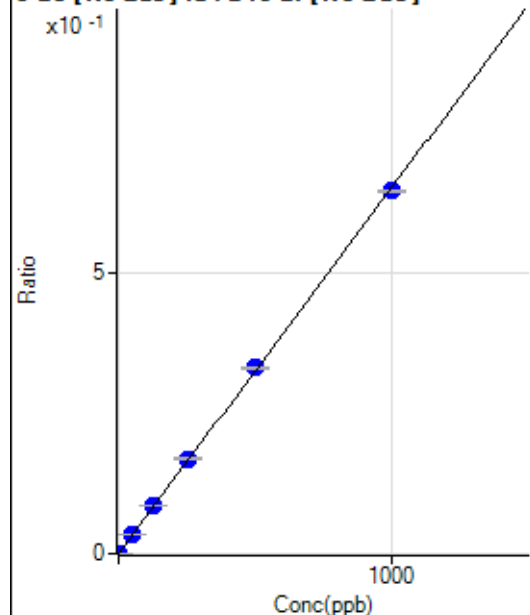


Batch Folder: D:\ICP-MS Data\P7082519 MS.b\
Analysis File: P7082519 MS.batch.bin
DA Date-Time: 2019-08-25 23:49:26
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-08-25 13:00:13
2	003CALS.d	S02	2019-08-25 13:03:49
3	004CALS.d	S03	2019-08-25 13:08:09
4	005CALS.d	S04	2019-08-25 13:12:06
5	006CALS.d	S05	2019-08-25 13:15:58
6	007CALS.d	S06	2019-08-25 13:19:48
7	008CALS.d	S07	2019-08-25 13:23:35
8	009CALS.d	S08	2019-08-25 13:27:21

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	54.45	0.0000	P	28.5
2	☐	1.000	0.978	1753.46	0.0007	P	2.8
3	☐	50.000	53.243	92721.93	0.0346	P	1.7
4	☐	125.000	132.932	227094.15	0.0863	P	0.2
5	☐	250.000	259.634	419792.44	0.1686	P	0.8
6	☐	500.000	508.656	804750.78	0.3302	P	0.6
7	☐	1000.000	992.110	1513702.84	0.6441	P	0.3
8	☐			352.23	0.0002	P	18.7

$$y = 6.4919\text{E-}004 * x + 2.0201\text{E-}005$$

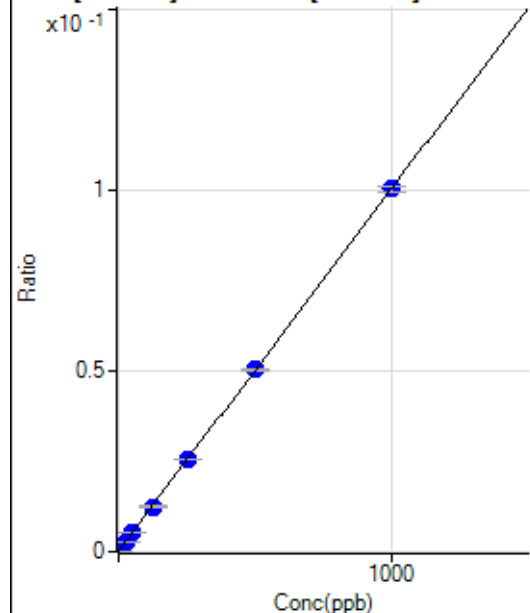
$$R = 0.9999$$

$$DL = 0.02664$$

$$BEC = 0.03112$$

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	611.15	0.0002	P	8.3
2	☐	25.000	23.030	6790.70	0.0025	P	2.3
3	☐	50.000	50.842	14273.95	0.0053	P	3.1
4	☐	125.000	122.035	32786.48	0.0125	P	3.6
5	☐	250.000	252.186	63545.81	0.0255	P	1.0
6	☐	500.000	499.994	122728.71	0.0504	P	1.8
7	☐	1000.000	999.834	236149.84	0.1005	P	1.6
8	☐			10876.55	0.0049	P	6.9

$$y = 1.0027\text{E-}004 * x + 2.2682\text{E-}004$$

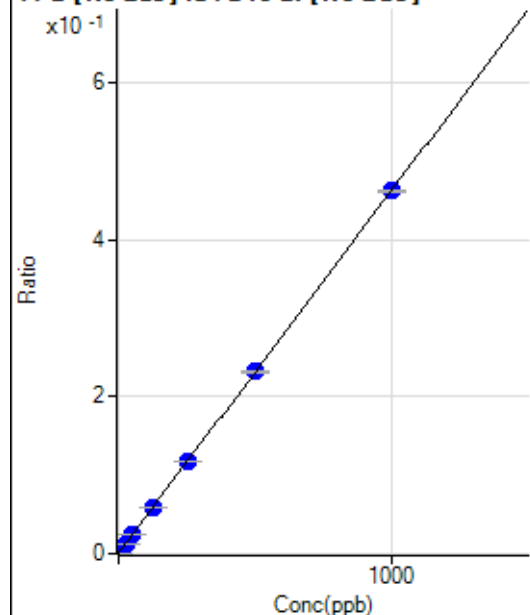
$$R = 1.0000$$

$$DL = 0.5605$$

$$BEC = 2.262$$

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	2428.07	0.0009	P	3.7
2	☐	25.000	23.343	31299.92	0.0117	P	1.7
3	☐	50.000	50.196	64605.95	0.0241	P	2.7
4	☐	125.000	123.204	152162.06	0.0578	P	0.7
5	☐	250.000	251.494	291678.83	0.1171	P	0.6
6	☐	500.000	501.572	567053.63	0.2327	P	1.0
7	☐	1000.000	999.097	1087206.90	0.4626	P	0.8
8	☐			49743.99	0.0224	P	7.5

$$y = 4.6213E-004 * x + 9.0171E-004$$

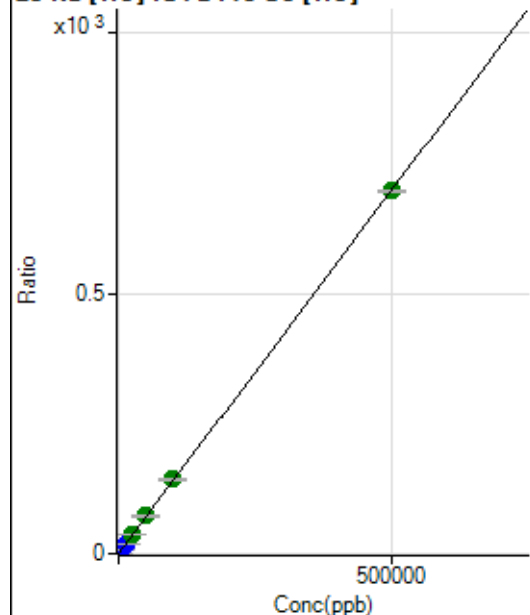
$$R = 1.0000$$

$$DL = 0.2144$$

$$BEC = 1.951$$

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	5642.98	0.0258	P	3.8
2	☐	500.000	470.362	151490.50	0.6816	P	0.6
3	☐	5000.000	5088.767	1506653.47	7.1208	P	0.1
4	☐	12500.000	12993.820	3549301.38	18.1423	P	0.5
5	☐	25000.000	25933.416	6673830.88	36.1832	A	0.5
6	☐	50000.000	51723.728	12904983.19	72.1411	A	1.0
7	☐	100000.00	101947.56	24960167.75	142.1651	A	0.5
8	☐	500000.00	499378.24	122375090.2	696.2784	A	0.6

$$y = 0.0014 * x + 0.0258$$

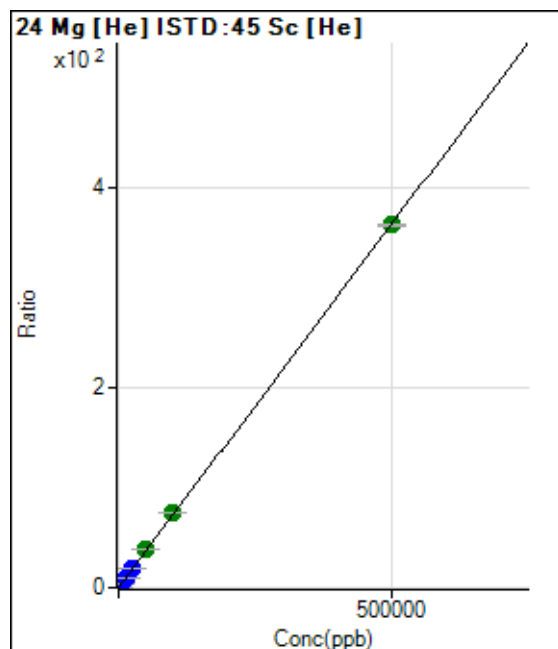
$$R = 1.0000$$

$$DL = 2.091$$

$$BEC = 18.54$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.12	0.0004	P	40.5
2	☐	500.000	500.100	80857.05	0.3638	P	1.3
3	☐	5000.000	5189.535	798073.72	3.7719	P	0.2
4	☐	12500.000	13193.511	1875934.28	9.5888	P	0.5
5	☐	25000.000	26237.094	3517044.09	19.0683	P	0.2
6	☐	50000.000	52503.859	6825846.33	38.1577	A	1.0
7	☐	100000.00	103018.53	13144967.65	74.8694	A	0.4
8	☐	500000.00	499064.81	63746147.26	362.6973	A	0.7

$$y = 7.2675\text{E-}004 * x + 3.9454\text{E-}004$$

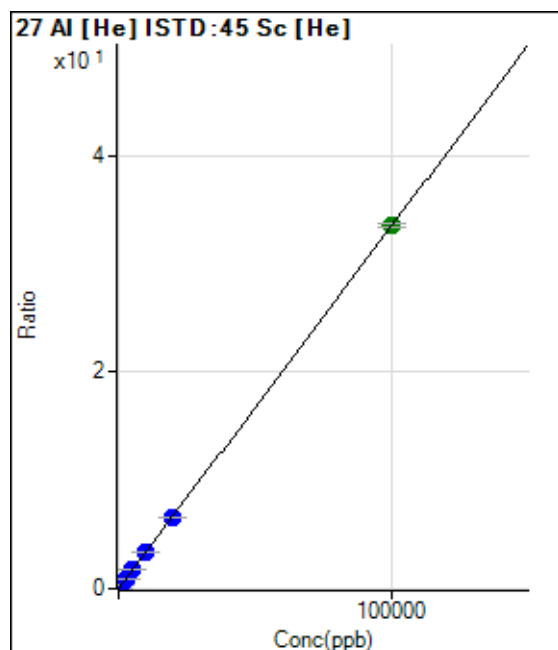
$$R = 1.0000$$

$$DL = 0.6594$$

$$BEC = 0.5429$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	36.12	0.0002	P	58.3
2	☐	20.000	19.272	1472.36	0.0066	P	5.1
3	☐	1000.000	980.118	69531.75	0.3286	P	0.4
4	☐	2500.000	2525.088	165581.48	0.8464	P	0.7
5	☐	5000.000	5046.723	311975.92	1.6914	P	0.1
6	☐	10000.000	9952.088	596648.29	3.3353	P	0.9
7	☐	20000.000	19774.560	1163537.29	6.6271	P	0.3
8	☐	100000.00	100047.11	5892779.78	33.5283	A	0.9

$$y = 3.3512\text{E-}004 * x + 1.6564\text{E-}004$$

$$R = 1.0000$$

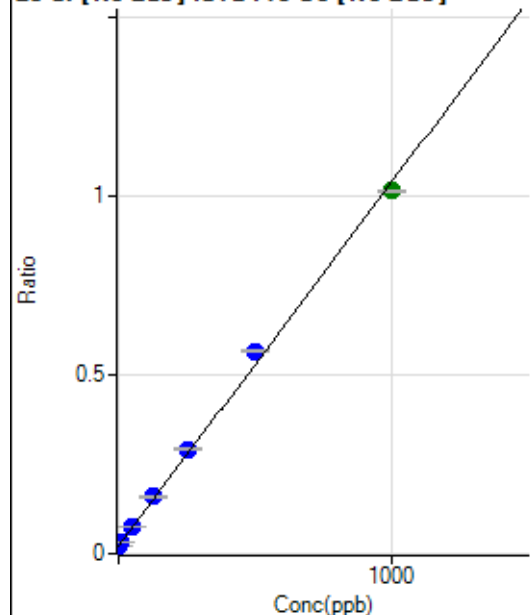
$$DL = 0.8645$$

$$BEC = 0.4943$$

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	114334.80	0.0212	P	0.6
2	☐	10.000	9.259	162074.47	0.0306	P	1.1
3	☐	50.000	54.185	400201.57	0.0763	P	2.1
4	☐	125.000	135.478	797747.71	0.1589	P	1.3
5	☐	250.000	266.390	1364453.92	0.2921	P	1.0
6	☐	500.000	535.298	2609035.50	0.5655	P	0.9
7	☐	1000.000	976.742	4548600.27	1.0144	A	0.5
8	☐			324249.35	0.0753	P	0.4

$$y = 0.0010 * x + 0.0212$$

$$R = 0.9989$$

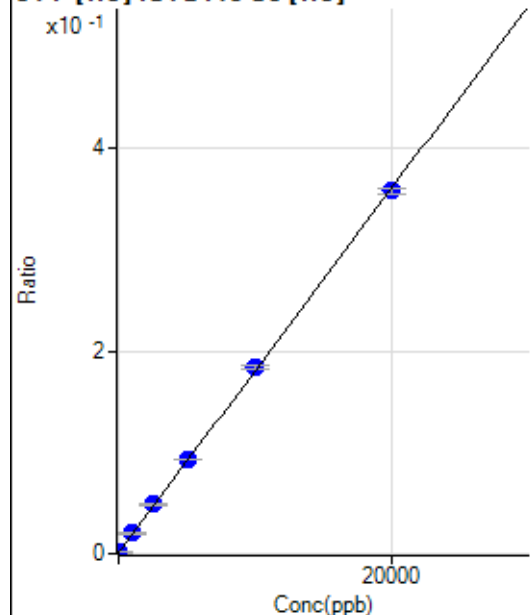
$$DL = 0.3634$$

$$BEC = 20.81$$

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	-29.767	55.56	0.0003	P	45.4
2	☐	0.000	29.767	294.46	0.0013	P	20.5
3	☐	1000.000	1072.571	4253.56	0.0201	P	4.8
4	☐	2500.000	2648.166	9483.95	0.0485	P	4.4
5	☐	5000.000	5098.475	17079.87	0.0926	P	0.7
6	☐	10000.000	10186.783	32954.15	0.1842	P	2.3
7	☐	20000.000	19859.841	62928.11	0.3584	P	1.3
8	☐			86.11	0.0005	P	22.9

$$y = 1.8008E-005 * x + 7.9016E-004$$

$$R = 0.9999$$

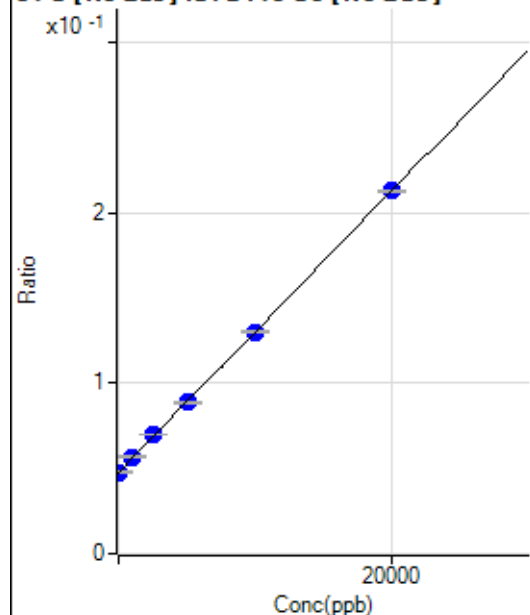
$$DL = 32.29$$

$$BEC = 43.88$$

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	-14.957	256932.51	0.0476	P	0.5
2	☐	0.000	14.957	253397.49	0.0478	P	0.5
3	☐	1000.000	1103.897	298031.02	0.0568	P	2.8
4	☐	2500.000	2646.304	349043.93	0.0695	P	0.1
5	☐	5000.000	4989.637	415196.12	0.0889	P	1.0
6	☐	10000.000	9986.372	600335.50	0.1301	P	1.0
7	☐	20000.000	19985.922	953612.76	0.2127	P	0.4
8	☐			195417.34	0.0454	P	0.6

