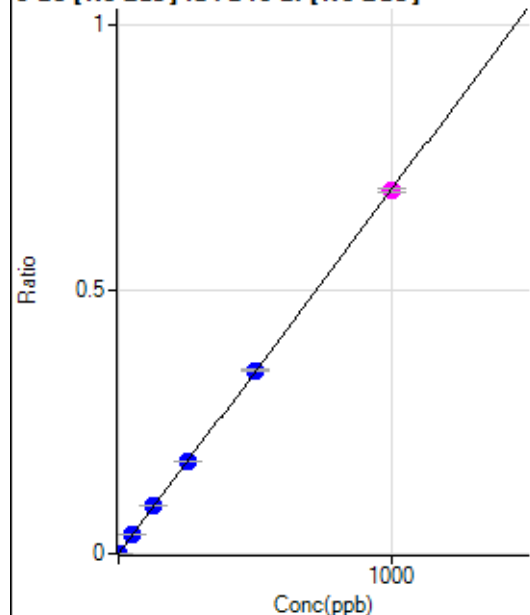


Calibration for 006CAL.S.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7071020 MS.b\
 Analysis File: P7071020 MS.batch.bin
 DA Date-Time: 2020-07-10 16:04:14
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	S00	2020-07-10 11:47:34
2	007CAL.S.d	S02	2020-07-10 11:56:27
3	008CAL.S.d	S03	2020-07-10 12:00:32
4	009CAL.S.d	S04	2020-07-10 12:05:09
5	010CAL.S.d	S05	2020-07-10 12:08:54
6	011CAL.S.d	S06	2020-07-10 12:12:33
7	013CAL.S.d	S07	2020-07-10 12:19:47
8	014CAL.S.d	S08	2020-07-10 12:23:20

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	26.1
2	☐	1.000	0.991	4161.80	0.0007	P	7.2
3	☐	50.000	52.903	228975.83	0.0365	P	2.5
4	☐	125.000	130.472	559304.47	0.0899	P	0.3
5	☐	250.000	252.828	1075798.58	0.1742	P	0.9
6	☐	500.000	504.184	2066544.44	0.3475	P	1.0
7	☐	1000.000	996.372	4065042.22	0.6866	M	1.2
8	☐			703.74	0.0001	P	7.1

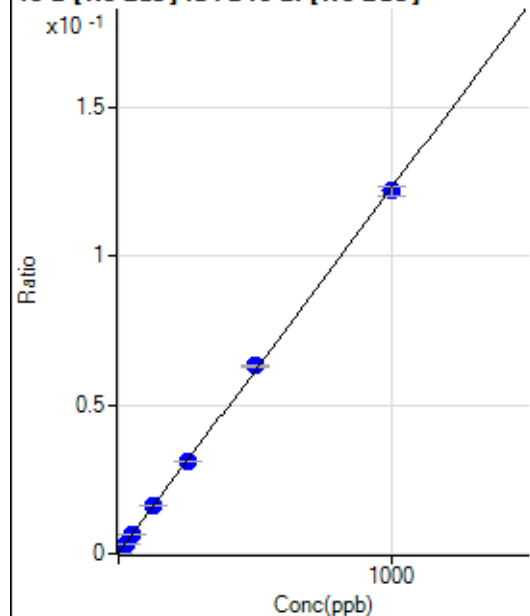
$$y = 6.8914\text{E-}004 * x + 9.9932\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.01134$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1891.87	0.0003	P	7.8
2	☐	25.000	24.475	19877.73	0.0033	P	7.2
3	☐	50.000	52.377	42240.56	0.0067	P	1.5
4	☐	125.000	130.690	101501.71	0.0163	P	1.2
5	☐	250.000	251.952	192468.77	0.0312	P	1.0
6	☐	500.000	512.455	375200.80	0.0631	P	1.0
7	☐	1000.000	992.468	721435.72	0.1219	P	2.4
8	☐			19493.71	0.0039	P	3.8

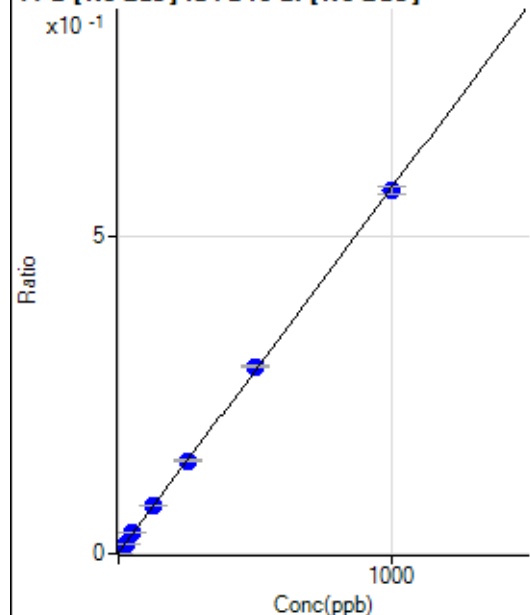
$$y = 1.2250\text{E-}004 * x + 3.1032\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.5936$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8975.26	0.0015	P	3.6
2	☐	25.000	24.757	94529.96	0.0157	P	6.7
3	☐	50.000	53.906	204198.73	0.0325	P	2.0
4	☐	125.000	130.836	477850.32	0.0768	P	0.8
5	☐	250.000	252.621	907405.02	0.1470	P	1.3
6	☐	500.000	511.582	1761240.27	0.2961	P	0.2
7	☐	1000.000	992.635	3392886.10	0.5732	P	2.1
8	☐			90677.98	0.0180	P	5.5

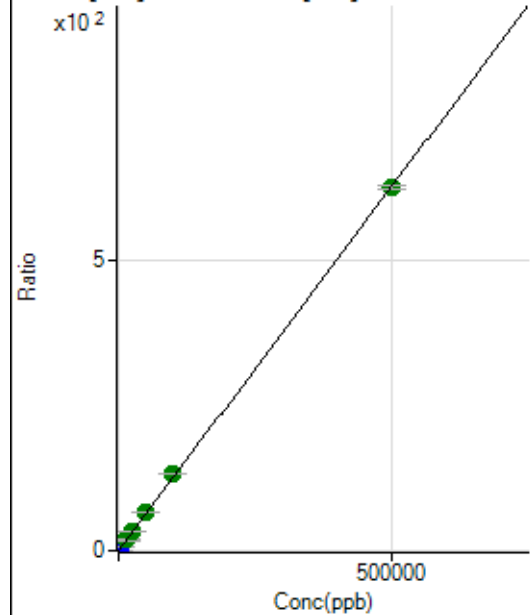
$$y = 5.7596\text{E-}004 * x + 0.0015$$

$$R = 0.9999$$

$$DL = 0.2728$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	31520.65	0.0557	P	0.4
2	☐	500.000	497.061	381008.61	0.6795	P	1.0
3	☐	5000.000	5586.129	3832664.88	7.0668	P	0.6
4	☐	12500.000	14923.294	8956742.69	18.7858	A	9.7
5	☐	25000.000	26102.334	17347187.15	32.8166	A	1.0
6	☐	50000.000	52426.879	34212336.40	65.8564	A	0.3
7	☐	100000.00	105183.45	68183674.34	132.0709	A	0.4
8	☐	500000.00	498599.06	318769550.1	625.8450	A	0.9

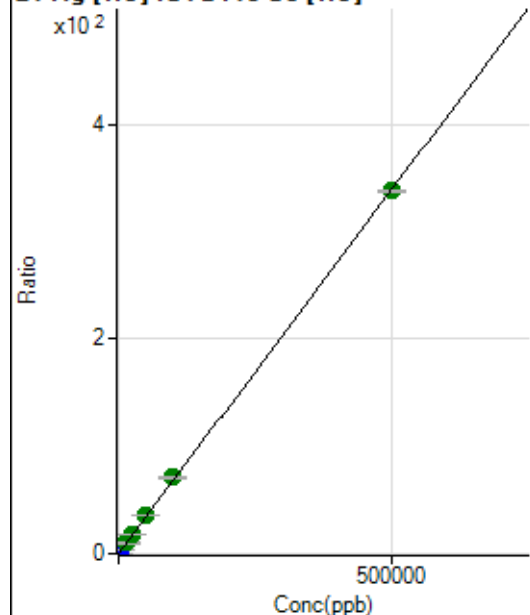
$$y = 0.0013 * x + 0.0557$$

$$R = 0.9999$$

$$DL = 0.5815$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2082.41	0.0037	P	3.5
2	☐	500.000	500.036	191964.23	0.3423	P	0.4
3	☐	5000.000	5702.033	2096449.43	3.8655	P	0.8
4	☐	12500.000	15164.808	4899343.80	10.2743	A	9.5
5	☐	25000.000	26526.518	9498830.75	17.9693	A	0.7
6	☐	50000.000	52667.951	18532566.04	35.6741	A	0.6
7	☐	100000.00	104619.18	36582039.71	70.8590	A	0.5
8	☐	500000.00	498659.40	172024965.3	337.7304	A	0.4

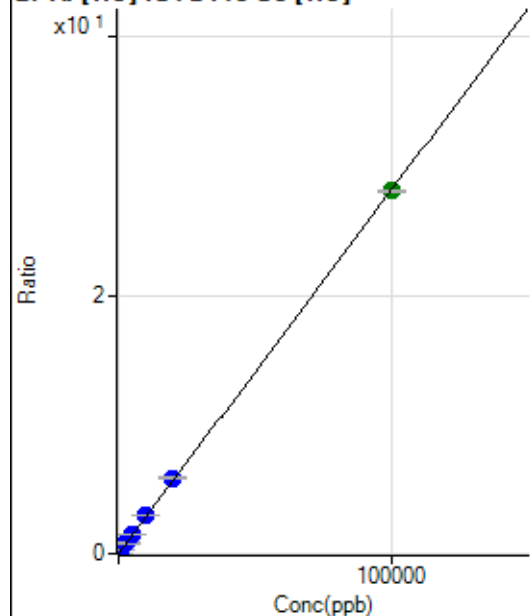
$$y = 6.7727E-004 * x + 0.0037$$

$$R = 0.9999$$

$$DL = 0.5621$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	165.30	0.0003	P	6.0
2	☐	20.000	19.896	3303.73	0.0059	P	1.8
3	☐	1000.000	1117.306	170746.59	0.3148	P	0.7
4	☐	2500.000	3034.775	407399.41	0.8546	P	10.0
5	☐	5000.000	5308.550	790126.69	1.4947	P	0.6
6	☐	10000.000	10541.240	1541755.81	2.9678	P	0.3
7	☐	20000.000	20853.152	3030826.07	5.8707	P	0.5
8	☐	100000.00	99745.276	14302794.97	28.0796	A	0.3

$$y = 2.8151E-004 * x + 2.9192E-004$$

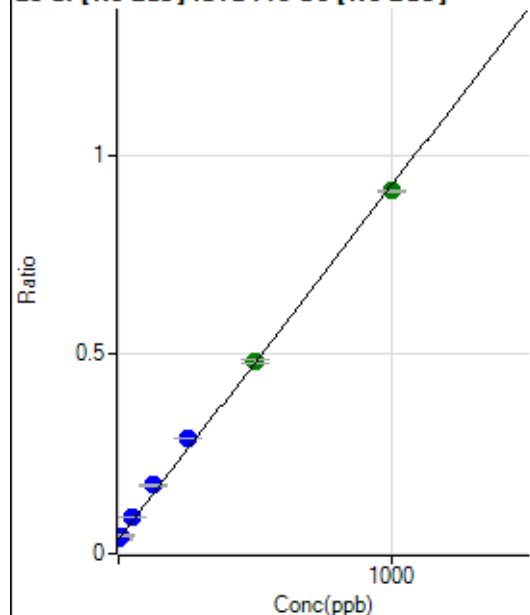
$$R = 1.0000$$

$$DL = 0.1877$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	512253.74	0.0363	P	2.4
2	☐	10.000	9.857	606684.82	0.0451	P	8.4
3	☐	50.000	61.431	1303640.05	0.0908	P	0.8
4	☐	125.000	153.160	2448854.40	0.1722	P	1.2
5	☐	250.000	286.668	4181341.20	0.2906	P	0.7
6	☐	500.000	503.479	6752585.09	0.4829	A	1.3
7	☐	1000.000	985.004	12715774.94	0.9100	A	0.5
8	☐			709820.07	0.0573	P	1.2

$$y = 8.8698\text{E-}004 * x + 0.0363$$

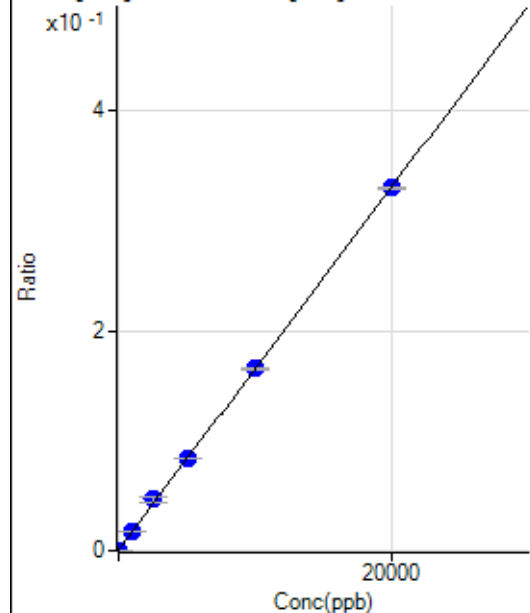
$$R = 0.9990$$

$$DL = 2.903$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.933	366.69	0.0006	P	19.7
2	☐	0.000	-0.933	347.24	0.0006	P	28.6
3	☐	1000.000	1054.497	9781.46	0.0180	P	2.9
4	☐	2500.000	2793.101	22281.27	0.0467	P	9.4
5	☐	5000.000	5022.764	44149.52	0.0835	P	0.8
6	☐	10000.000	9982.026	85900.61	0.1654	P	1.2
7	☐	20000.000	19963.934	170404.77	0.3301	P	0.5
8	☐			491.70	0.0010	P	12.7

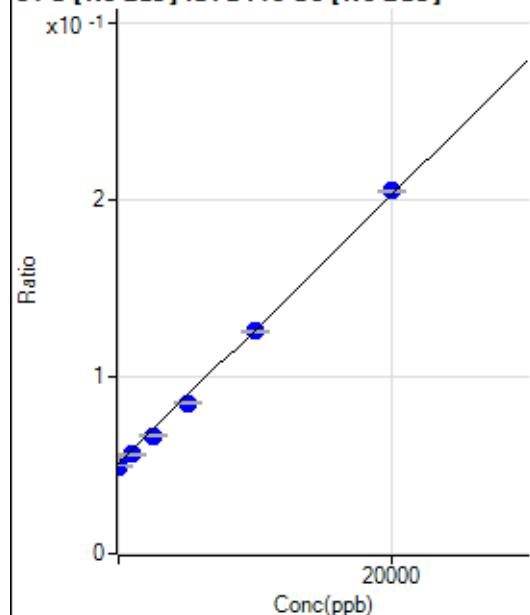
$$y = 1.6502\text{E-}005 * x + 6.3214\text{E-}004$$

$$R = 0.9999$$

$$DL = 27.58$$

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	-196.918	694739.56	0.0493	P	2.6
2	☐	0.000	196.918	703814.53	0.0523	P	7.6
3	☐	1000.000	676.133	802634.03	0.0559	P	0.5
4	☐	2500.000	2087.278	947660.66	0.0666	P	2.0
5	☐	5000.000	4504.577	1223021.79	0.0850	P	1.1
6	☐	10000.000	9840.053	1755313.04	0.1255	P	1.3
7	☐	20000.000	20271.613	2861378.97	0.2048	P	0.5
8	☐			541003.84	0.0437	P	1.3

