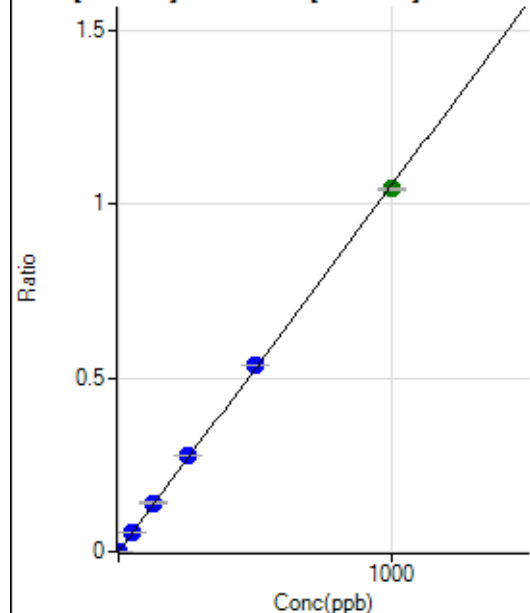


Batch Folder: D:\ICP-MS Data\P7021919-MS.b\
Analysis File: P7021919-MS.batch.bin
DA Date-Time: 2019-02-19 17:47:58
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-02-19 13:48:43
2			
3	005CALS.d	S02	2019-02-19 13:57:25
4	006CALS.d	S03	2019-02-19 14:01:20
5	007CALS.d	S04	2019-02-19 14:05:15
6	008CALS.d	S05	2019-02-19 14:09:03
7	009CALS.d	S06	2019-02-19 14:12:48
8	010CALS.d	S07	2019-02-19 14:16:35
9	011CALS.d	S08	2019-02-19 14:20:26

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	132.22	0.0000	P	25.1
2	☐	0.100					
3	☐	1.000	0.980	5933.47	0.0011	P	2.4
4	☐	50.000	53.146	313208.08	0.0560	P	0.7
5	☐	125.000	132.776	770095.20	0.1398	P	2.5
6	☐	250.000	261.432	1497352.37	0.2752	P	0.7
7	☐	500.000	510.422	2912164.78	0.5373	P	0.0
8	☐	1000.000	990.802	5540281.58	1.0430	A	0.4
9	☐			627.80	0.0001	P	14.7

$$y = 0.0011 * x + 2.3203E-005$$

$$R = 0.9998$$

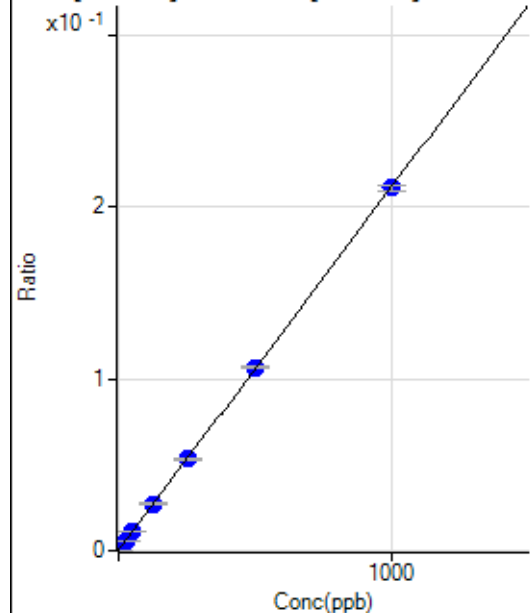
$$DL = 0.01663$$

$$BEC = 0.02204$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1294.55	0.0002	P	15.4
2	☐	2.500					
3	☐	25.000	23.767	29560.49	0.0053	P	2.1
4	☐	50.000	51.513	62231.88	0.0111	P	0.4
5	☐	125.000	126.476	148552.82	0.0270	P	4.2
6	☐	250.000	251.748	290865.64	0.0535	P	1.6
7	☐	500.000	504.089	578959.14	0.1068	P	1.9
8	☐	1000.000	997.289	1121449.66	0.2111	P	1.7
9	☐			35127.98	0.0069	P	7.1

$$y = 2.1146E-004 * x + 2.2724E-004$$

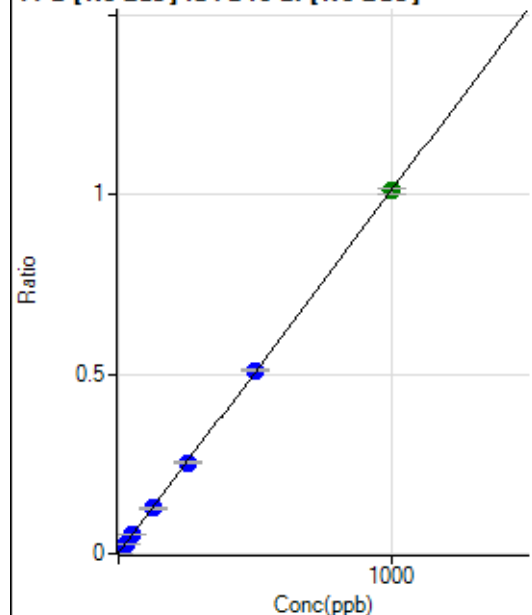
$$R = 1.0000$$

$$DL = 0.4979$$

$$BEC = 1.075$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	6815.70	0.0012	P	4.1
2	☐	2.500					
3	☐	25.000	23.335	139588.08	0.0248	P	1.1
4	☐	50.000	50.774	294189.68	0.0526	P	0.8
5	☐	125.000	125.620	706595.18	0.1283	P	4.5
6	☐	250.000	249.908	1382182.89	0.2541	P	1.4
7	☐	500.000	502.703	2763185.67	0.5098	P	1.1
8	☐	1000.000	998.597	5373502.29	1.0116	A	1.7
9	☐			167066.47	0.0330	P	8.1

$$y = 0.0010 * x + 0.0012$$

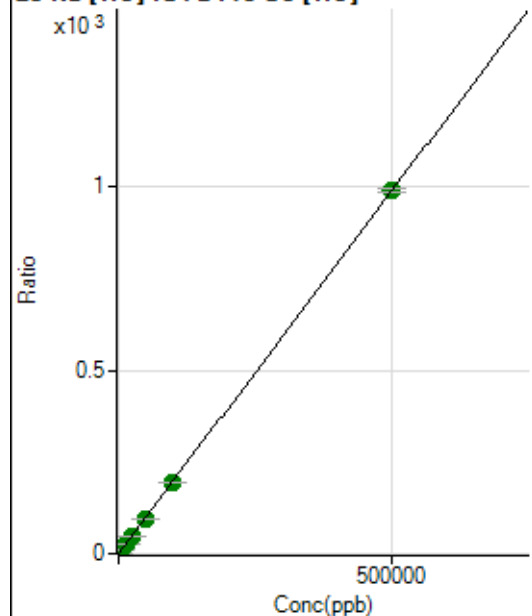
$$R = 1.0000$$

$$DL = 0.1462$$

$$BEC = 1.182$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	48688.47	0.0685	P	1.2
2	☐	50.000					
3	☐	500.000	464.033	701133.42	0.9844	P	0.5
4	☐	5000.000	4968.060	6947446.77	9.8742	A	1.2
5	☐	12500.000	12252.878	16679150.20	24.2526	A	0.8
6	☐	25000.000	24338.867	32648561.15	48.1072	A	1.3
7	☐	50000.000	48614.557	64378695.88	96.0213	A	0.1
8	☐	100000.00	97526.319	129307672.34	192.5607	A	0.6
9	☐	500000.00	500672.87	728584327.40	988.2698	A	1.0

$$y = 0.0020 * x + 0.0685$$

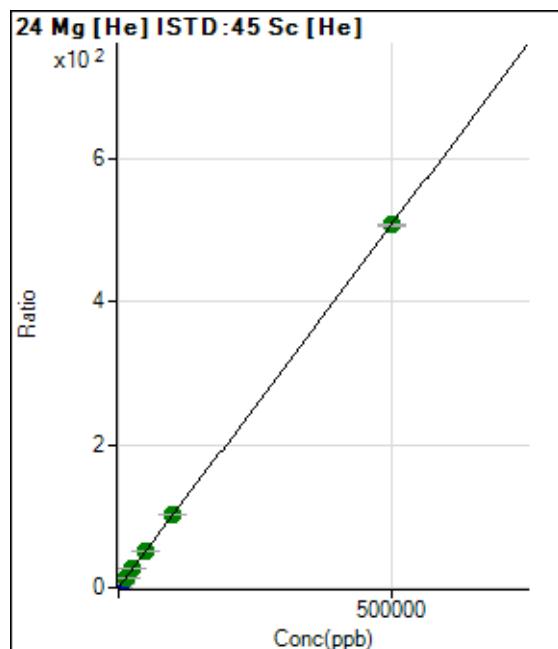
$$R = 1.0000$$

$$DL = 1.223$$

$$BEC = 34.69$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	327.80	0.0005	P	19.1
2	☐	50.000					
3	☐	500.000	494.424	358024.57	0.5026	P	0.5
4	☐	5000.000	5220.451	3731103.38	5.3029	P	0.2
5	☐	12500.000	12908.189	9017000.55	13.1113	A	1.1
6	☐	25000.000	25419.913	17523055.25	25.8195	A	0.8
7	☐	50000.000	50374.858	34306106.32	51.1662	A	0.6
8	☐	100000.00	100296.47	68408047.36	101.8716	A	0.2
9	☐	500000.00	499869.82	374314275.03	507.7182	A	0.7

$$y = 0.0010 * x + 4.6109E-004$$

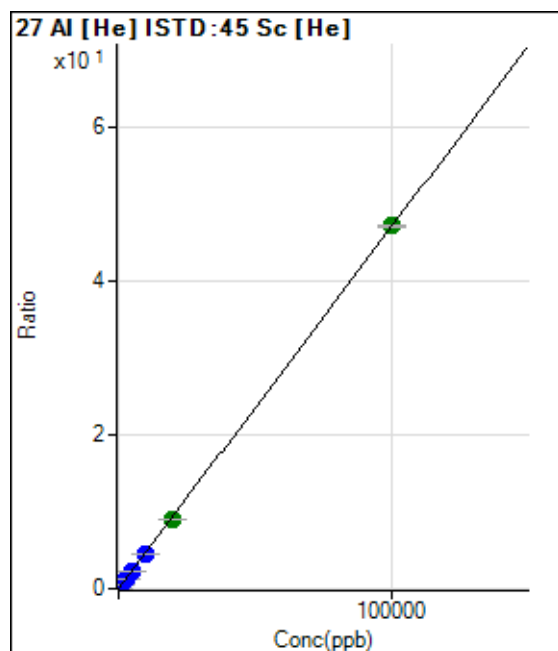
$$R = 1.0000$$

$$DL = 0.2605$$

$$BEC = 0.454$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	100.01	0.0001	P	36.6
2	☐	2.000					
3	☐	20.000	18.857	6432.20	0.0090	P	1.6
4	☐	1000.000	983.526	326327.64	0.4638	P	0.9
5	☐	2500.000	2456.649	796567.18	1.1583	P	0.7
6	☐	5000.000	4802.418	1536666.27	2.2641	P	0.5
7	☐	10000.000	9530.705	3012475.09	4.4931	P	0.4
8	☐	20000.000	19039.353	6027366.41	8.9757	A	0.5
9	☐	100000.00	100250.18	34842508.07	47.2604	A	0.6

$$y = 4.7142E-004 * x + 1.4080E-004$$

$$R = 0.9999$$

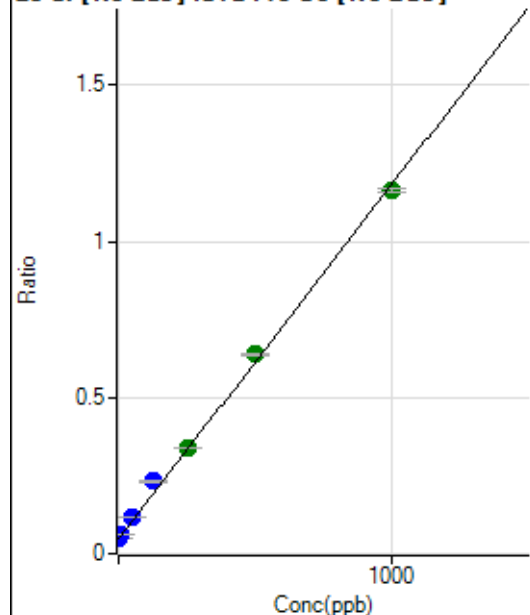
$$DL = 0.3278$$

$$BEC = 0.2987$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	578282.81	0.0466	P	0.3
2	☐	1.000					
3	☐	10.000	12.103	760860.23	0.0603	P	1.1
4	☐	50.000	64.067	1488789.53	0.1193	P	0.4
5	☐	125.000	162.639	2826490.43	0.2311	P	4.0
6	☐	250.000	256.276	4048448.14	0.3373	A	0.8
7	☐	500.000	520.844	7643788.89	0.6374	A	1.0
8	☐	1000.000	982.580	13664704.21	1.1611	A	0.9
9	☐			1561843.61	0.1318	P	2.9

$$y = 0.0011 * x + 0.0466$$

$$R = 0.9991$$

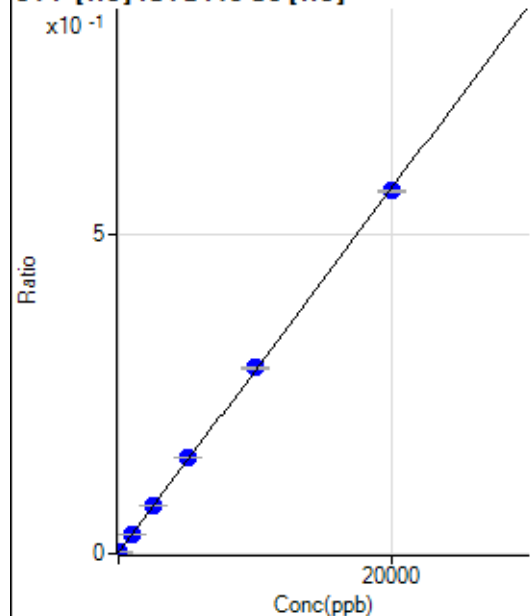
$$DL = 0.3193$$

$$BEC = 41.09$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-22.337	661.15	0.0009	P	3.5
2	☐	0.000					
3	☐	0.000	22.337	1572.37	0.0022	P	6.9
4	☐	1000.000	1036.386	21964.20	0.0312	P	0.9
5	☐	2500.000	2615.523	52535.44	0.0764	P	1.4
6	☐	5000.000	5201.131	102047.85	0.1504	P	0.7
7	☐	10000.000	10149.231	195722.36	0.2919	P	0.9
8	☐	20000.000	19858.842	382540.84	0.5697	P	0.7
9	☐			861.17	0.0012	P	8.4

$$y = 2.8607E-005 * x + 0.0016$$

$$R = 0.9999$$

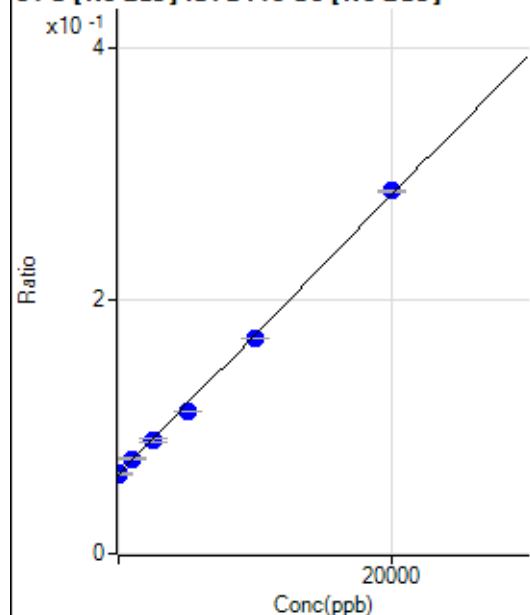
$$DL = 9.733$$

$$BEC = 54.84$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-36.512	774762.71	0.0624	P	0.5
2	☐	0.000					
3	☐	0.000	36.512	797588.48	0.0632	P	1.2
4	☐	1000.000	1110.707	937460.85	0.0751	P	0.5
5	☐	2500.000	2399.140	1092859.35	0.0893	P	2.7
6	☐	5000.000	4528.719	1354416.34	0.1128	P	0.4
7	☐	10000.000	9712.694	2039483.12	0.1701	P	0.4
8	☐	20000.000	20268.545	3372850.25	0.2866	P	0.2
9	☐			736114.87	0.0621	P	2.6