$$y = 8.2552E-006 * x + 0.0477$$

R = 1.0000

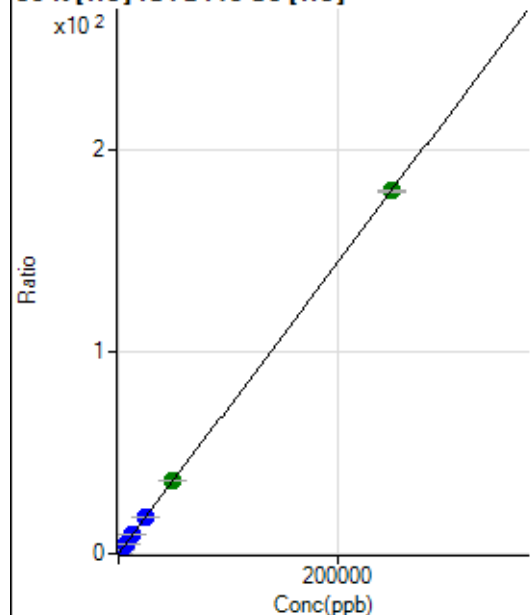
DL = 88.59

BEC = 5777

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	13070.11	0.0599	P	2.3
2	☐	500.000	487.556	91313.67	0.4109	P	0.7
3	☐	2500.000	2558.143	402333.04	1.9015	P	0.5
4	☐	6250.000	6454.999	920856.57	4.7069	P	0.4
5	☐	12500.000	12818.418	1713129.23	9.2880	P	0.1
6	☐	25000.000	25414.666	3283751.94	18.3563	P	0.7
7	☐	50000.000	50219.993	6358147.58	36.2140	A	0.6
8	☐	250000.00	249892.93	31629429.88	179.9617	A	0.8

$$y = 7.1992E-004 * x + 0.0599$$

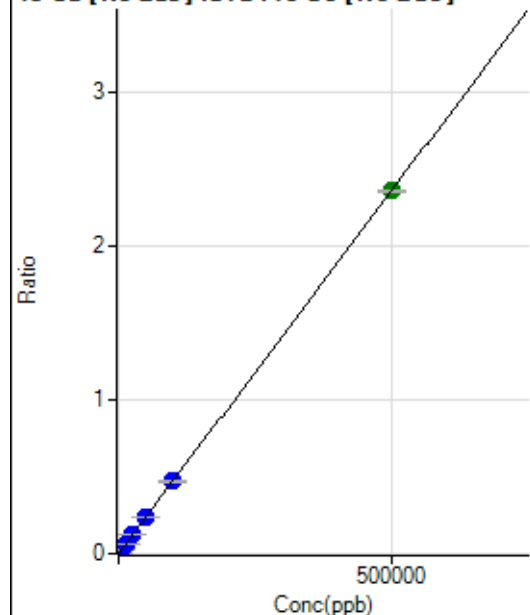
R = 1.0000

DL = 5.72

BEC = 83.15

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	113.90	0.0000	P	29.7
2	☐	500.000	468.621	11830.18	0.0022	P	2.5
3	☐	5000.000	4970.192	123145.09	0.0235	P	3.1
4	☐	12500.000	12715.729	301264.30	0.0600	P	0.3
5	☐	25000.000	25558.068	563449.56	0.1206	P	0.2
6	☐	50000.000	50940.000	1108934.85	0.2404	P	0.3
7	☐	100000.00	99602.523	2107322.79	0.4700	P	0.6
8	☐	500000.00	499952.52	10152164.20	2.3589	A	0.6

$$y = 4.7183\text{E-}006 * x + 2.1088\text{E-}005$$

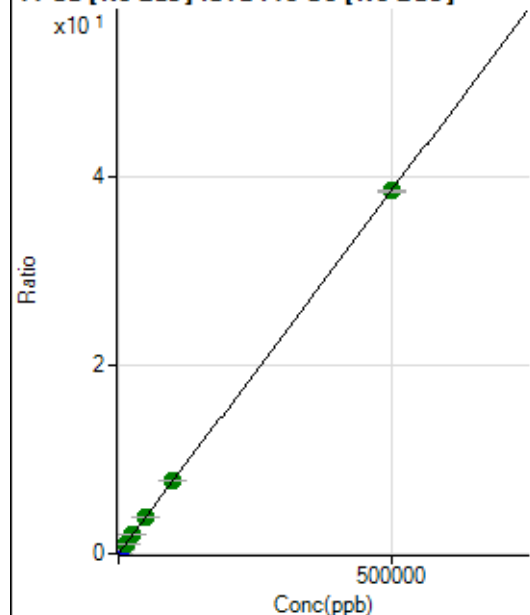
$$R = 1.0000$$

$$DL = 3.976$$

$$BEC = 4.469$$

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	6546.64	0.0012	P	1.6
2	☐	500.000	460.717	194151.85	0.0366	P	1.0
3	☐	5000.000	4940.121	1999478.50	0.3810	P	1.9
4	☐	12500.000	12664.629	4893828.89	0.9750	A	0.3
5	☐	25000.000	25506.942	9167285.02	1.9624	A	0.4
6	☐	50000.000	50697.529	17988566.90	3.8992	A	0.1
7	☐	100000.00	100508.71	34655656.33	7.7290	A	0.2
8	☐	500000.00	499799.68	165385727.3	38.4292	A	0.9

$$y = 7.6887\text{E-}005 * x + 0.0012$$

$$R = 1.0000$$

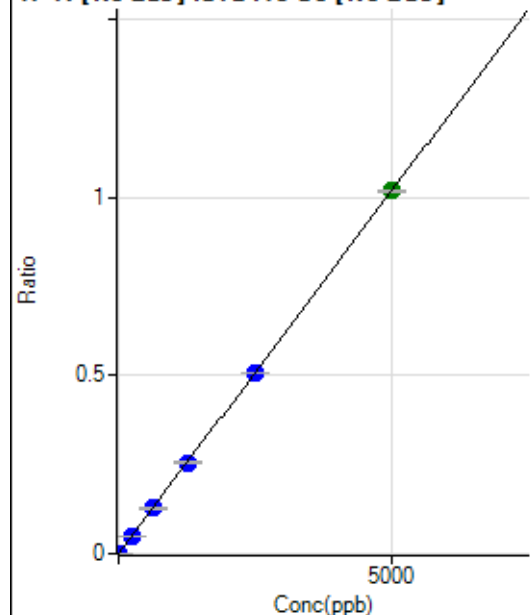
$$DL = 0.736$$

$$BEC = 15.76$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102.78	0.0000	P	20.6
2	☐	5.000	4.886	5365.12	0.0010	P	7.9
3	☐	250.000	247.023	263647.97	0.0503	P	2.9
4	☐	625.000	624.444	637480.41	0.1270	P	0.6
5	☐	1250.000	1258.408	1195544.32	0.2559	P	0.5
6	☐	2500.000	2491.257	2337231.11	0.5066	P	0.4
7	☐	5000.000	5002.488	4561332.35	1.0173	A	0.3
8	☐			1505.70	0.0003	P	15.2

$$y = 2.0335\text{E-}004 * x + 1.9036\text{E-}005$$

$$R = 1.0000$$

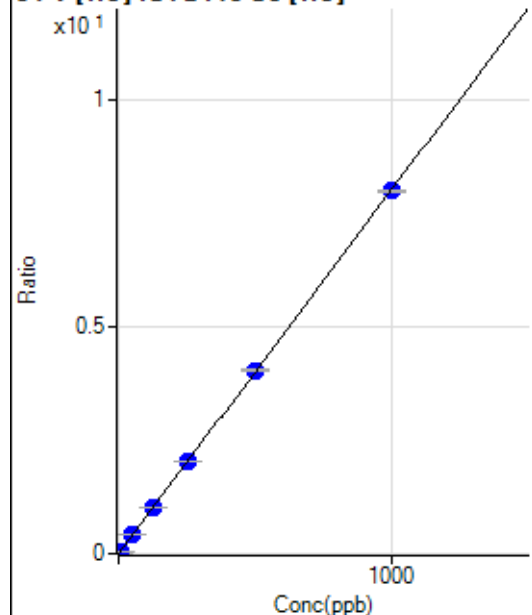
$$DL = 0.05798$$

$$BEC = 0.09361$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	173.
2	☐	5.000	4.991	8910.60	0.0401	P	1.3
3	☐	50.000	50.420	85685.79	0.4050	P	0.2
4	☐	125.000	127.377	200154.96	1.0231	P	0.4
5	☐	250.000	252.747	374426.75	2.0300	P	0.1
6	☐	500.000	503.492	723400.43	4.0440	P	1.2
7	☐	1000.000	997.249	1406283.38	8.0097	P	0.4
8	☐			237.78	0.0014	P	18.1

$$y = 0.0080 * x + 1.0131\text{E-}005$$

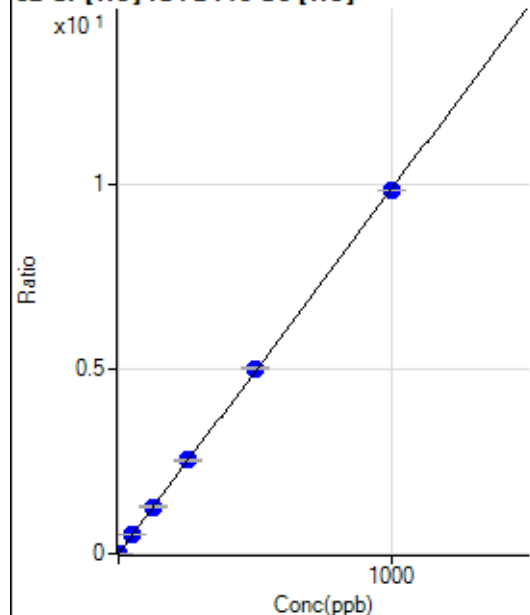
$$R = 1.0000$$

$$DL = 0.006554$$

$$BEC = 0.001261$$

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	253.34	0.0012	P	2.3
2	☐	2.000	1.907	4442.96	0.0200	P	0.2
3	☐	50.000	50.895	106598.53	0.5038	P	0.6
4	☐	125.000	128.821	249128.63	1.2734	P	0.9
5	☐	250.000	255.783	466157.51	2.5274	P	0.4
6	☐	500.000	506.254	894624.27	5.0011	P	1.0
7	☐	1000.000	994.905	1725385.95	9.8272	P	0.1
8	☐			43336.94	0.2466	P	1.4

$$y = 0.0099 * x + 0.0012$$

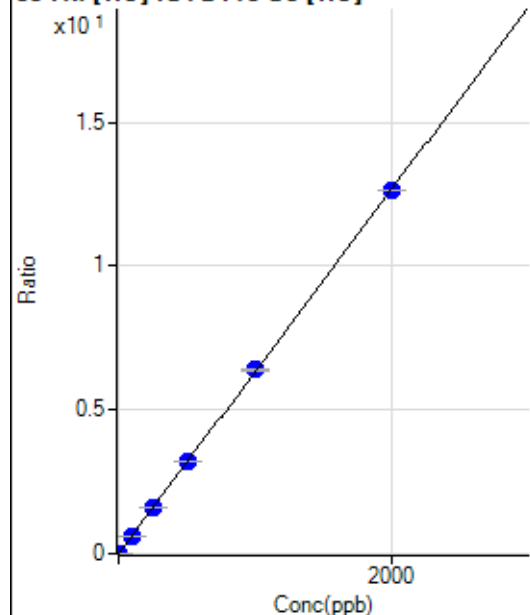
$$R = 0.9999$$

$$DL = 0.007956$$

$$BEC = 0.1175$$

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	56.67	0.0003	P	16.0
2	☐	1.000	1.000	1463.43	0.0066	P	6.8
3	☐	100.000	99.615	133474.00	0.6308	P	0.6
4	☐	250.000	254.845	315651.07	1.6135	P	0.6
5	☐	500.000	509.067	594411.46	3.2227	P	0.1
6	☐	1000.000	1010.232	1144012.34	6.3952	P	0.9
7	☐	2000.000	1992.031	2213980.00	12.6101	P	0.2
8	☐			7192.97	0.0409	P	4.1

$$y = 0.0063 * x + 2.5965E-004$$

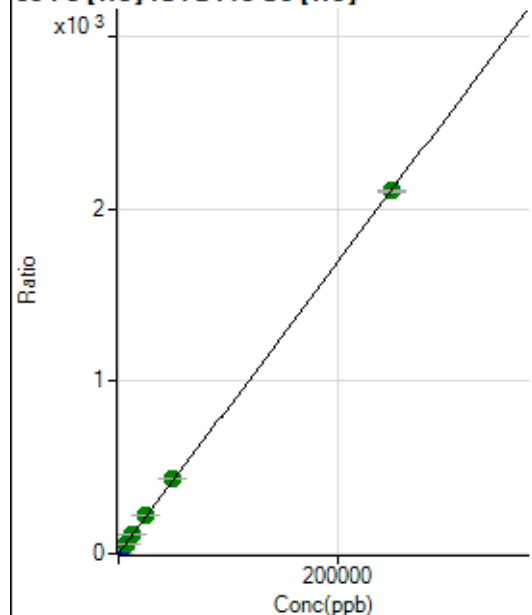
$$R = 1.0000$$

$$DL = 0.01963$$

$$BEC = 0.04102$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3126.35	0.0143	P	2.0
2	☐	50.000	52.267	101060.15	0.4547	P	0.2
3	☐	2500.000	2601.462	4640973.48	21.9343	P	0.4
4	☐	6250.000	6595.968	10875891.56	55.5920	A	0.4
5	☐	12500.000	13187.620	20497885.18	111.1333	A	0.2
6	☐	25000.000	26105.113	39349428.66	219.9761	A	1.4
7	☐	50000.000	51378.144	76010112.81	432.9268	A	0.1
8	☐	250000.00	249569.81	369596934.1	2,102.890	A	0.5

$$y = 0.0084 * x + 0.0143$$

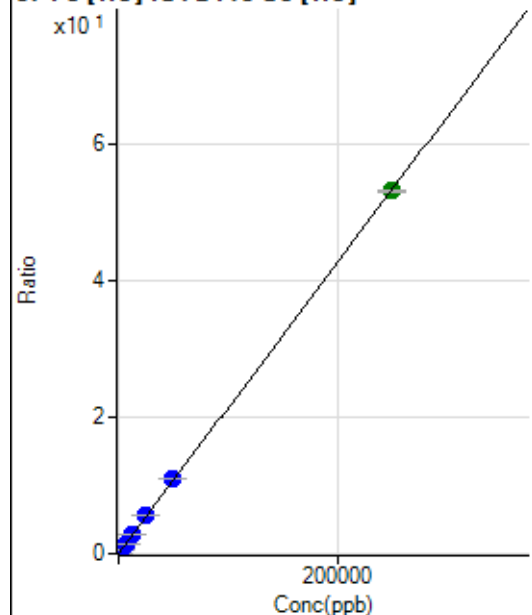
$$R = 1.0000$$

$$DL = 0.1017$$

$$BEC = 1.699$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	175.93	0.0008	P	6.9
2	☐	50.000	50.599	2574.37	0.0116	P	3.8
3	☐	2500.000	2594.228	117091.30	0.5534	P	0.2
4	☐	6250.000	6639.071	276817.97	1.4150	P	0.9
5	☐	12500.000	13178.749	517918.77	2.8080	P	0.1
6	☐	25000.000	25999.945	990848.92	5.5390	P	1.1
7	☐	50000.000	51029.625	1908579.79	10.8706	P	0.2
8	☐	250000.00	249649.47	9346525.21	53.1784	A	0.3

