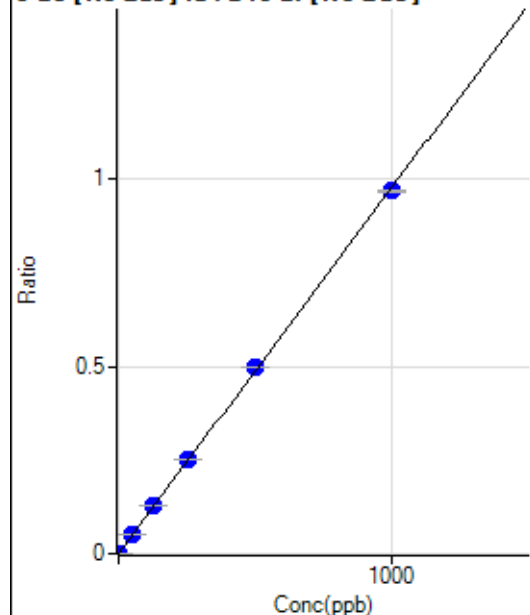


Batch Folder: D:\ICP-MS Data\P7113018 MS.b\
Analysis File: P7113018 MS.batch.bin
DA Date-Time: 2018-11-30 23:19:52
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-11-30 11:35:55
2	004CAL.S.d	S01	2018-11-30 11:39:29
3	005CAL.S.d	S02	2018-11-30 11:44:05
4	006CAL.S.d	S03	2018-11-30 11:47:59
5	007CAL.S.d	S04	2018-11-30 11:52:10
6	008CAL.S.d	S05	2018-11-30 11:55:57
7	009CAL.S.d	S06	2018-11-30 11:59:42
8	010CAL.S.d	S07	2018-11-30 12:03:26
9	011CAL.S.d	S08	2018-11-30 12:07:11

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	40.74	0.0000	P	20.7
2	☐	0.100	0.097	461.13	0.0001	P	8.6
3	☐	1.000	1.005	4424.84	0.0010	P	5.1
4	☐	50.000	53.306	232047.71	0.0521	P	0.6
5	☐	125.000	133.044	564745.12	0.1299	P	0.9
6	☐	250.000	258.956	1038865.86	0.2528	P	0.7
7	☐	500.000	508.965	1964310.73	0.4969	P	0.3
8	☐	1000.000	992.108	3838247.89	0.9686	P	0.5
9	☐			603.73	0.0002	P	5.4

$$y = 9.7631\text{E-}004 * x + 9.3370\text{E-}006$$

$$R = 0.9999$$

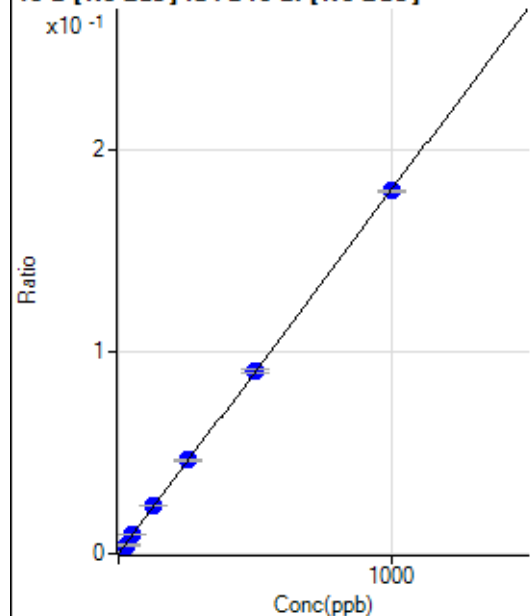
$$DL = 0.005952$$

$$BEC = 0.009564$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	347.24	0.0001	P	6.8
2	☐	2.500	2.653	2472.52	0.0006	P	8.6
3	☐	25.000	23.345	19129.34	0.0043	P	2.1
4	☐	50.000	52.000	42070.90	0.0094	P	4.0
5	☐	125.000	129.358	101570.30	0.0234	P	0.1
6	☐	250.000	256.225	189810.70	0.0462	P	1.1
7	☐	500.000	501.346	357004.78	0.0903	P	2.3
8	☐	1000.000	997.167	711525.34	0.1796	P	0.8
9	☐			17555.23	0.0046	P	5.4

$$y = 1.7998\text{E-}004 * x + 7.9582\text{E-}005$$

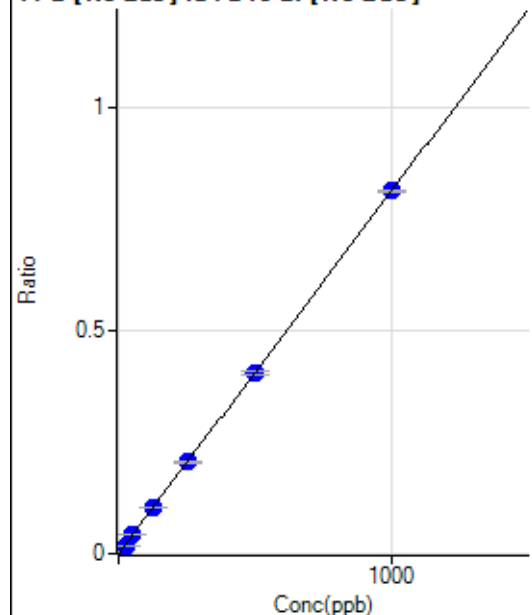
$$R = 1.0000$$

$$DL = 0.08963$$

$$BEC = 0.4422$$

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	1597.38	0.0004	P	14.2
2	☐	2.500	2.270	9820.26	0.0022	P	1.7
3	☐	25.000	23.055	85455.25	0.0191	P	0.5
4	☐	50.000	50.776	185788.27	0.0417	P	2.1
5	☐	125.000	127.973	454303.37	0.1045	P	1.4
6	☐	250.000	252.140	844427.75	0.2055	P	0.9
7	☐	500.000	497.951	1602983.01	0.4055	P	1.8
8	☐	1000.000	1000.128	3226187.59	0.8141	P	0.8
9	☐			80314.44	0.0210	P	7.7

$$y = 8.1363\text{E-}004 * x + 3.6624\text{E-}004$$

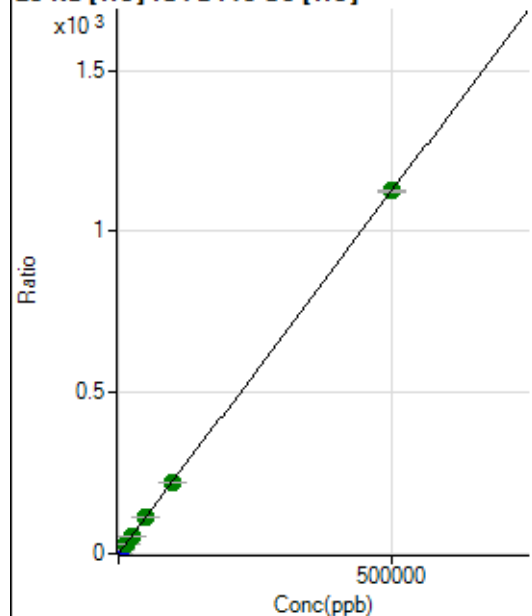
$$R = 1.0000$$

$$DL = 0.1915$$

$$BEC = 0.4501$$

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	13334.19	0.0426	P	1.1
2	☐	50.000	44.125	45182.76	0.1419	P	2.3
3	☐	500.000	463.834	342048.63	1.0862	P	0.7
4	☐	5000.000	5013.030	3435112.62	11.3221	P	0.4
5	☐	12500.000	12442.108	7951816.93	28.0379	A	0.2
6	☐	25000.000	24889.083	14508333.83	56.0442	A	0.3
7	☐	50000.000	49549.058	28486310.71	111.5303	A	0.7
8	☐	100000.00	98616.246	59418245.08	221.9338	A	0.6
9	☐	500000.00	500328.74	338498921.4	1,125.805	A	0.7

$$y = 0.0023 * x + 0.0426$$

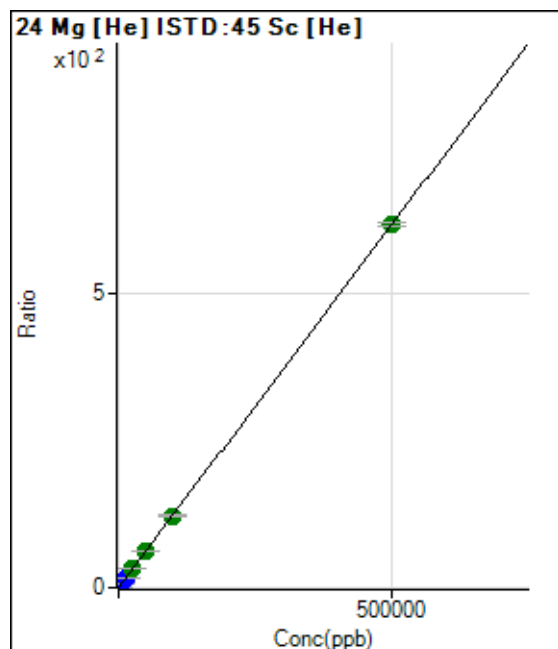
$$R = 1.0000$$

$$DL = 0.6137$$

$$BEC = 18.93$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	86.11	0.0003	P	30.6
2	☐	50.000	46.327	18309.05	0.0575	P	2.1
3	☐	500.000	463.330	180290.87	0.5725	P	0.4
4	☐	5000.000	5125.307	1920692.75	6.3306	P	0.5
5	☐	12500.000	12784.441	4478315.59	15.7906	P	0.3
6	☐	25000.000	25382.431	8115856.35	31.3506	A	0.4
7	☐	50000.000	50272.235	15859649.66	62.0925	A	0.5
8	☐	100000.00	99178.287	32796207.33	122.4973	A	0.5
9	☐	500000.00	500109.67	185726226.3	617.6952	A	0.9

$$y = 0.0012 * x + 2.7485E-004$$

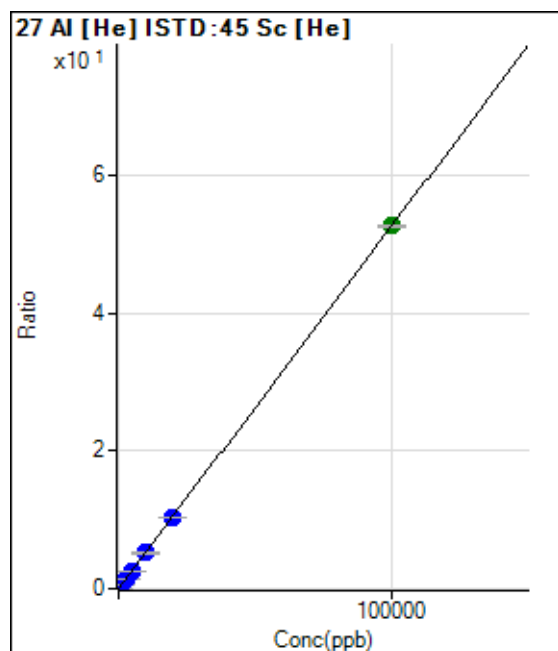
$$R = 1.0000$$

$$DL = 0.2045$$

$$BEC = 0.2225$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0002	P	10.1
2	☐	2.000	1.731	344.46	0.0011	P	20.4
3	☐	20.000	18.467	3117.11	0.0099	P	1.2
4	☐	1000.000	1013.676	162096.46	0.5343	P	0.4
5	☐	2500.000	2499.076	373476.79	1.3169	P	0.7
6	☐	5000.000	4944.477	674469.77	2.6054	P	0.3
7	☐	10000.000	9861.615	1327158.15	5.1962	P	1.1
8	☐	20000.000	19456.685	2744786.30	10.2518	P	0.2
9	☐	100000.00	100125.16	15862099.31	52.7558	A	0.5

$$y = 5.2690E-004 * x + 1.6869E-004$$

$$R = 1.0000$$

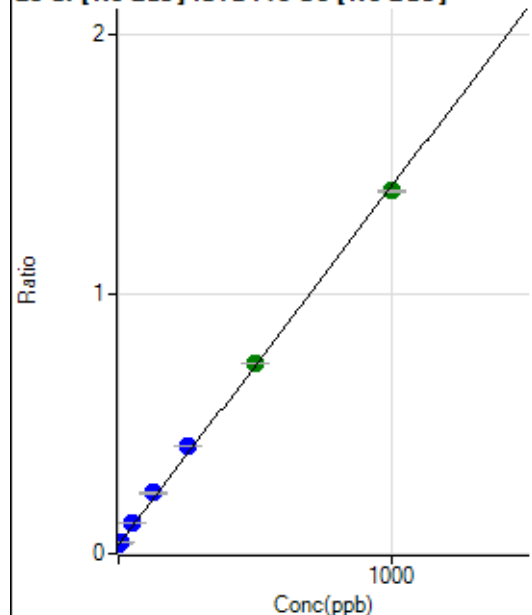
$$DL = 0.09749$$

$$BEC = 0.3202$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	248945.42	0.0341	P	0.4
2	☐	1.000	1.161	264456.96	0.0357	P	0.6
3	☐	10.000	9.856	354142.23	0.0477	P	0.5
4	☐	50.000	58.998	837517.35	0.1154	P	0.7
5	☐	125.000	144.280	1638225.26	0.2331	P	0.8
6	☐	250.000	277.276	2715336.02	0.4165	P	0.3
7	☐	500.000	505.799	4614604.49	0.7317	A	0.5
8	☐	1000.000	987.423	8949423.03	1.3959	A	0.5
9	☐			491447.02	0.0737	P	0.3

$$y = 0.0014 * x + 0.0341$$

$$R = 0.9994$$

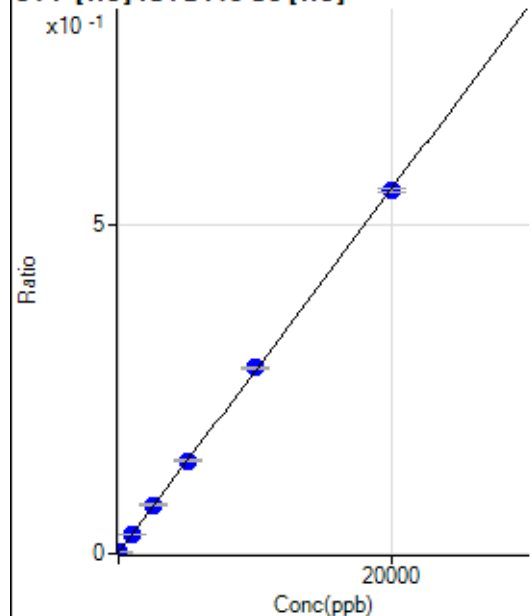
$$DL = 0.3299$$

$$BEC = 24.71$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-19.231	308.35	0.0010	P	4.3
2	☐	0.000	-15.416	347.24	0.0011	P	28.5
3	☐	0.000	34.647	777.83	0.0025	P	9.3
4	☐	1000.000	1031.580	9089.25	0.0300	P	3.9
5	☐	2500.000	2590.512	20695.71	0.0730	P	4.0
6	☐	5000.000	5049.447	36439.87	0.1408	P	1.5
7	☐	10000.000	10164.859	71982.14	0.2818	P	1.0
8	☐	20000.000	19892.316	147272.72	0.5501	P	1.0
9	☐			397.25	0.0013	P	17.9

