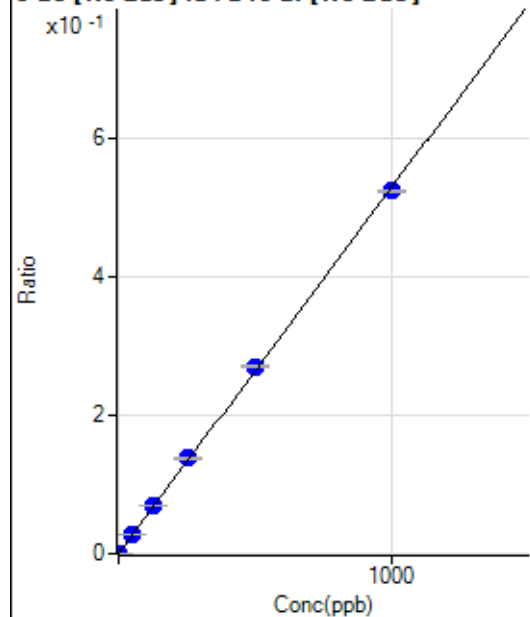


Batch Folder: D:\ICP-MS Data\P7122219MS.b\
Analysis File: P7122219MS.batch.bin
DA Date-Time: 2019-12-24 01:16:40
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-12-22 15:32:28
2	004CALS.d	S02	2019-12-22 15:36:07
3	005CALS.d	S03	2019-12-22 15:40:51
4	006CALS.d	S04	2019-12-22 15:45:07
5	007CALS.d	S05	2019-12-22 15:49:00
6	008CALS.d	S06	2019-12-22 15:52:50
7	009CALS.d	S07	2019-12-22 15:56:39
8	010CALS.d	S08	2019-12-22 16:00:29

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	79.63	0.0000	P	11.1
2	☐	1.000	1.047	3155.97	0.0006	P	1.4
3	☐	50.000	53.386	153124.85	0.0282	P	0.1
4	☐	125.000	133.093	364916.79	0.0703	P	0.2
5	☐	250.000	260.027	666257.78	0.1373	P	0.7
6	☐	500.000	510.532	1246968.50	0.2696	P	0.7
7	☐	1000.000	991.046	2445797.10	0.5234	P	0.6
8	☐			420.39	0.0001	P	10.6

$$y = 5.2810\text{E-}004 * x + 1.5232\text{E-}005$$

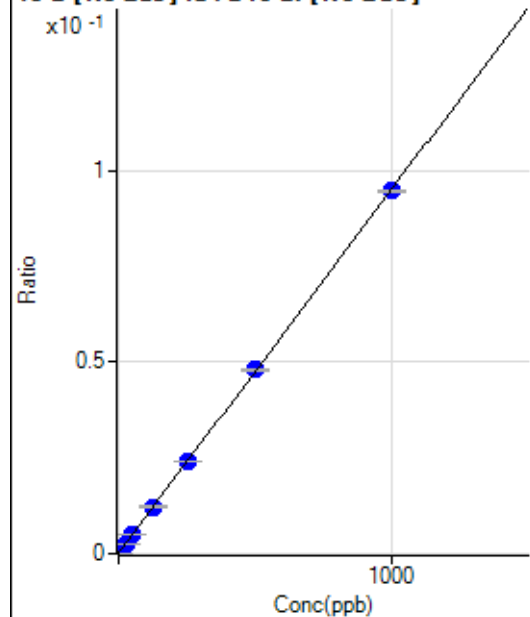
$$R = 0.9998$$

$$DL = 0.009612$$

$$BEC = 0.02884$$

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	758.38	0.0001	P	5.7
2	☐	25.000	24.896	13912.52	0.0025	P	2.7
3	☐	50.000	51.128	27105.64	0.0050	P	1.6
4	☐	125.000	128.027	63766.11	0.0123	P	3.1
5	☐	250.000	252.430	116839.15	0.0241	P	1.3
6	☐	500.000	505.085	222191.57	0.0480	P	0.6
7	☐	1000.000	996.418	442244.26	0.0946	P	0.5
8	☐			8472.19	0.0018	P	11.0

$$y = 9.4833\text{E-}005 * x + 1.4503\text{E-}004$$

$$R = 1.0000$$

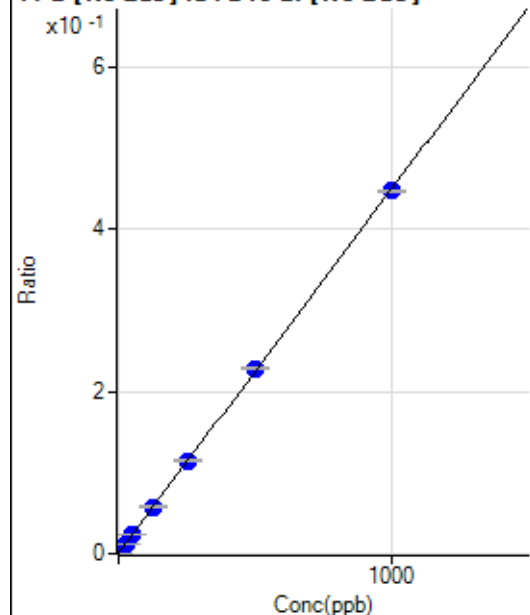
$$DL = 0.2627$$

$$BEC = 1.529$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3708.95	0.0007	P	7.0
2	☐	25.000	24.698	65381.01	0.0118	P	0.9
3	☐	50.000	51.099	128137.57	0.0236	P	1.1
4	☐	125.000	127.872	301068.99	0.0580	P	2.6
5	☐	250.000	252.562	552419.63	0.1139	P	2.1
6	☐	500.000	507.034	1053992.12	0.2279	P	0.9
7	☐	1000.000	995.436	2087695.17	0.4468	P	0.4
8	☐			39355.55	0.0084	P	10.8

$$y = 4.4809\text{E-}004 * x + 7.0922\text{E-}004$$

$$R = 1.0000$$

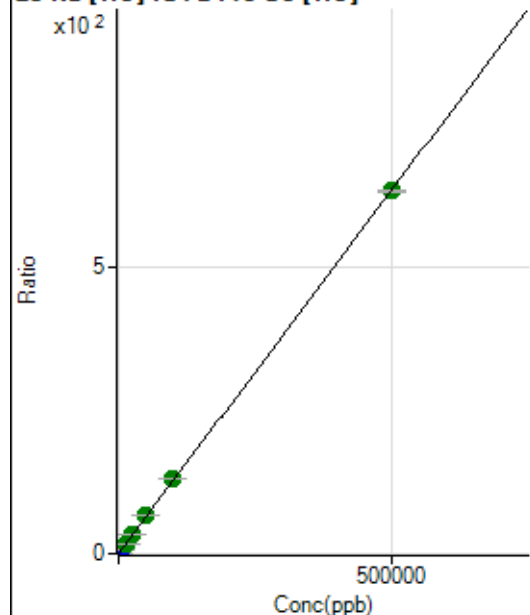
$$DL = 0.3331$$

$$BEC = 1.583$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	14944.10	0.0316	P	2.8
2	☐	500.000	504.074	329052.13	0.6700	P	1.1
3	☐	5000.000	5141.764	3099803.86	6.5433	P	0.3
4	☐	12500.000	13006.194	7248966.13	16.5032	A	0.8
5	☐	25000.000	26021.929	13324440.83	32.9869	A	0.2
6	☐	50000.000	51978.708	26658834.97	65.8597	A	1.5
7	☐	100000.00	102251.11	53435742.86	129.5269	A	0.2
8	☐	500000.00	499286.73	284448223.0	632.3504	A	0.6

$$y = 0.0013 * x + 0.0316$$

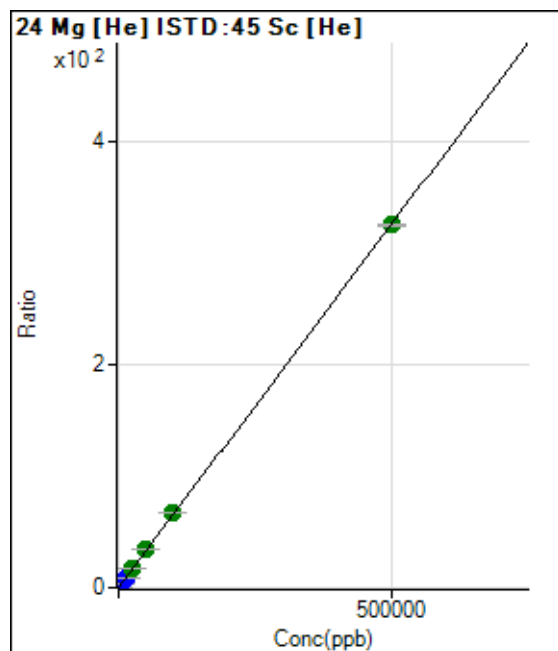
$$R = 1.0000$$

$$DL = 2.07$$

$$BEC = 24.93$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.78	0.0003	P	22.7
2	☐	500.000	526.044	168507.38	0.3431	P	1.8
3	☐	5000.000	5233.865	1615590.83	3.4105	P	0.8
4	☐	12500.000	13176.361	3771208.24	8.5856	P	1.0
5	☐	25000.000	26402.203	6948883.75	17.2031	A	0.1
6	☐	50000.000	52312.709	13797004.13	34.0855	A	1.5
7	☐	100000.00	102948.41	27672775.96	67.0781	A	0.1
8	☐	500000.00	499089.66	146278960.2	325.1905	A	0.7

$$y = 6.5157\text{E-}004 * x + 3.2276\text{E-}004$$

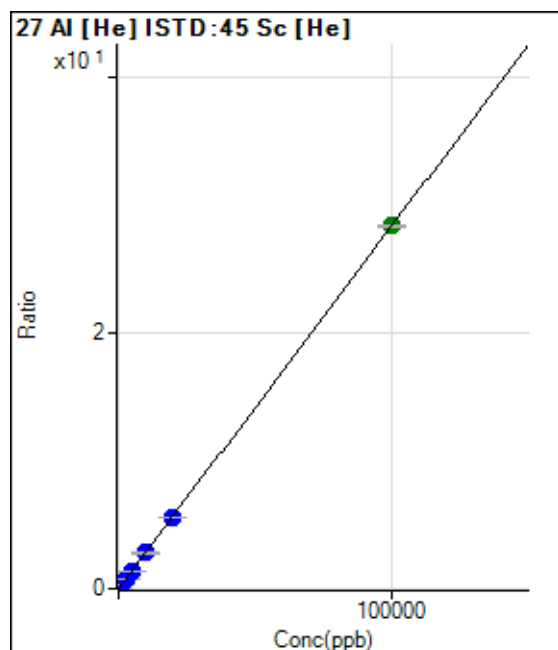
$$R = 1.0000$$

$$DL = 0.3374$$

$$BEC = 0.4954$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0001	P	24.6
2	☐	20.000	20.031	2828.17	0.0058	P	4.8
3	☐	1000.000	1001.290	134436.13	0.2838	P	1.1
4	☐	2500.000	2517.192	313330.19	0.7133	P	0.4
5	☐	5000.000	4971.816	569083.41	1.4089	P	0.1
6	☐	10000.000	9817.735	1126113.08	2.7820	P	1.2
7	☐	20000.000	19490.491	2278407.47	5.5228	P	0.7
8	☐	100000.00	100121.09	12761342.82	28.3697	A	0.5