$$y = 2.1301E-004 * x + 8.0589E-004$$

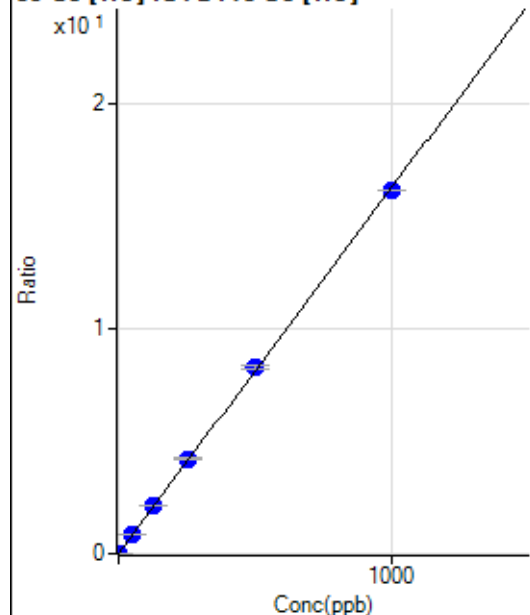
$$R = 1.0000$$

$$DL = 0.7823$$

$$BEC = 3.783$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.34	0.0003	P	34.8
2	☐	1.000	0.985	3624.95	0.0163	P	2.5
3	☐	50.000	51.998	179086.61	0.8464	P	0.4
4	☐	125.000	131.828	419727.16	2.1454	P	0.3
5	☐	250.000	259.717	779541.06	4.2264	P	0.4
6	☐	500.000	510.045	1484660.39	8.2998	P	1.5
7	☐	1000.000	991.595	2832968.50	16.1356	P	0.2
8	☐			34058.56	0.1938	P	0.4

$$y = 0.0163 * x + 2.9036E-004$$

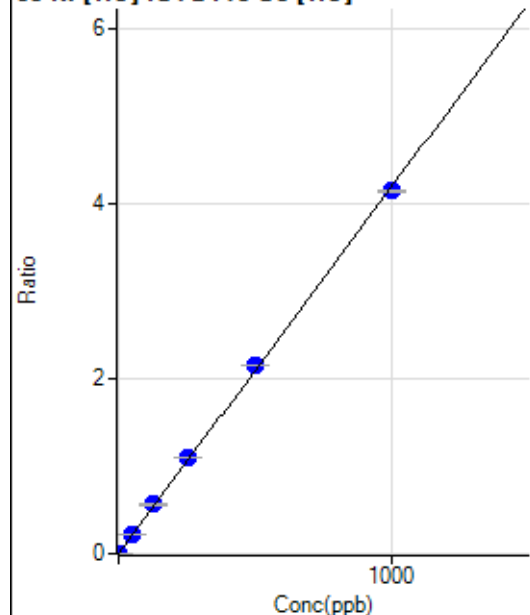
$$R = 0.9999$$

$$DL = 0.01865$$

$$BEC = 0.01784$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.56	0.0003	P	20.2
2	☐	1.000	1.030	1036.72	0.0047	P	4.8
3	☐	50.000	53.511	47540.31	0.2247	P	0.9
4	☐	125.000	133.897	109886.37	0.5617	P	0.7
5	☐	250.000	261.618	202364.52	1.0971	P	0.6
6	☐	500.000	513.080	384859.93	2.1514	P	0.6
7	☐	1000.000	989.268	728224.85	4.1477	P	0.3
8	☐			18471.79	0.1051	P	0.6

$$y = 0.0042 * x + 3.4623E-004$$

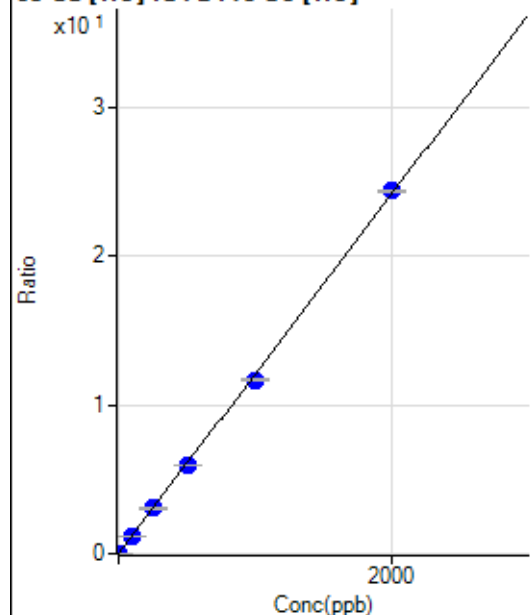
$$R = 0.9998$$

$$DL = 0.05017$$

$$BEC = 0.08259$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	553.36	0.0025	P	3.9
2	☐	2.000	1.872	5587.82	0.0251	P	3.9
3	☐	100.000	100.247	256614.60	1.2128	P	0.2
4	☐	250.000	251.449	594398.26	3.0383	P	0.7
5	☐	500.000	495.387	1103601.66	5.9834	P	0.3
6	☐	1000.000	964.190	2082802.24	11.6433	P	1.1
7	☐	2000.000	2018.865	4279830.21	24.3765	P	0.4
8	☐			5947.96	0.0338	P	1.2

$$y = 0.0121 * x + 0.0025$$

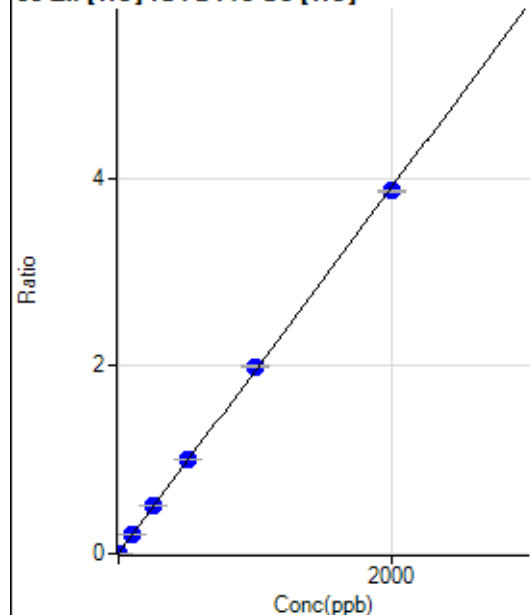
$$R = 0.9998$$

$$DL = 0.02465$$

$$BEC = 0.2099$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	413.35	0.0019	P	2.3
2	☐	2.000	2.103	1330.08	0.0060	P	9.3
3	☐	100.000	107.927	44854.46	0.2120	P	0.8
4	☐	250.000	264.979	101284.73	0.5177	P	1.0
5	☐	500.000	517.331	186100.02	1.0090	P	0.1
6	☐	1000.000	1022.433	356383.11	1.9923	P	1.2
7	☐	2000.000	1982.182	677810.69	3.8606	P	0.4
8	☐			6252.56	0.0356	P	2.1

$$y = 0.0019 * x + 0.0019$$

$$R = 0.9999$$

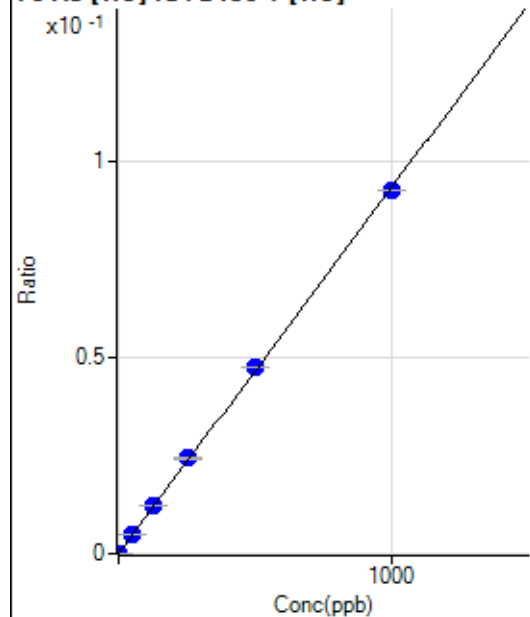
$$DL = 0.0683$$

$$BEC = 0.9724$$

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	6.79	0.0000	P	15.9
2	☐	1.000	0.964	249.39	0.0001	P	13.1
3	☐	50.000	53.152	12916.31	0.0050	P	2.1
4	☐	125.000	131.881	30185.05	0.0123	P	0.9
5	☐	250.000	260.796	56737.14	0.0244	P	1.3
6	☐	500.000	510.173	108558.49	0.0476	P	0.2
7	☐	1000.000	991.197	206650.34	0.0926	P	0.0
8	☐			295.07	0.0001	P	4.1

$$y = 9.3384\text{E-}005 * x + 2.5518\text{E-}006$$

$$R = 0.9998$$

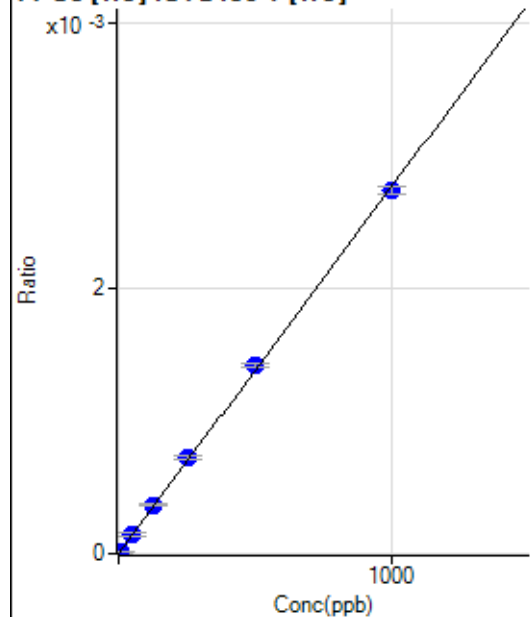
$$DL = 0.01305$$

$$BEC = 0.02733$$

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	☐	5.000	4.027	31.11	0.0000	P	22.6
3	☐	50.000	51.452	371.12	0.0001	P	22.6
4	☐	125.000	133.027	902.27	0.0004	P	5.8
5	☐	250.000	260.194	1676.79	0.0007	P	4.4
6	☐	500.000	514.782	3243.75	0.0014	P	2.3
7	☐	1000.000	988.989	6104.71	0.0027	P	2.1
8	☐			2.22	0.0000	P	86.6

$$y = 2.7645\text{E-}006 * x + 4.1799\text{E-}007$$

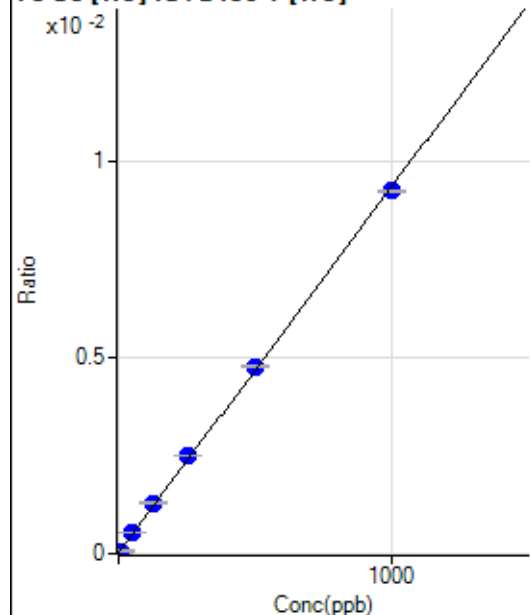
$$R = 0.9998$$

$$DL = 0.7857$$

$$BEC = 0.1512$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	59.26	0.0000	P	24.6
2	☐	5.000	5.063	187.04	0.0001	P	12.9
3	☐	50.000	54.332	1374.15	0.0005	P	0.8
4	☐	125.000	134.696	3128.76	0.0013	P	3.5
5	☐	250.000	266.238	5828.99	0.0025	P	1.2
6	☐	500.000	510.127	10877.61	0.0048	P	0.2
7	☐	1000.000	989.448	20625.83	0.0092	P	0.8
8	☐			43.83	0.0000	P	14.9

$$y = 9.3148\text{E-}006 * x + 2.2245\text{E-}005$$

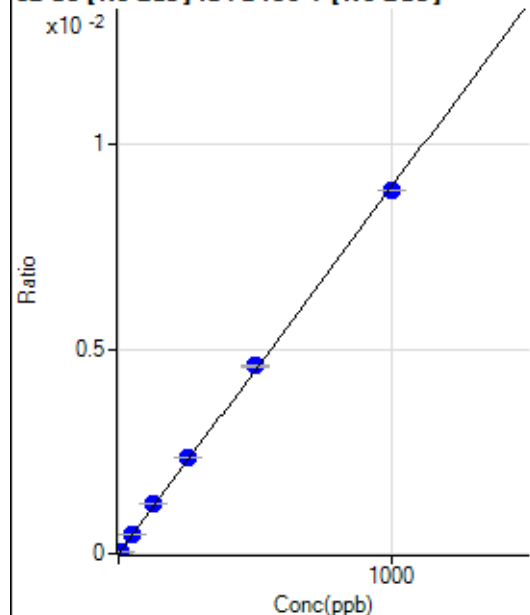
$$R = 0.9998$$

$$DL = 1.762$$

$$BEC = 2.388$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	66.42	0.0000	P	26.6
2	☐	5.000	5.769	1000.09	0.0001	P	5.9
3	☐	50.000	53.452	8732.69	0.0005	P	3.9
4	☐	125.000	134.654	21011.05	0.0012	P	1.0
5	☐	250.000	262.867	38419.92	0.0024	P	0.2
6	☐	500.000	512.348	74300.82	0.0046	P	0.9
7	☐	1000.000	989.226	140847.90	0.0089	P	0.2
8	☐			182.19	0.0000	P	14.9

$$y = 8.9523\text{E-}006 * x + 3.5972\text{E-}006$$

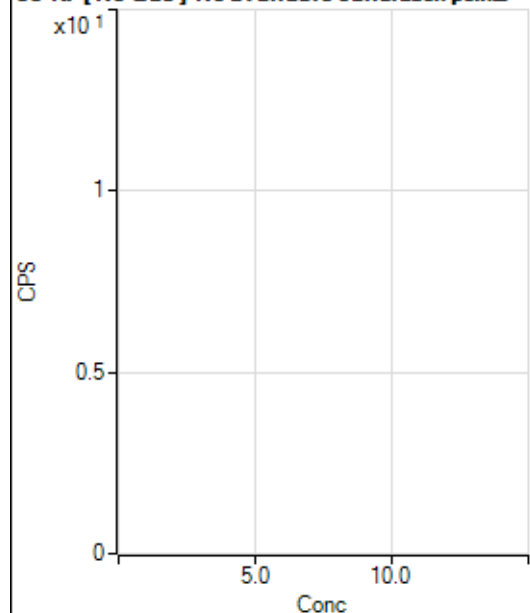
$$R = 0.9998$$

$$DL = 0.3209$$

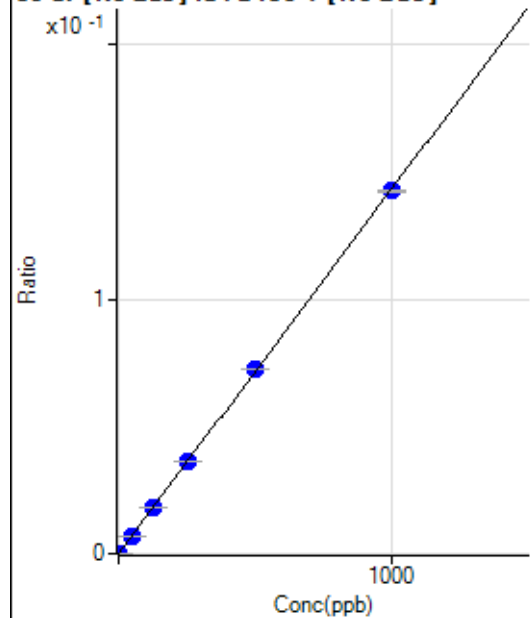
$$BEC = 0.4018$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			242.23		P	3.2
2	☐			230.01		P	2.5
3	☐			235.56		P	9.1
4	☐			207.78		P	11.8
5	☐			213.34		P	10.2
6	☐			184.45		P	5.8
7	☐			220.01		P	6.6
8	☐			254.45		P	17.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	383.35	0.0000	P	22.7
2	☐	1.000	0.894	2694.81	0.0001	P	0.5
3	☐	50.000	49.329	128411.33	0.0071	P	2.1
4	☐	125.000	126.616	315576.58	0.0182	P	0.5
5	☐	250.000	253.557	592463.31	0.0363	P	0.2
6	☐	500.000	506.531	1174918.67	0.0726	P	0.4
7	☐	1000.000	995.677	2267981.78	0.1427	P	0.4
8	☐			9564.66	0.0006	P	2.4

