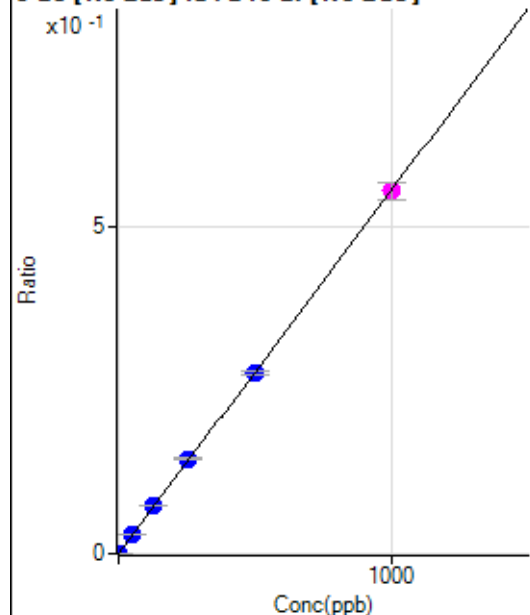


Batch Folder: D:\P8072818- MS.b\
Analysis File: P8072818- MS.batch.bin
DA Date-Time: 2018-07-28 16:32:05
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-07-28 13:10:10
2			
3	005CALS.d	S02	2018-07-28 13:17:52
4	006CALS.d	S03	2018-07-28 13:21:34
5	007CALS.d	S04	2018-07-28 13:25:18
6	008CALS.d	S05	2018-07-28 13:28:53
7	009CALS.d	S06	2018-07-28 13:32:23
8	010CALS.d	S07	2018-07-28 13:35:50
9	011CALS.d	S08	2018-07-28 13:39:13

9 Be [No Gas] ISTD:6 Li [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	62.97	0.0000	P	30.4
2	☐	0.100					
3	☐	1.000	1.099	1148.23	0.0006	P	3.4
4	☐	50.000	52.678	54882.69	0.0292	P	1.1
5	☐	125.000	130.749	135227.36	0.0725	P	1.1
6	☐	250.000	260.916	269501.92	0.1447	P	1.4
7	☐	500.000	496.897	523463.74	0.2755	P	1.8
8	☐	1000.000	997.970	1013007.74	0.5533	M	4.8
9	☐			598.18	0.0003	P	13.0

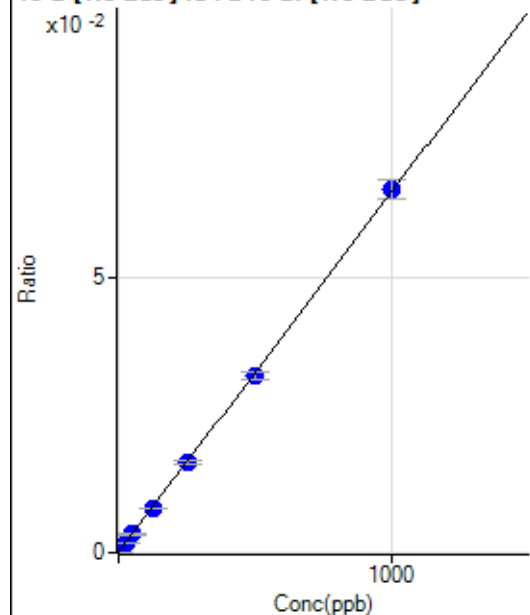
$$y = 5.5444\text{E-}004 * x + 3.5385\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.05826$$

Weight: <None>

Min Conc: 0

10 B [No Gas] ISTD:6 Li [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	130.56	0.0001	P	30.1
2	☐	2.500					
3	☐	25.000	25.445	3092.15	0.0017	P	8.3
4	☐	50.000	50.791	6376.72	0.0034	P	8.3
5	☐	125.000	122.149	15044.58	0.0081	P	0.4
6	☐	250.000	249.750	30577.93	0.0164	P	3.7
7	☐	500.000	488.995	60932.56	0.0321	P	4.3
8	☐	1000.000	1005.871	120645.29	0.0659	P	5.5
9	☐			5609.67	0.0030	P	12.3

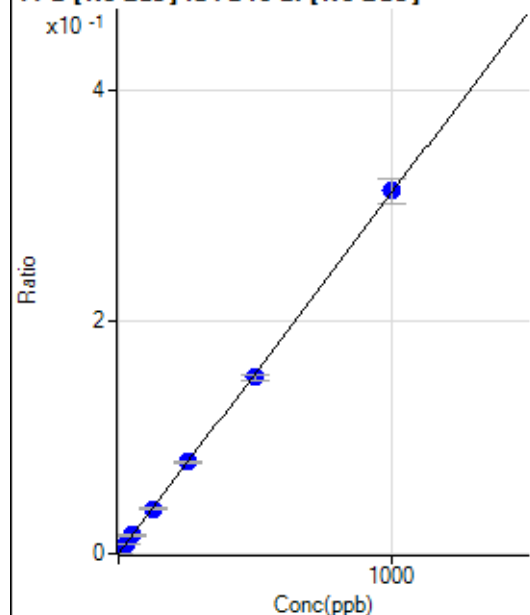
$$y = 6.5457\text{E-}005 * x + 7.2830\text{E-}005$$

$$R = 0.9999$$

$$DL = 1.005$$

Weight: <None>

Min Conc: 0

11 B [No Gas] ISTD:6 Li [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	394.47	0.0002	P	4.7
2	☐	2.500					
3	☐	25.000	25.145	14291.12	0.0080	P	11.8
4	☐	50.000	50.696	30024.27	0.0160	P	3.2
5	☐	125.000	124.128	72427.80	0.0388	P	2.0
6	☐	250.000	252.688	146839.07	0.0789	P	3.4
7	☐	500.000	488.448	289165.11	0.1522	P	2.8
8	☐	1000.000	1005.175	572716.15	0.3130	P	6.6
9	☐			25406.79	0.0137	P	13.6

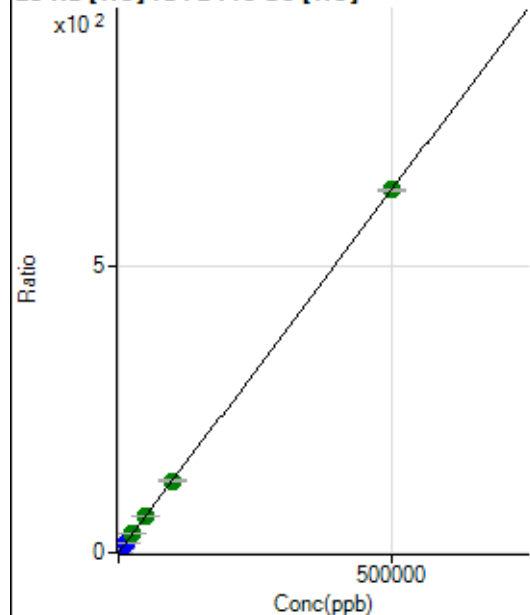
$$y = 3.1119\text{E-}004 * x + 2.2087\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.09942$$

Weight: <None>

Min Conc: 0

23 Na [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5309.55	0.1039	P	5.2
2	☐	50.000					
3	☐	500.000	488.646	36929.48	0.7217	P	1.9
4	☐	5000.000	5127.474	326157.44	6.5870	P	1.8
5	☐	12500.000	12608.223	788109.73	16.0457	P	1.3
6	☐	25000.000	25820.808	1572160.87	32.7516	A	2.2
7	☐	50000.000	50860.469	2972543.36	64.4116	A	1.0
8	☐	100000.00	98593.357	5717242.19	124.7648	A	2.7
9	☐	500000.00	500150.27	30257580.19	632.4912	A	0.9

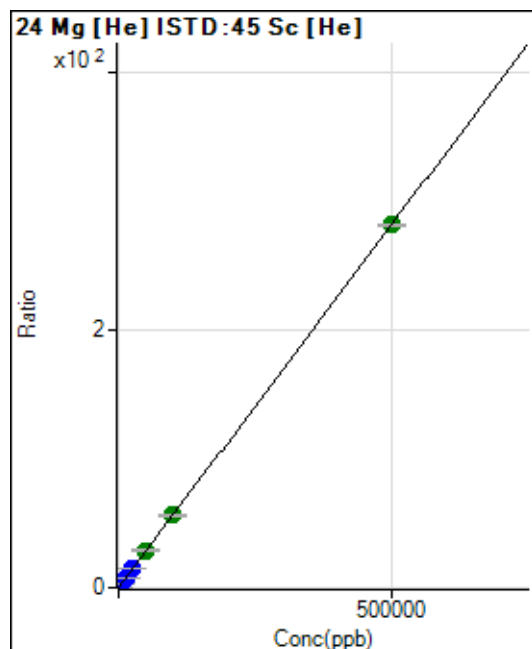
$$y = 0.0013 * x + 0.1039$$

$$R = 1.0000$$

$$DL = 12.7$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	411.14	0.0080	P	16.8
2	☐	50.000					
3	☐	500.000	470.041	13943.48	0.2725	P	0.3
4	☐	5000.000	5247.041	146555.66	2.9597	P	1.5
5	☐	12500.000	12623.106	349160.66	7.1091	P	1.9
6	☐	25000.000	25622.004	692326.53	14.4216	P	1.6
7	☐	50000.000	51237.636	1330494.28	28.8315	A	1.6
8	☐	100000.00	99654.719	2569042.03	56.0683	A	3.2
9	☐	500000.00	499908.67	13453667.66	281.2293	A	0.8

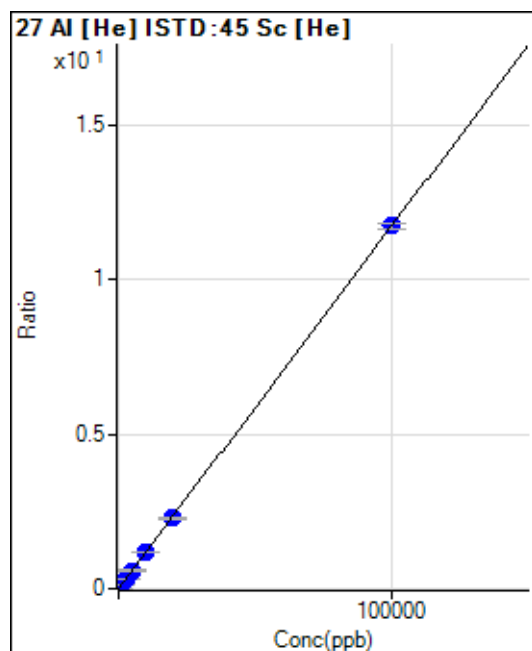
$$y = 5.6255E-004 * x + 0.0080$$

$$R = 1.0000$$

$$DL = 7.212$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.51	0.0004	P	20.4
2	☐	2.000					
3	☐	20.000	20.273	144.21	0.0028	P	8.9
4	☐	1000.000	1021.566	5949.47	0.1201	P	1.4
5	☐	2500.000	2427.474	13992.96	0.2849	P	0.4
6	☐	5000.000	4993.955	28108.95	0.5856	P	2.3
7	☐	10000.000	9924.789	53688.97	1.1633	P	0.7
8	☐	20000.000	19431.966	104364.29	2.2772	P	2.0
9	☐	100000.00	100123.02	561224.32	11.7316	P	1.3

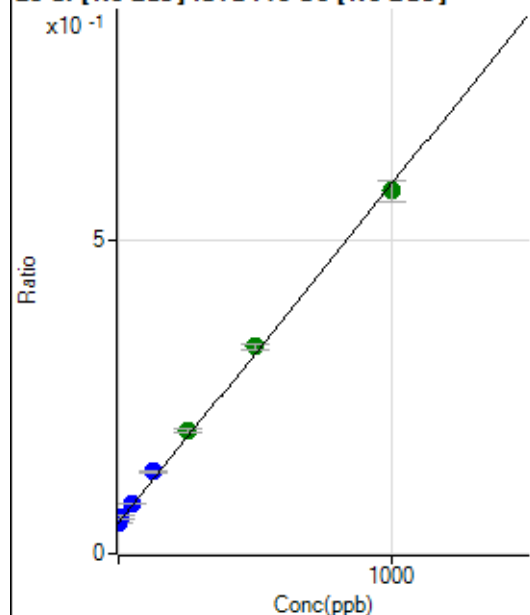
$$y = 1.1717E-004 * x + 4.4103E-004$$

$$R = 1.0000$$

$$DL = 2.305$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD :45 Sc [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	302270.73	0.0491	P	2.2
2	☐	1.000					
3	☐	10.000	17.900	355843.46	0.0587	P	7.5
4	☐	50.000	57.289	509805.75	0.0799	P	0.8
5	☐	125.000	150.831	820292.48	0.1303	P	1.5
6	☐	250.000	272.044	1231049.84	0.1956	A	2.0
7	☐	500.000	520.609	2082942.58	0.3295	A	2.6
8	☐	1000.000	980.512	3485899.77	0.5772	A	5.8
9	☐			504481.37	0.0823	P	3.6