$$y = 2.7576E-005 * x + 0.0015$$

$$R = 0.9999$$

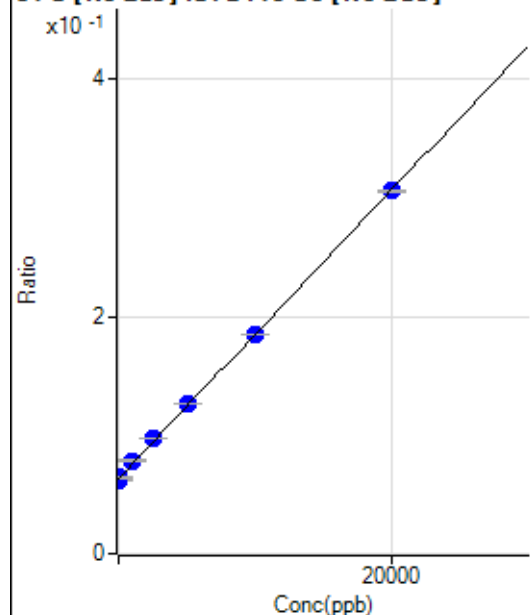
$$DL = 21.09$$

$$BEC = 54.94$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	20.446	463778.03	0.0635	P	0.6
2	☐	0.000	-82.095	461339.96	0.0622	P	1.0
3	☐	0.000	61.649	475361.26	0.0640	P	1.2
4	☐	1000.000	1243.431	568523.19	0.0784	P	0.6
5	☐	2500.000	2820.301	685689.27	0.0975	P	0.1
6	☐	5000.000	5131.013	819239.89	0.1257	P	0.1
7	☐	10000.000	9990.999	1165390.64	0.1848	P	0.6
8	☐	20000.000	19919.538	1958929.82	0.3055	P	0.2
9	☐			406479.04	0.0609	P	1.8

$$y = 1.2164\text{E-}005 * x + 0.0632$$

$$R = 0.9998$$

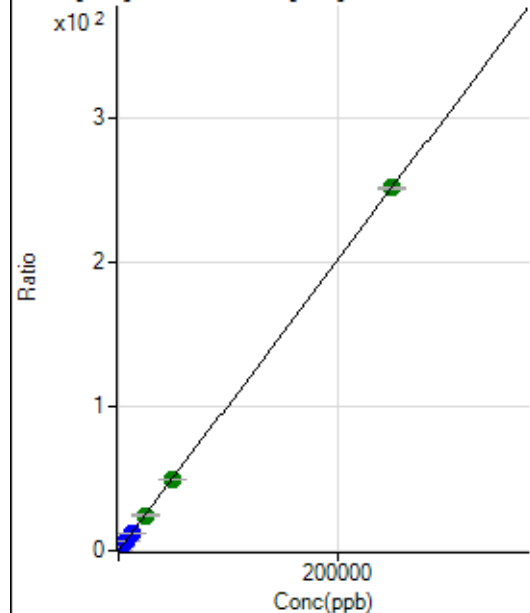
$$DL = 144.6$$

$$BEC = 5199$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	21238.05	0.0679	P	4.7
2	☐	50.000	45.465	36153.30	0.1135	P	0.7
3	☐	500.000	468.924	169709.26	0.5389	P	0.7
4	☐	2500.000	2546.830	796865.57	2.6265	P	0.4
5	☐	6250.000	6296.258	1813200.37	6.3932	P	0.4
6	☐	12500.000	12462.111	3258588.70	12.5875	P	0.3
7	☐	25000.000	24438.663	6288174.01	24.6194	A	0.6
8	☐	50000.000	48754.857	13131805.67	49.0480	A	0.3
9	☐	250000.00	250305.49	75628247.52	251.5300	A	0.7

$$y = 0.0010 * x + 0.0679$$

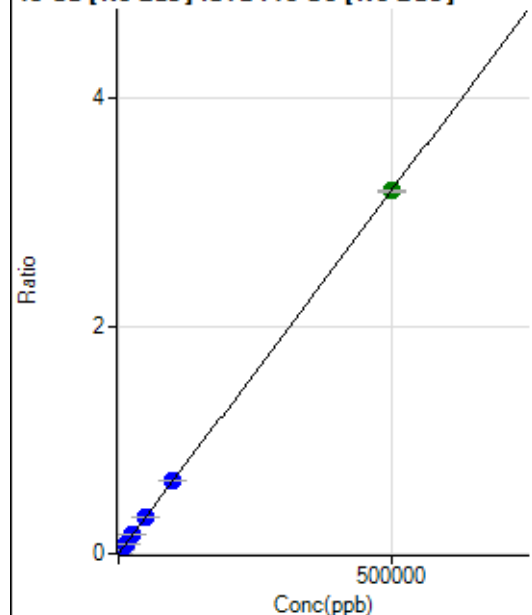
$$R = 1.0000$$

$$DL = 9.521$$

$$BEC = 67.54$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	122.23	0.0000	P	4.4
2	☐	50.000	45.569	2278.05	0.0003	P	4.6
3	☐	500.000	480.515	22890.60	0.0031	P	3.1
4	☐	5000.000	5154.728	238594.17	0.0329	P	1.5
5	☐	12500.000	12787.923	573381.16	0.0816	P	0.4
6	☐	25000.000	25256.904	1050221.82	0.1611	P	0.7
7	☐	50000.000	50222.431	2020131.38	0.3203	P	1.3
8	☐	100000.00	100564.98	4111861.68	0.6414	P	0.3
9	☐	500000.00	499843.19	21264616.10	3.1877	A	0.4

$$y = 6.3774E-006 * x + 1.6735E-005$$

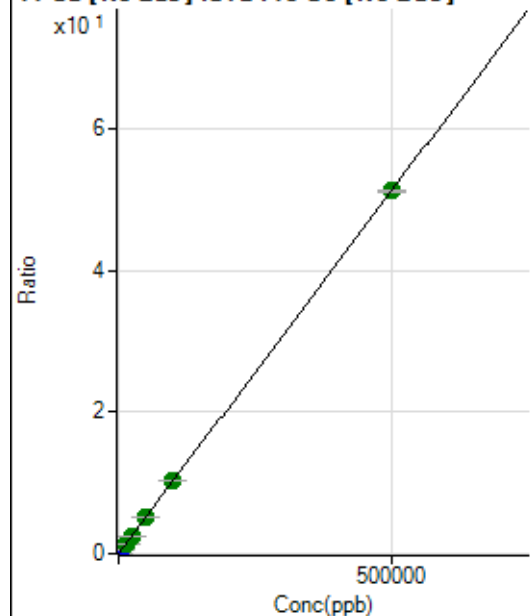
$$R = 1.0000$$

$$DL = 0.3437$$

$$BEC = 2.624$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8217.12	0.0011	P	2.7
2	☐	50.000	45.862	43167.38	0.0058	P	1.1
3	☐	500.000	464.321	361770.75	0.0487	P	0.8
4	☐	5000.000	5110.646	3806815.93	0.5248	P	1.0
5	☐	12500.000	12663.061	9128113.57	1.2986	A	0.5
6	☐	25000.000	25130.003	16794520.86	2.5759	A	0.2
7	☐	50000.000	50063.955	32359056.63	5.1307	A	0.9
8	☐	100000.00	99957.820	65667554.94	10.2428	A	0.4
9	☐	500000.00	499990.39	341742424.3	51.2302	A	0.6

$$y = 1.0246E-004 * x + 0.0011$$

$$R = 1.0000$$

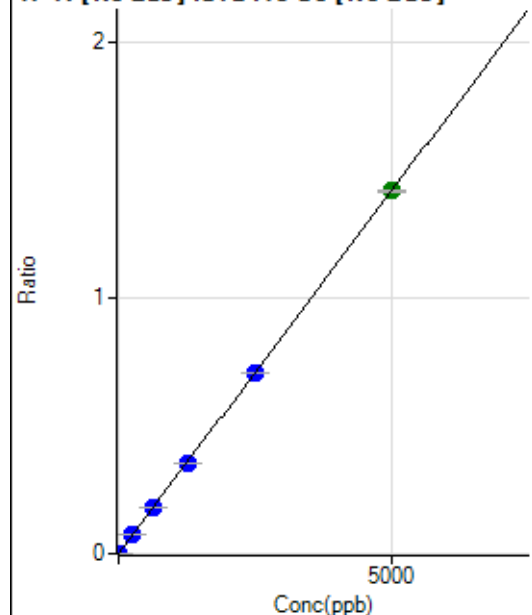
$$DL = 0.8943$$

$$BEC = 10.98$$

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	75.00	0.0000	P	19.2
2	☐	0.500	0.505	1138.98	0.0002	P	16.6
3	☐	5.000	5.082	10790.49	0.0015	P	0.9
4	☐	250.000	255.046	525193.61	0.0724	P	0.1
5	☐	625.000	635.995	1268833.42	0.1805	P	0.7
6	☐	1250.000	1254.174	2320612.92	0.3559	P	0.5
7	☐	2500.000	2494.153	4464498.24	0.7079	P	0.4
8	☐	5000.000	5000.253	9097752.29	1.4191	A	0.5
9	☐			6990.83	0.0010	P	5.1

$$y = 2.8380E-004 * x + 1.0267E-005$$

$$R = 1.0000$$

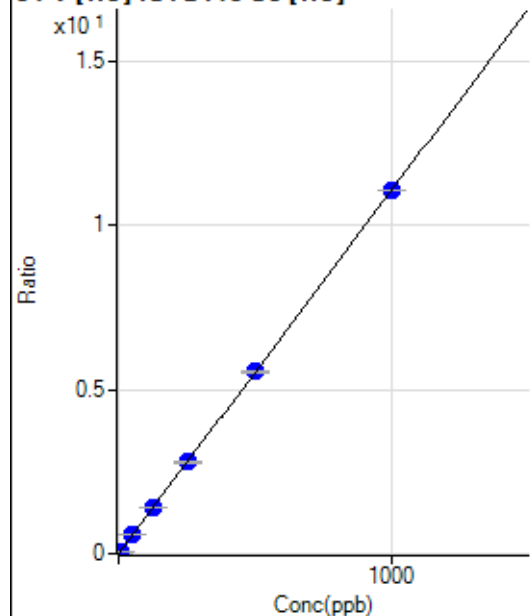
$$DL = 0.02085$$

$$BEC = 0.03618$$

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	5.55	0.0000	P	124.9
2	☐	0.500	0.509	1799.03	0.0056	P	1.7
3	☐	5.000	5.036	17551.72	0.0557	P	1.6
4	☐	50.000	51.235	171999.85	0.5669	P	0.6
5	☐	125.000	127.429	399870.56	1.4100	P	0.5
6	☐	250.000	251.696	720942.88	2.7849	P	0.4
7	☐	500.000	501.129	1416162.39	5.5448	P	1.2
8	☐	1000.000	998.646	2958349.89	11.0496	P	0.2
9	☐			1153.40	0.0038	P	9.7

$$y = 0.0111 * x + 1.7640E-005$$

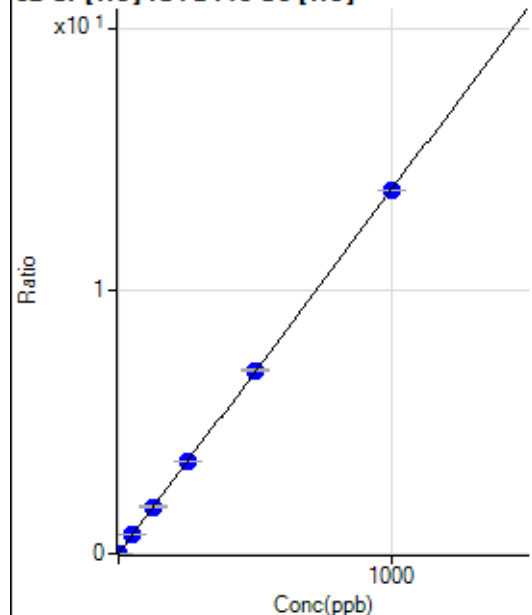
$$R = 1.0000$$

$$DL = 0.005976$$

$$BEC = 0.001594$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1068.95	0.0034	P	4.2
2	☐	0.200	0.184	1899.04	0.0060	P	2.5
3	☐	2.000	1.924	9476.50	0.0301	P	1.4
4	☐	50.000	51.955	219562.84	0.7237	P	1.2
5	☐	125.000	129.094	508540.93	1.7931	P	0.8
6	☐	250.000	253.841	911914.01	3.5226	P	0.2
7	☐	500.000	503.630	1784165.01	6.9856	P	1.1
8	☐	1000.000	996.615	3700180.43	13.8203	P	0.0
9	☐			138046.54	0.4591	P	0.6

$$y = 0.0139 * x + 0.0034$$

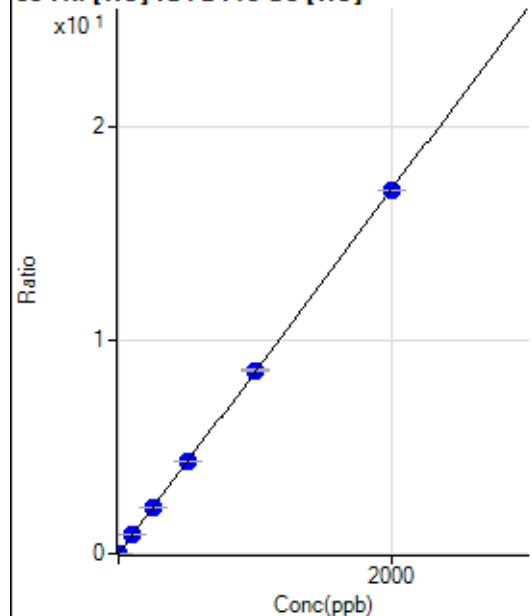
$$R = 1.0000$$

$$DL = 0.03077$$

$$BEC = 0.2463$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.22	0.0002	P	13.0
2	☐	0.100	0.106	340.01	0.0011	P	5.6
3	☐	1.000	0.976	2673.62	0.0085	P	5.1
4	☐	100.000	102.857	266254.08	0.8776	P	0.4
5	☐	250.000	256.638	620898.46	2.1894	P	0.8
6	☐	500.000	508.335	1122584.44	4.3364	P	0.1
7	☐	1000.000	1008.253	2196710.17	8.6009	P	1.2
8	☐	2000.000	1992.817	4551431.42	16.9996	P	0.1
9	☐			33684.22	0.1120	P	1.2

