	0.00
Cr	52	2	He	35015	0.01
Fe	56	2	He	3582914	0.00
Se	78	2	He	1019	0.39
As	75	2	He	5228	0.05
Ca	44	2	He	23000	0.01
Na	23	2	He	826630	0.00
Mg	24	2	He	392987	0.00
K	39	2	He	573377	0.00
Mn	55	2	He	27668	0.01
Co	59	2	He	50179	0.00
Ni	60	2	He	12823	0.02
Cu	63	2	He	34908	0.01
Zn	66	2	He	12613	0.02
Al	27	2	He	3334	0.13
B	11	1	No Gas	53622	0.00
Al	27	1	No Gas	94979	0.00
Si	28	1	No Gas	442979	0.00
Ag	107	1	No Gas	74928	0.00
Cd	111	1	No Gas	14361	0.02
Sr	88	1	No Gas	124787	0.00
Mo	95	1	No Gas	26624	0.01
Sn	118	1	No Gas	42787	0.01
Sb	121	1	No Gas	62238	0.00
Ba	137	1	No Gas	21528	0.02
Tl	205	1	No Gas	141172	0.00
Tl	203	1	No Gas	60383	0.00
Pb	208	1	No Gas	206821	0.00
U	238	1	No Gas	207453	0.00
Ca	43	2	He	1357	0.17
Sb	121	2	He	36926	0.00
Cu	63	1	No Gas	57421	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	605555	0.39	609455	99.36	70	120	
Ge	72	2	He	339705	0.68	341738	99.41	70	120	
Ge	72	1	No Gas	906433	0.93	909044	99.71	70	120	

Calibration Standard Report

In	115	1	No Gas	1172708	1.89	1213150	96.67	70	120	
Bi	209	1	No Gas	1096759	1.51	1085974	100.99	70	120	

Calibration Standard Report

Sample Table

Sample Name	100/500/10K
Data File Name	015CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:02:18-05:00
Sample Type	CalStd
Level	5
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	186793	0.00
V	51	2	He	297908	0.00
Cr	52	2	He	336166	0.00
Fe	56	2	He	34137713	0.00
Se	78	2	He	5572	0.03
As	75	2	He	50520	0.00
Ca	44	2	He	222846	0.00
Na	23	2	He	6930206	0.00
Mg	24	2	He	3960553	0.00
K	39	2	He	5095244	0.00
Mn	55	2	He	266212	0.00
Co	59	2	He	487354	0.00
Ni	60	2	He	122944	0.00
Cu	63	2	He	324170	0.00
Zn	66	2	He	73988	0.00
Al	27	2	He	24862	0.01
B	11	1	No Gas	440710	0.00
Al	27	1	No Gas	711105	0.00
Si	28	1	No Gas	1882867	0.00
Ag	107	1	No Gas	709762	0.00
Cd	111	1	No Gas	139511	0.00
Sr	88	1	No Gas	1313783	0.00
Mo	95	1	No Gas	258390	0.00
Sn	118	1	No Gas	411528	0.00
Sb	121	1	No Gas	582958	0.00
Ba	137	1	No Gas	207268	0.00
Tl	205	1	No Gas	1492409	0.00
Tl	203	1	No Gas	582561	0.00
Pb	208	1	No Gas	1917711	0.00
U	238	1	No Gas	2212867	0.00
Ca	43	2	He	13347	0.02
Sb	121	2	He	355017	0.00
Cu	63	1	No Gas	538634	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	594653	3.43	609455	97.57	70	120	
Ge	72	2	He	346818	1.28	341738	101.49	70	120	
Ge	72	1	No Gas	907566	2.81	909044	99.84	70	120	

Calibration Standard Report

In	115	1	No Gas	1186094	2.05	1213150	97.77	70	120	
Bi	209	1	No Gas	1106525	2.65	1085974	101.89	70	120	

Calibration Standard Report

Sample Table

Sample Name	200/1000/20K
Data File Name	016CALS.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:04:34-05:00
Sample Type	CalStd
Level	6
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD
Be	9	1	No Gas	362806	0.00
V	51	2	He	584720	0.00
Cr	52	2	He	653138	0.00
Fe	56	2	He	66300264	0.00
Se	78	2	He	10389	0.03
As	75	2	He	98491	0.00
Ca	44	2	He	434981	0.00
Na	23	2	He	13485545	0.00
Mg	24	2	He	7691138	0.00
K	39	2	He	9741391	0.00
Mn	55	2	He	522817	0.00
Co	59	2	He	944586	0.00
Ni	60	2	He	241613	0.00
Cu	63	2	He	629073	0.00
Zn	66	2	He	137783	0.00
Al	27	2	He	47020	0.00
B	11	1	No Gas	930119	0.00
Al	27	1	No Gas	1473107	0.00
Si	28	1	No Gas	3210026	0.00
Ag	107	1	No Gas	1523761	0.00
Cd	111	1	No Gas	272425	0.00
Sr	88	1	No Gas	2550318	0.00
Mo	95	1	No Gas	507068	0.00
Sn	118	1	No Gas	807821	0.00
Sb	121	1	No Gas	1314528	0.00
Ba	137	1	No Gas	404549	0.00
Tl	205	1	No Gas	2897494	0.00
Tl	203	1	No Gas	1145094	0.00
Pb	208	1	No Gas	3923129	0.00
U	238	1	No Gas	4251477	0.00
Ca	43	2	He	25831	0.00
Sb	121	2	He	698783	0.00
Cu	63	1	No Gas	1059787	0.00

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	603187	2.14	609455	98.97	70	120	
Ge	72	2	He	339358	1.19	341738	99.30	70	120	
Ge	72	1	No Gas	877750	1.76	909044	96.56	70	120	

Calibration Standard Report

In	115	1	No Gas	1104810	4.73	1213150	91.07	70	120	
Bi	209	1	No Gas	1073749	1.65	1085974	98.87	70	120	

Initial Calibration Verification (ICV) Report

Sample Table

Sample Name	ICV
Data File Name	018_ICV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:08:50-05:00
Sample Type	ICV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	104.855	6.149	947555	2.51	100	104.9	90	110	
Be	9	1	No Gas	101.873	4.123	191953	0.18	100	101.9	90	110	
V	51	2	He	102.179	0.646	305107	0.18	100	102.2	90	110	
Cr	52	2	He	103.431	0.492	345646	0.38	100	103.4	90	110	
Fe	56	2	He	10219.368	0.628	34632853	0.12	10000	102.2	90	110	
Se	78	2	He	105.249	1.005	5817	0.45	100	105.2	90	110	
As	75	2	He	108.657	0.754	54687	0.24	100	108.7	90	110	
Ca	44	2	He	10181.791	0.497	226406	0.29	10000	101.8	90	110	
Na	23	2	He	10145.959	0.758	7036791	0.45	10000	101.5	90	110	
Mg	24	2	He	10295.152	1.653	4046187	1.28	10000	103.0	90	110	
K	39	2	He	10207.087	0.748	5140384	0.55	10000	102.1	90	110	
Mn	55	2	He	102.748	0.400	274304	0.20	100	102.7	90	110	
Co	59	2	He	103.245	0.773	498605	0.50	100	103.2	90	110	
Ni	60	2	He	103.446	1.355	127458	0.85	100	103.4	90	110	
Cu	63	2	He	103.228	0.762	332469	0.52	100	103.2	90	110	
Zn	66	2	He	105.092	1.555	76740	1.31	100	105.1	90	110	
Al	27	2	He	99.041	2.224	24185	1.67	100	99.0	90	110	
B	11	1	No Gas	459.419	4.183	440774	3.07	500	91.9	90	110	
Al	27	1	No Gas	92.484	0.615	704339	0.37	100	92.5	90	110	
Si	28	1	No Gas	531.473	2.681	1916143	2.04	500	106.3	90	110	
Ag	107	1	No Gas	92.036	2.813	723544	0.80	100	92.0	90	110	
Cd	111	1	No Gas	99.256	3.482	141940	1.50	100	99.3	90	110	
Sr	88	1	No Gas	98.257	2.457	1316921	1.12	100	98.3	90	110	
Mo	95	1	No Gas	94.625	2.511	251657	0.77	100	94.6	90	110	
Sn	118	1	No Gas	100.414	3.022	425836	1.44	100	100.4	90	110	
Sb	121	1	No Gas	91.377	1.105	603606	0.92	100	91.4	90	110	
Ba	137	1	No Gas	99.348	2.204	211084	0.44	100	99.3	90	110	
Tl	205	1	No Gas	104.076	1.068	1563214	0.77	100	104.1	90	110	
Tl	203	1	No Gas	103.012	0.456	610077	0.39	100	103.0	90	110	
Pb	208	1	No Gas	97.053	0.968	1954215	0.89	100	97.1	90	110	
U	238	1	No Gas	102.564	1.864	2264971	1.70	100	102.6	90	110	
Ca	43	2	He	10326.939	0.822	13650	0.50	10000	103.3	90	110	
Sb	121	2	He	104.811	0.777	373533	0.27	100	104.8	90	110	
Ti	47	2	He	107.516	0.829	12923	1.31	100	107.5	90	110	
Cu	63	1	No Gas	100.653	0.901	550403	0.67	100	100.7	90	110	
Se	82	1	No Gas	111.271	21.427	8330	21.69	100	111.3	90	110	ICV Main CR1 Failed

QC ISTD Table

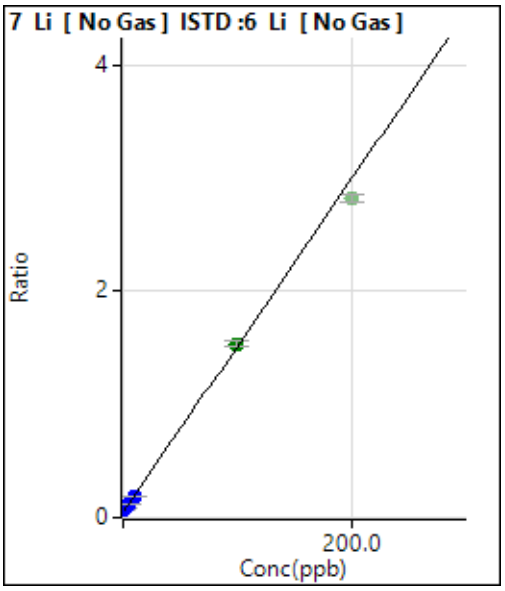
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	621351	4.24	609455	101.95	70	120	
Ge	72	2	He	346251	0.51	341738	101.32	70	120	
Ge	72	1	No Gas	906980	0.23	909044	99.77	70	120	
In	115	1	No Gas	1169963	2.06	1213150	96.44	70	120	
Bi	209	1	No Gas	1113090	0.31	1085974	102.50	70	120	

Calibration for 018_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072122A.b\
Analysis File: 072122A.batch.bin
DA Date-Time: 07/21/2022 20:31:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	011CALB.d	CAL BLK	07/21/2022 13:52:51
2	012CALS.d	2/10/200	07/21/2022 13:55:14
3	013CALS.d	5/25/500	07/21/2022 13:57:35
4	014CALS.d	10/50/100	07/21/2022 13:59:57
5	015CALS.d	100/500/10K	07/21/2022 14:02:18
6	016CALS.d	200/1000/20K	07/21/2022 14:04:34

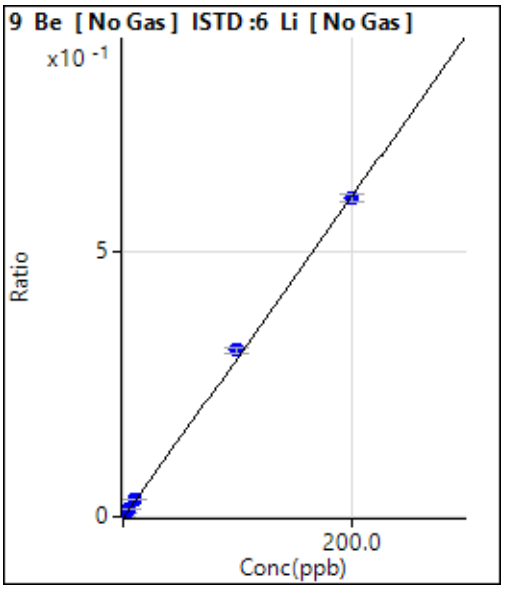
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36769.57	0.0603	P	0.8	
2	☐	2.000	1.700	52055.70	0.0854	P	0.4	-15.0
3	☐	5.000	4.390	78088.23	0.1250	P	0.4	-12.2
4	☐	10.000	9.126	117975.86	0.1948	P	0.6	-8.7
5	☐	100.000	100.124	912530.51	1.5359	A	3.9	0.1
6	☑	200.000		1700771.69	2.8207	A	2.5	

y = 0.0147 * x + 0.0603
R = 1.0000
DL = 0.09995 ppb
BEC = 4.094 ppb

Weight: <None>
Min Conc: <None>

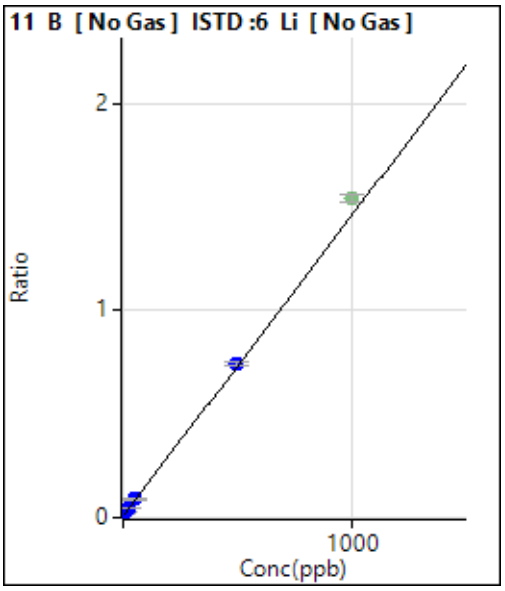


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	70.00	0.0001	P	1.3	
2	☐	2.000	1.982	3737.19	0.0061	P	1.3	-0.9
3	☐	5.000	4.792	9154.70	0.0147	P	0.9	-4.2
4	☐	10.000	10.256	18917.77	0.0312	P	1.2	2.6
5	☐	100.000	103.555	186792.51	0.3144	P	3.9	3.6
6	☐	200.000	198.215	362805.89	0.6017	P	2.3	-0.9

y = 0.0030 * x + 1.1487E-004
R = 0.9998
DL = 0.001424 ppb
BEC = 0.03785 ppb

Weight: <None>
Min Conc: <None>

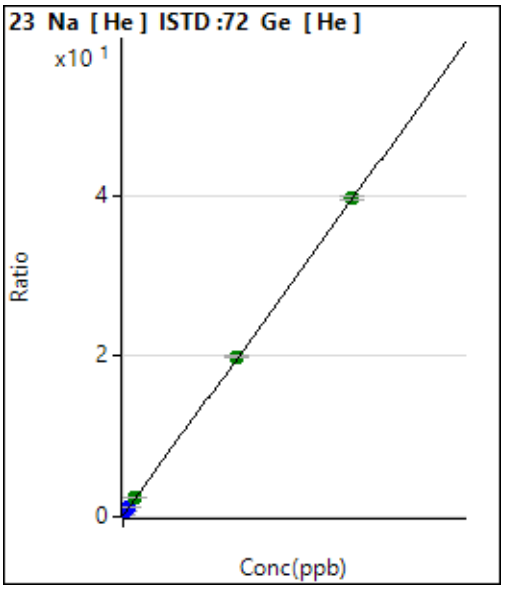
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9566.64	0.0157	P	1.0	
2	☐	10.000	8.908	17449.23	0.0286	P	2.2	-10.9
3	☐	25.000	22.710	30382.90	0.0486	P	3.6	-9.2
4	☐	50.000	50.212	53621.82	0.0886	P	1.0	0.4
5	☐	500.000	500.115	440710.36	0.7413	P	2.5	0.0
6	☑	1000.000		930119.21	1.5422	A	1.9	

y = 0.0015 * x + 0.0157
R = 1.0000
DL = 0.3348 ppb
BEC = 10.82 ppb

Weight: <None>
Min Conc: <None>

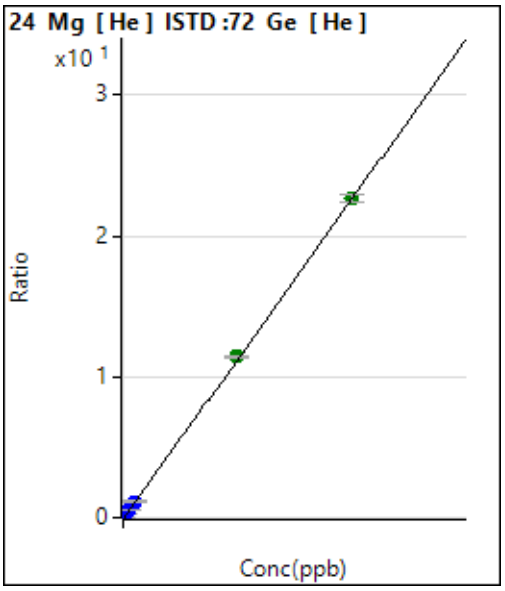


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120294.93	0.3520	P	1.8	
2	☐	200.000	198.600	247349.63	0.7430	P	1.5	-0.7
3	☐	500.000	478.331	444358.27	1.2936	P	0.5	-4.3
4	☐	1000.000	1057.324	826630.25	2.4333	A	1.1	5.7
5	☐	10000.00	9973.583	6930206.35	19.9839	A	1.0	-0.3
6	☐	20000.00	20010.89	13485545.2	39.7412	A	0.9	0.1

y = 0.0020 * x + 0.3520
R = 1.0000
DL = 9.729 ppb
BEC = 178.8 ppb

Weight: <None>
Min Conc: <None>

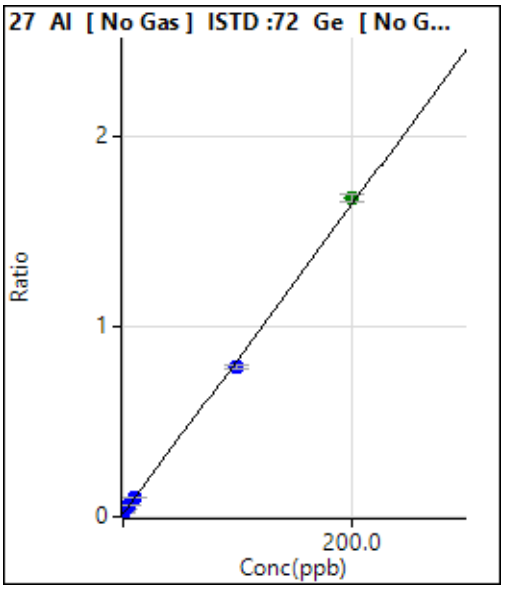
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	240.01	0.0007	P	19.9	
2	☐	200.000	202.362	76703.76	0.2304	P	1.9	1.2
3	☐	500.000	493.407	192616.64	0.5607	P	1.0	-1.3
4	☐	1000.000	1018.652	392987.17	1.1569	P	1.5	1.9
5	☐	10000.00	10060.69	3960552.54	11.4201	A	0.8	0.6
6	☐	20000.00	19968.86	7691138.43	22.6664	A	1.8	-0.2

y = 0.0011 * x + 7.0311E-004
R = 1.0000
DL = 0.3689 ppb
BEC = 0.6195 ppb

Weight: <None>
Min Conc: <None>

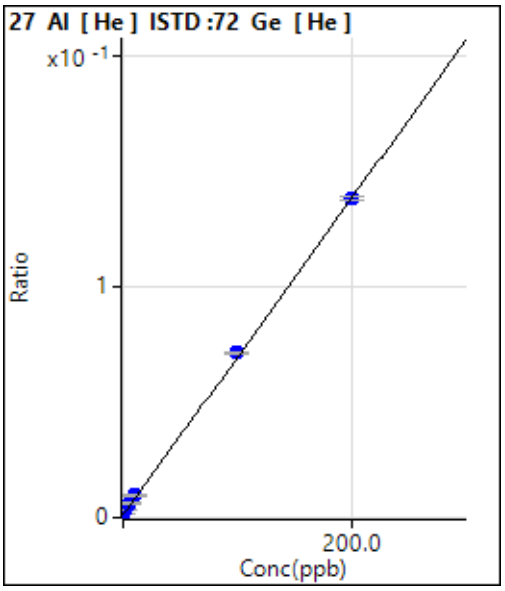


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21791.89	0.0239	P	23.9	
2	☐	2.000	1.610	33554.09	0.0370	P	1.2	-19.5
3	☐	5.000	4.467	56374.27	0.0603	P	1.1	-10.7
4	☐	10.000	9.934	94979.12	0.1048	P	0.3	-0.7
5	☐	100.000	93.383	711105.04	0.7839	P	2.6	-6.6
6	☐	200.000	203.329	1473106.91	1.6787	A	2.1	1.7

y = 0.0081 * x + 0.0239
R = 0.9993
DL = 2.108 ppb
BEC = 2.942 ppb

Weight: <None>
Min Conc: <None>

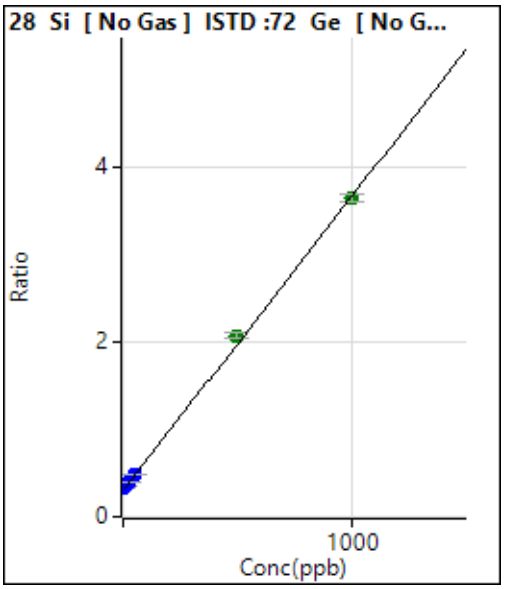
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	610.03	0.0018	P	7.4	
2	☐	2.000	2.574	1183.40	0.0036	P	8.1	28.7
3	☐	5.000	6.285	2096.87	0.0061	P	7.6	25.7
4	☐	10.000	11.684	3333.80	0.0098	P	4.9	16.8
5	☐	100.000	101.713	24862.49	0.0717	P	1.4	1.7
6	☐	200.000	199.021	47019.69	0.1386	P	1.0	-0.5

y = 6.8726E-004 * x + 0.0018
R = 0.9999
DL = 0.5794 ppb
BEC = 2.597 ppb

Weight: <None>
Min Conc: <None>

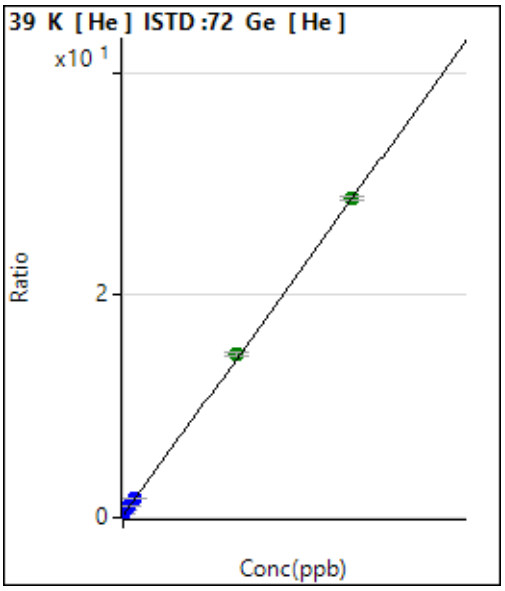


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	291952.32	0.3212	P	0.5	
2	☐	10.000	11.120	324857.87	0.3587	P	1.6	11.2
3	☐	25.000	20.037	363436.05	0.3887	P	0.2	-19.9
4	☐	50.000	49.712	442979.07	0.4888	P	1.6	-0.6
5	☐	500.000	520.487	1882867.06	2.0757	A	2.8	4.1
6	☐	1000.000	989.884	3210026.31	3.6580	A	2.1	-1.0

y = 0.0034 * x + 0.3212
R = 0.9997
DL = 1.346 ppb
BEC = 95.28 ppb

Weight: <None>
Min Conc: <None>

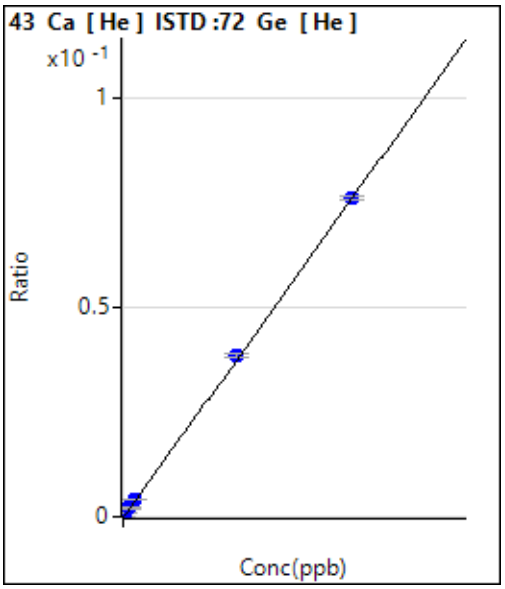
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	112199.76	0.3283	P	0.7	
2	☐	200.000	197.257	202717.44	0.6089	P	0.8	-1.4
3	☐	500.000	464.527	339748.82	0.9890	P	0.6	-7.1
4	☐	1000.000	955.856	573376.54	1.6879	P	0.3	-4.4
5	☐	10000.00	10099.83	5095244.09	14.6935	A	1.9	1.0
6	☐	20000.00	19953.20	9741391.31	28.7081	A	1.2	-0.2

y = 0.0014 * x + 0.3283
R = 1.0000
DL = 4.643 ppb
BEC = 230.8 ppb

Weight: <None>
Min Conc: <None>

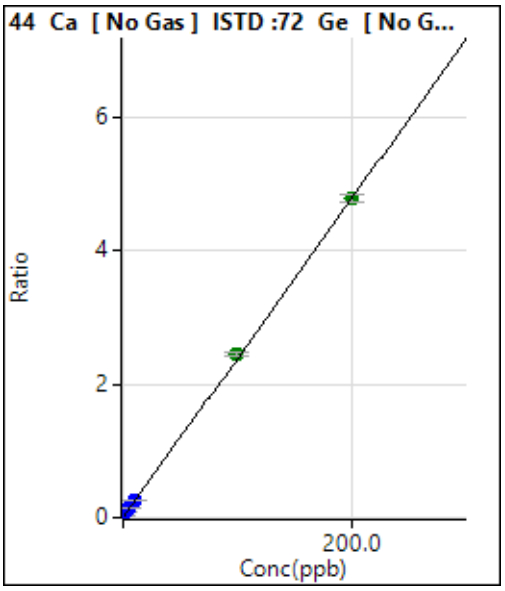


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	88.9	
2	☐	200.000	208.122	286.68	0.0009	P	19.9	4.1
3	☐	500.000	524.615	710.03	0.0021	P	8.9	4.9
4	☐	1000.000	1030.282	1356.75	0.0040	P	3.0	3.0
5	☐	10000.00	10080.91	13346.70	0.0385	P	2.7	0.8
6	☐	20000.00	19957.33	25831.08	0.0761	P	1.3	-0.2

y = 3.8110E-006 * x + 6.8028E-005
R = 1.0000
DL = 47.63 ppb
BEC = 17.85 ppb

Weight: <None>
Min Conc: <None>

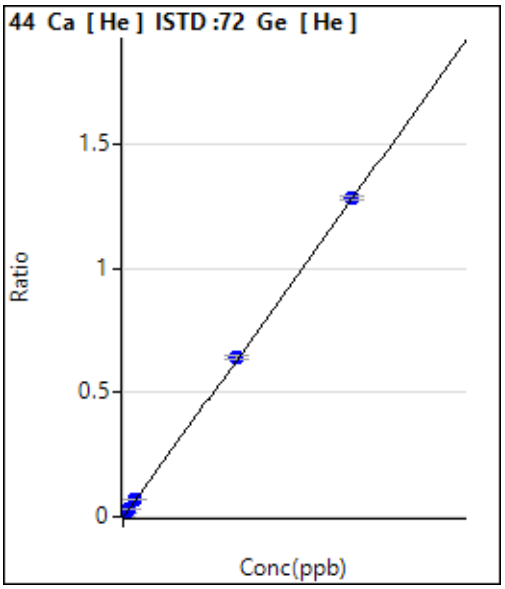
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	25964.83	0.0286	P	1.3	
2	☐	2.000	1.887	66728.30	0.0737	P	0.7	-5.7
3	☐	5.000	4.568	128794.71	0.1378	P	0.8	-8.6
4	☐	10.000	9.948	241426.87	0.2664	P	1.2	-0.5
5	☐	100.000	101.665	2230132.10	2.4586	A	3.0	1.7
6	☐	200.000	199.182	4203021.40	4.7896	A	2.1	-0.4

y = 0.0239 * x + 0.0286
R = 0.9999
DL = 0.04666 ppb
BEC = 1.195 ppb

Weight: <None>
Min Conc: <None>

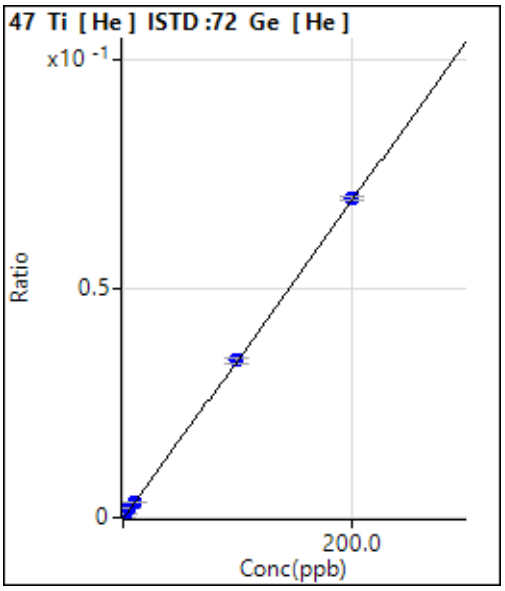


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	796.70	0.0023	P	7.0	
2	☐	200.000	193.446	4897.63	0.0147	P	4.7	-3.3
3	☐	500.000	500.162	11795.19	0.0343	P	1.3	0.0
4	☐	1000.000	1021.629	22999.51	0.0677	P	1.7	2.2
5	☐	10000.00	10005.86	222845.58	0.6426	P	2.1	0.1
6	☐	20000.00	19996.04	434980.58	1.2819	P	1.5	0.0

y = 6.3992E-005 * x + 0.0023
R = 1.0000
DL = 7.708 ppb
BEC = 36.44 ppb

Weight: <None>
Min Conc: <None>

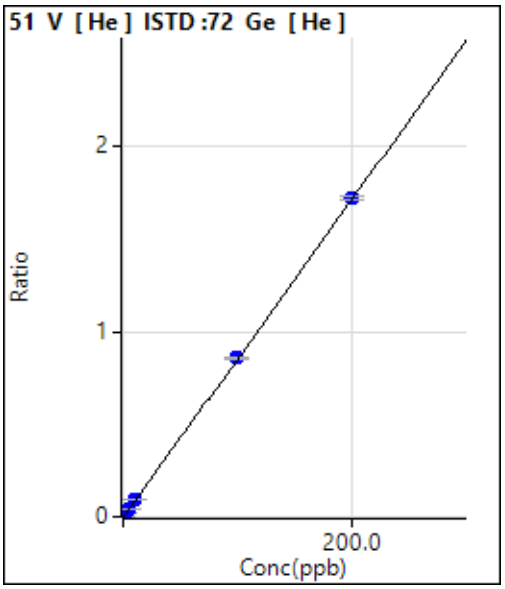
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13.33	0.0000	P	114.0	
2	☐	2.000	2.313	280.01	0.0008	P	28.6	15.7
3	☐	5.000	5.623	683.37	0.0020	P	6.9	12.5
4	☐	10.000	9.453	1126.73	0.0033	P	2.7	-5.5
5	☐	100.000	98.540	11861.96	0.0342	P	3.4	-1.5
6	☐	200.000	200.738	23633.94	0.0696	P	0.9	0.4

y = 3.4677E-004 * x + 3.8764E-005
R = 0.9999
DL = 0.3823 ppb
BEC = 0.1118 ppb

Weight: <None>
Min Conc: <None>

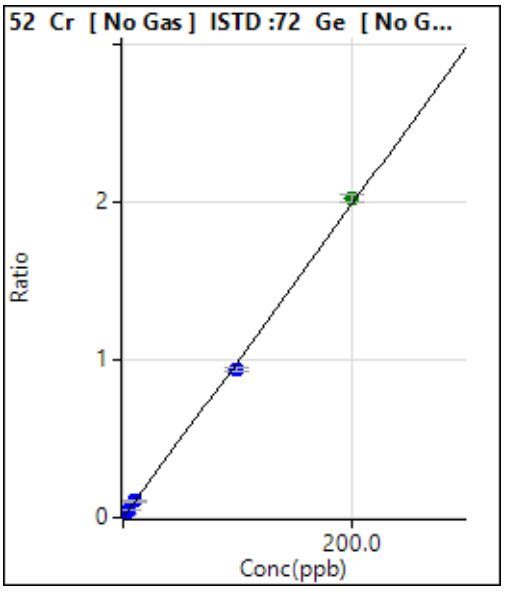


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1128.94	0.0033	P	3.7	
2	☐	2.000	2.058	6986.26	0.0210	P	1.2	2.9
3	☐	5.000	4.967	15793.57	0.0460	P	2.8	-0.7
4	☐	10.000	10.355	31343.53	0.0923	P	0.5	3.5
5	☐	100.000	99.604	297908.46	0.8591	P	1.3	-0.4
6	☐	200.000	200.180	584719.70	1.7232	P	1.4	0.1

y = 0.0086 * x + 0.0033
R = 1.0000
DL = 0.04312 ppb
BEC = 0.3846 ppb

Weight: <None>
Min Conc: <None>

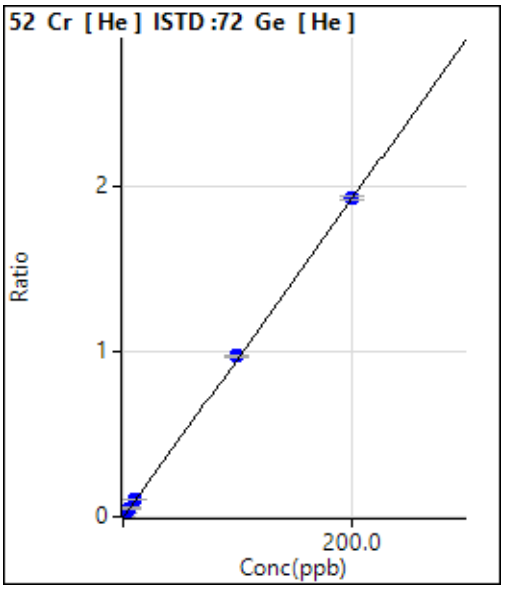
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8409.39	0.0093	P	3.1	
2	☐	2.000	1.903	25517.33	0.0282	P	3.2	-4.8
3	☐	5.000	4.509	50560.27	0.0541	P	1.2	-9.8
4	☐	10.000	9.517	94132.06	0.1039	P	2.0	-4.8
5	☐	100.000	94.023	856229.18	0.9439	P	2.7	-6.0
6	☐	200.000	203.026	1779026.53	2.0275	A	3.0	1.5

y = 0.0099 * x + 0.0093
R = 0.9994
DL = 0.08699 ppb
BEC = 0.9308 ppb

Weight: <None>
Min Conc: <None>

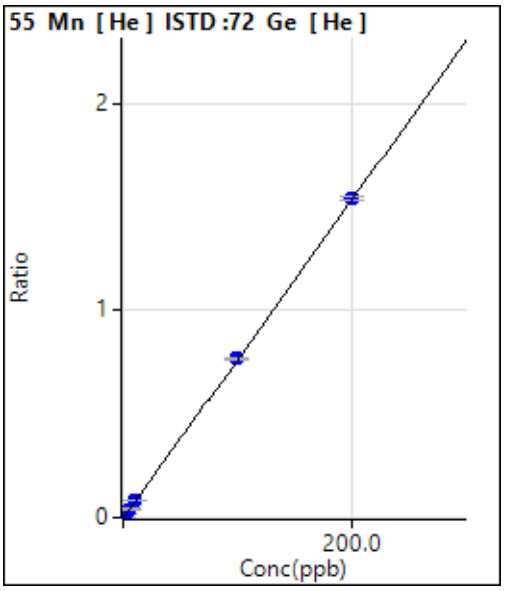


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1170.07	0.0034	P	2.0	
2	☐	2.000	2.168	8082.53	0.0243	P	1.5	8.4
3	☐	5.000	5.056	17881.92	0.0521	P	4.0	1.1
4	☐	10.000	10.361	35015.07	0.1031	P	2.5	3.6
5	☐	100.000	100.428	336166.26	0.9694	P	1.2	0.4
6	☐	200.000	199.765	653138.45	1.9248	P	1.4	-0.1

y = 0.0096 * x + 0.0034
R = 1.0000
DL = 0.0218 ppb
BEC = 0.3559 ppb

Weight: <None>
Min Conc: <None>

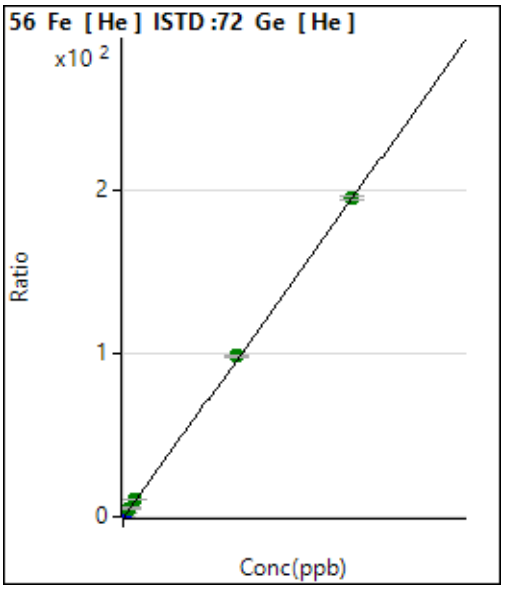
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1046.73	0.0031	P	9.2	
2	☐	2.000	2.093	6371.61	0.0191	P	5.3	4.7
3	☐	5.000	5.000	14244.27	0.0415	P	1.8	0.0
4	☐	10.000	10.205	27668.26	0.0814	P	1.7	2.1
5	☐	100.000	99.551	266212.19	0.7677	P	1.2	-0.4
6	☐	200.000	200.213	522817.42	1.5408	P	1.6	0.1

y = 0.0077 * x + 0.0031
R = 1.0000
DL = 0.1106 ppb
BEC = 0.3987 ppb

Weight: <None>
Min Conc: <None>

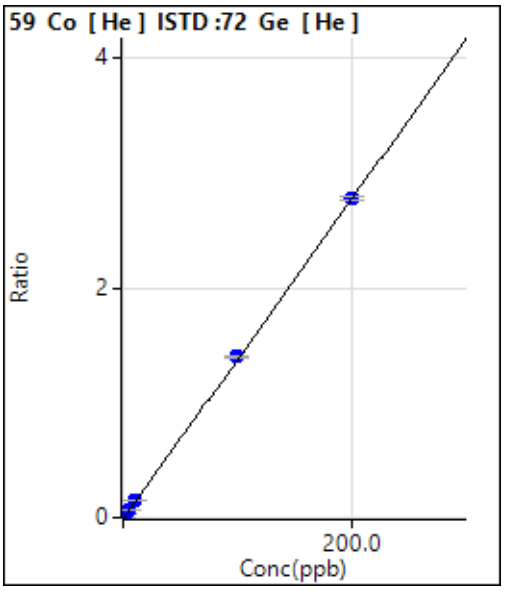


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13056.45	0.0382	P	2.8	
2	☐	200.000	197.283	655342.93	1.9684	P	0.5	-1.4
3	☐	500.000	536.685	1816787.73	5.2891	A	1.8	7.3
4	☐	1000.000	1074.128	3582913.69	10.5475	A	0.7	7.4
5	☐	10000.00	10058.21	34137712.8	98.4477	A	2.0	0.6
6	☐	20000.00	19966.29	66300264.0	195.388	A	1.5	-0.2

y = 0.0098 * x + 0.0382
R = 1.0000
DL = 0.3329 ppb
BEC = 3.905 ppb

Weight: <None>
Min Conc: <None>

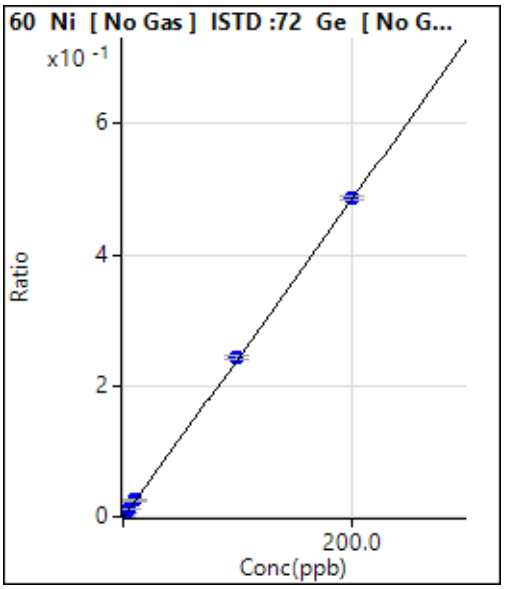
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	50.00	0.0001	P	53.4	
2	☐	2.000	1.963	9163.23	0.0275	P	1.5	-1.9
3	☐	5.000	5.090	24432.17	0.0711	P	4.7	1.8
4	☐	10.000	10.582	50179.17	0.1477	P	1.3	5.8
5	☐	100.000	100.755	487354.46	1.4053	P	0.8	0.8
6	☐	200.000	199.592	944586.47	2.7837	P	1.5	-0.2

y = 0.0139 * x + 1.4662E-004
R = 1.0000
DL = 0.01685 ppb
BEC = 0.01051 ppb

Weight: <None>
Min Conc: <None>

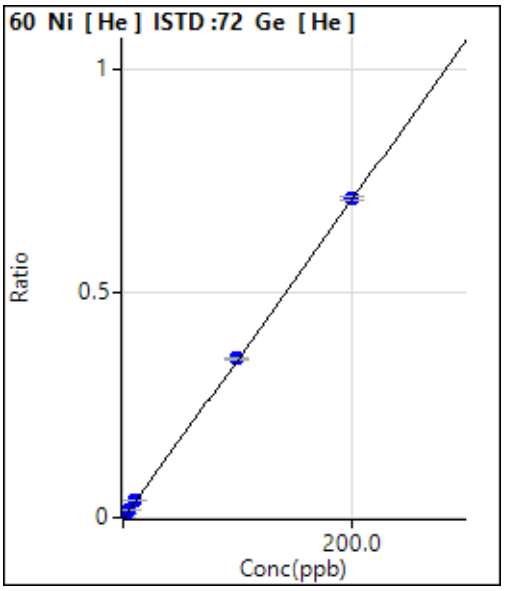


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	303.34	0.0003	P	10.4	
2	☐	2.000	1.918	4524.16	0.0050	P	0.7	-4.1
3	☐	5.000	4.819	11261.54	0.0120	P	0.7	-3.6
4	☐	10.000	10.267	22916.22	0.0253	P	5.0	2.7
5	☐	100.000	99.682	220044.58	0.2426	P	2.7	-0.3
6	☐	200.000	200.151	427156.45	0.4867	P	1.6	0.1

y = 0.0024 * x + 3.3393E-004
R = 1.0000
DL = 0.04303 ppb
BEC = 0.1374 ppb

Weight: <None>
Min Conc: <None>

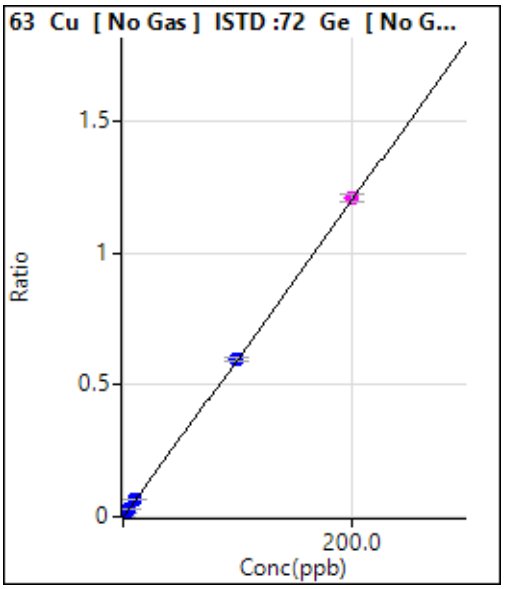
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	103.33	0.0003	P	15.5	
2	☐	2.000	2.044	2520.28	0.0076	P	1.9	2.2
3	☐	5.000	4.946	6144.82	0.0179	P	2.5	-1.1
4	☐	10.000	10.532	12822.90	0.0378	P	3.0	5.3
5	☐	100.000	99.624	122944.42	0.3545	P	1.7	-0.4
6	☐	200.000	200.162	241613.25	0.7120	P	1.0	0.1

y = 0.0036 * x + 3.0260E-004
R = 1.0000
DL = 0.03946 ppb
BEC = 0.0851 ppb

Weight: <None>
Min Conc: <None>

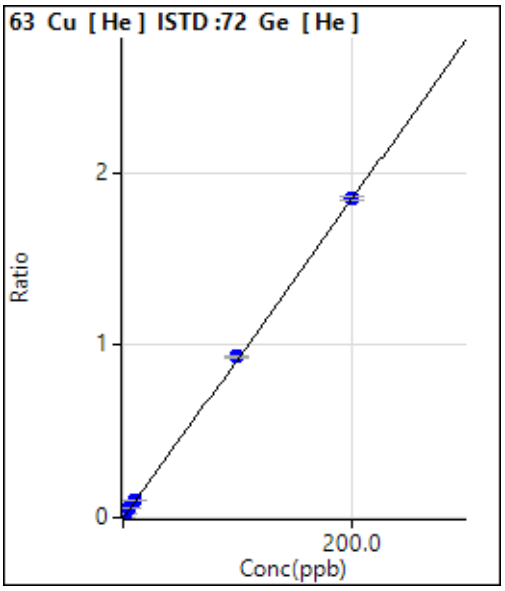


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2863.68	0.0032	P	9.8	
2	☐	2.000	1.987	13653.68	0.0151	P	1.8	-0.6
3	☐	5.000	4.748	29572.38	0.0316	P	0.9	-5.0
4	☐	10.000	10.038	57421.08	0.0634	P	2.6	0.4
5	☐	100.000	98.471	538634.41	0.5938	P	2.5	-1.5
6	☐	200.000	200.769	1059787.33	1.2073	M	2.4	0.4

y = 0.0060 * x + 0.0032
R = 1.0000
DL = 0.1542 ppb
BEC = 0.5257 ppb

Weight: <None>
Min Conc: <None>

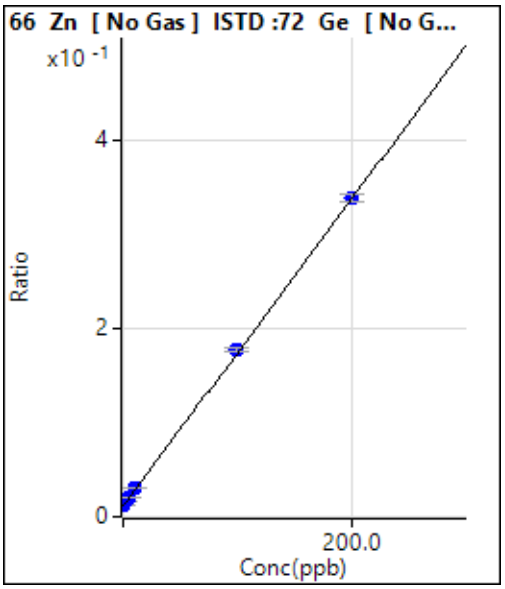
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1416.78	0.0041	P	10.0	
2	☐	2.000	2.114	7899.10	0.0237	P	1.8	5.7
3	☐	5.000	5.126	17735.22	0.0516	P	1.2	2.5
4	☐	10.000	10.648	34908.43	0.1028	P	1.9	6.5
5	☐	100.000	100.486	324169.71	0.9348	P	1.5	0.5
6	☐	200.000	199.720	629072.50	1.8539	P	1.3	-0.1

y = 0.0093 * x + 0.0041
R = 1.0000
DL = 0.1345 ppb
BEC = 0.4478 ppb

Weight: <None>
Min Conc: <None>

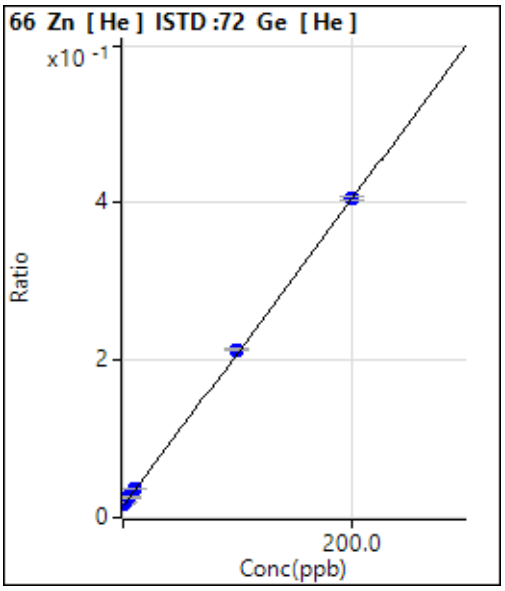


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	11811.97	0.0130	P	3.9	
2	☐	2.000	1.984	14694.89	0.0162	P	1.1	-0.8
3	☐	5.000	4.940	19671.30	0.0210	P	2.6	-1.2
4	☐	10.000	10.360	27080.68	0.0299	P	1.7	3.6
5	☐	100.000	100.746	160719.11	0.1772	P	2.8	0.7
6	☐	200.000	199.610	296865.13	0.3383	P	2.0	-0.2

y = 0.0016 * x + 0.0130
R = 1.0000
DL = 0.922 ppb
BEC = 7.971 ppb

Weight: <None>
Min Conc: <None>

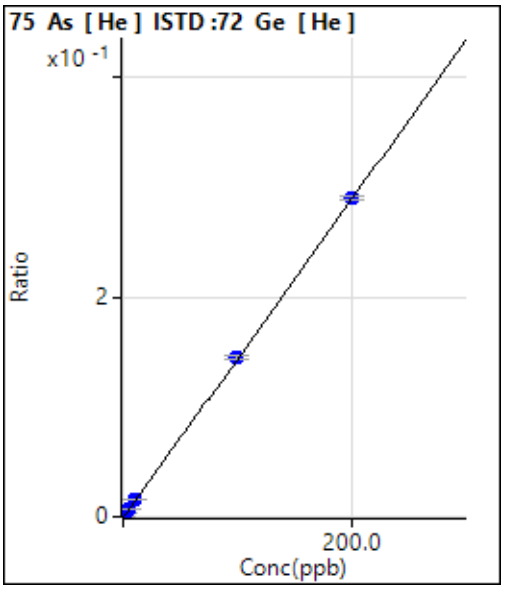
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5641.27	0.0165	P	3.1	
2	☐	2.000	1.688	6591.69	0.0198	P	0.5	-15.6
3	☐	5.000	4.771	8869.73	0.0258	P	3.2	-4.6
4	☐	10.000	10.566	12612.68	0.0371	P	2.0	5.7
5	☐	100.000	100.835	73987.82	0.2133	P	0.8	0.8
6	☐	200.000	199.563	137783.43	0.4060	P	0.7	-0.2

y = 0.0020 * x + 0.0165
R = 1.0000
DL = 0.7896 ppb
BEC = 8.456 ppb

Weight: <None>
Min Conc: <None>

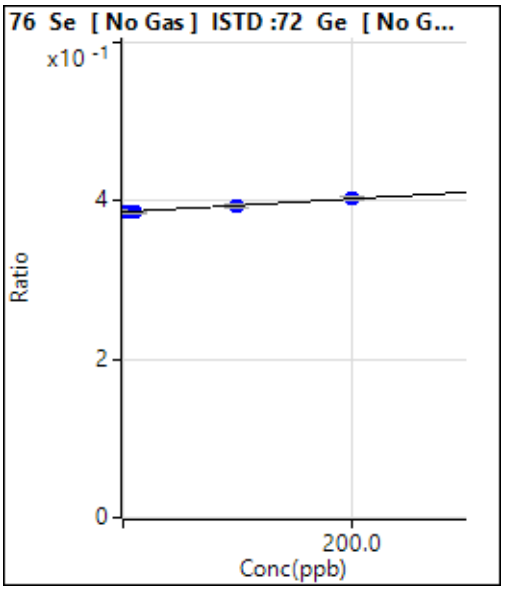


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	116.66	0.0003	P	26.9	
2	☐	2.000	1.976	1067.83	0.0032	P	2.9	-1.2
3	☐	5.000	4.992	2604.71	0.0076	P	2.5	-0.2
4	☐	10.000	10.374	5227.70	0.0154	P	2.8	3.7
5	☐	100.000	100.210	50519.60	0.1457	P	2.1	0.2
6	☐	200.000	199.877	98490.73	0.2903	P	1.3	-0.1

y = 0.0015 * x + 3.4191E-004
R = 1.0000
DL = 0.1902 ppb
BEC = 0.2357 ppb

Weight: <None>
Min Conc: <None>

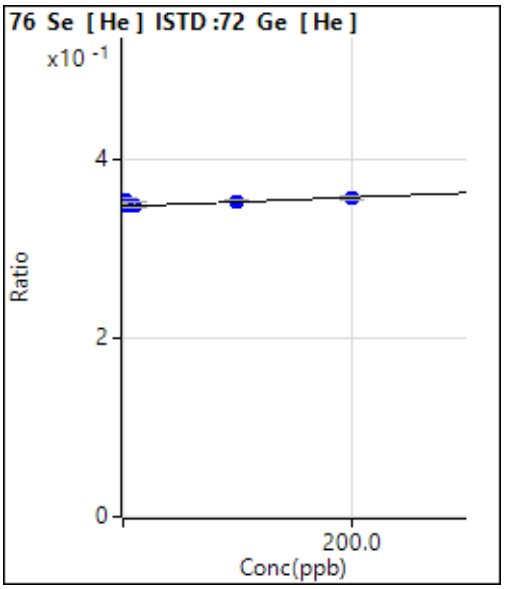
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	350854.36	0.3860	P	0.4	
2	☐	2.000	16.215	350820.19	0.3873	P	1.3	710.7
3	☐	5.000	3.327	361115.80	0.3862	P	0.8	-33.5
4	☐	10.000	-7.823	349248.20	0.3853	P	0.6	-178.2
5	☐	100.000	87.529	356872.77	0.3933	P	1.1	-12.5
6	☐	200.000	207.026	353963.92	0.4033	P	0.8	3.5

y = 8.3643E-005 * x + 0.3860
R = 0.9900
DL = 59.61 ppb
BEC = 4614 ppb

Weight: <None>
Min Conc: <None>

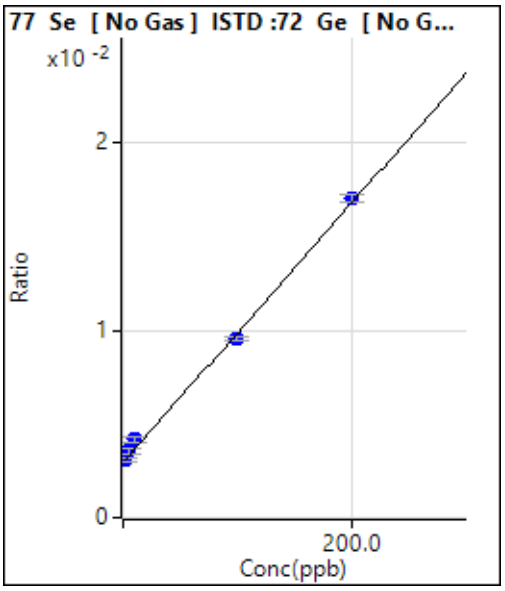


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	118826.42	0.3477	P	0.9	
2	☐	2.000	136.952	118093.22	0.3547	P	0.9	6747.6
3	☐	5.000	37.024	120094.50	0.3496	P	0.9	640.5
4	☐	10.000	31.626	118671.87	0.3493	P	1.6	216.3
5	☐	100.000	120.825	122730.98	0.3539	P	0.5	20.8
6	☐	200.000	186.356	121244.77	0.3572	P	1.5	-6.8

y = 5.1015E-005 * x + 0.3477
R = 0.7727
DL = 174.4 ppb
BEC = 6816 ppb

Weight: <None>
Min Conc: <None>

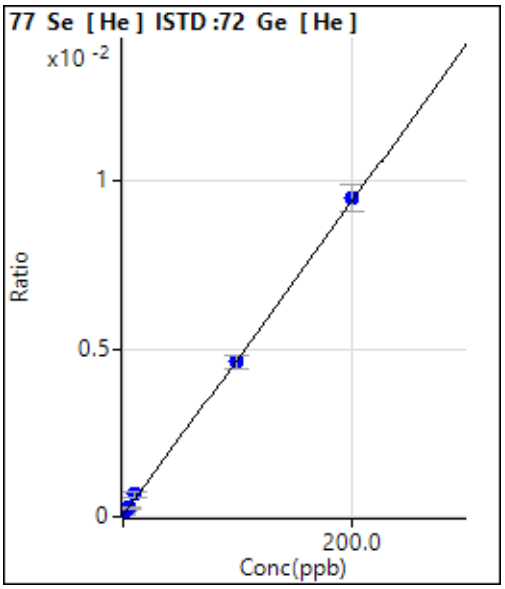
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2773.66	0.0031	P	6.6	
2	☐	2.000	0.554	2800.35	0.0031	P	4.5	-72.3
3	☐	5.000	7.462	3337.14	0.0036	P	7.3	49.2
4	☐	10.000	16.218	3783.94	0.0042	P	6.5	62.2
5	☐	100.000	94.356	8702.95	0.0096	P	2.6	-5.6
6	☐	200.000	202.464	14985.21	0.0171	P	2.0	1.2

y = 6.9227E-005 * x + 0.0031
R = 0.9988
DL = 8.78 ppb
BEC = 44.1 ppb

Weight: <None>
Min Conc: <None>

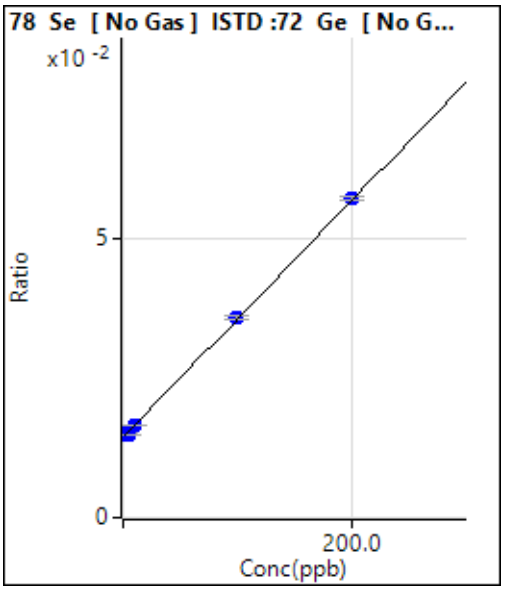


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	21.3	
2	☐	2.000	2.188	60.00	0.0002	P	33.4	9.4
3	☐	5.000	3.944	90.00	0.0003	P	33.9	-21.1
4	☐	10.000	12.591	226.67	0.0007	P	23.7	25.9
5	☐	100.000	96.947	1600.12	0.0046	P	8.4	-3.1
6	☐	200.000	201.421	3220.45	0.0095	P	9.0	0.7

y = 4.6752E-005 * x + 7.7986E-005
R = 0.9997
DL = 1.065 ppb
BEC = 1.668 ppb

Weight: <None>
Min Conc: <None>

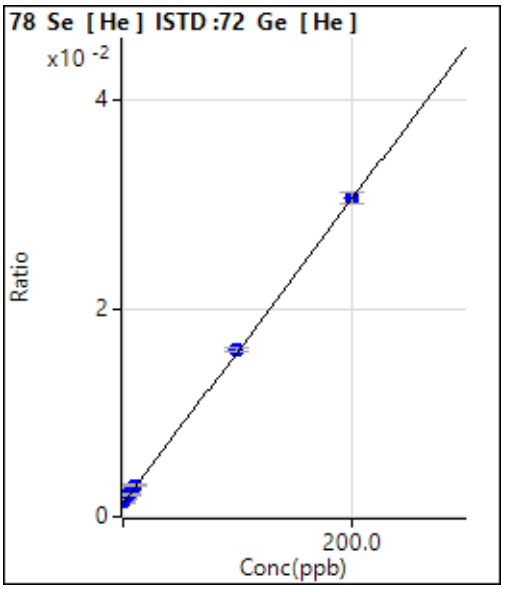
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	13400.22	0.0147	P	1.7	
2	☐	2.000	1.788	13693.83	0.0151	P	0.7	-10.6
3	☐	5.000	0.669	13914.06	0.0149	P	0.9	-86.6
4	☐	10.000	8.196	14931.88	0.0165	P	1.4	-18.0
5	☐	100.000	99.096	32379.14	0.0357	P	2.2	-0.9
6	☐	200.000	200.652	50163.62	0.0572	P	1.6	0.3

y = 2.1140E-004 * x + 0.0147
R = 0.9998
DL = 3.645 ppb
BEC = 69.73 ppb

Weight: <None>
Min Conc: <None>

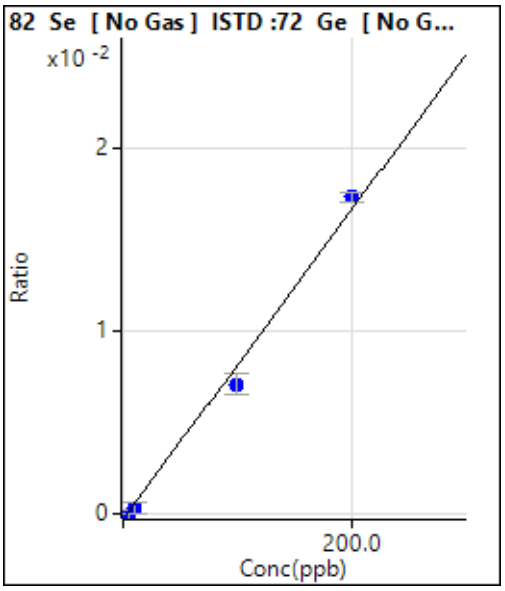


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	486.68	0.0014	P	7.6	
2	☐	2.000	2.382	590.01	0.0018	P	6.8	19.1
3	☐	5.000	4.999	740.02	0.0022	P	3.3	0.0
4	☐	10.000	10.782	1018.71	0.0030	P	4.6	7.8
5	☐	100.000	100.225	5571.83	0.0161	P	2.0	0.2
6	☐	200.000	199.844	10388.68	0.0306	P	4.0	-0.1

y = 1.4610E-004 * x + 0.0014
R = 1.0000
DL = 2.236 ppb
BEC = 9.748 ppb

Weight: <None>
Min Conc: <None>

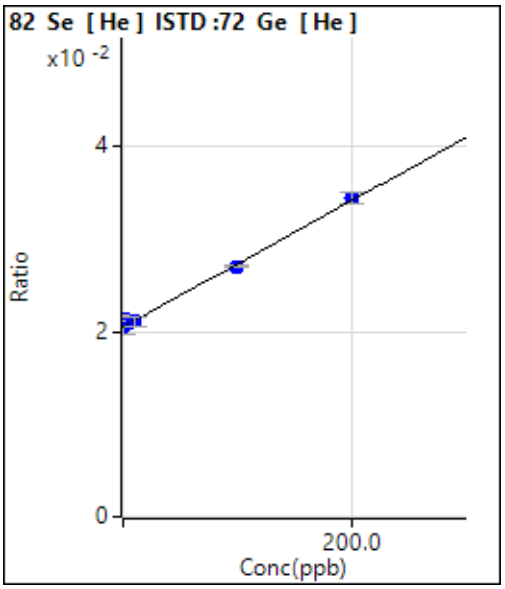
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-197.63	-0.0002	P	-153.	
2	☐	2.000	0.528	-160.30	-0.0002	P	-283.	-73.6
3	☐	5.000	1.157	-115.27	-0.0001	P	-524.	-76.9
4	☐	10.000	5.904	249.67	0.0003	P	209.5	-41.0
5	☐	100.000	86.268	6422.21	0.0071	P	15.5	-13.7
6	☐	200.000	207.182	15179.76	0.0173	P	3.1	3.6

y = 8.4547E-005 * x - 2.2014E-004
R = 0.9970
DL = 12.01 ppb
BEC = -2.604 ppb

Weight: <None>
Min Conc: <None>

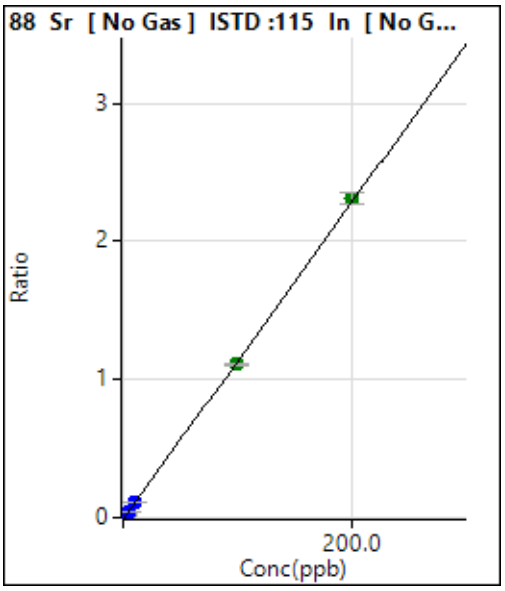


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7048.65	0.0206	P	9.4	
2	☐	2.000	12.446	7152.03	0.0215	P	2.2	522.3
3	☐	5.000	3.790	7175.37	0.0209	P	3.2	-24.2
4	☐	10.000	7.207	7175.38	0.0211	P	4.9	-27.9
5	☐	100.000	94.470	9393.42	0.0271	P	0.9	-5.5
6	☐	200.000	202.830	11705.28	0.0345	P	3.8	1.4

y = 6.8312E-005 * x + 0.0206
R = 0.9977
DL = 84.9 ppb
BEC = 302 ppb

Weight: <None>
Min Conc: <None>

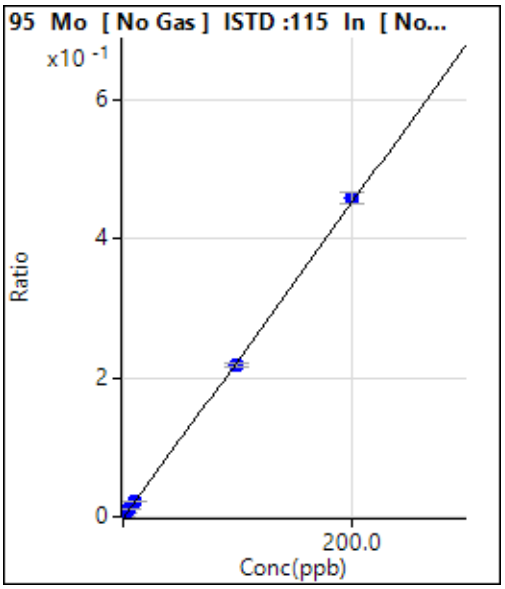
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	573.36	0.0005	P	20.2	
2	☐	2.000	1.790	25160.64	0.0210	P	4.7	-10.5
3	☐	5.000	4.160	60861.54	0.0481	P	1.4	-16.8
4	☐	10.000	9.249	124786.68	0.1064	P	0.8	-7.5
5	☐	100.000	96.666	1313783.00	1.1077	A	1.4	-3.3
6	☐	200.000	201.727	2550317.88	2.3111	A	3.9	0.9

y = 0.0115 * x + 4.7408E-004
R = 0.9998
DL = 0.02513 ppb
BEC = 0.04139 ppb

Weight: <None>
Min Conc: <None>

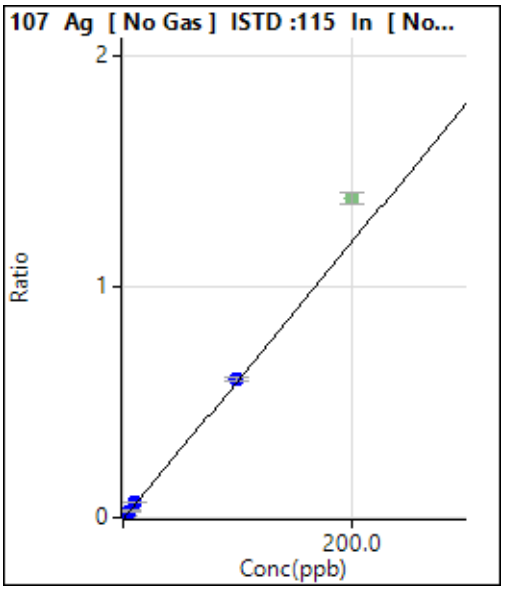


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	46.67	0.0000	P	42.4	
2	☐	2.000	1.923	5284.49	0.0044	P	8.6	-3.9
3	☐	5.000	4.455	12859.72	0.0102	P	3.1	-10.9
4	☐	10.000	9.967	26623.51	0.0227	P	1.6	-0.3
5	☐	100.000	95.840	258390.00	0.2179	P	2.8	-4.2
6	☐	200.000	202.096	507067.92	0.4595	P	3.8	1.0

y = 0.0023 * x + 3.8228E-005
R = 0.9997
DL = 0.02138 ppb
BEC = 0.01681 ppb

Weight: <None>
Min Conc: <None>

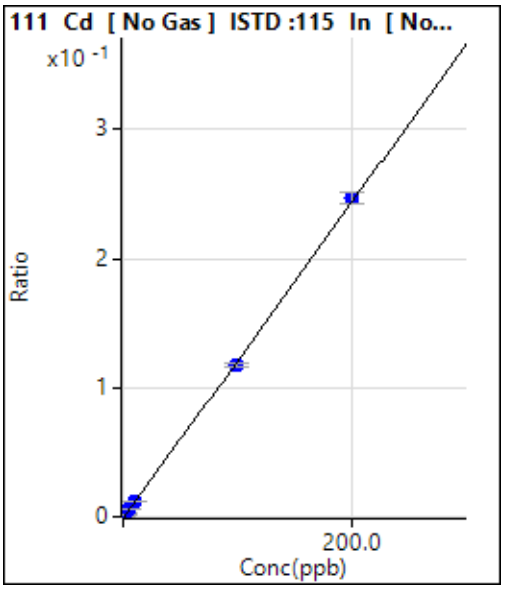
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	840.04	0.0007	P	2.4	
2	☐	2.000	1.900	14461.43	0.0121	P	3.3	-5.0
3	☐	5.000	4.704	36450.50	0.0288	P	4.1	-5.9
4	☐	10.000	10.570	74928.30	0.0639	P	2.7	5.7
5	☐	100.000	99.960	709762.36	0.5986	P	1.9	0.0
6	☑	200.000		1523760.97	1.3807	A	3.7	

y = 0.0060 * x + 6.9271E-004
R = 1.0000
DL = 0.008278 ppb
BEC = 0.1158 ppb

Weight: <None>
Min Conc: <None>

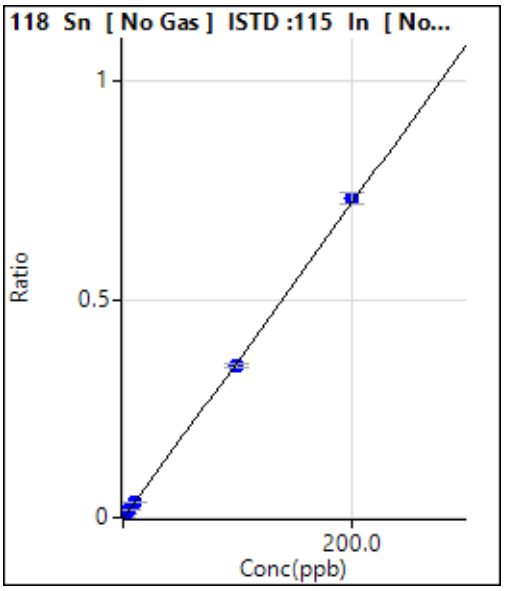


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	173.2	
2	☐	2.000	1.895	2783.68	0.0023	P	11.8	-5.3
3	☐	5.000	4.378	6778.49	0.0054	P	4.5	-12.4
4	☐	10.000	10.013	14361.36	0.0123	P	4.4	0.1
5	☐	100.000	96.217	139511.34	0.1177	P	2.7	-3.8
6	☐	200.000	201.907	272424.91	0.2469	P	4.1	1.0

y = 0.0012 * x + 8.2256E-006
R = 0.9998
DL = 0.03495 ppb
BEC = 0.006727 ppb

Weight: <None>
Min Conc: <None>

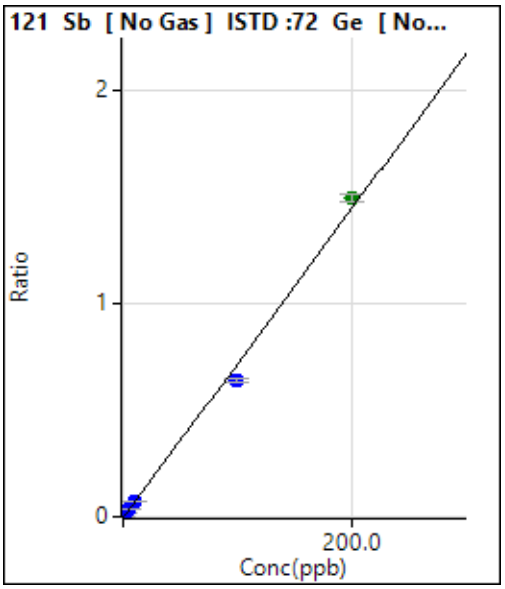
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1186.74	0.0010	P	10.4	
2	☐	2.000	1.877	9320.13	0.0078	P	2.3	-6.1
3	☐	5.000	4.395	21341.02	0.0169	P	1.3	-12.1
4	☐	10.000	9.823	42786.64	0.0365	P	4.8	-1.8
5	☐	100.000	95.700	411527.57	0.3471	P	2.3	-4.3
6	☐	200.000	202.175	807820.67	0.7321	P	4.0	1.1

y = 0.0036 * x + 9.7983E-004
R = 0.9997
DL = 0.08431 ppb
BEC = 0.2709 ppb

Weight: <None>
Min Conc: <None>

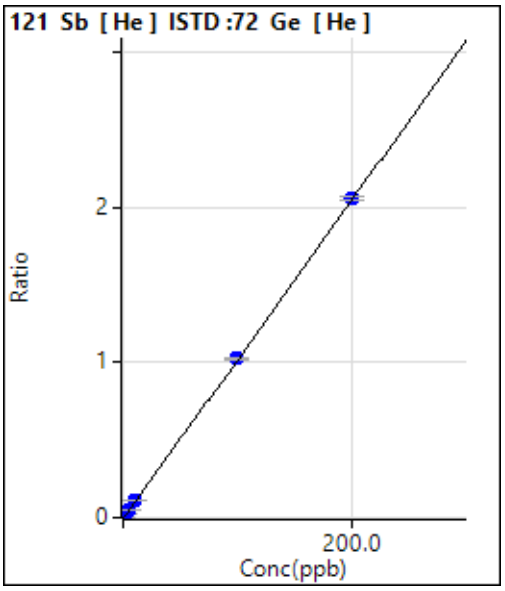


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1450.11	0.0016	P	4.3	
2	☐	2.000	1.745	12926.59	0.0143	P	2.2	-12.8
3	☐	5.000	4.438	31641.64	0.0338	P	1.7	-11.2
4	☐	10.000	9.231	62237.58	0.0687	P	1.8	-7.7
5	☐	100.000	88.234	582958.44	0.6427	P	3.0	-11.8
6	☐	200.000	205.938	1314527.77	1.4979	A	1.8	3.0

y = 0.0073 * x + 0.0016
R = 0.9977
DL = 0.02799 ppb
BEC = 0.2195 ppb

Weight: <None>
Min Conc: <None>

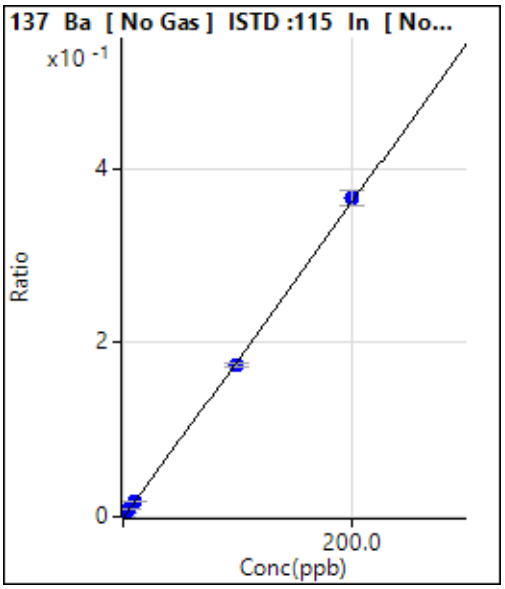
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	723.37	0.0021	P	12.7	
2	☐	2.000	2.106	7909.20	0.0238	P	2.3	5.3
3	☐	5.000	4.935	18139.45	0.0528	P	5.4	-1.3
4	☐	10.000	10.375	36925.61	0.1087	P	0.4	3.8
5	☐	100.000	99.454	355017.26	1.0238	P	1.7	-0.5
6	☐	200.000	200.255	698782.83	2.0593	P	1.1	0.1

y = 0.0103 * x + 0.0021
R = 1.0000
DL = 0.07859 ppb
BEC = 0.206 ppb

Weight: <None>
Min Conc: <None>

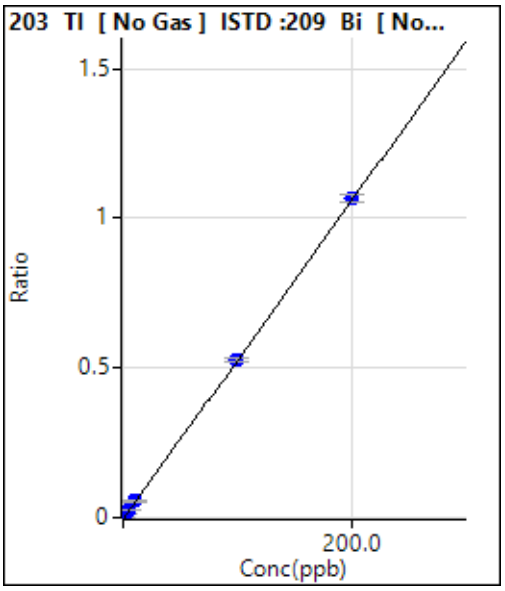


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	120.00	0.0001	P	7.3	
2	☐	2.000	1.881	4210.77	0.0035	P	8.3	-6.0
3	☐	5.000	4.416	10264.23	0.0081	P	2.8	-11.7
4	☐	10.000	10.058	21528.15	0.0184	P	3.8	0.6
5	☐	100.000	96.229	207267.91	0.1748	P	2.6	-3.8
6	☐	200.000	201.898	404549.16	0.3667	P	4.2	0.9

y = 0.0018 * x + 9.8878E-005
R = 0.9998
DL = 0.01194 ppb
BEC = 0.05446 ppb

Weight: <None>
Min Conc: <None>

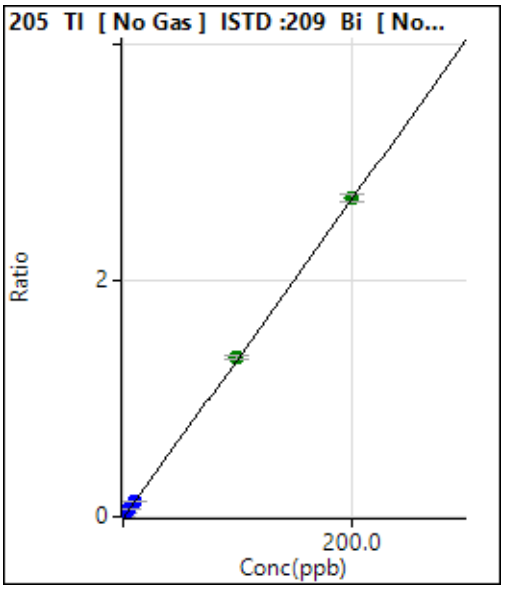
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	24.7	
2	☐	2.000	1.932	11348.66	0.0104	P	1.1	-3.4
3	☐	5.000	4.789	28846.92	0.0256	P	0.2	-4.2
4	☐	10.000	10.329	60382.61	0.0551	P	2.0	3.3
5	☐	100.000	98.991	582560.81	0.5267	P	2.6	-1.0
6	☐	200.000	200.494	1145093.65	1.0667	P	1.8	0.2

y = 0.0053 * x + 1.1648E-004
R = 1.0000
DL = 0.01619 ppb
BEC = 0.0219 ppb

Weight: <None>
Min Conc: <None>

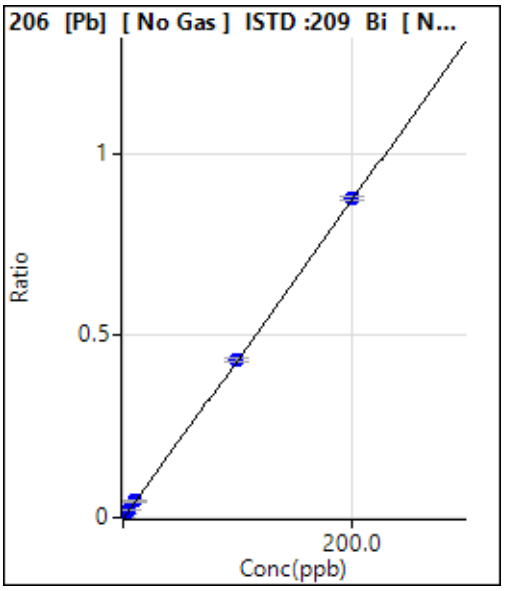


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0002	P	16.7	
2	☐	2.000	1.877	27911.58	0.0256	P	1.4	-6.2
3	☐	5.000	4.547	69436.09	0.0616	P	0.9	-9.1
4	☐	10.000	9.522	141172.24	0.1287	P	1.3	-4.8
5	☐	100.000	100.001	1492409.46	1.3494	A	3.1	0.0
6	☐	200.000	200.036	2897494.02	2.6991	A	2.1	0.0

y = 0.0135 * x + 2.4856E-004
R = 1.0000
DL = 0.009249 ppb
BEC = 0.01842 ppb

Weight: <None>
Min Conc: <None>

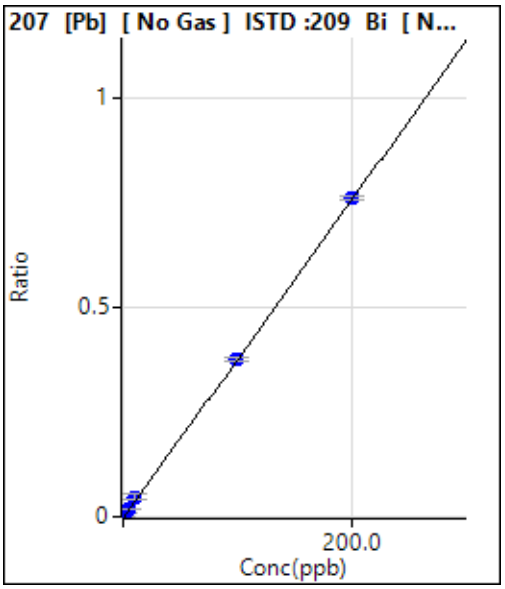
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0002	P	19.1	
2	☐	2.000	2.024	9897.40	0.0091	P	3.7	1.2
3	☐	5.000	4.881	24310.72	0.0216	P	2.0	-2.4
4	☐	10.000	10.230	49324.47	0.0450	P	1.4	2.3
5	☐	100.000	99.139	479979.56	0.4340	P	2.6	-0.9
6	☐	200.000	200.422	941647.33	0.8771	P	1.7	0.2

y = 0.0044 * x + 2.1156E-004
R = 1.0000
DL = 0.02769 ppb
BEC = 0.04835 ppb

Weight: <None>
Min Conc: <None>

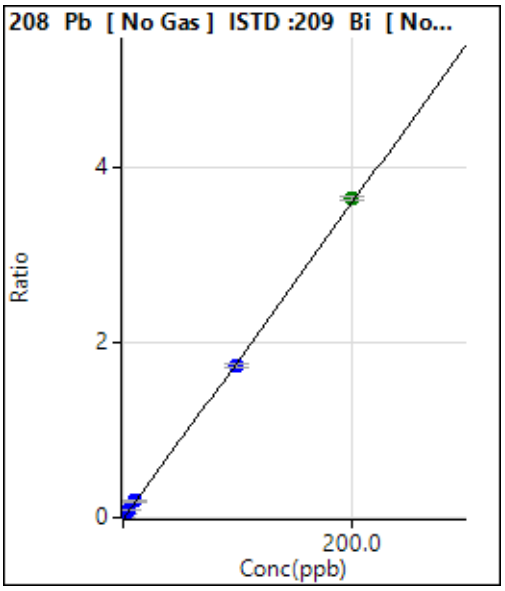


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.67	0.0002	P	19.1	
2	☐	2.000	2.011	8589.76	0.0079	P	2.9	0.5
3	☐	5.000	4.890	21214.97	0.0188	P	3.2	-2.2
4	☐	10.000	12.504	52489.54	0.0478	P	24.7	25.0
5	☐	100.000	99.093	417277.42	0.3773	P	2.3	-0.9
6	☐	200.000	200.331	818590.98	0.7625	P	1.1	0.2

y = 0.0038 * x + 2.1770E-004
R = 0.9999
DL = 0.03273 ppb
BEC = 0.05722 ppb

Weight: <None>
Min Conc: <None>

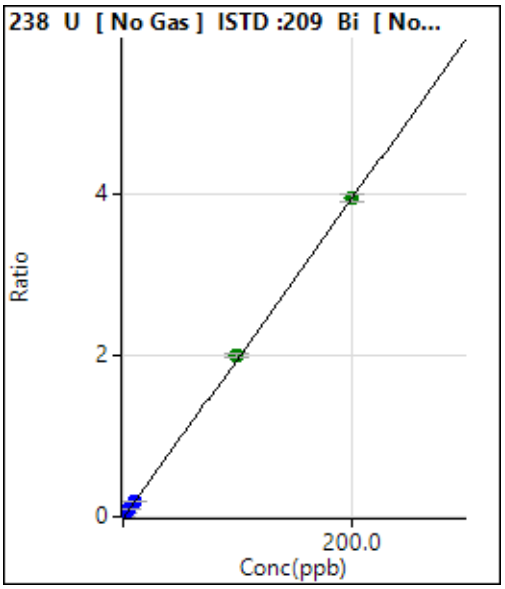
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1106.71	0.0010	P	8.2	
2	☐	2.000	1.933	39258.04	0.0360	P	0.7	-3.4
3	☐	5.000	4.692	96761.53	0.0859	P	2.2	-6.2
4	☐	10.000	10.372	206821.22	0.1885	P	5.1	3.7
5	☐	100.000	95.846	1917711.42	1.7339	P	2.5	-4.2
6	☐	200.000	202.067	3923129.37	3.6543	A	1.5	1.0

y = 0.0181 * x + 0.0010
R = 0.9997
DL = 0.01381 ppb
BEC = 0.05634 ppb

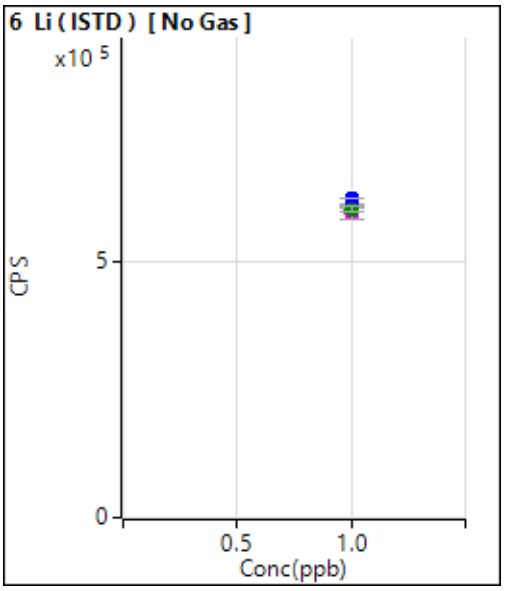
Weight: <None>
Min Conc: <None>



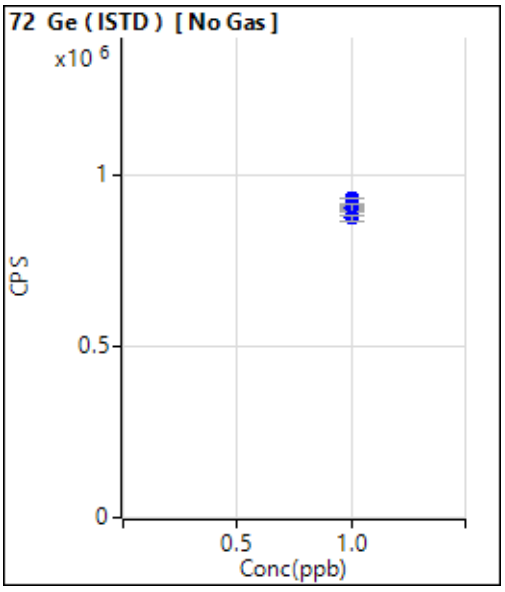
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0000	P	138.0	
2	☐	2.000	1.872	40574.34	0.0372	P	1.0	-6.4
3	☐	5.000	4.544	101629.08	0.0902	P	1.0	-9.1
4	☐	10.000	9.534	207452.89	0.1892	P	1.2	-4.7
5	☐	100.000	100.843	2212867.26	2.0007	A	2.6	0.8
6	☐	200.000	199.615	4251477.33	3.9604	A	2.3	-0.2

y = 0.0198 * x + 2.1657E-005
R = 1.0000
DL = 0.00452 ppb
BEC = 0.001092 ppb

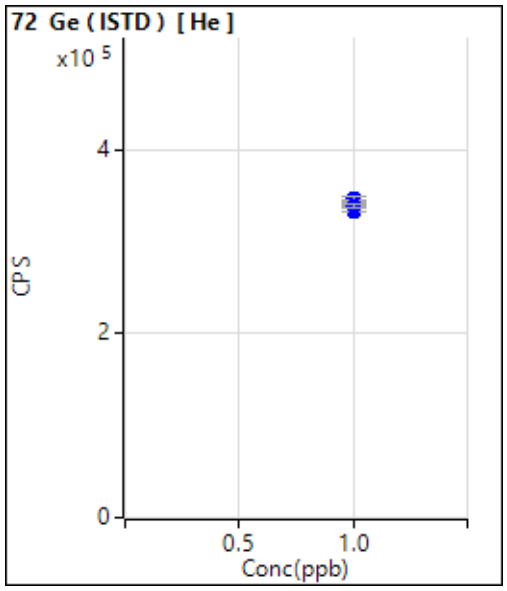
Weight: <None>
Min Conc: <None>



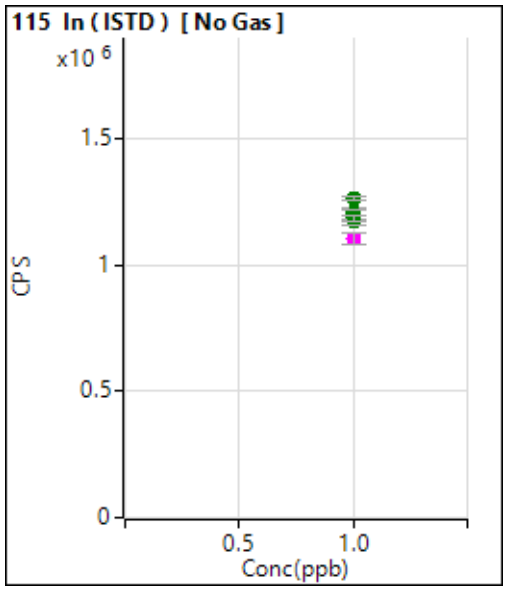
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		609454.62		P	1.2	
2	☐	1.000		609696.57		P	0.9	
3	☐	1.000		624584.54		P	0.3	
4	☐	1.000		605555.24		P	0.4	
5	☐	1.000		594653.43		M	3.4	
6	☐	1.000		603186.57		A	2.1	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		909044.28		P	1.3	
2	☐	1.000		905782.82		P	0.5	
3	☐	1.000		934952.25		P	0.3	
4	☐	1.000		906433.32		P	0.9	
5	☐	1.000		907566.08		P	2.8	
6	☐	1.000		877750.33		P	1.8	

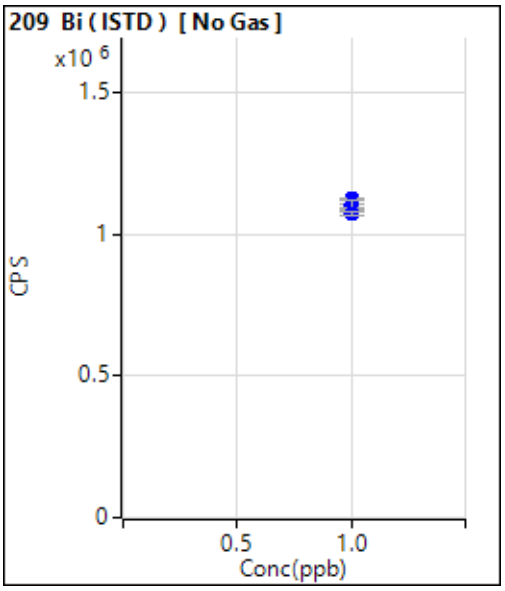


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		341738.04		P	0.9	
2	☐	1.000		332927.20		P	0.2	
3	☐	1.000		343516.27		P	0.7	
4	☐	1.000		339705.30		P	0.7	
5	☐	1.000		346817.93		P	1.3	
6	☐	1.000		339358.17		P	1.2	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1213150.40		A	2.4	
2	☐	1.000		1200208.90		A	3.0	
3	☐	1.000		1264830.84		A	1.5	
4	☐	1.000		1172708.42		A	1.9	
5	☐	1.000		1186094.38		A	2.1	
6	☐	1.000		1104809.50		M	4.7	

Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1085973.92		P	0.9	
2	☐	1.000		1091638.37		P	0.1	
3	☐	1.000		1127161.13		P	0.4	
4	☐	1.000		1096758.63		P	1.5	
5	☐	1.000		1106524.72		P	2.6	
6	☐	1.000		1073748.99		P	1.6	

Sample Report

Sample Table

Sample Name	LLICV2
Data File Name	019LCV2.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:10:54-05:00
Sample Type	LLCCV2
Dilution	1
Comment	
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.990	1.990	5.36	53198	0.00	2	
Be	9	1	No Gas	2.014	2.014	1.34	3757	0.05	2	
V	51	2	He	2.153	2.153	2.48	6763	0.03	2	
Cr	52	2	He	2.238	2.238	5.85	7736	0.03	2	
Fe	56	2	He	211.506	211.506	3.03	653566	0.03	200	
Se	78	2	He	2.927	2.927	8.31	575	0.51	2	NewName Main CR1 Failed
As	75	2	He	2.132	2.132	2.42	1066	0.20	2	
Ca	44	2	He	215.037	215.037	8.15	4991	4.31	200	
Na	23	2	He	212.602	212.602	4.67	238956	0.09	200	
Mg	24	2	He	217.810	217.810	2.84	76884	0.28	200	
K	39	2	He	218.648	218.648	4.50	198277	0.11	200	
Mn	55	2	He	2.159	2.159	2.28	6095	0.04	2	
Co	59	2	He	2.163	2.163	5.59	9400	0.02	2	
Ni	60	2	He	2.181	2.181	10.60	2497	0.09	2	
Cu	63	2	He	2.032	2.032	5.76	7122	0.03	2	
Zn	66	2	He	1.885	1.885	19.78	6265	0.03	2	
Al	27	2	He	2.555	2.555	27.01	1097	0.23	2	
B	11	1	No Gas	46.211	46.211	8.94	51669	0.09	10	NewName Main CR1 Failed
Al	27	1	No Gas	1.638	1.638	12.35	33187	0.00	2	
Si	28	1	No Gas	23.594	23.594	11.94	356972	0.01	10	NewName Main CR1 Failed
Ag	107	1	No Gas	1.835	1.835	6.82	14855	0.01	2	
Cd	111	1	No Gas	1.985	1.985	7.18	2780	0.07	2	
Sr	88	1	No Gas	1.828	1.828	7.17	24436	0.01	2	
Mo	95	1	No Gas	2.099	2.099	12.02	5478	0.04	2	
Sn	118	1	No Gas	2.013	2.013	4.23	9440	0.02	2	
Sb	121	1	No Gas	1.936	1.936	6.95	13938	0.01	2	
Ba	137	1	No Gas	1.941	1.941	6.08	4137	0.05	2	
Tl	205	1	No Gas	1.866	1.866	5.45	28132	0.01	2	
Tl	203	1	No Gas	2.070	2.070	3.79	12320	0.02	2	
Pb	208	1	No Gas	1.951	1.951	5.92	40153	0.00	2	
U	238	1	No Gas	1.813	1.813	3.93	39845	0.00	2	
Ca	43	2	He	228.071	228.071	25.20	290	78.64	200	
Sb	121	2	He	2.350	2.350	2.35	8146	0.03	2	
Ti	47	2	He	2.397	2.397	6.70	270	0.89	200	
Cu	63	1	No Gas	1.922	1.922	6.33	13073	0.01	2	
Se	82	1	No Gas	4.099	4.099	95.53	107	3.82	2	NewName Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	603541	3.18	609455	99.03	70	120	
Ge	72	2	He	310238	2.27	341738	90.78	70	120	
Ge	72	1	No Gas	891339	3.53	909044	98.05	70	120	
In	115	1	No Gas	1145330	7.87	1213150	94.41	70	120	
Bi	209	1	No Gas	1107882	4.21	1085974	102.02	70	120	

Sample Report

Sample Table

Sample Name	LLICV5
Data File Name	020LCV5.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:13:00-05:00
Sample Type	LLCCV5
Dilution	1
Comment	
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	4.675	4.675	2.08	76136	0.01	5	
Be	9	1	No Gas	5.007	5.007	3.99	9270	0.05	5	
V	51	2	He	4.813	4.813	4.54	15690	0.03	5	
Cr	52	2	He	4.829	4.829	0.75	17535	0.03	5	
Fe	56	2	He	521.430	521.430	3.84	1805931	0.03	500	
Se	78	2	He	4.414	4.414	31.84	727	0.61	5	
As	75	2	He	4.736	4.736	7.03	2534	0.19	5	
Ca	44	2	He	483.245	483.245	6.12	11682	4.14	500	
Na	23	2	He	451.319	451.319	4.46	435888	0.10	500	
Mg	24	2	He	484.241	484.241	3.01	193404	0.25	500	
K	39	2	He	438.915	438.915	5.41	334730	0.13	500	
Mn	55	2	He	4.805	4.805	3.63	14044	0.03	5	
Co	59	2	He	4.956	4.956	5.47	24332	0.02	5	
Ni	60	2	He	4.809	4.809	4.47	6115	0.08	5	
Cu	63	2	He	4.853	4.853	6.60	17241	0.03	5	
Zn	66	2	He	4.780	4.780	8.10	9087	0.05	5	
Al	27	2	He	5.478	5.478	17.68	1947	0.28	5	
B	11	1	No Gas	35.216	35.216	2.02	41732	0.08	25	NewName2 Main CR1 Failed
Al	27	1	No Gas	4.725	4.725	2.49	55668	0.01	5	
Si	28	1	No Gas	30.328	30.328	1.84	377763	0.01	25	
Ag	107	1	No Gas	4.459	4.459	0.76	36160	0.01	5	
Cd	111	1	No Gas	4.686	4.686	5.30	6772	0.07	5	
Sr	88	1	No Gas	4.450	4.450	2.81	60711	0.01	5	
Mo	95	1	No Gas	4.741	4.741	2.19	12766	0.04	5	
Sn	118	1	No Gas	4.766	4.766	2.35	21495	0.02	5	
Sb	121	1	No Gas	4.588	4.588	1.42	31164	0.01	5	
Ba	137	1	No Gas	4.661	4.661	1.90	10104	0.05	5	
Tl	205	1	No Gas	4.621	4.621	0.90	69728	0.01	5	
Tl	203	1	No Gas	4.926	4.926	1.65	29318	0.02	5	
Pb	208	1	No Gas	4.688	4.688	1.70	95545	0.00	5	
U	238	1	No Gas	4.538	4.538	1.39	100315	0.00	5	
Ca	43	2	He	439.333	439.333	15.50	613	71.63	500	
Sb	121	2	He	4.975	4.975	1.70	18707	0.03	5	
Ti	47	2	He	4.506	4.506	24.17	563	0.80	5	
Cu	63	1	No Gas	4.864	4.864	1.68	28841	0.02	5	
Se	82	1	No Gas	9.930	9.930	46.20	553	1.80	5	NewName2 Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	605564	0.87	609455	99.36	70	120	
Ge	72	2	He	351622	3.01	341738	102.89	70	120	
Ge	72	1	No Gas	892188	0.16	909044	98.15	70	120	
In	115	1	No Gas	1180376	1.93	1213150	97.30	70	120	
Bi	209	1	No Gas	1113919	0.51	1085974	102.57	70	120	

Initial Calibration Blank (ICB) Report

Sample Table

Sample Name	ICB
Data File Name	021_ICB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:15:07-05:00
Sample Type	ICB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	-0.042	-185.7	36118	2.0	0.5	
Be	9	1	No Gas	0.001	465.5	72	14.5	0.5	
V	51	2	He	-0.051	-14.7	961	2.3	2.5	
Cr	52	2	He	-0.021	-285.4	1080	17.9	2.5	
Fe	56	2	He	1.123	16.1	16494	3.4	100	
Se	78	2	He	-0.030	-1045.2	476	2.9	1	
As	75	2	He	-0.039	-81.4	96	16.1	2.5	
Ca	44	2	He	-9.407	-20.8	580	6.9	100	
Na	23	2	He	-4.077	-35.9	115344	0.6	100	
Mg	24	2	He	0.887	9.5	573	5.3	100	
K	39	2	He	-2.127	-67.3	109072	0.3	100	
Mn	55	2	He	0.003	571.9	1033	4.0	2.5	
Co	59	2	He	0.001	364.3	53	28.6	2.5	
Ni	60	2	He	0.100	37.3	220	19.8	2.5	
Cu	63	2	He	0.039	100.3	1510	7.6	1	
Zn	66	2	He	0.480	21.1	5848	1.5	2.5	
Al	27	2	He	-0.110	-327.9	573	14.8	5	
B	11	1	No Gas	9.444	6.3	18118	2.8	0.5	ICB Main CR1 Failed
Al	27	1	No Gas	-0.916	-7.3	14605	2.7	5	
Si	28	1	No Gas	4.387	12.2	297652	0.5	10	
Ag	107	1	No Gas	-0.030	-26.2	570	9.3	2.5	
Cd	111	1	No Gas	-0.007	0.0	0	#DIV/0!	1	
Sr	88	1	No Gas	-0.008	-29.3	443	7.9	2.5	
Mo	95	1	No Gas	0.017	73.8	90	38.5	2.5	
Sn	118	1	No Gas	0.143	18.6	1733	4.5	5	
Sb	121	1	No Gas	0.058	78.5	1783	16.1	2.5	
Ba	137	1	No Gas	0.034	47.8	187	17.2	2.5	
Tl	205	1	No Gas	0.010	37.1	427	13.3	1	
Tl	203	1	No Gas	0.017	83.0	227	35.9	1	
Pb	208	1	No Gas	-0.011	-36.3	903	8.9	2.5	
U	238	1	No Gas	0.001	141.6	53	78.1	2.5	
Ca	43	2	He	10.876	150.6	37	56.8	100	
Sb	121	2	He	0.082	33.9	993	9.9	2.5	
Ti	47	2	He	-0.055	-180.9	7	173.2	2.5	
Se	82	1	No Gas	0.830	944.1	-134	-440.0	1	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	604572	0.25	609455	99.20	70	120	
Ge	72	2	He	335290	0.35	341738	98.11	70	120	
Ge	72	1	No Gas	885976	0.59	909044	97.46	70	120	
In	115	1	No Gas	1159012	1.95	1213150	95.54	70	120	
Bi	209	1	No Gas	1106299	0.12	1085974	101.87	70	120	

Interference Check Solution A (ICS-A) Report

Sample Table

Sample Name	ICSA
Data File Name	023ICSA.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:21:31-05:00
Sample Type	ICSA
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.113	72.6	37114	1.8	0	ICSA Main CR1 Failed
Be	9	1	No Gas	-0.009	-33.4	52	11.2	0	ICSA Main CR1 Failed
V	51	2	He	0.085	21.6	1361	3.1	0	ICSA Main CR1 Failed
Cr	52	2	He	1.375	2.4	5625	2.7	0	ICSA Main CR1 Failed
Fe	56	2	He	103827.989	1.2	343066475	0.5	0	
Se	78	2	He	0.201	371.2	491	6.7	0	ICSA Main CR1 Failed
As	75	2	He	0.234	23.3	230	12.4	0	ICSA Main CR1 Failed
Ca	44	2	He	107004.166	1.0	2313208	0.6	0	
Na	23	2	He	104624.184	1.0	69665909	0.4	0	
Mg	24	2	He	103797.069	0.6	39788060	0.7	0	
K	39	2	He	103363.703	0.7	49760104	0.6	0	
Mn	55	2	He	0.467	3.5	2247	2.7	0	ICSA Main CR1 Failed
Co	59	2	He	0.261	13.8	1277	12.4	0	ICSA Main CR1 Failed
Ni	60	2	He	0.853	5.8	1127	5.1	0	ICSA Main CR1 Failed
Cu	63	2	He	0.174	20.4	1944	5.5	0	ICSA Main CR1 Failed
Zn	66	2	He	2.820	13.3	7432	2.7	0	ICSA Main CR1 Failed
Al	27	2	He	102758.801	0.5	23850471	0.3	0	
B	11	1	No Gas	6.677	5.8	15459	2.3	0	
Al	27	1	No Gas	94934.386	0.6	688532390	0.3	0	
Si	28	1	No Gas	17.586	6.0	339055	0.7	0	ICSA Main CR1 Failed
Ag	107	1	No Gas	0.133	18.6	1720	9.2	0	ICSA Main CR1 Failed
Cd	111	1	No Gas	1.386	11.2	1850	9.8	0	ICSA Main CR1 Failed
Sr	88	1	No Gas	4.454	2.2	56007	1.2	0	ICSA Main CR1 Failed
Mo	95	1	No Gas	2242.053	1.6	5544242	0.8	0	
Sn	118	1	No Gas	0.362	13.0	2490	6.3	0	ICSA Main CR1 Failed
Sb	121	1	No Gas	0.573	8.1	5131	6.1	0	ICSA Main CR1 Failed
Ba	137	1	No Gas	0.697	10.4	1483	8.8	0	ICSA Main CR1 Failed
Tl	205	1	No Gas	0.009	57.8	403	19.3	0	ICSA Main CR1 Failed
Tl	203	1	No Gas	0.016	65.4	220	27.6	0	ICSA Main CR1 Failed
Pb	208	1	No Gas	0.175	9.3	4527	6.7	0	ICSA Main CR1 Failed
U	238	1	No Gas	0.007	29.2	183	25.8	0	ICSA Main CR1 Failed
Ca	43	2	He	100962.035	0.6	129966	1.0	0	
Sb	121	2	He	0.423	5.0	2184	3.5	0	ICSA Main CR1 Failed
Ti	47	2	He	2169.041	1.3	254012	0.5	0	
Se	82	1	No Gas	-4.312	-113.6	-521	-70.6	0	ICSA Main CR1 Failed

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	599443	0.06	609455	98.36	70	120	
Ge	72	2	He	337721	0.83	341738	98.82	70	120	
Ge	72	1	No Gas	891189	0.30	909044	98.04	70	120	
In	115	1	No Gas	1087803	1.43	1213150	89.67	70	120	
Bi	209	1	No Gas	1081397	0.33	1085974	99.58	70	120	

Interference Check Solution AB (ICS-AB) Report

Sample Table

Sample Name	ICSAB
Data File Name	024ICSB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:23:39-05:00
Sample Type	ICSB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High	QC Flag
Li	7	1	No Gas	102.786	2.102	877426	0.97	100	102.8	180	120	ICSB Main CR1 Failed
Be	9	1	No Gas	99.357	0.801	176661	0.75	100	99.4	80	120	
V	51	2	He	99.670	0.654	291706	0.15	100	99.7	80	120	
Cr	52	2	He	100.547	0.185	329340	0.60	100	100.5	80	120	
Fe	56	2	He	104502.821	0.444	346977955	0.79	100	104502.8	80	120	ICSB Main CR1 Failed
Se	78	2	He	98.270	2.058	5355	1.39	100	98.3	80	120	
As	75	2	He	100.224	0.241	49446	0.27	100	100.2	80	120	
Ca	44	2	He	107083.516	0.603	2326122	0.62	100	107083.5	80	120	ICSB Main CR1 Failed
Na	23	2	He	105873.518	0.952	70838701	1.11	100	105873.5	80	120	ICSB Main CR1 Failed
Mg	24	2	He	104729.795	0.657	40338285	0.21	100	104729.8	80	120	ICSB Main CR1 Failed
K	39	2	He	104635.654	0.651	50613114	0.16	100	104635.7	80	120	ICSB Main CR1 Failed
Mn	55	2	He	99.137	0.541	259421	0.60	100	99.1	80	120	
Co	59	2	He	98.572	0.634	466543	0.46	100	98.6	80	120	
Ni	60	2	He	96.472	0.310	116508	0.78	100	96.5	80	120	
Cu	63	2	He	96.884	0.574	305898	0.43	100	96.9	80	120	
Zn	66	2	He	98.316	0.770	70721	0.46	100	98.3	80	120	
Al	27	2	He	93359.878	0.735	21773126	0.24	100	93359.9	80	120	ICSB Main CR1 Failed
B	11	1	No Gas	493.341	3.753	445724	2.76	100	493.3	80	120	
Al	27	1	No Gas	85541.897	0.792	621488324	0.89	100	85541.9	80	120	ICSB Main CR1 Failed
Si	28	1	No Gas	502.146	0.683	1797827	0.62	100	502.1	80	120	
Ag	107	1	No Gas	85.513	0.700	657708	0.95	100	85.5	80	120	
Cd	111	1	No Gas	95.365	0.708	133422	0.55	100	95.4	80	120	
Sr	88	1	No Gas	100.766	1.921	1320948	1.09	100	100.8	80	120	
Mo	95	1	No Gas	2046.368	0.389	5323111	1.25	100	2046.4	80	120	ICSB Main CR1 Failed
Sn	118	1	No Gas	97.778	0.618	405688	1.42	100	97.8	80	120	
Sb	121	1	No Gas	86.548	1.183	562791	0.85	100	86.5	80	120	
Ba	137	1	No Gas	96.814	1.535	201200	0.66	100	96.8	80	120	
Tl	205	1	No Gas	97.862	3.910	1422605	2.28	100	97.9	80	120	
Tl	203	1	No Gas	96.978	2.331	555955	0.86	100	97.0	80	120	
Pb	208	1	No Gas	94.764	1.810	1847187	0.83	100	94.8	80	120	
U	238	1	No Gas	101.404	1.659	2167832	0.06	100	101.4	80	120	
Ca	43	2	He	100847.314	0.741	130440	0.63	100	100847.3	80	120	ICSB Main CR1 Failed
Sb	121	2	He	98.912	0.710	345521	0.28	100	98.9	80	120	
Ti	47	2	He	2102.841	0.441	247459	0.62	100	2102.8	80	120	ICSB Main CR1 Failed
Cu	63	1	No Gas	92.783	1.006	499611	0.74	100	92.8	80	120	
Se	82	1	No Gas	98.705	10.026	7258	11.22	100	98.7	80	120	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	585673	1.21	609455	96.10	70	120	
Ge	72	2	He	339343	0.50	341738	99.30	70	120	
Ge	72	1	No Gas	892756	1.14	909044	98.21	70	120	
In	115	1	No Gas	1144112	0.87	1213150	94.31	70	120	
Bi	209	1	No Gas	1077706	1.62	1085974	99.24	70	120	

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	027_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:42:38-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	104.720	0.228	902303	0.64	100	104.7	90	110	
Be	9	1	No Gas	101.719	0.673	182671	0.97	100	101.7	90	110	
V	51	2	He	101.862	0.974	301326	0.28	100	101.9	90	110	
Cr	52	2	He	102.389	0.809	338983	0.12	100	102.4	90	110	
Fe	56	2	He	10289.170	0.531	34545122	0.63	10000	102.9	90	110	
Se	78	2	He	102.865	2.791	5643	1.86	100	102.9	90	110	
As	75	2	He	103.382	1.025	51553	0.87	100	103.4	90	110	
Ca	44	2	He	10272.725	0.793	226291	0.40	10000	102.7	90	110	
Na	23	2	He	10277.465	0.752	7060022	0.32	10000	102.8	90	110	
Mg	24	2	He	10270.563	1.088	3999139	1.30	10000	102.7	90	110	
K	39	2	He	10362.983	1.371	5168388	0.73	10000	103.6	90	110	
Mn	55	2	He	102.037	1.867	269860	1.31	100	102.0	90	110	
Co	59	2	He	101.928	0.550	487665	0.29	100	101.9	90	110	
Ni	60	2	He	102.382	1.795	124976	1.57	100	102.4	90	110	
Cu	63	2	He	102.771	1.160	327913	0.51	100	102.8	90	110	
Zn	66	2	He	102.973	1.497	74605	0.90	100	103.0	90	110	
Al	27	2	He	106.894	1.602	25811	1.01	100	106.9	90	110	
B	11	1	No Gas	454.460	3.708	415596	4.36	500	90.9	90	110	
Al	27	1	No Gas	96.067	0.365	723064	1.08	100	96.1	90	110	
Si	28	1	No Gas	515.060	1.003	1846217	0.70	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	98.258	1.421	710038	1.25	100	98.3	90	110	
Cd	111	1	No Gas	95.086	1.895	140309	0.40	100	95.1	90	110	
Sr	88	1	No Gas	93.941	1.656	1299038	0.76	100	93.9	90	110	
Mo	95	1	No Gas	94.091	1.374	258193	1.01	100	94.1	90	110	
Sn	118	1	No Gas	94.531	1.021	413736	1.17	100	94.5	90	110	
Sb	121	1	No Gas	89.714	0.779	586403	1.51	100	89.7	90	110	CCV Main CR1-2 Failed
Ba	137	1	No Gas	94.390	1.790	206912	0.63	100	94.4	90	110	
Tl	205	1	No Gas	99.856	2.111	1513003	2.33	100	99.9	90	110	
Tl	203	1	No Gas	98.144	0.414	586333	0.76	100	98.1	90	110	
Pb	208	1	No Gas	94.683	0.707	1923239	1.24	100	94.7	90	110	
U	238	1	No Gas	99.116	1.101	2207997	1.23	100	99.1	90	110	
Ca	43	2	He	10417.617	3.075	13640	2.46	10000	104.2	90	110	
Sb	121	2	He	102.215	0.590	360912	0.11	100	102.2	90	110	
Ti	47	2	He	105.838	1.066	12603	1.07	100	105.8	90	110	
Cu	63	1	No Gas	98.606	0.248	533570	0.96	100	98.6	90	110	
Se	82	1	No Gas	106.771	3.383	7904	3.85	100	106.8	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	591512	0.84	609455	97.06	70	120	
Ge	72	2	He	343029	0.70	341738	100.38	70	120	
Ge	72	1	No Gas	897374	0.74	909044	98.72	70	120	
In	115	1	No Gas	1206981	2.16	1213150	99.49	70	120	
Bi	209	1	No Gas	1122812	0.53	1085974	103.39	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-02
Data File Name	029SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:47:00-05:00
Sample Type	Sample
Dilution	20
Comment	DODTW 181402
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	1.649	32.983	3.56	48164	0.00	2000	
Be	9	1	No Gas	-0.001	-0.018	-1786.70	65	0.00	2000	
V	51	2	He	0.027	0.540	93.81	1248	0.00	2000	
Cr	52	2	He	0.164	3.280	36.17	1763	0.01	2000	
Fe	56	2	He	68.133	1362.669	3.28	248497	0.03	200000	
Se	78	2	He	-0.541	-10.817	-79.26	475	-0.11	2000	
As	75	2	He	0.458	9.162	14.26	354	0.13	2000	
Ca	44	2	He	10150.695	203013.905	3.82	229821	4.42	200000	
Na	23	2	He	27884.188	557683.761	3.17	19475396	0.14	200000	
Mg	24	2	He	8133.071	162661.428	2.36	3255379	0.25	200000	
K	39	2	He	24.743	494.862	24.83	128184	0.02	200000	
Mn	55	2	He	114.793	2295.852	2.71	311946	0.04	2000	
Co	59	2	He	1.344	26.871	6.31	6655	0.02	2000	
Ni	60	2	He	1.282	25.631	3.19	1713	0.07	2000	
Cu	63	2	He	0.078	1.555	14.67	1717	0.00	2000	
Zn	66	2	He	1.470	29.395	8.03	6835	0.02	2000	
Al	27	2	He	7.602	152.031	7.18	2470	0.31	2000	
B	11	1	No Gas	8.627	172.547	9.52	16587	0.05	2000	
Al	27	1	No Gas	7.125	142.509	3.95	71128	0.01	2000	
Si	28	1	No Gas	795.147	15902.934	0.55	2606585	0.03	2000	
Ag	107	1	No Gas	-0.014	-0.279	-73.54	650	0.00	2000	
Cd	111	1	No Gas	0.037	0.750	106.12	57	0.07	2000	
Sr	88	1	No Gas	191.236	3824.716	3.74	2339869	0.01	2000	
Mo	95	1	No Gas	0.070	1.395	17.41	210	0.03	2000	
Sn	118	1	No Gas	0.172	3.450	26.80	1713	0.01	2000	
Sb	121	1	No Gas	0.109	2.177	28.88	2070	0.01	2000	
Ba	137	1	No Gas	1.636	32.711	3.97	3277	0.05	2000	
Tl	205	1	No Gas	0.032	0.646	29.76	720	0.00	2000	
Tl	203	1	No Gas	0.042	0.833	13.07	357	0.01	2000	
Pb	208	1	No Gas	0.018	0.355	36.15	1410	0.00	2000	
U	238	1	No Gas	0.497	9.941	2.38	10415	0.00	2000	
Ca	43	2	He	10028.381	200567.629	0.33	13507	74.25	200000	
Sb	121	2	He	0.099	1.975	28.00	1103	0.01	2000	
Ti	47	2	He	0.218	4.359	102.22	40	0.54	2000	
Cu	63	1	No Gas	0.097	1.939	50.24	3244	0.00	2000	
Zn	66	1	No Gas	1.673	33.456	11.48	13647	0.01	2000	
Se	82	1	No Gas	2.183	43.665	404.61	-24	-9.17	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	577426	1.68	609455	94.74	70	120	
Ge	72	2	He	352767	2.79	341738	103.23	70	120	
Ge	72	1	No Gas	868444	1.70	909044	95.53	70	120	
In	115	1	No Gas	1068972	3.80	1213150	88.12	70	120	

Sample Report

Bi	209	1	No Gas	1053661	2.03	1085974	97.02	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-03
Data File Name	030SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:49:05-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	52.362	52.362	2.70	571395	0.01	2000	
Be	9	1	No Gas	-0.007	-0.007	-110.81	67	-0.01	2000	
V	51	2	He	2.667	2.667	2.26	9931	0.03	2000	
Cr	52	2	He	634.672	634.672	1.12	2313610	0.03	2000	
Fe	56	2	He	4208.593	4208.593	1.00	15612210	0.03	200000	
Se	78	2	He	-0.988	-0.988	-39.12	485	-0.20	2000	
As	75	2	He	1.014	1.014	2.07	687	0.15	2000	
Ca	44	2	He	394734.575	394734.575	0.35	9569032	4.13	200000	>LDR
Na	23	2	He	752352.439	752352.439	0.98	561072818	0.13	200000	>LDR
Mg	24	2	He	287542.237	287542.237	0.48	123625298	0.23	200000	>LDR
K	39	2	He	1582.704	1582.704	3.19	977045	0.16	200000	
Mn	55	2	He	1433.896	1433.896	1.40	4172552	0.03	2000	
Co	59	2	He	4.490	4.490	2.75	23778	0.02	2000	
Ni	60	2	He	50.012	50.012	1.99	67470	0.07	2000	
Cu	63	2	He	8.627	8.627	3.33	31838	0.03	2000	
Zn	66	2	He	14.347	14.347	4.39	16857	0.09	2000	
Al	27	2	He	11.530	11.530	6.99	3677	0.31	2000	
B	11	1	No Gas	12.201	12.201	4.42	24603	0.05	2000	
Al	27	1	No Gas	9.535	9.535	7.59	103440	0.01	2000	
Si	28	1	No Gas	20413.455	20413.455	4.16	70471409	0.03	2000	>LDR
Ag	107	1	No Gas	-0.002	-0.002	-271.86	883	0.00	2000	
Cd	111	1	No Gas	1.438	1.438	8.53	2290	0.06	2000	
Sr	88	1	No Gas	6060.543	6060.543	1.53	90046069	0.01	2000	>LDR
Mo	95	1	No Gas	9.715	9.715	1.80	28705	0.03	2000	
Sn	118	1	No Gas	0.305	0.305	4.23	2700	0.01	2000	
Sb	121	1	No Gas	0.101	0.101	33.62	2367	0.00	2000	
Ba	137	1	No Gas	22.806	22.806	1.70	53842	0.04	2000	
Tl	205	1	No Gas	0.013	0.013	3.67	483	0.00	2000	
Tl	203	1	No Gas	0.017	0.017	31.41	233	0.01	2000	
Pb	208	1	No Gas	0.031	0.031	20.72	1790	0.00	2000	
U	238	1	No Gas	2.432	2.432	1.67	54997	0.00	2000	
Ca	43	2	He	388485.368	388485.368	0.54	560819	69.27	200000	>LDR
Sb	121	2	He	0.098	0.098	21.33	1183	0.01	2000	
Ti	47	2	He	0.116	0.116	64.34	30	0.39	2000	
Cu	63	1	No Gas	9.598	9.598	4.66	61901	0.02	2000	
Zn	66	1	No Gas	16.067	16.067	8.79	39916	0.04	2000	
Se	82	1	No Gas	-0.785	-0.785	-784.83	-284	0.28	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	720920	2.51	609455	118.29	70	120	
Ge	72	2	He	378789	0.77	341738	110.84	70	120	
Ge	72	1	No Gas	1020915	5.56	909044	112.31	70	120	
In	115	1	No Gas	1297332	1.73	1213150	106.94	70	120	
Bi	209	1	No Gas	1139185	0.33	1085974	104.90	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-04
Data File Name	031SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:51:12-05:00
Sample Type	Sample
Dilution	1
Comment	DODTW 181402
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	51.121	51.121	2.43	600773	0.01	2000	
Be	9	1	No Gas	-0.004	-0.004	-189.71	80	0.00	2000	
V	51	2	He	3.073	3.073	1.79	11781	0.03	2000	
Cr	52	2	He	698.589	698.589	0.70	2665755	0.03	2000	
Fe	56	2	He	4582.159	4582.159	1.07	17791779	0.03	200000	
Se	78	2	He	-1.034	-1.034	-81.42	505	-0.20	2000	
As	75	2	He	1.142	1.142	8.72	792	0.14	2000	
Ca	44	2	He	400108.381	400108.381	1.23	10153272	3.94	200000	>LDR
Na	23	2	He	766708.475	766708.475	1.19	598557911	0.13	200000	>LDR
Mg	24	2	He	294718.996	294718.996	0.84	132646795	0.22	200000	>LDR
K	39	2	He	1685.378	1685.378	2.46	1080732	0.16	200000	
Mn	55	2	He	1446.969	1446.969	1.09	4407817	0.03	2000	
Co	59	2	He	4.546	4.546	1.39	25197	0.02	2000	
Ni	60	2	He	52.132	52.132	0.68	73622	0.07	2000	
Cu	63	2	He	9.800	9.800	1.52	37636	0.03	2000	
Zn	66	2	He	15.101	15.101	5.09	18232	0.08	2000	
Al	27	2	He	13.061	13.061	3.87	4267	0.31	2000	
B	11	1	No Gas	9.702	9.702	5.65	23516	0.04	2000	
Al	27	1	No Gas	9.850	9.850	2.94	116205	0.01	2000	
Si	28	1	No Gas	19595.626	19595.626	3.00	74080959	0.03	2000	>LDR
Ag	107	1	No Gas	0.026	0.026	31.85	1150	0.00	2000	
Cd	111	1	No Gas	1.405	1.405	4.45	2340	0.06	2000	
Sr	88	1	No Gas	6053.101	6053.101	1.78	93992382	0.01	2000	>LDR
Mo	95	1	No Gas	10.992	10.992	4.38	33920	0.03	2000	
Sn	118	1	No Gas	0.334	0.334	18.68	2967	0.01	2000	
Sb	121	1	No Gas	0.038	0.038	51.59	2084	0.00	2000	
Ba	137	1	No Gas	22.772	22.772	1.60	56182	0.04	2000	
Tl	205	1	No Gas	0.008	0.008	64.11	453	0.00	2000	
Tl	203	1	No Gas	0.013	0.013	30.84	230	0.01	2000	
Pb	208	1	No Gas	0.024	0.024	22.14	1833	0.00	2000	
U	238	1	No Gas	2.277	2.277	1.80	56771	0.00	2000	
Ca	43	2	He	392568.737	392568.737	0.59	593257	66.17	200000	>LDR
Sb	121	2	He	0.079	0.079	46.65	1160	0.01	2000	
Ti	47	2	He	0.155	0.155	136.07	37	0.42	2000	
Cu	63	1	No Gas	9.995	9.995	3.24	70425	0.01	2000	
Zn	66	1	No Gas	14.785	14.785	3.24	41400	0.04	2000	
Se	82	1	No Gas	0.410	0.410	2200.96	-224	-0.18	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	774863	1.93	609455	127.14	70	120	ISTD Failed
Ge	72	2	He	396523	0.42	341738	116.03	70	120	
Ge	72	1	No Gas	1116737	3.02	909044	122.85	70	120	ISTD Failed
In	115	1	No Gas	1355852	1.42	1213150	111.76	70	120	
Bi	209	1	No Gas	1256590	2.15	1085974	115.71	70	120	

Sample Report

Sample Table

Sample Name	HS22070320-05
Data File Name	033SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:55:49-05:00
Sample Type	Sample
Dilution	20
Comment	DODTW 181402
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	5.612	112.243	5.88	109699	0.01	2000	
Be	9	1	No Gas	0.016	0.327	59.34	130	0.01	2000	
V	51	2	He	0.086	1.712	11.33	1608	0.01	2000	
Cr	52	2	He	0.235	4.705	11.20	2264	0.01	2000	
Fe	56	2	He	1585.716	31714.315	0.36	6190768	0.03	200000	
Se	78	2	He	-1.058	-21.170	-6.00	505	-0.21	2000	
As	75	2	He	0.068	1.365	87.02	176	0.04	2000	
Ca	44	2	He	10258.392	205167.835	0.19	262234	3.91	200000	
Na	23	2	He	37444.398	748887.957	0.14	29478255	0.13	200000	
Mg	24	2	He	9788.718	195774.363	0.90	4422999	0.22	200000	
K	39	2	He	96.244	1924.873	2.20	185186	0.05	200000	
Mn	55	2	He	631.751	12635.017	1.86	1932548	0.03	2000	
Co	59	2	He	18.115	362.296	1.44	100613	0.02	2000	
Ni	60	2	He	9.746	194.928	2.39	13914	0.07	2000	
Cu	63	2	He	0.079	1.581	61.40	1944	0.00	2000	
Zn	66	2	He	3.352	67.044	7.76	9173	0.04	2000	
Al	27	2	He	16.988	339.768	15.41	5358	0.32	2000	
B	11	1	No Gas	1.651	33.024	36.84	14367	0.01	2000	
Al	27	1	No Gas	11.426	228.521	4.45	133429	0.01	2000	
Si	28	1	No Gas	1057.063	21141.267	1.55	4428228	0.02	2000	
Ag	107	1	No Gas	0.009	0.174	191.57	1020	0.00	2000	
Cd	111	1	No Gas	0.015	0.299	120.33	37	0.04	2000	
Sr	88	1	No Gas	185.614	3712.280	2.84	2919423	0.01	2000	
Mo	95	1	No Gas	0.024	0.476	41.06	127	0.02	2000	
Sn	118	1	No Gas	0.106	2.110	28.73	1867	0.01	2000	
Sb	121	1	No Gas	0.033	0.662	102.44	2087	0.00	2000	
Ba	137	1	No Gas	0.993	19.865	4.62	2614	0.04	2000	
Tl	205	1	No Gas	0.005	0.108	27.34	447	0.00	2000	
Tl	203	1	No Gas	-0.002	-0.031	-811.12	150	0.00	2000	
Pb	208	1	No Gas	0.042	0.831	24.49	2463	0.00	2000	
U	238	1	No Gas	0.016	0.318	20.06	470	0.00	2000	
Ca	43	2	He	9987.801	199756.022	3.74	15175	65.82	200000	
Sb	121	2	He	0.054	1.080	20.13	1063	0.01	2000	
Ti	47	2	He	0.057	1.148	74.60	23	0.25	2000	
Cu	63	1	No Gas	0.194	3.879	18.45	4918	0.00	2000	
Zn	66	1	No Gas	3.385	67.694	12.49	21083	0.02	2000	
Se	82	1	No Gas	-2.627	-52.531	-444.57	-507	0.52	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	790512	3.44	609455	129.71	70	120	ISTD Failed
Ge	72	2	He	398051	0.83	341738	116.48	70	120	
Ge	72	1	No Gas	1140444	4.25	909044	125.46	70	120	ISTD Failed
In	115	1	No Gas	1372959	2.63	1213150	113.17	70	120	

Sample Report

Bi	209	1	No Gas	1391317	1.77	1085974	128.12	70	120	ISTD Failed

Sample Report

Sample Table

Sample Name	HS22070320-06
Data File Name	034SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:57:52-05:00
Sample Type	Sample
Dilution	500
Comment	DODTW 181402
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.239	119.260	4.73	51044	0.00	2000	
Be	9	1	No Gas	-0.011	-5.276	-83.10	67	-0.02	2000	
V	51	2	He	0.063	31.606	50.31	1549	0.00	2000	
Cr	52	2	He	0.127	63.415	42.09	1870	0.01	2000	
Fe	56	2	He	31.579	15789.444	2.06	139747	0.02	200000	
Se	78	2	He	-1.034	-516.853	-122.99	513	-0.20	2000	
As	75	2	He	-0.047	-23.624	-76.34	110	-0.04	2000	
Ca	44	2	He	822.799	411399.262	0.78	22131	3.72	200000	
Na	23	2	He	1719.972	859985.932	3.22	1504436	0.11	200000	
Mg	24	2	He	664.134	332067.141	0.72	303705	0.22	200000	
K	39	2	He	-21.638	-10819.136	-16.98	119773	-0.02	200000	
Mn	55	2	He	63.994	31997.234	0.63	199075	0.03	2000	
Co	59	2	He	0.388	194.157	11.37	2240	0.02	2000	
Ni	60	2	He	0.201	100.684	2.99	410	0.05	2000	
Cu	63	2	He	-0.036	-18.199	-63.67	1533	0.00	2000	
Zn	66	2	He	0.067	33.391	318.98	6695	0.00	2000	
Al	27	2	He	-0.453	-226.520	-33.71	593	-0.08	2000	
B	11	1	No Gas	-0.925	-462.682	-23.18	11461	-0.01	2000	
Al	27	1	No Gas	-0.157	-78.702	-512.05	26046	0.00	2000	
Si	28	1	No Gas	30.564	15282.116	5.48	486634	0.01	2000	
Ag	107	1	No Gas	-0.023	-11.487	-17.18	780	0.00	2000	
Cd	111	1	No Gas	-0.001	-0.460	-634.26	10	-0.01	2000	
Sr	88	1	No Gas	13.608	6804.047	1.45	219536	0.01	2000	
Mo	95	1	No Gas	0.051	25.556	119.36	217	0.02	2000	
Sn	118	1	No Gas	0.071	35.565	26.35	1737	0.00	2000	
Sb	121	1	No Gas	-0.019	-9.439	-116.52	1673	0.00	2000	
Ba	137	1	No Gas	0.040	19.790	69.95	240	0.02	2000	
Tl	205	1	No Gas	0.000	-0.201	-1036.77	337	0.00	2000	
Tl	203	1	No Gas	0.003	1.731	293.09	187	0.00	2000	
Pb	208	1	No Gas	-0.031	-15.704	-6.09	623	-0.01	2000	
U	238	1	No Gas	0.003	1.560	132.15	117	0.00	2000	
Ca	43	2	He	762.810	381404.781	11.66	1197	63.74	200000	
Sb	121	2	He	0.007	3.491	445.00	880	0.00	2000	
Ti	47	2	He	-0.016	-8.015	-682.69	13	-0.12	2000	
Cu	63	1	No Gas	-0.028	-13.964	-66.30	3424	0.00	2000	
Zn	66	1	No Gas	-0.511	-255.263	-29.49	13947	0.00	2000	
Se	82	1	No Gas	-6.119	-3059.744	-71.97	-850	0.72	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	801702	1.76	609455	131.54	70	120	ISTD Failed
Ge	72	2	He	402511	0.85	341738	117.78	70	120	
Ge	72	1	No Gas	1147328	1.77	909044	126.21	70	120	ISTD Failed
In	115	1	No Gas	1404219	1.36	1213150	115.75	70	120	

Sample Report

Bi	209	1	No Gas	1381584	1.67	1085974	127.22	70	120	ISTD Failed

Sample Report

Sample Table

Sample Name	HS22070320-07
Data File Name	035SMPL.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T14:59:57-05:00
Sample Type	Sample
Dilution	500
Comment	DODTW 181402
ISTD Ref FileName	011CALB.d
Sample QC Pass/Fail	Pass
ISTD Pass/Fail	Fail

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	FinalConc	Conc %RSD	CPS	%RSD	LDR	QC Flag
Li	7	1	No Gas	0.170	84.931	32.04	49082	0.00	2000	
Be	9	1	No Gas	-0.013	-6.310	-56.81	60	-0.02	2000	
V	51	2	He	0.098	49.015	15.53	1590	0.01	2000	
Cr	52	2	He	0.141	70.552	18.90	1833	0.01	2000	
Fe	56	2	He	32.483	16241.700	1.61	136534	0.02	200000	
Se	78	2	He	-0.825	-412.495	-52.16	500	-0.16	2000	
As	75	2	He	-0.034	-16.969	-74.95	112	-0.03	2000	
Ca	44	2	He	863.060	431529.925	0.57	22075	3.91	200000	
Na	23	2	He	1758.801	879400.602	0.68	1462683	0.12	200000	
Mg	24	2	He	694.849	347424.621	0.72	302733	0.23	200000	
K	39	2	He	-13.711	-6855.420	-18.40	118438	-0.01	200000	
Mn	55	2	He	66.890	33444.914	0.63	198200	0.03	2000	
Co	59	2	He	0.374	187.021	1.34	2057	0.02	2000	
Ni	60	2	He	0.194	96.834	25.27	380	0.05	2000	
Cu	63	2	He	-0.085	-42.309	-30.25	1290	-0.01	2000	
Zn	66	2	He	0.118	59.196	339.60	6418	0.00	2000	
Al	27	2	He	-0.409	-204.608	-81.01	577	-0.07	2000	
B	11	1	No Gas	-1.264	-632.067	-16.24	10793	-0.01	2000	
Al	27	1	No Gas	-1.123	-561.361	-18.82	16259	-0.01	2000	
Si	28	1	No Gas	37.271	18635.318	17.99	488854	0.01	2000	
Ag	107	1	No Gas	-0.034	-16.757	-23.92	670	-0.01	2000	
Cd	111	1	No Gas	0.001	0.579	589.94	13	0.01	2000	
Sr	88	1	No Gas	14.167	7083.647	2.55	221758	0.01	2000	
Mo	95	1	No Gas	0.022	10.830	89.39	120	0.02	2000	
Sn	118	1	No Gas	0.062	31.078	36.96	1640	0.00	2000	
Sb	121	1	No Gas	-0.014	-6.917	-194.26	1640	0.00	2000	
Ba	137	1	No Gas	0.036	17.846	24.19	223	0.02	2000	
Tl	205	1	No Gas	-0.003	-1.631	-108.37	277	0.00	2000	
Tl	203	1	No Gas	-0.002	-1.220	-168.77	140	0.00	2000	
Pb	208	1	No Gas	-0.034	-17.197	-1.64	537	-0.01	2000	
U	238	1	No Gas	0.000	0.130	572.88	37	0.00	2000	
Ca	43	2	He	953.508	476753.814	10.99	1420	67.14	200000	
Sb	121	2	He	0.006	3.175	254.33	837	0.00	2000	
Ti	47	2	He	-0.061	-30.708	-142.05	7	-0.92	2000	
Cu	63	1	No Gas	-0.041	-20.358	-14.91	3187	0.00	2000	
Zn	66	1	No Gas	-0.396	-197.751	-117.09	13504	0.00	2000	
Se	82	1	No Gas	-2.767	-1383.567	-488.54	-476	0.58	2000	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	782780	1.02	609455	128.44	70	120	ISTD Failed
Ge	72	2	He	383505	0.42	341738	112.22	70	120	
Ge	72	1	No Gas	1095915	4.95	909044	120.56	70	120	ISTD Failed
In	115	1	No Gas	1363132	2.54	1213150	112.36	70	120	

Sample Report

Bi	209	1	No Gas	1352845	1.80	1085974	124.57	70	120	ISTD Failed

Continuing Calibration Verification (CCV) Report

Sample Table

Sample Name	CCV
Data File Name	039_CCV.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T15:09:51-05:00
Sample Type	CCV
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Exp Value	%Rec	%Low	%High2	QC Flag
Li	7	1	No Gas	103.870	3.178	875176	1.25	100	103.9	90	110	
Be	9	1	No Gas	99.930	1.585	175464	0.93	100	99.9	90	110	
V	51	2	He	103.167	1.969	296889	0.50	100	103.2	90	110	
Cr	52	2	He	103.911	2.015	334663	0.67	100	103.9	90	110	
Fe	56	2	He	10351.517	1.257	33812219	0.27	10000	103.5	90	110	
Se	78	2	He	102.326	3.178	5464	1.77	100	102.3	90	110	
As	75	2	He	101.393	2.404	49188	0.98	100	101.4	90	110	
Ca	44	2	He	10239.226	2.208	219425	0.75	10000	102.4	90	110	
Na	23	2	He	10608.358	0.963	7086424	0.81	10000	106.1	90	110	
Mg	24	2	He	10594.781	0.927	4013660	0.79	10000	105.9	90	110	
K	39	2	He	10427.941	1.785	5059095	0.28	10000	104.3	90	110	
Mn	55	2	He	102.592	0.279	264008	1.24	100	102.6	90	110	
Co	59	2	He	103.020	1.342	479551	1.20	100	103.0	90	110	
Ni	60	2	He	102.701	1.089	121972	0.41	100	102.7	90	110	
Cu	63	2	He	104.127	1.294	323225	0.32	100	104.1	90	110	
Zn	66	2	He	102.525	0.479	72299	1.05	100	102.5	90	110	
Al	27	2	He	106.948	1.946	25130	2.77	100	106.9	90	110	
B	11	1	No Gas	414.147	3.784	371194	4.96	500	82.8	90	110	CCV Main CR1-2 Failed
Al	27	1	No Gas	96.332	2.279	702268	1.15	100	96.3	90	110	
Si	28	1	No Gas	514.244	3.022	1785861	0.67	5000	10.3	90	110	CCV Main CR1-2 Failed
Ag	107	1	No Gas	102.120	4.433	684506	1.02	100	102.1	90	110	
Cd	111	1	No Gas	98.829	3.855	135312	1.21	100	98.8	90	110	
Sr	88	1	No Gas	99.292	5.747	1273125	1.03	100	99.3	90	110	
Mo	95	1	No Gas	98.343	3.684	250400	1.77	100	98.3	90	110	
Sn	118	1	No Gas	98.428	4.823	399501	0.70	100	98.4	90	110	
Sb	121	1	No Gas	90.930	2.429	575667	1.14	100	90.9	90	110	
Ba	137	1	No Gas	98.467	4.777	200221	1.34	100	98.5	90	110	
Tl	205	1	No Gas	100.001	1.202	1458648	0.60	100	100.0	90	110	
Tl	203	1	No Gas	98.761	0.902	568031	1.07	100	98.8	90	110	
Pb	208	1	No Gas	95.661	1.330	1870564	1.00	100	95.7	90	110	
U	238	1	No Gas	100.158	1.262	2148052	1.21	100	100.2	90	110	
Ca	43	2	He	10247.820	5.702	13056	5.58	10000	102.5	90	110	
Sb	121	2	He	102.158	2.063	350907	0.59	100	102.2	90	110	
Ti	47	2	He	103.190	0.806	11955	1.10	100	103.2	90	110	
Cu	63	1	No Gas	98.490	2.272	516228	1.09	100	98.5	90	110	
Se	82	1	No Gas	101.746	3.154	7288	3.68	100	101.7	90	110	

QC ISTD Table

Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	578455	2.03	609455	94.91	70	120	
Ge	72	2	He	333767	1.49	341738	97.67	70	120	
Ge	72	1	No Gas	869655	3.24	909044	95.67	70	120	
In	115	1	No Gas	1121092	5.11	1213150	92.41	70	120	
Bi	209	1	No Gas	1081071	1.72	1085974	99.55	70	120	

Continuing Calibration Blank (CCB) Report

Sample Table

Sample Name	CCB
Data File Name	040_CCB.d
Data Path Name	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq Date Time	2022-07-21T15:11:54-05:00
Sample Type	CCB
Dilution	1
Comment	
ISTD Ref File Name	011CALB.d
Sample QC Pass/Fail	Fail
ISTD Pass/Fail	Pass

QC Analyte Table

Name	Mass	Tune Step	Tune Mode	Conc	Conc %RSD	CPS	CPS %RSD	Upper Limit	QC Flag
Li	7	1	No Gas	0.099	13.7	36898	1.6	0.5	
Be	9	1	No Gas	0.006	123.4	80	16.5	0.5	
V	51	2	He	-0.007	-380.0	1057	6.6	2.5	
Cr	52	2	He	0.003	1720.1	1123	13.4	2.5	
Fe	56	2	He	0.594	19.2	14334	2.8	100	
Se	78	2	He	0.766	93.8	500	6.4	2	
As	75	2	He	-0.050	-42.5	88	11.6	2.5	
Ca	44	2	He	-9.093	-33.3	570	11.5	100	
Na	23	2	He	30.547	2.6	134191	0.2	100	
Mg	24	2	He	0.526	20.4	423	8.9	100	
K	39	2	He	4.964	47.9	109196	1.2	100	
Mn	55	2	He	0.036	163.9	1087	13.3	2.5	
Co	59	2	He	0.000	-3020.3	47	65.5	2.5	
Ni	60	2	He	0.007	619.8	107	47.2	2.5	
Cu	63	2	He	-0.070	-48.5	1140	8.6	2	
Zn	66	2	He	-0.345	-106.4	5154	4.8	2.5	
Al	27	2	He	-0.840	-29.8	393	14.5	5	
B	11	1	No Gas	33.093	17.2	39239	11.7	0.5	CCB Main CR1 Failed
Al	27	1	No Gas	-1.328	-2.9	11495	2.9	5	
Si	28	1	No Gas	-7.498	-9.0	259022	0.6	10	
Ag	107	1	No Gas	-0.040	-16.1	510	12.2	2.5	
Cd	111	1	No Gas	-0.002	-399.0	7	173.2	1	
Sr	88	1	No Gas	-0.003	-366.3	487	27.4	2.5	
Mo	95	1	No Gas	0.046	28.2	160	16.5	2.5	
Sn	118	1	No Gas	0.071	52.4	1387	12.1	5	
Sb	121	1	No Gas	1.130	12.5	8580	9.4	2.5	
Ba	137	1	No Gas	0.029	42.2	170	15.6	2.5	
Tl	205	1	No Gas	0.097	30.6	1680	25.0	1	
Tl	203	1	No Gas	0.082	17.5	600	13.0	1	
Pb	208	1	No Gas	0.062	59.2	2321	31.5	2.5	
U	238	1	No Gas	0.005	65.5	133	53.2	2.5	
Ca	43	2	He	-1.731	-4.1	20	0.0	100	
Sb	121	2	He	1.035	4.8	4151	3.8	2.5	
Ti	47	2	He	-0.082	-62.2	3	173.2	2.5	
Cu	63	1	No Gas	-0.107	-38.7	2197	10.5	2.5	
Se	82	1	No Gas	-1.473	-383.7	-303	-137.8	2	

QC ISTD Table

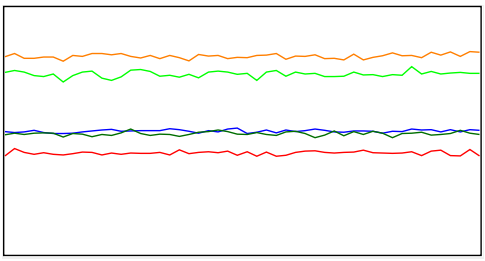
Name	Mass	Tune Step	Tune Mode	CPS	%RSD	Ref CPS	%Rec	%QC Low	%QC High	QC Flag
Li	6	1	No Gas	597868	1.39	609455	98.10	70	120	
Ge	72	2	He	325573	0.44	341738	95.27	70	120	
Ge	72	1	No Gas	875420	1.34	909044	96.30	70	120	
In	115	1	No Gas	1121699	3.99	1213150	92.46	70	120	
Bi	209	1	No Gas	1084367	0.77	1085974	99.85	70	120	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\072122A.b
Acq. Date-Time	07/21/2022 13:03:03
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	5000	2052	20518.24		
24	10000	7305	73051.38		
59	20000	9989	99893.52		
115	20000	16071	160711.62		
208	20000	9775	97746.00		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	1.849	5.000	
24	1.629	5.000	
59	1.132	5.000	
115	1.171	5.000	
208	1.574	5.000	

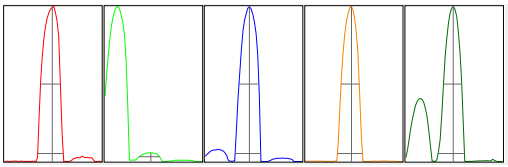
Mass	Background	Background (Required)	Background (Flag)
9	1.300		
24	0.400		
59	0.700		
115	0.800		
208	1.700		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.452 %
Doubly Charged	70 / 140 1.336 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	2066.83	9.00	8.90 - 9.10	
24	7508.04	23.95	23.90 - 24.10	
59	10610.03	58.90	58.90 - 59.10	
115	16833.18	114.95	114.90 - 115.10	
208	9847.23	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.781		
24	0.63			
59	0.61	0.782		
115	0.56	0.765		
208	0.56	0.805		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.9 V	Deflect	13.0 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9995	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

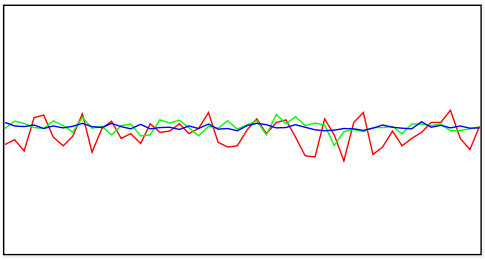
EM

Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	97	969.43		
24	1000	512	5120.74		
59	10000	5117	51165.99		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

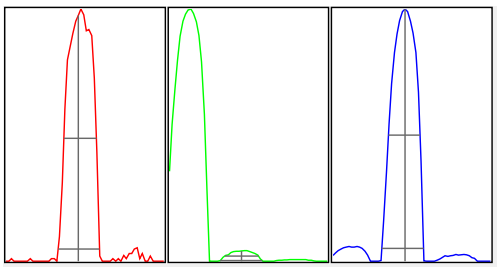
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	10.946	5.000	Fail
24	4.485	5.000	
59	1.723	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.300		
24	0.100		
59	0.100		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.314 %
Doubly Charged	70 / 140 1.093 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	95.01	8.90	8.90 - 9.10	
24	510.11	23.90	23.90 - 24.10	
59	5327.51	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.772		
24	0.63	0.793		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.59	0.779		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.7 V	Deflect	-0.2 V
Extract 2	-200.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.6 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9995	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	-0.1 mm

EM

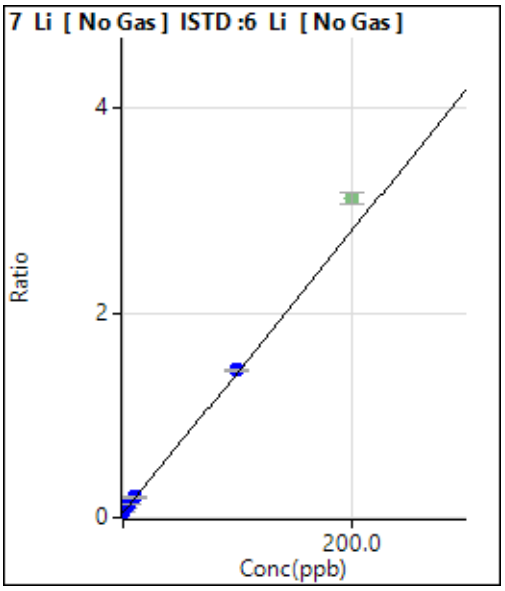
Discriminator	4.5 mV	Analog HV	2102 V	Pulse HV	1001 V

Calibration for 082_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072222A.b\
Analysis File: 072222A.batch.bin
DA Date-Time: 07/22/2022 22:33:36
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	075CALB.d	CAL BLK	07/22/2022 16:41:00
2	076CALS.d	2/10/200	07/22/2022 16:43:15
3	077CALS.d	5/25/500	07/22/2022 16:45:30
4	078CALS.d	10/50/100	07/22/2022 16:47:45
5	079CALS.d	100/500/10K	07/22/2022 16:49:59
6	080CALS.d	200/1000/20K	07/22/2022 16:52:12

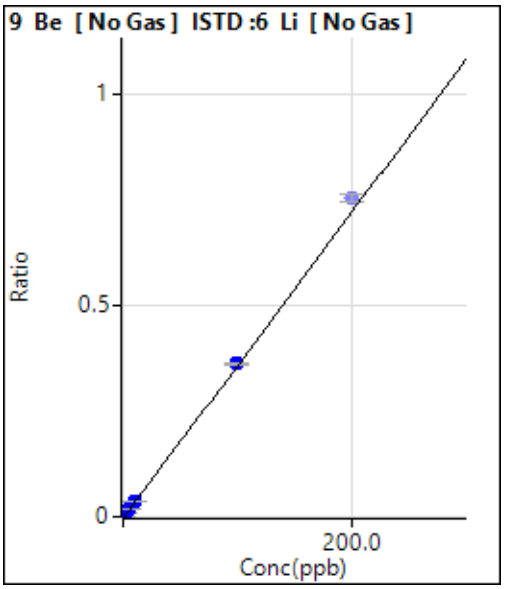
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	22521.38	0.0615	P	0.1	
2	☐	2.000	1.926	32621.03	0.0880	P	0.5	-3.7
3	☐	5.000	4.856	47431.23	0.1284	P	1.1	-2.9
4	☐	10.000	9.896	74130.52	0.1978	P	1.1	-1.0
5	☐	100.000	100.019	523729.19	1.4386	P	0.1	0.0
6	☑	200.000		1087940.97	3.1197	A	3.6	

y = 0.0138 * x + 0.0615
R = 1.0000
DL = 0.01805 ppb
BEC = 4.469 ppb

Weight: <None>
Min Conc: <None>

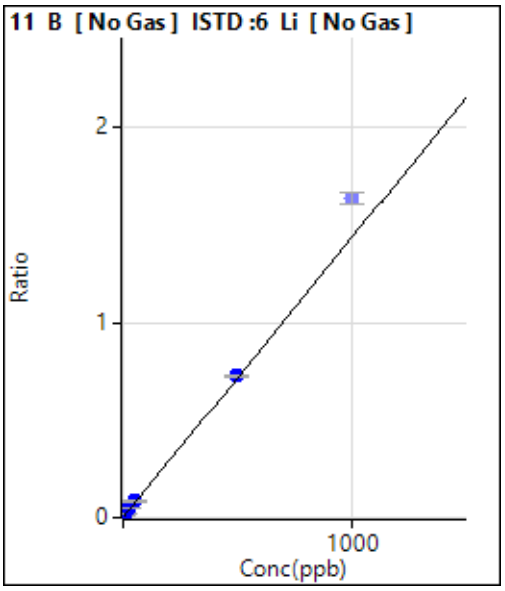


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23.33	0.0001	P	45.3	
2	☐	2.000	2.039	2761.96	0.0075	P	2.3	2.0
3	☐	5.000	4.699	6316.47	0.0171	P	2.9	-6.0
4	☐	10.000	9.777	13304.69	0.0355	P	1.4	-2.2
5	☐	100.000	100.037	132001.22	0.3626	P	0.5	0.0
6	☑	200.000		263504.28	0.7555	P	2.5	

y = 0.0036 * x + 6.3863E-005
R = 1.0000
DL = 0.02393 ppb
BEC = 0.01762 ppb

Weight: <None>
Min Conc: <None>

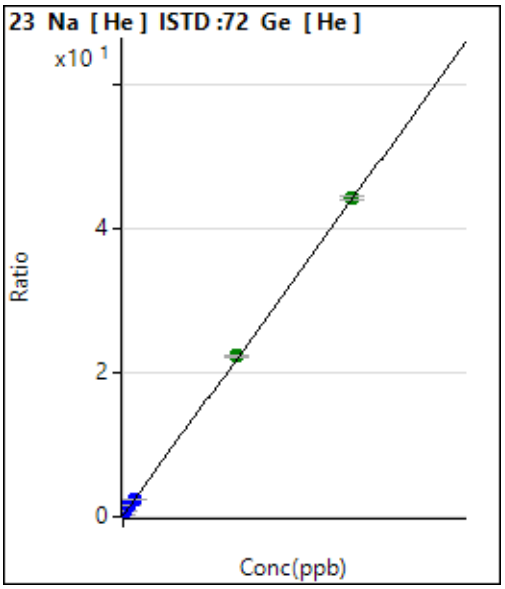
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3773.87	0.0103	P	2.7	
2	☐	10.000	9.605	8922.90	0.0241	P	2.3	-4.0
3	☐	25.000	24.631	16856.86	0.0456	P	3.0	-1.5
4	☐	50.000	51.831	31717.45	0.0846	P	1.9	3.7
5	☐	500.000	499.843	264649.26	0.7269	P	2.0	0.0
6	☑	1000.000		571505.64	1.6385	P	3.2	

y = 0.0014 * x + 0.0103
R = 1.0000
DL = 0.5933 ppb
BEC = 7.192 ppb

Weight: <None>
Min Conc: <None>

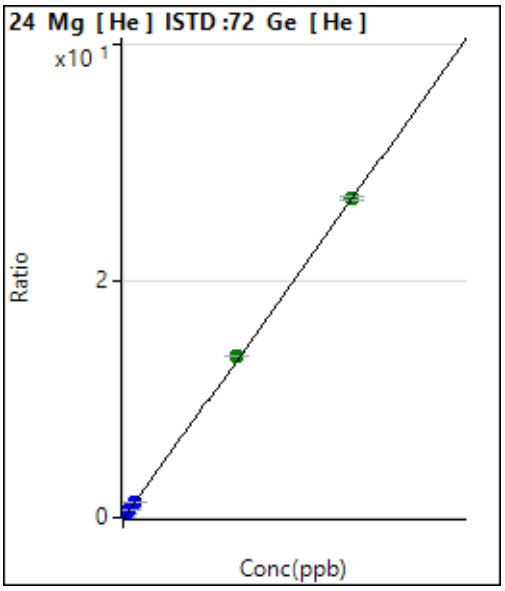


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	101020.70	0.3919	P	0.9	
2	☐	200.000	197.410	210938.84	0.8245	P	0.4	-1.3
3	☐	500.000	492.225	381004.20	1.4706	P	0.5	-1.6
4	☐	1000.000	969.577	671853.82	2.5168	P	0.5	-3.0
5	☐	10000.00	9983.061	5797265.12	22.2702	A	0.6	-0.2
6	☐	20000.00	20010.21	11421780.2	44.2452	A	0.9	0.1

y = 0.0022 * x + 0.3919
R = 1.0000
DL = 4.979 ppb
BEC = 178.8 ppb

Weight: <None>
Min Conc: <None>

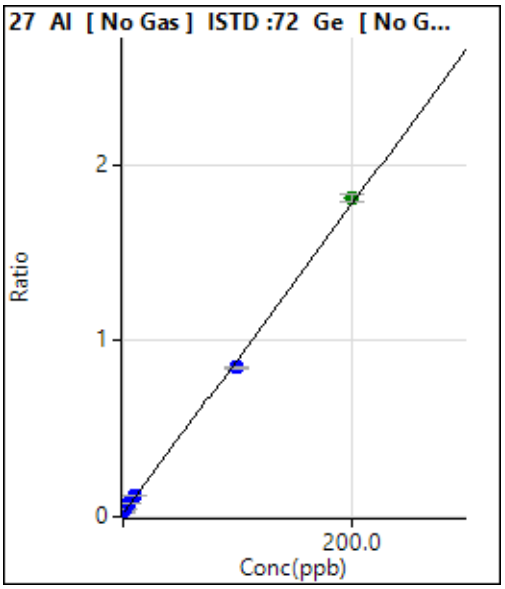
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	443.35	0.0017	P	20.3	
2	☐	200.000	199.787	69684.15	0.2724	P	0.6	-0.1
3	☐	500.000	498.787	175498.11	0.6775	P	1.4	-0.2
4	☐	1000.000	984.485	356497.92	1.3355	P	1.2	-1.6
5	☐	10000.00	10087.40	3557939.53	13.6678	A	0.8	0.9
6	☐	20000.00	19957.10	6980047.81	27.0390	A	0.9	-0.2

y = 0.0014 * x + 0.0017
R = 1.0000
DL = 0.7752 ppb
BEC = 1.271 ppb

Weight: <None>
Min Conc: <None>

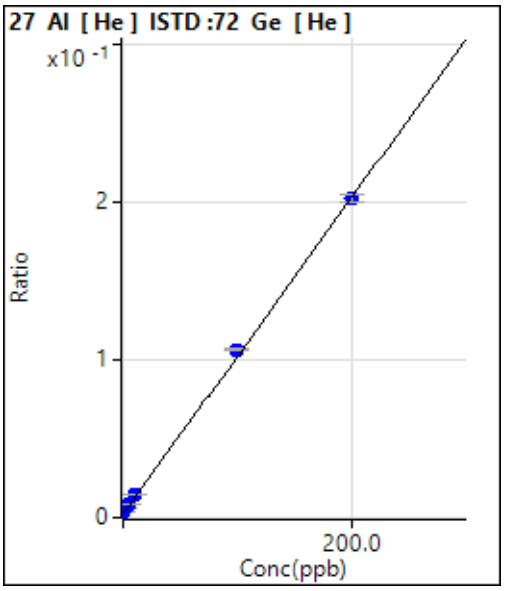


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14991.63	0.0276	P	2.2	
2	☐	2.000	2.147	25446.95	0.0465	P	3.3	7.4
3	☐	5.000	5.678	42538.71	0.0775	P	2.8	13.6
4	☐	10.000	10.090	65430.35	0.1163	P	1.2	0.9
5	☐	100.000	93.623	473875.63	0.8507	P	1.6	-6.4
6	☐	200.000	203.166	979663.87	1.8139	A	2.6	1.6

y = 0.0088 * x + 0.0276
R = 0.9993
DL = 0.206 ppb
BEC = 3.137 ppb

Weight: <None>
Min Conc: <None>

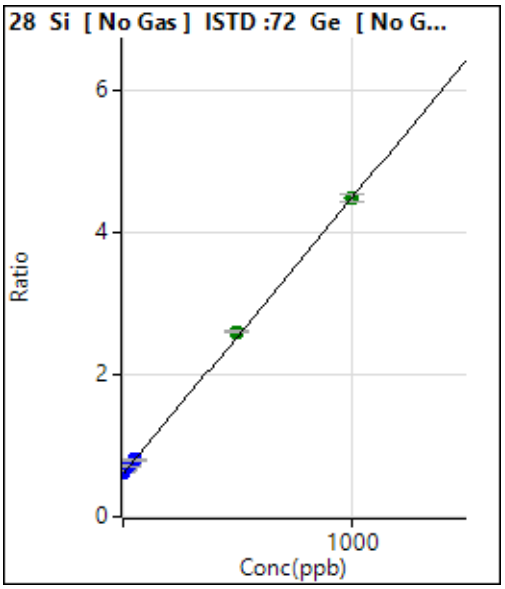
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	890.05	0.0035	P	8.4	
2	☐	2.000	2.803	1603.46	0.0063	P	0.9	40.1
3	☐	5.000	5.522	2330.24	0.0090	P	3.1	10.4
4	☐	10.000	11.204	3923.95	0.0147	P	3.9	12.0
5	☐	100.000	102.777	27754.57	0.1066	P	1.6	2.8
6	☐	200.000	198.530	52338.55	0.2027	P	1.9	-0.7

y = 0.0010 * x + 0.0035
R = 0.9999
DL = 0.8673 ppb
BEC = 3.441 ppb

Weight: <None>
Min Conc: <None>

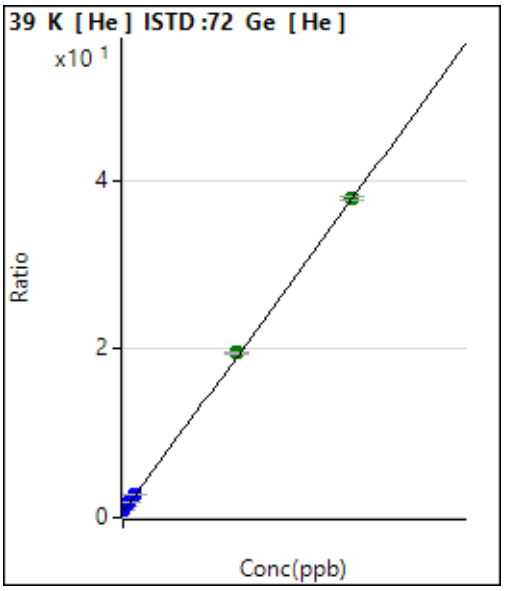


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340799.88	0.6272	P	2.3	
2	☐	10.000	8.804	362218.02	0.6613	P	1.4	-12.0
3	☐	25.000	23.830	394897.96	0.7194	P	1.3	-4.7
4	☐	50.000	43.913	448458.25	0.7971	P	0.9	-12.2
5	☐	500.000	509.687	1447573.57	2.5988	A	1.5	1.9
6	☐	1000.000	995.502	2418798.46	4.4780	A	1.9	-0.4

y = 0.0039 * x + 0.6272
R = 0.9999
DL = 11.21 ppb
BEC = 162.2 ppb

Weight: <None>
Min Conc: <None>

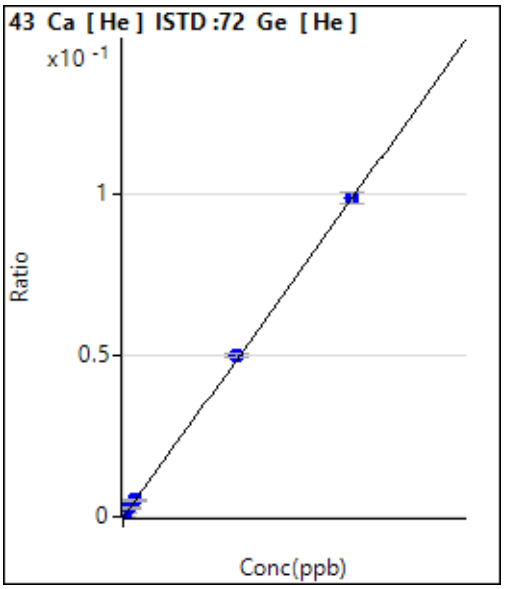
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	222019.51	0.8613	P	1.6	
2	☐	200.000	213.867	321698.00	1.2575	P	0.5	6.9
3	☐	500.000	501.956	463977.04	1.7910	P	1.0	0.4
4	☐	1000.000	962.171	705669.50	2.6434	P	0.6	-3.8
5	☐	10000.00	10064.21	5076291.49	19.5019	A	1.6	0.6
6	☐	20000.00	19969.59	9770507.56	37.8483	A	0.6	-0.2

y = 0.0019 * x + 0.8613
R = 1.0000
DL = 23 ppb
BEC = 465 ppb

Weight: <None>
Min Conc: <None>

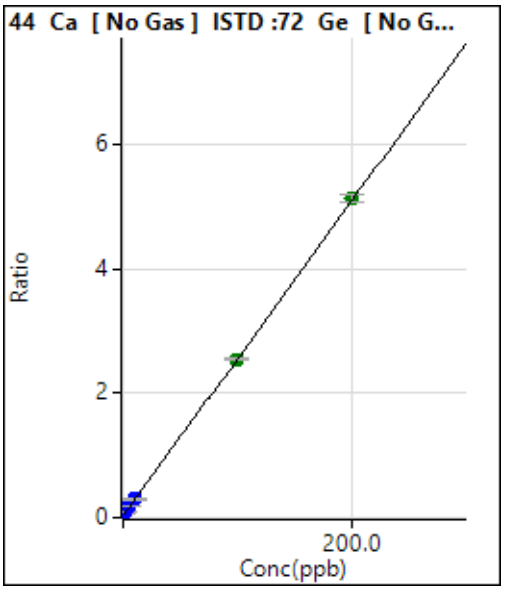


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	53.33	0.0002	P	10.8	
2	☐	200.000	192.332	296.68	0.0012	P	22.6	-3.8
3	☐	500.000	516.791	716.70	0.0028	P	17.8	3.4
4	☐	1000.000	1011.771	1393.43	0.0052	P	10.8	1.2
5	☐	10000.00	10100.52	13083.10	0.0503	P	2.3	1.0
6	☐	20000.00	19948.80	25570.63	0.0991	P	3.8	-0.3

y = 4.9553E-006 * x + 2.0690E-004
R = 1.0000
DL = 13.55 ppb
BEC = 41.75 ppb

Weight: <None>
Min Conc: <None>

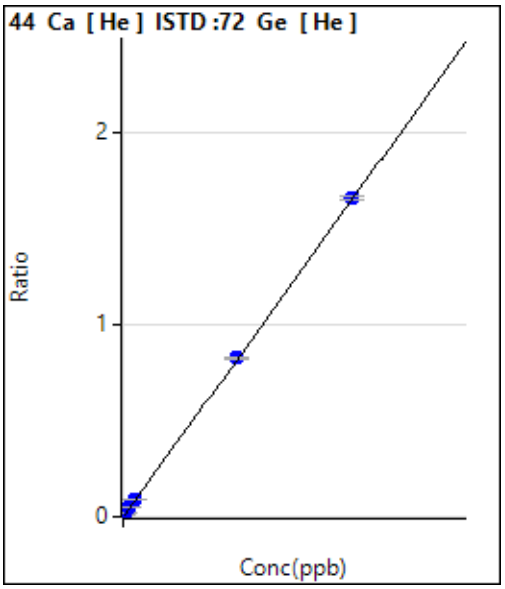
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	30163.36	0.0555	P	1.3	
2	☐	2.000	1.906	56864.55	0.1038	P	2.2	-4.7
3	☐	5.000	4.775	96926.40	0.1766	P	0.4	-4.5
4	☐	10.000	9.429	165720.76	0.2946	P	0.9	-5.7
5	☐	100.000	98.638	1423927.12	2.5560	A	0.6	-1.4
6	☐	200.000	200.716	2778452.56	5.1438	A	1.8	0.4

y = 0.0254 * x + 0.0555
R = 1.0000
DL = 0.08316 ppb
BEC = 2.19 ppb

Weight: <None>
Min Conc: <None>

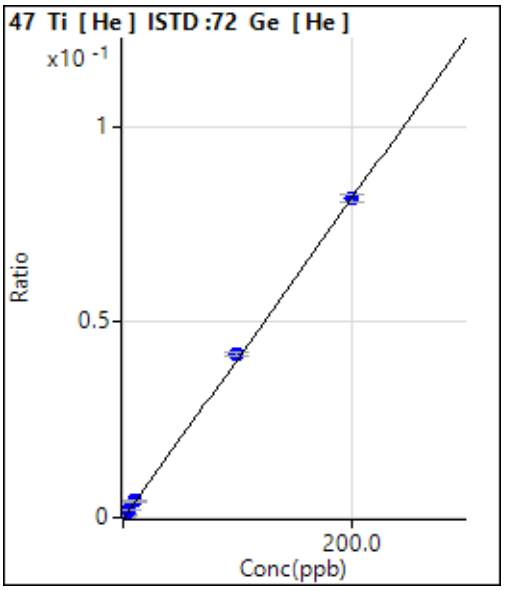


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1520.11	0.0059	P	7.7	
2	☐	200.000	194.134	5611.23	0.0219	P	0.3	-2.9
3	☐	500.000	497.525	12175.61	0.0470	P	1.4	-0.5
4	☐	1000.000	983.297	23260.01	0.0871	P	1.9	-1.7
5	☐	10000.00	9926.327	215033.36	0.8260	P	0.6	-0.7
6	☐	20000.00	20037.79	428897.15	1.6615	P	1.1	0.2

y = 8.2622E-005 * x + 0.0059
R = 1.0000
DL = 16.56 ppb
BEC = 71.33 ppb

Weight: <None>
Min Conc: <None>

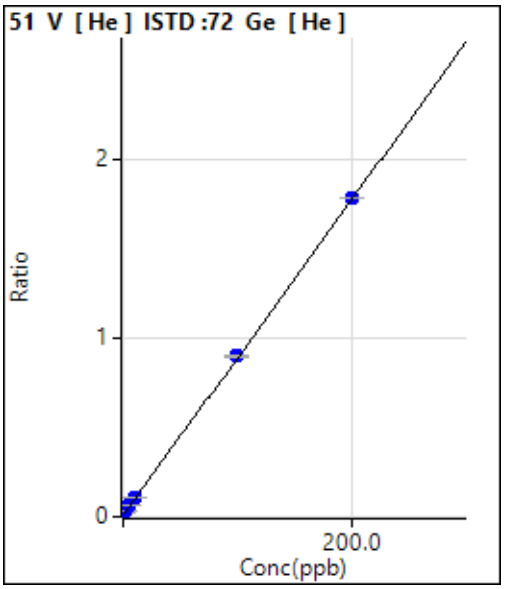
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	173.2	
2	☐	2.000	1.873	206.67	0.0008	P	40.4	-6.3
3	☐	5.000	4.487	486.68	0.0019	P	13.6	-10.3
4	☐	10.000	10.406	1150.06	0.0043	P	6.1	4.1
5	☐	100.000	101.732	10877.83	0.0418	P	2.0	1.7
6	☐	200.000	199.128	21103.20	0.0817	P	2.2	-0.4

y = 4.1034E-004 * x + 3.8361E-005
R = 0.9999
DL = 0.4858 ppb
BEC = 0.09349 ppb

Weight: <None>
Min Conc: <None>

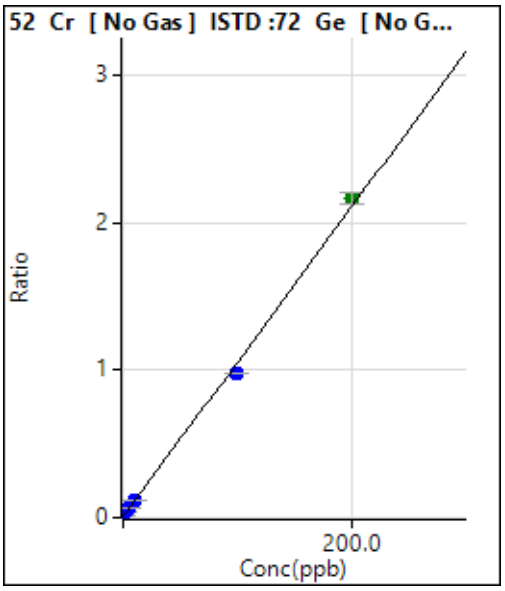


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4528.55	0.0176	P	1.9	
2	☐	2.000	2.193	9454.42	0.0370	P	1.8	9.6
3	☐	5.000	5.165	16380.91	0.0632	P	1.4	3.3
4	☐	10.000	10.270	28926.01	0.1084	P	1.1	2.7
5	☐	100.000	99.828	234304.30	0.9001	P	1.2	-0.2
6	☐	200.000	200.066	461120.61	1.7862	P	0.5	0.0

y = 0.0088 * x + 0.0176
R = 1.0000
DL = 0.1121 ppb
BEC = 1.987 ppb

Weight: <None>
Min Conc: <None>

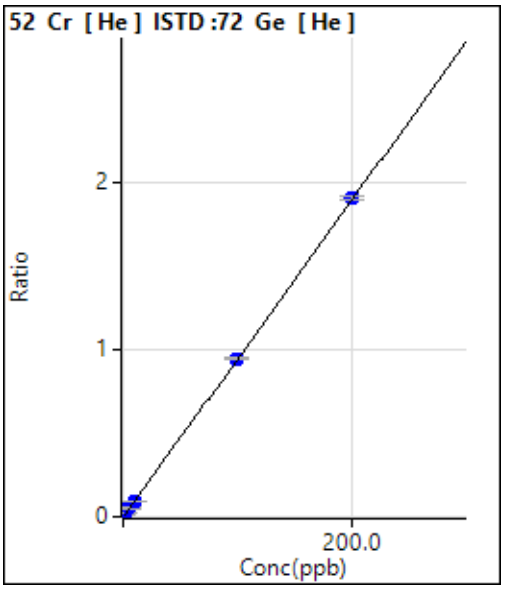
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9576.80	0.0176	P	2.4	
2	☐	2.000	1.903	20609.19	0.0376	P	0.6	-4.9
3	☐	5.000	4.699	36783.11	0.0670	P	3.7	-6.0
4	☐	10.000	9.183	64237.19	0.1142	P	1.0	-8.2
5	☐	100.000	91.272	544364.61	0.9772	P	0.5	-8.7
6	☐	200.000	204.413	1169990.35	2.1667	A	3.7	2.2

y = 0.0105 * x + 0.0176
R = 0.9987
DL = 0.1187 ppb
BEC = 1.676 ppb

Weight: <None>
Min Conc: <None>

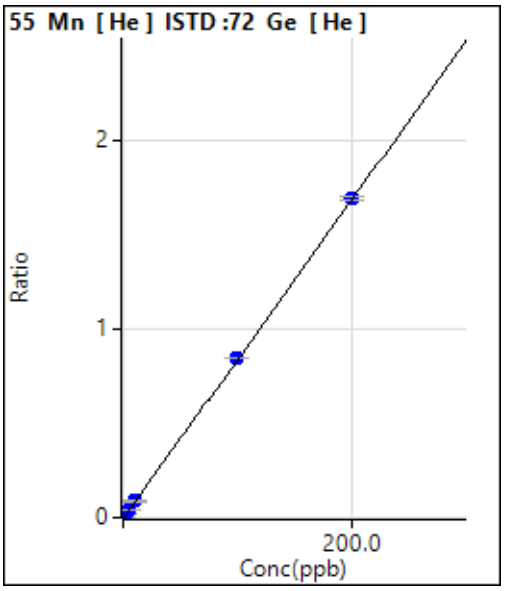


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1720.14	0.0067	P	12.4	
2	☐	2.000	1.867	6228.17	0.0243	P	1.5	-6.7
3	☐	5.000	4.842	13600.29	0.0525	P	3.6	-3.2
4	☐	10.000	9.519	25831.30	0.0968	P	1.5	-4.8
5	☐	100.000	98.979	245589.10	0.9434	P	1.1	-1.0
6	☐	200.000	200.540	491679.69	1.9046	P	0.8	0.3

y = 0.0095 * x + 0.0067
R = 1.0000
DL = 0.2616 ppb
BEC = 0.7057 ppb

Weight: <None>
Min Conc: <None>

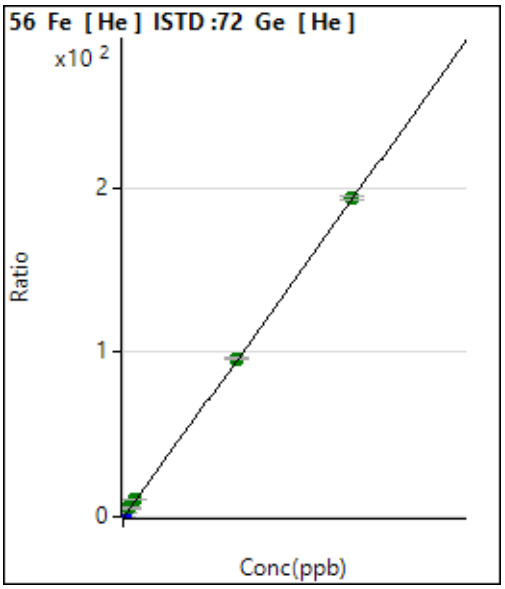
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	910.05	0.0035	P	11.2	
2	☐	2.000	2.123	5501.20	0.0215	P	1.9	6.2
3	☐	5.000	4.877	11611.78	0.0448	P	3.0	-2.5
4	☐	10.000	9.951	23427.06	0.0878	P	2.0	-0.5
5	☐	100.000	99.779	220798.45	0.8482	P	0.7	-0.2
6	☐	200.000	200.115	438223.72	1.6975	P	0.8	0.1

y = 0.0085 * x + 0.0035
R = 1.0000
DL = 0.1395 ppb
BEC = 0.4168 ppb

Weight: <None>
Min Conc: <None>

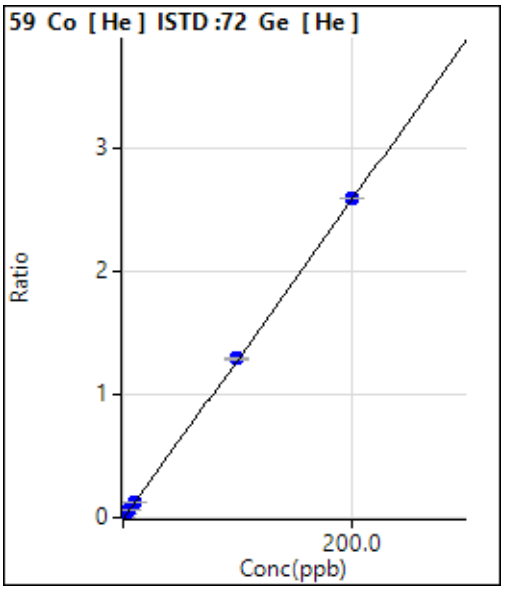


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	21019.70	0.0816	P	2.6	
2	☐	200.000	196.824	508231.70	1.9866	P	0.5	-1.6
3	☐	500.000	535.061	1362919.09	5.2604	A	0.8	7.0
4	☐	1000.000	1045.494	2723079.23	10.2009	A	0.9	4.5
5	☐	10000.00	9936.646	25058973.7	96.2583	A	0.3	-0.6
6	☐	20000.00	20028.55	50064510.9	193.937	A	1.1	0.1

y = 0.0097 * x + 0.0816
R = 1.0000
DL = 0.657 ppb
BEC = 8.426 ppb

Weight: <None>
Min Conc: <None>

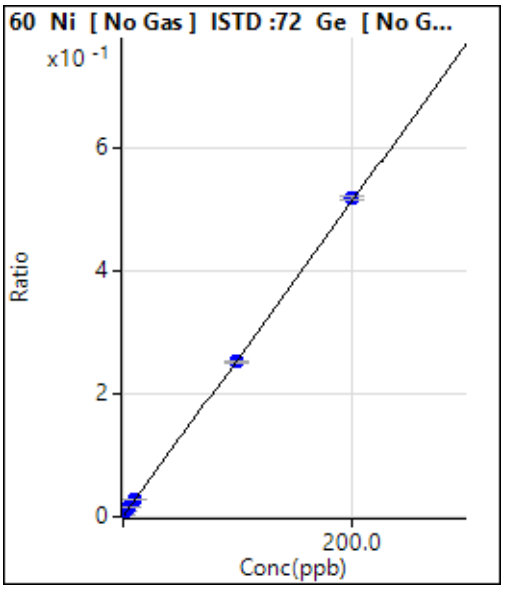
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	76.67	0.0003	P	33.2	
2	☐	2.000	2.061	6905.20	0.0270	P	3.0	3.0
3	☐	5.000	5.060	17060.97	0.0659	P	1.3	1.2
4	☐	10.000	9.977	34580.80	0.1295	P	0.5	-0.2
5	☐	100.000	99.645	336102.98	1.2911	P	0.8	-0.4
6	☐	200.000	200.177	669505.72	2.5935	P	0.3	0.1

y = 0.0130 * x + 2.9785E-004
R = 1.0000
DL = 0.02291 ppb
BEC = 0.02299 ppb

Weight: <None>
Min Conc: <None>

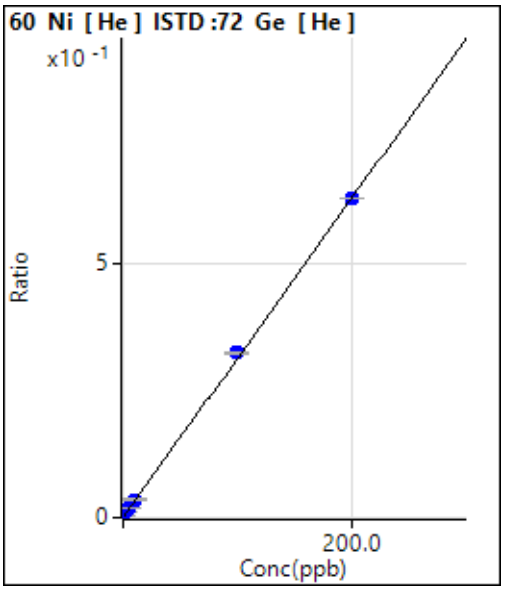


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1846.82	0.0034	P	4.3	
2	☐	2.000	1.871	4477.49	0.0082	P	3.7	-6.5
3	☐	5.000	4.741	8509.46	0.0155	P	2.4	-5.2
4	☐	10.000	9.635	15752.66	0.0280	P	2.6	-3.7
5	☐	100.000	97.333	140357.44	0.2520	P	1.1	-2.7
6	☐	200.000	201.359	279598.50	0.5176	P	1.8	0.7

y = 0.0026 * x + 0.0034
R = 0.9999
DL = 0.1724 ppb
BEC = 1.33 ppb

Weight: <None>
Min Conc: <None>

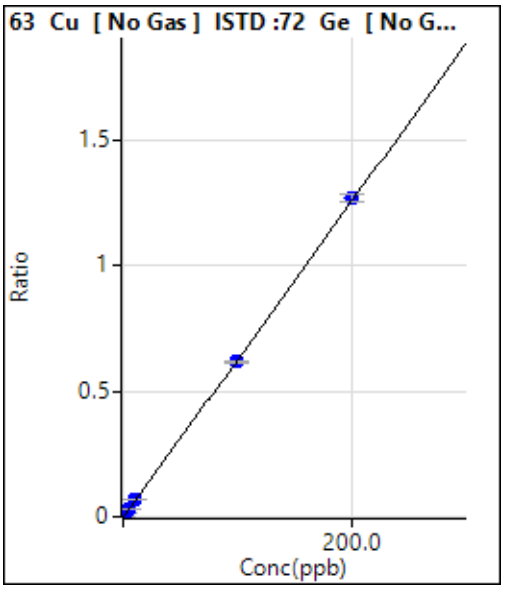
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	973.39	0.0038	P	12.1	
2	☐	2.000	1.912	2503.60	0.0098	P	3.9	-4.4
3	☐	5.000	4.963	5021.01	0.0194	P	2.3	-0.7
4	☐	10.000	10.130	9510.12	0.0356	P	4.1	1.3
5	☐	100.000	101.948	84437.71	0.3243	P	0.8	1.9
6	☐	200.000	199.021	162531.09	0.6296	P	0.5	-0.5

y = 0.0031 * x + 0.0038
R = 0.9999
DL = 0.4364 ppb
BEC = 1.2 ppb

Weight: <None>
Min Conc: <None>

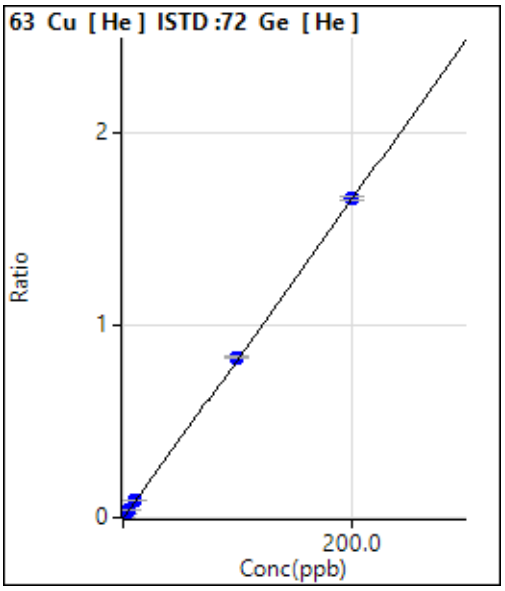


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1666.80	0.0031	P	10.4	
2	☐	2.000	1.845	8042.50	0.0147	P	0.7	-7.7
3	☐	5.000	4.851	18442.71	0.0336	P	1.9	-3.0
4	☐	10.000	10.031	37251.37	0.0662	P	1.3	0.3
5	☐	100.000	97.592	343897.45	0.6174	P	1.2	-2.4
6	☐	200.000	201.208	685668.22	1.2696	P	2.6	0.6

y = 0.0063 * x + 0.0031
R = 0.9999
DL = 0.1523 ppb
BEC = 0.4875 ppb

Weight: <None>
Min Conc: <None>

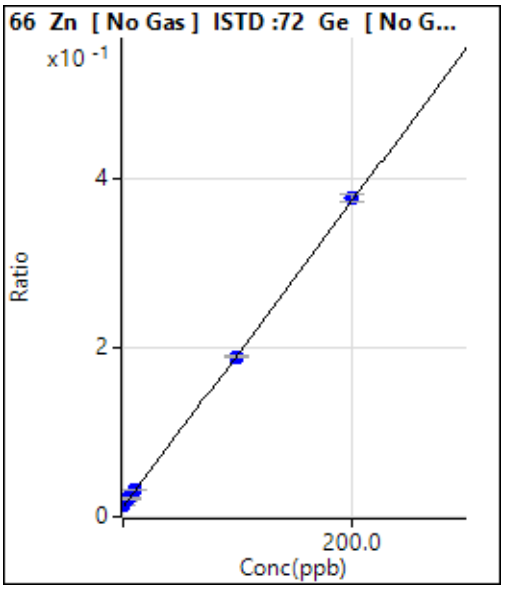
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	863.38	0.0033	P	11.7	
2	☐	2.000	1.871	4824.26	0.0189	P	0.3	-6.4
3	☐	5.000	4.899	11384.95	0.0440	P	2.8	-2.0
4	☐	10.000	10.112	23266.78	0.0872	P	0.6	1.1
5	☐	100.000	100.197	217024.71	0.8337	P	1.2	0.2
6	☐	200.000	199.900	428531.17	1.6600	P	1.1	-0.1

y = 0.0083 * x + 0.0033
R = 1.0000
DL = 0.1416 ppb
BEC = 0.4042 ppb

Weight: <None>
Min Conc: <None>

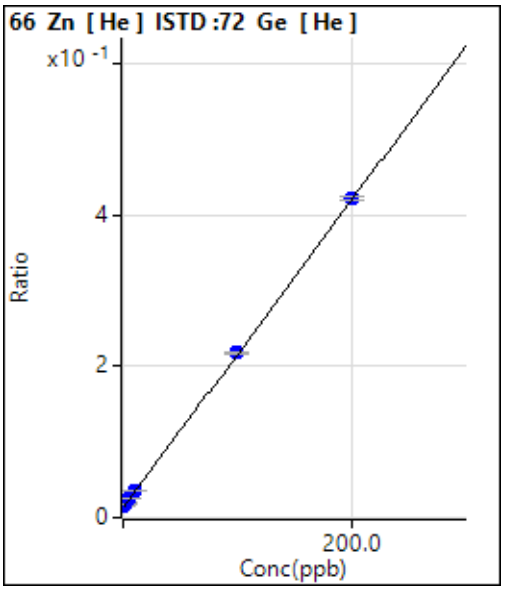


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7372.10	0.0136	P	2.7	
2	☐	2.000	1.998	9410.06	0.0172	P	1.1	-0.1
3	☐	5.000	4.658	12075.57	0.0220	P	3.6	-6.8
4	☐	10.000	10.232	18052.27	0.0321	P	4.6	2.3
5	☐	100.000	97.461	105860.73	0.1901	P	2.1	-2.5
6	☐	200.000	201.267	204181.62	0.3780	P	2.3	0.6

y = 0.0018 * x + 0.0136
R = 0.9999
DL = 0.6141 ppb
BEC = 7.489 ppb

Weight: <None>
Min Conc: <None>

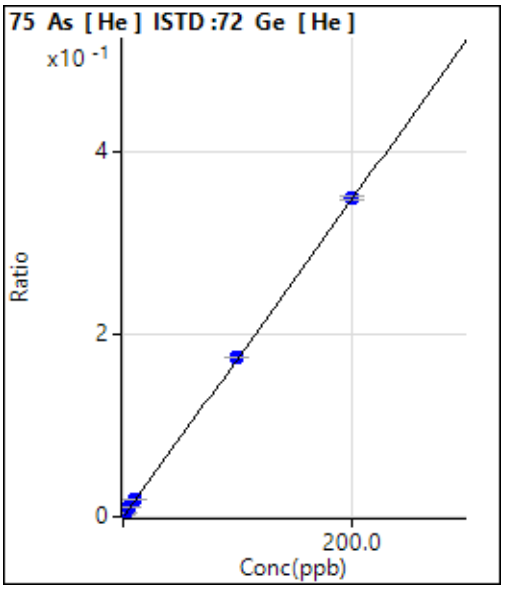
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3923.98	0.0152	P	7.4	
2	☐	2.000	1.862	4864.28	0.0190	P	8.5	-6.9
3	☐	5.000	5.169	6668.44	0.0257	P	3.1	3.4
4	☐	10.000	9.549	9253.33	0.0347	P	0.7	-4.5
5	☐	100.000	99.845	56879.27	0.2185	P	1.0	-0.2
6	☐	200.000	200.097	109092.81	0.4226	P	1.5	0.0

y = 0.0020 * x + 0.0152
R = 1.0000
DL = 1.656 ppb
BEC = 7.476 ppb

Weight: <None>
Min Conc: <None>

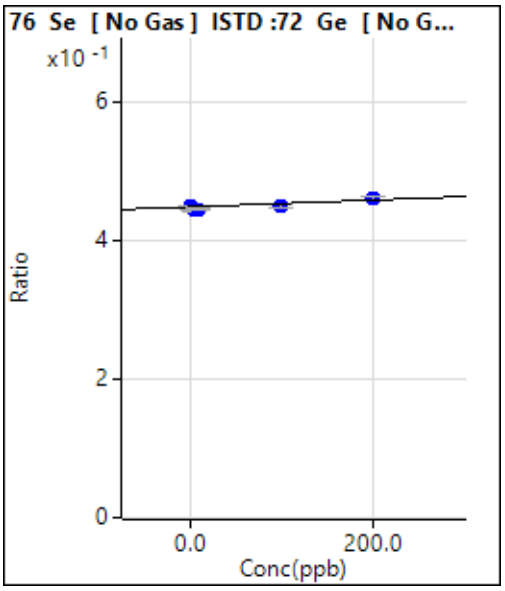


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	331.12	0.0013	P	0.7	
2	☐	2.000	2.067	1247.84	0.0049	P	6.8	3.4
3	☐	5.000	5.148	2650.27	0.0102	P	1.1	3.0
4	☐	10.000	10.084	5020.96	0.0188	P	4.9	0.8
5	☐	100.000	99.763	45469.58	0.1747	P	0.2	-0.2
6	☐	200.000	200.110	90108.23	0.3491	P	1.1	0.1

y = 0.0017 * x + 0.0013
R = 1.0000
DL = 0.01633 ppb
BEC = 0.7391 ppb

Weight: <None>
Min Conc: <None>

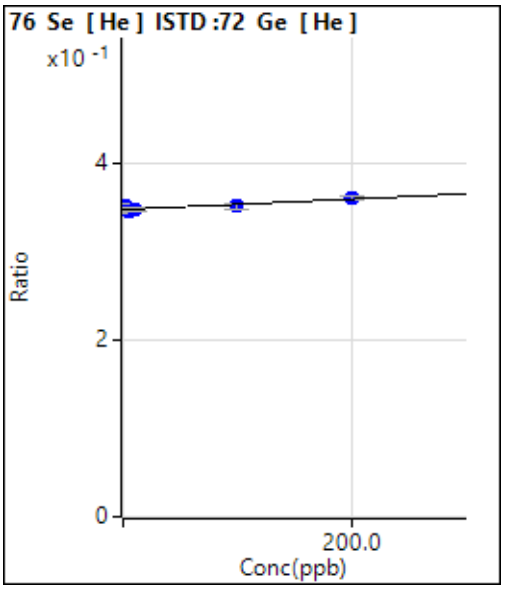
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	243879.34	0.4488	P	0.8	
2	☐	2.000	-17.577	245337.98	0.4479	P	1.1	-978.9
3	☐	5.000	-97.258	243678.46	0.4439	P	0.9	-2045.
4	☐	10.000	-76.211	250360.19	0.4450	P	0.4	-862.1
5	☐	100.000	20.829	250578.17	0.4498	P	0.8	-79.2
6	☐	200.000	246.648	249101.00	0.4611	P	0.9	23.3

y = 4.9874E-005 * x + 0.4488
R = 0.9159
DL = 224.5 ppb
BEC = 8999 ppb

Weight: <None>
Min Conc: <None>

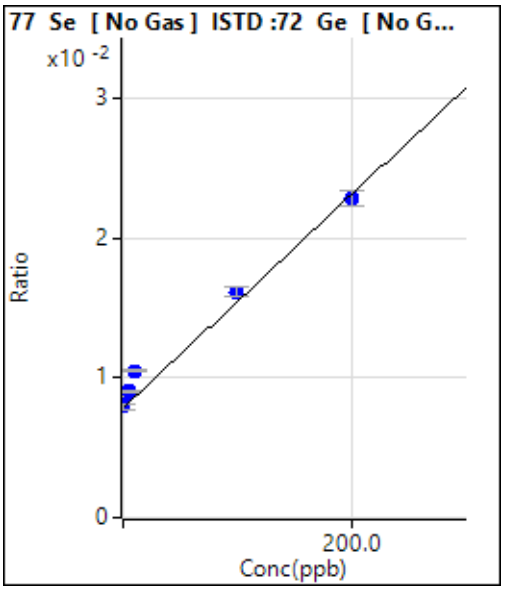


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	89713.84	0.3481	P	2.6	
2	☐	2.000	74.020	90186.95	0.3525	P	1.0	3601.0
3	☐	5.000	-17.294	89898.26	0.3470	P	1.8	-445.9
4	☐	10.000	10.758	93093.17	0.3487	P	1.3	7.6
5	☐	100.000	60.578	91549.26	0.3517	P	1.6	-39.4
6	☐	200.000	219.510	93251.05	0.3612	P	1.5	9.8

y = 5.9872E-005 * x + 0.3481
R = 0.8965
DL = 451.8 ppb
BEC = 5814 ppb

Weight: <None>
Min Conc: <None>

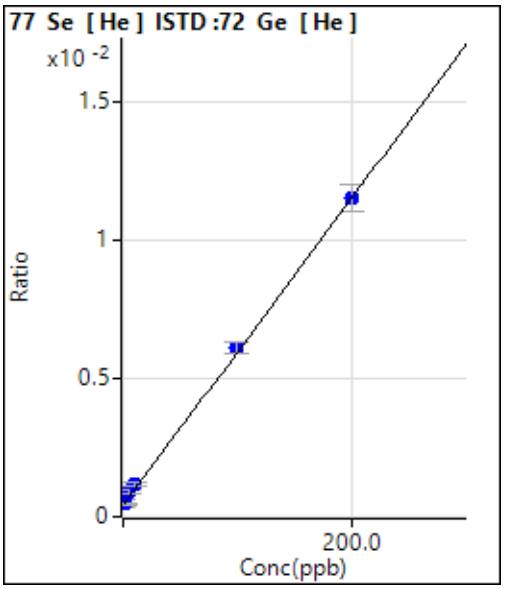
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4327.43	0.0080	P	4.8	
2	☐	2.000	11.088	4827.64	0.0088	P	4.2	454.4
3	☐	5.000	13.799	4951.01	0.0090	P	1.7	176.0
4	☐	10.000	32.896	5894.72	0.0105	P	1.1	229.0
5	☐	100.000	106.961	8983.15	0.0161	P	4.3	7.0
6	☐	200.000	195.064	12339.16	0.0229	P	4.6	-2.5

y = 7.6309E-005 * x + 0.0080
R = 0.9949
DL = 14.94 ppb
BEC = 104.4 ppb

Weight: <None>
Min Conc: <None>

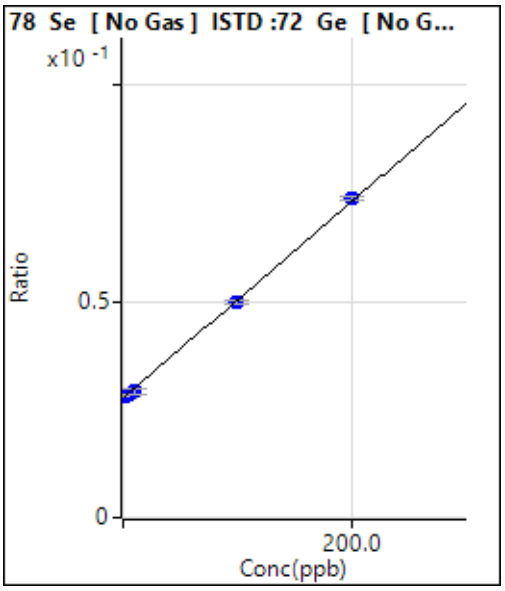


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	123.34	0.0005	P	49.6	
2	☐	2.000	-0.413	116.67	0.0005	P	19.8	-120.7
3	☐	5.000	7.376	230.01	0.0009	P	20.0	47.5
4	☐	10.000	12.944	320.01	0.0012	P	13.3	29.4
5	☐	100.000	101.496	1593.46	0.0061	P	5.7	1.5
6	☐	200.000	199.069	2980.39	0.0115	P	8.1	-0.5

y = 5.5587E-005 * x + 4.7899E-004
R = 0.9997
DL = 12.82 ppb
BEC = 8.617 ppb

Weight: <None>
Min Conc: <None>

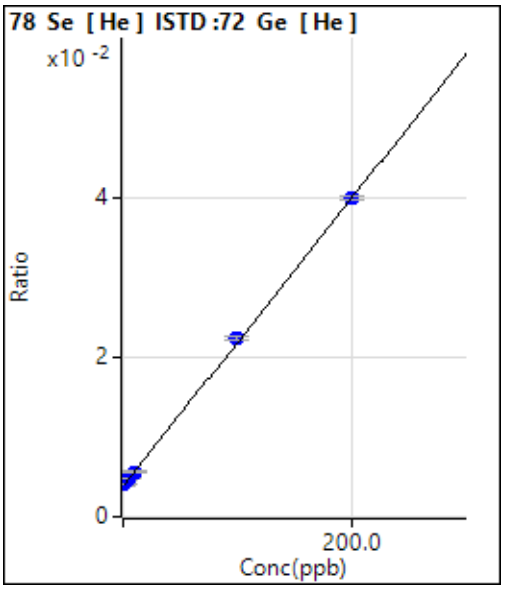
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15228.94	0.0280	P	4.8	
2	☐	2.000	-0.361	15312.28	0.0280	P	1.3	-118.0
3	☐	5.000	1.312	15552.61	0.0283	P	0.8	-73.8
4	☐	10.000	4.820	16386.90	0.0291	P	4.0	-51.8
5	☐	100.000	96.212	27755.54	0.0498	P	2.4	-3.8
6	☐	200.000	202.269	39879.53	0.0738	P	0.9	1.1

y = 2.2634E-004 * x + 0.0280
R = 0.9996
DL = 17.73 ppb
BEC = 123.9 ppb

Weight: <None>
Min Conc: <None>

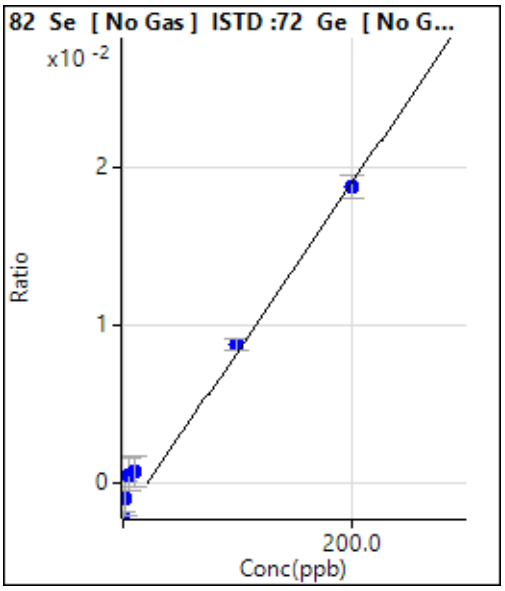


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1042.04	0.0040	P	3.9	
2	☐	2.000	1.929	1122.72	0.0044	P	8.7	-3.6
3	☐	5.000	4.242	1244.73	0.0048	P	1.4	-15.2
4	☐	10.000	8.749	1499.42	0.0056	P	5.5	-12.5
5	☐	100.000	101.998	5833.28	0.0224	P	2.6	2.0
6	☐	200.000	199.083	10295.28	0.0399	P	1.4	-0.5

y = 1.8003E-004 * x + 0.0040
R = 0.9999
DL = 2.647 ppb
BEC = 22.45 ppb

Weight: <None>
Min Conc: <None>

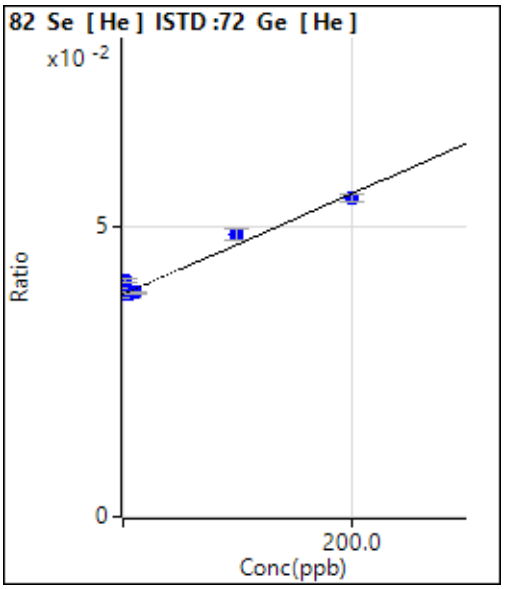
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-1169.64	-0.0021	P	-28.8	
2	☐	2.000	11.829	-489.32	-0.0009	P	-242.6	491.4
3	☐	5.000	25.531	303.18	0.0006	P	361.5	410.6
4	☐	10.000	27.434	432.42	0.0008	P	250.5	174.3
5	☐	100.000	103.351	4927.15	0.0088	P	8.3	3.4
6	☐	200.000	196.841	10145.59	0.0188	P	7.5	-1.6

y = 1.0629E-004 * x - 0.0021
R = 0.9953
DL = 17.43 ppb
BEC = -20.2 ppb

Weight: <None>
Min Conc: <None>

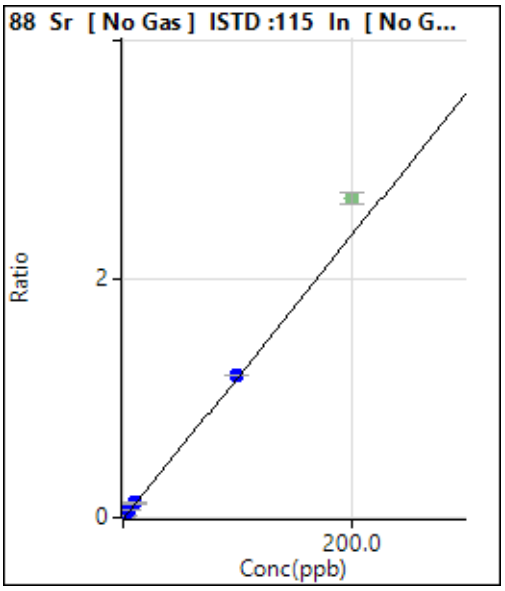


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	9900.44	0.0384	P	3.9	
2	☐	2.000	25.547	10394.20	0.0406	P	1.5	1177.3
3	☐	5.000	1.405	9980.51	0.0385	P	4.4	-71.9
4	☐	10.000	1.991	10300.76	0.0386	P	0.7	-80.1
5	☐	100.000	119.577	12699.51	0.0488	P	4.1	19.6
6	☐	200.000	190.467	14184.40	0.0549	P	2.7	-4.8

y = 8.6775E-005 * x + 0.0384
R = 0.9845
DL = 52.37 ppb
BEC = 442.7 ppb

Weight: <None>
Min Conc: <None>

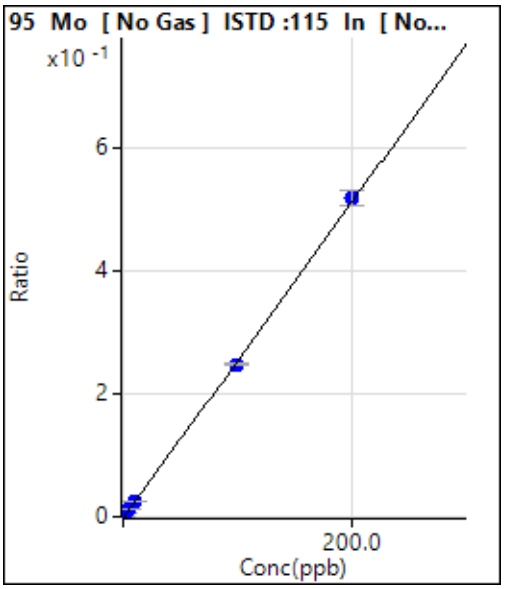
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	440.01	0.0007	P	21.8	
2	☐	2.000	1.928	14971.90	0.0236	P	1.4	-3.6
3	☐	5.000	4.945	37305.67	0.0595	P	0.6	-1.1
4	☐	10.000	10.148	76943.97	0.1213	P	1.0	1.5
5	☐	100.000	99.989	751203.74	1.1888	P	0.3	0.0
6	☑	200.000		1633628.10	2.6759	A	3.3	

y = 0.0119 * x + 7.0622E-004
R = 1.0000
DL = 0.03891 ppb
BEC = 0.05944 ppb

Weight: <None>
Min Conc: <None>

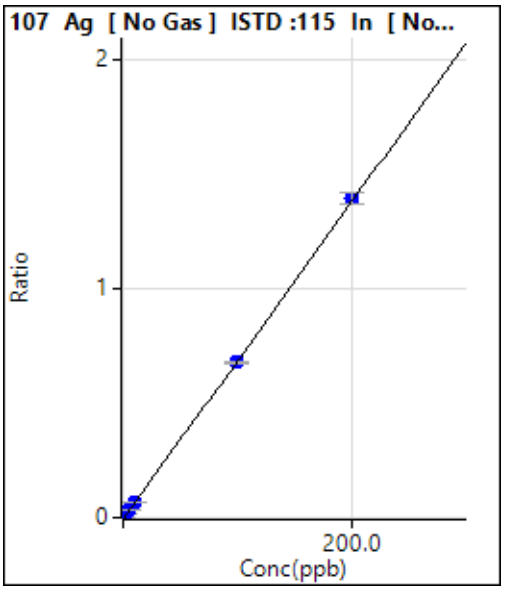


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	70.5	
2	☐	2.000	1.908	3120.41	0.0049	P	6.3	-4.6
3	☐	5.000	4.964	8002.52	0.0128	P	2.5	-0.7
4	☐	10.000	9.921	16163.44	0.0255	P	1.8	-0.8
5	☐	100.000	96.260	156031.50	0.2469	P	1.6	-3.7
6	☐	200.000	201.876	316075.26	0.5178	P	4.2	0.9

y = 0.0026 * x + 2.6926E-005
R = 0.9998
DL = 0.02219 ppb
BEC = 0.0105 ppb

Weight: <None>
Min Conc: <None>

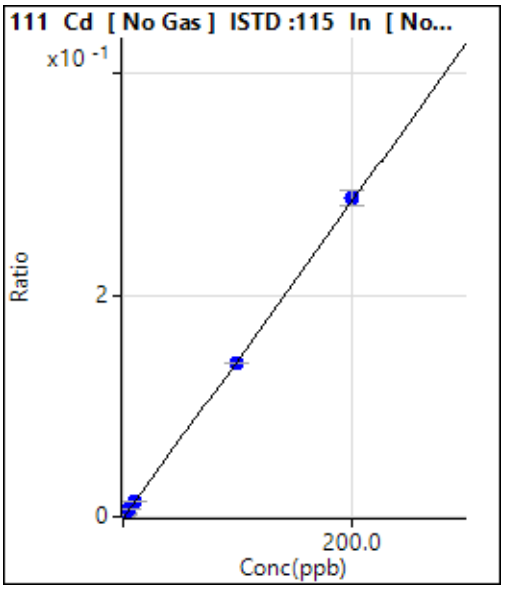
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	170.00	0.0003	P	30.1	
2	☐	2.000	1.884	8452.87	0.0133	P	3.0	-5.8
3	☐	5.000	4.810	21093.78	0.0336	P	0.9	-3.8
4	☐	10.000	9.738	43013.48	0.0678	P	1.8	-2.6
5	☐	100.000	97.609	427802.14	0.6770	P	0.6	-2.4
6	☐	200.000	201.214	851846.00	1.3953	P	3.1	0.6

y = 0.0069 * x + 2.7301E-004
R = 0.9999
DL = 0.03552 ppb
BEC = 0.03938 ppb

Weight: <None>
Min Conc: <None>

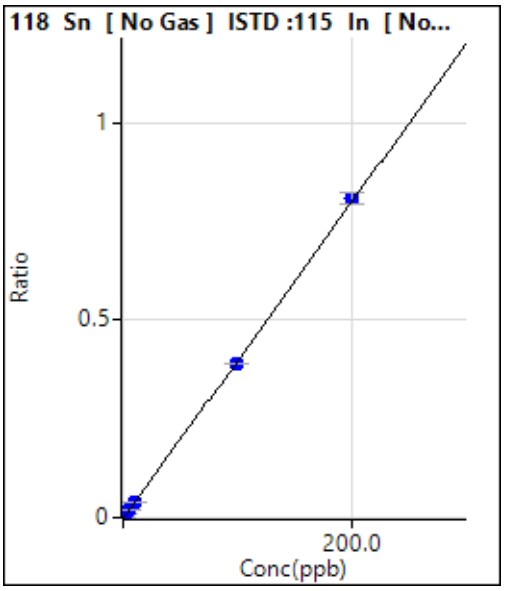


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.794	1630.13	0.0026	P	12.0	-10.3
3	☐	5.000	4.743	4254.11	0.0068	P	6.3	-5.1
4	☐	10.000	9.806	8893.14	0.0140	P	3.2	-1.9
5	☐	100.000	97.102	87629.73	0.1387	P	0.8	-2.9
6	☐	200.000	201.467	175579.46	0.2877	P	5.2	0.7

y = 0.0014 * x + 1.0756E-005
R = 0.9999
DL = 0.01957 ppb
BEC = 0.007532 ppb

Weight: <None>
Min Conc: <None>

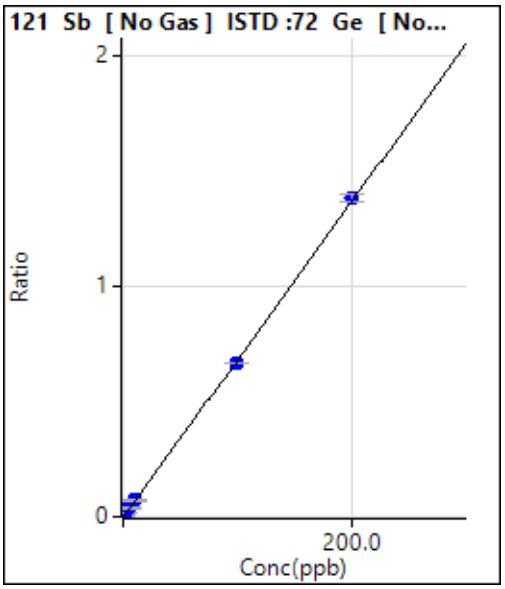
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	773.37	0.0012	P	19.6	
2	☐	2.000	1.746	5227.81	0.0082	P	5.7	-12.7
3	☐	5.000	4.707	12622.97	0.0201	P	2.1	-5.9
4	☐	10.000	9.583	25171.17	0.0397	P	1.6	-4.2
5	☐	100.000	97.120	246921.81	0.3907	P	0.8	-2.9
6	☐	200.000	201.471	494041.54	0.8092	P	3.1	0.7

y = 0.0040 * x + 0.0012
R = 0.9999
DL = 0.1819 ppb
BEC = 0.3099 ppb

Weight: <None>
Min Conc: <None>

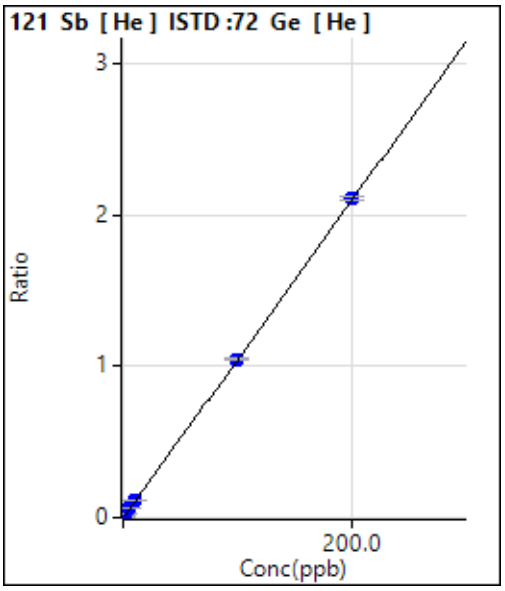


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2250.23	0.0041	P	10.2	
2	☐	2.000	1.997	9763.85	0.0178	P	0.9	-0.2
3	☐	5.000	4.899	20706.63	0.0377	P	1.2	-2.0
4	☐	10.000	9.778	40044.69	0.0712	P	2.4	-2.2
5	☐	100.000	97.048	372940.68	0.6695	P	0.7	-3.0
6	☐	200.000	201.490	748292.20	1.3855	P	2.6	0.7

y = 0.0069 * x + 0.0041
R = 0.9998
DL = 0.1849 ppb
BEC = 0.6033 ppb

Weight: <None>
Min Conc: <None>

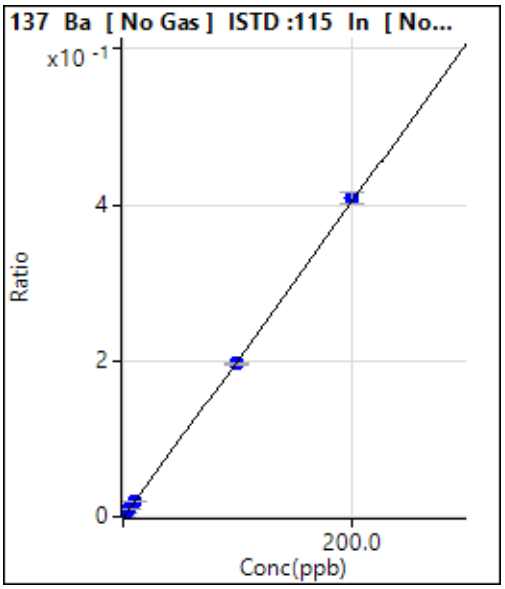
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1680.14	0.0065	P	5.4	
2	☐	2.000	2.049	7162.08	0.0280	P	6.2	2.4
3	☐	5.000	4.867	14908.70	0.0575	P	1.2	-2.7
4	☐	10.000	10.056	29884.44	0.1120	P	2.4	0.6
5	☐	100.000	99.120	272219.12	1.0457	P	0.8	-0.9
6	☐	200.000	200.440	544180.02	2.1080	P	1.1	0.2

y = 0.0105 * x + 0.0065
R = 1.0000
DL = 0.1002 ppb
BEC = 0.6217 ppb

Weight: <None>
Min Conc: <None>

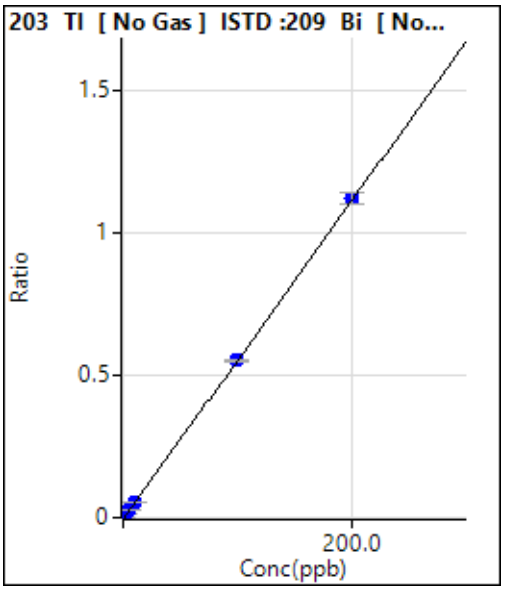


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	123.33	0.0002	P	32.3	
2	☐	2.000	1.898	2563.64	0.0040	P	2.2	-5.1
3	☐	5.000	4.730	6134.89	0.0098	P	1.5	-5.4
4	☐	10.000	9.756	12663.05	0.0200	P	0.4	-2.4
5	☐	100.000	96.660	123852.91	0.1960	P	0.6	-3.3
6	☐	200.000	201.690	249488.07	0.4087	P	4.1	0.8

y = 0.0020 * x + 1.9805E-004
R = 0.9998
DL = 0.09464 ppb
BEC = 0.09778 ppb

Weight: <None>
Min Conc: <None>

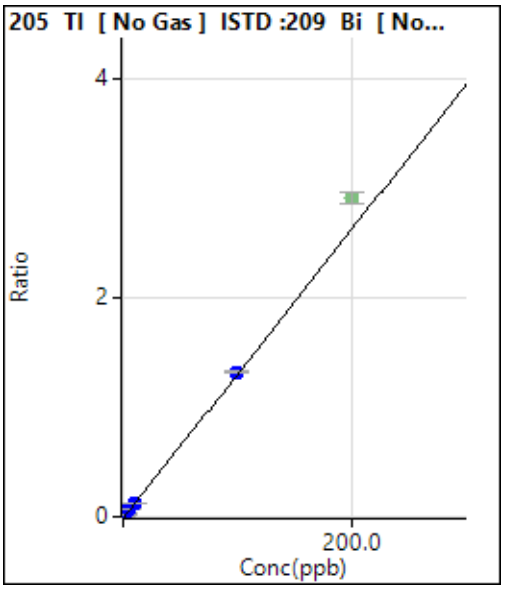
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10.00	0.0000	P	100.0	
2	☐	2.000	1.978	6588.54	0.0111	P	5.1	-1.1
3	☐	5.000	4.907	16441.12	0.0274	P	4.8	-1.9
4	☐	10.000	9.888	33652.28	0.0552	P	0.7	-1.1
5	☐	100.000	98.701	333813.46	0.5508	P	0.7	-1.3
6	☐	200.000	200.658	666727.99	1.1198	P	3.6	0.3

y = 0.0056 * x + 1.7029E-005
R = 1.0000
DL = 0.009157 ppb
BEC = 0.003051 ppb

Weight: <None>
Min Conc: <None>

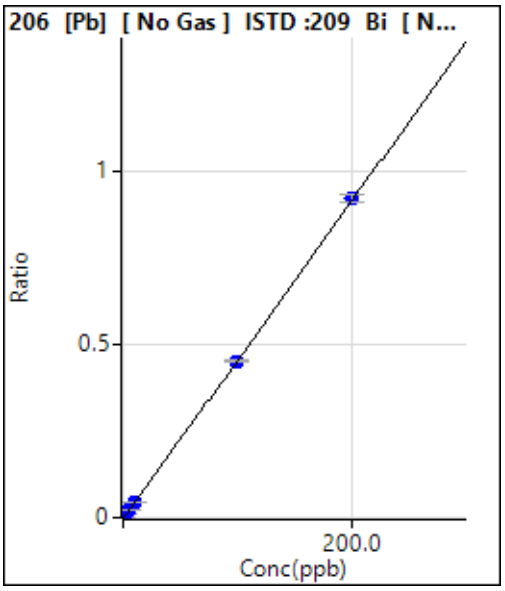


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	68.7	
2	☐	2.000	1.973	15546.65	0.0261	P	3.4	-1.4
3	☐	5.000	4.918	38971.16	0.0649	P	1.5	-1.6
4	☐	10.000	9.822	79056.20	0.1297	P	0.8	-1.8
5	☐	100.000	100.022	800158.35	1.3203	P	0.9	0.0
6	☑	200.000		1734259.51	2.9126	A	3.1	

y = 0.0132 * x + 2.8501E-005
R = 1.0000
DL = 0.004448 ppb
BEC = 0.002159 ppb

Weight: <None>
Min Conc: <None>

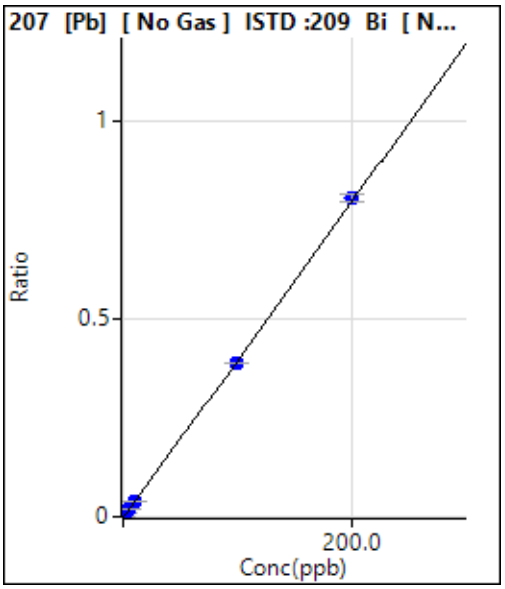
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	313.35	0.0005	P	22.4	
2	☐	2.000	1.993	5768.11	0.0097	P	1.8	-0.3
3	☐	5.000	4.868	13714.44	0.0229	P	1.1	-2.6
4	☐	10.000	9.725	27507.31	0.0451	P	0.7	-2.8
5	☐	100.000	98.442	273817.27	0.4518	P	1.2	-1.6
6	☐	200.000	200.796	548514.74	0.9210	P	2.1	0.4

y = 0.0046 * x + 5.3729E-004
R = 1.0000
DL = 0.07862 ppb
BEC = 0.1172 ppb

Weight: <None>
Min Conc: <None>

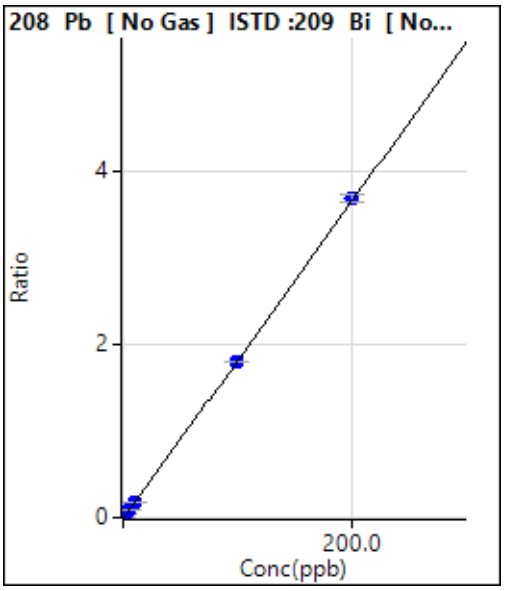


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	290.03	0.0005	P	29.5	
2	☐	2.000	1.958	4951.09	0.0083	P	4.8	-2.1
3	☐	5.000	4.838	11872.57	0.0198	P	4.1	-3.2
4	☐	10.000	9.562	23549.08	0.0386	P	1.0	-4.4
5	☐	100.000	97.049	234836.46	0.3875	P	1.1	-3.0
6	☐	200.000	201.502	478782.99	0.8040	P	2.6	0.8

y = 0.0040 * x + 4.9675E-004
R = 0.9998
DL = 0.1101 ppb
BEC = 0.1246 ppb

Weight: <None>
Min Conc: <None>

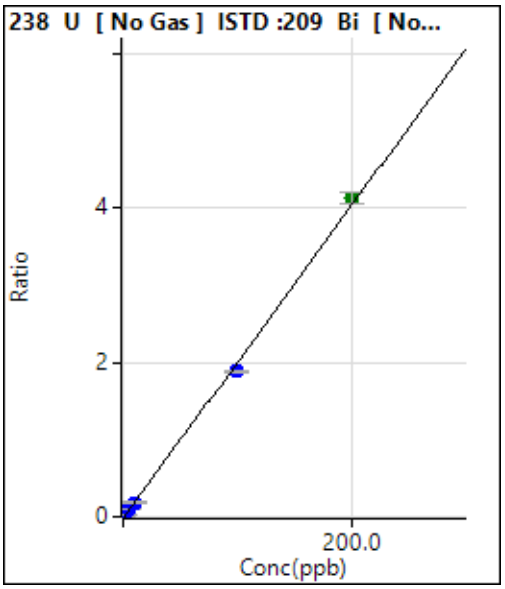
Calibration for 082_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1520.29	0.0026	P	35.2	
2	☐	2.000	1.940	22768.51	0.0382	P	3.2	-3.0
3	☐	5.000	4.878	55262.90	0.0921	P	1.9	-2.4
4	☐	10.000	9.750	110635.37	0.1815	P	0.3	-2.5
5	☐	100.000	97.840	1089287.57	1.7974	P	0.7	-2.2
6	☐	200.000	201.096	2198300.08	3.6915	P	2.5	0.5

y = 0.0183 * x + 0.0026
R = 0.9999
DL = 0.15 ppb
BEC = 0.1419 ppb

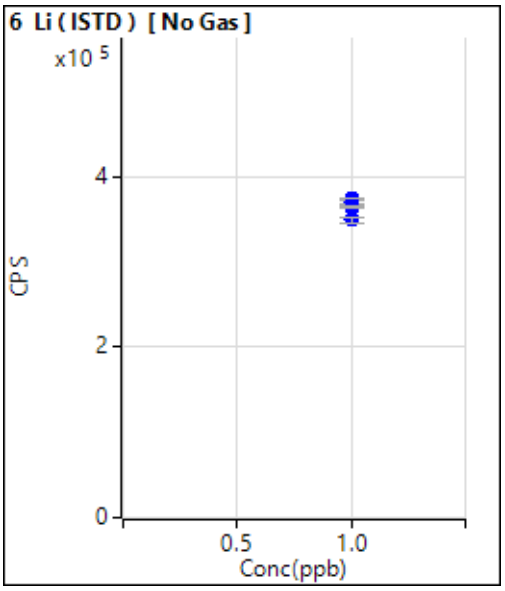
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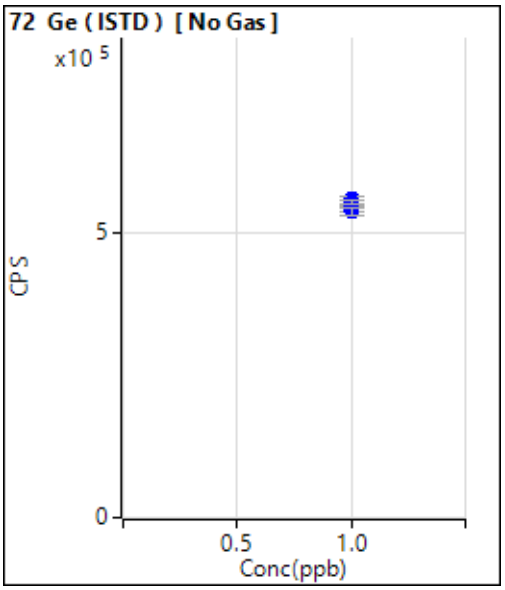
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	1.819	21966.63	0.0368	P	1.8	-9.1
3	☐	5.000	4.596	55874.45	0.0931	P	2.3	-8.1
4	☐	10.000	9.201	113620.60	0.1864	P	2.3	-8.0
5	☐	100.000	92.721	1138082.30	1.8779	P	0.8	-7.3
6	☐	200.000	203.692	2456229.54	4.1255	A	3.7	1.8

y = 0.0203 * x + 5.6778E-006
R = 0.9991
DL = 0.001457 ppb
BEC = 0.0002803 ppb

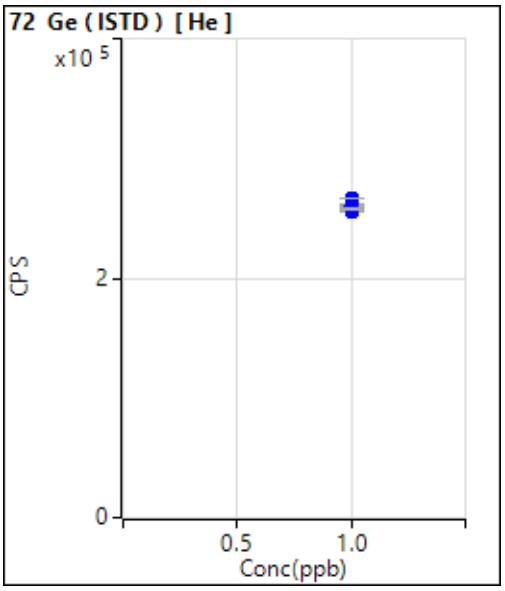
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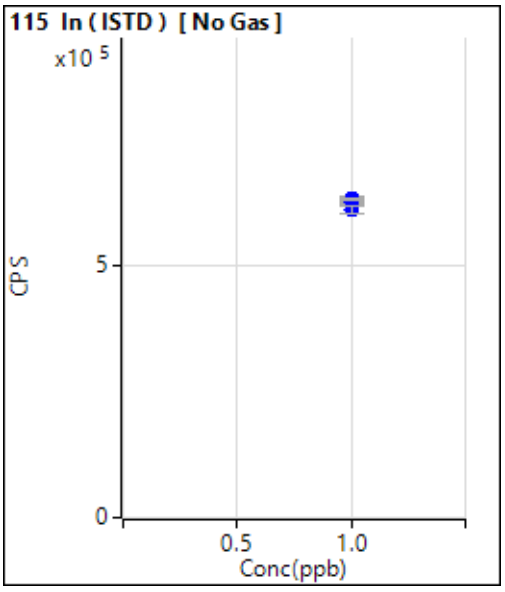
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		366034.68		P	0.6	
2	☐	1.000		370523.01		P	0.8	
3	☐	1.000		369411.31		P	1.1	
4	☐	1.000		374813.87		P	0.3	
5	☐	1.000		364045.07		P	0.6	
6	☐	1.000		348902.04		P	2.0	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		543459.16		P	1.7	
2	☐	1.000		547745.26		P	0.5	
3	☐	1.000		548938.94		P	1.2	
4	☐	1.000		562632.98		P	0.8	
5	☐	1.000		557087.95		P	1.3	
6	☐	1.000		540320.16		P	2.6	

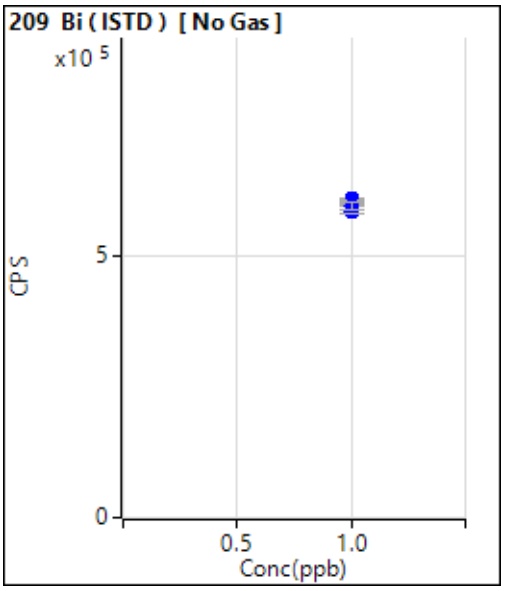


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		257787.38		P	1.2	
2	☐	1.000		255831.09		P	0.4	
3	☐	1.000		259073.31		P	1.2	
4	☐	1.000		266948.19		P	0.3	
5	☐	1.000		260324.94		P	1.0	
6	☐	1.000		258153.70		P	0.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		622161.85		P	1.1	
2	☐	1.000		633967.19		P	0.8	
3	☐	1.000		627339.12		P	1.1	
4	☐	1.000		634478.14		P	0.8	
5	☐	1.000		631936.67		P	0.9	
6	☐	1.000		610872.69		P	2.8	

Calibration for 082_ICV.d



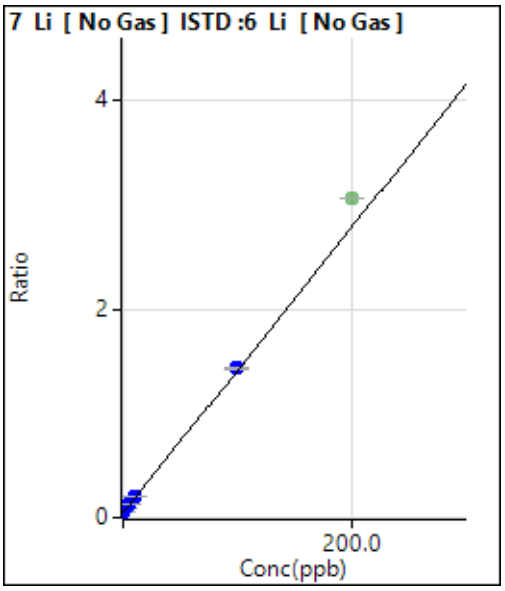
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		583311.23		P	1.2	
2	☐	1.000		596246.23		P	1.0	
3	☐	1.000		600125.59		P	1.0	
4	☐	1.000		609677.62		P	0.6	
5	☐	1.000		606027.99		P	0.2	
6	☐	1.000		595732.54		P	2.4	

Calibration for 018_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\072222A.b\
Analysis File: 072222A.batch.bin
DA Date-Time: 07/22/2022 22:33:36
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	011CALB.d	CAL BLK	07/22/2022 12:22:47
2	012CALS.d	2/10/200	07/22/2022 12:25:03
3	013CALS.d	5/25/500	07/22/2022 12:27:18
4	014CALS.d	10/50/100	07/22/2022 12:29:33
5	015CALS.d	100/500/10K	07/22/2022 12:31:48
6	016CALS.d	200/1000/20K	07/22/2022 12:34:00