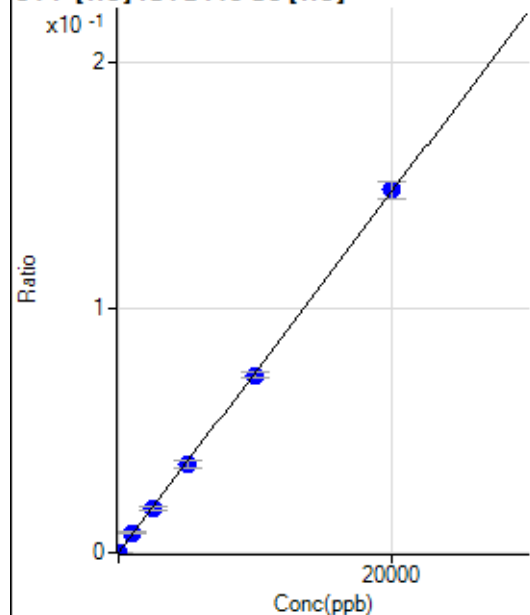
$$y = 5.3863\text{E-}004 * x + 0.0491$$

$$R = 0.9993$$

$$DL = 6.011$$

Weight: <None>

Min Conc: 0

31 P [He] ISTD :45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	7.521	5.56	0.0001	P	173.
2	☐	0.000					
3	☐	0.000	-7.521	0.00	0.0000	P	
4	☐	1000.000	1080.913	397.25	0.0080	P	6.7
5	☐	2500.000	2410.058	875.07	0.0178	P	8.8
6	☐	5000.000	4921.238	1741.87	0.0363	P	8.4
7	☐	10000.000	9832.438	3345.01	0.0725	P	3.1
8	☐	20000.000	20110.669	6793.57	0.1482	P	4.8
9	☐			5.55	0.0001	P	86.6

$$y = 7.3660\text{E-}006 * x + 5.5398\text{E-}005$$

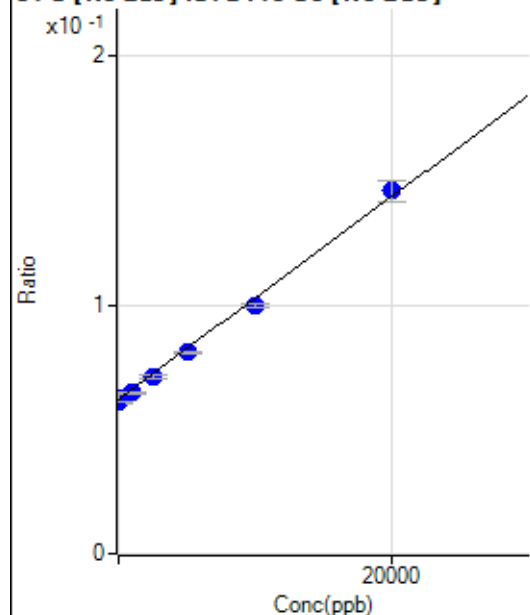
$$R = 0.9999$$

$$DL = 39.08$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-197.564	377671.34	0.0613	P	2.4
2	☐	0.000					
3	☐	0.000	197.564	381471.05	0.0629	P	6.9
4	☐	1000.000	633.573	412671.95	0.0647	P	1.0
5	☐	2500.000	2217.386	447807.69	0.0712	P	2.4
6	☐	5000.000	4599.736	508812.52	0.0808	P	1.5
7	☐	10000.000	9201.744	629470.10	0.0996	P	1.9
8	☐	20000.000	20552.842	880211.22	0.1457	P	5.6
9	☐			362413.07	0.0591	P	3.9

$$y = 4.0679\text{E-}006 * x + 0.0621$$

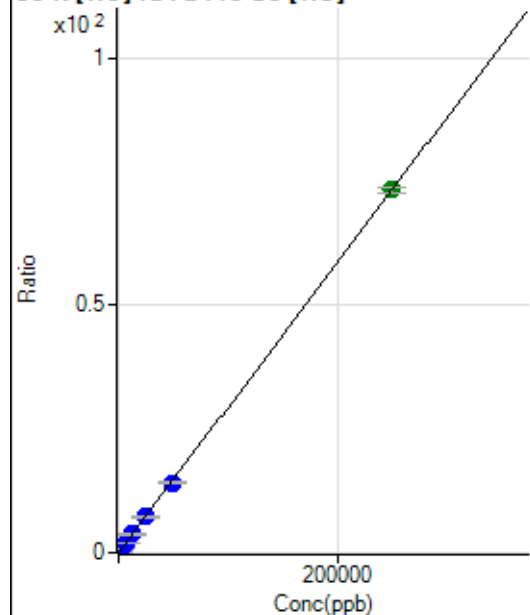
$$R = 0.9985$$

$$DL = 2141$$

Weight: <None>

Min Conc: 0

39 K [He] ISTD:45 Sc [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2216.95	0.0434	P	1.7
2	☐	50.000					
3	☐	500.000	510.018	9851.06	0.1925	P	2.4
4	☐	2500.000	2575.309	39442.31	0.7966	P	2.8
5	☐	6250.000	6213.725	91396.19	1.8607	P	1.0
6	☐	12500.000	12471.699	177196.69	3.6910	P	1.0
7	☐	25000.000	24467.499	332276.19	7.1995	P	0.5
8	☐	50000.000	47921.868	644344.69	14.0594	P	1.9
9	☐	250000.00	250470.42	3506547.56	73.3000	A	1.8

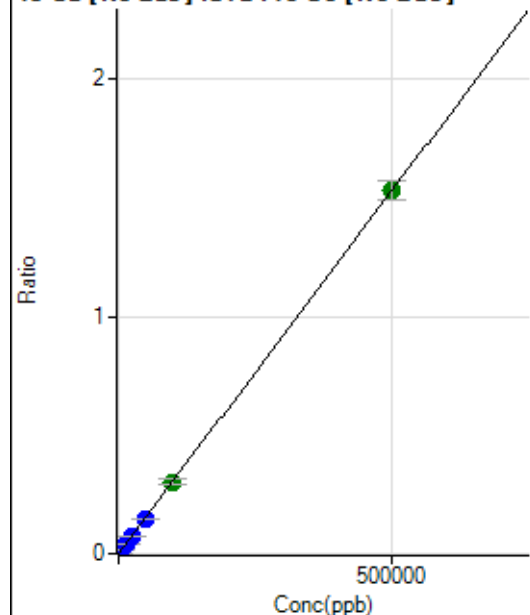
$$y = 2.9248\text{E-}004 * x + 0.0434$$

$$R = 1.0000$$

$$DL = 7.757$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	561.15	0.0001	P	3.2
2	☐	50.000					
3	☐	500.000	485.630	9545.34	0.0016	P	5.9
4	☐	5000.000	4830.356	94636.51	0.0148	P	0.9
5	☐	12500.000	12094.970	232986.01	0.0370	P	2.7
6	☐	25000.000	24281.000	467116.38	0.0742	P	2.6
7	☐	50000.000	47629.900	920014.06	0.1455	P	1.9
8	☐	100000.00	99150.423	1828682.38	0.3028	A	6.1
9	☐	500000.00	500454.71	9364299.86	1.5282	A	5.3

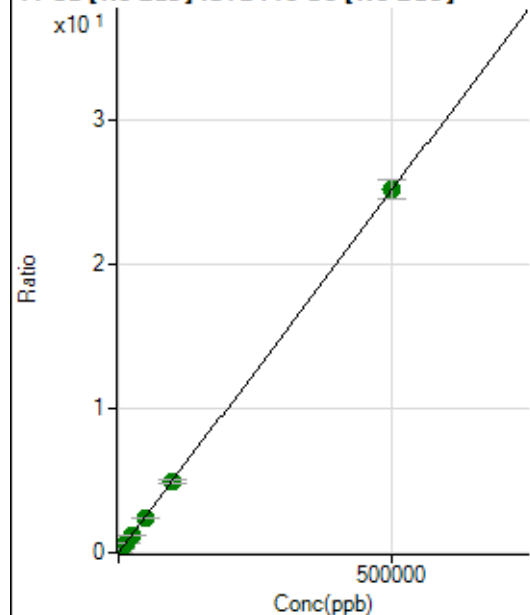
$$y = 3.0534E-006 * x + 9.1098E-005$$

$$R = 1.0000$$

$$DL = 2.867$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15320.22	0.0025	P	1.7
2	☐	50.000					
3	☐	500.000	482.817	162344.64	0.0268	P	7.1
4	☐	5000.000	4876.467	1580931.09	0.2479	A	1.5
5	☐	12500.000	12062.394	3836397.61	0.6096	A	2.2
6	☐	25000.000	24131.071	7658313.71	1.2170	A	2.5
7	☐	50000.000	47545.733	15143182.28	2.3954	A	2.3
8	☐	100000.00	97257.944	29578050.66	4.8973	A	5.5
9	☐	500000.00	500849.47	154476289.5	25.2094	A	5.2

$$y = 5.0328E-005 * x + 0.0025$$

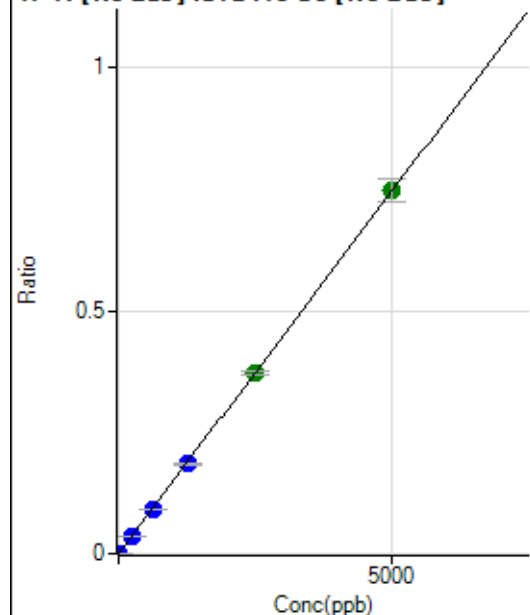
$$R = 1.0000$$

$$DL = 2.506$$

Weight: <None>

Min Conc: 0

47 Ti [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	108.34	0.0000	P	18.4
2	☐	0.500					
3	☐	5.000	5.212	4812.15	0.0008	P	8.8
4	☐	250.000	246.408	234413.86	0.0368	P	0.6
5	☐	625.000	613.512	575856.46	0.0915	P	1.8
6	☐	1250.000	1242.501	1166006.03	0.1853	P	2.0
7	☐	2500.000	2485.448	2342941.15	0.3706	A	2.1
8	☐	5000.000	5010.766	4511130.87	0.7471	A	6.3
9	☐			2333.63	0.0004	P	13.8

$$y = 1.4910\text{E-}004 * x + 1.7541\text{E-}005$$

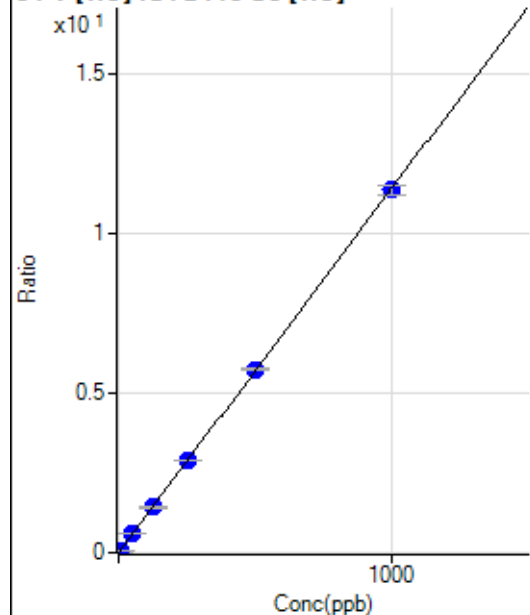
$$R = 1.0000$$

$$DL = 0.06494$$

Weight: <None>

Min Conc: 0

51 V [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0002	P	45.2
2	☐	0.500					
3	☐	5.000	4.847	2842.56	0.0556	P	4.3
4	☐	50.000	50.818	28744.10	0.5805	P	1.6
5	☐	125.000	124.534	69854.30	1.4223	P	1.7
6	☐	250.000	253.558	139004.06	2.8956	P	1.3
7	☐	500.000	504.466	265852.89	5.7607	P	1.0
8	☐	1000.000	996.896	521670.43	11.3837	P	2.4
9	☐			214.45	0.0045	P	11.9

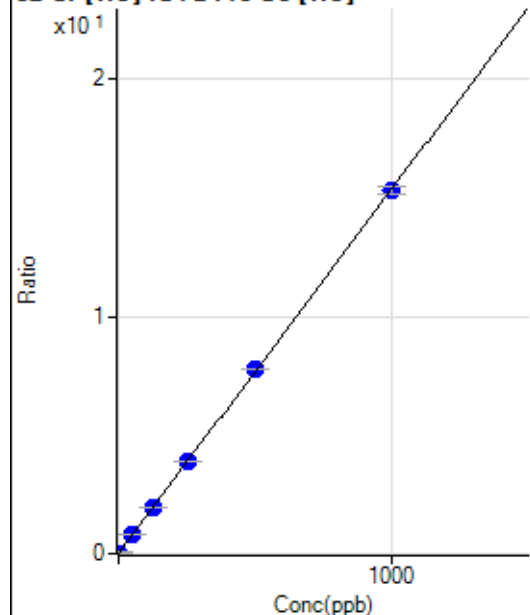
$$y = 0.0114 * x + 2.1681\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.02577$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	490.02	0.0096	P	12.3
2	☐	0.200					
3	☐	2.000	1.995	2059.08	0.0402	P	3.5
4	☐	50.000	51.180	39386.58	0.7954	P	1.5
5	☐	125.000	125.364	95014.05	1.9345	P	1.4
6	☐	250.000	253.760	187505.89	3.9059	P	1.2
7	☐	500.000	506.169	359120.36	7.7814	P	0.6
8	☐	1000.000	995.871	701182.84	15.3005	P	2.2
9	☐			27311.29	0.5709	P	0.5

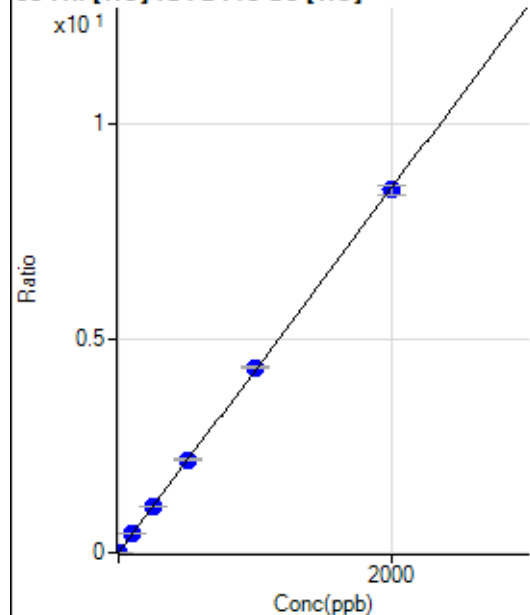
$$y = 0.0154 * x + 0.0096$$

$$R = 1.0000$$

$$DL = 0.2307$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.22	0.0014	P	5.4
2	☐	0.100					
3	☐	1.000	1.076	306.67	0.0060	P	6.7
4	☐	100.000	101.642	21510.10	0.4344	P	2.0
5	☐	250.000	250.373	52458.22	1.0681	P	1.6
6	☐	500.000	507.393	103833.26	2.1630	P	1.6
7	☐	1000.000	1016.575	199938.63	4.3322	P	0.6
8	☐	2000.000	1989.736	388517.45	8.4781	P	2.4
9	☐			2010.18	0.0420	P	1.4

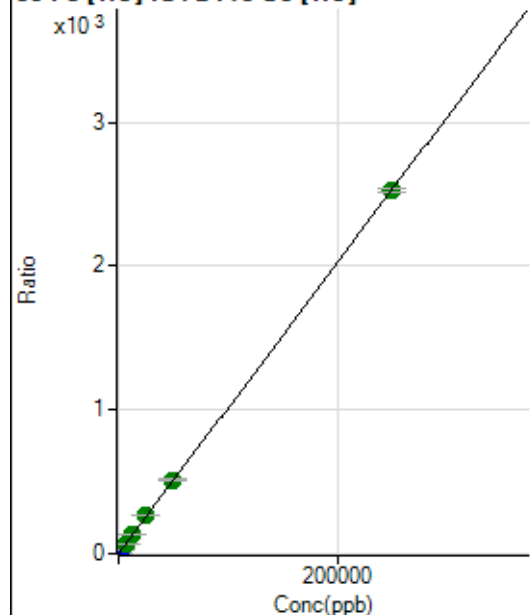
$$y = 0.0043 * x + 0.0014$$

$$R = 0.9999$$

$$DL = 0.05319$$

Weight: <None>

Min Conc: 0

56 Fe [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1370.48	0.0268	P	10.8
2	☐	5.000					
3	☐	50.000	50.693	27579.57	0.5390	P	2.3
4	☐	2500.000	2603.401	1303690.77	26.3294	P	1.8
5	☐	6250.000	6513.491	3233303.72	65.8337	A	2.1
6	☐	12500.000	13035.896	6323719.06	131.7306	A	1.5
7	☐	25000.000	25957.353	12104495.41	262.2782	A	0.5
8	☐	50000.000	50766.723	23506941.04	512.9313	A	2.1
9	☐	250000.00	249716.50	120694759.1	2,522.953	A	1.0