$$y = 0.0085 * x + 1.6677E-004$$

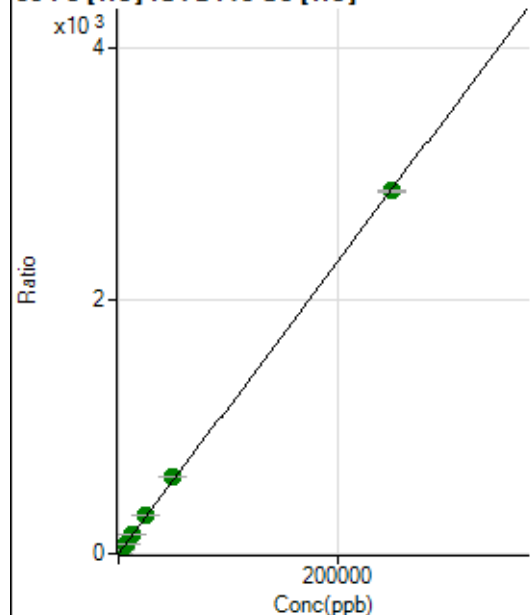
$$R = 1.0000$$

$$DL = 0.007602$$

$$BEC = 0.01955$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4839.81	0.0155	P	4.9
2	☐	5.000	5.344	24483.86	0.0769	P	0.2
3	☐	50.000	53.516	198560.42	0.6306	P	0.4
4	☐	2500.000	2731.441	9529775.44	31.4103	A	0.5
5	☐	6250.000	6838.130	22295137.30	78.6120	A	0.3
6	☐	12500.000	13580.614	40412615.25	156.1093	A	0.2
7	☐	25000.000	26801.380	78684957.31	308.0671	A	0.6
8	☐	50000.000	52861.022	162672261.0	607.5932	A	0.4
9	☐	250000.00	249176.60	861115004.4	2,864.019	A	0.4

$$y = 0.0115 * x + 0.0155$$

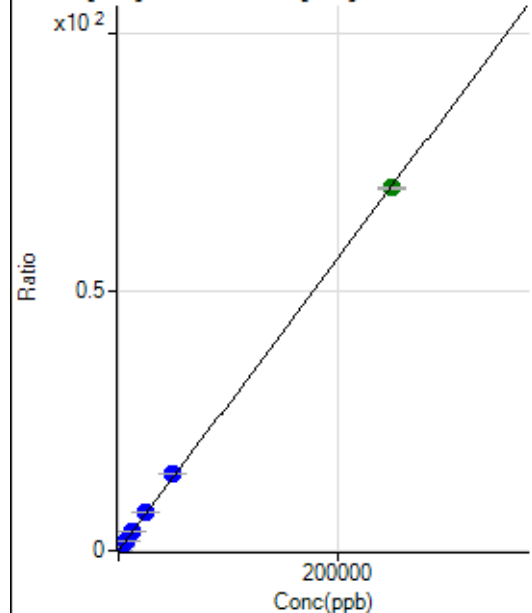
$$R = 0.9999$$

$$DL = 0.1961$$

$$BEC = 1.345$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	175.93	0.0006	P	7.8
2	☐	5.000	4.970	624.10	0.0020	P	2.5
3	☐	50.000	53.730	4936.18	0.0157	P	3.7
4	☐	2500.000	2765.791	236200.66	0.7785	P	0.7
5	☐	6250.000	6911.613	551529.83	1.9447	P	0.2
6	☐	12500.000	13697.106	997512.93	3.8533	P	0.3
7	☐	25000.000	26947.377	1936134.89	7.5804	P	0.7
8	☐	50000.000	53262.678	4011198.93	14.9824	P	0.6
9	☐	250000.00	249073.67	21064825.24	70.0603	A	0.5

$$y = 2.8128E-004 * x + 5.6209E-004$$

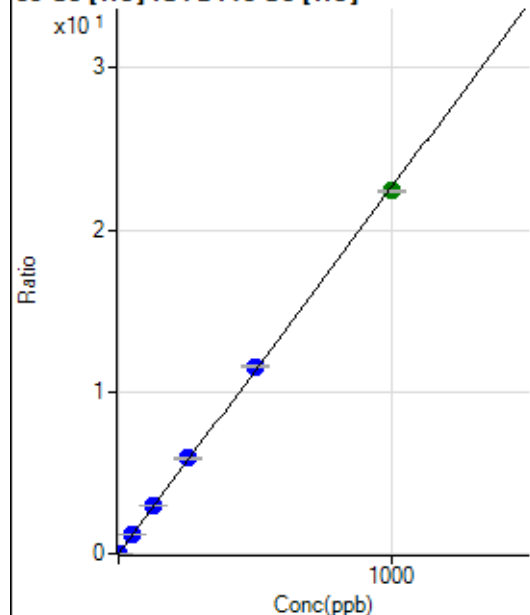
$$R = 0.9999$$

$$DL = 0.4673$$

$$BEC = 1.998$$

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	54.45	0.0002	P	6.1
2	☐	0.100	0.094	733.36	0.0023	P	9.9
3	☐	1.000	0.994	7135.18	0.0227	P	1.7
4	☐	50.000	53.301	365757.45	1.2056	P	1.1
5	☐	125.000	132.357	848928.73	2.9934	P	0.6
6	☐	250.000	260.249	1523647.25	5.8857	P	0.3
7	☐	500.000	511.833	2956329.19	11.5752	P	1.3
8	☐	1000.000	990.437	5996848.24	22.3987	A	0.4
9	☐			80074.54	0.2663	P	0.6

$$y = 0.0226 * x + 1.7383E-004$$

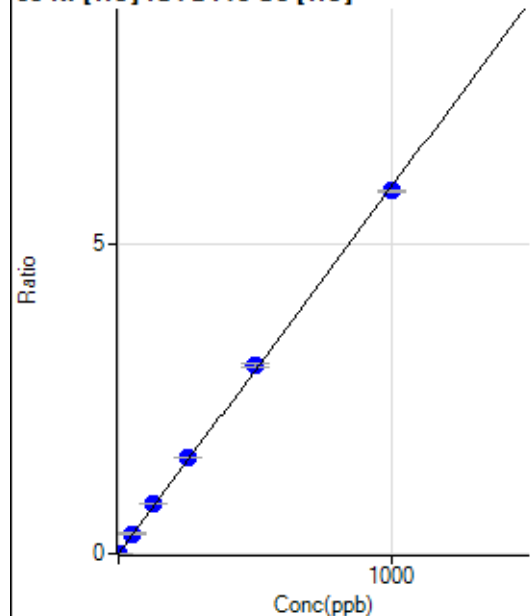
$$R = 0.9998$$

$$DL = 0.001415$$

$$BEC = 0.007687$$

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	96.67	0.0003	P	12.2
2	☐	0.100	0.109	304.45	0.0010	P	11.3
3	☐	1.000	1.050	2052.40	0.0065	P	3.1
4	☐	50.000	54.914	98656.78	0.3252	P	1.2
5	☐	125.000	134.175	225206.38	0.7941	P	0.6
6	☐	250.000	262.147	401559.28	1.5512	P	0.2
7	☐	500.000	513.345	775728.66	3.0373	P	1.4
8	☐	1000.000	988.898	1566435.81	5.8507	P	0.7
9	☐			51259.44	0.1705	P	1.1

$$y = 0.0059 * x + 3.0873E-004$$

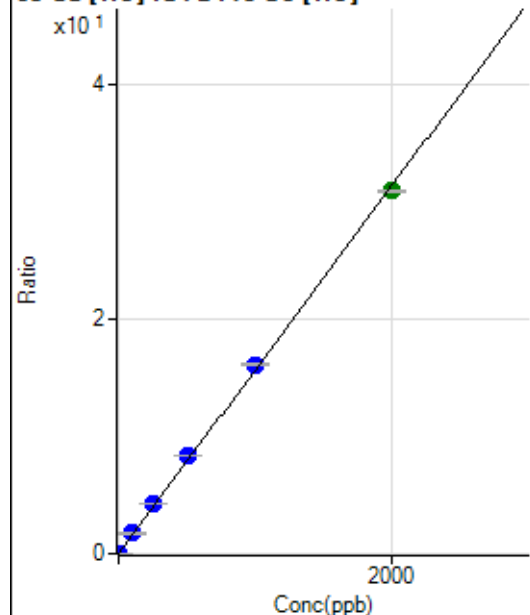
$$R = 0.9998$$

$$DL = 0.01908$$

$$BEC = 0.05218$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	274.45	0.0009	P	8.8
2	☐	0.200	0.202	1288.97	0.0040	P	7.6
3	☐	2.000	2.020	10245.95	0.0325	P	2.1
4	☐	100.000	110.091	523686.46	1.7261	P	0.9
5	☐	250.000	270.603	1202870.41	4.2415	P	0.8
6	☐	500.000	531.698	2157214.10	8.3331	P	0.1
7	☐	1000.000	1028.690	4117622.75	16.1215	P	1.0
8	☐	2000.000	1974.651	8285200.57	30.9456	A	0.2
9	☐			21640.66	0.0720	P	1.6

$$y = 0.0157 * x + 8.7699E-004$$

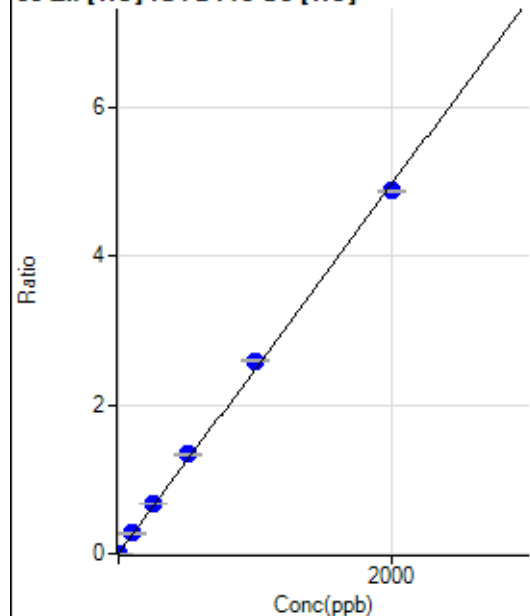
$$R = 0.9997$$

$$DL = 0.01482$$

$$BEC = 0.05596$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	504.46	0.0016	P	7.5
2	☐	0.200	0.159	638.91	0.0020	P	7.1
3	☐	2.000	2.137	2179.09	0.0069	P	4.0
4	☐	100.000	108.973	82606.50	0.2723	P	1.1
5	☐	250.000	270.767	191182.14	0.6741	P	0.5
6	☐	500.000	536.313	345247.24	1.3336	P	0.3
7	☐	1000.000	1044.356	662900.28	2.5955	P	1.3
8	☐	2000.000	1965.699	1307577.59	4.8838	P	0.3
9	☐			12573.36	0.0418	P	0.6

$$y = 0.0025 * x + 0.0016$$

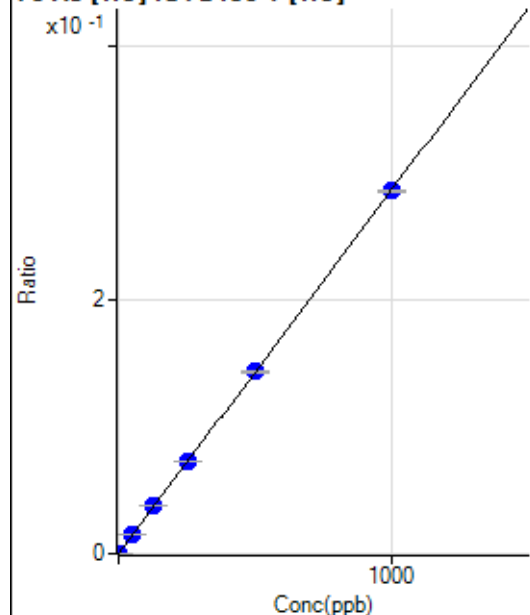
$$R = 0.9994$$

$$DL = 0.1451$$

$$BEC = 0.6485$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5.56	0.0000	P	66.0
2	☐	0.100	0.091	48.76	0.0000	P	9.8
3	☐	1.000	1.038	490.75	0.0003	P	9.1
4	☐	50.000	52.512	23833.13	0.0151	P	0.7
5	☐	125.000	131.276	56144.78	0.0377	P	0.4
6	☐	250.000	253.517	100608.75	0.0727	P	0.5
7	☐	500.000	500.585	196083.02	0.1436	P	1.1
8	☐	1000.000	997.918	402101.14	0.2862	P	0.2
9	☐			735.83	0.0005	P	3.2

$$y = 2.8682\text{E-}004 * x + 3.4229\text{E-}006$$

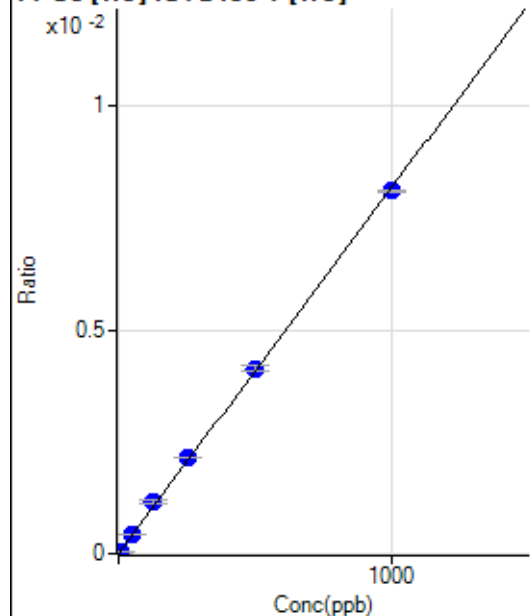
$$R = 1.0000$$

$$DL = 0.02362$$

$$BEC = 0.01193$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	0.500	0.654	10.00	0.0000	P	66.7
3	☐	5.000	6.417	86.67	0.0001	P	20.2
4	☐	50.000	52.469	680.03	0.0004	P	1.6
5	☐	125.000	140.289	1712.35	0.0011	P	6.8
6	☐	250.000	262.788	2974.80	0.0022	P	1.8
7	☐	500.000	506.265	5655.64	0.0041	P	2.5
8	☐	1000.000	991.629	11395.75	0.0081	P	0.4
9	☐			6.67	0.0000	P	51.2

$$y = 8.1797\text{E-}006 * x + 6.7767\text{E-}007$$

$$R = 0.9998$$

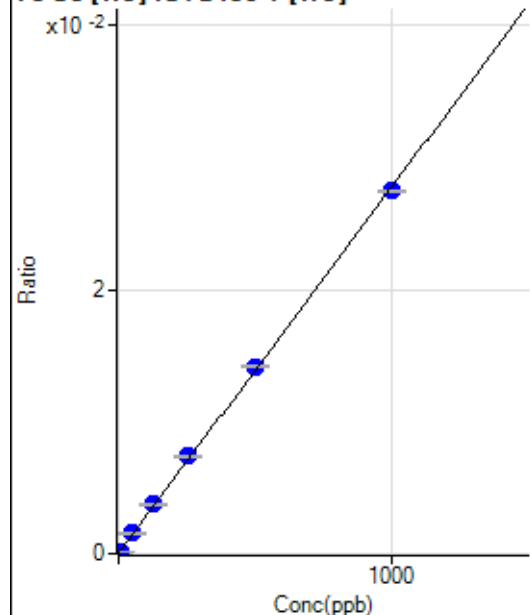
$$DL = 0.4305$$

$$BEC = 0.08285$$

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	62.96	0.0000	P	15.8
2	☐	0.500	0.562	90.12	0.0001	P	8.5
3	☐	5.000	5.625	317.29	0.0002	P	10.3
4	☐	50.000	54.252	2438.50	0.0015	P	2.1
5	☐	125.000	134.016	5591.24	0.0038	P	2.5
6	☐	250.000	264.112	10174.61	0.0074	P	1.1
7	☐	500.000	509.540	19325.88	0.0142	P	1.0
8	☐	1000.000	990.359	38585.76	0.0275	P	0.9
9	☐			97.53	0.0001	P	10.4

