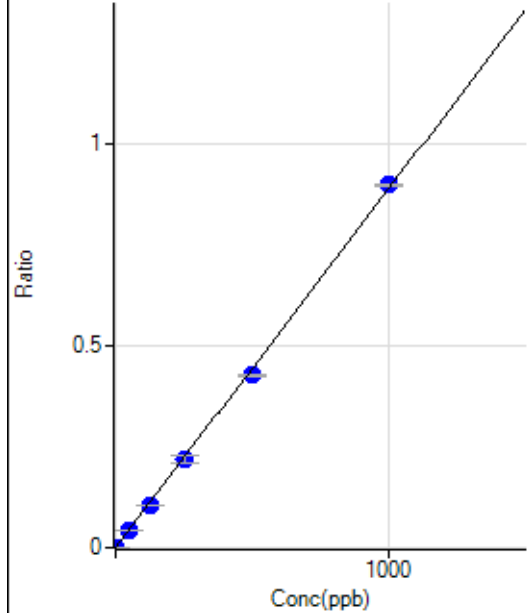


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7011421MS.b\
Analysis File: P7011421MS.batch.bin
DA Date-Time: 2021-01-15 12:09:00
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-01-14 13:27:35
2	004CALS.d	S02	2021-01-14 13:30:45
3	005CALS.d	S03	2021-01-14 13:33:53
4	006CALS.d	S04	2021-01-14 13:37:03
5	007CALS.d	S05	2021-01-14 13:40:10
6	008CALS.d	S06	2021-01-14 13:43:16
7	009CALS.d	S07	2021-01-14 13:46:17
8	010CALS.d	S08	2021-01-14 13:49:15

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11.11	0.0000	P	1.7
2	☐	1.000	0.875	898.19	0.0008	P	10.6
3	☐	50.000	47.340	49736.76	0.0421	P	2.4
4	☐	125.000	117.670	125718.42	0.1045	P	0.2
5	☐	250.000	246.489	261131.55	0.2189	P	10.5
6	☐	500.000	480.739	533905.14	0.4270	P	0.7
7	☐	1000.000	1011.558	1076426.23	0.8985	P	0.6
8	☐			279.64	0.0002	P	9.5

$$y = 8.8820E-004 * x + 9.6926E-006$$

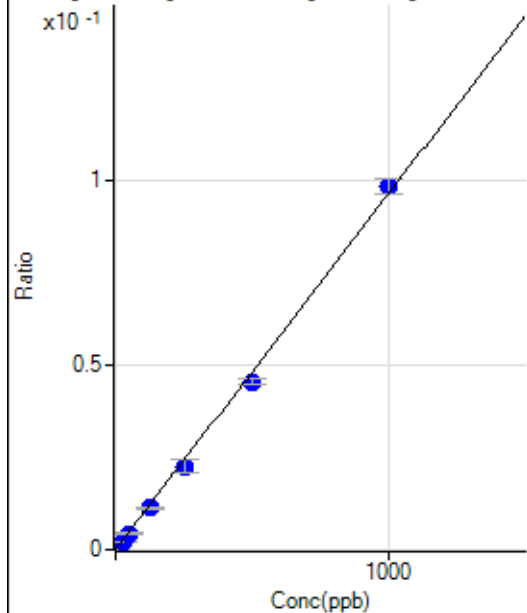
$$R = 0.9997$$

$$DL = 0.0005669$$

$$BEC = 0.01091$$

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	36.11	0.0000	P	47.1
2	☐	25.000	22.568	2511.38	0.0022	P	6.6
3	☐	50.000	45.438	5206.59	0.0044	P	3.5
4	☐	125.000	116.515	13520.20	0.0112	P	7.2
5	☐	250.000	234.342	26871.53	0.0226	P	14.5
6	☐	500.000	471.504	56762.37	0.0454	P	3.2
7	☐	1000.000	1019.512	117545.27	0.0981	P	4.1
8	☐			3619.97	0.0029	P	14.6

$$y = 9.6202E-005 * x + 3.1342E-005$$

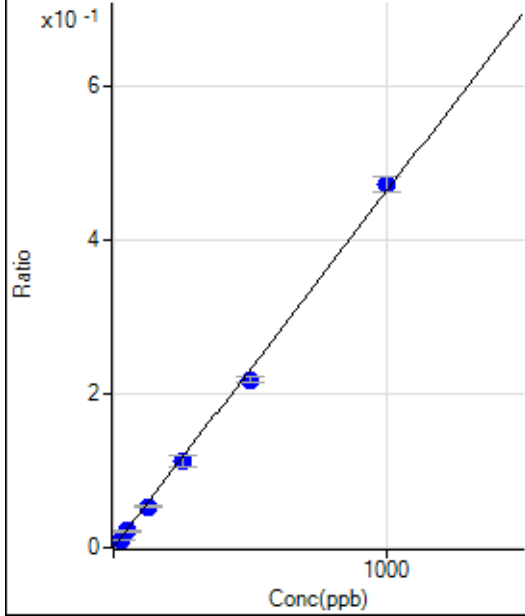
$$R = 0.9993$$

$$DL = 0.4603$$

$$BEC = 0.3258$$

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	155.56	0.0001	P	5.3
2	☐	25.000	21.781	11677.00	0.0102	P	6.8
3	☐	50.000	46.381	25611.04	0.0217	P	4.1
4	☐	125.000	113.945	63756.90	0.0530	P	5.0
5	☐	250.000	242.402	133979.09	0.1126	P	14.6
6	☐	500.000	471.451	273717.92	0.2189	P	3.9
7	☐	1000.000	1017.817	566005.00	0.4724	P	4.3
8	☐			18055.61	0.0147	P	11.9

$$y = 4.6398\text{E-}004 * x + 1.3565\text{E-}004$$

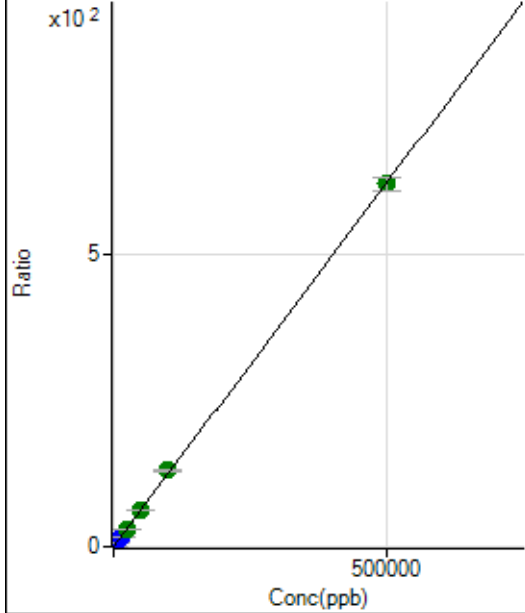
$$R = 0.9994$$

$$DL = 0.04655$$

$$BEC = 0.2924$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	12449.86	0.0539	P	2.0
2	☐	500.000	505.948	159427.17	0.6847	P	0.4
3	☐	5000.000	5147.747	1570922.78	6.4722	P	12.2
4	☐	12500.000	13308.102	3898262.85	16.6467	P	0.2
5	☐	25000.000	23582.703	7151656.58	29.4573	A	8.4
6	☐	50000.000	50816.619	14539929.14	63.4131	A	1.0
7	☐	100000.00	104820.20	29712152.75	130.7458	A	1.6
8	☐	500000.00	499003.47	146043640.7	622.2216	A	3.5

$$y = 0.0012 * x + 0.0539$$

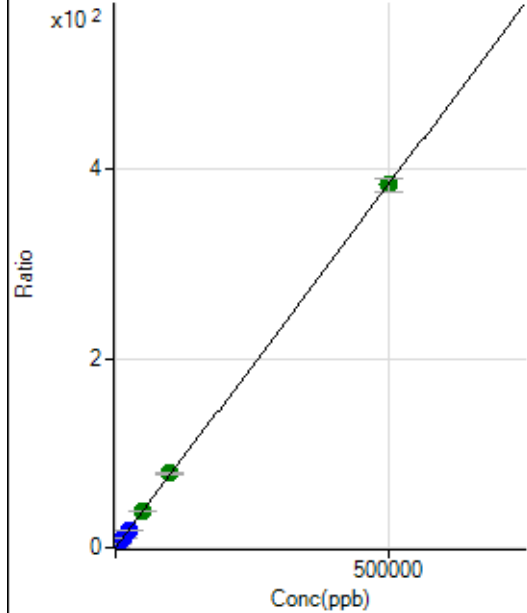
$$R = 0.9999$$

$$DL = 2.551$$

$$BEC = 43.2$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	83.34	0.0004	P	19.8
2	☐	500.000	486.089	87032.34	0.3738	P	0.5
3	☐	5000.000	4975.796	927955.48	3.8229	P	12.2
4	☐	12500.000	12784.212	2299916.39	9.8214	P	0.6
5	☐	25000.000	24135.947	4503002.84	18.5421	P	7.8
6	☐	50000.000	49608.046	8738271.20	38.1103	A	0.8
7	☐	100000.00	102454.57	17886243.11	78.7080	A	1.6
8	☐	500000.00	499584.63	90075270.76	383.7913	A	3.8

$$y = 7.6822\text{E-}004 * x + 3.6044\text{E-}004$$

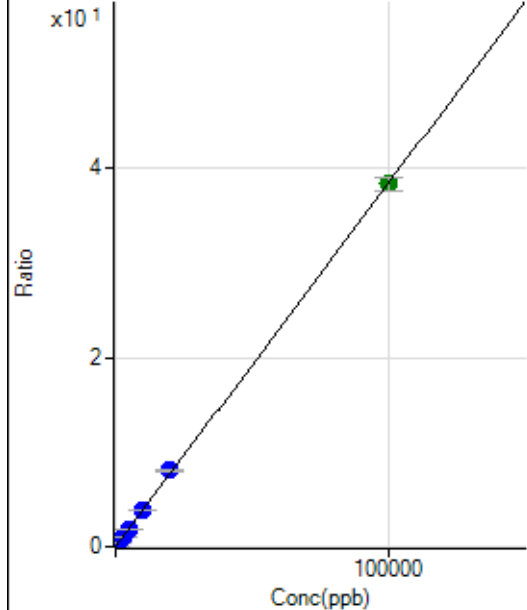
$$R = 1.0000$$

$$DL = 0.2787$$

$$BEC = 0.4692$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	386.13	0.0017	P	21.4
2	☐	20.000	19.451	2127.98	0.0091	P	7.1
3	☐	1000.000	973.911	91126.43	0.3756	P	13.1
4	☐	2500.000	2515.410	226582.15	0.9676	P	0.5
5	☐	5000.000	4757.388	444114.95	1.8285	P	7.5
6	☐	10000.000	10075.092	887505.10	3.8704	P	0.5
7	☐	20000.000	20967.111	1830025.47	8.0529	P	1.5
8	☐	100000.00	99811.075	8995701.16	38.3286	A	3.8

$$y = 3.8399\text{E-}004 * x + 0.0017$$

$$R = 0.9999$$

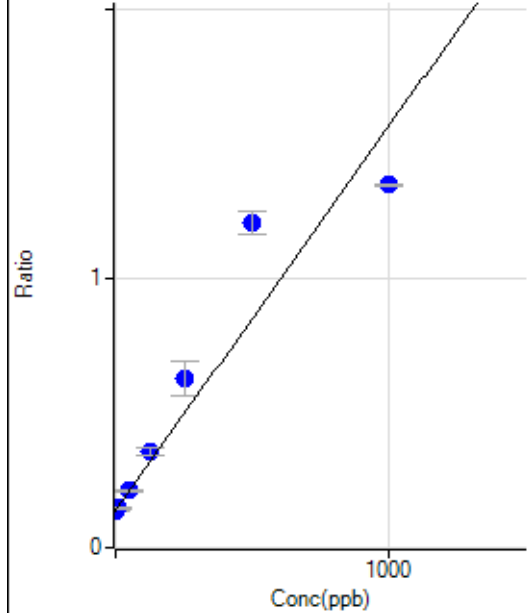
$$DL = 2.786$$

$$BEC = 4.348$$

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	386439.21	0.1380	P	2.7
2	☐	10.000	6.586	416237.58	0.1474	P	2.6
3	☐	50.000	53.190	624845.97	0.2139	P	3.9
4	☐	125.000	153.800	1044527.81	0.3575	P	7.0
5	☐	250.000	344.186	1780925.77	0.6293	P	21.5
6	☐	500.000	748.732	3422785.34	1.2069	P	7.3
7	☐	1000.000	848.362	3719256.81	1.3491	P	0.8
8	☐			649290.35	0.2206	P	3.3

$$y = 0.0014 * x + 0.1380$$

$$R = 0.9439$$

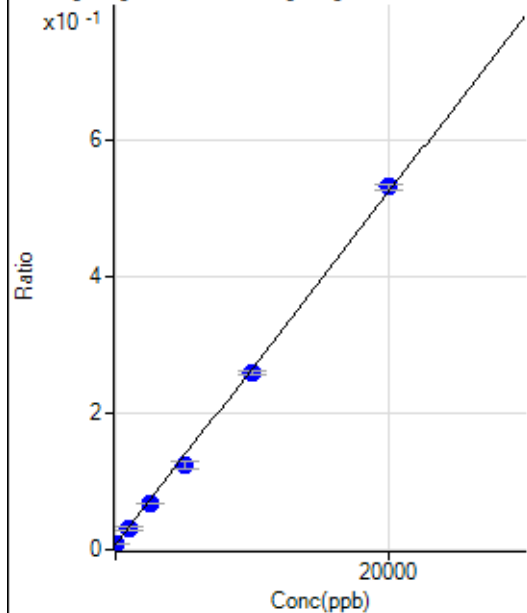
$$DL = 7.963$$

$$BEC = 96.64$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	10.903	1905.73	0.0082	P	2.0
2	☐	0.000	-10.903	1789.05	0.0077	P	7.7
3	☐	1000.000	917.692	7666.05	0.0316	P	13.6
4	☐	2500.000	2313.027	15825.40	0.0676	P	1.5
5	☐	5000.000	4533.152	30303.30	0.1248	P	8.4
6	☐	10000.000	9710.965	59209.15	0.2583	P	2.5
7	☐	20000.000	20288.716	120645.00	0.5309	P	1.7
8	☐			1733.48	0.0074	P	4.5

$$y = 2.5775E-005 * x + 0.0080$$

$$R = 0.9995$$

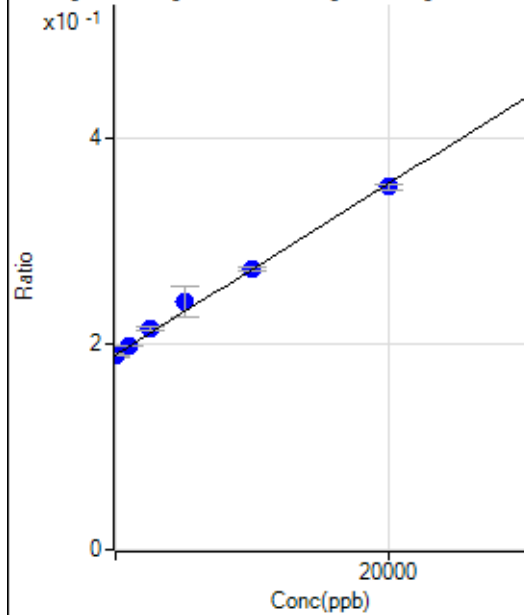
$$DL = 44.32$$

$$BEC = 309$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-24.336	530656.85	0.1894	P	2.5
2	☐	0.000	24.336	536335.18	0.1899	P	1.3
3	☐	1000.000	997.807	578291.48	0.1980	P	0.3
4	☐	2500.000	3127.208	630198.02	0.2157	P	1.7
5	☐	5000.000	6223.608	688152.03	0.2416	P	12.4
6	☐	10000.000	10029.580	774797.38	0.2733	P	1.7
7	☐	20000.000	19601.017	973267.24	0.3531	P	1.4
8	☐			526454.30	0.1789	P	3.5