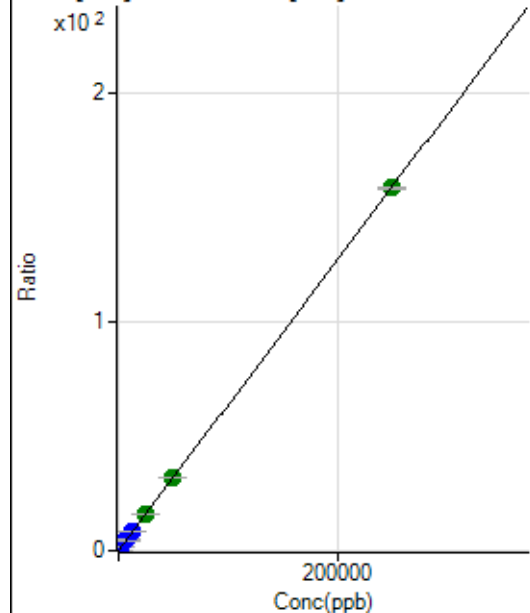
$$y = 7.5964\text{E-}006 * x + 0.0508$$

R = 0.9994

DL = 1044

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	31087.63	0.0549	P	0.9
2	☐	500.000	469.054	197682.04	0.3525	P	0.6
3	☐	2500.000	2668.677	948222.95	1.7484	P	0.4
4	☐	6250.000	7228.994	2212932.07	4.6422	P	10.0
5	☐	12500.000	12583.921	4250202.28	8.0403	P	0.9
6	☐	25000.000	25128.321	8312372.17	16.0006	A	0.6
7	☐	50000.000	50360.989	16527037.88	32.0124	A	0.1
8	☐	250000.00	249884.67	80796896.60	158.6240	A	0.3

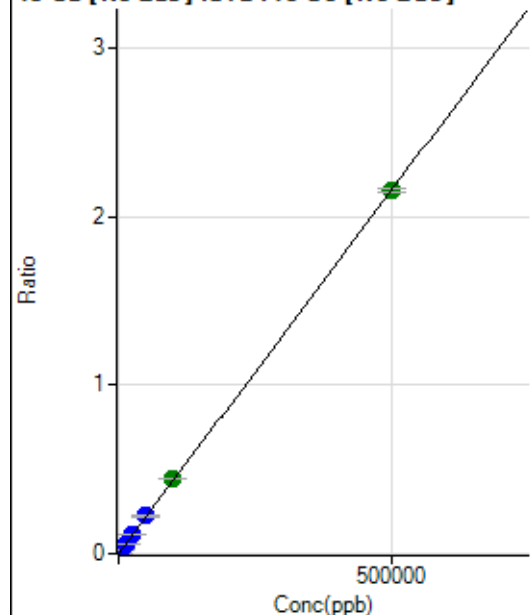
$$y = 6.3457\text{E-}004 * x + 0.0549$$

R = 1.0000

DL = 2.349

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	692.55	0.0000	P	3.8
2	☐	500.000	519.719	30808.62	0.0023	P	9.0
3	☐	5000.000	5454.687	338287.72	0.0236	P	1.2
4	☐	12500.000	13556.093	832012.50	0.0585	P	1.5
5	☐	25000.000	25829.944	1603239.36	0.1114	P	1.3
6	☐	50000.000	51913.945	3130746.10	0.2239	P	1.9
7	☐	100000.00	102605.76	6183328.42	0.4425	A	1.2
8	☐	500000.00	499214.98	26657386.30	2.1528	A	0.9

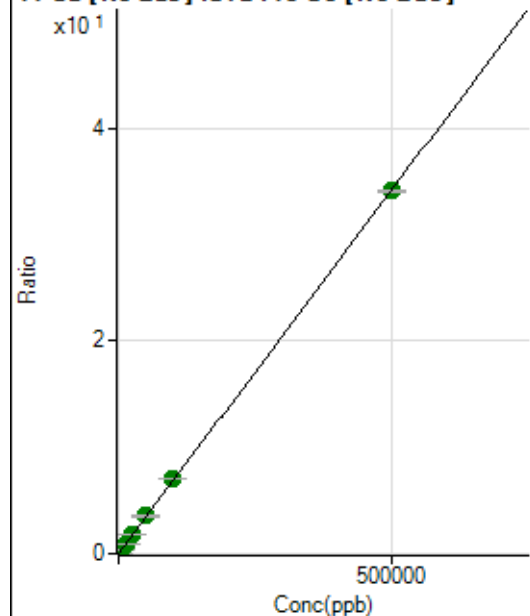
$$y = 4.3122\text{E-}006 * x + 4.9093\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.314$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33060.89	0.0023	P	3.5
2	☐	500.000	522.363	511712.44	0.0380	P	9.5
3	☐	5000.000	5349.805	5281790.55	0.3680	A	0.1
4	☐	12500.000	13330.844	12991399.46	0.9134	A	0.7
5	☐	25000.000	25529.156	25137875.92	1.7472	A	0.9
6	☐	50000.000	51819.691	49555304.96	3.5440	A	1.1
7	☐	100000.00	102897.00	98299620.14	7.0349	A	0.7
8	☐	500000.00	499187.88	422507532.4	34.1196	A	0.7

$$y = 6.8346\text{E-}005 * x + 0.0023$$

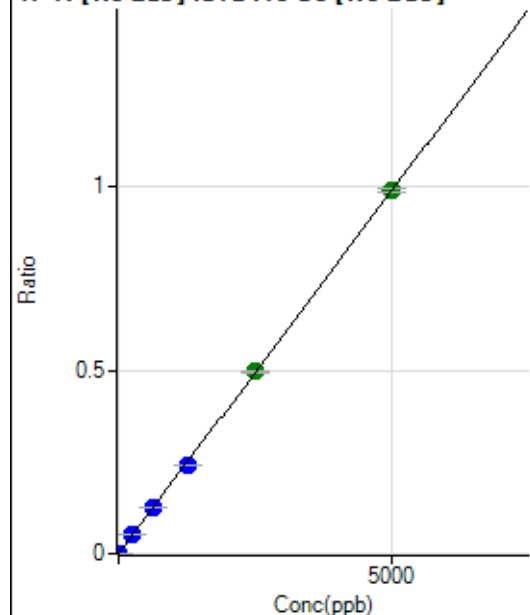
$$R = 1.0000$$

$$DL = 3.645$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	269.46	0.0000	P	4.4
2	☐	5.000	4.938	13398.30	0.0010	P	10.4
3	☐	250.000	256.305	728544.61	0.0508	P	0.8
4	☐	625.000	635.782	1790349.04	0.1259	P	0.8
5	☐	1250.000	1216.436	3465196.78	0.2408	P	0.6
6	☐	2500.000	2509.163	6945893.64	0.4968	A	1.5
7	☐	5000.000	5002.147	13837818.54	0.9903	A	1.1
8	☐			4550.89	0.0004	P	2.2

$$y = 1.9797E-004 * x + 1.9123E-005$$

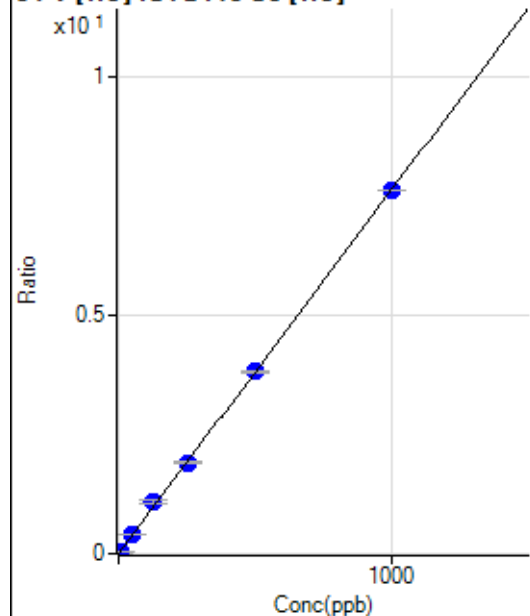
$$R = 1.0000$$

$$DL = 0.01274$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12.22	0.0000	P	31.2
2	☐	5.000	4.619	19728.95	0.0352	P	1.2
3	☐	50.000	51.941	214494.34	0.3955	P	0.5
4	☐	125.000	142.453	517083.15	1.0846	P	9.9
5	☐	250.000	250.735	1009172.18	1.9091	P	0.6
6	☐	500.000	499.943	1977468.29	3.8065	P	0.3
7	☐	1000.000	997.568	3921227.72	7.5953	P	0.2
8	☐			686.69	0.0013	P	3.5

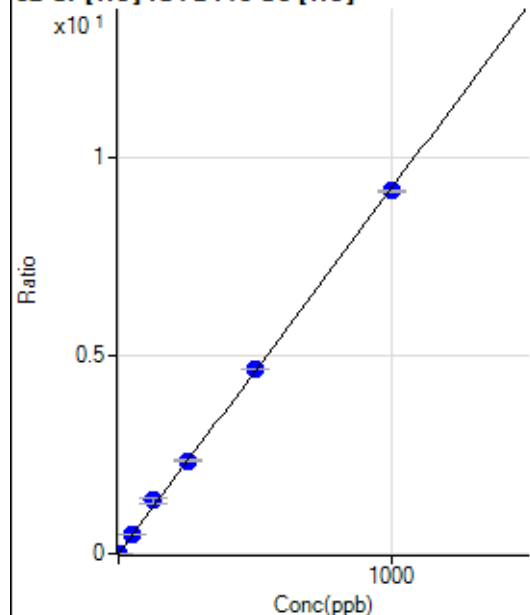
$$y = 0.0076 * x + 2.1573E-005$$

$$R = 0.9998$$

$$DL = 0.00265$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	734.48	0.0013	P	2.4
2	☐	2.000	1.893	10530.59	0.0188	P	1.6
3	☐	50.000	53.424	268276.12	0.4946	P	0.2
4	☐	125.000	146.005	643377.19	1.3496	P	9.9
5	☐	250.000	255.073	1245850.83	2.3568	P	0.6
6	☐	500.000	505.796	2427176.44	4.6721	P	0.1
7	☐	1000.000	993.037	4735006.49	9.1716	P	0.2
8	☐			7513.55	0.0148	P	8.9

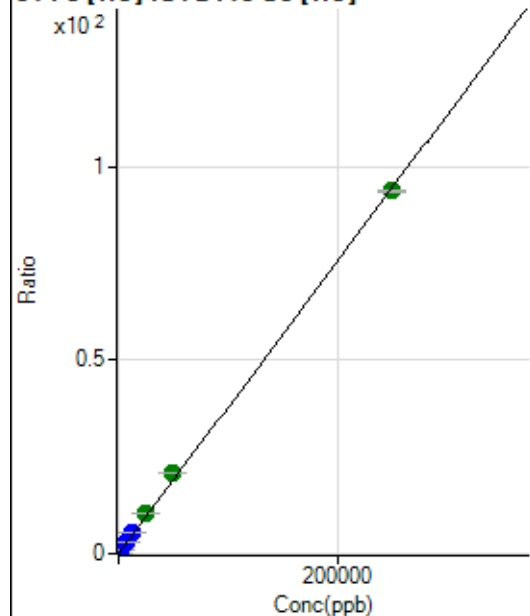
$$y = 0.0092 * x + 0.0013$$

$$R = 0.9998$$

$$DL = 0.01007$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1095.16	0.0019	P	1.9
2	☐	50.000	54.050	12513.58	0.0223	P	0.5
3	☐	2500.000	2969.904	608446.28	1.1219	P	0.8
4	☐	6250.000	8093.646	1455408.72	3.0540	P	10.4
5	☐	12500.000	14066.086	2804998.62	5.3062	P	0.6
6	☐	25000.000	27905.720	5467819.80	10.5250	A	0.7
7	☐	50000.000	55144.941	10736725.63	20.7968	A	0.2
8	☐	250000.00	248551.34	47741287.49	93.7294	A	0.6

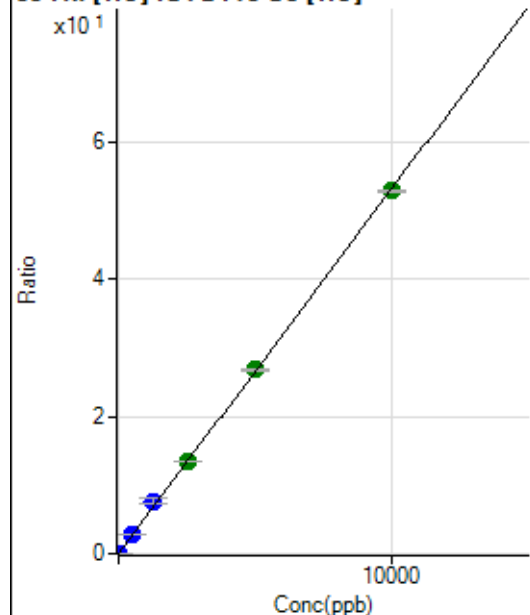
$$y = 3.7710E-004 * x + 0.0019$$

$$R = 0.9997$$

$$DL = 0.2918$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1800.14	0.0032	P	5.7
2	☐	1.000	0.958	4641.92	0.0083	P	2.2
3	☐	500.000	531.887	1536541.83	2.8331	P	0.4
4	☐	1250.000	1436.794	3645844.95	7.6476	P	9.9
5	☐	2500.000	2518.669	7085587.60	13.4038	A	0.3
6	☐	5000.000	5044.270	13944148.26	26.8412	A	0.6
7	☐	10000.000	9948.254	27327793.76	52.9329	A	0.5
8	☐			17177.98	0.0337	P	1.1

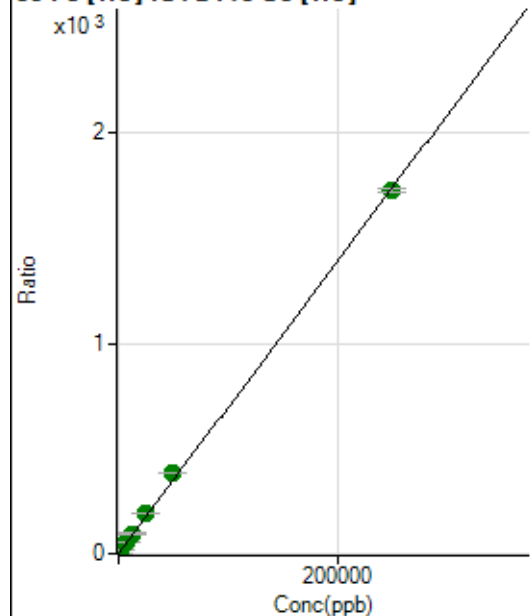
$$y = 0.0053 * x + 0.0032$$

$$R = 0.9998$$

$$DL = 0.1016$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13671.05	0.0241	P	1.1
2	☐	50.000	52.037	215861.52	0.3850	P	0.7
3	☐	2500.000	2868.819	10801632.48	19.9166	A	1.3
4	☐	6250.000	7898.503	26119287.94	54.7927	A	10.0
5	☐	12500.000	13826.971	50695236.27	95.9009	A	0.4
6	☐	25000.000	27632.822	99552664.16	191.6312	A	0.3
7	☐	50000.000	54869.628	196435427.7	380.4922	A	0.3
8	☐	250000.00	248651.54	878221691.8	1,724.183	A	0.9

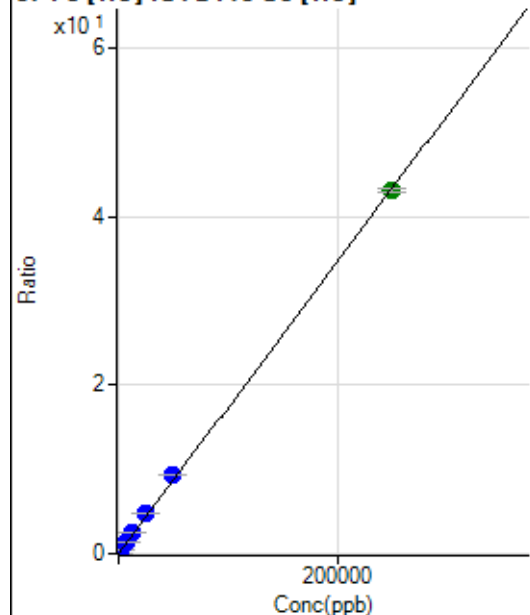
$$y = 0.0069 * x + 0.0241$$

$$R = 0.9998$$

$$DL = 0.1133$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	466.59	0.0008	P	2.1
2	☐	50.000	52.410	5546.00	0.0099	P	0.4
3	☐	2500.000	2920.286	274427.52	0.5060	P	1.0
4	☐	6250.000	8003.686	660404.07	1.3854	P	10.0
5	☐	12500.000	13918.719	1273256.71	2.4086	P	0.2
6	☐	25000.000	27615.633	2482186.54	4.7780	P	0.1
7	☐	50000.000	53731.201	4799059.86	9.2957	P	0.7
8	☐	250000.00	248873.21	21929902.12	43.0531	A	0.9