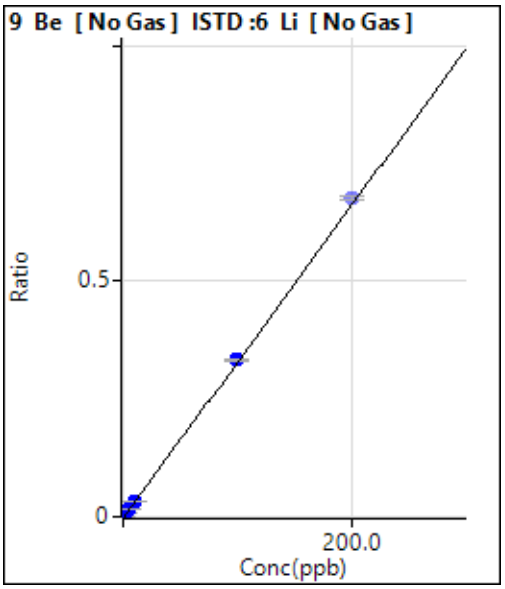
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	23553.08	0.0622	P	0.1	
2	☐	2.000	2.044	33843.87	0.0902	P	1.7	2.2
3	☐	5.000	4.882	48593.52	0.1290	P	0.6	-2.4
4	☐	10.000	9.709	73389.82	0.1951	P	0.7	-2.9
5	☐	100.000	100.034	543233.05	1.4315	P	1.2	0.0
6	☑	200.000		1111708.11	3.0639	A	0.4	

y = 0.0137 * x + 0.0622
R = 1.0000
DL = 0.011 ppb
BEC = 4.544 ppb

Weight: <None>
Min Conc: <None>

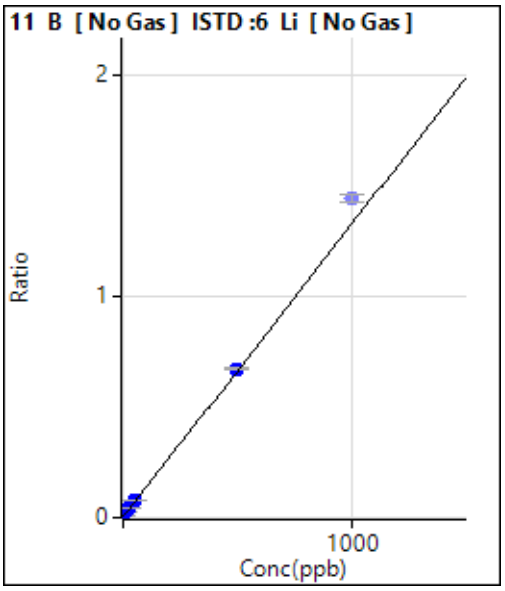


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	31.67	0.0001	P	24.1	
2	☐	2.000	1.971	2490.24	0.0066	P	2.9	-1.4
3	☐	5.000	4.900	6164.72	0.0164	P	0.9	-2.0
4	☐	10.000	9.873	12375.51	0.0329	P	1.9	-1.3
5	☐	100.000	100.018	126181.86	0.3325	P	1.2	0.0
6	☑	200.000		245664.09	0.6771	P	1.0	

y = 0.0033 * x + 8.3619E-005
R = 1.0000
DL = 0.01822 ppb
BEC = 0.02516 ppb

Weight: <None>
Min Conc: <None>

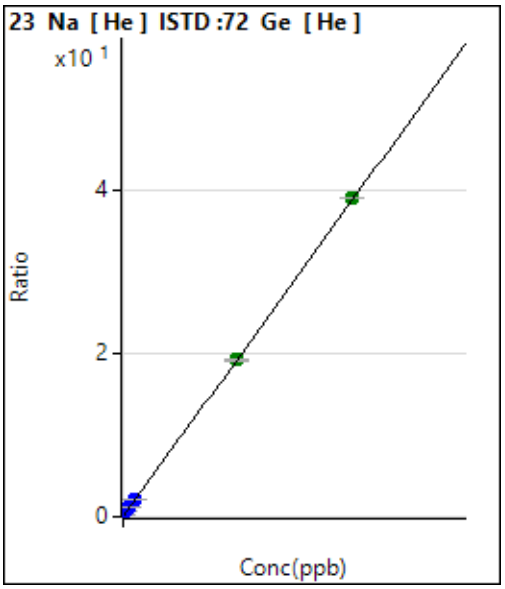
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	4120.64	0.0109	P	2.7	
2	☐	10.000	9.341	8721.08	0.0232	P	0.7	-6.6
3	☐	25.000	23.846	15982.49	0.0424	P	2.5	-4.6
4	☐	50.000	50.197	29070.17	0.0773	P	3.4	0.4
5	☐	500.000	500.051	255177.46	0.6724	P	1.9	0.0
6	☑	1000.000		523762.73	1.4434	P	2.0	

y = 0.0013 * x + 0.0109
R = 1.0000
DL = 0.6777 ppb
BEC = 8.226 ppb

Weight: <None>
Min Conc: <None>

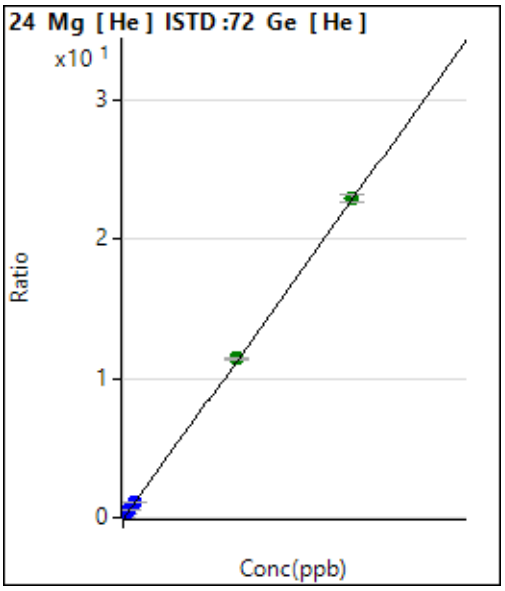


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	50250.66	0.2347	P	0.9	
2	☐	200.000	194.664	131155.43	0.6113	P	0.4	-2.7
3	☐	500.000	473.007	252599.51	1.1498	P	1.2	-5.4
4	☐	1000.000	966.287	449706.83	2.1041	P	0.3	-3.4
5	☐	10000.00	9830.604	4339543.37	19.2531	A	1.7	-1.7
6	☐	20000.00	20087.11	8456294.46	39.0955	A	0.6	0.4

y = 0.0019 * x + 0.2347
R = 1.0000
DL = 3.321 ppb
BEC = 121.3 ppb

Weight: <None>
Min Conc: <None>

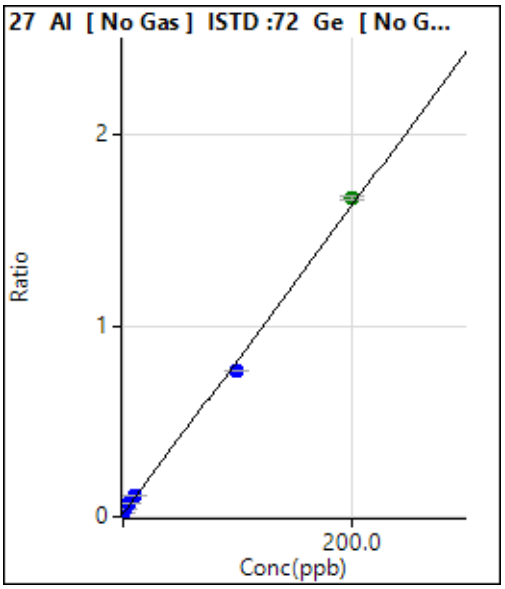
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	270.01	0.0013	P	7.8	
2	☐	200.000	194.785	48196.87	0.2246	P	0.7	-2.6
3	☐	500.000	479.292	121025.09	0.5509	P	1.8	-4.1
4	☐	1000.000	969.147	237802.21	1.1126	P	0.2	-3.1
5	☐	10000.00	9954.042	2573464.70	11.4162	A	0.6	-0.5
6	☐	20000.00	20025.09	4966589.41	22.9654	A	2.1	0.1

y = 0.0011 * x + 0.0013
R = 1.0000
DL = 0.2579 ppb
BEC = 1.1 ppb

Weight: <None>
Min Conc: <None>

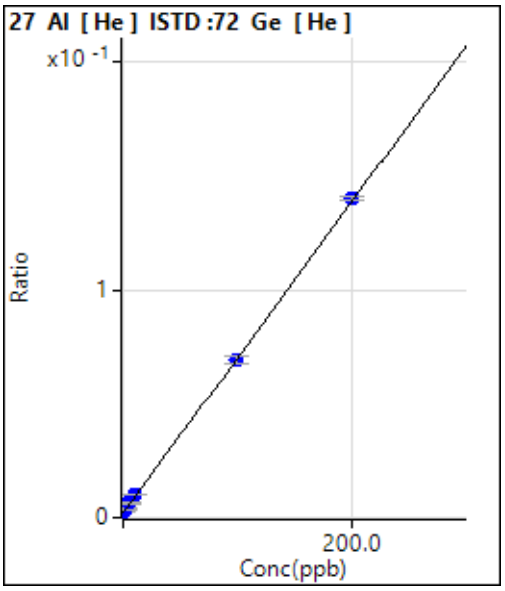


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	14030.62	0.0241	P	0.9	
2	☐	2.000	2.093	23540.15	0.0410	P	3.1	4.6
3	☐	5.000	5.689	40699.87	0.0700	P	1.2	13.8
4	☐	10.000	10.349	62590.58	0.1076	P	1.1	3.5
5	☐	100.000	91.553	460831.42	0.7629	P	0.4	-8.4
6	☐	200.000	204.188	976431.78	1.6717	A	0.7	2.1

y = 0.0081 * x + 0.0241
R = 0.9987
DL = 0.08135 ppb
BEC = 2.983 ppb

Weight: <None>
Min Conc: <None>

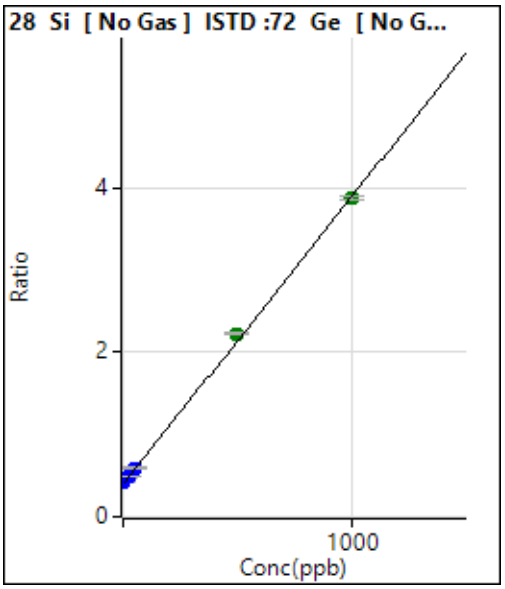
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	573.36	0.0027	P	13.9	
2	☐	2.000	1.514	796.70	0.0037	P	14.7	-24.3
3	☐	5.000	5.472	1410.10	0.0064	P	5.2	9.4
4	☐	10.000	10.844	2156.87	0.0101	P	2.3	8.4
5	☐	100.000	97.306	15595.70	0.0692	P	5.0	-2.7
6	☐	200.000	201.298	30353.40	0.1403	P	1.3	0.6

y = 6.8373E-004 * x + 0.0027
R = 0.9998
DL = 1.63 ppb
BEC = 3.917 ppb

Weight: <None>
Min Conc: <None>

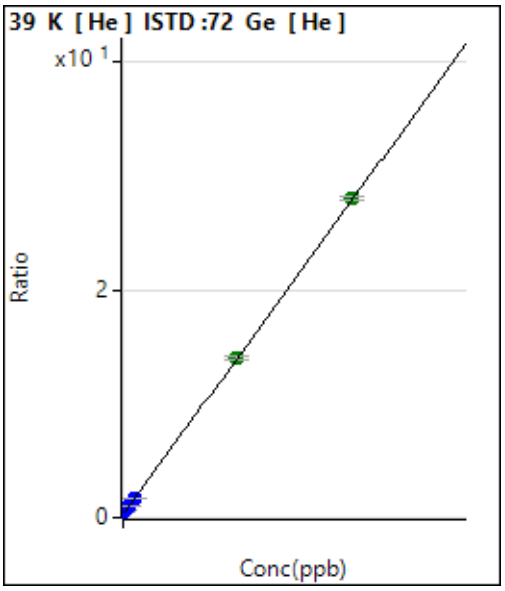


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	243298.36	0.4175	P	1.8	
2	☐	10.000	12.882	265733.47	0.4625	P	1.5	28.8
3	☐	25.000	23.318	290162.39	0.4989	P	0.4	-6.7
4	☐	50.000	50.307	345081.96	0.5932	P	0.8	0.6
5	☐	500.000	518.676	1346516.86	2.2290	A	0.9	3.7
6	☐	1000.000	990.660	2264789.55	3.8774	A	0.7	-0.9

y = 0.0035 * x + 0.4175
R = 0.9997
DL = 6.447 ppb
BEC = 119.5 ppb

Weight: <None>
Min Conc: <None>

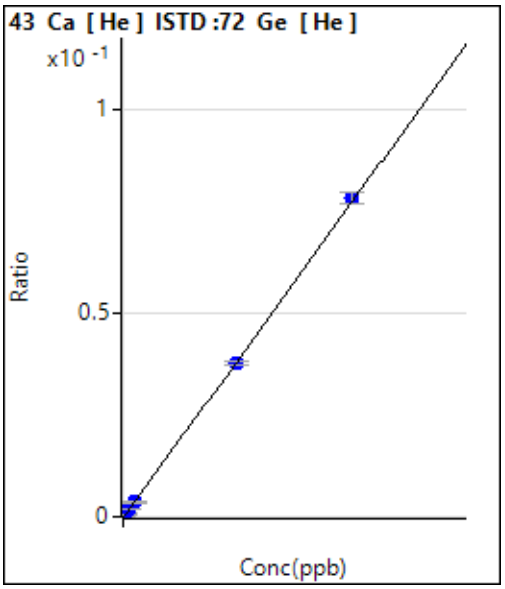
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	91454.87	0.4271	P	1.9	
2	☐	200.000	184.206	146109.57	0.6810	P	0.7	-7.9
3	☐	500.000	471.058	236462.09	1.0763	P	1.3	-5.8
4	☐	1000.000	973.747	378109.25	1.7691	P	0.2	-2.6
5	☐	10000.00	9900.005	3171460.89	14.0712	A	2.1	-1.0
6	☐	20000.00	20052.19	6069746.99	28.0629	A	0.9	0.3

y = 0.0014 * x + 0.4271
R = 1.0000
DL = 17.92 ppb
BEC = 309.9 ppb

Weight: <None>
Min Conc: <None>

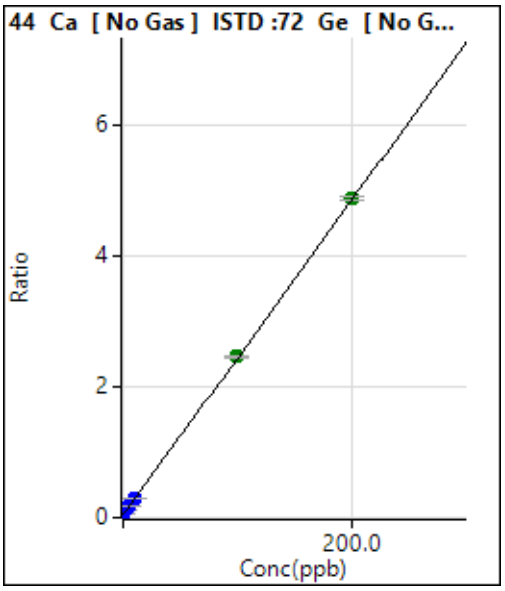


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	42.7	
2	☐	200.000	184.241	180.01	0.0008	P	45.5	-7.9
3	☐	500.000	452.951	413.34	0.0019	P	1.9	-9.4
4	☐	1000.000	900.385	773.37	0.0036	P	9.8	-10.0
5	☐	10000.00	9655.205	8472.74	0.0376	P	2.5	-3.4
6	☐	20000.00	20178.71	16953.99	0.0784	P	3.3	0.9

y = 3.8792E-006 * x + 1.2434E-004
R = 0.9998
DL = 41.03 ppb
BEC = 32.05 ppb

Weight: <None>
Min Conc: <None>

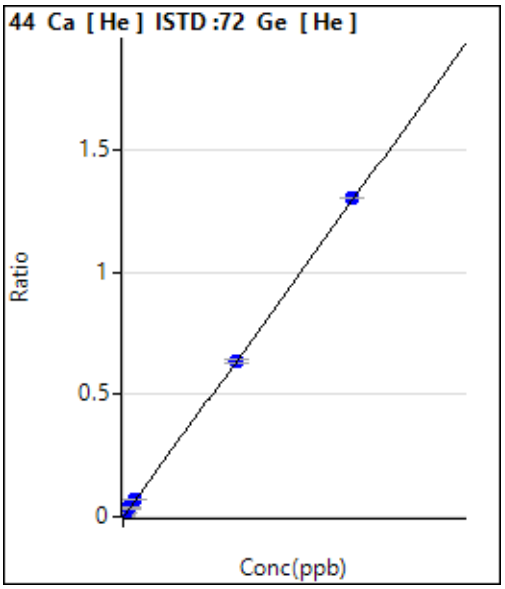
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38226.77	0.0656	P	3.8	
2	☐	2.000	1.897	63924.86	0.1112	P	1.2	-5.2
3	☐	5.000	4.748	104615.65	0.1799	P	1.2	-5.0
4	☐	10.000	9.514	171369.60	0.2946	P	0.9	-4.9
5	☐	100.000	99.600	1487614.09	2.4627	A	1.5	-0.4
6	☐	200.000	200.232	2853071.31	4.8846	A	1.1	0.1

y = 0.0241 * x + 0.0656
R = 1.0000
DL = 0.3146 ppb
BEC = 2.725 ppb

Weight: <None>
Min Conc: <None>

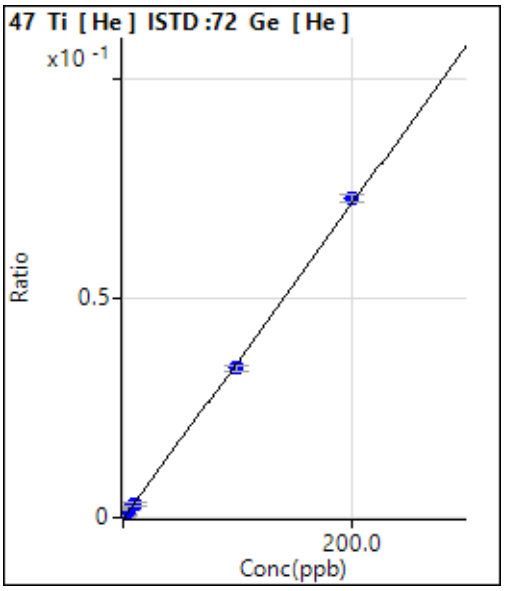


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	766.70	0.0036	P	20.1	
2	☐	200.000	205.541	3623.87	0.0169	P	7.9	2.8
3	☐	500.000	493.603	7809.02	0.0355	P	3.4	-1.3
4	☐	1000.000	1012.170	14768.16	0.0691	P	3.1	1.2
5	☐	10000.00	9764.795	143279.84	0.6357	P	2.4	-2.4
6	☐	20000.00	20117.09	282465.72	1.3059	P	0.3	0.6

y = 6.4737E-005 * x + 0.0036
R = 0.9999
DL = 33.33 ppb
BEC = 55.34 ppb

Weight: <None>
Min Conc: <None>

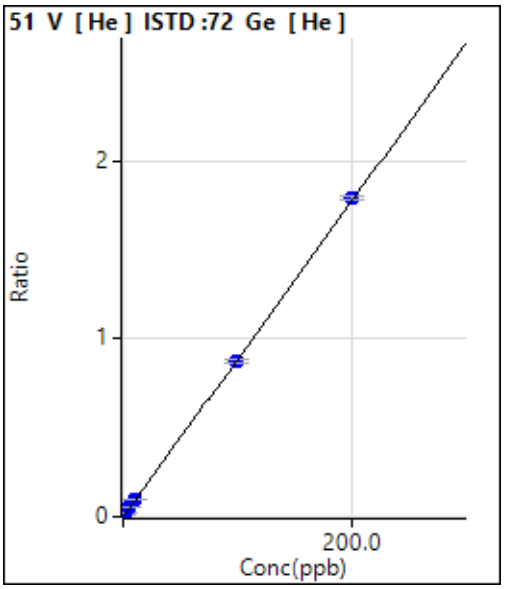
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.858	150.00	0.0007	P	17.7	-7.1
3	☐	5.000	4.983	400.01	0.0018	P	19.0	-0.3
4	☐	10.000	8.283	643.36	0.0030	P	20.1	-17.2
5	☐	100.000	94.866	7692.29	0.0341	P	4.2	-5.1
6	☐	200.000	202.655	15765.90	0.0729	P	2.6	1.3

y = 3.5950E-004 * x + 3.1234E-005
R = 0.9995
DL = 0.2257 ppb
BEC = 0.08688 ppb

Weight: <None>
Min Conc: <None>

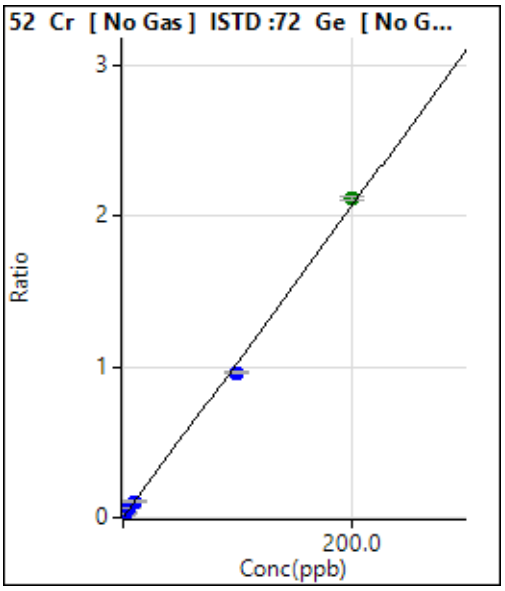


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1541.21	0.0072	P	4.2	
2	☐	2.000	2.034	5421.09	0.0253	P	0.6	1.7
3	☐	5.000	4.887	11117.88	0.0506	P	3.1	-2.3
4	☐	10.000	9.882	20299.49	0.0950	P	1.3	-1.2
5	☐	100.000	97.830	197492.30	0.8762	P	1.9	-2.2
6	☐	200.000	201.093	387894.48	1.7935	P	1.3	0.5

y = 0.0089 * x + 0.0072
R = 0.9999
DL = 0.1023 ppb
BEC = 0.8102 ppb

Weight: <None>
Min Conc: <None>

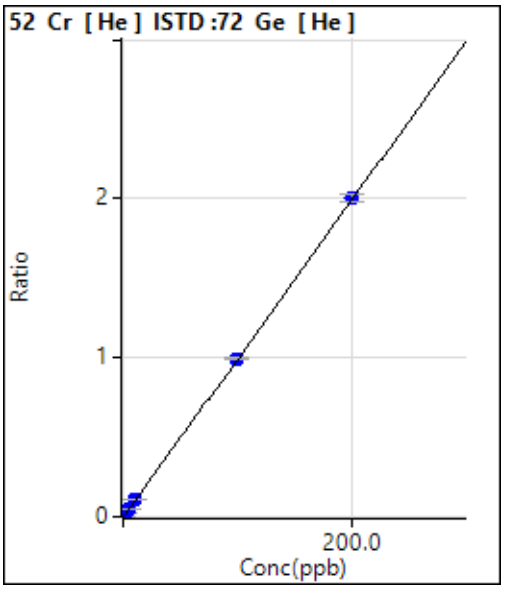
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7242.01	0.0124	P	3.3	
2	☐	2.000	1.879	18269.07	0.0318	P	1.8	-6.1
3	☐	5.000	4.527	34363.51	0.0591	P	2.6	-9.5
4	☐	10.000	9.252	62717.01	0.1078	P	1.0	-7.5
5	☐	100.000	91.931	579961.61	0.9601	P	1.5	-8.1
6	☐	200.000	204.085	1236030.24	2.1163	A	1.4	2.0

y = 0.0103 * x + 0.0124
R = 0.9989
DL = 0.1204 ppb
BEC = 1.205 ppb

Weight: <None>
Min Conc: <None>

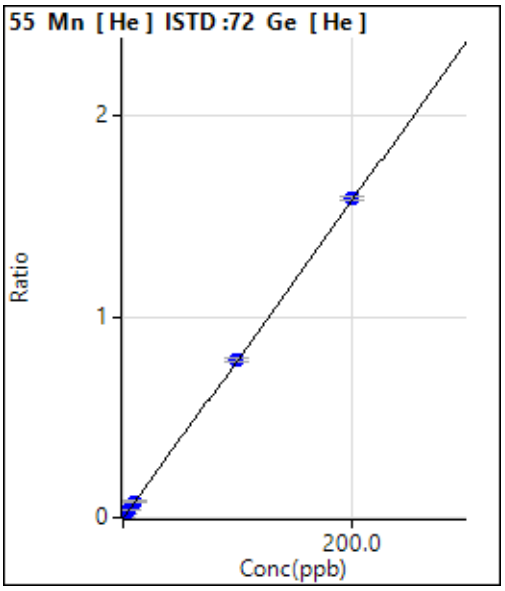


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1006.72	0.0047	P	6.7	
2	☐	2.000	1.837	4940.96	0.0230	P	3.4	-8.2
3	☐	5.000	4.834	11631.85	0.0529	P	1.5	-3.3
4	☐	10.000	9.936	22194.95	0.1039	P	1.4	-0.6
5	☐	100.000	99.162	224094.48	0.9942	P	1.8	-0.8
6	☐	200.000	200.428	433567.88	2.0048	P	2.1	0.2

y = 0.0100 * x + 0.0047
R = 1.0000
DL = 0.09532 ppb
BEC = 0.4712 ppb

Weight: <None>
Min Conc: <None>

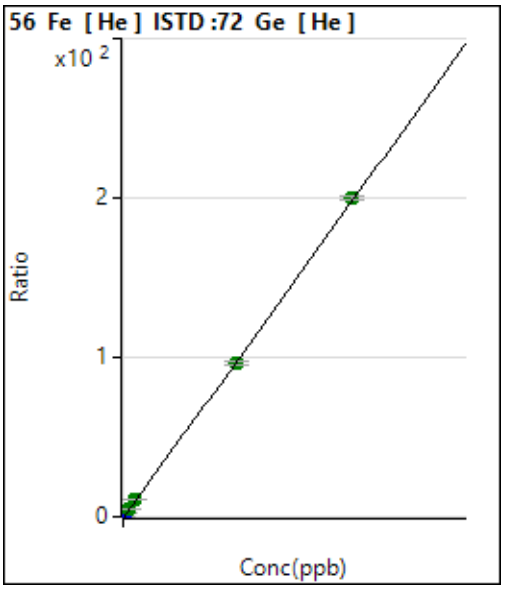
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	733.37	0.0034	P	15.1	
2	☐	2.000	1.887	3933.97	0.0183	P	4.3	-5.6
3	☐	5.000	4.981	9396.73	0.0428	P	1.2	-0.4
4	☐	10.000	9.869	17394.62	0.0814	P	3.0	-1.3
5	☐	100.000	98.470	176090.33	0.7813	P	2.5	-1.5
6	☐	200.000	200.773	343777.98	1.5895	P	1.1	0.4

y = 0.0079 * x + 0.0034
R = 1.0000
DL = 0.1962 ppb
BEC = 0.4338 ppb

Weight: <None>
Min Conc: <None>

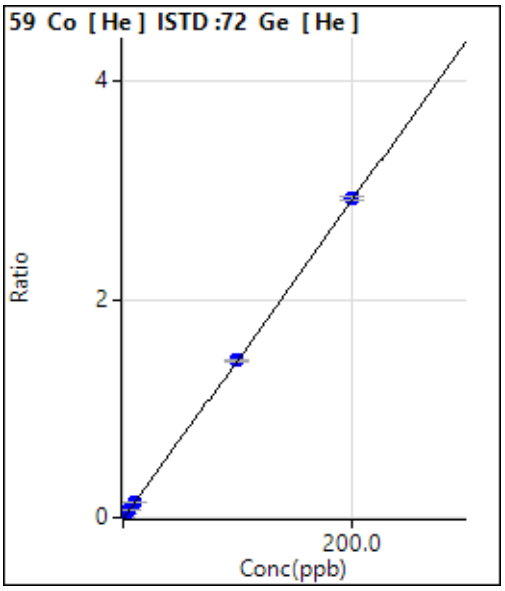


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	8886.38	0.0415	P	2.9	
2	☐	200.000	189.714	413940.30	1.9293	P	0.4	-5.1
3	☐	500.000	517.565	1140513.00	5.1916	A	1.9	3.5
4	☐	1000.000	1050.434	2242942.36	10.4940	A	1.1	5.0
5	☐	10000.00	9729.434	21829892.1	96.8552	A	2.1	-2.7
6	☐	20000.00	20132.42	43338032.6	200.371	A	0.8	0.7

y = 0.0100 * x + 0.0415
R = 0.9999
DL = 0.3672 ppb
BEC = 4.171 ppb

Weight: <None>
Min Conc: <None>

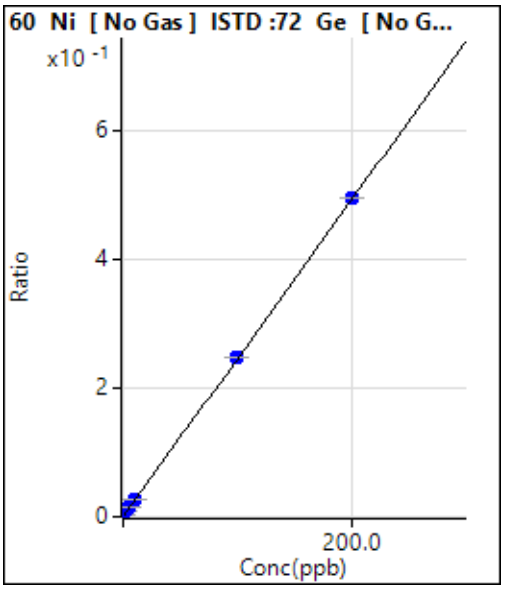
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0003	P	45.5	
2	☐	2.000	1.949	6161.50	0.0287	P	5.1	-2.6
3	☐	5.000	4.931	15866.11	0.0722	P	0.8	-1.4
4	☐	10.000	9.969	31139.07	0.1457	P	2.1	-0.3
5	☐	100.000	98.872	325118.19	1.4424	P	1.4	-1.1
6	☐	200.000	200.568	632756.92	2.9256	P	1.2	0.3

y = 0.0146 * x + 2.9562E-004
R = 1.0000
DL = 0.02766 ppb
BEC = 0.02027 ppb

Weight: <None>
Min Conc: <None>

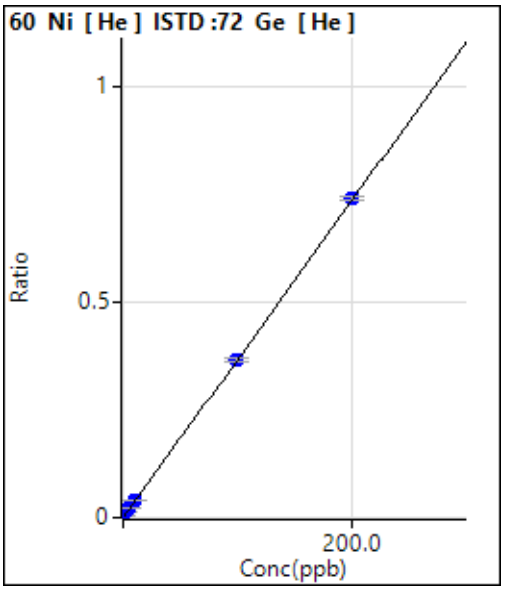


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1613.47	0.0028	P	8.5	
2	☐	2.000	2.028	4457.47	0.0078	P	0.9	1.4
3	☐	5.000	4.939	8676.21	0.0149	P	2.9	-1.2
4	☐	10.000	10.016	15946.21	0.0274	P	5.0	0.2
5	☐	100.000	99.721	149864.61	0.2481	P	0.6	-0.3
6	☐	200.000	200.140	289188.45	0.4951	P	0.4	0.1

y = 0.0025 * x + 0.0028
R = 1.0000
DL = 0.2856 ppb
BEC = 1.125 ppb

Weight: <None>
Min Conc: <None>

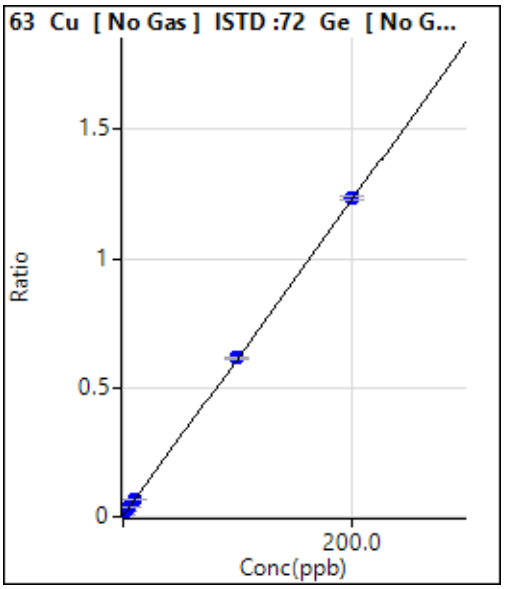
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	756.70	0.0035	P	14.4	
2	☐	2.000	2.233	2520.28	0.0117	P	5.8	11.6
3	☐	5.000	5.021	4834.28	0.0220	P	5.7	0.4
4	☐	10.000	10.300	8853.02	0.0414	P	0.8	3.0
5	☐	100.000	98.812	82726.66	0.3670	P	1.7	-1.2
6	☐	200.000	200.576	160345.21	0.7414	P	1.4	0.3

y = 0.0037 * x + 0.0035
R = 1.0000
DL = 0.4138 ppb
BEC = 0.9605 ppb

Weight: <None>
Min Conc: <None>

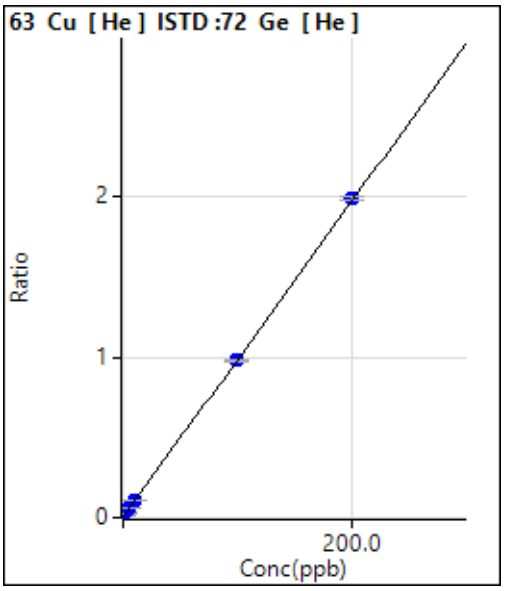


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	5127.71	0.0088	P	4.9	
2	☐	2.000	1.849	11555.08	0.0201	P	3.3	-7.6
3	☐	5.000	4.734	21954.71	0.0378	P	1.6	-5.3
4	☐	10.000	9.909	40383.66	0.0694	P	2.9	-0.9
5	☐	100.000	99.211	371883.87	0.6156	P	1.5	-0.8
6	☐	200.000	200.407	721101.68	1.2346	P	1.3	0.2

y = 0.0061 * x + 0.0088
R = 1.0000
DL = 0.21 ppb
BEC = 1.439 ppb

Weight: <None>
Min Conc: <None>

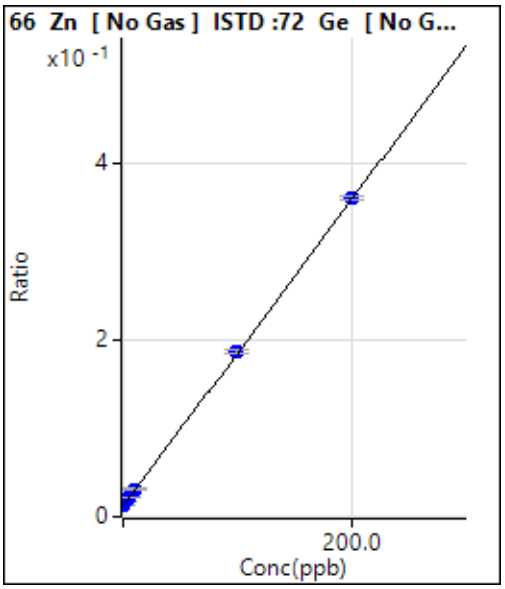
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3043.74	0.0142	P	13.0	
2	☐	2.000	1.609	6441.62	0.0300	P	1.7	-19.6
3	☐	5.000	4.546	12936.36	0.0589	P	1.0	-9.1
4	☐	10.000	9.704	23407.09	0.1095	P	3.4	-3.0
5	☐	100.000	98.077	220370.16	0.9776	P	0.6	-1.9
6	☐	200.000	200.992	430084.11	1.9885	P	1.2	0.5

y = 0.0098 * x + 0.0142
R = 0.9999
DL = 0.5635 ppb
BEC = 1.448 ppb

Weight: <None>
Min Conc: <None>

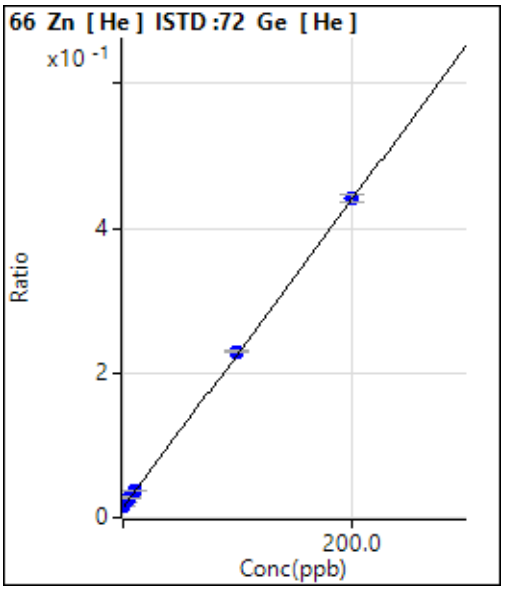


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7989.16	0.0137	P	0.7	
2	☐	2.000	1.830	9703.63	0.0169	P	4.2	-8.5
3	☐	5.000	4.218	12229.05	0.0210	P	3.0	-15.6
4	☐	10.000	9.991	18065.55	0.0311	P	5.2	-0.1
5	☐	100.000	100.133	113307.17	0.1876	P	2.1	0.1
6	☐	200.000	199.955	210801.21	0.3609	P	1.2	0.0

y = 0.0017 * x + 0.0137
R = 1.0000
DL = 0.1576 ppb
BEC = 7.894 ppb

Weight: <None>
Min Conc: <None>

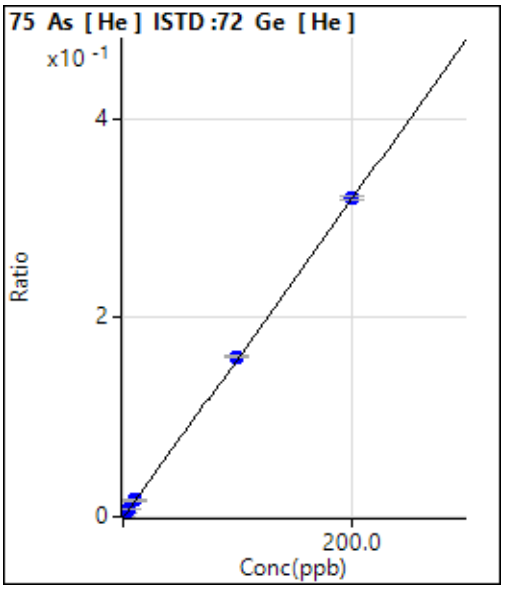
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3467.17	0.0162	P	5.1	
2	☐	2.000	2.230	4490.84	0.0209	P	6.5	11.5
3	☐	5.000	5.333	6048.12	0.0275	P	4.1	6.7
4	☐	10.000	9.954	7982.46	0.0373	P	2.8	-0.5
5	☐	100.000	100.027	51578.17	0.2288	P	1.3	0.0
6	☐	200.000	199.978	95433.91	0.4413	P	2.3	0.0

y = 0.0021 * x + 0.0162
R = 1.0000
DL = 1.17 ppb
BEC = 7.615 ppb

Weight: <None>
Min Conc: <None>

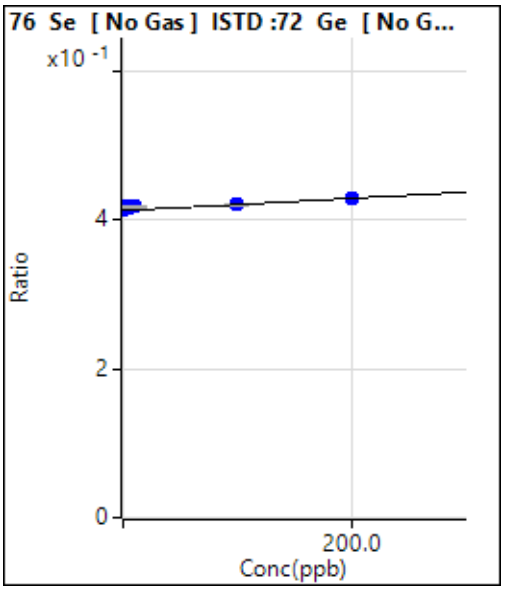


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	97.78	0.0005	P	50.1	
2	☐	2.000	2.052	803.36	0.0037	P	7.6	2.6
3	☐	5.000	4.953	1843.47	0.0084	P	2.2	-0.9
4	☐	10.000	10.197	3588.27	0.0168	P	5.0	2.0
5	☐	100.000	100.214	36287.49	0.1610	P	2.0	0.2
6	☐	200.000	199.884	69357.96	0.3207	P	1.3	-0.1

y = 0.0016 * x + 4.5715E-004
R = 1.0000
DL = 0.4289 ppb
BEC = 0.2854 ppb

Weight: <None>
Min Conc: <None>

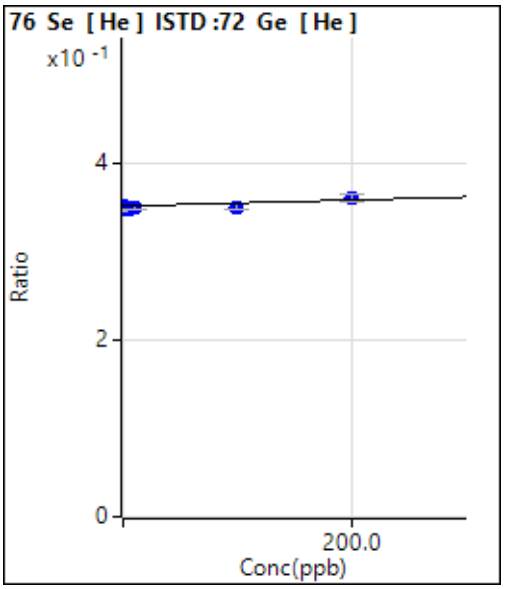
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	240291.79	0.4123	P	1.0	
2	☐	2.000	73.440	240440.09	0.4184	P	0.6	3572.0
3	☐	5.000	42.018	241832.13	0.4158	P	0.3	740.4
4	☐	10.000	62.744	242907.86	0.4175	P	0.5	527.4
5	☐	100.000	92.896	253743.61	0.4200	P	0.6	-7.1
6	☐	200.000	199.275	250520.91	0.4289	P	0.3	-0.4

y = 8.3369E-005 * x + 0.4123
R = 0.9211
DL = 152.7 ppb
BEC = 4945 ppb

Weight: <None>
Min Conc: <None>

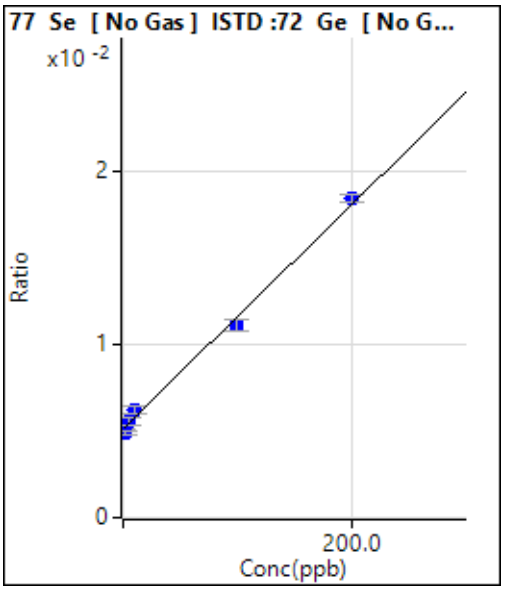


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	75319.87	0.3518	P	1.6	
2	☐	2.000	-129.657	74498.49	0.3472	P	1.3	-6582.
3	☐	5.000	-87.831	76606.81	0.3487	P	1.8	-1856.
4	☐	10.000	-38.814	74887.79	0.3504	P	1.1	-488.1
5	☐	100.000	-17.236	79151.37	0.3511	P	1.7	-117.2
6	☐	200.000	264.696	78072.21	0.3610	P	2.4	32.3

y = 3.4938E-005 * x + 0.3518
R = 0.8920
DL = 484.2 ppb
BEC = 1.007E+04 ppb

Weight: <None>
Min Conc: <None>

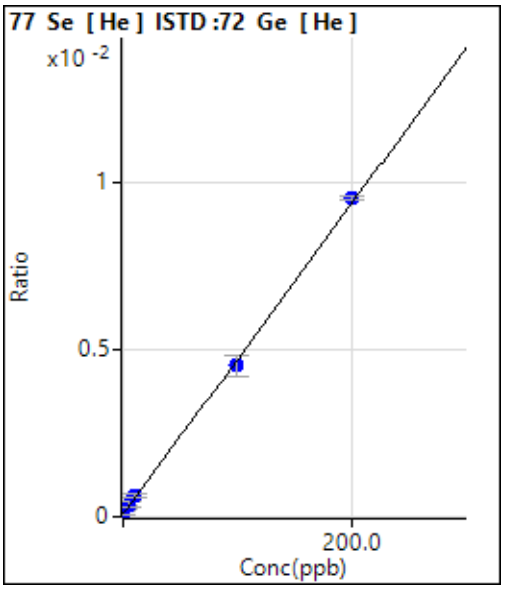
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3060.41	0.0053	P	7.0	
2	☐	2.000	-5.732	2803.67	0.0049	P	4.4	-386.6
3	☐	5.000	4.663	3230.44	0.0056	P	8.3	-6.7
4	☐	10.000	14.849	3613.90	0.0062	P	6.1	48.5
5	☐	100.000	91.388	6748.46	0.0112	P	5.8	-8.6
6	☐	200.000	204.149	10791.14	0.0185	P	2.6	2.1

y = 6.4784E-005 * x + 0.0053
R = 0.9977
DL = 16.99 ppb
BEC = 81.05 ppb

Weight: <None>
Min Conc: <None>

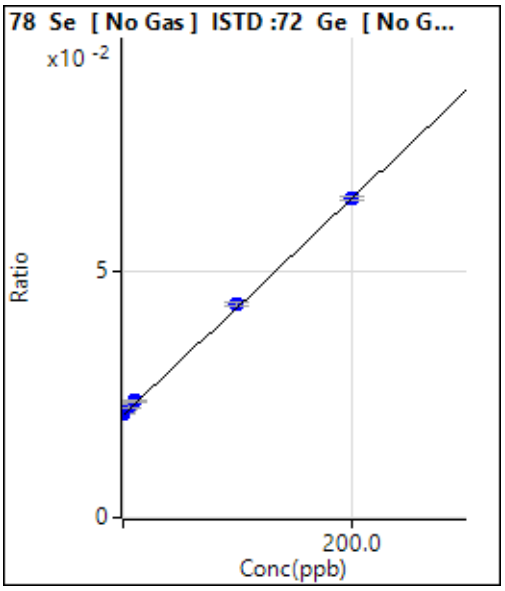


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26.67	0.0001	P	78.3	
2	☐	2.000	3.331	60.00	0.0003	P	28.8	66.5
3	☐	5.000	5.164	80.00	0.0004	P	50.3	3.3
4	☐	10.000	10.377	130.00	0.0006	P	19.6	3.8
5	☐	100.000	94.669	1020.06	0.0045	P	14.4	-5.3
6	☐	200.000	202.629	2066.87	0.0096	P	1.4	1.3

y = 4.6548E-005 * x + 1.2456E-004
R = 0.9994
DL = 6.283 ppb
BEC = 2.676 ppb

Weight: <None>
Min Conc: <None>

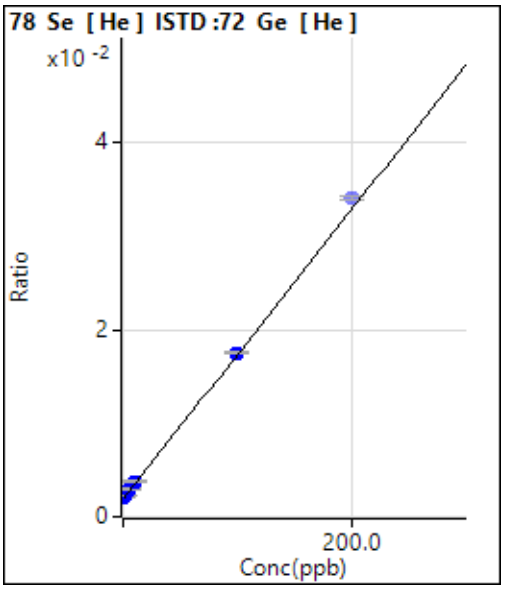
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	12309.17	0.0211	P	2.3	
2	☐	2.000	4.530	12706.19	0.0221	P	2.5	126.5
3	☐	5.000	6.837	13149.99	0.0226	P	3.9	36.7
4	☐	10.000	11.404	13740.56	0.0236	P	2.9	14.0
5	☐	100.000	101.328	26165.72	0.0433	P	2.1	1.3
6	☐	200.000	199.195	37816.64	0.0647	P	0.9	-0.4

y = 2.1901E-004 * x + 0.0211
R = 0.9999
DL = 6.632 ppb
BEC = 96.43 ppb

Weight: <None>
Min Conc: <None>

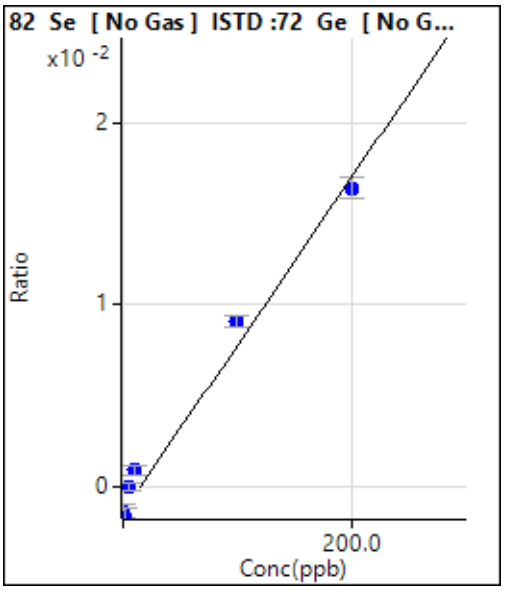


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	448.01	0.0021	P	3.1	
2	☐	2.000	1.037	483.34	0.0023	P	2.7	-48.1
3	☐	5.000	5.510	646.69	0.0029	P	2.4	10.2
4	☐	10.000	10.977	810.03	0.0038	P	6.4	9.8
5	☐	100.000	99.896	3951.25	0.0175	P	2.1	-0.1
6	☑	200.000		7368.03	0.0341	P	0.8	

y = 1.5452E-004 * x + 0.0021
R = 0.9999
DL = 1.265 ppb
BEC = 13.54 ppb

Weight: <None>
Min Conc: <None>

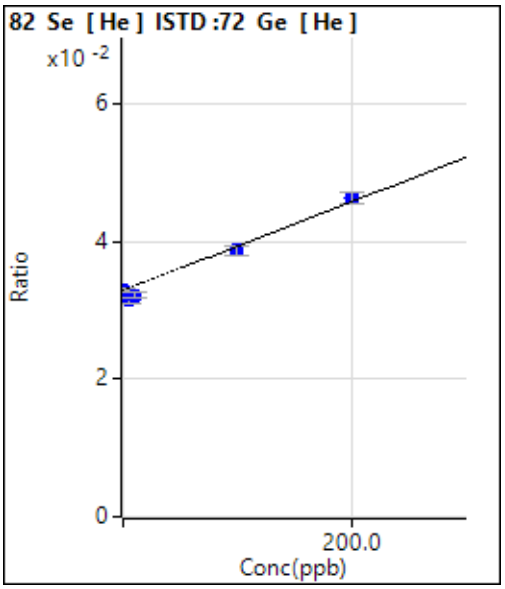
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-786.09	-0.0013	P	-52.2	
2	☐	2.000	-4.014	-987.03	-0.0017	P	-56.5	-300.7
3	☐	5.000	14.229	-18.16	0.0000	P	-1085.	184.6
4	☐	10.000	24.135	512.65	0.0009	P	59.8	141.3
5	☐	100.000	113.055	5498.82	0.0091	P	7.6	13.1
6	☐	200.000	192.595	9607.98	0.0165	P	7.5	-3.7

y = 9.2428E-005 * x - 0.0013
R = 0.9934
DL = 22.85 ppb
BEC = -14.58 ppb

Weight: <None>
Min Conc: <None>

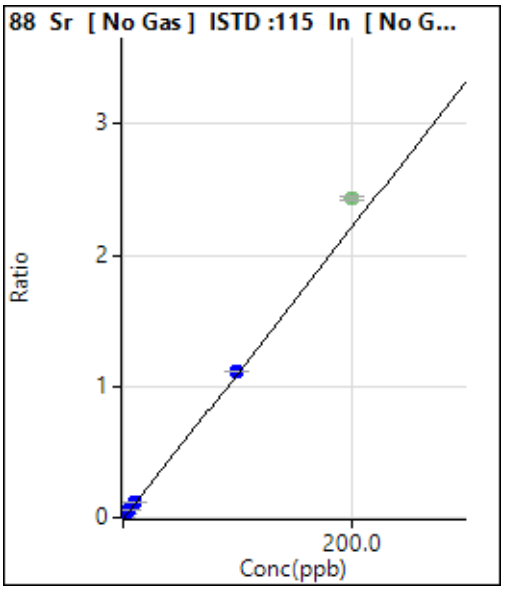


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	7065.31	0.0330	P	0.9	
2	☐	2.000	-19.811	6805.18	0.0317	P	2.4	-1090.
3	☐	5.000	-24.373	6905.22	0.0314	P	2.8	-587.5
4	☐	10.000	-12.581	6878.53	0.0322	P	2.6	-225.8
5	☐	100.000	89.907	8742.95	0.0388	P	3.5	-10.1
6	☐	200.000	207.128	10030.61	0.0464	P	3.2	3.6

y = 6.4522E-005 * x + 0.0330
R = 0.9938
DL = 13.47 ppb
BEC = 511.4 ppb

Weight: <None>
Min Conc: <None>

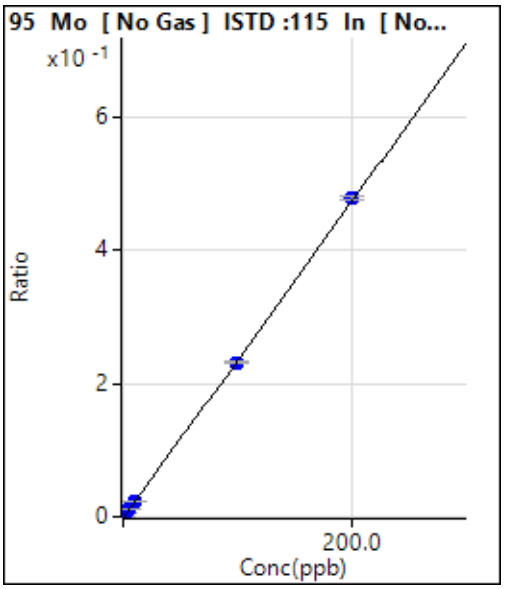
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	430.02	0.0006	P	2.8	
2	☐	2.000	1.992	16356.96	0.0227	P	4.4	-0.4
3	☐	5.000	5.031	40896.24	0.0565	P	1.0	0.6
4	☐	10.000	10.047	81242.49	0.1122	P	1.7	0.5
5	☐	100.000	99.994	824676.00	1.1115	P	0.3	0.0
6	☑	200.000		1763440.29	2.4338	A	1.5	

y = 0.0111 * x + 5.9950E-004
R = 1.0000
DL = 0.004516 ppb
BEC = 0.05396 ppb

Weight: <None>
Min Conc: <None>

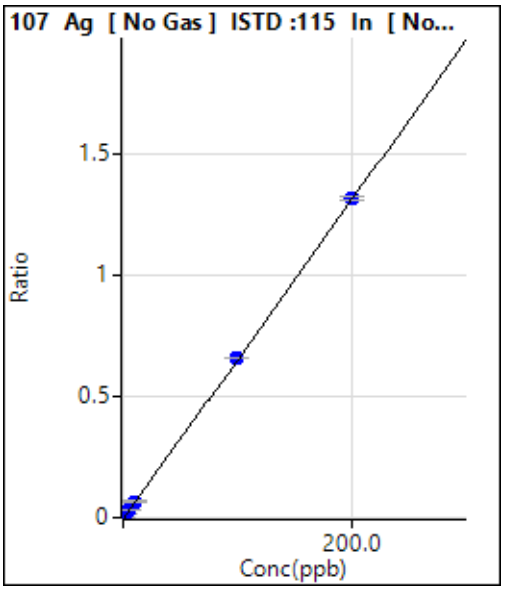


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	69.2	
2	☐	2.000	1.999	3437.17	0.0048	P	12.7	-0.1
3	☐	5.000	5.070	8742.96	0.0121	P	3.2	1.4
4	☐	10.000	9.916	17091.17	0.0236	P	1.0	-0.8
5	☐	100.000	97.256	171623.99	0.2313	P	1.2	-2.7
6	☐	200.000	201.374	347002.94	0.4789	P	1.1	0.7

y = 0.0024 * x + 2.3227E-005
R = 0.9999
DL = 0.02028 ppb
BEC = 0.009767 ppb

Weight: <None>
Min Conc: <None>

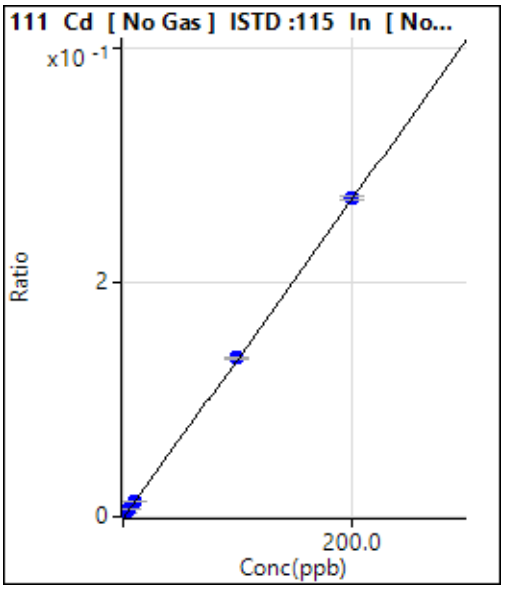
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	340.01	0.0005	P	35.4	
2	☐	2.000	1.954	9576.99	0.0133	P	5.0	-2.3
3	☐	5.000	4.907	23671.46	0.0327	P	1.2	-1.9
4	☐	10.000	10.158	48652.92	0.0672	P	1.2	1.6
5	☐	100.000	99.958	487505.12	0.6570	P	0.5	0.0
6	☐	200.000	200.016	952303.21	1.3143	P	0.9	0.0

y = 0.0066 * x + 4.7418E-004
R = 1.0000
DL = 0.0766 ppb
BEC = 0.07219 ppb

Weight: <None>
Min Conc: <None>

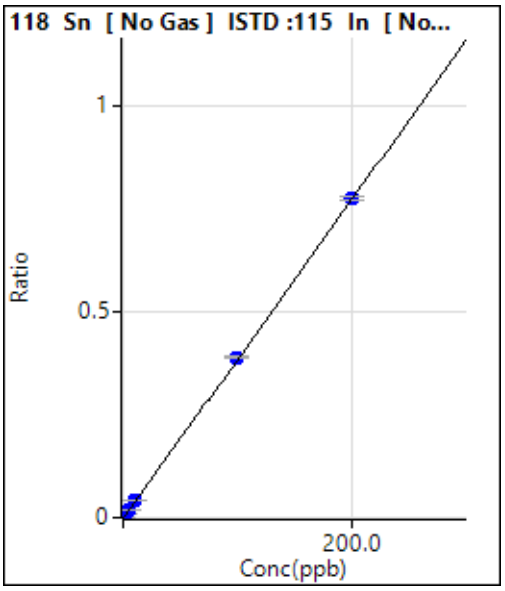


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.053	2010.19	0.0028	P	8.9	2.6
3	☐	5.000	4.974	4901.02	0.0068	P	6.3	-0.5
4	☐	10.000	9.923	9777.10	0.0135	P	5.1	-0.8
5	☐	100.000	99.653	100614.86	0.1356	P	1.2	-0.3
6	☐	200.000	200.177	197379.91	0.2724	P	0.6	0.1

y = 0.0014 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

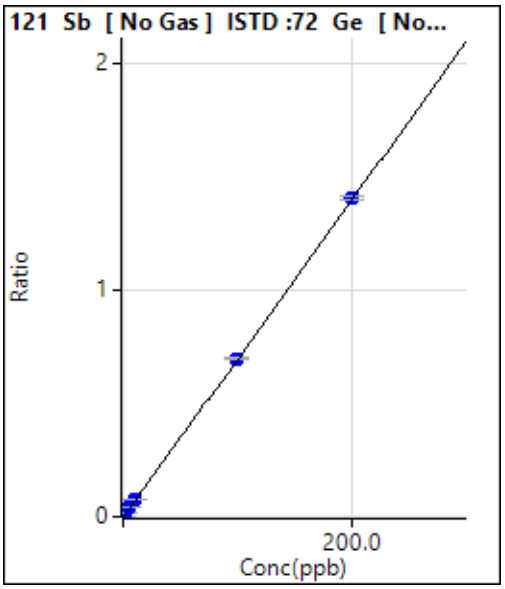
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1030.06	0.0014	P	10.9	
2	☐	2.000	1.861	6228.26	0.0087	P	6.5	-6.9
3	☐	5.000	4.805	14528.28	0.0201	P	1.6	-3.9
4	☐	10.000	10.043	29239.53	0.0404	P	0.7	0.4
5	☐	100.000	100.161	289265.86	0.3898	P	0.5	0.2
6	☐	200.000	199.923	562801.98	0.7767	P	0.8	0.0

y = 0.0039 * x + 0.0014
R = 1.0000
DL = 0.1207 ppb
BEC = 0.3703 ppb

Weight: <None>
Min Conc: <None>

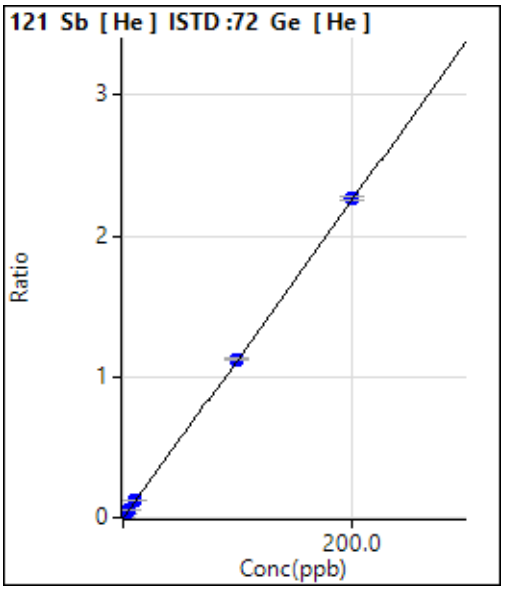


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2263.57	0.0039	P	4.0	
2	☐	2.000	2.061	10527.79	0.0183	P	3.3	3.1
3	☐	5.000	4.970	22506.33	0.0387	P	2.3	-0.6
4	☐	10.000	10.030	43124.46	0.0741	P	2.3	0.3
5	☐	100.000	99.024	421257.39	0.6974	P	1.5	-1.0
6	☐	200.000	200.487	822383.76	1.4080	P	1.2	0.2

y = 0.0070 * x + 0.0039
R = 1.0000
DL = 0.06653 ppb
BEC = 0.5546 ppb

Weight: <None>
Min Conc: <None>

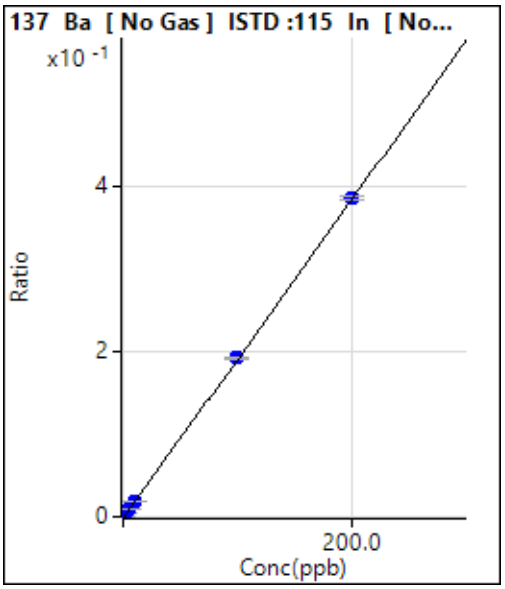
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1306.75	0.0061	P	4.5	
2	☐	2.000	1.928	5974.79	0.0278	P	0.7	-3.6
3	☐	5.000	4.866	13400.35	0.0610	P	0.4	-2.7
4	☐	10.000	9.952	25294.70	0.1184	P	1.2	-0.5
5	☐	100.000	98.973	253008.75	1.1225	P	1.4	-1.0
6	☐	200.000	200.520	490486.14	2.2679	P	1.7	0.3

y = 0.0113 * x + 0.0061
R = 1.0000
DL = 0.07326 ppb
BEC = 0.5409 ppb

Weight: <None>
Min Conc: <None>

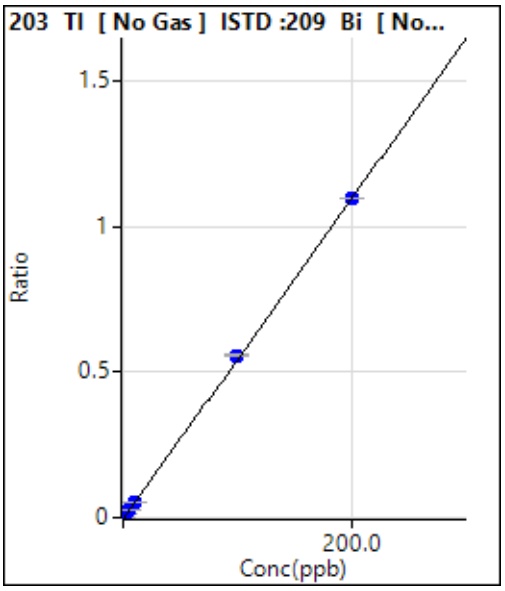


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	100.00	0.0001	P	26.1	
2	☐	2.000	1.897	2737.01	0.0038	P	4.9	-5.2
3	☐	5.000	5.088	7215.46	0.0100	P	0.8	1.8
4	☐	10.000	9.937	13997.76	0.0193	P	1.3	-0.6
5	☐	100.000	99.654	142923.21	0.1926	P	1.0	-0.3
6	☐	200.000	200.175	280262.69	0.3868	P	1.3	0.1

y = 0.0019 * x + 1.3933E-004
R = 1.0000
DL = 0.05648 ppb
BEC = 0.07213 ppb

Weight: <None>
Min Conc: <None>

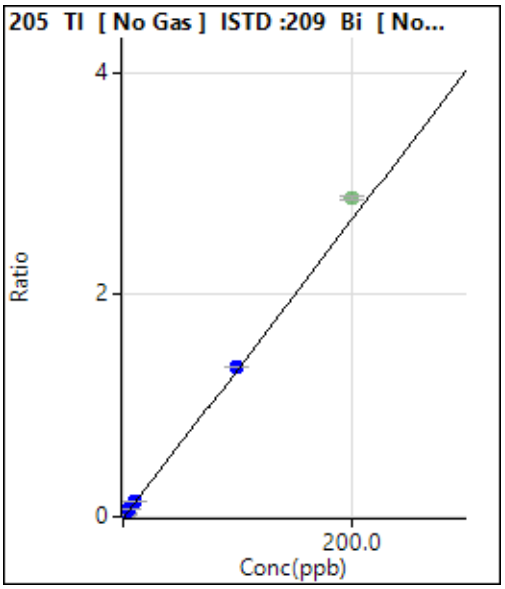
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	20.00	0.0000	P	50.5	
2	☐	2.000	1.958	7939.32	0.0108	P	2.1	-2.1
3	☐	5.000	4.904	20163.19	0.0271	P	2.3	-1.9
4	☐	10.000	9.898	40639.84	0.0546	P	1.8	-1.0
5	☐	100.000	101.408	426242.53	0.5589	P	0.2	1.4
6	☐	200.000	199.304	824420.77	1.0985	P	0.5	-0.3

y = 0.0055 * x + 2.7457E-005
R = 1.0000
DL = 0.007543 ppb
BEC = 0.004982 ppb

Weight: <None>
Min Conc: <None>

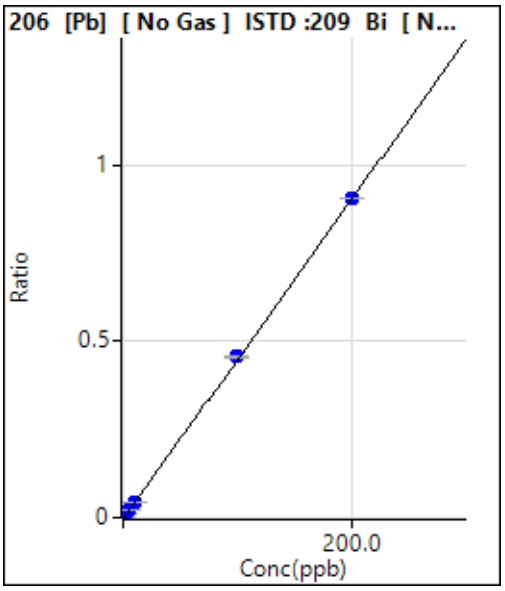


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	15.3	
2	☐	2.000	1.981	19572.24	0.0267	P	6.1	-0.9
3	☐	5.000	4.809	48186.57	0.0647	P	1.3	-3.8
4	☐	10.000	9.825	98319.15	0.1321	P	0.8	-1.7
5	☐	100.000	100.027	1024840.40	1.3439	P	0.1	0.0
6	☑	200.000		2155763.72	2.8726	A	1.1	

y = 0.0134 * x + 5.0214E-005
R = 1.0000
DL = 0.001718 ppb
BEC = 0.003738 ppb

Weight: <None>
Min Conc: <None>

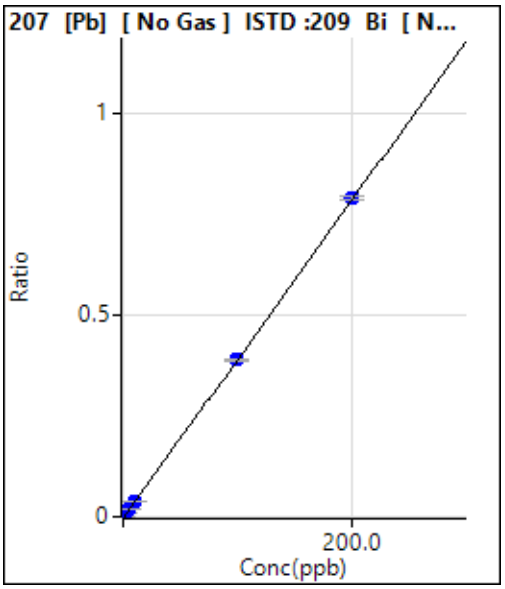
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	223.34	0.0003	P	13.9	
2	☐	2.000	1.970	6788.64	0.0093	P	3.7	-1.5
3	☐	5.000	4.935	16931.70	0.0227	P	0.5	-1.3
4	☐	10.000	10.001	34040.16	0.0457	P	1.4	0.0
5	☐	100.000	100.639	348706.24	0.4573	P	0.9	0.6
6	☐	200.000	199.682	680699.39	0.9070	P	0.3	-0.2

y = 0.0045 * x + 3.0587E-004
R = 1.0000
DL = 0.02803 ppb
BEC = 0.06736 ppb

Weight: <None>
Min Conc: <None>

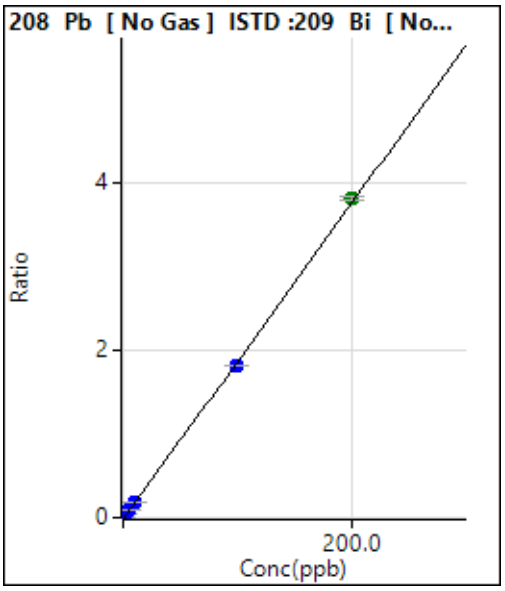


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	203.34	0.0003	P	23.7	
2	☐	2.000	2.044	6104.94	0.0083	P	5.1	2.2
3	☐	5.000	4.926	14658.92	0.0197	P	2.4	-1.5
4	☐	10.000	10.068	29705.80	0.0399	P	2.1	0.7
5	☐	100.000	98.832	296767.97	0.3891	P	1.0	-1.2
6	☐	200.000	200.582	592483.92	0.7895	P	1.3	0.3

y = 0.0039 * x + 2.7886E-004
R = 1.0000
DL = 0.05048 ppb
BEC = 0.07087 ppb

Weight: <None>
Min Conc: <None>

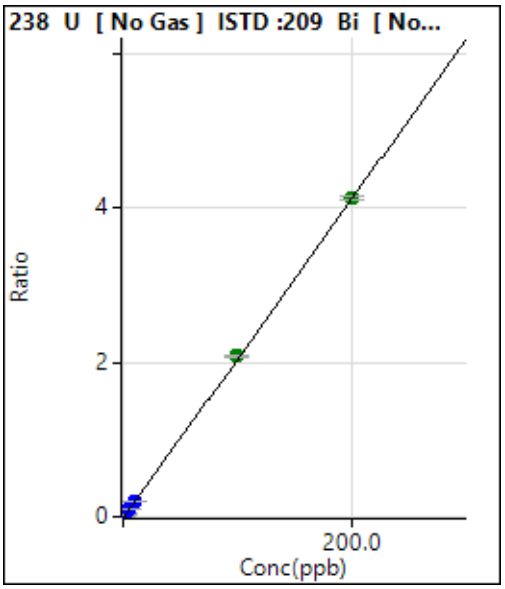
Calibration for 018_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	953.37	0.0013	P	13.4	
2	☐	2.000	1.941	27850.42	0.0379	P	2.8	-3.0
3	☐	5.000	4.760	67960.72	0.0912	P	1.4	-4.8
4	☐	10.000	9.681	137044.39	0.1841	P	0.7	-3.2
5	☐	100.000	95.840	1380728.71	1.8106	P	0.6	-4.2
6	☐	200.000	202.103	2864175.84	3.8166	A	1.2	1.1

y = 0.0189 * x + 0.0013
R = 0.9997
DL = 0.02778 ppb
BEC = 0.06923 ppb

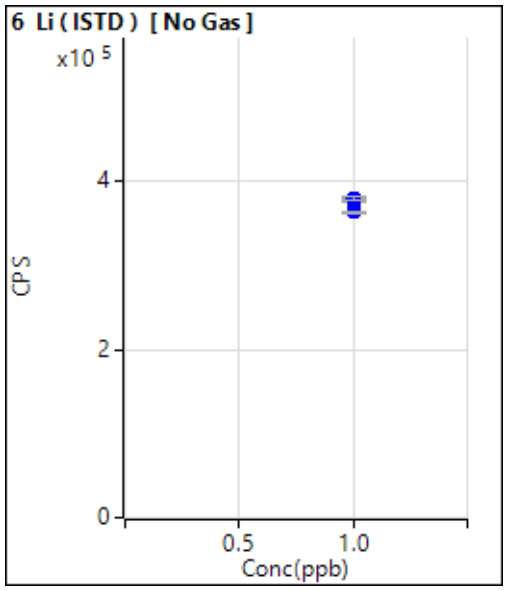
Weight: <None>
Min Conc: <None>



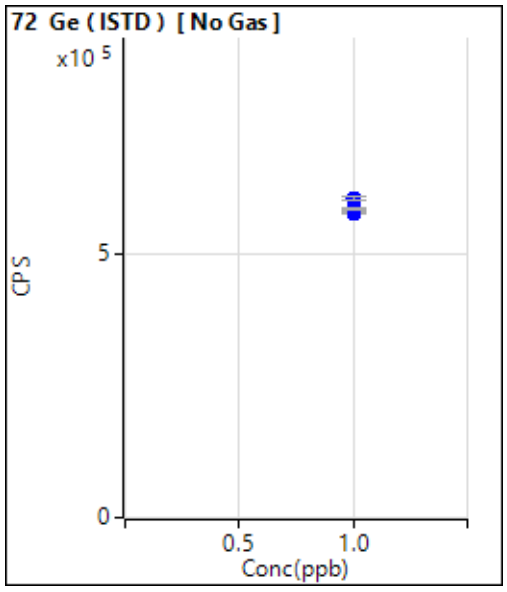
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.808	27461.14	0.0374	P	4.0	-9.6
3	☐	5.000	4.562	70398.63	0.0944	P	1.2	-8.8
4	☐	10.000	9.286	143115.70	0.1922	P	0.7	-7.1
5	☐	100.000	100.548	1587093.88	2.0811	A	0.8	0.5
6	☐	200.000	199.775	3103131.10	4.1350	A	1.2	-0.1

y = 0.0207 * x + 9.1317E-006
R = 1.0000
DL = 0.001146 ppb
BEC = 0.0004412 ppb

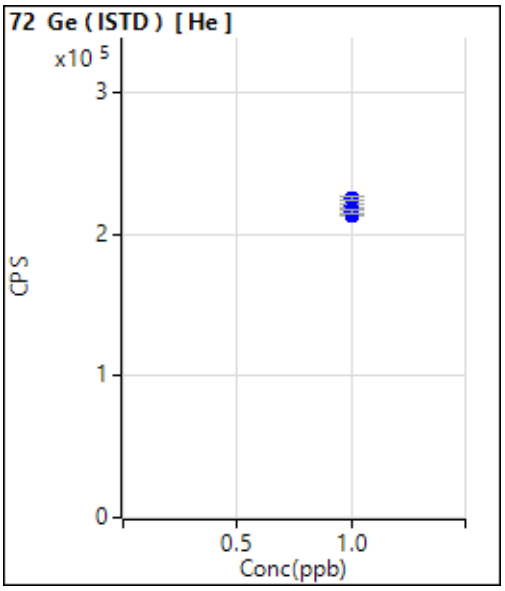
Weight: <None>
Min Conc: <None>



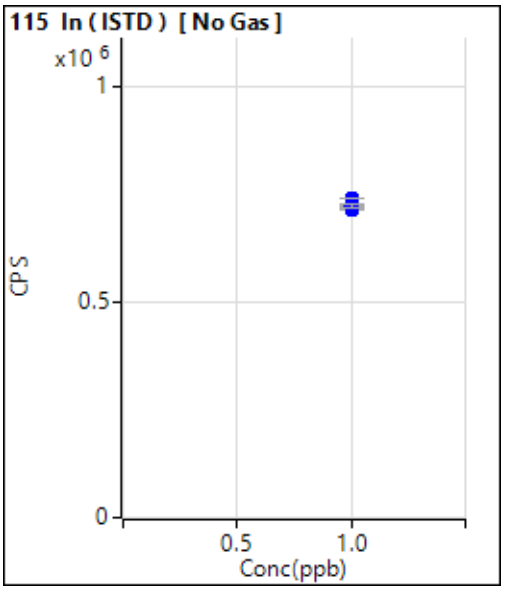
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		378696.85		P	0.3	
2	☐	1.000		375303.20		P	0.4	
3	☐	1.000		376644.58		P	1.3	
4	☐	1.000		376164.54		P	0.3	
5	☐	1.000		379501.19		P	0.7	
6	☐	1.000		362848.46		P	0.5	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		582807.83		P	0.3	
2	☐	1.000		574640.02		P	0.3	
3	☐	1.000		581596.78		P	1.2	
4	☐	1.000		581784.22		P	0.5	
5	☐	1.000		604100.33		P	0.7	
6	☐	1.000		584090.51		P	0.5	

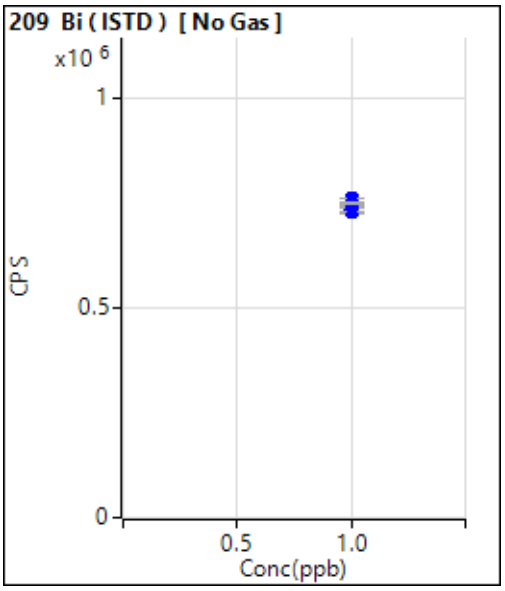


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		214132.18		P	0.6	
2	☐	1.000		214558.31		P	0.1	
3	☐	1.000		219713.33		P	1.0	
4	☐	1.000		213729.32		P	0.9	
5	☐	1.000		225433.03		P	1.5	
6	☐	1.000		216305.39		P	1.4	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		717354.35		P	0.5	
2	☐	1.000		719716.54		P	0.1	
3	☐	1.000		723929.93		P	1.4	
4	☐	1.000		724062.77		P	0.4	
5	☐	1.000		741989.65		P	0.6	
6	☐	1.000		724629.62		P	1.0	

Calibration for 018_ICV.d



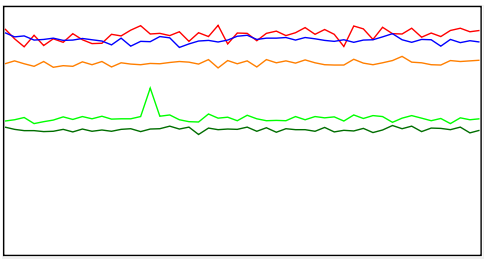
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		729851.16		P	0.6	
2	☐	1.000		733910.82		P	1.1	
3	☐	1.000		745411.16		P	1.5	
4	☐	1.000		744563.22		P	0.6	
5	☐	1.000		762599.44		P	0.2	
6	☐	1.000		750518.14		P	1.0	

Tune Check Report

Operator Name	ALSHS NoUser
Acq/Data Batch	D:\Agilent\ICPMH\1\DATA\072222A.b
Acq. Date-Time	07/22/2022 11:18:17
Report Comment	---
Instrument Name	G8422A SG22121190

[No Gas]

Sensitivity



Sampling Period [sec]	0.514
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	2000	1781	17811.39		
24	10000	5523	55233.36		
59	10000	8696	86962.18		
115	20000	15517	155173.04		
208	20000	10105	101049.82		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	
115		-	
208		-	

Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	2.523	5.000	
24	3.591	5.000	
59	1.359	5.000	
115	1.256	5.000	
208	1.518	5.000	

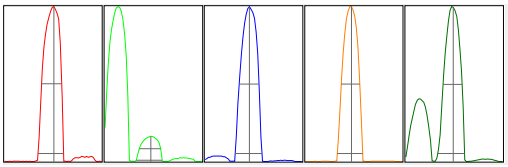
Mass	Background	Background (Required)	Background (Flag)
9	1.400		
24	0.100		
59	0.400		
115	1.200		
208	0.900		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.458 %
Doubly Charged	70 / 140 0.707 %

Tune Check Report

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	37.4
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	1823.24	9.05	8.90 - 9.10	
24	5521.54	23.95	23.90 - 24.10	
59	9169.37	58.90	58.90 - 59.10	
115	15775.22	114.95	114.90 - 115.10	
208	10130.97	208.00	207.90 - 208.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.780		
24	0.65	0.789		
59	0.61	0.819		
115	0.57	0.774		
208	0.58	0.820		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	10.2 V	Deflect	13.2 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-45 V
Omega Bias	-80 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	0.0 mL/min	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9994	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	0.0 mm

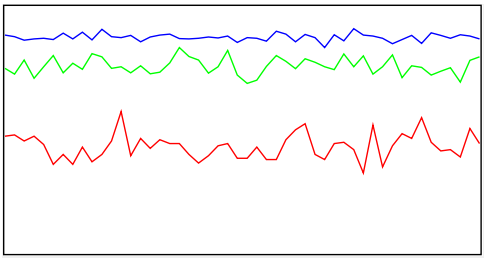
EM

Discriminator	4.6 mV	Analog HV	2101 V	Pulse HV	1013 V

[He]

Tune Check Report

Sensitivity



Sampling Period [sec]	0.306
Integration Time [sec]	0.1

Mass	Range	Count	Resp [cps/(ug/l)]	Resp (Required) [cps/(ug/l)]	Resp (Flag)
9	200	87	865.83		
24	500	380	3796.31		
59	5000	4379	43788.33		

Mass	Resp Ratio	Resp Ratio (Required)	Resp Ratio (Flag)
9		-	
24		-	
59		-	

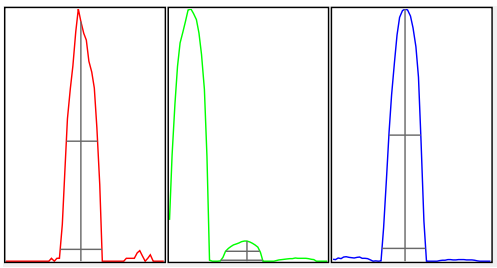
Mass	RSD%	RSD% (Required)	RSD% (Flag)
9	12.103	5.000	Fail
24	4.490	5.000	
59	1.666	5.000	

Mass	Background	Background (Required)	Background (Flag)
9	0.200		
24	0.000		
59	0.300		

Oxide/Doubly Charged Ratio

Oxide	156 / 140 0.321 %
Doubly Charged	70 / 140 0.743 %

Resolution/Axis



Integration Time [sec]	0.1
Acquisition Time [sec]	22.24
Y Axis	Linear

Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	86.26	8.95	8.90 - 9.10	
24	385.07	24.00	23.90 - 24.10	
59	4499.80	58.90	58.90 - 59.10	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.779		
24	0.63	0.785		

Tune Check Report

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
59	0.60	0.816		

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.70 L/min	Dilution Gas	0.35 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	8.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.8 V	Deflect	0.0 V
Extract 2	-195.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-85 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	3.0 V
He Flow	3.6 mL/min	OctP Bias	-18.0 V		
H2 Flow	0.0 mL/min	OctP RF	190 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9994	QP Bias	-15.0 V
Mass Offset	125	Axis Offset	0.02		

Hardware Settings

Torch

Torch H	0.1 mm	Torch V	0.0 mm

EM

Discriminator	4.6 mV	Analog HV	2101 V	Pulse HV	1013 V

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right solutions.
right partner.

WorkOrder: HS22070326

LHAAP 16 July 2022

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

21-Jul-2022

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HS22070326-MSVOA-SW8260

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Form 3A - MS/MSD

Form 3B - LCS/LCSD

Form 4 - MB Assoc

Form 5 - Tune

Form 6 - ICAL

Form 6I - ICV

Form 7 - CCV

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Run Log

Raw Data VOA6 412359

Raw Data VOA6 412540

Raw Data VOA6 412669

HS22070326 RSK175

HS22070326 Wet Chemistry

HS22070326 - Sub Perch IV Rpt (E2200665)

CoverLetter

Certificate of Analysis

Chain of Custody

Preparation Sheets

Analytical Results

Accuracy and Precision

Initial Calibration

Chromatograms

HS22070326 LHAAP 16 July 2022 Final

ALS WO# HS22070326

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July 21, 2022

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS22070326**

Laboratory Results for: **LHAAP 16 July 2022**

Dear Vicki Graves ,

ALS Environmental received 12 sample(s) on Jul 07, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,

Generated By: DAYNA.FISHER
Dane J. Wacasey

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Work Order: HS22070326

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22070326-01	16WW44-220705	Water		05-Jul-2022 07:35	07-Jul-2022 09:40	☐
HS22070326-02	16WW44-220705-FD	Water		05-Jul-2022 07:35	07-Jul-2022 09:40	☐
HS22070326-03	16RW10-220705	Water		05-Jul-2022 08:20	07-Jul-2022 09:40	☐
HS22070326-04	16RW09-220705	Water		05-Jul-2022 09:00	07-Jul-2022 09:40	☐
HS22070326-05	16RW09-220705-FD	Water		05-Jul-2022 09:00	07-Jul-2022 09:40	☐
HS22070326-06	16EW01-220705	Water		05-Jul-2022 09:50	07-Jul-2022 09:40	☐
HS22070326-07	16WW40-220705	Water		05-Jul-2022 10:35	07-Jul-2022 09:40	☐
HS22070326-08	16WW12-220705	Water		05-Jul-2022 11:30	07-Jul-2022 09:40	☐
HS22070326-09	16WW13-220705	Water		05-Jul-2022 12:15	07-Jul-2022 09:40	☐
HS22070326-10	16WW42-220705	Water		05-Jul-2022 12:55	07-Jul-2022 09:40	☐
HS22070326-11	16RW04-220705	Water		05-Jul-2022 13:50	07-Jul-2022 09:40	☐
HS22070326-12	Trip Blank-220705	Water	CG-020822-749	05-Jul-2022 00:00	07-Jul-2022 09:40	☐

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc. **CASE NARRATIVE**
Project: LHAAP 16 July 2022
Work Order: HS22070326

Work Order Comments

- The analysis for Perchlorate was subcontracted to ALS Houston Specialty Lab. Final report attached.

Work Order Comments

- COC Project Name "LHAAP 16 January 2022" sampling date is for July 2022. Project Name "LHAAP 16 July 2022" applied at sample login.

GC Semivolatiles by Method RSK-175

Batch ID: R412754

Sample ID: 16WW40-220705 (HS22070326-07MS)

- The recovery of the Matrix Spike (MS) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The recovery of the MS may be due to sample matrix interference.

Sample ID: 16WW40-220705 (HS22070326-07MSD)

- The recovery of the Matrix Spike Duplicate (MSD) associated to this analyte was outside of the established control limits. However, the LCS was within control limits. The failed recovery of the MSD may be due to sample matrix interference.

Sample ID: HS22070020-01MS

- MS and MSD are for an unrelated sample

GCMS Volatiles by Method SW8260

Batch ID: R412669

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

Batch ID: R412540

Sample ID: 16EW01-220705 (HS22070326-06)

- 1,2-Dichloroethane-d4 (SURR) failed qc recovery limits due to matrix. confirmed by re-analysis @ higher dilution.

Sample ID: 16RW09-220705-FD (HS22070326-05)

- Toluene-d8 (SURR) exceeded recovery limits due to matrix. Confirmed by re-analysis @ dilution.

- 4-BFB (SURR) exceeded recovery limits. Compound reported is not associated with this SURR.

Sample ID: 16RW10-220705 (HS22070326-03)

- 4-BFB (SURR) exceeded recovery limits. Compound reported is not associated with this SURR.

Sample ID: 16WW40-220705 (HS22070326-07MSD)

- Toluene-d8 (SURR) exceeded recovery limits due to matrix.

Sample ID: Trip Blank-220705 (HS22070326-12)

- Toluene-d8 (SURR) exceeded recovery limits. Sample is ND.

Sample ID: 16WW40-220705 (HS22070326-07MS)

- MS and/or MSD recovered outside control limits

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Work Order: HS22070326

CASE NARRATIVE

WetChemistry by Method SM5310B

Batch ID: R413420

• The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16WW44-220705
Collection Date: 05-Jul-2022 07:35

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-01
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	08-Jul-2022 13:16
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:16
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:16
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:16
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Jul-2022 13:16
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:16
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:16
Surr: 1,2-Dichloroethane-d4	*88.1*			**0**	*81-118*	*%REC*	*1*	*08-Jul-2022 13:16*
Surr: 4-Bromofluorobenzene	*104*			**0**	*85-114*	*%REC*	*1*	*08-Jul-2022 13:16*
Surr: Dibromofluoromethane	*90.8*			**0**	*80-119*	*%REC*	*1*	*08-Jul-2022 13:16*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*1*	*08-Jul-2022 13:16*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16WW44-220705-FD
Collection Date: 05-Jul-2022 07:35

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-02
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	08-Jul-2022 13:37
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:37
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:37
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:37
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Jul-2022 13:37
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:37
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 13:37
Surr: 1,2-Dichloroethane-d4	*105*			**0**	*81-118*	*%REC*	*1*	*08-Jul-2022 13:37*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*08-Jul-2022 13:37*
Surr: Dibromofluoromethane	*100*			**0**	*80-119*	*%REC*	*1*	*08-Jul-2022 13:37*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*1*	*08-Jul-2022 13:37*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16RW10-220705
Collection Date: 05-Jul-2022 08:20

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-03
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	08-Jul-2022 17:29
1,1-Dichloroethene	**20**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 17:29
1,2-Dichloroethane	**4.8**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 17:29
cis-1,2-Dichloroethene	**420**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 17:29
Methylene chloride	10	U	2.0	10	10	ug/L	5	08-Jul-2022 17:29
Trichloroethene	**930**		**5.0**	**12**	**25**	**ug/L**	25	08-Jul-2022 17:50
Vinyl chloride	**190**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 17:29
Surr: 1,2-Dichloroethane-d4	*102*			**0**	*81-118*	*%REC*	*25*	*08-Jul-2022 17:50*
Surr: 1,2-Dichloroethane-d4	*99.2*			**0**	*81-118*	*%REC*	*5*	*08-Jul-2022 17:29*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*5*	*08-Jul-2022 17:29*
Surr: 4-Bromofluorobenzene	*117*	*S*		**0**	*85-114*	*%REC*	*25*	*08-Jul-2022 17:50*
Surr: Dibromofluoromethane	*94.9*			**0**	*80-119*	*%REC*	*5*	*08-Jul-2022 17:29*
Surr: Dibromofluoromethane	*90.2*			**0**	*80-119*	*%REC*	*25*	*08-Jul-2022 17:50*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*5*	*08-Jul-2022 17:29*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*25*	*08-Jul-2022 17:50*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 12:58
Ethene	**0.0301**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 12:58
Methane	**2.23**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	11-Jul-2022 14:02
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16RW09-220705
Collection Date: 05-Jul-2022 09:00

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-04
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	08-Jul-2022 14:19
1,1-Dichloroethene	**12**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 14:19
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 14:19
cis-1,2-Dichloroethene	**130**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 14:19
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Jul-2022 14:19
Trichloroethene	**1,900**		**5.0**	**12**	**25**	**ug/L**	25	08-Jul-2022 16:05
Vinyl chloride	**94**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 14:19
Surr: 1,2-Dichloroethane-d4	*98.9*			**0**	*81-118*	*%REC*	*1*	*08-Jul-2022 14:19*
Surr: 1,2-Dichloroethane-d4	*100*			**0**	*81-118*	*%REC*	*25*	*08-Jul-2022 16:05*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*08-Jul-2022 14:19*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*25*	*08-Jul-2022 16:05*
Surr: Dibromofluoromethane	*93.6*			**0**	*80-119*	*%REC*	*1*	*08-Jul-2022 14:19*
Surr: Dibromofluoromethane	*95.5*			**0**	*80-119*	*%REC*	*25*	*08-Jul-2022 16:05*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*1*	*08-Jul-2022 14:19*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*25*	*08-Jul-2022 16:05*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.00303**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 13:06
Ethene	**0.0165**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 13:06
Methane	**0.892**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	11-Jul-2022 14:34
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**1.96**		**0.500**	**1.00**	**1.00**	**mg/L**	1	20-Jul-2022 19:35
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16RW09-220705-FD
Collection Date: 05-Jul-2022 09:00

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-05
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	08-Jul-2022 14:40
1,1-Dichloroethene	**12**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 14:40
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 14:40
cis-1,2-Dichloroethene	**130**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 14:40
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Jul-2022 14:40
Trichloroethene	**1,900**		**5.0**	**12**	**25**	**ug/L**	25	08-Jul-2022 16:26
Vinyl chloride	**99**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 14:40
Surr: 1,2-Dichloroethane-d4	*89.6*			**0**	*81-118*	*%REC*	*1*	*08-Jul-2022 14:40*
Surr: 1,2-Dichloroethane-d4	*88.4*			**0**	*81-118*	*%REC*	*25*	*08-Jul-2022 16:26*
Surr: 4-Bromofluorobenzene	*99.4*			**0**	*85-114*	*%REC*	*1*	*08-Jul-2022 14:40*
Surr: 4-Bromofluorobenzene	*126*	*S*		**0**	*85-114*	*%REC*	*25*	*08-Jul-2022 16:26*
Surr: Dibromofluoromethane	*90.9*			**0**	*80-119*	*%REC*	*1*	*08-Jul-2022 14:40*
Surr: Dibromofluoromethane	*92.0*			**0**	*80-119*	*%REC*	*25*	*08-Jul-2022 16:26*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*25*	*08-Jul-2022 16:26*
Surr: Toluene-d8	*127*	*S*		**0**	*89-112*	*%REC*	*1*	*08-Jul-2022 14:40*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.00301**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 13:17
Ethene	**0.0170**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 13:17
Methane	**0.968**		**0.00535**	**0.0250**	**0.0250**	**mg/L**	50	11-Jul-2022 14:42
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**2.05**		**0.500**	**1.00**	**1.00**	**mg/L**	1	20-Jul-2022 19:50
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16EW01-220705
Collection Date: 05-Jul-2022 09:50

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-06
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	10	U	3.0	10	10	ug/L	10	08-Jul-2022 16:47
1,1-Dichloroethene	**27**		**2.0**	**5.0**	**10**	**ug/L**	10	08-Jul-2022 16:47
1,2-Dichloroethane	**14**		**2.0**	**5.0**	**10**	**ug/L**	10	08-Jul-2022 16:47
cis-1,2-Dichloroethene	**7,600**		**20**	**50**	**100**	**ug/L**	100	11-Jul-2022 13:32
Methylene chloride	**10**	J	**4.0**	**20**	**20**	**ug/L**	10	08-Jul-2022 16:47
Trichloroethene	**2,900**		**20**	**50**	**100**	**ug/L**	100	11-Jul-2022 13:32
Vinyl chloride	**730**		**2.0**	**5.0**	**10**	**ug/L**	10	08-Jul-2022 16:47
Surr: 1,2-Dichloroethane-d4	*77.7*	*S*		**0**	*81-118*	*%REC*	*10*	*08-Jul-2022 16:47*
Surr: 1,2-Dichloroethane-d4	*99.4*			**0**	*81-118*	*%REC*	*100*	*11-Jul-2022 13:32*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*10*	*08-Jul-2022 16:47*
Surr: 4-Bromofluorobenzene	*103*			**0**	*85-114*	*%REC*	*100*	*11-Jul-2022 13:32*
Surr: Dibromofluoromethane	*95.8*			**0**	*80-119*	*%REC*	*10*	*08-Jul-2022 16:47*
Surr: Dibromofluoromethane	*96.2*			**0**	*80-119*	*%REC*	*100*	*11-Jul-2022 13:32*
Surr: Toluene-d8	*108*			**0**	*89-112*	*%REC*	*10*	*08-Jul-2022 16:47*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*100*	*11-Jul-2022 13:32*
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**18.5**		**0.500**	**1.00**	**1.00**	**mg/L**	1	20-Jul-2022 20:02
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16WW40-220705
Collection Date: 05-Jul-2022 10:35

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-07
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	08-Jul-2022 13:58
1,1-Dichloroethene	**3.2**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 13:58
1,2-Dichloroethane	**3.7**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 13:58
cis-1,2-Dichloroethene	**180**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 13:58
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Jul-2022 13:58
Trichloroethene	**990**		**2.0**	**5.0**	**10**	**ug/L**	10	08-Jul-2022 15:01
Vinyl chloride	**10**		**0.20**	**0.50**	**1.0**	**ug/L**	1	08-Jul-2022 13:58
Surr: 1,2-Dichloroethane-d4	*100*			**0**	*81-118*	*%REC*	*10*	*08-Jul-2022 15:01*
Surr: 1,2-Dichloroethane-d4	*103*			**0**	*81-118*	*%REC*	*1*	*08-Jul-2022 13:58*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*1*	*08-Jul-2022 13:58*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*10*	*08-Jul-2022 15:01*
Surr: Dibromofluoromethane	*98.5*			**0**	*80-119*	*%REC*	*1*	*08-Jul-2022 13:58*
Surr: Dibromofluoromethane	*96.7*			**0**	*80-119*	*%REC*	*10*	*08-Jul-2022 15:01*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*10*	*08-Jul-2022 15:01*
Surr: Toluene-d8	*106*			**0**	*89-112*	*%REC*	*1*	*08-Jul-2022 13:58*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	0.000500	U	0.000144	0.000500	0.00100	mg/L	1	11-Jul-2022 13:25
Ethene	0.000500	U	0.000234	0.000500	0.00100	mg/L	1	11-Jul-2022 13:25
Methane	**2.51**		**0.0107**	**0.0500**	**0.0500**	**mg/L**	100	11-Jul-2022 14:52
TOTAL ORGANIC CARBON - SM5310B-2011		**Method:SM5310B**						Analyst: JAC
Organic Carbon, Total	**4.67**		**0.500**	**1.00**	**1.00**	**mg/L**	1	20-Jul-2022 20:16
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastructure, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16WW12-220705
Collection Date: 05-Jul-2022 11:30

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-08
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	08-Jul-2022 18:11
1,1-Dichloroethene	**4.4**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 18:11
1,2-Dichloroethane	**6.5**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 18:11
cis-1,2-Dichloroethene	**100**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 18:11
Methylene chloride	10	U	2.0	10	10	ug/L	5	08-Jul-2022 18:11
Trichloroethene	**2,100**		**5.0**	**12**	**25**	**ug/L**	25	08-Jul-2022 18:32
Vinyl chloride	**9.9**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 18:11
Surr: 1,2-Dichloroethane-d4	*96.1*			**0**	*81-118*	*%REC*	*5*	*08-Jul-2022 18:11*
Surr: 1,2-Dichloroethane-d4	*104*			**0**	*81-118*	*%REC*	*25*	*08-Jul-2022 18:32*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*5*	*08-Jul-2022 18:11*
Surr: 4-Bromofluorobenzene	*89.9*			**0**	*85-114*	*%REC*	*25*	*08-Jul-2022 18:32*
Surr: Dibromofluoromethane	*95.0*			**0**	*80-119*	*%REC*	*5*	*08-Jul-2022 18:11*
Surr: Dibromofluoromethane	*93.5*			**0**	*80-119*	*%REC*	*25*	*08-Jul-2022 18:32*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*5*	*08-Jul-2022 18:11*
Surr: Toluene-d8	*97.4*			**0**	*89-112*	*%REC*	*25*	*08-Jul-2022 18:32*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16WW13-220705
Collection Date: 05-Jul-2022 12:15

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-09
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	08-Jul-2022 18:53
1,1-Dichloroethene	**3.1**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 18:53
1,2-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	08-Jul-2022 18:53
cis-1,2-Dichloroethene	**820**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 18:53
Methylene chloride	**5.1**	J	**2.0**	**10**	**10**	**ug/L**	5	08-Jul-2022 18:53
Trichloroethene	**2,500**		**5.0**	**12**	**25**	**ug/L**	25	08-Jul-2022 19:14
Vinyl chloride	**16**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 18:53
Surr: 1,2-Dichloroethane-d4	*92.9*			**0**	*81-118*	*%REC*	*5*	*08-Jul-2022 18:53*
Surr: 1,2-Dichloroethane-d4	*96.4*			**0**	*81-118*	*%REC*	*25*	*08-Jul-2022 19:14*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*5*	*08-Jul-2022 18:53*
Surr: 4-Bromofluorobenzene	*100*			**0**	*85-114*	*%REC*	*25*	*08-Jul-2022 19:14*
Surr: Dibromofluoromethane	*90.3*			**0**	*80-119*	*%REC*	*5*	*08-Jul-2022 18:53*
Surr: Dibromofluoromethane	*95.6*			**0**	*80-119*	*%REC*	*25*	*08-Jul-2022 19:14*
Surr: Toluene-d8	*94.6*			**0**	*89-112*	*%REC*	*5*	*08-Jul-2022 18:53*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*25*	*08-Jul-2022 19:14*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16WW42-220705
Collection Date: 05-Jul-2022 12:55

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-10
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	08-Jul-2022 19:35
1,1-Dichloroethene	2.5	U	1.0	2.5	5.0	ug/L	5	08-Jul-2022 19:35
1,2-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	08-Jul-2022 19:35
cis-1,2-Dichloroethene	**1,400**		**5.0**	**12**	**25**	**ug/L**	25	08-Jul-2022 19:56
Methylene chloride	**5.3**	J	**2.0**	**10**	**10**	**ug/L**	5	08-Jul-2022 19:35
Trichloroethene	**850**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 19:35
Vinyl chloride	**4.6**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 19:35
Surr: 1,2-Dichloroethane-d4	*98.8*			**0**	*81-118*	*%REC*	*5*	*08-Jul-2022 19:35*
Surr: 1,2-Dichloroethane-d4	*96.6*			**0**	*81-118*	*%REC*	*25*	*08-Jul-2022 19:56*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*5*	*08-Jul-2022 19:35*
Surr: 4-Bromofluorobenzene	*98.3*			**0**	*85-114*	*%REC*	*25*	*08-Jul-2022 19:56*
Surr: Dibromofluoromethane	*95.4*			**0**	*80-119*	*%REC*	*5*	*08-Jul-2022 19:35*
Surr: Dibromofluoromethane	*95.0*			**0**	*80-119*	*%REC*	*25*	*08-Jul-2022 19:56*
Surr: Toluene-d8	*111*			**0**	*89-112*	*%REC*	*5*	*08-Jul-2022 19:35*
Surr: Toluene-d8	*91.3*			**0**	*89-112*	*%REC*	*25*	*08-Jul-2022 19:56*
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastructure, Inc.
Project: LHAAP 16 July 2022
Sample ID: 16RW04-220705
Collection Date: 05-Jul-2022 13:50

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-11
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	5.0	U	1.5	5.0	5.0	ug/L	5	08-Jul-2022 20:17
1,1-Dichloroethene	**2.6**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 20:17
1,2-Dichloroethane	2.5	U	1.0	2.5	5.0	ug/L	5	08-Jul-2022 20:17
cis-1,2-Dichloroethene	**130**		**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 20:17
Methylene chloride	**5.1**	J	**2.0**	**10**	**10**	**ug/L**	5	08-Jul-2022 20:17
Trichloroethene	**2,500**		**5.0**	**12**	**25**	**ug/L**	25	11-Jul-2022 13:53
Vinyl chloride	**4.3**	J	**1.0**	**2.5**	**5.0**	**ug/L**	5	08-Jul-2022 20:17
Surr: 1,2-Dichloroethane-d4	*96.7*			**0**	*81-118*	*%REC*	*5*	*08-Jul-2022 20:17*
Surr: 1,2-Dichloroethane-d4	*101*			**0**	*81-118*	*%REC*	*25*	*11-Jul-2022 13:53*
Surr: 4-Bromofluorobenzene	*104*			**0**	*85-114*	*%REC*	*5*	*08-Jul-2022 20:17*
Surr: 4-Bromofluorobenzene	*101*			**0**	*85-114*	*%REC*	*25*	*11-Jul-2022 13:53*
Surr: Dibromofluoromethane	*94.9*			**0**	*80-119*	*%REC*	*5*	*08-Jul-2022 20:17*
Surr: Dibromofluoromethane	*98.3*			**0**	*80-119*	*%REC*	*25*	*11-Jul-2022 13:53*
Surr: Toluene-d8	*110*			**0**	*89-112*	*%REC*	*5*	*08-Jul-2022 20:17*
Surr: Toluene-d8	*109*			**0**	*89-112*	*%REC*	*25*	*11-Jul-2022 13:53*
DISSOLVED GASES BY RSK-175		**Method:RSK-175**						Analyst: PPM
Ethane	**0.00195**		**0.000144**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 13:53
Ethene	**0.00258**		**0.000234**	**0.000500**	**0.00100**	**mg/L**	1	11-Jul-2022 13:53
Methane	**0.314**		**0.00107**	**0.00500**	**0.00500**	**mg/L**	10	11-Jul-2022 15:05
SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)		**Method:NA**						Analyst: SUB
Subcontract Analysis	See Attached		0	0		NA	1	21-Jul-2022 14:34

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
Sample ID: Trip Blank-220705
Collection Date: 05-Jul-2022 00:00

ANALYTICAL REPORT
WorkOrder:HS22070326
Lab ID:HS22070326-12
Matrix:Water

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
VOLATILES ORGANICS BY METHOD 8260C		**Method:SW8260**						Analyst: PC
1,1,2-Trichloroethane	1.0	U	0.30	1.0	1.0	ug/L	1	08-Jul-2022 12:55
1,1-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 12:55
1,2-Dichloroethane	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 12:55
cis-1,2-Dichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 12:55
Methylene chloride	2.0	U	0.40	2.0	2.0	ug/L	1	08-Jul-2022 12:55
Trichloroethene	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 12:55
Vinyl chloride	0.50	U	0.20	0.50	1.0	ug/L	1	08-Jul-2022 12:55
Surr: 1,2-Dichloroethane-d4	*100*			**0**	*81-118*	*%REC*	*1*	*08-Jul-2022 12:55*
Surr: 4-Bromofluorobenzene	*102*			**0**	*85-114*	*%REC*	*1*	*08-Jul-2022 12:55*
Surr: Dibromofluoromethane	*98.1*			**0**	*80-119*	*%REC*	*1*	*08-Jul-2022 12:55*
Surr: Toluene-d8	*130*	*S*		**0**	*89-112*	*%REC*	*1*	*08-Jul-2022 12:55*

Note: See Qualifiers Page for a list of qualifiers and their explanation.

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R412540 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS22070326-01	16WW44-220705	05 Jul 2022 07:35			08 Jul 2022 13:16	1
HS22070326-02	16WW44-220705-FD	05 Jul 2022 07:35			08 Jul 2022 13:37	1
HS22070326-03	16RW10-220705	05 Jul 2022 08:20			08 Jul 2022 17:50	25
HS22070326-03	16RW10-220705	05 Jul 2022 08:20			08 Jul 2022 17:29	5
HS22070326-04	16RW09-220705	05 Jul 2022 09:00			08 Jul 2022 16:05	25
HS22070326-04	16RW09-220705	05 Jul 2022 09:00			08 Jul 2022 14:19	1
HS22070326-05	16RW09-220705-FD	05 Jul 2022 09:00			08 Jul 2022 16:26	25
HS22070326-05	16RW09-220705-FD	05 Jul 2022 09:00			08 Jul 2022 14:40	1
HS22070326-06	16EW01-220705	05 Jul 2022 09:50			08 Jul 2022 16:47	10
HS22070326-07	16WW40-220705	05 Jul 2022 10:35			08 Jul 2022 15:01	10
HS22070326-07	16WW40-220705	05 Jul 2022 10:35			08 Jul 2022 13:58	1
HS22070326-08	16WW12-220705	05 Jul 2022 11:30			08 Jul 2022 18:32	25
HS22070326-08	16WW12-220705	05 Jul 2022 11:30			08 Jul 2022 18:11	5
HS22070326-09	16WW13-220705	05 Jul 2022 12:15			08 Jul 2022 19:14	25
HS22070326-09	16WW13-220705	05 Jul 2022 12:15			08 Jul 2022 18:53	5
HS22070326-10	16WW42-220705	05 Jul 2022 12:55			08 Jul 2022 19:56	25
HS22070326-10	16WW42-220705	05 Jul 2022 12:55			08 Jul 2022 19:35	5
HS22070326-11	16RW04-220705	05 Jul 2022 13:50			08 Jul 2022 20:17	5
HS22070326-12	Trip Blank-220705	05 Jul 2022 00:00			08 Jul 2022 12:55	1
Batch ID: R412669 (0)	**Test Name :** VOLATILES ORGANICS BY METHOD 8260C				**Matrix:** Water	
HS22070326-06	16EW01-220705	05 Jul 2022 09:50			11 Jul 2022 13:32	100
HS22070326-11	16RW04-220705	05 Jul 2022 13:50			11 Jul 2022 13:53	25
Batch ID: R412754 (0)	**Test Name :** DISSOLVED GASES BY RSK-175				**Matrix:** Water	
HS22070326-03	16RW10-220705	05 Jul 2022 08:20			11 Jul 2022 14:02	100
HS22070326-03	16RW10-220705	05 Jul 2022 08:20			11 Jul 2022 12:58	1
HS22070326-04	16RW09-220705	05 Jul 2022 09:00			11 Jul 2022 14:34	50
HS22070326-04	16RW09-220705	05 Jul 2022 09:00			11 Jul 2022 13:06	1
HS22070326-05	16RW09-220705-FD	05 Jul 2022 09:00			11 Jul 2022 14:42	50
HS22070326-05	16RW09-220705-FD	05 Jul 2022 09:00			11 Jul 2022 13:17	1
HS22070326-07	16WW40-220705	05 Jul 2022 10:35			11 Jul 2022 14:52	100
HS22070326-07	16WW40-220705	05 Jul 2022 10:35			11 Jul 2022 13:25	1
HS22070326-11	16RW04-220705	05 Jul 2022 13:50			11 Jul 2022 15:05	10
HS22070326-11	16RW04-220705	05 Jul 2022 13:50			11 Jul 2022 13:53	1
Batch ID: R413420 (0)	**Test Name :** TOTAL ORGANIC CARBON - SM5310B-2011				**Matrix:** Water	
HS22070326-04	16RW09-220705	05 Jul 2022 09:00			20 Jul 2022 19:35	1
HS22070326-05	16RW09-220705-FD	05 Jul 2022 09:00			20 Jul 2022 19:50	1
HS22070326-06	16EW01-220705	05 Jul 2022 09:50			20 Jul 2022 20:02	1
HS22070326-07	16WW40-220705	05 Jul 2022 10:35			20 Jul 2022 20:16	1

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: R413462 (0)	**Test Name :** SUBCONTRACT ANALYSIS - PERCHLORATE (EPA 6850)				**Matrix:** Water	
HS22070326-01	16WW44-220705	05 Jul 2022 07:35			21 Jul 2022 14:34	1
HS22070326-02	16WW44-220705-FD	05 Jul 2022 07:35			21 Jul 2022 14:34	1
HS22070326-03	16RW10-220705	05 Jul 2022 08:20			21 Jul 2022 14:34	1
HS22070326-04	16RW09-220705	05 Jul 2022 09:00			21 Jul 2022 14:34	1
HS22070326-05	16RW09-220705-FD	05 Jul 2022 09:00			21 Jul 2022 14:34	1
HS22070326-06	16EW01-220705	05 Jul 2022 09:50			21 Jul 2022 14:34	1
HS22070326-07	16WW40-220705	05 Jul 2022 10:35			21 Jul 2022 14:34	1
HS22070326-08	16WW12-220705	05 Jul 2022 11:30			21 Jul 2022 14:34	1
HS22070326-09	16WW13-220705	05 Jul 2022 12:15			21 Jul 2022 14:34	1
HS22070326-10	16WW42-220705	05 Jul 2022 12:55			21 Jul 2022 14:34	1
HS22070326-11	16RW04-220705	05 Jul 2022 13:50			21 Jul 2022 14:34	1

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

QC BATCH REPORT

Batch ID: R412754 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MBLK Sample ID: **MBLK-220711** Units: **mg/L** Analysis Date: **11-Jul-2022 09:00**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742107** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.000500	0.00100								U
Ethene	0.000500	0.00100								U
Methane	0.000500	0.000500								U

LCS Sample ID: **LCS-220711** Units: **mg/L** Analysis Date: **11-Jul-2022 09:10**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742108** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0206	0.00100	0.01804	0	114	75 - 125				
Ethene	0.0189	0.00100	0.0168	0	113	75 - 125				
Methane	0.00936	0.000500	0.009647	0	97.1	75 - 125				

MS Sample ID: **HS22070326-07MS** Units: **mg/L** Analysis Date: **11-Jul-2022 13:35**
Client ID: **16WW40-220705** Run ID: **FID-4_412754** SeqNo: **6742134** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0225	0.00100	0.01804	0	125	75 - 125				
Ethene	0.0242	0.00100	0.0168	0	144	75 - 125				S
Methane	0.749	0.000500	0.009647	3.020	-23500	75 - 125				SEO

MS Sample ID: **HS22070020-01MS** Units: **mg/L** Analysis Date: **11-Jul-2022 11:36**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742123** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0255	0.00100	0.01804	0	141	75 - 125				S
Ethene	0.0262	0.00100	0.0168	0.01680	56.2	75 - 125				S
Methane	1.26	0.000500	0.009647	1.330	-729	75 - 125				SEO

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

QC BATCH REPORT

Batch ID: R412754 (0) **Instrument:** FID-4 **Method:** DISSOLVED GASES BY RSK-175

MSD Sample ID: **HS22070326-07MSD** Units: **mg/L** Analysis Date: **11-Jul-2022 13:43**
Client ID: **16WW40-220705** Run ID: **FID-4_412754** SeqNo: **6742135** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0203	0.00100	0.01804	0	113	75 - 125	0.02247	10.1	30	
Ethene	0.0233	0.00100	0.0168	0	139	75 - 125	0.02422	3.89	30	S
Methane	0.860	0.000500	0.009647	3.020	-22400	75 - 125	0.7487	13.8	30	SEO

MSD Sample ID: **HS22070020-01MSD** Units: **mg/L** Analysis Date: **11-Jul-2022 11:53**
Client ID: Run ID: **FID-4_412754** SeqNo: **6742124** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Ethane	0.0233	0.00100	0.01804	0	129	75 - 125	0.02546	8.71	30	S
Ethene	0.0270	0.00100	0.0168	0.01680	60.6	75 - 125	0.02624	2.73	30	S
Methane	1.28	0.000500	0.009647	1.330	-525	75 - 125	1.260	1.55	30	SEO

The following samples were analyzed in this batch: HS22070326-03 HS22070326-04 HS22070326-05 HS22070326-07 HS22070326-11

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

QC BATCH REPORT

Batch ID: R412540 (0) **Instrument: VOA6** **Method: VOLATILES ORGANICS BY METHOD 8260C**

MBLK Sample ID: **VBLKW-220708** Units: **ug/L** Analysis Date: **08-Jul-2022 12:34**
Client ID: Run ID: **VOA6_412540** SeqNo: **6737491** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	1.0	1.0								U
1,1-Dichloroethene	0.50	1.0								U
1,2-Dichloroethane	0.50	1.0								U
cis-1,2-Dichloroethene	0.50	1.0								U
Methylene chloride	2.0	2.0								U
Trichloroethene	0.50	1.0								U
Vinyl chloride	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*43.78*	*1.0*	*50*	*0*	*87.6*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*56.19*	*1.0*	*50*	*0*	*112*	*85 - 114*				
Surr: Dibromofluoromethane	*45.82*	*1.0*	*50*	*0*	*91.6*	*80 - 119*				
Surr: Toluene-d8	*52.73*	*1.0*	*50*	*0*	*105*	*89 - 112*				

LCS Sample ID: **VLCSW-220708** Units: **ug/L** Analysis Date: **08-Jul-2022 11:52**
Client ID: Run ID: **VOA6_412540** SeqNo: **6737490** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	20.54	1.0	20	0	103	80 - 119				
1,1-Dichloroethene	18.08	1.0	20	0	90.4	71 - 131				
1,2-Dichloroethane	20.76	1.0	20	0	104	73 - 128				
cis-1,2-Dichloroethene	20.13	1.0	20	0	101	78 - 123				
Methylene chloride	20.22	2.0	20	0	101	74 - 124				
Trichloroethene	20.74	1.0	20	0	104	79 - 123				
Vinyl chloride	18.23	1.0	20	0	91.2	58 - 137				
Surr: 1,2-Dichloroethane-d4	*57.28*	*1.0*	*50*	*0*	*115*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.56*	*1.0*	*50*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*52.94*	*1.0*	*50*	*0*	*106*	*80 - 119*				
Surr: Toluene-d8	*55.07*	*1.0*	*50*	*0*	*110*	*89 - 112*				

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

QC BATCH REPORT

Batch ID: R412540 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MS Sample ID: **HS22070326-07MS** Units: **ug/L** Analysis Date: **08-Jul-2022 15:23**
Client ID: **16WW40-220705** Run ID: **VOA6_412540** SeqNo: **6737499** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	192.2	10	200	0	96.1	80 - 119				
1,1-Dichloroethene	210.2	10	200	0	105	71 - 131				
1,2-Dichloroethane	188.9	10	200	0	94.5	73 - 128				
cis-1,2-Dichloroethene	340.3	10	200	173	83.6	78 - 123				
Methylene chloride	201.4	20	200	0	101	74 - 124				
Trichloroethene	1152	10	200	993.3	79.4	79 - 123				O
Vinyl chloride	200.1	10	200	10.73	94.7	58 - 137				
Surr: 1,2-Dichloroethane-d4	*453.3*	*10*	*500*	*0*	*90.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*515.7*	*10*	*500*	*0*	*103*	*85 - 114*				
Surr: Dibromofluoromethane	*455.2*	*10*	*500*	*0*	*91.0*	*80 - 119*				
Surr: Toluene-d8	*545.9*	*10*	*500*	*0*	*109*	*89 - 112*				

MSD Sample ID: **HS22070326-07MSD** Units: **ug/L** Analysis Date: **08-Jul-2022 15:44**
Client ID: **16WW40-220705** Run ID: **VOA6_412540** SeqNo: **6737500** PrepDate: DF: **10**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
1,1,2-Trichloroethane	199	10	200	0	99.5	80 - 119	192.2	3.47	20	
1,1-Dichloroethene	197.3	10	200	0	98.6	71 - 131	210.2	6.36	20	
1,2-Dichloroethane	178.8	10	200	0	89.4	73 - 128	188.9	5.48	20	
cis-1,2-Dichloroethene	325.3	10	200	173	76.1	78 - 123	340.3	4.51	20	S
Methylene chloride	187.3	20	200	0	93.7	74 - 124	201.4	7.23	20	
Trichloroethene	1079	10	200	993.3	42.8	79 - 123	1152	6.56	20	SO
Vinyl chloride	205.6	10	200	10.73	97.4	58 - 137	200.1	2.7	20	
Surr: 1,2-Dichloroethane-d4	*454.9*	*10*	*500*	*0*	*91.0*	*81 - 118*	*453.3*	*0.355*	*20*	
Surr: 4-Bromofluorobenzene	*519.3*	*10*	*500*	*0*	*104*	*85 - 114*	*515.7*	*0.692*	*20*	
Surr: Dibromofluoromethane	*451.1*	*10*	*500*	*0*	*90.2*	*80 - 119*	*455.2*	*0.908*	*20*	
Surr: Toluene-d8	*653.6*	*10*	*500*	*0*	*131*	*89 - 112*	*545.9*	*18*	*20*	S

The following samples were analyzed in this batch:

HS22070326-01	HS22070326-02	HS22070326-03	HS22070326-04
HS22070326-05	HS22070326-06	HS22070326-07	HS22070326-08
HS22070326-09	HS22070326-10	HS22070326-11	HS22070326-12

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

QC BATCH REPORT

Batch ID: R412669 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MBLK Sample ID: **VBLKW-220711** Units: **ug/L** Analysis Date: **11-Jul-2022 12:29**
Client ID: Run ID: **VOA6_412669** SeqNo: **6740198** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	0.50	1.0								U
Trichloroethene	0.50	1.0								U
Surr: 1,2-Dichloroethane-d4	*48.35*	*1.0*	*50*	*0*	*96.7*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.01*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*47.57*	*1.0*	*50*	*0*	*95.1*	*80 - 119*				
Surr: Toluene-d8	*55.32*	*1.0*	*50*	*0*	*111*	*89 - 112*				

LCS Sample ID: **VLCSW-220711** Units: **ug/L** Analysis Date: **11-Jul-2022 11:47**
Client ID: Run ID: **VOA6_412669** SeqNo: **6740197** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	20.4	1.0	20	0	102	78 - 123				
Trichloroethene	20.76	1.0	20	0	104	79 - 123				
Surr: 1,2-Dichloroethane-d4	*55.15*	*1.0*	*50*	*0*	*110*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*53.84*	*1.0*	*50*	*0*	*108*	*85 - 114*				
Surr: Dibromofluoromethane	*54.21*	*1.0*	*50*	*0*	*108*	*80 - 119*				
Surr: Toluene-d8	*52.75*	*1.0*	*50*	*0*	*105*	*89 - 112*				

MS Sample ID: **HS22070388-08MS** Units: **ug/L** Analysis Date: **11-Jul-2022 14:14**
Client ID: Run ID: **VOA6_412669** SeqNo: **6740203** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	18.09	1.0	20	0	90.5	78 - 123				
Trichloroethene	20.08	1.0	20	0	100	79 - 123				
Surr: 1,2-Dichloroethane-d4	*50.22*	*1.0*	*50*	*0*	*100*	*81 - 118*				
Surr: 4-Bromofluorobenzene	*51.21*	*1.0*	*50*	*0*	*102*	*85 - 114*				
Surr: Dibromofluoromethane	*48.95*	*1.0*	*50*	*0*	*97.9*	*80 - 119*				
Surr: Toluene-d8	*55.07*	*1.0*	*50*	*0*	*110*	*89 - 112*				

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

QC BATCH REPORT

Batch ID: R412669 (0) **Instrument:** VOA6 **Method:** VOLATILES ORGANICS BY METHOD 8260C

MSD Sample ID: **HS22070388-08MSD** Units: **ug/L** Analysis Date: **11-Jul-2022 14:35**
Client ID: Run ID: **VOA6_412669** SeqNo: **6740204** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
cis-1,2-Dichloroethene	17.49	1.0	20	0	87.4	78 - 123	18.09	3.38	20	
Trichloroethene	19.25	1.0	20	0	96.2	79 - 123	20.08	4.23	20	
Surr: 1,2-Dichloroethane-d4	*50.01*	*1.0*	*50*	*0*	*100*	*81 - 118*	*50.22*	*0.422*	*20*	
Surr: 4-Bromofluorobenzene	*53.78*	*1.0*	*50*	*0*	*108*	*85 - 114*	*51.21*	*4.88*	*20*	
Surr: Dibromofluoromethane	*49.21*	*1.0*	*50*	*0*	*98.4*	*80 - 119*	*48.95*	*0.521*	*20*	
Surr: Toluene-d8	*54.21*	*1.0*	*50*	*0*	*108*	*89 - 112*	*55.07*	*1.57*	*20*	

The following samples were analyzed in this batch: HS22070326-06 HS22070326-11

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: HS22070326

QC BATCH REPORT

Batch ID: R413420 (0) **Instrument:** TOC_04 **Method:** TOTAL ORGANIC CARBON - SM5310B-2011

MBLK Sample ID: **MBLK-07202022** Units: **mg/L** Analysis Date: **20-Jul-2022 18:25**
Client ID: Run ID: **TOC_04_413420** SeqNo: **6757678** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	1.00	1.00								U

LCS Sample ID: **LCS-07202022** Units: **mg/L** Analysis Date: **20-Jul-2022 18:39**
Client ID: Run ID: **TOC_04_413420** SeqNo: **6757679** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.542	1.00	10	0	95.4	85 - 115				

LCSD Sample ID: **LCSD-07202022** Units: **mg/L** Analysis Date: **20-Jul-2022 18:52**
Client ID: Run ID: **TOC_04_413420** SeqNo: **6757680** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	9.48	1.00	10	0	94.8	85 - 115	9.542	0.652	20	

MS Sample ID: **HS22070326-07MS** Units: **mg/L** Analysis Date: **20-Jul-2022 20:31**
Client ID: **16WW40-220705** Run ID: **TOC_04_413420** SeqNo: **6757687** PrepDate: DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Organic Carbon, Total	15.78	1.00	10	4.673	111	80 - 120				

The following samples were analyzed in this batch: HS22070326-04 HS22070326-05 HS22070326-06 HS22070326-07

ALS Houston, US Date: 21-Jul-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 July 2022
WorkOrder: **HS22070326**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

Unit Reported	Description
mg/L	Milligrams per Liter

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352 2021-2022	31-Jul-2022
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2021-080	31-Aug-2022
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932021-12	30-Jul-2022

ALS Houston, US Date: 21-Jul-22

Sample Receipt Checklist

Work Order ID: HS22070326 **Date/Time Received:** 07-Jul-2022 09:40

Client Name: CBI-Houston **Received by:** Nilesh D. Ranchod

Completed By:	/S/ Corey Grandits	07-Jul-2022 18:03	**Reviewed by:**	/S/ Ragen Giga	19-Jul-2022 18:16
	eSignature	Date/Time		eSignature	Date/Time

Matrices: W Carrier name: FedEx

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	1.8uc/2.3c	IR31
Cooler(s)/Kit(s):	48468	
Date/Time sample(s) sent to storage:	7/7/2022	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☑	No ☐	N/A ☐
pH adjusted?	Yes ☐	No ☑	N/A ☐
pH adjusted by:			

Login Notes: COC Project Name "LHAAP 16 January 2022" sampling date is for July 2022. Project Name "LHAAP 16 July 2022" applied at sample login.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

HS22070326

Aptim Environmental & Infrastucture, Inc.

LHAAP 16 June 2022

Project: APTIM LONGHORN ARMY AMMN. PLANT (LHAAP) GROUNDWATER TREATMENT PLANT (GWTP) KARNACK, TEXAS	Project No. 501032
Job: **LHAAP 16 January 2022**	
Prepared By: Scott Beesinger	P.O. Number

Field Sample I.D.	Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: VOC by SW 8260B	TOC by SM5310C	MEE by RSK 176	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Remarks (Preservatives, etc.)	Lab I.D.#
16WW44-220705		WG	7/5/22	0735		4	X					X	
16WW44-220705-FD		WG	7/5/22	0735		4	X					X	
16RW10-220705		WG	7/5/22	0820		7	X		X			X	
16RW09-220705		WG	7/5/22	0900		9	X	X	X			X	
16RW09-220705-FD		WG	7/5/22	0900		9	X	X	X			X	
16EW01-220705		WG	7/5/22	0950		6	X	X				X	
16WW40-220705		WG	7/5/22	1035		9	X	X	X			X	
16WW40-220705-MS		WG	7/5/22	1035		9	X	X	X			X	

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
Scott Beesinger	7/6/22	1430	NC	7/7/22	09.40						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition
				NC	7/7/22				

Remarks:

48468 - Jaw 4°C 1-8

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

HS22070326

Aptim Environmental & Infrastucture, Inc.

LHAAP 16 June 2022

Project: APTIM
LONGHORN ARMY AMMN. PLANT (LHAAP)
GROUNDWATER TREATMENT PLANT (GWTP)
KARNACK, TEXAS

Project No. 501032

Job: **LHAAP 16 January 2022**

Prepared By: Scott Beesinger

P.O. Number

Field Sample I.D.	Sample Matrix	Date / Time	MS / MSD	No. OF CONTAINERS	VOC by SW 8260B	TOC by SM5310C	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Remarks (Preservatives, etc.)	Lab I.D.#
16WW40-220705-MSD	WG	7/5/22 1035		9	X	X	X			X		
16WW12-220705	WG	7/5/22 1130		4	X					X		
16WW13-220705	WG	7/5/22 1215		4	X					X		
16WW42-220705	WG	7/5/22 1255		4	X					X		
16RW04-220705	WG	7/5/22 1350		7	X		X			X		
TRIP BLANK-220705	W	7/5/22		2	X							

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
[signature]	7/6/22	1430	[signature]	7/7/22	0940						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

(Word) S:\I-ces\Forms\Chain of Custody - BiWeekly

ALS
10450 Stancliff Rd., Suite 210
Houston, Texas 77099
Tel. +1 281 530 5656
Fax. +1 281 530 5857

48468

CUSTODY SEAL

Date: 7/6/22 Time: 1430
Name: Scott Beesinger
Company: Bhate

Seal Broken By: SW
Date: 07/07/22

48468

48468

ORIGIN ID:SGRA (903) 930-6193
SCOTT BEESINGER
APTIM ENVIRONMENTAL & INFRASTRUCTURE
1203-B EAST GRAND AVE
PMB 202
MARSHALL, TX 75670
UNITED STATES US

SHIP DATE: 10JUN22
ACTWGT: 1.00 LB MAN
CAD: 0221247/CAFE3512
DIMS: 18x16x13 IN

TO SHIPPING DEPT
ALS LABORATORY GROUP
10450 STANCLIFF RD
SUITE 210
HOUSTON TX 77099
(281) 530-5856
REF: LHAAP 16-80 95837-DW

RMA:

FedEx Express

TUE - 14 JUN 10:30A
PRIORITY OVERNIGHT

FedEx 1994 2862

AB SGRA

77099
TX-US
IAH

July 21, 2022 Service Request No:E2200665

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22070326

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory July 11, 2022
For your reference, these analyses have been assigned our service request number **E2200665.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS	**Service Request No.:**	E2200665
Project:	HS22070326	**Date Received:**	07/11/22
Sample Matrix:	W		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Eleven samples were received for analysis at ALS Environmental in Houston on 07/11/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200287: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS-DLCS recoveries met acceptance criteria. The MS/MSD recoveries failed high, suspect matrix interference in parent sample (lab analyzed at 5x due to interferences encountered at a 1x)

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2200665
Project: HS22070326

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200665-001	16WW44-220705	7/5/2022	0735
E2200665-002	16WW44-220705-FD	7/5/2022	0735
E2200665-003	16RW10-220705	7/5/2022	0820
E2200665-004	16RW09-220705	7/5/2022	0900
E2200665-005	16RW09-220705-FD	7/5/2022	0900
E2200665-006	16EW01-220705	7/5/2022	0950
E2200665-007	16WW40-220705	7/5/2022	1035
E2200665-008	16WW12-220705	7/5/2022	1130
E2200665-009	16WW13-220705	7/5/2022	1215
E2200665-010	16WW42-220705	7/5/2022	1255
E2200665-011	16RW04-220705	7/5/2022	1350

Service Request Summary

Folder #: **E2200665**
Client Name: ALS Environmental - US
Project Name: HS22070326
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/11/22
Internal Due Date: 7/21/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070326
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2200665-001	16WW44-220705	Water	07/05/22 0735	**IV**
E2200665-002	16WW44-220705-FD	Water	07/05/22 0735	**IV**
E2200665-003	16RW10-220705	Water	07/05/22 0820	**IV**
E2200665-004	16RW09-220705	Water	07/05/22 0900	**IV**
E2200665-005	16RW09-220705-FD	Water	07/05/22 0900	**IV**
E2200665-006	16EW01-220705	Water	07/05/22 0950	**IV**
E2200665-007	16WW40-220705	Water	07/05/22 1035	**IV**
E2200665-008	16WW12-220705	Water	07/05/22 1130	**IV**
E2200665-009	16WW13-220705	Water	07/05/22 1215	**IV**
E2200665-010	16WW42-220705	Water	07/05/22 1255	**IV**
E2200665-011	16RW04-220705	Water	07/05/22 1350	**IV**

Service Request Summary

Folder #: **E2200665**
Client Name: ALS Environmental - US
Project Name: HS22070326
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/11/22
Internal Due Date: 7/21/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070326
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	10	IV Due 7/28
Semivoa GCMS	ClO4 DOD/6850	1	MS/MSD

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

10450 Stancliff Rd, Houston, TX 77099 | 281-530-5656 | www.alsglobal.com

ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-12	7/31/2022
Washington Department of Health	C819-2022	11/14/2022

Chain of Custody

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

10450 Stancliff Rd, Ste 210
Houston, TX 77099
T: +1 281 530 5656
F: +1 281 530 5887
www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 19142

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22070326
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22070326-01**	**16WW44-220705**	**Water**	**05 Jul 2022 07:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
2.	**HS22070326-02**	**16WW44-220705-FD**	**Water**	**05 Jul 2022 07:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
3.	**HS22070326-03**	**16RW10-220705**	**Water**	**05 Jul 2022 08:20**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
4.	**HS22070326-04**	**16RW09-220705**	**Water**	**05 Jul 2022 09:00**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
5.	**HS22070326-05**	**16RW09-220705-FD**	**Water**	**05 Jul 2022 09:00**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
6.	**HS22070326-06**	**16EW01-220705**	**Water**	**05 Jul 2022 09:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
7.	**HS22070326-07**	**16WW40-220705**	**Water**	**05 Jul 2022 10:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
8.	**HS22070326-08**	**16WW12-220705**	**Water**	**05 Jul 2022 11:30**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19142**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
9.	**HS22070326-09**	**16WW13-220705**	**Water**	**05 Jul 2022 12:15**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
10.	**HS22070326-10**	**16WW42-220705**	**Water**	**05 Jul 2022 12:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
11.	**HS22070326-11**	**16RW04-220705**	**Water**	**05 Jul 2022 13:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022

Comments: HS22070326-07 MS/MSD

Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: COREY G Date/Time: 7-11-22 0800

Cooler ID(s): _____ Temperature(s): _____

Cooler Receipt Form

ALS Environmental

Project Chemist CG

Client/Project ALS-H

Thermometer ID IR31

Date/Time Received: 7-11-22 Initials: CG Date/Time Logged in: 7-11-22 Initials CG

1. Method of delivery: ◯ US Mail ◯ Fed Ex ◯ UPS ◯ DHL ⊗ Courier (ALS) ◯ Client

2. Samples received in: ⊗ Cooler ◯ Box ◯ Envelope ◯ Other

3. Were custody seals on coolers? ◯ Yes ⊗ No If yes, how many and where?

Were they intact? ◯ Yes ◯ No ⊗ N/A

Were they signed and dated? ◯ Yes ◯ No ⊗ N/A

4. Packing Material: ◯ Inserts ⊗ Baggies ◯ Bubble Wrap ◯ Gel Packs ⊗ Wet Ice ◯ Sleeves ◯ Other

5. Foreign or Regulated Soil? ◯ Yes ◯ No Location of Sampling:

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		7-11-22	0800	CG	2.2°C	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ⊗ Yes ◯ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ⊗ Yes ◯ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ⊗ Yes ◯ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ⊗ Yes ◯ No

10. Did sample labels and tags agree with custody documents? ⊗ Yes ◯ No

Notes, Discrepancies, & Resolutions:

Service request Label:

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 402637 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/12/22 09:30

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200664-001	LH18/24-SP650_070622_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2200664-002	LH18/24-SP650_070622_BIX	.01	6850/ClO4 DOD			Water	10mL	
3	E2200665-001	16WW44-220705	.01	6850/ClO4 DOD			Water	10mL	
4	E2200665-002	16WW44-220705-FD	.01	6850/ClO4 DOD			Water	10mL	
5	E2200665-003	16RW10-220705	.01	6850/ClO4 DOD			Water	10mL	
6	E2200665-004	16RW09-220705	.01	6850/ClO4 DOD			Water	10mL	
7	E2200665-005	16RW09-220705-FD	.01	6850/ClO4 DOD			Water	10mL	
8	E2200665-006	16EW01-220705	.01	6850/ClO4 DOD			Water	10mL	
9	E2200665-007	16WW40-220705	.01	6850/ClO4 DOD			Water	10mL	
10	E2200665-008	16WW12-220705	.01	6850/ClO4 DOD			Water	10mL	
11	E2200665-009	16WW13-220705	.01	6850/ClO4 DOD			Water	10mL	
12	E2200665-010	16WW42-220705	.01	6850/ClO4 DOD			Water	10mL	
13	E2200665-011	16RW04-220705	.01	6850/ClO4 DOD			Water	10mL	
14	EQ2200287-01	MB		6850/ClO4 DOD			Liquid	10mL	
15	EQ2200287-02	LCS		6850/ClO4 DOD			Liquid	10mL	
16	EQ2200287-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
17	EQ2200287-04	16WW40-220705 MS	.01	6850/ClO4 DOD			Liquid	10mL	
18	EQ2200287-05	16WW40-220705 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200287-02	1.00µL	EQ2200287-03	1.00µL	EQ2200287-04	1.00µL	EQ2200287-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200664-001	100.00µL	E2200664-002	100.00µL	E2200665-001	100.00µL	E2200665-002	100.00µL	E2200665-003	100.00µL	E2200665-004	100.00µL
E2200665-005	100.00µL	E2200665-006	100.00µL	E2200665-007	100.00µL	E2200665-008	100.00µL	E2200665-009	100.00µL	E2200665-010	100.00µL
E2200665-011	100.00µL	EQ2200287-01	100.00µL	EQ2200287-02	100.00µL	EQ2200287-03	100.00µL	EQ2200287-04	100.00µL	EQ2200287-05	100.00µL

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223055)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (222410)
6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)		

Preparation Information Benchsheet

Prep Run#: 402637 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/12/22 09:30

Preparation Steps

Step: Preparation
Started: 7/12/22 09:30
Finished: 7/12/22 10:15
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 7/12/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0735
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW44-220705	**Units:**	µg/L
Lab Code:	E2200665-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:45	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0735
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW44-220705-FD	**Units:**	µg/L
Lab Code:	E2200665-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:53	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0820
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW10-220705	**Units:**	µg/L
Lab Code:	E2200665-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**2.05**		0.500	0.250	0.125	5	7/12/22	7/20/22 17:26	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0900
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW09-220705	**Units:**	µg/L
Lab Code:	E2200665-004	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 20:16	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0900
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW09-220705-FD	**Units:**	µg/L
Lab Code:	E2200665-005	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.221**	J	0.500	0.250	0.125	5	7/12/22	7/20/22 17:34	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0950
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16EW01-220705	**Units:**	µg/L
Lab Code:	E2200665-006	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**38.1**		0.500	0.250	0.125	5	7/12/22	7/20/22 17:41	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1035
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	E2200665-007	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.500	0.250	0.125	5	7/12/22	7/20/22 17:49	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1130
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW12-220705	**Units:**	µg/L
Lab Code:	E2200665-008	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**58.3**		1.00	0.500	0.250	10	7/12/22	7/20/22 16:11	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1215
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW13-220705	**Units:**	µg/L
Lab Code:	E2200665-009	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/20/22 16:18	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1255
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW42-220705	**Units:**	µg/L
Lab Code:	E2200665-010	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 21:04	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1350
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW04-220705	**Units:**	µg/L
Lab Code:	E2200665-011	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 21:12	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200287-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 16:18	402637	770203	

Accuracy & Precision

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/12/22
Sample Matrix:	Water		

Lab Control Sample Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method:	6850	**Units:**	µg/L
Prep Method:	Method	**Basis:**	NA
		Extraction Lot:	402637

	Lab Control Sample EQ2200287-02			Duplicate Lab Control Sample EQ2200287-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0991	0.100	99	0.103	0.100	103	84 - 119	3	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200287-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0991**	J	0.100	0.0500	0.0250	1	7/12/22	7/12/22 16:26	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200287-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.103**		0.100	0.0500	0.0250	1	7/12/22	7/12/22 17:07	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/5/22
Sample Matrix:	Water	**Date Received:**	7/11/22
		Date Analyzed:	7/12/22

Matrix Spike Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	E2200665-007	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW40-220705MS				16WW40-220705DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2200287-04				EQ2200287-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.202	0.100	202	*	0.193	0.100	193	*	84 - 119	5	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1035
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	EQ2200287-04	**Basis:**	NA
Run Type:	Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.202**		0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:29	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1035
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	EQ2200287-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.193**		0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:37	402637	770203	

HS22070326-MSVOA-SW8260

ALS WO# HS22070326

right solutions.
right partner.

Form 1

Organic Analysis Data Sheet

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-01
16WW44-220705

Collected	Received	Matrix	Units
07/05/22 07:35	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/08/22 13:16	VOA6_412540	X070809
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 13:16	VOA6_412540	X070809
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/08/22 13:16	VOA6_412540	X070809
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 13:16	VOA6_412540	X070809
Methylene chloride	2	U	0.40	2.0	2.0	1	07/08/22 13:16	VOA6_412540	X070809
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 13:16	VOA6_412540	X070809
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/08/22 13:16	VOA6_412540	X070809

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-02
16WW44-220705-FD

Collected	Received	Matrix	Units
07/05/22 07:35	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/08/22 13:37	VOA6_412540	X070810
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 13:37	VOA6_412540	X070810
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/08/22 13:37	VOA6_412540	X070810
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 13:37	VOA6_412540	X070810
Methylene chloride	2	U	0.40	2.0	2.0	1	07/08/22 13:37	VOA6_412540	X070810
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 13:37	VOA6_412540	X070810
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/08/22 13:37	VOA6_412540	X070810

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-03
16RW10-220705

Collected	Received	Matrix	Units
07/05/22 08:20	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	07/08/22 17:29	VOA6_412540	X070821
1,1-Dichloroethene	20		1.0	5.0	5.0	5	07/08/22 17:29	VOA6_412540	X070821
1,2-Dichloroethane	4.8	J	1.0	5.0	5.0	5	07/08/22 17:29	VOA6_412540	X070821
cis-1,2-Dichloroethene	420		1.0	5.0	5.0	5	07/08/22 17:29	VOA6_412540	X070821
Methylene chloride	10	U	2.0	10	10	5	07/08/22 17:29	VOA6_412540	X070821
Vinyl chloride	190		1.0	5.0	5.0	5	07/08/22 17:29	VOA6_412540	X070821
Trichloroethene	930		5.0	25	25	25	07/08/22 17:50	VOA6_412540	X070822

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-04
16RW09-220705

Collected	Received	Matrix	Units
07/05/22 09:00	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/08/22 14:19	VOA6_412540	X070812
1,1-Dichloroethene	12		0.20	1.0	1.0	1	07/08/22 14:19	VOA6_412540	X070812
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/08/22 14:19	VOA6_412540	X070812
cis-1,2-Dichloroethene	130		0.20	1.0	1.0	1	07/08/22 14:19	VOA6_412540	X070812
Methylene chloride	2	U	0.40	2.0	2.0	1	07/08/22 14:19	VOA6_412540	X070812
Vinyl chloride	94		0.20	1.0	1.0	1	07/08/22 14:19	VOA6_412540	X070812
Trichloroethene	1900		5.0	25	25	25	07/08/22 16:05	VOA6_412540	X070817

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-05
16RW09-220705-FD

Collected	Received	Matrix	Units
07/05/22 09:00	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/08/22 14:40	VOA6_412540	X070813
1,1-Dichloroethene	12		0.20	1.0	1.0	1	07/08/22 14:40	VOA6_412540	X070813
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/08/22 14:40	VOA6_412540	X070813
cis-1,2-Dichloroethene	130		0.20	1.0	1.0	1	07/08/22 14:40	VOA6_412540	X070813
Methylene chloride	2	U	0.40	2.0	2.0	1	07/08/22 14:40	VOA6_412540	X070813
Vinyl chloride	99		0.20	1.0	1.0	1	07/08/22 14:40	VOA6_412540	X070813
Trichloroethene	1900		5.0	25	25	25	07/08/22 16:26	VOA6_412540	X070818

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-06
16EW01-220705

Collected	Received	Matrix	Units
07/05/22 09:50	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	10	U	3.0	10	10	10	07/08/22 16:47	VOA6_412540	X070819
1,1-Dichloroethene	27		2.0	10	10	10	07/08/22 16:47	VOA6_412540	X070819
1,2-Dichloroethane	14		2.0	10	10	10	07/08/22 16:47	VOA6_412540	X070819
Methylene chloride	10	J	4.0	20	20	10	07/08/22 16:47	VOA6_412540	X070819
Vinyl chloride	730		2.0	10	10	10	07/08/22 16:47	VOA6_412540	X070819
cis-1,2-Dichloroethene	7600		20	100	100	100	07/11/22 13:32	VOA6_412669	X071110
Trichloroethene	2900		20	100	100	100	07/11/22 13:32	VOA6_412669	X071110

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-07
16WW40-220705

Collected	Received	Matrix	Units
07/05/22 10:35	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/08/22 13:58	VOA6_412540	X070811
1,1-Dichloroethene	3.2		0.20	1.0	1.0	1	07/08/22 13:58	VOA6_412540	X070811
1,2-Dichloroethane	3.7		0.20	1.0	1.0	1	07/08/22 13:58	VOA6_412540	X070811
cis-1,2-Dichloroethene	180		0.20	1.0	1.0	1	07/08/22 13:58	VOA6_412540	X070811
Methylene chloride	2	U	0.40	2.0	2.0	1	07/08/22 13:58	VOA6_412540	X070811
Vinyl chloride	10		0.20	1.0	1.0	1	07/08/22 13:58	VOA6_412540	X070811
Trichloroethene	990		2.0	10	10	10	07/08/22 15:01	VOA6_412540	X070814

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-08
16WW12-220705

Collected	Received	Matrix	Units
07/05/22 11:30	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	07/08/22 18:11	VOA6_412540	X070823
1,1-Dichloroethene	4.4	J	1.0	5.0	5.0	5	07/08/22 18:11	VOA6_412540	X070823
1,2-Dichloroethane	6.5		1.0	5.0	5.0	5	07/08/22 18:11	VOA6_412540	X070823
cis-1,2-Dichloroethene	100		1.0	5.0	5.0	5	07/08/22 18:11	VOA6_412540	X070823
Methylene chloride	10	U	2.0	10	10	5	07/08/22 18:11	VOA6_412540	X070823
Vinyl chloride	9.9		1.0	5.0	5.0	5	07/08/22 18:11	VOA6_412540	X070823
Trichloroethene	2100		5.0	25	25	25	07/08/22 18:32	VOA6_412540	X070824

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-09
16WW13-220705

Collected	Received	Matrix	Units
07/05/22 12:15	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	07/08/22 18:53	VOA6_412540	X070825
1,1-Dichloroethene	3.1	J	1.0	5.0	5.0	5	07/08/22 18:53	VOA6_412540	X070825
1,2-Dichloroethane	2.5	U	1.0	5.0	5.0	5	07/08/22 18:53	VOA6_412540	X070825
cis-1,2-Dichloroethene	820		1.0	5.0	5.0	5	07/08/22 18:53	VOA6_412540	X070825
Methylene chloride	5.1	J	2.0	10	10	5	07/08/22 18:53	VOA6_412540	X070825
Vinyl chloride	16		1.0	5.0	5.0	5	07/08/22 18:53	VOA6_412540	X070825
Trichloroethene	2500		5.0	25	25	25	07/08/22 19:14	VOA6_412540	X070826

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-10
16WW42-220705

Collected	Received	Matrix	Units
07/05/22 12:55	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	07/08/22 19:35	VOA6_412540	X070827
1,1-Dichloroethene	2.5	U	1.0	5.0	5.0	5	07/08/22 19:35	VOA6_412540	X070827
1,2-Dichloroethane	2.5	U	1.0	5.0	5.0	5	07/08/22 19:35	VOA6_412540	X070827
Methylene chloride	5.3	J	2.0	10	10	5	07/08/22 19:35	VOA6_412540	X070827
Trichloroethene	850		1.0	5.0	5.0	5	07/08/22 19:35	VOA6_412540	X070827
Vinyl chloride	4.6	J	1.0	5.0	5.0	5	07/08/22 19:35	VOA6_412540	X070827
cis-1,2-Dichloroethene	1400		5.0	25	25	25	07/08/22 19:56	VOA6_412540	X070828

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-11
16RW04-220705

Collected	Received	Matrix	Units
07/05/22 13:50	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	5	U	1.5	5.0	5.0	5	07/08/22 20:17	VOA6_412540	X070829
1,1-Dichloroethene	2.6	J	1.0	5.0	5.0	5	07/08/22 20:17	VOA6_412540	X070829
1,2-Dichloroethane	2.5	U	1.0	5.0	5.0	5	07/08/22 20:17	VOA6_412540	X070829
cis-1,2-Dichloroethene	130		1.0	5.0	5.0	5	07/08/22 20:17	VOA6_412540	X070829
Methylene chloride	5.1	J	2.0	10	10	5	07/08/22 20:17	VOA6_412540	X070829
Vinyl chloride	4.3	J	1.0	5.0	5.0	5	07/08/22 20:17	VOA6_412540	X070829
Trichloroethene	2500		5.0	25	25	25	07/11/22 13:53	VOA6_412669	X071111

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

HS22070326-12
Trip Blank-220705

Collected	Received	Matrix	Units
07/05/22 00:00	07/07/22 09:40	Water	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/08/22 12:55	VOA6_412540	X070808
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 12:55	VOA6_412540	X070808
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/08/22 12:55	VOA6_412540	X070808
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 12:55	VOA6_412540	X070808
Methylene chloride	2	U	0.40	2.0	2.0	1	07/08/22 12:55	VOA6_412540	X070808
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 12:55	VOA6_412540	X070808
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/08/22 12:55	VOA6_412540	X070808

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

VBLKW-220708
VBLKW-220708

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
1,1,2-Trichloroethane	1	U	0.30	1.0	1.0	1	07/08/22 12:34	VOA6_412540	X070807
1,1-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 12:34	VOA6_412540	X070807
1,2-Dichloroethane	0.5	U	0.20	1.0	1.0	1	07/08/22 12:34	VOA6_412540	X070807
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 12:34	VOA6_412540	X070807
Methylene chloride	2	U	0.40	2.0	2.0	1	07/08/22 12:34	VOA6_412540	X070807
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/08/22 12:34	VOA6_412540	X070807
Vinyl chloride	0.5	U	0.20	1.0	1.0	1	07/08/22 12:34	VOA6_412540	X070807

Form 1 - Organic Analysis Data Sheet

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

VBLKW-220711
VBLKW-220711

Collected	Received	Matrix	Units
NA	NA	Aqueous	ug/L

Analyte	Result	Q	DL	LOD	LOQ	DF	Analysis Date	Run ID	Data File
cis-1,2-Dichloroethene	0.5	U	0.20	1.0	1.0	1	07/11/22 12:29	VOA6_412669	X071107
Trichloroethene	0.5	U	0.20	1.0	1.0	1	07/11/22 12:29	VOA6_412669	X071107

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Form 2

System Monitoring Compound Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

VLCSW-220708 (6737490)	Analyzed 07/08/22 11:52		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	52.94	50.00	106	80 - 119	
Toluene-d8	55.07	50.00	110	89 - 112	
4-Bromofluorobenzene	51.56	50.00	103	85 - 114	
1,2-Dichloroethane-d4	57.28	50.00	115	81 - 118	

VBLKW-220708 (6737491)	Analyzed 07/08/22 12:34		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	43.78	50.00	88	81 - 118	
Dibromofluoromethane	45.82	50.00	92	80 - 119	
Toluene-d8	52.73	50.00	105	89 - 112	
4-Bromofluorobenzene	56.19	50.00	112	85 - 114	

HS22070326-12 (6737492)	Analyzed 07/08/22 12:55		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Toluene-d8	**65.14**	**50.00**	**130**	**89 - 112**	*
1,2-Dichloroethane-d4	50.03	50.00	100	81 - 118	
Dibromofluoromethane	49.06	50.00	98	80 - 119	
4-Bromofluorobenzene	50.82	50.00	102	85 - 114	

HS22070326-01 (6737493)	Analyzed 07/08/22 13:16		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	44.03	50.00	88	81 - 118	
Dibromofluoromethane	45.41	50.00	91	80 - 119	
Toluene-d8	55.17	50.00	110	89 - 112	
4-Bromofluorobenzene	52.01	50.00	104	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

HS22070326-02 (6737494)	Analyzed 07/08/22 13:37		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	52.69	50.00	105	81 - 118	
Dibromofluoromethane	50.21	50.00	100	80 - 119	
Toluene-d8	54.26	50.00	109	89 - 112	
4-Bromofluorobenzene	50.40	50.00	101	85 - 114	

HS22070326-07 (6737495)	Analyzed 07/08/22 13:58		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	51.47	50.00	103	81 - 118	
Dibromofluoromethane	49.23	50.00	99	80 - 119	
Toluene-d8	53.20	50.00	106	89 - 112	
4-Bromofluorobenzene	50.56	50.00	101	85 - 114	

HS22070326-04 (6737496)	Analyzed 07/08/22 14:19		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	49.43	50.00	99	81 - 118	
Dibromofluoromethane	46.80	50.00	94	80 - 119	
Toluene-d8	54.86	50.00	110	89 - 112	
4-Bromofluorobenzene	50.96	50.00	102	85 - 114	

HS22070326-05 (6737497)	Analyzed 07/08/22 14:40		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Toluene-d8	**63.60**	**50.00**	**127**	**89 - 112**	*
1,2-Dichloroethane-d4	44.78	50.00	90	81 - 118	
Dibromofluoromethane	45.46	50.00	91	80 - 119	
4-Bromofluorobenzene	49.70	50.00	99	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

HS22070326-07 (6737498)	Analyzed 07/08/22 15:01	Conc Units µg/L	DF 10		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	502.5	500.0	100	81 - 118	
Dibromofluoromethane	483.6	500.0	97	80 - 119	
Toluene-d8	546.5	500.0	109	89 - 112	
4-Bromofluorobenzene	507.4	500.0	101	85 - 114	

HS22070326-07MS (6737499)	Analyzed 07/08/22 15:23	Conc Units µg/L	DF 10		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	453.3	500.0	91	81 - 118	
Dibromofluoromethane	455.2	500.0	91	80 - 119	
Toluene-d8	545.9	500.0	109	89 - 112	
4-Bromofluorobenzene	515.7	500.0	103	85 - 114	

HS22070326-07MSD (6737500)	Analyzed 07/08/22 15:44	Conc Units µg/L	DF 10		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Toluene-d8	**653.6**	**500.0**	**131**	**89 - 112**	*
1,2-Dichloroethane-d4	454.9	500.0	91	81 - 118	
Dibromofluoromethane	451.1	500.0	90	80 - 119	
4-Bromofluorobenzene	519.3	500.0	104	85 - 114	

HS22070326-04 (6737501)	Analyzed 07/08/22 16:05	Conc Units µg/L	DF 25		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1252	1250	100	81 - 118	
Dibromofluoromethane	1194	1250	96	80 - 119	
Toluene-d8	1369	1250	110	89 - 112	
4-Bromofluorobenzene	1267	1250	101	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

HS22070326-05 (6737502)	Analyzed 07/08/22 16:26		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Bromofluorobenzene	**1570**	**1250**	**126**	**85 - 114**	*
Dibromofluoromethane	1150	1250	92	80 - 119	
Toluene-d8	1378	1250	110	89 - 112	
1,2-Dichloroethane-d4	1105	1250	88	81 - 118	

HS22070326-06 (6737503)	Analyzed 07/08/22 16:47		Conc Units µg/L		DF 10
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	**388.7**	**500.0**	**78**	**81 - 118**	*
Dibromofluoromethane	479.0	500.0	96	80 - 119	
Toluene-d8	541.4	500.0	108	89 - 112	
4-Bromofluorobenzene	506.3	500.0	101	85 - 114	

HS22070326-03 (6737504)	Analyzed 07/08/22 17:29		Conc Units µg/L		DF 5
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	248.0	250.0	99	81 - 118	
Dibromofluoromethane	237.2	250.0	95	80 - 119	
Toluene-d8	270.7	250.0	108	89 - 112	
4-Bromofluorobenzene	255.4	250.0	102	85 - 114	

HS22070326-03 (6737505)	Analyzed 07/08/22 17:50		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
4-Bromofluorobenzene	**1462**	**1250**	**117**	**85 - 114**	*
Dibromofluoromethane	1127	1250	90	80 - 119	
Toluene-d8	1370	1250	110	89 - 112	
1,2-Dichloroethane-d4	1275	1250	102	81 - 118	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

HS22070326-08 (6737506)	Analyzed 07/08/22 18:11	Conc Units µg/L	DF 5		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	240.3	250.0	96	81 - 118	
Dibromofluoromethane	237.6	250.0	95	80 - 119	
Toluene-d8	273.9	250.0	110	89 - 112	
4-Bromofluorobenzene	253.4	250.0	101	85 - 114	

HS22070326-08 (6737507)	Analyzed 07/08/22 18:32	Conc Units µg/L	DF 25		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1295	1250	104	81 - 118	
Dibromofluoromethane	1169	1250	94	80 - 119	
Toluene-d8	1218	1250	97	89 - 112	
4-Bromofluorobenzene	1123	1250	90	85 - 114	

HS22070326-09 (6737508)	Analyzed 07/08/22 18:53	Conc Units µg/L	DF 5		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	232.1	250.0	93	81 - 118	
Dibromofluoromethane	225.8	250.0	90	80 - 119	
Toluene-d8	236.4	250.0	95	89 - 112	
4-Bromofluorobenzene	252.4	250.0	101	85 - 114	

HS22070326-09 (6737509)	Analyzed 07/08/22 19:14	Conc Units µg/L	DF 25		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1205	1250	96	81 - 118	
Dibromofluoromethane	1195	1250	96	80 - 119	
Toluene-d8	1360	1250	109	89 - 112	
4-Bromofluorobenzene	1252	1250	100	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

HS22070326-10 (6737510)	Analyzed 07/08/22 19:35	Conc Units µg/L	DF 5		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	246.9	250.0	99	81 - 118	
Dibromofluoromethane	238.4	250.0	95	80 - 119	
Toluene-d8	276.9	250.0	111	89 - 112	
4-Bromofluorobenzene	253.6	250.0	101	85 - 114	

HS22070326-10 (6737511)	Analyzed 07/08/22 19:56	Conc Units µg/L	DF 25		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1208	1250	97	81 - 118	
Dibromofluoromethane	1187	1250	95	80 - 119	
Toluene-d8	1141	1250	91	89 - 112	
4-Bromofluorobenzene	1229	1250	98	85 - 114	

HS22070326-11 (6737512)	Analyzed 07/08/22 20:17	Conc Units µg/L	DF 5		
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	241.7	250.0	97	81 - 118	
Dibromofluoromethane	237.2	250.0	95	80 - 119	
Toluene-d8	275.2	250.0	110	89 - 112	
4-Bromofluorobenzene	259.1	250.0	104	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412669

Volatiles Organics by Method 8260C

VLCSW-220711 (6740197)	Analyzed 07/11/22 11:47		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
Dibromofluoromethane	54.21	50.00	108	80 - 119	
Toluene-d8	52.75	50.00	105	89 - 112	
4-Bromofluorobenzene	53.84	50.00	108	85 - 114	
1,2-Dichloroethane-d4	55.15	50.00	110	81 - 118	

VBLKW-220711 (6740198)	Analyzed 07/11/22 12:29		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	48.35	50.00	97	81 - 118	
Dibromofluoromethane	47.57	50.00	95	80 - 119	
Toluene-d8	55.32	50.00	111	89 - 112	
4-Bromofluorobenzene	51.01	50.00	102	85 - 114	

HS22070326-06 (6740201)	Analyzed 07/11/22 13:32		Conc Units µg/L		DF 100
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	4971	5000	99	81 - 118	
Dibromofluoromethane	4810	5000	96	80 - 119	
Toluene-d8	5464	5000	109	89 - 112	
4-Bromofluorobenzene	5146	5000	103	85 - 114	

HS22070326-11 (6740202)	Analyzed 07/11/22 13:53		Conc Units µg/L		DF 25
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	1262	1250	101	81 - 118	
Dibromofluoromethane	1229	1250	98	80 - 119	
Toluene-d8	1360	1250	109	89 - 112	
4-Bromofluorobenzene	1268	1250	101	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

Form 2 - System Monitoring Compound Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412669

Volatiles Organics by Method 8260C

ZZZZZZMS (6740203)	Analyzed 07/11/22 14:14		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	50.22	50.00	100	81 - 118	
Dibromofluoromethane	48.95	50.00	98	80 - 119	
Toluene-d8	55.07	50.00	110	89 - 112	
4-Bromofluorobenzene	51.21	50.00	102	85 - 114	

ZZZZZZMSD (6740204)	Analyzed 07/11/22 14:35		Conc Units µg/L		DF 1
Surrogate	Result Conc	Spike Conc	%Recovery	%Recovery Limits	#
1,2-Dichloroethane-d4	50.01	50.00	100	81 - 118	
Dibromofluoromethane	49.21	50.00	98	80 - 119	
Toluene-d8	54.21	50.00	108	89 - 112	
4-Bromofluorobenzene	53.78	50.00	108	85 - 114	

- Surrogate %Recovery Flag * - %Recovery / RPD Outside Limits

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Form 3A

Matrix Spike/Spike Duplicate Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

16WW40-220705			HS22070326-07	HS22070326-07MS				HS22070326-07MSD						
Sample Matrix	Aqueous		Run Date	07/08/22				07/08/22						
Units	µg/L		Run Time	15:01				15:23						
			Data File	X070814.D				X070815.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	#	MSD Result	Spike Added	%R	#	RPD Limit	RPD	#
1,1,2-Trichloroethane	80-119	10	0	192.2	200.0	96		199	200.0	100		20	4	
1,1-Dichloroethene	71-131	10	0	210.2	200.0	105		197.3	200.0	99		20	6	
1,2-Dichloroethane	73-128	10	0	188.9	200.0	95		178.8	200.0	89		20	6	
cis-1,2-Dichloroethene	78-123	10	173.0	340.3	200.0	84		325.3	200.0	76	*	20	4	
Methylene chloride	74-124	10	0	201.4	200.0	101		187.3	200.0	94		20	7	
Trichloroethene	79-123	10	993.3	1152	200.0	79		1079	200.0	43	*	20	7	
Vinyl chloride	58-137	10	10.73	200.1	200.0	95		205.6	200.0	97		20	3	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

Form 3A - Matrix Spike/Spike Duplicate Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412669

Volatiles Organics by Method 8260C

		HS22070388-08		HS22070388-08MS				HS22070388-08MSD						
Sample Matrix Aqueous **Units** µg/L		**Run Date** 07/11/22 **Run Time** 12:50 **Data File** X071108.D		07/11/22 14:14 X071112.D				07/11/22 14:35 X071113.D						
Analyte	%R Limits	DF	Result	MS Result	Spike Added	%R	#	MSD Result	Spike Added	%R	#	RPD Limit	RPD	#
cis-1,2-Dichloroethene	78-123	1	0	18.09	20.00	91		17.49	20.00	87		20	3	
Trichloroethene	79-123	1	0	20.08	20.00	100		19.25	20.00	96		20	4	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits OL - Outside Limits

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Form 3B

Laboratory Control Sample Recovery

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastructure, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

Batch QC			LCS		
QC Matrix: Aqueous	Units: ug/L	Run Date / Run Time	07/08/22 11:52		
Analyte	%R Limits	Spike Added	LCS Result	%R	#
1,1,2-Trichloroethane	80-119	20	20.54	103	
1,1-Dichloroethene	71-131	20	18.08	90	
1,2-Dichloroethane	73-128	20	20.76	104	
1,2-Dichloroethane-d4	81-118	50	57.28	115	
4-Bromofluorobenzene	85-114	50	51.56	103	
cis-1,2-Dichloroethene	78-123	20	20.13	101	
Dibromofluoromethane	80-119	50	52.94	106	
Methylene chloride	74-124	20	20.22	101	
Toluene-d8	89-112	50	55.07	110	
Trichloroethene	79-123	20	20.74	104	
Vinyl chloride	58-137	20	18.23	91	

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

Form 3B - Laboratory Control Sample Recovery

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412669

Volatiles Organics by Method 8260C

Batch QC			LCS			
QC Matrix: Aqueous	Units: %REC	Run Date / Run Time	07/11/22 11:47			
Analyte	%R Limits	Spike Added	LCS Result	%R	#	
1,2-Dichloroethane-d4	81-118	50	55.15	110		
4-Bromofluorobenzene	85-114	50	53.84	108		
cis-1,2-Dichloroethene	78-123	20	20.4	102		
Dibromofluoromethane	80-119	50	54.21	108		
Toluene-d8	89-112	50	52.75	105		
Trichloroethene	79-123	20	20.76	104		

- %Recovery / RPD Flag * - %Recovery / RPD Outside Limits

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Form 4

Method Blank Summary

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

BatchID
R412540

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220708	X070807.D	07/08/22 12:34	VOA6_412540
VLCSW-220708	VLCSW-220708	X070805.D	07/08/22 11:52	VOA6_412540
Trip Blank-220705	HS22070326-12	X070808.D	07/08/22 12:55	VOA6_412540
16WW44-220705	HS22070326-01	X070809.D	07/08/22 13:16	VOA6_412540
16WW44-220705-FD	HS22070326-02	X070810.D	07/08/22 13:37	VOA6_412540
16WW40-220705	HS22070326-07	X070811.D	07/08/22 13:58	VOA6_412540
16RW09-220705	HS22070326-04	X070812.D	07/08/22 14:19	VOA6_412540
16RW09-220705-FD	HS22070326-05	X070813.D	07/08/22 14:40	VOA6_412540
16WW40-220705	HS22070326-07	X070814.D	07/08/22 15:01	VOA6_412540
HS22070326-07MS	HS22070326-07MS	X070815.D	07/08/22 15:23	VOA6_412540
HS22070326-07MSD	HS22070326-07MSD	X070816.D	07/08/22 15:44	VOA6_412540
16RW09-220705	HS22070326-04	X070817.D	07/08/22 16:05	VOA6_412540
16RW09-220705-FD	HS22070326-05	X070818.D	07/08/22 16:26	VOA6_412540
16EW01-220705	HS22070326-06	X070819.D	07/08/22 16:47	VOA6_412540
16RW10-220705	HS22070326-03	X070821.D	07/08/22 17:29	VOA6_412540
16RW10-220705	HS22070326-03	X070822.D	07/08/22 17:50	VOA6_412540
16WW12-220705	HS22070326-08	X070823.D	07/08/22 18:11	VOA6_412540
16WW12-220705	HS22070326-08	X070824.D	07/08/22 18:32	VOA6_412540
16WW13-220705	HS22070326-09	X070825.D	07/08/22 18:53	VOA6_412540
16WW13-220705	HS22070326-09	X070826.D	07/08/22 19:14	VOA6_412540
16WW42-220705	HS22070326-10	X070827.D	07/08/22 19:35	VOA6_412540
16WW42-220705	HS22070326-10	X070828.D	07/08/22 19:56	VOA6_412540
16RW04-220705	HS22070326-11	X070829.D	07/08/22 20:17	VOA6_412540

Form 4 - Method Blank Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

BatchID
R412669

Client Sample ID	Lab Sample ID	File ID	Date Analyzed	Run ID
METHOD BLANK	VBLKW-220711	X071107.D	07/11/22 12:29	VOA6_412669
VLCSW-220711	VLCSW-220711	X071105.D	07/11/22 11:47	VOA6_412669
ZZZZZZ	HS22070388-08	X071108.D	07/11/22 12:50	VOA6_412669
ZZZZZZ	HS22070329-01	X071109.D	07/11/22 13:11	VOA6_412669
16EW01-220705	HS22070326-06	X071110.D	07/11/22 13:32	VOA6_412669
16RW04-220705	HS22070326-11	X071111.D	07/11/22 13:53	VOA6_412669
ZZZZZZMS	HS22070388-08MS	X071112.D	07/11/22 14:14	VOA6_412669
ZZZZZZMSD	HS22070388-08MSD	X071113.D	07/11/22 14:35	VOA6_412669

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Form 5

Instrument Performance Check

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412359

Volatiles Organics by Method 8260C

Tune File X070601.D 07/06/22 10:59

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	19.2 (19.2)
75	30.0 - 60.0% of mass 95	47.6 (47.6)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.3 (6.27)
173	Less than 2.0% of mass 174	0.7 (0.782) 1
174	50.0 - 120.0% of mass 95	89.3 (89.3)
175	4.0 - 9.0% of mass 174	6 (6.77) 1
176	93.0 - 101.0% of mass 174	86.9 (97.3) 1
177	5.0 - 9.0% of mass 176	7 (8.05) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	ICAL1	07/06/22 11:20	X070602	VSTD000.25
2	ICAL2	07/06/22 12:02	X070603	VSTD000.5
3	ICAL3	07/06/22 12:23	X070604	VSTD001
4	ICAL4	07/06/22 12:44	X070605	VSTD002
5	ICAL5	07/06/22 13:05	X070606	VSTD005
6	ICAL6	07/06/22 13:26	X070607	VSTD020
7	ICAL7	07/06/22 13:47	X070608	VSTD050
8	ICAL8	07/06/22 14:08	X070609	VSTD100
9	ICAL9	07/06/22 14:28	X070610	VSTD150
10	ICAL	07/06/22 14:49	X070611	VSTD200
11	ICV	07/06/22 15:52	X070614	CCV

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

Tune File X070801.D 07/08/22 10:28

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16.1 (16.1)
75	30.0 - 60.0% of mass 95	45.2 (45.2)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.5 (6.55)
173	Less than 2.0% of mass 174	0.8 (0.836) 1
174	50.0 - 120.0% of mass 95	89.8 (89.8)
175	4.0 - 9.0% of mass 174	6.5 (7.28) 1
176	93.0 - 101.0% of mass 174	88.2 (98.2) 1
177	5.0 - 9.0% of mass 176	6.2 (6.99) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	07/08/22 11:10	X070803	CCV
2	CCB	07/08/22 11:31	X070804	CCB
3	LCS	07/08/22 11:52	X070805	VLCSW-220708
4	MBLK	07/08/22 12:34	X070807	VBLKW-220708
5	SAMP	07/08/22 12:55	X070808	Trip Blank-220705
6	SAMP	07/08/22 13:16	X070809	16WW44-220705
7	SAMP	07/08/22 13:37	X070810	16WW44-220705-FD
8	SAMP	07/08/22 13:58	X070811	16WW40-220705
9	SAMP	07/08/22 14:19	X070812	16RW09-220705
10	SAMP	07/08/22 14:40	X070813	16RW09-220705-FD
11	SAMP	07/08/22 15:01	X070814	16WW40-220705
12	MS	07/08/22 15:23	X070815	HS22070326-07MS
13	MSD	07/08/22 15:44	X070816	HS22070326-07MSD
14	SAMP	07/08/22 16:05	X070817	16RW09-220705
15	SAMP	07/08/22 16:26	X070818	16RW09-220705-FD
16	SAMP	07/08/22 16:47	X070819	16EW01-220705
17	SAMP	07/08/22 17:29	X070821	16RW10-220705
18	SAMP	07/08/22 17:50	X070822	16RW10-220705
19	SAMP	07/08/22 18:11	X070823	16WW12-220705
20	SAMP	07/08/22 18:32	X070824	16WW12-220705
21	SAMP	07/08/22 18:53	X070825	16WW13-220705
22	SAMP	07/08/22 19:14	X070826	16WW13-220705
23	SAMP	07/08/22 19:35	X070827	16WW42-220705
24	SAMP	07/08/22 19:56	X070828	16WW42-220705
25	SAMP	07/08/22 20:17	X070829	16RW04-220705
26	CCV_EN	07/08/22 20:38	X070830	CCV-END

Form 5 - Instrument Performance Check

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412669

Volatiles Organics by Method 8260C

Tune File X071101.D 07/11/22 10:23

m / e	Ion Abundance Criterion	%RA
50	15.0 - 40.0% of mass 95	16.3 (16.3)
75	30.0 - 60.0% of mass 95	47 (47)
95	Base peak, 100% RA	100 (100)
96	5.0 - 9.0% of mass 95	6.7 (6.66)
173	Less than 2.0% of mass 174	0.6 (0.703) 1
174	50.0 - 120.0% of mass 95	86.4 (86.4)
175	4.0 - 9.0% of mass 174	6.2 (7.22) 1
176	93.0 - 101.0% of mass 174	86.6 (100) 1
177	5.0 - 9.0% of mass 176	5.8 (6.7) 2

Value is % of mass 1) 174 2) 176 RA - Relative Abundance

This check applies to the following analyses

	Type	Date Analyzed	Lab File ID	Sample ID
1	CCV	07/11/22 10:44	X071102	CCV
2	CCB	07/11/22 11:26	X071104	CCB
3	LCS	07/11/22 11:47	X071105	VLCSW-220711
4	MBLK	07/11/22 12:29	X071107	VBLKW-220711
5	SAMP	07/11/22 13:32	X071110	16EW01-220705
6	SAMP	07/11/22 13:53	X071111	16RW04-220705
7	MS	07/11/22 14:14	X071112	ZZZZZZMS
8	MSD	07/11/22 14:35	X071113	ZZZZZZMSD
9	CCV_EN	07/11/22 14:56	X071114	CCV-END

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Form 6

Initial Calibration Data

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120
ICAL End Date 06-JUL-2022 1449

Calibration Files

Level 1 ..Voa6.i\X220706.b\X070602.D
Level 2 ..Voa6.i\X220706.b\X070603.D
Level 3 ..Voa6.i\X220706.b\X070604.D
Level 4 ..Voa6.i\X220706.b\X070605.D
Level 5 ..Voa6.i\X220706.b\X070606.D
Level 6 ..Voa6.i\X220706.b\X070607.D
Level 7 ..Voa6.i\X220706.b\X070608.D
Level 8 ..Voa6.i\X220706.b\X070609.D
Level 9 ..Voa6.i\X220706.b\X070610.D
Level 10 ..Voa6.i\X220706.b\X070611.D

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Dichlorodifluoromethane	NE 228618	2244 472287	3986 730536	8882 NE	18774	92044	LINR	0.02678	0.52058		0.99751	
Chloromethane	NE 294786	3473 593952	6557 933811	13168 NE	29886	112794	LINR	0.02315	0.66134		0.99763	
Propionitrile	NE 0.05770	0.06489 0.06278	0.05598 0.05859	0.04621 0.05823	0.05594	0.06198	AVRG		0.05803		9.32069	
Vinyl Chloride	NE 0.57196	0.70191 0.66494	0.67775 0.69281	0.60470 0.60241	0.58529	0.65392	AVRG		0.63952		7.64867	
Bromomethane	NE 176516	2387 344344	3753 NE	11634 NE	19488	75223	LINR	-0.00734	0.36869		0.99608	
Chloroethane	NE 0.34789	0.45911 0.38597	0.40065 0.40462	0.37357 0.35342	0.40334	0.40593	AVRG		0.39272		8.47705	
Trichlorofluoromethane	NE 0.67093	0.82389 0.77105	0.69347 0.93760	0.78330 0.79565	0.74470	0.85058	AVRG		0.78569		10.30295	
Acrolein	NE 19387	255 34243	357 53183	1255 NE	2163	7750	LINR	-0.03329	0.01875		0.99941	
Acetone	NE 0.11922	0.14672 0.12870	0.13728 0.13116	0.12933 0.11774	0.14765	0.14137	AVRG		0.13324		8.17429	
1,1-Dichloroethene	NE 0.41281	0.55905 0.47435	0.48136 0.52133	0.46051 0.45169	0.46054	0.48332	AVRG		0.47833		8.76191	

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Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Isobutyl Alcohol	NE 0.05972	0.05853 0.06396	0.05565 0.05904	0.06459 0.05263	0.05996	0.06123	AVRG		0.05948		6.29876	
Acetonitrile	NE 0.05236	0.05823 0.05673	0.05046 0.06335	0.06147 0.05461	0.05651	0.05891	AVRG		0.05696		7.23354	
Allyl Chloride	NE 1.12540	1.18248 1.26397	1.18379 1.28361	1.06667 1.12357	1.19299	1.27683	AVRG		1.18881		6.35509	
Iodomethane	NE 662033	4551 1331022	8470 2317759	17091 NE	46631	226571	QUAD	0.01853	1.63495	-0.08684	0.99983	
Acrylonitrile	NE 0.16390	0.16016 0.17760	0.15012 0.18748	0.16394 0.16646	0.14359	0.16757	AVRG		0.16454		7.97212	
Methylene Chloride	NE 278913	3611 510517	6773 843638	19043 NE	28961	104226	LINR	0.01251	0.58854		0.99715	
Methyl tert-butyl ether	NE 1.28444	1.51807 1.34533	1.34886 1.47525	1.40025 1.30321	1.31864	1.34442	AVRG		1.37094		5.76884	
Carbon Disulfide	NE 1.30403	1.50018 1.48870	1.48724 1.57227	1.35754 1.35759	1.41146	1.47062	AVRG		1.43885		5.99587	
trans-1,2-Dichloroethene	NE 0.48821	0.55751 0.52160	0.47815 0.57257	0.49281 0.49651	0.46859	0.49485	AVRG		0.50787		7.02264	
Vinyl Acetate	NE 1.27195	1.20065 1.37516	1.20040 1.46961	1.18381 1.30183	1.25923	1.34556	AVRG		1.28980		7.31928	
1,1-Dichloroethane	NE 0.87630	1.04484 0.94846	0.92994 1.01939	0.91579 0.88962	0.86940	0.90988	AVRG		0.93374		6.57881	
Chloroprene	NE 0.20536	0.25440 0.24395	0.22795 0.25442	NE 0.22948	0.23231	0.22968	AVRG		0.23469		6.88366	*

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2-Butanone	NE	0.13754	0.14536	0.14185	0.12762	0.14926						
	0.15636	0.17587	0.16130	0.16471			AVRG		0.15110		9.89300	
Methacrylonitrile	NE	0.44287	0.36611	0.34136	0.34918	0.38115						
	0.36505	0.38625	0.36505	0.36928			AVRG		0.37403		7.83511	
2,2-Dichloropropane	NE	3935	6446	16259	32701	128059						
	373902	695305	1055611	1584194			LINR	0.00723	0.75133		0.99982	
cis-1,2-Dichloroethene	NE	0.63077	0.56859	0.57565	0.57206	0.58048						
	0.55488	0.58845	0.57150	0.56603			AVRG		0.57871		3.73871	
Chloroform	NE	1.03131	0.93537	0.94502	0.90220	0.90517						
	0.88569	0.93179	0.87682	0.89595			AVRG		0.92326		5.05904	
Bromochloromethane	NE	0.33675	0.32625	0.28304	0.30665	0.29851						
	0.29220	0.29841	0.28777	0.29573			AVRG		0.30281		5.87685	
1,1,1-Trichloroethane	NE	0.87686	0.73831	0.78712	0.68762	0.71793						
	0.72024	0.77822	0.73792	0.76734			AVRG		0.75684		7.27207	
1,1-Dichloropropene	NE	0.51761	0.42920	0.44713	0.43947	0.42234						
	0.43437	0.40862	0.45747	0.52928			AVRG		0.45395		9.23043	
1,2-Dichloroethane	NE	0.45426	0.40960	0.41677	0.39826	0.41275						
	0.41462	0.38626	0.41130	0.42528			AVRG		0.41434		4.51566	
Carbon Tetrachloride	NE	0.48575	0.45944	0.46312	0.40207	0.38561						
	0.39798	0.37809	0.42138	0.50377			AVRG		0.43302		10.63840	
Benzene	NE	1.41120	1.23145	1.26142	1.35361	1.33106						
	1.30676	1.21967	1.34745	1.40267			AVRG		1.31836		5.27209	
Trichloroethene	NE	0.39730	0.37807	0.37368	0.35687	0.36774						
	0.36579	0.37976	0.37485	0.37578			AVRG		0.37443		2.97845	

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Bromodichloromethane	NE	0.49277	0.50529	0.44456	0.43180	0.43314						
	0.44349	0.40839	0.44050	0.44514			AVRG		0.44945		6.77432	
Methyl Methacrylate	NE	0.40537	0.38781	0.37932	0.34216	0.36653						
	0.36904	0.41719	0.36397	0.31823			AVRG		0.37218		8.14060	
2-Chloroethylvinyl ether	NE	1262	2653	4759	10612	49783						
	155463	304667	461701	623026			LINR	0.11717	0.11052		0.99586	
1,2-Dichloropropane	NE	0.40295	0.37630	0.32988	0.35679	0.35264						
	0.34791	0.34622	0.35392	0.35296			AVRG		0.35773		5.81206	
2-Nitropropane	NE	0.17611	0.14281	0.13075	0.12064	0.11023						
	0.11824	0.12143	0.11333	0.10220			AVRG		0.12619		17.49861	*
Dibromomethane	NE	0.26219	0.25295	0.22382	0.21408	0.20879						
	0.21219	0.20988	0.20664	0.20879			AVRG		0.22215		9.37137	
4-Methyl-2-Pentanone	NE	0.28217	0.24988	0.26328	0.28186	0.29160						
	0.29347	0.31267	0.28643	0.29264			AVRG		0.28378		6.41473	
cis-1,3-Dichloropropene	NE	0.61233	0.61725	0.56220	0.55529	0.58065						
	0.58897	0.54578	0.59239	0.60076			AVRG		0.58396		4.30480	
Ethyl Methacrylate	NE	0.43281	0.37149	0.39269	0.38010	0.42610						
	0.40478	0.38018	0.42138	0.43224			AVRG		0.40464		6.01432	
Toluene	NE	1.64034	1.52244	1.56895	1.51332	1.54320						
	1.51365	1.63387	1.53111	1.52139			AVRG		1.55425		3.22020	
trans-1,3-Dichloropropene	NE	0.51749	0.48569	0.43703	0.44092	0.48270						
	0.48284	0.44191	0.48469	0.48859			AVRG		0.47354		5.78180	
2-Hexanone	NE	0.16495	0.16255	0.16326	0.17647	0.18250						
	0.19028	0.19643	0.18949	0.19121			AVRG		0.17968		7.41565	

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1,1,2-Trichloroethane	NE	0.29379	0.29020	0.27210	0.28696	0.28978						
	0.28174	0.28852	0.27613	0.27912			AVRG		0.28426		2.57584	
1,3-Dichloropropane	NE	0.64476	0.59666	0.57811	0.59005	0.58259						
	0.57798	0.59697	0.56514	0.57038			AVRG		0.58918		3.99341	
Dibromochloromethane	NE	0.39651	0.40546	0.37677	0.38505	0.38007						
	0.39001	0.39390	0.38728	0.39588			AVRG		0.39010		2.28706	
Tetrachloroethene	NE	0.36587	0.32830	0.35475	0.32458	0.32369						
	0.31727	0.34614	0.33586	0.33278			AVRG		0.33658		4.75168	
1,2-Dibromoethane	NE	0.33961	0.32298	0.35379	0.35083	0.34074						
	0.34681	0.34913	0.33959	0.34292			AVRG		0.34293		2.64628	
1-Chlorohexane	NE	0.31576	0.31351	0.29592	0.24973	0.27317						
	0.27315	0.27241	0.31523	0.31230			AVRG		0.29124		8.47163	
Chlorobenzene	NE	1.06589	1.01980	1.03527	1.02341	0.99871						
	0.99533	1.02411	0.99685	0.99758			AVRG		1.01744		2.30728	
1,1,1,2-Tetrachloroethane	NE	0.41539	0.36422	0.37071	0.35178	0.35947						
	0.36431	0.37124	0.36718	0.37302			AVRG		0.37081		4.84448	
Ethylbenzene	NE	0.56789	0.52141	0.53238	0.52072	0.50444						
	0.51053	0.54247	0.53021	0.53143			AVRG		0.52905		3.52558	
m,p-Xylenes	NE	0.64695	0.61885	0.67406	0.65903	0.64743						
	0.64203	0.67448	0.65712	0.65517			AVRG		0.65279		2.60707	
o-Xylene	NE	0.63614	0.61100	0.64034	0.62668	0.62039						
	0.61765	0.64101	0.62607	0.62521			AVRG		0.62717		1.64261	
Styrene	NE	1.04948	0.98990	0.98629	1.00918	1.05677						
	1.05358	1.09546	1.06360	1.06601			AVRG		1.04114		3.59353	

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Bromoform	NE	0.20694	0.21031	0.21435	0.21513	0.22091						
	0.23376	0.23842	0.23725	0.24335			AVRG		0.22449		6.12077	
Isopropylbenzene	NE	1.66264	1.47409	1.58570	1.51881	1.50831						
	1.50142	1.62393	1.58792	1.57808			AVRG		1.56010		4.02658	
1,1,2,2-Tetrachloroethane	NE	0.91864	0.86647	0.84137	0.83101	0.76347						
	0.77319	0.65427	0.76490	0.78390			AVRG		0.79969		9.47670	
1,2,3-Trichloropropane	NE	0.79579	0.69499	0.70443	0.66588	0.66691						
	0.61007	0.54217	0.62638	0.63262			AVRG		0.65991		10.71177	
trans-1,4-Dichloro-2-butene	NE	0.09533	0.08788	0.06679	0.07966	0.08623						
	0.09582	0.09878	0.09845	0.10031			AVRG		0.08992		12.31675	
n-Propylbenzene	NE	4.08468	3.59493	3.67782	3.61849	3.62881						
	3.62769	3.32262	3.86636	3.87837			AVRG		3.69997		5.87768	
Bromobenzene	NE	0.95684	0.89832	0.93069	0.90839	0.89768						
	0.89102	0.77851	0.90375	0.91825			AVRG		0.89816		5.48400	
1,3,5-Trimethylbenzene	NE	2.96923	2.71715	2.76431	2.59034	2.61229						
	2.59354	2.34923	2.70202	2.70665			AVRG		2.66719		6.23675	
2-Chlorotoluene	NE	2.52397	2.60604	2.50790	2.40238	2.27798						
	2.23076	1.97980	2.29806	2.31708			AVRG		2.34933		8.01606	
4-Chlorotoluene	NE	2.63948	2.78326	2.63588	2.62571	2.55318						
	2.54418	2.24256	2.59723	2.58817			AVRG		2.57885		5.59058	
tert-Butylbenzene	NE	2.55300	2.29297	2.30592	2.17037	2.16203						
	2.12758	1.95416	2.28544	2.28961			AVRG		2.23790		7.32334	
1,2,4-Trimethylbenzene	NE	2.85096	2.60303	2.65839	2.59496	2.56634						
	2.57871	2.29534	2.65574	2.67499			AVRG		2.60872		5.56946	

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sec-Butylbenzene	NE 2.94203	3.48906 3.21595	3.06207 3.20274	3.15737 3.20853	2.96867	2.94253	AVRG		3.13210		5.63946	
p-Isopropyltoluene	NE 2.56474	2.59548 2.80205	2.35214 2.77820	2.60344 2.79812	2.50961	2.53136	AVRG		2.61502		5.82143	
1,3-Dichlorobenzene	NE 1.45535	1.57752 1.51457	1.47466 1.51648	1.51358 1.54059	1.41588	1.45084	AVRG		1.49549		3.36596	
1,4-Dichlorobenzene	NE 1.47543	1.74560 1.53130	1.62017 1.51969	1.61194 1.53771	1.55675	1.49059	AVRG		1.56546		5.31687	
Benzyl Chloride	NE 0.46252	0.48897 0.60455	0.40396 0.52364	0.41979 0.55988	0.41984	0.42676	AVRG		0.47888		14.77196	
n-Butylbenzene	NE 2.17743	2.24648 2.47185	1.85913 2.38974	2.05070 2.41410	2.05377	2.13676	AVRG		2.19999		9.12320	
1,2-Dichlorobenzene	NE 1.30147	1.45436 1.36632	1.19509 1.34144	1.35612 1.35513	1.32191	1.29245	AVRG		1.33159		5.22300	
1,2-Dibromo-3-Chloropropane	NE 19733	220 46014	240 59633	747 82211	1639	6429	LINR	0.04576	0.06653		0.99805	*
1,2,4-Trichlorobenzene	NE 0.49382	0.50149 0.54518	0.42991 0.55210	0.46261 0.58201	0.42253	0.53767	AVRG		0.50304		11.15060	
Hexachlorobutadiene	NE 0.41067	0.41715 0.48271	0.38357 0.48056	0.45039 0.49539	0.39667	0.46324	AVRG		0.44226		9.31709	
Naphthalene	NE 195396	2154 445332	3671 593234	7630 821089	16357	68129	LINR	0.04645	0.66146		0.99746	
1,2,3-Trichlorobenzene	NE 94733	953 223441	1624 293740	3319 408985	7553	35281	LINR	0.04891	0.32935		0.99720	

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Ethyl Acetate	NE 0.42963	0.49197 0.45633	0.46840 0.41610	NE 0.42554	0.48963	0.44650	AVRG		0.45301		6.36097	*
Methyl Acrylate	NE 241889	NE 452925	NE 648238	6582 990328	14161	56584	LINR	0.04034	0.47545		0.99823	*
n-Butanol	NE 84111	922 181490	1186 255408	NE NE	4438	27545	LINR	0.80892	0.00944		0.99521	*
Ethyl Acrylate	NE 1.03892	NE 1.26891	NE 1.13515	0.52808 0.98180	0.35441	1.08187	AVRG		0.91273		37.02764	*
Cyclohexanone	NE 0.01770	0.03889 0.01459	0.02516 0.01708	0.01919 0.01720	0.01981	0.01849	AVRG		0.02090		35.07283	*
1,4-Dioxane	0.00436 0.00431	0.00451 0.00462	0.00550 0.00427	NE 0.00365	0.00479	0.00462	AVRG		0.00452		10.86985	*
n-Hexane	NE 0.48063	0.52638 0.60871	0.46851 0.65543	0.48442 0.56193	0.48311	0.50949	AVRG		0.53096		12.25408	
Freon TF	NE 205242	2637 437673	4021 759845	9995 NE	19880	82373	QUAD	-0.00726	2.55524	-0.43716	0.99889	
Methyl Acetate	NE 0.27711	0.31181 0.31330	0.31208 0.32391	0.26390 0.29114	0.26196	0.29675	AVRG		0.29466		7.72156	
Methylcyclohexane	NE 0.69028	0.71896 0.72387	0.59155 0.74864	0.68849 0.74618	0.65141	0.68367	AVRG		0.69367		7.15077	
Isopropyl alcohol	NE 0.02008	0.02224 0.02164	0.01991 0.02251	0.02034 0.01922	0.01988	0.02348	AVRG		0.02103		6.99120	
Amyl alcohol	NE 0.00628	NE 0.00704	NE 0.00671	0.00522 0.00672	0.00409	0.00580	AVRG		0.00598		17.37162	*

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Allyl alcohol	NE 0.02403	0.02632 0.03044	0.02343 0.03277	0.02422 0.02810	0.02416	0.02547	AVRG		0.02655		12.25408	
4-Methyl-2-pentanol	NE 0.04445	0.08503 0.04445	0.04945 0.04858	0.05265 0.04950	0.05370	0.05090	AVRG		0.05319		23.22821	*
Tert-butyl alcohol	NE 0.03514	0.04248 0.03732	0.03485 0.03980	0.03179 0.03454	0.03460	0.03537	AVRG		0.03621		8.84717	
Diethyl ether	NE 0.33801	0.42954 0.37244	0.37176 0.38274	0.37946 0.34211	0.40411	0.40564	AVRG		0.38064		7.78247	
1,3-Butadiene	NE 0.44569	0.56311 0.54282	0.48612 0.53855	0.44236 0.48396	0.45613	0.51704	AVRG		0.49731		9.04179	
Cyclohexane	NE 338562	3905 730603	5668 1071645	14214 NE	29249	129079	QUAD	0.01494	1.37109	-0.03808	0.99699	
alpha-Methylstyrene	NE 1.31747	1.26366 1.18816	1.27917 1.37782	1.23821 1.39629	1.24952	1.28864	AVRG		1.28877		5.15102	
Diisopropyl ether	NE 1.43671	1.53372 1.55869	1.40078 1.64730	1.49149 1.44601	1.47306	1.55489	AVRG		1.50474		5.07498	
Dichlorofluoromethane	NE 0.85060	NE 0.94003	NE 1.05898	1.00882 0.92349	0.97836	1.02313	AVRG		0.96906		7.25146	*
Propylene oxide	NE 0.04992	0.07500 0.05087	0.05851 0.05357	0.05396 0.04855	0.05553	0.06009	AVRG		0.05622		14.24058	
3-Methyl-1-butanol	NE 0.00581	NE 0.00654	NE 0.00625	0.00145 0.00624	0.00487	0.00558	AVRG		0.00525		33.58407	*
Butyl acrylate	NE 0.52147	NE 0.57263	0.39905 0.59198	0.48299 0.61912	0.48528	0.50938	AVRG		0.52274		13.53409	*

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Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
1,2,3-Trimethylbenzene	NE 2.32763	2.61779 2.38960	2.17266 2.36896	2.68306 2.38882	2.26360	2.36488	AVRG		2.39744		6.68433	
Ethanol	NE 0.00305	NE 0.00308	NE 0.00274	0.00403 0.00232	0.00343	0.00362	AVRG		0.00318		17.83184	*
tert-Butyl formate	NE 0.26357	NE 0.29562	NE 0.27752	0.26267 0.23838	NE	0.26910	AVRG		0.26781		7.04493	*
3,3-Dimethyl-1-butanol	NE 0.02275	NE 0.02324	NE 0.02281	NE 0.02290	0.02518	0.02530	AVRG		0.02370		5.09004	*
tert-Amyl methyl ether	NE 1.43699	2.09954 1.58784	1.84206 1.49104	1.76788 1.32713	1.77658	1.53779	AVRG		1.65187		14.51959	
tert-Butyl ethyl ether	NE 1.42724	1.56852 1.50317	1.53872 1.64661	1.55151 1.45446	1.46230	1.52505	AVRG		1.51973		4.43030	
tert-Amyl alcohol	NE 0.02636	0.03310 0.02956	0.02698 0.02775	0.03185 0.02384	0.02841	0.02691	AVRG		0.02831		10.06299	
Epichlorohydrin	NE 0.02250	NE 0.02024	0.01807 0.02286	0.02137 0.02288	0.02265	0.02324	AVRG		0.02173		8.17071	*
Isoprene	NE 0.15902	0.24454 0.17230	0.21632 0.19846	0.25701 0.17192	0.21352	0.18837	AVRG		0.20239		16.57739	*
n-Amyl acetate	NE 0.43772	NE 0.46697	NE 0.47751	NE 0.49928	NE	0.43849	AVRG		0.46399		5.67875	*
Isopropyl acetate	NE 0.79437	0.36983 0.73032	0.87712 0.77875	0.84689 0.80021	0.79606	0.79357	AVRG		0.75412		19.87108	*
n-Butyl acetate	NE 0.19069	0.31787 0.18402	0.26460 0.17444	0.20421 0.17218	0.23654	0.21349	AVRG		0.21756		22.15930	*

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

Initial Calibration Data

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412359

Volatiles Organics by Method 8260C

ICAL Start Date 06-JUL-2022 1120 **ICAL End Date** 06-JUL-2022 1449

Compound	Level 1 0.250 Level 7 50.0	Level 2 0.500 Level 8 100.0	Level 3 1.00 Level 9 150.0	Level 4 2.00 Level 10 200.0	Level 5 5.00	Level 6 20.00	Curve	b	m1	m2	%RSD or R^2	Q
Acetaldehyde	NE 66564	NE 129846	NE 181687	2907 NE	11383	25191	LINR	-0.14857	0.03276		0.99589	
Methyl Amyl Ketone	NE 0.50401	NE 0.52962	NE 0.53046	0.41257 0.55064	0.42225	0.49770	AVRG		0.49246		11.02369	*
Dimethyl Disulfide	NE 0.75621	0.65543 0.82365	0.66876 0.78053	0.73789 0.79630	0.65126	0.73135	AVRG		0.73349		8.60528	
1,2-Dichloroethylene (total)	NE 0.52154	0.59414 0.55502	0.52337 0.57203	0.53423 0.53127	0.52033	0.53766	AVRG		0.54329		4.69482	
Xylenes (total)	NE 0.57483	0.59008 0.52262	0.61201 0.59560	0.58690 0.59247	0.58938	0.58471	AVRG		0.58318		4.24847	
Dibromofluoromethane	NE 241477	2530 434904	3275 627970	9962 978031	21128	85780	LINR	-0.00580	0.45849		0.99941	
1,2-Dichloroethane-d4	NE 251549	2572 454111	3656 634876	11348 964795	21986	88656	LINR	-0.02335	0.45760		0.99847	
Toluene-d8	NE 1.22083	1.48278 1.29799	0.98355 1.21131	1.24160 1.20806	1.26438	1.26401	AVRG		1.24161		10.32338	
4-Bromofluorobenzene	NE 310560	3152 562316	5552 839072	12993 1105705	28163	113041	LINR	-0.00630	0.43176		0.99980	

NE - Not Evaluated, AVRG - Averaged, LINR - Linear Regression, WLIN - Weighted Linear, QUAD - Quadratic, * - Curve Fit Outside Limits

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Form 6I

Initial Calibration Verification (ICV)

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
1,1,1,2-Tetrachlor	50.00	47.77	95.56	80-120	
1,1,1-Trichloroeth	50.00	43.57	87.14	80-120	
1,1,2,2-Tetrachlor	50.00	47.78	95.57	80-120	
Freon TF	50.00	50.42	100.85	80-120	
Methyl Acetate	50.00	52.89	105.79	80-120	
Cyclohexane	50.00	40.22	80.45	80-120	
Methylcyclohexane	50.00	49.87	99.75	80-120	
Carbon Disulfide	100.00	100.61	100.62	80-120	
2-Hexanone	100.00	106.18	106.18	80-120	
1,1,2-Trichloroeth	50.00	47.91	95.82	80-120	
1,1-Dichloroethane	50.00	51.34	102.68	80-120	
1,1-Dichloroethene	50.00	48.66	97.33	80-120	
1,1-Dichloropropen	50.00	44.21	88.43	80-120	
1,2,3-Trichloroben	50.00	56.53	113.06	80-120	
1,2,3-Trichloropro	50.00	46.94	93.89	80-120	
1,2,4-Trichloroben	50.00	59.83	119.68	80-120	
1,2,4-Trimethylben	50.00	49.10	98.20	80-120	
1,2-Dibromo-3-Chlo	50.00	49.15	98.30	80-120	
1,2-Dibromoethane	50.00	48.64	97.30	80-120	
Acrolein	100.00	102.58	102.59	80-120	
Acrylonitrile	100.00	104.26	104.26	80-120	
1,2-Dichlorobenzen	50.00	50.47	100.95	80-120	
1,2-Dichloroethane	50.00	46.35	92.70	80-120	
1,2-Dichloropropan	50.00	47.98	95.97	80-120	
1,3,5-Trimethylben	50.00	47.94	95.90	80-120	
1,3-Dichlorobenzen	50.00	49.56	99.14	80-120	
1,3-Dichloropropan	50.00	47.61	95.22	80-120	
1,4-Dichlorobenzen	50.00	48.75	97.51	80-120	
1-Chlorohexane	50.00	44.75	89.50	80-120	
2,2-Dichloropropan	50.00	45.14	90.29	80-120	
2-Butanone	100.00	104.45	104.46	80-120	
2-Chlorotoluene	50.00	46.68	93.36	80-120	
4-Chlorotoluene	50.00	48.71	97.42	80-120	
p-Isopropyltoluene	50.00	49.08	98.16	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
4-Methyl-2-Pentano	100.00	100.35	100.35	80-120	
Acetone	100.00	113.99	114.00	80-120	
Benzene	50.00	48.27	96.55	80-120	
Bromobenzene	50.00	49.23	98.47	80-120	
Bromochloromethane	50.00	45.37	90.75	80-120	
Bromodichlorometha	50.00	46.64	93.29	80-120	
Bromoform	50.00	51.60	103.20	80-120	
Bromomethane	50.00	55.13	110.27	80-120	
Carbon Tetrachlori	50.00	40.95	81.91	80-120	
Chlorobenzene	50.00	48.18	96.38	80-120	
Chloroethane	50.00	48.92	97.85	80-120	
Chloroform	50.00	45.18	90.38	80-120	
Chloromethane	50.00	47.85	95.71	80-120	
cis-1,2-Dichloroet	50.00	46.56	93.13	80-120	
cis-1,3-Dichloropr	50.00	48.90	97.82	80-120	
Dibromochlorometha	50.00	47.73	95.48	80-120	
Dibromomethane	50.00	45.16	90.34	80-120	
Dichlorodifluorome	50.00	44.23	88.47	80-120	
Ethylbenzene	50.00	47.42	94.84	80-120	
Hexachlorobutadien	50.00	53.45	106.91	80-120	
Isopropylbenzene	50.00	46.65	93.32	80-120	
m,p-Xylenes	100.00	97.09	97.10	80-120	
Methyl tert-butyl	50.00	53.13	106.27	80-120	
Methylene Chloride	50.00	50.08	100.16	80-120	
n-Butylbenzene	50.00	50.44	100.89	80-120	
n-Propylbenzene	50.00	47.83	95.66	80-120	
Naphthalene	50.00	56.59	113.20	80-120	
o-Xylene	50.00	48.17	96.35	80-120	
sec-Butylbenzene	50.00	45.81	91.62	80-120	
Styrene	50.00	50.18	100.36	80-120	
tert-Butylbenzene	50.00	46.42	92.85	80-120	
Tetrachloroethene	50.00	44.87	89.74	80-120	
Toluene	50.00	47.63	95.28	80-120	
trans-1,2-Dichloro	50.00	52.82	105.65	80-120	

Initial Calibration Verification (ICV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412359

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070614.D
Lab Smp Id ICV
Analysis Type VOA

ICAL Date 06-JUL-2022
ICAL Time 1347
Client Smp ID ICV
Level LOW

Compound	Amount Added	Amount Recovered	% Recovered	Limits	Q
trans-1,3-Dichloro	50.00	48.85	97.71	80-120	
Trichloroethene	50.00	46.69	93.39	80-120	
Trichlorofluoromet	50.00	49.15	98.31	80-120	
Vinyl Chloride	50.00	47.18	94.37	80-120	
1,2-Dichloroethyle	100.00	99.38	99.39	80-120	
Xylenes (total)	150.00	145.27	96.85	80-120	
1,4-Dioxane	1000.00	838.63	83.86	80-120	
1,2-Dichloroethane	50.00	49.44	98.88	0-130	
4-Bromofluorobenze	50.00	52.44	104.88	0-130	
Dibromofluorometha	50.00	49.49	99.00	74-125	
Toluene-d8	50.00	51.51	103.03	78-123	

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Form 7

Continuing Calibration Verification (CCV)

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412540

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070803.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 08-JUL-2022 1110
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	43.21537	0.40619	0.100	13.56926	20.0	Linear	
4-Bromofluorobenzene	50.0	53.24967	0.46255	0.100	-6.49935	20.0	Linear	
Dibromofluoromethane	50.0	50.42318	0.46504	0.100	-0.84635	20.0	Linear	
Toluene-d8	1.24161	1.26112	1.26112	0.100	-1.57110	20.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.28231	0.28231	0.100	0.68493	20.0	Averaged	
1,1-Dichloroethene	0.47833	0.47350	0.47350	0.100	1.00886	20.0	Averaged	
1,2-Dichloroethane	0.41434	0.40569	0.40569	0.100	2.08741	20.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.58787	0.58787	0.100	-1.58227	20.0	Averaged	
Methylene Chloride	50.0	49.29508	0.57288	0.100	1.40984	20.0	Linear	
Trichloroethene	0.37443	0.38817	0.38817	0.200	-3.67116	20.0	Averaged	
Vinyl Chloride	0.63952	0.63170	0.63170	0.100	1.22324	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412540

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X070830.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 08-JUL-2022 2038
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	46.07436	0.43236	0.100	7.85128	50.0	Linear	
4-Bromofluorobenzene	50.0	52.46839	0.45580	0.100	-4.93678	50.0	Linear	
Dibromofluoromethane	50.0	49.25548	0.45433	0.100	1.48903	50.0	Linear	
Toluene-d8	1.24161	1.27319	1.27319	0.100	-2.54315	50.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.27497	0.27497	0.100	3.26997	50.0	Averaged	
1,1-Dichloroethene	0.47833	0.38611	0.38611	0.100	19.27896	50.0	Averaged	
1,2-Dichloroethane	0.41434	0.47491	0.47491	0.100	-14.61863	50.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.48569	0.48569	0.100	16.07472	50.0	Averaged	
Methylene Chloride	50.0	41.01032	0.47536	0.100	17.97937	50.0	Linear	
Trichloroethene	0.37443	0.43120	0.43120	0.200	-15.16139	50.0	Averaged	
Vinyl Chloride	0.63952	0.57656	0.57656	0.100	9.84553	50.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412669

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X071102.D
Analysis Type WATER
Lab Sample ID CCV

Injection Date 11-JUL-2022 1044
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	52.01936	0.48677	0.100	-4.03871	20.0	Linear	
4-Bromofluorobenzene	50.0	54.83933	0.47627	0.100	-9.67867	20.0	Linear	
Dibromofluoromethane	50.0	51.20290	0.47219	0.100	-2.40580	20.0	Linear	
Toluene-d8	1.24161	1.29879	1.29879	0.100	-4.60479	20.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.28842	0.28842	0.100	-1.46329	20.0	Averaged	
1,1-Dichloroethene	0.47833	0.45412	0.45412	0.100	5.06029	20.0	Averaged	
1,2-Dichloroethane	0.41434	0.42488	0.42488	0.100	-2.54196	20.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.57860	0.57860	0.100	0.01852	20.0	Averaged	
Methylene Chloride	50.0	47.36143	0.55012	0.100	5.27714	20.0	Linear	
Trichloroethene	0.37443	0.37935	0.37935	0.200	-1.31423	20.0	Averaged	
Vinyl Chloride	0.63952	0.61673	0.61673	0.100	3.56318	20.0	Averaged	

Continuing Calibration Verification (CCV)

Client Aptim Environmental & Infrastucture, Inc.
Project LHAAP 16 July 2022

Workorder HS22070326

RunID VOA6_412669

Volatiles Organics by Method 8260C

Instrument ID voa6.i
Lab File ID X071114.D
Analysis Type WATER
Lab Sample ID CCV-END

Injection Date 11-JUL-2022 1456
ICAL Date(s) 06-JUL-2022 06-JUL-2022
ICAL Times 1120 1449
Quant Type ISTD

Compound	$\overline{RRF}$ / Amount	RF50	CCV RRF50	Min RRF	%D / %Drift	Max %D / %Drift	Curve Type	Q
1,2-Dichloroethane-d4	50.0	54.57657	0.51017	0.100	-9.15315	50.0	Linear	
4-Bromofluorobenzene	50.0	53.20560	0.46217	0.100	-6.41120	50.0	Linear	
Dibromofluoromethane	50.0	53.16984	0.49022	0.100	-6.33968	50.0	Linear	
Toluene-d8	1.24161	1.26269	1.26269	0.100	-1.69729	50.0	Averaged	
1,1,2-Trichloroethane	0.28426	0.28109	0.28109	0.100	1.11565	50.0	Averaged	
1,1-Dichloroethene	0.47833	0.41656	0.41656	0.100	12.91386	50.0	Averaged	
1,2-Dichloroethane	0.41434	0.42578	0.42578	0.100	-2.76031	50.0	Averaged	
cis-1,2-Dichloroethene	0.57871	0.56047	0.56047	0.100	3.15182	50.0	Averaged	
Methylene Chloride	50.0	45.57493	0.52909	0.100	8.85015	50.0	Linear	
Trichloroethene	0.37443	0.36748	0.36748	0.200	1.85513	50.0	Averaged	
Vinyl Chloride	0.63952	0.54393	0.54393	0.100	14.94726	50.0	Averaged	

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Form 8

Internal Standard Area and RT Summary

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412540

Volatiles Organics by Method 8260C

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X070803	475166	#	4.19	#	647995	#	4.97	#	596434	#	7.67	#	353394	#	9.66	#
CCB	X070804	615556		4.19		883269		4.97		762507		7.67		314946		9.67	
VLCSW-220708	X070805	463855		4.19		706741		4.97		611781		7.67		288072		9.67	
VBLKW-220708	X070807	547715		4.19		767886		4.97		684361		7.67		354237		9.67	
HS22070326-12	X070808	628841		4.19		900797		4.97		642971		7.67		292108		9.67	
HS22070326-01	X070809	517453		4.19		731427		4.97		627748		7.67		288456		9.67	
HS22070326-02	X070810	593964		4.19		861965		4.97		739860		7.68		321890		9.67	
HS22070326-07	X070811	624523		4.19		906055		4.97		778605		7.67		347313		9.67	
HS22070326-04	X070812	576739		4.19		833373		4.97		702052		7.67		309805		9.67	
HS22070326-05	X070813	516877		4.19		780138		4.97		626976		7.67		274484		9.67	
HS22070326-07	X070814	616093		4.19		882391		4.97		753799		7.67		328575		9.67	
HS22070326-07MS	X070815	512403		4.19		714717		4.97		625850		7.67		299670		9.67	
HS22070326-07MSD	X070816	513766		4.19		719939		4.97		625244		7.67		294304		9.67	
HS22070326-04	X070817	616253		4.19		869729		4.97		617073		7.67		287584		9.67	
HS22070326-05	X070818	499331		4.19		713494		4.97		614132		7.67		336261		9.67	
HS22070326-06	X070819	590153		4.19		734479		4.97		637453		7.67		290171		9.67	
HS22070326-03	X070821	614402		4.19		878025		4.97		750354		7.67		330008		9.67	
HS22070326-03	X070822	516755		4.19		809624		4.97		623307		7.67		284838		9.67	
HS22070326-08	X070823	563300		4.18		786357		4.97		618329		7.67		279974		9.67	
HS22070326-08	X070824	523304		4.19		733639		4.97		690115		7.67		280316		9.67	
HS22070326-09	X070825	512943		4.19		749937		4.97		710101		7.67		280602		9.67	
HS22070326-09	X070826	583376		4.18		828684		4.97		621806		7.67		314511		9.67	
HS22070326-10	X070827	622292		4.19		887128		4.97		752201		7.67		327961		9.67	
HS22070326-10	X070828	561714		4.19		785619		4.97		745014		7.67		281320		9.67	
HS22070326-11	X070829	595460		4.19		847929		4.97		710381		7.67		317880		9.67	
CCV-END	X070830	470702		4.19		660870		4.97		724176		7.67		344856		9.67	

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

Form 8 - Internal Standard Area and RT Summary

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

RunID
VOA6_412669

Volatiles Organics by Method 8260C

		IS1				IS2				IS3				IS4			
Sample ID	File ID	Area		RT		Area		RT		Area		RT		Area		RT	
12-HOUR STD (CCV)	X071102	475235	#	4.19	#	720542	#	4.97	#	648777	#	7.67	#	320895	#	9.66	#
CCB	X071104	613824		4.19		863023		4.97		745185		7.67		319010		9.67	
VLCSW-220711	X071105	489965		4.19		742577		4.97		680971		7.67		327233		9.67	
VBLKW-220711	X071107	590809		4.19		838777		4.97		706017		7.67		311322		9.67	
HS22070326-06	X071110	627399		4.19		892884		4.97		773271		7.67		343906		9.67	
HS22070326-11	X071111	625789		4.19		905770		4.97		783608		7.67		350070		9.67	
ZZZZZZMS	X071112	618550		4.19		891356		4.97		763876		7.67		343400		9.66	
ZZZZZZMSD	X071113	610794		4.19		885417		4.97		771854		7.67		365835		9.67	
CCV-END	X071114	493042		4.19		755868		4.97		692646		7.67		335777		9.67	

IS1 - Pentafluorobenzene IS2 - 1,4-Difluorobenzene IS3 - Chlorobenzene-d5 IS4 - 1,4-Dichlorobenzene-d4

AREA UPPER LIMIT = +100% of 12H STD IS Area
AREA LOWER LIMIT = - 50% of 12H STD IS Area
RT - Retention Time IS - Internal Standard

RT UPPER LIMIT = + 0.50 of 12H STD IS RT
RT LOWER LIMIT = - 0.50 of 12H STD IS RT
CCV - Continuing Calibration Verification

- Area or RT Limit Flag
* - Value Outside Area or RT limits
H - Hour STD - Standard

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Analysis Run Log

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

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LHAAP 16 July 2022

07/20/2022

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

RunID
VOA6_412359

Instrument ID VOA6 **Matrix** R412359 **Start Date** 07/06/2022 **EndDate** 07/06/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/06/22 10:59	X070601.D
VSTD000.25	ICAL1	VSTD000.25	1	07/06/22 11:20	X070602.D
VSTD000.5	ICAL2	VSTD000.5	1	07/06/22 12:02	X070603.D
VSTD001	ICAL3	VSTD001	1	07/06/22 12:23	X070604.D
VSTD002	ICAL4	VSTD002	1	07/06/22 12:44	X070605.D
VSTD005	ICAL5	VSTD005	1	07/06/22 13:05	X070606.D
VSTD020	ICAL6	VSTD020	1	07/06/22 13:26	X070607.D
VSTD050	ICAL7	VSTD050	1	07/06/22 13:47	X070608.D
VSTD100	ICAL8	VSTD100	1	07/06/22 14:08	X070609.D
VSTD150	ICAL9	VSTD150	1	07/06/22 14:28	X070610.D
VSTD200	ICAL	VSTD200	1	07/06/22 14:49	X070611.D
CCV	ICV	CCV	1	07/06/22 15:52	X070614.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

RunID
VOA6_412540

Instrument ID VOA6 **Matrix** R412540 **Start Date** 07/08/2022 **EndDate** 07/08/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/08/22 10:28	X070801.D
CCV	CCV	CCV	1	07/08/22 11:10	X070803.D
CCB	CCB	CCB	1	07/08/22 11:31	X070804.D
VLCSW-220708	LCS	VLCSW-220708	1	07/08/22 11:52	X070805.D
VBLKW-220708	MBLK	VBLKW-220708	1	07/08/22 12:34	X070807.D
Trip Blank-220705	SAMP	HS22070326-12	1	07/08/22 12:55	X070808.D
16WW44-220705	SAMP	HS22070326-01	1	07/08/22 13:16	X070809.D
16WW44-220705-FD	SAMP	HS22070326-02	1	07/08/22 13:37	X070810.D
16WW40-220705	SAMP	HS22070326-07	1	07/08/22 13:58	X070811.D
16RW09-220705	SAMP	HS22070326-04	1	07/08/22 14:19	X070812.D
16RW09-220705-FD	SAMP	HS22070326-05	1	07/08/22 14:40	X070813.D
16WW40-220705	SAMP	HS22070326-07	10	07/08/22 15:01	X070814.D
HS22070326-07MS	MS	HS22070326-07MS	10	07/08/22 15:23	X070815.D
HS22070326-07MSD	MSD	HS22070326-07MSD	10	07/08/22 15:44	X070816.D
16RW09-220705	SAMP	HS22070326-04	25	07/08/22 16:05	X070817.D
16RW09-220705-FD	SAMP	HS22070326-05	25	07/08/22 16:26	X070818.D
16EW01-220705	SAMP	HS22070326-06	10	07/08/22 16:47	X070819.D
16RW10-220705	SAMP	HS22070326-03	5	07/08/22 17:29	X070821.D
16RW10-220705	SAMP	HS22070326-03	25	07/08/22 17:50	X070822.D
16WW12-220705	SAMP	HS22070326-08	5	07/08/22 18:11	X070823.D
16WW12-220705	SAMP	HS22070326-08	25	07/08/22 18:32	X070824.D
16WW13-220705	SAMP	HS22070326-09	5	07/08/22 18:53	X070825.D
16WW13-220705	SAMP	HS22070326-09	25	07/08/22 19:14	X070826.D
16WW42-220705	SAMP	HS22070326-10	5	07/08/22 19:35	X070827.D
16WW42-220705	SAMP	HS22070326-10	25	07/08/22 19:56	X070828.D
16RW04-220705	SAMP	HS22070326-11	5	07/08/22 20:17	X070829.D
CCV-END	CCV_END	CCV-END	1	07/08/22 20:38	X070830.D

Form 13 - Analysis Run Log

Client Aptim Environmental & Infrastucture, Inc.

Project LHAAP 16 July 2022

Workorder
HS22070326

Volatiles Organics by Method 8260C

RunID
VOA6_412669

Instrument ID VOA6 **Matrix** R412669 **Start Date** 07/11/2022 **EndDate** 07/11/2022

Client Sample ID	Type	Lab Sample ID	DF	Analysis Date	File ID
BFB	TUNE	BFB	1	07/11/22 10:23	X071101.D
CCV	CCV	CCV	1	07/11/22 10:44	X071102.D
CCB	CCB	CCB	1	07/11/22 11:26	X071104.D
VLCSW-220711	LCS	VLCSW-220711	1	07/11/22 11:47	X071105.D
VBLKW-220711	MBLK	VBLKW-220711	1	07/11/22 12:29	X071107.D
ZZZZZZZZZZ	SAMP	HS22070388-08	1	07/11/22 12:50	X071108.D
ZZZZZZZZZZ	SAMP	HS22070329-01	100	07/11/22 13:11	X071109.D
16EW01-220705	SAMP	HS22070326-06	100	07/11/22 13:32	X071110.D
16RW04-220705	SAMP	HS22070326-11	25	07/11/22 13:53	X071111.D
ZZZZZZMS	MS	HS22070388-08MS	1	07/11/22 14:14	X071112.D
ZZZZZZMSD	MSD	HS22070388-08MSD	1	07/11/22 14:35	X071113.D
CCV-END	CCV_END	CCV-END	1	07/11/22 14:56	X071114.D

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Raw Data VOA6 412359

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 1
Report Date: 06-Jul-2022 11:45

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 06-JUL-2022 10:59
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.702	8.889	(0.000)	95	25488			0.00- 100.00	100.00
8.702	8.889	(0.000)	50	4886			15.00- 40.00	19.17
8.702	8.889	(0.000)	75	12128			30.00- 60.00	47.58
8.702	8.889	(0.000)	96	1599			5.00- 9.00	6.27
8.702	8.889	(0.000)	173	178			0.00- 2.00	0.78
8.702	8.889	(0.000)	174	22768			50.00- 0.00	89.33
8.702	8.889	(0.000)	175	1541			5.00- 9.00	6.77
8.702	8.889	(0.000)	176	22152			95.00- 101.00	97.29
8.702	8.889	(0.000)	177	1783			5.00- 9.00	8.05

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.17
75	30.00 - 60.00% of mass 95	47.58
96	5.00 - 9.00% of mass 95	6.27
173	Less than 2.00% of mass 174	0.70 (0.78)
174	Greater than 50.00% of mass 95	89.33
175	5.00 - 9.00% of mass 174	6.05 (6.77)
176	95.00 - 101.00% of mass 174	86.91 (97.29)
177	5.00 - 9.00% of mass 176	7.00 (8.05)

Data File: X070601.D
Spectrum: Scan 2164 (8.70)
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	239	62.90	924	86.90	968	129.00	126
37.10	1021	64.10	221	88.00	1186	129.90	146
38.00	900	65.20	186	90.80	67	138.90	72
39.00	471	66.10	89	91.90	658	140.90	395
39.90	845	67.00	99	93.00	1011	142.80	346
41.90	63	68.00	2733	94.00	2894	145.70	78
44.00	1042	69.00	2427	95.00	25488	154.80	111
44.90	335	69.80	151	96.00	1599	157.10	175
47.00	267	71.90	113	103.90	180	167.80	73
47.90	114	73.00	1230	106.00	55	170.00	83
49.00	781	74.00	4070	109.70	56	172.70	178
50.00	4886	75.00	12128	112.90	50	173.90	22768
51.00	1387	76.00	1032	115.00	174	174.90	1541
55.10	54	77.10	365	115.80	150	175.90	22152
55.90	287	78.10	269	116.90	209	176.90	1783
57.00	773	78.80	689	117.60	150	177.80	82
60.00	207	79.80	169	118.80	115	185.90	590
61.00	895	80.90	795	119.00	114	262.10	177
62.00	1194	81.80	230	128.00	131		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 1

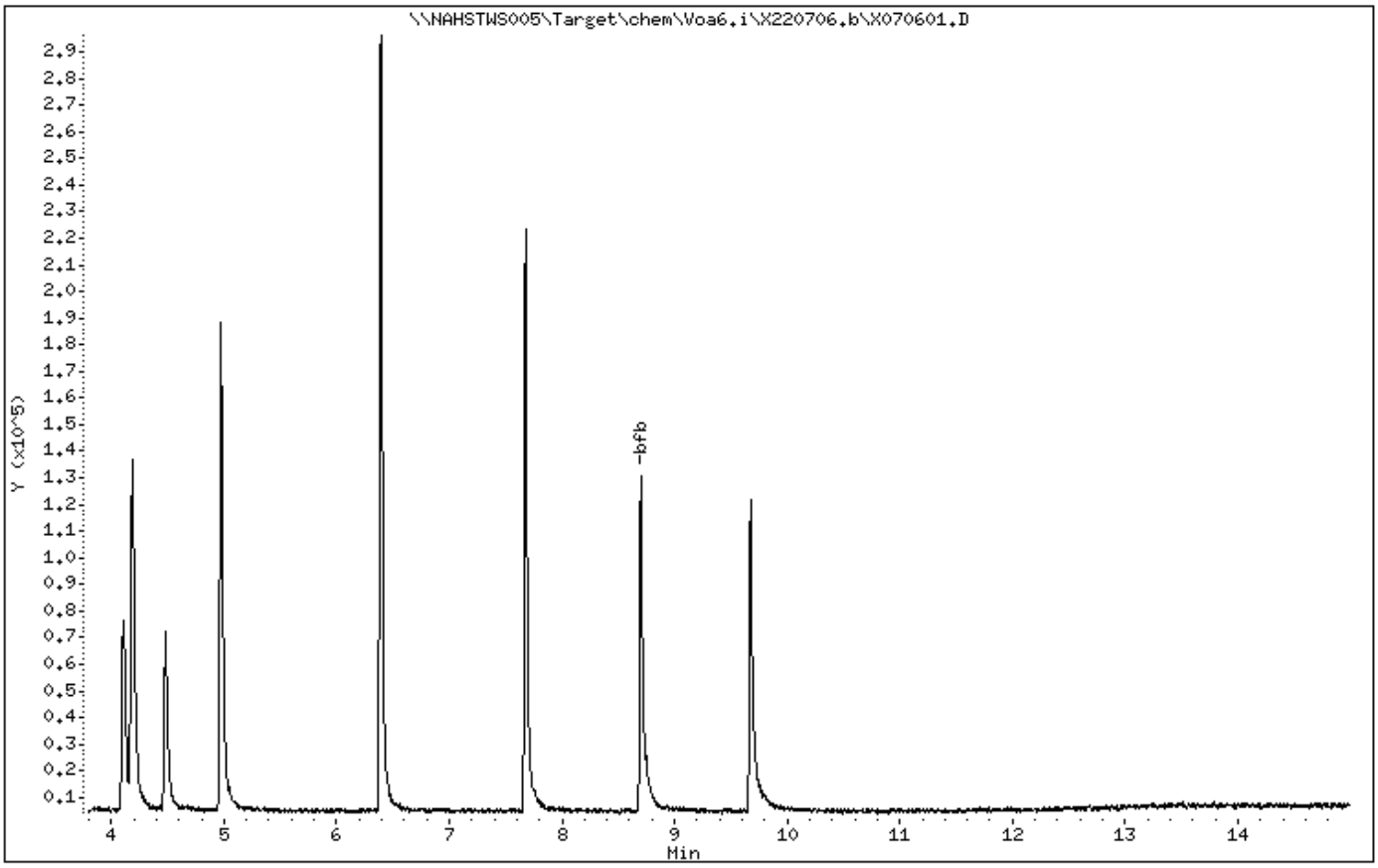
Date : 06-JUL-2022 10:59

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D Page 2

Date : 06-JUL-2022 10:59

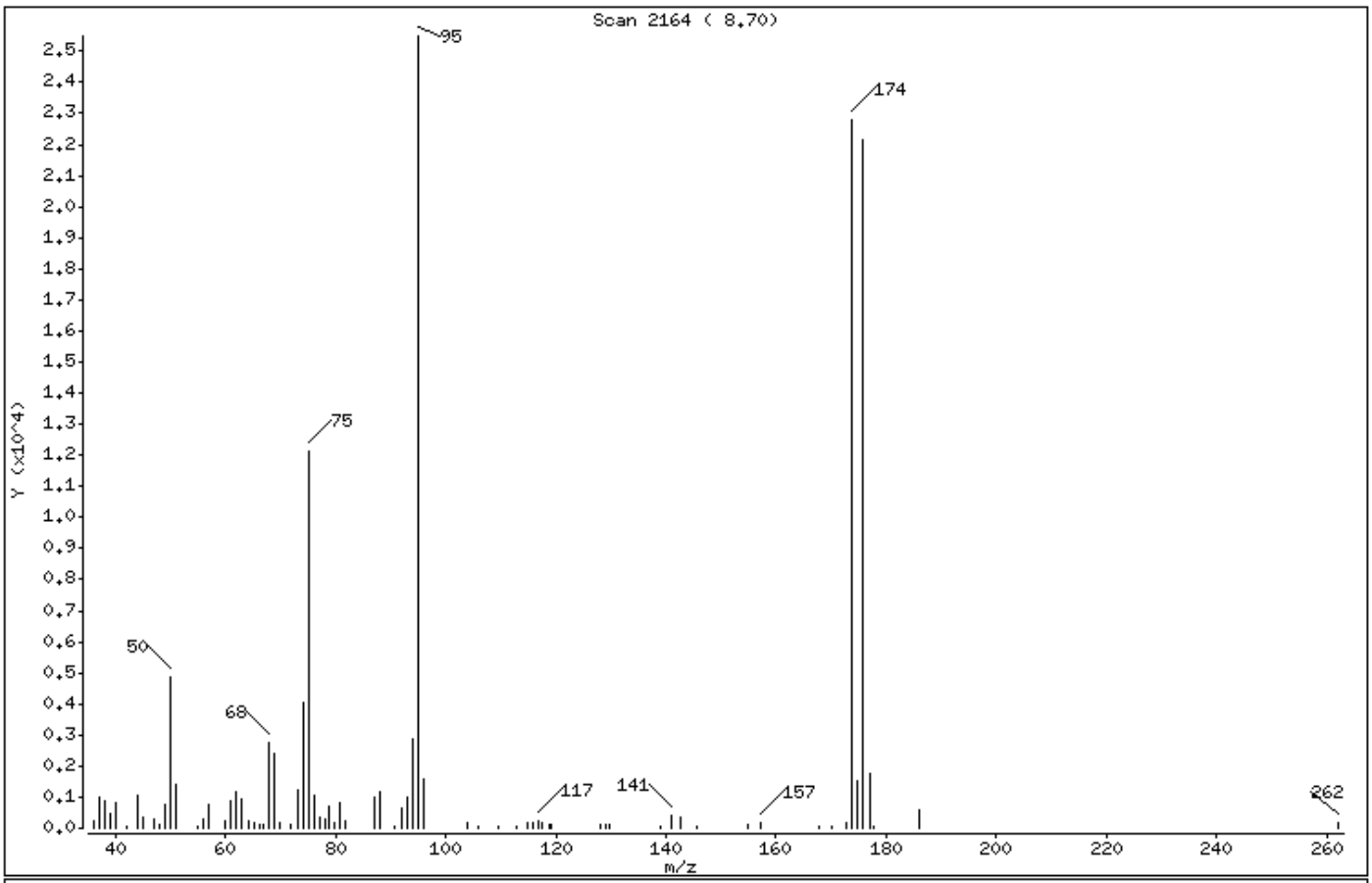
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	19.17
75	30.00 - 60.00% of mass 95	47.58
96	5.00 - 9.00% of mass 95	6.27
173	Less than 2.00% of mass 174	0.70 (0.78)
174	Greater than 50.00% of mass 95	89.33
175	5.00 - 9.00% of mass 174	6.05 (6.77)
176	95.00 - 101.00% of mass 174	86.91 (97.29)
177	5.00 - 9.00% of mass 176	7.00 (8.05)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070601.D

Date : 06-JUL-2022 10:59

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X070601.D
Spectrum: Scan 2164 (8.70)
Location of Maximum: 95.00
Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.10	239	62.90	924	86.90	968	129.00	126
37.10	1021	64.10	221	88.00	1186	129.90	146
38.00	900	65.20	186	90.80	67	138.90	72
39.00	471	66.10	89	91.90	658	140.90	395
39.90	845	67.00	99	93.00	1011	142.80	346
41.90	63	68.00	2733	94.00	2894	145.70	78
44.00	1042	69.00	2427	95.00	25488	154.80	111
44.90	335	69.80	151	96.00	1599	157.10	175
47.00	267	71.90	113	103.90	180	167.80	73
47.90	114	73.00	1230	106.00	55	170.00	83
49.00	781	74.00	4070	109.70	56	172.70	178
50.00	4886	75.00	12128	112.90	50	173.90	22768
51.00	1387	76.00	1032	115.00	174	174.90	1541
55.10	54	77.10	365	115.80	150	175.90	22152
55.90	287	78.10	269	116.90	209	176.90	1783
57.00	773	78.80	689	117.60	150	177.80	82
60.00	207	79.80	169	118.80	115	185.90	590
61.00	895	80.90	795	119.00	114	262.10	177
62.00	1194	81.80	230	128.00	131		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Lab Smp Id: VSTD000.25 Client Smp ID: VSTD000.25
Inj Date : 06-JUL-2022 11:20
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.25;VSTD000.25;1;1;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 2 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

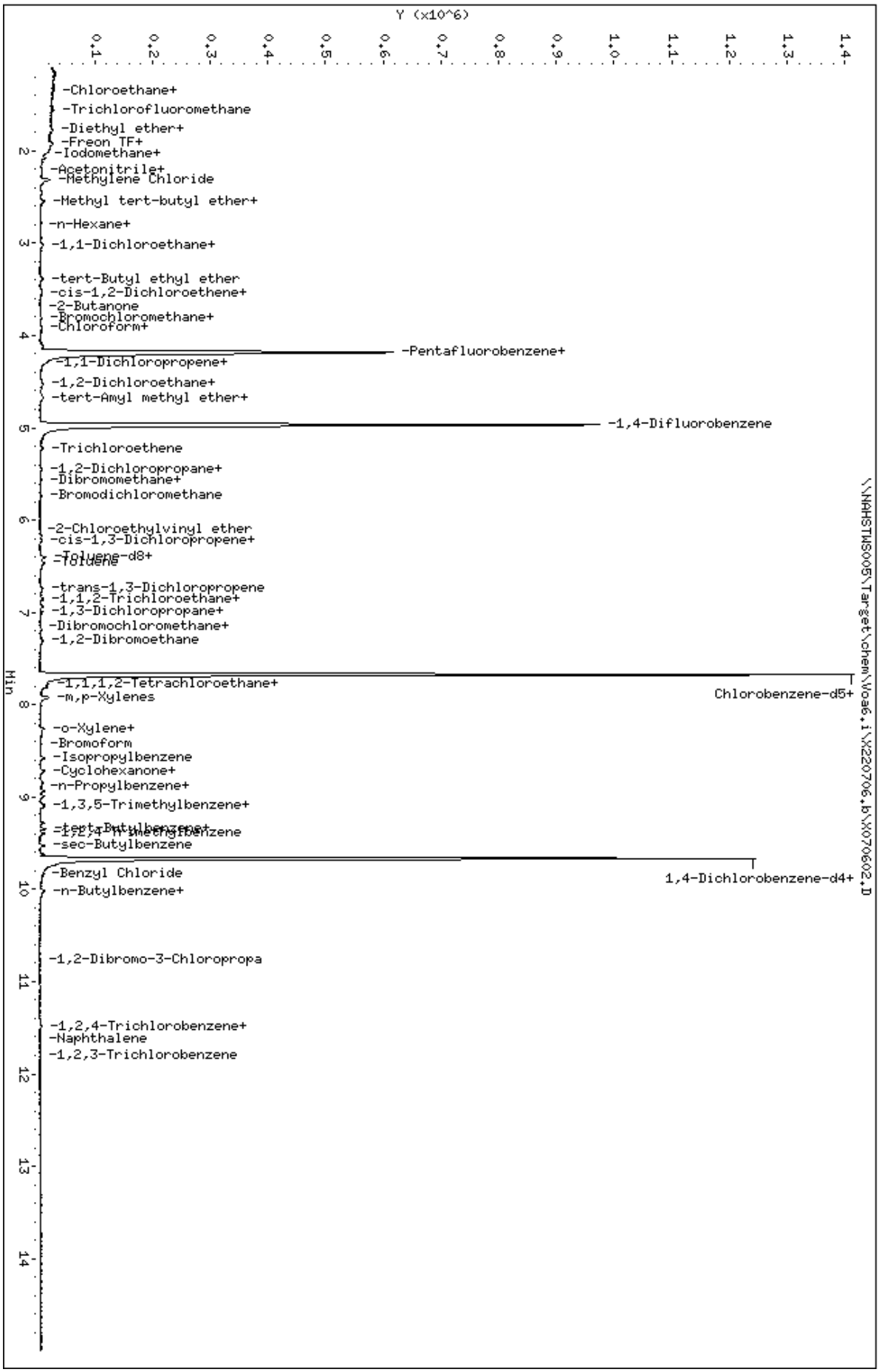
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	554842	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	841573	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	758983	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	332385	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.492	4.492	(1.073)	1413	0.25000	(Ta)
$ 69 4-Bromofluorobenzene	95	8.717	8.717	(1.136)	2364	0.25000	0.04(aM)
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.981)	2078	0.25000	0.11
$ 48 Toluene-d8	98	6.404	6.404	(0.835)	7582	0.25000	0.40(a)
53 1,1,2-Trichloroethane	83	6.854	6.854	(0.893)	1359	0.25000	0.31(a)
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	1469	0.25000	0.27(aM)
33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	2424	0.25000	0.34(a)
27 cis-1,2-Dichloroethene	96	3.544	3.544	(0.847)	1688	0.25000	0.26(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	3035	0.25000	1.09(aM)
38 Trichloroethene	130	5.223	5.223	(1.051)	1665	0.25000	0.26(a)
5 Vinyl Chloride	62	1.148	1.148	(0.275)	2150	0.25000	0.30(a)

QC Flag Legend

T - Target compound detected outside RT window.

