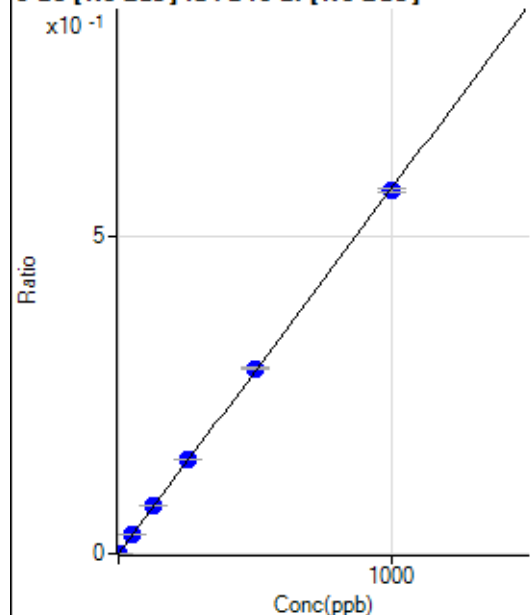


Batch Folder: D:\ICP-MS Data\P7092419MS.b\
Analysis File: P7092419MS.batch.bin
DA Date-Time: 2019-09-25 01:00:32
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-09-24 10:53:19
2	004CALS.d	S02	2019-09-24 11:01:45
3	005CALS.d	S03	2019-09-24 11:05:41
4	006CALS.d	S04	2019-09-24 11:09:38
5	007CALS.d	S05	2019-09-24 11:13:29
6	008CALS.d	S06	2019-09-24 11:17:18
7	009CALS.d	S07	2019-09-24 11:21:06
8	010CALS.d	S08	2019-09-24 11:24:52

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	43.33	0.0000	P	33.4
2	☐	1.000	1.055	2076.84	0.0006	P	1.4
3	☐	50.000	52.925	99880.87	0.0306	P	0.6
4	☐	125.000	130.327	231018.85	0.0752	P	0.9
5	☐	250.000	257.111	424776.02	0.1484	P	0.8
6	☐	500.000	507.985	820387.84	0.2932	P	0.4
7	☐	1000.000	993.418	1574103.54	0.5734	P	1.1
8	☐			233.34	0.0001	P	13.8

$$y = 5.7717\text{E-}004 * x + 1.3078\text{E-}005$$

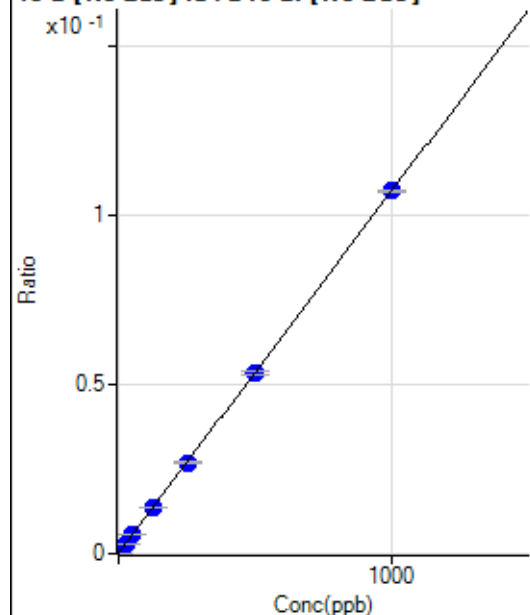
$$R = 0.9999$$

$$DL = 0.02271$$

$$BEC = 0.02266$$

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	458.36	0.0001	P	15.5
2	☐	25.000	24.286	9133.70	0.0027	P	2.2
3	☐	50.000	49.251	17660.98	0.0054	P	0.3
4	☐	125.000	125.667	41677.93	0.0136	P	1.6
5	☐	250.000	250.151	76938.11	0.0269	P	1.9
6	☐	500.000	498.331	149443.57	0.0534	P	2.1
7	☐	1000.000	1000.769	294096.64	0.1071	P	0.5
8	☐			1423.94	0.0050	P	5.7

$$y = 1.0691\text{E-}004 * x + 1.3835\text{E-}004$$

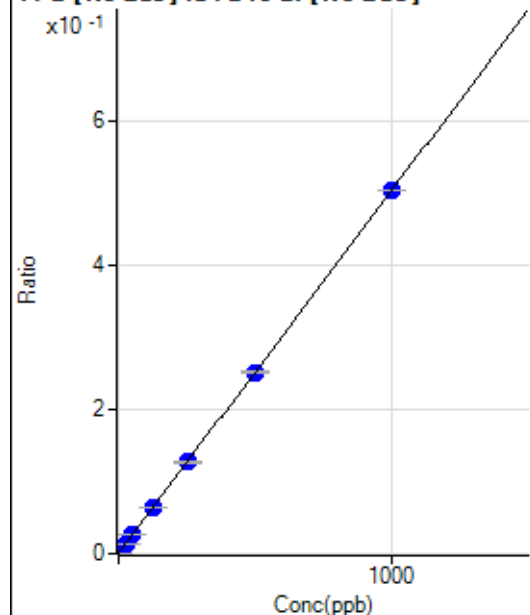
$$R = 1.0000$$

$$DL = 0.6016$$

$$BEC = 1.294$$

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	2033.55	0.0006	P	1.7
2	☐	25.000	24.743	43655.78	0.0131	P	2.9
3	☐	50.000	50.286	84743.40	0.0259	P	1.0
4	☐	125.000	125.746	196255.74	0.0639	P	1.8
5	☐	250.000	251.758	364503.80	0.1274	P	1.1
6	☐	500.000	499.526	705305.38	0.2521	P	1.7
7	☐	1000.000	999.696	1383314.32	0.5039	P	0.2
8	☐			66809.46	0.0233	P	5.7

$$y = 5.0341\text{E-}004 * x + 6.1385\text{E-}004$$

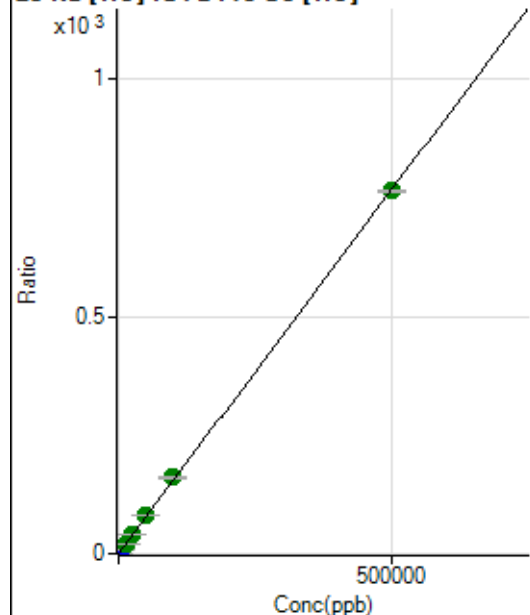
$$R = 1.0000$$

$$DL = 0.06239$$

$$BEC = 1.219$$

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	7677.28	0.0321	P	1.1
2	☐	500.000	530.681	203565.41	0.8462	P	1.5
3	☐	5000.000	5299.020	1878620.64	8.1613	P	0.7
4	☐	12500.000	13371.099	4411302.40	20.5446	A	0.5
5	☐	25000.000	26549.808	8247259.82	40.7621	A	0.2
6	☐	50000.000	53046.386	16448744.81	81.4104	A	0.1
7	☐	100000.00	104630.44	32621371.56	160.5453	A	0.7
8	☐	500000.00	498666.98	188033725.0	765.0353	A	0.6

$$y = 0.0015 * x + 0.0321$$

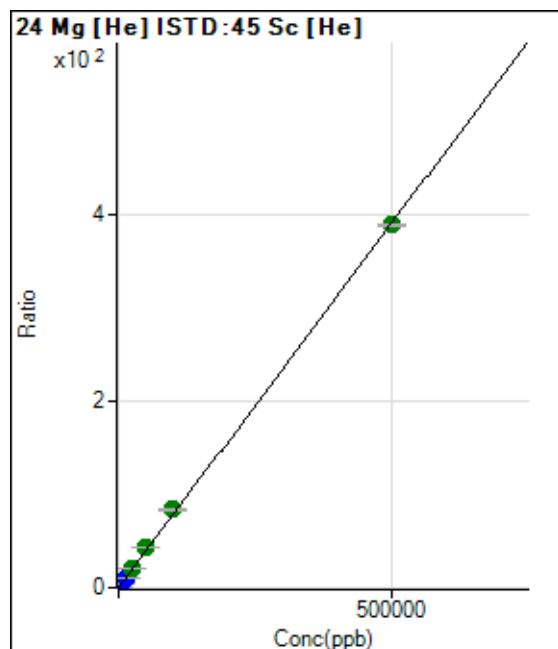
$$R = 0.9999$$

$$DL = 0.6873$$

$$BEC = 20.92$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	188.90	0.0008	P	28.6
2	☐	500.000	569.344	107312.66	0.4461	P	0.7
3	☐	5000.000	5503.858	991071.82	4.3054	P	0.1
4	☐	12500.000	13793.988	2316620.45	10.7891	P	0.5
5	☐	25000.000	27425.594	4340020.80	21.4505	A	0.1
6	☐	50000.000	54559.863	8621792.99	42.6723	A	0.4
7	☐	100000.00	107003.58	17004864.44	83.6888	A	0.7
8	☐	500000.00	497984.55	95728738.25	389.4770	A	0.7

$$y = 7.8211\text{E-}004 * x + 7.8987\text{E-}004$$

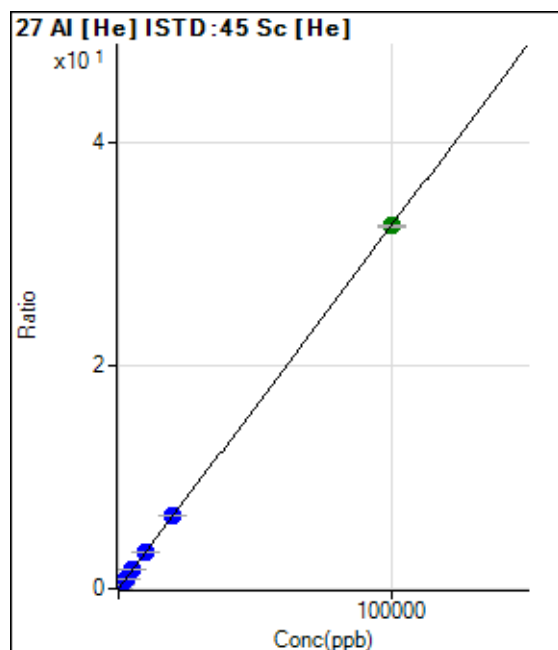
$$R = 0.9999$$

$$DL = 0.8652$$

$$BEC = 1.01$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.89	0.0001	P	69.1
2	☐	20.000	22.472	1775.18	0.0074	P	8.5
3	☐	1000.000	1067.185	80053.27	0.3478	P	1.0
4	☐	2500.000	2595.284	181581.67	0.8457	P	1.2
5	☐	5000.000	5151.278	339601.64	1.6785	P	0.9
6	☐	10000.000	10284.311	677070.23	3.3510	P	0.1
7	☐	20000.000	20183.179	1336268.80	6.5764	P	0.8
8	☐	100000.00	99924.315	8002432.91	32.5588	A	0.7

$$y = 3.2583\text{E-}004 * x + 5.7999\text{E-}005$$

$$R = 1.0000$$

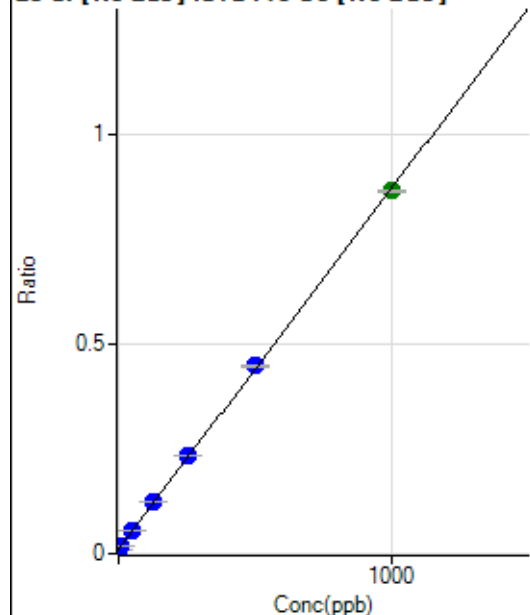
$$DL = 0.3691$$

$$BEC = 0.178$$

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	69322.37	0.0111	P	2.2
2	☐	10.000	9.527	119877.58	0.0193	P	1.2
3	☐	50.000	51.811	338554.74	0.0557	P	0.4
4	☐	125.000	132.069	716564.96	0.1248	P	1.2
5	☐	250.000	258.918	1251923.11	0.2340	P	0.5
6	☐	500.000	507.208	2356952.66	0.4477	P	0.3
7	☐	1000.000	993.197	4537911.82	0.8660	A	0.6
8	☐			541565.10	0.0952	P	1.6

$$y = 8.6075E-004 * x + 0.0111$$

$$R = 0.9999$$

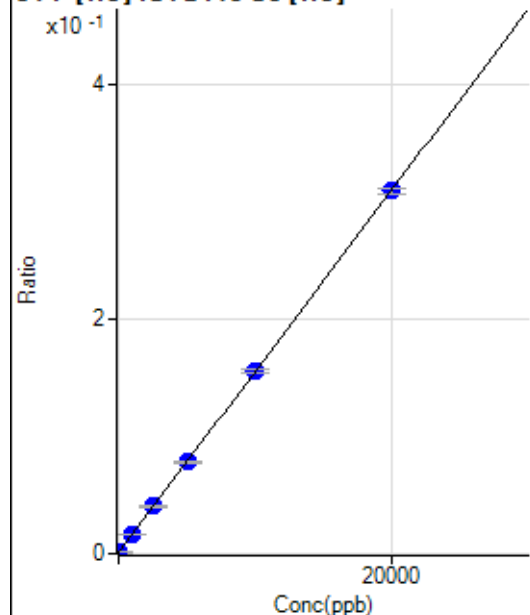
$$DL = 0.842$$

$$BEC = 12.93$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-35.832	61.11	0.0003	P	44.0
2	☐	0.000	35.832	327.79	0.0014	P	5.1
3	☐	1000.000	1007.078	3767.30	0.0164	P	3.3
4	☐	2500.000	2548.552	8625.06	0.0402	P	3.3
5	☐	5000.000	5006.411	15808.95	0.0781	P	0.7
6	☐	10000.000	10047.748	31520.20	0.1560	P	1.6
7	☐	20000.000	19968.100	62832.80	0.3092	P	1.8
8	☐			108.34	0.0004	P	9.1

$$y = 1.5446E-005 * x + 8.0903E-004$$

$$R = 1.0000$$

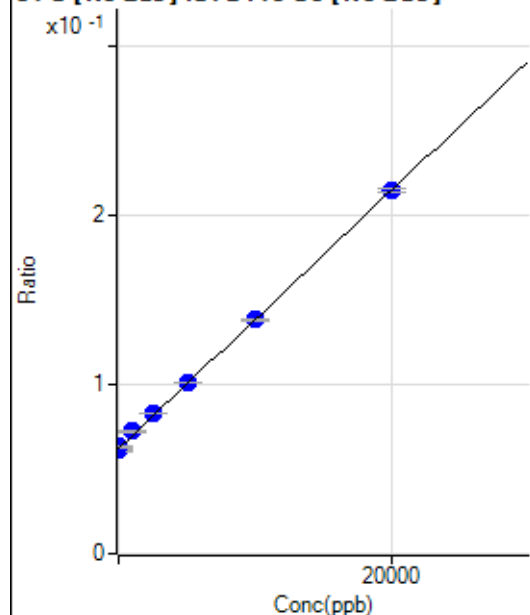
$$DL = 17.63$$

$$BEC = 52.38$$

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	-146.677	380303.72	0.0611	P	0.8
2	☐	0.000	146.677	392547.84	0.0633	P	0.5
3	☐	1000.000	1359.339	440961.71	0.0726	P	1.1
4	☐	2500.000	2756.246	478100.05	0.0833	P	0.5
5	☐	5000.000	5108.346	541834.78	0.1013	P	1.0
6	☐	10000.000	9980.309	729390.66	0.1386	P	0.8
7	☐	20000.000	19932.761	1125008.15	0.2147	P	1.1
8	☐			357996.79	0.0629	P	1.4