$$y = 1.1039E-005 * x + 0.0628$$

$$R = 0.9995$$

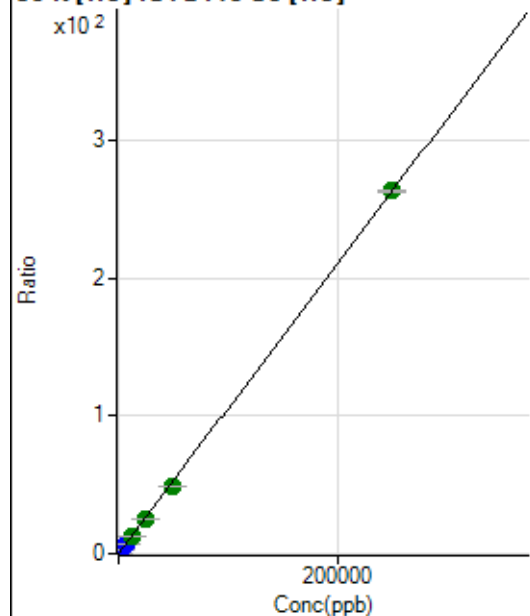
$$DL = 143$$

$$BEC = 5693$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	52742.18	0.0742	P	0.8
2	☐	50.000					
3	☐	500.000	449.856	389101.86	0.5463	P	0.7
4	☐	2500.000	2417.316	1837154.60	2.6111	P	0.1
5	☐	6250.000	6090.394	4446791.85	6.4659	P	0.7
6	☐	12500.000	11817.651	8467538.47	12.4764	A	0.7
7	☐	25000.000	23538.871	16612368.25	24.7775	A	0.2
8	☐	50000.000	46816.977	33043344.49	49.2072	A	0.8
9	☐	250000.00	250821.75	194116759.89	263.3040	A	0.6

$$y = 0.0010 * x + 0.0742$$

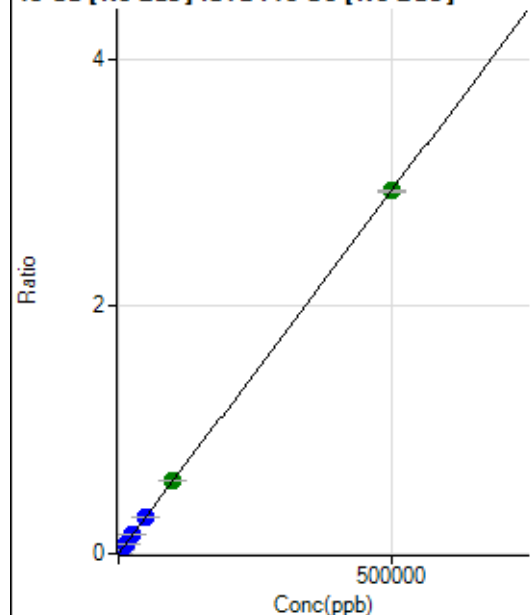
$$R = 0.9999$$

$$DL = 1.674$$

$$BEC = 70.68$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	683.39	0.0001	P	9.0
2	☐	50.000					
3	☐	500.000	471.676	35585.64	0.0028	P	0.2
4	☐	5000.000	5083.311	372839.77	0.0299	P	0.9
5	☐	12500.000	12687.780	911033.32	0.0745	P	3.2
6	☐	25000.000	25526.544	1797700.32	0.1498	P	1.1
7	☐	50000.000	50588.433	3558920.70	0.2968	P	0.7
8	☐	100000.00	99832.492	6891836.09	0.5856	A	0.9
9	☐	500000.00	499942.83	34741241.75	2.9323	A	0.7

$$y = 5.8652\text{E-}006 * x + 5.5081\text{E-}005$$

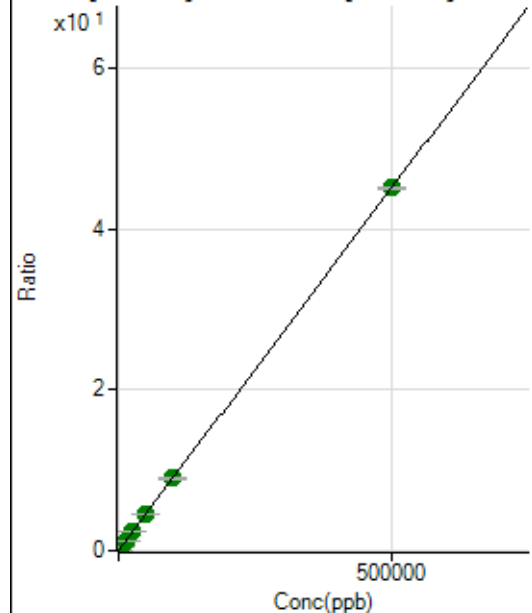
$$R = 1.0000$$

$$DL = 2.53$$

$$BEC = 9.391$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	155321.82	0.0125	P	0.3
2	☐	50.000					
3	☐	500.000	487.032	711403.74	0.0564	P	0.5
4	☐	5000.000	5071.015	5860415.67	0.4695	A	0.7
5	☐	12500.000	12607.528	14052055.00	1.1486	A	3.1
6	☐	25000.000	25086.474	27286356.86	2.2732	A	0.1
7	☐	50000.000	50091.243	54283441.49	4.5265	A	0.8
8	☐	100000.00	99351.253	105510725.97	8.9656	A	1.0
9	☐	500000.00	500112.91	534099373.05	45.0802	A	0.8

$$y = 9.0115\text{E-}005 * x + 0.0125$$

$$R = 1.0000$$

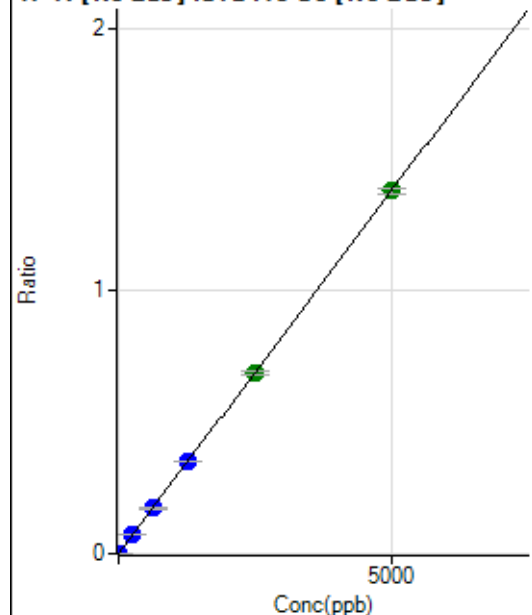
$$DL = 1.076$$

$$BEC = 138.9$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	955.63	0.0001	P	5.1
2	☐	0.500					
3	☐	5.000	4.828	17789.13	0.0014	P	2.3
4	☐	250.000	253.225	873868.42	0.0700	P	0.5
5	☐	625.000	630.962	2132514.22	0.1743	P	3.4
6	☐	1250.000	1273.006	4220659.25	0.3516	P	0.8
7	☐	2500.000	2489.739	8246435.08	0.6876	A	1.2
8	☐	5000.000	4998.473	16245545.85	1.3805	A	1.3
9	☐			5787.51	0.0005	P	2.8

$$y = 2.7616E-004 * x + 7.7019E-005$$

$$R = 1.0000$$

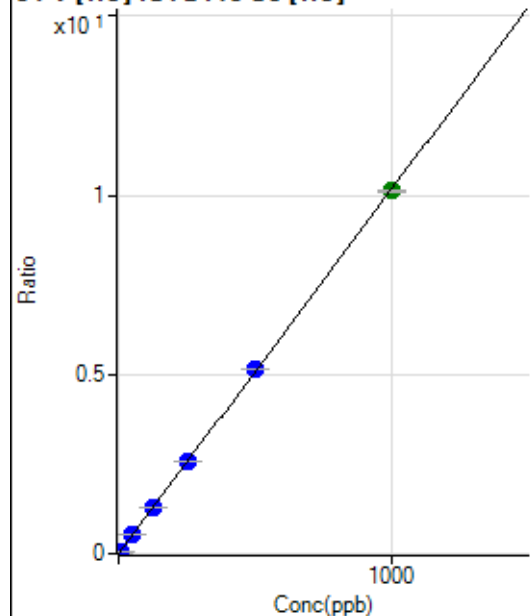
$$DL = 0.04303$$

$$BEC = 0.2789$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	18.89	0.0000	P	20.1
2	☐	0.500					
3	☐	5.000	5.023	36394.03	0.0511	P	1.5
4	☐	50.000	51.338	367246.93	0.5220	P	0.8
5	☐	125.000	128.405	897783.65	1.3054	P	1.0
6	☐	250.000	253.364	1748135.65	2.5759	P	1.2
7	☐	500.000	505.739	3447290.09	5.1416	P	0.1
8	☐	1000.000	995.797	6798226.64	10.1238	A	0.4
9	☐			1702.35	0.0023	P	2.5

$$y = 0.0102 * x + 2.6559E-005$$

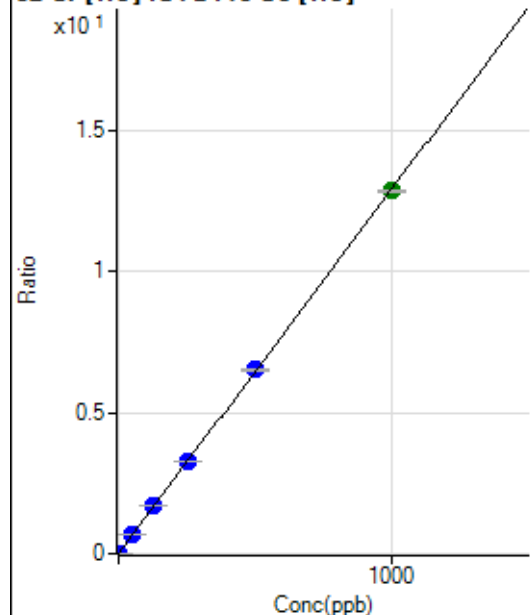
$$R = 1.0000$$

$$DL = 0.001575$$

$$BEC = 0.002612$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4261.80	0.0060	P	3.3
2	☐	0.200					
3	☐	2.000	1.946	22121.23	0.0311	P	1.3
4	☐	50.000	52.239	477627.71	0.6788	P	0.7
5	☐	125.000	129.356	1149972.47	1.6721	P	0.4
6	☐	250.000	254.341	2227380.02	3.2819	P	0.6
7	☐	500.000	504.437	4359986.78	6.5031	P	0.5
8	☐	1000.000	996.040	8618806.26	12.8350	A	0.6
9	☐			170568.77	0.2314	P	1.1

$$y = 0.0129 * x + 0.0060$$

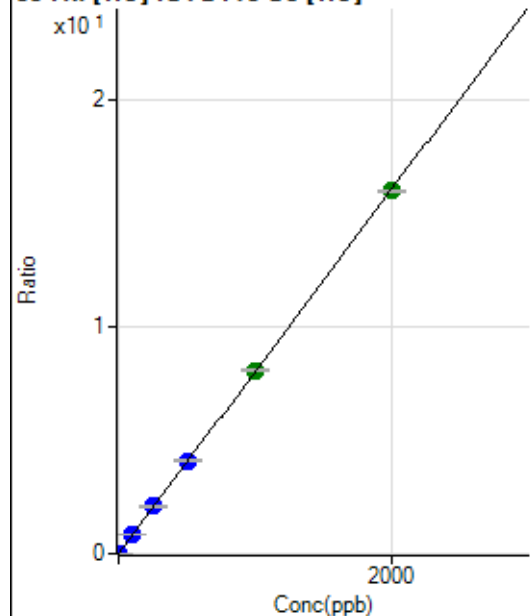
$$R = 1.0000$$

$$DL = 0.04558$$

$$BEC = 0.4654$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	196.67	0.0003	P	2.0
2	☐	0.100					
3	☐	1.000	1.021	6038.02	0.0085	P	2.9
4	☐	100.000	103.917	587772.08	0.8354	P	0.5
5	☐	250.000	258.844	1430763.74	2.0804	P	0.4
6	☐	500.000	510.698	2785502.01	4.1044	P	1.1
7	☐	1000.000	1007.574	5429102.49	8.0974	A	0.4
8	☐	2000.000	1992.237	10751063.73	16.0103	A	0.7
9	☐			57185.40	0.0776	P	2.3

$$y = 0.0080 * x + 2.7661E-004$$

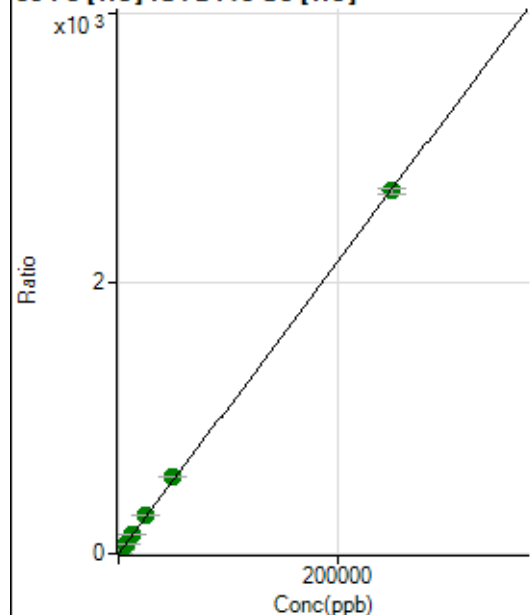
$$R = 1.0000$$

$$DL = 0.002037$$

$$BEC = 0.03442$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	15721.78	0.0221	P	1.7
2	☐	5.000					
3	☐	50.000	56.634	450085.03	0.6319	P	0.8
4	☐	2500.000	2747.842	20832631.71	29.6087	A	0.7
5	☐	6250.000	6880.108	50962936.33	74.1016	A	0.6
6	☐	12500.000	13504.094	98695604.98	145.4233	A	0.7
7	☐	25000.000	26580.186	191903659.85	286.2162	A	0.8
8	☐	50000.000	52312.212	378247078.82	563.2779	A	0.4
9	☐	250000.00	249311.10	1978984888.6	2,684.403	A	1.4

$$y = 0.0108 * x + 0.0221$$

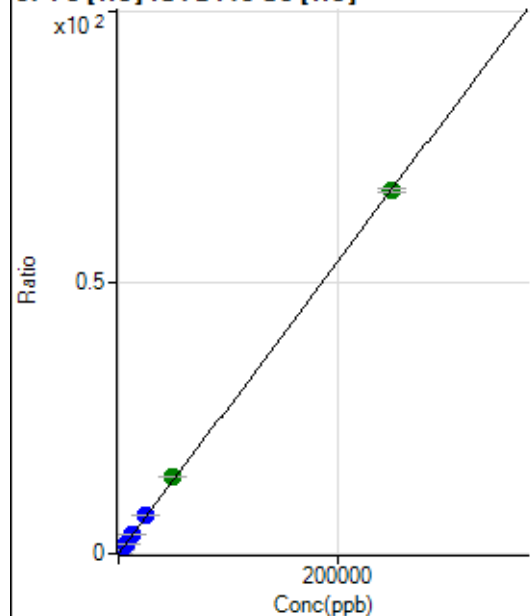
$$R = 0.9999$$

$$DL = 0.105$$

$$BEC = 2.054$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	481.50	0.0007	P	3.1
2	☐	5.000					
3	☐	50.000	57.250	11436.22	0.0161	P	1.2
4	☐	2500.000	2756.809	521550.19	0.7413	P	0.8
5	☐	6250.000	6895.449	1274404.15	1.8531	P	1.2
6	☐	12500.000	13467.729	2455781.30	3.6186	P	1.4
7	☐	25000.000	26730.597	4814924.76	7.1815	P	0.8
8	☐	50000.000	52458.084	9463614.33	14.0929	A	0.5
9	☐	250000.00	249268.23	49367743.23	66.9636	A	1.2