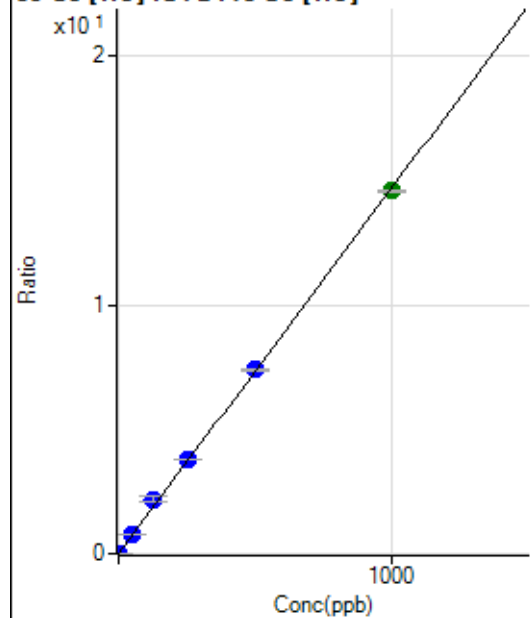
$$y = 1.7299\text{E-}004 * x + 8.2400\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.2961$$

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	102.23	0.0002	P	11.3
2	☐	1.000	0.992	8273.56	0.0148	P	2.1
3	☐	50.000	54.573	435053.23	0.8022	P	0.9
4	☐	125.000	148.319	1038994.88	2.1798	P	10.1
5	☐	250.000	257.666	2001744.48	3.7867	P	0.6
6	☐	500.000	503.590	3844614.11	7.4006	P	0.5
7	☐	1000.000	993.145	7534779.82	14.5948	A	0.7
8	☐			11333.40	0.0222	P	0.7

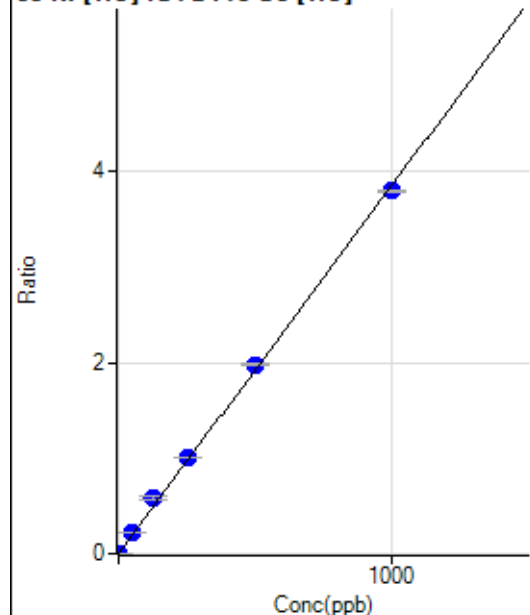
$$y = 0.0147 * x + 1.8050\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.004152$$

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	358.90	0.0006	P	1.7
2	☐	1.000	1.020	2554.71	0.0046	P	6.6
3	☐	50.000	55.352	115755.60	0.2134	P	1.1
4	☐	125.000	151.349	277646.68	0.5825	P	10.1
5	☐	250.000	261.879	532551.51	1.0074	P	1.2
6	☐	500.000	513.909	1026702.53	1.9763	P	0.6
7	☐	1000.000	986.514	1958328.10	3.7933	P	0.4
8	☐			2945.90	0.0058	P	1.4

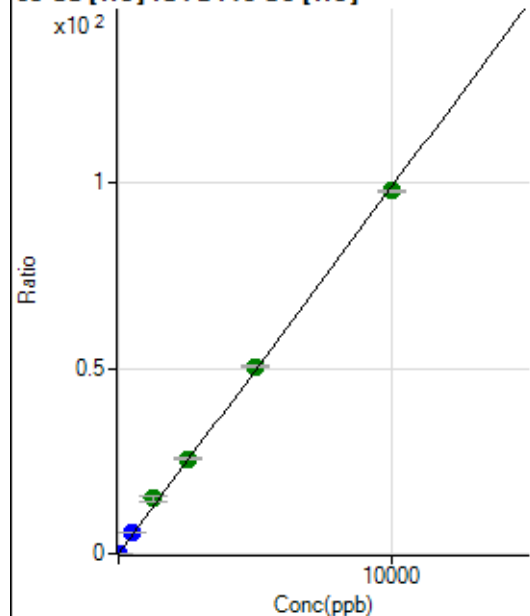
$$y = 0.0038 * x + 6.3378E-004$$

$$R = 0.9995$$

$$DL = 0.00847$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	783.37	0.0014	P	3.9
2	☐	2.000	2.214	13068.19	0.0233	P	2.5
3	☐	500.000	557.493	2994633.46	5.5216	P	0.8
4	☐	1250.000	1499.047	7076642.67	14.8449	A	10.0
5	☐	2500.000	2586.244	13537817.44	25.6102	A	1.0
6	☐	5000.000	5099.073	26230381.28	50.4921	A	0.9
7	☐	10000.000	9894.897	50583865.36	97.9800	A	0.4
8	☐			9443.17	0.0185	P	1.8

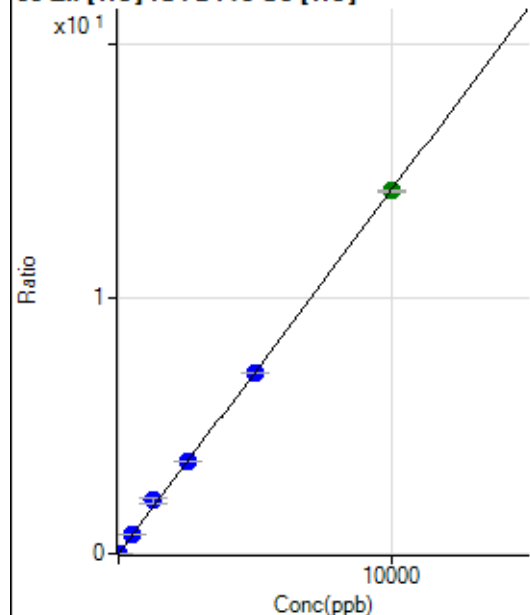
$$y = 0.0099 * x + 0.0014$$

$$R = 0.9996$$

$$DL = 0.01651$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1361.20	0.0024	P	2.8
2	☐	2.000	2.146	3065.93	0.0055	P	4.3
3	☐	500.000	541.128	419848.79	0.7741	P	0.8
4	☐	1250.000	1471.350	1001517.63	2.1008	P	9.8
5	☐	2500.000	2554.076	1926751.60	3.6449	P	0.6
6	☐	5000.000	4957.577	3674240.26	7.0726	P	0.3
7	☐	10000.000	9977.968	7347758.99	14.2325	A	0.3
8	☐			7592.08	0.0149	P	2.5

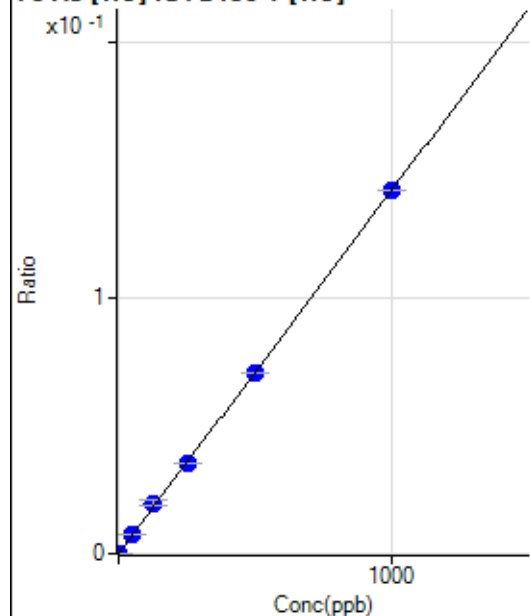
$$y = 0.0014 * x + 0.0024$$

$$R = 0.9997$$

$$DL = 0.1391$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	24.08	0.0000	P	20.2
2	☐	1.000	0.945	487.05	0.0001	P	4.7
3	☐	50.000	51.519	24918.93	0.0073	P	0.4
4	☐	125.000	139.303	59888.12	0.0198	P	9.3
5	☐	250.000	247.916	117784.04	0.0353	P	0.4
6	☐	500.000	498.996	232756.74	0.0710	P	0.3
7	☐	1000.000	999.159	458359.84	0.1421	P	0.2
8	☐			211.73	0.0001	P	7.5

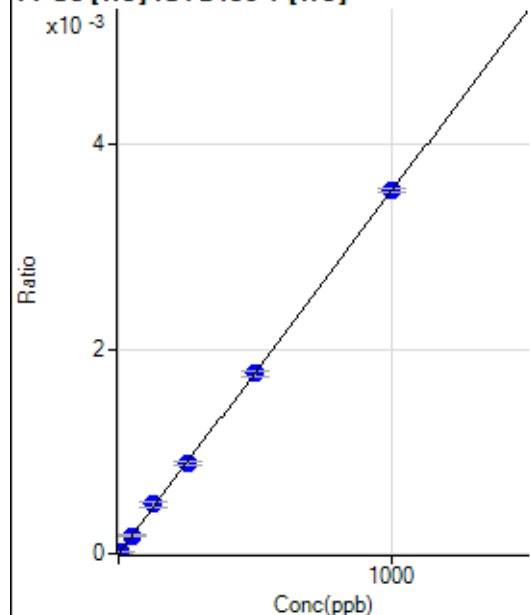
$$y = 1.4220E-004 * x + 6.8918E-006$$

$$R = 0.9999$$

$$DL = 0.02938$$

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	1.11	0.0000	P	173.
2	☐	5.000	5.197	64.44	0.0000	P	25.3
3	☐	50.000	49.844	601.13	0.0002	P	8.3
4	☐	125.000	136.297	1461.21	0.0005	P	9.8
5	☐	250.000	247.755	2933.68	0.0009	P	5.0
6	☐	500.000	497.066	5777.91	0.0018	P	3.3
7	☐	1000.000	1000.623	11438.02	0.0035	P	1.0
8	☐			11.11	0.0000	P	86.6

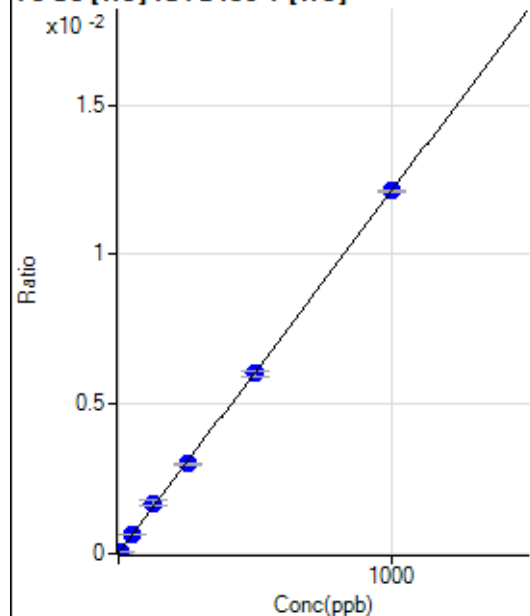
$$y = 3.5433\text{E-}006 * x + 3.1862\text{E-}007$$

$$R = 0.9999$$

$$DL = 0.4672$$

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	53.09	0.0000	P	12.0
2	☐	5.000	5.017	261.73	0.0001	P	10.3
3	☐	50.000	50.153	2116.22	0.0006	P	3.1
4	☐	125.000	139.156	5132.43	0.0017	P	11.6
5	☐	250.000	247.812	10078.27	0.0030	P	2.0
6	☐	500.000	497.325	19806.17	0.0060	P	3.3
7	☐	1000.000	1000.107	39127.97	0.0121	P	0.6
8	☐			57.41	0.0000	P	19.4

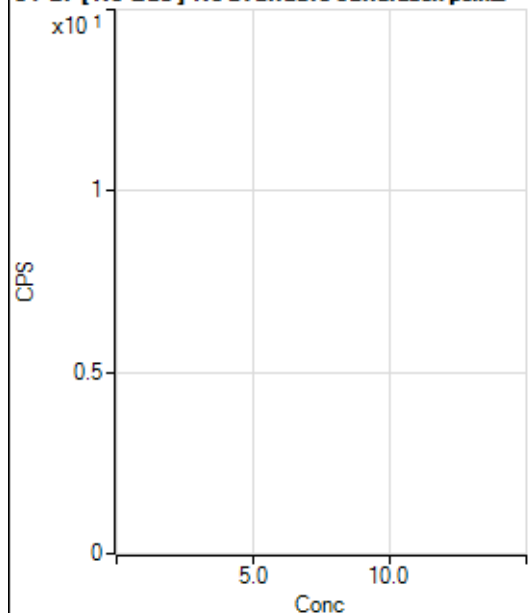
$$y = 1.2113\text{E-}005 * x + 1.5196\text{E-}005$$

$$R = 0.9999$$

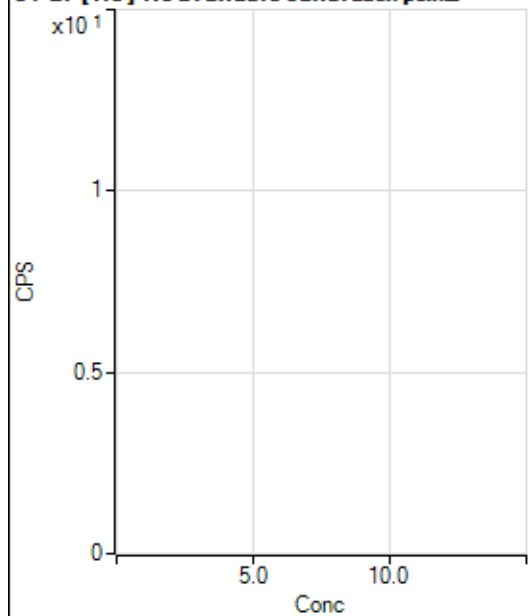
$$DL = 0.4507$$

Weight: <None>

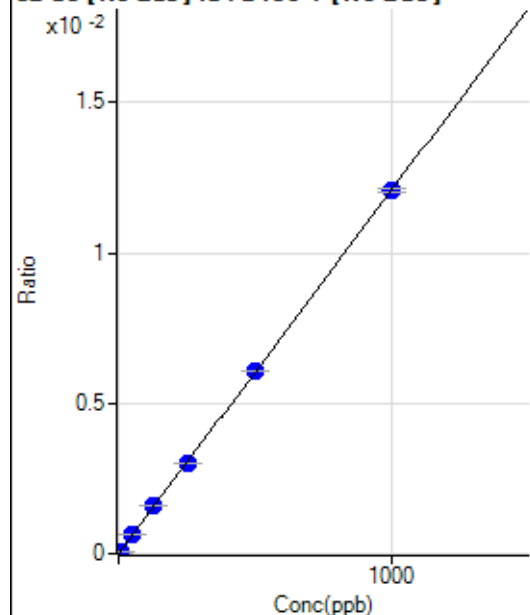
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			48534.81		P	1.4
2	☐			48813.01		P	1.6
3	☐			46493.02		P	2.7
4	☐			45522.08		P	1.2
5	☐			45695.95		P	1.5
6	☐			46044.22		P	1.0
7	☐			45160.73		P	2.6
8	☐			42931.34		P	0.4

