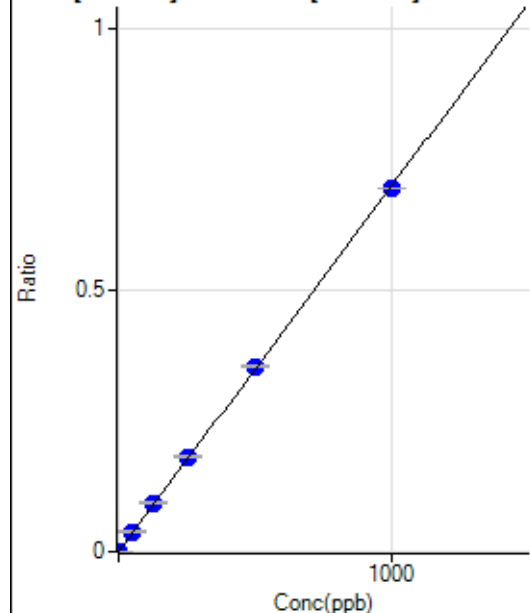


Batch Folder: D:\ICP-MS Data\P708019-MS.b\
Analysis File: P708019-MS.batch.bin
DA Date-Time: 2019-08-08 00:34:21
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-08-07 11:59:26
2	004CALS.d	S02	2019-08-07 12:03:02
3	005CALS.d	S03	2019-08-07 12:07:40
4	006CALS.d	S04	2019-08-07 12:11:36
5	007CALS.d	S05	2019-08-07 12:15:29
6	008CALS.d	S06	2019-08-07 12:19:18
7	009CALS.d	S07	2019-08-07 12:23:06
8	010CALS.d	S08	2019-08-07 12:26:52

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	62.22	0.0000	P	6.9
2	☐	1.000	1.040	1476.77	0.0008	P	3.9
3	☐	50.000	55.069	78254.56	0.0385	P	1.3
4	☐	125.000	133.585	189933.67	0.0933	P	4.2
5	☐	250.000	259.959	340283.97	0.1815	P	0.6
6	☐	500.000	507.332	637131.89	0.3542	P	0.4
7	☐	1000.000	992.518	1214323.50	0.6929	P	0.2
8	☐			298.89	0.0002	P	14.4

$$y = 6.9810E-004 * x + 3.0910E-005$$

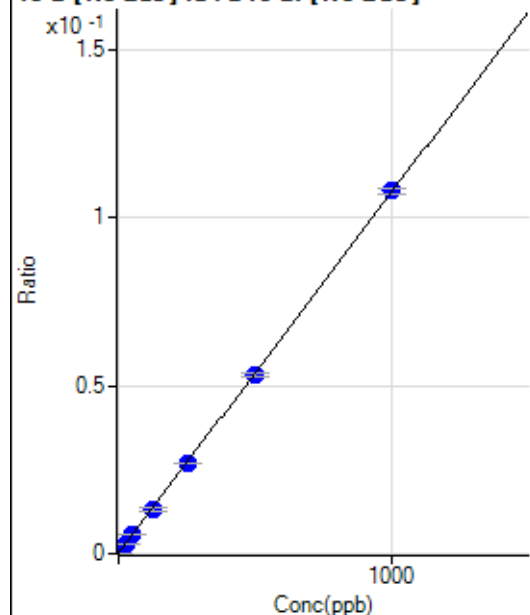
$$R = 0.9999$$

$$DL = 0.0091$$

$$BEC = 0.04428$$

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	452.81	0.0002	P	14.0
2	☐	25.000	24.426	5542.90	0.0028	P	3.2
3	☐	50.000	51.070	11585.43	0.0057	P	2.0
4	☐	125.000	120.945	26830.19	0.0132	P	5.1
5	☐	250.000	248.403	50306.88	0.0268	P	1.2
6	☐	500.000	492.512	95302.05	0.0530	P	2.3
7	☐	1000.000	1004.611	188992.93	0.1078	P	1.7
8	☐			10912.76	0.0062	P	7.9

$$y = 1.0712E-004 * x + 2.2481E-004$$

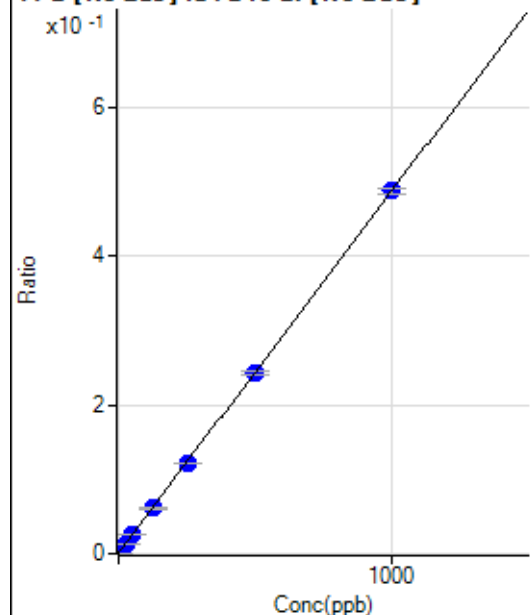
$$R = 0.9999$$

$$DL = 0.8827$$

$$BEC = 2.099$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2150.24	0.0011	P	7.7
2	☐	25.000	24.312	25074.37	0.0129	P	2.7
3	☐	50.000	52.099	53587.34	0.0263	P	2.2
4	☐	125.000	122.993	123703.03	0.0607	P	3.6
5	☐	250.000	247.485	227138.77	0.1212	P	0.9
6	☐	500.000	498.662	437167.85	0.2430	P	1.5
7	☐	1000.000	1001.461	853509.07	0.4870	P	1.6
8	☐			49264.69	0.0279	P	4.2

$$y = 4.8524\text{E-}004 * x + 0.0011$$

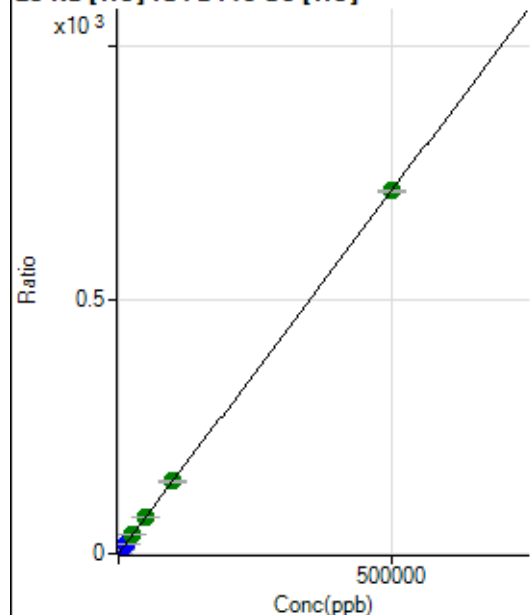
R = 1.0000

DL = 0.5061

BEC = 2.201

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3197.70	0.0183	P	5.3
2	☐	500.000	482.530	123779.03	0.7080	P	0.9
3	☐	5000.000	5149.382	1279327.50	7.3785	P	1.2
4	☐	12500.000	12914.696	3033029.86	18.4777	P	0.7
5	☐	25000.000	25493.233	5634422.00	36.4566	A	0.5
6	☐	50000.000	50566.178	10851334.53	72.2942	A	0.5
7	☐	100000.00	99750.239	21626988.68	142.5946	A	0.8
8	☐	500000.00	499956.82	110442613.5	714.6231	A	0.6

$$y = 0.0014 * x + 0.0183$$

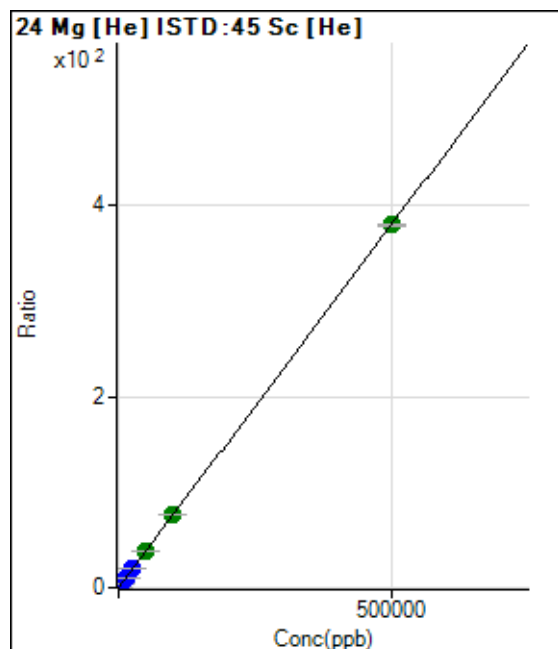
R = 1.0000

DL = 2.046

BEC = 12.8

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.67	0.0007	P	25.3
2	☐	500.000	504.525	67165.36	0.3842	P	0.9
3	☐	5000.000	5209.818	686754.39	3.9609	P	1.4
4	☐	12500.000	13006.424	1622962.60	9.8874	P	0.6
5	☐	25000.000	25644.165	3012837.05	19.4938	P	0.4
6	☐	50000.000	51223.486	5844568.62	38.9377	A	0.6
7	☐	100000.00	100600.62	11598081.16	76.4712	A	1.0
8	☐	500000.00	499710.55	58705434.65	379.8505	A	0.5

$$y = 7.6014\text{E-}004 * x + 6.6670\text{E-}004$$

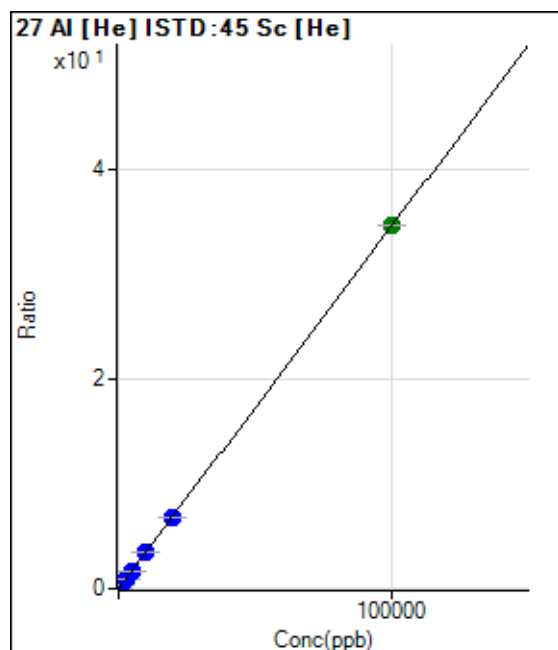
$$R = 1.0000$$

$$DL = 0.6664$$

$$BEC = 0.8771$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.56	0.0002	P	79.3
2	☐	20.000	18.433	1147.32	0.0066	P	12.4
3	☐	1000.000	1017.966	61189.73	0.3529	P	0.4
4	☐	2500.000	2545.593	144803.60	0.8822	P	0.8
5	☐	5000.000	4998.234	267691.80	1.7320	P	0.3
6	☐	10000.000	9943.690	517189.92	3.4456	P	0.2
7	☐	20000.000	19421.913	1020707.99	6.7298	P	0.5
8	☐	100000.00	100120.01	5361596.73	34.6912	A	0.2

$$y = 3.4649\text{E-}004 * x + 1.7524\text{E-}004$$

$$R = 1.0000$$

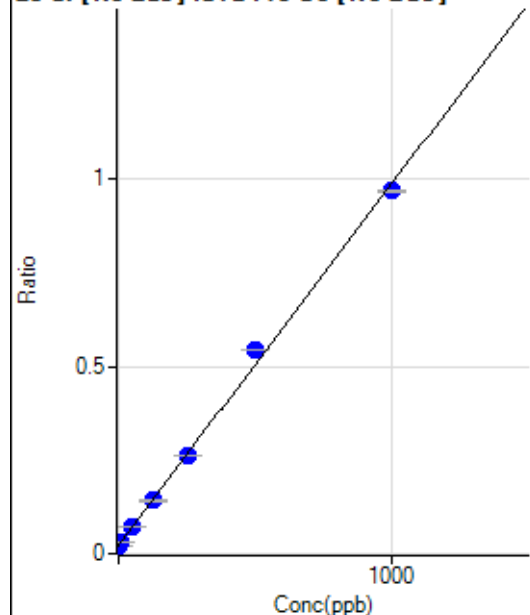
$$DL = 1.203$$

$$BEC = 0.5058$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	94616.02	0.0227	P	0.8
2	☐	10.000	9.596	129946.38	0.0320	P	4.3
3	☐	50.000	52.323	310943.25	0.0732	P	0.9
4	☐	125.000	124.298	600550.76	0.1427	P	4.6
5	☐	250.000	247.081	996153.54	0.2612	P	0.9
6	☐	500.000	539.516	1977249.57	0.5435	P	0.4
7	☐	1000.000	980.947	3491767.44	0.9696	P	0.4
8	☐			155907.75	0.0424	P	4.0

$$y = 9.6531E-004 * x + 0.0227$$

R = 0.9988

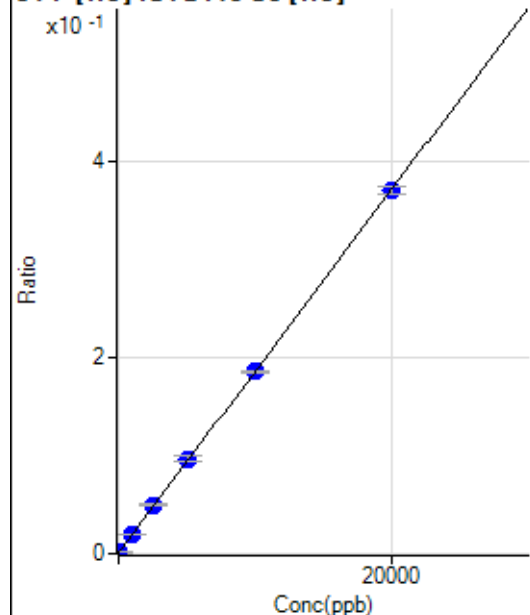
DL = 0.5356

BEC = 23.54

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-29.538	38.89	0.0002	P	62.4
2	☐	0.000	29.538	230.57	0.0013	P	15.9
3	☐	1000.000	1013.986	3392.19	0.0196	P	4.3
4	☐	2500.000	2656.227	8210.92	0.0500	P	4.0
5	☐	5000.000	5177.422	14952.51	0.0968	P	5.1
6	☐	10000.000	10005.090	27960.49	0.1863	P	0.9
7	☐	20000.000	19932.872	56164.86	0.3703	P	2.3
8	☐			94.45	0.0006	P	10.8