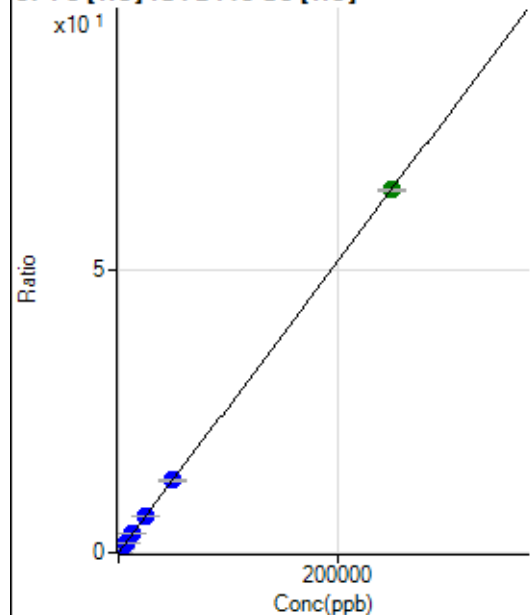
$$y = 0.0101 * x + 0.0268$$

$$R = 1.0000$$

$$DL = 0.8615$$

Weight: <None>

Min Conc: 0

57 Fe [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0010	P	30.2
2	☐	5.000					
3	☐	50.000	51.637	727.82	0.0142	P	8.8
4	☐	2500.000	2598.483	33048.91	0.6675	P	2.8
5	☐	6250.000	6381.143	80431.25	1.6377	P	2.4
6	☐	12500.000	12805.367	157722.19	3.2855	P	1.3
7	☐	25000.000	25678.468	304007.15	6.5874	P	0.9
8	☐	50000.000	50300.651	591267.06	12.9029	P	2.6
9	☐	250000.00	249852.49	3065847.78	64.0870	A	0.6

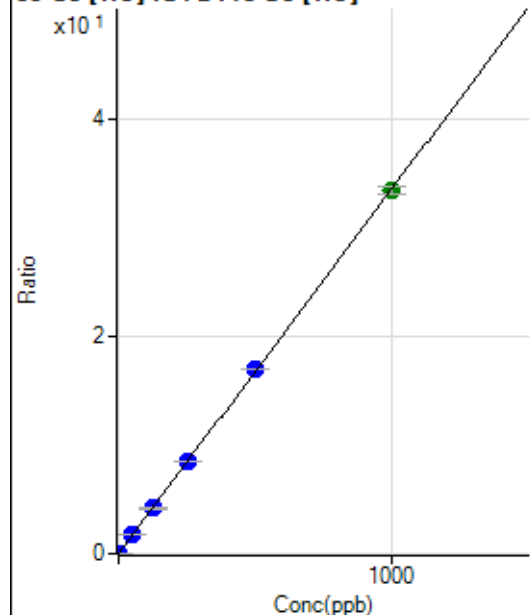
$$y = 2.5650E-004 * x + 9.7950E-004$$

$$R = 1.0000$$

$$DL = 3.455$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.34	0.0018	P	9.1
2	☐	0.100					
3	☐	1.000	1.007	1821.26	0.0356	P	2.2
4	☐	50.000	51.187	85106.84	1.7188	P	1.4
5	☐	125.000	124.763	205636.53	4.1867	P	1.2
6	☐	250.000	253.901	408924.36	8.5182	P	1.3
7	☐	500.000	506.199	783689.28	16.9809	P	0.6
8	☐	1000.000	995.896	1530929.58	33.4065	A	2.2
9	☐			19129.99	0.3999	P	2.0

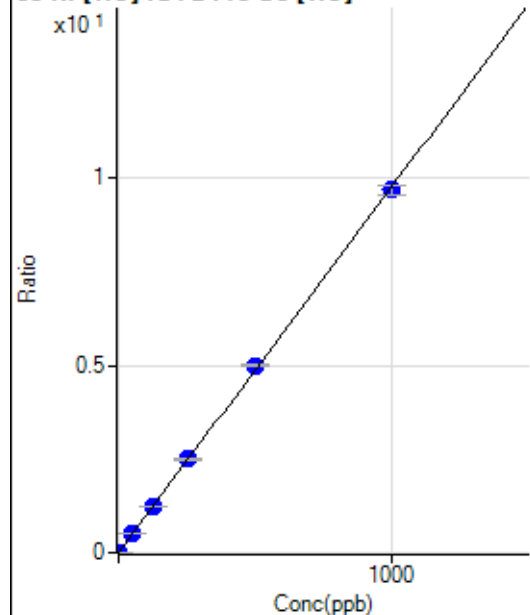
$$y = 0.0335 * x + 0.0018$$

$$R = 1.0000$$

$$DL = 0.01476$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	157.78	0.0031	P	6.4
2	☐	0.100					
3	☐	1.000	0.965	638.91	0.0125	P	5.7
4	☐	50.000	51.411	24963.67	0.5041	P	0.4
5	☐	125.000	125.720	60330.14	1.2283	P	1.4
6	☐	250.000	256.377	120084.13	2.5016	P	2.0
7	☐	500.000	510.934	229936.20	4.9824	P	0.9
8	☐	1000.000	992.778	443499.14	9.6782	P	2.6
9	☐			14766.92	0.3087	P	1.1

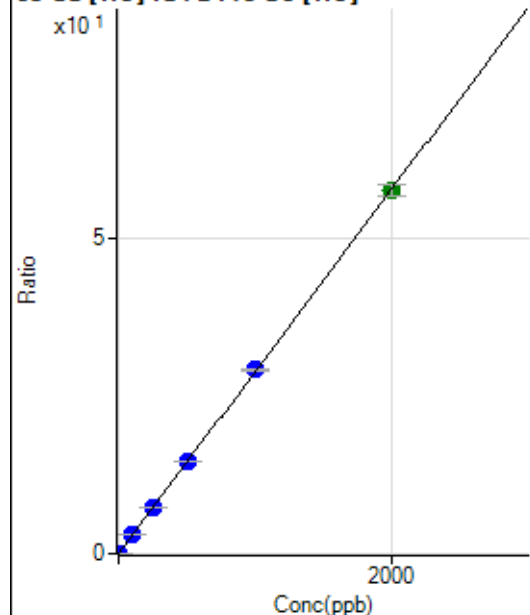
$$y = 0.0097 * x + 0.0031$$

$$R = 0.9999$$

$$DL = 0.06034$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	427.79	0.0084	P	9.1
2	☐	0.200					
3	☐	2.000	1.958	3319.34	0.0649	P	3.0
4	☐	100.000	101.828	145886.86	2.9461	P	0.9
5	☐	250.000	250.373	355191.15	7.2316	P	1.4
6	☐	500.000	507.308	702992.50	14.6442	P	1.4
7	☐	1000.000	1011.554	1347209.63	29.1916	P	0.7
8	☐	2000.000	1992.258	2633953.49	57.4848	A	3.1
9	☐			6729.53	0.1407	P	1.1

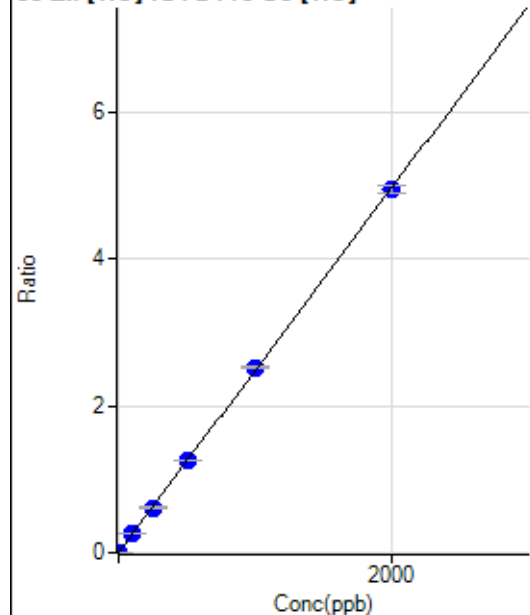
$$y = 0.0288 * x + 0.0084$$

$$R = 1.0000$$

$$DL = 0.07893$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	57.78	0.0011	P	16.3
2	☐	0.200					
3	☐	2.000	2.170	333.34	0.0065	P	8.8
4	☐	100.000	102.947	12697.10	0.2564	P	1.7
5	☐	250.000	247.233	30170.78	0.6142	P	1.1
6	☐	500.000	509.157	60670.96	1.2638	P	0.8
7	☐	1000.000	1015.691	116296.77	2.5199	P	0.5
8	☐	2000.000	1990.064	226213.03	4.9362	P	2.3
9	☐			1725.69	0.0361	P	2.1

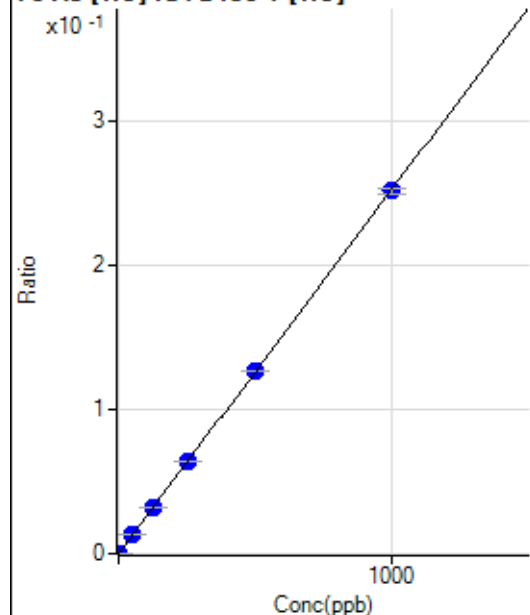
$$y = 0.0025 * x + 0.0011$$

$$R = 0.9999$$

$$DL = 0.2232$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	7.41	0.0000	P	49.9
2	☐	0.100					
3	☐	1.000	0.893	85.80	0.0002	P	4.4
4	☐	50.000	51.380	4419.88	0.0130	P	2.4
5	☐	125.000	127.147	10805.53	0.0321	P	0.3
6	☐	250.000	254.728	21613.25	0.0643	P	1.2
7	☐	500.000	501.976	41471.90	0.1267	P	0.9
8	☐	1000.000	997.493	81390.88	0.2517	P	1.9
9	☐			150.00	0.0004	P	7.0

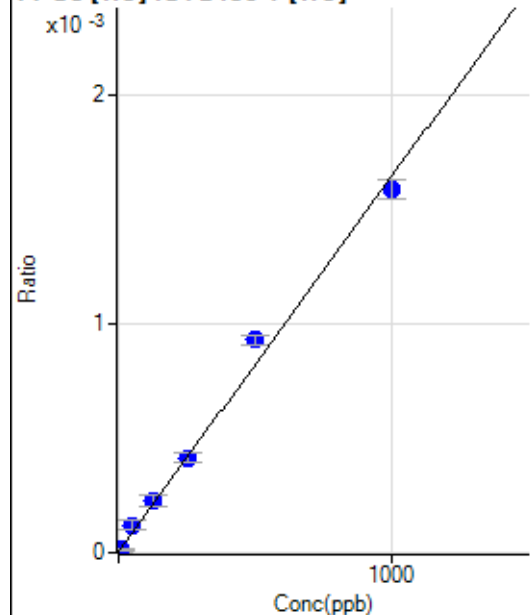
$$y = 2.5232\text{E-}004 * x + 2.1608\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1282$$

Weight: <None>

Min Conc: 0

77 Se [He] ISTD:89 Y [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	5.810	4.44	0.0000	P	42.7
4	☐	50.000	71.561	41.11	0.0001	P	37.3
5	☐	125.000	136.802	76.67	0.0002	P	20.1
6	☐	250.000	251.572	140.00	0.0004	P	12.0
7	☐	500.000	564.522	304.46	0.0009	P	4.7
8	☐	1000.000	964.789	513.35	0.0016	P	5.3
9	☐			1.11	0.0000	P	173.