$$y = 8.3393\text{E-}006 * x + 0.1897$$

$$R = 0.9975$$

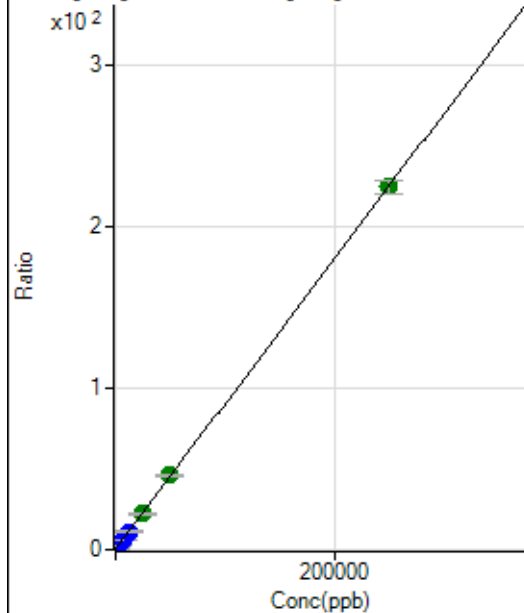
$$DL = 1290$$

$$BEC = 2.274\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	80132.36	0.3467	P	2.4
2	☐	500.000	499.963	185298.18	0.7958	P	1.0
3	☐	2500.000	2527.246	635520.01	2.6171	P	11.5
4	☐	6250.000	6466.147	1441519.36	6.1557	P	0.2
5	☐	12500.000	12181.162	2741675.93	11.2899	P	7.9
6	☐	25000.000	24239.627	5072477.15	22.1229	A	1.4
7	☐	50000.000	50789.516	10447599.54	45.9746	A	1.7
8	☐	250000.00	249928.40	52778085.21	224.8755	A	3.8

$$y = 8.9837\text{E-}004 * x + 0.3467$$

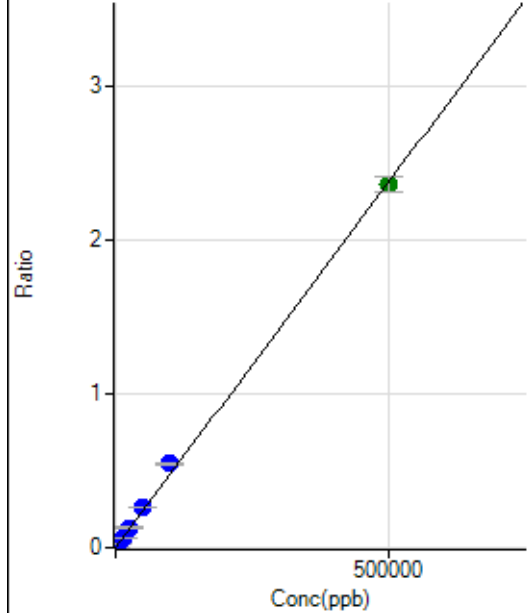
$$R = 1.0000$$

$$DL = 27.65$$

$$BEC = 385.9$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	325.02	0.0001	P	17.0
2	☐	500.000	503.104	7085.19	0.0025	P	6.7
3	☐	5000.000	5345.758	74649.12	0.0256	P	0.3
4	☐	12500.000	13415.356	186845.25	0.0640	P	1.9
5	☐	25000.000	27517.721	373336.90	0.1311	P	12.6
6	☐	50000.000	54543.206	736218.20	0.2597	P	1.6
7	☐	100000.00	114478.00	1501886.52	0.5449	P	1.5
8	☐	500000.00	496497.84	6951561.27	2.3629	A	4.1

$$y = 4.7589\text{E-}006 * x + 1.1567\text{E-}004$$

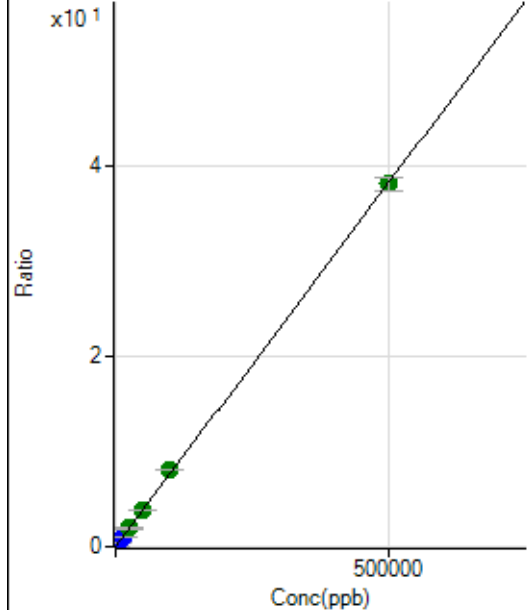
$$R = 0.9995$$

$$DL = 12.42$$

$$BEC = 24.31$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	10566.80	0.0038	P	6.9
2	☐	500.000	521.703	123102.63	0.0436	P	1.8
3	☐	5000.000	5311.581	1194820.85	0.4090	P	0.6
4	☐	12500.000	13336.621	2983562.18	1.0213	P	1.7
5	☐	25000.000	25532.059	5559544.96	1.9518	A	12.6
6	☐	50000.000	50472.096	10928529.18	3.8547	A	1.2
7	☐	100000.00	106152.92	22334087.74	8.1030	A	1.5
8	☐	500000.00	498671.54	111966155.0	38.0512	A	3.4

$$y = 7.6298\text{E-}005 * x + 0.0038$$

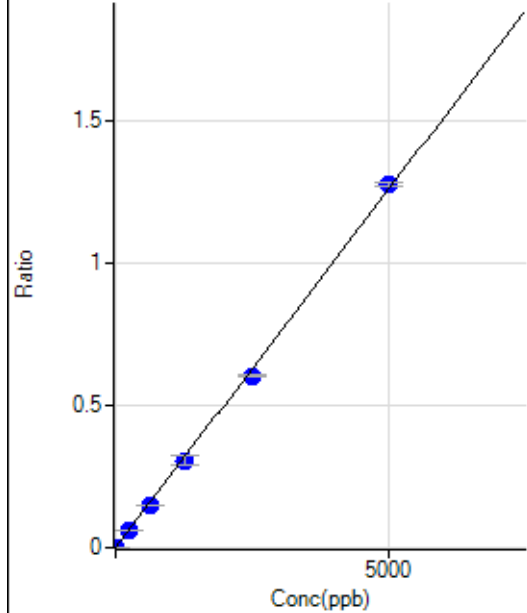
$$R = 0.9999$$

$$DL = 10.26$$

$$BEC = 49.48$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	7.5
2	☐	5.000	4.706	3400.48	0.0012	P	2.6
3	☐	250.000	235.445	173128.68	0.0593	P	2.5
4	☐	625.000	594.564	437161.94	0.1496	P	1.7
5	☐	1250.000	1218.244	873321.41	0.3066	P	12.5
6	☐	2500.000	2395.738	1709266.18	0.6029	P	1.5
7	☐	5000.000	5064.603	3513098.73	1.2745	P	1.0
8	☐			977.84	0.0003	P	4.4

$$y = 2.5165\text{E-}004 * x + 1.8824\text{E-}005$$

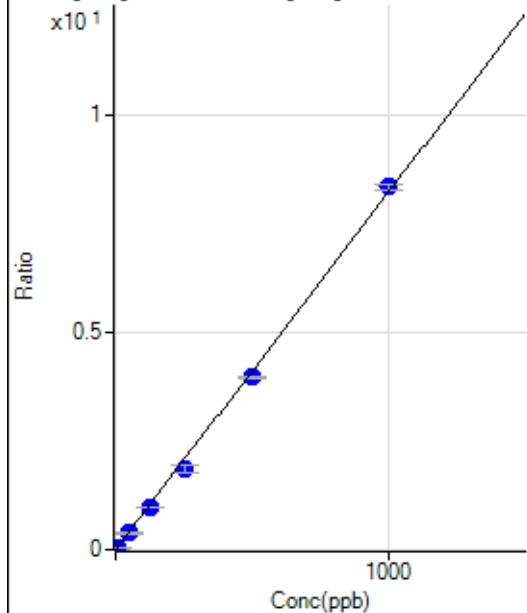
$$R = 0.9997$$

$$DL = 0.01691$$

$$BEC = 0.0748$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5.56	0.0000	P	34.5
2	☐	5.000	4.626	8858.27	0.0380	P	0.6
3	☐	50.000	47.225	94296.24	0.3882	P	10.8
4	☐	125.000	120.168	231287.06	0.9877	P	0.5
5	☐	250.000	226.044	451225.67	1.8578	P	7.6
6	☐	500.000	483.092	910328.20	3.9704	P	1.5
7	☐	1000.000	1015.187	1896085.79	8.3436	P	1.5
8	☐			393.34	0.0017	P	8.5

$$y = 0.0082 * x + 2.4027\text{E-}005$$

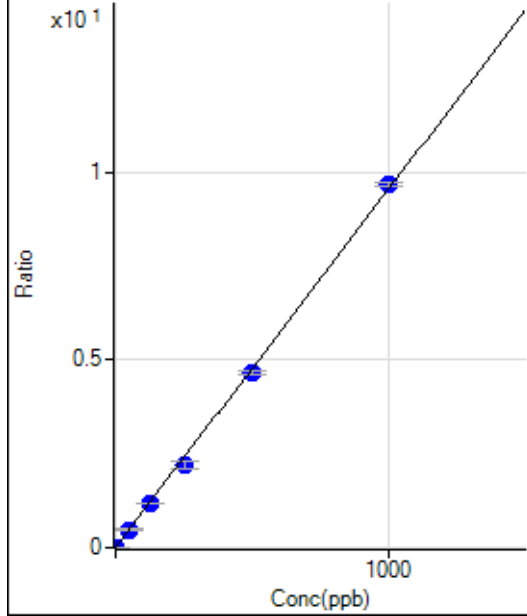
$$R = 0.9995$$

$$DL = 0.00303$$

$$BEC = 0.002923$$

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	1164.50	0.0050	P	2.9
2	☐	2.000	1.943	5484.41	0.0236	P	0.6
3	☐	50.000	48.176	112742.89	0.4642	P	11.3
4	☐	125.000	122.126	273777.32	1.1691	P	0.6
5	☐	250.000	229.542	532511.72	2.1930	P	8.0
6	☐	500.000	487.039	1065546.48	4.6473	P	1.6
7	☐	1000.000	1012.046	2193363.13	9.6515	P	1.1
8	☐			9365.26	0.0399	P	3.4

$$y = 0.0095 * x + 0.0050$$

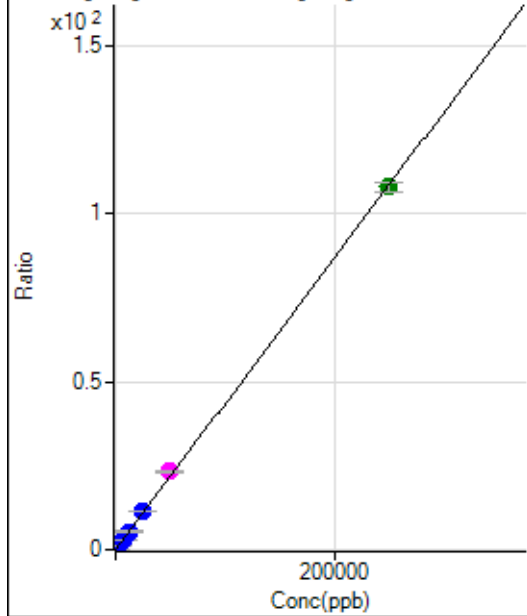
$$R = 0.9996$$

$$DL = 0.04666$$

$$BEC = 0.5285$$

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	1254.69	0.0054	P	6.0
2	☐	50.000	50.528	6364.61	0.0273	P	2.5
3	☐	2500.000	2597.138	274748.48	1.1313	P	11.2
4	☐	6250.000	6552.532	666451.45	2.8459	P	0.2
5	☐	12500.000	12225.924	1288547.45	5.3054	P	7.6
6	☐	25000.000	26114.369	2596916.85	11.3260	P	0.8
7	☐	50000.000	53770.510	5298501.59	23.3149	M	1.2
8	☐	250000.00	249139.63	25354496.52	108.0073	A	2.9

$$y = 4.3350E-004 * x + 0.0054$$

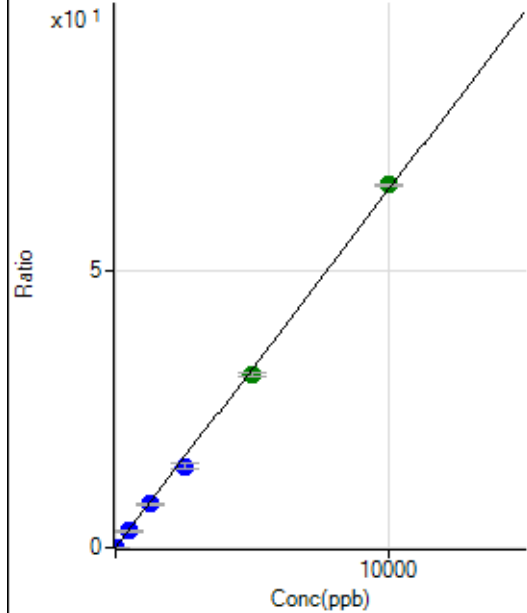
$$R = 0.9999$$

$$DL = 2.261$$

$$BEC = 12.52$$

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	58.89	0.0003	P	23.8
2	☐	1.000	0.947	1481.20	0.0064	P	5.5
3	☐	500.000	482.409	755573.41	3.1109	P	11.2
4	☐	1250.000	1209.656	1826650.11	7.8004	P	0.5
5	☐	2500.000	2273.490	3560955.02	14.6602	P	7.4
6	☐	5000.000	4847.913	7167311.21	31.2607	A	1.6
7	☐	10000.000	10138.594	14857414.22	65.3762	A	0.9
8	☐			9373.05	0.0399	P	4.5

$$y = 0.0064 * x + 2.5485E-004$$

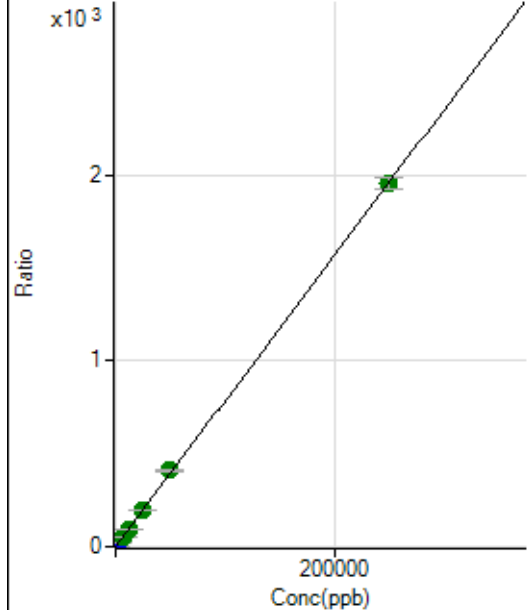
$$R = 0.9995$$

$$DL = 0.02816$$

$$BEC = 0.03952$$

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	5469.63	0.0237	P	3.8
2	☐	50.000	50.480	97399.56	0.4183	P	0.1
3	☐	2500.000	2495.237	4743478.98	19.5306	P	11.2
4	☐	6250.000	6262.852	11470911.37	48.9847	A	0.5
5	☐	12500.000	11719.183	22254234.53	91.6405	A	7.9
6	☐	25000.000	25122.092	45035266.75	196.4202	A	1.4
7	☐	50000.000	52570.165	93399990.05	411.0006	A	1.5
8	☐	250000.00	249512.52	457886039.8	1,950.633	A	3.1