$$y = 7.6522\text{E-}006 * x + 0.0622$$

$$R = 0.9997$$

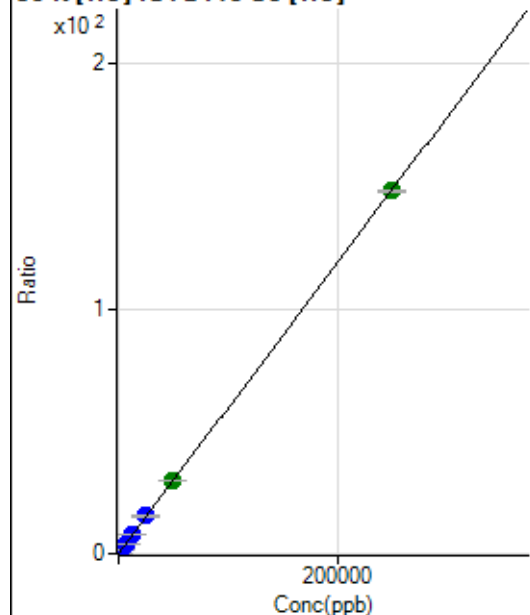
$$DL = 153.3$$

$$BEC = 8126$$

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	8691.80	0.0363	P	1.5
2	☐	500.000	528.315	84054.87	0.3494	P	0.6
3	☐	2500.000	2621.888	365994.37	1.5900	P	0.8
4	☐	6250.000	6513.566	836575.17	3.8961	P	1.0
5	☐	12500.000	12894.735	1553359.17	7.6775	P	0.1
6	☐	25000.000	25769.970	3092755.88	15.3071	P	0.1
7	☐	50000.000	50579.694	6097524.74	30.0088	A	0.2
8	☐	250000.00	249779.46	36390403.94	148.0503	A	0.4

$$y = 5.9258\text{E-}004 * x + 0.0363$$

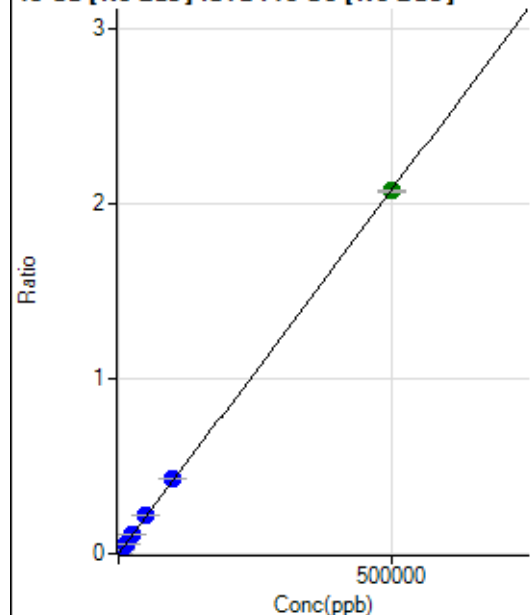
$$R = 1.0000$$

$$DL = 2.689$$

$$BEC = 61.31$$

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	94.45	0.0000	P	22.2
2	☐	500.000	528.048	13687.45	0.0022	P	4.0
3	☐	5000.000	5305.599	133900.66	0.0220	P	1.1
4	☐	12500.000	13187.577	314418.76	0.0548	P	0.9
5	☐	25000.000	26179.591	581532.02	0.1087	P	0.5
6	☐	50000.000	52083.986	1138304.97	0.2162	P	1.3
7	☐	100000.00	103442.67	2250110.32	0.4294	P	0.7
8	☐	500000.00	499023.81	11778986.55	2.0716	A	0.3

$$y = 4.1512\text{E-}006 * x + 1.5162\text{E-}005$$

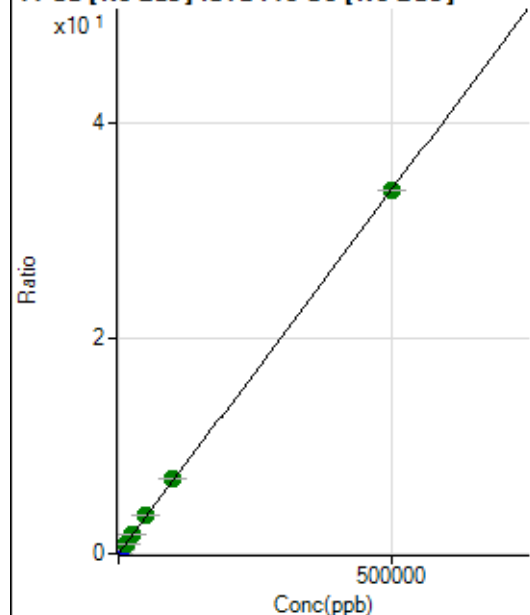
$$R = 1.0000$$

$$DL = 2.429$$

$$BEC = 3.652$$

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	7924.87	0.0013	P	2.7
2	☐	500.000	522.350	226892.43	0.0366	P	0.7
3	☐	5000.000	5291.457	2181217.32	0.3590	P	0.4
4	☐	12500.000	13135.492	5106308.19	0.8894	A	0.3
5	☐	25000.000	26268.928	9509057.42	1.7773	A	1.0
6	☐	50000.000	52305.376	18623504.41	3.5376	A	0.6
7	☐	100000.00	103969.64	36839197.00	7.0306	A	0.6
8	☐	500000.00	498893.26	191784620.9	33.7310	A	0.1

$$y = 6.7609\text{E-}005 * x + 0.0013$$

$$R = 1.0000$$

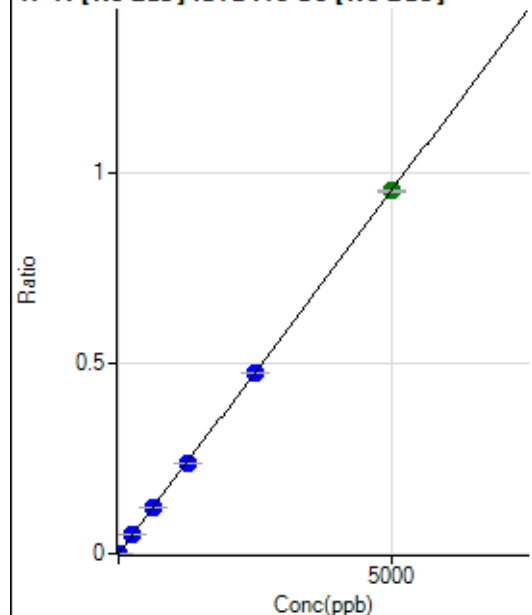
$$DL = 1.507$$

$$BEC = 18.82$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	47.23	0.0000	P	40.8
2	☐	5.000	5.292	6307.13	0.0010	P	4.2
3	☐	250.000	253.718	294127.65	0.0484	P	0.5
4	☐	625.000	636.748	697562.73	0.1215	P	0.3
5	☐	1250.000	1255.993	1282123.14	0.2396	P	0.3
6	☐	2500.000	2497.197	2508234.30	0.4764	P	0.4
7	☐	5000.000	4998.249	4996999.24	0.9536	A	0.4
8	☐			1433.46	0.0003	P	7.2

$$y = 1.9079\text{E-}004 * x + 7.5819\text{E-}006$$

$$R = 1.0000$$

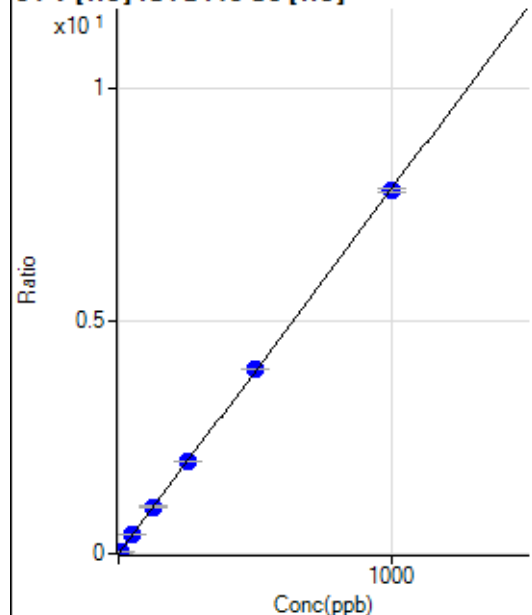
$$DL = 0.04858$$

$$BEC = 0.03974$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6.67	0.0000	P	50.1
2	☐	5.000	5.396	10163.64	0.0422	P	2.6
3	☐	50.000	50.967	91801.10	0.3988	P	1.2
4	☐	125.000	128.799	216385.25	1.0078	P	1.0
5	☐	250.000	254.839	403425.49	1.9940	P	0.4
6	☐	500.000	507.282	801962.07	3.9691	P	0.5
7	☐	1000.000	994.624	1581270.01	7.7822	P	1.2
8	☐			332.23	0.0014	P	5.7

$$y = 0.0078 * x + 2.7877\text{E-}005$$

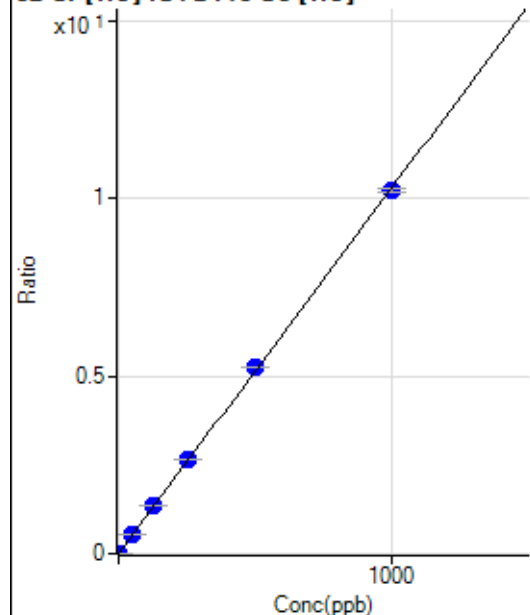
$$R = 0.9999$$

$$DL = 0.005352$$

$$BEC = 0.003563$$

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	394.46	0.0016	P	8.5
2	☐	2.000	2.142	5695.64	0.0237	P	3.3
3	☐	50.000	52.356	124314.40	0.5401	P	0.8
4	☐	125.000	130.372	288224.28	1.3424	P	0.9
5	☐	250.000	256.087	533161.47	2.6352	P	0.6
6	☐	500.000	509.457	1058900.36	5.2408	P	0.4
7	☐	1000.000	992.960	2075192.58	10.2131	P	0.9
8	☐			72845.50	0.2964	P	1.5

$$y = 0.0103 * x + 0.0016$$

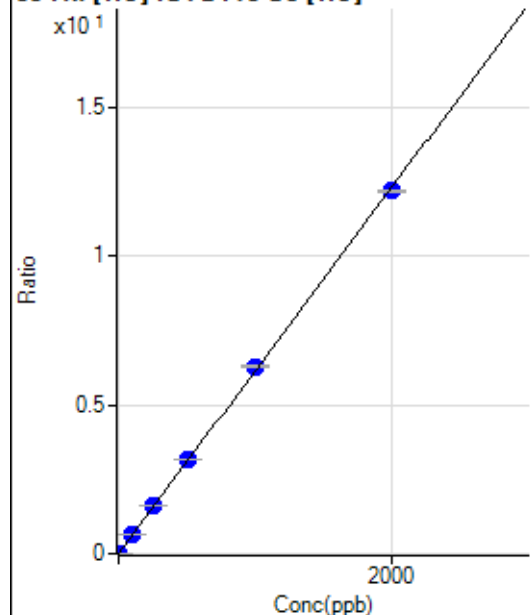
$$R = 0.9999$$

$$DL = 0.04097$$

$$BEC = 0.1604$$

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	53.33	0.0002	P	6.2
2	☐	1.000	1.081	1654.57	0.0069	P	3.1
3	☐	100.000	104.092	147518.23	0.6409	P	1.3
4	☐	250.000	261.210	345244.28	1.6079	P	1.0
5	☐	500.000	513.809	639886.51	3.1626	P	0.6
6	☐	1000.000	1023.867	1273290.12	6.3019	P	0.5
7	☐	2000.000	1983.009	2479973.97	12.2052	P	0.8
8	☐			9551.00	0.0389	P	1.2

$$y = 0.0062 * x + 2.2293E-004$$

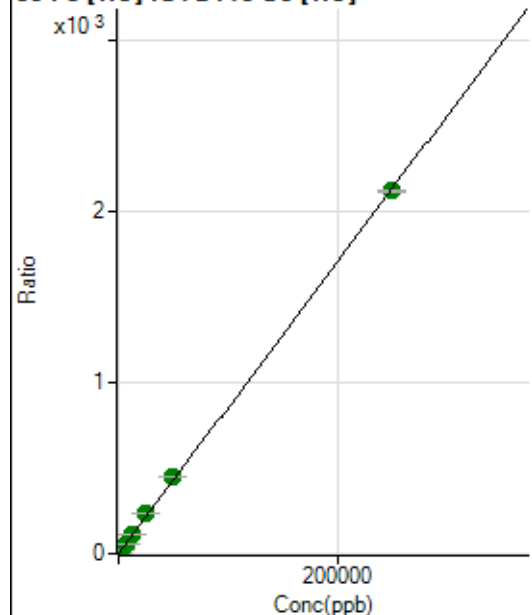
$$R = 0.9999$$

$$DL = 0.006708$$

$$BEC = 0.03622$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1429.74	0.0060	P	11.2
2	☐	50.000	59.940	124189.01	0.5162	P	0.9
3	☐	2500.000	2783.630	5456017.31	23.7028	A	0.8
4	☐	6250.000	6977.457	12755029.68	59.4045	A	1.0
5	☐	12500.000	13822.861	23809523.22	117.6789	A	0.3
6	☐	25000.000	27452.957	47220089.48	233.7108	A	0.5
7	☐	50000.000	53120.060	91885236.31	452.2129	A	0.7
8	☐	250000.00	249043.52	521103715.3	2,120.093	A	0.6

$$y = 0.0085 * x + 0.0060$$

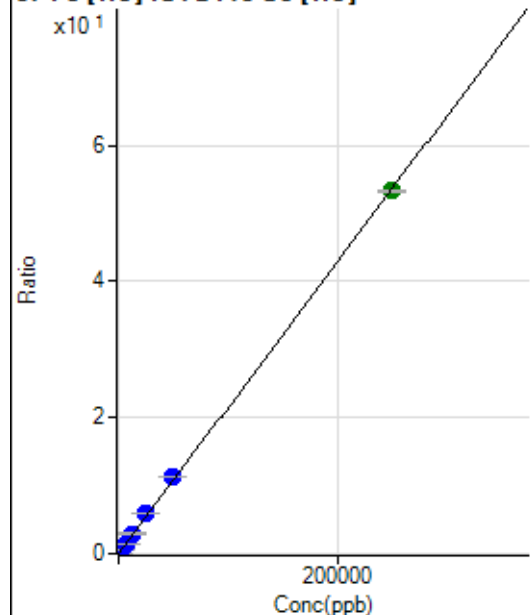
$$R = 0.9999$$

$$DL = 0.2357$$

$$BEC = 0.7021$$

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	25.93	0.0001	P	32.6
2	☐	50.000	58.260	3024.47	0.0126	P	0.3
3	☐	2500.000	2822.214	139003.82	0.6039	P	0.9
4	☐	6250.000	6990.195	321118.65	1.4956	P	1.0
5	☐	12500.000	13813.273	597910.76	2.9553	P	0.9
6	☐	25000.000	27389.299	1183911.67	5.8597	P	0.7
7	☐	50000.000	52964.058	2302366.69	11.3310	P	0.5
8	☐	250000.00	249080.86	13097228.53	53.2875	A	0.9

