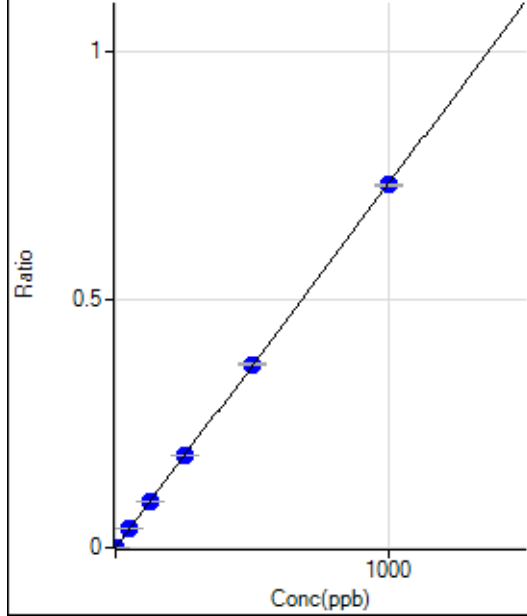


Calibration for 006CALS_P7061721 MS.D

Batch Folder: C:\Agilent\ICPMH\1\DATA\P7061721 MS .b\
 Analysis File: P7061721 MS .batch.bin
 DA Date-Time: 2021-06-18 01:22:03
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P7061721 MS.D	S00	2021-06-17 12:47:03
2	005CALS P7061721 MS.D	S02	2021-06-17 12:53:24
3	006CALS P7061721 MS.D	S03	2021-06-17 12:56:34
4	007CALS P7061721 MS.D	S04	2021-06-17 12:59:43
5	008CALS P7061721 MS.D	S05	2021-06-17 13:02:51
6	009CALS P7061721 MS.D	S06	2021-06-17 13:05:55
7	010CALS P7061721 MS.D	S07	2021-06-17 13:08:55
8	011CALS P7061721 MS.D	S08	2021-06-17 13:11:54

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	50.00	0.0000	P	19.4
2	☐	1.000	1.092	1205.63	0.0008	P	4.5
3	☐	50.000	51.035	55646.15	0.0375	P	1.4
4	☐	125.000	127.958	137670.40	0.0941	P	0.8
5	☐	250.000	252.876	269407.85	0.1859	P	0.6
6	☐	500.000	503.806	521754.56	0.3703	P	0.5
7	☐	1000.000	996.956	1006938.06	0.7327	P	0.7
8	☐			259.26	0.0002	P	26.6

$$y = 7.3486\text{E-}004 * x + 3.4410\text{E-}005$$

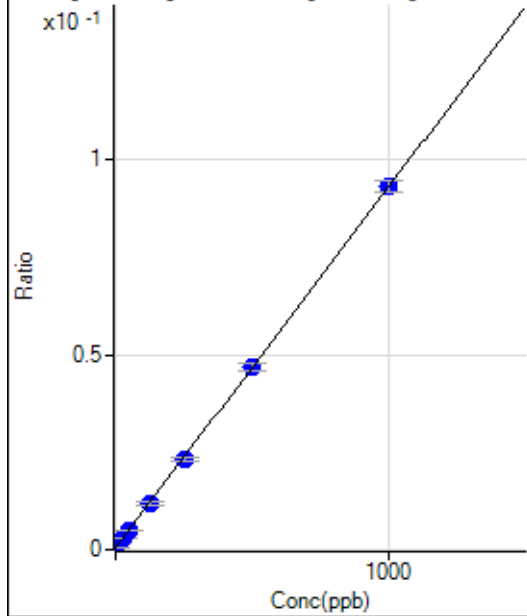
$$R = 1.0000$$

$$DL = 0.02724$$

$$BEC = 0.04682$$

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	763.92	0.0005	P	24.5
2	☐	25.000	25.838	4197.92	0.0029	P	2.9
3	☐	50.000	49.034	7502.02	0.0051	P	4.6
4	☐	125.000	121.708	17243.49	0.0118	P	6.0
5	☐	250.000	246.331	33790.94	0.0233	P	4.9
6	☐	500.000	501.476	66105.63	0.0469	P	3.4
7	☐	1000.000	1000.618	127894.28	0.0931	P	3.3
8	☐			5114.89	0.0038	P	17.4

$$y = 9.2495\text{E-}005 * x + 5.2559\text{E-}004$$

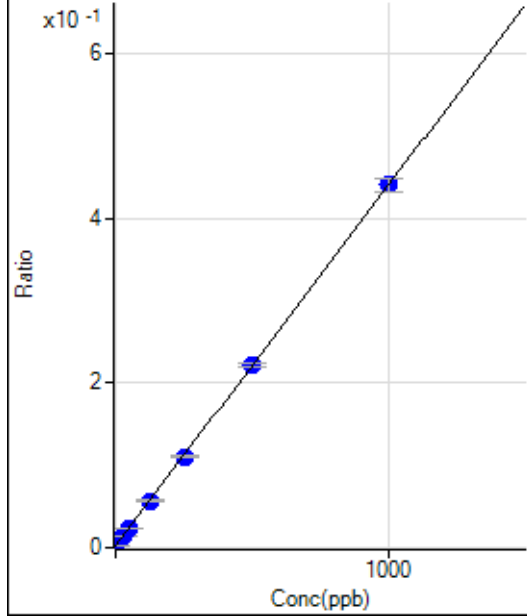
$$R = 1.0000$$

$$DL = 4.176$$

$$BEC = 5.682$$

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	3622.75	0.0025	P	5.1
2	☐	25.000	25.185	19474.07	0.0135	P	4.2
3	☐	50.000	48.982	35503.21	0.0240	P	3.7
4	☐	125.000	123.513	82834.87	0.0566	P	3.3
5	☐	250.000	246.124	159917.03	0.1103	P	2.9
6	☐	500.000	502.311	313629.78	0.2226	P	2.4
7	☐	1000.000	1000.046	605421.08	0.4406	P	3.8
8	☐			24506.55	0.0182	P	12.7

$$y = 4.3811\text{E-}004 * x + 0.0025$$

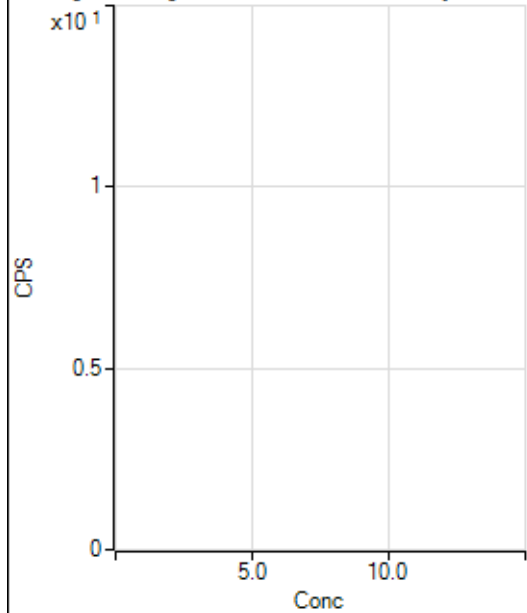
$$R = 1.0000$$

$$DL = 0.8698$$

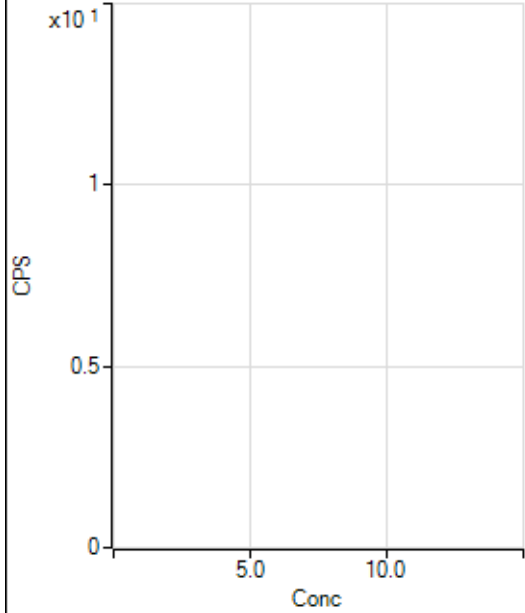
$$BEC = 5.688$$

Weight: <None>

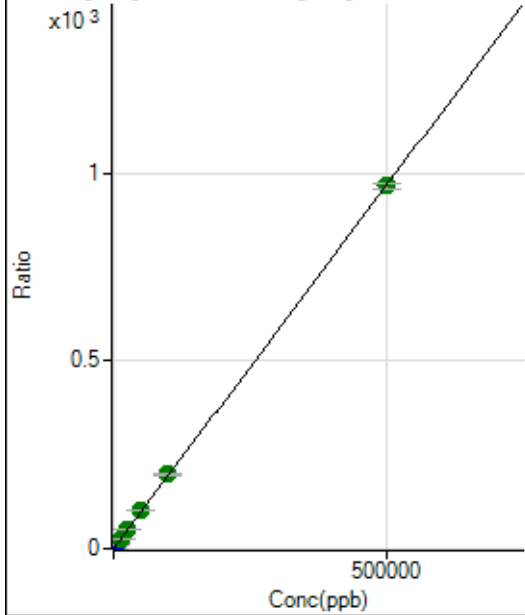
Min Conc: 0

12 C [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	21276.54	0.0876	P	2.4
2	☐	500.000	475.353	240716.50	1.0065	P	0.9
3	☐	5000.000	4757.432	2211430.73	9.2835	P	0.4
4	☐	12500.000	13309.266	6089158.86	25.8138	A	1.1
5	☐	25000.000	26205.296	11924627.61	50.7412	A	0.7
6	☐	50000.000	52183.747	23401035.59	100.9563	A	0.6
7	☐	100000.00	102382.55	45713820.81	197.9882	A	1.1
8	☐	500000.00	499227.06	227197580.0	965.0697	A	1.4

$$y = 0.0019 * x + 0.0876$$

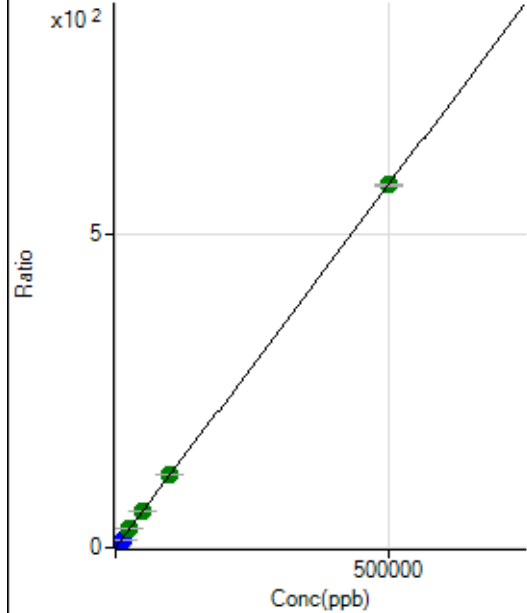
$$R = 1.0000$$

$$DL = 3.308$$

$$BEC = 45.34$$

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	2611.40	0.0108	P	11.1
2	☐	500.000	450.640	127641.45	0.5337	P	1.2
3	☐	5000.000	4671.928	1293942.51	5.4320	P	0.0
4	☐	12500.000	11577.744	3171636.16	13.4454	P	0.6
5	☐	25000.000	25772.247	7030559.53	29.9164	A	0.6
6	☐	50000.000	51310.273	13803532.78	59.5503	A	0.8
7	☐	100000.00	99704.280	26716612.92	115.7059	A	0.6
8	☐	500000.00	499915.89	136574344.7	580.1047	A	0.8

$$y = 0.0012 * x + 0.0108$$

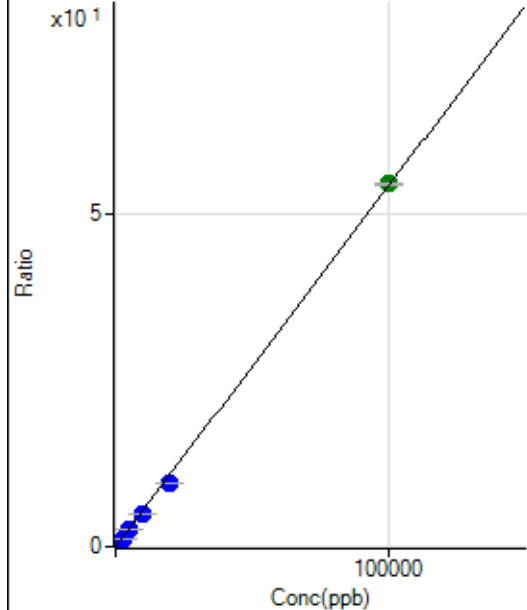
$$R = 1.0000$$

$$DL = 3.087$$

$$BEC = 9.265$$

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	352.79	0.0015	P	11.8
2	☐	20.000	17.610	2625.30	0.0110	P	4.2
3	☐	1000.000	920.588	118935.32	0.4993	P	0.5
4	☐	2500.000	2333.388	298001.65	1.2633	P	1.2
5	☐	5000.000	4551.178	578749.73	2.4627	P	0.5
6	☐	10000.000	9002.324	1128799.31	4.8698	P	0.4
7	☐	20000.000	17489.149	2184152.09	9.4594	P	0.9
8	☐	100000.00	100629.33	12812420.34	54.4206	A	0.8

$$y = 5.4079E-004 * x + 0.0015$$

$$R = 0.9996$$

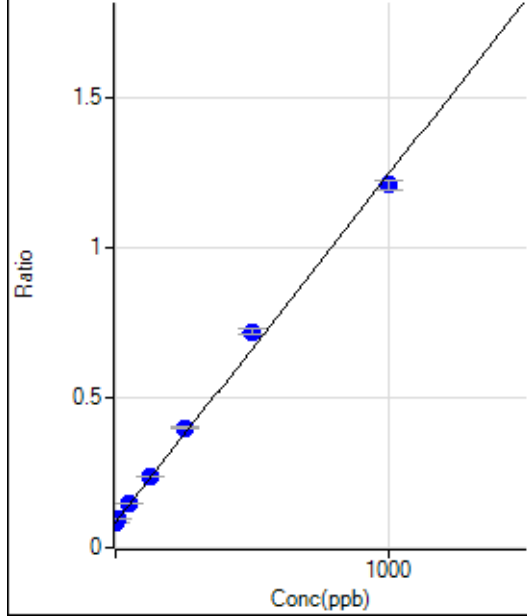
$$DL = 0.9545$$

$$BEC = 2.686$$

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	234885.55	0.0841	P	0.8
2	☐	10.000	10.815	267029.59	0.0967	P	0.9
3	☐	50.000	54.479	408195.65	0.1474	P	1.4
4	☐	125.000	132.463	655289.48	0.2381	P	1.9
5	☐	250.000	271.100	1085748.28	0.3993	P	2.1
6	☐	500.000	546.920	1944489.00	0.7199	P	2.6
7	☐	1000.000	970.100	3204418.15	1.2119	P	2.8
8	☐			313417.09	0.1192	P	0.7

$$y = 0.0012 * x + 0.0841$$

$$R = 0.9981$$

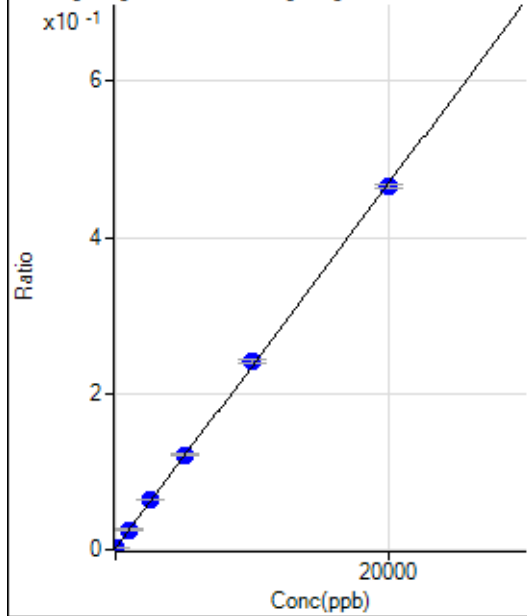
$$DL = 1.709$$

$$BEC = 72.34$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	5.579	472.24	0.0019	P	2.1
2	☐	0.000	-5.579	402.79	0.0017	P	10.7
3	☐	1000.000	1022.410	6120.83	0.0257	P	1.9
4	☐	2500.000	2634.009	14941.13	0.0633	P	1.5
5	☐	5000.000	5132.502	28600.17	0.1217	P	0.9
6	☐	10000.000	10261.226	55977.34	0.2415	P	2.7
7	☐	20000.000	19818.390	107305.05	0.4647	P	0.9
8	☐			500.02	0.0021	P	15.5

