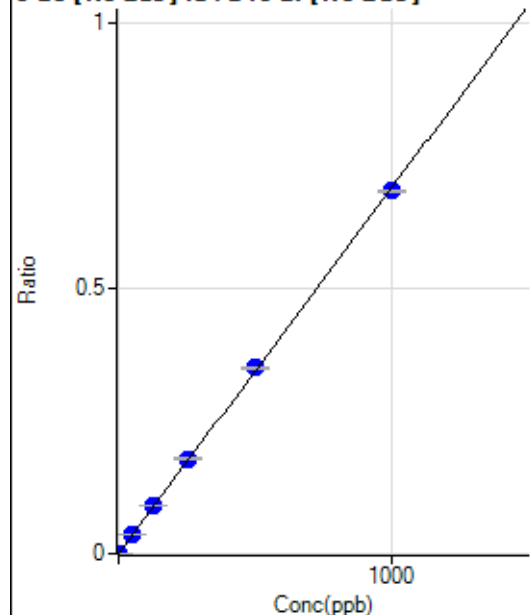


Batch Folder: D:\ICP-MS Data\P7080419 MS.b\
Analysis File: P7080419 MS.batch.bin
DA Date-Time: 2019-08-05 03:42:05
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-08-04 14:04:32
2	003CALS.d	S02	2019-08-04 14:08:09
3	004CALS.d	S03	2019-08-04 14:12:47
4	005CALS.d	S04	2019-08-04 14:16:44
5	006CALS.d	S05	2019-08-04 14:20:36
6	007CALS.d	S06	2019-08-04 14:24:27
7	008CALS.d	S07	2019-08-04 14:28:15
8	009CALS.d	S08	2019-08-04 14:32:01

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	63.33	0.0000	P	19.3
2	☒	1.000	1.020	1703.46	0.0007	P	3.2
3	☐	50.000	53.001	84887.62	0.0365	P	0.9
4	☐	125.000	131.770	203879.49	0.0907	P	0.6
5	☐	250.000	260.196	380570.86	0.1791	P	0.7
6	☐	500.000	507.882	742333.82	0.3495	P	0.2
7	☐	1000.000	992.514	1456859.39	0.6831	P	0.5
8	☐			298.90	0.0001	P	6.2

$$y = 6.8820\text{E-}004 * x + 2.7263\text{E-}005$$

$$R = 0.9999$$

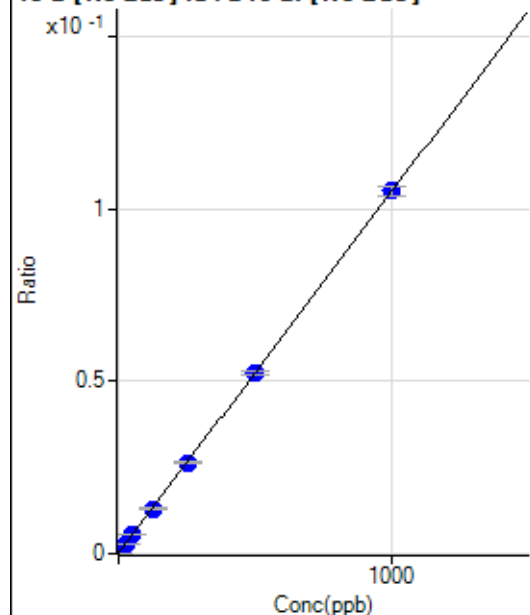
$$DL = 0.02296$$

$$BEC = 0.03961$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	394.46	0.0002	P	7.7
2	☒	25.000	23.107	6054.24	0.0026	P	2.4
3	☐	50.000	49.497	12455.62	0.0054	P	1.8
4	☐	125.000	122.386	29198.53	0.0130	P	2.2
5	☐	250.000	249.646	55943.04	0.0263	P	2.3
6	☐	500.000	496.332	110793.64	0.0522	P	2.2
7	☐	1000.000	1002.322	224366.66	0.1052	P	3.0
8	☐			12861.45	0.0063	P	6.1

$$y = 1.0478\text{E-}004 * x + 1.6970\text{E-}004$$

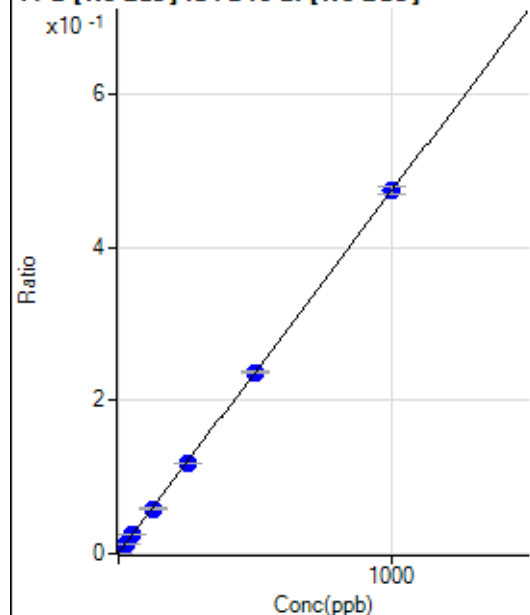
$$R = 1.0000$$

$$DL = 0.3763$$

$$BEC = 1.62$$

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	1655.72	0.0007	P	6.5
2	☒	25.000	23.552	27717.99	0.0119	P	1.1
3	☐	50.000	50.006	56699.20	0.0244	P	2.8
4	☐	125.000	121.985	131370.19	0.0585	P	2.6
5	☐	250.000	247.266	250248.47	0.1178	P	0.7
6	☐	500.000	500.148	504299.00	0.2375	P	1.7
7	☐	1000.000	1001.022	1012254.21	0.4746	P	2.3
8	☐			57716.82	0.0285	P	3.9

$$y = 4.7339\text{E-}004 * x + 7.1220\text{E-}004$$

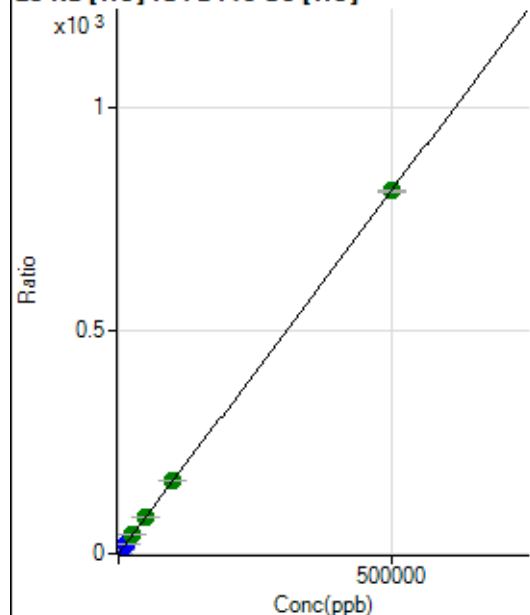
$$R = 1.0000$$

$$DL = 0.2945$$

$$BEC = 1.504$$

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	5434.54	0.0319	P	1.4
2	☒	500.000	492.017	140075.49	0.8312	P	1.0
3	☐	5000.000	5157.633	1360867.68	8.4100	P	0.3
4	☐	12500.000	12712.378	3215980.82	20.6821	P	0.3
5	☐	25000.000	25680.722	6087579.78	41.7480	A	0.8
6	☐	50000.000	50921.469	12463272.76	82.7494	A	0.7
7	☐	100000.00	99846.034	25244424.87	162.2230	A	0.7
8	☐	500000.00	499897.73	128739594.5	812.0716	A	0.6

$$y = 0.0016 * x + 0.0319$$

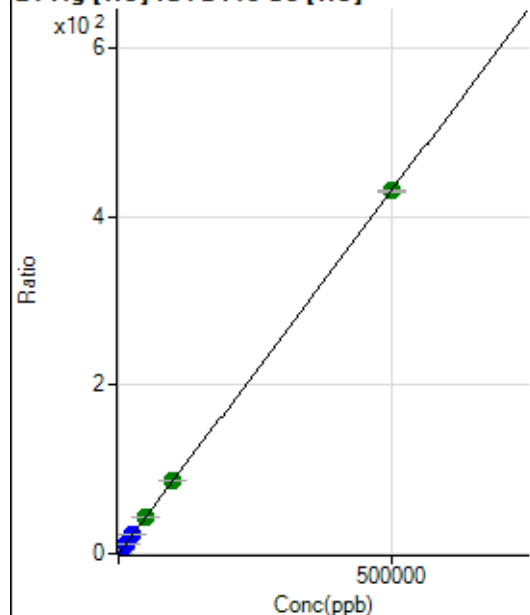
$$R = 1.0000$$

$$DL = 0.8189$$

$$BEC = 19.66$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	69.45	0.0004	P	70.7
2	☒	500.000	497.715	72277.82	0.4289	P	1.3
3	☐	5000.000	5146.501	716931.42	4.4306	P	0.5
4	☐	12500.000	12674.610	1696608.83	10.9110	P	0.7
5	☐	25000.000	25639.583	3218421.04	22.0715	P	0.7
6	☐	50000.000	51199.822	6638064.99	44.0742	A	1.0
7	☐	100000.00	100088.88	13408164.54	86.1589	A	0.2
8	☐	500000.00	499824.43	68210295.27	430.2592	A	0.4

$$y = 8.6082\text{E-}004 * x + 4.0866\text{E-}004$$

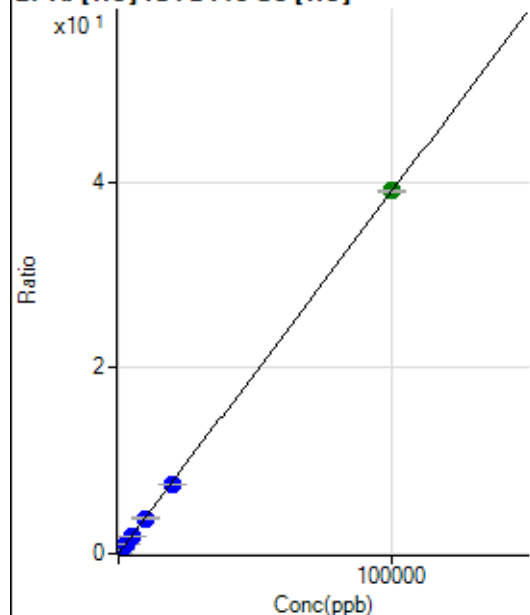
$$R = 1.0000$$

$$DL = 1.006$$

$$BEC = 0.4747$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0002	P	34.7
2	☒	20.000	19.586	1314.00	0.0078	P	2.1
3	☐	1000.000	995.388	62794.10	0.3881	P	1.2
4	☐	2500.000	2448.285	148389.79	0.9543	P	0.5
5	☐	5000.000	4945.224	281050.77	1.9274	P	0.7
6	☐	10000.000	9800.162	575250.98	3.8194	P	1.0
7	☐	20000.000	19020.729	1153550.48	7.4128	P	0.7
8	☐	100000.00	100219.91	6191869.06	39.0574	A	0.6

$$y = 3.8971\text{E-}004 * x + 1.6327\text{E-}004$$

$$R = 0.9999$$

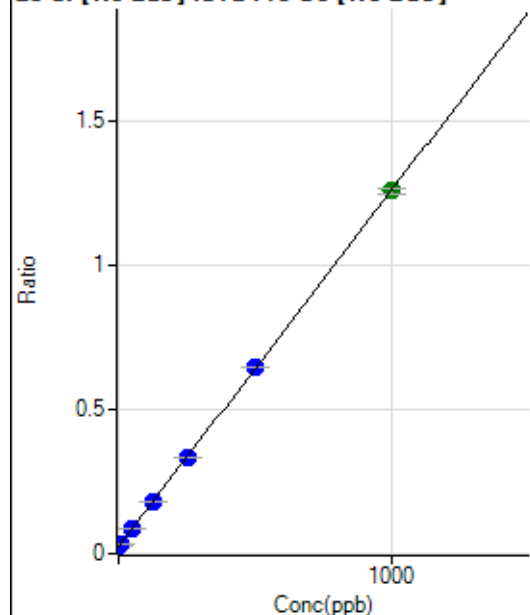
$$DL = 0.4367$$

$$BEC = 0.419$$

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	104891.06	0.0248	P	1.3
2	☒	10.000	8.673	151838.93	0.0355	P	0.9
3	☐	50.000	48.759	359816.67	0.0850	P	1.2
4	☐	125.000	124.755	728142.40	0.1789	P	0.7
5	☐	250.000	251.786	1277941.02	0.3358	P	0.5
6	☐	500.000	502.426	2449488.49	0.6455	P	0.2
7	☐	1000.000	998.447	4852636.31	1.2582	A	1.4
8	☐			465885.46	0.1236	P	5.4

$$y = 0.0012 * x + 0.0248$$

$$R = 1.0000$$

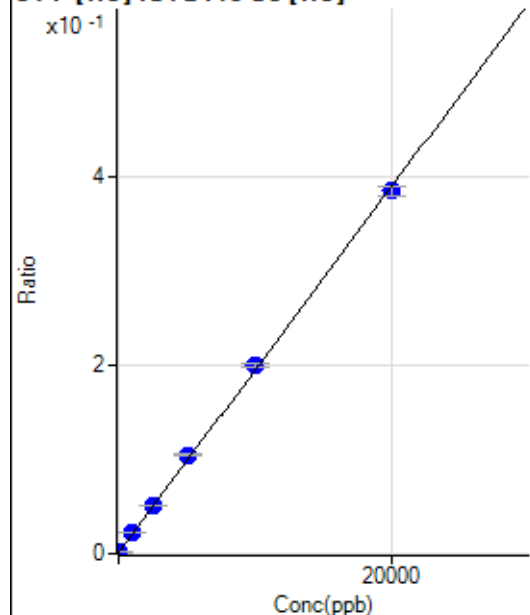
$$DL = 0.8035$$

$$BEC = 20.09$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-25.140	75.01	0.0004	P	19.4
2	☒	0.000	25.140	238.90	0.0014	P	11.3
3	☐	1000.000	1115.981	3658.95	0.0226	P	6.8
4	☐	2500.000	2597.330	7991.34	0.0514	P	1.7
5	☐	5000.000	5337.593	15255.65	0.1046	P	2.7
6	☐	10000.000	10248.955	30134.21	0.2001	P	2.5
7	☐	20000.000	19773.159	59924.21	0.3851	P	2.4
8	☐			69.45	0.0004	P	61.8