$$y = 1.4326E-004 * x + 2.0736E-005$$

$$R = 1.0000$$

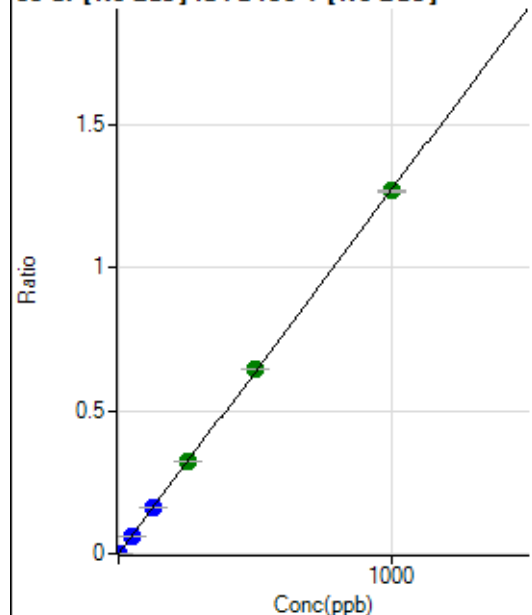
$$DL = 0.0987$$

$$BEC = 0.1447$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	127.78	0.0000	P	21.7
2	☐	1.000	0.953	22087.25	0.0012	P	5.2
3	☐	50.000	48.861	1126498.97	0.0622	P	2.3
4	☐	125.000	124.617	2755604.49	0.1586	P	0.4
5	☐	250.000	251.660	5220010.32	0.3202	A	0.2
6	☐	500.000	504.909	10399084.17	0.6424	A	0.0
7	☐	1000.000	997.235	20172583.61	1.2689	A	0.4
8	☐			81707.36	0.0053	P	1.1

$$y = 0.0013 * x + 6.9207E-006$$

$$R = 1.0000$$

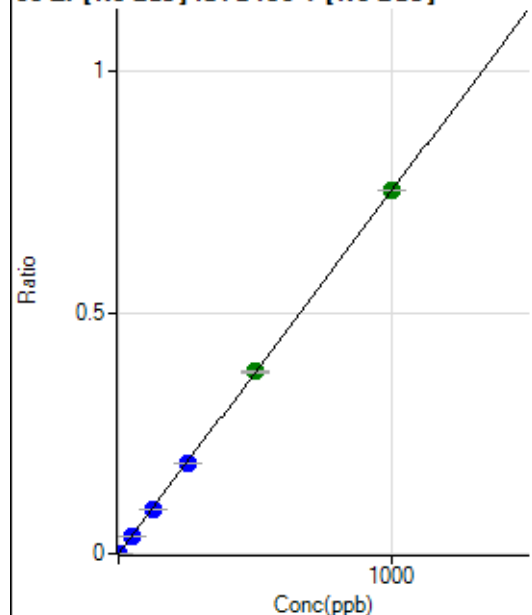
$$DL = 0.003535$$

$$BEC = 0.005439$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	763.95	0.0000	P	11.0
2	☐	1.000	0.795	11566.25	0.0006	P	3.2
3	☐	50.000	47.803	651964.78	0.0360	P	2.7
4	☐	125.000	123.143	1609879.92	0.0926	P	0.1
5	☐	250.000	247.241	3031307.14	0.1860	P	0.4
6	☐	500.000	501.470	6104407.69	0.3771	A	0.2
7	☐	1000.000	1000.297	11958842.28	0.7522	A	0.2
8	☐			4423.10	0.0003	P	8.0

$$y = 7.5195E-004 * x + 4.1360E-005$$

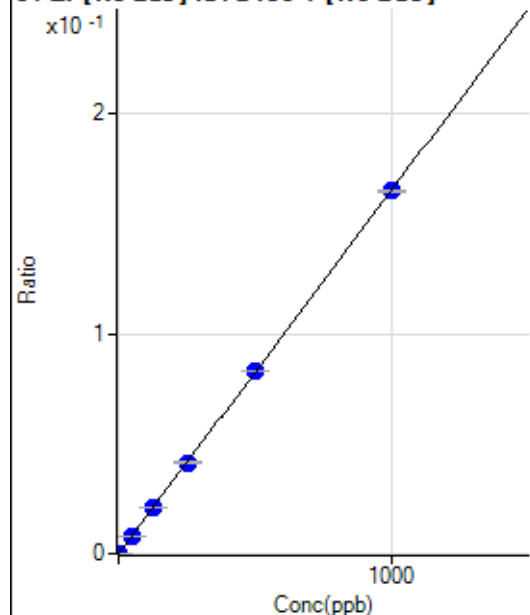
$$R = 1.0000$$

$$DL = 0.01813$$

$$BEC = 0.055$$

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	163.90	0.0000	P	27.4
2	☐	1.000	0.804	2564.23	0.0001	P	6.0
3	☐	50.000	48.768	146065.02	0.0081	P	3.7
4	☐	125.000	125.511	360404.73	0.0207	P	0.4
5	☐	250.000	251.253	676645.16	0.0415	P	0.7
6	☐	500.000	502.622	1343898.83	0.0830	P	0.7
7	☐	1000.000	998.374	2621722.41	0.1649	P	0.2
8	☐			919.52	0.0001	P	22.1

$$y = 1.6517E-004 * x + 8.8608E-006$$

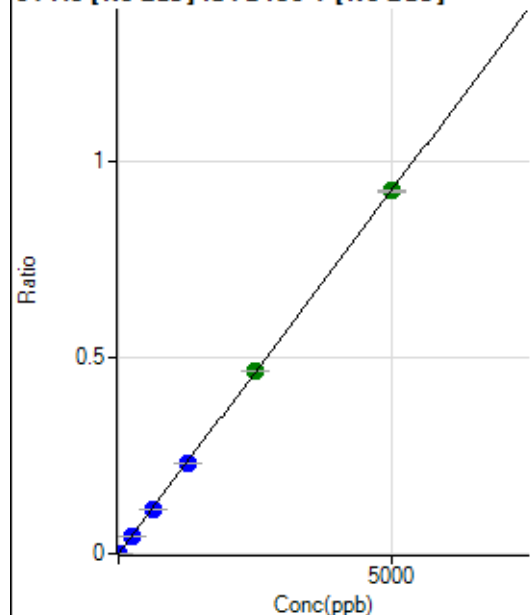
$$R = 1.0000$$

$$DL = 0.04416$$

$$BEC = 0.05365$$

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	300.02	0.0000	P	10.4
2	☐	5.000	4.370	14950.05	0.0008	P	0.3
3	☐	250.000	243.680	818190.94	0.0452	P	2.3
4	☐	625.000	621.181	2000144.88	0.1151	P	0.3
5	☐	1250.000	1244.105	3757525.69	0.2305	P	0.2
6	☐	2500.000	2512.294	7534006.94	0.4654	A	0.4
7	☐	5000.000	4996.121	14715141.30	0.9256	A	0.3
8	☐			10445.91	0.0007	P	8.0

$$y = 1.8526E-004 * x + 1.6242E-005$$

$$R = 1.0000$$

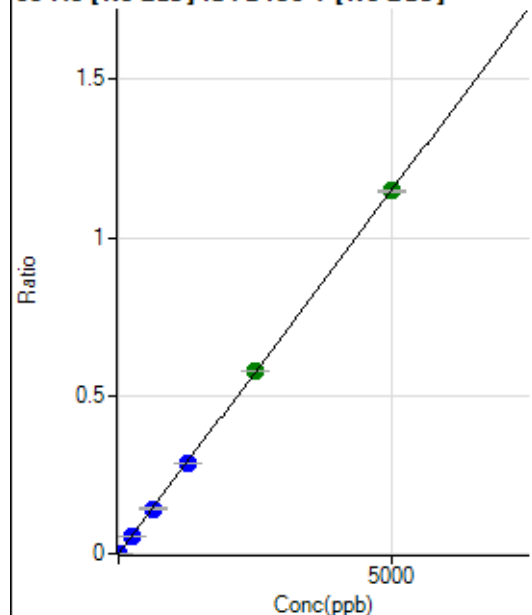
$$DL = 0.02728$$

$$BEC = 0.08767$$

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	27.78	0.0000	P	104.
2	☐	5.000	4.668	19441.64	0.0011	P	0.7
3	☐	250.000	242.631	1009890.55	0.0557	P	2.2
4	☐	625.000	622.038	2483399.08	0.1429	P	0.5
5	☐	1250.000	1245.571	4664556.05	0.2861	P	0.2
6	☐	2500.000	2512.827	9344002.55	0.5773	A	0.5
7	☐	5000.000	4995.433	18244443.63	1.1476	A	0.2
8	☐			15600.66	0.0010	P	4.1

$$y = 2.2973\text{E-}004 * x + 1.4970\text{E-}006$$

$$R = 1.0000$$

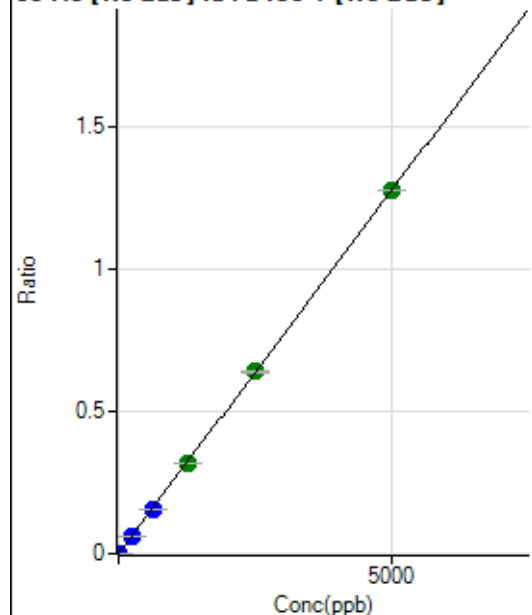
$$DL = 0.02048$$

$$BEC = 0.006517$$

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	108.34	0.0000	P	28.3
2	☐	5.000	4.598	21363.88	0.0012	P	2.3
3	☐	250.000	243.322	1125996.95	0.0621	P	2.4
4	☐	625.000	620.728	2755162.91	0.1585	P	0.5
5	☐	1250.000	1253.031	5216993.35	0.3200	A	0.2
6	☐	2500.000	2505.406	10357651.88	0.6399	A	0.4
7	☐	5000.000	4997.407	20291280.14	1.2763	A	0.1
8	☐			23133.34	0.0015	P	2.3

$$y = 2.5540\text{E-}004 * x + 5.8699\text{E-}006$$

$$R = 1.0000$$

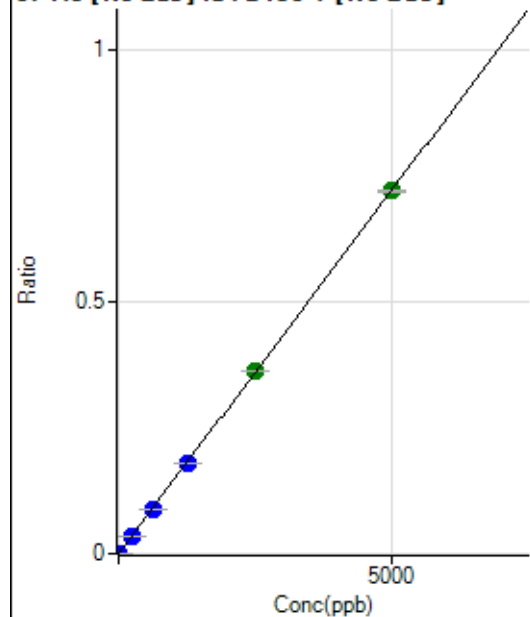
$$DL = 0.01948$$

$$BEC = 0.02298$$

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	13.89	0.0000	P	34.2
2	☐	5.000	4.560	11913.80	0.0007	P	3.0
3	☐	250.000	242.080	632135.09	0.0349	P	2.8
4	☐	625.000	620.221	1553533.02	0.0894	P	0.5
5	☐	1250.000	1237.310	2907308.33	0.1783	P	0.3
6	☐	2500.000	2514.722	5867124.96	0.3625	A	0.4
7	☐	5000.000	4996.805	11450260.94	0.7202	A	0.2
8	☐			9631.45	0.0006	P	5.7

$$y = 1.4414\text{E-}004 * x + 7.5042\text{E-}007$$

$$R = 1.0000$$

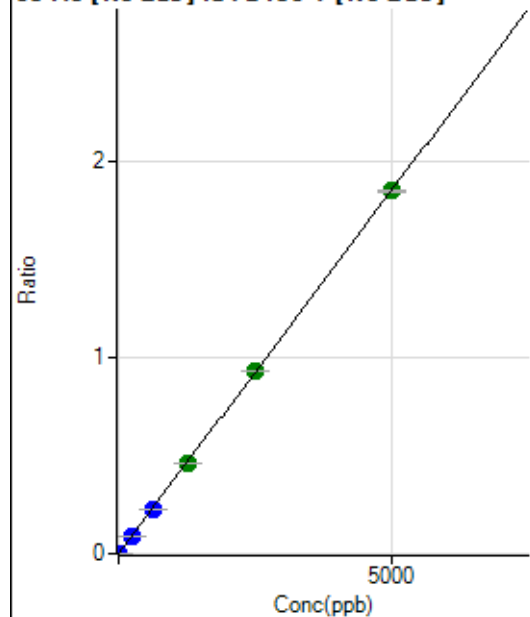
$$DL = 0.005336$$

$$BEC = 0.005206$$

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	50.00	0.0000	P	57.9
2	☐	5.000	4.558	30628.42	0.0017	P	0.3
3	☐	250.000	242.606	1628871.57	0.0899	P	2.3
4	☐	625.000	620.744	3997534.55	0.2300	P	0.2
5	☐	1250.000	1248.741	7543649.04	0.4628	A	0.2
6	☐	2500.000	2511.737	15066343.22	0.9308	A	0.7
7	☐	5000.000	4995.349	29429882.60	1.8511	A	0.4
8	☐			23626.03	0.0015	P	6.1