$$y = 1.8541E-005 * x + 7.7053E-004$$

R = 0.9999

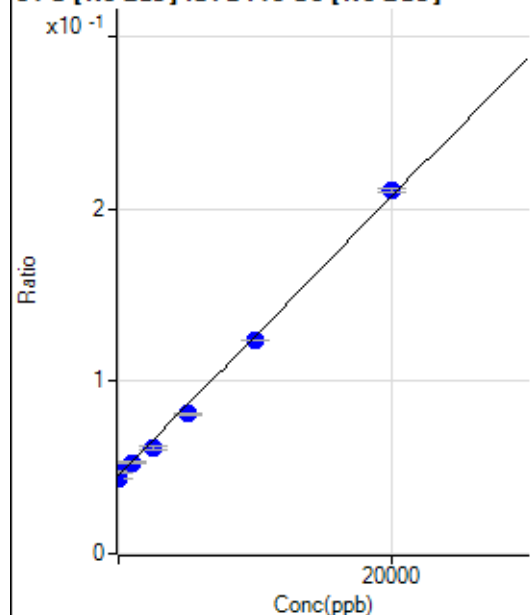
DL = 28.25

BEC = 41.56

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	-263.627	180213.51	0.0433	P	1.2
2	☐	0.000	263.627	193249.34	0.0476	P	3.0
3	☐	1000.000	910.634	224165.38	0.0528	P	1.5
4	☐	2500.000	1941.286	257445.26	0.0611	P	2.8
5	☐	5000.000	4430.998	310064.21	0.0813	P	1.1
6	☐	10000.000	9669.096	450153.00	0.1237	P	0.1
7	☐	20000.000	20382.010	758008.59	0.2105	P	1.2
8	☐			144999.12	0.0395	P	4.6

$$y = 8.0998\text{E-}006 * x + 0.0454$$

R = 0.9989

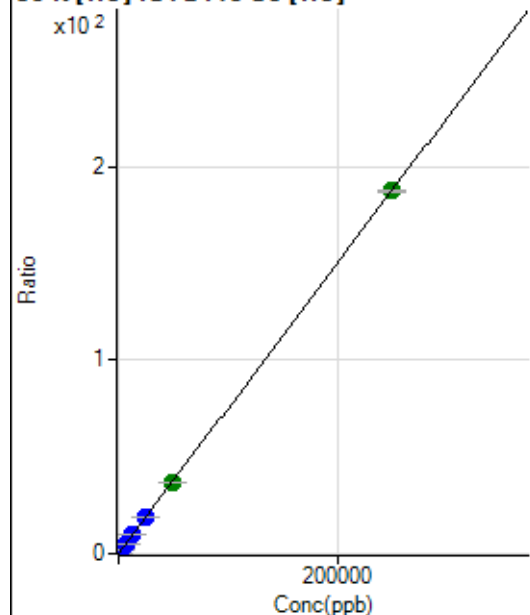
DL = 359.4

BEC = 5608

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	10451.28	0.0598	P	2.9
2	☐	500.000	490.612	74732.79	0.4275	P	2.3
3	☐	2500.000	2609.495	349463.09	2.0155	P	1.1
4	☐	6250.000	6436.270	801617.39	4.8836	P	0.8
5	☐	12500.000	12568.072	1465088.75	9.4793	P	0.3
6	☐	25000.000	24941.934	2814916.10	18.7533	P	0.1
7	☐	50000.000	49194.571	5601132.98	36.9301	A	0.7
8	☐	250000.00	250157.75	28985873.56	187.5480	A	0.4

$$y = 7.4948\text{E-}004 * x + 0.0598$$

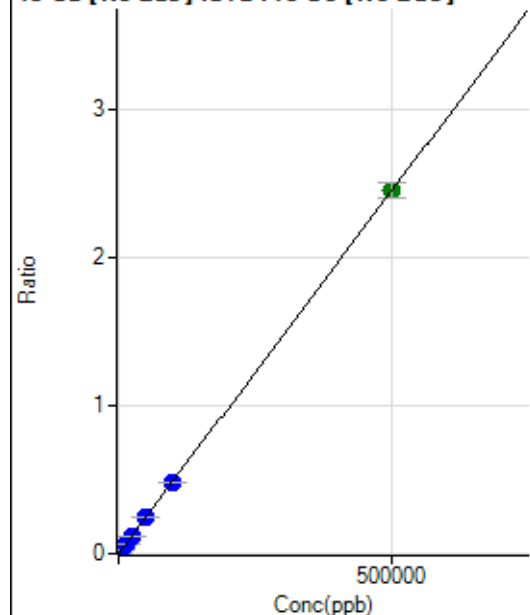
R = 1.0000

DL = 7.034

BEC = 79.75

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	91.67	0.0000	P	39.9
2	☐	500.000	482.855	9678.55	0.0024	P	4.6
3	☐	5000.000	5055.713	105037.61	0.0247	P	1.8
4	☐	12500.000	12386.875	254916.86	0.0606	P	5.0
5	☐	25000.000	24813.736	462695.50	0.1213	P	1.3
6	☐	50000.000	49726.109	884534.76	0.2431	P	0.4
7	☐	100000.00	99096.383	1744767.20	0.4845	P	0.4
8	☐	500000.00	500219.71	8982178.41	2.4457	A	4.2

$$y = 4.8892\text{E-}006 * x + 2.2030\text{E-}005$$

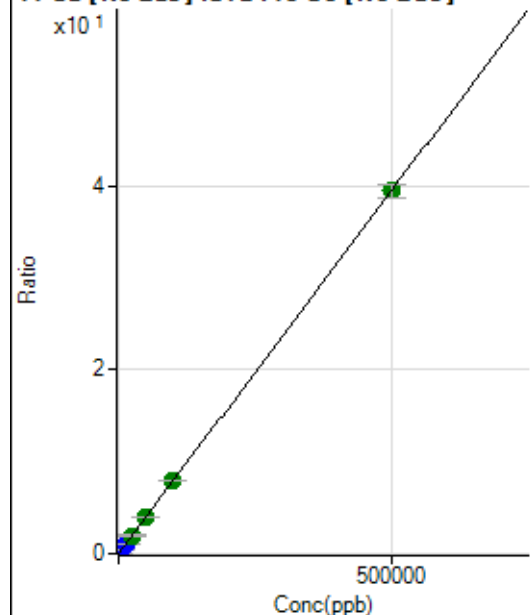
$$R = 1.0000$$

$$DL = 5.387$$

$$BEC = 4.506$$

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	7147.77	0.0017	P	4.2
2	☐	500.000	488.671	163505.86	0.0402	P	3.9
3	☐	5000.000	5058.998	1700804.64	0.4006	P	1.4
4	☐	12500.000	12373.896	4112367.93	0.9774	P	5.2
5	☐	25000.000	24991.111	7520319.18	1.9722	A	1.5
6	☐	50000.000	50384.682	14458327.75	3.9744	A	0.6
7	☐	100000.00	100412.64	28516551.33	7.9190	A	0.1
8	☐	500000.00	499882.02	144777462.9	39.4160	A	3.7

$$y = 7.8847\text{E-}005 * x + 0.0017$$

$$R = 1.0000$$

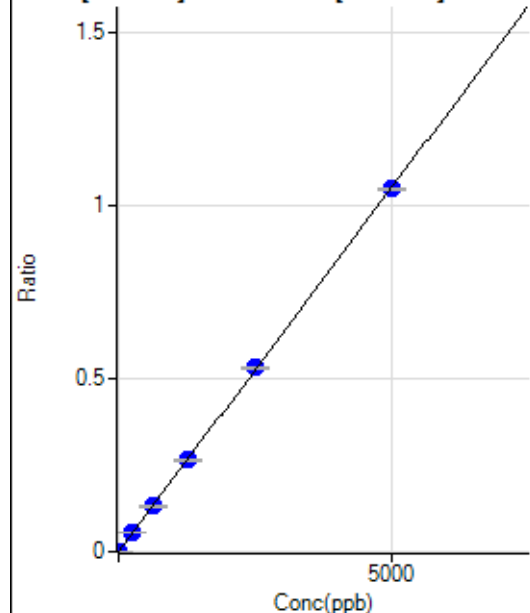
$$DL = 2.721$$

$$BEC = 21.77$$

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	55.56	0.0000	P	17.3
2	☐	5.000	5.195	4489.77	0.0011	P	7.8
3	☐	250.000	260.072	232363.65	0.0547	P	0.8
4	☐	625.000	630.983	558611.16	0.1328	P	5.0
5	☐	1250.000	1256.939	1008359.14	0.2644	P	1.9
6	☐	2500.000	2524.953	1932433.18	0.5312	P	0.5
7	☐	5000.000	4984.537	3776155.60	1.0486	P	0.4
8	☐			1466.80	0.0004	P	2.8

$$y = 2.1038\text{E-}004 * x + 1.3344\text{E-}005$$

$$R = 1.0000$$

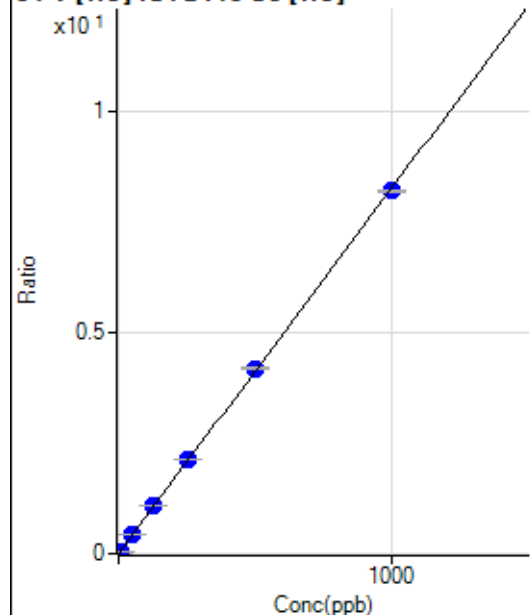
$$DL = 0.03285$$

$$BEC = 0.06343$$

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	8.89	0.0001	P	77.7
2	☐	5.000	5.227	7544.26	0.0432	P	3.9
3	☐	50.000	52.894	75639.29	0.4363	P	1.2
4	☐	125.000	130.657	176871.29	1.0775	P	0.6
5	☐	250.000	257.330	327988.46	2.1222	P	0.4
6	☐	500.000	507.650	628392.30	4.1865	P	0.6
7	☐	1000.000	993.490	1242626.07	8.1931	P	0.9
8	☐			246.67	0.0016	P	10.0

$$y = 0.0082 * x + 5.0778\text{E-}005$$

$$R = 0.9999$$

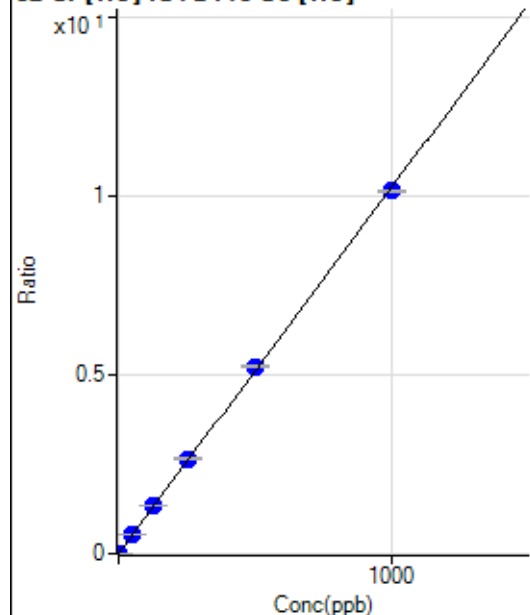
$$DL = 0.01436$$

$$BEC = 0.006157$$

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	248.89	0.0014	P	10.2
2	☐	2.000	1.998	3825.00	0.0219	P	3.1
3	☐	50.000	53.326	94916.37	0.5474	P	1.0
4	☐	125.000	132.413	222763.08	1.3571	P	0.2
5	☐	250.000	259.356	410622.17	2.6569	P	0.6
6	☐	500.000	511.292	785981.25	5.2363	P	0.5
7	☐	1000.000	990.922	1539014.66	10.1471	P	0.7
8	☐			25921.86	0.1677	P	0.3

$$y = 0.0102 * x + 0.0014$$

$$R = 0.9998$$

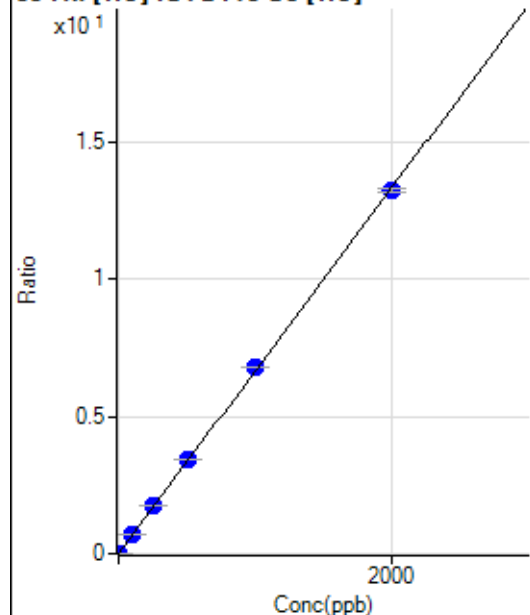
$$DL = 0.0427$$

$$BEC = 0.1391$$

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	23.33	0.0001	P	13.9
2	☐	1.000	1.018	1206.74	0.0069	P	3.9
3	☐	100.000	105.417	121545.73	0.7010	P	1.2
4	☐	250.000	260.383	284198.05	1.7314	P	0.5
5	☐	500.000	516.160	530428.95	3.4320	P	0.3
6	☐	1000.000	1018.509	1016485.72	6.7721	P	0.6
7	☐	2000.000	1985.137	2001893.91	13.1991	P	1.0
8	☐			7499.80	0.0485	P	1.5

$$y = 0.0066 * x + 1.3338E-004$$

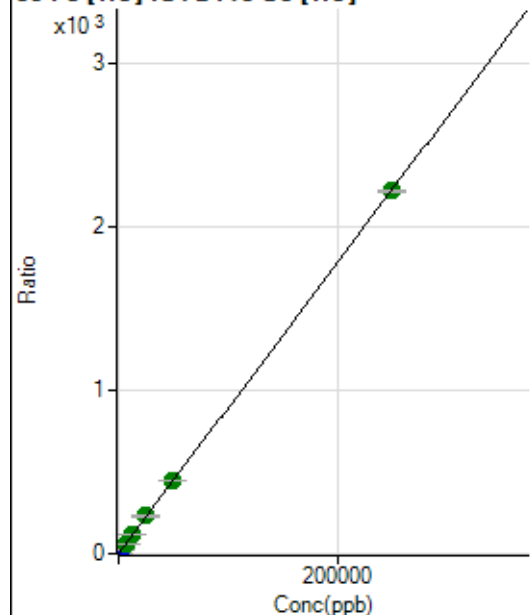
$$R = 0.9999$$

$$DL = 0.008374$$

$$BEC = 0.02006$$

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	2309.51	0.0132	P	8.3
2	☐	50.000	53.980	86222.05	0.4932	P	2.1
3	☐	2500.000	2692.474	4153668.35	23.9557	P	1.2
4	☐	6250.000	6647.585	9705276.03	59.1261	A	0.6
5	☐	12500.000	13096.325	18000746.47	116.4709	A	0.8
6	☐	25000.000	25882.851	34548499.85	230.1737	A	1.0
7	☐	50000.000	50615.933	68267667.73	450.1100	A	0.8
8	☐	250000.00	249746.84	343220703.9	2,220.860	A	0.8

