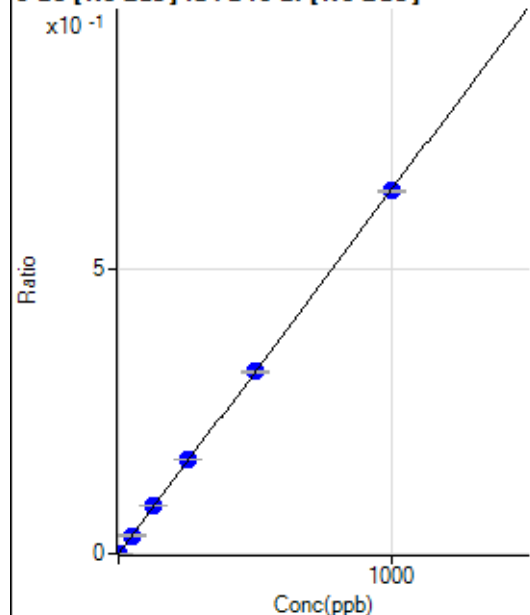


Calibration for 003CALB.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7071520MS2.b\
 Analysis File: P7071520MS2.batch.bin
 DA Date-Time: 2020-07-16 00:43:15
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-07-15 14:53:51
2	004CALS.d	S01	2020-07-15 14:57:34
3	005CALS.d	S02	2020-07-15 15:02:17
4	006CALS.d	S03	2020-07-15 15:06:22
5	007CALS.d	S04	2020-07-15 15:11:00
6	008CALS.d	S05	2020-07-15 15:14:50
7	009CALS.d	S06	2020-07-15 15:18:31
8	010CALS.d	S07	2020-07-15 15:22:07
9	011CALS.d	S08	2020-07-15 15:25:40

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	101.86	0.0000	P	12.5
2	☐	0.100	0.110	429.65	0.0001	P	17.3
3	☐	1.000	0.929	2954.07	0.0006	P	7.2
4	☐	50.000	50.115	152688.06	0.0322	P	1.3
5	☐	125.000	130.276	391362.74	0.0836	P	0.4
6	☐	250.000	257.931	766969.82	0.1655	P	0.9
7	☐	500.000	500.722	1486085.02	0.3212	P	1.1
8	☐	1000.000	996.991	2931005.97	0.6395	P	0.6
9	☐			535.21	0.0001	P	8.7

$$y = 6.4142\text{E-}004 * x + 2.0909\text{E-}005$$

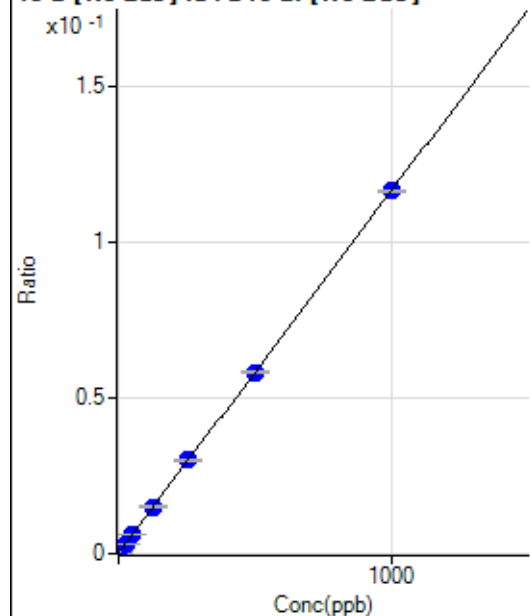
$$R = 1.0000$$

$$DL = 0.01222$$

$$BEC = 0.0326$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1094.53	0.0002	P	16.7
2	☐	2.500	2.273	2300.28	0.0005	P	8.9
3	☐	25.000	22.972	13890.26	0.0029	P	2.5
4	☐	50.000	49.007	28149.25	0.0059	P	1.8
5	☐	125.000	127.152	70353.35	0.0150	P	3.4
6	☐	250.000	256.830	139598.30	0.0301	P	2.1
7	☐	500.000	497.473	268966.36	0.0581	P	1.0
8	☐	1000.000	999.388	534173.36	0.1166	P	0.2
9	☐			19577.31	0.0049	P	7.2

$$y = 1.1640\text{E-}004 * x + 2.2472\text{E-}004$$

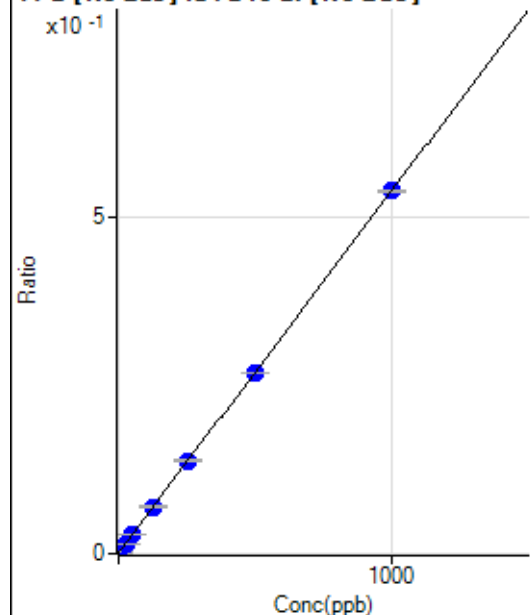
$$R = 1.0000$$

$$DL = 0.9655$$

$$BEC = 1.931$$

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	5359.51	0.0011	P	2.9
2	☐	2.500	2.221	10809.81	0.0023	P	4.8
3	☐	25.000	22.489	63213.55	0.0132	P	3.3
4	☐	50.000	49.851	132507.79	0.0279	P	1.0
5	☐	125.000	127.886	327235.62	0.0699	P	1.6
6	☐	250.000	254.549	639710.62	0.1380	P	1.8
7	☐	500.000	496.710	1241219.78	0.2683	P	0.7
8	☐	1000.000	1000.218	2470796.22	0.5391	P	0.2
9	☐			92452.39	0.0234	P	7.1

$$y = 5.3788\text{E-}004 * x + 0.0011$$

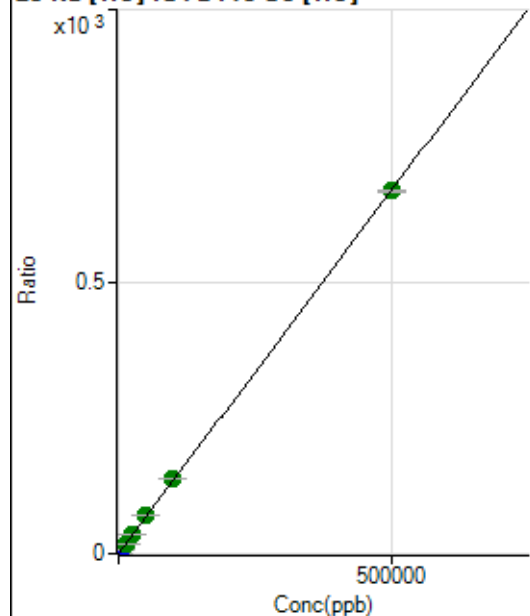
$$R = 1.0000$$

$$DL = 0.179$$

$$BEC = 2.046$$

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	32564.65	0.0748	P	1.6
2	☐	5.000	43.859	60350.82	0.1334	P	2.3
3	☐	500.000	494.625	318679.84	0.7360	P	0.7
4	☐	5000.000	5261.671	2965199.55	7.1082	P	0.3
5	☐	12500.000	13272.730	7379856.20	17.8169	A	2.5
6	☐	25000.000	26688.624	14284462.30	35.7503	A	0.6
7	☐	50000.000	51781.266	27990737.59	69.2924	A	0.6
8	☐	100000.00	102324.57	56797867.88	136.8553	A	0.2
9	☐	500000.00	499250.59	255333428.8	667.4389	A	0.8

$$y = 0.0013 * x + 0.0748$$

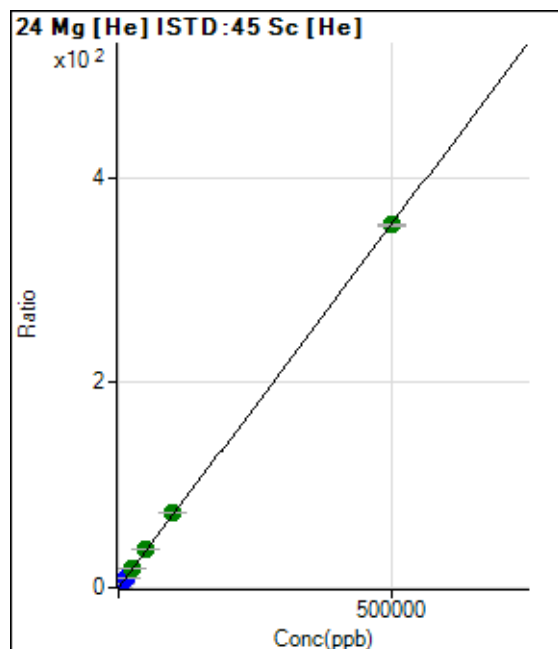
$$R = 1.0000$$

$$DL = 2.742$$

$$BEC = 55.94$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1781.10	0.0041	P	1.1
2	☐	5.000	46.618	16803.45	0.0371	P	2.3
3	☐	500.000	494.859	153712.55	0.3550	P	0.4
4	☐	5000.000	5367.589	1589378.89	3.8101	P	0.5
5	☐	12500.000	13528.993	3975365.59	9.5971	P	1.9
6	☐	25000.000	26985.936	7647280.96	19.1391	A	0.5
7	☐	50000.000	52342.108	14994090.85	37.1185	A	0.2
8	☐	100000.00	102375.29	30128840.56	72.5957	A	0.1
9	☐	500000.00	499162.03	135409828.2	353.9464	A	0.4

$$y = 7.0907\text{E-}004 * x + 0.0041$$

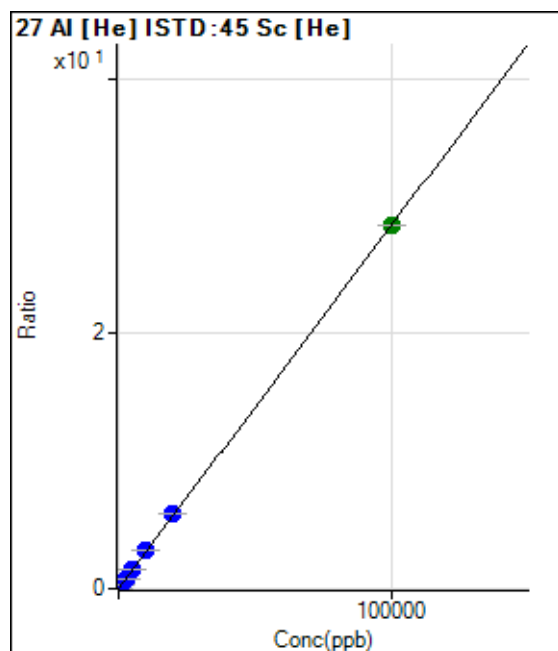
$$R = 1.0000$$

$$DL = 0.1966$$

$$BEC = 5.768$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	100.65	0.0002	P	10.8
2	☐	2.000	1.634	315.28	0.0007	P	3.5
3	☐	20.000	20.047	2572.40	0.0059	P	1.9
4	☐	1000.000	1051.726	125044.19	0.2998	P	0.9
5	☐	2500.000	2709.444	319735.87	0.7719	P	1.4
6	☐	5000.000	5403.446	614971.09	1.5391	P	0.4
7	☐	10000.000	10503.505	1208454.90	2.9916	P	0.4
8	☐	20000.000	20485.192	2421382.29	5.8343	P	0.4
9	☐	100000.00	99826.685	10876639.23	28.4304	A	0.1

$$y = 2.8480\text{E-}004 * x + 2.3125\text{E-}004$$

$$R = 1.0000$$

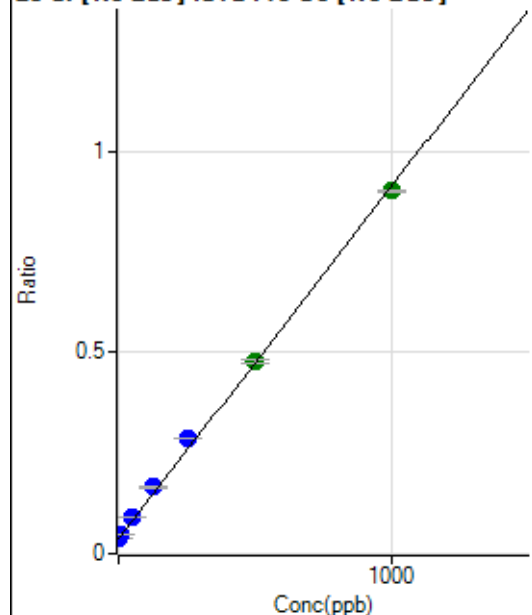
$$DL = 0.2638$$

$$BEC = 0.812$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	418937.90	0.0368	P	1.0
2	☐	1.000	2.510	421173.77	0.0390	P	7.4
3	☐	10.000	10.282	509143.62	0.0458	P	0.7
4	☐	50.000	61.305	994154.24	0.0905	P	0.9
5	☐	125.000	146.432	1795410.11	0.1650	P	0.8
6	☐	250.000	283.413	3019166.47	0.2850	P	0.3
7	☐	500.000	502.640	5122238.57	0.4770	A	2.6
8	☐	1000.000	987.078	9856606.73	0.9012	A	0.4
9	☐			571514.81	0.0590	P	1.6

$$y = 8.7571\text{E-}004 * x + 0.0368$$

$$R = 0.9993$$

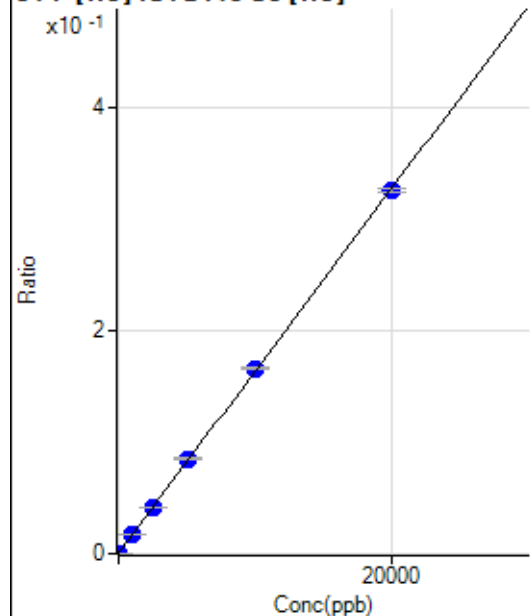
$$DL = 1.323$$

$$BEC = 42.01$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-5.022	108.34	0.0002	P	25.9
2	☐	0.000	-1.071	141.67	0.0003	P	27.0
3	☐	0.000	6.093	186.12	0.0004	P	7.2
4	☐	1000.000	1009.375	7010.22	0.0168	P	2.2
5	☐	2500.000	2547.306	17360.67	0.0419	P	0.4
6	☐	5000.000	5179.975	33914.47	0.0849	P	2.1
7	☐	10000.000	10139.313	66984.13	0.1658	P	1.6
8	☐	20000.000	19878.968	134793.15	0.3248	P	0.9
9	☐			233.34	0.0006	P	13.5

$$y = 1.6322\text{E-}005 * x + 3.3045\text{E-}004$$

$$R = 0.9999$$

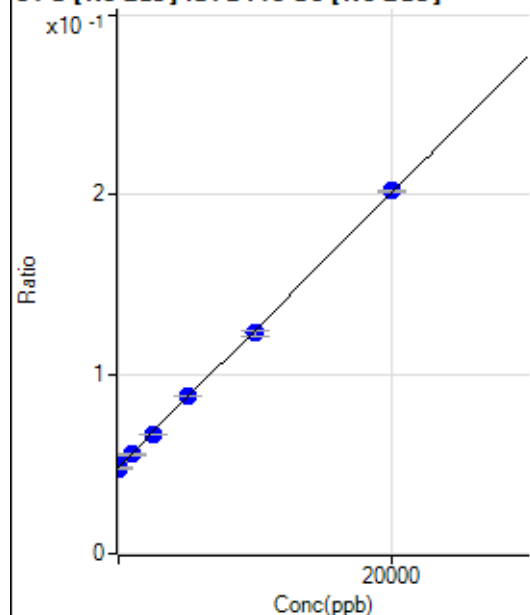
$$DL = 11.02$$

$$BEC = 20.25$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-129.177	541537.22	0.0476	P	1.0
2	☐	0.000	196.051	540627.33	0.0500	P	7.3
3	☐	0.000	-66.874	533980.38	0.0480	P	1.6
4	☐	1000.000	876.721	607004.56	0.0552	P	0.7
5	☐	2500.000	2347.730	723314.52	0.0665	P	0.6
6	☐	5000.000	5141.602	930568.57	0.0878	P	0.4
7	☐	10000.000	9758.140	1322191.61	0.1231	P	2.8
8	☐	20000.000	20110.727	2211976.07	0.2022	P	0.4
9	☐			454194.89	0.0469	P	1.3