$$y = 2.6864E-004 * x + 6.7712E-004$$

$$R = 0.9999$$

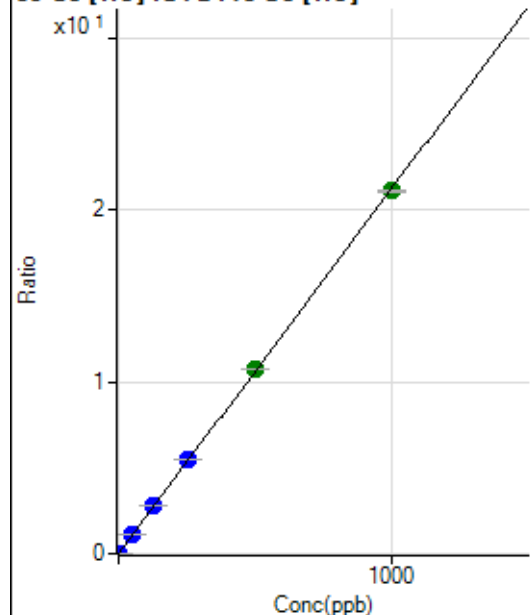
$$DL = 0.2359$$

$$BEC = 2.521$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	121.12	0.0002	P	14.4
2	☐	0.100					
3	☐	1.000	0.972	14823.25	0.0208	P	2.8
4	☐	50.000	52.928	791122.97	1.1244	P	0.5
5	☐	125.000	132.098	1929835.78	2.8060	P	0.9
6	☐	250.000	259.561	3741859.08	5.5134	P	0.5
7	☐	500.000	504.255	7181119.76	10.7108	A	0.3
8	☐	1000.000	994.449	14184172.01	21.1227	A	0.8
9	☐			171768.73	0.2330	P	0.8

$$y = 0.0212 * x + 1.7042E-004$$

$$R = 0.9999$$

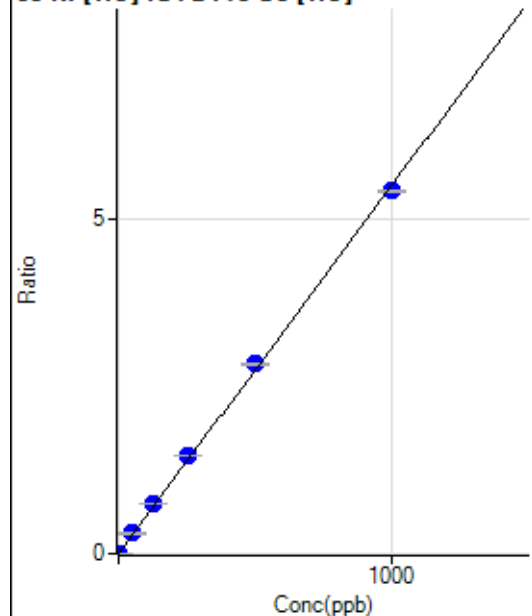
$$DL = 0.003464$$

$$BEC = 0.008023$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	275.56	0.0004	P	18.1
2	☐	0.100					
3	☐	1.000	1.121	4659.72	0.0065	P	1.0
4	☐	50.000	54.992	212727.56	0.3023	P	0.9
5	☐	125.000	136.096	514194.26	0.7477	P	1.5
6	☐	250.000	265.872	991049.92	1.4603	P	0.7
7	☐	500.000	515.930	1899478.58	2.8333	P	1.1
8	☐	1000.000	986.430	3637402.41	5.4167	P	0.5
9	☐			73630.79	0.0999	P	0.8

$$y = 0.0055 * x + 3.8721E-004$$

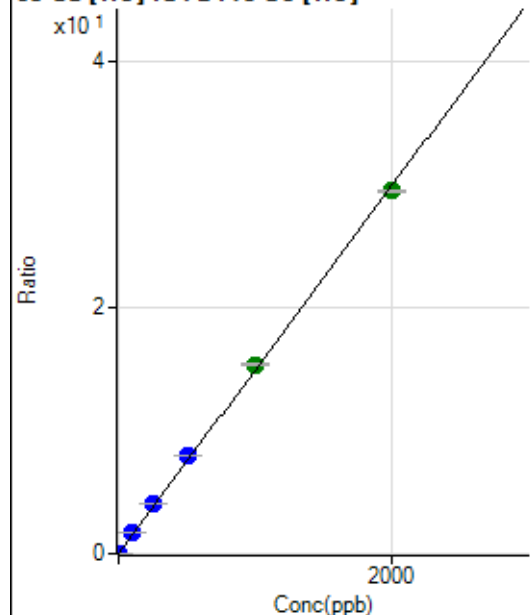
$$R = 0.9996$$

$$DL = 0.03825$$

$$BEC = 0.07052$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2439.14	0.0034	P	5.5
2	☐	0.200					
3	☐	2.000	2.048	24201.32	0.0340	P	1.0
4	☐	100.000	109.872	1155344.73	1.6420	P	0.2
5	☐	250.000	271.519	2787286.94	4.0528	P	0.2
6	☐	500.000	530.257	5369600.82	7.9116	P	0.2
7	☐	1000.000	1029.270	10294020.89	15.3538	A	0.7
8	☐	2000.000	1974.617	19777603.87	29.4526	A	0.8
9	☐			32956.17	0.0447	P	0.7

$$y = 0.0149 * x + 0.0034$$

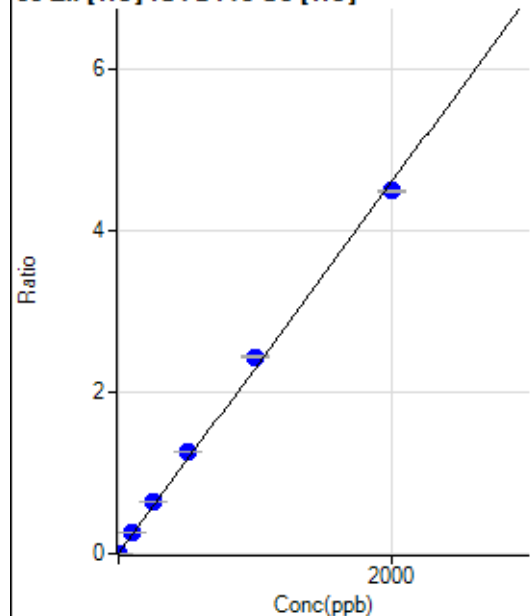
$$R = 0.9997$$

$$DL = 0.03779$$

$$BEC = 0.2301$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	695.58	0.0010	P	4.4
2	☐	0.200					
3	☐	2.000	2.168	4246.24	0.0060	P	4.1
4	☐	100.000	115.069	186765.34	0.2654	P	0.8
5	☐	250.000	281.984	446387.22	0.6491	P	0.3
6	☐	500.000	546.385	852958.28	1.2567	P	0.4
7	☐	1000.000	1059.444	1633122.06	2.4359	P	0.8
8	☐	2000.000	1953.930	3016235.79	4.4917	P	0.7
9	☐			26861.63	0.0364	P	0.9

$$y = 0.0023 * x + 9.7841E-004$$

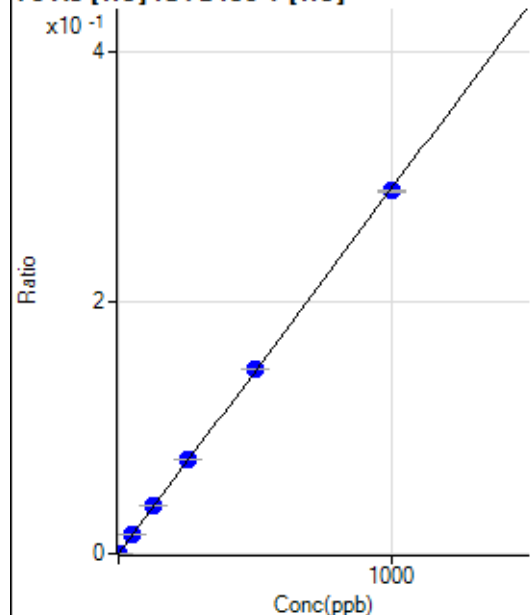
$$R = 0.9990$$

$$DL = 0.05634$$

$$BEC = 0.4257$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	23.46	0.0000	P	31.8
2	☐	0.100					
3	☐	1.000	0.954	987.70	0.0003	P	0.8
4	☐	50.000	52.559	52863.50	0.0153	P	1.7
5	☐	125.000	131.593	129320.51	0.0383	P	0.7
6	☐	250.000	258.240	250918.35	0.0751	P	0.4
7	☐	500.000	506.443	486190.07	0.1472	P	0.4
8	☐	1000.000	993.767	938940.88	0.2888	P	0.4
9	☐			1303.77	0.0004	P	5.9

$$y = 2.9065E-004 * x + 6.7744E-006$$

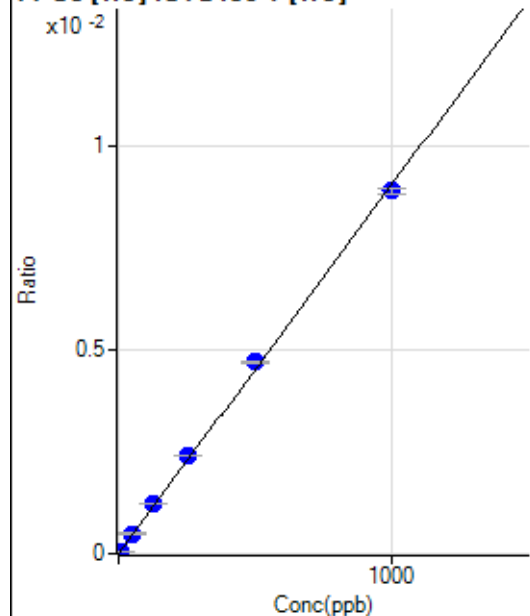
$$R = 0.9999$$

$$DL = 0.02225$$

$$BEC = 0.02331$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	6.103	192.22	0.0001	P	10.7
4	☐	50.000	53.282	1669.02	0.0005	P	6.0
5	☐	125.000	135.932	4164.01	0.0012	P	1.7
6	☐	250.000	267.186	8092.41	0.0024	P	0.4
7	☐	500.000	519.979	15560.80	0.0047	P	0.7
8	☐	1000.000	984.178	28987.97	0.0089	P	1.7
9	☐			17.78	0.0000	P	10.5

$$y = 9.0605E-006 * x + 0.0000E+000$$

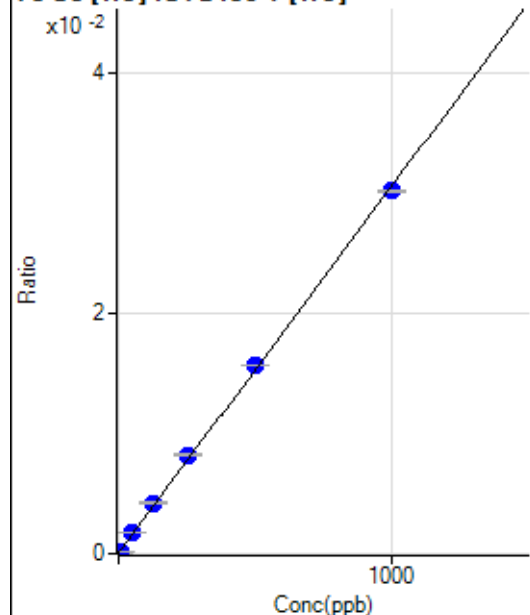
$$R = 0.9995$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	177.78	0.0001	P	4.1
2	☐	0.500					
3	☐	5.000	5.660	779.66	0.0002	P	3.2
4	☐	50.000	55.795	6072.32	0.0018	P	1.0
5	☐	125.000	136.260	14240.43	0.0042	P	2.3
6	☐	250.000	268.175	27549.62	0.0082	P	0.5
7	☐	500.000	511.574	51772.84	0.0157	P	0.3
8	☐	1000.000	987.968	98248.94	0.0302	P	0.7
9	☐			261.11	0.0001	P	14.3

$$y = 3.0541\text{E-}005 * x + 5.1358\text{E-}005$$

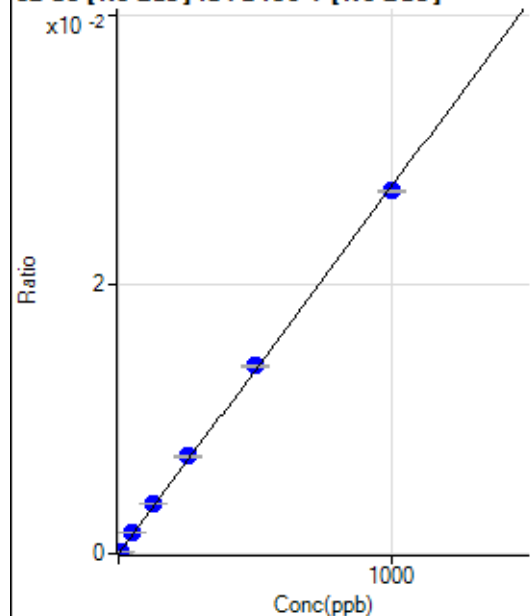
$$R = 0.9997$$

$$DL = 0.2051$$

$$BEC = 1.682$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	-6.82	0.0000	P	-1287.
2	☐	0.500					
3	☐	5.000	5.424	2772.96	0.0001	P	3.7
4	☐	50.000	55.754	28278.24	0.0015	P	1.0
5	☐	125.000	136.487	68748.40	0.0037	P	3.4
6	☐	250.000	264.753	132756.94	0.0072	P	0.8
7	☐	500.000	512.477	255261.54	0.0140	P	0.9
8	☐	1000.000	988.347	480461.83	0.0270	P	0.5
9	☐			181.90	0.0000	P	54.6

$$y = 2.7312\text{E-}005 * x - 3.8519\text{E-}007$$

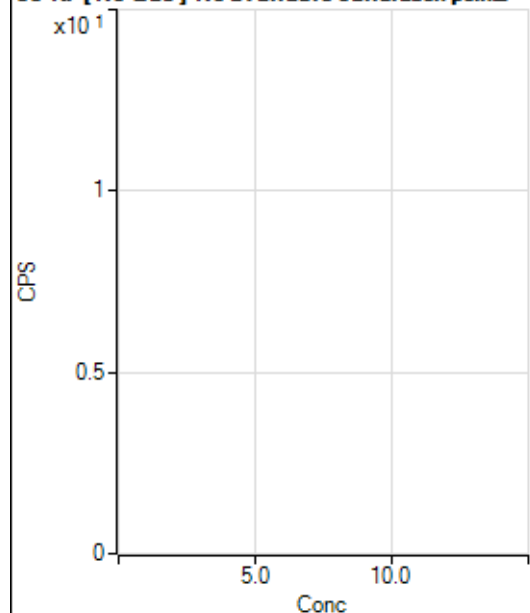
$$R = 0.9997$$

$$DL = 0.5447$$

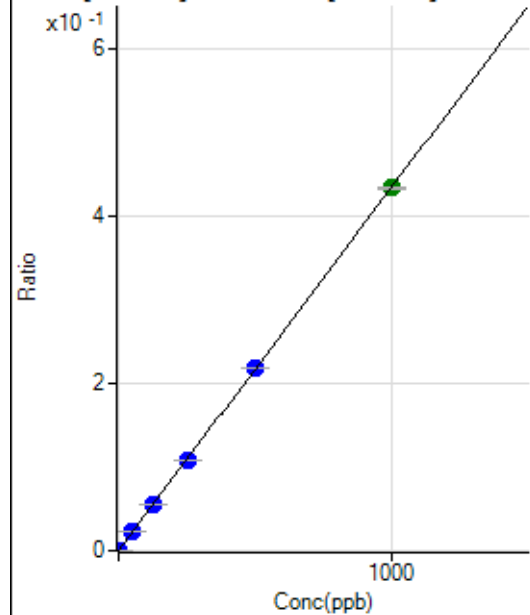
$$BEC = -0.0141$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			1861.27		P	4.8
2	☐						
3	☐			1840.15		P	6.8
4	☐			1781.25		P	4.6
5	☐			1801.26		P	6.3
6	☐			1780.14		P	4.1
7	☐			1756.81		P	2.6
8	☐			1781.25		P	5.4
9	☐			1900.15		P	4.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2825.40	0.0002	P	3.3
2	☐	0.100					
3	☐	1.000	0.828	9584.22	0.0005	P	2.0
4	☐	50.000	50.875	413801.47	0.0223	P	0.1
5	☐	125.000	127.201	1023223.63	0.0555	P	2.9
6	☐	250.000	249.292	1993347.31	0.1086	P	0.7
7	☐	500.000	502.190	3985942.15	0.2186	P	0.2
8	☐	1000.000	998.763	7733858.77	0.4345	A	0.3
9	☐			31560.62	0.0018	P	0.9