$$y = 2.3358E-005 * x + 0.0018$$

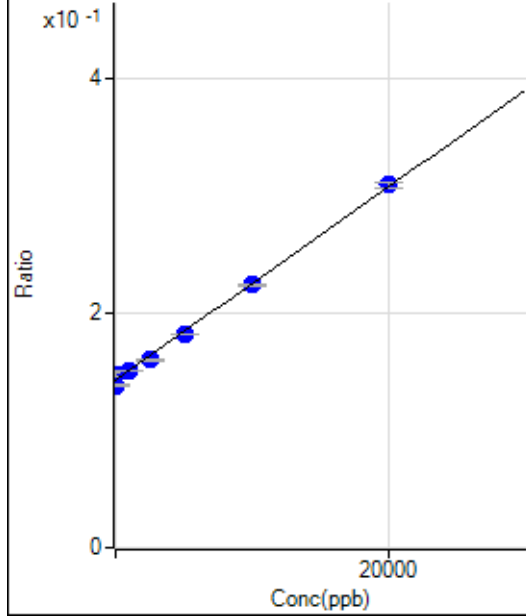
$$R = 0.9998$$

$$DL = 14.21$$

$$BEC = 77.69$$

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	-562.709	386672.68	0.1385	P	0.2
2	☐	0.000	562.709	408061.24	0.1477	P	1.8
3	☐	1000.000	964.908	418150.64	0.1510	P	0.8
4	☐	2500.000	2096.087	441354.38	0.1604	P	0.6
5	☐	5000.000	4762.893	495794.13	0.1823	P	0.3
6	☐	10000.000	9857.481	605883.21	0.2243	P	0.6
7	☐	20000.000	20182.780	818065.52	0.3094	P	1.5
8	☐			354607.18	0.1348	P	1.3

$$y = 8.2384E-006 * x + 0.1431$$

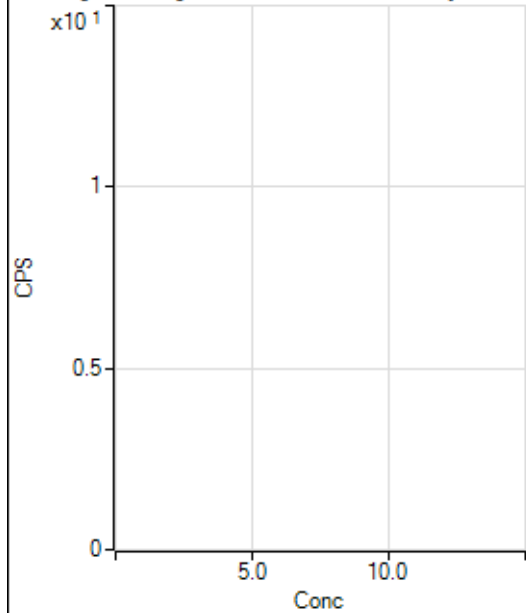
$$R = 0.9988$$

$$DL = 517.7$$

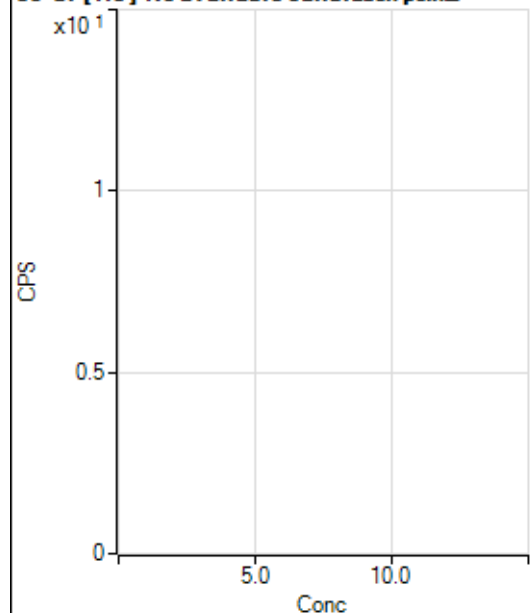
$$BEC = 1.737E+04$$

Weight: <None>

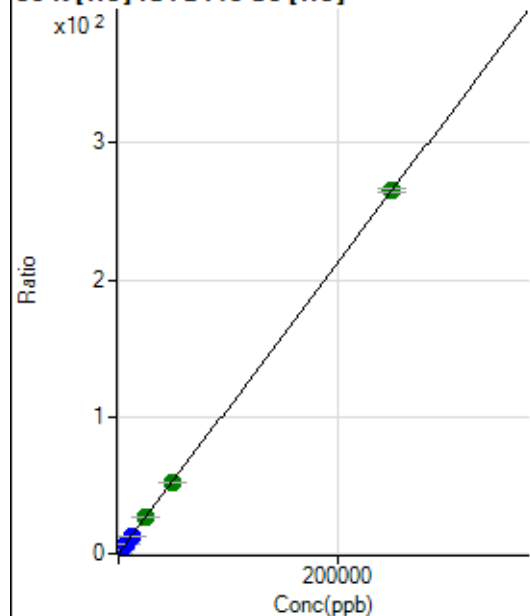
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	47180.95	0.1943	P	1.7
2	☐	500.000	472.375	166059.64	0.6943	P	0.2
3	☐	2500.000	2354.963	640067.67	2.6870	P	0.3
4	☐	6250.000	5886.122	1515517.22	6.4247	P	0.6
5	☐	12500.000	11638.835	2940846.57	12.5138	P	0.2
6	☐	25000.000	25082.369	6199117.02	26.7436	A	0.2
7	☐	50000.000	48998.175	12019996.02	52.0581	A	1.0
8	☐	250000.00	250245.78	62408989.59	265.0757	A	1.1

$$y = 0.0011 * x + 0.1943$$

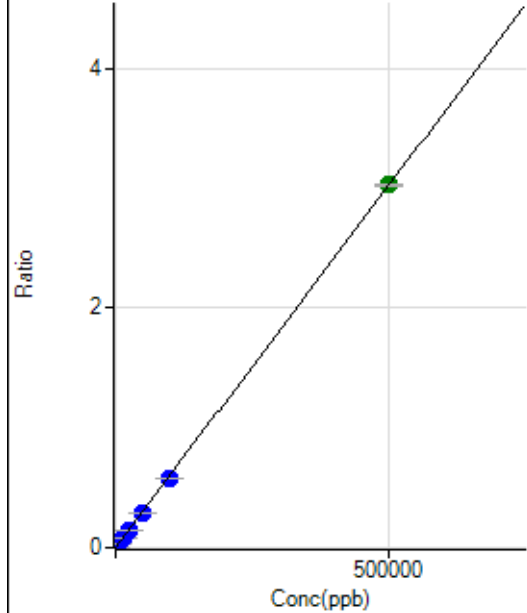
$$R = 1.0000$$

$$DL = 9.403$$

$$BEC = 183.6$$

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	280.57	0.0001	P	27.0
2	☐	500.000	472.661	8160.75	0.0030	P	3.7
3	☐	5000.000	4824.626	80939.81	0.0292	P	1.3
4	☐	12500.000	12145.875	202134.25	0.0734	P	2.1
5	☐	25000.000	24458.374	401908.49	0.1478	P	0.6
6	☐	50000.000	48191.624	786351.44	0.2911	P	0.6
7	☐	100000.00	95935.898	1532352.12	0.5794	P	1.0
8	☐	500000.00	501031.37	7956932.29	3.0258	A	0.7

$$y = 6.0389\text{E-}006 * x + 1.0047\text{E-}004$$

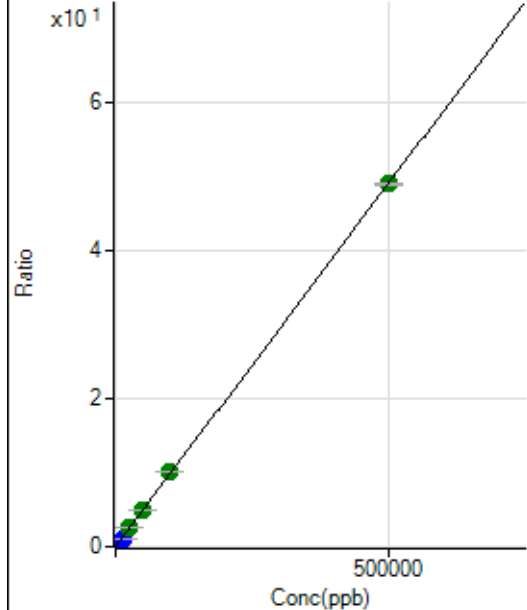
$$R = 1.0000$$

$$DL = 13.48$$

$$BEC = 16.64$$

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	9998.10	0.0036	P	3.4
2	☐	500.000	468.321	136739.79	0.0495	P	1.9
3	☐	5000.000	4672.489	1278575.79	0.4618	P	0.6
4	☐	12500.000	11712.455	3171296.23	1.1523	P	0.5
5	☐	25000.000	25633.450	6845765.86	2.5175	A	1.0
6	☐	50000.000	50936.019	13502910.02	4.9990	A	0.5
7	☐	100000.00	102327.49	26550478.20	10.0392	A	0.4
8	☐	500000.00	499432.22	128817094.5	48.9844	A	0.7

$$y = 9.8073\text{E-}005 * x + 0.0036$$

$$R = 1.0000$$

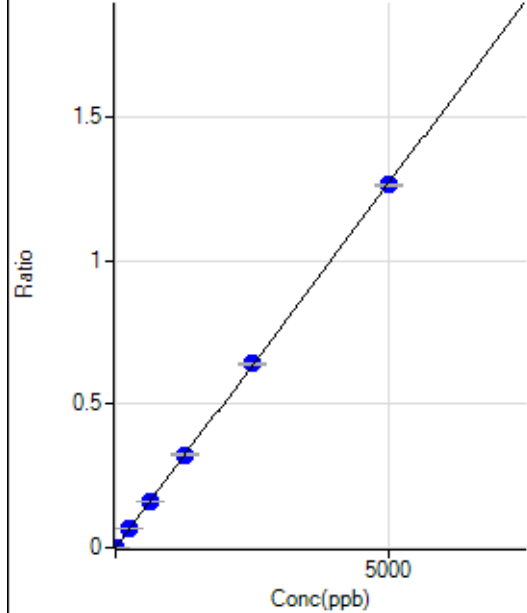
$$DL = 3.736$$

$$BEC = 36.5$$

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	55.56	0.0000	P	22.9
2	☐	5.000	5.163	3675.56	0.0013	P	1.3
3	☐	250.000	254.093	178653.67	0.0645	P	1.0
4	☐	625.000	637.935	445814.29	0.1620	P	0.5
5	☐	1250.000	1279.030	883070.69	0.3247	P	0.5
6	☐	2500.000	2522.467	1729856.72	0.6404	P	0.9
7	☐	5000.000	4979.687	3343584.77	1.2643	P	0.5
8	☐			819.49	0.0003	P	9.3

$$y = 2.5388\text{E-}004 * x + 1.9894\text{E-}005$$

$$R = 1.0000$$

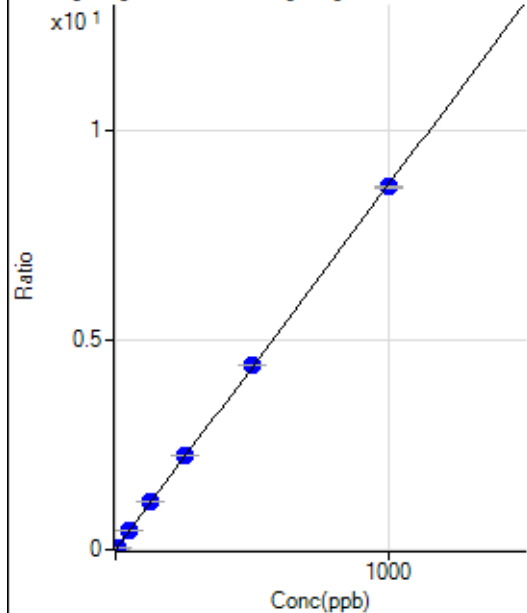
$$DL = 0.05389$$

$$BEC = 0.07836$$

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	5.55	0.0000	P	69.3
2	☐	5.000	5.293	11014.19	0.0461	P	0.8
3	☐	50.000	51.247	106160.02	0.4457	P	0.2
4	☐	125.000	129.264	265161.29	1.1241	P	0.2
5	☐	250.000	256.747	524692.44	2.2327	P	0.3
6	☐	500.000	507.411	1022783.69	4.4124	P	0.3
7	☐	1000.000	994.011	1995824.05	8.6438	P	0.8
8	☐			562.24	0.0024	P	11.6

$$y = 0.0087 * x + 2.2868\text{E-}005$$

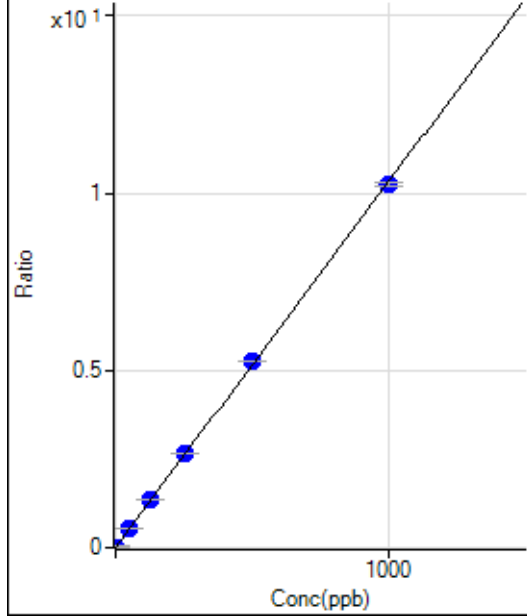
$$R = 0.9999$$

$$DL = 0.005469$$

$$BEC = 0.00263$$

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	1096.72	0.0045	P	4.5
2	☐	2.000	2.189	6479.26	0.0271	P	1.0
3	☐	50.000	52.341	129644.12	0.5442	P	0.4
4	☐	125.000	130.837	319318.77	1.3537	P	0.2
5	☐	250.000	257.730	625622.34	2.6621	P	0.5
6	☐	500.000	510.964	1222364.25	5.2734	P	0.2
7	☐	1000.000	991.739	2362296.44	10.2310	P	1.0
8	☐			5987.93	0.0254	P	1.0

$$y = 0.0103 * x + 0.0045$$

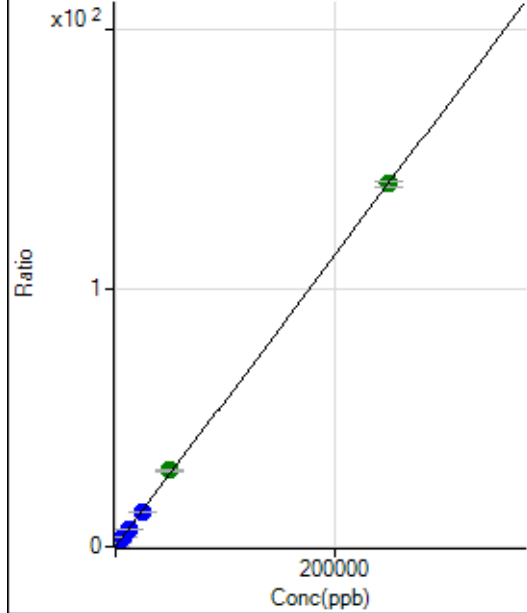
$$R = 0.9999$$

$$DL = 0.0589$$

$$BEC = 0.4381$$

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	1511.64	0.0062	P	2.4
2	☐	50.000	46.382	7723.29	0.0323	P	1.6
3	☐	2500.000	2409.363	324012.59	1.3602	P	0.2
4	☐	6250.000	6010.320	798211.41	3.3838	P	0.7
5	☐	12500.000	11911.560	1574580.48	6.7001	P	0.5
6	☐	25000.000	23445.689	3055540.51	13.1820	P	0.1
7	☐	50000.000	52526.549	6817047.64	29.5245	A	1.2
8	☐	250000.00	249686.44	33034801.97	140.3221	A	1.3

$$y = 5.6197E-004 * x + 0.0062$$

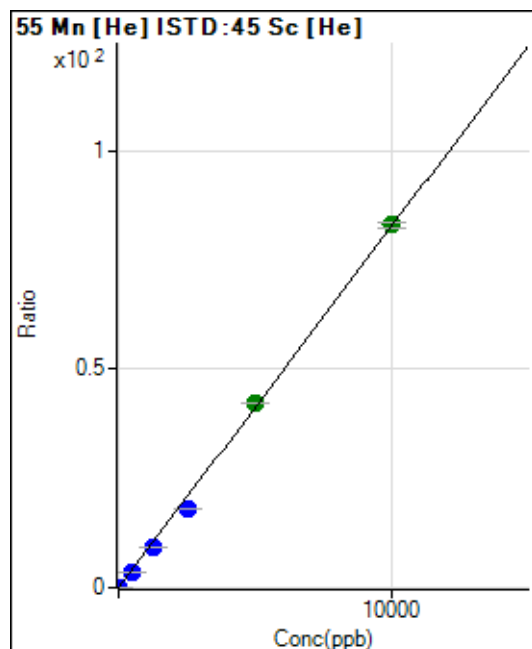
$$R = 0.9999$$

$$DL = 0.79$$

$$BEC = 11.08$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	171.11	0.0007	P	20.5
2	☐	1.000	0.916	1977.93	0.0083	P	7.7
3	☐	500.000	440.958	867410.26	3.6414	P	0.2
4	☐	1250.000	1109.293	2160597.02	9.1593	P	0.5
5	☐	2500.000	2171.267	4213049.00	17.9273	P	0.2
6	☐	5000.000	5115.796	9790791.38	42.2381	A	0.5
7	☐	10000.000	10044.826	19147385.83	82.9336	A	1.9
8	☐			8779.96	0.0373	P	3.5