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070602.D
Date : 06-JUL-2022 11:20
Client ID: VSTD000.25
Sample Info: VSTD000.25;VSTD000.25;1;1;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

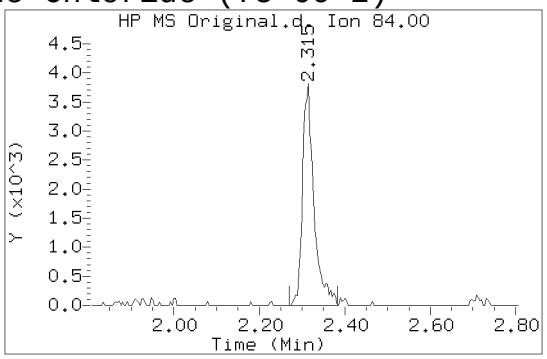
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Inj Date : 06-JUL-2022 11:20
InstruID : voa6.i
LabSampID : VSTD000.25

Methylene Chloride (75-09-2)

Reason Code:

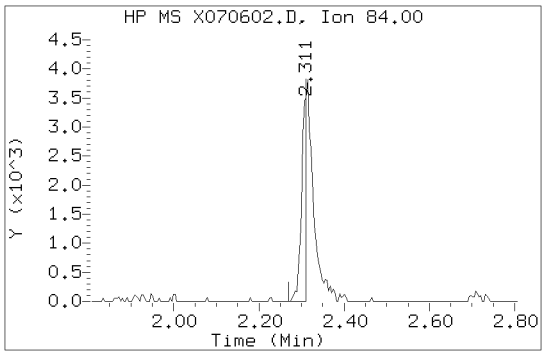
BEFORE

MASS
64
AREA
1122
HEIGHT
1063
06-Jul-2022
11:36
ALSHS
Server



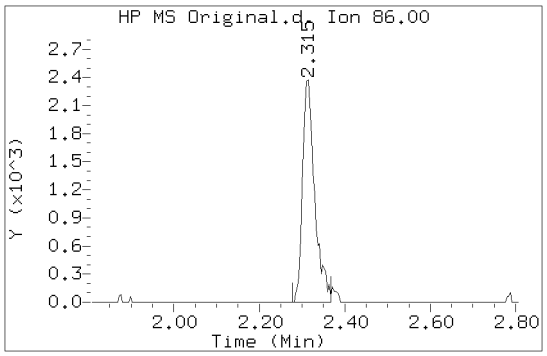
AFTER

MASS
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AREA
3035
HEIGHT
3496
15-Jul-2022
14:25
ALSHS
Ser



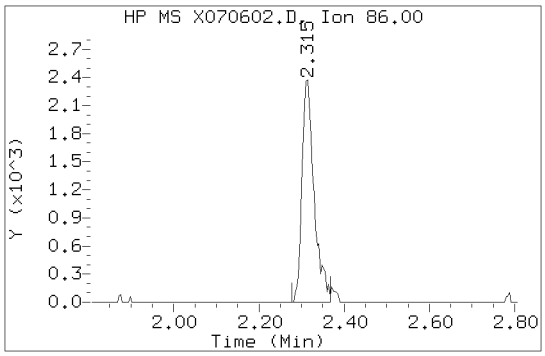
BEFORE

MASS
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AREA
629
HEIGHT
432
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
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AREA
4755
HEIGHT
2374
15-Jul-2022
14:25
ALSHS
Ser

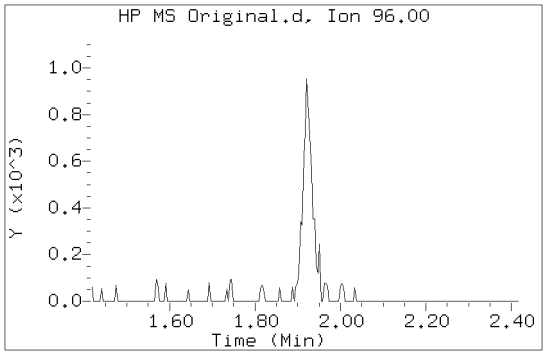


1,1-Dichloroethene (75-35-4)

Reason Code:

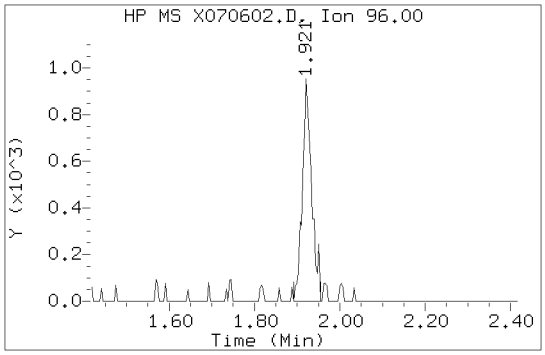
BEFORE

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AREA
2076
HEIGHT
1275
06-Jul-2022
11:36
ALSHS
Server



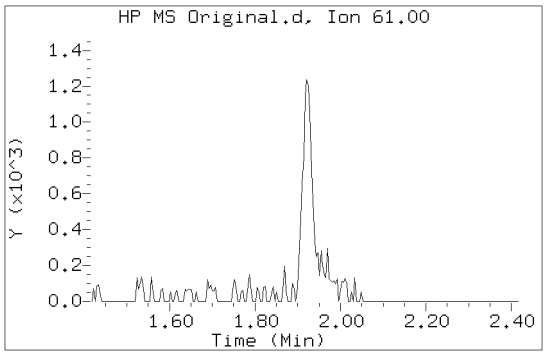
AFTER

MASS
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AREA
1469
HEIGHT
953
15-Jul-2022
14:25
ALSHS
Ser



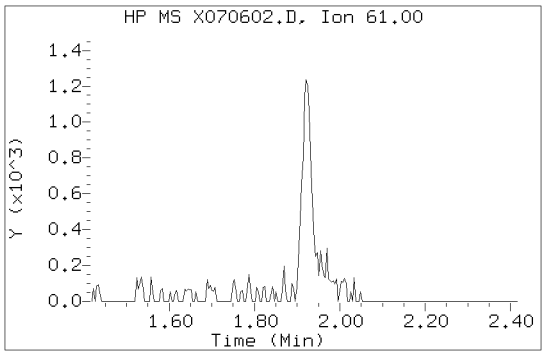
BEFORE

MASS
127
AREA
1136
HEIGHT
640
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
61
AREA
0
HEIGHT
0
15-Jul-2022
14:25
ALSHS
Ser



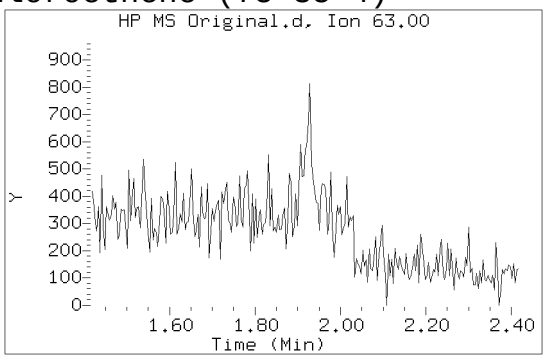
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Inj Date : 06-JUL-2022 11:20
InstruID : voa6.i
LabSampID : VSTD000.25

1,1-Dichloroethene (75-35-4)

Reason Code:

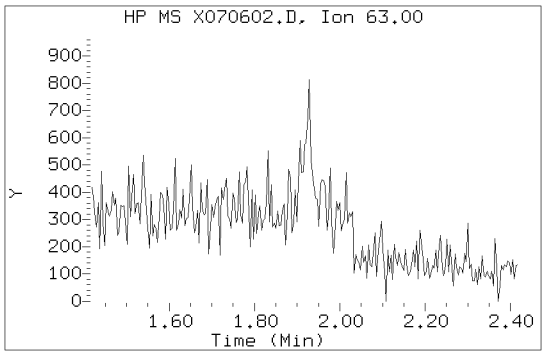
BEFORE

MASS
141
AREA
0
HEIGHT
0
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
63
AREA
0
HEIGHT
0
15-Jul-2022
14:25
ALSHS
Ser

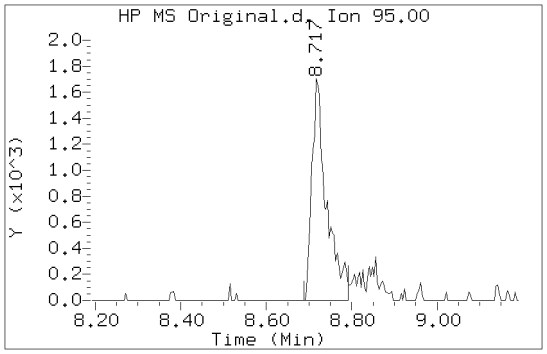


4-Bromofluorobenzene (460-00-4)

Reason Code:

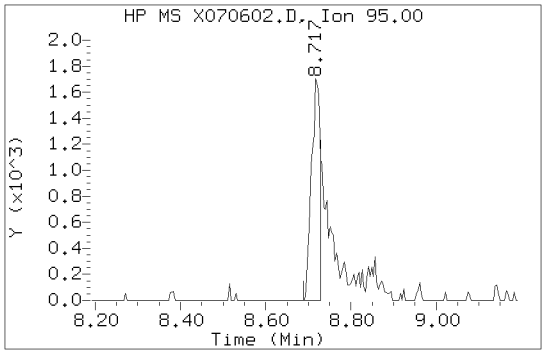
BEFORE

MASS
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AREA
1513
HEIGHT
746
06-Jul-2022
11:36
ALSHS
Server



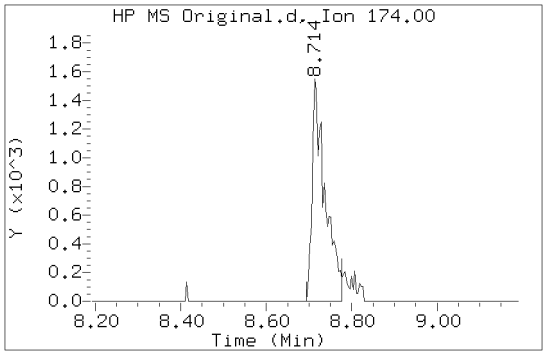
AFTER

MASS
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AREA
2364
HEIGHT
1704
15-Jul-2022
14:25
ALSHS
Ser



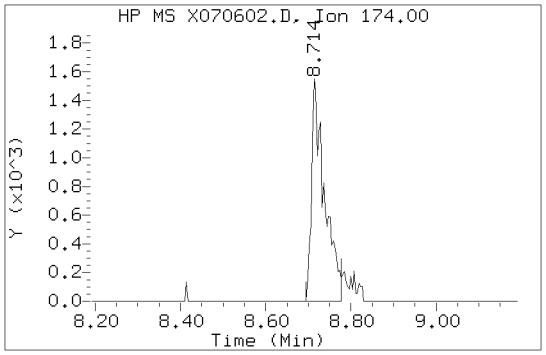
BEFORE

MASS
61
AREA
1976
HEIGHT
952
06-Jul-2022
11:36
ALSHS
Server



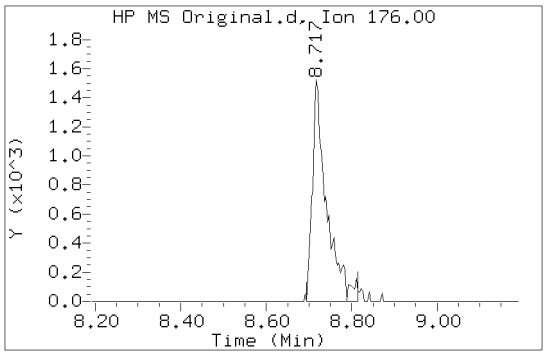
AFTER

MASS
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AREA
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HEIGHT
1550
15-Jul-2022
14:25
ALSHS
Ser



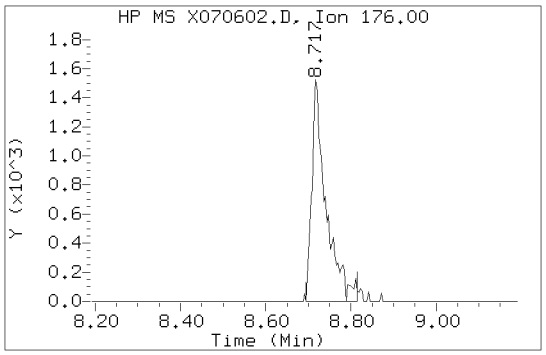
BEFORE

MASS
98
AREA
887
HEIGHT
675
06-Jul-2022
11:36
ALSHS
Server



AFTER

MASS
176
AREA
3533
HEIGHT
1524
15-Jul-2022
14:25
ALSHS
Ser



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Lab Smp Id: VSTD000.5 Client Smp ID: VSTD000.5
Inj Date : 06-JUL-2022 12:02
Operator : PC Inst ID: voa6.i
Smp Info : VSTD000.5;VSTD000.5;1;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 11:20 Cal File: X070602.D
Als bottle: 4 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

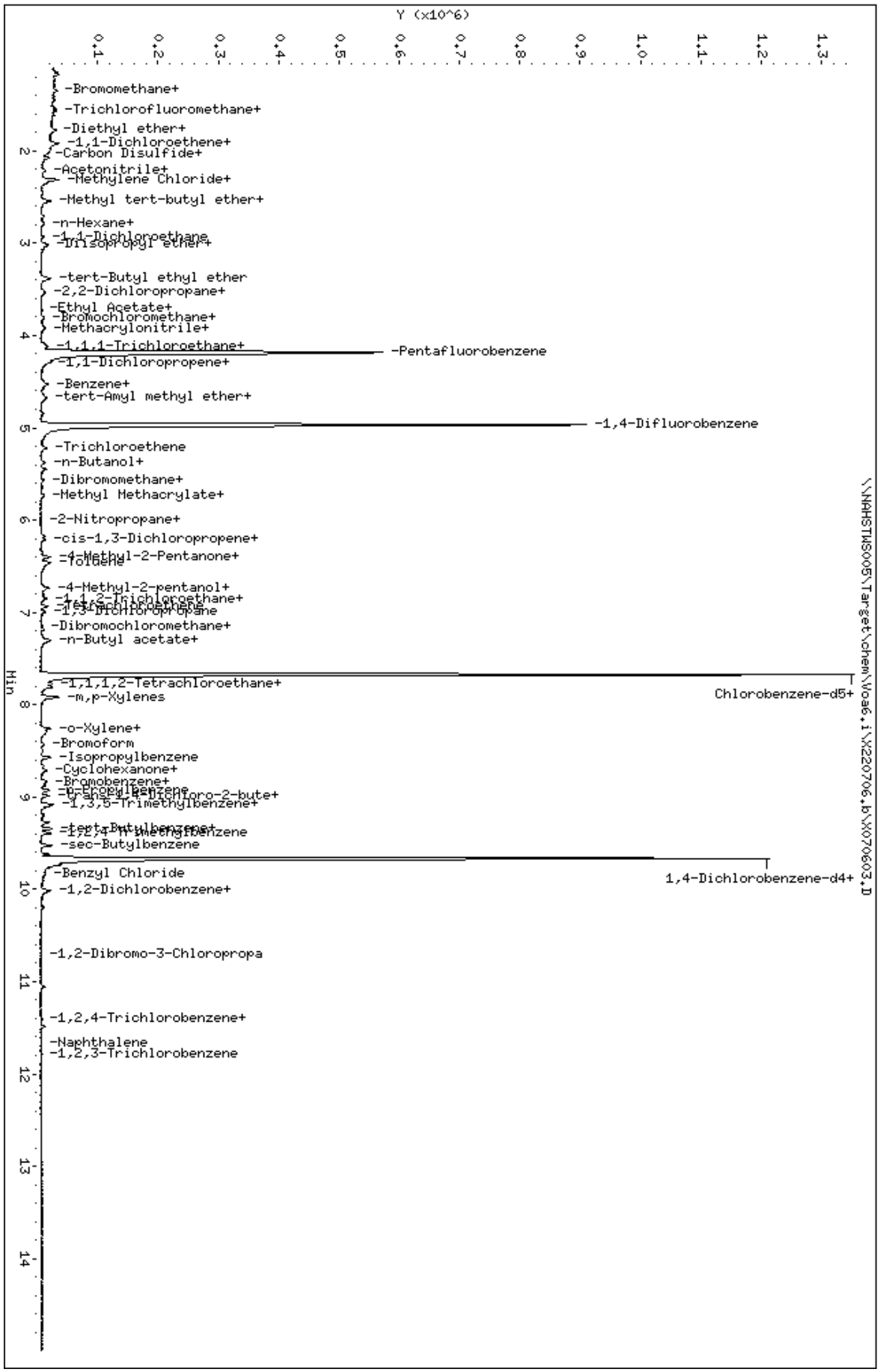
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	517303	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	797124	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	731127	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	327223	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	2572	0.50000	(TaM)
$	69 4-Bromofluorobenzene	95	8.717	8.717	(1.136)	3152	0.50000	0.18(aM)
$	30 Dibromofluoromethane	113	4.121	4.121	(0.985)	2530	0.50000	0.24(M)
$	48 Toluene-d8	98	6.400	6.400	(0.834)	10841	0.50000	0.59(aM)
	53 1,1,2-Trichloroethane	83	6.850	6.850	(0.893)	2148	0.50000	0.51(a)
	11 1,1-Dichloroethene	96	1.925	1.925	(0.460)	2892	0.50000	0.58(a)
	33 1,2-Dichloroethane	62	4.575	4.575	(0.921)	3621	0.50000	0.54(aM)
	27 cis-1,2-Dichloroethene	96	3.548	3.548	(0.848)	3263	0.50000	0.54(a)
	17 Methylene Chloride	84	2.307	2.307	(0.551)	3611	0.50000	1.21(aM)
	38 Trichloroethene	130	5.220	5.220	(1.051)	3167	0.50000	0.53(a)
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	3631	0.50000	0.54(aM)

QC Flag Legend

T - Target compound detected outside RT window.

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Date : 06-JUL-2022 12:02
Client ID: VSTD000.5
Sample Info: VSTD000.5;VSTD000.5;1;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

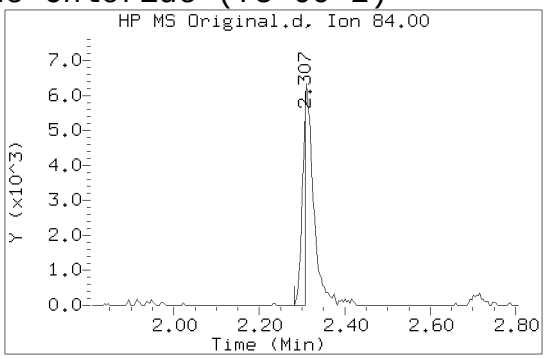
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Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Methylene Chloride (75-09-2)

Reason Code:

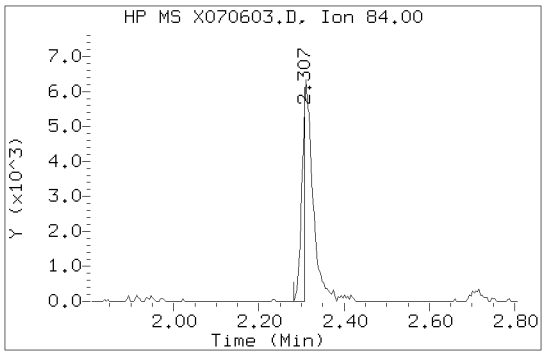
BEFORE

MASS
84
AREA
3611
HEIGHT
5578
15-Jul-2022
14:25
linh
pham



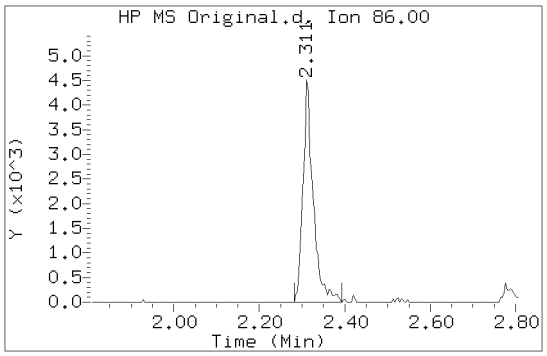
AFTER

MASS
84
AREA
3611
HEIGHT
5578
15-Jul-2022
14:25
linh
pham



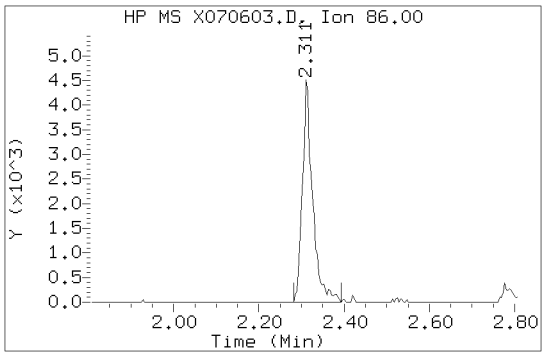
BEFORE

MASS
86
AREA
7666
HEIGHT
4512
15-Jul-2022
14:25
linh
pham



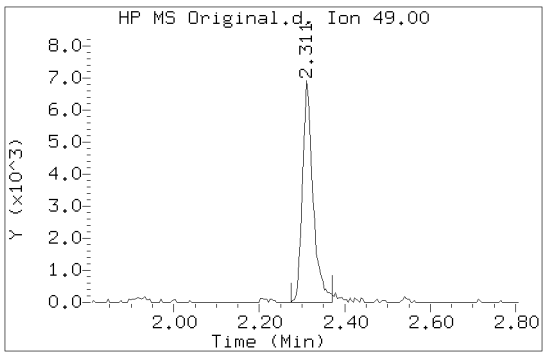
AFTER

MASS
86
AREA
7666
HEIGHT
4512
15-Jul-2022
14:25
linh
pham



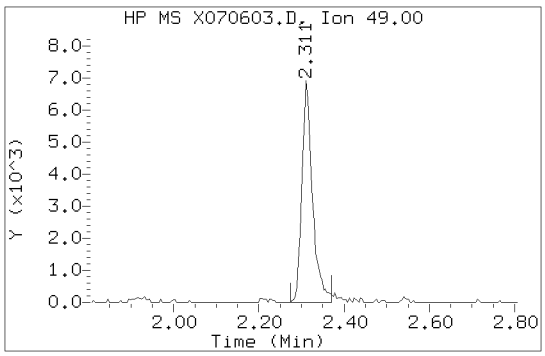
BEFORE

MASS
49
AREA
12193
HEIGHT
6914
15-Jul-2022
14:25
linh
pham



AFTER

MASS
49
AREA
12193
HEIGHT
6914
15-Jul-2022
14:25
linh
pham

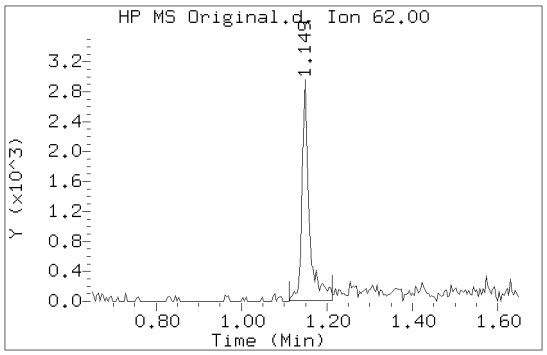


Vinyl Chloride (75-01-4)

Reason Code:

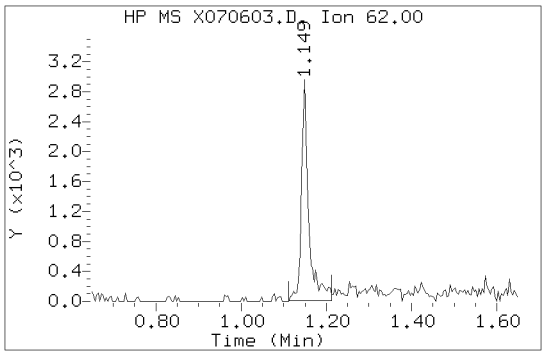
BEFORE

MASS
62
AREA
3631
HEIGHT
2951
15-Jul-2022
14:25
linh
pham



AFTER

MASS
62
AREA
3631
HEIGHT
2951
15-Jul-2022
14:25
linh
pham

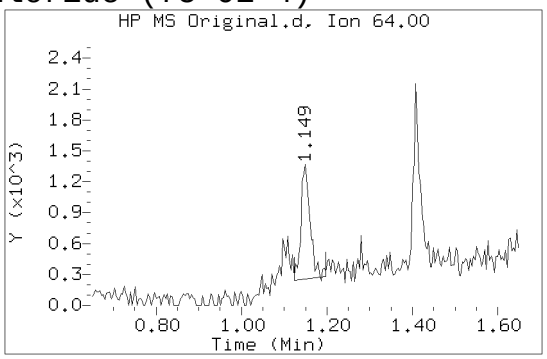


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Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Vinyl Chloride (75-01-4)

BEFORE

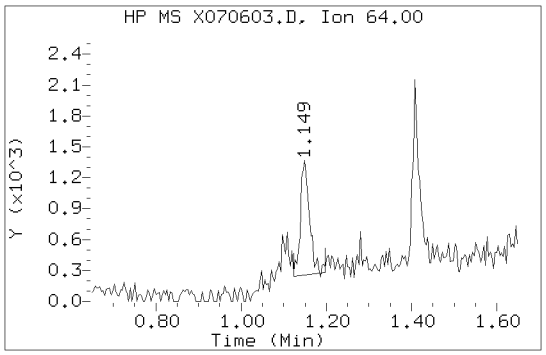
MASS
64
AREA
1708
HEIGHT
1116
15-Jul-2022
14:25
linh
pham



Reason Code:

AFTER

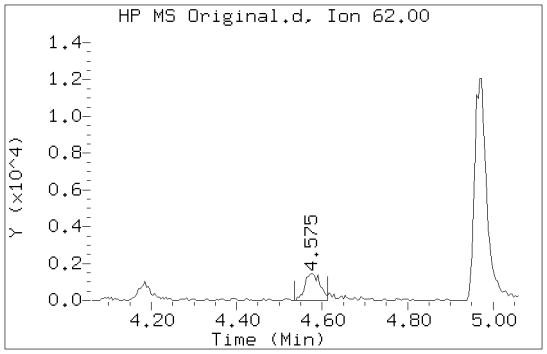
MASS
64
AREA
1708
HEIGHT
1116
15-Jul-2022
14:25
linh
pham



1,2-Dichloroethane (107-06-2)

BEFORE

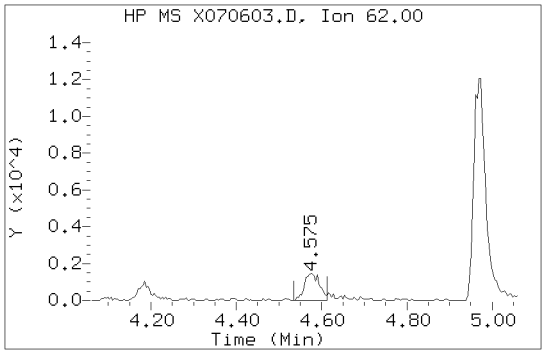
MASS
62
AREA
3621
HEIGHT
1448
15-Jul-2022
14:25
linh
pham



Reason Code:

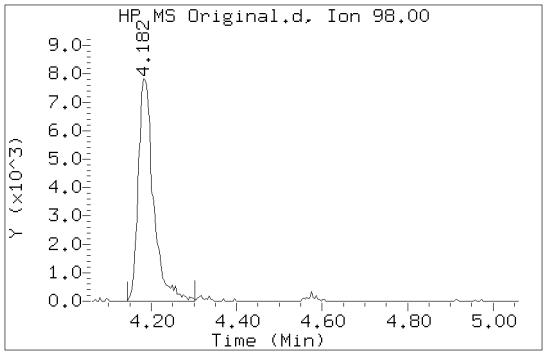
AFTER

MASS
62
AREA
3621
HEIGHT
1448
15-Jul-2022
14:25
linh
pham



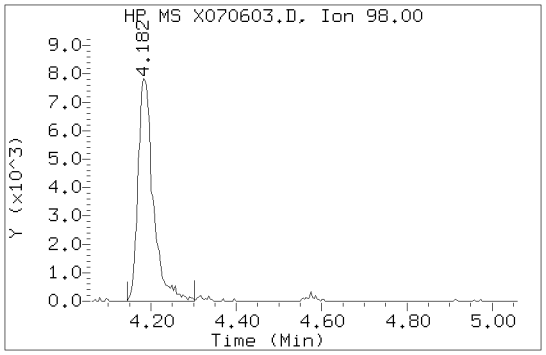
BEFORE

MASS
98
AREA
19367
HEIGHT
7823
15-Jul-2022
14:25
linh
pham



AFTER

MASS
98
AREA
19367
HEIGHT
7823
15-Jul-2022
14:25
linh
pham

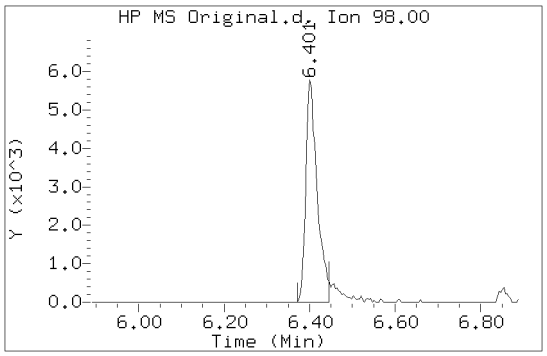


Toluene-d8 (2037-26-5)

Reason Code:

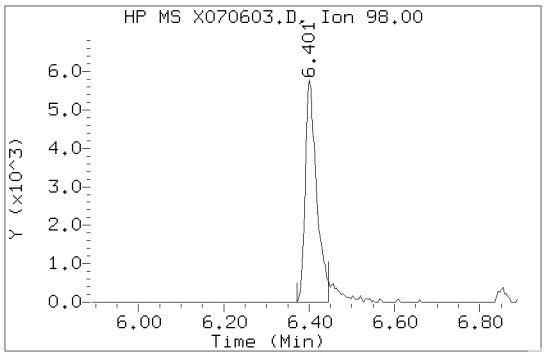
BEFORE

MASS
98
AREA
10841
HEIGHT
5782
15-Jul-2022
14:25
linh
pham



AFTER

MASS
98
AREA
10841
HEIGHT
5782
15-Jul-2022
14:25
linh
pham



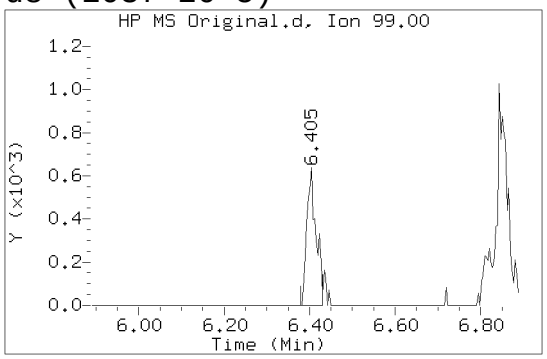
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

Toluene-d8 (2037-26-5)

Reason Code:

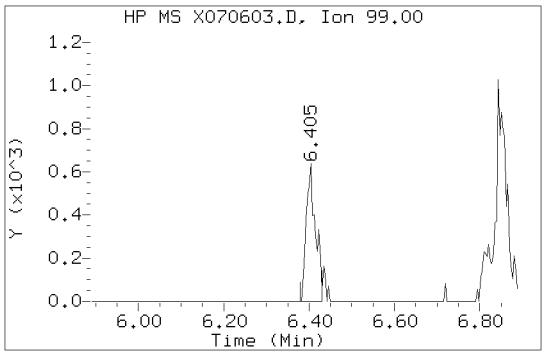
BEFORE

MASS
99
AREA
971
HEIGHT
639
15-Jul-2022
14:25
linh
pham



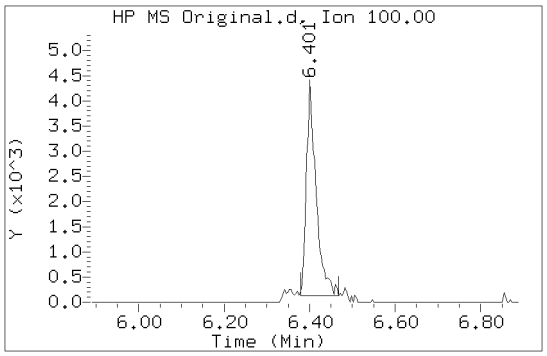
AFTER

MASS
99
AREA
971
HEIGHT
639
15-Jul-2022
14:25
linh
pham



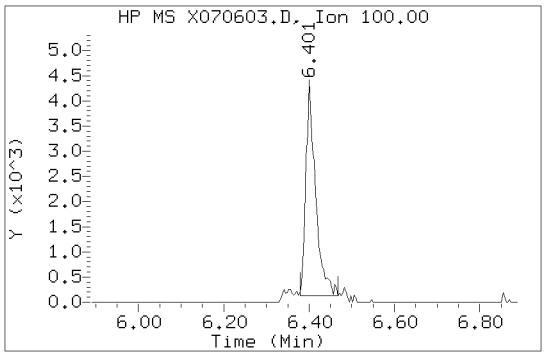
BEFORE

MASS
100
AREA
6864
HEIGHT
4294
15-Jul-2022
14:25
linh
pham



AFTER

MASS
100
AREA
6864
HEIGHT
4294
15-Jul-2022
14:25
linh
pham

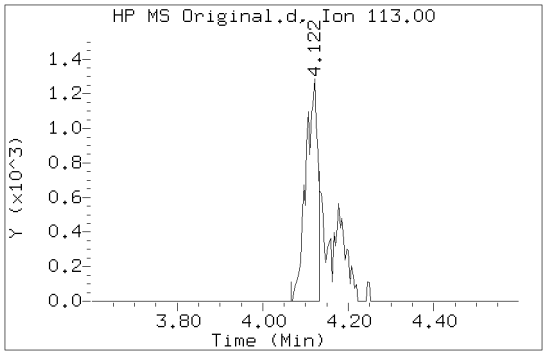


Dibromofluoromethane (1868-53-7)

Reason Code:

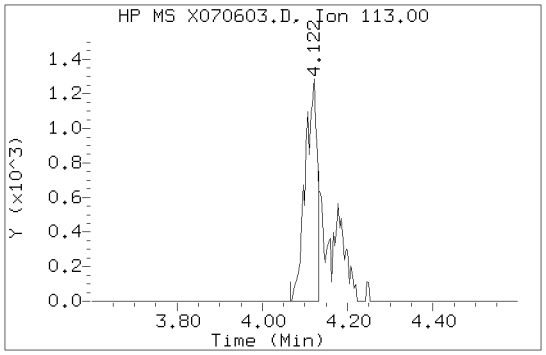
BEFORE

MASS
113
AREA
2530
HEIGHT
1286
15-Jul-2022
14:25
linh
pham



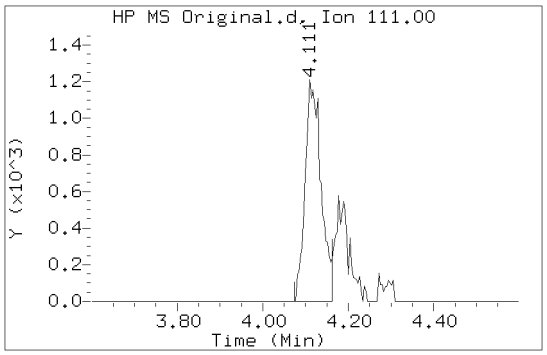
AFTER

MASS
113
AREA
2530
HEIGHT
1286
15-Jul-2022
14:25
linh
pham



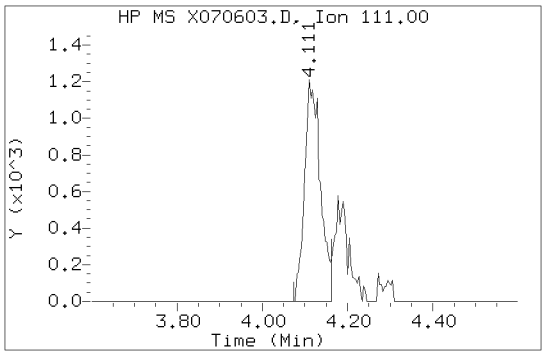
BEFORE

MASS
111
AREA
3177
HEIGHT
1211
15-Jul-2022
14:25
linh
pham



AFTER

MASS
111
AREA
3177
HEIGHT
1211
15-Jul-2022
14:25
linh
pham



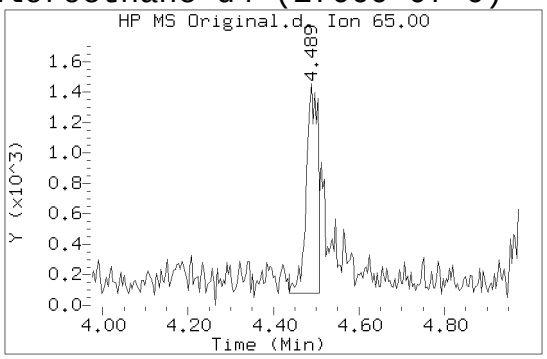
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

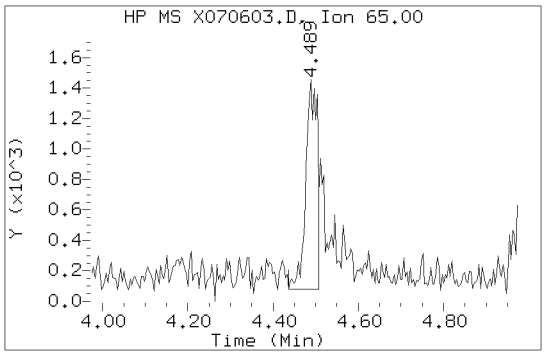
BEFORE

MASS
65
AREA
2572
HEIGHT
1375
15-Jul-2022
14:25
linh
pham



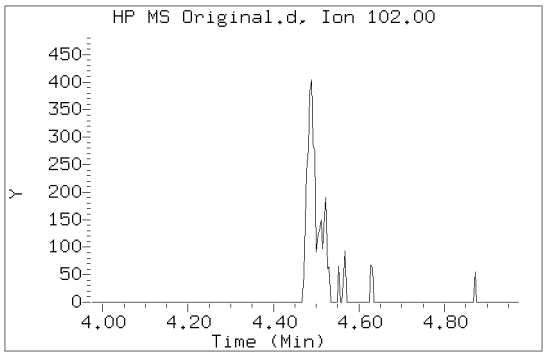
AFTER

MASS
65
AREA
2572
HEIGHT
1375
15-Jul-2022
14:25
linh
pham



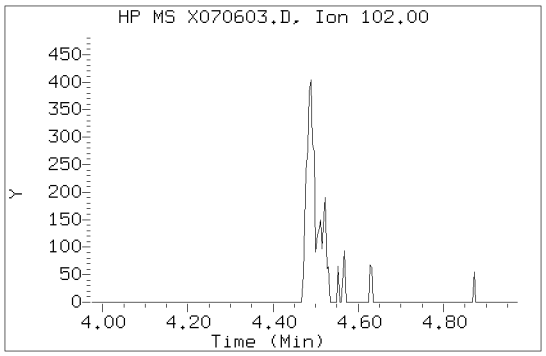
BEFORE

MASS
102
AREA
0
HEIGHT
0
15-Jul-2022
14:25
linh
pham



AFTER

MASS
102
AREA
0
HEIGHT
0
15-Jul-2022
14:25
linh
pham

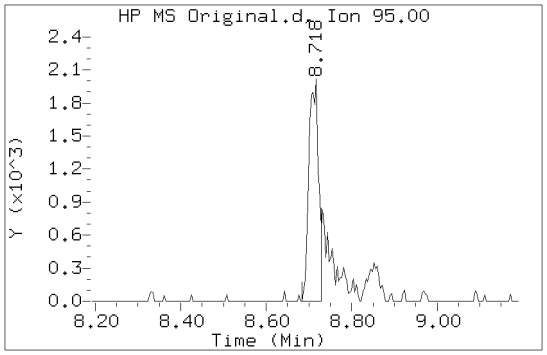


4-Bromofluorobenzene (460-00-4)

Reason Code:

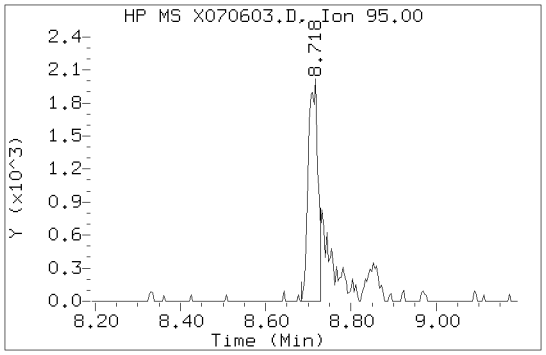
BEFORE

MASS
95
AREA
3152
HEIGHT
2018
15-Jul-2022
14:25
linh
pham



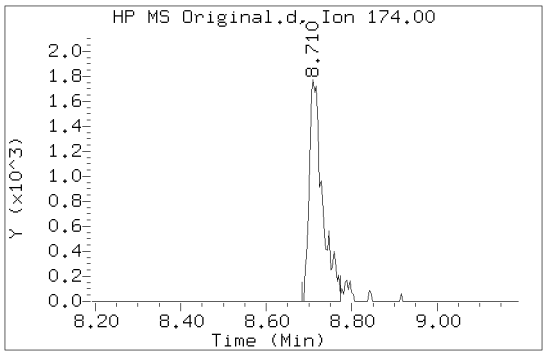
AFTER

MASS
95
AREA
3152
HEIGHT
2018
15-Jul-2022
14:25
linh
pham



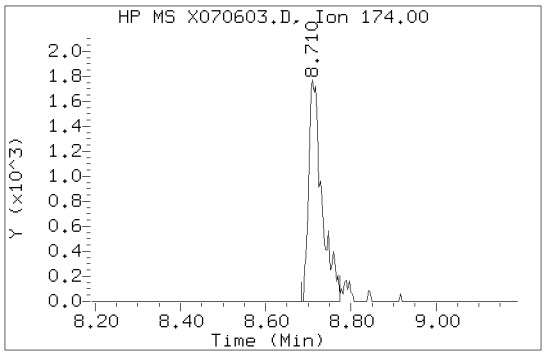
BEFORE

MASS
174
AREA
3817
HEIGHT
1773
15-Jul-2022
14:25
linh
pham



AFTER

MASS
174
AREA
3817
HEIGHT
1773
15-Jul-2022
14:25
linh
pham



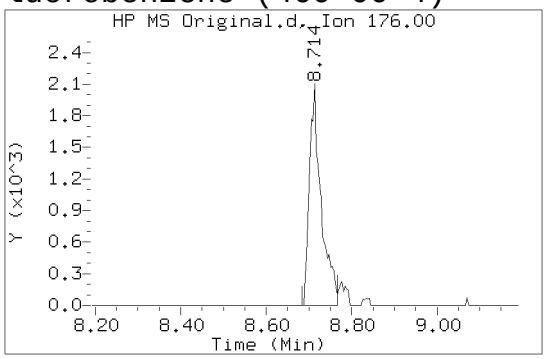
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070603.D
Inj Date : 06-JUL-2022 12:02
InstruID : voa6.i
LabSampID : VSTD000.5

4-Bromofluorobenzene (460-00-4)

Reason Code:

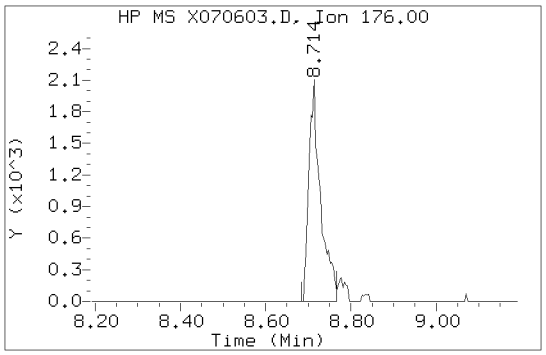
BEFORE

MASS
176
AREA
3989
HEIGHT
2104
15-Jul-2022
14:25
linh
pham



AFTER

MASS
176
AREA
3989
HEIGHT
2104
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Lab Smp Id: VSTD001 Client Smp ID: VSTD001
Inj Date : 06-JUL-2022 12:23
Operator : PC Inst ID: voa6.i
Smp Info : VSTD001;VSTD001;1;3;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:02 Cal File: X070603.D
Als bottle: 5 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

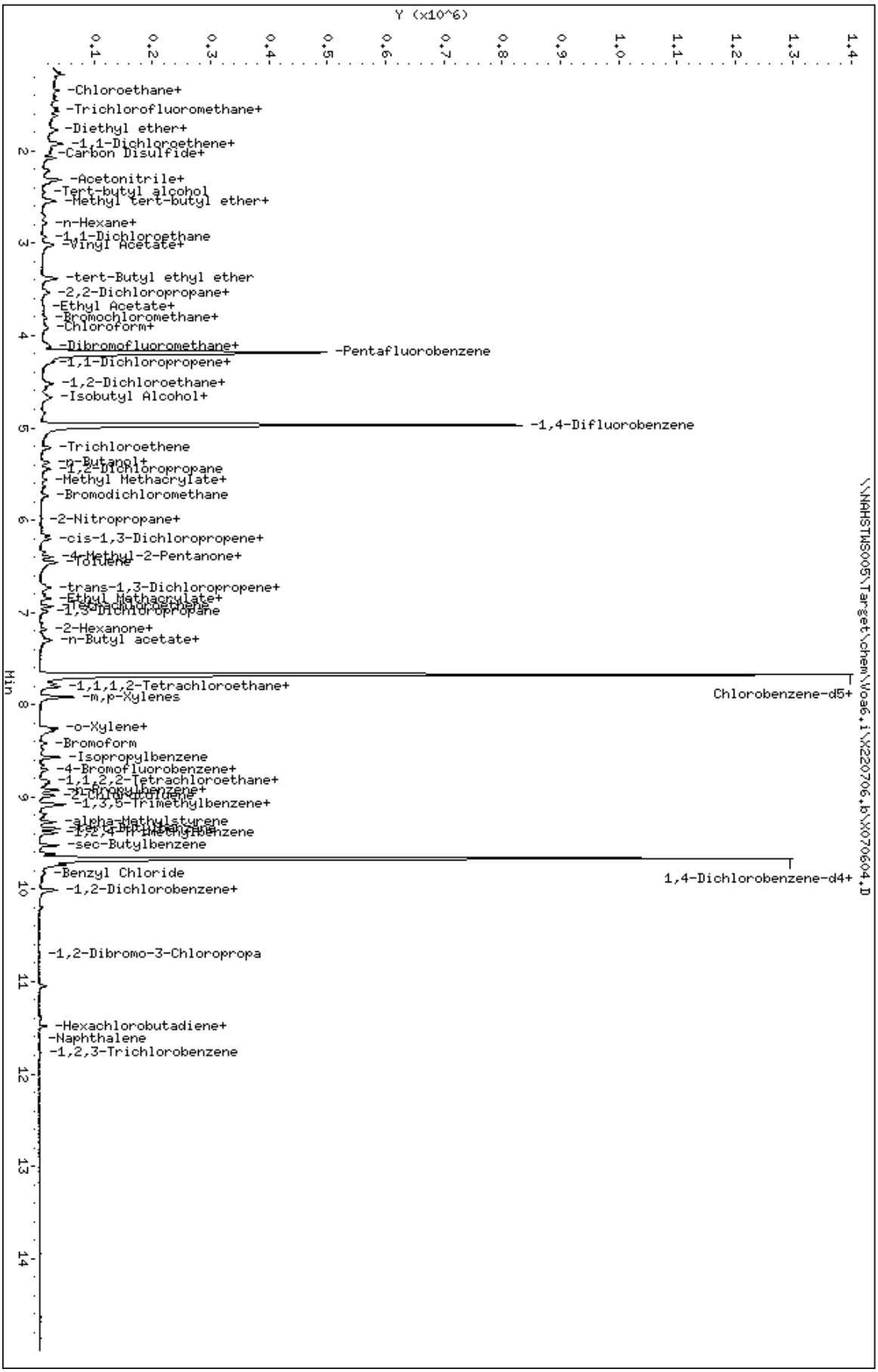
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	451641	50.0000	
* 36 1,4-Difluorobenzene	114	4.972	4.972	(1.000)	737303	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	732248	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	331230	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.489	4.489	(1.073)	3656	1.00000	(a)
$ 69 4-Bromofluorobenzene	95	8.706	8.706	(1.135)	5552	1.00000	0.56(a)
$ 30 Dibromofluoromethane	113	4.114	4.114	(0.983)	3275	1.00000	0.50
$ 48 Toluene-d8	98	6.401	6.401	(0.834)	14404	1.00000	0.79(a)
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	4250	1.00000	1.02(a)
11 1,1-Dichloroethene	96	1.925	1.925	(0.460)	4348	1.00000	1.00(a)
33 1,2-Dichloroethane	62	4.579	4.579	(0.921)	6040	1.00000	0.98(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	5136	1.00000	0.98(a)
17 Methylene Chloride	84	2.315	2.315	(0.553)	6773	1.00000	1.89(aM)
38 Trichloroethene	130	5.216	5.216	(1.049)	5575	1.00000	1.00(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	6122	1.00000	1.05(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Date : 06-JUL-2022 12:23
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;3;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

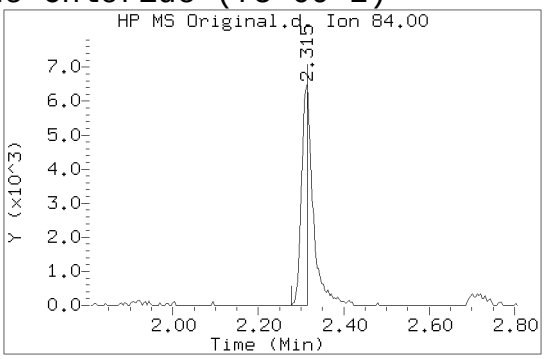
Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070604.D
Inj Date : 06-JUL-2022 12:23
InstruID : voa6.i
LabSampID : VSTD001

Methylene Chloride (75-09-2)

Reason Code:

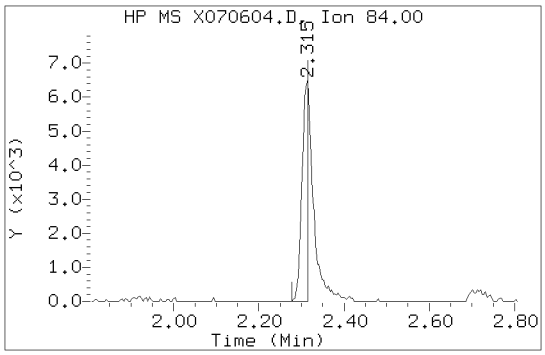
BEFORE

MASS
84
AREA
6773
HEIGHT
6513
15-Jul-2022
14:25
linh
pham



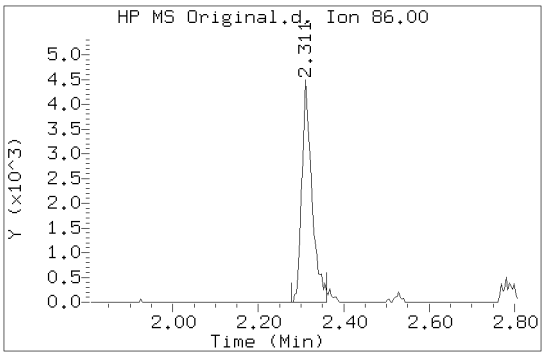
AFTER

MASS
84
AREA
6773
HEIGHT
6513
15-Jul-2022
14:25
linh
pham



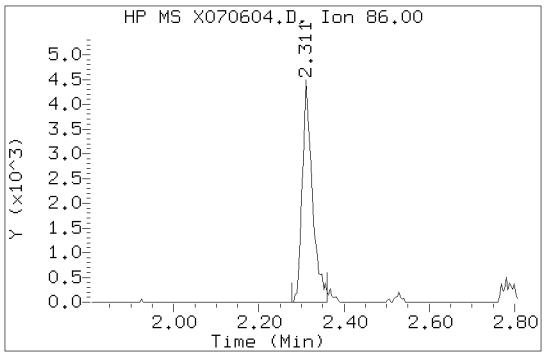
BEFORE

MASS
86
AREA
7530
HEIGHT
4492
15-Jul-2022
14:25
linh
pham



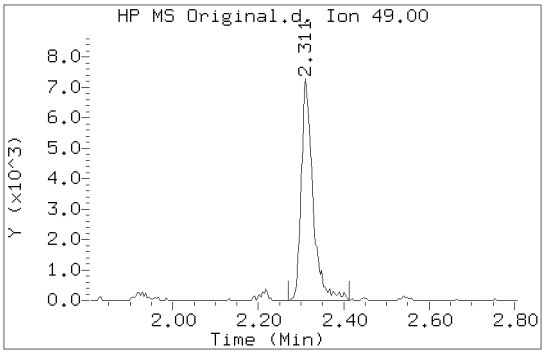
AFTER

MASS
86
AREA
7530
HEIGHT
4492
15-Jul-2022
14:25
linh
pham



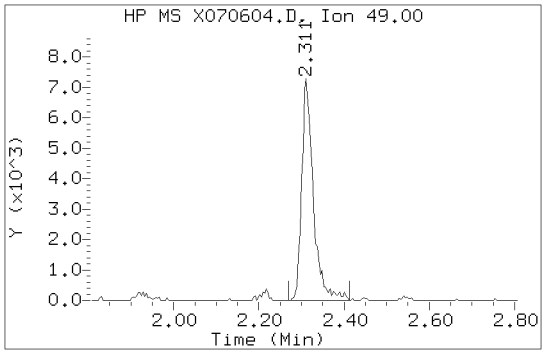
BEFORE

MASS
49
AREA
14080
HEIGHT
7288
15-Jul-2022
14:25
linh
pham



AFTER

MASS
49
AREA
14080
HEIGHT
7288
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Lab Smp Id: VSTD002 Client Smp ID: VSTD002
Inj Date : 06-JUL-2022 12:44
Operator : PC Inst ID: voa6.i
Smp Info : VSTD002;VSTD002;1;4;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:23 Cal File: X070604.D
Als bottle: 6 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

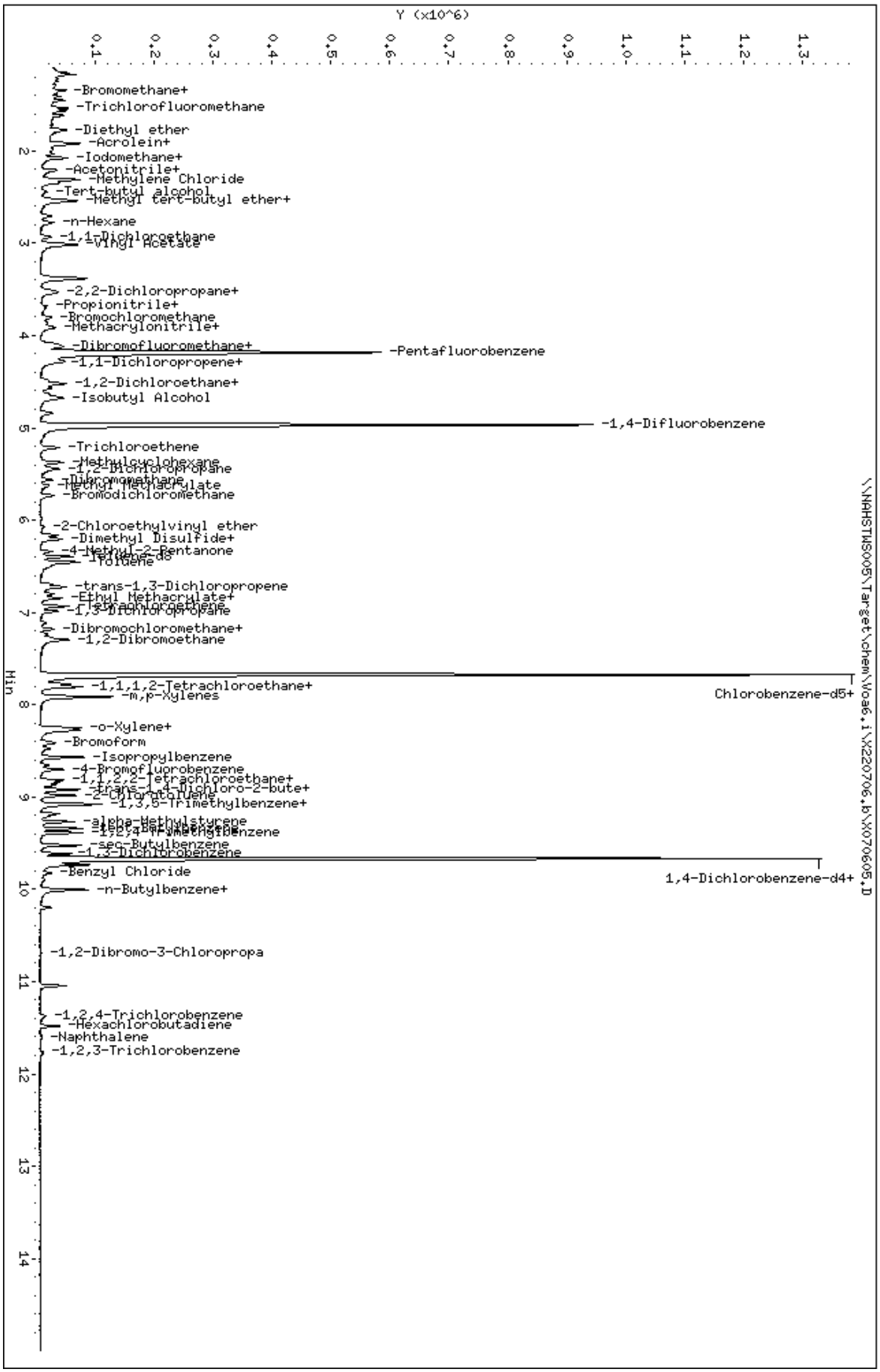
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	530225	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	824307	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	729884	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	337544	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.072)	11348	2.00000	1.17(a)
$ 69 4-Bromofluorobenzene	95	8.702	8.702	(1.134)	12993	2.00000	1.74(a)
$ 30 Dibromofluoromethane	113	4.117	4.117	(0.984)	9962	2.00000	1.75
$ 48 Toluene-d8	98	6.397	6.397	(0.834)	36249	2.00000	1.99(a)
53 1,1,2-Trichloroethane	83	6.846	6.846	(0.892)	7944	2.00000	1.91(a)
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	9767	2.00000	1.92(a)
33 1,2-Dichloroethane	62	4.567	4.567	(0.919)	13742	2.00000	2.01(a)
27 cis-1,2-Dichloroethene	96	3.540	3.540	(0.846)	12209	2.00000	1.98(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	19043	2.00000	3.67(a)
38 Trichloroethene	130	5.212	5.212	(1.049)	12321	2.00000	1.99(a)
5 Vinyl Chloride	62	1.148	1.148	(0.275)	12825	2.00000	1.89(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220706.b\X070605.D
Date : 06-JUL-2022 12:44
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;4;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070605.D
Inj Date : 06-JUL-2022 12:44
InstruID : voa6.i
LabSampID : VSTD002

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Lab Smp Id: VSTD005 Client Smp ID: VSTD005
Inj Date : 06-JUL-2022 13:05
Operator : PC Inst ID: voa6.i
Smp Info : VSTD005;VSTD005;1;5;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 12:44 Cal File: X070605.D
Als bottle: 7 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

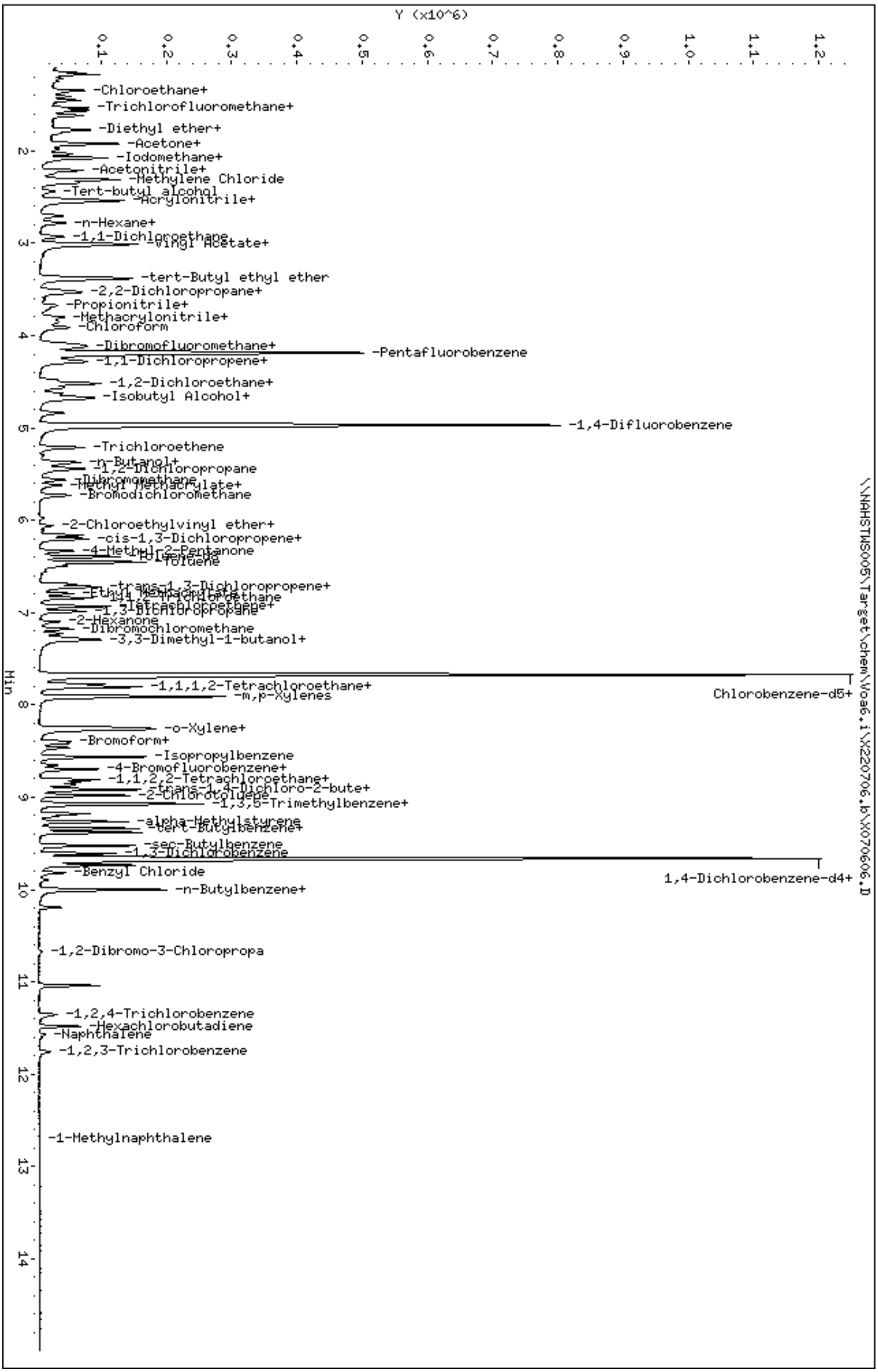
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	457328	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	703889	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	639975	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	300852	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.485	4.485	(1.072)	21986	5.00000	4.08(a)
$ 69 4-Bromofluorobenzene	95	8.695	8.695	(1.133)	28163	5.00000	4.78(a)
$ 30 Dibromofluoromethane	113	4.106	4.106	(0.981)	21128	5.00000	4.74
$ 48 Toluene-d8	98	6.393	6.393	(0.833)	80917	5.00000	5.09
53 1,1,2-Trichloroethane	83	6.847	6.847	(0.893)	18365	5.00000	5.04
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	21062	5.00000	4.81(a)
33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	28033	5.00000	4.80(a)
27 cis-1,2-Dichloroethene	96	3.537	3.537	(0.845)	26162	5.00000	4.94(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	28961	5.00000	6.00(M)
38 Trichloroethene	130	5.212	5.212	(1.049)	25120	5.00000	4.76(a)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	26767	5.00000	4.57(a)

QC Flag Legend

a - Target compound detected but, quantitated amount

Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220706.b\X070606.D
Date : 06-JUL-2022 13:05
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;5;;
Purge Volume: 5.0
Column phase: DB624

\\NAHSTWS005\Target\chem\Woa6.i\X220706.b\X070606.D

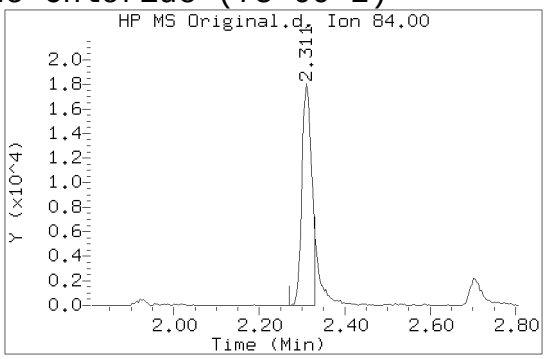
Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070606.D
Inj Date : 06-JUL-2022 13:05
InstruID : voa6.i
LabSampID : VSTD005

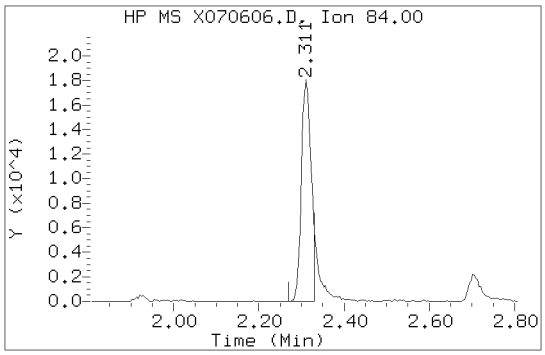
Methylene Chloride (75-09-2)

Reason Code:

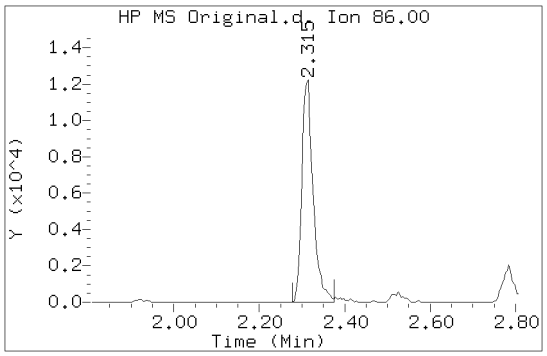
BEFORE
MASS
84
AREA
28961
HEIGHT
18056
15-Jul-2022
14:25
linh
pham



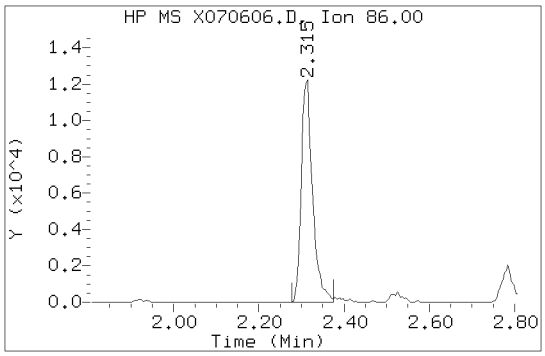
AFTER
MASS
84
AREA
28961
HEIGHT
18056
15-Jul-2022
14:25
linh
pham



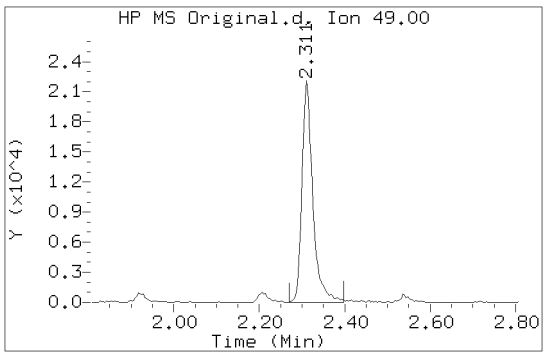
BEFORE
MASS
86
AREA
22788
HEIGHT
12232
15-Jul-2022
14:25
linh
pham



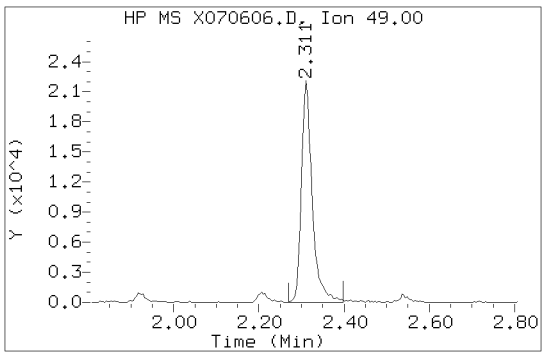
AFTER
MASS
86
AREA
22788
HEIGHT
12232
15-Jul-2022
14:25
linh
pham



BEFORE
MASS
49
AREA
39454
HEIGHT
22104
15-Jul-2022
14:25
linh
pham



AFTER
MASS
49
AREA
39454
HEIGHT
22104
15-Jul-2022
14:25
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D Page 1
Report Date: 15-Jul-2022 14:25

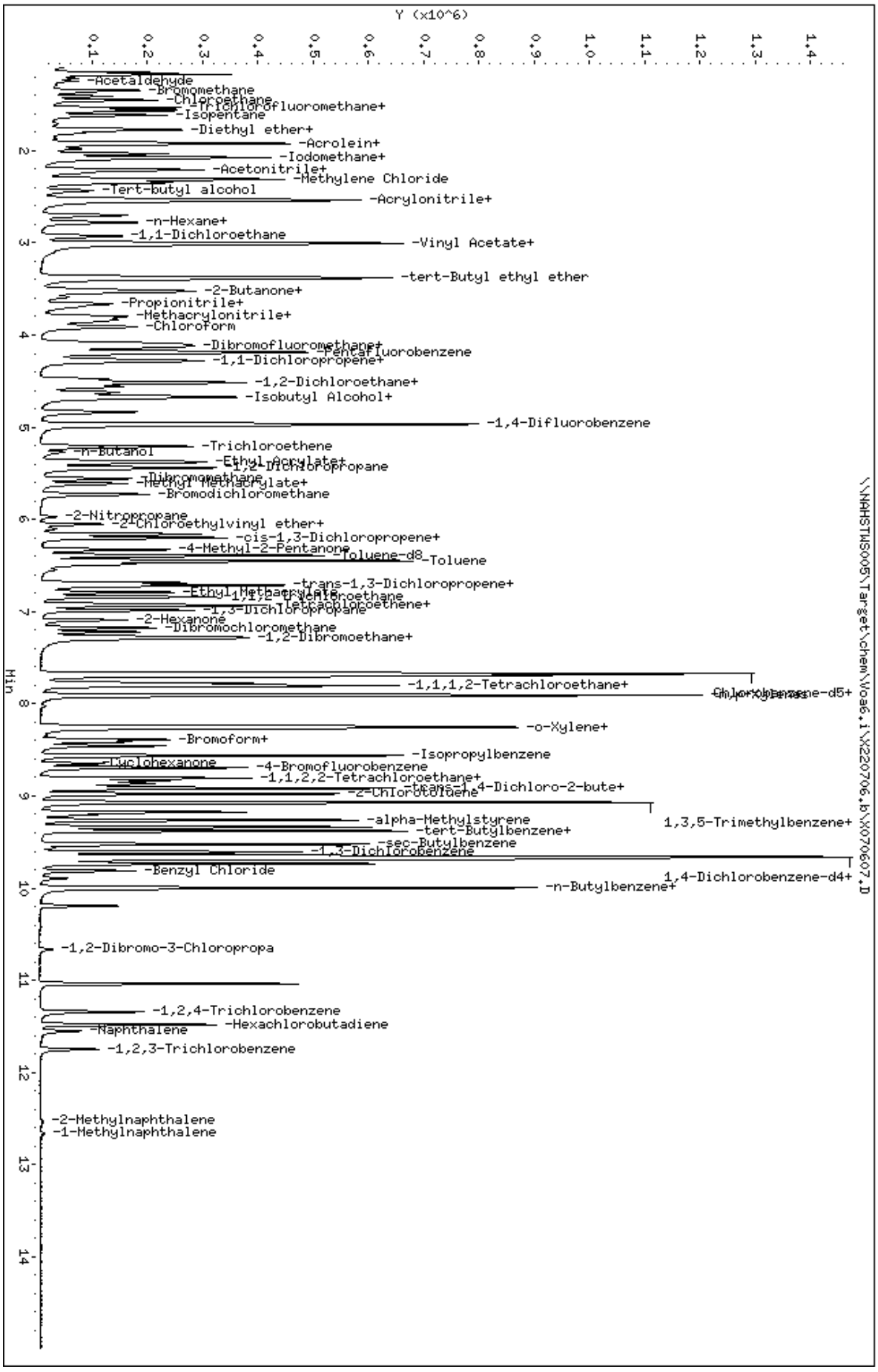
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D
Lab Smp Id: VSTD020 Client Smp ID: VSTD020
Inj Date : 06-JUL-2022 13:26
Operator : PC Inst ID: voa6.i
Smp Info : VSTD020;VSTD020;1;6;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:05 Cal File: X070606.D
Als bottle: 8 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	441521	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	687694	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	629838	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	301150	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	88656	20.0000	20.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	113041	20.0000	20.46
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	85780	20.0000	20.89
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	318449	20.0000	20.36
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	73006	20.0000	20.38
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	85358	20.0000	20.20
33 1,2-Dichloroethane	62	4.564	4.564	(0.919)	113537	20.0000	19.92
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	102517	20.0000	20.06
17 Methylene Chloride	84	2.307	2.307	(0.551)	104226	20.0000	20.68
38 Trichloroethene	130	5.208	5.208	(1.048)	101157	20.0000	19.64
5 Vinyl Chloride	62	1.149	1.149	(0.275)	115487	20.0000	20.45



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\X070607.D
Date : 06-JUL-2022 13:26
Client ID: VSTD020
Sample Info: VSTD020;VSTD020;1;6;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070607.D
Inj Date : 06-JUL-2022 13:26
InstruID : voa6.i
LabSampID : VSTD020

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D Page 1
Report Date: 15-Jul-2022 14:25

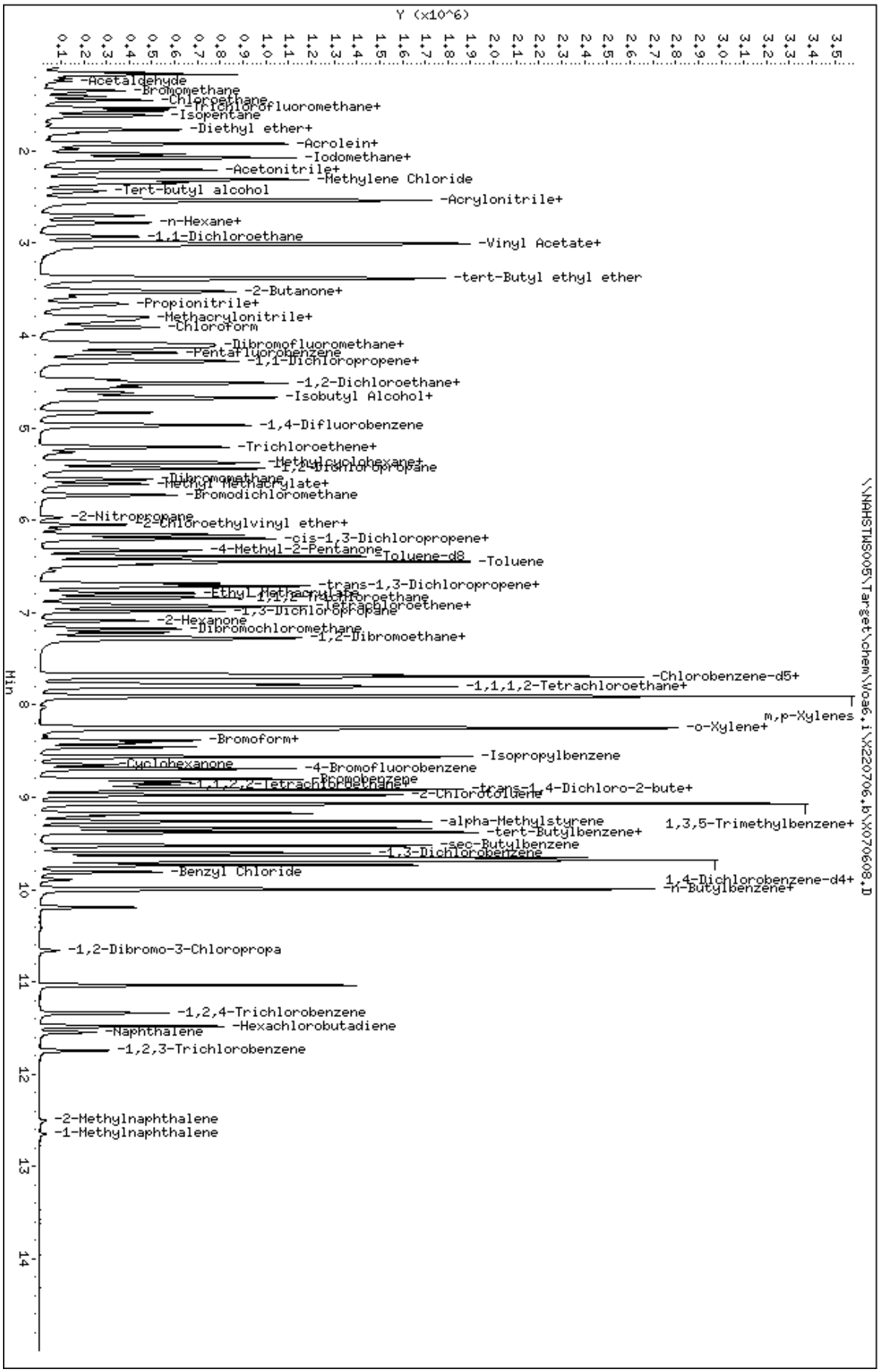
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D
Lab Smp Id: VSTD050 Client Smp ID: VSTD050
Inj Date : 06-JUL-2022 13:47
Operator : PC Inst ID: voa6.i
Smp Info : VSTD050;VSTD050;1;7;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:26 Cal File: X070607.D
Als bottle: 9 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	AMOUNTS ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	524720	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	789735	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	716144	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	343654	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	251549	50.0000	51.21
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	310560	50.0000	49.90
$ 30 Dibromofluoromethane	113	4.103	4.103	(0.980)	241477	50.0000	49.89
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	874288	50.0000	49.16
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	201769	50.0000	49.55
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	216608	50.0000	43.15
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	327436	50.0000	50.03
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	291155	50.0000	47.94
17 Methylene Chloride	84	2.311	2.311	(0.552)	278913	50.0000	45.78
38 Trichloroethene	130	5.209	5.209	(1.048)	288879	50.0000	48.84
5 Vinyl Chloride	62	1.149	1.149	(0.275)	300120	50.0000	44.71



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\X070608.D
Date : 06-JUL-2022 13:47
Client ID: VSTD050
Sample Info: VSTD050;VSTD050;1;7;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070608.D
Inj Date : 06-JUL-2022 13:47
InstruID : voa6.i
LabSampID : VSTD050

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Lab Smp Id: VSTD100 Client Smp ID: VSTD100
Inj Date : 06-JUL-2022 14:08
Operator : PC Inst ID: voa6.i
Smp Info : VSTD100;VSTD100;1;8;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 10 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

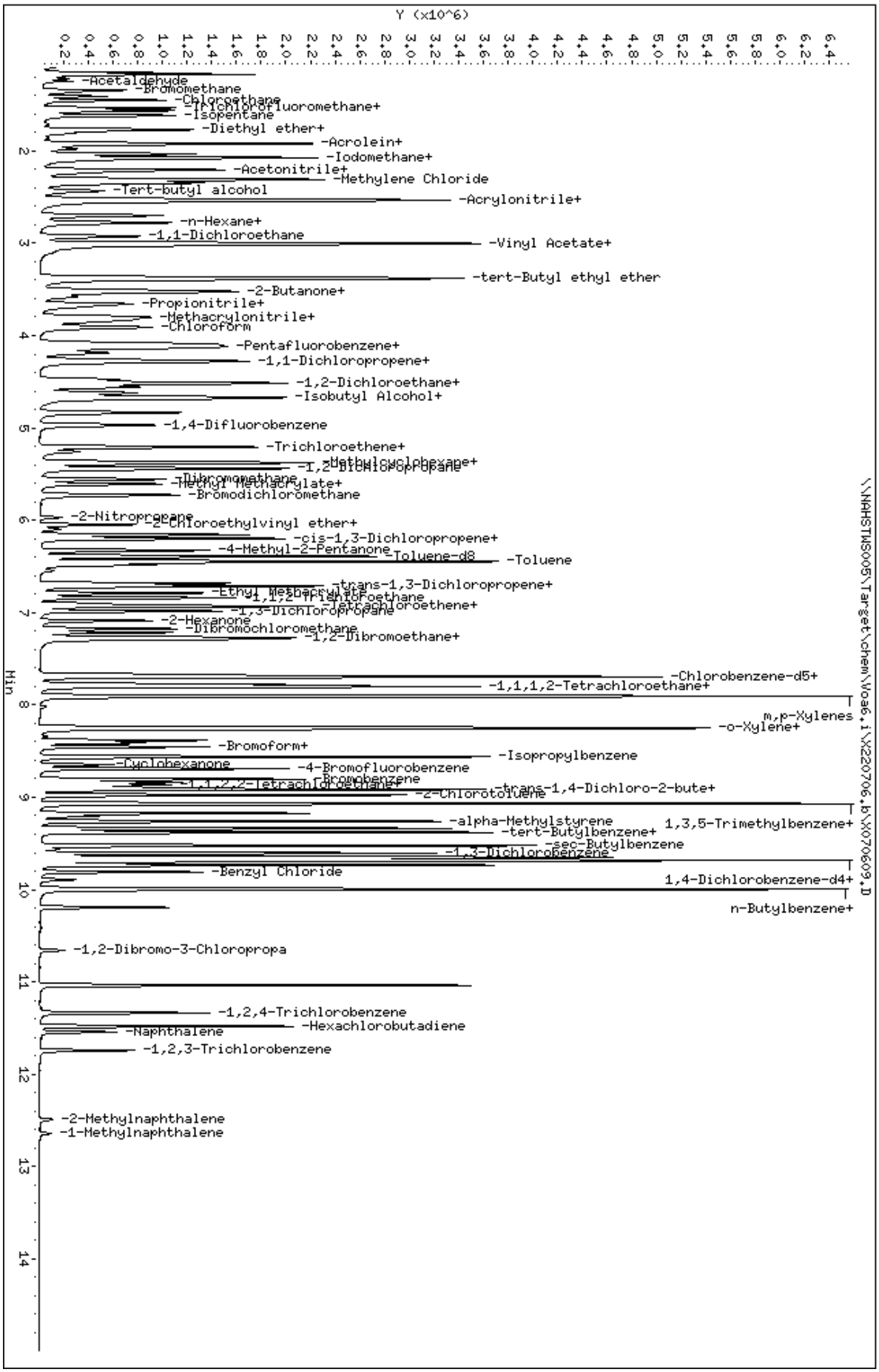
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	458566	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.969	(1.000)	803838	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	633328	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	360755	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	454111	100.000	107.03
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	562316	100.000	102.50
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	434904	100.000	103.13
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1644104	100.000	104.54(A)
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	365458	100.000	101.49
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	435039	100.000	99.16
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	620979	100.000	93.22
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	539682	100.000	101.68
17 Methylene Chloride	84	2.307	2.307	(0.551)	510517	100.000	95.20
38 Trichloroethene	130	5.208	5.208	(1.048)	610532	100.000	101.42
5 Vinyl Chloride	62	1.149	1.149	(0.275)	609836	100.000	103.97

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Date : 06-JUL-2022 14:08
Client ID: VSTD100
Sample Info: VSTD100;VSTD100;1;8;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070609.D
Inj Date : 06-JUL-2022 14:08
InstruID : voa6.i
LabSampID : VSTD100

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Lab Smp Id: VSTD150 Client Smp ID: VSTD150
Inj Date : 06-JUL-2022 14:28
Operator : PC Inst ID: voa6.i
Smp Info : VSTD150;VSTD150;1;9;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:08 Cal File: X070609.D
Als bottle: 11 Calibration Sample, Level: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

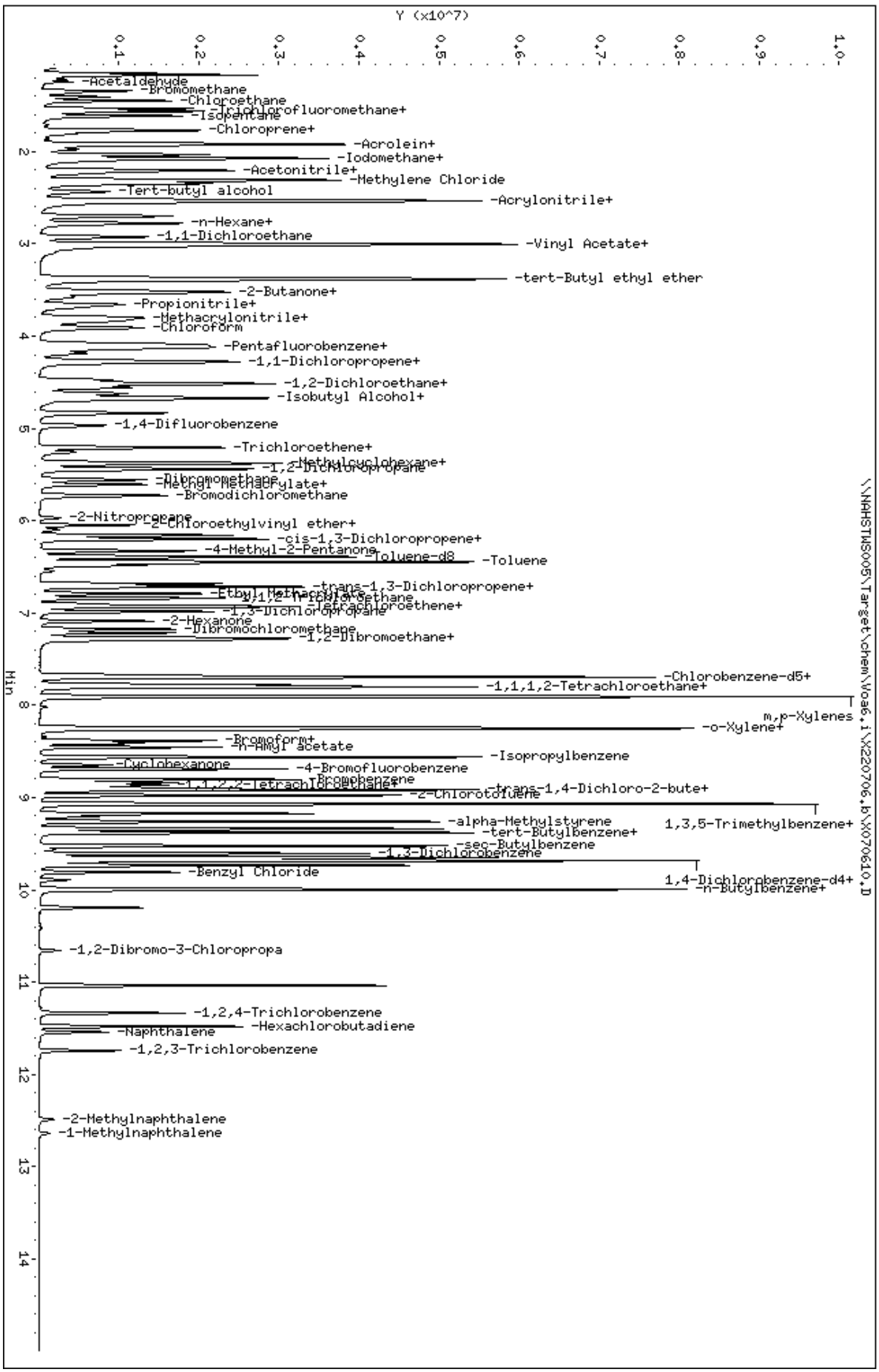
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	467218	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	708435	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	652387	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	312809	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	634876	150.000	147.30
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	839072	150.000	148.62
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	627970	150.000	146.28
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	2370733	150.000	146.33(A)
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	540430	150.000	145.70
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	730731	150.000	163.48
33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	874133	150.000	148.89
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	801041	150.000	148.13
17 Methylene Chloride	84	2.307	2.307	(0.551)	843638	150.000	154.02
38 Trichloroethene	130	5.208	5.208	(1.048)	796666	150.000	150.16
5 Vinyl Chloride	62	1.149	1.149	(0.275)	971073	150.000	162.49

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Date : 06-JUL-2022 14:28
Client ID: VSTD150
Sample Info: VSTD150;VSTD150;1;9;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070610.D
Inj Date : 06-JUL-2022 14:28
InstruID : voa6.i
LabSampID : VSTD150

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D Page 1
Report Date: 15-Jul-2022 14:25

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Lab Smp Id: VSTD200 Client Smp ID: VSTD200
Inj Date : 06-JUL-2022 14:49
Operator : PC Inst ID: voa6.i
Smp Info : VSTD200;VSTD200;1;10;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:28 Cal File: X070610.D
Als bottle: 12 Calibration Sample, Level: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

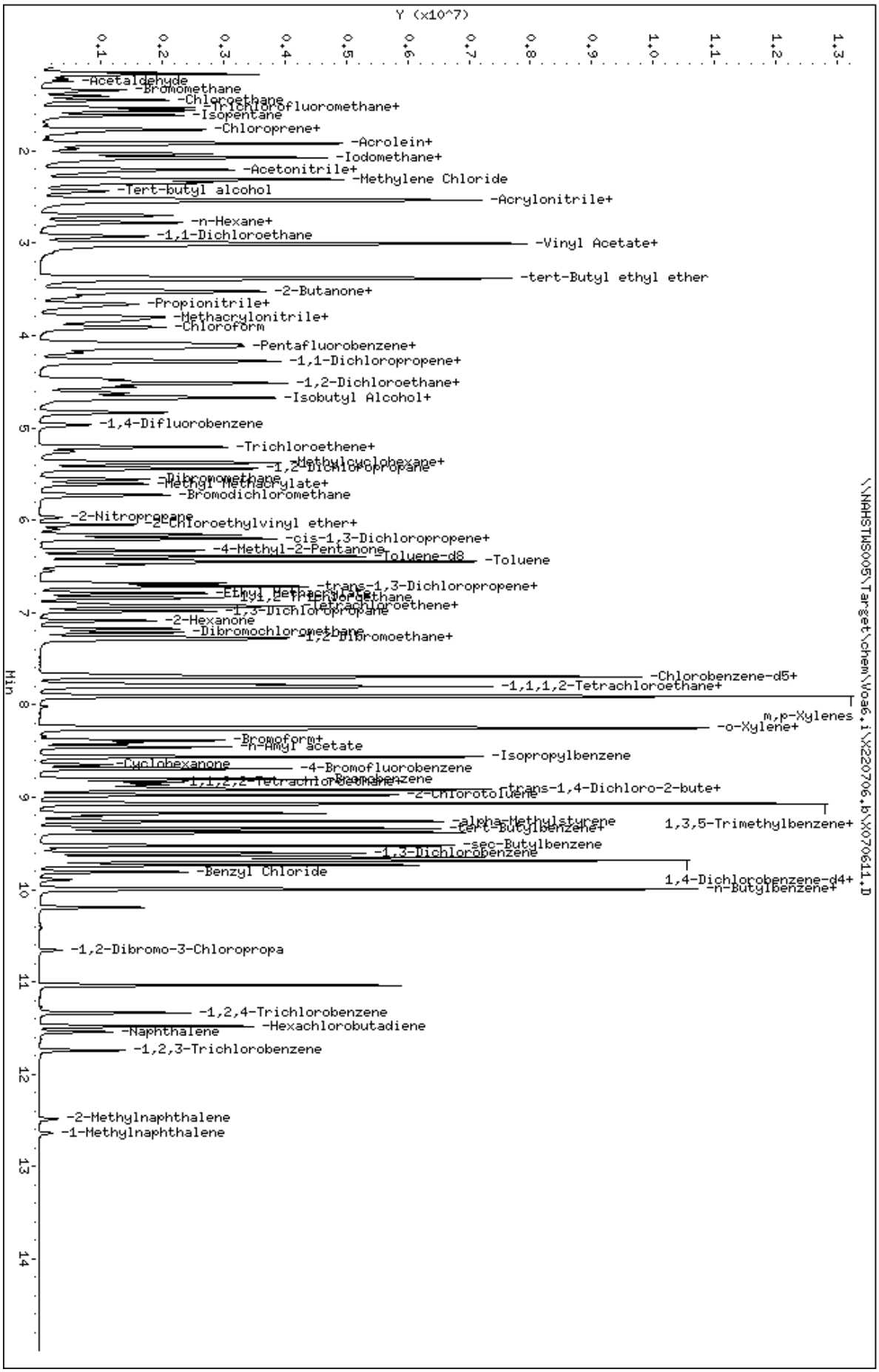
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/l)	ON-COL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	529767	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	697056	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	640107	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	304695	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	964795	200.000	197.82
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	1105705	200.000	199.72
$ 30 Dibromofluoromethane	113	4.099	4.099	(0.979)	978031	200.000	201.03(A)
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	3093155	200.000	194.59(A)
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	714668	200.000	196.38
11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	957171	200.000	188.86
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	1185784	200.000	205.28(A)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1199454	200.000	195.61
17 Methylene Chloride	84	2.307	2.307	(0.551)	1096995	200.000	176.54
38 Trichloroethene	130	5.208	5.208	(1.048)	1047757	200.000	200.72(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	1276551	200.000	188.39

QC Flag Legend

A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220706.b\X070611.D
Date : 06-JUL-2022 14:49
Client ID: VSTD200
Sample Info: VSTD200;VSTD200;1;10;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070611.D
Inj Date : 06-JUL-2022 14:49
InstruID : voa6.i
LabSampID : VSTD200

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D Page 1
Report Date: 15-Jul-2022 14:25

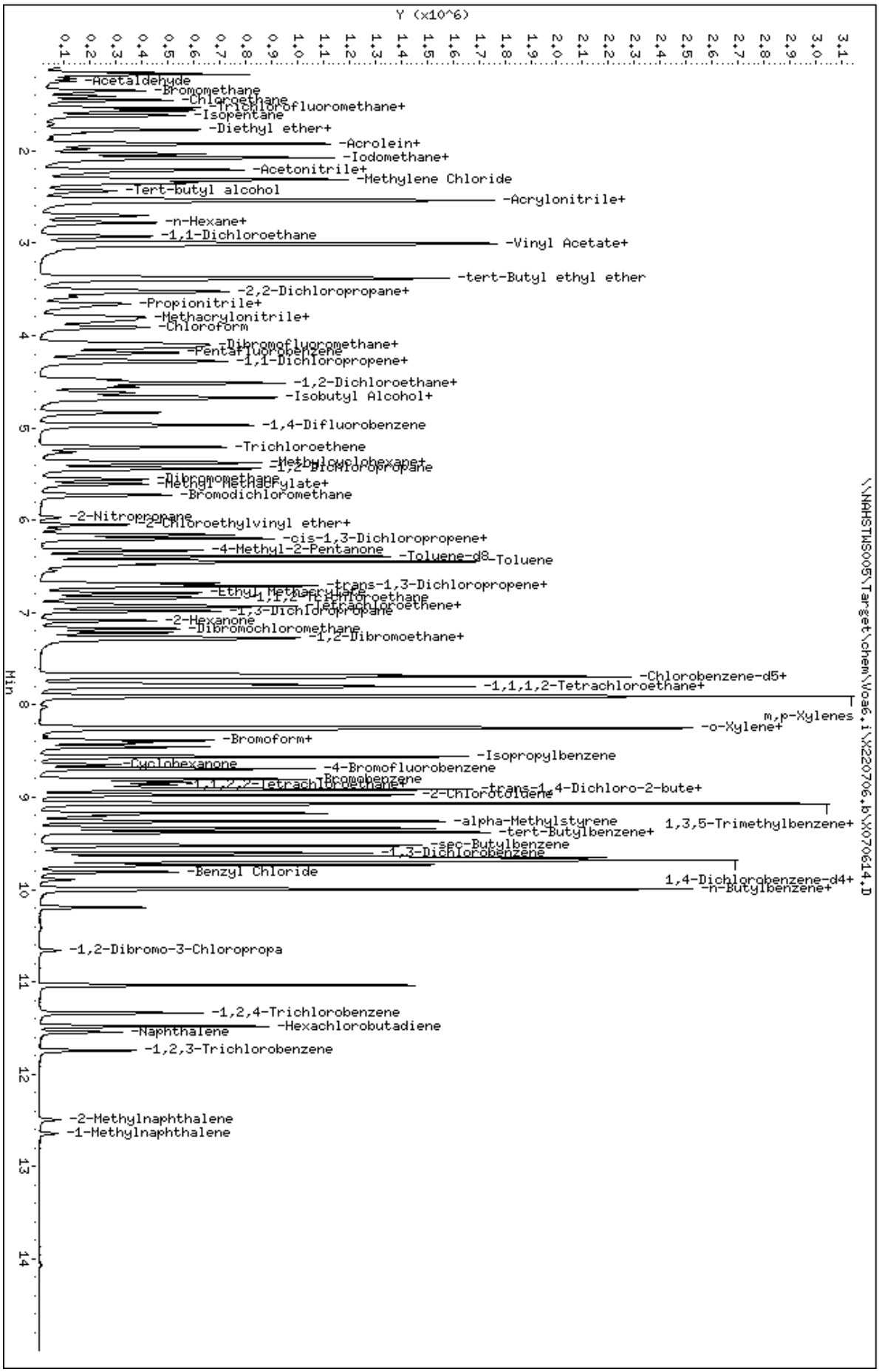
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 06-JUL-2022 15:52
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;ICV
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\8260W.m
Meth Date : 15-Jul-2022 14:25 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 14:49 Cal File: X070611.D
Als bottle: 15 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	472913	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	715416	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	649761	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.665	(1.000)	314721	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	219042	49.4414	49.44
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	296009	52.4412	52.44
$ 30 Dibromofluoromethane	113	4.103	4.099	(0.980)	215909	49.4980	49.49
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	831163	51.5130	51.51
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	176990	47.9123	47.91
11 1,1-Dichloroethene	96	1.921	1.917	(0.459)	220172	48.6658	48.66
33 1,2-Dichloroethane	62	4.556	4.560	(0.917)	274800	46.3519	46.35
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	254872	46.5638	46.56
17 Methylene Chloride	84	2.307	2.307	(0.551)	275295	50.0810	50.08
38 Trichloroethene	130	5.209	5.208	(1.048)	250171	46.6962	46.69
5 Vinyl Chloride	62	1.149	1.149	(0.275)	285397	47.1828	47.18



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Date : 06-JUL-2022 15:52
Client ID: ICV
Sample Info: CCV;CCV;2;;ICV
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220706.b\X070614.D
Inj Date : 06-JUL-2022 15:52
InstruID : voa6.i
LabSampID : ICV

NO MANUAL INTEGRATIONS

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right partner.

Raw Data VOA6 412540

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070801.D Page 1
Report Date: 09-Jul-2022 17:44

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070801.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 08-JUL-2022 10:28
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	CONCENTRATIONS FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.695	8.889	(0.000)	95	56176			0.00- 100.00	100.00
8.695	8.889	(0.000)	50	9070			15.00- 40.00	16.15
8.695	8.889	(0.000)	75	25408			30.00- 60.00	45.23
8.695	8.889	(0.000)	96	3679			5.00- 9.00	6.55
8.695	8.889	(0.000)	173	422			0.00- 2.00	0.84
8.695	8.889	(0.000)	174	50456			50.00- 0.00	89.82
8.695	8.889	(0.000)	175	3673			5.00- 9.00	7.28
8.695	8.889	(0.000)	176	49528			95.00- 101.00	98.16
8.695	8.889	(0.000)	177	3461			5.00- 9.00	6.99

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.15
75	30.00 - 60.00% of mass 95	45.23
96	5.00 - 9.00% of mass 95	6.55
173	Less than 2.00% of mass 174	0.75 (0.84)
174	Greater than 50.00% of mass 95	89.82
175	5.00 - 9.00% of mass 174	6.54 (7.28)
176	95.00 - 101.00% of mass 174	88.17 (98.16)
177	5.00 - 9.00% of mass 176	6.16 (6.99)

Data File: X070801.D
Spectrum: Scan 2162 (8.69)
Location of Maximum: 95.10
Number of points: 96

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	373	63.00	1741	94.00	5316	142.10	107
37.00	2137	64.00	254	95.10	56176	142.90	403
38.10	1759	64.90	66	96.00	3679	144.80	66
39.00	1132	66.90	155	97.10	156	145.80	73
40.00	683	68.00	5115	98.10	367	147.90	81
40.90	443	69.00	5697	99.30	117	152.80	50
42.00	844	70.10	434	103.10	54	154.90	141
43.10	477	71.00	152	103.90	323	156.80	72
44.10	913	72.10	220	104.90	85	158.90	96
45.00	726	73.00	2062	106.00	167	161.00	52
46.90	795	74.00	7992	106.80	53	169.20	50
47.80	332	75.10	25408	109.00	52	169.70	65
49.00	2131	76.00	2588	115.10	78	173.00	422
50.00	9070	77.10	478	115.90	222	173.90	50456
51.10	2980	78.00	445	116.80	347	175.00	3673
52.10	126	79.10	779	117.80	169	175.90	49528
52.80	107	79.90	345	118.90	234	176.90	3461
53.90	86	81.00	1361	127.90	265	177.80	59
55.10	1157	81.90	212	129.00	96	186.00	471
56.00	643	82.80	178	129.70	118	261.90	68
57.00	1315	87.00	2414	131.00	119	278.20	53
58.10	173	88.00	2948	134.90	113		
60.00	493	90.90	178	136.80	99		
61.00	1790	92.00	1528	138.70	70		
62.00	2475	93.00	1843	140.90	423		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070801.D Page 1

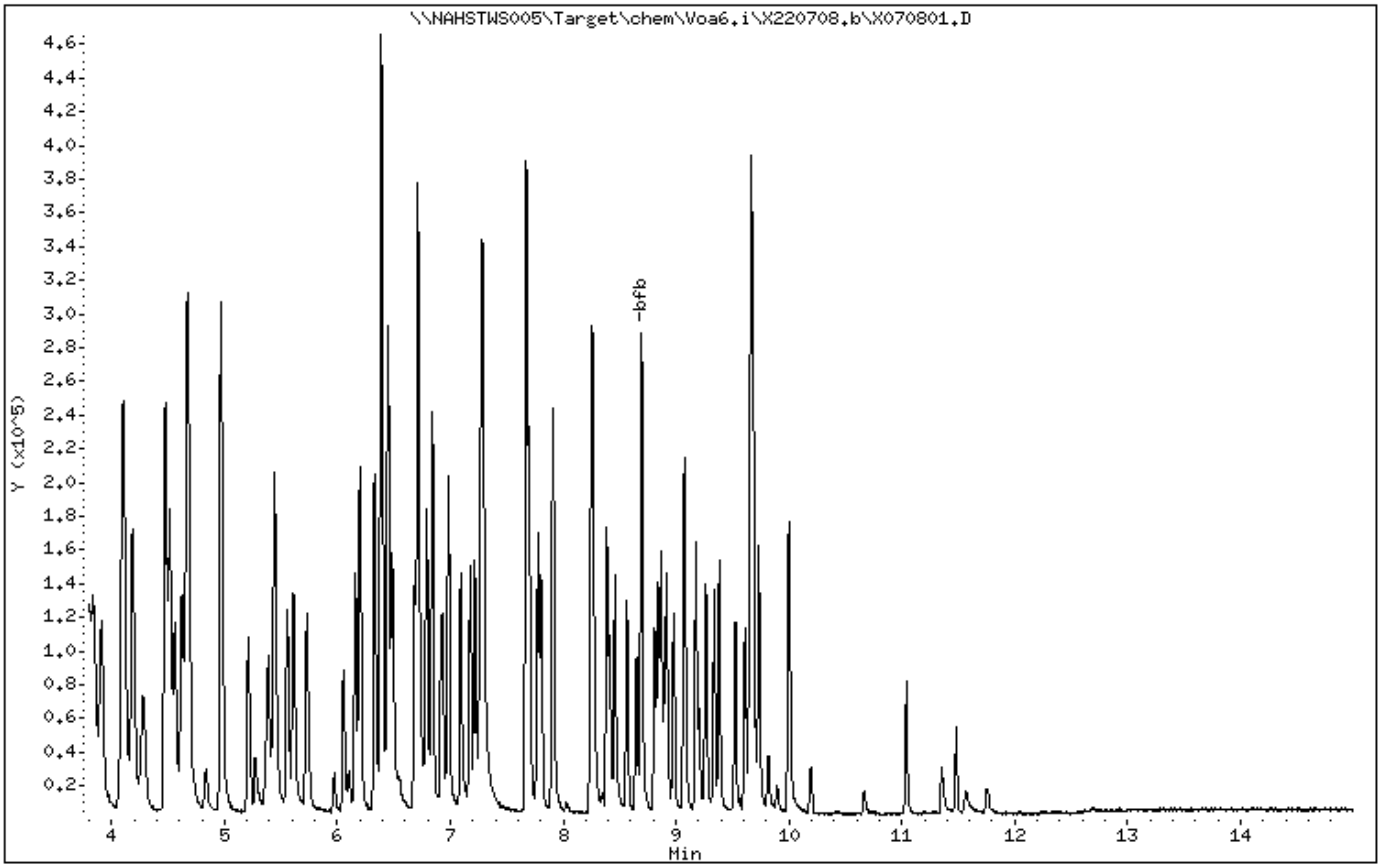
Date : 08-JUL-2022 10:28

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070801.D Page 2

Date : 08-JUL-2022 10:28

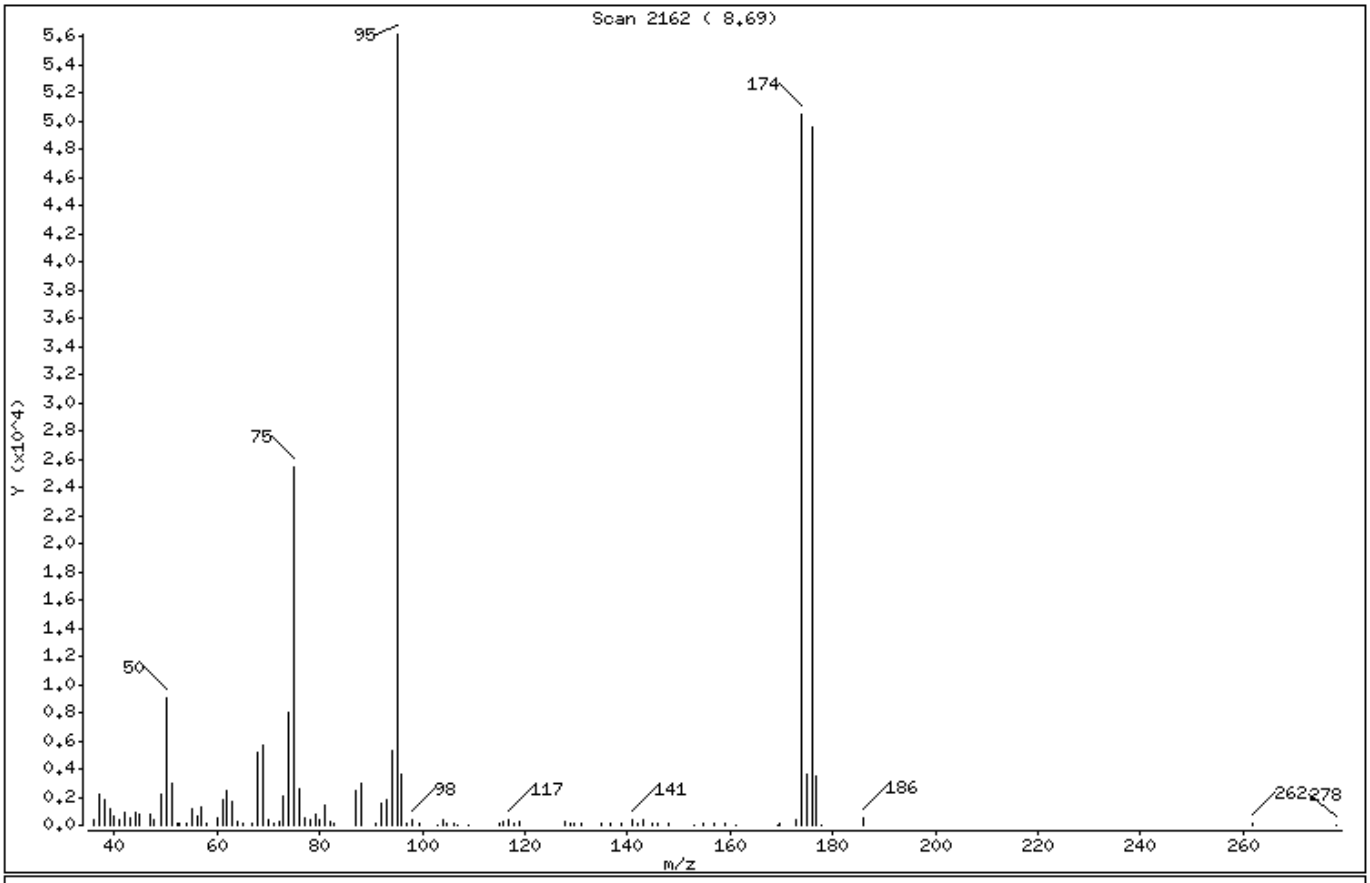
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.15
75	30.00 - 60.00% of mass 95	45.23
96	5.00 - 9.00% of mass 95	6.55
173	Less than 2.00% of mass 174	0.75 (0.84)
174	Greater than 50.00% of mass 95	89.82
175	5.00 - 9.00% of mass 174	6.54 (7.28)
176	95.00 - 101.00% of mass 174	88.17 (98.16)
177	5.00 - 9.00% of mass 176	6.16 (6.99)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070801.D

Date : 08-JUL-2022 10:28

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X070801.D
Spectrum: Scan 2162 (8.69)
Location of Maximum: 95.10
Number of points: 96

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	373	63.00	1741	94.00	5316	142.10	107
37.00	2137	64.00	254	95.10	56176	142.90	403
38.10	1759	64.90	66	96.00	3679	144.80	66
39.00	1132	66.90	155	97.10	156	145.80	73
40.00	683	68.00	5115	98.10	367	147.90	81
40.90	443	69.00	5697	99.30	117	152.80	50
42.00	844	70.10	434	103.10	54	154.90	141
43.10	477	71.00	152	103.90	323	156.80	72
44.10	913	72.10	220	104.90	85	158.90	96
45.00	726	73.00	2062	106.00	167	161.00	52
46.90	795	74.00	7992	106.80	53	169.20	50
47.80	332	75.10	25408	109.00	52	169.70	65
49.00	2131	76.00	2588	115.10	78	173.00	422
50.00	9070	77.10	478	115.90	222	173.90	50456
51.10	2980	78.00	445	116.80	347	175.00	3673
52.10	126	79.10	779	117.80	169	175.90	49528
52.80	107	79.90	345	118.90	234	176.90	3461
53.90	86	81.00	1361	127.90	265	177.80	59
55.10	1157	81.90	212	129.00	96	186.00	471
56.00	643	82.80	178	129.70	118	261.90	68
57.00	1315	87.00	2414	131.00	119	278.20	53
58.10	173	88.00	2948	134.90	113		
60.00	493	90.90	178	136.80	99		
61.00	1790	92.00	1528	138.70	70		
62.00	2475	93.00	1843	140.90	423		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070803.D Page 1
Report Date: 19-Jul-2022 14:36

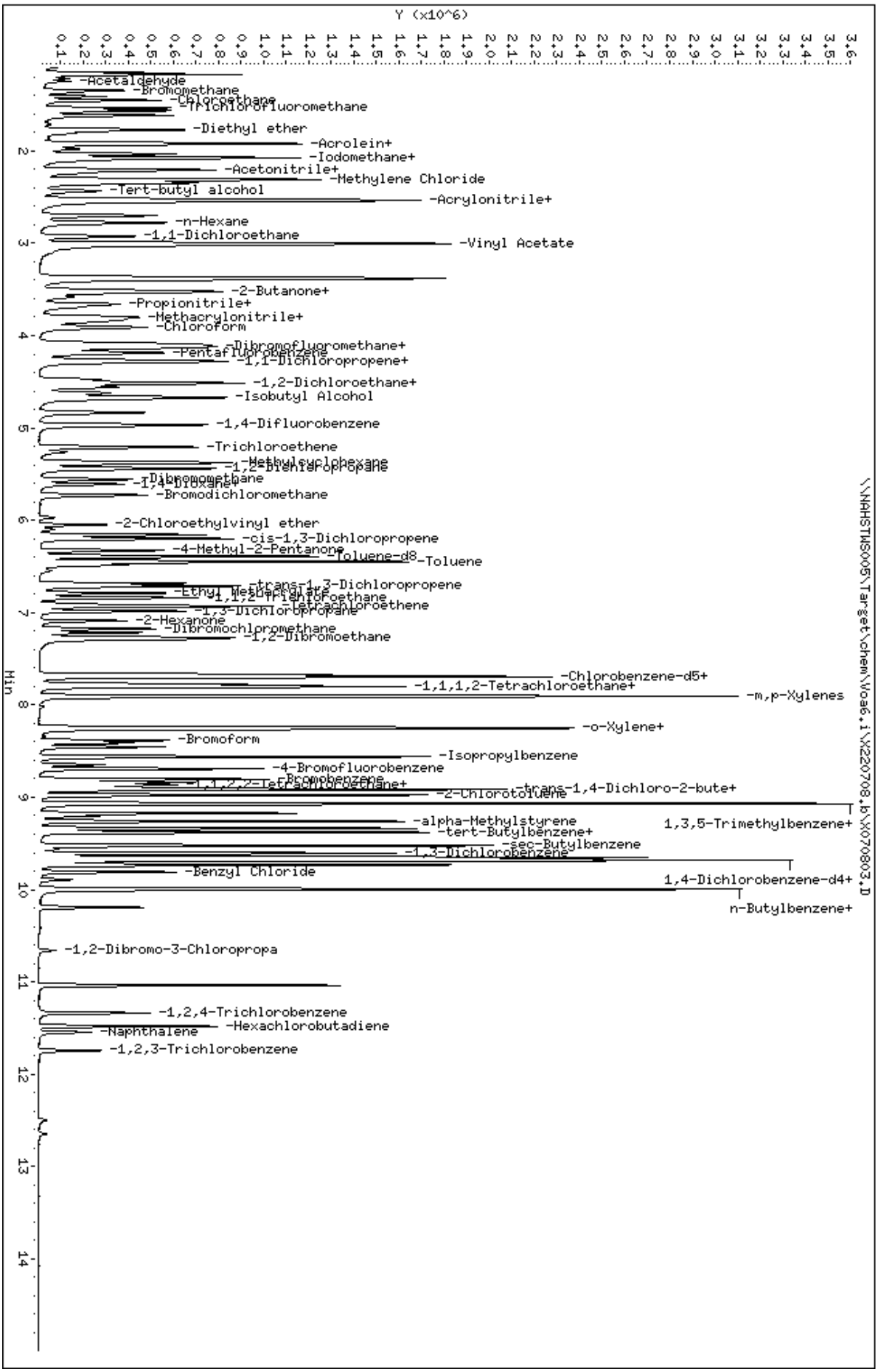
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070803.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 08-JUL-2022 11:10
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	475166	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	647995	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	596434	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	353394	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	193010	50.0000	43.21
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	275879	50.0000	53.24
$	30 Dibromofluoromethane	113	4.102	4.102	(0.980)	220969	50.0000	50.42
$	48 Toluene-d8	98	6.389	6.389	(0.833)	752174	50.0000	50.78
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	168382	50.0000	49.65
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	224993	50.0000	49.49
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	262888	50.0000	48.95
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	279335	50.0000	50.79
	17 Methylene Chloride	84	2.311	2.311	(0.552)	272211	50.0000	49.29
	38 Trichloroethene	130	5.208	5.208	(1.048)	251534	50.0000	51.83
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	300161	50.0000	49.38



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220708.b\X070803.D
Date : 08-JUL-2022 11:10
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070803.D
Inj Date : 08-JUL-2022 11:10
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\nahstws005\Target\chem\voa6.i\X220708.b\X070804.D Page 1
Report Date: 08-Jul-2022 11:47

ALS Laboratory Group

Data file : \\nahstws005\Target\chem\voa6.i\X220708.b\X070804.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 08-JUL-2022 11:31
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X220708.b\8260W.m
Meth Date : 08-Jul-2022 11:26 pcabasca Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	615556	50.0000	
	145 alpha-Methylstyrene	118	9.272	9.261	(0.959)	6578	0.81031	0.81(a)
	17 Methylene Chloride	84	2.318	2.311	(0.554)	3247	1.07362	1.07(a)
$	30 Dibromofluoromethane	113	4.103	4.102	(0.980)	280540	49.4106	49.41
	34 Carbon Tetrachloride	117	4.181	4.267	(0.842)	50633	6.61914	6.61
$	35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	300798	52.2260	52.22
*	36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	883269	50.0000	
	42 1,2-Dichloropropane	63	4.969	5.437	(1.000)	153672	24.3174	24.31
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	762507	50.0000	
$	48 Toluene-d8	98	6.389	6.389	(0.833)	1036411	54.7359	54.73
	58 1-Chlorohexane	55	7.671	7.697	(1.544)	7491	1.45601	1.45(a)
	61 Ethylbenzene	106	7.919	7.799	(1.032)	4792	0.59394	0.59(a)
	63 o-Xylene	106	7.919	8.245	(1.032)	4814	0.50333	0.50(a)
	66 Bromoform	173	8.695	8.410	(1.133)	1881	0.54943	0.54(a)
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	324605	48.9835	48.98
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	314946	50.0000	
	71 1,2,3-Trichloropropane	75	8.691	8.867	(0.899)	150773	36.2719	36.27
	73 n-Propylbenzene	91	8.920	8.912	(0.923)	11829	0.50756	0.50(a)
	74 Bromobenzene	156	8.811	8.807	(0.912)	3998	0.70668	0.70(a)
	75 1,3,5-Trimethylbenzene	105	9.077	9.069	(0.939)	11679	0.69516	0.69(a)

76	2-Chlorotoluene	91	8.983	8.976 (0.929)	10001	0.67582	0.67(a)
77	4-Chlorotoluene	91	9.085	9.069 (0.940)	11316	0.69663	0.69(a)

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
78 tert-Butylbenzene	119	9.340	9.336	(0.966)	9390	0.66613	0.66(a)
79 1,2,4-Trimethylbenzene	105	9.388	9.381	(0.971)	14723	0.89599	0.89(a)
81 sec-Butylbenzene	105	9.527	9.523	(0.986)	14631	0.74160	0.74(a)
82 p-Isopropyltoluene	119	9.651	9.650	(0.998)	14577	0.88497	0.88(a)
83 1,3-Dichlorobenzene	146	9.613	9.606	(0.995)	13007	1.38079	1.38(a)
84 1,4-Dichlorobenzene	146	9.684	9.684	(1.002)	14646	1.48528	1.48(a)
86 Benzyl Chloride	91	9.827	9.808	(1.281)	10830	1.48295	1.48(a)
87 n-Butylbenzene	91	10.011	9.995	(1.036)	17175	1.23939	1.23(a)
88 1,2-Dichlorobenzene	146	9.999	9.995	(1.035)	16395	1.95468	1.95(a)
89 1,2-Dibromo-3-Chloropropane	155	10.678	10.659	(1.105)	2116	7.33739	7.33
90 1,2,4-Trichlorobenzene	180	11.349	11.337	(1.174)	22703	7.16502	7.16
92 Naphthalene	128	11.555	11.544	(1.195)	45314	13.1981	13.19
93 1,2,3-Trichlorobenzene	180	11.750	11.742	(1.216)	22972	13.5187	13.51
141 Cyclohexane	56	4.185	4.125	(1.000)	10052	1.86601	1.86(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070805.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070805.D
Lab Smp Id: VLCSW-220708 Client Smp ID: VLCSW-220708
Inj Date : 08-JUL-2022 11:52
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220708;VLCSW-220708;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

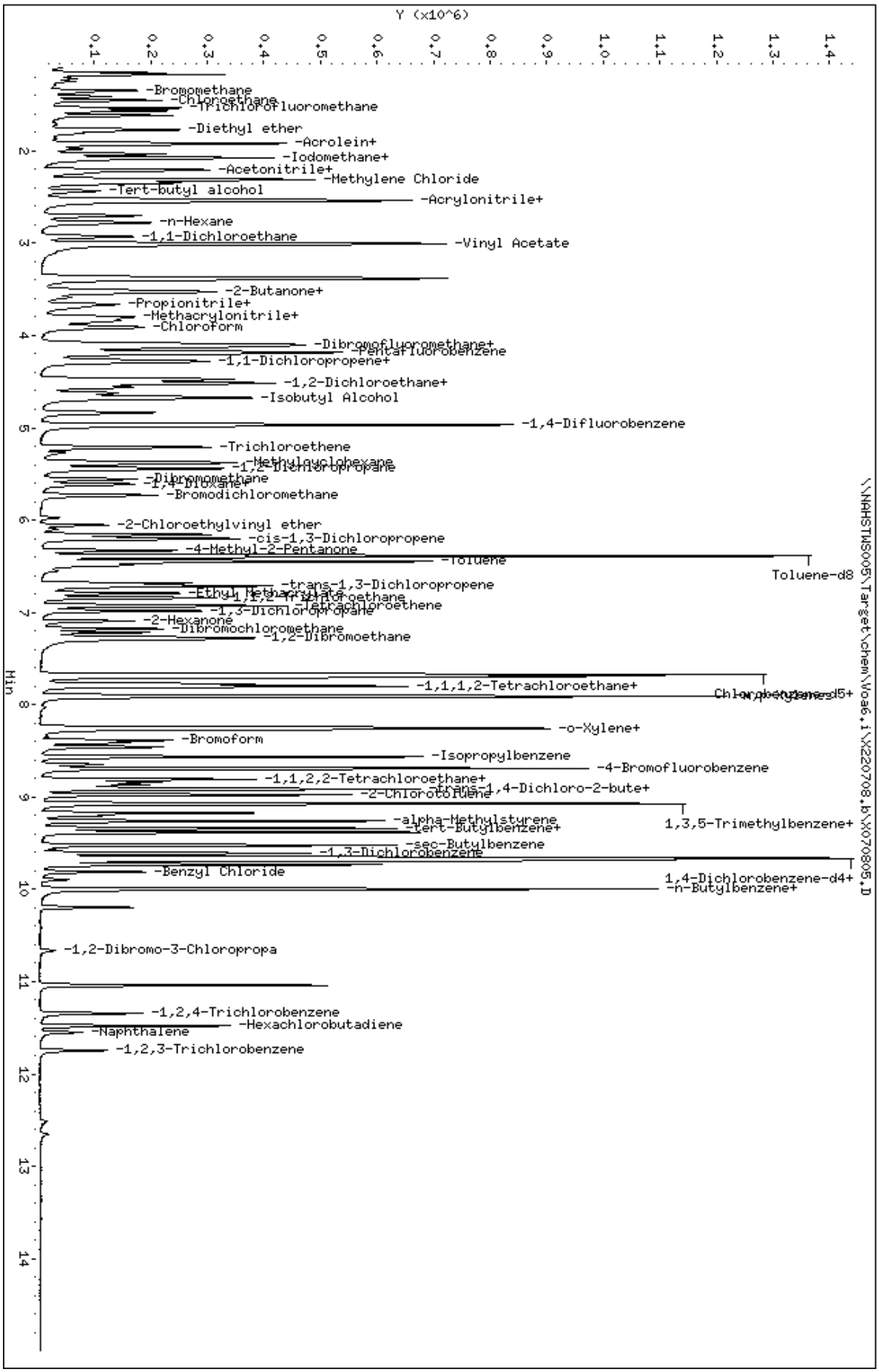
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	463855	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	706741	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	611781	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	288072	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	248107	57.2762	57.27(M)
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	274077	51.5649	51.56
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	226399	52.9364	52.93
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	836692	55.0749	55.07
53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	71433	20.5378	20.53
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	80230	18.0800	18.07
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	121601	20.7628	20.76
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	108097	20.1344	20.13
17 Methylene Chloride	84	2.311	2.311	(0.552)	106992	20.2214	20.22
38 Trichloroethene	130	5.208	5.208	(1.048)	109778	20.7423	20.74
5 Vinyl Chloride	62	1.149	1.149	(0.275)	108171	18.2324	18.23

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220708.b\X070805.D
Date : 08-JUL-2022 11:52
Client ID: VLCSW-220708
Sample Info: VLCSW-220708;VLCSW-220708;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

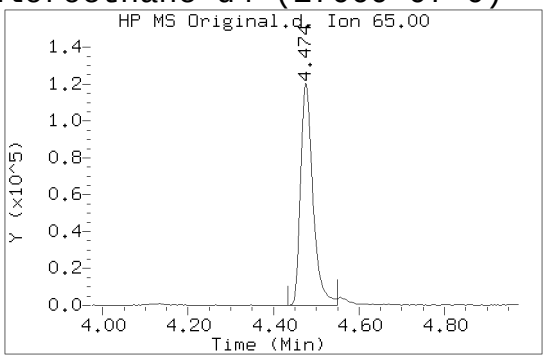
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Inj Date : 08-JUL-2022 11:52
InstruID : voa6.i
LabSampID : VLCSW-220708

1,2-Dichloroethane-d4 (17060-07-0)

Reason Code:

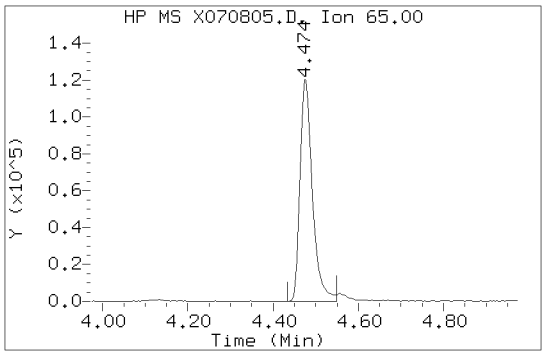
BEFORE

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HEIGHT
120154
19-Jul-2022
14:36
linh
pham



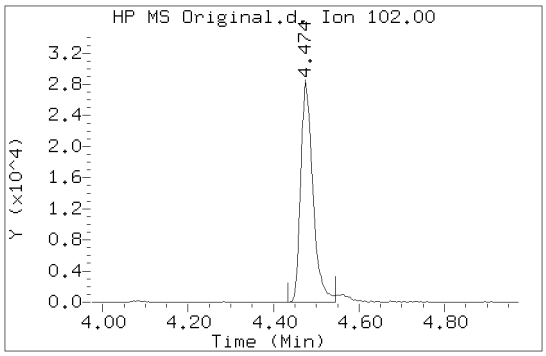
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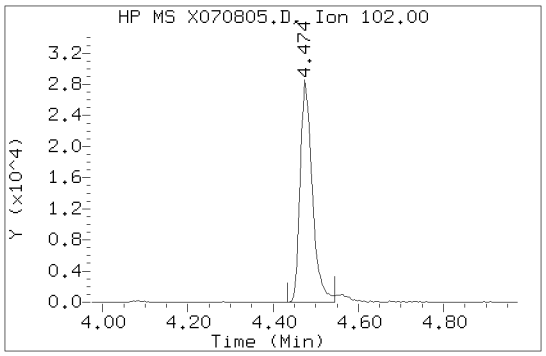
BEFORE

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HEIGHT
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19-Jul-2022
14:36
linh
pham



AFTER

MASS
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HEIGHT
28568
19-Jul-2022
14:36
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070807.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070807.D
Lab Smp Id: VBLKW-220708 Client Smp ID: VBLKW-220708
Inj Date : 08-JUL-2022 12:34
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220708;VBLKW-220708;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

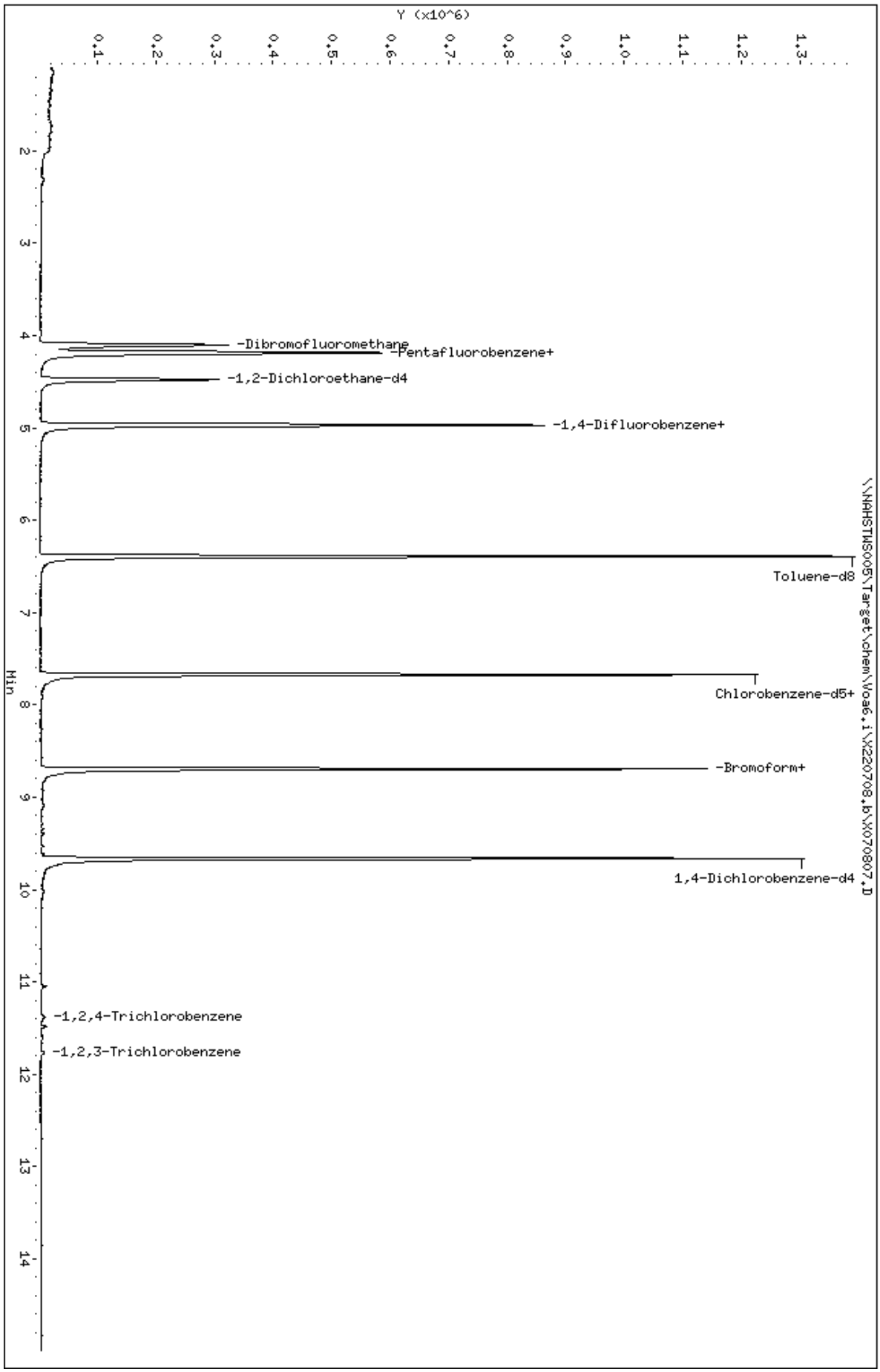
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	547715	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	767886	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	684361	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	354237	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	225300	43.7781	43.77
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	333910	56.1873	56.18(M)
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	231612	45.8249	45.82
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	896056	52.7271	52.72

QC Flag Legend

M - Compound response manually integrated.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070807.D
Date : 08-JUL-2022 12:34
Client ID: VBLKW-220708
Sample Info: VBLKW-220708;VBLKW-220708;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

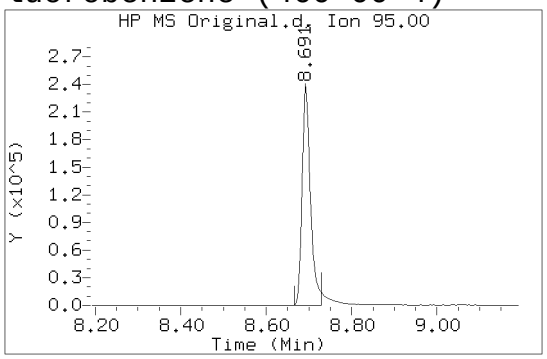
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Inj Date : 08-JUL-2022 12:34
InstruID : voa6.i
LabSampID : VBLKW-220708

4-Bromofluorobenzene (460-00-4)

Reason Code:

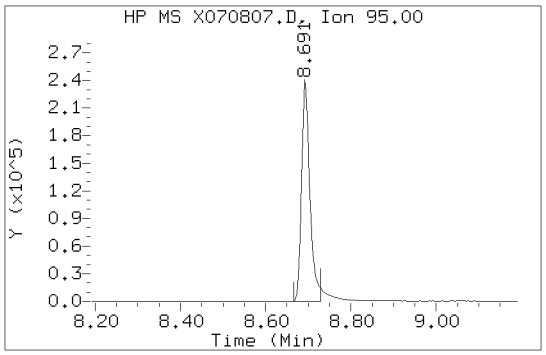
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19-Jul-2022
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pham



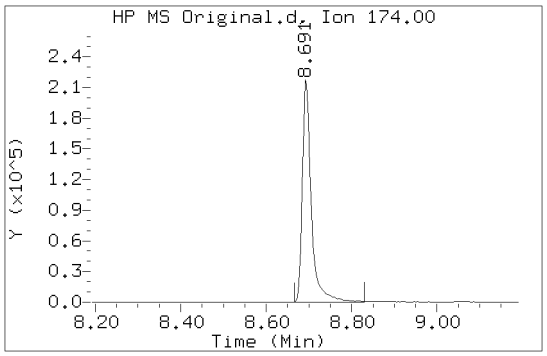
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19-Jul-2022
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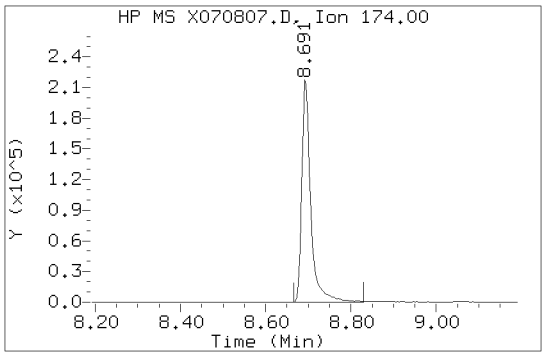
BEFORE

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19-Jul-2022
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pham



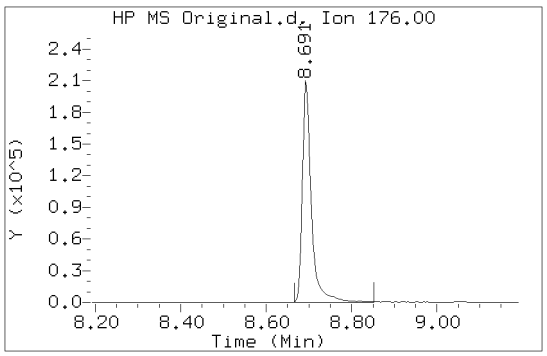
AFTER

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HEIGHT
217180
19-Jul-2022
14:36
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pham



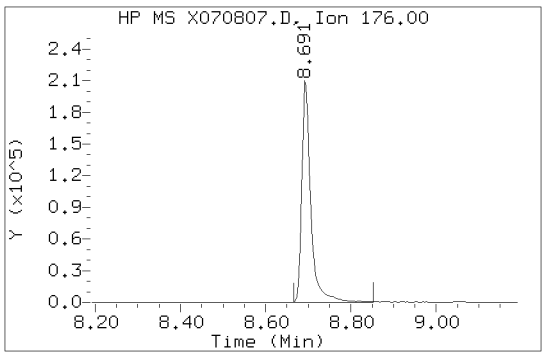
BEFORE

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19-Jul-2022
14:36
linh
pham



AFTER

MASS
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HEIGHT
209765
19-Jul-2022
14:36
linh
pham



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070808.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070808.D
Lab Smp Id: HS22070326-12 Client Smp ID: HS22070326-12
Inj Date : 08-JUL-2022 12:55
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-12;HS22070326-12;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

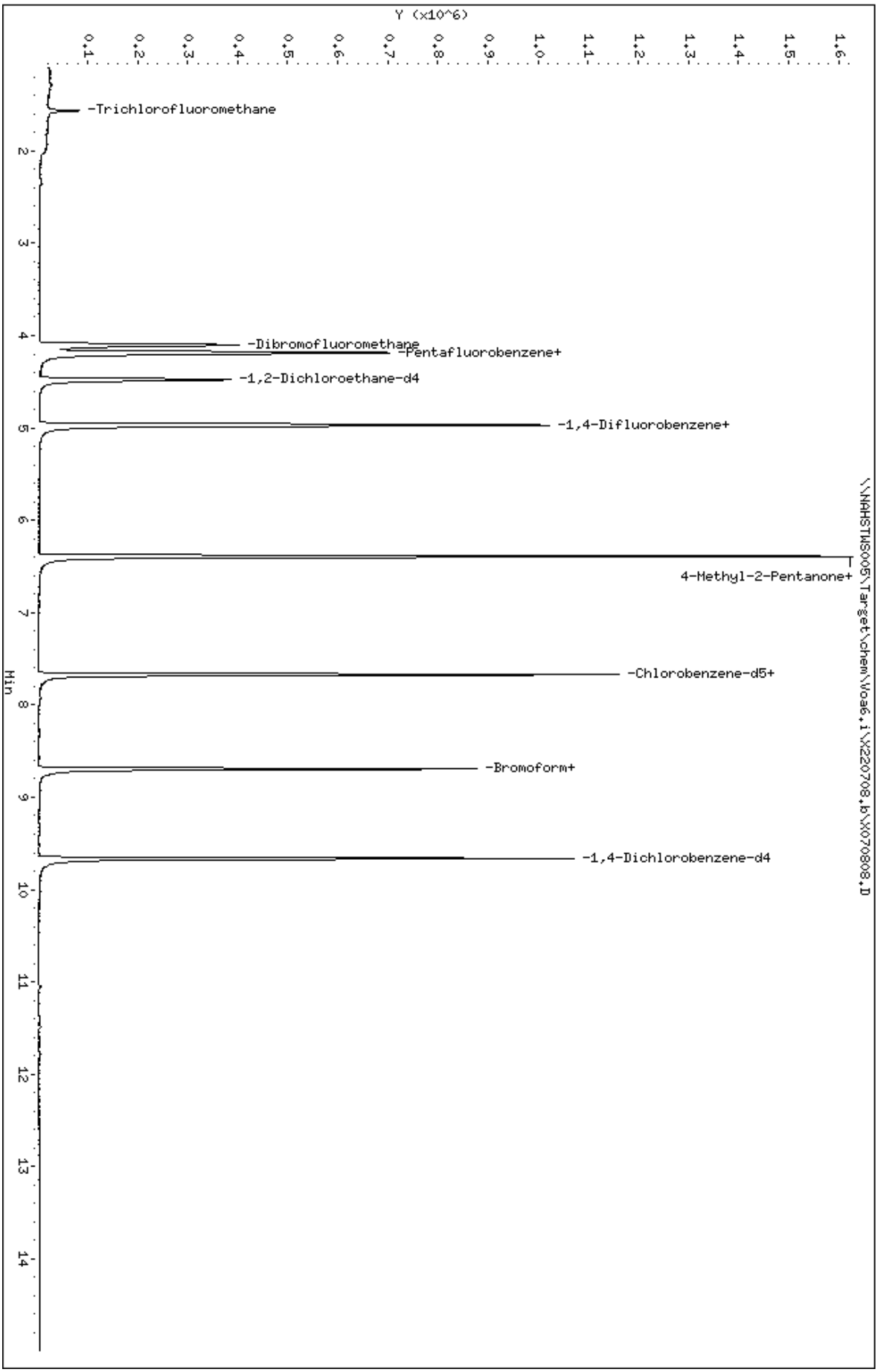
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	628841	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	900797	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	642971	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	292108	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	294635	50.0271	50.02
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	283938	50.8242	50.82
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	284583	49.0618	49.06
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1040027	65.1385	65.13(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070808.D
Date : 08-JUL-2022 12:55
Client ID: HS220703326-12
Sample Info: HS220703326-12;HS220703326-12;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070808.D
Inj Date : 08-JUL-2022 12:55
InstruID : voa6.i
LabSampID : HS22070326-12

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070809.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070809.D
Lab Smp Id: HS22070326-01 Client Smp ID: HS22070326-01
Inj Date : 08-JUL-2022 13:16
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-01;HS22070326-01;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	517453	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	731427	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	627748	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	288456	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	214051	44.0313	44.03
$ 69 4-Bromofluorobenzene	95	8.695	8.691	(1.133)	283628	52.0072	52.00
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	216834	45.4074	45.40
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	860085	55.1747	55.17

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070809.D

Date : 08-JUL-2022 13:16

Client ID: HS22070326-01

Instrument: voa6.i

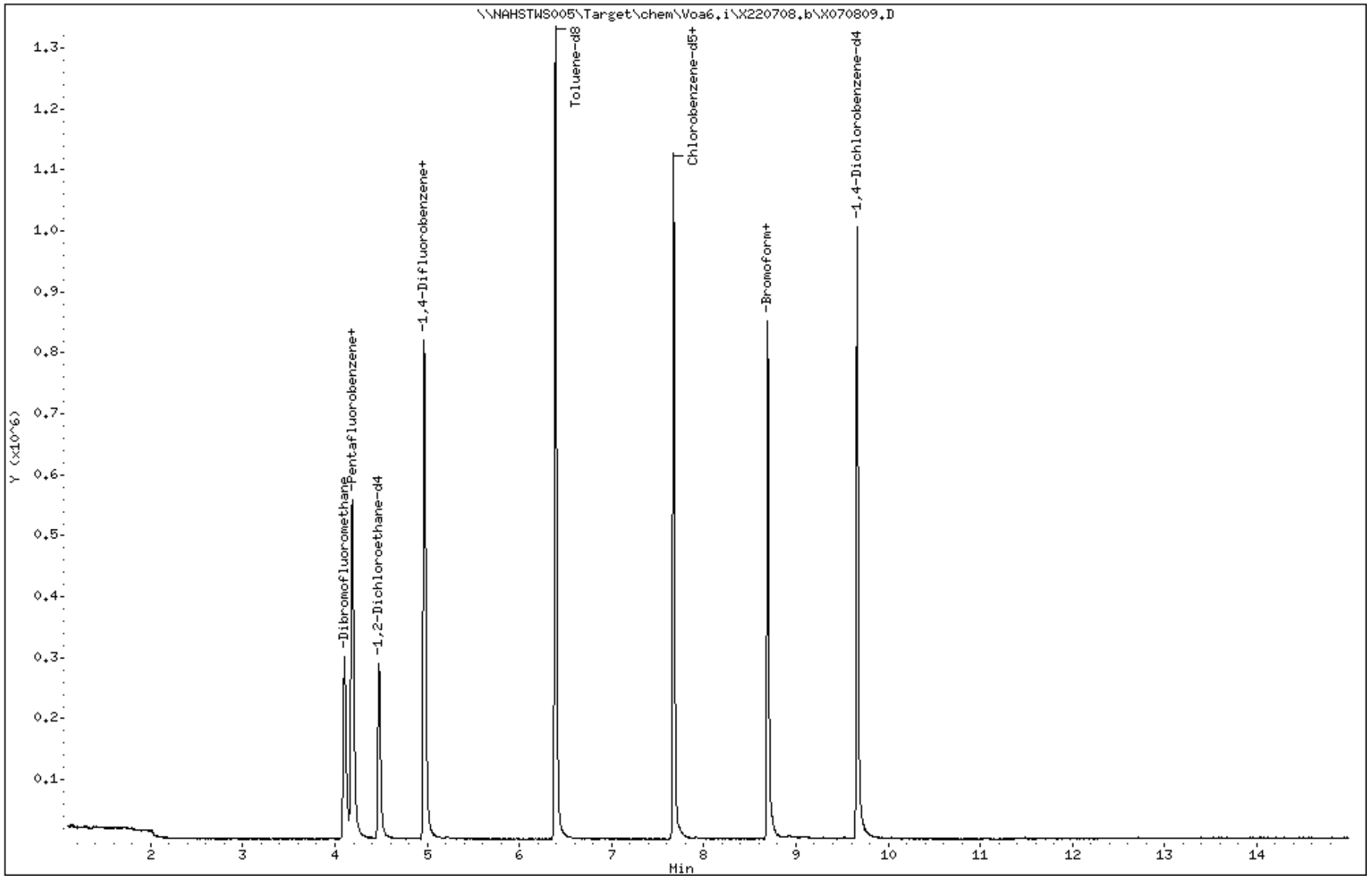
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Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070809.D
Inj Date : 08-JUL-2022 13:16
InstruID : voa6.i
LabSampID : HS22070326-01

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070810.D Page 1
Report Date: 19-Jul-2022 14:36

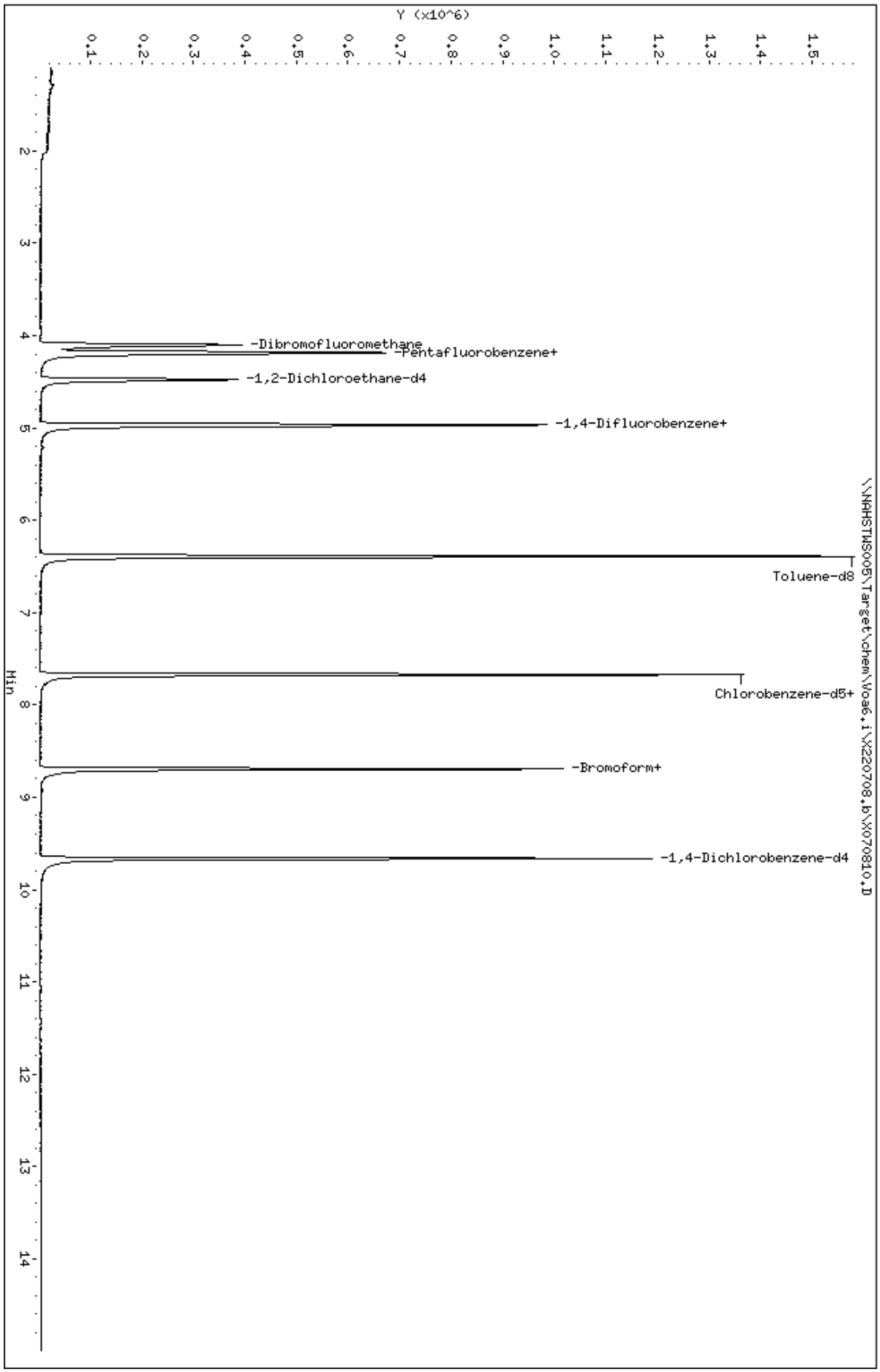
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070810.D
Lab Smp Id: HS22070326-02 Client Smp ID: HS22070326-02
Inj Date : 08-JUL-2022 13:37
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-02;HS22070326-02;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	593964	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	861965	50.0000	
* 47 Chlorobenzene-d5	117	7.675	7.671	(1.000)	739860	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	321890	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	292794	52.6945	52.69
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.132)	324002	50.3981	50.39
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	275071	50.2133	50.21
$ 48 Toluene-d8	98	6.389	6.389	(0.832)	996970	54.2646	54.26


Data File: \\NAHSTWS005\Target\chem\voa6.i\X220708.b\X070810.D
Date : 08-JUL-2022 13:37
Client ID: HS220703326-02
Sample Info: HS220703326-02;HS220703326-02;;;
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1
Y (x10^6)
0.1
0.2
0.3
0.4
0.5
0.6
0.7
0.8
0.9
1.0
1.1
1.2
1.3
1.4
1.5
2
3
4
5
6
7
8
9
10
11
12
13
14
Min
-Dibromofluoromethane
-Pentafluorobenzene+
-1,2-Dichloroethane-d4
-1,4-Difluorobenzene+
Toluene-d8
Chlorobenzene-d5+
-Bromoform+
-1,4-Dichlorobenzene-d4
\\NAHSTWS005\Target\chem\voa6.i\X220708.b\X070810.D

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070810.D
Inj Date : 08-JUL-2022 13:37
InstruID : voa6.i
LabSampID : HS22070326-02

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D
Lab Smp Id: HS22070326-07 Client Smp ID: HS22070326-07
Inj Date : 08-JUL-2022 13:58
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-07;HS22070326-07;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

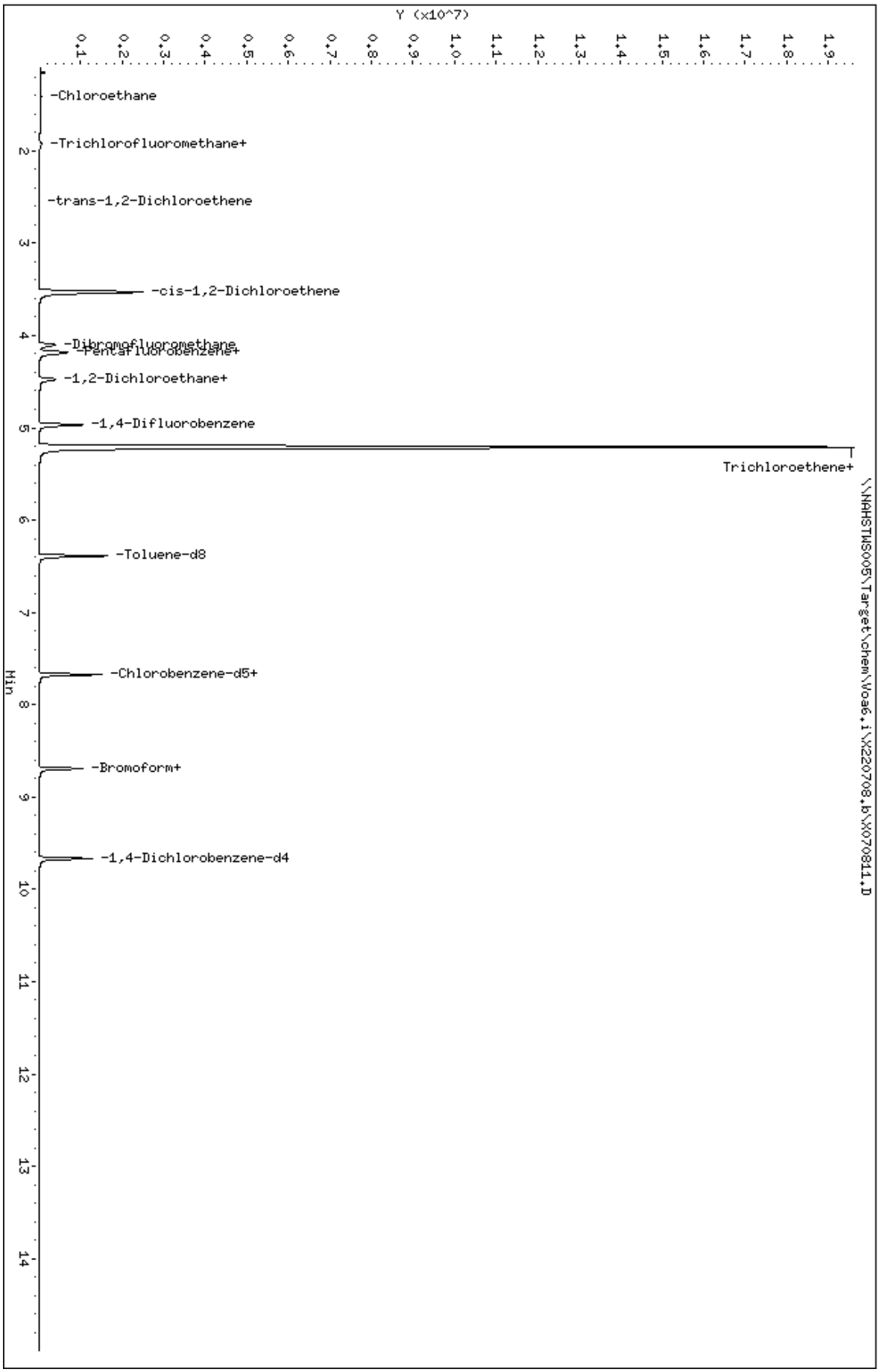
Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	624523	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	906055	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	778605	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	347313	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	300863	51.4707	51.47
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	342069	50.5617	50.56
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	283600	49.2314	49.23
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1028518	53.1960	53.19
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	19144	3.20425	3.20(a)
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	27704	3.68975	3.68(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	1301274	180.023	180.02
38 Trichloroethene	130	5.208	5.208	(1.048)	6668180	982.779	982.77(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	80396	10.0647	10.06

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220708.b\X070811.D
Date : 08-JUL-2022 13:58
Client ID: HS220703326-07
Sample Info: HS220703326-07;HS220703326-07;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D Page 2

Date : 08-JUL-2022 13:58

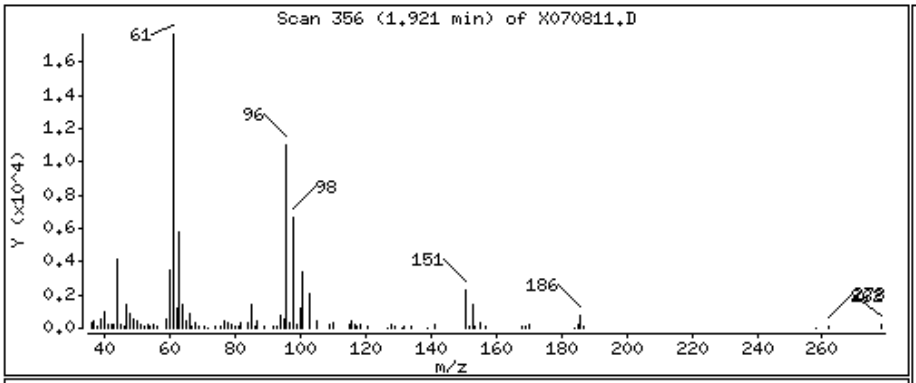
Client ID: HS22070326-07 Instrument: voa6.i

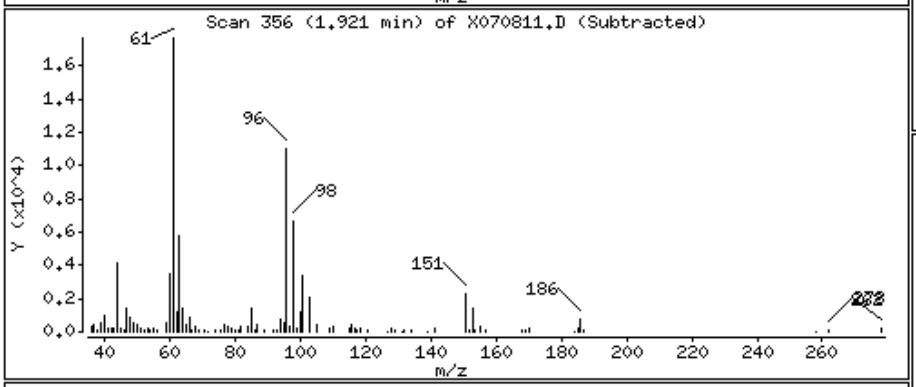
Sample Info: HS22070326-07;HS22070326-07;;;

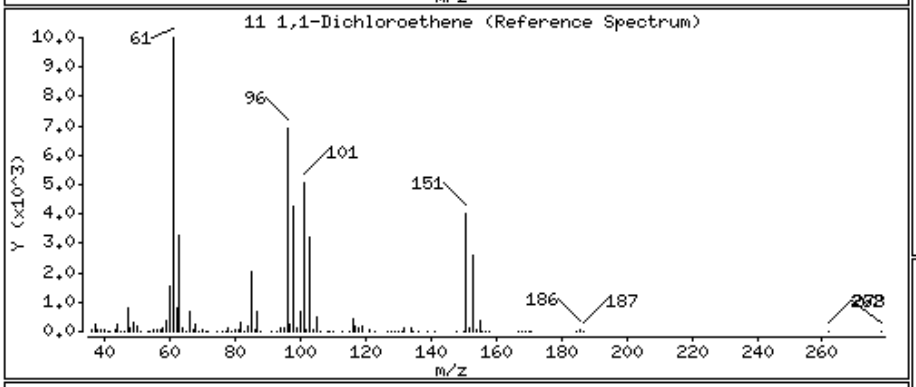
Purge Volume: 5.0 Operator: PC

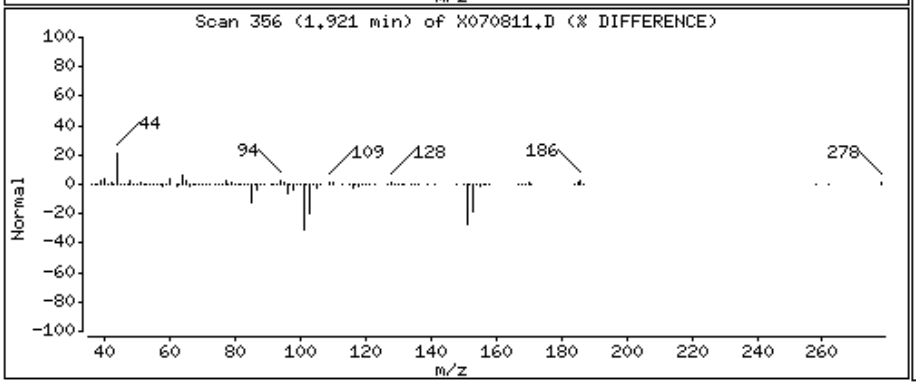
Column phase: DB624 Column diameter: 0.18

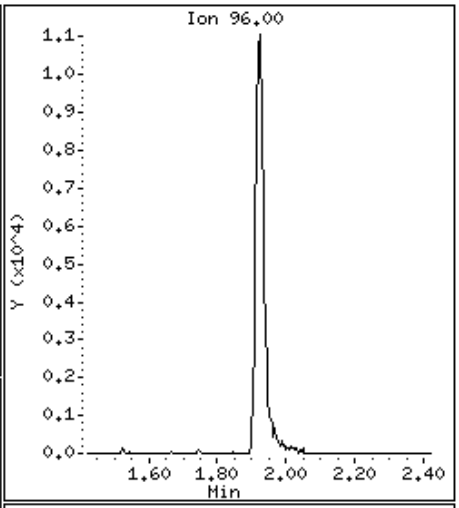
11 1,1-Dichloroethene Concentration: 3.20 ug/l

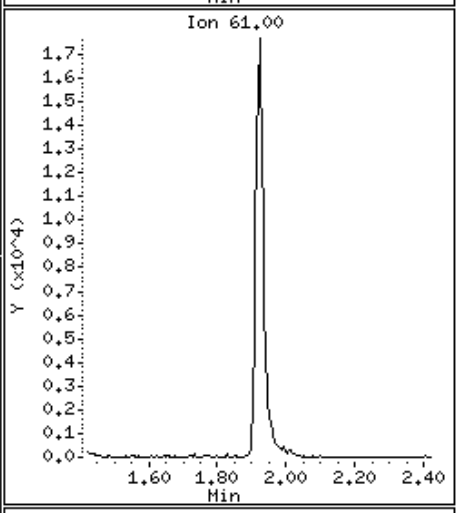


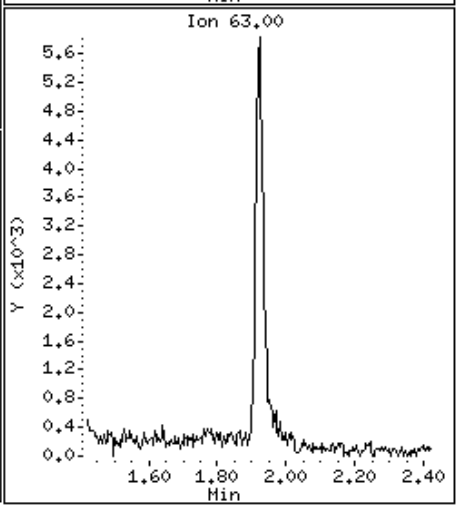












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D Page 3

Date : 08-JUL-2022 13:58

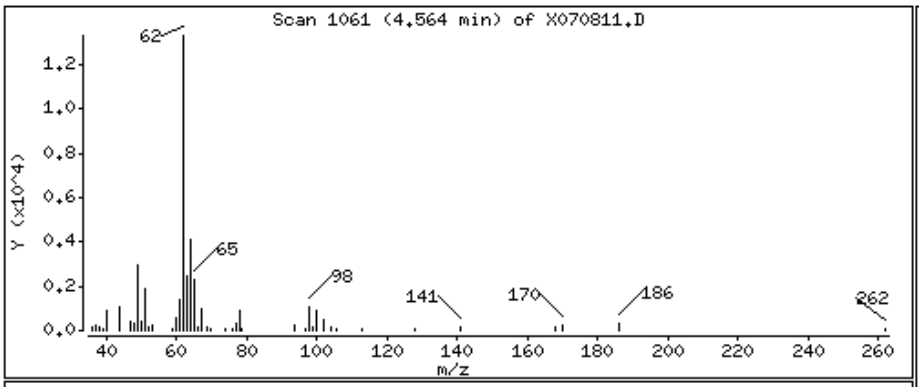
Client ID: HS22070326-07 Instrument: voa6.i

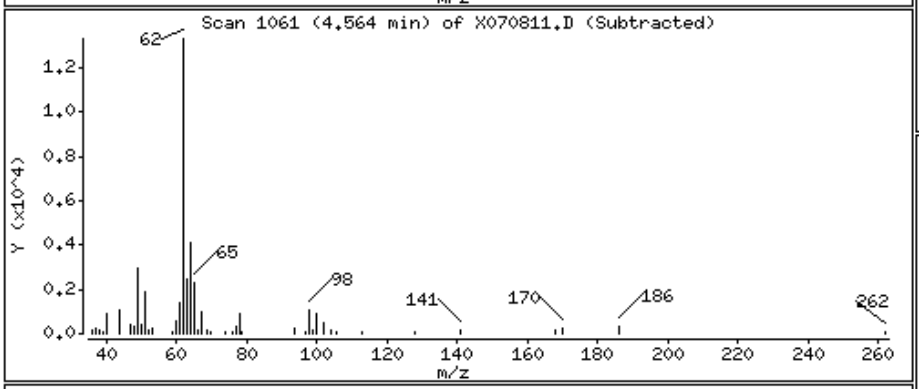
Sample Info: HS22070326-07;HS22070326-07;;;

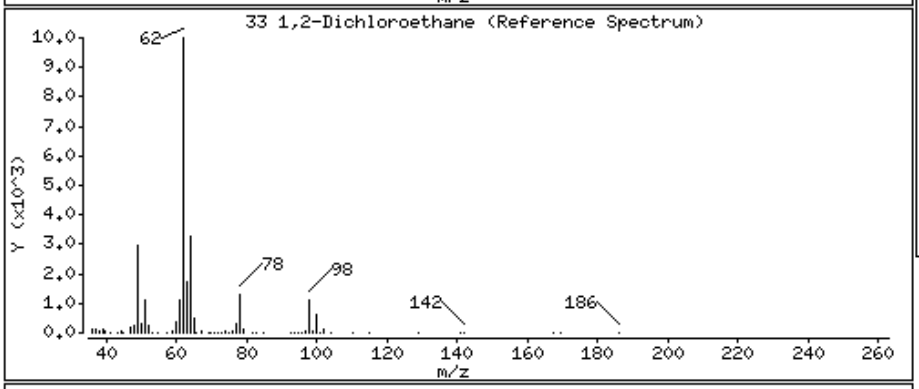
Purge Volume: 5.0 Operator: PC

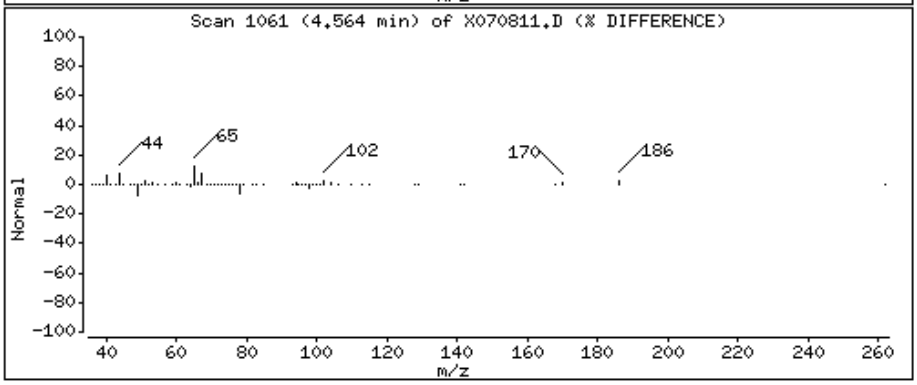
Column phase: DB624 Column diameter: 0.18

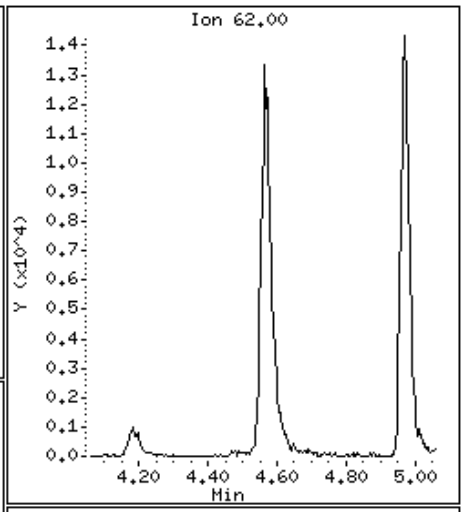
33 1,2-Dichloroethane Concentration: 3.68 ug/l

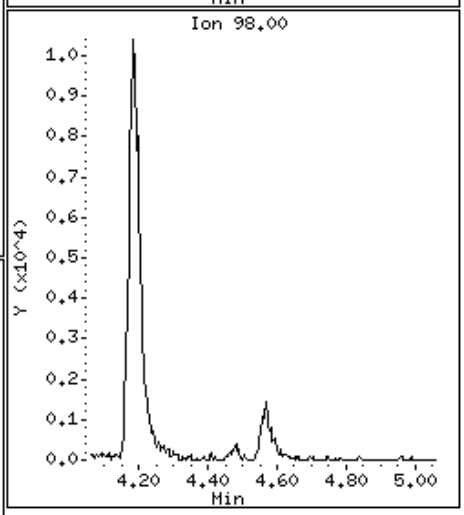












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D Page 4

Date : 08-JUL-2022 13:58

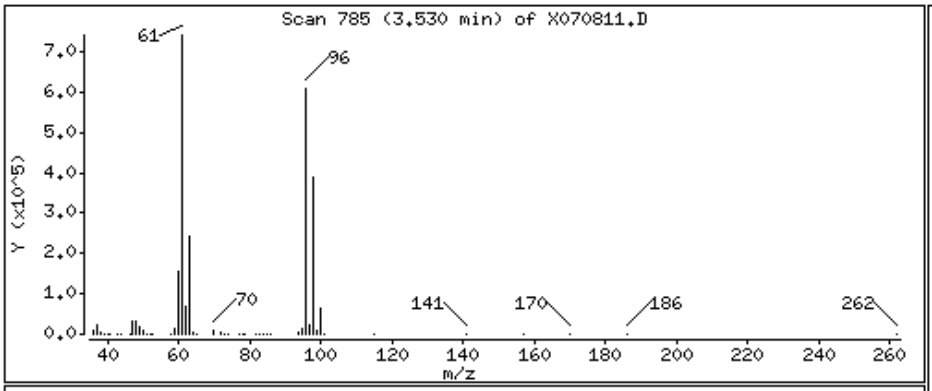
Client ID: HS22070326-07 Instrument: voa6.i

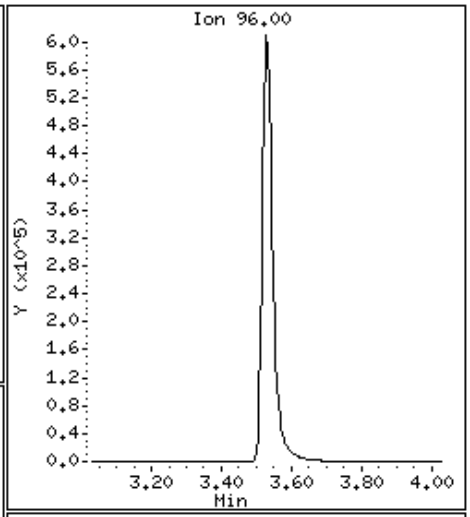
Sample Info: HS22070326-07;HS22070326-07;;;

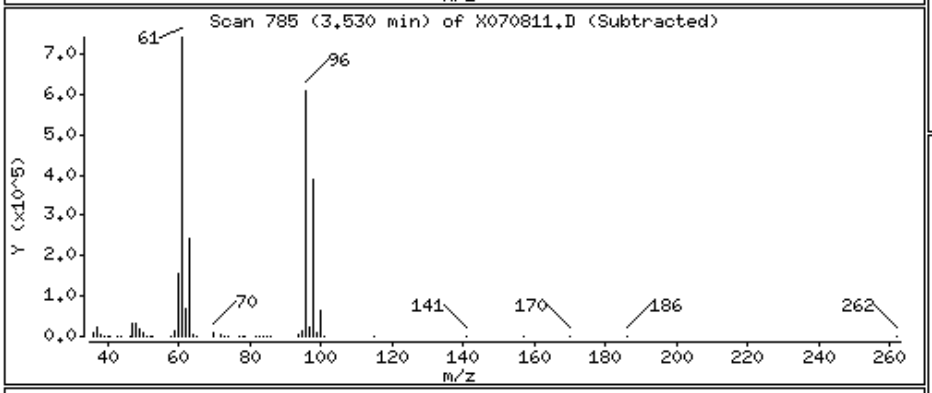
Purge Volume: 5.0 Operator: PC

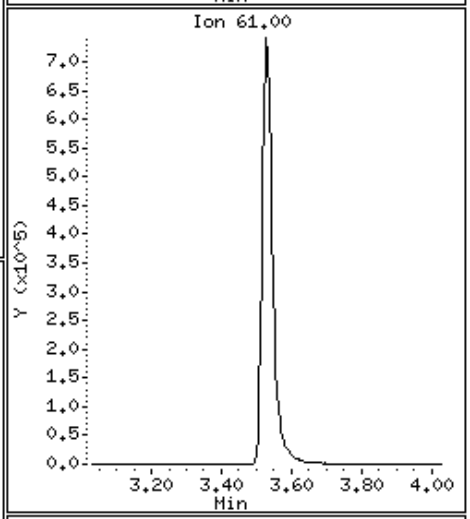
Column phase: DB624 Column diameter: 0.18

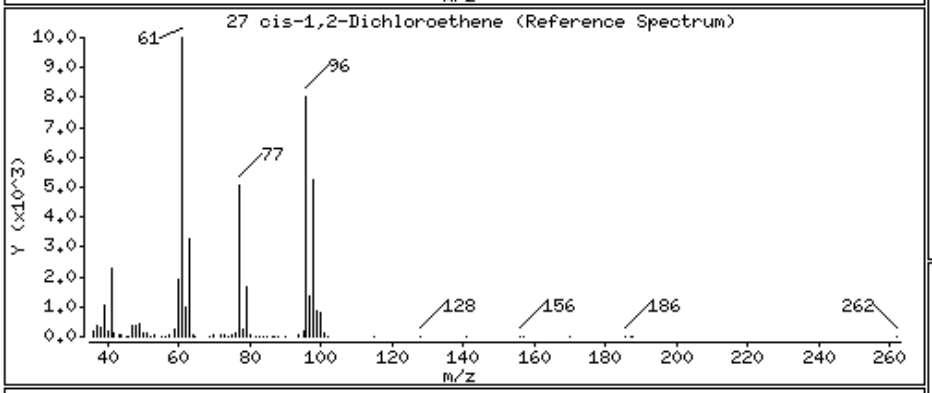
27 cis-1,2-Dichloroethene Concentration: 180.02 ug/l

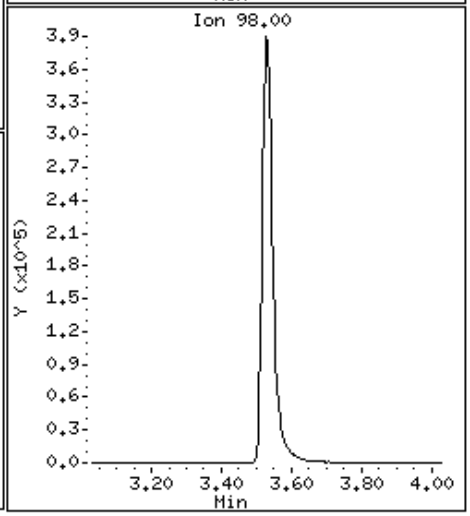


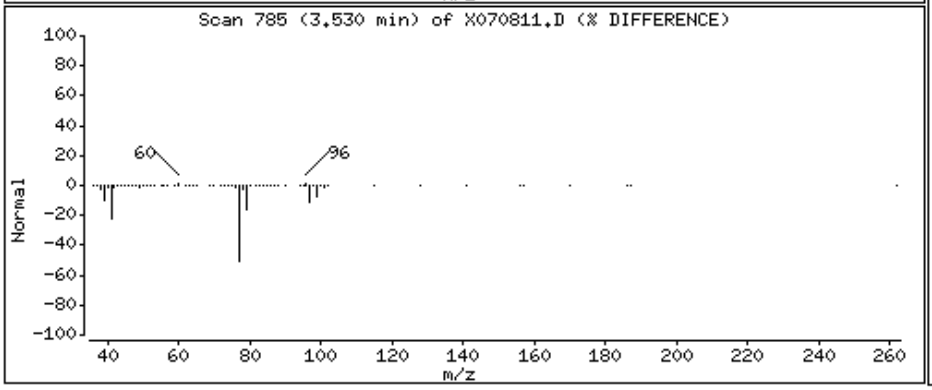












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D Page 5

Date : 08-JUL-2022 13:58

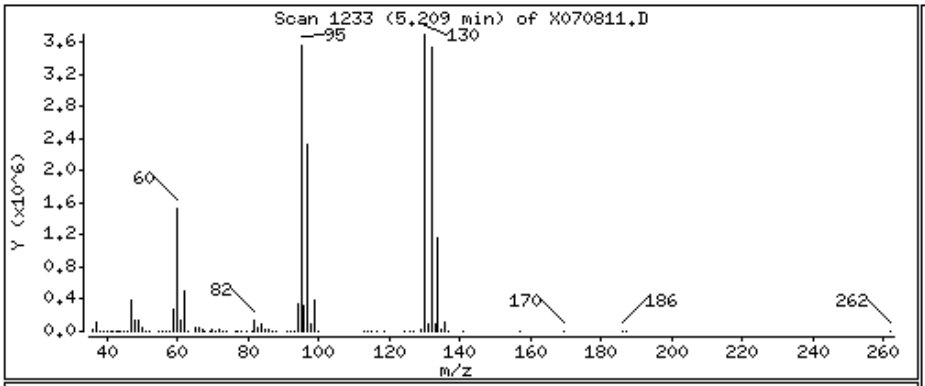
Client ID: HS22070326-07 Instrument: voa6.i

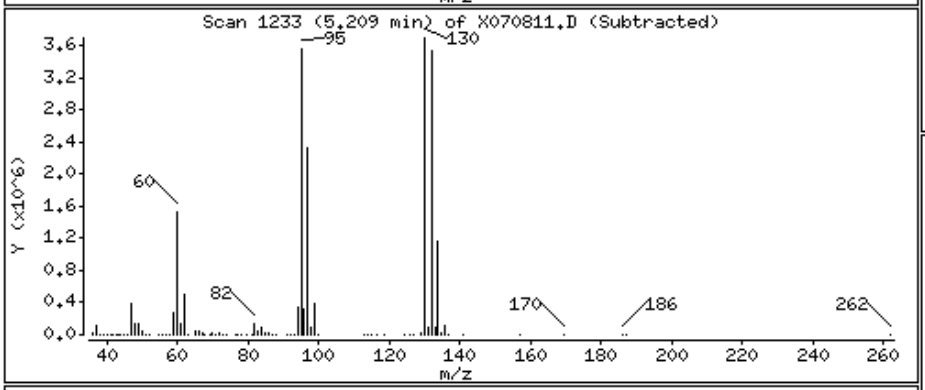
Sample Info: HS22070326-07;HS22070326-07;;;

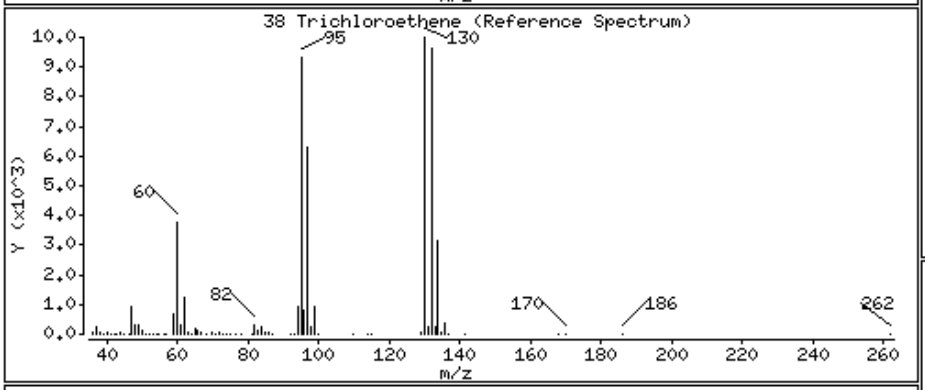
Purge Volume: 5.0 Operator: PC

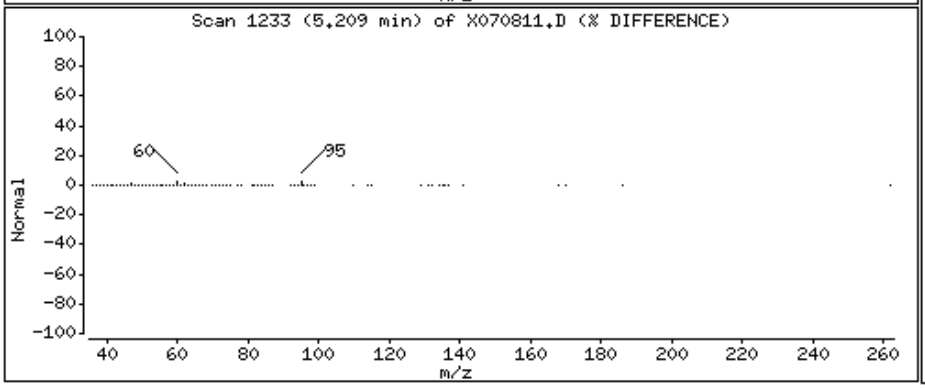
Column phase: DB624 Column diameter: 0.18

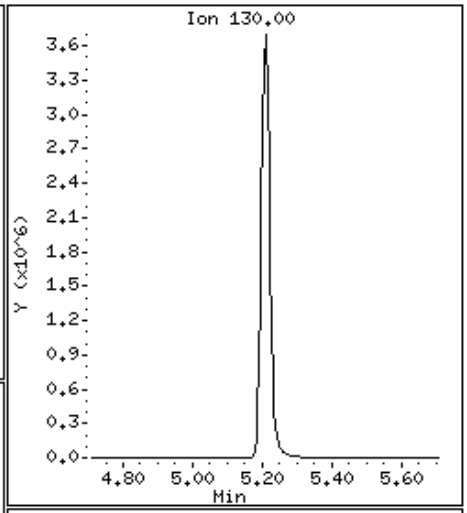
38 Trichloroethene Concentration: 982.77 ug/l

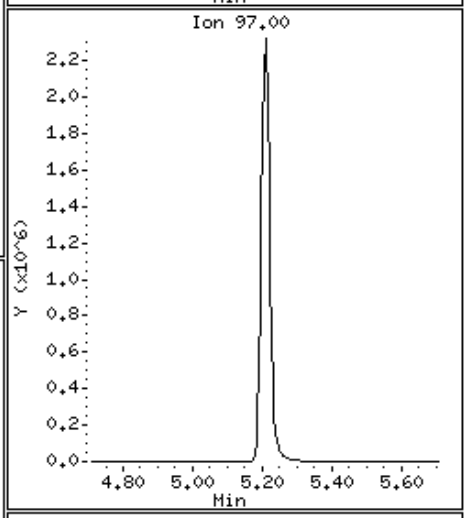


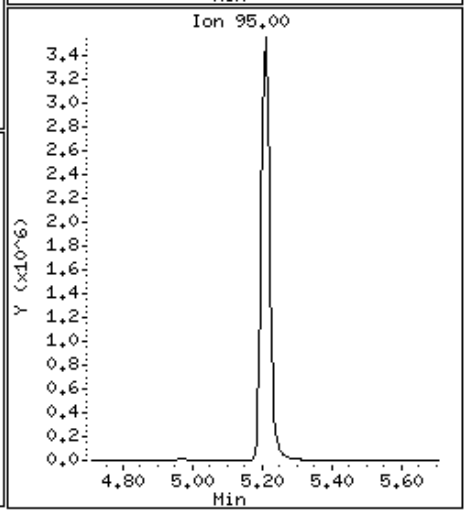












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D

Date : 08-JUL-2022 13:58

Client ID: HS22070326-07

Instrument: voa6.i

Sample Info: HS22070326-07;HS22070326-07;;;

Purge Volume: 5.0

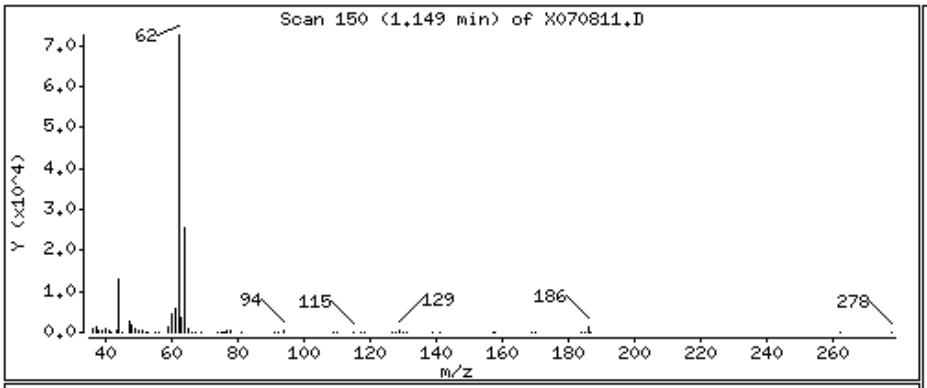
Operator: PC

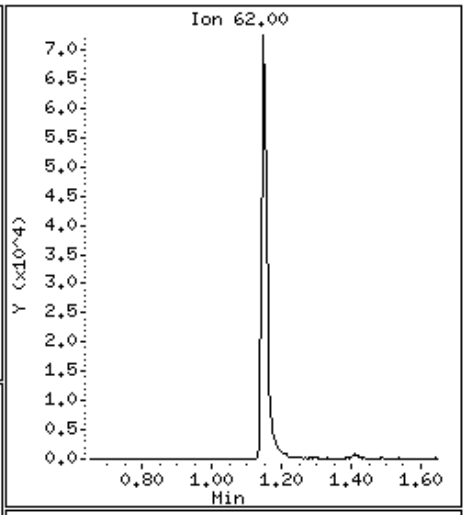
Column phase: DB624

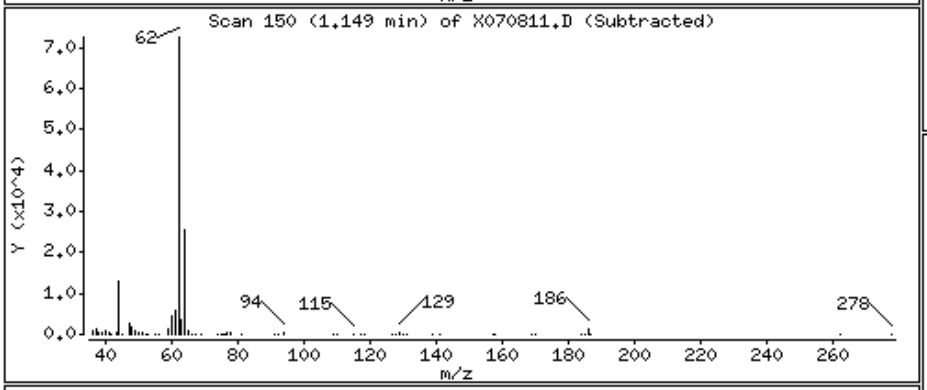
Column diameter: 0.18

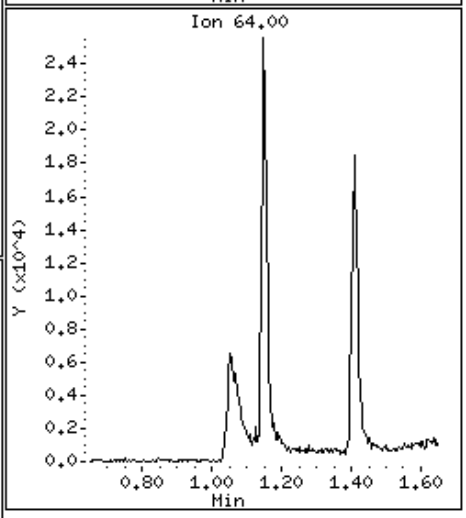
5 Vinyl Chloride

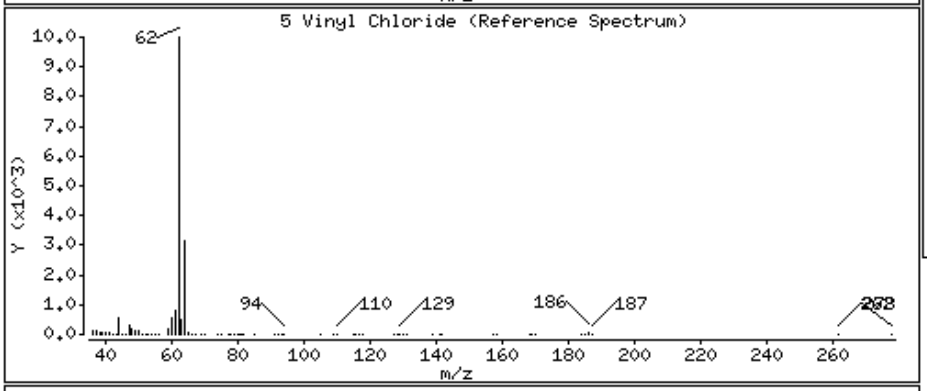
Concentration: 10.06 ug/l

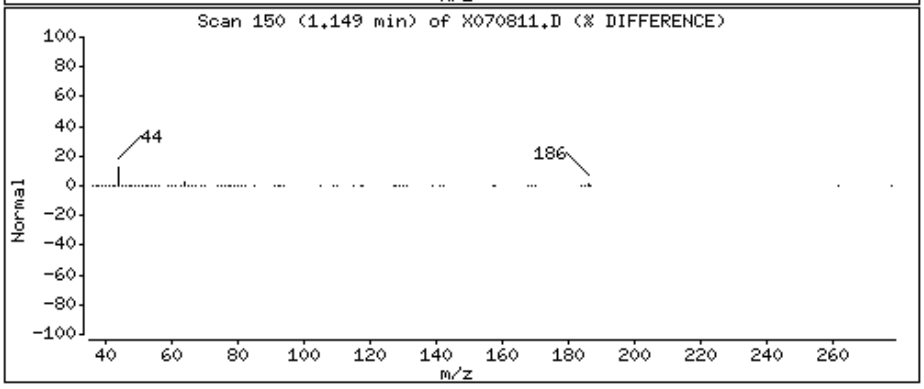












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070811.D
Inj Date : 08-JUL-2022 13:58
InstruID : voa6.i
LabSampID : HS22070326-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D
Lab Smp Id: HS22070326-04 Client Smp ID: HS22070326-04
Inj Date : 08-JUL-2022 14:19
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-04;HS22070326-04;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	576739	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	833373	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	702052	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	309805	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	267068	49.4293	49.42
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	310871	50.9632	50.96
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	249030	46.7976	46.79
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	956446	54.8625	54.86
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	68955	12.4977	12.49
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	867000	129.882	129.88
38 Trichloroethene	130	5.212	5.208	(1.049)	11217603	1797.48	1797.47(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	691549	93.7475	93.74

QC Flag Legend

A - Target compound detected but, quantitated amount
exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D

Date : 08-JUL-2022 14:19

Client ID: HS22070326-04

Instrument: voa6.i

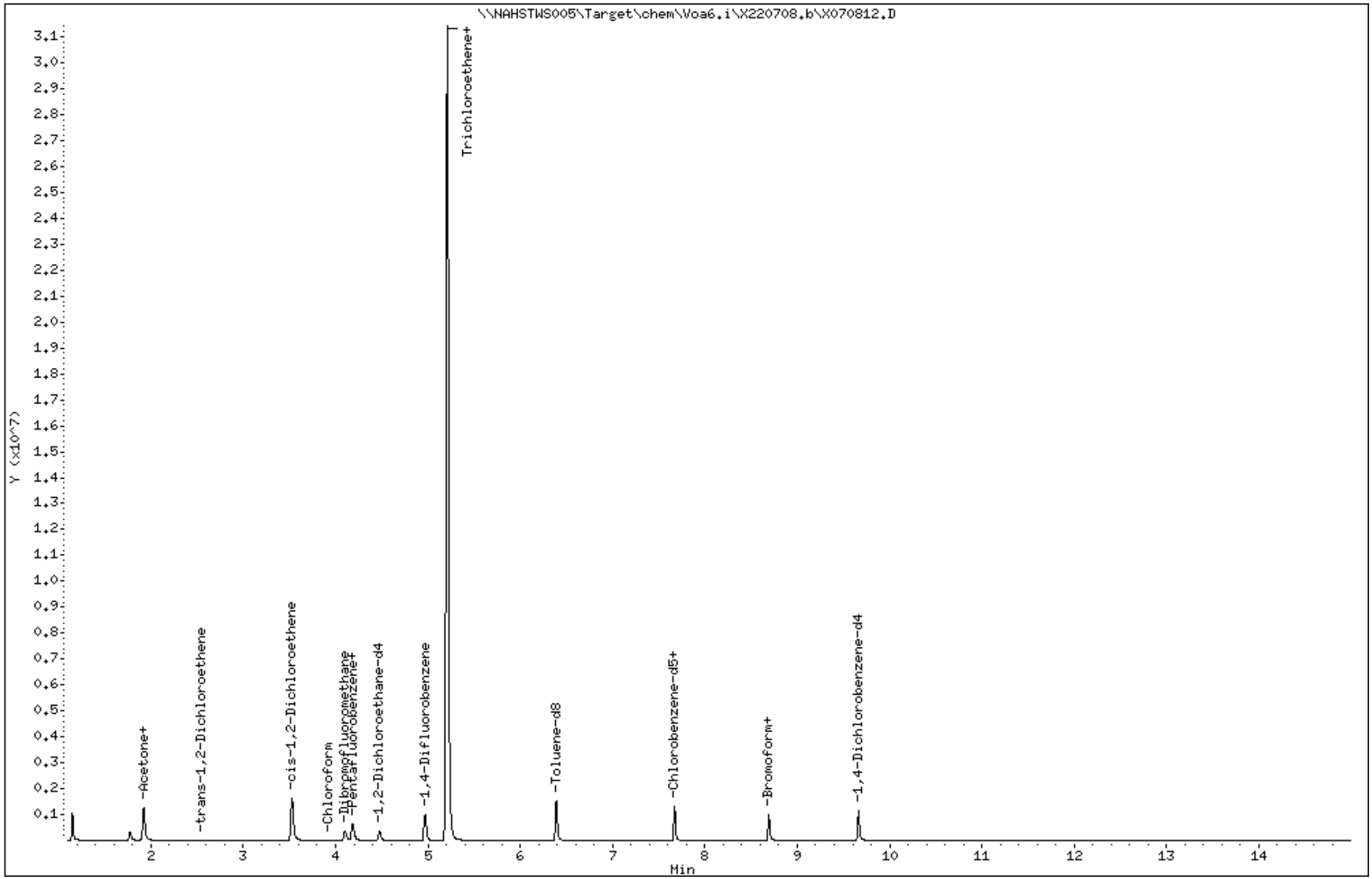
Sample Info: HS22070326-04;HS22070326-04;;;

Purge Volume: 5.0

Operator: PC

Column phase: DB624

Column diameter: 0.18



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D Page 2

Date : 08-JUL-2022 14:19

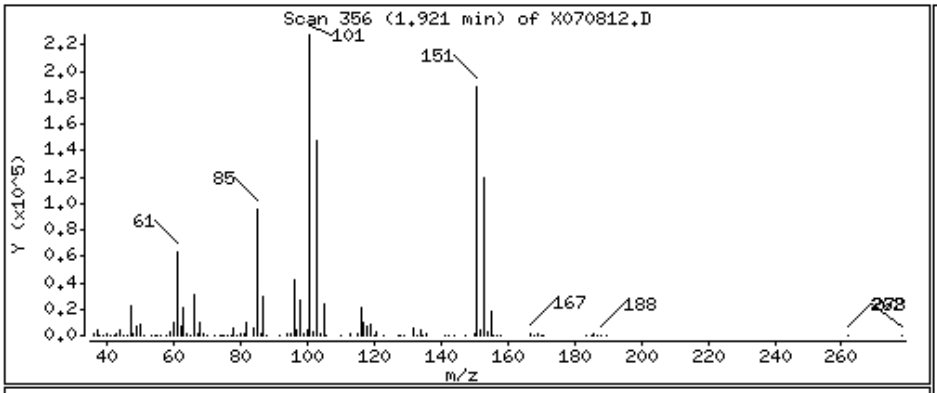
Client ID: HS22070326-04 Instrument: voa6.i

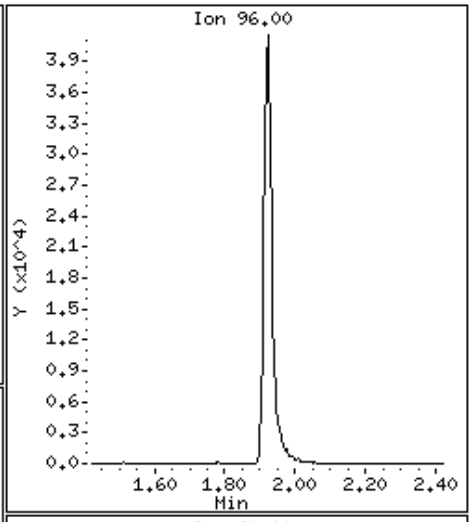
Sample Info: HS22070326-04;HS22070326-04;;;

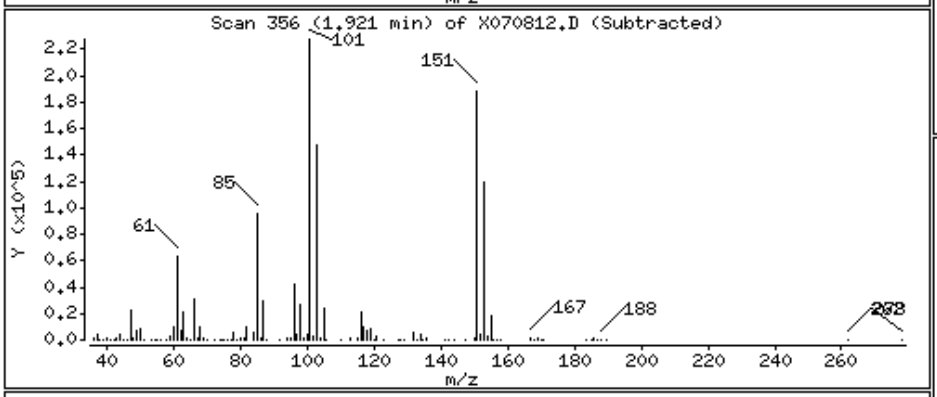
Purge Volume: 5.0 Operator: PC

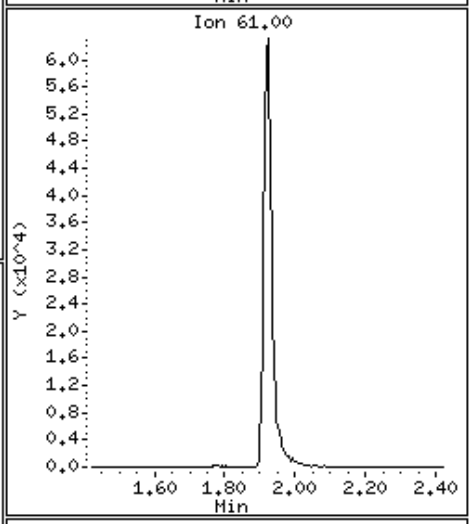
Column phase: DB624 Column diameter: 0.18

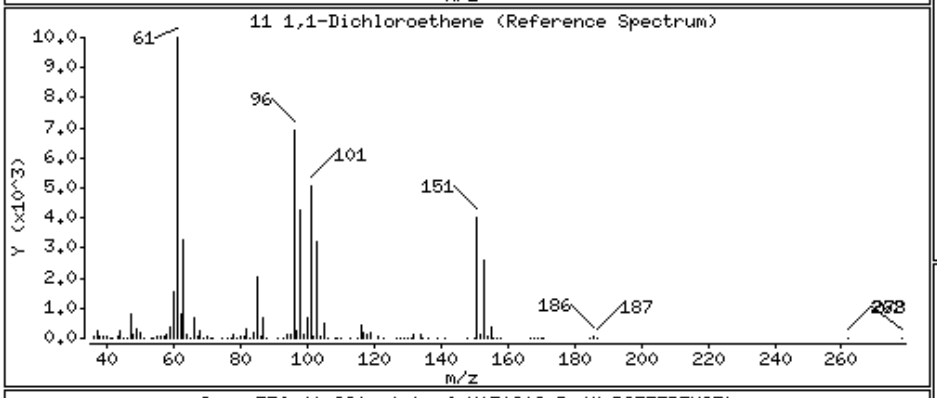
11 1,1-Dichloroethene Concentration: 12.49 ug/l

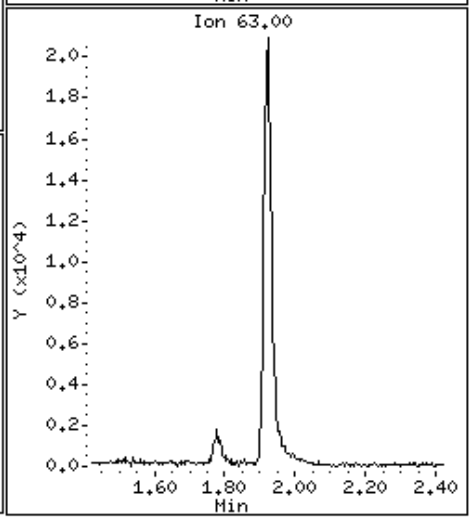


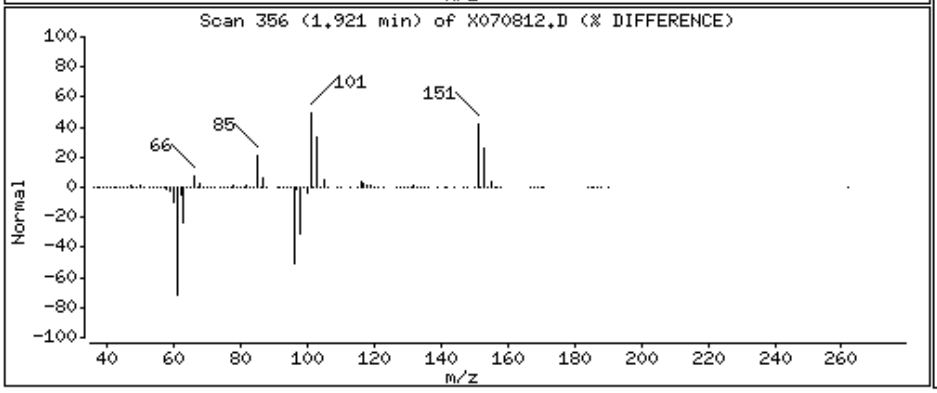












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D

Date : 08-JUL-2022 14:19

Client ID: HS22070326-04

Instrument: voa6.i

Sample Info: HS22070326-04;HS22070326-04;;;

Purge Volume: 5.0

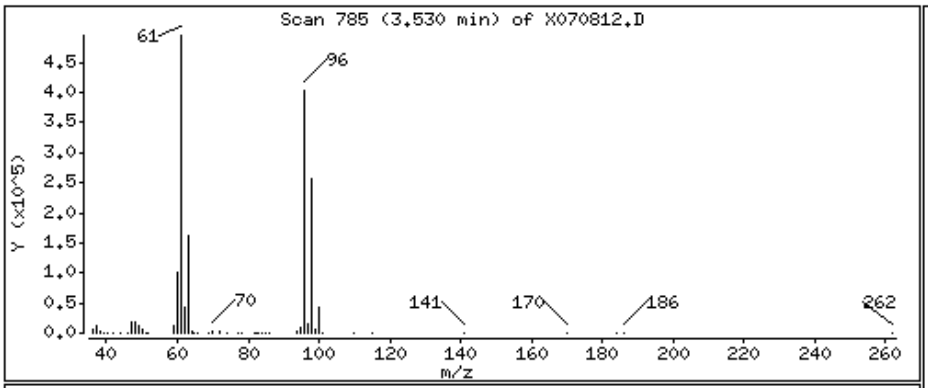
Operator: PC

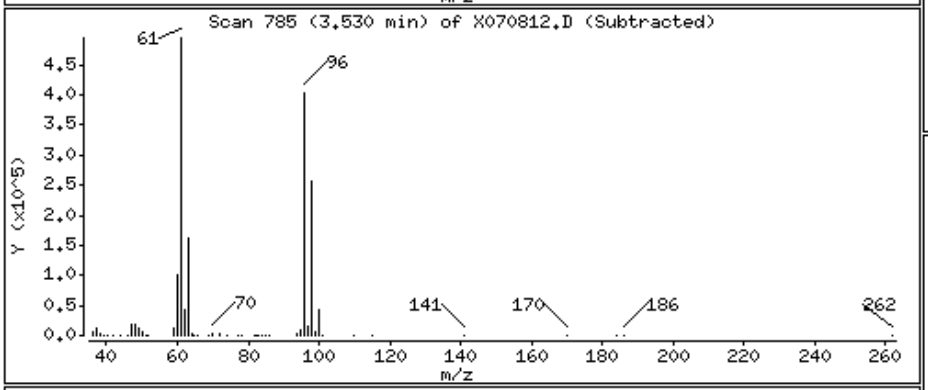
Column phase: DB624

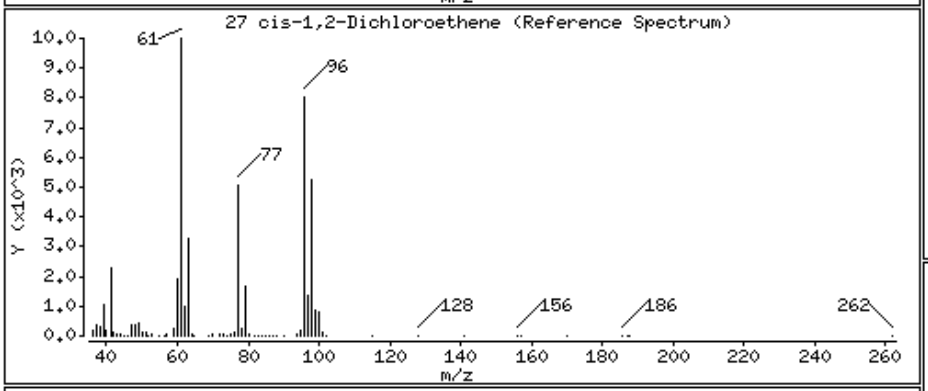
Column diameter: 0.18

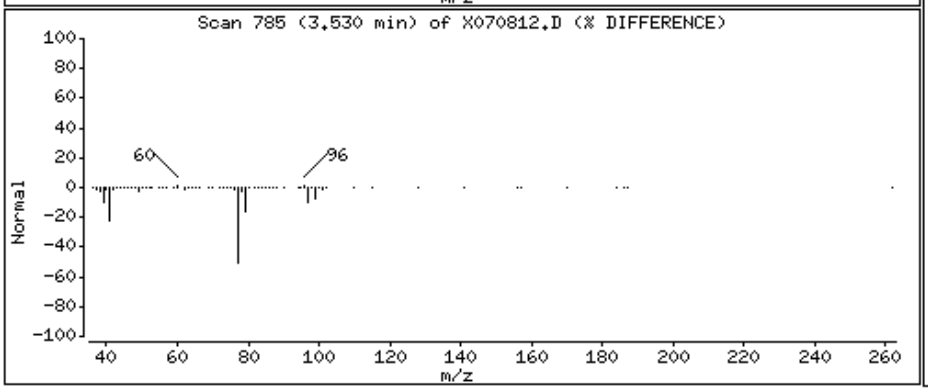
27 cis-1,2-Dichloroethene

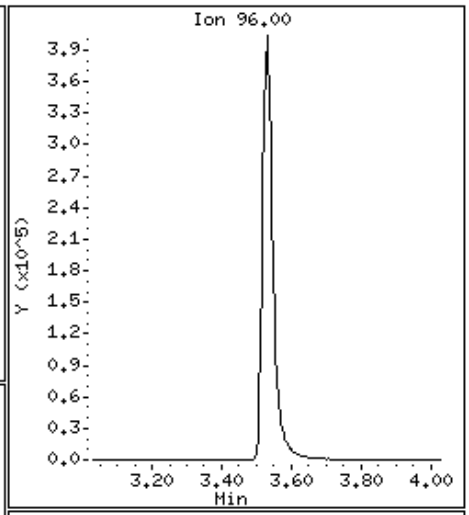
Concentration: 129.88 ug/l

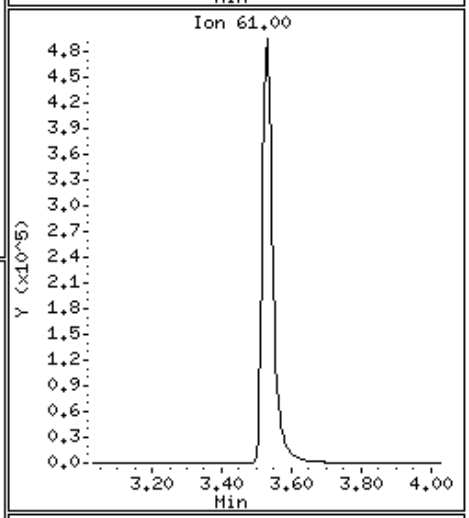


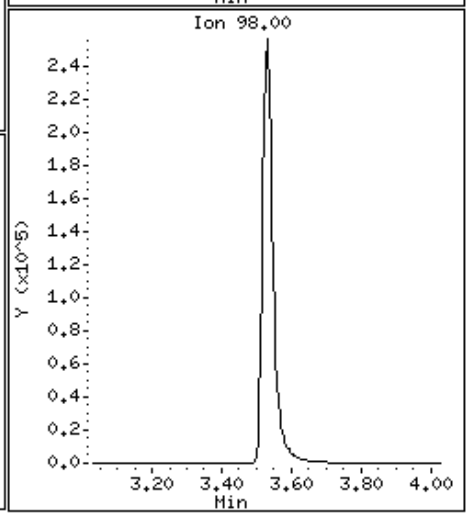












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D Page 4

Date : 08-JUL-2022 14:19

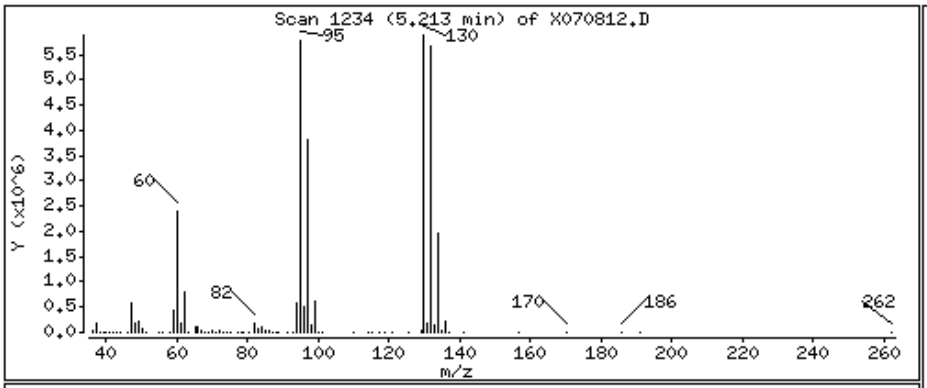
Client ID: HS22070326-04 Instrument: voa6.i

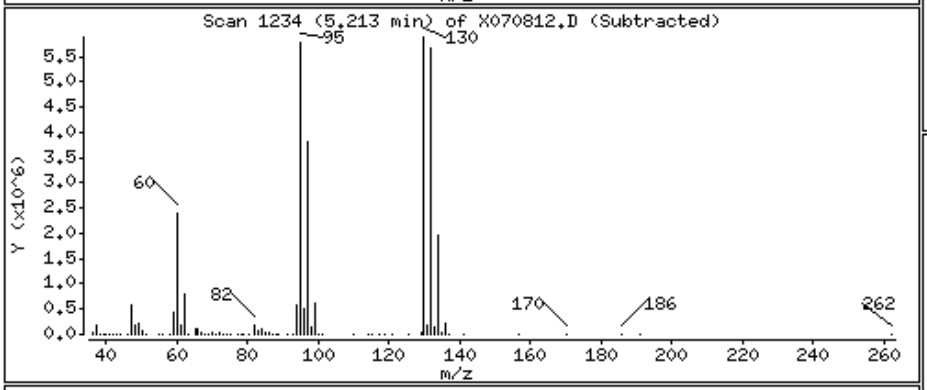
Sample Info: HS22070326-04;HS22070326-04;;;

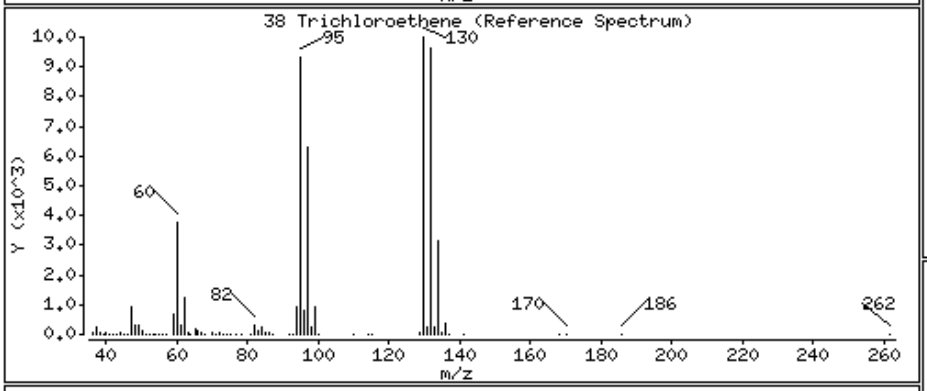
Purge Volume: 5.0 Operator: PC

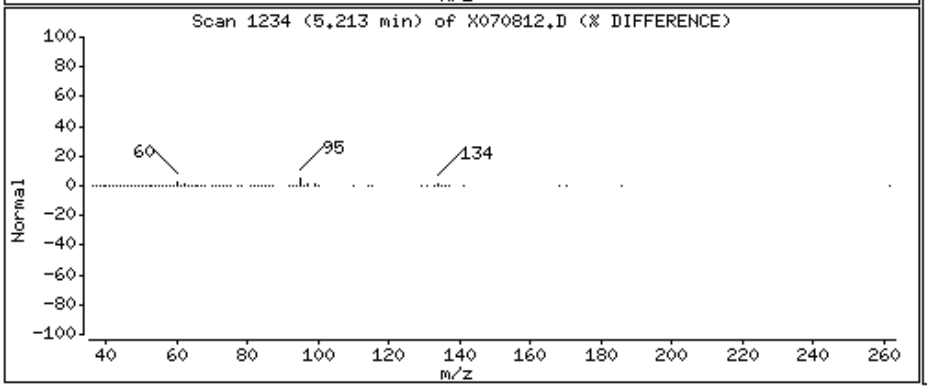
Column phase: DB624 Column diameter: 0.18

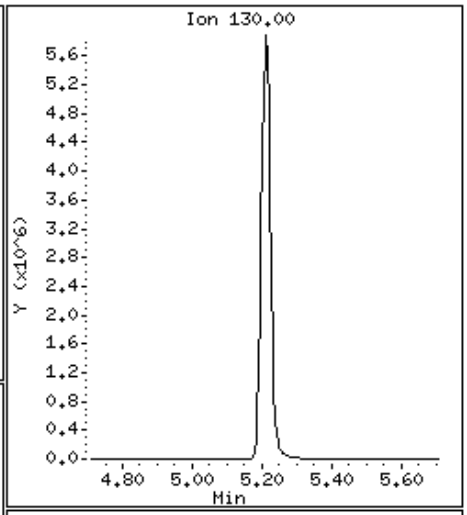
38 Trichloroethene Concentration: 1797.47 ug/l

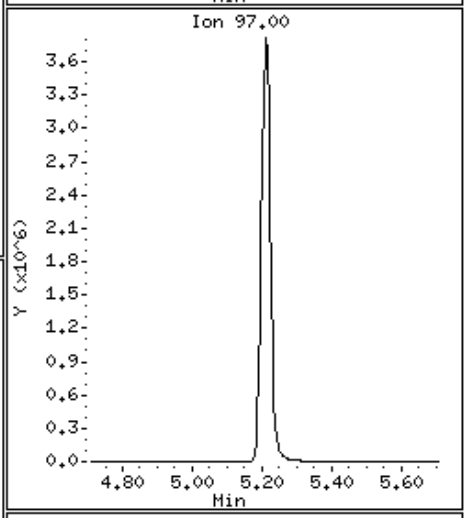


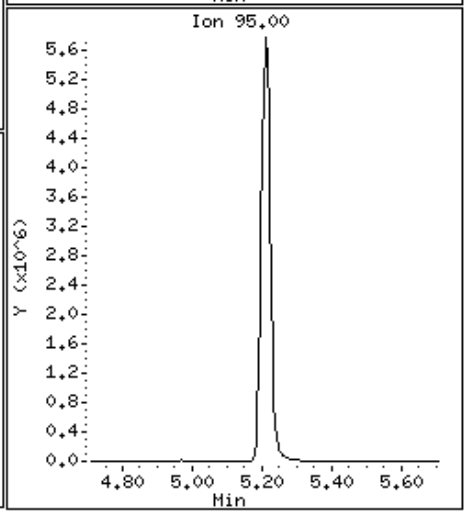












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D Page 5

Date : 08-JUL-2022 14:19

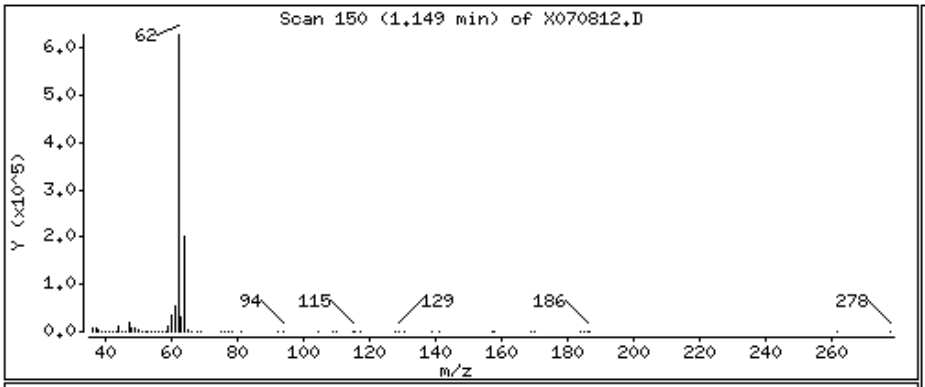
Client ID: HS22070326-04 Instrument: voa6.i

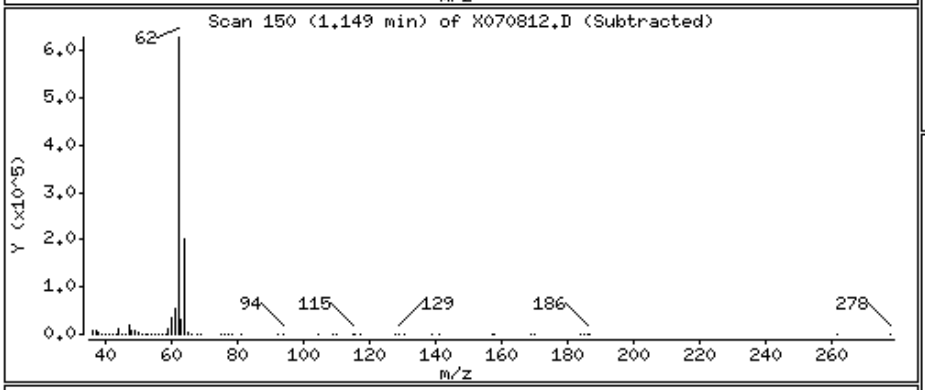
Sample Info: HS22070326-04;HS22070326-04;;;

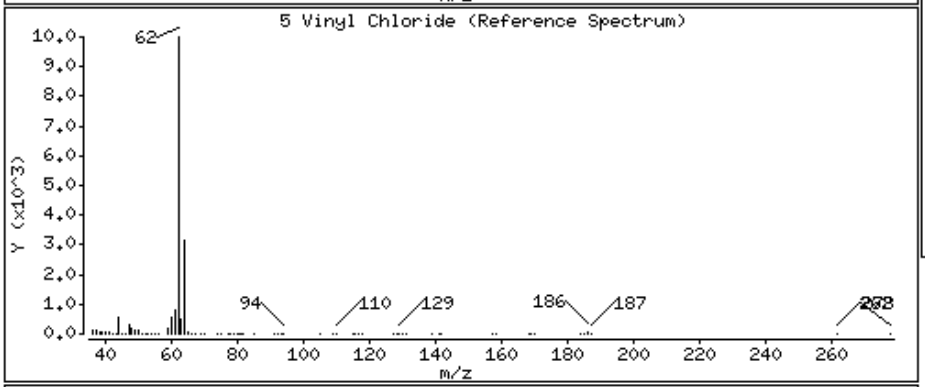
Purge Volume: 5.0 Operator: PC

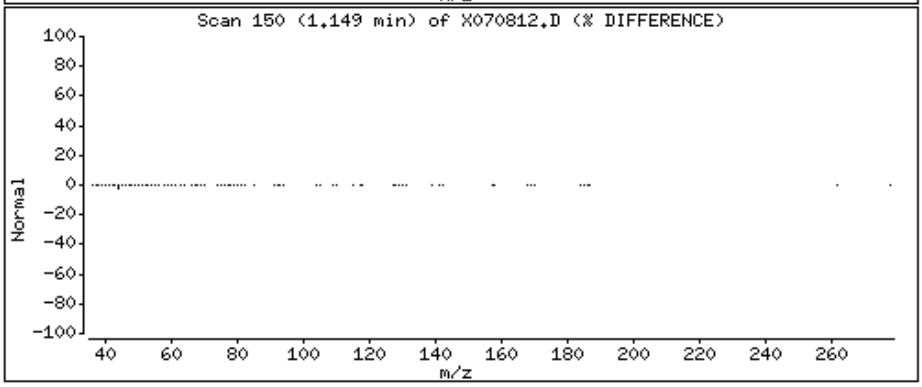
Column phase: DB624 Column diameter: 0.18

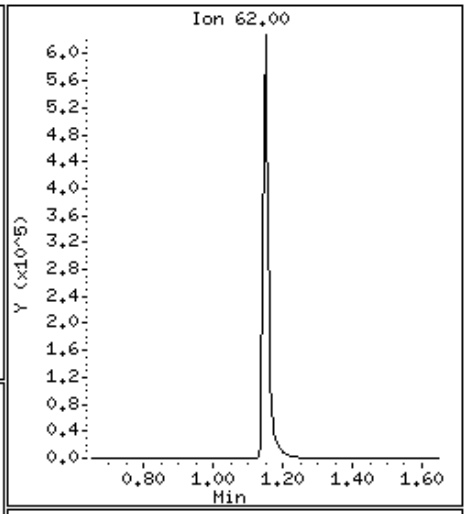
5 Vinyl Chloride Concentration: 93.74 ug/l

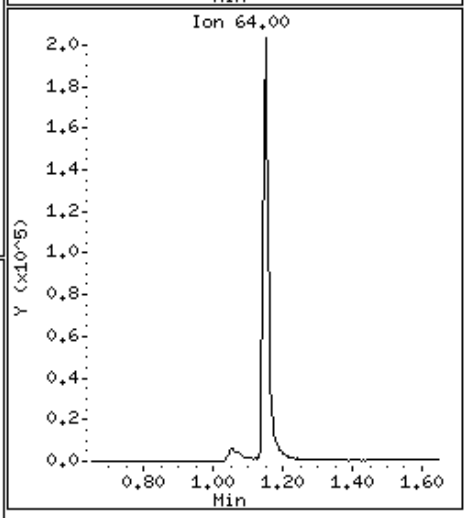












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070812.D
Inj Date : 08-JUL-2022 14:19
InstruID : voa6.i
LabSampID : HS22070326-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D
Lab Smp Id: HS22070326-05 Client Smp ID: HS22070326-05
Inj Date : 08-JUL-2022 14:40
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-05;HS22070326-05;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

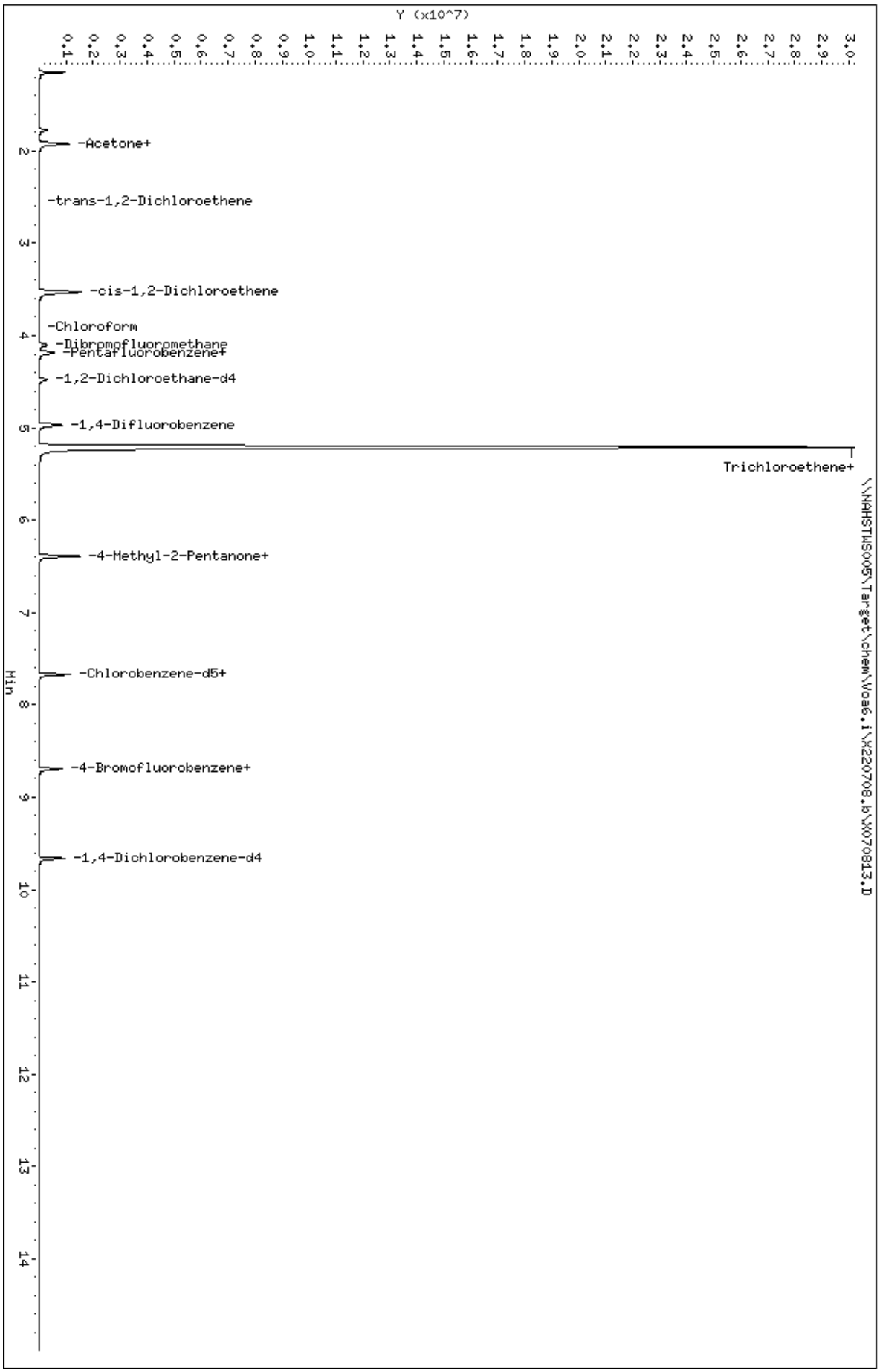
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	516877	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	780138	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	626976	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	274484	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	217364	44.7821	44.78
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	270808	49.7037	49.70
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	216831	45.4576	45.45
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	990159	63.5972	63.59(R)
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	61733	12.4845	12.48
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	800803	133.859	133.85
38 Trichloroethene	130	5.212	5.208	(1.049)	10718604	1834.72	1834.71(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	654090	98.9387	98.93

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D
Date : 08-JUL-2022 14:40
Client ID: HS220703326-05
Sample Info: HS220703326-05;HS220703326-05;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D Page 2

Date : 08-JUL-2022 14:40

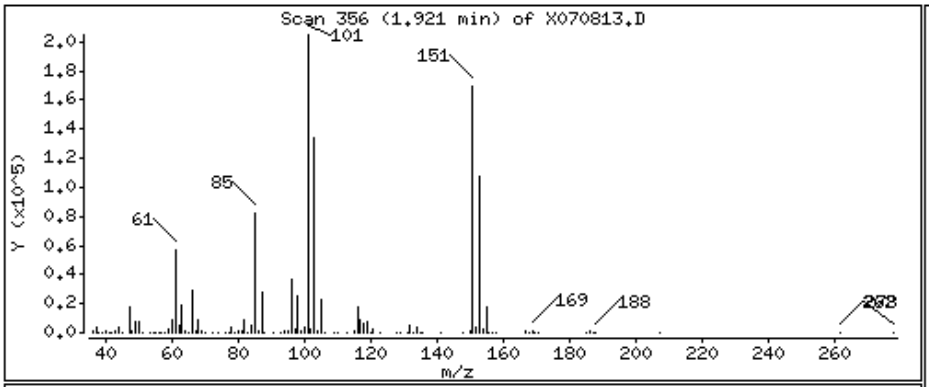
Client ID: HS22070326-05 Instrument: voa6.i

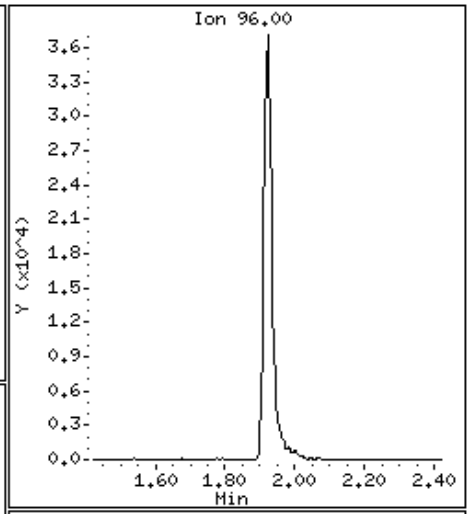
Sample Info: HS22070326-05;HS22070326-05;;;

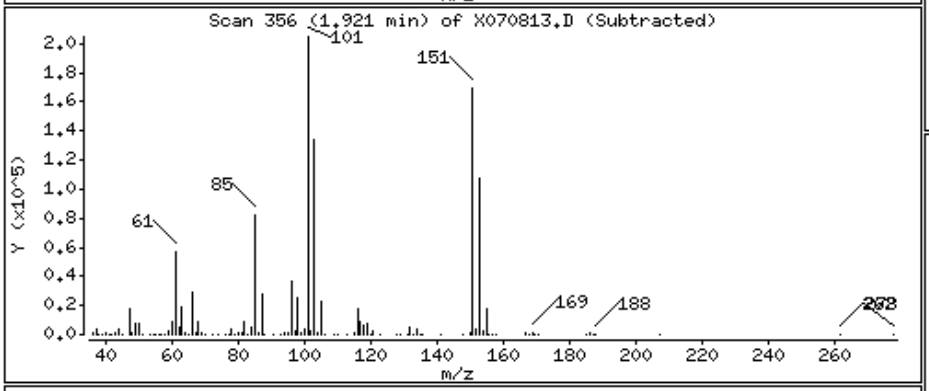
Purge Volume: 5.0 Operator: PC

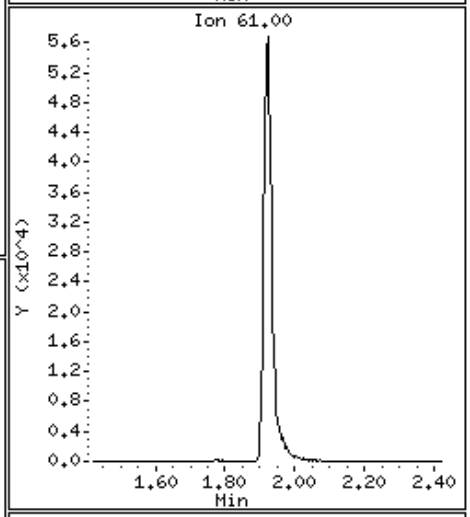
Column phase: DB624 Column diameter: 0.18

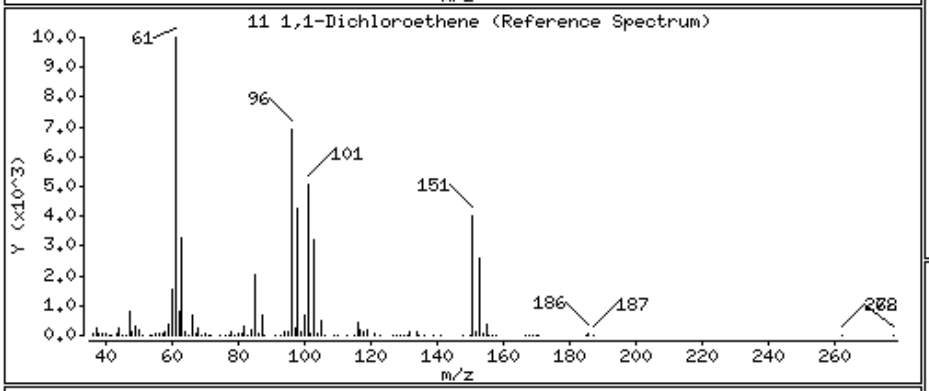
11 1,1-Dichloroethene Concentration: 12.48 ug/l

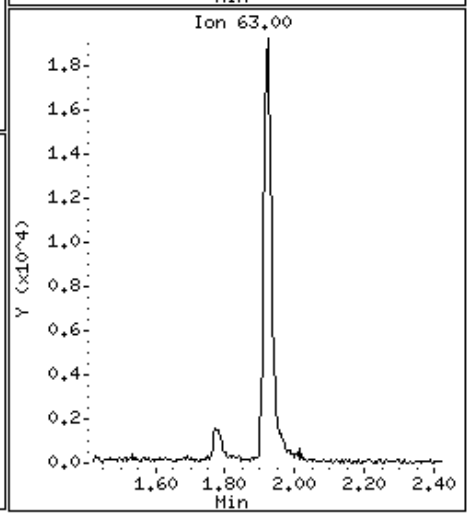


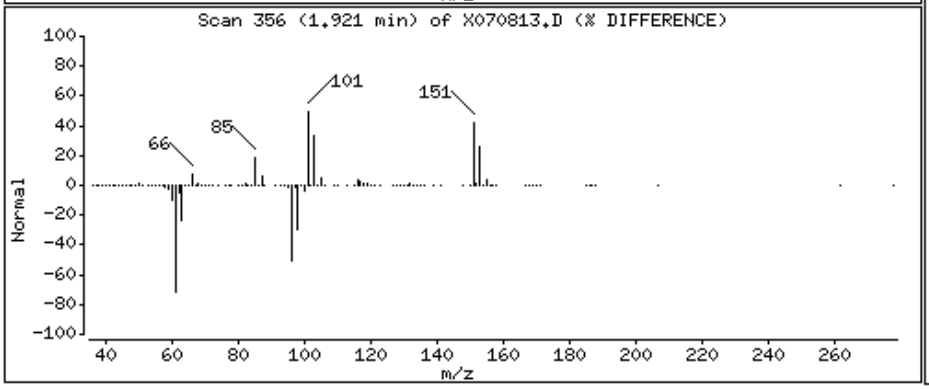












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D Page 3

Date : 08-JUL-2022 14:40

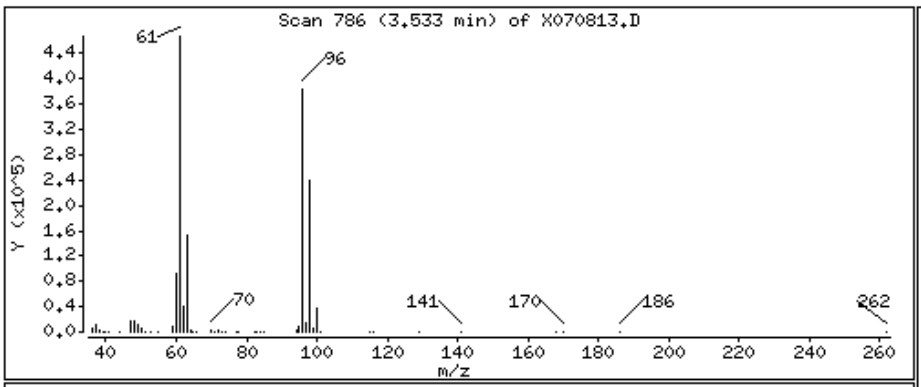
Client ID: HS22070326-05 Instrument: voa6.i

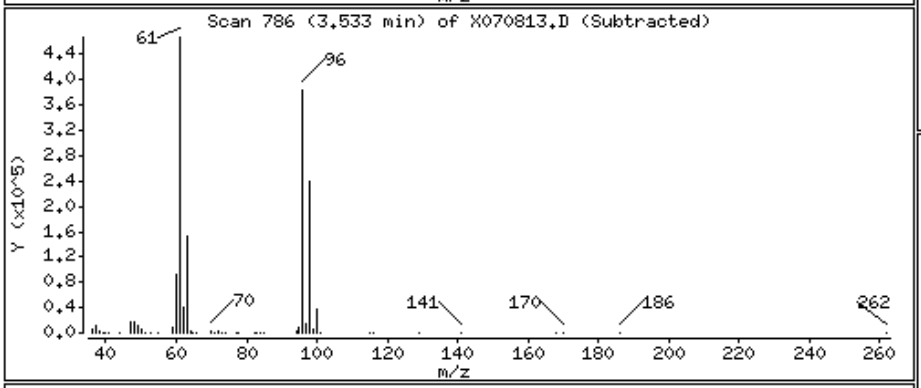
Sample Info: HS22070326-05;HS22070326-05;;;

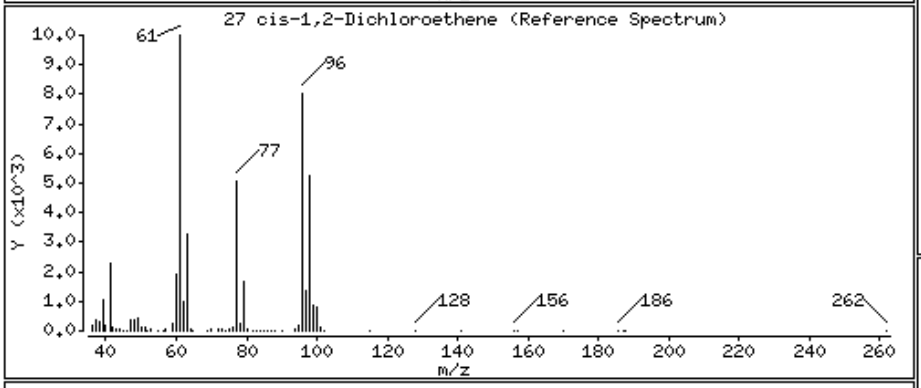
Purge Volume: 5.0 Operator: PC

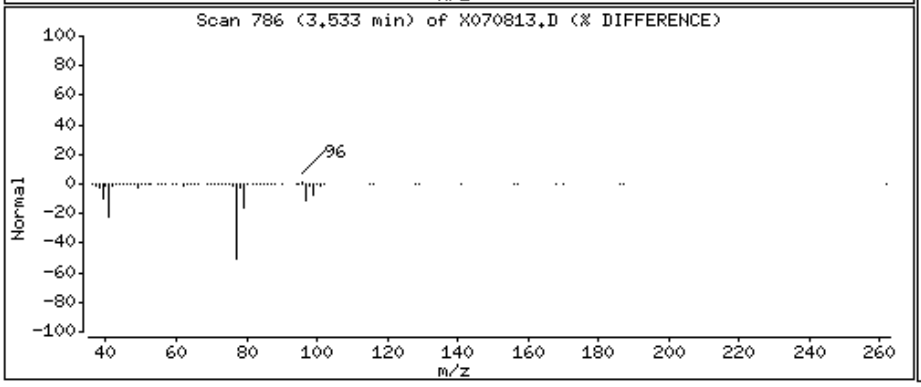
Column phase: DB624 Column diameter: 0.18

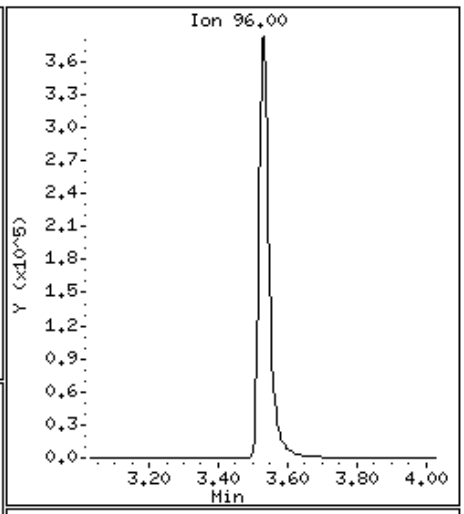
27 cis-1,2-Dichloroethene Concentration: 133.85 ug/l

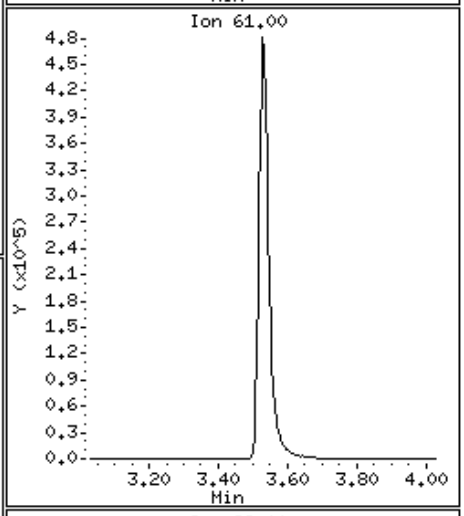


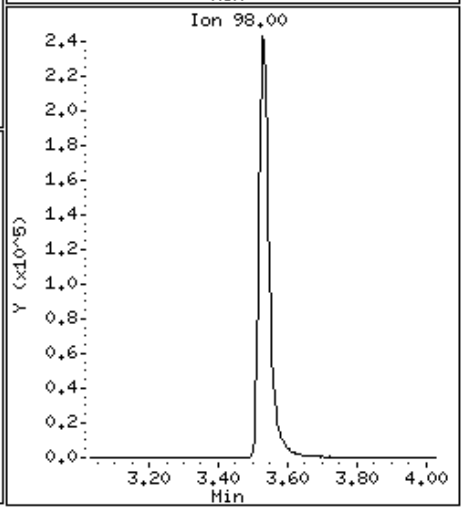












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D

Date : 08-JUL-2022 14:40

Client ID: HS22070326-05

Instrument: voa6.i

Sample Info: HS22070326-05;HS22070326-05;;;

Purge Volume: 5.0

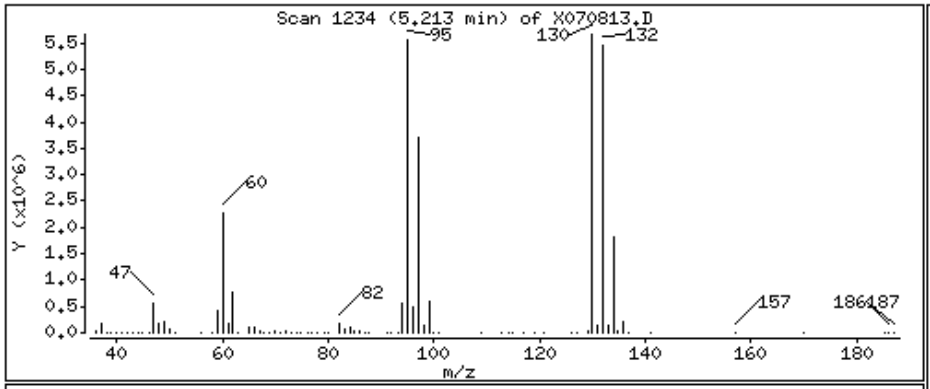
Operator: PC

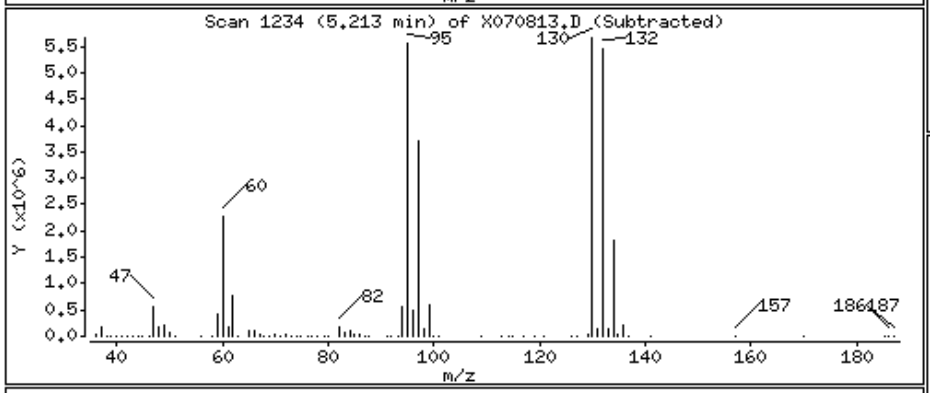
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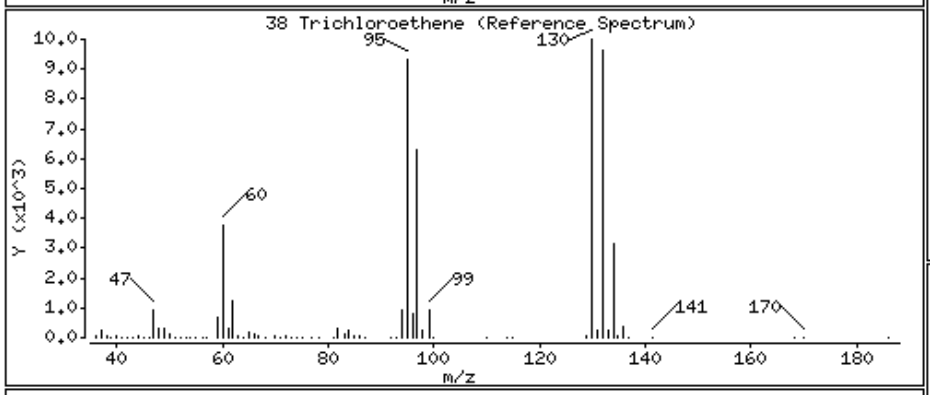
Column diameter: 0.18