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			70.07		P	49.5
2	☐			40.04		P	25.0
3	☐			83.42		P	42.1
4	☐			60.06		P	16.7
5	☐			50.05		P	34.6
6	☐			83.42		P	42.1
7	☐			80.09		P	12.5
8	☐			103.44		P	22.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	22.88	0.0000	P	79.8
2	☐	5.000	5.173	1687.89	0.0001	P	7.3
3	☐	50.000	52.433	17948.89	0.0006	P	0.6
4	☐	125.000	130.326	44334.00	0.0016	P	0.4
5	☐	250.000	248.602	86338.66	0.0030	P	1.6
6	☐	500.000	502.583	168390.56	0.0061	P	0.5
7	☐	1000.000	998.270	335995.82	0.0121	P	1.0
8	☐			221.08	0.0000	P	16.2

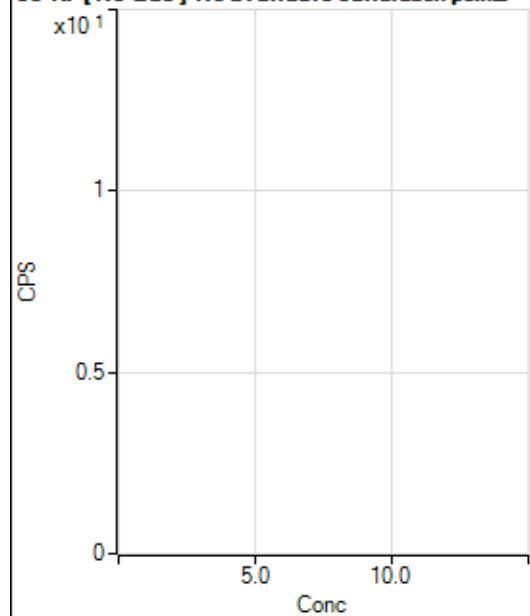
$$y = 1.2083E-005 * x + 8.4739E-007$$

$$R = 1.0000$$

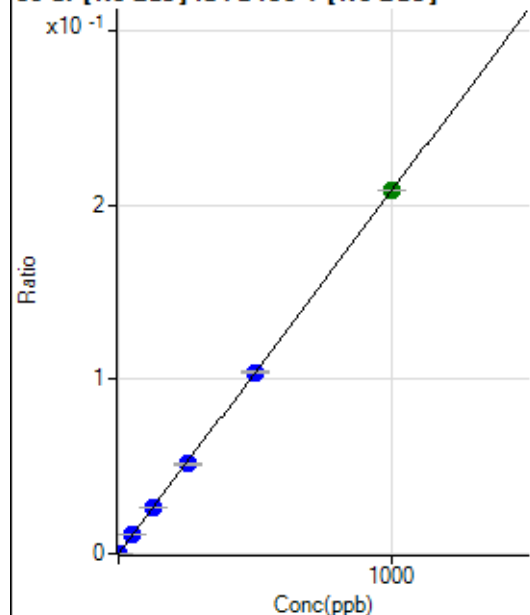
$$DL = 0.1679$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			402.23		P	4.9
2	☐			404.46		P	9.1
3	☐			416.68		P	6.0
4	☐			416.68		P	2.1
5	☐			400.01		P	5.5
6	☐			403.35		P	8.3
7	☐			441.12		P	2.2
8	☐			515.57		P	3.6

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	741.72	0.0000	P	26.4
2	☐	1.000	1.037	6487.84	0.0002	P	6.7
3	☐	50.000	52.151	307857.00	0.0109	P	0.7
4	☐	125.000	128.889	755544.06	0.0269	P	0.6
5	☐	250.000	246.437	1474589.13	0.0513	P	0.6
6	☐	500.000	500.097	2886375.89	0.1041	P	0.7
7	☐	1000.000	1000.249	5799486.28	0.2082	A	0.1
8	☐			29233.47	0.0012	P	0.6

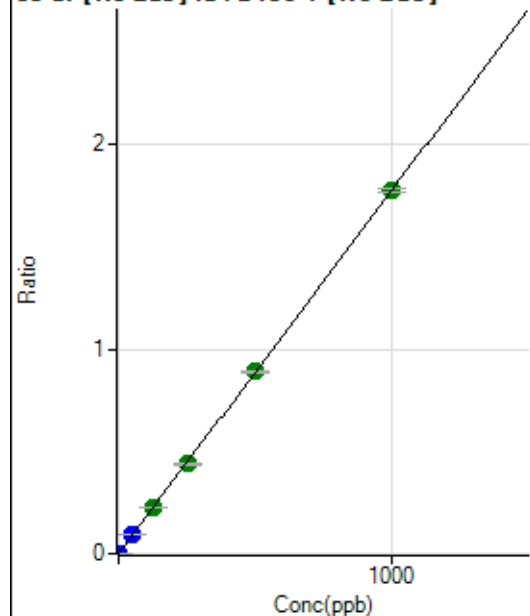
$$y = 2.0811\text{E-}004 * x + 2.7597\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1051$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	538.92	0.0000	P	15.4
2	☐	1.000	1.022	48868.04	0.0018	P	6.8
3	☐	50.000	52.288	2626548.39	0.0928	P	0.7
4	☐	125.000	127.889	6388222.80	0.2270	A	0.8
5	☐	250.000	246.668	12581846.03	0.4379	A	1.2
6	☐	500.000	501.110	24662305.41	0.8895	A	0.4
7	☐	1000.000	999.802	49432432.70	1.7747	A	0.9
8	☐			243137.69	0.0098	P	0.5

$$y = 0.0018 * x + 1.9946\text{E-}005$$

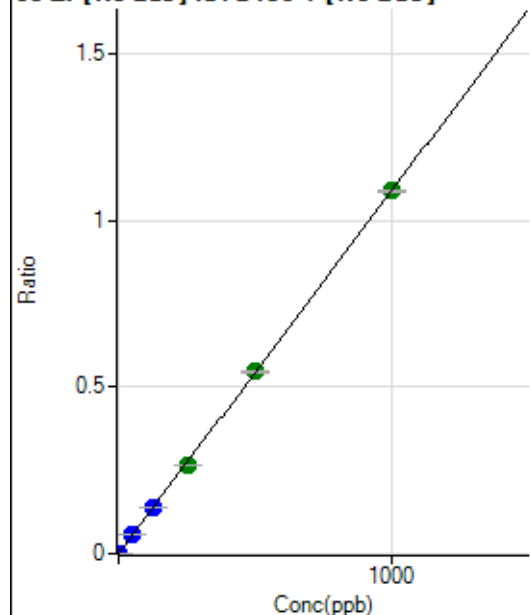
$$R = 1.0000$$

$$DL = 0.005195$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1477.93	0.0001	P	7.4
2	☐	1.000	0.925	28298.47	0.0011	P	7.9
3	☐	50.000	50.737	1566169.74	0.0554	P	0.5
4	☐	125.000	128.119	3930820.57	0.1397	P	0.5
5	☐	250.000	245.335	7685832.64	0.2675	A	0.2
6	☐	500.000	501.102	15144493.57	0.5462	A	0.1
7	☐	1000.000	1000.188	30368282.62	1.0902	A	0.5
8	☐			10954.63	0.0004	P	2.8

$$y = 0.0011 * x + 5.4789E-005$$

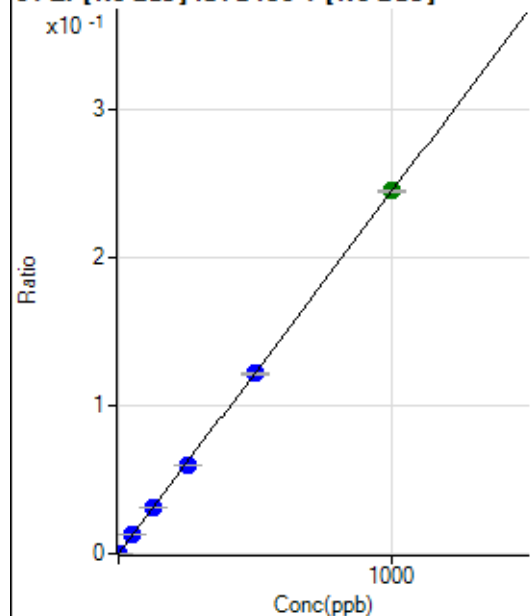
$$R = 1.0000$$

$$DL = 0.01114$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	241.68	0.0000	P	16.4
2	☐	1.000	0.921	6246.08	0.0002	P	3.9
3	☐	50.000	50.940	352793.34	0.0125	P	1.0
4	☐	125.000	129.474	891390.95	0.0317	P	0.8
5	☐	250.000	245.284	1724367.49	0.0600	P	0.6
6	☐	500.000	496.807	3369495.74	0.1215	P	0.3
7	☐	1000.000	1002.169	6828784.53	0.2451	A	0.6
8	☐			2333.62	0.0001	P	5.8

$$y = 2.4460E-004 * x + 8.9414E-006$$

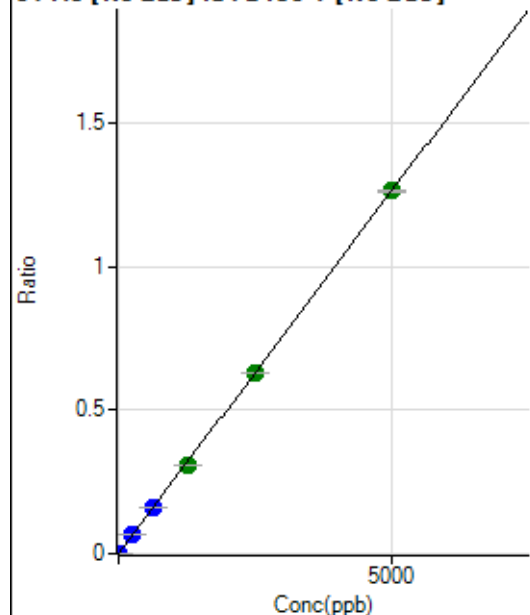
$$R = 1.0000$$

$$DL = 0.01802$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	430.58	0.0000	P	14.3
2	☐	5.000	4.960	33832.83	0.0013	P	8.5
3	☐	250.000	257.517	1844007.29	0.0652	P	0.4
4	☐	625.000	638.518	4546539.30	0.1616	P	0.8
5	☐	1250.000	1224.979	8907284.31	0.3100	A	0.6
6	☐	2500.000	2500.699	17543417.06	0.6328	A	0.4
7	☐	5000.000	5003.840	35270219.54	1.2661	A	0.8
8	☐			13773.83	0.0006	P	3.2

$$y = 2.5302\text{E-}004 * x + 1.5934\text{E-}005$$

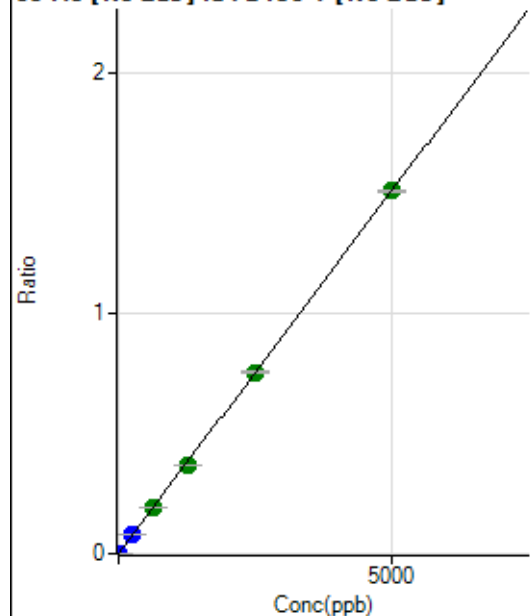
$$R = 1.0000$$

$$DL = 0.02708$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102.79	0.0000	P	19.9
2	☐	5.000	5.083	40990.57	0.0015	P	8.6
3	☐	250.000	260.483	2227682.30	0.0787	P	0.5
4	☐	625.000	639.550	5439394.43	0.1933	A	0.6
5	☐	1250.000	1224.461	10634653.54	0.3701	A	1.3
6	☐	2500.000	2503.273	20977193.35	0.7566	A	1.1
7	☐	5000.000	5002.405	42117411.70	1.5120	A	0.8
8	☐			15662.01	0.0006	P	2.9

$$y = 3.0225\text{E-}004 * x + 3.8104\text{E-}006$$

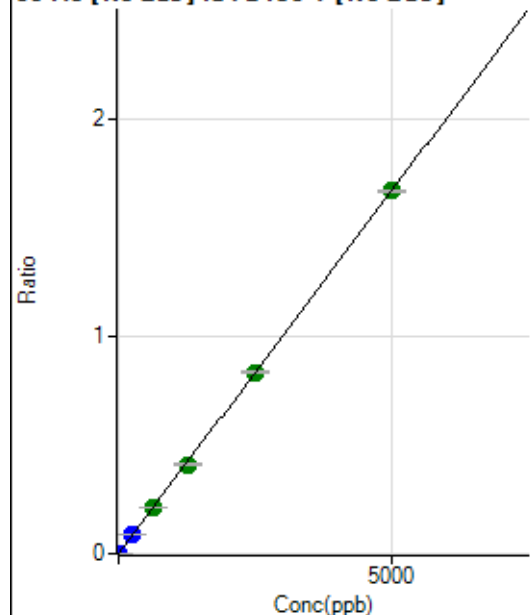
$$R = 1.0000$$

$$DL = 0.00752$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	213.90	0.0000	P	17.5
2	☐	5.000	5.014	44846.58	0.0017	P	8.2
3	☐	250.000	259.874	2459207.41	0.0869	P	0.6
4	☐	625.000	642.679	6047944.97	0.2149	A	0.7
5	☐	1250.000	1229.539	11815563.20	0.4112	A	1.7
6	☐	2500.000	2502.963	23207843.57	0.8371	A	1.1
7	☐	5000.000	5000.930	46586104.17	1.6724	A	0.9
8	☐			36453.16	0.0015	P	3.4

$$y = 3.3443\text{E-}004 * x + 7.9260\text{E-}006$$

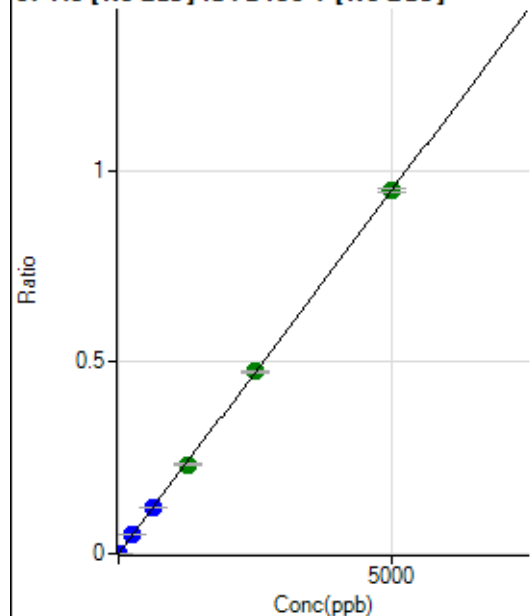
$$R = 1.0000$$

$$DL = 0.01247$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	10.9
2	☐	5.000	4.991	25239.90	0.0009	P	6.9
3	☐	250.000	257.821	1381338.81	0.0488	P	0.7
4	☐	625.000	633.810	3377057.41	0.1200	P	0.8
5	☐	1250.000	1228.643	6685468.47	0.2326	A	0.6
6	☐	2500.000	2508.875	13171067.91	0.4751	A	1.0
7	☐	5000.000	4999.410	26368322.81	0.9466	A	1.0
8	☐			10142.90	0.0004	P	5.8