$$y = 0.0083 * x + 7.0540E-004$$

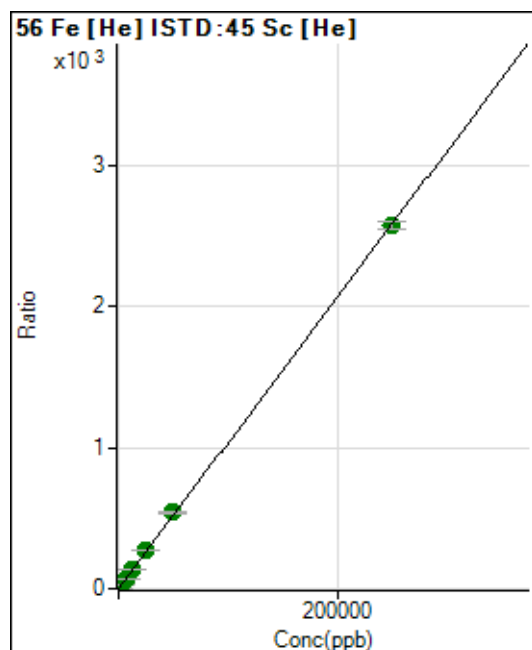
$$R = 0.9993$$

$$DL = 0.05245$$

$$BEC = 0.08544$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15482.37	0.0637	P	1.8
2	☐	50.000	45.399	127244.49	0.5320	P	0.9
3	☐	2500.000	2698.076	6644536.78	27.8934	A	0.8
4	☐	6250.000	6831.942	16637901.30	70.5328	A	0.8
5	☐	12500.000	13447.051	32610632.67	138.7652	A	1.1
6	☐	25000.000	26807.682	64110124.12	276.5753	A	0.6
7	☐	50000.000	52357.103	124703660.2	540.1083	A	1.6
8	☐	250000.00	249283.93	605313539.4	2,571.337	A	2.0

$$y = 0.0103 * x + 0.0637$$

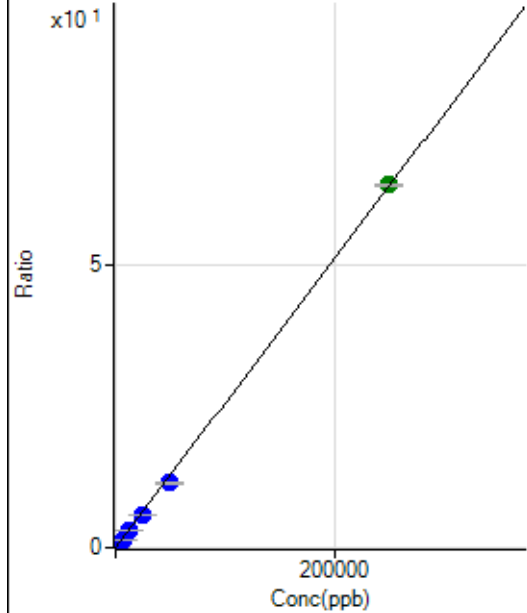
$$R = 0.9999$$

$$DL = 0.328$$

$$BEC = 6.18$$

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	416.68	0.0017	P	9.9
2	☐	50.000	44.678	3141.13	0.0131	P	1.9
3	☐	2500.000	2338.206	142727.05	0.5992	P	0.3
4	☐	6250.000	5912.893	356796.25	1.5126	P	0.9
5	☐	12500.000	11629.592	698741.89	2.9733	P	0.7
6	☐	25000.000	23055.108	1365928.31	5.8927	P	0.7
7	☐	50000.000	44669.464	2635658.51	11.4155	P	1.5
8	☐	250000.00	251314.16	15119107.40	64.2166	A	0.9

$$y = 2.5552E-004 * x + 0.0017$$

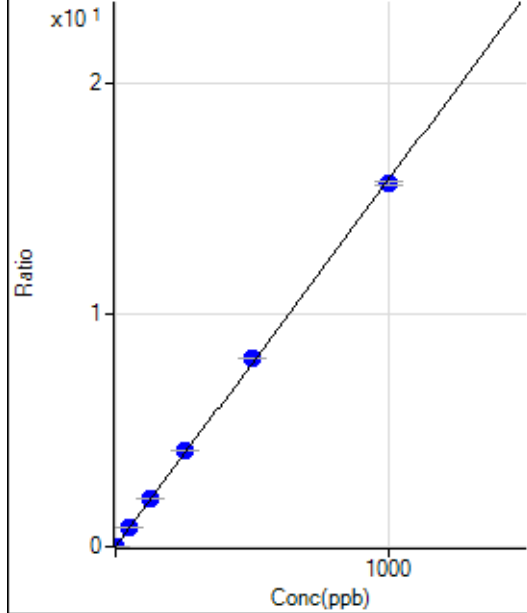
$$R = 0.9997$$

$$DL = 2.001$$

$$BEC = 6.721$$

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	144.45	0.0006	P	23.8
2	☐	1.000	1.099	4305.12	0.0180	P	1.8
3	☐	50.000	53.252	200981.15	0.8437	P	0.4
4	☐	125.000	132.464	494873.63	2.0979	P	0.5
5	☐	250.000	262.140	975528.56	4.1511	P	0.5
6	☐	500.000	514.414	1888080.77	8.1453	P	0.6
7	☐	1000.000	988.663	3614417.72	15.6541	P	1.0
8	☐			5439.94	0.0231	P	1.3

$$y = 0.0158 * x + 5.9434E-004$$

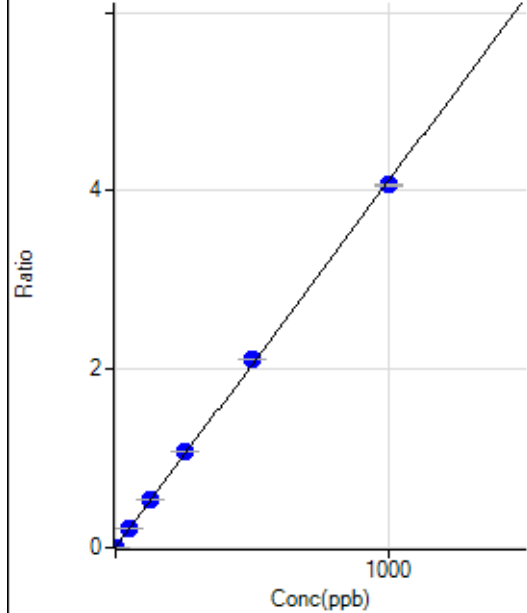
$$R = 0.9998$$

$$DL = 0.02684$$

$$BEC = 0.03754$$

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	442.23	0.0018	P	7.2
2	☐	1.000	1.181	1595.66	0.0067	P	6.4
3	☐	50.000	53.112	52372.92	0.2199	P	0.2
4	☐	125.000	131.817	128080.40	0.5430	P	0.9
5	☐	250.000	260.964	252198.64	1.0732	P	0.5
6	☐	500.000	512.994	488584.17	2.1078	P	0.5
7	☐	1000.000	989.754	938604.44	4.0650	P	0.8
8	☐			1621.21	0.0069	P	2.1

$$y = 0.0041 * x + 0.0018$$

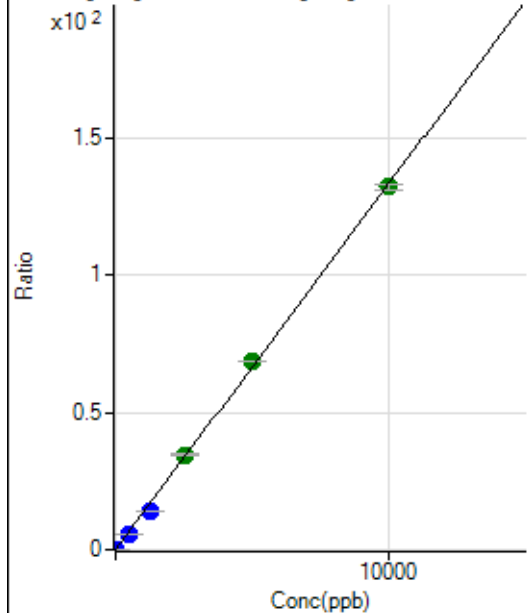
$$R = 0.9998$$

$$DL = 0.0954$$

$$BEC = 0.4438$$

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	1025.60	0.0042	P	8.0
2	☐	2.000	1.673	6338.09	0.0265	P	2.2
3	☐	500.000	427.401	1356992.46	5.6966	P	0.3
4	☐	1250.000	1054.399	3313663.25	14.0474	P	0.4
5	☐	2500.000	2588.761	8103709.26	34.4831	A	1.3
6	☐	5000.000	5162.511	15938905.73	68.7621	A	0.4
7	☐	10000.000	9924.634	30519610.93	132.1872	A	1.6
8	☐			6859.45	0.0291	P	1.2

$$y = 0.0133 * x + 0.0042$$

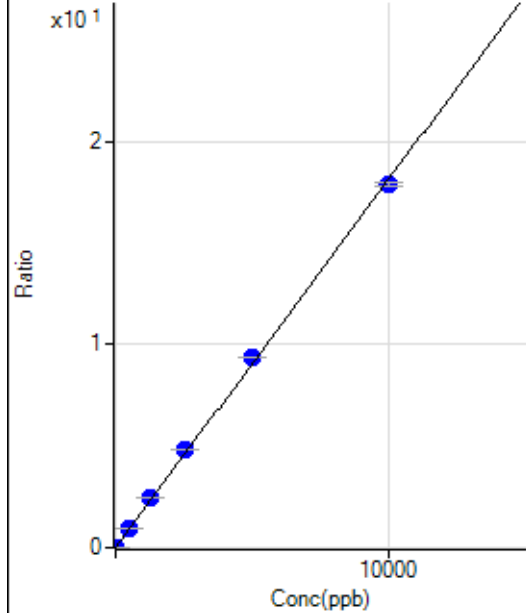
$$R = 0.9995$$

$$DL = 0.07627$$

$$BEC = 0.3169$$

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	240.00	0.0010	P	6.3
2	☐	2.000	2.462	1302.29	0.0054	P	5.0
3	☐	500.000	538.625	232542.93	0.9762	P	0.4
4	☐	1250.000	1347.348	575679.81	2.4405	P	0.6
5	☐	2500.000	2660.753	1132373.92	4.8185	P	0.8
6	☐	5000.000	5180.375	2174372.22	9.3805	P	0.2
7	☐	10000.000	9855.524	4120325.05	17.8452	P	1.0
8	☐			6732.71	0.0286	P	1.9

$$y = 0.0018 * x + 9.8795E-004$$

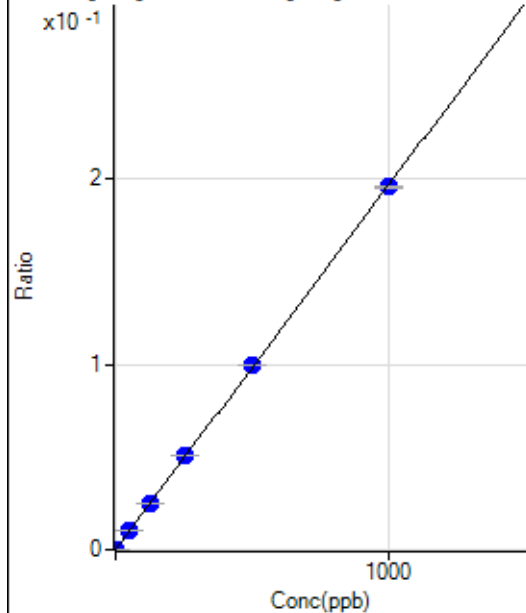
$$R = 0.9996$$

$$DL = 0.1024$$

$$BEC = 0.5457$$

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	5.55	0.0000	P	88.5
2	☐	1.000	1.070	300.62	0.0002	P	9.3
3	☐	50.000	50.754	13890.59	0.0100	P	2.0
4	☐	125.000	127.266	34712.23	0.0250	P	0.4
5	☐	250.000	256.608	69747.27	0.0504	P	0.2
6	☐	500.000	504.842	136756.76	0.0991	P	0.2
7	☐	1000.000	995.606	265804.02	0.1955	P	0.3
8	☐			126.54	0.0001	P	4.3

$$y = 1.9638E-004 * x + 3.9315E-006$$

$$R = 1.0000$$

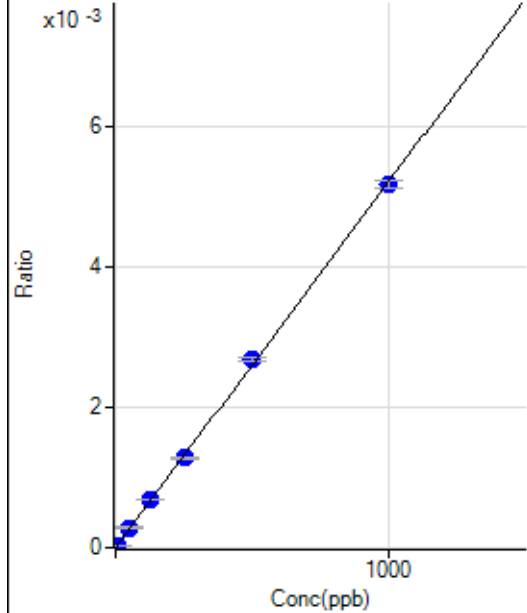
$$DL = 0.05314$$

$$BEC = 0.02002$$

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	0.00	0.0000	P	
2	☐	5.000	5.328	38.89	0.0000	P	44.2
3	☐	50.000	53.330	386.67	0.0003	P	8.5
4	☐	125.000	130.820	945.59	0.0007	P	2.2
5	☐	250.000	245.267	1766.79	0.0013	P	1.9
6	☐	500.000	516.061	3704.96	0.0027	P	2.6
7	☐	1000.000	992.257	7021.77	0.0052	P	2.0
8	☐			3.33	0.0000	P	100.