$$y = 3.7057\text{E-}004 * x + 2.7068\text{E-}006$$

$$R = 1.0000$$

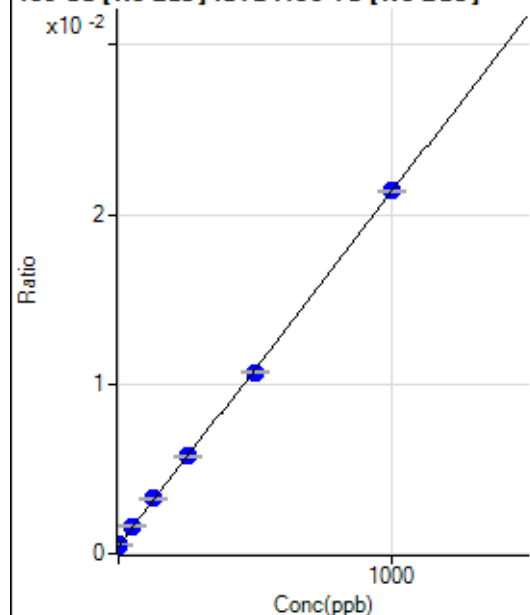
$$DL = 0.01268$$

$$BEC = 0.007304$$

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	5337.34	0.0005	P	1.3
2	☐	1.000	3.273	5998.77	0.0005	P	1.3
3	☐	50.000	56.010	18462.84	0.0016	P	3.0
4	☐	125.000	132.968	36135.94	0.0032	P	1.1
5	☐	250.000	253.851	62022.39	0.0058	P	1.4
6	☐	500.000	489.779	116532.06	0.0107	P	0.9
7	☐	1000.000	1002.849	232447.51	0.0214	P	0.3
8	☐			5170.62	0.0005	P	9.9

$$y = 2.0858\text{E-}005 * x + 4.6730\text{E-}004$$

$$R = 0.9999$$

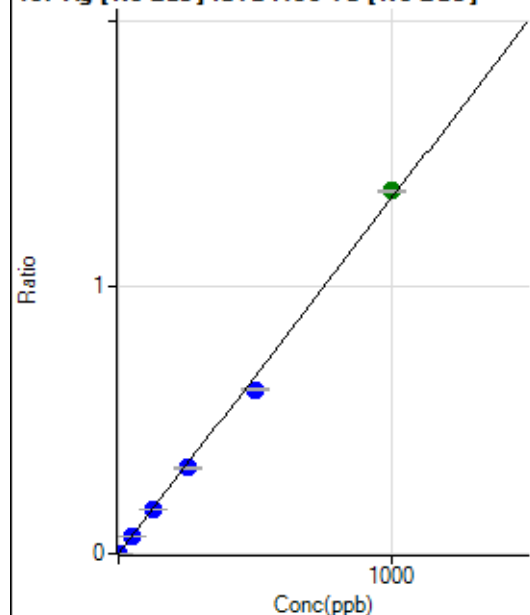
$$DL = 0.894$$

$$BEC = 22.4$$

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	162.51	0.0000	P	32.7
2	☐	1.000	1.023	15436.82	0.0014	P	1.1
3	☐	50.000	50.760	763913.98	0.0677	P	1.7
4	☐	125.000	125.361	1864308.37	0.1672	P	0.2
5	☐	250.000	241.187	3462132.88	0.3216	P	0.6
6	☐	500.000	462.231	6723759.37	0.6164	P	0.4
7	☐	1000.000	1021.005	14799881.02	1.3616	A	0.3
8	☐			1804.33	0.0002	P	22.6

$$y = 0.0013 * x + 1.4250\text{E-}005$$

$$R = 0.9989$$

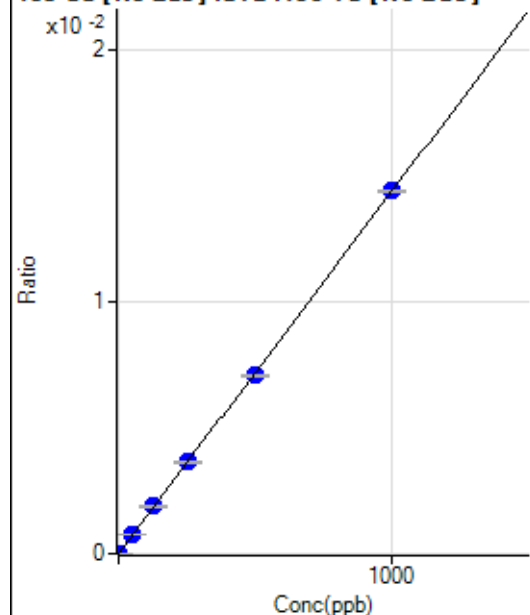
$$DL = 0.01048$$

$$BEC = 0.01069$$

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	11.11	0.0000	P	21.4
2	☐	1.000	1.012	173.62	0.0000	P	28.9
3	☐	50.000	52.520	8518.00	0.0008	P	2.9
4	☐	125.000	130.922	20972.77	0.0019	P	2.1
5	☐	250.000	252.938	39099.91	0.0036	P	0.9
6	☐	500.000	491.620	76996.70	0.0071	P	1.1
7	☐	1000.000	1002.589	156467.81	0.0144	P	0.9
8	☐			27.78	0.0000	P	16.6

$$y = 1.4356E-005 * x + 9.7238E-007$$

$$R = 0.9999$$

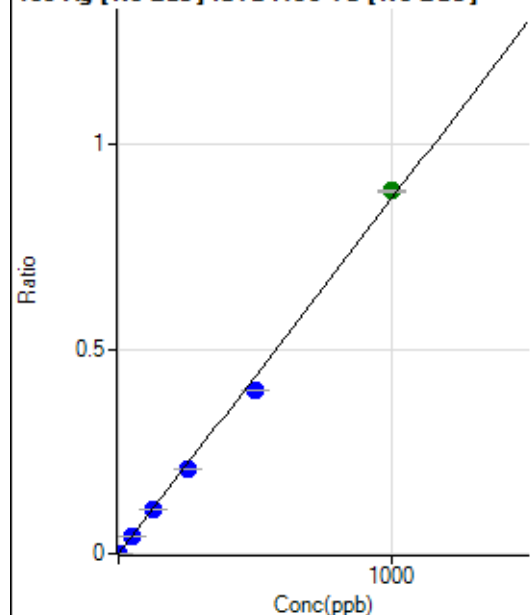
$$DL = 0.04352$$

$$BEC = 0.06773$$

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	19.45	0.0000	P	23.7
2	☐	1.000	1.005	9792.68	0.0009	P	0.6
3	☐	50.000	50.584	495614.69	0.0439	P	1.3
4	☐	125.000	124.922	1209551.80	0.1085	P	0.6
5	☐	250.000	240.344	2246275.94	0.2087	P	0.6
6	☐	500.000	460.188	4358515.94	0.3996	P	0.4
7	☐	1000.000	1022.301	9648593.01	0.8876	A	0.2
8	☐			1136.21	0.0001	P	23.9

$$y = 8.6828E-004 * x + 1.7002E-006$$

$$R = 0.9988$$

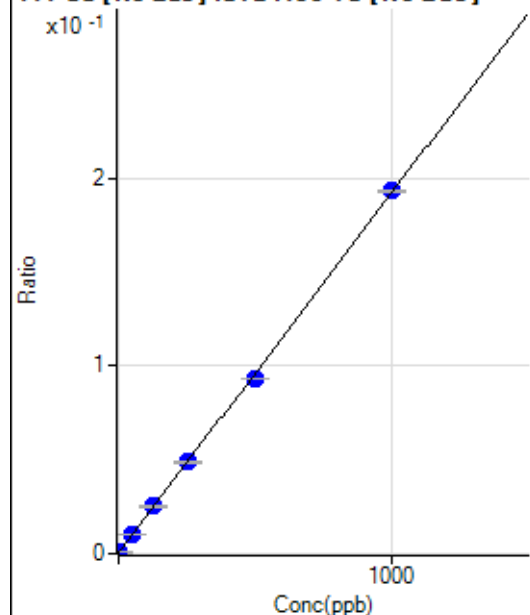
$$DL = 0.001393$$

$$BEC = 0.001958$$

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	3746.41	0.0003	P	1.2
2	☐	1.000	1.195	6243.10	0.0006	P	1.0
3	☐	50.000	52.385	117184.91	0.0104	P	1.5
4	☐	125.000	129.588	281089.17	0.0252	P	0.7
5	☐	250.000	252.165	524646.77	0.0487	P	0.2
6	☐	500.000	485.376	1020085.59	0.0935	P	0.4
7	☐	1000.000	1006.078	2103191.81	0.1935	P	0.4
8	☐			4018.07	0.0004	P	9.8

$$y = 1.9199\text{E-}004 * x + 3.2801\text{E-}004$$

$$R = 0.9998$$

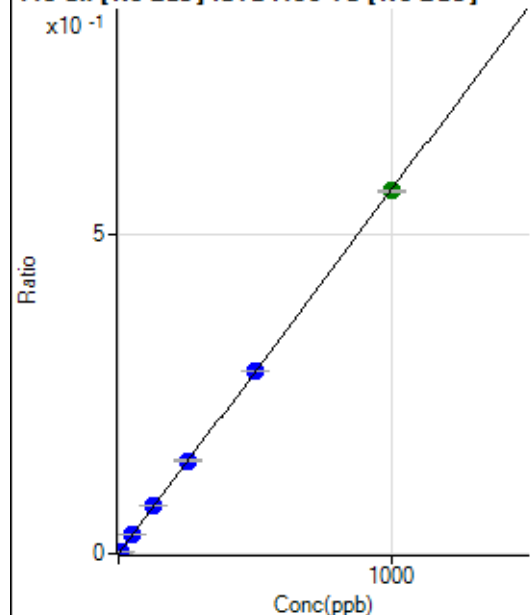
$$DL = 0.06397$$

$$BEC = 1.708$$

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	816.72	0.0001	P	10.9
2	☐	5.000	5.193	33905.80	0.0030	P	1.2
3	☐	50.000	52.269	336374.67	0.0298	P	2.7
4	☐	125.000	130.896	831440.99	0.0746	P	0.5
5	☐	250.000	256.051	1569263.23	0.1458	P	0.4
6	☐	500.000	501.849	3116019.21	0.2857	P	0.6
7	☐	1000.000	996.711	6166350.40	0.5673	A	0.4
8	☐			3700.65	0.0004	P	4.9

$$y = 5.6909\text{E-}004 * x + 7.1551\text{E-}005$$

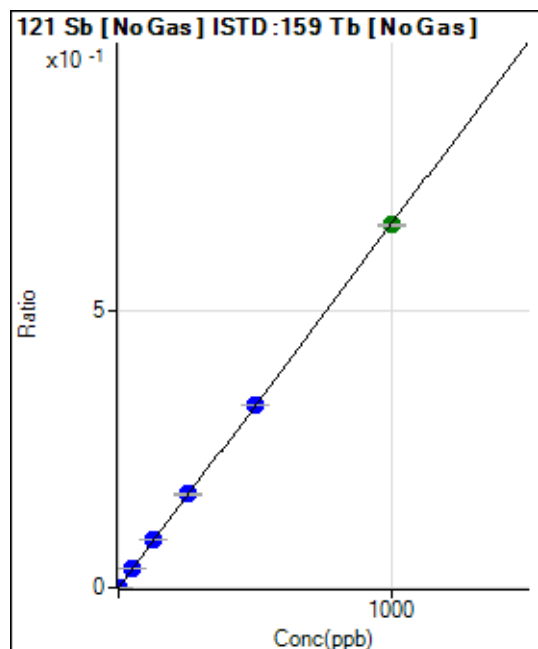
$$R = 1.0000$$

$$DL = 0.04111$$

$$BEC = 0.1257$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	166.68	0.0000	P	22.0
2	☐	2.000	1.870	13896.44	0.0012	P	2.2
3	☐	50.000	52.040	385065.06	0.0341	P	2.6
4	☐	125.000	130.541	954528.22	0.0856	P	0.3
5	☐	250.000	257.149	1814923.87	0.1686	P	0.7
6	☐	500.000	500.577	3579958.02	0.3282	P	0.4
7	☐	1000.000	997.130	7106057.97	0.6537	A	0.4
8	☐			11143.77	0.0011	P	2.4

$$y = 6.5561\text{E-}004 * x + 1.4577\text{E-}005$$

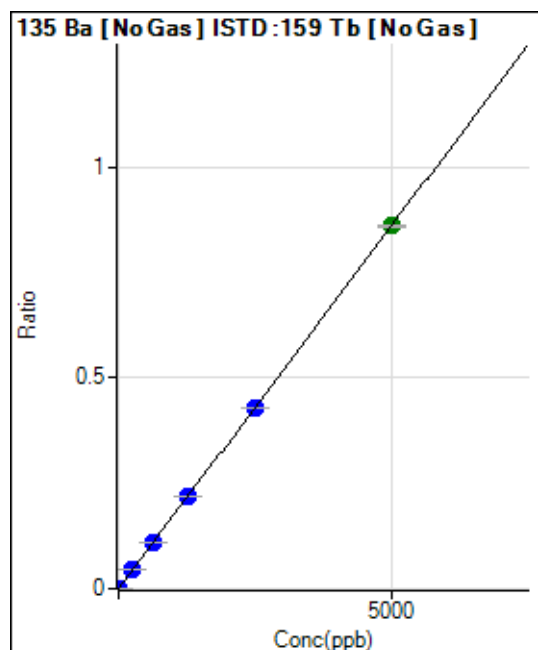
$$R = 1.0000$$

$$DL = 0.01469$$

$$BEC = 0.02223$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	62.9
2	☐	10.000	9.978	19247.40	0.0017	P	1.3
3	☐	250.000	257.249	499135.63	0.0442	P	2.6
4	☐	625.000	645.071	1237119.67	0.1109	P	0.6
5	☐	1250.000	1271.058	2352965.46	0.2186	P	0.5
6	☐	2500.000	2486.091	4663760.30	0.4276	P	0.7
7	☐	5000.000	4998.819	9344719.74	0.8597	A	0.3
8	☐			1939.12	0.0002	P	14.2

$$y = 1.7198\text{E-}004 * x + 2.4417\text{E-}006$$

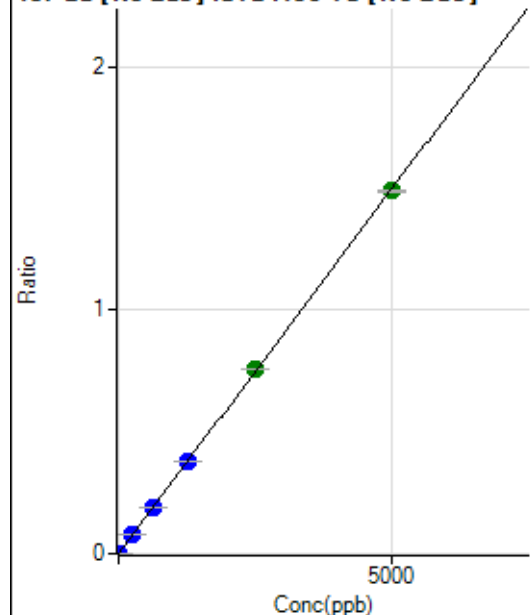
$$R = 1.0000$$

$$DL = 0.02678$$

$$BEC = 0.0142$$

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	58.34	0.0000	P	74.4
2	☐	10.000	10.142	34045.46	0.0030	P	0.8
3	☐	250.000	255.551	862593.21	0.0765	P	2.9
4	☐	625.000	639.249	2132741.85	0.1913	P	0.7
5	☐	1250.000	1265.554	4075724.31	0.3786	P	0.4
6	☐	2500.000	2529.434	8255039.08	0.7568	A	0.1
7	☐	5000.000	4979.335	16193725.36	1.4898	A	0.5
8	☐			3281.09	0.0003	P	13.2