$$y = 1.9429E-005 * x + 9.2925E-004$$

$$R = 0.9997$$

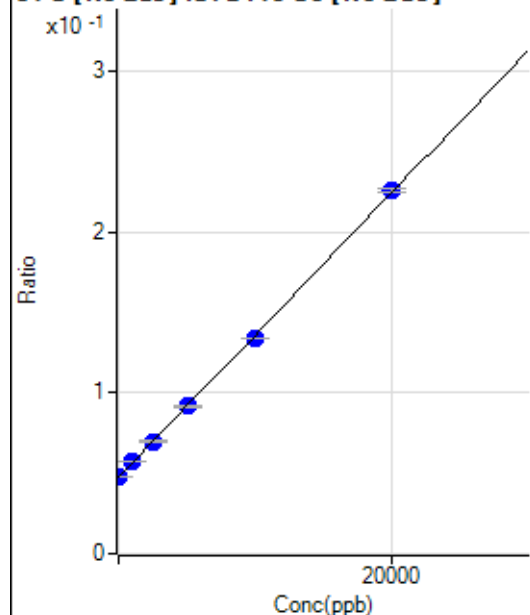
$$DL = 19.01$$

$$BEC = 47.83$$

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	10.791	201578.24	0.0477	P	1.5
2	☒	0.000	-10.791	202985.16	0.0475	P	0.1
3	☐	1000.000	1102.229	242639.53	0.0573	P	0.3
4	☐	2500.000	2519.205	284472.56	0.0699	P	1.0
5	☐	5000.000	4969.564	348518.70	0.0916	P	0.7
6	☐	10000.000	9757.554	508467.02	0.1340	P	0.4
7	☐	20000.000	20121.320	870638.78	0.2257	P	1.0
8	☐			161519.50	0.0429	P	7.5

$$y = 8.8540E-006 * x + 0.0476$$

R = 0.9999

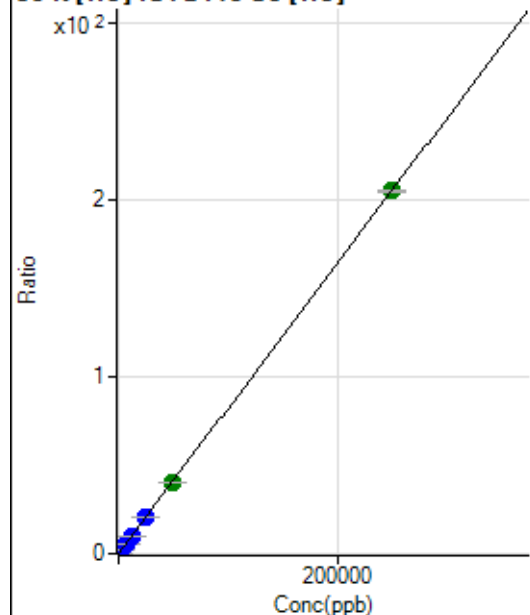
DL = 129

BEC = 5375

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	9848.13	0.0579	P	5.4
2	☒	500.000	487.597	77072.89	0.4573	P	1.6
3	☐	2500.000	2558.541	348540.22	2.1540	P	0.7
4	☐	6250.000	6213.004	800492.27	5.1480	P	0.3
5	☐	12500.000	12486.815	1500167.26	10.2879	P	0.7
6	☐	25000.000	24613.685	3045995.64	20.2231	P	0.5
7	☐	50000.000	49039.349	6261234.91	40.2343	A	0.3
8	☐	250000.00	250231.78	32509868.44	205.0651	A	0.3

$$y = 8.1927E-004 * x + 0.0579$$

R = 1.0000

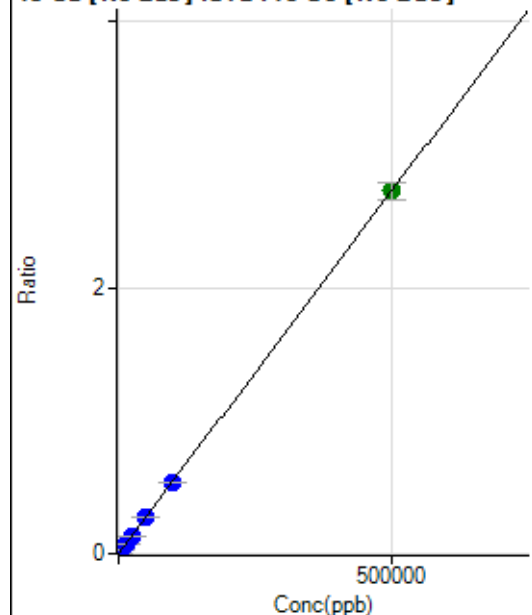
DL = 11.4

BEC = 70.63

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	130.56	0.0000	P	32.7
2	☒	500.000	486.567	11454.94	0.0027	P	1.2
3	☐	5000.000	4989.064	115062.09	0.0272	P	2.7
4	☐	12500.000	12405.220	275030.93	0.0676	P	0.5
5	☐	25000.000	24765.551	513251.74	0.1349	P	0.5
6	☐	50000.000	49470.763	1022365.03	0.2694	P	0.7
7	☐	100000.00	98254.827	2063491.93	0.5350	P	0.9
8	☐	500000.00	500416.17	10270167.85	2.7249	A	5.0

$$y = 5.4451\text{E-}006 * x + 3.0870\text{E-}005$$

$$R = 1.0000$$

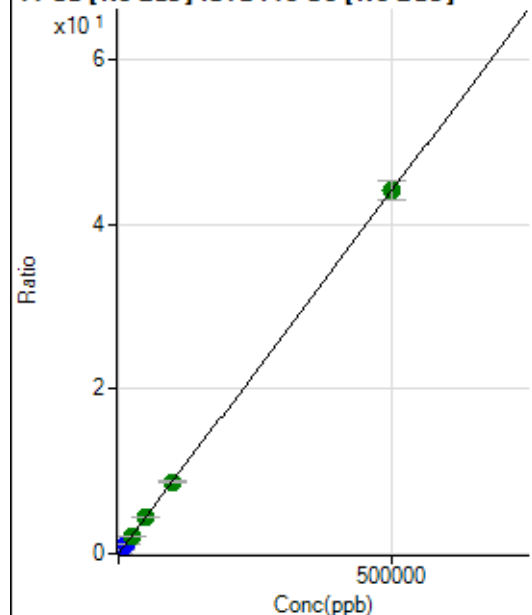
$$DL = 5.553$$

$$BEC = 5.669$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6883.33	0.0016	P	2.1
2	☒	500.000	467.189	182874.42	0.0428	P	0.6
3	☐	5000.000	4916.500	1839620.92	0.4348	P	0.6
4	☐	12500.000	12290.424	4413485.52	1.0844	P	0.1
5	☐	25000.000	24762.467	8307839.42	2.1833	A	0.1
6	☐	50000.000	49857.554	16675962.87	4.3942	A	0.1
7	☐	100000.00	99218.332	33719922.63	8.7430	A	0.6
8	☐	500000.00	500188.56	166088253.7	44.0697	A	5.3

$$y = 8.8103\text{E-}005 * x + 0.0016$$

$$R = 1.0000$$

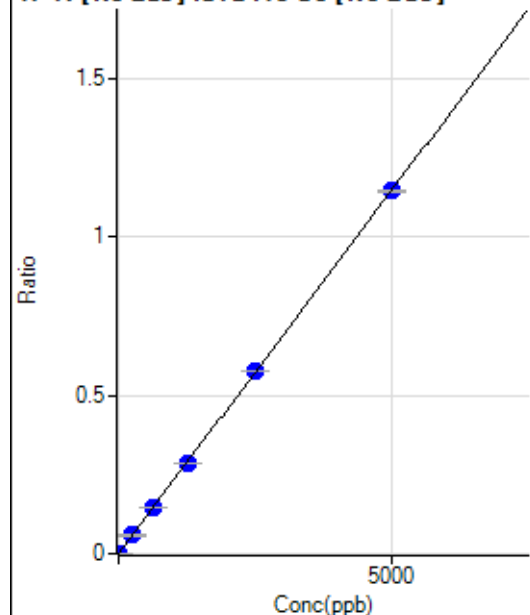
$$DL = 1.147$$

$$BEC = 18.48$$

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	80.56	0.0000	P	32.0
2	☒	5.000	5.148	5131.66	0.0012	P	0.4
3	☐	250.000	251.894	244696.39	0.0578	P	1.2
4	☐	625.000	626.392	585203.06	0.1438	P	0.1
5	☐	1250.000	1253.068	1094491.86	0.2876	P	0.7
6	☐	2500.000	2505.596	2182578.59	0.5751	P	0.0
7	☐	5000.000	4996.166	4422813.64	1.1468	P	0.6
8	☐			1666.84	0.0004	P	5.7

$$y = 2.2953\text{E-}004 * x + 1.9074\text{E-}005$$

$$R = 1.0000$$

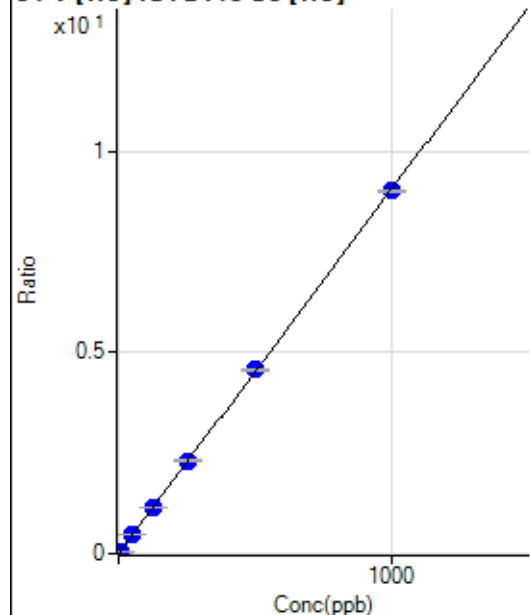
$$DL = 0.07983$$

$$BEC = 0.0831$$

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	3.33	0.0000	P	173.2
2	☒	5.000	5.178	7913.34	0.0470	P	1.7
3	☐	50.000	52.045	76336.31	0.4718	P	1.1
4	☐	125.000	126.598	178442.10	1.1476	P	0.2
5	☐	250.000	255.592	337840.29	2.3168	P	0.8
6	☐	500.000	504.892	689305.99	4.5766	P	1.0
7	☐	1000.000	995.853	1404708.36	9.0269	P	0.9
8	☐			293.34	0.0018	P	10.0

$$y = 0.0091 * x + 1.9658\text{E-}005$$

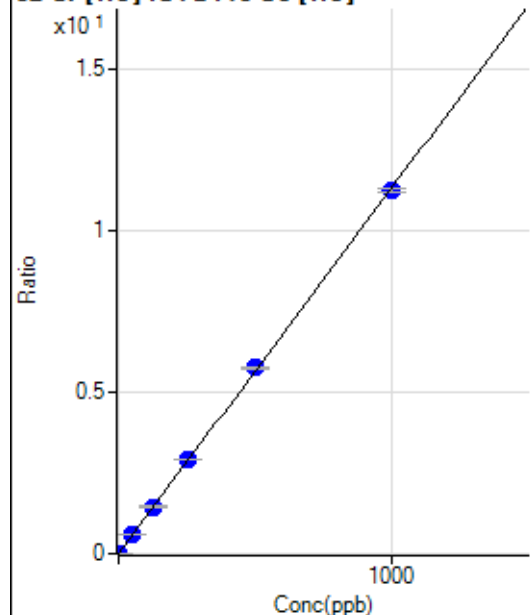
$$R = 1.0000$$

$$DL = 0.01127$$

$$BEC = 0.002169$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	336.68	0.0020	P	3.9
2	☒	2.000	2.034	4214.01	0.0250	P	2.1
3	☐	50.000	52.803	97053.62	0.5998	P	0.6
4	☐	125.000	128.611	226723.04	1.4581	P	0.6
5	☐	250.000	258.517	427090.27	2.9288	P	0.2
6	☐	500.000	508.856	868003.67	5.7630	P	0.9
7	☐	1000.000	992.851	1749495.69	11.2426	P	1.0
8	☐			27149.67	0.1713	P	0.4

$$y = 0.0113 * x + 0.0020$$

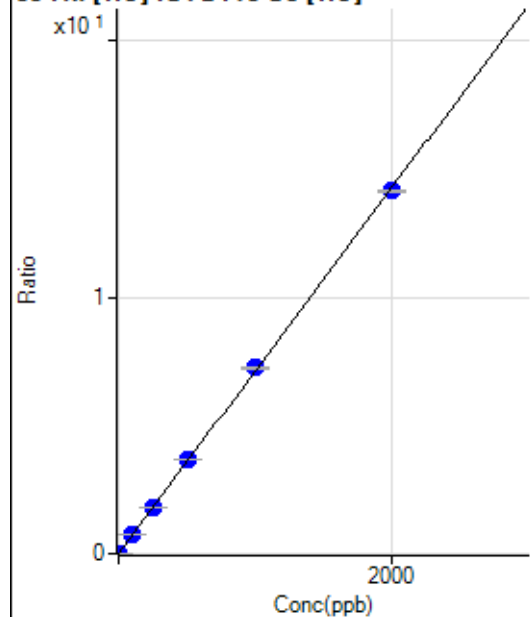
$$R = 0.9999$$

$$DL = 0.02035$$

$$BEC = 0.1747$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	35.56	0.0002	P	21.4
2	☒	1.000	1.030	1272.30	0.0075	P	2.5
3	☐	100.000	104.584	120665.03	0.7457	P	1.2
4	☐	250.000	255.704	283470.21	1.8230	P	0.3
5	☐	500.000	519.649	540198.23	3.7045	P	0.4
6	☐	1000.000	1018.028	1093068.45	7.2572	P	0.7
7	☐	2000.000	1985.132	2202178.18	14.1513	P	0.6
8	☐			8473.67	0.0535	P	2.2

$$y = 0.0071 * x + 2.0883E-004$$

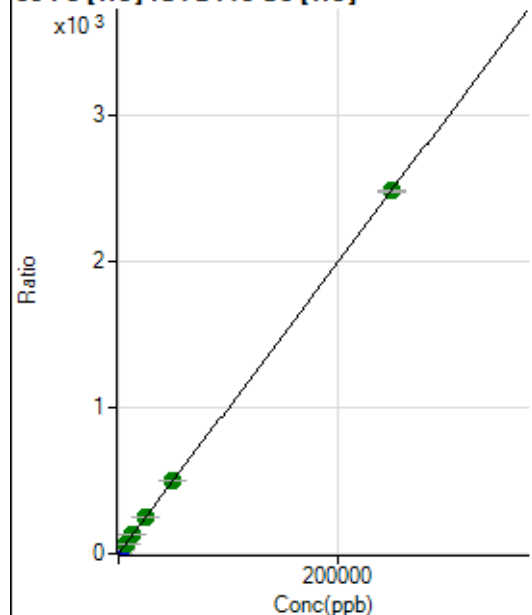
$$R = 0.9999$$

$$DL = 0.01878$$

$$BEC = 0.02929$$

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	2174.30	0.0128	P	2.4
2	☒	50.000	53.856	92205.02	0.5471	P	2.0
3	☐	2500.000	2636.149	4234376.19	26.1685	P	0.7
4	☐	6250.000	6429.761	9921999.07	63.8085	A	0.5
5	☐	12500.000	13012.231	18827876.58	129.1195	A	0.8
6	☐	25000.000	25677.402	38374623.08	254.7827	A	0.6
7	☐	50000.000	50005.542	77211290.62	496.1653	A	0.7
8	☐	250000.00	249899.68	393080982.8	2,479.504	A	0.7