$$y = 2.7695E-005 * x + 3.8821E-005$$

$$R = 0.9998$$

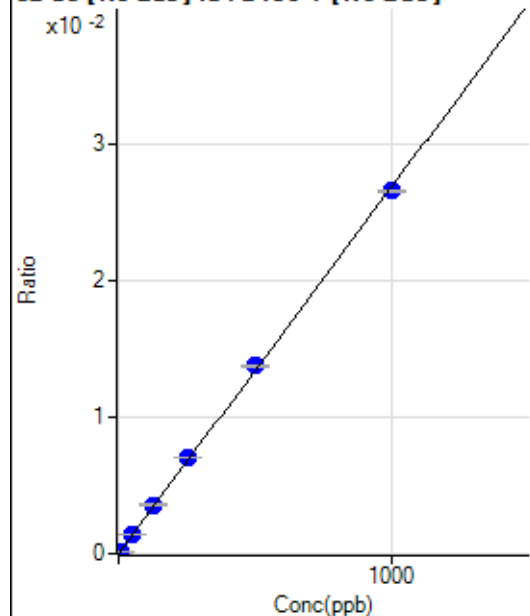
$$DL = 0.6644$$

$$BEC = 1.402$$

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	-1.70	0.0000	P	-1587.
2	☐	0.500	0.549	167.49	0.0000	P	17.1
3	☐	5.000	5.468	1690.93	0.0001	P	5.2
4	☐	50.000	53.947	16365.02	0.0014	P	1.4
5	☐	125.000	133.452	39311.19	0.0036	P	0.6
6	☐	250.000	261.738	72458.80	0.0070	P	0.6
7	☐	500.000	512.061	137491.58	0.0137	P	0.7
8	☐	1000.000	989.779	270760.88	0.0266	P	0.3
9	☐			362.33	0.0000	P	20.7

$$y = 2.6852E-005 * x - 1.5011E-007$$

$$R = 0.9998$$

$$DL = 0.2662$$

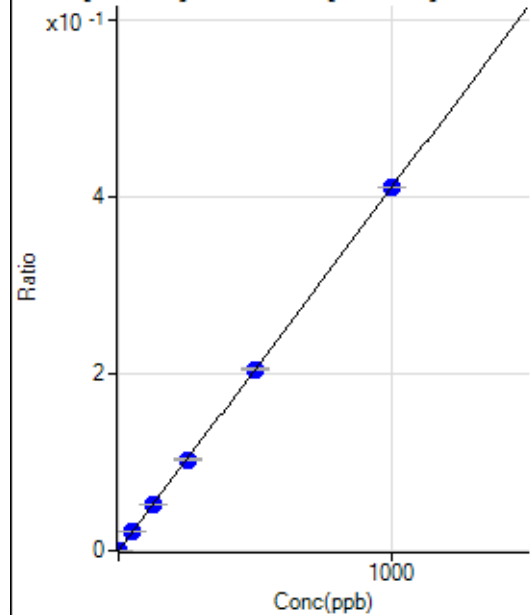
$$BEC = -0.005591$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			758.92		P	0.7
2	☐			766.70		P	2.6
3	☐			750.03		P	2.8
4	☐			848.93		P	8.0
5	☐			705.58		P	5.5
6	☐			715.59		P	11.4
7	☐			661.14		P	9.9
8	☐			733.36		P	5.2
9	☐			797.81		P	12.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1261.22	0.0001	P	4.7
2	☐	0.100	0.103	1750.18	0.0002	P	4.5
3	☐	1.000	0.922	5631.90	0.0005	P	5.0
4	☐	50.000	50.414	234876.19	0.0208	P	0.3
5	☐	125.000	127.416	574562.17	0.0524	P	0.1
6	☐	250.000	250.488	1060369.76	0.1029	P	1.0
7	☐	500.000	499.377	2049340.69	0.2049	P	0.8
8	☐	1000.000	999.867	4179226.83	0.4102	P	0.1
9	☐			20601.52	0.0020	P	2.6

$$y = 4.1016E-004 * x + 1.1043E-004$$

$$R = 1.0000$$

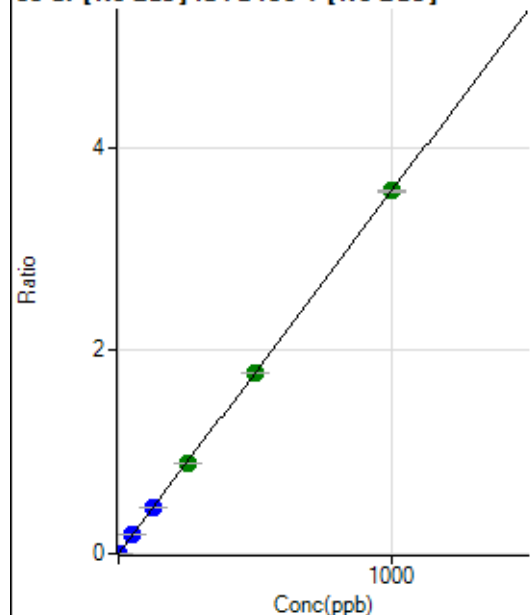
$$DL = 0.03798$$

$$BEC = 0.2692$$

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	141.67	0.0000	P	6.0
2	☐	0.100	0.093	3961.84	0.0003	P	8.1
3	☐	1.000	0.888	36670.11	0.0032	P	1.1
4	☐	50.000	51.004	2056950.72	0.1821	P	0.4
5	☐	125.000	127.562	4995151.98	0.4553	P	0.0
6	☐	250.000	249.069	9165617.48	0.8890	A	0.3
7	☐	500.000	498.237	17782937.03	1.7783	A	0.6
8	☐	1000.000	1000.744	36389702.55	3.5719	A	0.2
9	☐			169435.28	0.0161	P	0.9

$$y = 0.0036 * x + 1.2406E-005$$

$$R = 1.0000$$

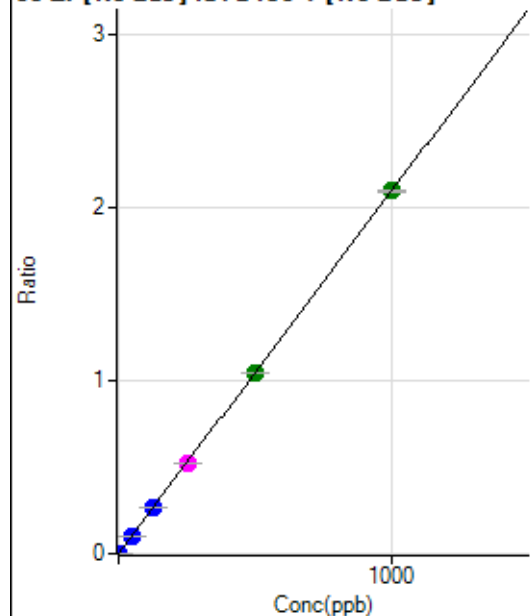
$$DL = 0.0006306$$

$$BEC = 0.003476$$

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	686.16	0.0001	P	13.1
2	☐	0.100	0.095	2981.00	0.0003	P	3.2
3	☐	1.000	0.917	22852.40	0.0020	P	2.9
4	☐	50.000	50.062	1185686.20	0.1049	P	0.2
5	☐	125.000	126.003	2896756.55	0.2640	P	0.5
6	☐	250.000	250.130	5403354.76	0.5241	M	0.6
7	☐	500.000	499.076	10456345.03	1.0457	A	0.3
8	☐	1000.000	1000.301	21351334.33	2.0957	A	0.3
9	☐			10643.27	0.0010	P	0.6

$$y = 0.0021 * x + 6.0078E-005$$

$$R = 1.0000$$

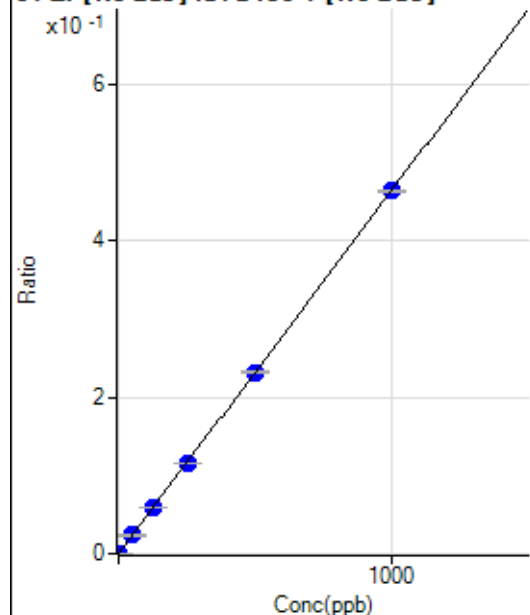
$$DL = 0.01124$$

$$BEC = 0.02868$$

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	158.34	0.0000	P	31.4
2	☐	0.100	0.094	661.16	0.0001	P	15.6
3	☐	1.000	0.927	5115.03	0.0004	P	2.1
4	☐	50.000	50.498	264755.83	0.0234	P	0.8
5	☐	125.000	127.196	647334.96	0.0590	P	0.0
6	☐	250.000	250.675	1198741.66	0.1163	P	0.7
7	☐	500.000	500.101	2319477.66	0.2320	P	0.3
8	☐	1000.000	999.481	4722576.15	0.4636	P	0.2
9	☐			2364.20	0.0002	P	13.8

$$y = 4.6378\text{E-}004 * x + 1.3859\text{E-}005$$

$$R = 1.0000$$

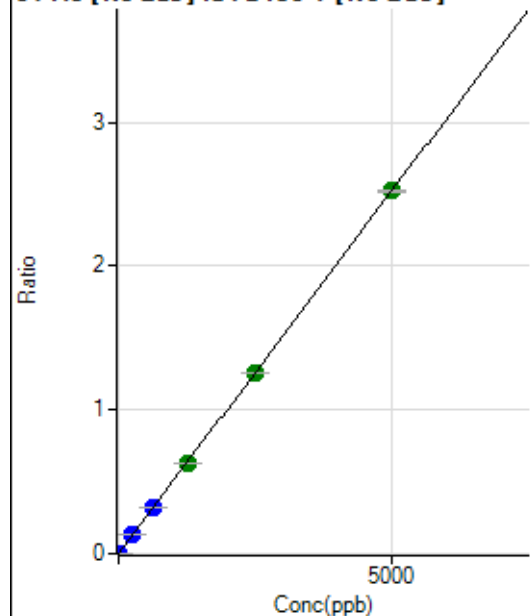
$$DL = 0.02813$$

$$BEC = 0.02988$$

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	255.57	0.0000	P	23.7
2	☐	0.500	0.452	2869.84	0.0003	P	8.1
3	☐	5.000	4.706	27599.74	0.0024	P	0.8
4	☐	250.000	252.703	1439039.23	0.1274	P	0.4
5	☐	625.000	633.904	3504852.72	0.3195	P	0.4
6	☐	1250.000	1247.951	6484035.91	0.6289	A	0.6
7	☐	2500.000	2488.600	12540981.53	1.2541	A	0.5
8	☐	5000.000	5004.964	25695678.87	2.5222	A	0.5
9	☐			33150.51	0.0032	P	2.5

$$y = 5.0394\text{E-}004 * x + 2.2383\text{E-}005$$

$$R = 1.0000$$

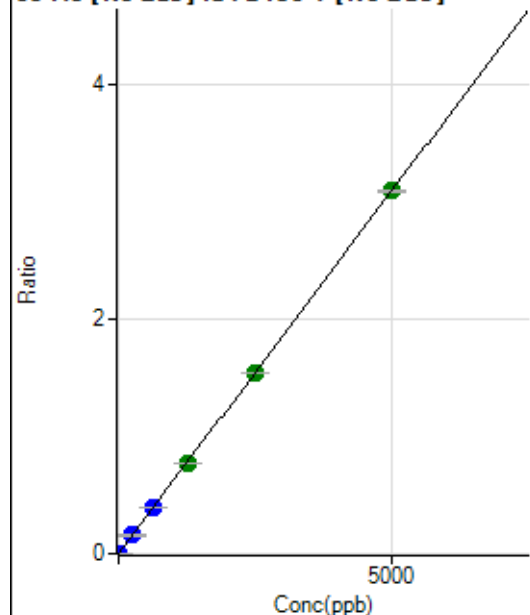
$$DL = 0.03164$$

$$BEC = 0.04442$$

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	44.45	0.0000	P	10.6
2	☐	0.500	0.509	3650.62	0.0003	P	10.7
3	☐	5.000	4.820	34397.83	0.0030	P	0.9
4	☐	250.000	252.319	1762231.77	0.1560	P	0.6
5	☐	625.000	635.161	4307448.19	0.3926	P	0.2
6	☐	1250.000	1247.016	7947480.91	0.7708	A	0.4
7	☐	2500.000	2492.040	15404128.64	1.5405	A	0.6
8	☐	5000.000	5003.340	31508395.84	3.0928	A	0.6
9	☐			51538.26	0.0049	P	0.8

$$y = 6.1815\text{E-}004 * x + 3.8912\text{E-}006$$

$$R = 1.0000$$

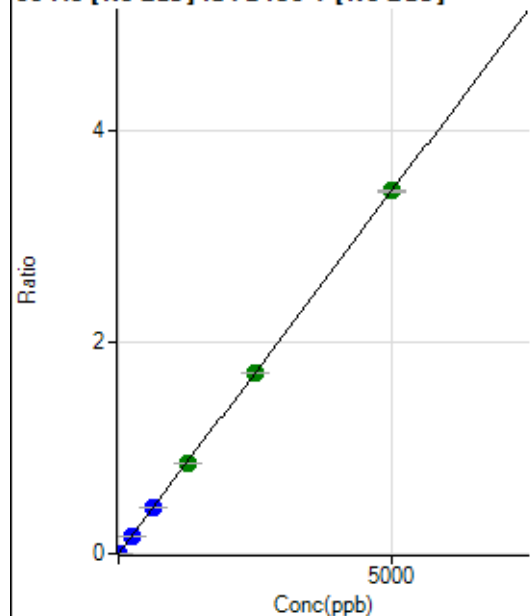
$$DL = 0.002001$$

$$BEC = 0.006295$$

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	158.34	0.0000	P	34.5
2	☐	0.500	0.484	3970.18	0.0003	P	4.1
3	☐	5.000	4.808	38216.11	0.0033	P	2.3
4	☐	250.000	251.396	1950217.32	0.1726	P	0.4
5	☐	625.000	633.879	4774589.08	0.4352	P	0.4
6	☐	1250.000	1242.172	8792912.00	0.8528	A	0.3
7	☐	2500.000	2491.816	17107521.39	1.7108	A	0.4
8	☐	5000.000	5004.869	35006416.41	3.4361	A	0.3
9	☐			63453.27	0.0060	P	1.7