$$y = 4.3489\text{E-}004 * x + 1.5069\text{E-}004$$

$$R = 1.0000$$

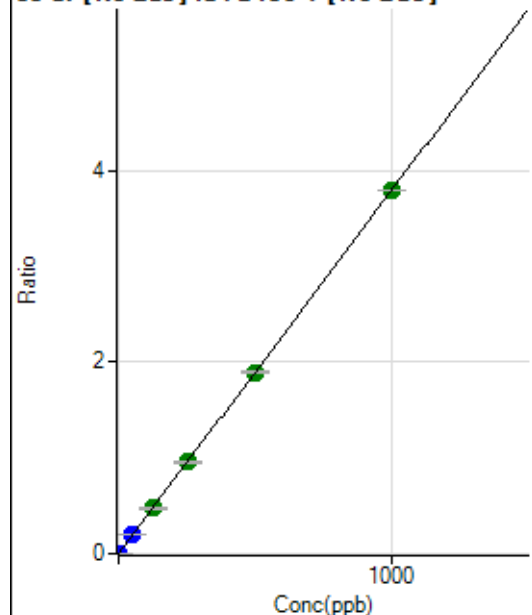
$$DL = 0.03397$$

$$BEC = 0.3465$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	261.12	0.0000	P	7.2
2	☐	0.100					
3	☐	1.000	0.809	57812.02	0.0031	P	2.1
4	☐	50.000	51.012	3591955.68	0.1934	P	0.2
5	☐	125.000	126.040	8812130.23	0.4777	A	3.1
6	☐	250.000	251.717	17518262.72	0.9541	A	0.3
7	☐	500.000	500.224	34579519.52	1.8960	A	0.5
8	☐	1000.000	999.278	67416208.45	3.7876	A	0.1
9	☐			251676.40	0.0145	P	0.9

$$y = 0.0038 * x + 1.3930E-005$$

$$R = 1.0000$$

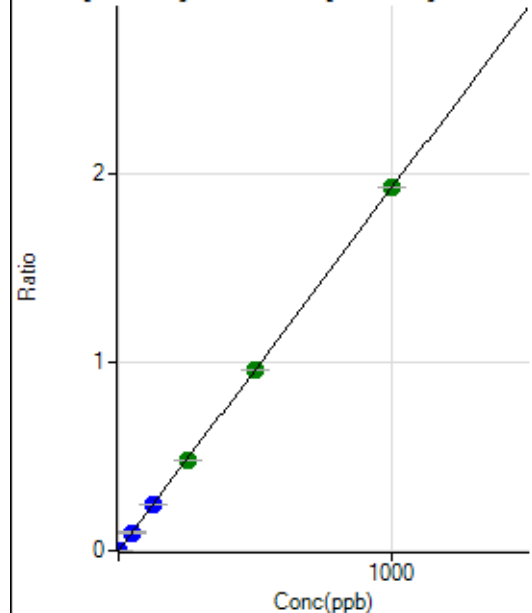
$$DL = 0.000794$$

$$BEC = 0.003675$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1666.84	0.0001	P	4.9
2	☐	0.100					
3	☐	1.000	0.938	35578.83	0.0019	P	1.2
4	☐	50.000	50.250	1798998.17	0.0968	P	0.7
5	☐	125.000	127.182	4518200.84	0.2450	P	3.9
6	☐	250.000	248.478	8786431.36	0.4785	A	0.4
7	☐	500.000	497.954	17488633.72	0.9589	A	0.3
8	☐	1000.000	1001.118	34312761.53	1.9278	A	0.1
9	☐			12308.61	0.0007	P	4.4

$$y = 0.0019 * x + 8.8885E-005$$

$$R = 1.0000$$

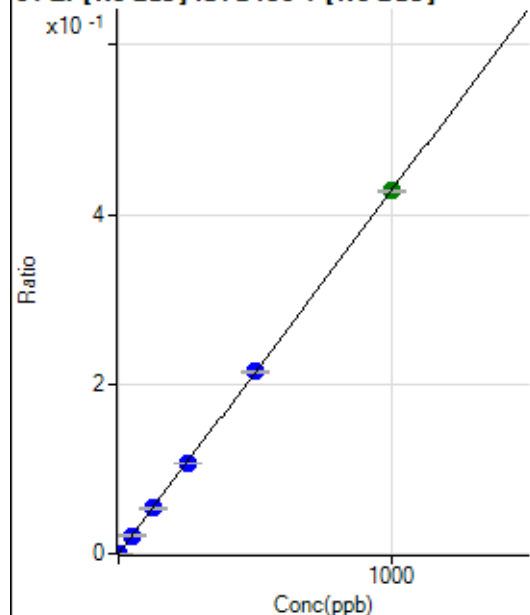
$$DL = 0.006855$$

$$BEC = 0.04616$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	372.24	0.0000	P	8.4
2	☐	0.100					
3	☐	1.000	0.958	8063.71	0.0004	P	4.7
4	☐	50.000	50.198	399313.64	0.0215	P	1.0
5	☐	125.000	125.497	990820.40	0.0537	P	2.8
6	☐	250.000	249.716	1962024.68	0.1069	P	0.8
7	☐	500.000	500.938	3909229.21	0.2143	P	0.8
8	☐	1000.000	999.530	7612087.59	0.4277	A	0.2
9	☐			2650.37	0.0002	P	4.3

$$y = 4.2785\text{E-}004 * x + 1.9858\text{E-}005$$

$$R = 1.0000$$

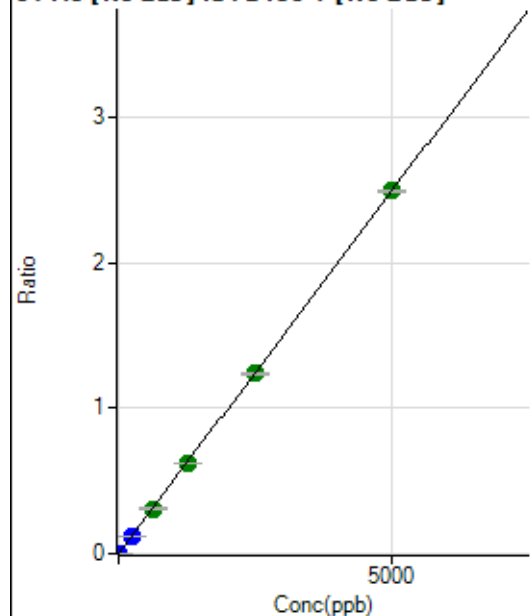
$$DL = 0.01169$$

$$BEC = 0.04641$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	569.48	0.0000	P	5.9
2	☐	0.500					
3	☐	5.000	4.738	44938.88	0.0024	P	1.9
4	☐	250.000	250.635	2323558.21	0.1251	P	0.5
5	☐	625.000	623.243	5737290.84	0.3110	A	2.3
6	☐	1250.000	1244.732	11403933.94	0.6211	A	0.3
7	☐	2500.000	2487.769	22638539.22	1.2413	A	1.2
8	☐	5000.000	5007.620	44473248.22	2.4986	A	0.6
9	☐			30931.78	0.0018	P	1.1

$$y = 4.9895\text{E-}004 * x + 3.0376\text{E-}005$$

$$R = 1.0000$$

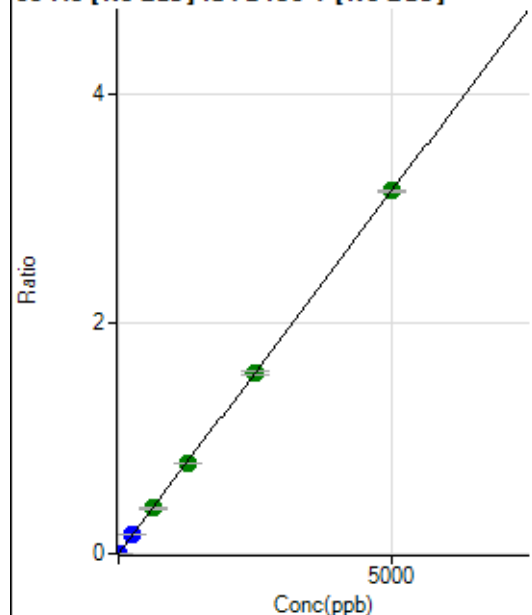
$$DL = 0.01079$$

$$BEC = 0.06088$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	175.01	0.0000	P	21.4
2	☐	0.500					
3	☐	5.000	4.693	55718.17	0.0030	P	1.6
4	☐	250.000	252.877	2962217.67	0.1595	P	0.7
5	☐	625.000	625.473	7276054.85	0.3944	A	2.4
6	☐	1250.000	1247.440	14442823.59	0.7866	A	0.9
7	☐	2500.000	2493.561	28676916.27	1.5724	A	1.4
8	☐	5000.000	5003.657	56160476.26	3.1552	A	0.6
9	☐			46961.85	0.0027	P	3.0

$$y = 6.3058\text{E-}004 * x + 9.3276\text{E-}006$$

$$R = 1.0000$$

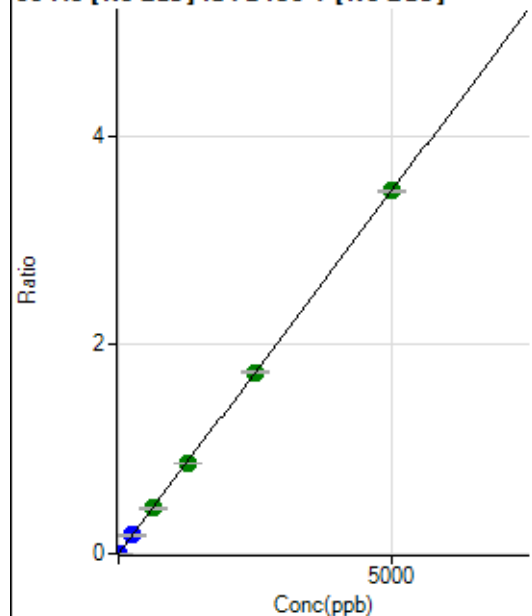
$$DL = 0.009502$$

$$BEC = 0.01479$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	311.13	0.0000	P	18.4
2	☐	0.500					
3	☐	5.000	4.690	61400.18	0.0033	P	1.5
4	☐	250.000	251.894	3247486.42	0.1748	P	1.2
5	☐	625.000	626.931	8026080.38	0.4351	A	2.8
6	☐	1250.000	1247.250	15893212.51	0.8656	A	0.4
7	☐	2500.000	2498.653	31626619.11	1.7341	A	0.6
8	☐	5000.000	5001.025	61776083.32	3.4707	A	0.4
9	☐			64982.59	0.0037	P	1.4

$$y = 6.9400\text{E-}004 * x + 1.6605\text{E-}005$$

$$R = 1.0000$$

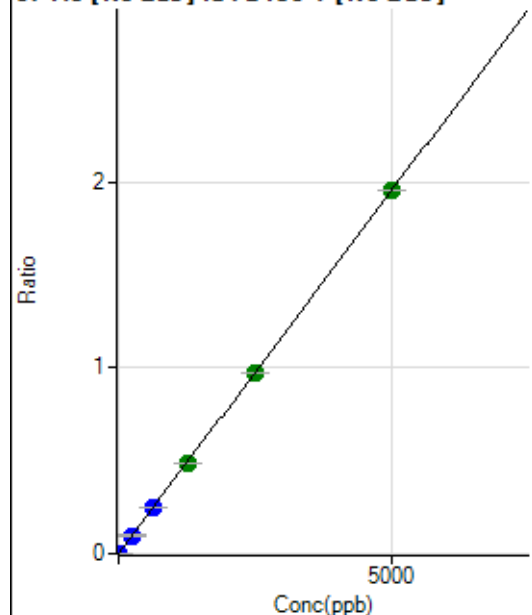
$$DL = 0.01321$$

$$BEC = 0.02393$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	94.45	0.0000	P	28.2
2	☐	0.500					
3	☐	5.000	4.596	33793.86	0.0018	P	1.9
4	☐	250.000	251.090	1822164.34	0.0981	P	1.2
5	☐	625.000	632.874	4560387.21	0.2472	P	3.2
6	☐	1250.000	1254.285	8996917.39	0.4900	A	0.1
7	☐	2500.000	2498.411	17800740.15	0.9760	A	0.4
8	☐	5000.000	4998.685	34758133.76	1.9528	A	0.1
9	☐			28056.33	0.0016	P	3.4

$$y = 3.9066E-004 * x + 5.0358E-006$$

$$R = 1.0000$$

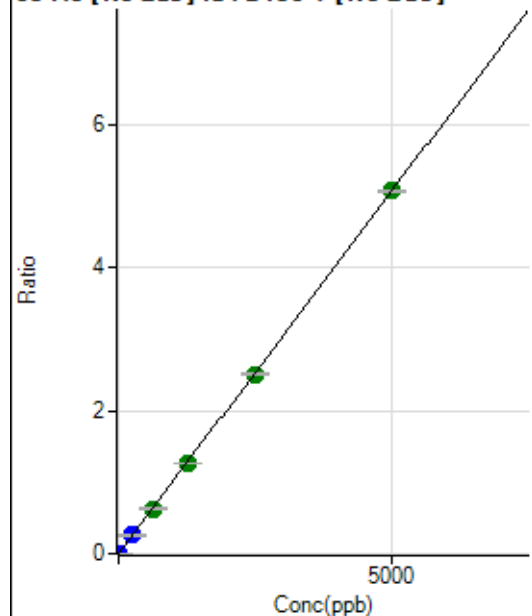
$$DL = 0.01089$$

$$BEC = 0.01289$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	294.46	0.0000	P	14.4
2	☐	0.500					
3	☐	5.000	4.615	87935.71	0.0047	P	1.7
4	☐	250.000	252.716	4749728.49	0.2557	P	1.6
5	☐	625.000	623.274	11633431.25	0.6306	A	2.6
6	☐	1250.000	1257.127	23353543.06	1.2719	A	0.2
7	☐	2500.000	2481.567	45789830.54	2.5107	A	0.9
8	☐	5000.000	5007.515	90176427.01	5.0664	A	0.6
9	☐			71167.52	0.0041	P	2.7