$$y = 0.0078 * x + 0.0237$$

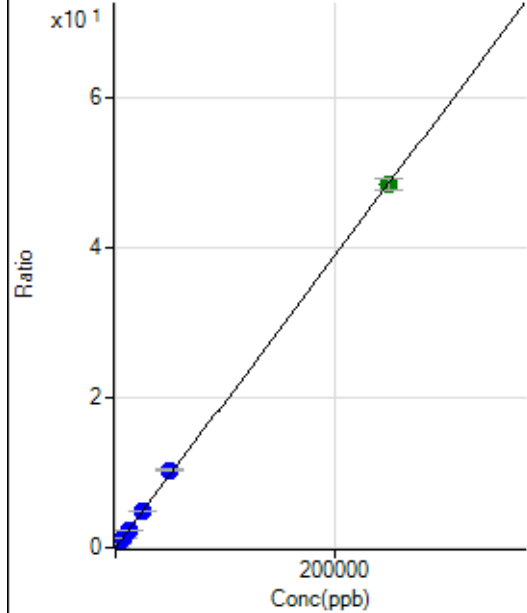
$$R = 0.9999$$

$$DL = 0.3484$$

$$BEC = 3.027$$

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	325.94	0.0014	P	9.2
2	☐	50.000	51.026	2633.61	0.0113	P	4.8
3	☐	2500.000	2496.751	117970.60	0.4859	P	11.7
4	☐	6250.000	6397.394	291054.80	1.2429	P	0.2
5	☐	12500.000	12021.747	566855.51	2.3343	P	7.9
6	☐	25000.000	25509.474	1135360.47	4.9517	P	1.1
7	☐	50000.000	53259.120	2349131.47	10.3368	P	1.0
8	☐	250000.00	249317.48	11357021.44	48.3836	A	3.2

$$y = 1.9406\text{E-}004 * x + 0.0014$$

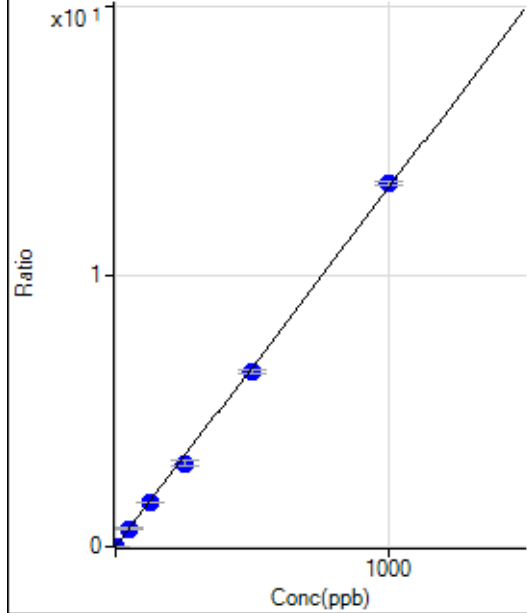
$$R = 0.9999$$

$$DL = 2.009$$

$$BEC = 7.265$$

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	56.78	0.0002	P	8.8
2	☐	1.000	0.952	2998.46	0.0129	P	6.0
3	☐	50.000	48.641	156793.19	0.6455	P	11.1
4	☐	125.000	123.868	384877.16	1.6435	P	0.3
5	☐	250.000	231.926	747328.33	3.0771	P	7.6
6	☐	500.000	486.960	1481236.03	6.4605	P	1.6
7	☐	1000.000	1011.248	3048889.14	13.4159	P	1.0
8	☐			4759.77	0.0203	P	3.9

$$y = 0.0133 * x + 2.4560\text{E-}004$$

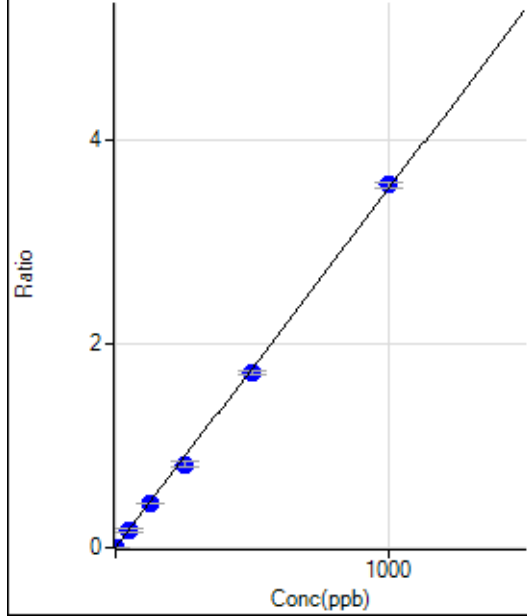
$$R = 0.9997$$

$$DL = 0.004901$$

$$BEC = 0.01851$$

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	54.45	0.0002	P	48.9
2	☐	1.000	0.998	874.48	0.0038	P	3.4
3	☐	50.000	48.401	41505.19	0.1710	P	12.1
4	☐	125.000	124.138	102613.23	0.4382	P	0.5
5	☐	250.000	232.418	199209.62	0.8202	P	7.5
6	☐	500.000	486.785	393804.40	1.7176	P	1.7
7	☐	1000.000	1011.191	810761.25	3.5676	P	1.3
8	☐			2544.69	0.0108	P	3.9

$$y = 0.0035 * x + 2.3542E-004$$

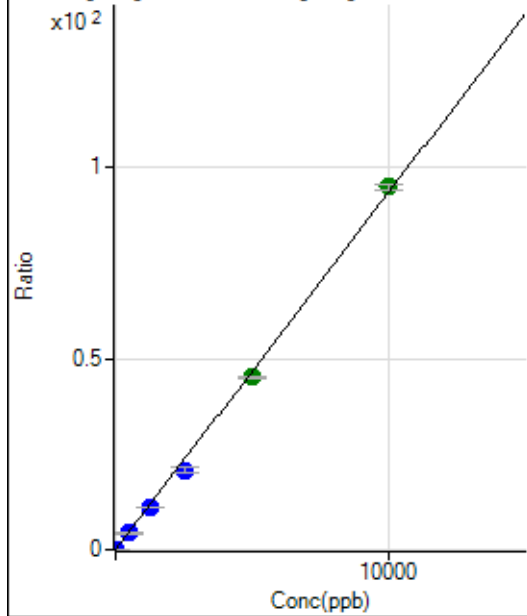
$$R = 0.9997$$

$$DL = 0.09792$$

$$BEC = 0.06673$$

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	791.99	0.0034	P	7.8
2	☐	2.000	2.010	5169.09	0.0222	P	2.1
3	☐	500.000	467.541	1061461.01	4.3691	P	10.8
4	☐	1250.000	1193.778	2611121.56	11.1503	P	0.5
5	☐	2500.000	2223.932	5044196.85	20.7693	P	7.6
6	☐	5000.000	4834.546	10351176.16	45.1457	A	1.4
7	☐	10000.000	10160.394	21560340.02	94.8755	A	1.8
8	☐			-19078.47	-0.0813	P	-3.1

$$y = 0.0093 * x + 0.0034$$

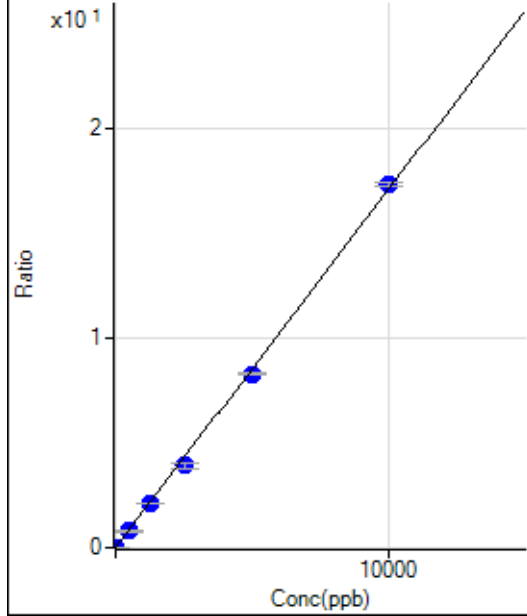
$$R = 0.9994$$

$$DL = 0.08588$$

$$BEC = 0.3669$$

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	108.89	0.0005	P	37.2
2	☐	2.000	2.075	933.37	0.0040	P	5.2
3	☐	500.000	473.979	196377.71	0.8088	P	11.6
4	☐	1250.000	1216.839	486049.33	2.0756	P	0.5
5	☐	2500.000	2299.312	952400.84	3.9216	P	7.7
6	☐	5000.000	4856.747	1899120.11	8.2828	P	1.1
7	☐	10000.000	10127.245	3924876.36	17.2708	P	1.2
8	☐			5210.97	0.0222	P	1.2

$$y = 0.0017 * x + 4.7082E-004$$

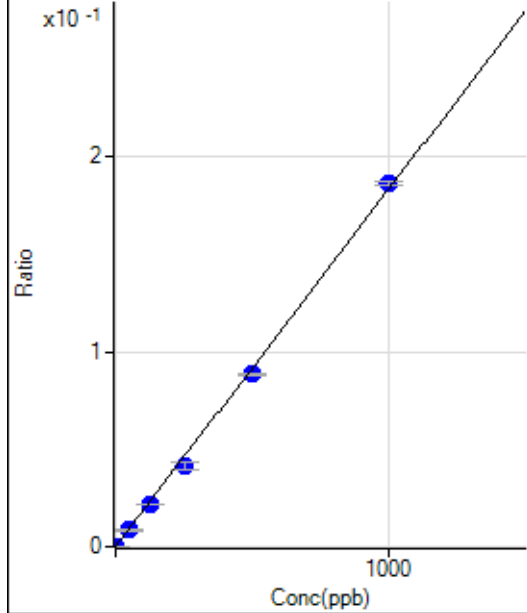
$$R = 0.9996$$

$$DL = 0.3078$$

$$BEC = 0.2761$$

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	1.23	0.0000	P	86.6
2	☐	1.000	0.949	281.48	0.0002	P	12.3
3	☐	50.000	47.135	14669.14	0.0086	P	11.7
4	☐	125.000	119.443	35751.17	0.0219	P	0.8
5	☐	250.000	225.990	69767.24	0.0414	P	8.6
6	☐	500.000	482.038	140553.47	0.0883	P	0.6
7	☐	1000.000	1015.822	297920.33	0.1861	P	1.0
8	☐			154.94	0.0001	P	20.0

$$y = 1.8319E-004 * x + 7.7178E-007$$

$$R = 0.9994$$

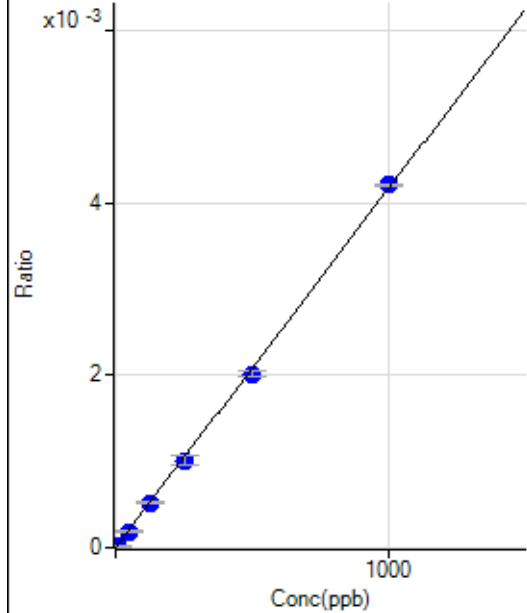
$$DL = 0.01095$$

$$BEC = 0.004213$$

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	3.311	23.33	0.0000	P	51.7
3	☐	50.000	43.841	311.12	0.0002	P	15.2
4	☐	125.000	123.854	844.48	0.0005	P	3.3
5	☐	250.000	241.427	1694.56	0.0010	P	11.4
6	☐	500.000	484.326	3213.72	0.0020	P	2.9
7	☐	1000.000	1010.440	6742.74	0.0042	P	0.4
8	☐			2.22	0.0000	P	86.7

$$y = 4.1673\text{E-}006 * x + 6.8747\text{E-}007$$

$$R = 0.9998$$

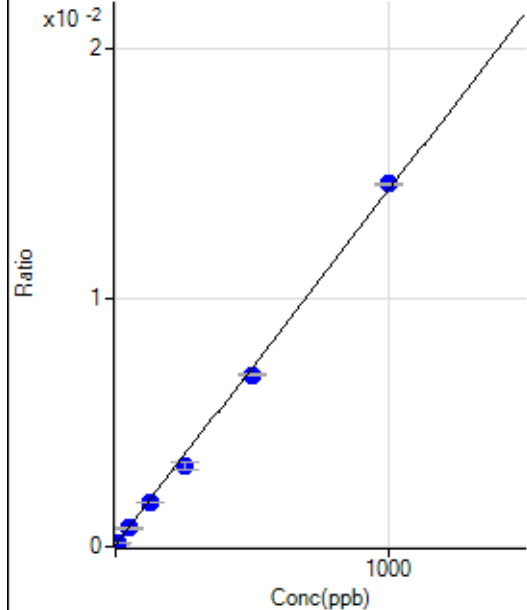
$$DL = 0.8572$$

$$BEC = 0.165$$

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	132.10	0.0001	P	13.6
2	☐	5.000	4.754	241.98	0.0002	P	13.6
3	☐	50.000	46.876	1275.99	0.0008	P	9.9
4	☐	125.000	119.322	2912.04	0.0018	P	3.0
5	☐	250.000	223.694	5507.86	0.0033	P	9.2
6	☐	500.000	478.771	10987.52	0.0069	P	0.6
7	☐	1000.000	1018.058	23351.48	0.0146	P	0.7
8	☐			153.71	0.0001	P	6.7

$$y = 1.4246\text{E-}005 * x + 8.2337\text{E-}005$$

$$R = 0.9993$$

$$DL = 2.358$$

$$BEC = 5.78$$

Weight: <None>

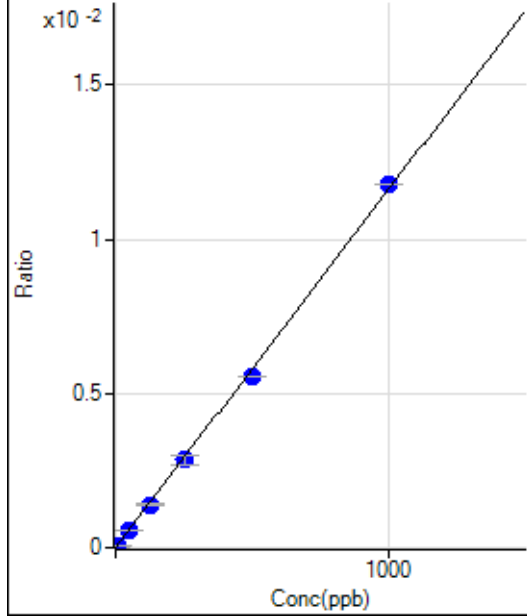
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3436.61		P	9.5
2	☐			3005.95		P	4.9
3	☐			3172.66		P	3.7
4	☐			3055.96		P	0.4
5	☐			3064.29		P	1.7
6	☐			2842.03		P	3.3
7	☐			2828.13		P	5.9
8	☐			3189.33		P	5.2

