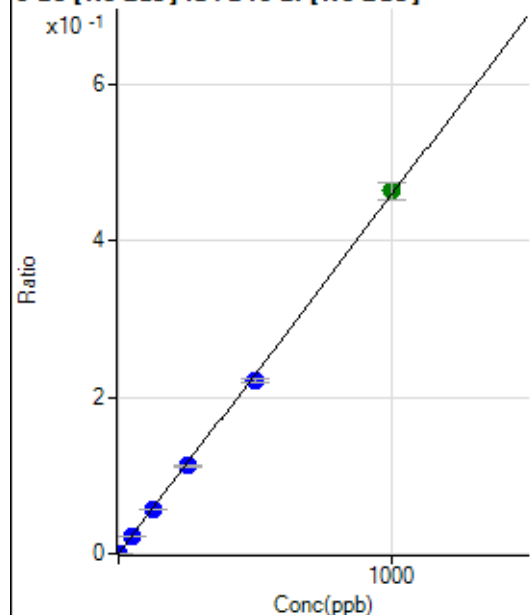


Calibration for 008CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8041923MS.b\
 Analysis File: P8041923MS.batch.bin
 DA Date-Time: 2023-04-21 11:33:33
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-04-19 14:09:14
2	006CALS.d	S02	2023-04-19 14:15:24
3	007CALS.d	S03	2023-04-19 14:18:27
4	008CALS.d	S04	2023-04-19 14:21:28
5	009CALS.d	S05	2023-04-19 14:24:27
6	010CALS.d	S06	2023-04-19 14:27:28
7	011CALS.d	S07	2023-04-19 14:30:26
8	012CALS.d	S08	2023-04-19 14:33:27

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.66	0.0000	P	14.2
2	☐	1.000	1.094	2147.40	0.0005	P	3.5
3	☐	50.000	50.230	96735.93	0.0230	P	1.1
4	☐	125.000	124.006	242192.77	0.0569	P	2.3
5	☐	250.000	244.430	477795.09	0.1121	P	0.8
6	☐	500.000	481.664	951678.54	0.2209	P	2.1
7	☐	1000.000	1010.673	1883111.12	0.4634	A	4.4
8	☐			727.01	0.0002	P	15.3

$$y = 4.5851\text{E-}004 * x + 1.0921\text{E-}005$$

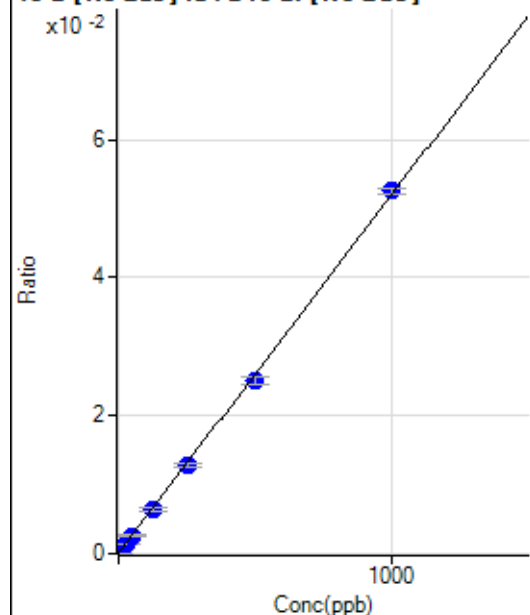
$$R = 0.9997$$

$$DL = 0.01014$$

$$BEC = 0.02382$$

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	358.60	0.0001	P	14.8
2	☐	25.000	24.249	5629.98	0.0013	P	5.0
3	☐	50.000	49.114	11060.68	0.0026	P	7.2
4	☐	125.000	121.148	27132.97	0.0064	P	8.2
5	☐	250.000	245.324	54665.05	0.0128	P	4.4
6	☐	500.000	481.097	108050.00	0.0251	P	4.0
7	☐	1000.000	1011.165	213884.58	0.0526	P	1.9
8	☐			16668.20	0.0041	P	9.3

$$y = 5.1924\text{E-}005 * x + 8.4022\text{E-}005$$

$$R = 0.9997$$

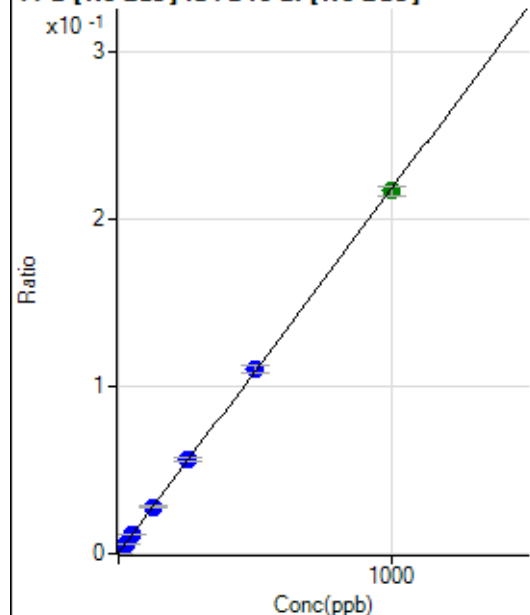
$$DL = 0.7205$$

$$BEC = 1.618$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1613.11	0.0004	P	5.2
2	☐	25.000	24.896	24332.63	0.0058	P	4.7
3	☐	50.000	51.554	48780.32	0.0116	P	5.4
4	☐	125.000	126.036	118585.83	0.0279	P	5.6
5	☐	250.000	257.250	240682.12	0.0565	P	3.6
6	☐	500.000	506.697	477809.55	0.1108	P	4.0
7	☐	1000.000	994.634	883643.98	0.2172	A	2.7
8	☐			72907.62	0.0181	P	8.7

$$y = 2.1799\text{E-}004 * x + 3.7800\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.2722$$

$$BEC = 1.734$$

Weight: <None>

Min Conc: 0

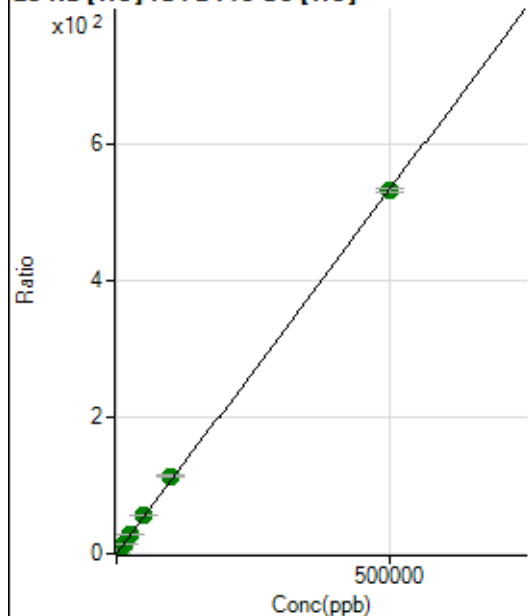
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			4553523.06		A	1.4
2	☐			4567985.78		A	0.2
3	☐			4608076.97		A	1.7
4	☐			4694425.06		A	0.5
5	☐			4745088.04		A	0.7
6	☐			5025861.61		A	1.5
7	☐			5300266.09		A	2.6
8	☐			4718158.18		A	1.8

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			54702.52		P	1.1
2	☐			54610.22		P	0.8
3	☐			57672.06		P	1.4
4	☐			58229.78		P	1.4
5	☐			59167.28		P	1.5
6	☐			63515.71		P	1.8
7	☐			69617.91		P	1.1
8	☐			64252.11		P	0.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	23605.75	0.1111	P	3.8
2	☐	500.000	545.705	141683.89	0.6935	P	3.4
3	☐	5000.000	5349.100	1253932.80	5.8198	A	2.7
4	☐	12500.000	13317.498	3070203.78	14.3239	A	3.2
5	☐	25000.000	26039.698	5960147.18	27.9014	A	2.2
6	☐	50000.000	53296.116	12252210.08	56.9902	A	0.7
7	☐	100000.00	106293.29	24332884.92	113.5502	A	2.3
8	☐	500000.00	498335.77	114590070.6	531.9488	A	1.2

$$y = 0.0011 * x + 0.1111$$

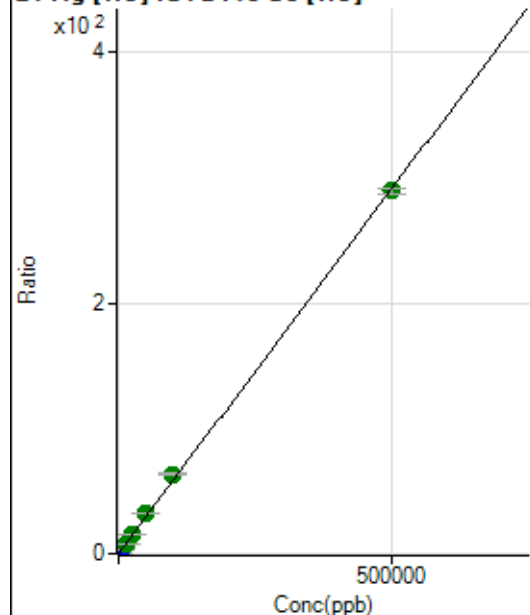
$$R = 0.9999$$

$$DL = 11.92$$

$$BEC = 104.1$$

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	344.46	0.0016	P	20.9
2	☐	500.000	556.991	66477.08	0.3255	P	4.9
3	☐	5000.000	5353.290	671146.99	3.1148	P	2.3
4	☐	12500.000	14056.598	1752546.13	8.1761	A	0.8
5	☐	25000.000	27267.558	3388113.88	15.8588	A	1.4
6	☐	50000.000	55039.295	6881432.79	32.0093	A	0.7
7	☐	100000.00	109013.50	13585139.19	63.3975	A	2.9
8	☐	500000.00	497537.48	62326943.06	289.3403	A	1.3

$$y = 5.8154\text{E-}004 * x + 0.0016$$

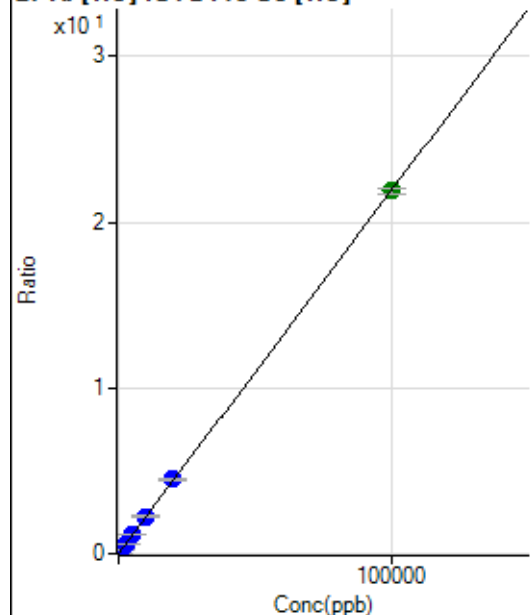
$$R = 0.9998$$

$$DL = 1.747$$

$$BEC = 2.784$$

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	67.07	0.0003	P	7.0
2	☐	20.000	22.492	1071.16	0.0052	P	5.6
3	☐	1000.000	1023.651	48418.47	0.2247	P	1.8
4	☐	2500.000	2574.472	121027.08	0.5646	P	1.7
5	☐	5000.000	5097.261	238750.26	1.1176	P	2.6
6	☐	10000.000	10252.486	483245.34	2.2476	P	1.8
7	☐	20000.000	20430.540	959721.37	4.4786	P	2.4
8	☐	100000.00	99881.681	4716443.21	21.8940	A	1.3

$$y = 2.1920\text{E-}004 * x + 3.1579\text{E-}004$$

$$R = 1.0000$$

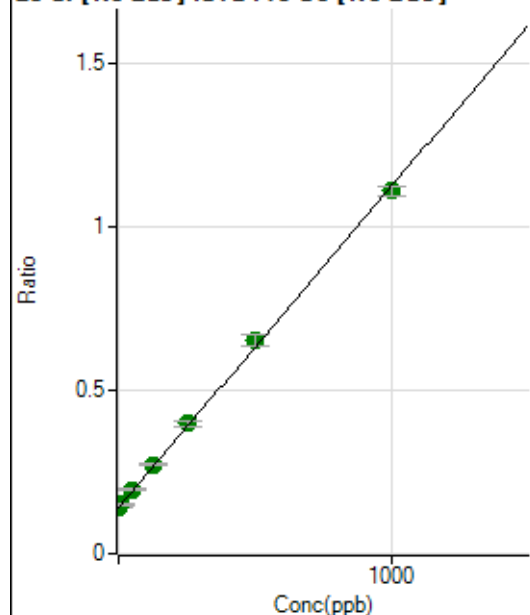
$$DL = 0.3028$$

$$BEC = 1.441$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	904462.34	0.1407	A	0.7
2	☐	10.000	10.351	947229.34	0.1509	A	1.5
3	☐	50.000	57.182	1252368.67	0.1970	A	2.5
4	☐	125.000	134.838	1761894.42	0.2733	A	4.0
5	☐	250.000	260.760	2569975.43	0.3971	A	4.7
6	☐	500.000	521.204	4216321.75	0.6532	A	5.4
7	☐	1000.000	985.116	6979127.07	1.1093	A	2.7
8	☐			1653066.92	0.2580	A	1.5

$$y = 9.8317E-004 * x + 0.1407$$

R = 0.9996

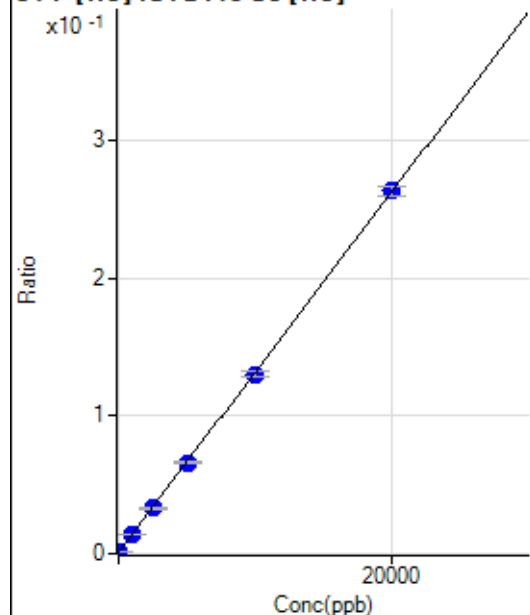
DL = 3.071

BEC = 143.2

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-22.588	169.45	0.0008	P	20.9
2	☐	0.000	22.588	283.35	0.0014	P	12.3
3	☐	1000.000	1028.663	3133.75	0.0145	P	1.0
4	☐	2500.000	2446.499	7090.78	0.0331	P	2.3
5	☐	5000.000	4975.009	14129.46	0.0661	P	2.8
6	☐	10000.000	9883.581	28019.39	0.1303	P	3.0
7	☐	20000.000	20069.712	56463.54	0.2635	P	2.5
8	☐			219.45	0.0010	P	14.1