$$y = 6.8656\text{E-}004 * x + 1.3865\text{E-}005$$

$$R = 1.0000$$

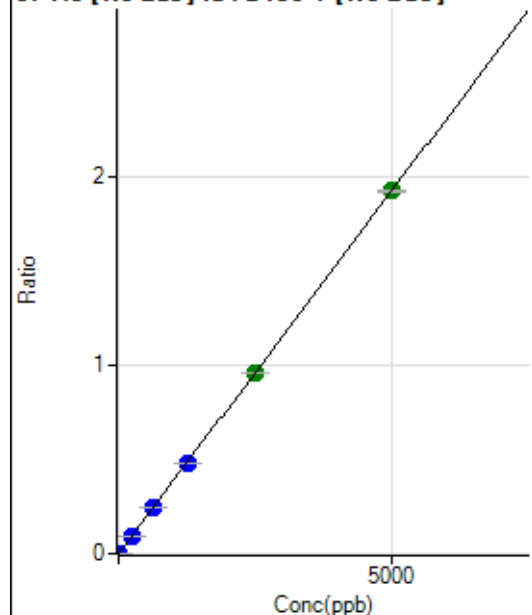
$$DL = 0.02093$$

$$BEC = 0.02019$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	44.45	0.0000	P	77.9
2	☐	0.500	0.503	2266.95	0.0002	P	3.4
3	☐	5.000	4.787	21319.47	0.0018	P	1.4
4	☐	250.000	250.660	1091693.35	0.0966	P	0.3
5	☐	625.000	631.100	2668904.64	0.2433	P	0.5
6	☐	1250.000	1245.207	4948732.14	0.4800	P	0.4
7	☐	2500.000	2489.512	9596194.31	0.9596	A	0.3
8	☐	5000.000	5005.647	19657790.37	1.9295	A	0.2
9	☐			31435.48	0.0030	P	1.7

$$y = 3.8547\text{E-}004 * x + 3.8878\text{E-}006$$

$$R = 1.0000$$

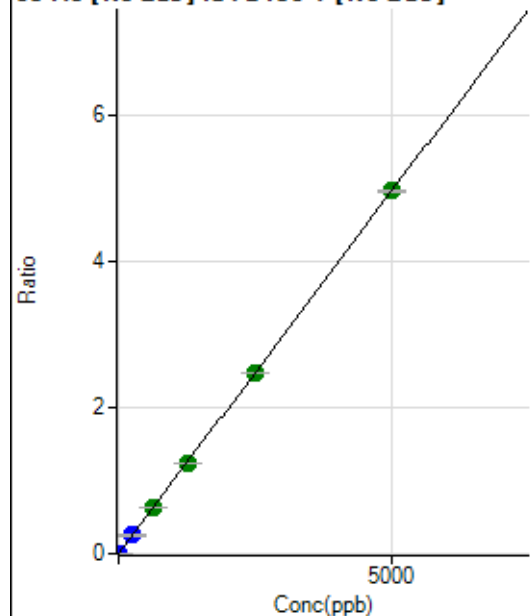
$$DL = 0.02356$$

$$BEC = 0.01009$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	69.45	0.0000	P	54.2
2	☐	0.500	0.486	5606.93	0.0005	P	2.4
3	☐	5.000	4.866	55776.69	0.0048	P	1.2
4	☐	250.000	252.206	2829537.28	0.2504	P	0.6
5	☐	625.000	624.167	6799612.22	0.6198	A	0.1
6	☐	1250.000	1244.427	12740320.77	1.2357	A	0.2
7	☐	2500.000	2491.317	24738013.92	2.4738	A	0.2
8	☐	5000.000	5005.729	50639753.91	4.9706	A	0.3
9	☐			80320.30	0.0076	P	1.2

$$y = 9.9298\text{E-}004 * x + 6.0843\text{E-}006$$

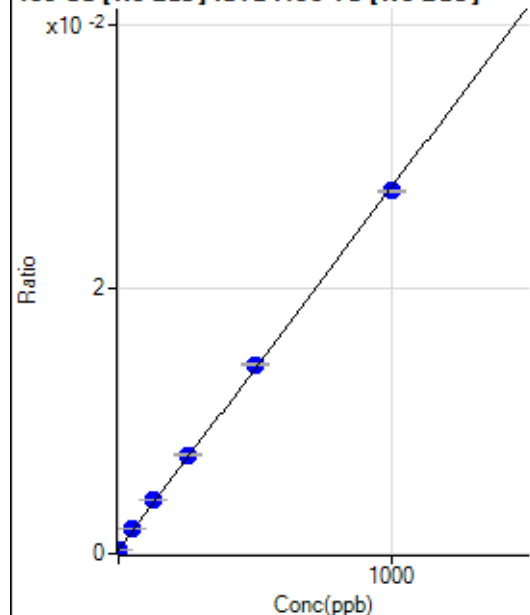
$$R = 1.0000$$

$$DL = 0.009965$$

$$BEC = 0.006127$$

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	4673.17	0.0003	P	2.1
2	☐	0.100	0.093	4759.33	0.0003	P	5.9
3	☐	1.000	1.043	5162.28	0.0003	P	1.5
4	☐	50.000	55.802	27978.57	0.0018	P	1.6
5	☐	125.000	138.231	61520.37	0.0041	P	0.6
6	☐	250.000	261.356	108518.87	0.0075	P	0.7
7	☐	500.000	510.500	205224.05	0.0143	P	1.3
8	☐	1000.000	989.967	403065.99	0.0274	P	0.6
9	☐			4573.18	0.0003	P	4.4

$$y = 2.7387\text{E-}005 * x + 3.0831\text{E-}004$$

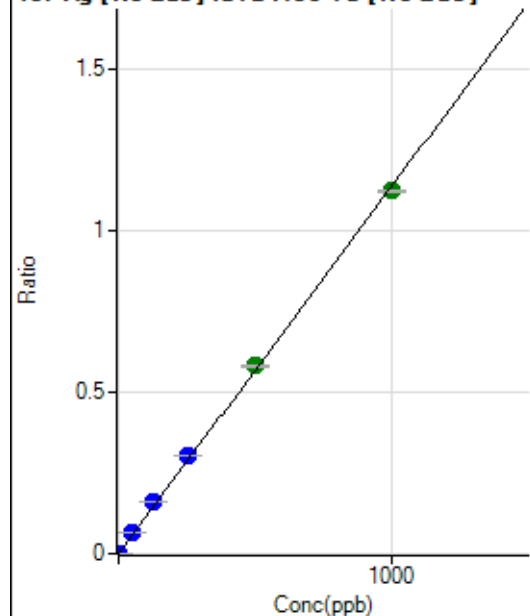
$$R = 0.9998$$

$$DL = 0.7011$$

$$BEC = 11.26$$

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	119.45	0.0000	P	18.0
2	☐	0.100	0.094	1750.19	0.0001	P	3.4
3	☐	1.000	0.920	16156.99	0.0011	P	0.6
4	☐	50.000	57.198	991655.13	0.0651	P	0.5
5	☐	125.000	140.220	2397622.36	0.1596	P	0.3
6	☐	250.000	265.610	4392917.42	0.3022	P	0.6
7	☐	500.000	511.008	8350779.01	0.5815	A	0.6
8	☐	1000.000	988.331	16530772.07	1.1246	A	0.4
9	☐			1491.82	0.0001	P	2.1

$$y = 0.0011 * x + 7.8849\text{E-}006$$

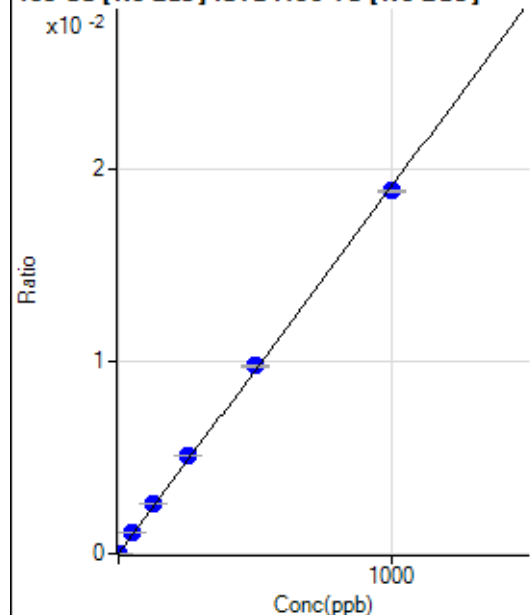
$$R = 0.9997$$

$$DL = 0.003747$$

$$BEC = 0.00693$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8.33	0.0000	P	100.0
2	☐	0.100	0.124	44.44	0.0000	P	5.2
3	☐	1.000	0.999	300.01	0.0000	P	7.6
4	☐	50.000	55.236	16035.71	0.0011	P	0.7
5	☐	125.000	137.879	39467.76	0.0026	P	1.3
6	☐	250.000	266.105	73672.26	0.0051	P	0.8
7	☐	500.000	511.251	139848.93	0.0097	P	0.6
8	☐	1000.000	988.477	276746.90	0.0188	P	0.3
9	☐			118.06	0.0000	P	16.8

$$y = 1.9046E-005 * x + 5.4823E-007$$

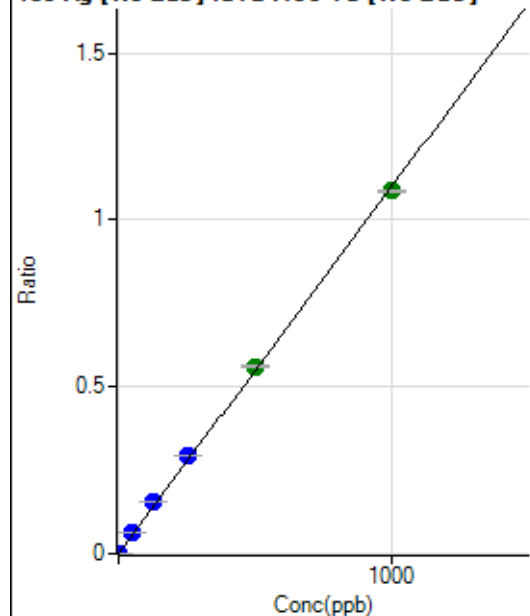
$$R = 0.9997$$

$$DL = 0.08637$$

$$BEC = 0.02879$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.56	0.0000	P	30.9
2	☐	0.100	0.091	1583.49	0.0001	P	6.2
3	☐	1.000	0.932	15759.33	0.0010	P	3.8
4	☐	50.000	56.808	951152.30	0.0624	P	0.3
5	☐	125.000	139.111	2297279.39	0.1529	P	0.2
6	☐	250.000	265.453	4240158.60	0.2917	P	0.5
7	☐	500.000	509.856	8046972.49	0.5603	A	0.6
8	☐	1000.000	989.105	15978376.75	1.0870	A	0.3
9	☐			1372.36	0.0001	P	9.6

$$y = 0.0011 * x + 3.6628E-006$$

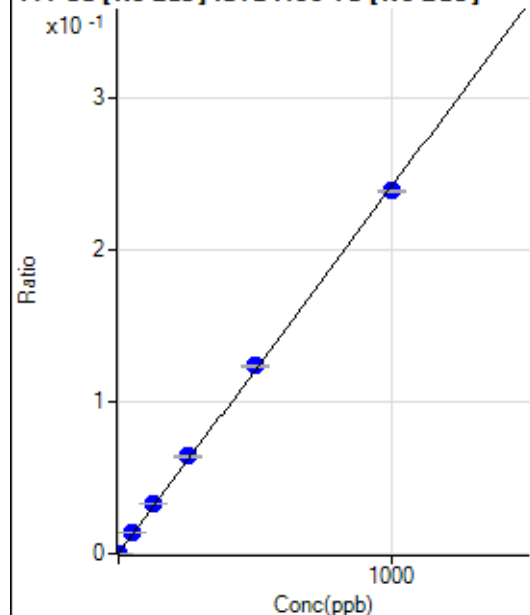
$$R = 0.9997$$

$$DL = 0.003091$$

$$BEC = 0.003333$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1868.99	0.0001	P	2.0
2	☐	0.100	0.089	2218.47	0.0001	P	2.1
3	☐	1.000	1.015	5654.10	0.0004	P	2.2
4	☐	50.000	55.846	207714.28	0.0136	P	0.2
5	☐	125.000	137.390	501326.74	0.0334	P	0.4
6	☐	250.000	264.526	931970.85	0.0641	P	0.3
7	☐	500.000	511.795	1780016.85	0.1239	P	0.9
8	☐	1000.000	988.630	3517574.48	0.2393	P	0.2
9	☐			2921.70	0.0002	P	3.6

$$y = 2.4193\text{E-}004 * x + 1.2331\text{E-}004$$

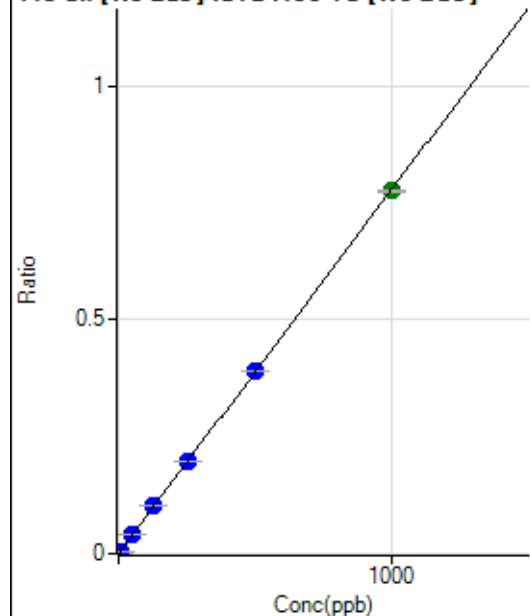
$$R = 0.9997$$

$$DL = 0.03063$$

$$BEC = 0.5097$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	827.84	0.0001	P	8.1
2	☐	0.500	0.505	6846.40	0.0004	P	3.5
3	☐	5.000	5.046	60932.45	0.0040	P	1.3
4	☐	50.000	53.204	630832.76	0.0414	P	0.4
5	☐	125.000	131.236	1533582.96	0.1021	P	0.3
6	☐	250.000	254.647	2877575.83	0.1980	P	0.3
7	☐	500.000	501.592	5599827.16	0.3899	P	0.3
8	☐	1000.000	997.103	11392692.79	0.7750	A	0.3
9	☐			28190.18	0.0019	P	1.8

$$y = 7.7724\text{E-}004 * x + 5.4628\text{E-}005$$

$$R = 1.0000$$

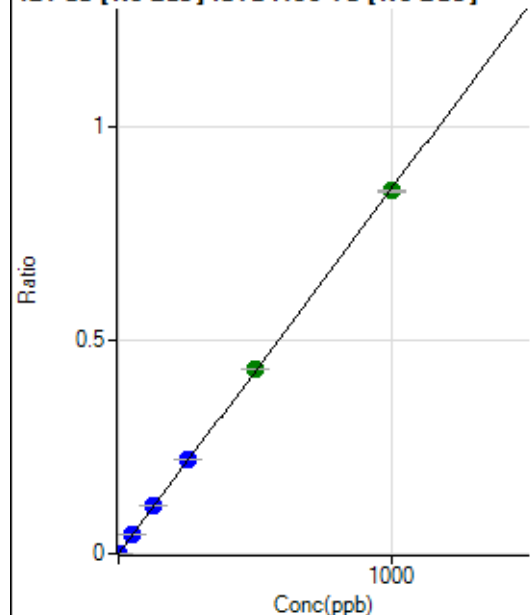
$$DL = 0.01702$$

$$BEC = 0.07028$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	38.89	0.0000	P	32.7
2	☐	0.200	0.203	2697.60	0.0002	P	6.9
3	☐	2.000	1.940	25434.94	0.0017	P	1.0
4	☐	50.000	53.253	693105.04	0.0455	P	0.3
5	☐	125.000	132.449	1700286.74	0.1132	P	0.3
6	☐	250.000	256.918	3190094.47	0.2195	P	0.7
7	☐	500.000	505.472	6201551.01	0.4318	A	0.0
8	☐	1000.000	994.441	12487442.90	0.8495	A	0.3
9	☐			17494.94	0.0012	P	2.6