$$y = 7.6427\text{E-}006 * x + 0.0485$$

$$R = 0.9997$$

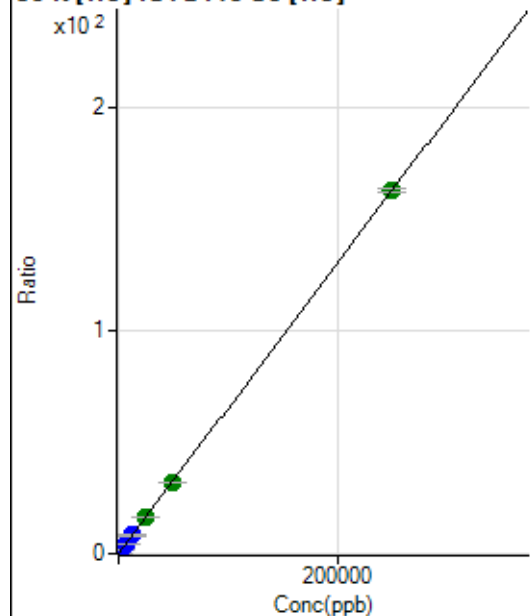
$$DL = 640.2$$

$$BEC = 6351$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	24881.91	0.0571	P	1.7
2	☐	5.000	43.254	38582.79	0.0853	P	1.7
3	☐	500.000	461.994	154886.46	0.3577	P	0.7
4	☐	2500.000	2490.431	699699.69	1.6773	P	0.2
5	☐	6250.000	6296.027	1720509.30	4.1531	P	0.5
6	☐	12500.000	12528.177	3279428.17	8.2075	P	0.4
7	☐	25000.000	24877.953	6560904.77	16.2419	A	0.7
8	☐	50000.000	49029.702	13261519.59	31.9541	A	0.4
9	☐	250000.00	250203.87	62296179.36	162.8309	A	0.9

$$y = 6.5056\text{E-}004 * x + 0.0571$$

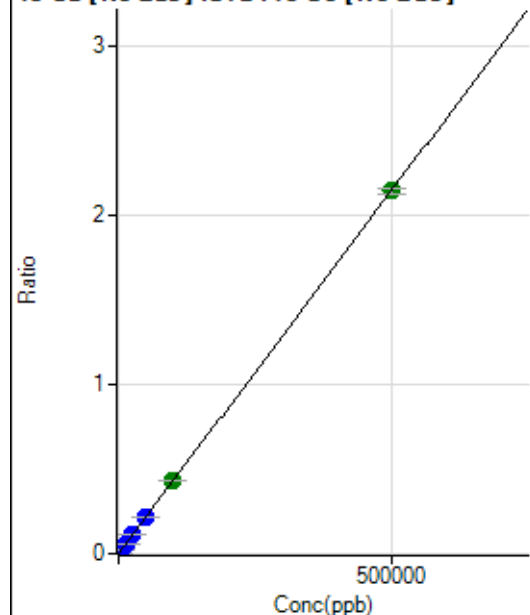
$$R = 1.0000$$

$$DL = 4.37$$

$$BEC = 87.83$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	475.25	0.0000	P	8.3
2	☐	5.000	49.035	2721.73	0.0003	P	8.2
3	☐	500.000	471.870	22959.23	0.0021	P	1.8
4	☐	5000.000	5103.474	240922.31	0.0219	P	0.3
5	☐	12500.000	13111.299	612096.03	0.0563	P	0.2
6	☐	25000.000	26225.190	1191771.35	0.1125	P	0.5
7	☐	50000.000	50506.105	2326315.93	0.2166	P	2.2
8	☐	100000.00	101246.88	4748679.40	0.4342	A	0.4
9	☐	500000.00	499622.46	20763870.54	2.1423	A	1.3

$$y = 4.2878\text{E-}006 * x + 4.1736\text{E-}005$$

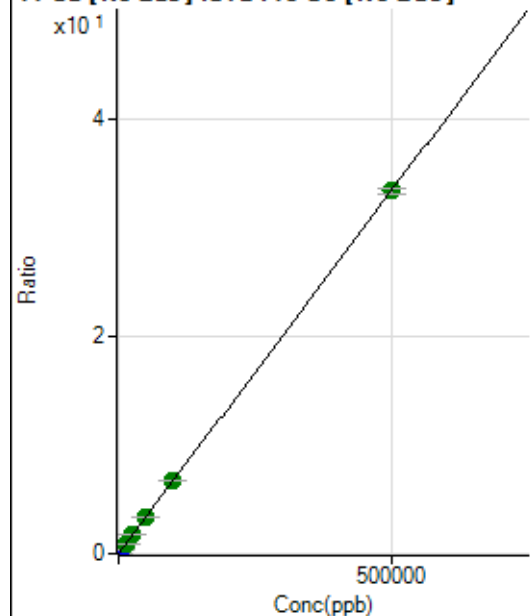
$$R = 1.0000$$

$$DL = 2.431$$

$$BEC = 9.734$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	23971.34	0.0021	P	0.4
2	☐	5.000	52.908	60979.79	0.0056	P	7.0
3	☐	500.000	485.038	384072.11	0.0345	P	0.7
4	☐	5000.000	5080.463	3756689.91	0.3419	P	0.1
5	☐	12500.000	12748.569	9298551.48	0.8547	A	0.9
6	☐	25000.000	25659.023	18201747.55	1.7181	A	0.9
7	☐	50000.000	49913.274	35868398.13	3.3401	A	3.4
8	☐	100000.00	101196.00	74042283.75	6.7696	A	0.3
9	☐	500000.00	499729.51	323921538.2	33.4216	A	1.5

$$y = 6.6875\text{E-}005 * x + 0.0021$$

$$R = 1.0000$$

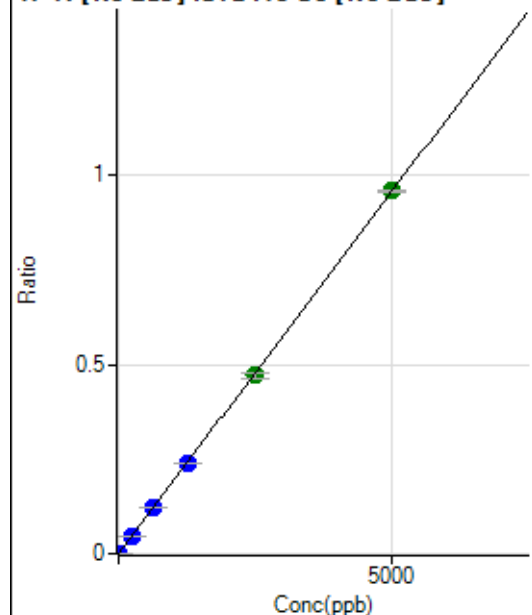
$$DL = 0.4045$$

$$BEC = 31.47$$

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	197.23	0.0000	P	20.3
2	☐	0.500	0.571	1372.35	0.0001	P	2.3
3	☐	5.000	4.642	10062.15	0.0009	P	3.6
4	☐	250.000	244.982	515138.02	0.0469	P	0.6
5	☐	625.000	629.144	1309475.50	0.1204	P	0.6
6	☐	1250.000	1248.835	2530932.76	0.2389	P	0.7
7	☐	2500.000	2467.690	5068902.68	0.4720	A	3.2
8	☐	5000.000	5016.180	10494421.07	0.9595	A	0.7
9	☐			3086.57	0.0003	P	5.8

$$y = 1.9128\text{E-}004 * x + 1.7304\text{E-}005$$

$$R = 1.0000$$

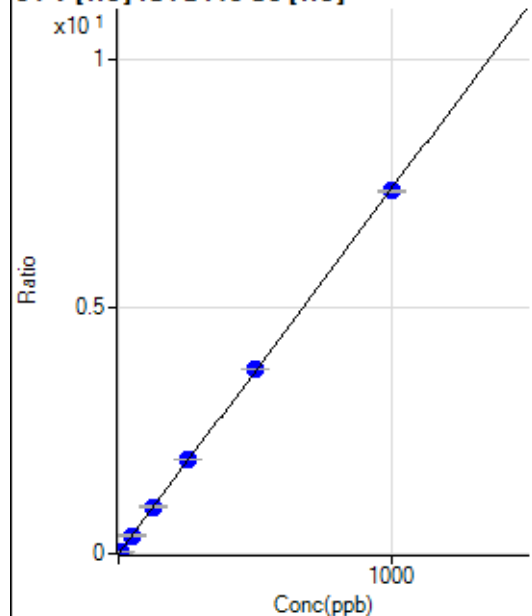
$$DL = 0.05516$$

$$BEC = 0.09047$$

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	18.89	0.0000	P	36.8
2	☐	0.500	0.452	1531.22	0.0034	P	5.5
3	☐	5.000	4.695	15048.94	0.0348	P	1.1
4	☐	50.000	50.003	154232.58	0.3697	P	0.8
5	☐	125.000	128.655	394069.73	0.9512	P	0.9
6	☐	250.000	258.727	764307.21	1.9129	P	0.6
7	☐	500.000	505.884	1510847.37	3.7402	P	0.5
8	☐	1000.000	994.421	3051227.21	7.3520	P	0.4
9	☐			574.46	0.0015	P	2.1

$$y = 0.0074 * x + 4.3390\text{E-}005$$

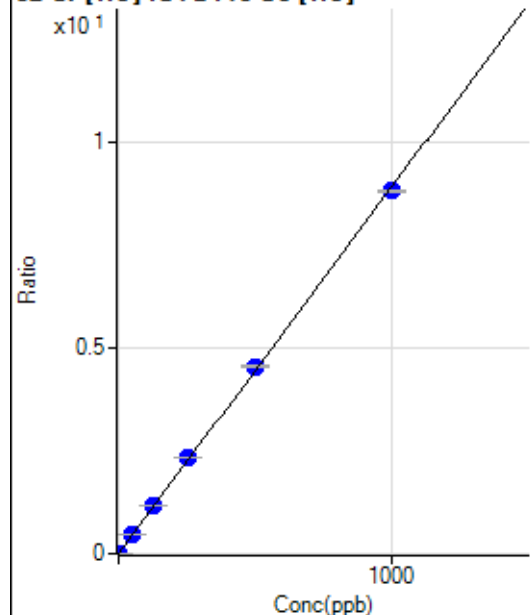
$$R = 0.9999$$

$$DL = 0.006471$$

$$BEC = 0.005869$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	565.58	0.0013	P	15.3
2	☐	0.200	0.198	1386.75	0.0031	P	7.5
3	☐	2.000	1.939	8050.08	0.0186	P	1.5
4	☐	50.000	51.261	191252.17	0.4585	P	0.1
5	☐	125.000	132.844	491325.31	1.1861	P	1.0
6	☐	250.000	263.405	939145.42	2.3505	P	0.8
7	☐	500.000	510.944	1841274.61	4.5581	P	0.6
8	☐	1000.000	990.133	3665352.86	8.8317	P	0.4
9	☐			5090.96	0.0133	P	2.0

$$y = 0.0089 * x + 0.0013$$

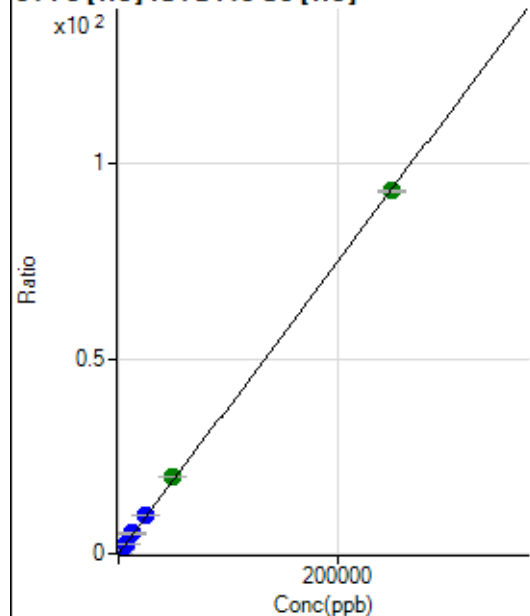
$$R = 0.9998$$

$$DL = 0.06659$$

$$BEC = 0.1455$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	824.53	0.0019	P	6.8
2	☐	5.000	4.715	1652.45	0.0037	P	3.1
3	☐	50.000	53.234	9418.55	0.0218	P	1.9
4	☐	2500.000	2734.182	426284.54	1.0219	P	0.4
5	☐	6250.000	7063.322	1092343.76	2.6369	P	0.9
6	☐	12500.000	13893.327	2071677.43	5.1849	P	0.7
7	☐	25000.000	26587.056	4007386.77	9.9204	P	0.5
8	☐	50000.000	52859.287	8184898.42	19.7214	A	0.4
9	☐	250000.00	249177.09	35563494.79	92.9592	A	0.4

$$y = 3.7306E-004 * x + 0.0019$$

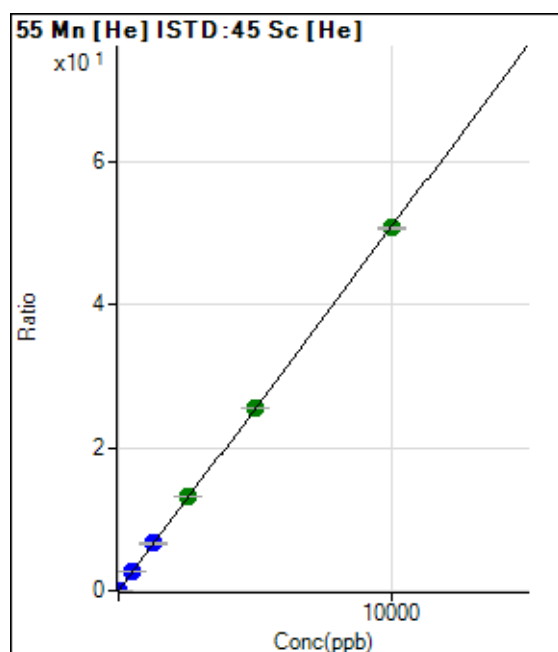
$$R = 0.9999$$

$$DL = 1.029$$

$$BEC = 5.074$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1036.72	0.0024	P	6.2
2	☒	0.100					
3	☐	1.000	1.016	3271.53	0.0076	P	3.8
4	☐	500.000	503.623	1071095.14	2.5676	P	0.4
5	☐	1250.000	1294.889	2733141.83	6.5980	P	1.3
6	☐	2500.000	2582.161	5256239.99	13.1549	A	0.2
7	☐	5000.000	5011.783	10313071.51	25.5304	A	0.0
8	☐	10000.000	9967.776	21072507.88	50.7742	A	0.5
9	☐			11956.11	0.0313	P	0.9

$$y = 0.0051 * x + 0.0024$$

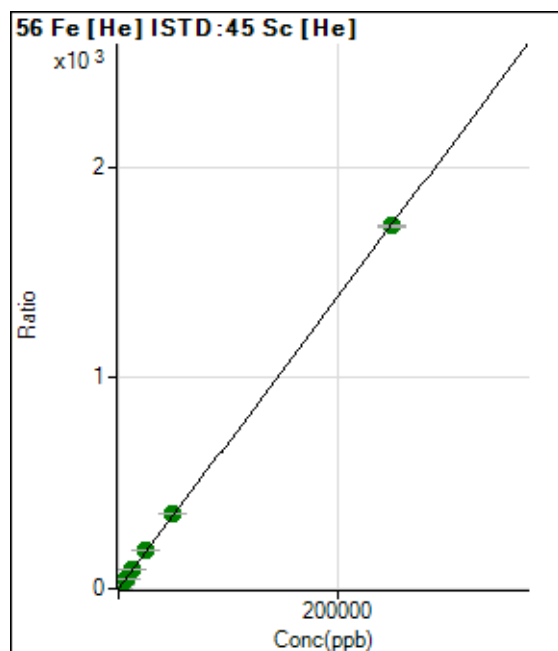
$$R = 1.0000$$

$$DL = 0.08694$$

$$BEC = 0.4674$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9231.12	0.0212	P	4.2
2	☐	5.000	4.768	24492.22	0.0541	P	2.2
3	☐	50.000	51.047	161889.26	0.3739	P	1.0
4	☐	2500.000	2624.820	7573565.95	18.1554	A	0.3
5	☐	6250.000	6785.707	19427958.60	46.9019	A	1.7
6	☐	12500.000	13588.563	37519098.60	93.9010	A	0.6
7	☐	25000.000	26424.889	73755327.82	182.5838	A	0.3
8	☐	50000.000	52059.163	149276743.7	359.6842	A	0.1
9	☐	250000.00	249376.60	659109217.6	1,722.898	A	0.8