$$y = 2.9919E-004 * x + 5.1315E-006$$

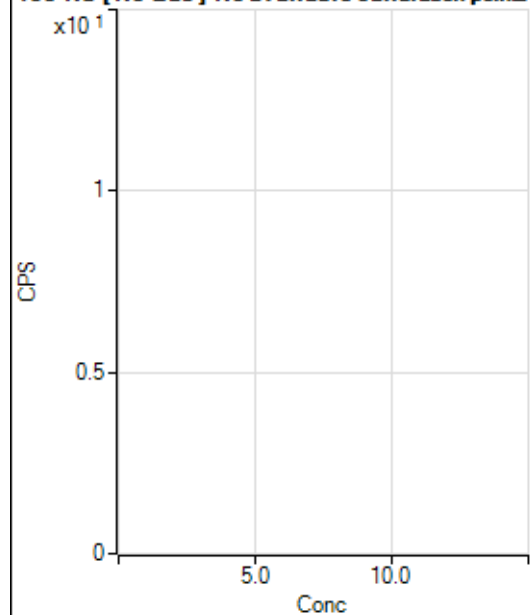
$$R = 1.0000$$

$$DL = 0.03829$$

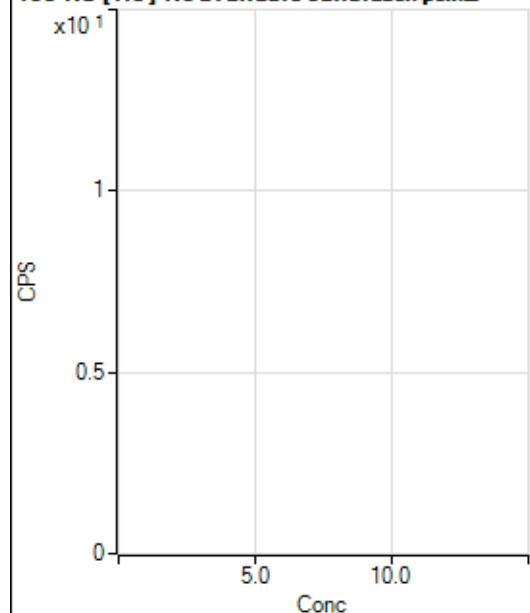
$$BEC = 0.01715$$

Weight: <None>

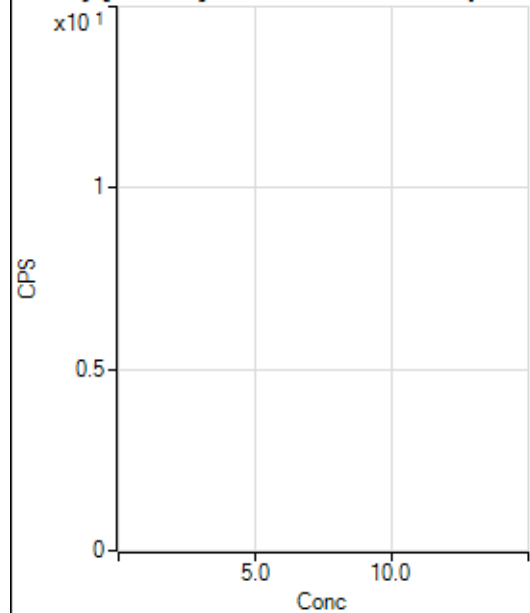
Min Conc: 0

150 Nd [No Gas] No available calibration points

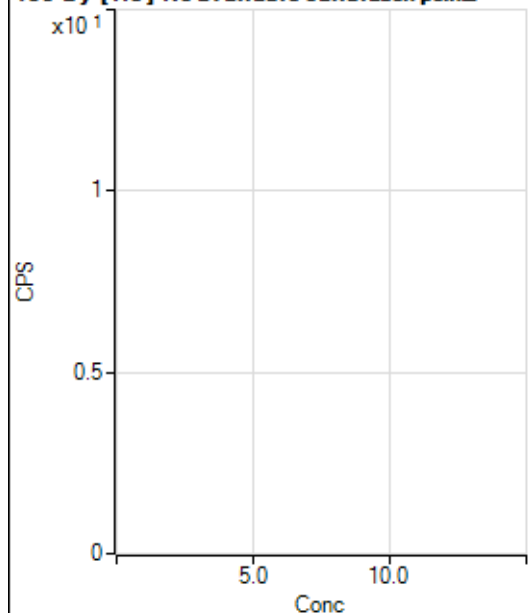
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			11.11		P	91.7
3	☐			55.56		P	25.0
4	☐			108.89		P	46.8
5	☐			173.34		P	23.4
6	☐			415.58		P	7.4
7	☐			708.93		P	17.5
8	☐			120.01		P	29.4

150 Nd [He] No available calibration points

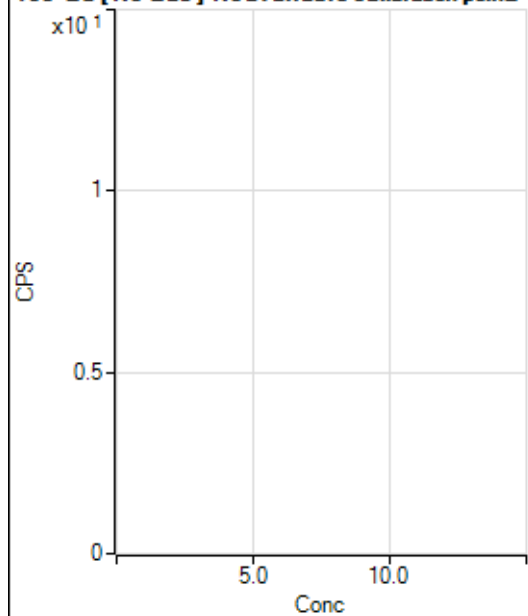
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	21.6
2	☐			11.11		P	45.8
3	☐			15.56		P	32.7
4	☐			15.56		P	53.9
5	☐			17.78		P	75.8
6	☐			43.33		P	46.2
7	☐			74.45		P	33.9
8	☐			46.67		P	21.4

156 Dy [No Gas] No available calibration points

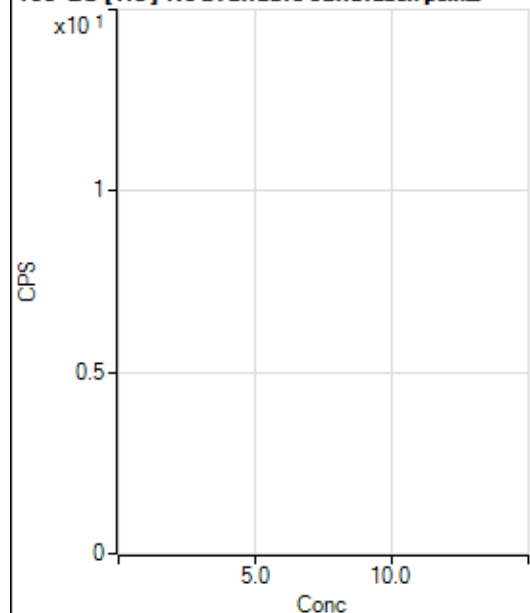
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	56.8
2	☐			5.56		P	173.
3	☐			30.56		P	56.8
4	☐			30.55		P	68.6
5	☐			61.11		P	31.5
6	☐			100.01		P	16.7
7	☐			180.56		P	7.1
8	☐			50.00		P	28.9

156 Dy [He] No available calibration points

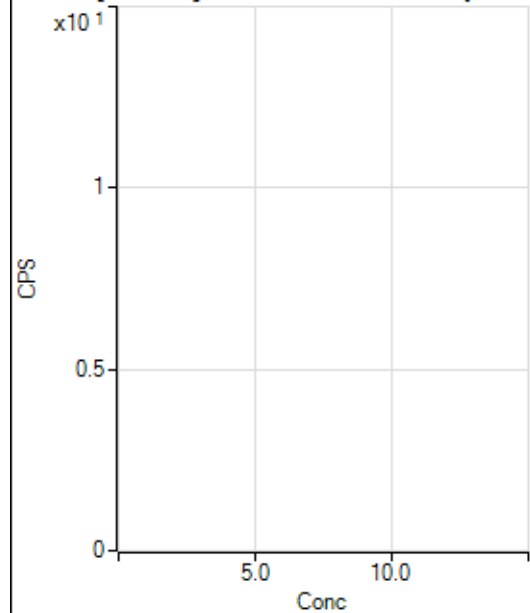
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	75.5
2	☐			12.22		P	56.8
3	☐			28.89		P	17.6
4	☐			51.11		P	26.4
5	☐			66.67		P	34.6
6	☐			145.56		P	2.6
7	☐			204.45		P	8.0
8	☐			33.33		P	20.0

160 Gd [No Gas] Noavailable calibration poin_

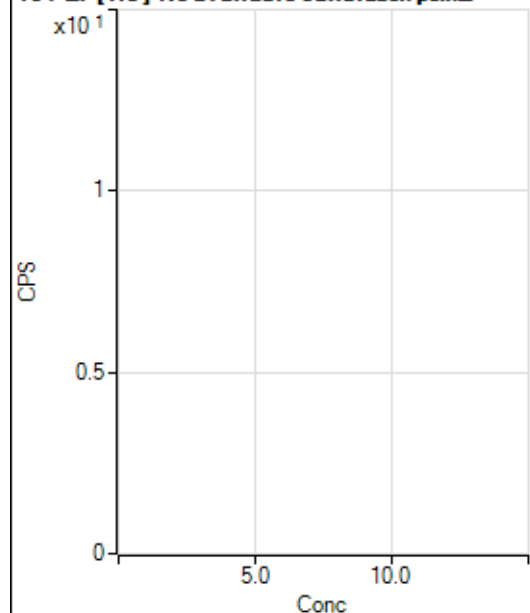
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	62.5
2	☐			72.23		P	24.0
3	☐			52.78		P	24.1
4	☐			61.11		P	56.8
5	☐			61.12		P	55.1
6	☐			88.90		P	10.8
7	☐			69.45		P	25.0
8	☐			77.78		P	43.3

160 Gd [He] No available calibration points

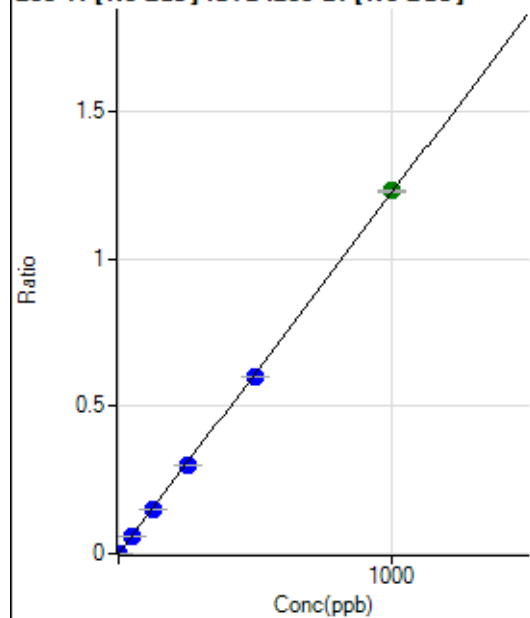
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			227.78		P	18.6
2	☐			230.00		P	19.6
3	☐			234.45		P	10.0
4	☐			214.45		P	10.4
5	☐			198.90		P	4.2
6	☐			206.67		P	11.3
7	☐			205.56		P	13.5
8	☐			187.78		P	2.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	8.7
2	☐			69.45		P	38.6
3	☐			55.56		P	52.7
4	☐			72.23		P	37.1
5	☐			61.11		P	43.8
6	☐			77.78		P	60.9
7	☐			88.89		P	10.8
8	☐			88.89		P	10.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	6.7
2	☐			52.22		P	9.7
3	☐			56.67		P	25.6
4	☐			44.45		P	24.1
5	☐			56.66		P	10.2
6	☐			83.34		P	16.0
7	☐			67.78		P	12.4
8	☐			62.22		P	16.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	430.58	0.0001	P	1.2
2	☐	1.000	0.907	7494.13	0.0012	P	3.4
3	☐	50.000	48.082	376609.26	0.0588	P	2.6
4	☐	125.000	121.710	949414.80	0.1488	P	1.1
5	☐	250.000	244.832	1864052.85	0.2993	P	0.3
6	☐	500.000	490.253	3741842.25	0.5992	P	0.5
7	☐	1000.000	1006.673	7508794.48	1.2303	A	0.5
8	☐			2489.26	0.0005	P	14.0

$$y = 0.0012 * x + 6.5913E-005$$

$$R = 0.9999$$

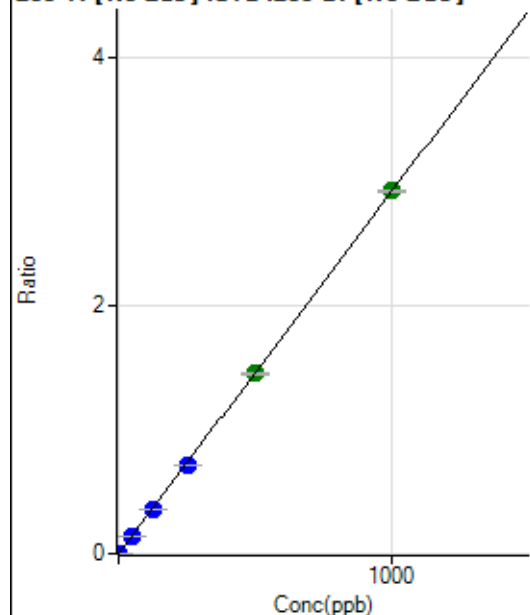
$$DL = 0.001948$$

$$BEC = 0.05394$$

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	663.93	0.0001	P	5.5
2	☐	1.000	0.894	17286.93	0.0027	P	1.1
3	☐	50.000	47.655	890635.38	0.1391	P	2.0
4	☐	125.000	120.966	2251901.66	0.3529	P	0.3
5	☐	250.000	242.864	4413013.38	0.7085	P	0.4
6	☐	500.000	498.557	9081819.56	1.4543	A	0.7
7	☐	1000.000	1003.127	17858356.13	2.9260	A	0.3
8	☐			5609.81	0.0010	P	13.0

$$y = 0.0029 * x + 1.0165E-004$$

$$R = 1.0000$$

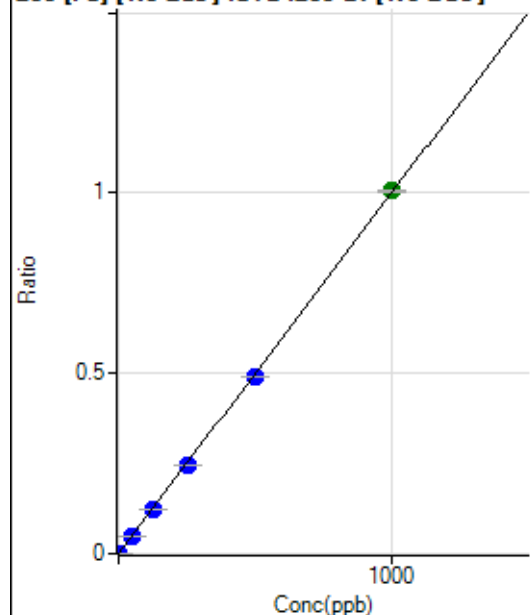
$$DL = 0.005721$$

$$BEC = 0.03485$$

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	616.70	0.0001	P	4.6
2	☐	1.000	0.881	6218.30	0.0010	P	0.5
3	☐	50.000	48.113	308399.98	0.0482	P	3.0
4	☐	125.000	122.571	782119.19	0.1226	P	0.2
5	☐	250.000	245.849	1530924.08	0.2458	P	0.3
6	☐	500.000	490.341	3060483.55	0.4901	P	0.7
7	☐	1000.000	1006.265	6137759.28	1.0056	A	0.7
8	☐			4200.79	0.0008	P	3.8