$$y = 0.0089 * x + 0.0132$$

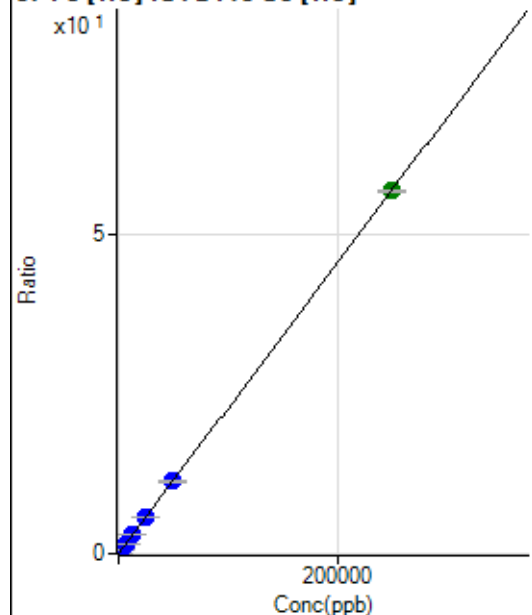
$$R = 1.0000$$

$$DL = 0.3687$$

$$BEC = 1.485$$

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	127.78	0.0007	P	19.1
2	☐	50.000	56.409	2368.77	0.0135	P	0.9
3	☐	2500.000	2662.939	105044.12	0.6058	P	0.4
4	☐	6250.000	6620.782	247058.57	1.5051	P	0.3
5	☐	12500.000	13045.136	458241.28	2.9649	P	0.0
6	☐	25000.000	25647.067	874837.40	5.8284	P	0.6
7	☐	50000.000	49866.101	1718602.86	11.3315	P	1.2
8	☐	250000.00	249923.91	8776548.75	56.7896	A	0.8

$$y = 2.2722E-004 * x + 7.3084E-004$$

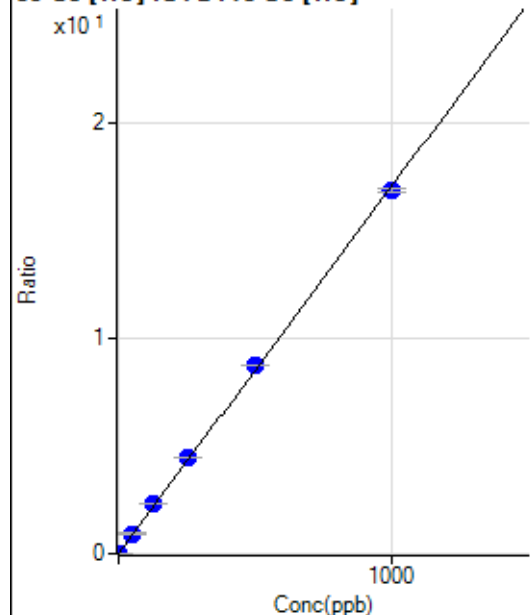
$$R = 1.0000$$

$$DL = 1.839$$

$$BEC = 3.216$$

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	35.56	0.0002	P	14.8
2	☐	1.000	1.005	3032.59	0.0173	P	1.8
3	☐	50.000	54.858	162215.59	0.9356	P	1.6
4	☐	125.000	135.004	377884.91	2.3022	P	0.2
5	☐	250.000	263.579	694633.59	4.4945	P	0.7
6	☐	500.000	514.196	1316079.29	8.7678	P	0.2
7	☐	1000.000	988.014	2555134.63	16.8470	P	1.1
8	☐			30883.81	0.1998	P	0.8

$$y = 0.0171 * x + 2.0342E-004$$

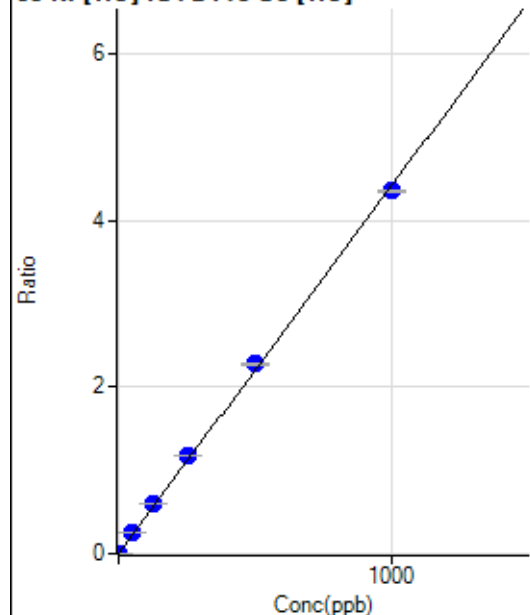
$$R = 0.9997$$

$$DL = 0.005287$$

$$BEC = 0.01193$$

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	20.00	0.0001	P	44.4
2	☐	1.000	1.159	913.38	0.0052	P	1.7
3	☐	50.000	55.997	42840.49	0.2471	P	1.7
4	☐	125.000	137.725	99724.02	0.6075	P	0.5
5	☐	250.000	265.511	180999.23	1.1711	P	0.7
6	☐	500.000	515.408	341224.58	2.2733	P	0.4
7	☐	1000.000	986.528	659943.28	4.3511	P	0.5
8	☐			12078.48	0.0782	P	2.2

$$y = 0.0044 * x + 1.1447E-004$$

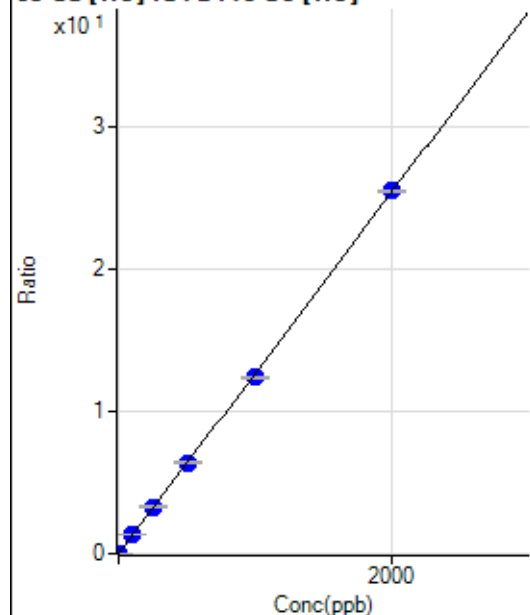
$$R = 0.9997$$

$$DL = 0.03453$$

$$BEC = 0.02595$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	356.68	0.0020	P	19.3
2	☐	2.000	1.973	4730.85	0.0271	P	3.9
3	☐	100.000	105.814	233040.04	1.3441	P	1.2
4	☐	250.000	260.284	542228.94	3.3033	P	1.1
5	☐	500.000	504.148	988545.50	6.3963	P	0.8
6	☐	1000.000	975.051	1856546.52	12.3689	P	0.8
7	☐	2000.000	2009.861	3866656.19	25.4936	P	0.4
8	☐			5337.72	0.0345	P	3.1

$$y = 0.0127 * x + 0.0020$$

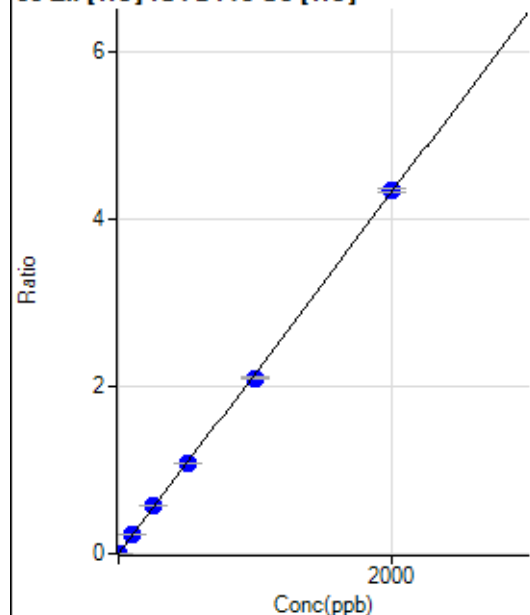
$$R = 0.9999$$

$$DL = 0.09327$$

$$BEC = 0.1609$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	207.78	0.0012	P	21.3
2	☐	2.000	2.124	1010.05	0.0058	P	8.8
3	☐	100.000	103.370	38943.17	0.2246	P	1.2
4	☐	250.000	268.004	95280.28	0.5805	P	0.8
5	☐	500.000	502.979	168204.85	1.0883	P	0.7
6	☐	1000.000	974.065	316203.05	2.1066	P	0.3
7	☐	2000.000	2009.803	659038.73	4.3452	P	1.0
8	☐			6275.88	0.0406	P	2.2

$$y = 0.0022 * x + 0.0012$$

$$R = 0.9998$$

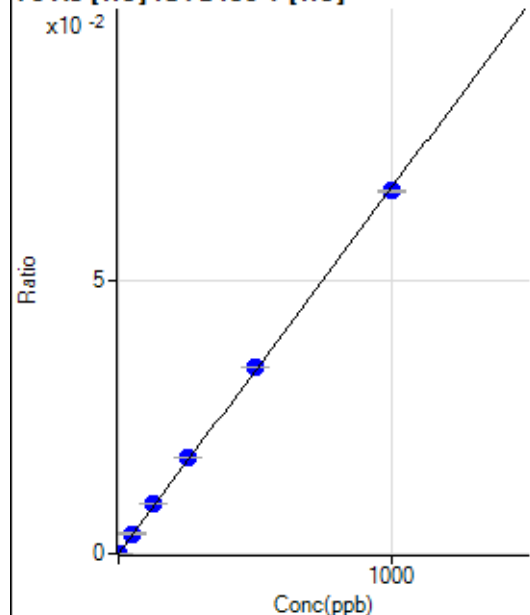
$$DL = 0.351$$

$$BEC = 0.5497$$

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	9.26	0.0000	P	0.4
2	☐	1.000	0.991	218.52	0.0001	P	3.8
3	☐	50.000	55.069	11575.04	0.0037	P	1.3
4	☐	125.000	135.894	27600.38	0.0091	P	0.7
5	☐	250.000	261.180	50347.27	0.0175	P	0.5
6	☐	500.000	507.988	96073.11	0.0340	P	0.1
7	☐	1000.000	991.596	186558.49	0.0663	P	0.7
8	☐			261.12	0.0001	P	4.2

$$y = 6.6841\text{E-}005 * x + 2.9215\text{E-}006$$

$$R = 0.9999$$

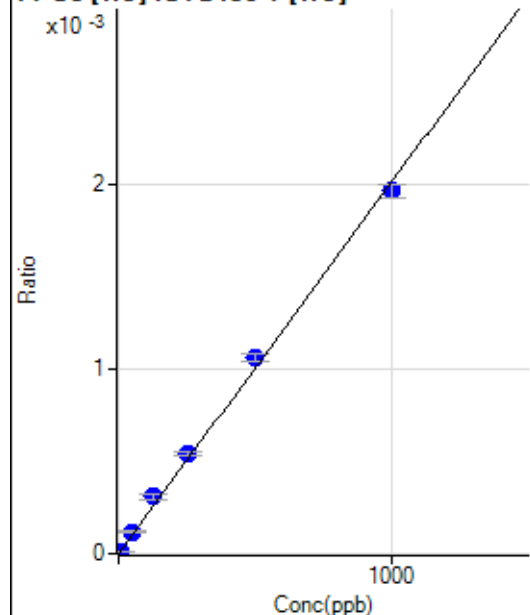
$$DL = 0.0004628$$

$$BEC = 0.04371$$

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	0.00	0.0000	P	
2	☐	5.000	6.099	38.89	0.0000	P	42.1
3	☐	50.000	57.467	364.46	0.0001	P	10.4
4	☐	125.000	152.848	936.71	0.0003	P	8.8
5	☐	250.000	270.627	1574.56	0.0005	P	3.6
6	☐	500.000	528.591	3017.03	0.0011	P	4.1
7	☐	1000.000	976.688	5545.60	0.0020	P	3.5
8	☐			0.00	0.0000	P	

$$y = 2.0174\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9989$$

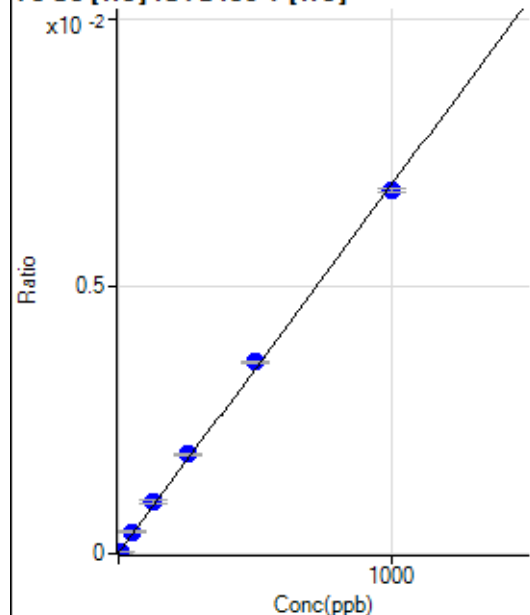
$$DL = 0$$

$$BEC = 0$$

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	43.21	0.0000	P	29.8
2	☐	5.000	5.452	161.73	0.0001	P	4.0
3	☐	50.000	58.078	1300.69	0.0004	P	2.9
4	☐	125.000	139.029	2951.56	0.0010	P	5.1
5	☐	250.000	267.990	5365.23	0.0019	P	2.9
6	☐	500.000	519.099	10159.19	0.0036	P	1.2
7	☐	1000.000	983.793	19119.46	0.0068	P	1.1
8	☐			42.59	0.0000	P	23.0

