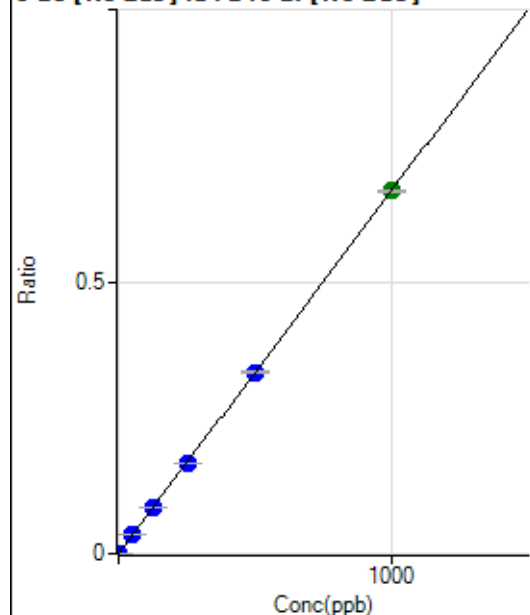


Batch Folder: D:\ICP-MS Data\P7083018MS.b\
Analysis File: P7083018MS.batch.bin
DA Date-Time: 2018-08-30 15:27:58
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-08-30 12:47:40
2			
3	005CALS.d	S02	2018-08-30 12:56:03
4	006CALS.d	S03	2018-08-30 12:59:57
5	007CALS.d	S04	2018-08-30 13:04:20
6	008CALS.d	S05	2018-08-30 13:08:07
7	009CALS.d	S06	2018-08-30 13:11:52
8	010CALS.d	S07	2018-08-30 13:15:37
9	011CALS.d	S08	2018-08-30 13:19:27

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.82	0.0000	P	26.1
2	☐	0.100					
3	☐	1.000	0.971	3367.12	0.0007	P	3.9
4	☐	50.000	50.717	184490.28	0.0339	P	0.6
5	☐	125.000	128.631	451734.10	0.0859	P	1.4
6	☐	250.000	250.487	856051.85	0.1672	P	0.1
7	☐	500.000	499.586	1682612.42	0.3334	P	0.6
8	☐	1000.000	999.595	3371750.68	0.6671	A	0.7
9	☐			462.98	0.0001	P	13.4

$$y = 6.6739\text{E-}004 * x + 1.1902\text{E-}005$$

$$R = 1.0000$$

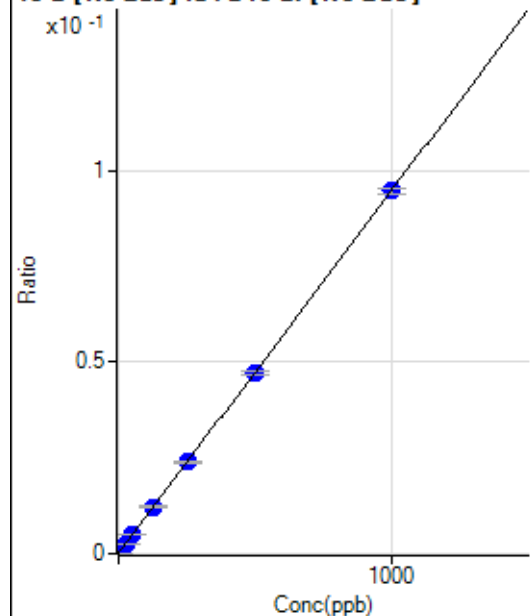
$$DL = 0.01395$$

$$BEC = 0.01783$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	502.81	0.0001	P	7.8
2	☐	2.500					
3	☐	25.000	24.395	12266.51	0.0024	P	3.0
4	☐	50.000	50.610	26632.86	0.0049	P	2.9
5	☐	125.000	127.262	63908.44	0.0122	P	4.3
6	☐	250.000	251.712	122588.33	0.0239	P	1.6
7	☐	500.000	499.257	239169.24	0.0474	P	2.0
8	☐	1000.000	999.645	479194.27	0.0948	P	1.4
9	☐			14126.65	0.0030	P	10.7

$$y = 9.4748\text{E-}005 * x + 9.2344\text{E-}005$$

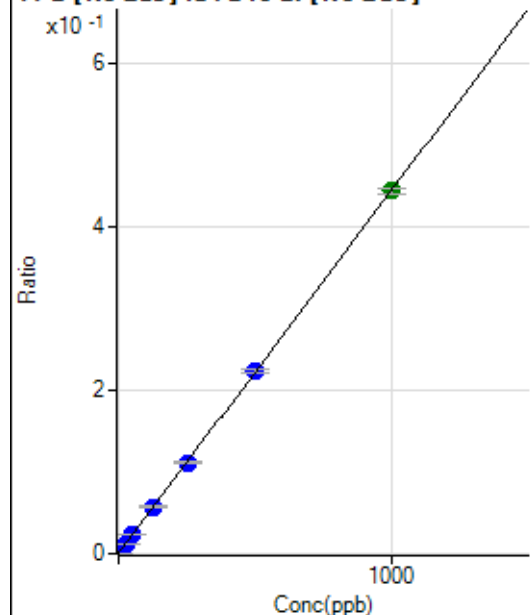
$$R = 1.0000$$

$$DL = 0.2279$$

$$BEC = 0.9746$$

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	2128.02	0.0004	P	3.3
2	☐	2.500					
3	☐	25.000	24.448	57479.57	0.0113	P	2.1
4	☐	50.000	51.380	126632.99	0.0232	P	1.1
5	☐	125.000	127.249	299740.06	0.0570	P	3.5
6	☐	250.000	249.259	569623.49	0.1112	P	1.7
7	☐	500.000	502.317	1129292.70	0.2238	P	1.8
8	☐	1000.000	998.690	2246937.83	0.4445	A	1.4
9	☐			64642.52	0.0136	P	9.8

$$y = 4.4474\text{E-}004 * x + 3.9084\text{E-}004$$

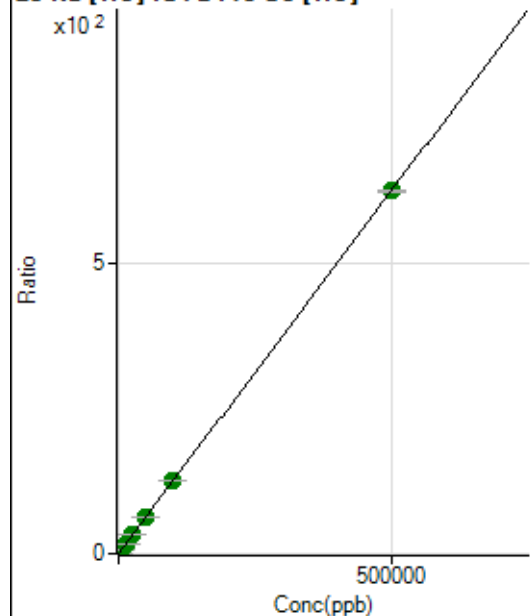
$$R = 1.0000$$

$$DL = 0.08824$$

$$BEC = 0.8788$$

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	12530.71	0.0215	P	3.4
2	☐	50.000					
3	☐	500.000	487.730	347570.13	0.6331	P	1.1
4	☐	5000.000	5059.957	3708157.63	6.3670	A	0.6
5	☐	12500.000	12935.183	9077306.19	16.2432	A	0.3
6	☐	25000.000	25611.489	17780713.77	32.1402	A	0.3
7	☐	50000.000	50870.723	35615967.81	63.8172	A	0.2
8	☐	100000.00	100774.01	72615719.68	126.3998	A	0.6
9	☐	500000.00	499716.08	357514180.2	626.7037	A	0.5

$$y = 0.0013 * x + 0.0215$$

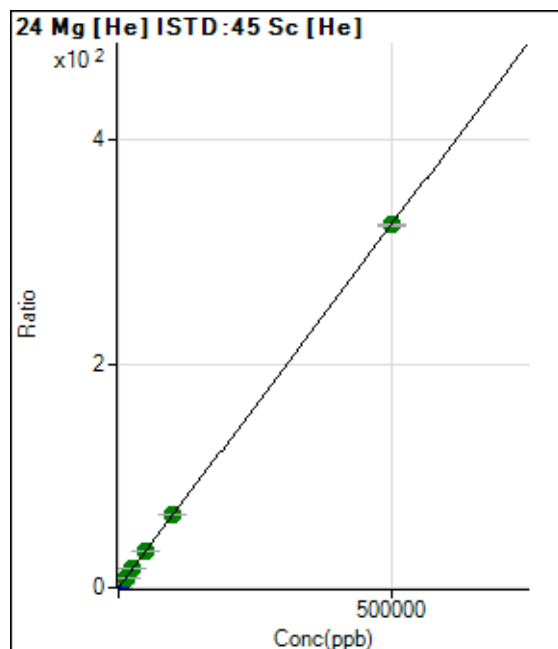
$$R = 1.0000$$

$$DL = 1.766$$

$$BEC = 17.11$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0002	P	50.1
2	☐	50.000					
3	☐	500.000	496.508	177039.32	0.3225	P	0.6
4	☐	5000.000	5163.388	1951988.76	3.3516	P	0.5
5	☐	12500.000	13054.608	4735344.25	8.4736	A	0.5
6	☐	25000.000	25989.664	9332559.67	16.8695	A	0.4
7	☐	50000.000	51450.486	18638108.40	33.3955	A	0.5
8	☐	100000.00	101100.90	37699930.35	65.6223	A	0.6
9	☐	500000.00	499569.79	184979536.0	324.2587	A	0.2

$$y = 6.4908\text{E-}004 * x + 2.0917\text{E-}004$$

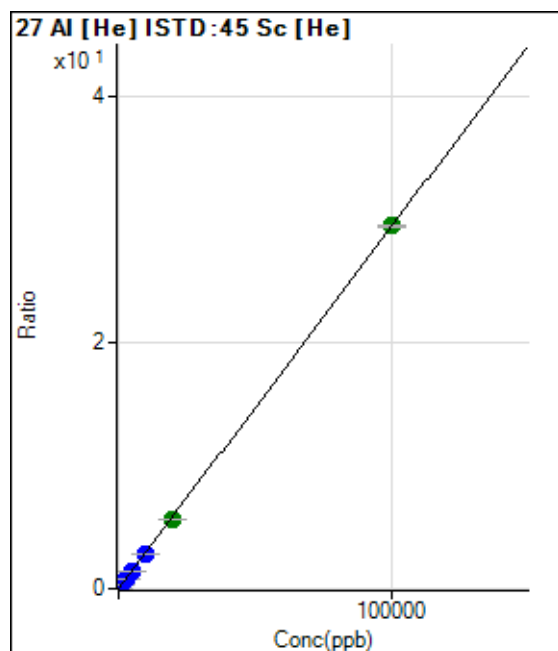
$$R = 1.0000$$

$$DL = 0.4839$$

$$BEC = 0.3223$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0001	P	71.5
2	☐	2.000					
3	☐	20.000	19.294	3186.57	0.0058	P	8.8
4	☐	1000.000	998.355	170981.69	0.2936	P	0.8
5	☐	2500.000	2514.043	413045.77	0.7391	P	0.6
6	☐	5000.000	4930.348	801793.77	1.4493	P	0.4
7	☐	10000.000	9783.586	1604997.61	2.8758	P	0.5
8	☐	20000.000	19233.824	3247969.37	5.6535	A	0.6
9	☐	100000.00	100178.02	16797917.56	29.4455	A	0.4

$$y = 2.9393\text{E-}004 * x + 1.3328\text{E-}004$$

$$R = 1.0000$$

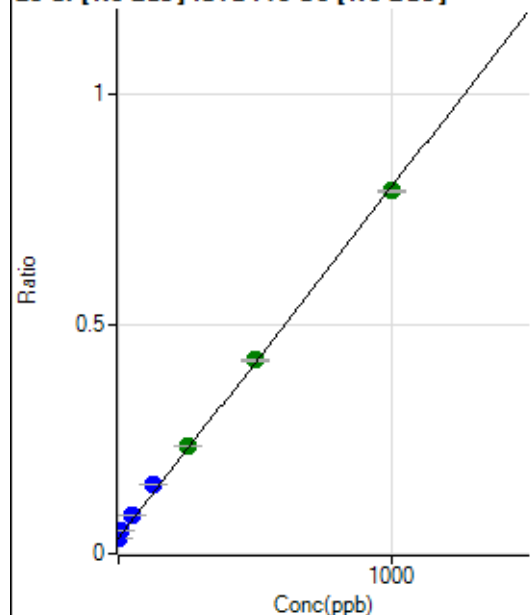
$$DL = 0.972$$

$$BEC = 0.4534$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	400851.86	0.0341	P	0.5
2	☐	1.000					
3	☐	10.000	19.505	540322.19	0.0490	P	0.2
4	☐	50.000	62.778	968229.70	0.0821	P	0.7
5	☐	125.000	153.333	1732299.23	0.1514	P	1.4
6	☐	250.000	260.589	2566384.71	0.2335	A	0.6
7	☐	500.000	508.363	4731404.75	0.4231	A	0.9
8	☐	1000.000	988.896	9082276.42	0.7909	A	0.8
9	☐			763774.63	0.0681	P	1.9

$$y = 7.6530E-004 * x + 0.0341$$

$$R = 0.9996$$

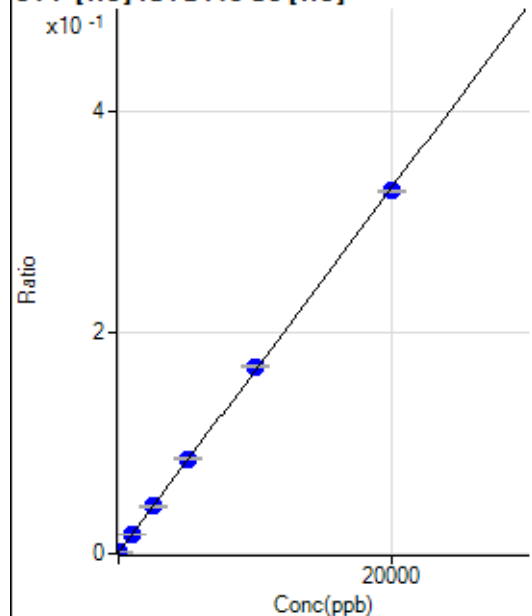
$$DL = 0.7053$$

$$BEC = 44.54$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-4.878	452.80	0.0008	P	11.0
2	☐	0.000					
3	☐	0.000	4.878	513.92	0.0009	P	6.3
4	☐	1000.000	1016.163	10240.03	0.0176	P	1.2
5	☐	2500.000	2534.160	23794.63	0.0426	P	2.8
6	☐	5000.000	5166.384	47521.15	0.0859	P	1.1
7	☐	10000.000	10214.770	94317.51	0.1690	P	0.6
8	☐	20000.000	19845.941	188170.01	0.3275	P	0.4
9	☐			569.48	0.0010	P	16.3