$$y = 5.2051\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9998$$

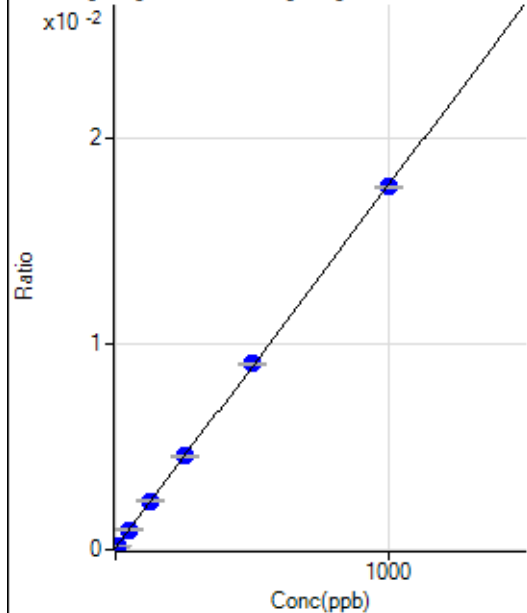
$$DL = 0$$

$$BEC = 0$$

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	115.43	0.0001	P	6.9
2	☐	5.000	6.905	285.19	0.0002	P	4.7
3	☐	50.000	50.610	1355.01	0.0010	P	3.5
4	☐	125.000	128.652	3259.03	0.0023	P	3.4
5	☐	250.000	253.424	6288.43	0.0045	P	2.3
6	☐	500.000	507.046	12427.56	0.0090	P	0.7
7	☐	1000.000	995.124	23931.41	0.0176	P	0.7
8	☐			107.41	0.0001	P	6.6

$$y = 1.7608\text{E-}005 * x + 8.1521\text{E-}005$$

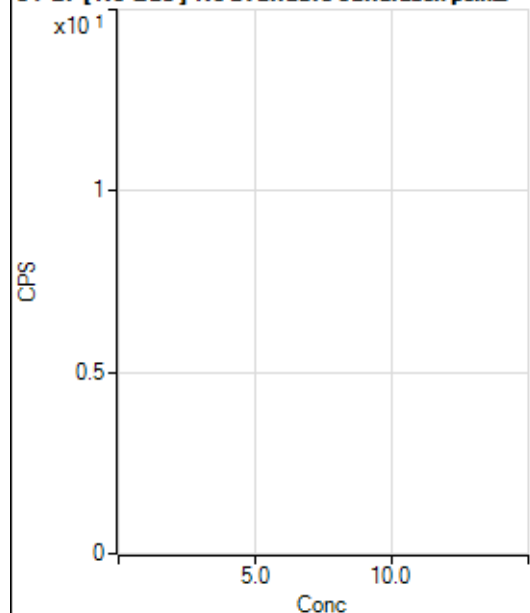
$$R = 1.0000$$

$$DL = 0.9515$$

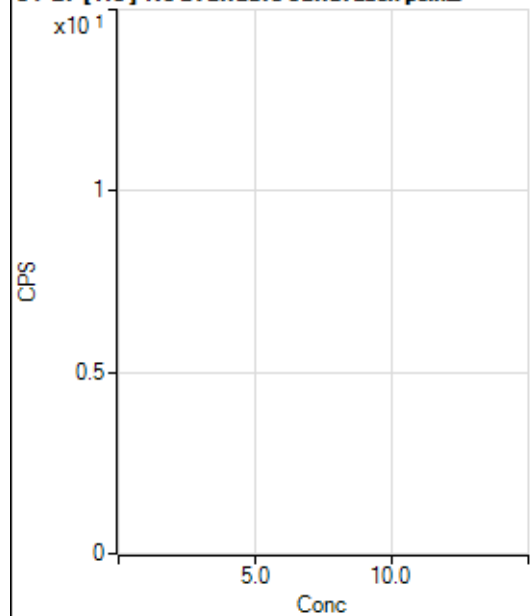
$$BEC = 4.63$$

Weight: <None>

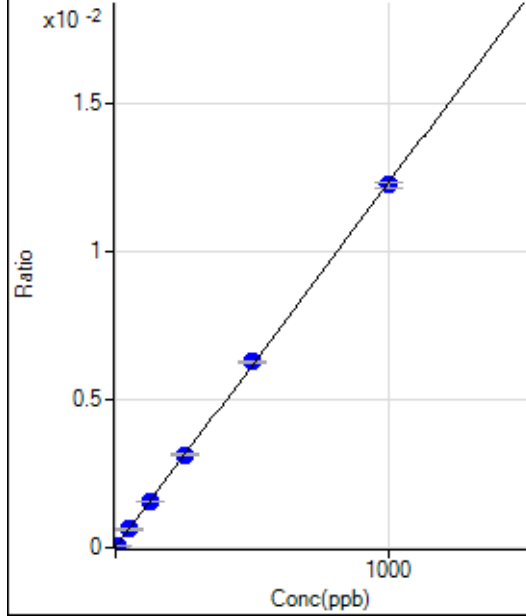
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4481.39		P	3.2
2	☐			4275.77		P	2.7
3	☐			4175.71		P	3.5
4	☐			3789.50		P	7.4
5	☐			3950.65		P	6.3
6	☐			4147.92		P	6.4
7	☐			3925.64		P	3.8
8	☐			3914.51		P	7.1

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			90.09		P	58.8
2	☐			76.74		P	37.7
3	☐			63.40		P	50.8
4	☐			76.74		P	7.5
5	☐			53.39		P	47.2
6	☐			26.69		P	43.3
7	☐			63.40		P	48.2
8	☐			56.72		P	10.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	74.12	0.0000	P	115.
2	☐	5.000	4.368	446.95	0.0001	P	29.2
3	☐	50.000	50.033	4342.49	0.0006	P	3.4
4	☐	125.000	127.681	10864.22	0.0016	P	1.0
5	☐	250.000	254.114	21645.19	0.0031	P	1.3
6	☐	500.000	508.320	43028.38	0.0063	P	1.5
7	☐	1000.000	994.478	83352.35	0.0122	P	1.7
8	☐			28.76	0.0000	P	224.

$$y = 1.2284\text{E-}005 * x + 1.0558\text{E-}005$$

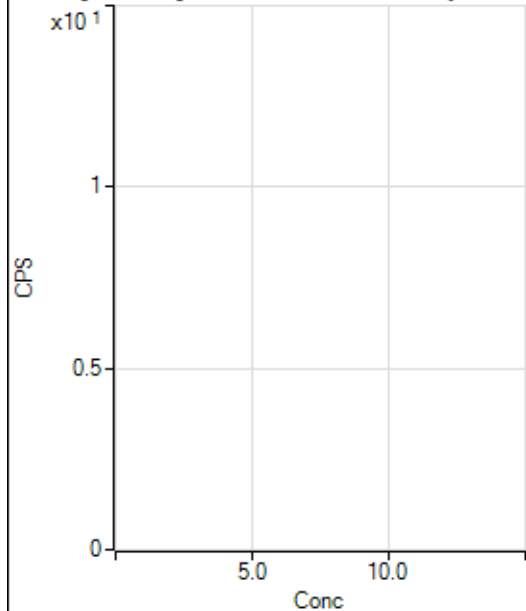
$$R = 0.9999$$

$$DL = 2.973$$

$$BEC = 0.8595$$

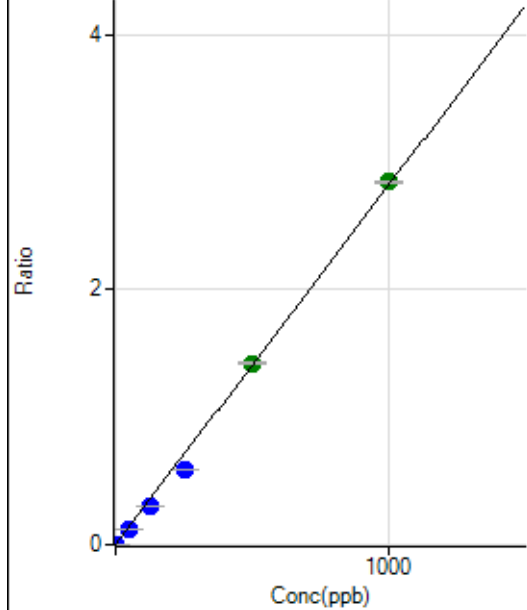
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			907.81		P	10.4
2	☐			988.93		P	6.9
3	☐			1014.49		P	3.6
4	☐			1023.38		P	5.4
5	☐			945.60		P	5.3
6	☐			930.04		P	8.4
7	☐			986.71		P	5.6
8	☐			914.48		P	7.8

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1714.04	0.0002	P	8.3
2	☐	1.000	0.082	3297.68	0.0005	P	5.9
3	☐	50.000	42.702	837519.43	0.1206	P	1.2
4	☐	125.000	106.659	2069271.10	0.3008	P	0.8
5	☐	250.000	208.966	4070775.96	0.5890	P	1.3
6	☐	500.000	505.622	9802708.29	1.4249	A	1.1
7	☐	1000.000	1010.106	19406522.14	2.8464	A	0.9
8	☐			7076.91	0.0011	P	8.2

$$y = 0.0028 * x + 2.4508E-004$$

$$R = 0.9991$$

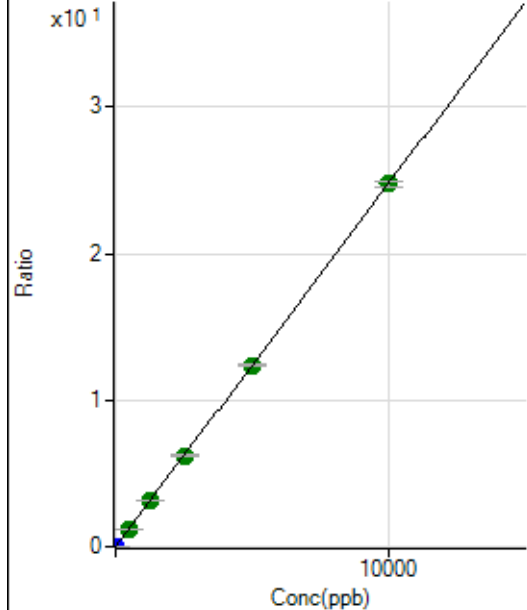
$$DL = 0.02158$$

$$BEC = 0.08698$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	680.59	0.0001	P	9.1
2	☐	1.000	0.874	15672.80	0.0023	P	2.6
3	☐	500.000	501.763	8638208.96	1.2434	A	0.5
4	☐	1250.000	1267.773	21613573.58	3.1416	A	0.8
5	☐	2500.000	2514.799	43065165.55	6.2316	A	1.1
6	☐	5000.000	4998.551	85209761.63	12.3862	A	1.2
7	☐	10000.000	9994.715	168843291.2	24.7665	A	1.8
8	☐			48298.30	0.0073	P	2.5

$$y = 0.0025 * x + 9.7259E-005$$

$$R = 1.0000$$

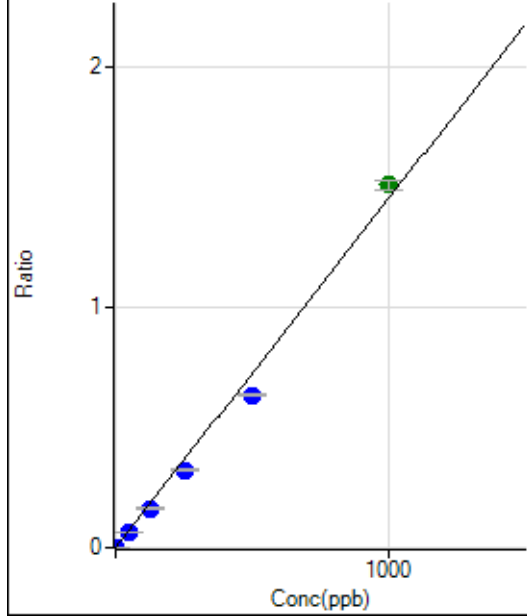
$$DL = 0.01066$$

$$BEC = 0.03925$$

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	447.24	0.0001	P	20.4
2	☐	1.000	0.895	9450.55	0.0014	P	4.2
3	☐	50.000	44.452	449373.24	0.0647	P	1.0
4	☐	125.000	112.277	1123398.19	0.1633	P	1.3
5	☐	250.000	223.023	2241195.04	0.3243	P	0.8
6	☐	500.000	437.683	4377944.50	0.6364	P	0.9
7	☐	1000.000	1039.771	10304916.20	1.5117	A	2.4
8	☐			2425.27	0.0004	P	1.3

$$y = 0.0015 * x + 6.3930E-005$$

$$R = 0.9969$$

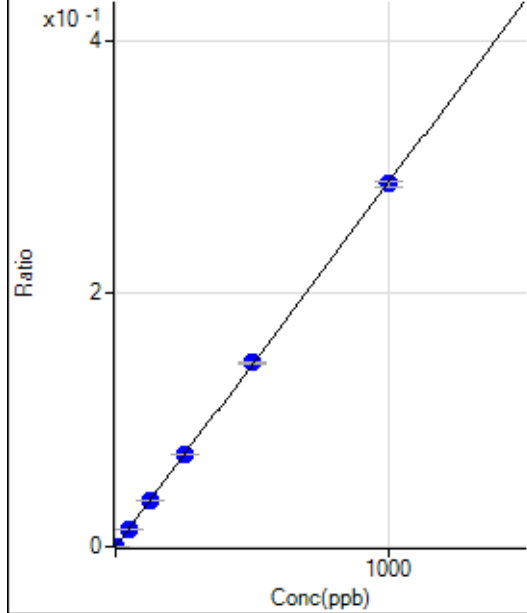
$$DL = 0.02698$$

$$BEC = 0.04397$$

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	77.78	0.0000	P	52.6
2	☐	1.000	0.981	2030.75	0.0003	P	13.8
3	☐	50.000	49.773	99644.15	0.0143	P	0.2
4	☐	125.000	126.915	251504.42	0.0366	P	1.1
5	☐	250.000	252.992	503550.69	0.0729	P	0.4
6	☐	500.000	505.391	1001265.13	0.1455	P	0.8
7	☐	1000.000	996.328	1955948.96	0.2869	P	1.7
8	☐			483.35	0.0001	P	4.9

$$y = 2.8796E-004 * x + 1.1107E-005$$

$$R = 1.0000$$

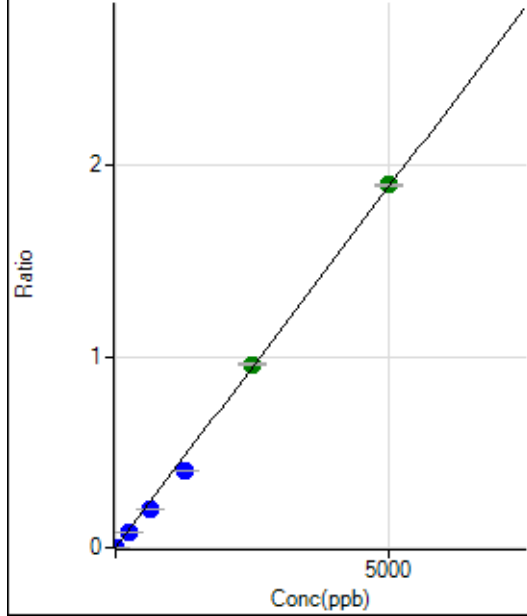
$$DL = 0.06082$$

$$BEC = 0.03857$$

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	177.78	0.0000	P	10.6
2	☐	5.000	4.324	11468.80	0.0017	P	4.7
3	☐	250.000	214.790	562961.64	0.0810	P	0.4
4	☐	625.000	538.162	1396634.10	0.2030	P	1.1
5	☐	1250.000	1069.347	2787577.10	0.4034	P	1.1
6	☐	2500.000	2547.735	6610944.42	0.9610	A	1.1
7	☐	5000.000	5033.912	12945811.23	1.8987	A	0.5
8	☐			3017.07	0.0005	P	6.3

$$y = 3.7718\text{E-}004 * x + 2.5409\text{E-}005$$

$$R = 0.9992$$

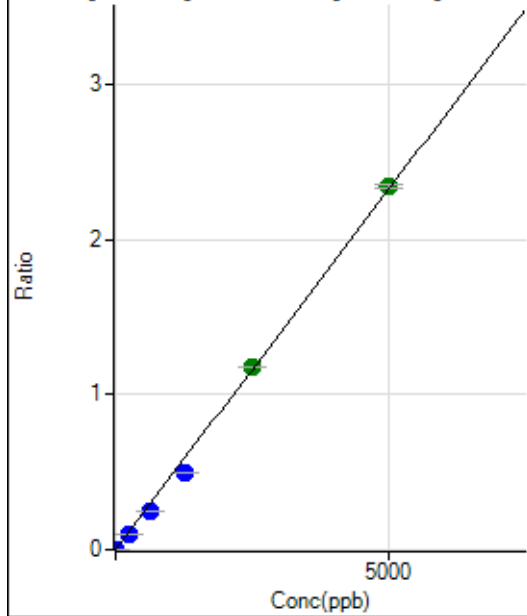
$$DL = 0.02136$$

$$BEC = 0.06737$$

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	69.45	0.0000	P	24.6
2	☐	5.000	4.469	14457.65	0.0021	P	4.1
3	☐	250.000	214.902	694167.79	0.0999	P	1.0
4	☐	625.000	538.476	1722587.73	0.2504	P	0.7
5	☐	1250.000	1063.654	3417892.13	0.4946	P	0.9
6	☐	2500.000	2540.937	8128213.38	1.1815	A	0.5
7	☐	5000.000	5038.689	15973077.96	2.3428	A	0.9
8	☐			3531.10	0.0005	P	8.3

$$y = 4.6496\text{E-}004 * x + 9.9192\text{E-}006$$

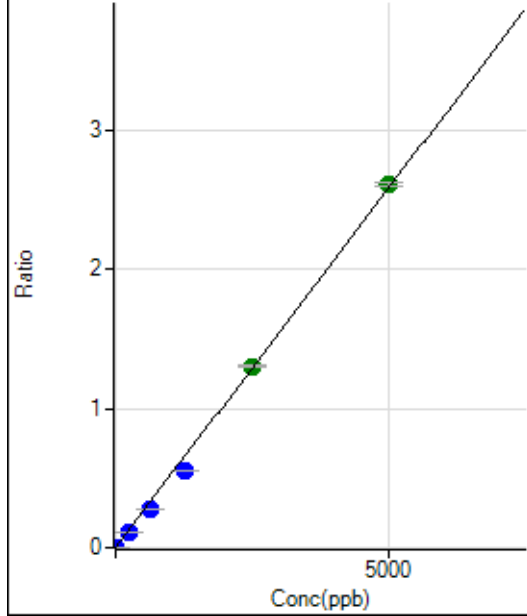
$$R = 0.9992$$

$$DL = 0.01573$$

$$BEC = 0.02133$$

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	108.34	0.0000	P	20.0
2	☐	5.000	4.383	15770.09	0.0023	P	2.5
3	☐	250.000	216.230	774660.74	0.1115	P	1.0
4	☐	625.000	541.508	1921241.23	0.2793	P	0.4
5	☐	1250.000	1064.278	3792824.26	0.5488	P	1.0
6	☐	2500.000	2520.837	8942739.87	1.2999	A	1.1
7	☐	5000.000	5048.138	17747809.25	2.6032	A	1.0
8	☐			4636.98	0.0007	P	8.1