$$y = 2.1394E-004 * x + 1.0833E-004$$

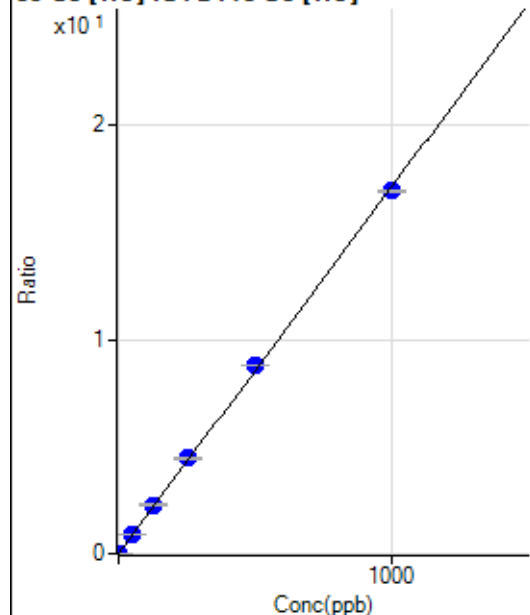
$$R = 0.9999$$

$$DL = 0.4945$$

$$BEC = 0.5064$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	37.78	0.0002	P	22.2
2	☐	1.000	1.128	4683.05	0.0195	P	0.9
3	☐	50.000	53.773	211941.52	0.9207	P	0.7
4	☐	125.000	133.271	489929.33	2.2817	P	0.8
5	☐	250.000	260.459	902185.57	4.4592	P	0.7
6	☐	500.000	512.490	1772736.83	8.7739	P	0.3
7	☐	1000.000	989.918	3443558.04	16.9474	P	0.4
8	☐			48291.60	0.1965	P	1.7

$$y = 0.0171 * x + 1.5791E-004$$

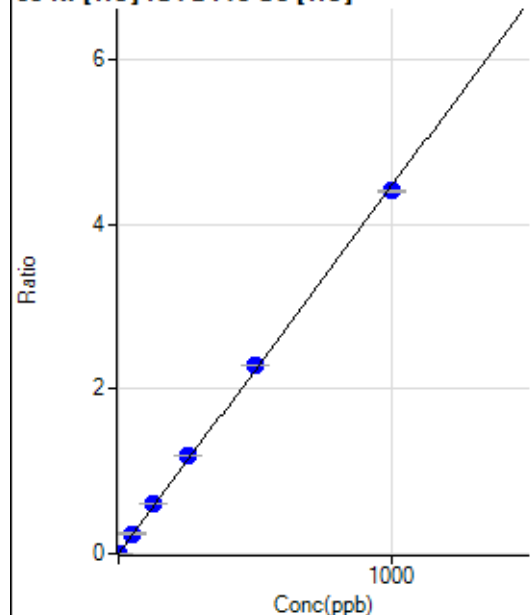
$$R = 0.9998$$

$$DL = 0.006133$$

$$BEC = 0.009224$$

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	65.56	0.0003	P	38.3
2	☐	1.000	1.132	1282.30	0.0053	P	3.2
3	☐	50.000	54.583	56201.86	0.2442	P	1.5
4	☐	125.000	135.296	129867.77	0.6048	P	0.5
5	☐	250.000	268.145	242471.95	1.1984	P	0.5
6	☐	500.000	513.363	463528.78	2.2942	P	0.5
7	☐	1000.000	987.266	896419.90	4.4117	P	0.7
8	☐			29525.41	0.1201	P	1.3

$$y = 0.0045 * x + 2.7409E-004$$

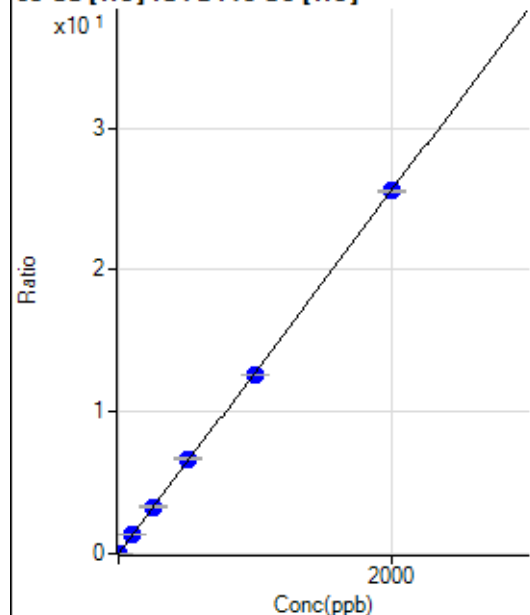
$$R = 0.9997$$

$$DL = 0.07043$$

$$BEC = 0.06134$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	584.47	0.0024	P	8.4
2	☐	2.000	2.144	7181.87	0.0299	P	3.0
3	☐	100.000	105.278	310379.81	1.3484	P	0.6
4	☐	250.000	258.871	711130.90	3.3119	P	0.5
5	☐	500.000	524.281	1356583.70	6.7050	P	0.6
6	☐	1000.000	987.154	2550368.16	12.6225	P	0.3
7	☐	2000.000	1998.980	5193147.56	25.5580	P	0.7
8	☐			9676.68	0.0394	P	3.7

$$y = 0.0128 * x + 0.0024$$

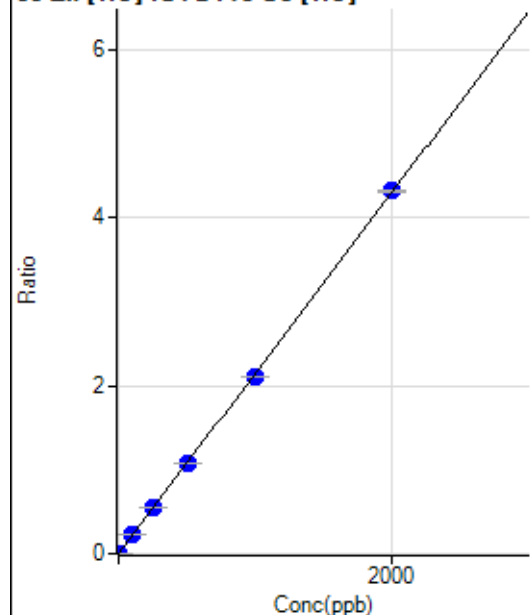
$$R = 0.9999$$

$$DL = 0.04834$$

$$BEC = 0.1911$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	220.00	0.0009	P	4.0
2	☐	2.000	2.237	1376.76	0.0057	P	2.7
3	☐	100.000	104.918	52059.17	0.2262	P	1.2
4	☐	250.000	255.191	117831.60	0.5488	P	0.9
5	☐	500.000	501.103	217845.10	1.0767	P	0.7
6	☐	1000.000	977.156	424047.19	2.0987	P	0.3
7	☐	2000.000	2010.251	877103.03	4.3166	P	0.8
8	☐			8729.40	0.0355	P	2.4

$$y = 0.0021 * x + 9.1961E-004$$

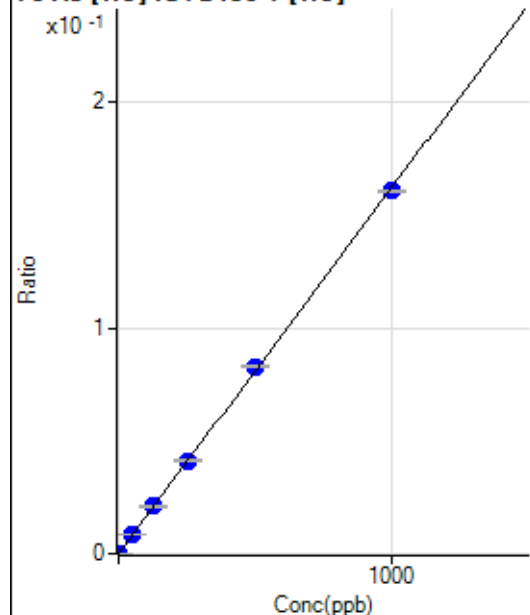
$$R = 0.9999$$

$$DL = 0.05093$$

$$BEC = 0.4284$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.47	0.0000	P	114.4
2	☐	1.000	1.047	263.58	0.0002	P	13.7
3	☐	50.000	52.705	12596.90	0.0085	P	0.6
4	☐	125.000	129.023	28876.80	0.0209	P	0.7
5	☐	250.000	254.686	53849.15	0.0413	P	1.1
6	☐	500.000	512.172	108252.01	0.0831	P	0.4
7	☐	1000.000	992.104	208360.76	0.1609	P	0.8
8	☐			321.61	0.0002	P	2.5

$$y = 1.6216\text{E-}004 * x + 1.6105\text{E-}006$$

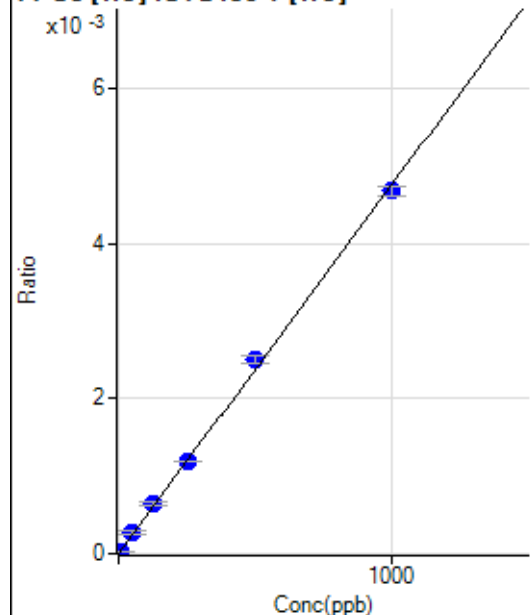
$$R = 0.9999$$

$$DL = 0.03408$$

$$BEC = 0.009932$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.709	34.45	0.0000	P	45.9
3	☐	50.000	56.530	396.68	0.0003	P	18.5
4	☐	125.000	134.542	883.38	0.0006	P	6.3
5	☐	250.000	251.320	1559.00	0.0012	P	0.8
6	☐	500.000	527.573	3271.53	0.0025	P	3.8
7	☐	1000.000	984.366	6064.70	0.0047	P	2.9
8	☐			4.45	0.0000	P	86.6

$$y = 4.7578\text{E-}006 * x + 0.0000\text{E+}000$$

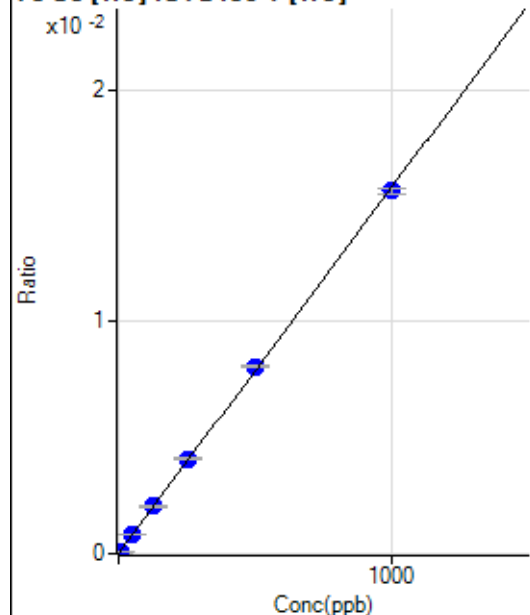
$$R = 0.9994$$

$$DL = 0$$

$$BEC = 0$$

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	15.43	0.0000	P	39.1
2	☐	5.000	5.725	154.32	0.0001	P	9.6
3	☐	50.000	54.340	1277.23	0.0009	P	0.3
4	☐	125.000	130.050	2843.51	0.0021	P	3.1
5	☐	250.000	258.833	5333.12	0.0041	P	1.8
6	☐	500.000	511.722	10527.96	0.0081	P	1.0
7	☐	1000.000	991.079	20249.37	0.0156	P	1.7
8	☐			27.16	0.0000	P	10.0

$$y = 1.5765\text{E-}005 * x + 1.0068\text{E-}005$$

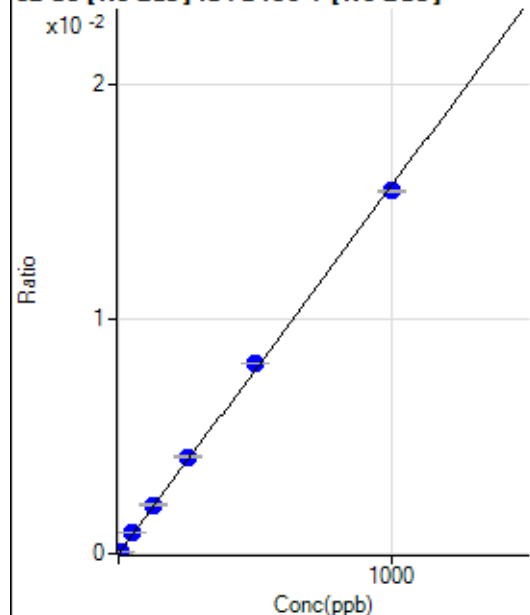
$$R = 0.9999$$

$$DL = 0.7497$$

$$BEC = 0.6386$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-145.03	0.0000	P	-20.0
2	☐	5.000	6.218	1140.76	0.0001	P	2.0
3	☐	50.000	56.186	11221.97	0.0009	P	2.1
4	☐	125.000	132.738	25412.21	0.0021	P	1.0
5	☐	250.000	262.096	47398.66	0.0041	P	1.5
6	☐	500.000	517.858	92447.54	0.0081	P	0.8
7	☐	1000.000	986.764	175755.81	0.0154	P	0.3
8	☐			-1.84	0.0000	P	-977.