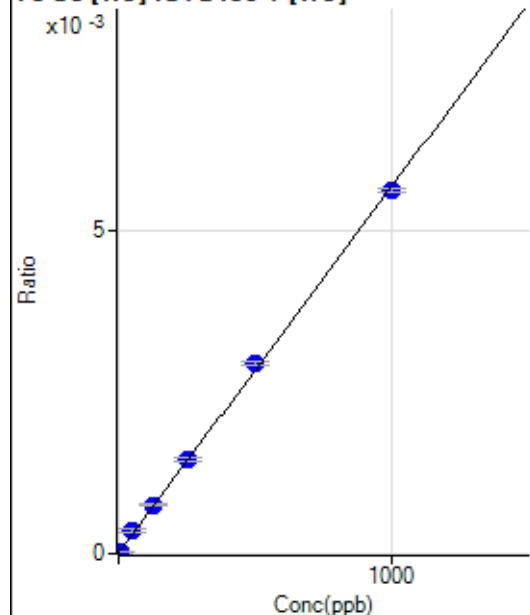
$$y = 1.6418\text{E-}006 * x + 3.2273\text{E-}006$$

$$R = 0.9967$$

$$DL = 10.21$$

Weight: <None>

Min Conc: 0

78 Se [He] ISTD:89 Y [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2.47	0.0000	P	114.
2	☐	0.500					
3	☐	5.000	3.723	9.88	0.0000	P	38.2
4	☐	50.000	60.676	119.76	0.0004	P	16.7
5	☐	125.000	131.730	254.33	0.0008	P	4.4
6	☐	250.000	255.639	490.76	0.0015	P	4.0
7	☐	500.000	516.788	963.62	0.0029	P	2.3
8	☐	1000.000	988.827	1819.27	0.0056	P	1.0
9	☐			3.09	0.0000	P	69.8

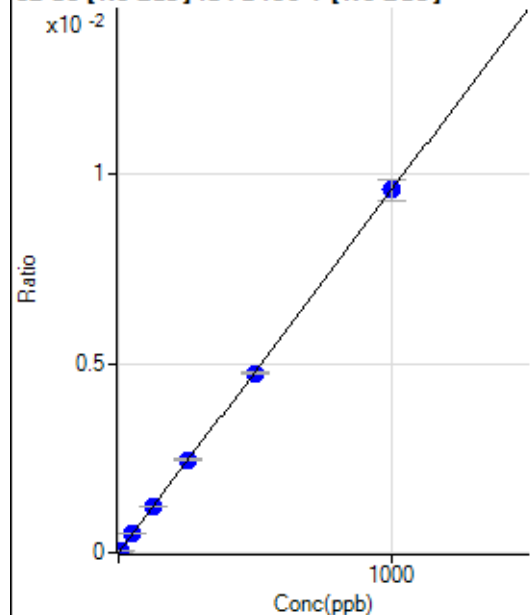
$$y = 5.6809\text{E-}006 * x + 7.2012\text{E-}006$$

$$R = 0.9997$$

$$DL = 4.347$$

Weight: <None>

Min Conc: 0

82 Se [No Gas] ISTD:89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-55.44	0.0000	P	-46.
2	☐	0.500					
3	☐	5.000	5.978	572.74	0.0001	P	3.7
4	☐	50.000	51.241	5583.28	0.0005	P	3.0
5	☐	125.000	126.074	13680.69	0.0012	P	0.4
6	☐	250.000	256.547	28224.95	0.0025	P	1.9
7	☐	500.000	494.740	55609.47	0.0047	P	1.4
8	☐	1000.000	1000.792	109228.01	0.0096	P	5.7
9	☐			88.44	0.0000	P	43.4

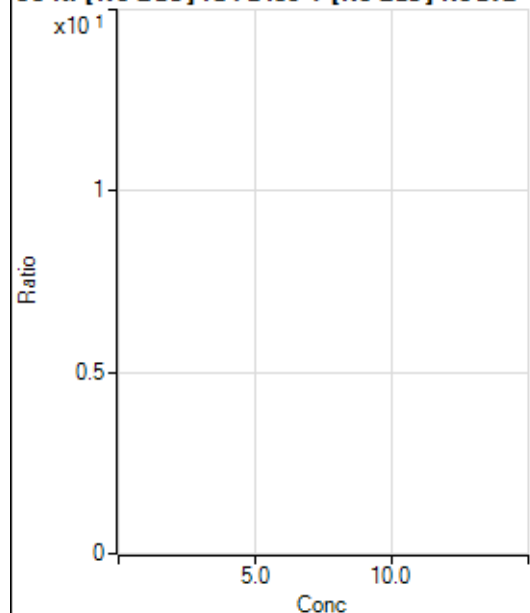
$$y = 9.5830\text{E-}006 * x - 5.0091\text{E-}006$$

$$R = 1.0000$$

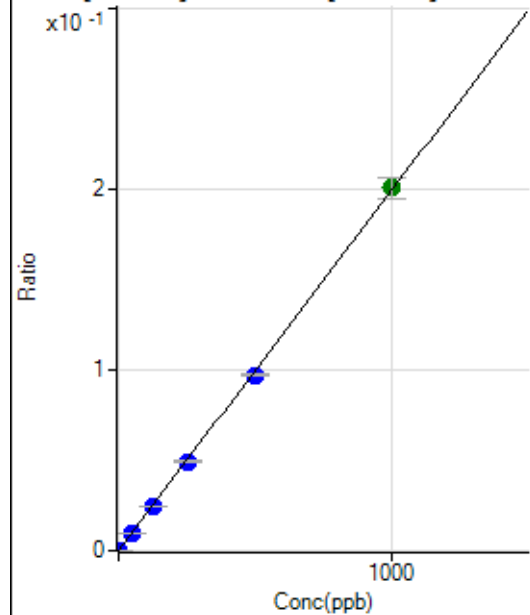
$$DL = 0.7282$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] ISTD:89 Y [No Gas] No av_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			367.79	0.0000	P	5.4
2	☐						
3	☐			332.24	0.0000	P	17.1
4	☐			348.90	0.0000	P	10.3
5	☐			295.57	0.0000	P	6.8
6	☐			340.01	0.0000	P	4.6
7	☐			343.35	0.0000	P	12.3
8	☐			320.01	0.0000	P	5.5
9	☐			336.68	0.0000	P	4.4

86 Sr [No Gas] ISTD:89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	530.59	0.0000	P	7.1
2	☐	0.100					
3	☐	1.000	1.045	2811.52	0.0003	P	1.2
4	☐	50.000	49.127	113006.33	0.0098	P	1.0
5	☐	125.000	124.328	282248.18	0.0248	P	0.5
6	☐	250.000	247.980	569041.83	0.0495	P	1.4
7	☐	500.000	487.256	1140625.00	0.0971	P	1.4
8	☐	1000.000	1007.005	2287259.84	0.2007	A	5.6
9	☐			11552.66	0.0010	P	3.9

$$y = 1.9927E-004 * x + 4.8036E-005$$

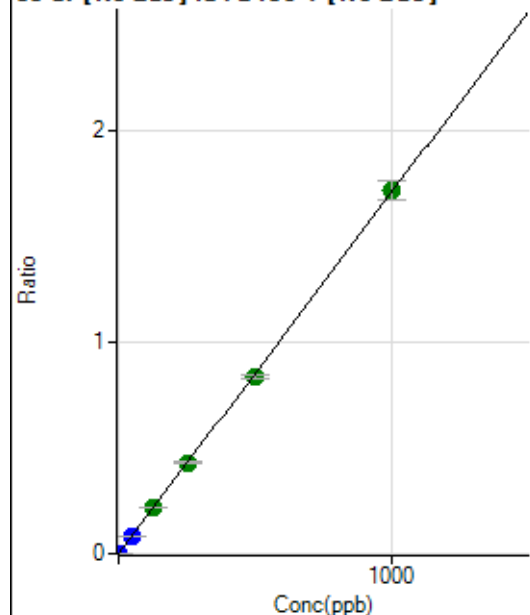
$$R = 0.9999$$

$$DL = 0.05154$$

Weight: <None>

Min Conc: 0

88 Sr [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	133.34	0.0000	P	16.8
2	☐	0.100					
3	☐	1.000	1.035	19450.71	0.0018	P	5.1
4	☐	50.000	49.940	978467.73	0.0852	P	1.1
5	☐	125.000	127.276	2468070.07	0.2171	A	1.4
6	☐	250.000	252.198	4947839.91	0.4301	A	2.2
7	☐	500.000	489.452	9800506.64	0.8347	A	1.9
8	☐	1000.000	1004.443	19522015.02	1.7129	A	5.3
9	☐			97561.81	0.0086	P	4.6

$$y = 0.0017 * x + 1.2071E-005$$

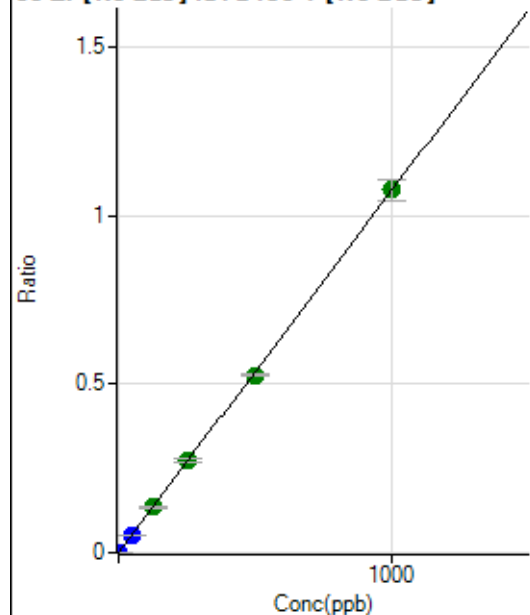
$$R = 0.9999$$

$$DL = 0.00356$$

Weight: <None>

Min Conc: 0

90 Zr [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1000.08	0.0001	P	18.2
2	☐	0.100					
3	☐	1.000	0.950	12125.33	0.0011	P	9.6
4	☐	50.000	48.466	598503.59	0.0521	P	1.6
5	☐	125.000	125.090	1527306.16	0.1343	A	3.1
6	☐	250.000	254.864	3147258.93	0.2736	A	2.5
7	☐	500.000	491.703	6197022.36	0.5278	A	0.8
8	☐	1000.000	1002.998	12266362.34	1.0765	A	5.7
9	☐			3975.77	0.0004	P	10.3

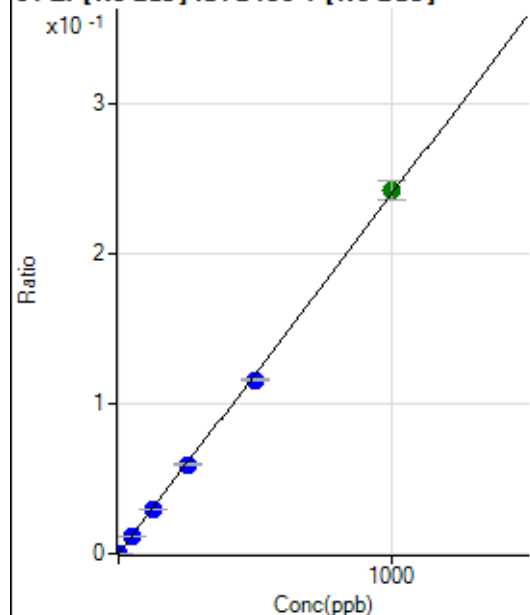
$$y = 0.0011 * x + 9.0465E-005$$

$$R = 0.9999$$

$$DL = 0.04599$$

Weight: <None>

Min Conc: 0

91 Zr [No Gas] ISTD : 89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	205.57	0.0000	P	17.8
2	☐	0.100					
3	☐	1.000	0.934	2642.03	0.0002	P	10.7
4	☐	50.000	48.382	133154.14	0.0116	P	1.7
5	☐	125.000	122.600	333657.65	0.0293	P	1.5
6	☐	250.000	247.061	680048.83	0.0591	P	2.2
7	☐	500.000	482.808	1356243.80	0.1155	P	1.5
8	☐	1000.000	1009.712	2752791.97	0.2415	A	5.4
9	☐			930.63	0.0001	P	5.3

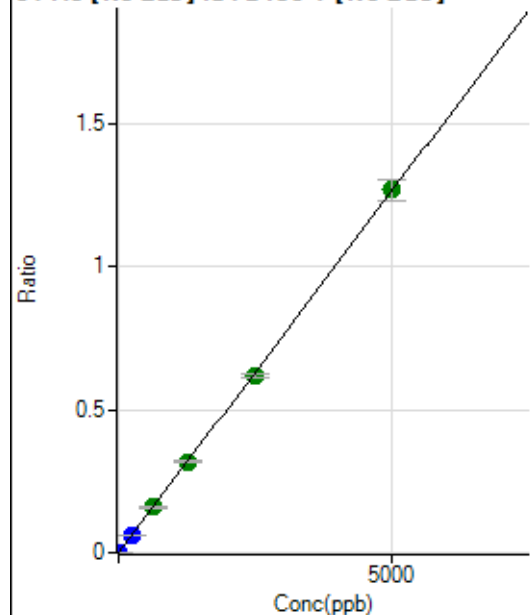
$$y = 2.3920\text{E-}004 * x + 1.8594\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.04144$$

Weight: <None>

Min Conc: 0

94 Mo [No Gas] ISTD : 89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	488.92	0.0000	P	10.4
2	☐	0.500					
3	☐	5.000	5.081	14536.11	0.0013	P	6.6
4	☐	250.000	248.464	722051.85	0.0629	P	0.6
5	☐	625.000	630.819	1813742.40	0.1595	A	2.0
6	☐	1250.000	1263.390	3674741.14	0.3194	A	2.1
7	☐	2500.000	2446.459	7262001.72	0.6185	A	2.5
8	☐	5000.000	5022.772	14470783.48	1.2698	A	5.6
9	☐			19534.27	0.0017	P	10.1

$$y = 2.5280\text{E-}004 * x + 4.4249\text{E-}005$$

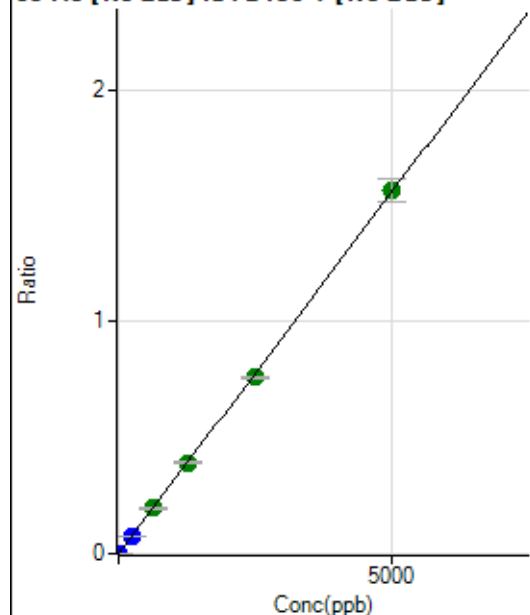
$$R = 0.9999$$

$$DL = 0.05449$$

Weight: <None>

Min Conc: 0

95 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	225.01	0.0000	P	9.2
2	☐	0.500					
3	☐	5.000	4.975	17194.93	0.0016	P	5.1
4	☐	250.000	247.965	887788.26	0.0773	P	0.2
5	☐	625.000	630.755	2234870.84	0.1966	A	2.7
6	☐	1250.000	1260.078	4517217.07	0.3927	A	1.6
7	☐	2500.000	2446.790	8952325.11	0.7624	A	1.2
8	☐	5000.000	5023.468	17833354.91	1.5653	A	6.3
9	☐			31186.79	0.0028	P	8.4

$$y = 3.1159\text{E-}004 * x + 2.0358\text{E-}005$$

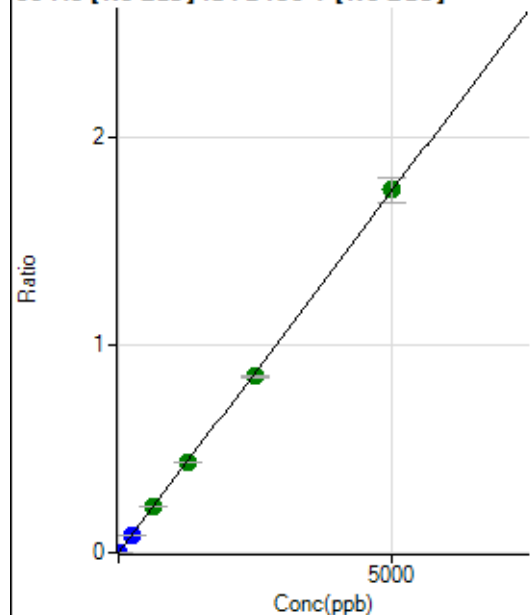
$$R = 0.9999$$

$$DL = 0.01796$$

Weight: <None>

Min Conc: 0

96 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	294.46	0.0000	P	12.0
2	☐	0.500					
3	☐	5.000	4.963	19125.26	0.0017	P	6.0
4	☐	250.000	248.230	989387.30	0.0861	P	0.4
5	☐	625.000	633.116	2497281.91	0.2196	A	1.6
6	☐	1250.000	1252.213	4997130.23	0.4344	A	1.9
7	☐	2500.000	2447.348	9968076.78	0.8489	A	1.1
8	☐	5000.000	5024.847	19854908.78	1.7430	A	6.6
9	☐			35762.12	0.0032	P	6.3