$$y = 0.0010 * x + 1.5707E-005$$

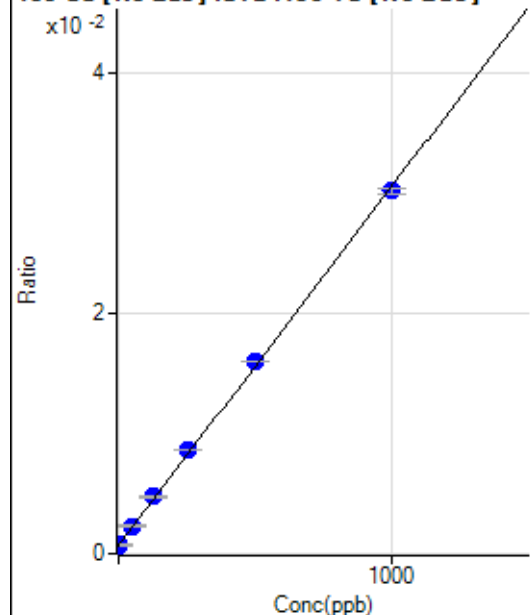
$$R = 1.0000$$

$$DL = 0.006698$$

$$BEC = 0.01552$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	15570.39	0.0007	P	2.2
2	☐	0.100					
3	☐	1.000	1.344	16351.79	0.0007	P	4.2
4	☐	50.000	54.411	51979.63	0.0023	P	1.6
5	☐	125.000	136.542	107353.95	0.0048	P	4.6
6	☐	250.000	265.671	194223.17	0.0086	P	0.8
7	☐	500.000	511.753	361546.14	0.0159	P	0.3
8	☐	1000.000	988.542	667397.66	0.0302	P	1.3
9	☐			15083.62	0.0007	P	1.6

$$y = 2.9831E-005 * x + 6.8343E-004$$

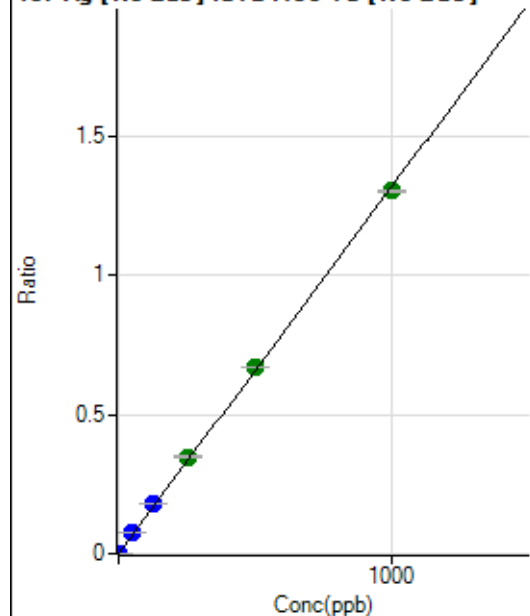
$$R = 0.9997$$

$$DL = 1.528$$

$$BEC = 22.91$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	241.68	0.0000	P	12.0
2	☐	0.100					
3	☐	1.000	1.174	35183.85	0.0016	P	0.6
4	☐	50.000	55.903	1659379.65	0.0736	P	2.1
5	☐	125.000	136.036	4044638.63	0.1792	P	3.1
6	☐	250.000	263.815	7839237.85	0.3475	A	0.9
7	☐	500.000	510.423	15238748.78	0.6722	A	0.4
8	☐	1000.000	989.660	28832803.42	1.3034	A	0.4
9	☐			2322.52	0.0001	P	10.1

$$y = 0.0013 * x + 1.0609E-005$$

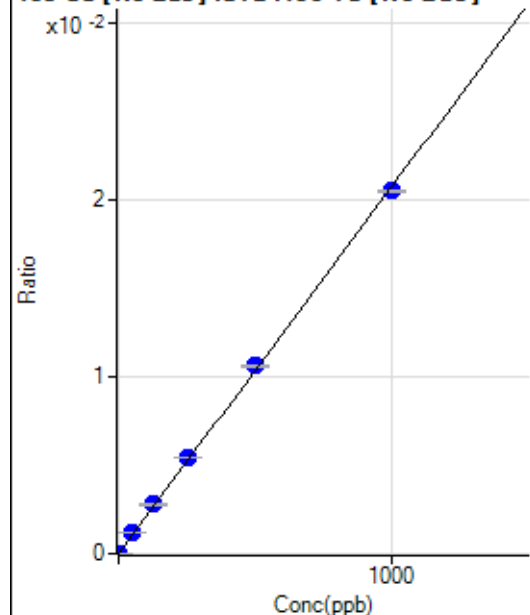
$$R = 0.9998$$

$$DL = 0.002908$$

$$BEC = 0.008055$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	38.89	0.0000	P	40.5
2	☐	0.100					
3	☐	1.000	1.156	580.58	0.0000	P	1.9
4	☐	50.000	56.246	26333.11	0.0012	P	0.5
5	☐	125.000	135.002	63242.61	0.0028	P	4.1
6	☐	250.000	261.929	122624.88	0.0054	P	1.0
7	☐	500.000	511.773	240694.33	0.0106	P	1.2
8	☐	1000.000	989.569	454097.19	0.0205	P	0.7
9	☐			152.78	0.0000	P	18.3

$$y = 2.0743\text{E-}005 * x + 1.7066\text{E-}006$$

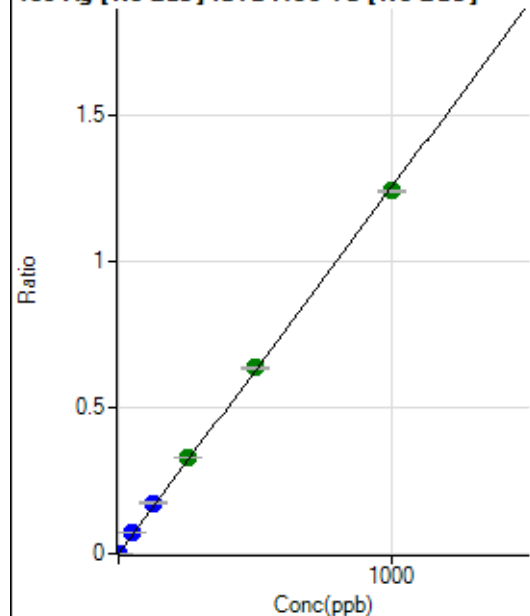
$$R = 0.9998$$

$$DL = 0.1$$

$$BEC = 0.08227$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	136.12	0.0000	P	36.8
2	☐	0.100					
3	☐	1.000	1.192	33838.73	0.0015	P	2.6
4	☐	50.000	55.945	1577399.32	0.0700	P	1.8
5	☐	125.000	137.027	3869680.03	0.1714	P	3.4
6	☐	250.000	263.620	7441066.22	0.3298	A	0.5
7	☐	500.000	508.545	14421650.32	0.6362	A	0.9
8	☐	1000.000	990.522	27411892.63	1.2392	A	0.6
9	☐			2316.96	0.0001	P	15.7

$$y = 0.0013 * x + 5.9731\text{E-}006$$

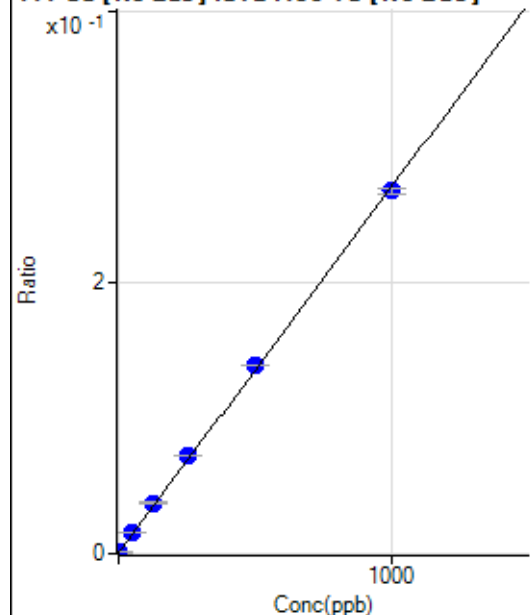
$$R = 0.9998$$

$$DL = 0.005274$$

$$BEC = 0.004774$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	10910.95	0.0005	P	2.4
2	☐	0.100					
3	☐	1.000	1.007	16966.22	0.0008	P	3.6
4	☐	50.000	55.161	346425.37	0.0154	P	1.1
5	☐	125.000	135.496	836542.54	0.0371	P	3.5
6	☐	250.000	264.956	1624792.81	0.0720	P	0.5
7	☐	500.000	511.379	3140671.71	0.1385	P	0.4
8	☐	1000.000	989.001	5916989.63	0.2675	P	1.3
9	☐			11264.13	0.0005	P	1.8

$$y = 2.6999\text{E-}004 * x + 4.7891\text{E-}004$$

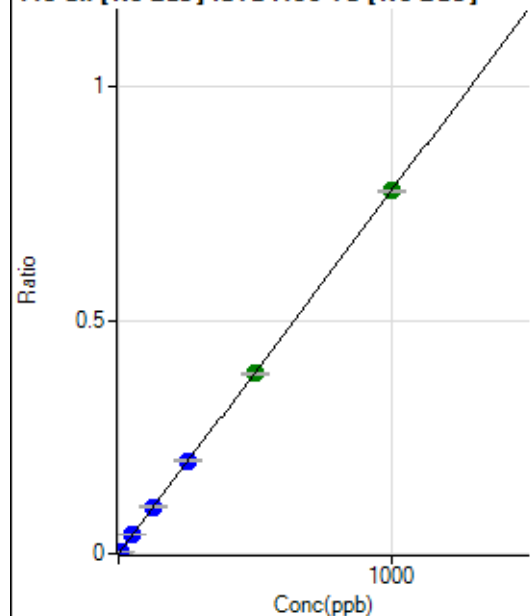
$$R = 0.9998$$

$$DL = 0.1298$$

$$BEC = 1.774$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1105.65	0.0000	P	13.0
2	☐	0.500					
3	☐	5.000	4.989	88697.26	0.0039	P	1.4
4	☐	50.000	52.173	914647.74	0.0406	P	0.3
5	☐	125.000	129.431	2271200.22	0.1006	P	2.9
6	☐	250.000	256.806	4502728.88	0.1996	P	0.8
7	☐	500.000	495.888	8734437.18	0.3853	A	0.8
8	☐	1000.000	999.692	17182484.06	0.7767	A	0.3
9	☐			13573.83	0.0006	P	5.5

$$y = 7.7694\text{E-}004 * x + 4.8530\text{E-}005$$

$$R = 1.0000$$

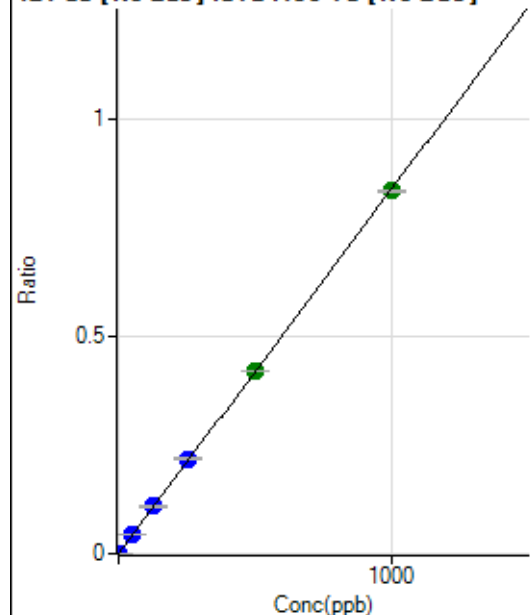
$$DL = 0.02433$$

$$BEC = 0.06246$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	130.56	0.0000	P	16.2
2	☐	0.200					
3	☐	2.000	1.951	37114.01	0.0016	P	1.9
4	☐	50.000	52.950	1001135.29	0.0444	P	1.2
5	☐	125.000	130.119	2464021.56	0.1092	P	3.2
6	☐	250.000	260.784	4935717.65	0.2188	P	1.2
7	☐	500.000	501.717	9540370.96	0.4209	A	0.6
8	☐	1000.000	995.658	18476486.18	0.8352	A	0.5
9	☐			20198.61	0.0010	P	1.3

$$y = 8.3886E-004 * x + 5.7313E-006$$

$$R = 0.9999$$

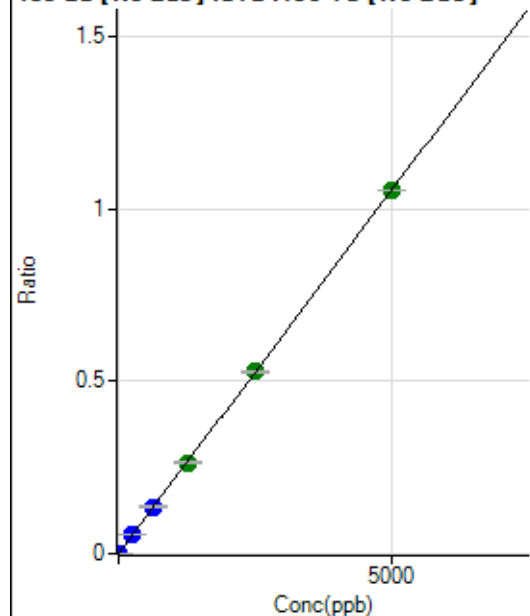
$$DL = 0.003311$$

$$BEC = 0.006832$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	61.11	0.0000	P	43.9
2	☐	1.000					
3	☐	10.000	9.765	46534.71	0.0021	P	1.1
4	☐	250.000	257.623	1222618.93	0.0543	P	1.6
5	☐	625.000	643.358	3058243.19	0.1355	P	3.2
6	☐	1250.000	1254.755	5961439.07	0.2642	A	0.6
7	☐	2500.000	2504.359	11954501.14	0.5274	A	0.4
8	☐	5000.000	4993.957	23263379.51	1.0516	A	0.1
9	☐			3975.73	0.0002	P	1.6

$$y = 2.1058E-004 * x + 2.6829E-006$$

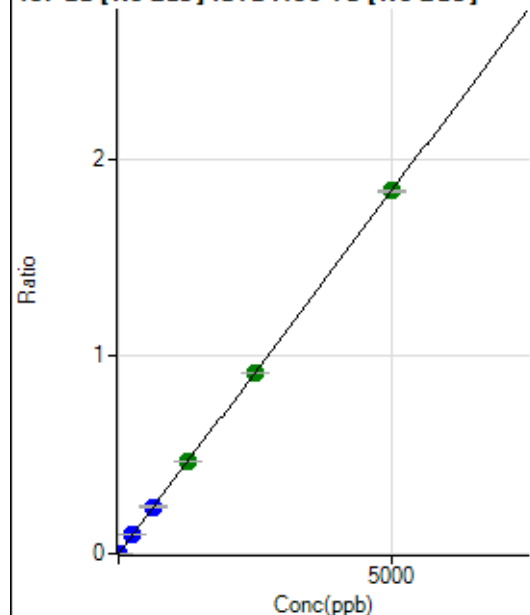
$$R = 1.0000$$

$$DL = 0.01678$$

$$BEC = 0.01274$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	80.56	0.0000	P	21.4
2	☐	1.000					
3	☐	10.000	9.717	80836.80	0.0036	P	0.8
4	☐	250.000	258.378	2141248.53	0.0950	P	0.9
5	☐	625.000	645.043	5354072.56	0.2372	P	3.3
6	☐	1250.000	1262.704	10475830.01	0.4643	A	0.2
7	☐	2500.000	2487.717	20736398.73	0.9148	A	0.4
8	☐	5000.000	5000.042	40669575.91	1.8386	A	0.8
9	☐			6465.64	0.0003	P	1.5