$$y = 1.5664\text{E-}005 * x - 1.0886\text{E-}005$$

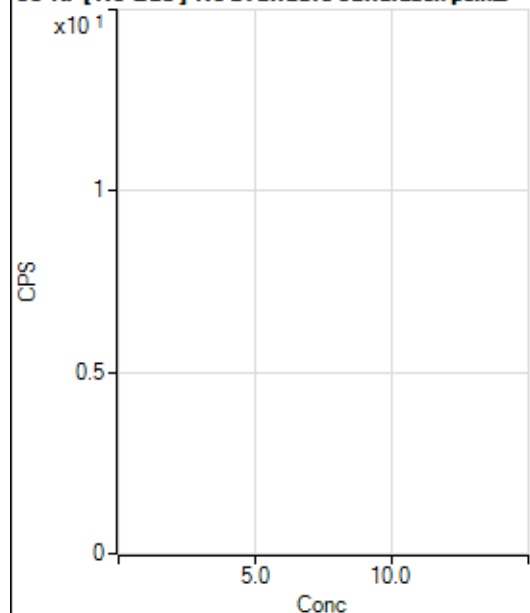
$$R = 0.9997$$

$$DL = 0.4177$$

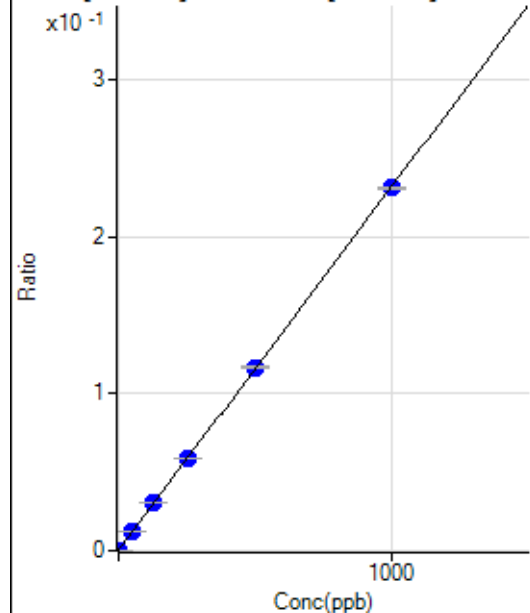
$$BEC = -0.695$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2076.85		P	1.1
2	☐			1957.95		P	2.4
3	☐			1952.38		P	3.1
4	☐			2007.95		P	6.5
5	☐			1685.68		P	3.6
6	☐			1657.91		P	1.6
7	☐			1653.45		P	2.3
8	☐			2091.30		P	2.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	3369.97	0.0003	P	10.0
2	☐	1.000	1.070	6610.14	0.0005	P	1.5
3	☐	50.000	50.903	155603.97	0.0121	P	0.8
4	☐	125.000	128.754	369808.24	0.0301	P	0.2
5	☐	250.000	253.946	684328.35	0.0591	P	0.7
6	☐	500.000	502.688	1332574.40	0.1168	P	1.3
7	☐	1000.000	997.155	2632914.94	0.2314	P	0.2
8	☐			14446.69	0.0012	P	3.3

$$y = 2.3180\text{E-}004 * x + 2.5319\text{E-}004$$

$$R = 1.0000$$

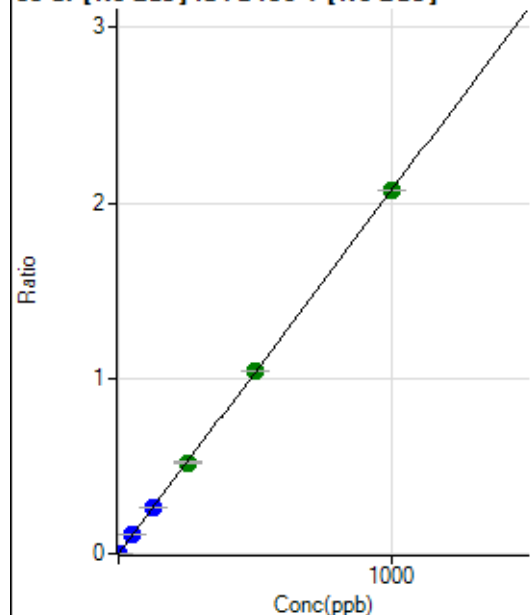
$$DL = 0.3289$$

$$BEC = 1.092$$

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	122.23	0.0000	P	16.8
2	☐	1.000	1.026	28161.88	0.0021	P	2.6
3	☐	50.000	50.426	1349491.09	0.1045	P	0.5
4	☐	125.000	125.338	3191795.38	0.2598	P	0.6
5	☐	250.000	251.004	6022206.90	0.5202	A	0.5
6	☐	500.000	502.427	11883550.79	1.0413	A	0.8
7	☐	1000.000	998.472	23547430.04	2.0695	A	0.2
8	☐			97452.35	0.0082	P	0.2

$$y = 0.0021 * x + 9.1773E-006$$

$$R = 1.0000$$

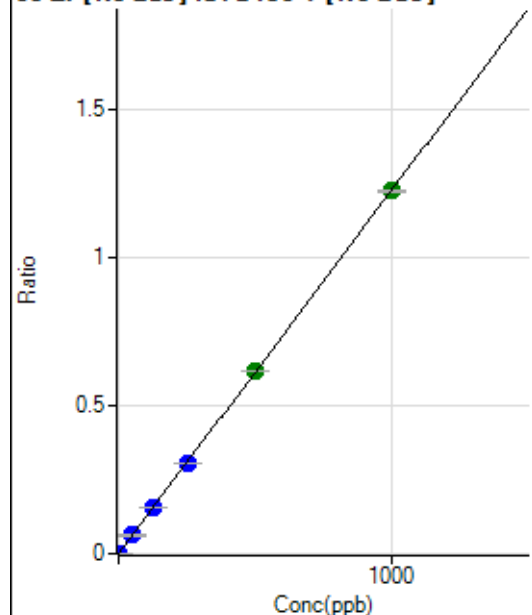
$$DL = 0.002229$$

$$BEC = 0.004428$$

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	933.41	0.0001	P	6.6
2	☐	1.000	0.946	16231.95	0.0012	P	2.9
3	☐	50.000	50.249	796879.31	0.0617	P	0.3
4	☐	125.000	124.965	1884691.77	0.1534	P	0.2
5	☐	250.000	248.821	3534761.10	0.3054	P	0.1
6	☐	500.000	502.735	7039890.87	0.6169	A	0.6
7	☐	1000.000	998.919	13946364.72	1.2257	A	0.4
8	☐			4342.49	0.0004	P	5.8

$$y = 0.0012 * x + 7.0130E-005$$

$$R = 1.0000$$

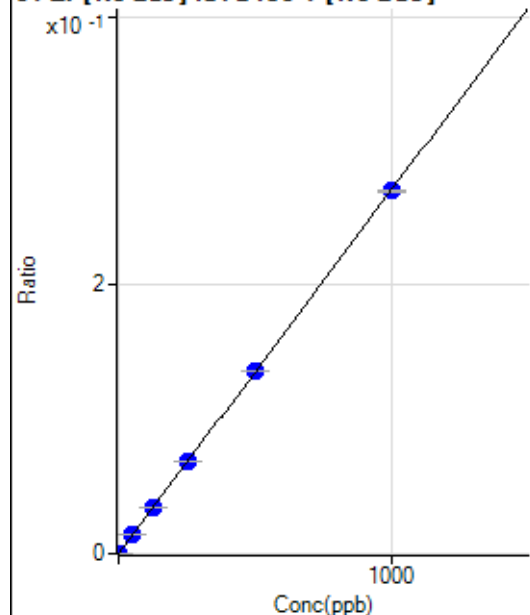
$$DL = 0.0113$$

$$BEC = 0.05716$$

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	208.34	0.0000	P	45.7
2	☐	1.000	0.936	3550.60	0.0003	P	1.2
3	☐	50.000	51.360	179941.67	0.0139	P	0.5
4	☐	125.000	128.023	426571.77	0.0347	P	0.4
5	☐	250.000	253.808	796573.24	0.0688	P	0.2
6	☐	500.000	502.377	1554195.56	0.1362	P	0.8
7	☐	1000.000	997.414	3076479.34	0.2704	P	0.4
8	☐			947.29	0.0001	P	3.6

$$y = 2.7106\text{E-}004 * x + 1.5677\text{E-}005$$

$$R = 1.0000$$

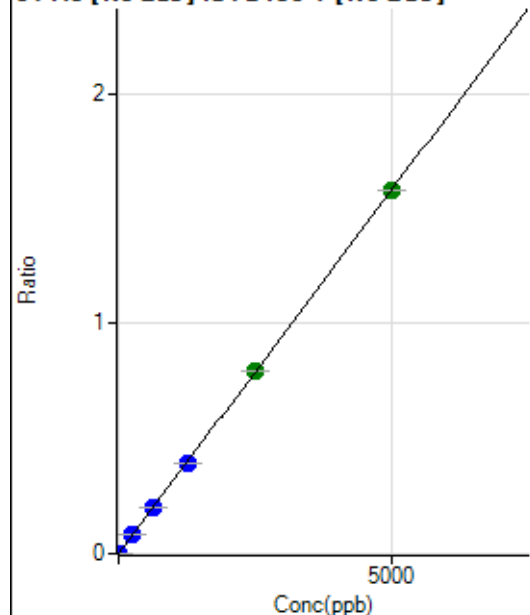
$$DL = 0.07927$$

$$BEC = 0.05783$$

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	347.24	0.0000	P	5.0
2	☐	5.000	4.848	20554.47	0.0016	P	0.8
3	☐	250.000	253.048	1033138.41	0.0800	P	0.2
4	☐	625.000	629.832	2446596.63	0.1991	P	0.8
5	☐	1250.000	1253.436	4587192.68	0.3963	P	0.3
6	☐	2500.000	2516.180	9077652.11	0.7955	A	0.7
7	☐	5000.000	4990.295	17950850.92	1.5776	A	0.2
8	☐			13579.11	0.0011	P	3.7

$$y = 3.1613\text{E-}004 * x + 2.6081\text{E-}005$$

$$R = 1.0000$$

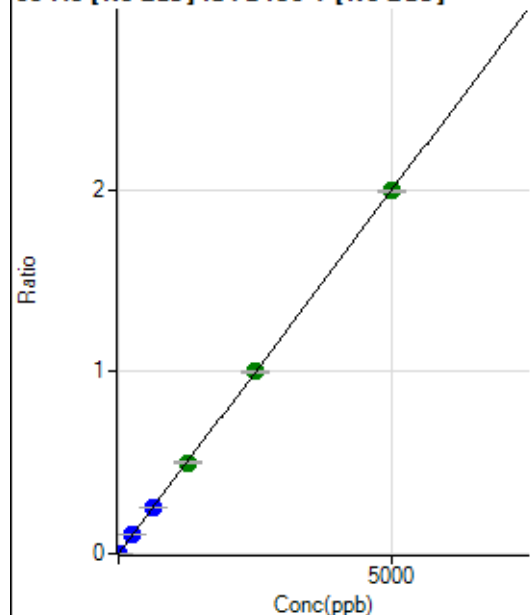
$$DL = 0.01242$$

$$BEC = 0.0825$$

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	33.33	0.0000	P	49.6
2	☐	5.000	4.915	25924.25	0.0020	P	1.0
3	☐	250.000	253.891	1309646.35	0.1014	P	0.6
4	☐	625.000	630.563	3095164.35	0.2519	P	0.9
5	☐	1250.000	1257.233	5814417.49	0.5023	A	0.1
6	☐	2500.000	2505.955	11425305.47	1.0012	A	0.5
7	☐	5000.000	4994.324	22703727.94	1.9953	A	0.4
8	☐			21372.27	0.0018	P	3.0

$$y = 3.9952E-004 * x + 2.4995E-006$$

$$R = 1.0000$$

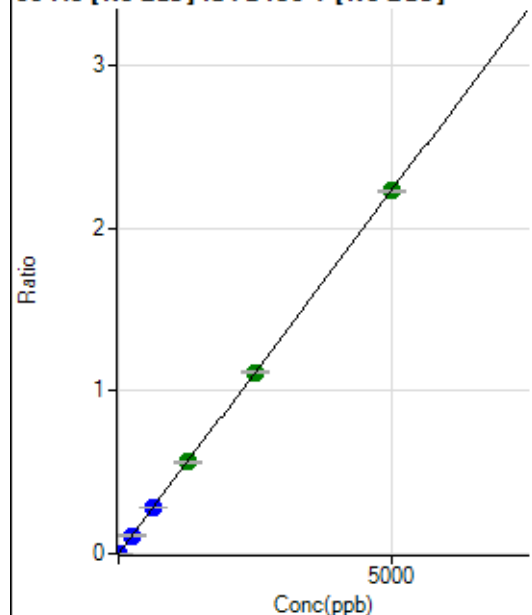
$$DL = 0.009305$$

$$BEC = 0.006256$$

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	72.23	0.0000	P	24.0
2	☐	5.000	5.009	29509.11	0.0022	P	2.6
3	☐	250.000	251.510	1447299.24	0.1121	P	0.4
4	☐	625.000	629.022	3444533.45	0.2804	P	0.2
5	☐	1250.000	1259.490	6497935.48	0.5613	A	0.4
6	☐	2500.000	2500.209	12716427.19	1.1143	A	0.4
7	☐	5000.000	4996.945	25340569.66	2.2271	A	0.5
8	☐			23361.49	0.0020	P	2.7

$$y = 4.4568E-004 * x + 5.4258E-006$$

$$R = 1.0000$$

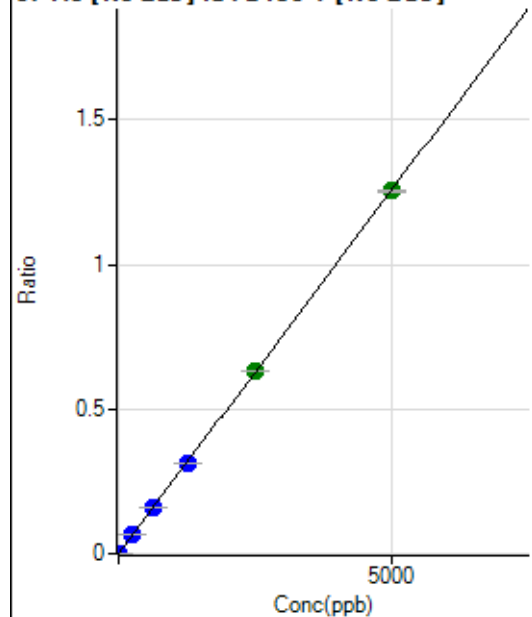
$$DL = 0.008752$$

$$BEC = 0.01217$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.8
2	☐	5.000	4.860	16129.20	0.0012	P	3.2
3	☐	250.000	252.559	819620.97	0.0635	P	0.4
4	☐	625.000	631.018	1948842.84	0.1586	P	0.6
5	☐	1250.000	1251.344	3641029.99	0.3145	P	0.4
6	☐	2500.000	2516.201	7217790.00	0.6325	A	0.4
7	☐	5000.000	4990.683	14273777.92	1.2545	A	0.4
8	☐			13337.33	0.0011	P	0.6

$$y = 2.5136\text{E-}004 * x + 1.6698\text{E-}006$$

$$R = 1.0000$$

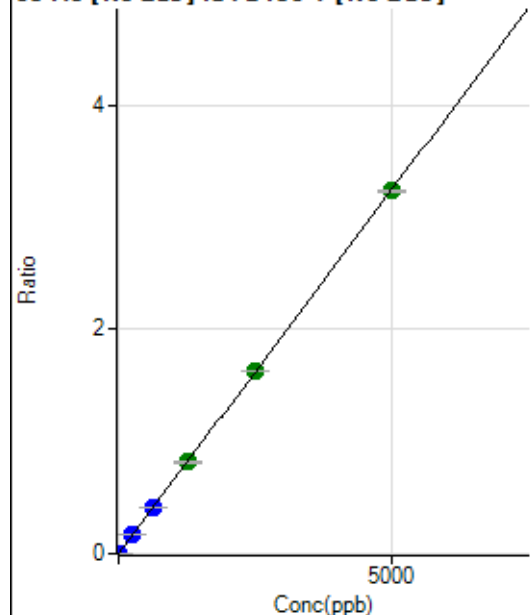
$$DL = 0.004338$$

$$BEC = 0.006643$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.44	0.0000	P	43.2
2	☐	5.000	4.950	42416.85	0.0032	P	1.9
3	☐	250.000	253.657	2126046.90	0.1647	P	0.2
4	☐	625.000	630.978	5032754.32	0.4096	P	0.5
5	☐	1250.000	1260.862	9475063.93	0.8185	A	1.0
6	☐	2500.000	2515.075	18632555.80	1.6327	A	0.7
7	☐	5000.000	4988.817	36851011.93	3.2387	A	0.2
8	☐			33612.74	0.0028	P	1.9