$$y = 1.6461E-005 * x + 8.5588E-004$$

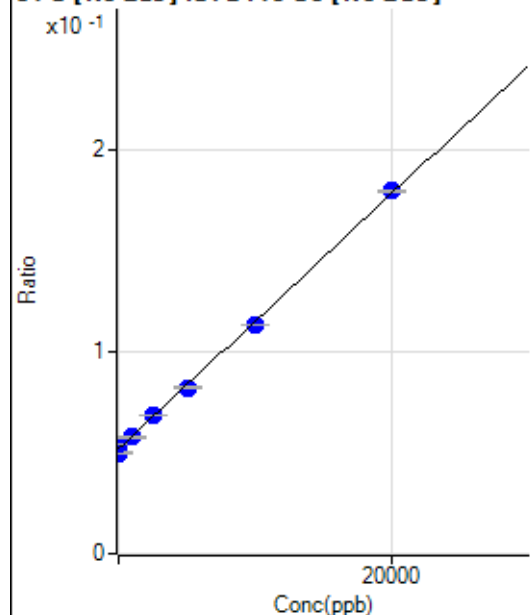
$$R = 0.9999$$

$$DL = 13.19$$

$$BEC = 52$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-323.762	586925.70	0.0499	P	0.3
2	☐	0.000					
3	☐	0.000	323.762	595306.64	0.0540	P	0.3
4	☐	1000.000	896.949	679338.00	0.0576	P	0.5
5	☐	2500.000	2579.188	780855.40	0.0683	P	0.5
6	☐	5000.000	4801.476	904483.79	0.0823	P	0.9
7	☐	10000.000	9701.481	1266487.71	0.1133	P	0.2
8	☐	20000.000	20194.145	2062073.90	0.1796	P	0.5
9	☐			487883.32	0.0435	P	2.7

$$y = 6.3191\text{E-}006 * x + 0.0520$$

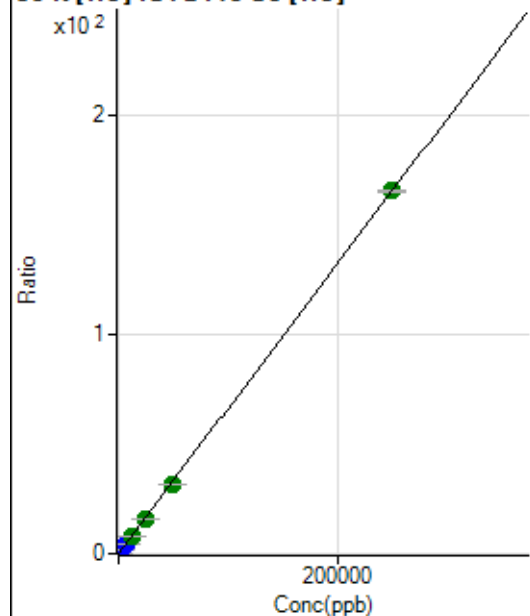
$$R = 0.9994$$

$$DL = 78.52$$

$$BEC = 8223$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	37787.81	0.0647	P	0.8
2	☐	50.000					
3	☐	500.000	470.398	205945.96	0.3751	P	0.3
4	☐	2500.000	2405.416	962177.83	1.6521	P	0.3
5	☐	6250.000	5986.662	2243984.71	4.0154	P	0.2
6	☐	12500.000	11843.179	4359399.14	7.8801	A	0.8
7	☐	25000.000	23787.210	8796683.44	15.7621	A	0.3
8	☐	50000.000	47542.973	18061480.27	31.4387	A	0.5
9	☐	250000.00	250653.11	94398042.39	165.4729	A	0.7

$$y = 6.5991\text{E-}004 * x + 0.0647$$

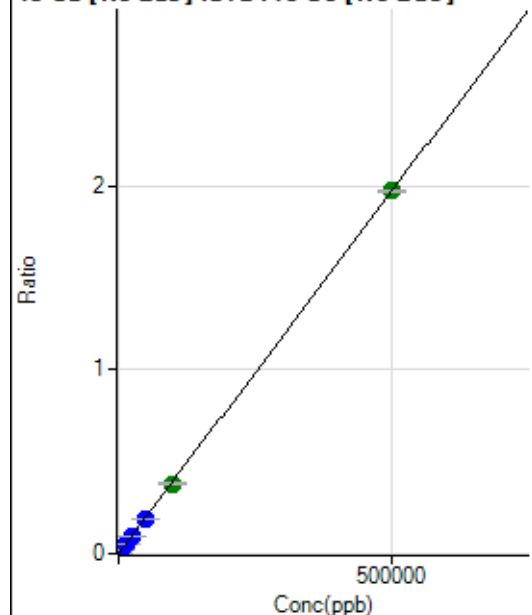
$$R = 0.9999$$

$$DL = 2.44$$

$$BEC = 98.07$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	216.68	0.0000	P	15.5
2	☐	50.000					
3	☐	500.000	454.850	19978.05	0.0018	P	1.3
4	☐	5000.000	4803.199	223540.73	0.0190	P	0.4
5	☐	12500.000	12282.412	554401.65	0.0485	P	0.4
6	☐	25000.000	24341.544	1055296.05	0.0960	P	0.9
7	☐	50000.000	48234.140	2127398.87	0.1903	P	0.2
8	☐	100000.00	96841.554	4386242.25	0.3820	A	0.1
9	☐	500000.00	500848.65	22153551.88	1.9754	A	0.4

$$y = 3.9441\text{E-}006 * x + 1.8428\text{E-}005$$

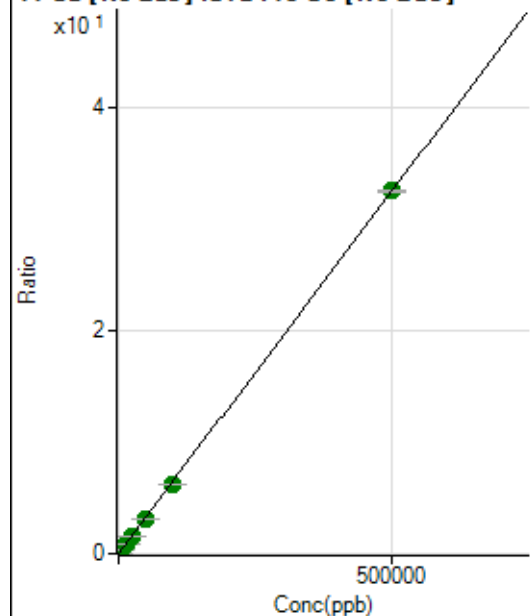
$$R = 1.0000$$

$$DL = 2.168$$

$$BEC = 4.672$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14660.97	0.0012	P	2.0
2	☐	50.000					
3	☐	500.000	441.238	330197.30	0.0300	P	0.2
4	☐	5000.000	4787.157	3686381.51	0.3127	A	0.6
5	☐	12500.000	12100.569	9020872.95	0.7885	A	0.2
6	☐	25000.000	24126.251	17265349.69	1.5710	A	0.3
7	☐	50000.000	48184.225	35068475.09	3.1362	A	0.4
8	☐	100000.00	96235.034	71912075.91	6.2625	A	0.7
9	☐	500000.00	500990.43	365567655.3	32.5970	A	0.3

$$y = 6.5063\text{E-}005 * x + 0.0012$$

$$R = 1.0000$$

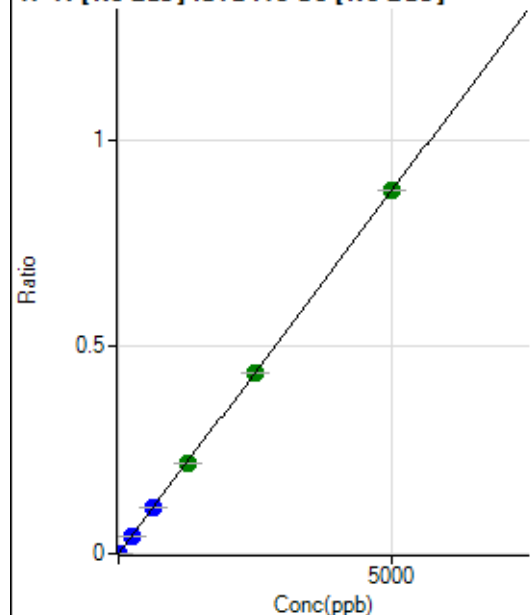
$$DL = 1.15$$

$$BEC = 19.16$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	130.56	0.0000	P	29.8
2	☐	0.500					
3	☐	5.000	4.761	9317.17	0.0008	P	2.5
4	☐	250.000	248.722	513794.47	0.0436	P	0.2
5	☐	625.000	626.474	1255635.73	0.1098	P	0.8
6	☐	1250.000	1249.092	2405073.90	0.2188	A	0.3
7	☐	2500.000	2497.251	4891997.11	0.4375	A	0.4
8	☐	5000.000	5001.481	10061820.36	0.8762	A	0.1
9	☐			2008.54	0.0002	P	5.4

$$y = 1.7519\text{E-}004 * x + 1.1111\text{E-}005$$

$$R = 1.0000$$

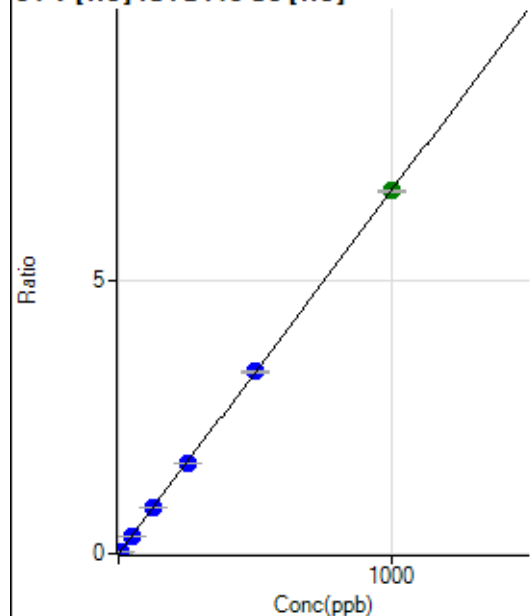
$$DL = 0.05678$$

$$BEC = 0.06342$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.33	0.0000	P	0.2
2	☐	0.500					
3	☐	5.000	4.737	17351.50	0.0316	P	1.0
4	☐	50.000	49.890	193741.68	0.3327	P	0.9
5	☐	125.000	125.088	466096.24	0.8340	P	0.4
6	☐	250.000	249.481	920243.76	1.6634	P	0.7
7	☐	500.000	501.210	1865059.38	3.3419	P	0.5
8	☐	1000.000	999.521	3828592.72	6.6644	A	0.8
9	☐			1330.08	0.0023	P	4.0

$$y = 0.0067 * x + 2.2829\text{E-}005$$

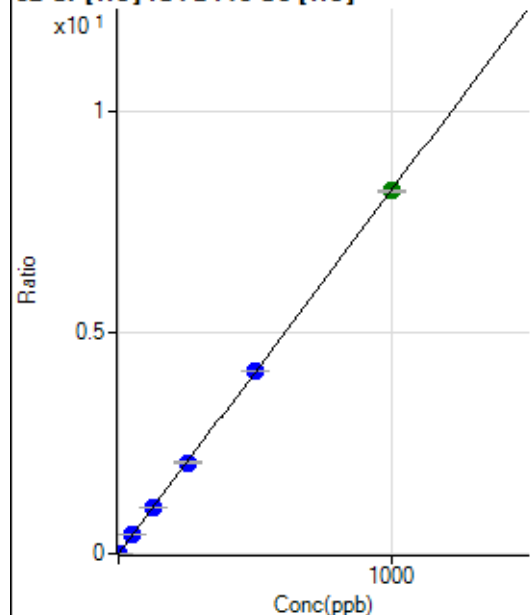
$$R = 1.0000$$

$$DL = 2.503\text{E-}05$$

$$BEC = 0.003424$$

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	710.03	0.0012	P	8.9
2	☐	0.200					
3	☐	2.000	2.050	9914.57	0.0181	P	3.2
4	☐	50.000	50.430	242005.34	0.4155	P	0.8
5	☐	125.000	126.876	583205.63	1.0436	P	0.4
6	☐	250.000	251.035	1141655.01	2.0637	P	0.7
7	☐	500.000	502.591	2305154.19	4.1304	P	0.5
8	☐	1000.000	998.190	4712029.51	8.2021	A	0.7
9	☐			151060.01	0.2648	P	0.8

$$y = 0.0082 * x + 0.0012$$

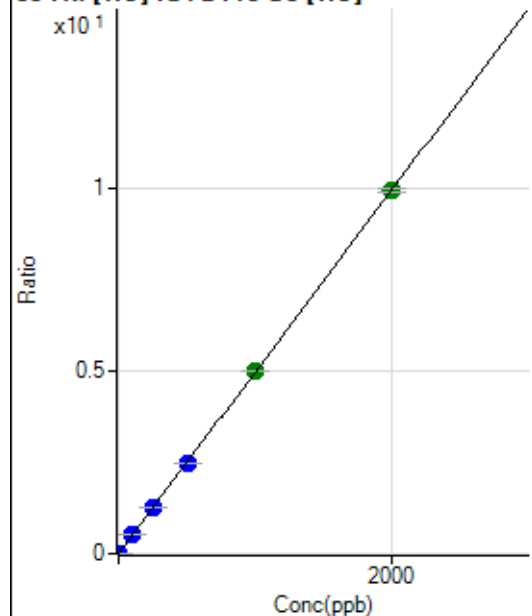
$$R = 1.0000$$

$$DL = 0.03946$$

$$BEC = 0.148$$

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	43.33	0.0001	P	27.5
2	☐	0.100					
3	☐	1.000	1.034	2858.10	0.0052	P	3.3
4	☐	100.000	101.410	293252.64	0.5035	P	0.8
5	☐	250.000	253.881	704390.23	1.2605	P	0.6
6	☐	500.000	501.484	1377373.52	2.4897	P	0.4
7	☐	1000.000	1004.201	2782382.46	4.9855	A	0.1
8	☐	2000.000	1996.973	5695563.11	9.9142	A	0.9
9	☐			25560.22	0.0448	P	1.4