$$y = 1.3074E-005 * x + 0.0011$$

R = 1.0000

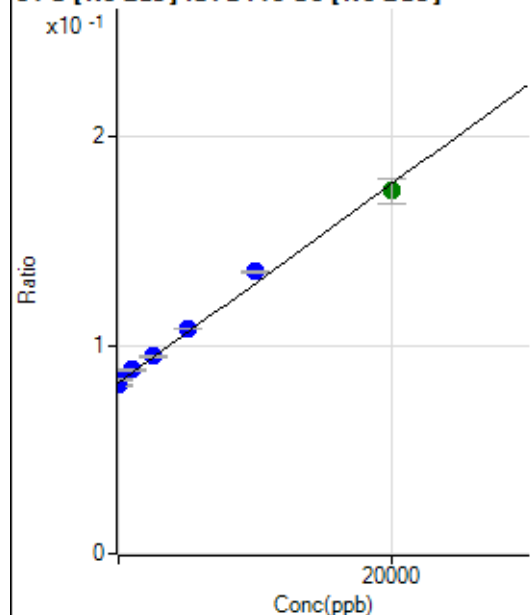
DL = 38.63

BEC = 83.61

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-272.957	519209.52	0.0808	P	1.3
2	☐	0.000	272.957	523468.73	0.0834	P	1.5
3	☐	1000.000	1335.229	562598.00	0.0885	P	0.8
4	☐	2500.000	2706.319	612656.38	0.0950	P	0.9
5	☐	5000.000	5438.195	699227.91	0.1081	P	0.7
6	☐	10000.000	11132.607	873057.91	0.1352	P	0.4
7	☐	20000.000	19281.597	1093899.88	0.1742	A	7.2
8	☐			472601.85	0.0737	P	1.5

$$y = 4.7742\text{E-}006 * x + 0.0821$$

$$R = 0.9970$$

$$DL = 721.8$$

$$BEC = 1.72\text{E}+04$$

Weight: <None>

Min Conc: 0

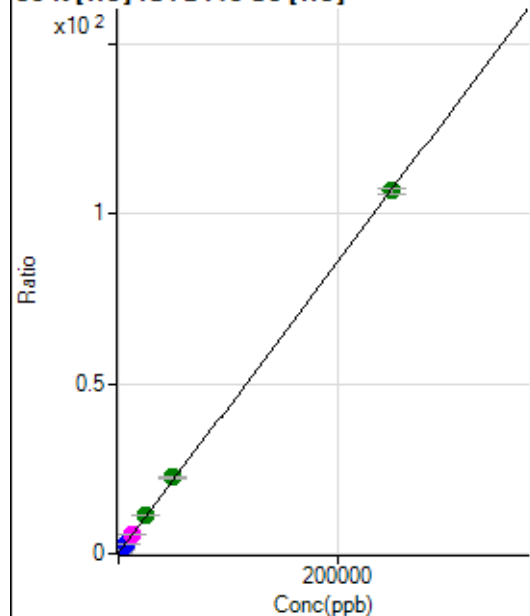
35 Cl [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			168814.45		P	0.8
2	☐			199091.19		P	0.6
3	☐			204633.64		P	1.3
4	☐			198817.53		P	1.1
5	☐			197187.53		P	0.3
6	☐			197787.02		P	0.7
7	☐			198640.03		P	1.4
8	☐			196280.40		P	0.3

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			1102.85		P	10.3
2	☐			1344.54		P	11.5
3	☐			1313.99		P	4.2
4	☐			1464.00		P	10.6
5	☐			1325.10		P	14.8
6	☐			1316.75		P	10.4
7	☐			1366.76		P	8.5
8	☐			1280.65		P	10.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	28957.40	0.1363	P	2.1
2	☐	500.000	527.231	73853.06	0.3615	P	3.8
3	☐	2500.000	2500.442	259531.70	1.2044	P	2.1
4	☐	6250.000	6333.345	609109.05	2.8417	P	1.9
5	☐	12500.000	12945.613	1210846.20	5.6663	M	2.6
6	☐	25000.000	26138.554	2429814.07	11.3019	A	1.6
7	☐	50000.000	52181.496	4806158.14	22.4267	A	1.5
8	☐	250000.00	249425.42	22981106.94	106.6833	A	1.3

$$y = 4.2717\text{E-}004 * x + 0.1363$$

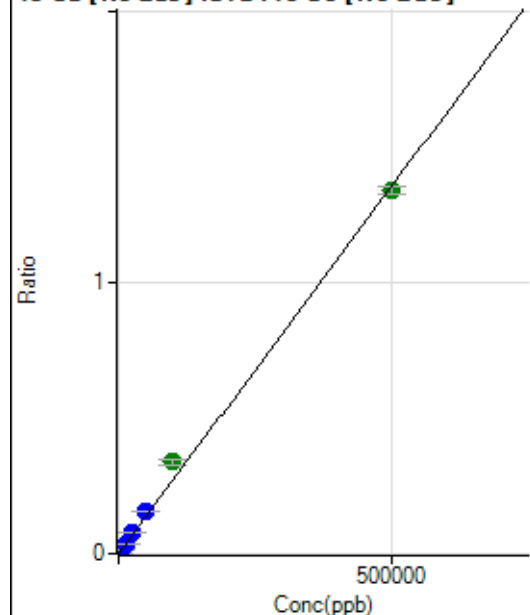
$$R = 1.0000$$

$$DL = 19.96$$

$$BEC = 319.1$$

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	124.99	0.0000	P	13.6
2	☐	500.000	539.599	9293.10	0.0015	P	2.4
3	☐	5000.000	5804.033	100059.85	0.0157	P	1.2
4	☐	12500.000	14248.692	248903.75	0.0386	P	0.4
5	☐	25000.000	28701.219	502998.31	0.0777	P	1.3
6	☐	50000.000	57948.131	1013035.00	0.1569	P	0.4
7	☐	100000.00	124549.12	2118444.10	0.3373	A	7.3
8	☐	500000.00	494058.50	8573702.78	1.3378	A	2.0

$$y = 2.7078\text{E-}006 * x + 1.9459\text{E-}005$$

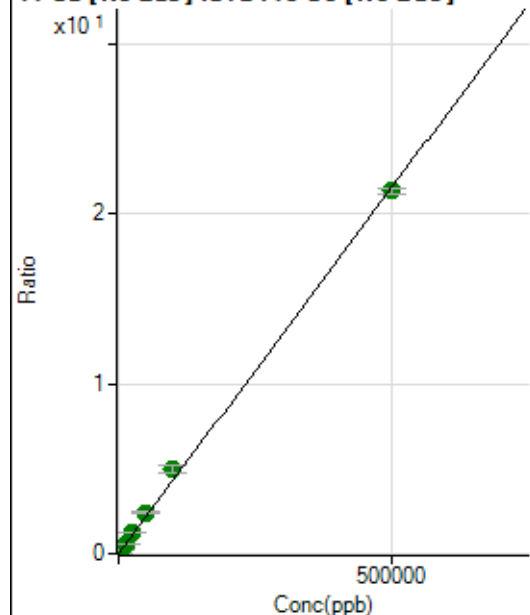
$$R = 0.9986$$

$$DL = 2.94$$

$$BEC = 7.186$$

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	15104.66	0.0024	P	1.6
2	☐	500.000	532.768	158673.97	0.0253	P	1.4
3	☐	5000.000	5691.446	1572508.14	0.2473	A	2.4
4	☐	12500.000	14009.257	3903040.02	0.6053	A	0.7
5	☐	25000.000	27894.460	7783953.37	1.2029	A	0.7
6	☐	50000.000	56311.785	15661395.79	2.4260	A	1.7
7	☐	100000.00	116410.96	31474019.97	5.0127	A	8.2
8	☐	500000.00	495897.22	136821034.2	21.3459	A	1.9

$$y = 4.3040\text{E-}005 * x + 0.0024$$

$$R = 0.9994$$

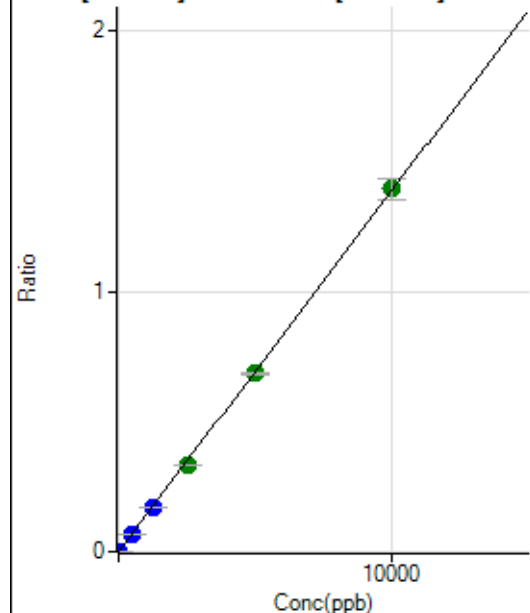
$$DL = 2.588$$

$$BEC = 54.61$$

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	150.00	0.0000	P	20.7
2	☐	5.000	4.850	4367.44	0.0007	P	1.0
3	☐	500.000	491.324	433277.92	0.0681	P	1.4
4	☐	1250.000	1208.800	1080705.42	0.1676	P	0.6
5	☐	2500.000	2408.479	2160749.22	0.3339	A	0.4
6	☐	5000.000	4938.932	4420093.28	0.6847	A	0.8
7	☐	10000.000	10058.998	8763846.03	1.3946	A	6.0
8	☐			1400.12	0.0002	P	17.0

$$y = 1.3864E-004 * x + 2.3364E-005$$

$$R = 0.9999$$

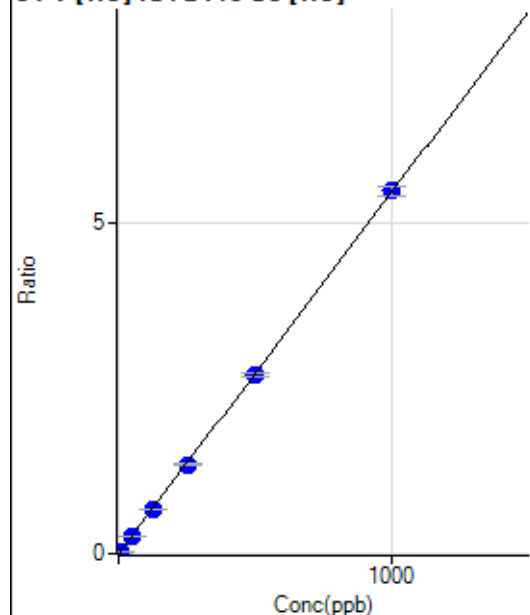
$$DL = 0.1045$$

$$BEC = 0.1685$$

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	5.56	0.0000	P	173.2
2	☐	5.000	5.120	5706.74	0.0279	P	3.2
3	☐	50.000	48.390	56812.29	0.2636	P	2.1
4	☐	125.000	121.474	141852.74	0.6618	P	2.1
5	☐	250.000	245.688	285933.67	1.3385	P	2.4
6	☐	500.000	494.432	579073.74	2.6935	P	1.4
7	☐	1000.000	1004.383	1172509.30	5.4716	P	2.5
8	☐			331.12	0.0015	P	10.2

$$y = 0.0054 * x + 2.5830E-005$$

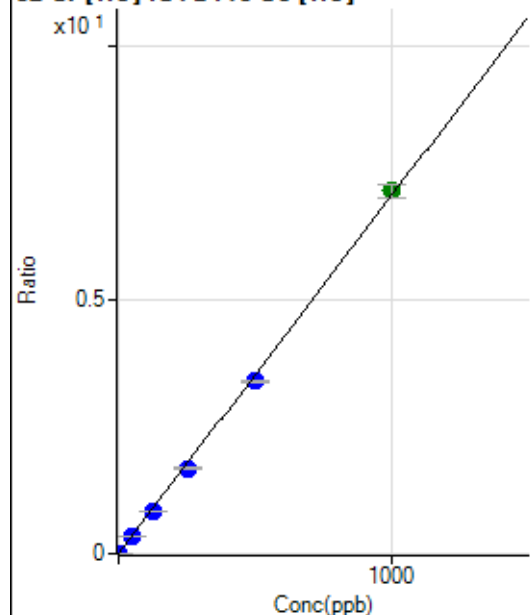
$$R = 1.0000$$

$$DL = 0.02464$$

$$BEC = 0.004742$$

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	596.69	0.0028	P	10.8
2	☐	2.000	1.965	3400.44	0.0166	P	3.8
3	☐	50.000	47.566	72767.55	0.3377	P	2.2
4	☐	125.000	118.523	179471.81	0.8373	P	1.4
5	☐	250.000	238.308	359027.89	1.6806	P	3.4
6	☐	500.000	480.970	728587.85	3.3891	P	0.3
7	☐	1000.000	1013.369	1529452.82	7.1375	A	3.8
8	☐			11611.48	0.0539	P	2.0

$$y = 0.0070 * x + 0.0028$$

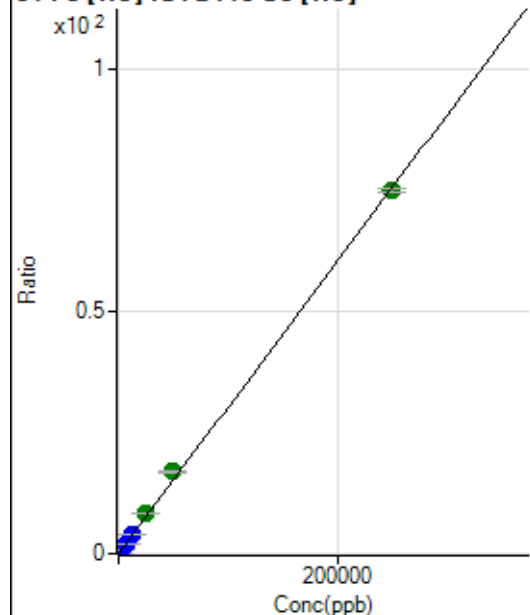
$$R = 0.9997$$

$$DL = 0.1294$$

$$BEC = 0.3988$$

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	633.36	0.0030	P	10.9
2	☐	50.000	57.659	4150.67	0.0203	P	8.4
3	☐	2500.000	2613.009	170220.96	0.7900	P	2.1
4	☐	6250.000	6604.182	426993.32	1.9920	P	1.1
5	☐	12500.000	13321.043	857722.52	4.0150	P	1.6
6	☐	25000.000	27929.654	1809203.34	8.4149	A	1.8
7	☐	50000.000	56028.609	3616670.39	16.8778	A	2.8
8	☐	250000.00	248450.27	16118667.84	74.8316	A	1.1