$$y = 0.0069 * x + 0.0212$$

$$R = 1.0000$$

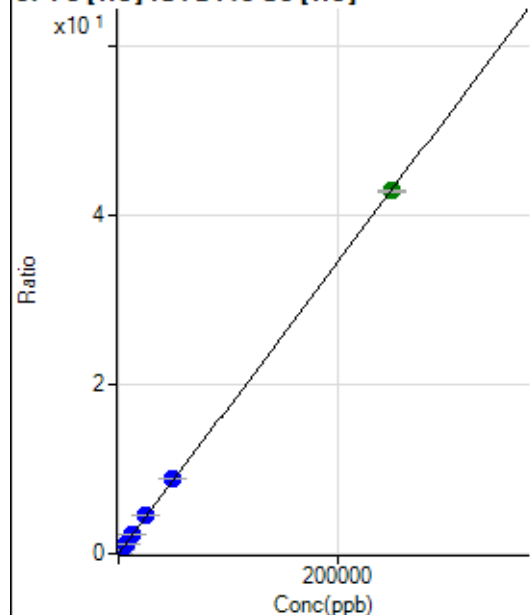
$$DL = 0.391$$

$$BEC = 3.069$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	326.61	0.0007	P	5.3
2	☐	5.000	5.367	756.54	0.0017	P	6.0
3	☐	50.000	51.254	4143.14	0.0096	P	0.9
4	☐	2500.000	2657.701	191059.97	0.4580	P	0.8
5	☐	6250.000	6911.147	492874.36	1.1898	P	1.3
6	☐	12500.000	13692.472	941601.13	2.3566	P	0.6
7	☐	25000.000	26435.775	1837632.89	4.5491	P	0.5
8	☐	50000.000	51122.508	3650748.35	8.7965	P	0.5
9	☐	250000.00	249554.19	16426309.03	42.9373	A	0.5

$$y = 1.7205E-004 * x + 7.4975E-004$$

$$R = 1.0000$$

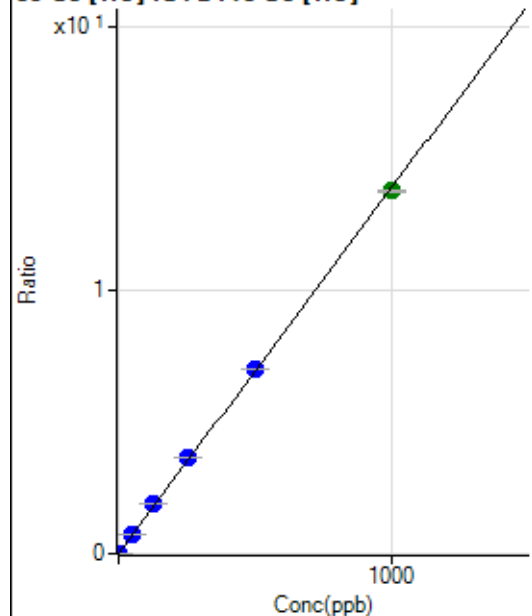
$$DL = 0.6966$$

$$BEC = 4.358$$

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	118.89	0.0003	P	13.1
2	☐	0.100	0.093	706.69	0.0016	P	13.5
3	☐	1.000	1.015	6212.52	0.0143	P	2.7
4	☐	50.000	52.137	301707.56	0.7233	P	0.3
5	☐	125.000	134.974	775451.65	1.8720	P	1.2
6	☐	250.000	264.533	1465825.05	3.6685	P	0.2
7	☐	500.000	506.381	2836654.30	7.0222	P	0.0
8	☐	1000.000	991.822	5708142.76	13.7538	A	0.3
9	☐			8252.44	0.0216	P	2.4

$$y = 0.0139 * x + 2.7281E-004$$

$$R = 0.9998$$

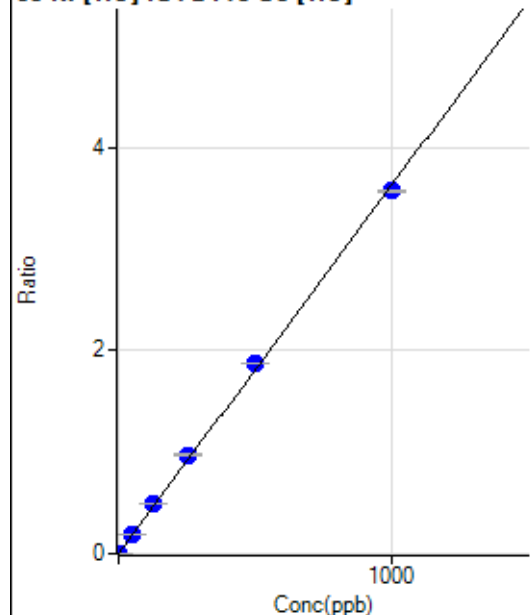
$$DL = 0.007722$$

$$BEC = 0.01967$$

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	244.45	0.0006	P	4.7
2	☒	0.100					
3	☐	1.000	1.080	1939.05	0.0045	P	2.5
4	☐	50.000	52.578	79761.90	0.1912	P	0.3
5	☐	125.000	135.747	204116.79	0.4928	P	2.0
6	☐	250.000	268.530	389260.19	0.9742	P	0.7
7	☐	500.000	517.001	757477.51	1.8752	P	0.6
8	☐	1000.000	985.395	1483068.85	3.5735	P	0.3
9	☐			2146.86	0.0056	P	3.4

$$y = 0.0036 * x + 5.6142E-004$$

$$R = 0.9996$$

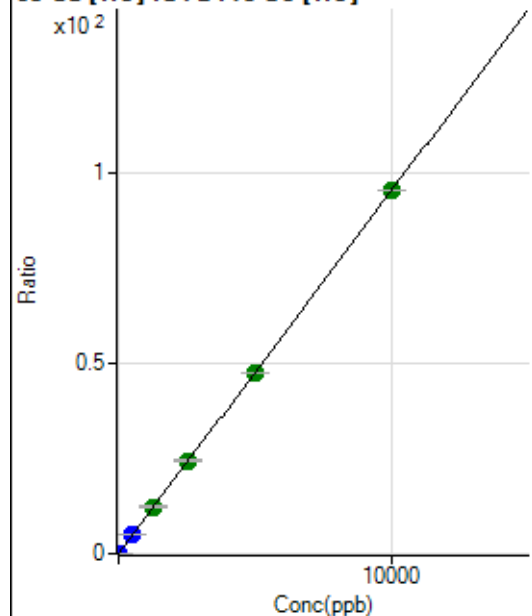
$$DL = 0.02176$$

$$BEC = 0.1548$$

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	623.36	0.0014	P	4.3
2	☐	0.200	0.198	1502.32	0.0033	P	1.4
3	☐	2.000	2.197	9701.10	0.0224	P	2.7
4	☐	500.000	513.585	2045436.29	4.9034	P	0.6
5	☐	1250.000	1289.106	5097239.89	12.3054	A	1.6
6	☐	2500.000	2567.401	9791807.77	24.5061	A	0.5
7	☐	5000.000	4967.673	19153684.30	47.4156	A	0.1
8	☐	10000.000	9993.746	39587770.80	95.3872	A	0.1
9	☐			5535.58	0.0145	P	6.5

$$y = 0.0095 * x + 0.0014$$

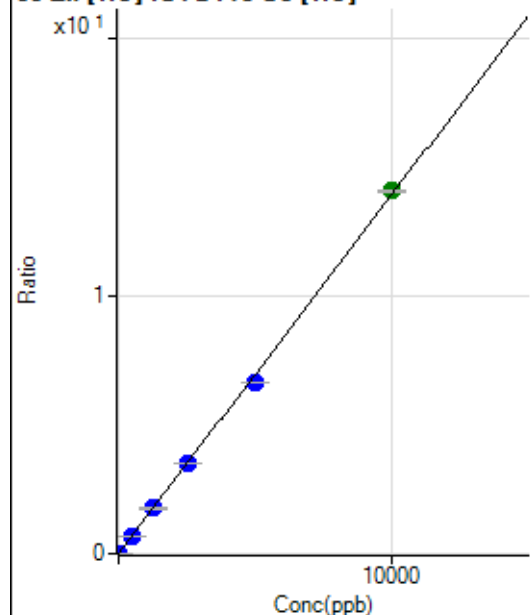
$$R = 1.0000$$

$$DL = 0.01917$$

$$BEC = 0.1499$$

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	577.80	0.0013	P	1.4
2	☒	0.200					
3	☐	2.000	2.147	1866.81	0.0043	P	3.4
4	☐	500.000	493.330	286533.53	0.6869	P	0.3
5	☐	1250.000	1262.422	727211.21	1.7556	P	2.4
6	☐	2500.000	2500.862	1389143.07	3.4766	P	0.3
7	☐	5000.000	4767.446	2676757.25	6.6264	P	0.4
8	☐	10000.000	10114.842	5834161.93	14.0574	A	0.7
9	☐			3703.87	0.0097	P	1.6

$$y = 0.0014 * x + 0.0013$$

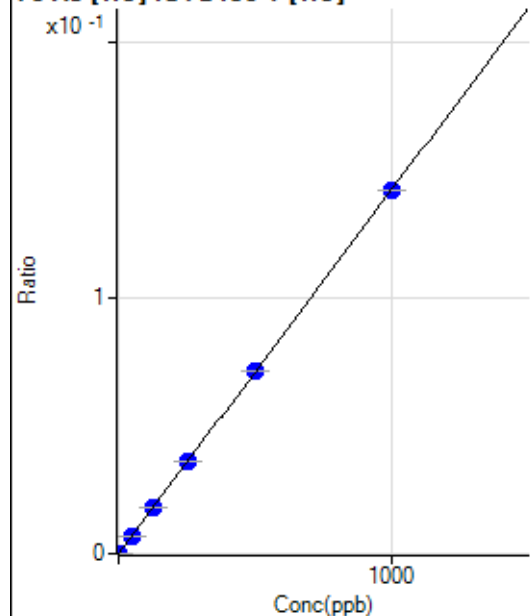
$$R = 0.9996$$

$$DL = 0.0398$$

$$BEC = 0.9547$$

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	30.25	0.0000	P	20.9
2	☐	0.100	0.088	63.58	0.0000	P	22.6
3	☐	1.000	0.977	375.93	0.0002	P	2.3
4	☐	50.000	49.645	17198.50	0.0071	P	0.3
5	☐	125.000	128.018	44004.57	0.0182	P	1.7
6	☐	250.000	255.195	85657.54	0.0363	P	0.5
7	☐	500.000	501.809	169685.14	0.0713	P	0.4
8	☐	1000.000	997.437	345148.61	0.1417	P	0.2
9	☐			148.77	0.0001	P	14.8

$$y = 1.4208E-004 * x + 1.2064E-005$$

$$R = 1.0000$$

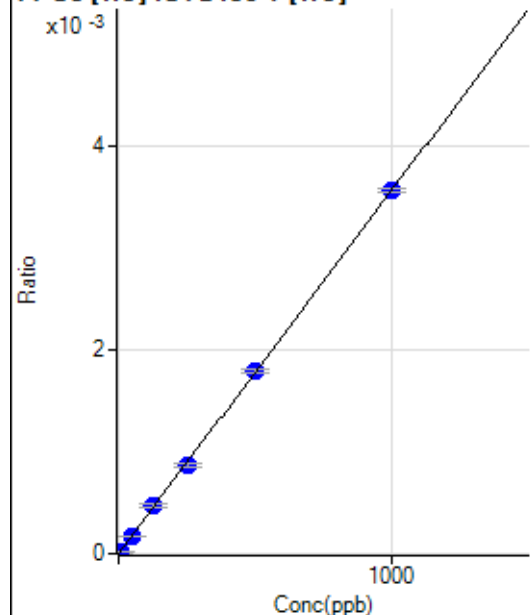
$$DL = 0.05321$$

$$BEC = 0.08491$$

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	☐	0.500	0.600	5.56	0.0000	P	33.9
3	☐	5.000	4.514	40.00	0.0000	P	16.6
4	☐	50.000	47.485	411.12	0.0002	P	6.6
5	☐	125.000	131.369	1130.07	0.0005	P	6.3
6	☐	250.000	243.970	2049.07	0.0009	P	5.4
7	☐	500.000	502.973	4257.36	0.0018	P	2.4
8	☐	1000.000	999.353	8657.15	0.0036	P	1.2
9	☐			0.00	0.0000	P	

$$y = 3.5572\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

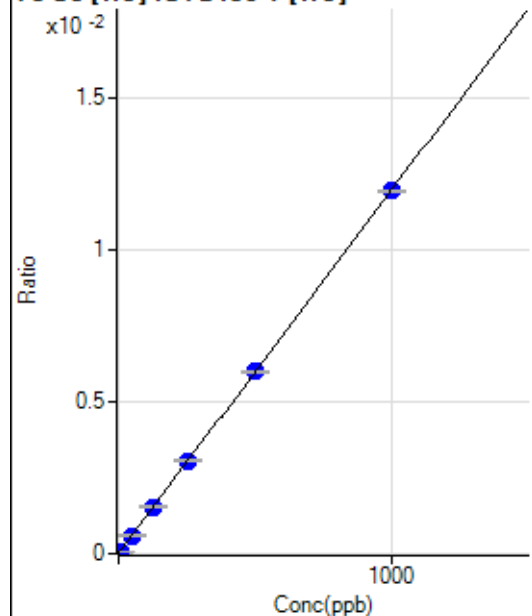
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	38.27	0.0000	P	15.5
2	☐	0.500	0.767	63.58	0.0000	P	14.8
3	☐	5.000	5.267	195.07	0.0001	P	8.5
4	☐	50.000	48.917	1462.44	0.0006	P	5.6
5	☐	125.000	127.846	3736.31	0.0015	P	1.3
6	☐	250.000	255.441	7255.58	0.0031	P	2.1
7	☐	500.000	500.885	14300.33	0.0060	P	1.1
8	☐	1000.000	997.894	29121.83	0.0120	P	0.6
9	☐			46.92	0.0000	P	17.9

$$y = 1.1968\text{E-}005 * x + 1.5279\text{E-}005$$

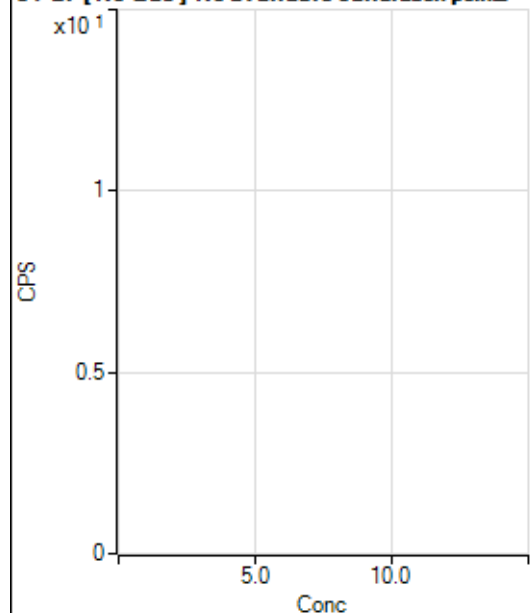
$$R = 1.0000$$

$$DL = 0.5955$$

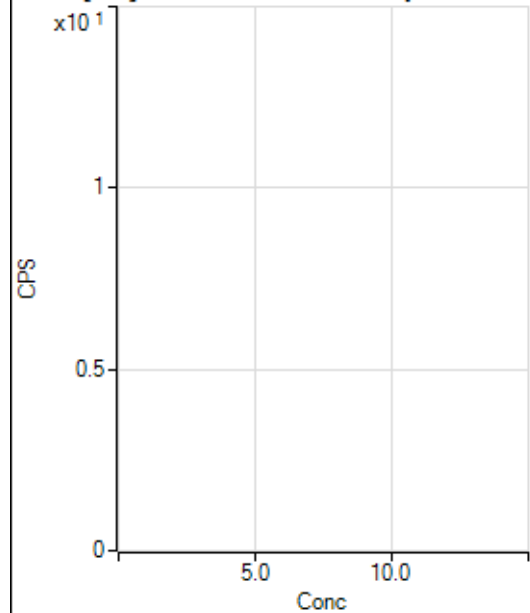
$$BEC = 1.277$$

Weight: <None>

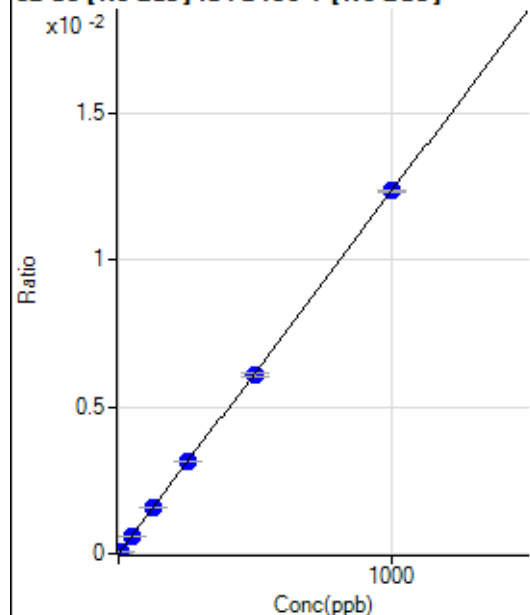
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			40003.27		P	2.9
2	☐			39843.08		P	3.1
3	☐			39772.25		P	2.1
4	☐			38818.85		P	3.0
5	☐			37915.73		P	2.4
6	☐			37898.78		P	1.5
7	☐			37778.41		P	0.9
8	☐			38527.88		P	1.7
9	☐			35821.39		P	0.9