$$y = 0.0099 * x + 0.0128$$

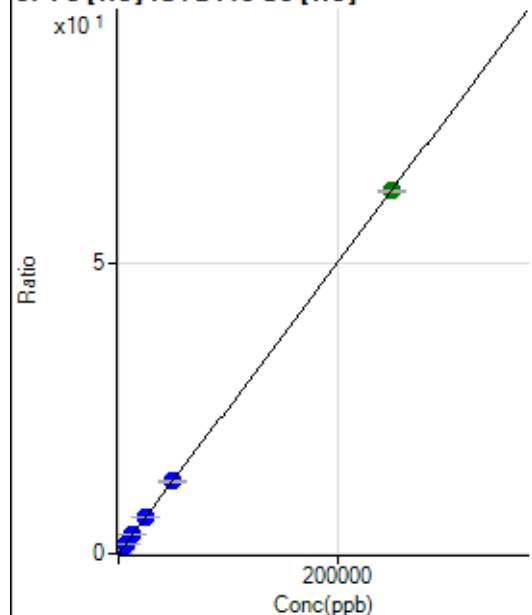
$$R = 1.0000$$

$$DL = 0.09385$$

$$BEC = 1.288$$

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	146.30	0.0009	P	2.1
2	☒	50.000	49.932	2252.08	0.0134	P	4.1
3	☐	2500.000	2632.280	106770.88	0.6599	P	1.7
4	☐	6250.000	6466.550	251882.39	1.6199	P	0.5
5	☐	12500.000	12975.985	473871.42	3.2496	P	0.3
6	☐	25000.000	25606.434	965731.96	6.4118	P	0.4
7	☐	50000.000	49819.978	1941171.70	12.4741	P	0.7
8	☐	250000.00	249944.82	9920832.17	62.5786	A	0.4

$$y = 2.5037E-004 * x + 8.5963E-004$$

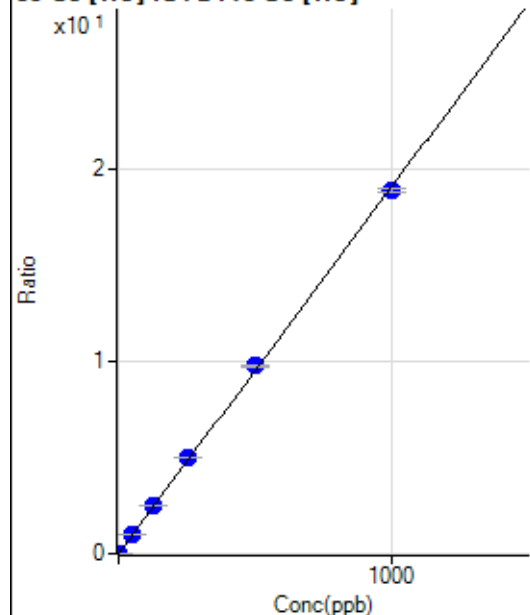
$$R = 1.0000$$

$$DL = 0.2118$$

$$BEC = 3.433$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	46.67	0.0003	P	37.6
2	☒	1.000	1.019	3319.33	0.0197	P	3.5
3	☐	50.000	53.969	166471.97	1.0288	P	0.4
4	☐	125.000	131.393	389399.09	2.5042	P	0.3
5	☐	250.000	261.482	726670.07	4.9834	P	0.5
6	☐	500.000	512.798	1471941.12	9.7727	P	0.9
7	☐	1000.000	989.733	2935112.28	18.8617	P	1.0
8	☐			36198.06	0.2283	P	1.4

$$y = 0.0191 * x + 2.7406E-004$$

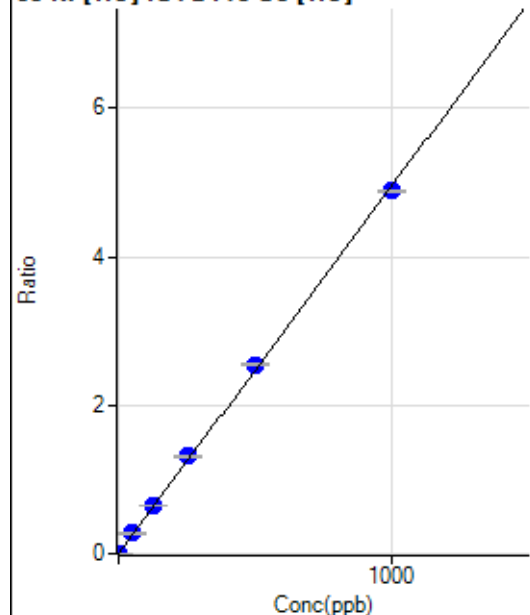
$$R = 0.9998$$

$$DL = 0.01622$$

$$BEC = 0.01438$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	44.44	0.0003	P	4.2
2	☒	1.000	1.031	903.38	0.0054	P	8.5
3	☐	50.000	55.043	44088.47	0.2725	P	1.4
4	☐	125.000	132.813	102176.11	0.6571	P	0.5
5	☐	250.000	264.506	190792.95	1.3084	P	0.4
6	☐	500.000	514.952	383607.76	2.5470	P	1.0
7	☐	1000.000	987.669	760153.19	4.8848	P	0.8
8	☐			13420.74	0.0847	P	2.0

$$y = 0.0049 * x + 2.6113E-004$$

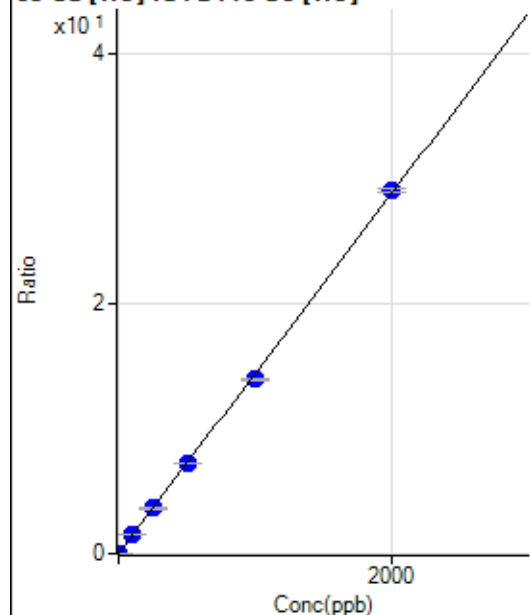
$$R = 0.9997$$

$$DL = 0.006619$$

$$BEC = 0.0528$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	426.68	0.0025	P	9.4
2	☒	2.000	1.913	5060.97	0.0300	P	2.3
3	☐	100.000	104.199	242978.48	1.5016	P	0.6
4	☐	250.000	251.652	563362.33	3.6230	P	0.7
5	☐	500.000	500.568	1050486.47	7.2041	P	0.8
6	☐	1000.000	968.888	2099839.69	13.9418	P	0.7
7	☐	2000.000	2014.998	4511555.53	28.9921	P	0.9
8	☐			5637.83	0.0356	P	1.2

$$y = 0.0144 * x + 0.0025$$

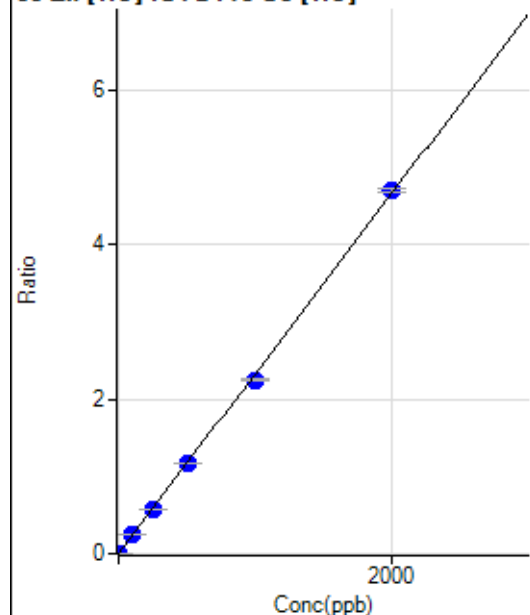
$$R = 0.9998$$

$$DL = 0.0491$$

$$BEC = 0.1742$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	286.67	0.0017	P	4.2
2	☒	2.000	1.970	1056.73	0.0063	P	3.4
3	☐	100.000	101.527	38506.40	0.2380	P	1.1
4	☐	250.000	247.729	89910.34	0.5782	P	1.0
5	☐	500.000	500.819	170198.76	1.1672	P	1.3
6	☐	1000.000	966.786	339132.34	2.2517	P	0.7
7	☐	2000.000	2016.610	730579.07	4.6949	P	1.1
8	☐			6587.13	0.0416	P	0.8

$$y = 0.0023 * x + 0.0017$$

$$R = 0.9998$$

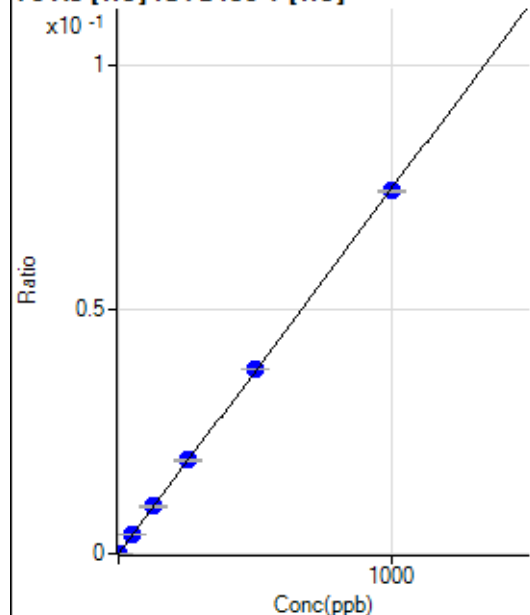
$$DL = 0.09116$$

$$BEC = 0.7238$$

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	8.02	0.0000	P	66.8
2	☒	1.000	0.991	225.93	0.0001	P	7.0
3	☐	50.000	53.306	11340.92	0.0040	P	1.8
4	☐	125.000	129.161	26538.42	0.0097	P	0.8
5	☐	250.000	257.237	50617.31	0.0192	P	1.9
6	☐	500.000	506.277	102284.62	0.0378	P	0.3
7	☐	1000.000	994.367	204722.54	0.0743	P	0.3
8	☐			295.69	0.0001	P	4.2

$$y = 7.4743\text{E-}005 * x + 2.7052\text{E-}006$$

$$R = 0.9999$$

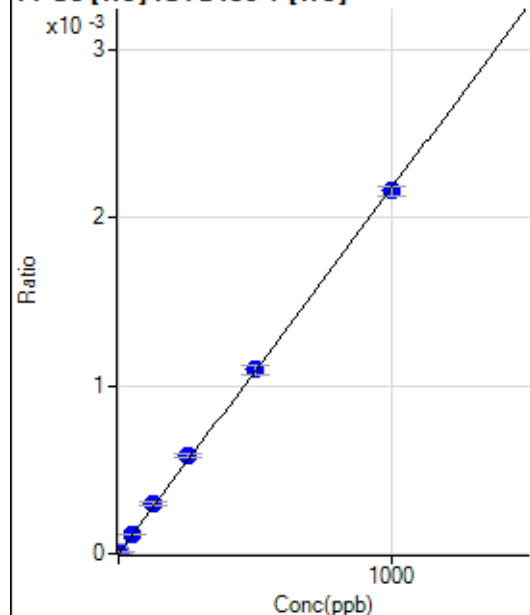
$$DL = 0.07253$$

$$BEC = 0.03619$$

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
2	☒	5.000		33.33	0.0000	P	9.9
3	☐	50.000	52.588	326.67	0.0001	P	2.3
4	☐	125.000	134.850	807.82	0.0003	P	7.7
5	☐	250.000	269.794	1546.77	0.0006	P	4.3
6	☐	500.000	502.357	2957.02	0.0011	P	4.5
7	☐	1000.000	992.512	5951.33	0.0022	P	2.7
8	☐			3.33	0.0000	P	100.2

$$y = 2.1767\text{E-}006 * x + 3.7553\text{E-}007$$

$$R = 0.9998$$

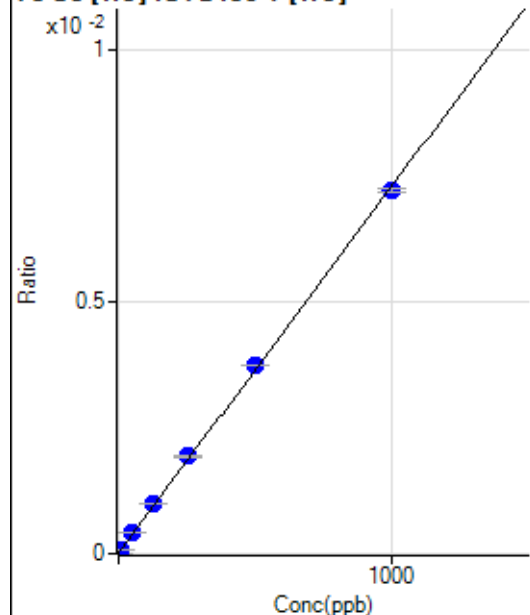
$$DL = 0.8964$$

$$BEC = 0.1725$$

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	39.51	0.0000	P	21.0
2	☒	5.000	6.652	181.48	0.0001	P	2.7
3	☐	50.000	54.964	1174.75	0.0004	P	3.4
4	☐	125.000	134.637	2727.44	0.0010	P	0.9
5	☐	250.000	264.636	5102.18	0.0019	P	1.9
6	☐	500.000	512.854	10117.17	0.0037	P	0.6
7	☐	1000.000	988.453	19837.71	0.0072	P	1.2
8	☐			39.51	0.0000	P	38.6