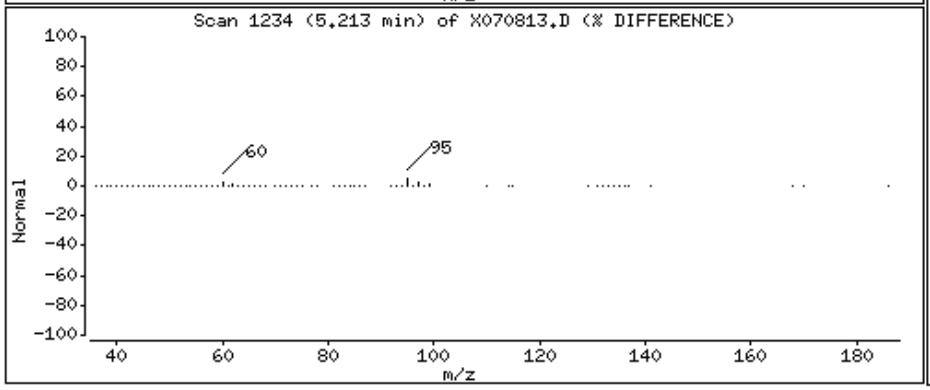
38 Trichloroethene

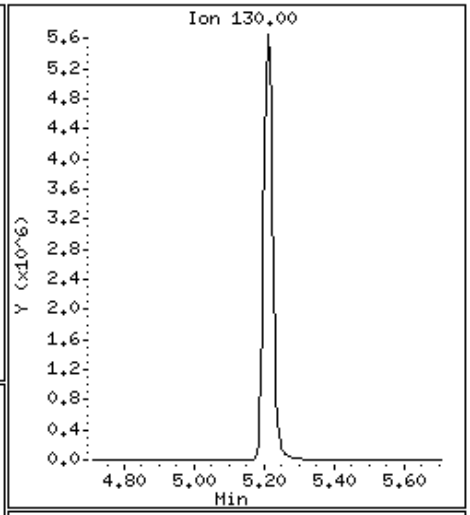
Concentration: 1834.71 ug/l

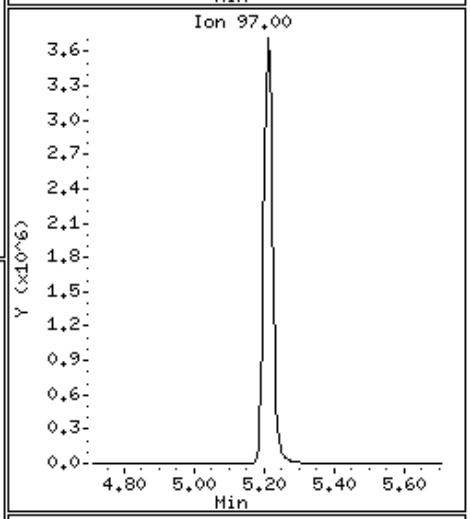


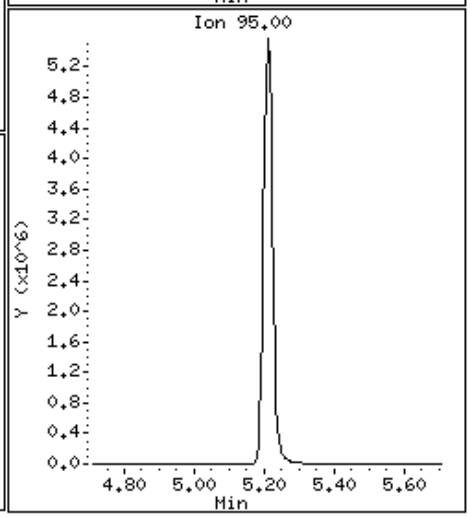












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D Page 5

Date : 08-JUL-2022 14:40

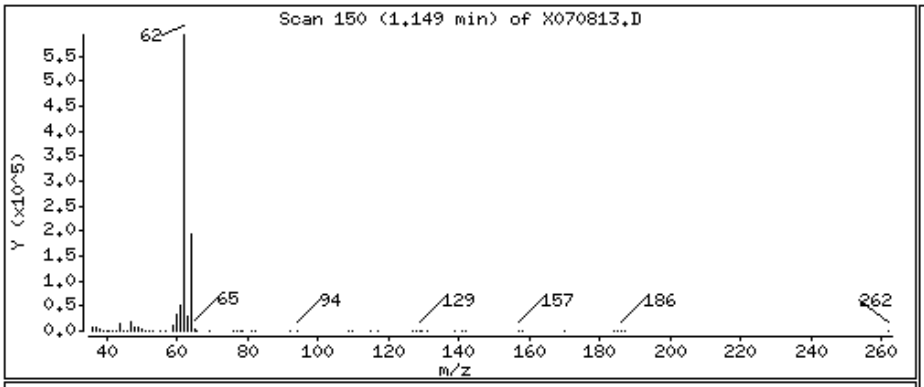
Client ID: HS22070326-05 Instrument: voa6.i

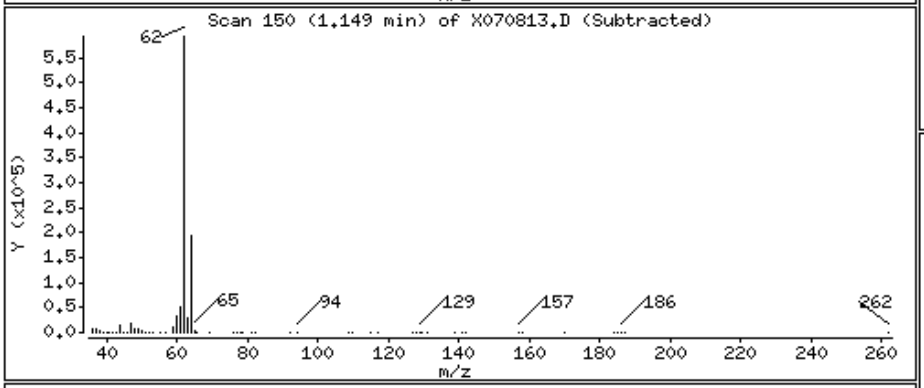
Sample Info: HS22070326-05;HS22070326-05;;;

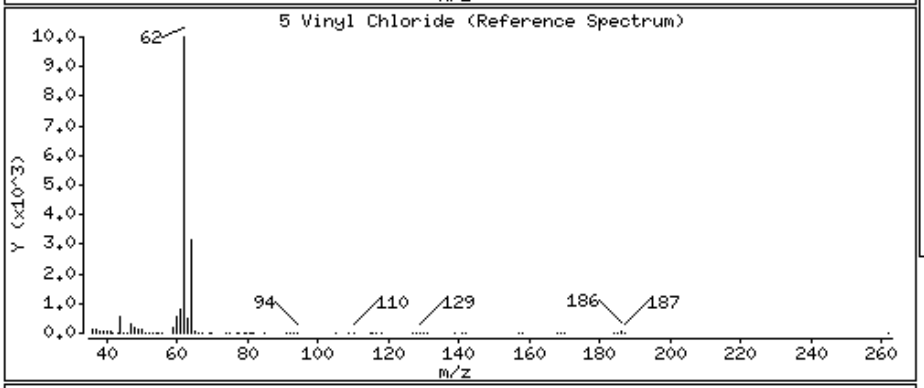
Purge Volume: 5.0 Operator: PC

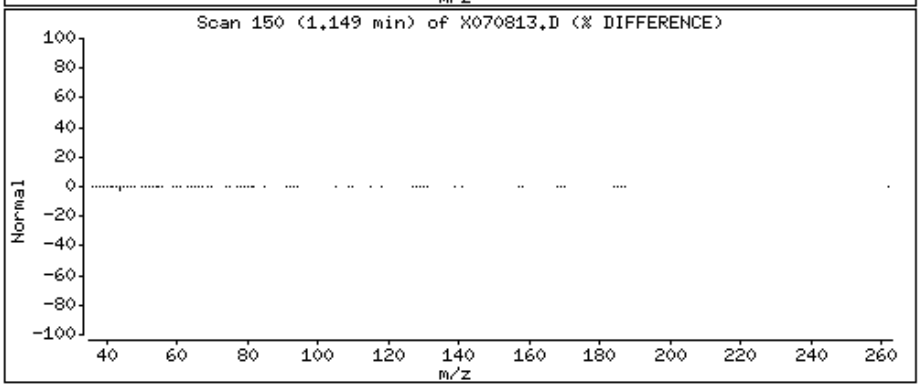
Column phase: DB624 Column diameter: 0.18

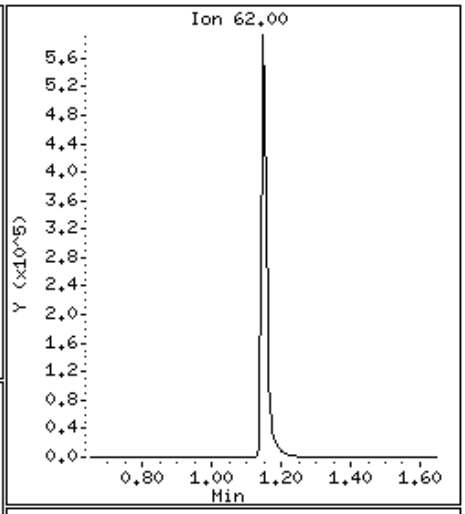
5 Vinyl Chloride Concentration: 98.93 ug/l

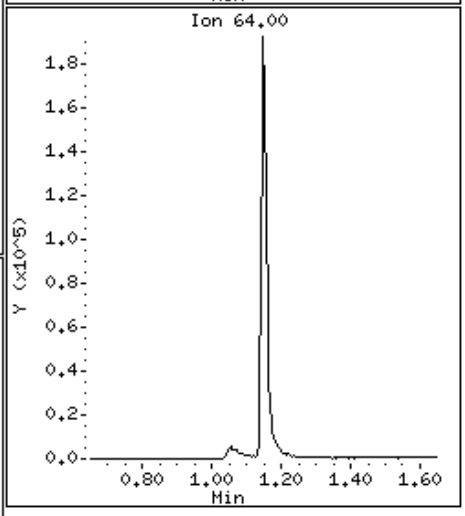












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070813.D
Inj Date : 08-JUL-2022 14:40
InstruID : voa6.i
LabSampID : HS22070326-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070814.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070814.D
Lab Smp Id: HS22070326-07 Client Smp ID: HS22070326-07
Inj Date : 08-JUL-2022 15:01
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-07;HS22070326-07;;;
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 14
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

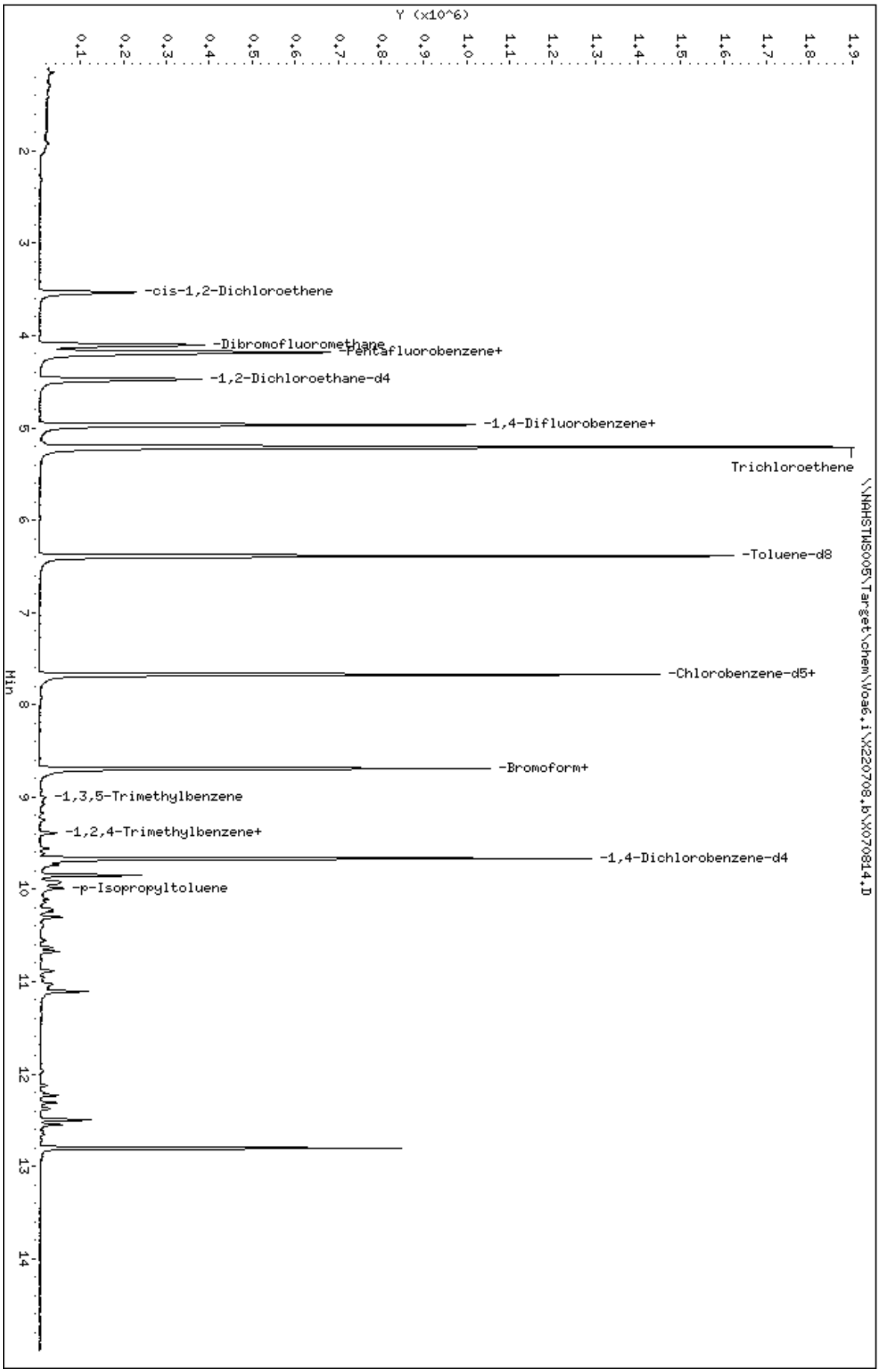
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	616093	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	882391	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	753799	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	328575	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	289913	50.2490	50.24
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	332341	50.7414	50.74
$ 30 Dibromofluoromethane	113	4.106	4.102	(0.981)	274829	48.3564	48.35
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1022946	54.6489	54.64
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	123380	17.3024	173.02
38 Trichloroethene	130	5.208	5.208	(1.048)	656355	99.3301	993.30
5 Vinyl Chloride	62	1.149	1.149	(0.275)	8455	1.07296	10.72(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220708.b\X070814.D
Date : 08-JUL-2022 15:01
Client ID: HS220703326-07
Sample Info: HS220703326-07;HS220703326-07;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070814.D Page 2

Date : 08-JUL-2022 15:01

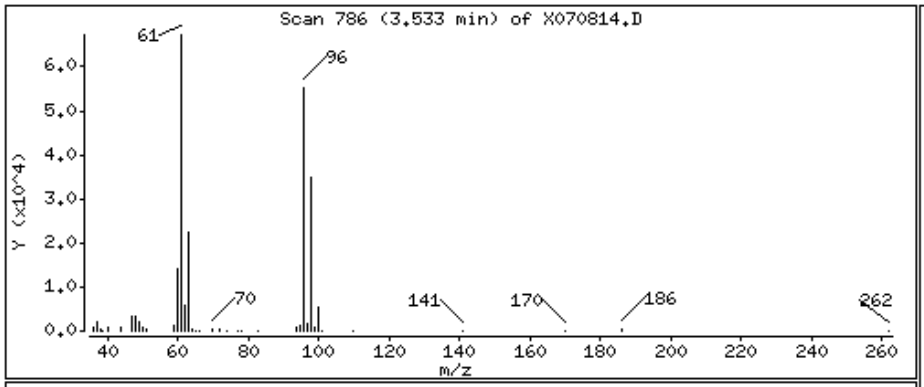
Client ID: HS22070326-07 Instrument: voa6.i

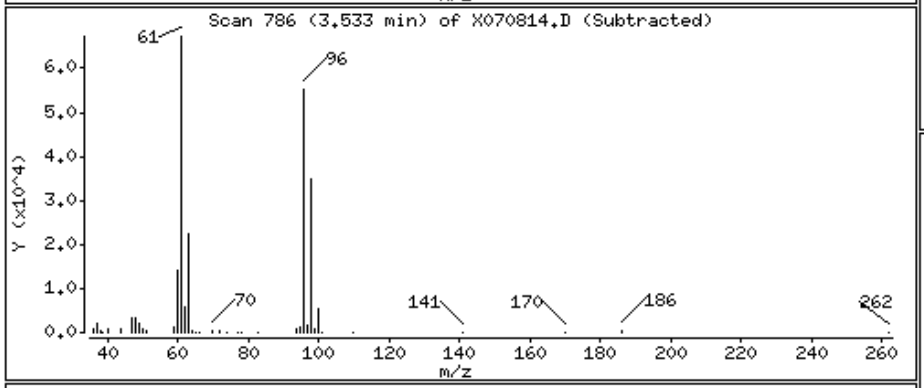
Sample Info: HS22070326-07;HS22070326-07;;;

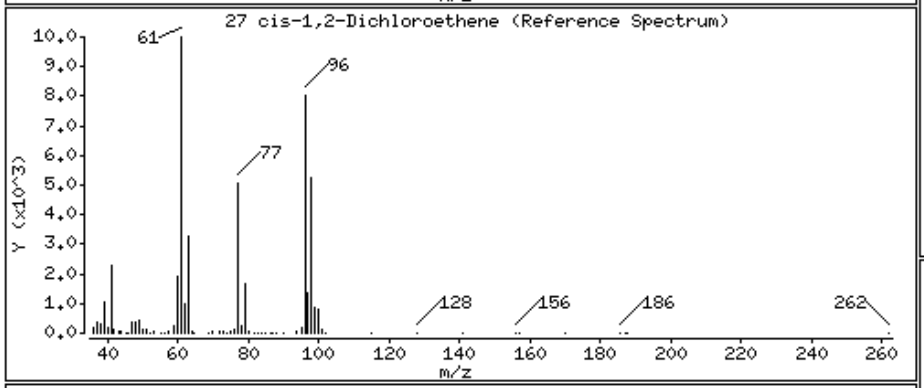
Purge Volume: 5.0 Operator: PC

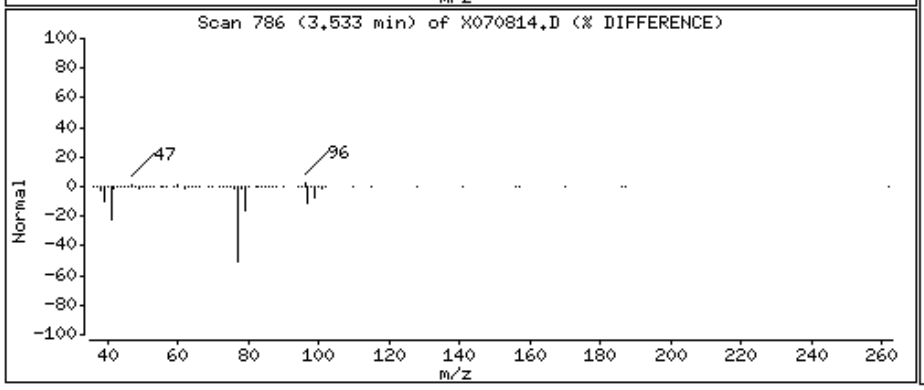
Column phase: DB624 Column diameter: 0.18

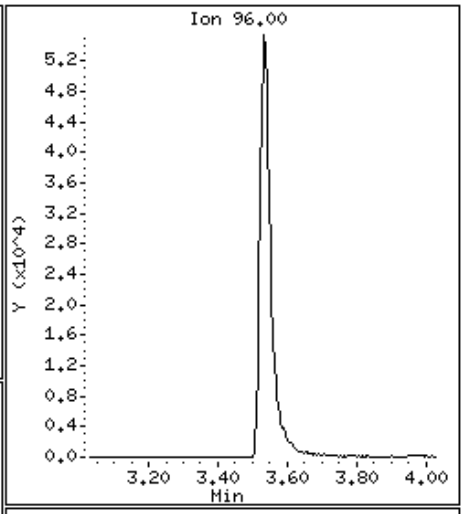
27 cis-1,2-Dichloroethene Concentration: 173.02 ug/l

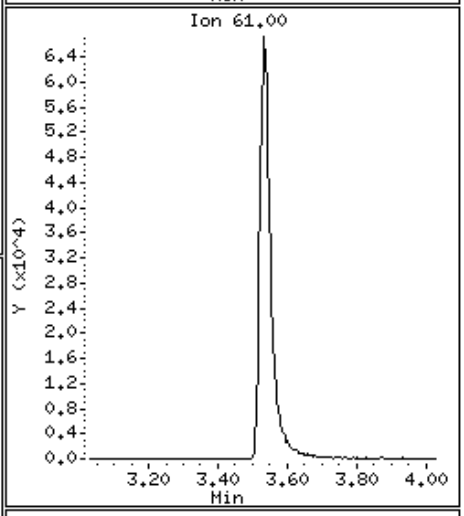


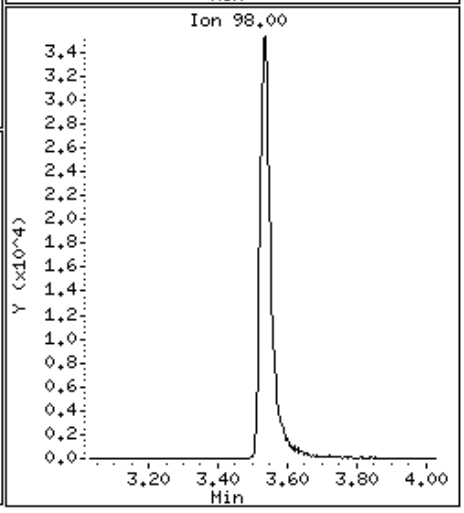












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070814.D Page 3

Date : 08-JUL-2022 15:01

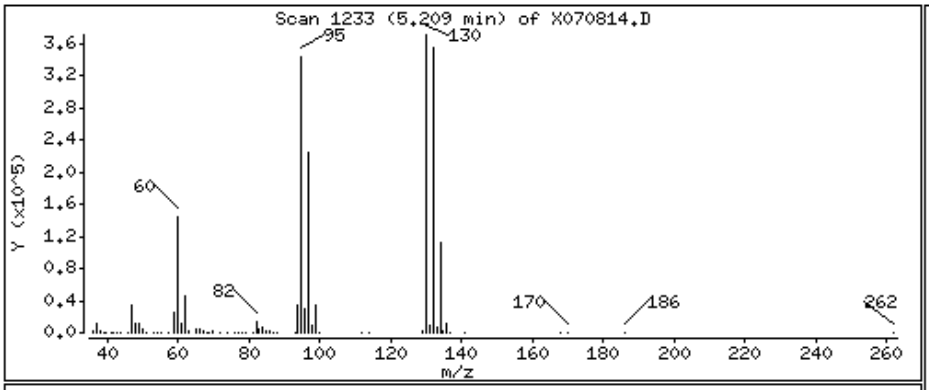
Client ID: HS22070326-07 Instrument: voa6.i

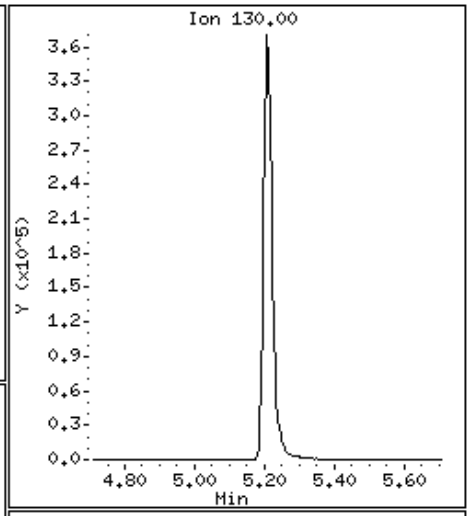
Sample Info: HS22070326-07;HS22070326-07;;;

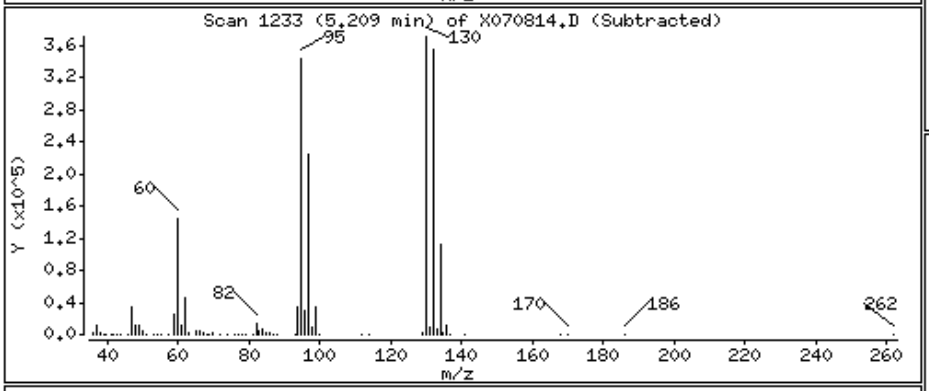
Purge Volume: 5.0 Operator: PC

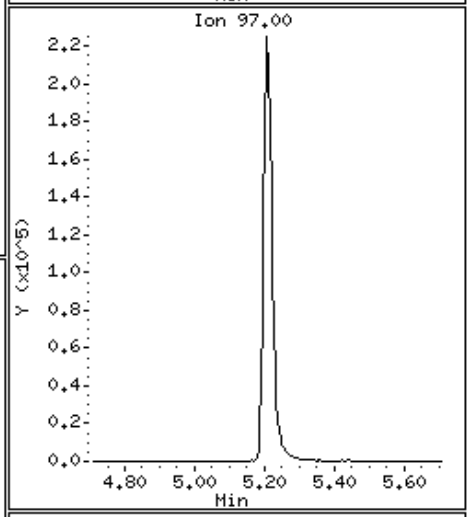
Column phase: DB624 Column diameter: 0.18

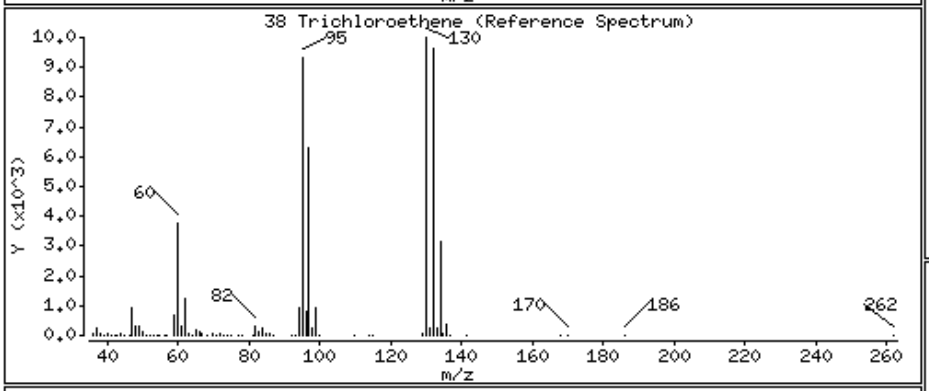
38 Trichloroethene Concentration: 993.30 ug/l

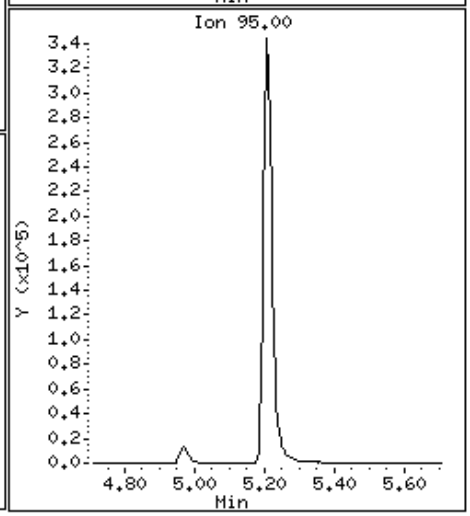


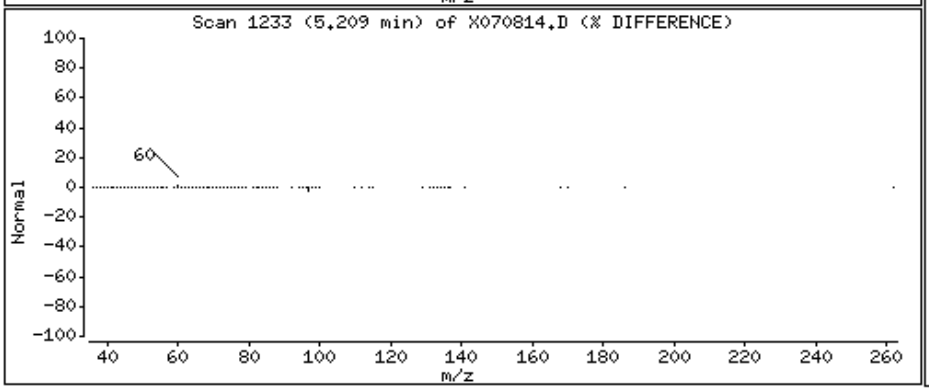












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070814.D Page 4

Date : 08-JUL-2022 15:01

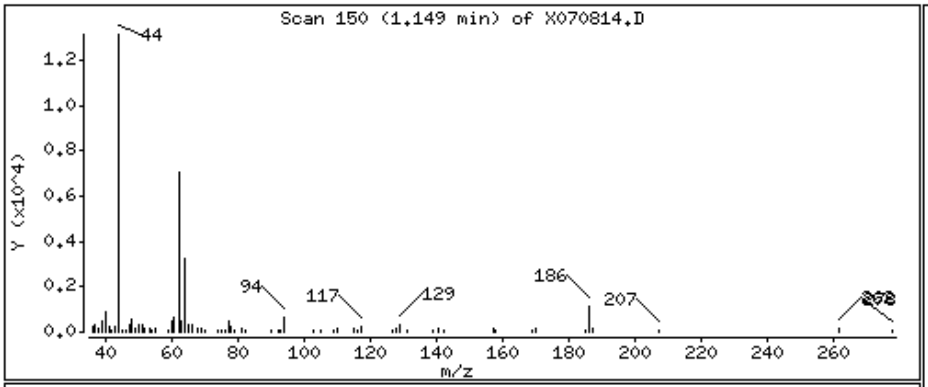
Client ID: HS22070326-07 Instrument: voa6.i

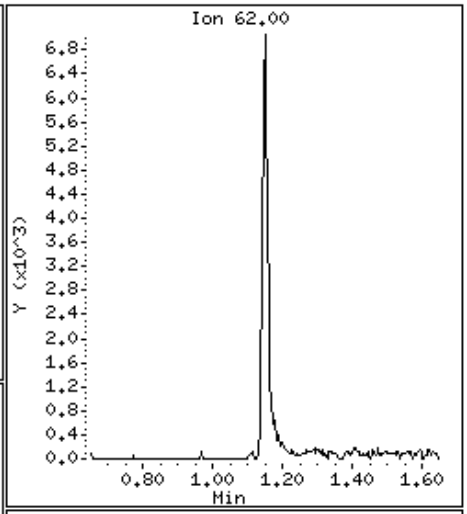
Sample Info: HS22070326-07;HS22070326-07;;;

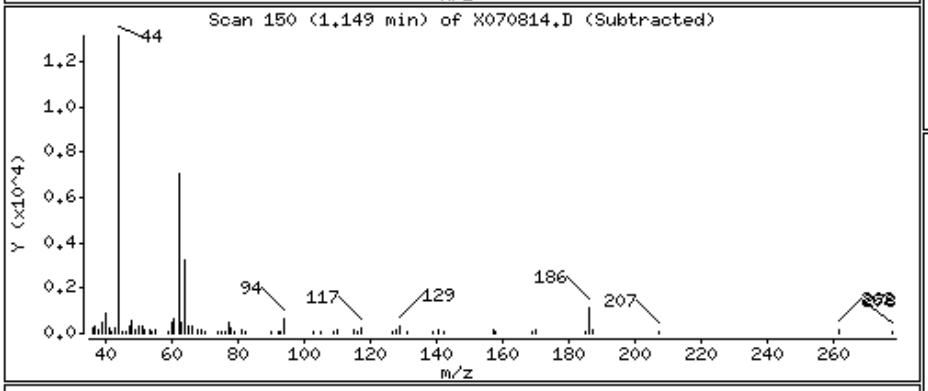
Purge Volume: 5.0 Operator: PC

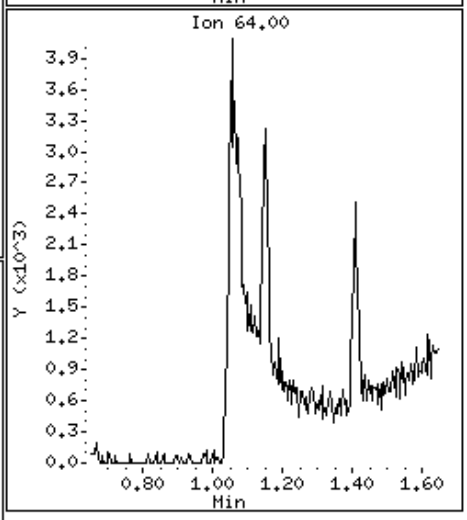
Column phase: DB624 Column diameter: 0.18

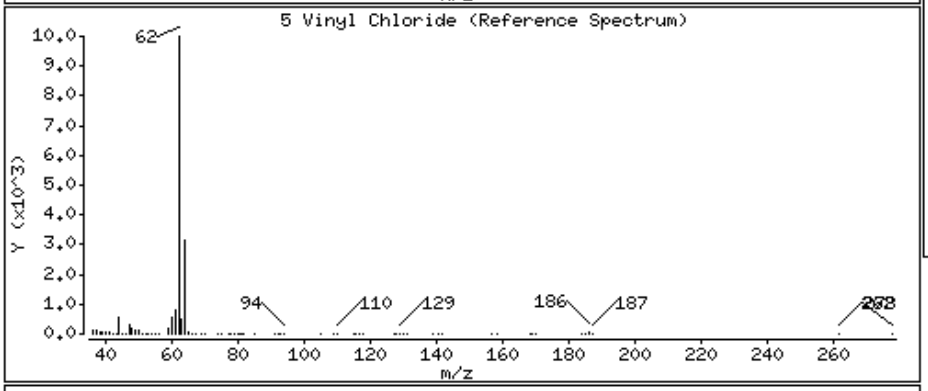
5 Vinyl Chloride Concentration: 10.72 ug/l

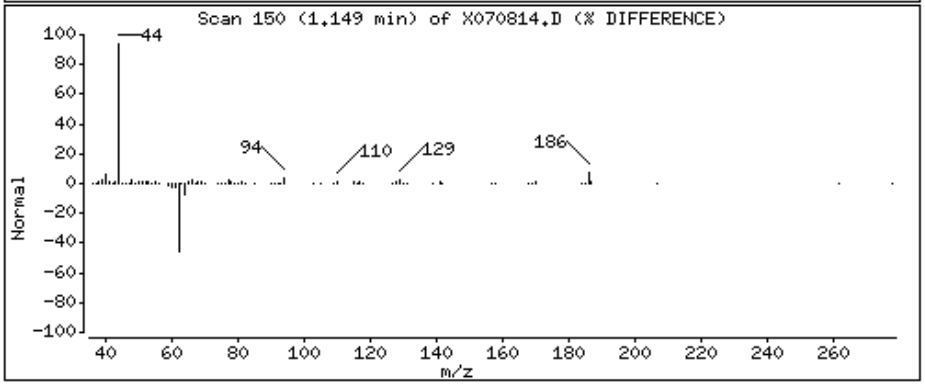












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070814.D
Inj Date : 08-JUL-2022 15:01
InstruID : voa6.i
LabSampID : HS22070326-07

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070815.D Page 1
Report Date: 19-Jul-2022 14:36

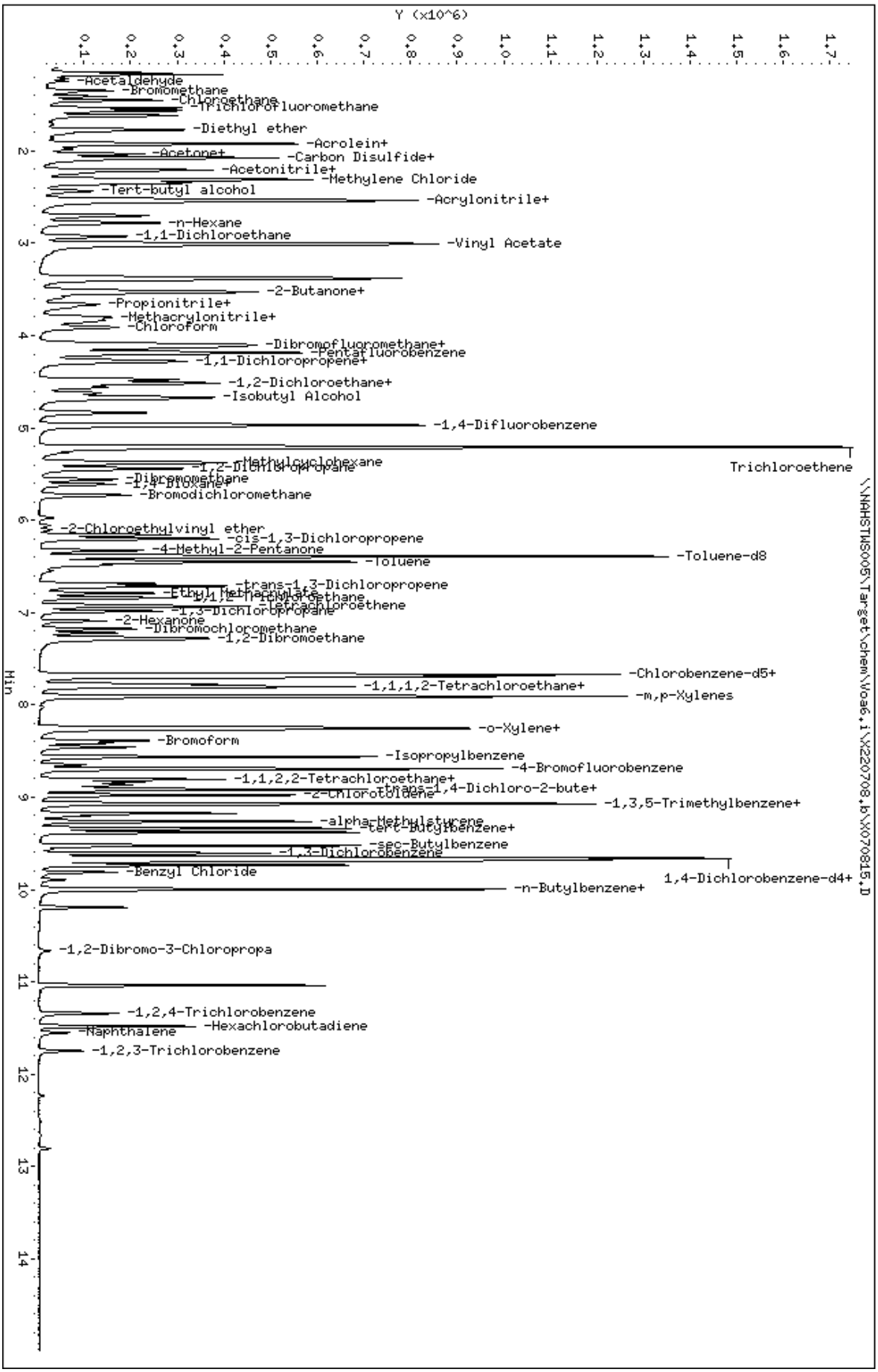
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070815.D
Lab Smp Id: HS22070326-07MS Client Smp ID: HS22070326-07MS
Inj Date : 08-JUL-2022 15:23
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-07MS;HS22070326-07MS;3;;MS
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 15 QC Sample: MS
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	512403	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	714717	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	625850	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	299670	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	218058	45.3312	45.33
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	280418	51.5719	51.57
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	215234	45.5172	45.51
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	848399	54.5901	54.59
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	68404	19.2249	192.24
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	103057	21.0237	210.23
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	111888	18.8912	188.91
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	201812	34.0285	340.28
17 Methylene Chloride	84	2.311	2.311	(0.552)	117678	20.1366	201.36
38 Trichloroethene	130	5.209	5.208	(1.048)	616586	115.203	1152.02
5 Vinyl Chloride	62	1.149	1.149	(0.275)	131152	20.0115	200.11



Data File: \\NAHSTMS005\Target\chem\voa6.i\X220708.b\X070815.D
Date : 08-JUL-2022 15:23
Client ID: HS220703326-07MS
Sample Info: HS220703326-07MS;HS220703326-07MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070815.D
Inj Date : 08-JUL-2022 15:23
InstruID : voa6.i
LabSampID : HS22070326-07MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070816.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070816.D
Lab Smp Id: HS22070326-07MSD Client Smp ID: HS22070326-07MSD
Inj Date : 08-JUL-2022 15:44
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-07MSD;HS22070326-07MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 15 QC Sample: MSD
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

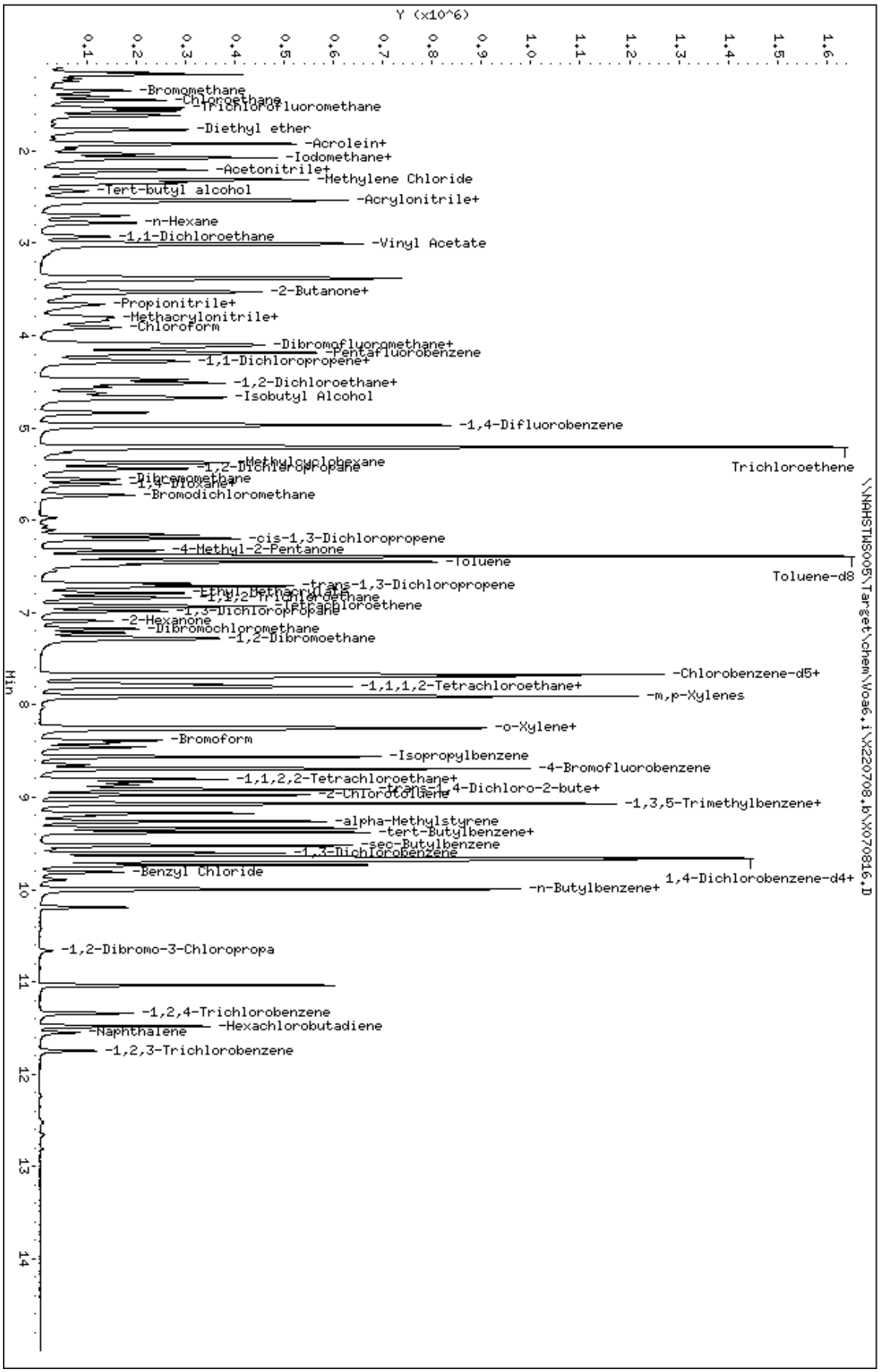
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	513766	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	719939	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	625244	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	294304	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	219396	45.4924	45.49
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	282079	51.9298	51.92
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	213868	45.1057	45.10
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1014815	65.3614	65.36(R)
53 1,1,2-Trichloroethane	83	6.843	6.839	(0.892)	70748	19.9029	199.02
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	96959	19.7272	197.27
33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	106695	17.8837	178.83
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	193419	32.5268	325.26
17 Methylene Chloride	84	2.307	2.311	(0.551)	109499	18.7323	187.32
38 Trichloroethene	130	5.208	5.208	(1.048)	581627	107.883	1078.82
5 Vinyl Chloride	62	1.149	1.149	(0.275)	135099	20.5590	205.59

QC Flag Legend

R - Spike/Surrogate failed recovery limits.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220708.b\X070816.D
Date : 08-JUL-2022 15:44
Client ID: HS220703326-07MSD
Sample Info: HS220703326-07MSD;HS220703326-07MSD;3;;MSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070816.D
Inj Date : 08-JUL-2022 15:44
InstruID : voa6.i
LabSampID : HS22070326-07MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D
Lab Smp Id: HS22070326-04 Client Smp ID: HS22070326-04
Inj Date : 08-JUL-2022 16:05
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-04;HS22070326-04;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 16
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

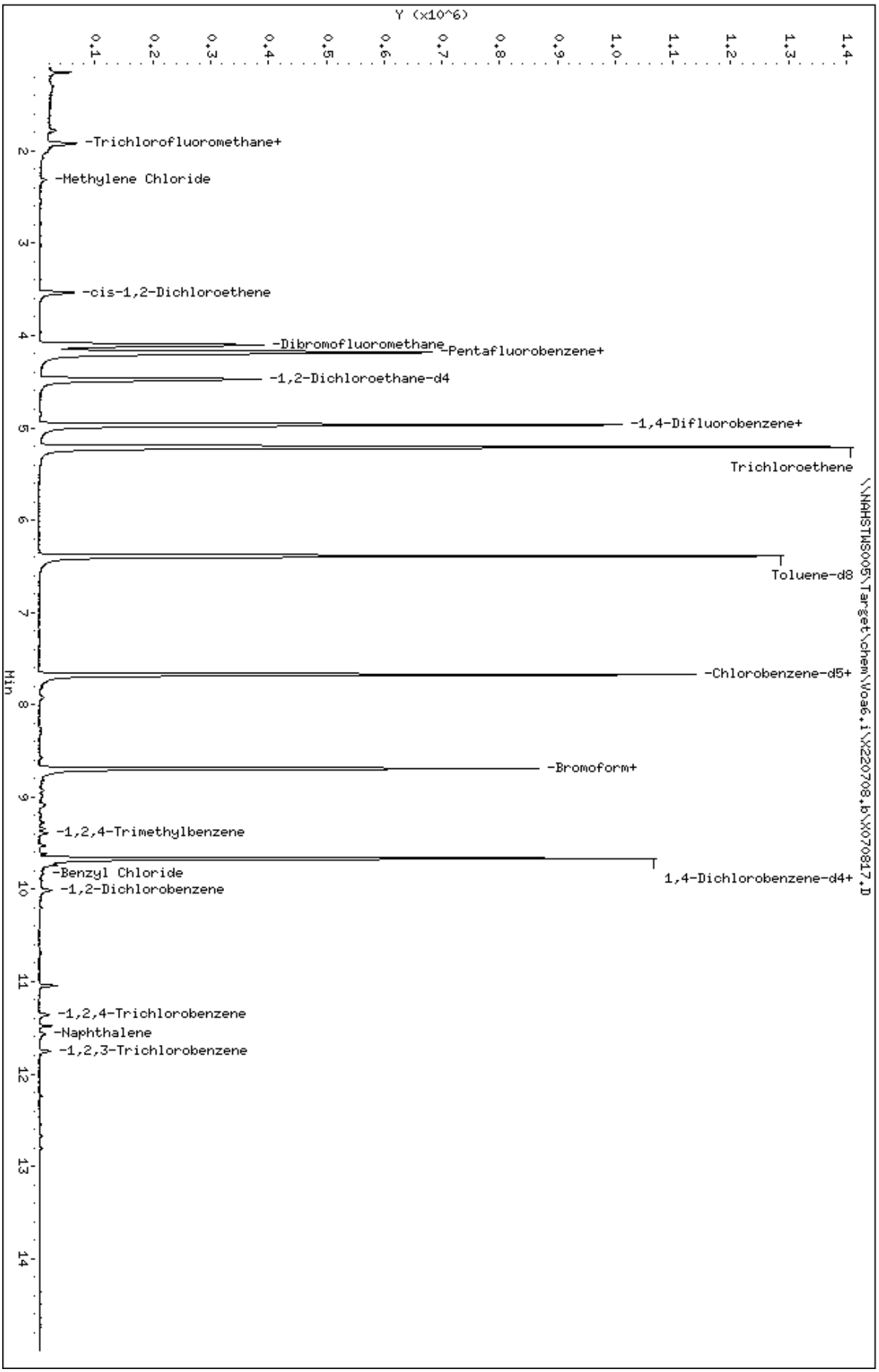
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	616253	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	869729	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	617073	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	287584	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	289005	50.0746	50.07
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	271753	50.6838	50.68
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	271582	47.7692	47.76
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	839387	54.7785	54.77
27 cis-1,2-Dichloroethene	96	3.536	3.529	(0.845)	34277	4.80564	120.14(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	4127	1.19443	29.86(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	496320	76.2045	1905.11
5 Vinyl Chloride	62	1.149	1.149	(0.275)	23430	2.97255	74.31(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D
Date : 08-JUL-2022 16:05
Client ID: HS220703326-04
Sample Info: HS220703326-04;HS220703326-04;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D Page 2

Date : 08-JUL-2022 16:05

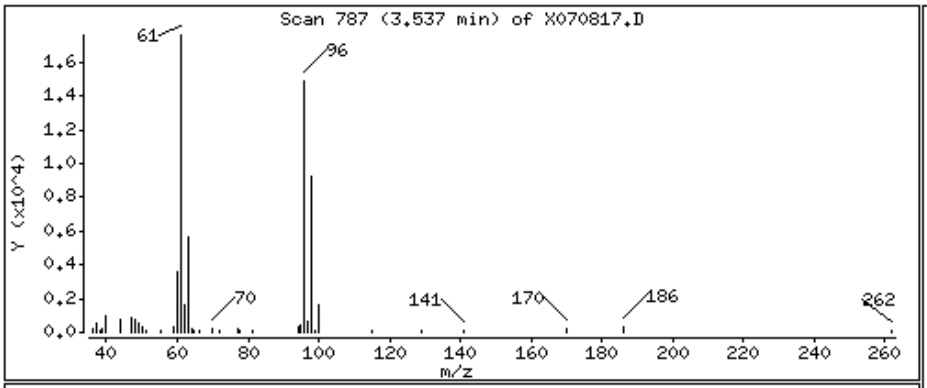
Client ID: HS22070326-04 Instrument: voa6.i

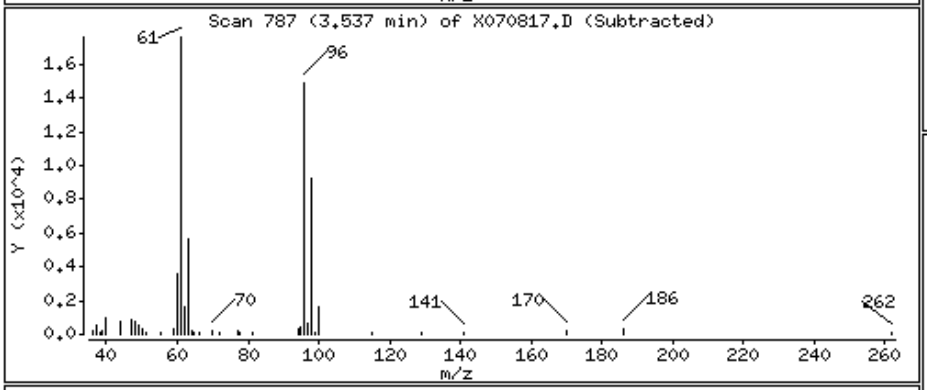
Sample Info: HS22070326-04;HS22070326-04;;;

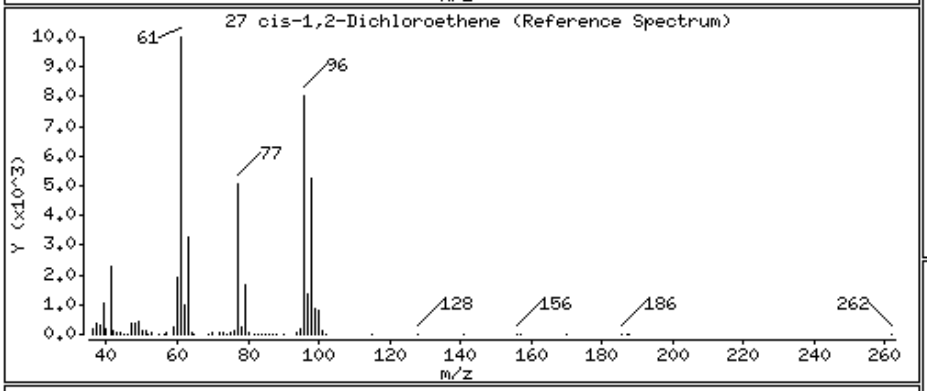
Purge Volume: 5.0 Operator: PC

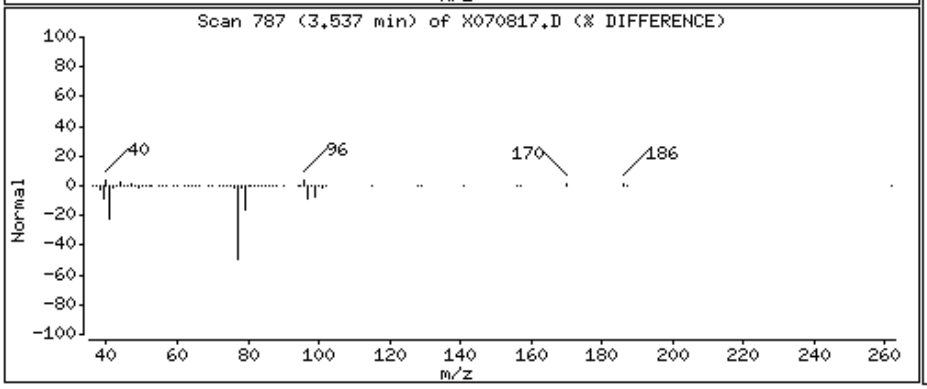
Column phase: DB624 Column diameter: 0.18

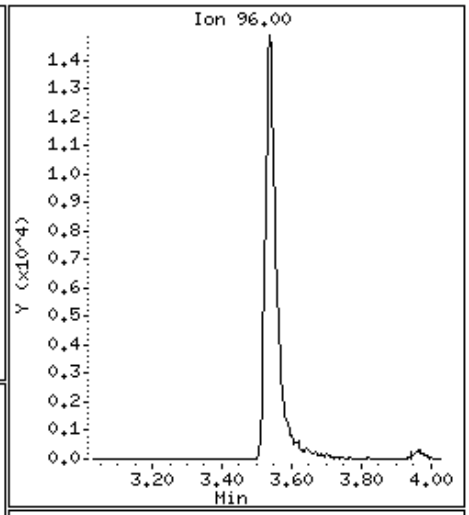
27 cis-1,2-Dichloroethene Concentration: 120.14 ug/l

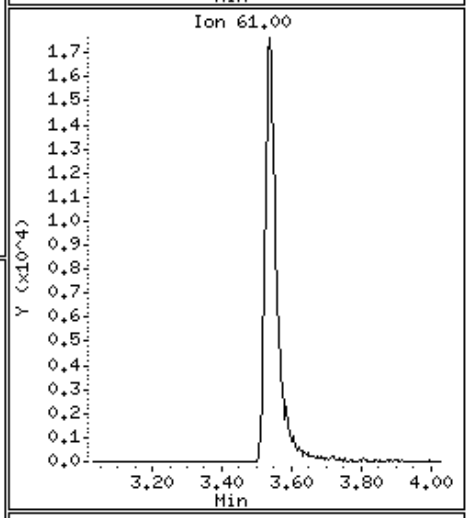


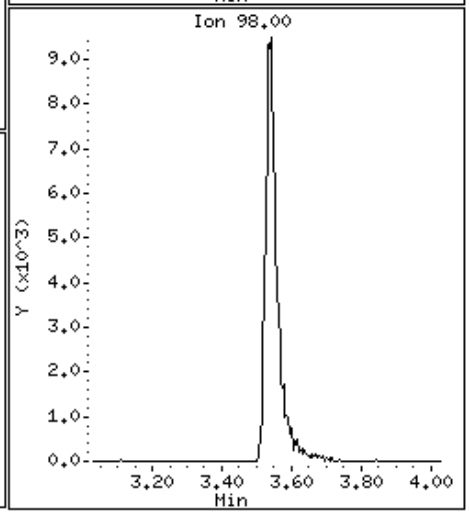












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D Page 3

Date : 08-JUL-2022 16:05

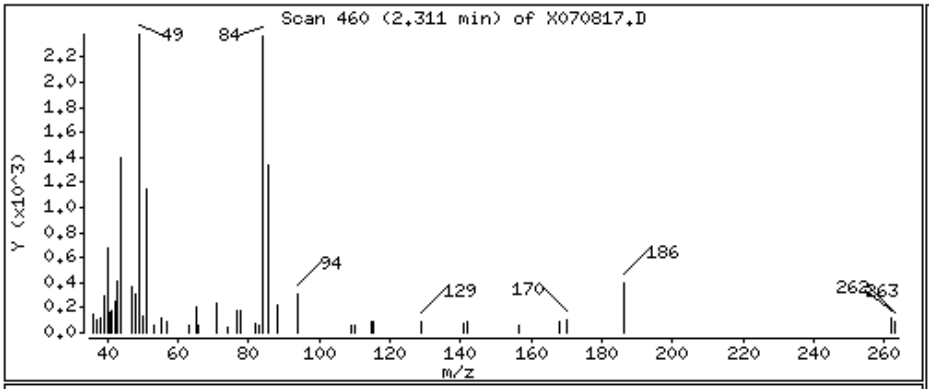
Client ID: HS22070326-04 Instrument: voa6.i

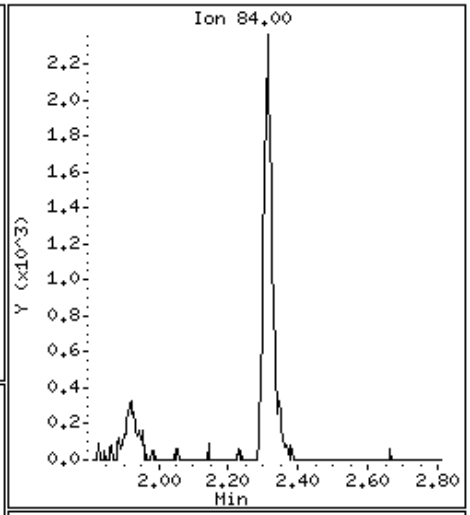
Sample Info: HS22070326-04;HS22070326-04;;;

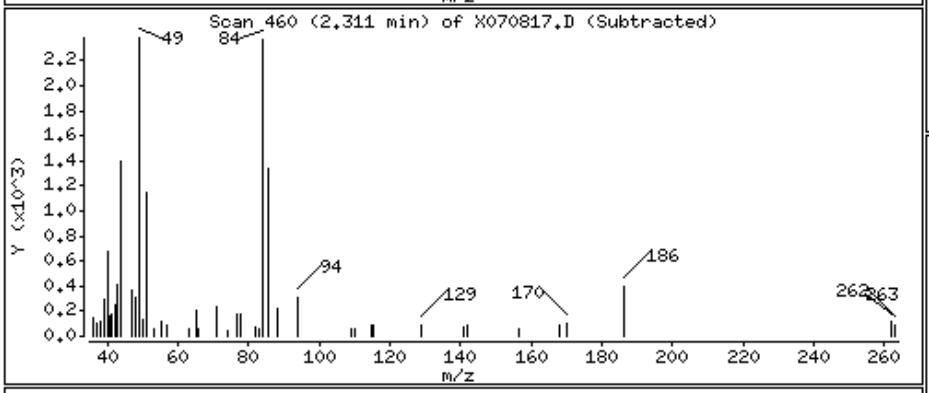
Purge Volume: 5.0 Operator: PC

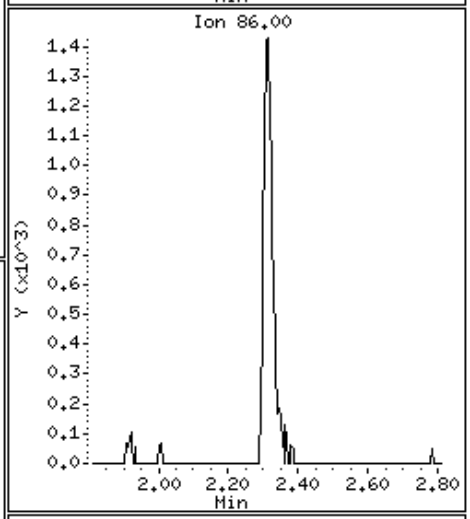
Column phase: DB624 Column diameter: 0.18

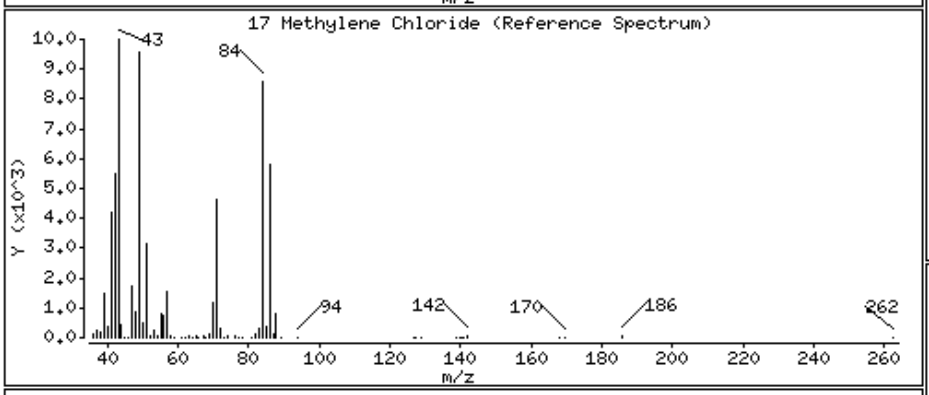
17 Methylene Chloride Concentration: 29.86 ug/l

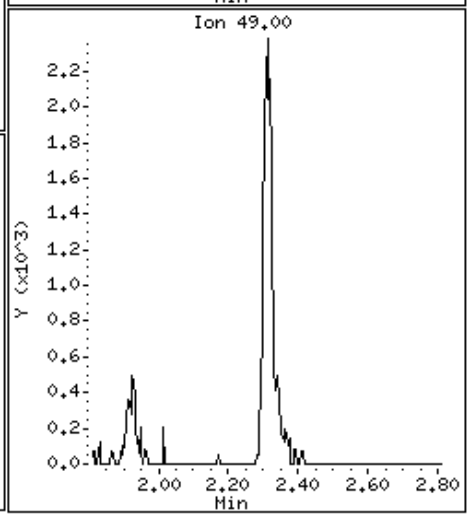


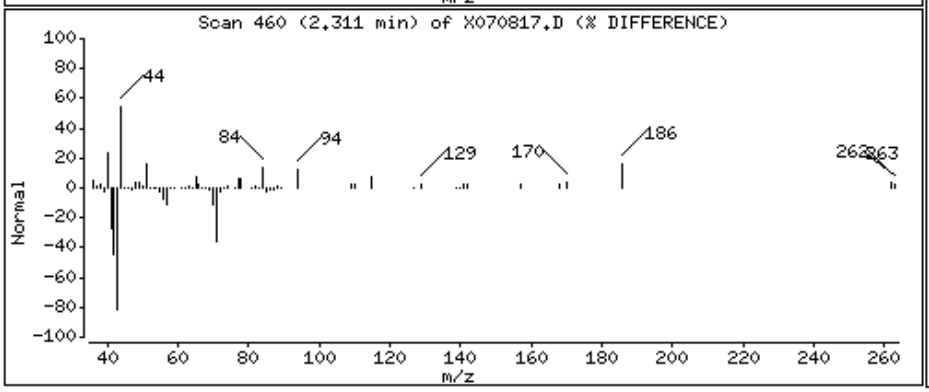












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D Page 4

Date : 08-JUL-2022 16:05

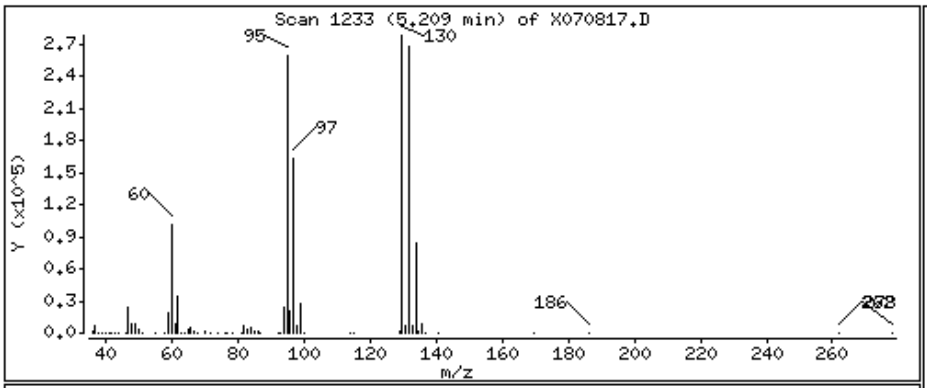
Client ID: HS22070326-04 Instrument: voa6.i

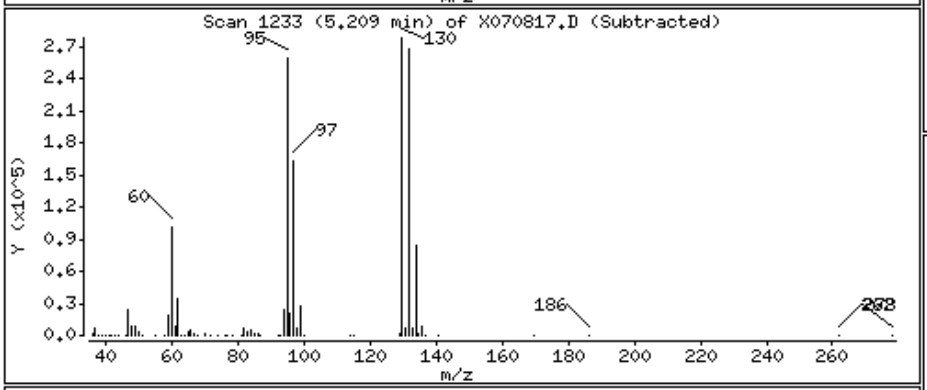
Sample Info: HS22070326-04;HS22070326-04;;;

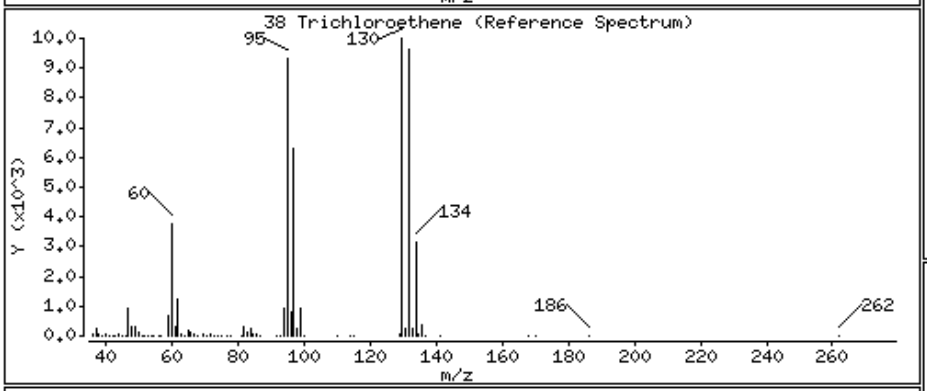
Purge Volume: 5.0 Operator: PC

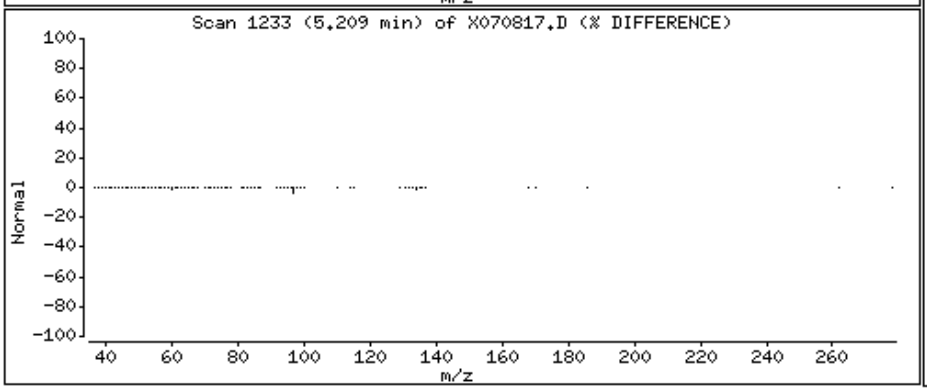
Column phase: DB624 Column diameter: 0.18

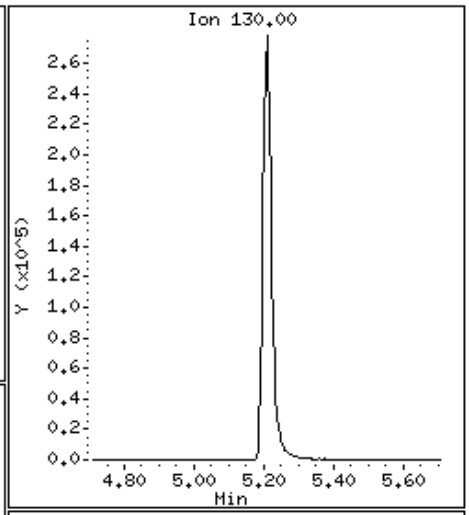
38 Trichloroethene Concentration: 1905.11 ug/l

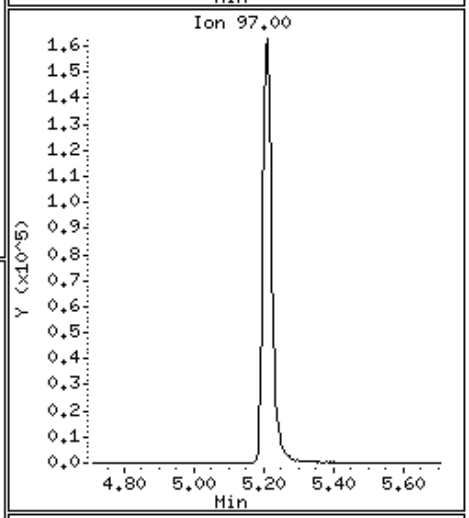


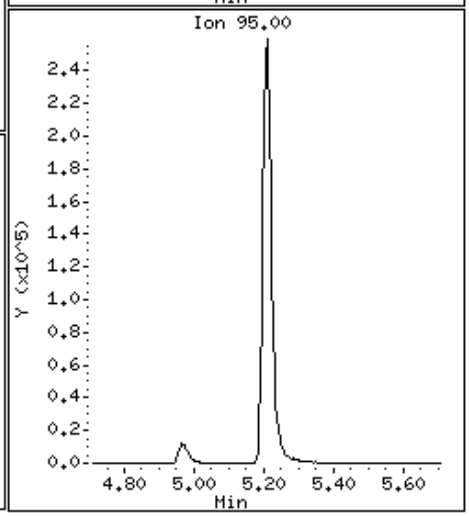












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D Page 5

Date : 08-JUL-2022 16:05

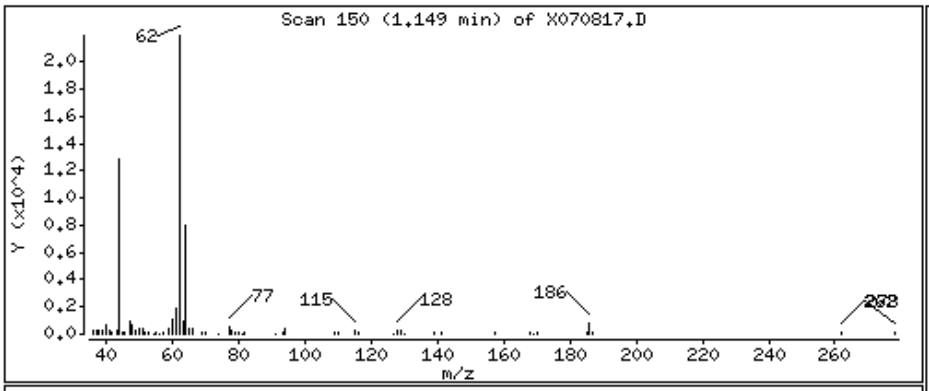
Client ID: HS22070326-04 Instrument: voa6.i

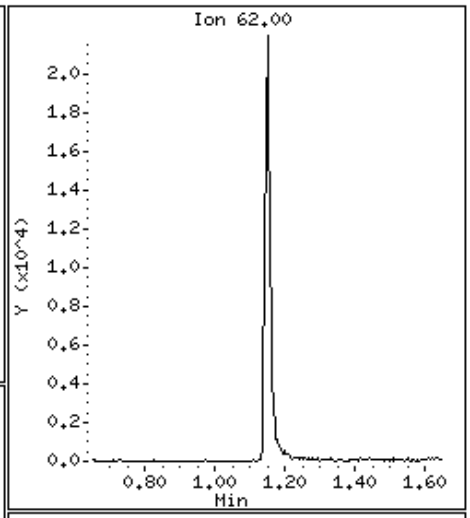
Sample Info: HS22070326-04;HS22070326-04;;;

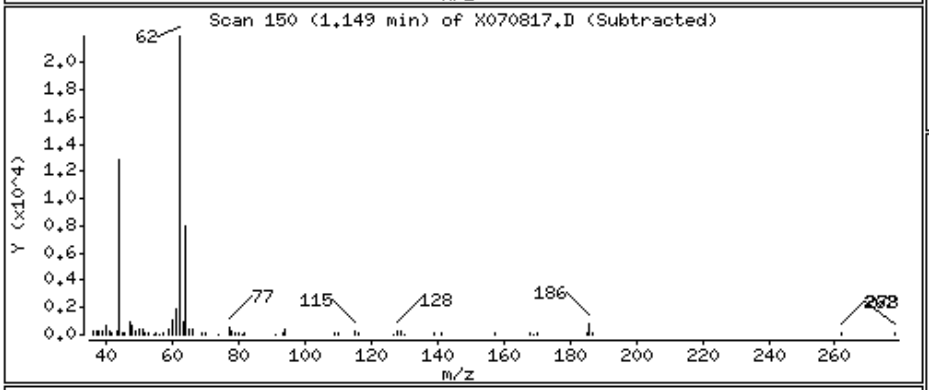
Purge Volume: 5.0 Operator: PC

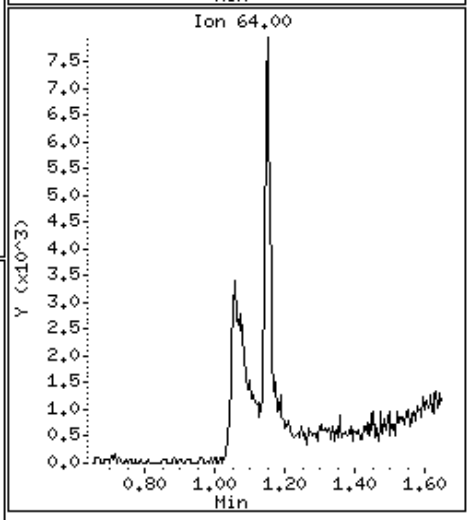
Column phase: DB624 Column diameter: 0.18

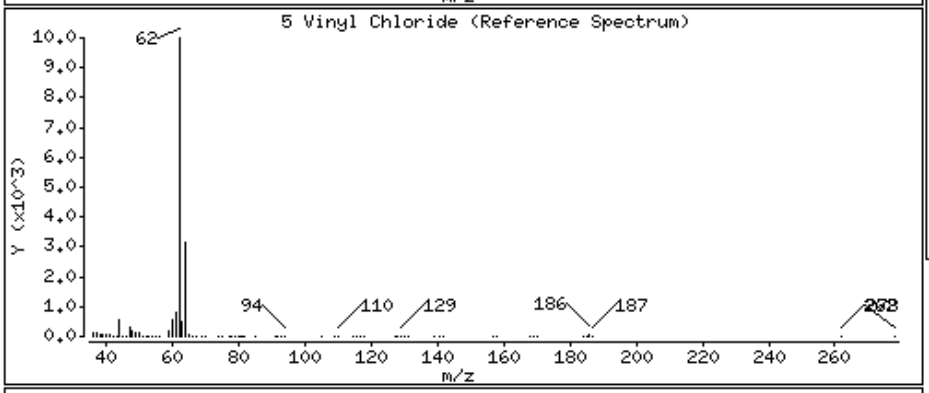
5 Vinyl Chloride Concentration: 74.31 ug/l

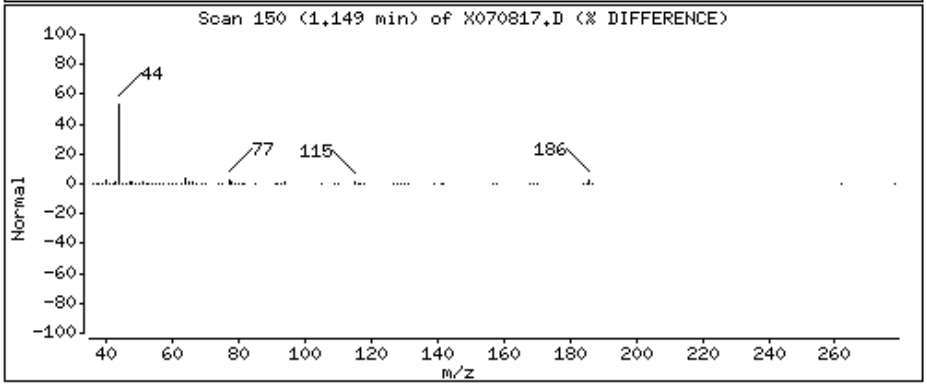












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070817.D
Inj Date : 08-JUL-2022 16:05
InstruID : voa6.i
LabSampID : HS22070326-04

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D
Lab Smp Id: HS22070326-05 Client Smp ID: HS22070326-05
Inj Date : 08-JUL-2022 16:26
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-05;HS22070326-05;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 17
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

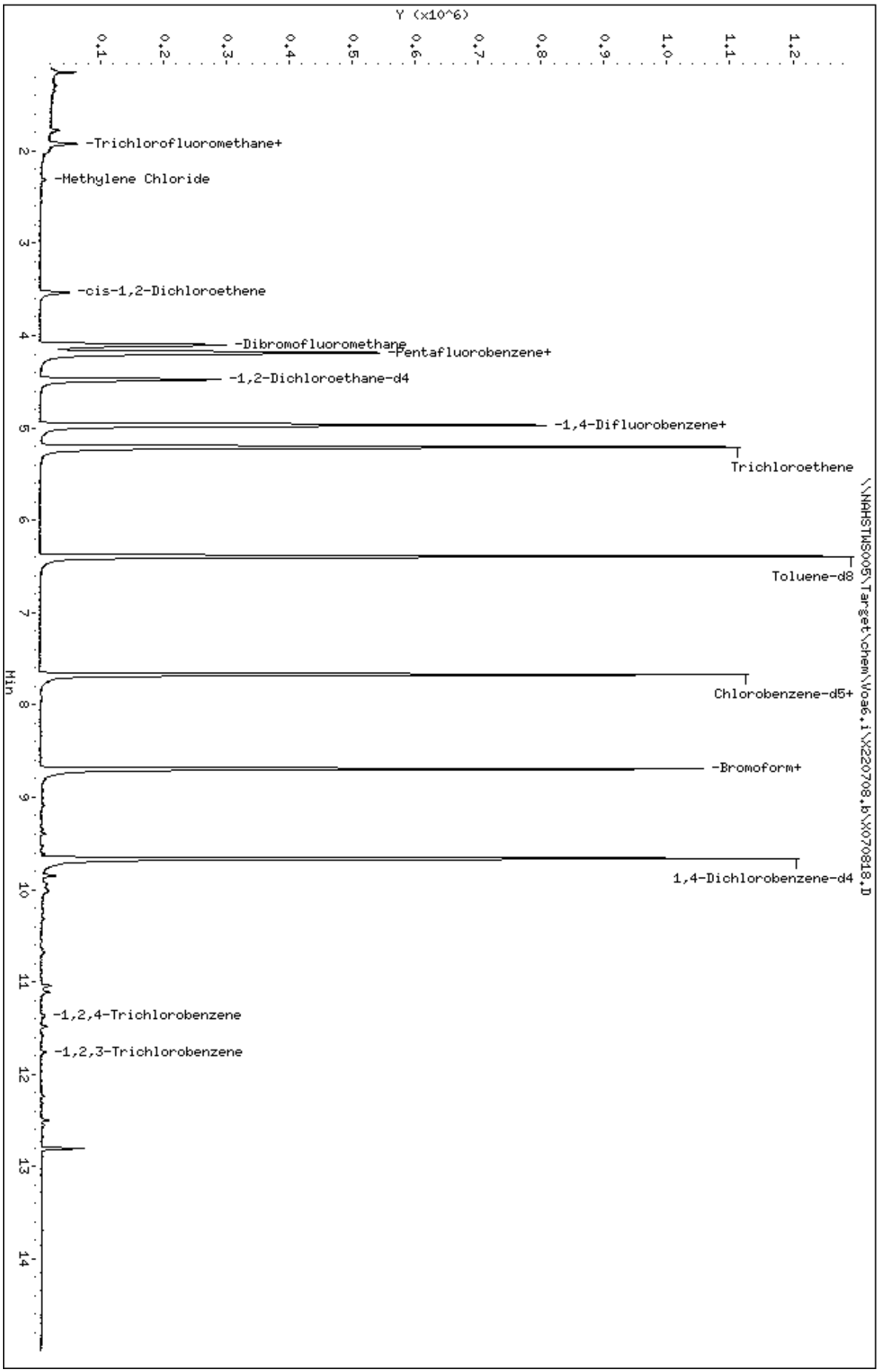
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	499331	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	713494	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	614132	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	336261	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	207355	44.2065	44.20
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	334639	62.7861	62.78
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	212044	46.0197	46.01
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	840808	55.1340	55.13
11 1,1-Dichloroethene	96	1.925	1.921	(0.460)	2768	0.57946	14.48(a)
27 cis-1,2-Dichloroethene	96	3.540	3.529	(0.846)	27711	4.79481	119.87(a)
17 Methylene Chloride	84	2.311	2.311	(0.552)	2858	1.11175	27.79(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	406403	76.0623	1901.55
5 Vinyl Chloride	62	1.149	1.149	(0.275)	23975	3.75393	93.84(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220708.b\X070818.D
Date : 08-JUL-2022 16:26
Client ID: HS220703326-05
Sample Info: HS220703326-05;HS220703326-05;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D Page 2

Date : 08-JUL-2022 16:26

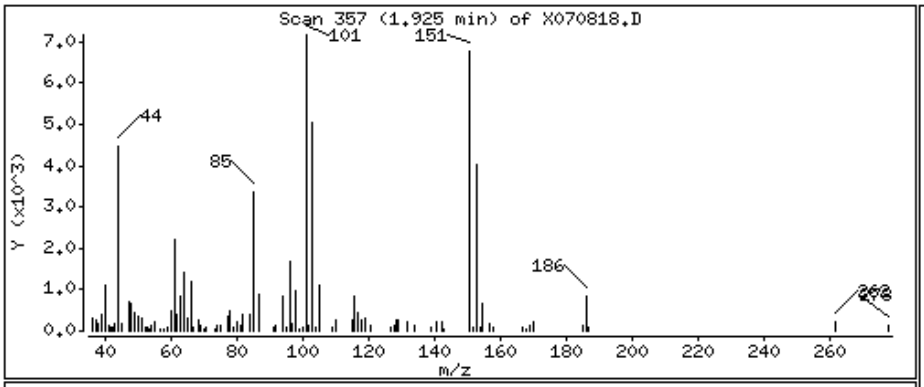
Client ID: HS22070326-05 Instrument: voa6.i

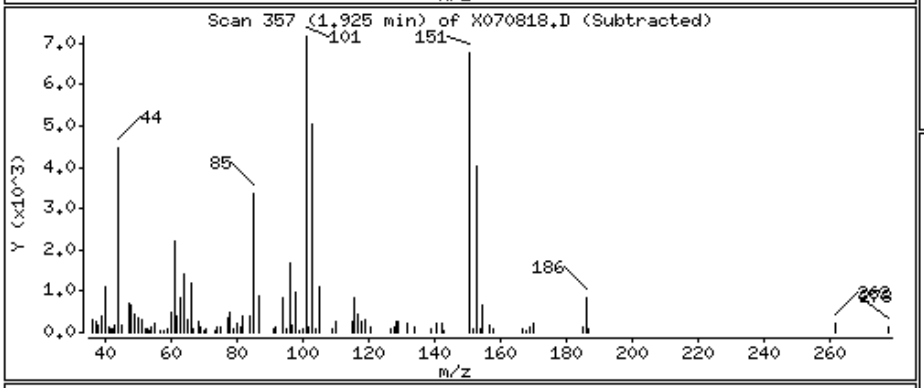
Sample Info: HS22070326-05;HS22070326-05;;;

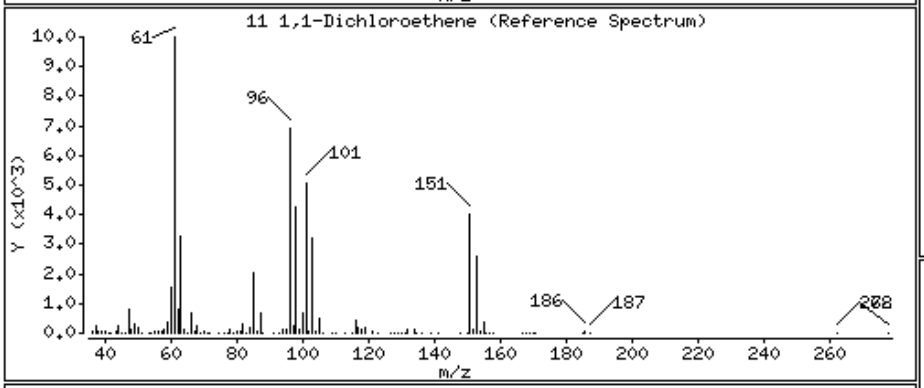
Purge Volume: 5.0 Operator: PC

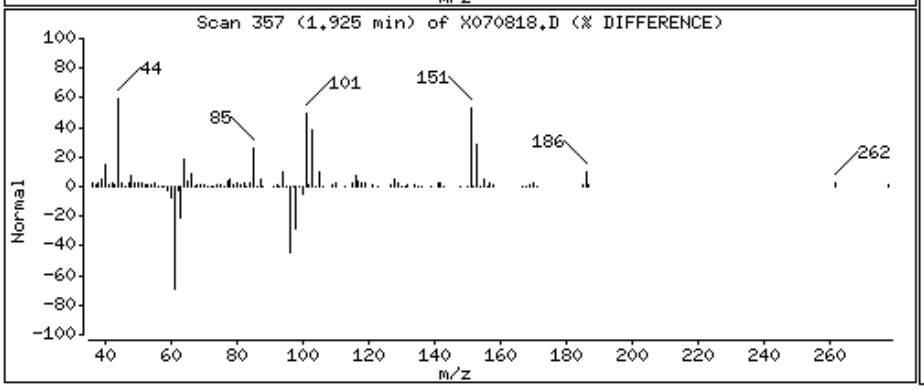
Column phase: DB624 Column diameter: 0.18

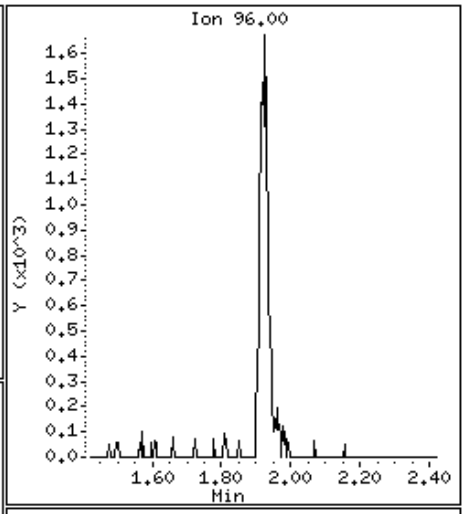
11 1,1-Dichloroethene Concentration: 14.48 ug/l

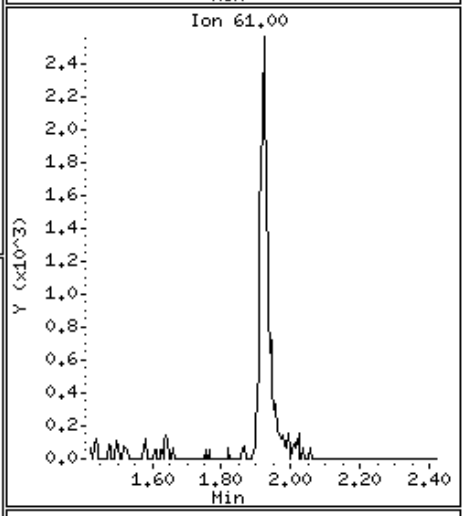


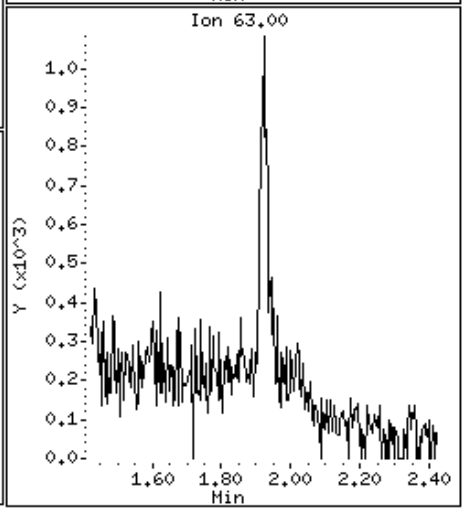












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D Page 3

Date : 08-JUL-2022 16:26

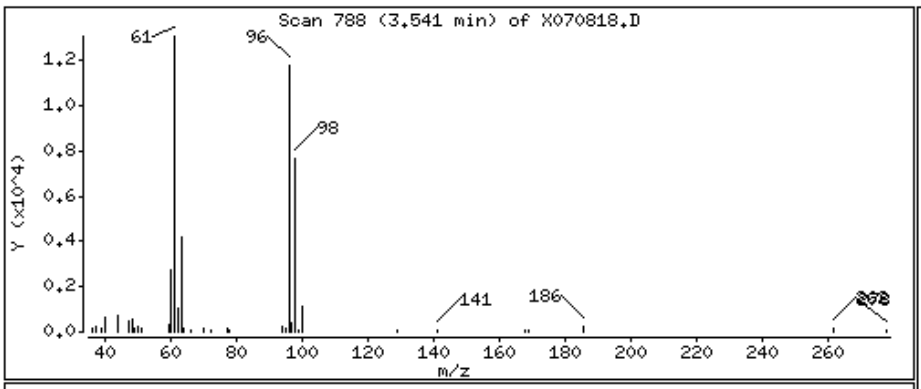
Client ID: HS22070326-05 Instrument: voa6.i

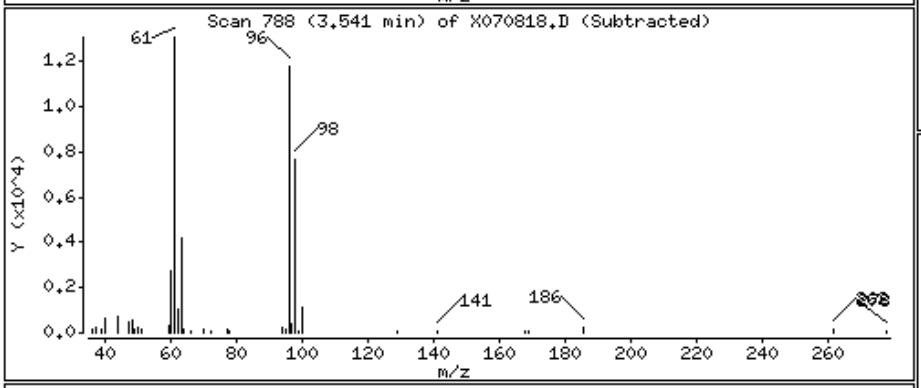
Sample Info: HS22070326-05;HS22070326-05;;;

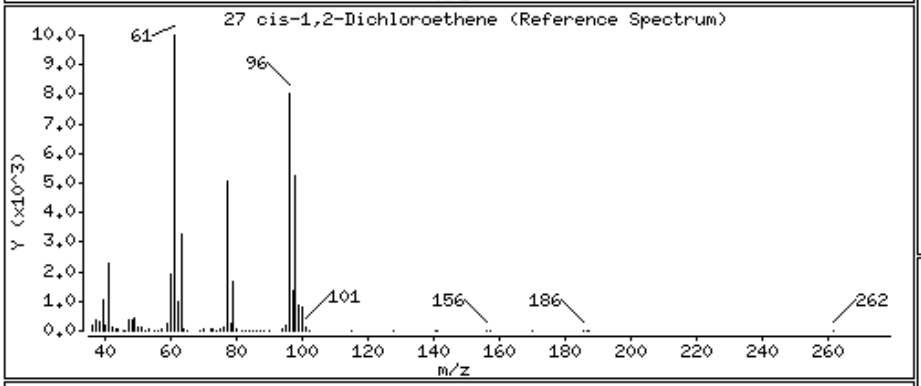
Purge Volume: 5.0 Operator: PC

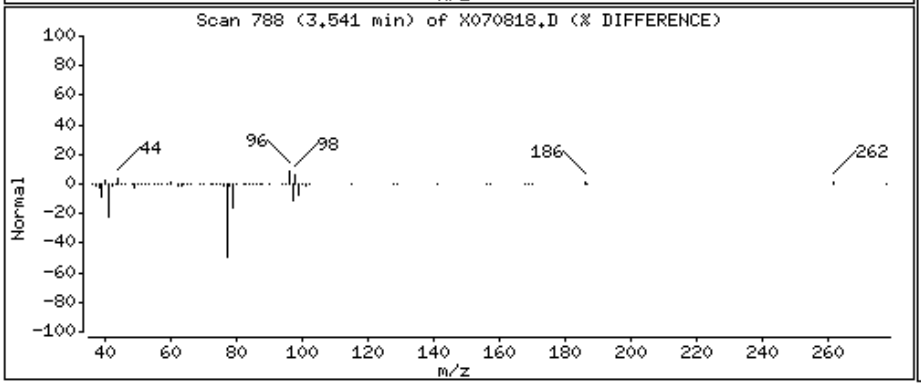
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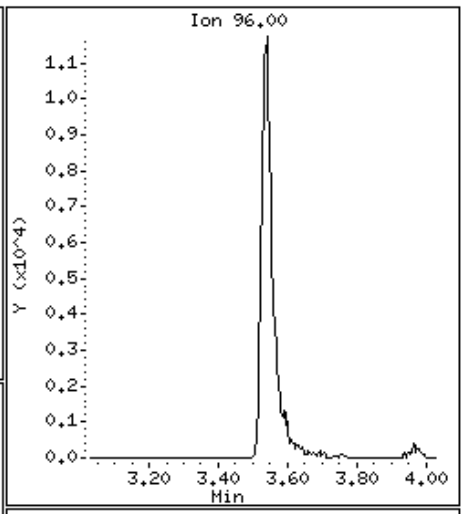
27 cis-1,2-Dichloroethene Concentration: 119.87 ug/l

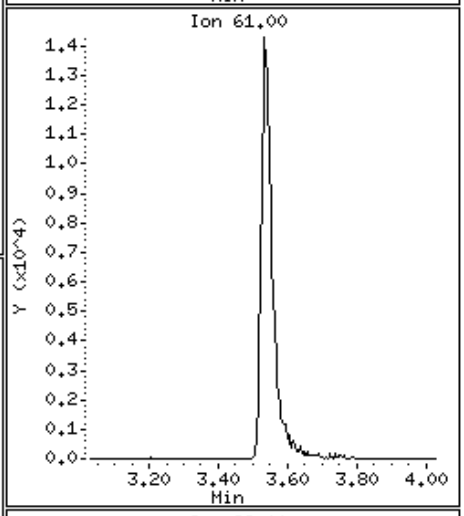


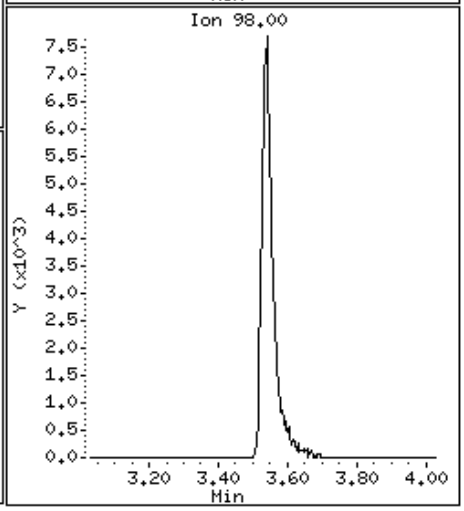












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D Page 4

Date : 08-JUL-2022 16:26

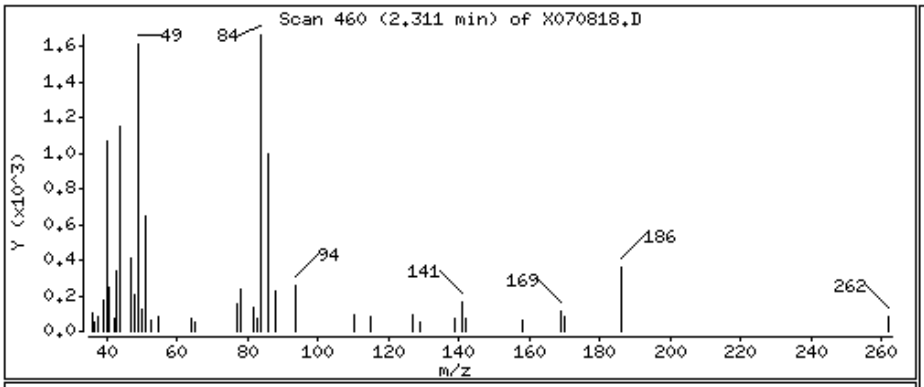
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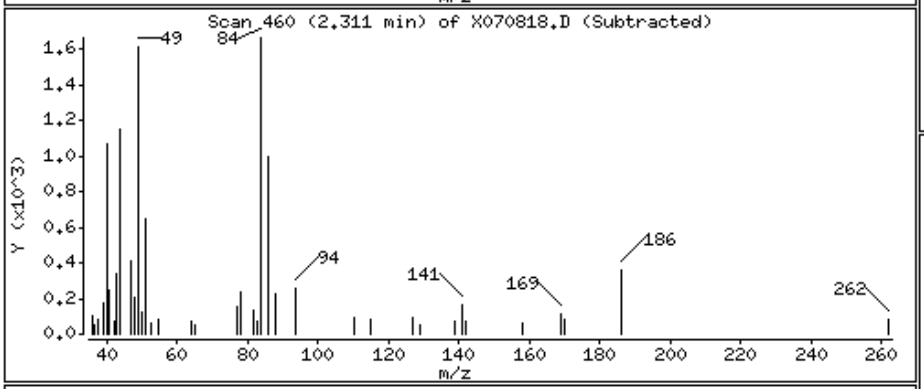
Sample Info: HS22070326-05;HS22070326-05;;;

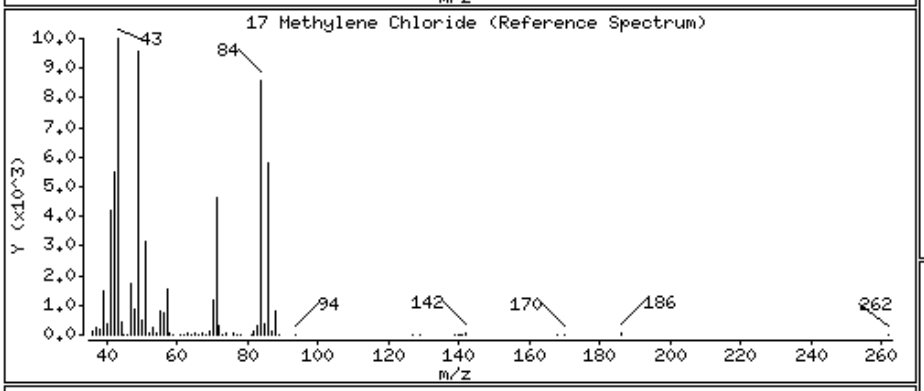
Purge Volume: 5.0 Operator: PC

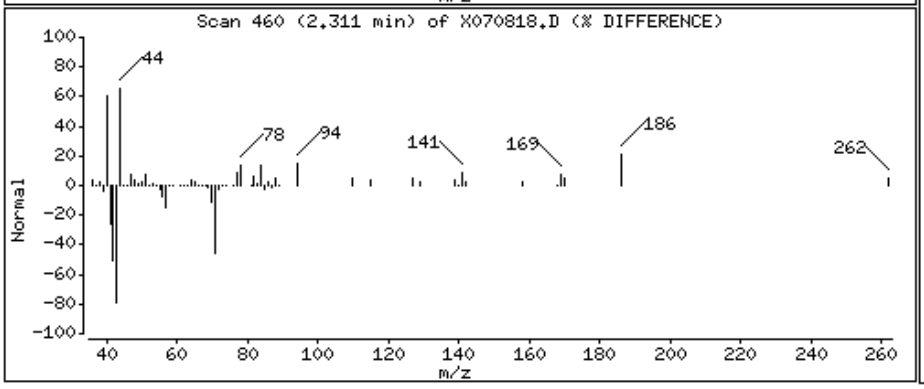
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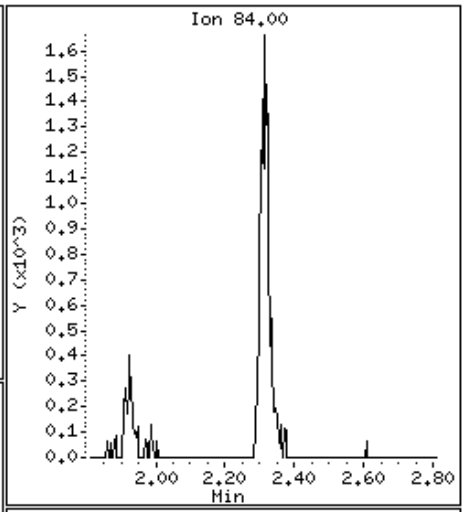
17 Methylene Chloride Concentration: 27.79 ug/l

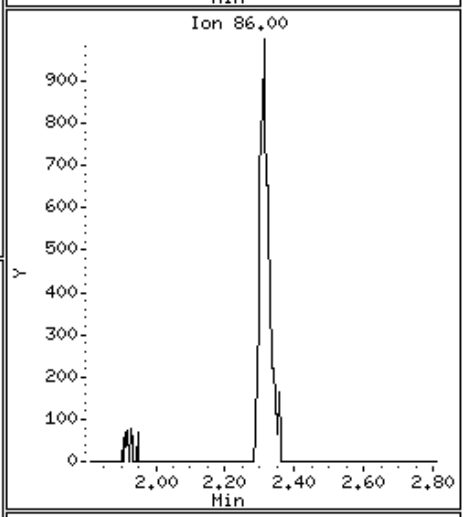


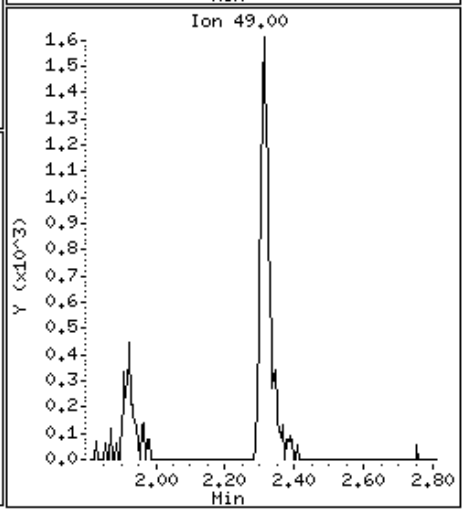












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D Page 5

Date : 08-JUL-2022 16:26

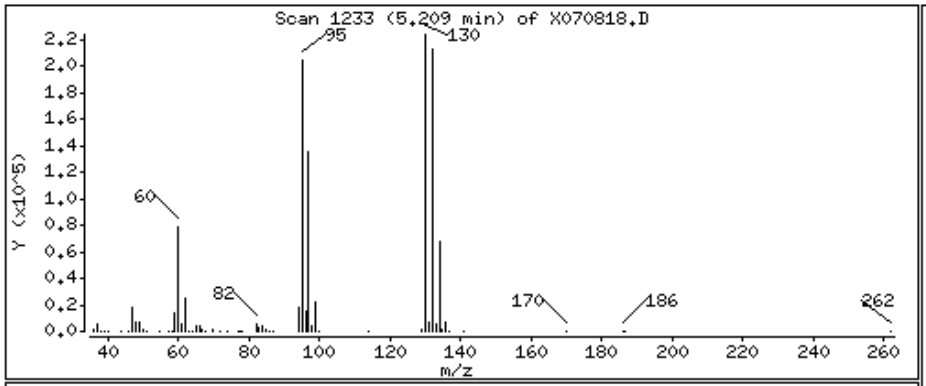
Client ID: HS22070326-05 Instrument: voa6.i

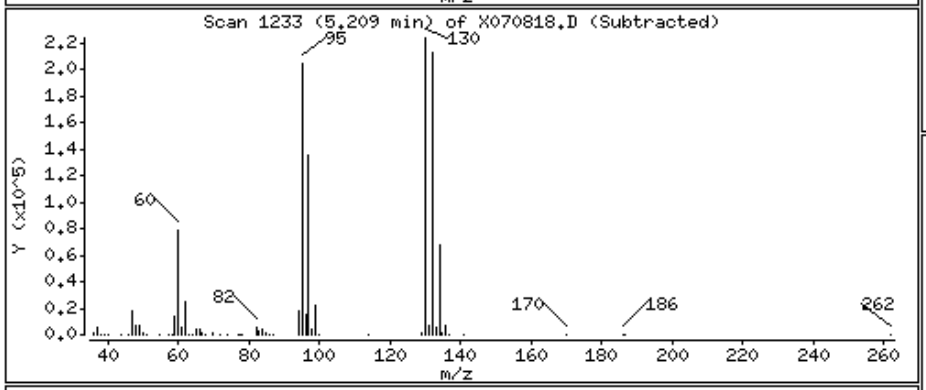
Sample Info: HS22070326-05;HS22070326-05;;;

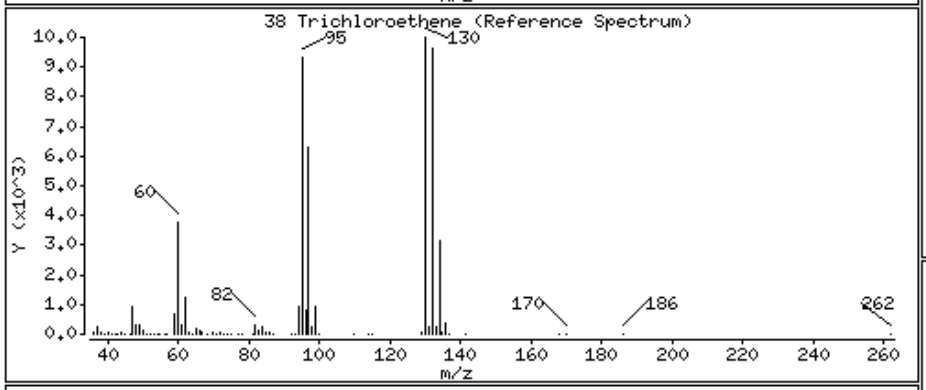
Purge Volume: 5.0 Operator: PC

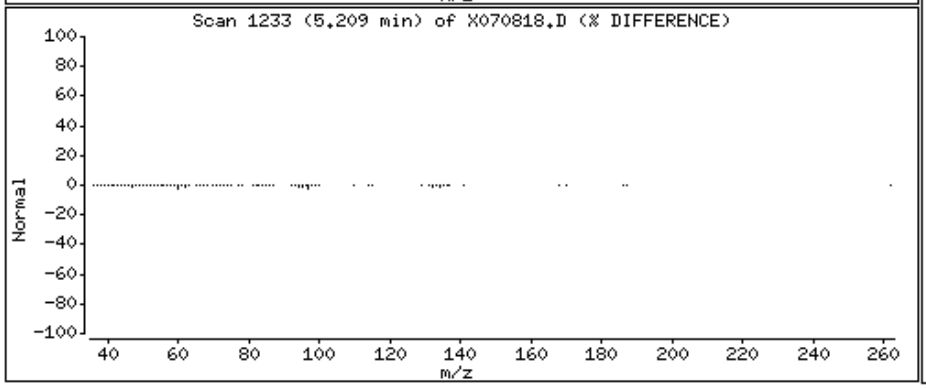
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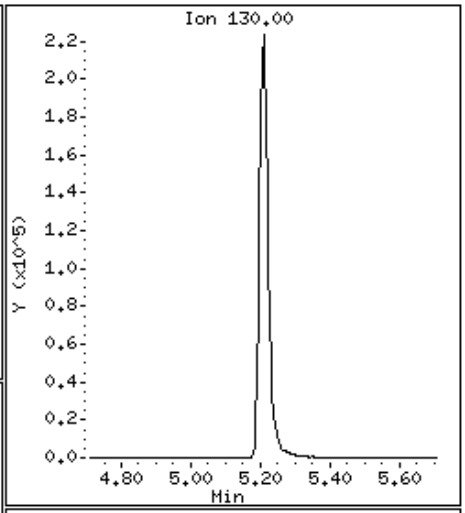
38 Trichloroethene Concentration: 1901.55 ug/l

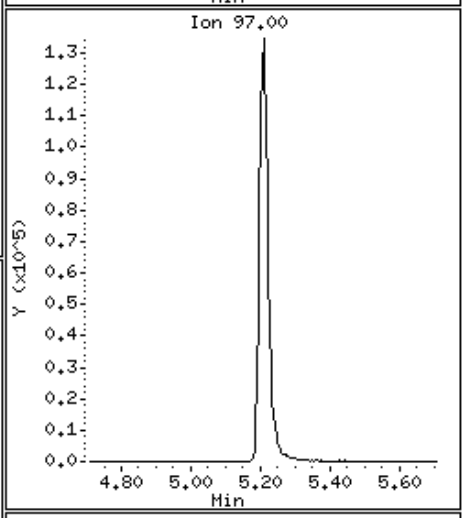


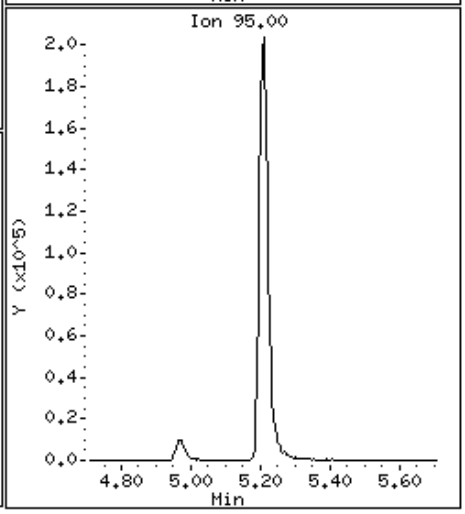












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D Page 6

Date : 08-JUL-2022 16:26

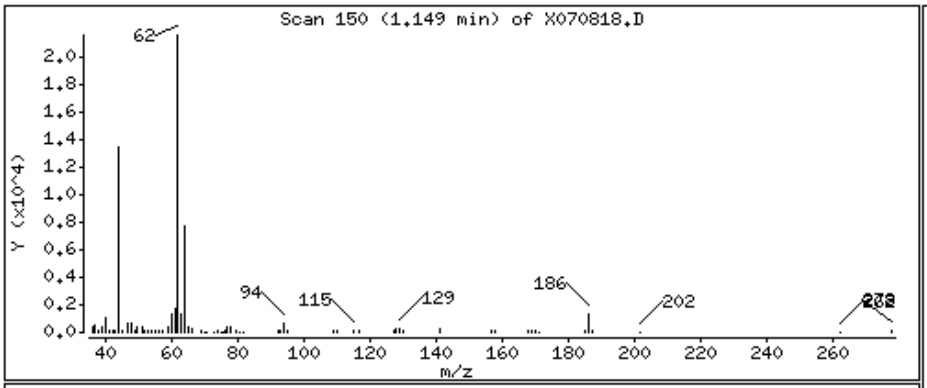
Client ID: HS22070326-05 Instrument: voa6.i

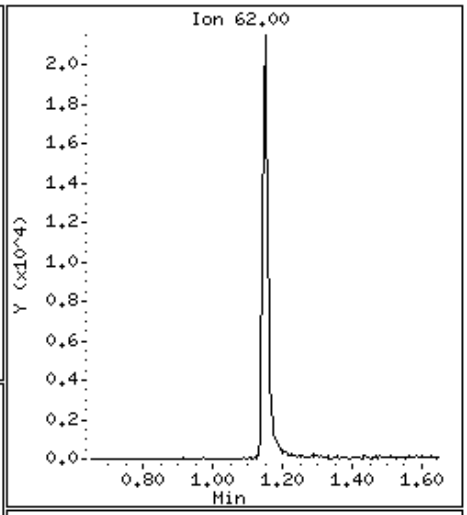
Sample Info: HS22070326-05;HS22070326-05;;;

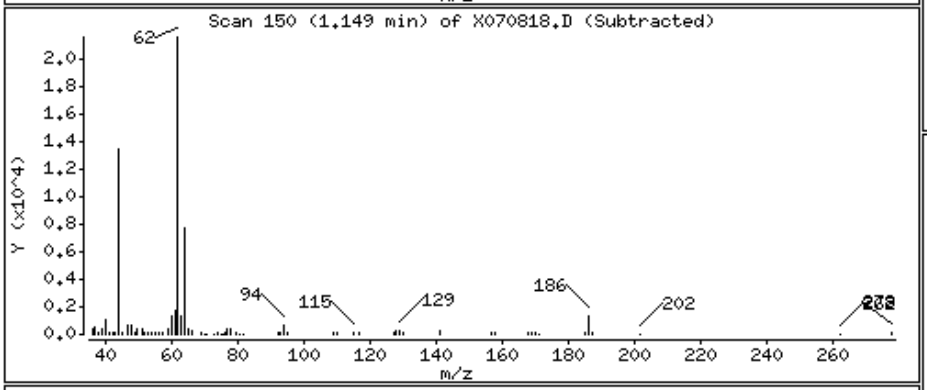
Purge Volume: 5.0 Operator: PC

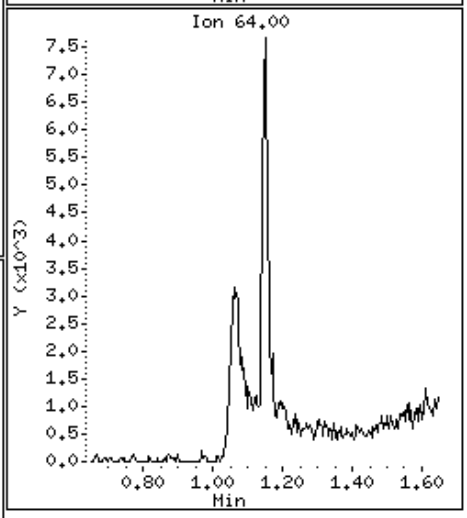
Column phase: DB624 Column diameter: 0.18

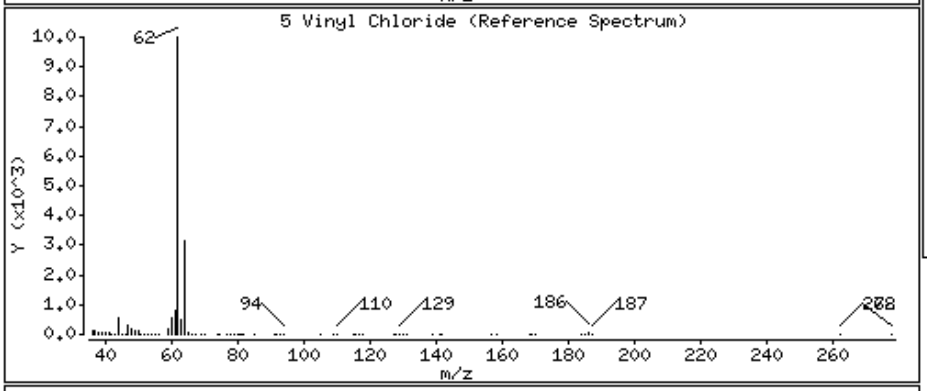
5 Vinyl Chloride Concentration: 93.84 ug/l

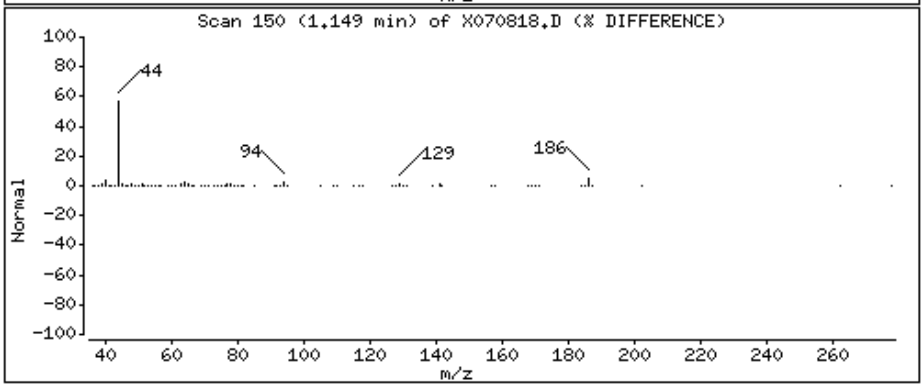












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070818.D
Inj Date : 08-JUL-2022 16:26
InstruID : voa6.i
LabSampID : HS22070326-05

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D
Lab Smp Id: HS22070326-06 Client Smp ID: HS22070326-06
Inj Date : 08-JUL-2022 16:47
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-06;HS22070326-06;;;
Misc Info : HS22052000V6;WATER;0;10;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 18
Dil Factor: 10.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

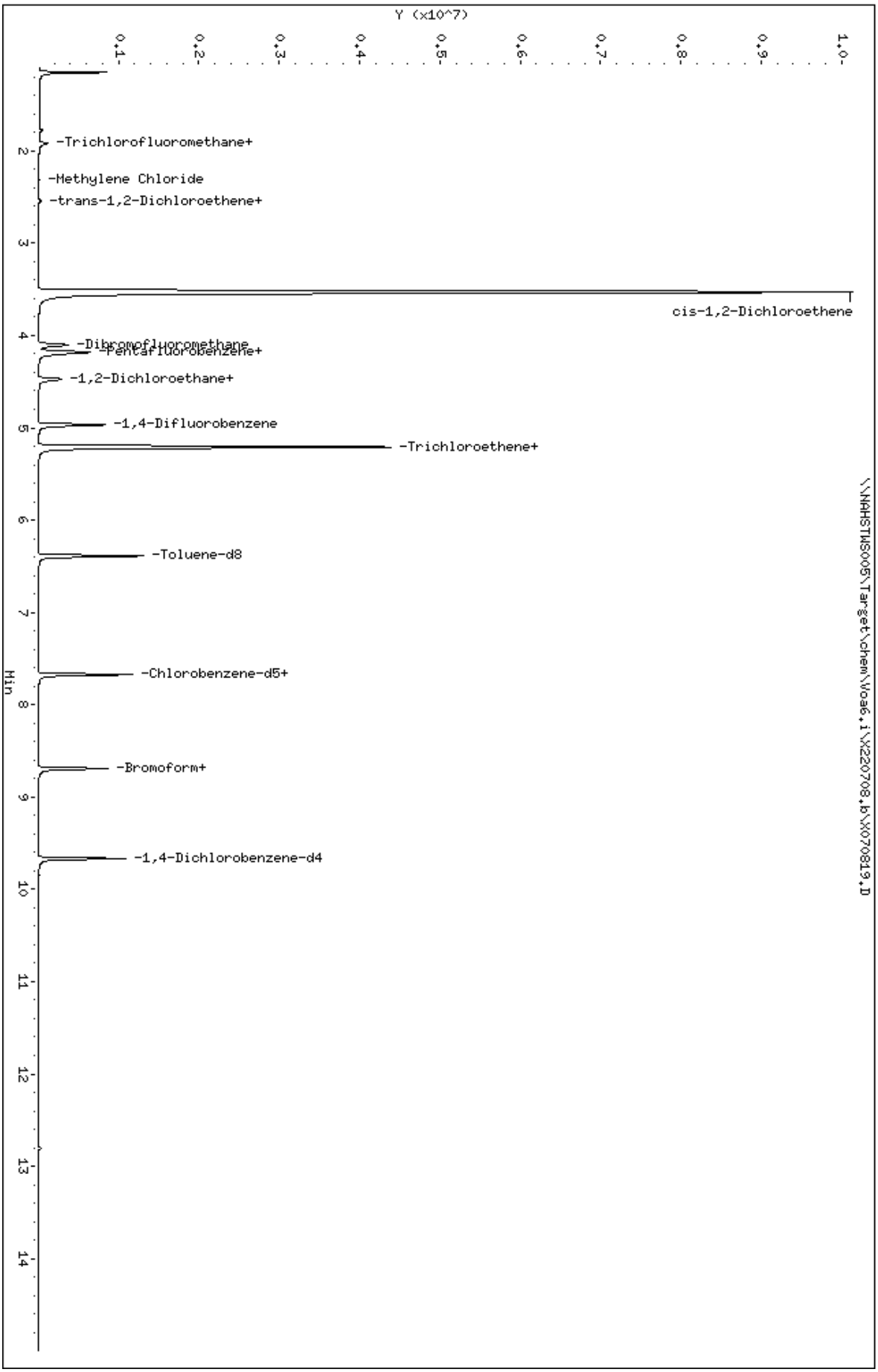
Name	Value	Description
DF	10.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	590153	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	734479	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	637453	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	290171	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	216262	38.8727	38.87
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	280406	50.6253	50.62
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	260794	47.9012	47.90
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	857015	54.1408	54.14
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	15085	2.67192	26.71(a)
33 1,2-Dichloroethane	62	4.564	4.560	(0.919)	8481	1.39340	13.93(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	5340995	781.926	7819.25(A)
17 Methylene Chloride	84	2.314	2.311	(0.553)	2639	1.00539	10.05(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	1526703	277.574	2775.73(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	552960	73.2563	732.56

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).

A - Target compound detected but, quantitated amount exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220708.b\X070819.D
Date : 08-JUL-2022 16:47
Client ID: HS220703Z6-06
Sample Info: HS220703Z6-06;HS220703Z6-06;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D

Date : 08-JUL-2022 16:47

Client ID: HS22070326-06

Instrument: voa6.i

Sample Info: HS22070326-06;HS22070326-06;;;

Purge Volume: 5.0

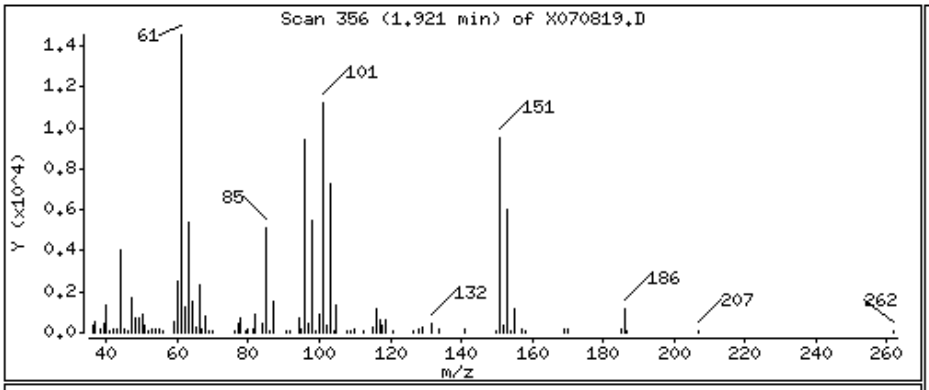
Operator: PC

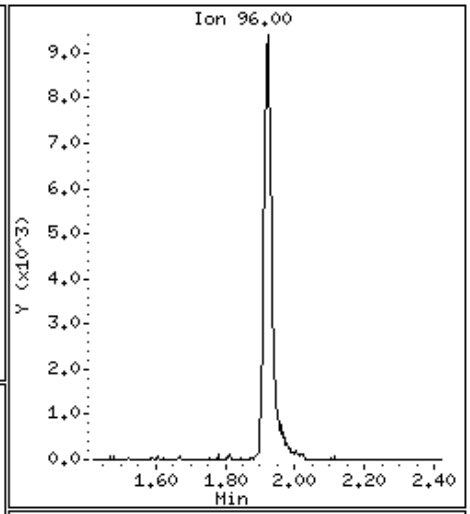
Column phase: DB624

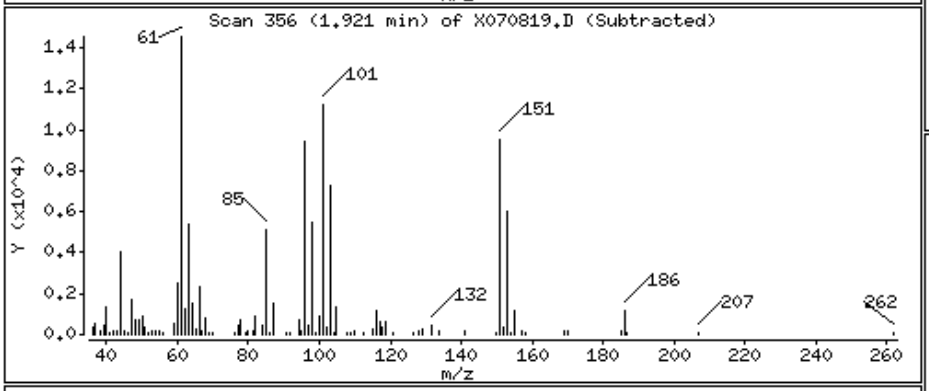
Column diameter: 0.18

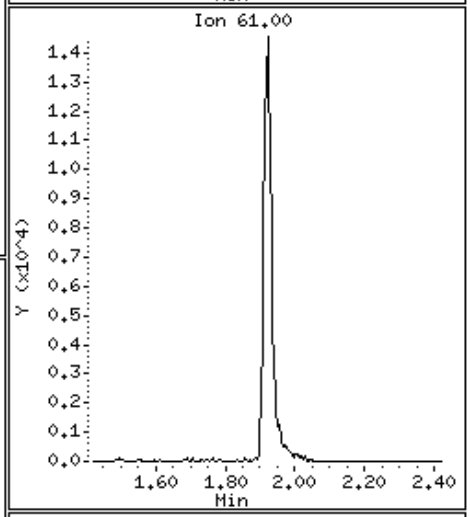
11 1,1-Dichloroethene

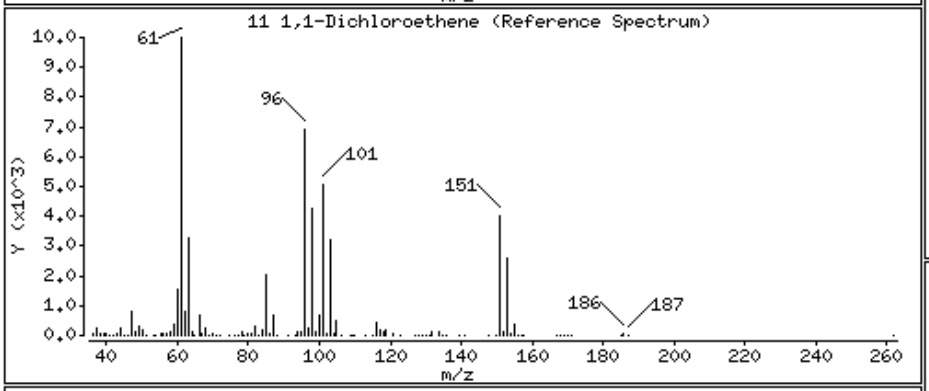
Concentration: 26.71 ug/l

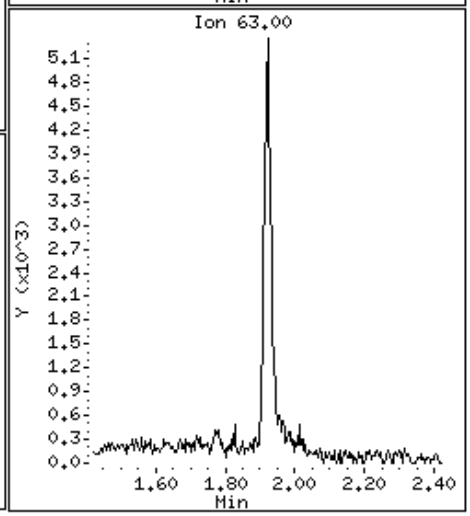


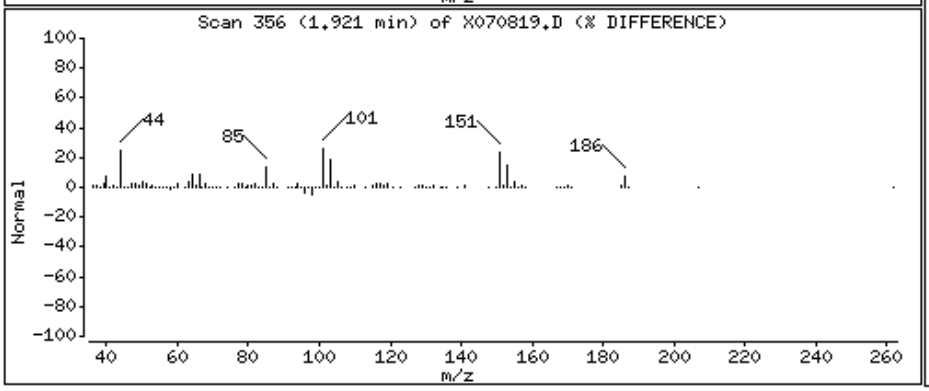












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D Page 3

Date : 08-JUL-2022 16:47

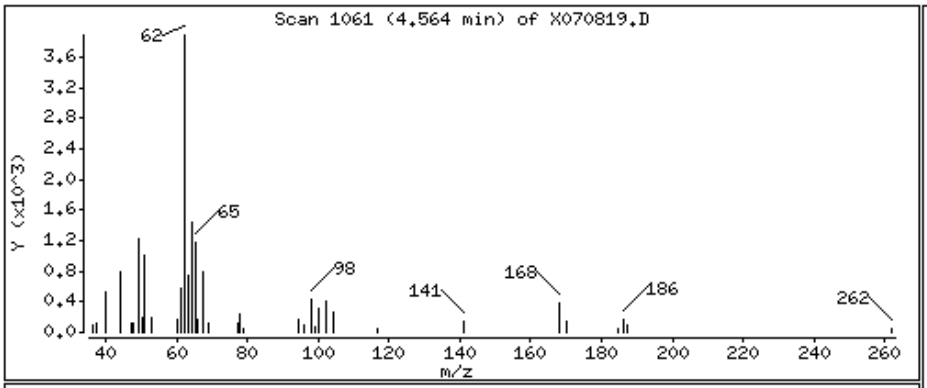
Client ID: HS22070326-06 Instrument: voa6.i

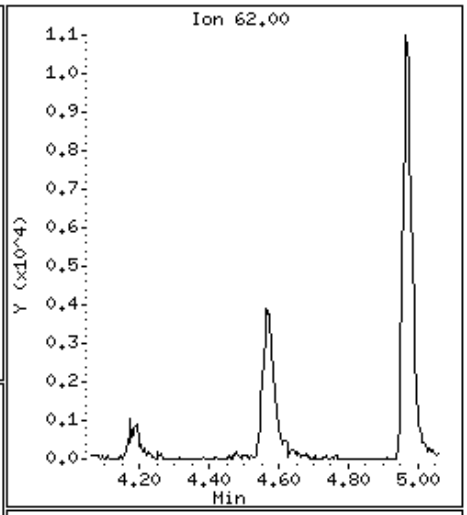
Sample Info: HS22070326-06;HS22070326-06;;;

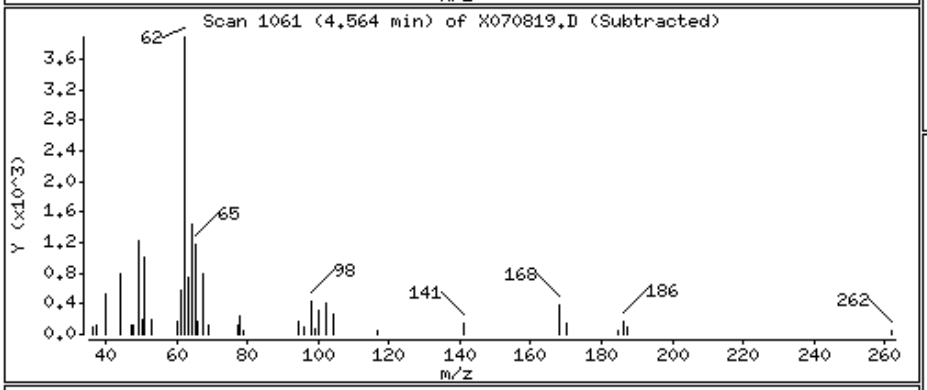
Purge Volume: 5.0 Operator: PC

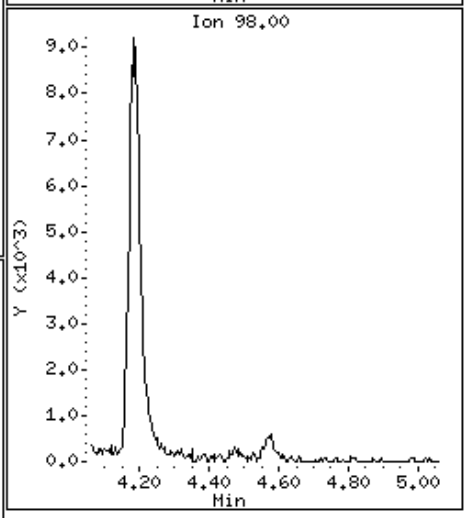
Column phase: DB624 Column diameter: 0.18

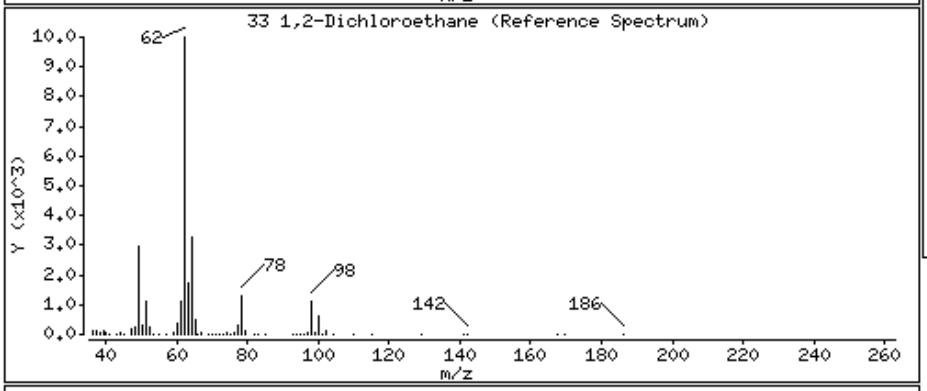
33 1,2-Dichloroethane Concentration: 13.93 ug/l

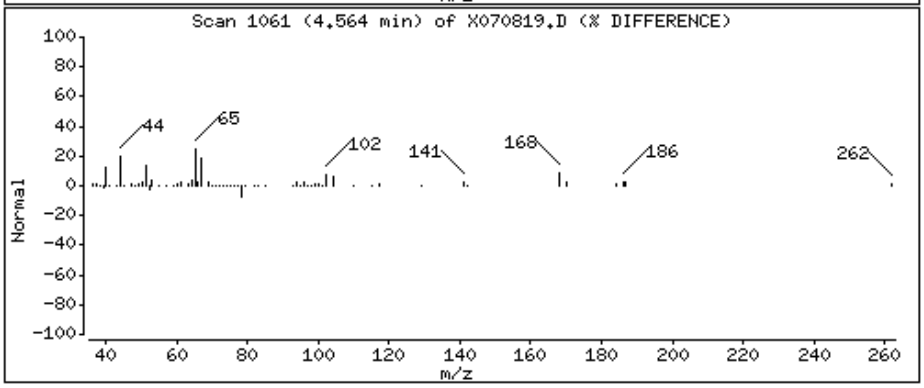












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D Page 4

Date : 08-JUL-2022 16:47

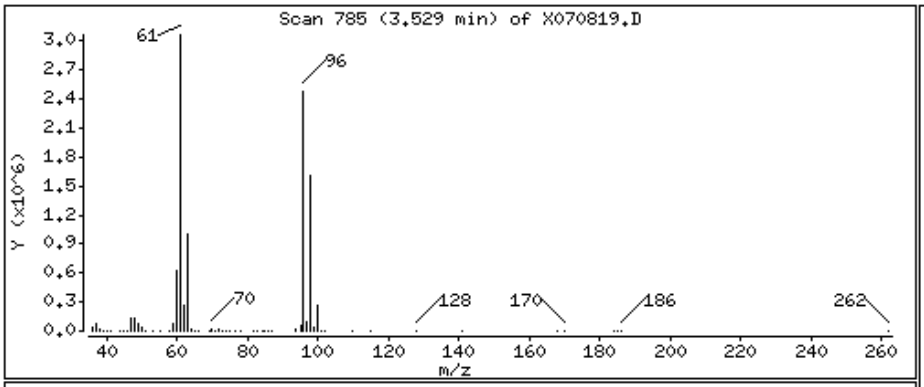
Client ID: HS22070326-06 Instrument: voa6.i

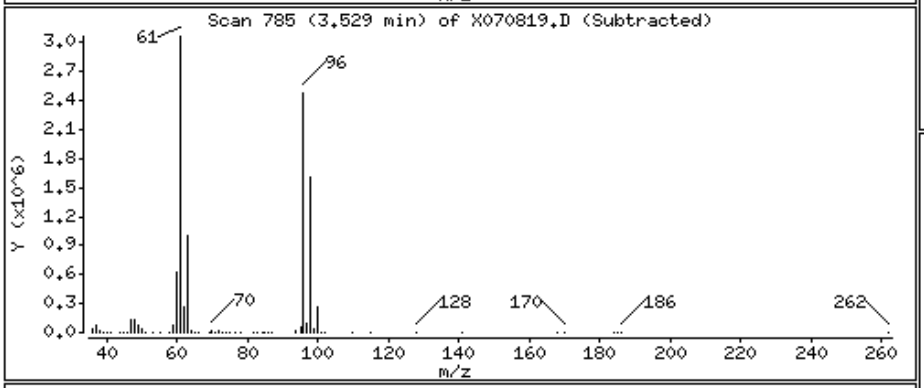
Sample Info: HS22070326-06;HS22070326-06;;;

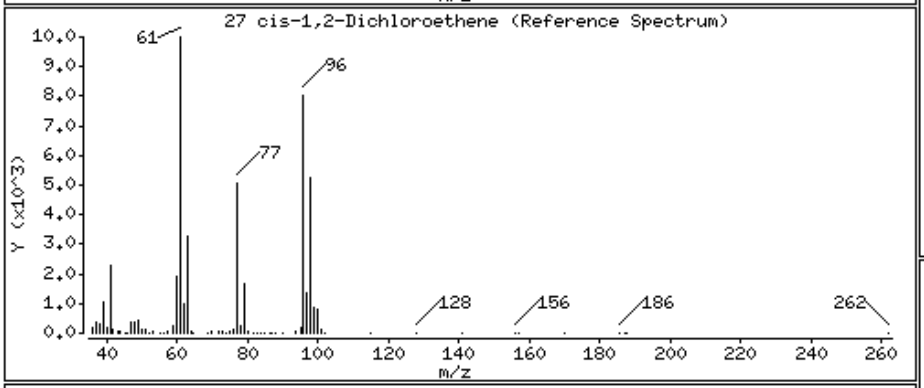
Purge Volume: 5.0 Operator: PC

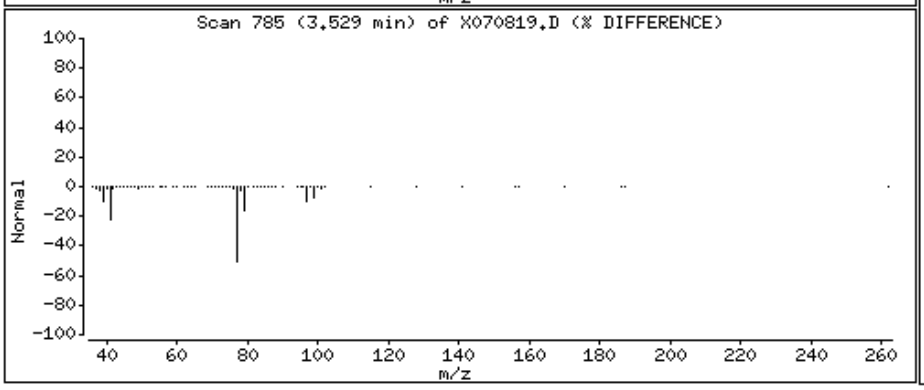
Column phase: DB624 Column diameter: 0.18

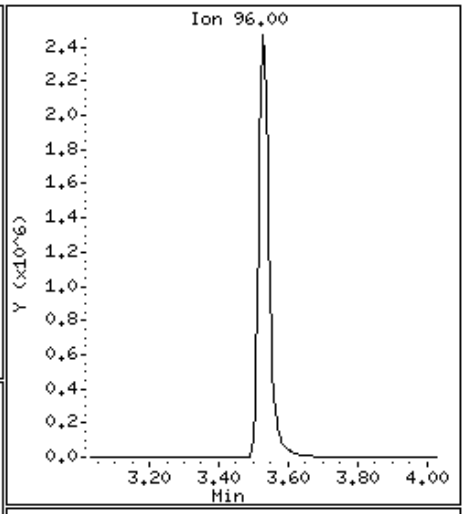
27 cis-1,2-Dichloroethene Concentration: 7819.25 ug/l

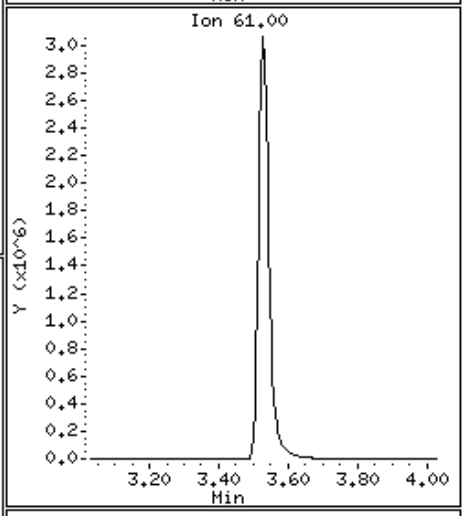


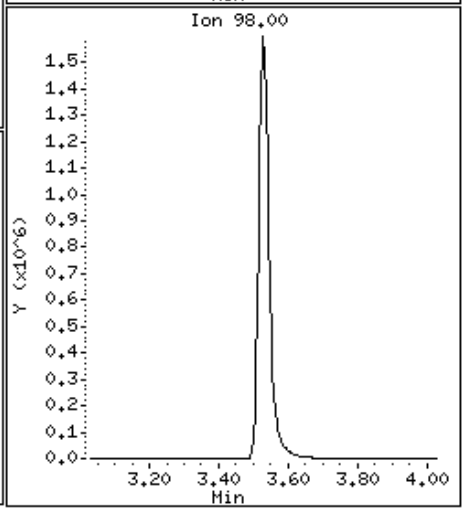












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D Page 5

Date : 08-JUL-2022 16:47

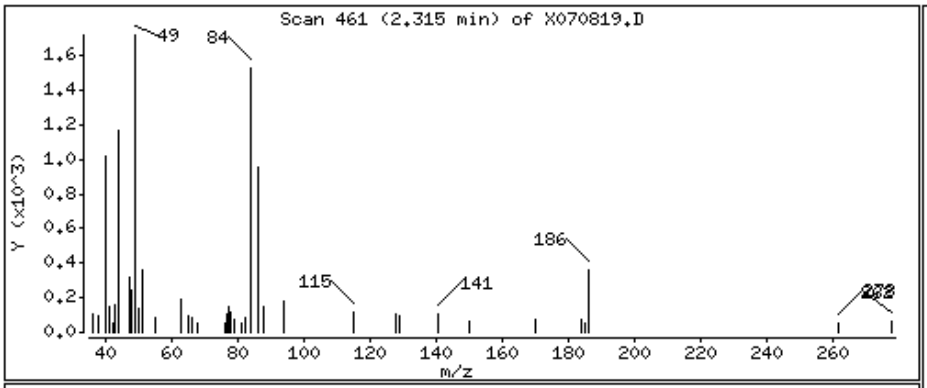
Client ID: HS22070326-06 Instrument: voa6.i

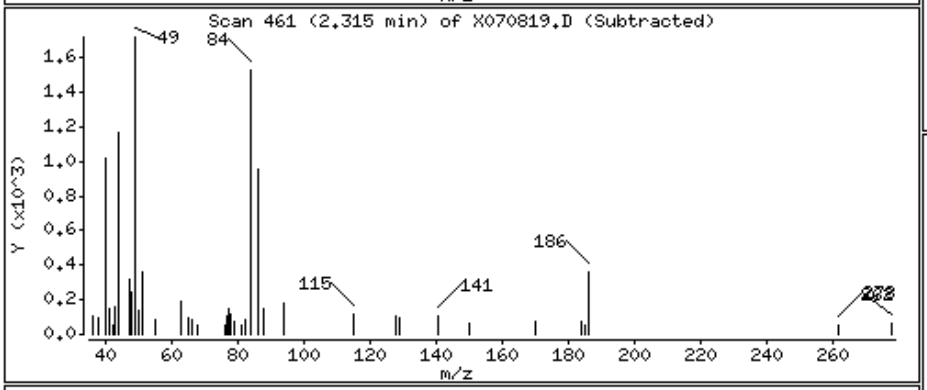
Sample Info: HS22070326-06;HS22070326-06;;;

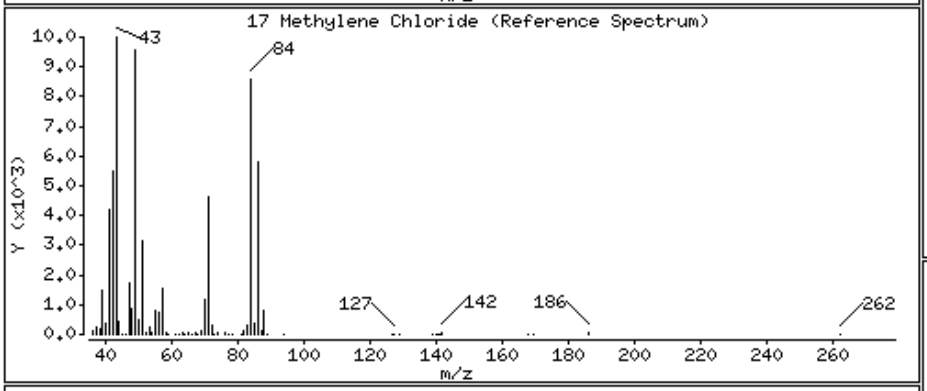
Purge Volume: 5.0 Operator: PC

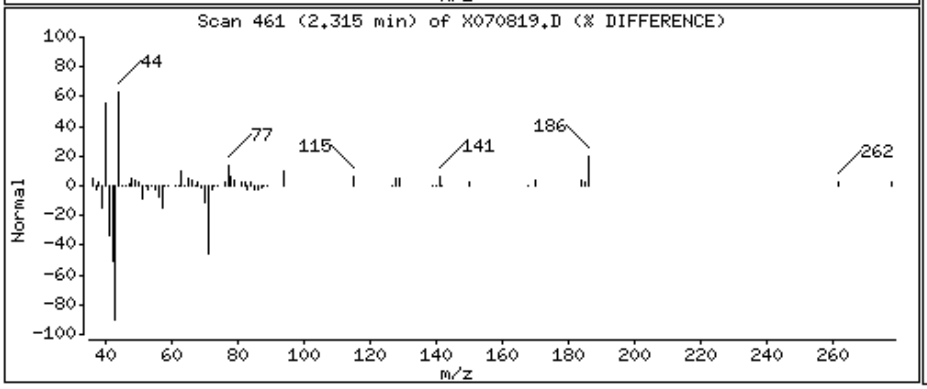
Column phase: DB624 Column diameter: 0.18

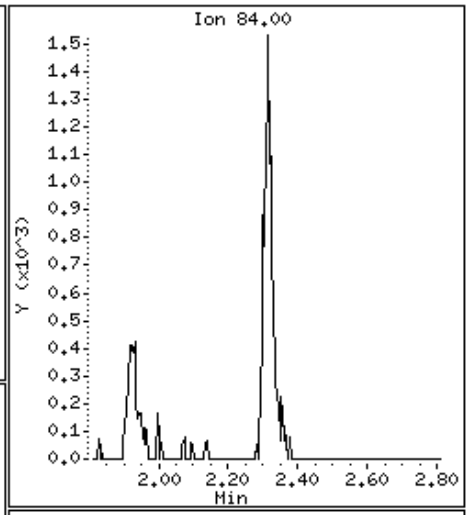
17 Methylene Chloride Concentration: 10.05 ug/l

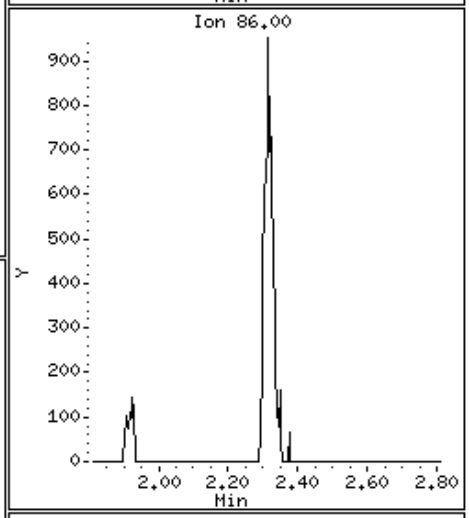


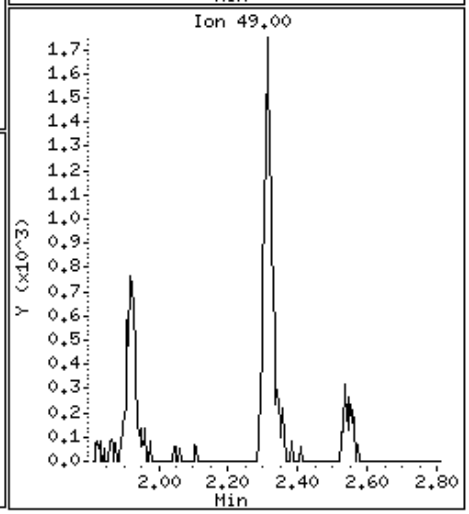












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D Page 6

Date : 08-JUL-2022 16:47

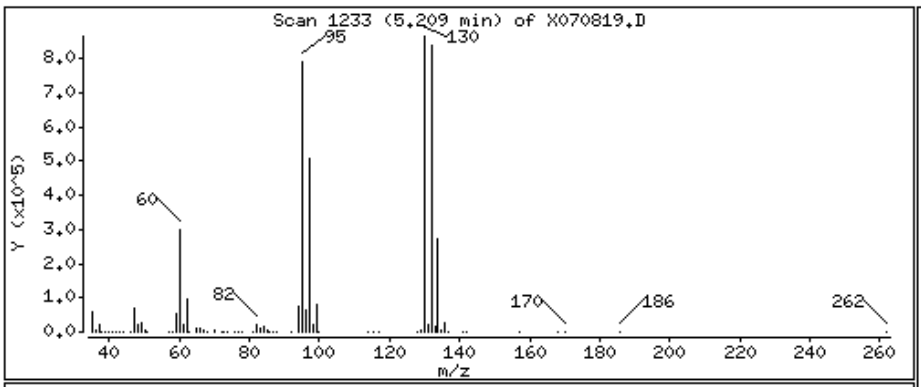
Client ID: HS22070326-06 Instrument: voa6.i

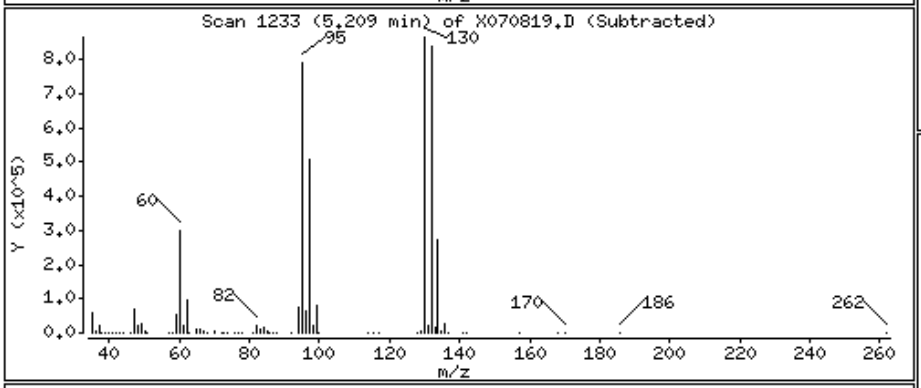
Sample Info: HS22070326-06;HS22070326-06;;;

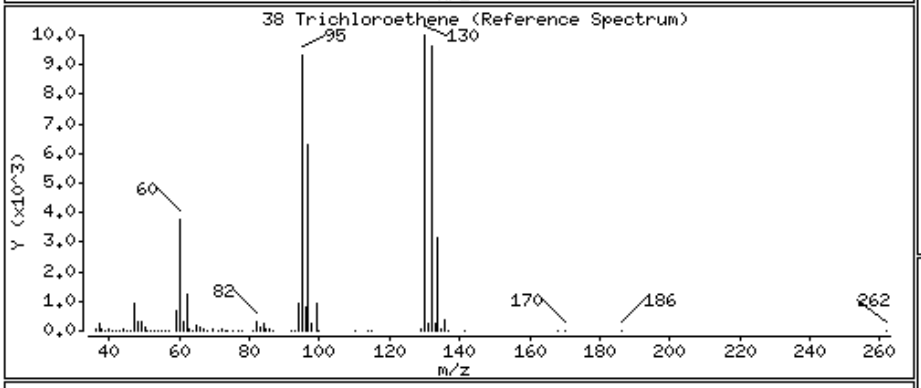
Purge Volume: 5.0 Operator: PC

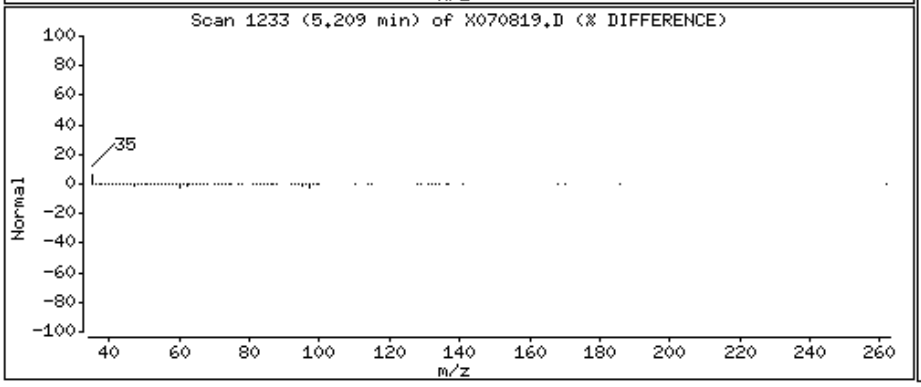
Column phase: DB624 Column diameter: 0.18

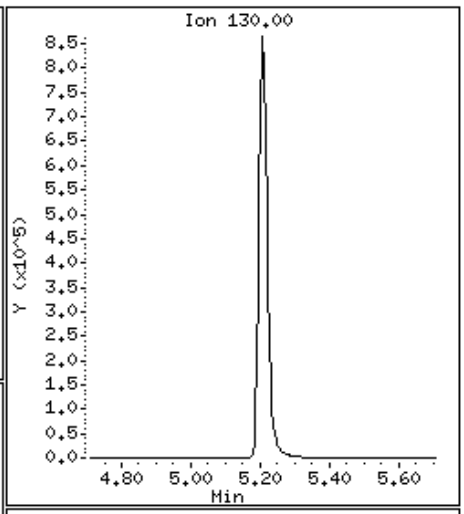
38 Trichloroethene Concentration: 2775.73 ug/l

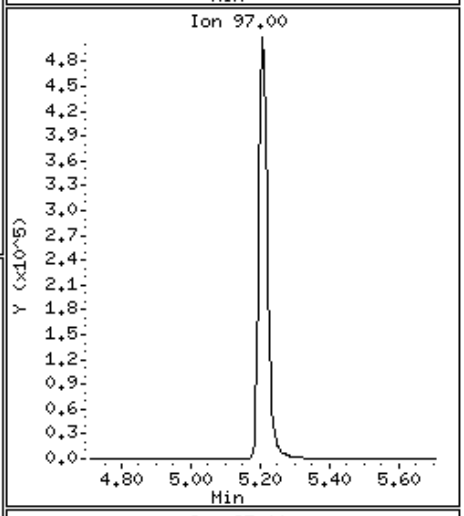


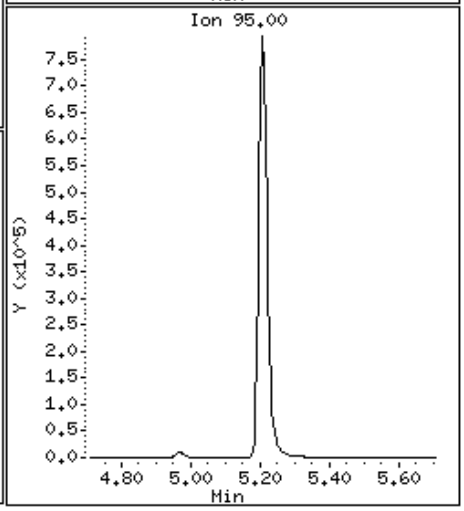












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D Page 7

Date : 08-JUL-2022 16:47

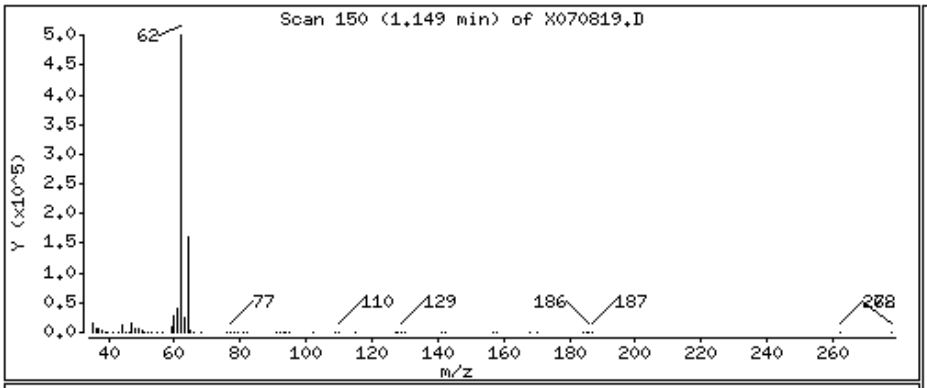
Client ID: HS22070326-06 Instrument: voa6.i

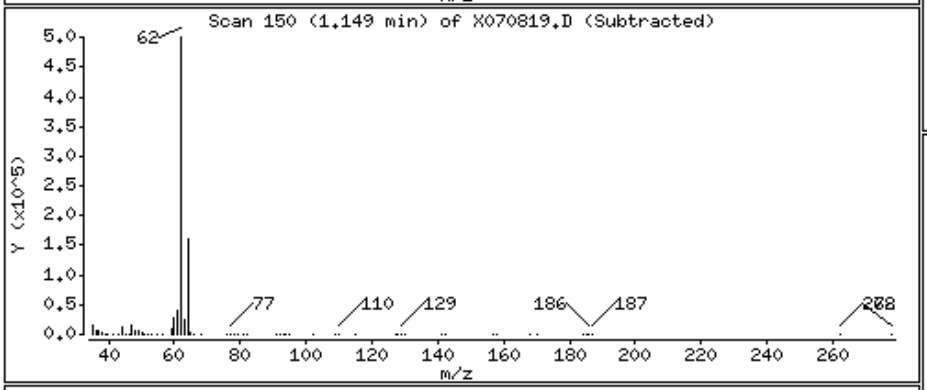
Sample Info: HS22070326-06;HS22070326-06;;;

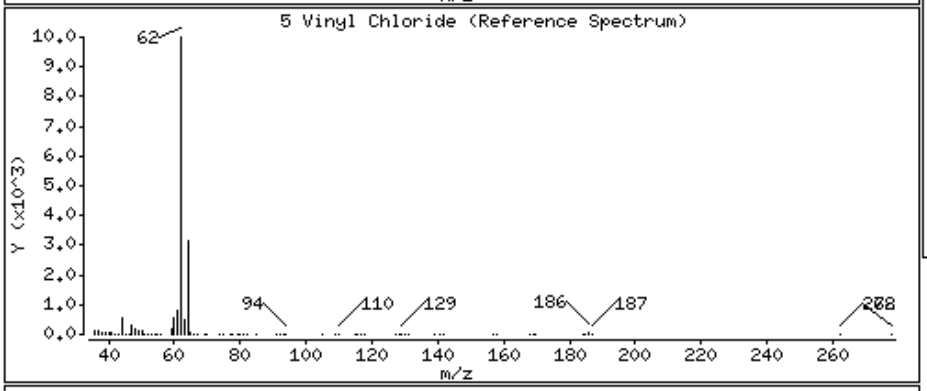
Purge Volume: 5.0 Operator: PC

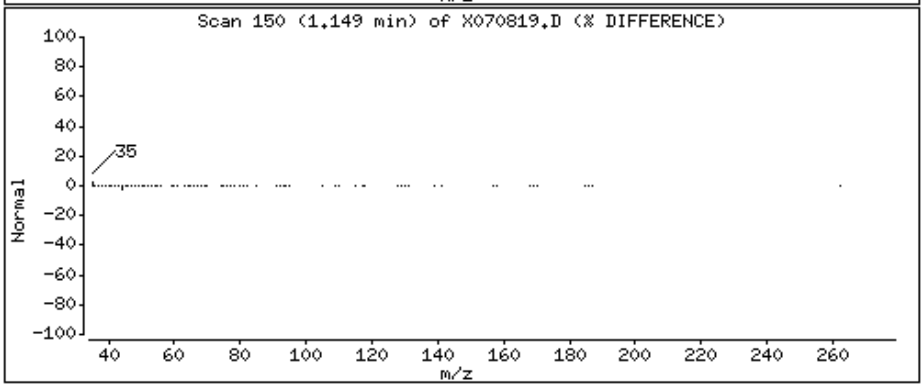
Column phase: DB624 Column diameter: 0.18

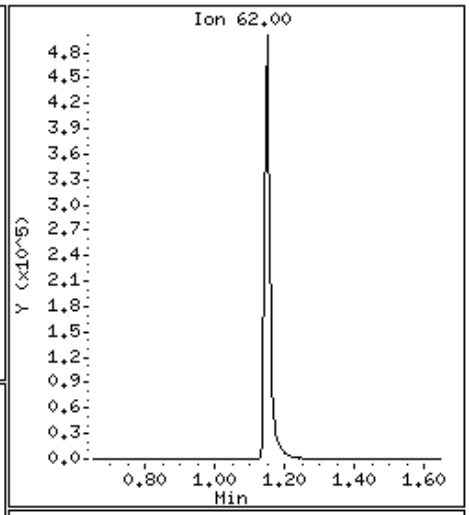
5 Vinyl Chloride Concentration: 732.56 ug/l

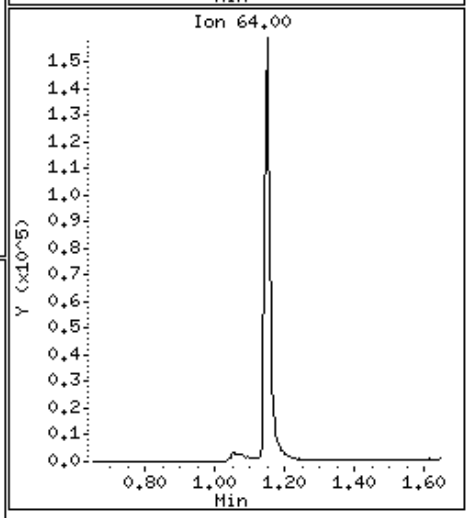












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070819.D
Inj Date : 08-JUL-2022 16:47
InstruID : voa6.i
LabSampID : HS22070326-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D
Lab Smp Id: HS22070326-03 Client Smp ID: HS22070326-03
Inj Date : 08-JUL-2022 17:29
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-03;HS22070326-03;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 20
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

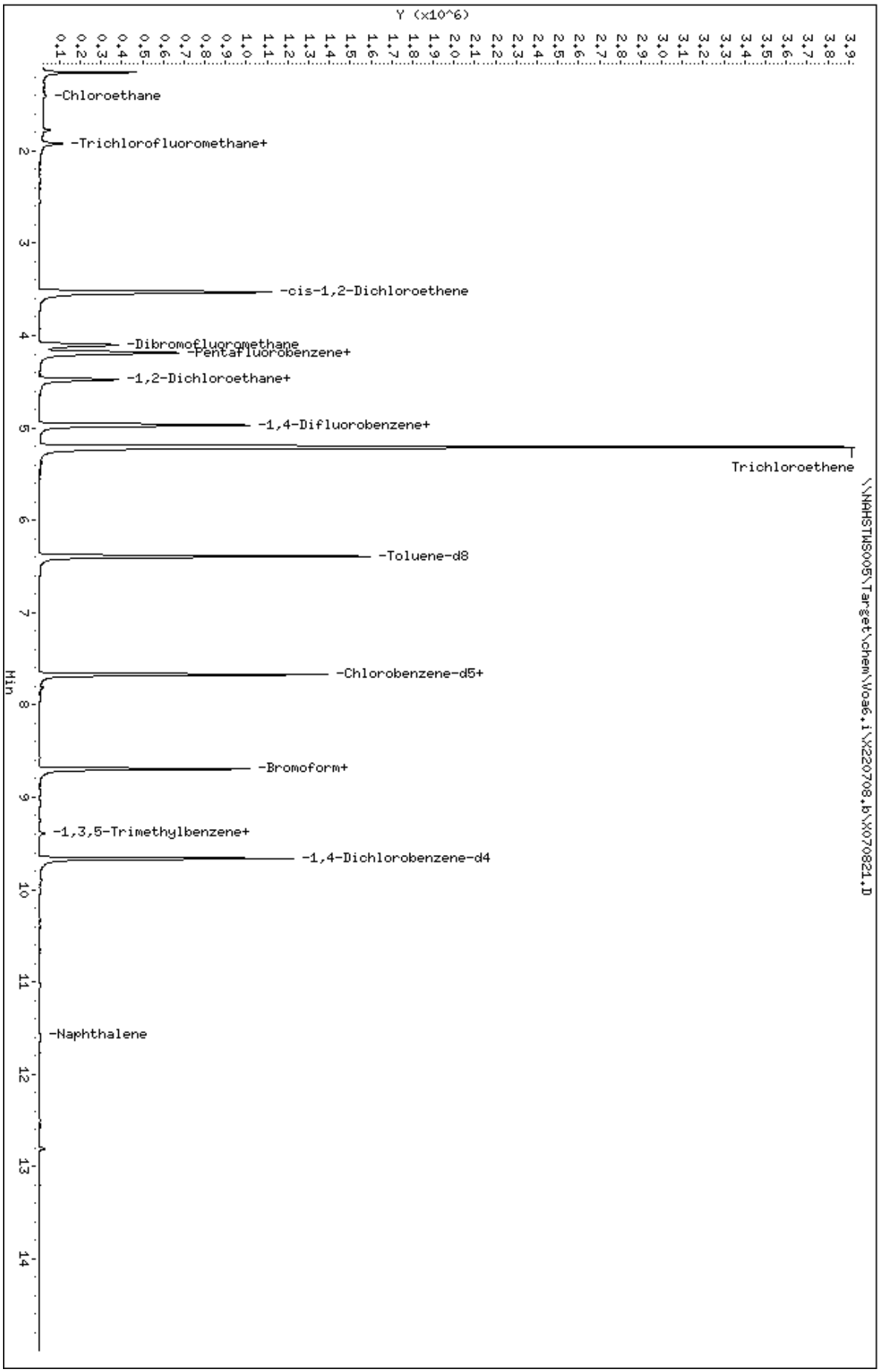
Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	614402	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	878025	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	750354	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	330008	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	285420	49.5914	49.59
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	333027	51.0817	51.08
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	268875	47.4335	47.43
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1008698	54.1351	54.13
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	23041	3.92005	19.60(a)
33 1,2-Dichloroethane	62	4.567	4.560	(0.919)	7001	0.96219	4.81(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	592581	83.3303	416.65
38 Trichloroethene	130	5.208	5.208	(1.048)	1359407	206.750	1033.75(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	298872	38.0319	190.15

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\voa6.i\X220708.b\X070821.D
Date : 08-JUL-2022 17:29
Client ID: HS220703Z6-03
Sample Info: HS220703Z6-03;HS220703Z6-03;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D Page 2

Date : 08-JUL-2022 17:29

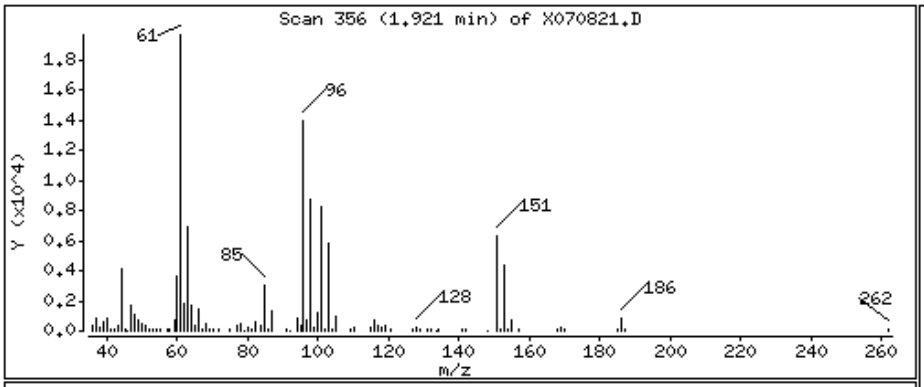
Client ID: HS22070326-03 Instrument: voa6.i

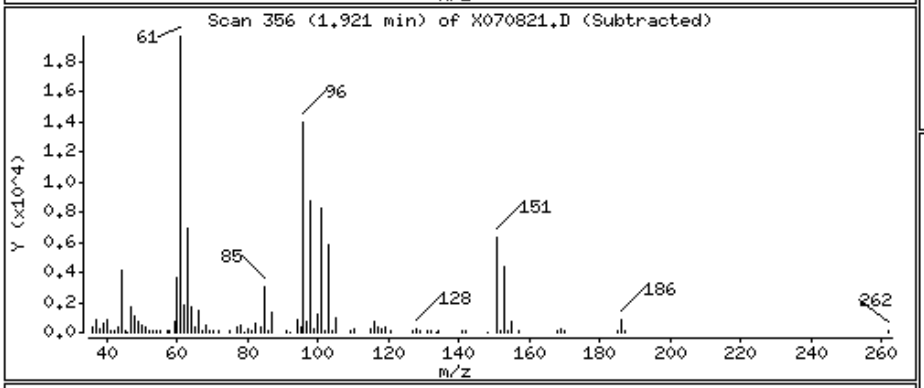
Sample Info: HS22070326-03;HS22070326-03;;;

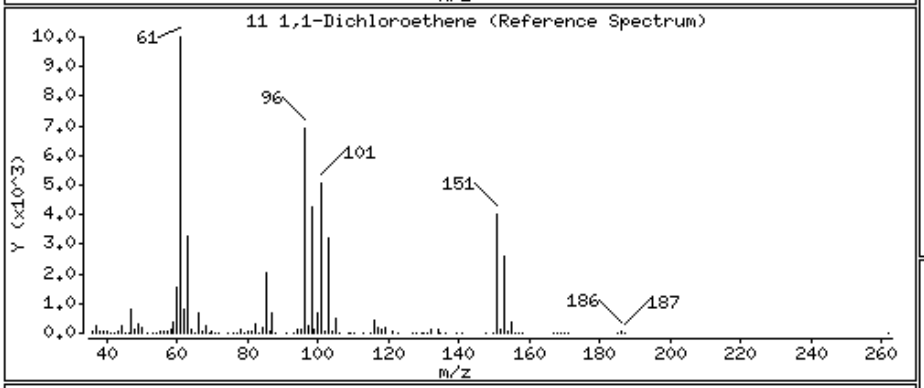
Purge Volume: 5.0 Operator: PC

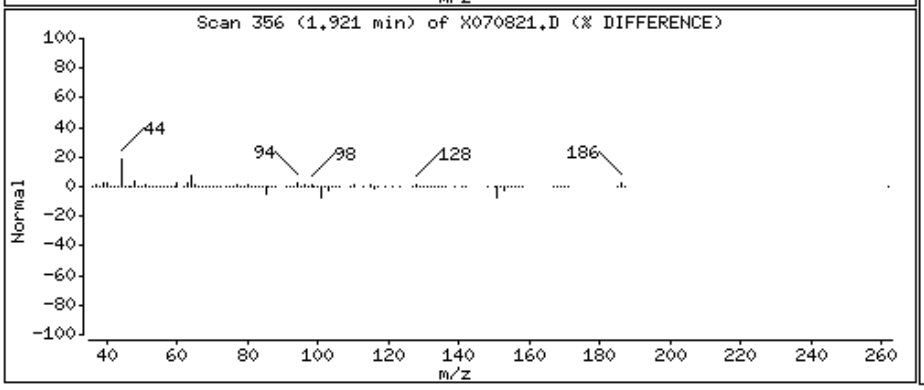
Column phase: DB624 Column diameter: 0.18

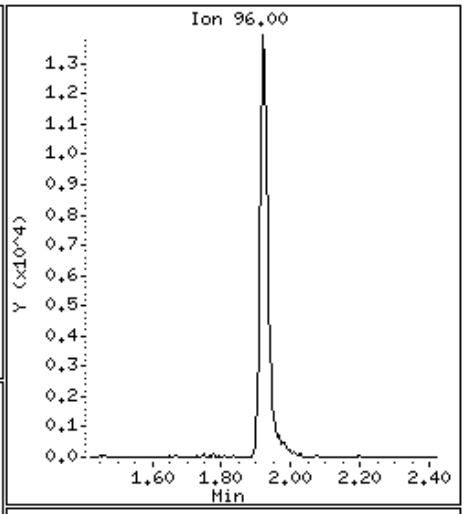
11 1,1-Dichloroethene Concentration: 19.60 ug/l

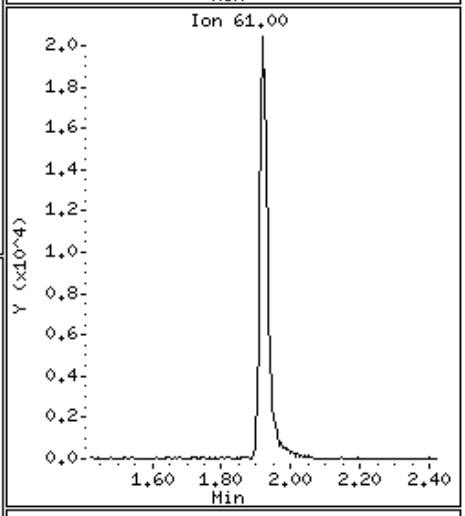


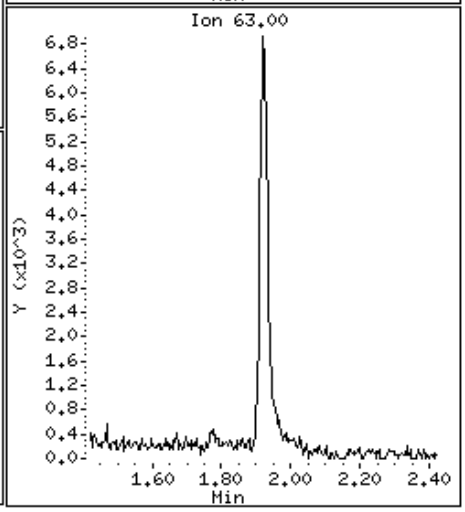












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D Page 3

Date : 08-JUL-2022 17:29

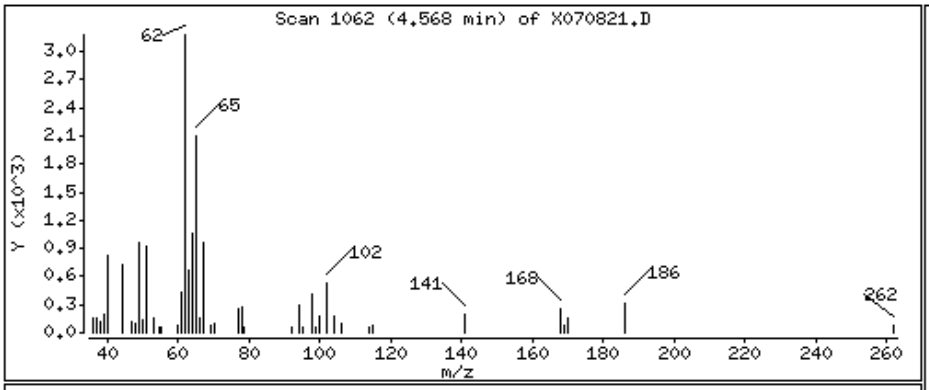
Client ID: HS22070326-03 Instrument: voa6.i

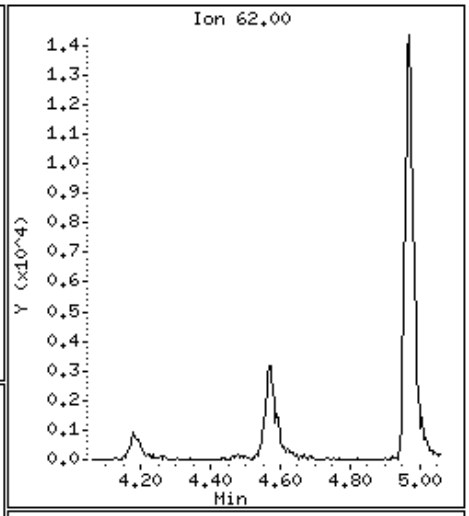
Sample Info: HS22070326-03;HS22070326-03;;;

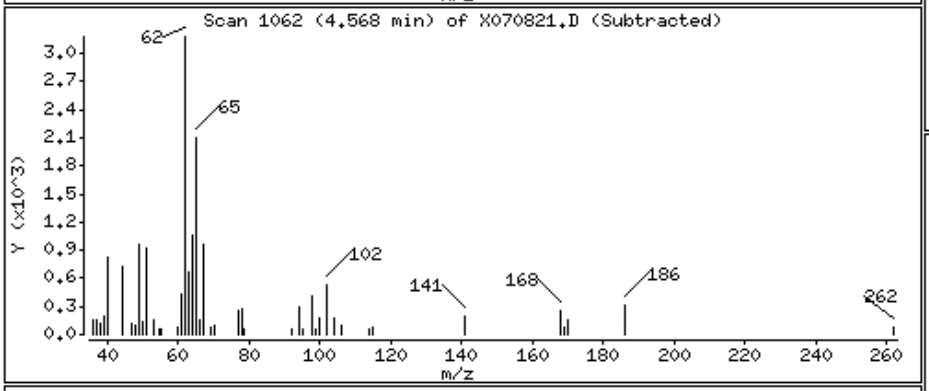
Purge Volume: 5.0 Operator: PC

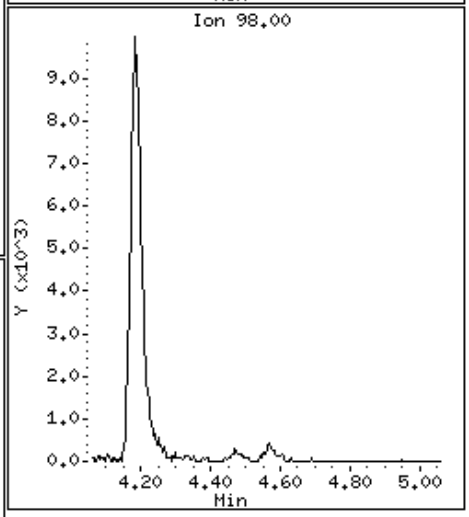
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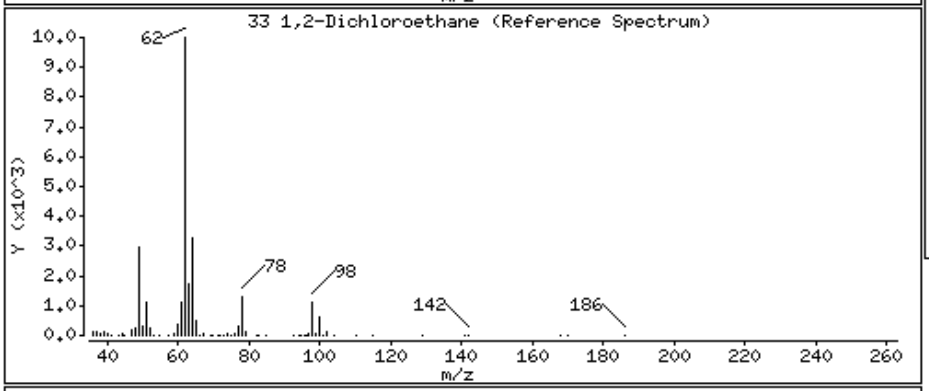
33 1,2-Dichloroethane Concentration: 4.81 ug/l

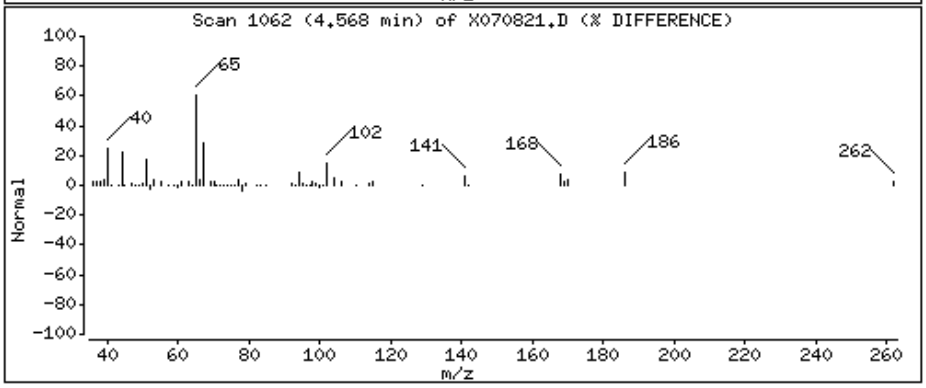












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D Page 4

Date : 08-JUL-2022 17:29

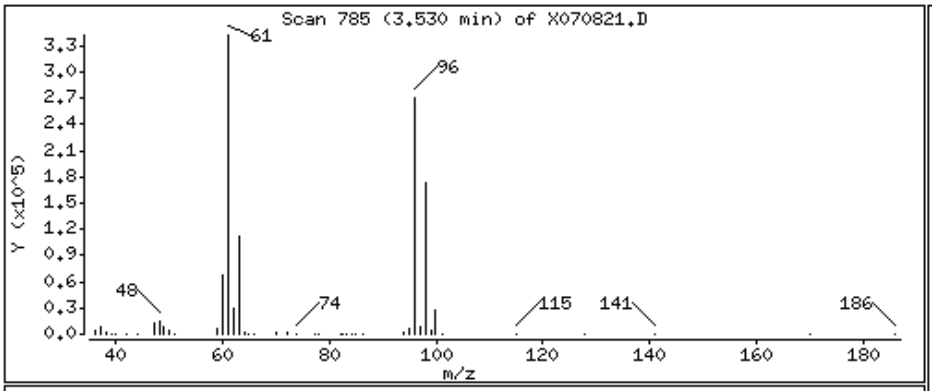
Client ID: HS22070326-03 Instrument: voa6.i

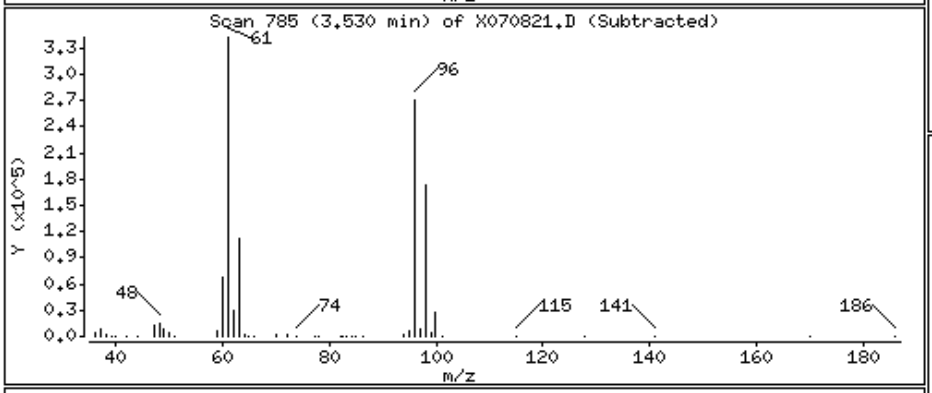
Sample Info: HS22070326-03;HS22070326-03;;;

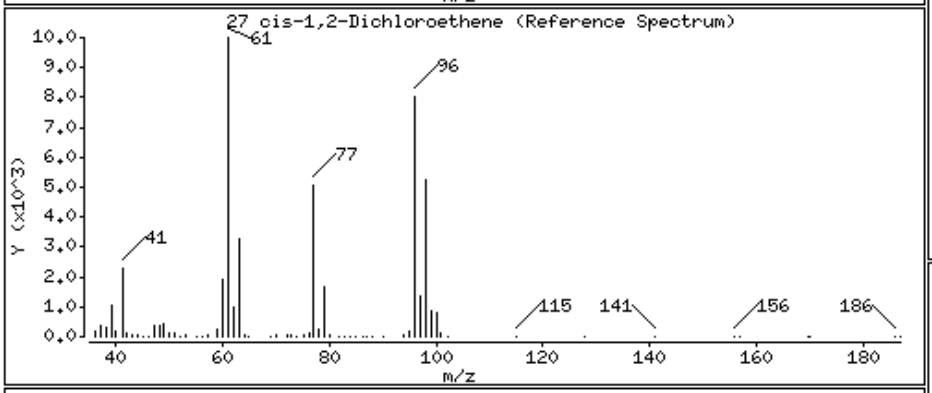
Purge Volume: 5.0 Operator: PC

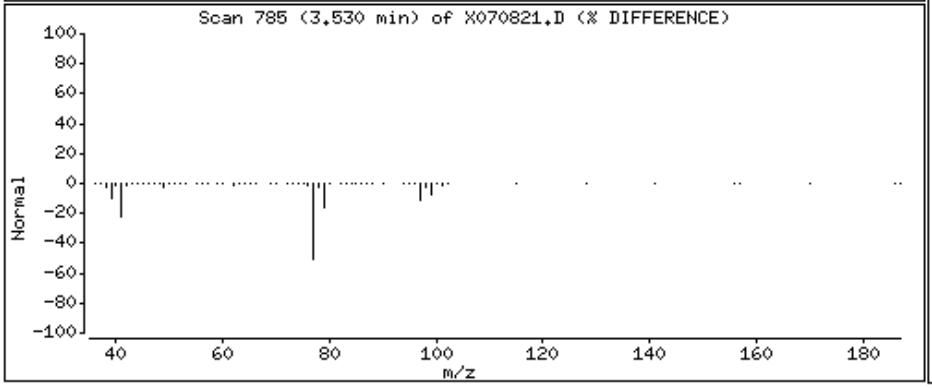
Column phase: DB624 Column diameter: 0.18

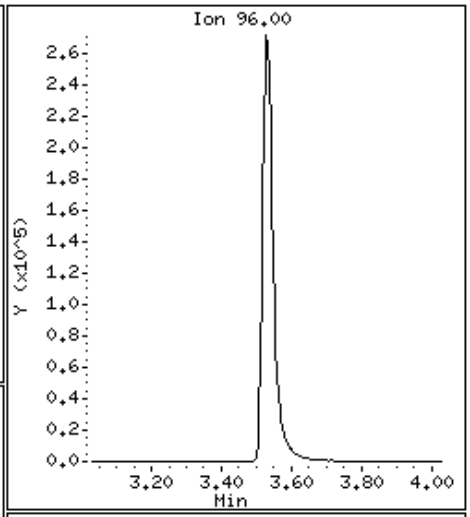
27 cis-1,2-Dichloroethene Concentration: 416.65 ug/l

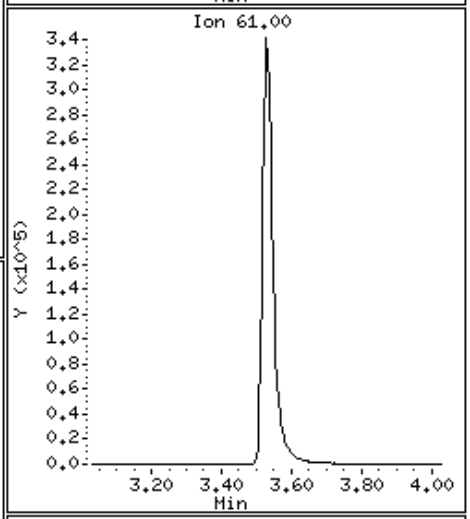


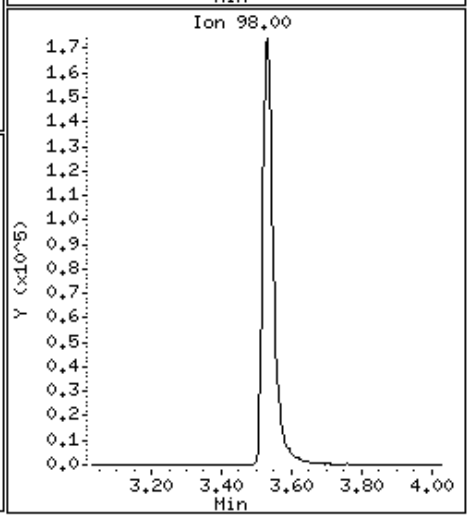












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D Page 5

Date : 08-JUL-2022 17:29

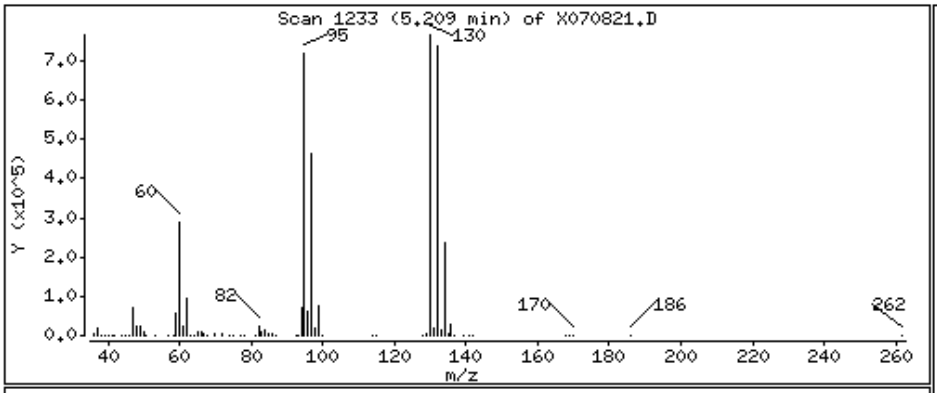
Client ID: HS22070326-03 Instrument: voa6.i

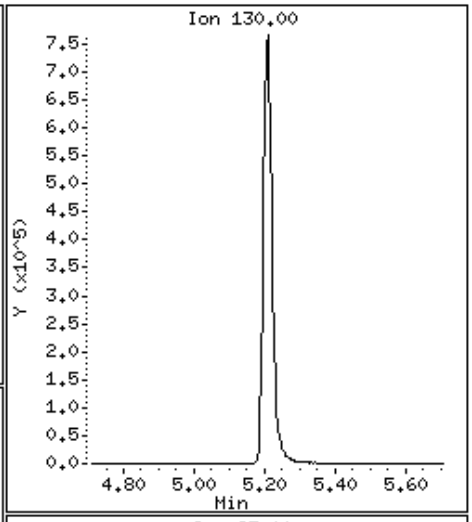
Sample Info: HS22070326-03;HS22070326-03;;;

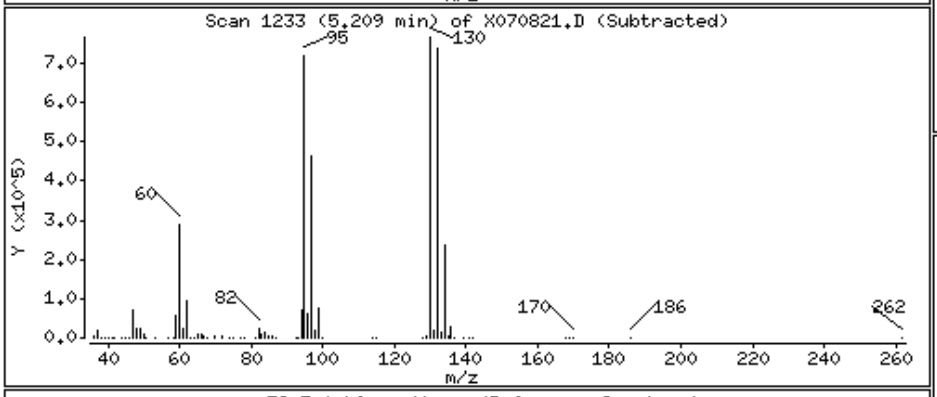
Purge Volume: 5.0 Operator: PC

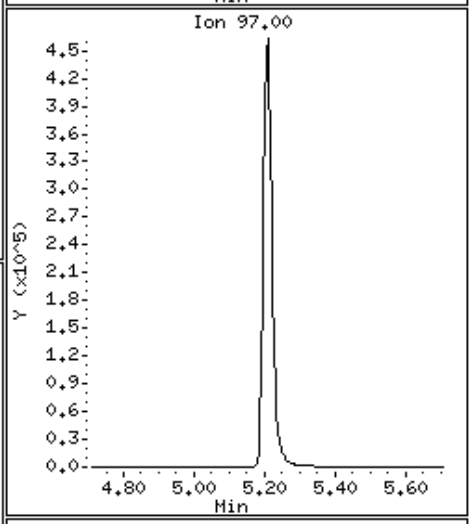
Column phase: DB624 Column diameter: 0.18

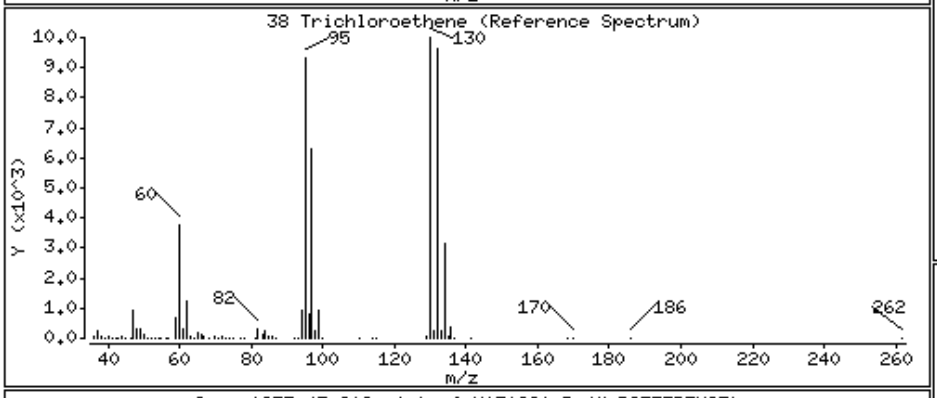
38 Trichloroethene Concentration: 1033.75 ug/l

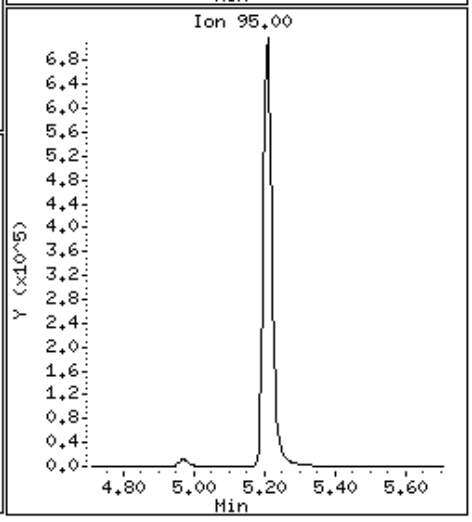


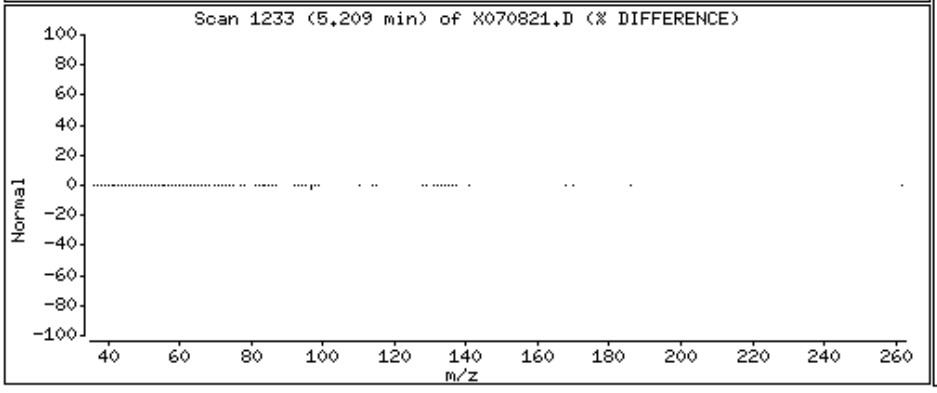












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D Page 6

Date : 08-JUL-2022 17:29

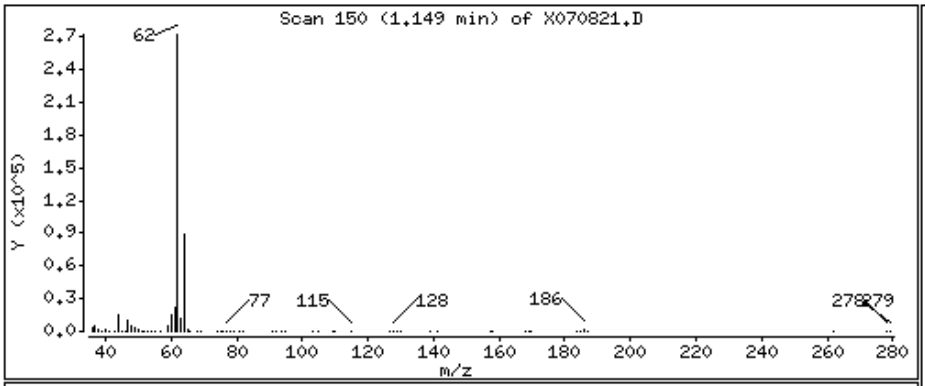
Client ID: HS22070326-03 Instrument: voa6.i

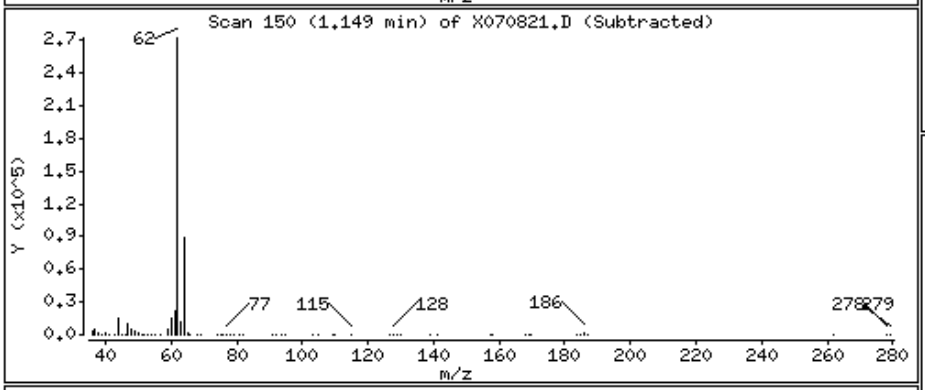
Sample Info: HS22070326-03;HS22070326-03;;;

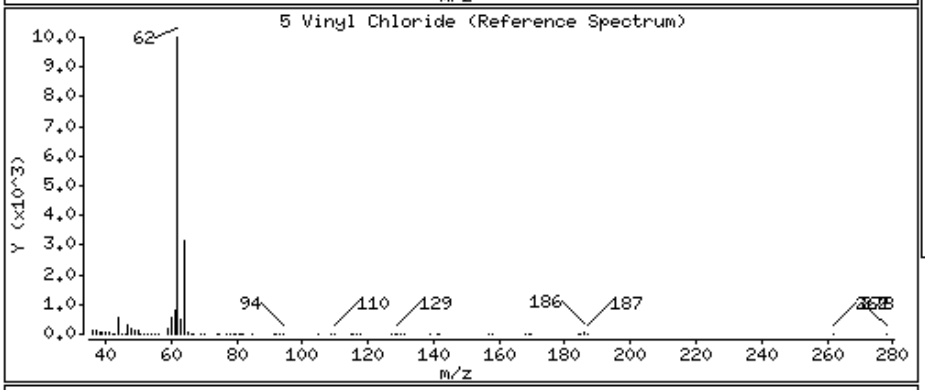
Purge Volume: 5.0 Operator: PC

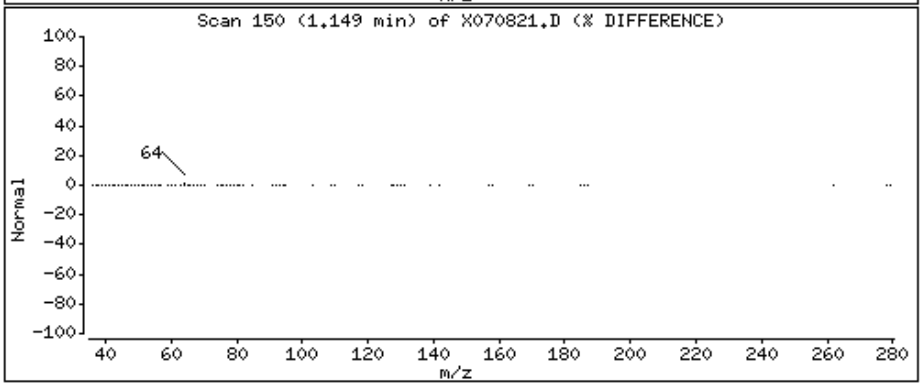
Column phase: DB624 Column diameter: 0.18

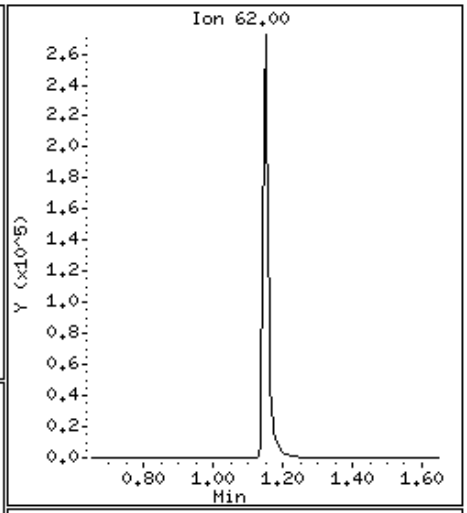
5 Vinyl Chloride Concentration: 190.15 ug/l

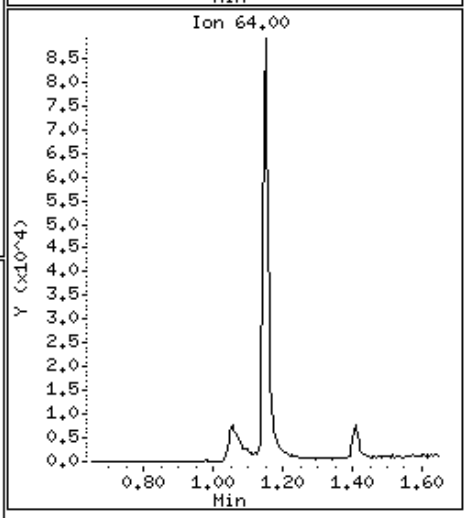












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070821.D
Inj Date : 08-JUL-2022 17:29
InstruID : voa6.i
LabSampID : HS22070326-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D
Lab Smp Id: HS22070326-03 Client Smp ID: HS22070326-03
Inj Date : 08-JUL-2022 17:50
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-03;HS22070326-03;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 21
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

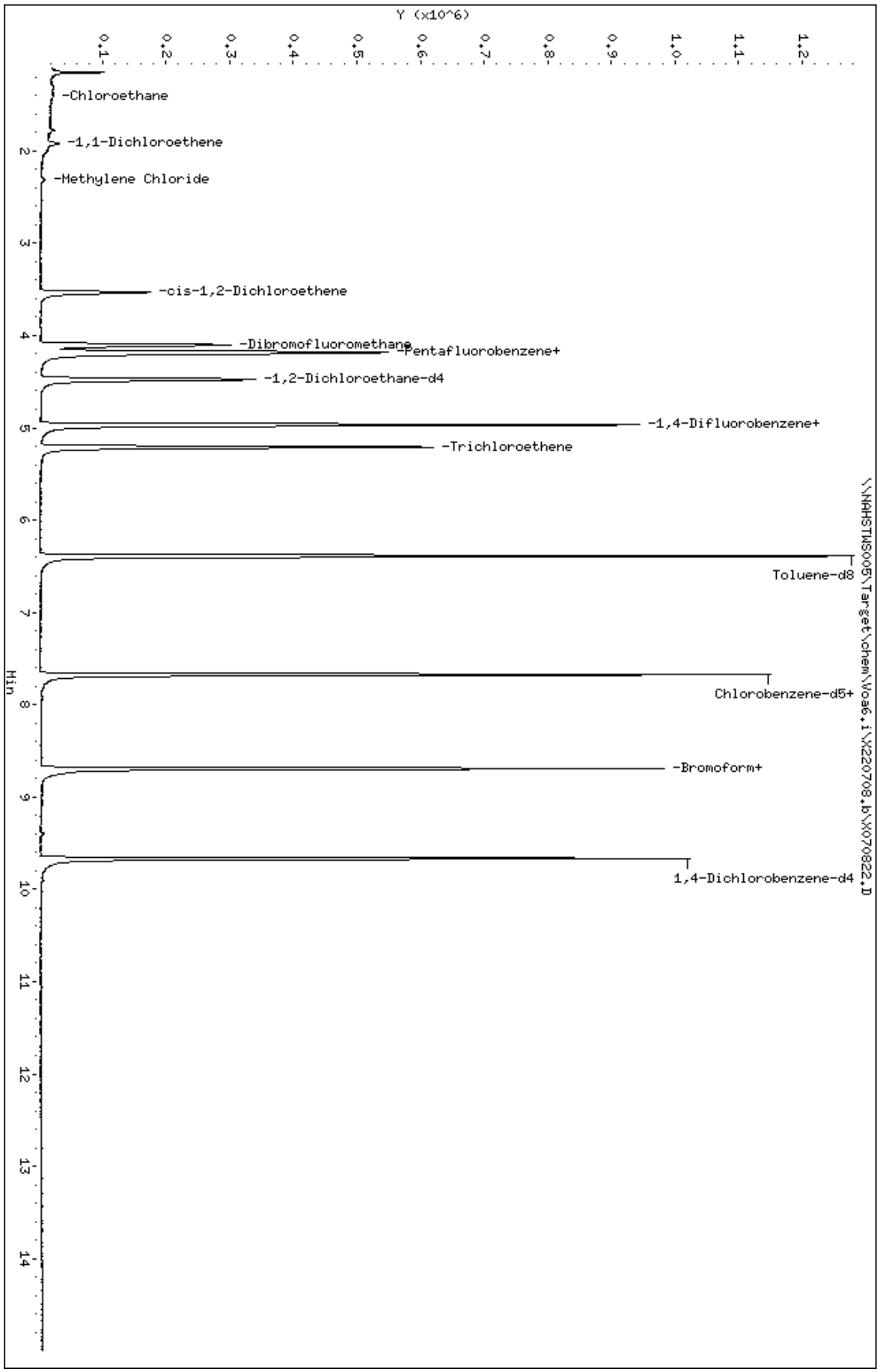
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	516755	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	809624	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	623307	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	284838	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	246767	51.0100	51.00
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	316420	58.4724	58.47
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	215041	45.0907	45.09
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	848063	54.7911	54.79
11 1,1-Dichloroethene	96	1.917	1.921	(0.458)	4354	0.88074	22.01(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	96200	16.0842	402.10
17 Methylene Chloride	84	2.314	2.311	(0.553)	2633	1.05836	26.45(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	226260	37.3188	932.96
5 Vinyl Chloride	62	1.149	1.149	(0.275)	55181	8.34874	208.71

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D
Date : 08-JUL-2022 17:50
Client ID: HS220703326-03
Sample Info: HS220703326-03;HS220703326-03;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D Page 2

Date : 08-JUL-2022 17:50

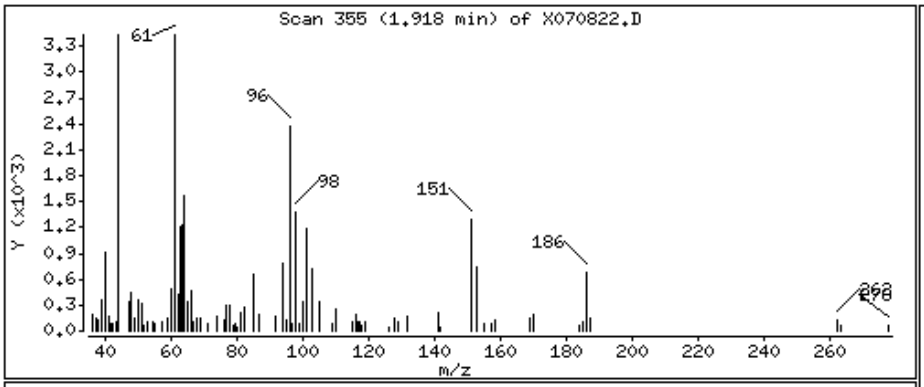
Client ID: HS22070326-03 Instrument: voa6.i

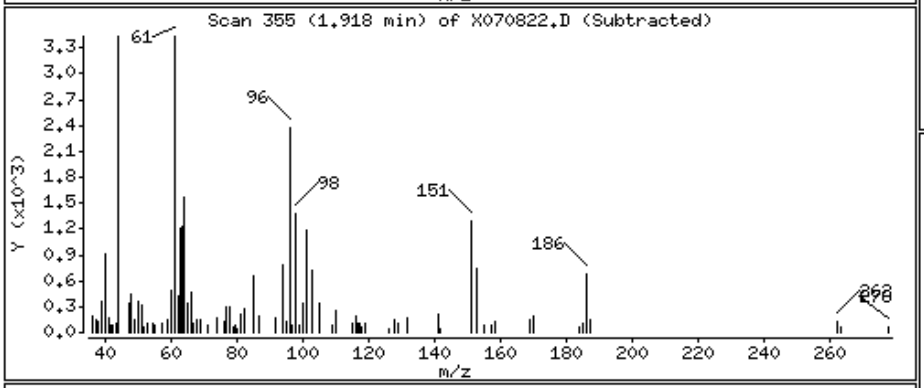
Sample Info: HS22070326-03;HS22070326-03;;;

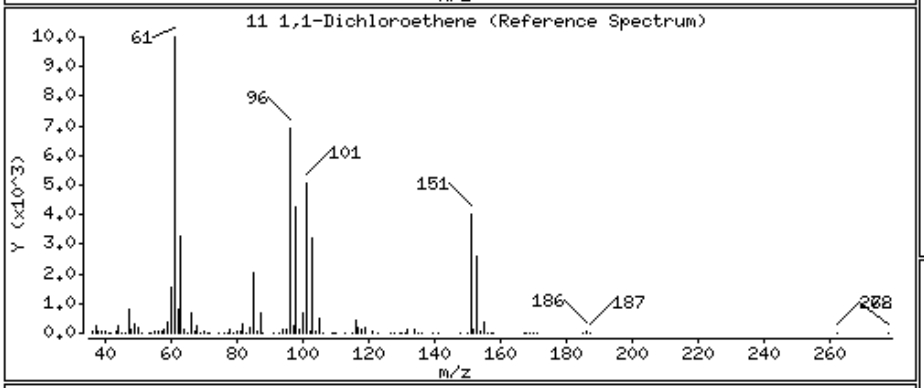
Purge Volume: 5.0 Operator: PC

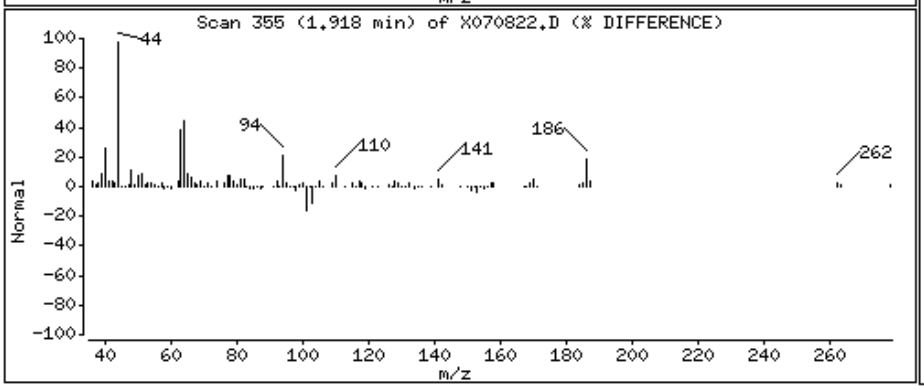
Column phase: DB624 Column diameter: 0.18

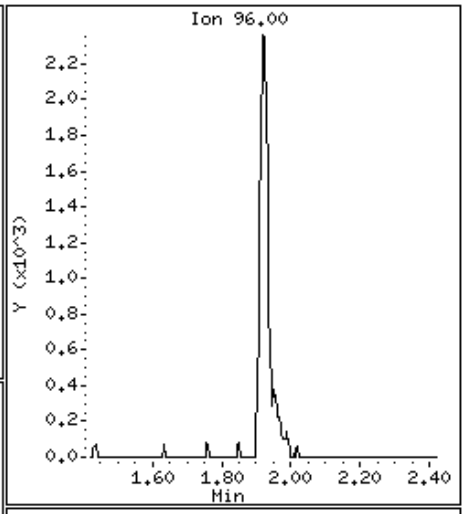
11 1,1-Dichloroethene Concentration: 22.01 ug/l

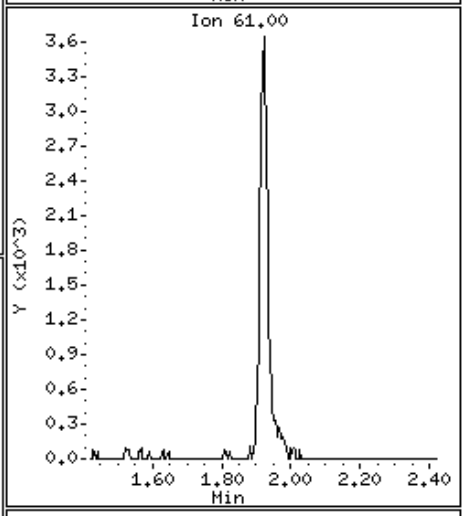


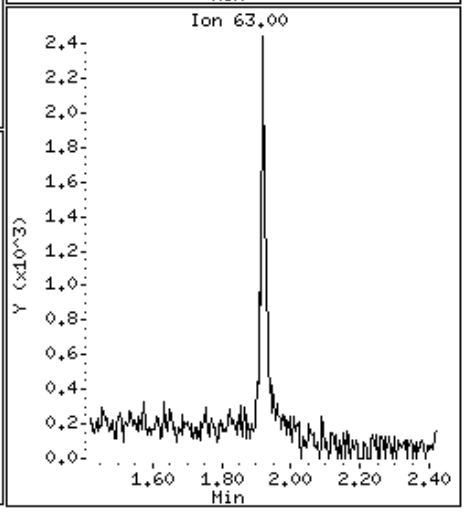












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D Page 3

Date : 08-JUL-2022 17:50

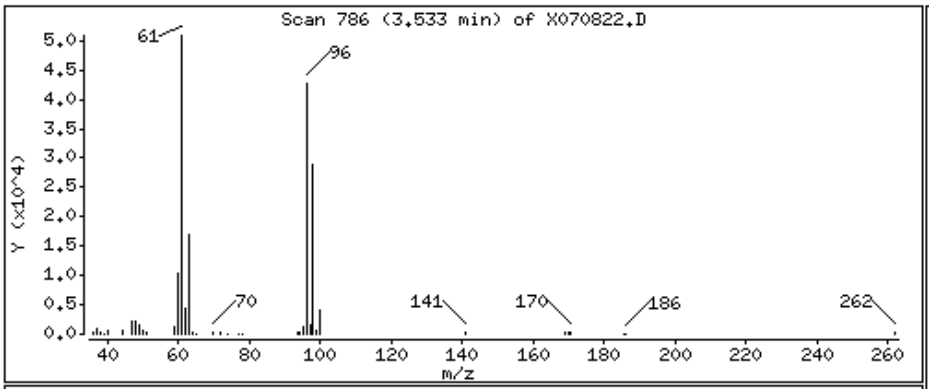
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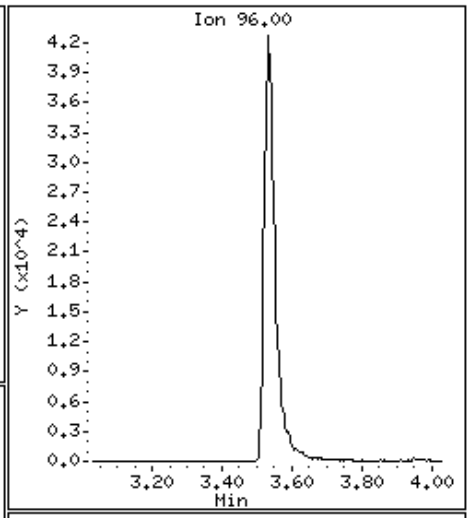
Sample Info: HS22070326-03;HS22070326-03;;;

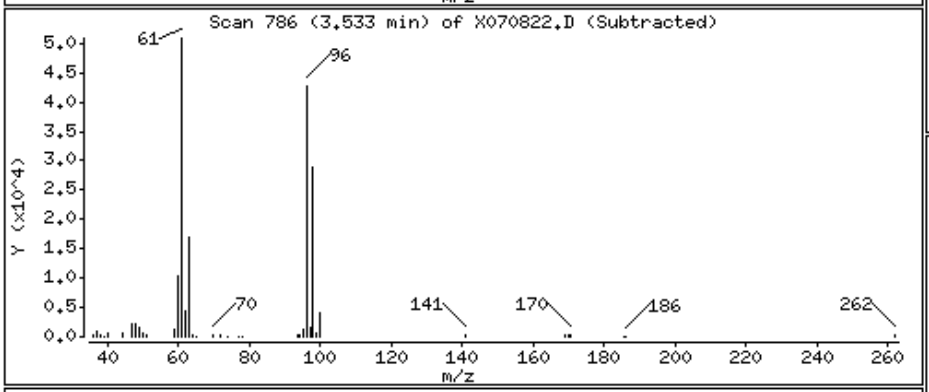
Purge Volume: 5.0 Operator: PC

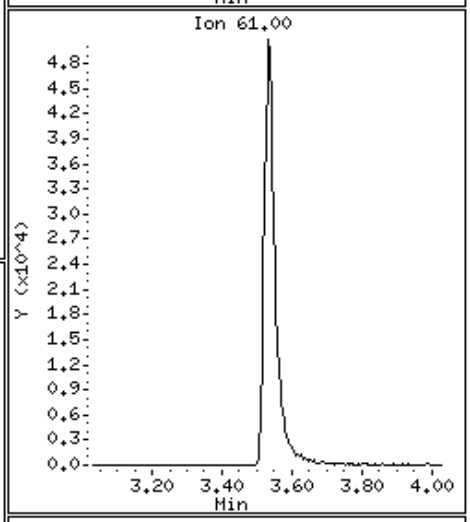
Column phase: DB624 Column diameter: 0.18

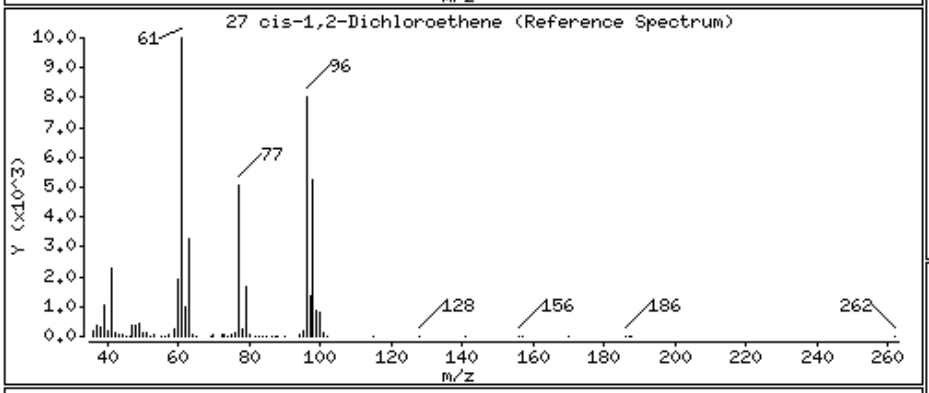
27 cis-1,2-Dichloroethene Concentration: 402.10 ug/l

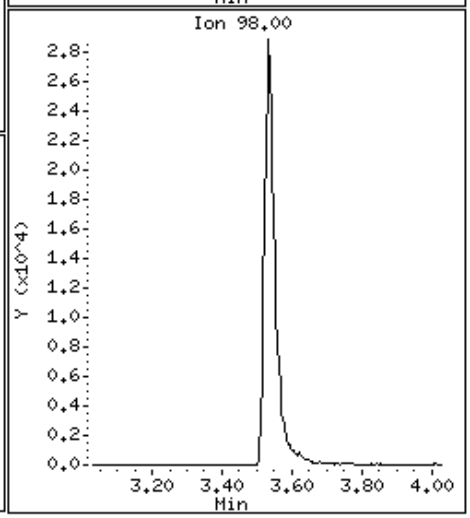


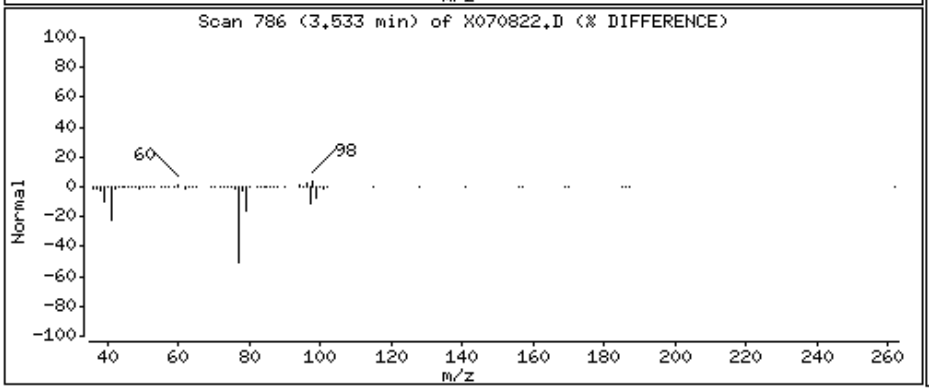












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D Page 4

Date : 08-JUL-2022 17:50

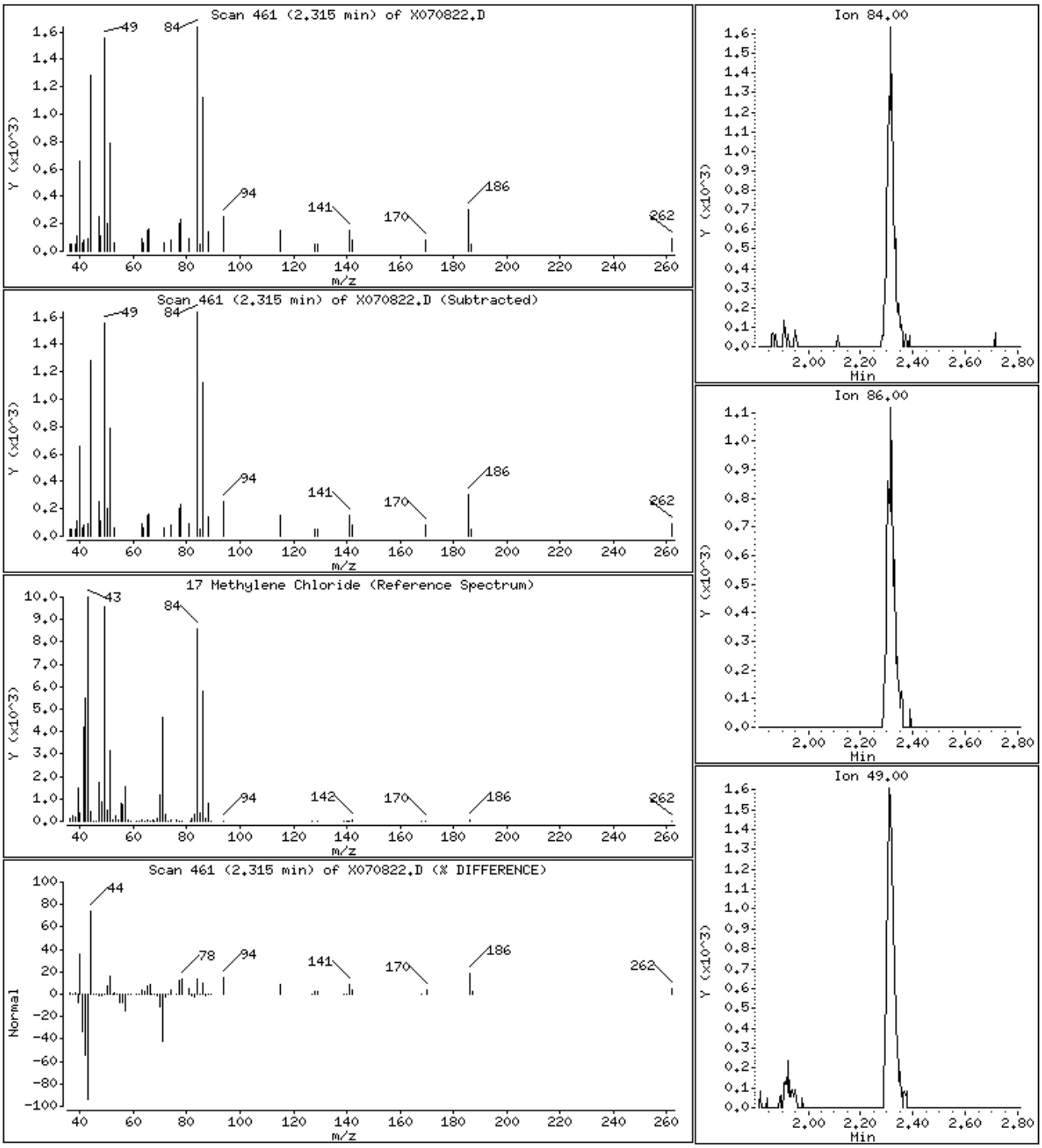
Client ID: HS22070326-03 Instrument: voa6.i

Sample Info: HS22070326-03;HS22070326-03;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

17 Methylene Chloride Concentration: 26.45 ug/l



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D Page 5

Date : 08-JUL-2022 17:50

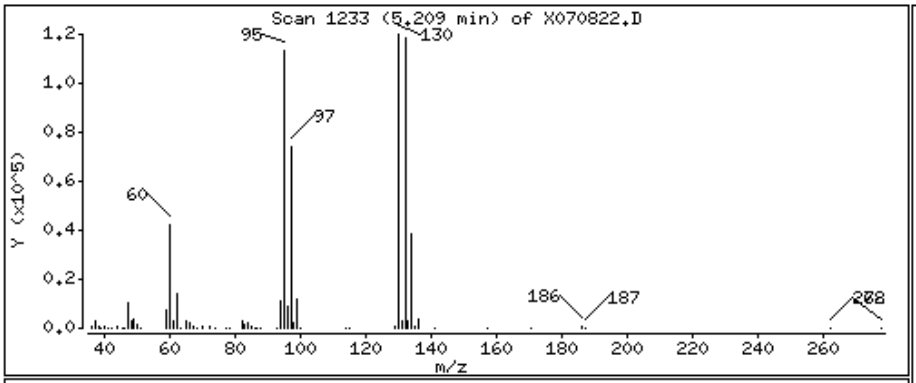
Client ID: HS22070326-03 Instrument: voa6.i

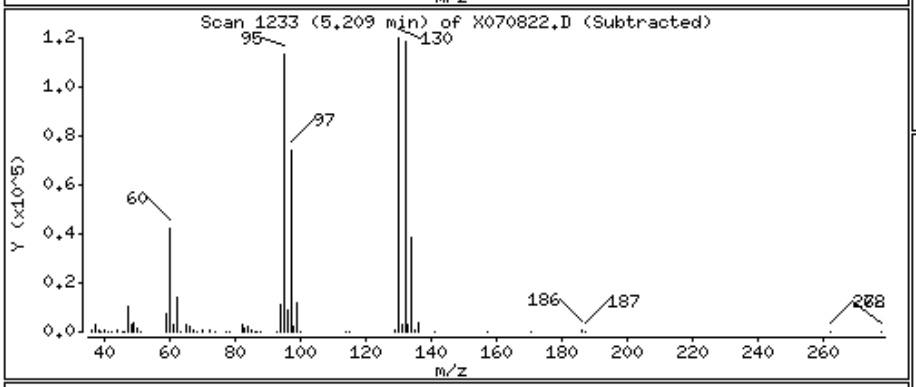
Sample Info: HS22070326-03;HS22070326-03;;;

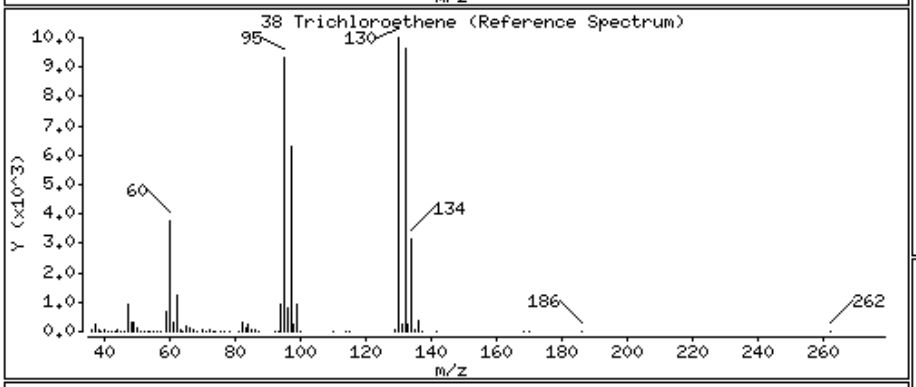
Purge Volume: 5.0 Operator: PC

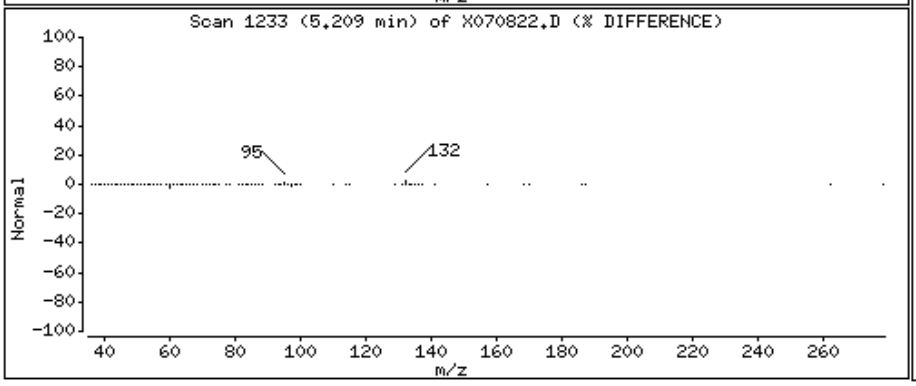
Column phase: DB624 Column diameter: 0.18

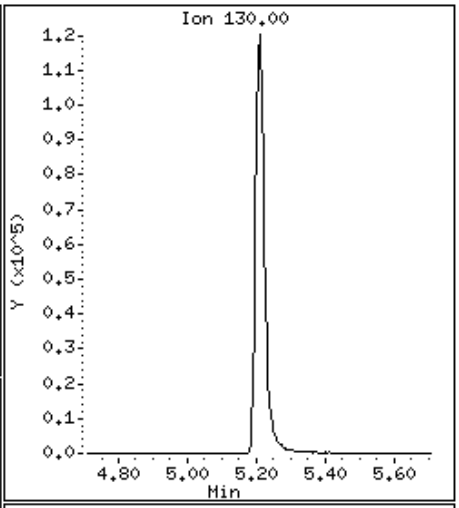
38 Trichloroethene Concentration: 932.96 ug/l

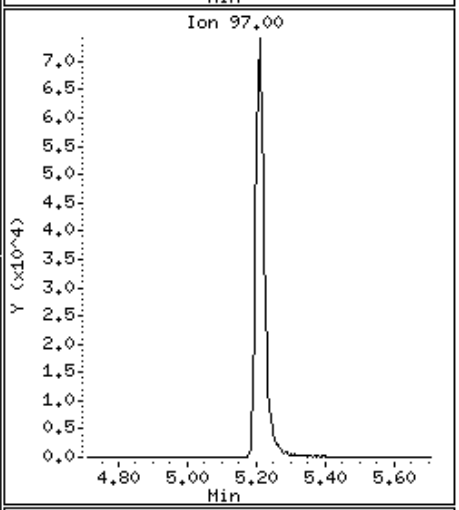


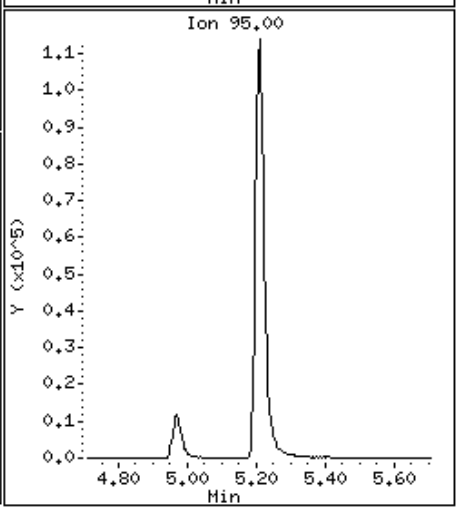












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D Page 6

Date : 08-JUL-2022 17:50

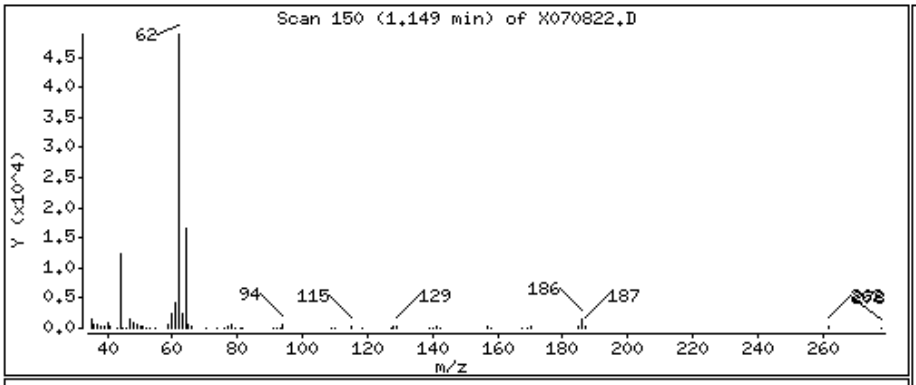
Client ID: HS22070326-03 Instrument: voa6.i

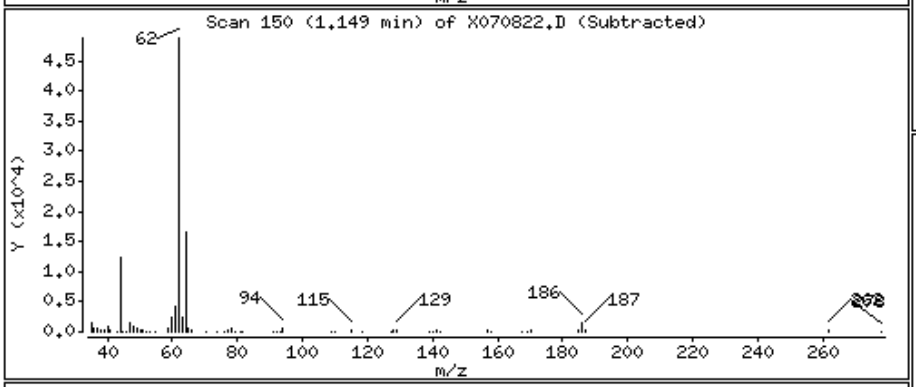
Sample Info: HS22070326-03;HS22070326-03;;;