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.73		P	48.2
2	☐			70.07		P	24.7
3	☐			26.69		P	21.7
4	☐			96.77		P	21.5
5	☐			80.08		P	54.5
6	☐			60.06		P	57.7
7	☐			36.70		P	41.7
8	☐			56.72		P	27.0
9	☐			73.41		P	7.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-21.69	0.0000	P	-54.
2	☐	0.500	0.596	126.75	0.0000	P	27.0
3	☐	5.000	5.120	1279.67	0.0001	P	5.0
4	☐	50.000	49.912	12537.89	0.0006	P	1.1
5	☐	125.000	127.508	31880.35	0.0016	P	1.2
6	☐	250.000	256.199	63168.96	0.0032	P	0.6
7	☐	500.000	494.187	123733.22	0.0061	P	2.7
8	☐	1000.000	1001.047	254563.05	0.0123	P	0.4
9	☐			153.95	0.0000	P	39.7

$$y = 1.2326E-005 * x - 1.0139E-006$$

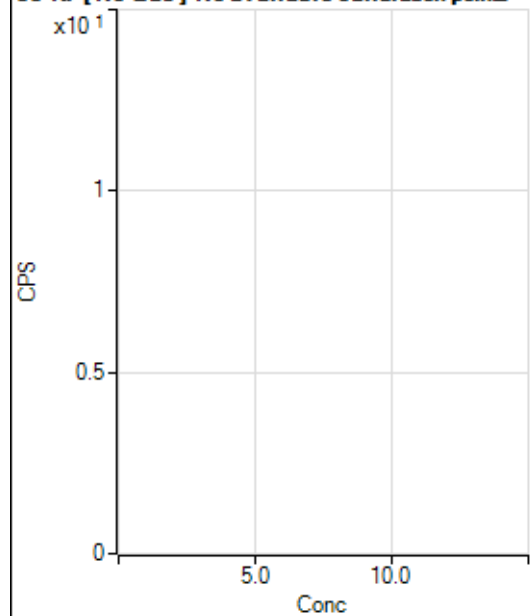
$$R = 1.0000$$

$$DL = 0.1353$$

$$BEC = -0.08225$$

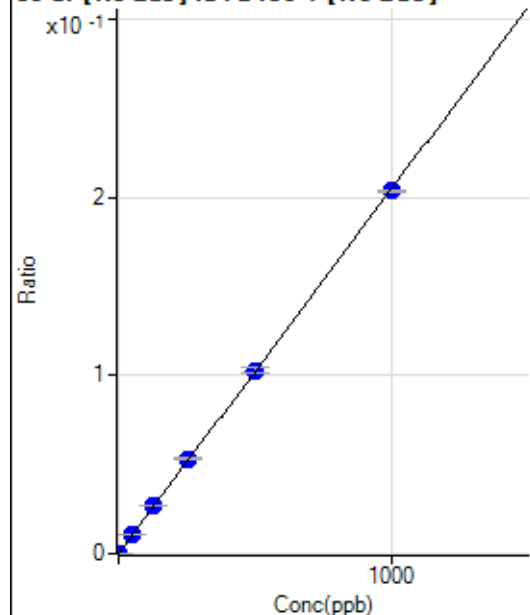
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			367.79		P	4.3
2	☐			333.34		P	13.0
3	☐			297.79		P	6.2
4	☐			341.12		P	6.9
5	☐			342.23		P	12.7
6	☐			343.34		P	18.6
7	☐			353.34		P	6.8
8	☐			401.12		P	5.0
9	☐			463.35		P	4.0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	483.36	0.0000	P	32.7
2	☐	0.100	0.117	941.73	0.0000	P	7.0
3	☐	1.000	0.990	4639.83	0.0002	P	9.0
4	☐	50.000	51.300	214627.82	0.0105	P	0.9
5	☐	125.000	129.943	539889.05	0.0266	P	0.9
6	☐	250.000	260.835	1067884.39	0.0534	P	0.3
7	☐	500.000	503.342	2091844.34	0.1030	P	2.8
8	☐	1000.000	994.937	4198842.06	0.2035	P	0.9
9	☐			21586.41	0.0012	P	2.8

$$y = 2.0452\text{E-}004 * x + 2.2522\text{E-}005$$

$$R = 0.9999$$

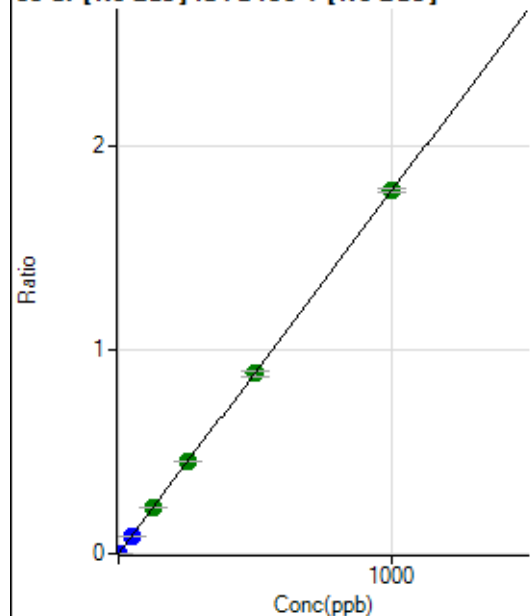
$$DL = 0.1079$$

$$BEC = 0.1101$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	430.58	0.0000	P	13.8
2	☐	0.100	0.096	3853.47	0.0002	P	6.4
3	☐	1.000	0.987	36681.29	0.0018	P	0.8
4	☐	50.000	49.552	1803753.17	0.0884	P	1.1
5	☐	125.000	127.072	4599071.07	0.2266	A	0.7
6	☐	250.000	254.158	9067401.42	0.4532	A	0.4
7	☐	500.000	496.752	17992300.58	0.8857	A	3.3
8	☐	1000.000	1000.348	36798386.24	1.7835	A	0.9
9	☐			182737.47	0.0102	P	1.3

$$y = 0.0018 * x + 2.0084\text{E-}005$$

$$R = 1.0000$$

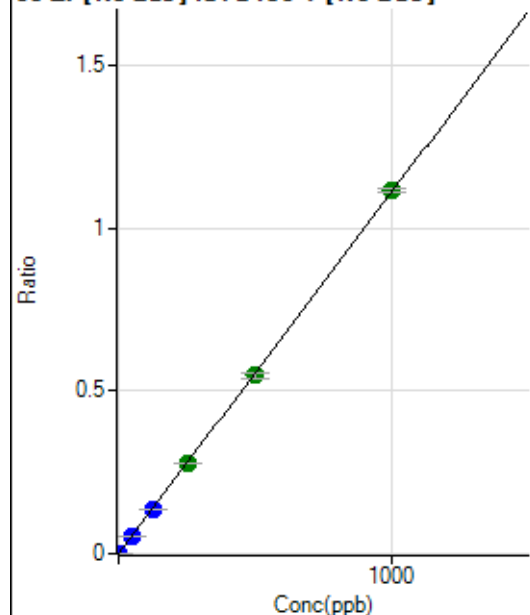
$$DL = 0.004672$$

$$BEC = 0.01126$$

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	1347.35	0.0001	P	10.6
2	☐	0.100	0.088	3256.04	0.0002	P	1.0
3	☐	1.000	0.875	21305.43	0.0010	P	3.8
4	☐	50.000	48.185	1092798.03	0.0535	P	0.5
5	☐	125.000	124.299	2800923.50	0.1380	P	0.8
6	☐	250.000	251.711	5590136.76	0.2794	A	0.3
7	☐	500.000	492.125	11096087.23	0.5462	A	2.5
8	☐	1000.000	1003.688	22980388.53	1.1138	A	0.9
9	☐			7385.55	0.0004	P	8.0

$$y = 0.0011 * x + 6.2859E-005$$

$$R = 1.0000$$

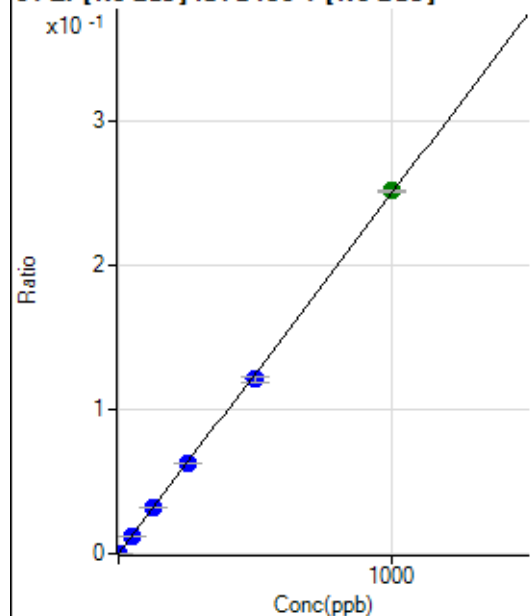
$$DL = 0.01796$$

$$BEC = 0.05665$$

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	255.57	0.0000	P	15.8
2	☐	0.100	0.091	702.82	0.0000	P	13.5
3	☐	1.000	0.907	4912.15	0.0002	P	7.6
4	☐	50.000	48.151	245635.90	0.0120	P	0.3
5	☐	125.000	126.815	642868.71	0.0317	P	0.7
6	☐	250.000	251.120	1254645.51	0.0627	P	0.3
7	☐	500.000	483.751	2453634.17	0.1208	P	3.0
8	☐	1000.000	1007.710	5190689.83	0.2516	A	0.8
9	☐			1511.25	0.0001	P	7.9

$$y = 2.4965E-004 * x + 1.1920E-005$$

$$R = 0.9998$$

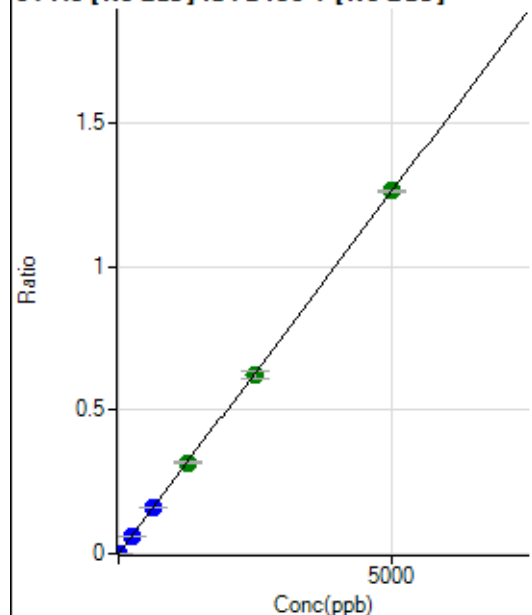
$$DL = 0.02257$$

$$BEC = 0.04775$$

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	513.92	0.0000	P	26.0
2	☐	0.500	0.495	3008.77	0.0001	P	2.6
3	☐	5.000	4.598	24388.15	0.0012	P	3.9
4	☐	250.000	244.205	1256528.40	0.0616	P	0.5
5	☐	625.000	628.150	3213041.28	0.1583	P	0.8
6	☐	1250.000	1260.281	6354353.70	0.3176	A	0.4
7	☐	2500.000	2470.461	12645298.90	0.6225	A	3.5
8	☐	5000.000	5012.095	26056184.61	1.2629	A	0.3
9	☐			9436.81	0.0005	P	5.2

$$y = 2.5196E-004 * x + 2.3991E-005$$

$$R = 1.0000$$

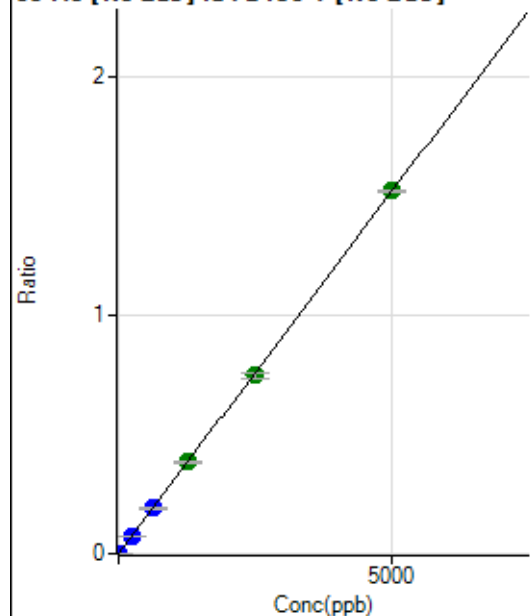
$$DL = 0.07413$$

$$BEC = 0.09522$$

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	136.12	0.0000	P	9.2
2	☐	0.500	0.502	3197.73	0.0002	P	7.4
3	☐	5.000	4.789	30043.54	0.0015	P	1.9
4	☐	250.000	245.807	1520395.51	0.0745	P	1.6
5	☐	625.000	626.378	3852574.39	0.1898	P	0.7
6	☐	1250.000	1265.392	7672156.77	0.3834	A	0.5
7	☐	2500.000	2463.087	15160392.35	0.7463	A	3.8
8	☐	5000.000	5014.646	31350100.70	1.5195	A	0.4
9	☐			10929.61	0.0006	P	2.3

$$y = 3.0300E-004 * x + 6.3531E-006$$

$$R = 1.0000$$

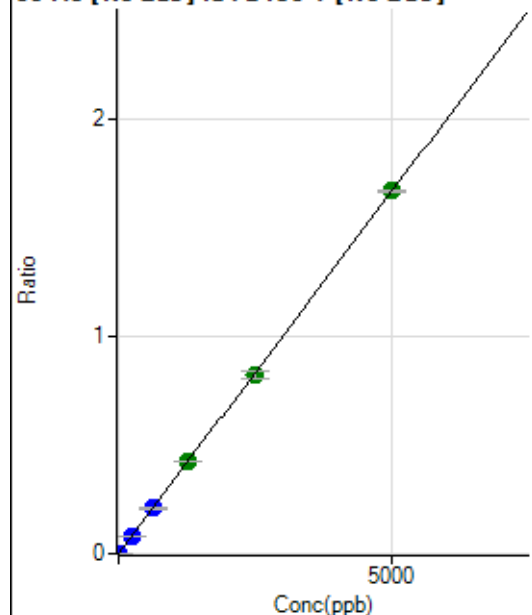
$$DL = 0.005772$$

$$BEC = 0.02097$$

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	313.91	0.0000	P	10.1
2	☐	0.500	0.523	3820.12	0.0002	P	7.8
3	☐	5.000	4.810	33406.61	0.0016	P	0.1
4	☐	250.000	245.506	1673183.91	0.0820	P	1.0
5	☐	625.000	625.311	4237360.69	0.2088	P	0.5
6	☐	1250.000	1267.257	8464944.64	0.4230	A	0.4
7	☐	2500.000	2470.457	16752046.38	0.8247	A	3.7
8	☐	5000.000	5010.643	34510940.35	1.6727	A	0.3
9	☐			26500.41	0.0015	P	2.3

$$y = 3.3382E-004 * x + 1.4659E-005$$

$$R = 1.0000$$

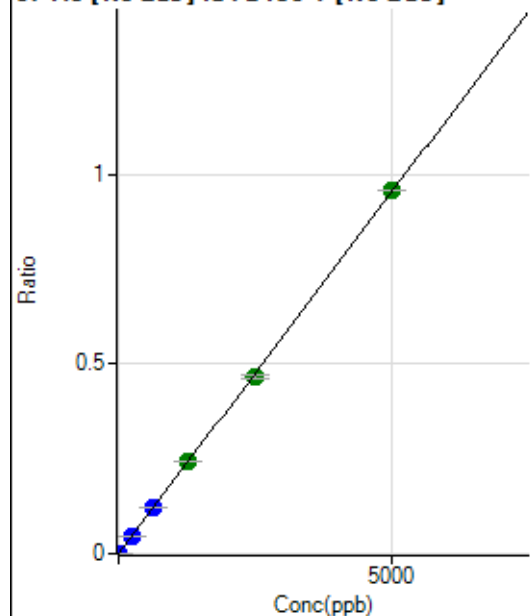
$$DL = 0.01325$$

$$BEC = 0.04391$$

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	102.79	0.0000	P	36.9
2	☐	0.500	0.467	1897.44	0.0001	P	4.1
3	☐	5.000	4.725	18643.26	0.0009	P	2.4
4	☐	250.000	243.708	947138.37	0.0464	P	0.7
5	☐	625.000	627.464	2424678.31	0.1195	P	0.5
6	☐	1250.000	1268.656	4832584.87	0.2415	A	0.5
7	☐	2500.000	2449.316	9472892.66	0.4663	A	3.1
8	☐	5000.000	5020.685	19719948.18	0.9558	A	0.1
9	☐			6585.12	0.0004	P	4.9