$$y = 6.4918\text{E-}004 * x + 3.3373\text{E-}006$$

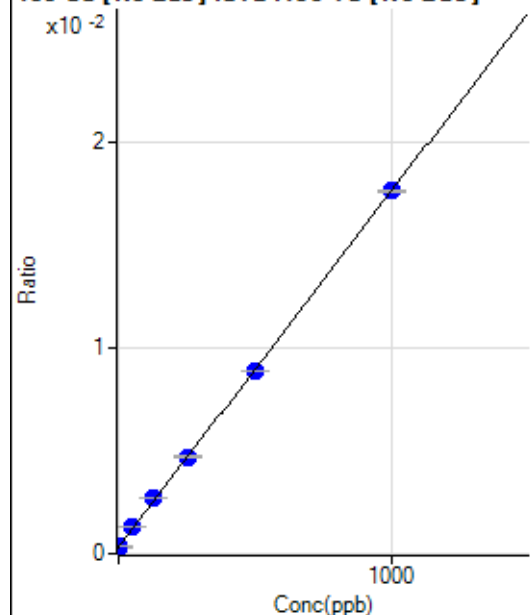
$$R = 1.0000$$

$$DL = 0.006655$$

$$BEC = 0.005141$$

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	6259.98	0.0003	P	5.7
2	☐	1.000	2.617	7043.75	0.0004	P	1.9
3	☐	50.000	56.189	25131.33	0.0013	P	1.8
4	☐	125.000	137.098	50524.24	0.0027	P	1.7
5	☐	250.000	253.545	85842.88	0.0047	P	0.9
6	☐	500.000	494.698	161123.00	0.0089	P	0.5
7	☐	1000.000	999.942	319129.22	0.0176	P	0.4
8	☐			6143.25	0.0003	P	2.8

$$y = 1.7312\text{E-}005 * x + 3.1532\text{E-}004$$

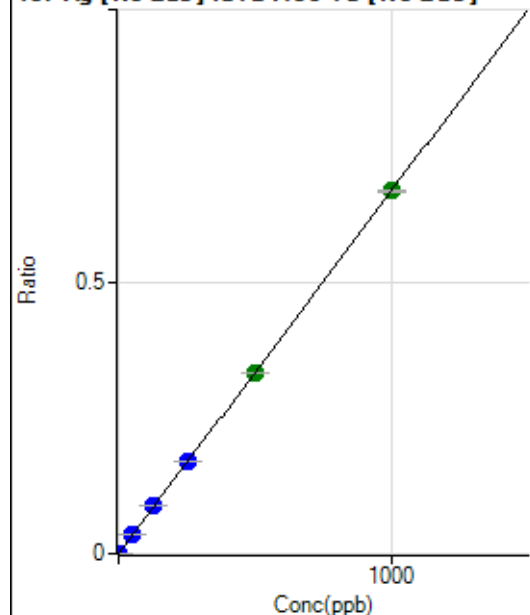
$$R = 0.9999$$

$$DL = 3.094$$

$$BEC = 18.21$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	8.8
2	☐	1.000	0.946	12483.79	0.0006	P	1.7
3	☐	50.000	54.503	710273.78	0.0364	P	0.6
4	☐	125.000	132.940	1668296.91	0.0888	P	0.2
5	☐	250.000	252.770	3080037.96	0.1688	P	0.3
6	☐	500.000	496.821	6020247.10	0.3318	A	0.4
7	☐	1000.000	999.680	12086694.63	0.6676	A	0.4
8	☐			658.38	0.0000	P	12.4

$$y = 6.6780\text{E-}004 * x + 7.2766\text{E-}006$$

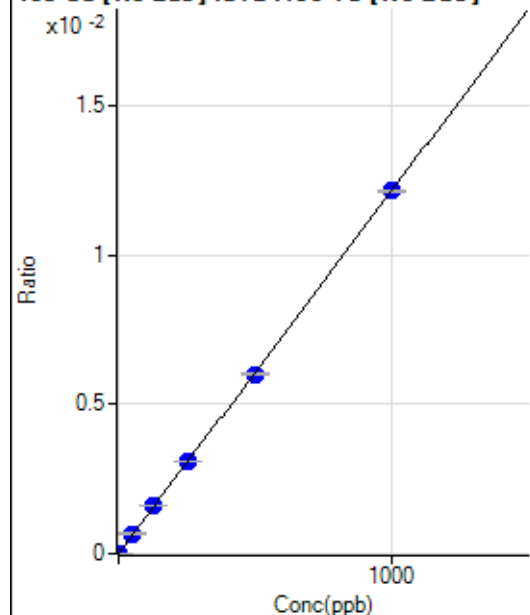
$$R = 1.0000$$

$$DL = 0.002869$$

$$BEC = 0.0109$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.89	0.0000	P	17.2
2	☐	1.000	0.949	238.90	0.0000	P	1.1
3	☐	50.000	55.210	13099.32	0.0007	P	2.6
4	☐	125.000	134.315	30672.41	0.0016	P	0.9
5	☐	250.000	255.509	56646.27	0.0031	P	1.1
6	☐	500.000	494.027	108907.74	0.0060	P	1.1
7	☐	1000.000	1000.184	219988.88	0.0122	P	0.5
8	☐			65.28	0.0000	P	10.7

$$y = 1.2148\text{E-}005 * x + 6.9963\text{E-}007$$

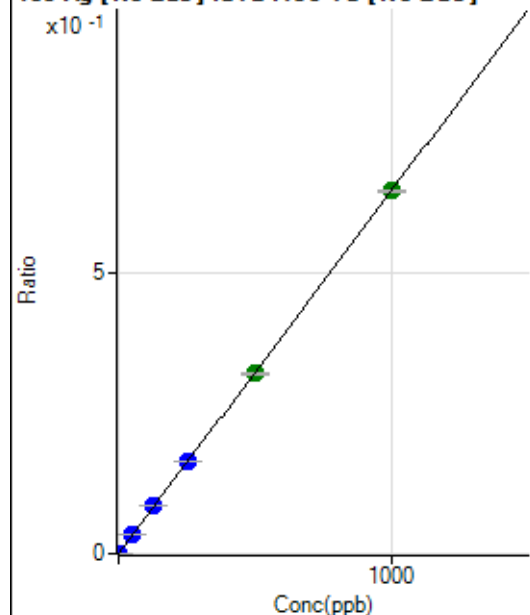
$$R = 0.9999$$

$$DL = 0.02976$$

$$BEC = 0.05759$$

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	83.34	0.0000	P	19.8
2	☐	1.000	0.943	11994.44	0.0006	P	1.6
3	☐	50.000	54.354	685612.78	0.0351	P	1.2
4	☐	125.000	133.260	1618754.81	0.0861	P	0.4
5	☐	250.000	253.244	2987033.23	0.1637	P	0.4
6	☐	500.000	496.785	5827132.29	0.3211	A	0.6
7	☐	1000.000	999.546	11698354.08	0.6461	A	0.2
8	☐			591.70	0.0000	P	7.4

$$y = 6.4643\text{E-}004 * x + 4.1971\text{E-}006$$

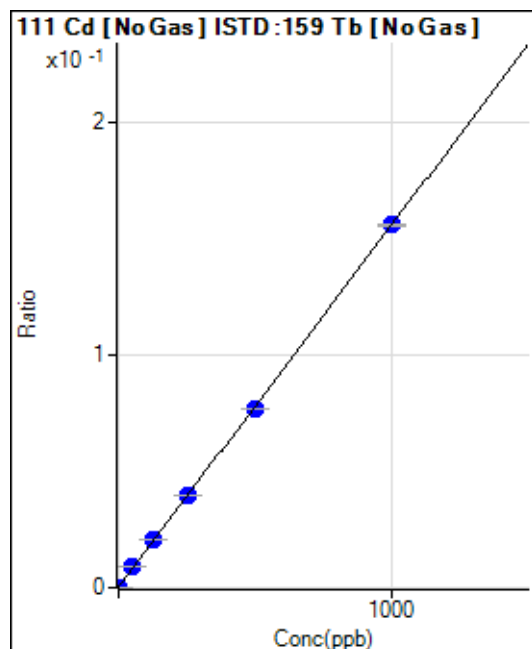
$$R = 1.0000$$

$$DL = 0.003858$$

$$BEC = 0.006493$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4390.32	0.0002	P	5.5
2	☐	1.000	1.184	7920.76	0.0004	P	2.1
3	☐	50.000	54.555	170073.91	0.0087	P	0.5
4	☐	125.000	133.128	393714.59	0.0210	P	0.8
5	☐	250.000	254.010	725777.47	0.0398	P	0.4
6	☐	500.000	494.417	1401082.97	0.0772	P	0.2
7	☐	1000.000	1000.545	2824978.71	0.1560	P	0.6
8	☐			4628.21	0.0003	P	1.8

$$y = 1.5573\text{E-}004 * x + 2.2115\text{E-}004$$

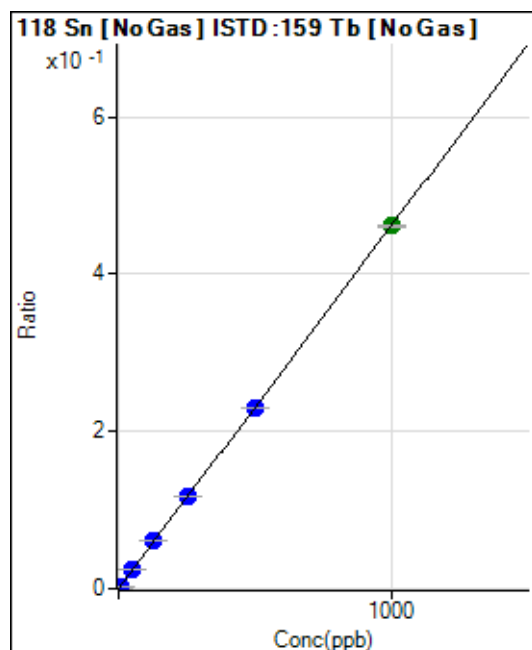
$$R = 0.9999$$

$$DL = 0.2345$$

$$BEC = 1.42$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1016.75	0.0001	P	5.5
2	☐	5.000	5.464	50271.14	0.0026	P	0.8
3	☐	50.000	53.005	478403.12	0.0245	P	0.5
4	☐	125.000	130.696	1134656.11	0.0604	P	0.9
5	☐	250.000	255.370	2151886.72	0.1179	P	0.5
6	☐	500.000	497.557	4168645.28	0.2297	P	0.4
7	☐	1000.000	999.014	8350497.93	0.4612	A	0.5
8	☐			4070.22	0.0002	P	7.7

$$y = 4.6163\text{E-}004 * x + 5.1215\text{E-}005$$

$$R = 1.0000$$

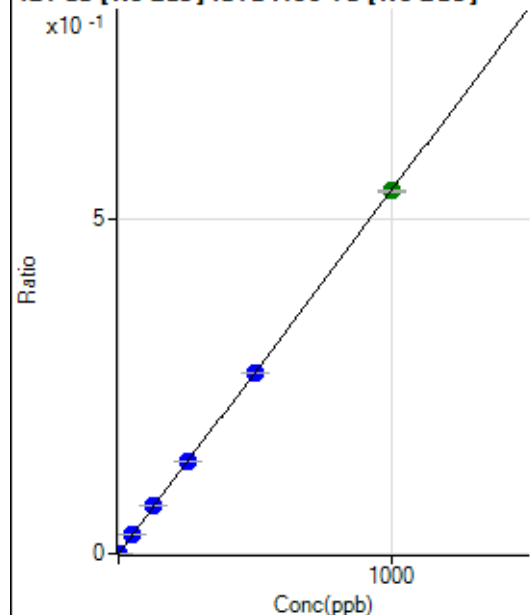
$$DL = 0.01833$$

$$BEC = 0.1109$$

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	102.78	0.0000	P	28.7
2	☐	2.000	2.108	22471.56	0.0012	P	1.2
3	☐	50.000	52.302	554540.17	0.0284	P	0.2
4	☐	125.000	130.662	1334078.07	0.0710	P	0.5
5	☐	250.000	254.694	2525017.68	0.1384	P	0.4
6	☐	500.000	498.181	4911550.85	0.2707	P	0.3
7	☐	1000.000	998.913	9826335.03	0.5427	A	0.5
8	☐			14485.80	0.0008	P	2.7

$$y = 5.4333\text{E-}004 * x + 5.1798\text{E-}006$$

$$R = 1.0000$$

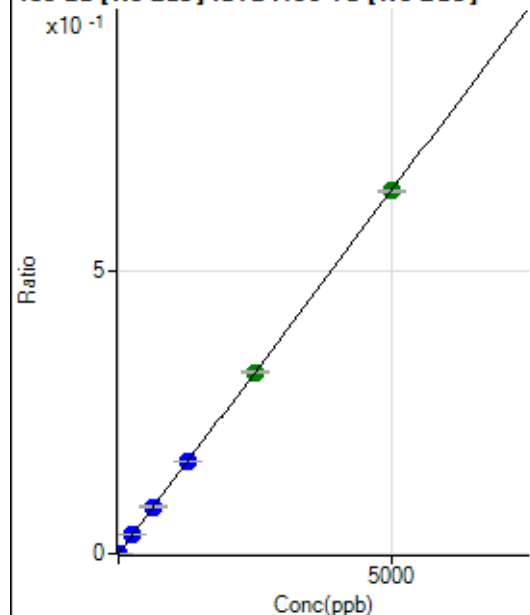
$$DL = 0.008208$$

$$BEC = 0.009533$$

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	61.11	0.0000	P	20.6
2	☐	10.000	10.674	26860.12	0.0014	P	0.8
3	☐	250.000	261.599	656137.23	0.0336	P	0.7
4	☐	625.000	648.307	1565948.43	0.0833	P	0.5
5	☐	1250.000	1263.481	2963381.10	0.1624	P	0.7
6	☐	2500.000	2500.605	5832455.68	0.3214	A	0.7
7	☐	5000.000	4992.832	11619539.50	0.6418	A	0.3
8	☐			1305.67	0.0001	P	13.1

$$y = 1.2854\text{E-}004 * x + 3.0778\text{E-}006$$

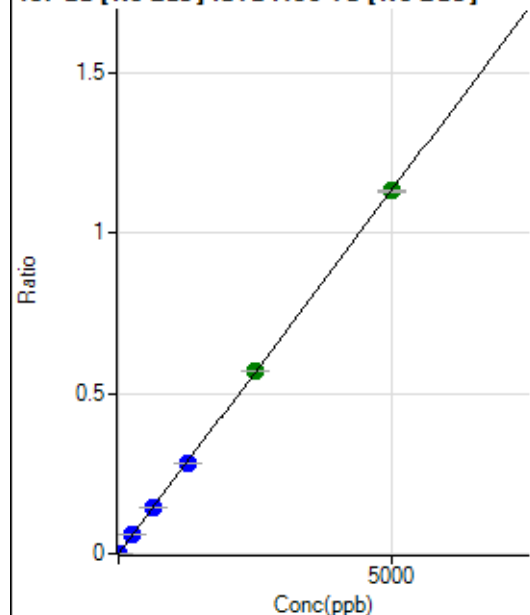
$$R = 1.0000$$

$$DL = 0.01483$$

$$BEC = 0.02394$$

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	33.33	0.0000	P	43.2
2	☐	10.000	10.833	47995.13	0.0025	P	0.2
3	☐	250.000	259.935	1149578.24	0.0589	P	0.2
4	☐	625.000	646.388	2753088.02	0.1465	P	0.1
5	☐	1250.000	1255.077	5190678.80	0.2845	P	0.2
6	☐	2500.000	2503.964	10298501.97	0.5676	A	0.2
7	☐	5000.000	4993.577	20492492.99	1.1319	A	0.8
8	☐			2219.72	0.0001	P	1.1