$$y = 2.8335\text{E-}004 * x + 8.2142\text{E-}005$$

$$R = 1.0000$$

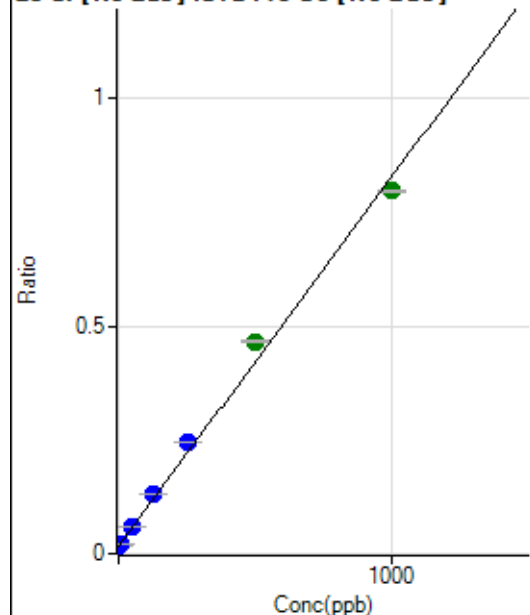
$$DL = 0.214$$

$$BEC = 0.2899$$

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	195308.94	0.0159	P	0.9
2	☐	10.000	8.666	296410.62	0.0230	P	0.6
3	☐	50.000	54.425	759340.91	0.0601	P	1.3
4	☐	125.000	140.131	1573069.06	0.1295	P	0.7
5	☐	250.000	281.981	2747110.44	0.2445	P	0.7
6	☐	500.000	553.989	5006113.00	0.4650	A	1.1
7	☐	1000.000	962.911	8725480.83	0.7966	A	0.8
8	☐			340682.87	0.0303	P	0.6

$$y = 8.1069\text{E-}004 * x + 0.0159$$

$$R = 0.9971$$

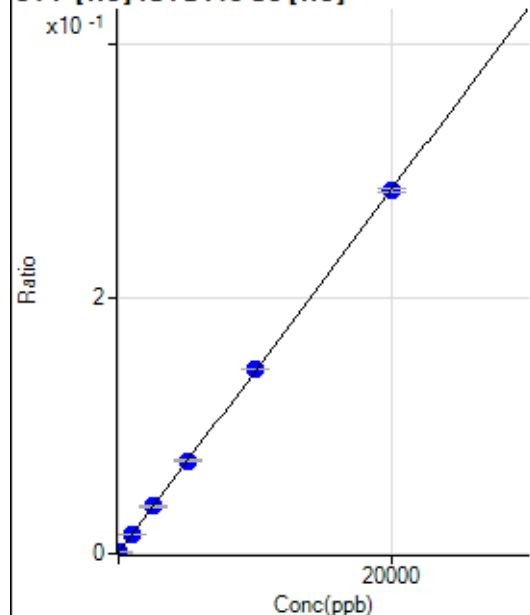
$$DL = 0.5208$$

$$BEC = 19.65$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-21.043	213.90	0.0005	P	8.0
2	☐	0.000	21.043	516.70	0.0011	P	15.5
3	☐	1000.000	991.565	7051.93	0.0149	P	4.6
4	☐	2500.000	2565.589	16387.35	0.0373	P	2.6
5	☐	5000.000	5074.775	29510.78	0.0731	P	1.5
6	☐	10000.000	10092.663	58518.77	0.1446	P	0.3
7	☐	20000.000	19927.198	117444.05	0.2847	P	0.9
8	☐			172.23	0.0004	P	44.9

$$y = 1.4248\text{E-}005 * x + 7.5167\text{E-}004$$

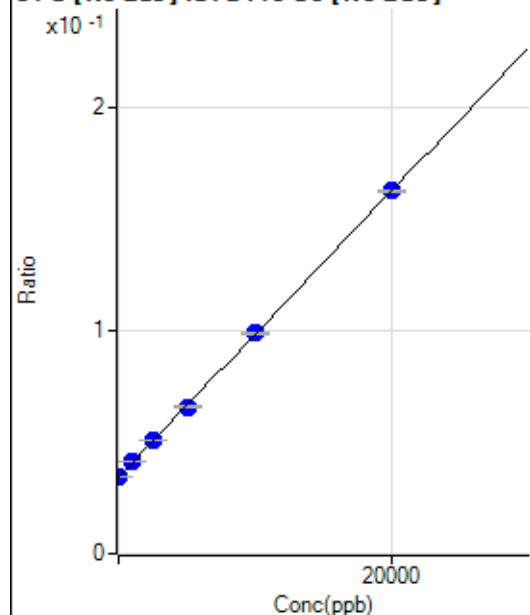
$$R = 1.0000$$

$$DL = 20.91$$

$$BEC = 52.76$$

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	19.499	422408.99	0.0345	P	0.1
2	☐	0.000	-19.499	441629.91	0.0342	P	0.4
3	☐	1000.000	1086.088	522309.55	0.0413	P	0.7
4	☐	2500.000	2576.022	617889.96	0.0509	P	1.6
5	☐	5000.000	4927.993	741290.73	0.0660	P	0.9
6	☐	10000.000	10032.139	1063397.91	0.0988	P	0.4
7	☐	20000.000	19988.125	1782686.48	0.1627	P	0.8
8	☐			347241.94	0.0309	P	1.2

$$y = 6.4247\text{E-}006 * x + 0.0343$$

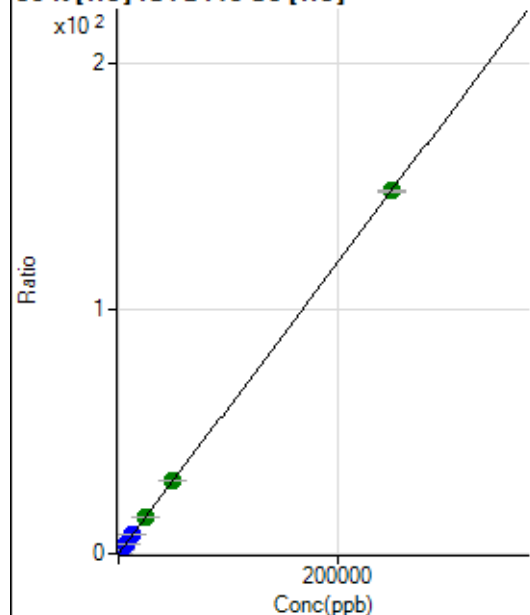
R = 1.0000

DL = 45.64

BEC = 5343

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	17736.23	0.0375	P	3.4
2	☐	500.000	500.836	164305.47	0.3345	P	0.6
3	☐	2500.000	2565.111	738494.59	1.5589	P	0.3
4	☐	6250.000	6413.843	1687449.08	3.8417	P	0.5
5	☐	12500.000	12621.266	3038956.88	7.5234	P	0.5
6	☐	25000.000	25199.766	6065558.34	14.9840	A	0.9
7	☐	50000.000	50362.480	12338722.50	29.9087	A	0.7
8	☐	250000.00	249896.71	66689657.05	148.2571	A	0.5

$$y = 5.9312\text{E-}004 * x + 0.0375$$

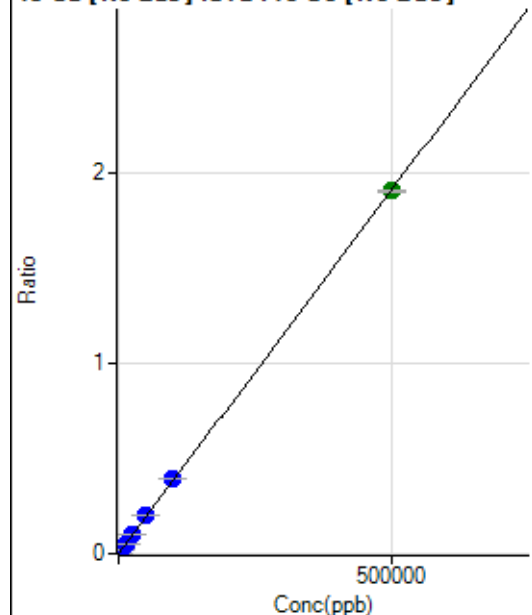
R = 1.0000

DL = 6.364

BEC = 63.17

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	250.02	0.0000	P	17.9
2	☐	500.000	497.801	24871.72	0.0019	P	1.9
3	☐	5000.000	5224.245	253171.76	0.0200	P	0.5
4	☐	12500.000	13149.309	611602.67	0.0504	P	0.5
5	☐	25000.000	26248.698	1129126.00	0.1005	P	0.2
6	☐	50000.000	52472.940	2162804.32	0.2009	P	0.5
7	☐	100000.00	103348.26	4334219.97	0.3957	P	0.3
8	☐	500000.00	499002.14	21453525.13	1.9104	A	0.6

$$y = 3.8283\text{E-}006 * x + 2.0396\text{E-}005$$

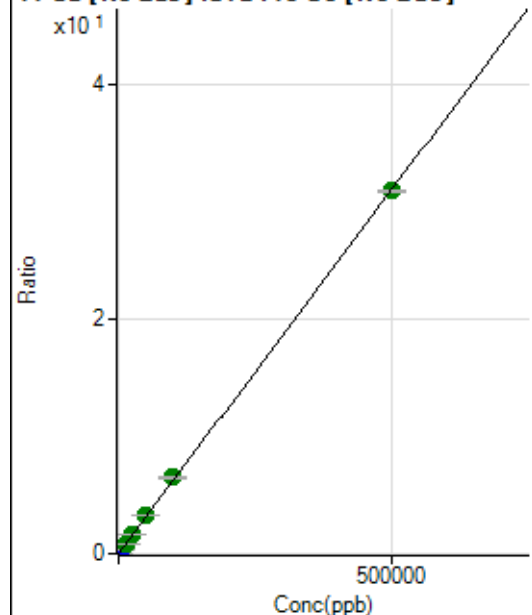
$$R = 1.0000$$

$$DL = 2.857$$

$$BEC = 5.328$$

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	10988.00	0.0009	P	6.4
2	☐	500.000	497.553	409613.79	0.0317	P	0.7
3	☐	5000.000	5234.323	4112190.41	0.3252	P	0.7
4	☐	12500.000	13118.984	9881505.78	0.8137	A	0.3
5	☐	25000.000	26284.213	18303559.78	1.6293	A	0.5
6	☐	50000.000	52643.400	35119959.12	3.2623	A	0.2
7	☐	100000.00	104637.56	71020833.53	6.4836	A	0.6
8	☐	500000.00	498726.12	346994441.0	30.8987	A	0.6