$$y = 7.2726\text{E-}006 * x + 1.3284\text{E-}005$$

$$R = 0.9998$$

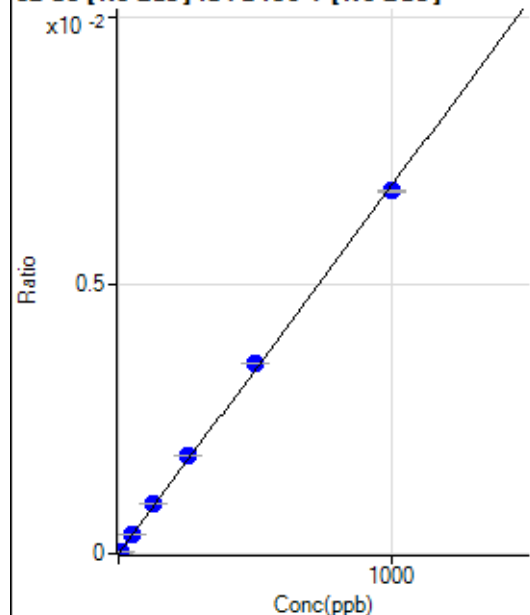
$$DL = 1.149$$

$$BEC = 1.827$$

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	3.58	0.0000	P	1605.
2	☒	5.000	5.221	782.26	0.0000	P	2.9
3	☐	50.000	53.293	7894.88	0.0004	P	1.7
4	☐	125.000	134.407	19373.69	0.0009	P	1.2
5	☐	250.000	264.964	36610.93	0.0018	P	0.1
6	☐	500.000	517.041	71637.25	0.0035	P	0.6
7	☐	1000.000	986.397	139485.76	0.0068	P	0.4
8	☐			89.42	0.0000	P	69.0

$$y = 6.8489\text{E-}006 * x + 1.6753\text{E-}007$$

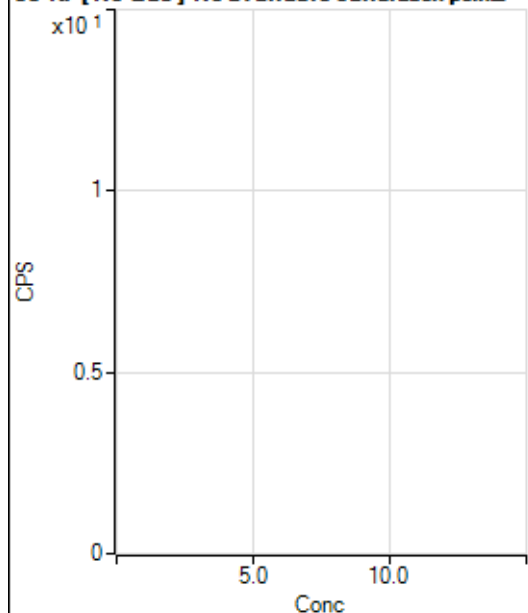
$$R = 0.9996$$

$$DL = 1.178$$

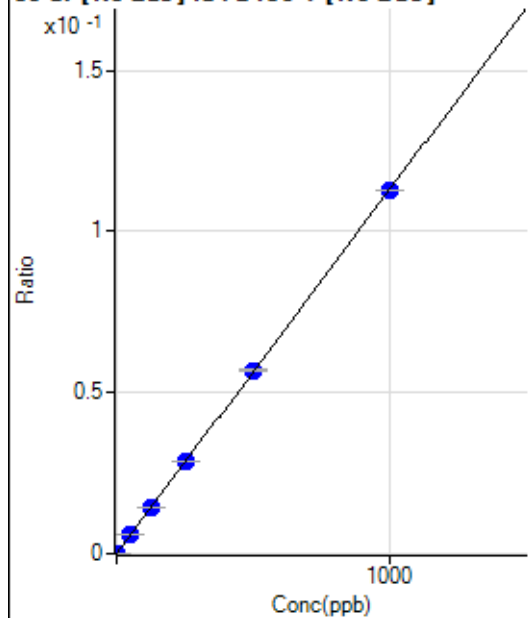
$$BEC = 0.02446$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			232.23		P	24.5
2	☐			228.89		P	10.9
3	☐			247.78		P	3.9
4	☐			192.23		P	5.0
5	☐			201.12		P	4.2
6	☐			195.56		P	13.7
7	☐			241.12		P	9.2
8	☐			223.34		P	23.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	358.35	0.0000	P	10.5
2	☒	1.000	1.014	2853.20	0.0001	P	8.0
3	☐	50.000	50.781	124338.17	0.0058	P	1.3
4	☐	125.000	127.672	303718.40	0.0144	P	0.9
5	☐	250.000	252.900	576405.42	0.0286	P	0.2
6	☐	500.000	503.855	1151249.80	0.0569	P	0.4
7	☐	1000.000	996.974	2324701.64	0.1126	P	0.2
8	☐			9762.04	0.0005	P	7.5

$$y = 1.1292E-004 * x + 1.6613E-005$$

$$R = 1.0000$$

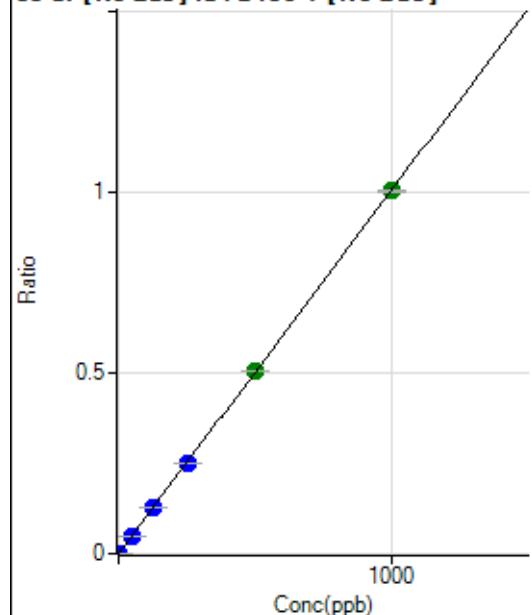
$$DL = 0.04655$$

$$BEC = 0.1471$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	172.23	0.0000	P	32.1
2	☒	1.000	0.946	20854.82	0.0010	P	3.4
3	☐	50.000	50.018	1086394.50	0.0502	P	0.6
4	☐	125.000	124.559	2632971.33	0.1251	P	0.2
5	☐	250.000	248.779	5040855.50	0.2499	P	0.5
6	☐	500.000	503.959	10239715.85	0.5062	A	0.2
7	☐	1000.000	998.380	20705111.23	1.0028	A	0.4
8	☐			82353.49	0.0042	P	3.0

$$y = 0.0010 * x + 7.9836E-006$$

$$R = 1.0000$$

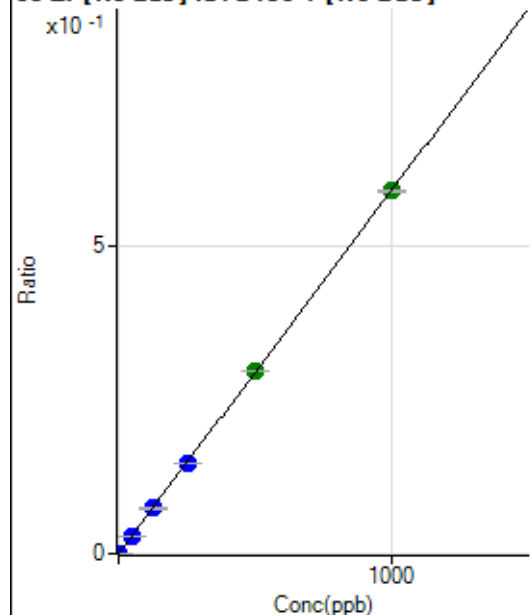
$$DL = 0.007661$$

$$BEC = 0.007948$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	733.38	0.0000	P	4.0
2	☒	1.000	0.905	12333.56	0.0006	P	2.7
3	☐	50.000	49.660	632390.35	0.0292	P	1.0
4	☐	125.000	124.438	1541204.47	0.0732	P	0.5
5	☐	250.000	248.153	2945661.18	0.1460	P	0.5
6	☐	500.000	502.916	5985730.39	0.2959	A	0.2
7	☐	1000.000	999.091	12135975.44	0.5878	A	0.3
8	☐			3903.49	0.0002	P	7.8

$$y = 5.8830E-004 * x + 3.4007E-005$$

$$R = 1.0000$$

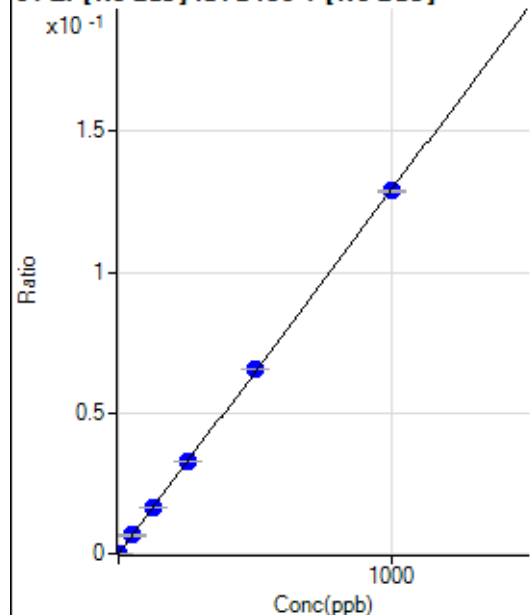
$$DL = 0.006961$$

$$BEC = 0.05781$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	158.34	0.0000	P	18.7
2	☒	1.000		2625.35	0.0001	P	4.4
3	☐	50.000	50.338	140811.19	0.0065	P	0.9
4	☐	125.000	126.036	342892.05	0.0163	P	0.7
5	☐	250.000	251.872	656749.16	0.0326	P	0.2
6	☐	500.000	504.826	1319850.43	0.0652	P	0.0
7	☐	1000.000	996.973	2660147.07	0.1288	P	0.6
8	☐			777.83	0.0000	P	3.7

$$y = 1.2923\text{E-}004 * x + 7.3394\text{E-}006$$

$$R = 1.0000$$

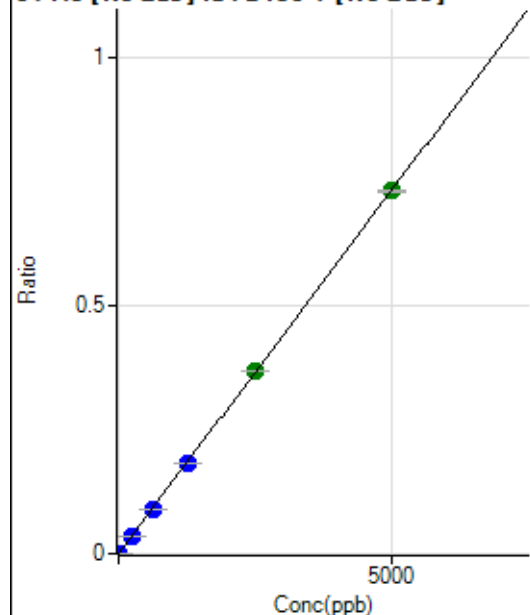
$$DL = 0.03193$$

$$BEC = 0.05679$$

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	269.46	0.0000	P	10.2
2	☒	5.000	4.674	15147.51	0.0007	P	2.4
3	☐	250.000	249.287	788108.54	0.0365	P	0.7
4	☐	625.000	621.445	1911800.84	0.0908	P	0.2
5	☐	1250.000	1237.074	3647901.56	0.1808	P	0.4
6	☐	2500.000	2515.883	7439291.49	0.3678	A	0.2
7	☐	5000.000	4995.770	15076877.59	0.7302	A	0.2
8	☐			7605.17	0.0004	P	2.1

$$y = 1.4617\text{E-}004 * x + 1.2488\text{E-}005$$

$$R = 1.0000$$

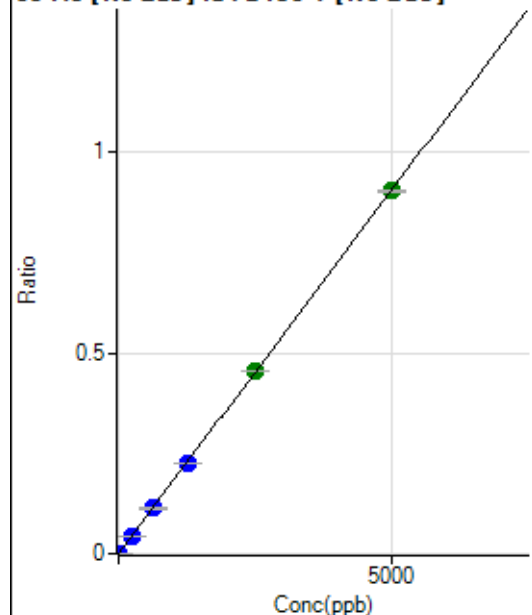
$$DL = 0.02627$$

$$BEC = 0.08543$$

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	69.45	0.0000	P	14.4
2	☒	5.000	4.754	18799.16	0.0009	P	1.5
3	☐	250.000	249.502	976213.53	0.0451	P	0.5
4	☐	625.000	622.766	2371290.90	0.1127	P	0.5
5	☐	1250.000	1245.586	4546434.22	0.2254	P	0.1
6	☐	2500.000	2517.161	9213333.37	0.4555	A	0.2
7	☐	5000.000	4992.827	18652022.98	0.9034	A	0.4
8	☐			11099.19	0.0006	P	1.6

$$y = 1.8094\text{E-}004 * x + 3.2214\text{E-}006$$

$$R = 1.0000$$

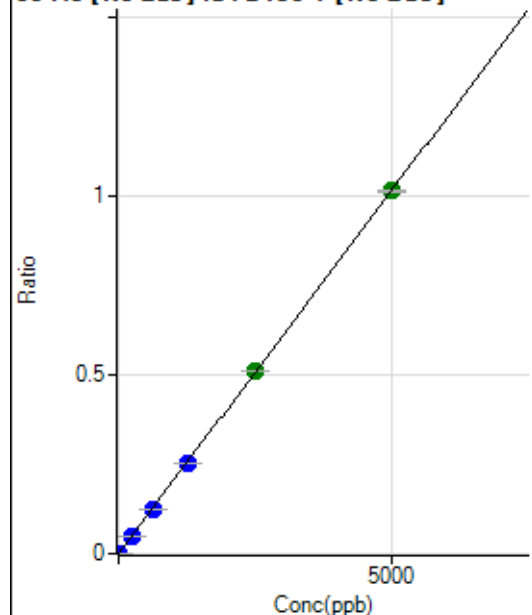
$$DL = 0.007666$$

$$BEC = 0.0178$$

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	122.23	0.0000	P	28.9
2	☒	5.000	4.552	20209.41	0.0009	P	2.4
3	☐	250.000	247.244	1083761.85	0.0501	P	0.4
4	☐	625.000	621.133	2649622.22	0.1259	P	0.4
5	☐	1250.000	1236.227	5055159.23	0.2506	P	0.5
6	☐	2500.000	2512.611	10303102.23	0.5093	A	0.3
7	☐	5000.000	4997.759	20916292.31	1.0131	A	0.4
8	☐			17633.72	0.0009	P	4.9