$$y = 3.0118E-004 * x + 0.0030$$

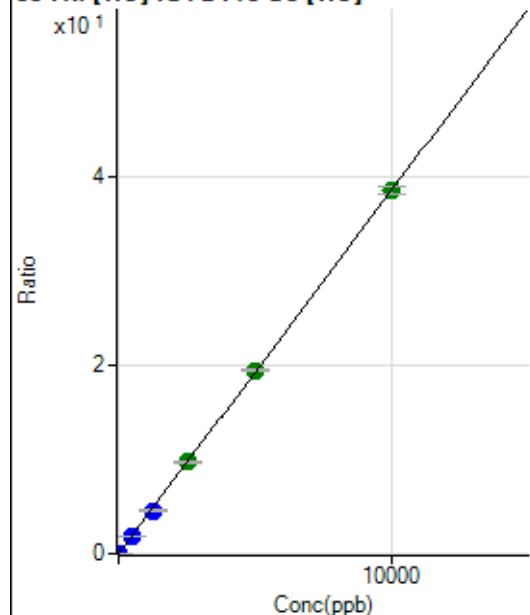
$$R = 0.9996$$

$$DL = 3.235$$

$$BEC = 9.889$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	57.78	0.0003	P	21.1
2	☐	1.000	1.007	848.92	0.0042	P	1.5
3	☐	500.000	466.236	386928.58	1.7958	P	2.6
4	☐	1250.000	1186.781	979724.70	4.5707	P	1.0
5	☐	2500.000	2515.491	2069353.20	9.6876	A	2.6
6	☐	5000.000	5037.746	4171046.12	19.4010	A	1.2
7	☐	10000.000	9986.845	8241928.21	38.4604	A	2.0
8	☐			3710.53	0.0172	P	3.9

$$y = 0.0039 * x + 2.7225E-004$$

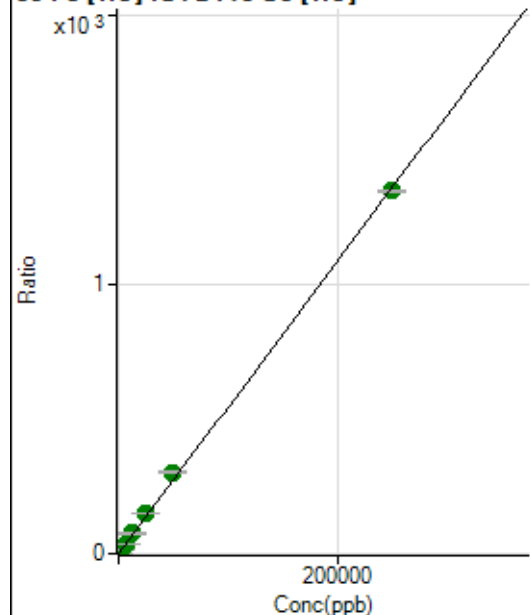
$$R = 1.0000$$

$$DL = 0.04471$$

$$BEC = 0.07069$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3806.12	0.0179	P	4.7
2	☐	50.000	54.460	63926.06	0.3129	P	3.9
3	☐	2500.000	2734.864	3195952.30	14.8329	A	2.5
4	☐	6250.000	6896.972	8012271.70	37.3794	A	1.4
5	☐	12500.000	13901.854	16091861.01	75.3254	A	2.1
6	☐	25000.000	27787.851	32367951.65	150.5470	A	1.7
7	☐	50000.000	55682.029	64641291.72	301.6521	A	2.5
8	☐	250000.00	248496.19	289950584.2	1,346.142	A	0.7

$$y = 0.0054 * x + 0.0179$$

$$R = 0.9997$$

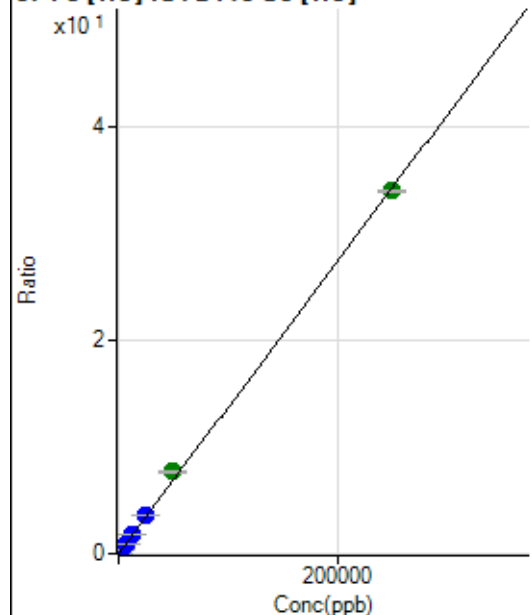
$$DL = 0.4663$$

$$BEC = 3.307$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	209.27	0.0010	P	1.4
2	☐	50.000	56.241	1764.96	0.0087	P	14.9
3	☐	2500.000	2590.111	76373.93	0.3545	P	3.5
4	☐	6250.000	6485.229	189934.45	0.8861	P	1.1
5	☐	12500.000	13070.396	381242.27	1.7849	P	3.1
6	☐	25000.000	26202.783	769064.56	3.5772	P	1.8
7	☐	50000.000	56008.288	1638286.24	7.6451	A	2.4
8	☐	250000.00	248642.76	7309762.95	33.9361	A	0.7

$$y = 1.3648\text{E-}004 * x + 9.8480\text{E-}004$$

$$R = 0.9997$$

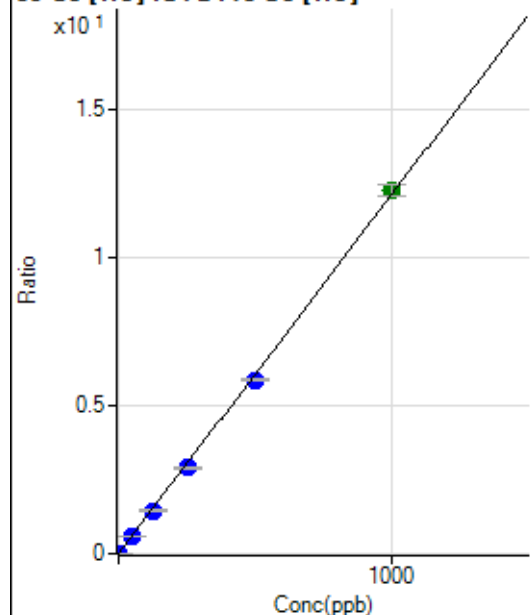
$$DL = 0.3017$$

$$BEC = 7.216$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	80.00	0.0004	P	24.9
2	☐	1.000	1.019	2600.26	0.0127	P	5.3
3	☐	50.000	47.952	125329.62	0.5817	P	4.0
4	☐	125.000	119.708	311164.39	1.4517	P	1.7
5	☐	250.000	240.933	624031.64	2.9214	P	2.3
6	☐	500.000	484.636	1263224.58	5.8759	P	1.3
7	☐	1000.000	1010.713	2625792.10	12.2539	A	3.3
8	☐			2167.97	0.0101	P	3.7

$$y = 0.0121 * x + 3.7581\text{E-}004$$

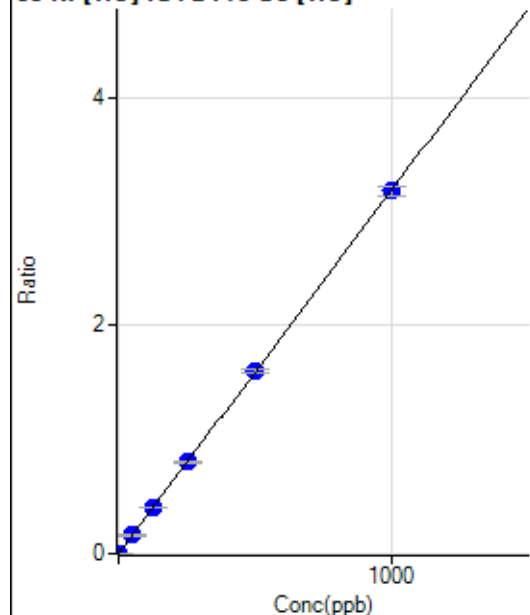
$$R = 0.9998$$

$$DL = 0.02316$$

$$BEC = 0.031$$

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	91.11	0.0004	P	35.0
2	☐	1.000	1.135	828.92	0.0040	P	5.3
3	☐	50.000	50.180	34553.16	0.1604	P	4.3
4	☐	125.000	126.396	86454.48	0.4033	P	2.5
5	☐	250.000	251.550	171387.86	0.8023	P	1.7
6	☐	500.000	502.224	344269.89	1.6014	P	1.4
7	☐	1000.000	998.317	682031.08	3.1827	P	2.3
8	☐			1973.49	0.0092	P	4.2

$$y = 0.0032 * x + 4.2881E-004$$

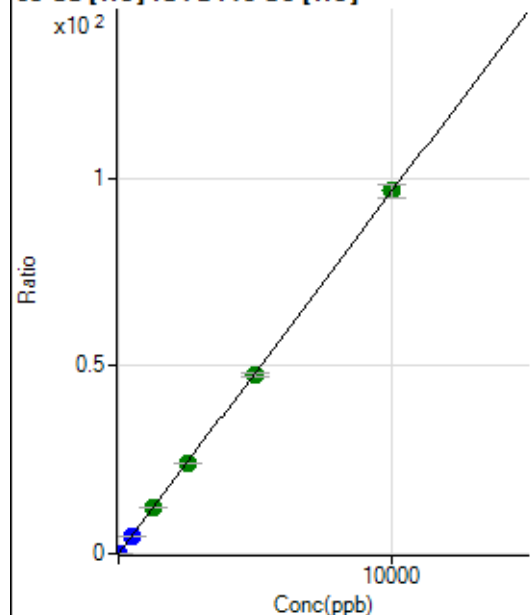
$$R = 1.0000$$

$$DL = 0.1413$$

$$BEC = 0.1345$$

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	1337.86	0.0063	P	8.5
2	☐	2.000	2.173	5564.49	0.0272	P	3.6
3	☐	500.000	476.074	989908.60	4.5940	P	2.0
4	☐	1250.000	1269.169	2622935.22	12.2367	A	2.5
5	☐	2500.000	2503.386	5154926.69	24.1303	A	1.6
6	☐	5000.000	4936.789	10229387.00	47.5799	A	2.4
7	☐	10000.000	10029.559	20711971.08	96.6566	A	3.8
8	☐			3906.14	0.0181	P	4.7

$$y = 0.0096 * x + 0.0063$$

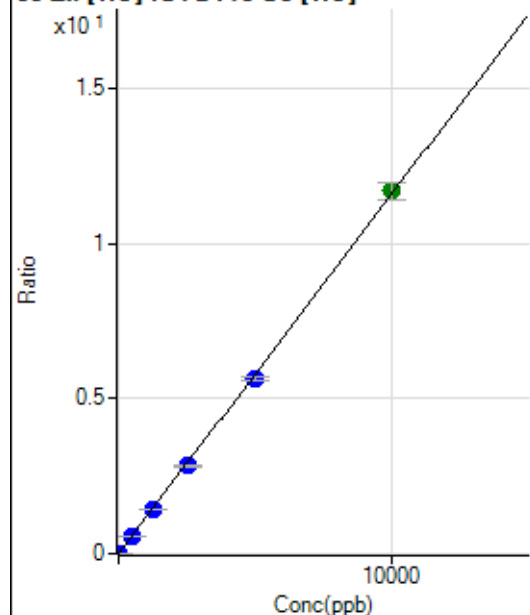
$$R = 1.0000$$

$$DL = 0.167$$

$$BEC = 0.6534$$

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	134.45	0.0006	P	12.7
2	☐	2.000	2.142	636.69	0.0031	P	6.3
3	☐	500.000	483.743	121098.77	0.5620	P	1.7
4	☐	1250.000	1228.939	305807.23	1.4267	P	1.7
5	☐	2500.000	2441.974	605499.42	2.8343	P	1.7
6	☐	5000.000	4848.153	1209623.54	5.6264	P	2.3
7	☐	10000.000	10093.876	2509830.22	11.7136	A	4.7
8	☐			10272.69	0.0477	P	3.1

$$y = 0.0012 * x + 6.3324E-004$$

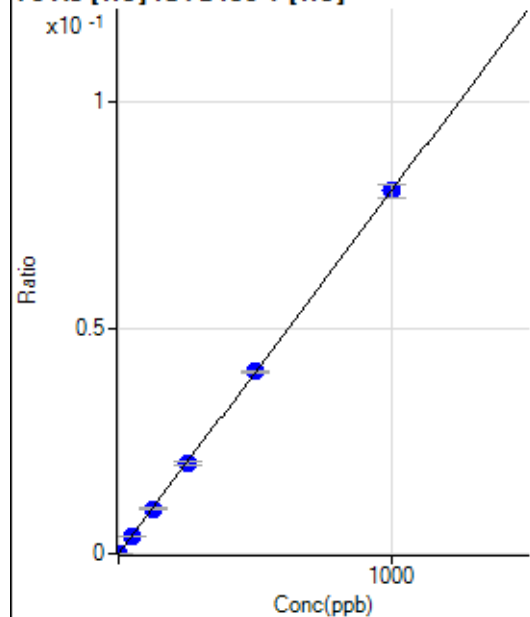
$$R = 0.9998$$

$$DL = 0.2075$$

$$BEC = 0.5457$$

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	4.00	0.0000	P	42.8
2	☐	1.000	1.098	150.68	0.0001	P	9.1
3	☐	50.000	48.599	6786.32	0.0039	P	3.4
4	☐	125.000	124.475	17300.63	0.0100	P	1.6
5	☐	250.000	248.915	34823.17	0.0200	P	3.1
6	☐	500.000	500.899	70276.45	0.0402	P	1.7
7	☐	1000.000	999.957	141036.50	0.0803	P	3.5
8	☐			28.00	0.0000	P	27.2

$$y = 8.0349E-005 * x + 2.3292E-006$$

$$R = 1.0000$$

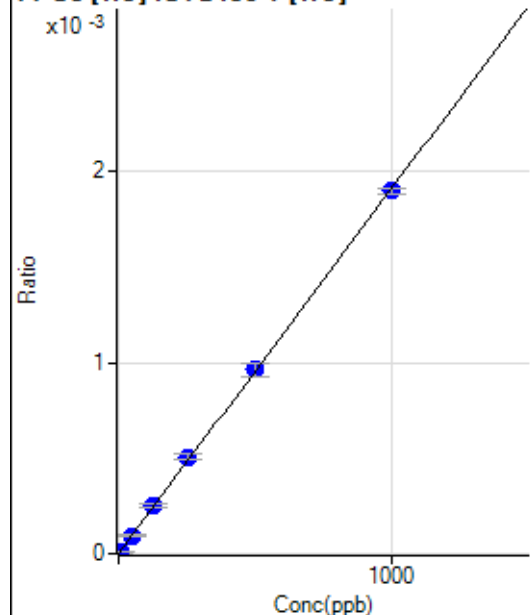
$$DL = 0.03725$$

$$BEC = 0.02899$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	5.000	5.225	17.78	0.0000	P	53.1
3	☐	50.000	48.274	161.11	0.0001	P	10.1
4	☐	125.000	129.318	427.79	0.0002	P	8.6
5	☐	250.000	265.682	883.37	0.0005	P	6.4
6	☐	500.000	503.321	1676.79	0.0010	P	7.1
7	☐	1000.000	993.964	3331.54	0.0019	P	1.8
8	☐			1.11	0.0000	P	173.2