$$y = 0.0050 * x + 7.4179E-005$$

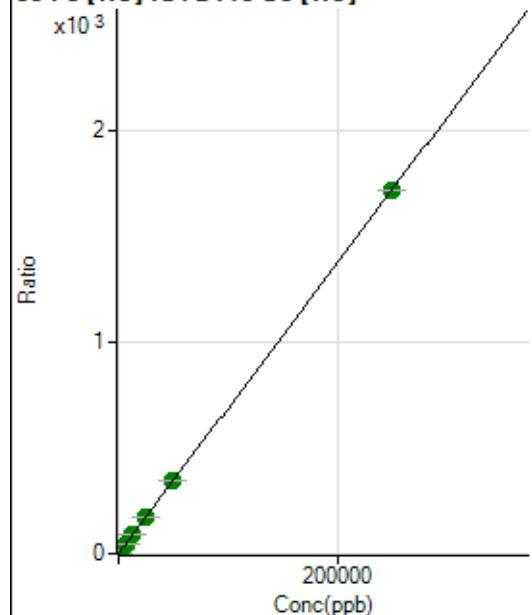
$$R = 1.0000$$

$$DL = 0.01234$$

$$BEC = 0.01494$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6405.28	0.0110	P	1.2
2	☐	5.000					
3	☐	50.000	49.934	193939.29	0.3533	P	0.9
4	☐	2500.000	2522.644	10077752.31	17.3041	A	0.8
5	☐	6250.000	6360.240	24371177.40	43.6114	A	0.6
6	☐	12500.000	12638.993	47938055.70	86.6533	A	0.7
7	☐	25000.000	25514.701	97621072.55	174.9183	A	0.1
8	☐	50000.000	50418.370	198561498.8	345.6368	A	1.1
9	☐	250000.00	249854.92	977096651.4	1,712.805	A	0.1

$$y = 0.0069 * x + 0.0110$$

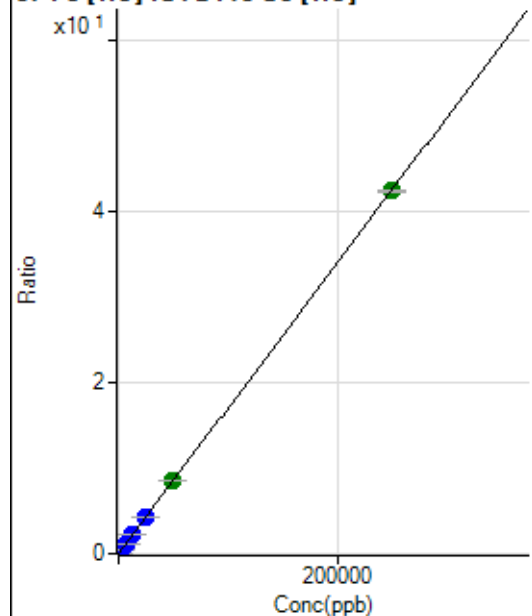
$$R = 1.0000$$

$$DL = 0.05706$$

$$BEC = 1.6$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	337.05	0.0006	P	9.8
2	☐	5.000					
3	☐	50.000	51.925	5162.16	0.0094	P	4.7
4	☐	2500.000	2561.252	253893.82	0.4359	P	0.5
5	☐	6250.000	6398.008	608092.08	1.0881	P	0.7
6	☐	12500.000	12759.536	1200192.39	2.1695	P	0.6
7	☐	25000.000	25534.636	2422692.79	4.3410	P	0.2
8	☐	50000.000	50621.815	4943794.78	8.6054	A	0.3
9	☐	250000.00	249804.88	24223455.87	42.4630	A	0.4

$$y = 1.6998E-004 * x + 5.7717E-004$$

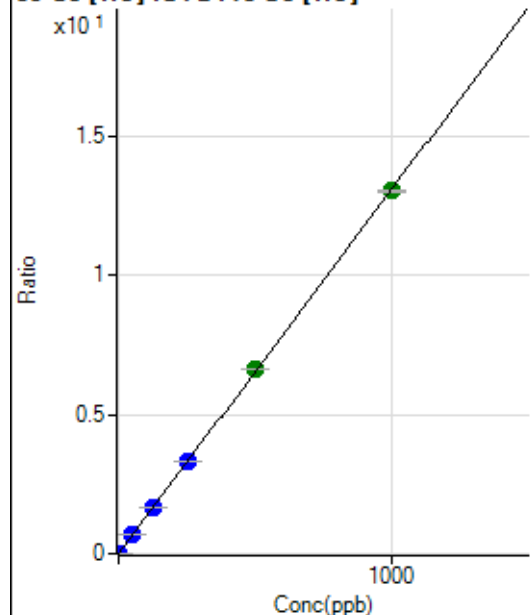
$$R = 1.0000$$

$$DL = 0.9993$$

$$BEC = 3.395$$

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	120.00	0.0002	P	26.6
2	☐	0.100					
3	☐	1.000	0.996	7269.70	0.0132	P	1.1
4	☐	50.000	51.277	391147.65	0.6716	P	0.7
5	☐	125.000	127.640	934078.40	1.6715	P	0.7
6	☐	250.000	252.816	1831449.12	3.3106	P	0.8
7	☐	500.000	504.838	3689302.69	6.6105	A	0.1
8	☐	1000.000	996.483	7496057.81	13.0481	A	0.6
9	☐			90267.87	0.1582	P	0.7

$$y = 0.0131 * x + 2.0544E-004$$

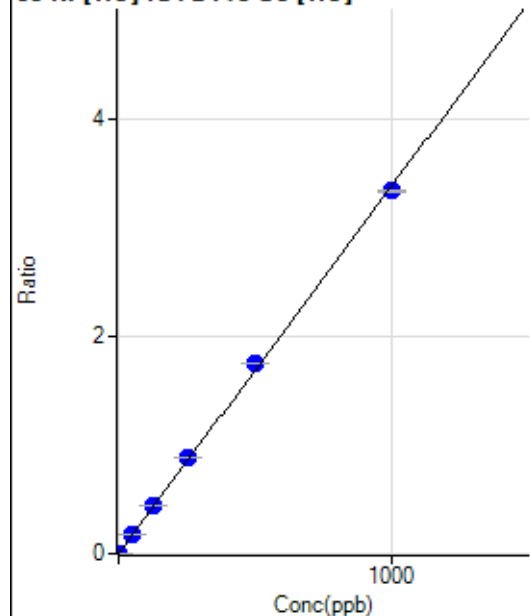
$$R = 1.0000$$

$$DL = 0.01253$$

$$BEC = 0.01569$$

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	46.67	0.0001	P	18.8
2	☐	0.100					
3	☐	1.000	1.098	2081.29	0.0038	P	3.2
4	☐	50.000	53.226	104844.65	0.1800	P	1.3
5	☐	125.000	132.638	250624.88	0.4485	P	1.0
6	☐	250.000	259.974	486282.16	0.8790	P	0.3
7	☐	500.000	517.023	975562.69	1.7480	P	0.1
8	☐	1000.000	987.879	1918778.56	3.3399	P	0.3
9	☐			54161.98	0.0949	P	0.1

$$y = 0.0034 * x + 7.9912E-005$$

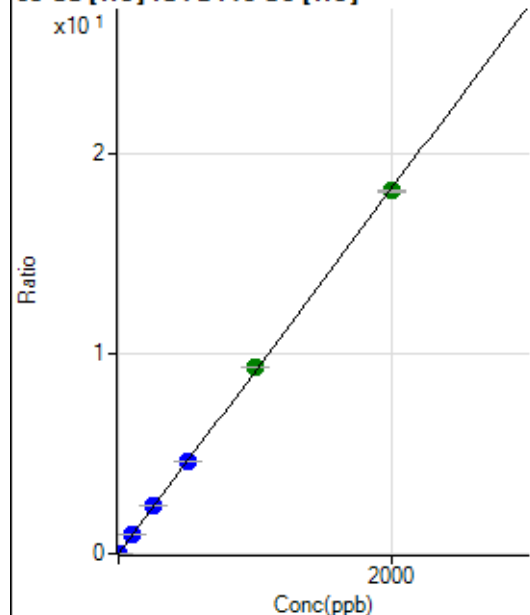
$$R = 0.9997$$

$$DL = 0.01335$$

$$BEC = 0.02364$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	835.59	0.0014	P	4.2
2	☐	0.200					
3	☐	2.000	2.023	10944.25	0.0199	P	1.4
4	☐	100.000	103.861	554070.53	0.9514	P	0.7
5	☐	250.000	259.116	1325187.62	2.3714	P	0.6
6	☐	500.000	506.320	2562713.99	4.6324	P	0.4
7	☐	1000.000	1018.303	5198707.60	9.3151	A	0.1
8	☐	2000.000	1987.936	10446388.94	18.1836	A	0.5
9	☐			22715.60	0.0398	P	1.0

$$y = 0.0091 * x + 0.0014$$

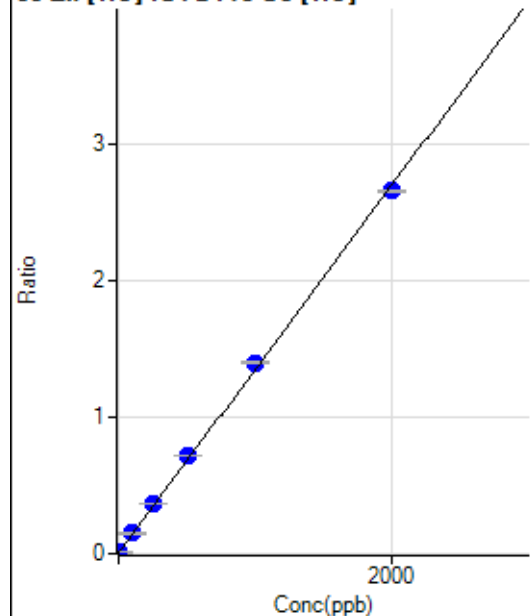
$$R = 0.9999$$

$$DL = 0.0198$$

$$BEC = 0.1565$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2425.80	0.0042	P	3.6
2	☐	0.200					
3	☐	2.000	2.501	4125.08	0.0075	P	6.1
4	☐	100.000	106.895	86087.52	0.1478	P	0.6
5	☐	250.000	269.900	205026.56	0.3669	P	1.4
6	☐	500.000	529.276	395821.35	0.7155	P	1.0
7	☐	1000.000	1037.212	780281.64	1.3981	P	0.8
8	☐	2000.000	1971.242	1524385.51	2.6534	P	0.3
9	☐			10092.49	0.0177	P	0.5

$$y = 0.0013 * x + 0.0042$$

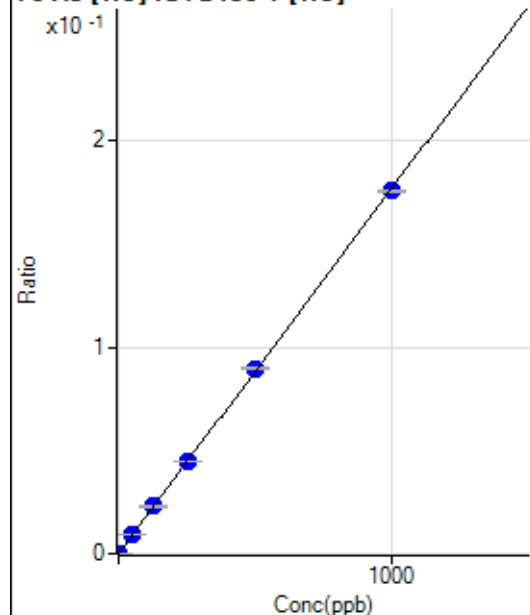
$$R = 0.9996$$

$$DL = 0.3336$$

$$BEC = 3.091$$

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	14.82	0.0000	P	33.3
2	☐	0.100					
3	☐	1.000	1.016	508.65	0.0002	P	5.0
4	☐	50.000	51.409	26338.08	0.0091	P	1.3
5	☐	125.000	129.366	63449.90	0.0229	P	0.9
6	☐	250.000	254.697	125176.84	0.0450	P	0.6
7	☐	500.000	507.884	253211.57	0.0898	P	0.8
8	☐	1000.000	994.267	511451.05	0.1758	P	0.6
9	☐			736.45	0.0003	P	4.3

$$y = 1.7683\text{E-}004 * x + 5.0149\text{E-}006$$

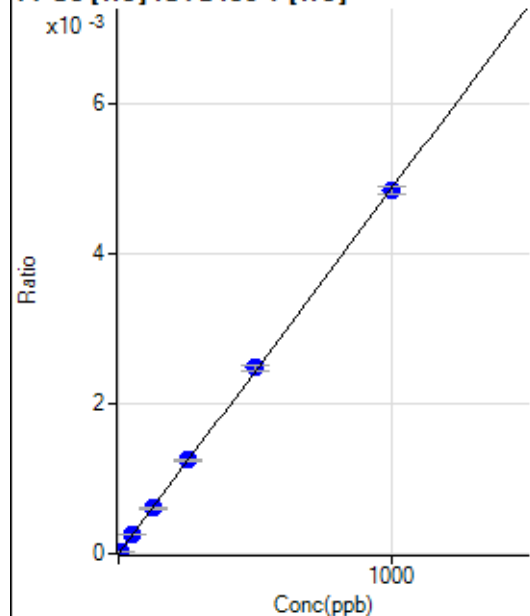
$$R = 0.9999$$

$$DL = 0.02835$$

$$BEC = 0.02836$$

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	☐	0.500					
3	☐	5.000	5.220	70.00	0.0000	P	39.1
4	☐	50.000	52.859	745.59	0.0003	P	4.8
5	☐	125.000	124.796	1685.68	0.0006	P	5.5
6	☐	250.000	255.871	3463.81	0.0012	P	3.5
7	☐	500.000	508.512	6984.01	0.0025	P	2.4
8	☐	1000.000	994.158	14087.02	0.0048	P	2.0
9	☐			5.56	0.0000	P	91.6

$$y = 4.8713\text{E-}006 * x + 0.0000\text{E+}000$$

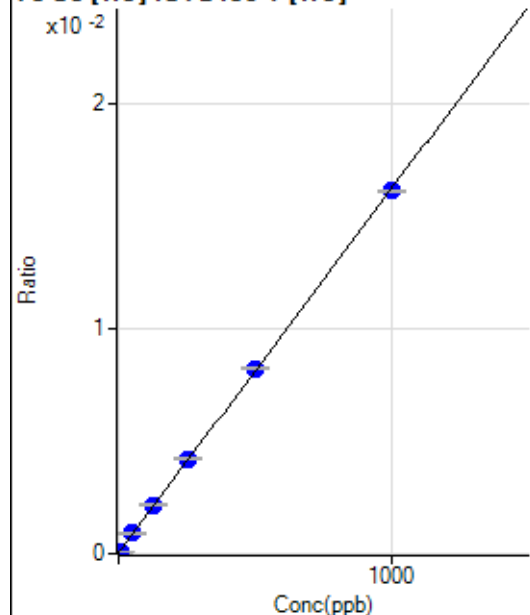
$$R = 0.9999$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	112.35	0.0000	P	7.7
2	☐	0.500					
3	☐	5.000	5.283	340.13	0.0001	P	3.0
4	☐	50.000	53.393	2612.61	0.0009	P	3.0
5	☐	125.000	130.979	5984.00	0.0022	P	3.3
6	☐	250.000	256.695	11651.66	0.0042	P	2.1
7	☐	500.000	506.564	23222.97	0.0082	P	1.2
8	☐	1000.000	994.126	46916.23	0.0161	P	0.8
9	☐			129.02	0.0000	P	8.0