$$y = 5.1567\text{E-}004 * x + 1.5480\text{E-}005$$

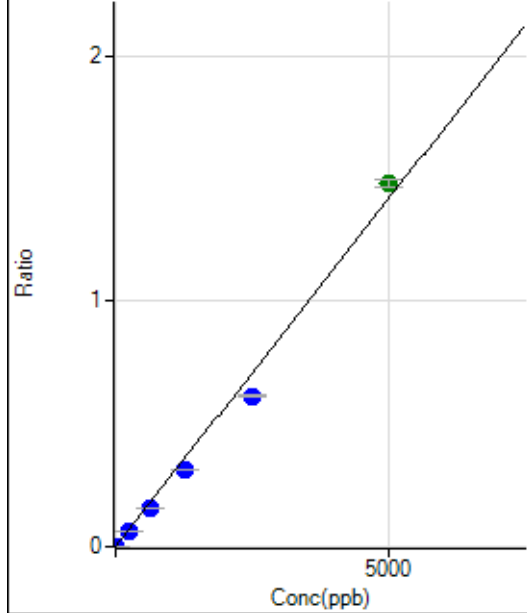
$$R = 0.9992$$

$$DL = 0.01804$$

$$BEC = 0.03002$$

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	47.22	0.0000	P	26.6
2	☐	5.000	4.301	8494.43	0.0012	P	5.4
3	☐	250.000	221.889	437242.01	0.0629	P	0.7
4	☐	625.000	556.320	1085660.92	0.1578	P	0.7
5	☐	1250.000	1099.937	2156177.76	0.3120	P	0.9
6	☐	2500.000	2164.406	4223416.20	0.6139	P	1.1
7	☐	5000.000	5215.304	10084363.25	1.4793	A	2.0
8	☐			2186.34	0.0003	P	5.6

$$y = 2.8364\text{E-}004 * x + 6.7448\text{E-}006$$

$$R = 0.9963$$

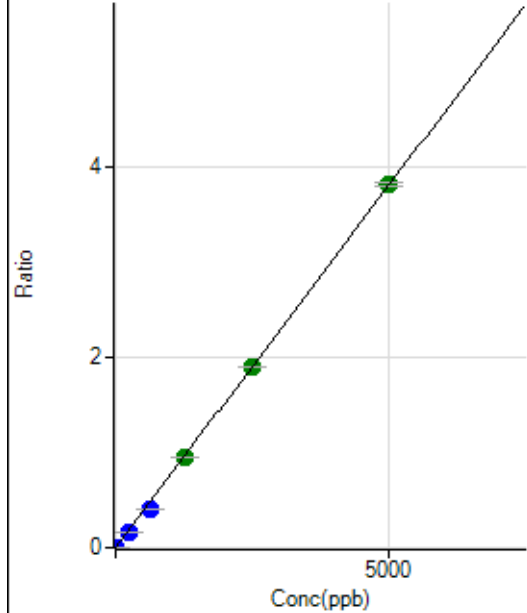
$$DL = 0.01896$$

$$BEC = 0.02378$$

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	88.89	0.0000	P	14.4
2	☐	5.000	4.383	23121.96	0.0033	P	3.6
3	☐	250.000	212.939	1122426.87	0.1616	P	1.1
4	☐	625.000	534.561	2790591.71	0.4056	P	0.8
5	☐	1250.000	1254.876	6580317.16	0.9522	A	1.0
6	☐	2500.000	2495.837	13028617.74	1.8938	A	0.7
7	☐	5000.000	5014.021	25939279.40	3.8045	A	1.2
8	☐			5409.50	0.0008	P	5.9

$$y = 7.5877E-004 * x + 1.2708E-005$$

$$R = 0.9998$$

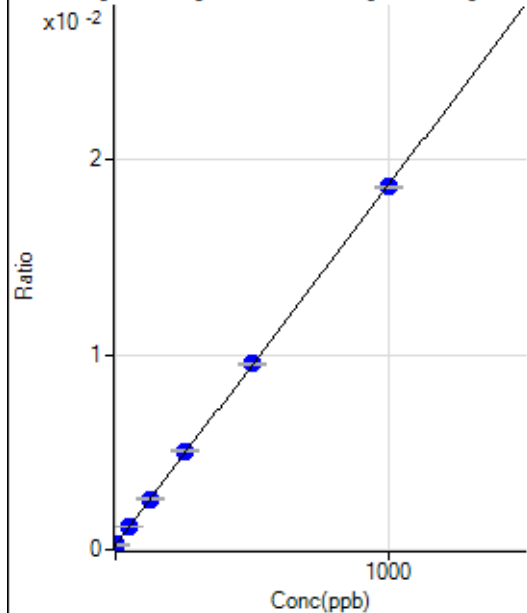
$$DL = 0.007228$$

$$BEC = 0.01675$$

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	1997.41	0.0002	P	6.4
2	☐	1.000	0.634	2089.09	0.0002	P	13.5
3	☐	50.000	52.279	10070.44	0.0012	P	2.4
4	☐	125.000	128.594	22014.84	0.0026	P	2.1
5	☐	250.000	261.452	43046.25	0.0051	P	0.8
6	☐	500.000	503.693	80849.22	0.0095	P	1.3
7	☐	1000.000	994.728	156942.05	0.0186	P	0.8
8	☐			2244.68	0.0003	P	5.1

$$y = 1.8483E-005 * x + 2.3661E-004$$

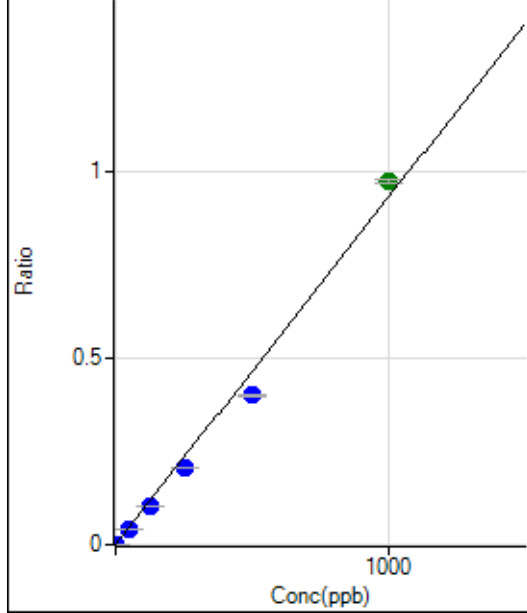
$$R = 0.9999$$

$$DL = 2.455$$

$$BEC = 12.8$$

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	80.56	0.0000	P	31.9
2	☐	1.000	0.929	7335.39	0.0009	P	1.5
3	☐	50.000	45.747	356024.97	0.0425	P	1.5
4	☐	125.000	112.507	880830.80	0.1046	P	0.2
5	☐	250.000	221.320	1746655.10	0.2057	P	1.4
6	☐	500.000	429.160	3377737.27	0.3988	P	0.6
7	☐	1000.000	1044.364	8179425.79	0.9706	A	1.1
8	☐			2533.62	0.0003	P	12.4

$$y = 9.2935\text{E-}004 * x + 9.5485\text{E-}006$$

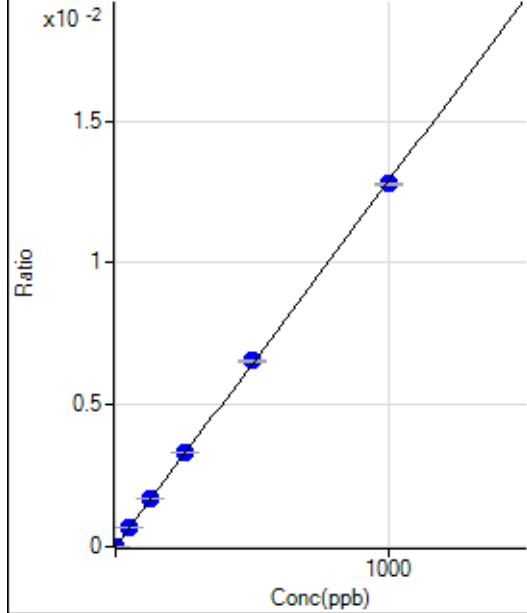
$$R = 0.9960$$

$$DL = 0.009828$$

$$BEC = 0.01027$$

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	15.28	0.0000	P	56.4
2	☐	1.000	1.106	134.73	0.0000	P	10.7
3	☐	50.000	51.576	5573.38	0.0007	P	0.1
4	☐	125.000	131.916	14317.06	0.0017	P	1.8
5	☐	250.000	257.307	28137.61	0.0033	P	1.4
6	☐	500.000	508.892	55482.60	0.0066	P	1.4
7	☐	1000.000	992.784	107695.37	0.0128	P	0.8
8	☐			112.50	0.0000	P	14.8

$$y = 1.2870\text{E-}005 * x + 1.8070\text{E-}006$$

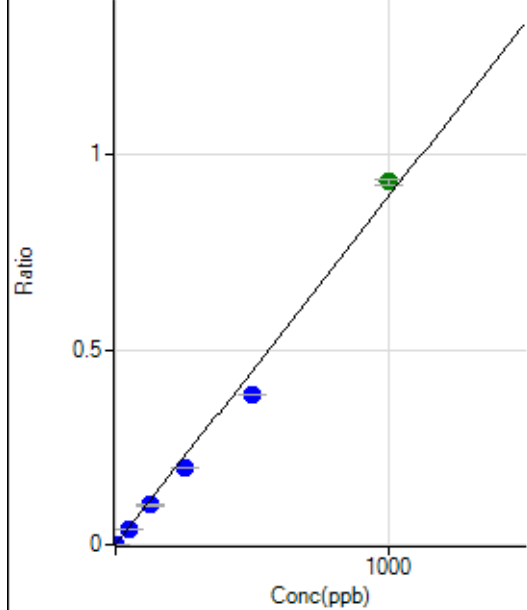
$$R = 0.9999$$

$$DL = 0.2374$$

$$BEC = 0.1404$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	36.11	0.0000	P	26.6
2	☐	1.000	0.910	6862.93	0.0008	P	1.5
3	☐	50.000	45.793	342477.48	0.0409	P	1.8
4	☐	125.000	113.313	852605.29	0.1012	P	0.6
5	☐	250.000	221.570	1680611.13	0.1979	P	1.0
6	☐	500.000	432.064	3268343.43	0.3859	P	0.5
7	☐	1000.000	1042.747	7849157.55	0.9314	A	1.5
8	☐			2555.86	0.0003	P	6.7

$$y = 8.9321\text{E-}004 * x + 4.2780\text{E-}006$$

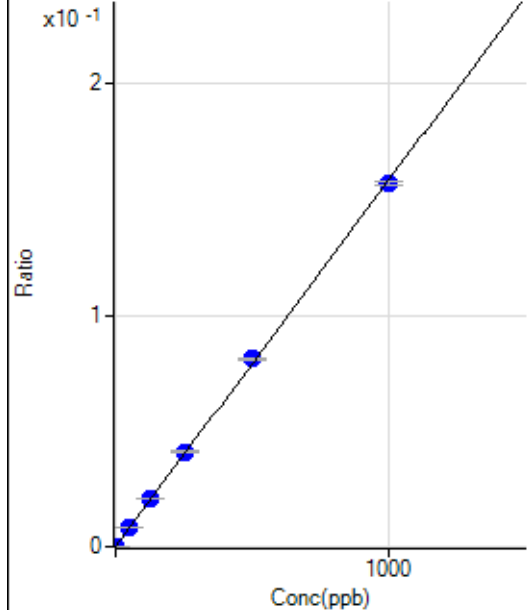
$$R = 0.9963$$

$$DL = 0.00382$$

$$BEC = 0.00479$$

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	194.60	0.0000	P	6.6
2	☐	1.000	1.078	1627.20	0.0002	P	5.5
3	☐	50.000	53.365	70880.83	0.0085	P	1.6
4	☐	125.000	131.035	174826.92	0.0208	P	0.3
5	☐	250.000	259.135	348353.04	0.0410	P	0.6
6	☐	500.000	512.280	686586.42	0.0811	P	0.6
7	☐	1000.000	990.653	1321051.38	0.1568	P	0.9
8	☐			645.73	0.0001	P	8.5

$$y = 1.5821\text{E-}004 * x + 2.3053\text{E-}005$$

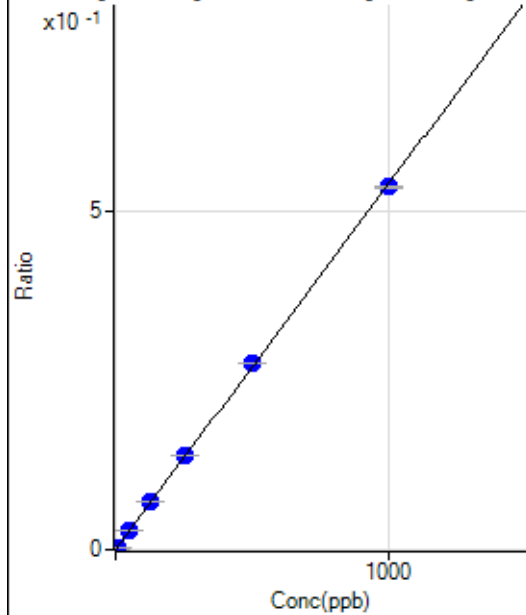
$$R = 0.9998$$

$$DL = 0.02865$$

$$BEC = 0.1457$$

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	822.27	0.0001	P	13.9
2	☐	5.000	5.331	24975.39	0.0030	P	2.9
3	☐	50.000	52.791	239194.07	0.0286	P	0.4
4	☐	125.000	131.890	599950.71	0.0712	P	0.6
5	☐	250.000	259.065	1187207.88	0.1398	P	0.8
6	☐	500.000	508.920	2325132.54	0.2745	P	0.5
7	☐	1000.000	992.271	4510524.41	0.5352	P	0.3
8	☐			2525.30	0.0003	P	5.0

$$y = 5.3928\text{E-}004 * x + 9.7382\text{E-}005$$

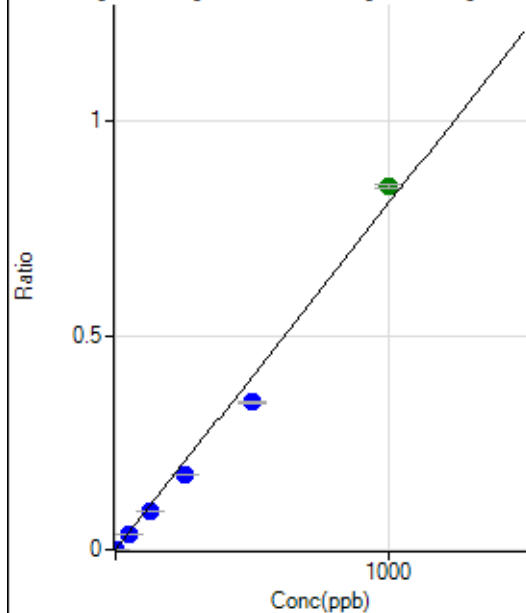
$$R = 0.9999$$

$$DL = 0.07551$$

$$BEC = 0.1806$$

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	91.67	0.0000	P	9.5
2	☐	2.000	1.823	12453.06	0.0015	P	3.6
3	☐	50.000	44.079	298114.20	0.0356	P	0.7
4	☐	125.000	109.518	745033.20	0.0884	P	0.7
5	☐	250.000	216.240	1482918.83	0.1746	P	0.6
6	☐	500.000	425.900	2912635.31	0.3439	P	0.6
7	☐	1000.000	1047.722	7130315.26	0.8461	A	1.2
8	☐			3617.23	0.0004	P	2.4