$$y = 6.8912\text{E-}006 * x + 1.3625\text{E-}005$$

$$R = 0.9995$$

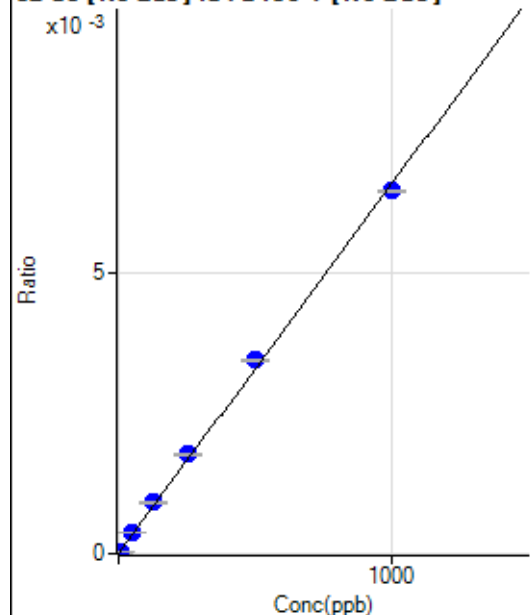
$$DL = 1.769$$

$$BEC = 1.977$$

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	95.72	0.0000	P	13.4
2	☐	5.000	5.241	826.37	0.0000	P	6.6
3	☐	50.000	55.596	8193.16	0.0004	P	0.7
4	☐	125.000	138.338	20327.62	0.0009	P	5.0
5	☐	250.000	268.368	36267.88	0.0018	P	1.1
6	☐	500.000	523.058	68611.83	0.0034	P	0.5
7	☐	1000.000	981.931	127912.71	0.0065	P	0.4
8	☐			119.55	0.0000	P	46.2

$$y = 6.5853\text{E-}006 * x + 4.3893\text{E-}006$$

$$R = 0.9994$$

$$DL = 0.268$$

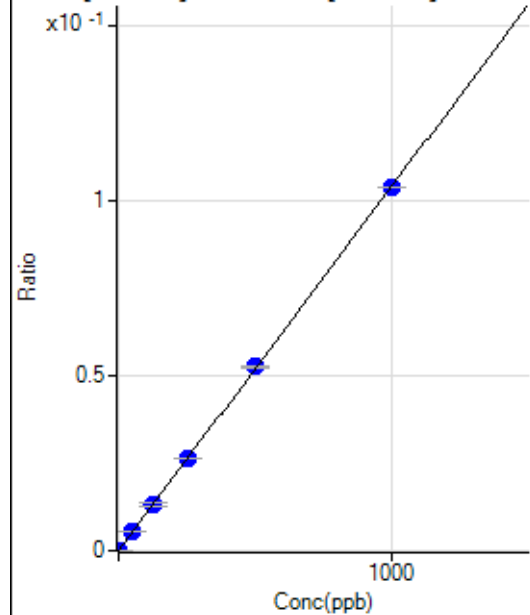
$$BEC = 0.6665$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			202.23		P	6.9
2	☐			200.01		P	10.9
3	☐			197.78		P	2.6
4	☐			184.45		P	12.8
5	☐			181.11		P	20.2
6	☐			166.67		P	14.0
7	☐			176.67		P	18.9
8	☐			227.78		P	12.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	302.79	0.0000	P	23.8
2	☐	1.000	1.064	2647.60	0.0001	P	3.8
3	☐	50.000	51.640	119023.28	0.0054	P	1.9
4	☐	125.000	126.097	291416.66	0.0131	P	5.4
5	☐	250.000	254.188	541335.64	0.0264	P	1.4
6	☐	500.000	504.373	1043631.20	0.0525	P	0.4
7	☐	1000.000	996.548	2048672.10	0.1036	P	0.1
8	☐			9083.86	0.0005	P	2.4

$$y = 1.0398\text{E-}004 * x + 1.3889\text{E-}005$$

$$R = 1.0000$$

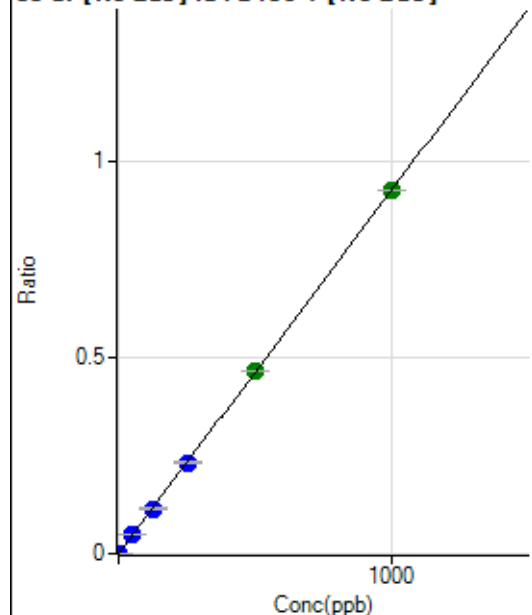
$$DL = 0.09538$$

$$BEC = 0.1336$$

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	116.67	0.0000	P	18.7
2	☐	1.000	0.975	19258.03	0.0009	P	5.1
3	☐	50.000	50.954	1041629.74	0.0471	P	1.7
4	☐	125.000	123.965	2544824.56	0.1146	P	5.2
5	☐	250.000	250.127	4733815.17	0.2312	P	1.1
6	☐	500.000	503.096	9253077.46	0.4651	A	0.2
7	☐	1000.000	998.502	18248421.41	0.9231	A	0.1
8	☐			75423.44	0.0038	P	2.2

$$y = 9.2450\text{E-}004 * x + 5.3496\text{E-}006$$

$$R = 1.0000$$

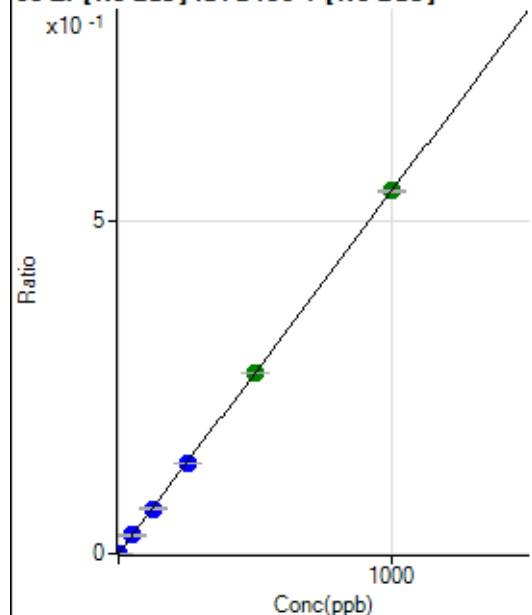
$$DL = 0.00325$$

$$BEC = 0.005786$$

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	661.15	0.0000	P	10.6
2	☐	1.000	0.873	10774.00	0.0005	P	4.8
3	☐	50.000	50.579	611348.96	0.0277	P	1.6
4	☐	125.000	123.125	1493767.23	0.0673	P	4.8
5	☐	250.000	248.773	2781549.74	0.1359	P	1.2
6	☐	500.000	498.590	5417142.96	0.2723	A	0.1
7	☐	1000.000	1001.217	10808644.43	0.5468	A	0.4
8	☐			3978.51	0.0002	P	3.4

$$y = 5.4608\text{E-}004 * x + 3.0319\text{E-}005$$

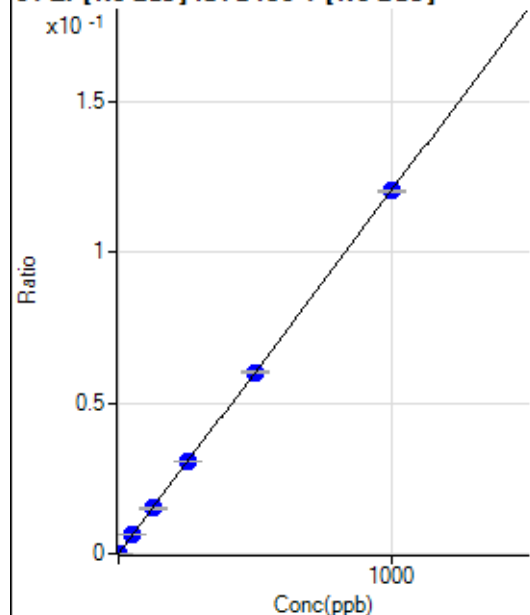
$$R = 1.0000$$

$$DL = 0.01762$$

$$BEC = 0.05552$$

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	138.89	0.0000	P	15.0
2	☐	1.000	0.841	2286.40	0.0001	P	10.0
3	☐	50.000	51.002	136063.90	0.0062	P	1.4
4	☐	125.000	126.184	337886.00	0.0152	P	4.9
5	☐	250.000	253.124	624681.61	0.0305	P	1.0
6	☐	500.000	500.067	1199201.57	0.0603	P	0.3
7	☐	1000.000	998.987	2380336.92	0.1204	P	0.6
8	☐			888.96	0.0000	P	4.9

$$y = 1.2053\text{E-}004 * x + 6.3697\text{E-}006$$

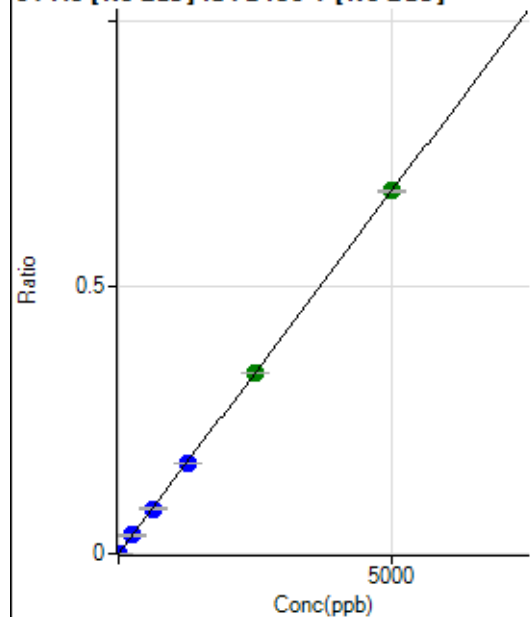
$$R = 1.0000$$

$$DL = 0.02384$$

$$BEC = 0.05285$$

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	266.68	0.0000	P	15.8
2	☐	5.000	4.519	13317.84	0.0006	P	6.2
3	☐	250.000	253.522	762716.22	0.0345	P	2.0
4	☐	625.000	619.228	1870599.93	0.0842	P	5.1
5	☐	1250.000	1247.675	3474481.20	0.1697	P	0.9
6	☐	2500.000	2492.179	6744388.95	0.3390	A	0.2
7	☐	5000.000	5005.037	13458653.77	0.6808	A	0.4
8	☐			8002.59	0.0004	P	1.8

$$y = 1.3603\text{E-}004 * x + 1.2233\text{E-}005$$

$$R = 1.0000$$

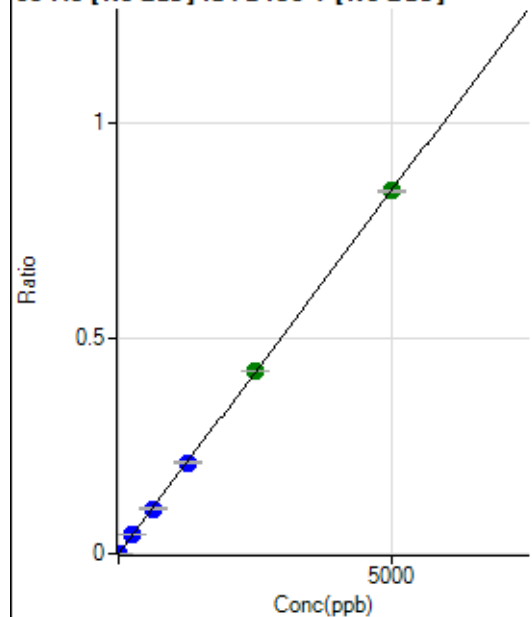
$$DL = 0.0427$$

$$BEC = 0.08993$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	12.2
2	☐	5.000	4.851	17478.00	0.0008	P	3.1
3	☐	250.000	255.356	951382.59	0.0430	P	1.3
4	☐	625.000	621.158	2324400.90	0.1047	P	4.4
5	☐	1250.000	1253.410	4323148.71	0.2112	P	1.1
6	☐	2500.000	2504.939	8396355.22	0.4221	A	0.2
7	☐	5000.000	4996.891	16643036.66	0.8419	A	0.2
8	☐			11210.33	0.0006	P	2.3

$$y = 1.6849\text{E-}004 * x + 4.8417\text{E-}006$$

$$R = 1.0000$$

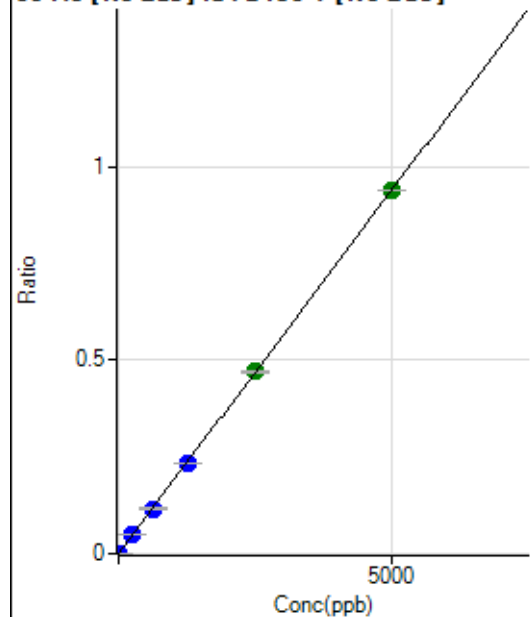
$$DL = 0.01048$$

$$BEC = 0.02874$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	158.34	0.0000	P	24.2
2	☐	5.000	4.876	19583.54	0.0009	P	4.9
3	☐	250.000	253.522	1051242.76	0.0475	P	1.1
4	☐	625.000	621.025	2586124.56	0.1165	P	4.7
5	☐	1250.000	1248.412	4792014.04	0.2341	P	1.2
6	☐	2500.000	2509.468	9360895.08	0.4705	A	0.7
7	☐	5000.000	4995.984	18518440.35	0.9368	A	0.1
8	☐			17572.61	0.0009	P	2.8

$$y = 1.8751\text{E-}004 * x + 7.2631\text{E-}006$$

$$R = 1.0000$$

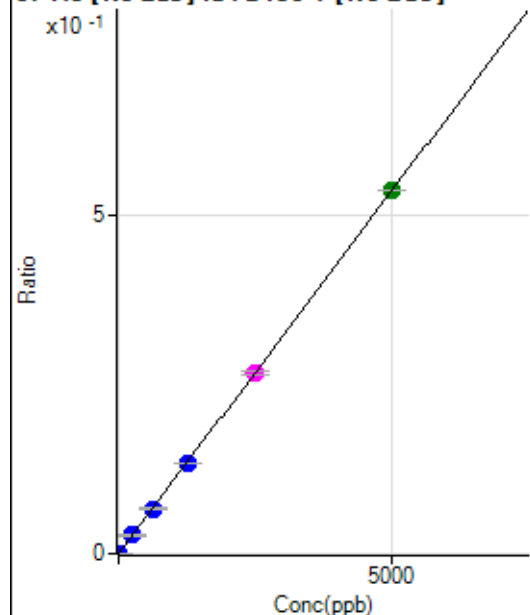
$$DL = 0.02812$$

$$BEC = 0.03874$$

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	50.00	0.0000	P	16.6
2	☐	5.000	4.614	10532.08	0.0005	P	4.1
3	☐	250.000	252.126	596003.13	0.0270	P	1.1
4	☐	625.000	617.973	1467063.51	0.0661	P	4.8
5	☐	1250.000	1243.903	2722138.86	0.1330	P	0.9
6	☐	2500.000	2493.165	5302404.85	0.2665	M	1.3
7	☐	5000.000	5005.714	10578236.70	0.5351	A	0.1
8	☐			6665.72	0.0003	P	4.5