$$y = 6.1953\text{E-}005 * x + 8.9633\text{E-}004$$

$$R = 0.9999$$

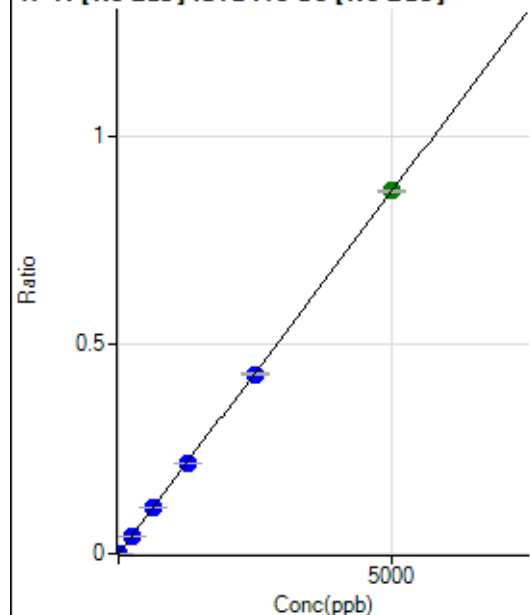
$$DL = 2.799$$

$$BEC = 14.47$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.89	0.0000	P	18.5
2	☐	5.000	5.056	11457.62	0.0009	P	2.9
3	☐	250.000	249.446	546591.17	0.0432	P	0.8
4	☐	625.000	629.729	1325034.50	0.1091	P	0.3
5	☐	1250.000	1244.097	2421342.27	0.2155	P	0.1
6	☐	2500.000	2481.401	4627785.74	0.4299	P	0.2
7	☐	5000.000	5010.212	9507874.08	0.8680	A	0.4
8	☐			2316.94	0.0002	P	8.4

$$y = 1.7324\text{E-}004 * x + 1.1330\text{E-}005$$

$$R = 1.0000$$

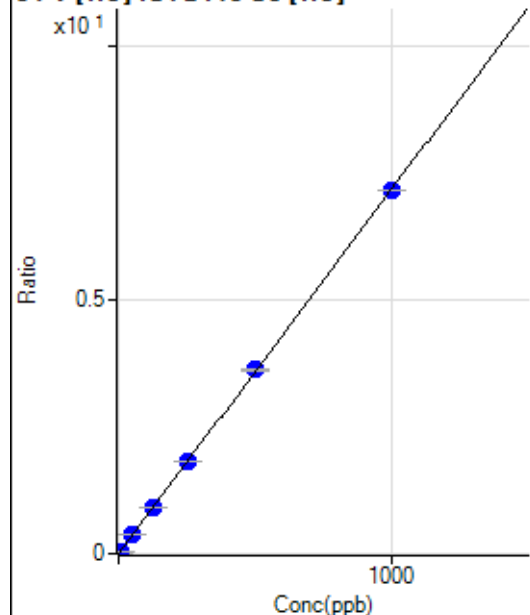
$$DL = 0.03633$$

$$BEC = 0.0654$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	5.165	18240.35	0.0371	P	2.5
3	☐	50.000	50.676	172581.66	0.3643	P	0.6
4	☐	125.000	127.509	402606.08	0.9166	P	0.3
5	☐	250.000	253.353	735634.14	1.8212	P	0.4
6	☐	500.000	505.685	1471401.45	3.6350	P	1.3
7	☐	1000.000	995.971	2953570.72	7.1594	P	0.1
8	☐			1128.95	0.0025	P	5.0

$$y = 0.0072 * x + 4.6872\text{E-}006$$

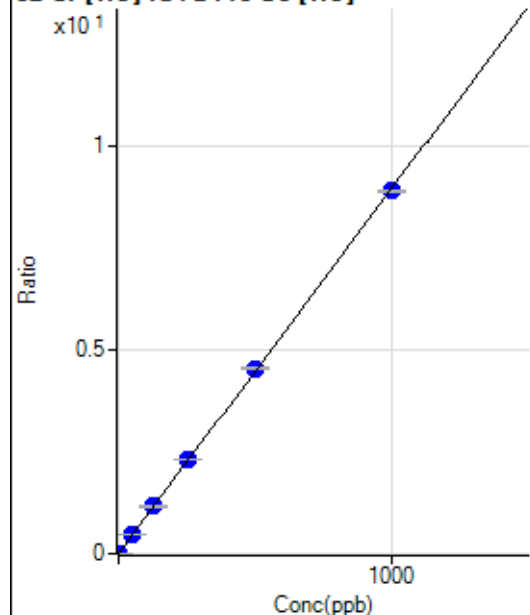
$$R = 1.0000$$

$$DL = 0.001694$$

$$BEC = 0.0006521$$

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	1376.75	0.0029	P	2.5
2	☐	2.000	2.007	10232.56	0.0208	P	1.1
3	☐	50.000	51.621	219811.60	0.4640	P	0.5
4	☐	125.000	129.249	508377.27	1.1574	P	0.9
5	☐	250.000	256.021	924879.13	2.2897	P	0.3
6	☐	500.000	507.097	1834693.72	4.5323	P	0.9
7	☐	1000.000	994.334	3665210.71	8.8843	P	0.4
8	☐			104011.25	0.2312	P	0.6

$$y = 0.0089 * x + 0.0029$$

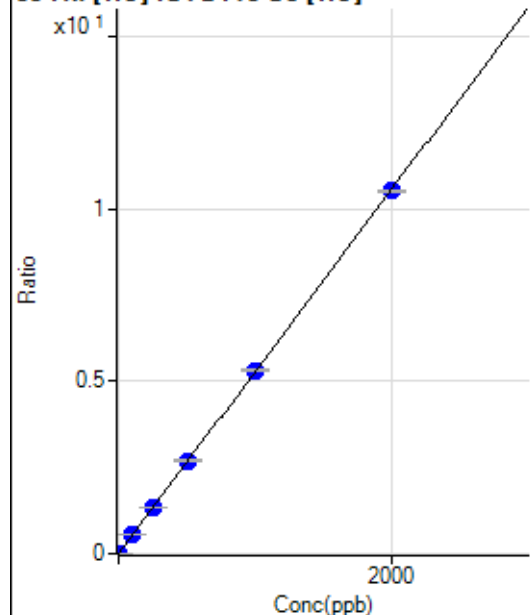
$$R = 0.9999$$

$$DL = 0.0241$$

$$BEC = 0.3256$$

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	234.45	0.0005	P	13.2
2	☐	1.000	0.975	2772.53	0.0056	P	5.5
3	☐	100.000	101.402	253836.54	0.5359	P	1.0
4	☐	250.000	256.320	594635.71	1.3538	P	0.4
5	☐	500.000	510.833	1089594.96	2.6975	P	0.7
6	☐	1000.000	1007.961	2154391.55	5.3221	P	0.9
7	☐	2000.000	1992.451	4339892.12	10.5198	P	0.2
8	☐			18196.97	0.0405	P	0.5

$$y = 0.0053 * x + 4.9527E-004$$

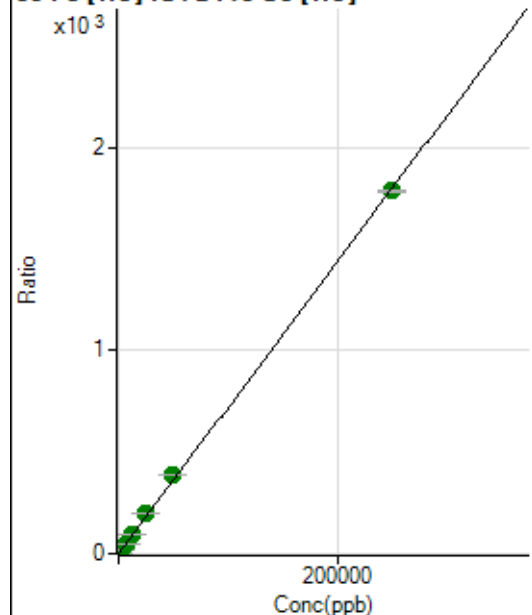
$$R = 1.0000$$

$$DL = 0.03704$$

$$BEC = 0.09381$$

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	3830.24	0.0081	P	1.7
2	☐	50.000	55.479	199527.57	0.4062	P	1.9
3	☐	2500.000	2741.030	9321893.03	19.6787	A	0.9
4	☐	6250.000	6948.559	21907019.24	49.8736	A	0.7
5	☐	12500.000	13824.480	40077210.62	99.2177	A	0.1
6	☐	25000.000	27222.567	79082586.03	195.3674	A	1.2
7	☐	50000.000	53969.801	159785433.2	387.3156	A	0.3
8	☐	250000.00	248897.68	803451869.8	1,786.191	A	0.4

$$y = 0.0072 * x + 0.0081$$

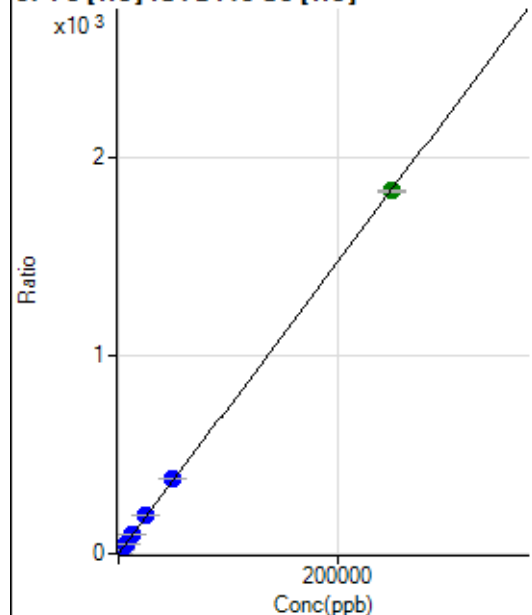
$$R = 0.9998$$

$$DL = 0.05726$$

$$BEC = 1.128$$

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	3657.57	0.0077	P	3.1
2	☐	50.000	54.649	200784.10	0.4088	P	1.8
3	☐	2500.000	2644.451	9196945.16	19.4150	P	0.9
4	☐	6250.000	6703.787	21613749.18	49.2059	P	0.7
5	☐	12500.000	13336.736	39538546.61	97.8842	P	0.1
6	☐	25000.000	26264.736	78027512.98	192.7610	P	1.2
7	☐	50000.000	52060.718	157623097.4	382.0742	P	0.3
8	☐	250000.00	249406.75	823324294.7	1,830.369	A	0.4