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			90.09		P	29.4
2	☐			60.06		P	44.1
3	☐			60.06		P	44.1
4	☐			63.40		P	50.8
5	☐			40.04		P	25.0
6	☐			40.04		P	43.3
7	☐			40.04		P	NaN
8	☐			50.05		P	34.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-28.21	0.0000	P	-245.
2	☐	5.000	5.188	345.30	0.0001	P	37.9
3	☐	50.000	48.552	3563.40	0.0006	P	4.2
4	☐	125.000	119.564	8901.73	0.0014	P	3.3
5	☐	250.000	244.926	17838.99	0.0028	P	11.2
6	☐	500.000	477.474	35189.72	0.0055	P	0.5
7	☐	1000.000	1013.282	73578.09	0.0118	P	0.1
8	☐			34.15	0.0000	P	333.8

$$y = 1.1616E-005 * x - 4.4535E-006$$

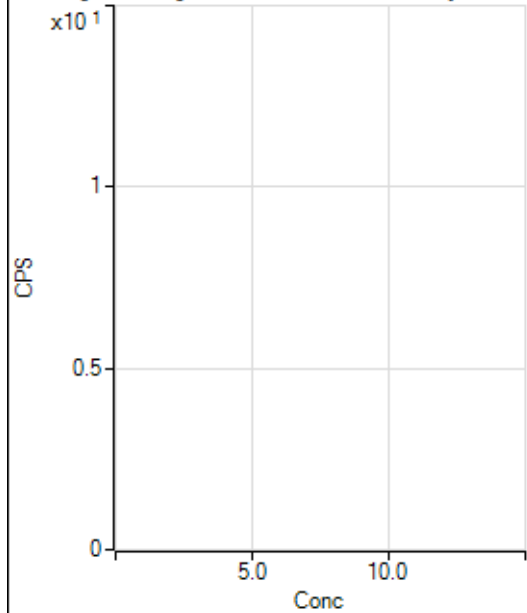
$$R = 0.9996$$

$$DL = 2.821$$

$$BEC = -0.3834$$

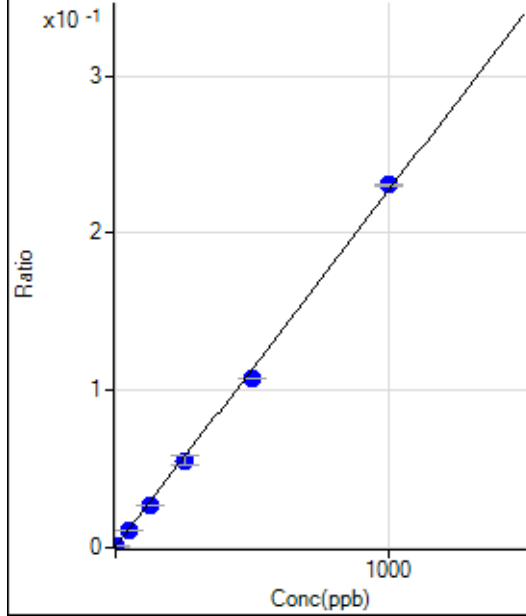
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			1739.02		P	4.6
2	☐			1722.34		P	4.7
3	☐			1677.90		P	2.7
4	☐			1722.34		P	1.4
5	☐			1660.11		P	4.0
6	☐			1612.33		P	3.0
7	☐			1610.11		P	3.1
8	☐			1622.33		P	4.9

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2716.98	0.0004	P	6.6
2	☐	1.000	0.960	4078.47	0.0007	P	5.1
3	☐	50.000	47.392	71209.29	0.0112	P	2.1
4	☐	125.000	118.210	175140.85	0.0272	P	1.4
5	☐	250.000	243.133	348937.45	0.0555	P	10.6
6	☐	500.000	472.697	683012.57	0.1076	P	0.5
7	☐	1000.000	1016.348	1443049.98	0.2308	P	0.5
8	☐			10442.88	0.0016	P	2.6

$$y = 2.2662\text{E-}004 * x + 4.4439\text{E-}004$$

$$R = 0.9994$$

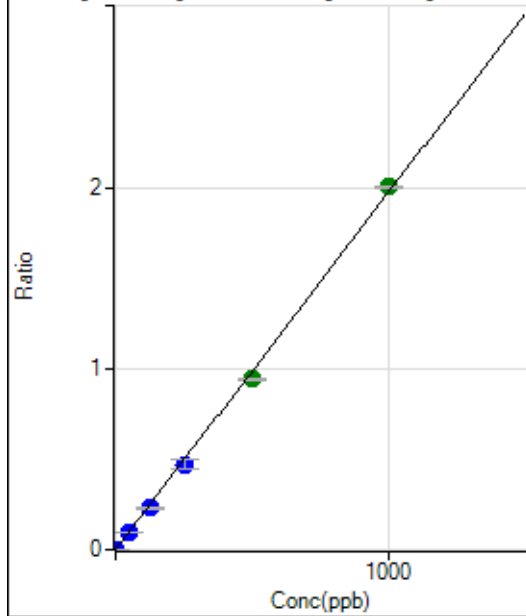
$$DL = 0.3903$$

$$BEC = 1.961$$

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	119.45	0.0000	P	13.4
2	☐	1.000	0.920	11301.89	0.0018	P	1.7
3	☐	50.000	46.582	585103.71	0.0919	P	1.0
4	☐	125.000	116.749	1481007.19	0.2303	P	1.8
5	☐	250.000	238.860	2957345.34	0.4711	P	11.9
6	☐	500.000	477.189	5975845.62	0.9412	A	1.5
7	☐	1000.000	1015.393	12523629.01	2.0027	A	0.2
8	☐			67846.05	0.0104	P	4.3

$$y = 0.0020 * x + 1.9562\text{E-}005$$

$$R = 0.9995$$

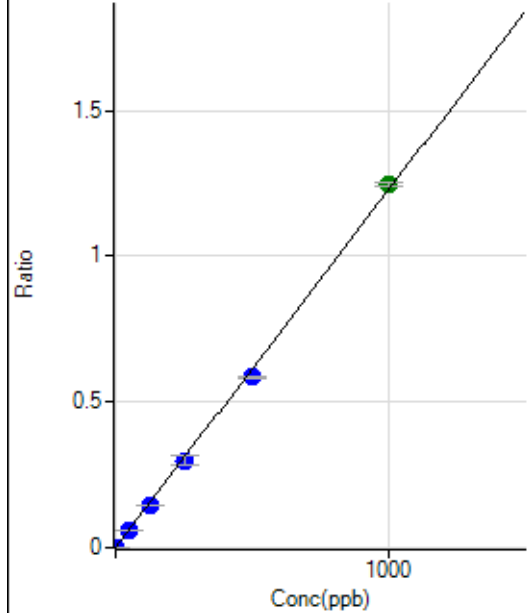
$$DL = 0.003983$$

$$BEC = 0.009918$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	302.79	0.0000	P	13.6
2	☐	1.000	0.909	7174.19	0.0012	P	5.6
3	☐	50.000	47.008	367701.34	0.0577	P	1.0
4	☐	125.000	118.238	933662.18	0.1452	P	1.6
5	☐	250.000	243.727	1878253.54	0.2992	P	11.8
6	☐	500.000	476.712	3715451.12	0.5852	P	1.4
7	☐	1000.000	1014.207	7784225.61	1.2449	A	1.2
8	☐			3539.42	0.0005	P	10.8

$$y = 0.0012 * x + 4.9477E-005$$

$$R = 0.9996$$

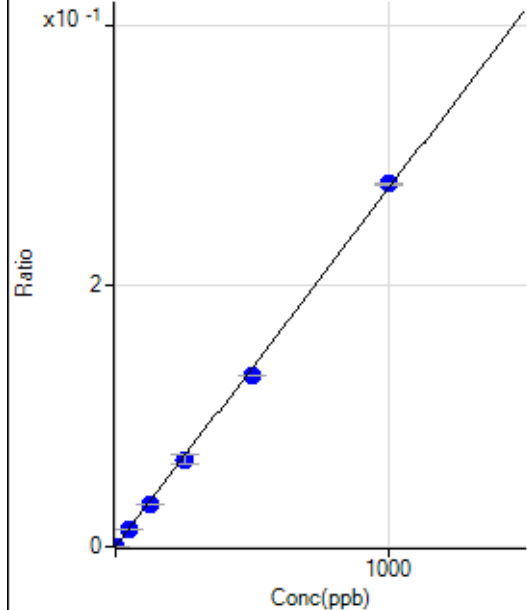
$$DL = 0.01643$$

$$BEC = 0.04031$$

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	50.00	0.0000	P	44.0
2	☐	1.000	0.928	1616.80	0.0003	P	12.1
3	☐	50.000	46.757	81757.42	0.0128	P	0.9
4	☐	125.000	118.009	208331.37	0.0324	P	2.4
5	☐	250.000	244.270	420934.13	0.0670	P	11.6
6	☐	500.000	478.668	834167.93	0.1314	P	0.6
7	☐	1000.000	1013.135	1738701.58	0.2780	P	0.8
8	☐			866.71	0.0001	P	4.2

$$y = 2.7444E-004 * x + 8.1782E-006$$

$$R = 0.9996$$

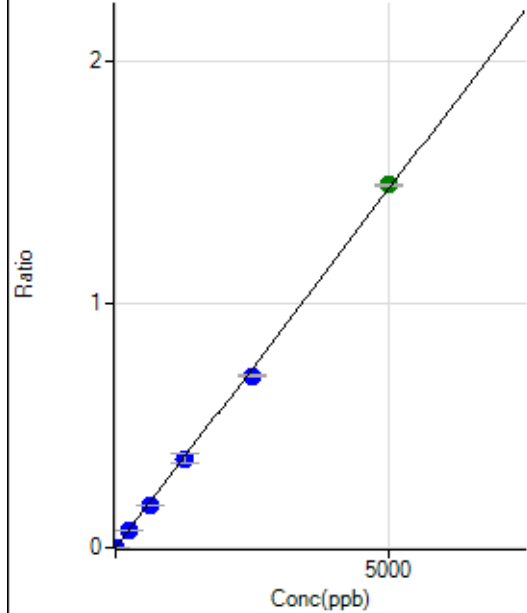
$$DL = 0.03933$$

$$BEC = 0.0298$$

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	77.78	0.0000	P	10.0
2	☐	5.000	4.794	8769.55	0.0014	P	4.3
3	☐	250.000	237.605	445472.13	0.0700	P	1.1
4	☐	625.000	594.777	1126229.90	0.1751	P	1.4
5	☐	1250.000	1235.312	2284365.31	0.3637	P	10.9
6	☐	2500.000	2392.465	4472253.96	0.7043	P	1.2
7	☐	5000.000	5061.837	9318593.52	1.4902	A	0.9
8	☐			3920.08	0.0006	P	13.5

$$y = 2.9440\text{E-}004 * x + 1.2687\text{E-}005$$

$$R = 0.9997$$

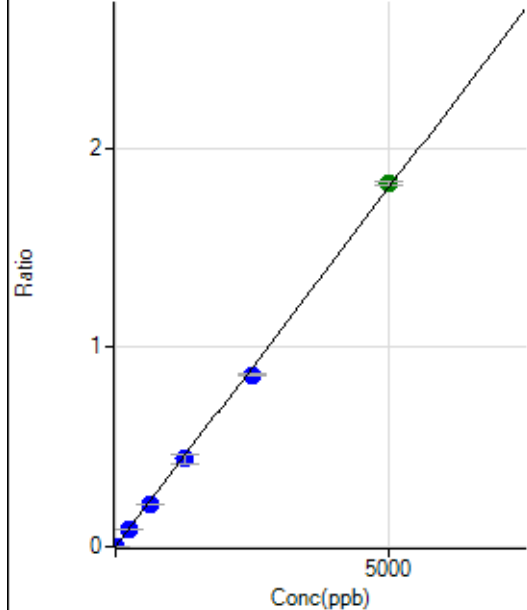
$$DL = 0.01296$$

$$BEC = 0.0431$$

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	8.33	0.0000	P	98.8
2	☐	5.000	4.683	10395.67	0.0017	P	5.1
3	☐	250.000	240.480	551605.03	0.0866	P	0.8
4	☐	625.000	596.386	1381722.58	0.2148	P	1.3
5	☐	1250.000	1230.870	2784918.66	0.4434	P	11.0
6	☐	2500.000	2398.386	5485722.69	0.8640	P	1.4
7	☐	5000.000	5059.642	11397184.37	1.8226	A	0.9
8	☐			4459.12	0.0007	P	9.5

$$y = 3.6023\text{E-}004 * x + 1.3681\text{E-}006$$

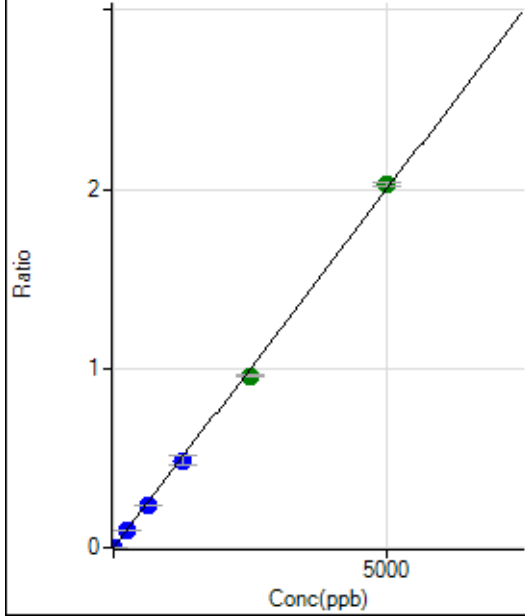
$$R = 0.9997$$

$$DL = 0.01125$$

$$BEC = 0.003798$$

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	36.11	0.0000	P	67.3
2	☐	5.000	4.604	11368.66	0.0018	P	2.9
3	☐	250.000	238.179	605965.24	0.0952	P	1.3
4	☐	625.000	595.731	1530732.50	0.2380	P	2.1
5	☐	1250.000	1219.835	3060319.73	0.4874	P	11.4
6	☐	2500.000	2391.656	6067506.56	0.9556	A	1.1
7	☐	5000.000	5065.963	12657059.31	2.0241	A	0.9
8	☐			6237.62	0.0010	P	2.8

$$y = 3.9955\text{E-}004 * x + 5.9511\text{E-}006$$

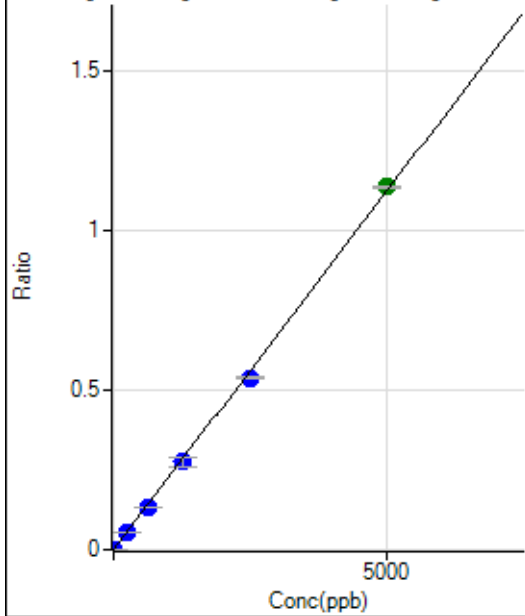
$$R = 0.9996$$

$$DL = 0.03006$$

$$BEC = 0.01489$$

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	2.78	0.0000	P	173.2
2	☐	5.000	4.733	6534.98	0.0011	P	3.9
3	☐	250.000	238.799	340728.69	0.0535	P	1.2
4	☐	625.000	595.768	858582.73	0.1335	P	1.8
5	☐	1250.000	1222.674	1720776.86	0.2740	P	11.1
6	☐	2500.000	2394.657	3407311.84	0.5366	P	1.1
7	☐	5000.000	5063.717	7095727.59	1.1347	A	0.6
8	☐			3206.00	0.0005	P	13.5