$$y = 1.0690\text{E-}004 * x + 2.2930\text{E-}006$$

$$R = 1.0000$$

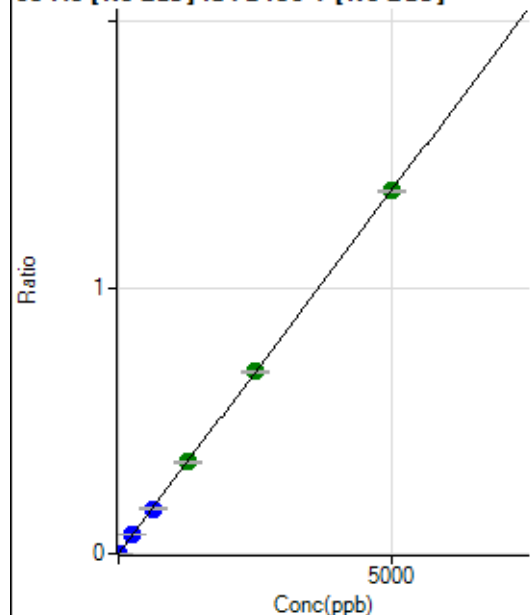
$$DL = 0.01066$$

$$BEC = 0.02145$$

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	183.34	0.0000	P	31.6
2	☐	5.000	4.653	27179.51	0.0013	P	4.5
3	☐	250.000	253.683	1531807.42	0.0693	P	1.0
4	☐	625.000	619.793	3758311.89	0.1692	P	4.8
5	☐	1250.000	1260.312	7044708.92	0.3441	A	1.0
6	☐	2500.000	2504.264	13603256.03	0.6838	A	0.5
7	☐	5000.000	4995.757	26965595.05	1.3641	A	0.2
8	☐			16735.47	0.0009	P	3.3

$$y = 2.7305\text{E-}004 * x + 8.4114\text{E-}006$$

$$R = 1.0000$$

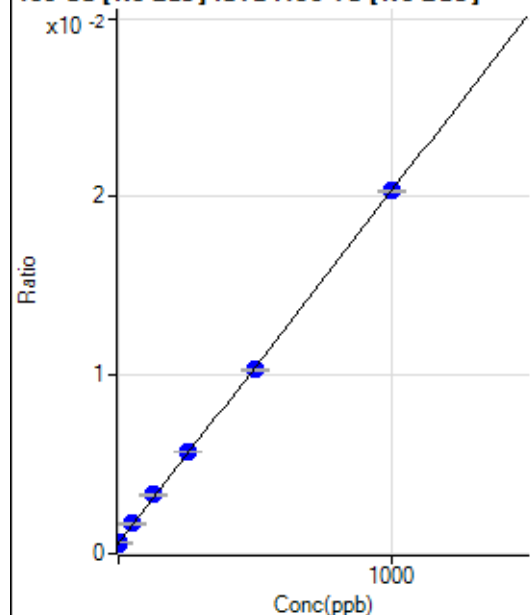
$$DL = 0.02921$$

$$BEC = 0.03081$$

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	6157.16	0.0006	P	2.6
2	☐	1.000	4.271	6821.37	0.0007	P	4.2
3	☐	50.000	56.817	18181.77	0.0017	P	5.0
4	☐	125.000	137.603	36422.85	0.0033	P	3.9
5	☐	250.000	258.612	59576.07	0.0057	P	1.1
6	☐	500.000	492.111	106537.25	0.0103	P	0.5
7	☐	1000.000	999.872	212067.58	0.0203	P	0.4
8	☐			6112.69	0.0006	P	2.7

$$y = 1.9745E-005 * x + 5.9137E-004$$

$$R = 0.9999$$

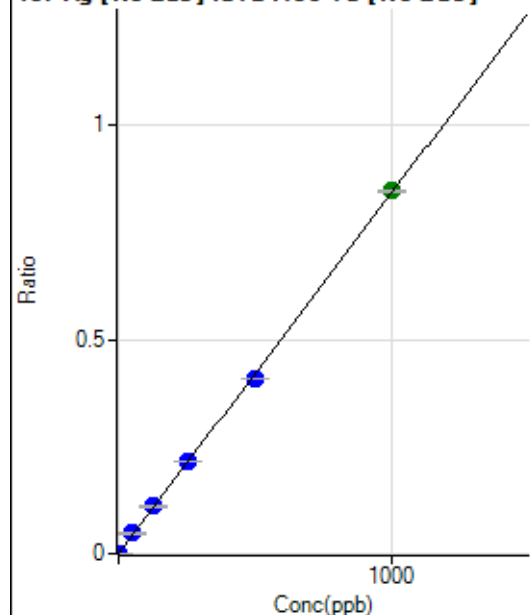
$$DL = 2.369$$

$$BEC = 29.95$$

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	169.45	0.0000	P	9.7
2	☐	1.000	1.093	9447.95	0.0009	P	6.5
3	☐	50.000	55.998	501455.21	0.0472	P	1.0
4	☐	125.000	131.590	1221598.41	0.1110	P	5.0
5	☐	250.000	254.814	2247154.93	0.2149	P	0.9
6	☐	500.000	484.552	4223698.19	0.4087	P	0.8
7	☐	1000.000	1005.397	8843112.78	0.8479	A	0.4
8	☐			1300.12	0.0001	P	13.6

$$y = 8.4336E-004 * x + 1.6270E-005$$

$$R = 0.9998$$

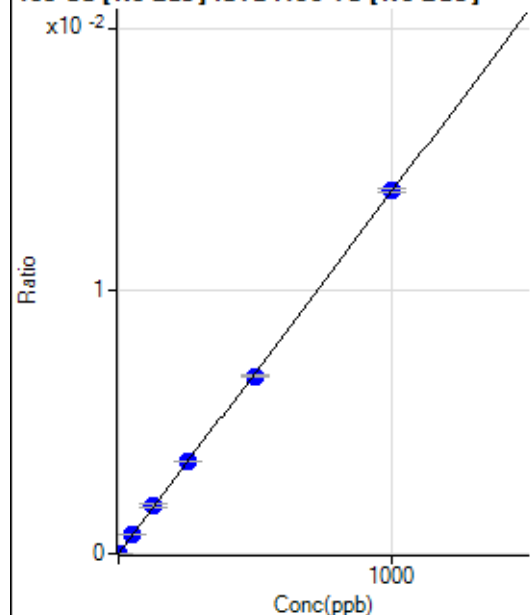
$$DL = 0.005642$$

$$BEC = 0.01929$$

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	13.89	0.0000	P	46.3
2	☐	1.000	1.164	175.00	0.0000	P	14.4
3	☐	50.000	54.295	7946.80	0.0007	P	1.4
4	☐	125.000	132.387	20067.23	0.0018	P	5.3
5	☐	250.000	253.804	36538.99	0.0035	P	0.5
6	☐	500.000	490.210	69744.34	0.0067	P	1.1
7	☐	1000.000	1002.806	143955.14	0.0138	P	0.9
8	☐			31.95	0.0000	P	54.6

$$y = 1.3763\text{E-}005 * x + 1.3354\text{E-}006$$

$$R = 0.9999$$

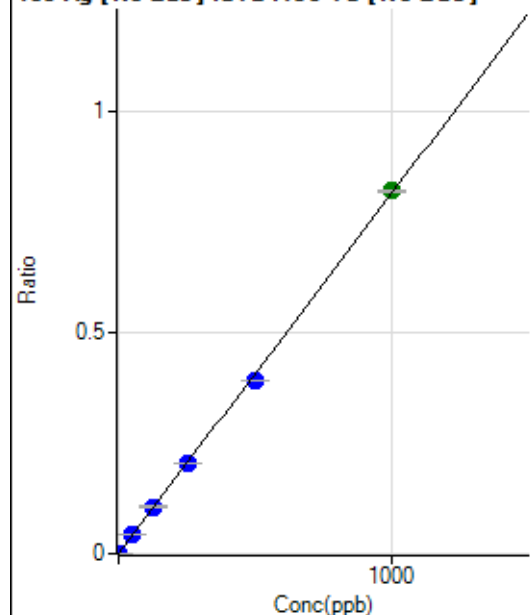
$$DL = 0.1348$$

$$BEC = 0.09703$$

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	38.89	0.0000	P	24.7
2	☐	1.000	1.113	9183.93	0.0009	P	3.2
3	☐	50.000	55.564	480813.39	0.0453	P	0.4
4	☐	125.000	130.456	1170398.32	0.1063	P	5.1
5	☐	250.000	251.823	2146382.75	0.2053	P	1.2
6	☐	500.000	482.106	4061771.70	0.3930	P	0.2
7	☐	1000.000	1007.531	8565346.98	0.8213	A	0.2
8	☐			1130.66	0.0001	P	11.7

$$y = 8.1515\text{E-}004 * x + 3.7347\text{E-}006$$

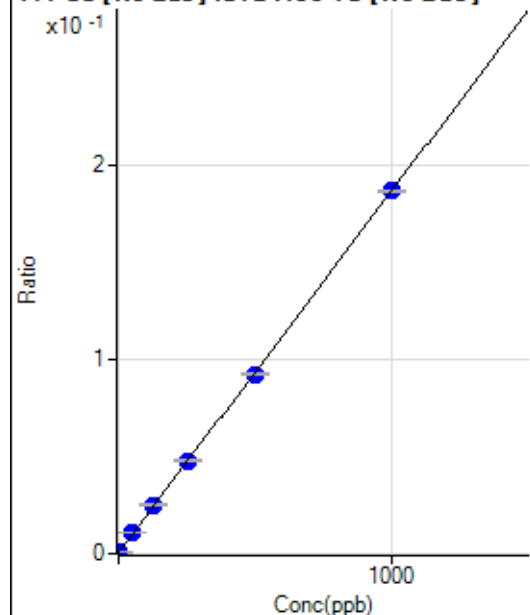
$$R = 0.9997$$

$$DL = 0.003393$$

$$BEC = 0.004582$$

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	4326.68	0.0004	P	2.8
2	☐	1.000	1.212	6467.89	0.0006	P	2.9
3	☐	50.000	55.152	113430.72	0.0107	P	0.4
4	☐	125.000	132.126	275341.43	0.0250	P	5.5
5	☐	250.000	255.079	501027.48	0.0479	P	0.5
6	☐	500.000	493.589	954296.67	0.0923	P	0.5
7	☐	1000.000	1000.787	1947998.04	0.1868	P	0.3
8	☐			4627.37	0.0005	P	2.8

$$y = 1.8622\text{E-}004 * x + 4.1555\text{E-}004$$

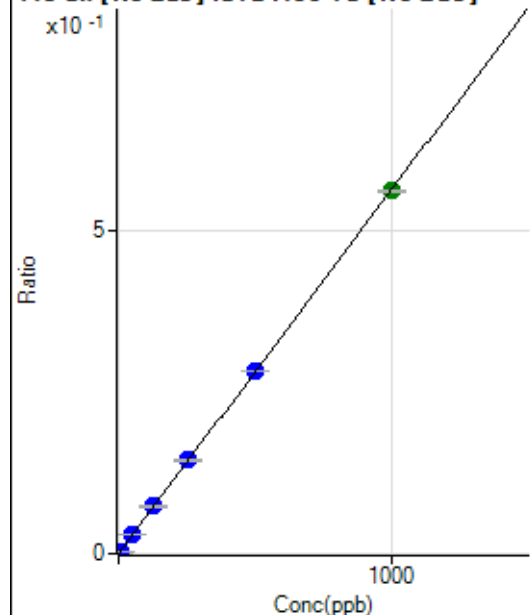
$$R = 0.9999$$

$$DL = 0.1875$$

$$BEC = 2.232$$

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	836.17	0.0001	P	9.2
2	☐	5.000	5.345	31099.16	0.0031	P	3.4
3	☐	50.000	54.258	324627.39	0.0306	P	1.6
4	☐	125.000	130.089	805819.60	0.0732	P	5.2
5	☐	250.000	256.720	1510008.50	0.1444	P	1.1
6	☐	500.000	501.262	2913594.84	0.2819	P	0.5
7	☐	1000.000	996.838	5845716.41	0.5605	A	0.6
8	☐			3961.84	0.0004	P	1.3

$$y = 5.6222\text{E-}004 * x + 8.0296\text{E-}005$$

$$R = 1.0000$$

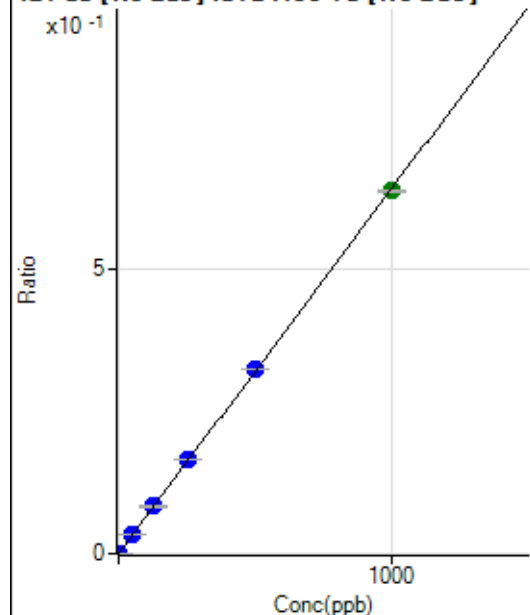
$$DL = 0.0396$$

$$BEC = 0.1428$$

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	258.35	0.0000	P	28.0
2	☐	2.000	1.995	13089.99	0.0013	P	4.8
3	☐	50.000	53.712	364415.35	0.0343	P	0.7
4	☐	125.000	130.278	916091.02	0.0832	P	5.0
5	☐	250.000	257.812	1722057.68	0.1647	P	1.2
6	☐	500.000	504.920	3333476.53	0.3225	P	0.2
7	☐	1000.000	994.742	6626508.35	0.6354	A	0.3
8	☐			10904.66	0.0011	P	6.8