$$y = 8.5427\text{E-}004 * x + 2.5663\text{E-}006$$

$$R = 0.9999$$

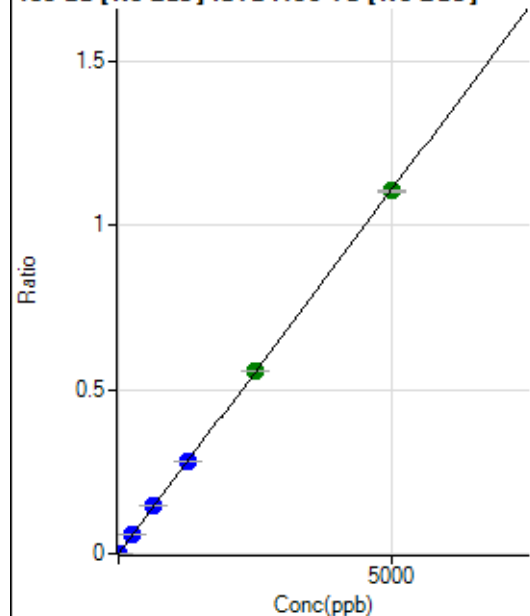
$$DL = 0.00295$$

$$BEC = 0.003004$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0000	P	47.8
2	☐	1.000	0.982	3367.23	0.0002	P	6.7
3	☐	10.000	9.992	33942.43	0.0022	P	2.5
4	☐	250.000	262.563	885831.70	0.0581	P	0.3
5	☐	625.000	652.405	2170944.23	0.1445	P	0.4
6	☐	1250.000	1268.264	4082136.03	0.2809	P	0.2
7	☐	2500.000	2508.106	7976571.53	0.5554	A	0.4
8	☐	5000.000	4987.327	16234174.32	1.1044	A	0.2
9	☐			2769.85	0.0002	P	4.0

$$y = 2.2144\text{E-}004 * x + 2.3790\text{E-}006$$

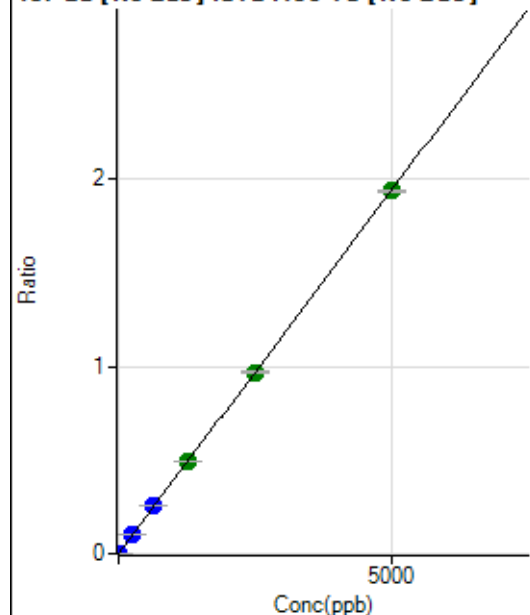
$$R = 1.0000$$

$$DL = 0.01539$$

$$BEC = 0.01074$$

Weight: <None>

Min Conc: 0

¹³⁷Ba [No Gas] ISTD : ¹⁵⁹Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	41.67	0.0000	P	19.6
2	☐	1.000	0.952	5698.63	0.0004	P	5.0
3	☐	10.000	9.839	58560.27	0.0038	P	1.0
4	☐	250.000	262.153	1550131.19	0.1018	P	0.4
5	☐	625.000	652.273	3804207.29	0.2532	P	0.6
6	☐	1250.000	1263.725	7129082.45	0.4905	A	0.7
7	☐	2500.000	2499.720	13933694.75	0.9702	A	0.2
8	☐	5000.000	4992.692	28483646.12	1.9378	A	0.6
9	☐			4837.15	0.0003	P	2.8

$$y = 3.8812\text{E-}004 * x + 2.7474\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.004168$$

$$BEC = 0.007079$$

Weight: <None>

Min Conc: 0

¹⁵⁰Nd [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			2.22		P	173.2
2	☐			6.67		P	0.0
3	☐			6.67		P	100.0
4	☐			77.78		P	19.8
5	☐			193.34		P	11.9
6	☐			344.46		P	10.7
7	☐			633.38		P	9.6
8	☐			1264.55		P	4.8
9	☐			328.90		P	9.1

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐			1.11		P	173.2
3	☐			1.11		P	173.2
4	☐			4.44		P	114.6
5	☐			23.33		P	37.8
6	☐			28.89		P	37.1
7	☐			47.78		P	10.7
8	☐			131.12		P	21.3
9	☐			124.45		P	21.6

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	100.0
2	☐			13.89		P	124.9
3	☐			8.33		P	100.0
4	☐			41.67		P	91.7
5	☐			55.56		P	37.8
6	☐			55.56		P	60.6
7	☐			144.45		P	29.6
8	☐			316.69		P	7.0
9	☐			277.79		P	21.3

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			4.45		P	86.6
3	☐			2.22		P	173.2
4	☐			23.33		P	28.6
5	☐			35.56		P	23.6
6	☐			48.89		P	49.3
7	☐			127.78		P	6.6
8	☐			254.45		P	8.5
9	☐			123.34		P	7.2

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	9.1
2	☐			88.89		P	19.5
3	☐			86.12		P	20.1
4	☐			77.78		P	16.4
5	☐			80.56		P	48.9
6	☐			86.12		P	29.6
7	☐			122.23		P	21.9
8	☐			133.34		P	33.1
9	☐			186.12		P	20.7

160 Gd [He] No available calibration points

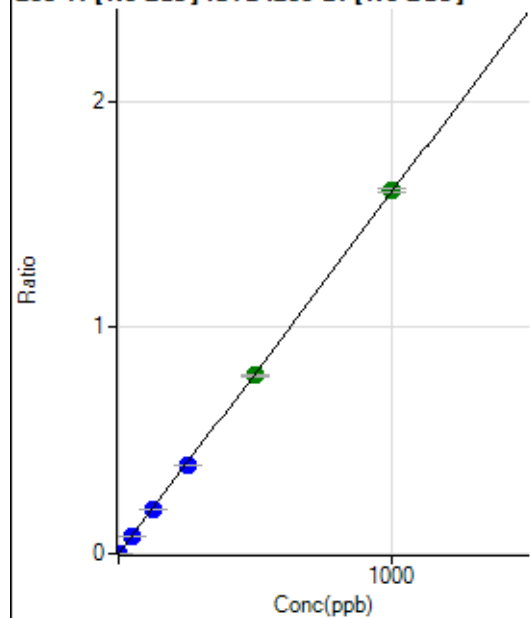
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			201.12		P	15.0
2	☐			223.34		P	12.8
3	☐			207.78		P	15.6
4	☐			226.67		P	14.9
5	☐			210.01		P	15.1
6	☐			177.78		P	15.2
7	☐			180.01		P	19.6
8	☐			220.01		P	12.4
9	☐			232.23		P	1.7

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	32.7
2	☐			44.45		P	57.3
3	☐			50.00		P	28.9
4	☐			63.89		P	32.8
5	☐			44.45		P	10.8
6	☐			58.34		P	14.3
7	☐			58.34		P	51.5
8	☐			83.34		P	34.6
9	☐			80.56		P	36.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			18.89		P	51.0
2	☐			23.33		P	24.7
3	☐			31.11		P	43.3
4	☐			25.55		P	27.1
5	☐			25.56		P	39.8
6	☐			21.11		P	24.1
7	☐			28.89		P	24.0
8	☐			56.66		P	27.0
9	☐			52.22		P	3.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	100.00	0.0000	P	37.6
2	☐	0.100	0.084	1558.50	0.0001	P	10.8
3	☐	1.000	0.844	14772.62	0.0014	P	0.3
4	☐	50.000	48.671	828796.88	0.0778	P	0.8
5	☐	125.000	123.249	2066576.63	0.1969	P	0.1
6	☐	250.000	245.305	3973916.41	0.3919	P	0.8
7	☐	500.000	493.862	7869162.59	0.7891	A	0.8
8	☐	1000.000	1004.528	15853437.86	1.6049	A	1.2
9	☐			15262.18	0.0017	P	2.9

$$y = 0.0016 * x + 9.2648E-006$$

$$R = 1.0000$$

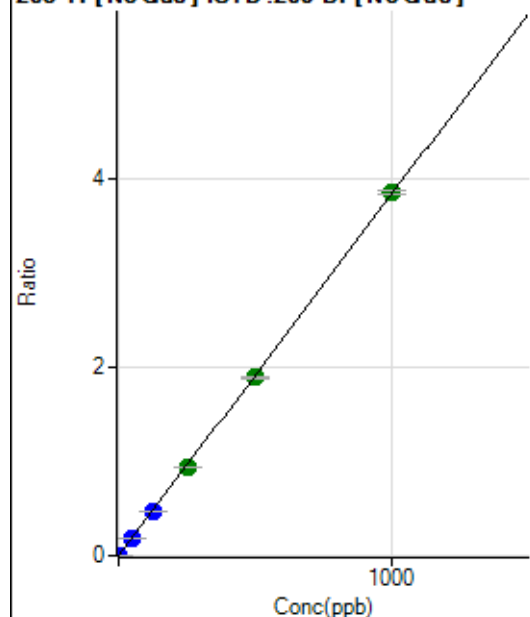
$$DL = 0.006548$$

$$BEC = 0.005799$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	255.57	0.0000	P	16.5
2	☐	0.100	0.089	3945.22	0.0004	P	1.6
3	☐	1.000	0.882	36974.78	0.0034	P	1.2
4	☐	50.000	49.237	2009582.29	0.1886	P	1.0
5	☐	125.000	124.331	4996610.49	0.4761	P	0.5
6	☐	250.000	245.684	9539535.89	0.9408	A	0.3
7	☐	500.000	493.973	18865093.83	1.8916	A	0.8
8	☐	1000.000	1004.214	37985860.23	3.8455	A	1.1
9	☐			38030.40	0.0042	P	2.3

$$y = 0.0038 * x + 2.3723E-005$$

$$R = 1.0000$$

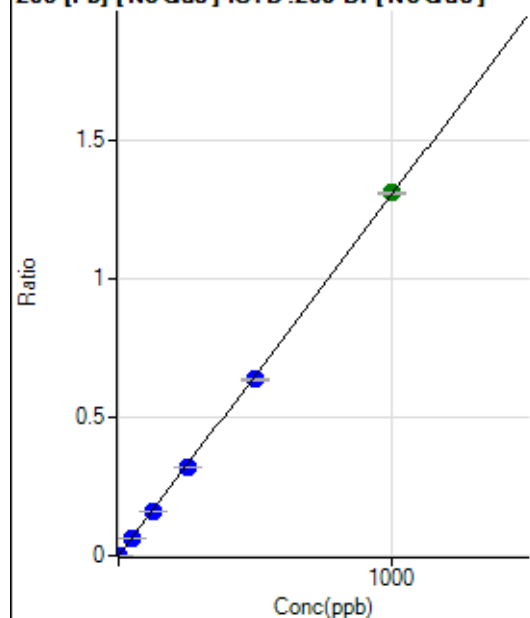
$$DL = 0.003058$$

$$BEC = 0.006195$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	587.07	0.0001	P	10.4
2	☐	0.100	0.086	1803.88	0.0002	P	2.2
3	☐	1.000	0.897	13299.59	0.0012	P	1.7
4	☐	50.000	49.502	687681.24	0.0645	P	1.0
5	☐	125.000	124.224	1698457.07	0.1618	P	0.6
6	☐	250.000	246.649	3257699.67	0.3213	P	0.6
7	☐	500.000	489.749	6361912.12	0.6379	P	1.3
8	☐	1000.000	1006.085	12944530.38	1.3104	A	0.6
9	☐			66791.45	0.0075	P	1.0

$$y = 0.0013 * x + 5.4469E-005$$

$$R = 0.9999$$

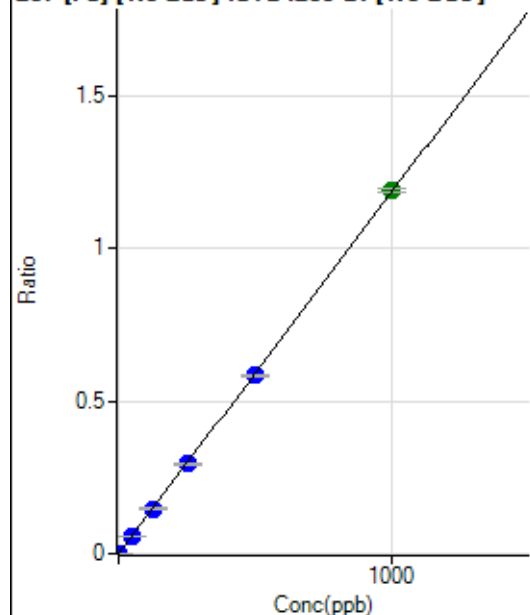
$$DL = 0.01303$$

$$BEC = 0.04182$$

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	564.85	0.0001	P	16.6
2	☐	0.100	0.088	1702.01	0.0002	P	7.5
3	☐	1.000	0.841	11412.62	0.0010	P	4.6
4	☐	50.000	49.512	625947.30	0.0587	P	0.4
5	☐	125.000	124.267	1546158.89	0.1473	P	1.3
6	☐	250.000	247.667	2976746.88	0.2936	P	0.8
7	☐	500.000	493.184	5829893.71	0.5846	P	1.0
8	☐	1000.000	1004.107	11756318.09	1.1901	A	1.0
9	☐			56574.19	0.0063	P	1.1

$$y = 0.0012 * x + 5.2404E-005$$

$$R = 1.0000$$

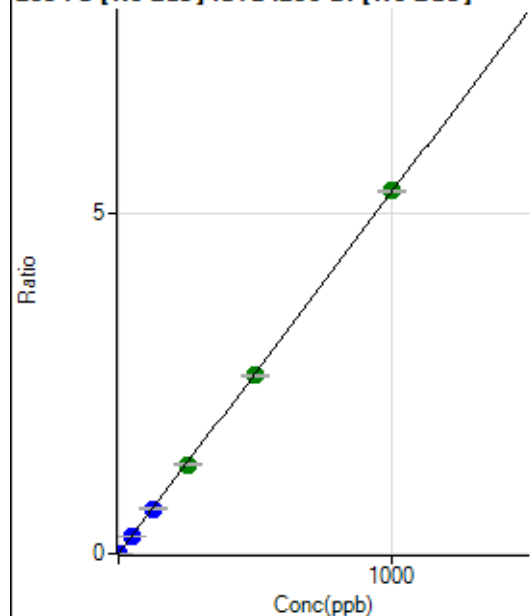
$$DL = 0.02197$$

$$BEC = 0.04422$$

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	2379.79	0.0002	P	6.2
2	☐	0.100	0.087	7413.99	0.0007	P	1.9
3	☐	1.000	0.867	52493.61	0.0048	P	0.5
4	☐	50.000	49.720	2817133.00	0.2643	P	0.6
5	☐	125.000	124.517	6943761.38	0.6617	P	0.9
6	☐	250.000	247.118	13312509.21	1.3130	A	0.3
7	☐	500.000	493.371	26140338.66	2.6211	A	0.6
8	☐	1000.000	1004.109	52693447.71	5.3342	A	0.6
9	☐			264710.23	0.0295	P	0.4