$$y = 3.4687\text{E-}004 * x + 2.6654\text{E-}005$$

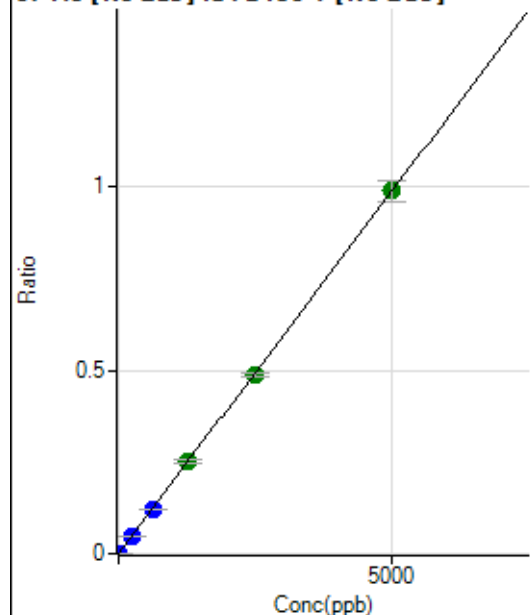
$$R = 0.9999$$

$$DL = 0.02761$$

Weight: <None>

Min Conc: 0

97 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	191.68	0.0000	P	9.2
2	☐	0.500					
3	☐	5.000	5.018	11018.91	0.0010	P	7.2
4	☐	250.000	246.488	559011.46	0.0487	P	0.3
5	☐	625.000	617.267	1385373.37	0.1218	P	1.0
6	☐	1250.000	1270.246	2883897.57	0.2507	A	3.0
7	☐	2500.000	2470.063	5724127.21	0.4875	A	1.4
8	☐	5000.000	5011.049	11270142.44	0.9890	A	5.6
9	☐			19790.21	0.0018	P	7.8

$$y = 1.9736E-004 * x + 1.7354E-005$$

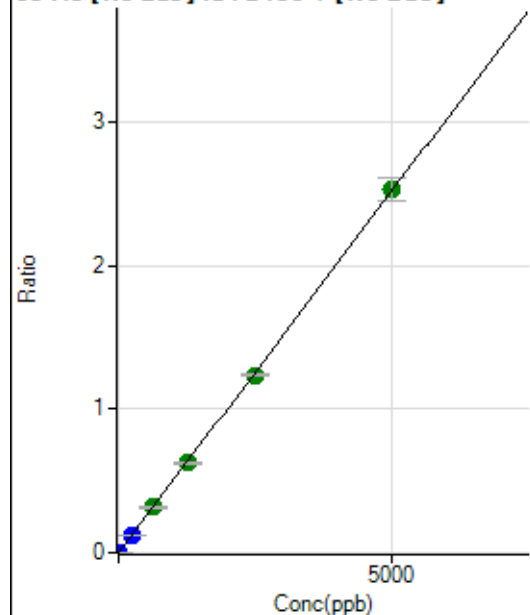
$$R = 1.0000$$

$$DL = 0.02428$$

Weight: <None>

Min Conc: 0

98 Mo [No Gas] ISTD:89 Y [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	369.47	0.0000	P	9.4
2	☐	0.500					
3	☐	5.000	4.961	27620.74	0.0025	P	8.9
4	☐	250.000	246.410	1423619.00	0.1239	P	0.4
5	☐	625.000	626.745	3583602.12	0.3152	A	0.8
6	☐	1250.000	1249.532	7228006.32	0.6283	A	2.0
7	☐	2500.000	2455.814	14499719.94	1.2348	A	0.9
8	☐	5000.000	5022.172	28770216.27	2.5252	A	6.2
9	☐			49915.39	0.0044	P	6.2

$$y = 5.0281E-004 * x + 3.3446E-005$$

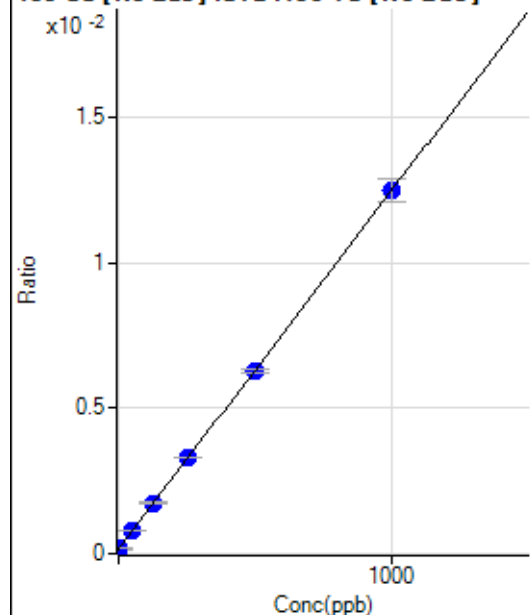
$$R = 0.9999$$

$$DL = 0.01882$$

Weight: <None>

Min Conc: 0

106 Cd [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2278.09	0.0002	P	7.2
2	☐	0.100					
3	☐	1.000	1.243	2483.69	0.0002	P	3.5
4	☐	50.000	51.925	12053.12	0.0008	P	5.6
5	☐	125.000	128.561	26167.91	0.0017	P	3.1
6	☐	250.000	255.287	50646.11	0.0033	P	1.3
7	☐	500.000	497.342	100019.88	0.0063	P	1.7
8	☐	1000.000	999.466	193774.70	0.0125	P	6.3
9	☐			2464.23	0.0002	P	9.8

$$y = 1.2329\text{E-}005 * x + 1.5772\text{E-}004$$

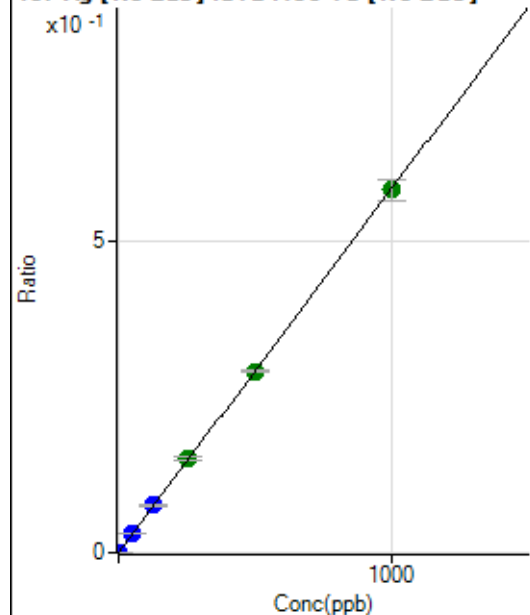
$$R = 1.0000$$

$$DL = 2.777$$

Weight: <None>

Min Conc: 0

107 Ag [No Gas] ISTD :159 Tb [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	80.56	0.0000	P	22.9
2	☐	0.100					
3	☐	1.000	1.084	9095.15	0.0006	P	11.2
4	☐	50.000	52.096	458978.80	0.0304	P	0.1
5	☐	125.000	129.818	1136845.82	0.0757	P	1.3
6	☐	250.000	259.852	2321458.54	0.1515	A	3.0
7	☐	500.000	499.369	4630995.29	0.2912	A	1.4
8	☐	1000.000	997.145	9029066.78	0.5815	A	6.1
9	☐			1075.10	0.0001	P	11.3

$$y = 5.8314\text{E-}004 * x + 5.5681\text{E-}006$$

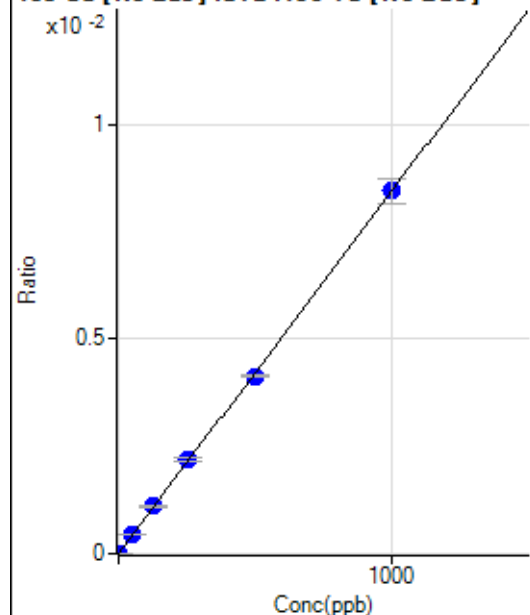
$$R = 0.9999$$

$$DL = 0.006553$$

Weight: <None>

Min Conc: 0

108 Cd [No Gas] ISTD :159 Tb [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.06	0.0000	P	35.5
2	☐	0.100					
3	☐	1.000	0.854	119.45	0.0000	P	36.0
4	☐	50.000	51.114	6529.50	0.0004	P	2.2
5	☐	125.000	130.261	16511.81	0.0011	P	2.8
6	☐	250.000	260.235	33640.83	0.0022	P	2.4
7	☐	500.000	490.350	65780.65	0.0041	P	1.1
8	☐	1000.000	1001.553	131126.86	0.0084	P	6.9
9	☐			63.89	0.0000	P	13.9

$$y = 8.4329\text{E-}006 * x + 1.2520\text{E-}006$$

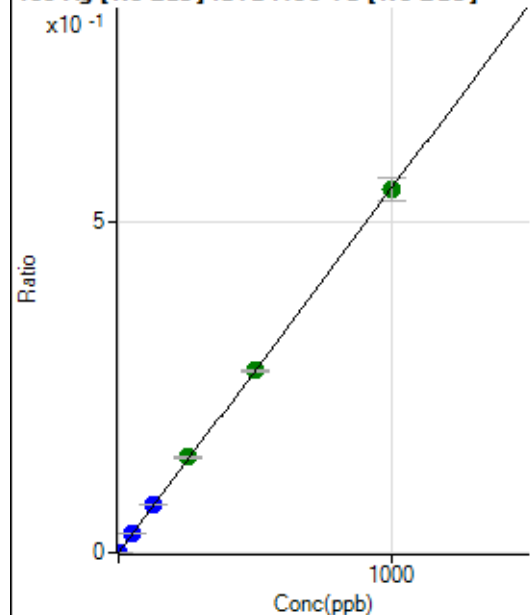
$$R = 0.9999$$

$$DL = 0.1583$$

Weight: <None>

Min Conc: 0

109 Ag [No Gas] ISTD :159 Tb [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	17.4
2	☐	0.100					
3	☐	1.000	1.061	8380.78	0.0006	P	7.3
4	☐	50.000	52.254	434755.62	0.0288	P	0.6
5	☐	125.000	131.118	1084333.51	0.0722	P	2.4
6	☐	250.000	262.245	2212835.66	0.1444	A	2.7
7	☐	500.000	500.561	4384511.34	0.2757	A	1.2
8	☐	1000.000	995.781	8515000.89	0.5484	A	6.5
9	☐			1008.42	0.0001	P	17.5

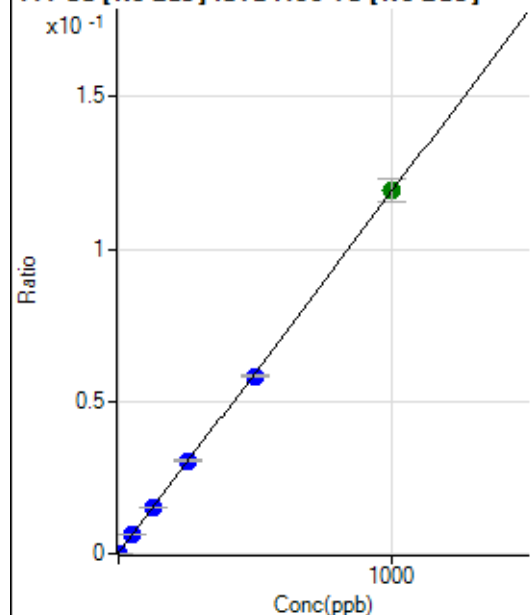
$$y = 5.5077\text{E-}004 * x + 1.9237\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.001823$$

Weight: <None>

Min Conc: 0

111 Cd [No Gas] ISTD :159 Tb [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1600.08	0.0001	P	7.4
2	☐	0.100					
3	☐	1.000	1.038	3352.33	0.0002	P	5.4
4	☐	50.000	51.492	93979.64	0.0062	P	0.2
5	☐	125.000	128.220	230150.62	0.0153	P	1.5
6	☐	250.000	255.432	466152.85	0.0304	P	1.7
7	☐	500.000	490.711	927854.34	0.0583	P	1.2
8	☐	1000.000	1002.810	1849406.52	0.1191	A	6.5
9	☐			2187.21	0.0001	P	10.4

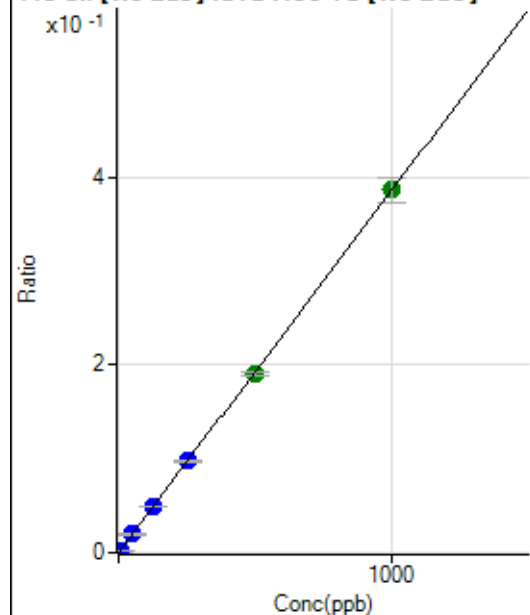
$$y = 1.1867\text{E-}004 * x + 1.1077\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.2068$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD :159 Tb [No Gas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	527.81	0.0000	P	13.7
2	☐	0.500					
3	☐	5.000	5.137	28812.59	0.0020	P	7.2
4	☐	50.000	50.434	294155.18	0.0195	P	0.5
5	☐	125.000	126.145	730534.28	0.0487	P	1.9
6	☐	250.000	253.968	1500120.72	0.0979	P	2.4
7	☐	500.000	493.630	3025865.41	0.1903	A	1.9
8	☐	1000.000	1002.028	5995462.28	0.3862	A	6.8
9	☐			15868.28	0.0010	P	8.3