$$y = 6.3872\text{E-}004 * x + 2.4831\text{E-}005$$

$$R = 0.9999$$

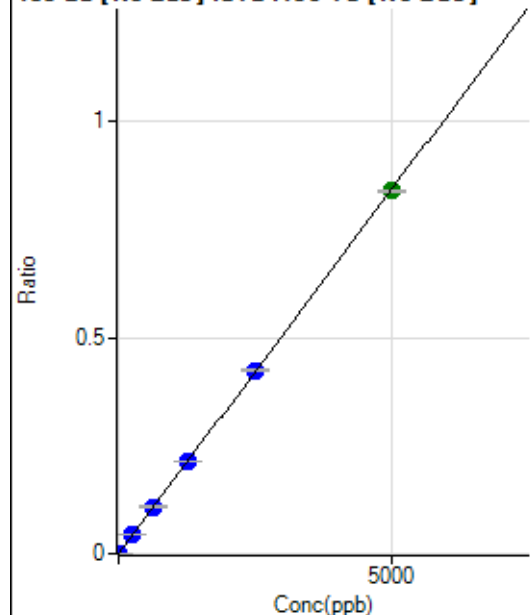
$$DL = 0.03263$$

$$BEC = 0.03888$$

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	33.33	0.0000	P	42.8
2	☐	10.000	10.573	17965.03	0.0018	P	6.2
3	☐	250.000	267.684	478438.32	0.0451	P	1.3
4	☐	625.000	643.017	1191456.64	0.1083	P	5.7
5	☐	1250.000	1269.439	2235038.03	0.2138	P	1.0
6	☐	2500.000	2518.641	4383232.39	0.4241	P	0.4
7	☐	5000.000	4982.682	8749883.62	0.8390	A	0.5
8	☐			1714.07	0.0002	P	4.1

$$y = 1.6838\text{E-}004 * x + 3.1979\text{E-}006$$

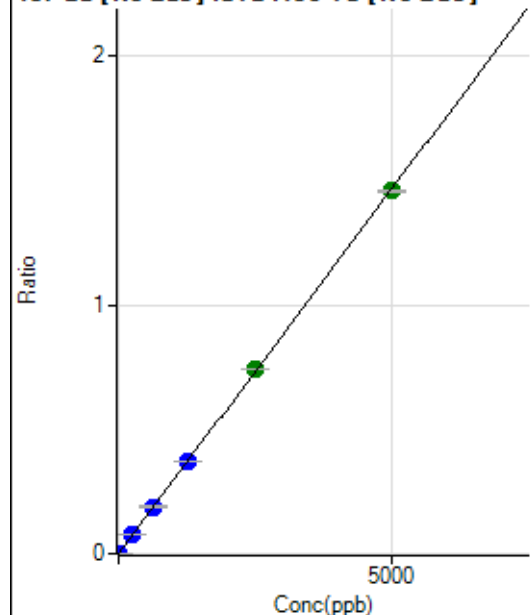
$$R = 1.0000$$

$$DL = 0.02441$$

$$BEC = 0.01899$$

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	36.11	0.0000	P	35.1
2	☐	10.000	10.292	30428.87	0.0030	P	4.8
3	☐	250.000	266.616	829499.51	0.0781	P	0.9
4	☐	625.000	640.398	2065835.05	0.1877	P	5.0
5	☐	1250.000	1273.998	3904341.02	0.3734	P	0.9
6	☐	2500.000	2525.024	7648954.08	0.7401	A	0.3
7	☐	5000.000	4978.732	15218569.61	1.4592	A	0.3
8	☐			3117.15	0.0003	P	3.1

$$y = 2.9309E-004 * x + 3.4665E-006$$

$$R = 1.0000$$

$$DL = 0.01245$$

$$BEC = 0.01183$$

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	☐			6.67		P	100.
3	☐			31.11		P	53.9
4	☐			86.67		P	7.7
5	☐			151.12		P	6.7
6	☐			355.57		P	10.8
7	☐			642.26		P	7.8
8	☐			144.45		P	27.0

150 Nd [He] No available calibration points

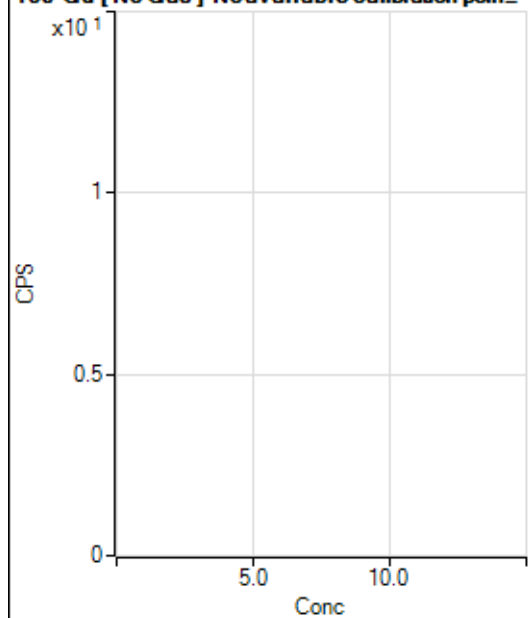
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	65.5
2	☐			4.45		P	86.6
3	☐			14.44		P	53.3
4	☐			18.89		P	36.7
5	☐			24.44		P	41.7
6	☐			38.89		P	9.9
7	☐			57.78		P	20.3
8	☐			54.45		P	24.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.78		P	173.
2	☐			5.56		P	173.
3	☐			13.89		P	34.7
4	☐			27.78		P	17.3
5	☐			16.67		P	50.0
6	☐			86.12		P	29.6
7	☐			152.79		P	27.5
8	☐			69.45		P	55.4

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			12.22		P	56.8
2	☐			12.22		P	15.7
3	☐			27.78		P	42.1
4	☐			32.22		P	15.8
5	☐			56.67		P	35.8
6	☐			107.78		P	12.5
7	☐			161.12		P	4.3
8	☐			31.11		P	37.6

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			55.56		P	45.8
2	☐			66.67		P	12.5
3	☐			63.89		P	15.1
4	☐			77.78		P	32.7
5	☐			44.45		P	10.8
6	☐			38.89		P	32.7
7	☐			100.00		P	14.4
8	☐			97.23		P	9.9

160 Gd [He] No available calibration points

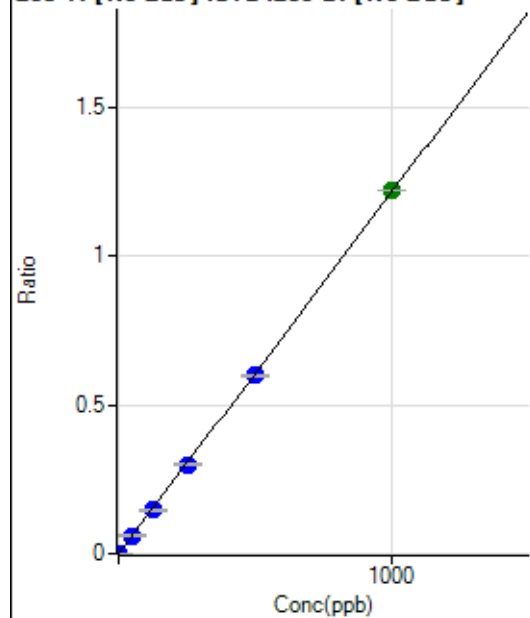
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			167.78		P	15.4
2	☐			158.89		P	7.9
3	☐			163.34		P	7.1
4	☐			173.34		P	25.0
5	☐			192.23		P	16.5
6	☐			166.67		P	12.5
7	☐			172.22		P	11.3
8	☐			167.78		P	6.4

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	33.3
2	☐			41.67		P	87.2
3	☐			44.45		P	43.3
4	☐			58.34		P	24.7
5	☐			75.00		P	57.7
6	☐			58.34		P	37.8
7	☐			47.22		P	36.7
8	☐			69.45		P	6.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	4.9
2	☐			36.67		P	9.1
3	☐			41.11		P	40.8
4	☐			41.11		P	4.7
5	☐			37.78		P	18.4
6	☐			42.22		P	4.6
7	☐			54.44		P	40.8
8	☐			46.67		P	51.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	444.47	0.0001	P	9.7
2	☐	1.000	0.959	7927.68	0.0012	P	1.7
3	☐	50.000	50.295	413574.25	0.0611	P	1.2
4	☐	125.000	121.933	1044674.27	0.1479	P	4.2
5	☐	250.000	247.392	2031926.28	0.3001	P	0.9
6	☐	500.000	492.765	3968735.03	0.5977	P	0.7
7	☐	1000.000	1004.638	8019627.87	1.2184	A	0.2
8	☐			2686.51	0.0005	P	6.9

$$y = 0.0012 * x + 6.6965E-005$$

$$R = 1.0000$$

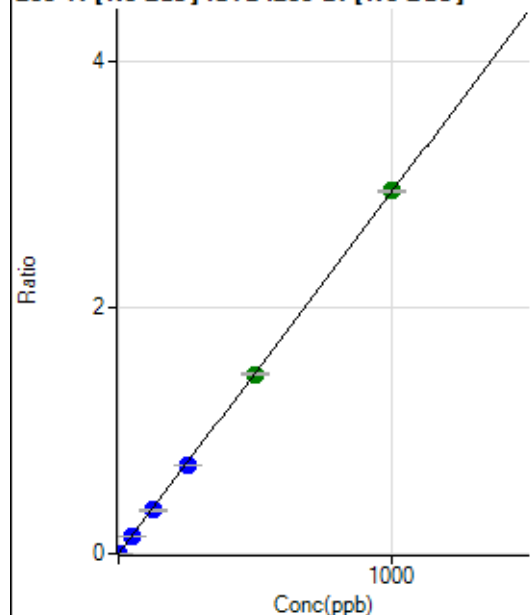
$$DL = 0.01612$$

$$BEC = 0.05522$$

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	738.95	0.0001	P	8.3
2	☐	1.000	0.925	18246.53	0.0028	P	5.3
3	☐	50.000	49.767	992453.87	0.1465	P	1.3
4	☐	125.000	121.137	2517391.35	0.3565	P	4.4
5	☐	250.000	243.961	4860839.00	0.7179	P	1.2
6	☐	500.000	496.791	9706616.19	1.4618	A	0.4
7	☐	1000.000	1003.609	19435893.66	2.9529	A	0.5
8	☐			5893.24	0.0010	P	7.8

$$y = 0.0029 * x + 1.1131E-004$$

$$R = 1.0000$$

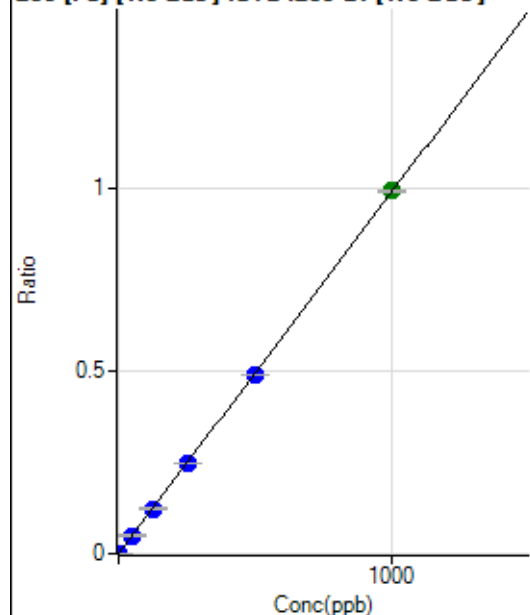
$$DL = 0.009441$$

$$BEC = 0.03783$$

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	700.04	0.0001	P	16.2
2	☐	1.000	0.942	6681.52	0.0010	P	1.3
3	☐	50.000	50.274	337334.88	0.0498	P	2.2
4	☐	125.000	123.129	860188.89	0.1218	P	5.0
5	☐	250.000	249.006	1667658.53	0.2463	P	1.3
6	☐	500.000	493.538	3240878.72	0.4881	P	0.5
7	☐	1000.000	1003.700	6532169.01	0.9924	A	0.4
8	☐			5632.84	0.0010	P	7.1

$$y = 9.8868E-004 * x + 1.0546E-004$$

$$R = 1.0000$$

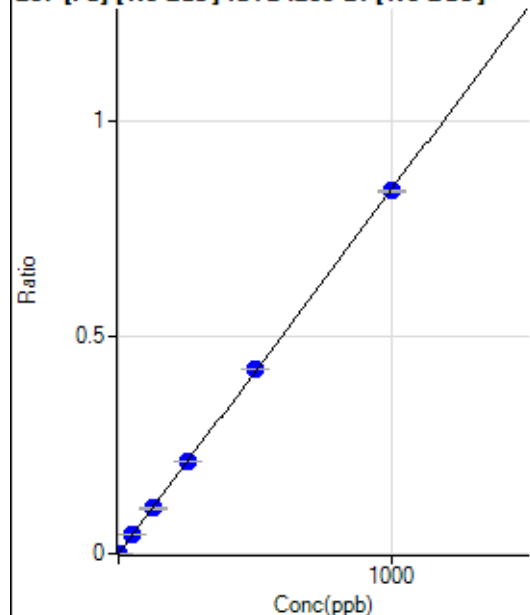
$$DL = 0.05194$$

$$BEC = 0.1067$$

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	624.11	0.0001	P	14.9
2	☐	1.000	0.947	5729.17	0.0009	P	3.5
3	☐	50.000	51.021	290803.88	0.0429	P	2.1
4	☐	125.000	124.547	739126.38	0.1047	P	4.7
5	☐	250.000	253.653	1442883.76	0.2131	P	1.4
6	☐	500.000	505.787	2821085.31	0.4248	P	0.5
7	☐	1000.000	996.199	5506935.31	0.8367	P	0.6
8	☐			4845.48	0.0008	P	5.4

$$y = 8.3977\text{E-}004 * x + 9.4043\text{E-}005$$

$$R = 1.0000$$

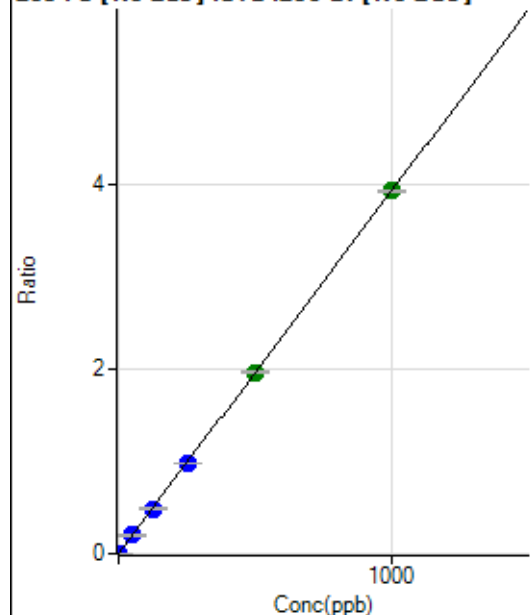
$$DL = 0.05001$$

$$BEC = 0.112$$

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	2444.61	0.0004	P	6.9
2	☐	1.000	0.936	26005.06	0.0040	P	2.4
3	☐	50.000	50.393	1340156.80	0.1979	P	2.2
4	☐	125.000	122.667	3397018.64	0.4812	P	5.1
5	☐	250.000	249.028	6611510.77	0.9765	P	1.2
6	☐	500.000	500.210	13021748.50	1.9610	A	0.4
7	☐	1000.000	1000.410	25811542.82	3.9216	A	0.2
8	☐			22033.64	0.0038	P	5.9