$$y = 2.2409\text{E-}004 * x + 4.5010\text{E-}007$$

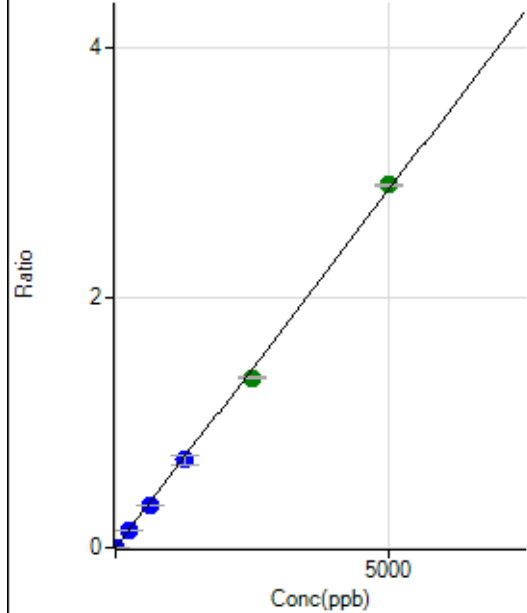
$$R = 0.9997$$

$$DL = 0.01044$$

$$BEC = 0.002009$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11.11	0.0000	P	86.7
2	☐	5.000	4.706	16609.97	0.0027	P	4.5
3	☐	250.000	239.212	872405.28	0.1370	P	1.0
4	☐	625.000	594.745	2190918.84	0.3406	P	1.2
5	☐	1250.000	1224.467	4403822.24	0.7013	P	11.4
6	☐	2500.000	2376.218	8641773.02	1.3610	A	1.3
7	☐	5000.000	5072.596	18167856.83	2.9054	A	0.9
8	☐			7424.33	0.0011	P	11.6

$$y = 5.7276\text{E-}004 * x + 1.8241\text{E-}006$$

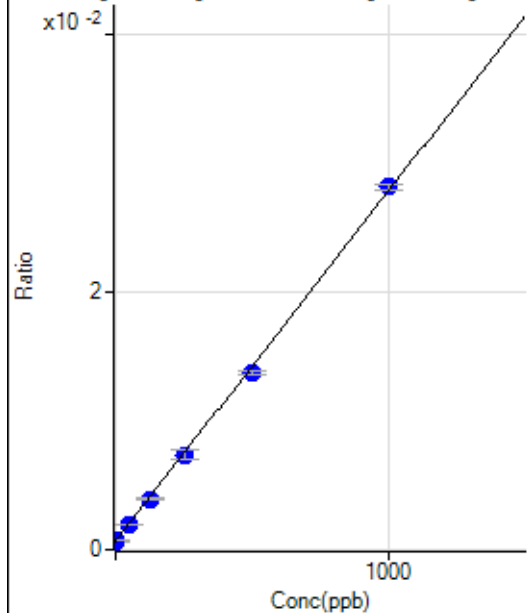
$$R = 0.9995$$

$$DL = 0.008282$$

$$BEC = 0.003185$$

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	2778.13	0.0007	P	2.7
2	☐	1.000	1.036	2947.62	0.0007	P	3.6
3	☐	50.000	46.145	8505.53	0.0019	P	4.8
4	☐	125.000	120.381	17561.28	0.0039	P	4.5
5	☐	250.000	247.146	32716.01	0.0074	P	10.3
6	☐	500.000	479.673	62554.58	0.0137	P	2.3
7	☐	1000.000	1011.647	128930.49	0.0282	P	1.3
8	☐			2853.13	0.0006	P	6.9

$$y = 2.7178\text{E-}005 * x + 6.6909\text{E-}004$$

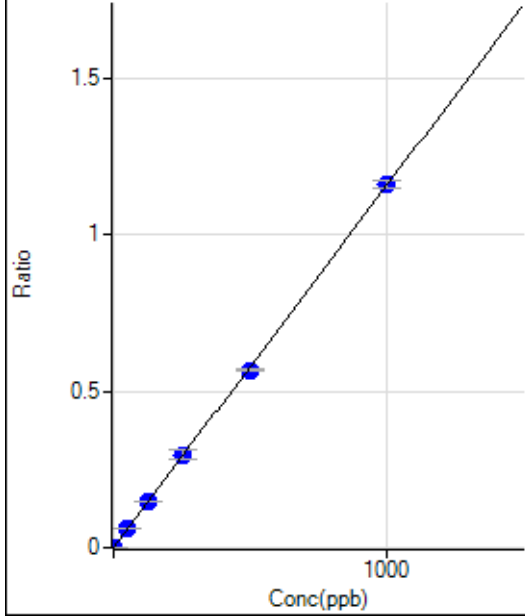
$$R = 0.9997$$

$$DL = 2.02$$

$$BEC = 24.62$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0000	P	38.3
2	☐	1.000	0.978	4820.38	0.0011	P	2.9
3	☐	50.000	51.382	262859.20	0.0594	P	1.1
4	☐	125.000	126.861	653965.03	0.1467	P	1.3
5	☐	250.000	256.793	1314312.56	0.2970	P	11.5
6	☐	500.000	490.575	2589489.81	0.5673	P	1.3
7	☐	1000.000	1002.713	5307418.00	1.1595	P	2.1
8	☐			2422.51	0.0005	P	2.5

$$y = 0.0012 * x + 8.7539E-006$$

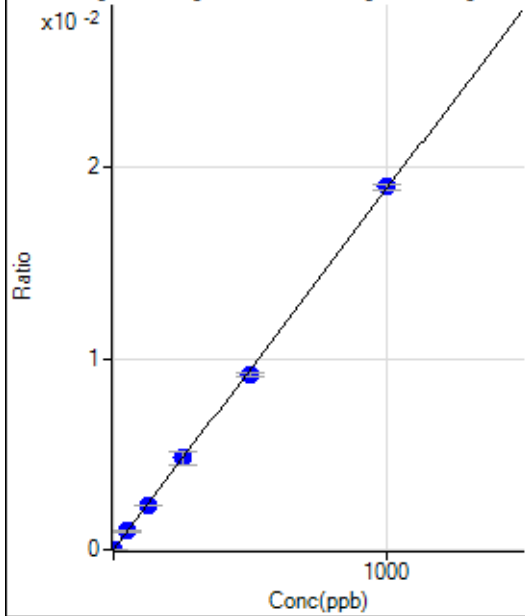
$$R = 0.9999$$

$$DL = 0.008702$$

$$BEC = 0.00757$$

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	9.72	0.0000	P	23.5
2	☐	1.000	1.055	94.45	0.0000	P	27.9
3	☐	50.000	50.570	4232.62	0.0010	P	2.5
4	☐	125.000	120.872	10182.91	0.0023	P	0.5
5	☐	250.000	253.792	21193.69	0.0048	P	13.0
6	☐	500.000	485.905	41879.65	0.0092	P	1.8
7	☐	1000.000	1006.587	86990.05	0.0190	P	1.9
8	☐			73.61	0.0000	P	22.4

$$y = 1.8878E-005 * x + 2.3364E-006$$

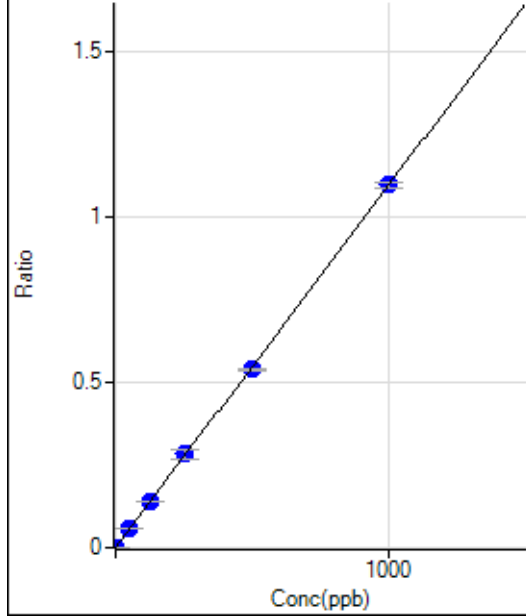
$$R = 0.9998$$

$$DL = 0.08731$$

$$BEC = 0.1238$$

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	22.22	0.0000	P	56.0
2	☐	1.000	0.972	4525.84	0.0011	P	3.8
3	☐	50.000	51.126	247772.44	0.0560	P	0.8
4	☐	125.000	127.949	624906.36	0.1402	P	1.0
5	☐	250.000	258.132	1251647.03	0.2828	P	11.5
6	☐	500.000	492.148	2461179.05	0.5392	P	1.3
7	☐	1000.000	1001.468	5022171.25	1.0972	P	1.9
8	☐			2325.25	0.0005	P	8.5

$$y = 0.0011 * x + 5.2956E-006$$

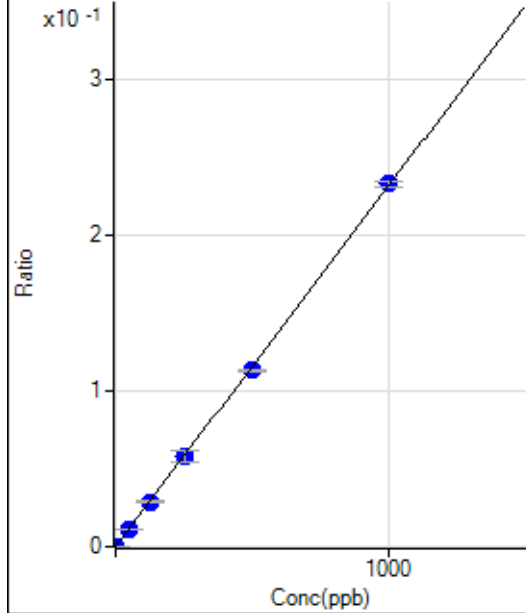
$$R = 0.9999$$

$$DL = 0.008117$$

$$BEC = 0.004834$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	548.82	0.0001	P	3.0
2	☐	1.000	1.114	1647.08	0.0004	P	2.4
3	☐	50.000	49.654	51311.53	0.0116	P	0.3
4	☐	125.000	123.880	128122.94	0.0287	P	1.6
5	☐	250.000	251.797	257807.24	0.0583	P	12.5
6	☐	500.000	487.695	514761.31	0.1128	P	1.2
7	☐	1000.000	1005.860	1064053.44	0.2325	P	1.3
8	☐			1087.17	0.0002	P	7.7

$$y = 2.3096E-004 * x + 1.3218E-004$$

$$R = 0.9999$$

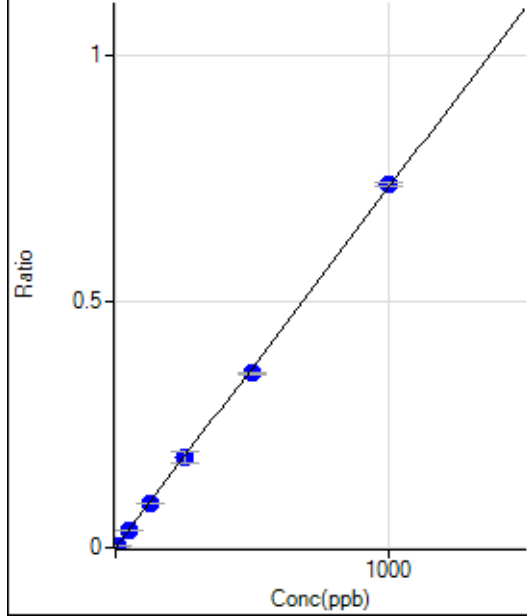
$$DL = 0.05065$$

$$BEC = 0.5723$$

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	194.45	0.0000	P	6.8
2	☐	5.000	4.798	15050.09	0.0036	P	4.2
3	☐	50.000	49.453	160375.50	0.0363	P	1.3
4	☐	125.000	123.694	403919.87	0.0906	P	2.2
5	☐	250.000	251.314	814272.66	0.1841	P	12.2
6	☐	500.000	483.719	1616948.88	0.3542	P	1.5
7	☐	1000.000	1008.004	3379081.67	0.7382	P	1.1
8	☐			2200.24	0.0005	P	3.8

$$y = 7.3225\text{E-}004 * x + 4.6856\text{E-}005$$

$$R = 0.9998$$

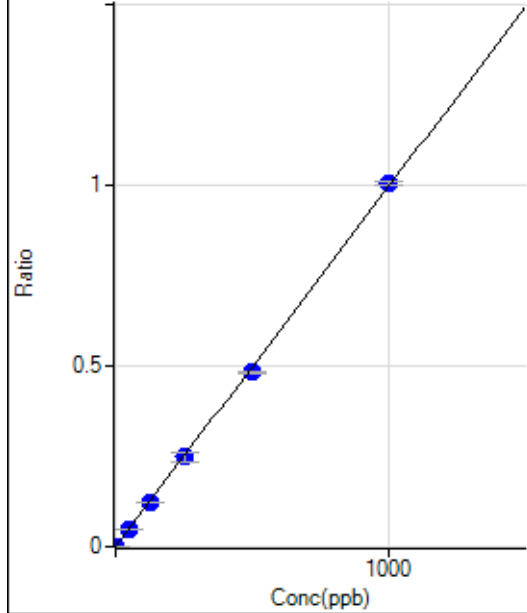
$$DL = 0.01302$$

$$BEC = 0.06399$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11.11	0.0000	P	86.7
2	☐	2.000	1.865	7874.64	0.0019	P	3.8
3	☐	50.000	48.620	214361.14	0.0485	P	0.6
4	☐	125.000	122.455	544040.86	0.1221	P	1.6
5	☐	250.000	248.737	1096990.94	0.2479	P	11.8
6	☐	500.000	485.086	2206776.72	0.4835	P	1.5
7	☐	1000.000	1008.160	4599730.83	1.0048	P	1.1
8	☐			3378.28	0.0007	P	1.4

$$y = 9.9668\text{E-}004 * x + 2.7043\text{E-}006$$

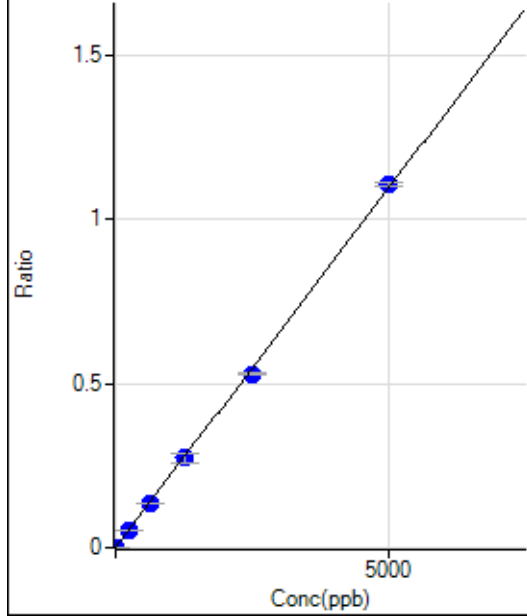
$$R = 0.9998$$

$$DL = 0.007056$$

$$BEC = 0.002713$$

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	8.33	0.0000	P	101.7
2	☐	10.000	9.897	9178.28	0.0022	P	2.4
3	☐	250.000	243.404	235929.42	0.0533	P	0.3
4	☐	625.000	608.672	594516.05	0.1334	P	2.3
5	☐	1250.000	1245.686	1207729.40	0.2730	P	12.0
6	☐	2500.000	2417.226	2417781.91	0.5297	P	0.9
7	☐	5000.000	5044.836	5060477.85	1.1055	P	1.1
8	☐			1786.28	0.0004	P	3.9

$$y = 2.1913\text{E-}004 * x + 2.0443\text{E-}006$$

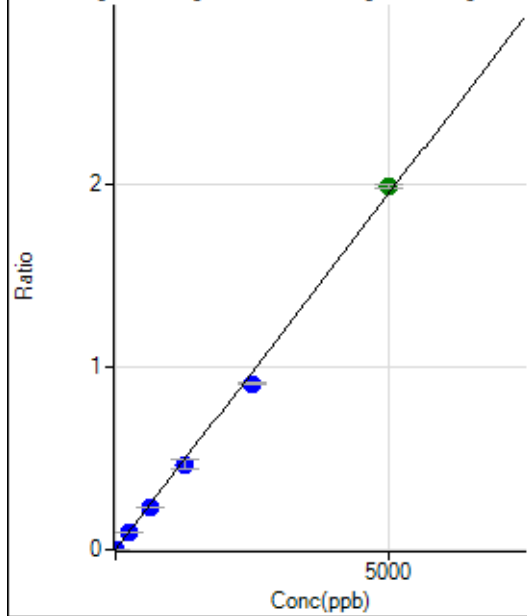
$$R = 0.9998$$

$$DL = 0.02846$$

$$BEC = 0.009329$$

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	19.44	0.0000	P	63.7
2	☐	10.000	9.352	15422.77	0.0036	P	3.1
3	☐	250.000	233.670	402734.42	0.0910	P	0.1
4	☐	625.000	586.295	1018265.30	0.2284	P	1.5
5	☐	1250.000	1201.432	2070974.44	0.4681	P	12.1
6	☐	2500.000	2334.134	4151290.19	0.9094	P	0.7
7	☐	5000.000	5100.731	9097493.26	1.9874	A	1.2
8	☐			2908.71	0.0006	P	7.5