$$y = 1.8935\text{E-}004 * x + 2.4692\text{E-}006$$

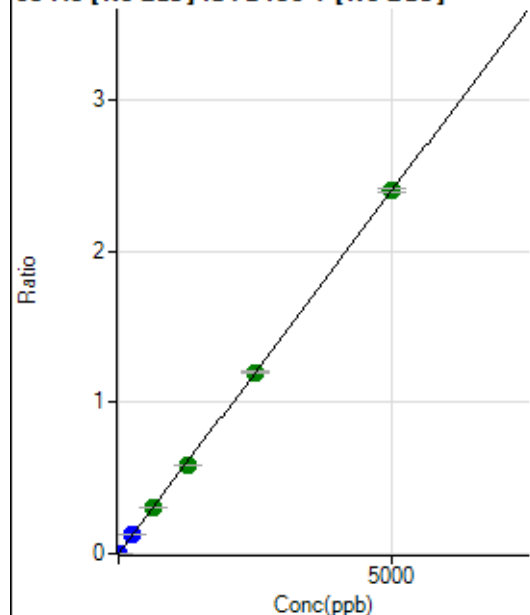
$$R = 1.0000$$

$$DL = 0.00425$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0000	P	20.3
2	☐	5.000	5.145	65844.73	0.0025	P	8.8
3	☐	250.000	257.031	3490460.06	0.1234	P	1.1
4	☐	625.000	635.897	8587858.61	0.3052	A	0.6
5	☐	1250.000	1223.696	16876778.33	0.5873	A	1.1
6	☐	2500.000	2504.440	33324584.77	1.2020	A	1.7
7	☐	5000.000	5002.642	66879907.05	2.4010	A	1.2
8	☐			23931.99	0.0010	P	4.5

$$y = 4.7995\text{E-}004 * x + 4.7430\text{E-}006$$

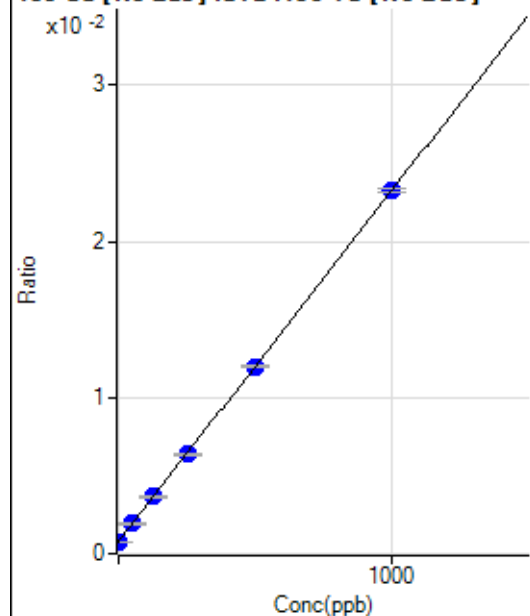
$$R = 1.0000$$

$$DL = 0.00603$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	17319.65	0.0008	P	3.3
2	☐	1.000	-0.632	16905.45	0.0008	P	1.2
3	☐	50.000	50.815	45298.37	0.0019	P	1.5
4	☐	125.000	127.091	85340.57	0.0036	P	1.1
5	☐	250.000	249.984	152310.18	0.0064	P	1.7
6	☐	500.000	499.884	277915.22	0.0120	P	0.7
7	☐	1000.000	999.762	531011.61	0.0232	P	1.1
8	☐			14463.46	0.0007	P	2.0

$$y = 2.2464\text{E-}005 * x + 7.7987\text{E-}004$$

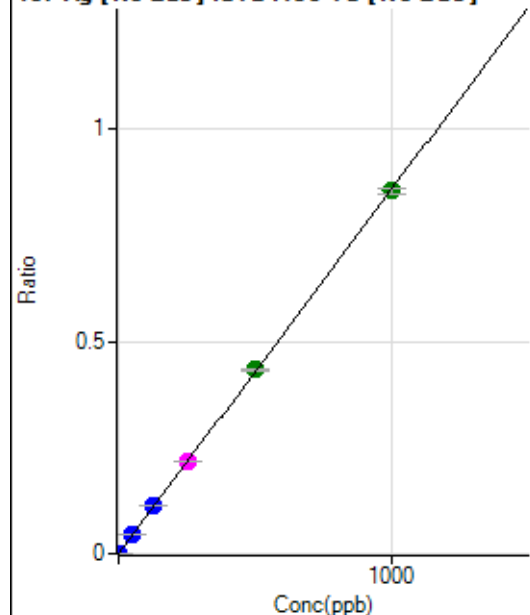
$$R = 1.0000$$

$$DL = 3.461$$

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	263.90	0.0000	P	8.7
2	☐	1.000	1.078	20632.48	0.0009	P	7.0
3	☐	50.000	54.849	1110257.24	0.0471	P	0.5
4	☐	125.000	133.221	2685213.49	0.1144	P	0.7
5	☐	250.000	251.673	5145998.73	0.2160	M	0.4
6	☐	500.000	504.614	10023810.81	0.4332	A	1.3
7	☐	1000.000	996.005	19536430.30	0.8550	A	1.5
8	☐			4951.05	0.0002	P	3.7

$$y = 8.5840E-004 * x + 1.1877E-005$$

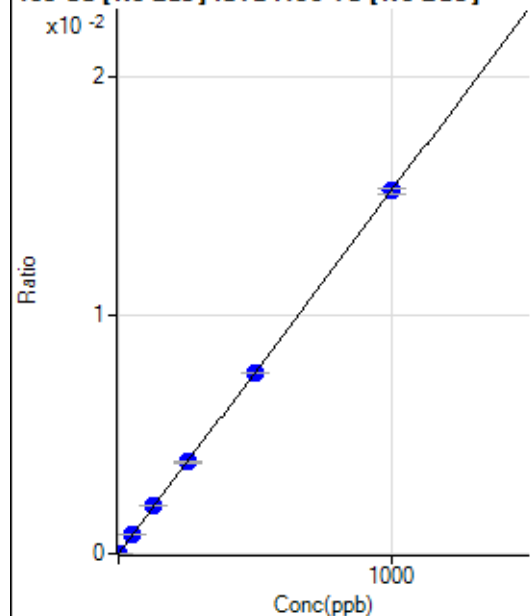
$$R = 1.0000$$

$$DL = 0.003607$$

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	34.72	0.0000	P	49.0
2	☐	1.000	1.075	394.46	0.0000	P	11.0
3	☐	50.000	52.332	18844.70	0.0008	P	1.1
4	☐	125.000	130.750	46834.39	0.0020	P	1.1
5	☐	250.000	252.137	91573.93	0.0038	P	1.8
6	☐	500.000	498.352	175844.73	0.0076	P	0.5
7	☐	1000.000	999.454	348182.99	0.0152	P	1.3
8	☐			247.23	0.0000	P	5.4

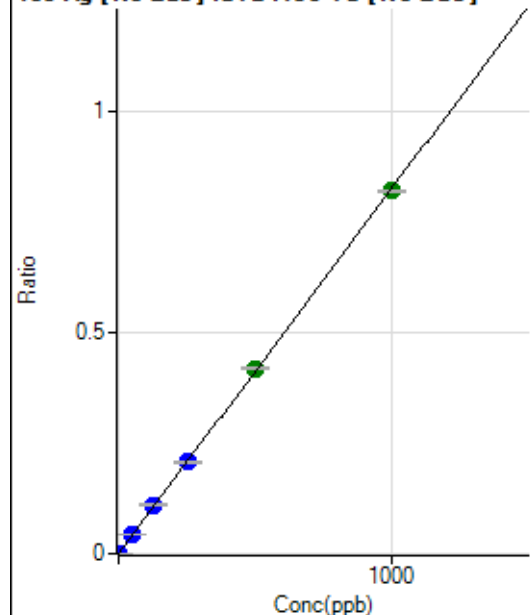
$$y = 1.5245E-005 * x + 1.5561E-006$$

$$R = 1.0000$$

$$DL = 0.15$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	144.45	0.0000	P	34.2
2	☐	1.000	1.074	19597.58	0.0009	P	9.0
3	☐	50.000	55.129	1070036.54	0.0454	P	0.6
4	☐	125.000	134.188	2593551.95	0.1105	P	1.2
5	☐	250.000	251.900	4938526.76	0.2074	P	1.4
6	☐	500.000	507.222	9662277.39	0.4175	A	1.0
7	☐	1000.000	994.509	18706399.72	0.8187	A	0.8
8	☐			4361.97	0.0002	P	8.8

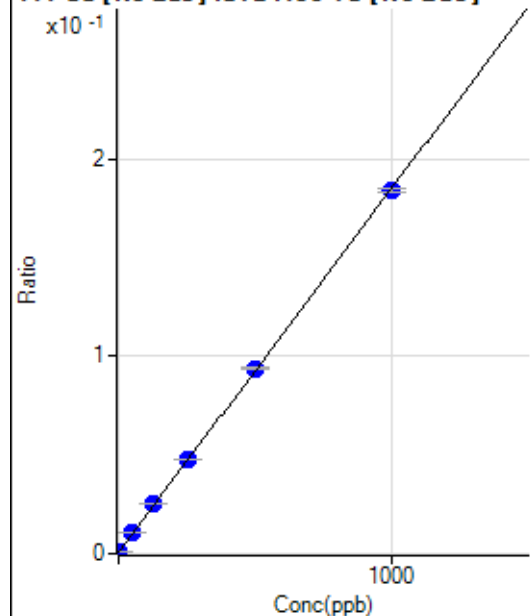
$$y = 8.2318\text{E-}004 * x + 6.5332\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.008143$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12113.34	0.0005	P	3.4
2	☐	1.000	0.884	15629.20	0.0007	P	0.8
3	☐	50.000	54.241	248457.13	0.0105	P	0.8
4	☐	125.000	134.773	595814.62	0.0254	P	0.3
5	☐	250.000	255.553	1134309.20	0.0476	P	1.5
6	☐	500.000	506.642	2172751.19	0.0939	P	0.6
7	☐	1000.000	993.857	4196487.90	0.1837	P	1.1
8	☐			11455.64	0.0006	P	2.0

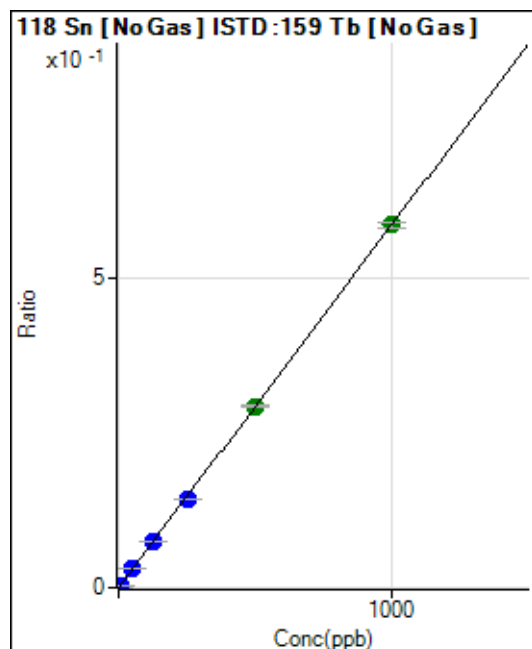
$$y = 1.8424\text{E-}004 * x + 5.4545\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.3011$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1308.46	0.0001	P	10.1
2	☐	5.000	5.035	66061.72	0.0030	P	7.2
3	☐	50.000	51.453	710289.23	0.0301	P	0.7
4	☐	125.000	127.910	1756494.96	0.0748	P	0.3
5	☐	250.000	243.614	3392176.68	0.1424	P	0.8
6	☐	500.000	500.919	6775962.56	0.2928	A	0.7
7	☐	1000.000	1000.700	13364348.91	0.5849	A	1.3
8	☐			5857.04	0.0003	P	4.6

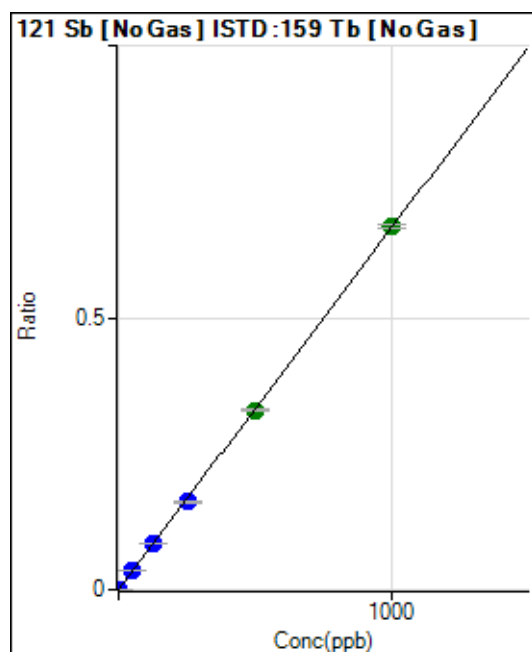
$$y = 5.8441\text{E-}004 * x + 5.8904\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.0306$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	22.4
2	☐	2.000	1.936	28387.97	0.0013	P	8.1
3	☐	50.000	51.126	801349.92	0.0340	P	0.9
4	☐	125.000	126.943	1981397.48	0.0844	P	0.9
5	☐	250.000	242.322	3836637.72	0.1611	P	1.2
6	☐	500.000	496.987	7645909.29	0.3304	A	0.6
7	☐	1000.000	1003.127	15237952.08	0.6669	A	1.0
8	☐			14480.27	0.0007	P	6.0

$$y = 6.6478\text{E-}004 * x + 3.5027\text{E-}006$$

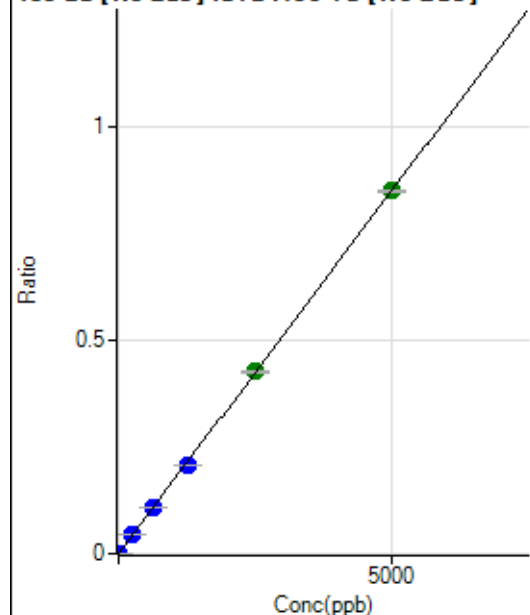
$$R = 1.0000$$

$$DL = 0.003534$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.01	0.0000	P	16.9
2	☐	10.000	10.011	37574.14	0.0017	P	8.0
3	☐	250.000	260.880	1047123.51	0.0444	P	0.9
4	☐	625.000	642.767	2569321.19	0.1094	P	0.7
5	☐	1250.000	1218.100	4938802.41	0.2074	P	1.3
6	☐	2500.000	2506.723	9876006.64	0.4268	A	0.7
7	☐	5000.000	5001.849	19457269.36	0.8515	A	0.8
8	☐			31369.77	0.0016	P	2.5

$$y = 1.7024\text{E-}004 * x + 3.3654\text{E-}006$$

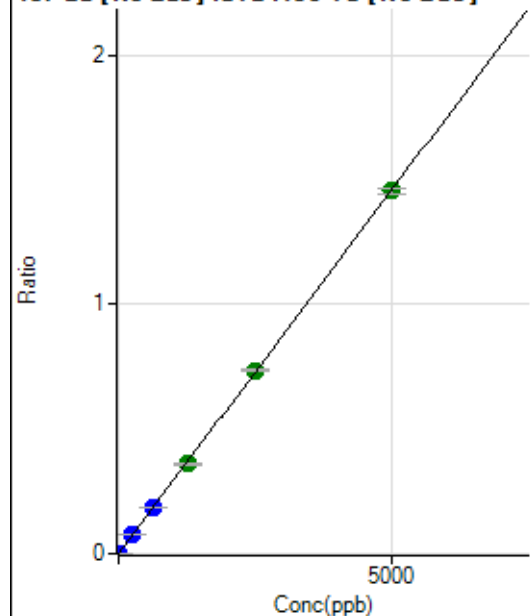
$$R = 1.0000$$

$$DL = 0.01002$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.68	0.0000	P	42.9
2	☐	10.000	10.232	65824.11	0.0030	P	7.1
3	☐	250.000	263.674	1813131.77	0.0769	P	0.6
4	☐	625.000	644.975	4416799.54	0.1881	P	0.5
5	☐	1250.000	1232.791	8563373.80	0.3596	A	0.8
6	☐	2500.000	2518.200	16996116.70	0.7345	A	1.0
7	☐	5000.000	4992.021	33267708.04	1.4560	A	1.6
8	☐			54067.76	0.0027	P	1.7