$$y = 3.6771\text{E-}004 * x + 3.5355\text{E-}006$$

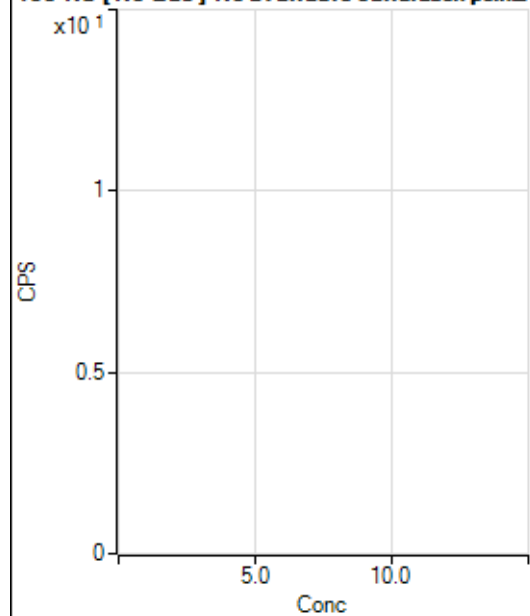
$$R = 1.0000$$

$$DL = 0.006185$$

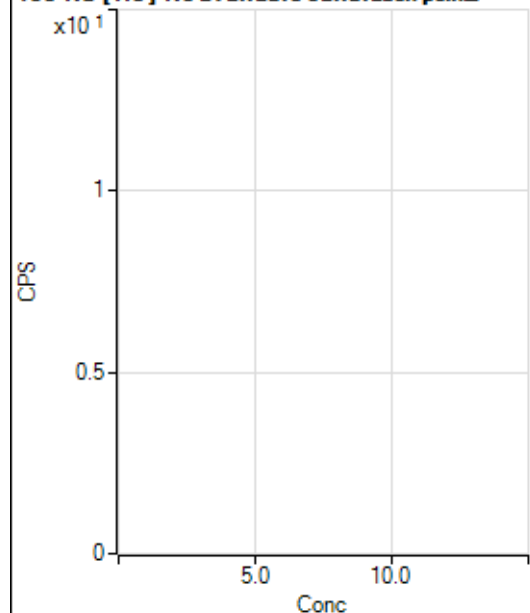
$$BEC = 0.009615$$

Weight: <None>

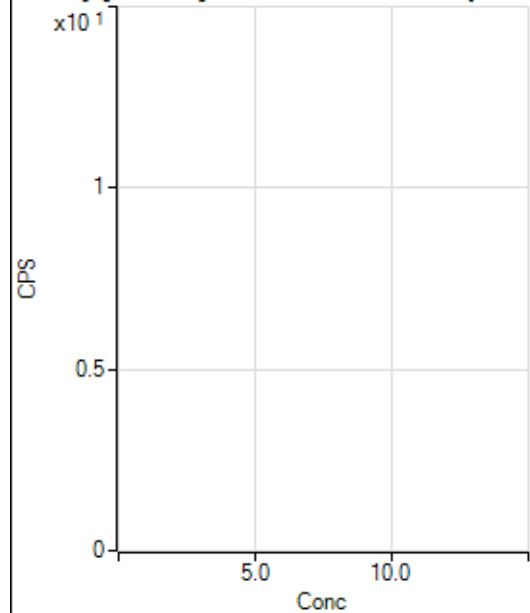
Min Conc: 0

150 Nd [No Gas] No available calibration points

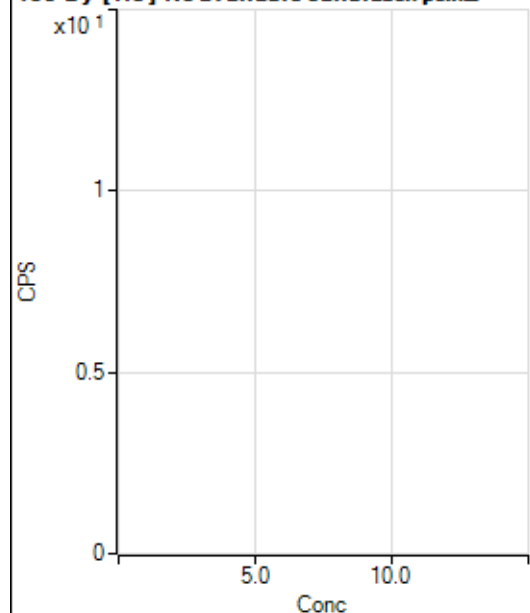
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			6.67		P	100.0
4	☐			86.67		P	35.2
5	☐			304.46		P	2.5
6	☐			493.36		P	14.1
7	☐			1044.53		P	8.7
8	☐			1826.87		P	3.0
9	☐			404.46		P	16.8

150 Nd [He] No available calibration points

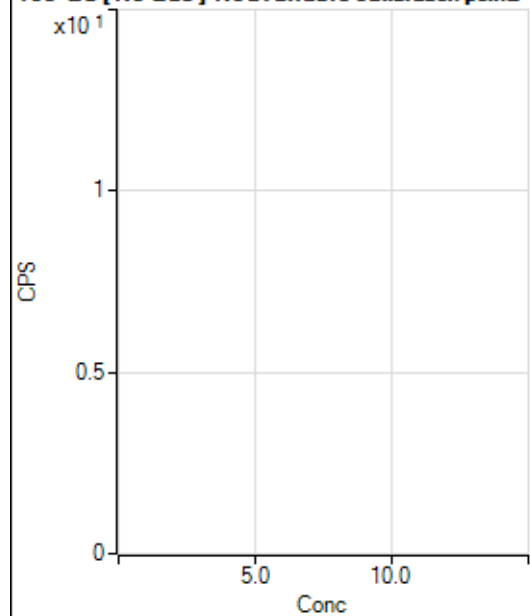
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2.22		P	173.2
2	☐						
3	☐			0.00		P	
4	☐			10.00		P	88.2
5	☐			25.56		P	30.1
6	☐			71.11		P	10.8
7	☐			142.23		P	19.1
8	☐			214.45		P	15.3
9	☐			181.11		P	11.8

156 Dy [No Gas] No available calibration points

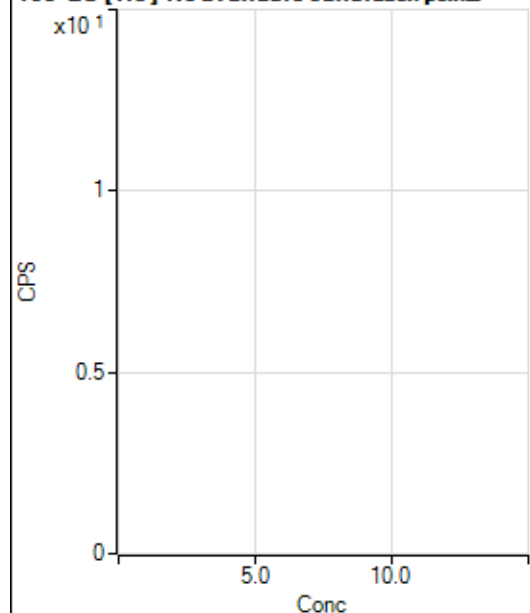
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			16.67		P	132.3
2	☐						
3	☐			8.33		P	100.0
4	☐			41.67		P	40.0
5	☐			83.34		P	36.1
6	☐			133.34		P	12.5
7	☐			286.13		P	17.1
8	☐			525.04		P	11.4
9	☐			202.79		P	16.6

156 Dy [He] No available calibration points

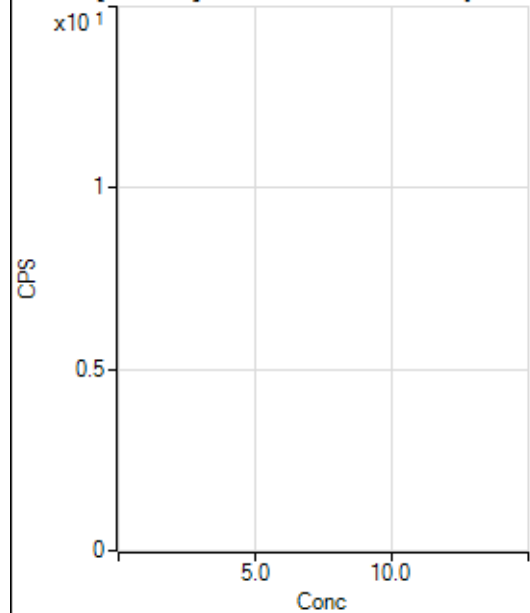
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			6.67		P	50.0
2	☐						
3	☐			7.78		P	49.5
4	☐			35.56		P	14.3
5	☐			60.00		P	40.1
6	☐			114.45		P	7.3
7	☐			260.01		P	4.4
8	☐			430.01		P	10.9
9	☐			124.45		P	15.5

160 Gd [No Gas] Noavailable calibration poin_

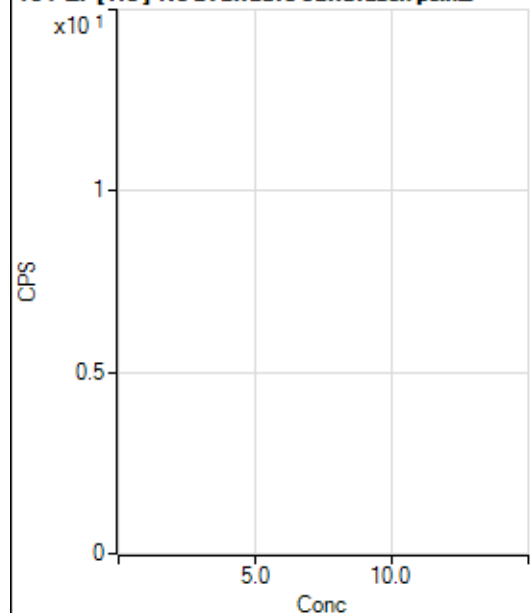
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			155.57		P	21.7
2	☐						
3	☐			150.01		P	5.6
4	☐			216.68		P	13.3
5	☐			225.01		P	13.4
6	☐			213.90		P	18.0
7	☐			269.46		P	21.7
8	☐			275.02		P	5.2
9	☐			338.91		P	16.4

160 Gd [He] No available calibration points

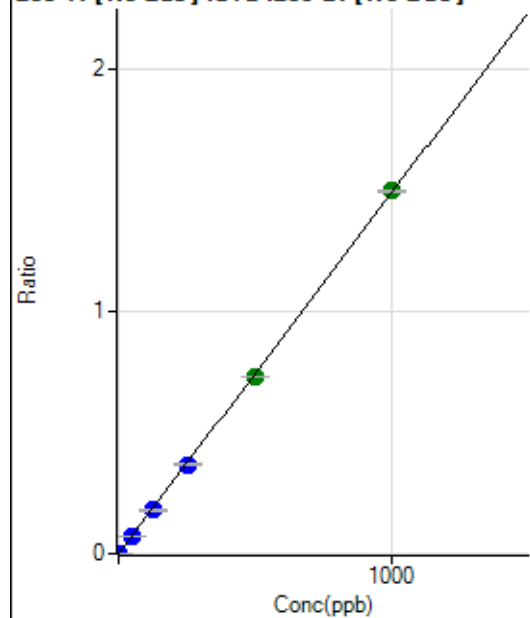
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			431.13		P	7.4
2	☐						
3	☐			400.01		P	5.5
4	☐			393.35		P	5.9
5	☐			403.35		P	11.7
6	☐			411.12		P	6.0
7	☐			383.35		P	8.3
8	☐			443.35		P	6.9
9	☐			481.13		P	6.5

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			77.78		P	43.3
2	☐						
3	☐			58.33		P	65.5
4	☐			72.22		P	58.1
5	☐			69.45		P	42.1
6	☐			72.22		P	6.7
7	☐			97.23		P	44.0
8	☐			97.23		P	48.7
9	☐			122.23		P	17.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			42.22		P	29.9
2	☐						
3	☐			47.78		P	35.1
4	☐			42.22		P	9.1
5	☐			42.22		P	24.1
6	☐			48.89		P	14.2
7	☐			44.45		P	35.4
8	☐			56.67		P	30.6
9	☐			68.89		P	12.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	480.59	0.0000	P	19.4
2	☐	0.100					
3	☐	1.000	0.878	20330.31	0.0013	P	4.2
4	☐	50.000	48.611	1097093.25	0.0723	P	0.6
5	☐	125.000	121.760	2734501.75	0.1810	P	3.5
6	☐	250.000	246.707	5431335.36	0.3667	P	1.4
7	☐	500.000	491.379	10655300.41	0.7304	A	0.6
8	☐	1000.000	1005.608	20698300.81	1.4948	A	0.2
9	☐			4692.72	0.0004	P	3.8

$$y = 0.0015 * x + 3.1809E-005$$

$$R = 0.9999$$

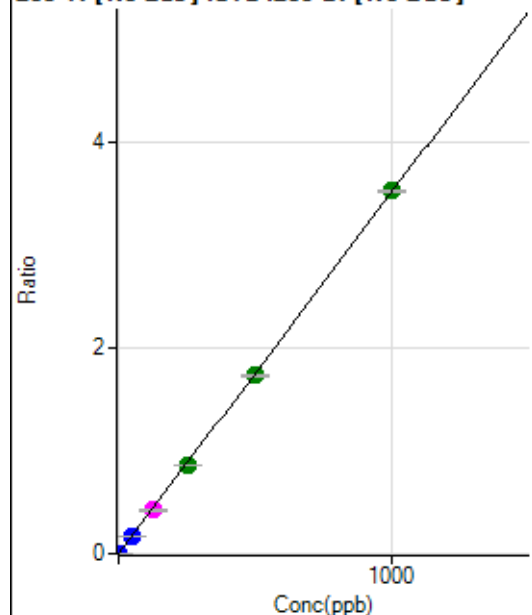
$$DL = 0.01246$$

$$BEC = 0.0214$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1319.58	0.0001	P	2.2
2	☐	0.100					
3	☐	1.000	0.875	48063.07	0.0032	P	1.5
4	☐	50.000	49.008	2612355.40	0.1721	P	0.2
5	☐	125.000	121.364	6436307.83	0.4261	M	4.3
6	☐	250.000	245.311	12754549.68	0.8612	A	1.3
7	☐	500.000	494.306	25314541.54	1.7353	A	1.0
8	☐	1000.000	1004.523	48831099.70	3.5264	A	0.5
9	☐			11310.79	0.0010	P	4.1

$$y = 0.0035 * x + 8.7421E-005$$

$$R = 1.0000$$

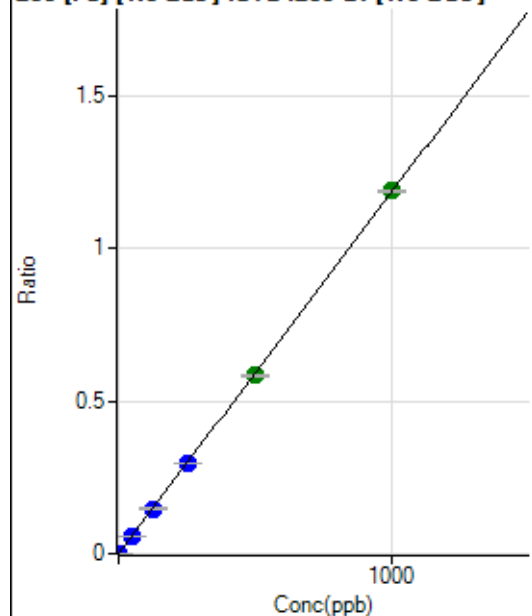
$$DL = 0.001627$$

$$BEC = 0.0249$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	694.48	0.0000	P	11.8
2	☐	0.100					
3	☐	1.000	0.918	17215.31	0.0011	P	1.9
4	☐	50.000	49.116	882921.74	0.0582	P	1.6
5	☐	125.000	124.314	2223375.54	0.1472	P	3.2
6	☐	250.000	248.774	4361206.75	0.2945	P	1.0
7	☐	500.000	493.334	8518203.14	0.5839	A	0.8
8	☐	1000.000	1003.769	16451387.64	1.1880	A	0.8
9	☐			23148.51	0.0020	P	2.8