$$y = 3.8962\text{E-}004 * x + 4.6323\text{E-}006$$

$$R = 0.9991$$

$$DL = 0.02273$$

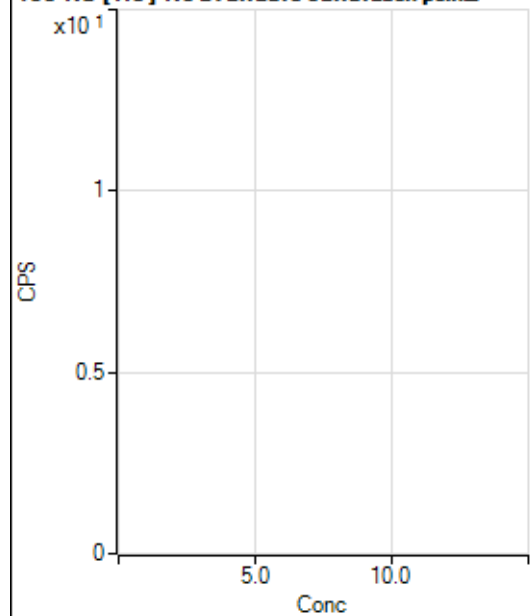
$$BEC = 0.01189$$

Weight: <None>

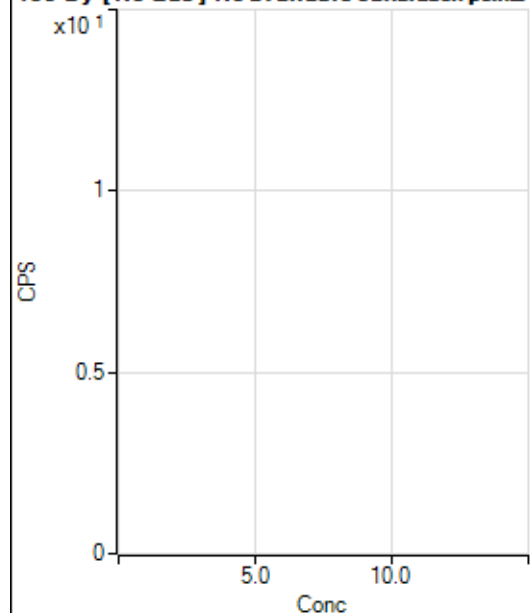
Min Conc: 0

150 Nd [No Gas] No available calibration points

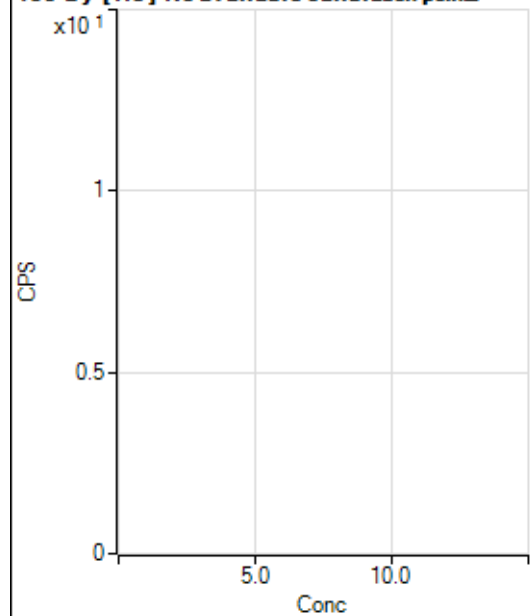
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			4.44		P	173.2
3	☐			28.89		P	26.6
4	☐			71.11		P	14.3
5	☐			113.33		P	20.4
6	☐			191.12		P	17.2
7	☐			317.79		P	22.2
8	☐			31.11		P	53.9

150 Nd [He] No available calibration points

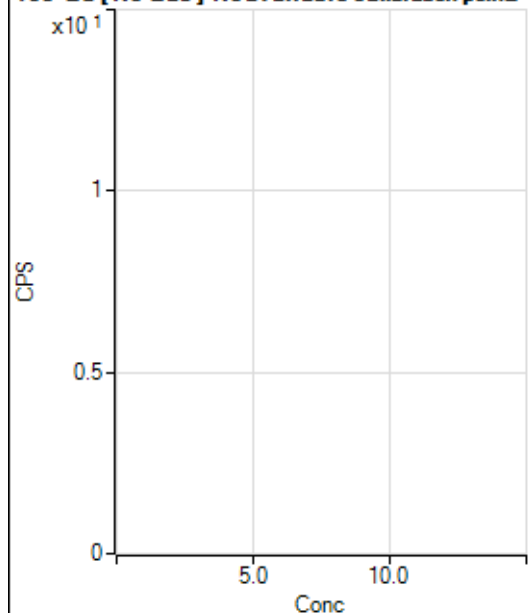
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			7.78		P	89.2
4	☐			18.89		P	36.7
5	☐			36.67		P	47.2
6	☐			52.22		P	13.3
7	☐			113.34		P	19.3
8	☐			12.22		P	15.7

156 Dy [No Gas] No available calibration points

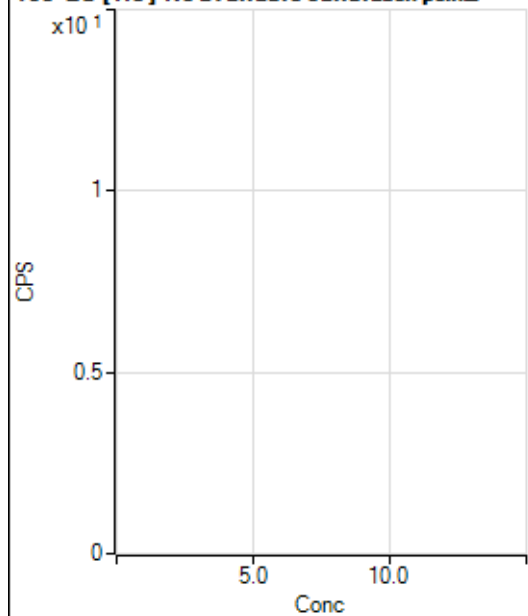
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	0.0
2	☐			0.00		P	
3	☐			27.78		P	45.8
4	☐			38.89		P	32.7
5	☐			58.33		P	28.6
6	☐			119.45		P	21.3
7	☐			194.45		P	10.8
8	☐			1094.52		P	5.9

156 Dy [He] No available calibration points

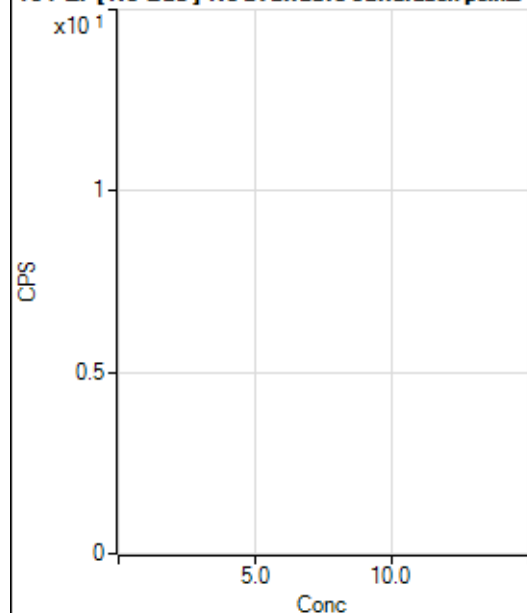
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐			4.44		P	43.4
3	☐			13.33		P	66.1
4	☐			23.33		P	24.7
5	☐			36.67		P	9.1
6	☐			67.78		P	41.8
7	☐			118.89		P	18.7
8	☐			796.70		P	2.2

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

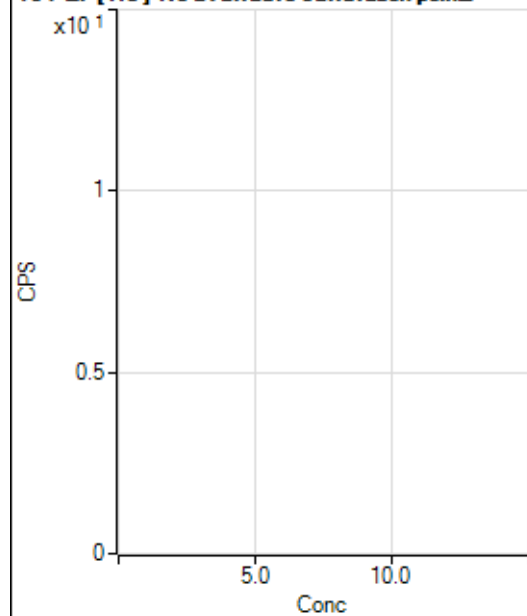
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	86.6
2	☐			41.67		P	20.0
3	☐			41.67		P	40.0
4	☐			50.00		P	44.1
5	☐			58.34		P	49.5
6	☐			111.11		P	11.5
7	☐			116.67		P	21.4
8	☐			1341.77		P	9.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46.67		P	51.5
2	☐			42.22		P	18.2
3	☐			47.78		P	29.0
4	☐			62.22		P	11.1
5	☐			78.89		P	2.4
6	☐			113.33		P	22.2
7	☐			121.12		P	19.3
8	☐			991.16		P	6.4

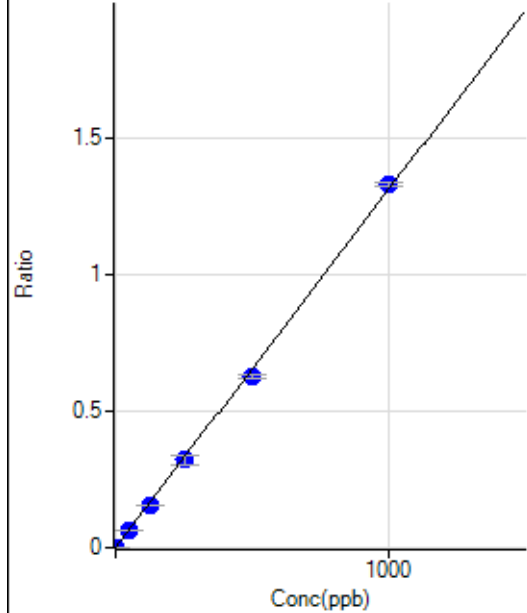
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	89.2
2	☐			33.33		P	25.0
3	☐			25.00		P	33.3
4	☐			11.11		P	86.6
5	☐			27.78		P	17.3
6	☐			30.56		P	31.5
7	☐			55.56		P	8.7
8	☐			150.01		P	30.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	0.0
2	☐			11.11		P	96.4
3	☐			16.66		P	34.6
4	☐			18.89		P	27.0
5	☐			18.89		P	10.2
6	☐			28.89		P	29.0
7	☐			38.89		P	52.4
8	☐			120.00		P	28.2

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	63.89	0.0000	P	52.8
2	☐	1.000	0.890	2914.28	0.0012	P	5.5
3	☐	50.000	47.004	157647.87	0.0618	P	0.4
4	☐	125.000	117.611	397717.58	0.1546	P	3.2
5	☐	250.000	244.985	820724.36	0.3219	P	12.2
6	☐	500.000	477.573	1671431.22	0.6275	P	1.4
7	☐	1000.000	1013.541	3528851.68	1.3317	P	1.1
8	☐			2014.10	0.0008	P	20.1

$$y = 0.0013 * x + 2.6325E-005$$

$$R = 0.9996$$

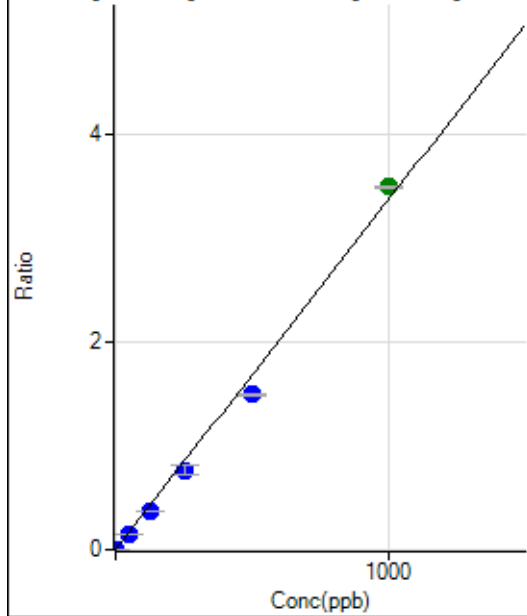
$$DL = 0.03176$$

$$BEC = 0.02004$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0001	P	35.0
2	☐	1.000	0.834	7007.61	0.0029	P	6.8
3	☐	50.000	43.107	371396.13	0.1456	P	0.4
4	☐	125.000	109.379	950221.63	0.3692	P	2.6
5	☐	250.000	226.655	1950824.26	0.7650	P	12.0
6	☐	500.000	443.056	3983463.24	1.4954	P	1.0
7	☐	1000.000	1036.605	9271727.38	3.4987	A	0.5
8	☐			4350.86	0.0017	P	15.9

$$y = 0.0034 * x + 6.0471E-005$$

$$R = 0.9974$$

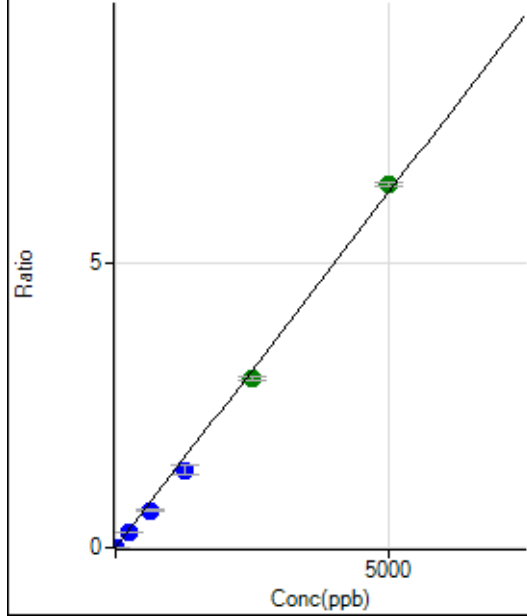
$$DL = 0.01884$$

$$BEC = 0.01792$$

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	62.96	0.0000	P	25.2
2	☐	1.000	0.805	2507.69	0.0010	P	0.4
3	☐	250.000	209.167	664782.03	0.2605	P	0.4
4	☐	625.000	527.099	1689597.62	0.6565	P	2.3
5	☐	1250.000	1090.788	3464207.34	1.3585	P	12.0
6	☐	2500.000	2389.871	7928006.48	2.9764	A	1.8
7	☐	5000.000	5109.147	16862051.42	6.3631	A	0.9
8	☐			18768.98	0.0074	P	5.3