$$y = 1.9085\text{E-}006 * x + 6.5398\text{E-}007$$

$$R = 0.9998$$

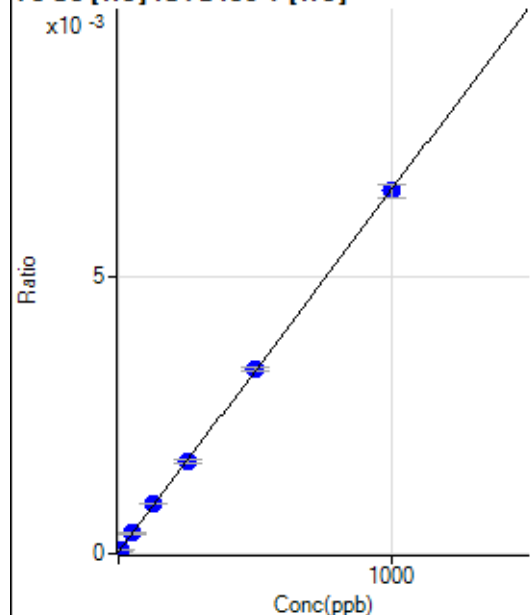
$$DL = 1.781$$

$$BEC = 0.3427$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	52.67	0.0000	P	22.7
2	☐	5.000	5.198	107.34	0.0001	P	4.0
3	☐	50.000	51.422	637.75	0.0004	P	2.9
4	☐	125.000	132.271	1549.25	0.0009	P	1.3
5	☐	250.000	251.601	2918.27	0.0017	P	3.7
6	☐	500.000	503.928	5807.12	0.0033	P	2.3
7	☐	1000.000	996.655	11495.19	0.0065	P	3.7
8	☐			57.34	0.0000	P	9.7

$$y = 6.5401\text{E-}006 * x + 3.0663\text{E-}005$$

$$R = 1.0000$$

$$DL = 3.198$$

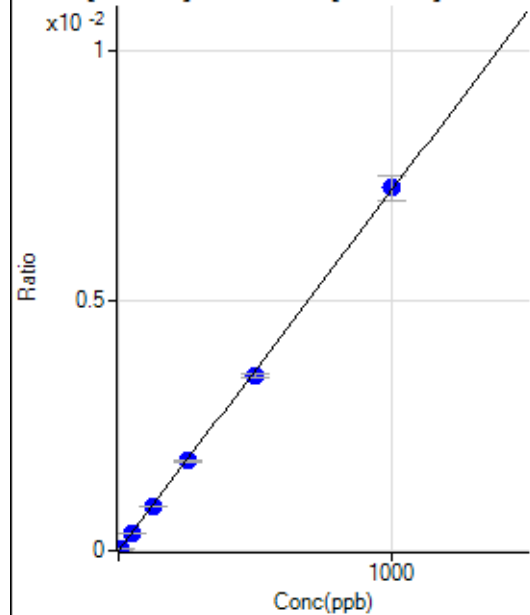
$$BEC = 4.688$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			28883.51		P	1.3
2	☐			28524.48		P	2.5
3	☐			28106.90		P	0.5
4	☐			28354.67		P	1.5
5	☐			28877.75		P	4.1
6	☐			29690.62		P	2.6
7	☐			30113.83		P	2.6
8	☐			31592.34		P	2.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-5.84	0.0000	P	-658.
2	☐	5.000	5.246	549.53	0.0000	P	6.3
3	☐	50.000	50.140	5335.90	0.0004	P	1.7
4	☐	125.000	124.001	13442.57	0.0009	P	1.5
5	☐	250.000	248.681	27116.28	0.0018	P	1.9
6	☐	500.000	486.889	53804.84	0.0035	P	2.3
7	☐	1000.000	1007.002	105993.62	0.0073	P	7.2
8	☐			125.82	0.0000	P	11.2

$$y = 7.2123E-006 * x - 3.8973E-007$$

$$R = 0.9999$$

$$DL = 1.068$$

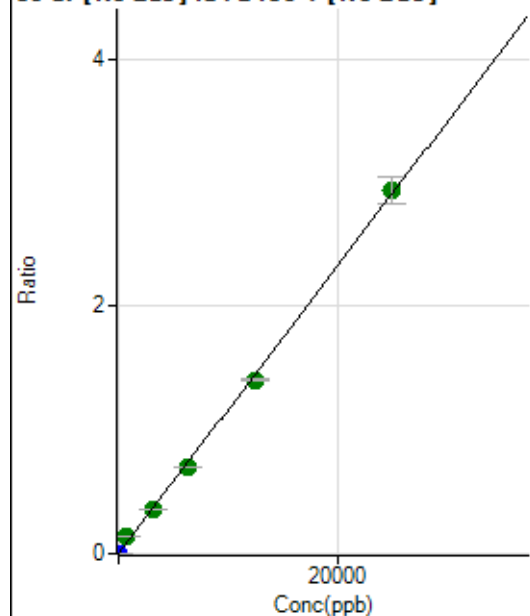
$$BEC = -0.05404$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			333.71		P	8.1
2	☐			316.22		P	0.8
3	☐			328.30		P	7.1
4	☐			318.71		P	2.2
5	☐			339.96		P	5.6
6	☐			324.96		P	3.1
7	☐			356.63		P	5.6
8	☐			324.13		P	6.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	472.24	0.0000	P	5.3
2	☐	1.000	1.015	2200.23	0.0001	P	5.7
3	☐	625.000	1215.971	2088226.91	0.1414	A	3.1
4	☐	3125.000	3039.978	5313903.98	0.3534	A	1.2
5	☐	6250.000	6002.063	10550432.87	0.6977	A	0.9
6	☐	12500.000	12094.678	21544213.68	1.4058	A	1.7
7	☐	25000.000	25260.499	42843119.36	2.9361	A	7.6
8	☐			11681.09	0.0008	P	6.1

$$y = 1.1623E-004 * x + 3.1802E-005$$

$$R = 0.9994$$

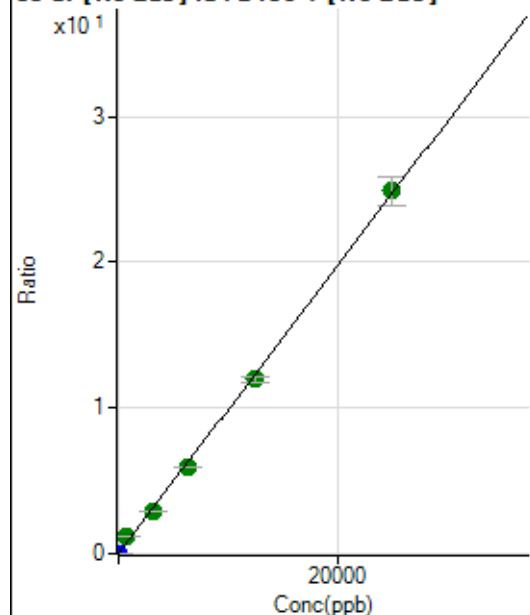
$$DL = 0.04376$$

$$BEC = 0.2736$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	241.68	0.0000	P	65.7
2	☐	1.000	0.983	14471.76	0.0010	P	1.4
3	☐	625.000	1208.336	17601506.65	1.1914	A	0.7
4	☐	3125.000	2991.097	44352527.03	2.9492	A	0.2
5	☐	6250.000	6003.461	89514944.36	5.9193	A	0.9
6	☐	12500.000	12139.188	183397940.2	11.9690	A	2.8
7	☐	25000.000	25244.195	363208849.7	24.8902	A	7.6
8	☐			92080.48	0.0061	P	5.2

$$y = 9.8598\text{E-}004 * x + 1.6275\text{E-}005$$

$$R = 0.9994$$

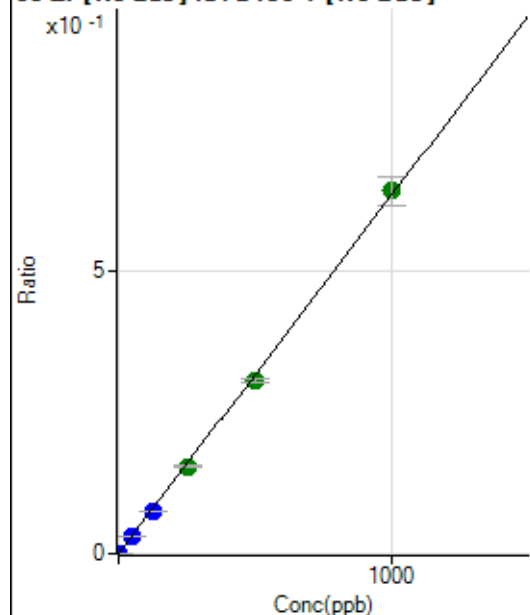
$$DL = 0.03253$$

$$BEC = 0.01651$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	555.58	0.0000	P	11.6
2	☐	1.000	0.925	9142.12	0.0006	P	2.7
3	☐	50.000	47.231	442167.77	0.0299	P	2.2
4	☐	125.000	118.086	1124494.48	0.0748	P	0.4
5	☐	250.000	242.106	2317858.95	0.1533	A	1.8
6	☐	500.000	481.797	4674018.29	0.3050	A	1.5
7	☐	1000.000	1012.078	9347080.94	0.6406	A	7.7
8	☐			2372.54	0.0002	P	3.4

$$y = 6.3290\text{E-}004 * x + 3.7414\text{E-}005$$

$$R = 0.9997$$

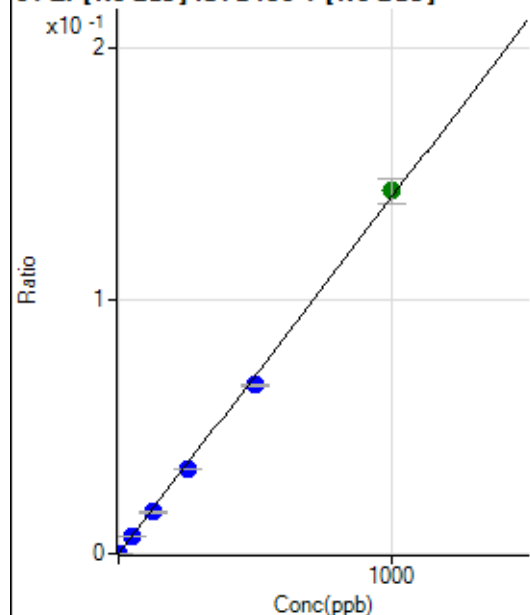
$$DL = 0.02057$$

$$BEC = 0.05911$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	83.34	0.0000	P	26.5
2	☐	1.000	0.869	1877.95	0.0001	P	5.6
3	☐	50.000	47.153	98070.55	0.0066	P	1.5
4	☐	125.000	116.155	245781.98	0.0163	P	1.7
5	☐	250.000	236.342	502850.91	0.0333	P	0.7
6	☐	500.000	472.518	1018820.91	0.0665	P	0.9
7	☐	1000.000	1018.403	2091266.17	0.1433	A	6.7
8	☐			447.24	0.0000	P	6.6

$$y = 1.4067\text{E-}004 * x + 5.6126\text{E-}006$$

$$R = 0.9993$$

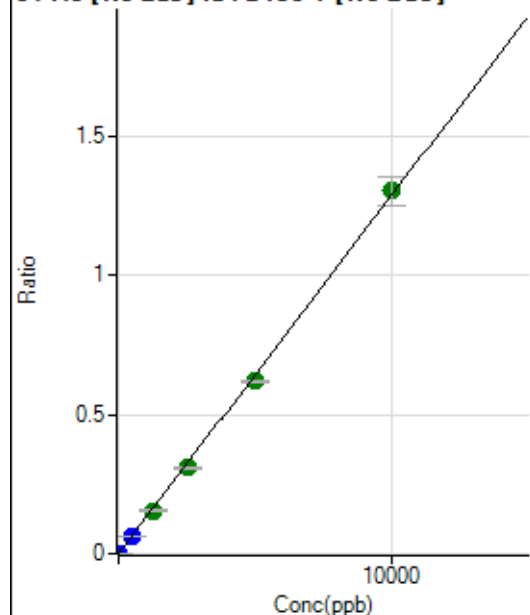
$$DL = 0.0317$$

$$BEC = 0.0399$$

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	158.34	0.0000	P	5.2
2	☐	5.000	5.534	10629.40	0.0007	P	1.6
3	☐	500.000	478.648	911617.59	0.0617	P	1.6
4	☐	1250.000	1204.812	2335776.03	0.1553	A	1.6
5	☐	2500.000	2403.681	4685602.62	0.3099	A	2.0
6	☐	5000.000	4809.346	9501812.89	0.6200	A	1.4
7	☐	10000.000	10126.123	19045904.77	1.3054	A	7.8
8	☐			4384.20	0.0003	P	13.0

$$y = 1.2891\text{E-}004 * x + 1.0663\text{E-}005$$

$$R = 0.9997$$

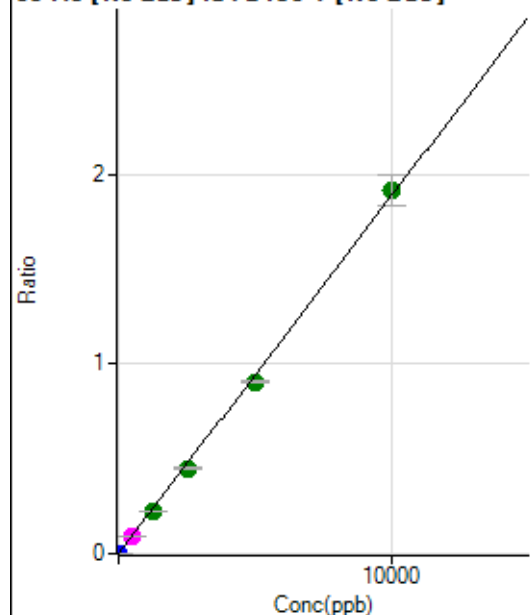
$$DL = 0.01281$$

$$BEC = 0.08272$$

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	22.22	0.0000	P	21.8
2	☐	5.000	4.705	13067.57	0.0009	P	1.8
3	☐	500.000	481.882	1344393.95	0.0910	M	2.6
4	☐	1250.000	1197.973	3402167.68	0.2262	A	0.7
5	☐	2500.000	2387.855	6818995.81	0.4509	A	2.0
6	☐	5000.000	4793.734	13874076.53	0.9053	A	1.5
7	☐	10000.000	10138.578	27926749.93	1.9146	A	8.5
8	☐			5807.26	0.0004	P	16.5