$$y = 0.0053 * x + 2.2084E-004$$

$$R = 1.0000$$

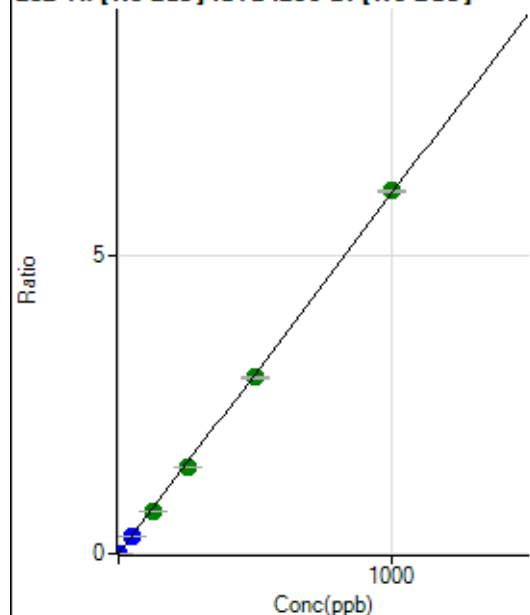
$$DL = 0.007675$$

$$BEC = 0.04157$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.56	0.0000	P	26.7
2	☐	0.100	0.083	5473.51	0.0005	P	2.6
3	☐	1.000	0.819	53868.32	0.0050	P	1.1
4	☐	50.000	46.585	2999594.83	0.2815	P	1.3
5	☐	125.000	118.362	7504930.49	0.7152	A	0.6
6	☐	250.000	241.762	14810900.79	1.4607	A	0.5
7	☐	500.000	490.053	29529460.15	2.9609	A	0.6
8	☐	1000.000	1008.034	60164074.49	6.0906	A	0.7
9	☐			14462.12	0.0016	P	9.6

$$y = 0.0060 * x + 5.1581E-006$$

$$R = 0.9999$$

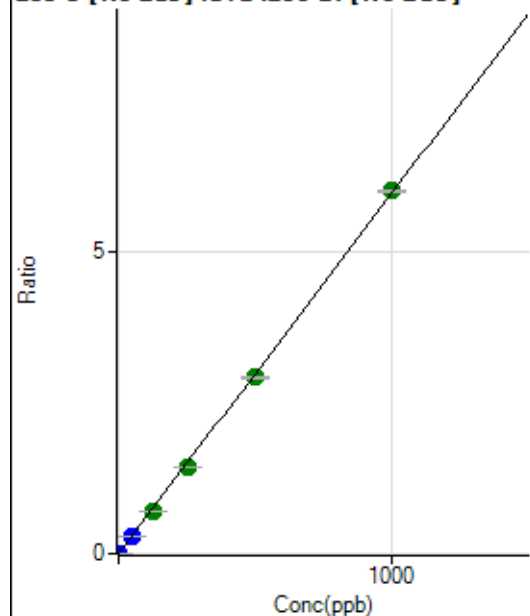
$$DL = 0.0006846$$

$$BEC = 0.0008537$$

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	138.90	0.0000	P	35.4
2	☐	0.100	0.085	5604.24	0.0005	P	3.9
3	☐	1.000	0.820	53240.49	0.0049	P	2.4
4	☐	50.000	46.738	2964034.92	0.2781	P	1.8
5	☐	125.000	118.638	7408897.04	0.7060	A	0.7
6	☐	250.000	241.889	14594961.09	1.4394	A	0.6
7	☐	500.000	490.180	29091322.52	2.9170	A	0.8
8	☐	1000.000	1007.896	59248699.24	5.9978	A	0.4
9	☐			4742.76	0.0005	P	6.3

$$y = 0.0060 * x + 1.2894E-005$$

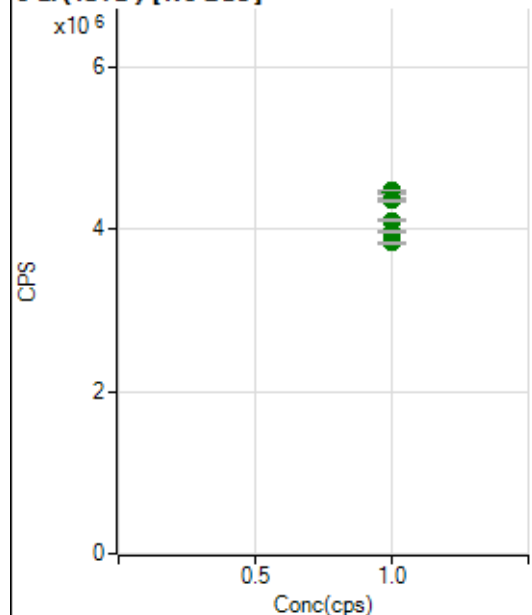
$$R = 0.9999$$

$$DL = 0.002301$$

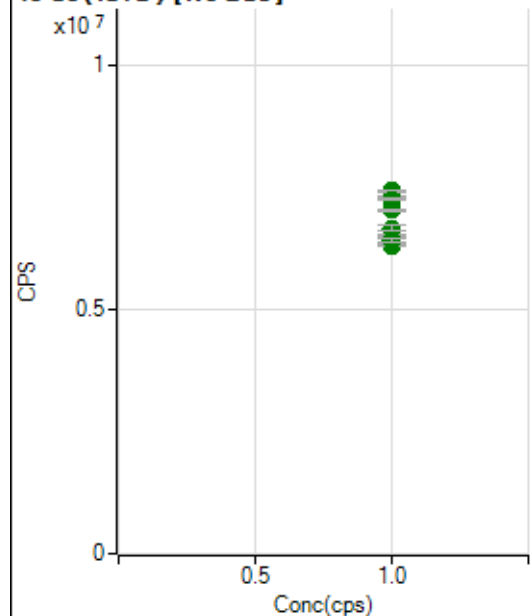
$$BEC = 0.002167$$

Weight: <None>

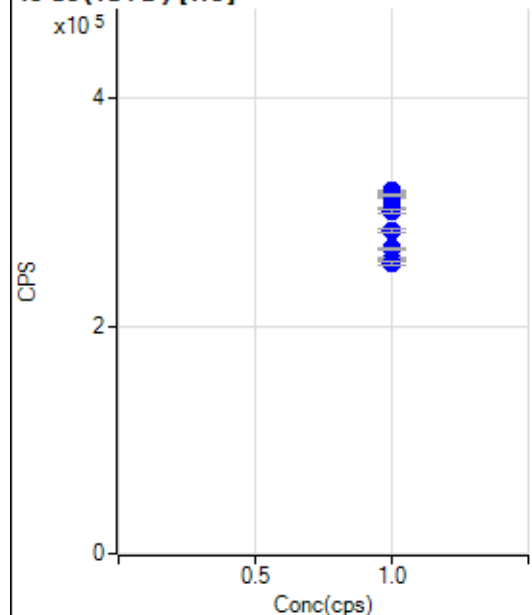
Min Conc: 0

6 Li (ISTD) [No Gas]

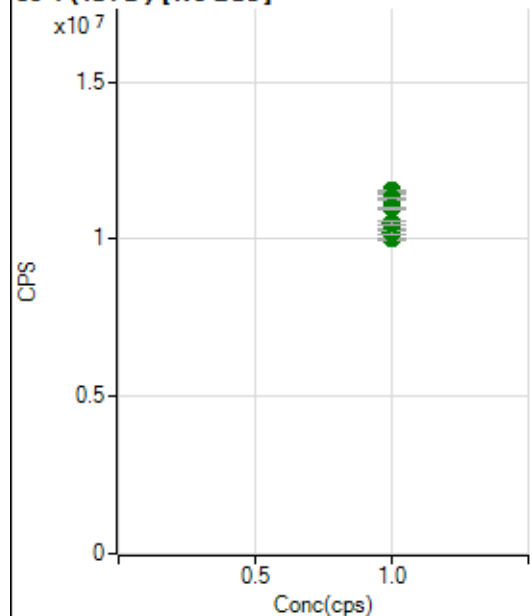
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		4363022.57		A	0.4
2	☐	1.000		4437012.19		A	0.6
3	☐	1.000		4468255.21		A	0.4
4	☐	1.000		4458106.25		A	0.9
5	☐	1.000		4347657.75		A	0.6
6	☐	1.000		4109017.99		A	0.8
7	☐	1.000		3953031.75		A	0.2
8	☐	1.000		3962726.19		A	0.7
9	☐	1.000		3828128.45		A	0.7

45 Sc (ISTD) [No Gas]

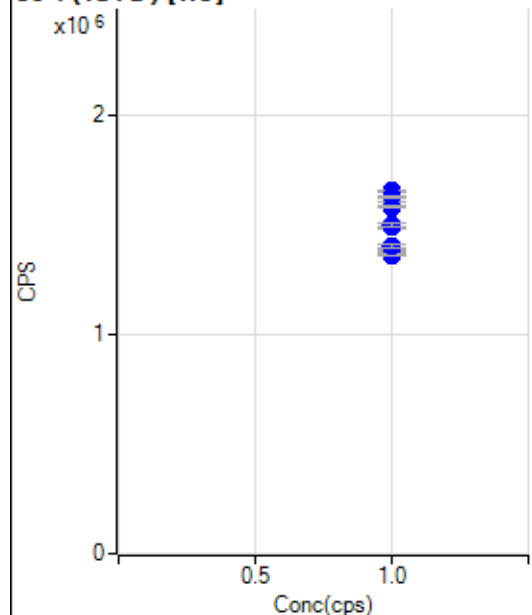
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7304781.59		A	0.5
2	☐	1.000		7411878.55		A	0.3
3	☐	1.000		7428751.99		A	0.4
4	☐	1.000		7254736.27		A	0.8
5	☐	1.000		7029198.07		A	0.4
6	☐	1.000		6519682.83		A	0.8
7	☐	1.000		6307116.89		A	0.4
8	☐	1.000		6411158.65		A	0.9
9	☐	1.000		6671070.98		A	1.4

45 Sc (ISTD) [He]

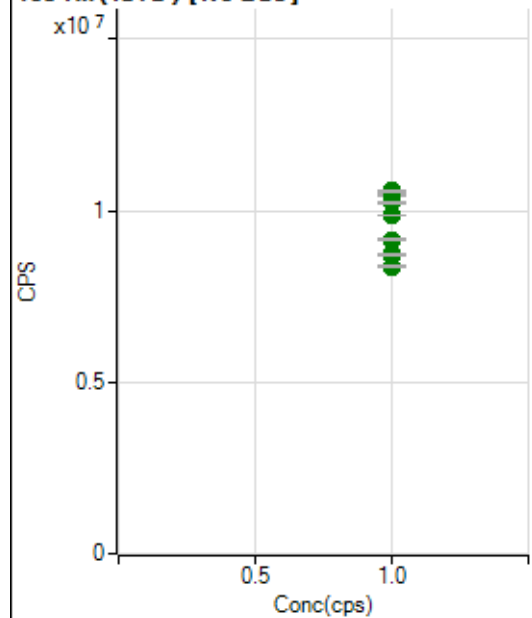
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		313089.51		P	1.0
2	☐	1.000		318444.19		P	0.7
3	☐	1.000		314897.95		P	0.4
4	☐	1.000		303402.51		P	0.6
5	☐	1.000		283613.06		P	1.1
6	☐	1.000		258872.97		P	0.3
7	☐	1.000		255428.98		P	1.3
8	☐	1.000		267736.49		P	0.8
9	☐	1.000		300662.04		P	0.8

89 Y (ISTD) [No Gas]

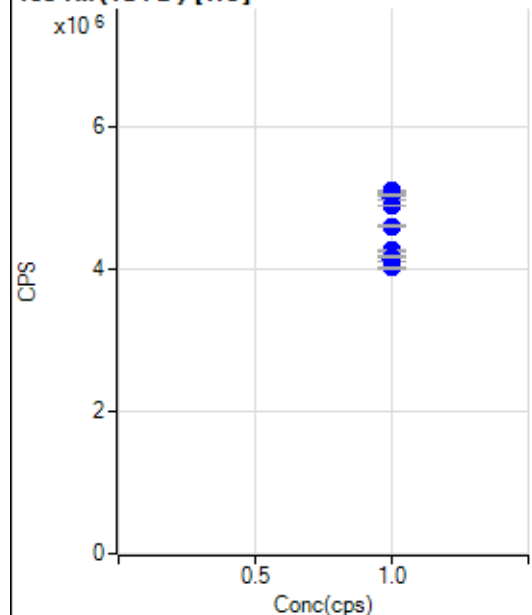
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		11420613.30		A	0.2
2	☐	1.000		11465806.91		A	0.4
3	☐	1.000		11529300.38		A	0.2
4	☐	1.000		11298354.14		A	0.6
5	☐	1.000		10970822.89		A	0.0
6	☐	1.000		10310131.24		A	0.6
7	☐	1.000		9999933.40		A	0.5
8	☐	1.000		10187864.92		A	1.0
9	☐	1.000		10512779.57		A	1.0

89 Y (ISTD) [He]

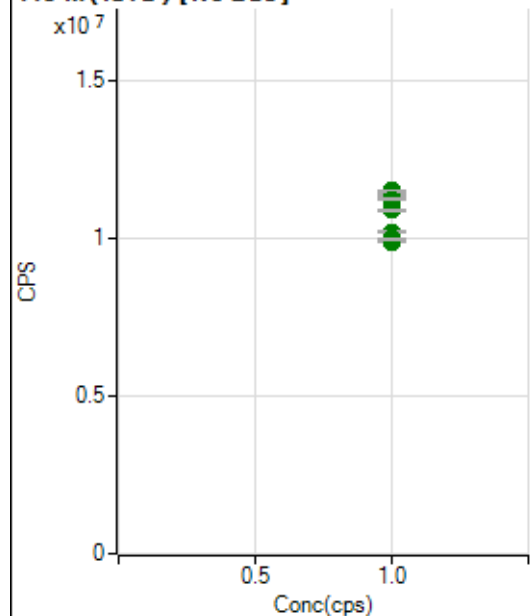
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		1620848.97		P	1.2
2	☐	1.000		1657180.22		P	0.4
3	☐	1.000		1629802.30		P	0.8
4	☐	1.000		1582025.71		P	0.5
5	☐	1.000		1490957.13		P	0.6
6	☐	1.000		1383591.32		P	0.8
7	☐	1.000		1365741.19		P	1.2
8	☐	1.000		1404829.51		P	1.0
9	☐	1.000		1500081.09		P	1.3