$$y = 1.6185E-005 * x + 3.8006E-005$$

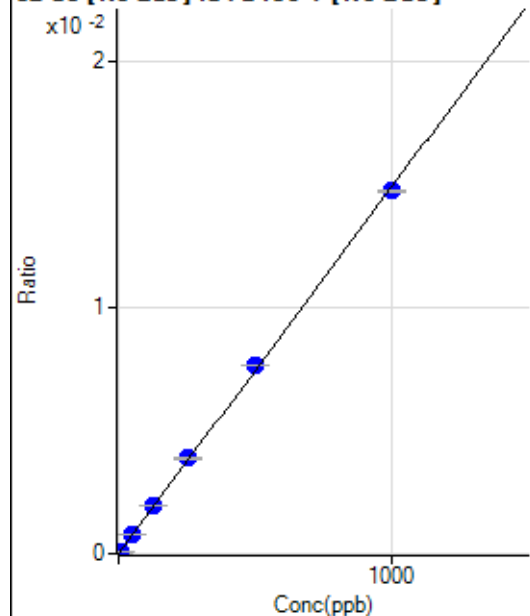
$$R = 0.9999$$

$$DL = 0.5439$$

$$BEC = 2.348$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	88.52	0.0000	P	42.5
2	☐	0.500					
3	☐	5.000	5.331	1446.80	0.0001	P	5.4
4	☐	50.000	52.305	14359.66	0.0008	P	0.4
5	☐	125.000	131.538	35312.48	0.0020	P	1.4
6	☐	250.000	259.539	67754.83	0.0039	P	0.6
7	☐	500.000	513.124	136809.78	0.0076	P	0.3
8	☐	1000.000	990.119	269678.84	0.0147	P	0.9
9	☐			260.79	0.0000	P	23.6

$$y = 1.4884E-005 * x + 4.8285E-006$$

$$R = 0.9998$$

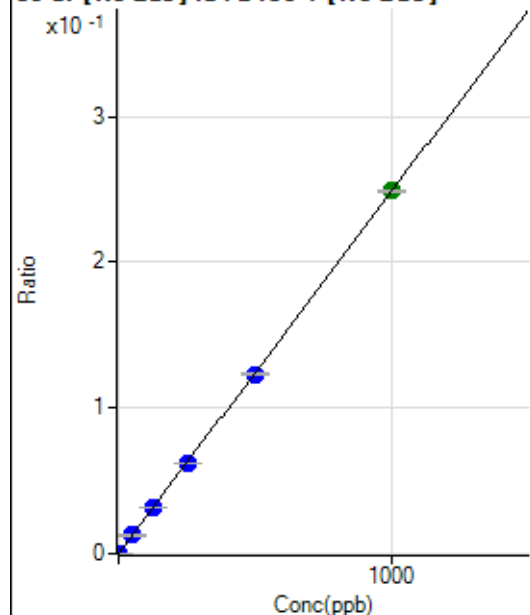
$$DL = 0.4135$$

$$BEC = 0.3244$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1136.21	0.0001	P	7.3
2	☐	0.100					
3	☐	1.000	0.957	5153.92	0.0003	P	5.6
4	☐	50.000	50.256	229965.84	0.0125	P	0.7
5	☐	125.000	125.913	563832.12	0.0313	P	1.6
6	☐	250.000	250.593	1091457.24	0.0623	P	0.5
7	☐	500.000	496.137	2207217.74	0.1233	P	0.7
8	☐	1000.000	1001.657	4552954.96	0.2489	A	0.3
9	☐			21936.85	0.0013	P	1.4

$$y = 2.4839\text{E-}004 * x + 6.1973\text{E-}005$$

$$R = 1.0000$$

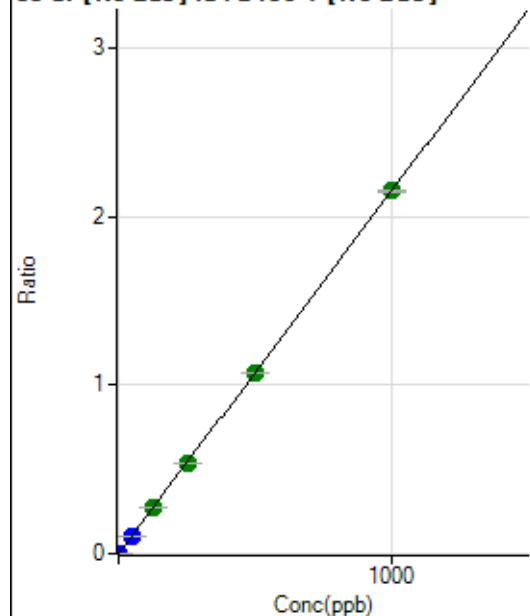
$$DL = 0.05443$$

$$BEC = 0.2495$$

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	227.79	0.0000	P	11.5
2	☐	0.100					
3	☐	1.000	0.981	36486.12	0.0021	P	2.7
4	☐	50.000	50.018	1973133.83	0.1076	P	0.6
5	☐	125.000	125.313	4851755.27	0.2697	A	0.4
6	☐	250.000	251.067	9463778.77	0.5402	A	0.1
7	☐	500.000	498.567	19204965.36	1.0728	A	0.3
8	☐	1000.000	1000.410	39380052.62	2.1526	A	0.5
9	☐			184996.56	0.0106	P	0.4

$$y = 0.0022 * x + 1.2421\text{E-}005$$

$$R = 1.0000$$

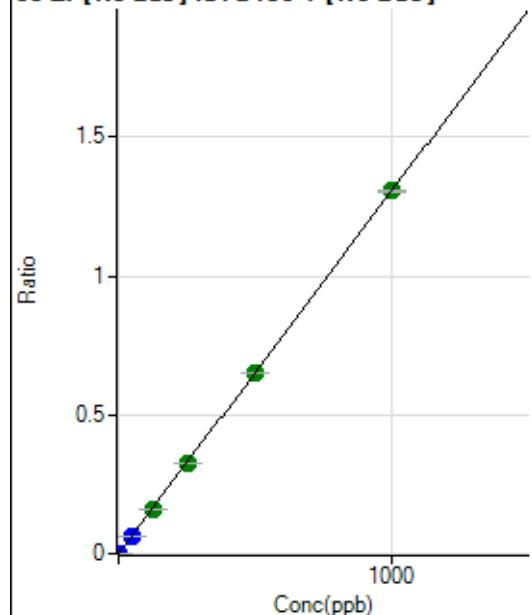
$$DL = 0.001995$$

$$BEC = 0.005772$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1608.49	0.0001	P	13.1
2	☐	0.100					
3	☐	1.000	0.952	22863.57	0.0013	P	0.6
4	☐	50.000	49.533	1186594.16	0.0647	P	0.3
5	☐	125.000	124.343	2921320.96	0.1624	A	0.2
6	☐	250.000	250.750	5734012.02	0.3273	A	0.4
7	☐	500.000	498.676	11652034.90	0.6509	A	0.1
8	☐	1000.000	1000.580	23891247.93	1.3059	A	0.2
9	☐			4898.26	0.0003	P	0.2

$$y = 0.0013 * x + 8.7723E-005$$

$$R = 1.0000$$

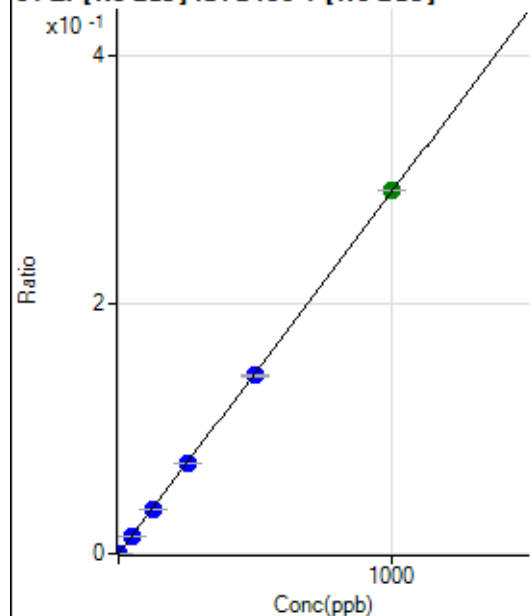
$$DL = 0.02636$$

$$BEC = 0.06722$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	308.35	0.0000	P	21.9
2	☐	0.100					
3	☐	1.000	0.928	4914.98	0.0003	P	3.3
4	☐	50.000	49.885	265516.62	0.0145	P	0.3
5	☐	125.000	124.364	649263.45	0.0361	P	0.5
6	☐	250.000	248.702	1263804.06	0.0721	P	0.3
7	☐	500.000	493.588	2562942.27	0.1432	P	0.8
8	☐	1000.000	1003.616	5325215.92	0.2911	A	0.1
9	☐			1152.87	0.0001	P	2.2

$$y = 2.9002E-004 * x + 1.6811E-005$$

$$R = 1.0000$$

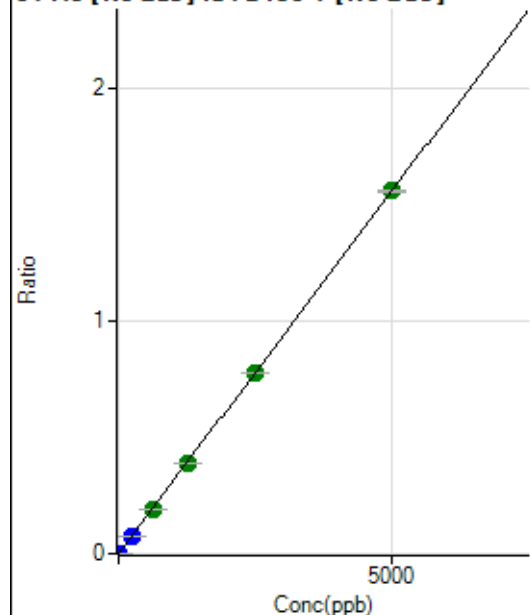
$$DL = 0.03808$$

$$BEC = 0.05797$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	519.48	0.0000	P	17.4
2	☐	0.500					
3	☐	5.000	4.842	26347.33	0.0015	P	3.6
4	☐	250.000	248.800	1417843.85	0.0773	P	0.2
5	☐	625.000	619.159	3462414.53	0.1924	A	0.7
6	☐	1250.000	1244.393	6774607.44	0.3867	A	0.3
7	☐	2500.000	2487.693	13839726.35	0.7731	A	0.3
8	☐	5000.000	5008.346	28472908.28	1.5564	A	0.4
9	☐			32061.88	0.0018	P	4.6

$$y = 3.1075\text{E-}004 * x + 2.8323\text{E-}005$$

$$R = 1.0000$$

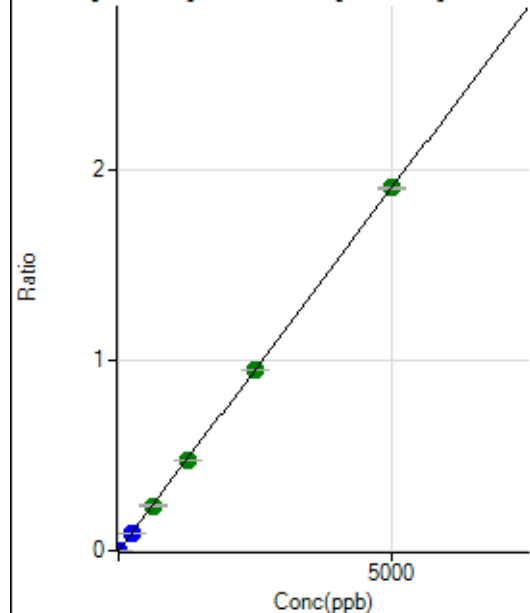
$$DL = 0.04759$$

$$BEC = 0.09114$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	5.9
2	☐	0.500					
3	☐	5.000	4.750	31154.28	0.0018	P	2.2
4	☐	250.000	248.344	1733119.61	0.0945	P	0.5
5	☐	625.000	622.977	4267020.80	0.2372	A	0.5
6	☐	1250.000	1252.686	8353598.10	0.4769	A	0.0
7	☐	2500.000	2492.119	16983251.07	0.9487	A	0.3
8	☐	5000.000	5003.605	34847118.83	1.9047	A	0.3
9	☐			53147.01	0.0031	P	4.8

$$y = 3.8067\text{E-}004 * x + 4.2414\text{E-}006$$

$$R = 1.0000$$

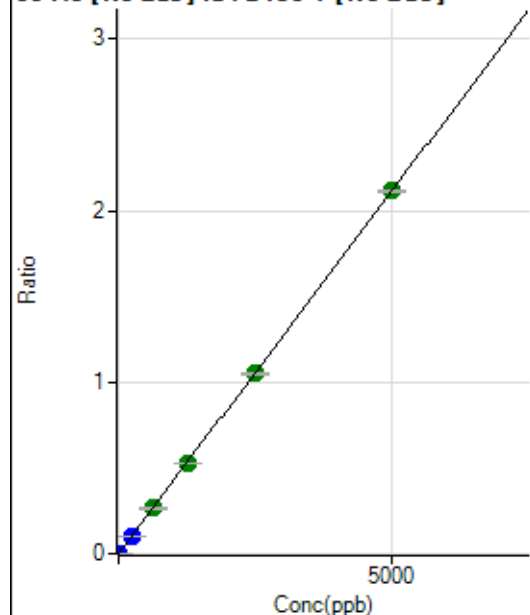
$$DL = 0.001982$$

$$BEC = 0.01114$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0000	P	12.2
2	☐	0.500					
3	☐	5.000	4.727	34520.35	0.0020	P	0.5
4	☐	250.000	246.094	1906030.49	0.1040	P	0.8
5	☐	625.000	624.068	4743970.16	0.2637	A	0.7
6	☐	1250.000	1251.544	9262475.99	0.5287	A	0.6
7	☐	2500.000	2483.466	18782607.54	1.0492	A	0.2
8	☐	5000.000	5008.193	38707392.88	2.1158	A	0.2
9	☐			68236.39	0.0039	P	5.8

$$y = 4.2247\text{E-}004 * x + 1.1515\text{E-}005$$

$$R = 1.0000$$

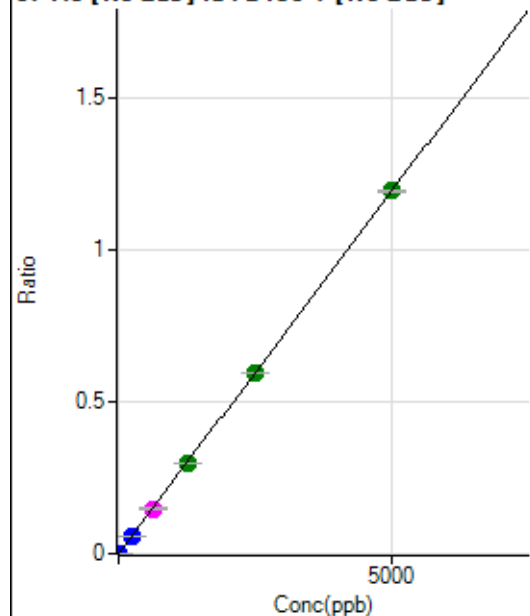
$$DL = 0.009963$$

$$BEC = 0.02726$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	33.0
2	☐	0.500					
3	☐	5.000	4.799	19714.28	0.0011	P	2.7
4	☐	250.000	247.764	1082298.98	0.0590	P	0.4
5	☐	625.000	621.879	2666177.56	0.1482	M	1.5
6	☐	1250.000	1249.914	5217343.56	0.2978	A	0.5
7	☐	2500.000	2486.245	10605548.16	0.5924	A	0.2
8	☐	5000.000	5007.401	21828290.94	1.1932	A	0.2
9	☐			32919.60	0.0019	P	4.2