$$y = 2.0271\text{E-}004 * x + 5.6734\text{E-}006$$

$$R = 1.0000$$

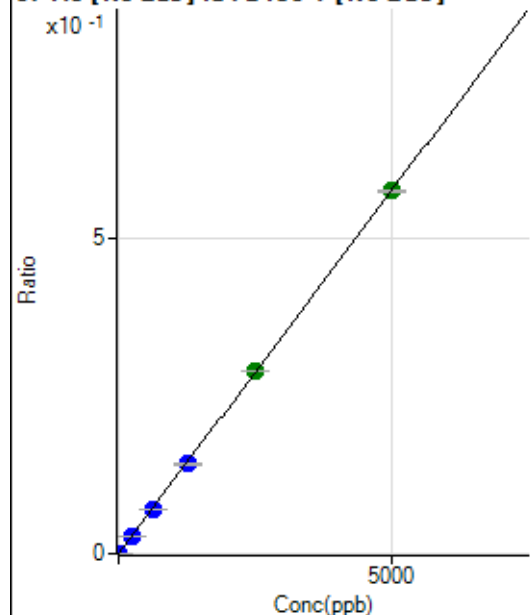
$$DL = 0.02426$$

$$BEC = 0.02799$$

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	36.11	0.0000	P	35.4
2	☒	5.000	4.644	11702.55	0.0005	P	0.7
3	☐	250.000	245.591	612772.65	0.0283	P	0.3
4	☐	625.000	615.193	1493813.96	0.0710	P	0.5
5	☐	1250.000	1234.001	2872374.93	0.1424	P	0.6
6	☐	2500.000	2513.808	5867770.96	0.2901	A	0.4
7	☐	5000.000	4998.543	11908377.09	0.5768	A	0.2
8	☐			6699.09	0.0003	P	3.8

$$y = 1.1539\text{E-}004 * x + 1.6753\text{E-}006$$

$$R = 1.0000$$

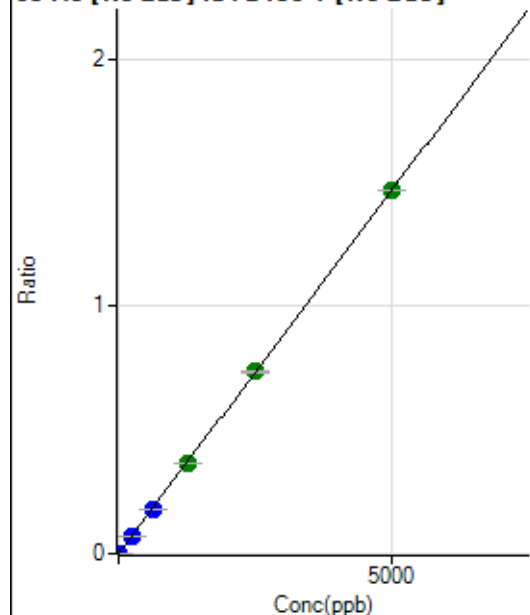
$$DL = 0.01542$$

$$BEC = 0.01452$$

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	130.56	0.0000	P	19.9
2	☒	5.000	4.618	29631.76	0.0014	P	0.6
3	☐	250.000	248.277	1575249.57	0.0729	P	0.3
4	☐	625.000	621.293	3836301.00	0.1823	P	0.1
5	☐	1250.000	1247.927	7386488.45	0.3662	A	0.6
6	☐	2500.000	2504.725	14866682.10	0.7349	A	0.6
7	☐	5000.000	4998.706	30282602.41	1.4667	A	0.2
8	☐			16830.07	0.0009	P	4.0

$$y = 2.9341\text{E-}004 * x + 6.0562\text{E-}006$$

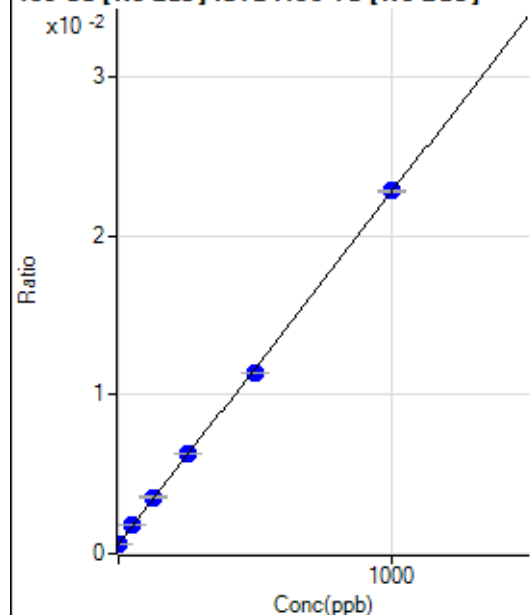
$$R = 1.0000$$

$$DL = 0.01234$$

$$BEC = 0.02064$$

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	6037.64	0.0006	P	2.6
2	☒	1.000	0.559	6173.84	0.0006	P	0.9
3	☐	50.000	55.624	18312.63	0.0018	P	0.9
4	☐	125.000	133.420	35762.82	0.0036	P	1.0
5	☐	250.000	255.808	62664.63	0.0063	P	0.6
6	☐	500.000	487.328	115961.01	0.0114	P	0.5
7	☐	1000.000	1003.551	233927.62	0.0229	P	0.7
8	☐			6123.83	0.0006	P	5.9

$$y = 2.2175\text{E-}005 * x + 6.0828\text{E-}004$$

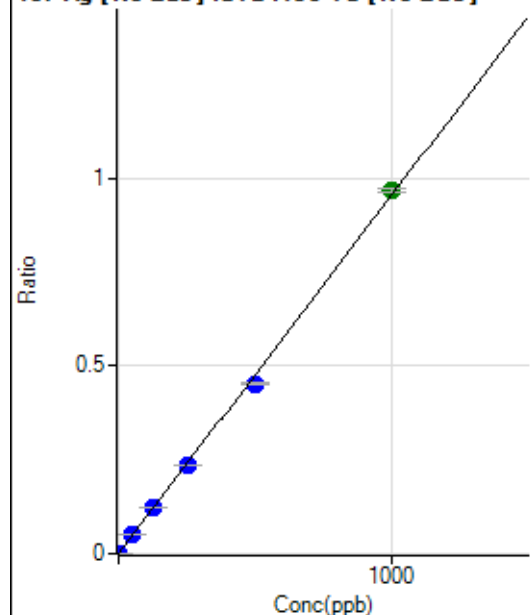
R = 0.9998

DL = 2.137

BEC = 27.43

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	119.45	0.0000	P	3.8
2	☒	1.000	1.149	11032.55	0.0011	P	2.8
3	☐	50.000	53.950	512561.07	0.0515	P	1.0
4	☐	125.000	129.988	1245111.73	0.1242	P	0.5
5	☐	250.000	247.755	2361423.16	0.2367	P	0.5
6	☐	500.000	474.167	4601568.12	0.4530	P	0.8
7	☐	1000.000	1012.656	9898106.38	0.9673	A	1.0
8	☐			1025.08	0.0001	P	15.7

$$y = 9.5524\text{E-}004 * x + 1.2033\text{E-}005$$

R = 0.9995

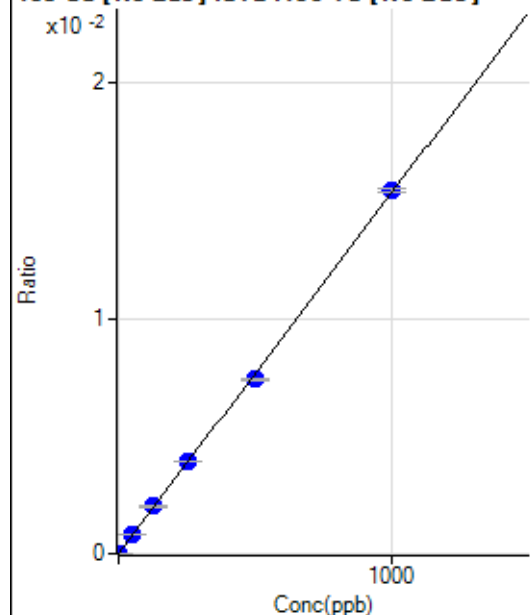
DL = 0.001423

BEC = 0.0126

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	6.94	0.0000	P	91.6
2	☒	1.000	1.010	161.11	0.0000	P	1.2
3	☐	50.000	53.671	8194.19	0.0008	P	1.0
4	☐	125.000	131.354	20211.89	0.0020	P	1.4
5	☐	250.000	255.203	39069.21	0.0039	P	1.0
6	☐	500.000	484.545	75521.16	0.0074	P	1.1
7	☐	1000.000	1005.449	157832.35	0.0154	P	1.0
8	☐			52.78	0.0000	P	20.8

$$y = 1.5341\text{E-}005 * x + 7.0040\text{E-}007$$

$$R = 0.9998$$

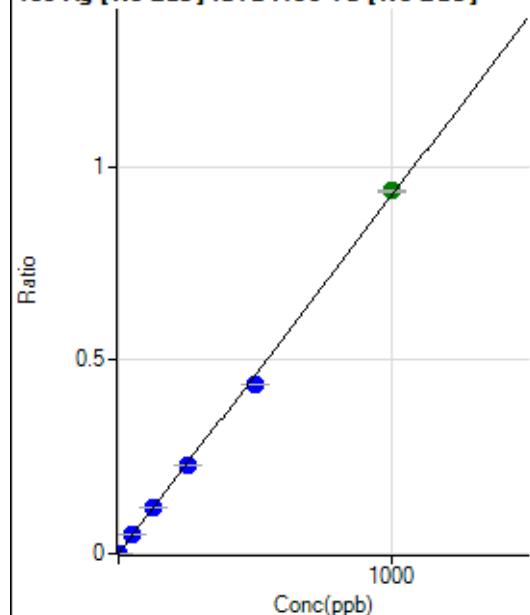
$$DL = 0.1255$$

$$BEC = 0.04566$$

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	27.78	0.0000	P	91.5
2	☒	1.000	1.071	9864.97	0.0010	P	1.8
3	☐	50.000	53.683	493006.54	0.0496	P	0.3
4	☐	125.000	128.573	1190651.36	0.1187	P	0.6
5	☐	250.000	246.911	2275257.80	0.2280	P	0.7
6	☐	500.000	471.952	4428178.27	0.4359	P	0.4
7	☐	1000.000	1014.166	9584039.88	0.9366	A	0.8
8	☐			1044.53	0.0001	P	16.2

$$y = 9.2356\text{E-}004 * x + 2.7963\text{E-}006$$

$$R = 0.9994$$

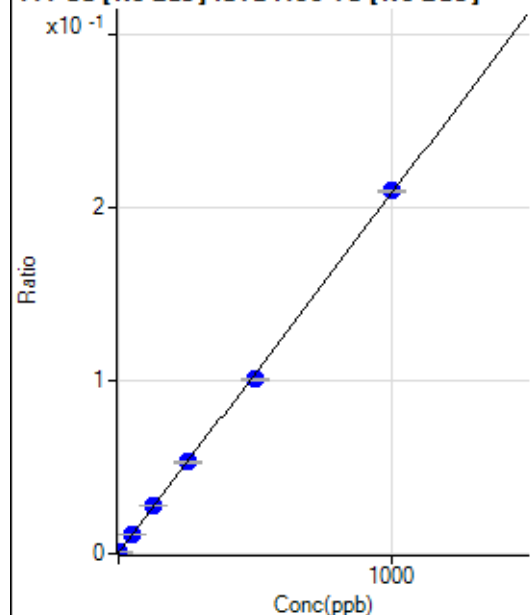
$$DL = 0.008313$$

$$BEC = 0.003028$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4246.49	0.0004	P	2.5
2	☒	1.000	0.987	6293.83	0.0006	P	1.7
3	☐	50.000	53.330	114348.45	0.0115	P	0.6
4	☐	125.000	130.280	275487.85	0.0275	P	0.4
5	☐	250.000	252.178	526640.41	0.0528	P	0.5
6	☐	500.000	483.289	1023663.21	0.1008	P	0.8
7	☐	1000.000	1006.984	2143627.09	0.2095	P	0.7
8	☐			4583.08	0.0005	P	5.7

$$y = 2.0761\text{E-}004 * x + 4.2782\text{E-}004$$

$$R = 0.9998$$

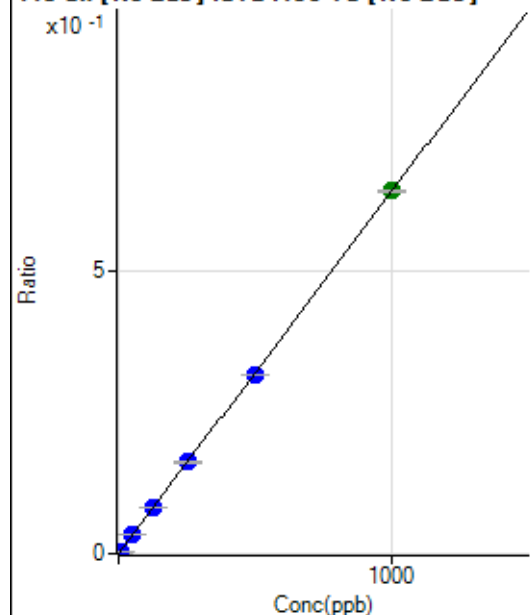
$$DL = 0.1574$$

$$BEC = 2.061$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	766.72	0.0001	P	3.9
2	☒	5.000	5.196	33813.95	0.0034	P	0.4
3	☐	50.000	53.087	338254.61	0.0340	P	0.1
4	☐	125.000	128.982	827614.63	0.0825	P	0.5
5	☐	250.000	252.599	1612121.15	0.1616	P	0.5
6	☐	500.000	493.781	3207883.56	0.3158	P	0.9
7	☐	1000.000	1001.807	6554992.77	0.6406	A	0.2
8	☐			3397.78	0.0004	P	3.1

$$y = 6.3934\text{E-}004 * x + 7.7243\text{E-}005$$

$$R = 1.0000$$

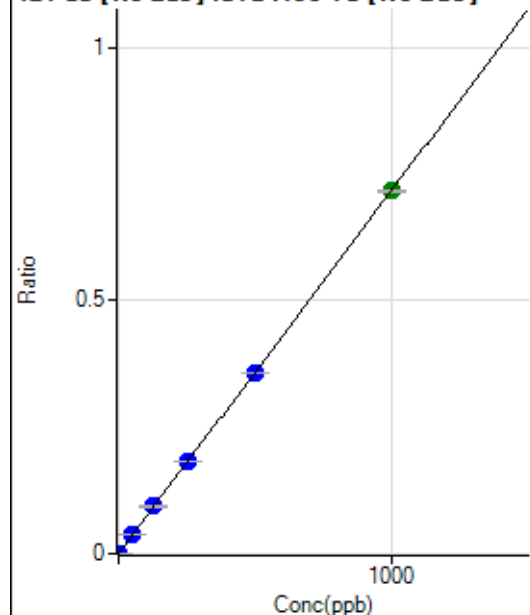
$$DL = 0.01407$$

$$BEC = 0.1208$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	116.67	0.0000	P	7.0
2	☒	2.000	1.943	13985.28	0.0014	P	3.6
3	☐	50.000	52.514	374858.92	0.0377	P	0.6
4	☐	125.000	129.996	935538.41	0.0933	P	0.5
5	☐	250.000	253.246	1813464.58	0.1818	P	0.7
6	☐	500.000	498.458	3634366.23	0.3577	P	0.3
7	☐	1000.000	999.209	7337781.42	0.7171	A	0.6
8	☐			11855.49	0.0013	P	3.5