$$y = 0.0073 * x + 0.0077$$

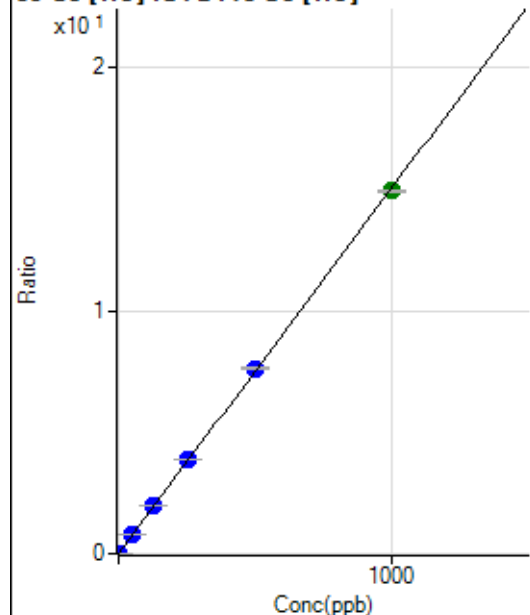
$$R = 1.0000$$

$$DL = 0.09765$$

$$BEC = 1.053$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	101.12	0.0002	P	15.7
2	☐	1.000	1.044	7815.51	0.0159	P	1.5
3	☐	50.000	52.238	372247.52	0.7858	P	0.6
4	☐	125.000	130.908	864829.43	1.9689	P	0.1
5	☐	250.000	259.127	1574174.94	3.8971	P	0.4
6	☐	500.000	507.734	3091032.07	7.6358	P	0.7
7	☐	1000.000	993.001	6160769.77	14.9335	A	0.2
8	☐			11709.29	0.0260	P	3.5

$$y = 0.0150 * x + 2.1364E-004$$

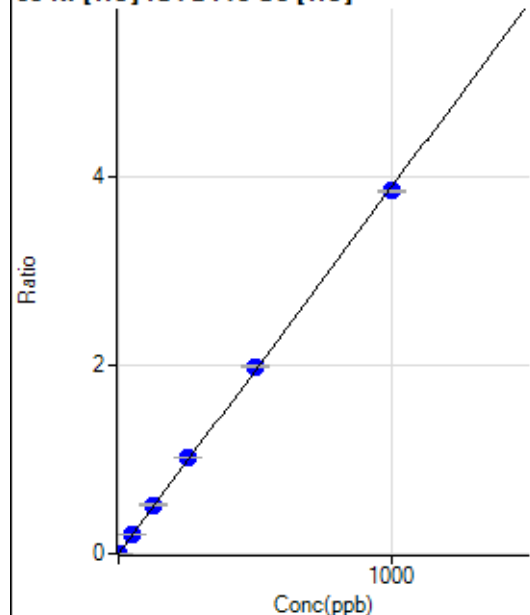
$$R = 0.9999$$

$$DL = 0.006688$$

$$BEC = 0.01421$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0001	P	8.8
2	☐	1.000	1.063	2105.74	0.0043	P	2.2
3	☐	50.000	53.374	98655.63	0.2083	P	1.1
4	☐	125.000	133.571	228845.96	0.5210	P	0.5
5	☐	250.000	262.638	413741.48	1.0243	P	0.1
6	☐	500.000	511.455	807398.07	1.9945	P	0.7
7	☐	1000.000	989.873	1592475.13	3.8601	P	0.5
8	☐			31611.95	0.0703	P	0.4

$$y = 0.0039 * x + 1.4085E-004$$

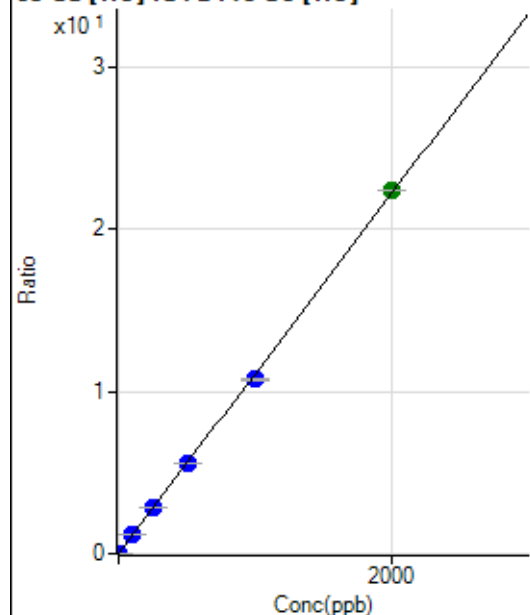
$$R = 0.9998$$

$$DL = 0.009504$$

$$BEC = 0.03612$$

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	811.15	0.0017	P	8.3
2	☐	2.000	1.974	11583.62	0.0236	P	0.4
3	☐	100.000	101.802	535226.85	1.1298	P	0.5
4	☐	250.000	253.857	1236398.87	2.8148	P	0.4
5	☐	500.000	498.706	2232976.48	5.5281	P	0.2
6	☐	1000.000	967.716	4341714.34	10.7254	P	0.7
7	☐	2000.000	2015.893	9216581.18	22.3407	A	0.2
8	☐			16462.80	0.0366	P	0.5

$$y = 0.0111 * x + 0.0017$$

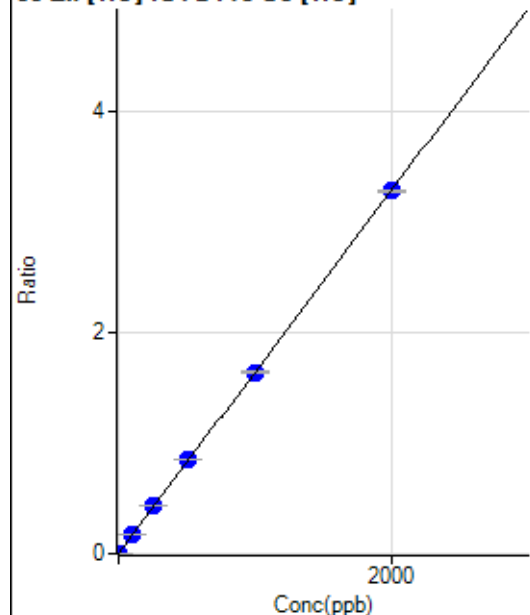
$$R = 0.9998$$

$$DL = 0.0385$$

$$BEC = 0.1546$$

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	971.16	0.0021	P	6.6
2	☐	2.000	2.102	2701.41	0.0055	P	1.6
3	☐	100.000	101.987	80218.95	0.1693	P	0.8
4	☐	250.000	259.341	187758.73	0.4275	P	0.3
5	☐	500.000	513.853	341296.58	0.8449	P	0.2
6	☐	1000.000	996.421	662459.73	1.6365	P	0.8
7	☐	2000.000	1997.059	1352274.06	3.2779	P	0.4
8	☐			19182.81	0.0426	P	0.5

$$y = 0.0016 * x + 0.0021$$

$$R = 1.0000$$

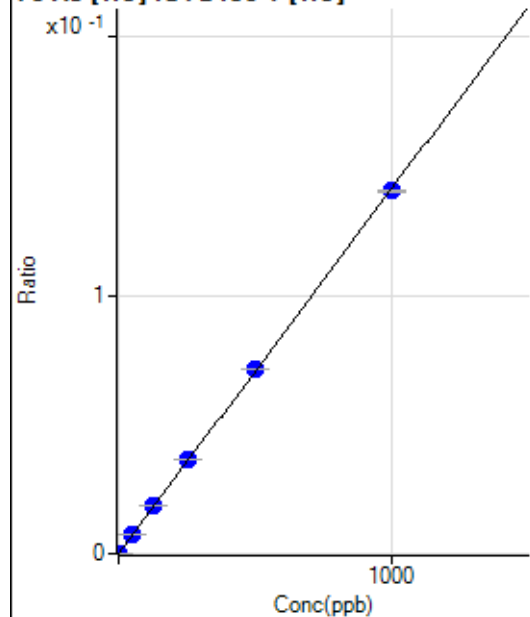
$$DL = 0.2477$$

$$BEC = 1.251$$

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	11.73	0.0000	P	32.7
2	☐	1.000	1.098	496.31	0.0002	P	4.2
3	☐	50.000	52.499	22688.70	0.0074	P	0.3
4	☐	125.000	130.803	53409.21	0.0185	P	0.9
5	☐	250.000	256.855	97671.73	0.0362	P	0.7
6	☐	500.000	505.554	193116.73	0.0713	P	0.3
7	☐	1000.000	994.659	384311.93	0.1403	P	0.2
8	☐			240.13	0.0001	P	3.2

$$y = 1.4104\text{E-}004 * x + 3.8822\text{E-}006$$

$$R = 0.9999$$

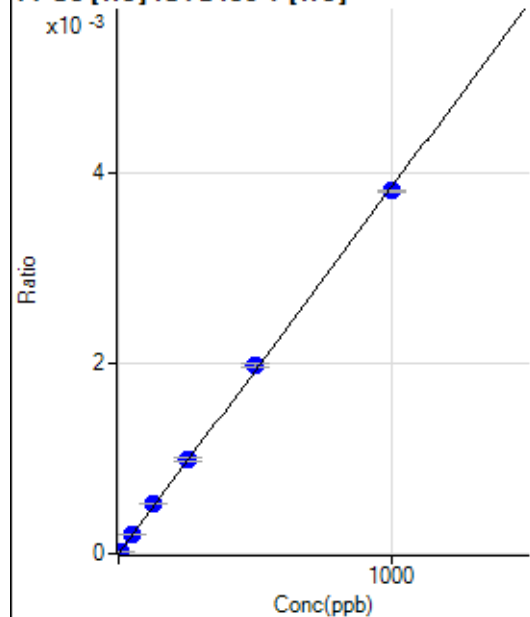
$$DL = 0.027$$

$$BEC = 0.02752$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.880	58.89	0.0000	P	3.6
3	☐	50.000	53.028	626.69	0.0002	P	5.1
4	☐	125.000	136.697	1526.77	0.0005	P	1.3
5	☐	250.000	256.625	2670.29	0.0010	P	5.2
6	☐	500.000	513.056	5361.08	0.0020	P	2.3
7	☐	1000.000	990.203	10466.15	0.0038	P	0.3
8	☐			11.11	0.0000	P	62.2