$$y = 2.2667E-004 * x + 1.6785E-006$$

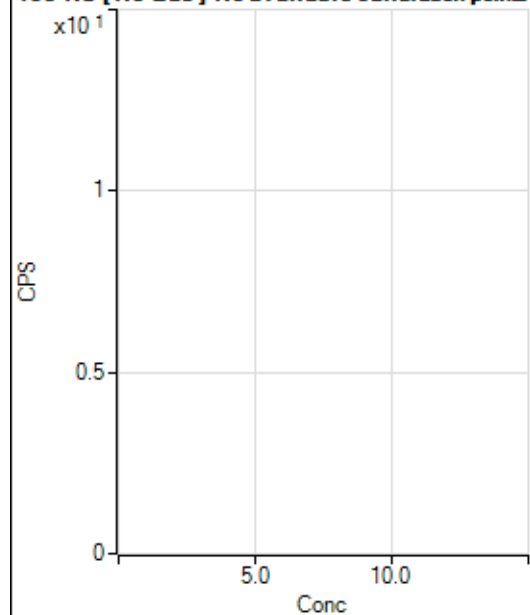
$$R = 1.0000$$

$$DL = 0.009586$$

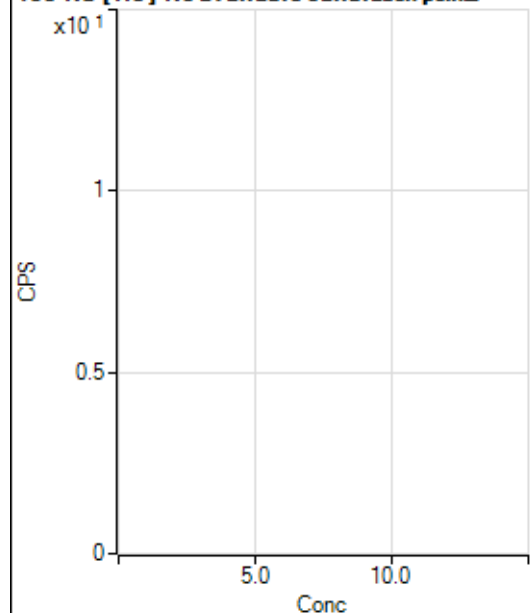
$$BEC = 0.007405$$

Weight: <None>

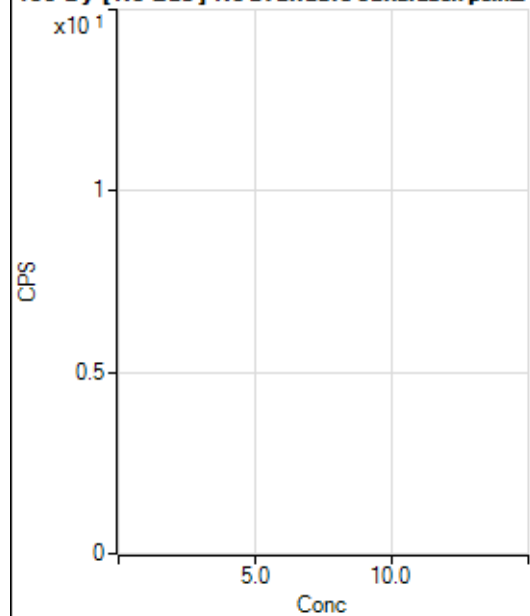
Min Conc: 0

150 Nd [No Gas] No available calibration points

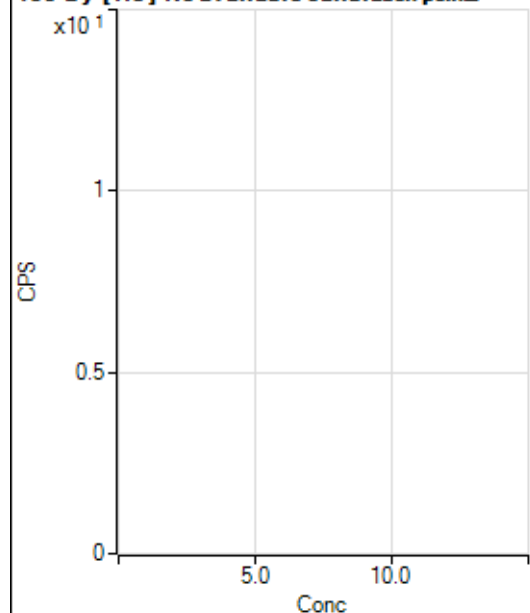
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			17.78		P	108.2
2	☐			26.67		P	109.0
3	☐			68.89		P	14.8
4	☐			151.12		P	33.4
5	☐			266.68		P	4.3
6	☐			506.69		P	14.7
7	☐			1044.52		P	4.2
8	☐			108.89		P	15.4

150 Nd [He] No available calibration points

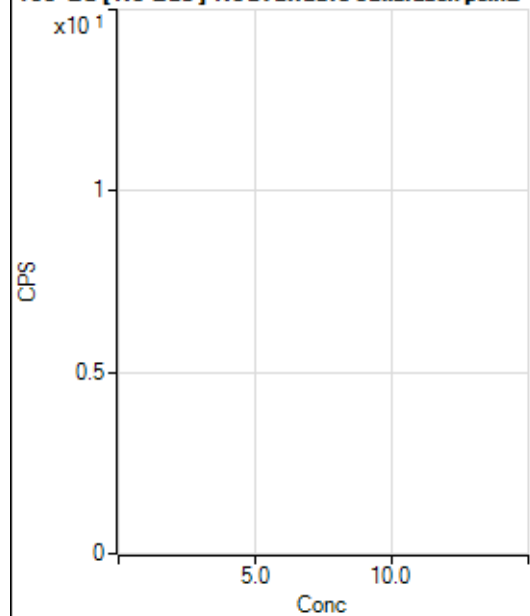
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	49.5
2	☐			12.22		P	41.7
3	☐			11.11		P	17.3
4	☐			23.33		P	49.5
5	☐			25.56		P	49.4
6	☐			43.33		P	20.3
7	☐			72.22		P	16.2
8	☐			53.34		P	53.4

156 Dy [No Gas] No available calibration points

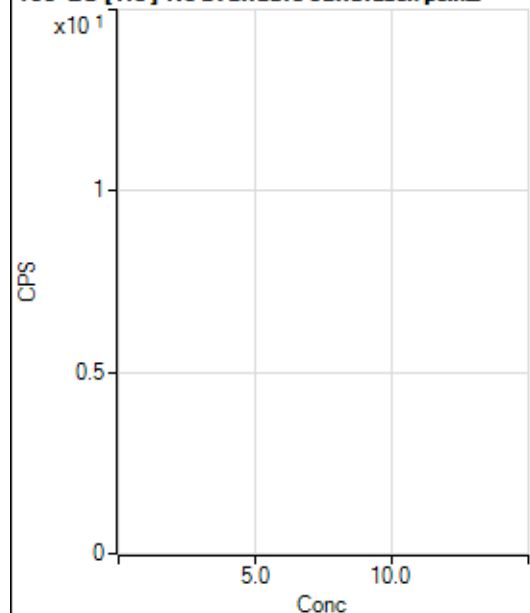
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	21.6
2	☐			30.56		P	83.3
3	☐			30.56		P	63.0
4	☐			47.22		P	53.9
5	☐			66.67		P	33.1
6	☐			119.45		P	62.5
7	☐			247.24		P	32.4
8	☐			41.67		P	52.9

156 Dy [He] No available calibration points

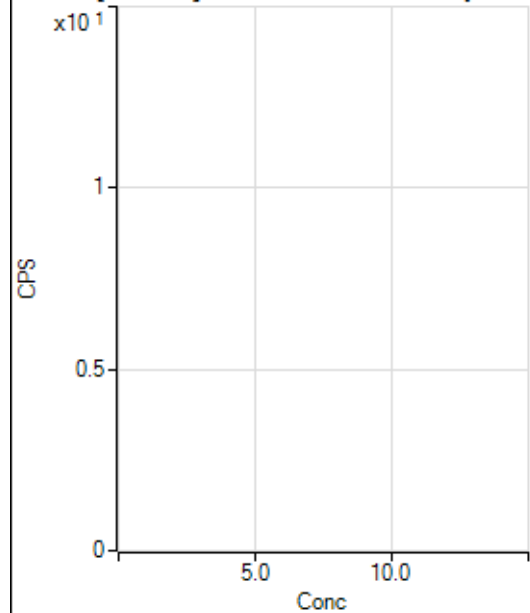
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.56		P	7.5
2	☐			30.00		P	29.4
3	☐			24.44		P	34.3
4	☐			42.22		P	16.4
5	☐			81.11		P	13.2
6	☐			128.89		P	3.9
7	☐			180.00		P	17.9
8	☐			57.78		P	13.3

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

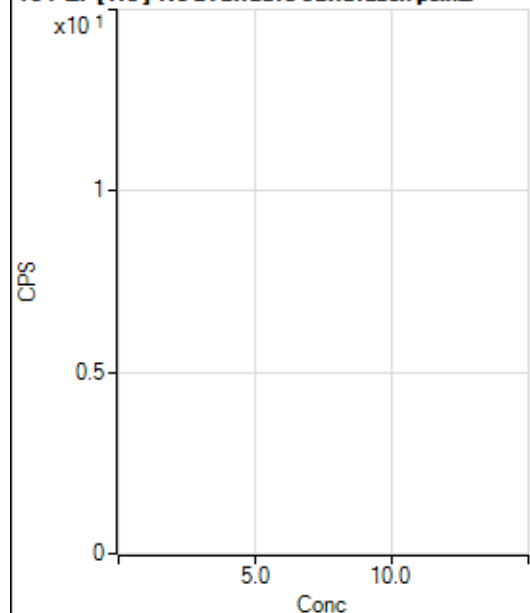
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			113.90		P	23.5
2	☐			105.56		P	24.1
3	☐			133.34		P	12.5
4	☐			102.78		P	12.4
5	☐			88.90		P	56.5
6	☐			144.45		P	26.6
7	☐			183.34		P	24.1
8	☐			175.01		P	21.8

160 Gd [He] No available calibration points

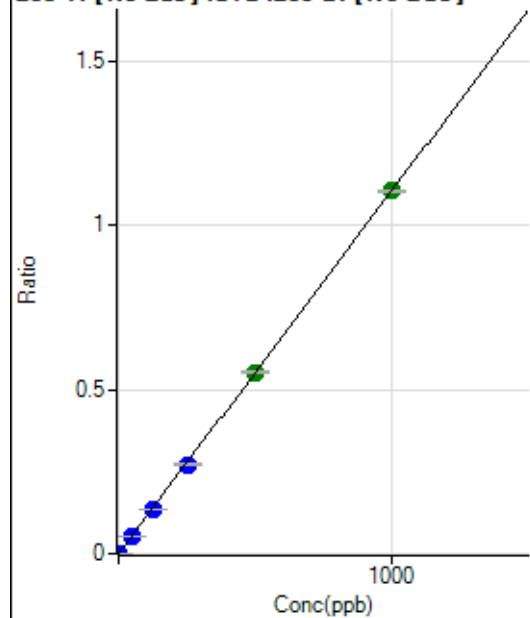
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			236.67		P	6.1
2	☐			215.56		P	13.3
3	☐			180.00		P	8.5
4	☐			197.78		P	3.5
5	☐			220.01		P	8.4
6	☐			211.12		P	3.6
7	☐			201.12		P	21.9
8	☐			197.78		P	29.1

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.01		P	19.2
2	☐			80.56		P	15.8
3	☐			100.00		P	22.0
4	☐			108.34		P	42.8
5	☐			91.67		P	18.2
6	☐			102.79		P	4.7
7	☐			130.57		P	25.8
8	☐			127.79		P	3.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			60.00		P	43.4
2	☐			68.89		P	36.3
3	☐			50.00		P	35.3
4	☐			63.33		P	18.2
5	☐			66.67		P	35.0
6	☐			58.89		P	26.8
7	☐			103.34		P	11.6
8	☐			77.78		P	30.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	891.74	0.0001	P	14.7
2	☐	1.000	0.980	15965.77	0.0011	P	2.7
3	☐	50.000	49.146	751114.68	0.0543	P	0.3
4	☐	125.000	123.529	1815308.16	0.1364	P	1.1
5	☐	250.000	246.445	3488939.92	0.2720	P	0.9
6	☐	500.000	500.822	6955265.35	0.5526	A	0.8
7	☐	1000.000	1000.704	13596520.10	1.1041	A	0.8
8	☐			3542.29	0.0003	P	1.2

$$y = 0.0011 * x + 6.2276E-005$$

$$R = 1.0000$$

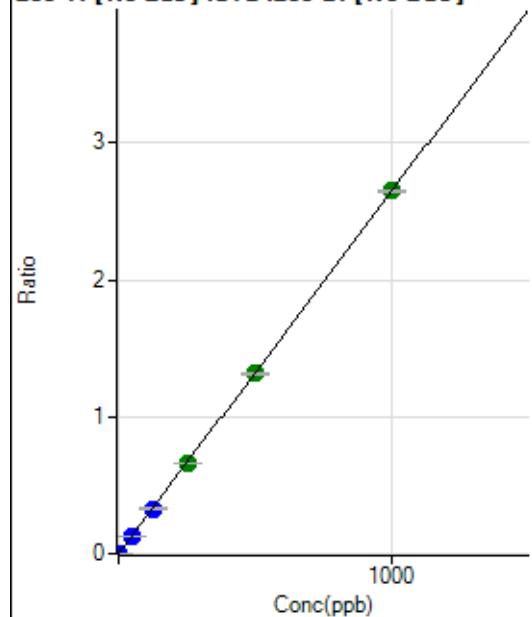
$$DL = 0.02491$$

$$BEC = 0.05645$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1394.58	0.0001	P	8.7
2	☐	1.000	0.991	37957.96	0.0027	P	1.7
3	☐	50.000	49.120	1798880.08	0.1300	P	0.4
4	☐	125.000	124.109	4371313.82	0.3283	P	1.2
5	☐	250.000	248.731	8440537.34	0.6579	A	0.9
6	☐	500.000	497.764	16570711.31	1.3166	A	0.7
7	☐	1000.000	1001.590	32621798.30	2.6491	A	0.4
8	☐			7824.86	0.0007	P	11.0

$$y = 0.0026 * x + 9.7464E-005$$

$$R = 1.0000$$

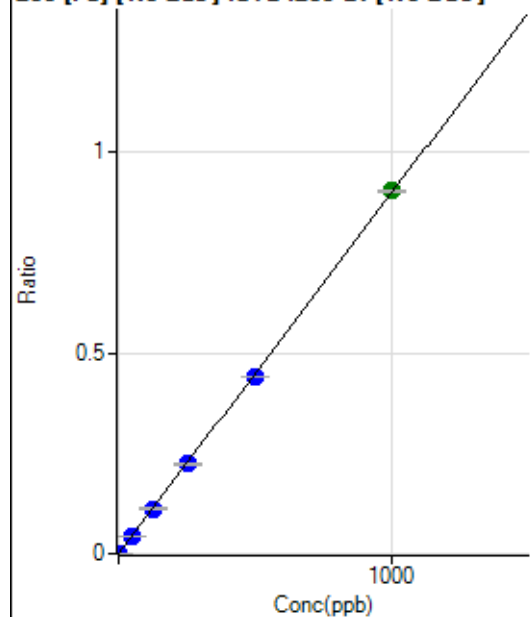
$$DL = 0.009578$$

$$BEC = 0.03685$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1311.21	0.0001	P	6.7
2	☐	1.000	0.978	13566.48	0.0010	P	2.2
3	☐	50.000	49.423	616527.02	0.0446	P	0.7
4	☐	125.000	124.822	1496385.39	0.1124	P	0.9
5	☐	250.000	248.305	2867172.63	0.2235	P	0.6
6	☐	500.000	489.822	5547825.18	0.4408	P	0.6
7	☐	1000.000	1005.564	11141987.63	0.9048	A	0.7
8	☐			8827.25	0.0008	P	3.4