$$y = 8.0751\text{E-}004 * x + 1.0864\text{E-}005$$

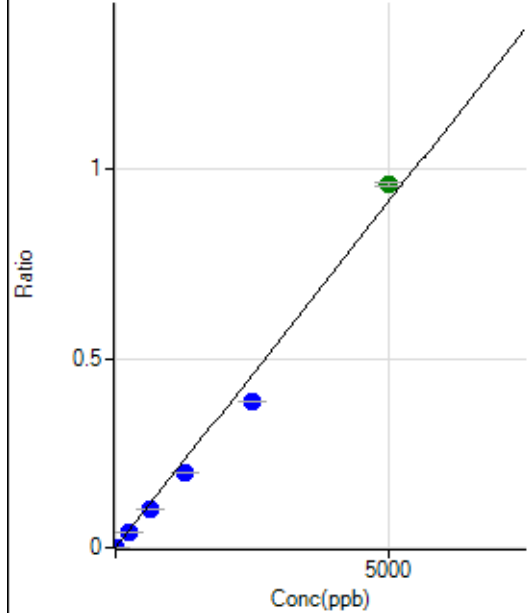
$$R = 0.9955$$

$$DL = 0.003835$$

$$BEC = 0.01345$$

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	47.22	0.0000	P	36.9
2	☐	10.000	9.051	13937.93	0.0017	P	3.5
3	☐	250.000	221.946	339543.32	0.0406	P	1.8
4	☐	625.000	546.779	841548.62	0.0999	P	0.7
5	☐	1250.000	1076.839	1670767.75	0.1967	P	0.7
6	☐	2500.000	2119.449	3279450.14	0.3872	P	0.5
7	☐	5000.000	5244.748	8075517.28	0.9582	A	1.0
8	☐			2680.89	0.0003	P	0.3

$$y = 1.8271E-004 * x + 5.5976E-006$$

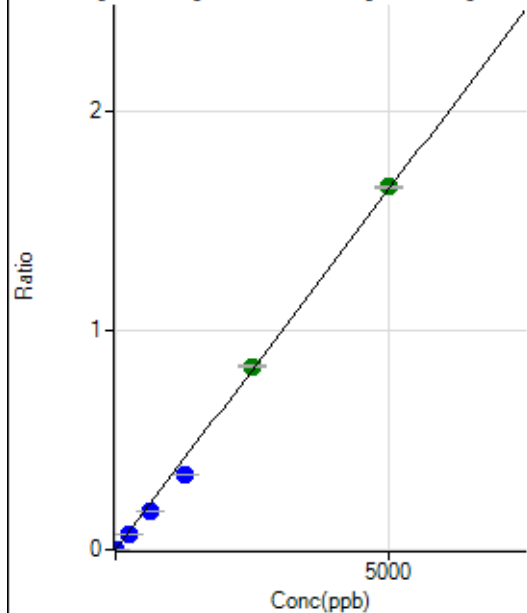
$$R = 0.9953$$

$$DL = 0.0339$$

$$BEC = 0.03064$$

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	63.89	0.0000	P	45.5
2	☐	10.000	8.779	24232.71	0.0029	P	1.3
3	☐	250.000	212.564	583212.07	0.0697	P	1.9
4	☐	625.000	526.506	1453347.22	0.1725	P	0.8
5	☐	1250.000	1041.663	2898564.30	0.3413	P	1.3
6	☐	2500.000	2549.671	7075560.57	0.8355	A	1.0
7	☐	5000.000	5041.435	13922160.99	1.6520	A	0.7
8	☐			4820.38	0.0006	P	6.2

$$y = 3.2769E-004 * x + 7.5601E-006$$

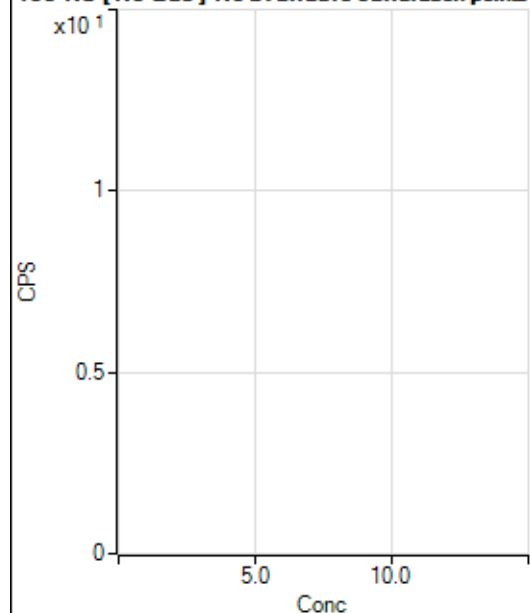
$$R = 0.9990$$

$$DL = 0.03146$$

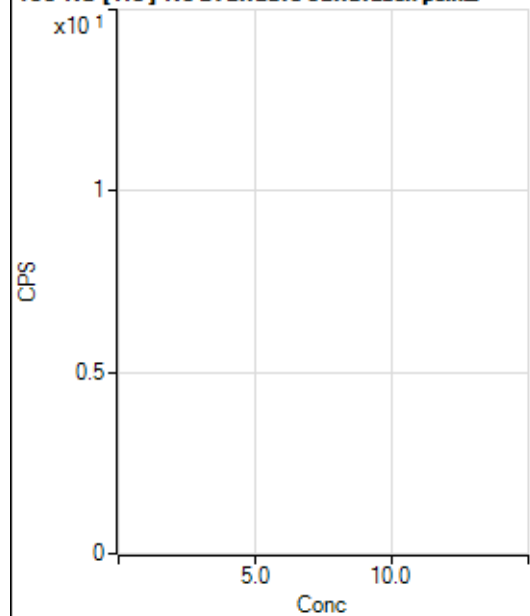
$$BEC = 0.02307$$

Weight: <None>

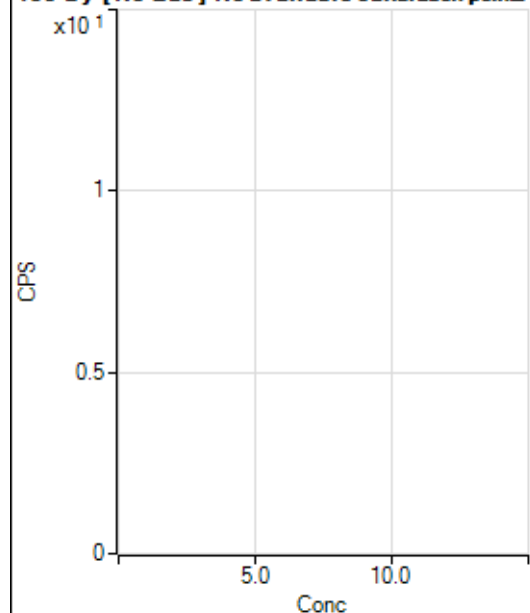
Min Conc: 0

150 Nd [No Gas] No available calibration points

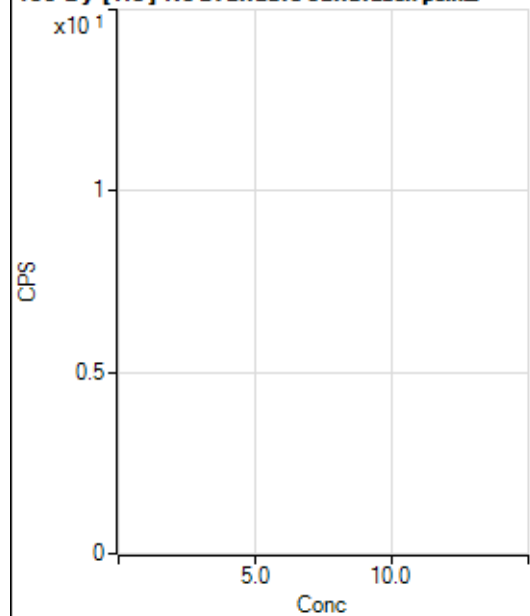
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	173.
2	☐			4.44		P	173.
3	☐			13.33		P	100.
4	☐			53.34		P	57.3
5	☐			122.23		P	12.6
6	☐			182.23		P	17.3
7	☐			328.90		P	8.2
8	☐			51.11		P	15.1

150 Nd [He] No available calibration points

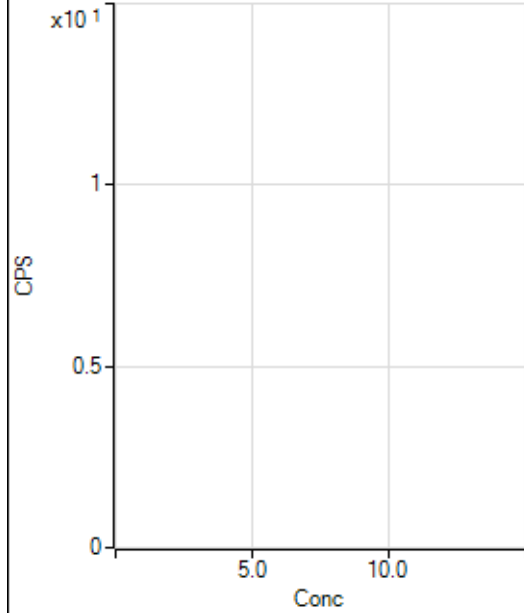
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			2.22		P	173.
3	☐			7.78		P	65.5
4	☐			15.56		P	12.4
5	☐			16.66		P	69.3
6	☐			31.11		P	30.9
7	☐			58.89		P	31.2
8	☐			20.00		P	76.4

156 Dy [No Gas] No available calibration points

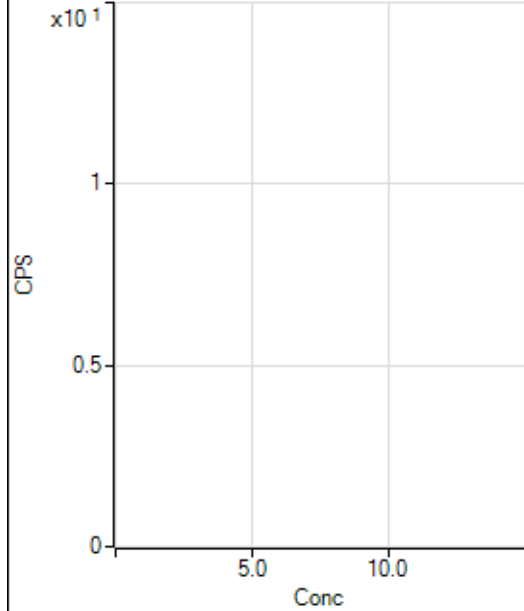
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			27.78		P	45.8
4	☐			55.56		P	17.3
5	☐			108.34		P	33.5
6	☐			216.68		P	13.9
7	☐			322.24		P	15.2
8	☐			1614.03		P	3.1

156 Dy [He] No available calibration points

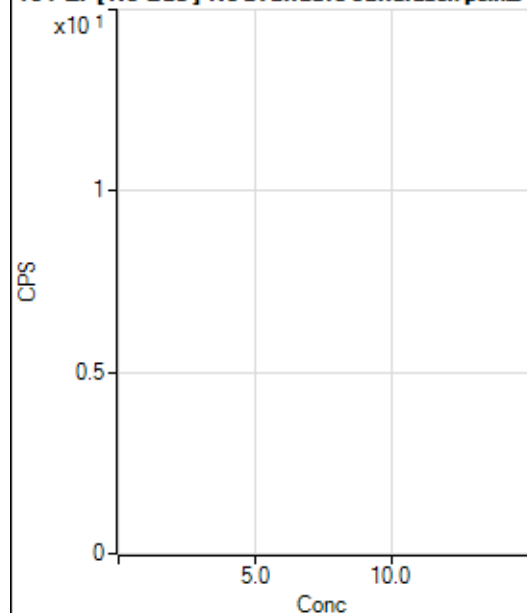
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.
3	☐			12.22		P	78.7
4	☐			32.22		P	48.9
5	☐			62.22		P	8.2
6	☐			127.78		P	11.8
7	☐			258.90		P	8.6
8	☐			1084.50		P	8.2

160 Gd [No Gas] Noavailable calibration poin_

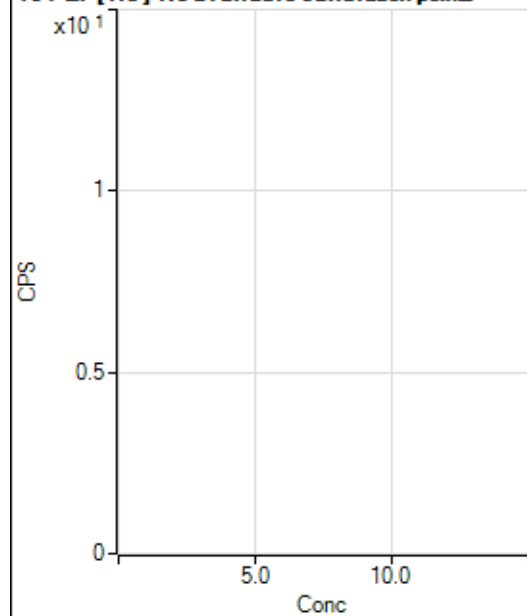
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	79.6
2	☐			33.33		P	50.0
3	☐			47.22		P	36.7
4	☐			63.89		P	54.3
5	☐			111.12		P	18.9
6	☐			222.23		P	19.2
7	☐			411.13		P	22.8
8	☐			1816.83		P	2.6

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			46.67		P	12.4
2	☐			46.67		P	37.8
3	☐			60.00		P	20.0
4	☐			81.11		P	29.2
5	☐			102.22		P	5.0
6	☐			152.23		P	18.9
7	☐			297.79		P	14.9
8	☐			1205.62		P	1.3

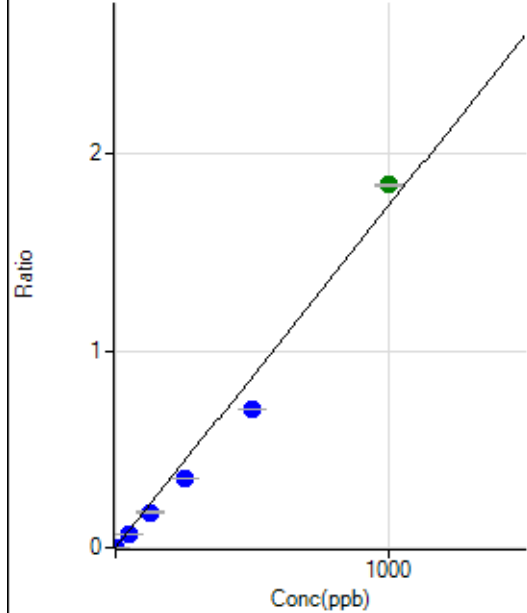
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	12.4
2	☐			47.22		P	20.4
3	☐			47.22		P	10.2
4	☐			52.78		P	9.1
5	☐			47.22		P	27.0
6	☐			88.89		P	35.5
7	☐			86.12		P	24.4
8	☐			322.24		P	12.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			34.44		P	44.7
2	☐			32.22		P	6.0
3	☐			27.78		P	61.6
4	☐			30.00		P	11.1
5	☐			48.89		P	21.9
6	☐			58.89		P	25.5
7	☐			61.11		P	22.1
8	☐			197.78		P	5.1