$$y = 0.0039 * x + 3.6830\text{E-}004$$

$$R = 1.0000$$

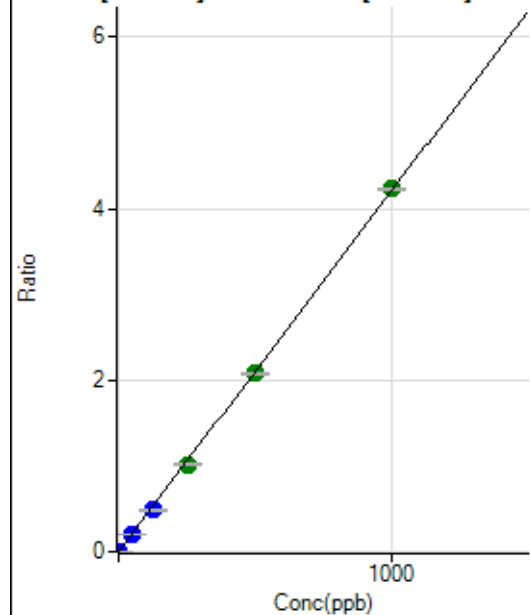
$$DL = 0.01941$$

$$BEC = 0.09396$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1776.10	0.0003	P	4.1
2	☐	1.000	0.797	23289.80	0.0036	P	5.4
3	☐	50.000	46.762	1332403.99	0.1967	P	1.8
4	☐	125.000	115.969	3441678.43	0.4875	P	4.9
5	☐	250.000	241.367	6867838.87	1.0143	A	1.3
6	☐	500.000	493.857	13779362.00	2.0751	A	0.6
7	☐	1000.000	1006.521	27834807.33	4.2289	A	0.8
8	☐			11030.92	0.0019	P	5.2

$$y = 0.0042 * x + 2.6756E-004$$

$$R = 0.9999$$

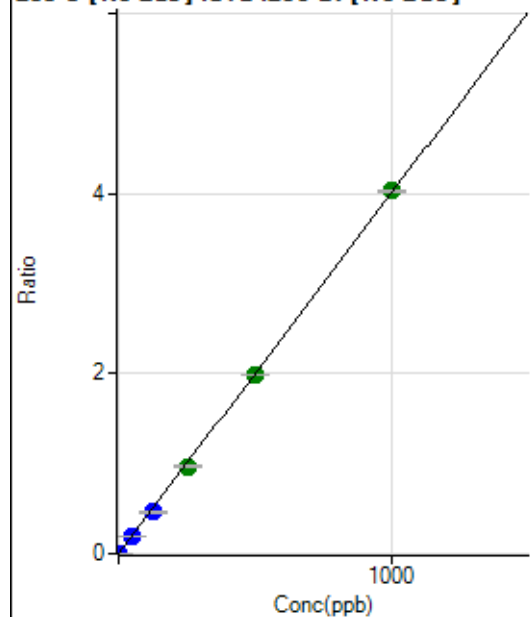
$$DL = 0.007833$$

$$BEC = 0.06369$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1969.69	0.0003	P	7.8
2	☐	1.000	0.862	24198.65	0.0038	P	1.8
3	☐	50.000	46.920	1277476.78	0.1886	P	1.9
4	☐	125.000	116.929	3315925.68	0.4696	P	4.5
5	☐	250.000	242.251	6585580.70	0.9726	A	1.3
6	☐	500.000	495.787	13216217.40	1.9903	A	0.6
7	☐	1000.000	1005.207	26558116.22	4.0349	A	0.8
8	☐			5117.93	0.0009	P	6.2

$$y = 0.0040 * x + 2.9676E-004$$

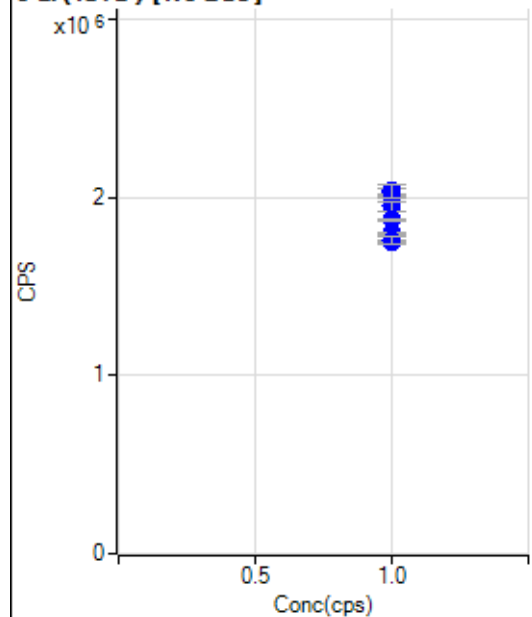
$$R = 0.9999$$

$$DL = 0.01723$$

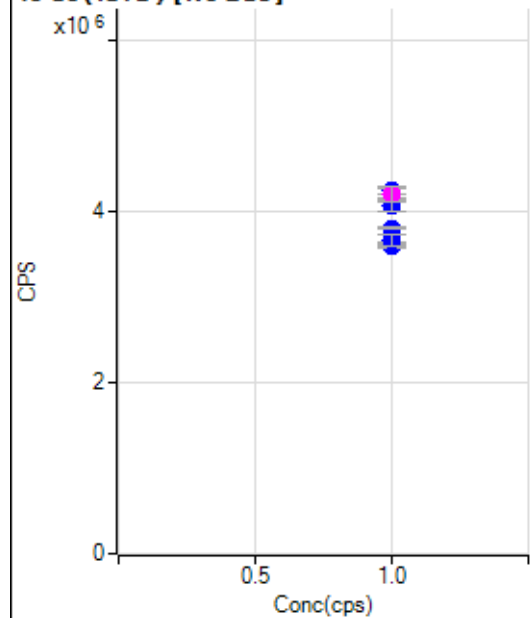
$$BEC = 0.07394$$

Weight: <None>

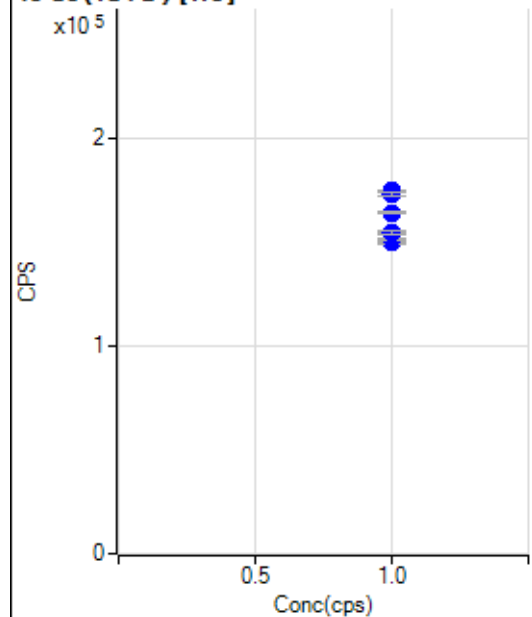
Min Conc: 0

6 Li (ISTD) [No Gas]

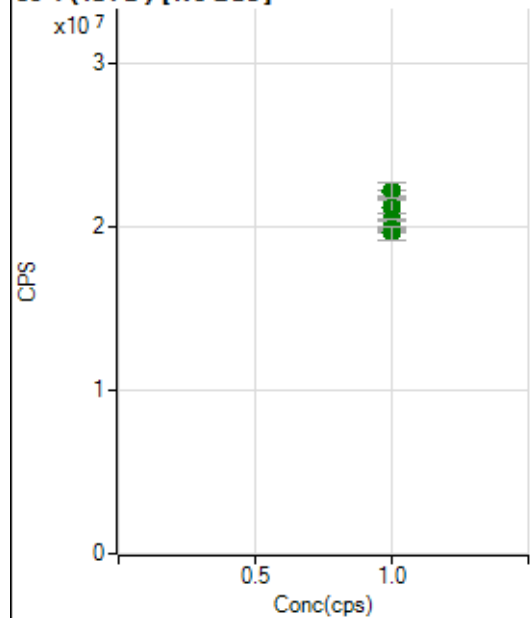
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2013656.35		P	0.7
2	☐	1.000		1949723.73		P	2.6
3	☐	1.000		2034192.56		P	1.5
4	☐	1.000		2037866.79		P	3.4
5	☐	1.000		1874745.67		P	0.4
6	☐	1.000		1798810.10		P	0.7
7	☐	1.000		1752503.34		P	0.5
8	☐	1.000		1762537.99		P	2.4

45 Sc (ISTD) [No Gas]

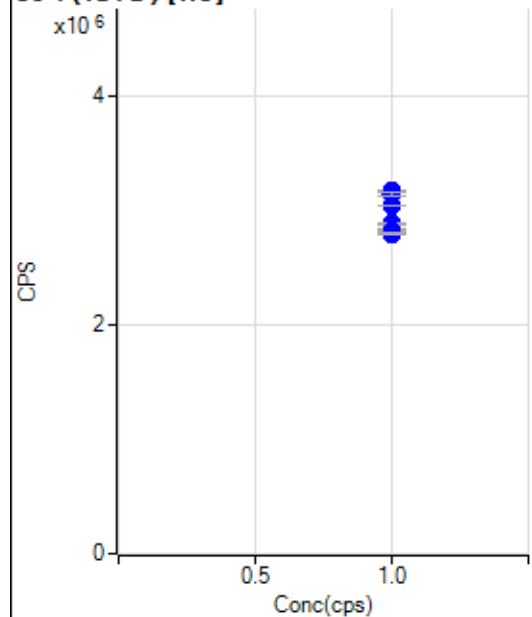
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4163216.98		P	0.2
2	☐	1.000		4066133.42		P	3.5
3	☐	1.000		4246194.80		P	1.5
4	☐	1.000		4213454.52		M	4.3
5	☐	1.000		3813339.54		P	0.5
6	☐	1.000		3637886.10		P	0.7
7	☐	1.000		3601045.22		P	1.0
8	☐	1.000		3676389.01		P	3.7

45 Sc (ISTD) [He]

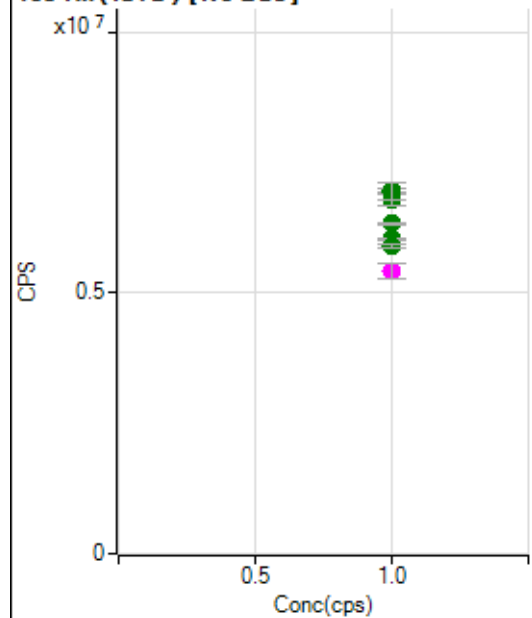
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		174871.78		P	0.5
2	☐	1.000		174837.03		P	0.8
3	☐	1.000		173392.15		P	1.3
4	☐	1.000		164141.53		P	0.6
5	☐	1.000		154554.94		P	0.6
6	☐	1.000		150102.52		P	0.6
7	☐	1.000		151672.83		P	0.7
8	☐	1.000		154554.01		P	1.2

89 Y (ISTD) [No Gas]

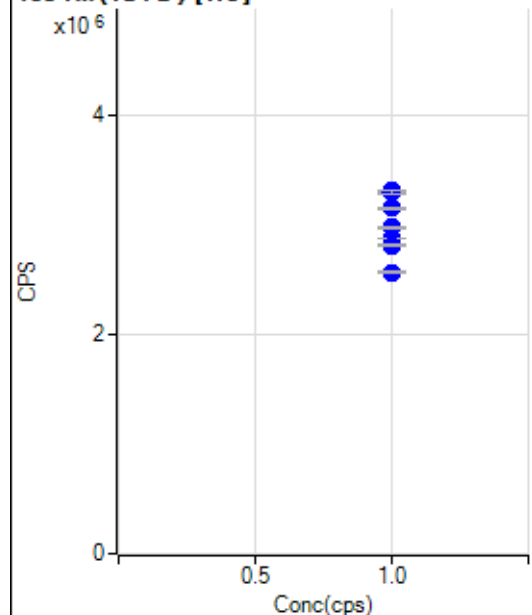
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21804392.18		A	0.2
2	☐	1.000		21272178.16		A	3.4
3	☐	1.000		22112983.00		A	1.4
4	☐	1.000		22235769.11		A	4.2
5	☐	1.000		20471016.36		A	0.3
6	☐	1.000		19894139.56		A	0.6
7	☐	1.000		19768135.12		A	0.5
8	☐	1.000		19634972.63		A	4.0

89 Y (ISTD) [He]

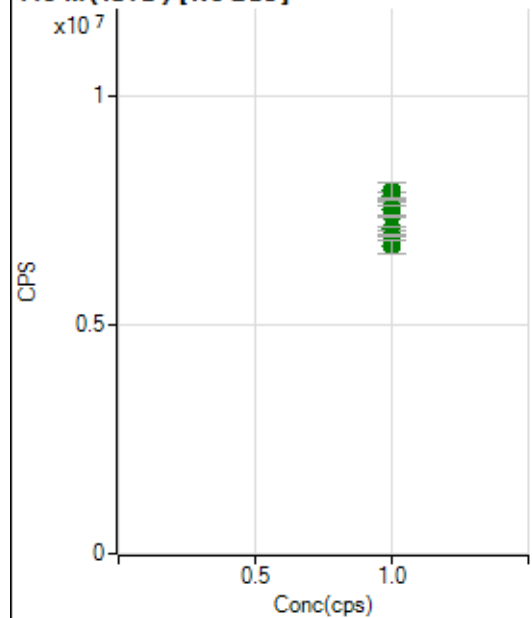
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3169652.24		P	0.4
2	☐	1.000		3159166.62		P	0.5
3	☐	1.000		3142445.34		P	1.2
4	☐	1.000		3037603.39		P	0.1
5	☐	1.000		2883520.48		P	0.8
6	☐	1.000		2829219.64		P	0.1
7	☐	1.000		2814577.43		P	0.4
8	☐	1.000		2796367.35		P	0.5