$$y = 9.9928E-004 * x + 9.4414E-005$$

$$R = 0.9999$$

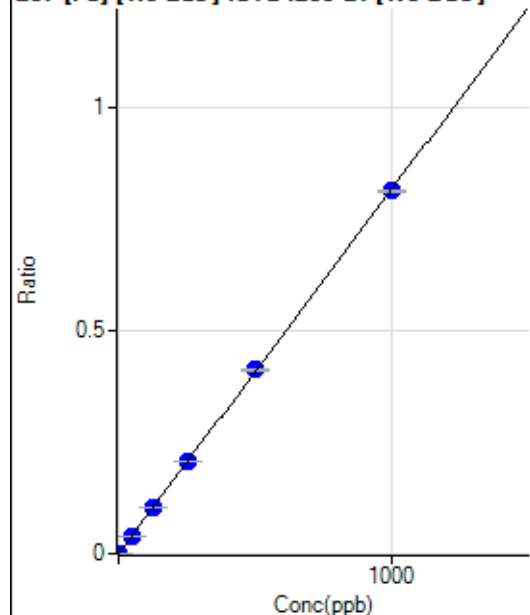
$$DL = 0.01299$$

$$BEC = 0.09448$$

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	603.74	0.0001	P	8.8
2	☐	1.000	0.944	5501.32	0.0009	P	1.5
3	☐	50.000	49.166	257295.87	0.0402	P	2.5
4	☐	125.000	125.332	652760.62	0.1023	P	0.2
5	☐	250.000	253.803	1289801.14	0.2071	P	0.5
6	☐	500.000	505.182	2573336.72	0.4121	P	0.6
7	☐	1000.000	996.459	4960341.40	0.8127	P	0.5
8	☐			3480.21	0.0006	P	3.0

$$y = 8.1551\text{E-}004 * x + 9.2445\text{E-}005$$

$$R = 1.0000$$

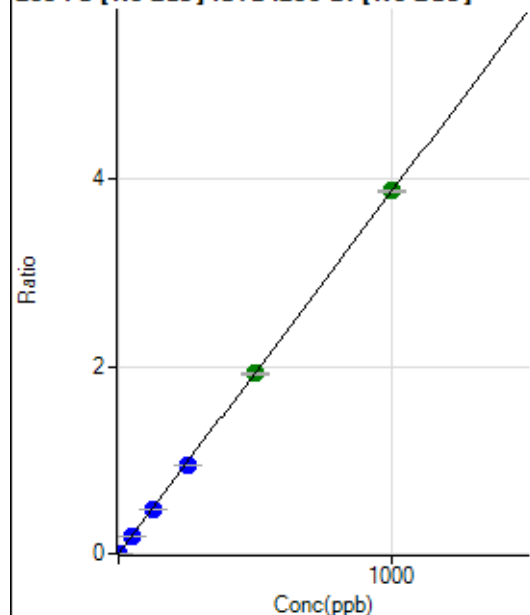
$$DL = 0.02984$$

$$BEC = 0.1134$$

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	2196.43	0.0003	P	2.8
2	☐	1.000	0.908	24528.12	0.0038	P	1.6
3	☐	50.000	47.948	1188352.98	0.1856	P	2.6
4	☐	125.000	122.106	3012786.37	0.4722	P	0.0
5	☐	250.000	246.073	5924935.76	0.9512	P	0.3
6	☐	500.000	497.569	12008971.51	1.9230	A	0.5
7	☐	1000.000	1002.662	23649255.83	3.8748	A	0.3
8	☐			15348.26	0.0029	P	3.5

$$y = 0.0039 * x + 3.3626\text{E-}004$$

$$R = 1.0000$$

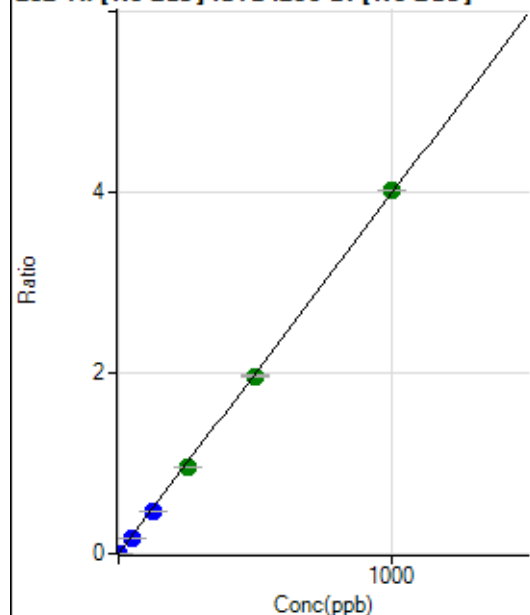
$$DL = 0.007434$$

$$BEC = 0.08702$$

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	1739.06	0.0003	P	6.2
2	☐	1.000	0.722	20077.21	0.0031	P	2.8
3	☐	50.000	44.374	1134831.10	0.1773	P	2.7
4	☐	125.000	115.889	2951032.41	0.4625	P	0.6
5	☐	250.000	240.608	5979669.58	0.9600	A	0.6
6	☐	500.000	493.440	12292752.82	1.9684	A	0.1
7	☐	1000.000	1007.049	24517326.01	4.0170	A	0.2
8	☐			8256.56	0.0015	P	14.1

$$y = 0.0040 * x + 2.6631E-004$$

$$R = 0.9999$$

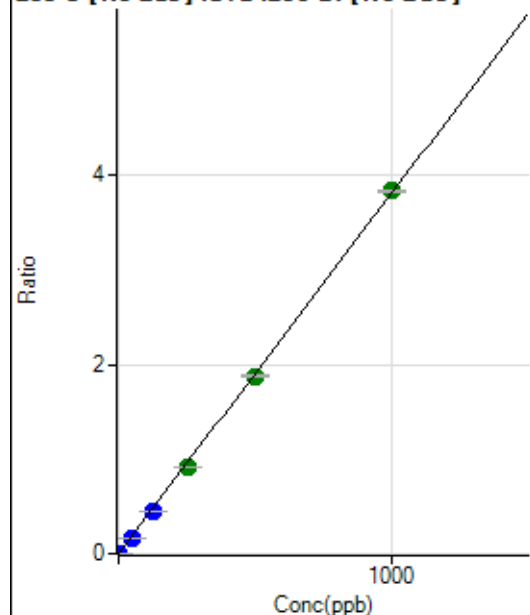
$$DL = 0.01234$$

$$BEC = 0.06677$$

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	2089.16	0.0003	P	4.5
2	☐	1.000	0.835	22356.32	0.0035	P	1.6
3	☐	50.000	44.733	1094275.11	0.1709	P	2.4
4	☐	125.000	115.911	2822503.62	0.4424	P	0.8
5	☐	250.000	241.359	5735300.17	0.9208	A	0.3
6	☐	500.000	493.378	11752260.16	1.8819	A	0.3
7	☐	1000.000	1006.871	23437630.91	3.8401	A	0.7
8	☐			5643.15	0.0011	P	19.5

$$y = 0.0038 * x + 3.1972E-004$$

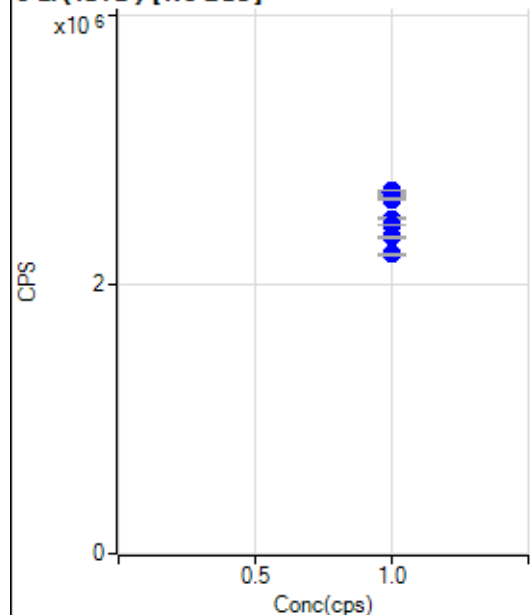
$$R = 0.9999$$

$$DL = 0.01133$$

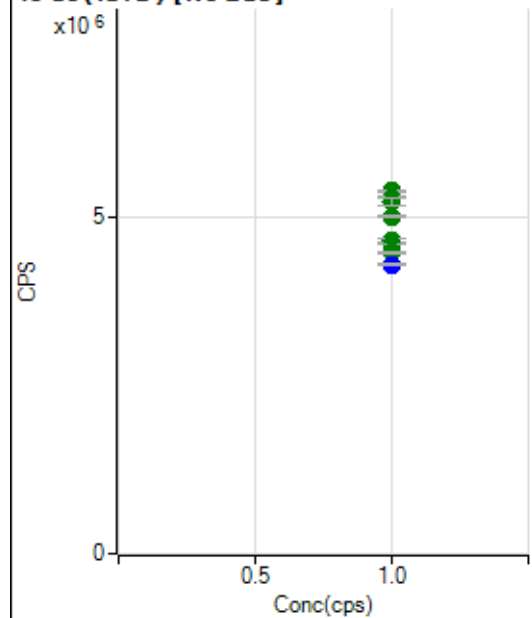
$$BEC = 0.08384$$

Weight: <None>

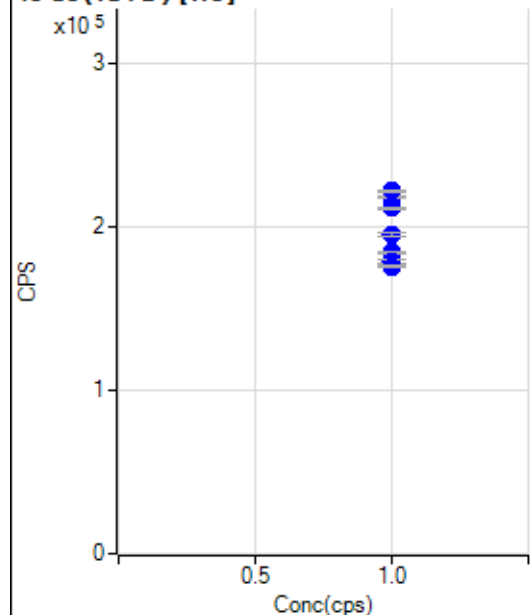
Min Conc: 0

6 Li (ISTD) [No Gas]

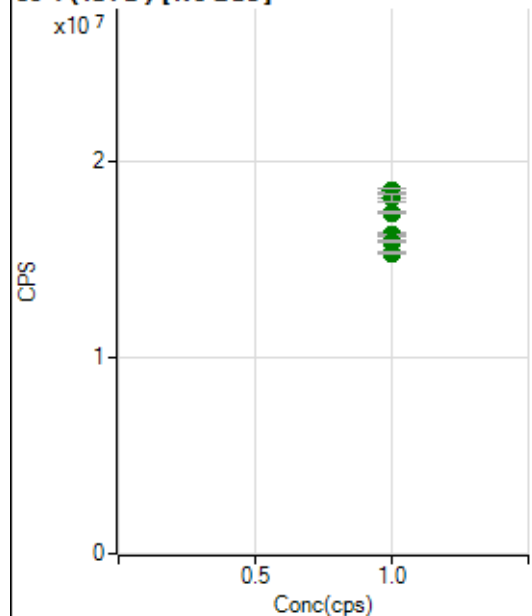
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2693232.94		P	0.8
2	☐	1.000		2677575.80		P	0.3
3	☐	1.000		2681470.55		P	1.6
4	☐	1.000		2630872.53		P	0.6
5	☐	1.000		2490394.73		P	0.9
6	☐	1.000		2436917.27		P	0.2
7	☐	1.000		2350146.67		P	0.2
8	☐	1.000		2220485.94		P	0.3

45 Sc (ISTD) [No Gas]

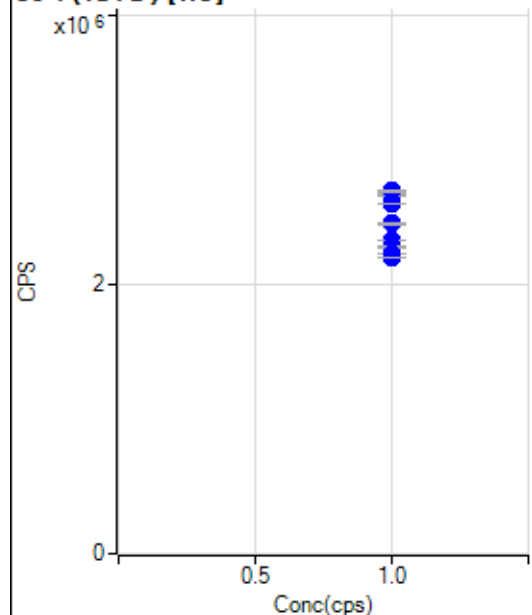
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5401497.51		A	0.3
2	☐	1.000		5299774.21		A	0.6
3	☐	1.000		5248967.96		A	2.4
4	☐	1.000		5019597.38		A	0.9
5	☐	1.000		4671653.79		A	0.8
6	☐	1.000		4613415.64		A	0.2
7	☐	1.000		4483863.03		A	0.4
8	☐	1.000		4303824.49		P	1.0

45 Sc (ISTD) [He]

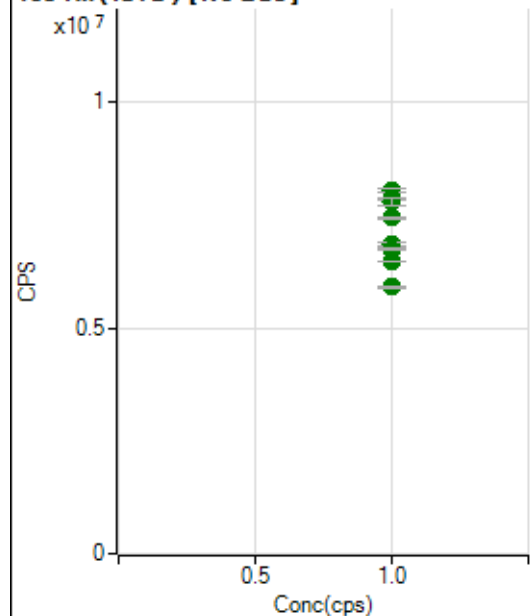
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		218341.85		P	0.4
2	☐	1.000		222243.33		P	0.7
3	☐	1.000		211584.37		P	0.3
4	☐	1.000		195641.57		P	0.7
5	☐	1.000		184444.24		P	0.3
6	☐	1.000		178898.60		P	1.1
7	☐	1.000		175572.57		P	0.2
8	☐	1.000		175759.19		P	0.5

89 Y (ISTD) [No Gas]

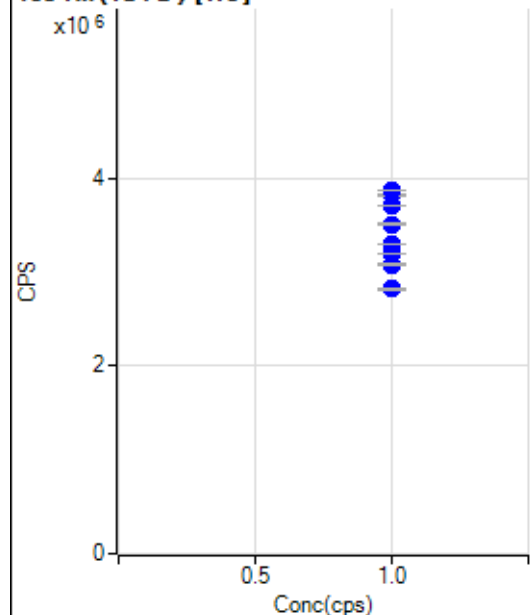
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18480691.53		A	0.9
2	☐	1.000		18104347.09		A	0.2
3	☐	1.000		18124000.98		A	2.3
4	☐	1.000		17378138.21		A	0.8
5	☐	1.000		16301562.68		A	0.9
6	☐	1.000		16186907.53		A	0.4
7	☐	1.000		15898136.01		A	0.3
8	☐	1.000		15309901.86		A	0.6