$$y = 0.0012 * x + 4.5982E-005$$

$$R = 1.0000$$

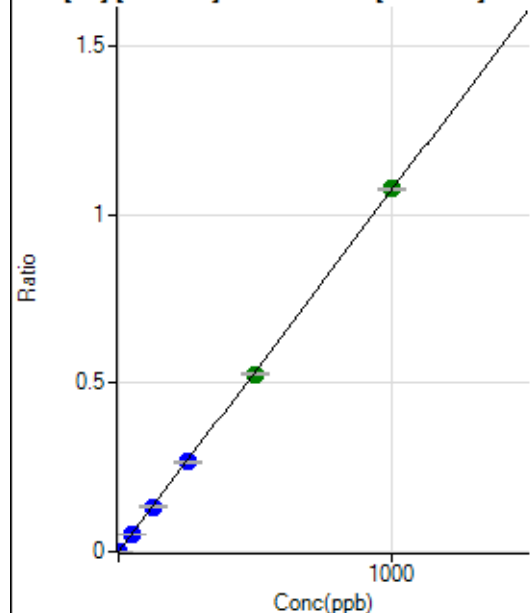
$$DL = 0.01379$$

$$BEC = 0.03885$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	631.52	0.0000	P	13.4
2	☐	0.100					
3	☐	1.000	0.879	14930.99	0.0010	P	3.2
4	☐	50.000	49.306	801431.67	0.0528	P	0.4
5	☐	125.000	124.041	2006015.25	0.1328	P	3.3
6	☐	250.000	248.519	3939328.10	0.2660	P	0.8
7	☐	500.000	491.561	7674302.89	0.5261	A	1.1
8	☐	1000.000	1004.744	14889078.23	1.0752	A	0.5
9	☐			19946.93	0.0017	P	0.9

$$y = 0.0011 * x + 4.1810E-005$$

$$R = 0.9999$$

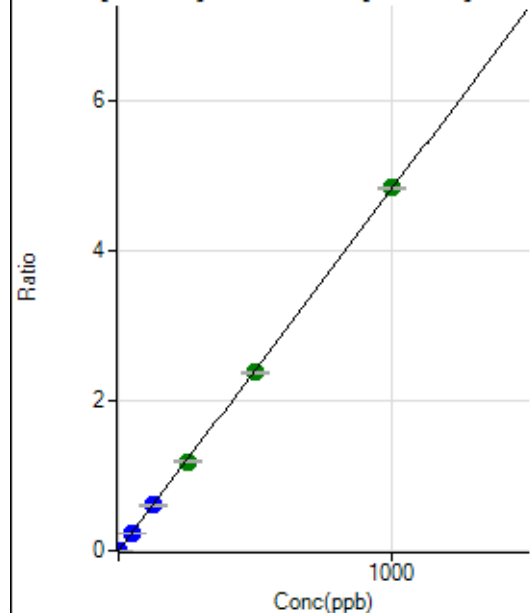
$$DL = 0.01565$$

$$BEC = 0.03907$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2861.32	0.0002	P	4.9
2	☐	0.100					
3	☐	1.000	0.895	68442.87	0.0045	P	0.9
4	☐	50.000	49.484	3621789.56	0.2386	P	0.8
5	☐	125.000	125.349	9127982.22	0.6042	P	3.3
6	☐	250.000	247.274	17650237.72	1.1917	A	0.7
7	☐	500.000	493.571	34699171.15	2.3786	A	0.7
8	☐	1000.000	1003.878	66987358.09	4.8376	A	0.6
9	☐			91235.10	0.0078	P	0.8

$$y = 0.0048 * x + 1.8950E-004$$

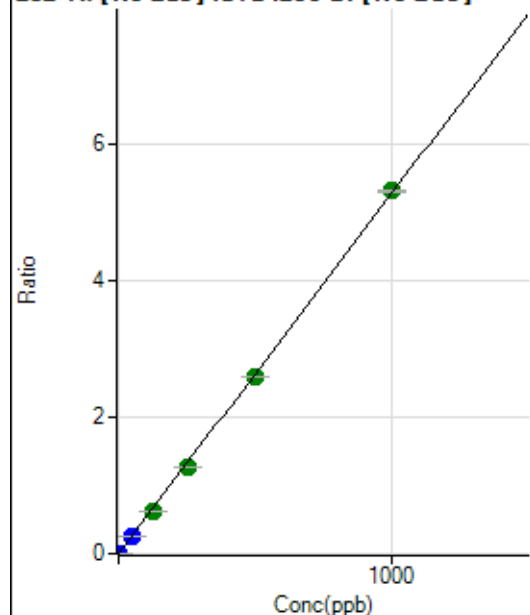
$$R = 1.0000$$

$$DL = 0.005812$$

$$BEC = 0.03933$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	659.30	0.0000	P	14.2
2	☐	0.100					
3	☐	1.000	0.823	66638.01	0.0044	P	1.5
4	☐	50.000	47.227	3777604.65	0.2489	P	0.3
5	☐	125.000	117.906	9386142.80	0.6213	A	3.4
6	☐	250.000	238.298	18597653.43	1.2557	A	0.4
7	☐	500.000	491.722	37799145.75	2.5911	A	1.0
8	☐	1000.000	1008.090	73558673.87	5.3120	A	0.9
9	☐			16447.85	0.0014	P	10.7

$$y = 0.0053 * x + 4.3696E-005$$

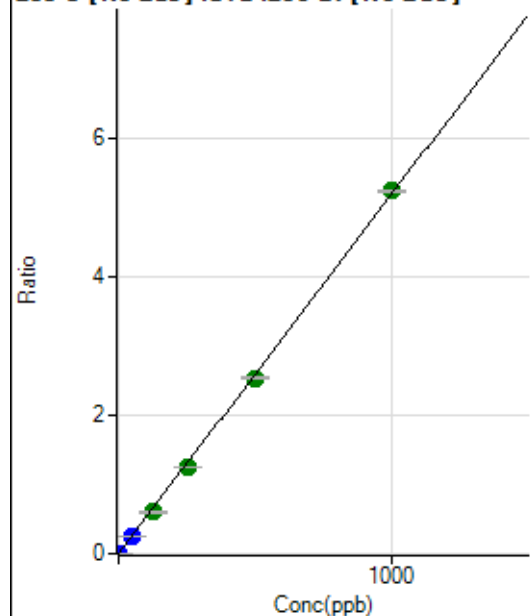
$$R = 0.9999$$

$$DL = 0.003535$$

$$BEC = 0.008293$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	75.00	0.0000	P	10.4
2	☐	0.100					
3	☐	1.000	0.861	67891.72	0.0045	P	1.9
4	☐	50.000	47.131	3706816.23	0.2442	P	0.7
5	☐	125.000	117.481	9195398.38	0.6088	A	4.3
6	☐	250.000	238.958	18339715.51	1.2383	A	0.4
7	☐	500.000	488.480	36928351.52	2.5313	A	0.6
8	☐	1000.000	1009.604	72446987.03	5.2318	A	0.4
9	☐			7594.24	0.0006	P	4.8

$$y = 0.0052 * x + 4.9659E-006$$

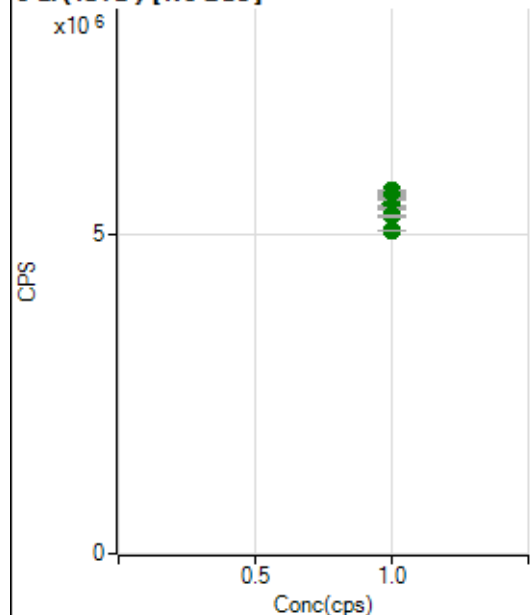
$$R = 0.9998$$

$$DL = 0.0002983$$

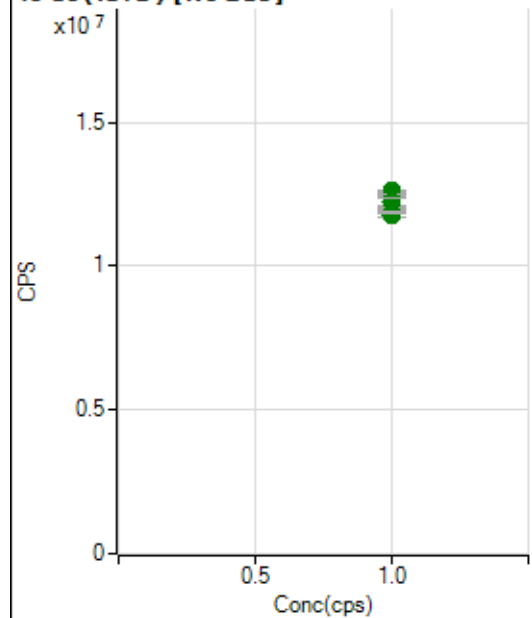
$$BEC = 0.0009583$$

Weight: <None>

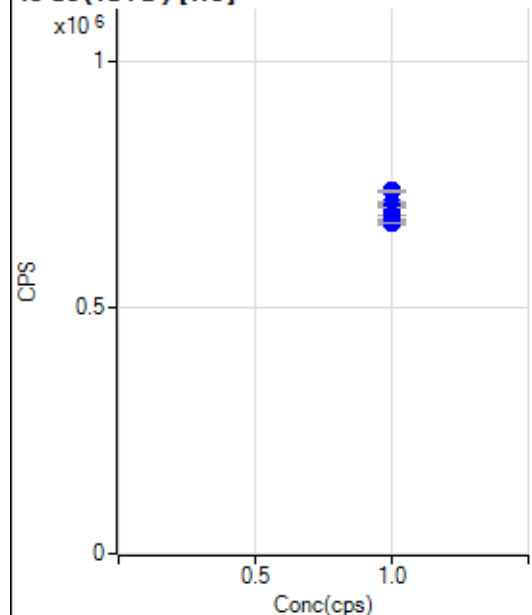
Min Conc: 0

6 Li (ISTD) [No Gas]

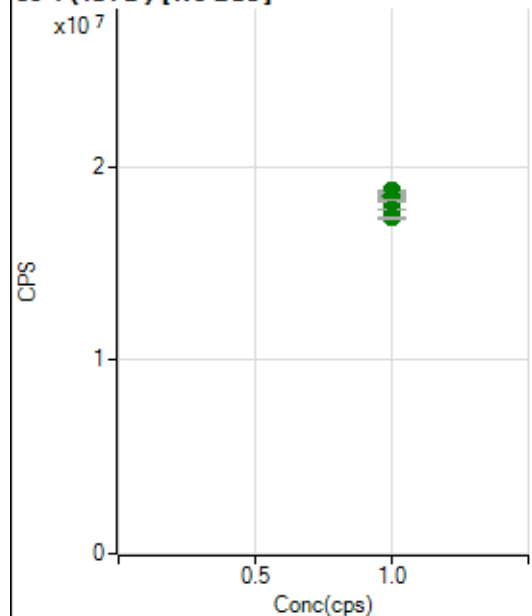
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		5698040.15		A	0.4
2	☐	1.000					
3	☐	1.000		5626959.40		A	0.6
4	☐	1.000		5596313.77		A	0.2
5	☐	1.000		5510788.88		A	2.0
6	☐	1.000		5440629.52		A	0.3
7	☐	1.000		5419775.92		A	0.2
8	☐	1.000		5311911.16		A	0.4
9	☐	1.000		5066657.77		A	0.3

45 Sc (ISTD) [No Gas]

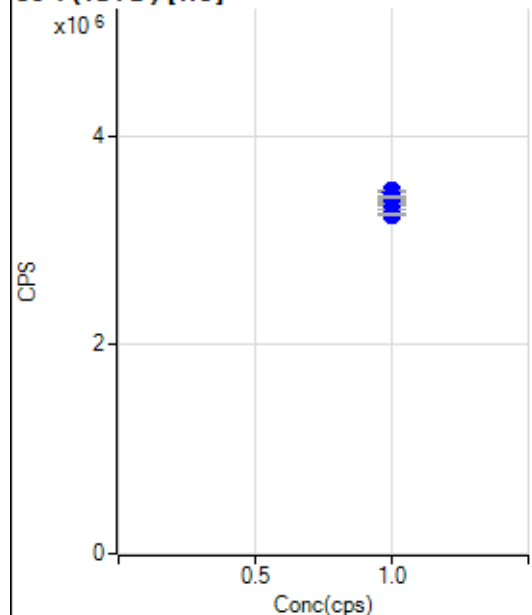
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		12408433.52		A	0.3
2	☐	1.000					
3	☐	1.000		12611999.24		A	0.9
4	☐	1.000		12482376.93		A	0.2
5	☐	1.000		12239496.45		A	2.4
6	☐	1.000		12003517.02		A	0.7
7	☐	1.000		11992707.82		A	0.6
8	☐	1.000		11768865.02		A	0.7
9	☐	1.000		11847613.63		A	0.4

45 Sc (ISTD) [He]

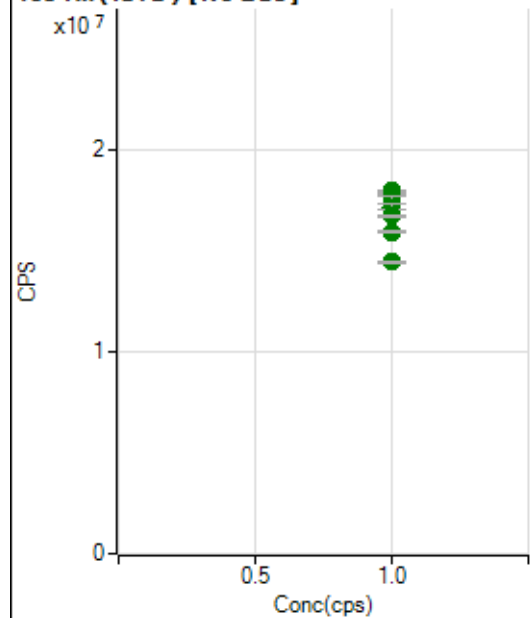
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		711049.92		P	0.8
2	☐	1.000					
3	☐	1.000		712287.75		P	0.8
4	☐	1.000		703600.49		P	0.0
5	☐	1.000		687744.29		P	0.6
6	☐	1.000		678706.64		P	0.9
7	☐	1.000		670464.63		P	1.0
8	☐	1.000		671514.00		P	0.2
9	☐	1.000		737245.55		P	0.5

89 Y (ISTD) [No Gas]

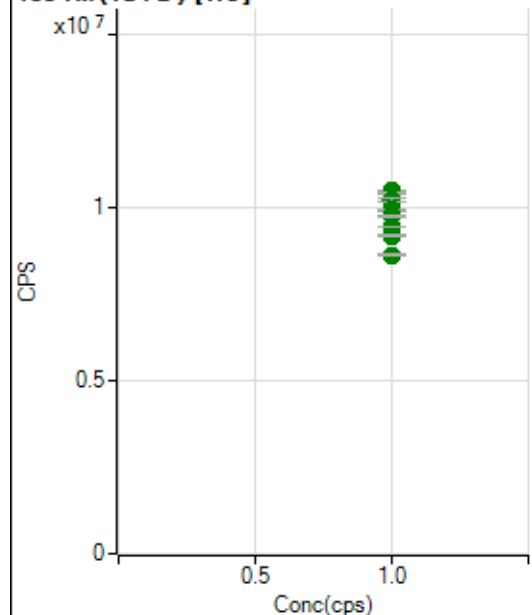
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		18750880.83		A	0.7
2	☐	1.000					
3	☐	1.000		18767831.94		A	0.5
4	☐	1.000		18576198.20		A	0.8
5	☐	1.000		18454797.92		A	2.5
6	☐	1.000		18360907.23		A	0.4
7	☐	1.000		18238021.67		A	0.4
8	☐	1.000		17799177.51		A	0.3
9	☐	1.000		17383973.77		A	0.3