$$y = 3.8585\text{E-}006 * x + 0.0000\text{E+}000$$

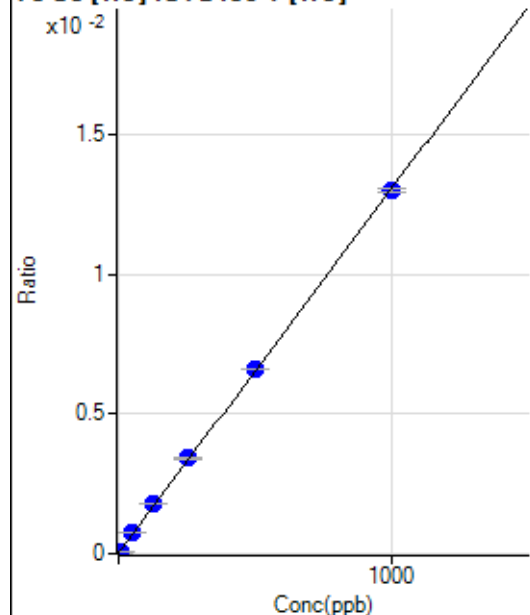
$$R = 0.9998$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	64.20	0.0000	P	18.6
2	☐	5.000	5.596	294.45	0.0001	P	9.1
3	☐	50.000	54.187	2226.12	0.0007	P	1.4
4	☐	125.000	134.583	5133.05	0.0018	P	1.9
5	☐	250.000	260.209	9191.25	0.0034	P	0.7
6	☐	500.000	503.652	17817.82	0.0066	P	0.3
7	☐	1000.000	994.212	35519.33	0.0130	P	1.1
8	☐			73.46	0.0000	P	17.5

$$y = 1.3021\text{E-}005 * x + 2.1260\text{E-}005$$

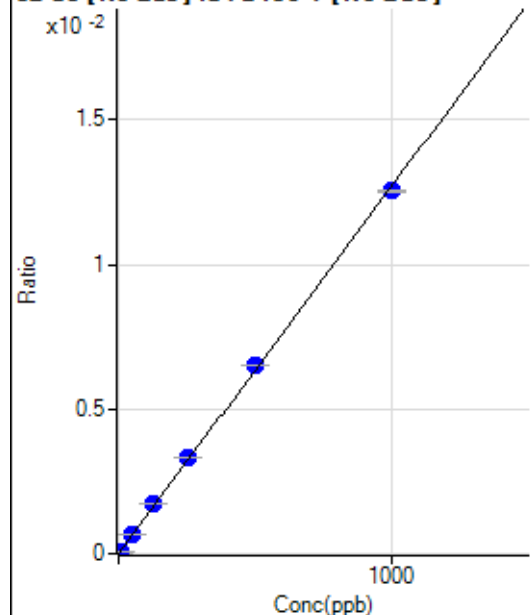
$$R = 0.9999$$

$$DL = 0.9105$$

$$BEC = 1.633$$

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	19.13	0.0000	P	384.
2	☐	5.000	5.440	1785.46	0.0001	P	4.5
3	☐	50.000	53.790	17238.41	0.0007	P	0.4
4	☐	125.000	134.410	42018.63	0.0017	P	0.8
5	☐	250.000	263.834	78316.08	0.0034	P	0.5
6	☐	500.000	513.892	148211.38	0.0065	P	0.8
7	☐	1000.000	988.228	290245.59	0.0125	P	0.6
8	☐			279.31	0.0000	P	12.6

$$y = 1.2698\text{E-}005 * x + 7.7725\text{E-}007$$

$$R = 0.9997$$

$$DL = 0.7062$$

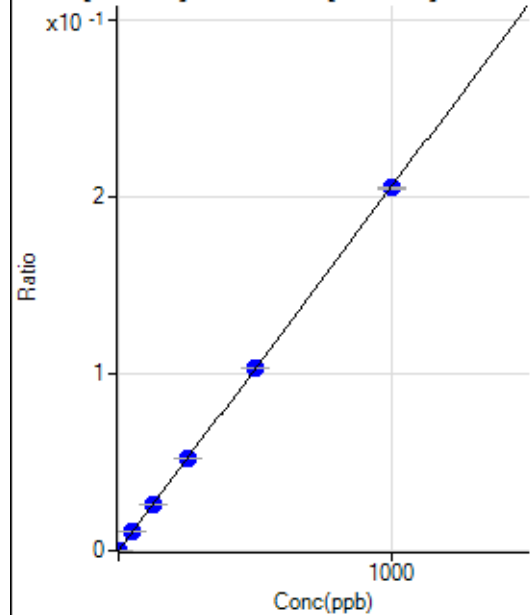
$$BEC = 0.06121$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			716.70		P	6.6
2	☐			737.81		P	2.8
3	☐			686.70		P	14.8
4	☐			714.48		P	11.7
5	☐			677.81		P	5.9
6	☐			633.36		P	4.2
7	☐			655.58		P	5.1
8	☐			698.92		P	3.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1230.66	0.0001	P	8.4
2	☐	1.000	1.010	6601.75	0.0003	P	2.4
3	☐	50.000	50.761	264634.34	0.0105	P	0.6
4	☐	125.000	128.090	649935.94	0.0264	P	0.5
5	☐	250.000	254.525	1225406.22	0.0524	P	0.5
6	☐	500.000	503.257	2353224.90	0.1036	P	0.4
7	☐	1000.000	996.816	4745756.58	0.2052	P	0.5
8	☐			10854.58	0.0005	P	2.1

$$y = 2.0580E-004 * x + 5.0501E-005$$

$$R = 1.0000$$

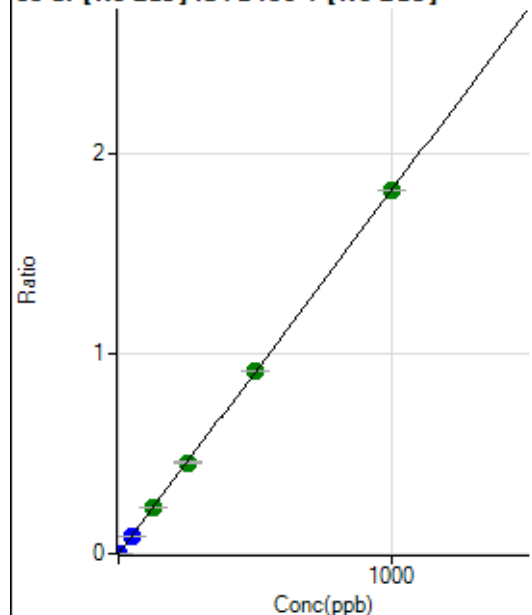
$$DL = 0.06216$$

$$BEC = 0.2454$$

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	205.57	0.0000	P	32.6
2	☐	1.000	0.968	45166.52	0.0018	P	1.2
3	☐	50.000	49.952	2287624.14	0.0907	P	0.3
4	☐	125.000	126.075	5635746.87	0.2290	A	0.3
5	☐	250.000	250.832	10648653.97	0.4556	A	0.6
6	☐	500.000	502.326	20722491.26	0.9125	A	0.8
7	☐	1000.000	998.497	41948702.33	1.8137	A	0.2
8	☐			86225.71	0.0038	P	1.0

$$y = 0.0018 * x + 8.4305E-006$$

$$R = 1.0000$$

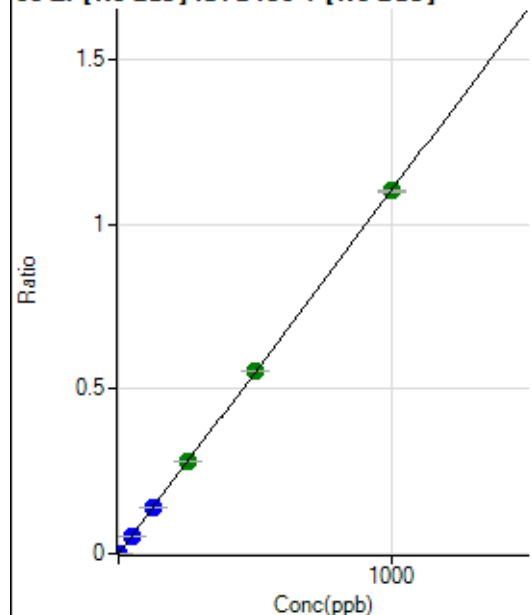
$$DL = 0.004541$$

$$BEC = 0.004641$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1366.80	0.0001	P	10.3
2	☐	1.000	0.846	25284.33	0.0010	P	0.3
3	☐	50.000	49.609	1381023.05	0.0548	P	0.4
4	☐	125.000	125.989	3421415.96	0.1390	P	0.2
5	☐	250.000	252.051	6499410.69	0.2781	A	0.4
6	☐	500.000	501.399	12562233.96	0.5531	A	0.3
7	☐	1000.000	998.684	25480561.51	1.1017	A	0.5
8	☐			6754.65	0.0003	P	2.1

$$y = 0.0011 * x + 5.6084E-005$$

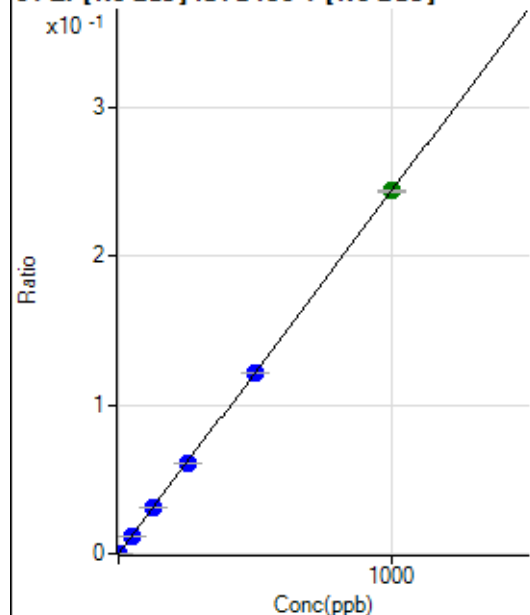
$$R = 1.0000$$

$$DL = 0.01564$$

$$BEC = 0.05084$$

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	230.56	0.0000	P	16.3
2	☐	1.000	0.857	5579.08	0.0002	P	8.6
3	☐	50.000	49.773	305933.55	0.0121	P	0.6
4	☐	125.000	126.503	758660.06	0.0308	P	0.2
5	☐	250.000	250.786	1428206.82	0.0611	P	0.1
6	☐	500.000	498.505	2758401.47	0.1215	P	0.4
7	☐	1000.000	1000.375	5637102.43	0.2437	A	0.2
8	☐			1547.38	0.0001	P	4.4