$$y = 0.0012 * x + 2.6328E-005$$

$$R = 0.9991$$

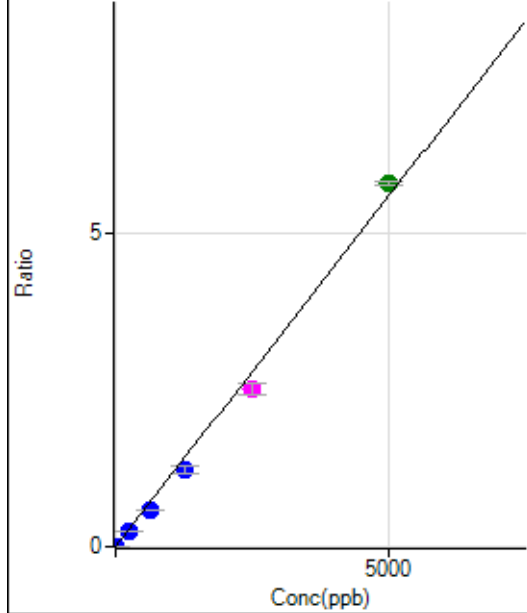
$$DL = 0.01597$$

$$BEC = 0.02114$$

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	53.71	0.0000	P	3.0
2	☐	1.000	0.767	2140.95	0.0009	P	7.9
3	☐	250.000	210.880	601211.88	0.2356	P	0.7
4	☐	625.000	527.466	1516773.36	0.5893	P	1.8
5	☐	1250.000	1096.216	3122961.24	1.2247	P	12.0
6	☐	2500.000	2247.948	6694573.47	2.5115	M	7.3
7	☐	5000.000	5178.620	15331578.93	5.7856	A	1.0
8	☐			17376.37	0.0069	P	3.7

$$y = 0.0011 * x + 2.2339E-005$$

$$R = 0.9977$$

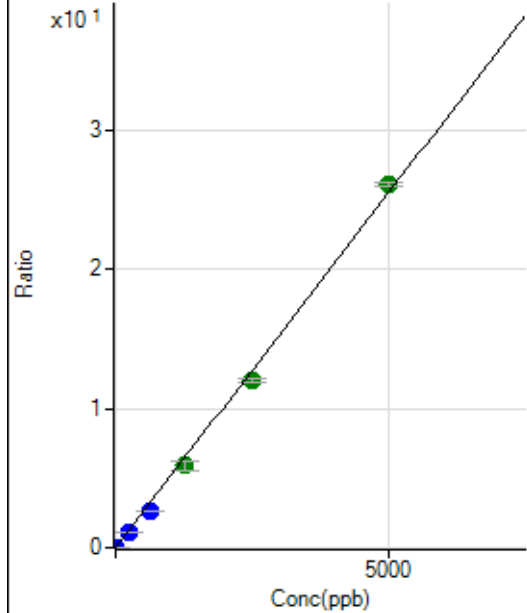
$$DL = 0.001809$$

$$BEC = 0.02$$

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	237.04	0.0001	P	7.8
2	☐	1.000	0.768	9773.81	0.0040	P	0.6
3	☐	250.000	207.928	2704281.27	1.0598	P	0.2
4	☐	625.000	520.722	6830642.62	2.6540	P	2.0
5	☐	1250.000	1155.398	15016545.28	5.8887	A	11.9
6	☐	2500.000	2352.788	31944920.85	11.9913	A	1.6
7	☐	5000.000	5112.395	69045948.76	26.0559	A	1.0
8	☐			76878.02	0.0305	P	4.2

$$y = 0.0051 * x + 9.8637E-005$$

$$R = 0.9991$$

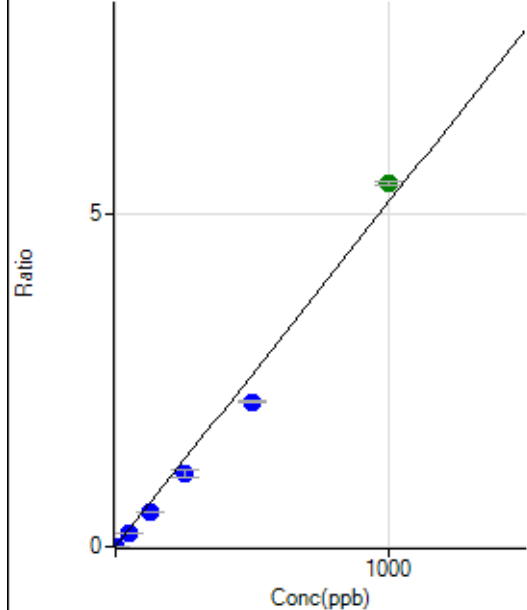
$$DL = 0.004532$$

$$BEC = 0.01935$$

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	87.04	0.0000	P	12.3
2	☐	1.000	0.001	105.56	0.0000	P	9.8
3	☐	50.000	39.238	517041.89	0.2026	P	0.6
4	☐	125.000	100.554	1336372.04	0.5192	P	1.9
5	☐	250.000	211.373	2784270.00	1.0914	P	11.3
6	☐	500.000	420.312	5780904.36	2.1702	P	1.1
7	☐	1000.000	1053.096	14408592.11	5.4375	A	1.1
8	☐			3789.50	0.0015	P	5.7

$$y = 0.0052 * x + 3.6213E-005$$

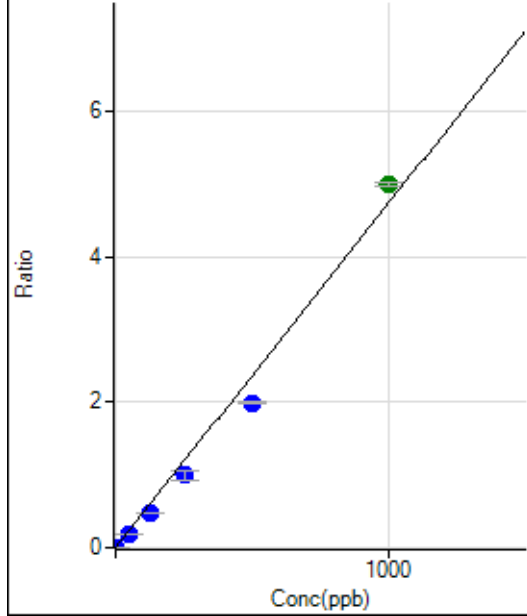
$$R = 0.9948$$

$$DL = 0.002588$$

$$BEC = 0.007014$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.66	0.0000	P	89.7
2	☐	1.000	0.745	8630.89	0.0035	P	2.6
3	☐	50.000	39.498	478145.92	0.1874	P	0.9
4	☐	125.000	100.389	1225747.68	0.4763	P	2.0
5	☐	250.000	210.407	2545596.28	0.9982	P	11.9
6	☐	500.000	420.607	5315466.92	1.9954	P	0.8
7	☐	1000.000	1053.196	13240076.86	4.9965	A	1.1
8	☐			2536.44	0.0010	P	5.4

$$y = 0.0047 * x + 7.0633E-006$$

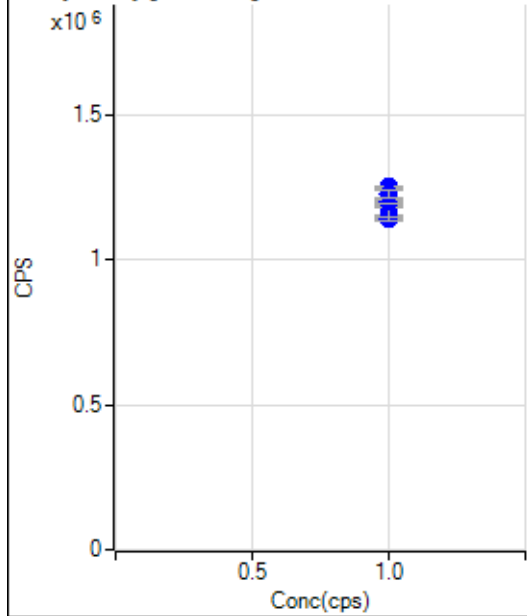
$$R = 0.9948$$

$$DL = 0.004004$$

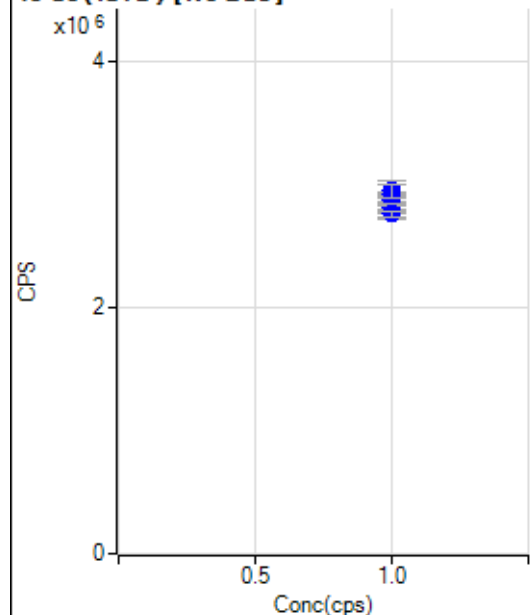
$$BEC = 0.001489$$

Weight: <None>

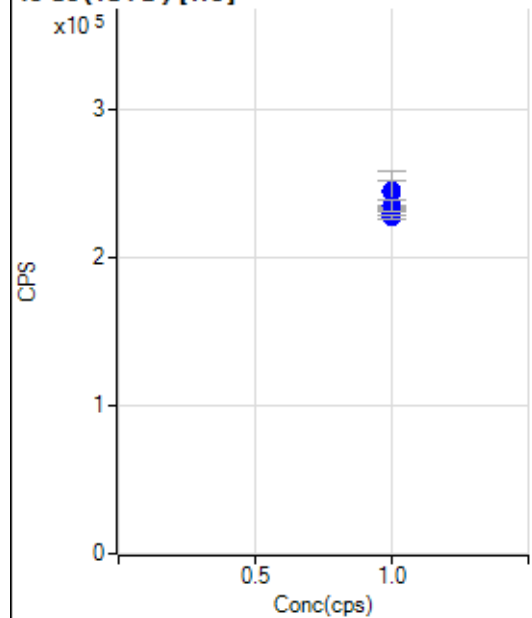
Min Conc: 0

6 Li (ISTD) [No Gas]

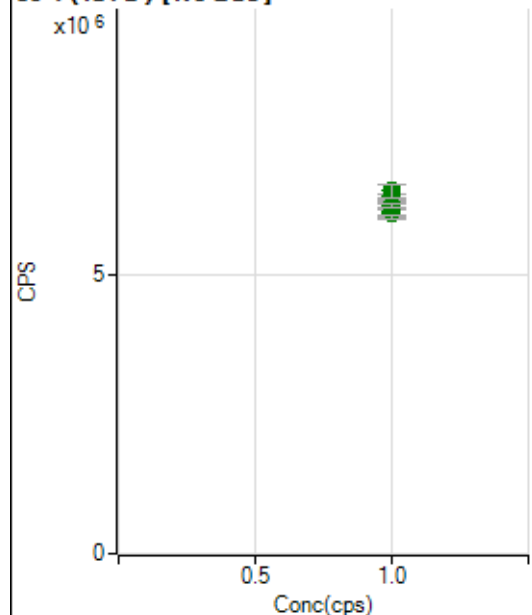
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1146466.53		P	1.7
2	☐	1.000		1140313.76		P	1.4
3	☐	1.000		1182622.12		P	0.1
4	☐	1.000		1202760.63		P	0.7
5	☐	1.000		1200089.84		P	8.8
6	☐	1.000		1250389.56		P	0.6
7	☐	1.000		1198095.48		P	1.1
8	☐	1.000		1228231.64		P	2.1

45 Sc (ISTD) [No Gas]

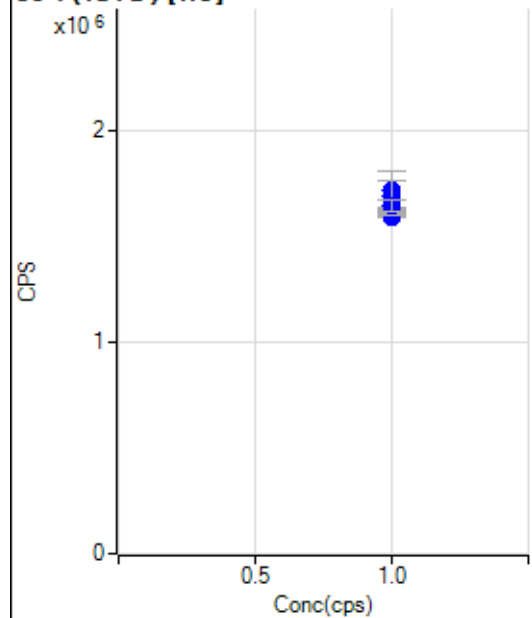
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2802306.63		P	2.7
2	☐	1.000		2825484.86		P	2.2
3	☐	1.000		2921054.47		P	0.1
4	☐	1.000		2921594.51		P	1.1
5	☐	1.000		2874975.58		P	11.0
6	☐	1.000		2835230.72		P	0.7
7	☐	1.000		2756628.50		P	1.4
8	☐	1.000		2944901.97		P	3.6

45 Sc (ISTD) [He]

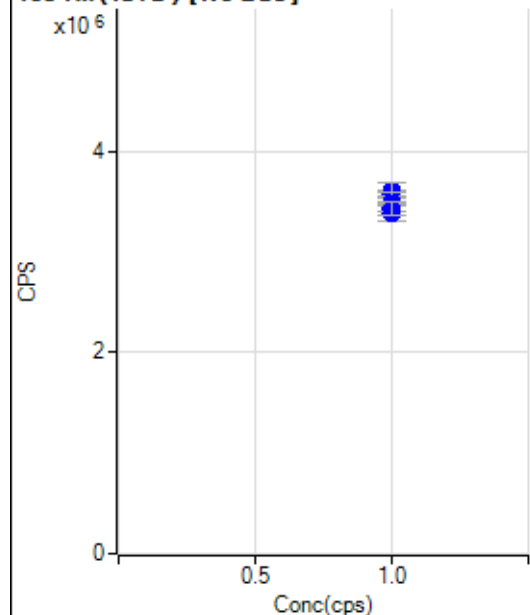
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		231153.11		P	0.3
2	☐	1.000		232844.55		P	0.4
3	☐	1.000		244853.41		P	10.8
4	☐	1.000		234176.39		P	0.4
5	☐	1.000		243748.27		P	7.1
6	☐	1.000		229302.15		P	1.1
7	☐	1.000		227272.53		P	1.0
8	☐	1.000		234900.95		P	3.4

89 Y (ISTD) [No Gas]

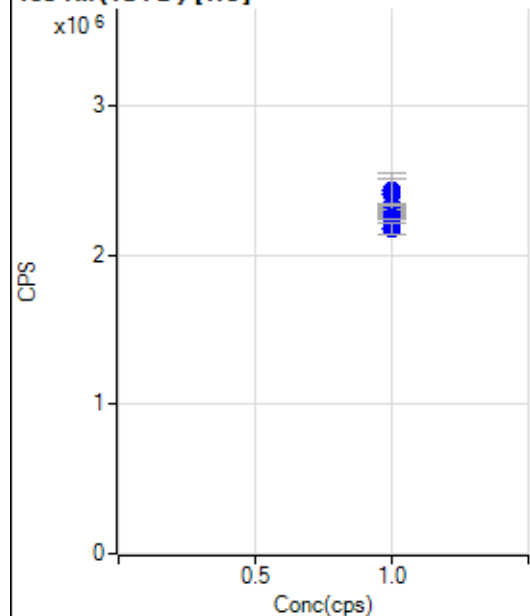
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6120688.94		A	2.6
2	☐	1.000		6162390.46		A	2.4
3	☐	1.000		6367737.82		A	1.0
4	☐	1.000		6432169.42		A	1.5
5	☐	1.000		6325957.76		A	9.7
6	☐	1.000		6349896.02		A	0.8
7	☐	1.000		6253584.56		A	1.3
8	☐	1.000		6522504.90		A	3.8