$$y = 1.8885\text{E-}004 * x + 1.4970\text{E-}006$$

$$R = 0.9996$$

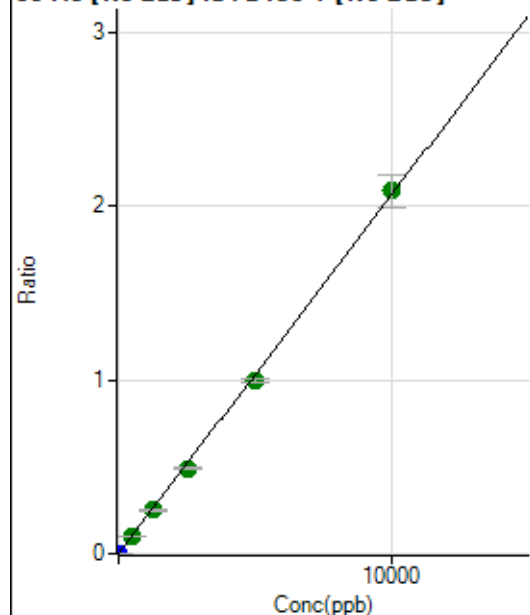
$$DL = 0.00518$$

$$BEC = 0.007927$$

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	94.45	0.0000	P	48.4
2	☐	5.000	4.696	14304.94	0.0010	P	0.6
3	☐	500.000	491.959	1498101.39	0.1014	A	1.4
4	☐	1250.000	1213.265	3761487.19	0.2501	A	1.2
5	☐	2500.000	2377.027	7409750.69	0.4900	A	1.3
6	☐	5000.000	4841.871	15294514.40	0.9981	A	2.4
7	☐	10000.000	10114.802	30399664.22	2.0850	A	9.4
8	☐			10290.30	0.0007	P	8.4

$$y = 2.0613\text{E-}004 * x + 6.3564\text{E-}006$$

$$R = 0.9997$$

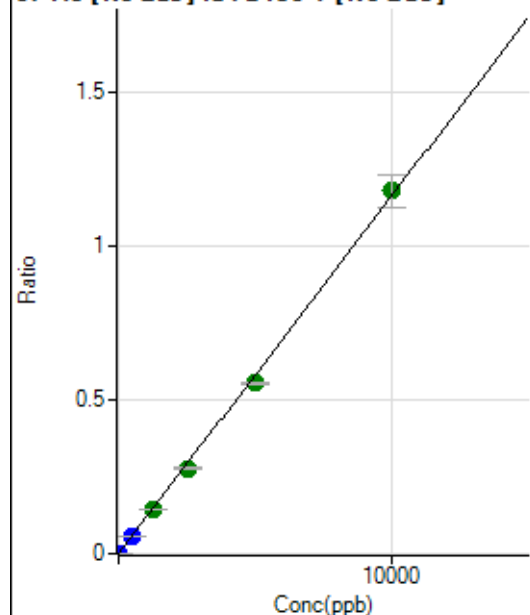
$$DL = 0.0448$$

$$BEC = 0.03084$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.55	0.0000	P	68.8
2	☐	5.000	4.876	8355.50	0.0006	P	4.8
3	☐	500.000	480.986	826639.94	0.0560	P	0.4
4	☐	1250.000	1220.832	2135807.12	0.1420	A	0.6
5	☐	2500.000	2379.459	4185977.35	0.2768	A	1.2
6	☐	5000.000	4771.603	8507534.13	0.5551	A	1.2
7	☐	10000.000	10148.930	17218991.88	1.1806	A	8.7
8	☐			3617.39	0.0002	P	24.3

$$y = 1.1633\text{E-}004 * x + 2.0583\text{E-}006$$

$$R = 0.9995$$

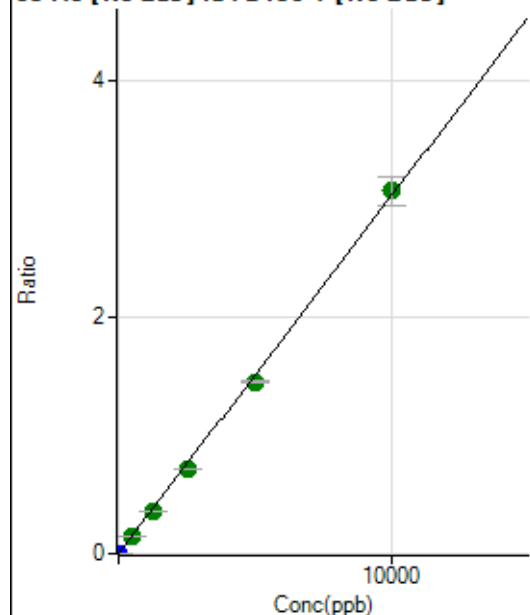
$$DL = 0.0365$$

$$BEC = 0.01769$$

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	63.89	0.0000	P	39.7
2	☐	5.000	4.635	20635.30	0.0014	P	0.1
3	☐	500.000	489.174	2184955.99	0.1479	A	0.7
4	☐	1250.000	1200.696	5459625.77	0.3630	A	0.6
5	☐	2500.000	2366.115	10817785.57	0.7154	A	1.8
6	☐	5000.000	4803.715	22257936.61	1.4524	A	1.7
7	☐	10000.000	10138.318	44725281.21	3.0653	A	7.7
8	☐			8842.04	0.0006	P	16.1

$$y = 3.0235\text{E-}004 * x + 4.3012\text{E-}006$$

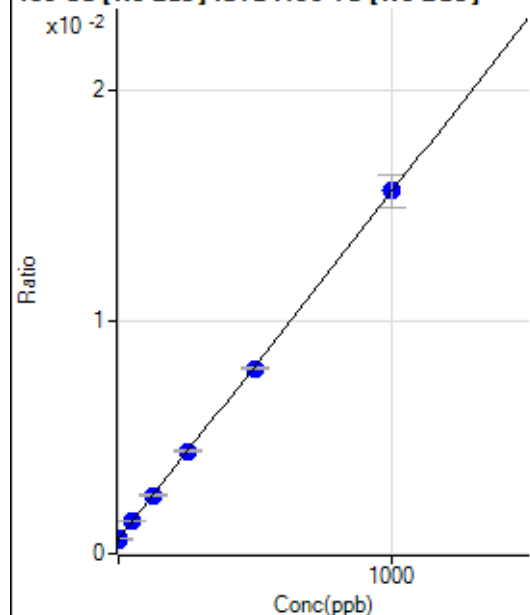
$$R = 0.9996$$

$$DL = 0.01694$$

$$BEC = 0.01423$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5804.16	0.0006	P	2.9
2	☐	1.000	3.752	6218.24	0.0007	P	5.2
3	☐	50.000	53.528	13231.74	0.0014	P	1.4
4	☐	125.000	126.513	23949.25	0.0025	P	2.9
5	☐	250.000	253.028	42176.79	0.0044	P	1.8
6	☐	500.000	492.588	77714.68	0.0080	P	1.5
7	☐	1000.000	1002.581	145844.13	0.0156	P	8.8
8	☐			6143.20	0.0007	P	5.1

$$y = 1.4990\text{E-}005 * x + 6.1723\text{E-}004$$

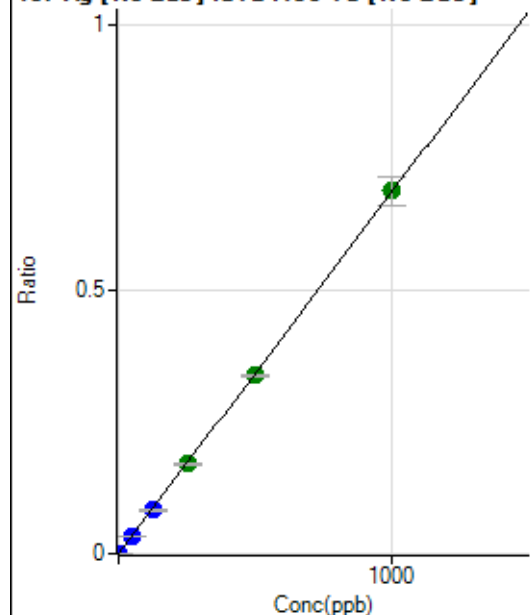
$$R = 0.9999$$

$$DL = 3.618$$

$$BEC = 41.18$$

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	116.67	0.0000	P	24.9
2	☐	1.000	1.015	6523.94	0.0007	P	5.2
3	☐	50.000	49.162	313316.30	0.0336	P	0.9
4	☐	125.000	119.948	781371.75	0.0820	P	2.5
5	☐	250.000	247.679	1619463.84	0.1693	A	1.0
6	☐	500.000	493.278	3274890.05	0.3372	A	1.4
7	☐	1000.000	1004.615	6404493.81	0.6867	A	7.8
8	☐			2422.51	0.0003	P	4.4

$$y = 6.8357\text{E-}004 * x + 1.2389\text{E-}005$$

$$R = 1.0000$$

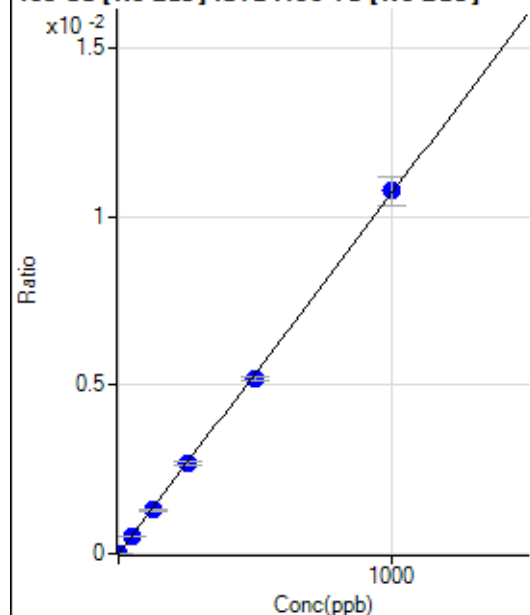
$$DL = 0.01352$$

$$BEC = 0.01812$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	49.0
2	☐	1.000	0.902	97.22	0.0000	P	17.4
3	☐	50.000	47.869	4778.67	0.0005	P	5.1
4	☐	125.000	121.150	12350.14	0.0013	P	2.8
5	☐	250.000	249.586	25519.61	0.0027	P	4.2
6	☐	500.000	486.504	50520.15	0.0052	P	2.1
7	☐	1000.000	1007.439	100443.77	0.0108	P	7.9
8	☐			76.39	0.0000	P	9.4

$$y = 1.0691\text{E-}005 * x + 8.8237\text{E-}007$$

$$R = 0.9999$$

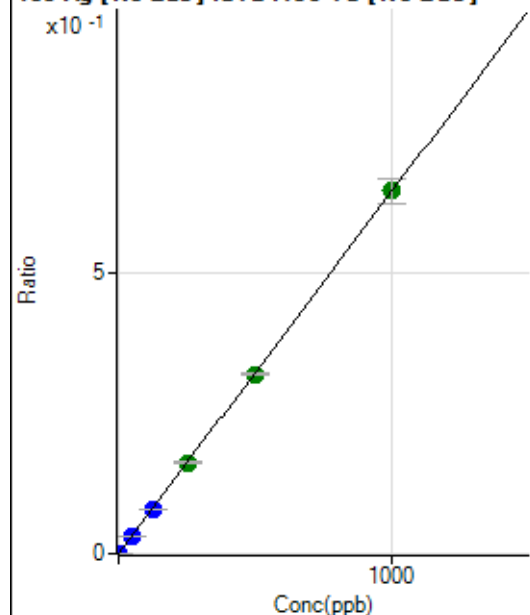
$$DL = 0.1213$$

$$BEC = 0.08253$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	61.8
2	☐	1.000	1.059	6309.96	0.0007	P	6.9
3	☐	50.000	49.825	298635.72	0.0320	P	1.4
4	☐	125.000	120.938	741065.38	0.0778	P	1.4
5	☐	250.000	251.586	1546994.73	0.1618	A	2.7
6	☐	500.000	495.142	3092273.46	0.3184	A	0.8
7	☐	1000.000	1002.549	6014817.32	0.6447	A	6.7
8	☐			2241.92	0.0002	P	5.4

$$y = 6.4303\text{E-}004 * x + 2.9381\text{E-}006$$

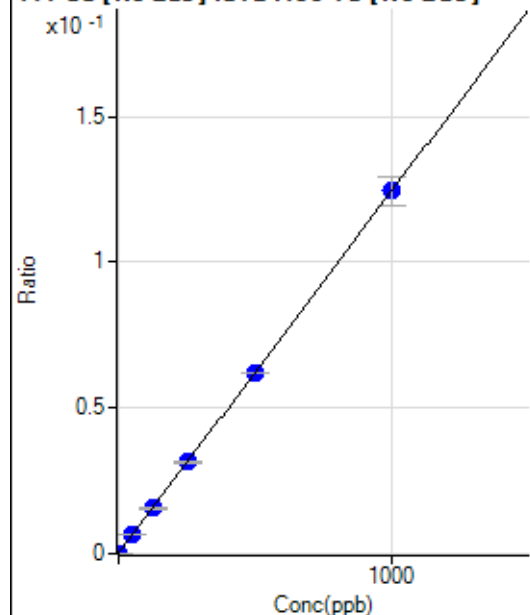
$$R = 1.0000$$

$$DL = 0.008475$$

$$BEC = 0.004569$$

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	1160.55	0.0001	P	3.2
2	☐	1.000	1.108	2410.39	0.0003	P	2.1
3	☐	50.000	51.549	60812.12	0.0065	P	2.7
4	☐	125.000	124.529	148523.40	0.0156	P	1.6
5	☐	250.000	251.745	300156.97	0.0314	P	1.2
6	☐	500.000	497.111	600728.29	0.0619	P	0.3
7	☐	1000.000	1000.990	1160258.95	0.1244	P	7.9
8	☐			1614.07	0.0002	P	6.1

$$y = 1.2418\text{E-}004 * x + 1.2342\text{E-}004$$

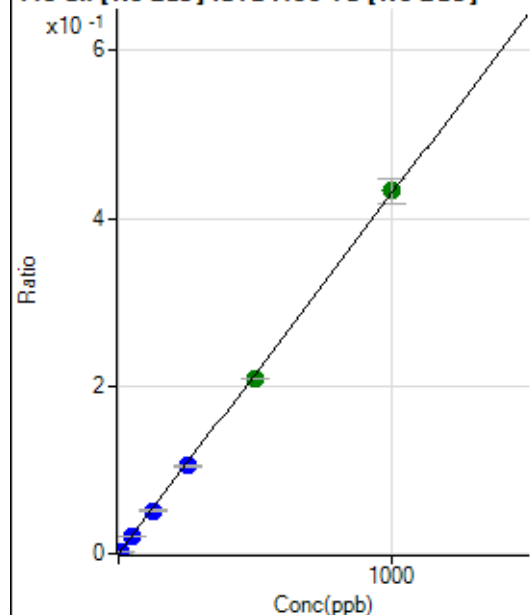
$$R = 1.0000$$

$$DL = 0.0962$$

$$BEC = 0.9939$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	563.92	0.0001	P	12.2
2	☐	5.000	4.828	19686.82	0.0021	P	3.6
3	☐	50.000	48.545	194680.32	0.0209	P	2.1
4	☐	125.000	119.421	488799.38	0.0513	P	1.5
5	☐	250.000	243.527	999925.79	0.1045	P	0.9
6	☐	500.000	487.707	2032867.25	0.2093	A	0.3
7	☐	1000.000	1008.535	4038011.72	0.4328	A	6.5
8	☐			2011.33	0.0002	P	4.0