103 Rh (ISTD) [No Gas]

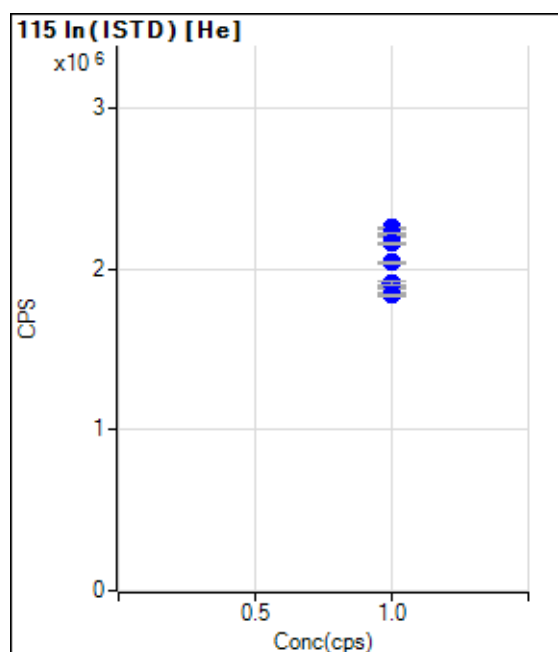
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		10427402.58		A	0.3
2	☐	1.000		10499673.41		A	0.3
3	☐	1.000		10576836.52		A	0.6
4	☐	1.000		10242838.51		A	0.5
5	☐	1.000		9862892.58		A	0.3
6	☐	1.000		9150733.80		A	0.6
7	☐	1.000		8735078.93		A	0.4
8	☐	1.000		8716351.24		A	1.2
9	☐	1.000		8377915.20		A	0.9

103 Rh (ISTD) [He]

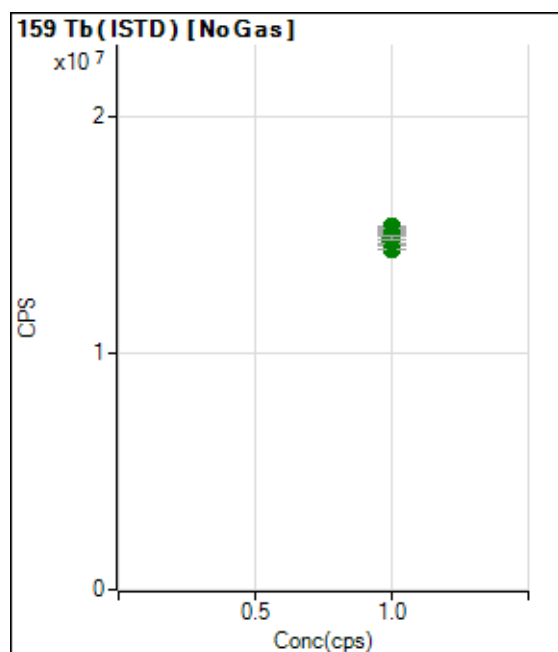
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		5015489.44		P	0.8
2	☐	1.000		5109825.03		P	0.8
3	☐	1.000		5055368.33		P	0.8
4	☐	1.000		4899506.07		P	0.2
5	☐	1.000		4614180.56		P	0.8
6	☐	1.000		4268360.39		P	0.6
7	☐	1.000		4139551.47		P	1.2
8	☐	1.000		4179669.76		P	0.9
9	☐	1.000		4023485.15		P	1.0

115 In (ISTD) [No Gas]

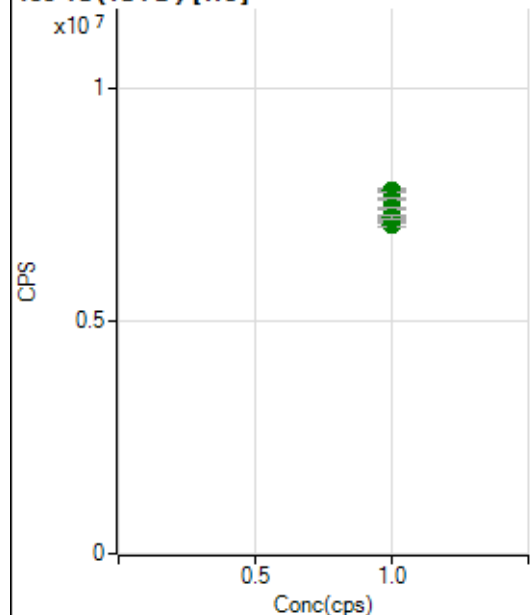
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		11341310.15		A	0.2
2	☐	1.000		11411642.19		A	0.4
3	☐	1.000		11488477.16		A	0.5
4	☐	1.000		11221281.52		A	0.5
5	☐	1.000		10869432.04		A	0.1
6	☐	1.000		10195301.16		A	0.4
7	☐	1.000		9902177.67		A	0.5
8	☐	1.000		9873522.73		A	0.6
9	☐	1.000		9959412.36		A	1.1



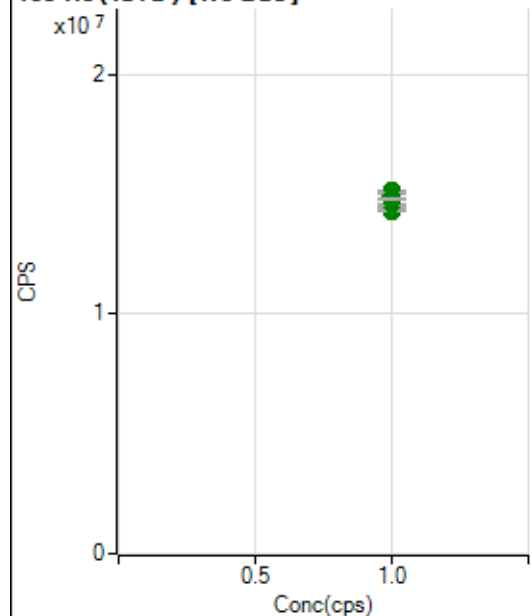
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		2207754.65		P	1.2
2	☐	1.000		2255310.95		P	0.6
3	☐	1.000		2219907.36		P	0.4
4	☐	1.000		2159368.91		P	0.2
5	☐	1.000		2040382.95		P	0.8
6	☐	1.000		1884171.43		P	0.5
7	☐	1.000		1841496.79		P	1.2
8	☐	1.000		1837117.04		P	0.8
9	☐	1.000		1907914.06		P	1.4



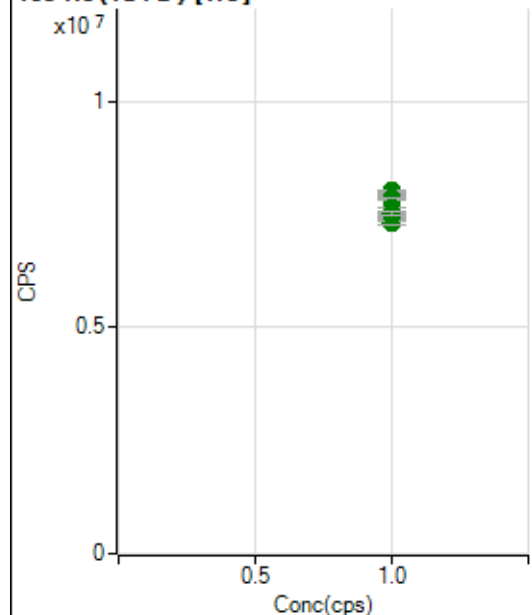
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		15157360.75		A	0.5
2	☐	1.000		15310987.41		A	0.2
3	☐	1.000		15323757.27		A	0.2
4	☐	1.000		15234832.00		A	0.5
5	☐	1.000		15026743.53		A	0.3
6	☐	1.000		14534882.98		A	0.1
7	☐	1.000		14361675.62		A	0.1
8	☐	1.000		14699533.95		A	0.8
9	☐	1.000		14855272.42		A	1.0

159 Tb (ISTD) [He]

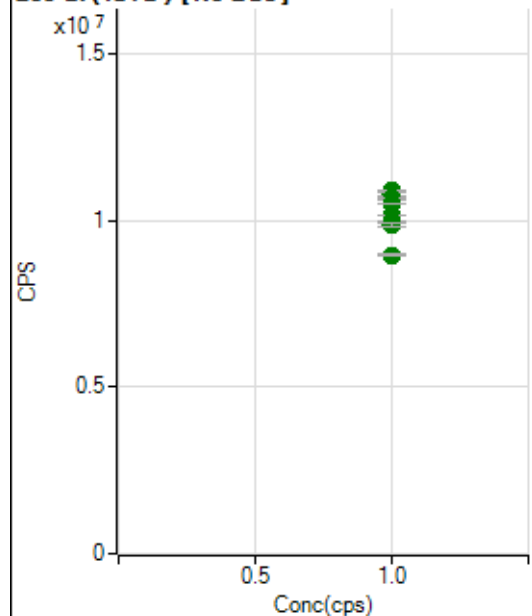
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7781222.38		A	0.1
2	☐	1.000		7781952.59		A	0.9
3	☐	1.000		7765864.95		A	0.1
4	☐	1.000		7603967.60		A	0.5
5	☐	1.000		7408929.48		A	0.7
6	☐	1.000		7099922.05		A	0.7
7	☐	1.000		7063534.69		A	1.3
8	☐	1.000		7181884.13		A	0.5
9	☐	1.000		7219243.50		A	0.9

165 Ho (ISTD) [No Gas]

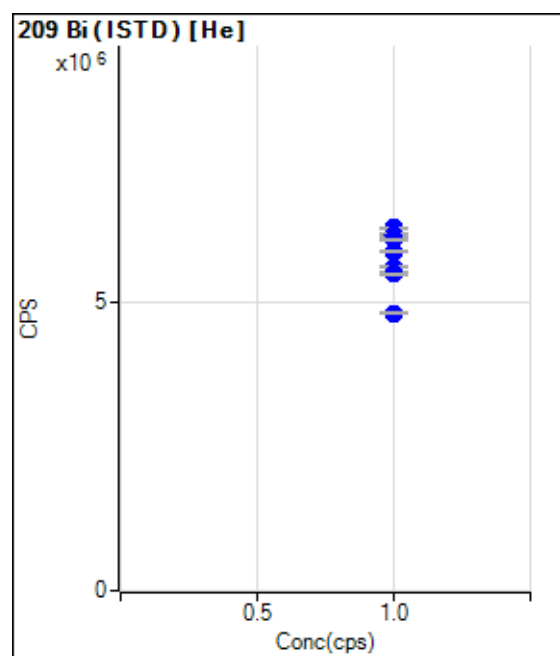
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		14927233.84		A	0.8
2	☐	1.000		15084896.00		A	0.3
3	☐	1.000		15135746.69		A	0.5
4	☐	1.000		15048206.41		A	0.6
5	☐	1.000		14847921.16		A	0.2
6	☐	1.000		14397968.21		A	0.2
7	☐	1.000		14299793.90		A	0.5
8	☐	1.000		14568098.07		A	0.2
9	☐	1.000		14791253.98		A	0.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7925891.41		A	0.4
2	☐	1.000		8015745.71		A	0.2
3	☐	1.000		8013538.35		A	0.4
4	☐	1.000		7851243.84		A	0.3
5	☐	1.000		7648800.93		A	0.4
6	☐	1.000		7370213.43		A	0.6
7	☐	1.000		7321956.97		A	1.2
8	☐	1.000		7480344.75		A	0.7
9	☐	1.000		7526559.27		A	0.9

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		10778266.65		A	0.6
2	☐	1.000		10831307.90		A	0.4
3	☐	1.000		10876639.28		A	0.5
4	☐	1.000		10657391.58		A	0.7
5	☐	1.000		10494267.97		A	0.4
6	☐	1.000		10139358.67		A	0.3
7	☐	1.000		9973219.85		A	0.5
8	☐	1.000		9878648.19		A	1.0
9	☐	1.000		8959382.64		A	0.7



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6092669.70		P	1.5
2	☐	1.000		6270922.34		P	0.7
3	☐	1.000		6154924.84		P	1.1
4	☐	1.000		6080874.21		P	0.5
5	☐	1.000		5862511.44		P	0.3
6	☐	1.000		5599211.51		P	0.5
7	☐	1.000		5477763.67		P	1.2
8	☐	1.000		5471552.56		P	0.7
9	☐	1.000		4799192.50		P	0.9

US EPA Tune Check Sample Report

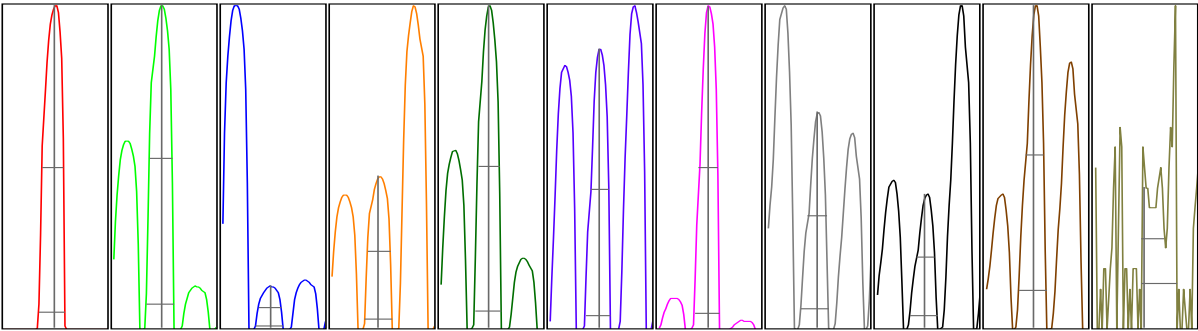
Batch Folder D:\ICP-MS Data\P7113018 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	17715	0.78	5.00	
24	146699	0.65	5.00	
25	19338	0.82	5.00	
26	22365	0.63	5.00	
59	114458	0.88	5.00	
113	14797	0.96	5.00	
115	174315	1.05	5.00	
206	48285	0.70	5.00	
207	45356	0.62	5.00	
208	105360	0.63	5.00	
220	0	84.46		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	17738	17638	17872	17804	17522
24	146612	146731	147949	146919	145284
25	19367	19364	19539	19328	19095
26	22404	22373	22564	22306	22179
59	114438	114783	115611	114617	112842
113	14922	14831	14909	14750	14574
115	176434	174862	175009	173755	171514
206	48115	48376	48782	48286	47866
207	45373	45300	45602	45596	44910
208	104944	105335	106269	105704	104547
220	0	0	1	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	29966	9.00	8.9 - 9.1		0.765	0.900	
24	234163	23.95	23.9 - 24.1		0.807	0.900	
25	31142	24.95	24.9 - 25.1		0.788	0.900	
26	35482	25.90	25.9 - 26.1		0.787	0.900	
59	194564	58.95	58.9 - 59.1		0.783	0.900	
113	27744	113.00	112.9 - 113.1		0.734	0.900	
115	328896	115.00	114.9 - 115.1		0.732	0.900	
206	90034	206.00	205.9 - 206.1		0.793	0.900	
207	81298	206.95	206.9 - 207.1		0.796	0.900	
208	195814	207.95	207.9 - 208.1		0.795	0.900	
220	0	220.00	-		1.030		

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
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	6.4	V	Deflect	14.2	V
Extract 2	-105.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	27880	0.28	
89	34960	0.43	
205	41949	0.44	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	27881	27791	27892	27837	28000
89	34820	34841	34964	34979	35199
205	41793	41747	41939	42079	42188

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.1	V	Deflect	2.0	V
Extract 2	-135.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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	4.1	mL/min	OctP RF	200	V			