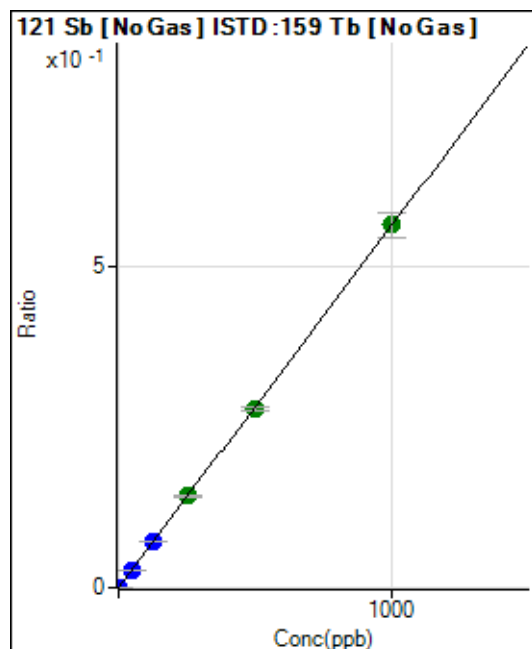
$$y = 3.8540\text{E-}004 * x + 3.6595\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03901$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	27.2
2	☐	0.200					
3	☐	2.000	2.039	16458.06	0.0012	P	6.2
4	☐	50.000	49.568	421770.73	0.0279	P	0.5
5	☐	125.000	126.285	1068104.36	0.0711	P	1.5
6	☐	250.000	254.458	2195787.25	0.1433	A	2.5
7	☐	500.000	493.031	4416111.65	0.2777	A	1.6
8	☐	1000.000	1002.231	8763829.02	0.5645	A	6.6
9	☐			25792.58	0.0017	P	11.7

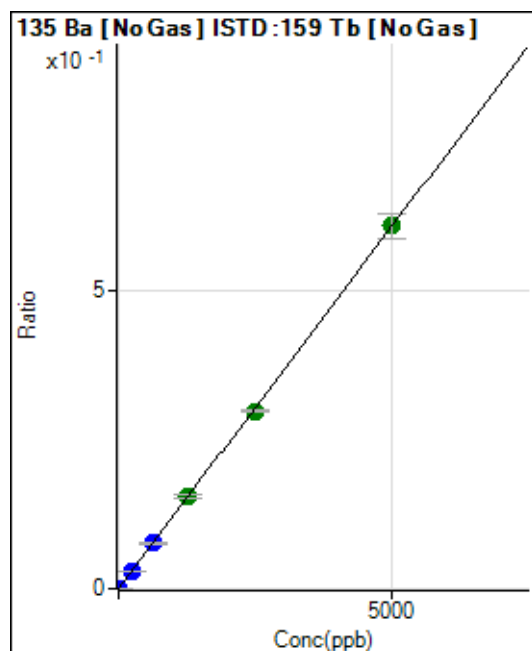
$$y = 5.6324\text{E-}004 * x + 3.0697\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.004447$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	23.3
2	☐	1.000					
3	☐	10.000	10.128	17595.72	0.0012	P	10.5
4	☐	250.000	249.536	457018.81	0.0303	P	0.7
5	☐	625.000	626.837	1141132.88	0.0760	P	1.4
6	☐	1250.000	1276.545	2371014.24	0.1548	A	2.2
7	☐	2500.000	2457.164	4737032.96	0.2979	A	1.6
8	☐	5000.000	5014.575	9437602.99	0.6079	A	6.6
9	☐			1886.33	0.0001	P	11.0

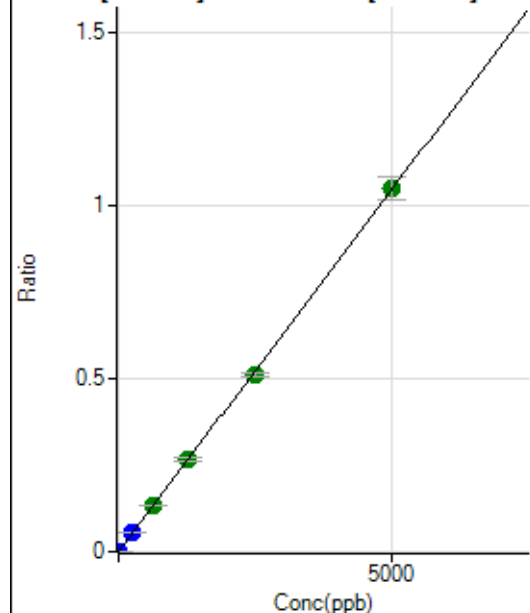
$$y = 1.2123\text{E-}004 * x + 5.3753\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.03105$$

Weight: <None>

Min Conc: 0

137 Ba [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	102.78	0.0000	P	24.8
2	☐	1.000					
3	☐	10.000	10.192	30511.40	0.0021	P	8.0
4	☐	250.000	253.367	799535.86	0.0529	P	0.6
5	☐	625.000	642.683	2015820.92	0.1343	A	2.1
6	☐	1250.000	1274.782	4079343.93	0.2663	A	2.9
7	☐	2500.000	2449.981	8138271.71	0.5118	A	1.8
8	☐	5000.000	5016.435	16269661.99	1.0478	A	6.3
9	☐			3050.49	0.0002	P	3.2

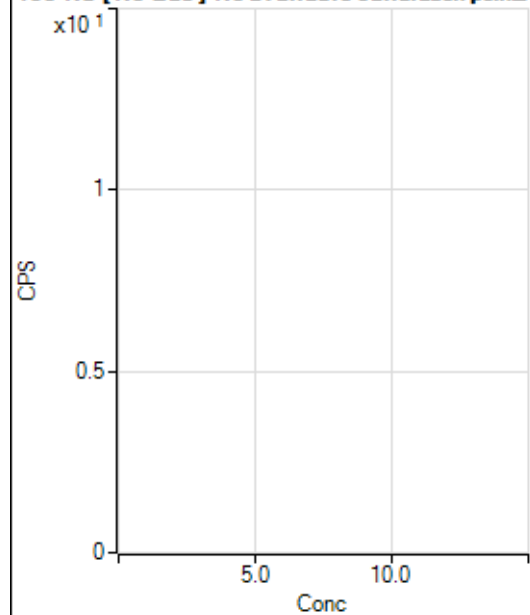
$$y = 2.0888E-004 * x + 7.1040E-006$$

$$R = 0.9999$$

$$DL = 0.02527$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			11.11		P	173.
4	☐			22.22		P	34.7
5	☐			66.67		P	55.7
6	☐			88.89		P	8.7
7	☐			222.23		P	4.6
8	☐			344.46		P	18.6
9	☐			137.78		P	24.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			1.11		P	173.
6	☐			3.33		P	0.0
7	☐			4.44		P	43.4
8	☐			10.00		P	66.7
9	☐			10.00		P	33.3

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	21.6
2	☐						
3	☐			25.00		P	88.2
4	☐			27.78		P	34.6
5	☐			30.56		P	41.7
6	☐			52.78		P	24.1
7	☐			127.78		P	26.4
8	☐			88.89		P	28.6
9	☐			100.01		P	14.4

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			2.22		P	86.6
4	☐			2.22		P	173.
5	☐			2.22		P	86.6
6	☐			3.33		P	100.
7	☐			7.78		P	65.5
8	☐			7.78		P	24.7
9	☐			16.67		P	20.0

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	16.7
2	☐						
3	☐			80.56		P	15.8
4	☐			105.56		P	19.9
5	☐			69.45		P	18.3
6	☐			86.12		P	24.4
7	☐			113.90		P	40.3
8	☐			91.67		P	15.7
9	☐			136.12		P	33.7

160 Gd [He] No available calibration points

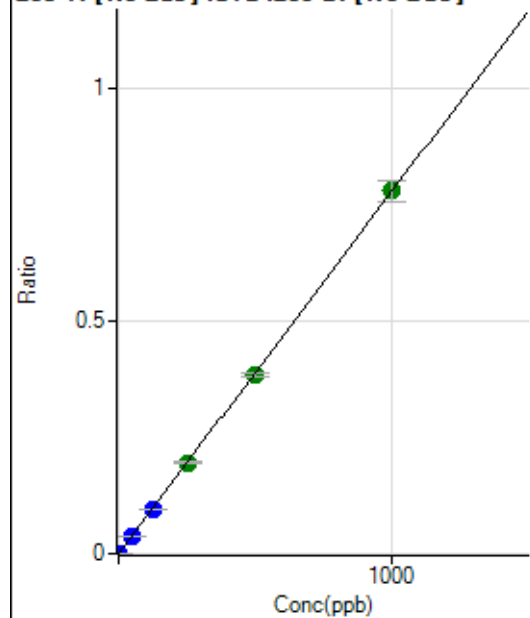
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	65.5
2	☐						
3	☐			13.33		P	25.0
4	☐			11.11		P	17.3
5	☐			8.89		P	43.3
6	☐			6.67		P	86.6
7	☐			10.00		P	88.2
8	☐			21.11		P	50.8
9	☐			23.33		P	57.2

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	9.1
2	☐						
3	☐			66.67		P	54.5
4	☐			66.67		P	25.0
5	☐			38.89		P	24.7
6	☐			66.67		P	45.1
7	☐			50.00		P	33.3
8	☐			58.34		P	14.3
9	☐			36.11		P	26.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐						
3	☐			17.78		P	47.2
4	☐			10.00		P	0.0
5	☐			12.22		P	87.7
6	☐			5.56		P	91.6
7	☐			6.67		P	50.0
8	☐			6.67		P	0.0
9	☐			7.78		P	24.7

203 Tl [No Gas] ISTD :209 Bi [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	125.01	0.0000	P	22.4
2	☐	0.100					
3	☐	1.000	0.984	7160.70	0.0008	P	8.8
4	☐	50.000	48.660	367229.23	0.0378	P	1.5
5	☐	125.000	121.739	917814.62	0.0945	P	2.6
6	☐	250.000	251.334	1917766.32	0.1951	A	2.7
7	☐	500.000	494.281	3868820.44	0.3837	A	1.3
8	☐	1000.000	1003.001	7663162.76	0.7787	A	5.8
9	☐			4598.32	0.0005	P	13.4

$$y = 7.7631\text{E-}004 * x + 1.3231\text{E-}005$$

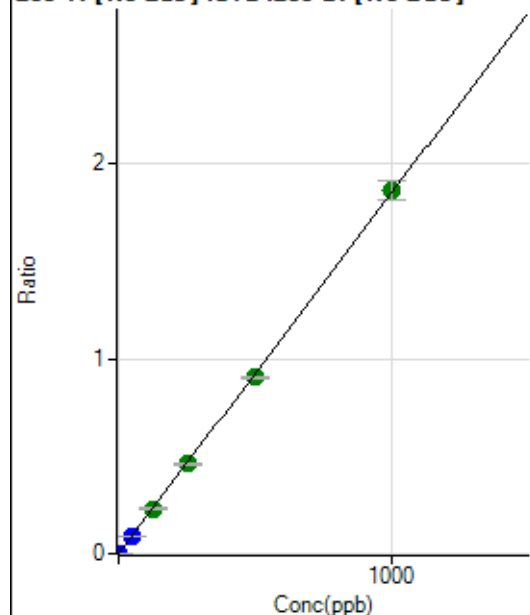
$$R = 1.0000$$

$$DL = 0.01144$$

Weight: <None>

Min Conc: 0

205 Tl [No Gas] ISTD :209 Bi [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	333.35	0.0000	P	9.6
2	☐	0.100					
3	☐	1.000	1.009	17518.48	0.0019	P	6.4
4	☐	50.000	49.304	885619.06	0.0911	P	1.1
5	☐	125.000	124.502	2233935.66	0.2301	A	2.8
6	☐	250.000	249.073	4523478.31	0.4602	A	2.2
7	☐	500.000	488.162	9093702.89	0.9020	A	1.3
8	☐	1000.000	1006.248	18299640.86	1.8592	A	5.4
9	☐			11188.80	0.0012	P	14.0

$$y = 0.0018 * x + 3.5339E-005$$

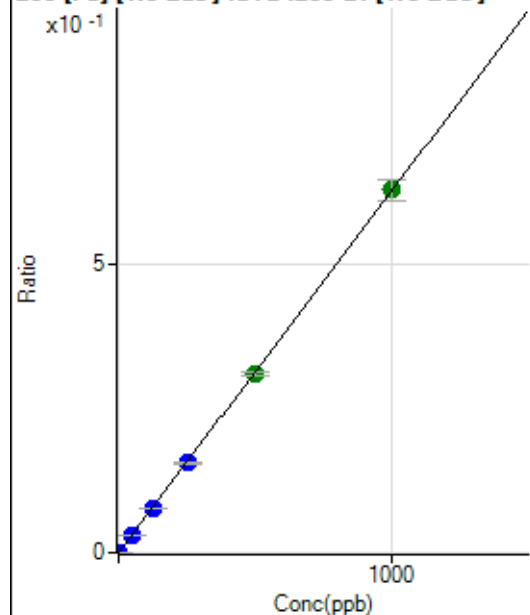
$$R = 0.9999$$

$$DL = 0.005525$$

Weight: <None>

Min Conc: 0

206 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	272.23	0.0000	P	10.9
2	☐	0.100					
3	☐	1.000	0.983	5972.00	0.0006	P	2.9
4	☐	50.000	49.512	302387.02	0.0311	P	0.5
5	☐	125.000	122.127	744850.72	0.0767	P	2.5
6	☐	250.000	247.874	1530003.29	0.1557	P	1.9
7	☐	500.000	494.766	3132083.72	0.3107	A	1.8
8	☐	1000.000	1003.532	6201631.39	0.6301	A	5.6
9	☐			39010.64	0.0042	P	5.4

$$y = 6.2785E-004 * x + 2.8902E-005$$

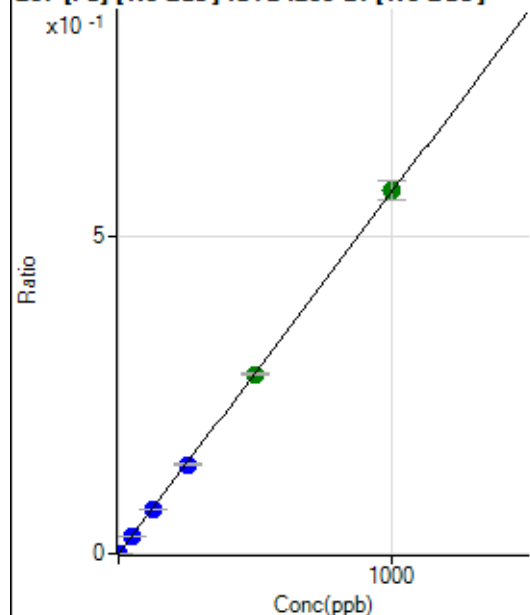
$$R = 1.0000$$

$$DL = 0.01508$$

Weight: <None>

Min Conc: 0

207 [Pb] [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	253.72	0.0000	P	23.3
2	☐	0.100					
3	☐	1.000	1.007	5553.24	0.0006	P	5.8
4	☐	50.000	48.635	269976.10	0.0278	P	0.4
5	☐	125.000	121.765	675030.48	0.0695	P	2.0
6	☐	250.000	246.158	1381005.38	0.1405	P	1.8
7	☐	500.000	495.119	2848913.14	0.2826	A	1.1
8	☐	1000.000	1003.874	5638907.71	0.5729	A	5.4
9	☐			32822.63	0.0036	P	5.3