$$y = 1.9037E-004 * x + 4.7876E-006$$

$$R = 0.9999$$

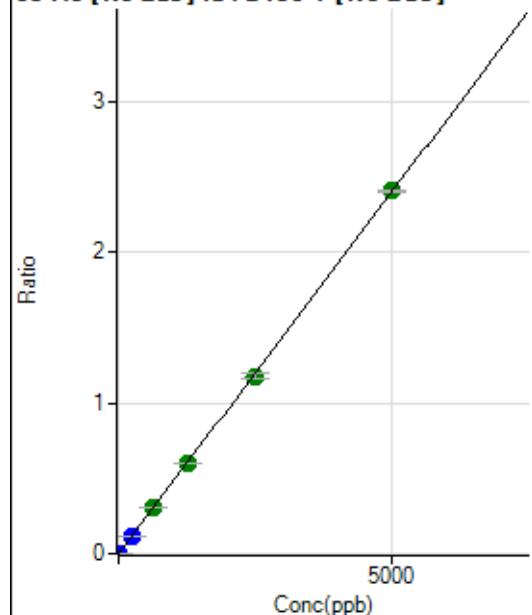
$$DL = 0.0278$$

$$BEC = 0.02515$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	238.90	0.0000	P	8.9
2	☐	0.500	0.474	4809.35	0.0002	P	8.9
3	☐	5.000	4.745	47117.71	0.0023	P	0.4
4	☐	250.000	245.283	2400094.54	0.1176	P	1.1
5	☐	625.000	628.821	6118215.07	0.3014	A	0.7
6	☐	1250.000	1259.268	12077865.29	0.6036	A	0.1
7	☐	2500.000	2455.271	23907833.69	1.1769	A	3.4
8	☐	5000.000	5019.806	49643855.62	2.4061	A	0.5
9	☐			15778.68	0.0009	P	3.6

$$y = 4.7932E-004 * x + 1.1152E-005$$

$$R = 0.9999$$

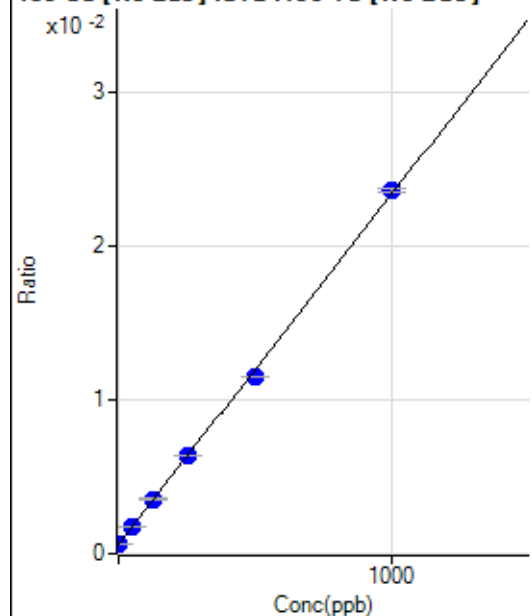
$$DL = 0.006191$$

$$BEC = 0.02327$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10504.30	0.0006	P	2.1
2	☐	0.100	0.741	10137.41	0.0006	P	3.6
3	☐	1.000	1.684	10746.17	0.0007	P	0.7
4	☐	50.000	50.936	28994.52	0.0018	P	1.3
5	☐	125.000	128.799	58195.56	0.0035	P	2.8
6	☐	250.000	251.189	103814.72	0.0063	P	0.3
7	☐	500.000	478.434	191839.08	0.0115	P	0.3
8	☐	1000.000	1009.963	397715.74	0.0236	P	1.1
9	☐			8936.50	0.0006	P	2.5

$$y = 2.2787E-005 * x + 6.1477E-004$$

$$R = 0.9997$$

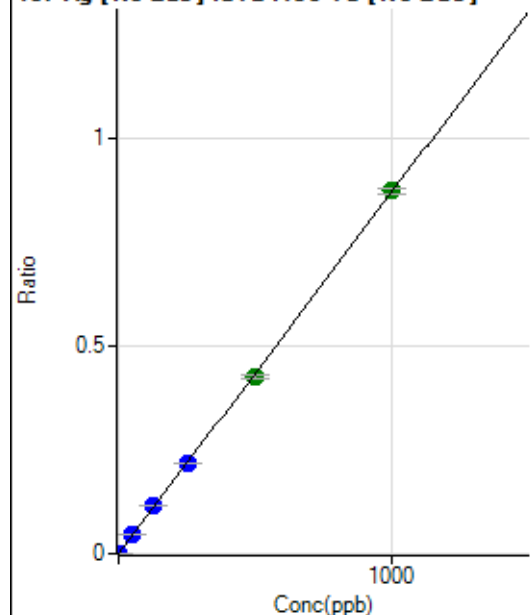
$$DL = 1.661$$

$$BEC = 26.98$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	197.23	0.0000	P	5.7
2	☐	0.100	0.100	1572.38	0.0001	P	18.7
3	☐	1.000	1.002	14538.64	0.0009	P	4.7
4	☐	50.000	52.191	741770.32	0.0454	P	0.3
5	☐	125.000	131.409	1874948.07	0.1144	P	0.9
6	☐	250.000	250.893	3575641.70	0.2183	P	0.9
7	☐	500.000	488.701	7082081.06	0.4253	A	2.0
8	☐	1000.000	1004.515	14712310.57	0.8741	A	1.5
9	☐			3267.18	0.0002	P	8.2

$$y = 8.7014\text{E-}004 * x + 1.1540\text{E-}005$$

$$R = 0.9999$$

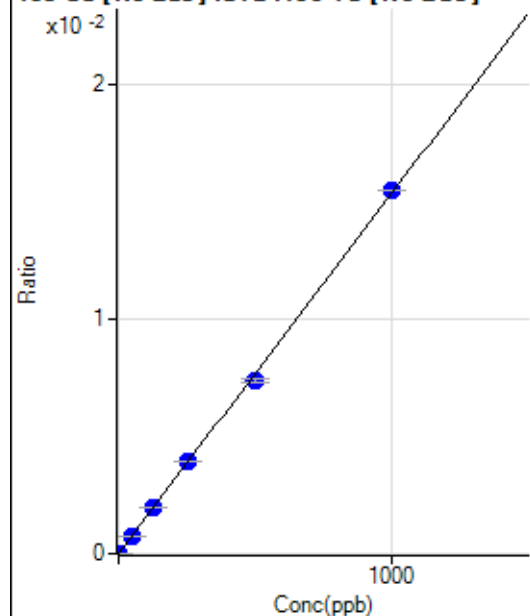
$$DL = 0.002252$$

$$BEC = 0.01326$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20.83	0.0000	P	53.0
2	☐	0.100	0.138	54.17	0.0000	P	29.8
3	☐	1.000	1.016	276.40	0.0000	P	7.9
4	☐	50.000	49.984	12534.92	0.0008	P	2.1
5	☐	125.000	128.174	32242.50	0.0020	P	2.2
6	☐	250.000	255.312	64139.09	0.0039	P	0.9
7	☐	500.000	482.288	123180.76	0.0074	P	2.2
8	☐	1000.000	1007.132	259959.77	0.0154	P	0.1
9	☐			255.56	0.0000	P	20.8

$$y = 1.5334\text{E-}005 * x + 1.2208\text{E-}006$$

$$R = 0.9998$$

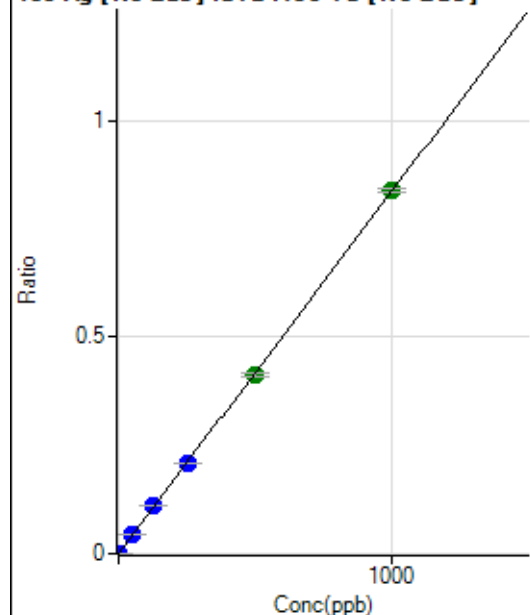
$$DL = 0.1266$$

$$BEC = 0.07961$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	108.34	0.0000	P	21.3
2	☐	0.100	0.098	1416.80	0.0001	P	1.2
3	☐	1.000	0.997	13807.26	0.0008	P	3.6
4	☐	50.000	52.135	711058.87	0.0435	P	1.4
5	☐	125.000	131.557	1801314.64	0.1099	P	1.3
6	☐	250.000	251.435	3438952.90	0.2100	P	0.3
7	☐	500.000	492.994	6856299.98	0.4117	A	1.8
8	☐	1000.000	1002.218	14086599.45	0.8369	A	1.1
9	☐			3178.27	0.0002	P	1.5

$$y = 8.3508E-004 * x + 6.3482E-006$$

$$R = 0.9999$$

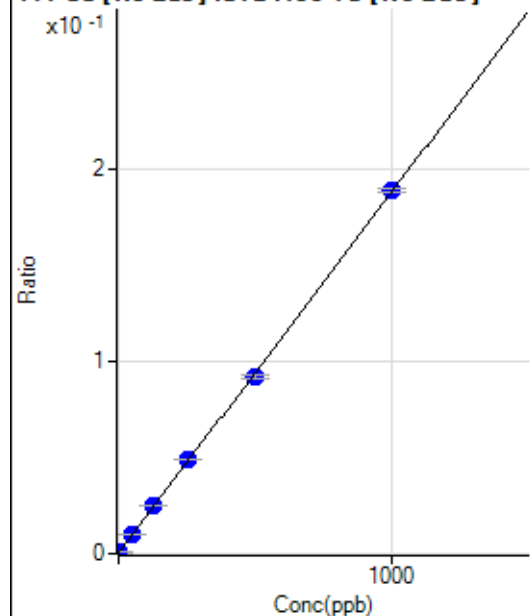
$$DL = 0.004847$$

$$BEC = 0.007602$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7362.04	0.0004	P	2.1
2	☒	0.100					
3	☐	1.000	1.056	10355.62	0.0006	P	0.4
4	☐	50.000	51.312	164548.40	0.0101	P	1.3
5	☐	125.000	130.900	410497.71	0.0250	P	1.3
6	☐	250.000	256.884	797930.09	0.0487	P	0.4
7	☐	500.000	488.338	1535911.75	0.0922	P	2.6
8	☐	1000.000	1003.307	3181572.20	0.1890	P	1.2
9	☐			7086.43	0.0005	P	2.5

$$y = 1.8798E-004 * x + 4.3087E-004$$

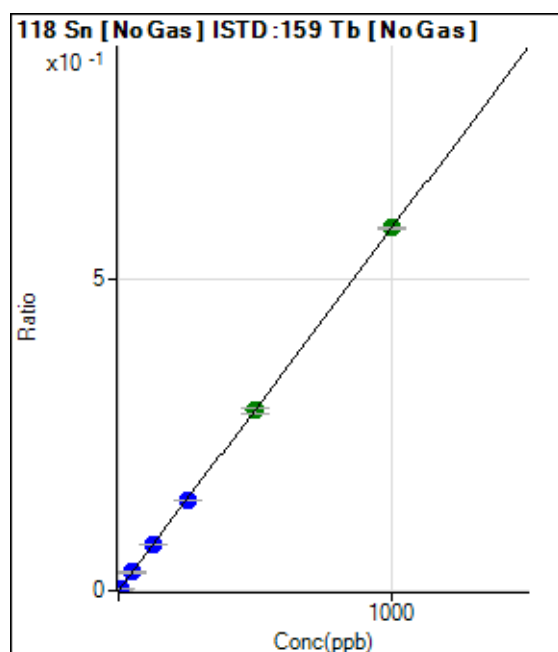
$$R = 0.9999$$

$$DL = 0.1443$$

$$BEC = 2.292$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1097.31	0.0001	P	9.6
2	☐	0.500	0.490	5584.65	0.0003	P	7.2
3	☐	5.000	4.739	46402.41	0.0028	P	1.0
4	☐	50.000	50.337	479096.80	0.0293	P	0.9
5	☐	125.000	128.288	1224377.99	0.0747	P	0.9
6	☐	250.000	250.074	2383006.15	0.1455	P	1.0
7	☐	500.000	496.285	4807519.03	0.2887	A	2.6
8	☐	1000.000	1001.412	9803774.96	0.5825	A	0.8
9	☐			3639.54	0.0003	P	5.3

$$y = 5.8159\text{E-}004 * x + 6.4247\text{E-}005$$

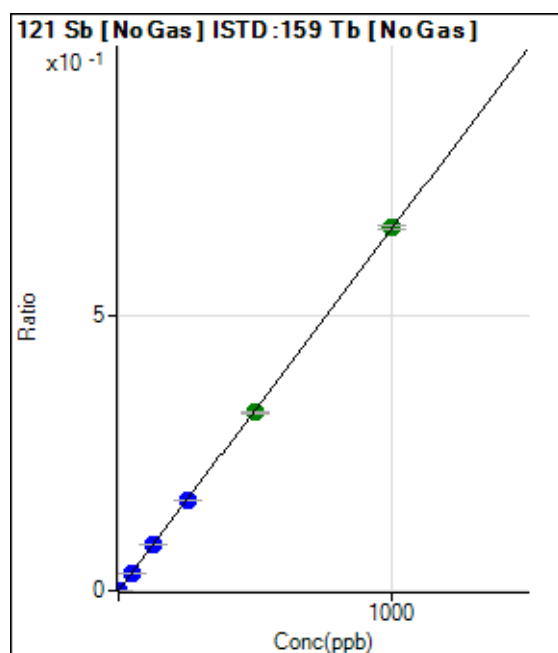
$$R = 1.0000$$

$$DL = 0.0319$$

$$BEC = 0.1105$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136.12	0.0000	P	24.7
2	☐	0.200	0.185	2075.26	0.0001	P	11.4
3	☐	2.000	1.873	20329.30	0.0012	P	3.3
4	☐	50.000	49.589	530960.57	0.0325	P	0.4
5	☐	125.000	128.100	1376917.25	0.0840	P	1.3
6	☐	250.000	249.177	2675357.63	0.1634	P	0.6
7	☐	500.000	492.632	5378609.02	0.3229	A	1.7
8	☐	1000.000	1003.523	11072727.07	0.6579	A	0.9
9	☐			10793.46	0.0007	P	11.4

$$y = 6.5554\text{E-}004 * x + 7.9682\text{E-}006$$

$$R = 1.0000$$

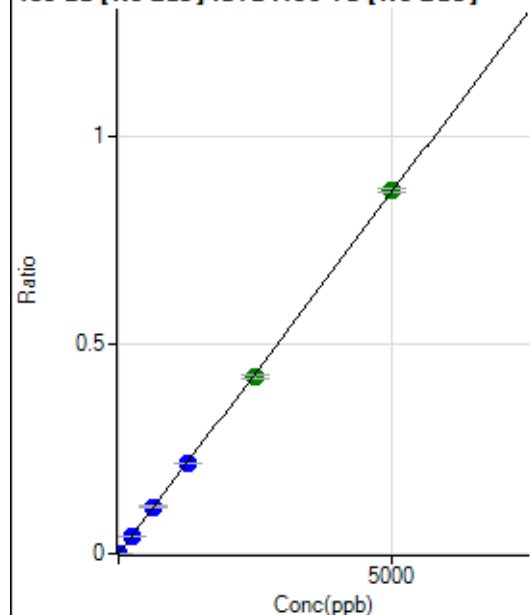
$$DL = 0.009012$$

$$BEC = 0.01216$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.00	0.0000	P	29.7
2	☐	1.000	0.982	2817.07	0.0002	P	4.4
3	☐	10.000	9.517	27171.79	0.0017	P	2.5
4	☐	250.000	251.126	709226.05	0.0434	P	0.8
5	☐	625.000	647.400	1835607.68	0.1120	P	1.5
6	☐	1250.000	1247.992	3534638.53	0.2158	P	0.7
7	☐	2500.000	2450.621	7058335.84	0.4238	A	1.8
8	☐	5000.000	5022.336	14617895.99	0.8685	A	1.1
9	☐			23314.70	0.0016	P	1.7