$$y = 4.2905\text{E-}004 * x + 6.0014\text{E-}005$$

$$R = 0.9999$$

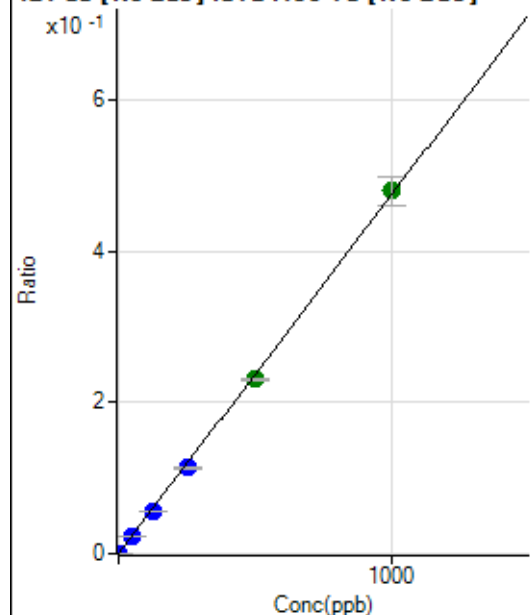
$$DL = 0.05111$$

$$BEC = 0.1399$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.55	0.0000	P	16.7
2	☐	2.000	1.985	8728.01	0.0009	P	4.3
3	☐	50.000	48.254	213489.59	0.0229	P	0.4
4	☐	125.000	118.632	536487.34	0.0563	P	3.2
5	☐	250.000	240.318	1090827.21	0.1141	P	1.8
6	☐	500.000	485.007	2235670.36	0.2302	A	1.5
7	☐	1000.000	1010.800	4474105.00	0.4798	A	7.8
8	☐			2294.70	0.0002	P	8.1

$$y = 4.7463\text{E-}004 * x + 3.2521\text{E-}006$$

$$R = 0.9998$$

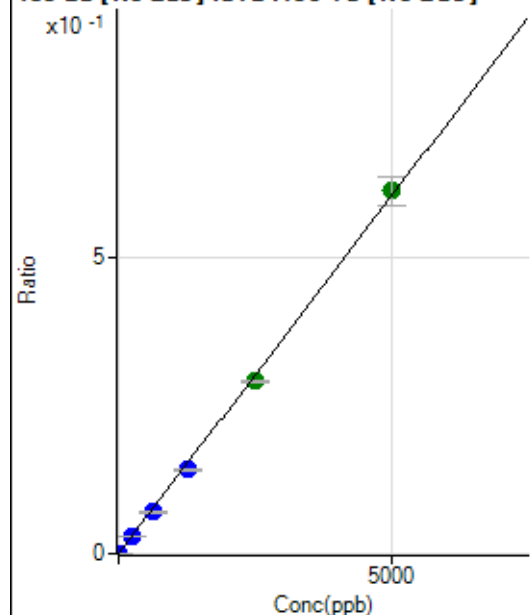
$$DL = 0.003424$$

$$BEC = 0.006852$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.45	0.0000	P	26.0
2	☐	10.000	9.249	10320.85	0.0011	P	4.1
3	☐	250.000	237.616	267217.28	0.0287	P	1.2
4	☐	625.000	584.134	671493.63	0.0705	P	2.3
5	☐	1250.000	1170.742	1350746.48	0.1412	P	1.9
6	☐	2500.000	2407.237	2820499.39	0.2904	A	1.2
7	☐	5000.000	5071.925	5706629.34	0.6119	A	7.7
8	☐			3500.55	0.0004	P	3.8

$$y = 1.2065\text{E-}004 * x + 2.0717\text{E-}006$$

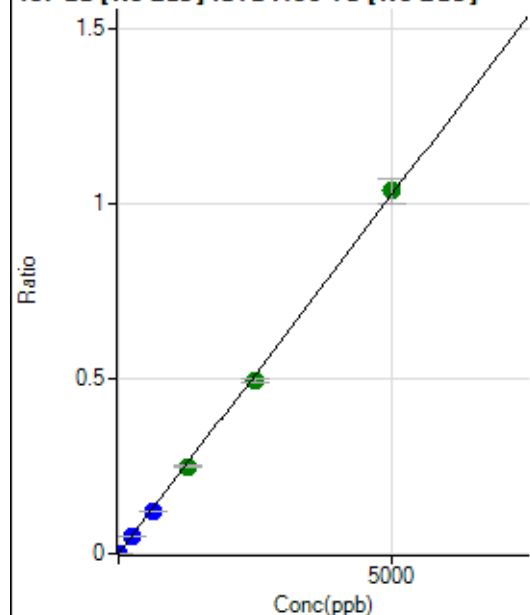
$$R = 0.9996$$

$$DL = 0.0134$$

$$BEC = 0.01717$$

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	22.22	0.0000	P	22.5
2	☐	10.000	9.700	18376.90	0.0020	P	3.1
3	☐	250.000	240.649	459749.12	0.0493	P	1.0
4	☐	625.000	588.767	1149875.56	0.1207	P	2.4
5	☐	1250.000	1217.675	2386404.35	0.2496	A	3.6
6	☐	2500.000	2408.613	4794504.67	0.4937	A	1.8
7	☐	5000.000	5058.772	9672208.72	1.0369	A	7.2
8	☐			5492.95	0.0006	P	7.8

$$y = 2.0497E-004 * x + 2.3664E-006$$

$$R = 0.9997$$

$$DL = 0.007795$$

$$BEC = 0.01155$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	114.5
2	☐			11.11		P	124.9
3	☐			37.78		P	27.0
4	☐			84.45		P	50.8
5	☐			140.00		P	17.2
6	☐			293.35		P	26.2
7	☐			655.59		P	9.7
8	☐			24.45		P	15.8

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			2.22		P	173.2
3	☐			4.45		P	86.6
4	☐			3.33		P	100.1
5	☐			13.33		P	90.2
6	☐			15.55		P	44.6
7	☐			44.44		P	31.2
8	☐			8.89		P	78.1

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	21.6
2	☐			11.11		P	86.6
3	☐			25.00		P	66.7
4	☐			44.44		P	28.6
5	☐			83.34		P	20.0
6	☐			180.56		P	32.7
7	☐			383.35		P	4.3
8	☐			838.94		P	4.9

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐			3.33		P	100.1
3	☐			10.00		P	88.2
4	☐			18.89		P	27.0
5	☐			36.66		P	31.5
6	☐			96.67		P	9.1
7	☐			150.00		P	13.3
8	☐			436.68		P	9.3

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83.34		P	36.1
2	☐			91.67		P	39.6
3	☐			88.89		P	19.5
4	☐			100.00		P	16.7
5	☐			141.67		P	21.2
6	☐			186.12		P	18.1
7	☐			319.46		P	8.0
8	☐			1100.08		P	23.9

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			113.34		P	0.0
2	☐			117.78		P	13.4
3	☐			121.11		P	16.6
4	☐			138.89		P	15.2
5	☐			170.00		P	16.8
6	☐			183.34		P	6.6
7	☐			230.01		P	5.2
8	☐			635.58		P	12.6

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			69.45		P	18.3
2	☐			58.33		P	28.6
3	☐			55.56		P	22.9
4	☐			63.89		P	7.5
5	☐			83.34		P	20.0
6	☐			80.56		P	21.5
7	☐			100.00		P	28.9
8	☐			127.78		P	32.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	52.9
2	☐			26.67		P	43.3
3	☐			26.67		P	37.5
4	☐			25.56		P	71.8
5	☐			27.78		P	27.7
6	☐			41.11		P	28.5
7	☐			27.78		P	6.9
8	☐			55.55		P	19.3

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	27.0
2	☐			75.00		P	11.1
3	☐			41.67		P	20.0
4	☐			61.11		P	28.4
5	☐			94.45		P	10.2
6	☐			105.56		P	16.4
7	☐			147.23		P	8.6
8	☐			394.46		P	15.3

172 Yb [He] No available calibration points

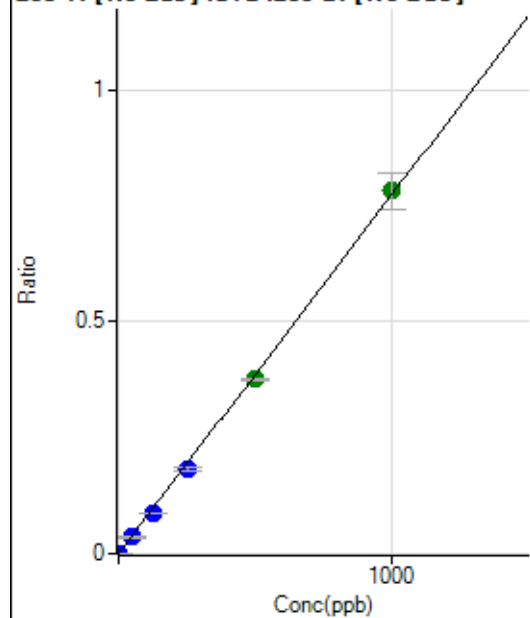
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	37.8
2	☐			20.37		P	41.7
3	☐			38.89		P	24.7
4	☐			33.33		P	50.0
5	☐			40.74		P	43.8
6	☐			48.15		P	43.7
7	☐			68.52		P	38.3
8	☐			201.86		P	24.0

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1719.61		P	16.9
2	☐			1575.14		P	8.3
3	☐			2494.75		P	9.4
4	☐			3736.75		P	3.0
5	☐			5793.09		P	4.5
6	☐			9798.37		P	1.1
7	☐			18524.67		P	3.6
8	☐			2044.66		P	2.7

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8842.01		P	3.9
2	☐			8767.89		P	7.4
3	☐			9277.50		P	0.9
4	☐			10024.34		P	2.0
5	☐			11123.38		P	1.8
6	☐			13449.66		P	1.2
7	☐			17274.59		P	1.7
8	☐			9249.71		P	3.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	91.67	0.0000	P	32.4
2	☐	1.000	0.899	3972.95	0.0007	P	4.2
3	☐	50.000	45.815	196839.78	0.0355	P	1.3
4	☐	125.000	114.184	487755.91	0.0883	P	0.7
5	☐	250.000	235.613	1011229.12	0.1822	P	3.6
6	☐	500.000	486.422	2086800.57	0.3762	A	0.6
7	☐	1000.000	1011.947	4218512.33	0.7827	A	10.0
8	☐			955.61	0.0002	P	10.6

$$y = 7.7342\text{E-}004 * x + 1.6644\text{E-}005$$

$$R = 0.9997$$

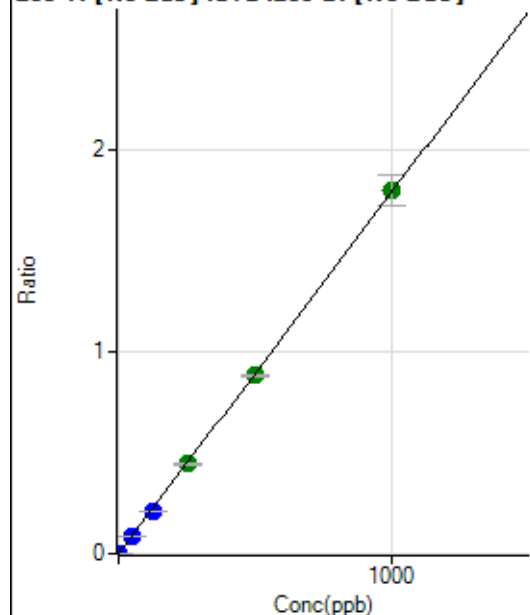
$$DL = 0.02091$$

$$BEC = 0.02152$$

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	155.56	0.0000	P	13.6
2	☐	1.000	0.923	9378.67	0.0017	P	4.7
3	☐	50.000	46.833	466176.96	0.0840	P	2.4
4	☐	125.000	118.378	1171835.90	0.2122	P	1.8
5	☐	250.000	248.045	2467401.23	0.4446	A	3.2
6	☐	500.000	494.096	4912649.07	0.8857	A	1.1
7	☐	1000.000	1004.427	9711147.96	1.8004	A	8.5
8	☐			2066.89	0.0004	P	8.9

$$y = 0.0018 * x + 2.8180E-005$$

$$R = 1.0000$$

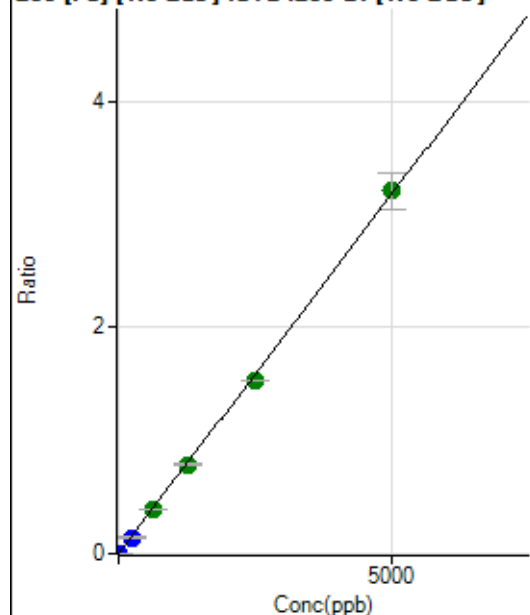
$$DL = 0.006409$$

$$BEC = 0.01572$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	429.64	0.0001	P	13.4
2	☐	1.000	0.898	3609.83	0.0006	P	1.9
3	☐	250.000	225.631	795251.16	0.1432	P	2.1
4	☐	625.000	612.162	2145398.46	0.3885	A	2.0
5	☐	1250.000	1238.165	4360262.89	0.7857	A	2.6
6	☐	2500.000	2410.528	8483969.29	1.5296	A	0.9
7	☐	5000.000	5050.518	17269501.19	3.2047	A	10.1
8	☐			3791.42	0.0008	P	9.5