$$y = 2.4363\text{E-}004 * x + 9.4590\text{E-}006$$

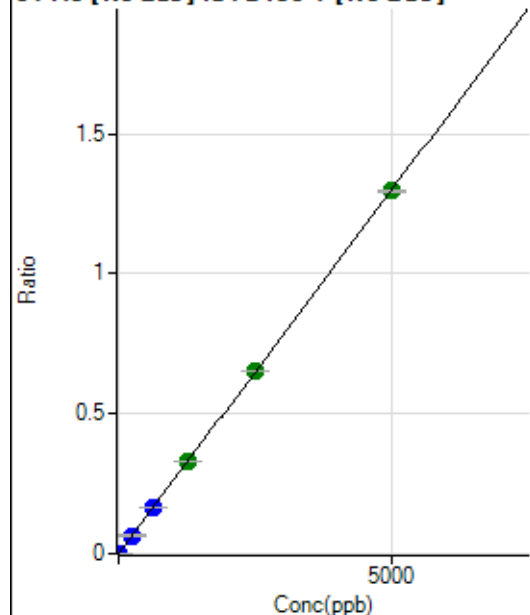
$$R = 1.0000$$

$$DL = 0.01897$$

$$BEC = 0.03883$$

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	491.70	0.0000	P	5.9
2	☐	5.000	4.955	33392.83	0.0013	P	2.6
3	☐	250.000	250.566	1640365.01	0.0651	P	1.2
4	☐	625.000	631.830	4036917.71	0.1640	P	0.7
5	☐	1250.000	1258.217	7634388.28	0.3267	A	0.3
6	☐	2500.000	2513.201	14817480.71	0.6524	A	0.7
7	☐	5000.000	4990.463	29964120.81	1.2955	A	0.6
8	☐			19558.58	0.0009	P	0.5

$$y = 2.5960\text{E-}004 * x + 2.0179\text{E-}005$$

$$R = 1.0000$$

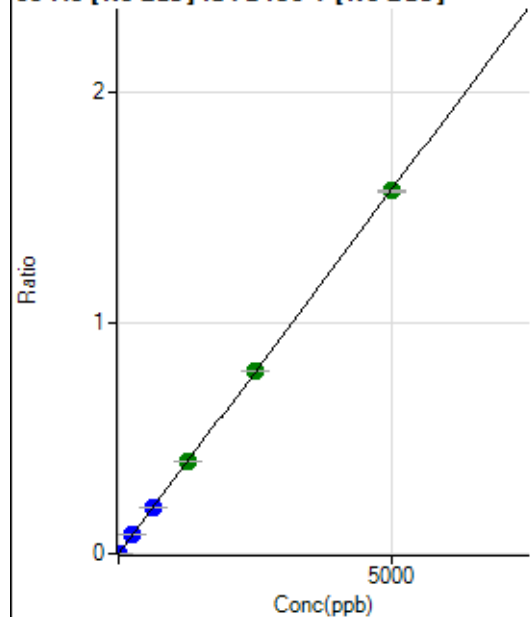
$$DL = 0.01372$$

$$BEC = 0.07773$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.89	0.0000	P	14.7
2	☐	5.000	5.192	41990.75	0.0016	P	0.8
3	☐	250.000	251.561	2002177.19	0.0794	P	0.2
4	☐	625.000	636.625	4945812.05	0.2010	P	0.2
5	☐	1250.000	1262.710	9316446.39	0.3986	A	0.7
6	☐	2500.000	2516.971	18045595.37	0.7946	A	0.3
7	☐	5000.000	4986.805	36410954.29	1.5743	A	0.3
8	☐			29734.52	0.0013	P	0.4

$$y = 3.1569\text{E-}004 * x + 3.6499\text{E-}006$$

$$R = 1.0000$$

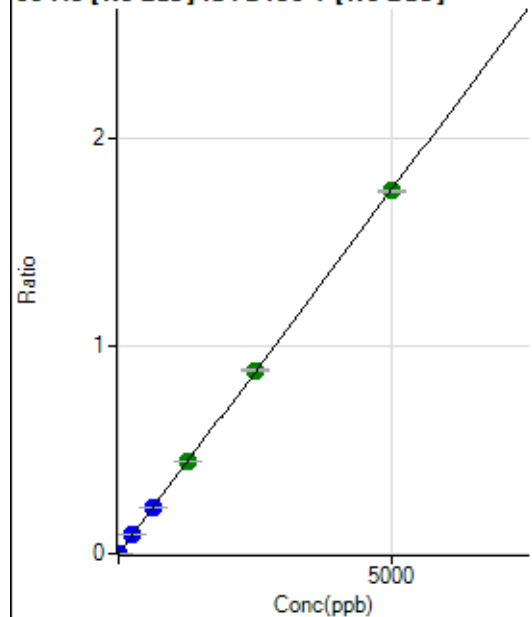
$$DL = 0.005104$$

$$BEC = 0.01156$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	25.2
2	☐	5.000	5.153	46214.88	0.0018	P	1.1
3	☐	250.000	252.167	2223880.97	0.0882	P	0.5
4	☐	625.000	634.068	5458129.11	0.2218	P	0.3
5	☐	1250.000	1257.940	10284212.82	0.4400	A	0.1
6	☐	2500.000	2520.982	20027055.48	0.8818	A	0.6
7	☐	5000.000	4986.282	40340236.67	1.7442	A	0.5
8	☐			39920.89	0.0018	P	1.4

$$y = 3.4980\text{E-}004 * x + 5.4742\text{E-}006$$

$$R = 1.0000$$

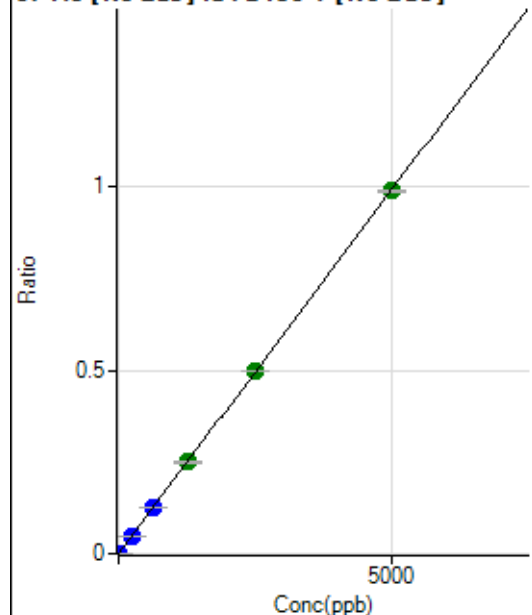
$$DL = 0.01184$$

$$BEC = 0.01565$$

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	47.22	0.0000	P	36.7
2	☐	5.000	5.067	25696.23	0.0010	P	2.0
3	☐	250.000	249.971	1248062.71	0.0495	P	0.4
4	☐	625.000	629.790	3069235.25	0.1247	P	0.5
5	☐	1250.000	1258.727	5825911.80	0.2493	A	0.6
6	☐	2500.000	2517.356	11321931.33	0.4985	A	0.4
7	☐	5000.000	4988.543	22848916.48	0.9879	A	0.7
8	☐			18629.46	0.0008	P	1.8

$$y = 1.9804\text{E-}004 * x + 1.9379\text{E-}006$$

$$R = 1.0000$$

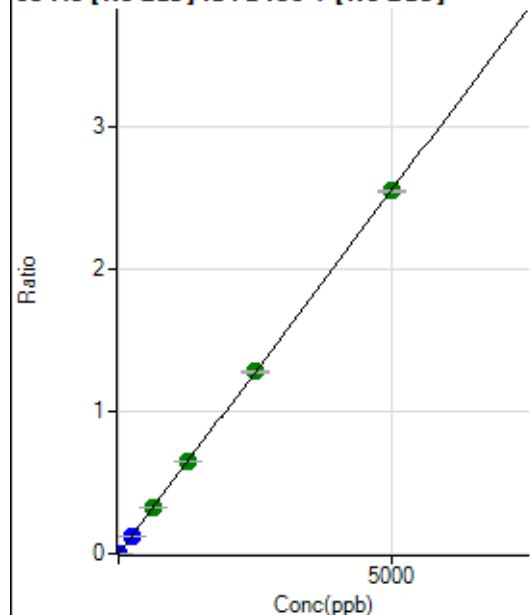
$$DL = 0.01079$$

$$BEC = 0.009786$$

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	169.45	0.0000	P	41.3
2	☐	5.000	5.217	68172.52	0.0027	P	1.6
3	☐	250.000	250.716	3223297.27	0.1279	P	0.4
4	☐	625.000	627.946	7880169.36	0.3202	A	0.3
5	☐	1250.000	1257.914	14992134.02	0.6415	A	0.1
6	☐	2500.000	2509.681	29064669.75	1.2798	A	0.8
7	☐	5000.000	4992.777	58885238.81	2.5460	A	0.5
8	☐			46799.84	0.0021	P	1.0

$$y = 5.0994\text{E-}004 * x + 6.9552\text{E-}006$$

$$R = 1.0000$$

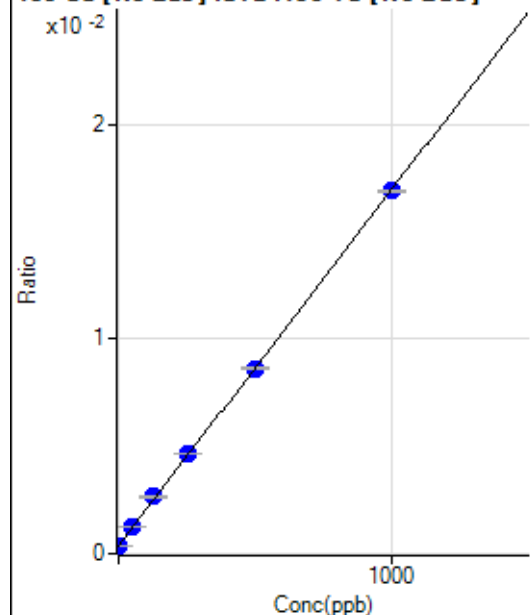
$$DL = 0.01689$$

$$BEC = 0.01364$$

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	10115.10	0.0004	P	2.3
2	☐	1.000	0.082	10626.65	0.0004	P	4.3
3	☐	50.000	54.964	36278.15	0.0013	P	0.8
4	☐	125.000	137.291	74655.70	0.0026	P	1.7
5	☐	250.000	260.168	130376.25	0.0047	P	0.5
6	☐	500.000	496.941	237301.41	0.0086	P	1.1
7	☐	1000.000	997.204	473290.36	0.0169	P	0.8
8	☐			9044.91	0.0003	P	0.1