89 Y(ISTD) [He]

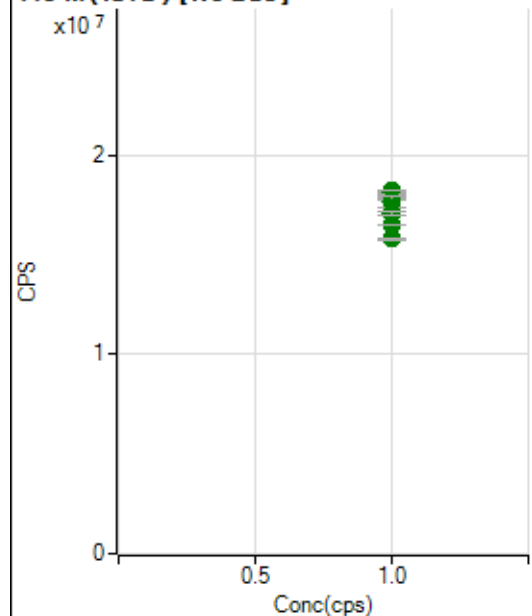
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3461512.35		P	0.1
2	☐	1.000					
3	☐	1.000		3477651.16		P	0.8
4	☐	1.000		3459372.52		P	1.6
5	☐	1.000		3380658.49		P	0.7
6	☐	1.000		3342784.33		P	0.3
7	☐	1.000		3302846.41		P	0.3
8	☐	1.000		3250743.94		P	0.8
9	☐	1.000		3424701.13		P	0.4

103 Rh(ISTD) [No Gas]

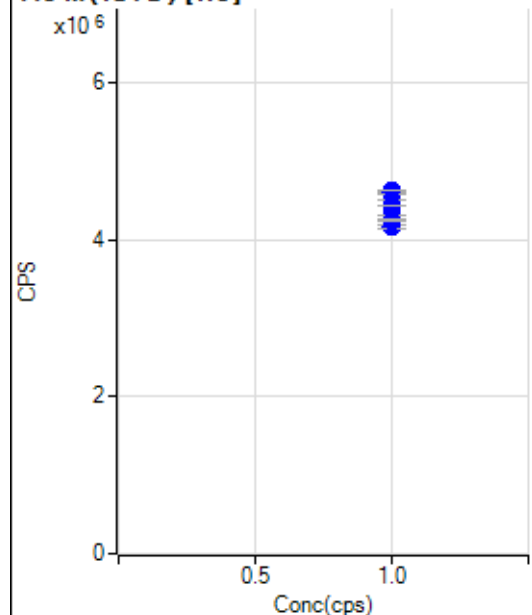
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		17935802.14		A	0.9
2	☐	1.000					
3	☐	1.000		17816174.01		A	0.4
4	☐	1.000		17663917.76		A	0.0
5	☐	1.000		17341395.35		A	3.4
6	☐	1.000		17151428.68		A	1.2
7	☐	1.000		16715058.36		A	0.5
8	☐	1.000		15901097.92		A	0.8
9	☐	1.000		14410953.10		A	1.0

103 Rh (ISTD) [He]

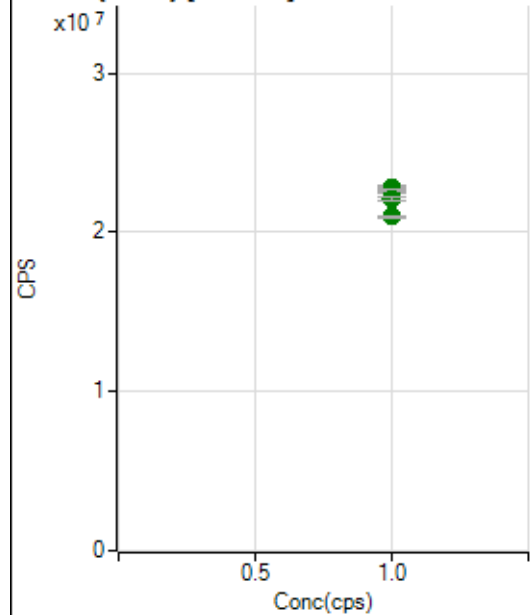
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		10471469.01		A	0.3
2	☐	1.000					
3	☐	1.000		10401366.10		A	0.4
4	☐	1.000		10214579.64		A	1.5
5	☐	1.000		9911783.46		A	0.4
6	☐	1.000		9754764.99		A	0.4
7	☐	1.000		9450999.10		A	0.1
8	☐	1.000		9174058.55		A	0.3
9	☐	1.000		8625612.86		A	0.4

115 In (ISTD) [No Gas]

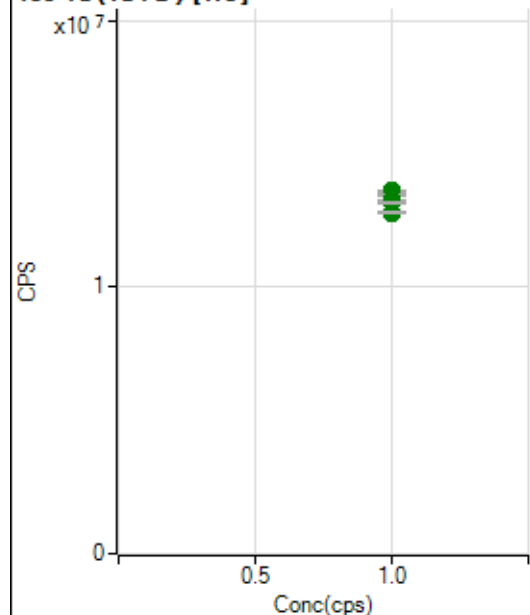
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		18202129.08		A	0.2
2	☐	1.000					
3	☐	1.000		18122584.86		A	1.0
4	☐	1.000		17797300.46		A	0.5
5	☐	1.000		17638328.37		A	3.1
6	☐	1.000		17364947.93		A	0.5
7	☐	1.000		17090239.71		A	0.8
8	☐	1.000		16471929.87		A	0.3
9	☐	1.000		15780215.89		A	0.5

115 In (ISTD) [He]

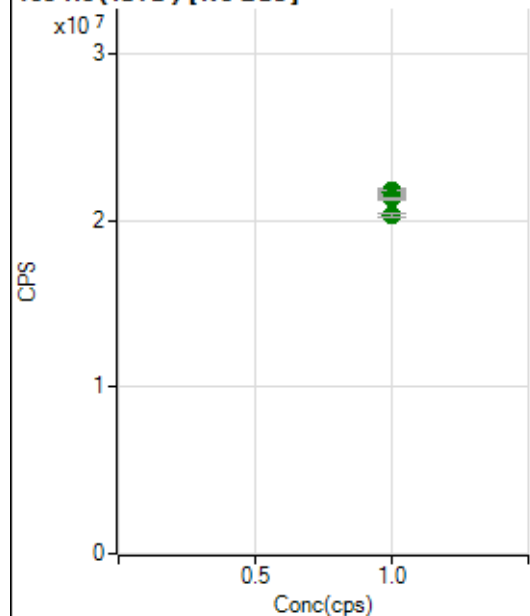
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		4625200.11		P	0.1
2	☐	1.000					
3	☐	1.000		4615289.85		P	0.5
4	☐	1.000		4607540.75		P	1.3
5	☐	1.000		4509369.26		P	0.3
6	☐	1.000		4438359.99		P	0.5
7	☐	1.000		4313321.38		P	0.3
8	☐	1.000		4163738.05		P	1.2
9	☐	1.000		4248466.94		P	0.8

159 Tb (ISTD) [No Gas]

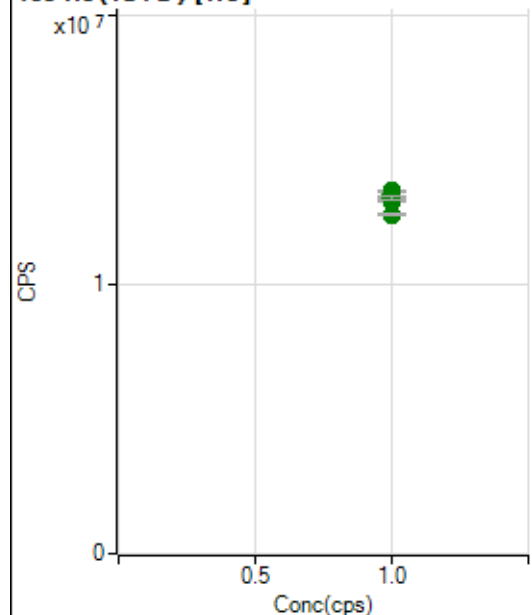
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		22782961.05		A	0.1
2	☐	1.000					
3	☐	1.000		22601285.78		A	0.2
4	☐	1.000		22537497.16		A	0.8
5	☐	1.000		22586634.94		A	2.8
6	☐	1.000		22562011.33		A	0.4
7	☐	1.000		22668584.11		A	0.7
8	☐	1.000		22121434.39		A	1.0
9	☐	1.000		20965442.05		A	0.5

159 Tb (ISTD) [He]

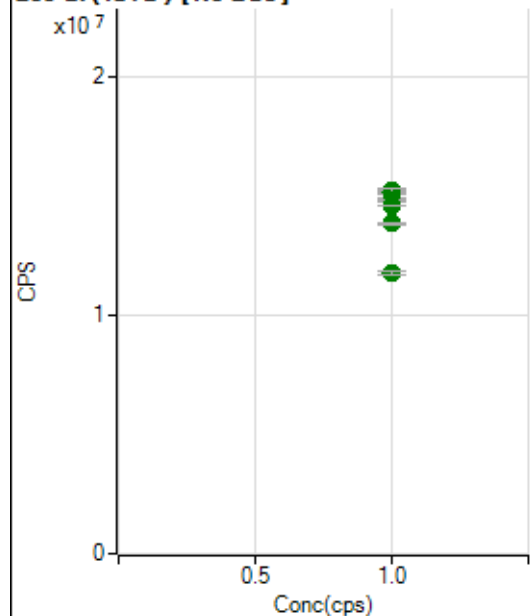
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		13604436.47		A	0.5
2	☐	1.000					
3	☐	1.000		13544162.58		A	0.2
4	☐	1.000		13594502.02		A	1.0
5	☐	1.000		13458119.66		A	1.0
6	☐	1.000		13435715.63		A	0.6
7	☐	1.000		13248249.80		A	0.8
8	☐	1.000		13161857.31		A	0.5
9	☐	1.000		12782001.61		A	0.5

165 Ho (ISTD) [No Gas]

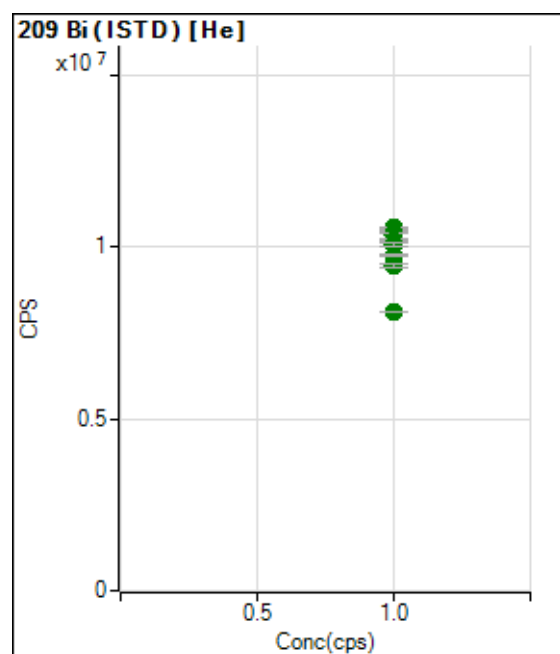
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		21786784.69		A	0.1
2	☐	1.000					
3	☐	1.000		21514242.15		A	2.1
4	☐	1.000		21724913.16		A	0.6
5	☐	1.000		21615065.76		A	2.9
6	☐	1.000		21550213.33		A	0.3
7	☐	1.000		21696310.21		A	1.0
8	☐	1.000		21313299.26		A	0.5
9	☐	1.000		20335431.01		A	1.1

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		13452738.27		A	0.5
2	☐	1.000					
3	☐	1.000		13270002.44		A	0.4
4	☐	1.000		13315208.41		A	1.1
5	☐	1.000		13248460.50		A	0.2
6	☐	1.000		13232901.33		A	0.3
7	☐	1.000		13053977.45		A	0.3
8	☐	1.000		13194702.72		A	1.2
9	☐	1.000		12581243.84		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		15096005.89		A	0.8
2	☐	1.000					
3	☐	1.000		15207012.69		A	0.4
4	☐	1.000		15177143.52		A	0.5
5	☐	1.000		15116097.41		A	2.8
6	☐	1.000		14810734.64		A	0.8
7	☐	1.000		14588221.45		A	0.4
8	☐	1.000		13847181.60		A	0.6
9	☐	1.000		11769792.74		A	1.0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		10557041.23		A	0.2
2	☐	1.000					
3	☐	1.000		10426238.80		A	0.7
4	☐	1.000		10325015.61		A	1.3
5	☐	1.000		10209297.21		A	0.9
6	☐	1.000		10074428.95		A	0.6
7	☐	1.000		9755247.42		A	0.3
8	☐	1.000		9453249.72		A	1.3
9	☐	1.000		8102609.95		A	0.2

US EPA Tune Check Sample Report

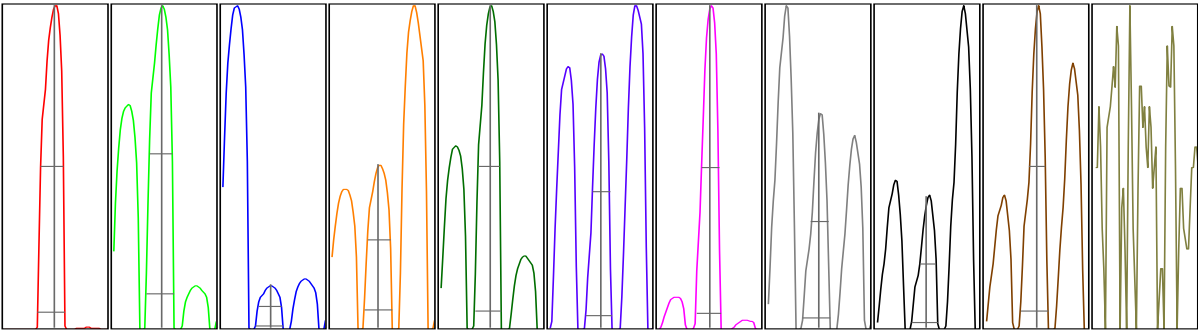
Batch Folder D:\ICP-MS Data\P7021919-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	26927	0.49	5.00	
24	270273	0.49	5.00	
25	36909	0.65	5.00	
26	42638	0.74	5.00	
59	224599	0.35	5.00	
113	24591	0.25	5.00	
115	286241	0.68	5.00	
206	65779	0.57	5.00	
207	59463	0.37	5.00	
208	143435	0.49	5.00	
220	0	36.30		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	26998	26886	26740	26916	27096
24	270335	270113	268222	270884	271809
25	36659	36863	36712	37171	37142
26	42426	42527	42299	42908	43029
59	223988	224632	223646	225215	225517
113	24534	24605	24618	24525	24674
115	285326	287797	284481	288811	284788
206	65736	66187	65250	65642	66080
207	59515	59723	59345	59578	59157
208	143157	143566	143014	142845	144592
220	0	1	0	1	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	44157	9.00	8.9 - 9.1		0.787	0.900	
24	430154	23.95	23.9 - 24.1		0.808	0.900	
25	57405	24.95	24.9 - 25.1		0.791	0.900	
26	66837	25.90	25.9 - 26.1		0.806	0.900	
59	383645	59.00	58.9 - 59.1		0.781	0.900	
113	48532	113.05	112.9 - 113.1		0.753	0.900	
115	567435	115.05	114.9 - 115.1		0.730	0.900	
206	133537	206.05	205.9 - 206.1		0.788	0.900	
207	117943	207.00	206.9 - 207.1		0.757	0.900	
208	289837	208.05	207.9 - 208.1		0.807	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	8.9	V	Deflect	14.0	V
Extract 2	-180.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-85	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	67663	0.37	
89	56137	0.64	
205	69524	1.16	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	67425	67568	67497	67779	68048
89	56072	56001	56062	55798	56750
205	68661	69038	69798	69364	70757

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	11.0	V	Deflect	2.2	V
Extract 2	-200.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-100	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			