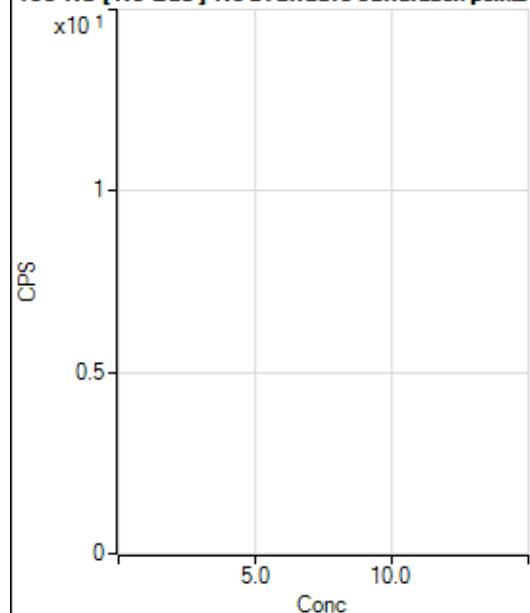
$$y = 2.9166\text{E-}004 * x + 6.3604\text{E-}006$$

$$R = 1.0000$$

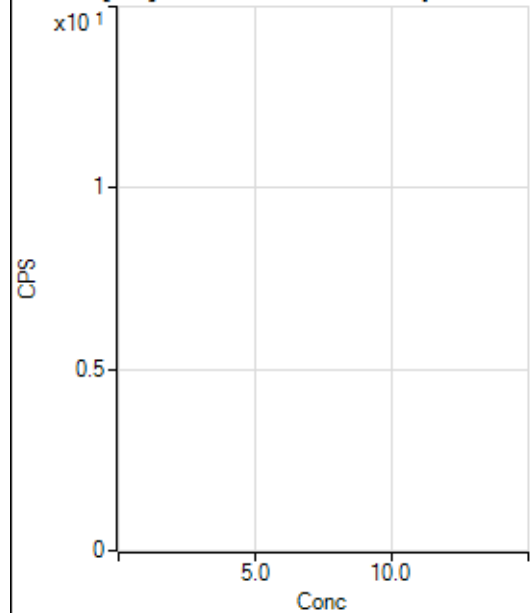
$$DL = 0.02807$$

Weight: <None>

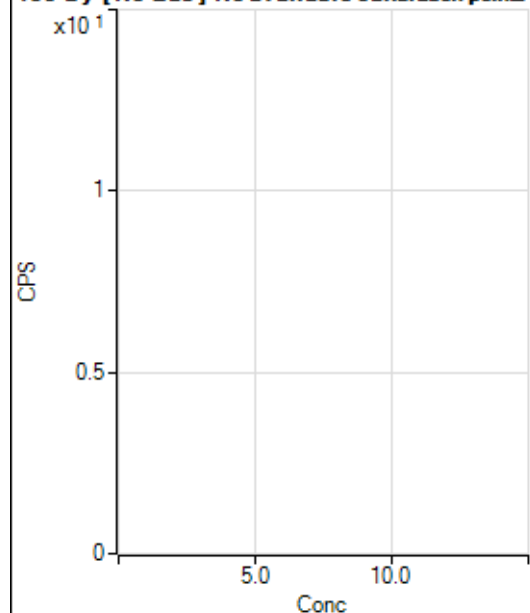
Min Conc: 0

150 Nd [No Gas] No available calibration points

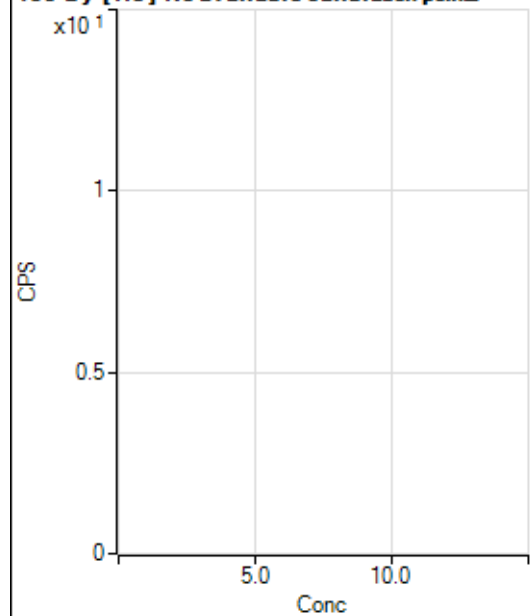
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	124.
2	☐			24.45		P	15.8
3	☐			173.34		P	37.9
4	☐			340.02		P	21.6
5	☐			660.04		P	11.2
6	☐			1233.44		P	8.3
7	☐			2395.85		P	3.4
8	☐			100.00		P	11.5

150 Nd [He] No available calibration points

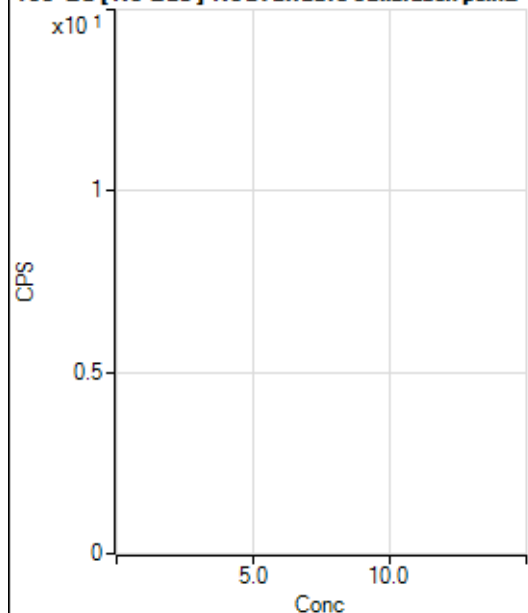
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			0.00		P	
3	☐			10.00		P	33.3
4	☐			24.44		P	7.9
5	☐			58.89		P	3.3
6	☐			87.78		P	11.6
7	☐			172.23		P	9.7
8	☐			21.11		P	18.2

156 Dy [No Gas] No available calibration points

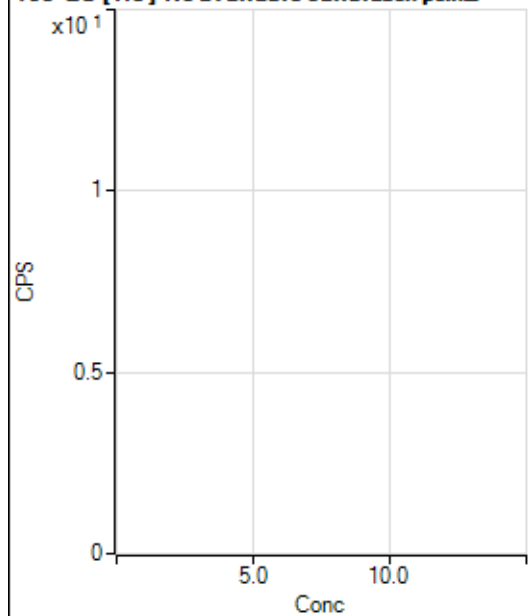
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	27.0
2	☐			69.45		P	42.1
3	☐			108.34		P	40.0
4	☐			152.78		P	11.4
5	☐			186.12		P	5.2
6	☐			313.90		P	18.1
7	☐			588.92		P	6.4
8	☐			969.52		P	8.7

156 Dy [He] No available calibration points

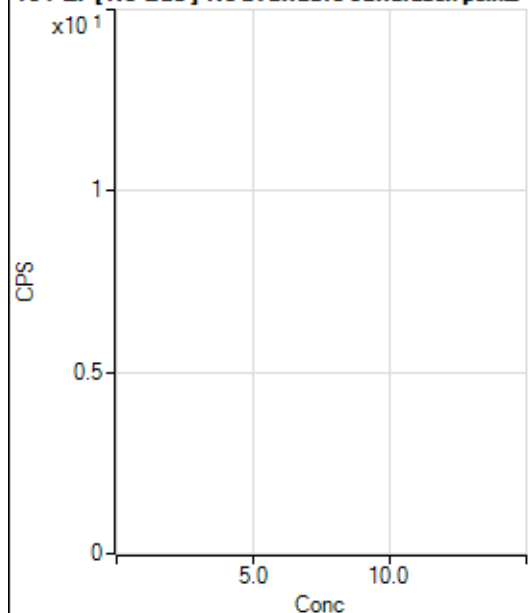
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			20.00		P	44.1
2	☐			24.45		P	28.4
3	☐			35.56		P	28.6
4	☐			54.45		P	12.7
5	☐			131.12		P	15.5
6	☐			254.45		P	8.9
7	☐			415.57		P	18.5
8	☐			561.13		P	6.9

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

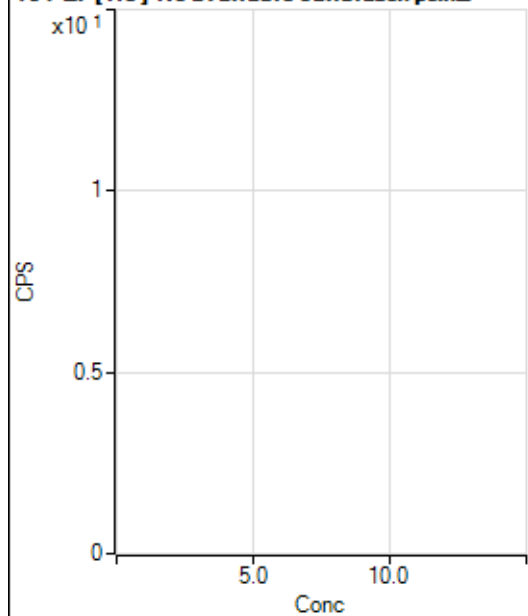
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			211.12		P	4.6
2	☐			216.68		P	23.4
3	☐			200.01		P	32.5
4	☐			266.68		P	8.3
5	☐			258.35		P	5.6
6	☐			344.47		P	16.1
7	☐			463.92		P	11.5
8	☐			1186.21		P	3.9

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			387.79		P	20.3
2	☐			382.23		P	11.6
3	☐			378.90		P	2.2
4	☐			361.12		P	7.4
5	☐			386.68		P	9.8
6	☐			477.79		P	2.0
7	☐			480.02		P	4.3
8	☐			932.27		P	9.1

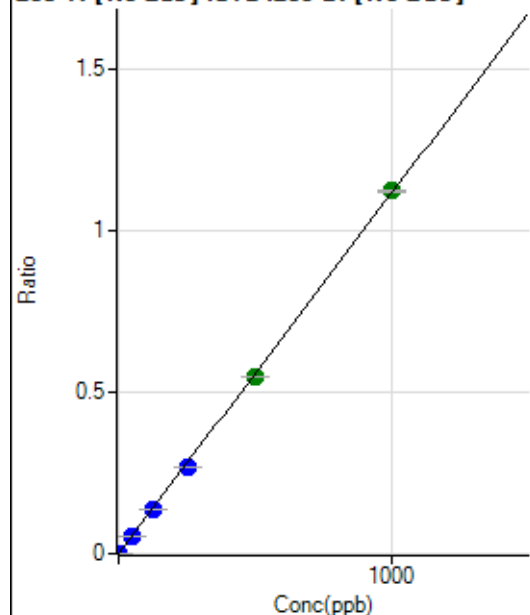
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			113.90		P	23.5
2	☐			130.56		P	63.0
3	☐			122.23		P	52.1
4	☐			130.56		P	9.8
5	☐			138.89		P	33.0
6	☐			147.23		P	45.8
7	☐			194.45		P	17.8
8	☐			219.45		P	26.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46.67		P	7.1
2	☐			56.67		P	25.6
3	☐			37.78		P	43.5
4	☐			52.22		P	16.1
5	☐			58.89		P	52.3
6	☐			74.44		P	25.5
7	☐			77.78		P	16.2
8	☐			87.78		P	29.5

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.12	0.0000	P	30.5
2	☐	1.000	0.947	13332.22	0.0011	P	7.4
3	☐	50.000	49.535	737990.87	0.0553	P	0.5
4	☐	125.000	124.335	1853598.65	0.1388	P	0.9
5	☐	250.000	238.693	3520474.77	0.2664	P	0.9
6	☐	500.000	492.230	6948857.45	0.5494	A	0.5
7	☐	1000.000	1006.818	13663393.53	1.1237	A	0.5
8	☐			1991.92	0.0002	P	15.0

$$y = 0.0011 * x + 8.4162E-006$$

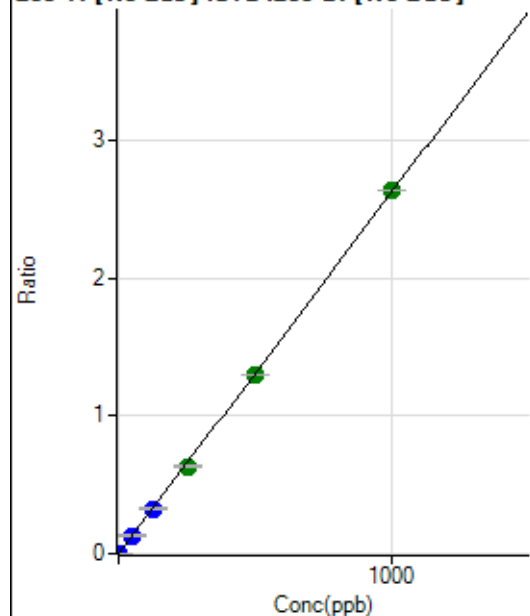
$$R = 0.9999$$

$$DL = 0.006908$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	236.12	0.0000	P	7.5
2	☐	1.000	0.986	32513.16	0.0026	P	9.4
3	☐	50.000	50.524	1766010.52	0.1323	P	1.1
4	☐	125.000	125.019	4372890.07	0.3274	P	1.2
5	☐	250.000	241.407	8353671.19	0.6322	A	1.1
6	☐	500.000	494.652	16384192.90	1.2954	A	0.3
7	☐	1000.000	1004.794	31992768.42	2.6313	A	0.2
8	☐			4695.49	0.0005	P	16.5

$$y = 0.0026 * x + 1.7916E-005$$

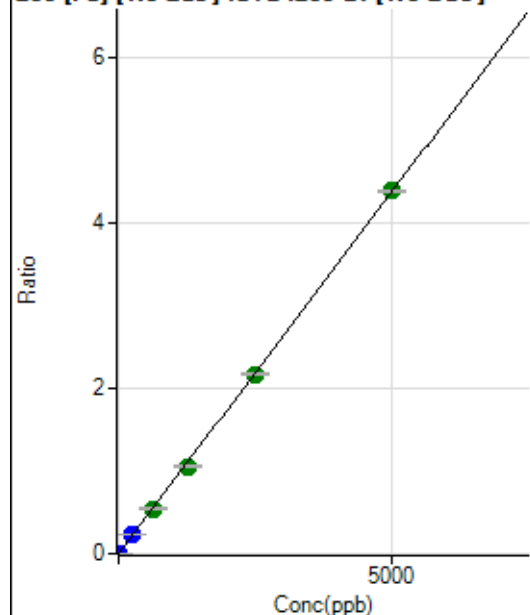
$$R = 0.9999$$

$$DL = 0.001542$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	401.87	0.0000	P	7.1
2	☐	1.000	1.092	12307.89	0.0010	P	8.6
3	☐	250.000	253.717	2958501.63	0.2217	P	0.2
4	☐	625.000	621.989	7257646.00	0.5434	A	1.4
5	☐	1250.000	1206.905	13932564.55	1.0544	A	0.7
6	☐	2500.000	2485.761	27466202.47	2.1715	A	0.8
7	☐	5000.000	5018.084	53299718.78	4.3837	A	0.6
8	☐			13542.39	0.0014	P	8.6