89 Y (ISTD) [He]

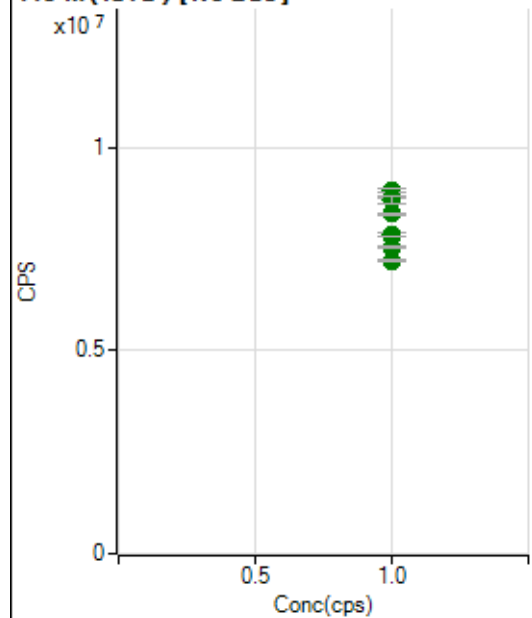
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2662835.72		P	0.3
2	☐	1.000		2694445.31		P	0.3
3	☐	1.000		2600915.66		P	0.2
4	☐	1.000		2450436.89		P	0.3
5	☐	1.000		2329516.84		P	0.4
6	☐	1.000		2278516.98		P	0.4
7	☐	1.000		2232509.91		P	0.2
8	☐	1.000		2199420.31		P	0.2

103 Rh (ISTD) [No Gas]

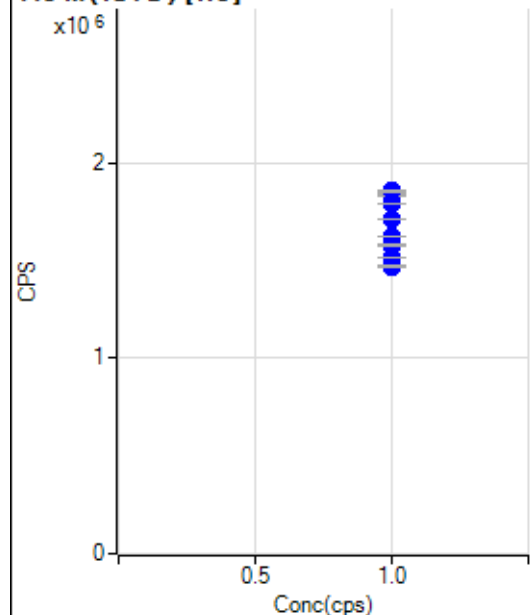
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8033858.86		A	0.9
2	☐	1.000		7870700.78		A	0.4
3	☐	1.000		7796228.99		A	2.4
4	☐	1.000		7432033.67		A	0.8
5	☐	1.000		6856701.45		A	1.2
6	☐	1.000		6738476.80		A	0.3
7	☐	1.000		6461958.00		A	0.3
8	☐	1.000		5908923.96		A	0.7

103 Rh (ISTD) [He]

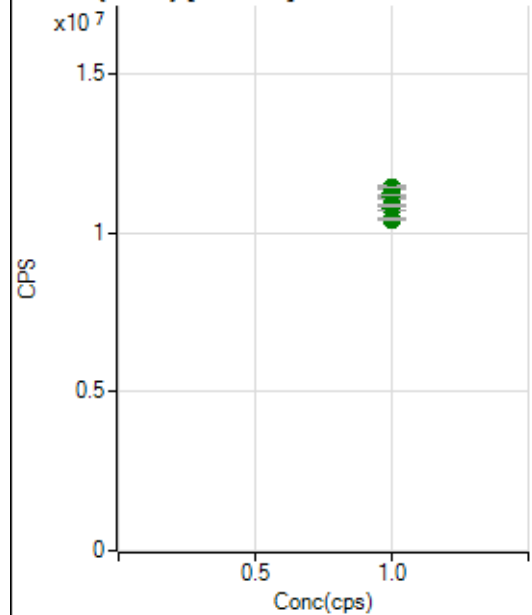
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3823401.68		P	0.4
2	☐	1.000		3862188.00		P	0.0
3	☐	1.000		3707685.29		P	0.2
4	☐	1.000		3508969.46		P	0.3
5	☐	1.000		3298071.31		P	0.2
6	☐	1.000		3190678.04		P	0.1
7	☐	1.000		3076774.50		P	0.3
8	☐	1.000		2815484.96		P	0.5

115 In (ISTD) [No Gas]

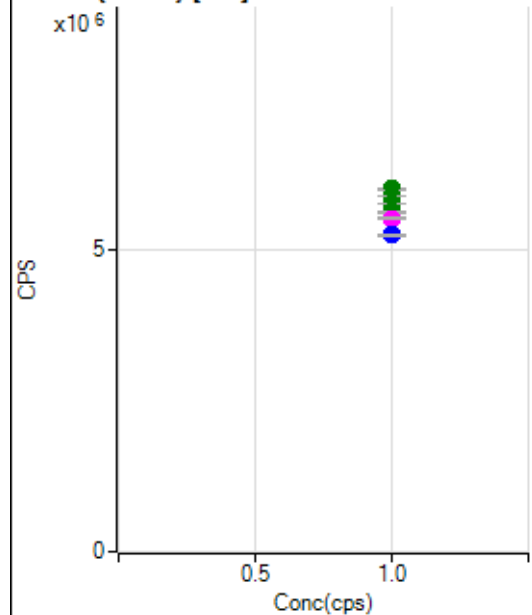
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8922533.42		A	0.9
2	☐	1.000		8750823.95		A	0.5
3	☐	1.000		8700403.06		A	2.5
4	☐	1.000		8348994.63		A	0.7
5	☐	1.000		7846994.52		A	1.1
6	☐	1.000		7806015.72		A	0.5
7	☐	1.000		7542980.98		A	0.3
8	☐	1.000		7197696.78		A	0.6

115 In (ISTD) [He]

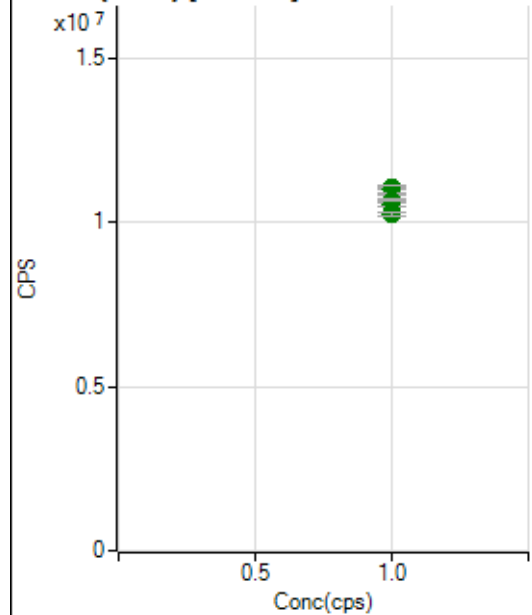
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1835241.46		P	0.6
2	☐	1.000		1857328.52		P	0.3
3	☐	1.000		1791790.75		P	0.3
4	☐	1.000		1709240.67		P	0.1
5	☐	1.000		1624839.85		P	0.1
6	☐	1.000		1580024.68		P	0.5
7	☐	1.000		1515303.91		P	0.2
8	☐	1.000		1469682.40		P	0.5

159 Tb (ISTD) [No Gas]

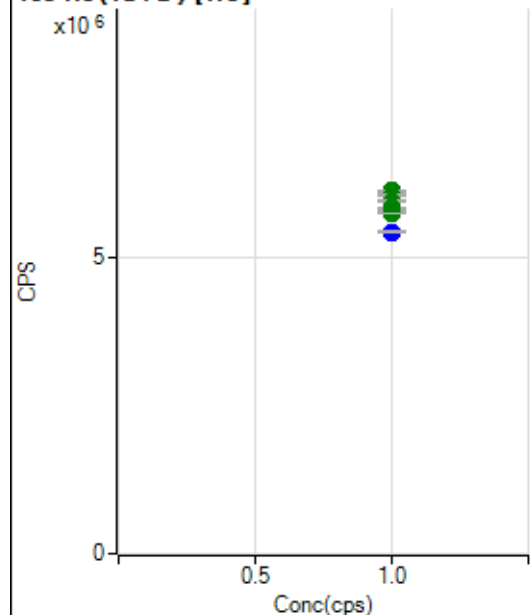
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11420838.44		A	0.9
2	☐	1.000		11200923.44		A	0.1
3	☐	1.000		11286069.69		A	2.3
4	☐	1.000		11151173.17		A	0.9
5	☐	1.000		10763926.79		A	1.1
6	☐	1.000		10907960.81		A	0.3
7	☐	1.000		10869916.37		A	0.2
8	☐	1.000		10430649.71		A	0.7

159 Tb (ISTD) [He]

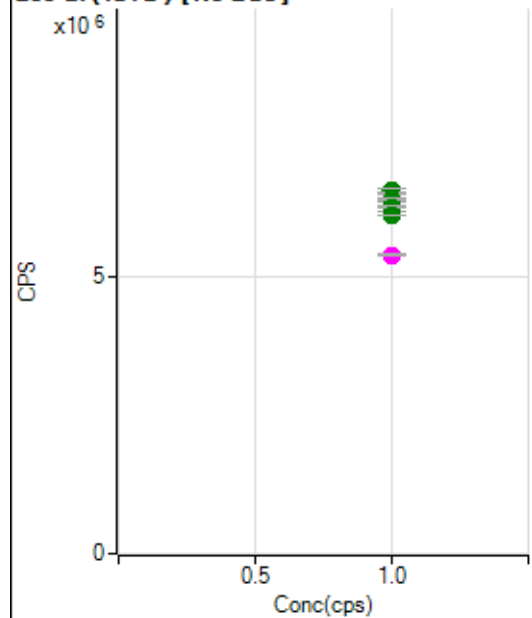
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6011241.72		A	0.4
2	☐	1.000		5991129.35		A	0.3
3	☐	1.000		5897154.36		A	0.2
4	☐	1.000		5775903.52		A	0.0
5	☐	1.000		5624568.18		A	0.5
6	☐	1.000		5623533.46		A	0.3
7	☐	1.000		5522429.43		M	0.7
8	☐	1.000		5248260.55		P	0.5

165 Ho (ISTD) [No Gas]

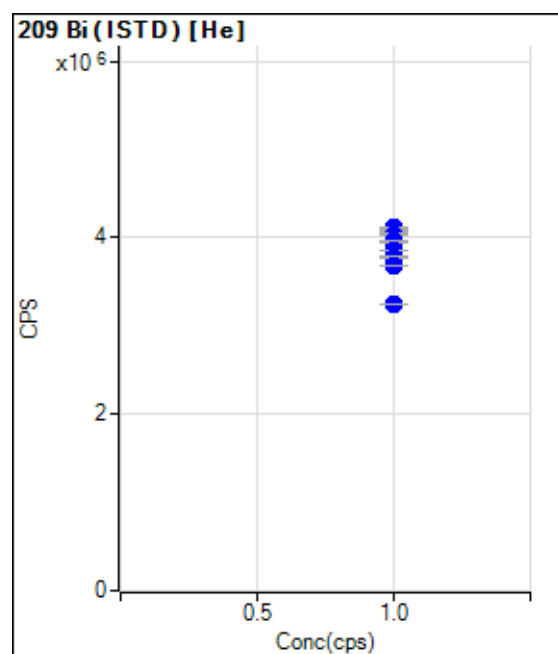
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11045156.58		A	0.8
2	☐	1.000		10865155.63		A	0.3
3	☐	1.000		10977561.62		A	2.4
4	☐	1.000		10852787.05		A	0.3
5	☐	1.000		10558156.83		A	1.5
6	☐	1.000		10671191.90		A	1.0
7	☐	1.000		10671875.76		A	0.3
8	☐	1.000		10242720.54		A	0.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6100771.71		A	0.4
2	☐	1.000		6133564.21		A	0.2
3	☐	1.000		6062505.60		A	0.4
4	☐	1.000		5964046.64		A	0.3
5	☐	1.000		5843685.05		A	0.7
6	☐	1.000		5798130.40		A	0.3
7	☐	1.000		5754563.53		A	0.3
8	☐	1.000		5443173.88		P	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6532931.64		A	1.1
2	☐	1.000		6381535.53		A	0.2
3	☐	1.000		6404683.41		A	2.2
4	☐	1.000		6380674.97		A	0.5
5	☐	1.000		6229013.76		A	1.6
6	☐	1.000		6244982.86		A	0.6
7	☐	1.000		6103405.78		A	0.2
8	☐	1.000		5374988.32		M	0.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4064968.34		P	0.5
2	☐	1.000		4111826.99		P	0.2
3	☐	1.000		4041468.00		P	0.2
4	☐	1.000		3956299.56		P	0.7
5	☐	1.000		3858726.75		P	0.1
6	☐	1.000		3775443.56		P	0.4
7	☐	1.000		3677709.60		P	0.3
8	☐	1.000		3249740.25		P	0.2

US EPA Tune Check Sample Report

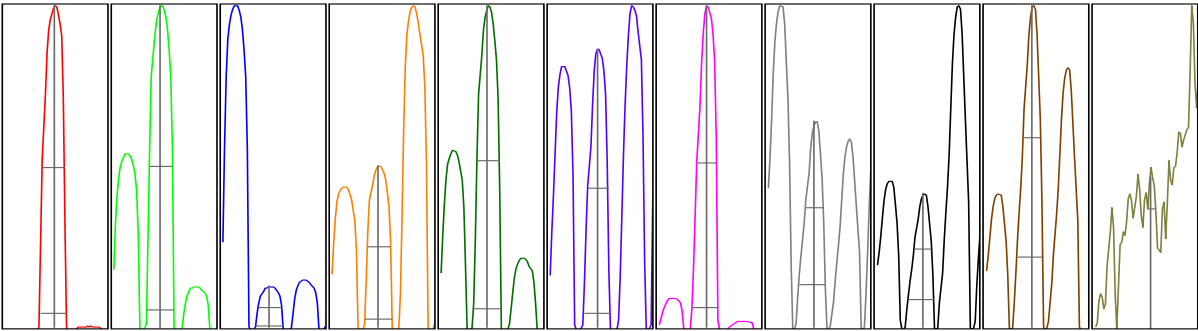
Batch Folder D:\ICP-MS Data\P7082519 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7465	0.48	5.00	
24	78070	0.75	5.00	
25	10454	0.80	5.00	
26	11901	0.65	5.00	
59	57193	0.78	5.00	
113	8545	1.02	5.00	
115	101913	1.24	5.00	
206	25054	0.57	5.00	
207	25484	0.57	5.00	
208	53661	0.66	5.00	
220	80	3.39		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7506	7438	7503	7434	7445
24	78133	77335	78902	77740	78241
25	10435	10375	10589	10400	10469
26	11924	11813	12021	11878	11870
59	57381	56854	57894	56913	56922
113	8619	8451	8654	8508	8491
115	103696	101080	102805	101187	100798
206	25050	24869	25270	25023	25060
207	25490	25349	25727	25400	25455
208	54018	53323	54054	53571	53338
220	77	80	76	81	83

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	12243	9.00	8.9 - 9.1		0.784	0.900	
24	122392	23.90	23.9 - 24.1		0.788	0.900	
25	16259	24.90	24.9 - 25.1		0.790	0.900	
26	18657	25.90	25.9 - 26.1		0.788	0.900	
59	93562	58.90	58.9 - 59.1		0.803	0.900	
113	15550	112.95	112.9 - 113.1		0.773	0.900	
115	184928	114.95	114.9 - 115.1		0.744	0.900	
206	45064	205.90	205.9 - 206.1		0.767	0.900	
207	41301	206.90	206.9 - 207.1		0.736	0.900	
208	98415	207.90	207.9 - 208.1		0.748	0.900	
220	81	220.20	-				

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	6.9	V	Deflect	14.2	V
Extract 2	-80.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-44	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	13862	0.44	
89	21534	0.65	
205	25104	0.64	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	13899	13895	13893	13867	13754
89	21571	21718	21571	21470	21339
205	25029	25377	24993	25121	24999

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	7.9	V	Deflect	1.8	V
Extract 2	-105.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	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			