89 Y (ISTD) [He]

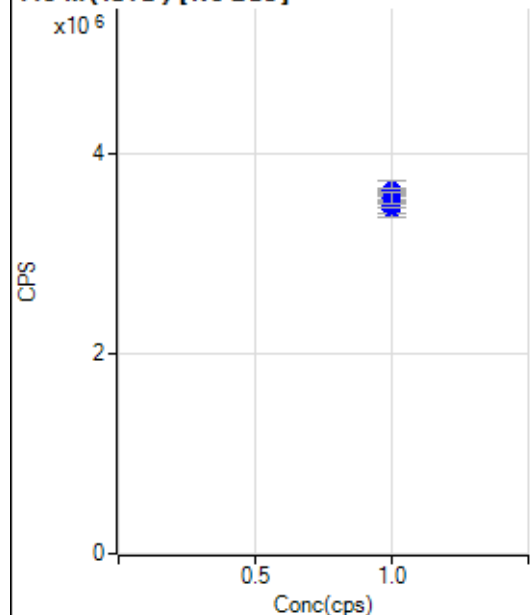
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1603620.43		P	0.9
2	☐	1.000		1612331.09		P	0.3
3	☐	1.000		1712844.72		P	10.6
4	☐	1.000		1633893.78		P	0.3
5	☐	1.000		1692574.75		P	7.6
6	☐	1.000		1591721.56		P	0.5
7	☐	1.000		1601034.30		P	0.6
8	☐	1.000		1640679.38		P	3.5

103 Rh (ISTD) [No Gas]

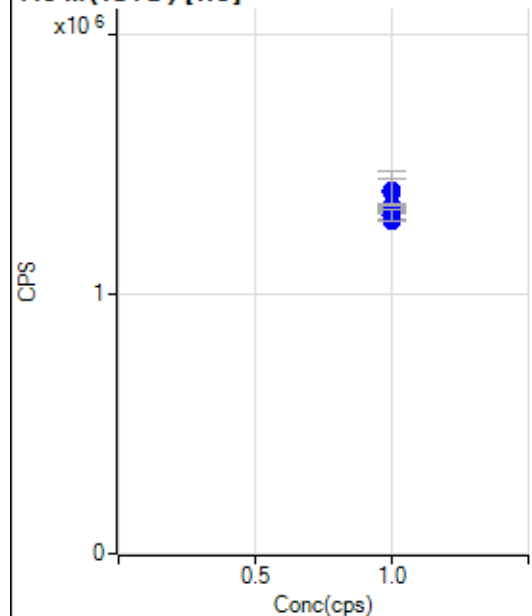
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3445427.28		P	2.7
2	☐	1.000		3502640.23		P	2.0
3	☐	1.000		3607598.28		P	0.5
4	☐	1.000		3582506.93		P	1.1
5	☐	1.000		3498114.18		P	10.5
6	☐	1.000		3484516.13		P	0.4
7	☐	1.000		3390438.80		P	1.2
8	☐	1.000		3427814.01		P	3.7

103 Rh (ISTD) [He]

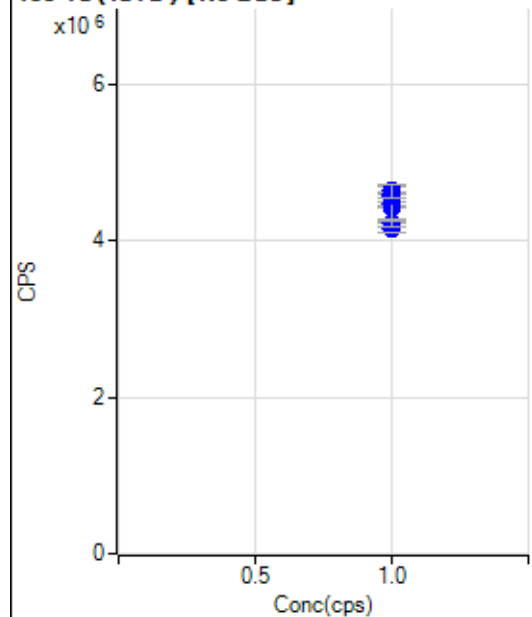
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2281631.98		P	0.9
2	☐	1.000		2314440.49		P	0.1
3	☐	1.000		2427391.92		P	10.3
4	☐	1.000		2331652.20		P	0.6
5	☐	1.000		2403812.24		P	8.5
6	☐	1.000		2257141.51		P	0.4
7	☐	1.000		2239582.87		P	0.5
8	☐	1.000		2174653.11		P	3.2

115 In (ISTD) [No Gas]

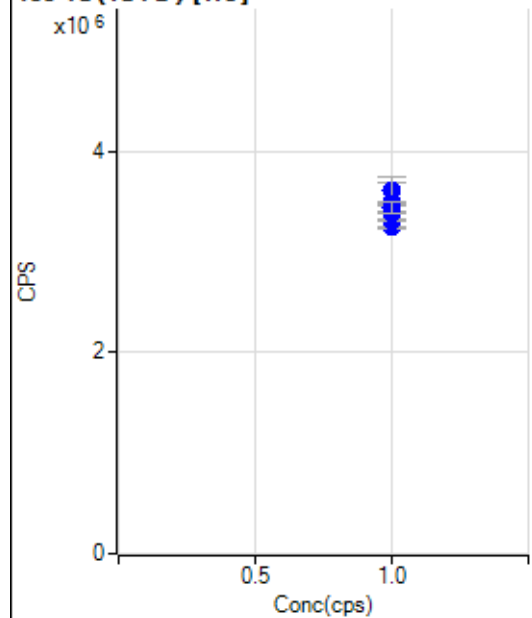
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3439127.67		P	2.9
2	☐	1.000		3489362.58		P	1.8
3	☐	1.000		3610715.11		P	0.5
4	☐	1.000		3620601.76		P	1.3
5	☐	1.000		3535599.98		P	10.2
6	☐	1.000		3554179.48		P	0.8
7	☐	1.000		3471751.15		P	1.3
8	☐	1.000		3554110.25		P	3.5

115 In (ISTD) [He]

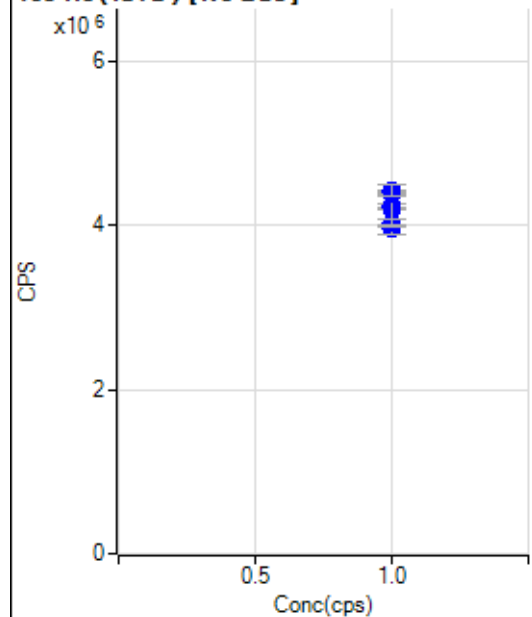
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1310753.30		P	0.4
2	☐	1.000		1332580.74		P	0.2
3	☐	1.000		1395588.26		P	10.6
4	☐	1.000		1340256.05		P	0.5
5	☐	1.000		1391471.01		P	7.7
6	☐	1.000		1298609.63		P	1.3
7	☐	1.000		1280189.69		P	0.5
8	☐	1.000		1299588.36		P	3.3

159 Tb (ISTD) [No Gas]

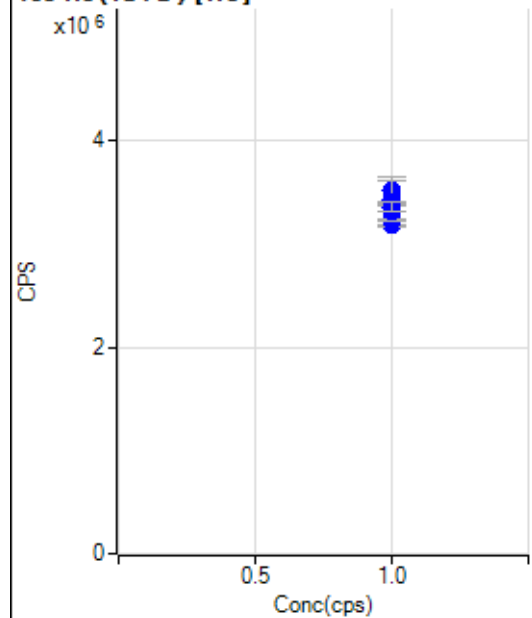
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4154277.33		P	3.0
2	☐	1.000		4228946.74		P	2.2
3	☐	1.000		4423288.03		P	0.7
4	☐	1.000		4458115.32		P	1.6
5	☐	1.000		4459376.39		P	9.8
6	☐	1.000		4564862.12		P	1.1
7	☐	1.000		4578269.79		P	1.8
8	☐	1.000		4630633.65		P	3.7

159 Tb (ISTD) [He]

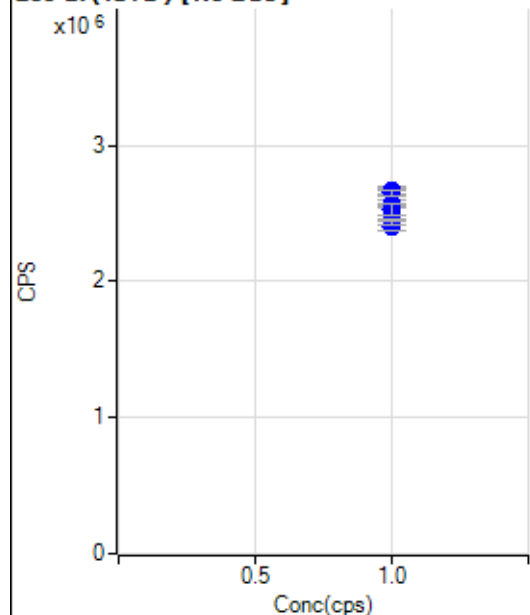
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3238957.14		P	0.4
2	☐	1.000		3308214.88		P	0.3
3	☐	1.000		3503311.37		P	10.4
4	☐	1.000		3381743.98		P	0.6
5	☐	1.000		3602818.94		P	7.5
6	☐	1.000		3456894.78		P	0.2
7	☐	1.000		3474338.49		P	0.4
8	☐	1.000		3430399.29		P	3.4

165 Ho (ISTD) [No Gas]

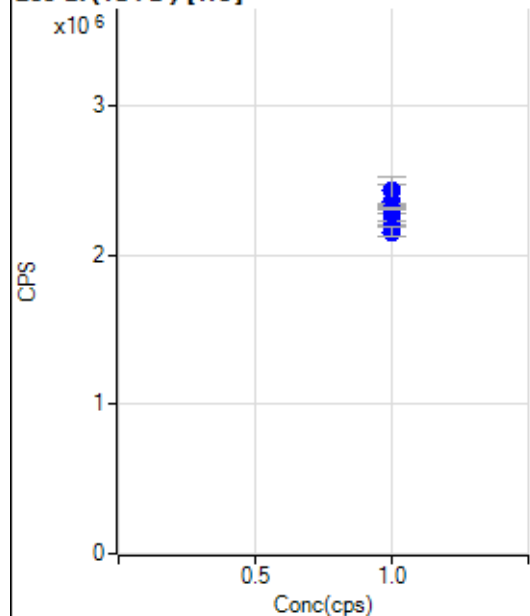
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3949134.11		P	2.7
2	☐	1.000		4030507.68		P	2.1
3	☐	1.000		4196927.96		P	0.7
4	☐	1.000		4243951.57		P	1.3
5	☐	1.000		4209161.88		P	9.7
6	☐	1.000		4378423.96		P	0.7
7	☐	1.000		4395110.77		P	1.1
8	☐	1.000		4419727.68		P	3.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3183274.88		P	0.6
2	☐	1.000		3227499.22		P	0.1
3	☐	1.000		3430535.54		P	10.7
4	☐	1.000		3315609.01		P	0.1
5	☐	1.000		3514769.08		P	7.8
6	☐	1.000		3401203.39		P	0.8
7	☐	1.000		3409456.69		P	0.4
8	☐	1.000		3361085.12		P	3.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2402684.15		P	3.0
2	☐	1.000		2436793.92		P	1.6
3	☐	1.000		2551642.60		P	0.2
4	☐	1.000		2574269.74		P	1.9
5	☐	1.000		2569588.40		P	9.6
6	☐	1.000		2664025.43		P	1.5
7	☐	1.000		2650154.32		P	1.5
8	☐	1.000		2524224.48		P	3.5

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2203820.82		P	0.2
2	☐	1.000		2223706.65		P	0.2
3	☐	1.000		2350390.52		P	10.5
4	☐	1.000		2278779.51		P	0.2
5	☐	1.000		2428645.28		P	7.8
6	☐	1.000		2336018.26		P	0.9
7	☐	1.000		2307442.39		P	0.6
8	☐	1.000		2152656.74		P	2.9

US EPA Tune Check Sample Report

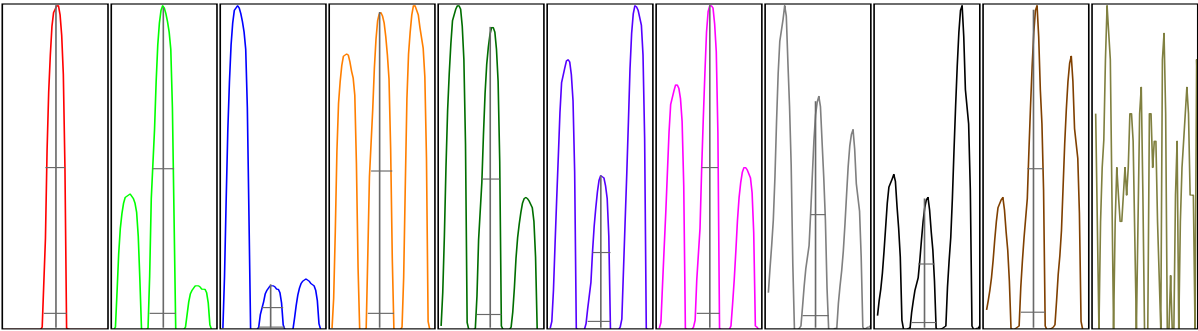
Batch Folder C:\Agilent\ICPMH\1\DATA\P7011421MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	3688	0.76	5.00	
24	47299	0.72	5.00	
25	6197	0.86	5.00	
26	7270	1.01	5.00	
59	8595	0.83	5.00	
113	4268	0.88	5.00	
115	11931	0.58	5.00	
206	4353	0.85	5.00	
207	3666	1.11	5.00	
208	9117	0.89	5.00	
220	0	36.78		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	3650	3676	3724	3705	3685
24	47156	46858	47540	47214	47727
25	6128	6153	6232	6221	6251
26	7196	7204	7366	7263	7321
59	8504	8555	8669	8583	8664
113	4218	4242	4312	4281	4289
115	11848	11877	12021	11955	11952
206	4310	4326	4374	4354	4403
207	3617	3636	3680	3678	3720
208	9024	9034	9154	9186	9188
220	0	0	0	0	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	6895	9.05	8.9 - 9.1		0.687	0.900	
24	81086	24.00	23.9 - 24.1		0.778	0.900	
25	10955	24.95	24.9 - 25.1		0.735	0.900	
26	12587	25.95	25.9 - 26.1		0.779	0.900	
59	16194	59.00	58.9 - 59.1		0.725	0.900	
113	8554	113.05	112.9 - 113.1		0.688	0.900	
115	23942	115.05	114.9 - 115.1		0.688	0.900	
206	9556	205.95	205.9 - 206.1		0.760	0.900	
207	8207	206.95	206.9 - 207.1		0.726	0.900	
208	20174	207.95	207.9 - 208.1		0.726	0.900	
220			-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 256.8 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.62	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		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.9	V	Deflect	13.6	V
Extract 2	-165.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	3056	4.25	
89	159324	4.50	
205	5024	4.90	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	2824	3108	3126	3104	3119
89	146633	161772	163361	161239	163615
205	4589	5164	5151	5068	5149

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.62	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		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.6	V	Deflect	2.4	V
Extract 2	-180.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-80	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	3.9	mL/min	OctP RF	200	V			