$$y = 5.7065E-004 * x + 2.6851E-005$$

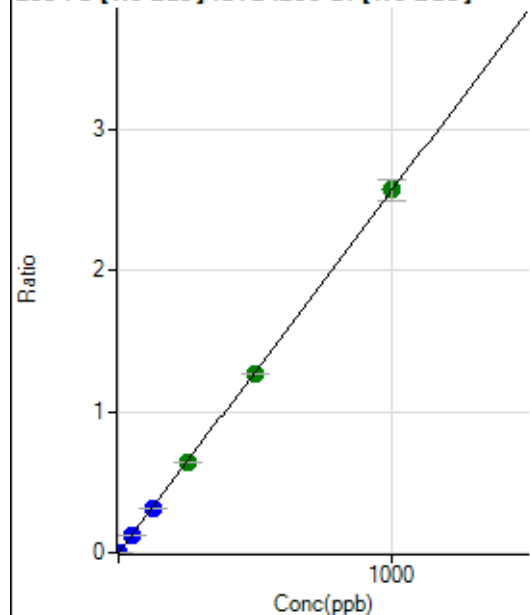
$$R = 1.0000$$

$$DL = 0.03282$$

Weight: <None>

Min Conc: 0

208 Pb [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1137.10	0.0001	P	4.5
2	☐	0.100					
3	☐	1.000	0.991	24591.57	0.0027	P	5.8
4	☐	50.000	48.847	1219613.44	0.1255	P	0.3
5	☐	125.000	122.059	3043403.84	0.3134	P	2.3
6	☐	250.000	250.219	6314012.39	0.6424	A	1.8
7	☐	500.000	494.256	12791687.52	1.2687	A	0.9
8	☐	1000.000	1003.243	25344635.46	2.5751	A	5.6
9	☐			152110.68	0.0166	P	5.1

$$y = 0.0026 * x + 1.2062E-004$$

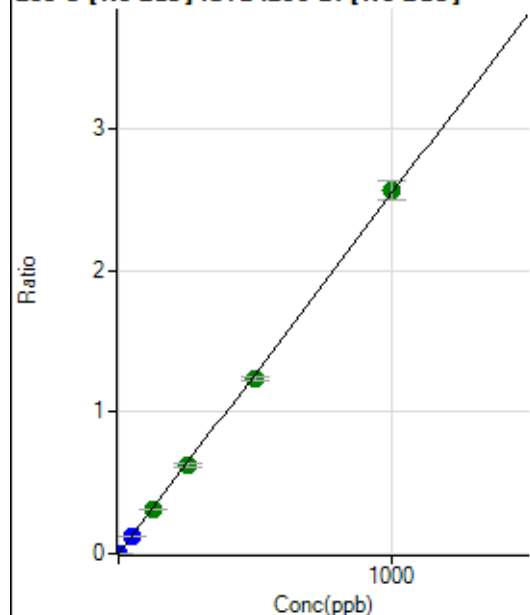
$$R = 1.0000$$

$$DL = 0.006353$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	525.04	0.0001	P	11.5
2	☐	0.100					
3	☐	1.000	0.954	22919.30	0.0025	P	6.0
4	☐	50.000	47.956	1186652.42	0.1221	P	0.6
5	☐	125.000	123.485	3052572.18	0.3143	A	1.7
6	☐	250.000	245.709	6147158.12	0.6254	A	2.3
7	☐	500.000	486.500	12483741.69	1.2382	A	1.4
8	☐	1000.000	1008.114	25255848.65	2.5658	A	5.2
9	☐			2294.77	0.0003	P	23.5

$$y = 0.0025 * x + 5.5756E-005$$

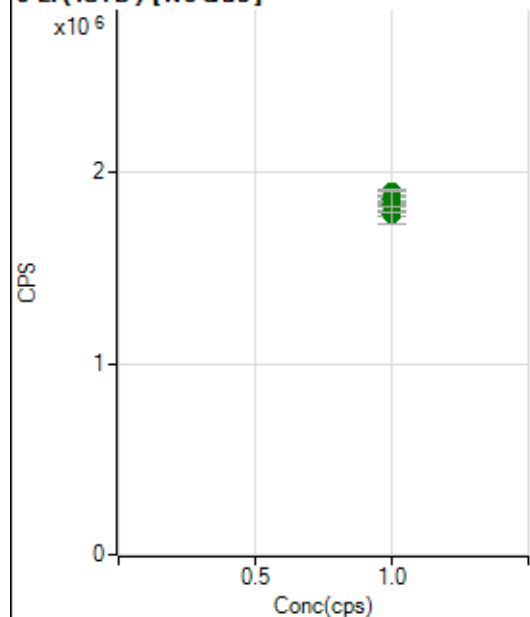
$$R = 0.9999$$

$$DL = 0.00756$$

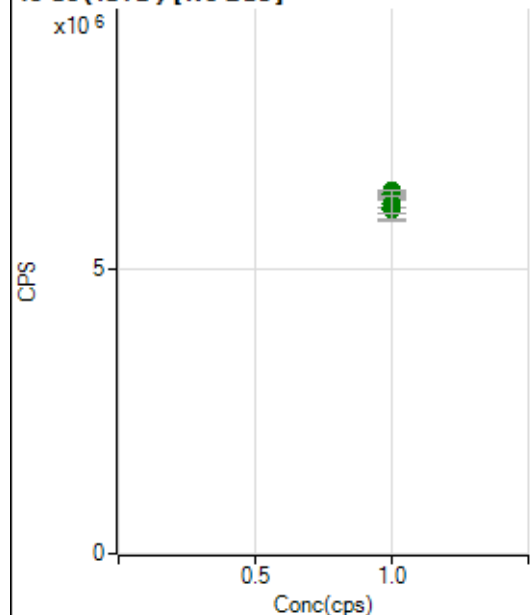
Weight: <None>

Min Conc: 0

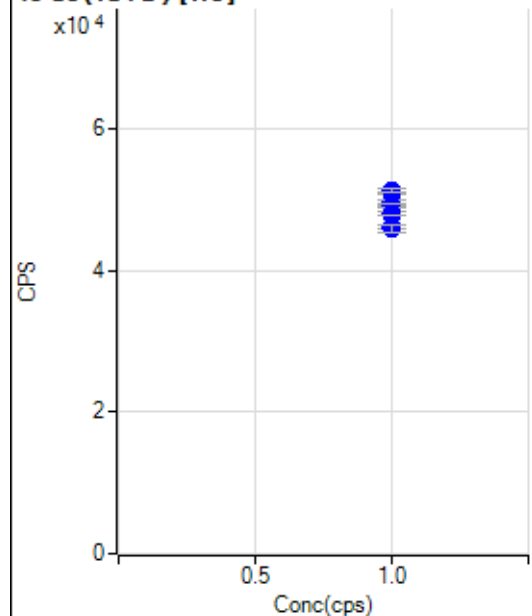
6 Li (ISTD) [No Gas]



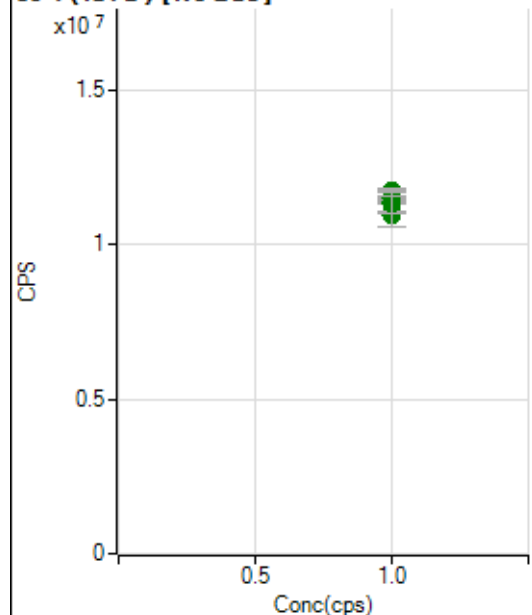
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1786132.11		A	2.0
2	☐	1.000					
3	☐	1.000		1783546.83		A	5.3
4	☐	1.000		1876875.14		A	0.2
5	☐	1.000		1864654.11		A	1.2
6	☐	1.000		1862838.95		A	1.8
7	☐	1.000		1900148.25		A	1.6
8	☐	1.000		1833355.01		A	4.6
9	☐	1.000		1862366.93		A	4.6

45 Sc (ISTD) [No Gas]

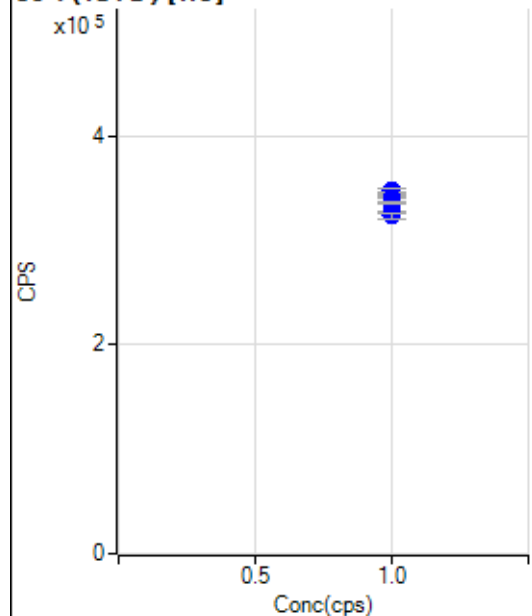
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6160069.63		A	2.2
2	☐	1.000					
3	☐	1.000		6081619.15		A	7.3
4	☐	1.000		6377367.25		A	0.8
5	☐	1.000		6295298.75		A	1.8
6	☐	1.000		6294583.26		A	1.6
7	☐	1.000		6323523.06		A	1.8
8	☐	1.000		6051895.27		A	5.5
9	☐	1.000		6138705.87		A	5.1

45 Sc (ISTD) [He]

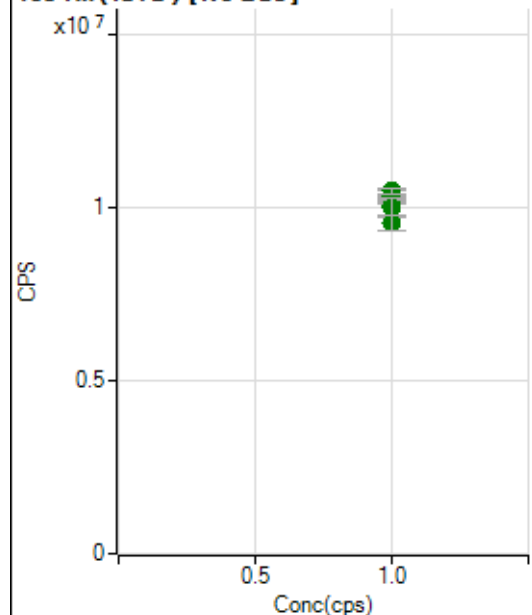
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		51126.16		P	1.7
2	☐	1.000					
3	☐	1.000		51175.18		P	1.2
4	☐	1.000		49521.57		P	1.2
5	☐	1.000		49122.38		P	1.4
6	☐	1.000		48010.82		P	1.3
7	☐	1.000		46153.56		P	1.5
8	☐	1.000		45845.71		P	2.7
9	☐	1.000		47839.11		P	0.1

89 Y (ISTD) [No Gas]

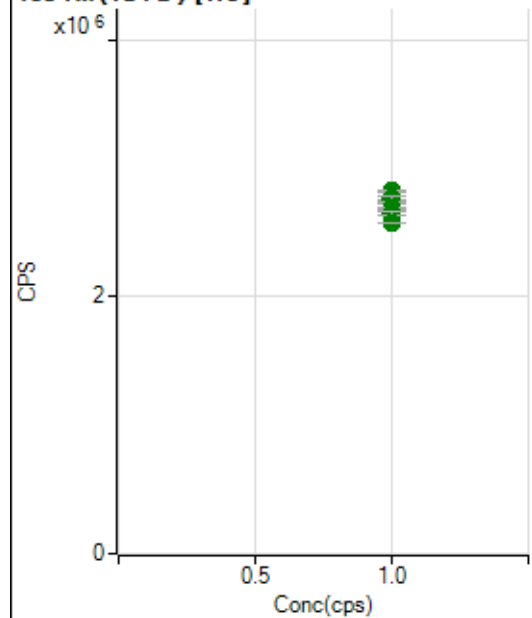
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11048989.97		A	0.6
2	☐	1.000					
3	☐	1.000		10969001.02		A	6.5
4	☐	1.000		11487253.86		A	0.1
5	☐	1.000		11370698.16		A	0.4
6	☐	1.000		11505999.69		A	1.4
7	☐	1.000		11742709.27		A	0.9
8	☐	1.000		11419923.02		A	5.7
9	☐	1.000		11310416.22		A	4.6

89 Y (ISTD) [He]

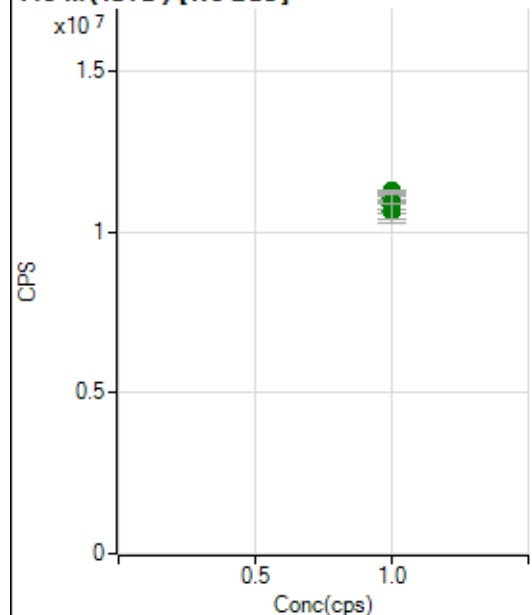
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		342818.91		P	0.5
2	☐	1.000					
3	☐	1.000		347445.65		P	1.1
4	☐	1.000		340379.16		P	0.2
5	☐	1.000		336586.69		P	0.2
6	☐	1.000		336182.32		P	0.9
7	☐	1.000		327387.51		P	0.7
8	☐	1.000		323426.12		P	1.7
9	☐	1.000		336199.56		P	0.5