$$y = 7.1766\text{E-}004 * x + 1.1754\text{E-}005$$

$$R = 1.0000$$

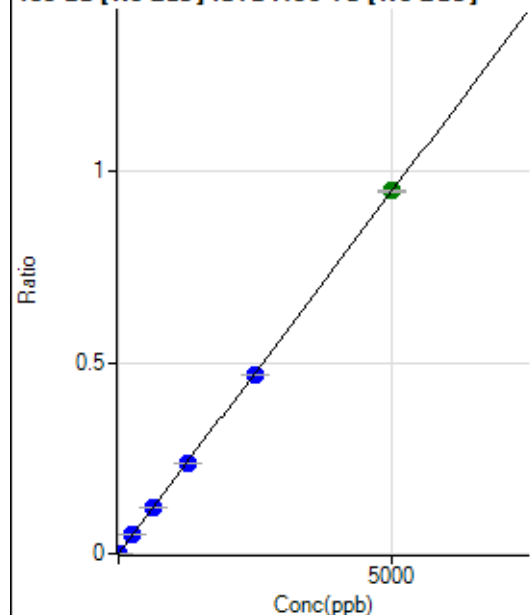
$$DL = 0.00346$$

$$BEC = 0.01638$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19.44	0.0000	P	65.2
2	☒	10.000	10.082	19027.63	0.0019	P	1.4
3	☐	250.000	261.947	493699.36	0.0497	P	0.6
4	☐	625.000	635.896	1208483.57	0.1205	P	0.3
5	☐	1250.000	1251.097	2365926.96	0.2371	P	1.0
6	☐	2500.000	2471.063	4758207.31	0.4684	P	0.1
7	☐	5000.000	5012.235	9720891.45	0.9500	A	0.6
8	☐			1555.72	0.0002	P	1.7

$$y = 1.8954\text{E-}004 * x + 1.9564\text{E-}006$$

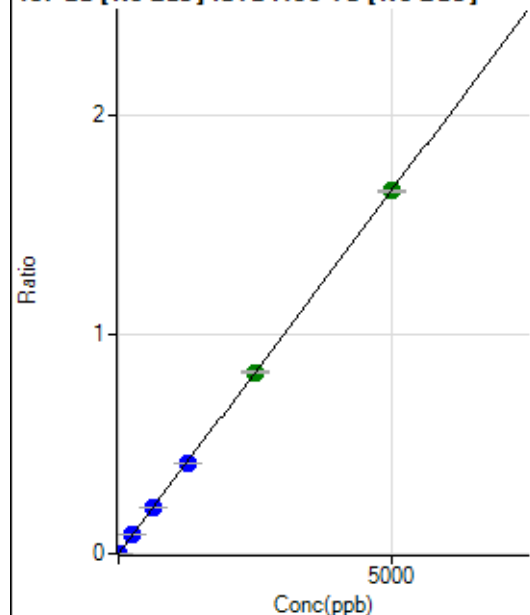
$$R = 1.0000$$

$$DL = 0.02019$$

$$BEC = 0.01032$$

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	41.67	0.0000	P	19.7
2	☒	10.000	10.229	33672.30	0.0034	P	1.2
3	☐	250.000	259.683	853487.67	0.0858	P	0.5
4	☐	625.000	636.521	2109462.09	0.2104	P	0.4
5	☐	1250.000	1249.117	4119210.07	0.4129	P	0.8
6	☐	2500.000	2500.061	8394696.80	0.8263	A	0.4
7	☐	5000.000	4998.265	16904176.42	1.6520	A	0.6
8	☐			2569.80	0.0003	P	5.9

$$y = 3.3052E-004 * x + 4.1962E-006$$

$$R = 1.0000$$

$$DL = 0.007512$$

$$BEC = 0.0127$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			8.89		P	43.3
2	☐			4.44		P	173.2
3	☐			22.22		P	45.8
4	☐			126.67		P	9.1
5	☐			195.56		P	13.8
6	☐			368.91		P	3.8
7	☐			624.48		P	10.7
8	☐			177.79		P	45.0

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	124.9
2	☐			6.66		P	86.6
3	☐			7.78		P	65.5
4	☐			15.56		P	53.9
5	☐			28.89		P	74.2
6	☐			46.67		P	14.3
7	☐			54.44		P	31.4
8	☐			72.23		P	37.3

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	86.6
2	☐			5.55		P	86.6
3	☐			11.11		P	114.6
4	☐			25.00		P	88.2
5	☐			44.45		P	10.8
6	☐			69.45		P	6.9
7	☐			136.12		P	9.4
8	☐			83.34		P	26.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐			16.67		P	87.2
3	☐			21.11		P	36.5
4	☐			35.56		P	14.3
5	☐			62.22		P	24.2
6	☐			105.56		P	14.2
7	☐			227.79		P	10.0
8	☐			61.11		P	6.3

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	51.5
2	☐			41.67		P	34.6
3	☐			19.44		P	65.5
4	☐			66.67		P	33.1
5	☐			55.56		P	8.7
6	☐			61.12		P	75.1
7	☐			77.78		P	22.3
8	☐			58.34		P	37.8

160 Gd [He] No available calibration points

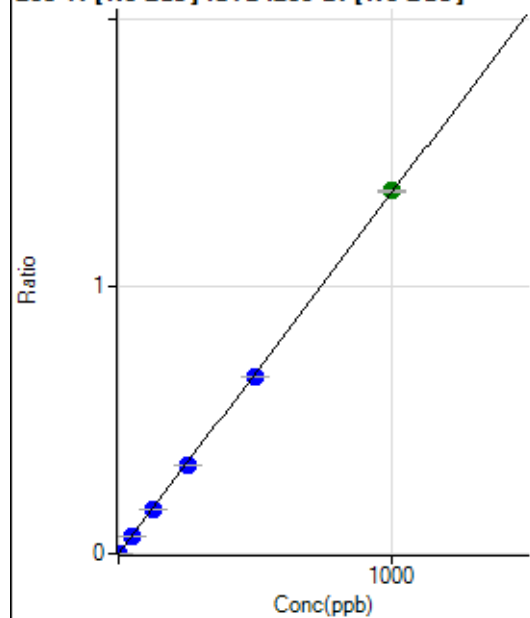
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			183.34		P	6.6
2	☐			198.89		P	5.4
3	☐			166.67		P	11.1
4	☐			165.56		P	22.1
5	☐			152.23		P	29.4
6	☐			151.12		P	19.3
7	☐			173.34		P	13.5
8	☐			198.90		P	5.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	18.2
2	☐			63.89		P	49.4
3	☐			47.22		P	10.2
4	☐			75.00		P	38.5
5	☐			66.67		P	0.0
6	☐			55.56		P	45.8
7	☐			55.56		P	52.7
8	☐			58.34		P	62.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			36.67		P	9.1
2	☐			38.89		P	35.7
3	☐			42.22		P	35.6
4	☐			52.22		P	16.1
5	☐			57.78		P	14.5
6	☐			43.33		P	20.4
7	☐			46.67		P	14.3
8	☐			41.11		P	28.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	483.36	0.0001	P	12.8
2	☒	1.000	0.925	8250.13	0.0013	P	1.3
3	☐	50.000	48.889	412116.87	0.0661	P	0.6
4	☐	125.000	121.895	1035732.73	0.1647	P	1.4
5	☐	250.000	245.532	2094156.53	0.3316	P	0.8
6	☐	500.000	490.254	4183836.55	0.6620	P	0.4
7	☐	1000.000	1006.434	8407125.71	1.3589	A	0.4
8	☐			2361.42	0.0004	P	4.7

$$y = 0.0014 * x + 7.8148E-005$$

$$R = 0.9999$$

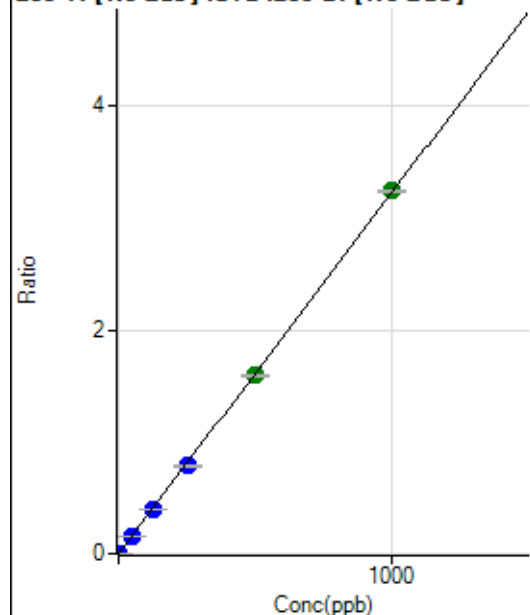
$$DL = 0.02216$$

$$BEC = 0.05788$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	725.06	0.0001	P	5.1
2	☒	1.000	0.919	19178.54	0.0031	P	5.1
3	☐	50.000	48.304	972588.97	0.1560	P	0.6
4	☐	125.000	120.826	2452889.33	0.3899	P	0.5
5	☐	250.000	243.248	4957269.34	0.7849	P	0.8
6	☐	500.000	494.126	10076117.50	1.5943	A	0.7
7	☐	1000.000	1005.232	20065100.45	3.2433	A	0.3
8	☐			5526.41	0.0010	P	9.9

$$y = 0.0032 * x + 1.1720E-004$$

$$R = 0.9999$$

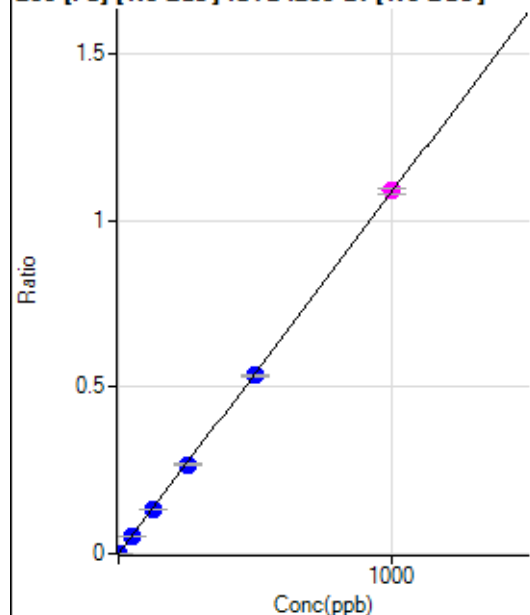
$$DL = 0.005537$$

$$BEC = 0.03633$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	564.85	0.0001	P	12.4
2	☒	1.000	0.922	6792.65	0.0011	P	2.4
3	☐	50.000	49.056	332491.71	0.0533	P	1.1
4	☐	125.000	123.522	843643.53	0.1341	P	0.3
5	☐	250.000	247.273	1695077.96	0.2684	P	0.6
6	☐	500.000	493.460	3384422.90	0.5355	P	0.5
7	☐	1000.000	1004.184	6741417.39	1.0896	M	1.3
8	☐			5345.68	0.0010	P	7.1

$$y = 0.0011 * x + 9.1260E-005$$

$$R = 1.0000$$

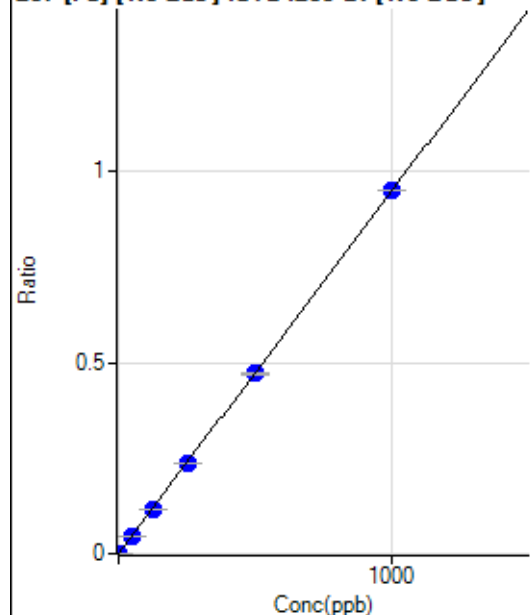
$$DL = 0.03125$$

$$BEC = 0.08411$$

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	544.47	0.0001	P	10.7
2	☒	1.000	0.978	6307.23	0.0010	P	2.9
3	☐	50.000	49.503	292755.36	0.0469	P	0.4
4	☐	125.000	124.274	740505.22	0.1177	P	0.3
5	☐	250.000	249.157	1490054.42	0.2359	P	0.5
6	☐	500.000	497.505	2976728.31	0.4710	P	0.6
7	☐	1000.000	1001.574	5865633.35	0.9481	P	0.2
8	☐			4458.29	0.0008	P	5.5

$$y = 9.4653\text{E-}004 * x + 8.8042\text{E-}005$$

$$R = 1.0000$$

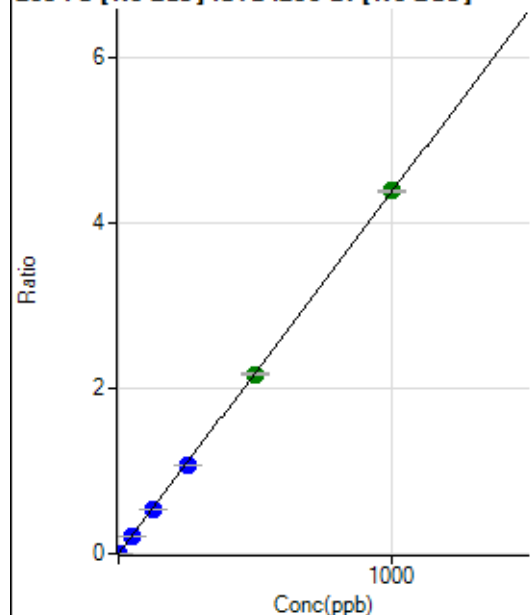
$$DL = 0.02989$$

$$BEC = 0.09302$$

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	1961.22	0.0003	P	7.4
2	☒	1.000	0.920	27040.93	0.0043	P	1.4
3	☐	50.000	48.412	1323984.63	0.2123	P	0.5
4	☐	125.000	121.889	3359464.69	0.5341	P	0.3
5	☐	250.000	244.382	6760722.04	1.0704	P	0.6
6	☐	500.000	496.624	13746074.64	2.1750	A	0.5
7	☐	1000.000	1003.561	27189187.64	4.3947	A	0.4
8	☐			20241.67	0.0039	P	6.9