$$y = 6.3451E-004 * x + 7.7809E-005$$

$$R = 0.9998$$

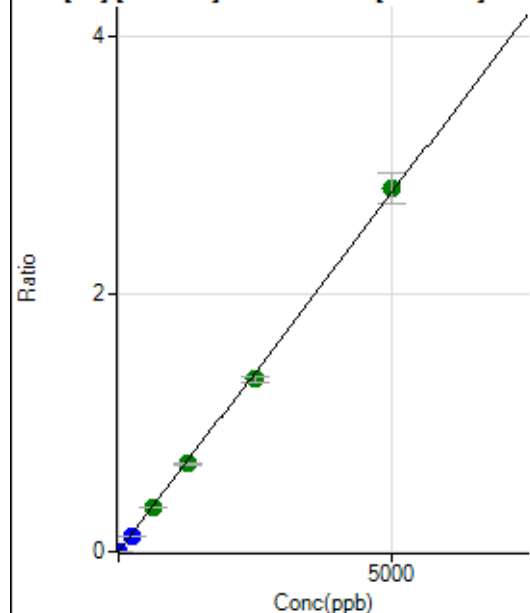
$$DL = 0.04928$$

$$BEC = 0.1226$$

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	403.72	0.0001	P	11.7
2	☐	1.000	0.853	3052.26	0.0005	P	5.8
3	☐	250.000	223.927	692717.75	0.1248	P	2.7
4	☐	625.000	609.985	1876399.00	0.3398	A	1.8
5	☐	1250.000	1226.761	3792246.87	0.6833	A	2.8
6	☐	2500.000	2403.446	7423182.63	1.3386	A	3.1
7	☐	5000.000	5057.267	15194078.12	2.8166	A	8.3
8	☐			2867.04	0.0006	P	3.1

$$y = 5.5692E-004 * x + 7.3005E-005$$

$$R = 0.9997$$

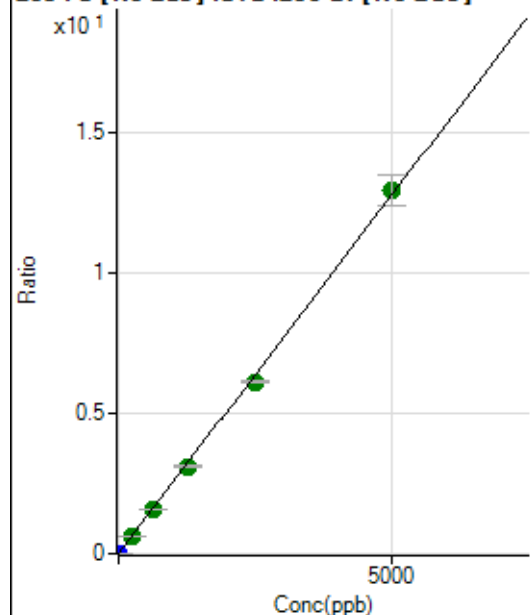
$$DL = 0.0459$$

$$BEC = 0.1311$$

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	1696.37	0.0003	P	4.0
2	☐	1.000	0.886	14294.12	0.0026	P	2.8
3	☐	250.000	231.713	3278378.70	0.5905	A	2.4
4	☐	625.000	611.013	8596123.83	1.5567	A	1.1
5	☐	1250.000	1220.545	17255269.22	3.1092	A	2.5
6	☐	2500.000	2394.710	33832361.35	6.1000	A	1.1
7	☐	5000.000	5062.671	69555819.03	12.8957	A	8.6
8	☐			13858.78	0.0028	P	6.0

$$y = 0.0025 * x + 3.0731E-004$$

$$R = 0.9997$$

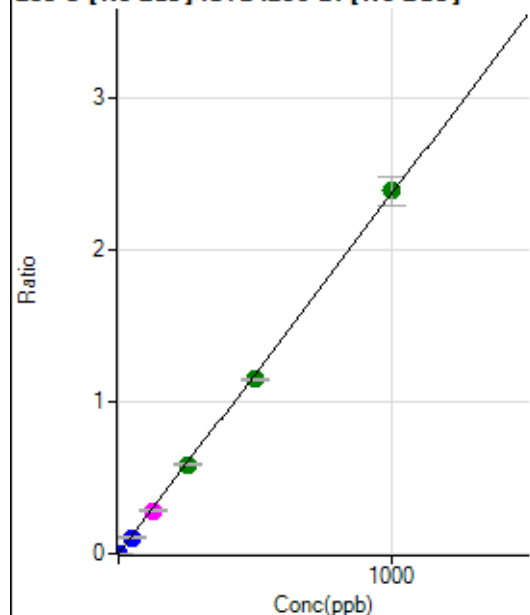
$$DL = 0.01435$$

$$BEC = 0.1206$$

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	66.67	0.0000	P	23.8
2	☐	1.000	0.929	12328.53	0.0022	P	3.3
3	☐	50.000	45.268	595053.53	0.1072	P	2.9
4	☐	125.000	119.422	1561047.20	0.2827	M	3.2
5	☐	250.000	248.166	3261211.92	0.5875	A	1.5
6	☐	500.000	485.483	6375317.67	1.1494	A	1.1
7	☐	1000.000	1008.651	12883517.91	2.3880	A	8.1
8	☐			1041.78	0.0002	P	25.6

$$y = 0.0024 * x + 1.2111E-005$$

$$R = 0.9998$$

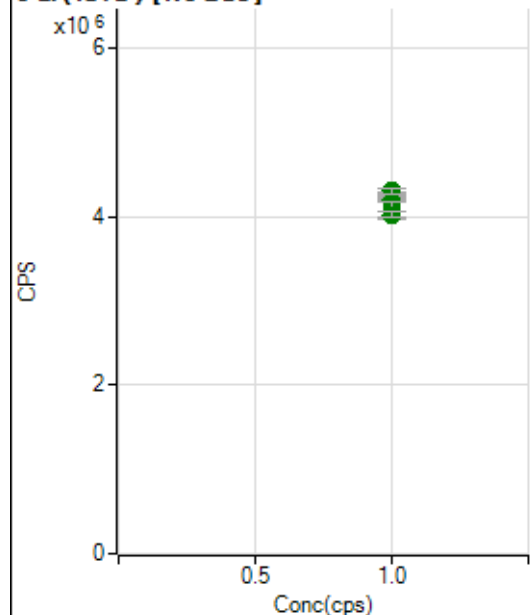
$$DL = 0.003657$$

$$BEC = 0.005116$$

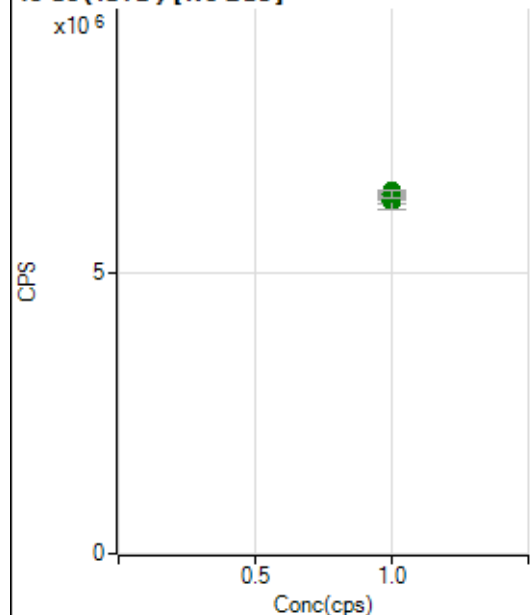
Weight: <None>

Min Conc: 0

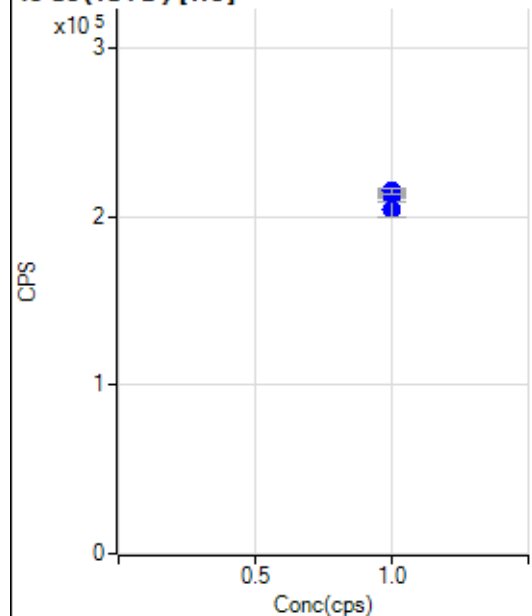
6 Li (ISTD) [No Gas]



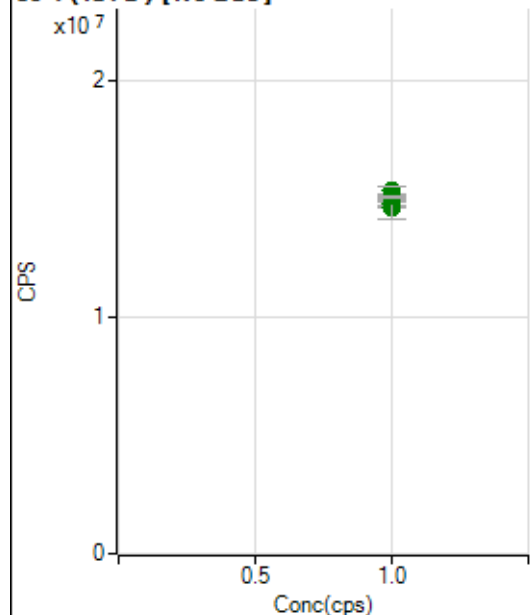
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4267536.88		A	1.2
2	☐	1.000		4190837.04		A	0.6
3	☐	1.000		4198550.86		A	1.0
4	☐	1.000		4259694.42		A	1.4
5	☐	1.000		4262880.12		A	0.4
6	☐	1.000		4309861.90		A	1.6
7	☐	1.000		4069381.20		A	5.2
8	☐	1.000		4025181.57		A	1.8

45 Sc (ISTD) [No Gas]

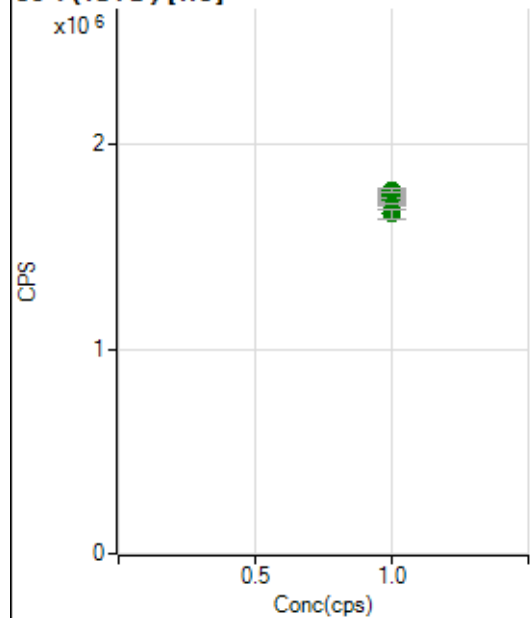
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6426540.95		A	0.7
2	☐	1.000		6277141.30		A	1.4
3	☐	1.000		6359075.95		A	0.7
4	☐	1.000		6448037.33		A	1.1
5	☐	1.000		6470722.13		A	0.5
6	☐	1.000		6455307.40		A	0.7
7	☐	1.000		6297884.77		A	5.5
8	☐	1.000		6409512.13		A	2.0

45 Sc (ISTD) [He]

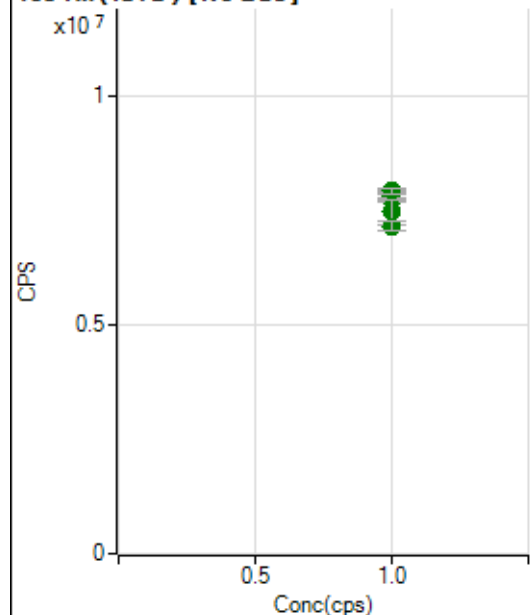
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		212501.47		P	1.1
2	☐	1.000		204522.14		P	4.7
3	☐	1.000		215515.70		P	1.5
4	☐	1.000		214351.87		P	0.3
5	☐	1.000		213651.01		P	1.3
6	☐	1.000		214976.57		P	1.1
7	☐	1.000		214314.53		P	0.7
8	☐	1.000		215403.37		P	1.1

89 Y (ISTD) [No Gas]

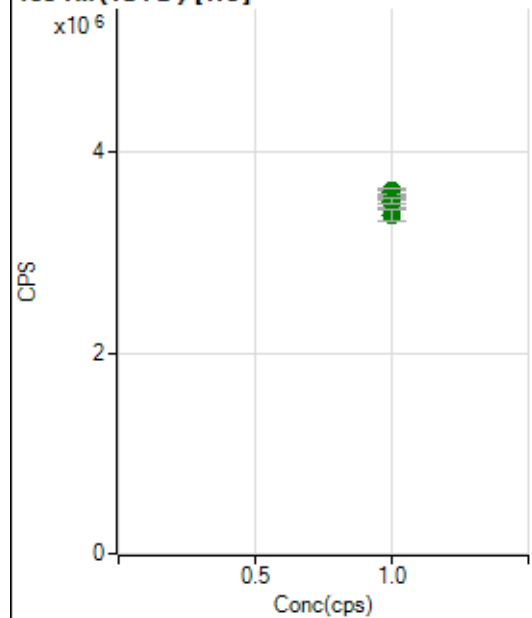
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14849111.86		A	0.2
2	☐	1.000		14681028.81		A	0.8
3	☐	1.000		14773044.36		A	1.0
4	☐	1.000		15038910.19		A	1.0
5	☐	1.000		15123683.66		A	1.2
6	☐	1.000		15328580.47		A	2.0
7	☐	1.000		14642613.95		A	6.9
8	☐	1.000		15076897.41		A	0.5

89 Y (ISTD) [He]

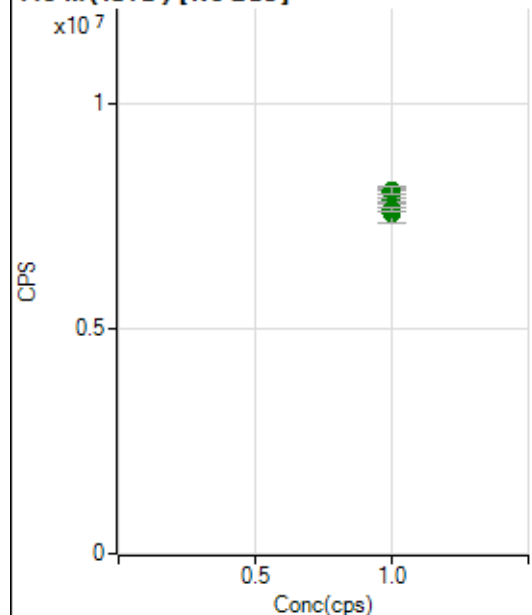
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1713631.88		A	1.7
2	☐	1.000		1661248.58		A	2.6
3	☐	1.000		1737414.99		A	1.4
4	☐	1.000		1729570.30		A	1.0
5	☐	1.000		1741551.00		A	2.2
6	☐	1.000		1746409.06		A	3.5
7	☐	1.000		1755912.30		A	1.5
8	☐	1.000		1775549.26		A	1.1