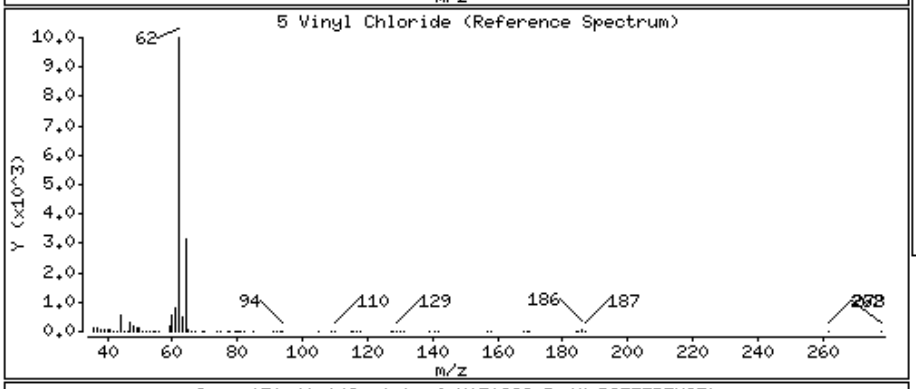
Purge Volume: 5.0 Operator: PC

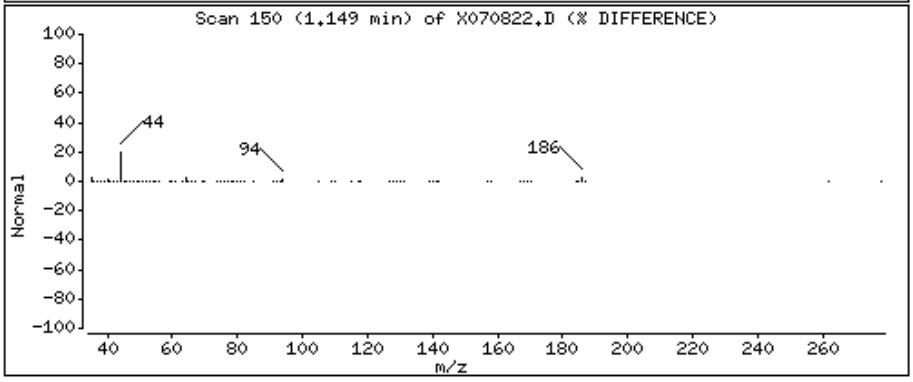
Column phase: DB624 Column diameter: 0.18

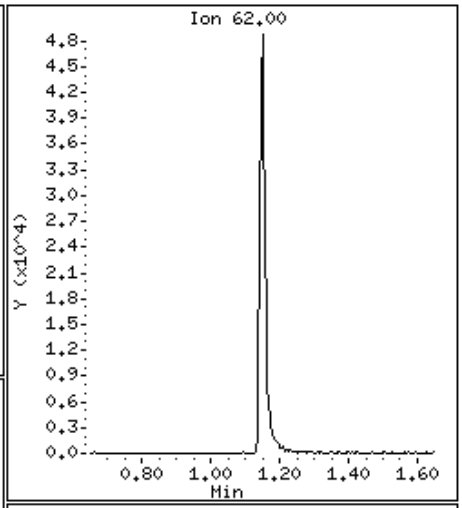
5 Vinyl Chloride Concentration: 208.71 ug/l

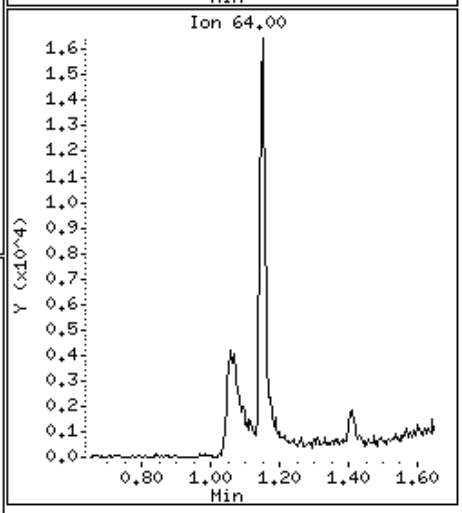












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070822.D
Inj Date : 08-JUL-2022 17:50
InstruID : voa6.i
LabSampID : HS22070326-03

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D
Lab Smp Id: HS22070326-08 Client Smp ID: HS22070326-08
Inj Date : 08-JUL-2022 18:11
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-08;HS22070326-08;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 22
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

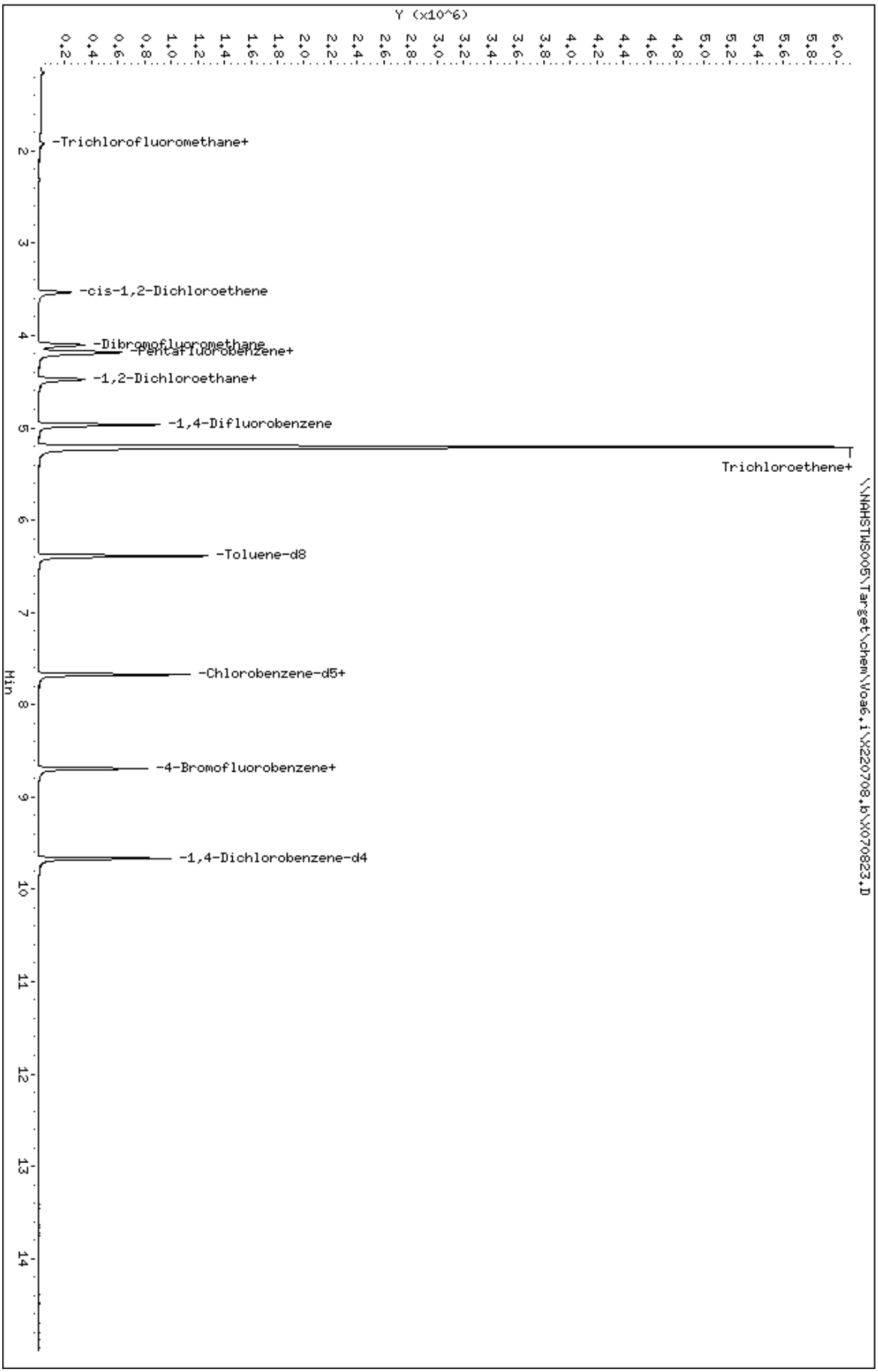
Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.185	(1.000)	563300	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	786357	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	618329	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	279974	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.071)	253763	48.0556	48.05
$ 69 4-Bromofluorobenzene	95	8.695	8.691	(1.133)	272289	50.6806	50.68
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.981)	246975	47.5232	47.52
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	841086	54.7779	54.77
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	4749	0.88126	4.40(a)
33 1,2-Dichloroethane	62	4.567	4.560	(0.919)	8455	1.29749	6.48(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.845)	130340	19.9915	99.95
38 Trichloroethene	130	5.208	5.208	(1.048)	2151881	365.428	1827.13(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	14222	1.97395	9.86(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D
Date : 08-JUL-2022 18:11
Client ID: HS220703326-08
Sample Info: HS220703326-08;HS220703326-08;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D Page 2

Date : 08-JUL-2022 18:11

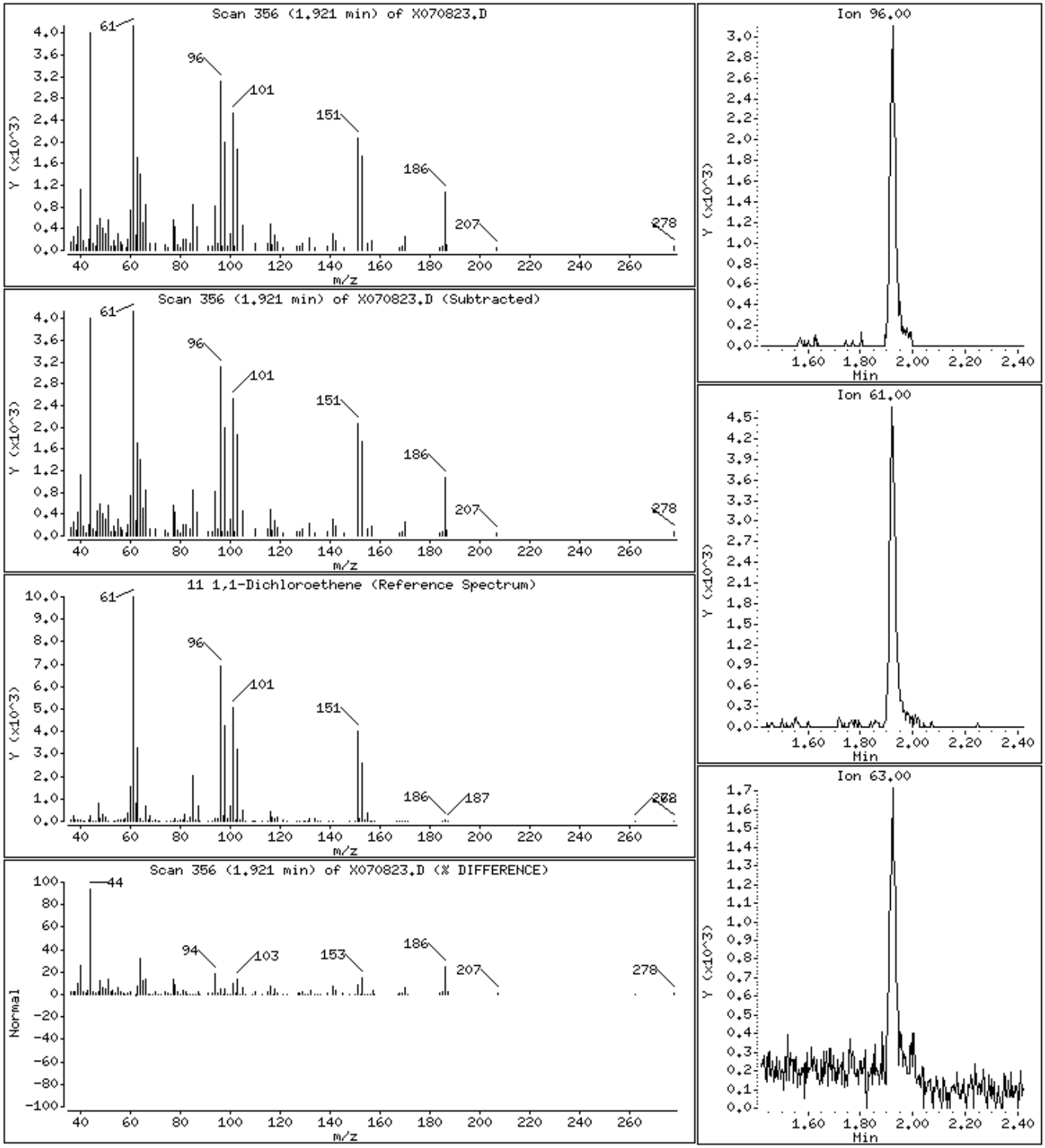
Client ID: HS22070326-08 Instrument: voa6.i

Sample Info: HS22070326-08;HS22070326-08;;;

Purge Volume: 5.0 Operator: PC

Column phase: DB624 Column diameter: 0.18

11 1,1-Dichloroethene Concentration: 4.40 ug/l



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D Page 3

Date : 08-JUL-2022 18:11

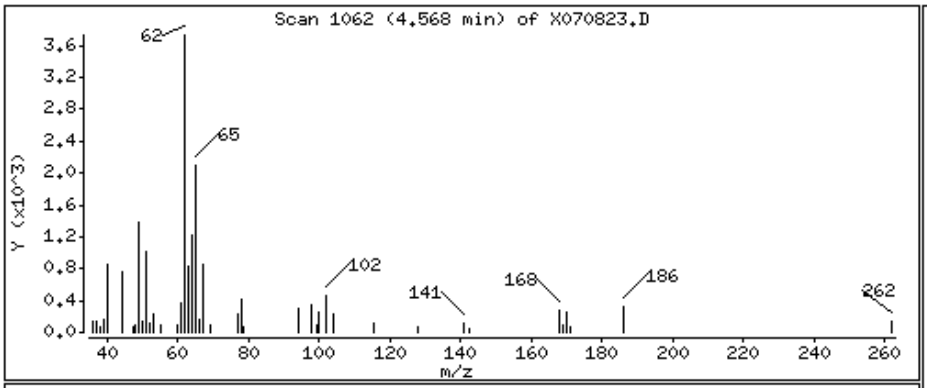
Client ID: HS22070326-08 Instrument: voa6.i

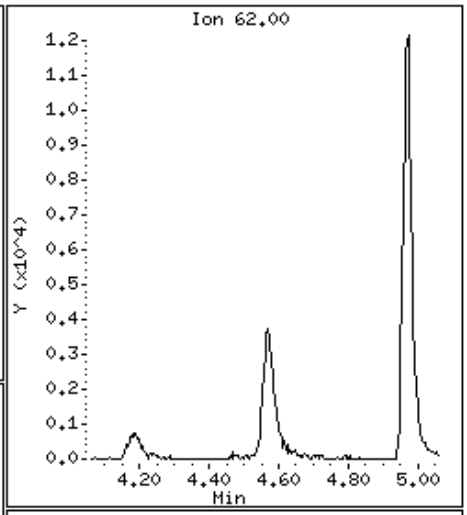
Sample Info: HS22070326-08;HS22070326-08;;;

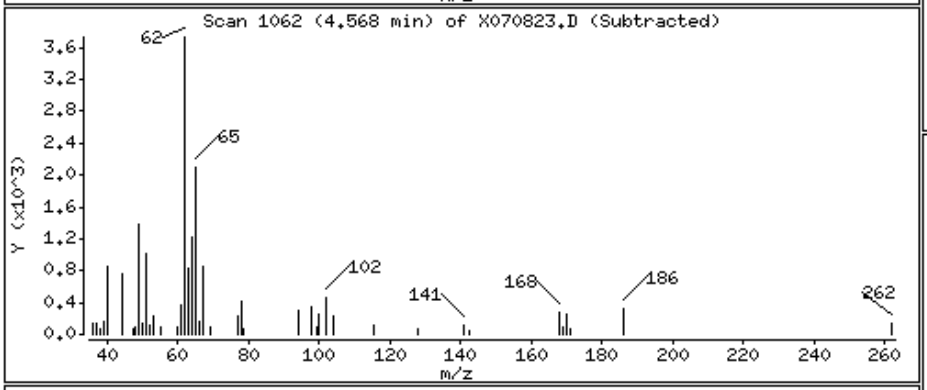
Purge Volume: 5.0 Operator: PC

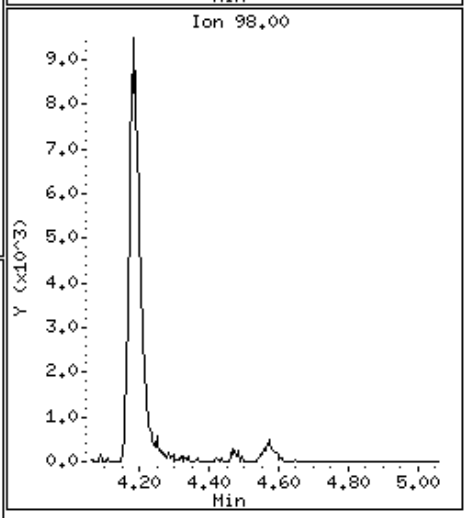
Column phase: DB624 Column diameter: 0.18

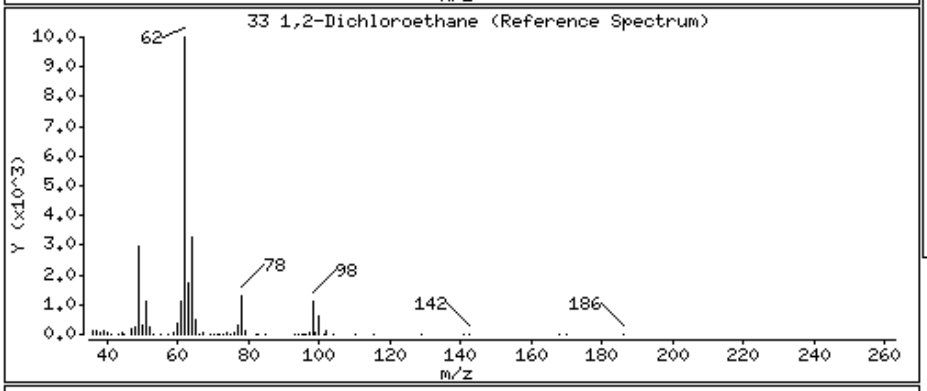
33 1,2-Dichloroethane Concentration: 6.48 ug/l

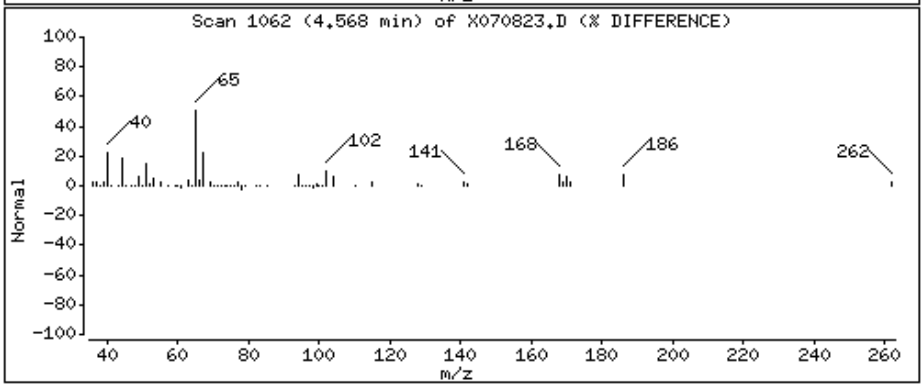












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D Page 4

Date : 08-JUL-2022 18:11

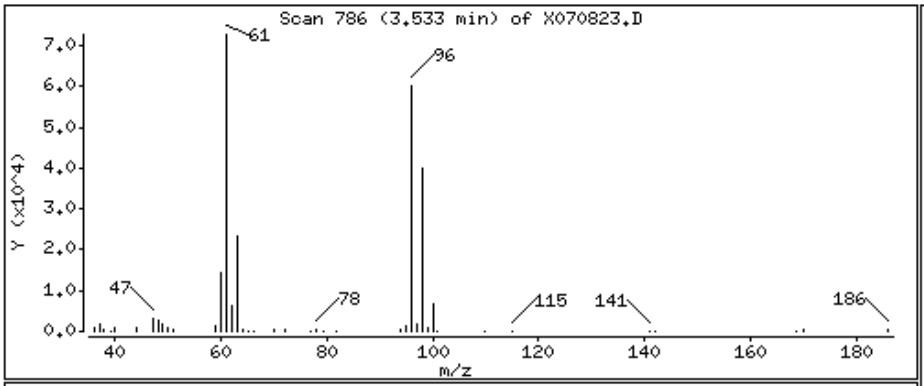
Client ID: HS22070326-08 Instrument: voa6.i

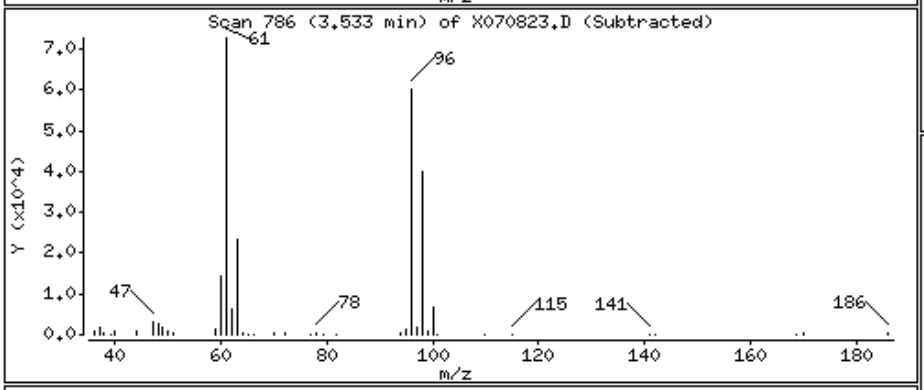
Sample Info: HS22070326-08;HS22070326-08;;;

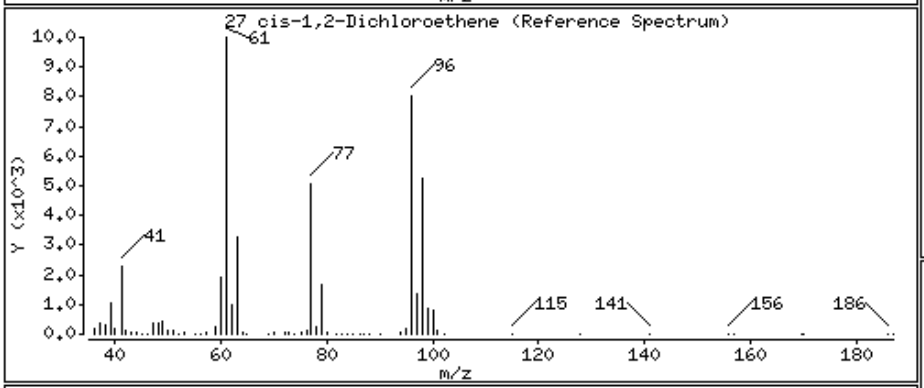
Purge Volume: 5.0 Operator: PC

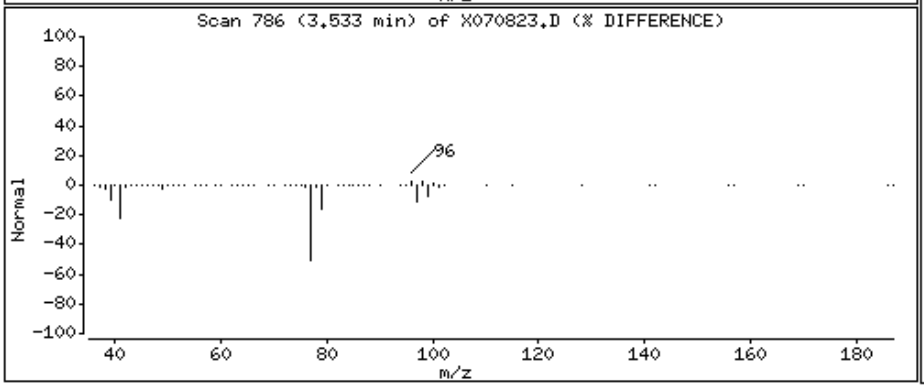
Column phase: DB624 Column diameter: 0.18

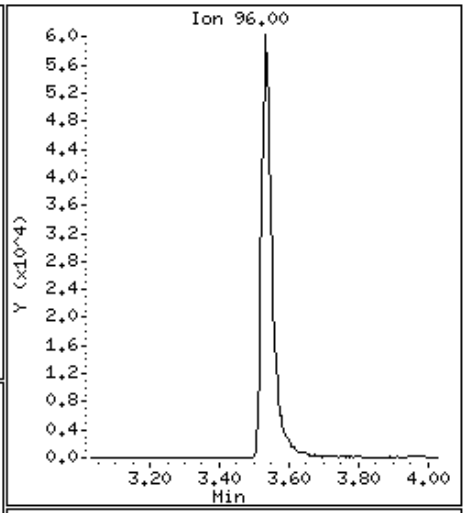
27 cis-1,2-Dichloroethene Concentration: 99.95 ug/l

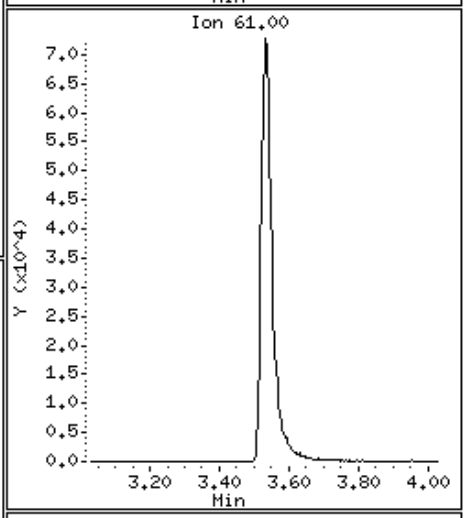


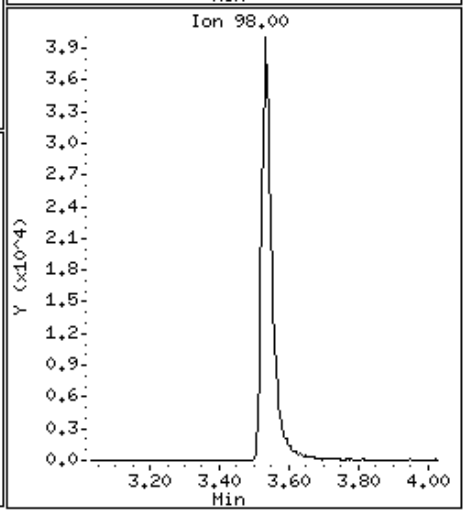












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D Page 5

Date : 08-JUL-2022 18:11

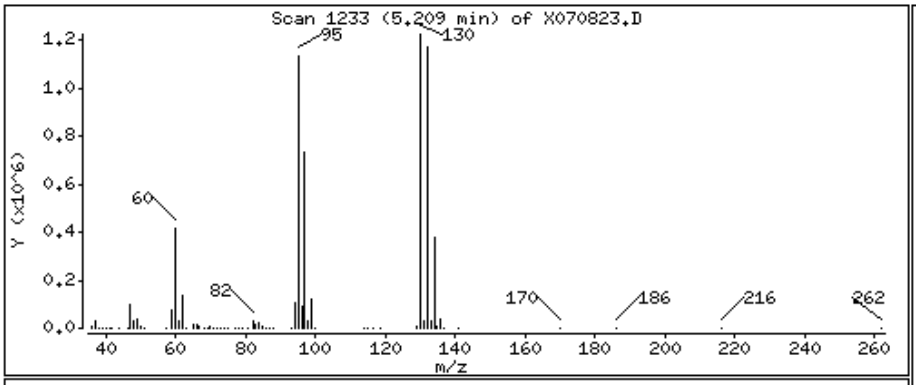
Client ID: HS22070326-08 Instrument: voa6.i

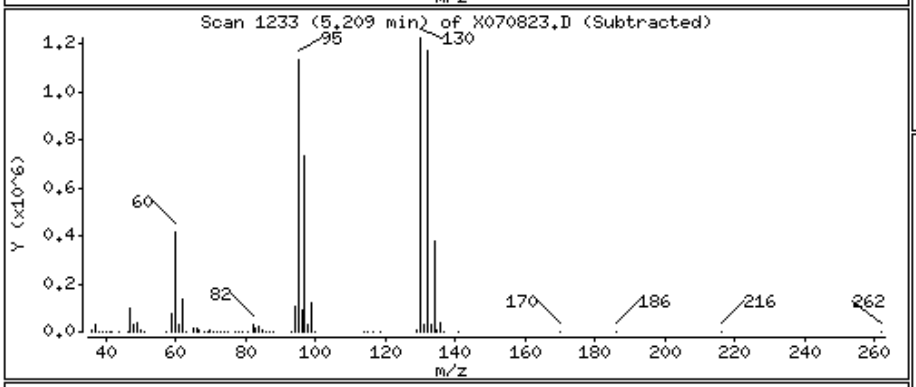
Sample Info: HS22070326-08;HS22070326-08;;;

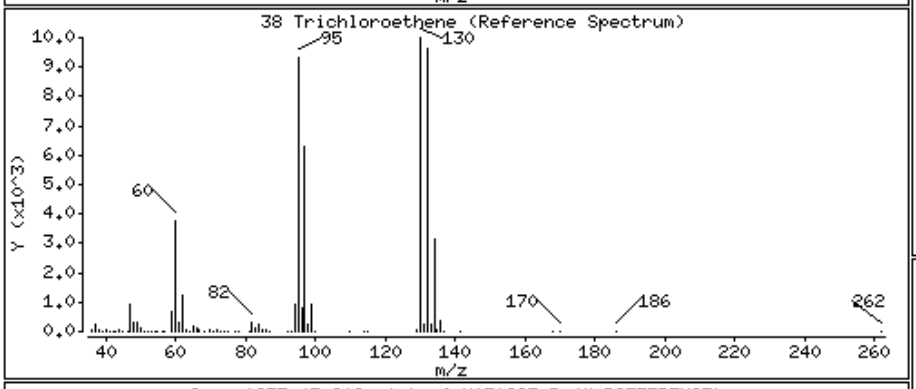
Purge Volume: 5.0 Operator: PC

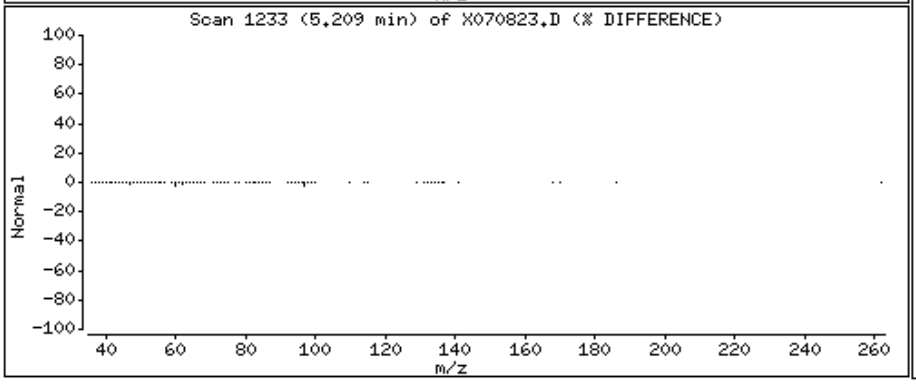
Column phase: DB624 Column diameter: 0.18

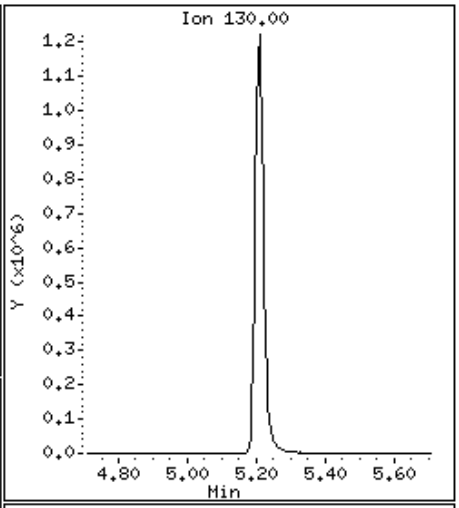
38 Trichloroethene Concentration: 1827.13 ug/l

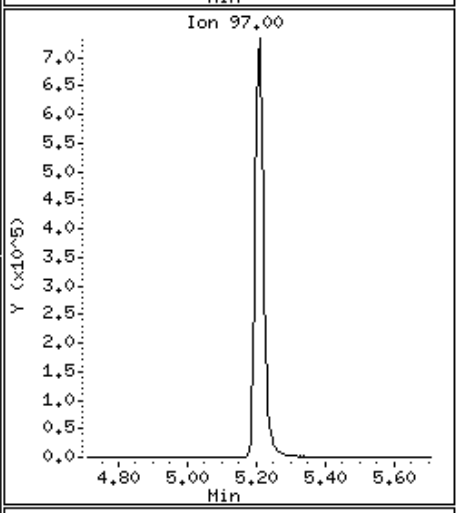


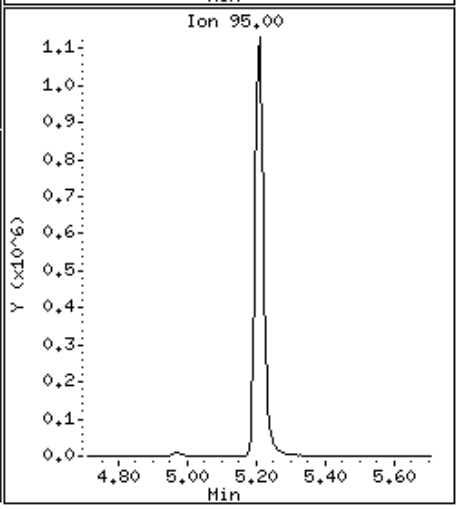












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D Page 6

Date : 08-JUL-2022 18:11

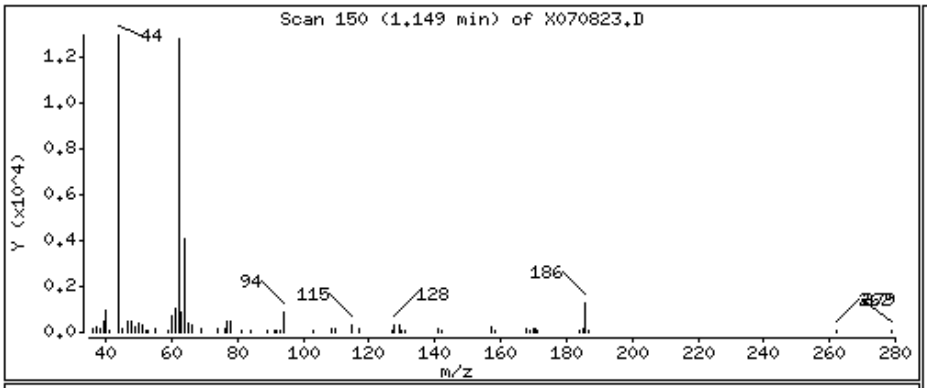
Client ID: HS22070326-08 Instrument: voa6.i

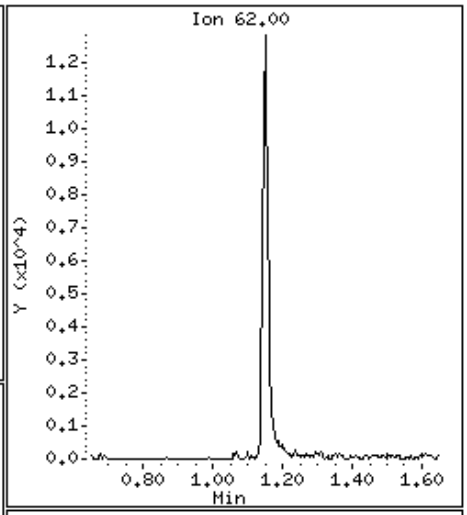
Sample Info: HS22070326-08;HS22070326-08;;;

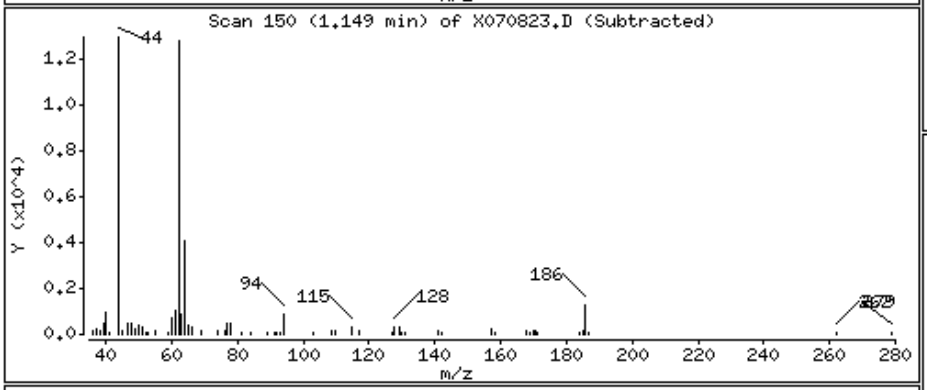
Purge Volume: 5.0 Operator: PC

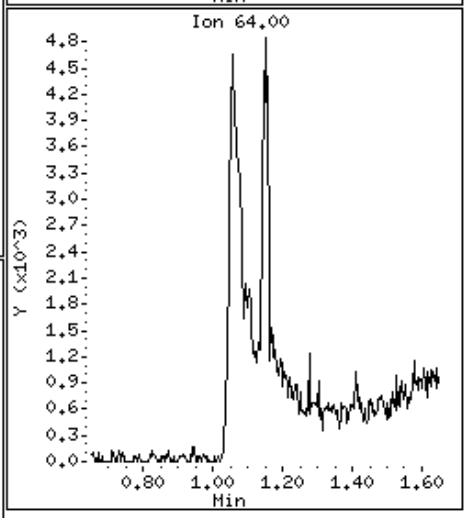
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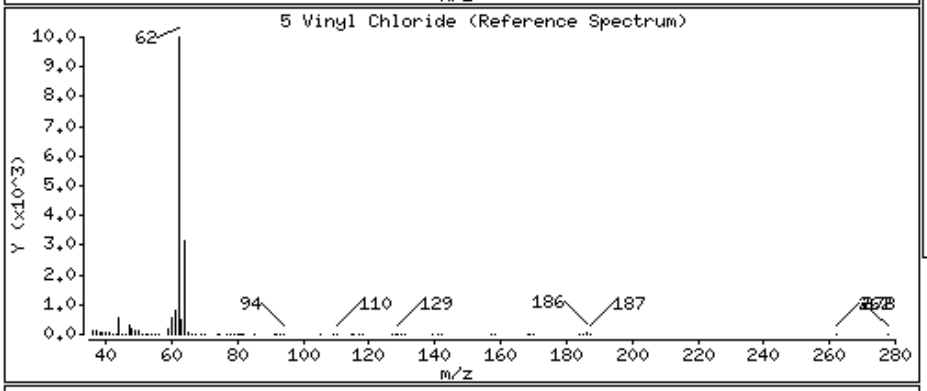
5 Vinyl Chloride Concentration: 9.86 ug/l

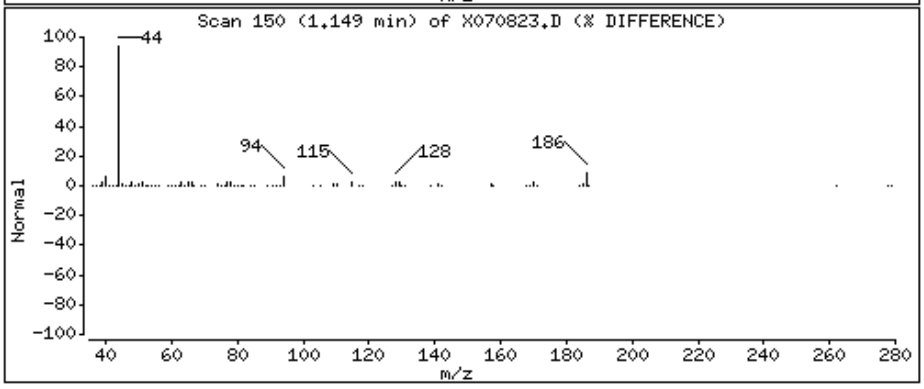












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070823.D
Inj Date : 08-JUL-2022 18:11
InstruID : voa6.i
LabSampID : HS22070326-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070824.D Page 1
Report Date: 19-Jul-2022 14:36

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070824.D
Lab Smp Id: HS22070326-08 Client Smp ID: HS22070326-08
Inj Date : 08-JUL-2022 18:32
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-08;HS22070326-08;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 23
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

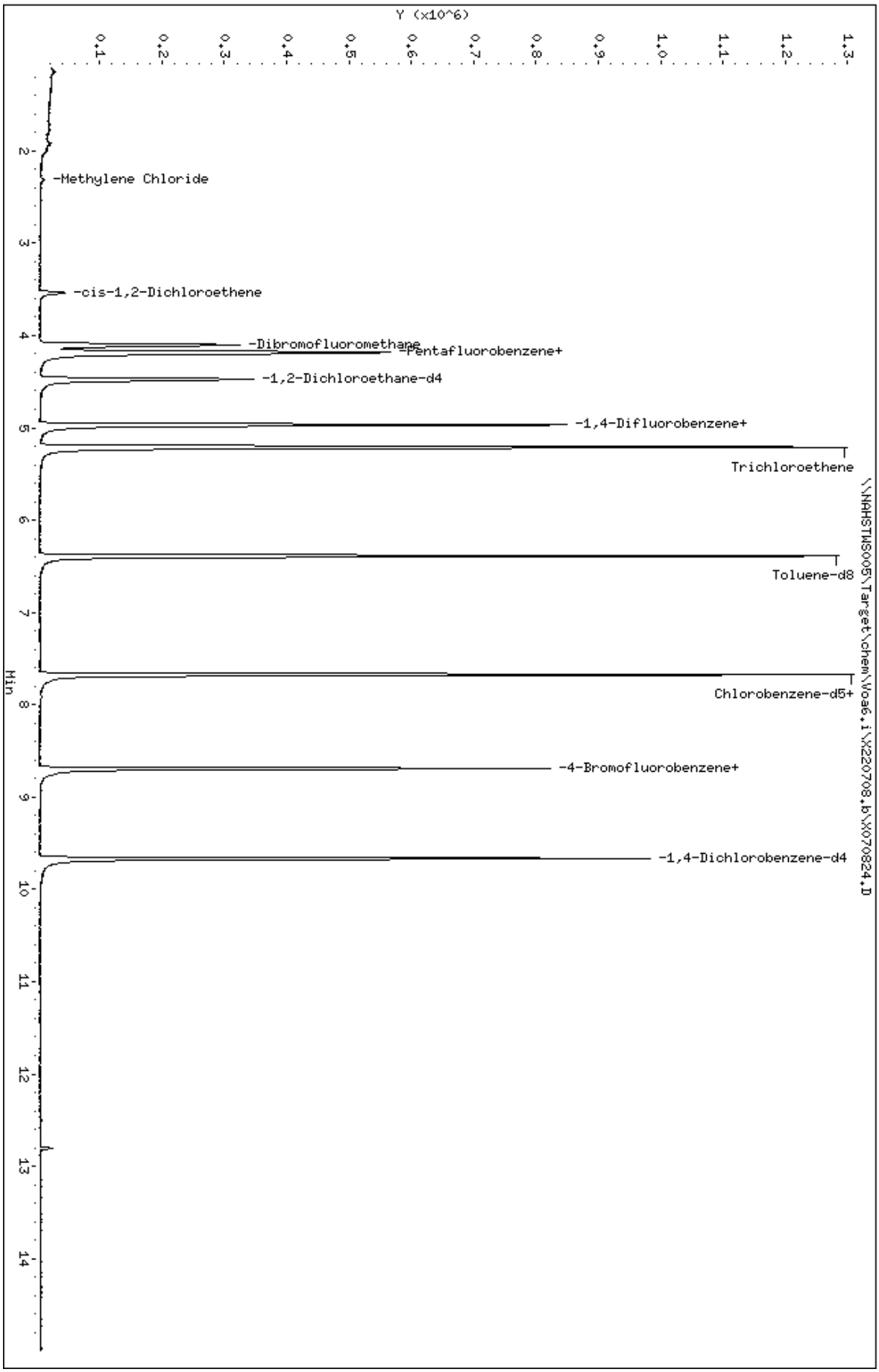
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	523304	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	733639	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	690115	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	280316	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	253729	51.8107	51.81
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	269667	44.9360	44.93
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	225681	46.7401	46.74
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	834809	48.7136	48.71
27 cis-1,2-Dichloroethene	96	3.536	3.529	(0.845)	23239	3.83682	95.92(a)
17 Methylene Chloride	84	2.314	2.311	(0.553)	2650	1.05570	26.39(a)
38 Trichloroethene	130	5.212	5.208	(1.049)	469701	85.4953	2137.38
5 Vinyl Chloride	62	1.149	1.149	(0.275)	3207	0.47914	11.97(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Woa6.i\X220708.b\X070824.D
Date : 08-JUL-2022 18:32
Client ID: HS220703Z6-08
Sample Info: HS220703Z6-08;HS220703Z6-08;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: woa6.i
Operator: PC
Column diameter: 0.18

Page 1

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070824.D Page 2

Date : 08-JUL-2022 18:32

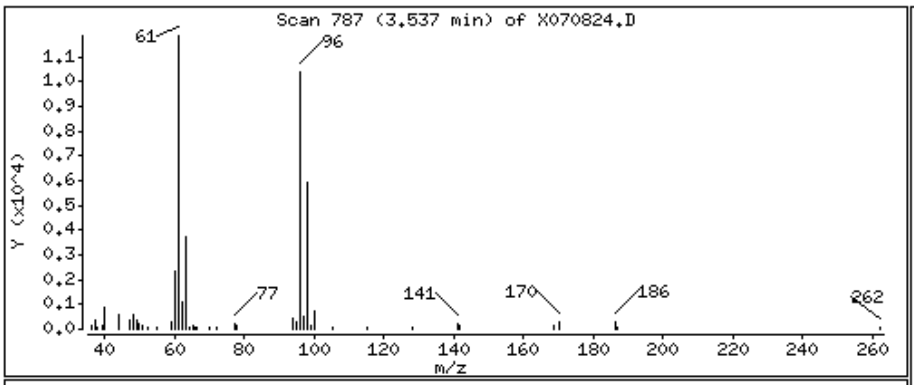
Client ID: HS22070326-08 Instrument: voa6.i

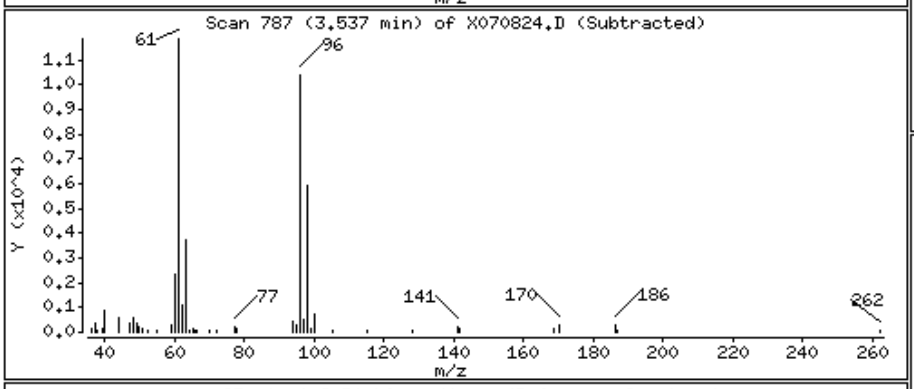
Sample Info: HS22070326-08;HS22070326-08;;;

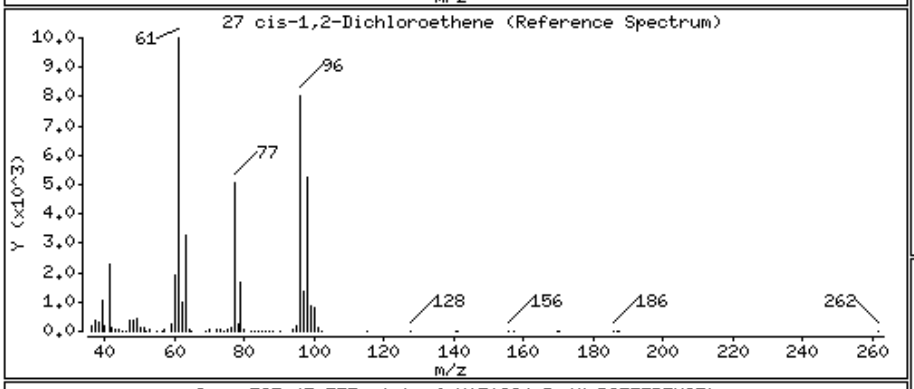
Purge Volume: 5.0 Operator: PC

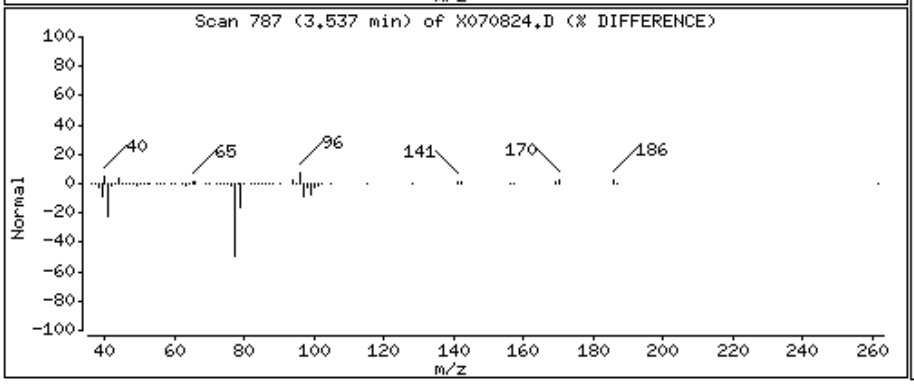
Column phase: DB624 Column diameter: 0.18

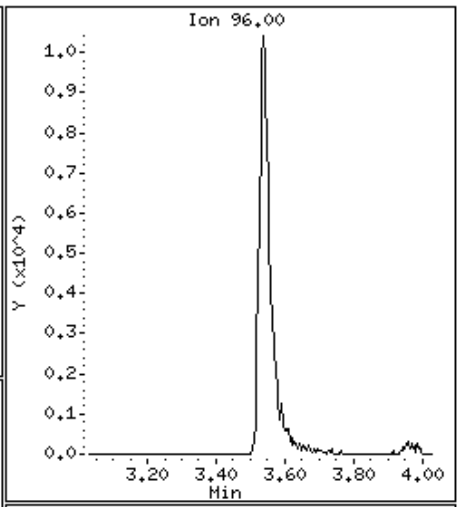
27 cis-1,2-Dichloroethene Concentration: 95.92 ug/l

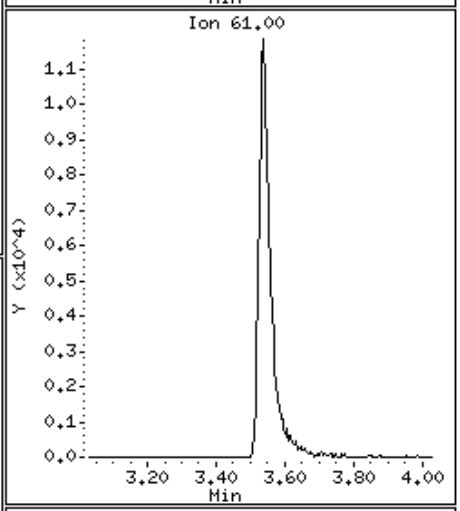


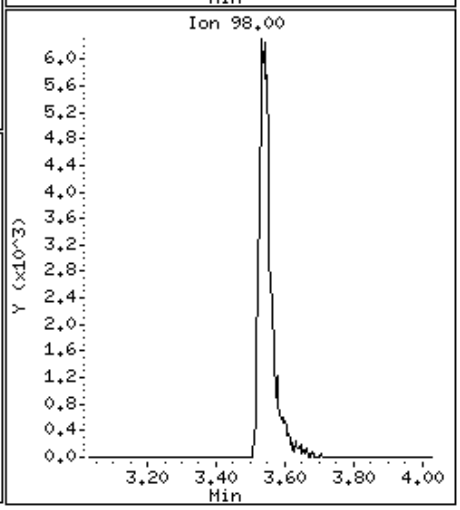












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070824.D Page 3

Date : 08-JUL-2022 18:32

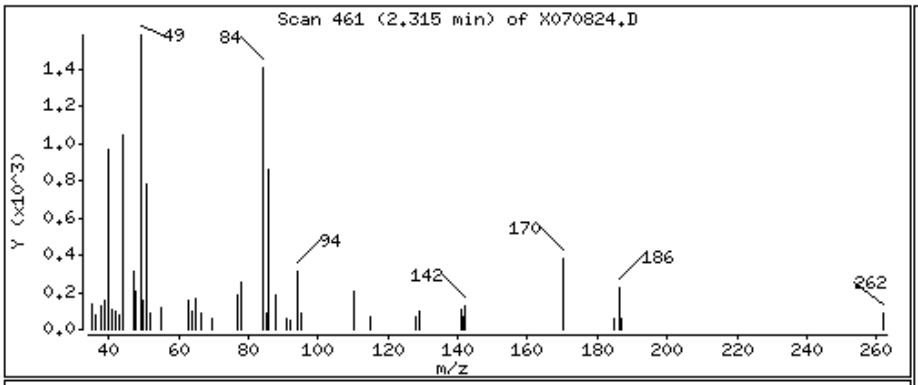
Client ID: HS22070326-08 Instrument: voa6.i

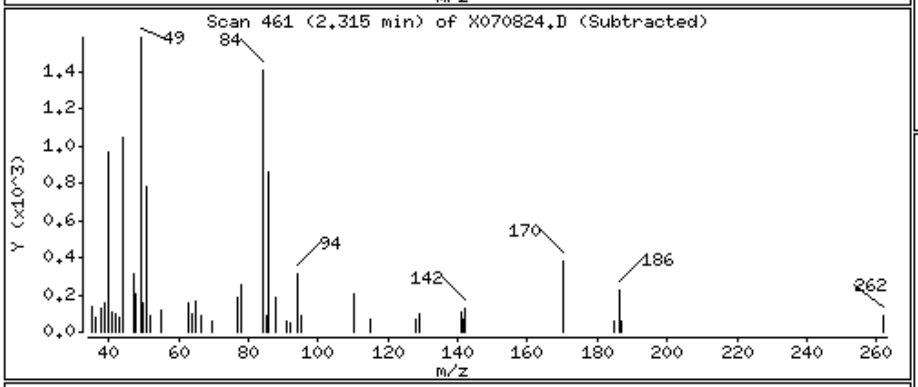
Sample Info: HS22070326-08;HS22070326-08;;;

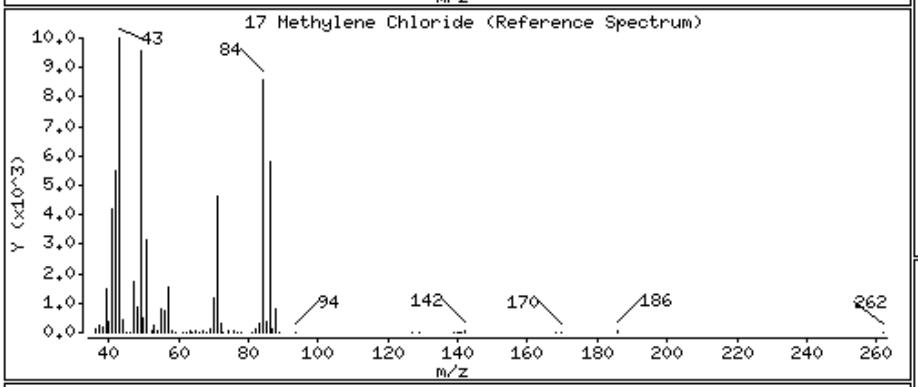
Purge Volume: 5.0 Operator: PC

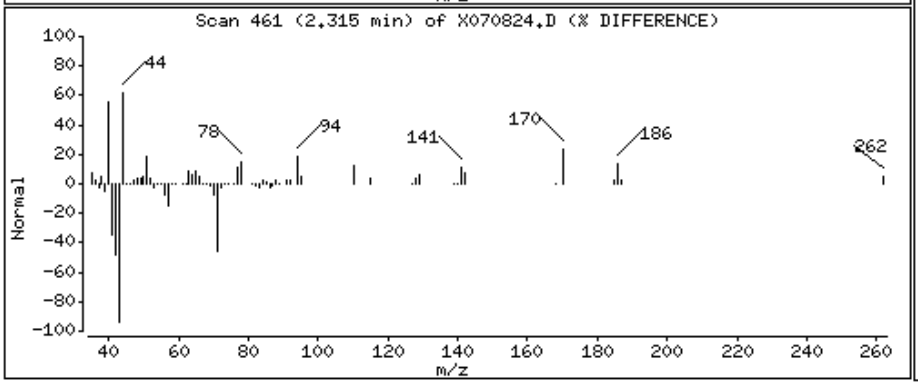
Column phase: DB624 Column diameter: 0.18

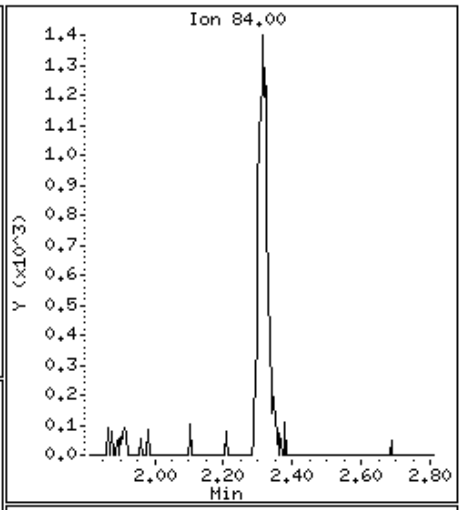
17 Methylene Chloride Concentration: 26.39 ug/l

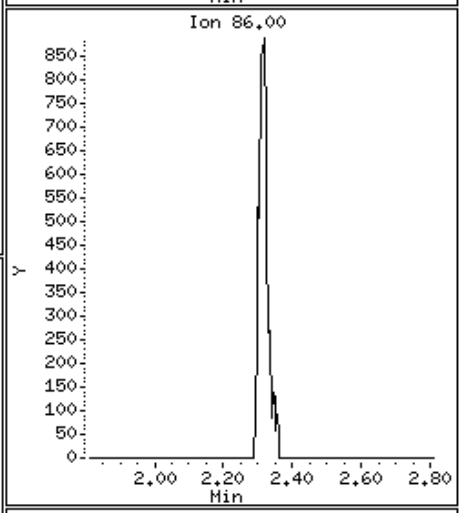


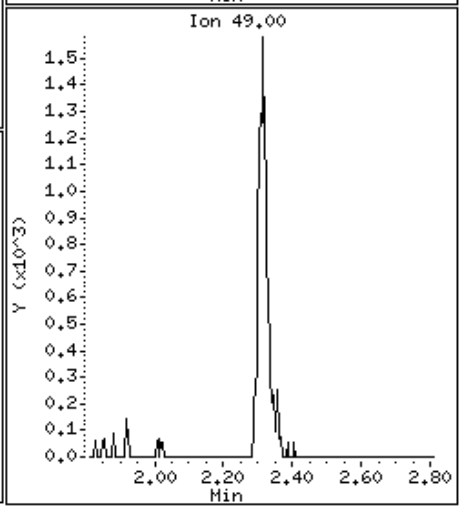












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070824.D Page 4

Date : 08-JUL-2022 18:32

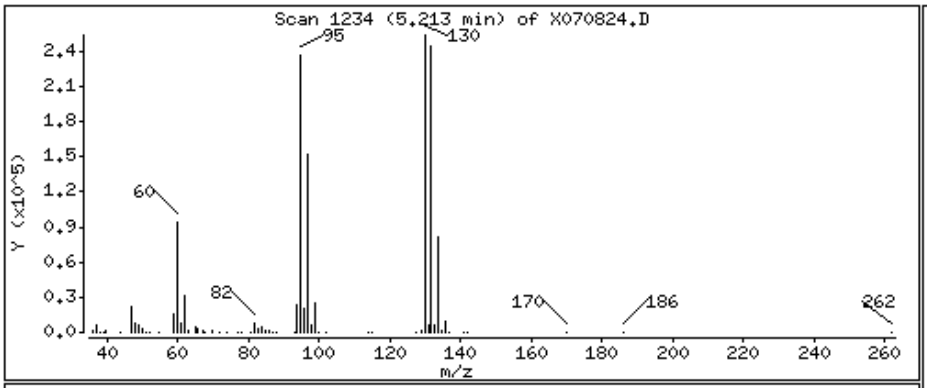
Client ID: HS22070326-08 Instrument: voa6.i

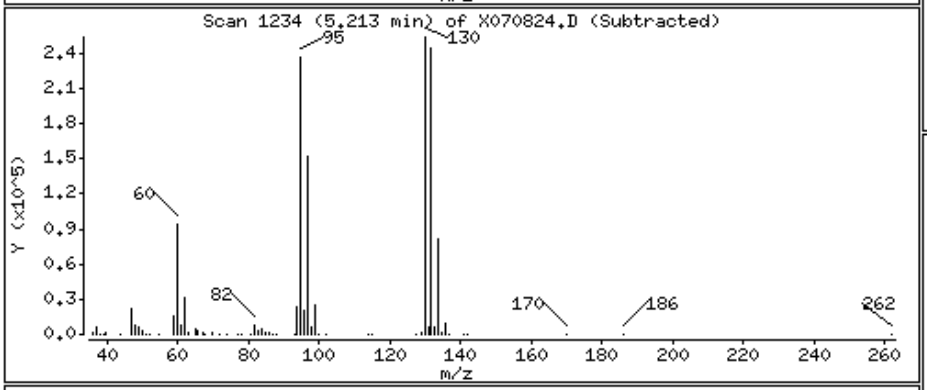
Sample Info: HS22070326-08;HS22070326-08;;;

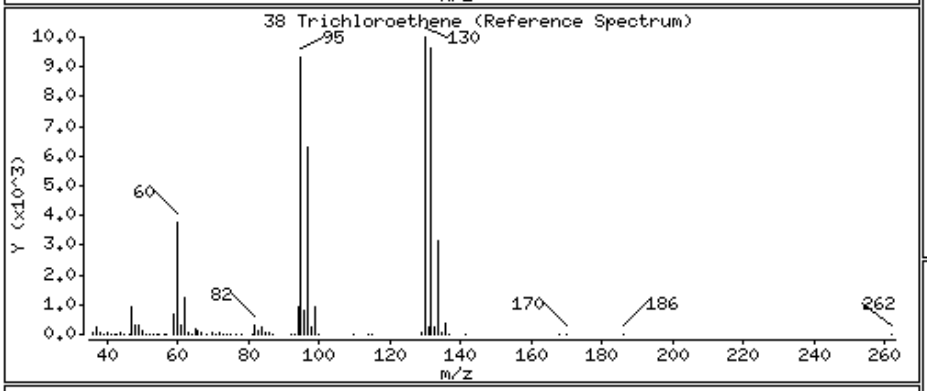
Purge Volume: 5.0 Operator: PC

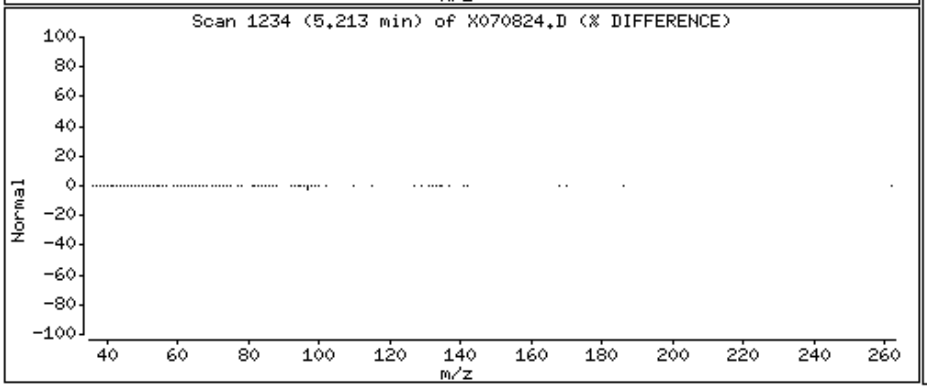
Column phase: DB624 Column diameter: 0.18

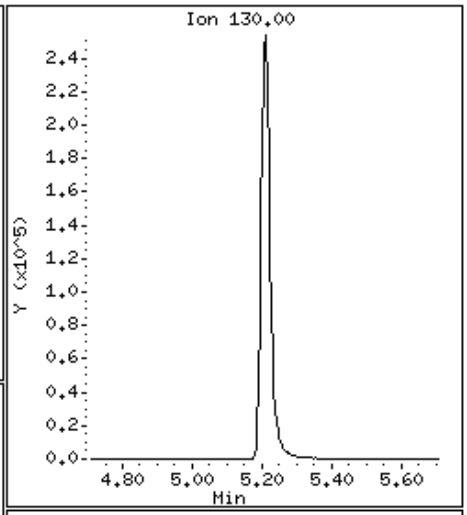
38 Trichloroethene Concentration: 2137.38 ug/l

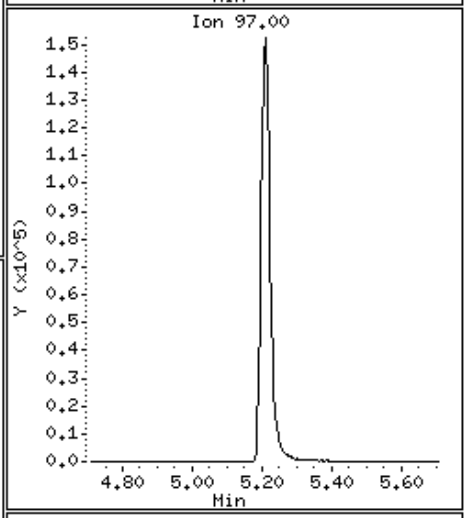


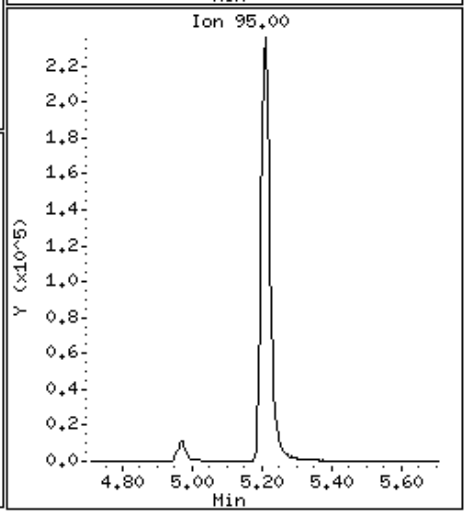












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070824.D Page 5

Date : 08-JUL-2022 18:32

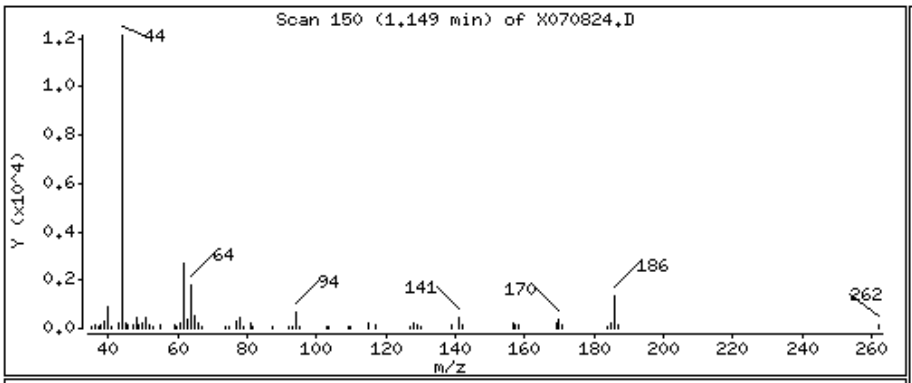
Client ID: HS22070326-08 Instrument: voa6.i

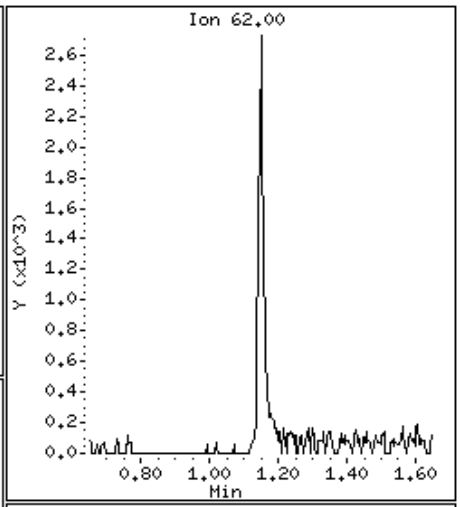
Sample Info: HS22070326-08;HS22070326-08;;;

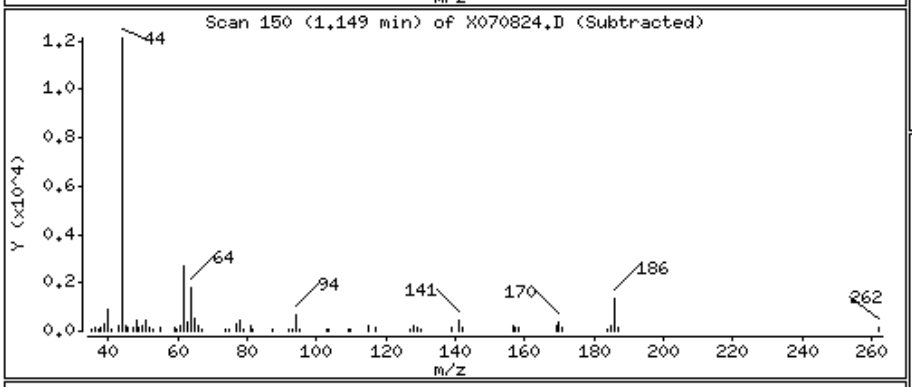
Purge Volume: 5.0 Operator: PC

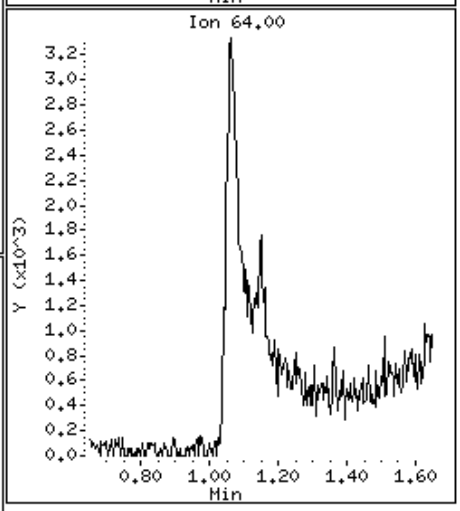
Column phase: DB624 Column diameter: 0.18

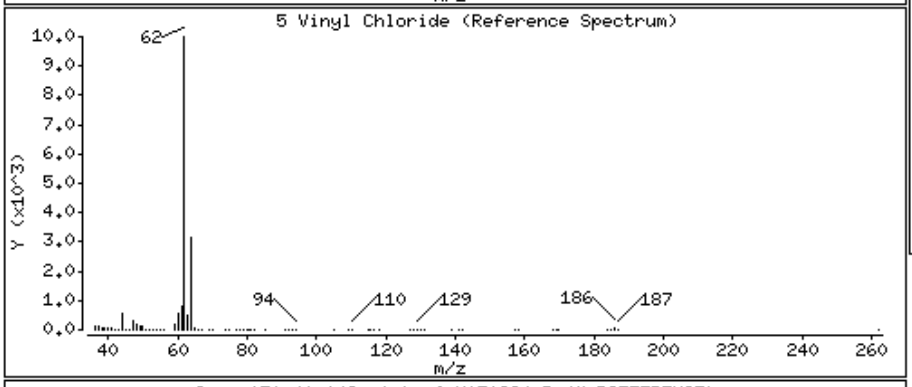
5 Vinyl Chloride Concentration: 11.97 ug/l

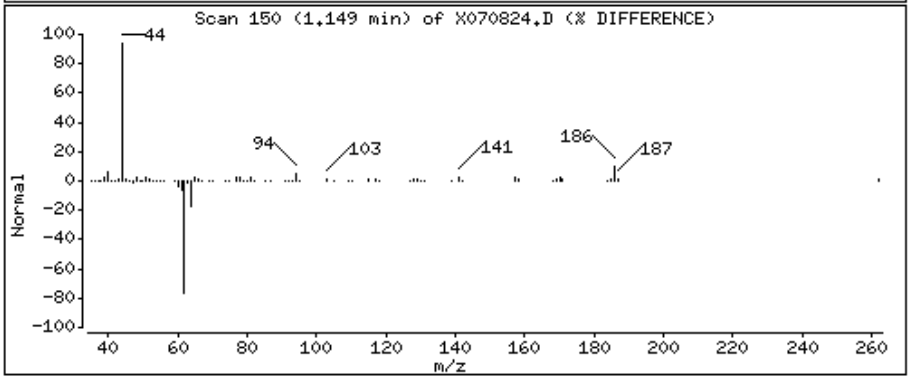












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070824.D
Inj Date : 08-JUL-2022 18:32
InstruID : voa6.i
LabSampID : HS22070326-08

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D
Lab Smp Id: HS22070326-09 Client Smp ID: HS22070326-09
Inj Date : 08-JUL-2022 18:53
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-09;HS22070326-09;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 24
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

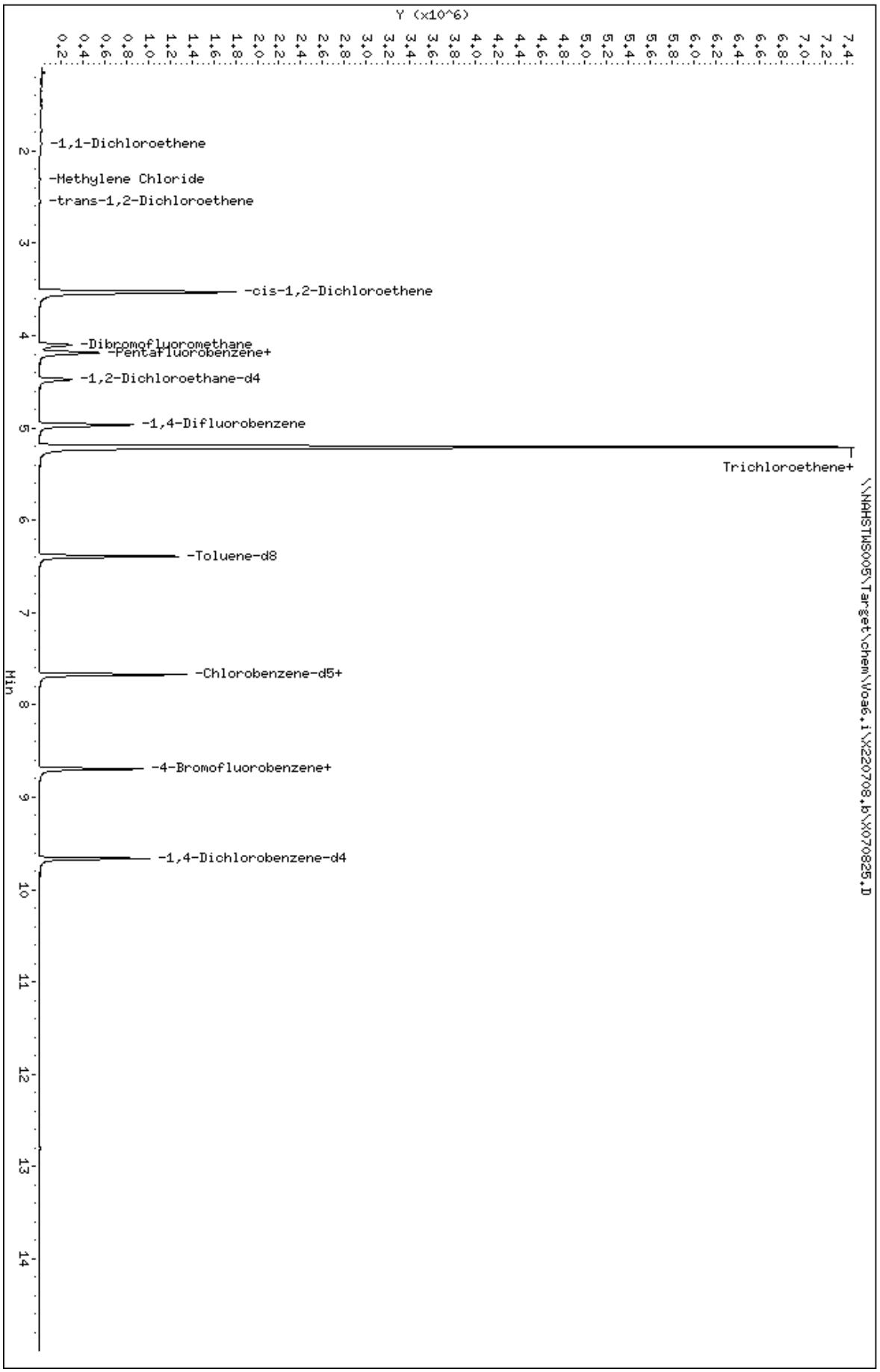
Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	512943	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	749937	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	710101	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	280602	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	223433	46.4273	46.42
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	311472	50.4800	50.48
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	213772	45.1582	45.15
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	833781	47.2842	47.28
11 1,1-Dichloroethene	96	1.917	1.921	(0.458)	3037	0.61890	3.09(a)
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	976168	164.423	822.11
17 Methylene Chloride	84	2.314	2.311	(0.553)	2339	1.01288	5.06(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	2646296	471.212	2356.06(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	20614	3.14202	15.71(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220708.b\X070825.D
Date : 08-JUL-2022 18:53
Client ID: HS220703326-09
Sample Info: HS220703326-09;HS220703326-09;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D Page 2

Date : 08-JUL-2022 18:53

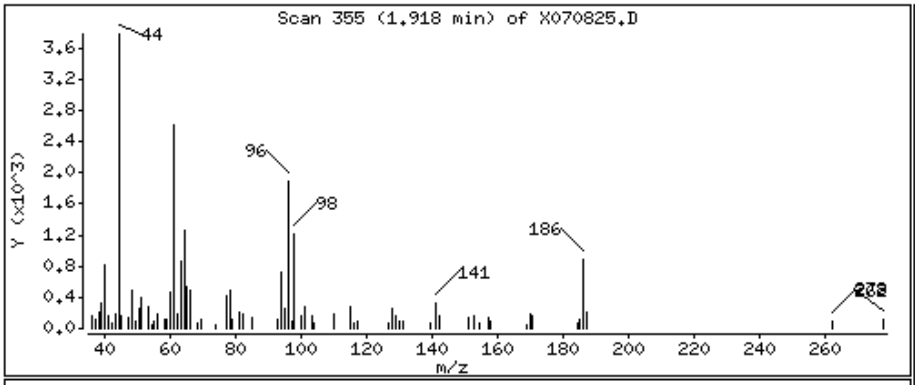
Client ID: HS22070326-09 Instrument: voa6.i

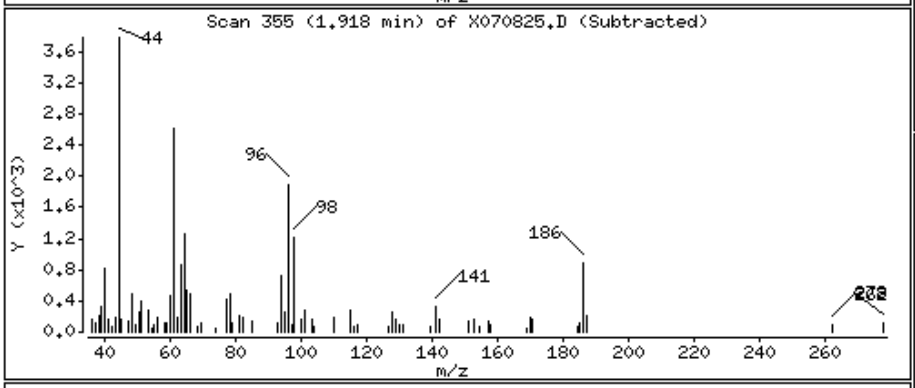
Sample Info: HS22070326-09;HS22070326-09;;;

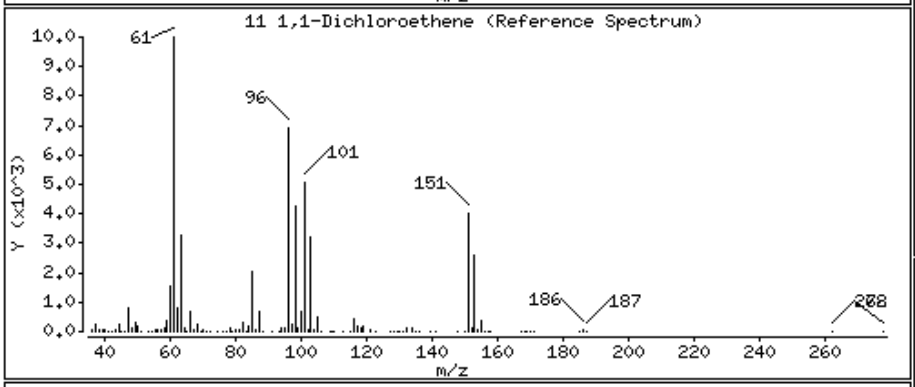
Purge Volume: 5.0 Operator: PC

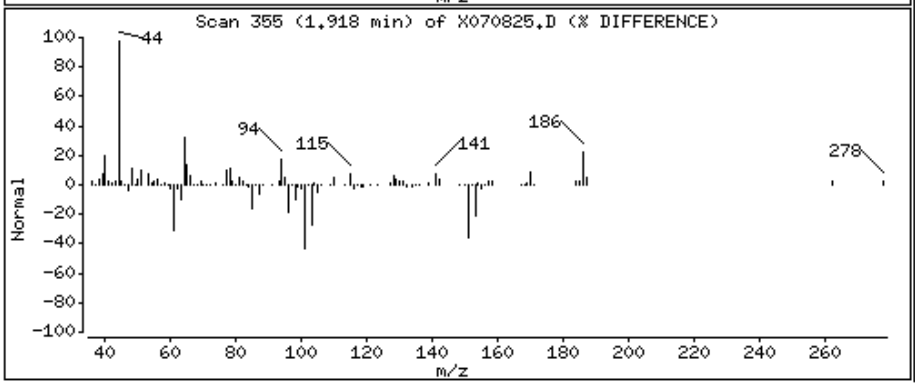
Column phase: DB624 Column diameter: 0.18

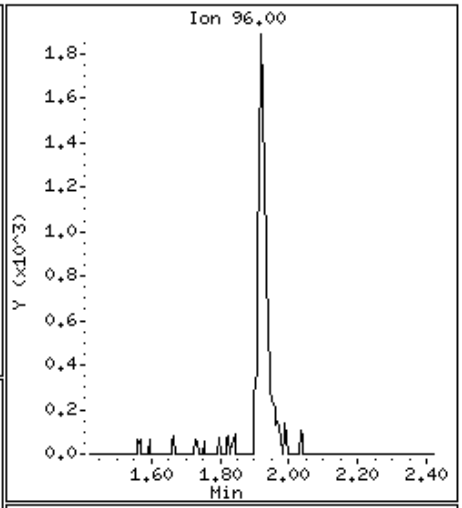
11 1,1-Dichloroethene Concentration: 3.09 ug/l

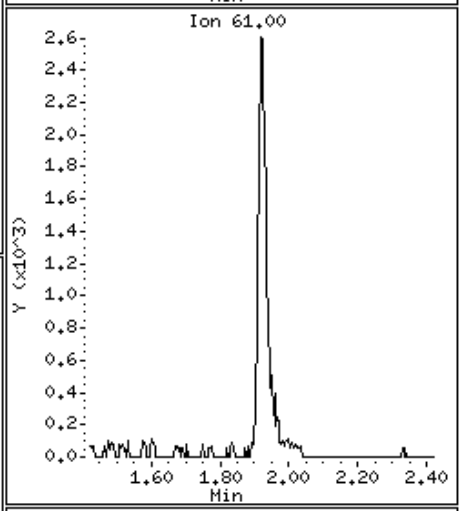


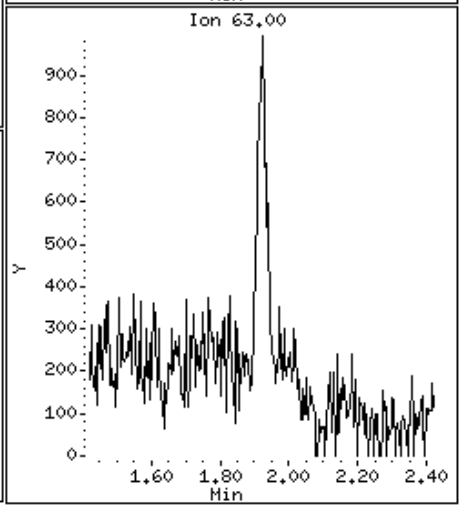












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D Page 3

Date : 08-JUL-2022 18:53

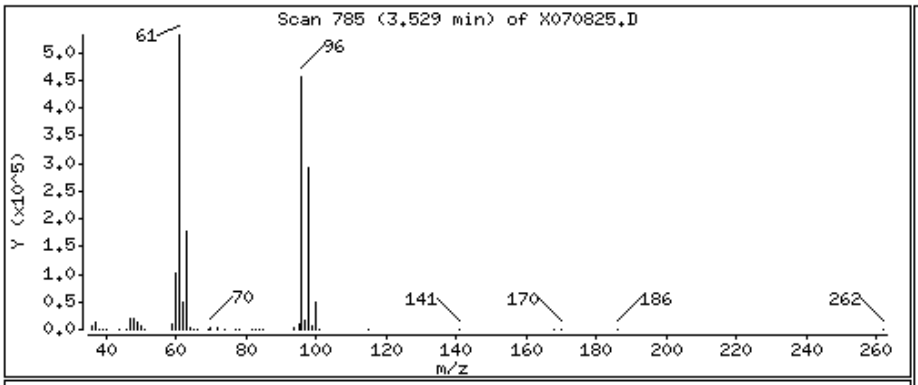
Client ID: HS22070326-09 Instrument: voa6.i

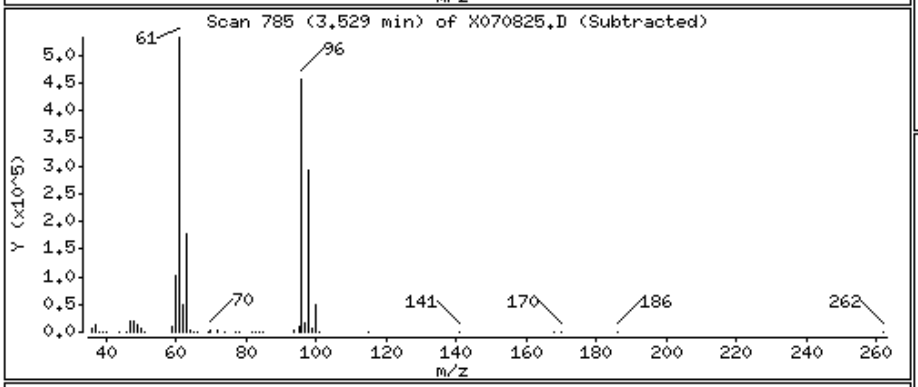
Sample Info: HS22070326-09;HS22070326-09;;;

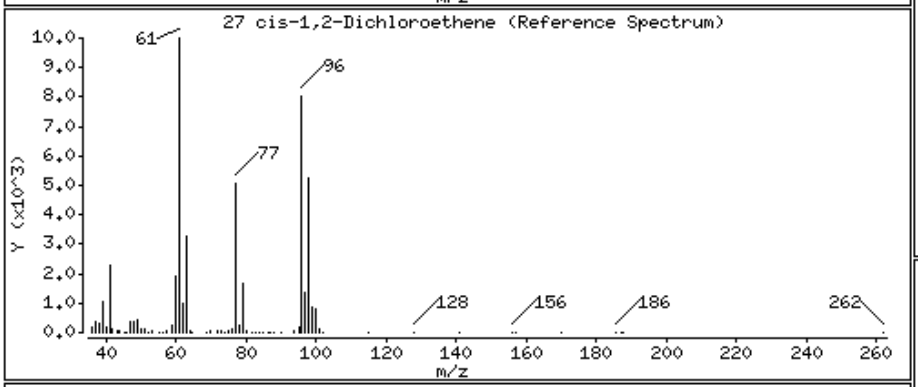
Purge Volume: 5.0 Operator: PC

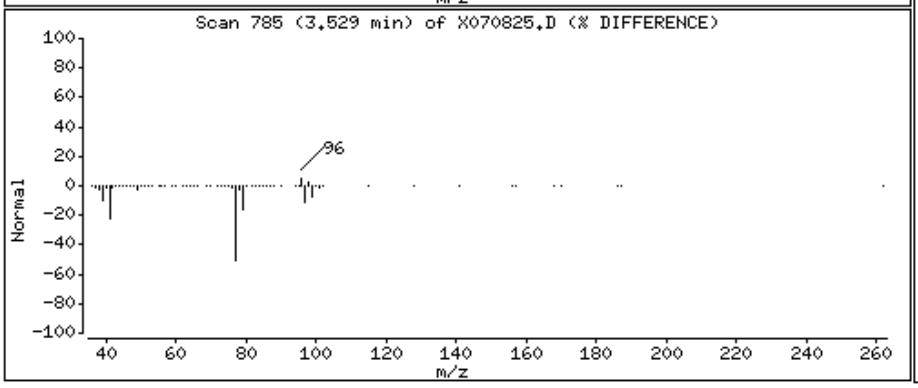
Column phase: DB624 Column diameter: 0.18

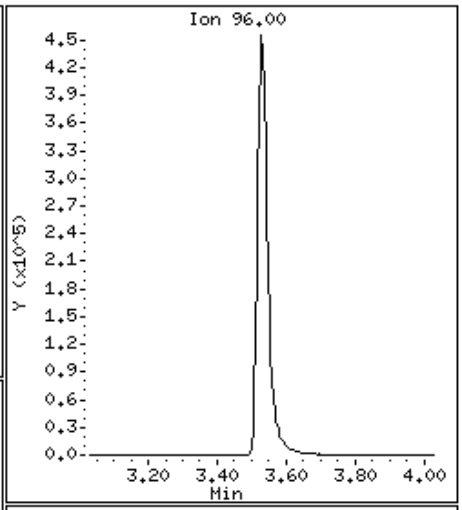
27 cis-1,2-Dichloroethene Concentration: 822.11 ug/l

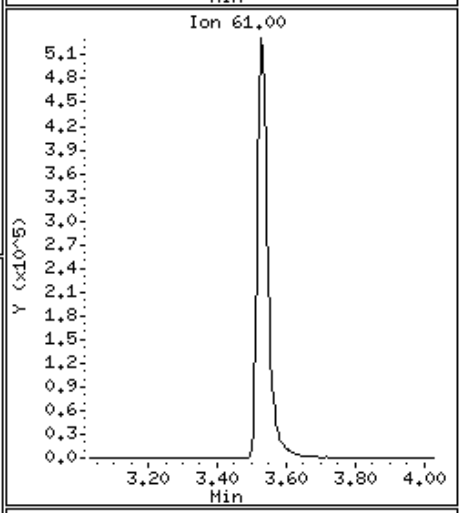


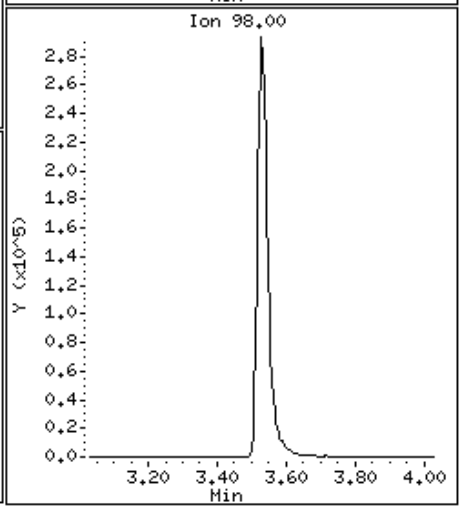












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D

Date : 08-JUL-2022 18:53

Client ID: HS22070326-09

Instrument: voa6.i

Sample Info: HS22070326-09;HS22070326-09;;;

Purge Volume: 5.0

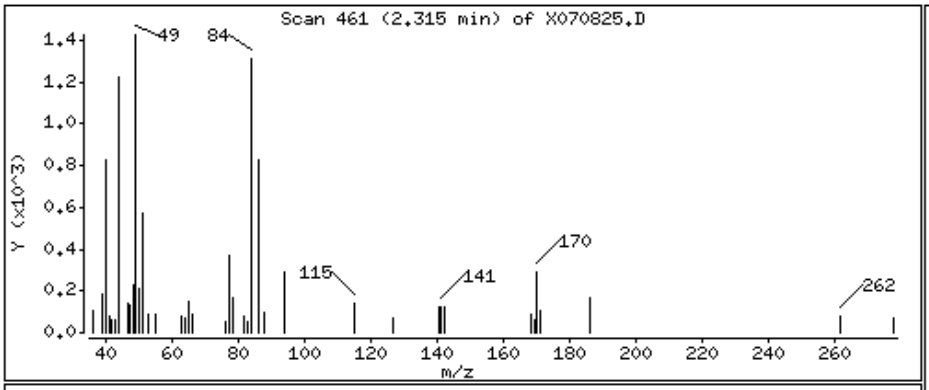
Operator: PC

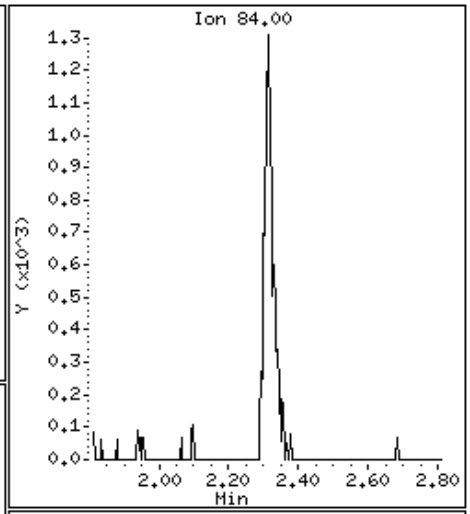
Column phase: DB624

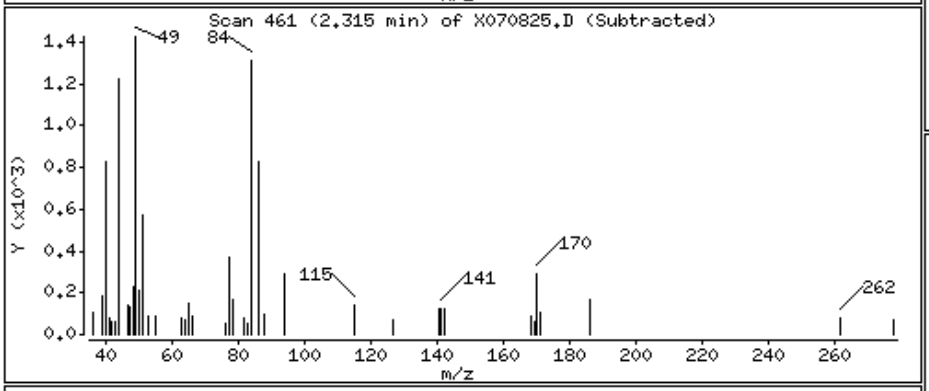
Column diameter: 0.18

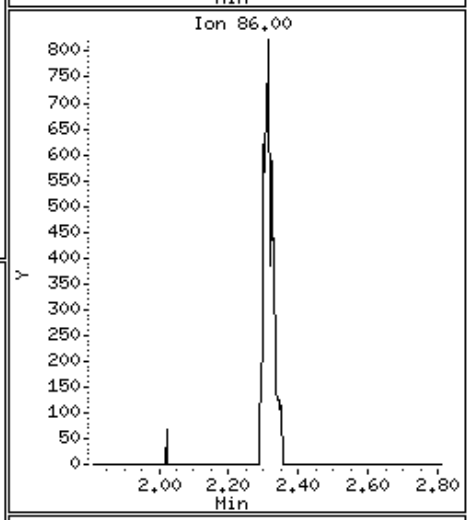
17 Methylene Chloride

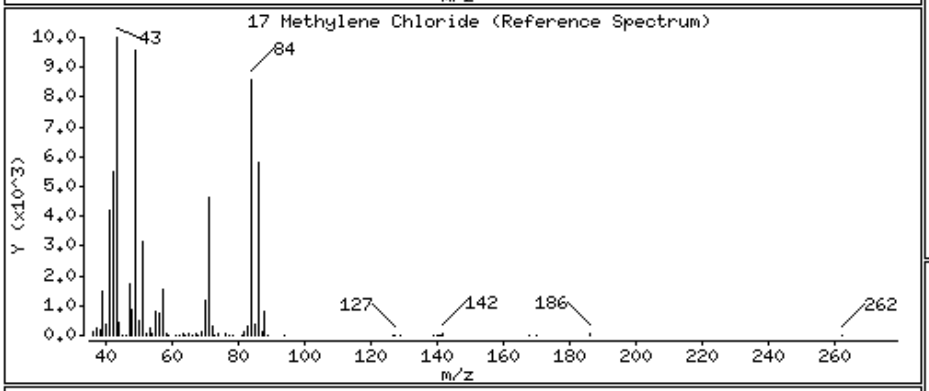
Concentration: 5.06 ug/l

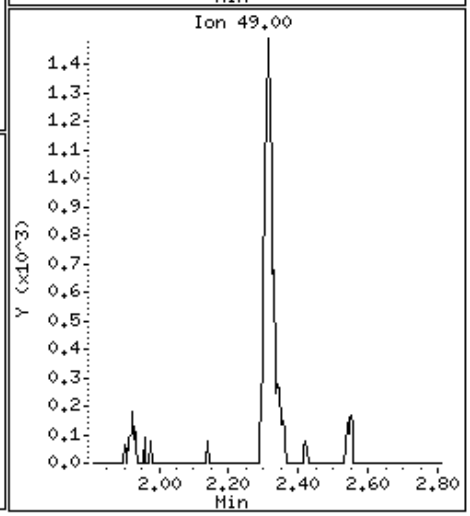


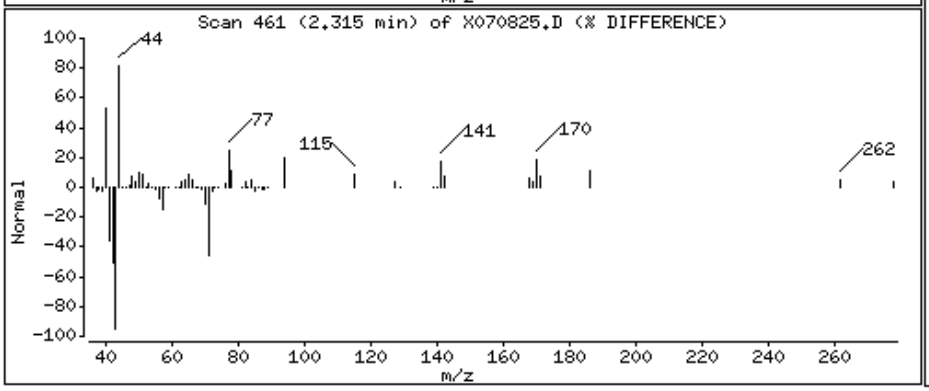












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D Page 5

Date : 08-JUL-2022 18:53

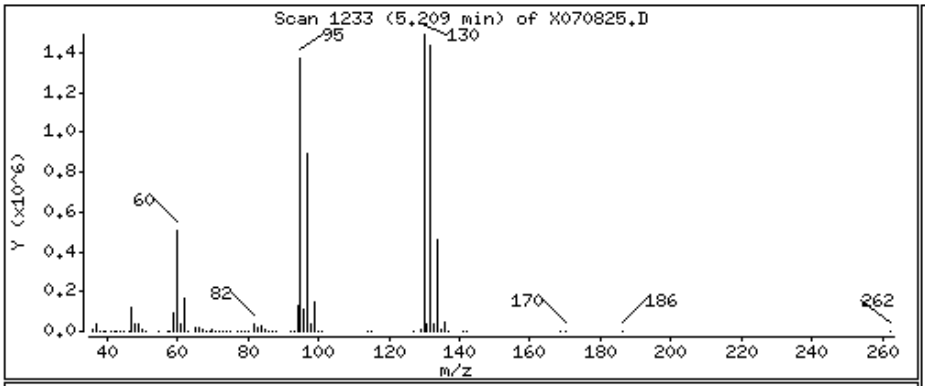
Client ID: HS22070326-09 Instrument: voa6.i

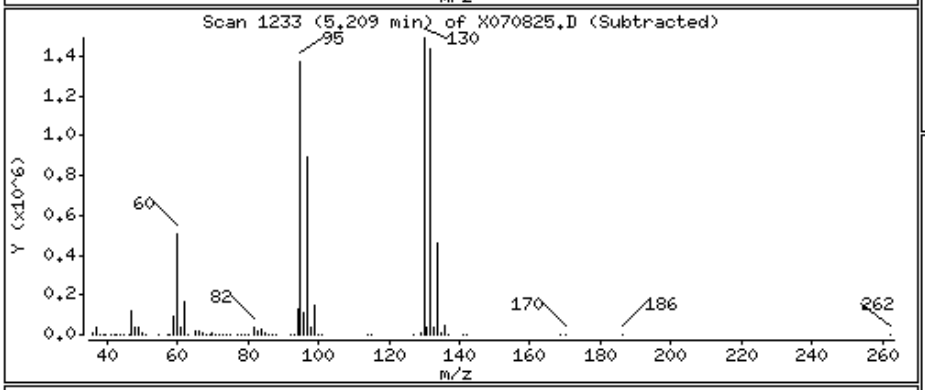
Sample Info: HS22070326-09;HS22070326-09;;;

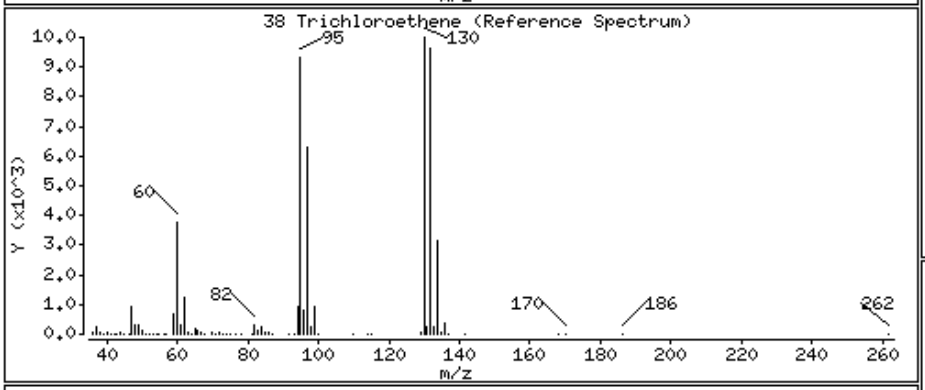
Purge Volume: 5.0 Operator: PC

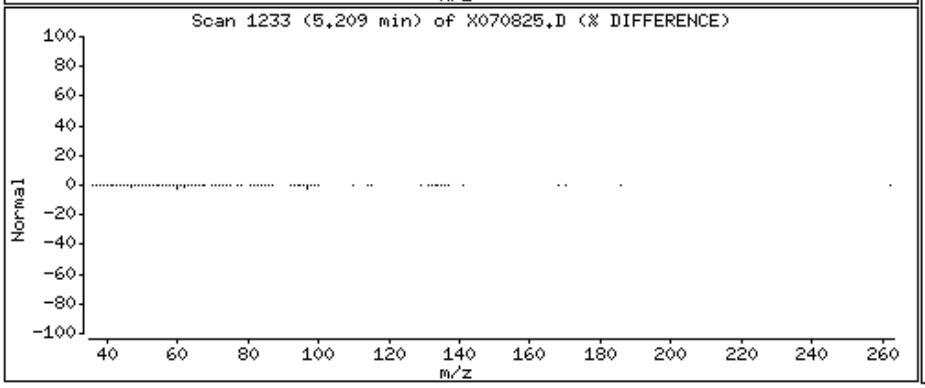
Column phase: DB624 Column diameter: 0.18

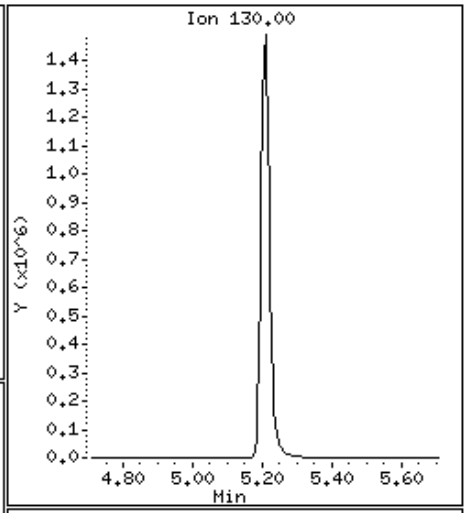
38 Trichloroethene Concentration: 2356.06 ug/l

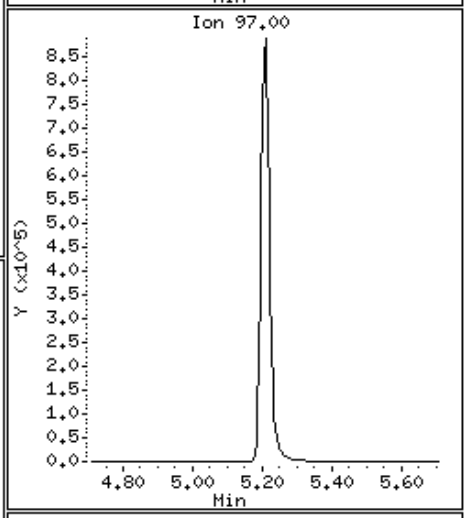


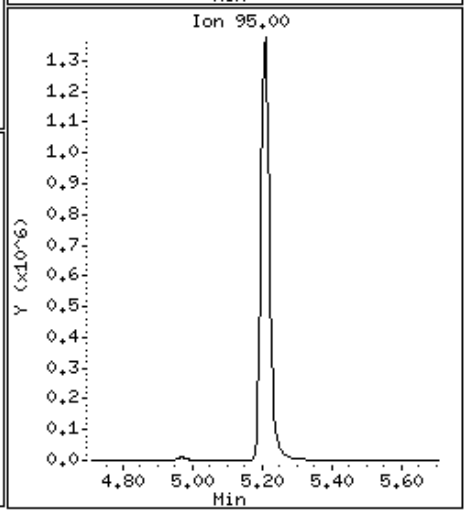












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D Page 6

Date : 08-JUL-2022 18:53

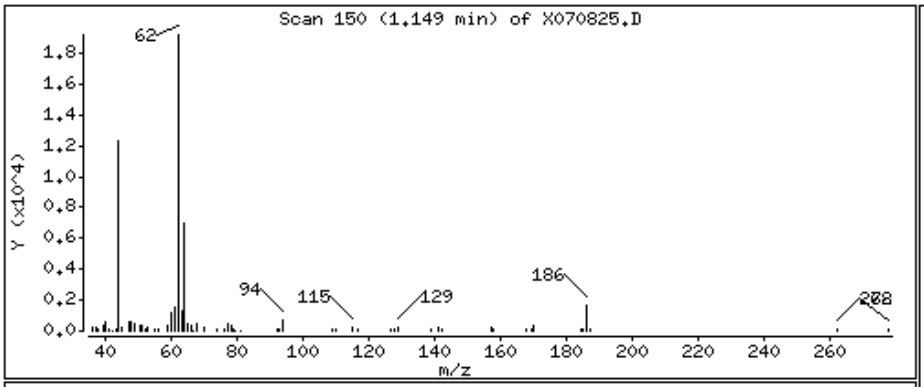
Client ID: HS22070326-09 Instrument: voa6.i

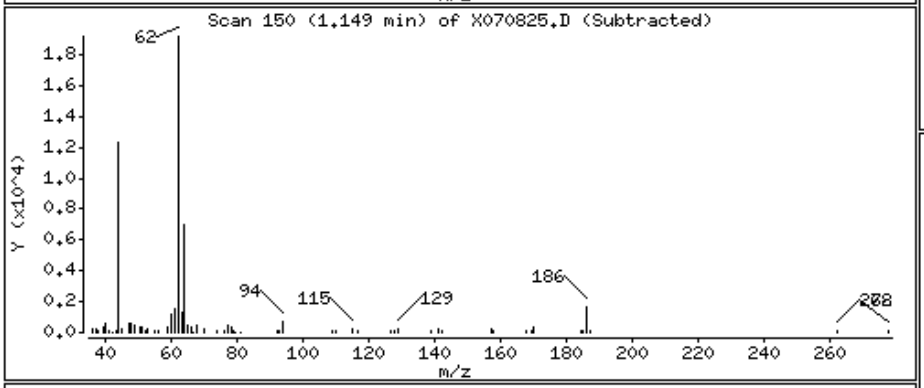
Sample Info: HS22070326-09;HS22070326-09;;;

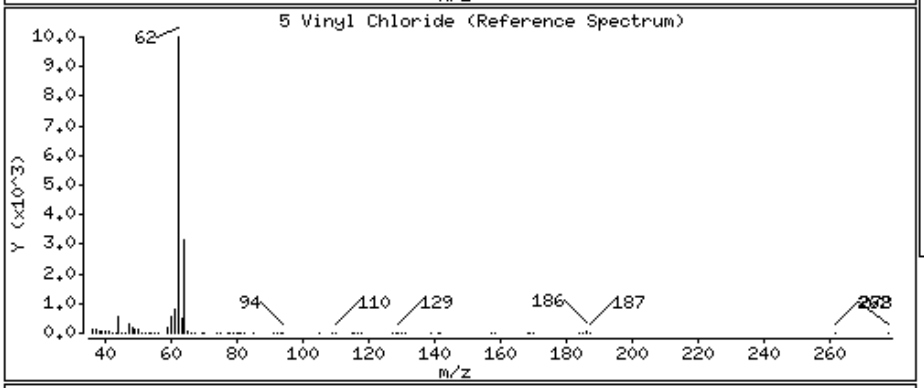
Purge Volume: 5.0 Operator: PC

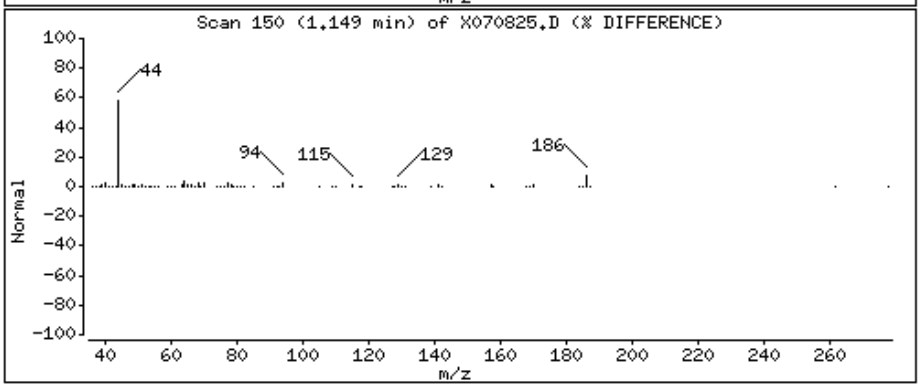
Column phase: DB624 Column diameter: 0.18

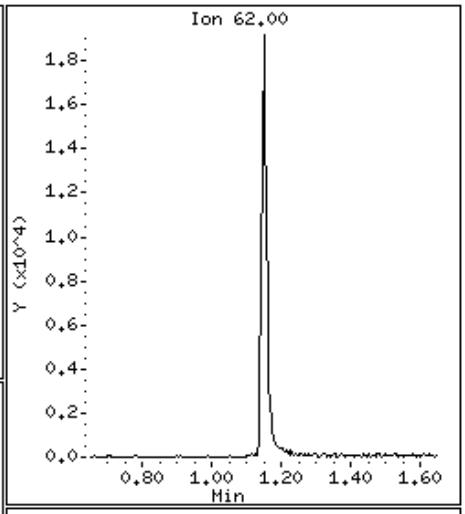
5 Vinyl Chloride Concentration: 15.71 ug/l

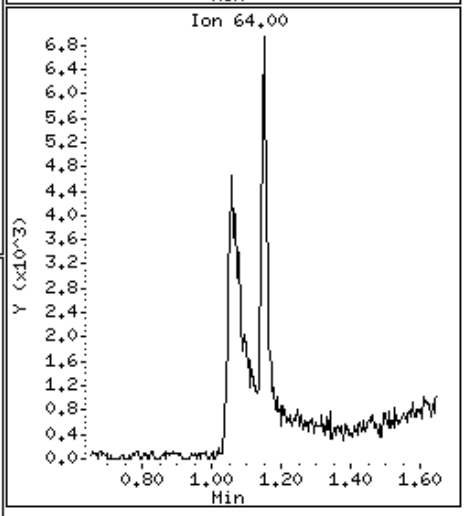












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070825.D
Inj Date : 08-JUL-2022 18:53
InstruID : voa6.i
LabSampID : HS22070326-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070826.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070826.D
Lab Smp Id: HS22070326-09 Client Smp ID: HS22070326-09
Inj Date : 08-JUL-2022 19:14
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-09;HS22070326-09;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 25
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

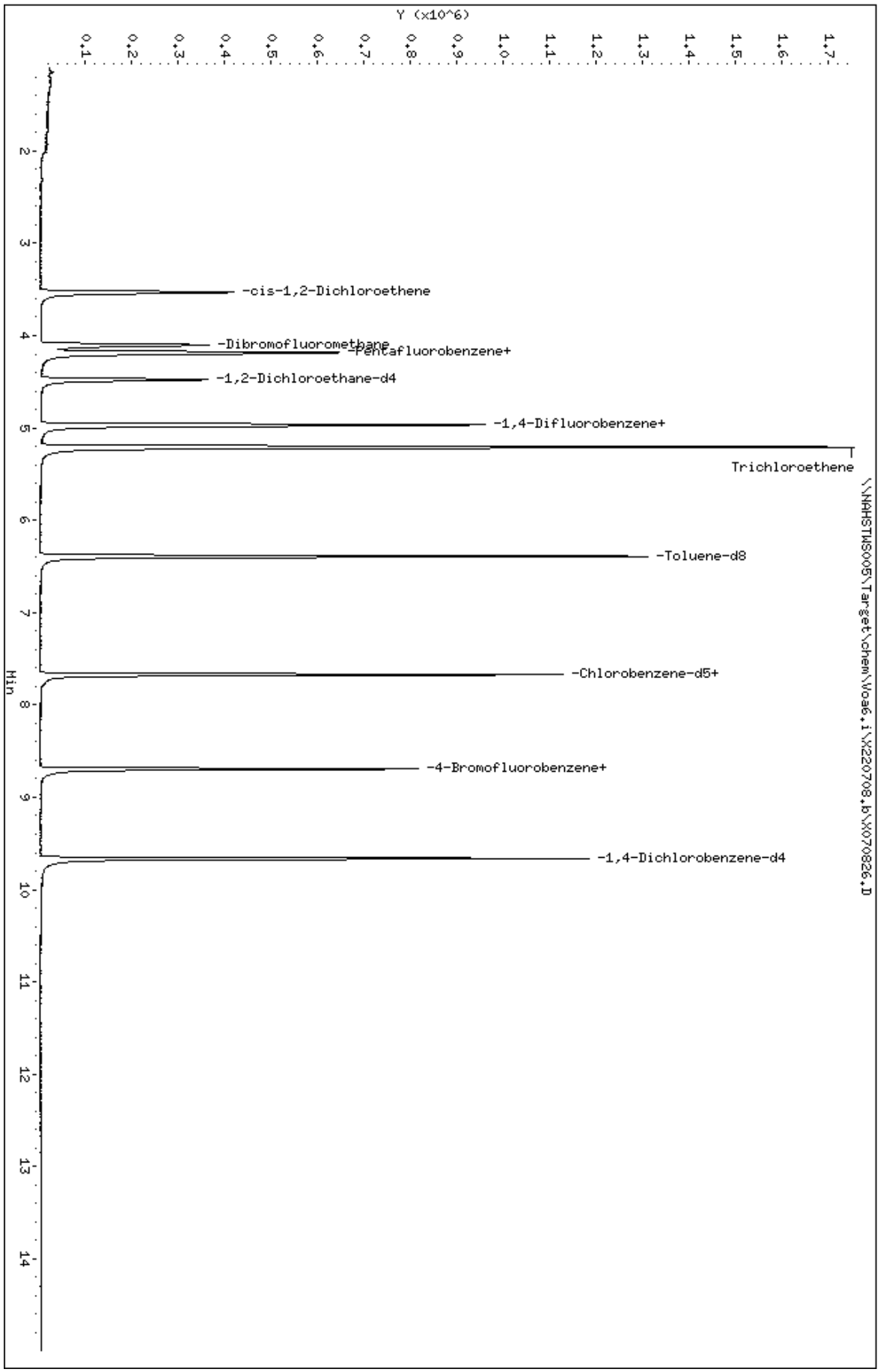
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.181	4.185	(1.000)	583376	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	828684	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	621806	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	314511	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.071)	263644	48.2124	48.21
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	270576	50.0764	50.07
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.981)	257289	47.8058	47.80
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	840197	54.4140	54.41
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.845)	221398	32.7894	819.73
38 Trichloroethene	130	5.208	5.208	(1.048)	615063	99.1137	2477.84
5 Vinyl Chloride	62	1.149	1.149	(0.275)	3965	0.53139	13.28(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070826.D
Date : 08-JUL-2022 19:14
Client ID: HS220703326-09
Sample Info: HS220703326-09;HS220703326-09;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070826.D Page 2

Date : 08-JUL-2022 19:14

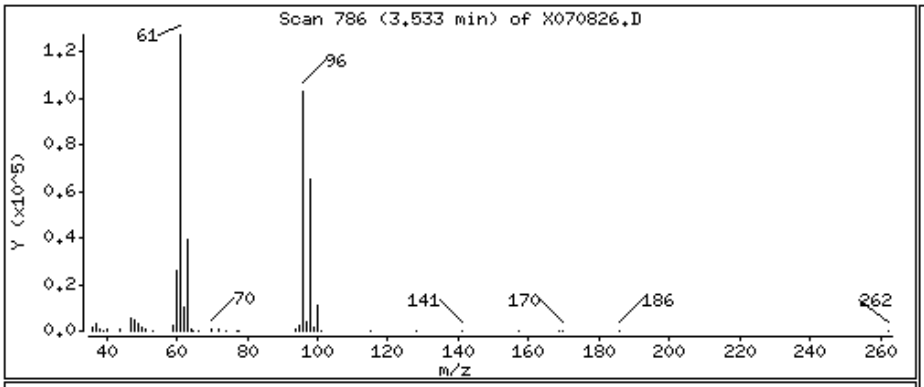
Client ID: HS22070326-09 Instrument: voa6.i

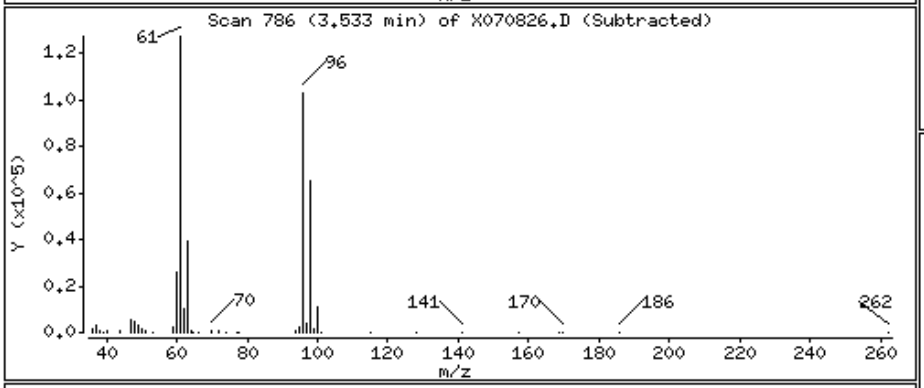
Sample Info: HS22070326-09;HS22070326-09;;;

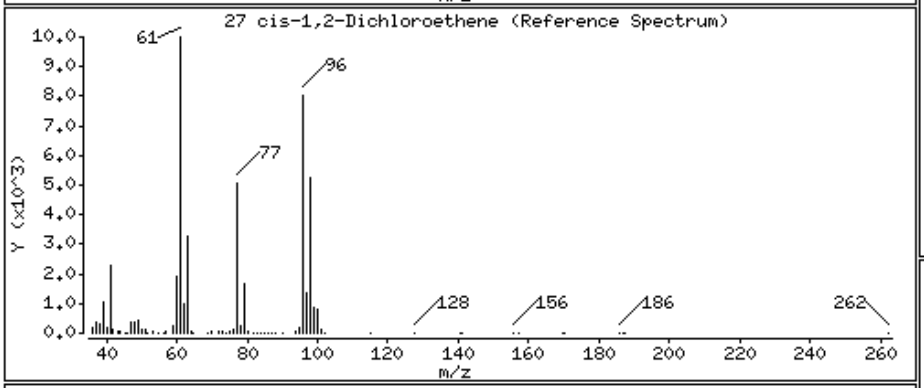
Purge Volume: 5.0 Operator: PC

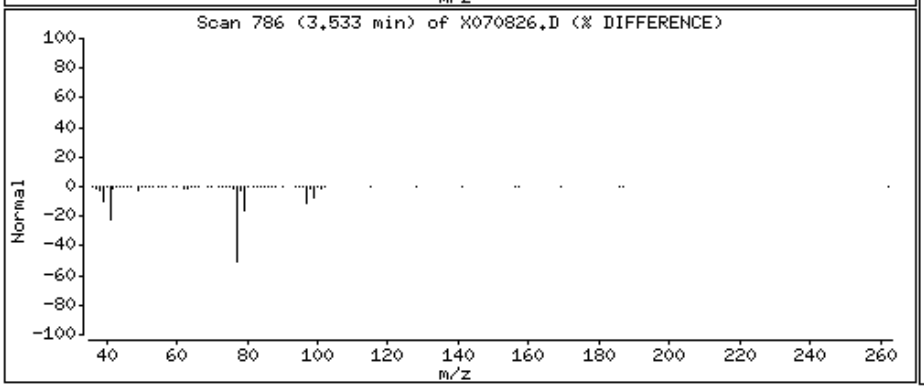
Column phase: DB624 Column diameter: 0.18

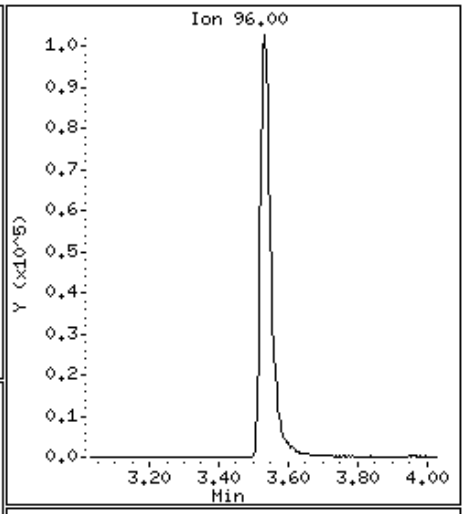
27 cis-1,2-Dichloroethene Concentration: 819.73 ug/l

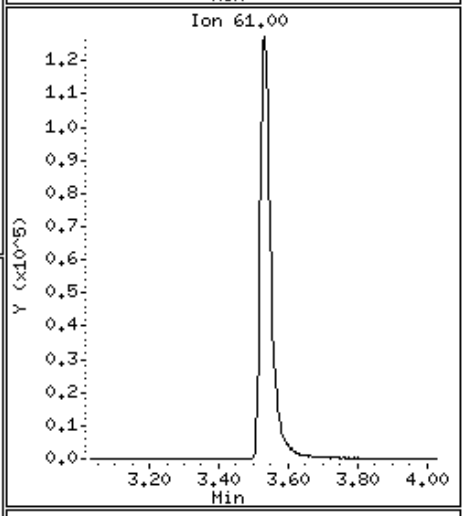


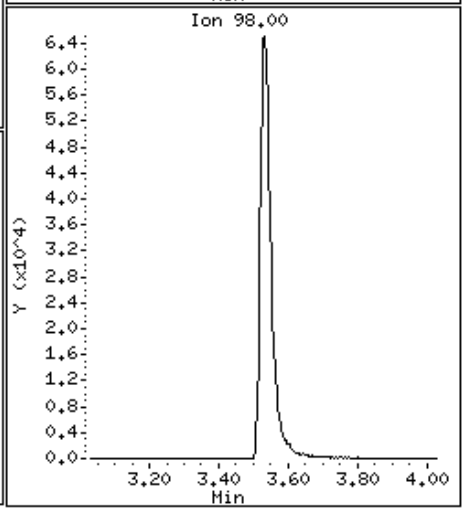












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070826.D Page 3

Date : 08-JUL-2022 19:14

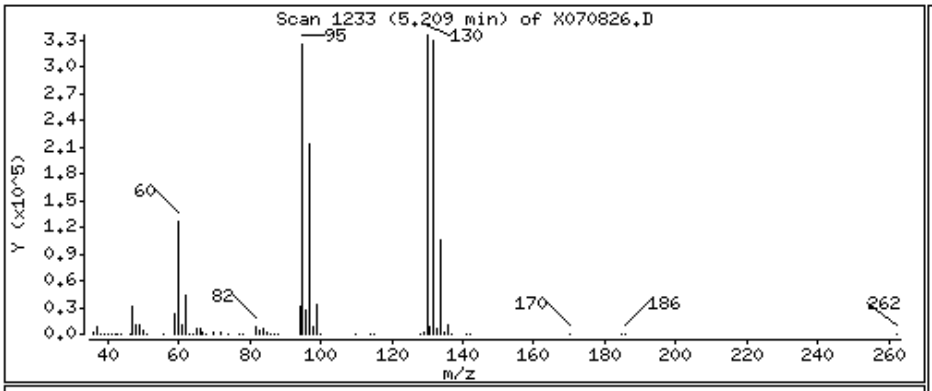
Client ID: HS22070326-09 Instrument: voa6.i

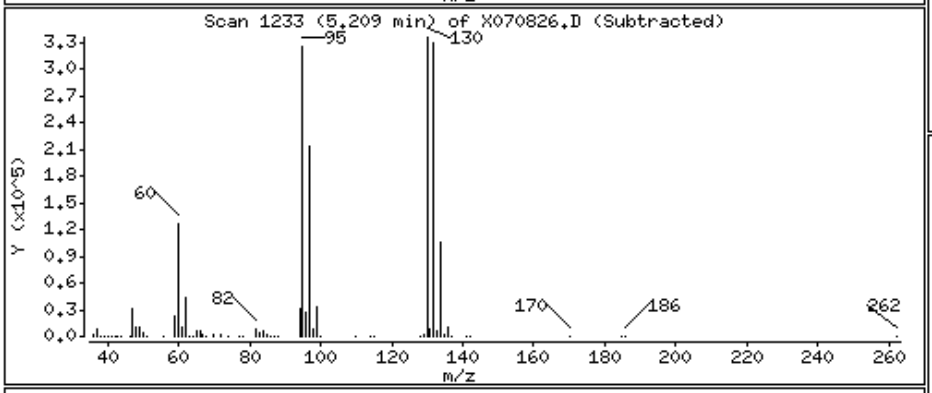
Sample Info: HS22070326-09;HS22070326-09;;;

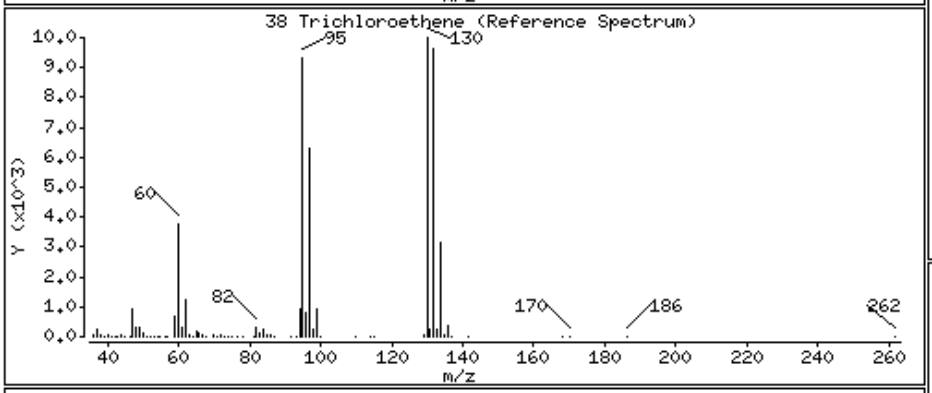
Purge Volume: 5.0 Operator: PC

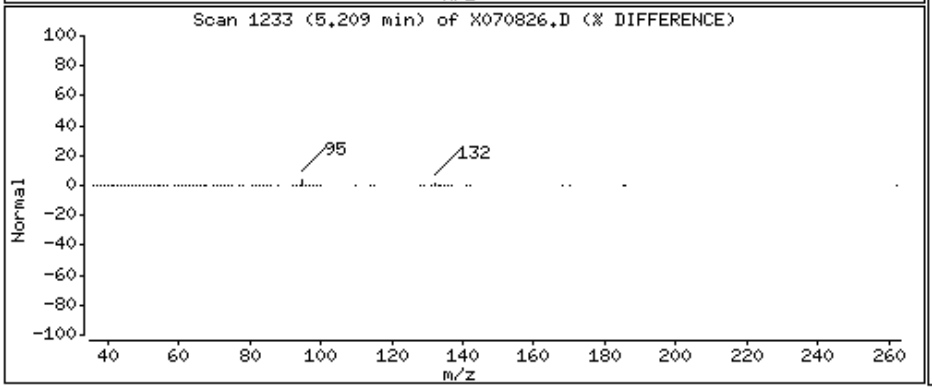
Column phase: DB624 Column diameter: 0.18

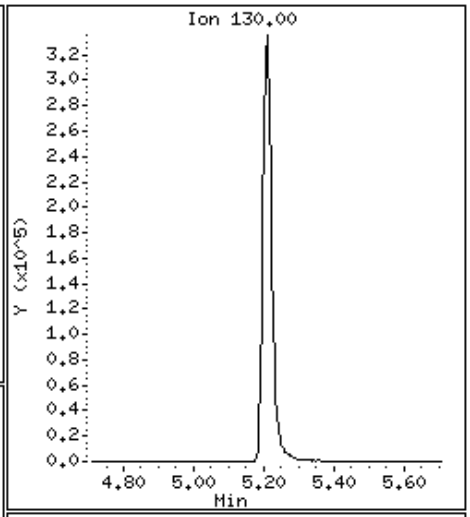
38 Trichloroethene Concentration: 2477.84 ug/l

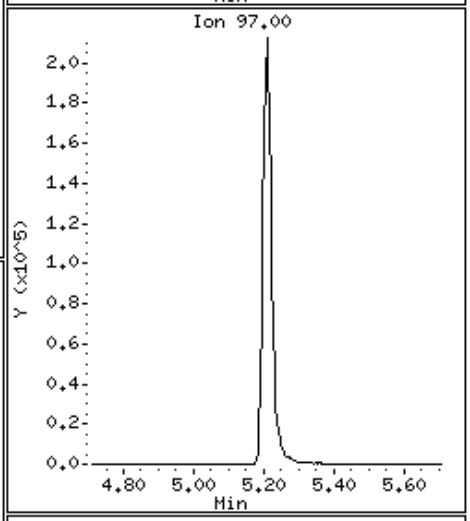


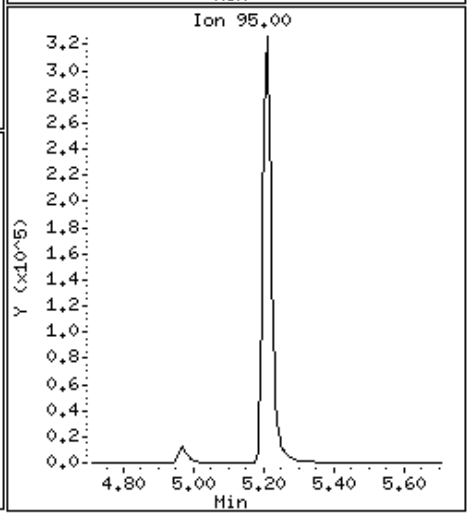












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070826.D Page 4

Date : 08-JUL-2022 19:14

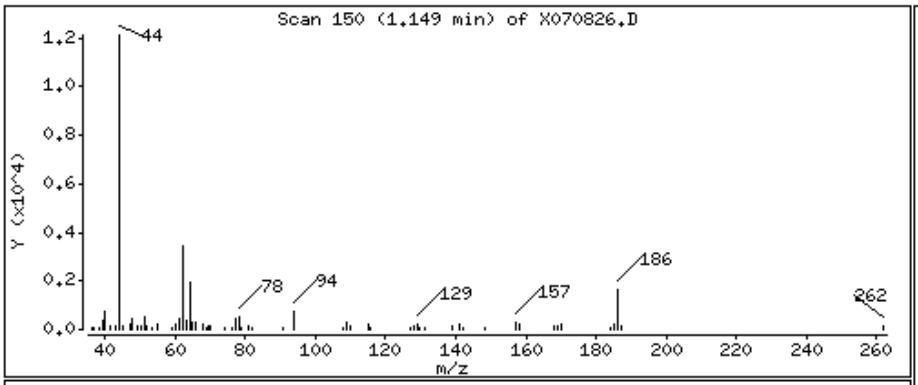
Client ID: HS22070326-09 Instrument: voa6.i

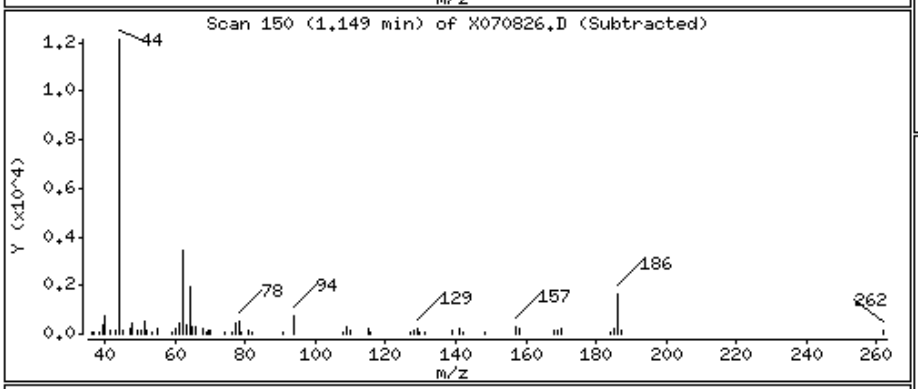
Sample Info: HS22070326-09;HS22070326-09;;;

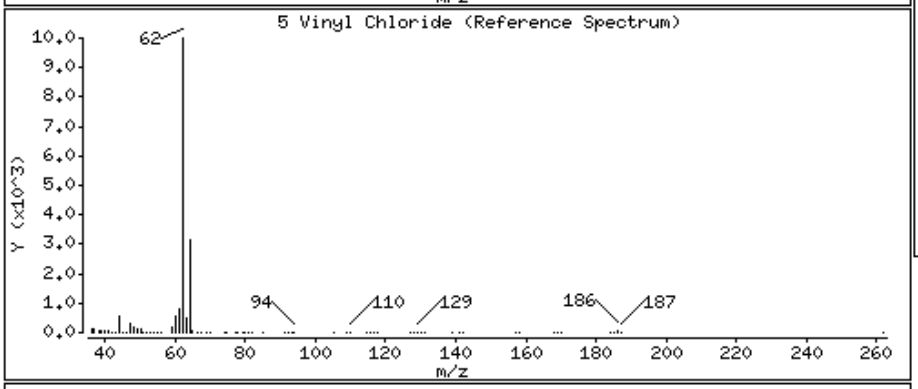
Purge Volume: 5.0 Operator: PC

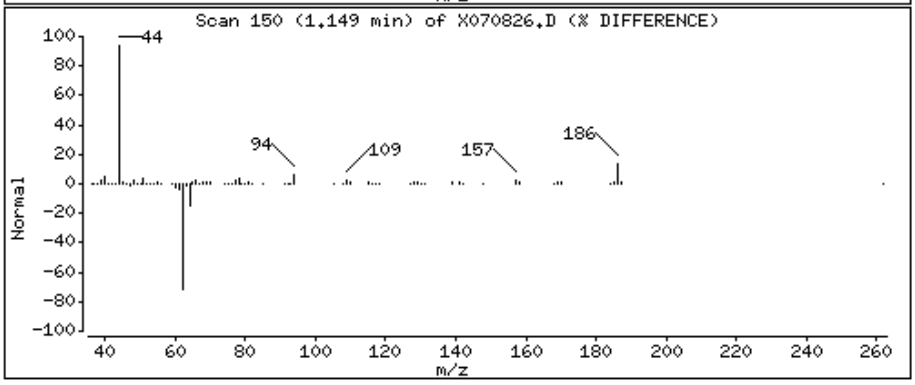
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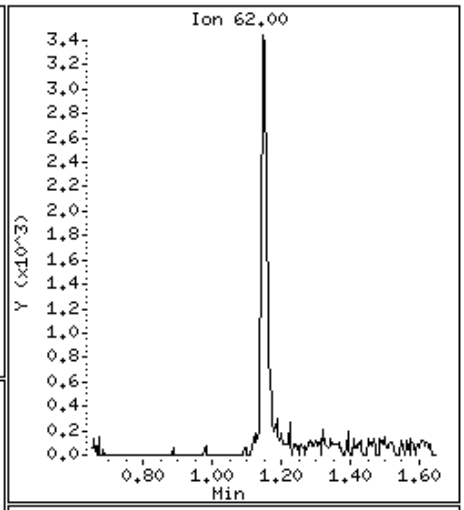
5 Vinyl Chloride Concentration: 13.28 ug/l

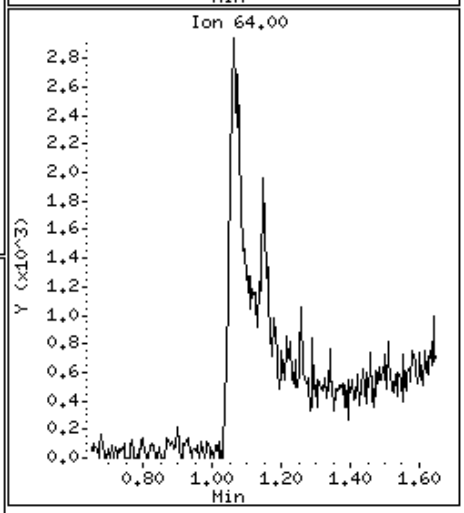












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070826.D
Inj Date : 08-JUL-2022 19:14
InstruID : voa6.i
LabSampID : HS22070326-09

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D
Lab Smp Id: HS22070326-10 Client Smp ID: HS22070326-10
Inj Date : 08-JUL-2022 19:35
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-10;HS22070326-10;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 26
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

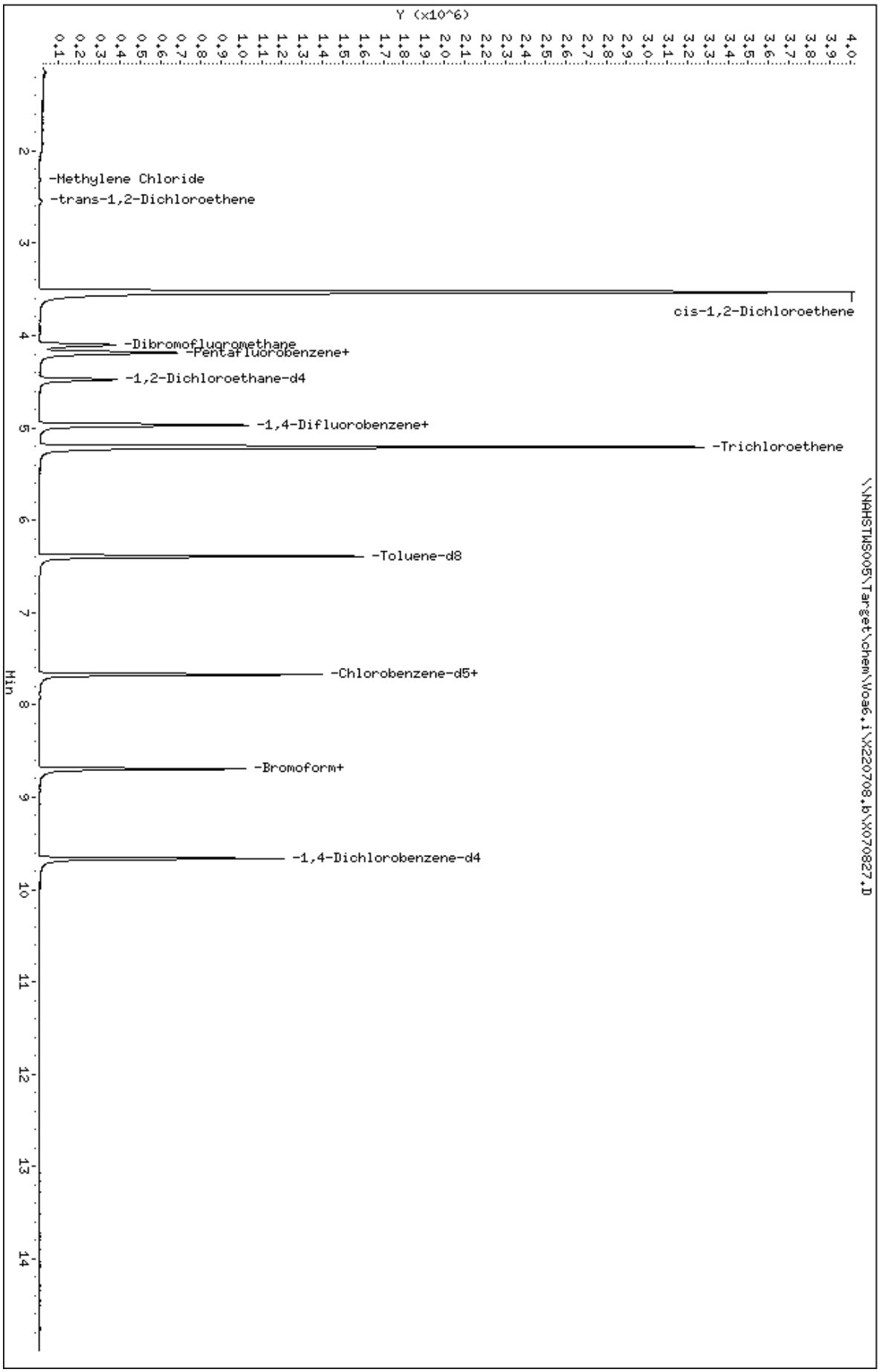
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	622292	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	887128	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	752201	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	327961	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	287919	49.3867	49.38
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	331454	50.7134	50.71
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	273747	47.6822	47.68
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1034495	55.3833	55.38
27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	2108249	292.709	1463.54(A)
17 Methylene Chloride	84	2.318	2.311	(0.554)	3112	1.05034	5.25(a)
38 Trichloroethene	130	5.209	5.208	(1.048)	1134263	170.738	853.69
5 Vinyl Chloride	62	1.149	1.149	(0.275)	7384	0.92771	4.63(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount
    exceeded maximum amount.



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D
Date : 08-JUL-2022 19:35
Client ID: HS220703326-10
Sample Info: HS220703326-10;HS220703326-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D

Date : 08-JUL-2022 19:35

Client ID: HS22070326-10

Instrument: voa6.i

Sample Info: HS22070326-10;HS22070326-10;;;

Purge Volume: 5.0

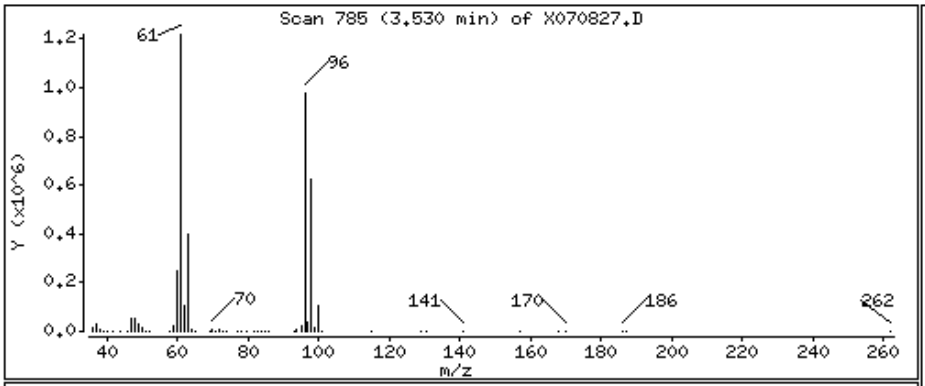
Operator: PC

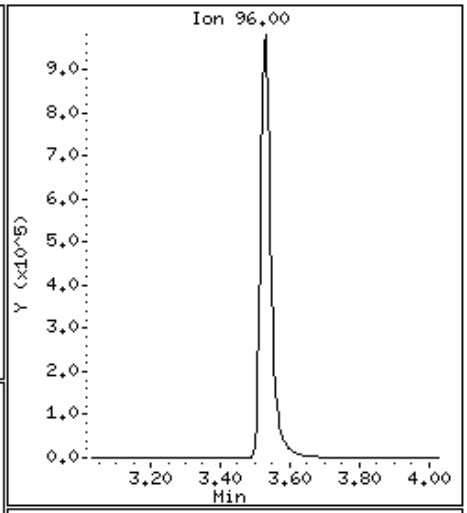
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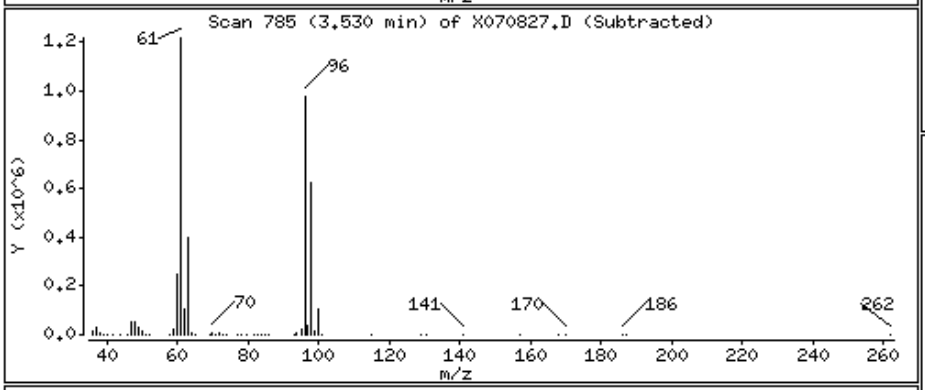
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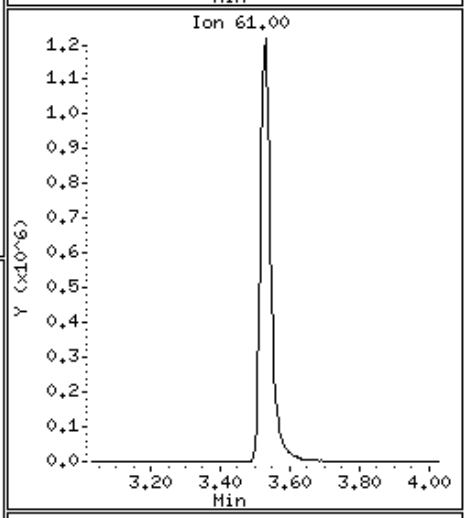
27 cis-1,2-Dichloroethene

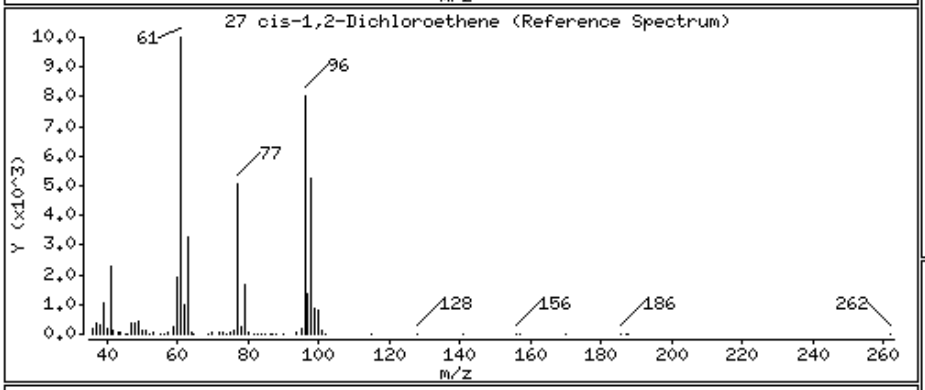
Concentration: 1463.54 ug/l

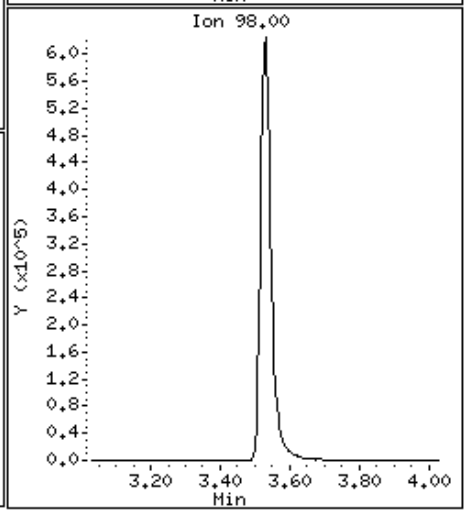


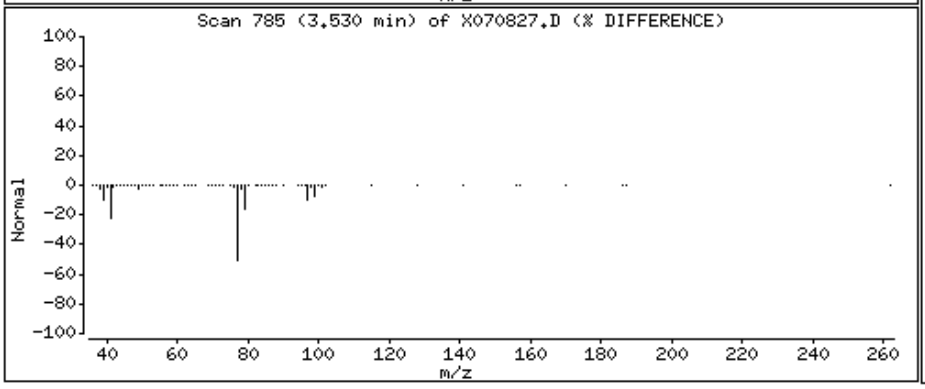












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D

Date : 08-JUL-2022 19:35

Client ID: HS22070326-10

Instrument: voa6.i

Sample Info: HS22070326-10;HS22070326-10;;;

Purge Volume: 5.0

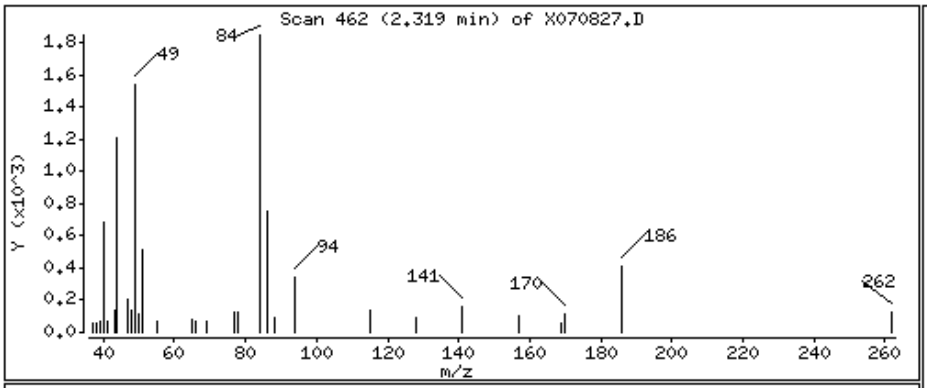
Operator: PC

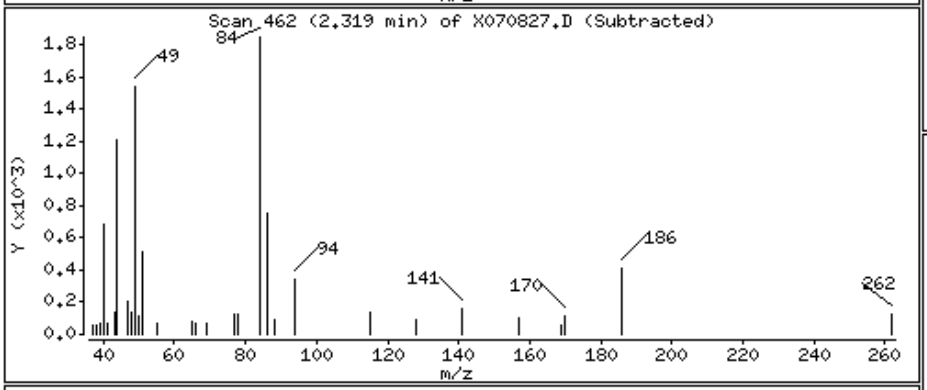
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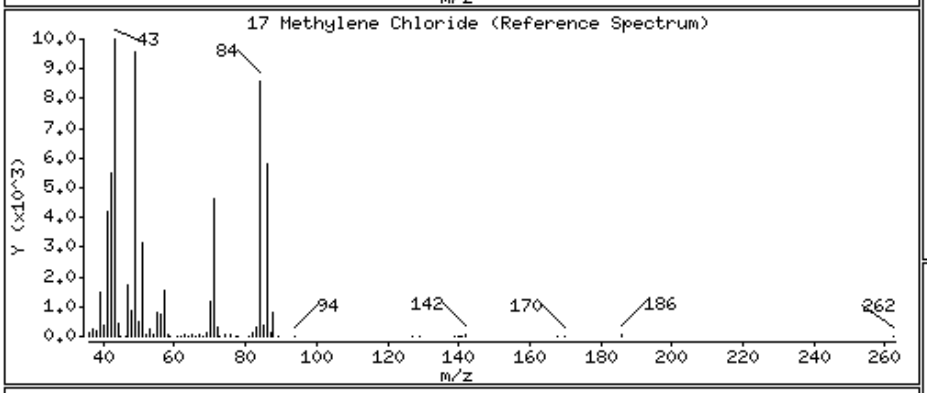
Column diameter: 0.18

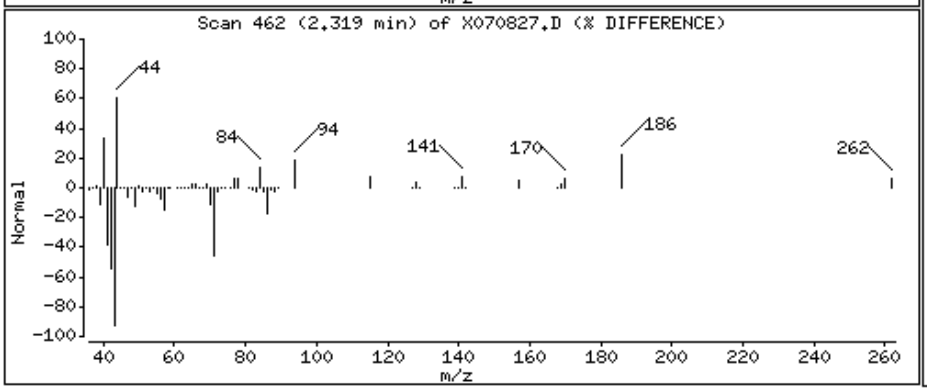
17 Methylene Chloride

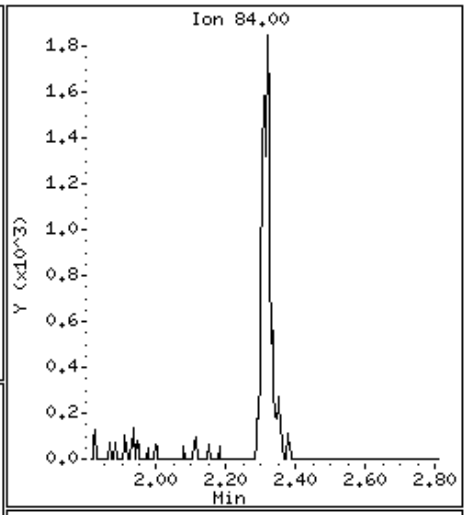
Concentration: 5.25 ug/l

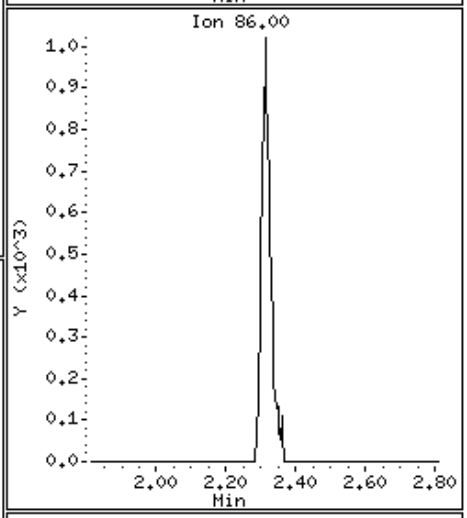


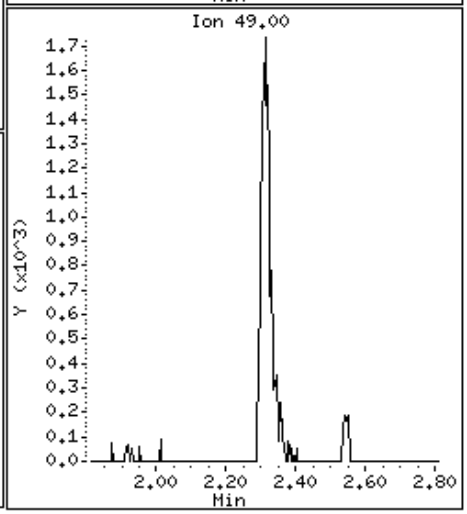












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D Page 4

Date : 08-JUL-2022 19:35

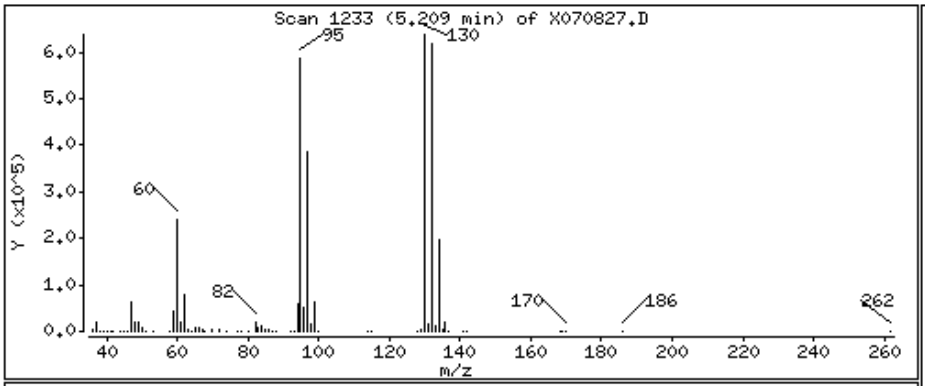
Client ID: HS22070326-10 Instrument: voa6.i

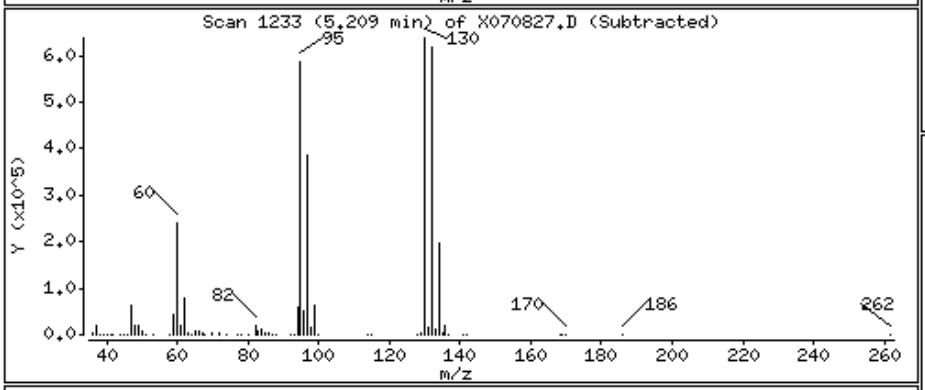
Sample Info: HS22070326-10;HS22070326-10;;;

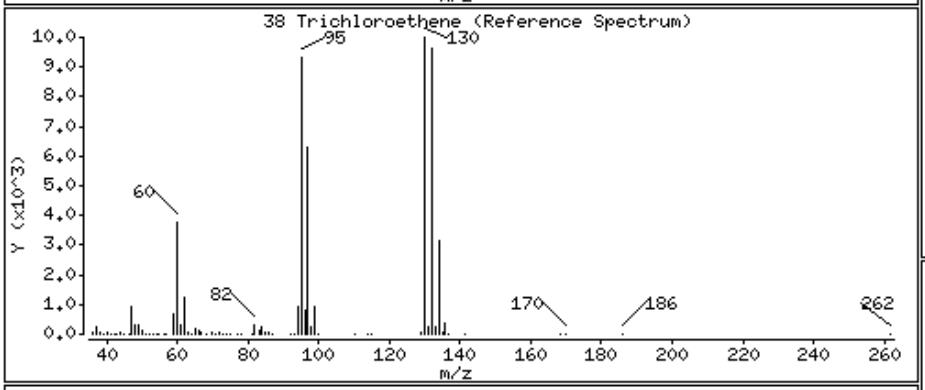
Purge Volume: 5.0 Operator: PC

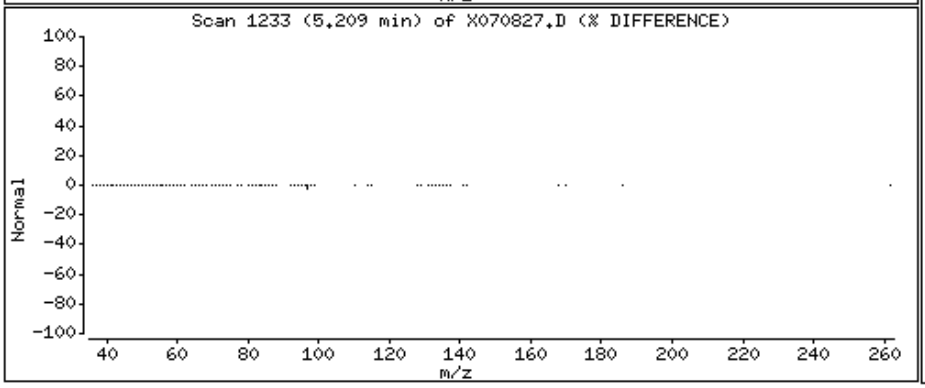
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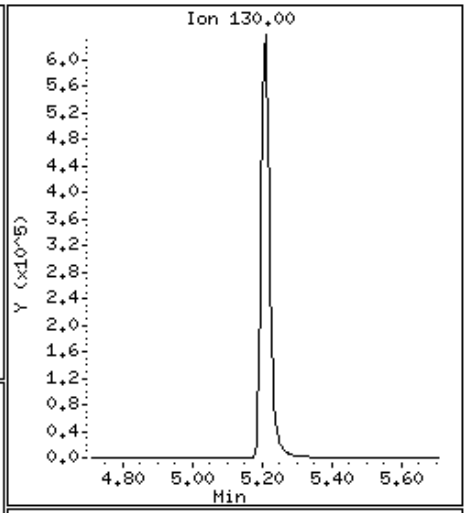
38 Trichloroethene Concentration: 853.69 ug/l

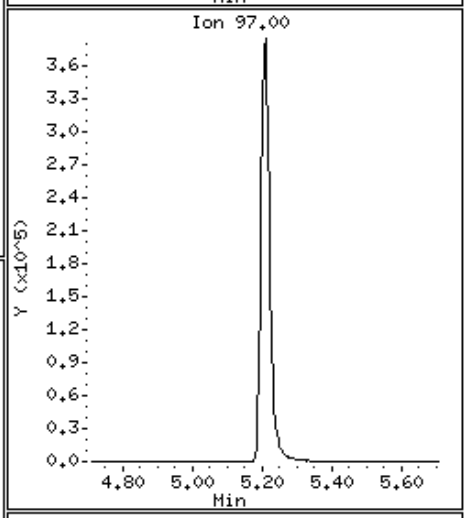


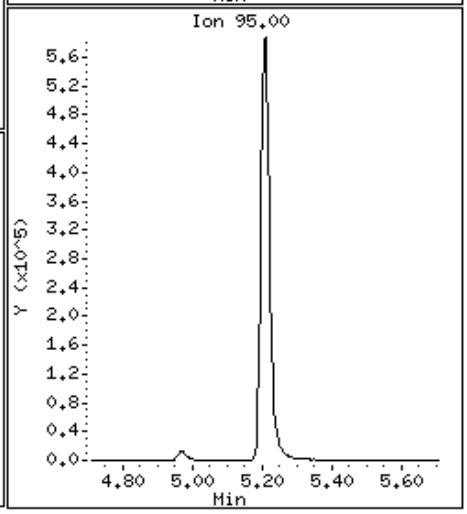












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D

Date : 08-JUL-2022 19:35

Client ID: HS22070326-10

Instrument: voa6.i

Sample Info: HS22070326-10;HS22070326-10;;;

Purge Volume: 5.0

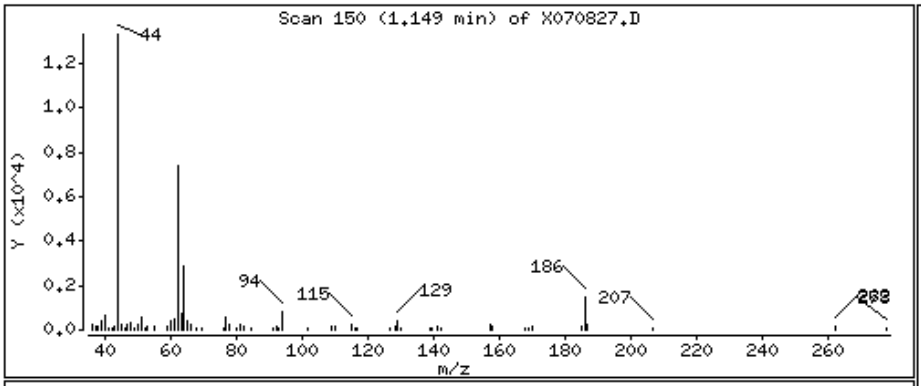
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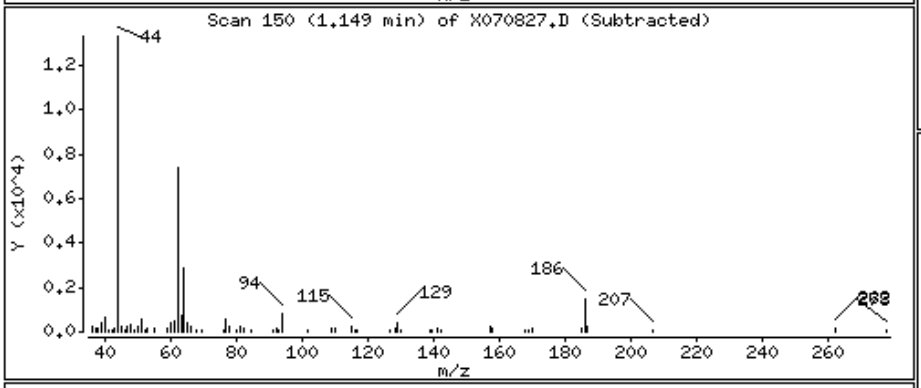
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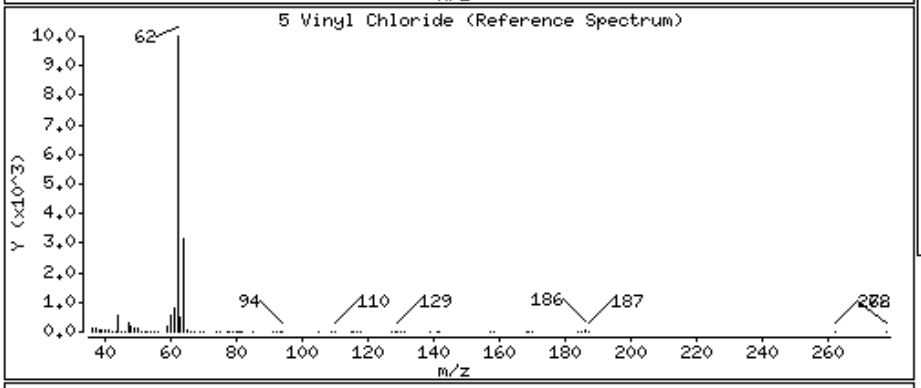
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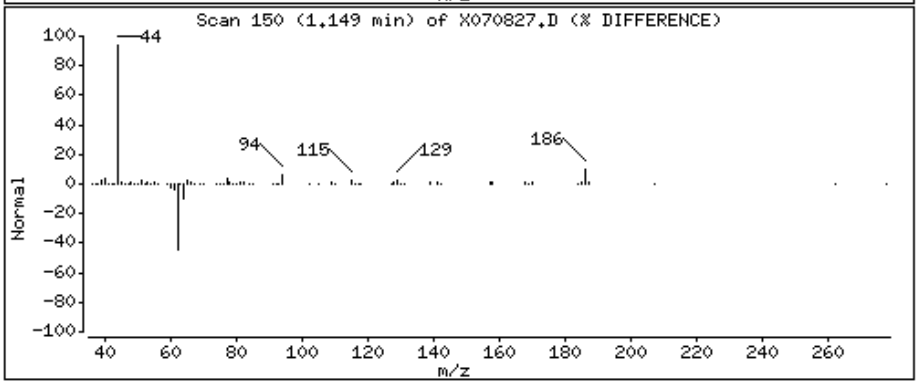
5 Vinyl Chloride

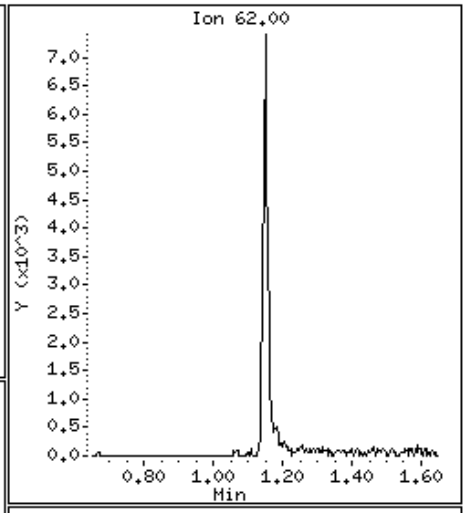
Concentration: 4.63 ug/l

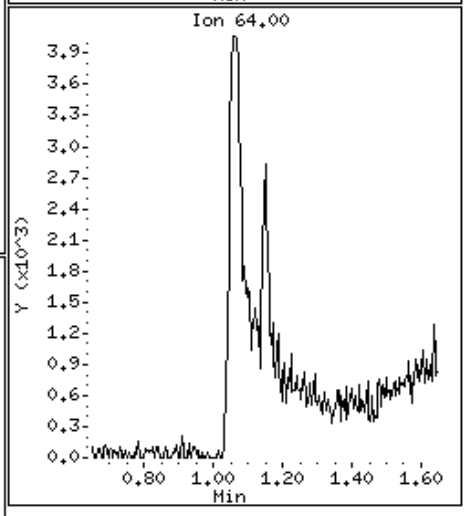












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070827.D
Inj Date : 08-JUL-2022 19:35
InstruID : voa6.i
LabSampID : HS22070326-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070828.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070828.D
Lab Smp Id: HS22070326-10 Client Smp ID: HS22070326-10
Inj Date : 08-JUL-2022 19:56
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-10;HS22070326-10;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 27
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

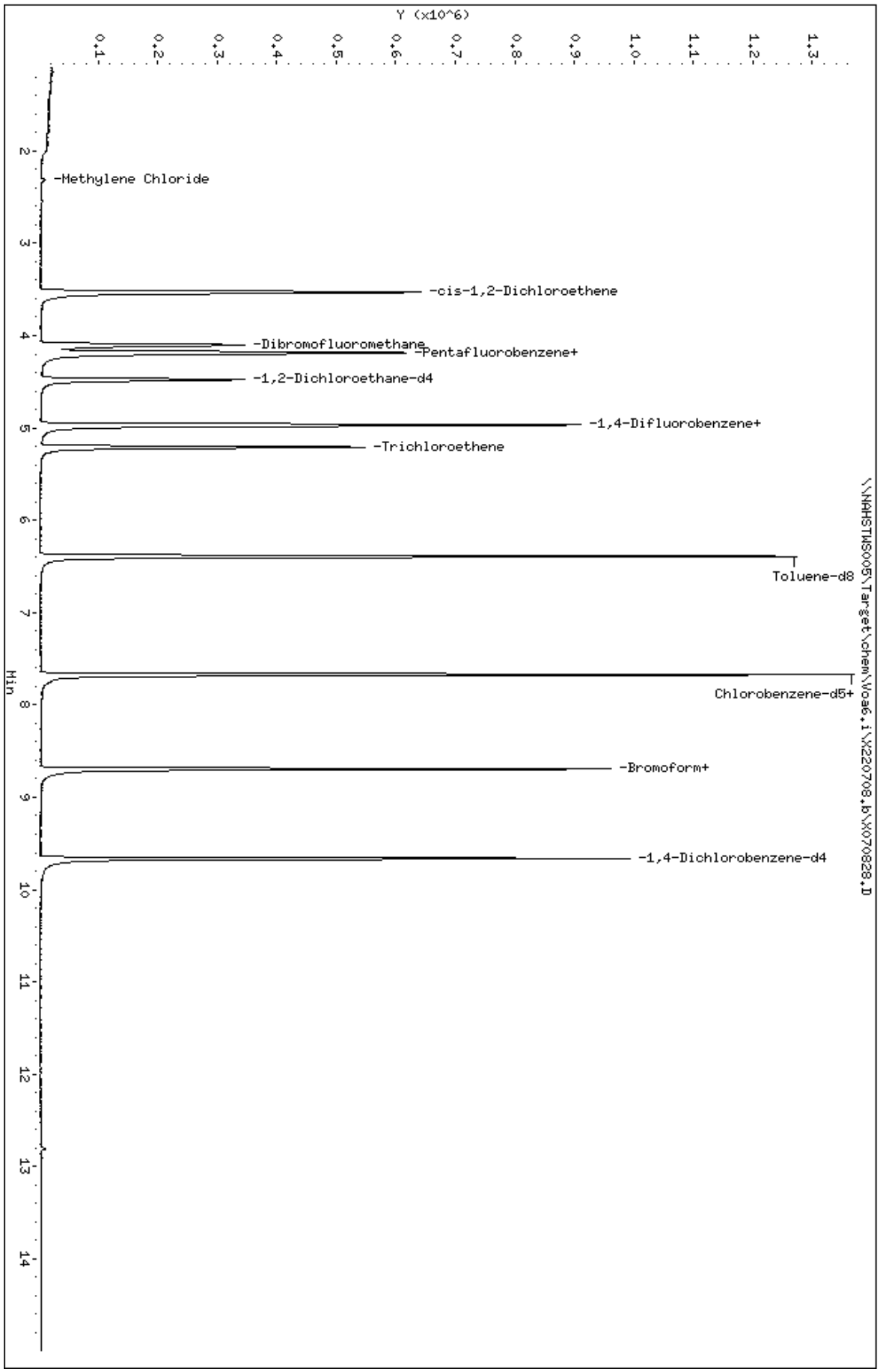
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	561714	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	785619	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	745014	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	281320	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	254373	48.3133	48.31
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	318181	49.1425	49.14
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	246035	47.4757	47.47
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	844535	45.6496	45.64
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	354320	54.4990	1362.47
17 Methylene Chloride	84	2.311	2.311	(0.552)	2851	1.05669	26.41(a)
38 Trichloroethene	130	5.212	5.208	(1.049)	197569	33.5822	839.55

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070828.D
Date : 08-JUL-2022 19:56
Client ID: HS220703326-10
Sample Info: HS220703326-10;HS220703326-10;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070828.D Page 2

Date : 08-JUL-2022 19:56

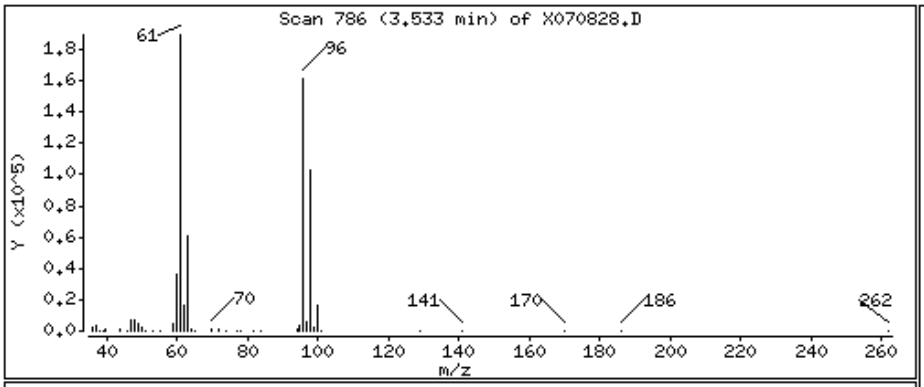
Client ID: HS22070326-10 Instrument: voa6.i

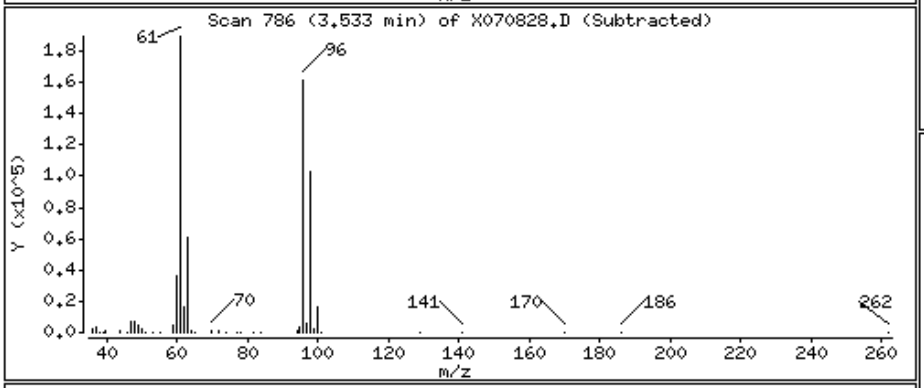
Sample Info: HS22070326-10;HS22070326-10;;;

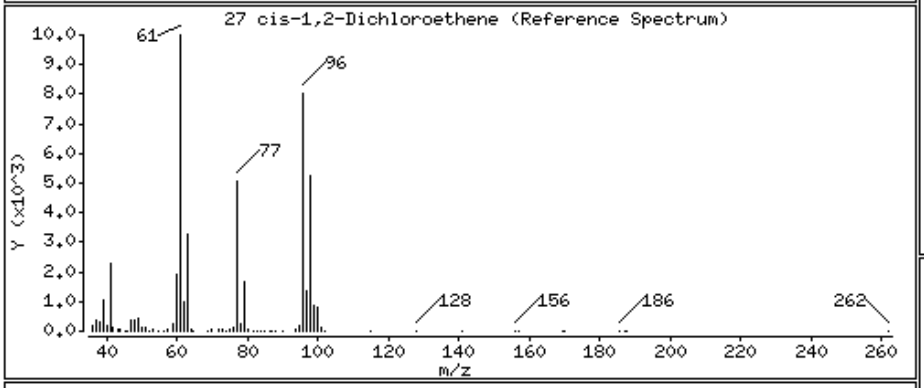
Purge Volume: 5.0 Operator: PC

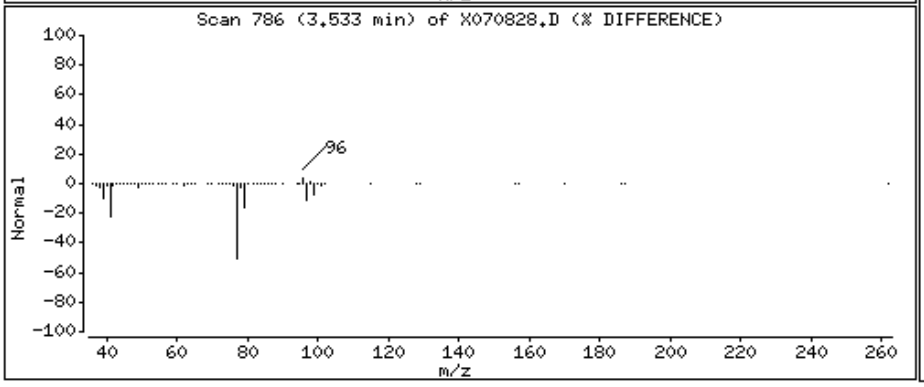
Column phase: DB624 Column diameter: 0.18

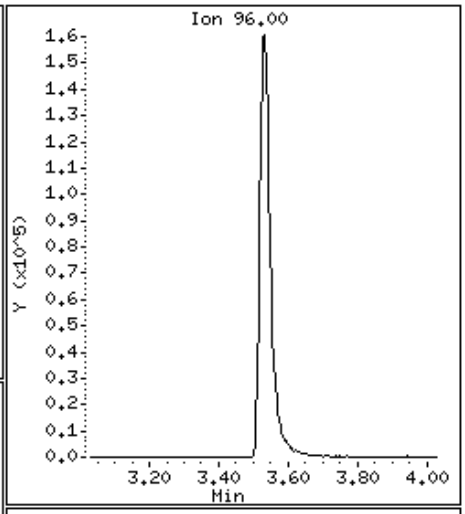
27 cis-1,2-Dichloroethene Concentration: 1362.47 ug/l

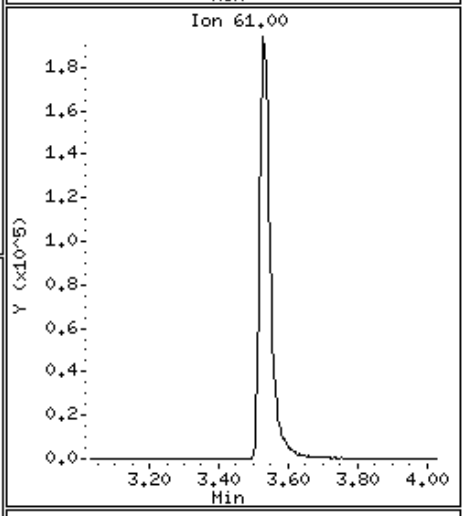


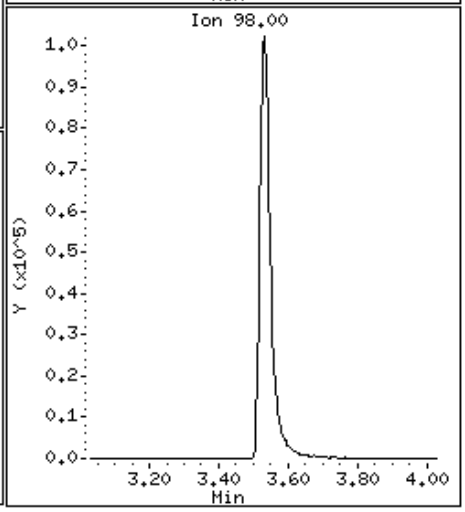












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070828.D Page 3

Date : 08-JUL-2022 19:56

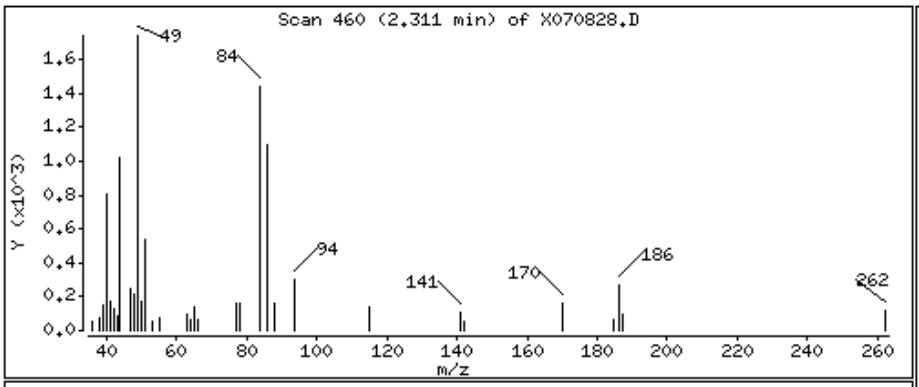
Client ID: HS22070326-10 Instrument: voa6.i

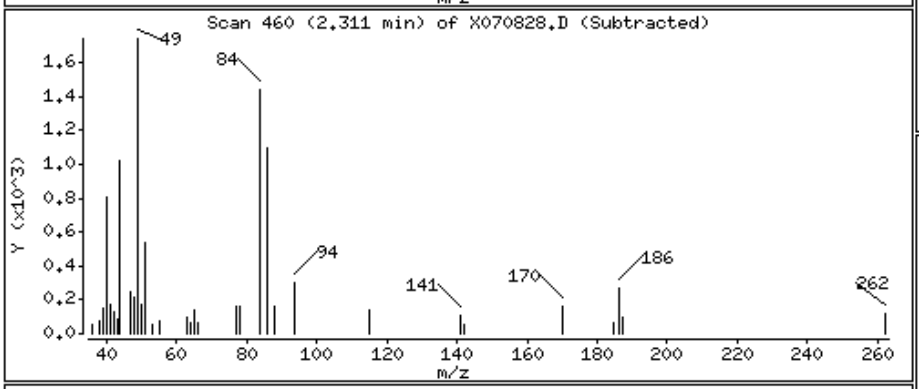
Sample Info: HS22070326-10;HS22070326-10;;;

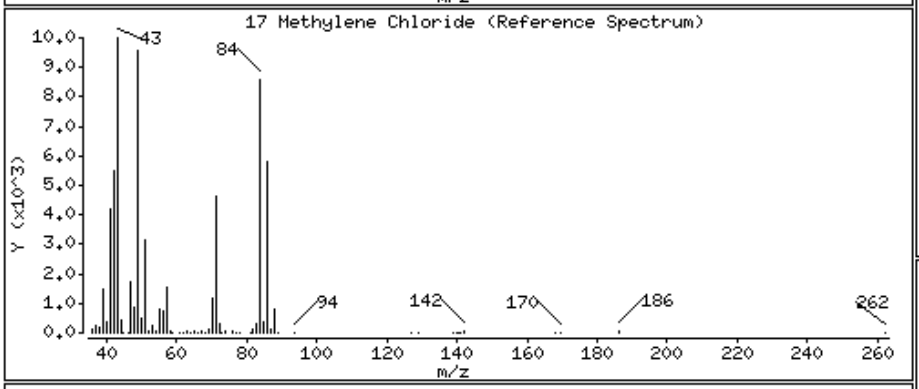
Purge Volume: 5.0 Operator: PC

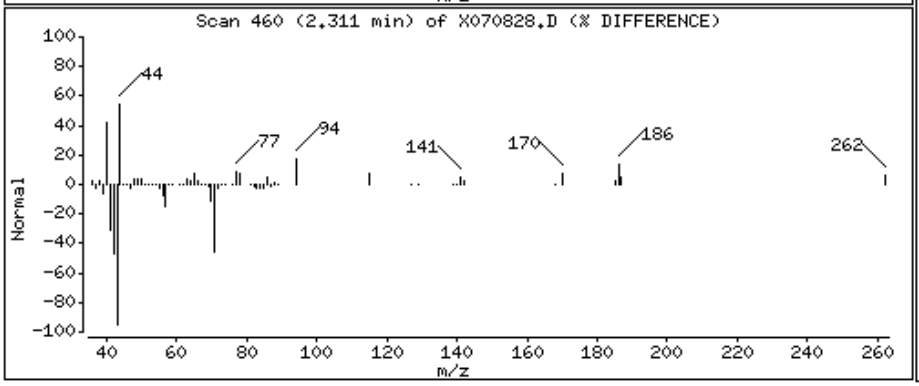
Column phase: DB624 Column diameter: 0.18

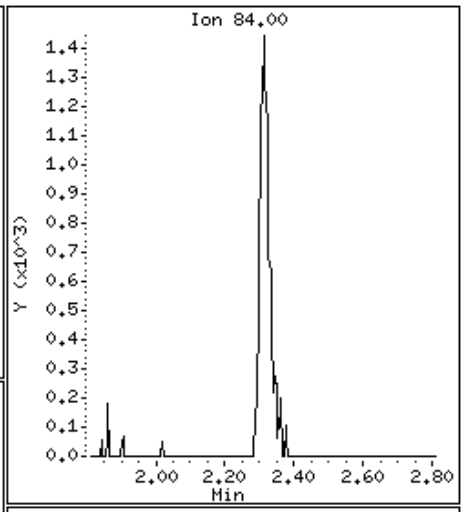
17 Methylene Chloride Concentration: 26.41 ug/l

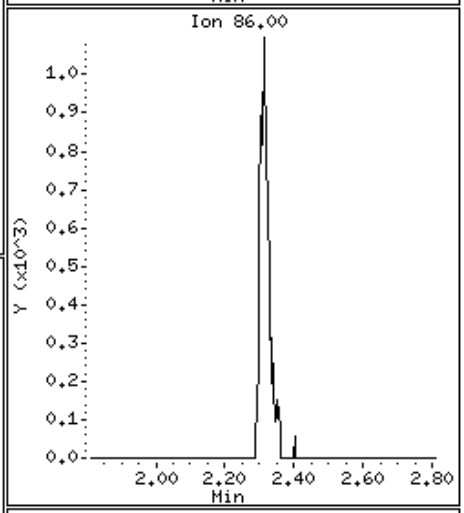


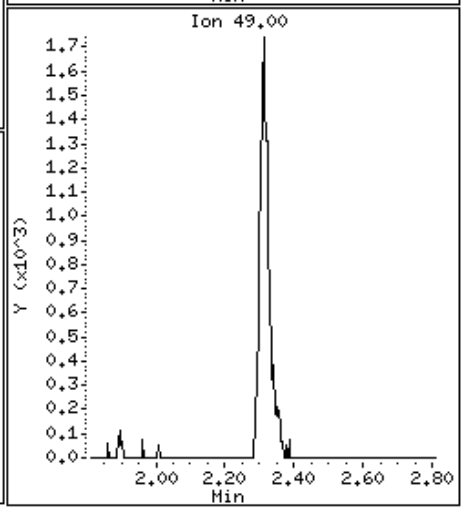












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070828.D Page 4

Date : 08-JUL-2022 19:56

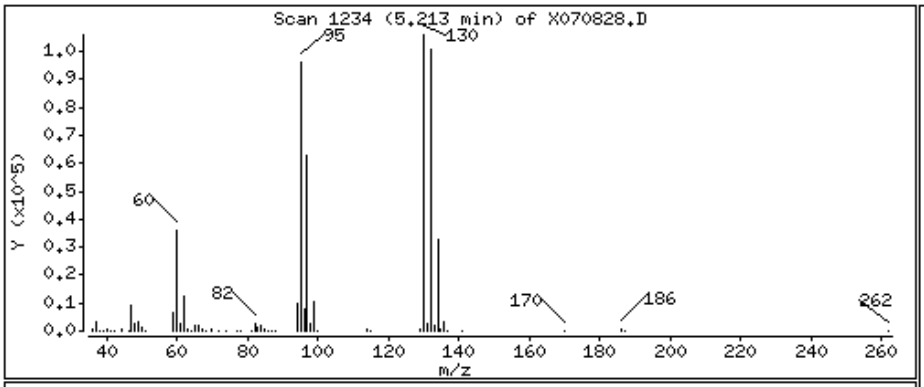
Client ID: HS22070326-10 Instrument: voa6.i

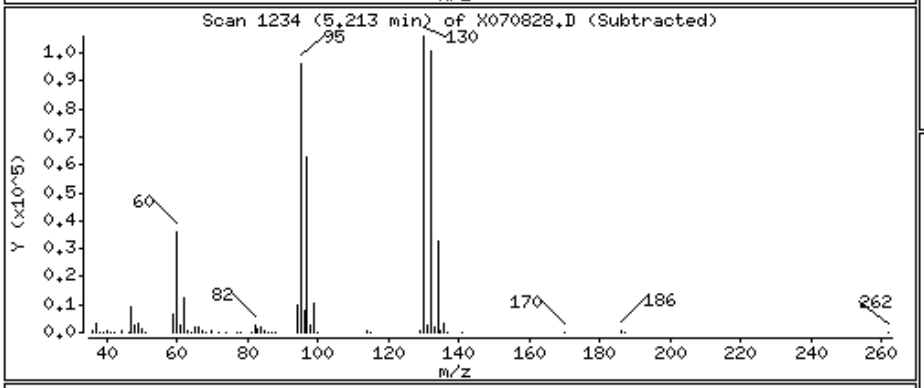
Sample Info: HS22070326-10;HS22070326-10;;;

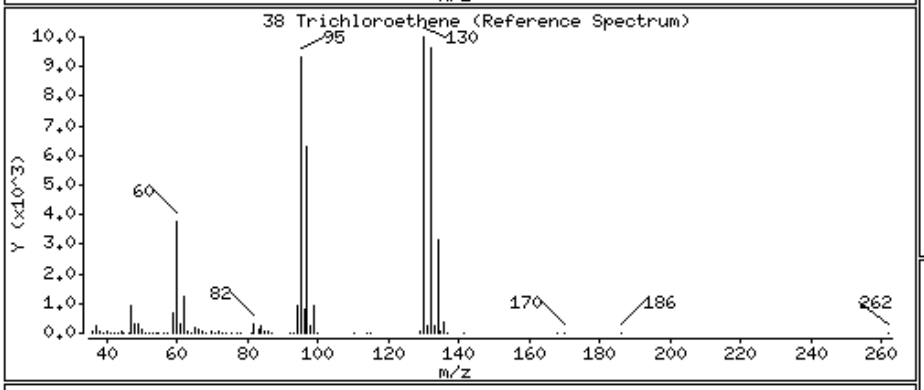
Purge Volume: 5.0 Operator: PC

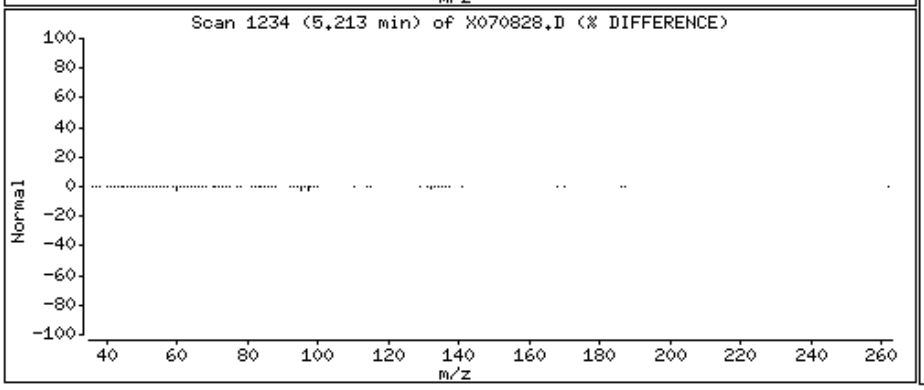
Column phase: DB624 Column diameter: 0.18

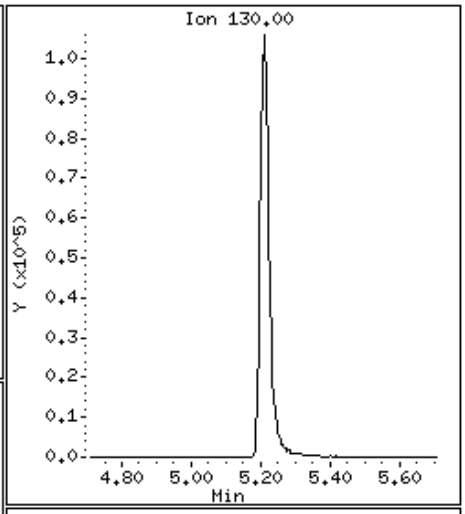
38 Trichloroethene Concentration: 839.55 ug/l

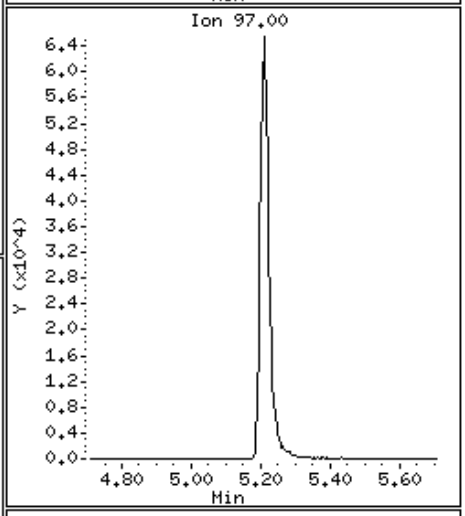


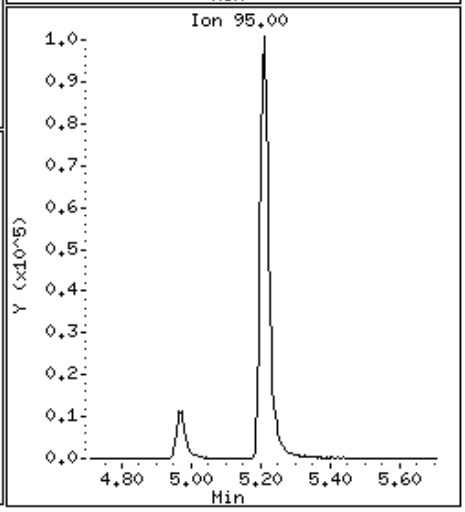












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070828.D
Inj Date : 08-JUL-2022 19:56
InstruID : voa6.i
LabSampID : HS22070326-10

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D
Lab Smp Id: HS22070326-11 Client Smp ID: HS22070326-11
Inj Date : 08-JUL-2022 20:17
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-11;HS22070326-11;;;
Misc Info : HS22052000V6;WATER;0;5;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:36 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 28
Dil Factor: 5.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

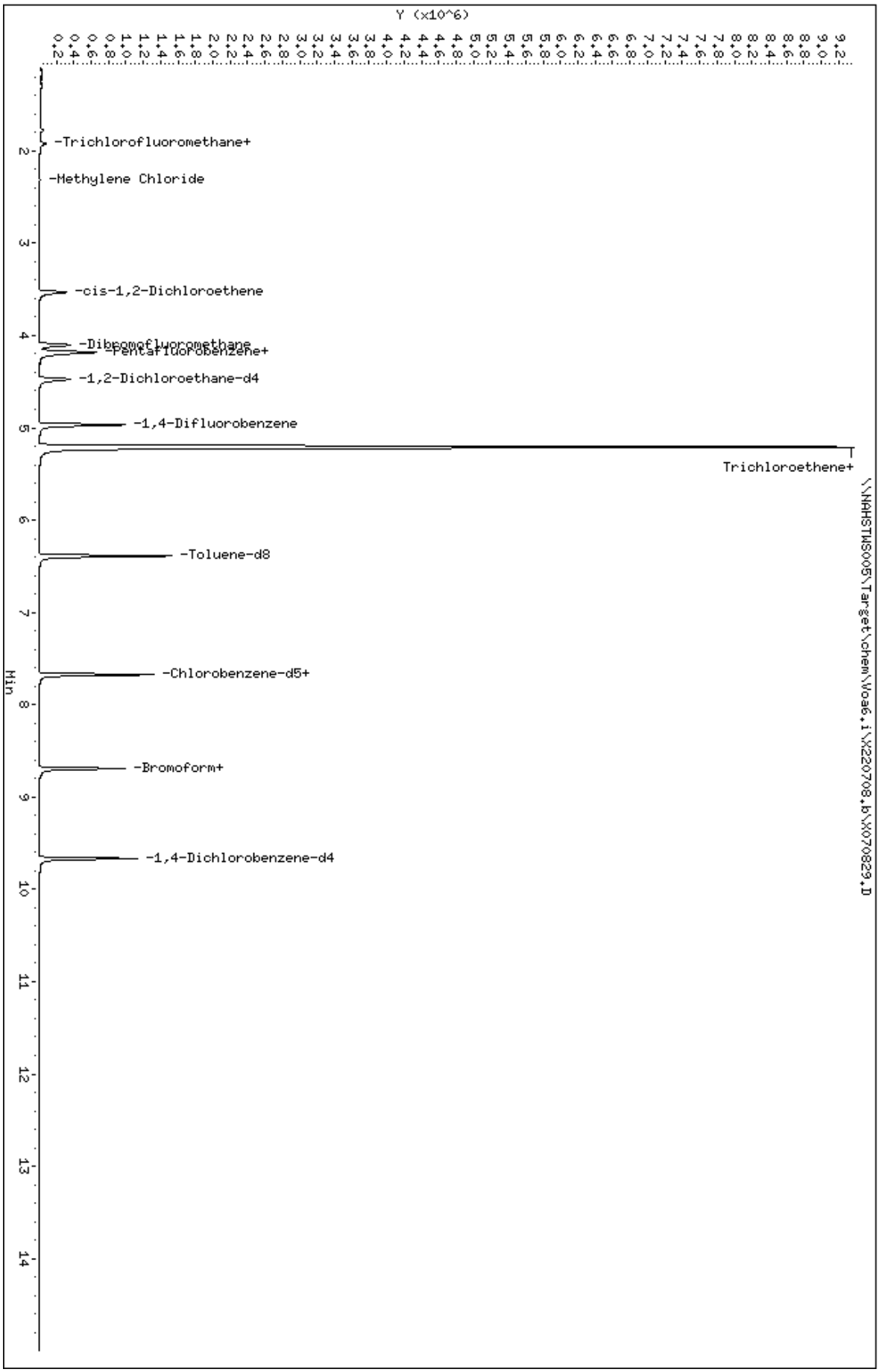
Name	Value	Description
DF	5.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	595460	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	847929	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	710381	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	317880	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	269846	48.3483	48.34
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	319870	51.8290	51.82
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	260588	47.4340	47.43
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	970765	55.0309	55.03
11 1,1-Dichloroethene	96	1.917	1.921	(0.458)	2938	0.51575	2.57(a)
27 cis-1,2-Dichloroethene	96	3.533	3.529	(0.844)	172418	25.0172	125.08
17 Methylene Chloride	84	2.307	2.311	(0.551)	2810	1.02640	5.13(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	3222799	507.547	2537.73(A)
5 Vinyl Chloride	62	1.149	1.149	(0.275)	6556	0.86080	4.30(a)

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount

exceeded maximum amount.



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220708.b\X070829.D
Date : 08-JUL-2022 20:17
Client ID: HS220703Z6-11
Sample Info: HS220703Z6-11;HS220703Z6-11;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D Page 2

Date : 08-JUL-2022 20:17

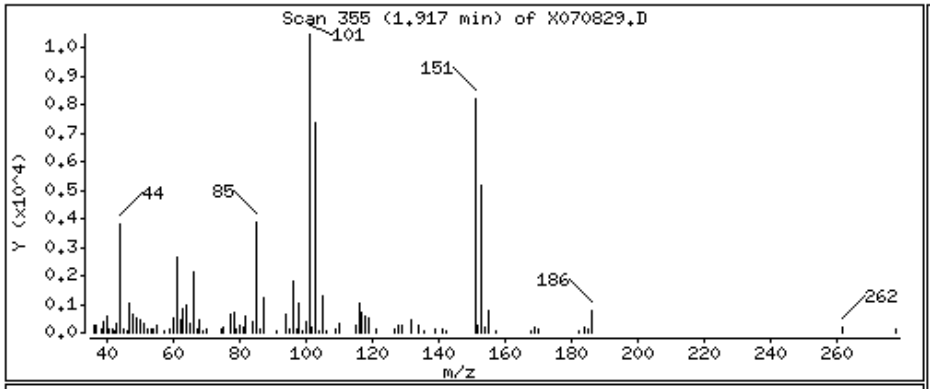
Client ID: HS22070326-11 Instrument: voa6.i

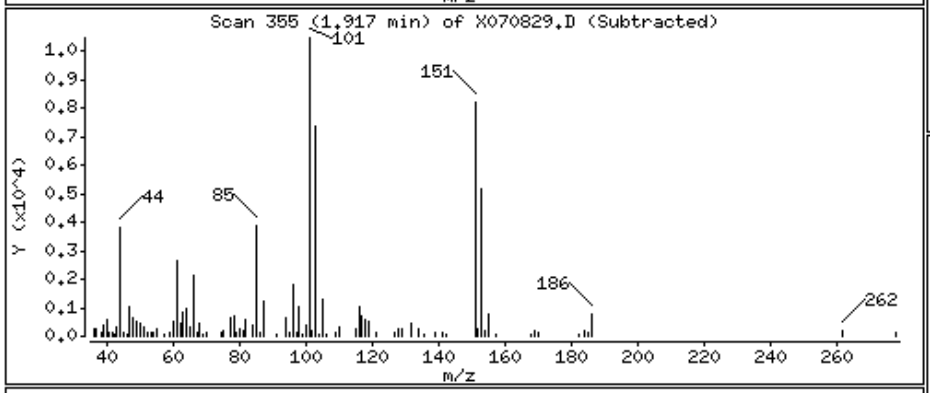
Sample Info: HS22070326-11;HS22070326-11;;;

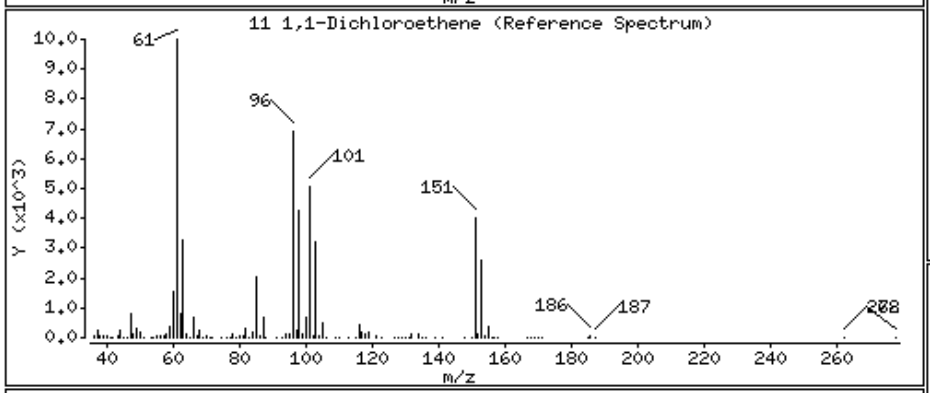
Purge Volume: 5.0 Operator: PC

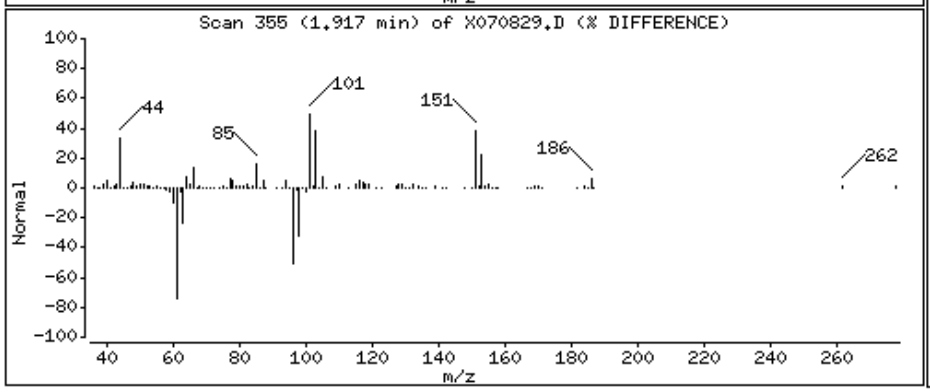
Column phase: DB624 Column diameter: 0.18

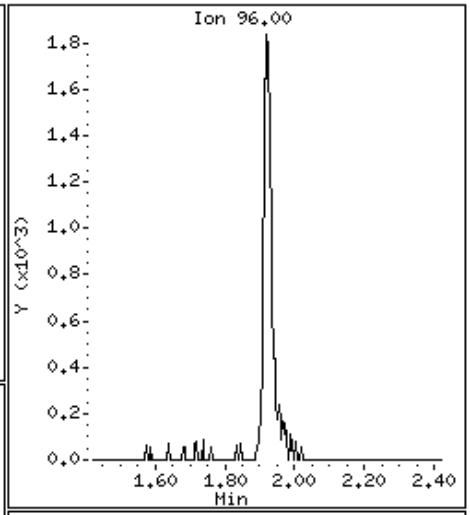
11 1,1-Dichloroethene Concentration: 2.57 ug/l

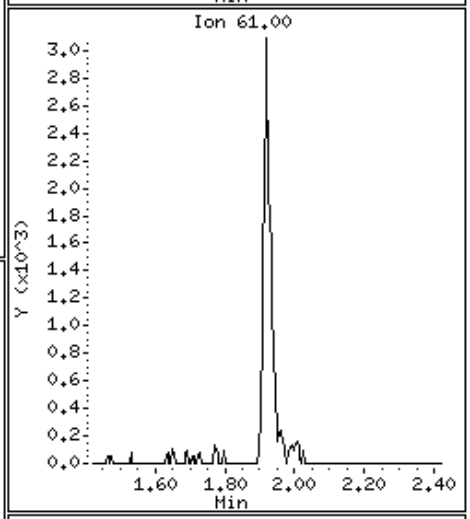


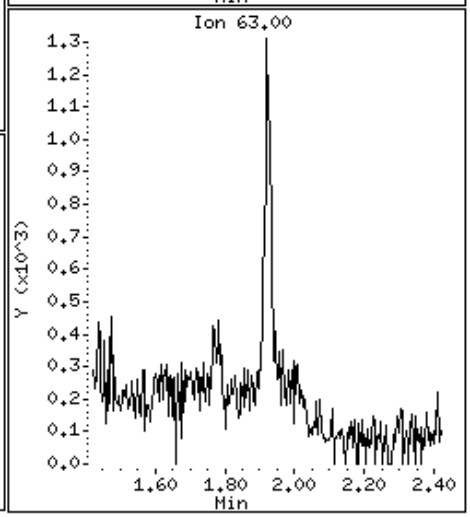












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D Page 3

Date : 08-JUL-2022 20:17

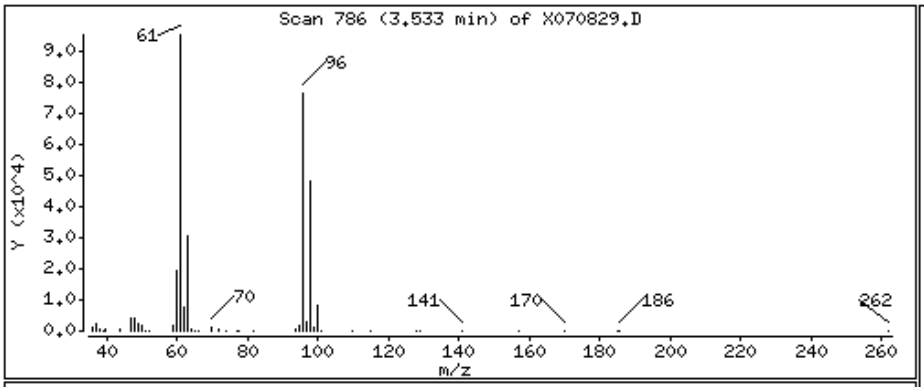
Client ID: HS22070326-11 Instrument: voa6.i

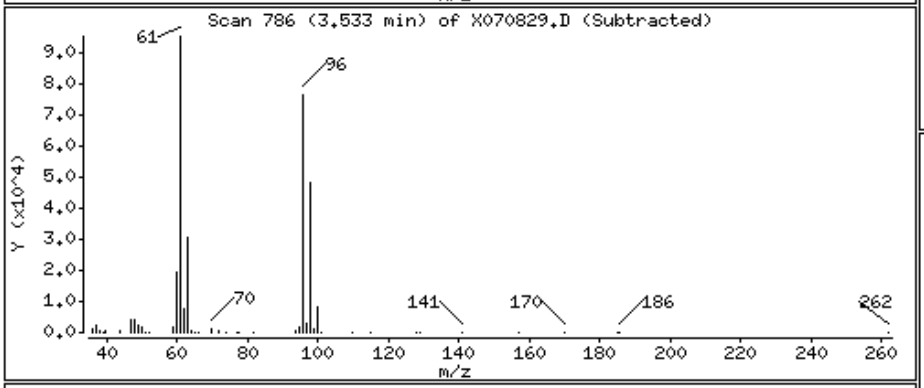
Sample Info: HS22070326-11;HS22070326-11;;;

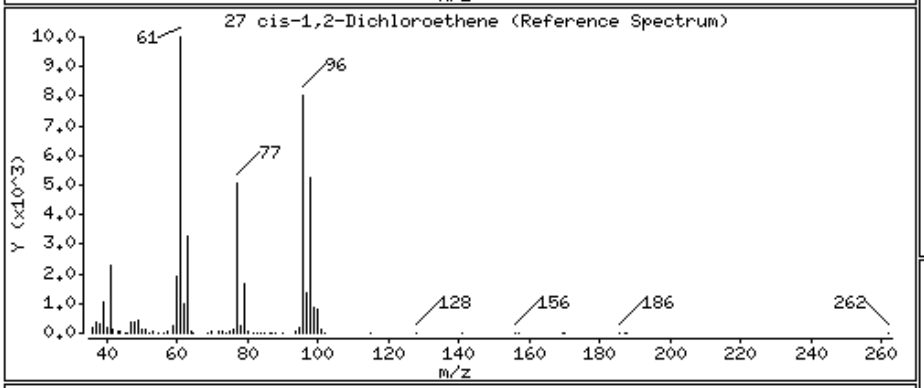
Purge Volume: 5.0 Operator: PC

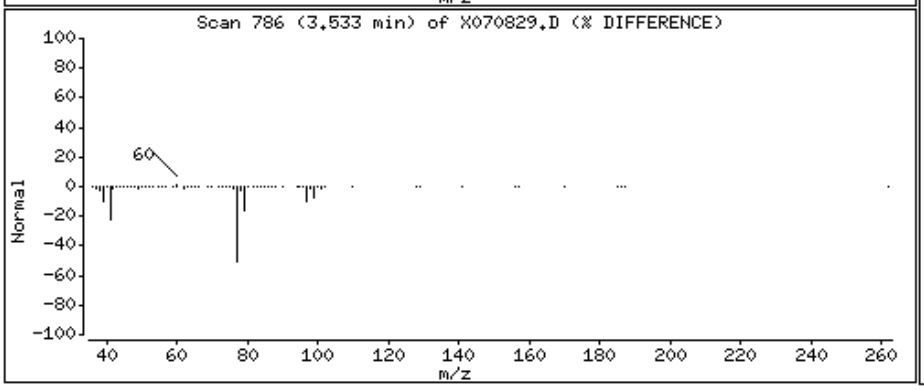
Column phase: DB624 Column diameter: 0.18

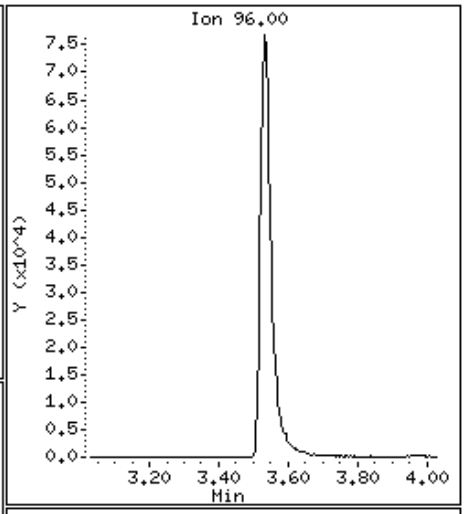
27 cis-1,2-Dichloroethene Concentration: 125.08 ug/l

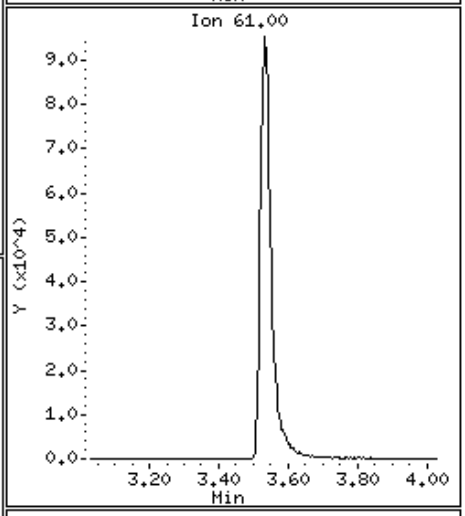


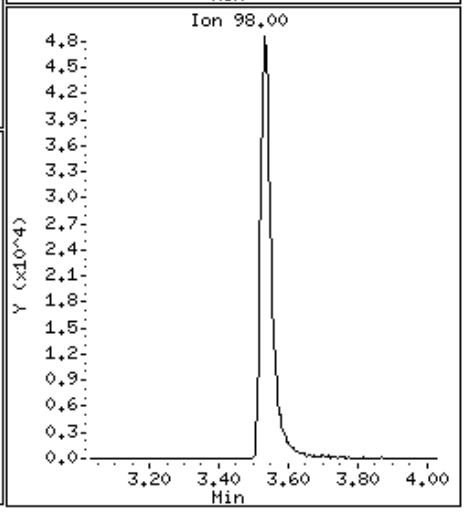












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D

Date : 08-JUL-2022 20:17

Client ID: HS22070326-11

Instrument: voa6.i

Sample Info: HS22070326-11;HS22070326-11;;;

Purge Volume: 5.0

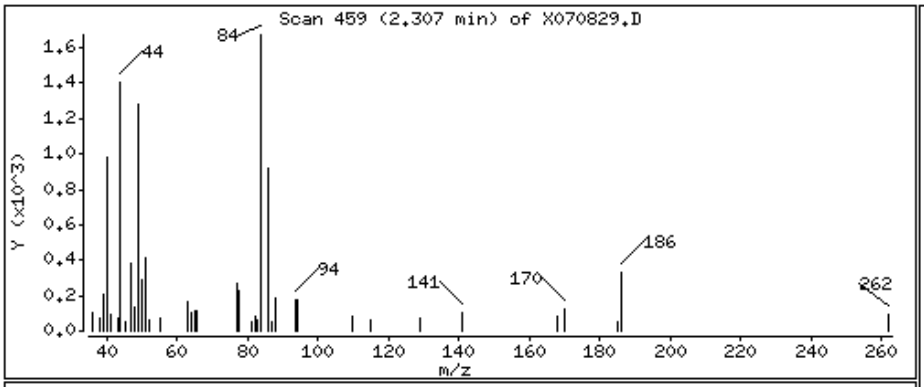
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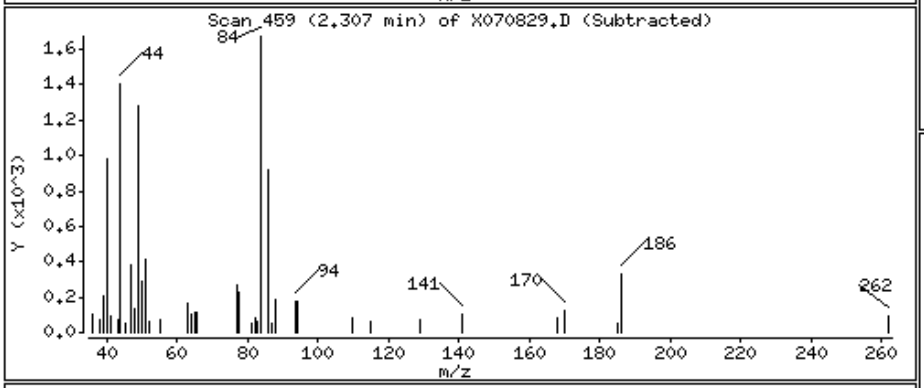
Column phase: DB624

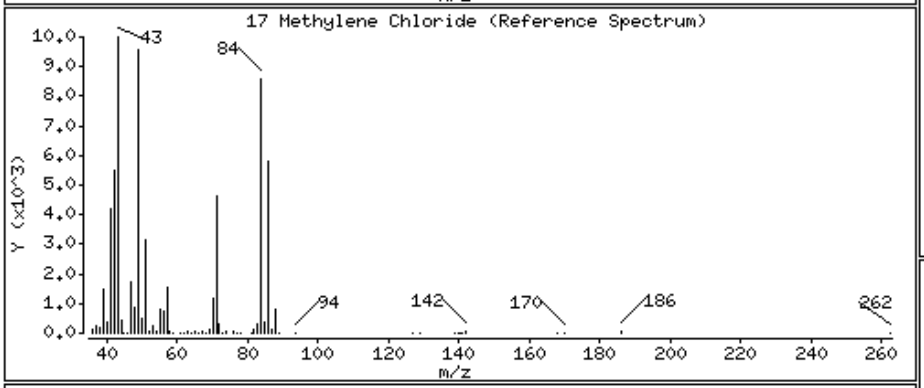
Column diameter: 0.18

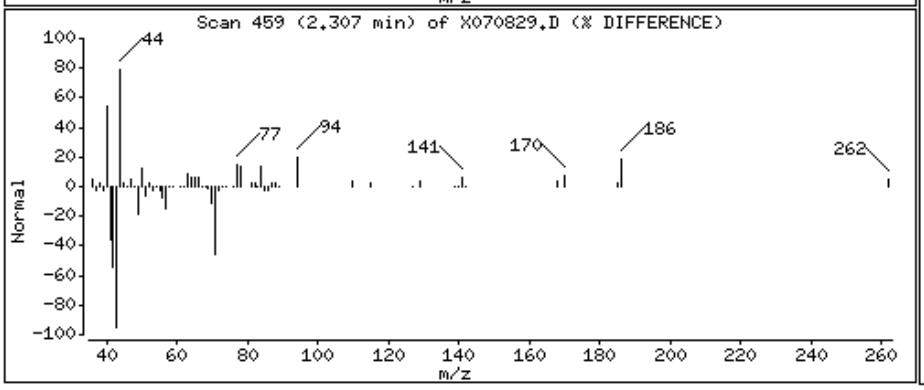
17 Methylene Chloride

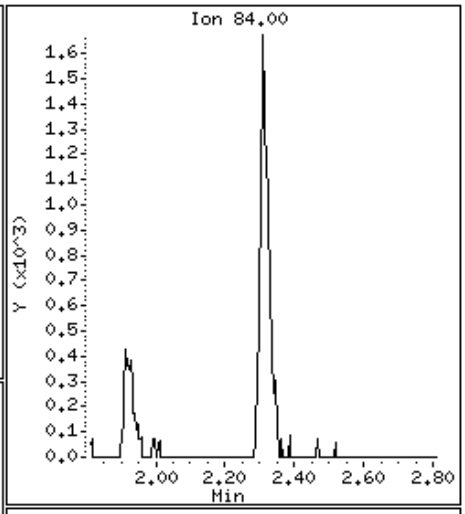
Concentration: 5.13 ug/l

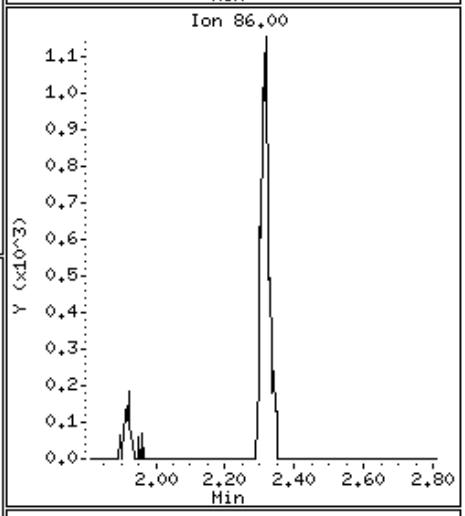


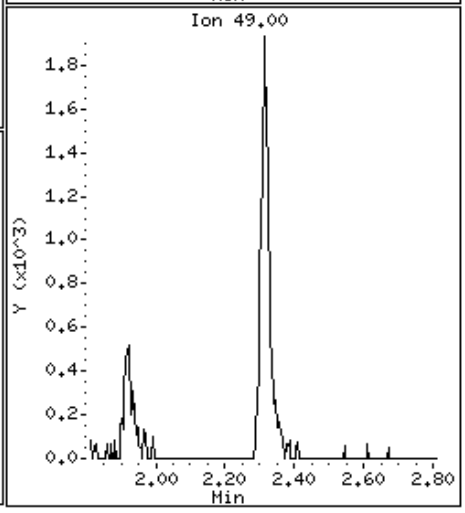












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D

Date : 08-JUL-2022 20:17

Client ID: HS22070326-11

Instrument: voa6.i

Sample Info: HS22070326-11;HS22070326-11;;;

Purge Volume: 5.0

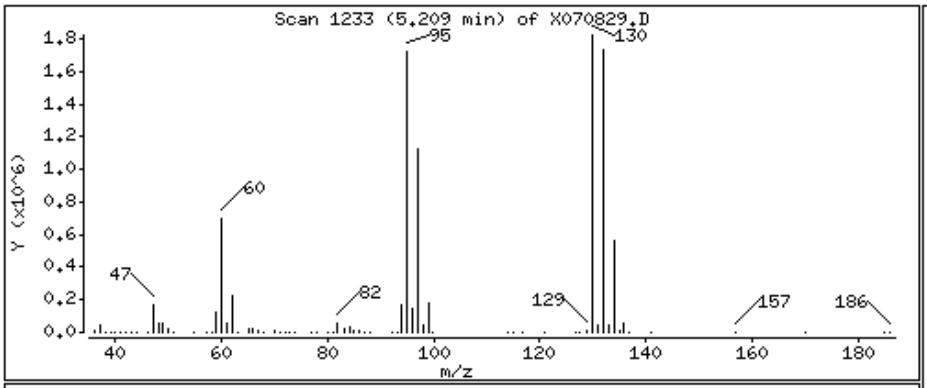
Operator: PC

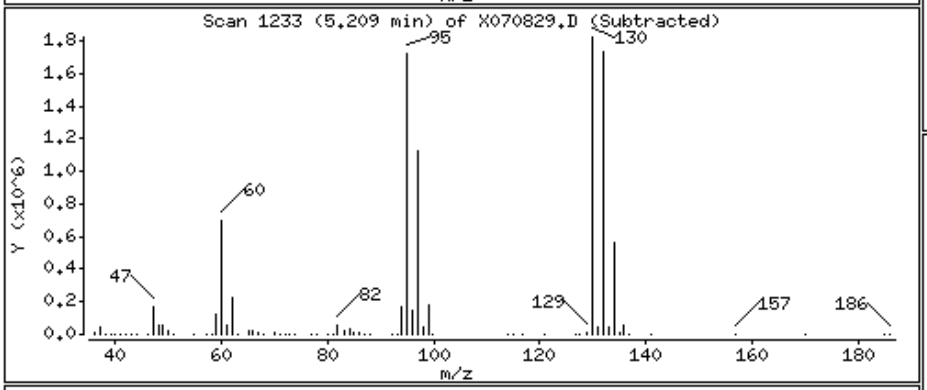
Column phase: DB624

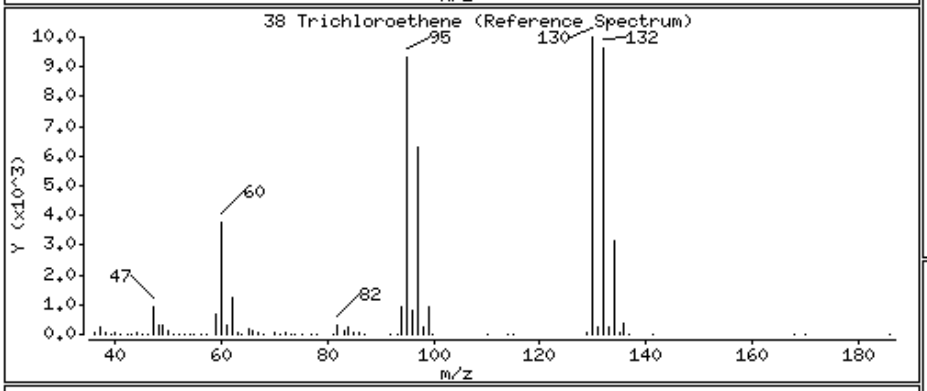
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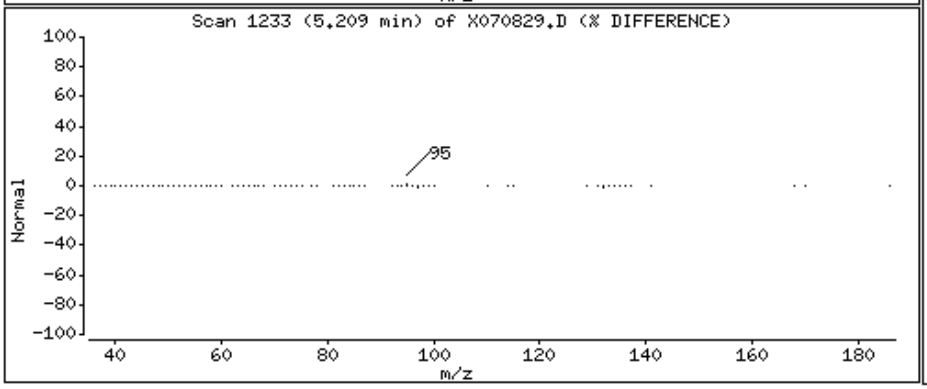
38 Trichloroethene

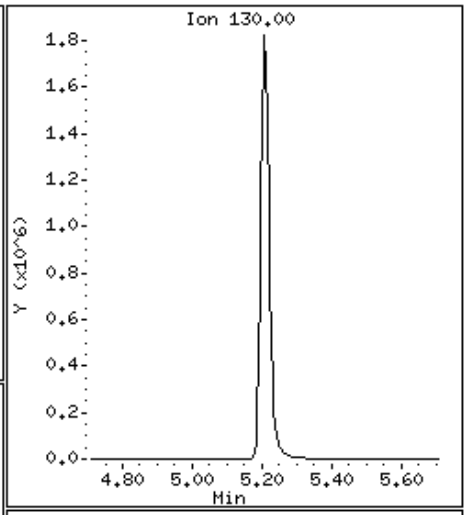
Concentration: 2537.73 ug/l

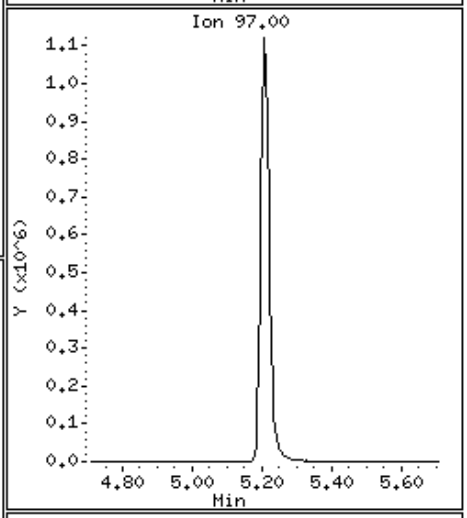


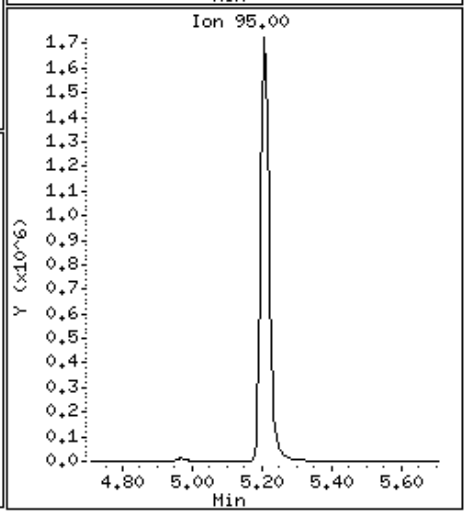












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D

Date : 08-JUL-2022 20:17

Client ID: HS22070326-11

Instrument: voa6.i

Sample Info: HS22070326-11;HS22070326-11;;;

Purge Volume: 5.0

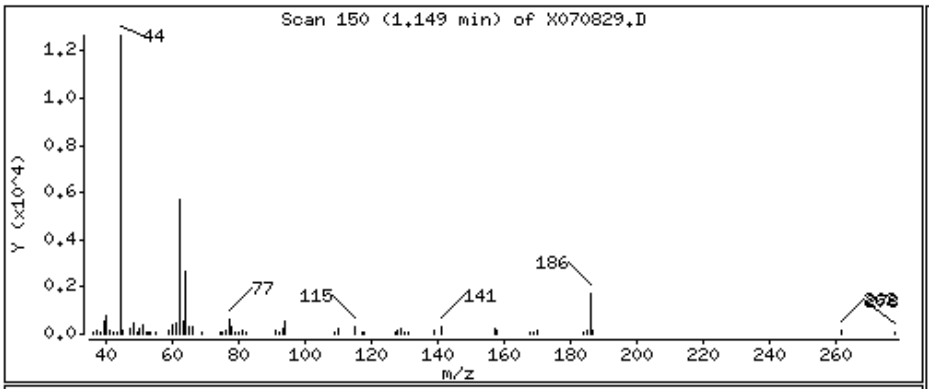
Operator: PC

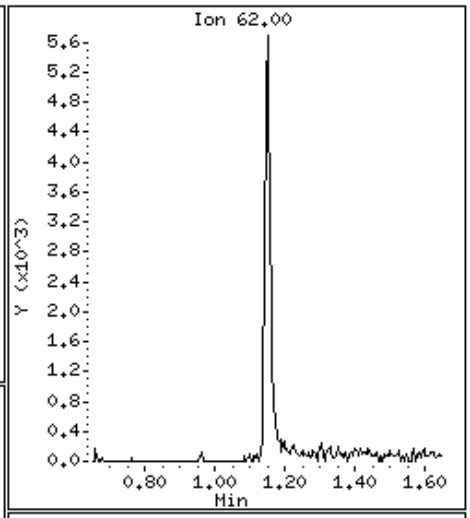
Column phase: DB624

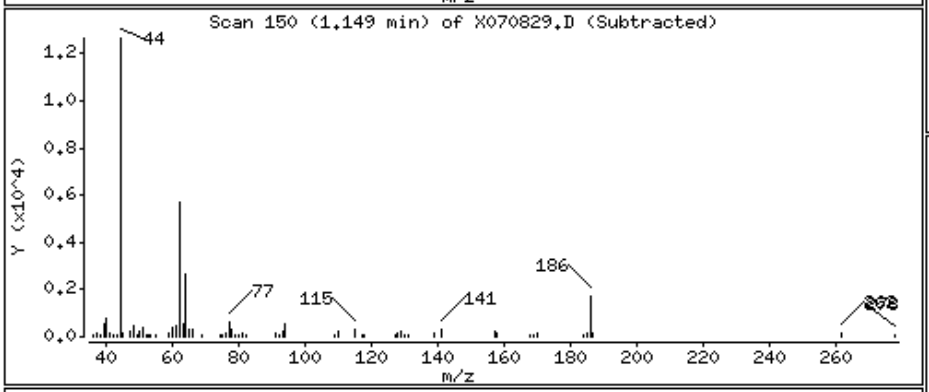
Column diameter: 0.18

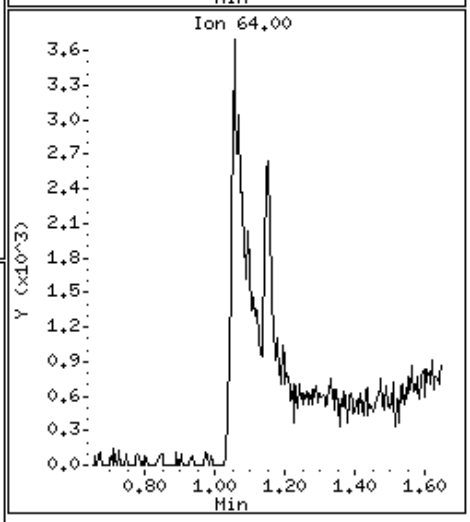
5 Vinyl Chloride

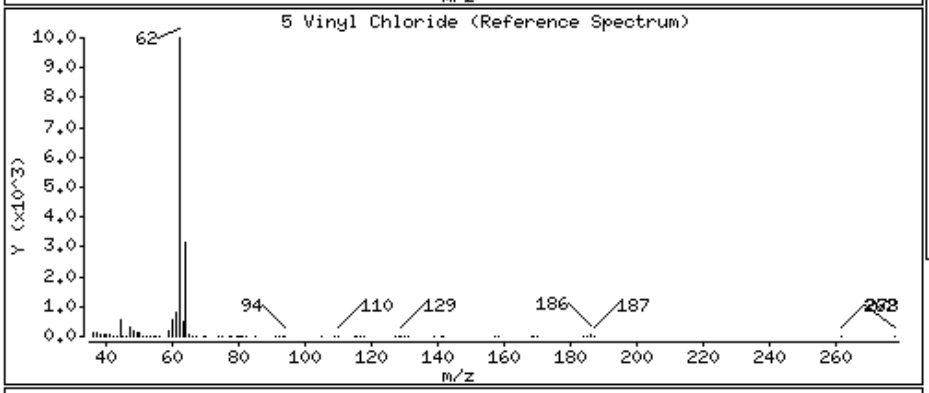
Concentration: 4.30 ug/l

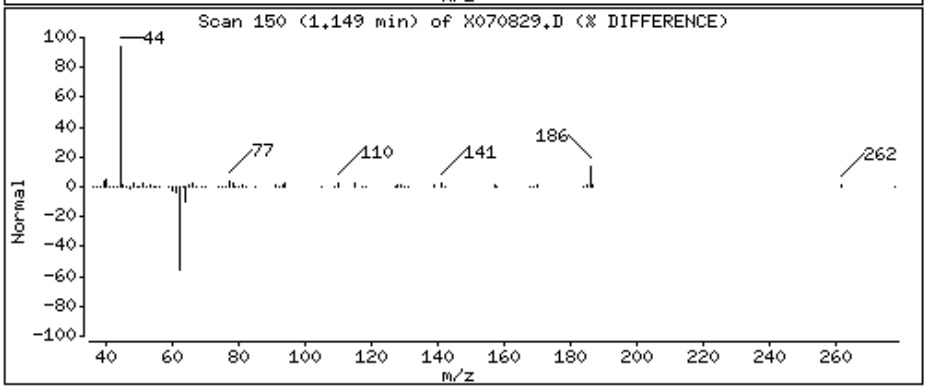












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070829.D
Inj Date : 08-JUL-2022 20:17
InstruID : voa6.i
LabSampID : HS22070326-11

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070830.D Page 1
Report Date: 19-Jul-2022 14:37

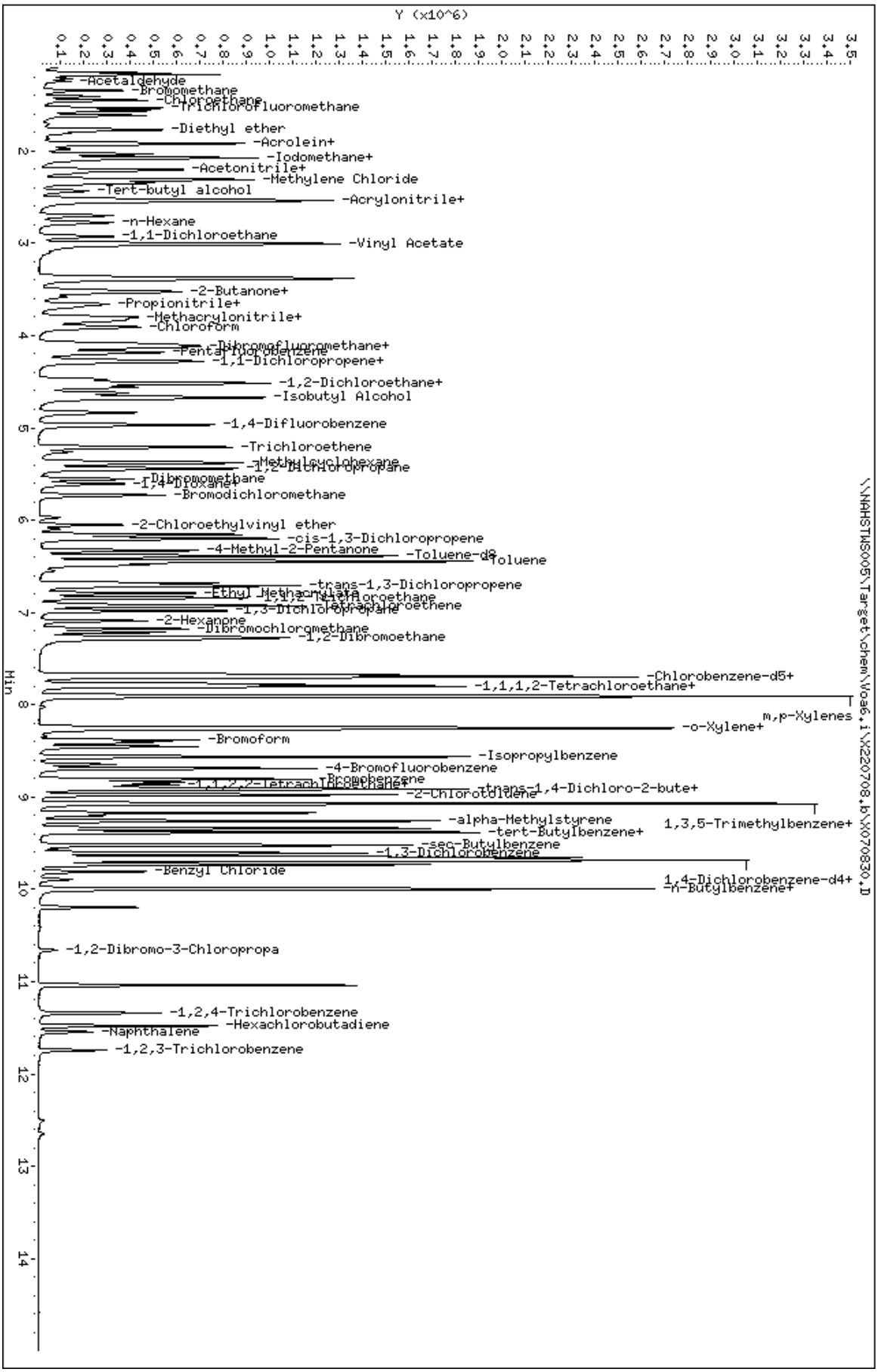
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070830.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 08-JUL-2022 20:38
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 29 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	470702	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	660870	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	724176	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.665	9.665	(1.000)	344856	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	203513	50.0000	46.07
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	330080	50.0000	52.46
$	30 Dibromofluoromethane	113	4.106	4.106	(0.981)	213853	50.0000	49.25
$	48 Toluene-d8	98	6.389	6.389	(0.833)	922012	50.0000	51.27
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	199124	50.0000	48.36
	11 1,1-Dichloroethene	96	1.917	1.917	(0.458)	181744	50.0000	40.36
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	313857	50.0000	57.30
	27 cis-1,2-Dichloroethene	96	3.529	3.529	(0.843)	228613	50.0000	41.96
	17 Methylene Chloride	84	2.311	2.311	(0.552)	223752	50.0000	41.01
	38 Trichloroethene	130	5.208	5.208	(1.048)	284964	50.0000	57.58
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	271386	50.0000	45.07


Y (x10^6)
Min
-Acetaldehyde
-Bromomethane
-Chloroethane
-Trichlorofluoromethane
-Diethyl ether
-Acrolein+
-Iodomethane+
-Acetonitrile+
-Methylene Chloride
-Tert-butyl alcohol
-Acrylonitrile+
-n-Hexane
-1,1-Dichloroethane
-Vinyl Acetate
-2-Butanone+
-Propionitrile+
-Methacrylonitrile+
-Chloroform
-Dibromofluoromethane+
-Pentafluorobenzene
-1,1-Dichloropropene+
-1,2-Dichloroethane+
-Isobutyl Alcohol
-1,4-Difluorobenzene
-Trichloroethene
-Methylcyclohexane
-1,2-Dichloropropane
-Dibromomethane
-1,4-Dioxane+
-Bromodichloromethane
-2-Chloroethylvinyl ether
-cis-1,3-Dichloropropene
-4-Methyl-2-Pentanone
-Toluene-d8
-Toluene
-trans-1,3-Dichloropropene
-Ethyl Methacrylate
-1,1,2-Trichloroethane
-Tetrachloroethene
-1,3-Dichloropropane
-2-Hexanone
-Dibromochloromethane
-1,2-Dibromoethane
-Chlorobenzene-d5+
-1,1,1,2-Tetrachloroethane+
m,p-Xylenes
-o-Xylene+
-Bromoform
-Isopropylbenzene
-4-Bromofluorobenzene
-Bromobenzene
-1,1,2,2-Tetrachloroethane+
-trans-1,4-Dichloro-2-bute+
-2-Chlorotoluene
-alpha-Methylstyrene
1,3,5-Trimethylbenzene+
-tert-Butylbenzene+
-sec-Butylbenzene
-1,3-Dichlorobenzene
-Benzyl Chloride
1,4-Dichlorobenzene-d4+
-n-Butylbenzene+
-1,2-Dibromo-3-Chloropropa
-1,2,4-Trichlorobenzene
-Hexachlorobutadiene
-Naphthalene
-1,2,3-Trichlorobenzene
\\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070830.D
Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070830.D
Date : 08-JUL-2022 20:38
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624
Instrument: voa6.i
Operator: PC
Column diameter: 0.18
Page 1

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220708.b\X070830.D
Inj Date : 08-JUL-2022 20:38
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

right solutions.
right partner.