$$y = 0.0044 * x + 3.1700\text{E-}004$$

$$R = 1.0000$$

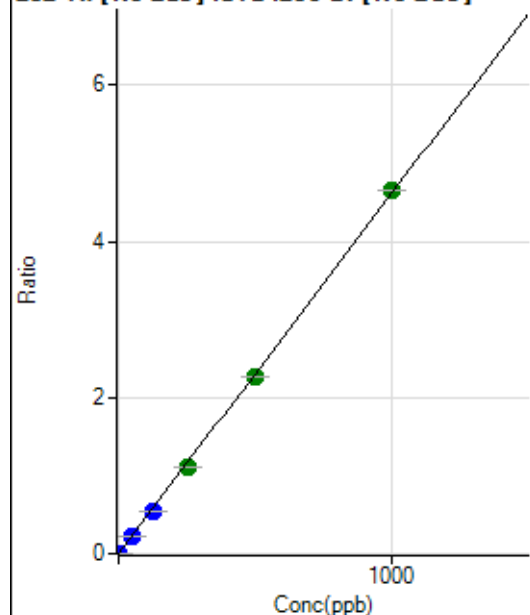
$$DL = 0.01613$$

$$BEC = 0.07239$$

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	1616.81	0.0003	P	4.2
2	☒	1.000	0.832	25477.17	0.0041	P	0.6
3	☐	50.000	45.909	1321919.33	0.2120	P	0.5
4	☐	125.000	117.318	3405020.88	0.5413	P	0.4
5	☐	250.000	240.719	7012870.88	1.1104	A	0.4
6	☐	500.000	490.945	14310705.99	2.2643	A	0.4
7	☐	1000.000	1008.013	28760855.50	4.6488	A	0.2
8	☐			7904.54	0.0015	P	7.3

$$y = 0.0046 * x + 2.6129E-004$$

$$R = 0.9999$$

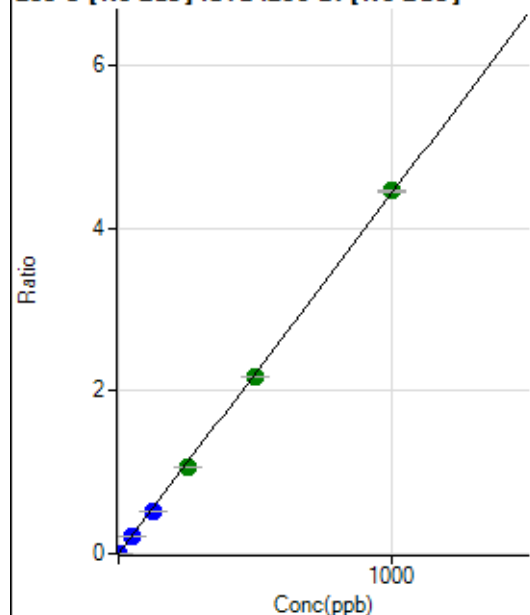
$$DL = 0.007179$$

$$BEC = 0.05666$$

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	1855.78	0.0003	P	14.1
2	☒	1.000	0.854	25359.09	0.0041	P	0.9
3	☐	50.000	46.047	1272449.03	0.2040	P	0.8
4	☐	125.000	117.908	3283686.40	0.5220	P	0.4
5	☐	250.000	241.178	6741642.55	1.0674	A	1.1
6	☐	500.000	491.884	13757138.59	2.1767	A	0.4
7	☐	1000.000	1007.348	27576873.53	4.4574	A	0.5
8	☐			4567.71	0.0009	P	5.1

$$y = 0.0044 * x + 2.9964E-004$$

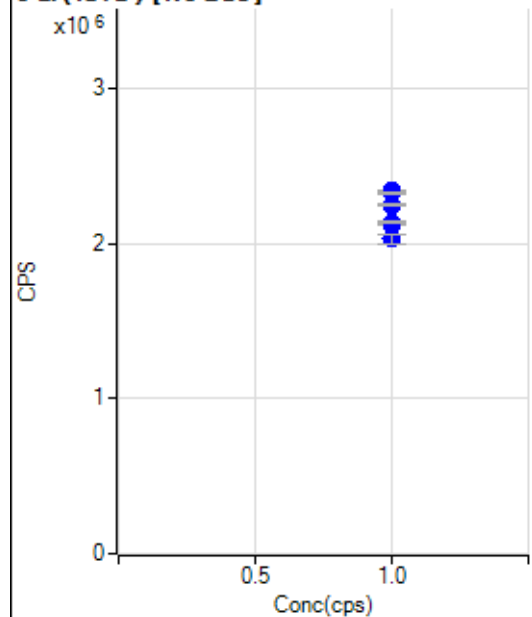
$$R = 0.9999$$

$$DL = 0.02861$$

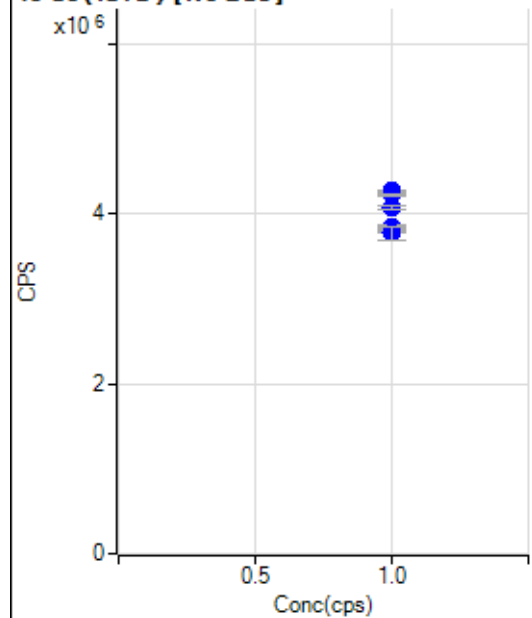
$$BEC = 0.06772$$

Weight: <None>

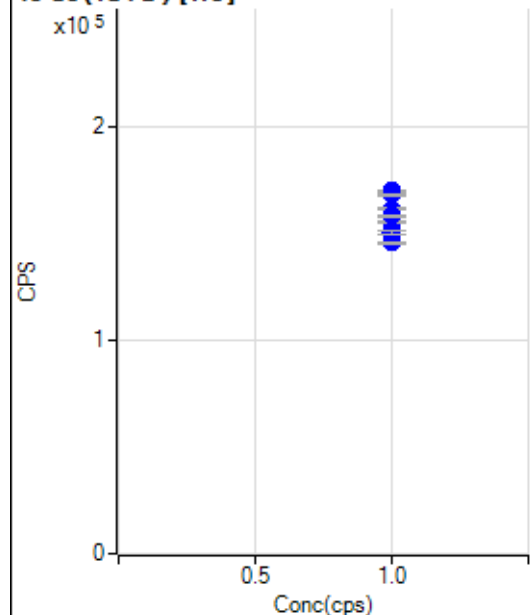
Min Conc: 0

6 Li (ISTD) [No Gas]

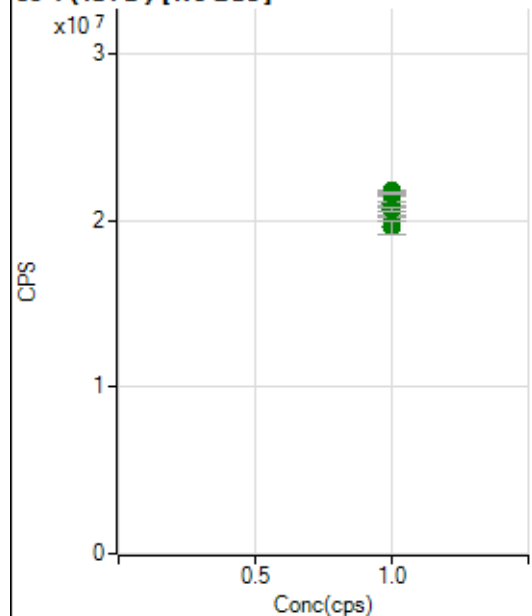
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		2324171.59		P	0.6
2	☐	1.000		2336890.47		P	0.3
3	☐	1.000		2325487.59		P	0.6
4	☐	1.000		2247545.51		P	0.9
5	☐	1.000		2124978.13		P	0.2
6	☐	1.000		2123691.81		P	0.6
7	☐	1.000		2132806.66		P	0.6
8	☐	1.000		2027051.51		P	3.0

45 Sc (ISTD) [No Gas]

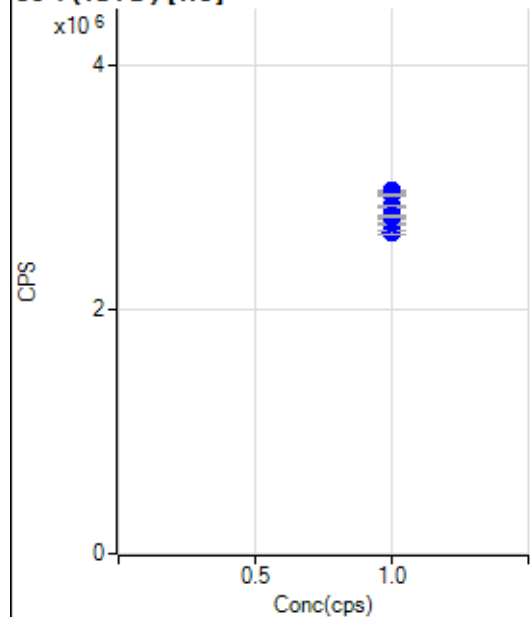
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		4227554.87		P	0.5
2	☐	1.000		4273980.22		P	0.7
3	☐	1.000		4231026.40		P	0.7
4	☐	1.000		4069755.95		P	1.1
5	☐	1.000		3805234.46		P	0.3
6	☐	1.000		3794992.36		P	0.6
7	☐	1.000		3856871.70		P	1.0
8	☐	1.000		3774109.24		P	4.0

45 Sc (ISTD) [He]

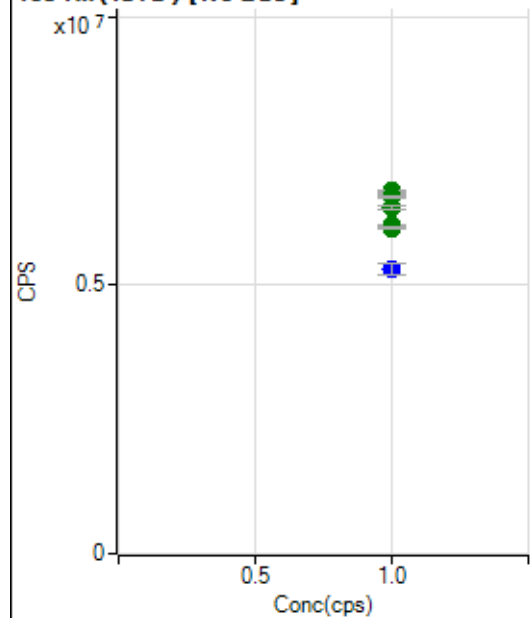
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		170190.89		P	0.3
2	☐	1.000		168533.89		P	0.5
3	☐	1.000		161817.04		P	0.9
4	☐	1.000		155496.38		P	0.1
5	☐	1.000		145823.48		P	0.8
6	☐	1.000		150620.83		P	1.0
7	☐	1.000		155622.96		P	1.0
8	☐	1.000		158536.79		P	0.8

89 Y (ISTD) [No Gas]

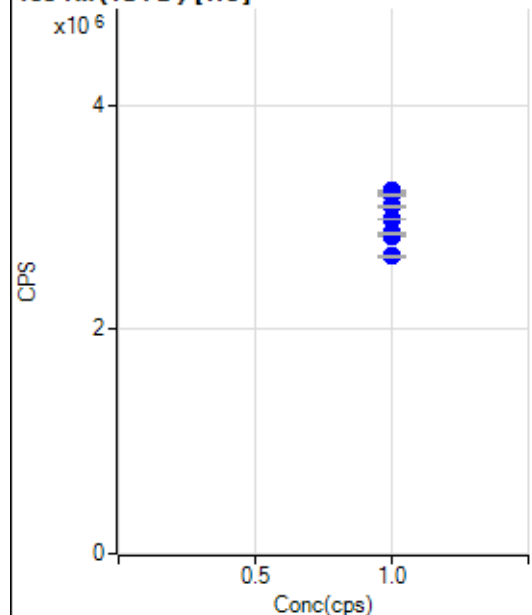
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		21569118.84		A	0.6
2	☐	1.000		21771589.95		A	0.7
3	☐	1.000		21622033.85		A	0.9
4	☐	1.000		21043655.66		A	1.0
5	☐	1.000		20172512.48		A	0.2
6	☐	1.000		20228906.50		A	0.4
7	☐	1.000		20646774.28		A	0.9
8	☐	1.000		19577865.96		A	3.8

89 Y(ISTD) [He]

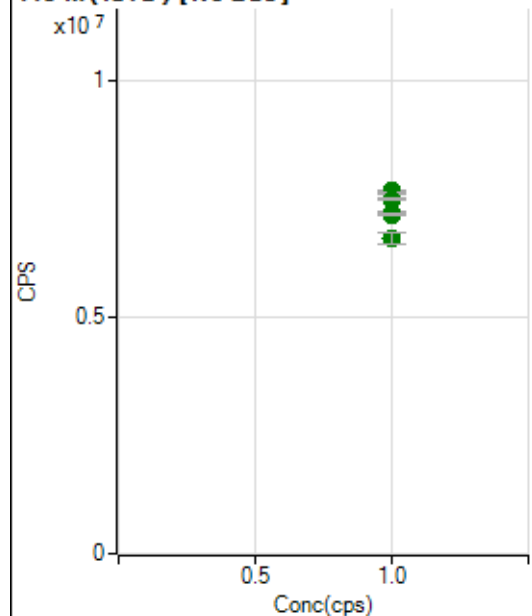
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		2972968.18		P	0.6
2	☐	1.000		2943178.98		P	0.3
3	☐	1.000		2844743.26		P	0.7
4	☐	1.000		2748285.89		P	0.4
5	☐	1.000		2632591.54		P	0.9
6	☐	1.000		2702855.06		P	0.7
7	☐	1.000		2754479.68		P	0.6
8	☐	1.000		2769946.00		P	0.7