103 Rh (ISTD) [No Gas]

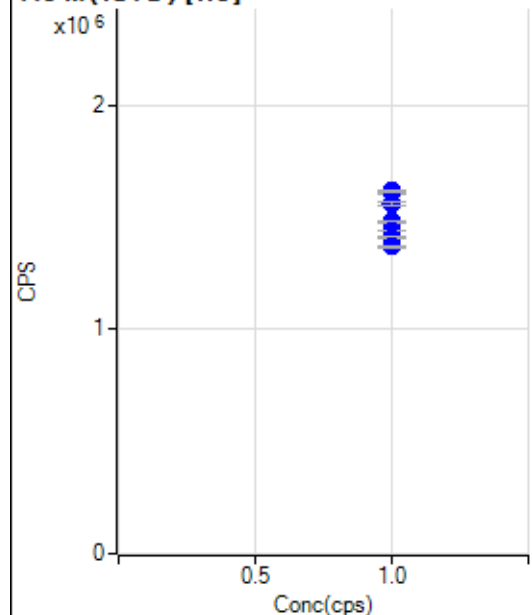
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6924214.56		A	0.5
2	☐	1.000		6768930.45		A	3.3
3	☐	1.000		6948894.69		A	1.7
4	☐	1.000		6955913.39		A	4.8
5	☐	1.000		6335438.08		A	0.6
6	☐	1.000		6044194.02		A	0.6
7	☐	1.000		5891488.98		A	0.9
8	☐	1.000		5420480.16		M	5.6

103 Rh (ISTD) [He]

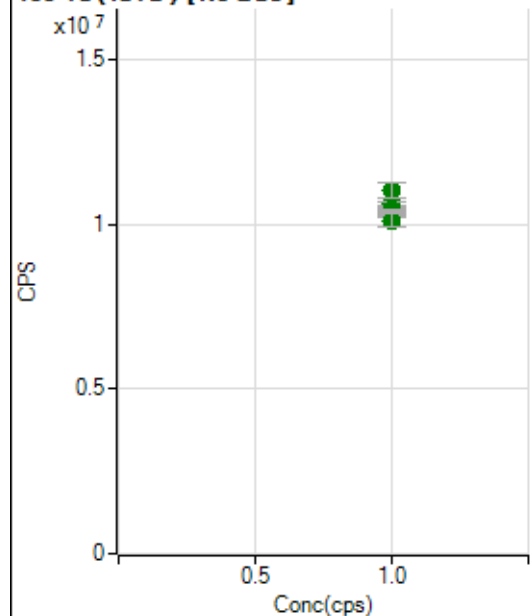
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3304031.97		P	0.5
2	☐	1.000		3300740.58		P	0.3
3	☐	1.000		3285777.83		P	1.1
4	☐	1.000		3143804.02		P	0.7
5	☐	1.000		2970596.14		P	0.2
6	☐	1.000		2869241.38		P	0.2
7	☐	1.000		2804586.42		P	0.6
8	☐	1.000		2559012.29		P	0.6

115 In (ISTD) [No Gas]

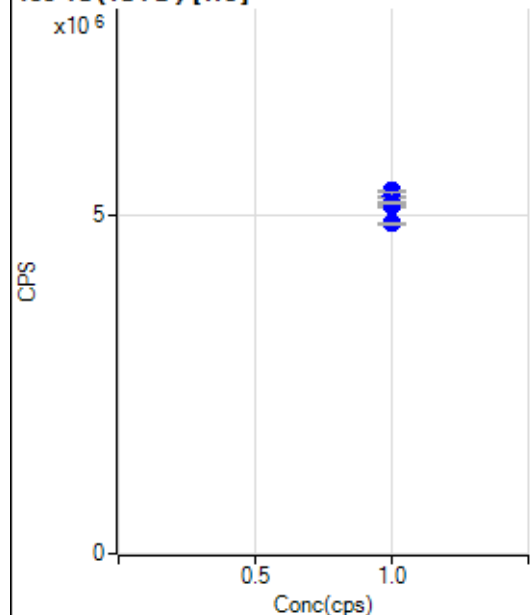
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7700492.64		A	0.4
2	☐	1.000		7513731.33		A	2.9
3	☐	1.000		7820398.67		A	2.1
4	☐	1.000		7937282.85		A	4.2
5	☐	1.000		7392182.86		A	0.7
6	☐	1.000		7108443.01		A	0.9
7	☐	1.000		6952938.73		A	0.8
8	☐	1.000		6720064.65		A	4.3

115 In (ISTD) [He]

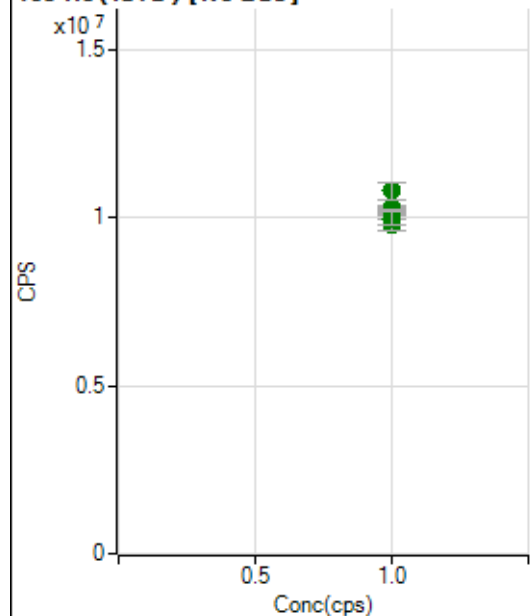
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1617716.38		P	0.3
2	☐	1.000		1610972.85		P	0.5
3	☐	1.000		1614011.18		P	0.5
4	☐	1.000		1556941.85		P	1.1
5	☐	1.000		1482309.13		P	0.7
6	☐	1.000		1443163.32		P	0.1
7	☐	1.000		1409063.23		P	0.8
8	☐	1.000		1368109.18		P	0.7

159 Tb (ISTD) [No Gas]

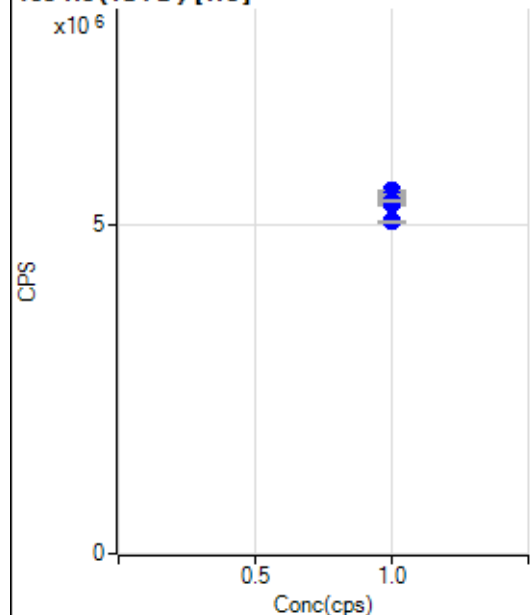
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10411344.36		A	0.5
2	☐	1.000		10086253.39		A	3.3
3	☐	1.000		10615111.79		A	1.2
4	☐	1.000		11021113.59		A	4.1
5	☐	1.000		10456347.00		A	0.8
6	☐	1.000		10335556.72		A	0.6
7	☐	1.000		10429248.11		A	0.7
8	☐	1.000		10117135.55		A	4.1

159 Tb (ISTD) [He]

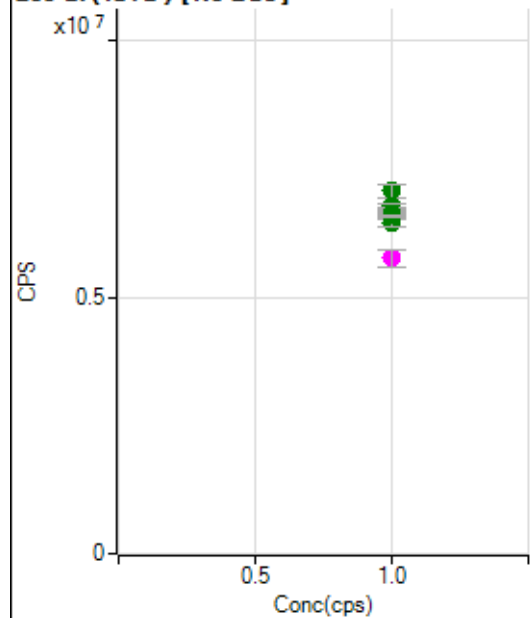
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5280594.88		P	0.5
2	☐	1.000		5264429.40		P	0.5
3	☐	1.000		5364913.67		P	0.7
4	☐	1.000		5300541.97		P	1.3
5	☐	1.000		5151555.69		P	0.8
6	☐	1.000		5152268.47		P	0.2
7	☐	1.000		5184212.08		P	0.8
8	☐	1.000		4885886.46		P	0.4

165 Ho (ISTD) [No Gas]

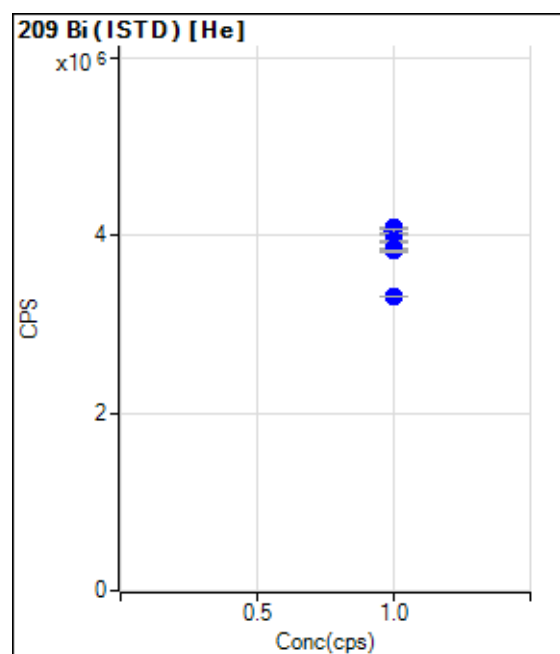
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10137712.64		A	1.0
2	☐	1.000		9780984.08		A	3.2
3	☐	1.000		10293234.00		A	1.0
4	☐	1.000		10789976.54		A	4.8
5	☐	1.000		10234127.40		A	1.0
6	☐	1.000		10159957.00		A	0.5
7	☐	1.000		10236099.79		A	0.4
8	☐	1.000		9974591.63		A	4.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5405849.57		P	0.3
2	☐	1.000		5364873.81		P	0.5
3	☐	1.000		5513501.52		P	0.7
4	☐	1.000		5440562.83		P	0.5
5	☐	1.000		5336431.10		P	0.7
6	☐	1.000		5307258.39		P	0.5
7	☐	1.000		5349739.85		P	0.5
8	☐	1.000		5051777.74		P	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6637831.43		A	0.2
2	☐	1.000		6445346.50		A	2.5
3	☐	1.000		6773835.59		A	1.5
4	☐	1.000		7068785.94		A	3.7
5	☐	1.000		6771280.87		A	0.9
6	☐	1.000		6640498.65		A	0.5
7	☐	1.000		6581941.78		A	0.4
8	☐	1.000		5756036.58		M	5.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4022288.76		P	0.5
2	☐	1.000		4010314.00		P	0.5
3	☐	1.000		4083042.37		P	0.7
4	☐	1.000		4055473.72		P	1.0
5	☐	1.000		3932572.51		P	0.8
6	☐	1.000		3850573.00		P	0.0
7	☐	1.000		3823774.11		P	0.5
8	☐	1.000		3308035.33		P	0.3

US EPA Tune Check Sample Report

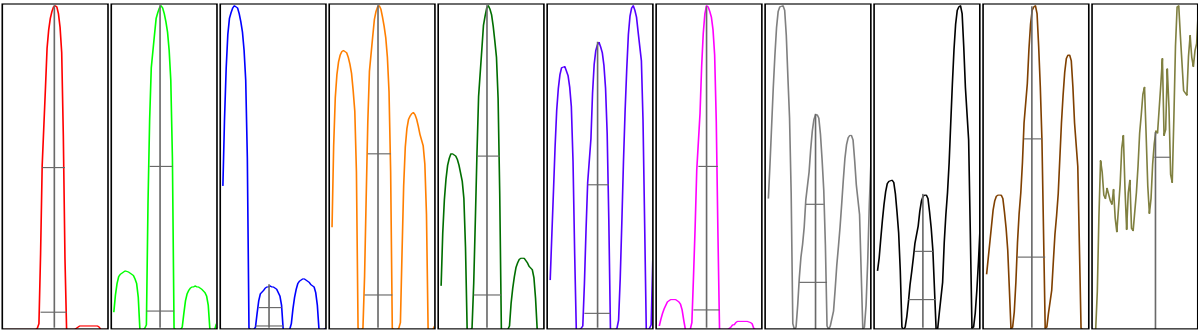
Batch Folder D:\ICP-MS Data\P708019-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6556	0.40	5.00	
24	207235	0.54	5.00	
25	28045	0.38	5.00	
26	31646	0.58	5.00	
59	58352	0.33	5.00	
113	9521	0.47	5.00	
115	113240	0.99	5.00	
206	30344	0.39	5.00	
207	30639	0.89	5.00	
208	65601	0.57	5.00	
220	90	4.73		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6520	6552	6548	6591	6568
24	205667	206459	208213	207875	207959
25	27892	28000	28053	28112	28170
26	31357	31580	31711	31795	31789
59	58067	58371	58560	58478	58285
113	9585	9532	9509	9518	9461
115	114915	113670	113043	112563	112011
206	30169	30278	30436	30436	30399
207	30198	30601	30736	30935	30726
208	65204	65286	65711	66141	65666
220	85	86	94	92	93

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	11043	9.00	8.9 - 9.1		0.780	0.900	
24	319335	23.90	23.9 - 24.1		0.789	0.900	
25	42602	24.90	24.9 - 25.1		0.790	0.900	
26	49490	25.90	25.9 - 26.1		0.807	0.900	
59	94851	58.90	58.9 - 59.1		0.801	0.900	
113	16801	112.95	112.9 - 113.1		0.778	0.900	
115	203772	114.95	114.9 - 115.1		0.776	0.900	
206	53171	205.95	205.9 - 206.1		0.781	0.900	
207	48104	206.90	206.9 - 207.1		0.757	0.900	
208	115202	207.90	207.9 - 208.1		0.781	0.900	
220	91	220.35	-				

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	7.3	V	Deflect	14.2	V
Extract 2	-90.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-50	V	Cell Exit	-50	V			

Cell Parameters

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

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	14338	0.40	
89	32272	0.32	
205	27978	0.30	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	14313	14349	14259	14415	14353
89	32205	32311	32129	32387	32330
205	27949	28013	27947	28102	27878

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	1.6	V
Extract 2	-100.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-50	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			