$$y = 2.3828\text{E-}004 * x + 3.6353\text{E-}006$$

$$R = 1.0000$$

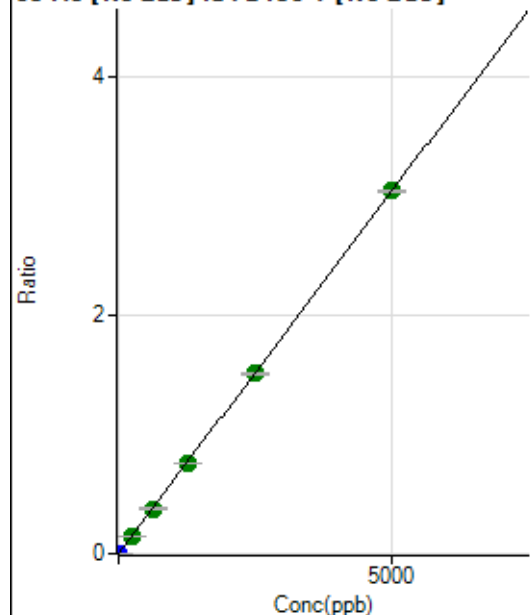
$$DL = 0.01512$$

$$BEC = 0.01526$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	37.4
2	☐	0.500					
3	☐	5.000	4.757	49798.94	0.0029	P	2.5
4	☐	250.000	246.555	2746792.64	0.1498	A	0.3
5	☐	625.000	621.681	6797680.88	0.3778	A	1.0
6	☐	1250.000	1251.648	13324718.44	0.7606	A	0.5
7	☐	2500.000	2483.166	27014977.69	1.5090	A	0.8
8	☐	5000.000	5008.592	55682938.75	3.0438	A	0.4
9	☐			82905.46	0.0048	P	4.0

$$y = 6.0771\text{E-}004 * x + 6.8224\text{E-}006$$

$$R = 1.0000$$

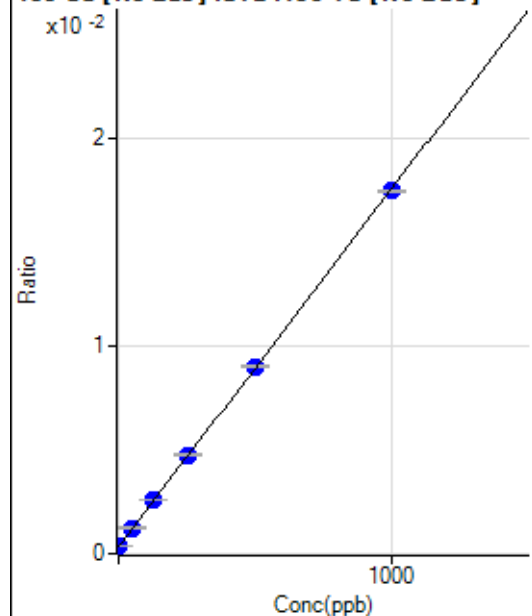
$$DL = 0.0126$$

$$BEC = 0.01123$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7466.18	0.0003	P	0.9
2	☐	0.100					
3	☐	1.000	1.682	7585.66	0.0004	P	2.0
4	☐	50.000	53.504	28858.09	0.0012	P	1.1
5	☐	125.000	131.047	59154.91	0.0026	P	0.1
6	☐	250.000	257.624	108336.81	0.0048	P	0.7
7	☐	500.000	504.905	209300.15	0.0090	P	1.0
8	☐	1000.000	994.710	408587.43	0.0175	P	0.8
9	☐			7688.51	0.0004	P	1.9

$$y = 1.7226\text{E-}005 * x + 3.2588\text{E-}004$$

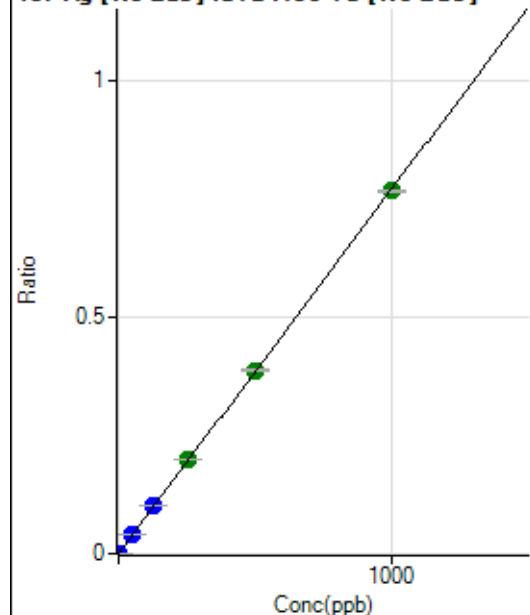
$$R = 0.9999$$

$$DL = 0.5359$$

$$BEC = 18.92$$

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	136.12	0.0000	P	13.6
2	☐	0.100					
3	☐	1.000	1.017	16905.15	0.0008	P	0.9
4	☐	50.000	53.317	951577.70	0.0411	P	0.8
5	☐	125.000	130.540	2306145.32	0.1007	P	0.0
6	☐	250.000	256.427	4498941.90	0.1978	A	0.1
7	☐	500.000	503.300	9006089.43	0.3883	A	0.6
8	☐	1000.000	995.885	17977753.18	0.7683	A	0.6
9	☐			1589.04	0.0001	P	6.1

$$y = 7.7144\text{E-}004 * x + 5.9387\text{E-}006$$

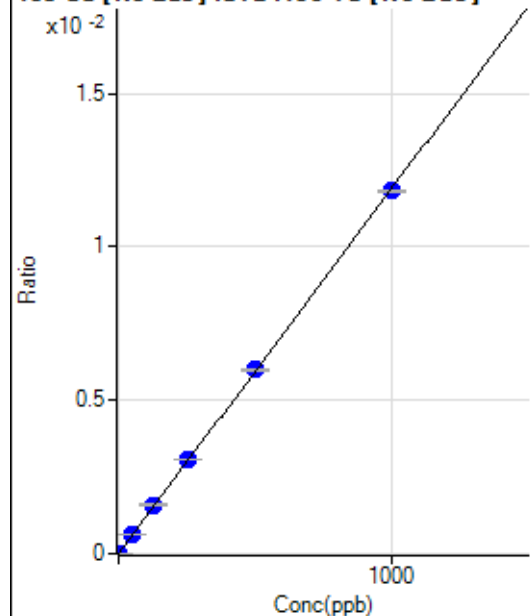
$$R = 1.0000$$

$$DL = 0.003134$$

$$BEC = 0.007698$$

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	20.83	0.0000	P	53.6
2	☐	0.100					
3	☐	1.000	1.065	290.29	0.0000	P	22.2
4	☐	50.000	51.947	14304.66	0.0006	P	2.2
5	☐	125.000	134.192	36544.53	0.0016	P	0.5
6	☐	250.000	257.992	69758.51	0.0031	P	0.6
7	☐	500.000	504.466	139100.70	0.0060	P	0.9
8	☐	1000.000	994.523	276622.29	0.0118	P	0.4
9	☐			115.28	0.0000	P	11.2

$$y = 1.1886\text{E-}005 * x + 9.1145\text{E-}007$$

$$R = 0.9999$$

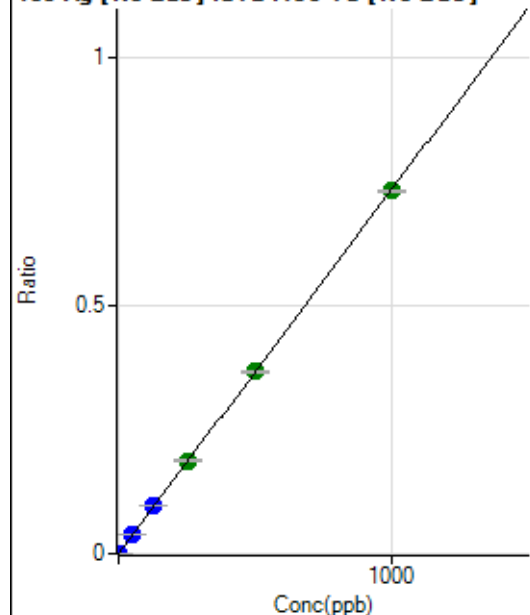
$$DL = 0.1232$$

$$BEC = 0.07668$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	27.8
2	☐	0.100					
3	☐	1.000	1.003	15812.24	0.0007	P	2.6
4	☐	50.000	53.553	910225.14	0.0393	P	1.3
5	☐	125.000	131.636	2214765.78	0.0967	P	0.5
6	☐	250.000	256.142	4279918.20	0.1882	A	0.3
7	☐	500.000	500.996	8537842.90	0.3681	A	1.2
8	☐	1000.000	996.959	17139528.68	0.7325	A	0.2
9	☐			1597.38	0.0001	P	2.9

$$y = 7.3472\text{E-}004 * x + 2.7916\text{E-}006$$

$$R = 1.0000$$

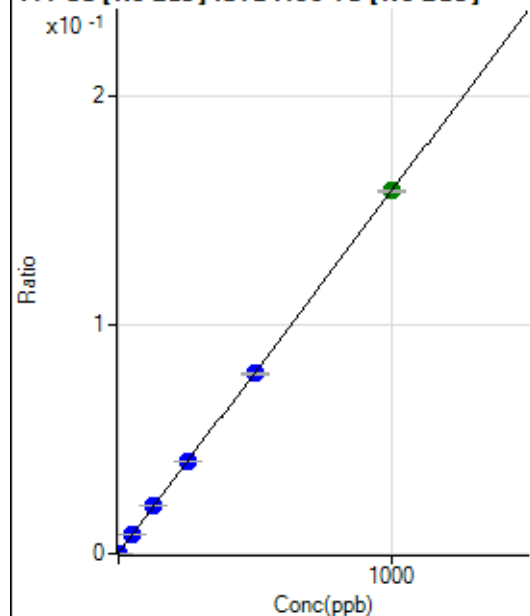
$$DL = 0.003164$$

$$BEC = 0.0038$$

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	5220.08	0.0002	P	1.1
2	☐	0.100					
3	☐	1.000	1.041	8391.93	0.0004	P	3.3
4	☐	50.000	53.117	199776.29	0.0086	P	0.6
5	☐	125.000	131.472	481796.59	0.0210	P	0.5
6	☐	250.000	254.627	921861.13	0.0405	P	0.6
7	☐	500.000	495.093	1823128.18	0.0786	P	1.6
8	☐	1000.000	1000.332	3710708.63	0.1586	A	0.4
9	☐			5901.29	0.0003	P	1.8

$$y = 1.5830\text{E-}004 * x + 2.2784\text{E-}004$$

$$R = 1.0000$$

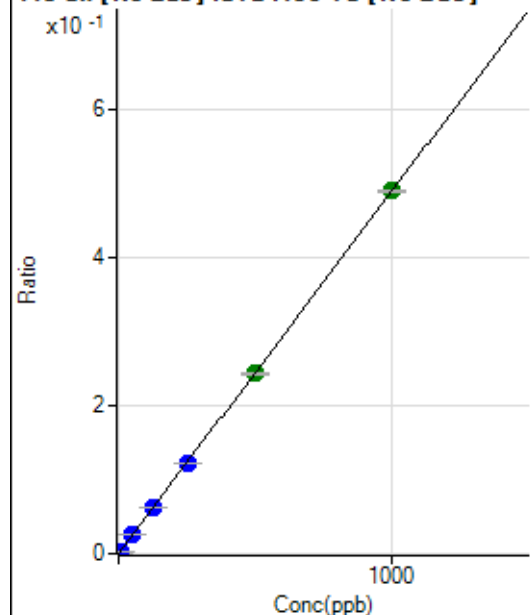
$$DL = 0.04589$$

$$BEC = 1.439$$

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	1600.22	0.0001	P	11.2
2	☐	0.500					
3	☐	5.000	4.897	52649.32	0.0025	P	2.0
4	☐	50.000	50.972	577798.05	0.0250	P	1.5
5	☐	125.000	127.244	1425452.52	0.0623	P	0.3
6	☐	250.000	247.301	2749930.51	0.1209	P	0.2
7	☐	500.000	496.812	5632887.02	0.2428	A	0.5
8	☐	1000.000	1001.940	11458517.97	0.4897	A	0.2
9	☐			11633.10	0.0005	P	3.3

$$y = 4.8867\text{E-}004 * x + 6.9815\text{E-}005$$

$$R = 1.0000$$

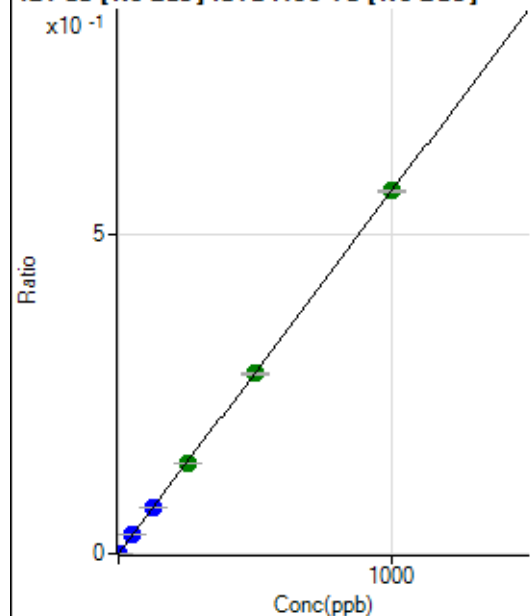
$$DL = 0.04782$$

$$BEC = 0.1429$$

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	111.12	0.0000	P	49.7
2	☐	0.200					
3	☐	2.000	1.910	23250.57	0.0011	P	1.0
4	☐	50.000	50.867	667034.55	0.0288	P	1.0
5	☐	125.000	127.163	1650547.54	0.0721	P	0.1
6	☐	250.000	250.808	3233021.75	0.1422	A	0.1
7	☐	500.000	497.425	6539648.32	0.2819	A	0.7
8	☐	1000.000	1000.772	13272633.89	0.5672	A	0.2
9	☐			20743.84	0.0009	P	1.2