$$y = 8.7358E-004 * x + 3.0482E-005$$

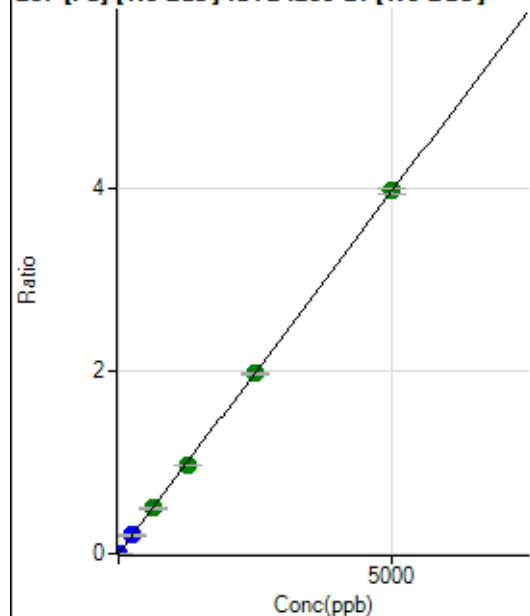
$$R = 0.9999$$

$$DL = 0.007385$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	392.61	0.0000	P	6.5
2	☐	1.000	1.061	10862.12	0.0009	P	9.0
3	☐	250.000	252.717	2666750.75	0.1998	P	1.0
4	☐	625.000	626.765	6618290.77	0.4955	A	0.7
5	☐	1250.000	1214.857	12691664.75	0.9604	A	0.5
6	☐	2500.000	2486.988	24868591.76	1.9661	A	0.7
7	☐	5000.000	5014.935	48203222.84	3.9646	A	1.3
8	☐			11573.86	0.0012	P	3.8

$$y = 7.9055E-004 * x + 2.9779E-005$$

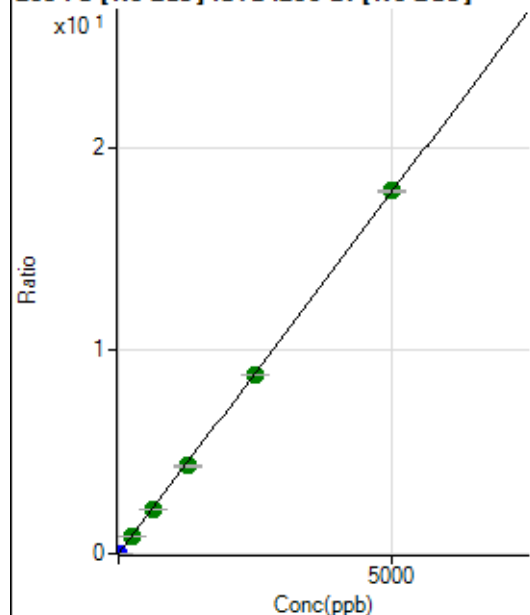
$$R = 1.0000$$

$$DL = 0.007298$$

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	1805.66	0.0001	P	4.6
2	☐	1.000	1.079	49728.54	0.0040	P	8.6
3	☐	250.000	250.382	11891753.68	0.8910	A	0.7
4	☐	625.000	622.667	29593061.08	2.2156	A	0.4
5	☐	1250.000	1212.728	57021835.30	4.3151	A	0.6
6	☐	2500.000	2479.563	111593933.5	8.8227	A	0.6
7	☐	5000.000	5019.809	217163822.9	17.8611	A	0.8
8	☐			53072.19	0.0055	P	6.9

$$y = 0.0036 * x + 1.3696E-004$$

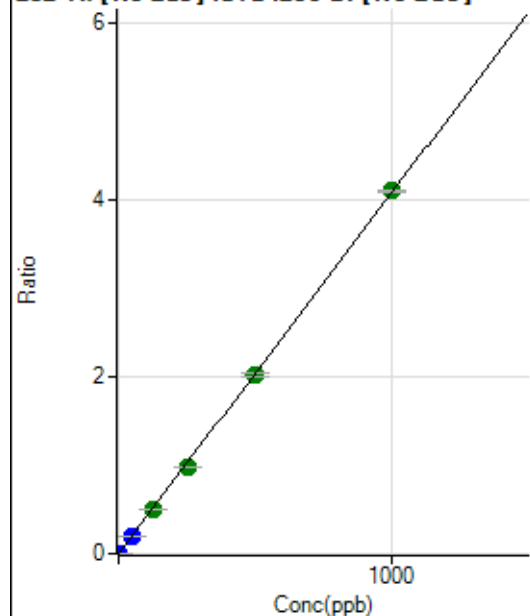
$$R = 1.0000$$

$$DL = 0.005329$$

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	963.03	0.0001	P	4.5
2	☐	1.000	-0.003	774.12	0.0001	P	36.7
3	☐	50.000	48.124	2620520.92	0.1963	P	0.4
4	☐	125.000	121.273	6607105.99	0.4947	A	0.9
5	☐	250.000	239.283	12896571.35	0.9760	A	1.1
6	☐	500.000	495.695	25572730.89	2.0218	A	1.6
7	☐	1000.000	1005.393	49857470.56	4.1006	A	0.3
8	☐			16141.89	0.0017	P	9.0

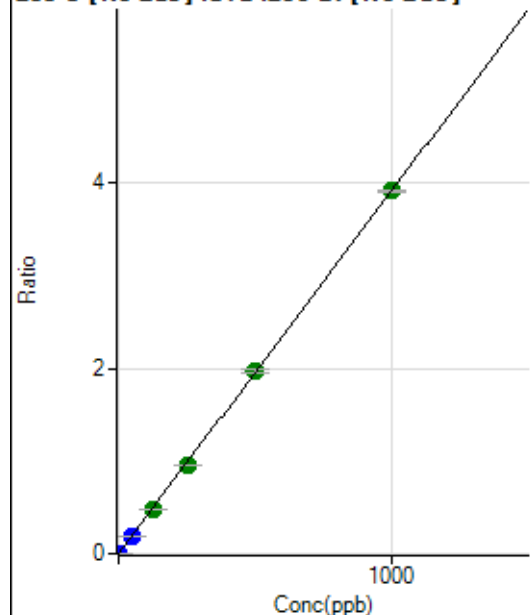
$$y = 0.0041 * x + 7.3039E-005$$

$$R = 0.9999$$

$$DL = 0.00241$$

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	72.23	0.0000	P	15.4
2	☐	1.000	0.923	45196.23	0.0036	P	9.1
3	☐	50.000	49.554	2587266.62	0.1939	P	1.2
4	☐	125.000	122.938	6423522.23	0.4809	A	0.4
5	☐	250.000	244.520	12640322.94	0.9565	A	0.5
6	☐	500.000	502.880	24883542.39	1.9672	A	2.1
7	☐	1000.000	1000.210	47573350.37	3.9128	A	0.5
8	☐			7827.80	0.0008	P	11.9

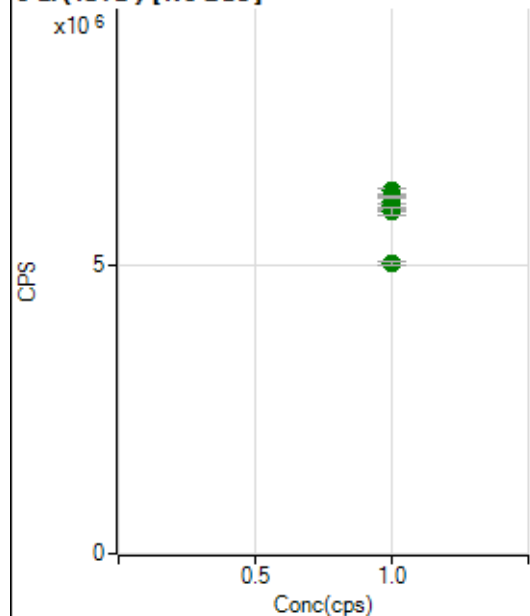
$$y = 0.0039 * x + 5.4899E-006$$

$$R = 1.0000$$

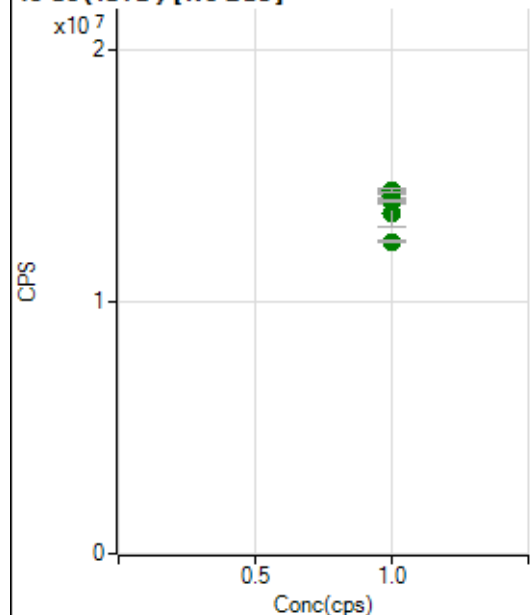
$$DL = 0.0006481$$

Weight: <None>

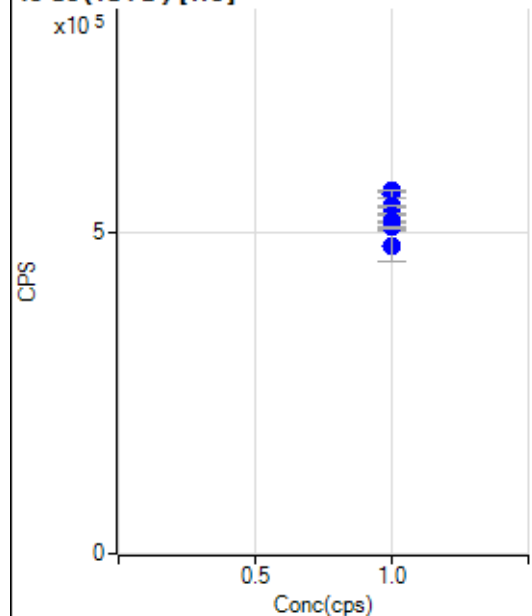
Min Conc: 0

6 Li (ISTD) [No Gas]

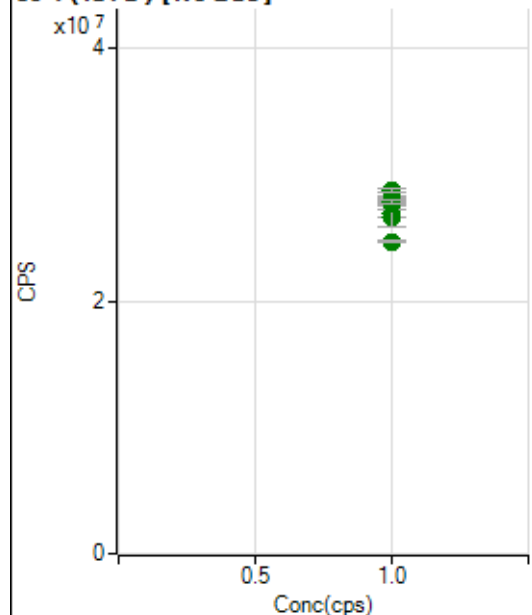
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6101068.10		A	1.6
2	☐	1.000		6022874.22		A	5.1
3	☐	1.000		6280401.43		A	1.6
4	☐	1.000		6219834.77		A	0.3
5	☐	1.000		6174384.98		A	0.7
6	☐	1.000		5947685.81		A	0.4
7	☐	1.000		5921130.19		A	2.3
8	☐	1.000		5030540.41		A	1.3

45 Sc (ISTD) [No Gas]

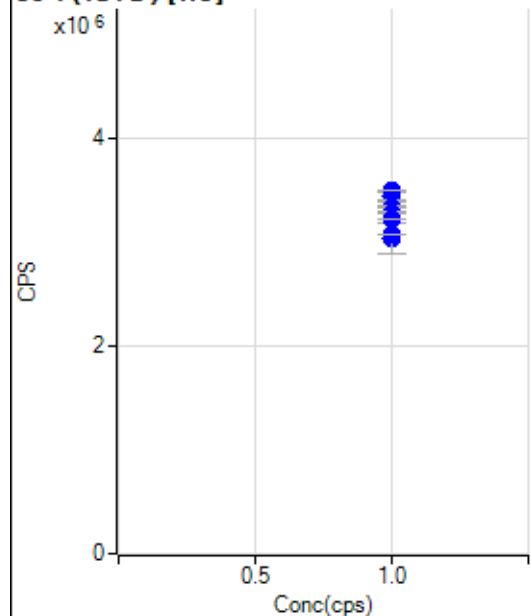
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14101116.18		A	2.5
2	☐	1.000		13516221.47		A	7.8
3	☐	1.000		14353442.84		A	1.3
4	☐	1.000		14223296.04		A	1.5
5	☐	1.000		14388678.53		A	0.9
6	☐	1.000		13984078.40		A	1.1
7	☐	1.000		13972996.18		A	0.5
8	☐	1.000		12383333.85		A	0.6

45 Sc (ISTD) [He]

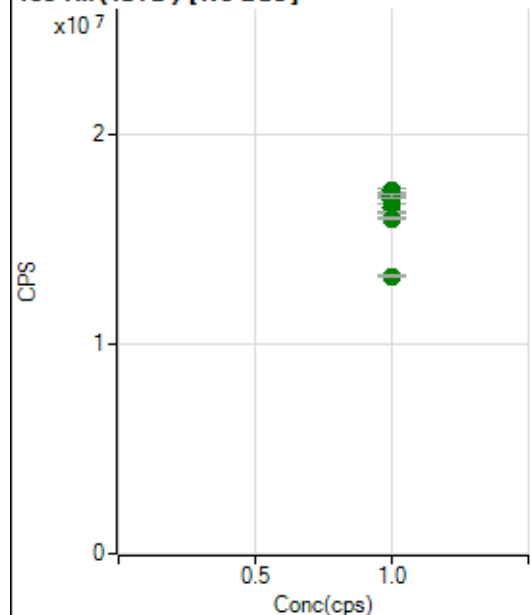
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		566272.51		P	0.3
2	☐	1.000		560772.95		P	2.1
3	☐	1.000		542357.88		P	0.6
4	☐	1.000		479772.18		P	9.6
5	☐	1.000		528626.70		P	0.5
6	☐	1.000		519501.32		P	0.2
7	☐	1.000		516269.31		P	0.3
8	☐	1.000		509367.01		P	0.8

89 Y (ISTD) [No Gas]

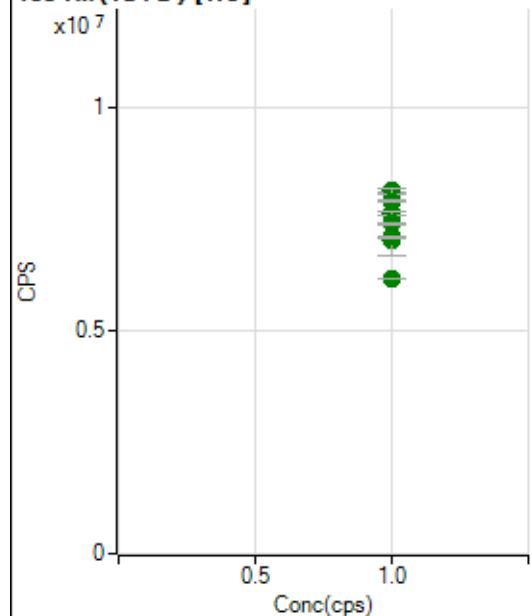
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		26969138.49		A	2.1
2	☐	1.000		26712785.16		A	6.3
3	☐	1.000		28293770.69		A	0.3
4	☐	1.000		28138751.25		A	0.3
5	☐	1.000		28737671.52		A	1.1
6	☐	1.000		27726029.03		A	0.6
7	☐	1.000		27856754.58		A	1.5
8	☐	1.000		24699661.02		A	0.5