Raw Data VOA6 412669

Volatiles Organics by Method 8260C

Wokorder

HS22070326

Client

Aptim Environmental & Infrastucture, Inc.

Project

LHAAP 16 July 2022

07/20/2022

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071101.D Page 1
Report Date: 11-Jul-2022 21:12

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071101.D
Lab Smp Id: BFB Client Smp ID: BFB
Inj Date : 11-JUL-2022 10:23
Operator : PC Inst ID: voa6.i
Smp Info : BFB;BFB;3;;BFB
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\bfb.m
Meth Date : 14-Jun-2022 12:47 Linh.Pham Quant Type: ISTD
Cal Date : Cal File:
Als bottle: 1 QC Sample: BFB
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 4.14 Sample Matrix: WATER
Processing Host: NAHSTW7051

Concentration Formula: Amt * DF * Uf * Vf * Vi * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vf	1.000	Volumetric correction factor
Vi	2.000	Injection Volume
Cpnd Variable		Local Compound Variable

					CONCENTRATIONS ON-COL (ug/L)	FINAL (ug/l)	TARGET RANGE	RATIO
1 bfb							CAS #: 460-00-4	
8.695	8.889	(0.000)	95	31944			0.00- 100.00	100.00
8.695	8.889	(0.000)	50	5218			15.00- 40.00	16.33
8.695	8.889	(0.000)	75	15000			30.00- 60.00	46.96
8.695	8.889	(0.000)	96	2128			5.00- 9.00	6.66
8.695	8.889	(0.000)	173	194			0.00- 2.00	0.70
8.695	8.889	(0.000)	174	27592			50.00- 0.00	86.38
8.695	8.889	(0.000)	175	1991			5.00- 9.00	7.22
8.695	8.889	(0.000)	176	27664			95.00- 101.00	100.26
8.695	8.889	(0.000)	177	1853			5.00- 9.00	6.70

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.33
75	30.00 - 60.00% of mass 95	46.96
96	5.00 - 9.00% of mass 95	6.66
173	Less than 2.00% of mass 174	0.61 (0.70)
174	Greater than 50.00% of mass 95	86.38
175	5.00 - 9.00% of mass 174	6.23 (7.22)
176	95.00 - 101.00% of mass 174	86.60 (100.26)
177	5.00 - 9.00% of mass 176	5.80 (6.70)

Data File: X071101.D
Spectrum: Scan 2161 (8.69)
Location of Maximum: 95.00
Number of points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	283	61.00	1251	85.20	99	119.00	191
37.00	1291	62.00	1109	86.00	108	127.90	303
38.10	937	63.10	1013	87.00	1483	128.90	146
39.00	1180	63.90	187	88.00	1978	129.80	135
40.00	1120	65.10	257	91.00	199	141.00	514
40.90	609	66.00	146	92.00	770	141.80	99
42.10	1727	67.20	75	93.00	1367	142.80	181
43.10	756	68.00	2961	94.00	3534	148.00	108
44.00	860	69.00	4144	95.00	31944	149.80	63
45.00	410	70.10	1098	96.00	2128	154.90	214
47.10	446	71.00	226	96.90	223	157.00	162
47.80	199	71.90	221	98.20	1204	160.60	70
49.10	1113	73.00	1370	99.10	69	169.90	149
50.10	5218	74.10	5419	104.10	94	170.70	51
51.00	2140	75.10	15000	105.00	141	173.00	194
52.10	115	76.10	1313	106.10	164	173.90	27592
52.90	198	77.20	389	106.80	73	175.00	1991
53.90	117	77.90	405	108.70	82	175.90	27664
54.20	113	78.80	683	110.10	55	176.90	1853
55.00	3082	80.00	298	114.90	234	184.80	55
56.10	722	80.90	774	116.00	263	186.00	514
57.00	1156	81.80	236	116.70	251	262.10	174
58.00	263	83.00	328	117.60	70	277.90	175
60.00	184	84.90	121	118.10	137		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071101.D Page 1

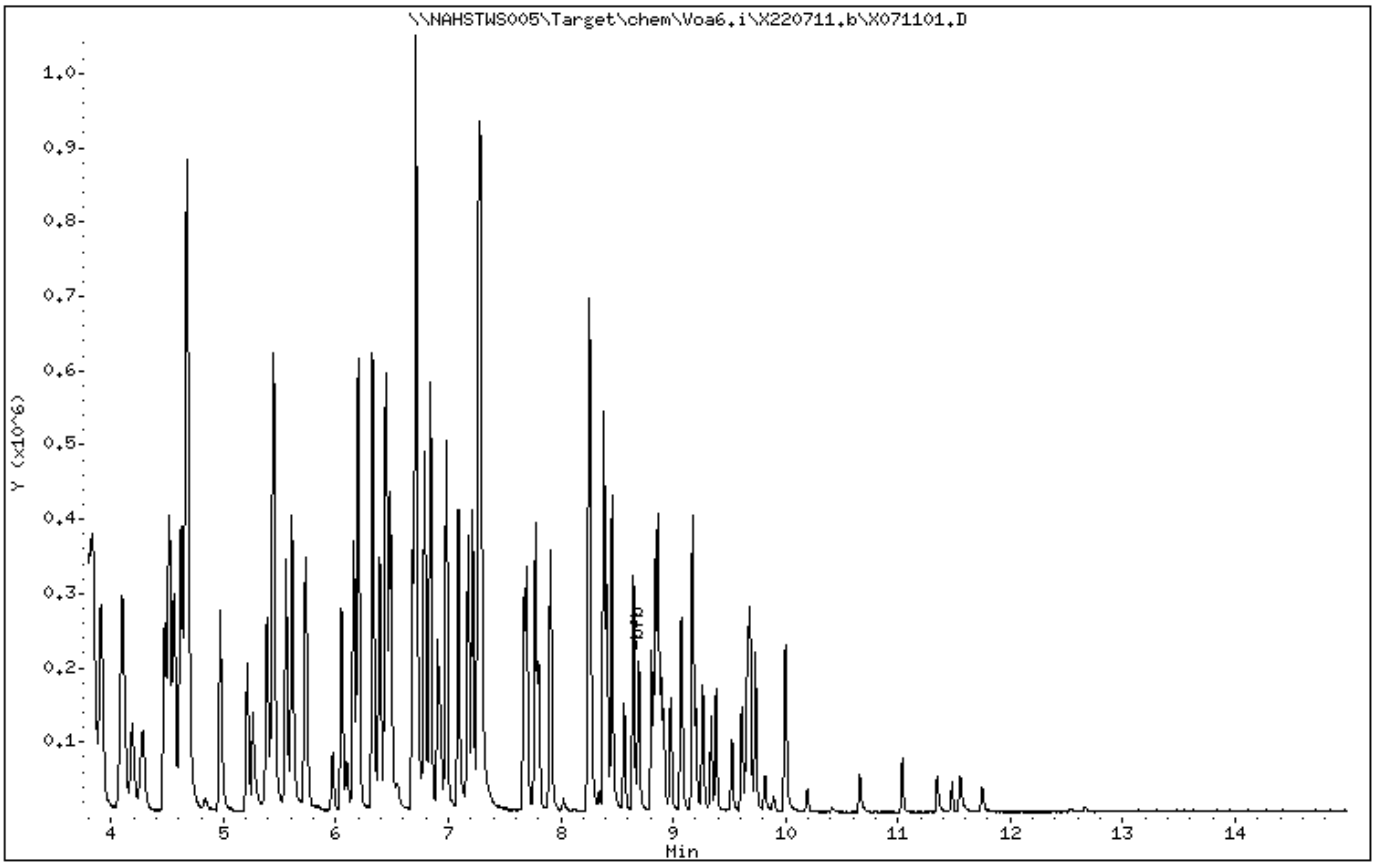
Date : 11-JUL-2022 10:23

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071101.D Page 2

Date : 11-JUL-2022 10:23

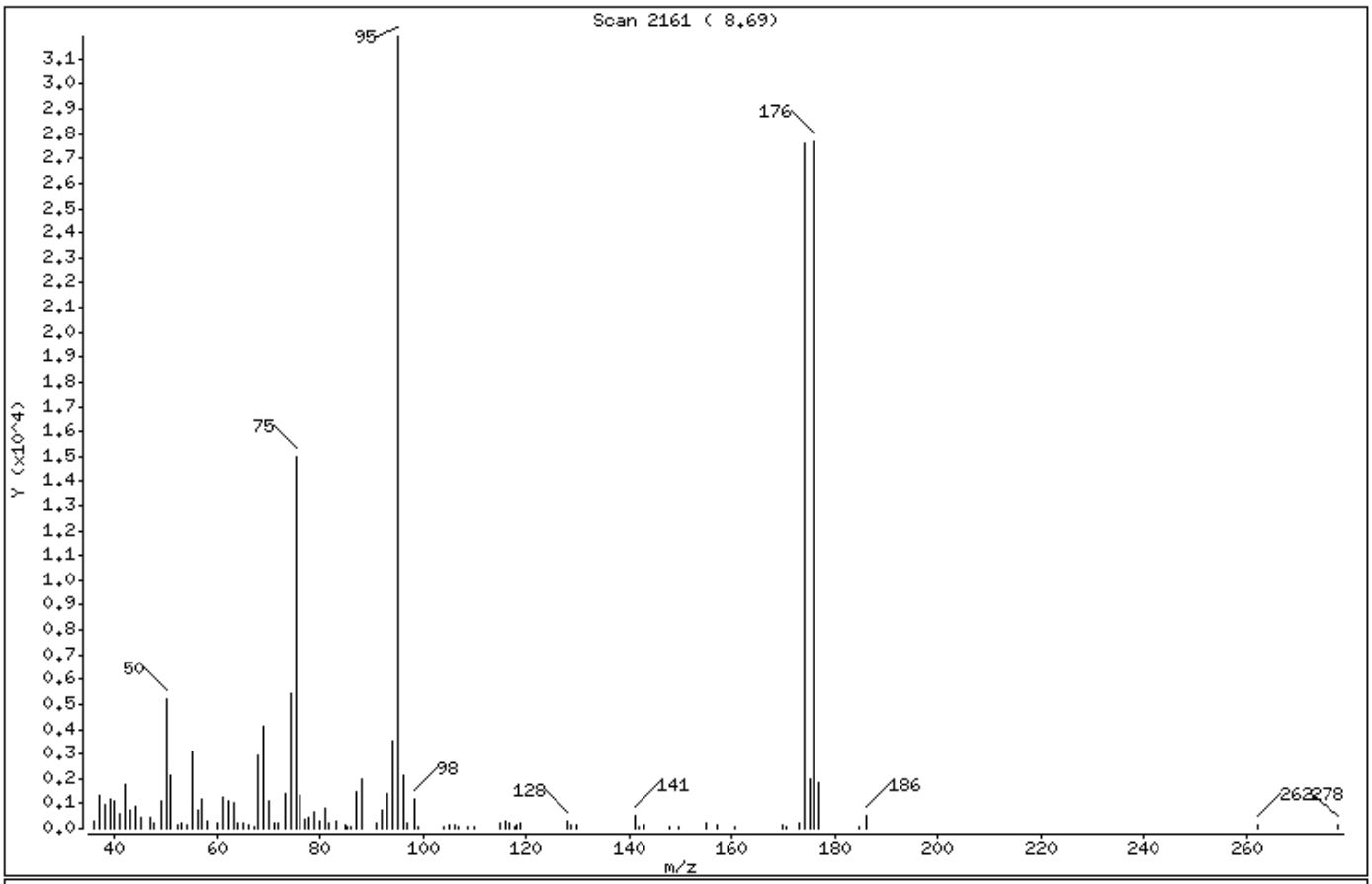
Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.33
75	30.00 - 60.00% of mass 95	46.96
96	5.00 - 9.00% of mass 95	6.66
173	Less than 2.00% of mass 174	0.61 (0.70)
174	Greater than 50.00% of mass 95	86.38
175	5.00 - 9.00% of mass 174	6.23 (7.22)
176	95.00 - 101.00% of mass 174	86.60 (100.26)
177	5.00 - 9.00% of mass 176	5.80 (6.70)

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071101.D Page 3

Date : 11-JUL-2022 10:23

Client ID: BFB Instrument: voa6.i

Sample Info: BFB;BFB;3;;BFB

Volume Injected (uL): 2.0 Operator: PC

Column phase: DB624 Column diameter: 0.25

Data File: X071101.D
Spectrum: Scan 2161 (8.69)
Location of Maximum: 95.00
Number of points: 95

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.90	283	61.00	1251	85.20	99	119.00	191
37.00	1291	62.00	1109	86.00	108	127.90	303
38.10	937	63.10	1013	87.00	1483	128.90	146
39.00	1180	63.90	187	88.00	1978	129.80	135
40.00	1120	65.10	257	91.00	199	141.00	514
40.90	609	66.00	146	92.00	770	141.80	99
42.10	1727	67.20	75	93.00	1367	142.80	181
43.10	756	68.00	2961	94.00	3534	148.00	108
44.00	860	69.00	4144	95.00	31944	149.80	63
45.00	410	70.10	1098	96.00	2128	154.90	214
47.10	446	71.00	226	96.90	223	157.00	162
47.80	199	71.90	221	98.20	1204	160.60	70
49.10	1113	73.00	1370	99.10	69	169.90	149
50.10	5218	74.10	5419	104.10	94	170.70	51
51.00	2140	75.10	15000	105.00	141	173.00	194
52.10	115	76.10	1313	106.10	164	173.90	27592
52.90	198	77.20	389	106.80	73	175.00	1991
53.90	117	77.90	405	108.70	82	175.90	27664
54.20	113	78.80	683	110.10	55	176.90	1853
55.00	3082	80.00	298	114.90	234	184.80	55
56.10	722	80.90	774	116.00	263	186.00	514
57.00	1156	81.80	236	116.70	251	262.10	174
58.00	263	83.00	328	117.60	70	277.90	175
60.00	184	84.90	121	118.10	137		

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071102.D Page 1
Report Date: 19-Jul-2022 14:37

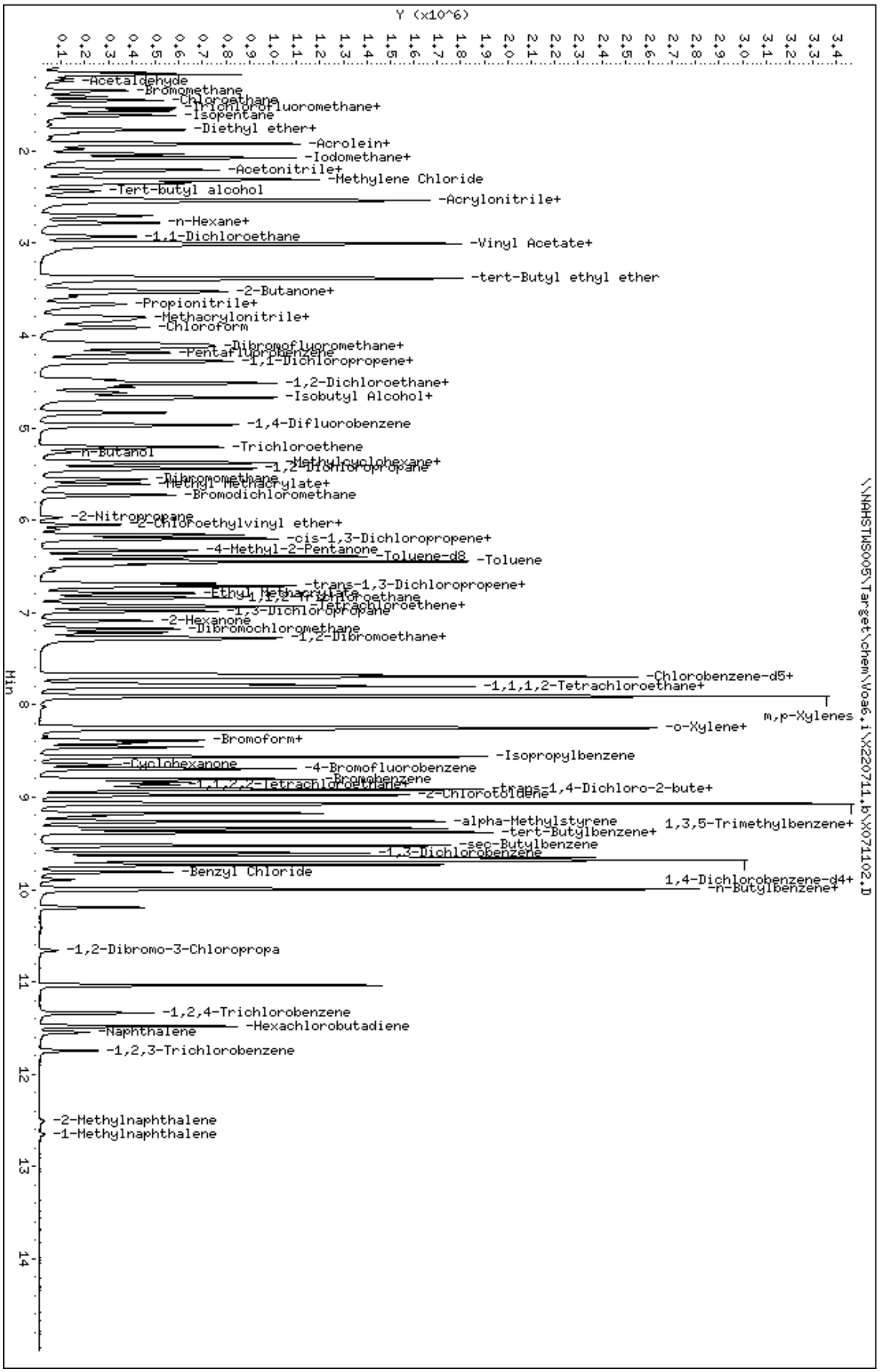
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071102.D
Lab Smp Id: CCV Client Smp ID: CCV
Inj Date : 11-JUL-2022 10:44
Operator : PC Inst ID: voa6.i
Smp Info : CCV;CCV;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	475235	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	720542	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	648777	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	320895	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	231330	50.0000	52.01
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	308996	50.0000	54.83
$	30 Dibromofluoromethane	113	4.102	4.102	(0.980)	224399	50.0000	51.20
$	48 Toluene-d8	98	6.389	6.389	(0.833)	842622	50.0000	52.30
	53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	187121	50.0000	50.73
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	215816	50.0000	47.46
	33 1,2-Dichloroethane	62	4.556	4.556	(0.917)	306141	50.0000	51.27
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	274973	50.0000	49.99
	17 Methylene Chloride	84	2.307	2.307	(0.551)	261434	50.0000	47.36
	38 Trichloroethene	130	5.208	5.208	(1.048)	273336	50.0000	50.65
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	293093	50.0000	48.21



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220711.b\X071102.D
Date : 11-JUL-2022 10:44
Client ID: CCV
Sample Info: CCV;CCV;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071102.D
Inj Date : 11-JUL-2022 10:44
InstruID : voa6.i
LabSampID : CCV

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071104.D Page 1
Report Date: 11-Jul-2022 21:13

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071104.D
Lab Smp Id: CCB Client Smp ID: CCB
Inj Date : 11-JUL-2022 11:26
Operator : PC Inst ID: voa6.i
Smp Info : CCB;CCB;;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\nahstws005\Target\chem\voa6.i\X220711.b\8260W.m
Meth Date : 11-Jul-2022 21:09 pcabasca Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 8260_GB.sub
Target Version: 4.14
Processing Host: NAHSTWS005

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	613824	50.0000	
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	264606	46.7200	46.72
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	276381	48.0302	48.03
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	863023	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	745185	50.0000	
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1021366	55.1952	55.19
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	322907	49.8656	49.86
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	319010	50.0000	

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071105.D Page 1
Report Date: 19-Jul-2022 14:37

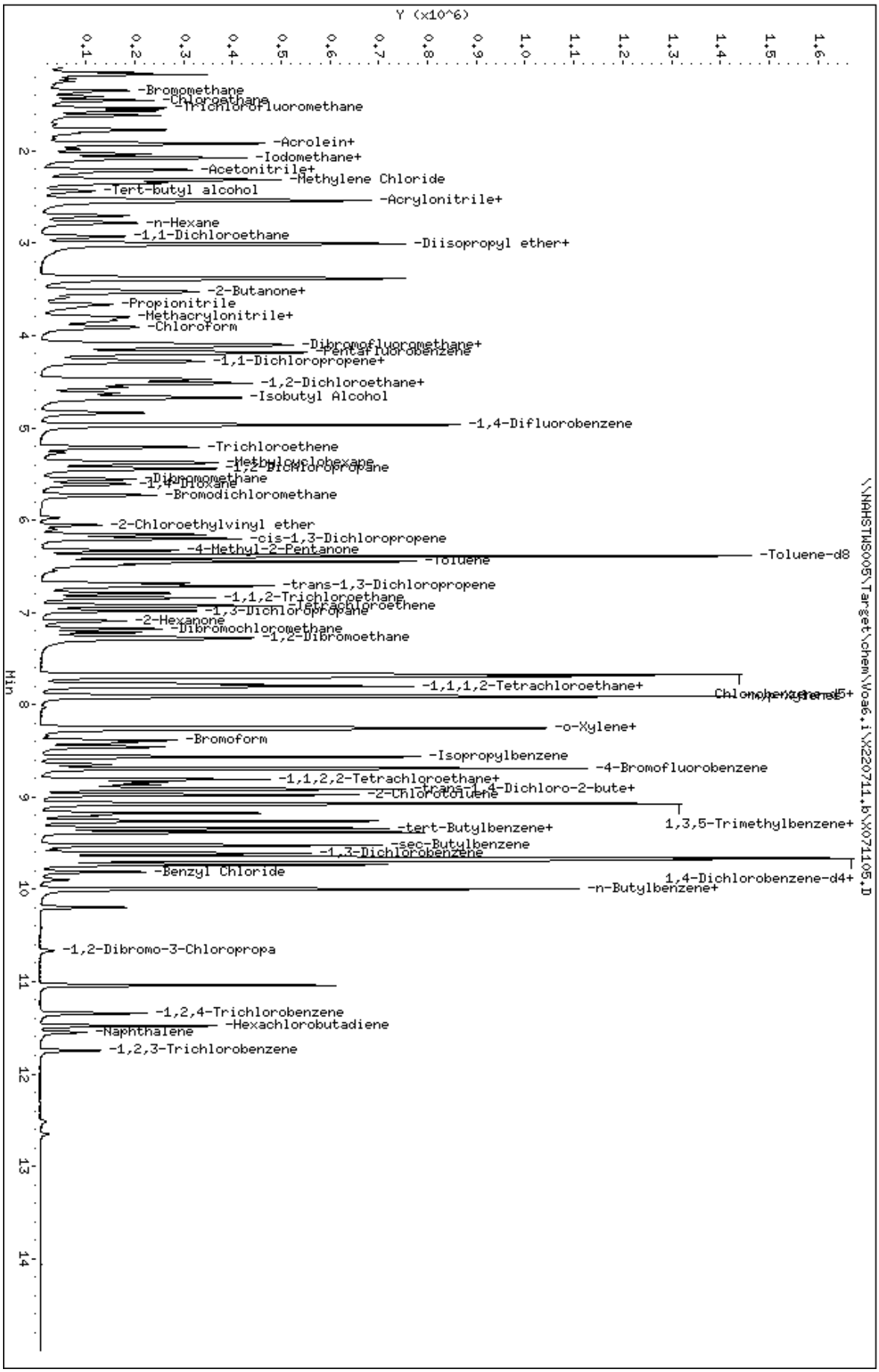
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071105.D
Lab Smp Id: VLCSW-220711 Client Smp ID: VLCSW-220711
Inj Date : 11-JUL-2022 11:47
Operator : PC Inst ID: voa6.i
Smp Info : VLCSW-220711;VLCSW-220711;3;;LCS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 5 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.189	4.185	(1.000)	489965	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	742577	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	680971	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	327233	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.068)	252534	55.1490	55.14
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	318475	53.8438	53.84
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.979)	244853	54.2073	54.20
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	891965	52.7477	52.74
53 1,1,2-Trichloroethane	83	6.839	6.843	(0.892)	79502	20.5353	20.53
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	86811	18.5205	18.52
33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	134994	21.9373	21.93
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.843)	115704	20.4029	20.40
17 Methylene Chloride	84	2.311	2.307	(0.552)	109532	19.6176	19.61
38 Trichloroethene	130	5.212	5.208	(1.049)	115451	20.7615	20.76
5 Vinyl Chloride	62	1.149	1.149	(0.274)	112842	18.0062	18.00



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071105.D
Date : 11-JUL-2022 11:47
Client ID: VLCSW-220711
Sample Info: VLCSW-220711;VLCSW-220711;3;;LCS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071105.D
Inj Date : 11-JUL-2022 11:47
InstruID : voa6.i
LabSampID : VLCSW-220711

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071107.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071107.D
Lab Smp Id: VBLKW-220711 Client Smp ID: VBLKW-220711
Inj Date : 11-JUL-2022 12:29
Operator : PC Inst ID: voa6.i
Smp Info : VBLKW-220711;VBLKW-220711;3;;BLANK
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 7 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

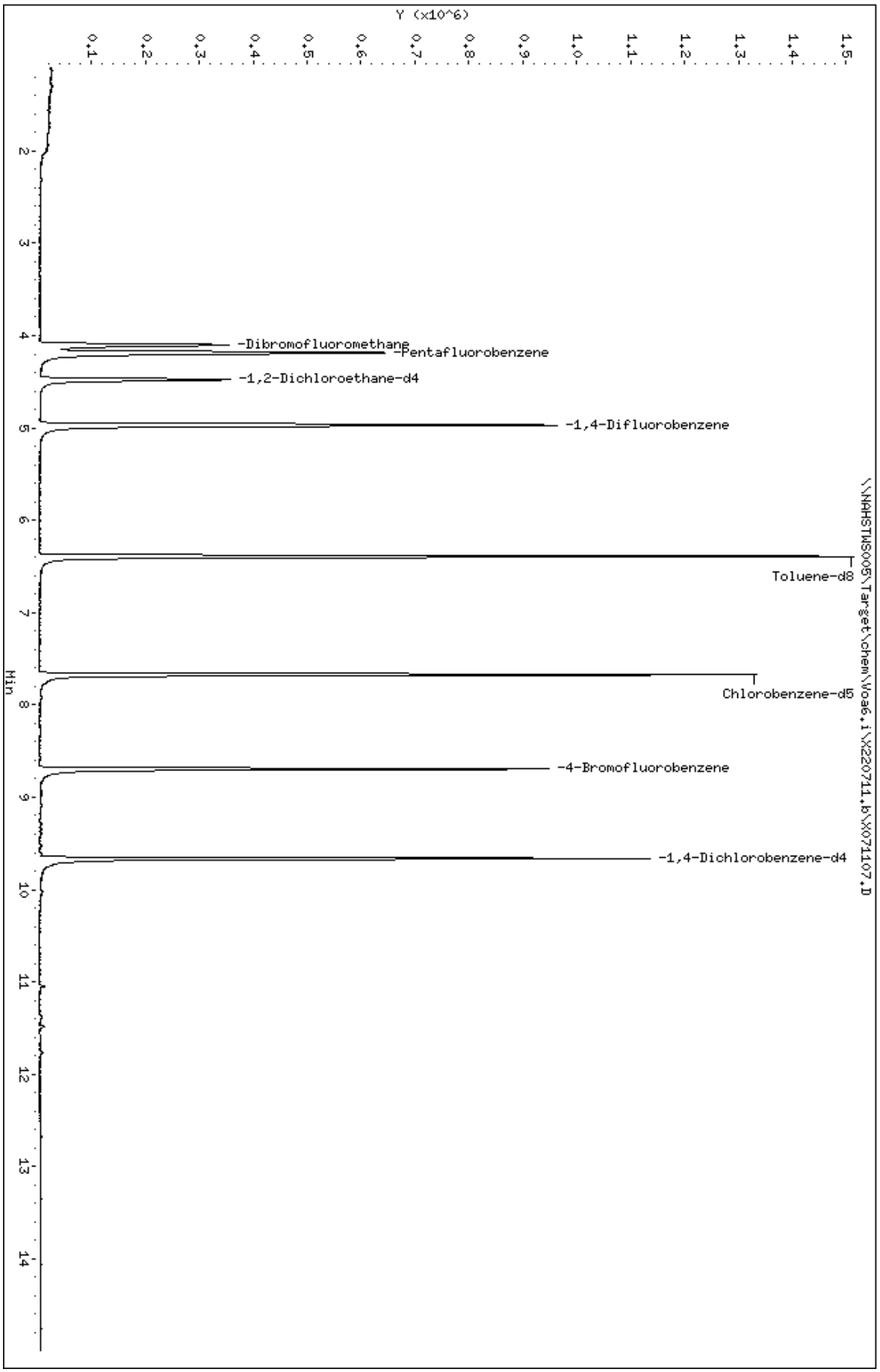
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	590809	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	838777	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	706017	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.666	9.662	(1.000)	311322	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.478	4.474	(1.070)	267757	48.3518	48.35
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	312896	51.0074	51.00
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	259286	47.5693	47.56
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	969855	55.3192	55.31

Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220711.b\X071107.D
Date : 11-JUL-2022 12:29
Client ID: VBLKW-220711
Sample Info: VBLKW-220711;VBLKW-220711;3;;BLANK
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18



Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071107.D
Inj Date : 11-JUL-2022 12:29
InstruID : voa6.i
LabSampID : VBLKW-220711

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D
Lab Smp Id: HS22070326-06 Client Smp ID: HS22070326-06
Inj Date : 11-JUL-2022 13:32
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-06;HS22070326-06;;;
Misc Info : HS22052000V6;WATER;0;100;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 10
Dil Factor: 100.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

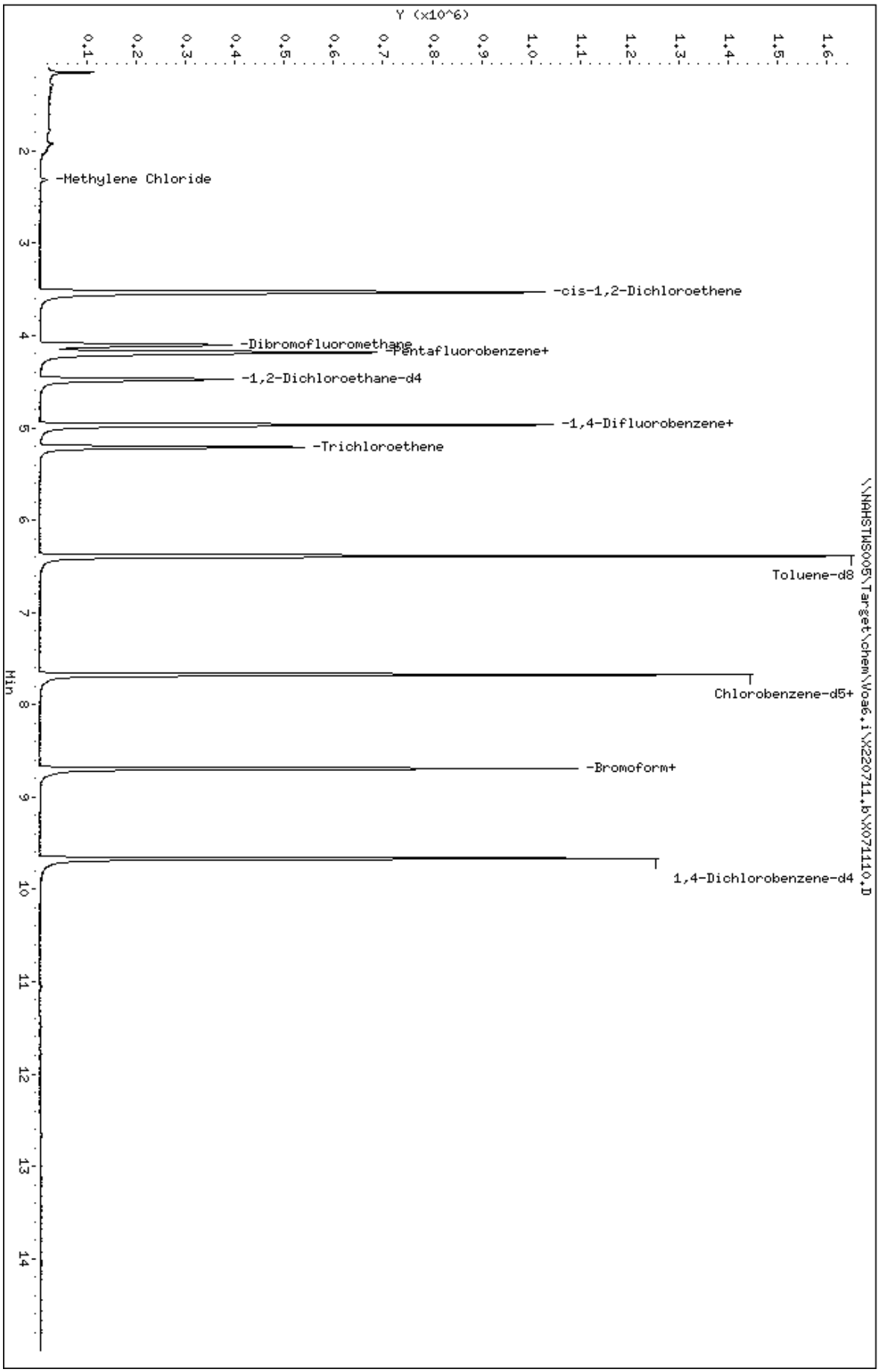
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	100.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	627399	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	892884	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	773271	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	343906	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.477	4.474	(1.070)	292115	49.7059	49.70
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	345755	51.4646	51.46
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	278378	48.0967	48.09
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1049131	54.6364	54.63
27 cis-1,2-Dichloroethene	96	3.529	3.533	(0.843)	548443	75.5258	7552.58
17 Methylene Chloride	84	2.311	2.307	(0.552)	6438	1.49726	149.72(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	193101	28.8797	2887.96
5 Vinyl Chloride	62	1.149	1.149	(0.275)	57496	7.16489	716.48

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D
Date : 11-JUL-2022 13:32
Client ID: HS220703Z6-06
Sample Info: HS220703Z6-06;HS220703Z6-06;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D Page 2

Date : 11-JUL-2022 13:32

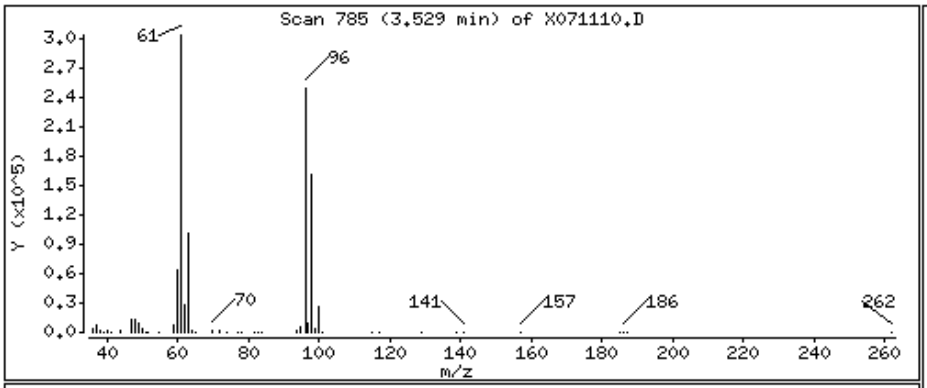
Client ID: HS22070326-06 Instrument: voa6.i

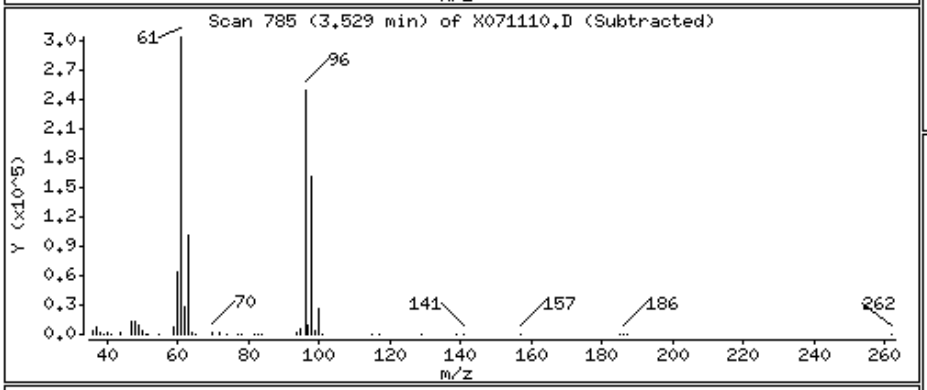
Sample Info: HS22070326-06;HS22070326-06;;;

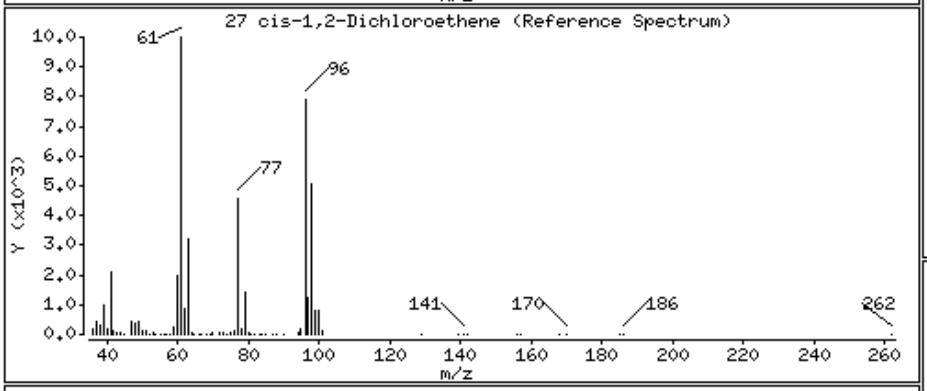
Purge Volume: 5.0 Operator: PC

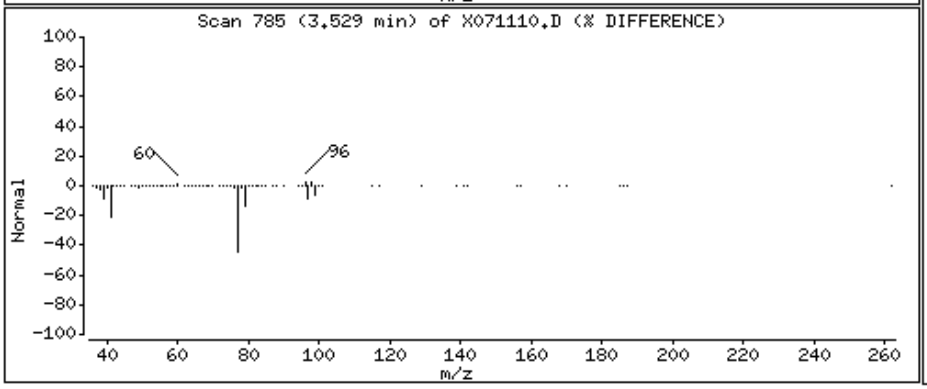
Column phase: DB624 Column diameter: 0.18

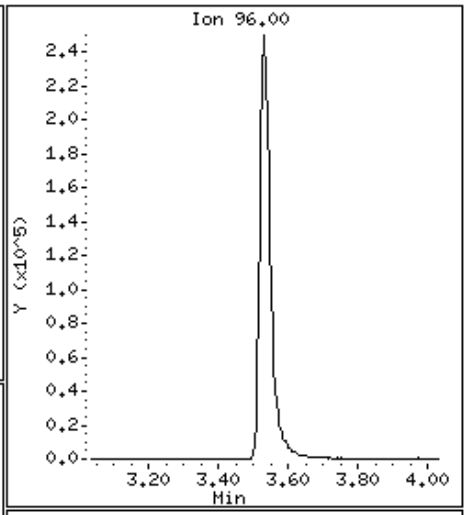
27 cis-1,2-Dichloroethene Concentration: 7552.58 ug/l

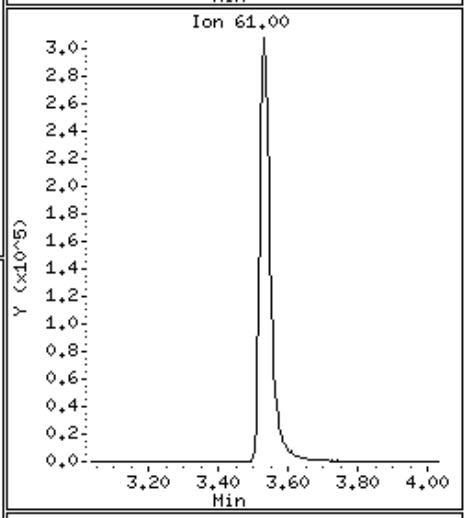


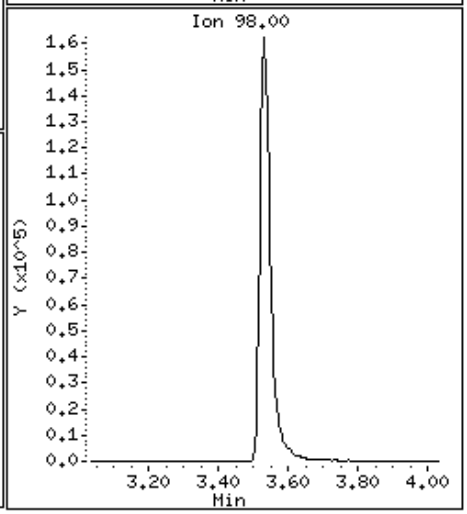












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D Page 3

Date : 11-JUL-2022 13:32

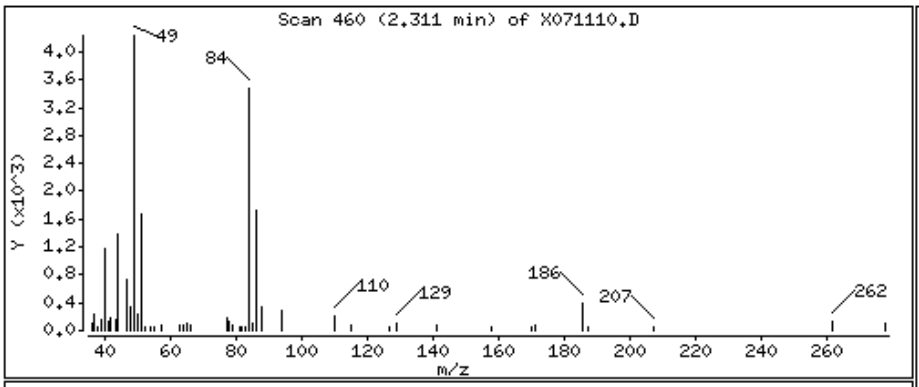
Client ID: HS22070326-06 Instrument: voa6.i

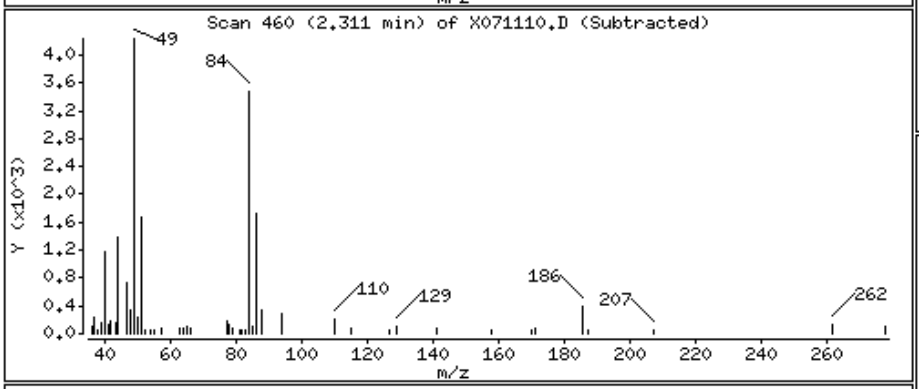
Sample Info: HS22070326-06;HS22070326-06;;;

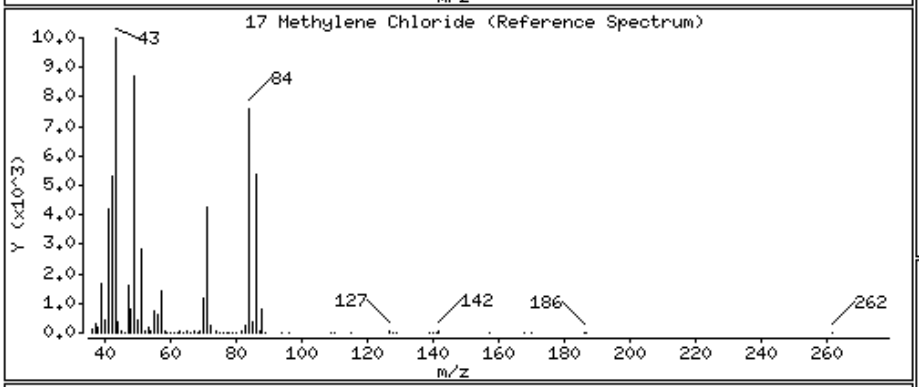
Purge Volume: 5.0 Operator: PC

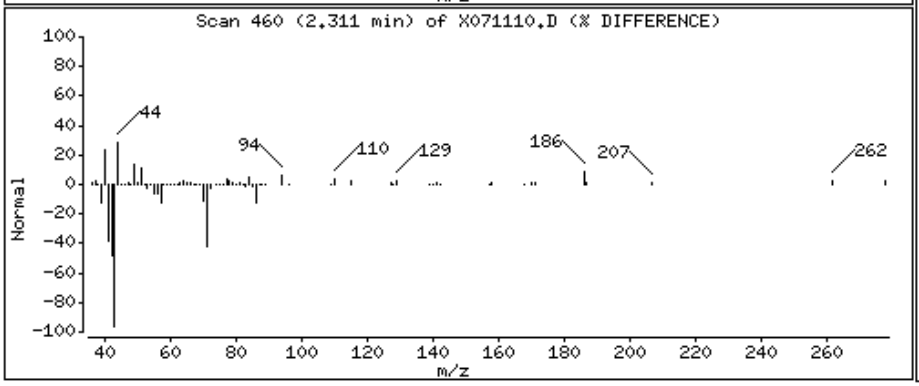
Column phase: DB624 Column diameter: 0.18

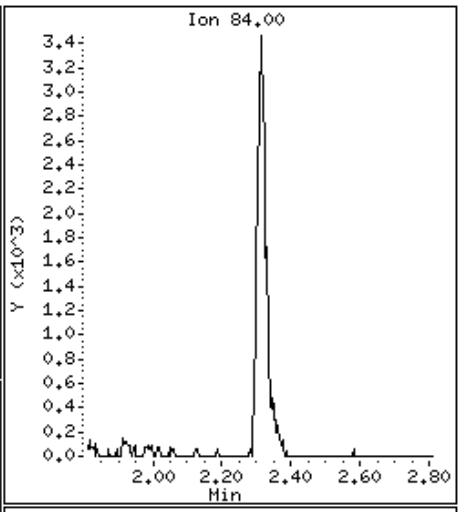
17 Methylene Chloride Concentration: 149.72 ug/l

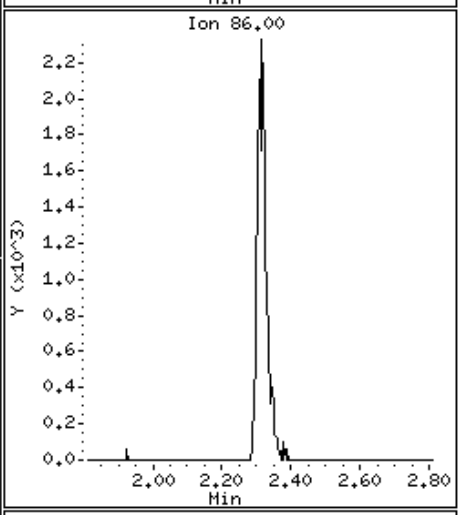


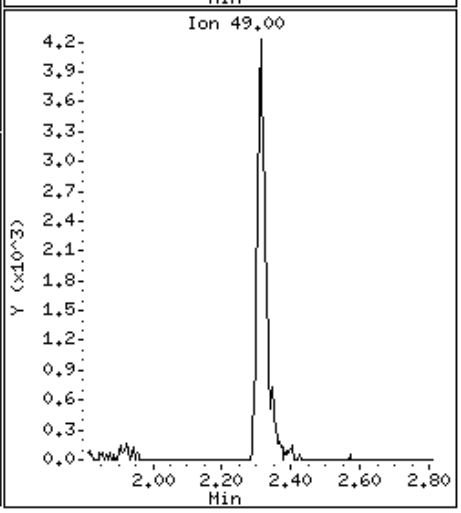












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D Page 4

Date : 11-JUL-2022 13:32

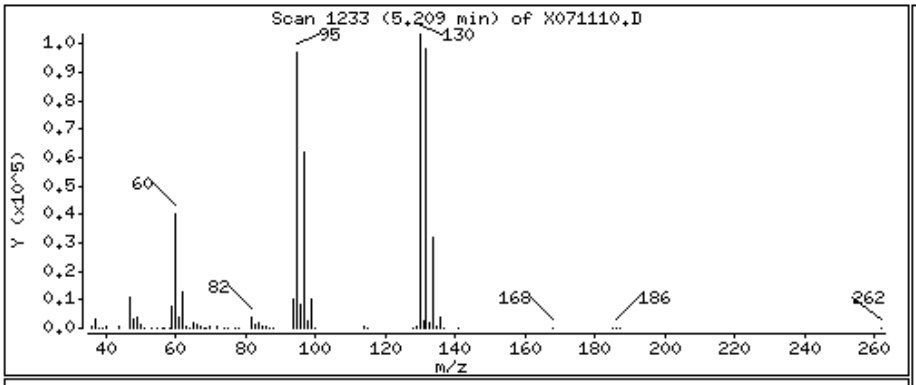
Client ID: HS22070326-06 Instrument: voa6.i

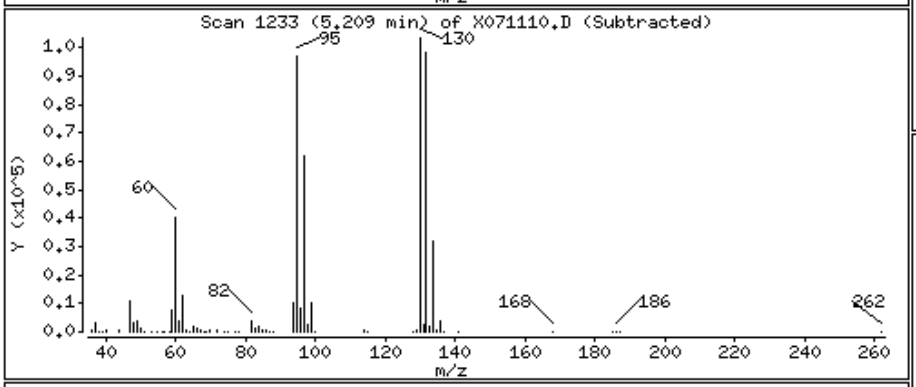
Sample Info: HS22070326-06;HS22070326-06;;;

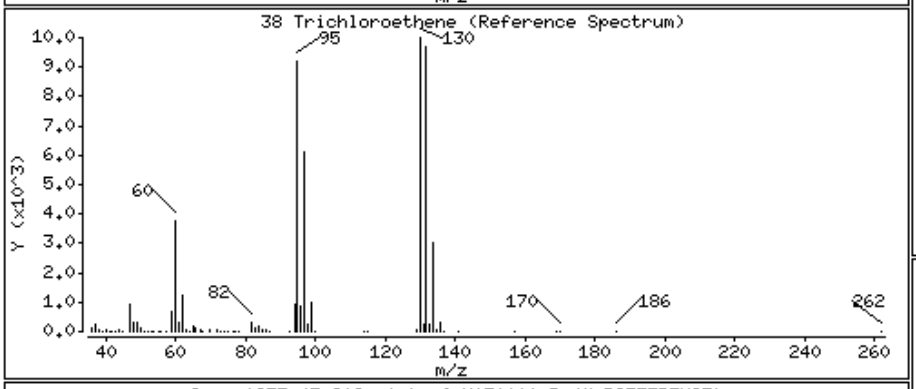
Purge Volume: 5.0 Operator: PC

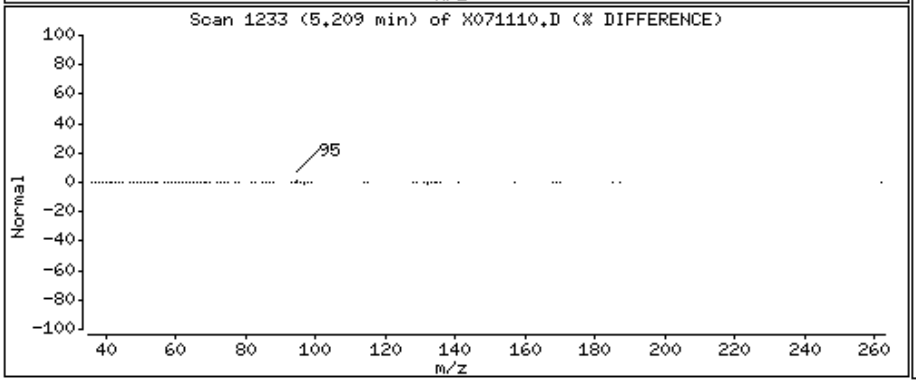
Column phase: DB624 Column diameter: 0.18

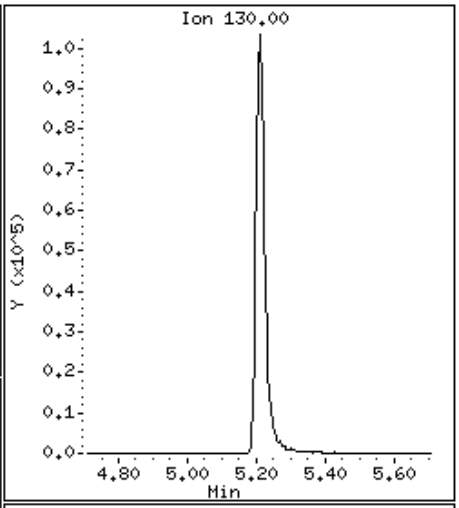
38 Trichloroethene Concentration: 2887.96 ug/l

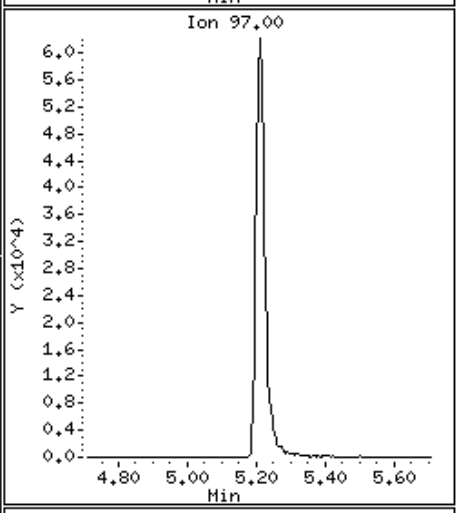


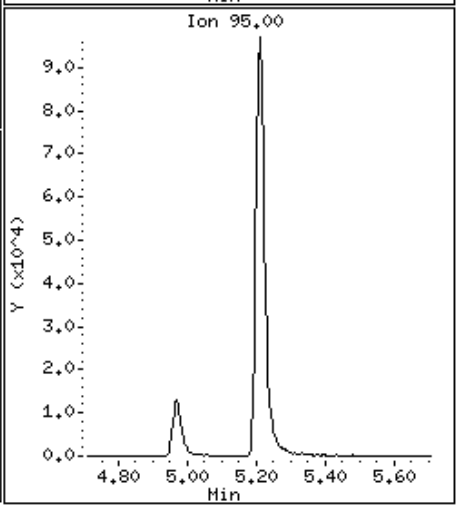












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D Page 5

Date : 11-JUL-2022 13:32

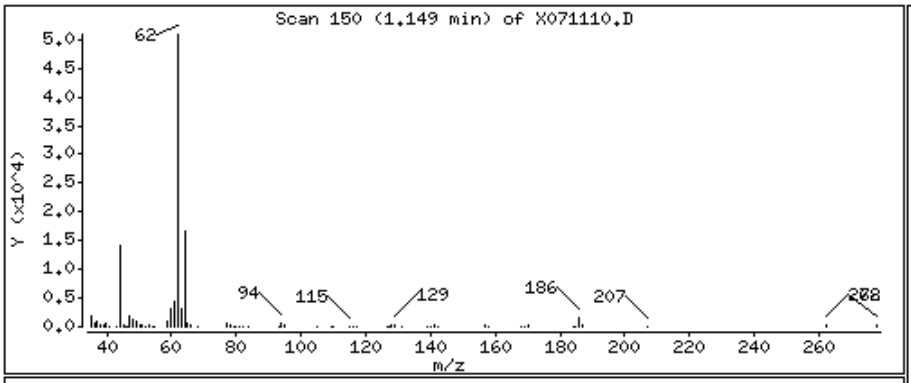
Client ID: HS22070326-06 Instrument: voa6.i

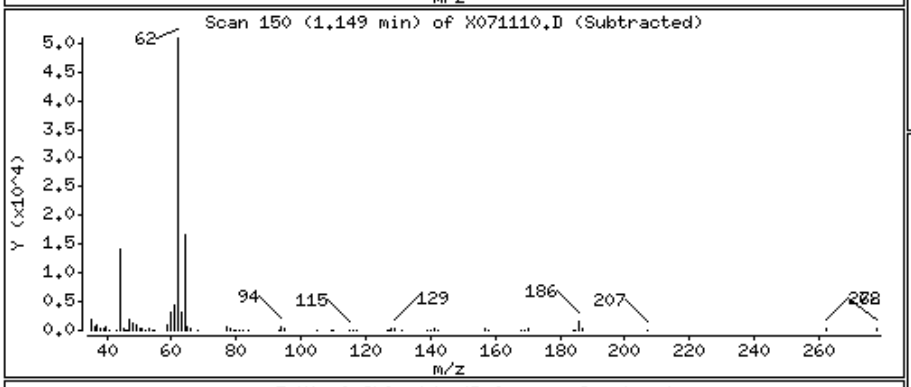
Sample Info: HS22070326-06;HS22070326-06;;;

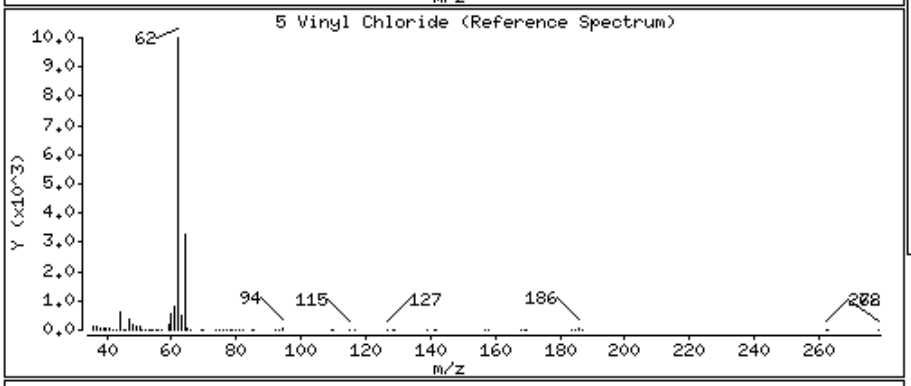
Purge Volume: 5.0 Operator: PC

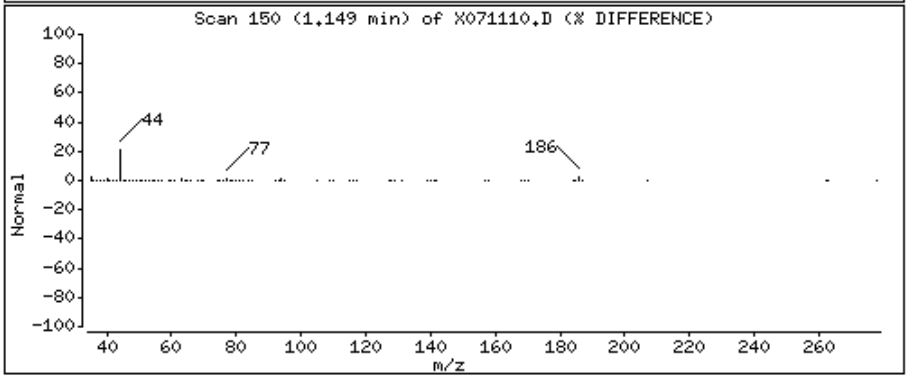
Column phase: DB624 Column diameter: 0.18

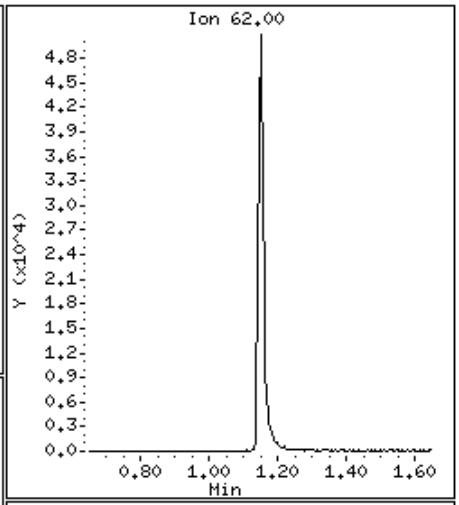
5 Vinyl Chloride Concentration: 716.48 ug/l

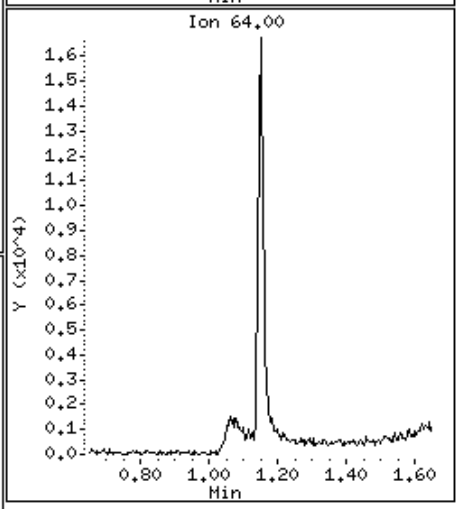












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071110.D
Inj Date : 11-JUL-2022 13:32
InstruID : voa6.i
LabSampID : HS22070326-06

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071111.D Page 1
Report Date: 19-Jul-2022 14:37

ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071111.D
Lab Smp Id: HS22070326-11 Client Smp ID: HS22070326-11
Inj Date : 11-JUL-2022 13:53
Operator : PC Inst ID: voa6.i
Smp Info : HS22070326-11;HS22070326-11;;;
Misc Info : HS22052000V6;WATER;0;25;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 11
Dil Factor: 25.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

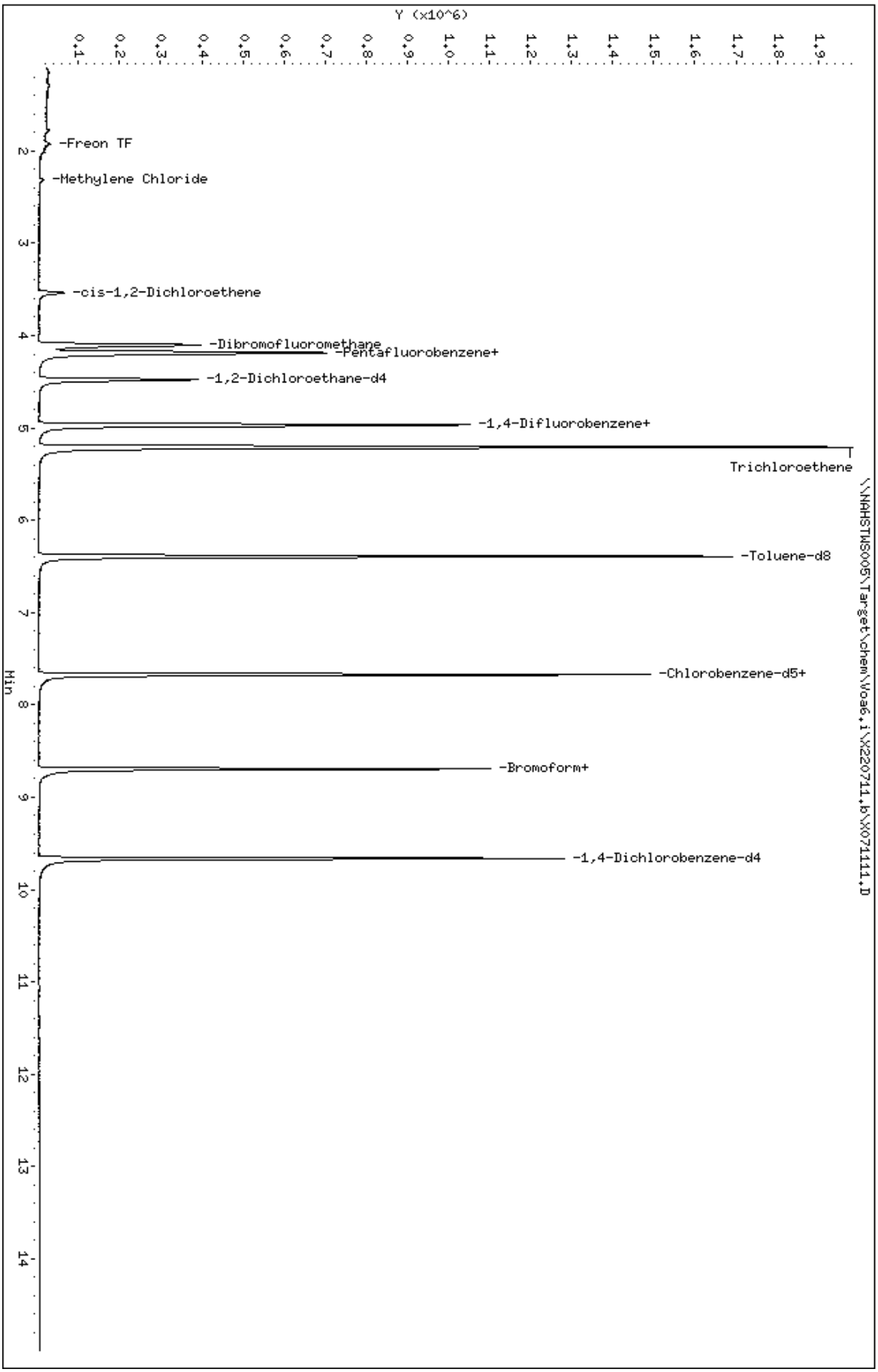
Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	25.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	625789	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	905770	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	783608	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	350070	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	295805	50.4811	50.48
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	345355	50.7225	50.72
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	283708	49.1500	49.15
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1058702	54.4075	54.40
27 cis-1,2-Dichloroethene	96	3.536	3.533	(0.845)	34629	4.78101	119.52(a)
17 Methylene Chloride	84	2.314	2.307	(0.553)	5535	1.37691	34.42(a)
38 Trichloroethene	130	5.208	5.208	(1.048)	684009	100.843	2521.08

QC Flag Legend

a - Target compound detected but, quantitated amount
    Below Limit Of Quantitation(BLOQ).



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071111.D
Date : 11-JUL-2022 13:53
Client ID: HS220703326-11
Sample Info: HS220703326-11;HS220703326-11;;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071111.D

Date : 11-JUL-2022 13:53

Client ID: HS22070326-11

Instrument: voa6.i

Sample Info: HS22070326-11;HS22070326-11;;;

Purge Volume: 5.0

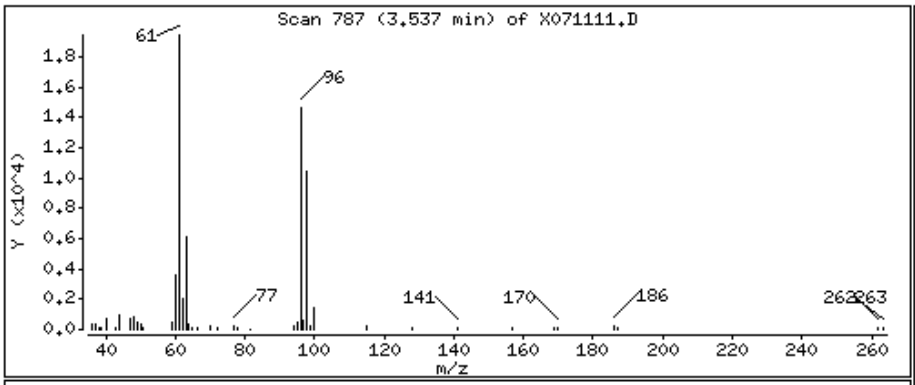
Operator: PC

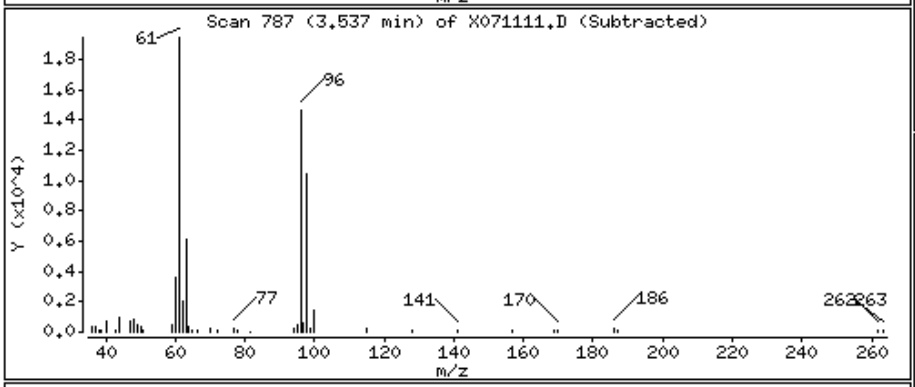
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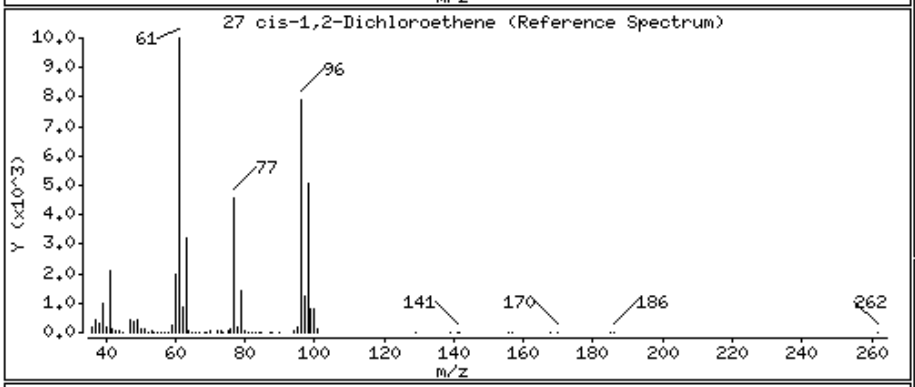
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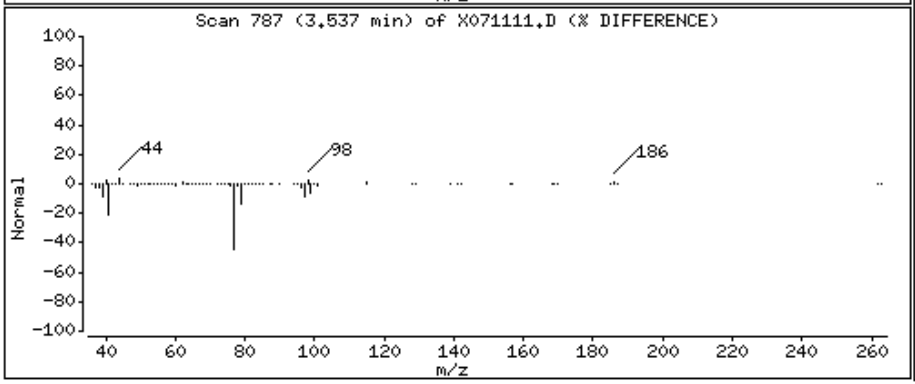
27 cis-1,2-Dichloroethene

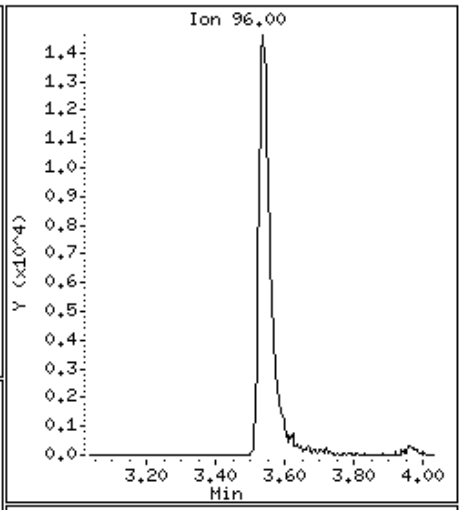
Concentration: 119.52 ug/l

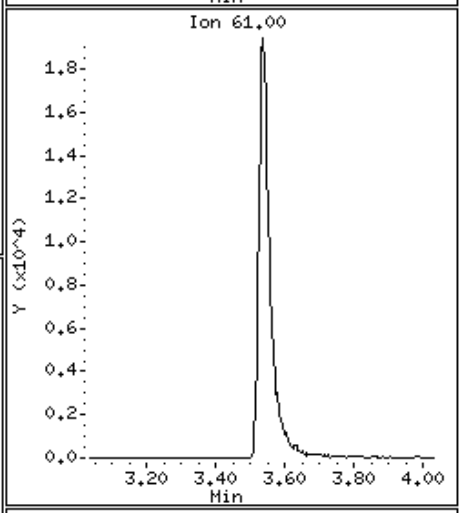


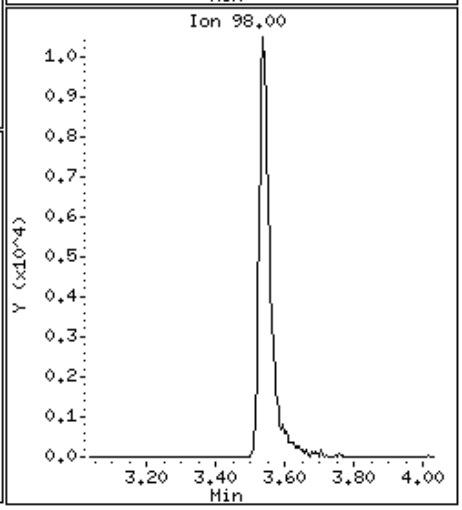












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071111.D Page 3

Date : 11-JUL-2022 13:53

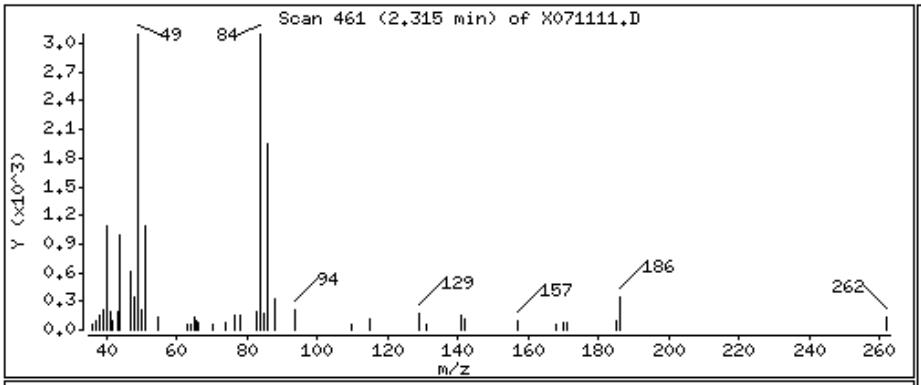
Client ID: HS22070326-11 Instrument: voa6.i

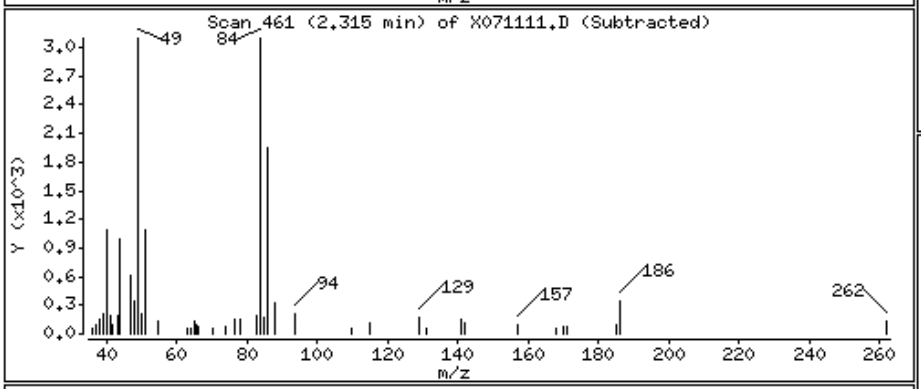
Sample Info: HS22070326-11;HS22070326-11;;;

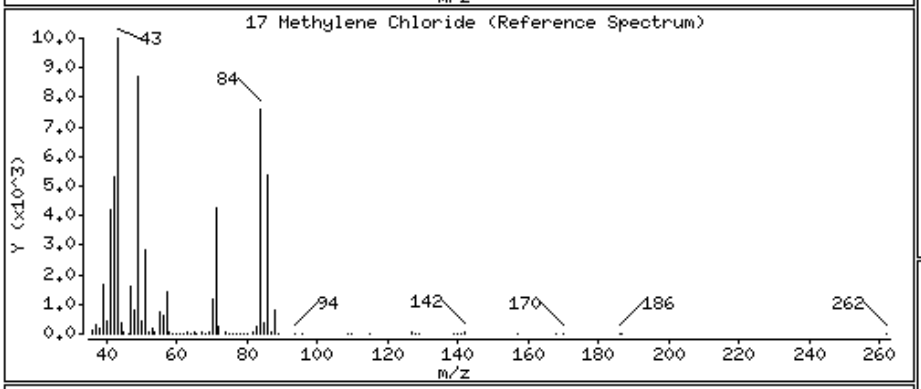
Purge Volume: 5.0 Operator: PC

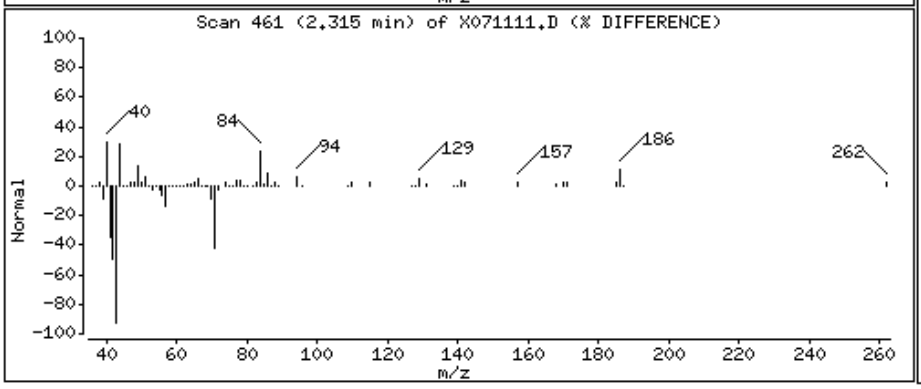
Column phase: DB624 Column diameter: 0.18

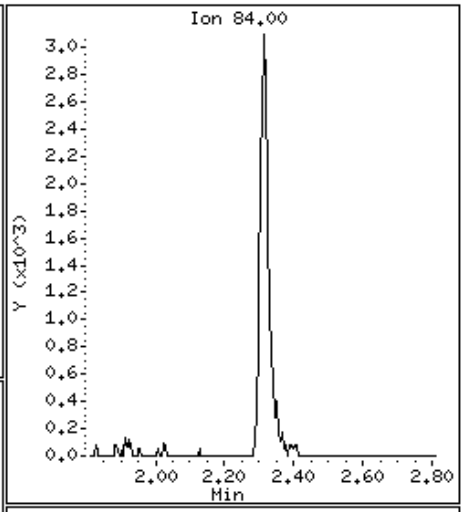
17 Methylene Chloride Concentration: 34.42 ug/l

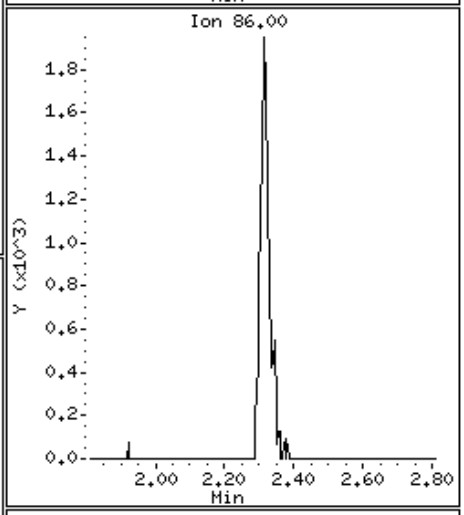


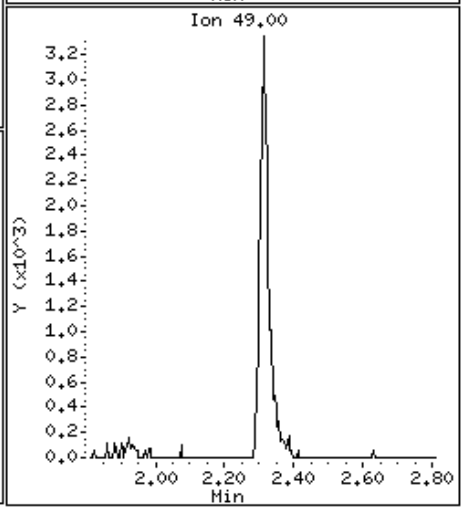












Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071111.D Page 4

Date : 11-JUL-2022 13:53

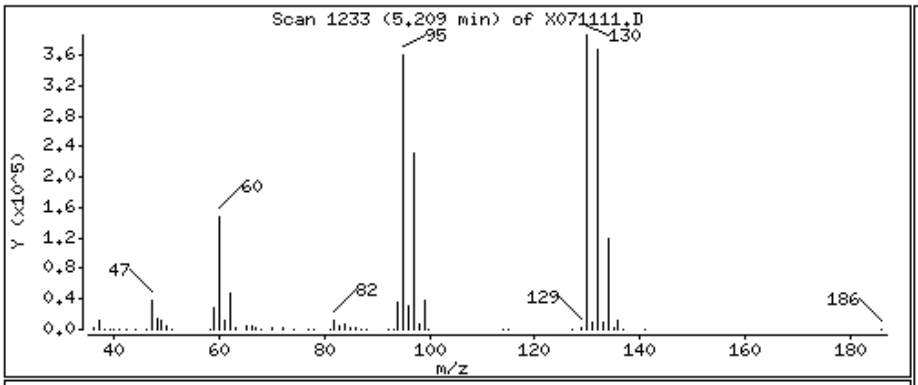
Client ID: HS22070326-11 Instrument: voa6.i

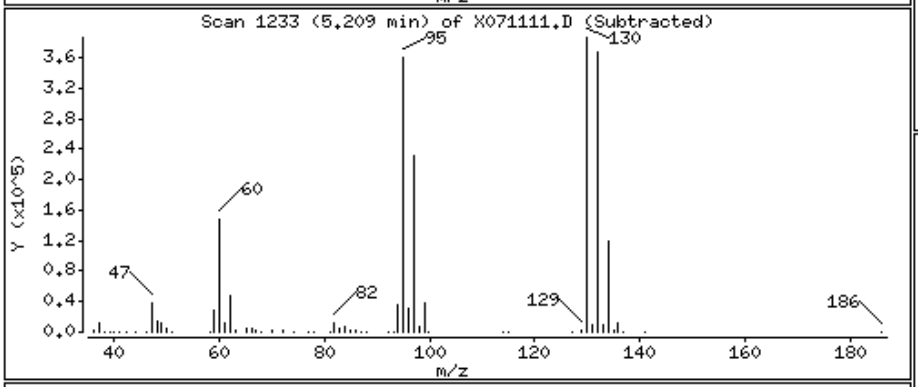
Sample Info: HS22070326-11;HS22070326-11;;;

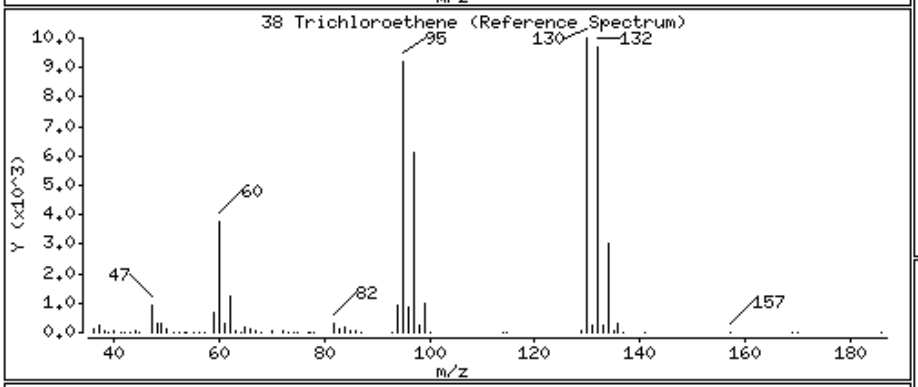
Purge Volume: 5.0 Operator: PC

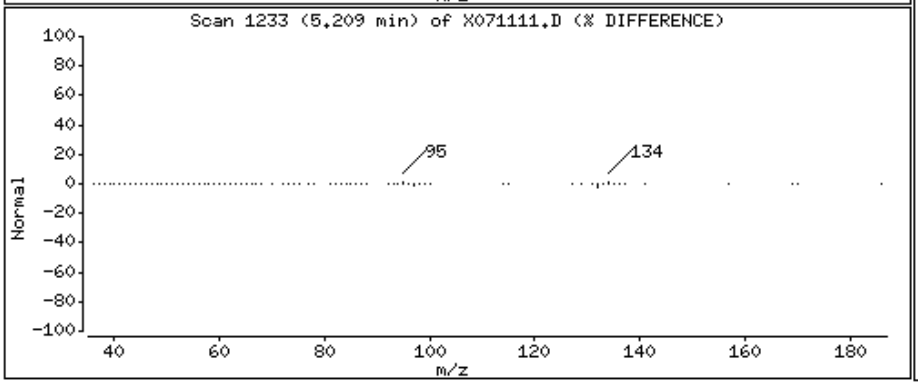
Column phase: DB624 Column diameter: 0.18

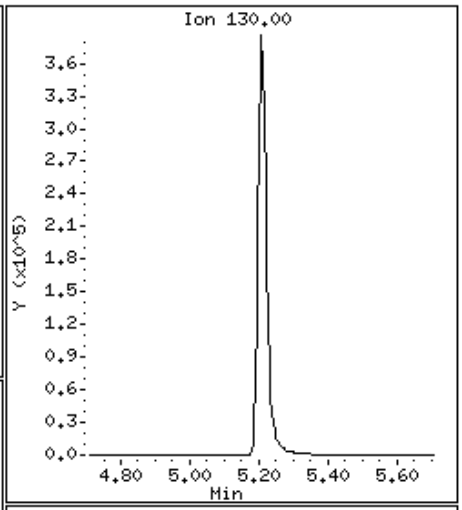
38 Trichloroethene Concentration: 2521.08 ug/l

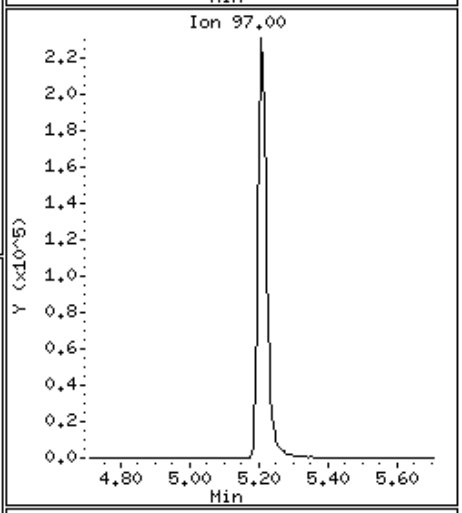


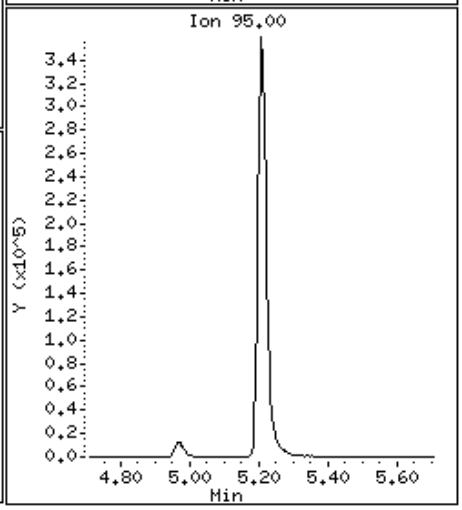












Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071111.D
Inj Date : 11-JUL-2022 13:53
InstruID : voa6.i
LabSampID : HS22070326-11

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071112.D Page 1
Report Date: 19-Jul-2022 14:37

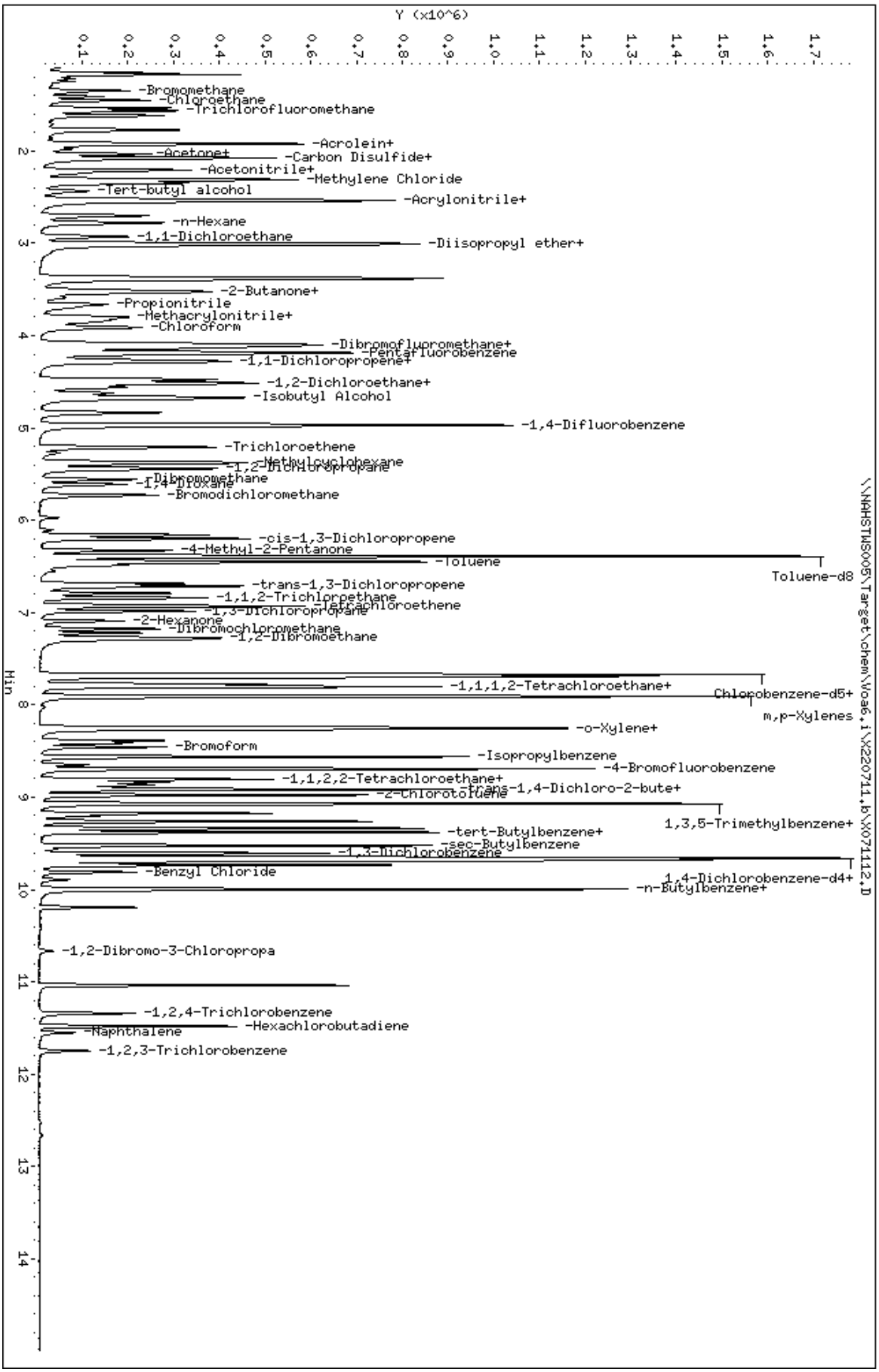
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071112.D
Lab Smp Id: HS22070388-08MS Client Smp ID: HS22070388-08MS
Inj Date : 11-JUL-2022 14:14
Operator : PC Inst ID: voa6.i
Smp Info : HS22070388-08MS;HS22070388-08MS;3;;MS
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 12 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	618550	50.0000	
* 36 1,4-Difluorobenzene	114	4.969	4.968	(1.000)	891356	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	763876	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.662	9.662	(1.000)	343400	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	290920	50.2226	50.22
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	339888	51.2120	51.21
$ 30 Dibromofluoromethane	113	4.103	4.102	(0.980)	279302	48.9518	48.95
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1044553	55.0671	55.06
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	86931	20.0172	20.01
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	105474	17.8243	17.82
33 1,2-Dichloroethane	62	4.564	4.556	(0.919)	150977	20.4394	20.43
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	129515	18.0906	18.09
17 Methylene Chloride	84	2.307	2.307	(0.551)	120752	17.2105	17.21
38 Trichloroethene	130	5.209	5.208	(1.048)	134014	20.0771	20.07
5 Vinyl Chloride	62	1.149	1.149	(0.275)	137579	17.3897	17.38



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071112.D
Date : 11-JUL-2022 14:14
Client ID: HS220703B8-08MS
Sample Info: HS220703B8-08MS;HS220703B8-08MS;3;;MS
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071112.D
Inj Date : 11-JUL-2022 14:14
InstruID : voa6.i
LabSampID : HS22070388-08MS

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071113.D Page 1
Report Date: 19-Jul-2022 14:37

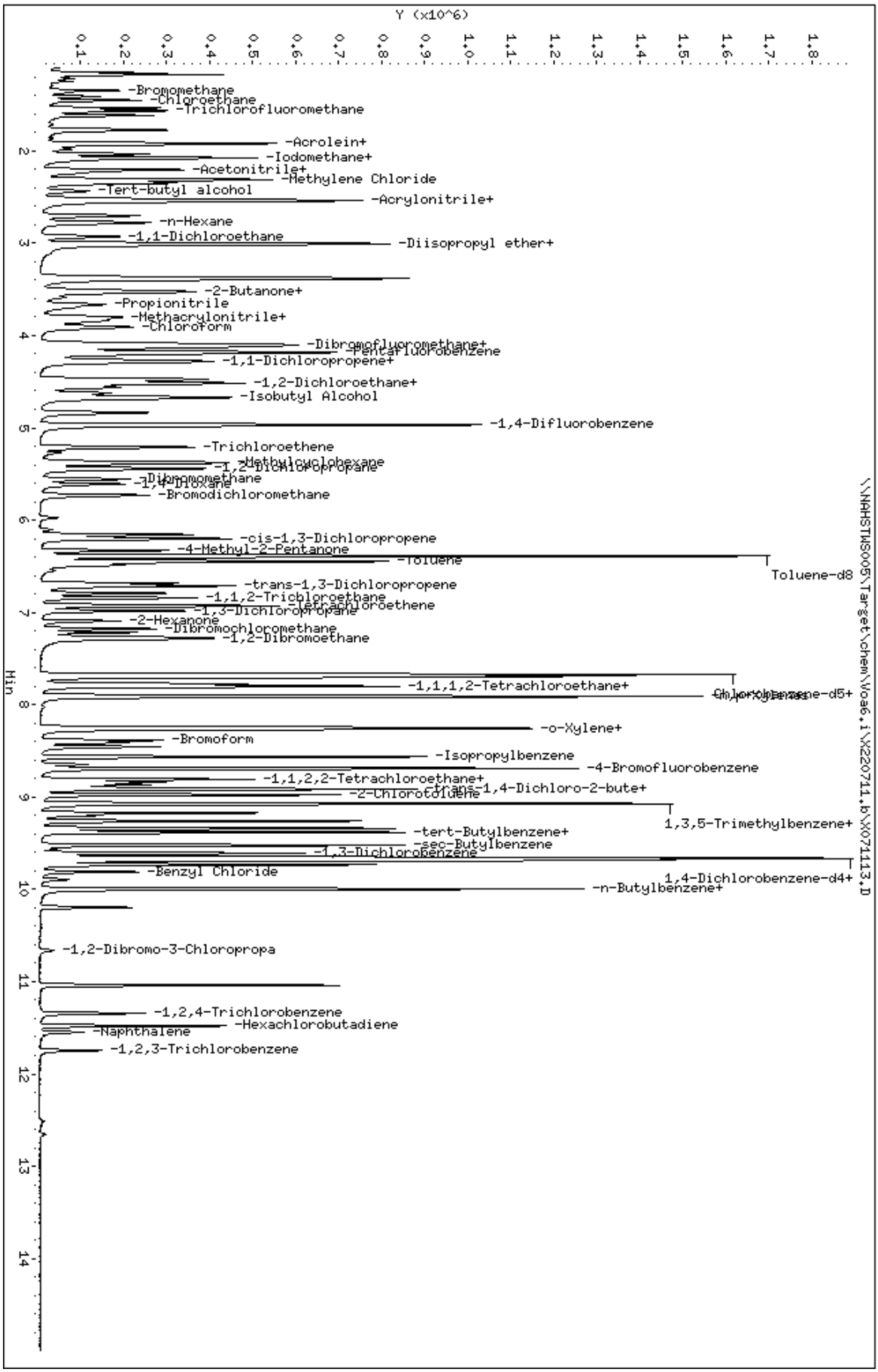
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071113.D
Lab Smp Id: HS22070388-08MSD Client Smp ID: HS22070388-08MSD
Inj Date : 11-JUL-2022 14:35
Operator : PC Inst ID: voa6.i
Smp Info : HS22070388-08MSD;HS22070388-08MSD;3;;MSD
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 12 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/l)	FINAL (ug/l)
* 1 Pentafluorobenzene	168	4.185	4.185	(1.000)	610794	50.0000	
* 36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	885417	50.0000	
* 47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	771854	50.0000	
* 70 1,4-Dichlorobenzene-d4	152	9.665	9.662	(1.000)	365835	50.0000	
$ 35 1,2-Dichloroethane-d4	65	4.474	4.474	(1.069)	286089	50.0110	50.01
$ 69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	360528	53.7761	53.77
$ 30 Dibromofluoromethane	113	4.102	4.102	(0.980)	277232	49.2075	49.20
$ 48 Toluene-d8	98	6.389	6.389	(0.833)	1039018	54.2091	54.20
53 1,1,2-Trichloroethane	83	6.843	6.843	(0.892)	84482	19.2522	19.25
11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	102726	17.5804	17.58
33 1,2-Dichloroethane	62	4.560	4.556	(0.918)	140845	19.1957	19.19
27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	123640	17.4893	17.48
17 Methylene Chloride	84	2.311	2.307	(0.552)	115605	16.7052	16.70
38 Trichloroethene	130	5.212	5.208	(1.049)	127610	19.2460	19.24
5 Vinyl Chloride	62	1.148	1.149	(0.275)	131292	16.8058	16.80



Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071113.D
Date : 11-JUL-2022 14:35
Client ID: HS220703B8-08HSD
Sample Info: HS220703B8-08HSD;HS220703B8-08HSD;3;;HSD
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071113.D
Inj Date : 11-JUL-2022 14:35
InstruID : voa6.i
LabSampID : HS22070388-08MSD

NO MANUAL INTEGRATIONS

Data File: \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071114.D Page 1
Report Date: 19-Jul-2022 14:37

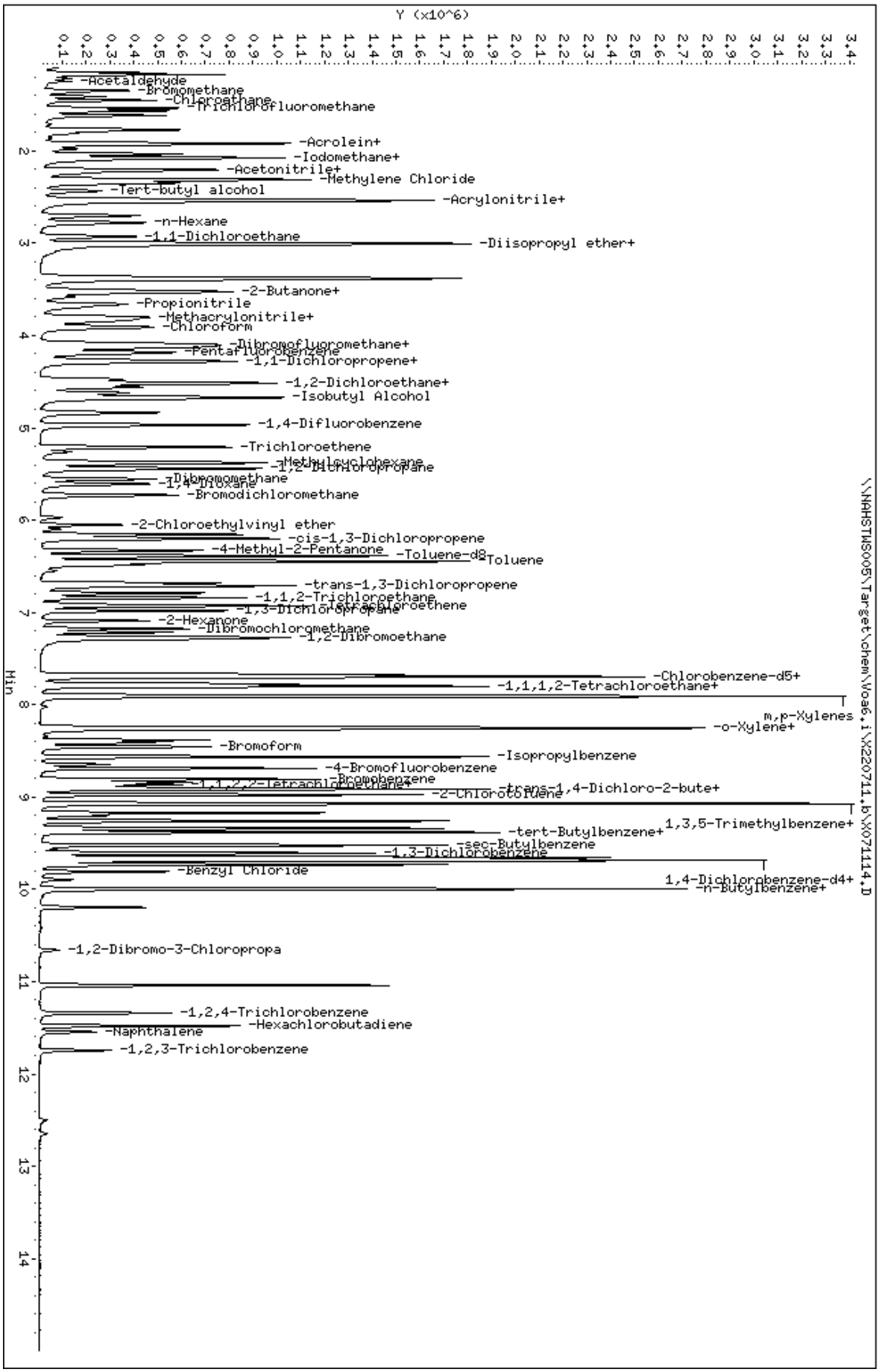
ALS Laboratory Group

Data file : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071114.D
Lab Smp Id: CCV-END Client Smp ID: CCV-END
Inj Date : 11-JUL-2022 14:56
Operator : PC Inst ID: voa6.i
Smp Info : CCV-END;CCV-END;2;;
Misc Info : HS22052000V6;WATER;0;1;
Comment   :
Method   : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\8260W.m
Meth Date : 19-Jul-2022 14:37 voa6.i Quant Type: ISTD
Cal Date : 06-JUL-2022 13:47 Cal File: X070608.D
Als bottle: 13 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 0CBI-VOA_short.sub
Target Version: 4.14
Processing Host: NAHSTW7056

Concentration Formula: Amt * DF * (Uf/Vo)*1 * CpndVariable

Name	Value	Description
DF	1.000	Dilution Factor
Uf	5.000	ng unit correction factor
Vo	5.000	sample purged
Cpnd Variable		Local Compound Variable

		QUANT SIG					AMOUNTS	
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/l)	ON-COL (ug/l)
*	1 Pentafluorobenzene	168	4.185	4.185	(1.000)	493042	50.0000	
*	36 1,4-Difluorobenzene	114	4.968	4.968	(1.000)	755868	50.0000	
*	47 Chlorobenzene-d5	117	7.671	7.671	(1.000)	692646	50.0000	
*	70 1,4-Dichlorobenzene-d4	152	9.666	9.666	(1.000)	335777	50.0000	
$	35 1,2-Dichloroethane-d4	65	4.477	4.477	(1.070)	251537	50.0000	54.57
$	69 4-Bromofluorobenzene	95	8.691	8.691	(1.133)	320118	50.0000	53.20
$	30 Dibromofluoromethane	113	4.103	4.103	(0.980)	241700	50.0000	53.16
$	48 Toluene-d8	98	6.389	6.389	(0.833)	874594	50.0000	50.84
	53 1,1,2-Trichloroethane	83	6.839	6.839	(0.892)	194696	50.0000	49.44
	11 1,1-Dichloroethene	96	1.921	1.921	(0.459)	205381	50.0000	43.54
	33 1,2-Dichloroethane	62	4.560	4.560	(0.918)	321834	50.0000	51.38
	27 cis-1,2-Dichloroethene	96	3.533	3.533	(0.844)	276336	50.0000	48.42
	17 Methylene Chloride	84	2.311	2.311	(0.552)	260862	50.0000	45.57
	38 Trichloroethene	130	5.208	5.208	(1.048)	277767	50.0000	49.07
	5 Vinyl Chloride	62	1.149	1.149	(0.275)	268180	50.0000	42.52



Data File: \\NAHSTMS005\Target\chem\Voa6.i\X220711.b\X071114.D
Date : 11-JUL-2022 14:56
Client ID: CCV-END
Sample Info: CCV-END;CCV-END;2;;
Purge Volume: 5.0
Column phase: DB624

Instrument: voa6.i
Operator: PC
Column diameter: 0.18

Data File : \\NAHSTWS005\Target\chem\Voa6.i\X220711.b\X071114.D
Inj Date : 11-JUL-2022 14:56
InstruID : voa6.i
LabSampID : CCV-END

NO MANUAL INTEGRATIONS

HS22070326 RSK175

ALS WO# HS22070326

FID04 -Logbook

Batch: 26730
Date: 01-24-2017
Method: RSK 175 ICAL
Comments: Target Sequence 170124

Analyst: Nosa Izekor
Reviewer:
Laboratory: Houston

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	E
1	ICAL1	CALIB_1	01-24-2017 09:06 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	N
2	ICAL2	CALIB_2	01-24-2017 09:30 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	N
3	ICAL3	CALIB_3	01-24-2017 09:59 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	N
4	ICAL4	CALIB_4	01-24-2017 10:15 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	N
5	ICAL5	CALIB_5	01-24-2017 10:39 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	N
6	ICAL6	CALIB_6	01-24-2017 10:57 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	N
7	ICAL7	CALIB_7	01-24-2017 11:13 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	N
8	ICV	METHSPIKI	01-24-2017 12:05 pm	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	N
9	LCS-170124	LCS	01-24-2017 12:24 pm	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	N
10	LCSD-170124	LCSD	01-24-2017 12:40 pm	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	N
11	MBLK-170124	MBLK	01-24-2017 12:57 pm	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	N
12	HS17010778-01	SAMP	01-24-2017 01:14 pm	1.00	0.00 mL	0.00 mL	012.D	Liquid	Y	N
13	HS17010779-01	SAMP	01-24-2017 01:31 pm	1.00	0.00 mL	0.00 mL	013.D	Liquid	Y	N
14	HS17010779-01DUP	SAMP	01-24-2017 01:47 pm	1.00	0.00 mL	0.00 mL	014.D	Liquid	Y	N
15	CCV	CCV	01-24-2017 02:01 pm	1.00	0.00 mL	0.00 mL	015.D	Liquid	Y	N

Chemical	Value
ICAL STD ID	30010700217
ICV STD ID	30010700610

FORM 3
WATER GASES METHOD SPIKE RECOVERY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070326

Matrix Spike - ENG SC Sample No.: ICV

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE AMOUNT ()	% REC #	QC. LIMITS REC.
Ethene	16.800	19.090	114	75-125
Methane	9.647	9.597	99	75-125
Ethane	18.043	19.657	109	75-125
Propane	26.463	27.238	103	75-125
N-Butane	34.955	36.010	103	75-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

_____

FORM III GASES

FORM 6
GASES INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070326

Instrument ID: FID-4 Calibration Date(s): 01/24/17 01/24/17

Column: RTX-PLOT ID: 0.53 (mm) Calibration Time(s): 0906 1113

LAB FILE ID: RF10: 001 RF25: 002 RF50: 003
RF100: 004 RF250: 005 RF500: 006

COMPOUND	RF10	RF25	RF50	RF100	RF250	RF500
Ethene	535.608	567.359	564.985	516.024	665.282	425.678
Methane	968.912	978.238	1019.699	880.798	960.713	930.704
Ethane	602.493	670.177	658.908	597.201	808.513	817.630
Propane	500	1279	2602	4785	18294	38286
N-Butane	438	936	2034	3864	18446	42817

FORM VI GASES

FORM 6
GASES INITIAL CALIBRATION DATA

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS2207032

Instrument ID: FID-4 Calibration Date(s): 01/24/17 01/24/17

Column: RTX-PLOT ID: 0.53 (mm) Calibration Time(s): 0906 1113

RF1000: 007

COMPOUND	RF1000	CURVE	COEFFICENTS A0	A1	A2	%RSD OR R^2	MA
Ethene	828.858	AVRG		586.256273		21.932	
Methane	1081.580	AVRG		974.377787		6.550	
Ethane	999.335	AVRG		736.322546		19.885	
Propane	96509	2ORDR	0.97987006	1.529e-003	-4.58e-009	0.9991365	(
N-Butane	114164	2ORDR	2.46870151	1.834e-003	-5.54e-009	0.9980766	(

FORM VI GASES

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\001.D
Lab Smp Id: ICAL1 Client Smp ID: ICAL1
Inj Date : 24-JAN-2017 09:06
Operator : JA Inst ID: FID-4.i
Smp Info : ICAL1;ICAL1;;;
Misc Info :
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:06 Cal File: 001.D
Als bottle: 1 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.030	0.013	374	0.38600	0.383(a)
2 Ethene	1.553	1.556	-0.003	361	0.67400	0.615(a)
3 Ethane	1.716	1.723	-0.007	435	0.72200	0.590(a)
4 Propane	4.073	4.113	-0.040	500	1.05900	1.743
5 N-Butane	7.640	7.690	-0.050	438	1.39800	3.271

QC Flag Legend

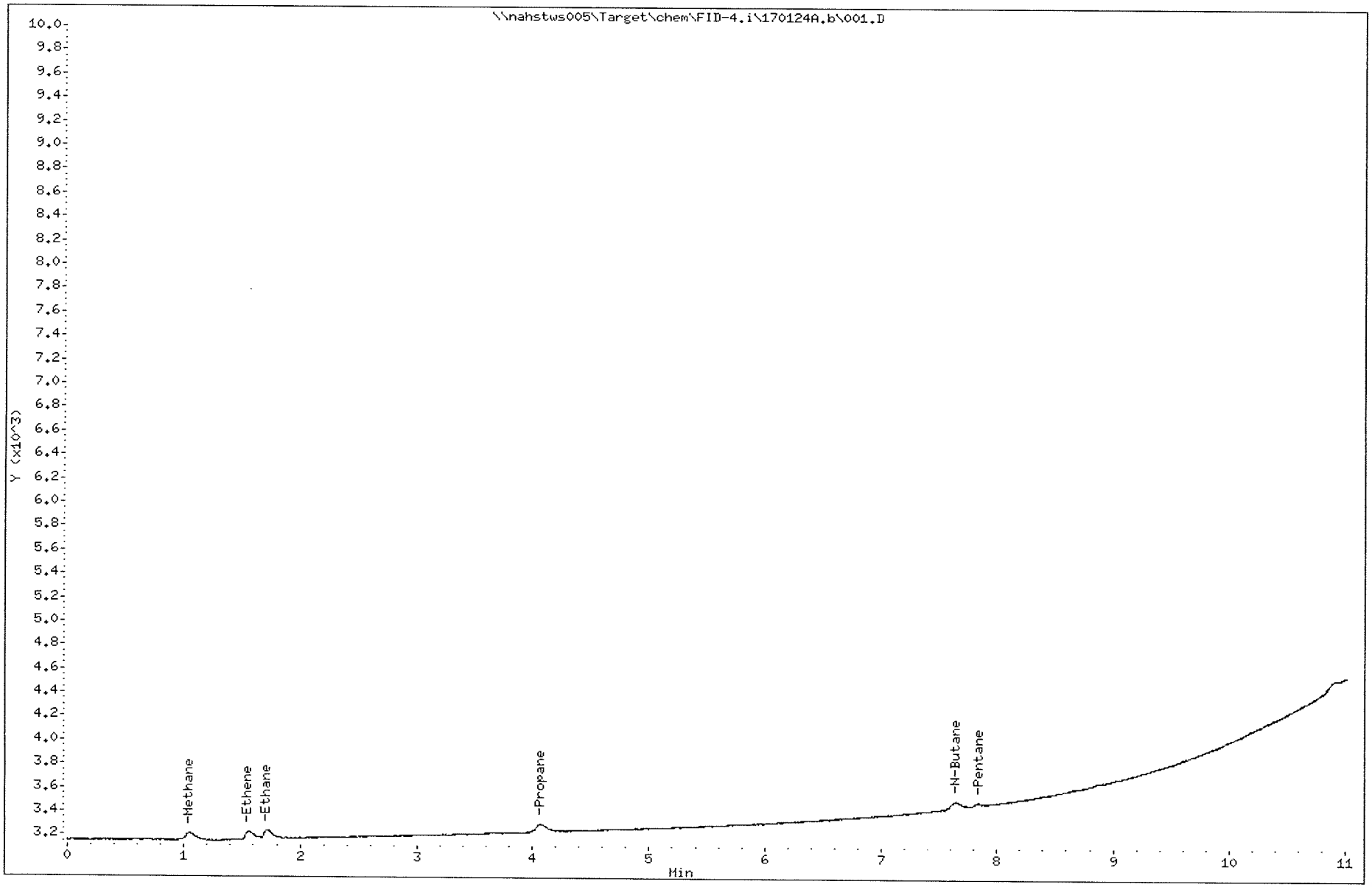
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\001.D
Date : 24-JAN-2017 09:06
Client ID: ICAL1
Sample Info: ICAL1;ICAL1;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: JA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\002.D
Lab Smp Id: ICAL2 Client Smp ID: ICAL2
Inj Date : 24-JAN-2017 09:30
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL2;ICAL2;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:59 Cal File: 003.D
Als bottle: 2 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.030	-0.007	944	0.96500	0.968
2 Ethene	1.560	1.556	0.004	956	1.68500	1.630
3 Ethane	1.723	1.723	0.000	1209	1.80400	1.641
4 Propane	4.123	4.113	0.010	1279	2.64600	2.927
5 N-Butane	7.716	7.690	0.026	936	3.49600	4.180

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\002.D

Date : 24-JAN-2017 09:30

Client ID: ICAL2

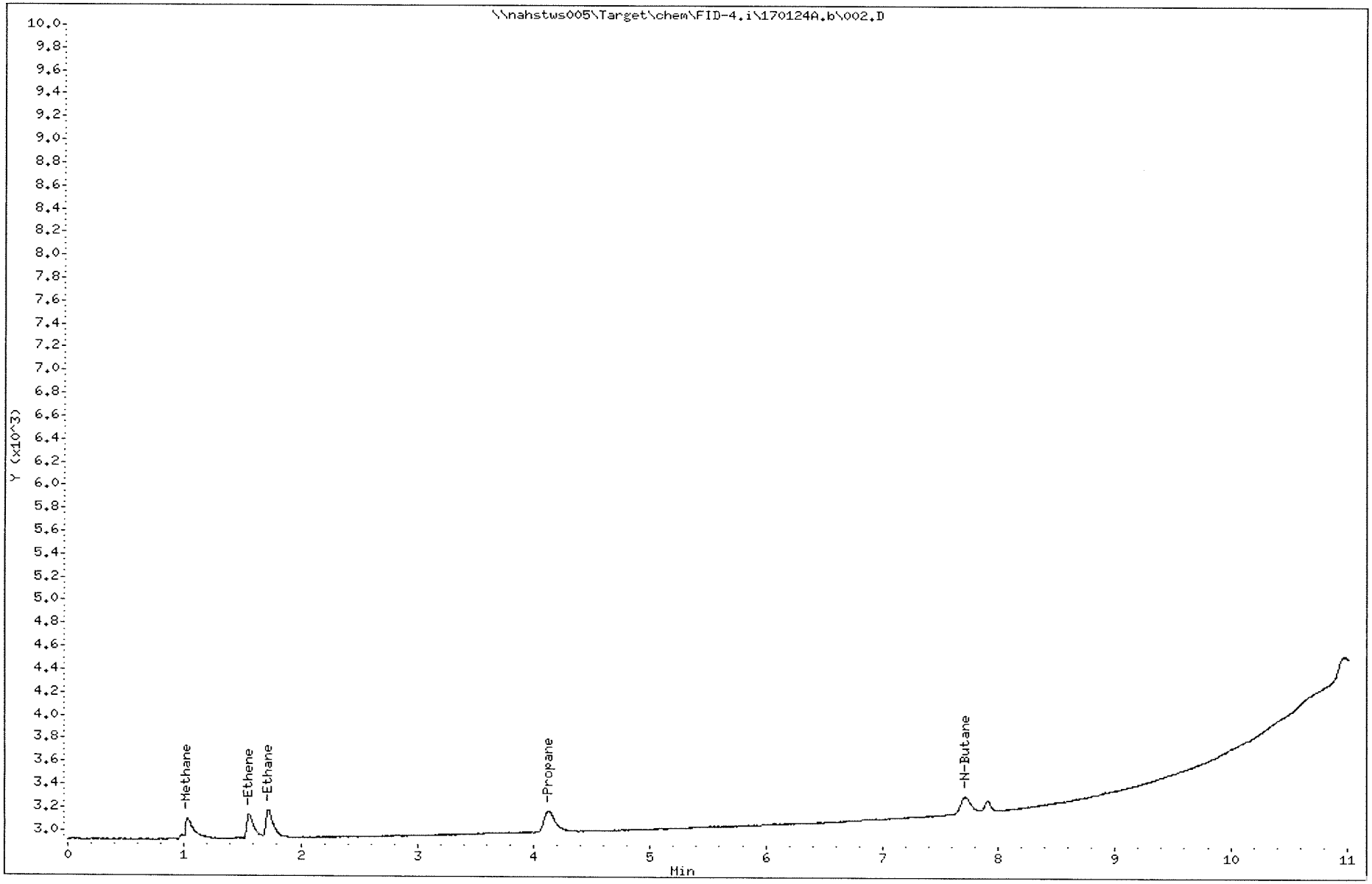
Sample Info: ICAL2;ICAL2;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\003.D
Lab Smp Id: ICAL3 Client Smp ID: ICAL3
Inj Date : 24-JAN-2017 09:59
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL3;ICAL3;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 3 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

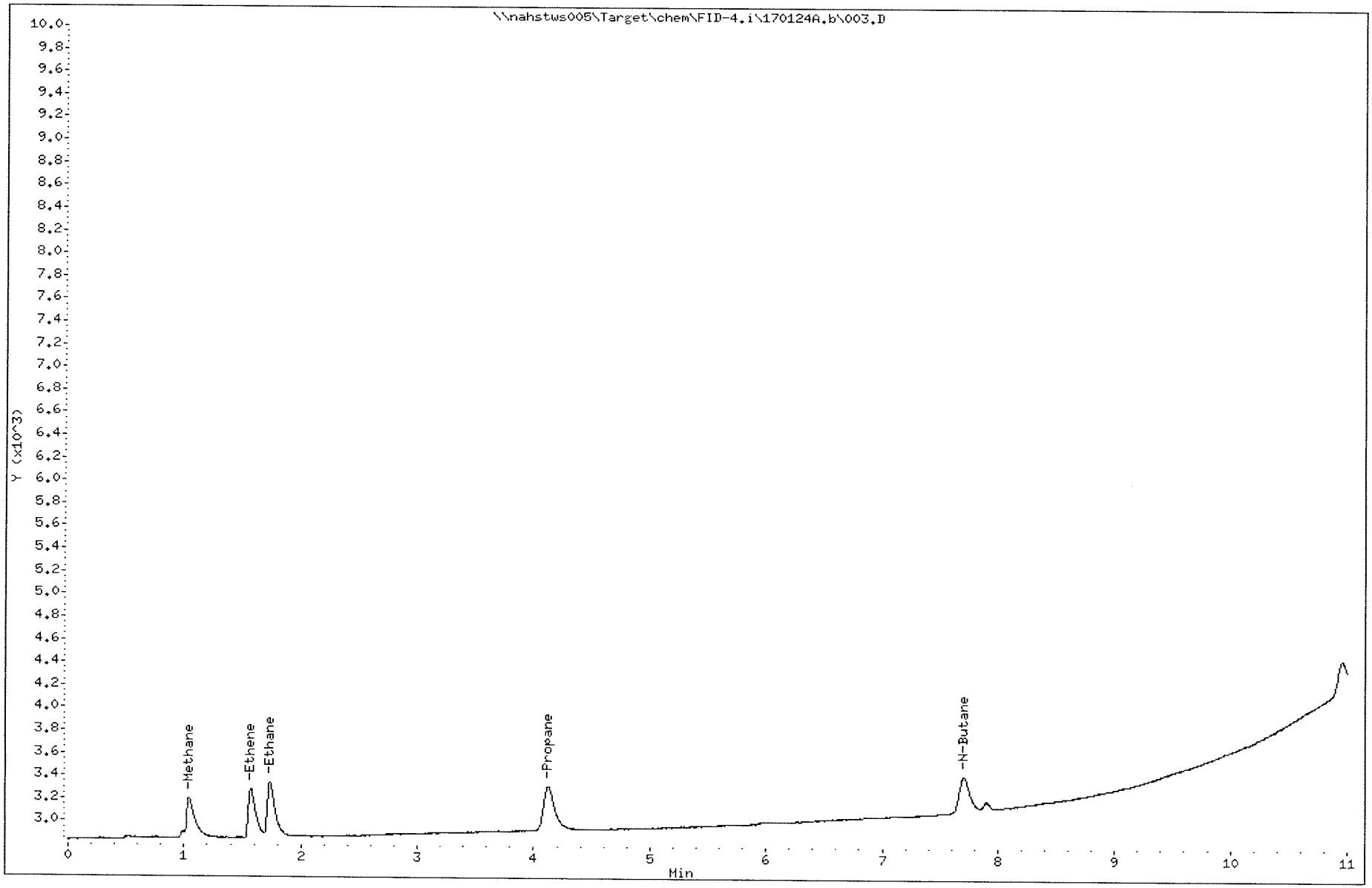
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.043	1.030	0.013	1967	1.92900	2.018
2 Ethene	1.570	1.556	0.014	1904	3.37000	3.247
3 Ethane	1.736	1.723	0.013	2378	3.60900	3.229
4 Propane	4.123	4.113	0.010	2602	5.29300	4.926
5 N-Butane	7.703	7.690	0.013	2034	6.99100	6.176

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\003.D
Date : 24-JAN-2017 09:59
Client ID: ICAL3
Sample Info: ICAL3;ICAL3;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\004.D
Lab Smp Id: ICAL4 Client Smp ID: ICAL4
Inj Date : 24-JAN-2017 10:15
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL4;ICAL4;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 09:30 Cal File: 002.D
Als bottle: 4 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.033	1.030	0.003	3399	3.85900	3.488
2 Ethene	1.563	1.556	0.007	3478	6.74000	5.932
3 Ethane	1.726	1.723	0.003	4310	7.21700	5.853
4 Propane	4.120	4.113	0.007	4785	10.5850	8.190
5 N-Butane	7.703	7.690	0.013	3864	13.9820	9.473(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\004.D

Date : 24-JAN-2017 10:15

Client ID: ICAL4

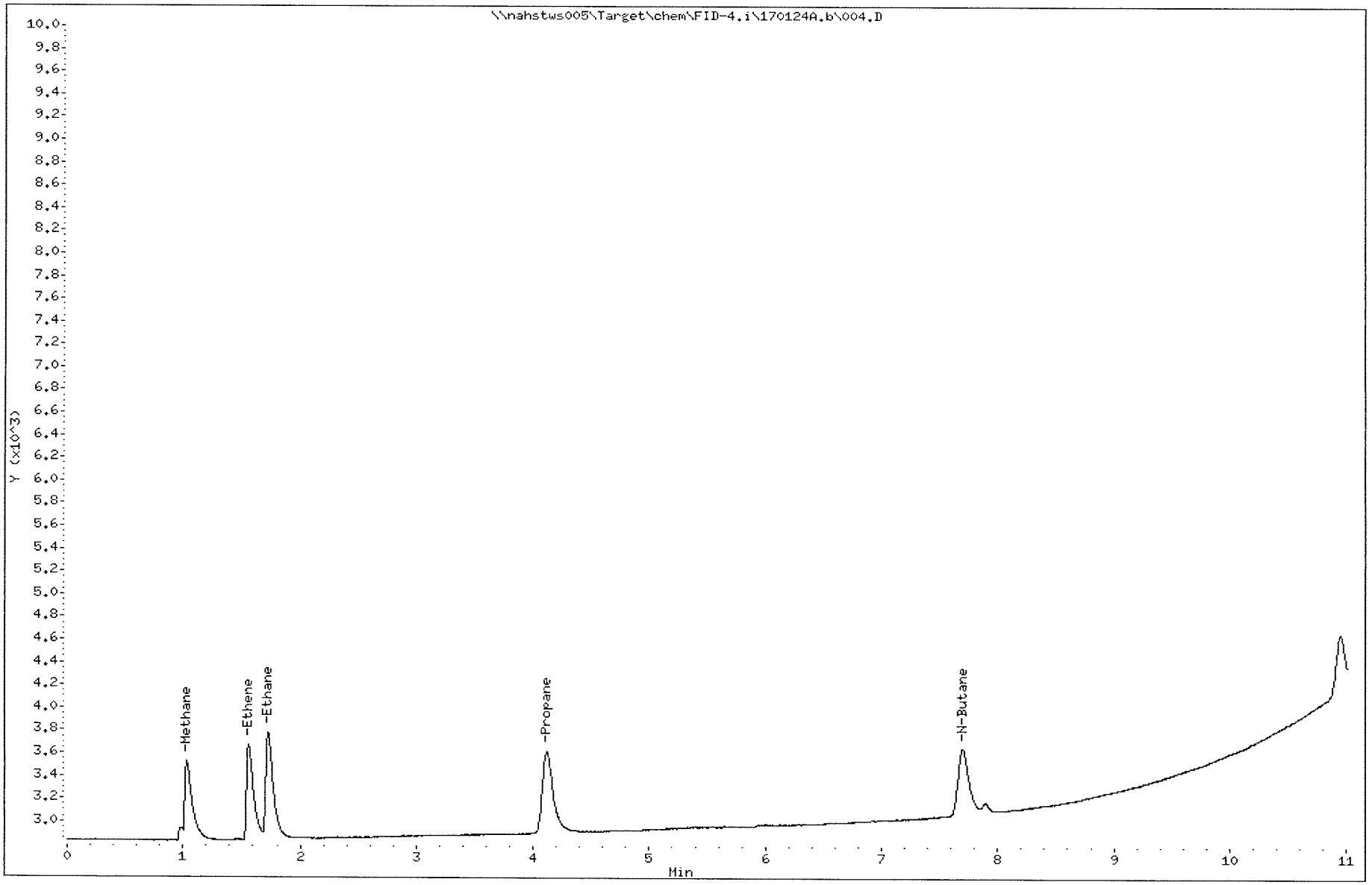
Sample Info: ICAL4;ICAL4;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\005.D
Lab Smp Id: ICAL5 Client Smp ID: ICAL5
Inj Date : 24-JAN-2017 10:39
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL5;ICAL5;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	1.043	1.030	0.013	9268	9.64700	9.511
2 Ethene	1.570	1.556	0.014	11210	16.8500	19.121
3 Ethane	1.733	1.723	0.010	14588	18.0430	19.811
4 Propane	4.120	4.113	0.007	18294	26.4630	27.415
5 N-Butane	7.700	7.690	0.010	18446	34.9550	34.419(M)

QC Flag Legend

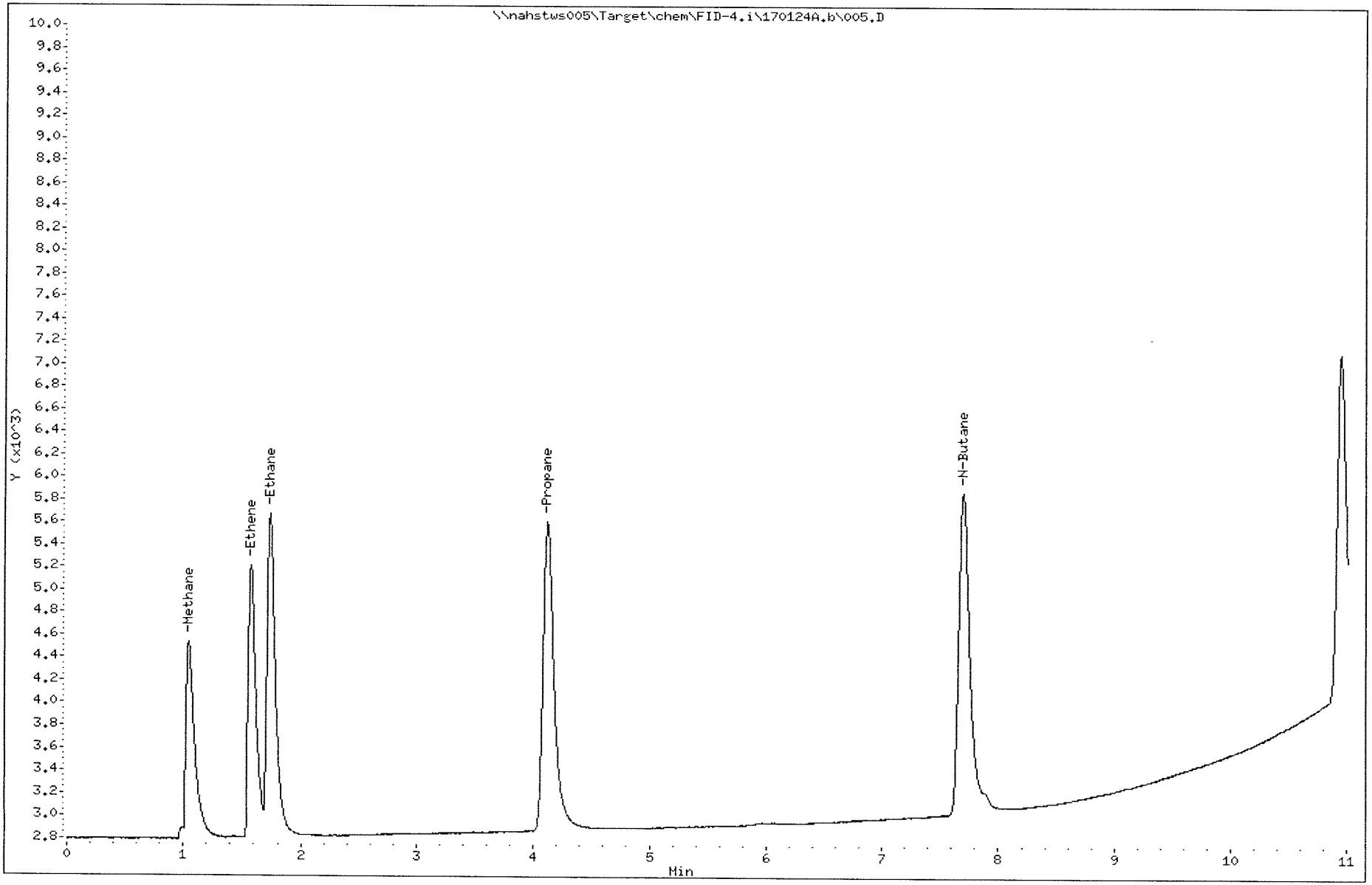
M - Compound response manually integrated.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\005.D
Date : 24-JAN-2017 10:39
Client ID: ICAL5
Sample Info: ICAL5;ICAL5;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\006.D
Lab Smp Id: ICAL6 Client Smp ID: ICAL6
Inj Date : 24-JAN-2017 10:57
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL6;ICAL6;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:39 Cal File: 005.D
Als bottle: 6 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

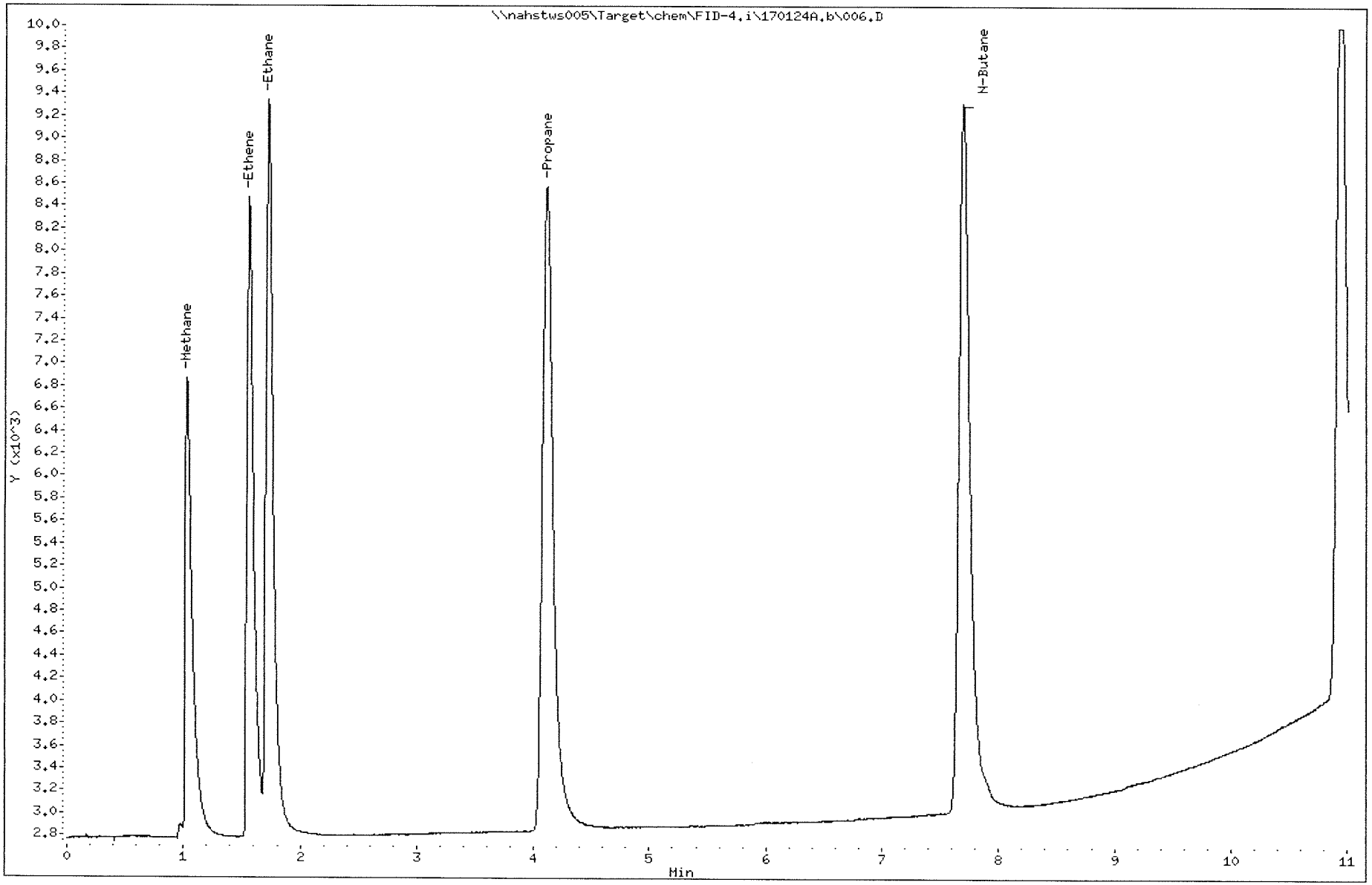
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	1.023	1.030	-0.007	17957	19.2940	18.429
2 Ethene	1.550	1.556	-0.006	22910	53.8200	39.078
3 Ethane	1.716	1.723	-0.007	29505	36.0860	40.070
4 Propane	4.110	4.113	-0.003	38286	52.9260	52.796
5 N-Butane	7.696	7.690	0.006	42817	69.9110	70.855

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\006.D
Date : 24-JAN-2017 10:57
Client ID: ICAL6
Sample Info: ICAL6;ICAL6;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\007.D
Lab Smp Id: ICAL7 Client Smp ID: ICAL7
Inj Date : 24-JAN-2017 11:13
Operator : MA Inst ID: FID-4.i
Smp Info : ICAL7;ICAL7;;;
Misc Info : ;1;0;1
Comment :
Method : \\nahstws005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 10:57 Cal File: 006.D
Als bottle: 7 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	1.030	1.030	0.000	41736	38.5880	42.833(A)
2 Ethene	1.556	1.556	0.000	55865	67.4000	95.291(A)
3 Ethane	1.723	1.723	0.000	72124	72.1720	97.951(A)
4 Propane	4.113	4.113	0.000	96509	105.852	105.844
5 N-Butane	7.690	7.690	0.000	114164	139.821	139.707

QC Flag Legend

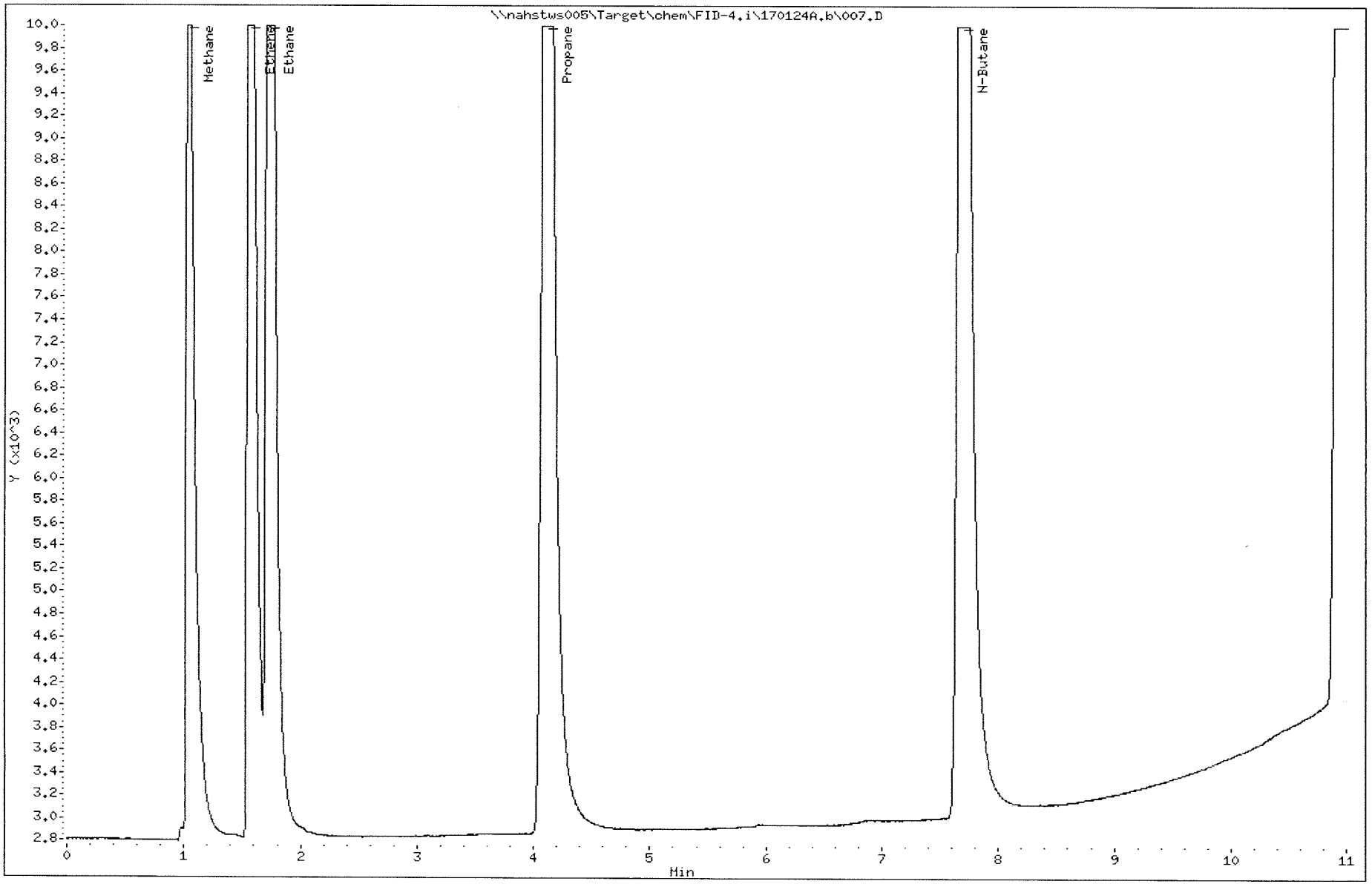
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\007.D
Date : 24-JAN-2017 11:13
Client ID: ICAL7
Sample Info: ICAL7;ICAL7;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\nahstws005\Target\chem\FID-4.i\170124A.b\008.D
Lab Smp Id: ICV Client Smp ID: ICV
Inj Date : 24-JAN-2017 12:05
Operator : MA Inst ID: FID-4.i
Smp Info : ICV;ICV;;;
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\170124A.b\RSKNI2.m
Meth Date : 22-Dec-2021 11:10 FID-4.i Quant Type: ESTD
Cal Date : 24-JAN-2017 11:13 Cal File: 007.D
Als bottle: 8 QC Sample: METHSPIKE
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: stdNIP2.sub
Target Version: 4.14

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

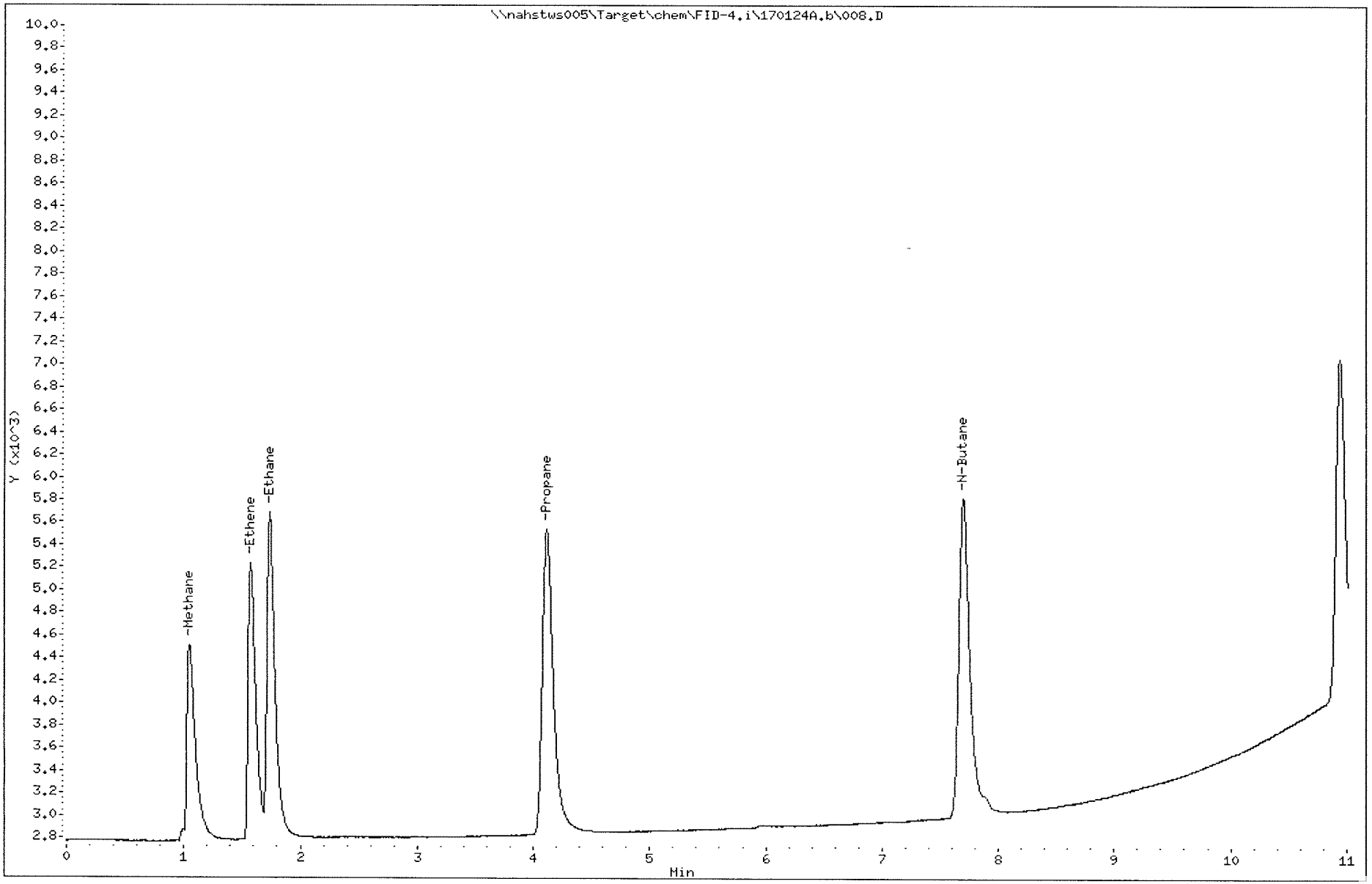
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	1.046	1.030	0.016	9352	9.59792	9.597
2 Ethene	1.573	1.556	0.017	11192	19.0906	19.090
3 Ethane	1.736	1.723	0.013	14474	19.6571	19.657
4 Propane	4.116	4.113	0.003	18164	27.2381	27.238
5 N-Butane	7.696	7.690	0.006	19425	36.0103	36.010

Data File: \\nahstws005\Target\chem\FID-4.i\170124A.b\008.D
Date : 24-JAN-2017 12:05
Client ID: ICV
Sample Info: ICV;ICV;;;

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: MA
Column diameter: 0.53



FID04 -Logbook

Batch: 50295 **Analyst:** Purvi Lad

Date: 07-11-2022 **Reviewer:**

Method: RSK175 **Laboratory:** Houston

Comments:

#	Samp ID	Type	Analyzed	DF	Init Wt/Vol	Final Vol	File ID	Matrix	Status	pH
1	RSK-CCV	CCV	07-11-2022 08:51 am	1.00	0.00 mL	0.00 mL	001.D	Liquid	Y	NA
2	MBLK-220711	MBLK	07-11-2022 09:00 am	1.00	0.00 mL	0.00 mL	002.D	Liquid	Y	NA
3	LCS-220711	LCS	07-11-2022 09:10 am	1.00	0.00 mL	0.00 mL	003.D	Liquid	Y	NA
4	HS22061645-01	SAMP	07-11-2022 09:19 am	1.00	0.00 mL	0.00 mL	004.D	Liquid	Y	<2
5	HS22061645-02	SAMP	07-11-2022 09:27 am	1.00	0.00 mL	0.00 mL	005.D	Liquid	Y	<2
6	HS22061645-03	SAMP	07-11-2022 09:36 am	1.00	0.00 mL	0.00 mL	006.D	Liquid	Y	<2
7	HS22061645-04	SAMP	07-11-2022 09:46 am	1.00	0.00 mL	0.00 mL	007.D	Liquid	Y	<2
8	HS22061645-05	SAMP	07-11-2022 09:56 am	1.00	0.00 mL	0.00 mL	008.D	Liquid	Y	<2
9	HS22061645-06	SAMP	07-11-2022 10:05 am	1.00	0.00 mL	0.00 mL	009.D	Liquid	Y	<2
10	HS22061645-10	SAMP	07-11-2022 10:15 am	1.00	0.00 mL	0.00 mL	010.D	Liquid	Y	<2
11	RSK-CCV	CCV	07-11-2022 10:26 am	1.00	0.00 mL	0.00 mL	011.D	Liquid	Y	NA
12	HS22061645-01	SAMP	07-11-2022 10:37 am	100.0(	0.00 mL	0.00 mL	012.D	Liquid	Y	<2
13	HS22061645-02	SAMP	07-11-2022 10:45 am	20.00	0.00 mL	0.00 mL	013.D	Liquid	Y	<2
14	HS22061645-03	SAMP	07-11-2022 10:54 am	20.00	0.00 mL	0.00 mL	014.D	Liquid	Y	<2
15	HS22061645-04	SAMP	07-11-2022 11:04 am	200.0(	0.00 mL	0.00 mL	015.D	Liquid	Y	<2
16	HS22061645-10	SAMP	07-11-2022 11:17 am	400.0(	0.00 mL	0.00 mL	016.D	Liquid	Y	<2
17	HS22070020-01	SAMP	07-11-2022 11:28 am	1.00	0.00 mL	0.00 mL	017.D	Liquid	Y	<2
18	HS22070020-01MS	MS	07-11-2022 11:36 am	1.00	0.00 mL	0.00 mL	018.D	Liquid	Y	NA
19	HS22070020-01MSD	MSD	07-11-2022 11:53 am	1.00	0.00 mL	0.00 mL	019.D	Liquid	Y	NA
20	HS22070020-02	SAMP	07-11-2022 12:02 pm	1.00	0.00 mL	0.00 mL	020.D	Liquid	Y	<2
21	HS22070020-04	SAMP	07-11-2022 12:10 pm	1.00	0.00 mL	0.00 mL	021.D	Liquid	Y	<2
22	RSK-CCV	CCV	07-11-2022 12:24 pm	1.00	0.00 mL	0.00 mL	022.D	Liquid	Y	NA
23	HS22070020-01	SAMP	07-11-2022 12:36 pm	100.0(	0.00 mL	0.00 mL	023.D	Liquid	Y	<2
24	HS22070020-02	SAMP	07-11-2022 12:46 pm	10.00	0.00 mL	0.00 mL	024.D	Liquid	Y	<2
25	HS22070326-03	SAMP	07-11-2022 12:58 pm	1.00	0.00 mL	0.00 mL	025.D	Liquid	Y	<2
26	HS22070326-04	SAMP	07-11-2022 01:06 pm	1.00	0.00 mL	0.00 mL	026.D	Liquid	Y	<2
27	HS22070326-05	SAMP	07-11-2022 01:17 pm	1.00	0.00 mL	0.00 mL	027.D	Liquid	Y	<2
28	HS22070326-07	SAMP	07-11-2022 01:25 pm	1.00	0.00 mL	0.00 mL	028.D	Liquid	Y	<2
29	HS22070326-07MS	MS	07-11-2022 01:35 pm	1.00	0.00 mL	0.00 mL	029.D	Liquid	Y	NA
30	HS22070326-07MSD	MSD	07-11-2022 01:43 pm	1.00	0.00 mL	0.00 mL	030.D	Liquid	Y	NA
31	HS22070326-11	SAMP	07-11-2022 01:53 pm	1.00	0.00 mL	0.00 mL	031.D	Liquid	Y	<2
32	HS22070326-03	SAMP	07-11-2022 02:02 pm	100.0(	0.00 mL	0.00 mL	032.D	Liquid	Y	<2
33	RSK-CCV	CCV	07-11-2022 02:23 pm	1.00	0.00 mL	0.00 mL	033.D	Liquid	Y	NA
34	HS22070326-04	SAMP	07-11-2022 02:34 pm	50.00	0.00 mL	0.00 mL	034.D	Liquid	Y	<2
35	HS22070326-05	SAMP	07-11-2022 02:42 pm	50.00	0.00 mL	0.00 mL	035.D	Liquid	Y	<2
36	HS22070326-07	SAMP	07-11-2022 02:52 pm	100.0(	0.00 mL	0.00 mL	036.D	Liquid	Y	<2
37	HS22070326-11	SAMP	07-11-2022 03:05 pm	10.00	0.00 mL	0.00 mL	037.D	Liquid	Y	<2
38	RSK-CCV	CCV	07-11-2022 03:16 pm	1.00	0.00 mL	0.00 mL	038.D	Liquid	Y	NA

FID04 -Logbook

Chemical	Value
pH Paper	300107067-03
CCV/LC/LSD/MS/MSD	300107064-16/63-06

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070326

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 0851

Lab File ID: 001 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	811.22873	0.01	-12.75	20.00	AVRG
Methane	974.99200	857.98694	0.01	12.00	20.00	AVRG
Ethene	585.76000	682.49258	0.01	-16.51	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070326

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1026

Lab File ID: 011 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	833.23172	0.01	-15.81	20.00	AVRG
Methane	974.99200	1032.3417	0.01	-5.88	20.00	AVRG
Ethene	585.76000	676.08309	0.01	-15.42	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070326

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1224

Lab File ID: 022 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	799.58987	0.01	-11.13	20.00	AVRG
Methane	974.99200	841.19415	0.01	13.72	20.00	AVRG
Ethene	585.76000	664.80712	0.01	-13.49	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070326

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1423

Lab File ID: 033 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	786.84254	0.01	-9.36	20.00	AVRG
Methane	974.99200	964.54856	0.01	1.07	20.00	AVRG
Ethene	585.76000	689.67359	0.01	-17.74	20.00	AVRG

FORM VII GASES

FORM 7B
GASES CALIBRATION VERIFICATION SUMMARY

Lab Name: Contract:

Lab Code: Case No.: SAS No.: SDG No.: HS22070326

Instrument ID: FID-4 Calibration Date: 07/11/22 Time: 1516

Lab File ID: 038 Init. Calib. Date(s): 01/24/17 01/24/17

Init. Calib. Times: 0906 1113

GC Column: RTX-PLOT ID: 0.53 (mm)

COMPOUND	RRF OR AMOUNT	RRF250.00 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Ethane	719.48900	744.38841	0.01	-3.46	20.00	AVRG
Methane	974.99200	886.28589	0.01	9.10	20.00	AVRG
Ethene	585.76000	623.62018	0.01	-6.46	20.00	AVRG

FORM VII GASES

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\001.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 08:51
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 1 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

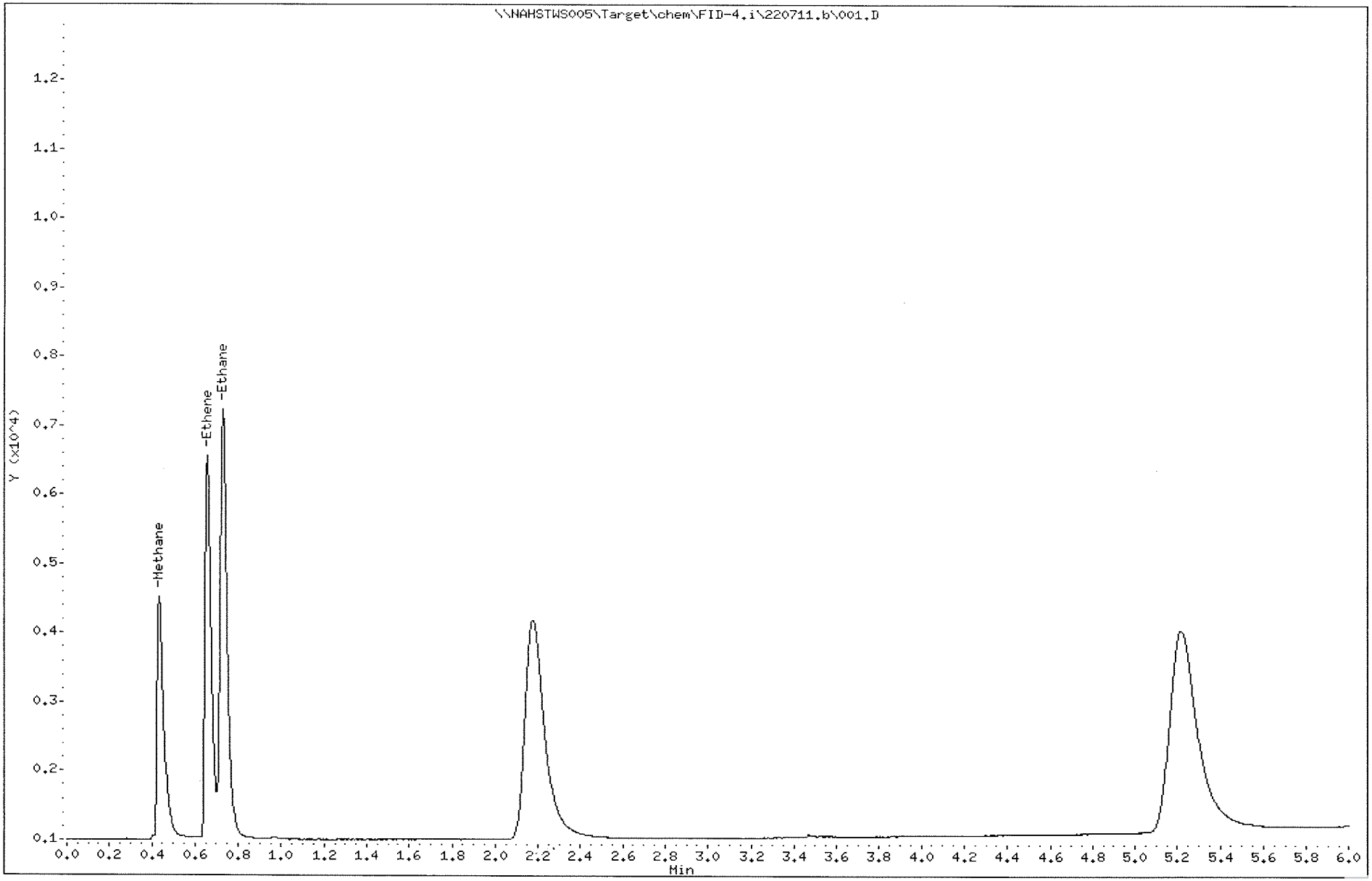
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.433	0.436	-0.003	8277	9.64700	8.489
2 Ethene	0.656	0.656	0.000	11500	16.8500	19.632
3 Ethane	0.730	0.733	-0.003	14637	18.0430	20.343

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\001.D
Date : 11-JUL-2022 08:51
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\002.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\002.D
Lab Smp Id: MBLK-220711 Client Smp ID: MBLK-220711
Inj Date : 11-JUL-2022 09:00
Operator : PL Inst ID: FID-4.i
Smp Info : MBLK-220711;MBLK-220711;3;;BLANK
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 2 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

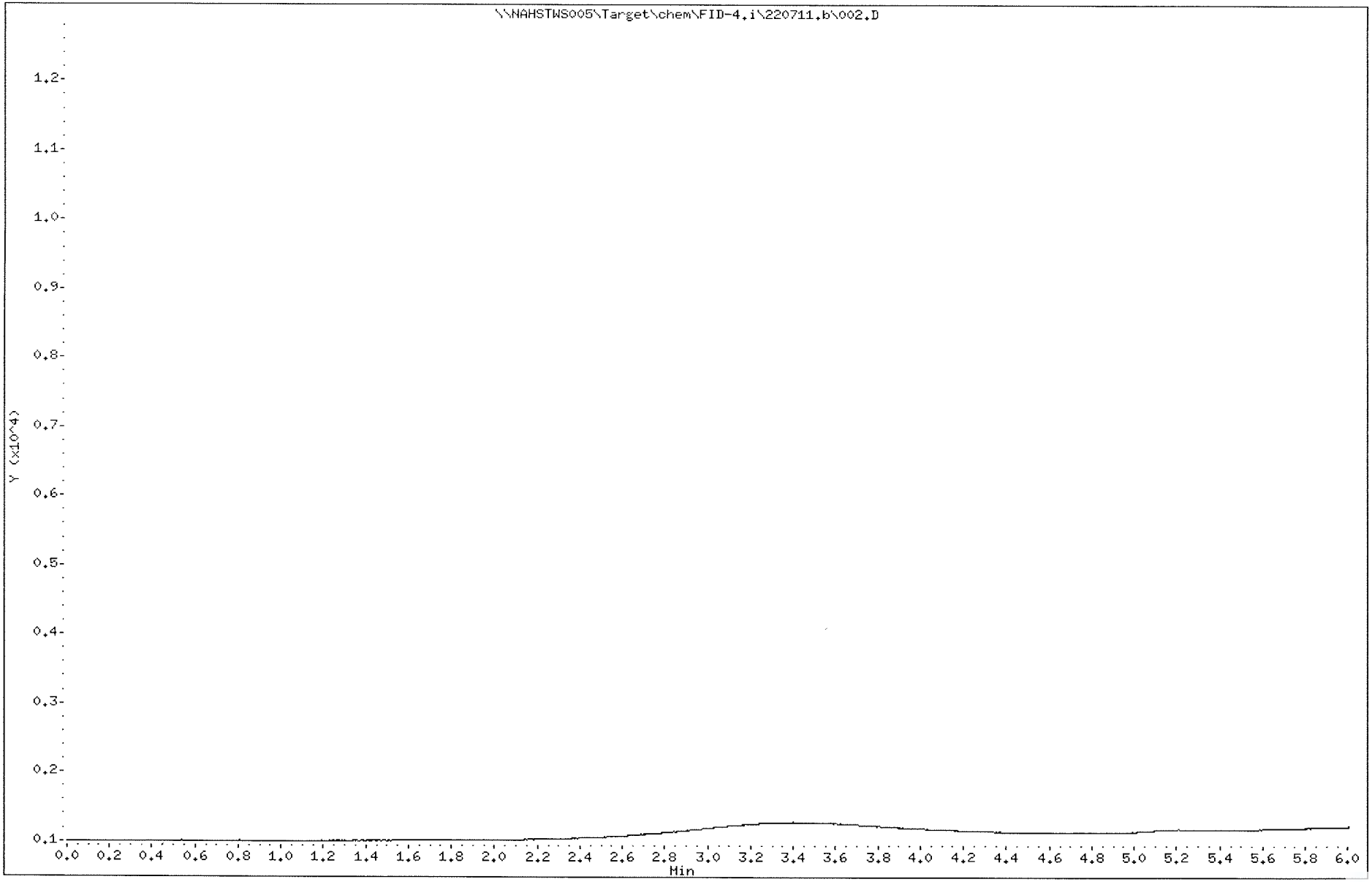
Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\002.D
Date : 11-JUL-2022 09:00
Client ID: MBLK-220711
Sample Info: MBLK-220711;MBLK-220711;3;;BLANK

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\003.D
Lab Smp Id: LCS-220711 Client Smp ID: LCS-220711
Inj Date : 11-JUL-2022 09:10
Operator : PL Inst ID: FID-4.i
Smp Info : LCS-220711;LCS-220711;3;;LCS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 3 QC Sample: LCS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

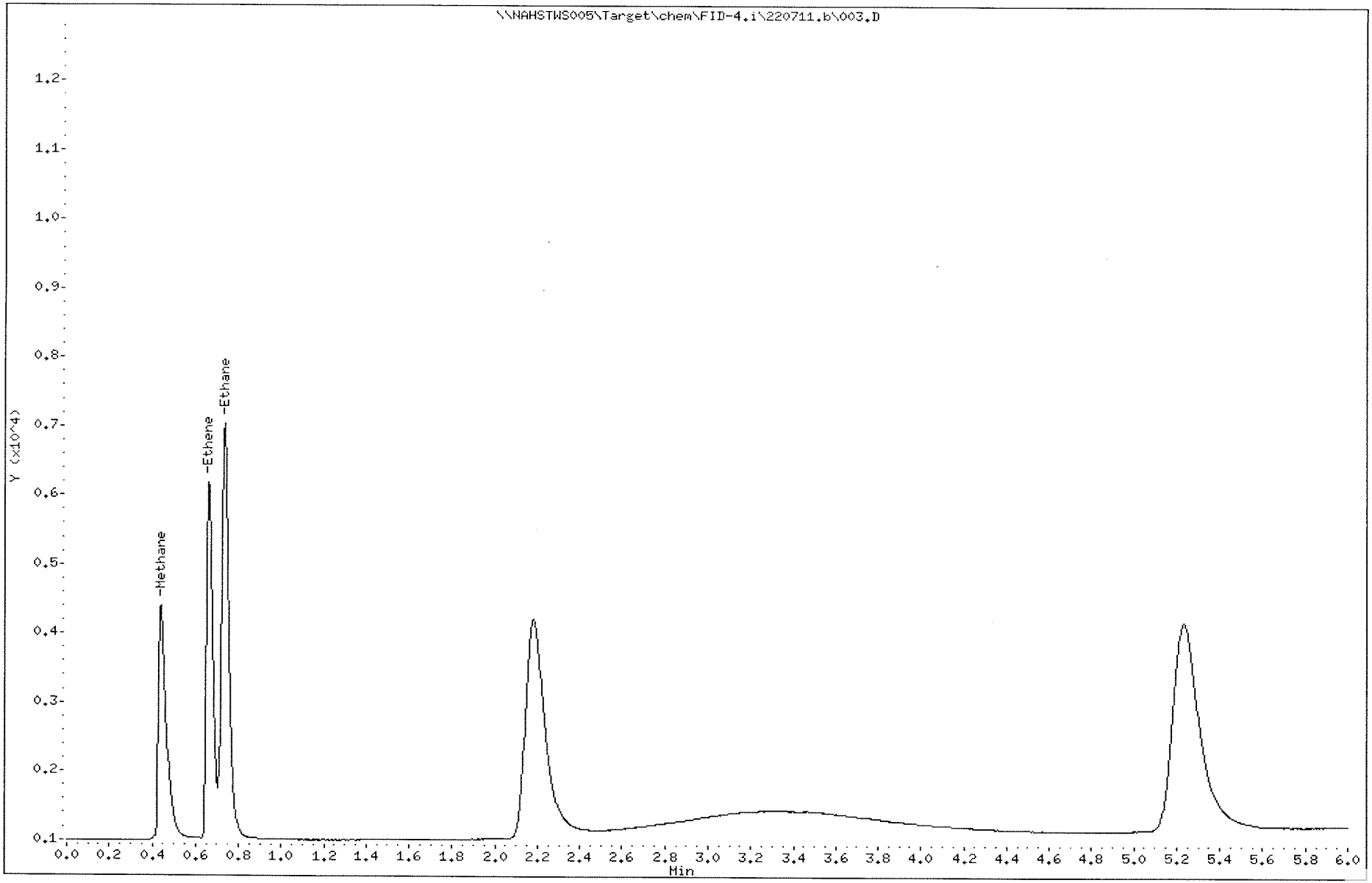
Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	9129	9.36315	9.363
2 Ethene	0.660	0.656	0.004	11090	18.9327	18.932
3 Ethane	0.733	0.733	0.000	14796	20.5646	20.564

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\003.D
Date : 11-JUL-2022 09:10
Client ID: LCS-220711
Sample Info: LCS-220711;LCS-220711;3;;LCS

Instrument: FID-4.i
Operator: PL
Column diameter: 0.53

Column phase: Rtx-PLOT



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\011.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 10:26
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 11 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

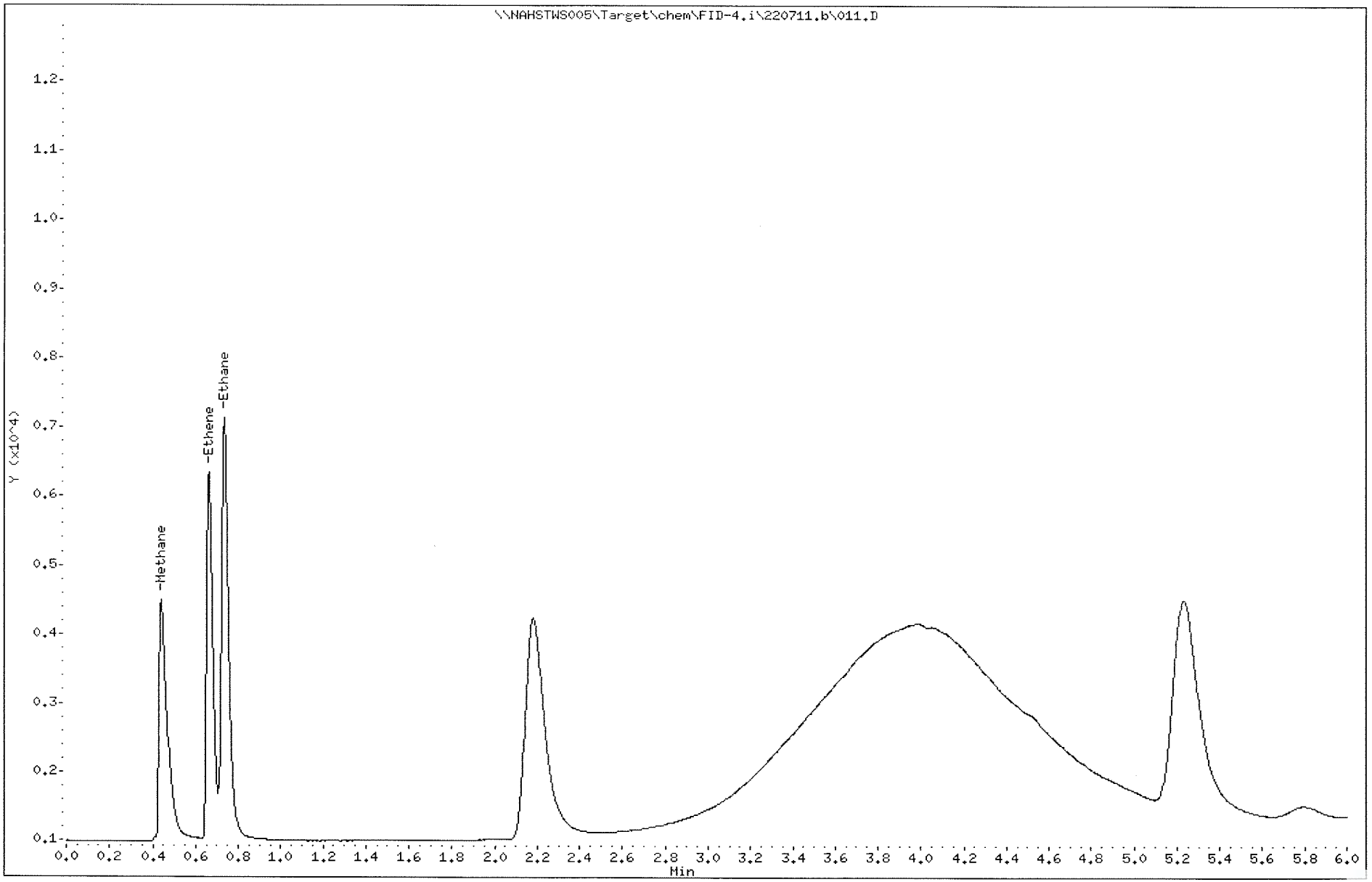
Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.440	0.436	0.004	9959	9.64700	10.214
2 Ethene	0.663	0.656	0.007	11392	16.8500	19.448
3 Ethane	0.733	0.733	0.000	15034	18.0430	20.895

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\011.D
Date : 11-JUL-2022 10:26
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\018.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 11-JUL-2022 11:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MS;HS22070020-01MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	1228226	1259.73	1259.728(AR)
2 Ethene	0.656	0.656	0.000	15372	26.2428	26.242(R)
3 Ethane	0.730	0.733	-0.003	18317	25.4583	25.458(RM)

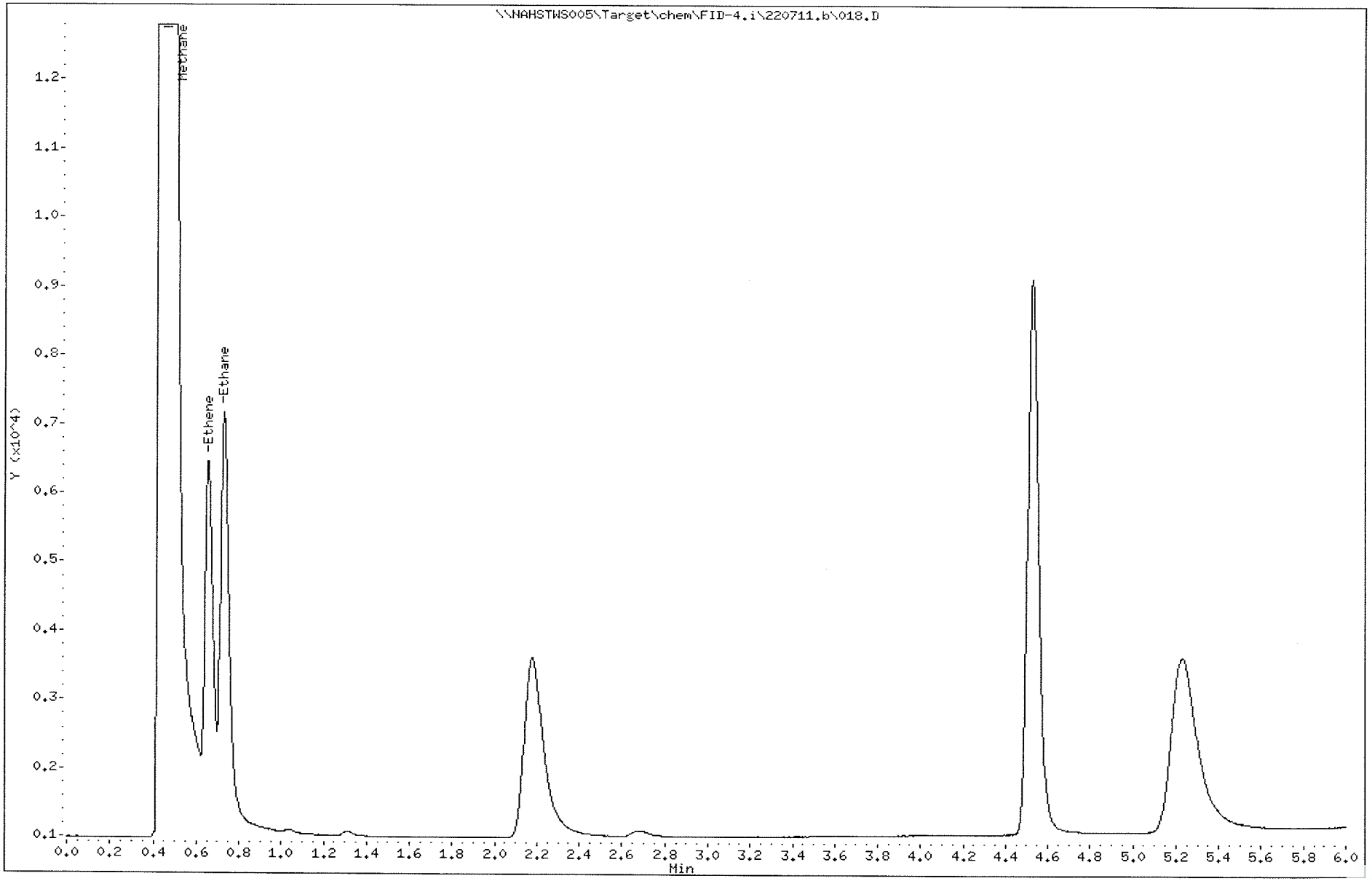
QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\018.D
Date : 11-JUL-2022 11:36
Client ID: HS22070020-01MS
Sample Info: HS22070020-01MS;HS22070020-01MS

Instrument: FID-4.i
Operator: PL
Column diameter: 0.53

Column phase: Rtx-PLOT



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\018.D
Lab Smp Id: HS22070020-01MS Client Smp ID: HS22070020-01MS
Inj Date : 11-JUL-2022 11:36
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MS;HS22070020-01MS
Misc Info : ;1;0;1
Comment   :
Method   : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 18 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	1228226	1259.73	1259.728(AR)
2 Ethene	0.656	0.656	0.000	15372	26.2428	26.242(R)
3 Ethane	0.730	0.733	-0.003	20237	28.1269	28.126(R)

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\018.D

Date : 11-JUL-2022 11:36

Client ID: HS22070020-01MS

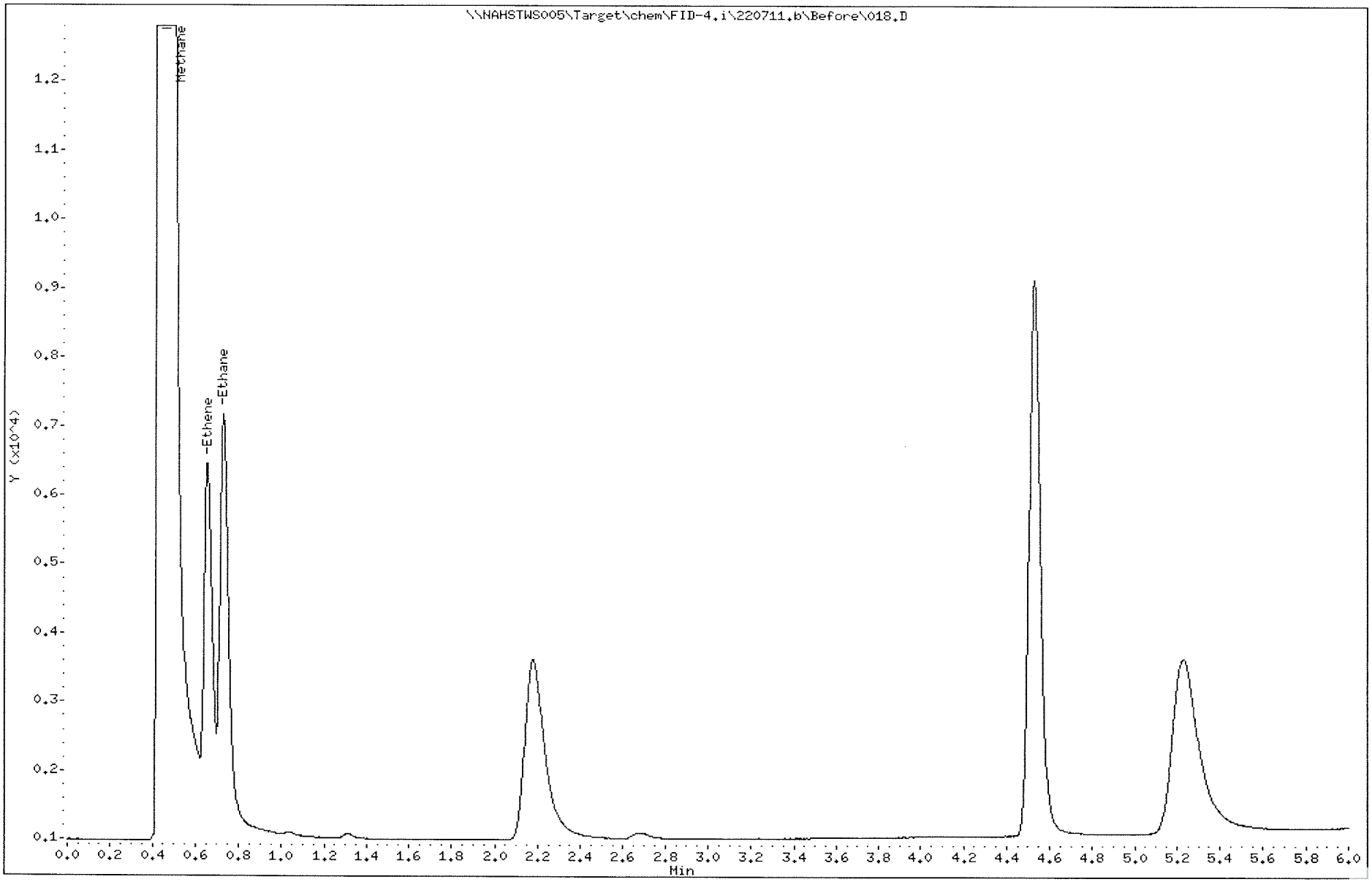
Instrument: FID-4.i

Sample Info: HS22070020-01MS;HS22070020-01MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\019.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\019.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 11-JUL-2022 11:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.440	0.436	0.004	1247365	1279.36	1279.358(AR)
2 Ethene	0.656	0.656	0.000	15798	26.9701	26.970(RM)
3 Ethane	0.730	0.733	-0.003	16788	23.3332	23.333(RM)

QC Flag Legend

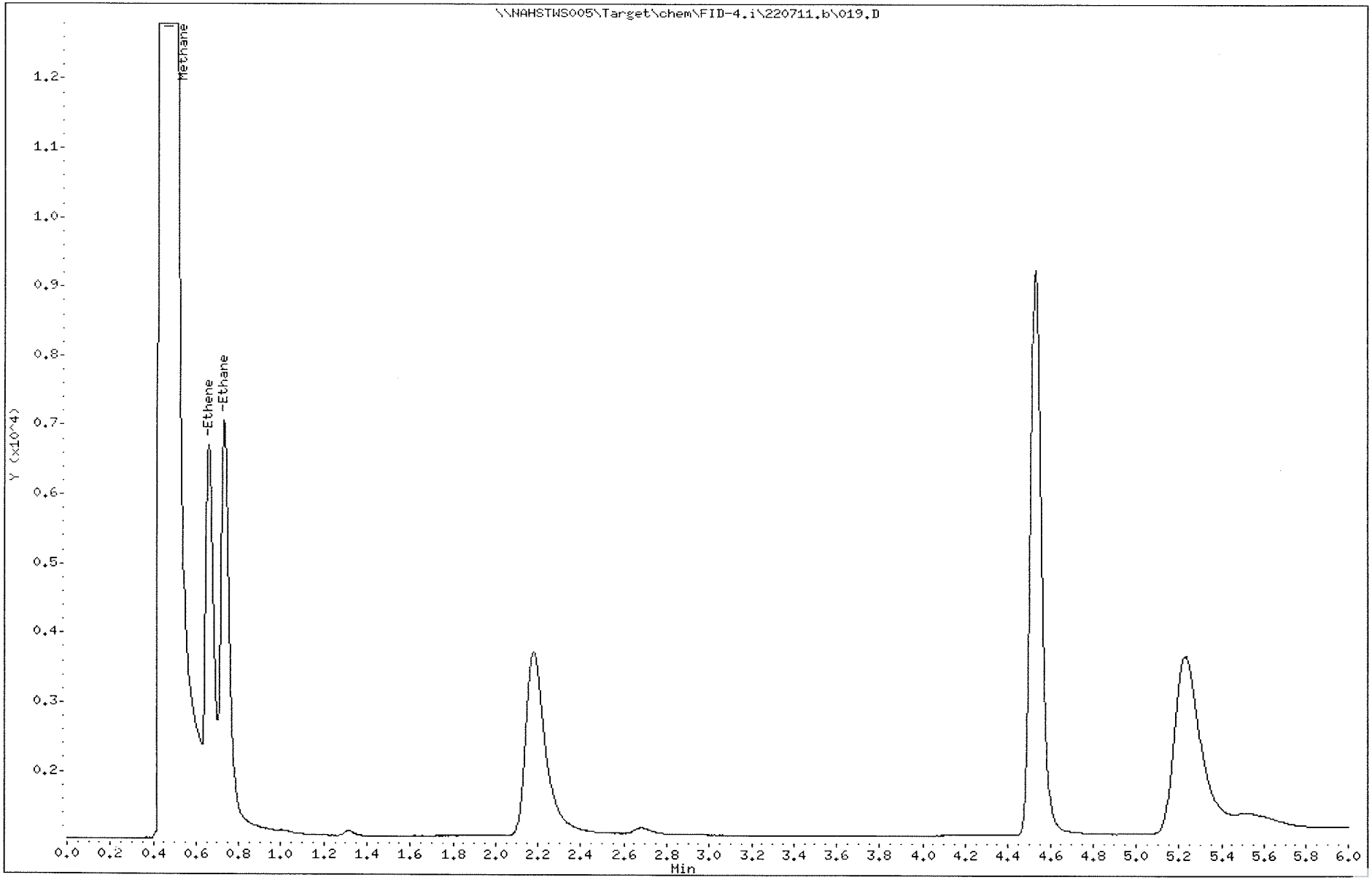
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\019.D
Date : 11-JUL-2022 11:53
Client ID: HS22070020-01MSD
Sample Info: HS22070020-01MSD;HS22070020-01MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\019.D
Lab Smp Id: HS22070020-01MSD Client Smp ID: HS22070020-01MSD
Inj Date : 11-JUL-2022 11:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070020-01MSD;HS22070020-01MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 19 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.440	0.436	0.004	1247365	1279.36	1279.358(AR)
2 Ethene	0.656	0.656	0.000	32140	54.8688	54.868(R)

QC Flag Legend

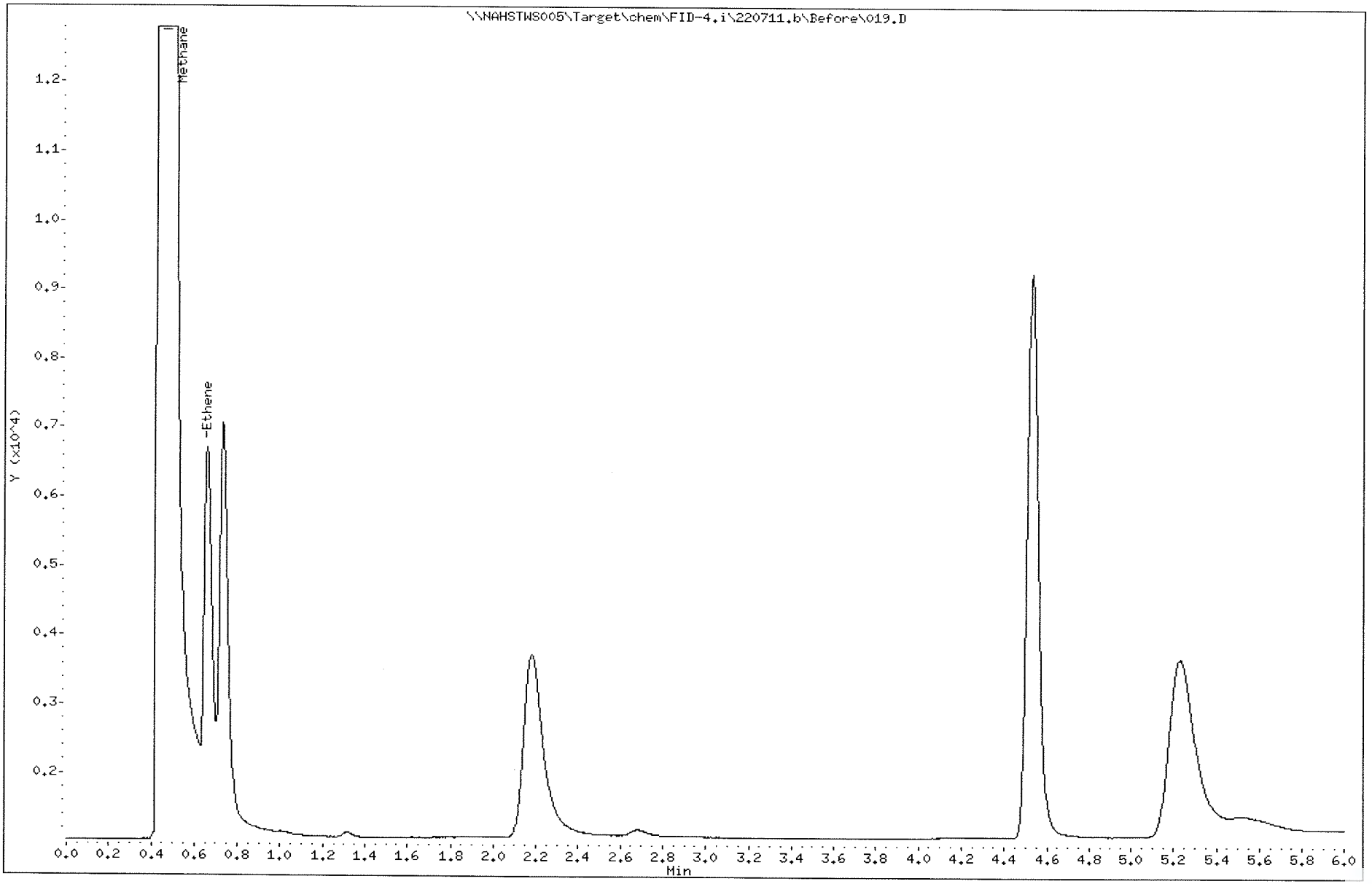
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\019.D
Date : 11-JUL-2022 11:53
Client ID: HS22070020-01MSD
Sample Info: HS22070020-01MSD;HS22070020-01MSD

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\022.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 12:24
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	8115	9.64700	8.323
2 Ethene	0.660	0.656	0.004	11202	16.8500	19.123(M)
3 Ethane	0.730	0.733	-0.003	14427	18.0430	20.051(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\022.D

Date : 11-JUL-2022 12:24

Client ID: RSK-CCV

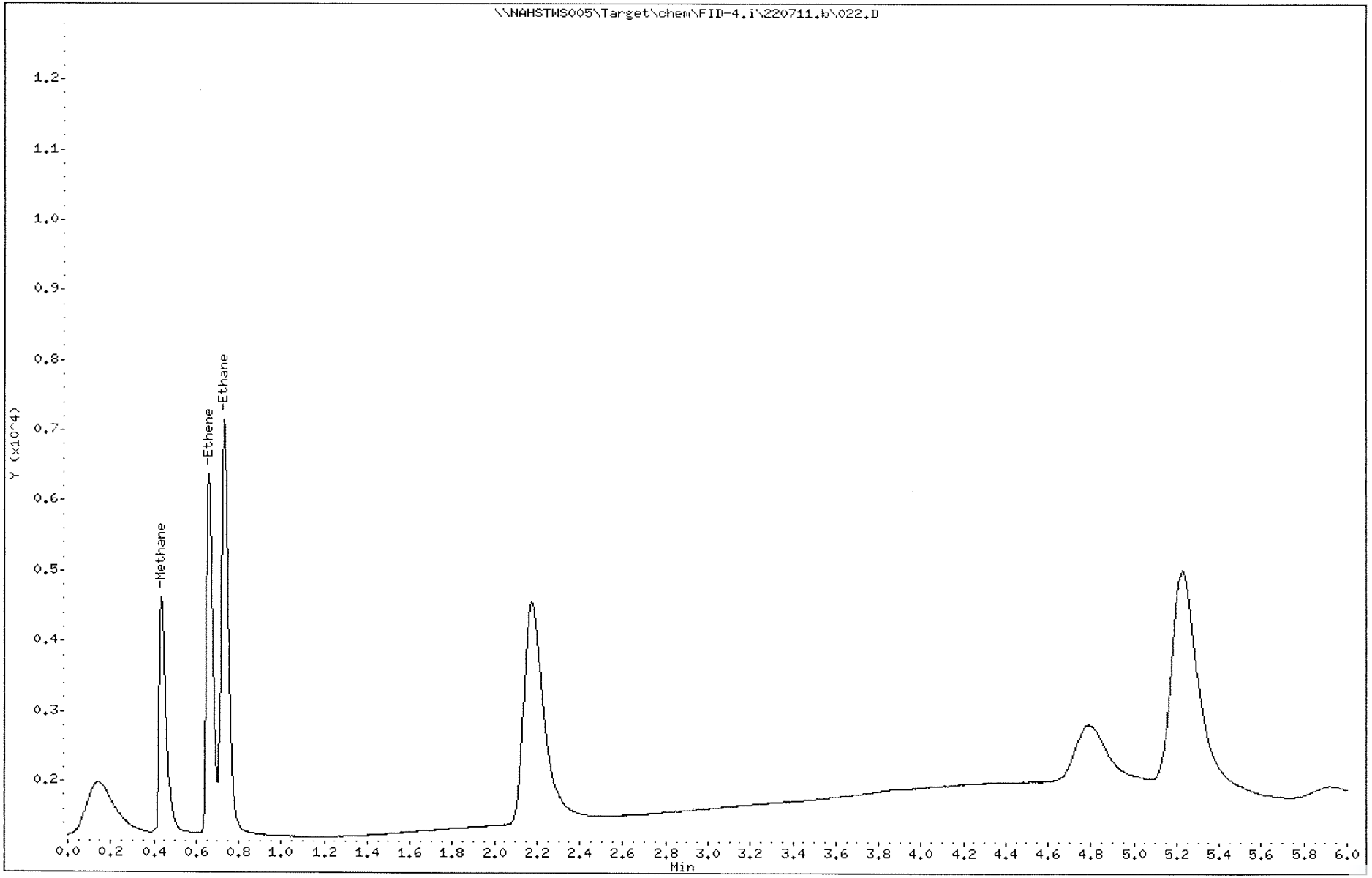
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\022.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 12:24
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 22 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	AMOUNTS CAL-AMT (ug/L)	AMOUNTS ON-COL (ug/L)
1 Methane	0.436	0.436	0.000	8115	9.64700	8.323
2 Ethene	0.660	0.656	0.004	25473	16.8500	43.487

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\022.D

Date : 11-JUL-2022 12:24

Client ID: RSK-CCV

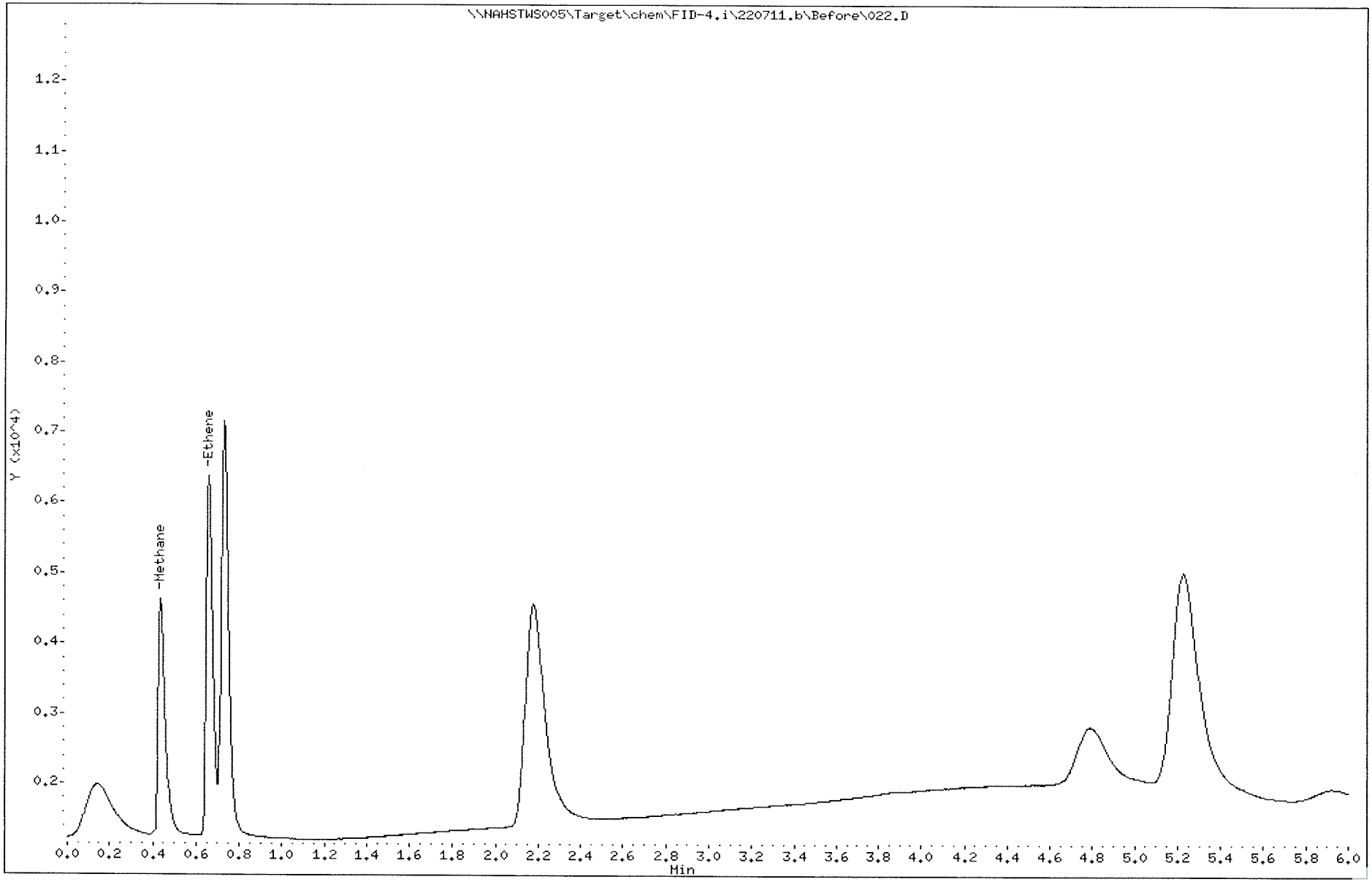
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\025.D
Lab Smp Id: HS22070326-03 Client Smp ID: HS22070326-03
Inj Date : 11-JUL-2022 12:58
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-03;HS22070326-03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	2899133	2973.49	2973.493(A)
2 Ethene	0.653	0.656	-0.003	17659	30.1471	30.147(M)

QC Flag Legend

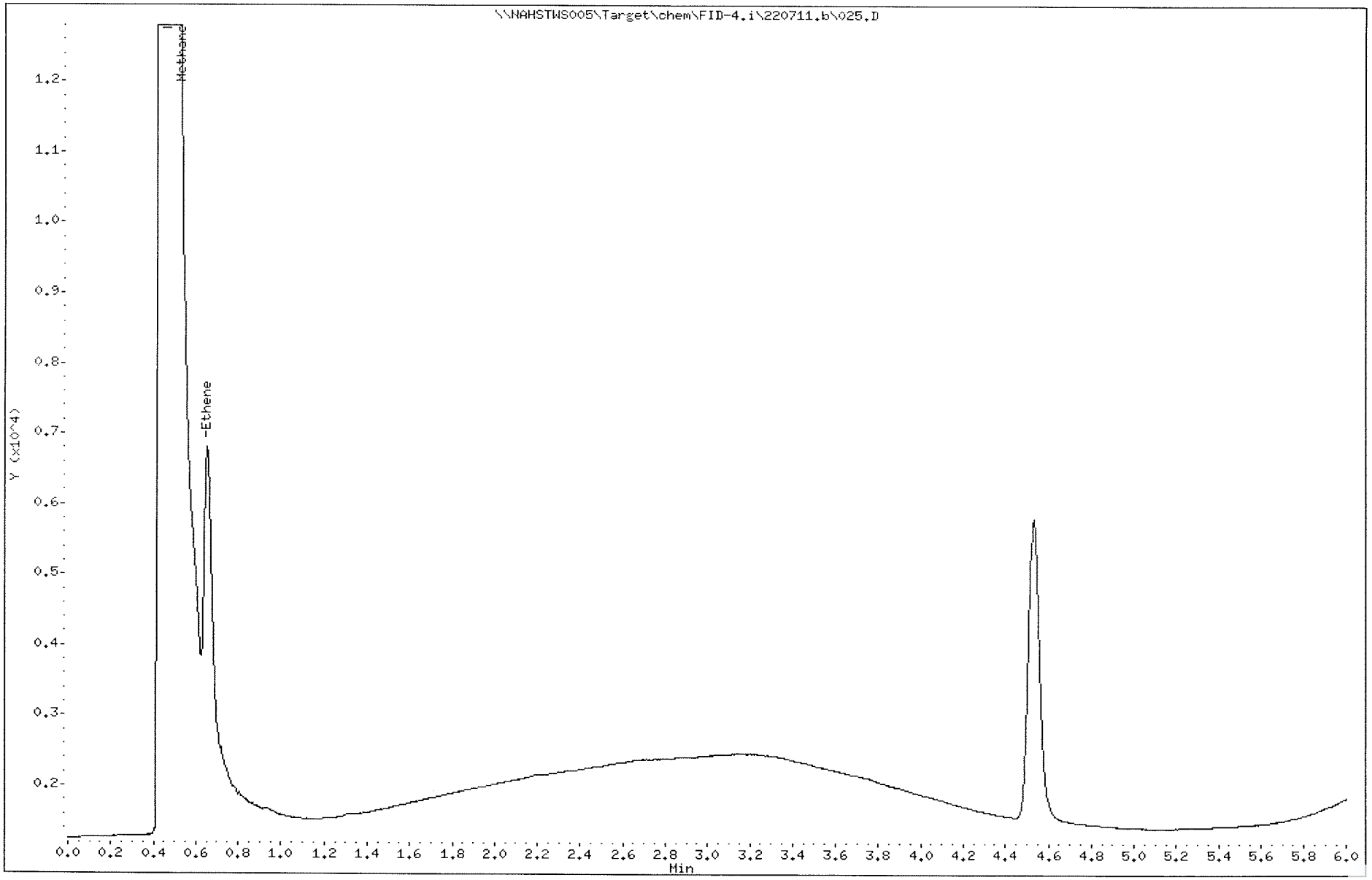
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\025.D
Date : 11-JUL-2022 12:58
Client ID: HS22070326-03
Sample Info: HS22070326-03;HS22070326-03

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\025.D
Lab Smp Id: HS22070326-03 Client Smp ID: HS22070326-03
Inj Date : 11-JUL-2022 12:58
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-03;HS22070326-03
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 25
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	2899133	2973.49	2973.493(A)
2 Ethene	0.653	0.656	-0.003	25603	43.7090	43.708

QC Flag Legend

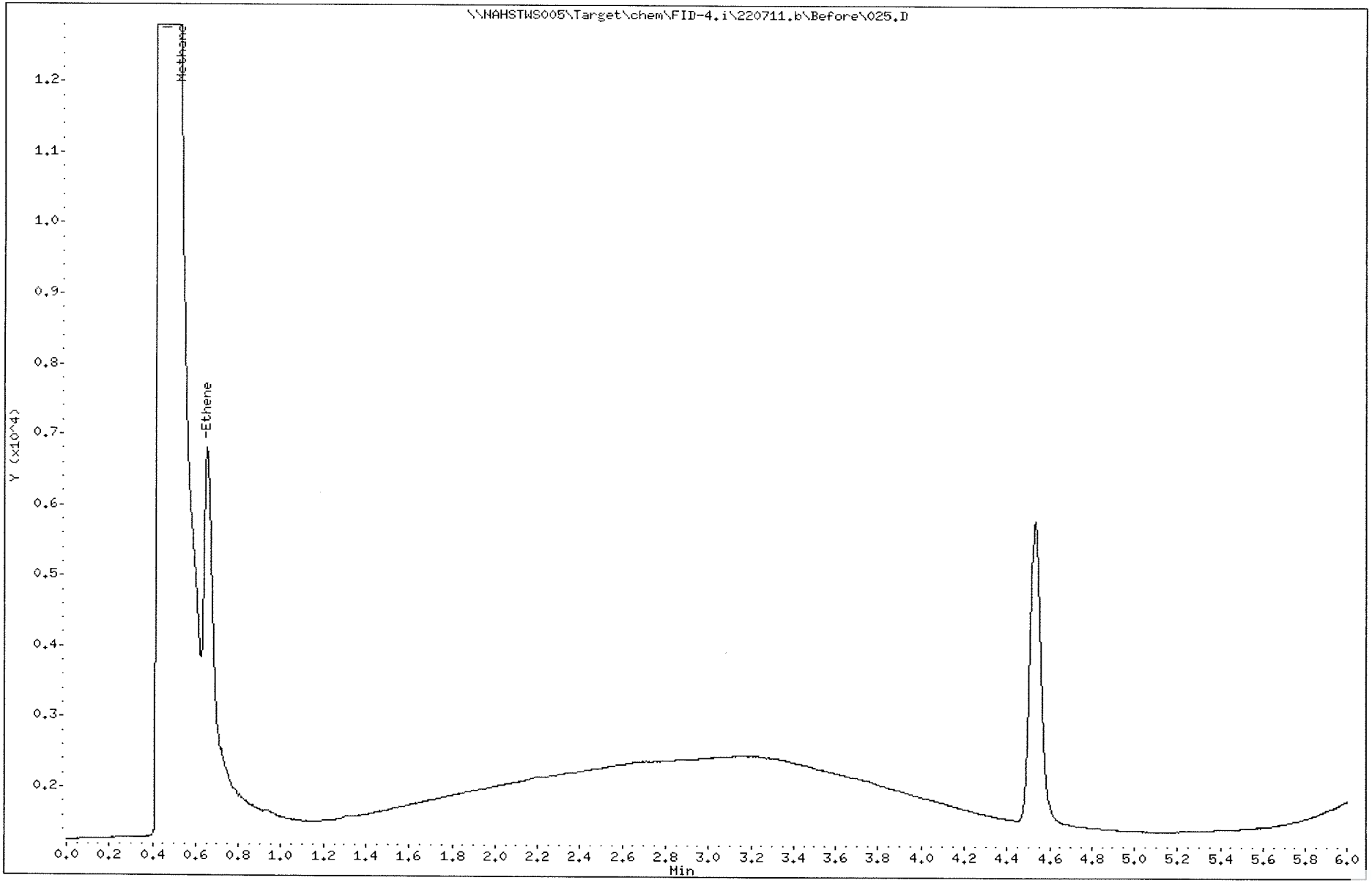
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\025.D
Date : 11-JUL-2022 12:58
Client ID: HS22070326-03
Sample Info: HS22070326-03;HS22070326-03

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\026.D
Lab Smp Id: HS22070326-04 Client Smp ID: HS22070326-04
Inj Date : 11-JUL-2022 13:06
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-04;HS22070326-04
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.440	0.436	0.004	925565	949.305	949.304(A)
2 Ethene	0.663	0.656	0.007	9664	16.4982	16.498(M)
3 Ethane	0.733	0.733	0.000	2182	3.03271	3.032(M)

QC Flag Legend

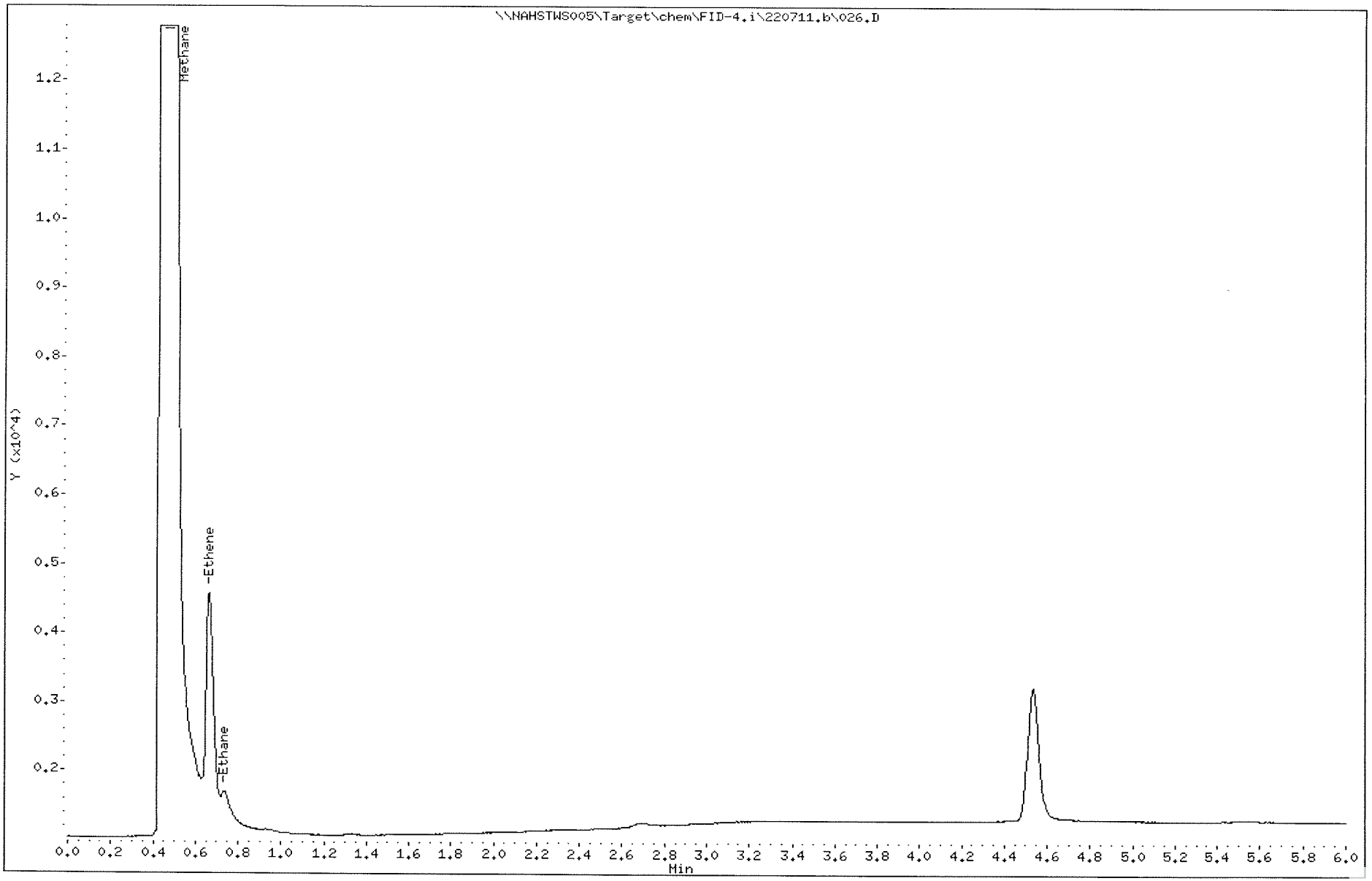
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\026.D
Date : 11-JUL-2022 13:06
Client ID: HS22070326-04
Sample Info: HS22070326-04;HS22070326-04

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\026.D
Lab Smp Id: HS22070326-04 Client Smp ID: HS22070326-04
Inj Date : 11-JUL-2022 13:06
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-04;HS22070326-04
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 26
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	925565	949.305	949.304(A)
2 Ethene	0.663	0.656	0.007	11663	19.9109	19.910

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\026.D

Date : 11-JUL-2022 13:06

Client ID: HS22070326-04

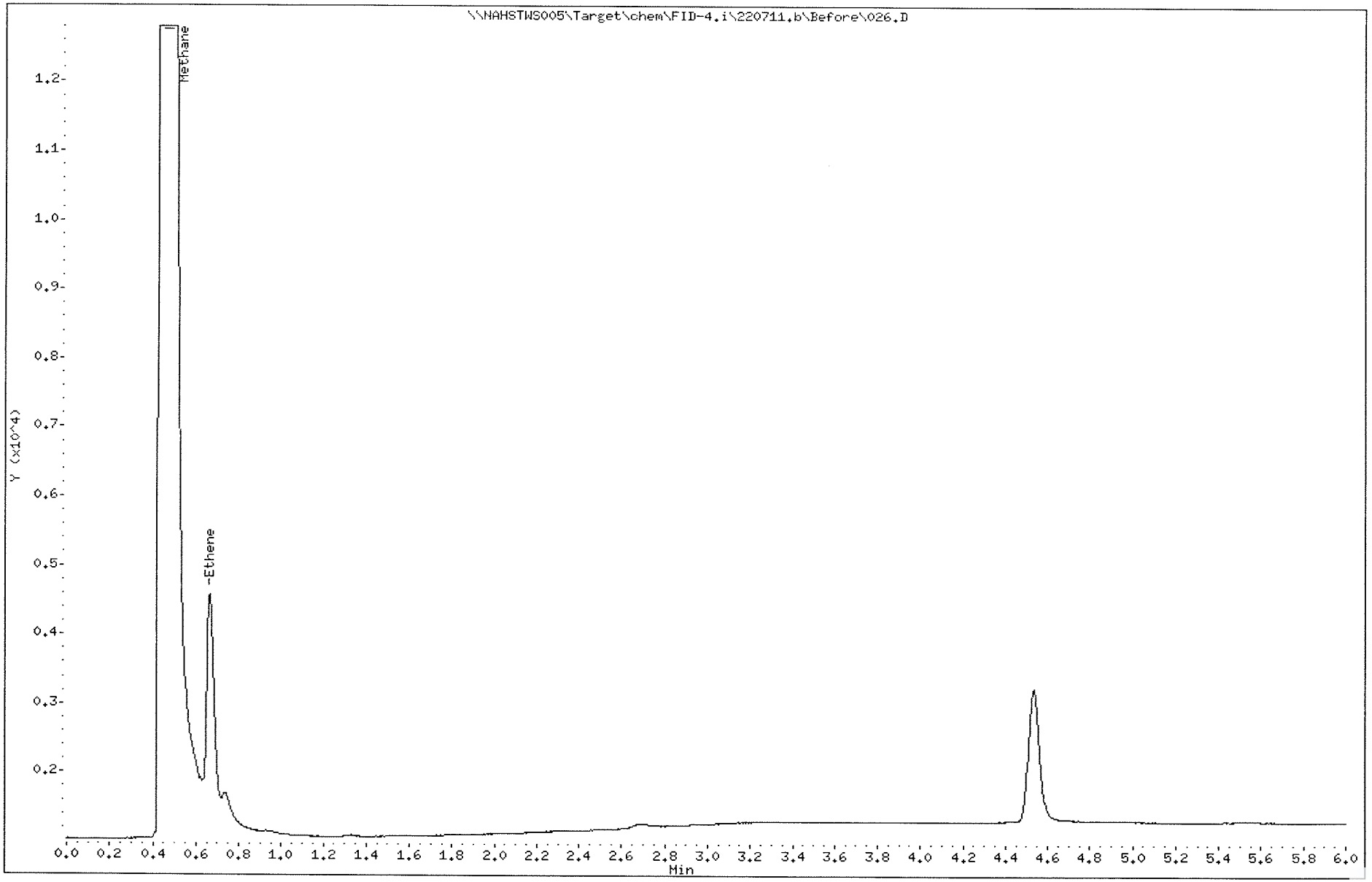
Sample Info: HS22070326-04;HS22070326-04

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\027.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\027.D
Lab Smp Id: HS22070326-05 Client Smp ID: HS22070326-05
Inj Date : 11-JUL-2022 13:17
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-05;HS22070326-05
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	998611	1024.22	1024.224(A)
2 Ethene	0.660	0.656	0.004	9973	17.0257	17.025(M)
3 Ethane	0.730	0.733	-0.003	2166	3.01047	3.010(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\027.D

Date : 11-JUL-2022 13:17

Client ID: HS22070326-05

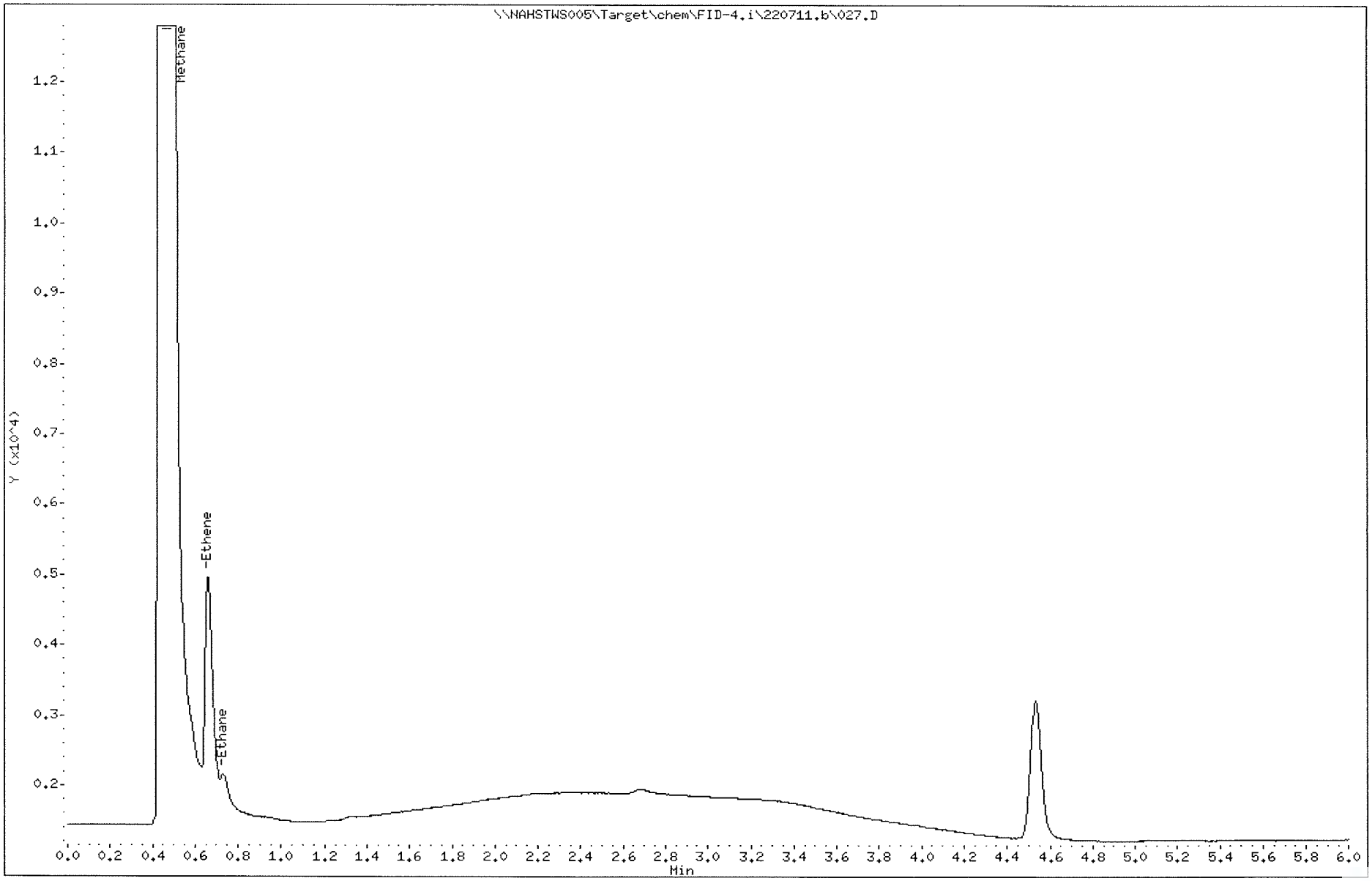
Instrument: FID-4.i

Sample Info: HS22070326-05;HS22070326-05

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\027.D
Lab Smp Id: HS22070326-05 Client Smp ID: HS22070326-05
Inj Date : 11-JUL-2022 13:17
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-05;HS22070326-05
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 27
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.440	0.436	0.004	998611	1024.22	1024.224(A)
2 Ethene	0.660	0.656	0.004	13423	22.9155	22.915

QC Flag Legend

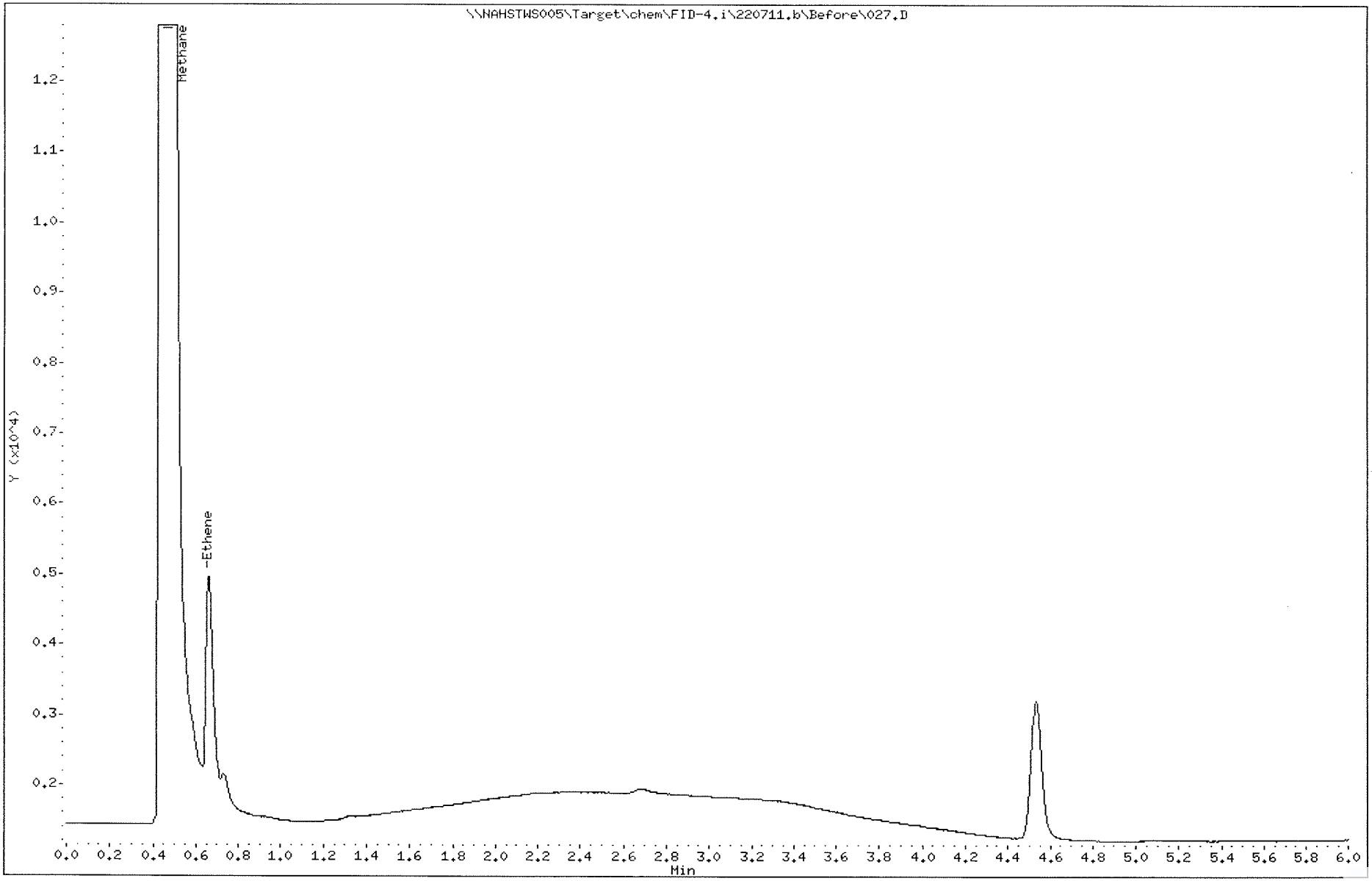
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\027.D
Date : 11-JUL-2022 13:17
Client ID: HS22070326-05
Sample Info: HS22070326-05;HS22070326-05

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\028.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\028.D
Lab Smp Id: HS22070326-07 Client Smp ID: HS22070326-07
Inj Date : 11-JUL-2022 13:25
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07;HS22070326-07
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 28
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	2944754	3020.28	3020.284(A)

QC Flag Legend

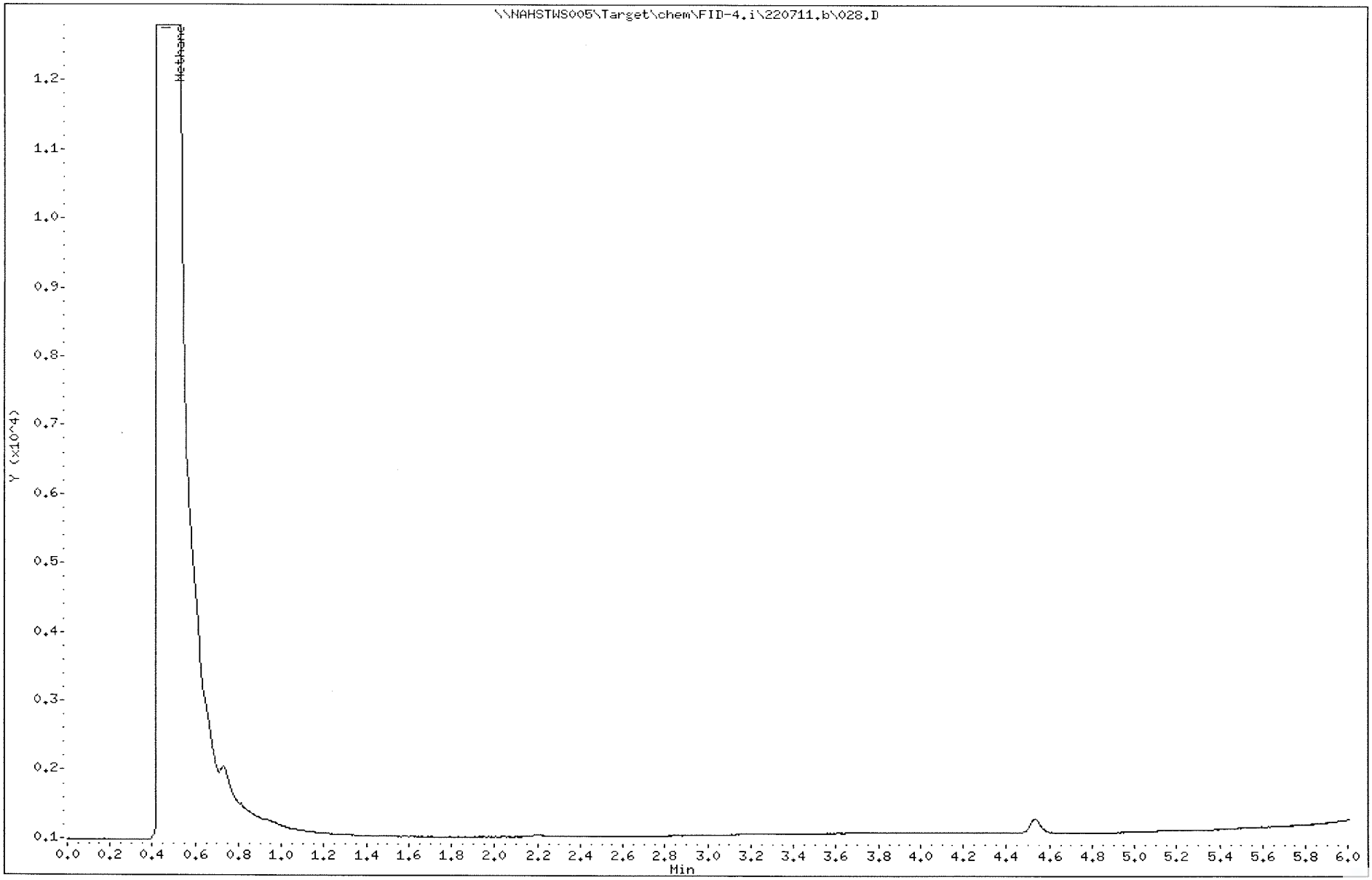
A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\028.D
Date : 11-JUL-2022 13:25
Client ID: HS22070326-07
Sample Info: HS22070326-07;HS22070326-07

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\029.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\029.D
Lab Smp Id: HS22070326-07MS Client Smp ID: HS22070326-07MS
Inj Date : 11-JUL-2022 13:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MS;HS22070326-07MS
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 29 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.440	0.436	0.004	729952	748.675	748.674(AR)
2 Ethene	0.660	0.656	0.004	14188	24.2215	24.221(R)
3 Ethane	0.733	0.733	0.000	16168	22.4715	22.471(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\029.D

Date : 11-JUL-2022 13:35

Client ID: HS22070326-07MS

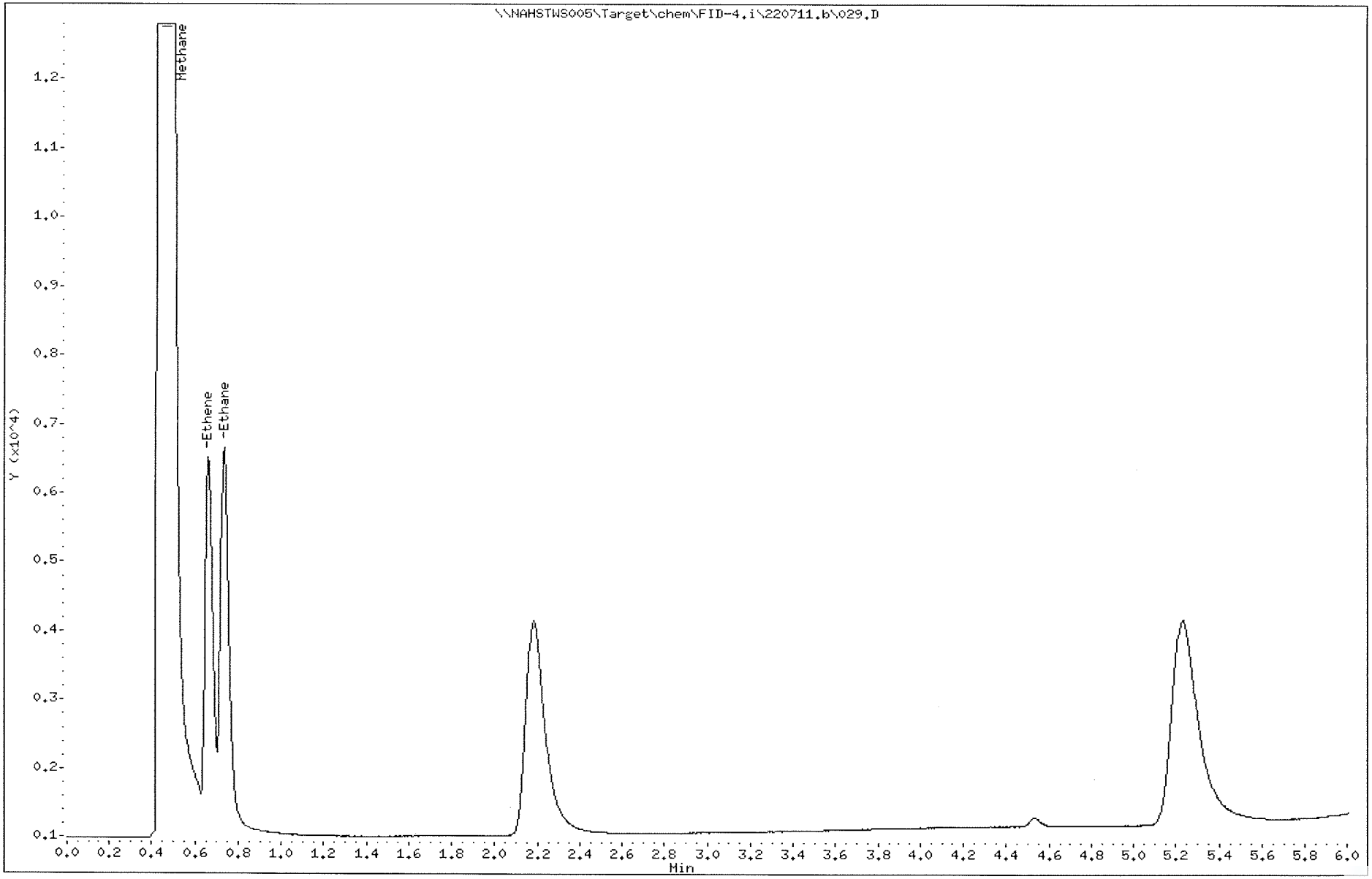
Instrument: FID-4.i

Sample Info: HS22070326-07MS;HS22070326-07MS

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\029.D
Lab Smp Id: HS22070326-07MS Client Smp ID: HS22070326-07MS
Inj Date : 11-JUL-2022 13:35
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MS;HS22070326-07MS
Misc Info : ;1;0;1
Comment   :
Method   : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 29 QC Sample: MS
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.440	0.436	0.004	729952	748.675	748.674(AR)
2 Ethene	0.660	0.656	0.004	14188	24.2215	24.221(R)
3 Ethane	0.733	0.733	0.000	17158	23.8475	23.847(R)

QC Flag Legend

A - Target compound detected but, quantitated amount
    exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\029.D

Date : 11-JUL-2022 13:35

Client ID: HS22070326-07MS

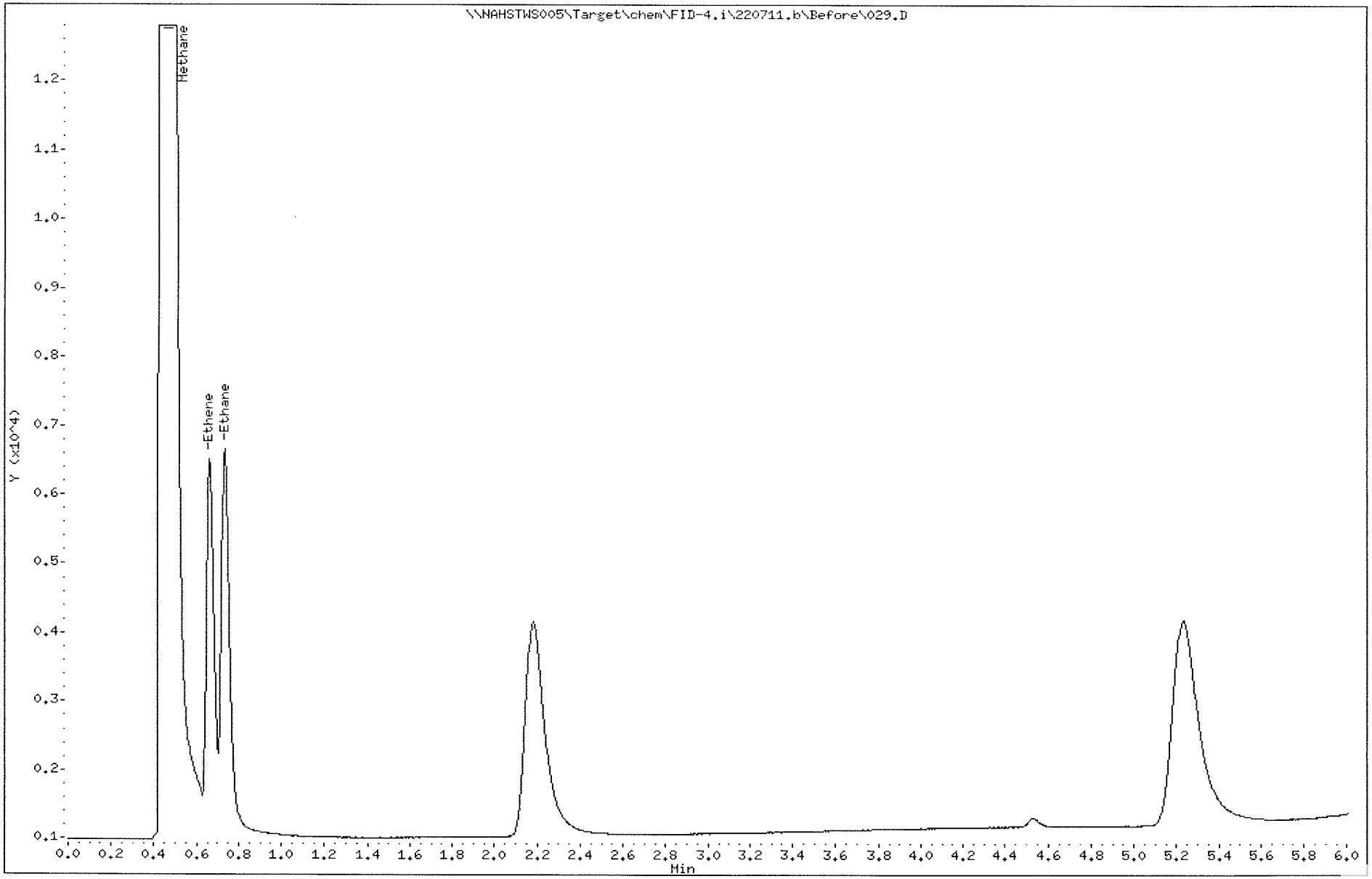
Sample Info: HS22070326-07MS;HS22070326-07MS