$$y = 5.6679\text{E-}004 * x + 4.8481\text{E-}006$$

$$R = 1.0000$$

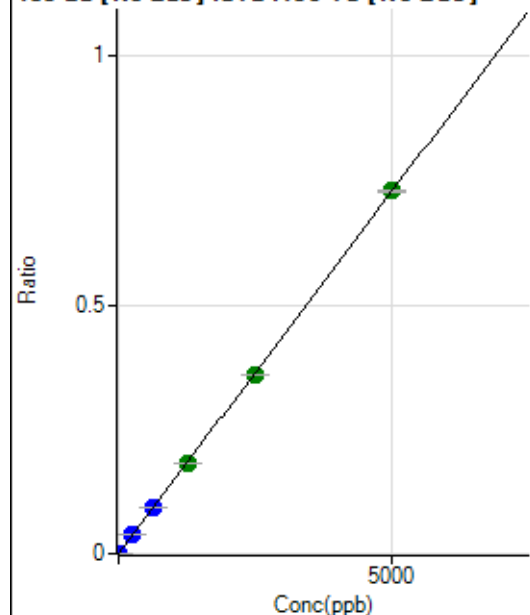
$$DL = 0.01276$$

$$BEC = 0.008554$$

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	30.56	0.0000	P	78.2
2	☐	1.000					
3	☐	10.000	9.816	30506.56	0.0014	P	2.9
4	☐	250.000	253.942	853321.11	0.0369	P	0.3
5	☐	625.000	634.127	2109292.43	0.0921	P	0.4
6	☐	1250.000	1241.712	4102005.69	0.1804	A	0.0
7	☐	2500.000	2470.259	8323230.74	0.3588	A	0.7
8	☐	5000.000	5015.605	17047644.83	0.7286	A	0.5
9	☐			2341.97	0.0001	P	5.0

$$y = 1.4526\text{E-}004 * x + 1.3302\text{E-}006$$

$$R = 1.0000$$

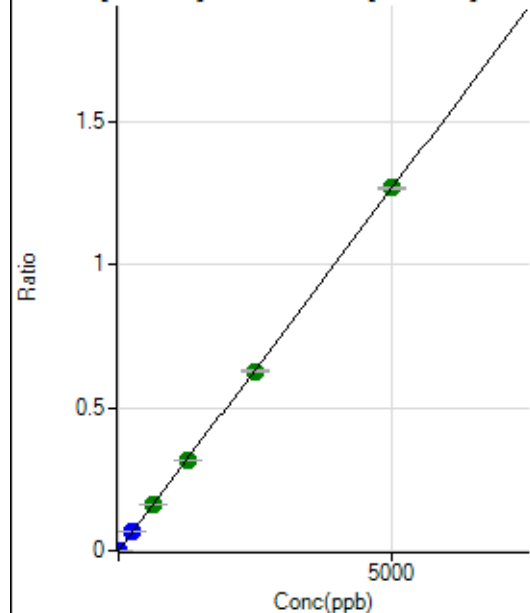
$$DL = 0.02147$$

$$BEC = 0.009157$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	15.7
2	☐	1.000					
3	☐	10.000	9.592	52031.91	0.0024	P	1.6
4	☐	250.000	253.419	1485803.73	0.0642	P	0.8
5	☐	625.000	628.090	3645246.09	0.1592	A	0.6
6	☐	1250.000	1241.889	7158127.59	0.3148	A	0.6
7	☐	2500.000	2478.981	14573409.88	0.6283	A	0.6
8	☐	5000.000	5011.981	29723866.64	1.2703	A	0.7
9	☐			4064.68	0.0002	P	5.7

$$y = 2.5345\text{E-}004 * x + 2.7907\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.005187$$

$$BEC = 0.01101$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

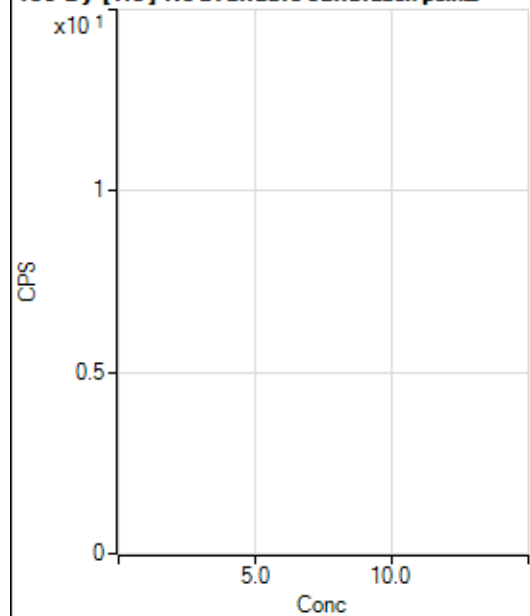
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			2.22		P	173.
4	☐			53.34		P	45.1
5	☐			175.56		P	26.9
6	☐			315.57		P	6.8
7	☐			660.04		P	1.7
8	☐			1220.10		P	8.1
9	☐			117.78		P	48.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			2.22		P	86.6
4	☐			4.44		P	43.4
5	☐			18.89		P	20.4
6	☐			35.56		P	35.5
7	☐			86.67		P	21.4
8	☐			154.45		P	25.9
9	☐			76.67		P	15.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			11.11		P	114.
4	☐			33.33		P	43.3
5	☐			47.23		P	20.4
6	☐			97.22		P	4.9
7	☐			163.90		P	10.6
8	☐			250.01		P	3.3
9	☐			166.68		P	15.0

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	49.5
2	☐						
3	☐			6.67		P	0.0
4	☐			15.56		P	65.5
5	☐			42.22		P	27.7
6	☐			58.89		P	25.5
7	☐			148.89		P	14.4
8	☐			246.68		P	6.2
9	☐			76.67		P	0.0

160 Gd [No Gas] Noavailable calibration poin...

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			175.01		P	14.3
2	☐						
3	☐			211.12		P	21.7
4	☐			194.46		P	2.5
5	☐			213.90		P	29.5
6	☐			200.01		P	15.0
7	☐			272.24		P	13.8
8	☐			233.35		P	15.6
9	☐			297.24		P	4.3

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			336.67		P	10.4
2	☐						
3	☐			308.90		P	4.4
4	☐			286.67		P	6.0
5	☐			323.34		P	16.0
6	☐			327.79		P	7.1
7	☐			307.79		P	2.3
8	☐			333.34		P	3.0
9	☐			361.12		P	13.7

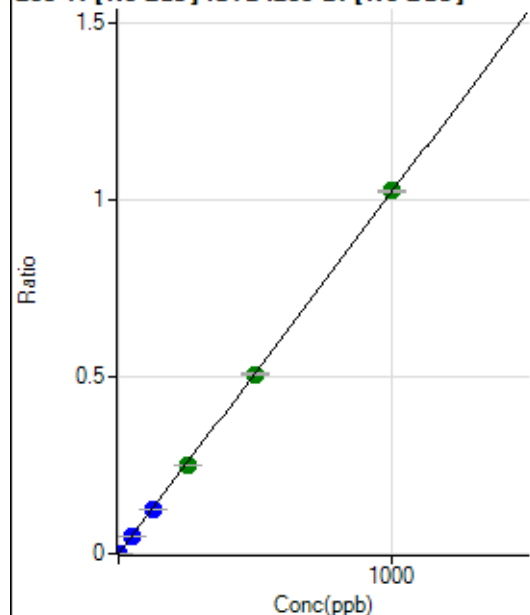
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			100.01		P	41.7
2	☐						
3	☐			105.56		P	24.1
4	☐			91.67		P	47.2
5	☐			91.67		P	39.6
6	☐			91.67		P	27.3
7	☐			108.34		P	35.2
8	☐			130.56		P	55.0
9	☐			105.56		P	25.4

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			28.89		P	24.0
2	☐						
3	☐			53.33		P	16.5
4	☐			41.11		P	12.4
5	☐			45.55		P	34.6
6	☐			31.11		P	32.7
7	☐			47.78		P	10.7
8	☐			38.89		P	9.9
9	☐			50.00		P	17.6

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	16.5
2	☐	0.100					
3	☐	1.000	0.940	12931.80	0.0010	P	3.5
4	☐	50.000	48.442	714003.54	0.0495	P	0.9
5	☐	125.000	121.885	1774802.47	0.1244	P	0.4
6	☐	250.000	244.155	3525520.44	0.2492	A	0.3
7	☐	500.000	495.930	7128471.69	0.5062	A	0.7
8	☐	1000.000	1003.963	14191717.50	1.0247	A	0.6
9	☐			4928.89	0.0004	P	5.2

$$y = 0.0010 * x + 9.5044E-006$$

$$R = 1.0000$$

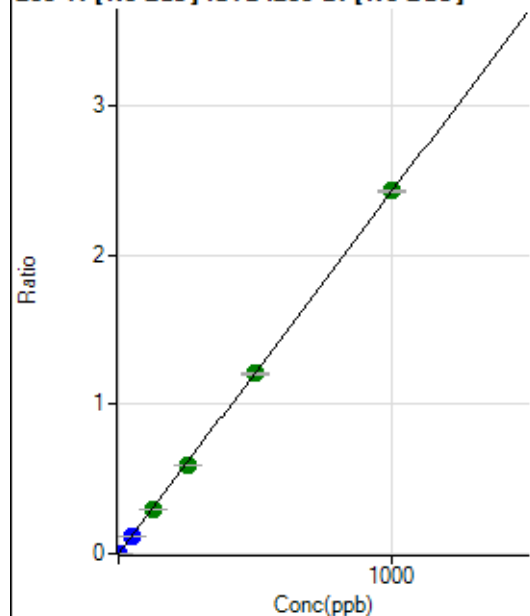
$$DL = 0.004619$$

$$BEC = 0.009312$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	280.57	0.0000	P	13.9
2	☐	0.100					
3	☐	1.000	0.929	30307.67	0.0023	P	2.5
4	☐	50.000	48.430	1694087.25	0.1173	P	0.7
5	☐	125.000	121.798	4209216.41	0.2951	A	0.4
6	☐	250.000	243.957	8360320.67	0.5910	A	0.6
7	☐	500.000	497.687	16978289.79	1.2056	A	0.8
8	☐	1000.000	1003.146	33653971.24	2.4300	A	0.6
9	☐			11847.45	0.0010	P	7.5

$$y = 0.0024 * x + 2.0002E-005$$

$$R = 1.0000$$

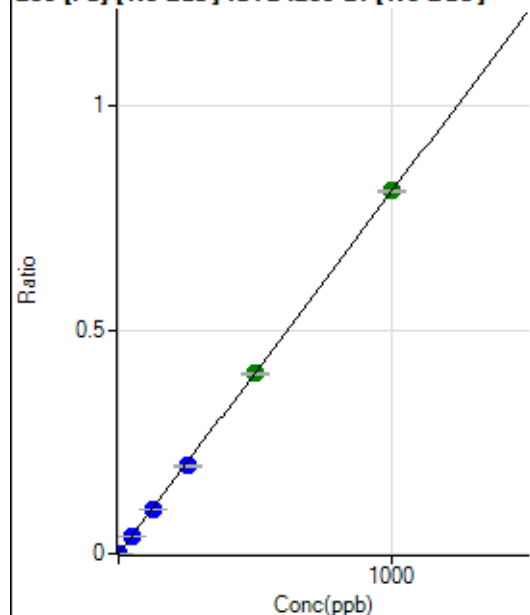
$$DL = 0.00345$$

$$BEC = 0.008258$$

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	320.38	0.0000	P	5.5
2	☐	0.100					
3	☐	1.000	0.937	10408.11	0.0008	P	2.9
4	☐	50.000	49.015	572021.46	0.0396	P	1.2
5	☐	125.000	123.907	1428236.52	0.1001	P	0.3
6	☐	250.000	242.140	2767569.36	0.1956	P	0.5
7	☐	500.000	498.548	5672030.16	0.4028	A	0.7
8	☐	1000.000	1002.877	11220139.14	0.8102	A	0.5
9	☐			17326.53	0.0015	P	1.0

$$y = 8.0782\text{E-}004 * x + 2.2838\text{E-}005$$

$$R = 1.0000$$

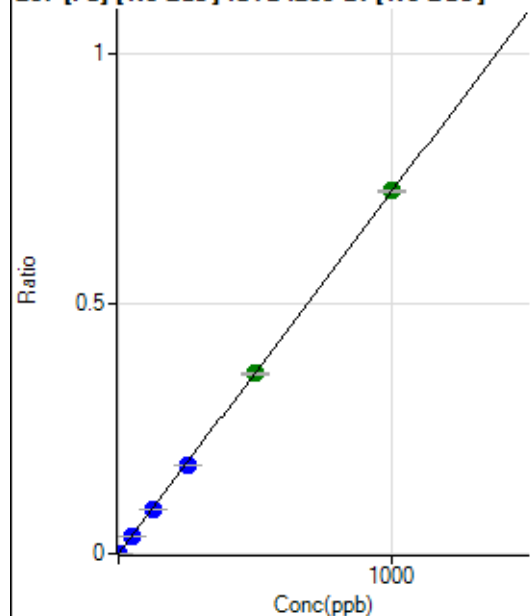
$$DL = 0.004669$$

$$BEC = 0.02827$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	253.72	0.0000	P	9.7
2	☐	0.100					
3	☐	1.000	0.958	9503.67	0.0007	P	1.8
4	☐	50.000	48.925	511665.86	0.0354	P	1.0
5	☐	125.000	123.652	1277319.27	0.0895	P	1.2
6	☐	250.000	242.871	2487846.73	0.1759	P	0.1
7	☐	500.000	497.525	5073041.72	0.3602	A	0.4
8	☐	1000.000	1003.242	10059566.08	0.7263	A	0.2
9	☐			14343.34	0.0012	P	0.9

$$y = 7.2398\text{E-}004 * x + 1.8082\text{E-}005$$

$$R = 1.0000$$

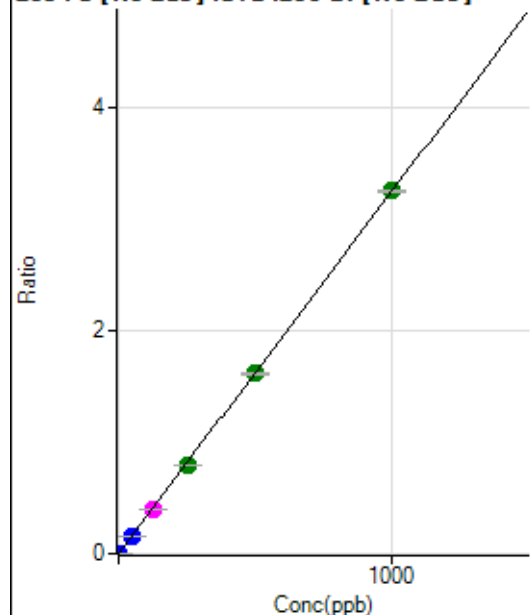
$$DL = 0.007251$$

$$BEC = 0.02498$$

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	1159.32	0.0001	P	6.3
2	☐	0.100					
3	☐	1.000	0.958	42561.76	0.0032	P	2.8
4	☐	50.000	49.114	2300534.21	0.1593	P	0.5
5	☐	125.000	123.436	5710959.56	0.4003	M	0.6
6	☐	250.000	244.725	11227447.82	0.7936	A	0.1
7	☐	500.000	497.680	22728091.37	1.6138	A	0.4
8	☐	1000.000	1002.719	45030286.08	3.2514	A	0.5
9	☐			66358.38	0.0056	P	0.4