$$y = 1.6573\text{E-}005 * x + 3.7404\text{E-}004$$

$$R = 0.9999$$

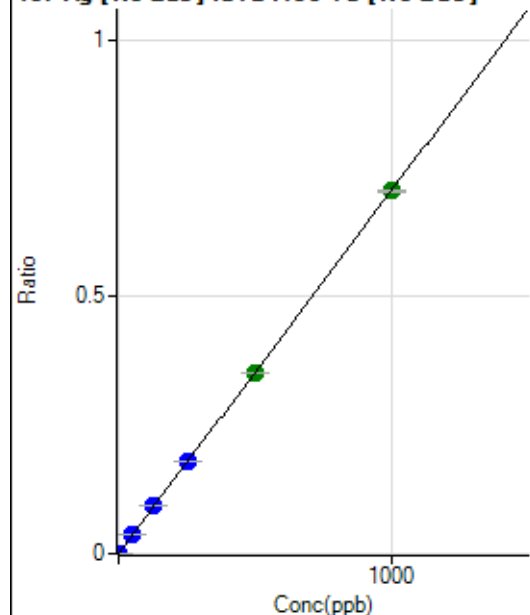
$$DL = 1.584$$

$$BEC = 22.57$$

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	205.56	0.0000	P	42.1
2	☐	1.000	1.106	22332.30	0.0008	P	2.2
3	☐	50.000	54.707	1090938.94	0.0386	P	0.4
4	☐	125.000	134.512	2676830.51	0.0950	P	0.5
5	☐	250.000	253.697	4984918.55	0.1792	P	0.3
6	☐	500.000	497.142	9676393.62	0.3511	A	0.7
7	☐	1000.000	999.080	19758253.74	0.7056	A	0.6
8	☐			2772.62	0.0001	P	2.0

$$y = 7.0620\text{E-}004 * x + 7.5919\text{E-}006$$

$$R = 0.9999$$

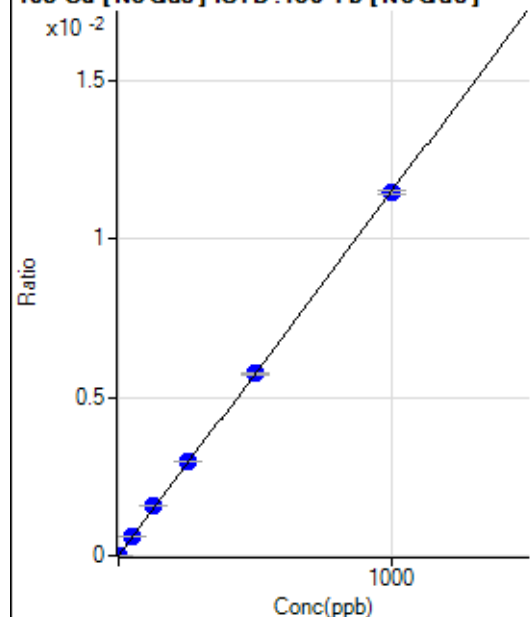
$$DL = 0.01359$$

$$BEC = 0.01075$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	31.94	0.0000	P	60.5
2	☐	1.000	1.130	401.41	0.0000	P	6.6
3	☐	50.000	53.940	17552.79	0.0006	P	2.2
4	☐	125.000	137.306	44543.75	0.0016	P	0.3
5	☐	250.000	259.337	83043.06	0.0030	P	0.4
6	☐	500.000	499.211	158321.07	0.0057	P	0.7
7	☐	1000.000	996.325	321018.30	0.0115	P	0.9
8	☐			66.67	0.0000	P	22.6

$$y = 1.1505\text{E-}005 * x + 1.1820\text{E-}006$$

$$R = 0.9999$$

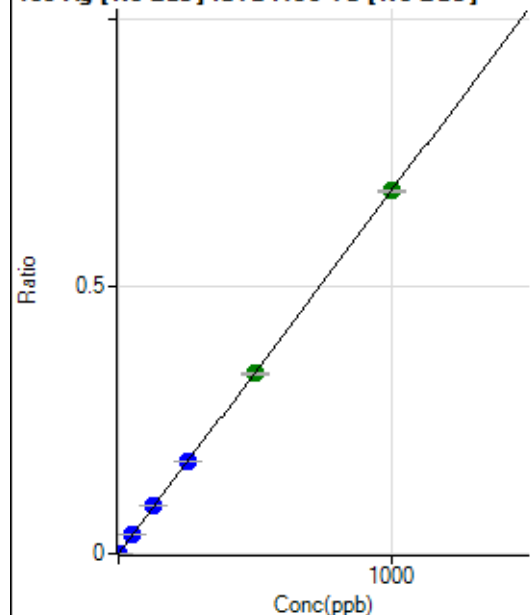
$$DL = 0.1864$$

$$BEC = 0.1027$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	83.33	0.0000	P	65.9
2	☐	1.000	1.089	20985.70	0.0007	P	1.7
3	☐	50.000	54.426	1041492.24	0.0369	P	0.2
4	☐	125.000	134.540	2569450.36	0.0912	P	0.5
5	☐	250.000	252.699	4765170.33	0.1713	P	0.3
6	☐	500.000	496.358	9271627.20	0.3364	A	1.0
7	☐	1000.000	999.733	18974794.52	0.6776	A	0.5
8	☐			2500.33	0.0001	P	2.1

$$y = 6.7776\text{E-}004 * x + 3.0882\text{E-}006$$

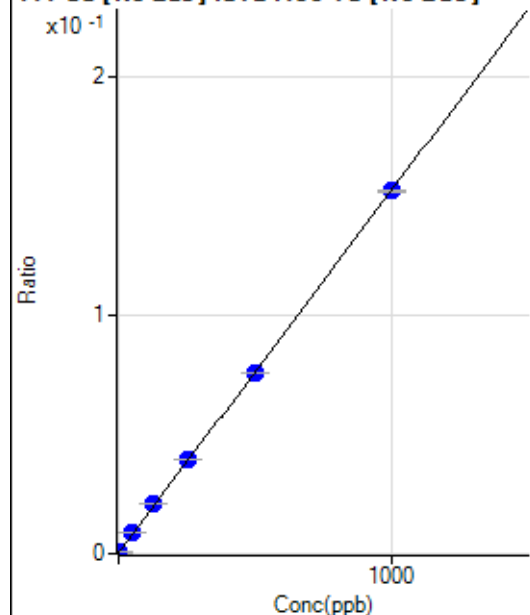
$$R = 0.9999$$

$$DL = 0.009012$$

$$BEC = 0.004556$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7092.94	0.0003	P	2.4
2	☐	1.000	0.988	11679.33	0.0004	P	2.4
3	☐	50.000	54.485	241327.23	0.0085	P	0.7
4	☐	125.000	134.916	585507.97	0.0208	P	0.7
5	☐	250.000	258.995	1103102.59	0.0396	P	0.7
6	☐	500.000	495.640	2084591.64	0.0756	P	0.1
7	☐	1000.000	998.467	4259390.06	0.1521	P	0.8
8	☐			7134.82	0.0003	P	0.2

$$y = 1.5207\text{E-}004 * x + 2.6229\text{E-}004$$

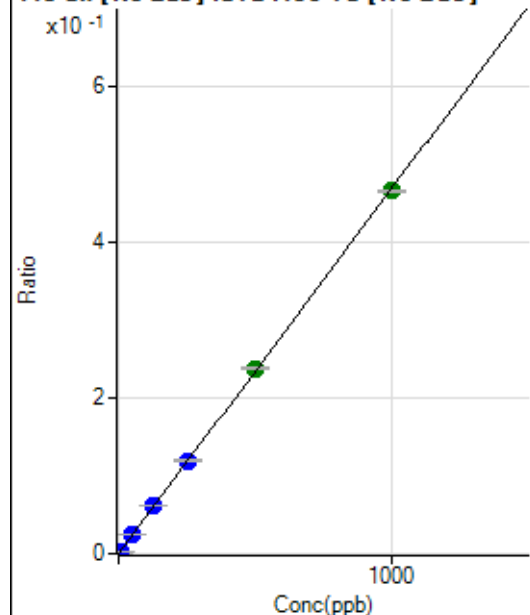
$$R = 0.9999$$

$$DL = 0.1237$$

$$BEC = 1.725$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2622.59	0.0001	P	6.3
2	☐	5.000	5.384	74101.42	0.0026	P	1.4
3	☐	50.000	53.014	703505.46	0.0249	P	0.7
4	☐	125.000	131.625	1739271.50	0.0617	P	0.4
5	☐	250.000	254.669	3320263.59	0.1193	P	0.8
6	☐	500.000	507.061	6545712.30	0.2375	A	1.0
7	☐	1000.000	994.322	13039650.12	0.4656	A	0.7
8	☐			7799.68	0.0003	P	3.5

$$y = 4.6820\text{E-}004 * x + 9.6984\text{E-}005$$

$$R = 0.9999$$

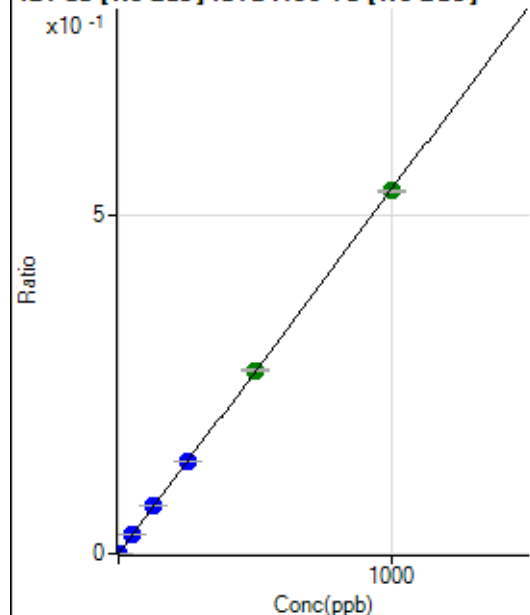
$$DL = 0.03928$$

$$BEC = 0.2071$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	33.3
2	☐	2.000	1.989	30386.50	0.0011	P	1.1
3	☐	50.000	52.064	789936.23	0.0280	P	0.9
4	☐	125.000	130.779	1980174.89	0.0703	P	0.4
5	☐	250.000	254.585	3806008.77	0.1368	P	0.4
6	☐	500.000	503.890	7462058.85	0.2708	A	0.7
7	☐	1000.000	996.083	14987898.25	0.5352	A	0.7
8	☐			14249.41	0.0005	P	5.0