$$y = 1.7293\text{E-}004 * x + 5.8502\text{E-}006$$

$$R = 0.9999$$

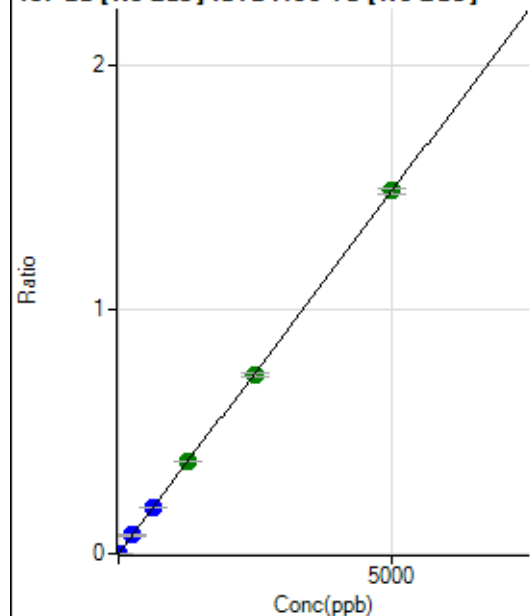
$$DL = 0.03013$$

$$BEC = 0.03383$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	172.23	0.0000	P	17.8
2	☐	1.000	0.984	4826.05	0.0003	P	7.5
3	☐	10.000	9.791	47847.44	0.0029	P	1.6
4	☐	250.000	252.508	1220756.56	0.0748	P	0.3
5	☐	625.000	642.643	3119223.83	0.1902	P	0.8
6	☐	1250.000	1268.455	6149756.69	0.3755	A	1.1
7	☐	2500.000	2468.926	12172637.68	0.7309	A	1.2
8	☐	5000.000	5008.593	24954107.33	1.4827	A	1.3
9	☐			39785.71	0.0027	P	2.5

$$y = 2.9602\text{E-}004 * x + 1.0074\text{E-}005$$

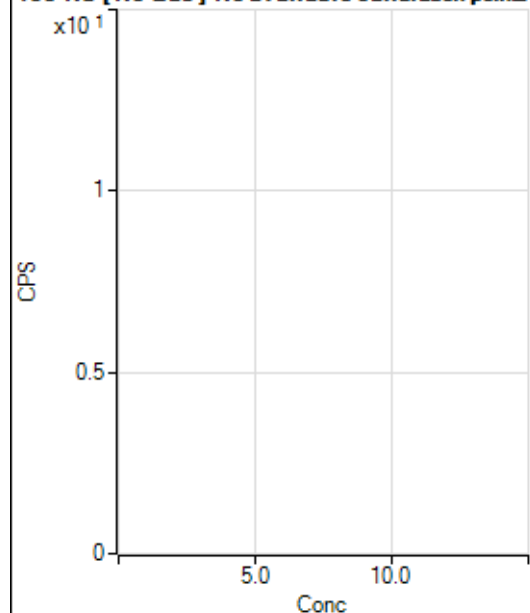
$$R = 1.0000$$

$$DL = 0.01812$$

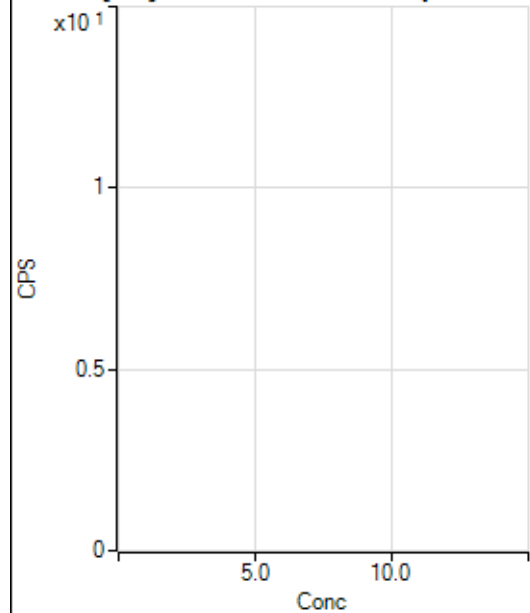
$$BEC = 0.03403$$

Weight: <None>

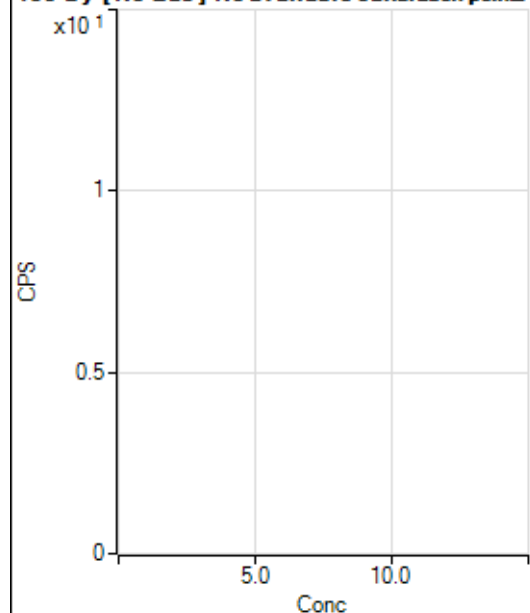
Min Conc: 0

150 Nd [No Gas] No available calibration points

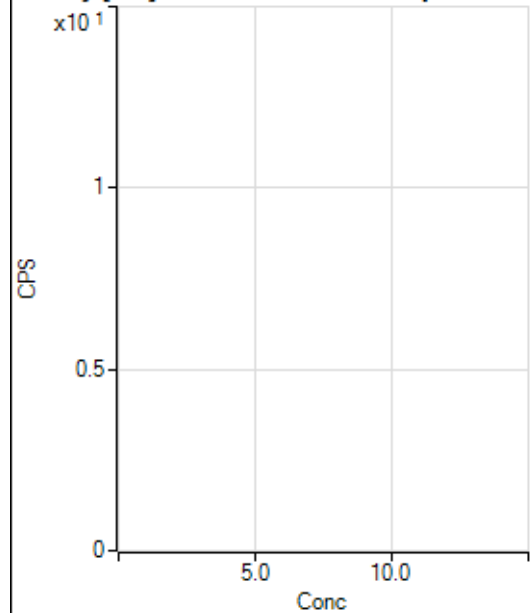
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	0.0
2	☐			11.11		P	34.6
3	☐			20.00		P	57.8
4	☐			88.89		P	24.1
5	☐			235.57		P	12.8
6	☐			448.91		P	13.5
7	☐			902.29		P	5.9
8	☐			1691.28		P	12.1
9	☐			51.11		P	32.8

150 Nd [He] No available calibration points

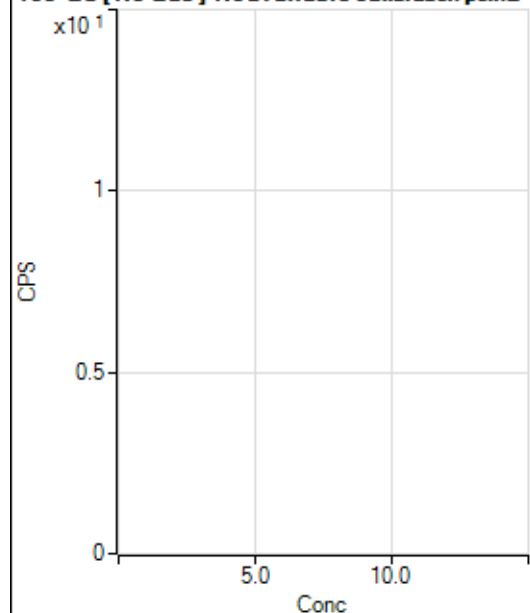
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			0.00		P	
3	☐			2.22		P	86.6
4	☐			5.56		P	34.7
5	☐			18.89		P	40.7
6	☐			38.89		P	32.4
7	☐			80.00		P	37.0
8	☐			118.89		P	16.2
9	☐			12.22		P	56.8

156 Dy [No Gas] No available calibration points

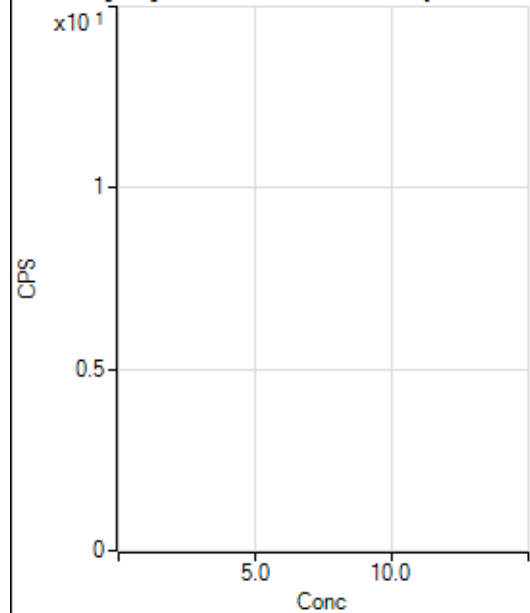
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	14.3
2	☐			38.89		P	44.6
3	☐			47.23		P	20.4
4	☐			66.67		P	37.5
5	☐			111.12		P	41.3
6	☐			130.56		P	13.3
7	☐			352.80		P	10.9
8	☐			477.81		P	11.2
9	☐			763.94		P	6.0

156 Dy [He] No available calibration points

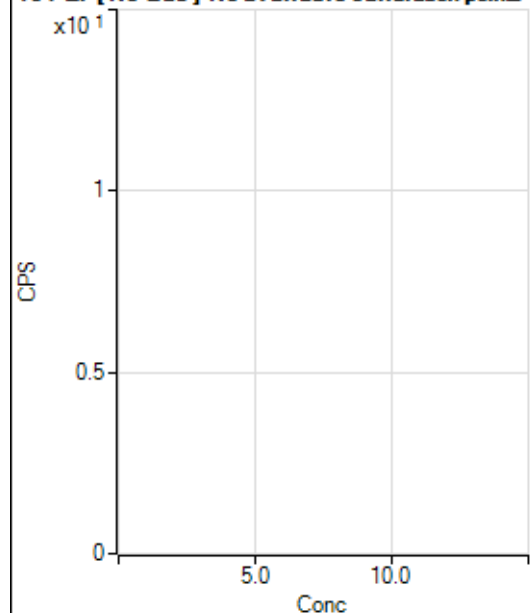
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	12.4
2	☐			11.11		P	34.6
3	☐			4.45		P	86.6
4	☐			15.55		P	24.8
5	☐			60.00		P	16.7
6	☐			97.78		P	13.8
7	☐			176.67		P	8.2
8	☐			327.79		P	10.7
9	☐			341.12		P	12.5

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

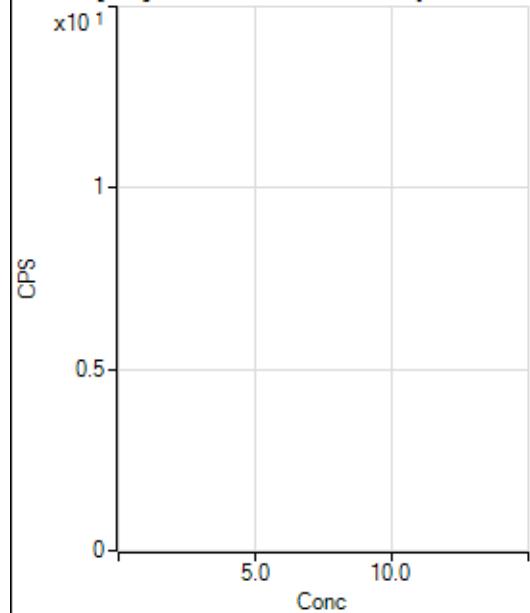
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			138.90		P	19.3
2	☐			150.01		P	28.9
3	☐			136.12		P	9.4
4	☐			136.12		P	18.7
5	☐			147.23		P	39.8
6	☐			169.45		P	36.3
7	☐			275.02		P	16.0
8	☐			377.80		P	27.2
9	☐			925.08		P	5.5

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			224.45		P	5.6
2	☐			227.78		P	11.9
3	☐			243.34		P	4.9
4	☐			223.34		P	6.0
5	☐			234.45		P	4.6
6	☐			262.23		P	13.9
7	☐			296.68		P	13.2
8	☐			354.46		P	14.7
9	☐			587.80		P	8.7

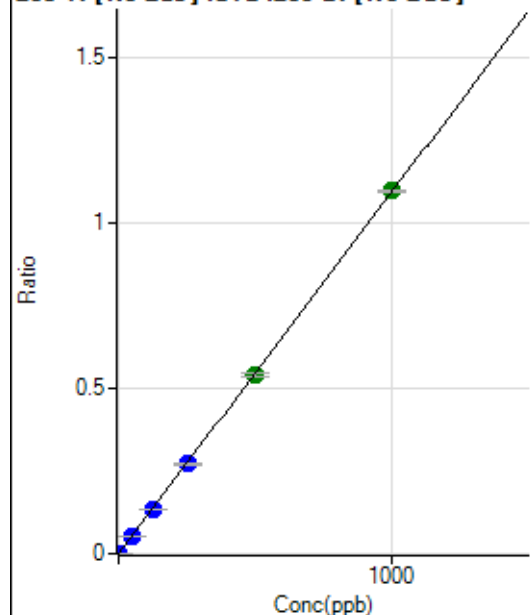
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			97.23		P	32.5
2	☐			102.78		P	28.5
3	☐			75.00		P	22.2
4	☐			102.78		P	56.9
5	☐			72.23		P	17.6
6	☐			80.56		P	23.9
7	☐			158.34		P	19.0
8	☐			138.89		P	27.1
9	☐			172.23		P	2.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			34.44		P	34.0
2	☐			33.33		P	40.0
3	☐			32.22		P	23.9
4	☐			30.00		P	11.1
5	☐			55.56		P	33.0
6	☐			38.89		P	13.1
7	☐			41.11		P	33.8
8	☐			61.11		P	13.7
9	☐			77.78		P	13.8

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.67	0.0000	P	25.0
2	☐	0.100	0.096	1058.43	0.0001	P	6.3
3	☐	1.000	0.903	9270.29	0.0010	P	3.9
4	☐	50.000	48.609	483412.84	0.0531	P	0.5
5	☐	125.000	123.941	1244145.45	0.1354	P	0.5
6	☐	250.000	247.661	2446246.49	0.2705	P	0.3
7	☐	500.000	493.874	4906005.19	0.5393	A	2.6
8	☐	1000.000	1003.850	9804508.81	1.0963	A	0.6
9	☐			1063.98	0.0002	P	11.8

$$y = 0.0011 * x + 1.2072E-005$$

$$R = 1.0000$$

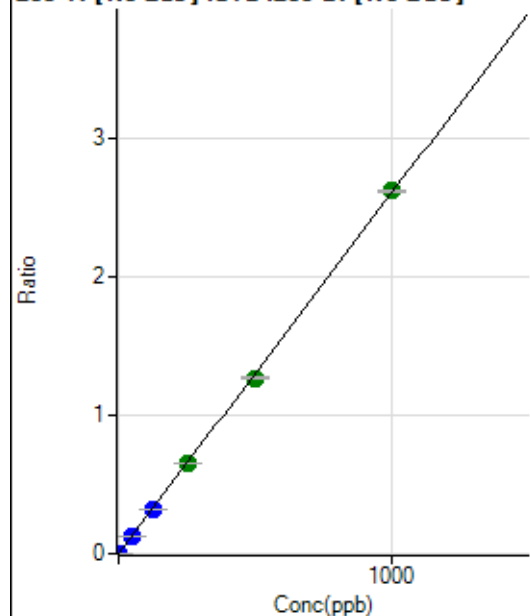
$$DL = 0.008294$$

$$BEC = 0.01105$$

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	275.02	0.0000	P	12.5
2	☐	0.100	0.092	2417.00	0.0003	P	13.2
3	☐	1.000	0.892	21807.61	0.0023	P	0.5
4	☐	50.000	48.490	1148325.61	0.1261	P	0.7
5	☐	125.000	121.527	2904964.49	0.3161	P	0.4
6	☐	250.000	249.399	5866112.07	0.6486	A	0.6
7	☐	500.000	487.814	11539796.44	1.2686	A	2.0
8	☐	1000.000	1006.753	23415085.07	2.6181	A	0.6
9	☐			2542.04	0.0004	P	9.0

$$y = 0.0026 * x + 2.8496E-005$$

$$R = 0.9999$$

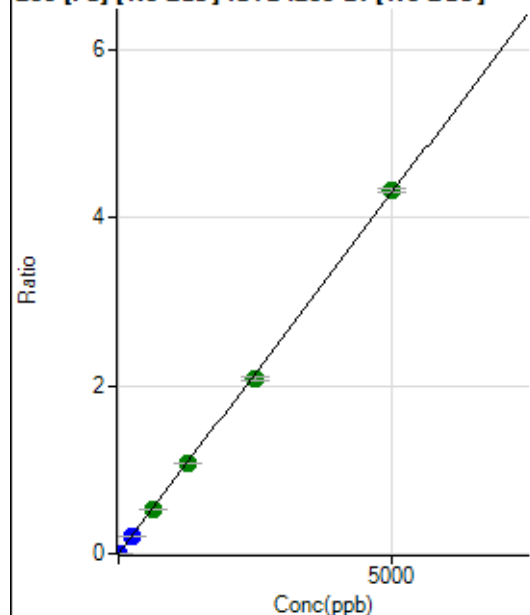
$$DL = 0.004095$$

$$BEC = 0.01096$$

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	450.02	0.0000	P	4.7
2	☐	0.100	0.083	1066.75	0.0001	P	12.1
3	☐	1.000	0.976	8219.47	0.0009	P	3.5
4	☐	250.000	245.684	1921630.25	0.2111	P	0.8
5	☐	625.000	615.295	4857709.08	0.5285	A	0.7
6	☐	1250.000	1251.533	9722154.04	1.0750	A	0.6
7	☐	2500.000	2435.027	19024298.57	2.0914	A	2.4
8	☐	5000.000	5033.532	38664664.75	4.3232	A	1.2
9	☐			7285.53	0.0010	P	4.4