103 Rh (ISTD) [No Gas]

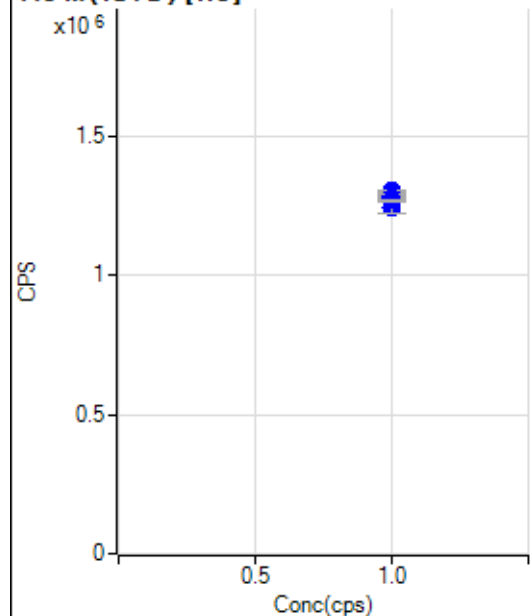
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7733250.43		A	0.7
2	☐	1.000		7728047.13		A	1.0
3	☐	1.000		7913787.24		A	0.5
4	☐	1.000		7815297.57		A	1.9
5	☐	1.000		7822971.10		A	1.6
6	☐	1.000		7932015.54		A	1.5
7	☐	1.000		7464122.56		A	7.2
8	☐	1.000		7165875.07		A	2.5

103 Rh (ISTD) [He]

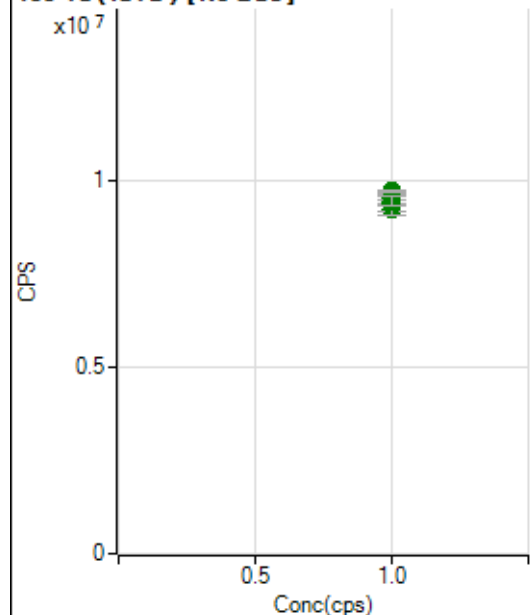
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3598144.98		A	1.4
2	☐	1.000		3513507.24		A	4.0
3	☐	1.000		3617211.30		A	1.6
4	☐	1.000		3588961.82		A	1.9
5	☐	1.000		3605309.43		A	2.2
6	☐	1.000		3552252.59		A	1.6
7	☐	1.000		3518046.30		A	1.3
8	☐	1.000		3377166.23		A	3.4

115 In (ISTD) [No Gas]

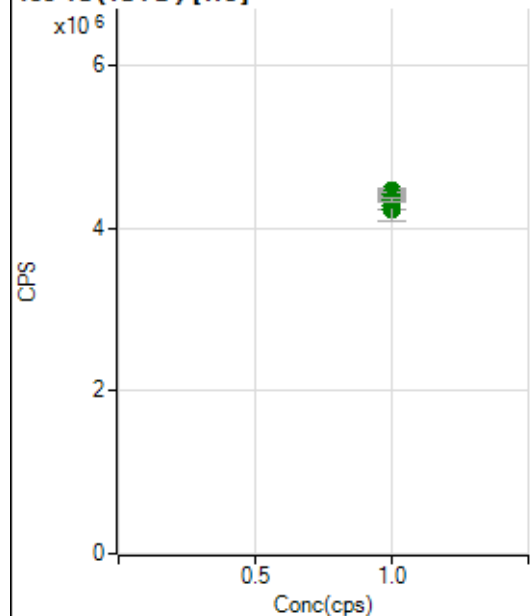
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8037430.99		A	0.7
2	☐	1.000		7887812.19		A	1.2
3	☐	1.000		7896035.57		A	3.1
4	☐	1.000		7853983.52		A	1.2
5	☐	1.000		8020394.71		A	2.8
6	☐	1.000		8070656.12		A	2.1
7	☐	1.000		7573621.66		A	6.0
8	☐	1.000		7668560.22		A	1.1

115 In (ISTD) [He]

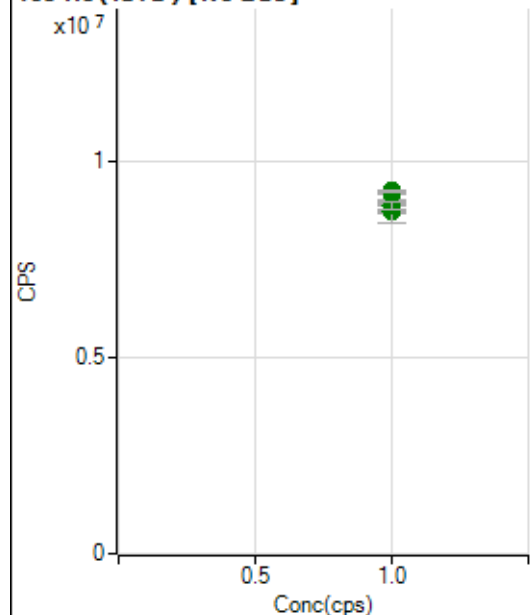
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1281026.48		P	0.7
2	☐	1.000		1242617.96		P	3.3
3	☐	1.000		1294284.56		P	0.5
4	☐	1.000		1282752.60		P	0.8
5	☐	1.000		1301869.75		P	0.6
6	☐	1.000		1291093.25		P	1.9
7	☐	1.000		1278272.03		P	1.4
8	☐	1.000		1266859.96		P	0.6

159 Tb (ISTD) [No Gas]

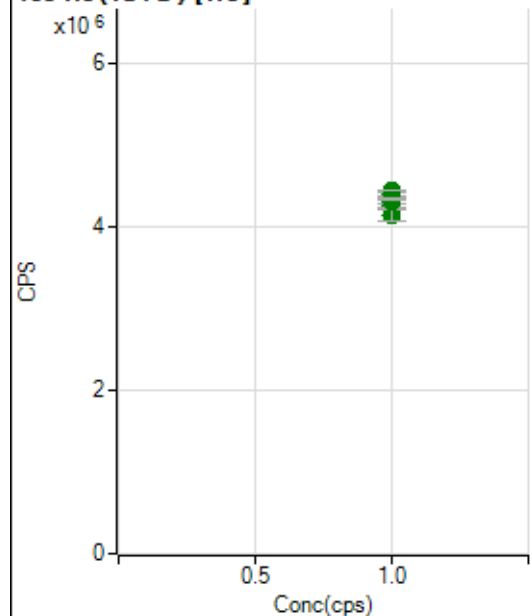
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9405830.28		A	1.3
2	☐	1.000		9234919.72		A	1.6
3	☐	1.000		9320299.44		A	0.5
4	☐	1.000		9529874.44		A	1.3
5	☐	1.000		9564954.72		A	1.6
6	☐	1.000		9712262.91		A	0.8
7	☐	1.000		9357694.72		A	6.6
8	☐	1.000		9436981.87		A	2.6

159 Tb (ISTD) [He]

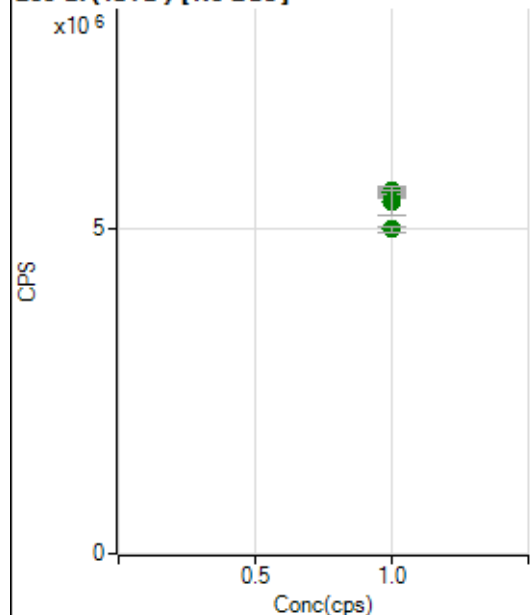
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4276252.68		A	1.8
2	☐	1.000		4215357.19		A	5.8
3	☐	1.000		4337421.85		A	0.7
4	☐	1.000		4395586.15		A	0.8
5	☐	1.000		4454200.49		A	1.2
6	☐	1.000		4425501.53		A	1.9
7	☐	1.000		4425136.57		A	1.1
8	☐	1.000		4341229.69		A	1.0

165 Ho (ISTD) [No Gas]

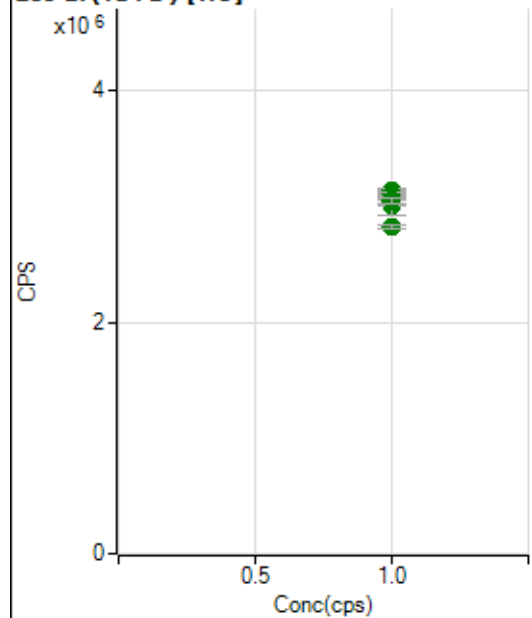
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9054782.67		A	2.4
2	☐	1.000		8731927.37		A	0.6
3	☐	1.000		8924604.63		A	1.0
4	☐	1.000		8975142.04		A	1.4
5	☐	1.000		8955631.45		A	0.5
6	☐	1.000		9267718.35		A	0.4
7	☐	1.000		8757774.76		A	6.6
8	☐	1.000		8881411.14		A	2.1

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4252422.85		A	0.8
2	☐	1.000		4136525.91		A	3.7
3	☐	1.000		4315454.17		A	1.5
4	☐	1.000		4309955.77		A	1.1
5	☐	1.000		4395891.91		A	0.8
6	☐	1.000		4395430.11		A	2.0
7	☐	1.000		4434546.81		A	0.1
8	☐	1.000		4329135.46		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5522303.60		A	2.0
2	☐	1.000		5575178.39		A	2.2
3	☐	1.000		5553529.43		A	2.3
4	☐	1.000		5522121.17		A	1.0
5	☐	1.000		5551861.72		A	2.4
6	☐	1.000		5546714.85		A	1.2
7	☐	1.000		5420450.13		A	8.6
8	☐	1.000		4990051.73		A	1.7

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3079726.86		A	1.9
2	☐	1.000		3000204.57		A	4.8
3	☐	1.000		3115325.61		A	1.9
4	☐	1.000		3046552.63		A	2.5
5	☐	1.000		3132527.14		A	1.8
6	☐	1.000		3098754.95		A	1.0
7	☐	1.000		3050593.50		A	1.4
8	☐	1.000		2822677.25		A	1.6

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8041923MS.b
Acq. Date-Time 2023-04-19 13:33:29
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		13499	134994.42			1.759	5.000
24		104064	1040640.03			1.733	5.000
25		13809	138088.18			1.795	5.000
26		15564	155640.10			1.659	5.000
59		79456	794555.69			1.959	5.000
113		7672	76715.06			1.334	5.000
115		99131	991312.85			2.769	5.000
206		18713	187125.14			1.208	5.000
207		16923	169234.24			1.172	5.000
208		40322	403216.45			1.339	5.000
220		0	4.60			17.860	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

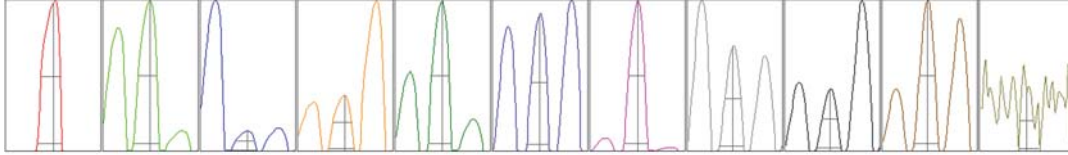
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	13472	13501	13122	13719	13684
24	102800	103696	102155	105010	106659
25	13781	13845	13403	13987	14027
26	15581	15618	15123	15770	15727
59	78947	79485	77129	80655	81062
113	7745	7700	7504	7757	7651
115	103283	98180	95756	99766	98673
206	18567	18620	18469	18958	18948
207	16832	16907	16649	17138	17090
208	40133	40044	39726	40592	41113

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	1	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	23465.48	9.05	8.90 - 9.10	
24	183658.27	24.00	23.90 - 24.10	
25	24215.63	25.00	24.90 - 25.10	
26	27910.43	26.00	25.90 - 26.10	
59	151410.57	59.00	58.90 - 59.10	
113	15628.69	113.00	112.90 - 113.10	
115	203349.65	115.05	114.90 - 115.10	
206	37887.19	205.95	205.90 - 206.10	
207	34499.06	206.95	206.90 - 207.10	
208	83118.06	207.95	207.90 - 208.10	
220	0.55	220.00	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.774	0.900	
24	0.59	0.814	0.900	
25	0.60	0.785	0.900	
26	0.59	0.800	0.900	
59	0.55	0.737	0.900	
113	0.50	0.690	0.900	
115	0.50	0.757	0.900	
206	0.50	0.769	0.900	
207	0.49	0.772	0.900	
208	0.49	0.773	0.900	
220	0.43	0.644		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.84 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.4 V	Deflect	14.8 V
Extract 2	-200.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-100 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	150 V		

QP Parameters

Mass Gain	124	Axis Gain	0.9991	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-1.0 mm
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EM

Discriminator	4.5 mV	Analog HV	2316 V	Pulse HV	1698 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		16432	164316.69			2.306	
89		13249	132493.51			1.772	
205		14803	148034.85			2.265	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	16633	16445	15810	16456	16814
89	13513	13317	12908	13133	13376
205	15107	14651	14306	14861	15092

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.84 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.4 V	Deflect	4.2 V
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US EPA Tune Check Report

Extract 2	-200.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-100 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	124	Axis Gain	0.9991	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	0.00		

Hardware Settings

Torch

Torch H	1.2 mm	Torch V	-1.0 mm
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EM

Discriminator	4.5 mV	Analog HV	2316 V	Pulse HV	1698 V
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