$$y = 8.9970E-004 * x + 9.1617E-005$$

$$R = 0.9999$$

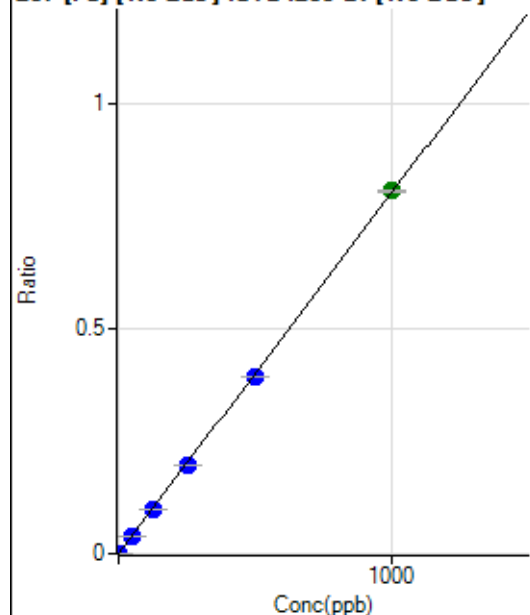
$$DL = 0.02033$$

$$BEC = 0.1018$$

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	1281.58	0.0001	P	9.8
2	☐	1.000	0.969	12115.12	0.0009	P	3.3
3	☐	50.000	49.235	547978.67	0.0396	P	1.1
4	☐	125.000	124.248	1328772.80	0.0998	P	0.7
5	☐	250.000	246.445	2538535.99	0.1979	P	0.4
6	☐	500.000	490.978	4960543.40	0.3941	P	0.5
7	☐	1000.000	1005.532	9938686.45	0.8071	A	0.4
8	☐			7987.82	0.0007	P	3.9

$$y = 8.0255E-004 * x + 8.9555E-005$$

$$R = 0.9999$$

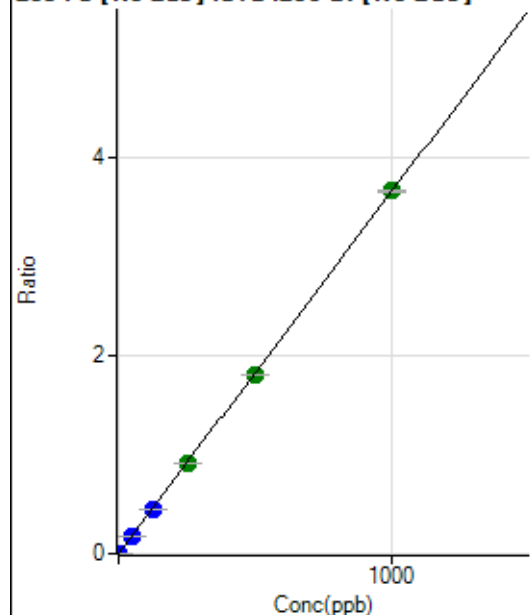
$$DL = 0.03291$$

$$BEC = 0.1116$$

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	4854.17	0.0003	P	6.4
2	☐	1.000	0.975	54378.05	0.0039	P	1.8
3	☐	50.000	49.279	2489776.95	0.1799	P	0.6
4	☐	125.000	124.220	6032145.13	0.4531	P	0.4
5	☐	250.000	248.357	11616576.24	0.9055	A	0.7
6	☐	500.000	495.763	22745881.47	1.8072	A	0.3
7	☐	1000.000	1002.663	45004667.67	3.6546	A	0.2
8	☐			34755.31	0.0031	P	2.5

$$y = 0.0036 * x + 3.3913E-004$$

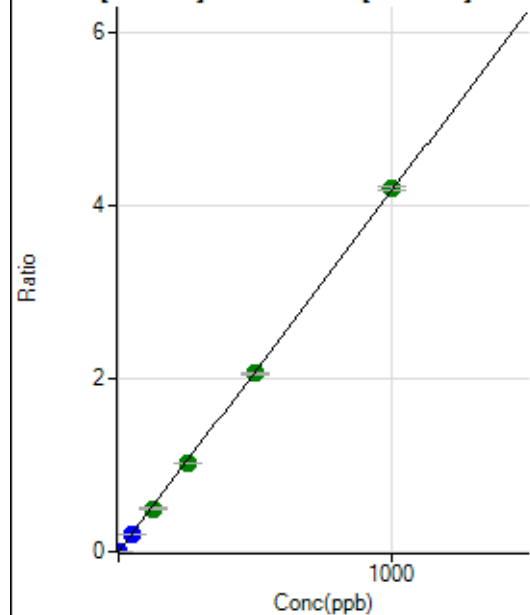
$$R = 1.0000$$

$$DL = 0.01773$$

$$BEC = 0.09305$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2715.17	0.0002	P	6.0
2	☐	1.000	0.862	52784.45	0.0038	P	2.0
3	☐	50.000	46.733	2695368.78	0.1948	P	0.5
4	☐	125.000	119.891	6649577.12	0.4995	A	0.8
5	☐	250.000	243.332	13002060.59	1.0135	A	0.7
6	☐	500.000	493.571	25871854.05	2.0556	A	0.4
7	☐	1000.000	1005.684	51573926.15	4.1881	A	1.1
8	☐			9946.64	0.0009	P	4.1

$$y = 0.0042 * x + 1.8965E-004$$

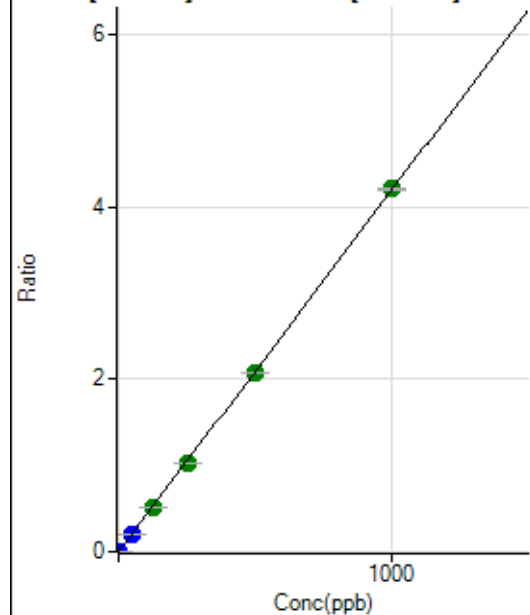
$$R = 0.9999$$

$$DL = 0.00816$$

$$BEC = 0.04554$$

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	3342.24	0.0002	P	4.6
2	☐	1.000	0.921	57246.41	0.0041	P	2.3
3	☐	50.000	47.062	2735163.88	0.1977	P	0.3
4	☐	125.000	120.491	6733476.28	0.5057	A	0.5
5	☐	250.000	244.086	13140480.24	1.0243	A	0.5
6	☐	500.000	495.148	26149096.77	2.0776	A	0.3
7	☐	1000.000	1004.615	51904983.10	4.2150	A	0.8
8	☐			5270.77	0.0005	P	3.9

$$y = 0.0042 * x + 2.3344E-004$$

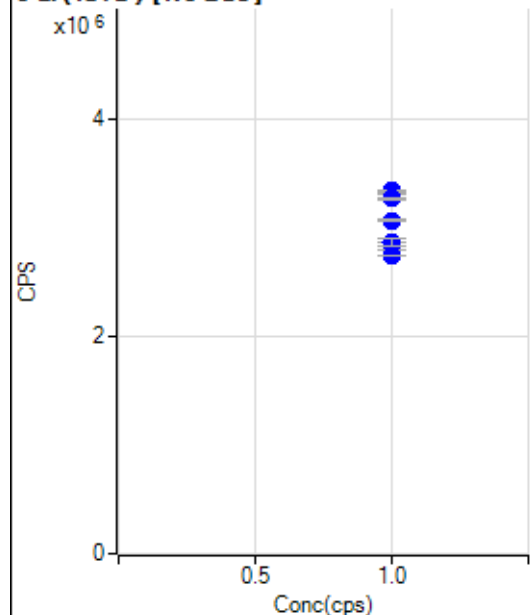
$$R = 1.0000$$

$$DL = 0.007732$$

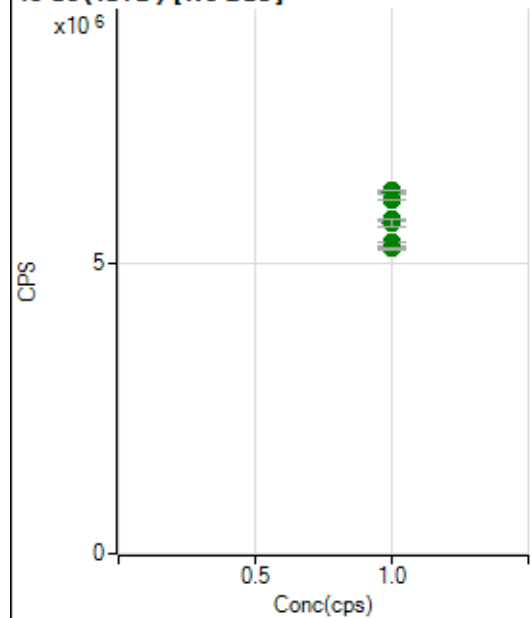
$$BEC = 0.05564$$

Weight: <None>

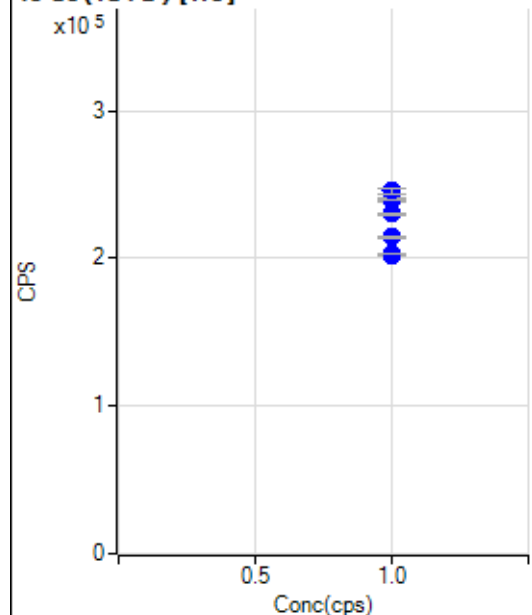
Min Conc: 0

6 Li (ISTD) [No Gas]

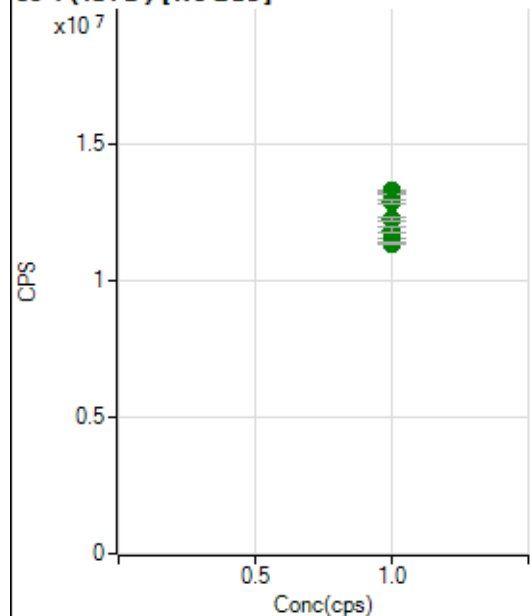
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3312794.13		P	0.1
2	☐	1.000		3340104.09		P	0.3
3	☐	1.000		3268427.36		P	0.3
4	☐	1.000		3070835.65		P	0.9
5	☐	1.000		2862204.41		P	0.1
6	☐	1.000		2798011.98		P	0.3
7	☐	1.000		2745359.95		P	0.3
8	☐	1.000		2874087.77		P	2.4

45 Sc (ISTD) [No Gas]

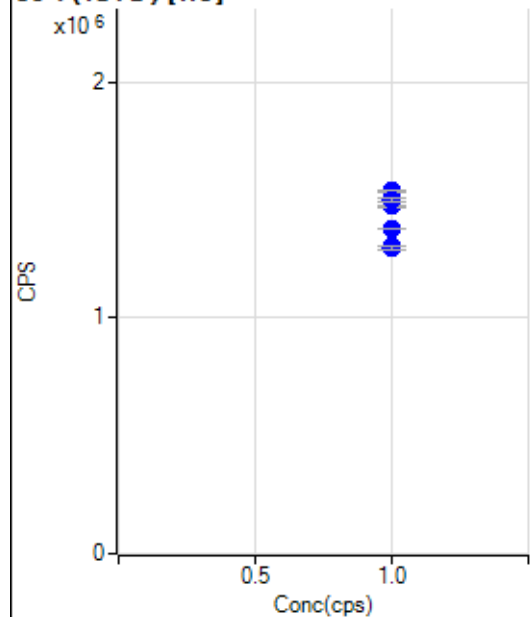
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6228703.70		A	0.2
2	☐	1.000		6201352.01		A	0.8
3	☐	1.000		6075356.04		A	0.4
4	☐	1.000		5741614.32		A	0.6
5	☐	1.000		5350335.71		A	0.4
6	☐	1.000		5264491.52		A	0.2
7	☐	1.000		5240029.02		A	0.9
8	☐	1.000		5685786.76		A	2.5

45 Sc (ISTD) [He]

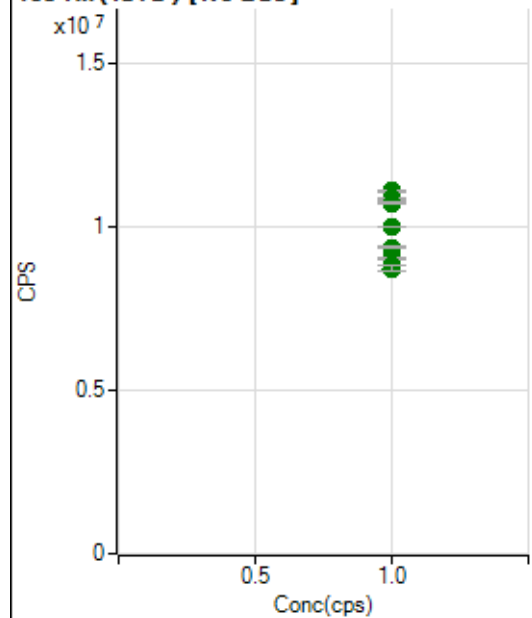
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		239232.80		P	0.2
2	☐	1.000		240567.97		P	0.2
3	☐	1.000		230194.58		P	0.8
4	☐	1.000		214719.96		P	0.5
5	☐	1.000		202327.29		P	0.6
6	☐	1.000		202047.46		P	0.4
7	☐	1.000		203191.75		P	0.2
8	☐	1.000		245799.25		P	1.5

89 Y (ISTD) [No Gas]

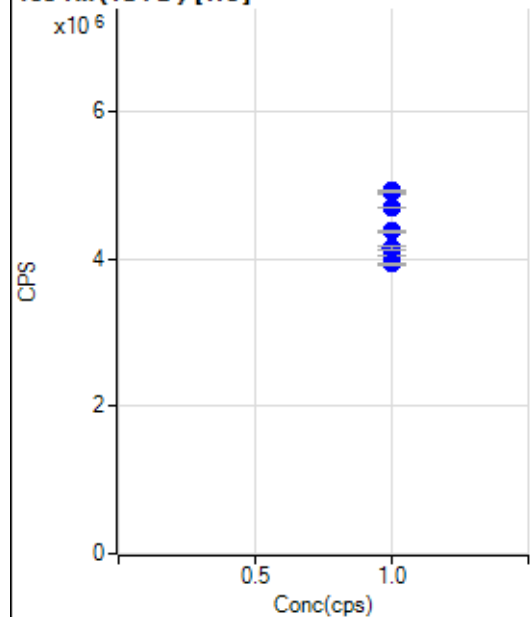
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13311872.02		A	0.6
2	☐	1.000		13186292.58		A	0.2
3	☐	1.000		12910691.19		A	0.6
4	☐	1.000		12286698.98		A	0.9
5	☐	1.000		11575804.41		A	0.2
6	☐	1.000		11412136.78		A	0.7
7	☐	1.000		11378564.83		A	0.4
8	☐	1.000		11864262.74		A	1.9