103 Rh(ISTD) [No Gas]

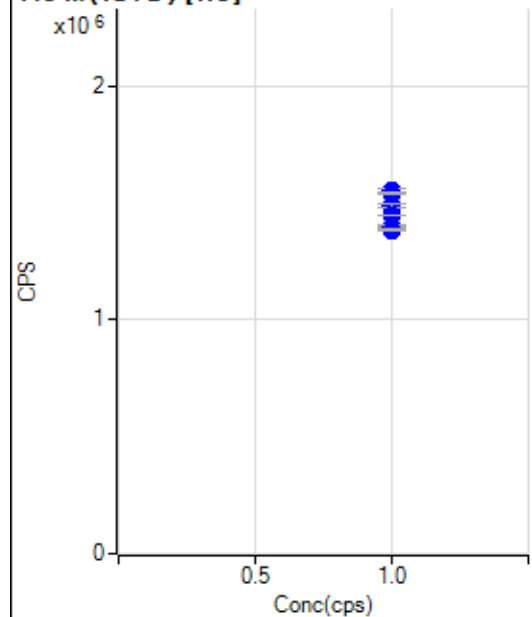
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		6727349.85		A	0.8
2	☐	1.000		6755168.55		A	0.6
3	☐	1.000		6650749.50		A	0.7
4	☐	1.000		6458455.92		A	1.1
5	☐	1.000		6126687.12		A	0.4
6	☐	1.000		6050630.52		A	0.5
7	☐	1.000		6067933.51		A	0.4
8	☐	1.000		5291245.78		P	3.8

103 Rh (ISTD) [He]

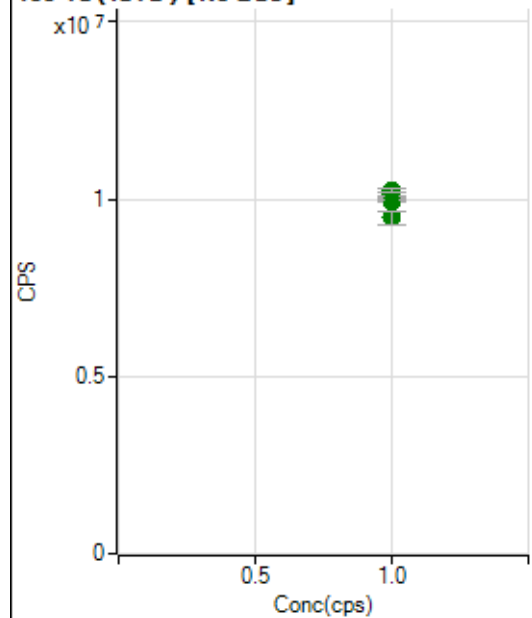
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		3232521.79		P	0.5
2	☐	1.000		3197982.45		P	0.4
3	☐	1.000		3093915.44		P	0.8
4	☐	1.000		2976042.00		P	0.1
5	☐	1.000		2834174.64		P	0.7
6	☐	1.000		2859006.52		P	0.7
7	☐	1.000		2858590.51		P	0.6
8	☐	1.000		2652682.84		P	0.5

115 In (ISTD) [No Gas]

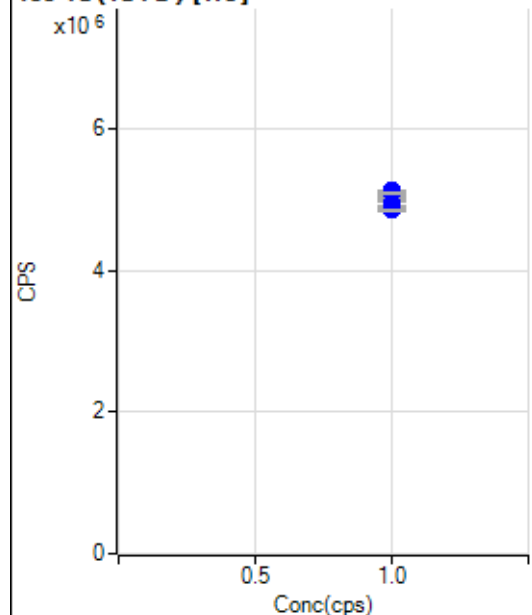
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7610242.01		A	0.5
2	☐	1.000		7676893.96		A	0.4
3	☐	1.000		7637581.45		A	0.5
4	☐	1.000		7497253.00		A	0.5
5	☐	1.000		7221308.60		A	0.1
6	☐	1.000		7176778.24		A	0.3
7	☐	1.000		7187703.61		A	0.8
8	☐	1.000		6669920.76		A	3.8

115 In (ISTD) [He]

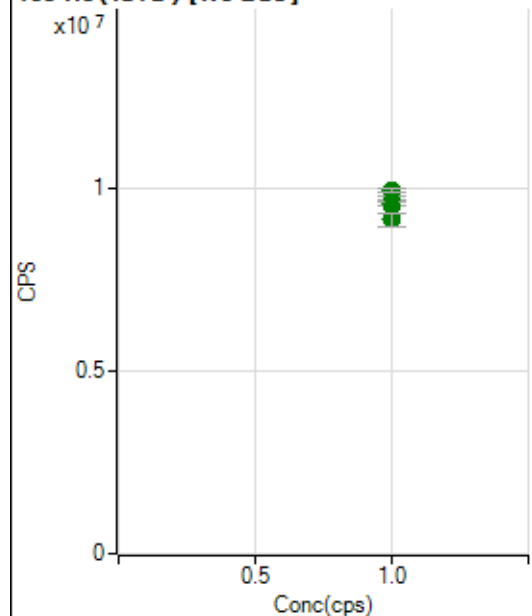
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		1550477.82		P	1.0
2	☐	1.000		1539966.08		P	0.7
3	☐	1.000		1486904.05		P	0.8
4	☐	1.000		1444537.04		P	0.2
5	☐	1.000		1384429.90		P	1.1
6	☐	1.000		1400811.01		P	0.5
7	☐	1.000		1393531.00		P	1.1
8	☐	1.000		1383226.91		P	0.5

159 Tb (ISTD) [No Gas]

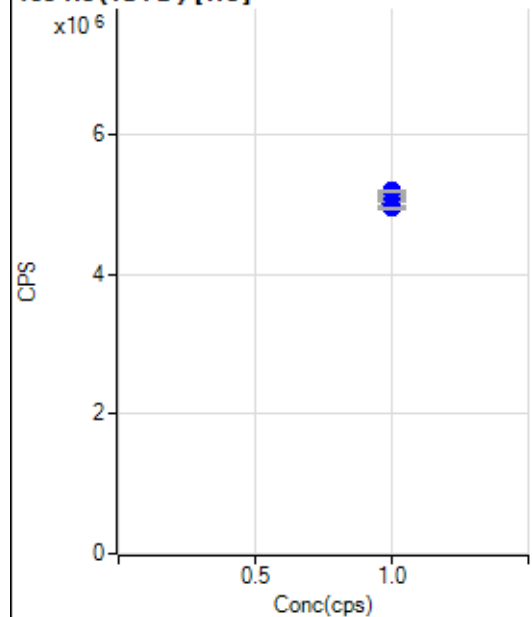
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		9925979.09		A	0.3
2	☐	1.000		9946943.05		A	0.3
3	☐	1.000		9943346.45		A	0.4
4	☐	1.000		10026570.54		A	0.3
5	☐	1.000		9977479.78		A	0.4
6	☐	1.000		10159356.17		A	0.9
7	☐	1.000		10232872.77		A	1.2
8	☐	1.000		9484715.48		A	4.1

159 Tb (ISTD) [He]

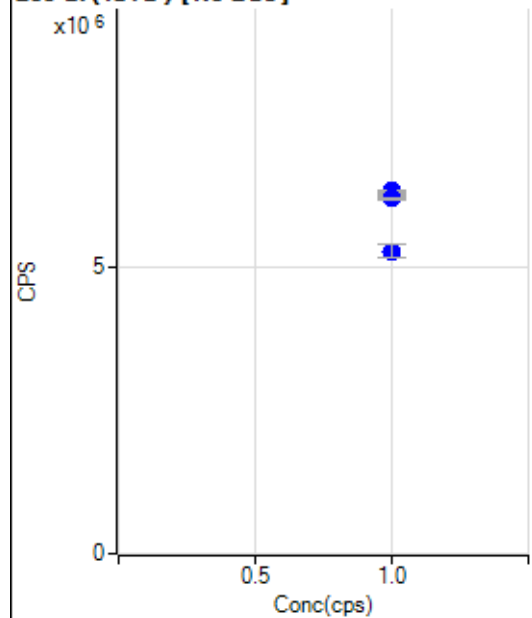
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		5121173.36		P	0.6
2	☐	1.000		5062442.63		P	0.3
3	☐	1.000		4979718.92		P	1.0
4	☐	1.000		4981746.04		P	0.4
5	☐	1.000		4903045.69		P	0.6
6	☐	1.000		5032415.34		P	0.7
7	☐	1.000		5096282.63		P	0.5
8	☐	1.000		4849928.02		P	0.3

165 Ho (ISTD) [No Gas]

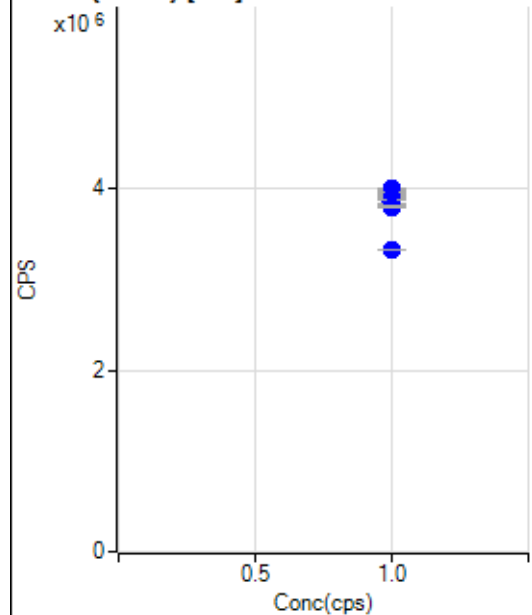
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		9565885.37		A	0.7
2	☐	1.000		9509765.92		A	0.2
3	☐	1.000		9566194.66		A	0.6
4	☐	1.000		9630417.06		A	0.6
5	☐	1.000		9620366.36		A	0.4
6	☐	1.000		9753756.47		A	0.1
7	☐	1.000		9915302.91		A	1.1
8	☐	1.000		9130859.84		A	4.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		5201062.11		P	0.7
2	☐	1.000		5129307.22		P	0.4
3	☐	1.000		5061297.63		P	1.1
4	☐	1.000		5072914.12		P	0.5
5	☐	1.000		5017091.39		P	0.8
6	☐	1.000		5141985.86		P	0.5
7	☐	1.000		5201830.58		P	0.5
8	☐	1.000		4955858.54		P	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		6188690.67		P	1.1
2	☐	1.000		6220066.51		P	0.1
3	☐	1.000		6236252.13		P	0.4
4	☐	1.000		6290587.68		P	0.4
5	☐	1.000		6315946.43		P	0.6
6	☐	1.000		6320240.32		P	0.5
7	☐	1.000		6186705.88		P	0.4
8	☐	1.000		5265274.68		P	4.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		3993942.61		P	0.4
2	☐	1.000		3948869.73		P	0.5
3	☐	1.000		3902797.03		P	1.1
4	☐	1.000		3898058.31		P	0.2
5	☐	1.000		3825124.42		P	0.7
6	☐	1.000		3844750.46		P	1.3
7	☐	1.000		3793067.06		P	0.4
8	☐	1.000		3319976.69		P	0.3

US EPA Tune Check Sample Report

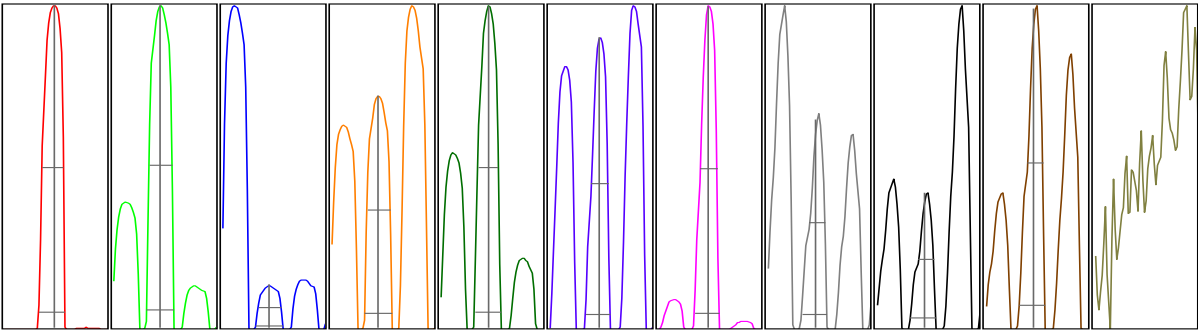
Batch Folder D:\ICP-MS Data\P7080419 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7071	0.58	5.00	
24	102567	0.20	5.00	
25	13648	0.47	5.00	
26	15832	0.44	5.00	
59	54178	0.36	5.00	
113	7875	1.05	5.00	
115	95958	1.65	5.00	
206	22177	0.60	5.00	
207	20440	0.39	5.00	
208	48216	0.48	5.00	
220	90	4.57		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7019	7107	7109	7037	7085
24	102329	102561	102883	102487	102575
25	13546	13637	13704	13657	13698
26	15747	15788	15874	15926	15825
59	53986	54411	54362	54104	54027
113	7963	7957	7861	7799	7793
115	98221	96843	95631	94460	94634
206	22115	22309	22320	22133	22009
207	20407	20571	20459	20365	20398
208	48063	48550	48352	47976	48142
220	97	89	87	89	88

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	11726	9.00	8.9 - 9.1		0.763	0.900	
24	161424	23.90	23.9 - 24.1		0.787	0.900	
25	21546	24.90	24.9 - 25.1		0.787	0.900	
26	24650	25.90	25.9 - 26.1		0.788	0.900	
59	94939	58.95	58.9 - 59.1		0.776	0.900	
113	16120	113.00	112.9 - 113.1		0.717	0.900	
115	195037	115.00	114.9 - 115.1		0.721	0.900	
206	46572	205.95	205.9 - 206.1		0.731	0.900	
207	43316	206.95	206.9 - 207.1		0.730	0.900	
208	102664	207.95	207.9 - 208.1		0.736	0.900	
220			-				

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	7.0	V	Deflect	14.0	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	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	13284	3.87	
89	26147	4.12	
205	21013	2.83	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	12976	13042	13135	14199	13069
89	25570	25838	25700	28062	25564
205	20719	20828	20756	22074	20686

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	7.6	V	Deflect	2.0	V
Extract 2	-95.0	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	190	V			