$$y = 0.0032 * x + 8.2628E-005$$

$$R = 1.0000$$

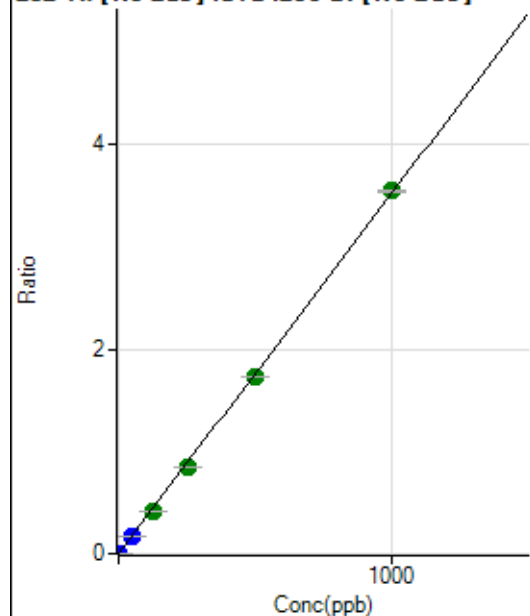
$$DL = 0.004851$$

$$BEC = 0.02548$$

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	133.34	0.0000	P	14.8
2	☐	0.100					
3	☐	1.000	0.890	41958.84	0.0031	P	1.7
4	☐	50.000	46.627	2371395.61	0.1642	P	0.2
5	☐	125.000	118.791	5969063.85	0.4184	A	0.8
6	☐	250.000	240.167	11967762.42	0.8459	A	0.2
7	☐	500.000	491.413	24376678.32	1.7309	A	0.5
8	☐	1000.000	1007.697	49156615.91	3.5494	A	0.5
9	☐			9685.43	0.0008	P	11.4

$$y = 0.0035 * x + 9.5023E-006$$

$$R = 0.9999$$

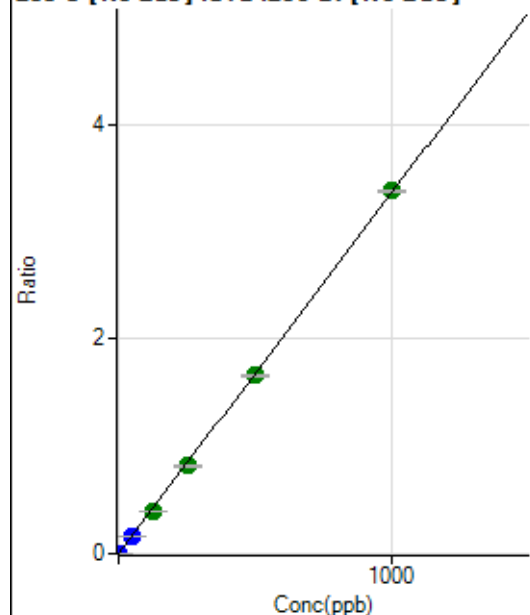
$$DL = 0.0012$$

$$BEC = 0.002698$$

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	169.46	0.0000	P	12.6
2	☐	0.100					
3	☐	1.000	0.928	41849.58	0.0031	P	0.6
4	☐	50.000	47.329	2299900.53	0.1593	P	0.3
5	☐	125.000	119.201	5722935.63	0.4012	A	1.0
6	☐	250.000	242.556	11548263.37	0.8163	A	0.6
7	☐	500.000	494.428	23433531.60	1.6640	A	0.9
8	☐	1000.000	1005.506	46866058.69	3.3840	A	0.3
9	☐			6902.11	0.0006	P	2.4

$$y = 0.0034 * x + 1.2081E-005$$

$$R = 0.9999$$

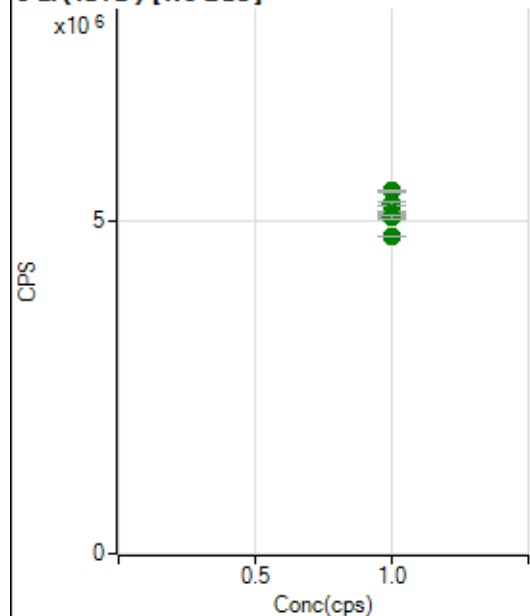
$$DL = 0.001355$$

$$BEC = 0.00359$$

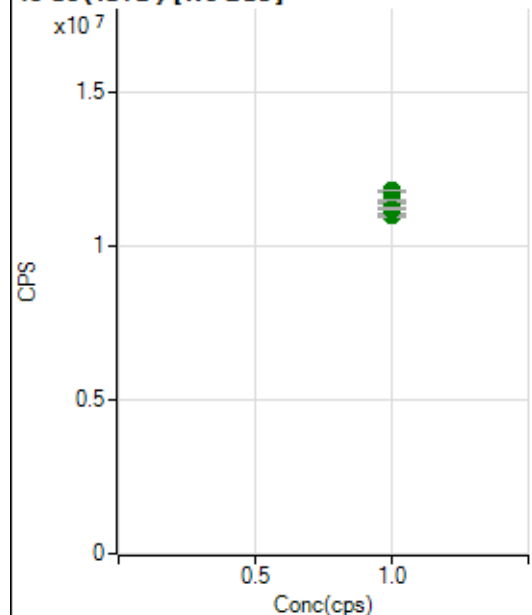
Weight: <None>

Min Conc: 0

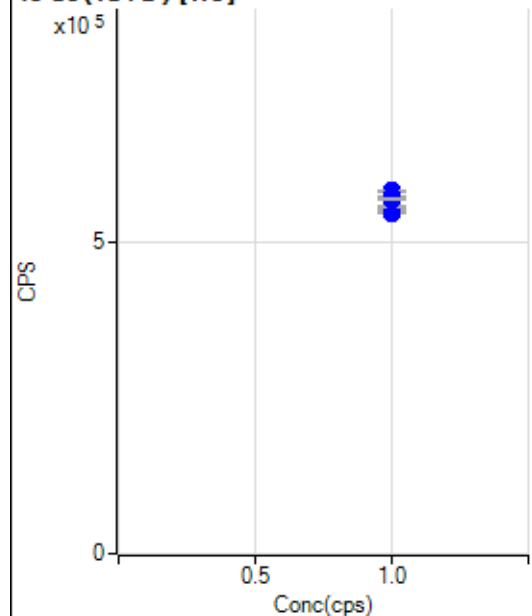
6 Li (ISTD) [No Gas]



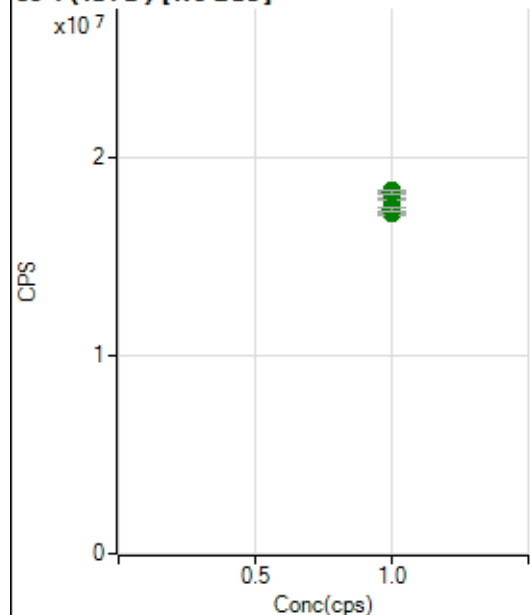
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5444803.81		A	0.1
2	☐	1.000					
3	☐	1.000		5102737.56		A	0.4
4	☐	1.000		5448747.21		A	0.5
5	☐	1.000		5261846.97		A	1.4
6	☐	1.000		5120375.24		A	0.4
7	☐	1.000		5046378.47		A	0.3
8	☐	1.000		5054111.24		A	0.7
9	☐	1.000		4764787.64		A	0.4

45 Sc (ISTD) [No Gas]

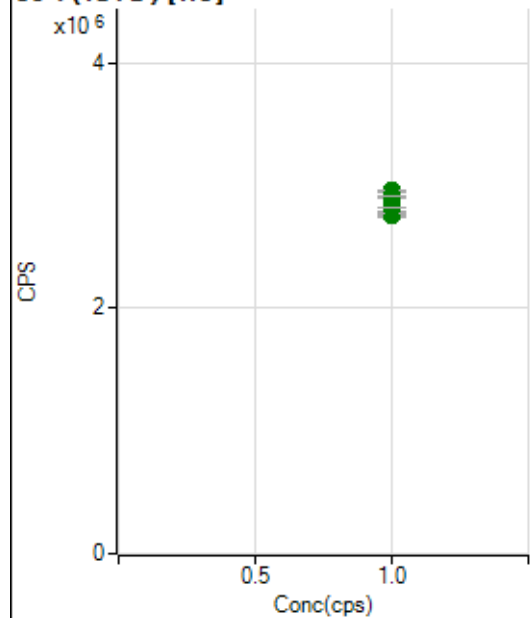
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11758855.21		A	0.6
2	☐	1.000					
3	☐	1.000		11023164.31		A	0.2
4	☐	1.000		11788491.41		A	0.1
5	☐	1.000		11440108.07		A	0.9
6	☐	1.000		10990294.17		A	0.5
7	☐	1.000		11181691.92		A	0.1
8	☐	1.000		11483243.40		A	0.7
9	☐	1.000		11214916.92		A	0.8

45 Sc (ISTD) [He]

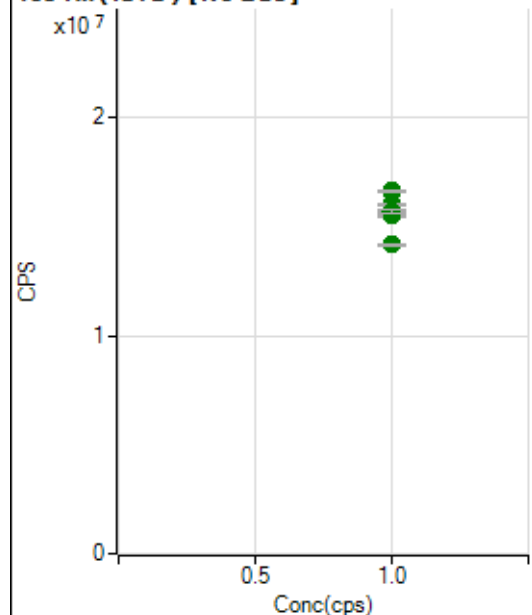
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		583915.61		P	0.2
2	☐	1.000					
3	☐	1.000		548993.08		P	0.5
4	☐	1.000		582404.51		P	0.4
5	☐	1.000		558845.48		P	1.0
6	☐	1.000		553228.36		P	0.5
7	☐	1.000		558095.47		P	0.4
8	☐	1.000		574506.25		P	0.6
9	☐	1.000		570467.87		P	0.5

89 Y (ISTD) [No Gas]

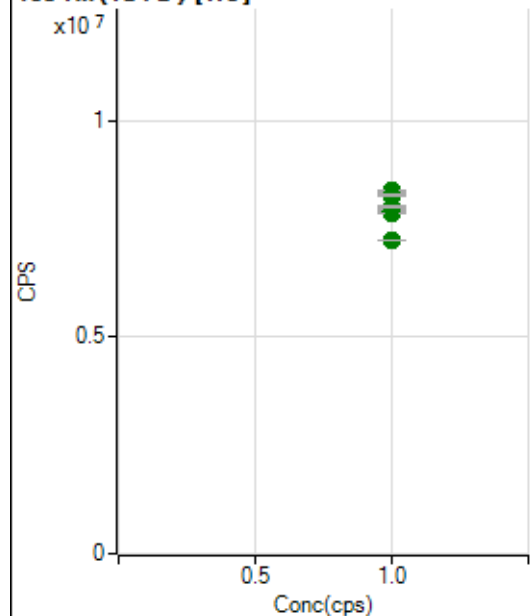
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18336679.45		A	0.3
2	☐	1.000					
3	☐	1.000		17188434.33		A	0.7
4	☐	1.000		18331606.39		A	0.5
5	☐	1.000		17992769.46		A	0.3
6	☐	1.000		17517732.93		A	0.1
7	☐	1.000		17901930.01		A	0.2
8	☐	1.000		18294755.28		A	1.3
9	☐	1.000		17412881.55		A	1.0

89 Y (ISTD) [He]

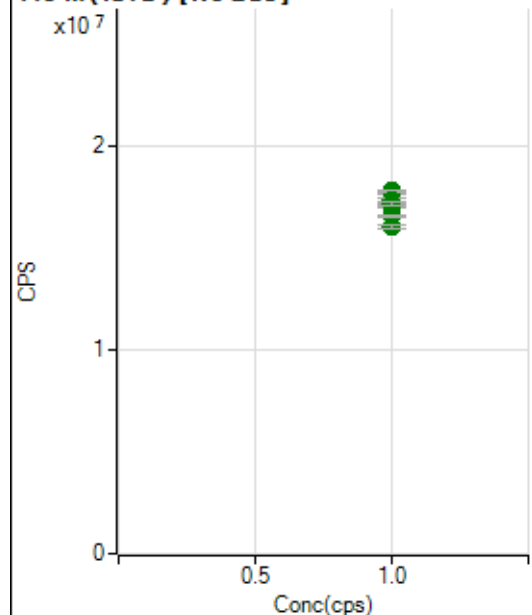
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2956488.15		A	0.4
2	☐	1.000					
3	☐	1.000		2754107.81		A	0.4
4	☐	1.000		2895766.48		A	0.3
5	☐	1.000		2773071.90		A	0.7
6	☐	1.000		2779152.46		A	0.3
7	☐	1.000		2819365.79		A	0.2
8	☐	1.000		2909066.87		A	0.7
9	☐	1.000		2914231.87		A	0.4