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D
Lab Smp Id: HS22070326-07MSD Client Smp ID: HS22070326-07MSD
Inj Date : 11-JUL-2022 13:43
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MSD;HS22070326-07MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 30 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	838460	859.966	859.965(AR)
2 Ethene	0.660	0.656	0.004	13646	23.2962	23.296(RM)
3 Ethane	0.733	0.733	0.000	14618	20.3172	20.317(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\030.D

Date : 11-JUL-2022 13:43

Client ID: HS22070326-07MSD

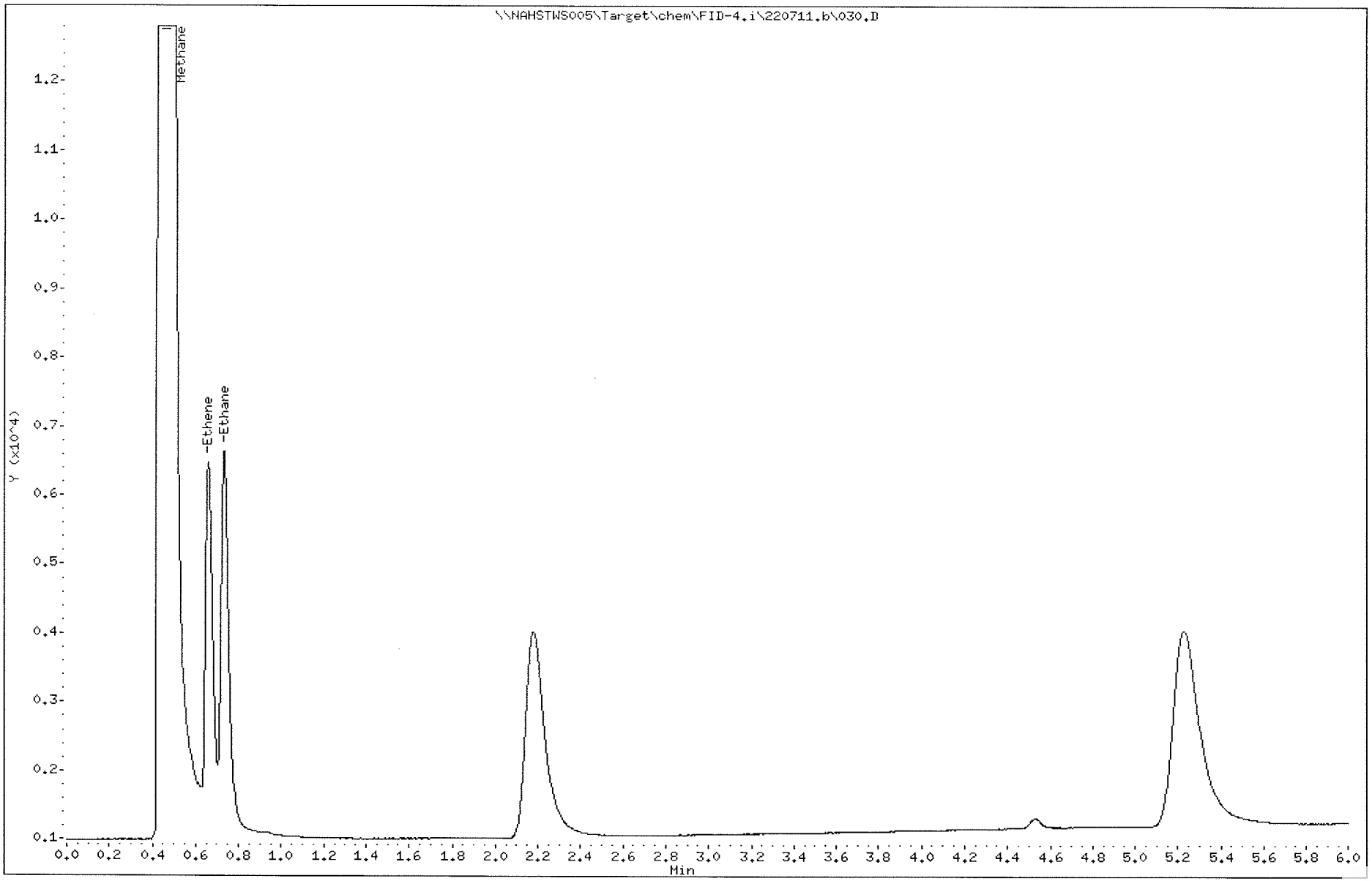
Instrument: FID-4.i

Sample Info: HS22070326-07MSD;HS22070326-07MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\030.D
Lab Smp Id: HS22070326-07MSD Client Smp ID: HS22070326-07MSD
Inj Date : 11-JUL-2022 13:43
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07MSD;HS22070326-07MSD
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 30 QC Sample: MSD
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.436	0.436	0.000	838460	859.966	859.965(AR)
2 Ethene	0.660	0.656	0.004	27996	47.7943	47.794(R)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\030.D

Date : 11-JUL-2022 13:43

Client ID: HS22070326-07MSD

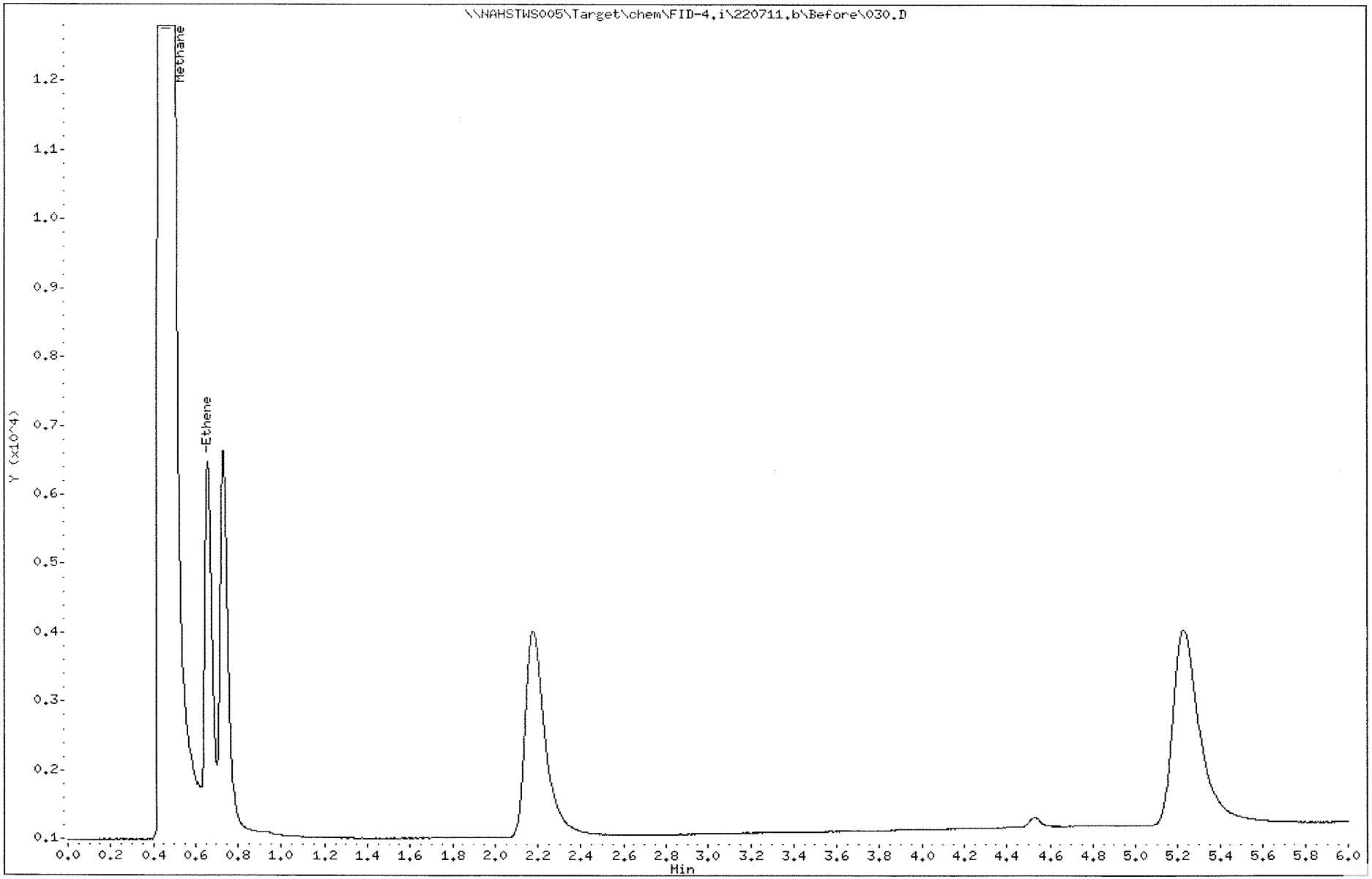
Instrument: FID-4.i

Sample Info: HS22070326-07MSD;HS22070326-07MSD

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\031.D
Lab Smp Id: HS22070326-11 Client Smp ID: HS22070326-11
Inj Date : 11-JUL-2022 13:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-11;HS22070326-11
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.436	0.436	0.000	287809	295.191	295.191(A)
2 Ethene	0.656	0.656	0.000	1512	2.58126	2.581(M)
3 Ethane	0.720	0.733	-0.013	1405	1.95277	1.952(M)

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\031.D

Date : 11-JUL-2022 13:53

Client ID: HS22070326-11

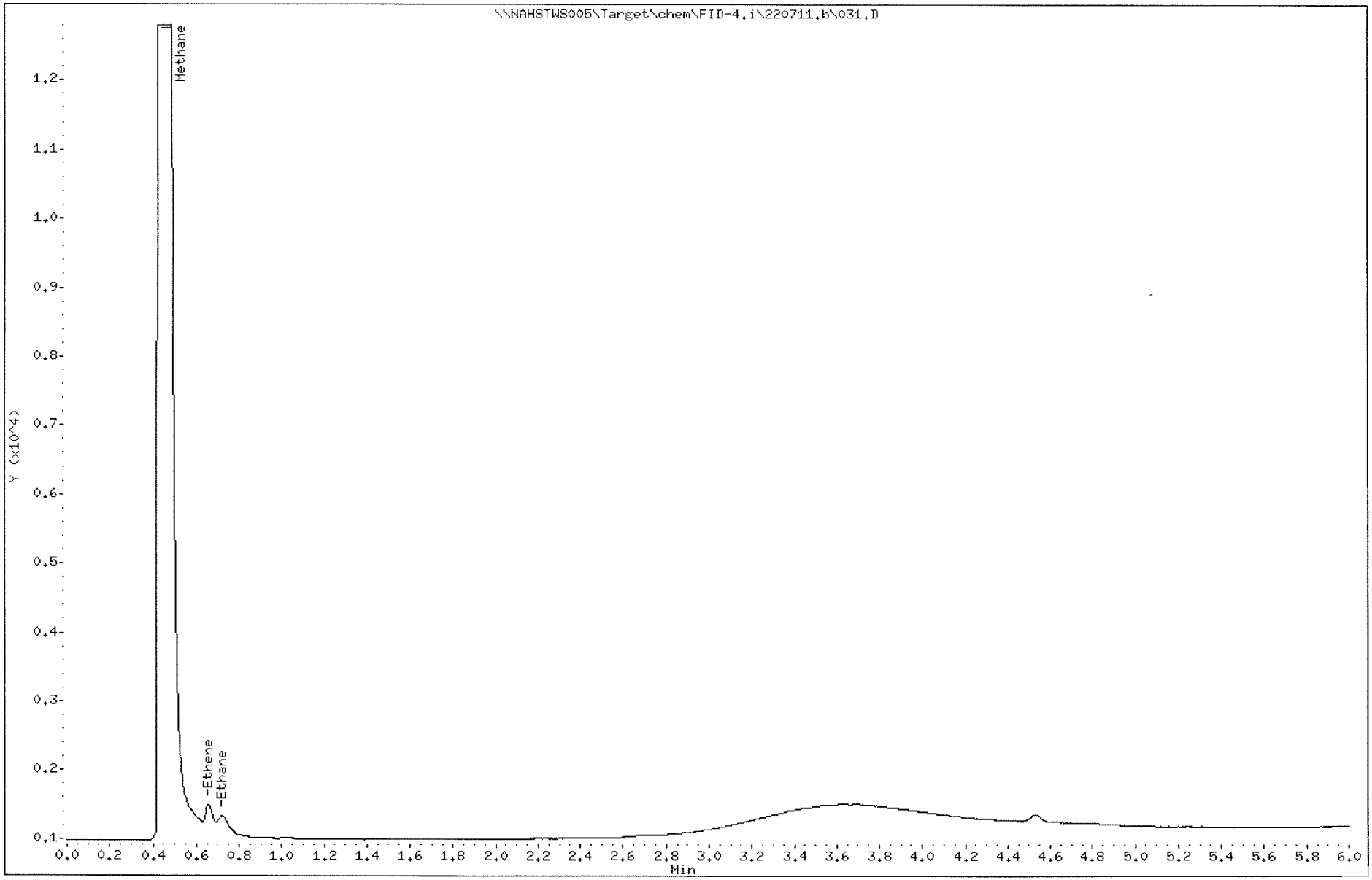
Instrument: FID-4.i

Sample Info: HS22070326-11;HS22070326-11

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\031.D
Lab Smp Id: HS22070326-11 Client Smp ID: HS22070326-11
Inj Date : 11-JUL-2022 13:53
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-11;HS22070326-11
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 31
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	287535	294.910	294.910(A)
2 Ethene	0.656	0.656	0.000	2505	4.27649	4.276

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\031.D

Date : 11-JUL-2022 13:53

Client ID: HS22070326-11

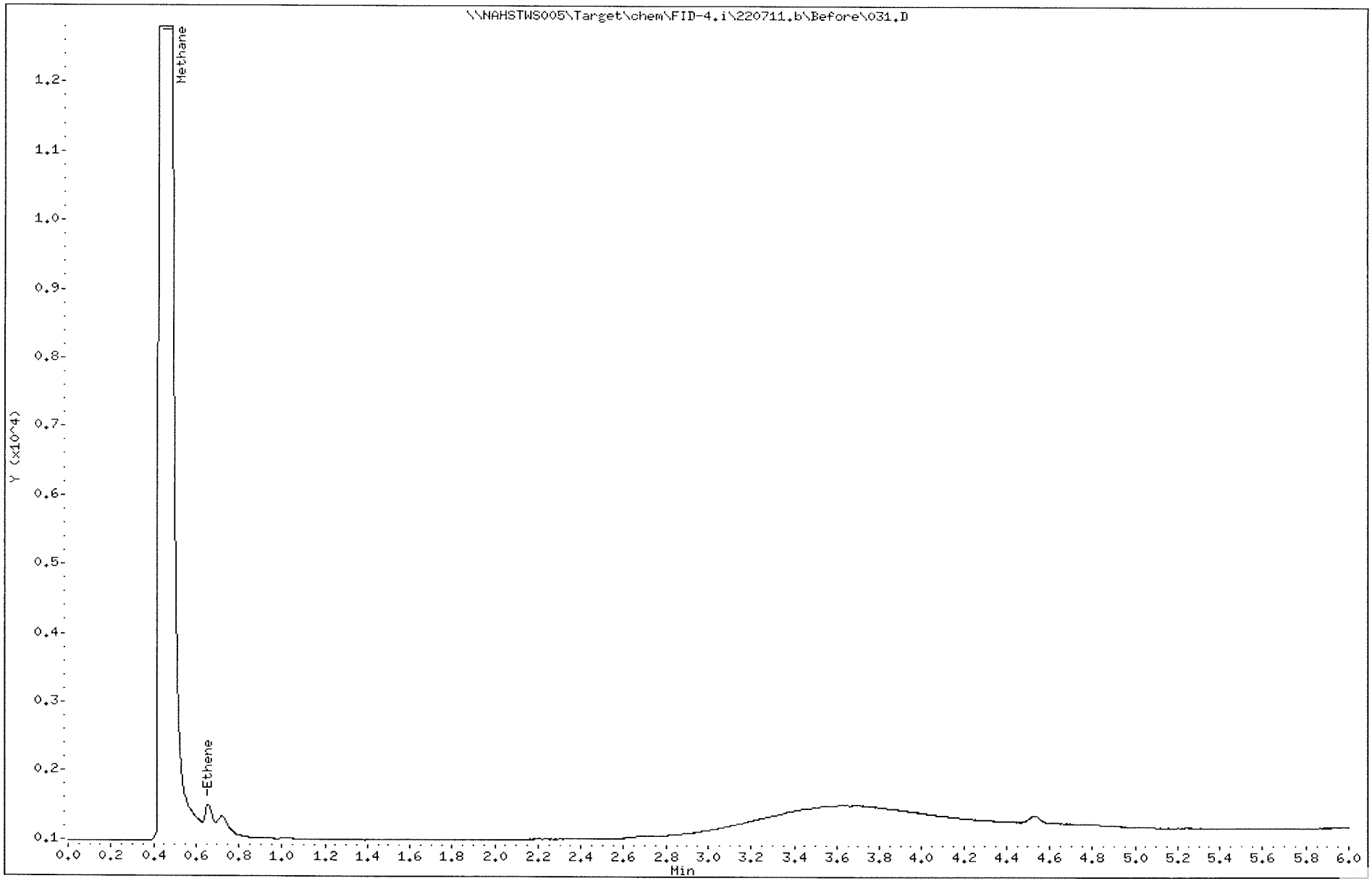
Sample Info: HS22070326-11;HS22070326-11

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\032.D
Lab Smp Id: HS22070326-03 Client Smp ID: HS22070326-03
Inj Date : 11-JUL-2022 14:02
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-03;HS22070326-03
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 32
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.453	0.436	0.017	21715	22.2720	2227.196(M)

QC Flag Legend

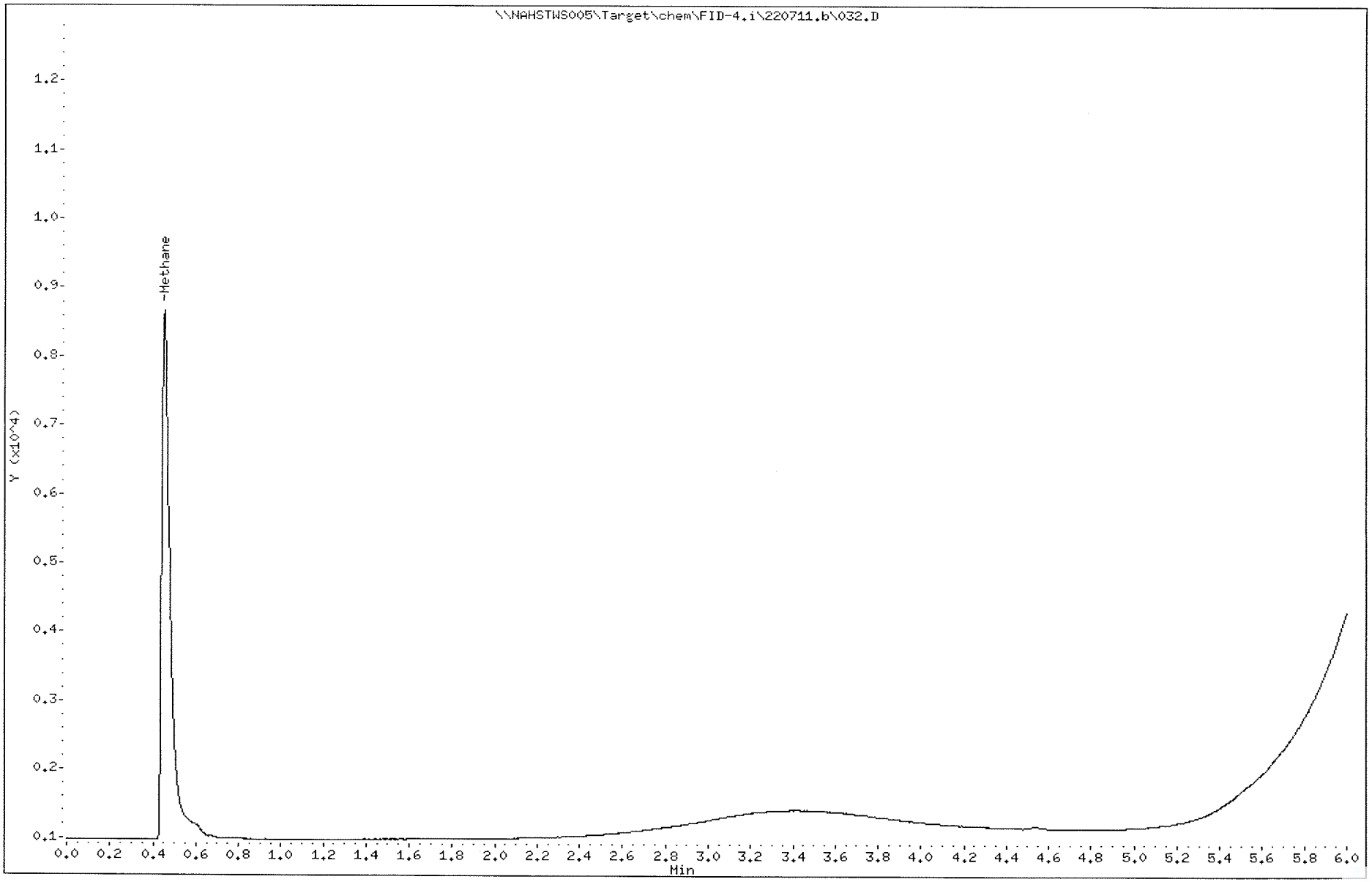
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\032.D
Date : 11-JUL-2022 14:02
Client ID: HS22070326-03
Sample Info: HS22070326-03;HS22070326-03

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\032.D
Lab Smp Id: HS22070326-03 Client Smp ID: HS22070326-03
Inj Date : 11-JUL-2022 14:02
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-03;HS22070326-03
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 32
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.453	0.436	0.017	22154	22.7222	2272.222

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\032.D

Date : 11-JUL-2022 14:02

Client ID: HS22070326-03

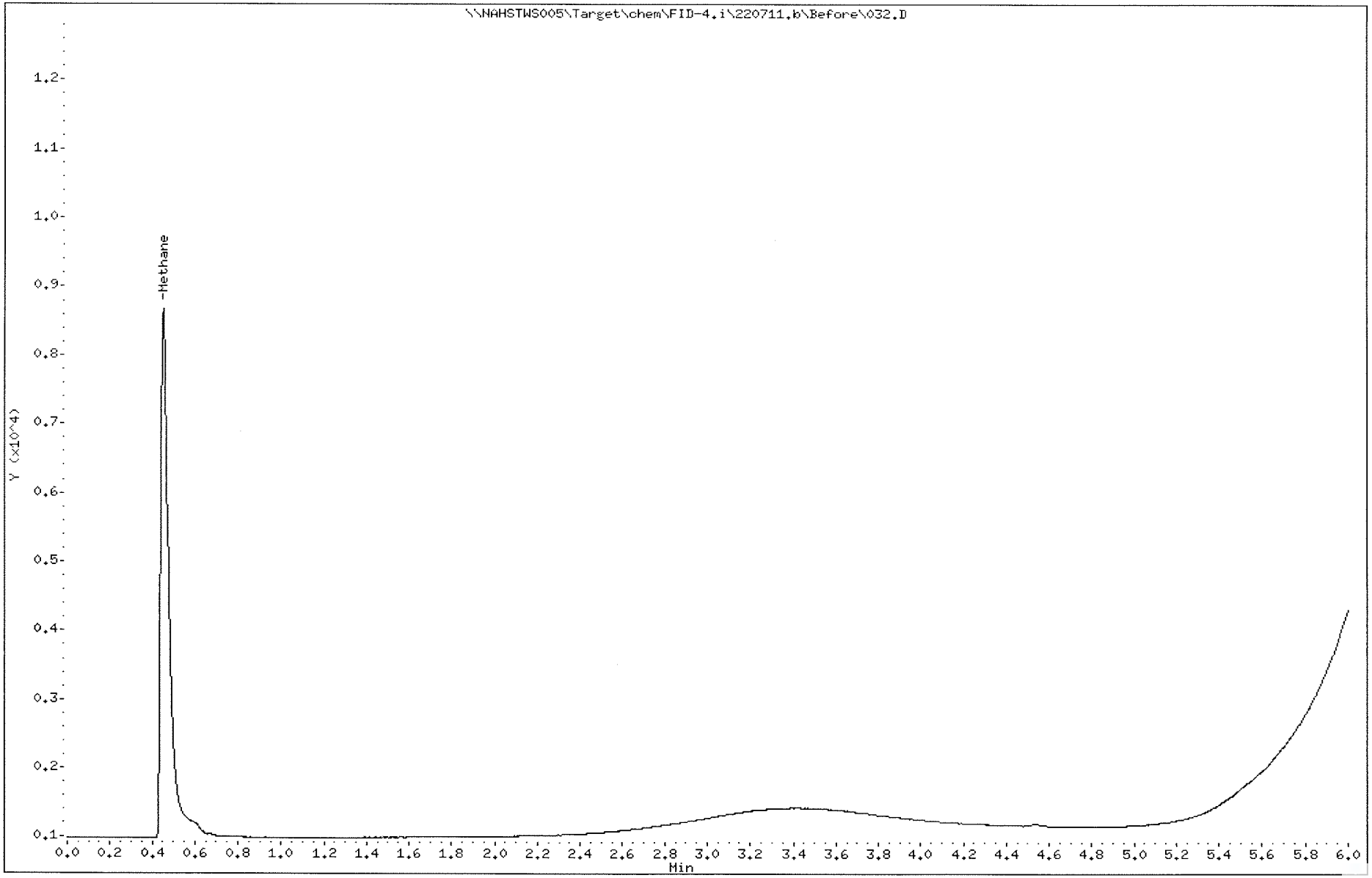
Instrument: FID-4.i

Sample Info: HS22070326-03;HS22070326-03

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 14:23
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	9305	9.64700	9.543
2 Ethene	0.660	0.656	0.004	11621	16.8500	19.839(M)
3 Ethane	0.730	0.733	-0.003	14197	18.0430	19.732(M)

QC Flag Legend

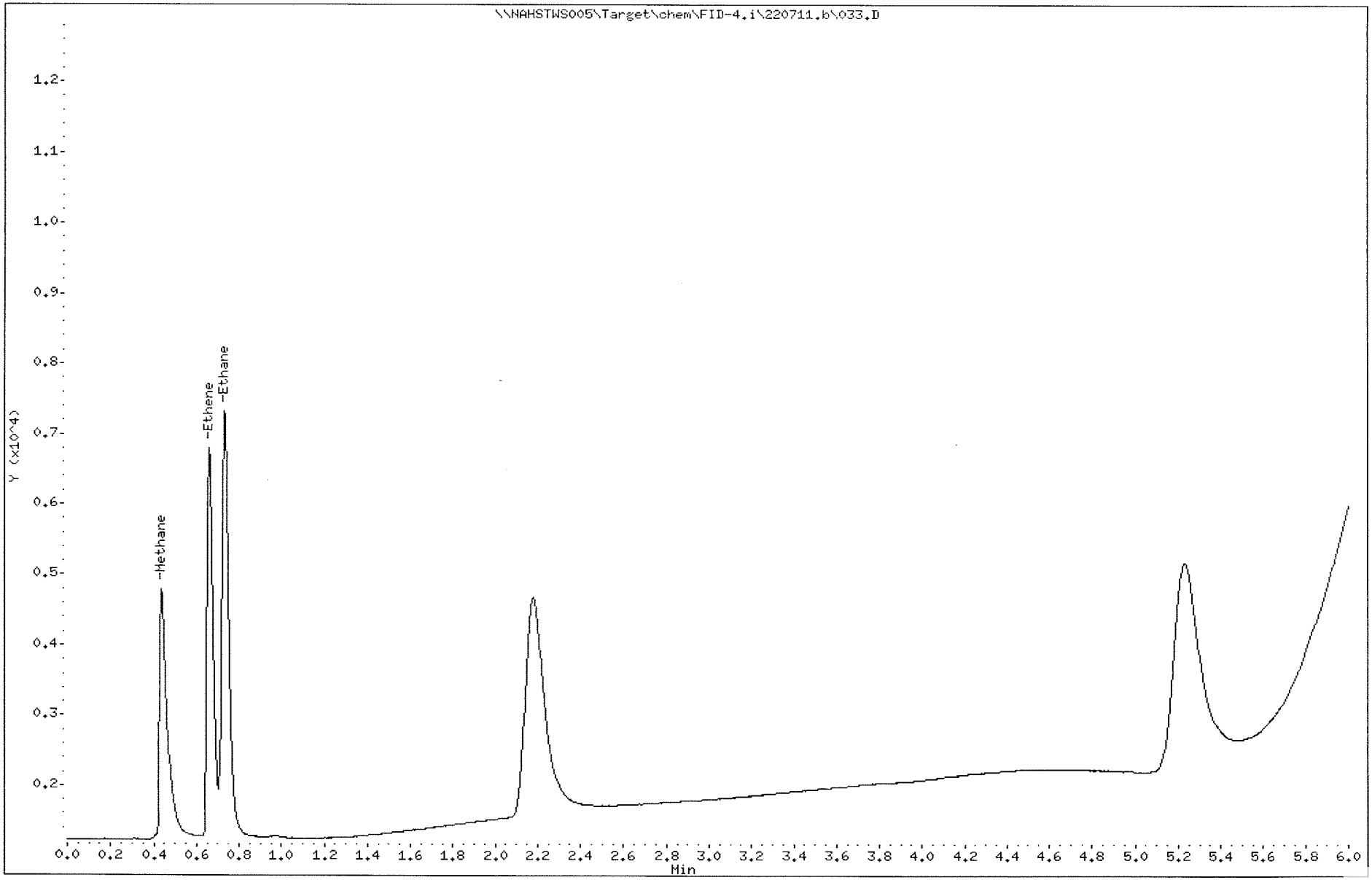
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\033.D
Date : 11-JUL-2022 14:23
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\033.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 14:23
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 33 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

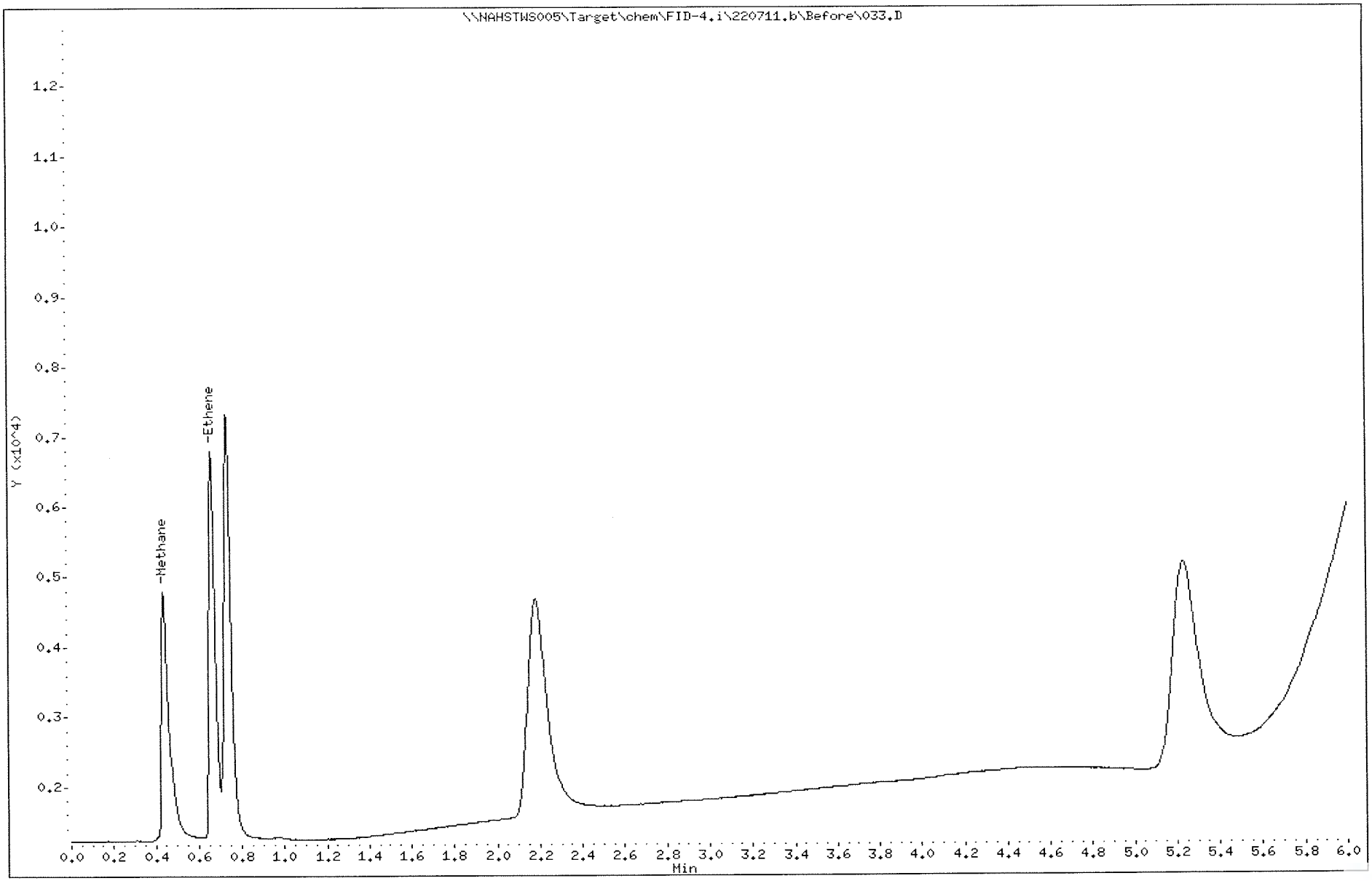
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	9305	9.64700	9.543
2 Ethene	0.660	0.656	0.004	25675	16.8500	43.831

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\033.D
Date : 11-JUL-2022 14:23
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53

Column phase: Rtx-PLOT



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\034.D
Lab Smp Id: HS22070326-04 Client Smp ID: HS22070326-04
Inj Date : 11-JUL-2022 14:34
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-04;HS22070326-04
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 34
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.436	0.014	17394	17.8401	892.007(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\034.D

Date : 11-JUL-2022 14:34

Client ID: HS22070326-04

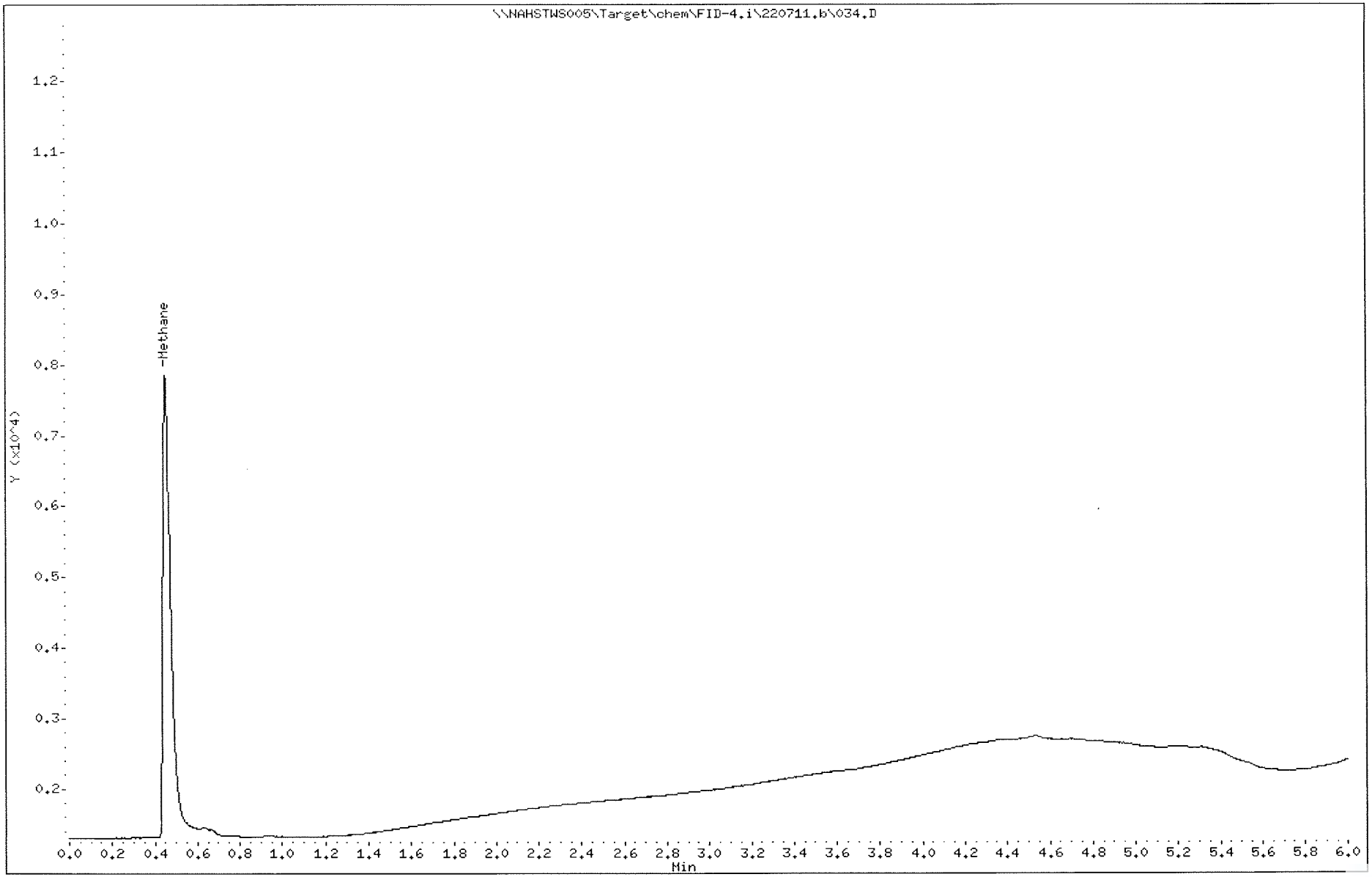
Instrument: FID-4.i

Sample Info: HS22070326-04;HS22070326-04`

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\034.D
Lab Smp Id: HS22070326-04 Client Smp ID: HS22070326-04
Inj Date : 11-JUL-2022 14:34
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-04;HS22070326-04
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 34
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.436	0.014	17913	18.3725	918.622

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\034.D

Date : 11-JUL-2022 14:34

Client ID: HS22070326-04

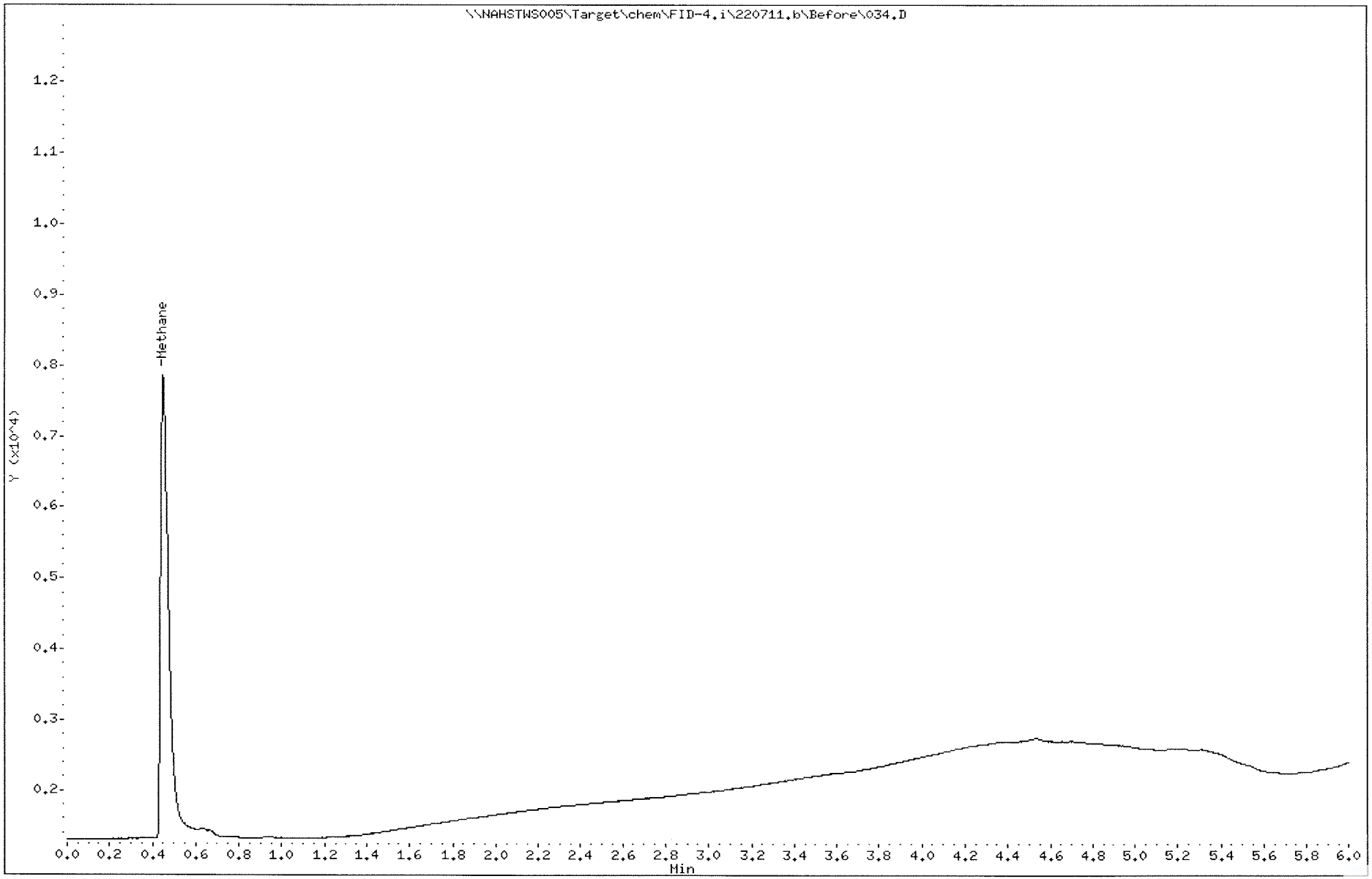
Instrument: FID-4.i

Sample Info: HS22070326-04;HS22070326-04

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\035.D
Lab Smp Id: HS22070326-05 Client Smp ID: HS22070326-05
Inj Date : 11-JUL-2022 14:42
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-05;HS22070326-05
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 35
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.436	0.014	18881	19.3653	968.264(M)

QC Flag Legend

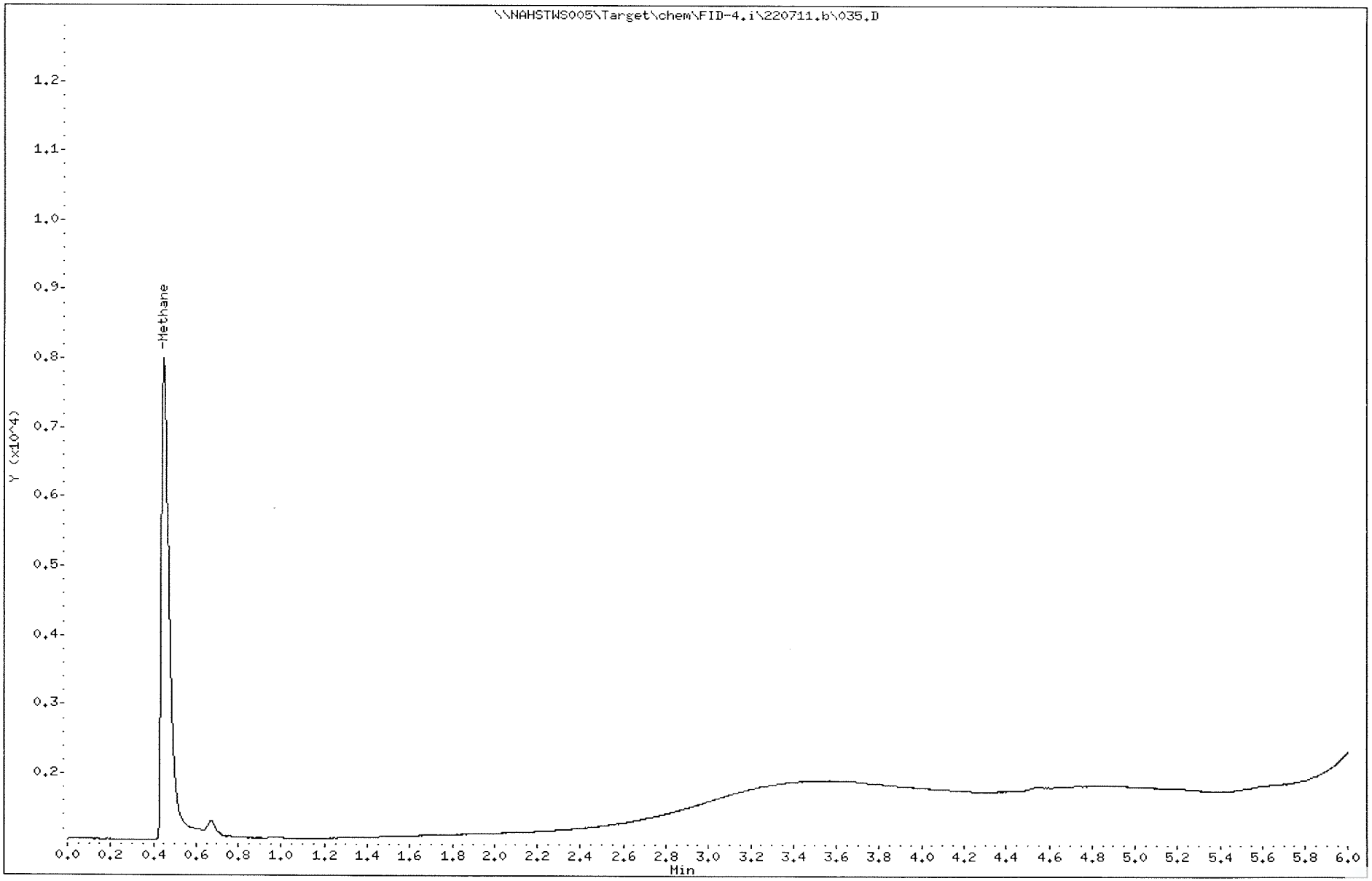
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\035.D
Date : 11-JUL-2022 14:42
Client ID: HS22070326-05
Sample Info: HS22070326-05;HS22070326-05

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\035.D
Lab Smp Id: HS22070326-05 Client Smp ID: HS22070326-05
Inj Date : 11-JUL-2022 14:42
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-05;HS22070326-05
Misc Info : ;1;0;50
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 35
Dil Factor: 50.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.450	0.436	0.014	19623	20.1263	1006.315

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\035.D

Date : 11-JUL-2022 14:42

Client ID: HS22070326-05

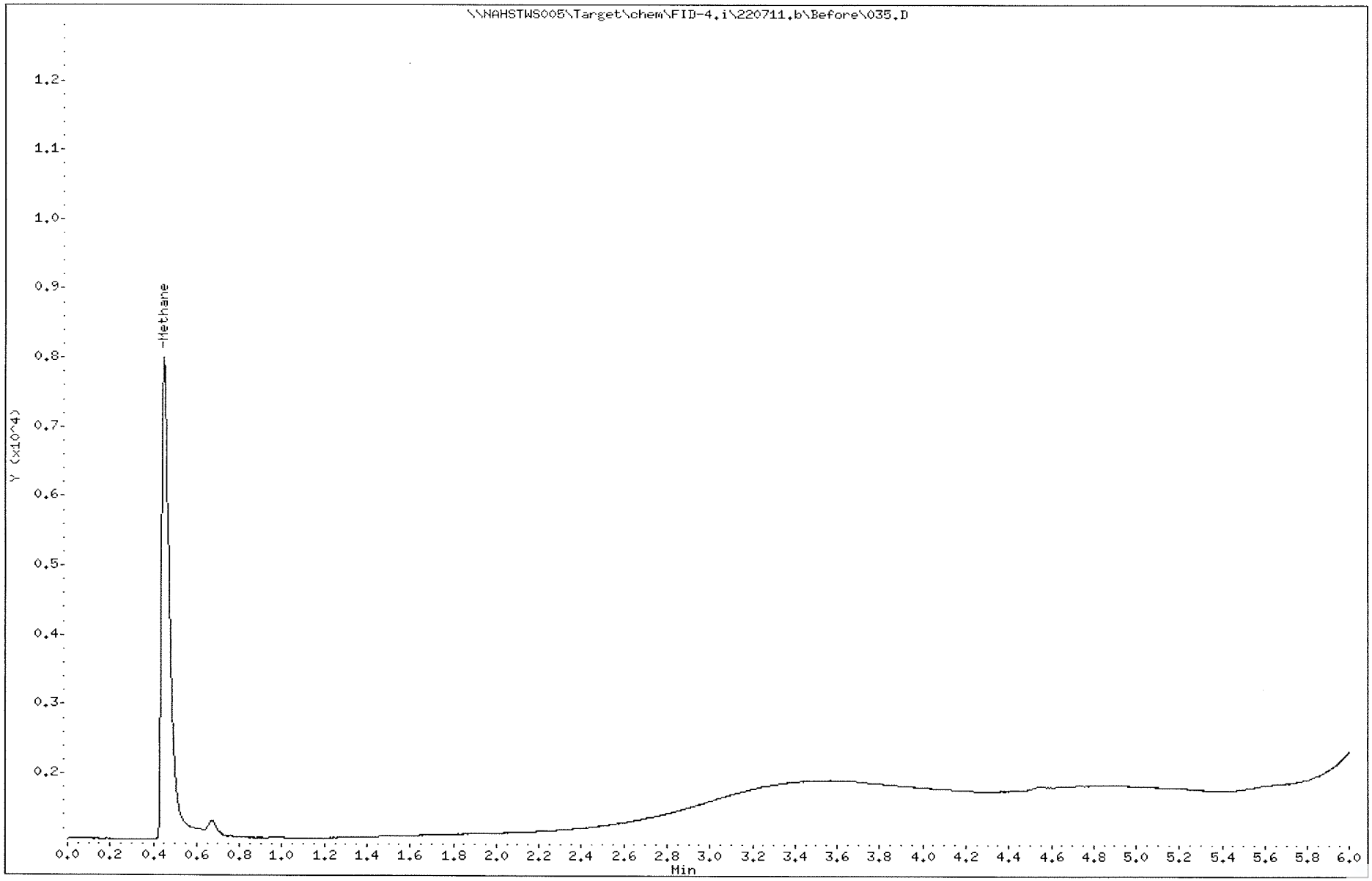
Instrument: FID-4.i

Sample Info: HS22070326-05;HS22070326-05

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\036.D
Lab Smp Id: HS22070326-07 Client Smp ID: HS22070326-07
Inj Date : 11-JUL-2022 14:52
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07;HS22070326-07
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 36
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	FINAL (ug/L)
1 Methane	0.450	0.436	0.014	24464	25.0915	2509.147(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\036.D

Date : 11-JUL-2022 14:52

Client ID: HS22070326-07

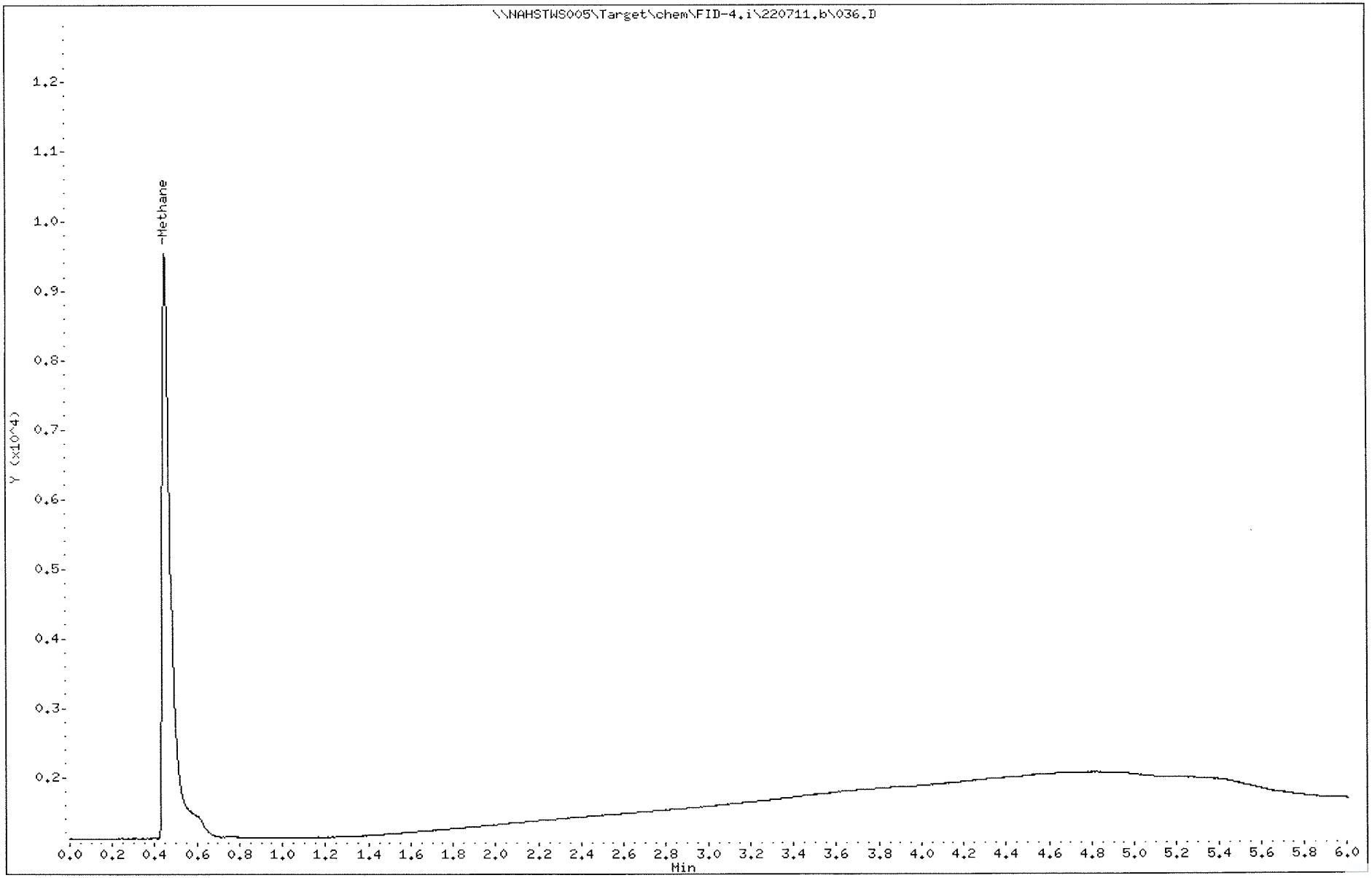
Instrument: FID-4.i

Sample Info: HS22070326-07;HS22070326-07

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\036.D
Lab Smp Id: HS22070326-07 Client Smp ID: HS22070326-07
Inj Date : 11-JUL-2022 14:52
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-07;HS22070326-07
Misc Info : ;1;0;100
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 36
Dil Factor: 100.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					CONCENTRATIONS	
					ON-COLUMN	FINAL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.450	0.436	0.014	25342	25.9920	2599.199

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\036.D

Date : 11-JUL-2022 14:52

Client ID: HS22070326-07

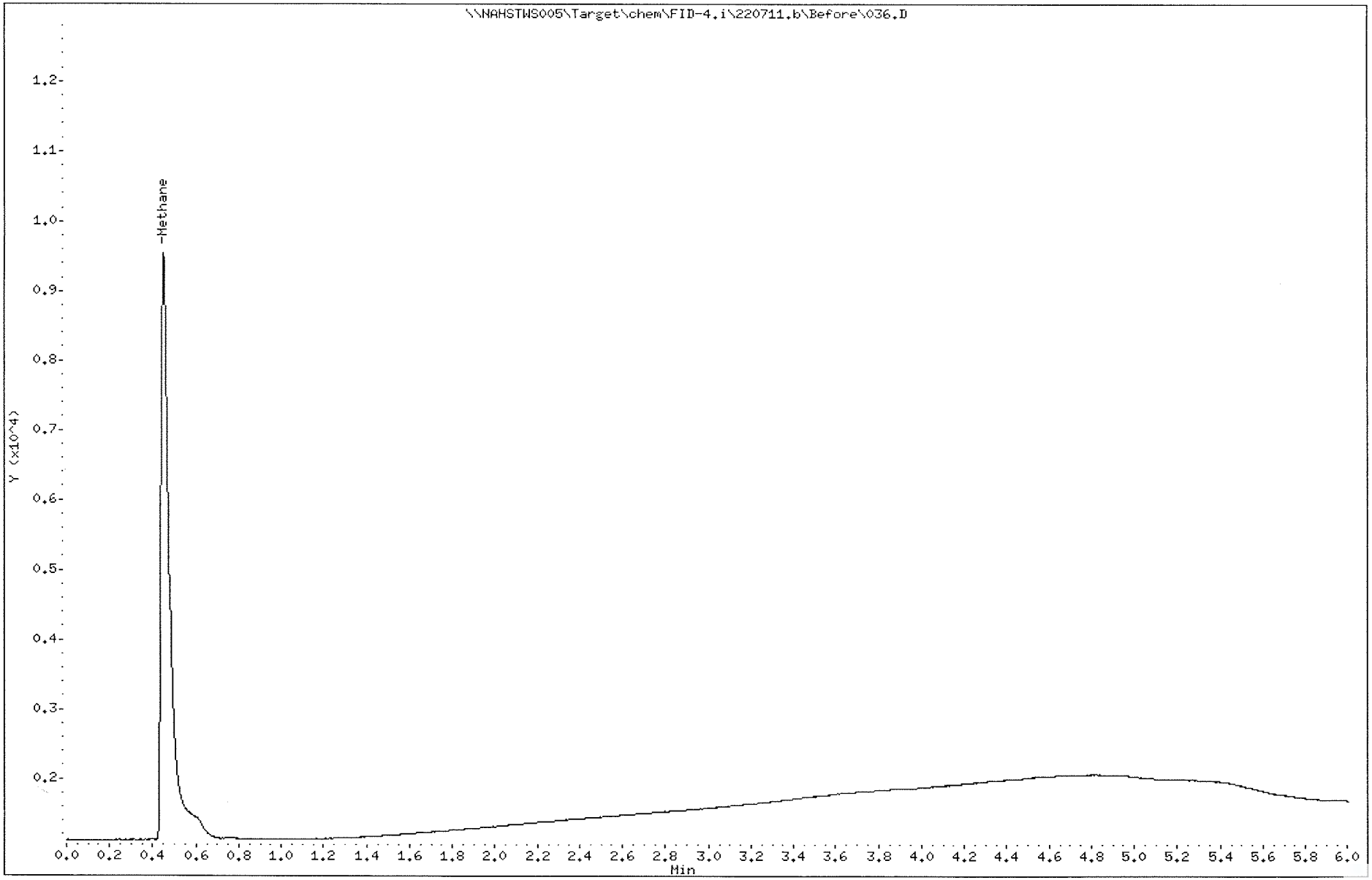
Instrument: FID-4.i

Sample Info: HS22070326-07;HS22070326-07

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\037.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\037.D
Lab Smp Id: HS22070326-11 Client Smp ID: HS22070326-11
Inj Date : 11-JUL-2022 15:05
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-11;HS22070326-11
Misc Info : ;1;0;10
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 37
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.436	0.010	30569	31.3531	313.530
2 Ethene	0.666	0.656	0.010	615	1.04992	10.499(M)

QC Flag Legend

M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\037.D

Date : 11-JUL-2022 15:05

Client ID: HS22070326-11

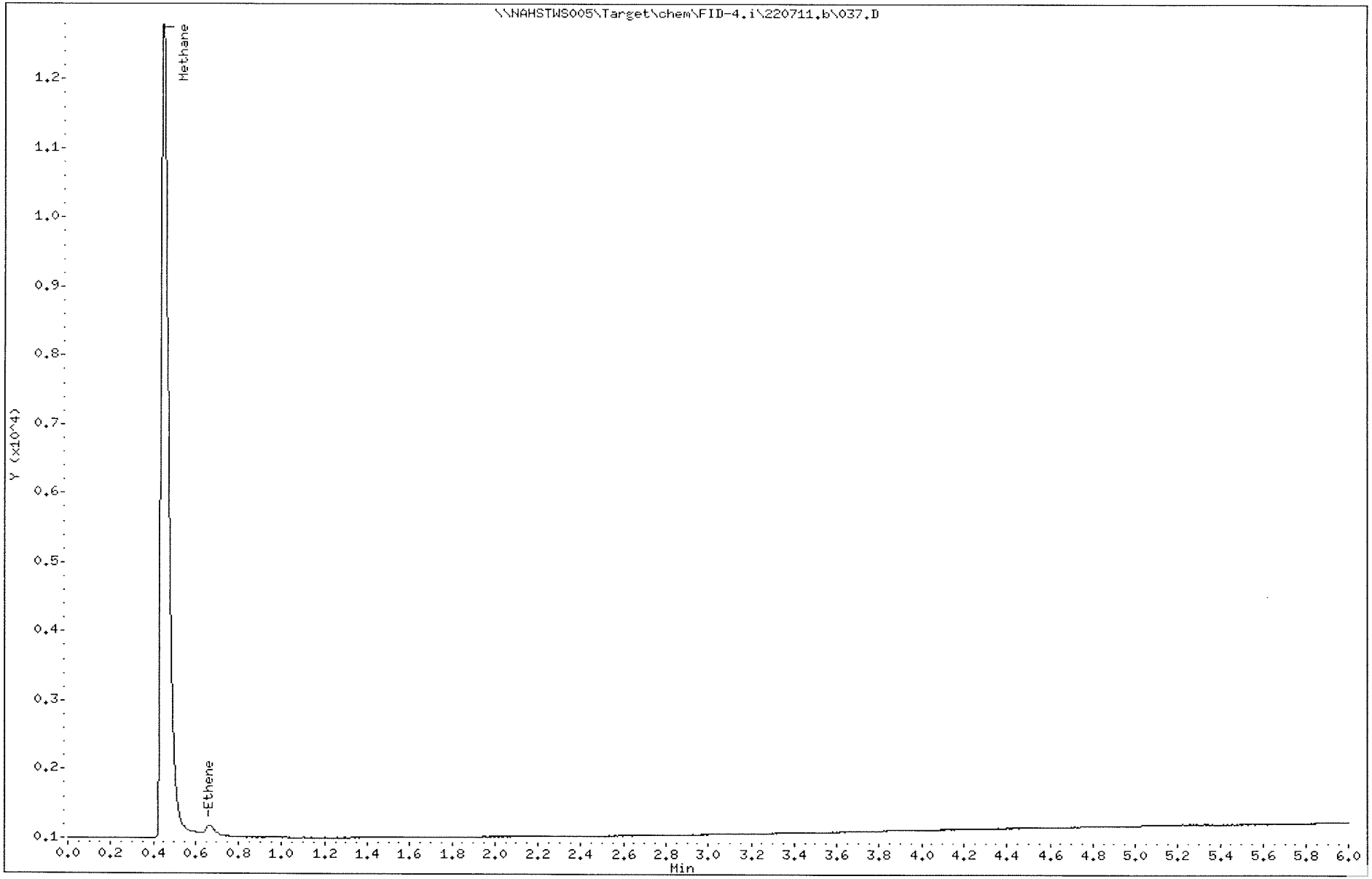
Instrument: FID-4.i

Sample Info: HS22070326-11;HS22070326-11

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\037.D
Lab Smp Id: HS22070326-11 Client Smp ID: HS22070326-11
Inj Date : 11-JUL-2022 15:05
Operator : PL Inst ID: FID-4.i
Smp Info : HS22070326-11;HS22070326-11
Misc Info : ;1;0;10
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 37
Dil Factor: 10.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

Compounds	RT	EXP RT	DLT RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/L)	CONCENTRATIONS FINAL (ug/L)
1 Methane	0.446	0.436	0.010	30467	31.2485	312.484
2 Ethene	0.666	0.656	0.010	579	0.98846	9.884

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\037.D

Date : 11-JUL-2022 15:05

Client ID: HS22070326-11

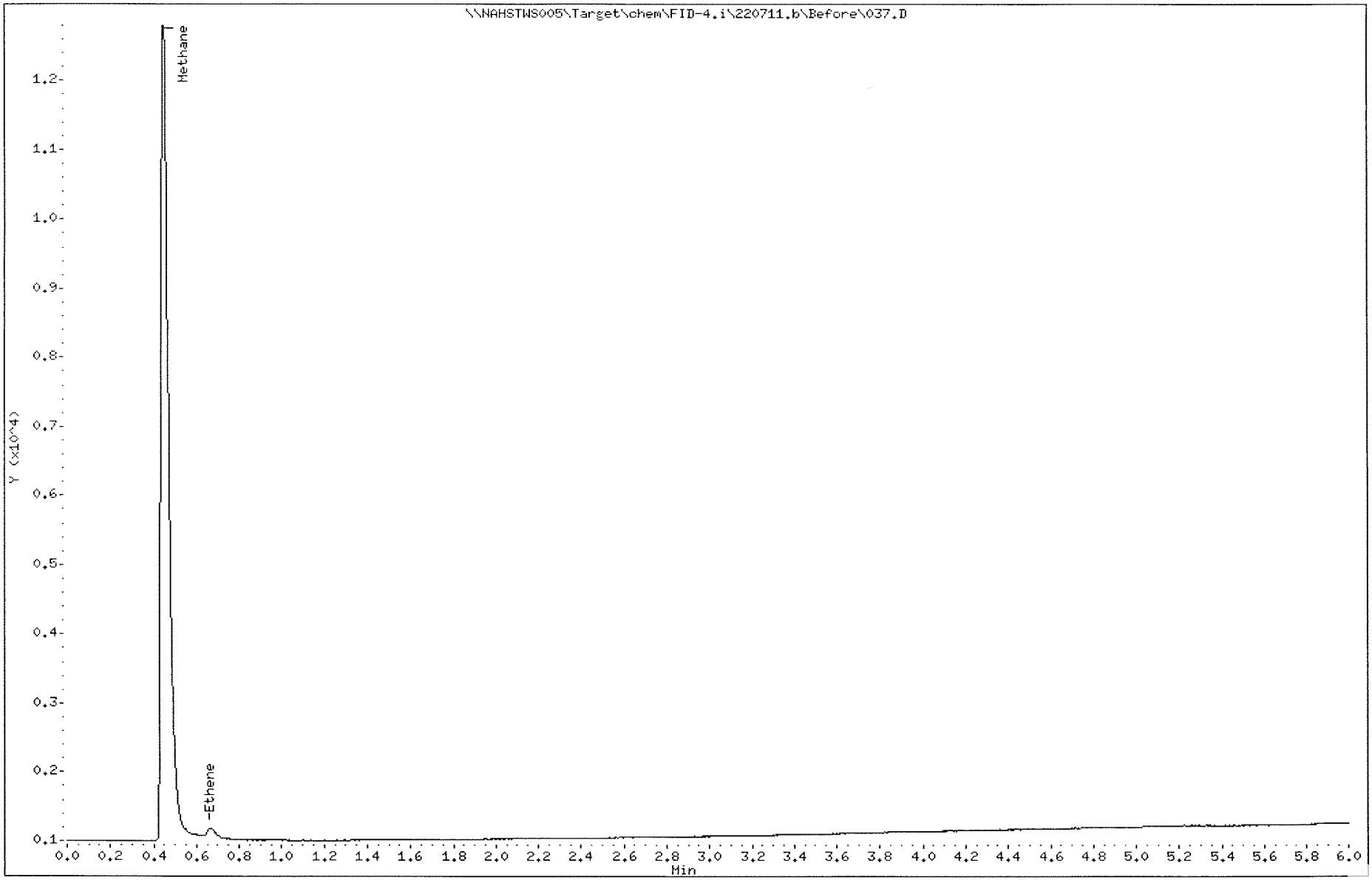
Instrument: FID-4.i

Sample Info: HS22070326-11;HS22070326-11

Operator: PL

Column phase: Rtx-PLOT

Column diameter: 0.53



Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\038.D Page 1
Report Date: 19-Jul-2022 14:18

ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\038.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 15:16
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	8550	9.64700	8.769
2 Ethene	0.656	0.656	0.000	10508	16.8500	17.939(M)
3 Ethane	0.730	0.733	-0.003	13431	18.0430	18.667(M)

QC Flag Legend

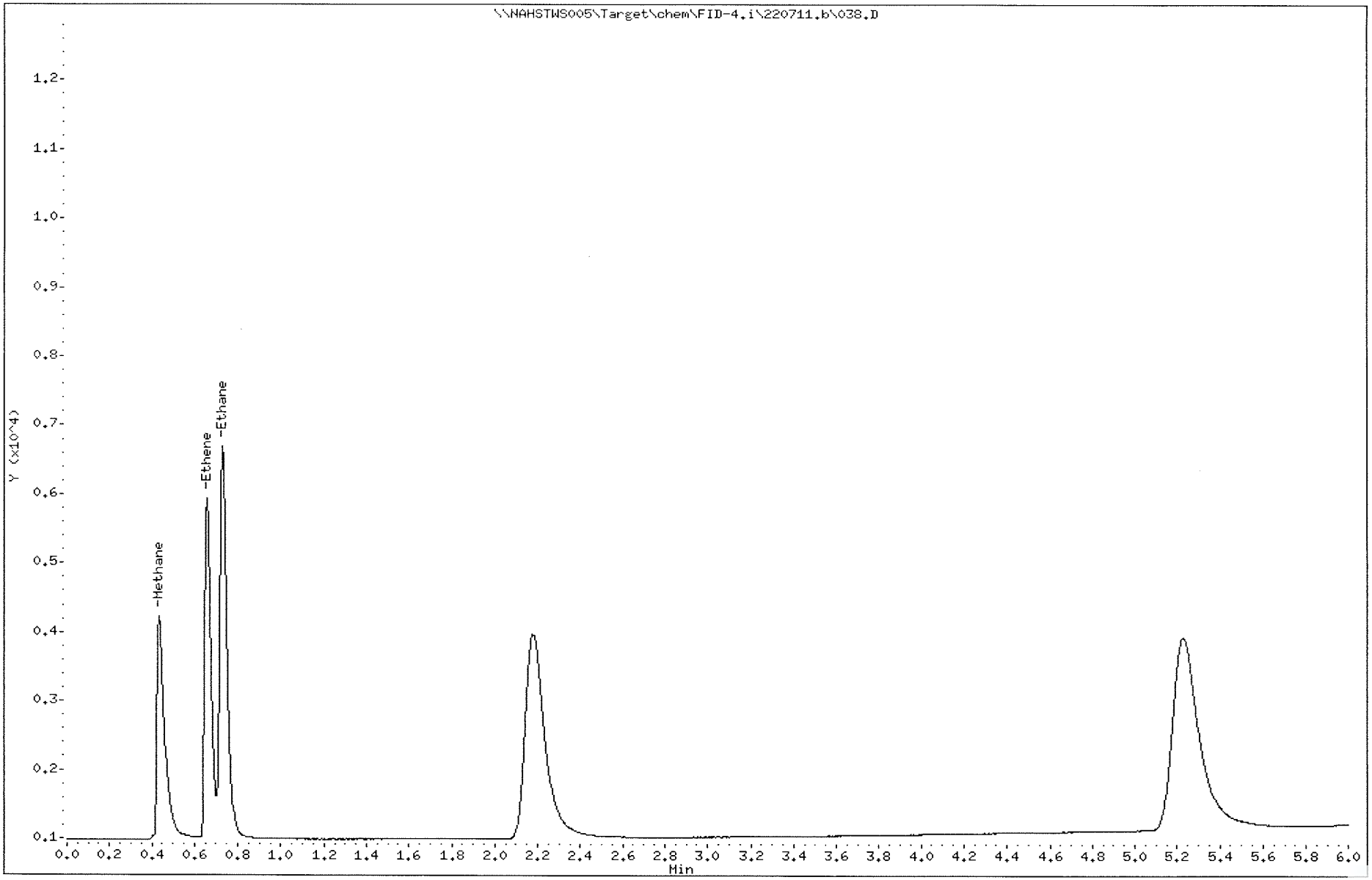
M - Compound response manually integrated.

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\038.D
Date : 11-JUL-2022 15:16
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



ALS Laboratory Group

Dissolved Gases Analysis

Data file : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\038.D
Lab Smp Id: RSK-CCV Client Smp ID: RSK-CCV
Inj Date : 11-JUL-2022 15:16
Operator : PL Inst ID: FID-4.i
Smp Info : RSK-CCV;RSK-CCV;2;4
Misc Info : ;1;0;1
Comment :
Method : \\NAHSTWS005\Target\chem\FID-4.i\220711.b\RSKNI3.m
Meth Date : 19-Jul-2022 14:15 Linh.Pham Quant Type: ESTD
Cal Date : 24-JAN-2017 10:15 Cal File: 004.D
Als bottle: 38 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: Falcon Compound Sublist: RSK175.sub
Target Version: 4.14
Processing Host: ALSHSW7104

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

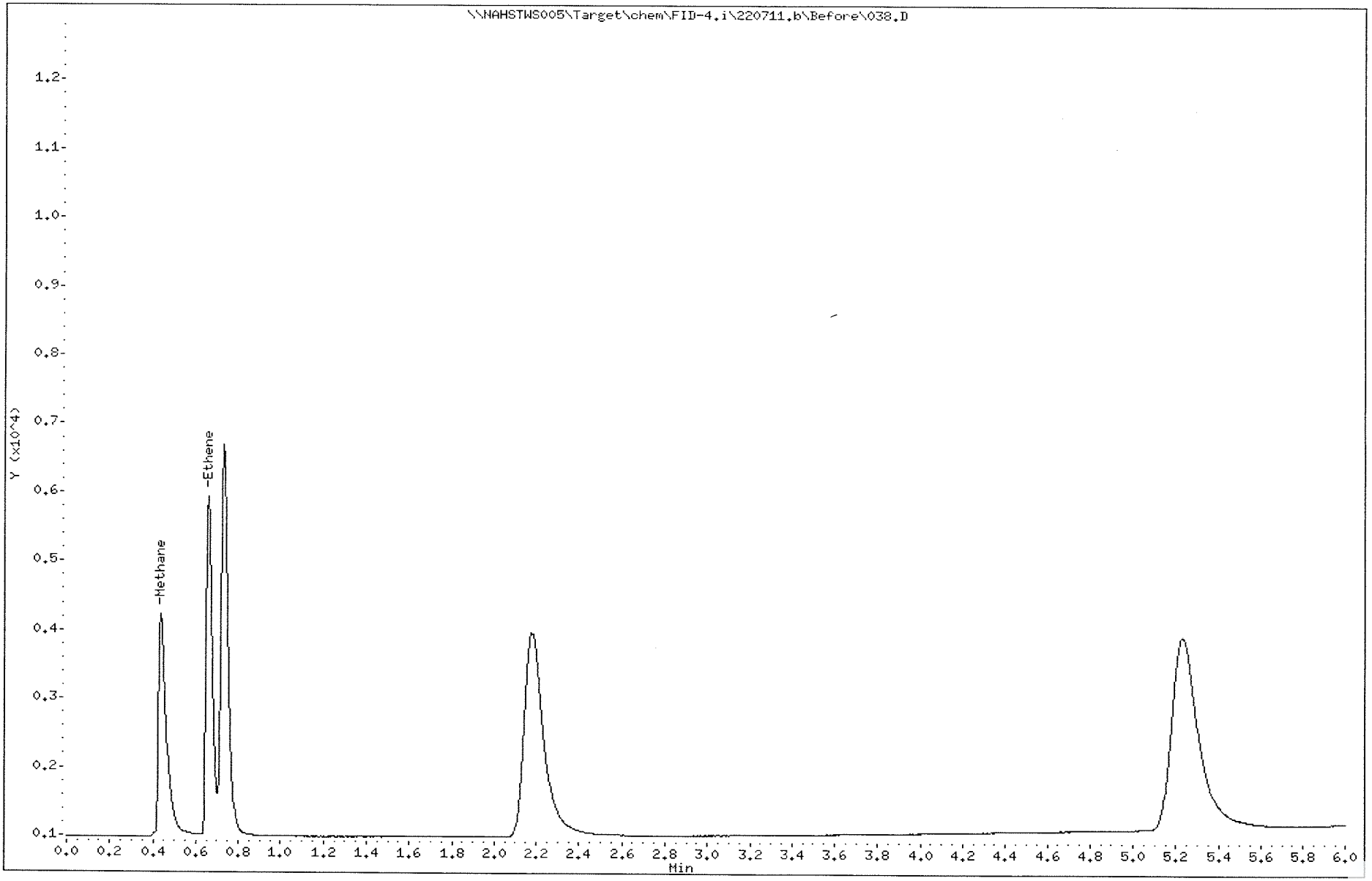
					AMOUNTS	
					CAL-AMT	ON-COL
Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	(ug/L)
1 Methane	0.436	0.436	0.000	8550	9.64700	8.769
2 Ethene	0.656	0.656	0.000	23814	16.8500	40.654

Data File: \\NAHSTWS005\Target\chem\FID-4.i\220711.b\Before\038.D
Date : 11-JUL-2022 15:16
Client ID: RSK-CCV
Sample Info: RSK-CCV;RSK-CCV;2;4

Column phase: Rtx-PLOT

Instrument: FID-4.i

Operator: PL
Column diameter: 0.53



HS22070326 Wet Chemistry

ALS WO# HS22070326

C:\TOC-L\Data\2022_06_07_002.tlx

HS220 70326

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Diluti	Result
1	Standard	NPOC	CAL	3100605703	06_07_2022	1.000	
2	Unknown	NPOC	ICV	3100605711	06_07_2022	1.000	NPOC:9.599mg/L
3	Unknown	NPOC	ICB		06_07_2022	1.000	NPOC:0.1185mg/

C:\TOC-L\Data\2022_06_07_002.tlx

	Notes	Status	Date / Time	Vial
1		Completed	6/7/2022 6:42:31 PM	1, 2, 3, 4, 5,
2		Completed	6/7/2022 6:53:59 PM	8
3		Completed	6/7/2022 7:04:57 PM	9

TOC-Control L Report

2022_06_07_002.tlx

Instr.Information

Instrument Options	TOC/ASI/IC Unit/
Catalyst	Regular Sensitivity

Cal. Curve

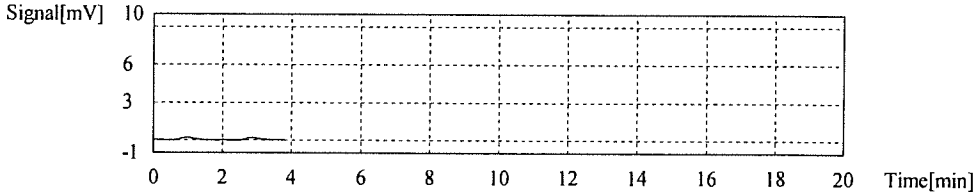
Sample Name:	CAL
Sample ID:	3100605703
Cal. Curve:	06_07_2022_CAL.2022_06_07_17_25_51.cal
Status	Completed

Type	Anal.
Standard	NPOC

Conc: 0.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	0.5059	50uL	1.000	*******		6/7/2022 5:33:20 PM
2	0.4436	50uL	1.000	*******		6/7/2022 5:36:04 PM

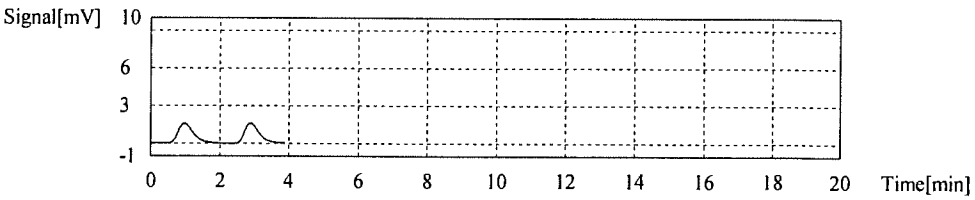
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	0.4748



Conc: 1.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	4.733	50uL	1.000	*******		6/7/2022 5:44:04 PM
2	4.778	50uL	1.000	*******		6/7/2022 5:46:49 PM

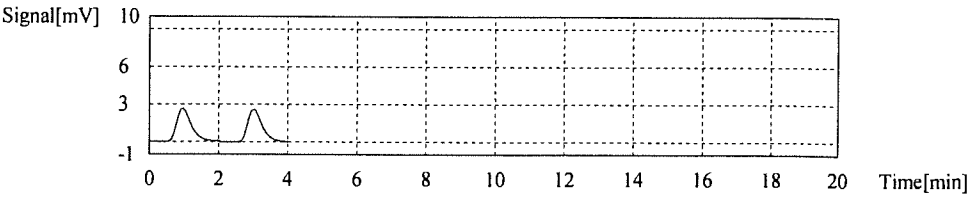
Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	4.756



Conc: 2.000mg/L

No.	Area	Inj. Vol.	Aut. Dil.	Rem.	Ex.	Date / Time
1	7.782	50uL	1.000	*******		6/7/2022 5:54:55 PM
2	7.707	50uL	1.000	*******		6/7/2022 5:57:36 PM

Acid Add.	1.500%
Sparge Gas Flow	80mL/min
Sp. Time	90.00sec
Mean Area	7.745



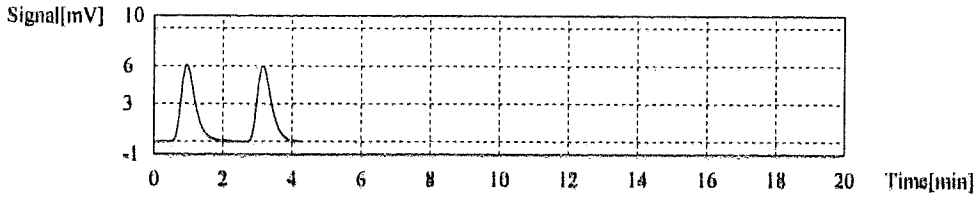
TOC-Control L Report

2022_06_07_002.tlx

Conc: 5.000mg/L

No.	Area	Inj. Vol	Aut. Dil	Rem.	Ex.	Date / Time
1	17.83	50uL	1.000	*******		6/7/2022 6:05:52 PM
2	17.74	50uL	1.000	*******		6/7/2022 6:08:28 PM

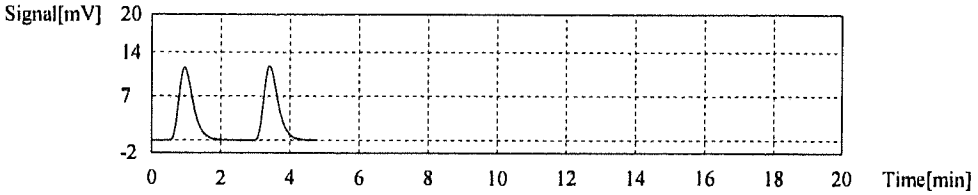
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 17.79



Conc: 10.00mg/L

No.	Area	Inj. Vol	Aut. Dil	Rem.	Ex.	Date / Time
1	34.34	50uL	1.000	*******		6/7/2022 6:17:00 PM
2	34.33	50uL	1.000	*******		6/7/2022 6:19:35 PM

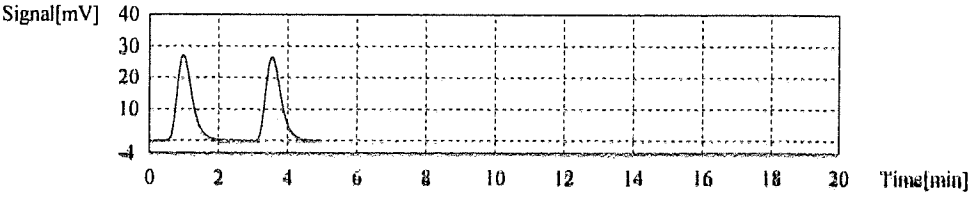
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 34.34



Conc: 25.00mg/L

No.	Area	Inj. Vol	Aut. Dil	Rem.	Ex.	Date / Time
1	84.01	50uL	1.000	*******		6/7/2022 6:28:26 PM
2	83.63	50uL	1.000	*******		6/7/2022 6:31:03 PM

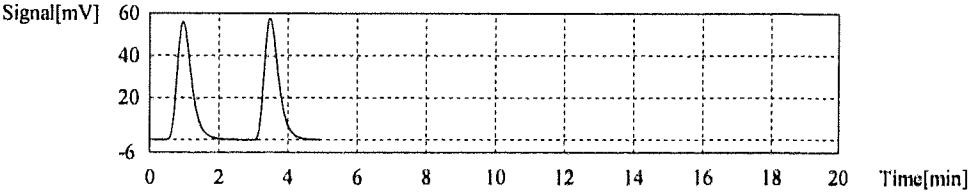
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 83.82



Conc: 50.00mg/L

No.	Area	Inj. Vol	Aut. Dil	Rem.	Ex.	Date / Time
1	167.5	50uL	1.000	*******		6/7/2022 6:39:49 PM
2	169.4	50uL	1.000	*******		6/7/2022 6:42:31 PM

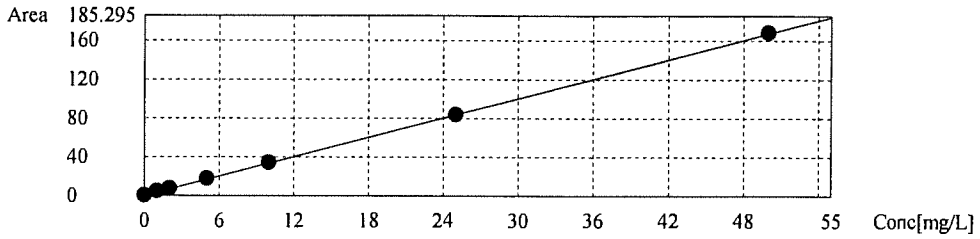
Acid Add. 1.500%
Sparge Gas Flow 80mL/min
Sp. Time 90.00sec
Mean Area 168.4



TOC-Control L Report

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Slope:	3.345
Intercept	0.000
r^2	1.0000
r	1.0000
RSE(%)	N/A
Zero Shift	Yes



Sample

Sample Name: ICV
Sample ID: 3100605711
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

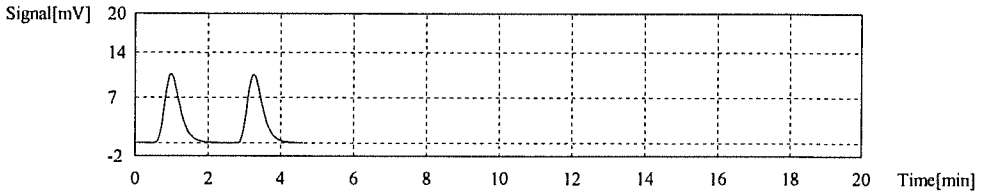
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.599mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	32.11	9.601mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 6:50:57 PM
2	32.10	9.598mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 6:53:59 PM

Mean Area 32.11
Mean Conc. 9.599mg/L



Sample

Sample Name: ICB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1185mg/L

1. Det

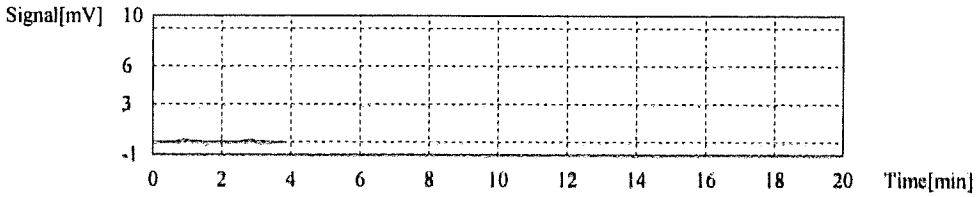
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.3661	0.1095mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 7:01:57 PM
2	0.4267	0.1276mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	6/7/2022 7:04:57 PM

TOC-Control L Report

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Mean Area	0.3964
Mean Conc.	0.1185mg/L



C:\TOC-L\Data\2022_07_20_002.tlx

	Type	Analysis	Sample Name	Sample ID	Origin	Manual Dilutl	Result
1	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.56mg/L
2	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1598mg/
3	Unknown	NPOC	MBLK-07202022		06_07_2022	1.000	NPOC:0.1340mg/
4	Unknown	NPOC	LCS-07202022	3100605711	06_07_2022	1.000	NPOC:9.542mg/L
5	Unknown	NPOC	LCSD-07202022		06_07_2022	1.000	NPOC:9.480mg/L
6	Unknown	NPOC	HS22070279-01	TOC_W	06_07_2022	1.000	NPOC:2.828mg/L
7	Unknown	NPOC	HS22070279-02		06_07_2022	1.000	NPOC:17.70mg/L
8	Unknown	NPOC	HS22070326-04	TOC_W 5310B	06_07_2022	1.000	NPOC:1.962mg/L
9	Unknown	NPOC	HS22070326-05		06_07_2022	1.000	NPOC:2.047mg/L
10	Unknown	NPOC	HS22070326-06		06_07_2022	1.000	NPOC:18.48mg/L
11	Unknown	NPOC	HS22070326-07		06_07_2022	1.000	NPOC:4.673mg/L
12	Unknown	NPOC	HS22070326-07MS		06_07_2022	1.000	NPOC:15.78mg/L
13	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.37mg/L
14	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1863mg/
15	Unknown	NPOC	HS22070688-01		06_07_2022	1.000	NPOC:21.68mg/L
16	Unknown	NPOC	CCV	320016206	06_07_2022	1.000	NPOC:24.69mg/L
17	Unknown	NPOC	CCB		06_07_2022	1.000	NPOC:0.1946mg/

C:\TOC-L\Data\2022_07_20_002.tlx

	Notes	Status	Date / Time	Vial
1		Completed	7/20/2022 6:01:01 PM	1
2		Completed	7/20/2022 6:13:18 PM	2
3		Completed	7/20/2022 6:25:38 PM	3
4		Completed	7/20/2022 6:39:27 PM	4
5		Completed	7/20/2022 6:52:51 PM	5
6		Completed	7/20/2022 7:06:36 PM	6
7		Completed	7/20/2022 7:21:34 PM	7
8		Completed	7/20/2022 7:35:53 PM	8
9		Completed	7/20/2022 7:50:12 PM	9
10		Completed	7/20/2022 8:02:03 PM	10
11		Completed	7/20/2022 8:16:32 PM	11
12		Completed	7/20/2022 8:31:28 PM	12
13		Completed	7/20/2022 8:46:50 PM	1
14		Completed	7/20/2022 8:59:12 PM	2
15		Completed	7/20/2022 9:10:29 PM	13
16		Completed	7/20/2022 9:25:43 PM	1
17		Completed	7/20/2022 9:38:04 PM	2

TOC-Control L Report

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[Instr.Information]

Instrument Options: TOC/ASI/IC Unit/
Catalyst: Regular Sensitivity

[Sample]

Sample Name: CCV
Sample ID: [illegible]16206
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

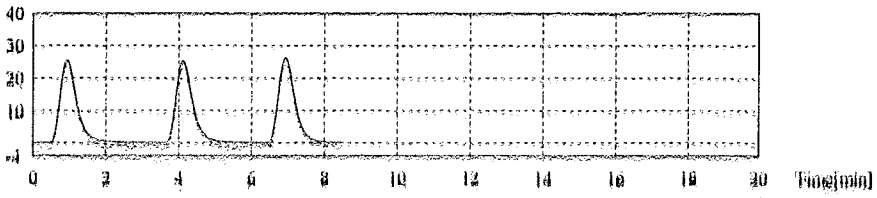
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.56mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	81.61	24.40mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 5:55:13 PM
2	81.74	24.44mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 5:58:16 PM
3	83.11	24.85mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:01:01 PM

Mean Area: 82.15
Mean Conc.: 24.56mg/L



[Sample]

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status: Completed
Chk. Result:

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1598mg/L

1. Det

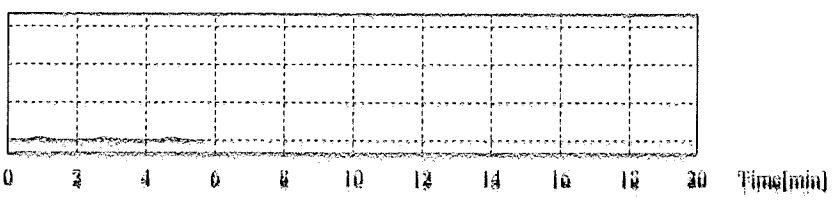
Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	0.5722	0.1711mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:09:04 PM
2	0.5406	0.1616mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:11:11 PM
3	0.4904	0.1466mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:13:18 PM

TOC-Control L Report

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Mean Area 0.5344
Mean Conc. 0.1598mg/L



Sample

Sample Name: MBLK-07302022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

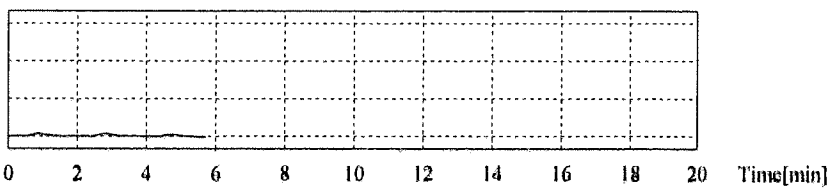
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1340mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Flg.	Cal. Curve	Date/Time
1	0.4443	0.1328mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:21:21 PM
2	0.4747	0.1419mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:23:28 PM
3	0.4251	0.1271mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:25:38 PM

Mean Area 0.4480
Mean Conc. 0.1340mg/L



Sample

Sample Name: LCS-07302022
Sample ID: 3100605711
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.542mg/L

1. Det

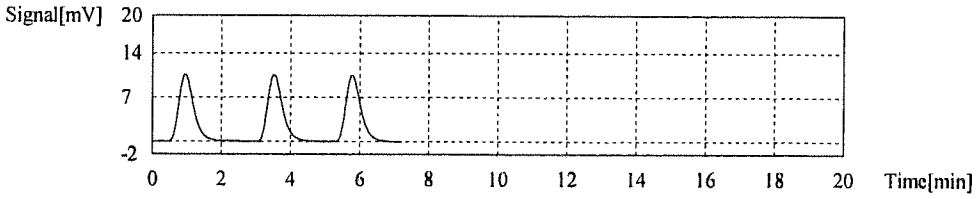
Anal.: NPOC

TOC-Control L Report

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No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.79	9.505mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:34:22 PM
2	31.79	9.505mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:36:52 PM
3	32.16	9.616mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:39:27 PM

Mean Area 31.91
Mean Conc. 9.542mg/L



Sample

Sample Name: LCSD-07202022
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

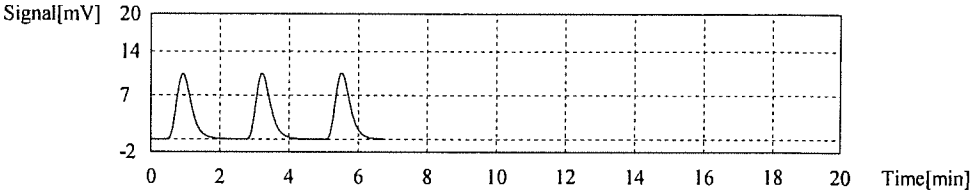
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:9.480mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	31.67	9.469mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:47:54 PM
2	31.49	9.415mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:50:26 PM
3	31.96	9.556mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 6:52:51 PM

Mean Area 31.71
Mean Conc. 9.480mg/L



Sample

Sample Name: HS22070326-04
Sample ID: TOC_W 5310B
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:1.962mg/L

1. Det

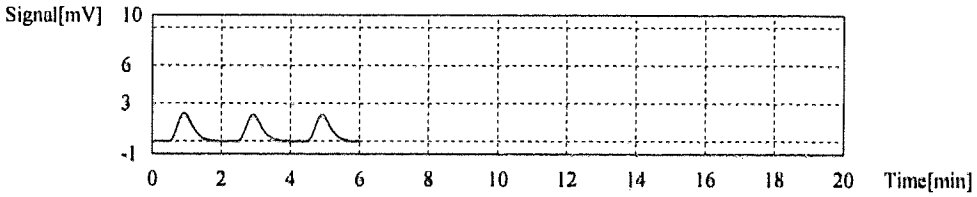
TOC-Control L Report

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Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	6.988	2.089mg/L	50uL	1.000	E	06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 7:29:51 PM
2	6.686	1.999mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 7:32:54 PM
3	6.439	1.925mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 7:35:53 PM

Mean Area 6.563
Mean Conc. 1.962mg/L



Sample

Sample Name: HS22070326-05
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

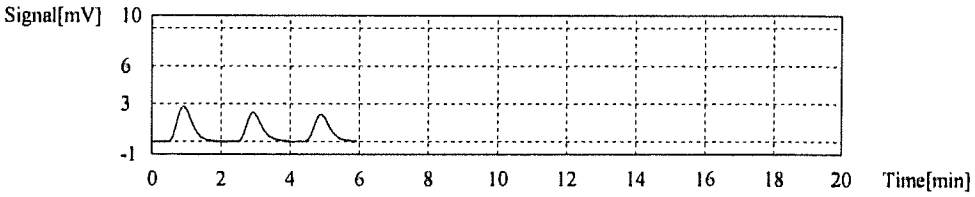
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:2.047mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	8.578	2.565mg/L	50uL	1.000	E	06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 7:44:13 PM
2	7.021	2.099mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 7:47:10 PM
3	6.674	1.995mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 7:50:12 PM

Mean Area 6.848
Mean Conc. 2.047mg/L



Sample

Sample Name: HS22070326-06
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:18.48mg/L

TOC-Control L Report

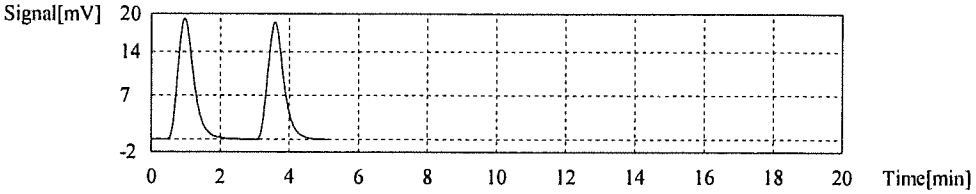
2022_07_20_002.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	62.36	18.65mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 7:59:07 PM
2	61.26	18.32mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:02:03 PM

Mean Area 61.81
Mean Conc. 18.48mg/L



Sample

Sample Name: HS22070326-07
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

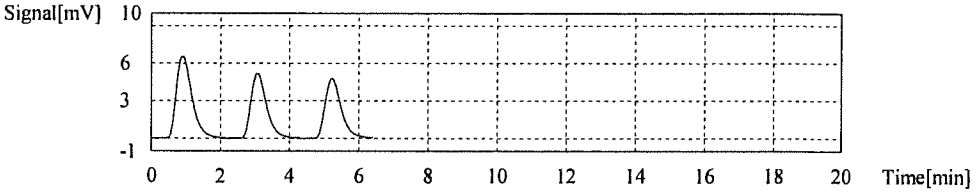
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:4.673mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	20.65	6.174mg/L	50uL	1.000	E	06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:10:31 PM
2	16.03	4.793mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:13:32 PM
3	15.23	4.554mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:16:32 PM

Mean Area 15.63
Mean Conc. 4.673mg/L



Sample

Sample Name: HS22070326-07MS
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:15.78mg/L

TOC-Control L Report

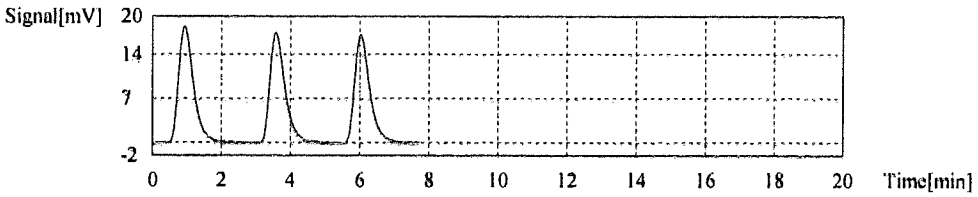
2022_07_20_002.tlx

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	55.91	16.72mg/L	50uL	1.000	E	06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:25:30 PM
2	52.92	15.82mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:28:15 PM
3	52.63	15.74mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:31:28 PM

Mean Area 52.78
Mean Conc. 15.78mg/L



Sample

Sample Name: CCV
Sample ID: 320016206
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

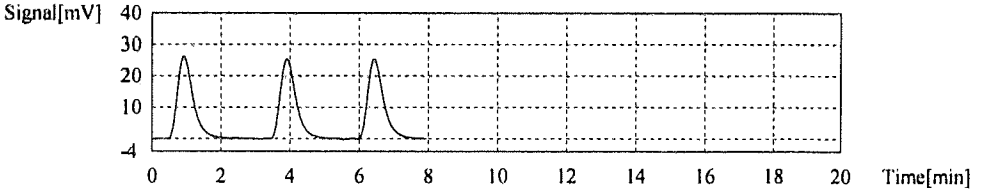
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:24.37mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Aut. Dil.	Ex.	Cal. Curve	Date / Time
1	83.01	24.82mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:41:20 PM
2	80.44	24.05mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:44:10 PM
3	81.04	24.23mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:46:50 PM

Mean Area 81.50
Mean Conc. 24.37mg/L



Sample

Sample Name: CCB
Sample ID:
Origin: 06_07_2022_CAL.cal
Status Completed
Chk. Result

TOC-Control L Report

2022_07_20_002.tlx

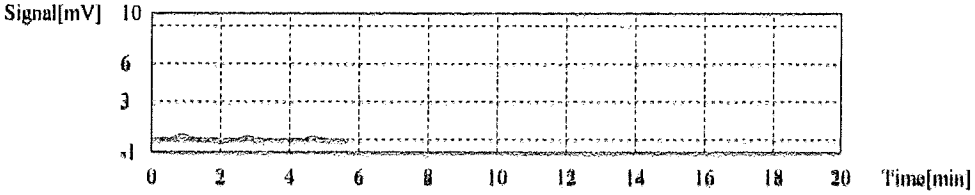
Type	Anal.	Manual Dilution	Result
Unknown	NPOC	1.000	NPOC:0.1863mg/L

1. Det

Anal.: NPOC

No.	Area	Conc.	Inj. Vol.	Auto Dil.	Ex.	Cal. Curve	Date/Time
1	0.8230	0.2461mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:54:55 PM
2	0.5814	0.1738mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:57:04 PM
3	0.4646	0.1389mg/L	50uL	1.000		06_07_2022_CAL.2022_06_07_17_25_51.cal	7/20/2022 8:59:12 PM

Mean Area 0.6230
Mean Conc. 0.1863mg/L



HS22070326 - Sub Perch IV Rpt (E2200665)

ALS WO# HS22070326

July 25, 2022 Service Request No:E2200665

Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Suite 210
Houston, TX 77099-4338

Laboratory Results for: HS22070326

Dear Dane,

Enclosed are the results of the sample(s) submitted to our laboratory July 11, 2022
For your reference, these analyses have been assigned our service request number **E2200665.**

Analyses were performed according to our laboratory's NELAP-approved quality assurance program. The test results meet requirements of the current TNI standards, where applicable, and except as noted in the laboratory case narrative provided. All results are intended to be considered in their entirety and ALS Environmental is not responsible for use of less than the complete final report. Results apply only to the items submitted to the laboratory, as received for analysis. In accordance with the current TNI Standard, a statement on the estimated uncertainty of measurement of any quantitative analysis will be supplied upon request.

Respectfully submitted,

ALS Group USA, Corp. dba ALS Environmental

Corey Grandits
Project Manager

ADDRESS 10450 Stancliff Rd., Suite 210, Houston, TX 77099
PHONE +1 281 530 5656 | FAX +1 281 530 5887
ALS Group USA, Corp.
dba ALS Environmental

Certificate of Analysis

ALS Environmental - Houston HRMS
10450 Stancliff Rd, Suite 210, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Environmental

Client:	ALS	**Service Request No.:**	E2200665
Project:	HS22070326	**Date Received:**	07/11/22
Sample Matrix:	W		

CASE NARRATIVE

All analyses were performed in adherence to the quality assurance program of ALS Environmental. This report contains analytical results for samples designated for Tier II. When appropriate to the method, method blank results have been reported with each analytical test.

Sample Receipt

Eleven samples were received for analysis at ALS Environmental in Houston on 07/11/22.

The samples were received in good condition and are consistent with the accompanying chain of custody form. The samples were stored in a refrigerator at 4°C upon receipt at the laboratory.

Data Validation Notes and Discussion

Precision and Accuracy:

EQ2200287: Laboratory Control Spike/Duplicate Laboratory Control Spike (LCS/DLCS) samples were analyzed and reported in addition to a MS/MSD for this extraction batch. The LCS-DLCS recoveries met acceptance criteria. The MS/MSD recoveries failed high, suspect matrix interference in parent sample (lab analyzed at 5x due to interferences encountered at a 1x)

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS group USA Corp dba ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

Client: ALS Environmental - US **Service Request:**E2200665
Project: HS22070326

SAMPLE CROSS-REFERENCE

SAMPLE #	CLIENT SAMPLE ID	DATE	TIME
E2200665-001	16WW44-220705	7/5/2022	0735
E2200665-002	16WW44-220705-FD	7/5/2022	0735
E2200665-003	16RW10-220705	7/5/2022	0820
E2200665-004	16RW09-220705	7/5/2022	0900
E2200665-005	16RW09-220705-FD	7/5/2022	0900
E2200665-006	16EW01-220705	7/5/2022	0950
E2200665-007	16WW40-220705	7/5/2022	1035
E2200665-008	16WW12-220705	7/5/2022	1130
E2200665-009	16WW13-220705	7/5/2022	1215
E2200665-010	16WW42-220705	7/5/2022	1255
E2200665-011	16RW04-220705	7/5/2022	1350

Service Request Summary

Folder #: **E2200665**
Client Name: ALS Environmental - US
Project Name: HS22070326
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/11/22
Internal Due Date: 7/21/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070326
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Lab Samp No.	Client Samp No	Matrix	Collected	HOUSTON ClO4 DOD/6850
E2200665-001	16WW44-220705	Water	07/05/22 0735	**IV**
E2200665-002	16WW44-220705-FD	Water	07/05/22 0735	**IV**
E2200665-003	16RW10-220705	Water	07/05/22 0820	**IV**
E2200665-004	16RW09-220705	Water	07/05/22 0900	**IV**
E2200665-005	16RW09-220705-FD	Water	07/05/22 0900	**IV**
E2200665-006	16EW01-220705	Water	07/05/22 0950	**IV**
E2200665-007	16WW40-220705	Water	07/05/22 1035	**IV**
E2200665-008	16WW12-220705	Water	07/05/22 1130	**IV**
E2200665-009	16WW13-220705	Water	07/05/22 1215	**IV**
E2200665-010	16WW42-220705	Water	07/05/22 1255	**IV**
E2200665-011	16RW04-220705	Water	07/05/22 1350	**IV**

Service Request Summary

Folder #: **E2200665**
Client Name: ALS Environmental - US
Project Name: HS22070326
Project Number:

Report To: Dane Wacasey
ALS Group USA, Corp.
10450 Stancliff Road
Houston, TX 77099-4338
USA
Phone Number: 281-575-2190
Cell Number:
Fax Number: 281-530-5887
E-mail: dane.wacasey@alsglobal.com

Project Chemist: Corey Grandits
Originating Lab: HOUSTON
Logged By: CGRANDITS
Date Received: 07/11/22
Internal Due Date: 7/21/2022
QAP: LAB QAP
Qualifier Set: Lab Standard
Formset: Lab Standard
Merged?: Y
Report to MDL?: Y
P.O. Number: HS22070326
EDD: EQUIS
EFWEDD_LHAAP

13 120 mL-Plastic Bottle Natural WM Unpreserved
Location: EHRMS-AirArch 1
Pressure Gas:

Test Comments:

Group	Test/Method	Samples	Comments
Semivoa GCMS	ClO4 DOD/6850	10	IV Due 7/28
Semivoa GCMS	ClO4 DOD/6850	1	MS/MSD

Data Qualifiers

Lab Standard

+	Possible Tedlar bag artifact.
A	TIC is a suspected aldol-condensation product
B	Analyte found in the associated method blank as well as in the sample.
BC	Reported results are not blank corrected.
BH	The back section of the tube yielded higher results than the front.
BT	Results indicated possible breakthrough; back section >=10% front section.
C	Result identification confirmed.
D	Compound identified in an analysis at a secondary dilution factor
D	Spike was diluted out
DE	Reported results are corrected for desorption efficiency.
E	Estimated value. Concentration above calibration range
E	The percent difference for the serial dilution was greater than 10%, indicating a possible matrix interference in the sample.
F	The chromatographic fingerprint of the sample matches the elution pattern of the calibration standard.
H	The chromatographic fingerprint of the sample resembles a petroleum product but the elution pattern indicates the presence of a greater amount of heavier molecular weight constituents than the calibration standard.
H1	Sample analysis performed past holding time. See case narrative.
H2	Initial analysis within holding time. Reanalysis for the required dilution was past holding time.
H3	Sample was received and analyzed past holding time.
H4	Sample was extracted past required extraction holding time, but analyzed within analysis holding time. See case narrative.
I	Internal standard not within the specified limits. See case narrative.
J	Estimated Value. Concentration found below MRL.
K	(Auto) The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
K	A deflection in the QC ion may indicate interference with the quantitation of this ion. The concentration of this analyte should be considered as an estimate.
K	Analyte was detected above the method reporting limit prior to normalization.
K	The reference ion ratio was outside acceptance criteria, which may indicate a potential bias to this result.
L	The chromatographic fingerprint of the sample resembles a petroleum product, but the elution pattern indicates the presence of a greater amount of lighter molecular weight constituents than the calibration standard.
L1	Laboratory control sample recovery outside the specified limits; results may be biased high.
L2	Laboratory control sample recovery outside the specified limits; results may be biased low.
L3	Laboratory control sample recovery outside the specified limits.
M	Matrix interference; results may be biased high.
M	The duplicate injection precision not met.
M1	Matrix interference due to coelution with a non-target compound; results may be biased high.

Data Qualifiers

Lab Standard

N	Presumptive evidence of a compound for TICs that have been identified based on a mass spectral library search.
N	The Matrix Spike sample recovery is not within control limits. See case narrative.
O	The chromatographic fingerprint of the sample resembles an oil, but does not match the calibration standard.
P	Indicates chlorodiphenyl ether interference present at the retention time of the target compound.
P	Pesticide/Aroclor target analyte > 40% difference for detected concentrations between GC columns
Q	Indicates as estimated value because the P and P + 2 theoretical abundance ratio does not meet method criteria.
R	Duplicate Precision not met.
R1	Duplicate precision not within the specified limits; however, the results are below the MRL and considered estimated.
S	Surrogate recovery not within specified limits.
S	The reported value was determined by the Method of Standard Additions (MSA).
T	Analyte is a tentatively identified compound, result is estimated.
U	Compound was analyzed for, but was not detected (ND).
V1	The continuing calibration verification standard was outside (biased high) the specified limits for this compound.
V2	The continuing calibration verification standard was outside (biased low) the specified limits for this compound.
W	Result quantified, but the corresponding peak was detected outside the generated retention time window.
W	The post-digestion spike for furnace AA analysis is out of control limits, while sample absorbance is less than 50% of spike absorbance.
X	See case narrative.
Y	Recovery outside limits
Y	The chromatogram resembles a petroleum product but does not match the calibration standard.
Z	The chromatogram does not resemble a petroleum product.
i	The MRL/MDL has been elevated due to a matrix interference.

ALS Laboratory Group

Acronyms

Cal	Calibration
Conc	CONCentration
Dioxin(s)	Polychlorinated dibenzo-p-dioxin(s)
EDL	Estimated Detection Limit
EMPC	Estimated Maximum Possible Concentration
Flags	Data qualifiers
Furan(s)	Polychlorinated dibenzofuran(s)
g	Grams
ICAL	Initial CALibration
ID	IDentifier
Ions	Masses monitored for the analyte during data acquisition
L	Liter (s)
LCS	Laboratory Control Sample
DLCS	Duplicate Laboratory Control Sample
MB	Method Blank
MCL	Method Calibration Limit
MDL	Method Detection Limit
mL	Milliliters
MS	Matrix Spiked sample
DMS	Duplicate Matrix Spiked sample
NO	Number of peaks meeting all identification criteria
PCDD(s)	Polychlorinated dibenzo-p-dioxin(s)
PCDF(s)	Polychlorinated dibenzofuran(s)
ppb	Parts per billion
ppm	Parts per million
ppq	Parts per quadrillion
ppt	Parts per trillion
QA	Quality Assurance
QC	Quality Control
Ratio	Ratio of areas from monitored ions for an analyte
% Rec.	Percent recovery
RPD	Relative Percent Difference
RRF	Relative Response Factor
RT	Retention Time
SDG	Sample Delivery Group
S/N	Signal-to-noise ratio
TEF	Toxicity Equivalence Factor
TEQ	Toxicity Equivalence Quotient

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ALS Environmental

State Certifications, Accreditations, and Licenses

Agency	Number	Expire Date
Arizona Department of Health Services	AZ0793	5/27/2023
California Department of Health Services	2919-2023	4/30/2023
Department of Defense	L22-90	3/31/2024
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Florida Department of Health	E87611-36	6/30/2023
Hawaii Department of Health	2022	4/30/2023
Illinois Environmental Protection Agency	2000322022-9	5/9/2023
Kansas Department of Health and Environment	E-10352 2022	7/31/2022
Louisiana Department of Environmental Quality	03087-2022	6/30/2023
Louisiana Department of Health and Hospitals	LA028	12/31/2022
Maine Department of Health and Human Services	2022017	6/5/2024
Maryland Department of the Environment	343	6/30/2023
Michigan Depratment of Environmental Quality	9971-2022	4/30/2023
Minnesota Department of Health	2228443	12/31/2022
Nebraska Department of Health and Human Services	NE-OS-25-13	4/30/2023
Nevada Department of Concervation and Natural Resources	TX026932022-1	7/31/2022
New Hampshire Environmental Laboratory Accreditation Program	209422	4/24/2023
New Jersey Department of Environmental Protection	TX008-2023	6/30/2023
New York Department of Health	11707	3/31/2023
Oklahoma Department of Environmental Quality	2021-080	8/31/2022
Oregon Environmental Laboratory Accreditation Program	TX200002	5/15/2023
Pennsylvania Department of Environmental Protection	68-03441-016	6/30/2023
Perry Johnson Laboratory Accreditation	L22-91	3/31/2024
Tennessee Department of Environment and Concervation	04016-2022	4/30/2023
Texas Commision on Environmental Quality	T104704231-22-29	4/30/2023
United States Department of Agriculture	P330-19-00299	10/10/2022
Utah Department of Health Environmental Laboratory Certification	TX026932021-12	7/31/2022
Washington Department of Health	C819-2022	11/14/2022

Chain of Custody

ALS Environmental - Houston HRMS
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Houston, TX 77099
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www.alsglobal.com

Subcontract Chain of Custody

SAMPLING STATE: Dept of Defense **COC ID:** 19142

SUBCONTRACT TO:

ALS Environmental
10450 Stancliff RoadSuite 210
Houston, TX 77084

Phone: +1 281 530 5656

CUSTOMER INFORMATION:

Company:	ALS Houston
Contact:	Dane J. Wacasey
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Email:	Dane.Wacasey@alsglobal.com
Alternate Contact:	Jumoke M. Lawal
Email:	jumoke.lawal@alsglobal.com

INVOICE INFORMATION:

Company:	ALS Houston
Contact:	Accounts Payable
Address:	10450 Stancliff Rd, Ste 210
Phone:	+1 281 530 5656
Reference:	HS22070326
TSR:	Ron Martino

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
1.	**HS22070326-01**	**16WW44-220705**	**Water**	**05 Jul 2022 07:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
2.	**HS22070326-02**	**16WW44-220705-FD**	**Water**	**05 Jul 2022 07:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
3.	**HS22070326-03**	**16RW10-220705**	**Water**	**05 Jul 2022 08:20**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
4.	**HS22070326-04**	**16RW09-220705**	**Water**	**05 Jul 2022 09:00**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
5.	**HS22070326-05**	**16RW09-220705-FD**	**Water**	**05 Jul 2022 09:00**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
6.	**HS22070326-06**	**16EW01-220705**	**Water**	**05 Jul 2022 09:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
7.	**HS22070326-07**	**16WW40-220705**	**Water**	**05 Jul 2022 10:35**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
8.	**HS22070326-08**	**16WW12-220705**	**Water**	**05 Jul 2022 11:30**

Subcontract Chain of Custody

SAMPLING STATE: **Dept of Defense** **COC ID: 19142**

	LAB SAMPLE ID	CLIENT SAMPLE ID	MATRIX	COLLECT DATE
	ANALYSIS REQUESTED			DUE DATE
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
9.	**HS22070326-09**	**16WW13-220705**	**Water**	**05 Jul 2022 12:15**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
10.	**HS22070326-10**	**16WW42-220705**	**Water**	**05 Jul 2022 12:55**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022
11.	**HS22070326-11**	**16RW04-220705**	**Water**	**05 Jul 2022 13:50**
	Level II and Level IV reports on a seperate pdf. Send WOA to Vicki Graves.			21 Jul 2022

Comments: HS22070326-07 MS/MSD

Please analyze for the analysis listed above.
Send report to the emails shown above.

QC Level: DOD IV (DoD Data Package)

Relinquished By: _____ Date/Time: _____

Received By: COREY G Date/Time: 7-11-22 0800

Cooler ID(s): _____ Temperature(s): _____

ALS Environmental

Cooler Receipt Form

Project Chemist CG

Client/Project ALS-H

Thermometer ID IR51

Date/Time Received: 7-11-22 Initials: CG Date/Time Logged in: 7-11-22 Initials CG

1. Method of delivery: ○ US Mail ○ Fed Ex ○ UPS ○ DHL ⊗ Courier (ALS) ○ Client

2. Samples received in: ⊗ Cooler ○ Box ○ Envelope ○ Other _____

3. Were custody seals on coolers? ○ Yes ⊗ No If yes, how many and where? _____

Were they intact? ○ Yes ○ No ⊗ N/A

Were they signed and dated? ○ Yes ○ No ⊗ N/A

4. Packing Material: ○ Inserts ⊗ Baggies ○ Bubble Wrap ○ Gel Packs ⊗ Wet Ice ○ Sleeves ○ Other _____

5. Foreign or Regulated Soil? ○ Yes ○ No Location of Sampling: _____

Cooler Tracking Number	COC ID	Date Opened	Time Opened	Opened By	Temp. °C	Temp Blank?
NA		7-11-22	0800	CG	2.2°C	☒
						☐
						☐
						☐

6. Were custody papers properly filled out (ink, signed, dated, etc)? ⊗ Yes ○ No

7. Did all bottles arrive in good condition (not broken, no signs of leakage)? ⊗ Yes ○ No

8. Were all sample labels complete (i.e., sample ID, analysis, preservation, etc)? ⊗ Yes ○ No

9. Were appropriate bottles/containers and volumes received for the requested tests? ⊗ Yes ○ No

10. Did sample labels and tags agree with custody documents? ⊗ Yes ○ No

Notes, Discrepancies, & Resolutions:

Service request Label:

HS-HRMSCoolerReceipt R1.0

ALS Environmental - Houston HRMS

10450 Stancliff Rd., Suite 210
Houston, TX 77099
T: +1 713 266 1599
F: +1 713 266 1599
www.alsglobal.com

SAMPLE ACCEPTANCE POLICY

This policy outlines the criteria samples must meet to be accepted by ALS Environmental – Houston HRMS.

Cooler Custody Seals (desirable, mandatory if specified in SAP):

- ✓ Intact on outside of cooler, signed and dated

Chain-of-Custody (COC) documentation (mandatory):

The following is required on each COC:

- ✓ Sample ID, the location, date and time of collection, collector's name, preservation type, sample type, and any other special remarks concerning the sampleThe COC must be completed in ink.
- ✓ Signature and date of relinquishing party.

In the absence of a COC at sample receipt, the COC will be requested from the client.

Sample Integrity (mandatory):

Samples are inspected upon arrival to ensure that sample integrity was not compromised during transfer to the laboratory.

- ✓ Sample containers must arrive in good condition (not broken or leaking).
- ✓ Samples must be labeled appropriately, including Sample IDs, and requested test using durable labels and indelible ink.
- ✓ The correct type of sample bottle must be used for the method requested.
- ✓ An appropriate sample volume, or weight, must be received.
- ✓ Sample IDs and number of containers must reconcile with the COC.
- ✓ Samples must be received within the method defined holding time.

Temperature Requirement (varies by sample matrix):

- ✓ Aqueous and Non-aqueous samples must be shipped and stored cold, at 0 to 6ºC.
- ✓ Tissue samples must be shipped and stored frozen, at -20 to -10ºC.
- ✓ Air samples are shipped and stored cold, at 0 to 6ºC
- ✓ The sample temperature must be recorded on the COC

All cooler inspections are documented on the Cooler Receipt Form (CRF). A separate CRF is completed for each service request. Any samples not meeting the above criteria are noted on the CRF and the Project Manager notified. The Project Manager must resolve any sample integrity issues with the client prior to proceeding with the analysis. Such resolutions are documented in writing and filed with the project folder. Data associated with samples received outside of this acceptance policy will be qualified on the case narrative of the final report

Preparation Information Benchsheets

ALS Environmental - Houston HRMS
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Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

Preparation Information Benchsheet

Prep Run#: 402637 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/12/22 09:30

#	Lab Code	Client ID	B#	Method /Test	pH	Cl	Matrix	Amt. Ext.	Sample Description
1	E2200664-001	LH18/24-SP650_070622_AIX	.01	6850/ClO4 DOD			Water	10mL	
2	E2200664-002	LH18/24-SP650_070622_BIX	.01	6850/ClO4 DOD			Water	10mL	
3	E2200665-001	16WW44-220705	.01	6850/ClO4 DOD			Water	10mL	
4	E2200665-002	16WW44-220705-FD	.01	6850/ClO4 DOD			Water	10mL	
5	E2200665-003	16RW10-220705	.01	6850/ClO4 DOD			Water	10mL	
6	E2200665-004	16RW09-220705	.01	6850/ClO4 DOD			Water	10mL	
7	E2200665-005	16RW09-220705-FD	.01	6850/ClO4 DOD			Water	10mL	
8	E2200665-006	16EW01-220705	.01	6850/ClO4 DOD			Water	10mL	
9	E2200665-007	16WW40-220705	.01	6850/ClO4 DOD			Water	10mL	
10	E2200665-008	16WW12-220705	.01	6850/ClO4 DOD			Water	10mL	
11	E2200665-009	16WW13-220705	.01	6850/ClO4 DOD			Water	10mL	
12	E2200665-010	16WW42-220705	.01	6850/ClO4 DOD			Water	10mL	
13	E2200665-011	16RW04-220705	.01	6850/ClO4 DOD			Water	10mL	
14	EQ2200287-01	MB		6850/ClO4 DOD			Liquid	10mL	
15	EQ2200287-02	LCS		6850/ClO4 DOD			Liquid	10mL	
16	EQ2200287-03	DLCS		6850/ClO4 DOD			Liquid	10mL	
17	EQ2200287-04	16WW40-220705 MS	.01	6850/ClO4 DOD			Liquid	10mL	
18	EQ2200287-05	16WW40-220705 DMS	.01	6850/ClO4 DOD			Liquid	10mL	

Spiking Solutions

Name: Perchlorate Intermediate Stock1 Inventory ID 222798 Logbook Ref: Perchlorate (1st Source) Expires On: 10/29/2022

EQ2200287-02	1.00µL	EQ2200287-03	1.00µL	EQ2200287-04	1.00µL	EQ2200287-05	1.00µL

Name: Perchlorate Internal Standard 1ug/mL Inventory ID 223118 Logbook Ref: Perchlorate Internal Standard Expires On: 10/31/2022

E2200664-001	100.00µL	E2200664-002	100.00µL	E2200665-001	100.00µL	E2200665-002	100.00µL	E2200665-003	100.00µL	E2200665-004	100.00µL
E2200665-005	100.00µL	E2200665-006	100.00µL	E2200665-007	100.00µL	E2200665-008	100.00µL	E2200665-009	100.00µL	E2200665-010	100.00µL
E2200665-011	100.00µL	EQ2200287-01	100.00µL	EQ2200287-02	100.00µL	EQ2200287-03	100.00µL	EQ2200287-04	100.00µL	EQ2200287-05	100.00µL

Preparation Materials

Water HPLC Grade	5/12/2022 Water (223055)	6850 Amber Glass screw vial	2mL Screw Top Vial (221894)	6850 0.45um syringe filters	6850 Syringe Filters (222410)
6850 Luer-Lok Syringes	Luer-Lok Syringes (221305)	6850 Pipette Tips 50-1000 uL	6850 Pipette Tips (221929)		

Preparation Information Benchsheet

Prep Run#: 402637 **Prep WorkFlow:** GenExt28Day **Status:** Prepped
Team: Semivoa GCMS/GRIVERA **Prep Method:** Method **Prep Date/Time:** 7/12/22 09:30

Preparation Steps

Step: Preparation
Started: 7/12/22 09:30
Finished: 7/12/22 10:15
By: GRIVERA
Comments

Comments: _____

Reviewed By: GR Date: 7/12/22

Chain of Custody

Relinquished By: _____ Date: _____ Extracts Examined

Received By: _____ Date: _____ Yes No

Analytical Results

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 210, Houston, TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0735
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW44-220705	**Units:**	µg/L
Lab Code:	E2200665-001	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:45	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0735
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW44-220705-FD	**Units:**	µg/L
Lab Code:	E2200665-002	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:53	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0820
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW10-220705	**Units:**	µg/L
Lab Code:	E2200665-003	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**2.05**		0.500	0.250	0.125	5	7/12/22	7/20/22 17:26	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0900
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW09-220705	**Units:**	µg/L
Lab Code:	E2200665-004	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 20:16	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0900
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW09-220705-FD	**Units:**	µg/L
Lab Code:	E2200665-005	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.221**	J	0.500	0.250	0.125	5	7/12/22	7/20/22 17:34	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 0950
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16EW01-220705	**Units:**	µg/L
Lab Code:	E2200665-006	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**38.1**		0.500	0.250	0.125	5	7/12/22	7/20/22 17:41	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1035
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	E2200665-007	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.500	0.250	0.125	5	7/12/22	7/20/22 17:49	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1130
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW12-220705	**Units:**	µg/L
Lab Code:	E2200665-008	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**58.3**		1.00	0.500	0.250	10	7/12/22	7/20/22 16:11	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1215
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW13-220705	**Units:**	µg/L
Lab Code:	E2200665-009	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/20/22 16:18	402637	771162	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1255
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW42-220705	**Units:**	µg/L
Lab Code:	E2200665-010	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 21:04	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1350
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16RW04-220705	**Units:**	µg/L
Lab Code:	E2200665-011	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 21:12	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Method Blank	**Units:**	µg/L
Lab Code:	EQ2200287-01	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	ND	U	0.100	0.0500	0.0250	1	7/12/22	7/12/22 16:18	402637	770203	

Accuracy & Precision

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ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/12/22
Sample Matrix:	Water		

Lab Control Sample Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method:	6850	**Units:**	µg/L
Prep Method:	Method	**Basis:**	NA
		Extraction Lot:	402637

	Lab Control Sample EQ2200287-02			Duplicate Lab Control Sample EQ2200287-03					
Analyte Name	**Result**	**Spike Amount**	**% Rec**	**Result**	**Spike Amount**	**% Rec**	**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	0.0991	0.100	99	0.103	0.100	103	84 - 119	3	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200287-02	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.0991**	J	0.100	0.0500	0.0250	1	7/12/22	7/12/22 16:26	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	NA
Sample Matrix:	Water	**Date Received:**	NA
Sample Name:	Duplicate Lab Control Sample	**Units:**	µg/L
Lab Code:	EQ2200287-03	**Basis:**	NA

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.103**		0.100	0.0500	0.0250	1	7/12/22	7/12/22 17:07	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/5/22
Sample Matrix:	Water	**Date Received:**	7/11/22
		Date Analyzed:	7/12/22

Matrix Spike Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	E2200665-007	**Basis:**	NA

Analytical Method: 6850
Prep Method: Method

		16WW40-220705MS				16WW40-220705DMS					
		Matrix Spike				**Duplicate Matrix Spike**					
		EQ2200287-04				EQ2200287-05					
Analyte Name	**Sample Result**	**Result**	**Spike Amount**	**% Rec**		**Result**	**Spike Amount**	**% Rec**		**% Rec Limits**	**RPD**	**RPD Limit**
Perchlorate	ND	0.202	0.100	202	*	0.193	0.100	193	*	84 - 119	5	15

Results flagged with an asterisk (*) indicate values outside control criteria.

Results flagged with a pound (#) indicate the control criteria is not applicable.

Percent recoveries and relative percent differences (RPD) are determined by the software using values in the calculation which have not been rounded.

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1035
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	EQ2200287-04	**Basis:**	NA
Run Type:	Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.202**		0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:29	402637	770203	

ALS Group USA, Corp. dba ALS Environmental

Analytical Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Collected:**	7/ 5/22 1035
Sample Matrix:	Water	**Date Received:**	7/11/22
Sample Name:	16WW40-220705	**Units:**	µg/L
Lab Code:	EQ2200287-05	**Basis:**	NA
Run Type:	Duplicate Matrix Spike		

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
Prep Method: Method

Analyte Name	Result	Q	LOQ	LOD	MDL	Dilution Factor	Date Extracted	Date Analyzed	Extraction Lot	Analysis Lot	Note
Perchlorate	**0.193**		0.100	0.0500	0.0250	1	7/12/22	7/12/22 19:37	402637	770203	

Initial Calibration

ALS Environmental - Houston HRMS
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20220601

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100819-09 **B:** MeOH 217304

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE2		20220601_016	Perchlorate6850c.lcm	1x	☒	222804	6/1/2022 14:02
2	PERCHLORATE3		20220601_017	Perchlorate6850c.lcm	1x	☒	222806	6/1/2022 14:09
3	PERCHLORATE4		20220601_018	Perchlorate6850c.lcm	1x	☒	222807	6/1/2022 14:17
4	PERCHLORATE5		20220601_019	Perchlorate6850c.lcm	1x	☒	222808	6/1/2022 14:25
5	PERCHLORATE6		20220601_020	Perchlorate6850c.lcm	1x	☒	222809	6/1/2022 14:33
6	PERCHLORATE7		20220601_021	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 14:41
7	PERCHLORATE8		20220601_022	Perchlorate6850c.lcm	1x	☒	222811	6/1/2022 14:49
8	PERCHLORATE9		20220601_023	Perchlorate6850c.lcm	1x	☒	222812	6/1/2022 14:57
9	PERCHLORATE10		20220601_024	Perchlorate6850c.lcm	1x	☒	222813	6/1/2022 15:05
10	PERCHLORATE1		20220601_026	Perchlorate6850c.lcm	1x	☒	222805	6/1/2022 15:39
11	PERCHLORATEICV		20220601_028	Perchlorate6850c.lcm	1x	☒	222814	6/1/2022 15:55
12	IB		20220601_029	Perchlorate6850c.lcm	1x	☒		6/1/2022 16:03
13	ICS		20220601_030	Perchlorate6850c.lcm	1x	☒		6/1/2022 16:11
14	PERCHLORATE7		20220601_031	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 16:58
15	LODV		20220601_032	Perchlorate6850c.lcm	1x	☒	222817	6/1/2022 17:22
16	E2200484-001X5		20220601_033	Perchlorate6850c.lcm	5x	☒	DNU-analyze 1x	6/1/2022 17:30
17	E2200454-002X500		20220601_034	Perchlorate6850c.lcm	500x	☒		6/1/2022 17:38
18	E2200484-001		20220601_035	Perchlorate6850c.lcm	1x	☒	DNU-bad injection	6/1/2022 17:46
19	E2200454-003		20220601_036	Perchlorate6850c.lcm	1x	☒		6/1/2022 17:54
20	E2200454-004		20220601_037	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:01
21	E2200454-005		20220601_038	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 18:09
22	E2200454-006		20220601_039	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 18:17
23	E2200454-007		20220601_040	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:25
24	E2200454-008		20220601_041	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:33
25	PERCHLORATE7		20220601_042	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 18:41
26	E2200470-001		20220601_043	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:49
27	R2204439-003		20220601_044	Perchlorate6850c.lcm	1x	☒		6/1/2022 18:57
28	R2204439-007		20220601_045	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:04
29	R2204439-009		20220601_046	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:12
30	R2204582-011		20220601_047	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:20
31	R2204582-030		20220601_048	Perchlorate6850c.lcm	1x	☒	Reanalyze- IR	6/1/2022 19:28
32	R2204582-035		20220601_049	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:36
33	R2204616-004		20220601_050	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:44
34	R2204616-011		20220601_051	Perchlorate6850c.lcm	1x	☒		6/1/2022 19:52
35	PERCHLORATE7		20220601_052	Perchlorate6850c.lcm	1x	☒	222810	6/1/2022 20:00
36	IB		20220601_053	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:08
37	IB		20220601_054	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:15
38	null		20220601_055	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:20
39	null		20220601_056	Perchlorate6850c.lcm	1x	☒		6/1/2022 20:25

Initial Calibration - Detailed Report

Calibration ID: EC2200008 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2200008-01	PERCHLORATE2	20220601_016	06/01/2022 14:02
02	EC2200008-02	PERCHLORATE3	20220601_017	06/01/2022 14:09
03	EC2200008-03	PERCHLORATE4	20220601_018	06/01/2022 14:17
04	EC2200008-04	PERCHLORATE5	20220601_019	06/01/2022 14:25
05	EC2200008-05	PERCHLORATE6	20220601_020	06/01/2022 14:33
06	EC2200008-06	PERCHLORATE7	20220601_021	06/01/2022 14:41
07	EC2200008-07	PERCHLORATE8	20220601_022	06/01/2022 14:49
08	EC2200008-08	PERCHLORATE9	20220601_023	06/01/2022 14:57
09	EC2200008-09	PERCHLORATE10	20220601_024	06/01/2022 15:05
10	EC2200008-10	PERCHLORATE1	20220601_026	06/01/2022 15:39

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 10.81** **Average RF = 0.1511**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.5000	0.1553	02	0.7000	0.1519	03	1.0000	0.1465	04	2.0000	0.1514
05	5.0000	0.1444	06	10.0000	0.1425	07	20.0000	0.1496	08	30.0000	0.1358
09	50.0000	0.1396	10	0.1000	0.1944						

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.5000	0.514	2.7	02	0.7000	0.703	0.5	03	1.0000	0.969	-3.1
04	2.0000	2.00	0.2	05	5.0000	4.78	-4.4	06	10.0000	9.43	-5.7
07	20.0000	19.8	-1.0	08	30.0000	27.0	-10.2	09	50.0000	46.2	-7.7
10	0.1000	0.129	28.6								

Initial Calibration Verification Summary Report

Calibration ID:	EC2200008	**Instrument ID:**	E-LCMS-01
Datafile ID:	20220601_028	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2200008-11	T	Average RF	10	9.710	ng/mL	-2.9	<= 15

Insight Report

Printed at 6/2/2022 10:42:59 AM

Method File: I:\LCMS01\DATA\20220601\20220601.lcm
Project File: I:\LCMS01\DATA\20220601\20220601.damlp

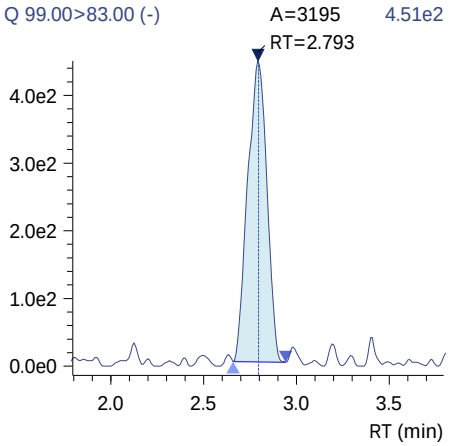
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 6/1/2022 2:02:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_016.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.793	3195	41158	0.5136	ng/mL	27.57	18.52-34.39
Perchlorate 2	Auto	2.781	881	41158	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.777	41158	41158	1.0000	ng/mL	----	

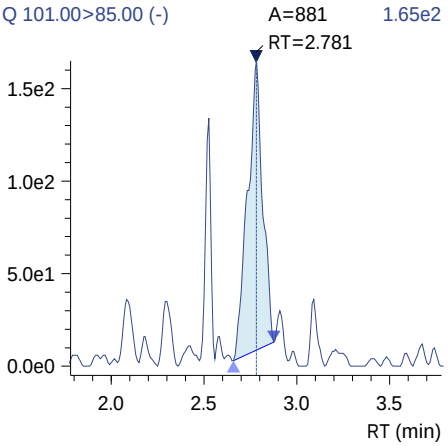
Perchlorate

Conc 0.5136



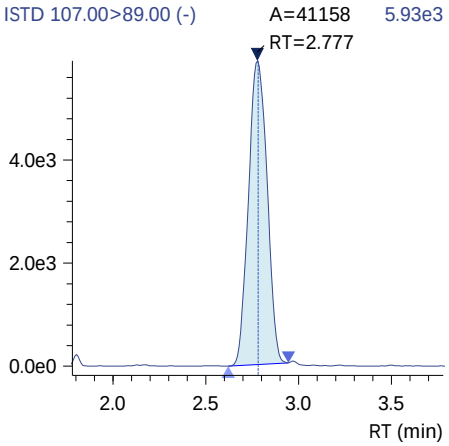
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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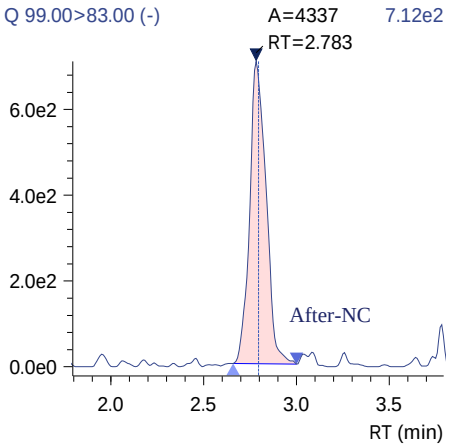
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/1/2022 2:09:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_017.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI	2.783	4337	40792	0.7035	ng/mL	24.99	18.52-34.39
Perchlorate 2	M	2.843	1084	40792	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.787	40792	40792	1.0000	ng/mL	----	

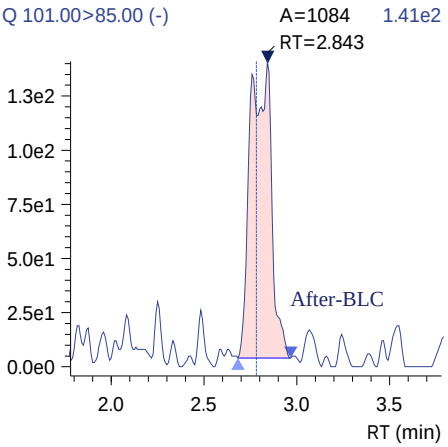
Perchlorate

Conc 0.7035



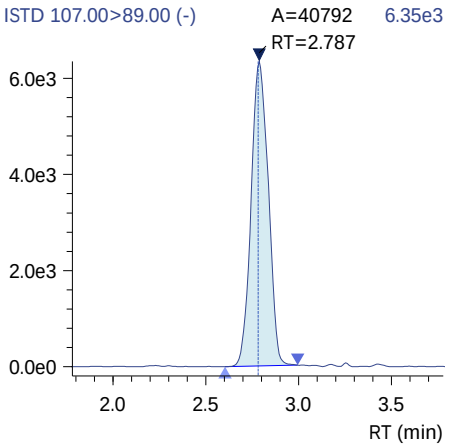
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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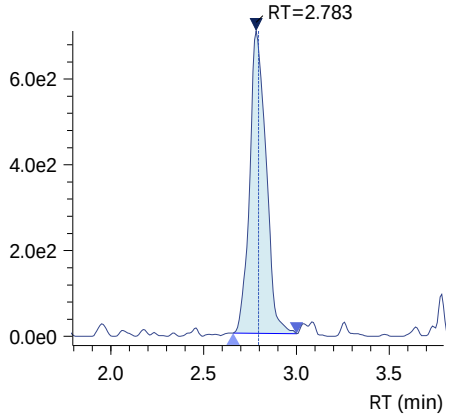
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 6/1/2022 2:09:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_017.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.7205

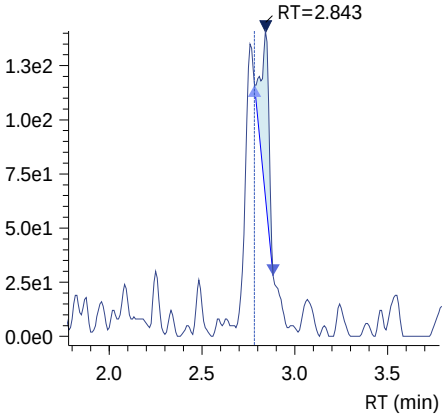
Q 99.00>83.00 (-) A=4337 7.12e2



Perchlorate 2

Conc 0.0000

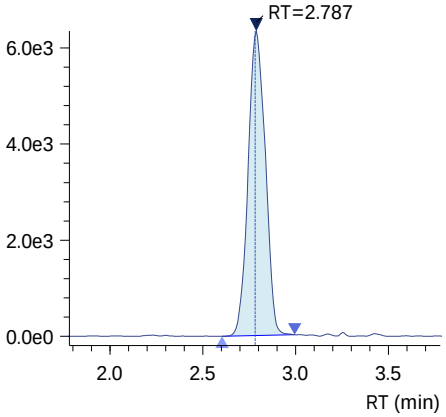
Q 101.00>85.00 (-) A=213 1.41e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=40792 6.35e3



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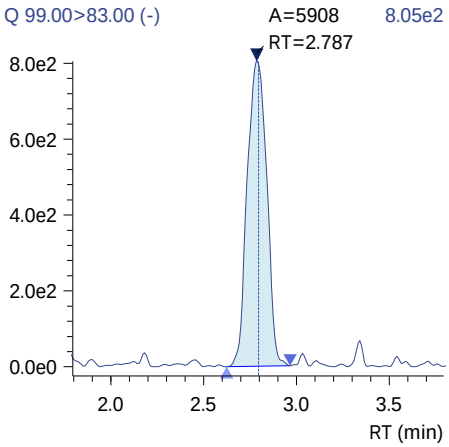
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 6/1/2022 2:17:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_018.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.787	5908	40337	0.9691	ng/mL	25.81	18.52-34.39
Perchlorate 2	Auto	2.776	1525	40337	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.787	40337	40337	1.0000	ng/mL	----	

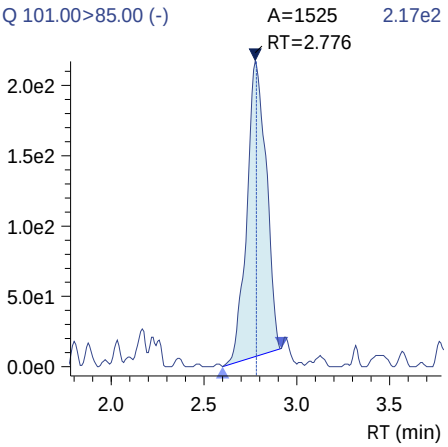
Perchlorate

Conc 0.9691



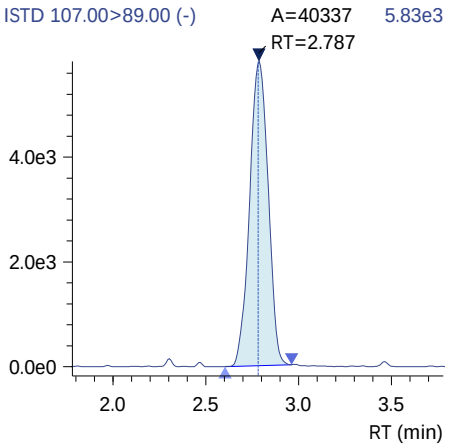
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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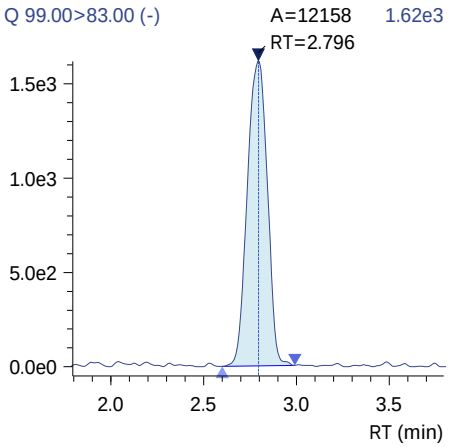
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 6/1/2022 2:25:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_019.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.796	12158	40141	2.0041	ng/mL	27.57	18.52-34.39
Perchlorate 2	Auto	2.785	3352	40141	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.784	40141	40141	1.0000	ng/mL	----	

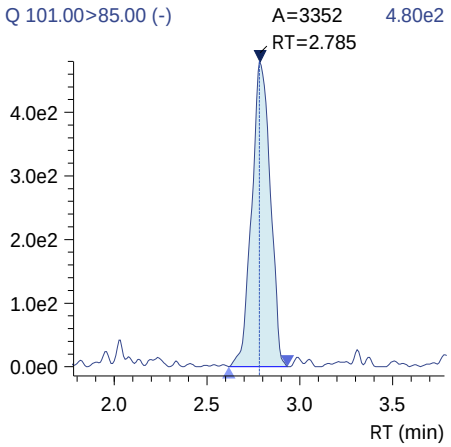
Perchlorate

Conc 2.0041



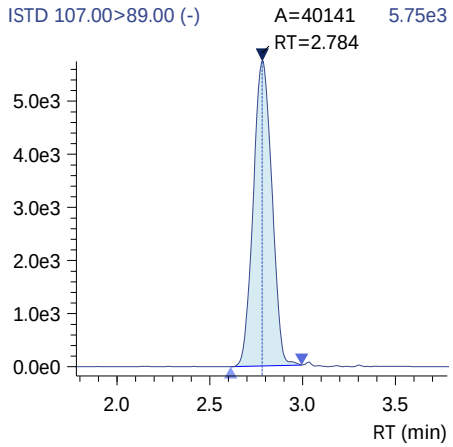
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



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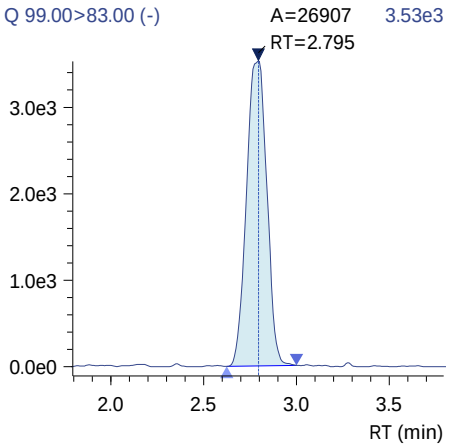
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 6/1/2022 2:33:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_020.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.795	26907	37256	4.7788	ng/mL	24.81	18.52-34.39
Perchlorate 2	Auto	2.781	6676	37256	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.781	37256	37256	1.0000	ng/mL	----	

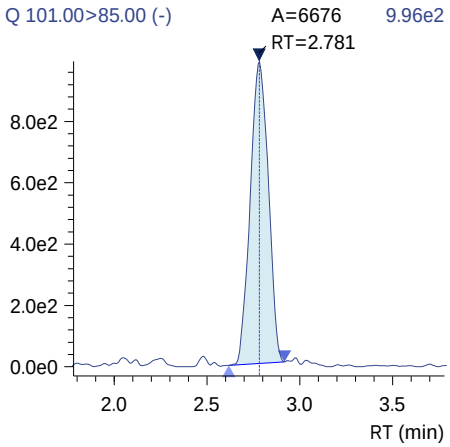
Perchlorate

Conc 4.7788



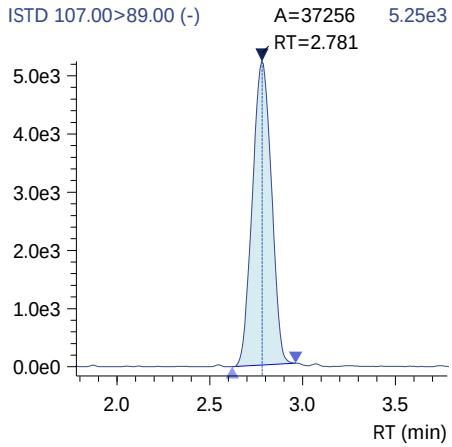
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

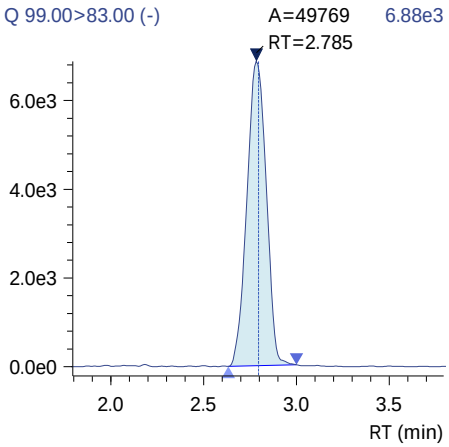
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 6/1/2022 2:41:37 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_021.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.785	49769	34931	9.4274	ng/mL	26.27	18.52-34.39
Perchlorate 2	Auto	2.789	13072	34931	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.782	34931	34931	1.0000	ng/mL	----	

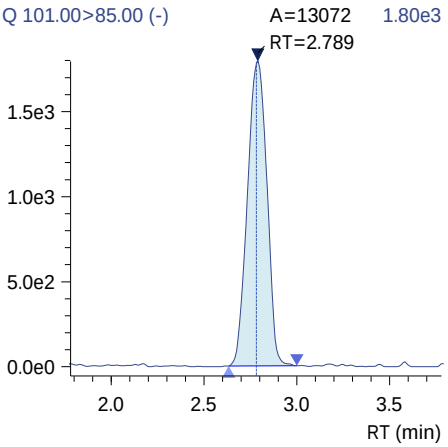
Perchlorate

Conc 9.4274



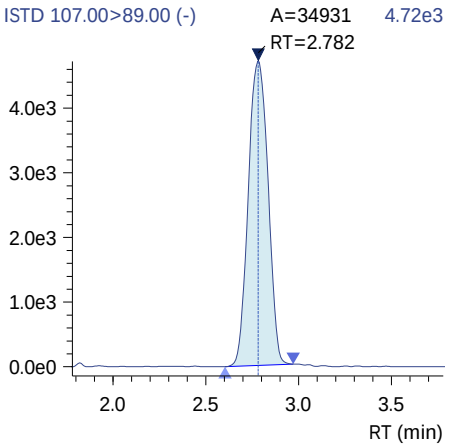
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



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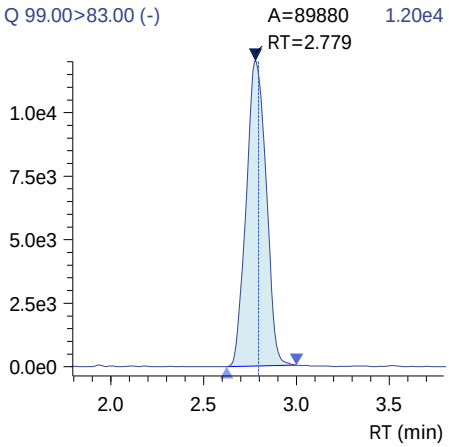
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 6/1/2022 2:49:32 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_022.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.779	89880	30033	19.8021	ng/mL	26.40	18.52-34.39
Perchlorate 2	Auto	2.789	23731	30033	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.774	30033	30033	1.0000	ng/mL	----	

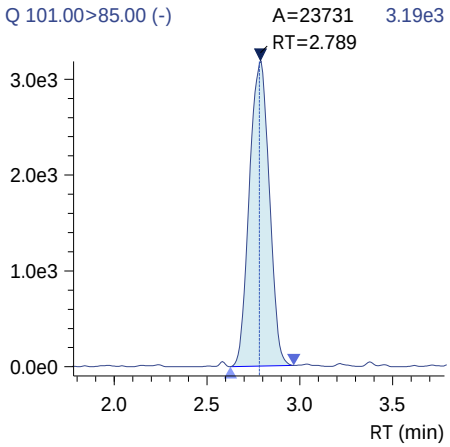
Perchlorate

Conc 19.8021



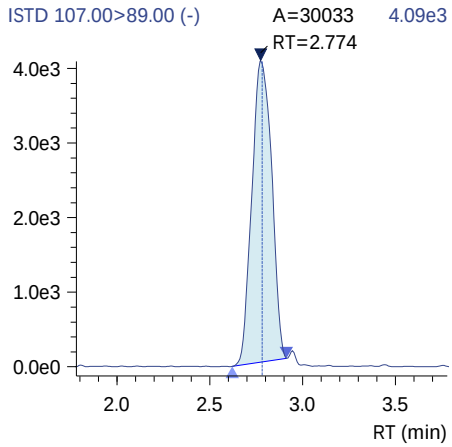
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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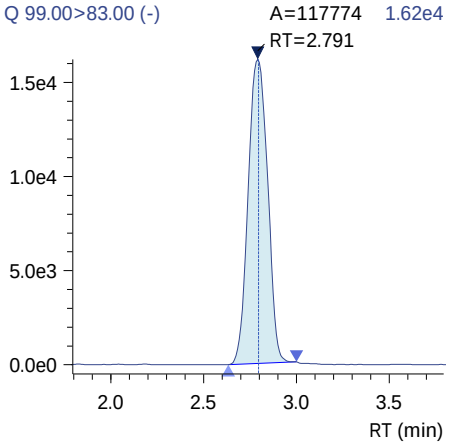
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 6/1/2022 2:57:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_023.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.791	117774	28915	26.9509	ng/mL	26.79	18.52-34.39
Perchlorate 2	Auto	2.786	31550	28915	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.793	28915	28915	1.0000	ng/mL	----	

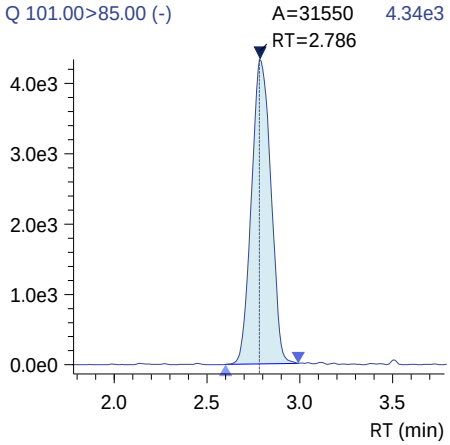
Perchlorate

Conc 26.9509



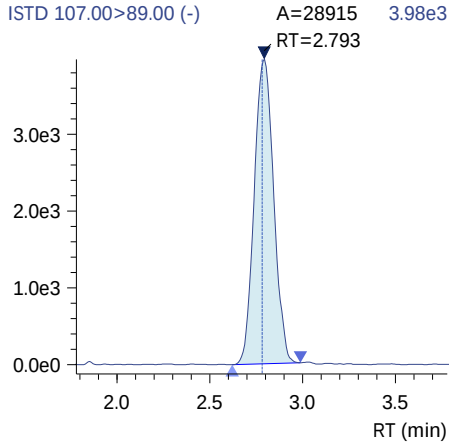
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 10:42:59 AM

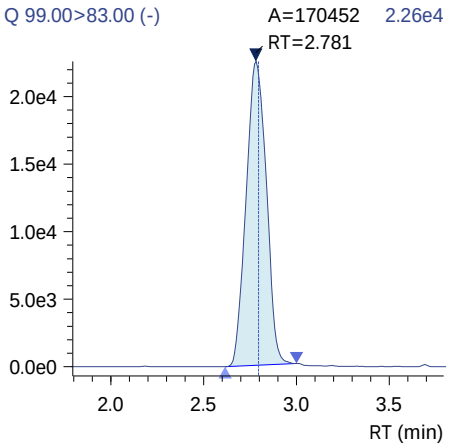
PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 6/1/2022 3:05:17 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_024.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.781	170452	24428	46.1701	ng/mL	25.87	18.52-34.39
Perchlorate 2	Auto	2.774	44101	24428	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.780	24428	24428	1.0000	ng/mL	----	

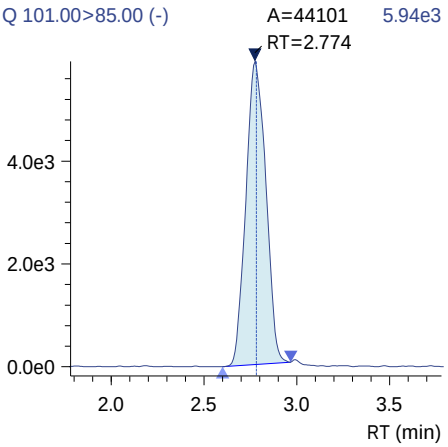
Perchlorate

Conc 46.1701



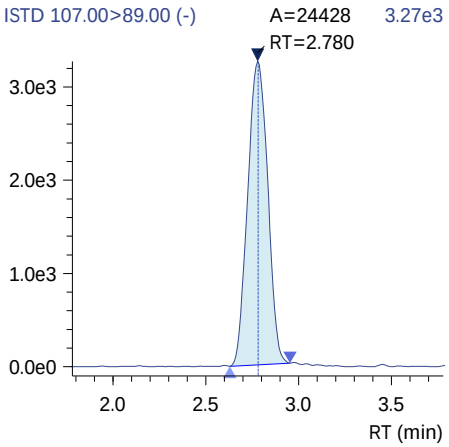
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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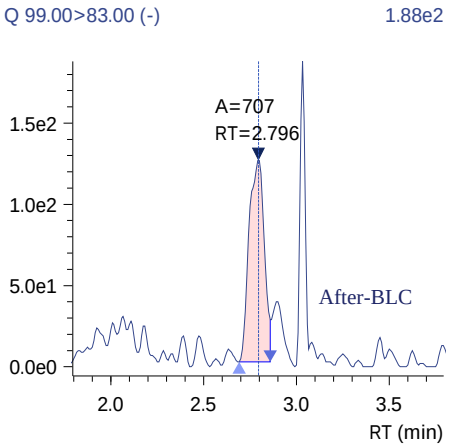
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 6/1/2022 3:39:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_026.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.796	707	36372	0.1286	ng/mL	28.15	18.52-34.39
Perchlorate 2	M	2.750	199	36372	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.772	36372	36372	1.0000	ng/mL	----	

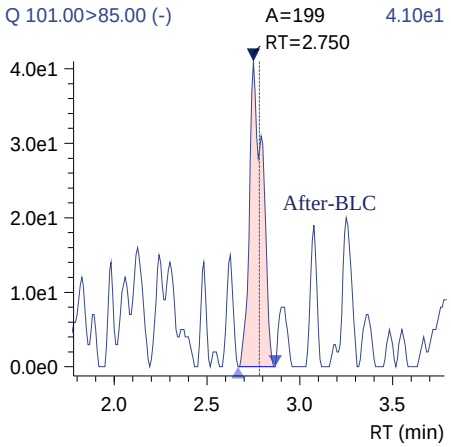
Perchlorate

Conc 0.1286



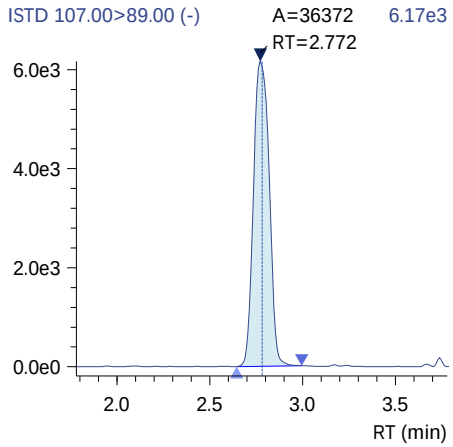
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 6/2/2022 9:46:32 AM

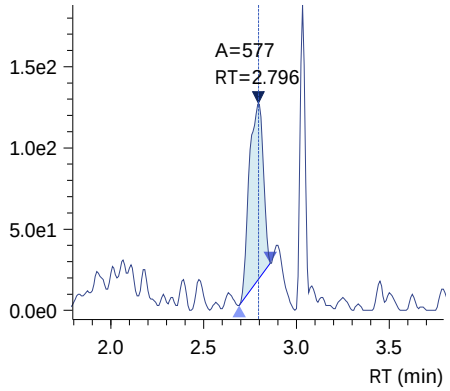
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 6/1/2022 3:39:38 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_026.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.1075

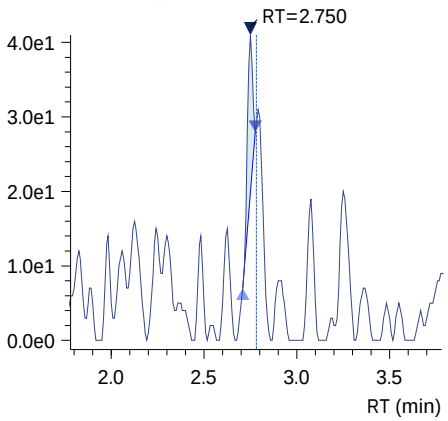
Q 99.00>83.00 (-) 1.88e2



Perchlorate 2

Conc 0.0000

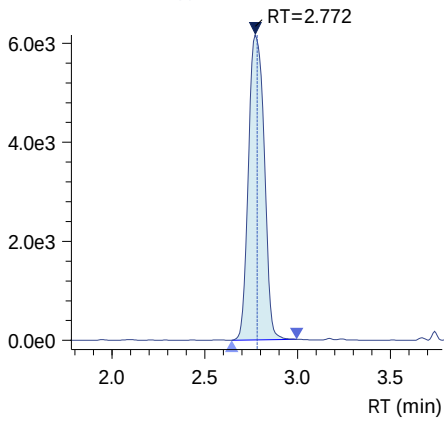
Q 101.00>85.00 (-) A=39 4.10e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=36372 6.17e3



Insight Report

Printed at 6/2/2022 10:42:59 AM

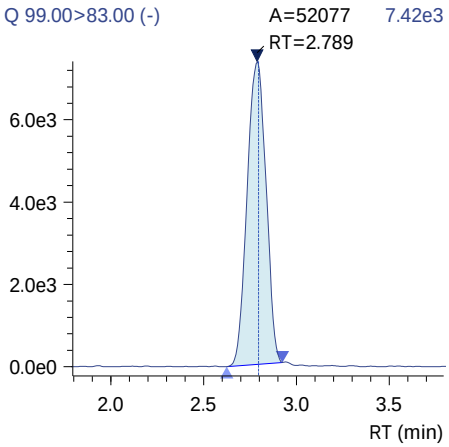
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 6/1/2022 3:55:25 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220601\20220601_028.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.789	52077	35488	9.7098	ng/mL	26.93	18.52-34.39
Perchlorate 2	Auto	2.782	14023	35488	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.780	35488	35488	1.0000	ng/mL	----	

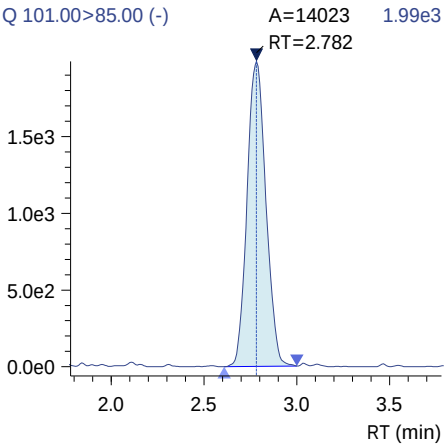
Perchlorate

Conc 9.7098



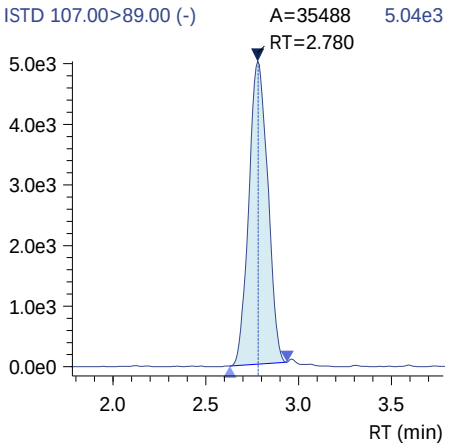
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



20220720

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 7/20/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200010**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE2		20220720_013	Perchlorate6850c.lcm	1x	☒	222804	7/20/2022 12:55
2	PERCHLORATE3		20220720_014	Perchlorate6850c.lcm	1x	☒	222806	7/20/2022 13:03
3	PERCHLORATE4		20220720_015	Perchlorate6850c.lcm	1x	☒	222807	7/20/2022 13:11
4	PERCHLORATE5		20220720_016	Perchlorate6850c.lcm	1x	☒	222808	7/20/2022 13:19
5	PERCHLORATE6		20220720_017	Perchlorate6850c.lcm	1x	☒	222809	7/20/2022 13:26
6	PERCHLORATE7		20220720_018	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 13:34
7	PERCHLORATE8		20220720_019	Perchlorate6850c.lcm	1x	☒	222811	7/20/2022 13:42
8	PERCHLORATE9		20220720_020	Perchlorate6850c.lcm	1x	☒	222812	7/20/2022 13:50
9	PERCHLORATE10		20220720_021	Perchlorate6850c.lcm	1x	☒	222813	7/20/2022 13:58
10	PERCHLORATE1		20220720_023	Perchlorate6850c.lcm	1x	☒	222805	7/20/2022 14:22
11	PERCHLORATEICV		20220720_024	Perchlorate6850c.lcm	1x	☒	222814	7/20/2022 14:47
12	ICS		20220720_025	Perchlorate6850c.lcm	1x	☒		7/20/2022 15:07
13	LODV		20220720_026	Perchlorate6850c.lcm	1x	☒	222817	7/20/2022 15:15
14	PERCHLORATE7		20220720_027	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 15:23
15	E2200665-003		20220720_028	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 15:31
16	E2200665-005		20220720_029	Perchlorate6850c.lcm	1x	☒	DNU- bad injection	7/20/2022 15:39
17	E2200665-006		20220720_030	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 15:47
18	E2200665-005		20220720_031	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 15:55
19	E2200665-007		20220720_032	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 16:03
20	E2200665-008		20220720_033	Perchlorate6850c.lcm	10x	☒		7/20/2022 16:11
21	E2200665-009		20220720_034	Perchlorate6850c.lcm	1x	☒		7/20/2022 16:18
22	PERCHLORATE7		20220720_035	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 16:34
23	PERCHLORATE7		20220720_036	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 17:18
24	E2200665-003		20220720_037	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:26
25	E2200665-005		20220720_038	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:34
26	E2200665-006		20220720_039	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:41
27	E2200665-007		20220720_040	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:49
28	PERCHLORATE7		20220720_041	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 17:57
29	E2200680-001		20220720_042	Perchlorate6850c.lcm	1000x	☒	DNU-out of ICAL range	7/20/2022 18:05
30	E2200680-002		20220720_043	Perchlorate6850c.lcm	1000x	☒	DNU-run 10x	7/20/2022 18:13
31	E2200680-003		20220720_044	Perchlorate6850c.lcm	1000x	☒	DNU-out of ICAL range	7/20/2022 18:21
32	E2200680-004		20220720_045	Perchlorate6850c.lcm	1000x	☒	DNU-out of ICAL range	7/20/2022 18:29
33	PERCHLORATE7		20220720_046	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 18:37
34	IB		20220720_047	Perchlorate6850c.lcm	1x	☒		7/20/2022 18:45
35	IB		20220720_048	Perchlorate6850c.lcm	1x	☒		7/20/2022 18:52
36	IB		20220720_049	Perchlorate6850c.lcm	1x	☒		7/20/2022 19:00
37	null		20220720_050	Perchlorate6850c.lcm	1x	☒		7/20/2022 19:05
38	null		20220720_051	Perchlorate6850c.lcm	1x	☒		7/20/2022 19:10

Initial Calibration - Detailed Report

Calibration ID: EC2200010 **Instrument ID:** E-LCMS-01
Column Name: 1

#	Lab Code	Sample Name	File Location	Aquisition Date
01	EC2200010-01	PERCHLORATE2	20220720_013	07/20/2022 12:55
02	EC2200010-02	PERCHLORATE3	20220720_014	07/20/2022 13:03
03	EC2200010-03	PERCHLORATE4	20220720_015	07/20/2022 13:11
04	EC2200010-04	PERCHLORATE5	20220720_016	07/20/2022 13:19
05	EC2200010-05	PERCHLORATE6	20220720_017	07/20/2022 13:26
06	EC2200010-06	PERCHLORATE7	20220720_018	07/20/2022 13:34
07	EC2200010-07	PERCHLORATE8	20220720_019	07/20/2022 13:42
08	EC2200010-08	PERCHLORATE9	20220720_020	07/20/2022 13:50
09	EC2200010-09	PERCHLORATE10	20220720_021	07/20/2022 13:58
10	EC2200010-10	PERCHLORATE1	20220720_023	07/20/2022 14:22

Analyte **Curve Fit** **Weighting**

Perchlorate **Average RF** **RSD = 6.707** **Average RF = 0.188**

#	Amount	RF	#	Amount	RF	#	Amount	RF	#	Amount	RF
01	0.5000	0.1779	02	0.7000	0.1816	03	1.0000	0.2072	04	2.0000	0.1907
05	5.0000	0.179	06	10.0000	0.188	07	20.0000	0.1806	08	30.0000	0.1812
09	50.0000	0.18	10	0.1000	0.2138						

Analyte

Perchlorate

#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D	#	Amount	Calculated Conc	%D
01	0.5000	0.473	-5.4	02	0.7000	0.676	-3.4	03	1.0000	1.10	10.2
04	2.0000	2.03	1.4	05	5.0000	4.76	-4.8	06	10.0000	10.0	-0.0
07	20.0000	19.2	-3.9	08	30.0000	28.9	-3.6	09	50.0000	47.9	-4.2
10	0.1000	0.114	13.7								

Initial Calibration Verification Summary Report

Calibration ID:	EC2200010	**Instrument ID:**	E-LCMS-01
Datafile ID:	20220720_024	**Column Name:**	1

Analyte	Lab Code	Type	Curve Fit	True Value	Calc Conc	Units	Result	Criteria
Perchlorate	EC2200010-11	T	Average RF	10	10.133	ng/mL	1.3	<= 15

Insight Report

Printed at 7/20/2022 2:55:57 PM

Method File: I:\LCMS01\DATA\20220720\20220720.lcm
Project File: I:\LCMS01\DATA\20220720\20220720-ICAL.damlp

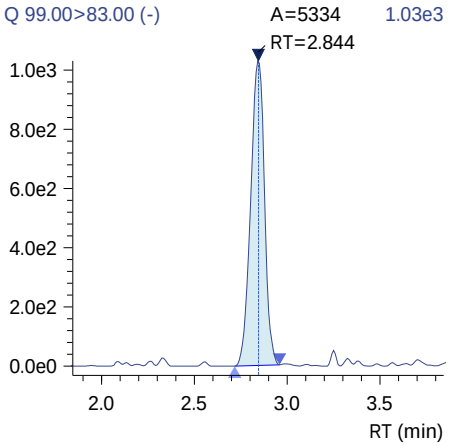
PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 7/20/2022 12:55:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_013.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.844	5334	59962	0.4732	ng/mL	35.04	22.95-42.62
Perchlorate 2	Auto	2.842	1869	59962	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	59962	59962	1.0000	ng/mL	----	

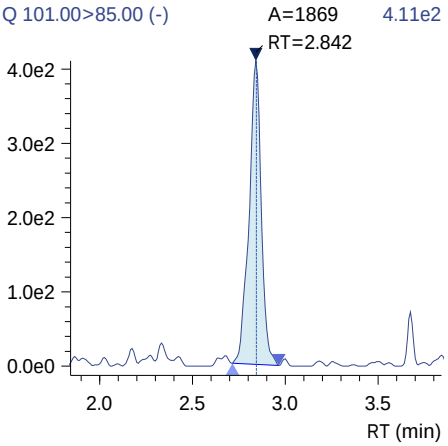
Perchlorate

Conc 0.4732



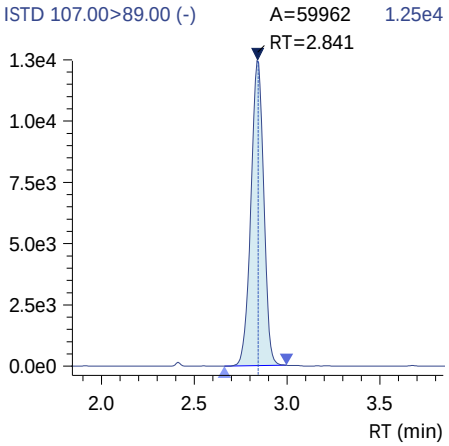
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:58:16 PM

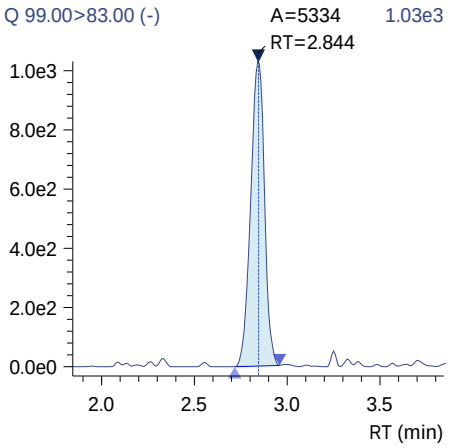
Method File: I:\LCMS01\DATA\20220720\20220720.lcm
Project File: I:\LCMS01\DATA\20220720\20220720-ICAL.damlp

PERCHLORATE2

Sample ID: PERCHLORATE2
Date Acquired: 7/20/2022 12:55:20 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_013.lcd
Vial: 21 | Inj. Volume: 25.0000uL | Tray: 1

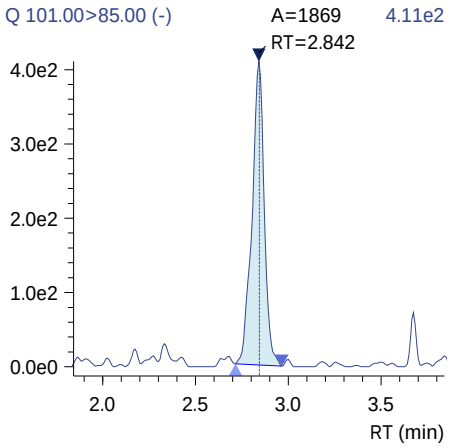
Perchlorate

Conc 0.4934



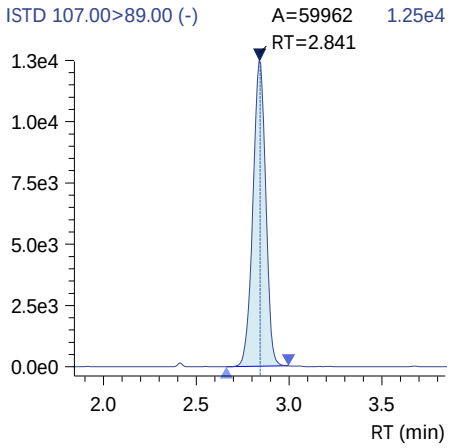
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:55:57 PM

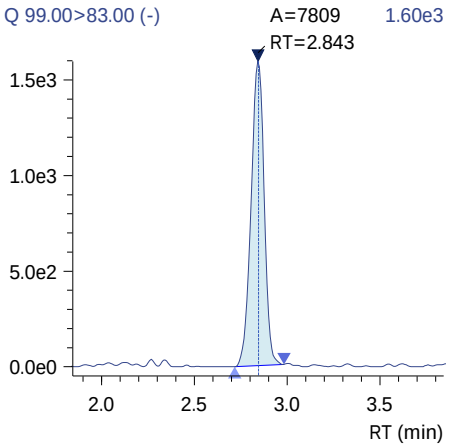
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 7/20/2022 1:03:14 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_014.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.843	7809	61423	0.6762	ng/mL	37.10	22.95-42.62
Perchlorate 2	Auto	2.838	2897	61423	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.843	61423	61423	1.0000	ng/mL	----	

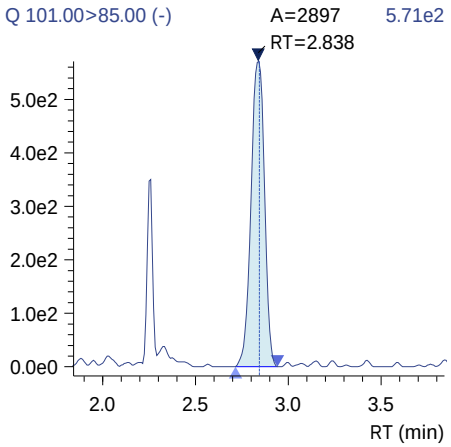
Perchlorate

Conc 0.6762



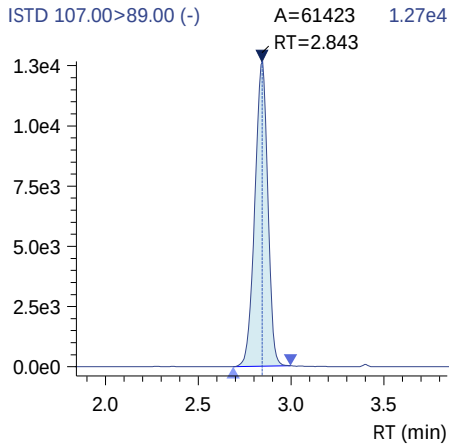
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:58:16 PM

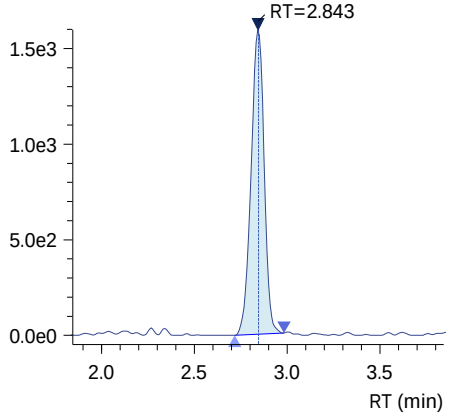
PERCHLORATE3

Sample ID: PERCHLORATE3
Date Acquired: 7/20/2022 1:03:14 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_014.lcd
Vial: 22 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 0.7051

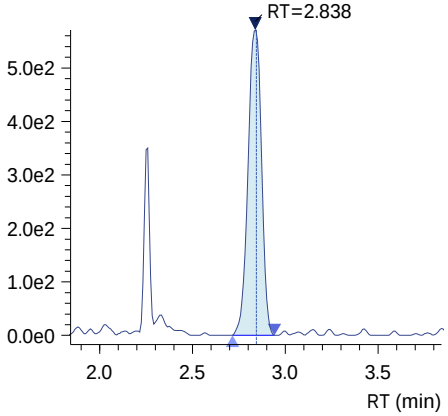
Q 99.00>83.00 (-) A=7809 1.60e3



Perchlorate 2

Conc 0.0000

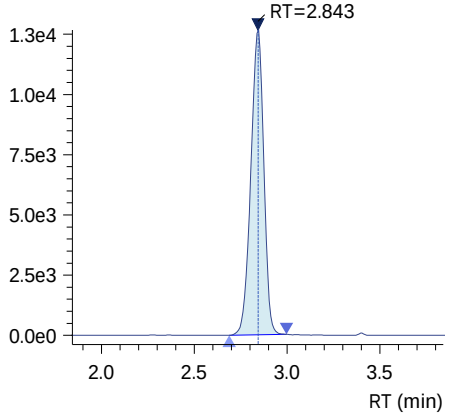
Q 101.00>85.00 (-) A=2897 5.71e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=61423 1.27e4



Insight Report

Printed at 7/20/2022 2:55:57 PM

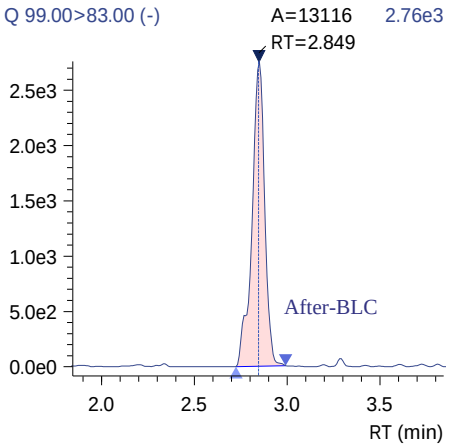
PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 7/20/2022 1:11:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_015.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.849	13116	63287	1.1024	ng/mL	29.14	22.95-42.62
Perchlorate 2	Auto	2.849	3822	63287	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.846	63287	63287	1.0000	ng/mL	----	

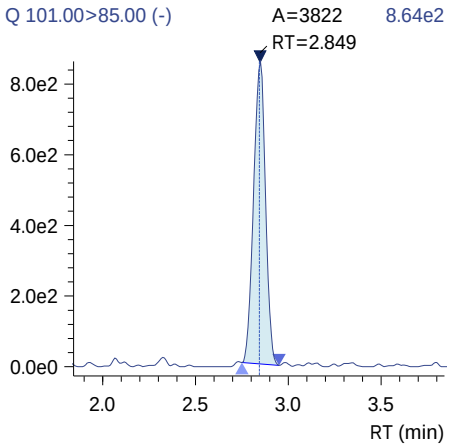
Perchlorate

Conc 1.1024



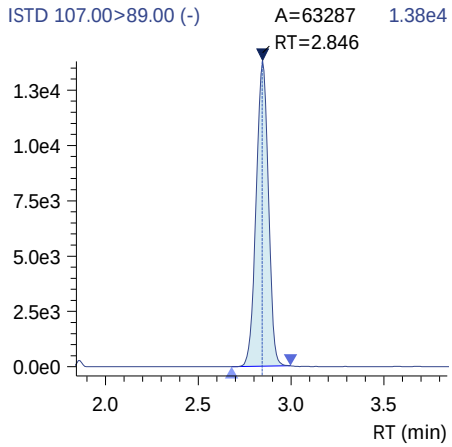
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

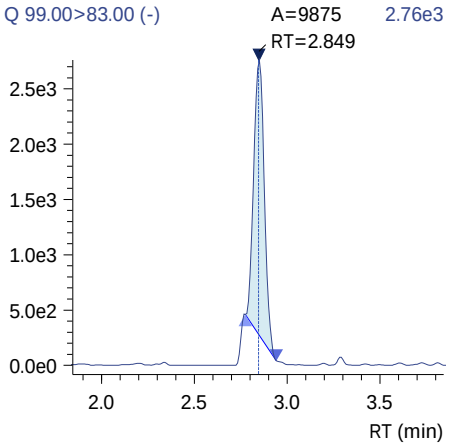
Printed at 7/20/2022 2:58:16 PM

PERCHLORATE4

Sample ID: PERCHLORATE4
Date Acquired: 7/20/2022 1:11:10 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_015.lcd
Vial: 23 | Inj. Volume: 25.0000uL | Tray: 1

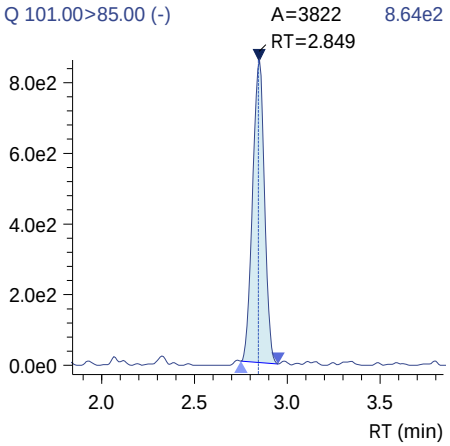
Perchlorate

Conc 0.8654



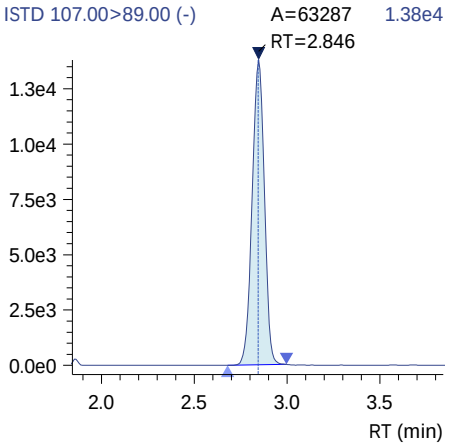
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:55:57 PM

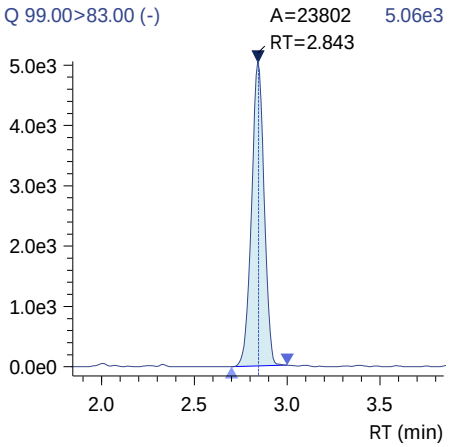
PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 7/20/2022 1:19:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_016.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.843	23802	62400	2.0289	ng/mL	35.10	22.95-42.62
Perchlorate 2	Auto	2.840	8355	62400	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.843	62400	62400	1.0000	ng/mL	----	

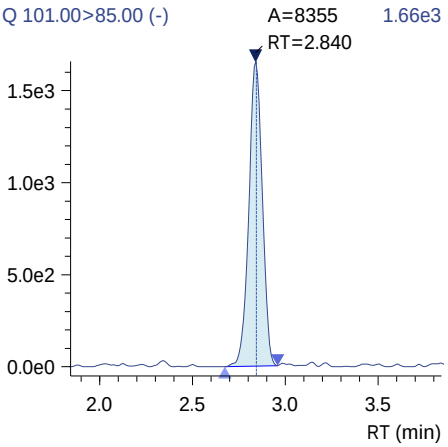
Perchlorate

Conc 2.0289



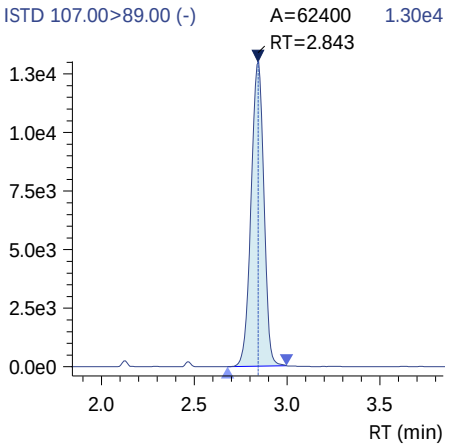
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

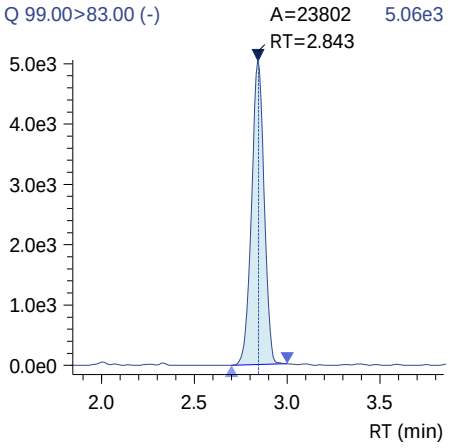
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PERCHLORATE5

Sample ID: PERCHLORATE5
Date Acquired: 7/20/2022 1:19:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_016.lcd
Vial: 24 | Inj. Volume: 25.0000uL | Tray: 1

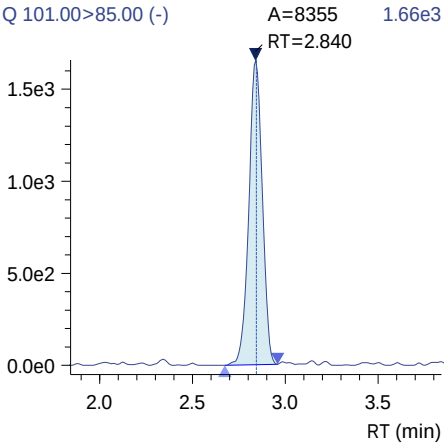
Perchlorate

Conc 2.1156



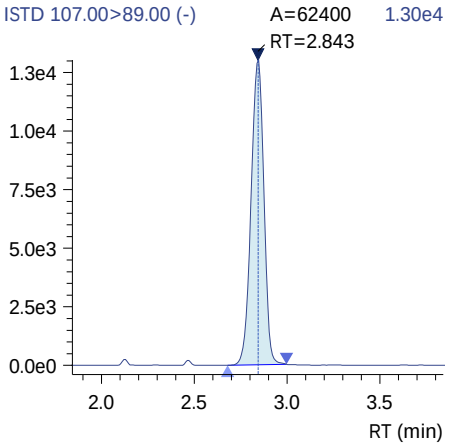
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:55:57 PM

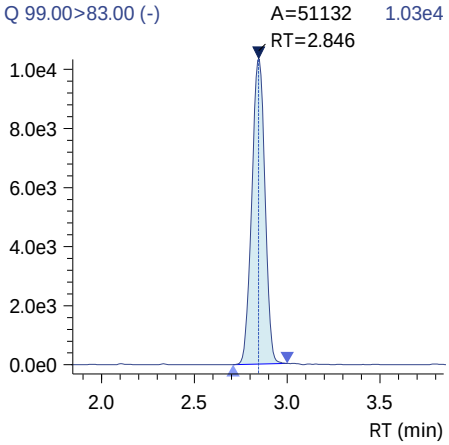
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 7/20/2022 1:26:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_017.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.846	51132	57141	4.7598	ng/mL	33.29	22.95-42.62
Perchlorate 2	Auto	2.843	17020	57141	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.844	57141	57141	1.0000	ng/mL	----	

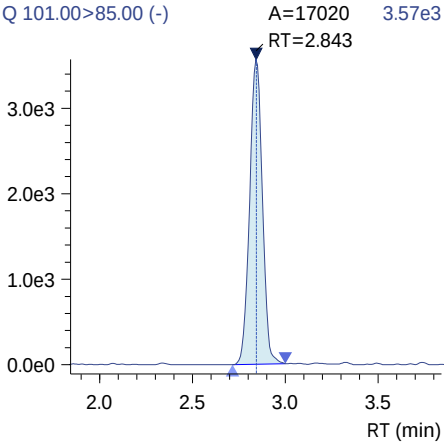
Perchlorate

Conc 4.7598



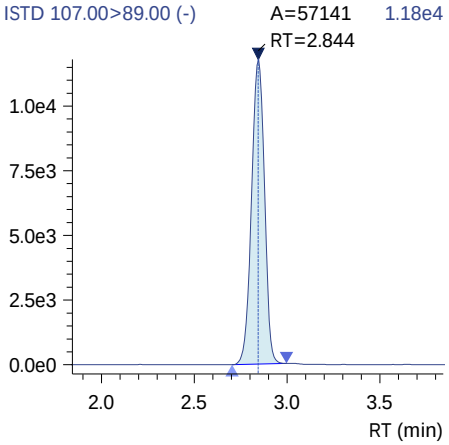
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:58:16 PM

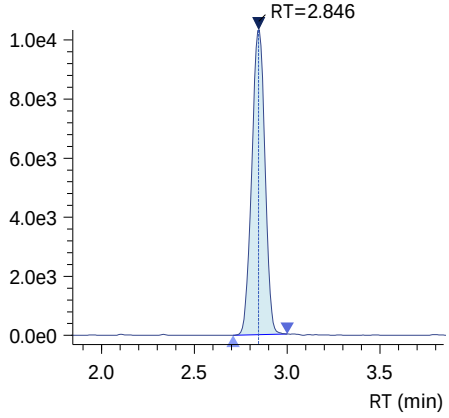
PERCHLORATE6

Sample ID: PERCHLORATE6
Date Acquired: 7/20/2022 1:26:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_017.lcd
Vial: 25 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 4.9631

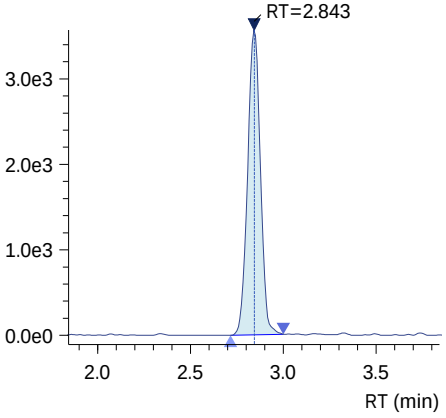
Q 99.00>83.00 (-) A=51132 1.03e4 RT=2.846



Perchlorate 2

Conc 0.0000

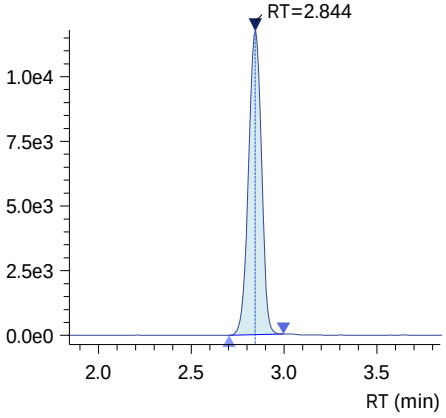
Q 101.00>85.00 (-) A=17020 3.57e3 RT=2.843



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=57141 1.18e4 RT=2.844



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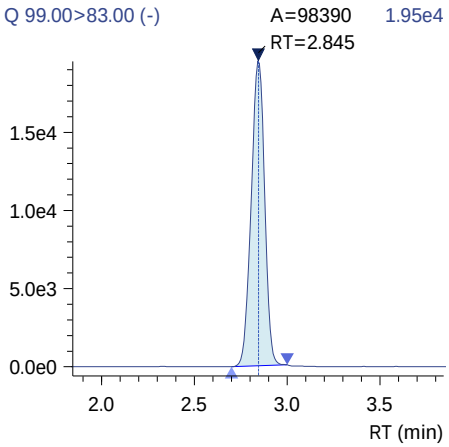
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 1:34:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_018.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.845	98390	52340	9.9991	ng/mL	32.49	22.95-42.62
Perchlorate 2	Auto	2.844	31964	52340	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.843	52340	52340	1.0000	ng/mL	----	

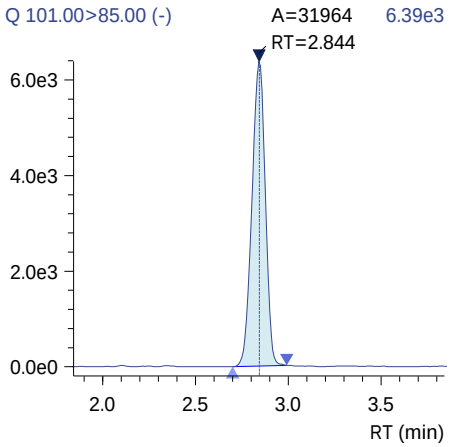
Perchlorate

Conc 9.9991



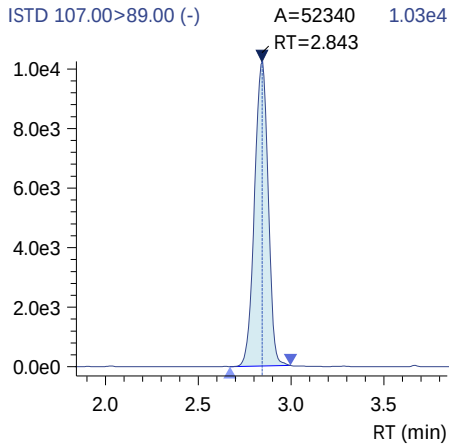
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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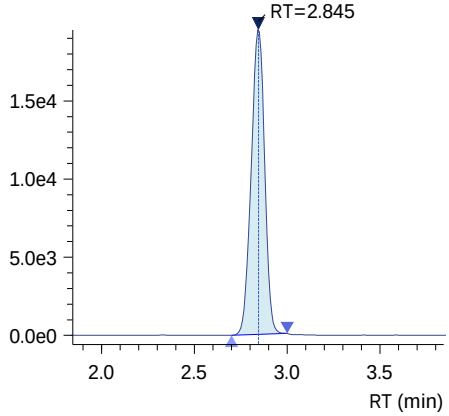
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 1:34:54 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_018.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.4261

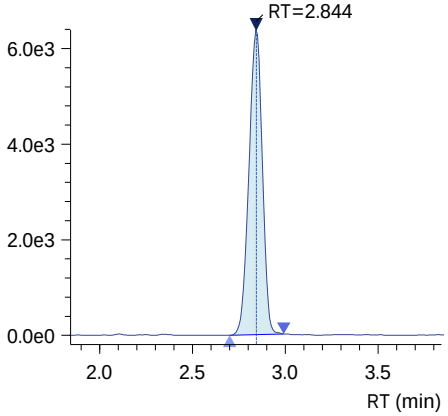
Q 99.00>83.00 (-) A=98390 1.95e4 RT=2.845



Perchlorate 2

Conc 0.0000

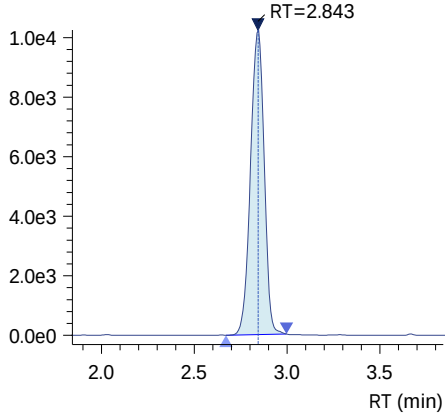
Q 101.00>85.00 (-) A=31964 6.39e3 RT=2.844



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=52340 1.03e4 RT=2.843



Insight Report

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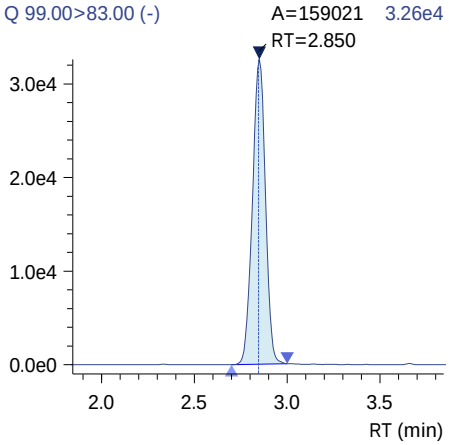
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 7/20/2022 1:42:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_019.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.850	159021	44029	19.2113	ng/mL	33.61	22.95-42.62
Perchlorate 2	Auto	2.847	53441	44029	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.849	44029	44029	1.0000	ng/mL	----	

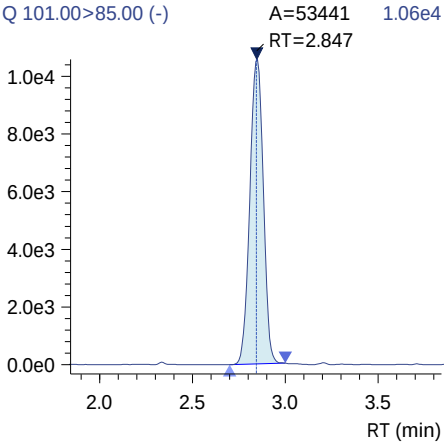
Perchlorate

Conc 19.2113



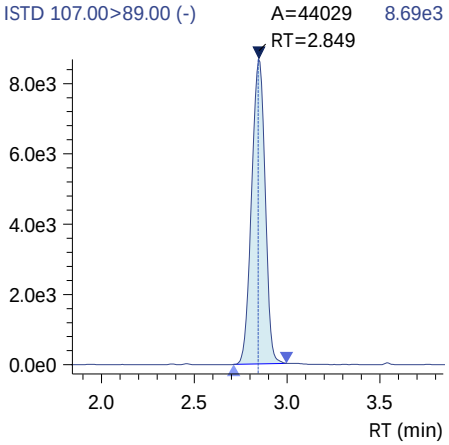
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:58:16 PM

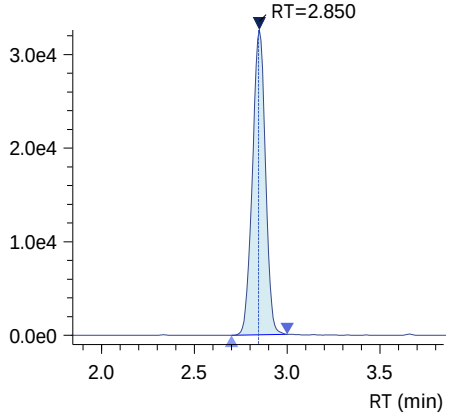
PERCHLORATE8

Sample ID: PERCHLORATE8
Date Acquired: 7/20/2022 1:42:46 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_019.lcd
Vial: 27 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 20.0318

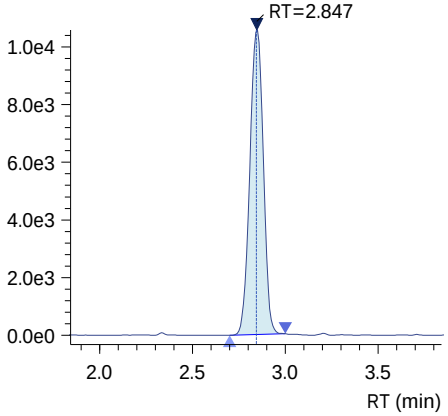
Q 99.00>83.00 (-) A=159021 3.26e4 RT=2.850



Perchlorate 2

Conc 0.0000

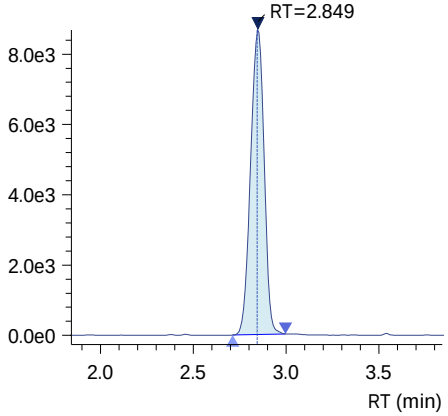
Q 101.00>85.00 (-) A=53441 1.06e4 RT=2.847



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=44029 8.69e3 RT=2.849



Insight Report

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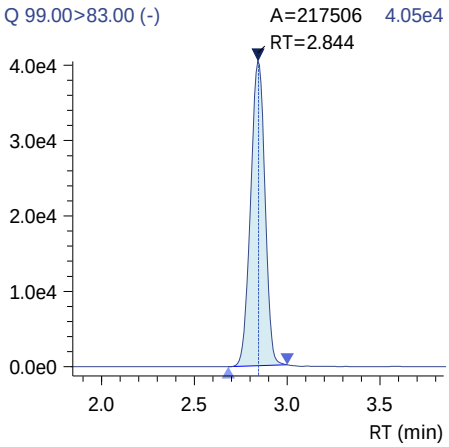
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 7/20/2022 1:50:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_020.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.844	217506	40023	28.9071	ng/mL	33.02	22.95-42.62
Perchlorate 2	Auto	2.842	71821	40023	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.843	40023	40023	1.0000	ng/mL	----	

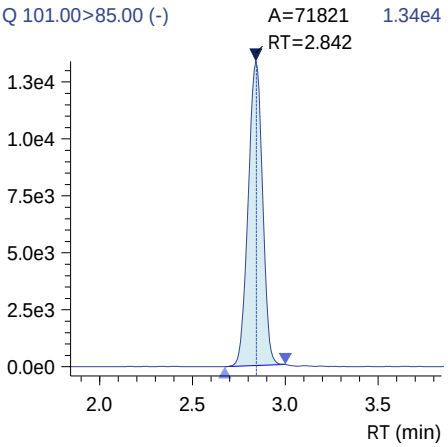
Perchlorate

Conc 28.9071



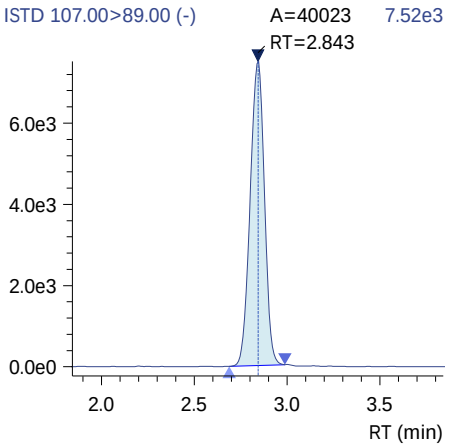
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:58:16 PM

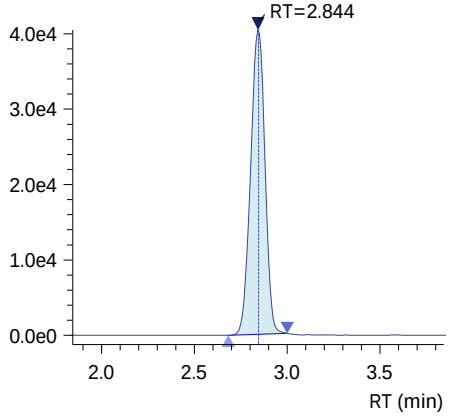
PERCHLORATE9

Sample ID: PERCHLORATE9
Date Acquired: 7/20/2022 1:50:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_020.lcd
Vial: 28 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 30.1416

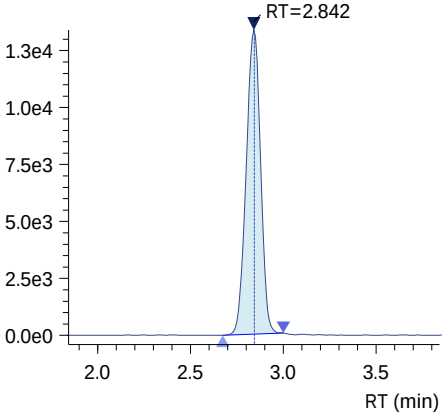
Q 99.00>83.00 (-) A=217506 4.05e4 RT=2.844



Perchlorate 2

Conc 0.0000

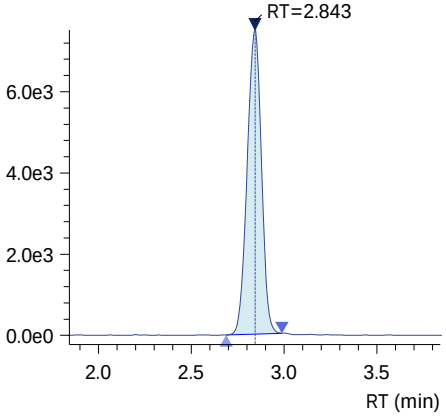
Q 101.00>85.00 (-) A=71821 1.34e4 RT=2.842



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=40023 7.52e3 RT=2.843



Insight Report

Printed at 7/20/2022 2:55:57 PM

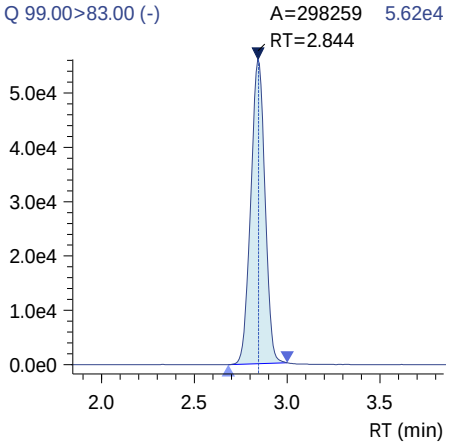
PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 7/20/2022 1:58:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_021.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.844	298259	33132	47.8837	ng/mL	32.63	22.95-42.62
Perchlorate 2	Auto	2.842	97306	33132	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	33132	33132	1.0000	ng/mL	----	

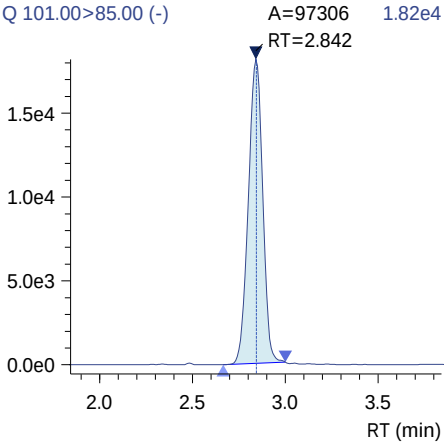
Perchlorate

Conc 47.8837



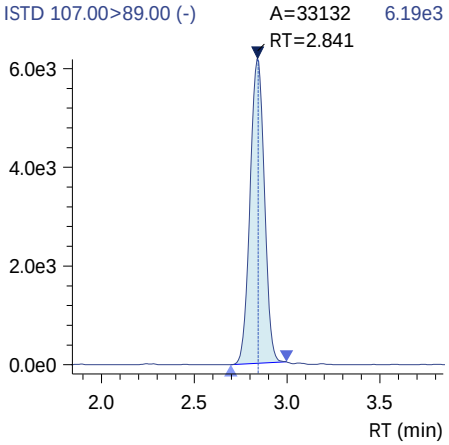
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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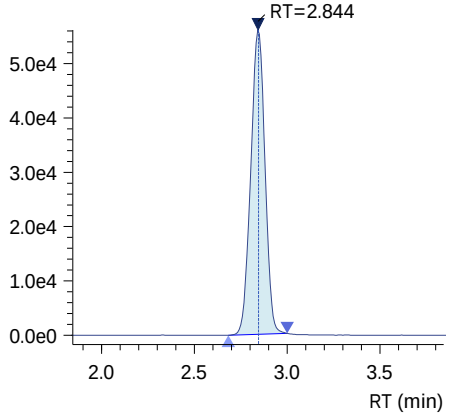
PERCHLORATE10

Sample ID: PERCHLORATE10
Date Acquired: 7/20/2022 1:58:33 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_021.lcd
Vial: 29 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 49.9288

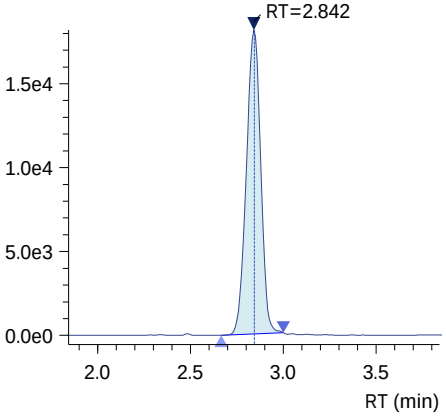
Q 99.00>83.00 (-) A=298259 5.62e4 RT=2.844



Perchlorate 2

Conc 0.0000

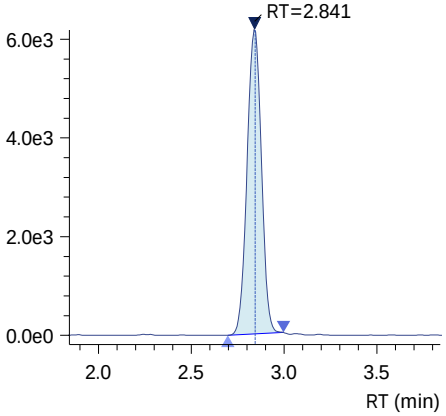
Q 101.00>85.00 (-) A=97306 1.82e4 RT=2.842



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=33132 6.19e3 RT=2.841



Insight Report

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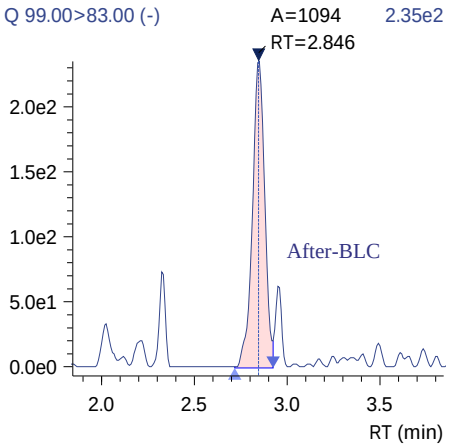
PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 7/20/2022 2:22:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_023.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.846	1094	51177	0.1137	ng/mL	39.58	22.95-42.62
Perchlorate 2	Auto	2.847	433	51177	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.842	51177	51177	1.0000	ng/mL	----	

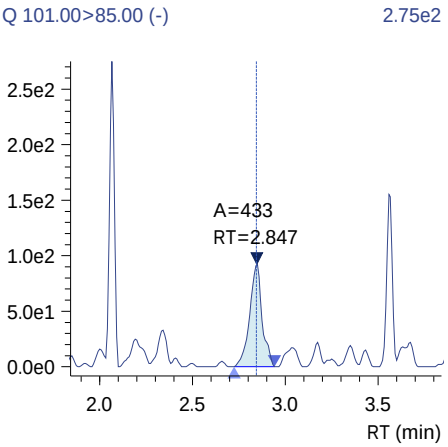
Perchlorate

Conc 0.1137



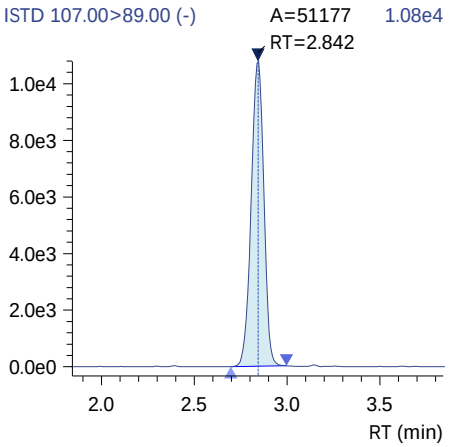
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

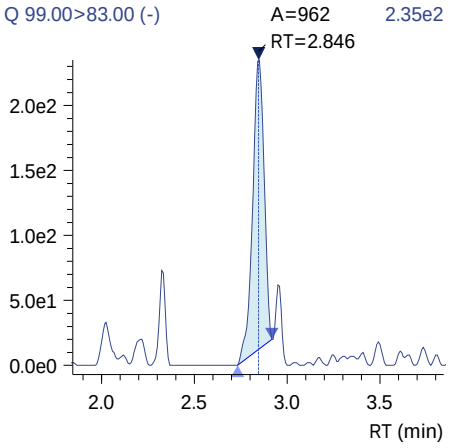
Printed at 7/20/2022 2:58:16 PM

PERCHLORATE1

Sample ID: PERCHLORATE1
Date Acquired: 7/20/2022 2:22:15 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_023.lcd
Vial: 20 | Inj. Volume: 25.0000uL | Tray: 1

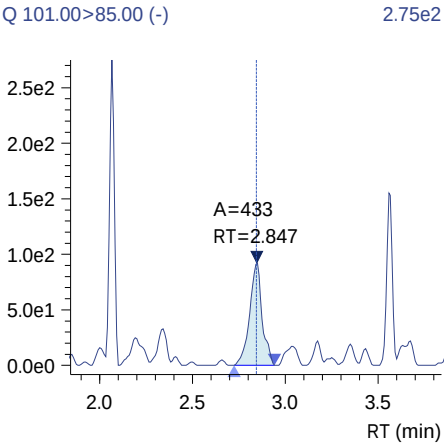
Perchlorate

Conc 0.1043



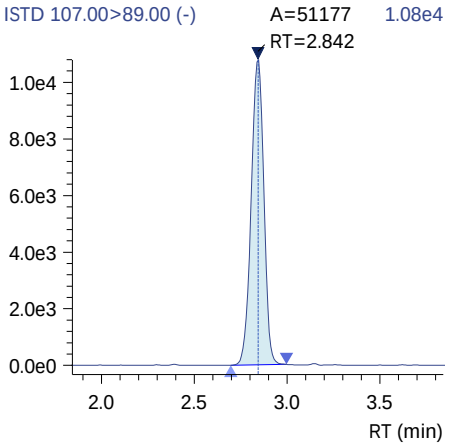
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/20/2022 2:55:57 PM

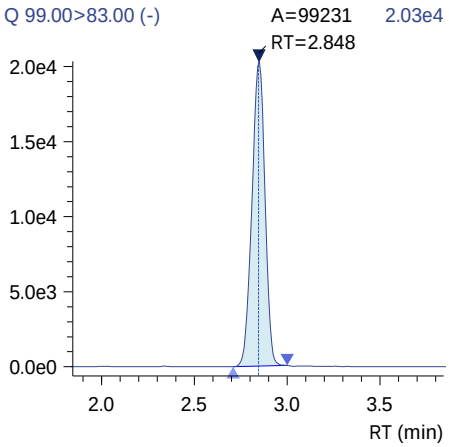
PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 7/20/2022 2:47:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_024.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.848	99231	52090	10.1329	ng/mL	32.61	22.95-42.62
Perchlorate 2	Auto	2.846	32358	52090	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.845	52090	52090	1.0000	ng/mL	----	

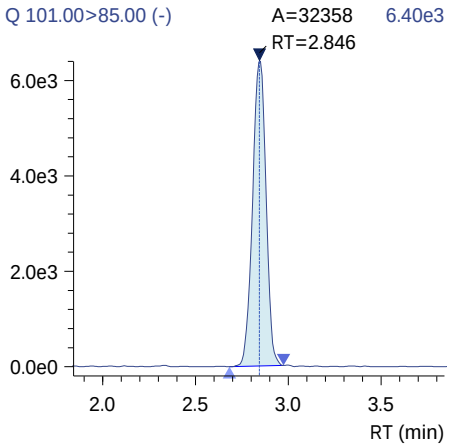
Perchlorate

Conc 10.1329



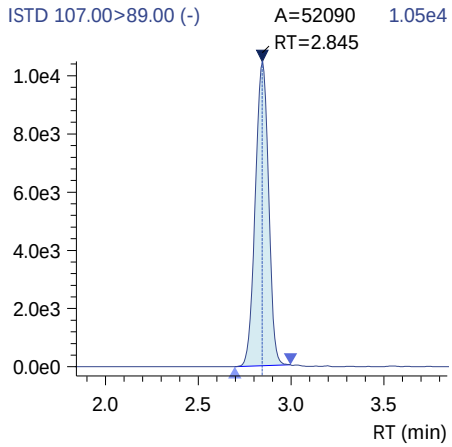
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

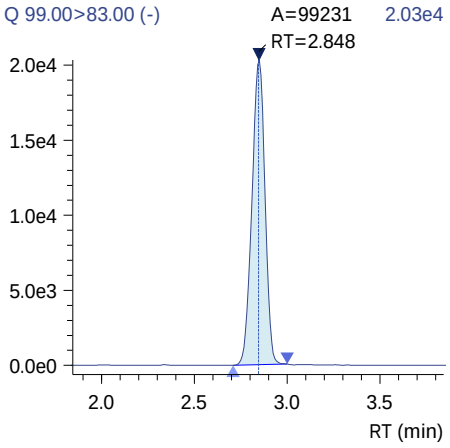
Printed at 7/20/2022 2:58:16 PM

PERCHLORATEICV

Sample ID: PERCHLORATEICV
Date Acquired: 7/20/2022 2:47:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_024.lcd
Vial: 30 | Inj. Volume: 25.0000uL | Tray: 1

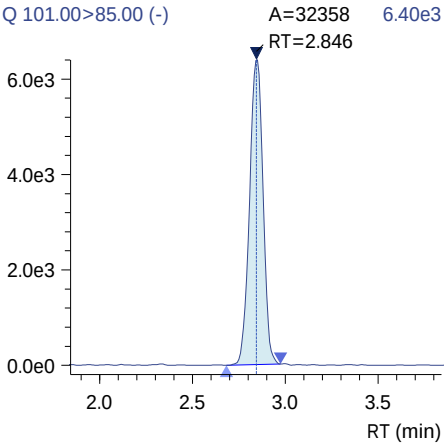
Perchlorate

Conc 10.5657



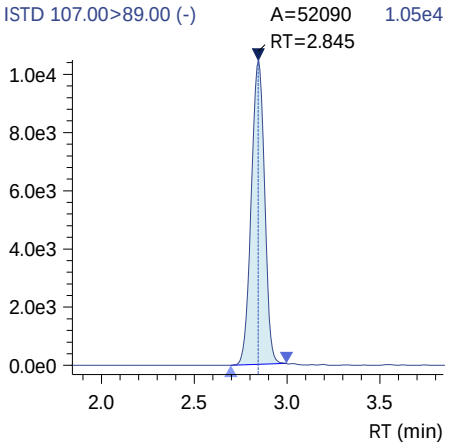
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Chromatograms and Selected Ion Monitoring

ALS Environmental - Houston HRMS
10450 Stancliff Rd., Suite 320, Houston TX 77099
Phone (713)266-1599 Fax (713)266-0130
www.alsglobal.com

20220712

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	null		20220712_001	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:05
2	null		20220712_002	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:10
3	IB		20220712_003	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:15
4	IB		20220712_004	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:23
5	IB		20220712_005	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:31
6	IB		20220712_006	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:39
7	ICS		20220712_007	Perchlorate6850c.lcm	1x	☒		7/12/2022 10:47
8	PERCHLORATE7		20220712_008	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 11:03
9	LODV		20220712_009	Perchlorate6850c.lcm	1x	☒	222817	7/12/2022 11:19
10	EQ2200284-01		20220712_010	Perchlorate6850c.lcm	1x	☒		7/12/2022 11:26
11	EQ2200284-02		20220712_011	Perchlorate6850c.lcm	1x	☒		7/12/2022 11:50
12	EQ2200284-03		20220712_012	Perchlorate6850c.lcm	1x	☒		7/12/2022 11:58
13	E2200663-001		20220712_013	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:06
14	R2205911-001		20220712_014	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:14
15	R2205911-002		20220712_015	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:22
16	R2205911-003		20220712_016	Perchlorate6850c.lcm	1x	☒		7/12/2022 12:30
17	R2205911-004		20220712_017	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:23
18	PERCHLORATE7		20220712_018	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 13:31
19	EQ2200288-01		20220712_019	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:39
20	EQ2200288-02		20220712_020	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:46
21	EQ2200288-03		20220712_021	Perchlorate6850c.lcm	1x	☒		7/12/2022 13:54
22	K2207496-001		20220712_022	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:20
23	K2207495-001		20220712_023	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:28
24	E2200586-001RE		20220712_024	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 14:36
25	E2200586-002RE		20220712_025	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:52
26	E2200586-003RE		20220712_026	Perchlorate6850c.lcm	1x	☒		7/12/2022 14:59
27	E2200586-001RE		20220712_027	Perchlorate6850c.lcm	10x	☒		7/12/2022 15:07
28	PERCHLORATE7		20220712_028	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 15:15
29	EQ2200278-01		20220712_029	Perchlorate6850c.lcm	1x	☒		7/12/2022 15:23
30	EQ2200278-02		20220712_030	Perchlorate6850c.lcm	1x	☒		7/12/2022 15:55
31	EQ2200278-03		20220712_031	Perchlorate6850c.lcm	1x	☒		7/12/2022 16:11
32	EQ2200287-01		20220712_032	Perchlorate6850c.lcm	1x	☒		7/12/2022 16:18
33	EQ2200287-02		20220712_033	Perchlorate6850c.lcm	1x	☒		7/12/2022 16:26
34	EQ2200287-03		20220712_034	Perchlorate6850c.lcm	1x	☒		7/12/2022 17:07
35	E2200664-001		20220712_035	Perchlorate6850c.lcm	1x	☒		7/12/2022 17:15
36	E2200664-002		20220712_036	Perchlorate6850c.lcm	1x	☒		7/12/2022 17:23
37	PERCHLORATE7		20220712_037	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 17:31
38	EQ2200278-04		20220712_038	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 17:39
39	EQ2200278-05		20220712_039	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 17:47
40	EQ2200278-06		20220712_040	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 17:54
41	EQ2200278-07		20220712_041	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:02
42	E2200646-001		20220712_042	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 18:10
43	E2200646-002		20220712_043	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 18:18
44	E2200646-003		20220712_044	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:26
45	E2200646-004		20220712_045	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:34
46	E2200646-005		20220712_046	Perchlorate6850c.lcm	1x	☒	Reanalyze -carryover	7/12/2022 18:42
47	E2200646-006		20220712_047	Perchlorate6850c.lcm	1x	☒		7/12/2022 18:50
48	PERCHLORATE7		20220712_048	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 18:58
49	E2200646-007		20220712_049	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:05
50	E2200646-008		20220712_050	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:13
51	E2200646-009		20220712_051	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:21
52	EQ2200287-04		20220712_052	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:29
53	EQ2200287-05		20220712_053	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:37
54	E2200665-001		20220712_054	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:45
55	E2200665-002		20220712_055	Perchlorate6850c.lcm	1x	☒		7/12/2022 19:53
56	E2200665-003		20220712_056	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/12/2022 20:01
57	PERCHLORATE7		20220712_057	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 20:08
58	E2200665-004		20220712_058	Perchlorate6850c.lcm	1x	☒		7/12/2022 20:16
59	E2200665-005		20220712_059	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/12/2022 20:24
60	E2200665-006		20220712_060	Perchlorate6850c.lcm	1x	☒	DNU-INST out of range	7/12/2022 20:32
61	E2200665-007		20220712_061	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/12/2022 20:40
62	E2200665-008		20220712_062	Perchlorate6850c.lcm	1x	☒	DNU- over ICAL range	7/12/2022 20:48
63	E2200665-009		20220712_063	Perchlorate6850c.lcm	1x	☒	DNU-IR	7/12/2022 20:56
64	E2200665-010		20220712_064	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:04
65	E2200665-011		20220712_065	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:12
66	PERCHLORATE7		20220712_066	Perchlorate6850c.lcm	1x	☒	222810	7/12/2022 21:20

20220712

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 6/1/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200008**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
67	IB		20220712_067	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:27
68	IB		20220712_068	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:35
69	IB		20220712_069	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:43
70	null		20220712_070	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:48
71	null		20220712_071	Perchlorate6850c.lcm	1x	☒		7/12/2022 21:53

20220720

1st Review: GRivera
2nd Review: Kneir

Injection Log
LCMS01 -Shimadzu 8050

ICAL Date: 7/20/2022
Cal. Std. xp: 9/4/2022
ICAL ID: **EC2200010**

Mobile Phases **A:** 0.75% Formic Acid/Water 3100820-02 **B:** MeOH 218535

			File Name	Acquisition Method	Dilution	R	Comments	Date/Time
1	PERCHLORATE2		20220720_013	Perchlorate6850c.lcm	1x	☒	222804	7/20/2022 12:55
2	PERCHLORATE3		20220720_014	Perchlorate6850c.lcm	1x	☒	222806	7/20/2022 13:03
3	PERCHLORATE4		20220720_015	Perchlorate6850c.lcm	1x	☒	222807	7/20/2022 13:11
4	PERCHLORATE5		20220720_016	Perchlorate6850c.lcm	1x	☒	222808	7/20/2022 13:19
5	PERCHLORATE6		20220720_017	Perchlorate6850c.lcm	1x	☒	222809	7/20/2022 13:26
6	PERCHLORATE7		20220720_018	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 13:34
7	PERCHLORATE8		20220720_019	Perchlorate6850c.lcm	1x	☒	222811	7/20/2022 13:42
8	PERCHLORATE9		20220720_020	Perchlorate6850c.lcm	1x	☒	222812	7/20/2022 13:50
9	PERCHLORATE10		20220720_021	Perchlorate6850c.lcm	1x	☒	222813	7/20/2022 13:58
10	PERCHLORATE1		20220720_023	Perchlorate6850c.lcm	1x	☒	222805	7/20/2022 14:22
11	PERCHLORATEICV		20220720_024	Perchlorate6850c.lcm	1x	☒	222814	7/20/2022 14:47
12	ICS		20220720_025	Perchlorate6850c.lcm	1x	☒		7/20/2022 15:07
13	LODV		20220720_026	Perchlorate6850c.lcm	1x	☒	222817	7/20/2022 15:15
14	PERCHLORATE7		20220720_027	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 15:23
15	E2200665-003		20220720_028	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 15:31
16	E2200665-005		20220720_029	Perchlorate6850c.lcm	1x	☒	DNU- bad injection	7/20/2022 15:39
17	E2200665-006		20220720_030	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 15:47
18	E2200665-005		20220720_031	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 15:55
19	E2200665-007		20220720_032	Perchlorate6850c.lcm	1x	☒	DNU-IS out or range	7/20/2022 16:03
20	E2200665-008		20220720_033	Perchlorate6850c.lcm	10x	☒		7/20/2022 16:11
21	E2200665-009		20220720_034	Perchlorate6850c.lcm	1x	☒		7/20/2022 16:18
22	PERCHLORATE7		20220720_035	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 16:34
23	PERCHLORATE7		20220720_036	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 17:18
24	E2200665-003		20220720_037	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:26
25	E2200665-005		20220720_038	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:34
26	E2200665-006		20220720_039	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:41
27	E2200665-007		20220720_040	Perchlorate6850c.lcm	5x	☒		7/20/2022 17:49
28	PERCHLORATE7		20220720_041	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 17:57
29	E2200680-001		20220720_042	Perchlorate6850c.lcm	1000x	☒	DNU-out of ICAL range	7/20/2022 18:05
30	E2200680-002		20220720_043	Perchlorate6850c.lcm	1000x	☒	DNU-run 10x	7/20/2022 18:13
31	E2200680-003		20220720_044	Perchlorate6850c.lcm	1000x	☒	DNU-out of ICAL range	7/20/2022 18:21
32	E2200680-004		20220720_045	Perchlorate6850c.lcm	1000x	☒	DNU-out of ICAL range	7/20/2022 18:29
33	PERCHLORATE7		20220720_046	Perchlorate6850c.lcm	1x	☒	222810	7/20/2022 18:37
34	IB		20220720_047	Perchlorate6850c.lcm	1x	☒		7/20/2022 18:45
35	IB		20220720_048	Perchlorate6850c.lcm	1x	☒		7/20/2022 18:52
36	IB		20220720_049	Perchlorate6850c.lcm	1x	☒		7/20/2022 19:00
37	null		20220720_050	Perchlorate6850c.lcm	1x	☒		7/20/2022 19:05
38	null		20220720_051	Perchlorate6850c.lcm	1x	☒		7/20/2022 19:10

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_028

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1511	0.1513	0.1	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_037

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.0	0.1511	0.1511	0.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_048

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.1	0.1511	0.1534	1.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_057

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.95	0.1511	0.1504	-0.5	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/12/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220712\20220712_066

Calibration Date: 6/1/22
Calibration ID: EC2200008
Analysis Lot: 770203
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.60	0.1511	0.1450	-4.0	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/20/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220720\20220720_027

Calibration Date: 7/20/22
Calibration ID: EC2200010
Analysis Lot: 771162
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	9.91	0.1880	0.1864	-0.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/20/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220720\20220720_035

Calibration Date: 7/20/22
Calibration ID: EC2200010
Analysis Lot: 771162
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.2	0.1880	0.1924	2.3	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/20/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220720\20220720_036

Calibration Date: 7/20/22
Calibration ID: EC2200010
Analysis Lot: 771162
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1880	0.1952	3.9	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client: ALS Environmental - US
Project: HS22070326

Service Request: E2200665
Date Analyzed: 7/20/22

Continuing Calibration Verification Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

Analytical Method: 6850
File ID: I:\LCMS01\DATA\20220720\20220720_041

Calibration Date: 7/20/22
Calibration ID: EC2200010
Analysis Lot: 771162
Units: ng/mL

Analyte Name	Expected	Result	Average RF	CCV RF	%D	%Drift	Criteria	Curve Fit
Perchlorate	10.0	10.4	0.1880	0.1959	4.2	NA	± 15 %	Average RF

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/12/22 15:15

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_028	**Lab Code:**	EQ2200290-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-03	35,939	2.84
Method Blank	EQ2200287-01	45,321	2.86
Lab Control Sample	EQ2200287-02	46,661	2.85
Duplicate Lab Control Sample	EQ2200287-03	46,929	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/12/22 17:31

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_037	**Lab Code:**	EQ2200290-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-04	34,449	2.85

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/12/22 18:58

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_048	**Lab Code:**	EQ2200290-05
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-05	28,691	2.86
16WW40-220705MS	EQ2200287-04	17,840	2.84
16WW40-220705DMS	EQ2200287-05	18,269	2.84
16WW44-220705	E2200665-001	30,345	2.85
16WW44-220705-FD	E2200665-002	31,820	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/12/22 20:08

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_057	**Lab Code:**	EQ2200290-06
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-06	29,254	2.87
16RW09-220705	E2200665-004	18,156	2.84
16WW42-220705	E2200665-010	24,741	2.83
16RW04-220705	E2200665-011	24,278	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/12/22 21:20

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220712\20220712_066	**Lab Code:**	EQ2200290-07
Instrument ID:	E-LCMS-01	**Analysis Lot:**	770203
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	35,436	2.78
	Upper Limit ==>	53,154	4.78
	Lower Limit ==>	17,718	0.78
Associated Analyses			
Continuing Calibration Verification	EQ2200290-07	27,714	2.86

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/20/22 15:23

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220720\20220720_027	**Lab Code:**	EQ2200305-01
Instrument ID:	E-LCMS-01	**Analysis Lot:**	771162
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	52,491	2.84
	Upper Limit ==>	78,737	4.84
	Lower Limit ==>	26,246	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200305-01	50,845	2.84
16WW12-220705	E2200665-008	27,177	2.83
16WW13-220705	E2200665-009	26,683	2.80

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/20/22 16:34

Internal Standard Area and RT Summary

Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220720\20220720_035	**Lab Code:**	EQ2200305-02
Instrument ID:	E-LCMS-01	**Analysis Lot:**	771162
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	52,491	2.84
	Upper Limit ==>	78,737	4.84
	Lower Limit ==>	26,246	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200305-02	41,993	2.83

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/20/22 17:18

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220720\20220720_036	**Lab Code:**	EQ2200305-03
Instrument ID:	E-LCMS-01	**Analysis Lot:**	771162
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	52,491	2.84
	Upper Limit ==>	78,737	4.84
	Lower Limit ==>	26,246	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200305-03	52,817	2.77
16RW10-220705	E2200665-003	33,140	2.84
16RW09-220705-FD	E2200665-005	31,579	2.84
16EW01-220705	E2200665-006	30,763	2.82
16WW40-220705	E2200665-007	29,984	2.83

Results flagged with an asterisk (*) indicate values outside control criteria.

ALS Group USA, Corp. dba ALS Environmental

QA/QC Report

Client:	ALS Environmental - US	**Service Request:**	E2200665
Project:	HS22070326	**Date Analyzed:**	7/20/22 17:57

Internal Standard Area and RT Summary
Perchlorates in Water, Soils, Solid Wastes Using High Performance LC/Electrospray/Mass Spectrometry

File ID:	I:\LCMS01\DATA\20220720\20220720_041	**Lab Code:**	EQ2200305-04
Instrument ID:	E-LCMS-01	**Analysis Lot:**	771162
Analytical Method:	6850	**Signal ID:**	1

		Sodium Perchlorate-18O4	
		Area	**RT**
	ICAL Average ==>	52,491	2.84
	Upper Limit ==>	78,737	4.84
	Lower Limit ==>	26,246	0.84
Associated Analyses			
Continuing Calibration Verification	EQ2200305-04	45,835	2.84

Results flagged with an asterisk (*) indicate values outside control criteria.