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30.56	0.0000	P	41.7
2	☐	1.000	0.871	6721.32	0.0015	P	1.0
3	☐	50.000	41.081	318991.48	0.0713	P	1.1
4	☐	125.000	103.564	802996.14	0.1798	P	1.2
5	☐	250.000	204.511	1596001.02	0.3551	P	0.6
6	☐	500.000	406.208	3117983.32	0.7052	P	0.6
7	☐	1000.000	1061.394	8019277.09	1.8427	A	0.6
8	☐			3500.57	0.0009	P	7.3

$$y = 0.0017 * x + 6.8210E-006$$

$$R = 0.9929$$

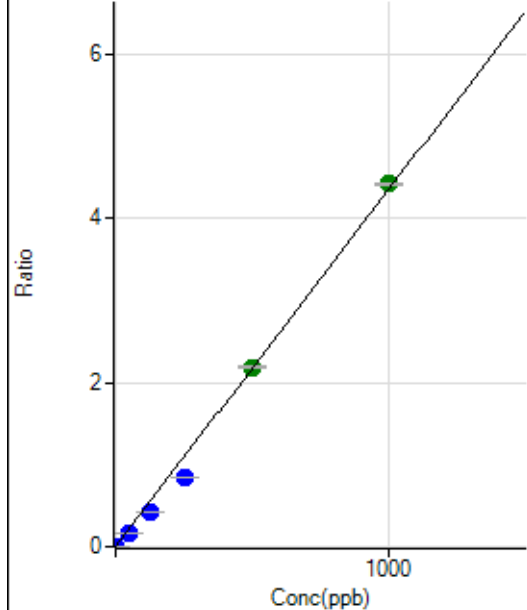
$$DL = 0.00491$$

$$BEC = 0.003929$$

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	94.45	0.0000	P	10.1
2	☐	1.000	0.823	15954.33	0.0036	P	4.8
3	☐	50.000	39.559	770076.05	0.1722	P	0.6
4	☐	125.000	98.772	1919935.79	0.4299	P	0.4
5	☐	250.000	193.370	3783050.26	0.8416	P	0.8
6	☐	500.000	502.786	9674703.08	2.1882	A	1.4
7	☐	1000.000	1016.565	19254134.63	4.4242	A	0.9
8	☐			8186.07	0.0021	P	8.9

$$y = 0.0044 * x + 2.1085E-005$$

$$R = 0.9982$$

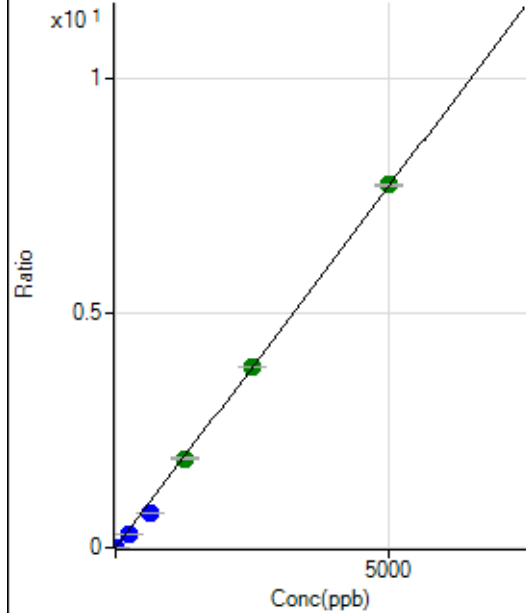
$$DL = 0.001468$$

$$BEC = 0.004845$$

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	535.21	0.0001	P	14.6
2	☐	1.000	0.833	6205.25	0.0014	P	3.9
3	☐	250.000	189.962	1308522.05	0.2926	P	0.5
4	☐	625.000	471.635	3243440.32	0.7262	P	0.6
5	☐	1250.000	1235.132	8548360.55	1.9017	A	0.6
6	☐	2500.000	2501.350	17027278.28	3.8511	A	0.6
7	☐	5000.000	5025.214	33670769.04	7.7368	A	0.5
8	☐			15970.89	0.0040	P	2.0

$$y = 0.0015 * x + 1.1951E-004$$

$$R = 0.9996$$

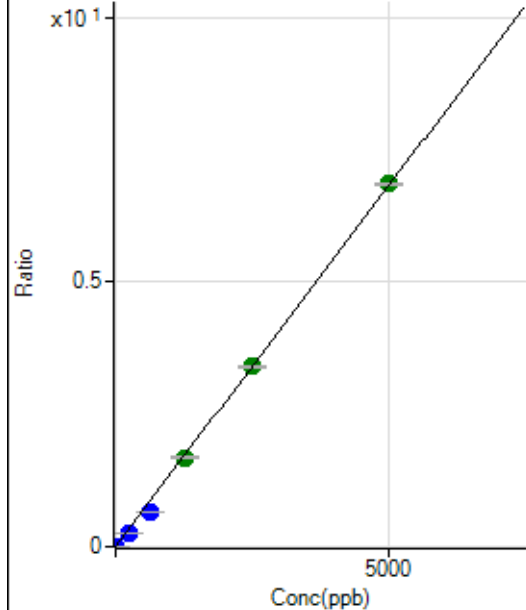
$$DL = 0.03394$$

$$BEC = 0.07763$$

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	453.72	0.0001	P	2.7
2	☐	1.000	0.817	5386.37	0.0012	P	3.7
3	☐	250.000	189.716	1158268.73	0.2590	P	0.7
4	☐	625.000	470.236	2866275.47	0.6418	P	0.5
5	☐	1250.000	1238.802	7599259.54	1.6906	A	1.1
6	☐	2500.000	2496.352	15061922.10	3.4066	A	1.1
7	☐	5000.000	5026.983	29854208.07	6.8599	A	0.7
8	☐			14389.44	0.0036	P	2.4

$$y = 0.0014 * x + 1.0130E-004$$

$$R = 0.9995$$

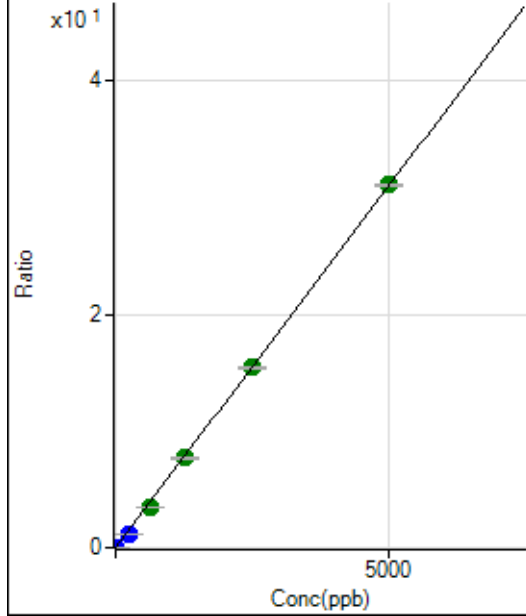
$$DL = 0.005991$$

$$BEC = 0.07423$$

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	2209.38	0.0005	P	2.2
2	☐	1.000	0.815	24525.88	0.0055	P	0.2
3	☐	250.000	188.976	5235926.73	1.1707	P	0.1
4	☐	625.000	552.738	15289048.52	3.4233	A	0.5
5	☐	1250.000	1239.795	34513398.28	7.6780	A	0.9
6	☐	2500.000	2493.732	68278936.60	15.4430	A	0.7
7	☐	5000.000	5017.769	135230444.4	31.0732	A	0.7
8	☐			64968.42	0.0163	P	1.8

$$y = 0.0062 * x + 4.9326E-004$$

$$R = 0.9999$$

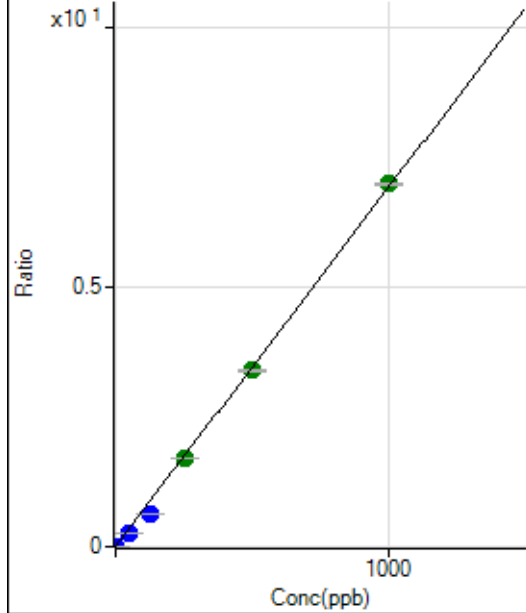
$$DL = 0.005153$$

$$BEC = 0.07965$$

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	198.16	0.0000	P	22.4
2	☐	1.000	0.001	231.49	0.0001	P	11.6
3	☐	50.000	37.134	1149068.70	0.2569	P	0.2
4	☐	125.000	93.083	2876043.70	0.6440	P	0.7
5	☐	250.000	245.043	7620069.32	1.6952	A	1.2
6	☐	500.000	491.376	15029604.74	3.3993	A	1.0
7	☐	1000.000	1010.185	30414318.50	6.9882	A	0.7
8	☐			4059.96	0.0010	P	10.9

$$y = 0.0069 * x + 4.4226E-005$$

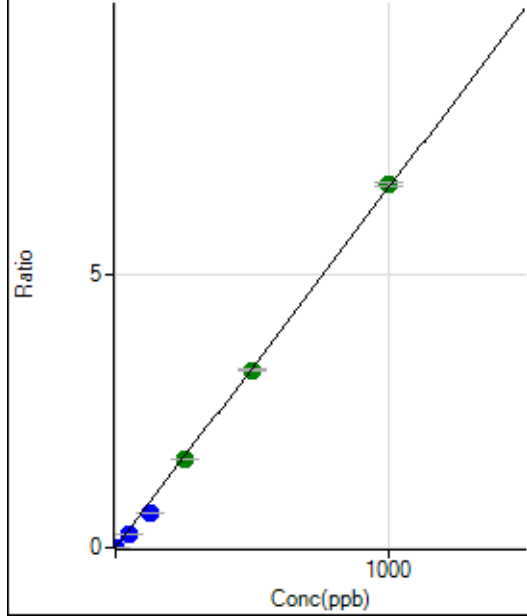
$$R = 0.9995$$

$$DL = 0.004302$$

$$BEC = 0.006393$$

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	69.44	0.0000	P	70.4
2	☐	1.000	0.763	22394.69	0.0051	P	1.4
3	☐	50.000	38.135	1127117.91	0.2520	P	0.3
4	☐	125.000	95.697	2824362.52	0.6324	P	0.8
5	☐	250.000	245.069	7279790.35	1.6195	A	0.9
6	☐	500.000	493.818	14428071.68	3.2633	A	0.5
7	☐	1000.000	1008.580	29005496.48	6.6649	A	1.0
8	☐			4295.26	0.0011	P	6.3

$$y = 0.0066 * x + 1.5508E-005$$

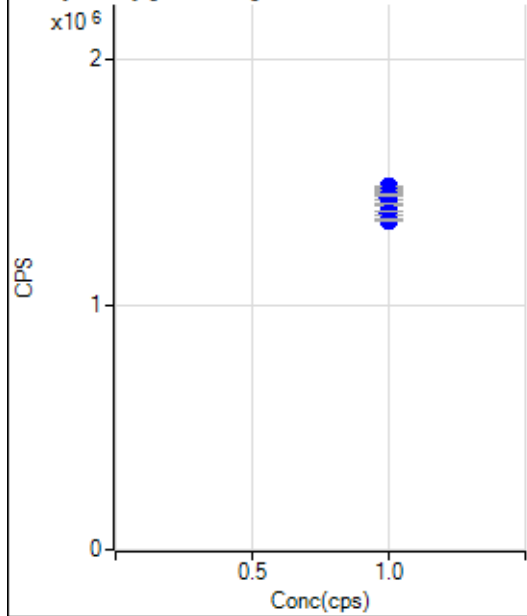
$$R = 0.9996$$

$$DL = 0.004958$$

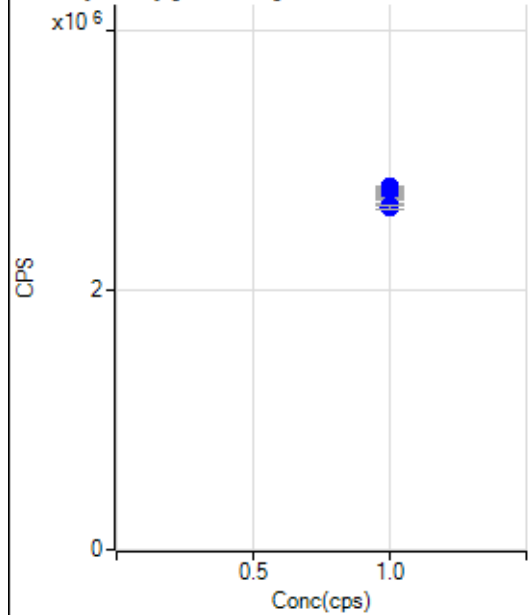
$$BEC = 0.002347$$

Weight: <None>

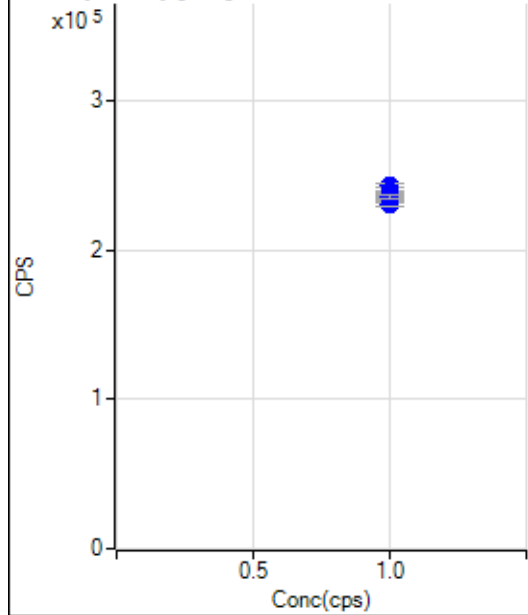
Min Conc: 0

6 Li (ISTD) [No Gas]

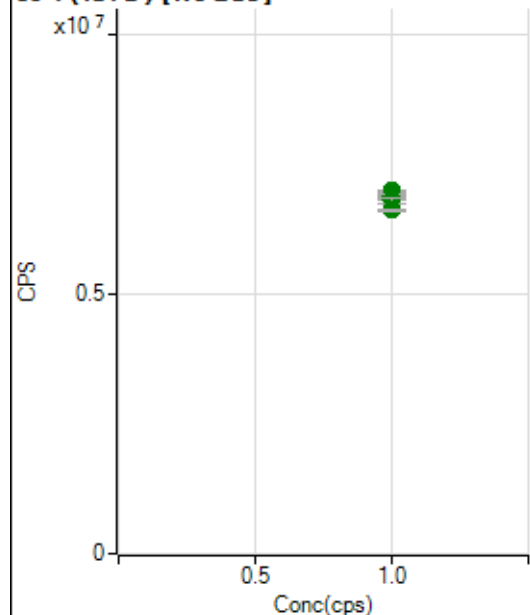
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1453505.05		P	0.7
2	☐	1.000		1439661.92		P	0.8
3	☐	1.000		1482377.03		P	0.2
4	☐	1.000		1463525.88		P	0.8
5	☐	1.000		1449520.60		P	0.3
6	☐	1.000		1409152.64		P	0.2
7	☐	1.000		1374386.57		P	1.1
8	☐	1.000		1346543.73		P	0.9

45 Sc (ISTD) [No Gas]

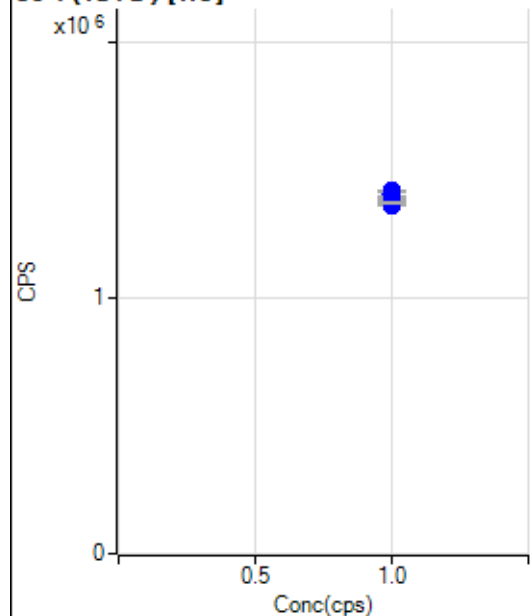
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2792815.10		P	0.2
2	☐	1.000		2762318.12		P	1.3
3	☐	1.000		2768531.77		P	0.1
4	☐	1.000		2752286.59		P	0.5
5	☐	1.000		2719262.39		P	0.2
6	☐	1.000		2701169.61		P	0.7
7	☐	1.000		2644767.32		P	1.5
8	☐	1.000		2629822.88		P	1.0

45 Sc (ISTD) [He]

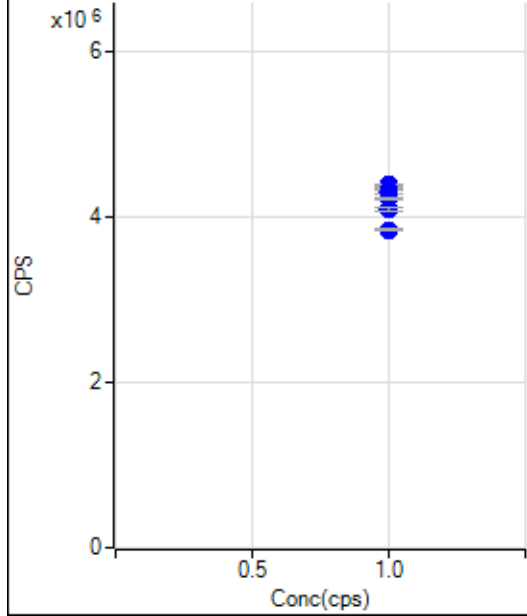
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		242829.81		P	1.2
2	☐	1.000		239173.85		P	0.3
3	☐	1.000		238208.41		P	0.3
4	☐	1.000		235891.87		P	0.2
5	☐	1.000		235007.91		P	0.1
6	☐	1.000		231797.10		P	0.4
7	☐	1.000		230913.74		P	1.3
8	☐	1.000		235446.95		P	1.3

89 Y (ISTD) [No Gas]

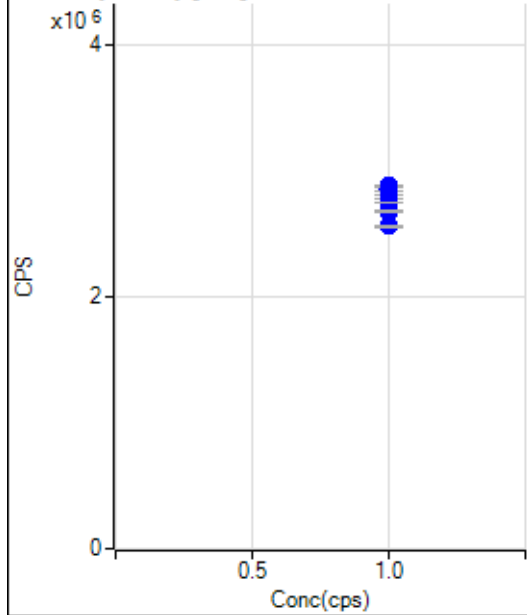
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6995668.37		A	0.5
2	☐	1.000		6929815.39		A	2.8
3	☐	1.000		6946818.30		A	0.9
4	☐	1.000		6880091.56		A	0.9
5	☐	1.000		6911087.05		A	0.7
6	☐	1.000		6879886.91		A	1.1
7	☐	1.000		6818522.61		A	1.7
8	☐	1.000		6626925.74		A	0.3