103 Rh (ISTD) [No Gas]

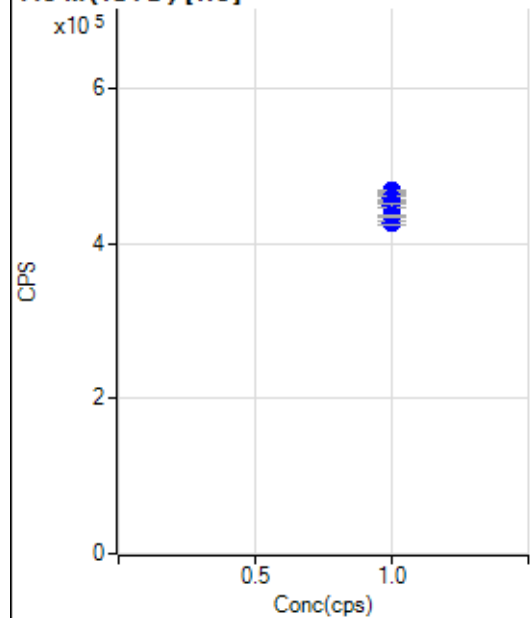
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10134799.27		A	0.8
2	☐	1.000					
3	☐	1.000		10064046.49		A	5.6
4	☐	1.000		10386881.83		A	0.3
5	☐	1.000		10297888.16		A	1.1
6	☐	1.000		10355304.23		A	2.5
7	☐	1.000		10472391.47		A	1.4
8	☐	1.000		10004194.49		A	5.5
9	☐	1.000		9570524.26		A	4.6

103 Rh (ISTD) [He]

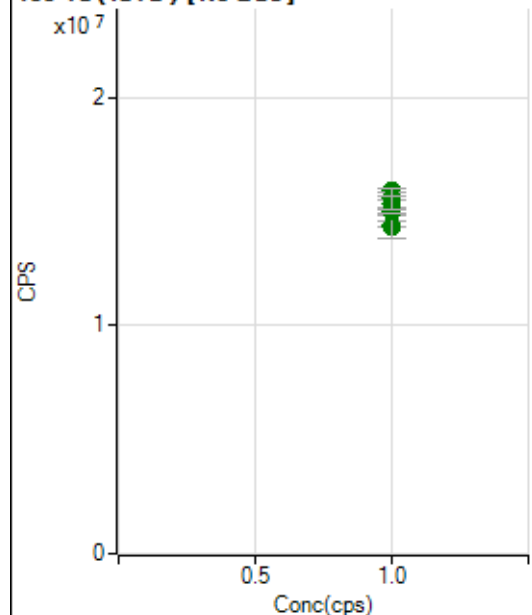
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2737863.57		A	1.0
2	☐	1.000					
3	☐	1.000		2824278.47		A	0.3
4	☐	1.000		2775240.03		A	1.1
5	☐	1.000		2747766.35		A	0.6
6	☐	1.000		2756791.94		A	1.6
7	☐	1.000		2690719.54		A	0.7
8	☐	1.000		2652943.21		A	1.0
9	☐	1.000		2572520.74		A	0.2

115 In (ISTD) [No Gas]

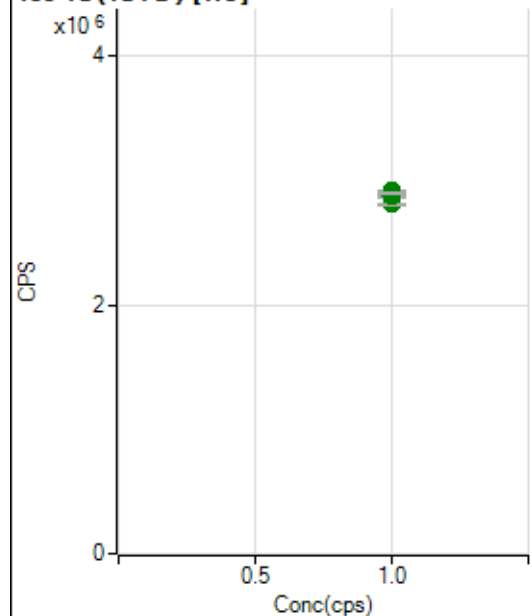
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10823759.19		A	1.6
2	☐	1.000					
3	☐	1.000		10642377.15		A	7.0
4	☐	1.000		11117331.48		A	0.1
5	☐	1.000		10965690.84		A	1.3
6	☐	1.000		11052834.89		A	1.9
7	☐	1.000		11295777.35		A	0.4
8	☐	1.000		10887947.94		A	5.2
9	☐	1.000		10652895.53		A	4.3

115 In (ISTD) [He]

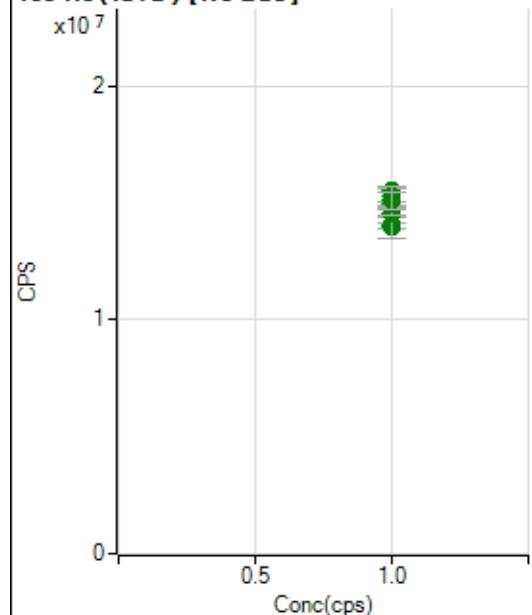
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		461594.74		P	0.6
2	☐	1.000					
3	☐	1.000		467455.63		P	0.7
4	☐	1.000		458755.65		P	1.0
5	☐	1.000		452133.46		P	0.3
6	☐	1.000		448587.18		P	1.2
7	☐	1.000		435057.04		P	0.7
8	☐	1.000		426319.76		P	1.3
9	☐	1.000		435235.81		P	0.2

159 Tb (ISTD) [No Gas]

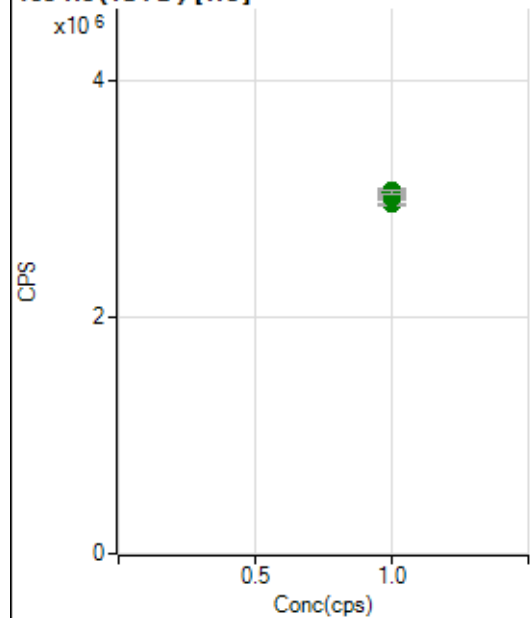
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14441618.67		A	1.5
2	☐	1.000					
3	☐	1.000		14335250.90		A	6.7
4	☐	1.000		15105404.50		A	0.5
5	☐	1.000		15017901.16		A	1.4
6	☐	1.000		15326001.16		A	2.2
7	☐	1.000		15904248.10		A	1.0
8	☐	1.000		15564106.43		A	5.8
9	☐	1.000		15376256.02		A	4.3

159 Tb (ISTD) [He]

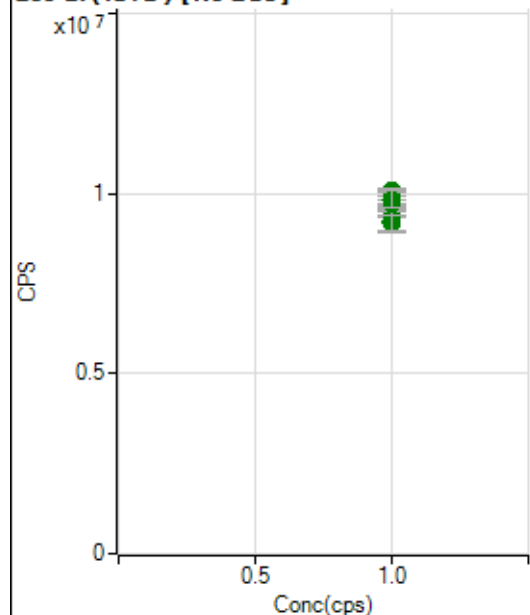
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2803920.44		A	0.6
2	☐	1.000					
3	☐	1.000		2893724.89		A	1.3
4	☐	1.000		2877498.67		A	0.7
5	☐	1.000		2871226.59		A	0.2
6	☐	1.000		2913983.46		A	0.8
7	☐	1.000		2866195.58		A	0.7
8	☐	1.000		2875691.27		A	1.5
9	☐	1.000		2893590.79		A	0.5

165 Ho (ISTD) [No Gas]

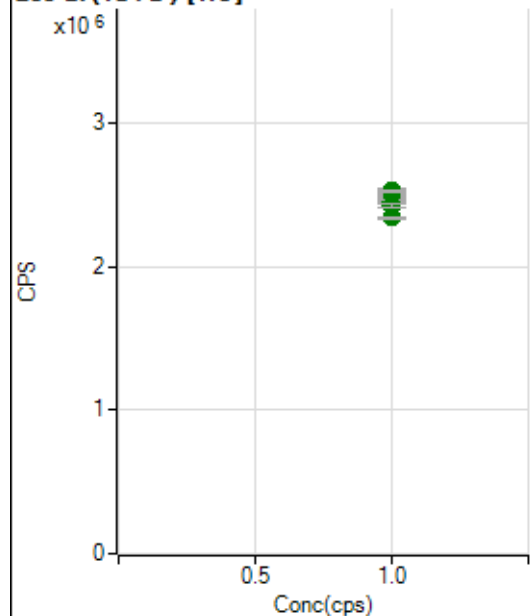
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14035658.99		A	1.8
2	☐	1.000					
3	☐	1.000		13962133.12		A	6.3
4	☐	1.000		14755519.77		A	0.3
5	☐	1.000		14605535.57		A	1.2
6	☐	1.000		14955318.56		A	1.7
7	☐	1.000		15524490.80		A	0.9
8	☐	1.000		15275722.04		A	5.5
9	☐	1.000		15114913.88		A	4.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2956282.98		A	0.5
2	☐	1.000					
3	☐	1.000		3051238.39		A	0.5
4	☐	1.000		3030303.57		A	0.7
5	☐	1.000		3009482.21		A	0.6
6	☐	1.000		3069183.60		A	1.3
7	☐	1.000		3018519.02		A	0.5
8	☐	1.000		3031989.30		A	0.8
9	☐	1.000		3056250.06		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9421475.83		A	1.9
2	☐	1.000					
3	☐	1.000		9252452.85		A	7.1
4	☐	1.000		9718403.81		A	0.5
5	☐	1.000		9713653.75		A	2.1
6	☐	1.000		9831713.39		A	2.0
7	☐	1.000		10083028.53		A	1.1
8	☐	1.000		9859665.27		A	4.8
9	☐	1.000		9197037.78		A	4.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2466640.09		A	1.4
2	☐	1.000					
3	☐	1.000		2524399.79		A	1.5
4	☐	1.000		2484088.85		A	0.5
5	☐	1.000		2481917.12		A	0.5
6	☐	1.000		2516961.89		A	0.6
7	☐	1.000		2452694.82		A	1.0
8	☐	1.000		2422951.49		A	1.1
9	☐	1.000		2338512.72		A	0.5

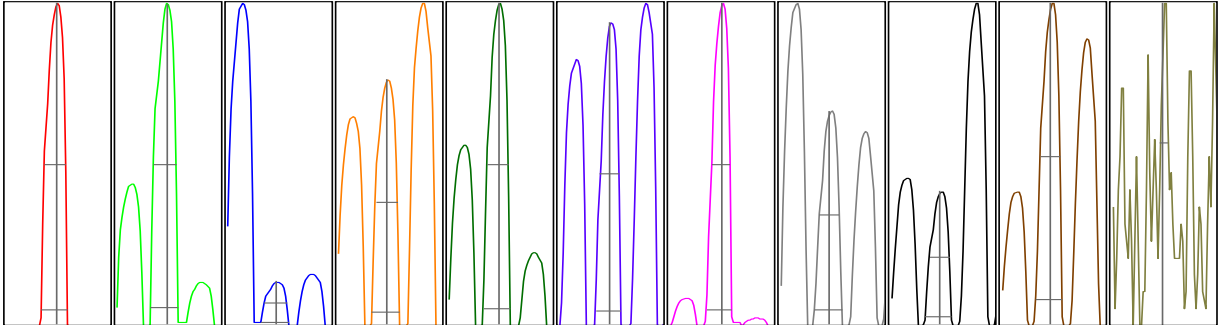
US EPA Tune Check Sample Report

Batch Folder D:\P8072818- MS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	5949	2.14	5.00	
24	106998	1.37	5.00	
25	14572	1.74	5.00	
26	16986	1.38	5.00	
59	69554	1.91	5.00	
113	9910	1.64	5.00	
115	124196	2.39	5.00	
206	31559	2.00	5.00	
207	28616	2.00	5.00	
208	68055	1.69	5.00	
220	1	17.67		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	5957	5779	6096	6040	5872
24	107800	104416	108004	107476	107297
25	14625	14151	14773	14548	14765
26	17021	16604	17167	16954	17185
59	69042	68782	70983	68039	70923
113	10004	9883	10003	9636	10022
115	128711	125326	123594	121212	122138
206	30841	31625	31032	31915	32380
207	28149	28506	28067	28911	29447
208	67403	67735	66689	68968	69482
220	1	1	1	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	10406	9.00	8.9 - 9.1		0.740	0.900	
24	177649	24.00	23.9 - 24.1		0.785	0.900	
25	24362	24.95	24.9 - 25.1		0.786	0.900	
26	28593	25.95	25.9 - 26.1		0.784	0.900	
59	121566	59.00	58.9 - 59.1		0.776	0.900	
113	18720	113.00	112.9 - 113.1		0.728	0.900	
115	233927	115.05	114.9 - 115.1		0.726	0.900	
206	57031	205.95	205.9 - 206.1		0.785	0.900	
207	51783	206.95	206.9 - 207.1		0.740	0.900	
208	124793	207.95	207.9 - 208.1		0.750	0.900	
220	1	220.00	-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.3	V	Deflect	14.2	V
Extract 2	-240.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-95	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	8775	1.18	
89	8693	1.22	
205	13453	1.17	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	8625	8849	8867	8824	8711
89	8551	8724	8813	8758	8620
205	13376	13571	13584	13523	13213

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.3	V	Deflect	2.0	V
Extract 2	-240.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-95	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	5.0	mL/min	OctP RF	200	V			