89 Y (ISTD) [He]

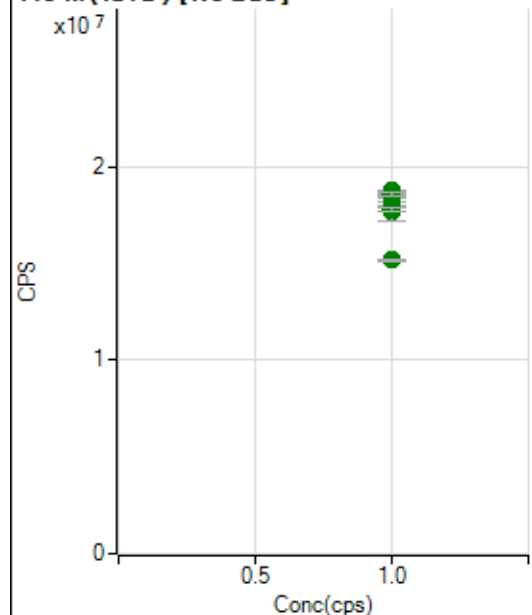
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3492681.75		P	0.3
2	☐	1.000		3450443.49		P	2.3
3	☐	1.000		3398094.39		P	0.6
4	☐	1.000		3040306.38		P	9.6
5	☐	1.000		3340307.35		P	0.5
6	☐	1.000		3279844.60		P	0.6
7	☐	1.000		3225787.11		P	0.2
8	☐	1.000		3071711.59		P	0.5

103 Rh (ISTD) [No Gas]

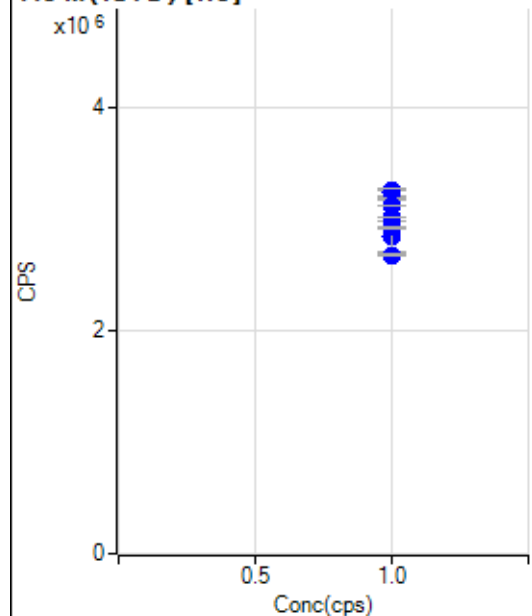
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16926358.78		A	2.2
2	☐	1.000		16586811.56		A	6.6
3	☐	1.000		17338649.60		A	1.2
4	☐	1.000		17232774.60		A	0.7
5	☐	1.000		17115244.61		A	1.2
6	☐	1.000		16288386.56		A	0.6
7	☐	1.000		16012059.07		A	0.6
8	☐	1.000		13271561.33		A	0.6

103 Rh (ISTD) [He]

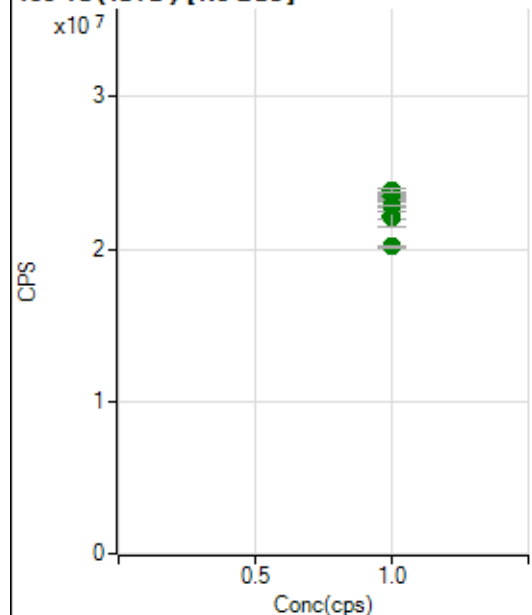
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8098897.73		A	0.3
2	☐	1.000		8143317.17		A	1.9
3	☐	1.000		7916636.83		A	0.6
4	☐	1.000		7035249.89		A	9.8
5	☐	1.000		7644563.77		A	1.1
6	☐	1.000		7411748.29		A	0.5
7	☐	1.000		7105611.42		A	0.4
8	☐	1.000		6181505.67		A	0.2

115 In (ISTD) [No Gas]

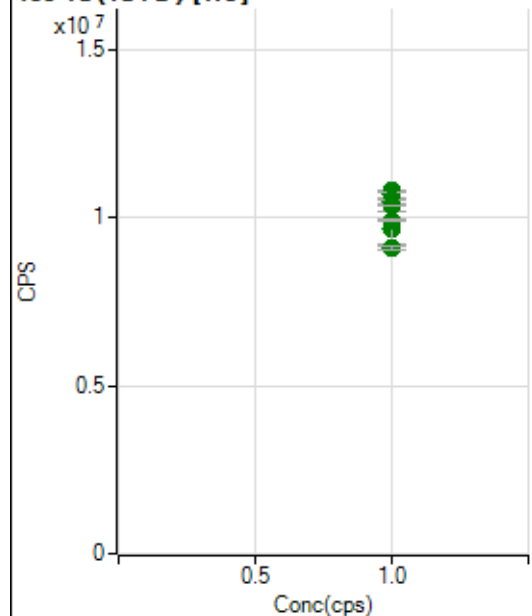
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17837433.77		A	1.7
2	☐	1.000		17698946.28		A	5.5
3	☐	1.000		18758427.17		A	0.6
4	☐	1.000		18505693.52		A	1.2
5	☐	1.000		18630075.56		A	1.2
6	☐	1.000		17952240.73		A	0.3
7	☐	1.000		17778239.76		A	1.0
8	☐	1.000		15188484.70		A	0.6

115 In (ISTD) [He]

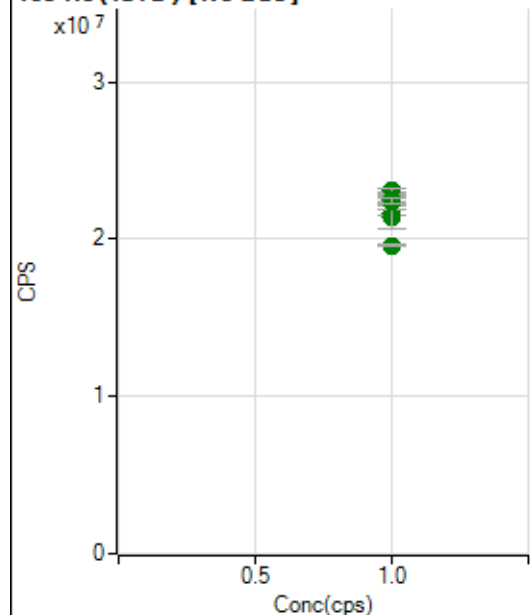
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3255860.21		P	0.2
2	☐	1.000		3249274.00		P	1.9
3	☐	1.000		3190446.94		P	0.4
4	☐	1.000		2845606.42		P	9.5
5	☐	1.000		3123511.25		P	0.2
6	☐	1.000		3022752.49		P	0.3
7	☐	1.000		2926011.76		P	0.4
8	☐	1.000		2679620.27		P	0.4

159 Tb (ISTD) [No Gas]

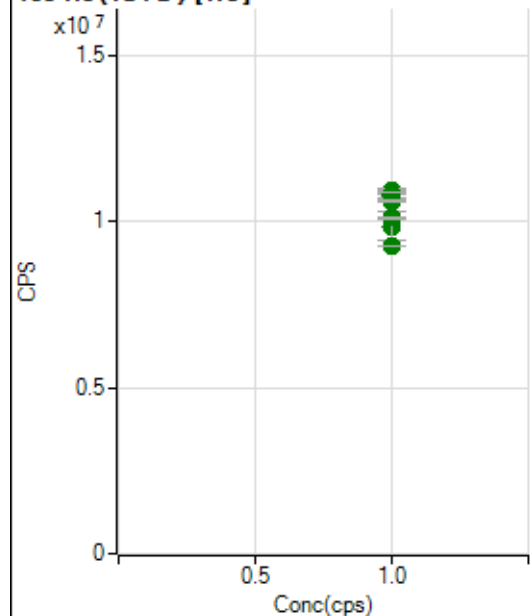
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22221302.87		A	2.8
2	☐	1.000		22069533.98		A	5.8
3	☐	1.000		23575585.48		A	0.3
4	☐	1.000		23479429.37		A	0.9
5	☐	1.000		23818123.53		A	1.2
6	☐	1.000		23141748.82		A	0.6
7	☐	1.000		22850126.32		A	0.5
8	☐	1.000		20152169.56		A	0.6

159 Tb (ISTD) [He]

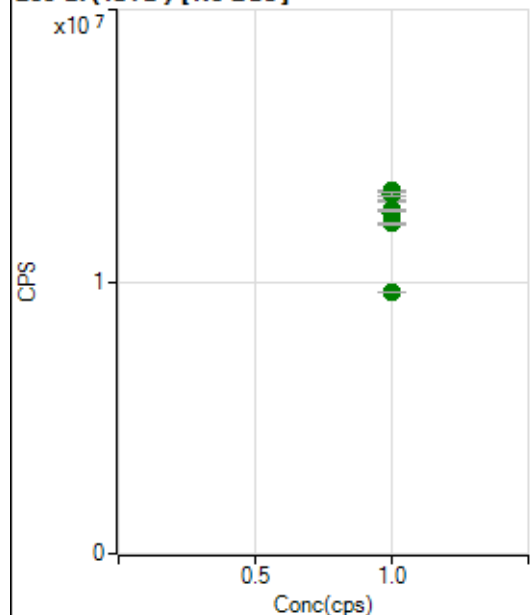
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10782890.67		A	0.4
2	☐	1.000		10678069.21		A	1.5
3	☐	1.000		10537401.44		A	0.8
4	☐	1.000		9663368.19		A	10.1
5	☐	1.000		10485441.86		A	1.1
6	☐	1.000		10352249.85		A	0.3
7	☐	1.000		9915650.20		A	0.4
8	☐	1.000		9076929.24		A	1.2

165 Ho (ISTD) [No Gas]

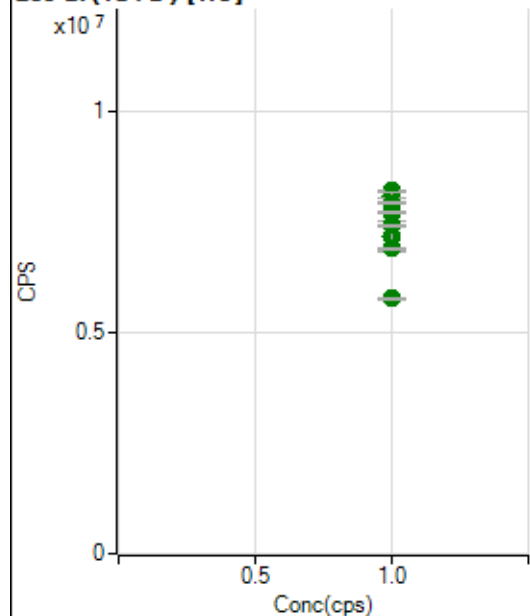
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21683414.82		A	1.8
2	☐	1.000		21345601.76		A	7.0
3	☐	1.000		22834711.33		A	0.6
4	☐	1.000		22963629.66		A	0.4
5	☐	1.000		23062039.10		A	1.6
6	☐	1.000		22383645.50		A	0.4
7	☐	1.000		22449661.33		A	1.8
8	☐	1.000		19600326.65		A	0.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10915233.10		A	1.0
2	☐	1.000		10827112.41		A	2.2
3	☐	1.000		10741044.01		A	1.0
4	☐	1.000		9861892.15		A	9.2
5	☐	1.000		10806970.05		A	1.5
6	☐	1.000		10602243.73		A	0.3
7	☐	1.000		10118378.53		A	0.5
8	☐	1.000		9266245.21		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13182455.63		A	2.0
2	☐	1.000		12551727.17		A	6.5
3	☐	1.000		13346364.80		A	0.3
4	☐	1.000		13356464.38		A	0.3
5	☐	1.000		13214927.30		A	1.1
6	☐	1.000		12648345.64		A	0.4
7	☐	1.000		12158733.29		A	0.5
8	☐	1.000		9628925.41		A	0.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8205936.61		A	0.6
2	☐	1.000		8097926.06		A	1.6
3	☐	1.000		7932719.40		A	0.8
4	☐	1.000		7184721.98		A	9.6
5	☐	1.000		7702576.13		A	0.7
6	☐	1.000		7431823.99		A	0.5
7	☐	1.000		6905051.49		A	0.7
8	☐	1.000		5770379.36		A	0.3

US EPA Tune Check Sample Report

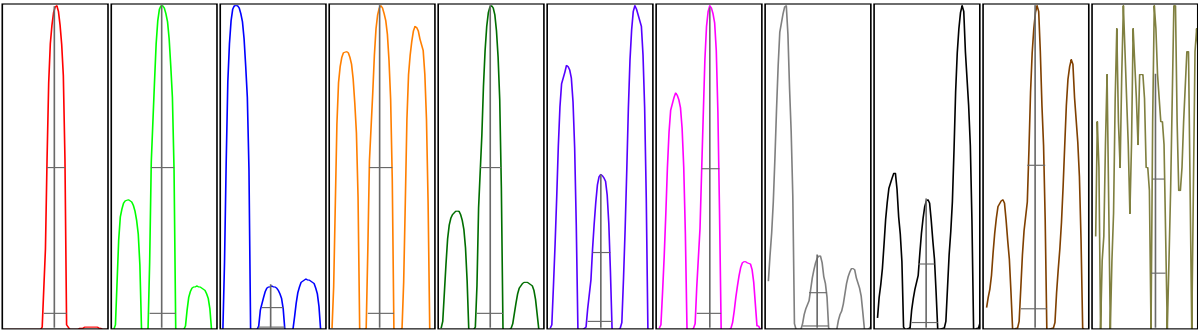
Batch Folder D:\ICP-MS Data\1\DATA\P7071020 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	14671	4.03	5.00	
24	201800	3.83	5.00	
25	26419	3.67	5.00	
26	31069	4.12	5.00	
59	103966	3.73	5.00	
113	16505	3.79	5.00	
115	46786	3.96	5.00	
206	19986	3.98	5.00	
207	16576	3.91	5.00	
208	41090	3.79	5.00	
220	0	37.18		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	14910	14870	14918	15038	13618
24	204376	204270	206857	205405	188090
25	26672	26730	26942	27044	24706
26	31629	31474	31507	31933	28801
59	105052	104736	106341	106530	97171
113	16660	16615	16878	16957	15416
115	47400	47421	47437	48151	43521
206	19936	20166	20501	20668	18659
207	16451	16704	17162	17038	15529
208	40806	41659	42165	42312	38508
220	1	0	1	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	27413	9.00	8.9 - 9.1		0.688	0.900	
24	326818	23.95	23.9 - 24.1		0.783	0.900	
25	43552	24.95	24.9 - 25.1		0.759	0.900	
26	50669	25.95	25.9 - 26.1		0.785	0.900	
59	178377	59.00	58.9 - 59.1		0.778	0.900	
113	31657	113.05	112.9 - 113.1		0.729	0.900	
115	90292	115.05	114.9 - 115.1		0.728	0.900	
206	41018	206.00	205.9 - 206.1		0.761	0.900	
207	34042	207.00	206.9 - 207.1		0.774	0.900	
208	84963	208.00	207.9 - 208.1		0.773	0.900	
220	1	220.35	-		0.406		

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	0.76	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	7.4	V	Deflect	13.2	V
Extract 2	-130.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	23378	0.96	
89	66628	0.69	
205	52795	1.30	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	23348	23354	23243	23187	23757
89	66429	66590	66288	66404	67428
205	53352	53289	52002	52088	53243

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	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	8.5	V	Deflect	2.2	V
Extract 2	-155.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	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			