103 Rh (ISTD) [No Gas]

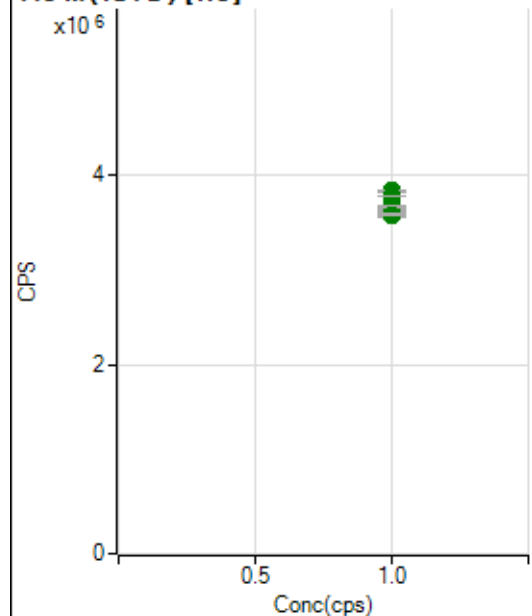
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16629981.27		A	0.5
2	☐	1.000					
3	☐	1.000		15500584.37		A	0.5
4	☐	1.000		16606873.11		A	0.6
5	☐	1.000		16018514.94		A	0.7
6	☐	1.000		15603517.01		A	1.0
7	☐	1.000		15604812.68		A	1.2
8	☐	1.000		15682174.66		A	1.2
9	☐	1.000		14154296.50		A	0.8

103 Rh (ISTD) [He]

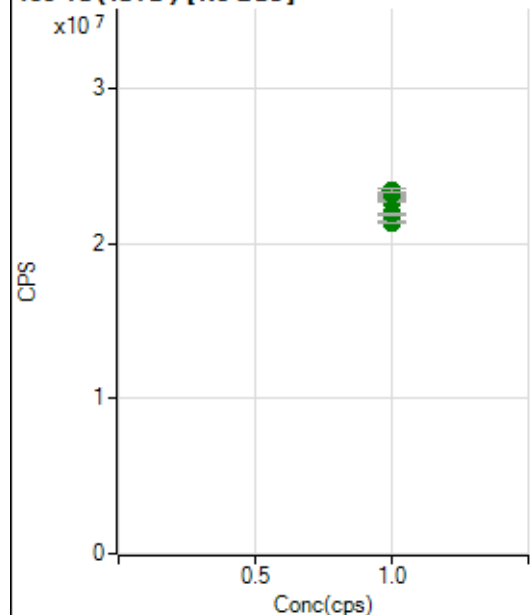
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8385111.96		A	0.4
2	☐	1.000					
3	☐	1.000		7874866.06		A	0.6
4	☐	1.000		8285891.20		A	0.3
5	☐	1.000		7981428.35		A	1.1
6	☐	1.000		7915650.65		A	0.5
7	☐	1.000		7921395.51		A	1.0
8	☐	1.000		8017388.49		A	0.5
9	☐	1.000		7244186.56		A	0.4

115 In (ISTD) [No Gas]

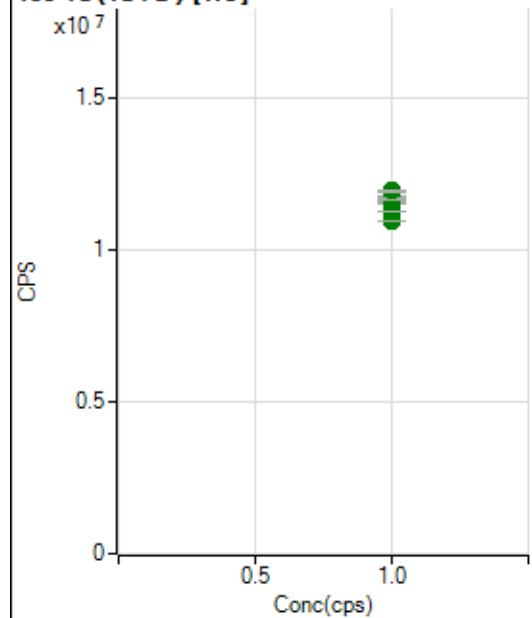
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17697915.33		A	0.6
2	☐	1.000					
3	☐	1.000		16539861.07		A	0.2
4	☐	1.000		17762708.21		A	0.7
5	☐	1.000		17340422.13		A	1.0
6	☐	1.000		17042876.14		A	0.9
7	☐	1.000		17159800.89		A	0.3
8	☐	1.000		17135740.55		A	1.5
9	☐	1.000		16030636.04		A	1.3

115 In (ISTD) [He]

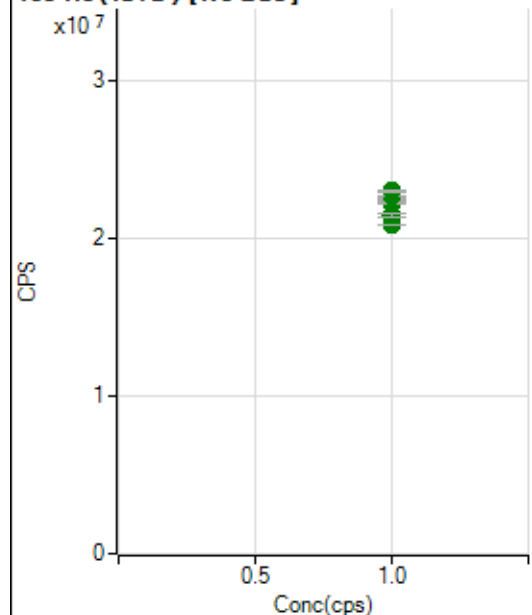
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3837837.81		A	0.5
2	☐	1.000					
3	☐	1.000		3579928.44		A	0.6
4	☐	1.000		3778354.73		A	0.1
5	☐	1.000		3621419.49		A	0.6
6	☐	1.000		3610890.58		A	0.7
7	☐	1.000		3606052.38		A	0.4
8	☐	1.000		3672153.09		A	0.2
9	☐	1.000		3584998.26		A	0.4

159 Tb (ISTD) [No Gas]

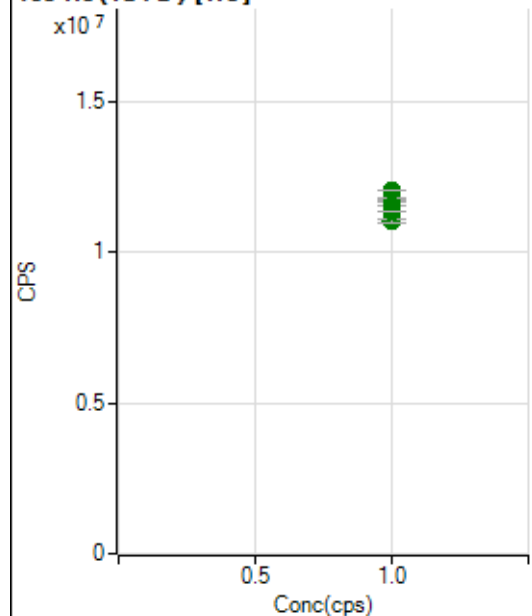
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22909896.33		A	0.7
2	☐	1.000					
3	☐	1.000		21377561.35		A	0.6
4	☐	1.000		23132361.60		A	0.3
5	☐	1.000		22898820.77		A	0.5
6	☐	1.000		22742021.33		A	0.3
7	☐	1.000		23195506.60		A	0.4
8	☐	1.000		23399242.71		A	1.0
9	☐	1.000		21915686.06		A	0.9

159 Tb (ISTD) [He]

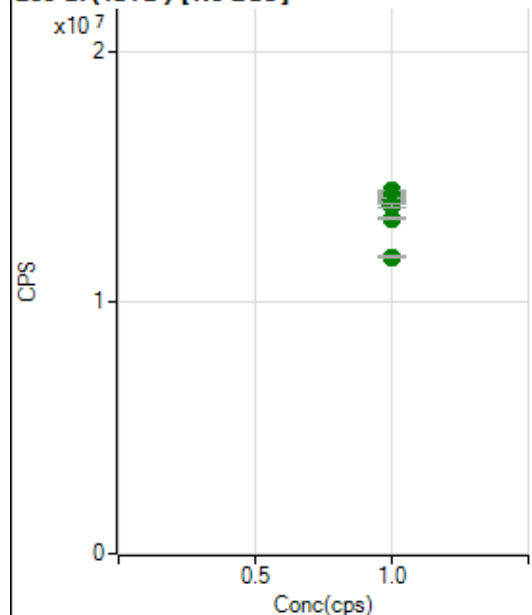
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11739239.41		A	0.6
2	☐	1.000					
3	☐	1.000		10952083.31		A	0.5
4	☐	1.000		11731332.74		A	0.6
5	☐	1.000		11506966.50		A	0.3
6	☐	1.000		11590581.49		A	0.2
7	☐	1.000		11694484.27		A	0.3
8	☐	1.000		11942692.04		A	0.2
9	☐	1.000		11283404.42		A	0.2

165 Ho (ISTD) [No Gas]

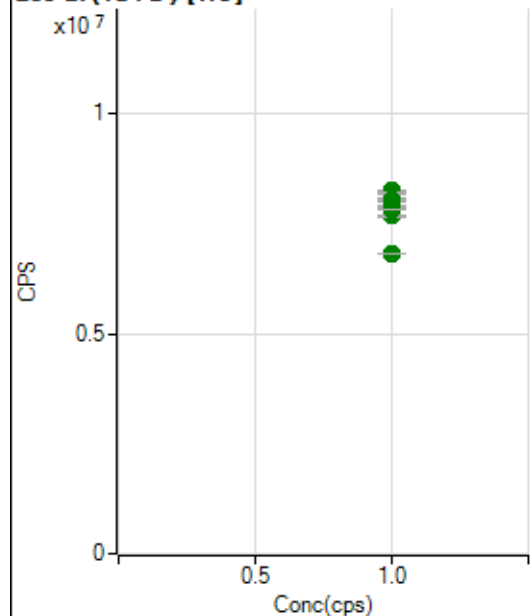
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22542375.85		A	0.2
2	☐	1.000					
3	☐	1.000		20888005.67		A	0.4
4	☐	1.000		22683297.56		A	0.1
5	☐	1.000		22370428.97		A	0.4
6	☐	1.000		22268151.37		A	0.6
7	☐	1.000		22714053.11		A	0.3
8	☐	1.000		23036982.80		A	0.7
9	☐	1.000		21486450.83		A	0.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11794775.24		A	0.3
2	☐	1.000					
3	☐	1.000		11036524.42		A	1.0
4	☐	1.000		11806675.79		A	0.2
5	☐	1.000		11580510.38		A	0.1
6	☐	1.000		11672181.08		A	0.3
7	☐	1.000		11812299.82		A	0.3
8	☐	1.000		12048572.87		A	0.1
9	☐	1.000		11368902.75		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14029486.59		A	0.2
2	☐	1.000					
3	☐	1.000		13349467.58		A	0.3
4	☐	1.000		14438286.87		A	0.3
5	☐	1.000		14265805.34		A	0.4
6	☐	1.000		14147313.67		A	0.8
7	☐	1.000		14083583.26		A	0.9
8	☐	1.000		13849752.99		A	1.1
9	☐	1.000		11805321.63		A	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8242903.98		A	0.3
2	☐	1.000					
3	☐	1.000		7672147.94		A	0.6
4	☐	1.000		8187663.49		A	0.4
5	☐	1.000		8054713.15		A	0.3
6	☐	1.000		7996847.03		A	0.4
7	☐	1.000		7893405.92		A	0.6
8	☐	1.000		7820671.90		A	0.3
9	☐	1.000		6813428.72		A	0.6

US EPA Tune Check Sample Report

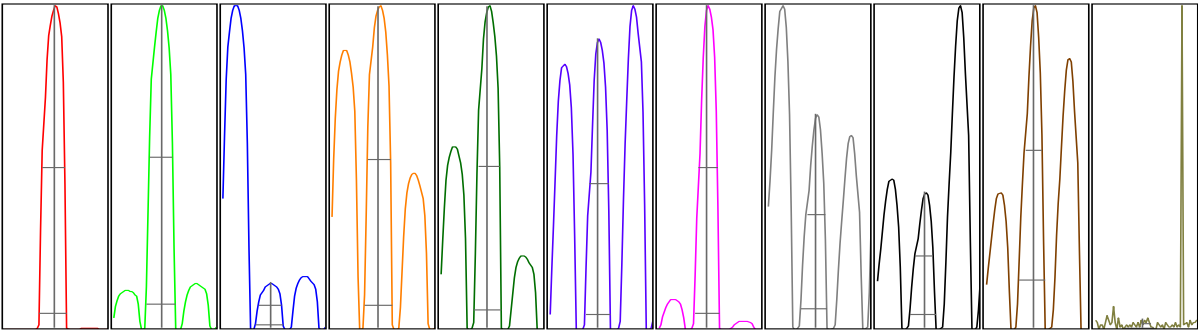
Batch Folder D:\ICP-MS Data\P7083018MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	22020	0.21	5.00	
24	901277	0.19	5.00	
25	126283	0.23	5.00	
26	145378	0.22	5.00	
59	164080	1.00	5.00	
113	20159	0.57	5.00	
115	238705	0.87	5.00	
206	58297	0.24	5.00	
207	54177	0.40	5.00	
208	123339	0.42	5.00	
220	0	37.50		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	22052	22082	21969	22006	21994
24	902724	899360	899564	901656	903082
25	126126	126246	126034	126783	126226
26	145368	145819	145420	145351	144931
59	166361	163065	163009	162670	165297
113	20294	20133	20184	20202	19981
115	241312	240309	238393	237153	236357
206	58210	58437	58148	58451	58238
207	54031	54562	54066	54089	54139
208	122881	124029	123324	123643	122818
220	0	0	0	0	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	35371	9.00	8.9 - 9.1		0.788	0.900	
24	1388516	23.95	23.9 - 24.1		0.855	0.900	
25	196104	24.95	24.9 - 25.1		0.802	0.900	
26	227044	25.90	25.9 - 26.1		0.810	0.900	
59	268966	58.90	58.9 - 59.1		0.785	0.900	
113	38011	112.95	112.9 - 113.1		0.735	0.900	
115	456469	114.95	114.9 - 115.1		0.733	0.900	
206	110199	205.95	205.9 - 206.1		0.754	0.900	
207	99642	206.95	206.9 - 207.1		0.747	0.900	
208	236294	207.95	207.9 - 208.1		0.744	0.900	
220	1	219.95	-		0.833		

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	7.8	V	Deflect	14.4	V
Extract 2	-150.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	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	44164	0.58	
89	78255	0.38	
205	49318	0.35	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	44019	44511	44258	44201	43829
89	77877	78185	78601	78512	78101
205	49307	49207	49574	49373	49129

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	7.7	V	Deflect	1.6	V
Extract 2	-115.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	200	V			