$$y = 8.5887\text{E-}004 * x + 4.6614\text{E-}005$$

$$R = 0.9999$$

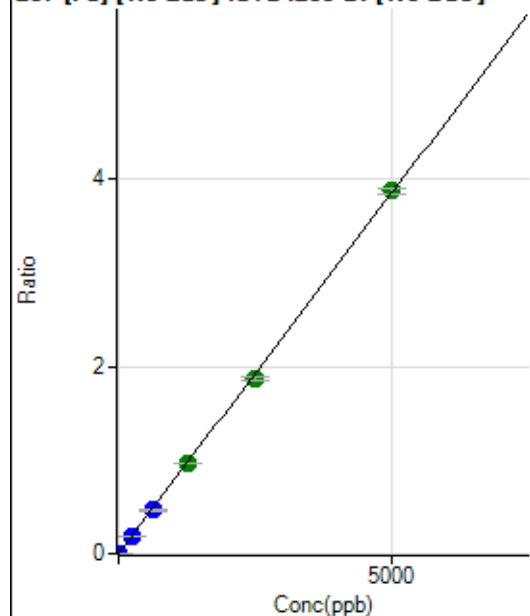
$$DL = 0.007705$$

$$BEC = 0.05427$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	348.16	0.0000	P	4.3
2	☐	0.100	0.097	998.22	0.0001	P	14.3
3	☐	1.000	0.936	7024.26	0.0008	P	2.9
4	☐	250.000	242.013	1695017.88	0.1862	P	0.1
5	☐	625.000	600.800	4247352.52	0.4621	P	0.7
6	☐	1250.000	1258.215	8752119.41	0.9677	A	1.2
7	☐	2500.000	2434.621	17033440.43	1.8725	A	2.0
8	☐	5000.000	5034.060	34626745.68	3.8717	A	1.4
9	☐			6283.13	0.0009	P	3.4

$$y = 7.6909\text{E-}004 * x + 3.6069\text{E-}005$$

$$R = 0.9999$$

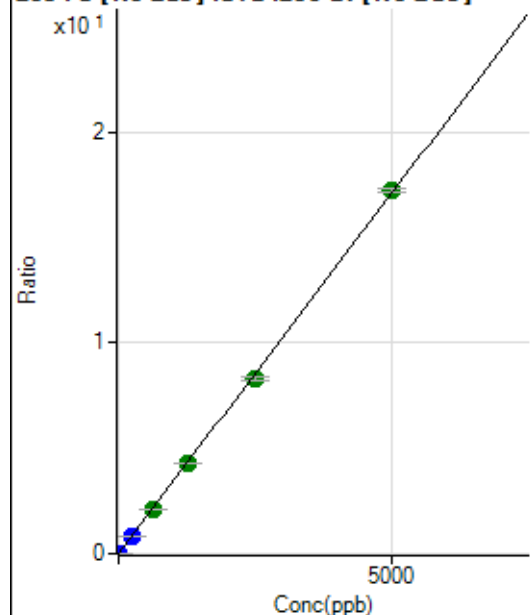
$$DL = 0.006023$$

$$BEC = 0.0469$$

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	1783.44	0.0002	P	1.6
2	☐	0.100	0.089	4443.03	0.0005	P	7.1
3	☐	1.000	0.963	32282.87	0.0035	P	2.6
4	☐	250.000	242.225	7534424.06	0.8275	P	0.5
5	☐	625.000	614.420	19290652.10	2.0988	A	0.4
6	☐	1250.000	1254.301	38749112.33	4.2844	A	0.7
7	☐	2500.000	2432.162	75569763.49	8.3074	A	2.1
8	☐	5000.000	5034.555	153797381.6	17.1961	A	0.9
9	☐			28900.09	0.0041	P	4.3

$$y = 0.0034 * x + 1.8473E-004$$

$$R = 0.9999$$

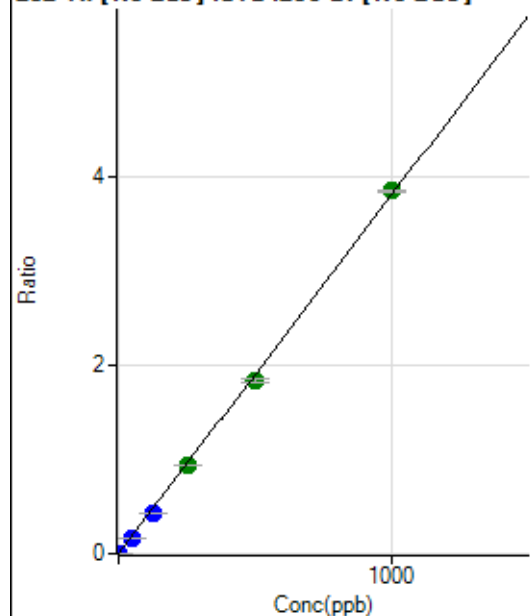
$$DL = 0.002605$$

$$BEC = 0.05408$$

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	970.43	0.0001	P	7.8
2	☐	0.100	-0.006	698.19	0.0001	P	13.1
3	☐	1.000	-0.004	790.79	0.0001	P	12.2
4	☐	50.000	44.009	1524655.53	0.1675	P	0.4
5	☐	125.000	112.135	3920113.11	0.4265	P	1.0
6	☐	250.000	244.657	8415524.26	0.9304	A	0.3
7	☐	500.000	483.157	16714501.53	1.8374	A	1.9
8	☐	1000.000	1011.666	34407262.34	3.8471	A	0.6
9	☐			8087.93	0.0012	P	3.0

$$y = 0.0038 * x + 1.0055E-004$$

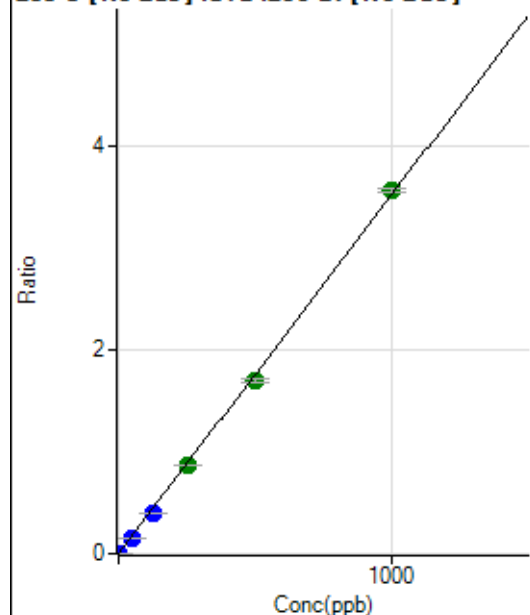
$$R = 0.9997$$

$$DL = 0.00616$$

$$BEC = 0.02644$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.01	0.0000	P	33.2
2	☐	0.100	0.082	2703.20	0.0003	P	3.9
3	☐	1.000	0.824	27083.26	0.0029	P	0.7
4	☐	50.000	44.492	1427152.81	0.1567	P	0.1
5	☐	125.000	112.132	3630778.86	0.3950	P	0.6
6	☐	250.000	245.308	7816032.16	0.8642	A	0.5
7	☐	500.000	483.418	15491675.17	1.7030	A	2.0
8	☐	1000.000	1011.348	31863309.04	3.5628	A	1.2
9	☐			3511.77	0.0005	P	2.9

$$y = 0.0035 * x + 1.0354E-005$$

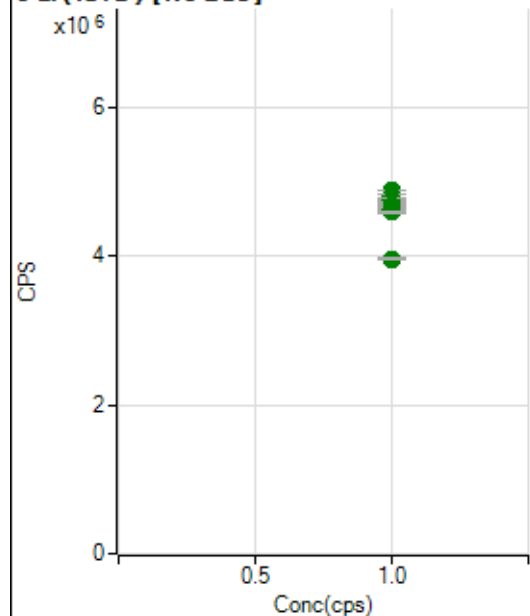
$$R = 0.9997$$

$$DL = 0.002929$$

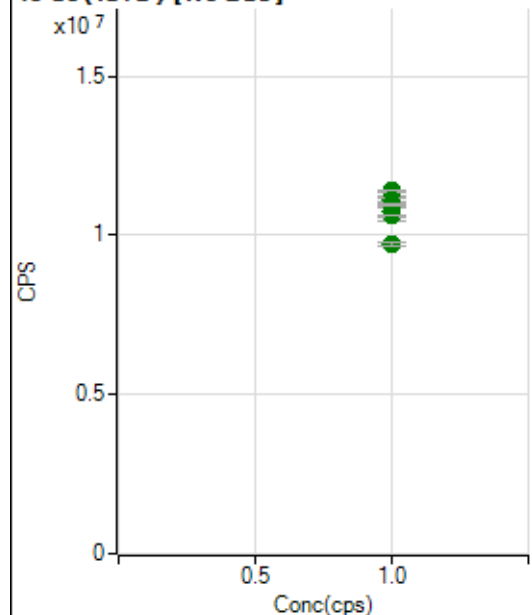
$$BEC = 0.002939$$

Weight: <None>

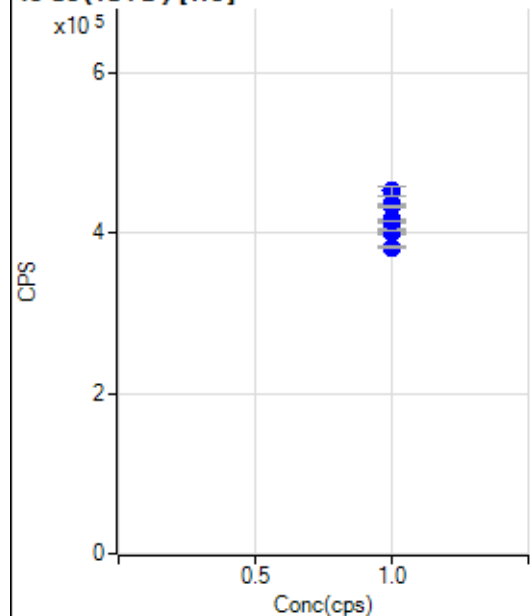
Min Conc: 0

6 Li (ISTD) [No Gas]

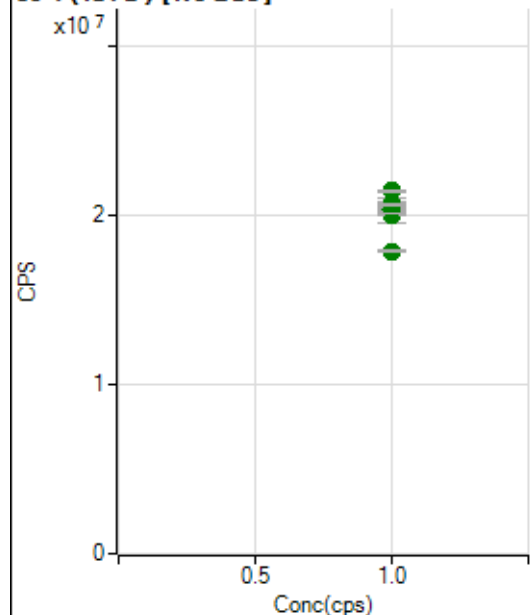
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4871134.51		A	0.1
2	☐	1.000		4714124.83		A	4.5
3	☐	1.000		4791412.53		A	1.2
4	☐	1.000		4747317.46		A	1.2
5	☐	1.000		4682366.21		A	0.3
6	☐	1.000		4635480.83		A	0.9
7	☐	1.000		4626779.13		A	0.9
8	☐	1.000		4583201.73		A	0.5
9	☐	1.000		3959296.75		A	0.9

45 Sc (ISTD) [No Gas]

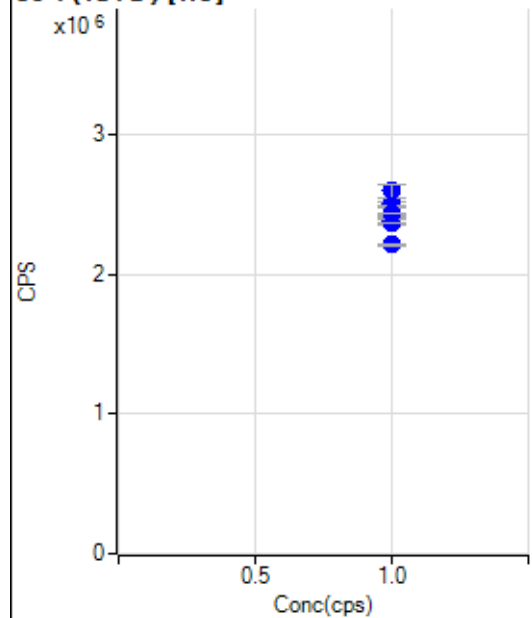
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11388784.14		A	0.6
2	☐	1.000		10841913.10		A	7.1
3	☐	1.000		11119604.69		A	1.2
4	☐	1.000		10988983.03		A	0.7
5	☐	1.000		10879827.06		A	0.4
6	☐	1.000		10594649.49		A	0.4
7	☐	1.000		10743008.66		A	2.2
8	☐	1.000		10937492.20		A	0.4
9	☐	1.000		9693176.94		A	1.3

45 Sc (ISTD) [He]

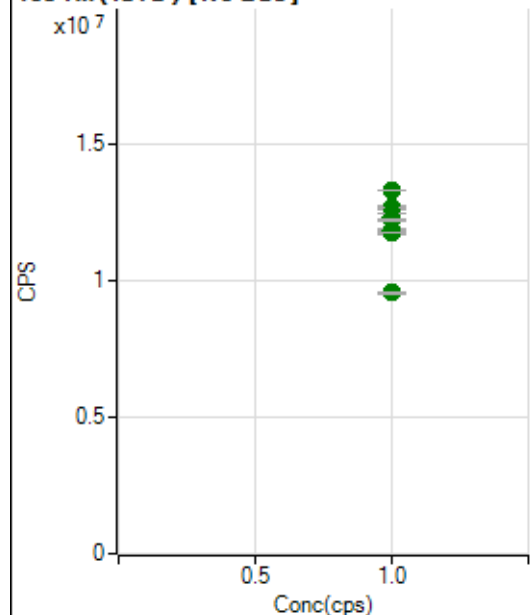
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		435491.15		P	0.9
2	☐	1.000		452567.71		P	2.8
3	☐	1.000		433018.00		P	0.4
4	☐	1.000		417153.16		P	0.3
5	☐	1.000		414272.52		P	1.0
6	☐	1.000		399568.65		P	0.5
7	☐	1.000		403952.93		P	0.1
8	☐	1.000		415021.89		P	0.4
9	☐	1.000		382568.85		P	0.6

89 Y (ISTD) [No Gas]

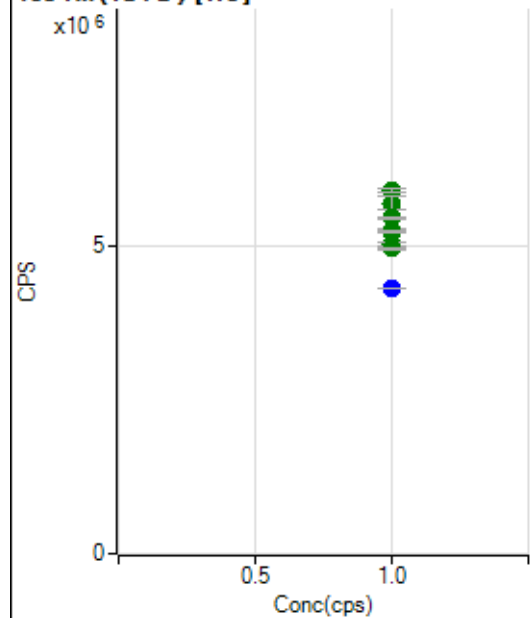
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21424377.74		A	0.9
2	☐	1.000		20253078.87		A	7.3
3	☐	1.000		20616130.39		A	1.2
4	☐	1.000		20414104.83		A	1.3
5	☐	1.000		20298948.73		A	1.1
6	☐	1.000		20009426.64		A	0.2
7	☐	1.000		20323559.84		A	2.2
8	☐	1.000		20632409.83		A	0.2
9	☐	1.000		17849956.68		A	0.8