89 Y (ISTD) [He]

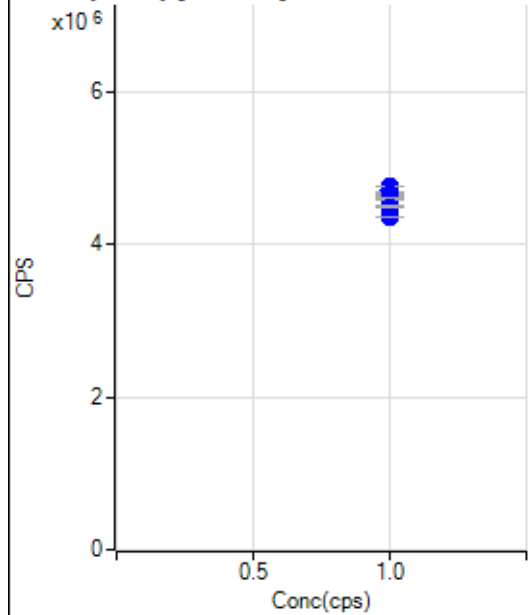
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1416251.78		P	0.7
2	☐	1.000		1404195.36		P	0.7
3	☐	1.000		1393110.92		P	0.4
4	☐	1.000		1388670.31		P	0.1
5	☐	1.000		1383950.19		P	0.2
6	☐	1.000		1379349.67		P	0.3
7	☐	1.000		1359450.61		P	0.5
8	☐	1.000		1369777.38		P	0.9

103 Rh (ISTD) [No Gas]

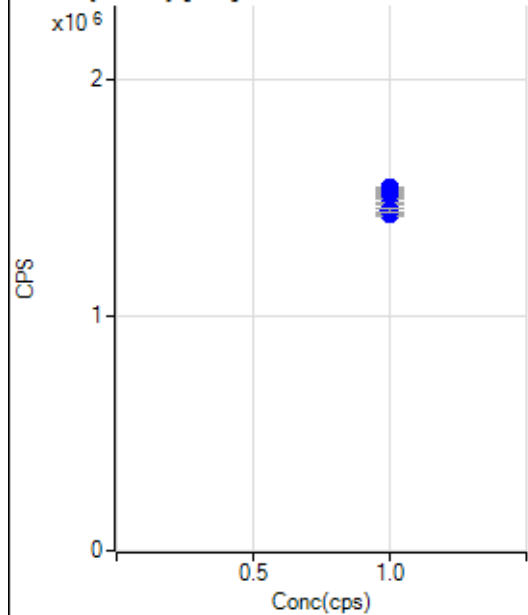
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4391321.15		P	0.3
2	☐	1.000		4339942.16		P	0.9
3	☐	1.000		4331203.20		P	0.1
4	☐	1.000		4307990.42		P	0.8
5	☐	1.000		4282324.00		P	0.4
6	☐	1.000		4224729.77		P	0.4
7	☐	1.000		4099426.95		P	1.1
8	☐	1.000		3845632.72		P	0.8

103 Rh (ISTD) [He]

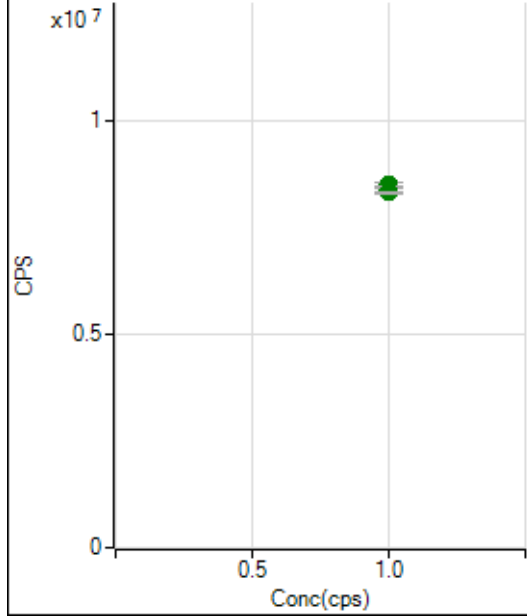
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2885614.61		P	0.6
2	☐	1.000		2863675.97		P	1.0
3	☐	1.000		2848792.49		P	0.2
4	☐	1.000		2810881.56		P	0.3
5	☐	1.000		2789243.02		P	0.1
6	☐	1.000		2751864.58		P	0.4
7	☐	1.000		2678386.66		P	0.5
8	☐	1.000		2563381.39		P	0.6

115 In (ISTD) [No Gas]

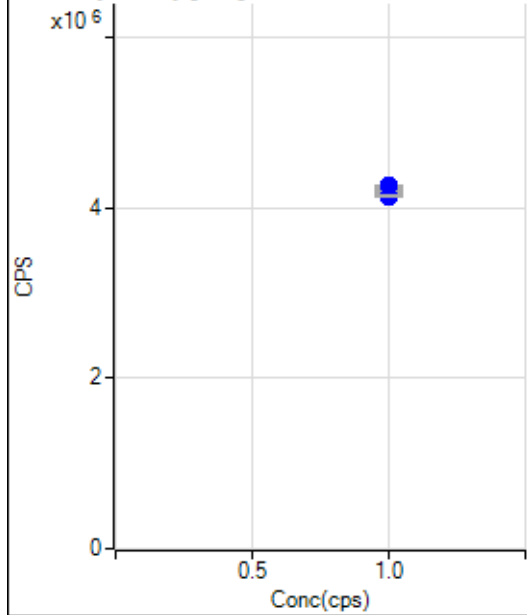
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4759511.48		P	0.0
2	☐	1.000		4725876.10		P	1.5
3	☐	1.000		4677851.30		P	0.3
4	☐	1.000		4670050.43		P	0.7
5	☐	1.000		4652952.75		P	0.3
6	☐	1.000		4605891.66		P	0.3
7	☐	1.000		4495872.07		P	0.3
8	☐	1.000		4360648.27		P	0.3

115 In (ISTD) [He]

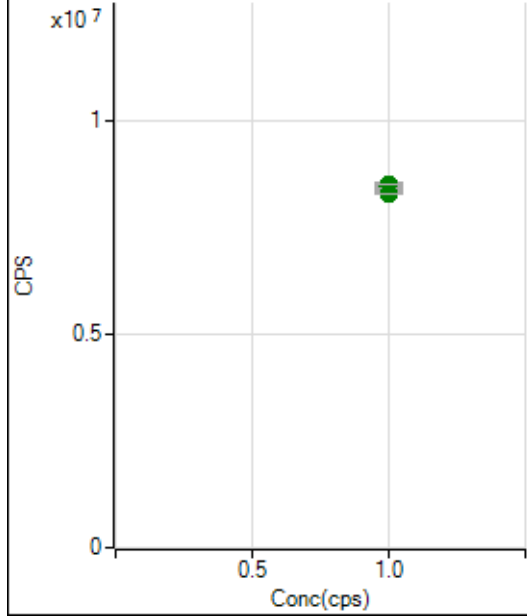
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1542118.17		P	0.7
2	☐	1.000		1524423.02		P	0.7
3	☐	1.000		1514432.00		P	0.4
4	☐	1.000		1504997.20		P	0.4
5	☐	1.000		1496220.50		P	0.2
6	☐	1.000		1472575.01		P	0.5
7	☐	1.000		1426744.42		P	0.4
8	☐	1.000		1445950.39		P	1.0

159 Tb (ISTD) [No Gas]

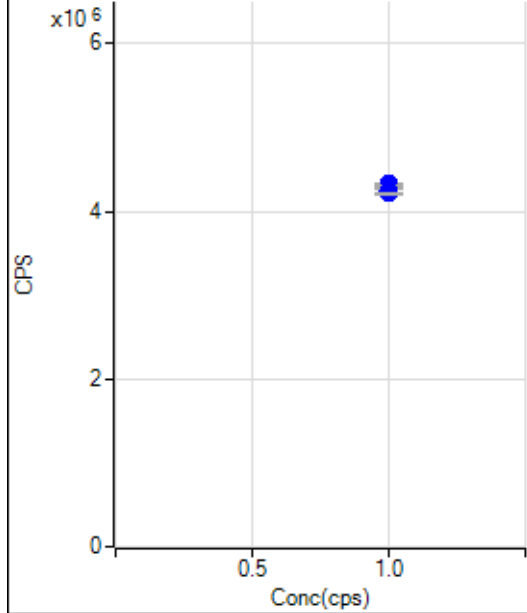
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8440365.15		A	0.4
2	☐	1.000		8403077.03		A	1.9
3	☐	1.000		8373445.78		A	1.3
4	☐	1.000		8423543.14		A	0.2
5	☐	1.000		8492242.51		A	1.0
6	☐	1.000		8468851.54		A	0.4
7	☐	1.000		8427574.74		A	0.5
8	☐	1.000		8304801.68		A	0.3

159 Tb (ISTD) [He]

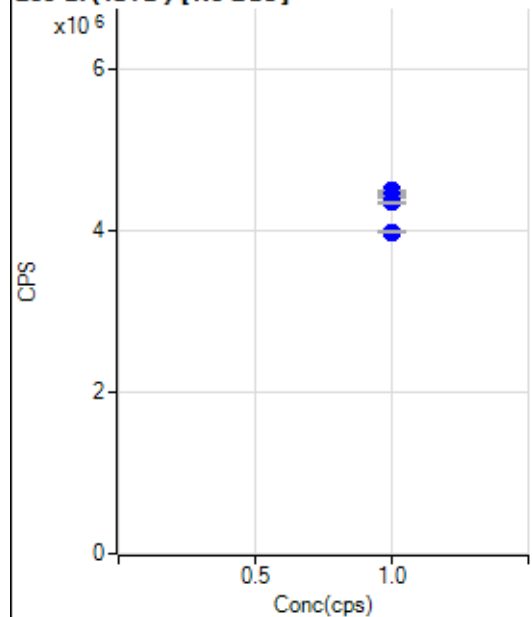
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4260387.99		P	0.4
2	☐	1.000		4223467.02		P	0.8
3	☐	1.000		4230245.39		P	0.8
4	☐	1.000		4232402.47		P	0.3
5	☐	1.000		4225122.13		P	0.3
6	☐	1.000		4228219.41		P	0.5
7	☐	1.000		4192679.97		P	0.2
8	☐	1.000		4139945.22		P	0.6

165 Ho (ISTD) [No Gas]

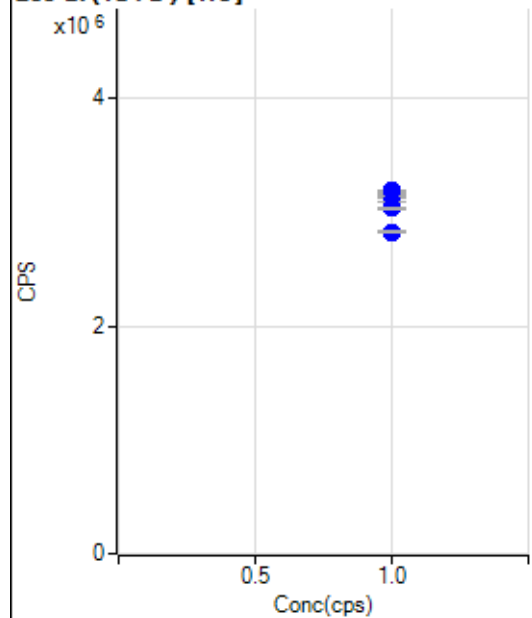
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8366790.01		A	1.2
2	☐	1.000		8332980.50		A	1.4
3	☐	1.000		8346919.81		A	0.7
4	☐	1.000		8442835.71		A	0.6
5	☐	1.000		8498082.44		A	0.9
6	☐	1.000		8451772.37		A	0.7
7	☐	1.000		8461420.29		A	0.9
8	☐	1.000		8289810.15		A	0.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4328359.93		P	0.6
2	☐	1.000		4286454.42		P	0.6
3	☐	1.000		4271162.54		P	0.6
4	☐	1.000		4301067.79		P	1.1
5	☐	1.000		4276163.41		P	0.6
6	☐	1.000		4312332.51		P	0.3
7	☐	1.000		4250661.26		P	0.9
8	☐	1.000		4215144.24		P	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4479155.84		P	0.2
2	☐	1.000		4426350.21		P	0.5
3	☐	1.000		4472350.21		P	0.2
4	☐	1.000		4466191.25		P	0.5
5	☐	1.000		4495151.91		P	0.1
6	☐	1.000		4421366.78		P	0.2
7	☐	1.000		4352103.23		P	0.5
8	☐	1.000		3987089.21		P	0.5

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3185348.84		P	0.9
2	☐	1.000		3161275.05		P	0.2
3	☐	1.000		3160168.60		P	0.1
4	☐	1.000		3148626.83		P	0.6
5	☐	1.000		3134490.86		P	0.2
6	☐	1.000		3092610.54		P	0.1
7	☐	1.000		3032247.45		P	0.7
8	☐	1.000		2822550.58		P	0.4

US EPA Tune Check Sample Report

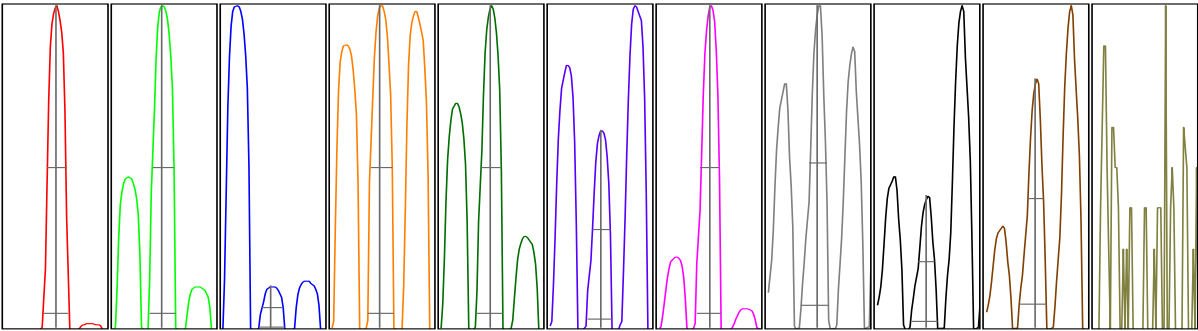
Batch Folder C:\Agilent\ICPMH\1\DATA\P7061721 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6501	4.03	5.00	
24	62969	3.49	5.00	
25	8207	3.28	5.00	
26	9412	3.48	5.00	
59	33020	3.73	5.00	
113	8666	3.45	5.00	
115	63510	3.17	5.00	
206	20395	3.50	5.00	
207	18108	3.40	5.00	
208	42800	3.39	5.00	
220	0	81.44		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6034	6584	6633	6615	6641
24	59048	63853	63729	64188	64028
25	7726	8311	8322	8341	8335
26	8828	9539	9534	9607	9550
59	30825	33603	33592	33663	33414
113	8133	8800	8817	8820	8761
115	59956	64682	64588	64510	63812
206	19127	20809	20630	20773	20634
207	17012	18437	18281	18374	18438
208	40212	43670	43375	43365	43378
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	11838	9.05	8.9 - 9.1		0.731	0.900	
24	103853	23.95	23.9 - 24.1		0.779	0.900	
25	13709	24.95	24.9 - 25.1		0.742	0.900	
26	15570	25.95	25.9 - 26.1		0.743	0.900	
59	57108	59.00	58.9 - 59.1		0.775	0.900	
113	16159	113.05	112.9 - 113.1		0.736	0.900	
115	117993	115.05	114.9 - 115.1		0.736	0.900	
206	41311	206.00	205.9 - 206.1		0.788	0.900	
207	36138	207.00	206.9 - 207.1		0.774	0.900	
208	87485	208.00	207.9 - 208.1		0.780	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	0.68	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		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.5	V	Deflect	13.8	V
Extract 2	-155.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-80	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	13018	0.27	
89	29653	0.42	
205	10566	0.82	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	12989	13040	13070	12987	13005
89	29591	29826	29560	29743	29547
205	10554	10582	10668	10593	10431

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.68	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		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.9	V	Deflect	2.0	V
Extract 2	-160.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-95	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			