Insight Report

Printed at 7/18/2022 10:38:07 AM

Method File: I:\LCMS01\DATA\20220712\20220601.lcm
Project File: I:\LCMS01\DATA\20220712\20220712.damlp

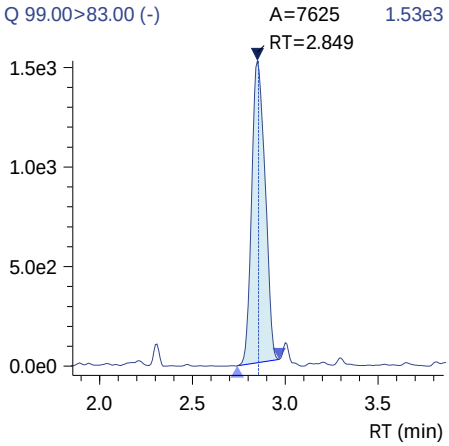
ICS

Sample ID: ICS
Date Acquired: 7/12/2022 10:47:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.849	7625	47727	1.0571	ng/mL	25.64	17.85-33.16
Perchlorate 2	Auto	2.841	1955	47727	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.846	47727	47727	1.0000	ng/mL	----	

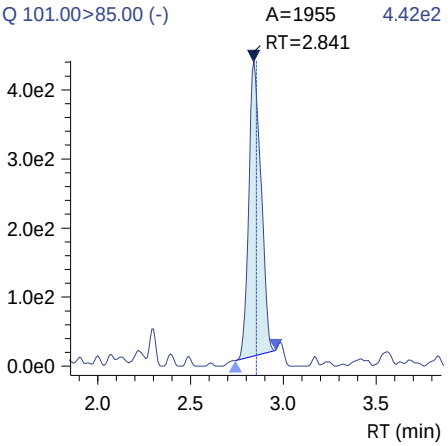
Perchlorate

Conc 1.0571



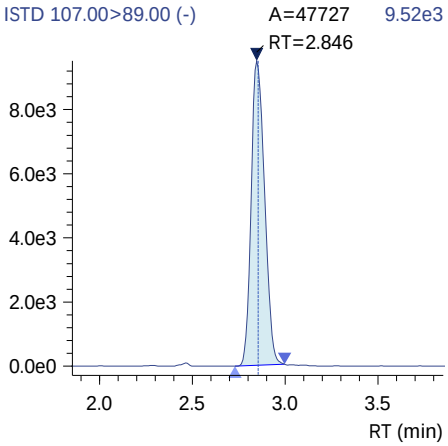
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

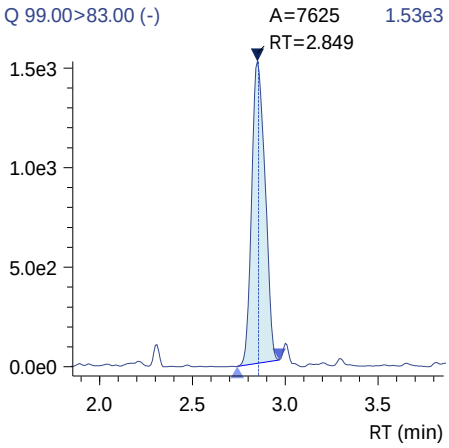
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Project File: I:\LCMS01\DATA\20220712\20220712.damlp

ICS

Sample ID: ICS
Date Acquired: 7/12/2022 10:47:31 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_007.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

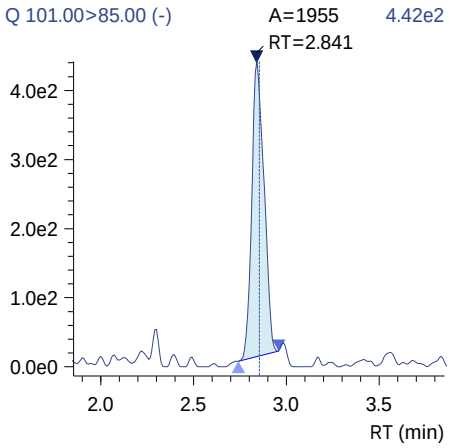
Perchlorate

Conc 1.0827



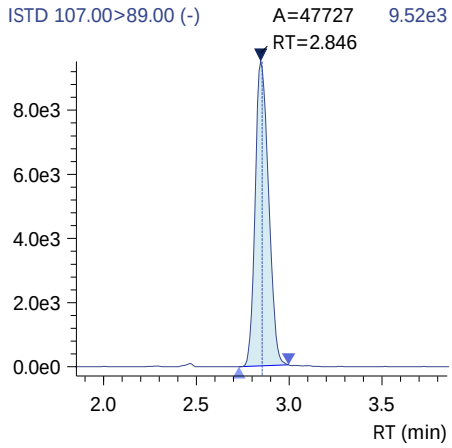
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

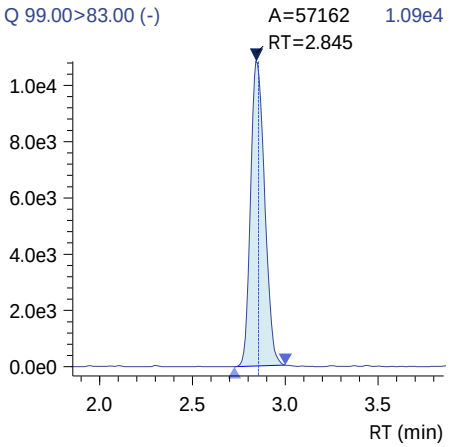
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 11:03:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_008.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.845	57162	37692	10.0347	ng/mL	24.30	17.85-33.16
Perchlorate 2	Auto	2.840	13889	37692	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	37692	37692	1.0000	ng/mL	----	

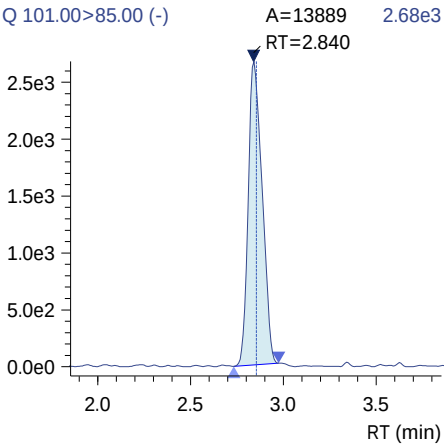
Perchlorate

Conc 10.0347



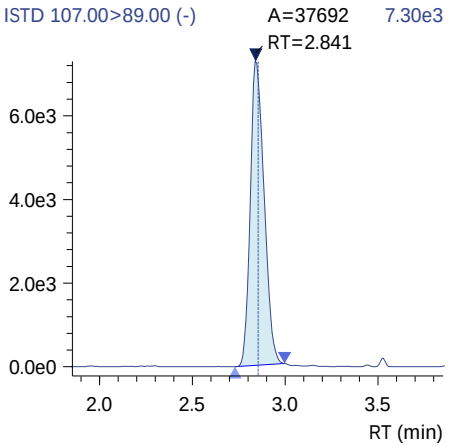
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

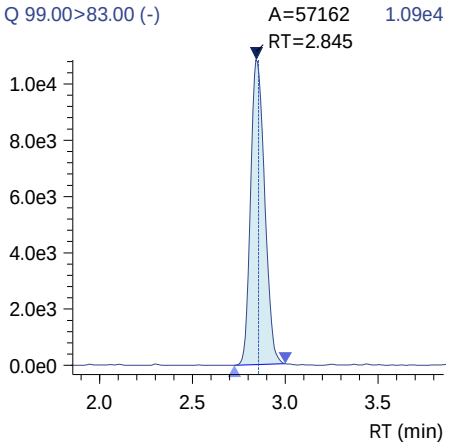
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PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 11:03:20 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_008.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

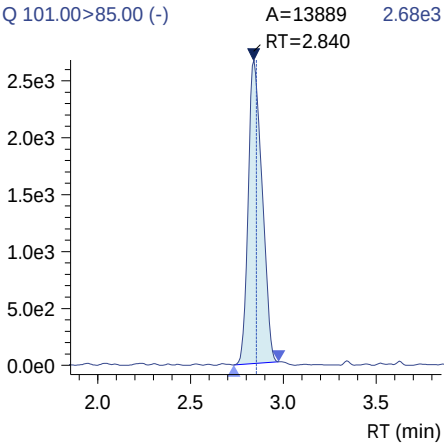
Perchlorate

Conc 10.2778



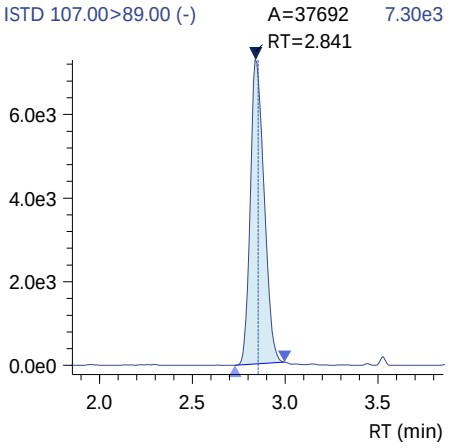
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

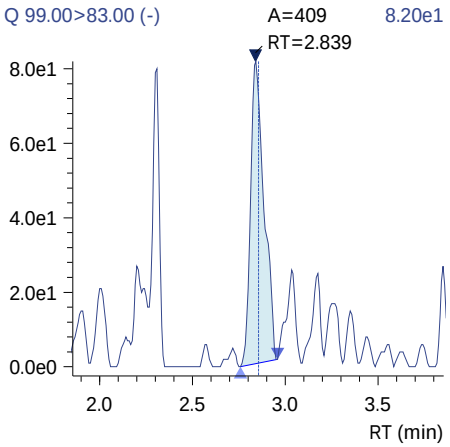
LODV

Sample ID: LODV
Date Acquired: 7/12/2022 11:19:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.839	409	41975	0.0645	ng/mL	22.25	17.85-33.16
Perchlorate 2	M	2.848	91	41975	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.839	41975	41975	1.0000	ng/mL	----	

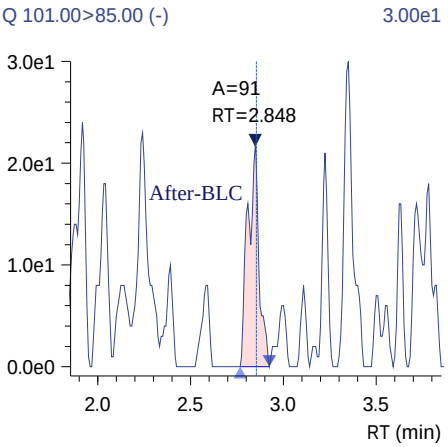
Perchlorate

Conc 0.0645



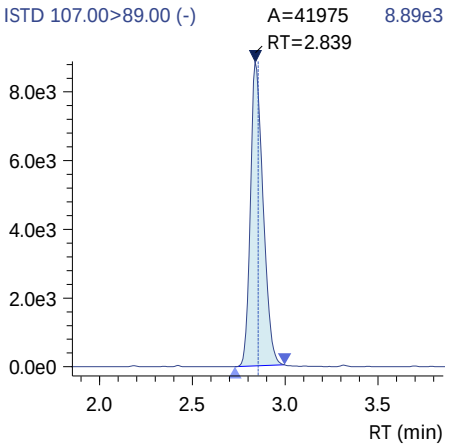
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

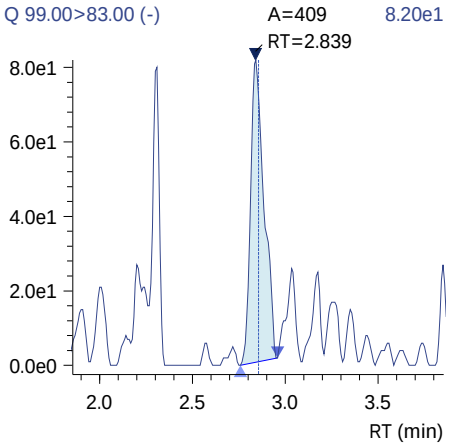
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LODV

Sample ID: LODV
Date Acquired: 7/12/2022 11:19:07 AM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_009.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

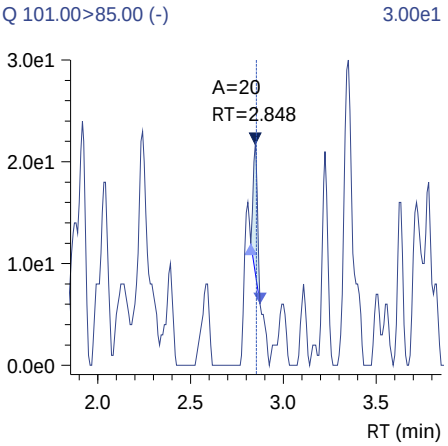
Perchlorate

Conc 0.0660



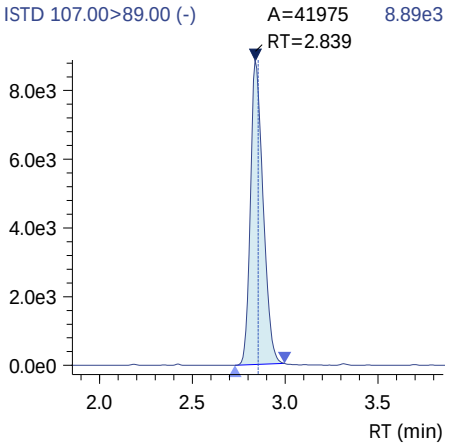
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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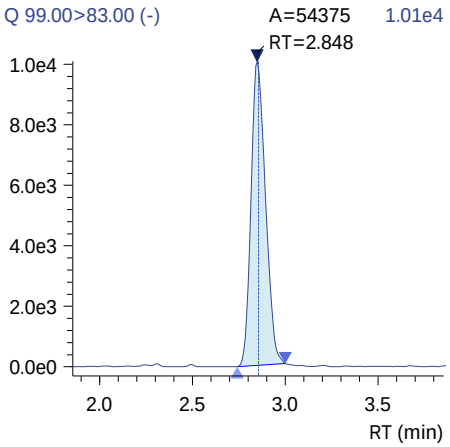
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 3:15:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_028.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.848	54375	35939	10.0110	ng/mL	24.99	17.85-33.16
Perchlorate 2	Auto	2.843	13586	35939	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.844	35939	35939	1.0000	ng/mL	----	

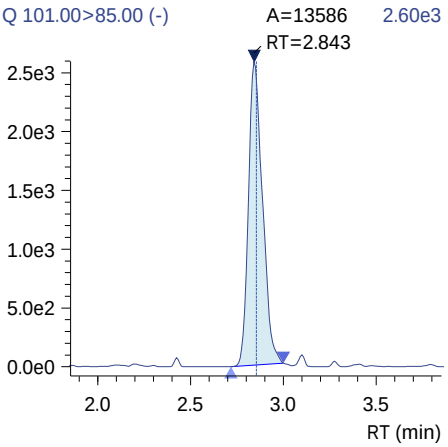
Perchlorate

Conc 10.0110



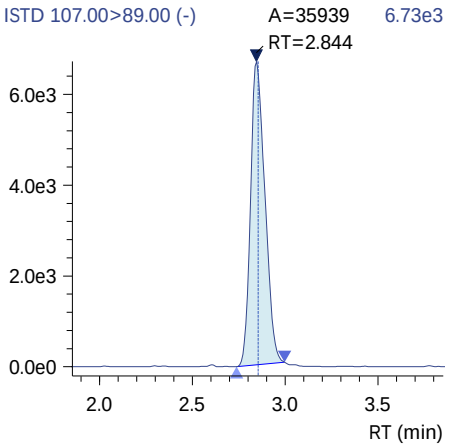
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

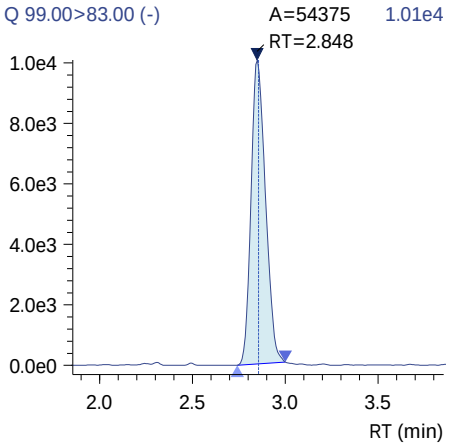
Printed at 7/18/2022 10:40:58 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 3:15:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_028.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

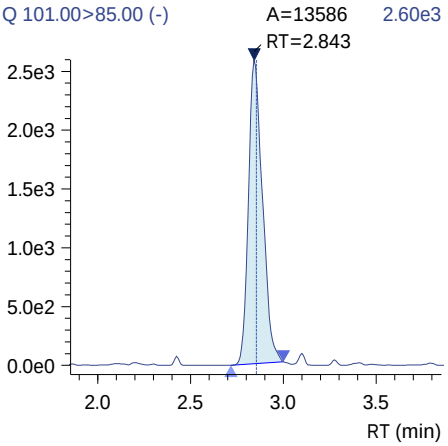
Perchlorate

Conc 10.2535



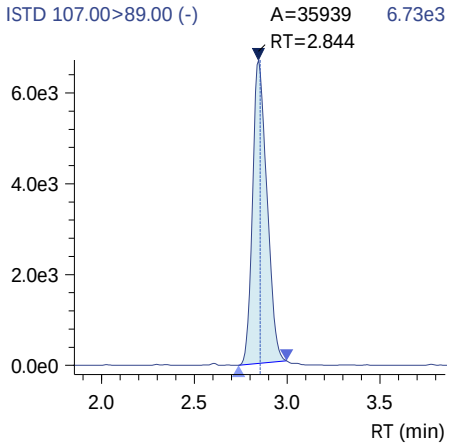
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

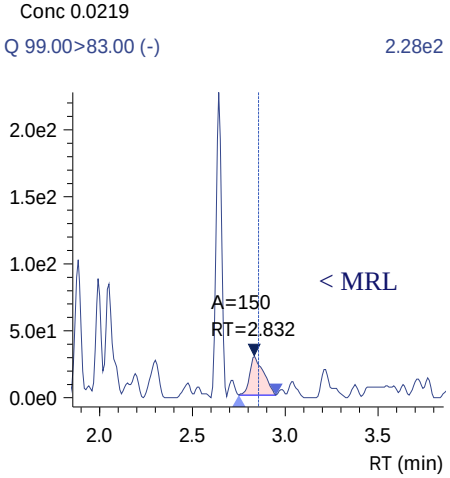
EQ2200287-01

Sample ID: EQ2200287-01
Date Acquired: 7/12/2022 4:18:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_032.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.832	150	45321	0.0219	ng/mL	-7.33	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	45321	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.857	45321	45321	1.0000	ng/mL	----	

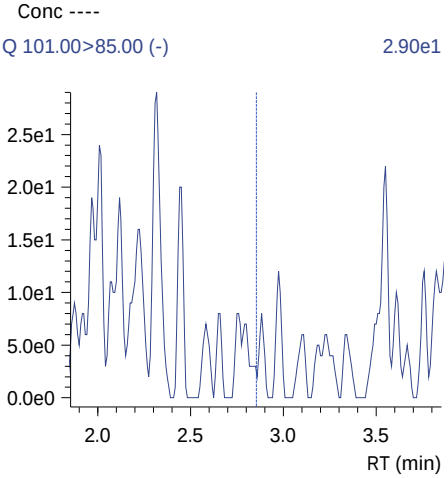
Perchlorate

Conc 0.0219



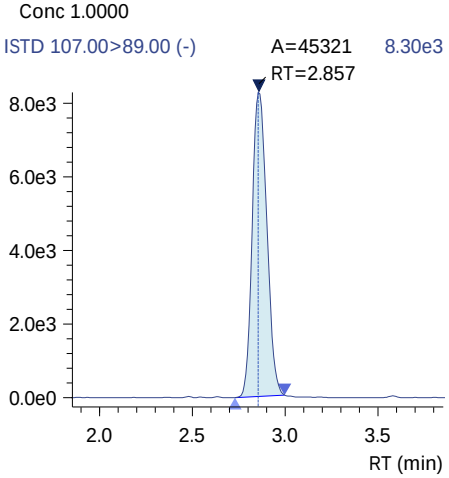
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

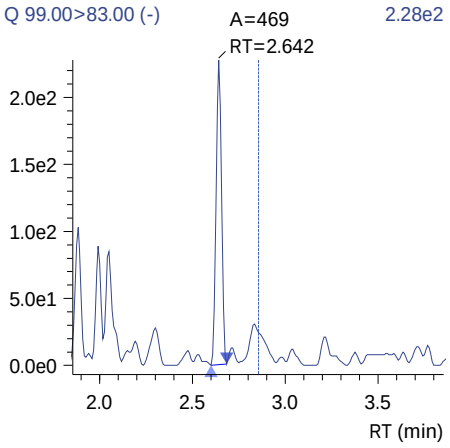
Printed at 7/18/2022 10:40:58 AM

EQ2200287-01

Sample ID: EQ2200287-01
Date Acquired: 7/12/2022 4:18:55 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_032.lcd
Vial: 2 | Inj. Volume: 25.0000uL | Tray: 2

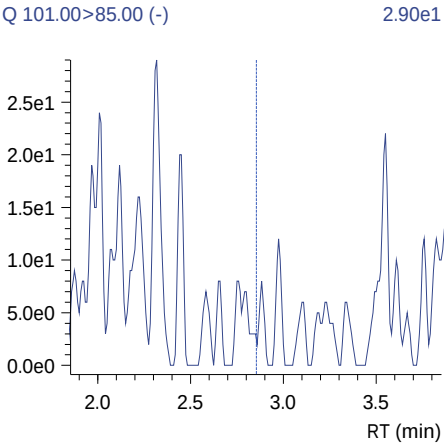
Perchlorate

Conc ----



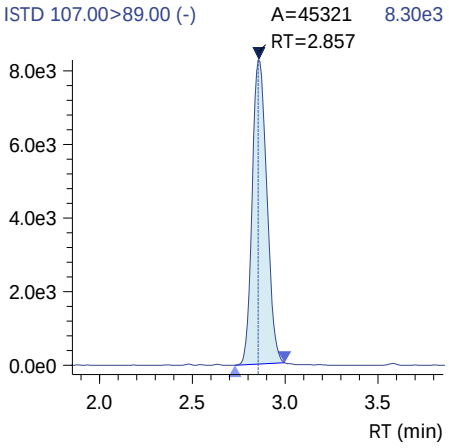
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

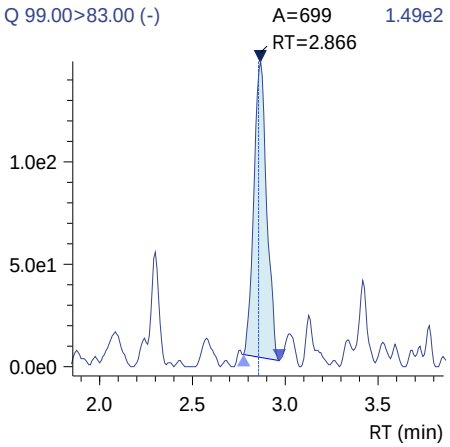
EQ2200287-02

Sample ID: EQ2200287-02
Date Acquired: 7/12/2022 4:26:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_033.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.866	699	46661	0.0991	ng/mL	32.90	17.85-33.16
Perchlorate 2	M	2.871	230	46661	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.852	46661	46661	1.0000	ng/mL	----	

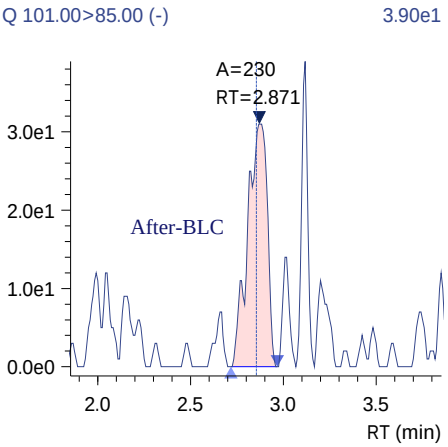
Perchlorate

Conc 0.0991



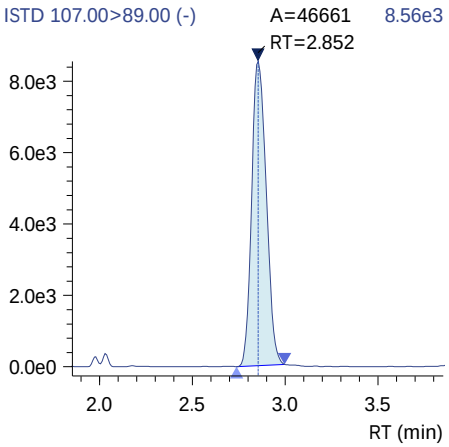
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

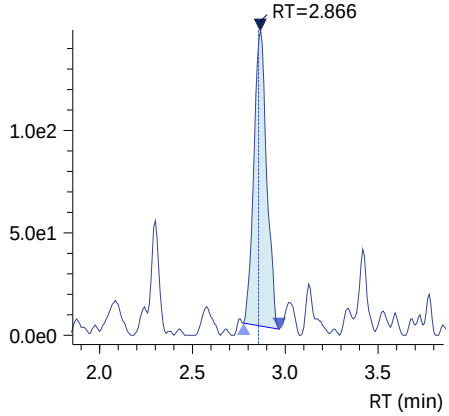
EQ2200287-02

Sample ID: EQ2200287-02
Date Acquired: 7/12/2022 4:26:47 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_033.lcd
Vial: 3 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc 0.1015

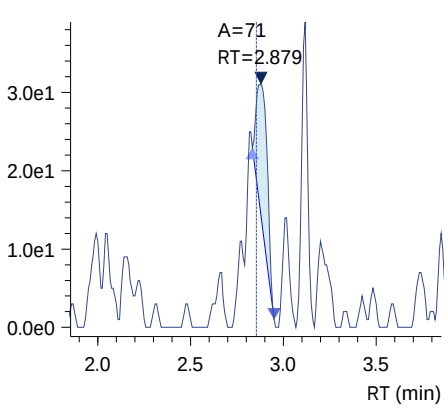
Q 99.00>83.00 (-) A=699 1.49e2 RT=2.866



Perchlorate 2

Conc 0.0000

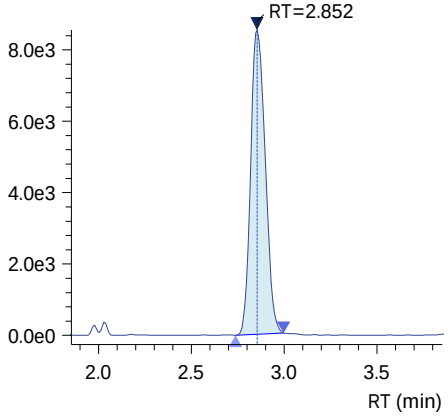
Q 101.00>85.00 (-) 3.90e1 A=71 RT=2.879



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=46661 8.56e3 RT=2.852



Insight Report

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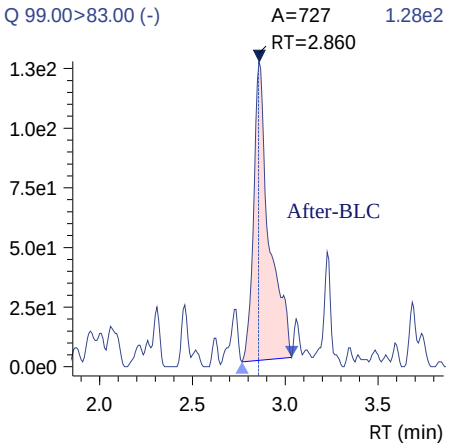
EQ2200287-03

Sample ID: EQ2200287-03
Date Acquired: 7/12/2022 5:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_034.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.860	727	46929	0.1025	ng/mL	24.48	17.85-33.16
Perchlorate 2	Auto	2.879	178	46929	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.858	46929	46929	1.0000	ng/mL	----	

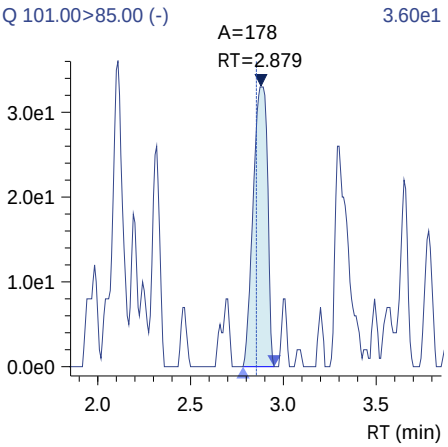
Perchlorate

Conc 0.1025



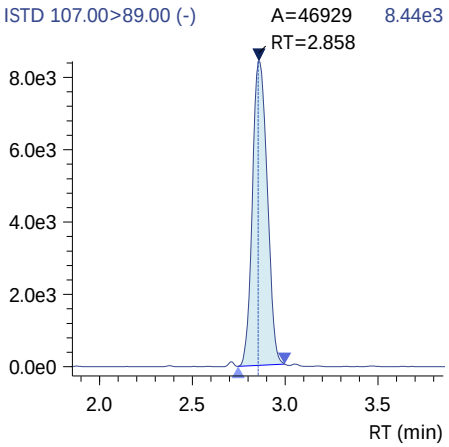
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

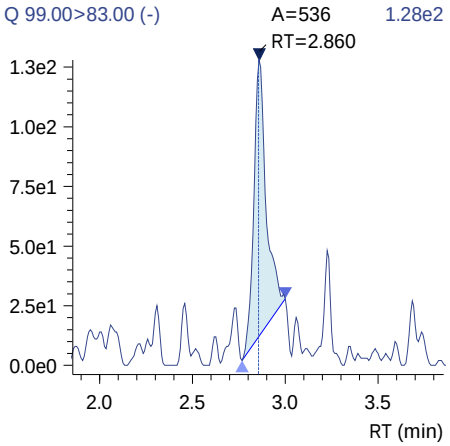
Printed at 7/18/2022 10:40:58 AM

EQ2200287-03

Sample ID: EQ2200287-03
Date Acquired: 7/12/2022 5:07:39 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_034.lcd
Vial: 4 | Inj. Volume: 25.0000uL | Tray: 2

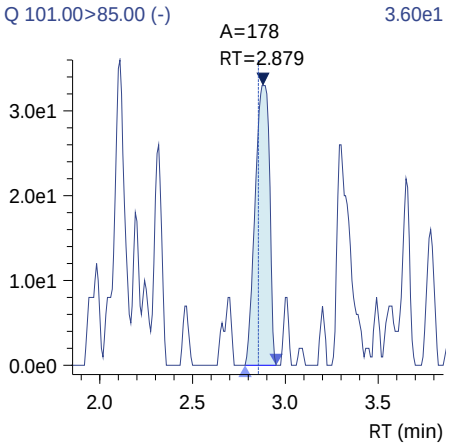
Perchlorate

Conc 0.0774



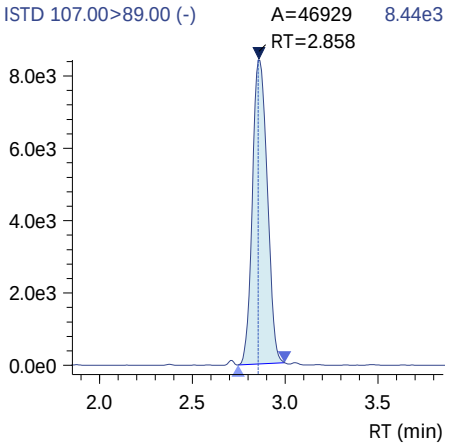
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:38:07 AM

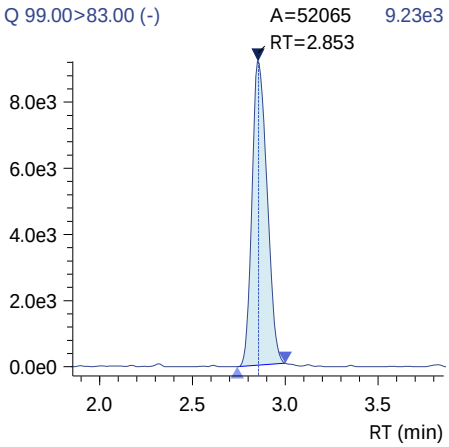
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 5:31:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_037.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.853	52065	34449	10.0004	ng/mL	25.49	17.85-33.16
Perchlorate 2	Auto	2.855	13272	34449	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.852	34449	34449	1.0000	ng/mL	----	

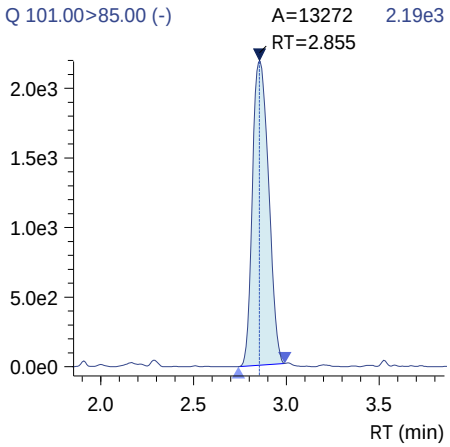
Perchlorate

Conc 10.0004



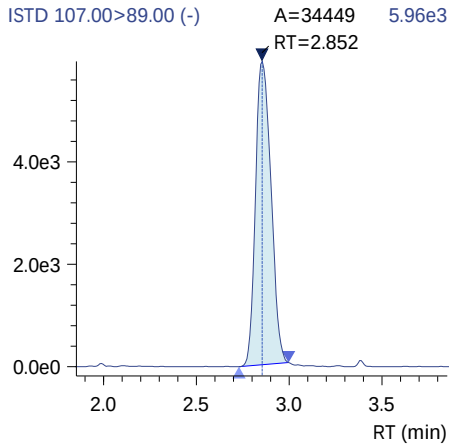
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

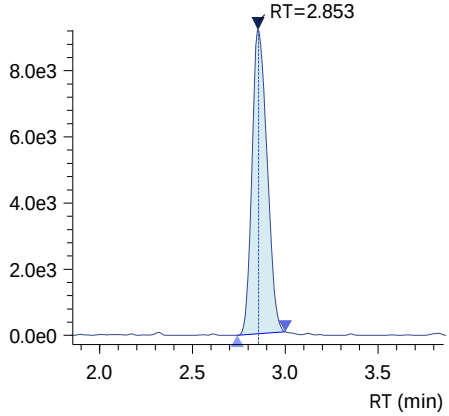
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 5:31:18 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_037.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.2426

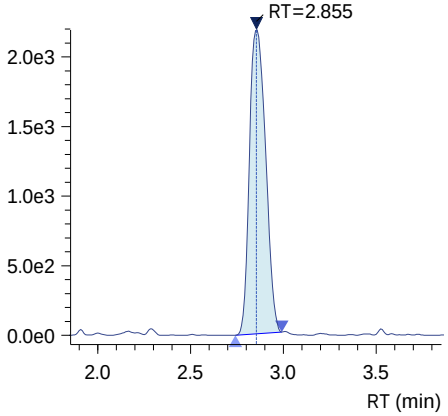
Q 99.00>83.00 (-) A=52065 9.23e3
RT=2.853



Perchlorate 2

Conc 0.0000

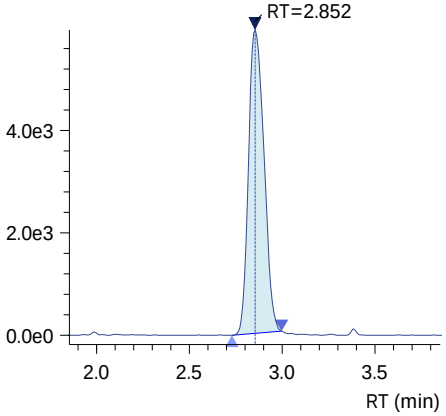
Q 101.00>85.00 (-) A=13272 2.19e3
RT=2.855



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=34449 5.96e3
RT=2.852



Insight Report

Printed at 7/18/2022 10:38:07 AM

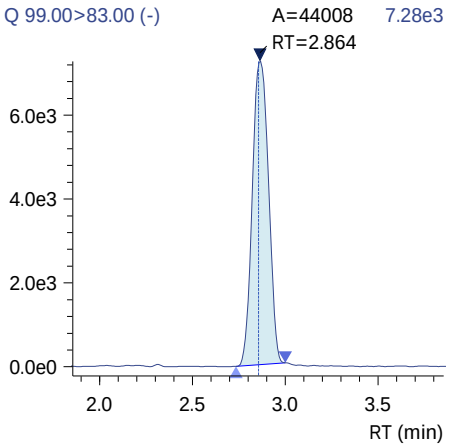
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 6:58:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_048.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.864	44008	28691	10.1492	ng/mL	26.41	17.85-33.16
Perchlorate 2	Auto	2.857	11623	28691	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.859	28691	28691	1.0000	ng/mL	----	

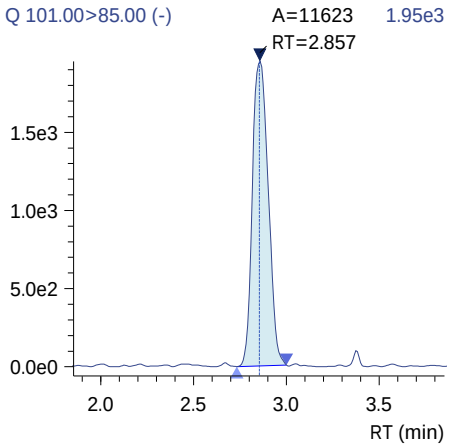
Perchlorate

Conc 10.1492



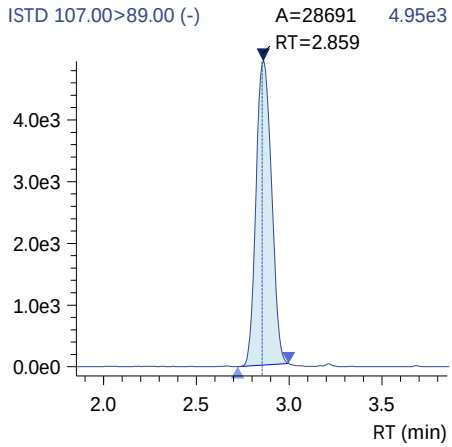
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

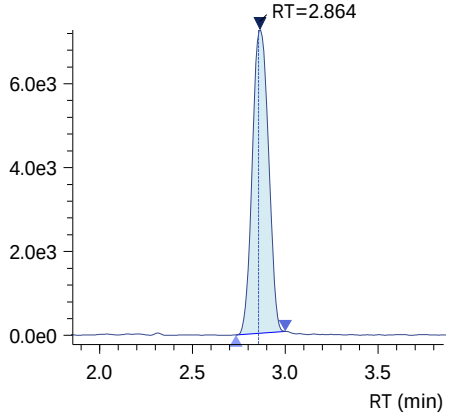
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 6:58:01 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_048.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.3950

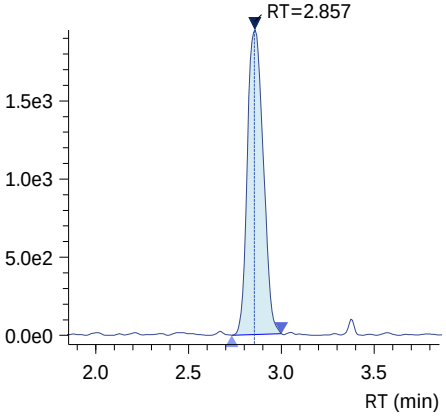
Q 99.00>83.00 (-) A=44008 7.28e3



Perchlorate 2

Conc 0.0000

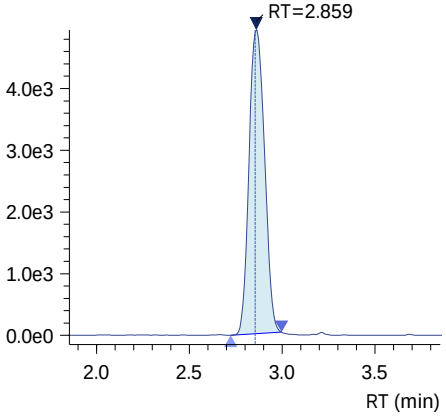
Q 101.00>85.00 (-) A=11623 1.95e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=28691 4.95e3



Insight Report

Printed at 7/18/2022 10:38:07 AM

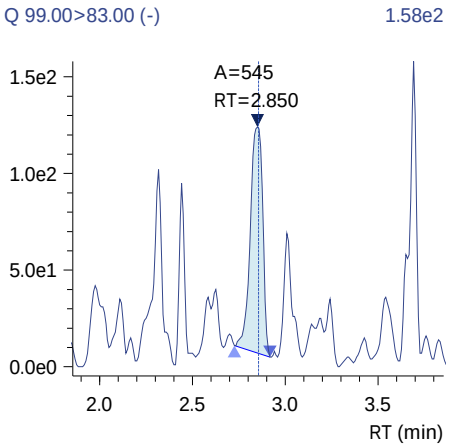
EQ2200287-04

Sample ID: EQ2200287-04
Date Acquired: 7/12/2022 7:29:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_052.lcd
Vial: 5 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.850	545	17840	0.2021	ng/mL	22.57	17.85-33.16
Perchlorate 2	Auto	2.824	123	17840	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	M	2.835	17840	17840	1.0000	ng/mL	----	

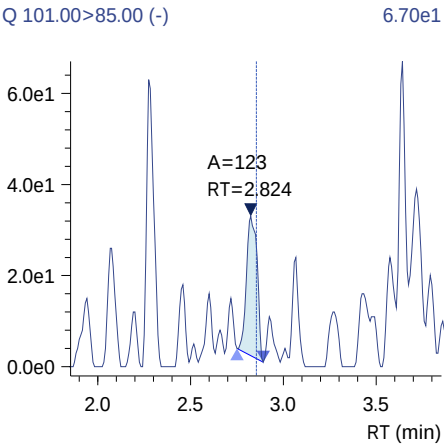
Perchlorate

Conc 0.2021



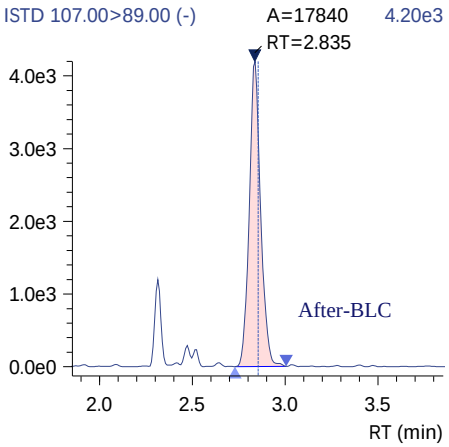
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

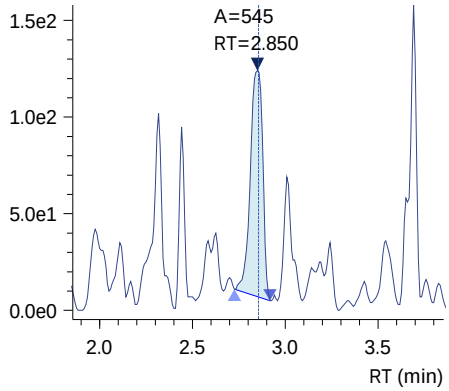
EQ2200287-04

Sample ID: EQ2200287-04
Date Acquired: 7/12/2022 7:29:28 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_052.lcd
Vial: 5 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc 0.2113

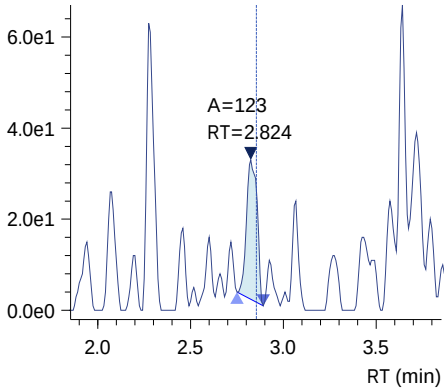
Q 99.00>83.00 (-) 1.58e2



Perchlorate 2

Conc 0.0000

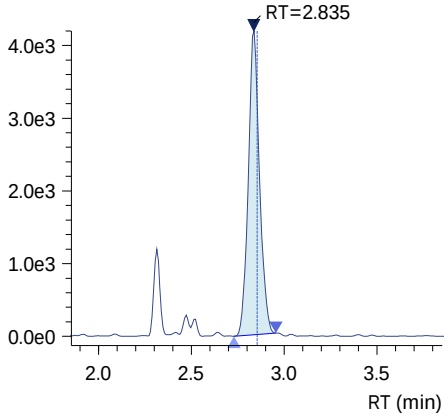
Q 101.00>85.00 (-) 6.70e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=17481 4.20e3



Insight Report

Printed at 7/18/2022 10:38:07 AM

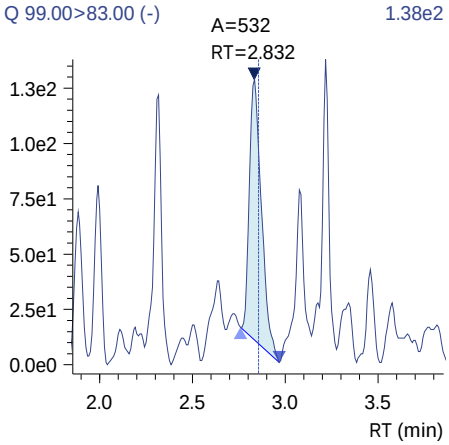
EQ2200287-05

Sample ID: EQ2200287-05
Date Acquired: 7/12/2022 7:37:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_053.lcd
Vial: 6 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.832	532	18269	0.1927	ng/mL	19.55	17.85-33.16
Perchlorate 2	Auto	2.849	104	18269	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.838	18269	18269	1.0000	ng/mL	----	

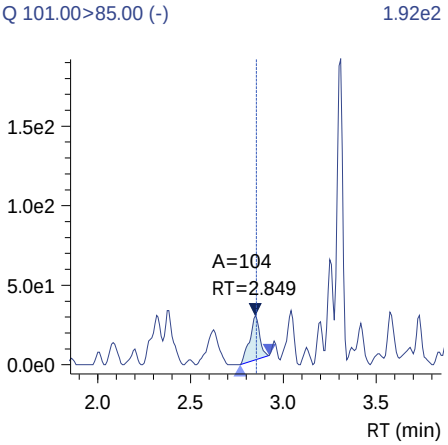
Perchlorate

Conc 0.1927



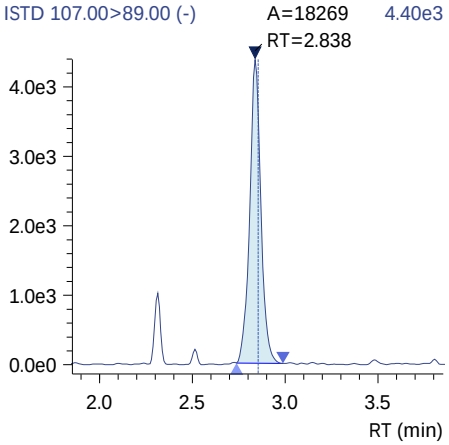
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

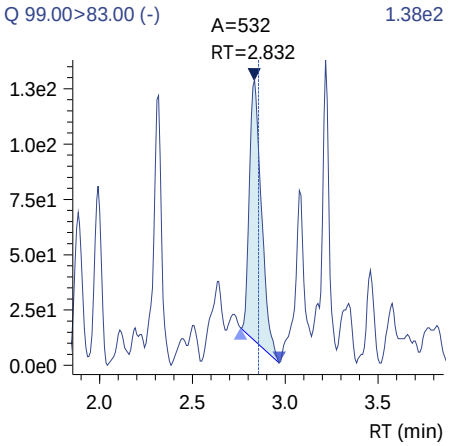
Printed at 7/18/2022 10:40:58 AM

EQ2200287-05

Sample ID: EQ2200287-05
Date Acquired: 7/12/2022 7:37:23 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_053.lcd
Vial: 6 | Inj. Volume: 25.0000uL | Tray: 2

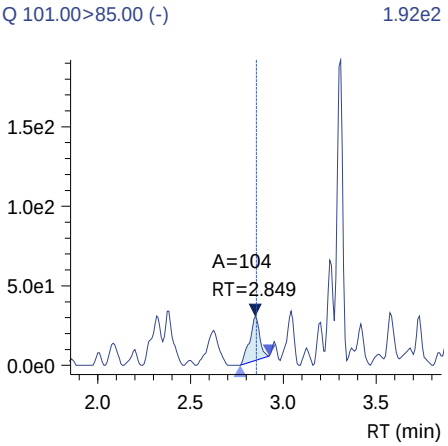
Perchlorate

Conc 0.1974



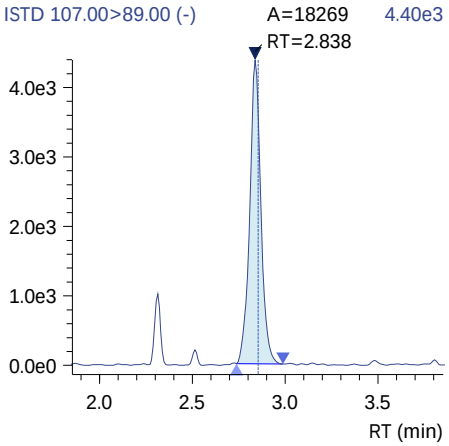
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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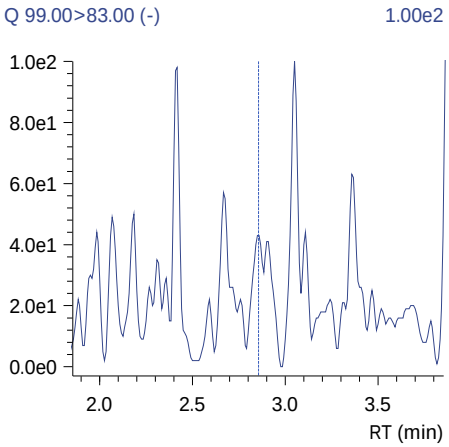
E2200665-001

Sample ID: E2200665-001
Date Acquired: 7/12/2022 7:45:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_054.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	30345	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	30345	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.849	30345	30345	1.0000	ng/mL	----	

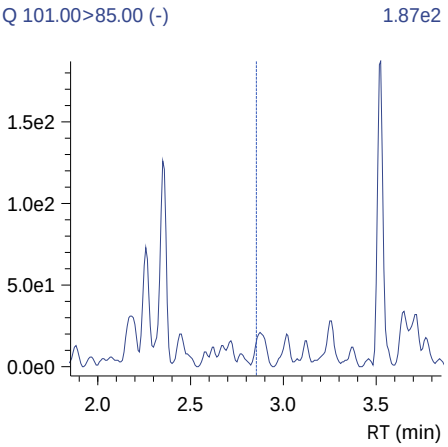
Perchlorate

Conc ----



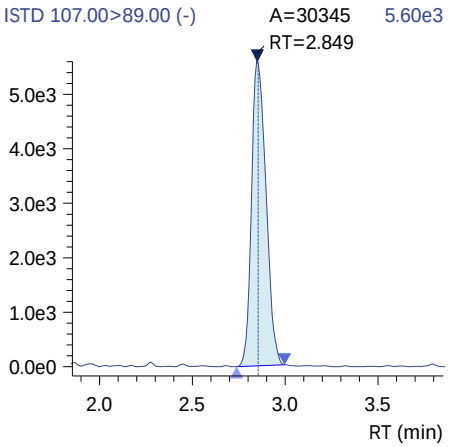
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

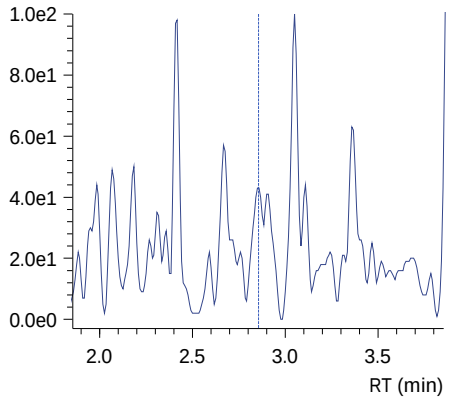
E2200665-001

Sample ID: E2200665-001
Date Acquired: 7/12/2022 7:45:19 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_054.lcd
Vial: 9 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc ----

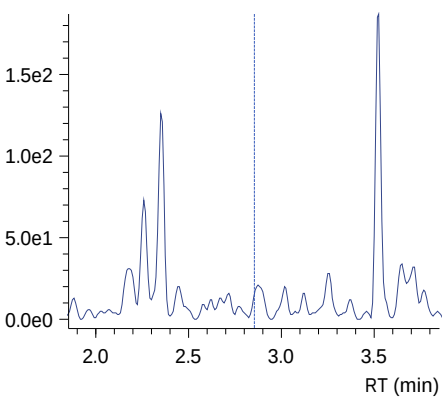
Q 99.00>83.00 (-) 1.00e2



Perchlorate 2

Conc ----

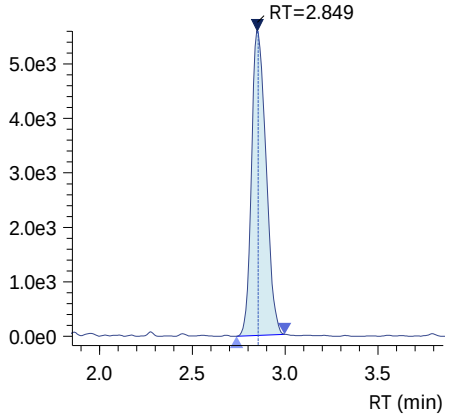
Q 101.00>85.00 (-) 1.87e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=30345 5.60e3



Insight Report

Printed at 7/18/2022 10:38:07 AM

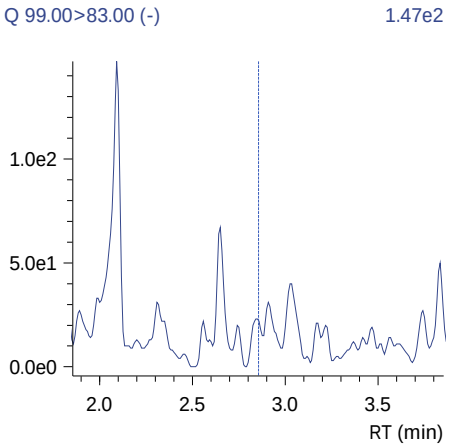
E2200665-002

Sample ID: E2200665-002
Date Acquired: 7/12/2022 7:53:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_055.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	31820	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	31820	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.864	31820	31820	1.0000	ng/mL	----	

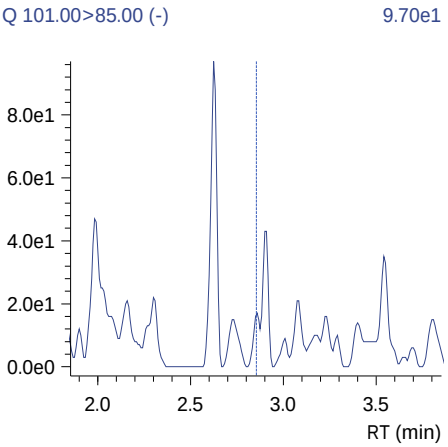
Perchlorate

Conc ----



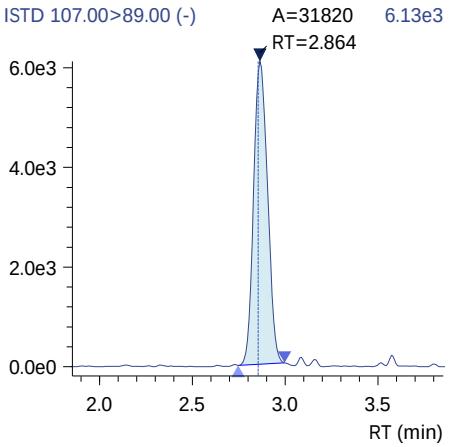
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

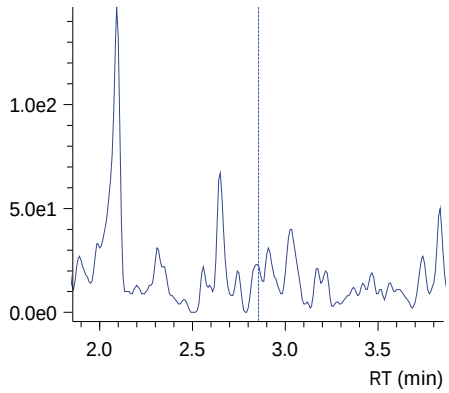
E2200665-002

Sample ID: E2200665-002
Date Acquired: 7/12/2022 7:53:11 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_055.lcd
Vial: 10 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc ----

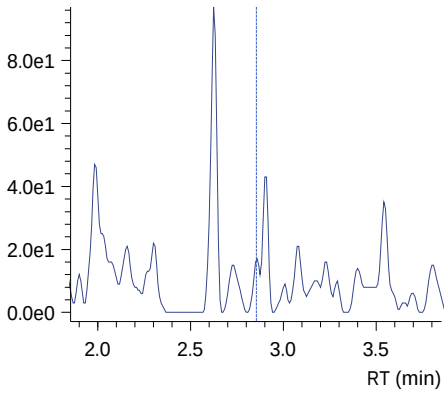
Q 99.00>83.00 (-) 1.47e2



Perchlorate 2

Conc ----

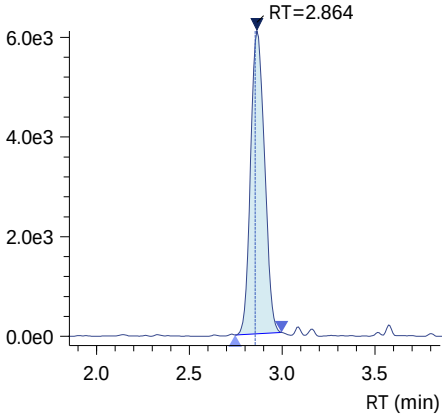
Q 101.00>85.00 (-) 9.70e1



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=31820 6.13e3



Insight Report

Printed at 7/18/2022 10:38:07 AM

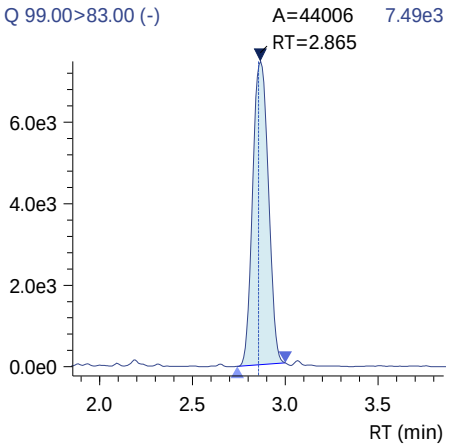
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 8:08:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_057.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.865	44006	29254	9.9534	ng/mL	25.78	17.85-33.16
Perchlorate 2	Auto	2.862	11345	29254	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.867	29254	29254	1.0000	ng/mL	----	

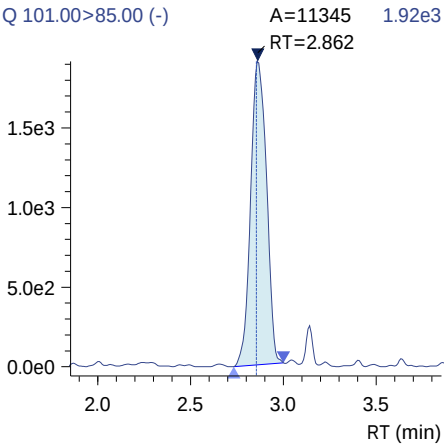
Perchlorate

Conc 9.9534



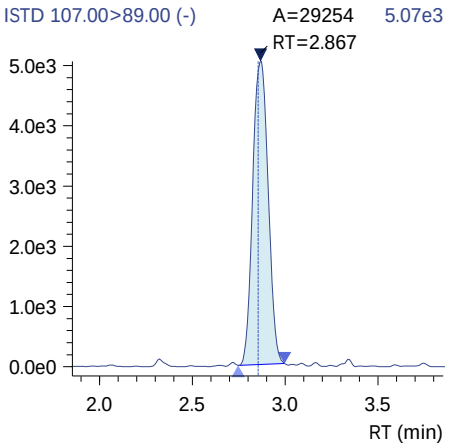
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

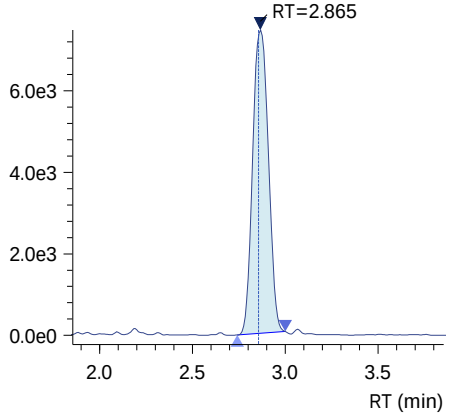
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 8:08:59 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_057.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.1945

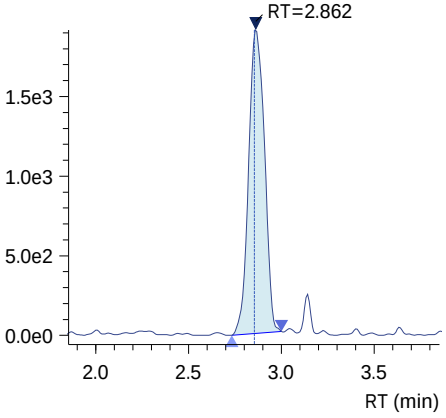
Q 99.00>83.00 (-) A=44006 7.49e3 RT=2.865



Perchlorate 2

Conc 0.0000

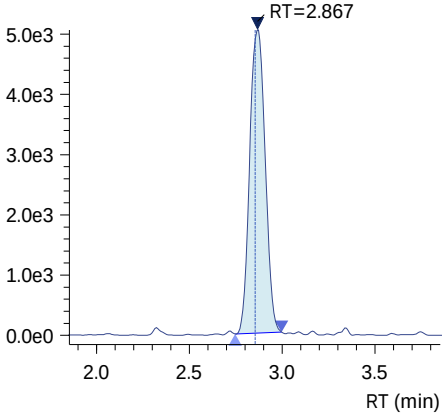
Q 101.00>85.00 (-) A=11345 1.92e3 RT=2.862



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=29254 5.07e3 RT=2.867



Insight Report

Printed at 7/18/2022 10:38:07 AM

E2200665-004

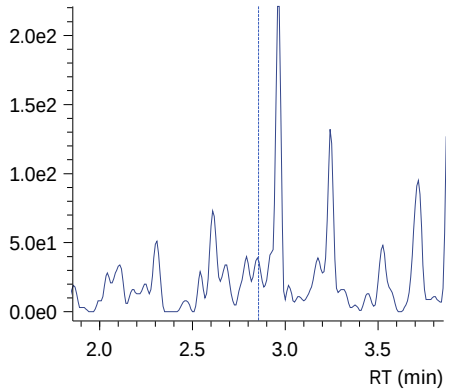
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Date Acquired: 7/12/2022 8:16:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_058.lcd
Vial: 12 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	18156	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	18156	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.837	18156	18156	1.0000	ng/mL	----	

Perchlorate

Conc ----

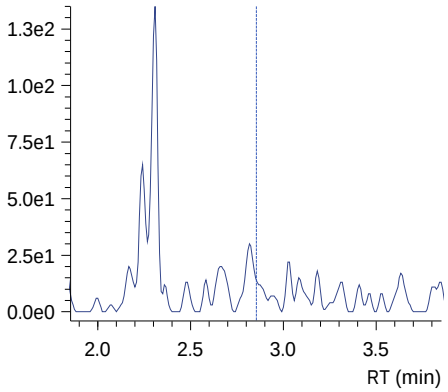
Q 99.00>83.00 (-) 2.21e2



Perchlorate 2

Conc ----

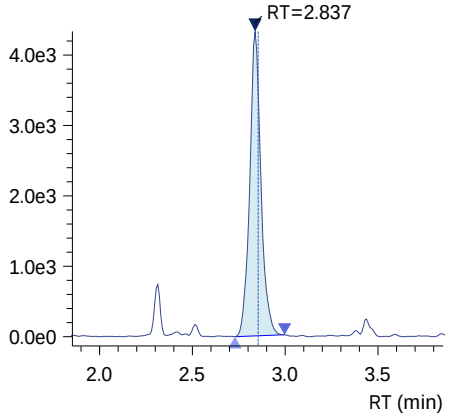
Q 101.00>85.00 (-) 1.35e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=18156 4.33e3



Insight Report

Printed at 7/18/2022 10:40:58 AM

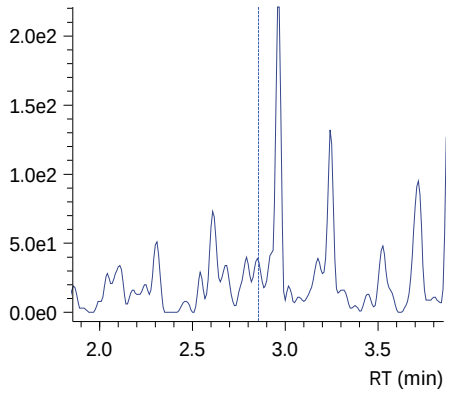
E2200665-004

Sample ID: E2200665-004
Date Acquired: 7/12/2022 8:16:51 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_058.lcd
Vial: 12 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc ----

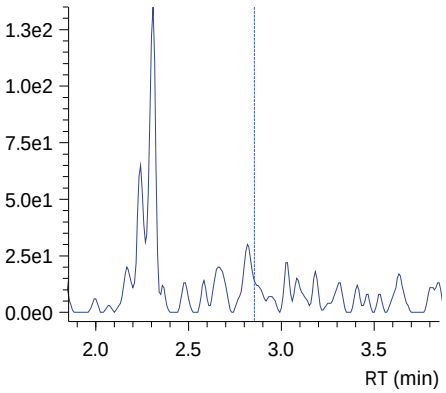
Q 99.00>83.00 (-) 2.21e2



Perchlorate 2

Conc ----

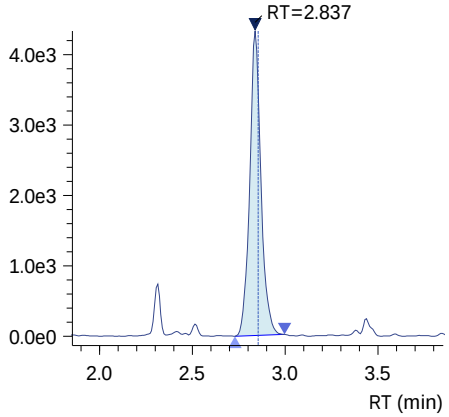
Q 101.00>85.00 (-) 1.35e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=18156 4.33e3



Insight Report

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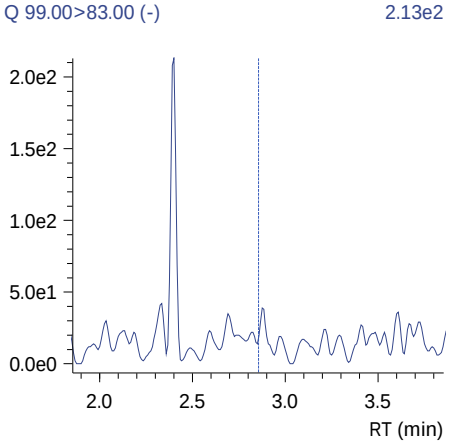
E2200665-010

Sample ID: E2200665-010
Date Acquired: 7/12/2022 9:04:21 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_064.lcd
Vial: 18 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	24741	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	24741	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.830	24741	24741	1.0000	ng/mL	----	

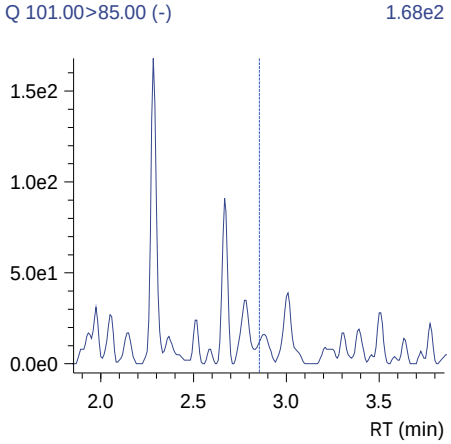
Perchlorate

Conc ----



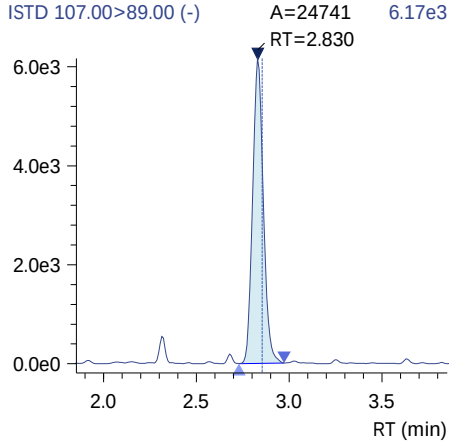
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

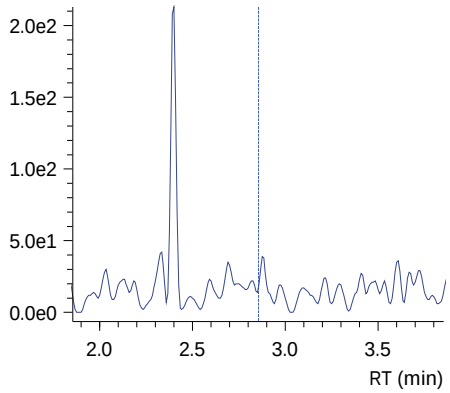
E2200665-010

Sample ID: E2200665-010
Date Acquired: 7/12/2022 9:04:21 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_064.lcd
Vial: 18 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc ----

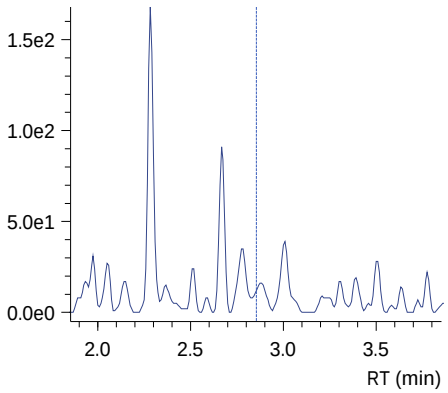
Q 99.00>83.00 (-) 2.13e2



Perchlorate 2

Conc ----

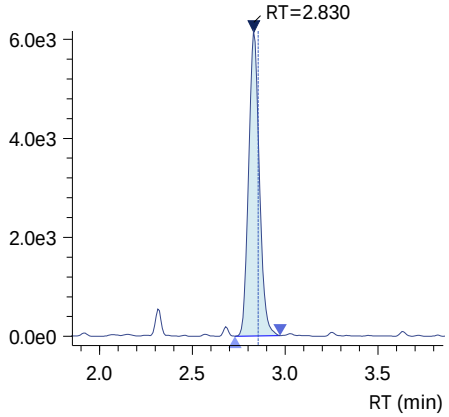
Q 101.00>85.00 (-) 1.68e2



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=24741 6.17e3



Insight Report

Printed at 7/18/2022 10:38:07 AM

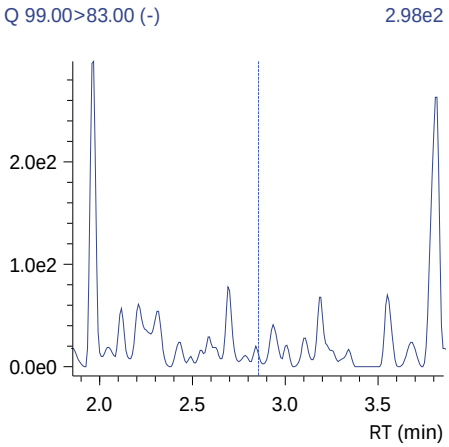
E2200665-011

Sample ID: E2200665-011
Date Acquired: 7/12/2022 9:12:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_065.lcd
Vial: 19 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	ND(W/B)	----	----	24278	----	ng/mL	0.00	17.85-33.16
Perchlorate 2	ND(W/B)	----	----	24278	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.840	24278	24278	1.0000	ng/mL	----	

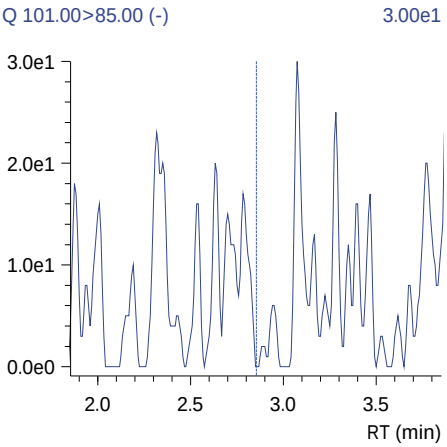
Perchlorate

Conc ----



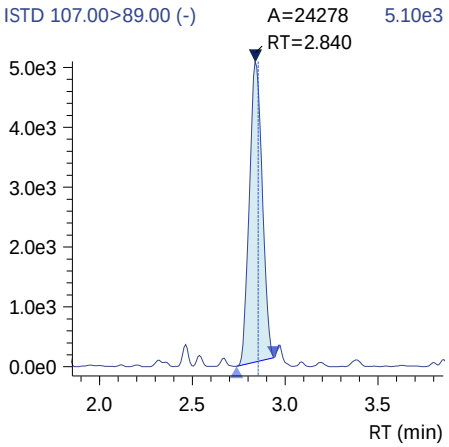
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

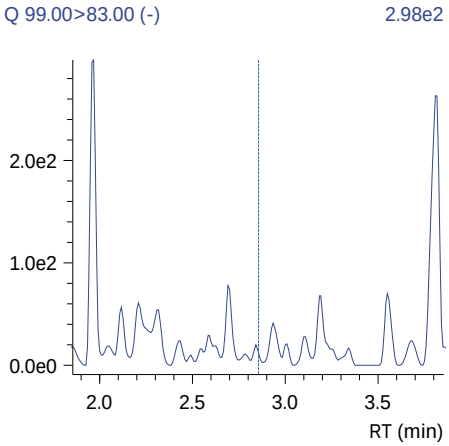
Printed at 7/18/2022 10:40:58 AM

E2200665-011

Sample ID: E2200665-011
Date Acquired: 7/12/2022 9:12:12 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_065.lcd
Vial: 19 | Inj. Volume: 25.0000uL | Tray: 2

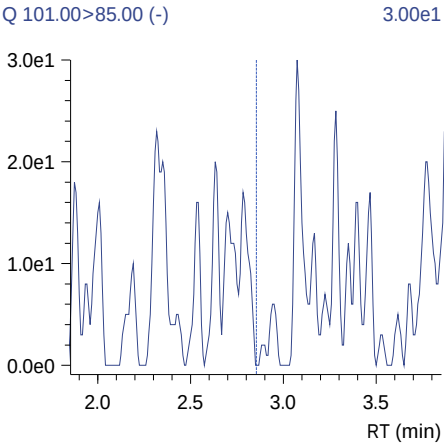
Perchlorate

Conc ----



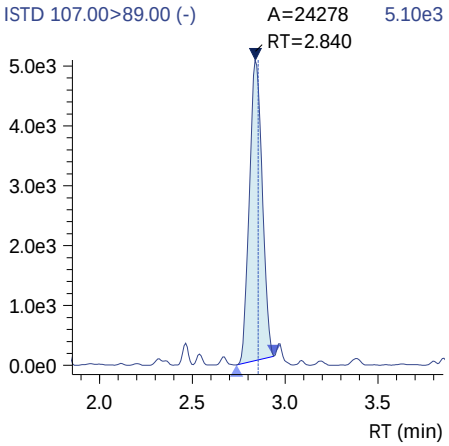
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

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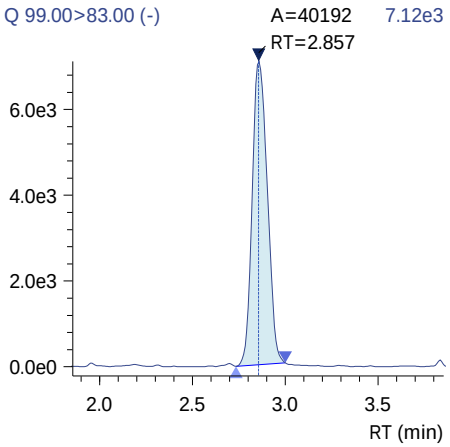
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 9:20:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_066.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.857	40192	27714	9.5959	ng/mL	25.92	17.85-33.16
Perchlorate 2	Auto	2.857	10418	27714	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.858	27714	27714	1.0000	ng/mL	----	

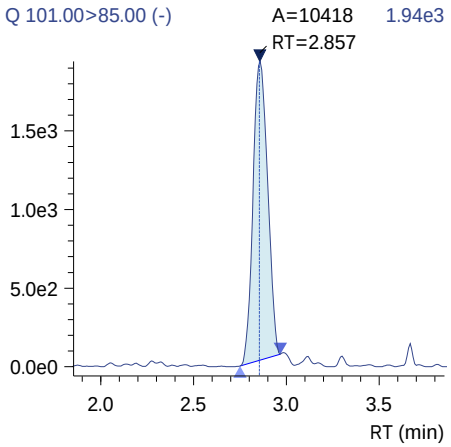
Perchlorate

Conc 9.5959



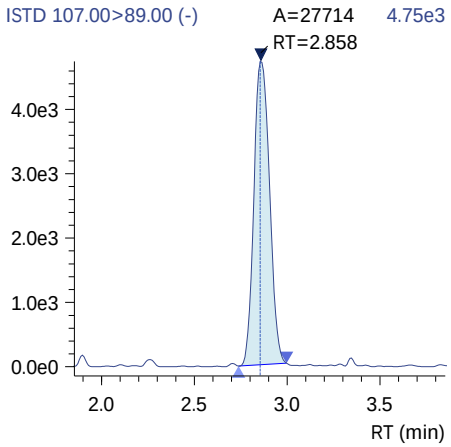
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/18/2022 10:40:58 AM

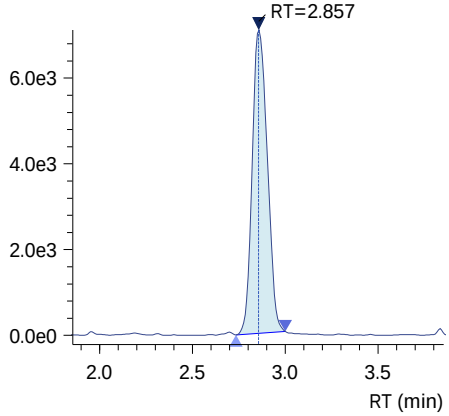
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/12/2022 9:20:05 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220712\20220712_066.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 9.8284

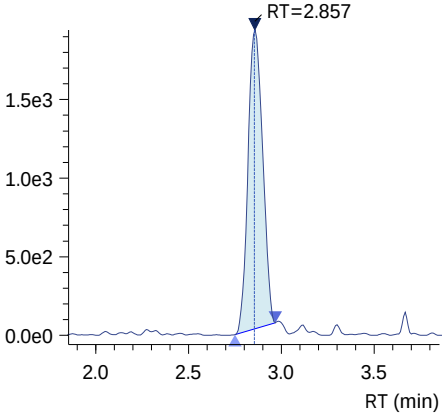
Q 99.00>83.00 (-) A=40192 7.12e3
RT=2.857



Perchlorate 2

Conc 0.0000

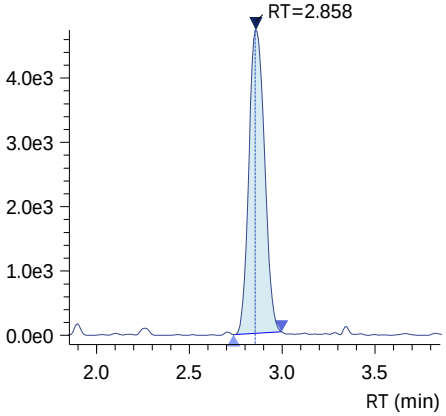
Q 101.00>85.00 (-) A=10418 1.94e3
RT=2.857



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=27714 4.75e3
RT=2.858



Insight Report

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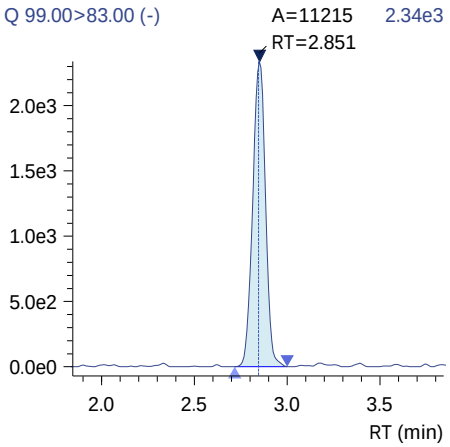
ICS

Sample ID: ICS
Date Acquired: 7/20/2022 3:07:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_025.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.851	11215	59000	1.0111	ng/mL	32.43	23.34-43.34
Perchlorate 2	Auto	2.847	3637	59000	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.847	59000	59000	1.0000	ng/mL	----	

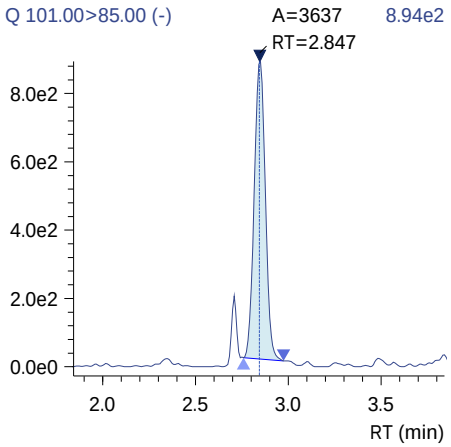
Perchlorate

Conc 1.0111



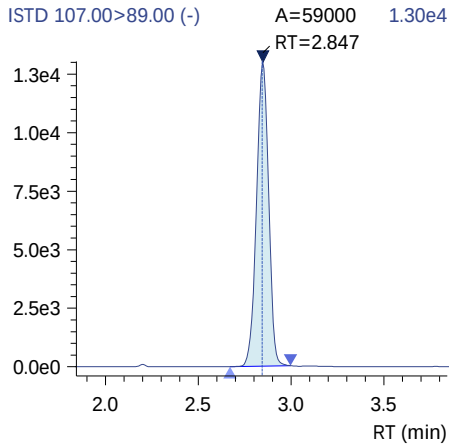
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 10:35:14 AM

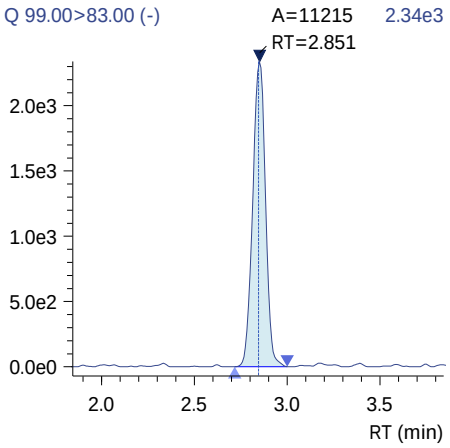
Method File: I:\LCMS01\DATA\20220720\20220720.lcm
Project File: I:\LCMS01\DATA\20220720\20220720.damlp

ICS

Sample ID: ICS
Date Acquired: 7/20/2022 3:07:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_025.lcd
Vial: 32 | Inj. Volume: 25.0000uL | Tray: 1

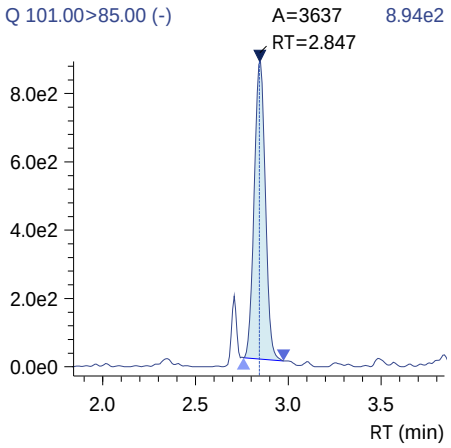
Perchlorate

Conc 1.0543



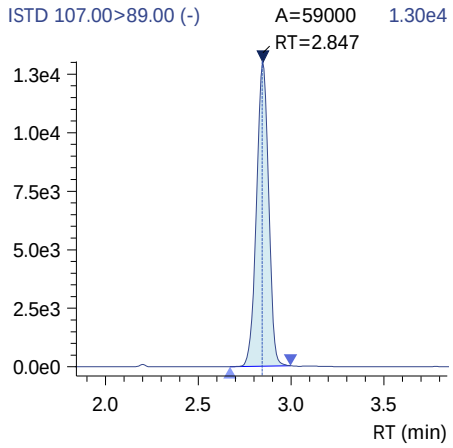
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

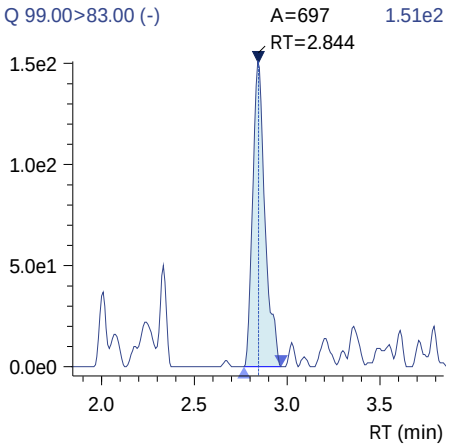
LODV

Sample ID: LODV
Date Acquired: 7/20/2022 3:15:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_026.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	MI R1	2.844	697	61851	0.0599	ng/mL	34.43	23.34-43.34
Perchlorate 2	M	2.841	240	61851	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.846	61851	61851	1.0000	ng/mL	----	

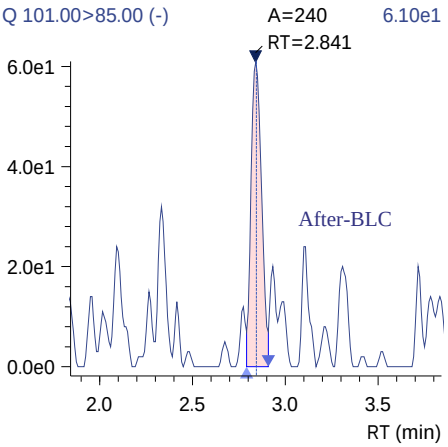
Perchlorate

Conc 0.0599



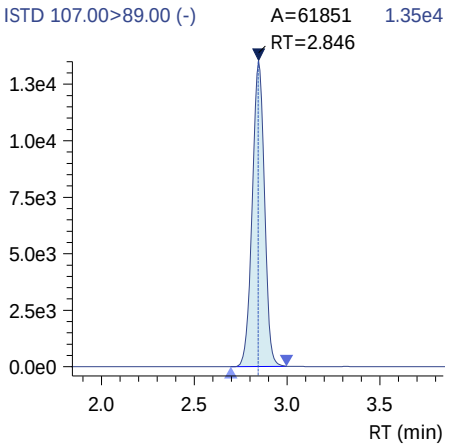
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

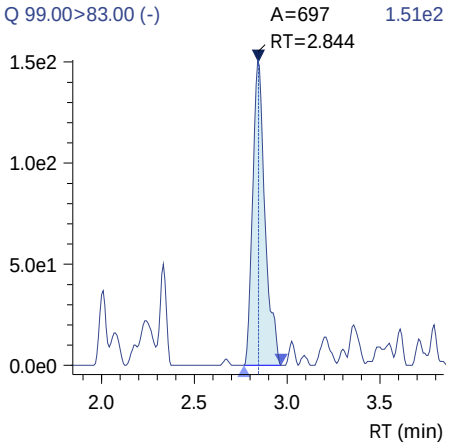
Printed at 7/21/2022 10:35:14 AM

LODV

Sample ID: LODV
Date Acquired: 7/20/2022 3:15:43 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_026.lcd
Vial: 33 | Inj. Volume: 25.0000uL | Tray: 1

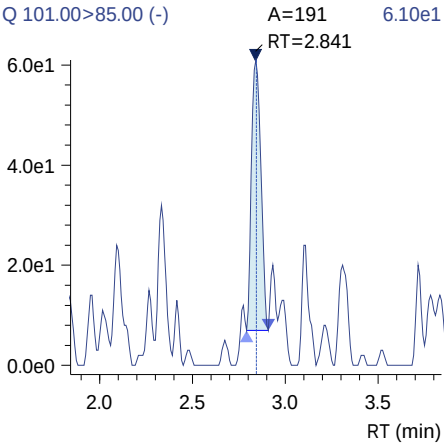
Perchlorate

Conc 0.0625



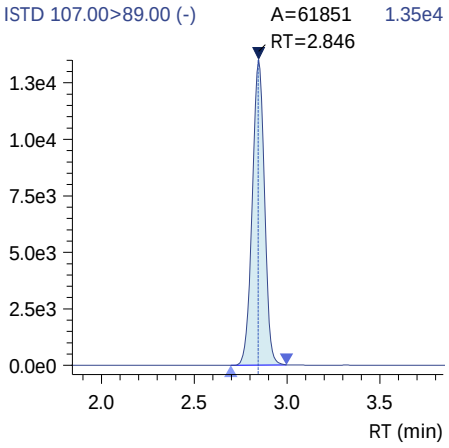
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

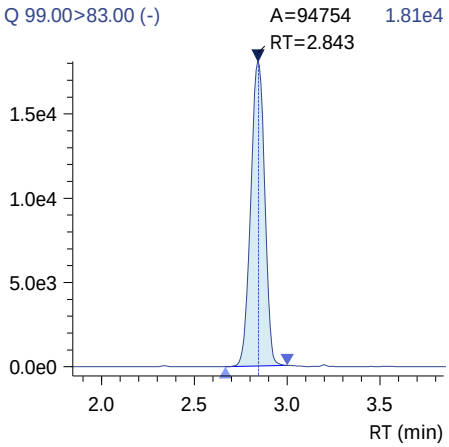
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 3:23:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_027.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.843	94754	50845	9.9127	ng/mL	32.62	23.34-43.34
Perchlorate 2	Auto	2.843	30906	50845	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	50845	50845	1.0000	ng/mL	----	

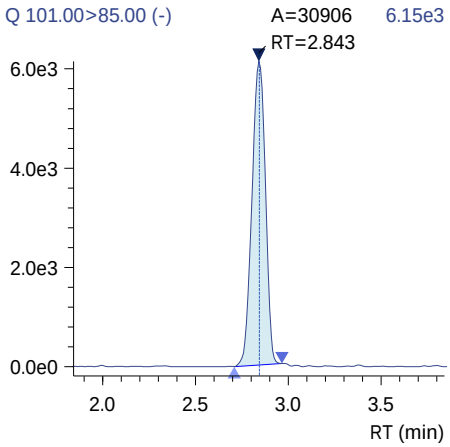
Perchlorate

Conc 9.9127



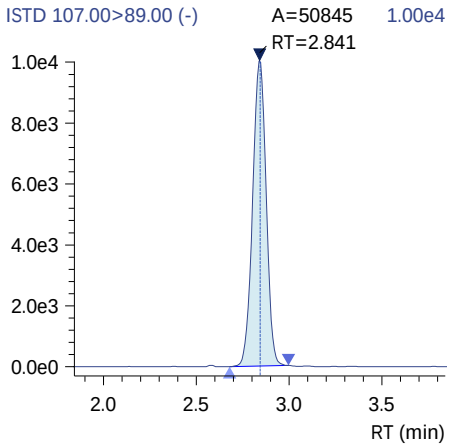
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

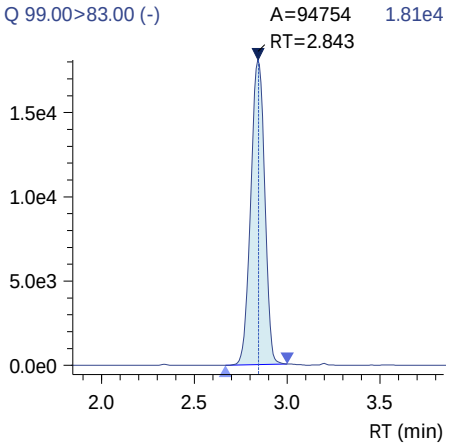
Printed at 7/21/2022 10:35:14 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 3:23:36 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_027.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

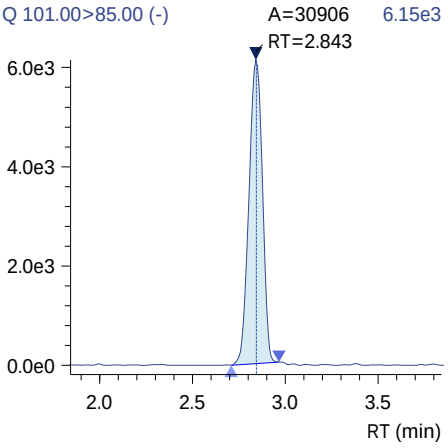
Perchlorate

Conc 10.3360



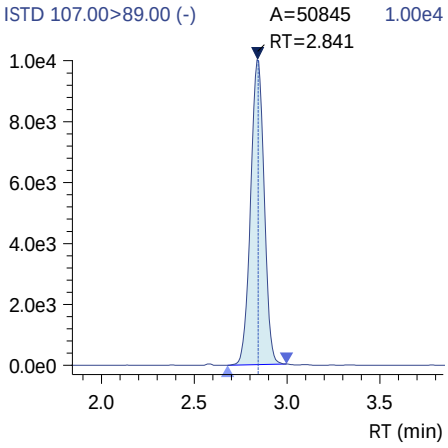
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

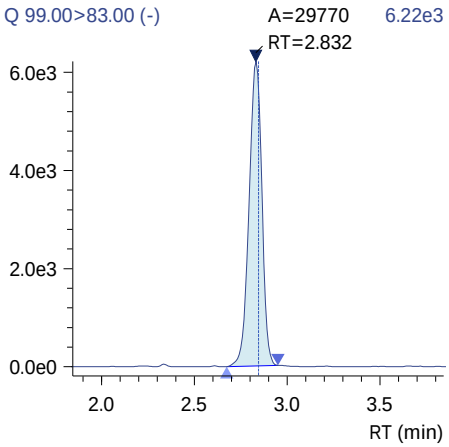
E2200665-008x10

Sample ID: E2200665-008x10
Date Acquired: 7/20/2022 4:11:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_033.lcd
Vial: 16 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.832	29770	27177	5.8267	ng/mL	33.38	23.34-43.34
Perchlorate 2	Auto	2.834	9937	27177	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.829	27177	27177	1.0000	ng/mL	----	

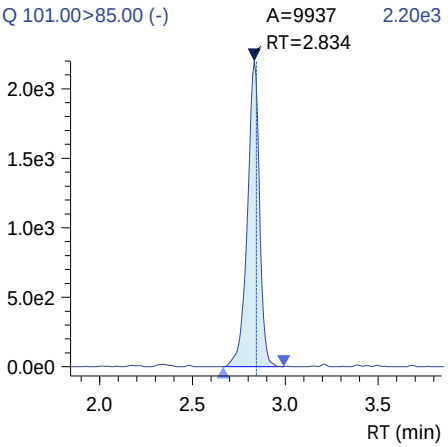
Perchlorate

Conc 5.8267



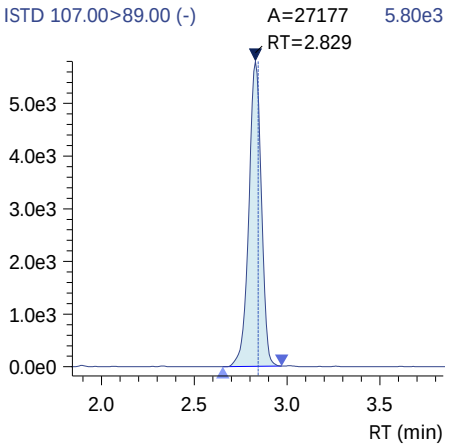
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

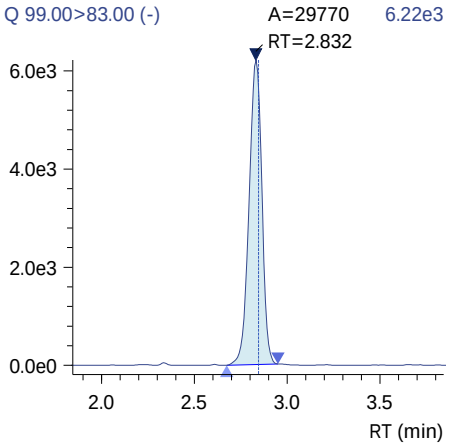
Printed at 7/21/2022 10:35:14 AM

E2200665-008x10

Sample ID: E2200665-008x10
Date Acquired: 7/20/2022 4:11:04 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_033.lcd
Vial: 16 | Inj. Volume: 25.0000uL | Tray: 2

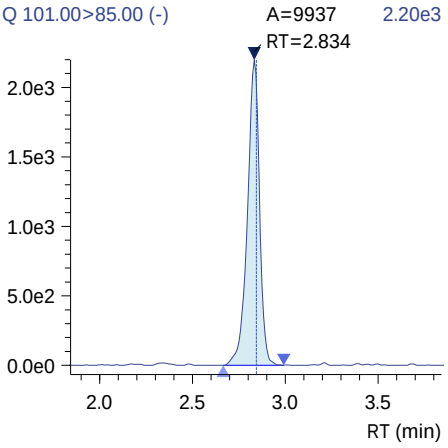
Perchlorate

Conc 6.0755



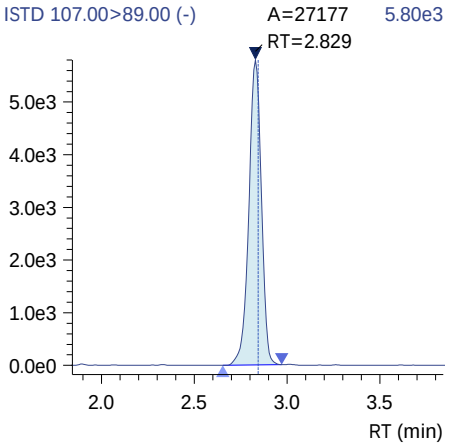
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

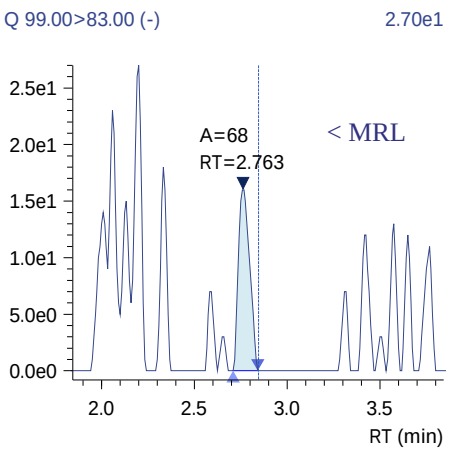
E2200665-009

Sample ID: E2200665-009
Date Acquired: 7/20/2022 4:18:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_034.lcd
Vial: 17 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.763	68	26683	0.0136	ng/mL	52.94	23.34-43.34
Perchlorate 2	ND(W/B)	----	----	26683	----	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.801	26683	26683	1.0000	ng/mL	----	

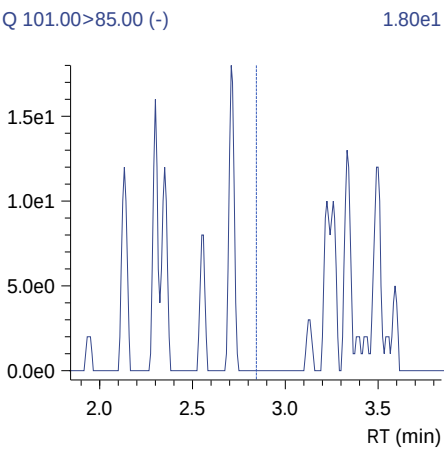
Perchlorate

Conc 0.0136



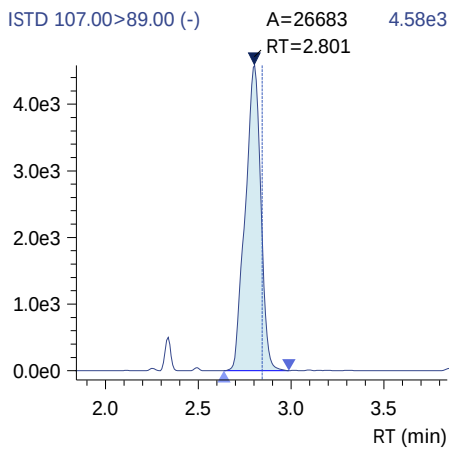
Perchlorate 2

Conc ----



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

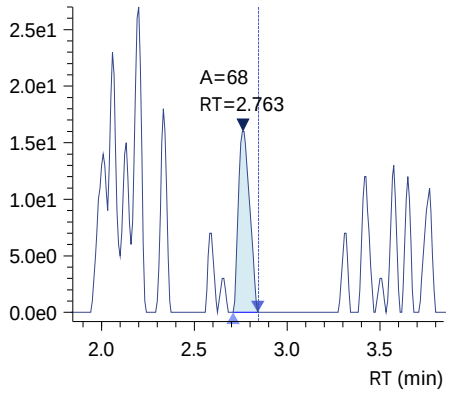
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E2200665-009

Sample ID: E2200665-009
Date Acquired: 7/20/2022 4:18:56 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_034.lcd
Vial: 17 | Inj. Volume: 25.0000uL | Tray: 2

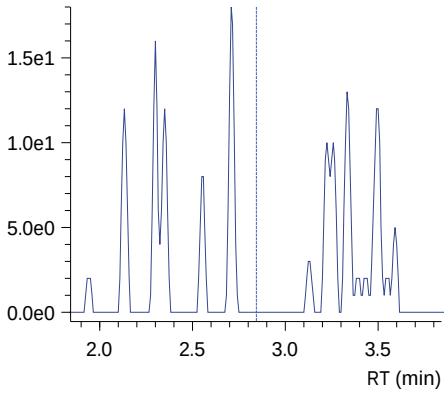
Perchlorate

Conc 0.0141
Q 99.00>83.00 (-) 2.70e1



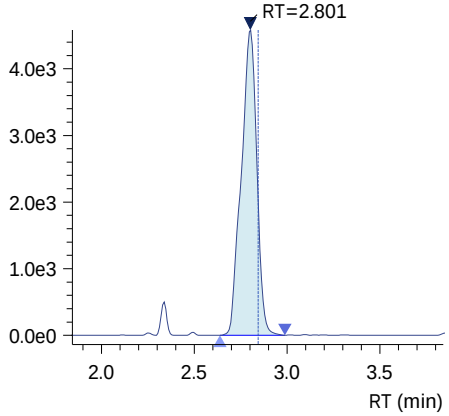
Perchlorate 2

Conc ----
Q 101.00>85.00 (-) 1.80e1



Sodium Perchlorate-18O4_IS

Conc 1.0000
ISTD 107.00>89.00 (-) A=26683 4.58e3



Insight Report

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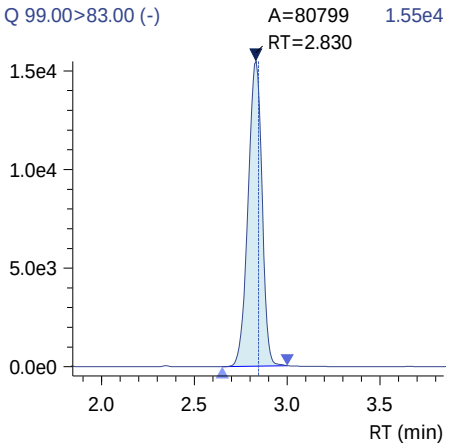
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 4:34:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_035.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.830	80799	41993	10.2346	ng/mL	33.37	23.34-43.34
Perchlorate 2	Auto	2.829	26965	41993	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.825	41993	41993	1.0000	ng/mL	----	

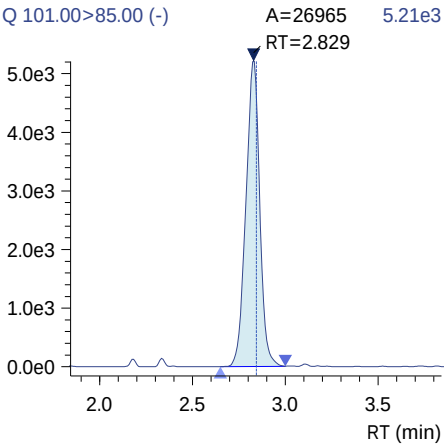
Perchlorate

Conc 10.2346



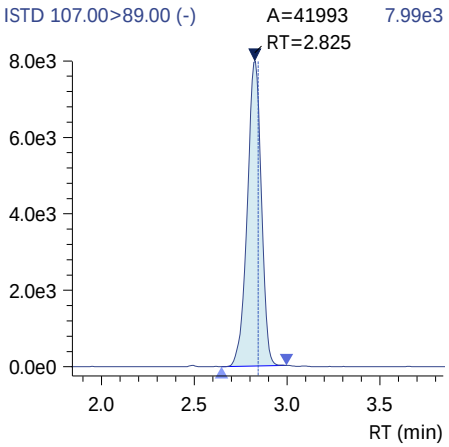
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

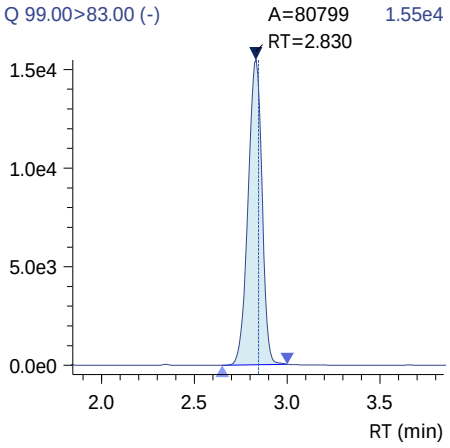
Printed at 7/21/2022 10:35:14 AM

PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 4:34:44 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_035.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

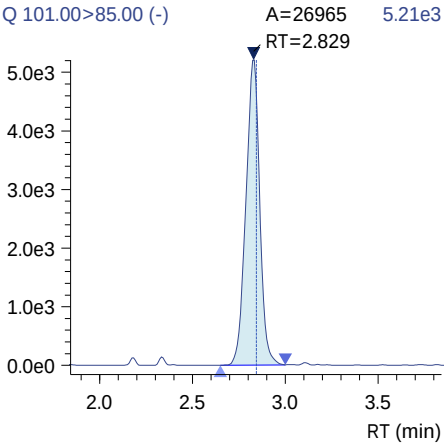
Perchlorate

Conc 10.6717



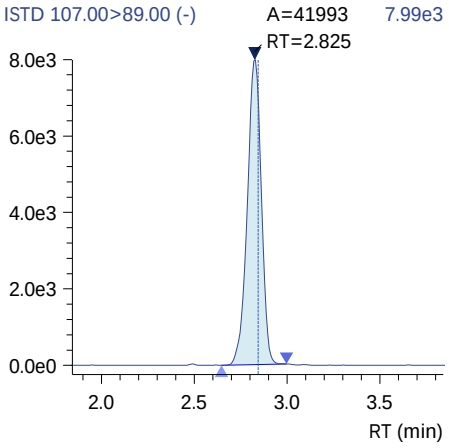
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

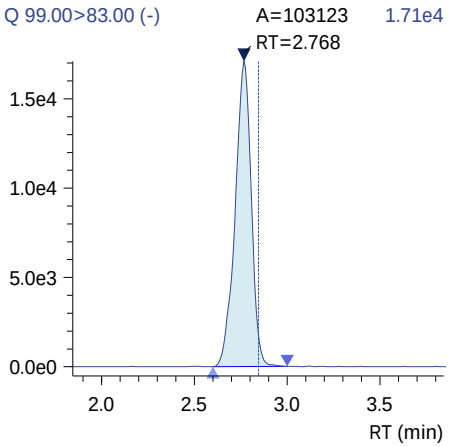
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 5:18:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_036.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.768	103123	52817	10.3854	ng/mL	34.17	23.34-43.34
Perchlorate 2	Auto	2.767	35234	52817	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.766	52817	52817	1.0000	ng/mL	----	

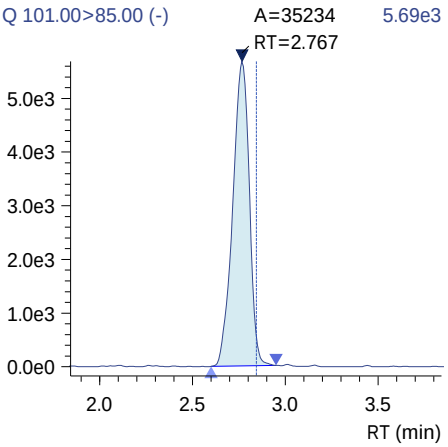
Perchlorate

Conc 10.3854



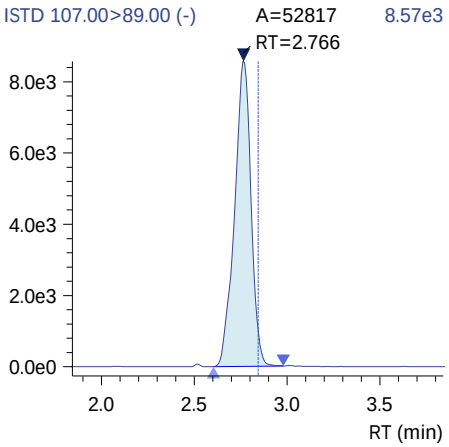
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 10:35:14 AM

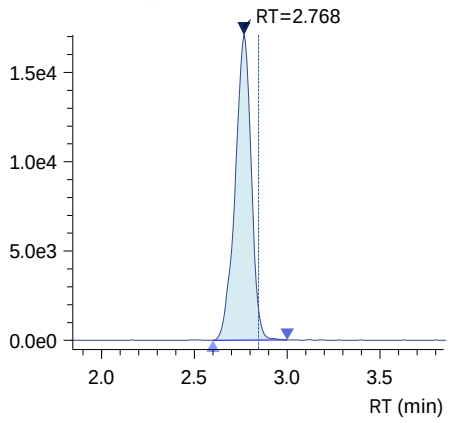
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 5:18:09 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_036.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.8290

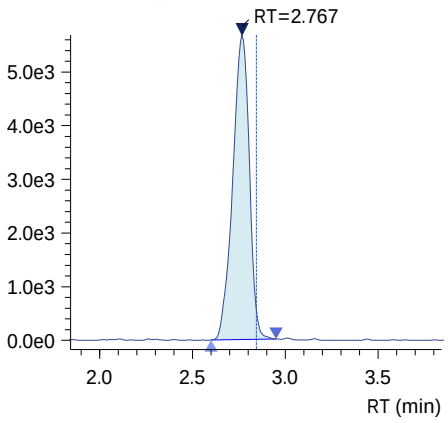
Q 99.00>83.00 (-) A=103123 1.71e4



Perchlorate 2

Conc 0.0000

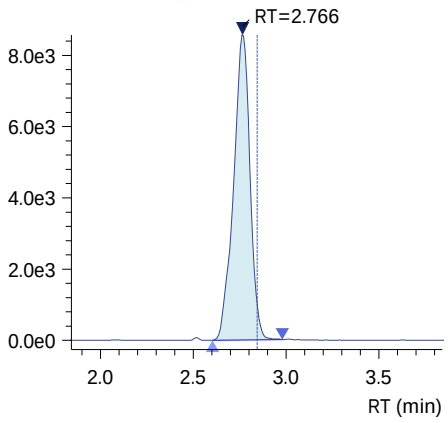
Q 101.00>85.00 (-) A=35234 5.69e3



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=52817 8.57e3



Insight Report

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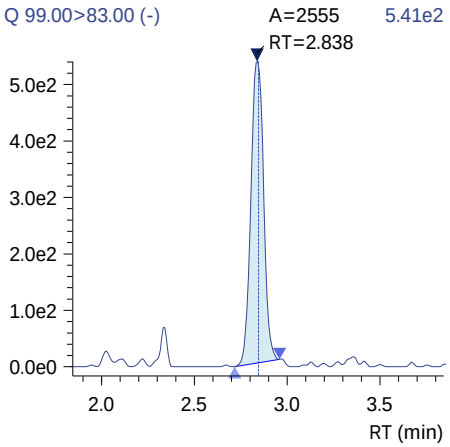
E2200665-003X5

Sample ID: E2200665-003X5
Date Acquired: 7/20/2022 5:26:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_037.lcd
Vial: 11 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.838	2555	33140	0.4101	ng/mL	29.08	23.34-43.34
Perchlorate 2	Auto	2.836	743	33140	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.837	33140	33140	1.0000	ng/mL	----	

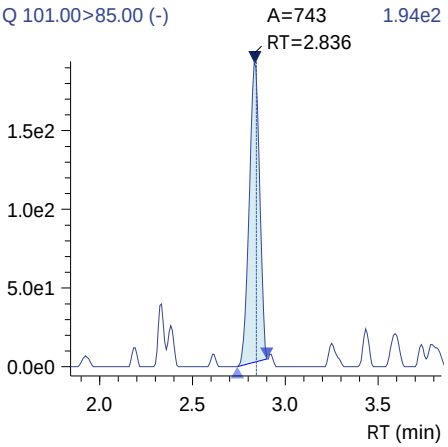
Perchlorate

Conc 0.4101



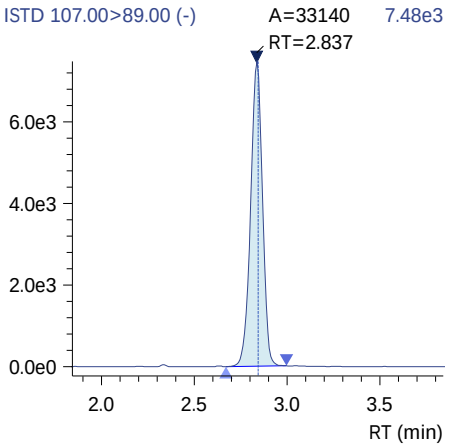
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 10:35:14 AM

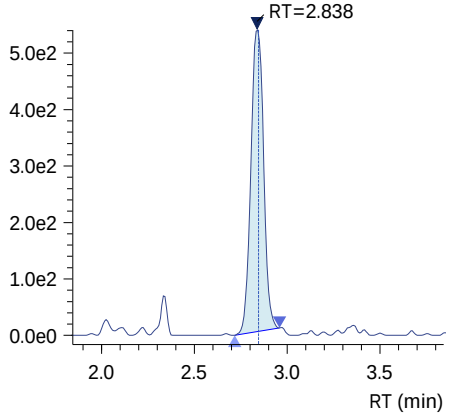
E2200665-003X5

Sample ID: E2200665-003X5
Date Acquired: 7/20/2022 5:26:03 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_037.lcd
Vial: 11 | Inj. Volume: 25.0000uL | Tray: 2

Perchlorate

Conc 0.4276

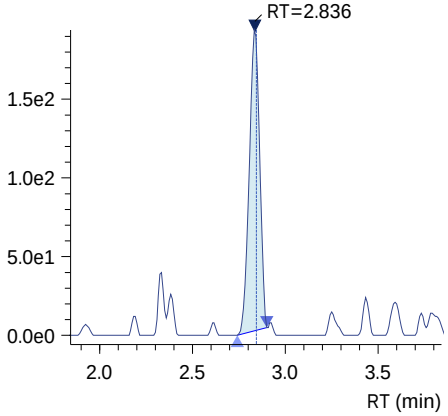
Q 99.00>83.00 (-) A=2555 5.41e2 RT=2.838



Perchlorate 2

Conc 0.0000

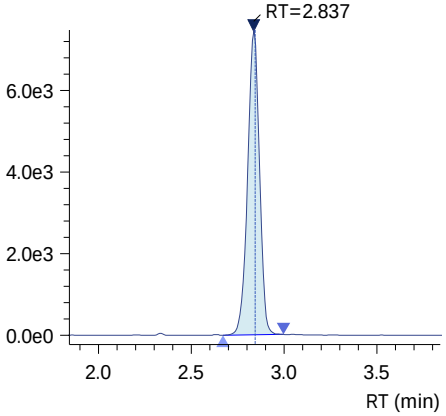
Q 101.00>85.00 (-) A=743 1.94e2 RT=2.836



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=33140 7.48e3 RT=2.837



Insight Report

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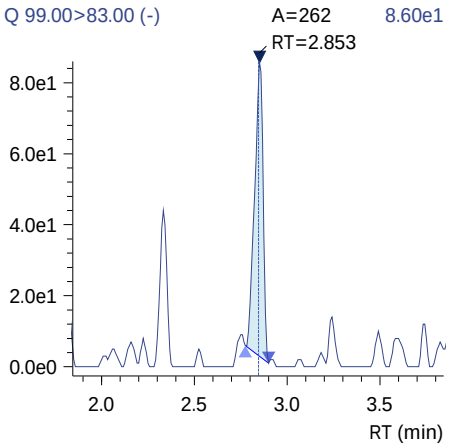
E2200665-005X5

Sample ID: E2200665-005X5
Date Acquired: 7/20/2022 5:34:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_038.lcd
Vial: 13 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.853	262	31579	0.0441	ng/mL	29.01	23.34-43.34
Perchlorate 2	Auto	2.829	76	31579	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.836	31579	31579	1.0000	ng/mL	----	

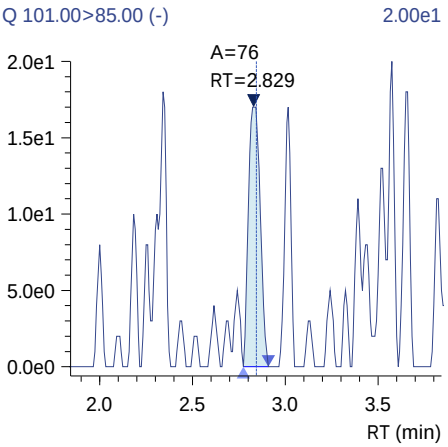
Perchlorate

Conc 0.0441



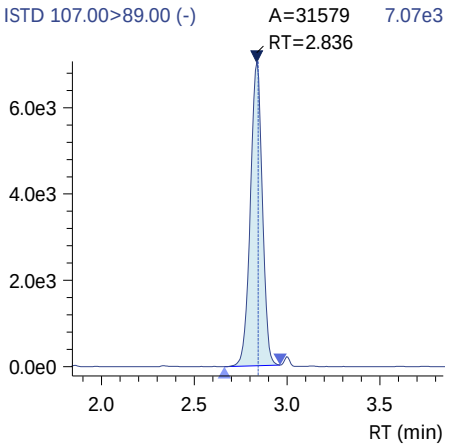
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

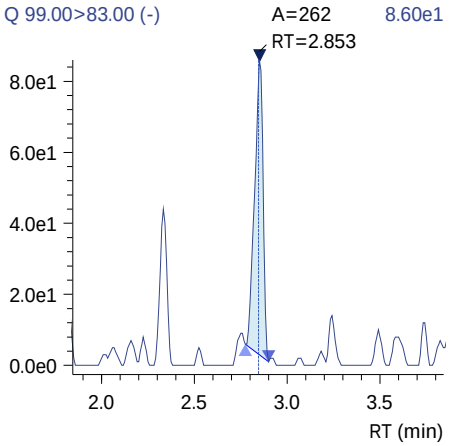
Printed at 7/21/2022 10:35:14 AM

E2200665-005X5

Sample ID: E2200665-005X5
Date Acquired: 7/20/2022 5:34:00 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_038.lcd
Vial: 13 | Inj. Volume: 25.0000uL | Tray: 2

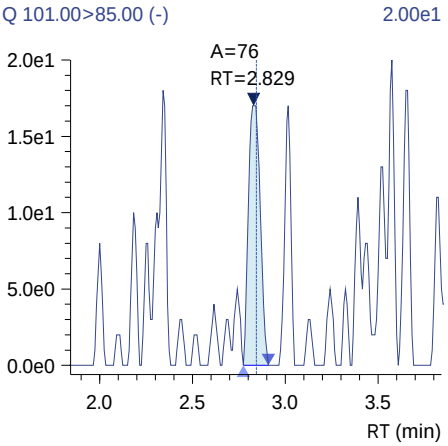
Perchlorate

Conc 0.0460



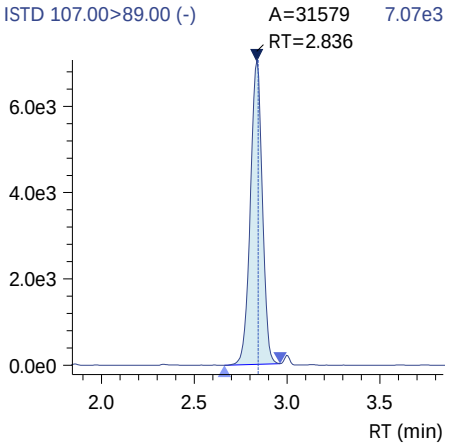
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

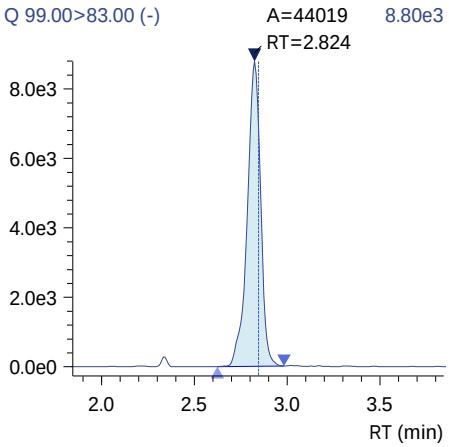
E2200665-006X5

Sample ID: E2200665-006X5
Date Acquired: 7/20/2022 5:41:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_039.lcd
Vial: 14 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.824	44019	30763	7.6112	ng/mL	31.88	23.34-43.34
Perchlorate 2	Auto	2.823	14033	30763	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.821	30763	30763	1.0000	ng/mL	----	

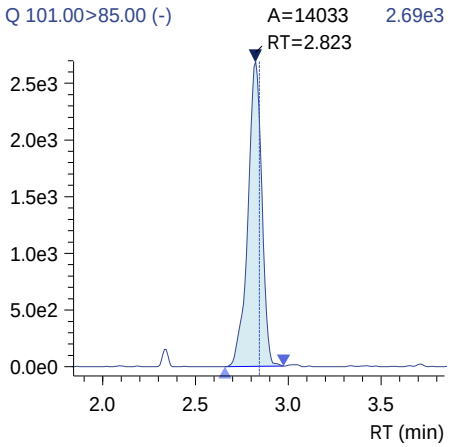
Perchlorate

Conc 7.6112



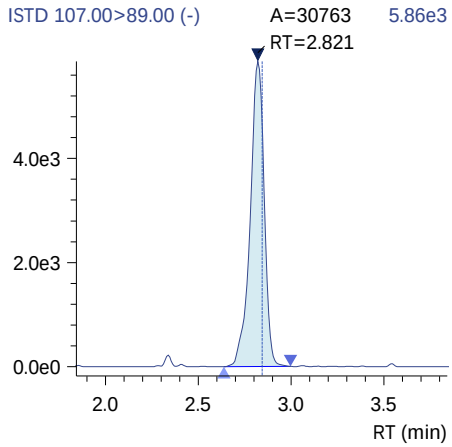
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

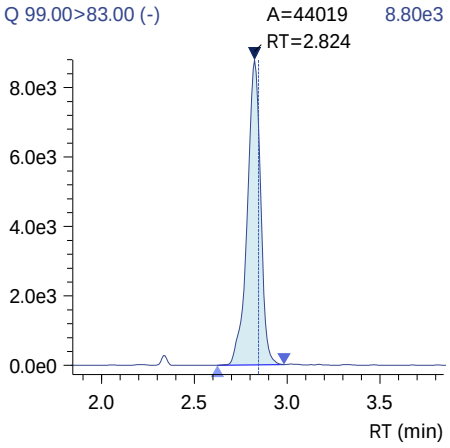
Printed at 7/21/2022 10:35:14 AM

E2200665-006X5

Sample ID: E2200665-006X5
Date Acquired: 7/20/2022 5:41:52 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_039.lcd
Vial: 14 | Inj. Volume: 25.0000uL | Tray: 2

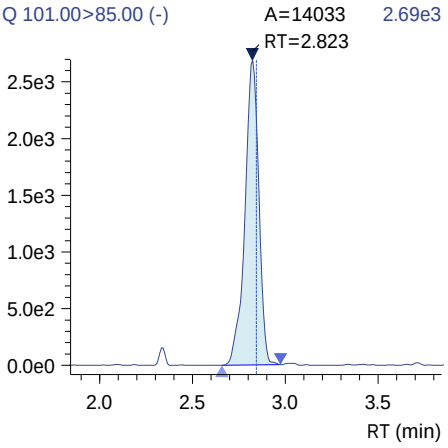
Perchlorate

Conc 7.9363



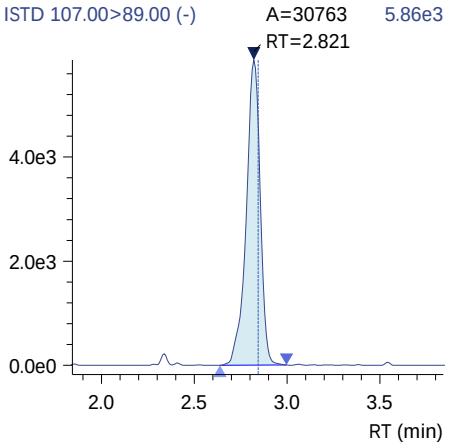
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

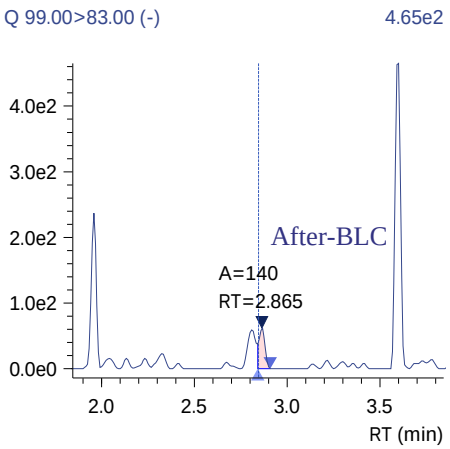
E2200665-007X5

Sample ID: E2200665-007X5
Date Acquired: 7/20/2022 5:49:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_040.lcd
Vial: 15 | Inj. Volume: 25.0000uL | Tray: 2

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	M	2.865	140	29984	0.0248	ng/mL	23.57	23.34-43.34
Perchlorate 2	M	2.873	33	29984	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.829	29984	29984	1.0000	ng/mL	----	

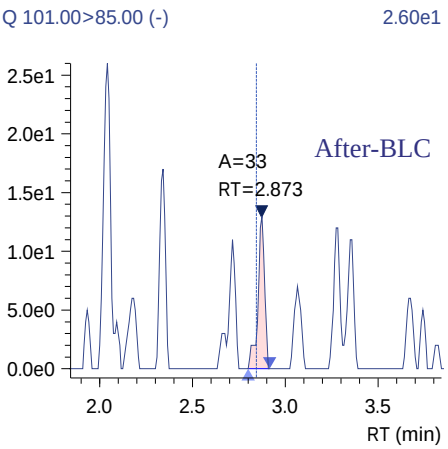
Perchlorate

Conc 0.0248



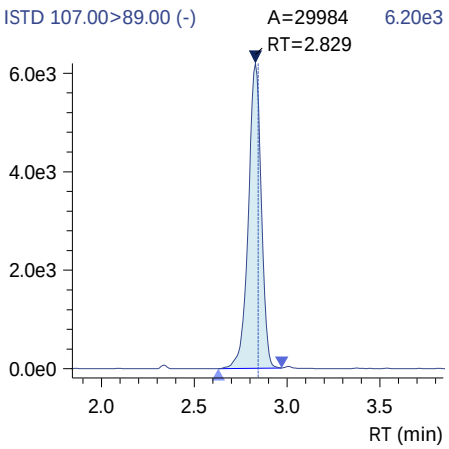
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

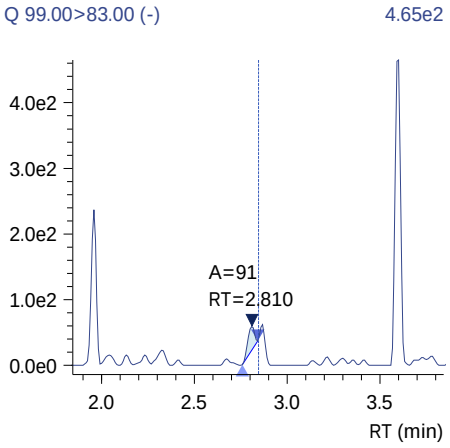
Printed at 7/21/2022 10:35:14 AM

E2200665-007X5

Sample ID: E2200665-007X5
Date Acquired: 7/20/2022 5:49:48 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_040.lcd
Vial: 15 | Inj. Volume: 25.0000uL | Tray: 2

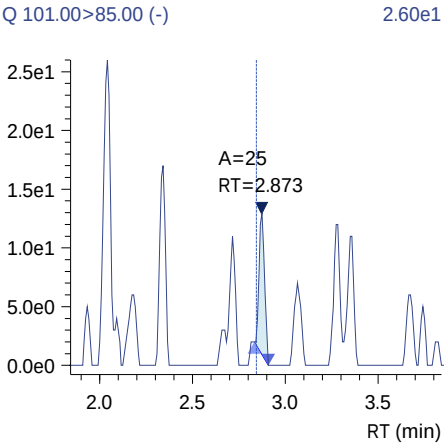
Perchlorate

Conc 0.0168



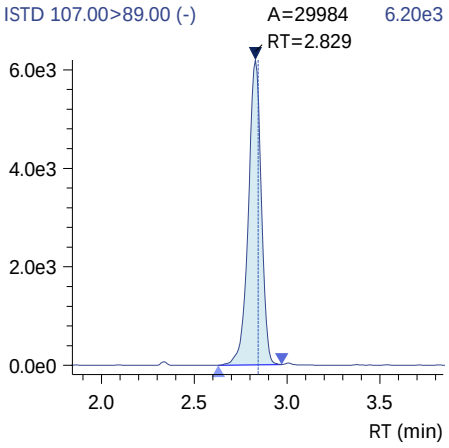
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 8:33:26 AM

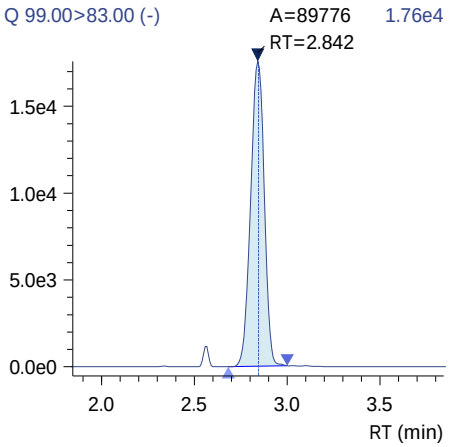
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 5:57:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_041.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Name	Mode ID	Found RT	Area	ISTD Area	Conc.	Unit	Ref 1 Actual Ratio	Comment 1
Perchlorate	Auto	2.842	89776	45835	10.4185	ng/mL	33.05	23.34-43.34
Perchlorate 2	Auto	2.840	29667	45835	0.0000	ng/mL	----	
Sodium Perchlorate-18O4_IS	Auto	2.841	45835	45835	1.0000	ng/mL	----	

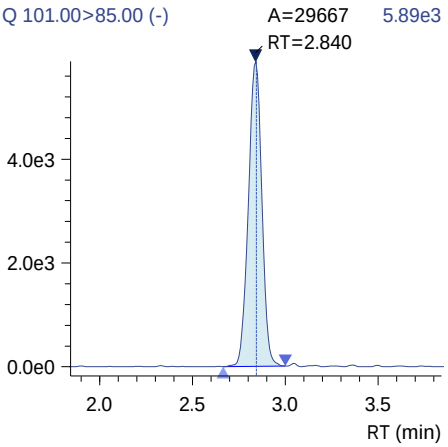
Perchlorate

Conc 10.4185



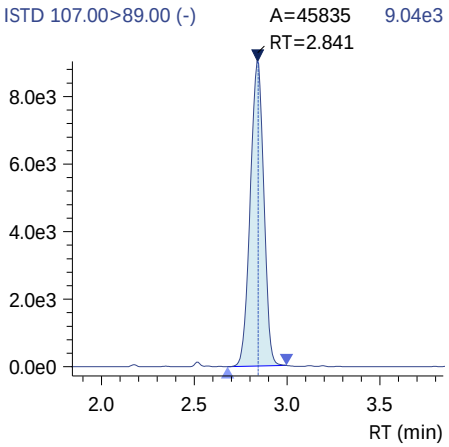
Perchlorate 2

Conc 0.0000



Sodium Perchlorate-18O4_IS

Conc 1.0000



Insight Report

Printed at 7/21/2022 10:35:14 AM

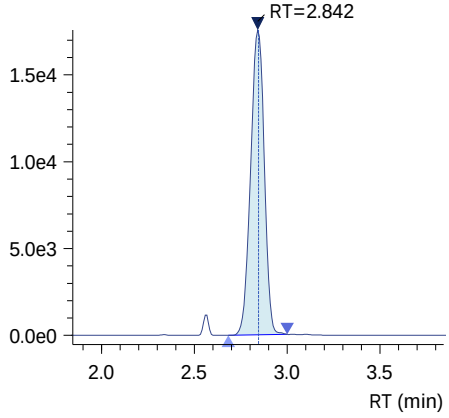
PERCHLORATE7

Sample ID: PERCHLORATE7
Date Acquired: 7/20/2022 5:57:40 PM
Acquired by: System Administrator
Data File: I:\LCMS01\DATA\20220720\20220720_041.lcd
Vial: 26 | Inj. Volume: 25.0000uL | Tray: 1

Perchlorate

Conc 10.8635

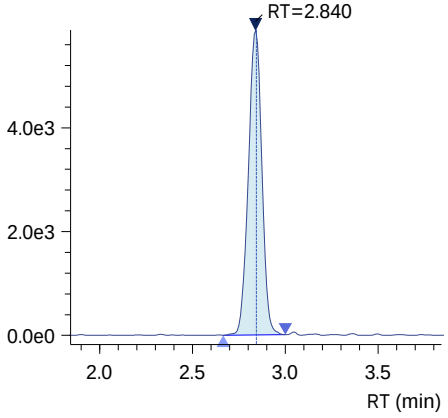
Q 99.00>83.00 (-) A=89776 1.76e4 RT=2.842



Perchlorate 2

Conc 0.0000

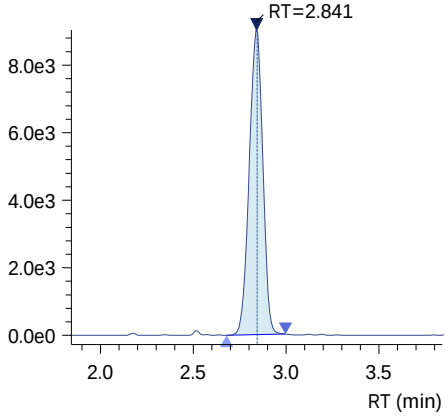
Q 101.00>85.00 (-) A=29667 5.89e3 RT=2.840



Sodium Perchlorate-18O4_IS

Conc 1.0000

ISTD 107.00>89.00 (-) A=45835 9.04e3 RT=2.841



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Houston, TX 77099
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alsglobal.com

right solutions.
right partner.

WorkOrder: HS22100890

LHAAP 16 June 2022 - WW24

Aptim Environmental & Infrastucture, Inc.

Vicki Graves
10333 Richmond Ave Ste 1030
Houston TX 77042

31-Oct-2022

ALS Environmental
ALS Group USA, Corp
10450 Stancliff Road, Suite 210
Houston, TX 77099
T : +1 281 530 5656
F : +1 281 530 5887
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  - Weight/Volume Log
  - Dates Report
  - QC
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  - COC
- HS22100890 - ME - ICP_W_DOD
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  - Form 7 - ICPMS07_420381 LCS
  - Form 8 - ICPMS07_420381 SD

HS22100890 LHAAP 16 June 2022 WW24
Final

ALS WO# HS22100890

10450 Stancliff Rd. Suite 210
Houston, TX 77099
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October 27, 2022

Vicki Graves
Aptim Environmental & Infrastucture, Inc.
10333 Richmond Ave
Ste 1030
Houston, TX 77042

Work Order: **HS22100890**

Laboratory Results for: **LHAAP 16 June 2022 - WW24**

Dear Vicki Graves ,

ALS Environmental received 1 sample(s) on Oct 17, 2022 for the analysis presented in the following report.

The analytical data provided relates directly to the samples received by ALS Environmental and for only the analyses requested. Results are expressed as "as received" unless otherwise noted.

QC sample results for this data met EPA or laboratory specifications except as noted in the Case Narrative or as noted with qualifiers in the QC batch information. Should this laboratory report need to be reproduced, it should be reproduced in full unless written approval has been obtained by ALS Environmental. Samples will be disposed in 30 days unless storage arrangements are made.

If you have any questions regarding this report, please feel free to call me.

Sincerely,



Generated By: DAYNA.FISHER
Dane J. Wacasey

ALS Houston, US Date: 27-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
Work Order: HS22100890

SAMPLE SUMMARY

Lab Samp ID	Client Sample ID	Matrix	TagNo	Collection Date	Date Received	Hold
HS22100890-01	16WW24-220627	Groundwater		27-Jun-2022 08:10	29-Jun-2022 09:50	☐

ALS Houston, US Date: 27-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
Work Order: HS22100890

CASE NARRATIVE

Work Order Comments

- This report contains additional analyses. The sample was originally reported as ALS Workorder Number HS22070088.

Metals by Method SW6020A

Batch ID: 185275

- The test results meet requirements of the current NELAP standards, state requirements or programs where applicable.

ALS Houston, US Date: 27-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
Sample ID: 16WW24-220627
Collection Date: 27-Jun-2022 08:10

ANALYTICAL REPORT
WorkOrder:HS22100890
Lab ID:HS22100890-01
Matrix:Groundwater

ANALYSES	RESULT	QUAL	DL	LOD	LOQ	UNITS	DILUTION FACTOR	DATE ANALYZED
METALS BY ICPMS BY SW6020A		**Method:SW6020A**				Prep:SW3010A / 25-Oct-2022		Analyst: JHD
Manganese	**7.01**		**0.0140**	**0.0500**	**0.100**	**mg/L**	20	27-Oct-2022 11:52

Note: See Qualifiers Page for a list of qualifiers and their explanation.

Weight / Prep Log

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

Batch ID: 185275 **Start Date:** 25 Oct 2022 10:00 **End Date:** 25 Oct 2022 14:00
Method: WATER - SW3010A **Prep Code:** 3010A

Sample ID	Container	Sample Wt/Vol	Final Volume	Prep Factor	
HS22100890-01		10 (mL)	10 (mL)	1	120 plastic HNO3

ALS Houston, US Date: 27-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

DATES REPORT

Sample ID	Client Samp ID	Collection Date	Leachate Date	Prep Date	Analysis Date	DF
Batch ID: 185275 (0)	**Test Name :** METALS BY ICPMS BY SW6020A				**Matrix:** Groundwater	
HS22100890-01	16WW24-220627	27 Jun 2022 08:10		25 Oct 2022 10:00	27 Oct 2022 11:52	20

ALS Houston, US Date: 27-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

QC BATCH REPORT

Batch ID: 185275 (0) **Instrument: ICPMS07** **Method: METALS BY ICPMS BY SW6020A**

MBLK Sample ID: **MBLK-185275** Units: **mg/L** Analysis Date: **27-Oct-2022 11:08**
Client ID: Run ID: **ICPMS07_420381** SeqNo: **6945249** PrepDate: **25-Oct-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Manganese	0.00250	0.00500								U

LCS Sample ID: **LCS-185275** Units: **mg/L** Analysis Date: **27-Oct-2022 11:10**
Client ID: Run ID: **ICPMS07_420381** SeqNo: **6945250** PrepDate: **25-Oct-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Manganese	0.0508	0.00500	0.05	0	102	87 - 115				

MS Sample ID: **HS22100782-03MS** Units: **mg/L** Analysis Date: **27-Oct-2022 11:36**
Client ID: Run ID: **ICPMS07_420381** SeqNo: **6945263** PrepDate: **25-Oct-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Manganese	0.2263	0.00500	0.05	0.178	96.6	87 - 115				

MSD Sample ID: **HS22100782-03MSD** Units: **mg/L** Analysis Date: **27-Oct-2022 11:37**
Client ID: Run ID: **ICPMS07_420381** SeqNo: **6945264** PrepDate: **25-Oct-2022** DF: **1**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%RPD	RPD Limit	Qual
Manganese	0.2322	0.00500	0.05	0.178	108	87 - 115	0.2263	2.58	20	

SD Sample ID: **HS22100782-03SD** Units: **mg/L** Analysis Date: **27-Oct-2022 11:34**
Client ID: Run ID: **ICPMS07_420381** SeqNo: **6945262** PrepDate: **25-Oct-2022** DF: **5**

Analyte	Result	PQL	SPK Val	SPK Ref Value	%REC	Control Limit	RPD Ref Value	%D	%D Limit	Qual
Manganese	0.1772	0.0250					0.178	0.469	10	

The following samples were analyzed in this batch: HS22100890-01

ALS Houston, US Date: 27-Oct-22

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: **HS22100890**

QUALIFIERS, ACRONYMS, UNITS

Qualifier	Description
*	Value exceeds Regulatory Limit
a	Not accredited
B	Analyte detected in the associated Method Blank above the Reporting Limit
E	Value above quantitation range
H	Analyzed outside of Holding Time
J	Analyte detected below quantitation limit
M	Manually integrated, see raw data for justification
n	Not offered for accreditation
ND	Not Detected at the Reporting Limit
O	Sample amount is > 4 times amount spiked
P	Dual Column results percent difference > 40%
R	RPD above laboratory control limit
S	Spike Recovery outside laboratory control limits
U	Analyzed but not detected above the MDL/SDL

Acronym	Description
DCS	Detectability Check Study
DUP	Method Duplicate
LCS	Laboratory Control Sample
LCSD	Laboratory Control Sample Duplicate
MBLK	Method Blank
MDL	Method Detection Limit
MQL	Method Quantitation Limit
MS	Matrix Spike
MSD	Matrix Spike Duplicate
PDS	Post Digestion Spike
PQL	Practical Quantitaion Limit
SD	Serial Dilution
SDL	Sample Detection Limit
TRRP	Texas Risk Reduction Program

CERTIFICATIONS,ACCREDITATIONS & LICENSES

Agency	Number	Expire Date
Arkansas	22-041-0	27-Mar-2023
California	2919 2022-2023	30-Apr-2023
Dept of Defense	L21-682	31-Dec-2023
Florida	E87611-36	30-Jun-2023
Illinois	2000322022-9	09-May-2023
Kansas	E-10352; 2022-2023	31-Jul-2023
Kentucky	123043, 2022-2023	30-Apr-2023
Louisiana	03087, 2022-2023	30-Jun-2023
Maryland	343, 2022-2023	30-Jun-2023
North Carolina	624-2022	31-Dec-2022
North Dakota	R-193 2022-2023	30-Apr-2023
Oklahoma	2022-141	31-Aug-2023
Texas	T104704231-22-29	30-Apr-2023
Utah	TX026932022-13	31-Jul-2023

ALS Houston, US Date: 27-Oct-22

Sample Receipt Checklist

Work Order ID: HS22100890 **Date/Time Received:** **17-Oct-2022 08:00**

Client Name: CBI-Houston **Received by:** **Pablo Marinez**

Completed By:	/S/ Pablo Marinez	29-Jun-2022 16:30	**Reviewed by:**	/S/ Dane J. Wacasey	27-Oct-2022 14:09
	eSignature	Date/Time		eSignature	Date/Time

Matrices: **WATER** Carrier name: **FedEx Priority Overnight**

Shipping container/cooler in good condition?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on shipping container/cooler?	Yes ☑	No ☐	Not Present ☐
Custody seals intact on sample bottles?	Yes ☐	No ☐	Not Present ☑
VOA/TX1005/TX1006 Solids in hermetically sealed vials?	Yes ☐	No ☐	Not Present ☑
Chain of custody present?	Yes ☑	No ☐	2 Page(s)
Chain of custody signed when relinquished and received?	Yes ☑	No ☐	COC IDs:CLIENT
Samplers name present on COC?	Yes ☑	No ☐	
Chain of custody agrees with sample labels?	Yes ☑	No ☐	
Samples in proper container/bottle?	Yes ☑	No ☐	
Sample containers intact?	Yes ☑	No ☐	
Sufficient sample volume for indicated test?	Yes ☑	No ☐	
All samples received within holding time?	Yes ☑	No ☐	
Container/Temp Blank temperature in compliance?	Yes ☑	No ☐	

Temperature(s)/Thermometer(s):	0.9°C/1.4°C UC/C	IR 31
Cooler(s)/Kit(s):	49231	
Date/Time sample(s) sent to storage:	6/29/22 16:45	

Water - VOA vials have zero headspace?	Yes ☑	No ☐	No VOA vials submitted ☐
Water - pH acceptable upon receipt?	Yes ☐	No ☑	N/A ☐
pH adjusted?	Yes ☑	No ☐	N/A ☐
pH adjusted by:	Corey Grandits		

Login Notes: relog of HS22070088-02 16WW24 for manganese
Unpreserved perchlorate volume split off and preserved with HNO3 for 6020 metals analysis.

Client Contacted: Date Contacted: Person Contacted:

Contacted By: Regarding:

Comments:

Corrective Action:

REVISED 10L 10-12-22

CHAIN OF CUSTODY

Name Of Lab Shipping To: ALS 10450 Stancliff Rd. Suite 210 Houston, TX. 77099 (281) 575-2190 ATTN: Dane Wacasey

Project: APTIM LONGHORN ARMY AMMN. PLANT (LHAAP) GROUNDWATER TREATMENT PLANT (GWTP) KARNACK, TEXAS	Project No. 501032
Job: **LHAAP 16 January 2022**	
Prepared By: Scott Beesinger	P.O. Number

Field Sample I.D. / Time	Sample Matrix	Date /	MS / MSD	No. OF CONTAINERS	Analyses: VOC by SW 8260B	~~TOC by SM5310C~~ 6020 MN	MEE by RSK 175	Anions sulfate and nitrate by SW9056	CO2 by RSK 175	Perchlorate by SW 6850	Remarks (Preservatives, etc.)	Lab I.D.#
16WW23-220627	WG	6/27/22 0725		4	X					X		
16WW24-220627	WG	6/27/22 0810		4	X	X				X		
16WW24-220627-MS	WG	6/27/22 0810		4	X					X		
16WW24-220627-MSD	WG	6/27/22 0810		4	X					X		
16WW27-220627	WG	6/27/22 1000		4	X					X		
16WW43-220627	WG	6/27/22 1040		4	X					X		
16RW05-220627	WG	6/27/22 1120		7	X		X			X		
16PM09-220627	WG	6/27/22 1300		4	X					X		

HS22100890

Aptim Environmental & Infrastucture, Inc.

LHAAP 16 June 2022

Additional Remarks: Standard TAT on all parameters. Please email results to Vicki.Graves@aptim.com and invoices to fedinvoices@aptim.com

Relinquished By:	Date	Time	Received By:	Date	Time	Relinquished By:	Date	Time	Received By:	Date	Time
	6/28/22	1400		6/29/22	0930						

For Lab Use Only

Received At Lab By:	Date	Time	Airbill No.	Opened By:	Date	Time	Temp of Container	Seal No.	Condition

Remarks:

9/29/22 0930 12.2 UPlaw

(Word) S:\Forms\Chain of Custody - BiWeekly

ALS
1945 Stencliff Rd., Suite 210
Houston Texas 77099
Tel: +1 281 530 5656
Fax: +1 281 530 5887 49231

CUSTODY SEAL

Date: 6/28/22 Time: 1730

Company: SHELL

Seal Broken By:

Date: 6/29/22

FedEx 7789 1994 3398 PRIORITY OVERNIGHT

AB SGRA 49231 77099

TX-US

IAH

HS22100890 - ME - ICP_W_DOD

ALS WO# HS22100890

ALS Houston, US Date: 31-Oct-22

FORM 13 - ANALYSIS RUN LOG

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890
Start Date: 27-Oct-2022 End Date: 27-Oct-2022

Run ID:ICPMS07_420381
Instrument:ICPMS07
Method:

Sample No.	D/F	Time	FileID	Analytes
ICPMS07_420381_Tune	1	27-Oct-2022 00:00	ICPMS07_420381_Tune_1	
CAL BLK	1	27-Oct-2022 10:24	004CALB.d_6945213	MN
2/10/200	1	27-Oct-2022 10:26	005CALS.d_6945214	MN
5/25/500	1	27-Oct-2022 10:28	006CALS.d_6945215	MN
10/50/100	1	27-Oct-2022 10:30	007CALS.d_6945216	MN
100/500/10K	1	27-Oct-2022 10:31	008CALS.d_6945217	MN
200/1000/20K	1	27-Oct-2022 10:33	009CALS.d_6945218	MN
ICV	1	27-Oct-2022 10:41	011_ICV.d_6945220	MN
LLICV2	1	27-Oct-2022 10:43	012LCV2.d_6945221	MN
LLICV5	1	27-Oct-2022 10:45	013LCV5.d_6945222	MN
ICB	1	27-Oct-2022 10:47	014_ICB.d_6945223	MN
ICSA	1	27-Oct-2022 10:52	015ICSA.d_6945224	MN
ICSAB	1	27-Oct-2022 10:54	016ICSB.d_6945225	MN
CCV 1	1	27-Oct-2022 11:04	018_CCV.d_6945247	MN
CCB 1	1	27-Oct-2022 11:06	019_CCB.d_6945248	MN
MBLK-185275	1	27-Oct-2022 11:08	020SMPL.d_6945249	MN
LCS-185275	1	27-Oct-2022 11:10	021SMPL.d_6945250	MN
CCV 2	1	27-Oct-2022 11:27	030_CCV.d_6945259	MN
CCB 2	1	27-Oct-2022 11:29	031_CCB.d_6945260	MN
ZZZZZZSD	5	27-Oct-2022 11:34	033SMPL.d_6945262	MN
ZZZZZZMS	1	27-Oct-2022 11:36	034SMPL.d_6945263	MN
ZZZZZZMSD	1	27-Oct-2022 11:37	035SMPL.d_6945264	MN
16WW24-220627	20	27-Oct-2022 11:52	039SMPL.d_6945332	MN
ZZZZZZPDS	1	27-Oct-2022 11:54	040SMPL.d_6945333	
CCV 3	1	27-Oct-2022 11:58	042_CCV.d_6945335	MN
CCB 3	1	27-Oct-2022 12:00	043_CCB.d_6945336	MN

ALS Houston, US

Date: 31-Oct-22

Form 2 - Initial and Continuing Calibration Verification

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

Run ID: ICPMS07_420381
Instrument: ICPMS07
Method: SW6020A

ICV	Date: 27-Oct-2022 10:41		Seq: 6945220	ICV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	100.577	101	90-110	

CCV1	Date: 27-Oct-2022 11:04		Seq: 6945247	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	103.119	103	90-110	

CCV2	Date: 27-Oct-2022 11:27		Seq: 6945259	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	102.294	102	90-110	

CCV3	Date: 27-Oct-2022 11:58		Seq: 6945335	CCV	Units: ug/L
Analyte	**True**	**Found**	**%R**	**Control Limits**	**Flag**
Manganese	100	102.951	103	90-110	

Form 3 - BLANKS

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

Run ID: ICPMS07_420381
Instrument: ICPMS07
Method: SW6020A

ICB	Date: 27-Oct-2022 10:47		Seq: 6945223	ICB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	

CCB1	Date: 27-Oct-2022 11:06		Seq: 6945248	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	

MBLK-185275	Date: 27-Oct-2022 11:08		Seq: 6945249	MBLK	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	

CCB2	Date: 27-Oct-2022 11:29		Seq: 6945260	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	

CCB3	Date: 27-Oct-2022 12:00		Seq: 6945336	CCB	Units: ug/L
Analyte	**Result**	**MDL**	**Report Limit**	**Qual**	
Manganese	5	0.7	5	U	

ALS Houston, US Date: 31-Oct-22

Form 4 - ICP Interference Check Sample

Client: Aptim Environmental & Infrastucture, Inc. Run ID: ICPMS07_420381
Project: LHAAP 16 June 2022 - WW24 Instrument: ICPMS07
WorkOrder: HS22100890 Method: SW6020A

ICSA	Date: 27-Oct-2022 10:52	Seq: 6945224	ICSA	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Manganese		0.459	0	

ICSAB	Date: 27-Oct-2022 10:54	Seq: 6945225	ICSAB	Units: ug/L
Analyte	**True**	**Found**	**%R**	
Manganese	100	102.3	102	

ALS Houston, US

Date: 31-Oct-22

Form 5A - Matrix Spike/Matrix Spike Duplicate Recovery

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

Date Analyzed: 27-Oct-2022 11:37
Date Extracted: 25-Oct-2022 10:00
Units: ug/L

Matrix Spike: HS22100782-03MS
Client Sample ID:

Analysis Method: SW6020A

Analyte	Sample Result	MS Result	Spike Amount	% Rec	MSD Result	Spike Amount	% Rec	% Rec Limits	RPD	RPD Limit
Manganese	178.0	226.3	50.00	96.6	232.2	50.00	108	87-115	2.58	20

ALS Houston, US

Date: 31-Oct-22

Form 7 - Laboratory Control Sample

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

Date Analyzed: 27-Oct-2022 11:10
Date Extracted: 25-Oct-2022 10:00
Units: ug/L

Lab Sample ID: LCS-185275
Analysis Method: SW6020A

Analyte	Spike Amount	LCS Result	% Rec	% Rec Limits
Manganese	50	50.8	102	87-115

ALS Houston, US

Date: 31-Oct-22

Form 8 - ICP Serial Dilutions

Client: Aptim Environmental & Infrastucture, Inc.
Project: LHAAP 16 June 2022 - WW24
WorkOrder: HS22100890

Date Analyzed: 27-Oct-2022 11:34
Date Extracted: 25-Oct-2022 10:00
Units: ug/L

Lab Sample ID: HS22100782-03SD
Client Sample ID:

Analysis Method: SW6020A

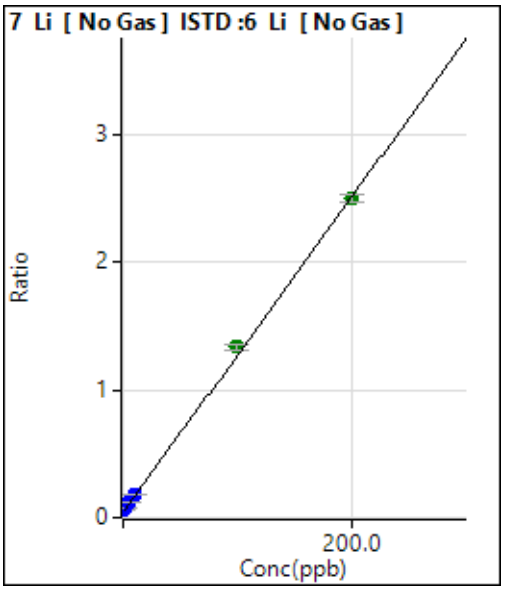
Analyte	Sample Result	C	SD Result	C	RPD	Q
Manganese	178		177.2		0	

Calibration for 279_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\102722B.b\
Analysis File: 102722B.batch.bin
DA Date-Time: 10/27/2022 23:05:31
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	273CALB.d	CAL BLK	10/27/2022 22:53:36
2	274CALS.d	2/10/200	10/27/2022 22:55:30
3	275CALS.d	5/25/500	10/27/2022 22:57:24
4	276CALS.d	10/50/100	10/27/2022 22:59:18
5	277CALS.d	100/500/10K	10/27/2022 23:01:12
6	278CALS.d	200/1000/20K	10/27/2022 23:03:01

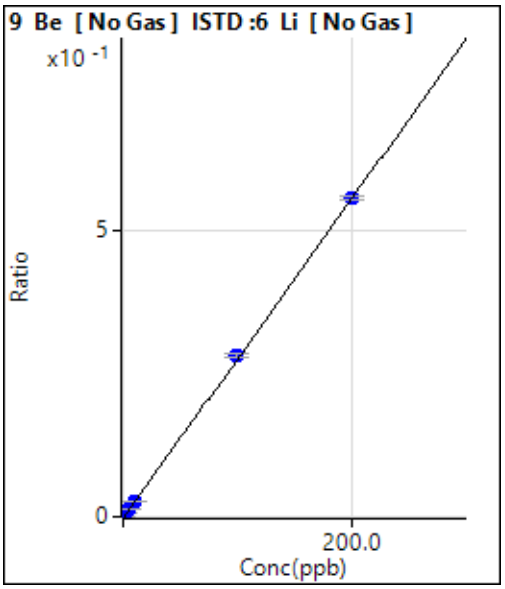
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	37407.95	0.0546	P	4.4	
2	☐	2.000	2.049	53829.04	0.0799	P	1.4	2.4
3	☐	5.000	5.073	78001.54	0.1173	P	1.1	1.5
4	☐	10.000	9.857	116102.87	0.1765	P	0.3	-1.4
5	☐	100.000	103.764	931824.36	1.3381	A	3.2	3.8
6	☐	200.000	198.123	1711093.26	2.5054	A	2.0	-0.9

y = 0.0124 * x + 0.0546
R = 0.9997
DL = 0.5761 ppb
BEC = 4.411 ppb

Weight: <None>
Min Conc: <None>

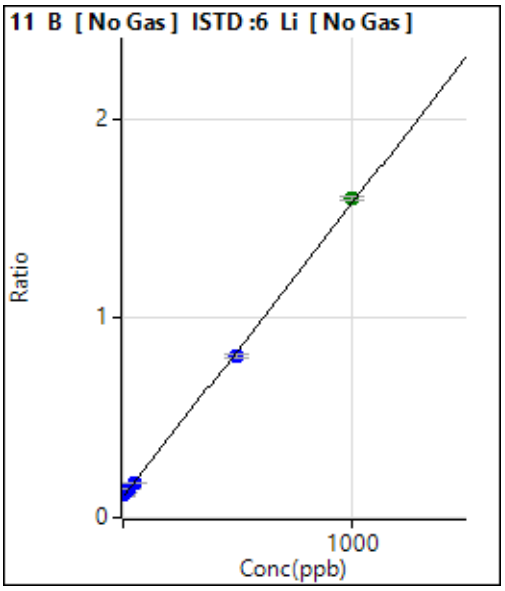


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3.33	0.0000	P	173.2	
2	☐	2.000	2.018	3797.21	0.0056	P	4.7	0.9
3	☐	5.000	4.948	9186.39	0.0138	P	1.3	-1.0
4	☐	10.000	10.059	18472.25	0.0281	P	0.3	0.6
5	☐	100.000	100.848	196039.97	0.2815	P	2.7	0.8
6	☐	200.000	199.574	380478.72	0.5571	P	1.3	-0.2

y = 0.0028 * x + 4.5543E-006
R = 1.0000
DL = 0.008478 ppb
BEC = 0.001632 ppb

Weight: <None>
Min Conc: <None>

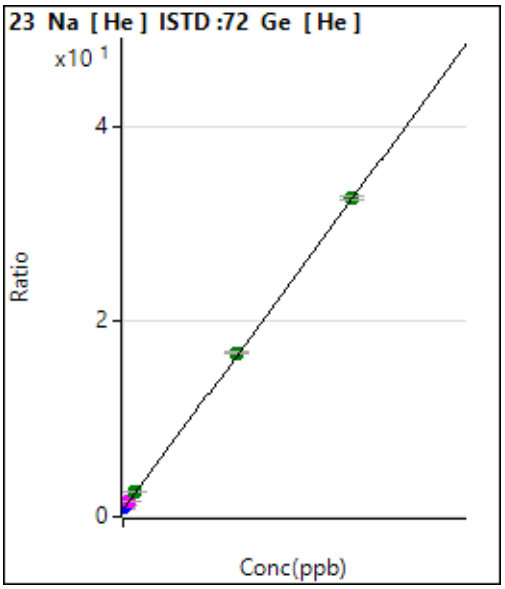
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	77435.52	0.1131	P	6.7	
2	☐	10.000	7.627	83711.07	0.1243	P	2.7	-23.7
3	☐	25.000	19.327	94064.08	0.1415	P	1.1	-22.7
4	☐	50.000	41.831	114854.08	0.1746	P	0.4	-16.3
5	☐	500.000	474.439	564883.83	0.8108	P	1.8	-5.1
6	☐	1000.000	1013.354	1095173.60	1.6035	A	1.4	1.3

y = 0.0015 * x + 0.1131
R = 0.9996
DL = 15.45 ppb
BEC = 76.88 ppb

Weight: <None>
Min Conc: <None>

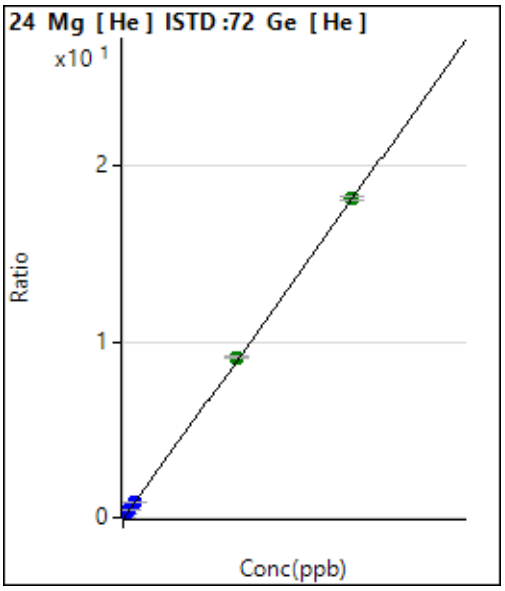


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	425164.68	0.8896	P	1.0	
2	☐	200.000	189.648	574926.22	1.1909	P	0.3	-5.2
3	☐	500.000	482.195	789822.36	1.6557	M	1.0	-3.6
4	☐	1000.000	1014.266	1188518.39	2.5011	A	1.1	1.4
5	☐	10000.00	10013.54	8350951.75	16.7994	A	1.1	0.1
6	☐	20000.00	19993.06	15571699.7	32.6552	A	1.0	0.0

y = 0.0016 * x + 0.8896
R = 1.0000
DL = 17.28 ppb
BEC = 559.9 ppb

Weight: <None>
Min Conc: <None>

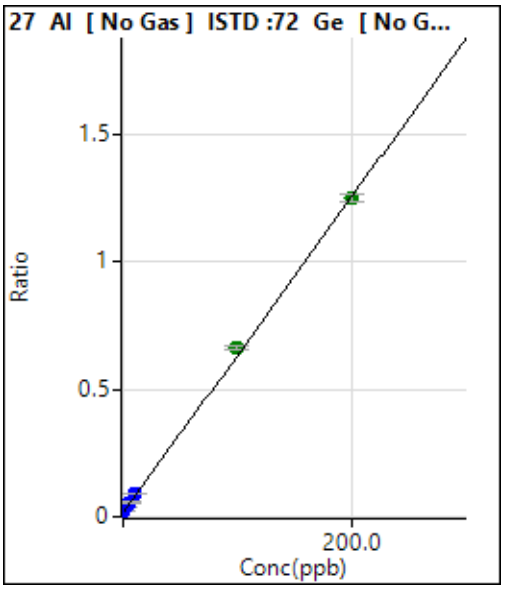
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	600.03	0.0013	P	2.5	
2	☐	200.000	203.122	89821.19	0.1861	P	2.1	1.6
3	☐	500.000	499.461	217378.62	0.4557	P	1.3	-0.1
4	☐	1000.000	1010.801	437633.43	0.9209	P	1.2	1.1
5	☐	10000.00	10038.48	4540900.04	9.1348	A	0.8	0.4
6	☐	20000.00	19980.20	8669275.50	18.1802	A	1.1	-0.1

y = 9.0985E-004 * x + 0.0013
R = 1.0000
DL = 0.1019 ppb
BEC = 1.38 ppb

Weight: <None>
Min Conc: <None>

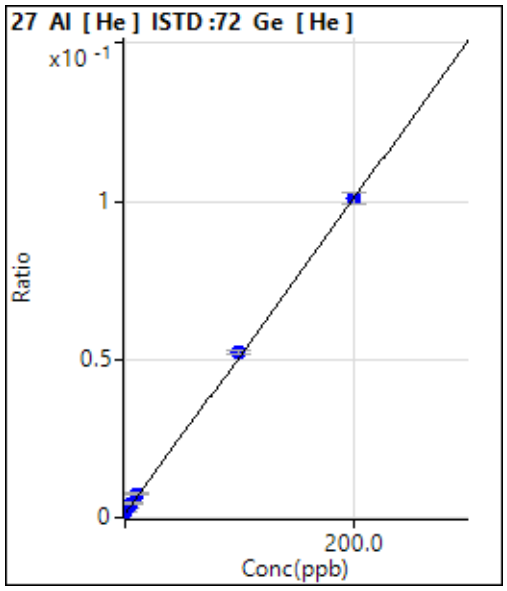


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	33179.79	0.0220	P	2.8	
2	☐	2.000	2.343	54804.68	0.0366	P	1.7	17.1
3	☐	5.000	5.532	85065.96	0.0563	P	3.2	10.6
4	☐	10.000	10.497	129232.85	0.0871	P	1.0	5.0
5	☐	100.000	103.488	1039153.06	0.6634	A	1.5	3.5
6	☐	200.000	198.214	1855478.15	1.2504	A	2.2	-0.9

y = 0.0062 * x + 0.0220
R = 0.9998
DL = 0.3037 ppb
BEC = 3.556 ppb

Weight: <None>
Min Conc: <None>

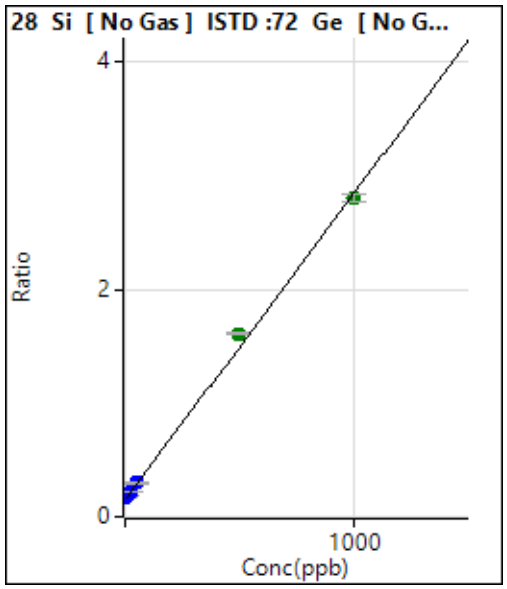
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	813.37	0.0017	P	8.2	
2	☐	2.000	2.828	1503.44	0.0031	P	10.0	41.4
3	☐	5.000	5.473	2113.53	0.0044	P	6.2	9.5
4	☐	10.000	11.695	3580.51	0.0075	P	3.8	16.9
5	☐	100.000	101.519	26007.88	0.0523	P	2.1	1.5
6	☐	200.000	199.136	48153.41	0.1010	P	3.3	-0.4

y = 4.9857E-004 * x + 0.0017
R = 0.9999
DL = 0.8386 ppb
BEC = 3.415 ppb

Weight: <None>
Min Conc: <None>

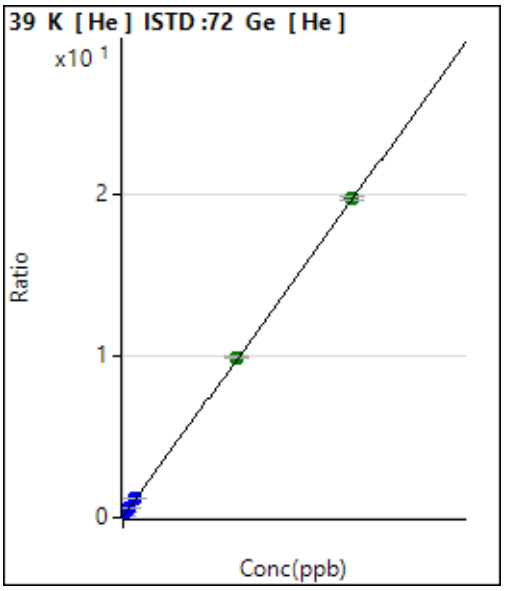


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	247835.98	0.1646	P	0.5	
2	☐	10.000	9.609	285563.68	0.1905	P	0.4	-3.9
3	☐	25.000	22.856	341572.48	0.2261	P	0.9	-8.6
4	☐	50.000	48.838	439216.11	0.2960	P	0.7	-2.3
5	☐	500.000	537.666	2523790.90	1.6110	A	0.6	7.5
6	☐	1000.000	981.283	4160908.06	2.8043	A	2.7	-1.9

y = 0.0027 * x + 0.1646
R = 0.9990
DL = 0.9301 ppb
BEC = 61.2 ppb

Weight: <None>
Min Conc: <None>

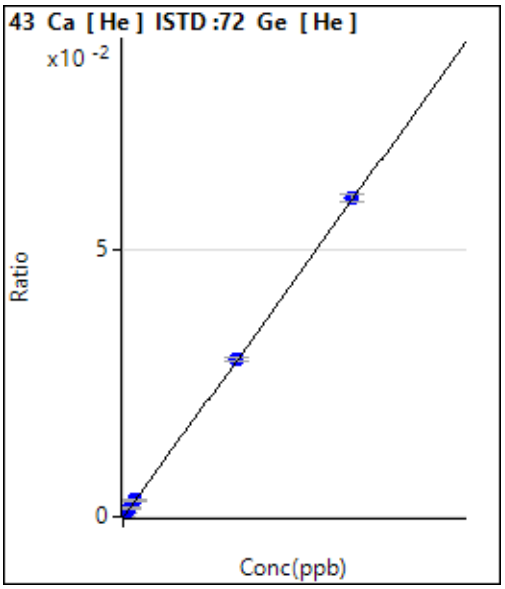
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	81516.56	0.1706	P	1.2	
2	☐	200.000	199.208	176259.98	0.3651	P	0.9	-0.4
3	☐	500.000	486.327	307927.40	0.6455	P	0.5	-2.7
4	☐	1000.000	995.257	542933.36	1.1425	P	0.8	-0.5
5	☐	10000.00	9968.620	4923956.39	9.9058	A	1.5	-0.3
6	☐	20000.00	20016.27	9402693.40	19.7181	A	0.7	0.1

y = 9.7658E-004 * x + 0.1706
R = 1.0000
DL = 6.249 ppb
BEC = 174.6 ppb

Weight: <None>
Min Conc: <None>

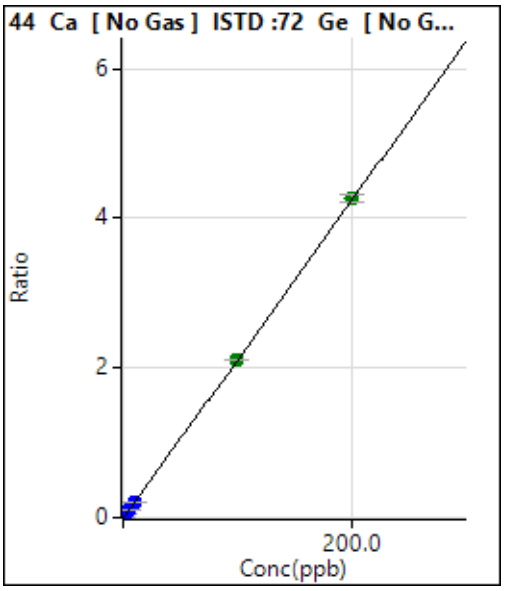


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	53.33	0.0001	P	29.4	
2	☐	200.000	190.313	326.68	0.0007	P	13.3	-4.8
3	☐	500.000	489.774	746.70	0.0016	P	15.9	-2.0
4	☐	1000.000	1005.070	1470.11	0.0031	P	3.8	0.5
5	☐	10000.00	9881.469	14628.01	0.0294	P	2.7	-1.2
6	☐	20000.00	20059.36	28432.93	0.0596	P	2.7	0.3

y = 2.9670E-006 * x + 1.1172E-004
R = 1.0000
DL = 33.2 ppb
BEC = 37.65 ppb

Weight: <None>
Min Conc: <None>

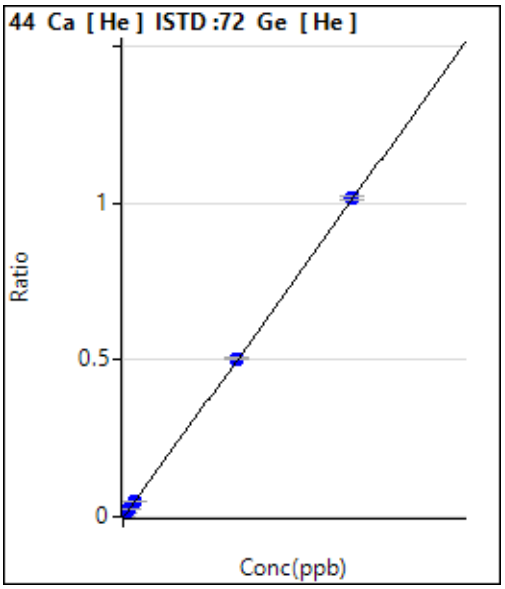
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	10881.14	0.0072	P	3.0	
2	☐	2.000	1.987	74169.19	0.0495	P	0.1	-0.6
3	☐	5.000	4.706	162048.56	0.1073	P	1.1	-5.9
4	☐	10.000	9.579	312894.81	0.2109	P	1.0	-4.2
5	☐	100.000	99.248	3316799.95	2.1172	A	0.3	-0.8
6	☐	200.000	200.405	6332840.12	4.2677	A	2.0	0.2

y = 0.0213 * x + 0.0072
R = 1.0000
DL = 0.0308 ppb
BEC = 0.34 ppb

Weight: <None>
Min Conc: <None>

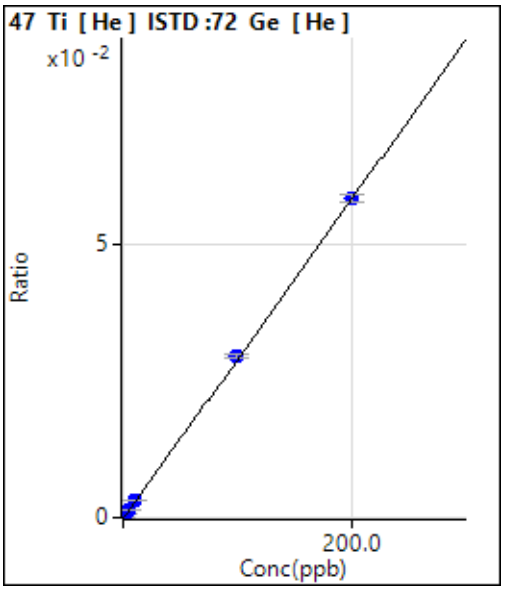


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	556.69	0.0012	P	14.7	
2	☐	200.000	190.376	5227.75	0.0108	P	5.0	-4.8
3	☐	500.000	477.614	12118.91	0.0254	P	2.7	-4.5
4	☐	1000.000	961.197	23734.08	0.0499	P	3.2	-3.9
5	☐	10000.00	9918.445	250804.29	0.5045	P	1.3	-0.8
6	☐	20000.00	20043.37	485630.49	1.0184	P	0.6	0.2

y = 5.0752E-005 * x + 0.0012
R = 1.0000
DL = 10.13 ppb
BEC = 22.95 ppb

Weight: <None>
Min Conc: <None>

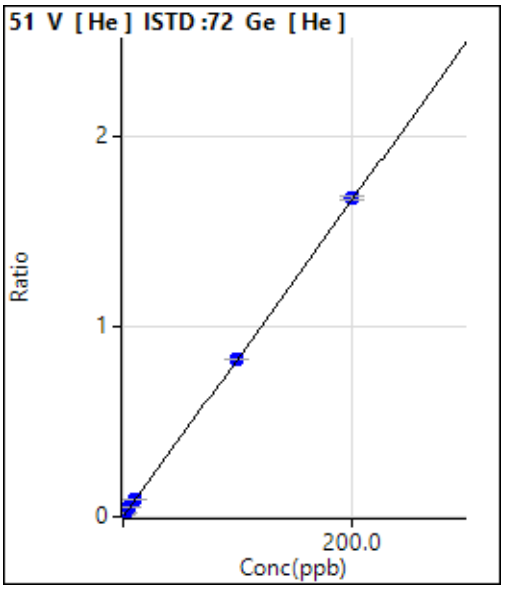
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	16.67	0.0000	P	91.8	
2	☐	2.000	1.973	296.68	0.0006	P	26.9	-1.4
3	☐	5.000	4.451	640.03	0.0013	P	11.5	-11.0
4	☐	10.000	10.541	1486.78	0.0031	P	4.3	5.4
5	☐	100.000	100.713	14708.13	0.0296	P	2.0	0.7
6	☐	200.000	199.631	27952.18	0.0586	P	2.3	-0.2

y = 2.9345E-004 * x + 3.5100E-005
R = 1.0000
DL = 0.3296 ppb
BEC = 0.1196 ppb

Weight: <None>
Min Conc: <None>

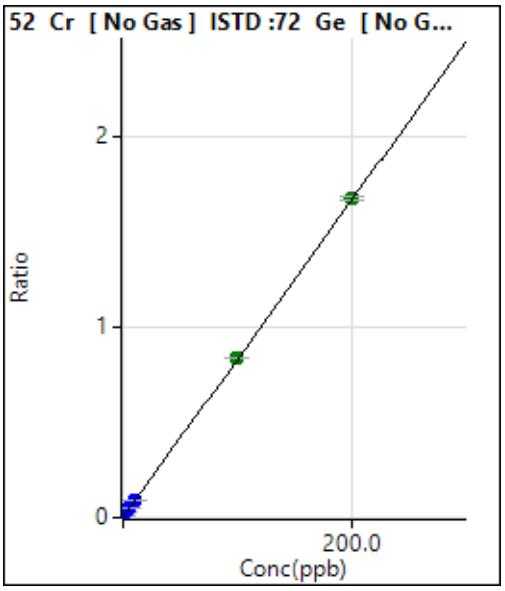


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	3852.79	0.0081	P	1.0	
2	☐	2.000	2.011	11946.36	0.0247	P	1.9	0.6
3	☐	5.000	4.839	22999.30	0.0482	P	0.1	-3.2
4	☐	10.000	9.813	42521.23	0.0895	P	0.7	-1.9
5	☐	100.000	98.606	410704.23	0.8262	P	1.0	-1.4
6	☐	200.000	200.710	797964.25	1.6734	P	0.9	0.4

y = 0.0083 * x + 0.0081
R = 1.0000
DL = 0.03054 ppb
BEC = 0.9714 ppb

Weight: <None>
Min Conc: <None>

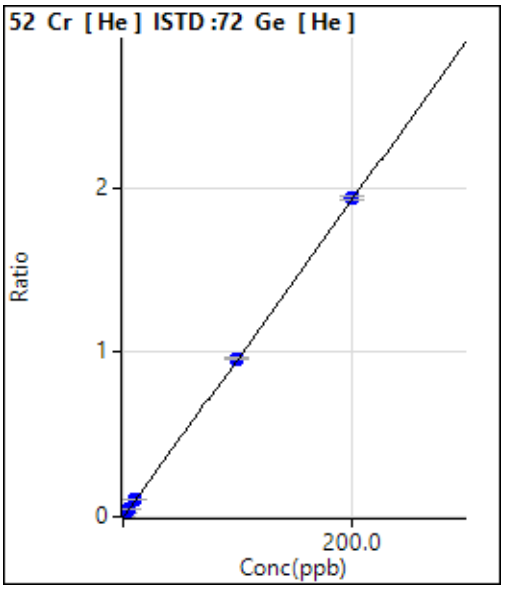
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	15155.25	0.0101	P	0.7	
2	☐	2.000	1.986	39928.58	0.0266	P	2.8	-0.7
3	☐	5.000	4.768	75289.86	0.0498	P	1.9	-4.6
4	☐	10.000	9.682	134794.90	0.0908	P	0.7	-3.2
5	☐	100.000	99.584	1317292.74	0.8409	A	0.9	-0.4
6	☐	200.000	200.230	2494302.20	1.6806	A	0.7	0.1

y = 0.0083 * x + 0.0101
R = 1.0000
DL = 0.02574 ppb
BEC = 1.207 ppb

Weight: <None>
Min Conc: <None>

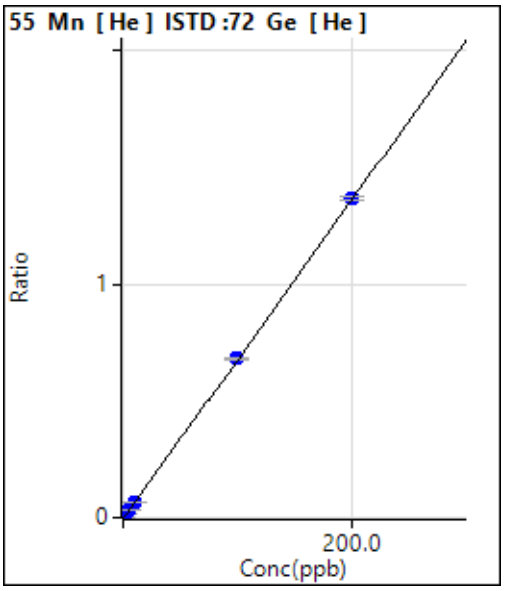


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	2120.20	0.0044	P	6.3	
2	☐	2.000	2.026	11588.43	0.0240	P	2.6	1.3
3	☐	5.000	4.793	24194.96	0.0507	P	1.8	-4.1
4	☐	10.000	9.893	47505.87	0.1000	P	1.0	-1.1
5	☐	100.000	98.971	477269.12	0.9601	P	1.3	-1.0
6	☐	200.000	200.524	925451.86	1.9408	P	1.2	0.3

y = 0.0097 * x + 0.0044
R = 1.0000
DL = 0.08714 ppb
BEC = 0.4592 ppb

Weight: <None>
Min Conc: <None>

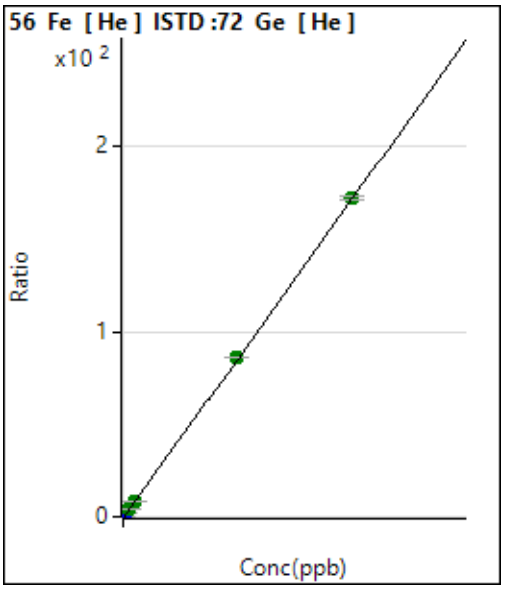
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	690.03	0.0014	P	11.2	
2	☐	2.000	1.904	6975.27	0.0144	P	3.8	-4.8
3	☐	5.000	4.894	16633.71	0.0349	P	3.1	-2.1
4	☐	10.000	9.733	32271.78	0.0679	P	1.3	-2.7
5	☐	100.000	99.705	339190.91	0.6823	P	0.8	-0.3
6	☐	200.000	200.164	652522.57	1.3684	P	0.8	0.1

y = 0.0068 * x + 0.0014
R = 1.0000
DL = 0.07093 ppb
BEC = 0.2115 ppb

Weight: <None>
Min Conc: <None>

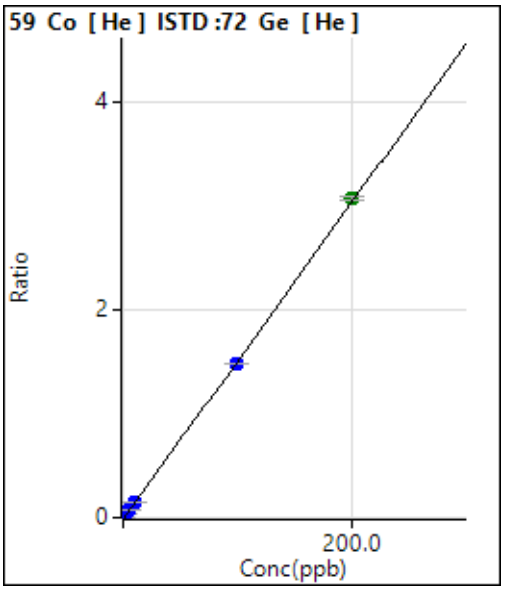


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	26439.26	0.0553	P	1.2	
2	☐	200.000	205.805	882398.40	1.8278	P	0.8	2.9
3	☐	500.000	517.250	2151619.03	4.5102	A	1.1	3.4
4	☐	1000.000	1010.838	4163561.82	8.7612	A	1.0	1.1
5	☐	10000.00	9994.758	42817902.7	86.1357	A	1.0	-0.1
6	☐	20000.00	20001.59	82171498.7	172.320	A	0.9	0.0

y = 0.0086 * x + 0.0553
R = 1.0000
DL = 0.2265 ppb
BEC = 6.422 ppb

Weight: <None>
Min Conc: <None>

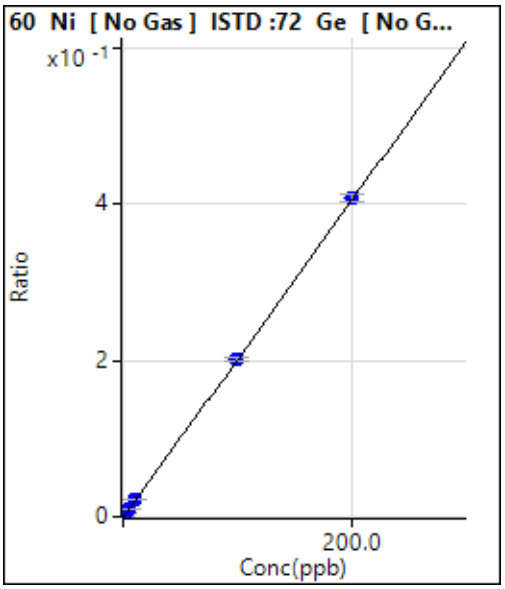
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	63.33	0.0001	P	37.4	
2	☐	2.000	1.926	14237.65	0.0295	P	4.1	-3.7
3	☐	5.000	4.787	34864.89	0.0731	P	0.1	-4.3
4	☐	10.000	9.809	71094.83	0.1496	P	0.4	-1.9
5	☐	100.000	96.788	733262.85	1.4751	P	0.4	-3.2
6	☐	200.000	201.622	1465233.99	3.0726	A	1.0	0.8

y = 0.0152 * x + 1.3279E-004
R = 0.9998
DL = 0.009782 ppb
BEC = 0.008714 ppb

Weight: <None>
Min Conc: <None>

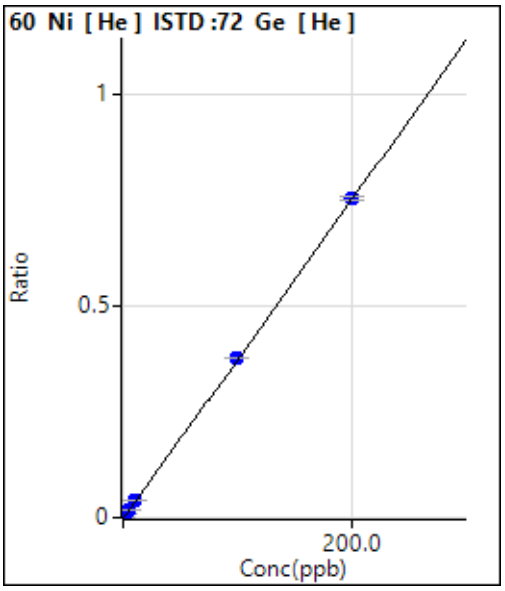


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1000.06	0.0007	P	8.9	
2	☐	2.000	2.055	7255.40	0.0048	P	2.5	2.7
3	☐	5.000	4.844	15872.86	0.0105	P	1.9	-3.1
4	☐	10.000	10.260	31914.53	0.0215	P	2.8	2.6
5	☐	100.000	98.778	315446.07	0.2014	P	1.7	-1.2
6	☐	200.000	200.601	605836.16	0.4083	P	1.9	0.3

y = 0.0020 * x + 6.6441E-004
R = 1.0000
DL = 0.0873 ppb
BEC = 0.327 ppb

Weight: <None>
Min Conc: <None>

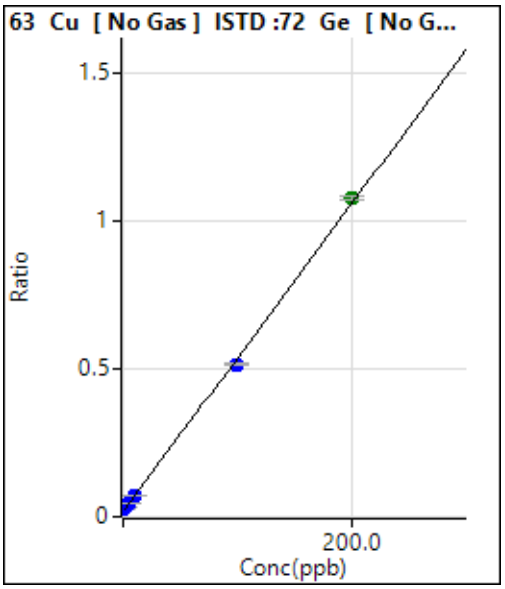
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	200.01	0.0004	P	27.8	
2	☐	2.000	2.149	4104.04	0.0085	P	5.5	7.4
3	☐	5.000	4.883	8963.11	0.0188	P	1.1	-2.3
4	☐	10.000	10.258	18539.56	0.0390	P	0.3	2.6
5	☐	100.000	99.951	187142.45	0.3764	P	0.7	0.0
6	☐	200.000	200.013	359018.97	0.7529	P	1.0	0.0

y = 0.0038 * x + 4.1829E-004
R = 1.0000
DL = 0.09257 ppb
BEC = 0.1112 ppb

Weight: <None>
Min Conc: <None>

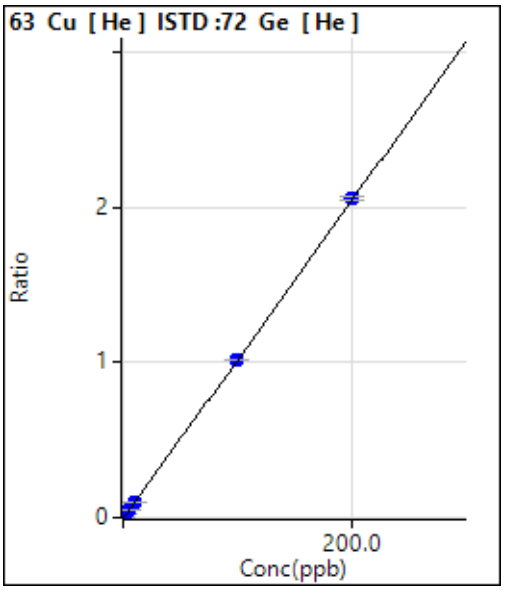


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	35209.28	0.0234	P	3.0	
2	☐	2.000	1.992	50600.90	0.0338	P	1.8	-0.4
3	☐	5.000	4.573	71269.60	0.0472	P	0.7	-8.5
4	☐	10.000	9.593	108732.15	0.0733	P	2.2	-4.1
5	☐	100.000	94.557	807165.85	0.5153	P	0.8	-5.4
6	☐	200.000	202.752	1600004.72	1.0781	A	1.5	1.4

y = 0.0052 * x + 0.0234
R = 0.9995
DL = 0.4037 ppb
BEC = 4.496 ppb

Weight: <None>
Min Conc: <None>

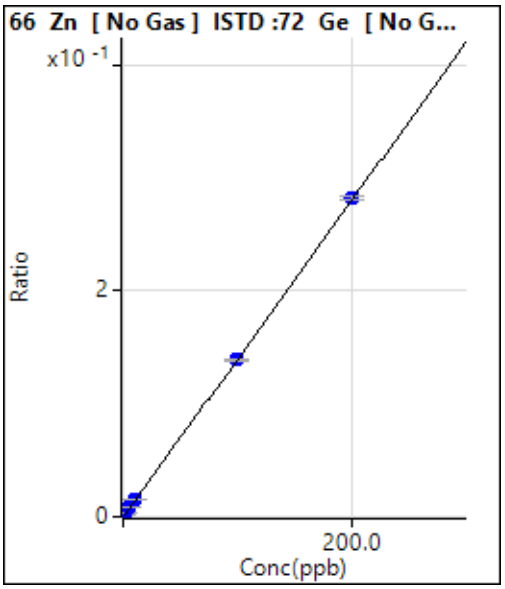
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1456.77	0.0030	P	5.3	
2	☐	2.000	2.100	11858.69	0.0246	P	2.9	5.0
3	☐	5.000	4.966	25727.98	0.0539	P	1.3	-0.7
4	☐	10.000	9.922	49757.79	0.1047	P	0.9	-0.8
5	☐	100.000	99.012	505780.31	1.0174	P	0.2	-1.0
6	☐	200.000	200.498	980966.52	2.0572	P	0.9	0.2

y = 0.0102 * x + 0.0030
R = 1.0000
DL = 0.04688 ppb
BEC = 0.2976 ppb

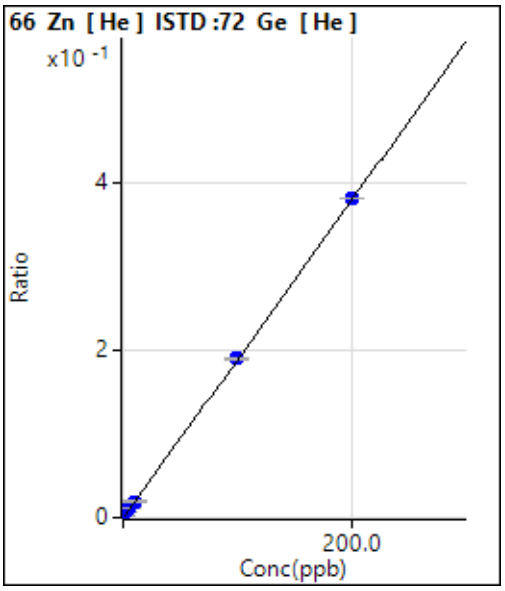
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1490.11	0.0010	P	5.4	
2	☐	2.000	2.234	6178.20	0.0041	P	4.9	11.7
3	☐	5.000	5.194	12495.93	0.0083	P	0.5	3.9
4	☐	10.000	9.934	22128.34	0.0149	P	3.6	-0.7
5	☐	100.000	98.710	218324.37	0.1394	P	1.3	-1.3
6	☐	200.000	200.641	418871.92	0.2823	P	1.8	0.3

y = 0.0014 * x + 9.8981E-004
R = 1.0000
DL = 0.1137 ppb
BEC = 0.706 ppb

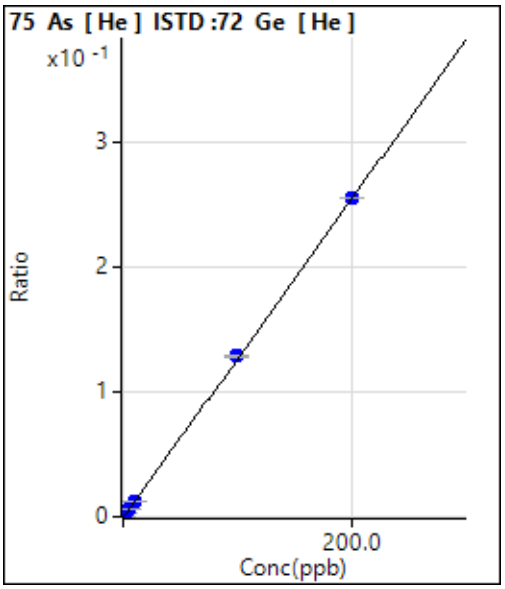
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	613.36	0.0013	P	9.8	
2	☐	2.000	2.451	2867.03	0.0059	P	5.9	22.5
3	☐	5.000	5.176	5304.48	0.0111	P	2.0	3.5
4	☐	10.000	9.542	9226.61	0.0194	P	3.4	-4.6
5	☐	100.000	99.486	94601.51	0.1903	P	1.8	-0.5
6	☐	200.000	200.271	182071.66	0.3818	P	0.6	0.1

y = 0.0019 * x + 0.0013
R = 1.0000
DL = 0.1995 ppb
BEC = 0.6753 ppb

Weight: <None>
Min Conc: <None>

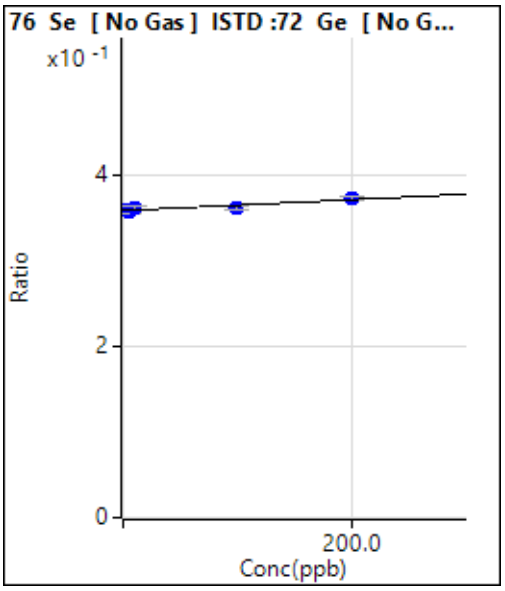


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	122.22	0.0003	P	16.3	
2	☐	2.000	1.983	1346.74	0.0028	P	1.0	-0.9
3	☐	5.000	4.895	3105.93	0.0065	P	3.0	-2.1
4	☐	10.000	9.921	6146.98	0.0129	P	1.1	-0.8
5	☐	100.000	100.677	64086.70	0.1289	P	1.6	0.7
6	☐	200.000	199.668	121810.91	0.2554	P	0.3	-0.2

y = 0.0013 * x + 2.5544E-004
R = 1.0000
DL = 0.09746 ppb
BEC = 0.1999 ppb

Weight: <None>
Min Conc: <None>

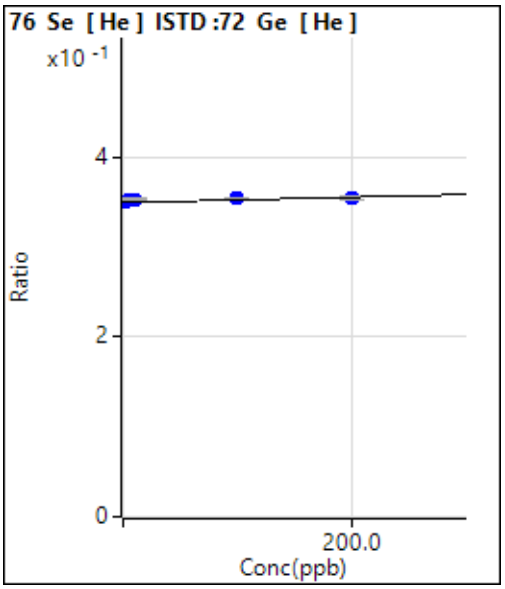
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	538425.96	0.3577	P	0.5	
2	☐	2.000	1.053	536313.71	0.3577	P	0.6	-47.4
3	☐	5.000	-29.901	537384.28	0.3557	P	1.5	-698.0
4	☐	10.000	48.248	535288.92	0.3608	P	1.0	382.5
5	☐	100.000	51.607	565482.63	0.3610	P	1.0	-48.4
6	☐	200.000	223.166	552052.85	0.3720	P	1.4	11.6

y = 6.4232E-005 * x + 0.3577
R = 0.9319
DL = 78.1 ppb
BEC = 5568 ppb

Weight: <None>
Min Conc: <None>

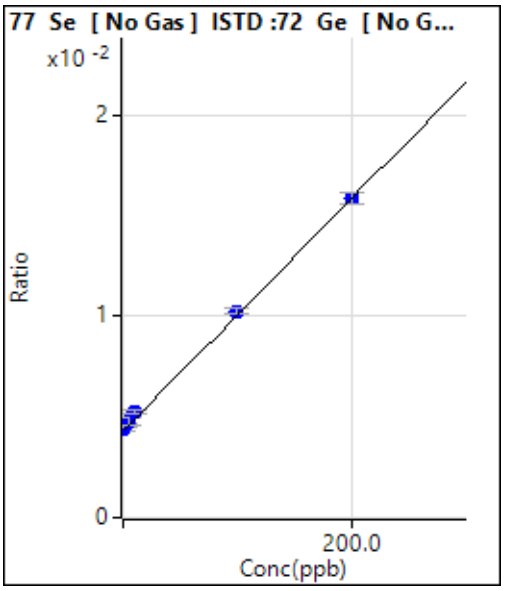


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	167206.36	0.3499	P	1.2	
2	☐	2.000	40.729	169494.91	0.3511	P	0.9	1936.5
3	☐	5.000	97.602	168306.46	0.3528	P	0.5	1852.0
4	☐	10.000	132.223	168157.69	0.3539	P	1.0	1222.2
5	☐	100.000	139.915	176016.47	0.3541	P	1.0	39.9
6	☐	200.000	171.229	169305.44	0.3550	P	1.0	-14.4

y = 3.0273E-005 * x + 0.3499
R = 0.7297
DL = 423.9 ppb
BEC = 1.156E+04 ppb

Weight: <None>
Min Conc: <None>

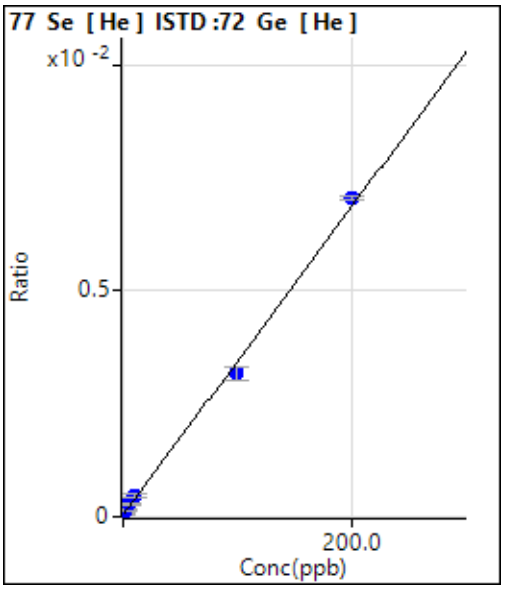
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6621.75	0.0044	P	4.7	
2	☐	2.000	3.888	6931.91	0.0046	P	3.9	94.4
3	☐	5.000	6.642	7225.41	0.0048	P	7.3	32.8
4	☐	10.000	15.299	7835.73	0.0053	P	3.1	53.0
5	☐	100.000	101.777	16093.21	0.0103	P	3.5	1.8
6	☐	200.000	198.787	23554.20	0.0159	P	3.2	-0.6

y = 5.7726E-005 * x + 0.0044
R = 0.9997
DL = 10.67 ppb
BEC = 76.2 ppb

Weight: <None>
Min Conc: <None>

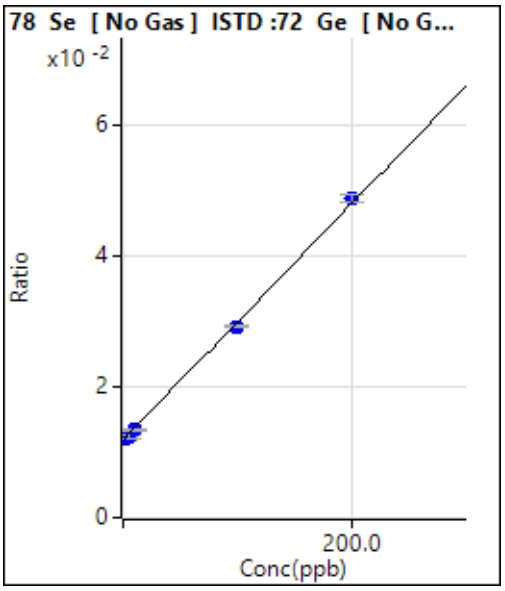


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	36.67	0.0001	P	68.0	
2	☐	2.000	2.017	70.00	0.0001	P	29.1	0.8
3	☐	5.000	5.960	133.34	0.0003	P	19.3	19.2
4	☐	10.000	11.753	226.67	0.0005	P	22.1	17.5
5	☐	100.000	90.600	1573.45	0.0032	P	8.4	-9.4
6	☐	200.000	204.588	3363.81	0.0071	P	1.0	2.3

y = 3.4107E-005 * x + 7.6355E-005
R = 0.9983
DL = 4.564 ppb
BEC = 2.239 ppb

Weight: <None>
Min Conc: <None>

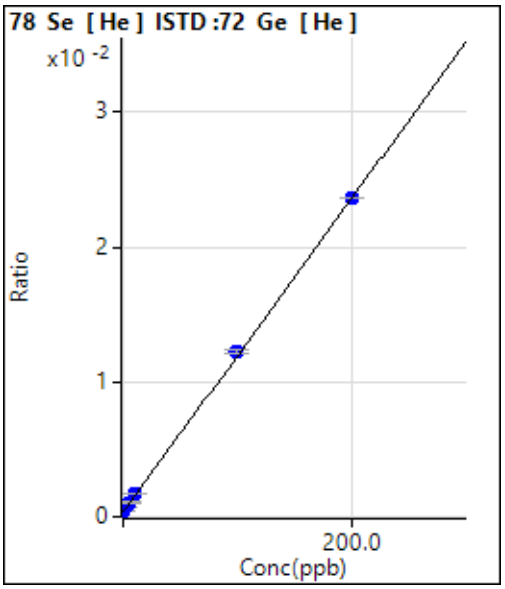
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	18276.02	0.0121	P	2.1	
2	☐	2.000	-0.690	18015.69	0.0120	P	3.8	-134.5
3	☐	5.000	0.514	18476.32	0.0122	P	4.0	-89.7
4	☐	10.000	6.806	19828.15	0.0134	P	2.0	-31.9
5	☐	100.000	94.110	45550.52	0.0291	P	1.2	-5.9
6	☐	200.000	203.244	72279.97	0.0487	P	2.5	1.6

y = 1.7994E-004 * x + 0.0121
R = 0.9994
DL = 4.327 ppb
BEC = 67.47 ppb

Weight: <None>
Min Conc: <None>

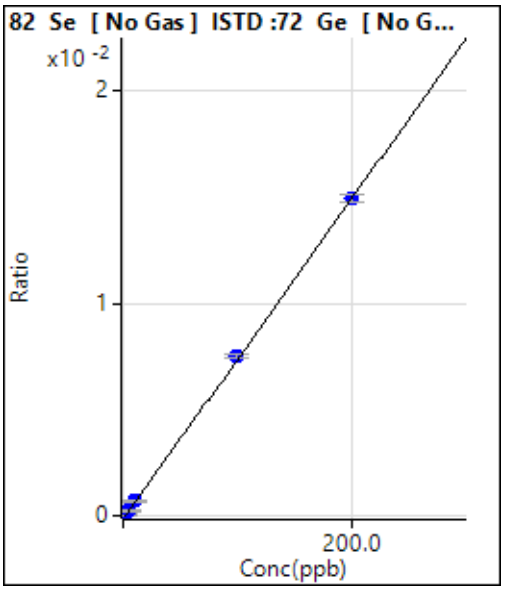


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	222.67	0.0005	P	7.5	
2	☐	2.000	2.058	340.68	0.0007	P	7.5	2.9
3	☐	5.000	4.872	492.68	0.0010	P	10.2	-2.6
4	☐	10.000	10.497	802.02	0.0017	P	5.5	5.0
5	☐	100.000	101.352	6094.06	0.0123	P	2.5	1.4
6	☐	200.000	199.302	11281.40	0.0237	P	0.2	-0.3

y = 1.1636E-004 * x + 4.6610E-004
R = 1.0000
DL = 0.8995 ppb
BEC = 4.006 ppb

Weight: <None>
Min Conc: <None>

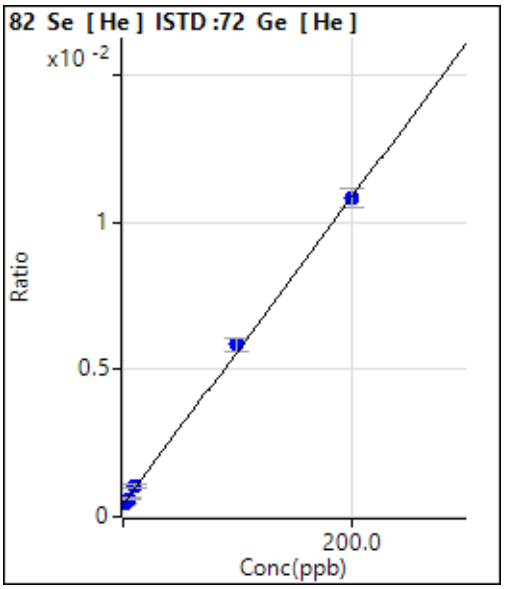
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	-79.91	-0.0001	P	-221.	
2	☐	2.000	1.970	143.11	0.0001	P	157.0	-1.5
3	☐	5.000	4.638	447.13	0.0003	P	38.6	-7.2
4	☐	10.000	10.272	1066.20	0.0007	P	8.3	2.7
5	☐	100.000	100.956	11799.11	0.0075	P	3.1	1.0
6	☐	200.000	199.518	22165.34	0.0149	P	2.4	-0.2

y = 7.5134E-005 * x - 5.2826E-005
R = 1.0000
DL = 4.677 ppb
BEC = -0.7031 ppb

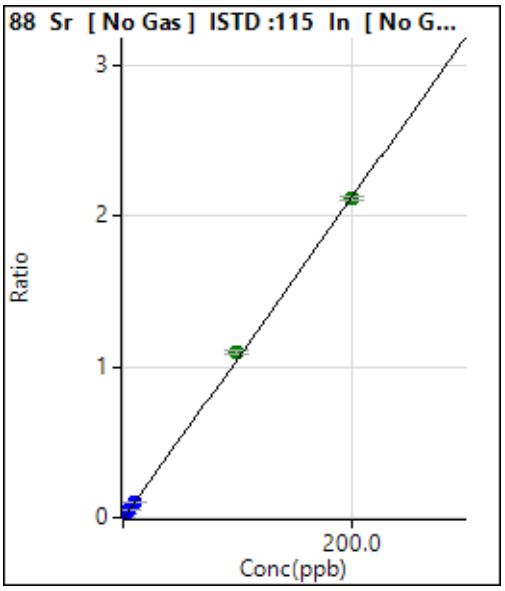
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	230.01	0.0005	P	26.6	
2	☐	2.000	-0.102	230.01	0.0005	P	4.6	-105.1
3	☐	5.000	2.557	293.34	0.0006	P	17.8	-48.9
4	☐	10.000	10.407	486.69	0.0010	P	12.2	4.1
5	☐	100.000	103.054	2910.37	0.0059	P	8.4	3.1
6	☐	200.000	198.535	5164.42	0.0108	P	6.0	-0.7

y = 5.2125E-005 * x + 4.8180E-004
R = 0.9997
DL = 7.375 ppb
BEC = 9.243 ppb

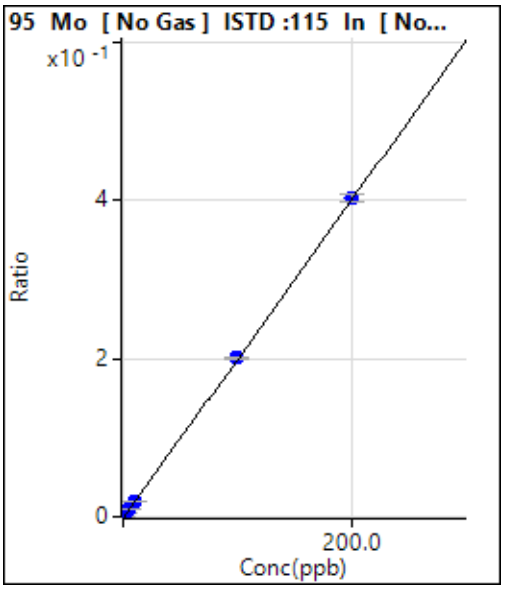
Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1383.43	0.0008	P	13.3	
2	☐	2.000	1.886	37322.54	0.0209	P	0.3	-5.7
3	☐	5.000	4.655	88605.36	0.0504	P	2.3	-6.9
4	☐	10.000	9.432	177444.05	0.1014	P	0.4	-5.7
5	☐	100.000	102.973	1978556.58	1.0994	A	1.5	3.0
6	☐	200.000	198.552	3740667.76	2.1191	A	1.4	-0.7

y = 0.0107 * x + 7.7890E-004
R = 0.9998
DL = 0.02909 ppb
BEC = 0.07301 ppb

Weight: <None>
Min Conc: <None>

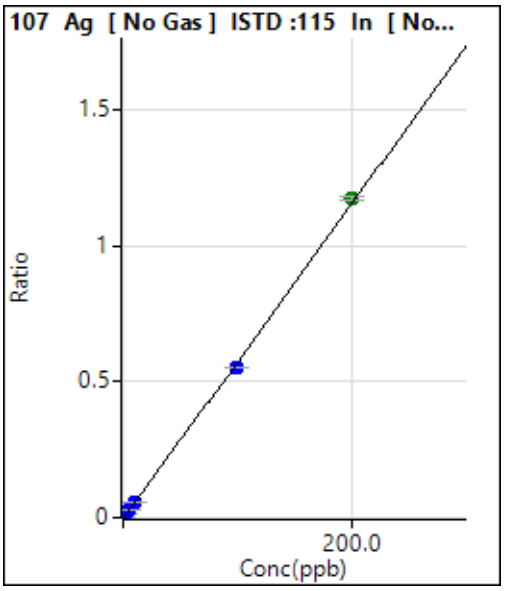


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	203.34	0.0001	P	22.9	
2	☐	2.000	1.967	7262.12	0.0041	P	5.7	-1.6
3	☐	5.000	4.912	17541.79	0.0100	P	2.7	-1.8
4	☐	10.000	9.849	34832.56	0.0199	P	2.6	-1.5
5	☐	100.000	99.527	360210.75	0.2001	P	0.8	-0.5
6	☐	200.000	200.246	710582.64	0.4026	P	1.8	0.1

y = 0.0020 * x + 1.1413E-004
R = 1.0000
DL = 0.03899 ppb
BEC = 0.05679 ppb

Weight: <None>
Min Conc: <None>

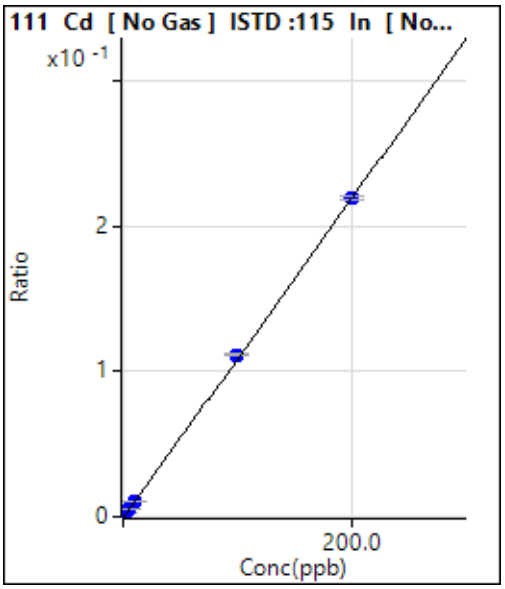
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	483.35	0.0003	P	4.9	
2	☐	2.000	1.873	19901.87	0.0111	P	4.4	-6.3
3	☐	5.000	4.665	48057.47	0.0274	P	1.1	-6.7
4	☐	10.000	9.338	95315.37	0.0545	P	0.8	-6.6
5	☐	100.000	95.004	993024.67	0.5517	P	0.4	-5.0
6	☐	200.000	202.541	2075978.87	1.1759	A	1.2	1.3

y = 0.0058 * x + 2.7183E-004
R = 0.9996
DL = 0.006834 ppb
BEC = 0.04683 ppb

Weight: <None>
Min Conc: <None>

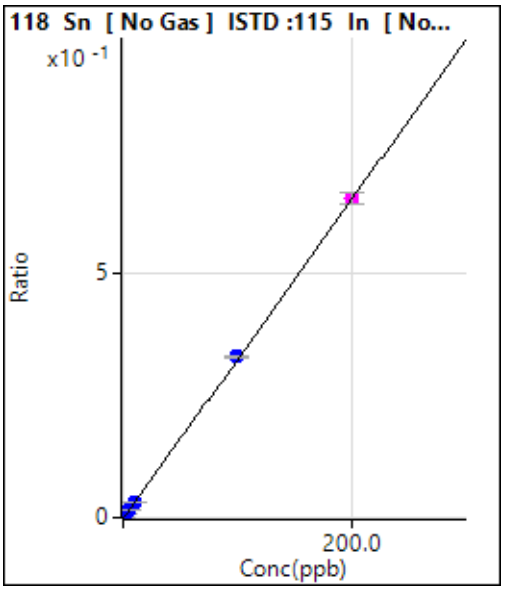


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	0.00	0.0000	P		
2	☐	2.000	2.018	3967.33	0.0022	P	1.2	0.9
3	☐	5.000	5.040	9747.10	0.0055	P	3.0	0.8
4	☐	10.000	9.837	18950.46	0.0108	P	1.3	-1.6
5	☐	100.000	101.184	200488.77	0.1114	P	1.3	1.2
6	☐	200.000	199.415	387575.04	0.2196	P	1.6	-0.3

y = 0.0011 * x + 0.0000E+000
R = 1.0000
DL = 0 ppb
BEC = 0 ppb

Weight: <None>
Min Conc: <None>

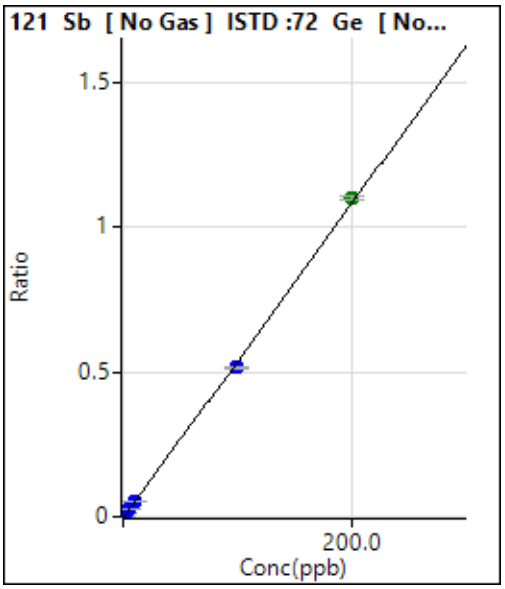
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	1390.10	0.0008	P	7.8	
2	☐	2.000	1.964	12886.53	0.0072	P	2.7	-1.8
3	☐	5.000	4.740	28668.28	0.0163	P	0.8	-5.2
4	☐	10.000	9.527	55996.21	0.0320	P	0.4	-4.7
5	☐	100.000	100.557	594449.37	0.3303	P	1.4	0.6
6	☐	200.000	199.752	1156707.64	0.6554	M	3.9	-0.1

y = 0.0033 * x + 7.8228E-004
R = 1.0000
DL = 0.05584 ppb
BEC = 0.2387 ppb

Weight: <None>
Min Conc: <None>

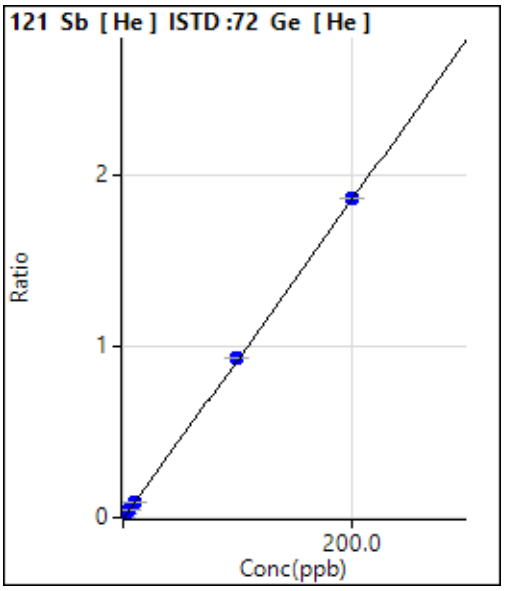


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	413.35	0.0003	P	12.6	
2	☐	2.000	1.902	15916.51	0.0106	P	2.7	-4.9
3	☐	5.000	4.598	38182.63	0.0253	P	1.2	-8.0
4	☐	10.000	9.237	74913.34	0.0505	P	1.4	-7.6
5	☐	100.000	94.905	808653.09	0.5162	P	0.9	-5.1
6	☐	200.000	202.596	1635016.02	1.1017	A	0.9	1.3

y = 0.0054 * x + 2.7461E-004
R = 0.9996
DL = 0.01908 ppb
BEC = 0.05051 ppb

Weight: <None>
Min Conc: <None>

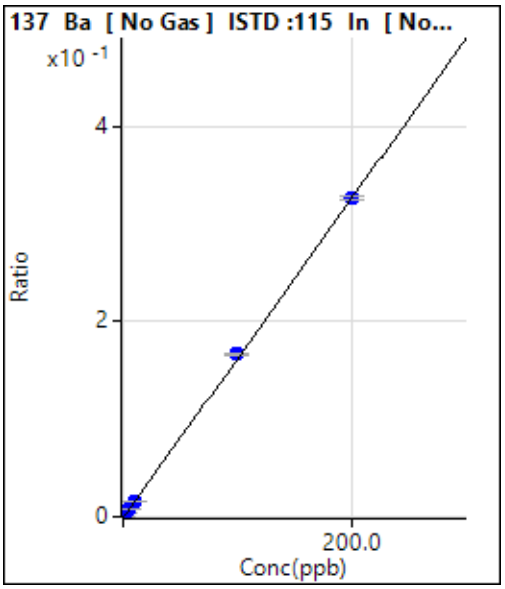
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	236.68	0.0005	P	9.5	
2	☐	2.000	2.042	9420.17	0.0195	P	2.0	2.1
3	☐	5.000	4.879	21915.26	0.0459	P	3.2	-2.4
4	☐	10.000	9.693	43141.19	0.0908	P	2.2	-3.1
5	☐	100.000	99.722	461982.40	0.9293	P	0.5	-0.3
6	☐	200.000	200.157	889264.34	1.8648	P	0.1	0.1

y = 0.0093 * x + 4.9540E-004
R = 1.0000
DL = 0.01523 ppb
BEC = 0.05319 ppb

Weight: <None>
Min Conc: <None>

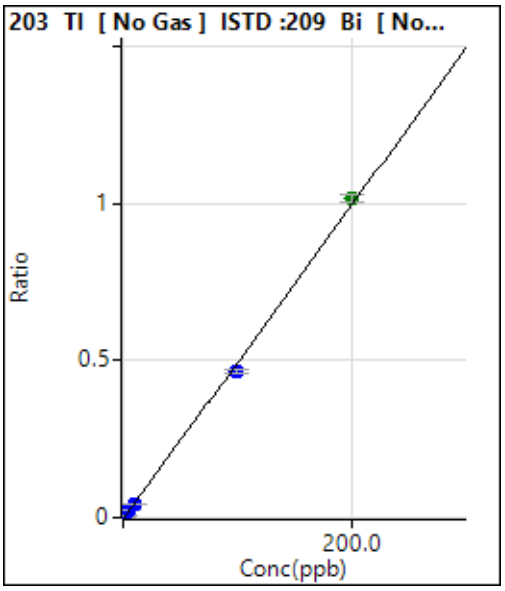


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	490.02	0.0003	P	17.0	
2	☐	2.000	1.907	6074.85	0.0034	P	2.5	-4.7
3	☐	5.000	4.897	14595.11	0.0083	P	2.8	-2.1
4	☐	10.000	9.797	28595.20	0.0163	P	1.3	-2.0
5	☐	100.000	101.507	300042.75	0.1667	P	1.4	1.5
6	☐	200.000	199.260	577240.34	0.3270	P	1.6	-0.4

y = 0.0016 * x + 2.7595E-004
R = 1.0000
DL = 0.08566 ppb
BEC = 0.1683 ppb

Weight: <None>
Min Conc: <None>

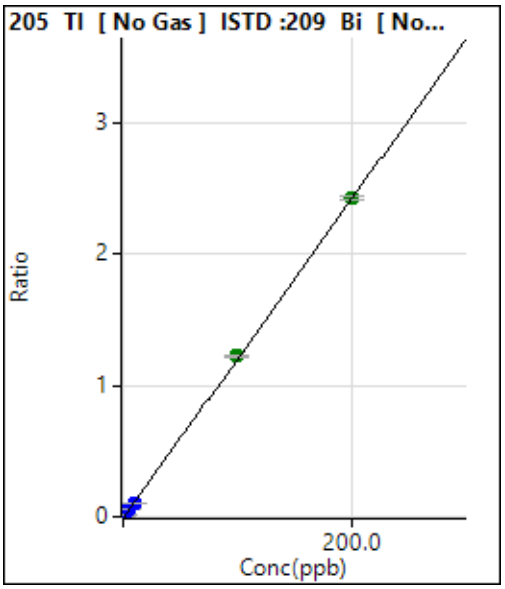
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	43.33	0.0000	P	33.8	
2	☐	2.000	1.790	15466.46	0.0090	P	2.0	-10.5
3	☐	5.000	4.413	37423.03	0.0221	P	4.3	-11.7
4	☐	10.000	8.772	74893.78	0.0439	P	1.6	-12.3
5	☐	100.000	93.470	807730.53	0.4677	P	2.9	-6.5
6	☐	200.000	203.343	1673485.60	1.0175	A	2.5	1.7

y = 0.0050 * x + 2.5371E-005
R = 0.9993
DL = 0.005142 ppb
BEC = 0.00507 ppb

Weight: <None>
Min Conc: <None>

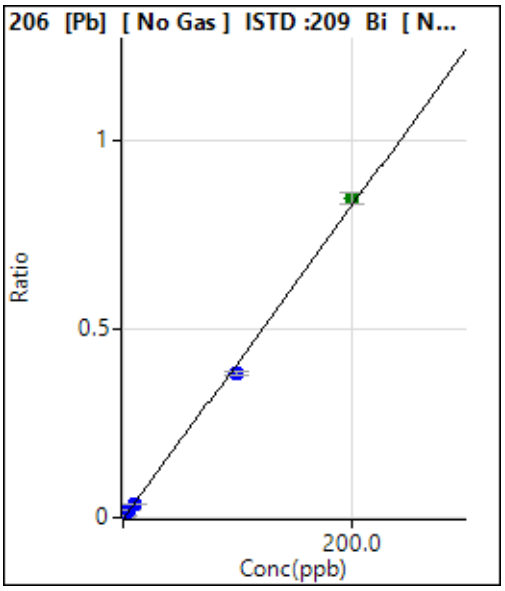


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	73.33	0.0000	P	7.6	
2	☐	2.000	1.764	37058.48	0.0215	P	2.5	-11.8
3	☐	5.000	4.337	89469.52	0.0528	P	1.6	-13.3
4	☐	10.000	8.668	180012.62	0.1056	P	0.5	-13.3
5	☐	100.000	100.842	2120415.65	1.2276	A	1.4	0.8
6	☐	200.000	199.665	3997860.88	2.4306	A	1.7	-0.2

y = 0.0122 * x + 4.3081E-005
R = 1.0000
DL = 0.0008112 ppb
BEC = 0.003539 ppb

Weight: <None>
Min Conc: <None>

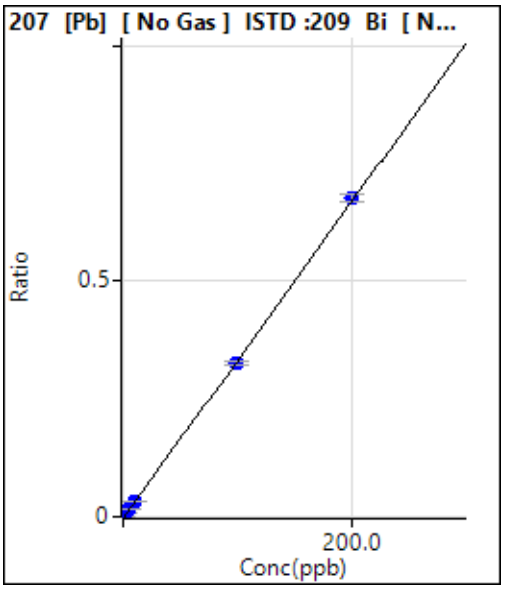
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	126.67	0.0001	P	40.9	
2	☐	2.000	1.764	12743.43	0.0074	P	1.5	-11.8
3	☐	5.000	4.450	31416.52	0.0186	P	3.3	-11.0
4	☐	10.000	8.672	61544.84	0.0361	P	0.9	-13.3
5	☐	100.000	92.342	662445.85	0.3836	P	2.5	-7.7
6	☐	200.000	203.911	1392863.78	0.8469	A	3.8	2.0

y = 0.0042 * x + 7.4593E-005
R = 0.9990
DL = 0.02204 ppb
BEC = 0.01796 ppb

Weight: <None>
Min Conc: <None>

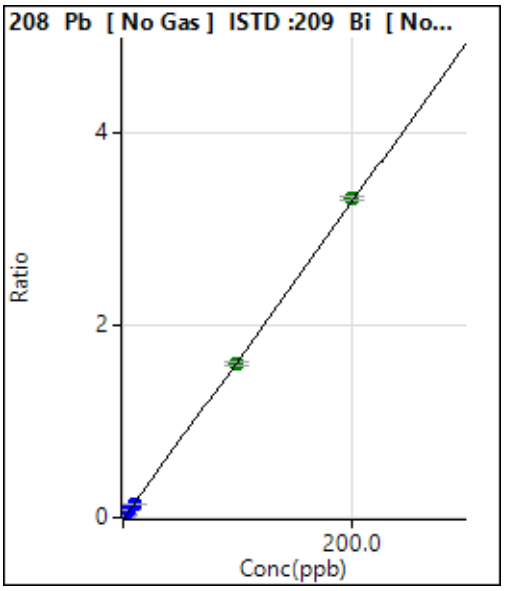


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	110.00	0.0001	P	54.0	
2	☐	2.000	1.912	11178.57	0.0065	P	2.2	-4.4
3	☐	5.000	4.799	27430.55	0.0162	P	1.4	-4.0
4	☐	10.000	9.562	54931.35	0.0322	P	2.4	-4.4
5	☐	100.000	97.229	564515.39	0.3269	P	2.9	-2.8
6	☐	200.000	201.413	1113624.31	0.6771	P	2.1	0.7

y = 0.0034 * x + 6.4367E-005
R = 0.9999
DL = 0.03104 ppb
BEC = 0.01915 ppb

Weight: <None>
Min Conc: <None>

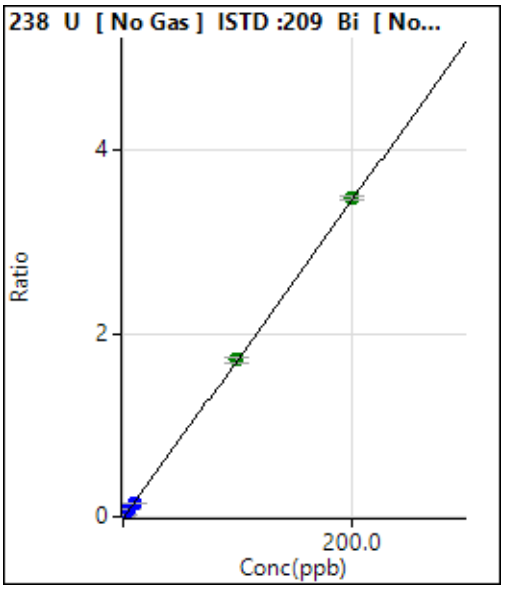
Calibration for 279_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	506.68	0.0003	P	17.4	
2	☐	2.000	1.801	51613.10	0.0300	P	1.2	-10.0
3	☐	5.000	4.457	124851.61	0.0737	P	1.4	-10.9
4	☐	10.000	8.891	250337.33	0.1468	P	1.1	-11.1
5	☐	100.000	97.130	2764069.61	1.6006	A	3.3	-2.9
6	☐	200.000	201.506	5461089.30	3.3203	A	1.8	0.8

y = 0.0165 * x + 2.9761E-004
R = 0.9999
DL = 0.009439 ppb
BEC = 0.01806 ppb

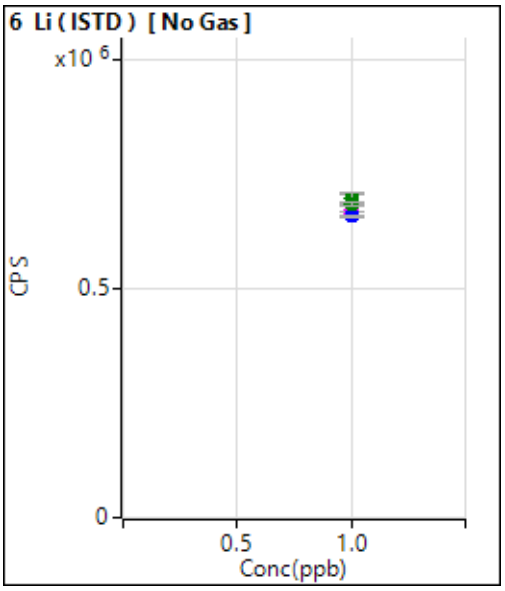
Weight: <None>
Min Conc: <None>



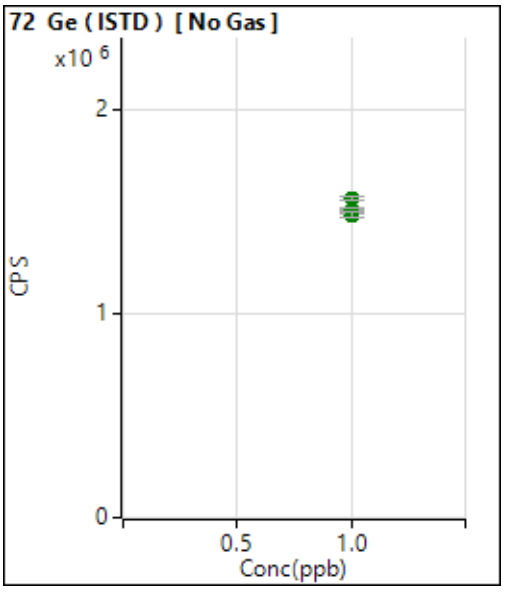
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	6.67	0.0000	P	86.6	
2	☐	2.000	1.717	51314.42	0.0298	P	1.5	-14.1
3	☐	5.000	4.335	127341.62	0.0752	P	3.0	-13.3
4	☐	10.000	8.694	257231.88	0.1508	P	1.3	-13.1
5	☐	100.000	98.652	2955825.79	1.7115	A	2.8	-1.3
6	☐	200.000	200.759	5728826.37	3.4829	A	1.2	0.4

y = 0.0173 * x + 3.9256E-006
R = 1.0000
DL = 0.0005881 ppb
BEC = 0.0002263 ppb

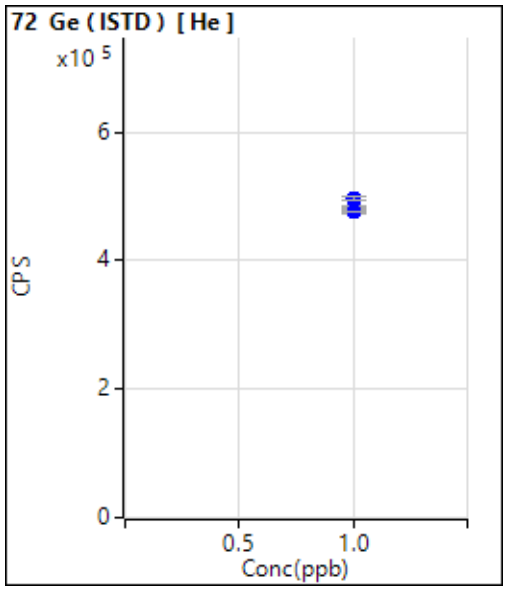
Weight: <None>
Min Conc: <None>



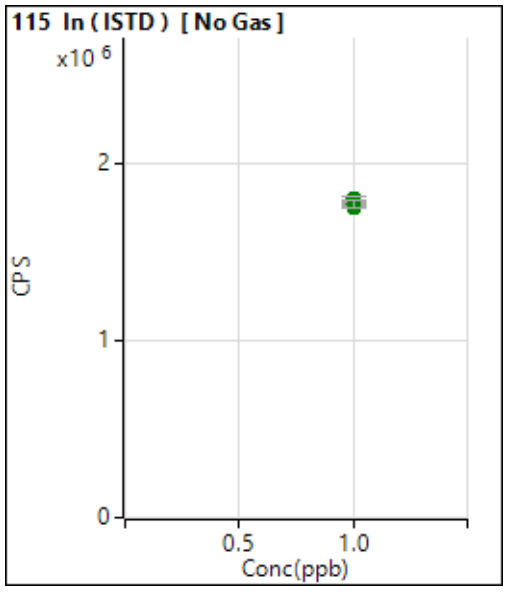
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		686623.28		M	5.8	
2	☐	1.000		673689.29		M	1.4	
3	☐	1.000		664855.34		M	1.3	
4	☐	1.000		657841.45		P	0.4	
5	☐	1.000		696814.49		A	3.1	
6	☐	1.000		683096.49		A	1.3	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1505388.26		A	0.3	
2	☐	1.000		1499199.30		A	0.5	
3	☐	1.000		1510708.36		A	1.2	
4	☐	1.000		1483867.37		A	1.2	
5	☐	1.000		1566592.48		A	1.0	
6	☐	1.000		1484271.80		A	2.0	

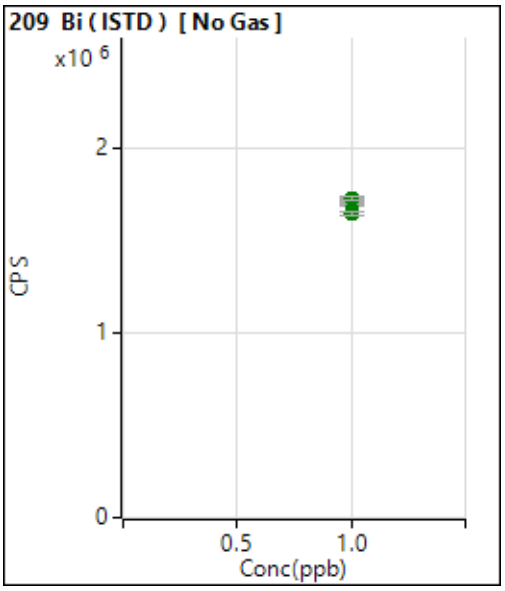


	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		477968.65		P	1.1	
2	☐	1.000		482772.94		P	0.7	
3	☐	1.000		477047.55		P	0.4	
4	☐	1.000		475223.39		P	0.6	
5	☐	1.000		497115.06		P	0.7	
6	☐	1.000		476862.14		P	0.3	



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1778171.76		A	1.7	
2	☐	1.000		1785735.71		A	0.8	
3	☐	1.000		1756920.28		A	1.4	
4	☐	1.000		1749797.90		A	0.8	
5	☐	1.000		1799874.55		A	1.2	
6	☐	1.000		1765581.59		A	2.2	

Calibration for 279_ICV.d



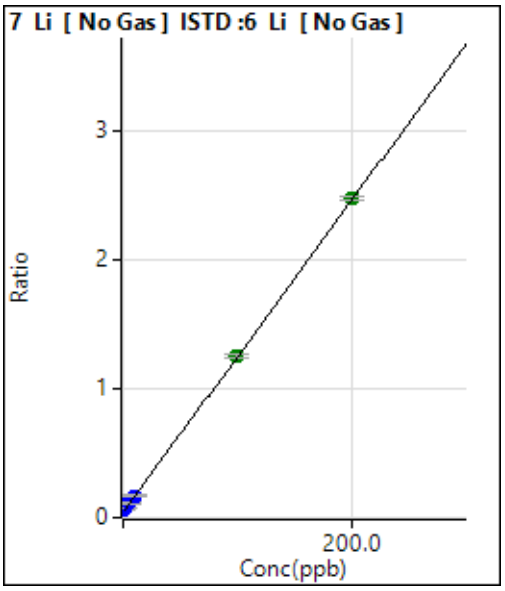
	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	1.000		1702213.52		A	1.6	
2	☐	1.000		1722286.59		A	0.8	
3	☐	1.000		1693450.29		A	1.5	
4	☐	1.000		1705409.61		A	0.8	
5	☐	1.000		1727550.76		A	1.8	
6	☐	1.000		1644925.18		A	0.7	

Calibration for 011_ICV.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\102722B.b\
Analysis File: 102722B.batch.bin
DA Date-Time: 10/27/2022 21:17:33
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	CAL BLK	10/27/2022 10:24:24
2	005CALS.d	2/10/200	10/27/2022 10:26:17
3	006CALS.d	5/25/500	10/27/2022 10:28:11
4	007CALS.d	10/50/100	10/27/2022 10:30:04
5	008CALS.d	100/500/10K	10/27/2022 10:31:56
6	009CALS.d	200/1000/20K	10/27/2022 10:33:46

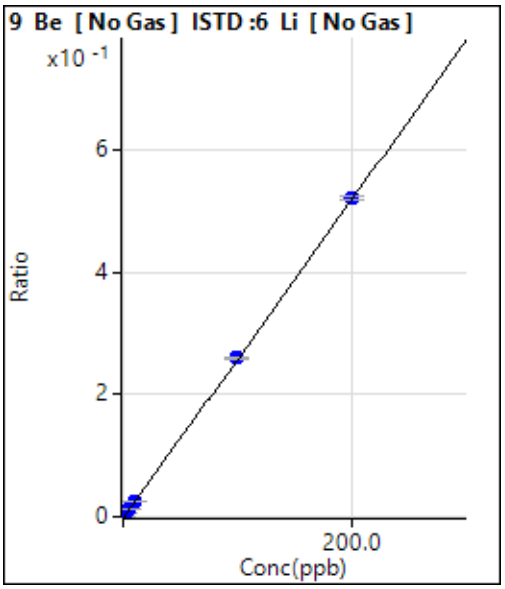
Calibration for 011_ICV.d



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	40997.80	0.0547	P	0.1	
2	☐	2.000	1.841	59120.08	0.0769	P	1.6	-7.9
3	☐	5.000	4.733	84095.96	0.1118	P	1.7	-5.3
4	☐	10.000	9.556	125720.52	0.1700	P	2.9	-4.4
5	☐	100.000	99.485	932768.84	1.2555	A	2.4	-0.5
6	☐	200.000	200.288	1758594.24	2.4722	A	1.7	0.1

y = 0.0121 * x + 0.0547
R = 1.0000
DL = 0.01358 ppb
BEC = 4.528 ppb

Weight: <None>
Min Conc: <None>



	Rjct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD	%RE
1	☐	0.000	0.000	38.33	0.0001	P	45.8	
2	☐	2.000	1.910	3872.24	0.0050	P	1.5	-4.5
3	☐	5.000	4.885	9630.02	0.0128	P	0.6	-2.3
4	☐	10.000	9.687	18744.25	0.0253	P	1.0	-3.1
5	☐	100.000	99.783	193542.42	0.2605	P	0.8	-0.2
6	☐	200.000	200.128	371570.77	0.5223	P	1.4	0.1

y = 0.0026 * x + 5.1188E-005
R = 1.0000
DL = 0.02693 ppb
BEC = 0.01961 ppb

Weight: <None>
Min Conc: <None>