89 Y (ISTD) [He]

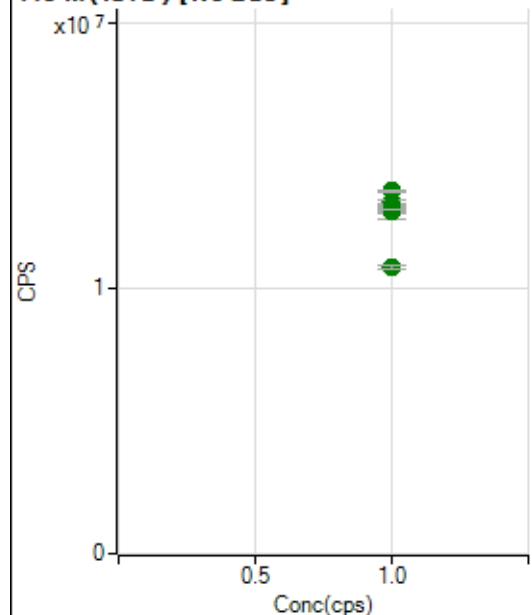
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2504857.36		P	0.7
2	☐	1.000		2596577.44		P	3.7
3	☐	1.000		2490594.84		P	0.5
4	☐	1.000		2433997.76		P	0.7
5	☐	1.000		2417807.15		P	0.6
6	☐	1.000		2361646.89		P	0.7
7	☐	1.000		2379539.18		P	0.8
8	☐	1.000		2435234.31		P	0.2
9	☐	1.000		2212219.74		P	0.5

103 Rh (ISTD) [No Gas]

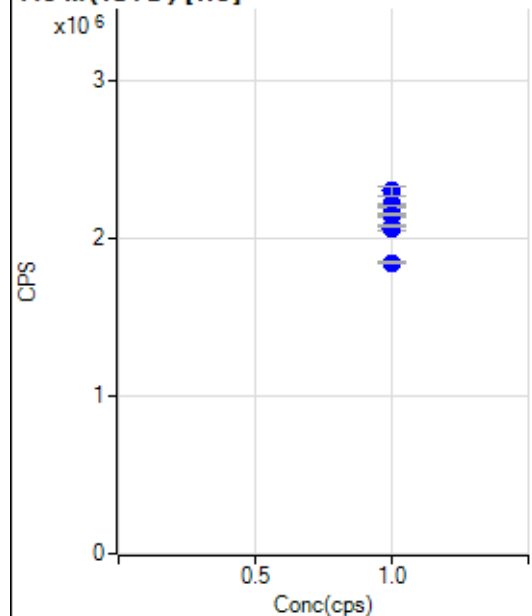
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13269495.78		A	0.1
2	☐	1.000		12295032.32		A	6.8
3	☐	1.000		12640362.73		A	0.7
4	☐	1.000		12455845.93		A	0.2
5	☐	1.000		12210997.32		A	0.4
6	☐	1.000		11814525.66		A	0.5
7	☐	1.000		11797129.96		A	1.7
8	☐	1.000		11730308.30		A	0.2
9	☐	1.000		9555157.91		A	0.9

103 Rh (ISTD) [He]

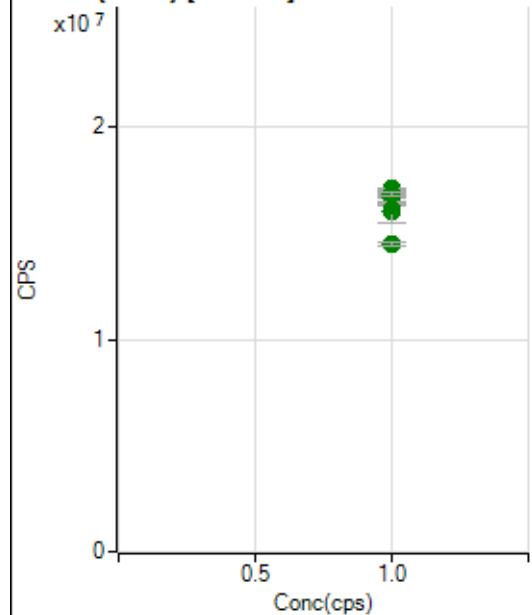
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5903857.90		A	1.2
2	☐	1.000		5709214.29		A	4.1
3	☐	1.000		5469265.61		A	0.6
4	☐	1.000		5259844.54		A	0.9
5	☐	1.000		5236475.37		A	0.4
6	☐	1.000		5040975.62		A	0.8
7	☐	1.000		4973093.16		A	0.4
8	☐	1.000		4961945.10		A	0.6
9	☐	1.000		4323903.30		P	0.3

115 In (ISTD) [No Gas]

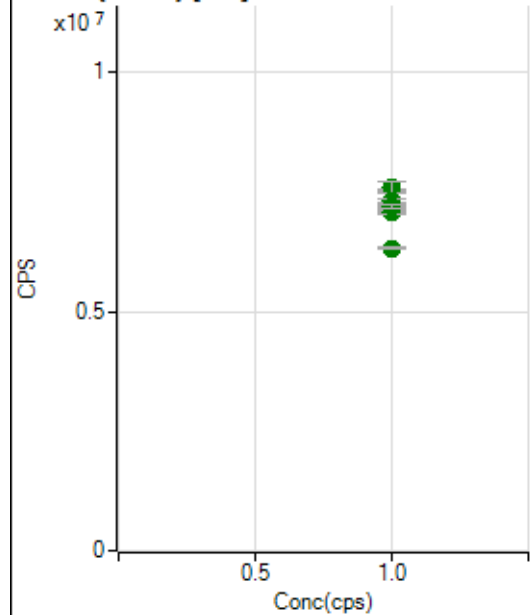
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13692134.11		A	0.4
2	☐	1.000		13004058.47		A	5.5
3	☐	1.000		13281053.26		A	0.9
4	☐	1.000		13147641.18		A	0.4
5	☐	1.000		13074823.49		A	0.4
6	☐	1.000		12899476.50		A	0.4
7	☐	1.000		13018655.36		A	1.5
8	☐	1.000		12979067.94		A	0.3
9	☐	1.000		10828335.32		A	1.5

115 In (ISTD) [He]

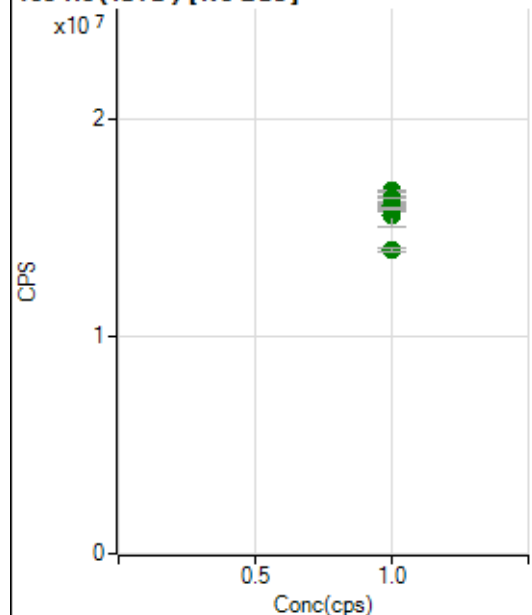
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2218355.00		P	0.2
2	☐	1.000		2301072.33		P	3.0
3	☐	1.000		2203073.19		P	0.2
4	☐	1.000		2140531.96		P	0.6
5	☐	1.000		2150307.14		P	0.4
6	☐	1.000		2075840.22		P	0.3
7	☐	1.000		2062285.99		P	0.9
8	☐	1.000		2077587.84		P	0.3
9	☐	1.000		1845862.87		P	0.2

159 Tb (ISTD) [No Gas]

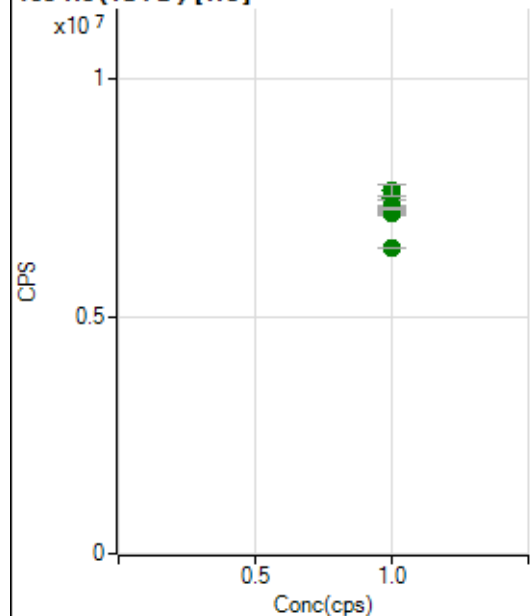
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17086198.08		A	0.9
2	☐	1.000		16052382.96		A	7.1
3	☐	1.000		16452625.59		A	0.6
4	☐	1.000		16329691.84		A	0.7
5	☐	1.000		16396434.90		A	0.8
6	☐	1.000		16377910.45		A	0.3
7	☐	1.000		16657327.39		A	1.9
8	☐	1.000		16831746.14		A	0.8
9	☐	1.000		14511117.84		A	1.1

159 Tb (ISTD) [He]

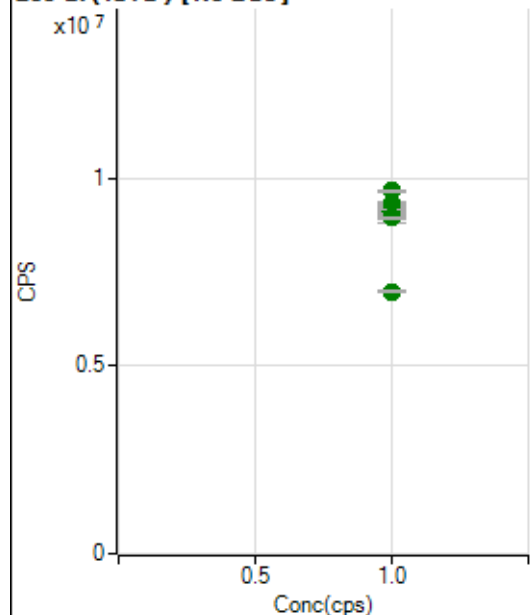
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7531300.10		A	0.7
2	☐	1.000		7577206.69		A	3.1
3	☐	1.000		7310136.42		A	0.6
4	☐	1.000		7071652.32		A	1.4
5	☐	1.000		7201195.45		A	0.4
6	☐	1.000		7080452.19		A	0.4
7	☐	1.000		7068530.38		A	1.4
8	☐	1.000		7188626.77		A	0.7
9	☐	1.000		6317619.21		A	0.7

165 Ho (ISTD) [No Gas]

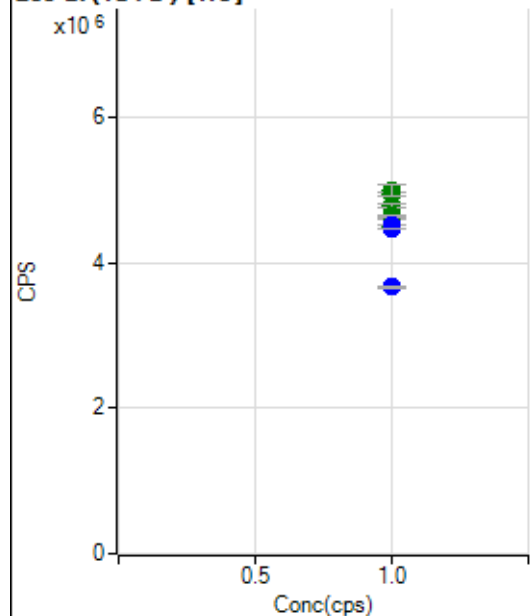
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16671539.33		A	0.5
2	☐	1.000		15530646.02		A	6.4
3	☐	1.000		15880667.12		A	0.8
4	☐	1.000		15834961.43		A	1.2
5	☐	1.000		15983291.01		A	0.9
6	☐	1.000		15871904.63		A	0.5
7	☐	1.000		16306963.23		A	1.3
8	☐	1.000		16373378.92		A	0.2
9	☐	1.000		13999617.99		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7505977.95		A	0.7
2	☐	1.000		7648461.83		A	3.0
3	☐	1.000		7324879.26		A	0.0
4	☐	1.000		7196092.32		A	0.5
5	☐	1.000		7296181.35		A	0.7
6	☐	1.000		7156108.85		A	0.3
7	☐	1.000		7185943.78		A	0.7
8	☐	1.000		7271214.75		A	0.2
9	☐	1.000		6449888.38		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9653642.22		A	0.7
2	☐	1.000		9087929.93		A	6.4
3	☐	1.000		9291688.68		A	0.6
4	☐	1.000		9104925.28		A	0.5
5	☐	1.000		9191455.56		A	0.6
6	☐	1.000		9044521.53		A	0.7
7	☐	1.000		9097958.54		A	1.1
8	☐	1.000		8943932.78		A	0.7
9	☐	1.000		6982559.00		A	0.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4941359.33		A	0.9
2	☐	1.000		4991947.08		A	3.1
3	☐	1.000		4785940.10		A	1.3
4	☐	1.000		4626416.42		A	0.6
5	☐	1.000		4648440.42		A	0.4
6	☐	1.000		4491784.76		A	1.1
7	☐	1.000		4526287.26		P	0.1
8	☐	1.000		4475435.21		P	0.2
9	☐	1.000		3668030.26		P	0.2

US EPA Tune Check Sample Report

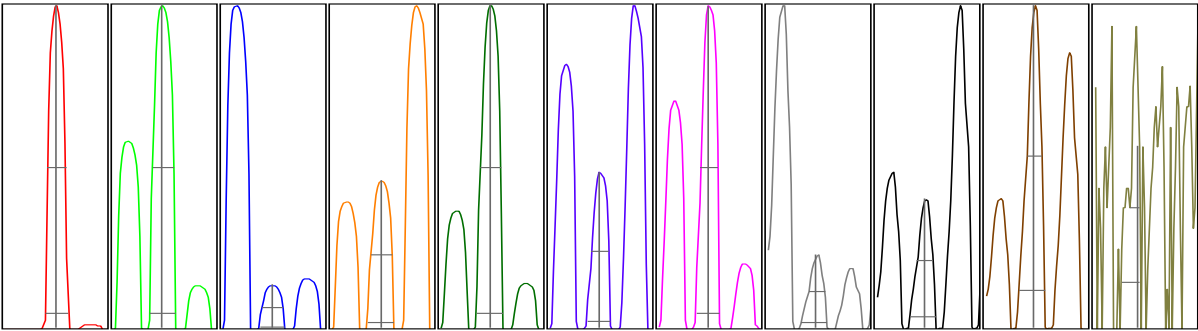
Batch Folder D:\ICP-MS Data\1\DATA\P7071520MS2.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	10488	1.57	5.00	
24	154182	1.57	5.00	
25	20590	1.31	5.00	
26	24233	1.53	5.00	
59	73671	1.67	5.00	
113	12111	1.15	5.00	
115	35543	2.44	5.00	
206	13725	1.49	5.00	
207	11775	1.62	5.00	
208	27940	1.95	5.00	
220	0	29.19		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	10344	10310	10583	10703	10502
24	153016	150733	154639	157059	155465
25	20380	20228	20731	20854	20755
26	23966	23736	24446	24636	24382
59	72908	71916	74133	74874	74523
113	12119	11893	12149	12279	12112
115	36987	35376	35352	35361	34640
206	13641	13419	13759	13934	13870
207	11605	11544	11867	11867	11990
208	27617	27204	28071	28619	28190
220	0	1	0	1	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	20342	9.05	8.9 - 9.1		0.685	0.900	
24	257018	23.95	23.9 - 24.1		0.742	0.900	
25	34567	25.00	24.9 - 25.1		0.740	0.900	
26	40371	26.00	25.9 - 26.1		0.778	0.900	
59	127858	59.00	58.9 - 59.1		0.775	0.900	
113	23516	113.00	112.9 - 113.1		0.689	0.900	
115	69079	115.00	114.9 - 115.1		0.689	0.900	
206	28058	205.95	205.9 - 206.1		0.741	0.900	
207	23442	206.95	206.9 - 207.1		0.744	0.900	
208	58221	207.95	207.9 - 208.1		0.742	0.900	
220	0	219.80	-		0.558		

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

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.3	V	Deflect	13.2	V
Extract 2	-150.0	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	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	16878	0.72	
89	46193	0.92	
205	31016	0.94	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	16937	16865	16793	16741	17052
89	46560	45892	45723	46081	46709
205	31520	30878	30917	30779	30987

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.5	V	Deflect	2.2	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	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			