89 Y(ISTD) [He]

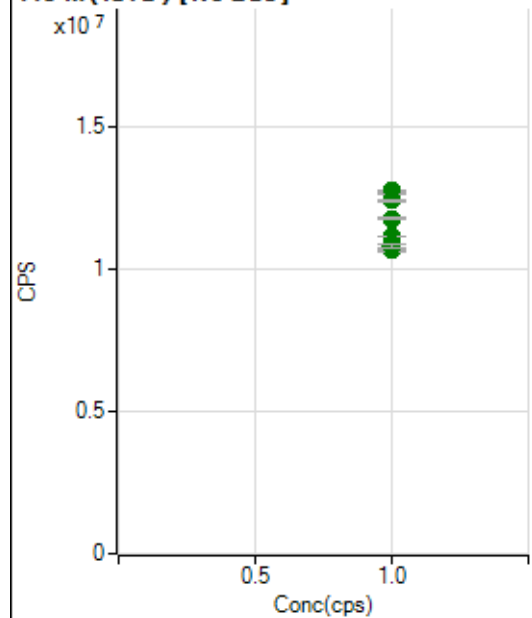
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1534576.11		P	0.5
2	☐	1.000		1538319.37		P	0.3
3	☐	1.000		1473565.79		P	0.7
4	☐	1.000		1380064.04		P	0.2
5	☐	1.000		1303801.03		P	0.5
6	☐	1.000		1303359.12		P	0.2
7	☐	1.000		1295153.73		P	0.9
8	☐	1.000		1500219.02		P	0.9

103 Rh(ISTD) [No Gas]

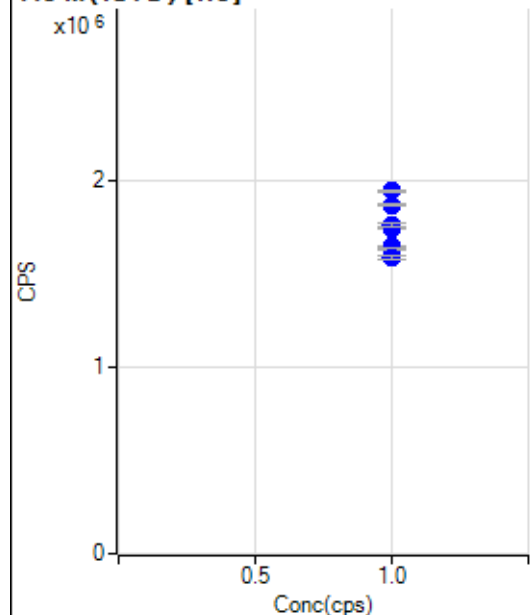
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11099276.81		A	0.7
2	☐	1.000		10876777.76		A	0.6
3	☐	1.000		10723112.05		A	0.6
4	☐	1.000		9987684.08		A	0.2
5	☐	1.000		9369997.87		A	0.6
6	☐	1.000		9039662.88		A	0.5
7	☐	1.000		8828161.48		A	0.2
8	☐	1.000		8723073.81		A	1.7

103 Rh (ISTD) [He]

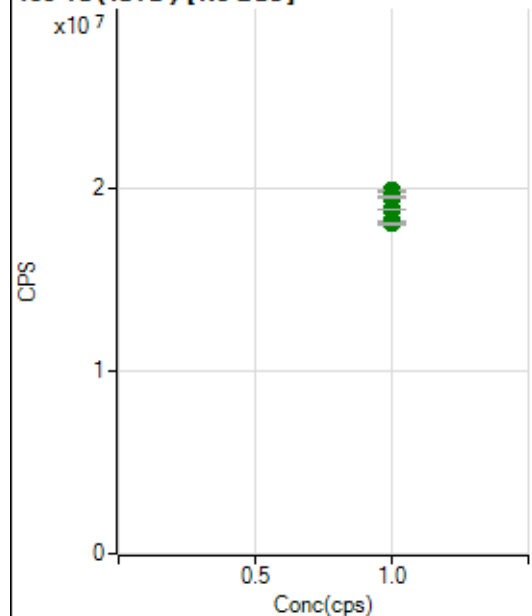
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4898002.60		P	0.6
2	☐	1.000		4921060.38		P	0.4
3	☐	1.000		4695677.26		P	0.5
4	☐	1.000		4371186.25		P	0.3
5	☐	1.000		4117363.14		P	0.4
6	☐	1.000		4047776.05		P	0.3
7	☐	1.000		3933786.68		P	0.8
8	☐	1.000		4139643.62		P	1.3

115 In (ISTD) [No Gas]

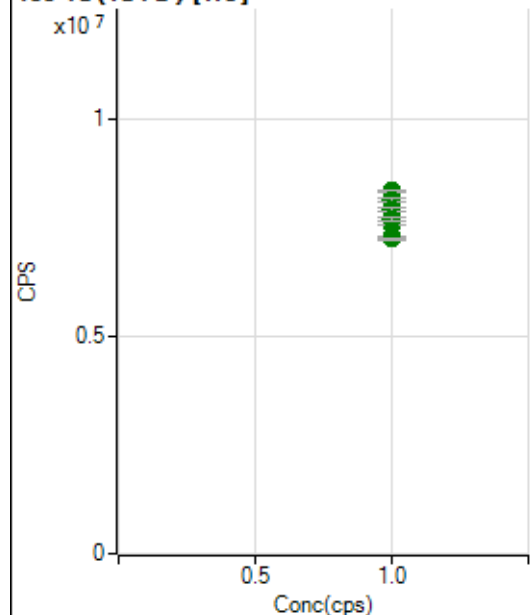
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		12732444.54		A	0.4
2	☐	1.000		12599884.49		A	0.2
3	☐	1.000		12394585.08		A	0.4
4	☐	1.000		11753190.68		A	0.6
5	☐	1.000		11140911.66		A	0.4
6	☐	1.000		10866030.34		A	0.5
7	☐	1.000		10658973.74		A	0.6
8	☐	1.000		10785461.10		A	1.4

115 In (ISTD) [He]

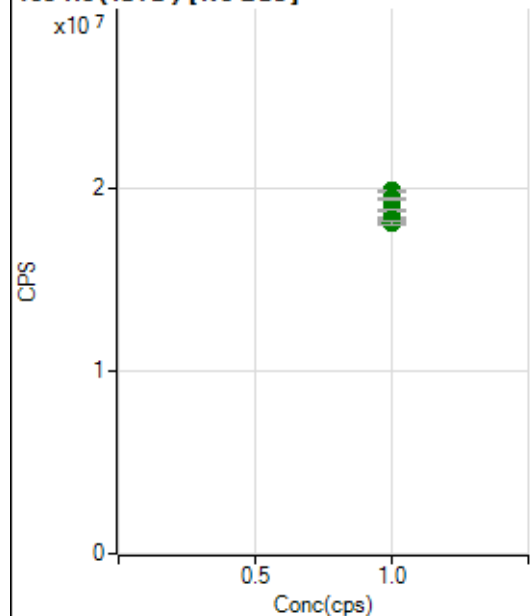
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1943069.11		P	0.6
2	☐	1.000		1941506.91		P	0.0
3	☐	1.000		1868872.49		P	0.3
4	☐	1.000		1744860.03		P	0.1
5	☐	1.000		1646625.58		P	0.5
6	☐	1.000		1628535.59		P	0.6
7	☐	1.000		1584646.08		P	0.9
8	☐	1.000		1758108.94		P	1.3

159 Tb (ISTD) [No Gas]

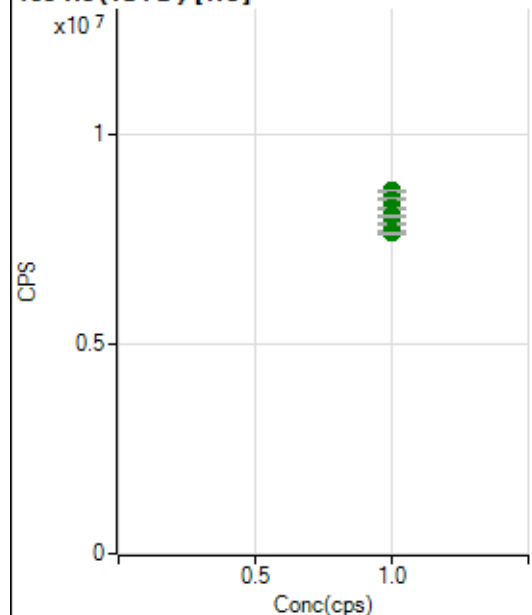
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19851034.70		A	0.2
2	☐	1.000		19532463.32		A	0.1
3	☐	1.000		19510821.38		A	0.1
4	☐	1.000		18790390.97		A	0.1
5	☐	1.000		18245884.59		A	0.1
6	☐	1.000		18145064.87		A	0.1
7	☐	1.000		18104883.89		A	0.1
8	☐	1.000		18047162.09		A	1.0

159 Tb (ISTD) [He]

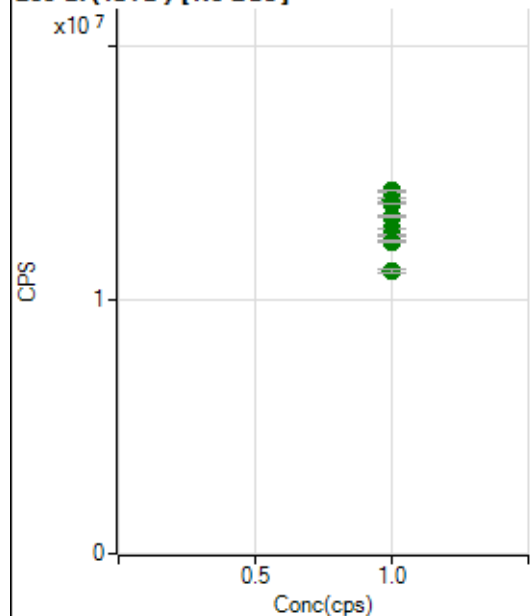
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8362857.03		A	0.4
2	☐	1.000		8162368.84		A	0.8
3	☐	1.000		7932065.85		A	0.8
4	☐	1.000		7583126.63		A	0.4
5	☐	1.000		7295917.46		A	0.3
6	☐	1.000		7328737.88		A	0.1
7	☐	1.000		7265273.57		A	0.5
8	☐	1.000		7706245.16		A	1.2

165 Ho (ISTD) [No Gas]

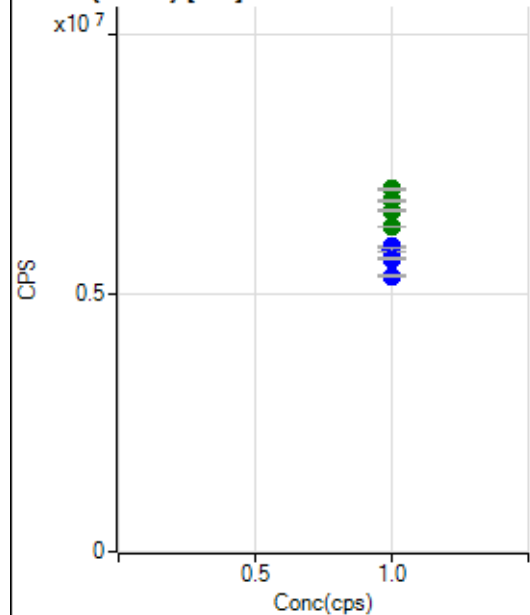
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19866226.48		A	0.3
2	☐	1.000		19442652.17		A	0.6
3	☐	1.000		19424060.68		A	0.2
4	☐	1.000		18810279.07		A	0.5
5	☐	1.000		18310511.87		A	1.2
6	☐	1.000		18187429.05		A	0.3
7	☐	1.000		18250330.61		A	0.5
8	☐	1.000		18106521.41		A	0.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8639057.58		A	0.5
2	☐	1.000		8448243.83		A	0.1
3	☐	1.000		8227079.04		A	0.7
4	☐	1.000		7857458.42		A	0.4
5	☐	1.000		7668143.91		A	0.5
6	☐	1.000		7660281.90		A	0.4
7	☐	1.000		7638356.34		A	0.5
8	☐	1.000		8039505.85		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14314842.14		A	0.8
2	☐	1.000		13967778.96		A	1.2
3	☐	1.000		13836586.74		A	0.1
4	☐	1.000		13314299.11		A	0.8
5	☐	1.000		12829206.61		A	0.5
6	☐	1.000		12586463.29		A	0.5
7	☐	1.000		12314499.96		A	0.3
8	☐	1.000		11158129.97		A	0.9

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7021813.16		A	0.9
2	☐	1.000		6804596.50		A	0.5
3	☐	1.000		6604448.58		A	0.3
4	☐	1.000		6292029.21		A	0.3
5	☐	1.000		5917098.66		P	0.6
6	☐	1.000		5844860.75		P	0.8
7	☐	1.000		5668301.10		P	0.6
8	☐	1.000		5338381.07		P	0.6

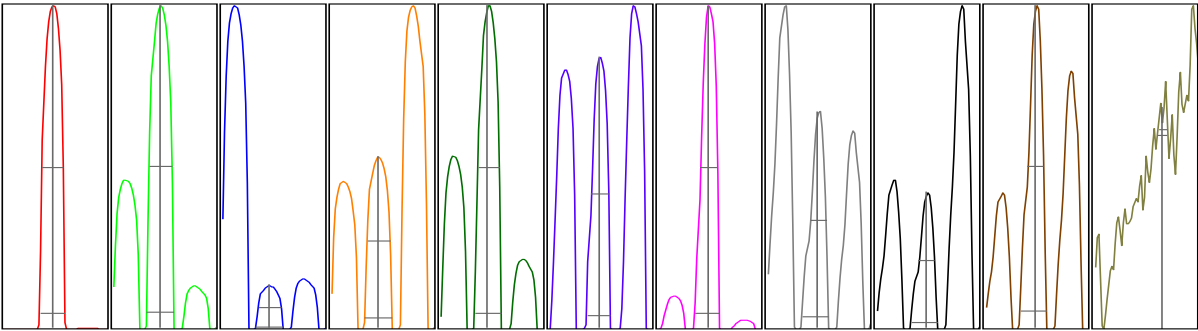
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7092419MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count	RSD%	RSD%	RSD%
	(Mean)	(Actual)	(Required)	(Flag)
9	9930	1.16	5.00	
24	113132	1.35	5.00	
25	15245	1.03	5.00	
26	17744	1.48	5.00	
59	87978	1.32	5.00	
113	13828	1.10	5.00	
115	159027	0.84	5.00	
206	49255	0.32	5.00	
207	44922	0.46	5.00	
208	106747	0.60	5.00	
220	145	2.76		

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
9	10034	10025	9961	9868	9761
24	114784	114263	113440	112082	111089
25	15452	15318	15262	15153	15042
26	18029	17956	17772	17546	17415
59	89115	88967	88067	87454	86288
113	14007	13913	13882	13657	13679
115	160422	160030	159073	158586	157024
206	49194	49464	49365	49198	49056
207	44896	45123	45131	44641	44822
208	107329	107388	106654	106542	105823
220	143	140	151	146	146

Integration Time [sec] = 0.1



Mass	Peak	Axis	Axis	Axis	Width-X%	Width-X%	Width-
	Height	(Actual)	(Required)	(Flag)	(Actual)	(Required)	X%
9	17015	8.95	8.9 - 9.1		0.739	0.900	
24	180786	23.90	23.9 - 24.1		0.787	0.900	
25	24196	24.90	24.9 - 25.1		0.787	0.900	
26	28235	25.90	25.9 - 26.1		0.788	0.900	
59	149065	58.90	58.9 - 59.1		0.780	0.900	
113	27044	113.00	112.9 - 113.1		0.689	0.900	
115	313490	115.00	114.9 - 115.1		0.716	0.900	
206	101831	206.00	205.9 - 206.1		0.773	0.900	
207	93120	207.00	206.9 - 207.1		0.772	0.900	
208	220973	208.00	207.9 - 208.1		0.770	0.900	
220	153	220.50	-		0.274		

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	6.7	V	Deflect	12.2	V
Extract 2	-125.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	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	150	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	21168	1.36	
89	27191	1.41	
205	38867	0.69	

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
59	21171	21208	21537	20730	21193
89	27354	27153	27729	26706	27013
205	38968	39040	38906	38397	39023

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.0	V	Deflect	1.2	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination	5.0	V
He Flow	4.1	mL/min	OctP RF	200	V			