$$y = 5.3732\text{E-}004 * x + 4.6211\text{E-}006$$

$$R = 1.0000$$

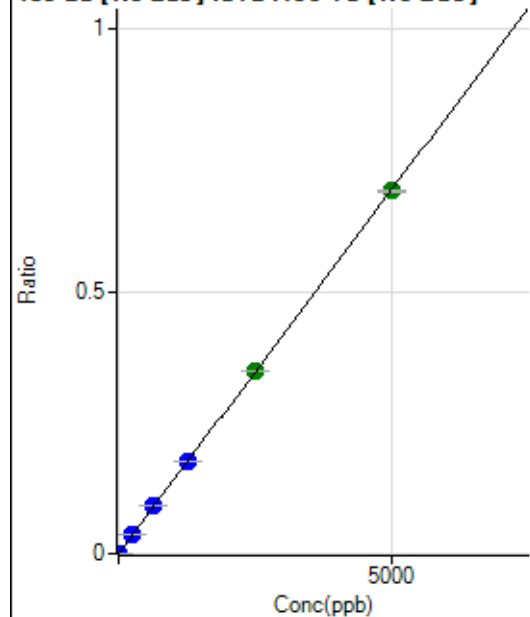
$$DL = 0.008601$$

$$BEC = 0.0086$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0000	P	71.6
2	☐	10.000	10.485	41220.77	0.0015	P	0.7
3	☐	250.000	259.779	1017532.60	0.0360	P	0.1
4	☐	625.000	652.118	2549262.43	0.0905	P	0.3
5	☐	1250.000	1267.355	4891922.85	0.1758	P	0.3
6	☐	2500.000	2508.198	9590323.48	0.3480	A	0.4
7	☐	5000.000	4987.683	19377117.97	0.6920	A	0.8
8	☐			3625.65	0.0001	P	9.7

$$y = 1.3873\text{E-}004 * x + 1.5369\text{E-}006$$

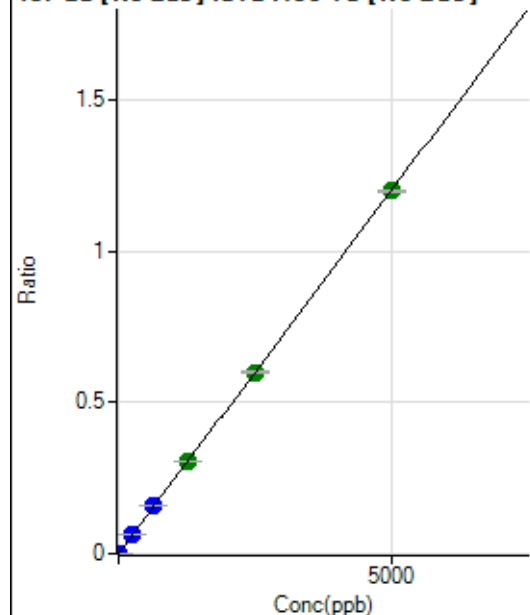
$$R = 1.0000$$

$$DL = 0.02378$$

$$BEC = 0.01108$$

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	58.34	0.0000	P	42.9
2	☐	10.000	10.454	71269.71	0.0025	P	0.2
3	☐	250.000	260.201	1767777.97	0.0626	P	1.1
4	☐	625.000	650.625	4411429.83	0.1566	P	0.6
5	☐	1250.000	1272.026	8516061.91	0.3061	A	0.6
6	☐	2500.000	2497.310	16561929.88	0.6009	A	0.7
7	☐	5000.000	4992.124	33639553.18	1.2013	A	0.6
8	☐			5926.53	0.0002	P	3.1

$$y = 2.4063E-004 * x + 2.1564E-006$$

$$R = 1.0000$$

$$DL = 0.01153$$

$$BEC = 0.008961$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	34.6
2	☐			15.56		P	65.5
3	☐			84.45		P	36.5
4	☐			164.45		P	32.8
5	☐			326.68		P	5.4
6	☐			642.26		P	14.0
7	☐			1329.00		P	4.6
8	☐			186.67		P	21.7

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	78.1
2	☐			7.78		P	24.7
3	☐			6.67		P	50.0
4	☐			13.33		P	25.0
5	☐			28.89		P	13.3
6	☐			63.33		P	32.9
7	☐			110.00		P	3.0
8	☐			58.89		P	21.4

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			72.23		P	13.3
2	☐			50.00		P	33.3
3	☐			66.67		P	12.5
4	☐			66.67		P	21.7
5	☐			116.67		P	12.4
6	☐			183.34		P	24.1
7	☐			322.24		P	14.7
8	☐			752.83		P	10.8

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.00		P	80.1
2	☐			27.78		P	38.6
3	☐			43.33		P	35.3
4	☐			67.78		P	15.0
5	☐			92.22		P	13.7
6	☐			166.67		P	12.5
7	☐			312.23		P	8.9
8	☐			333.34		P	12.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			161.12		P	11.9
2	☐			133.34		P	34.8
3	☐			188.90		P	31.9
4	☐			230.57		P	13.7
5	☐			166.68		P	13.2
6	☐			161.12		P	20.9
7	☐			244.46		P	25.8
8	☐			805.61		P	0.6

160 Gd [He] No available calibration points

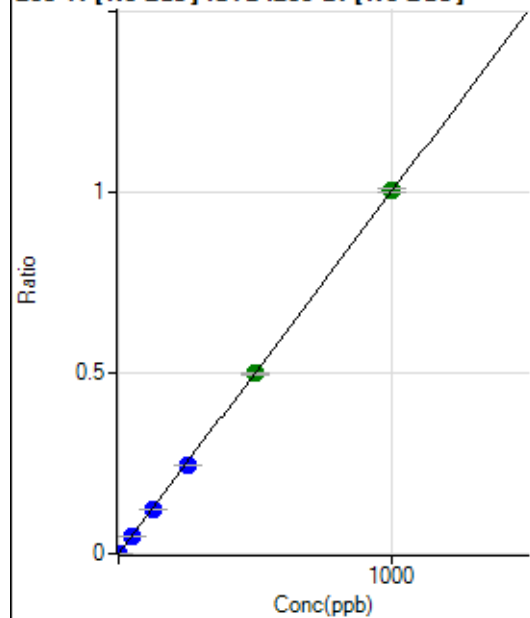
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			362.24		P	10.7
2	☐			351.12		P	4.5
3	☐			354.46		P	11.0
4	☐			362.24		P	16.0
5	☐			314.46		P	27.6
6	☐			315.57		P	17.4
7	☐			344.46		P	9.9
8	☐			684.47		P	2.5

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			136.12		P	3.5
2	☐			111.12		P	35.4
3	☐			147.23		P	19.9
4	☐			127.78		P	39.3
5	☐			147.23		P	3.3
6	☐			175.01		P	4.8
7	☐			166.68		P	17.3
8	☐			188.90		P	17.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			76.67		P	27.2
2	☐			70.00		P	17.2
3	☐			88.89		P	13.2
4	☐			105.56		P	39.5
5	☐			78.89		P	31.7
6	☐			86.67		P	3.8
7	☐			120.00		P	0.0
8	☐			107.78		P	12.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	838.96	0.0000	P	8.0
2	☐	1.000	0.906	17022.60	0.0010	P	3.9
3	☐	50.000	48.802	860973.22	0.0489	P	0.6
4	☐	125.000	123.802	2190065.91	0.1241	P	0.9
5	☐	250.000	245.603	4306627.66	0.2461	P	1.0
6	☐	500.000	497.823	8549659.39	0.4987	A	0.5
7	☐	1000.000	1002.398	17016895.17	1.0041	A	1.2
8	☐			7291.22	0.0005	P	1.1

$$y = 0.0010 * x + 4.9928E-005$$

$$R = 1.0000$$

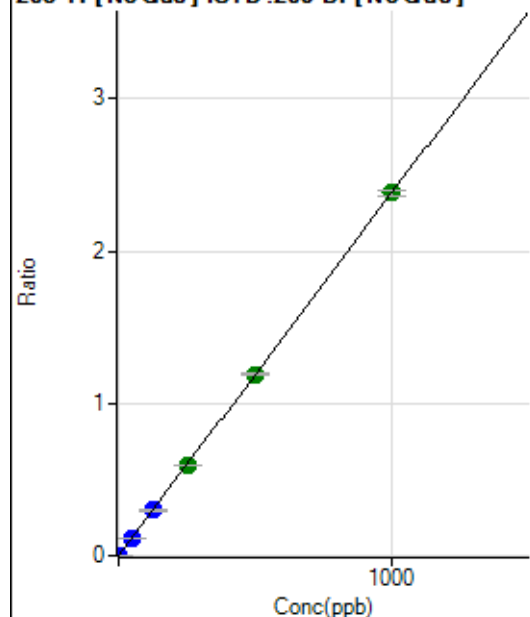
$$DL = 0.01198$$

$$BEC = 0.04985$$

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	1736.31	0.0001	P	3.2
2	☐	1.000	0.932	41273.56	0.0023	P	2.3
3	☐	50.000	48.880	2049160.96	0.1165	P	0.8
4	☐	125.000	124.839	5248326.72	0.2973	P	0.5
5	☐	250.000	247.615	10318118.03	0.5895	A	0.3
6	☐	500.000	499.350	20380542.64	1.1888	A	1.1
7	☐	1000.000	1000.997	40384989.10	2.3829	A	1.3
8	☐			17309.18	0.0012	P	3.1

$$y = 0.0024 * x + 1.0331E-004$$

$$R = 1.0000$$

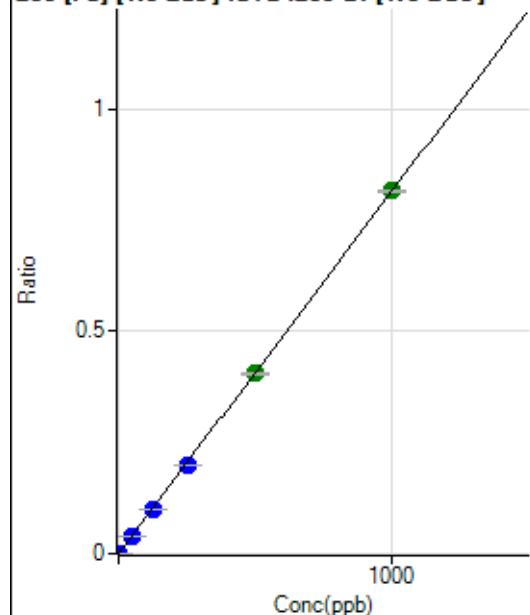
$$DL = 0.004221$$

$$BEC = 0.0434$$

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	1759.43	0.0001	P	8.6
2	☐	1.000	0.939	15440.85	0.0009	P	1.9
3	☐	50.000	48.733	699577.82	0.0398	P	0.4
4	☐	125.000	123.567	1776923.64	0.1006	P	0.4
5	☐	250.000	245.049	3491702.16	0.1995	P	0.2
6	☐	500.000	497.497	6941928.80	0.4049	A	0.7
7	☐	1000.000	1002.732	13830023.22	0.8160	A	0.8
8	☐			43149.91	0.0030	P	1.6

$$y = 8.1368E-004 * x + 1.0465E-004$$

$$R = 1.0000$$

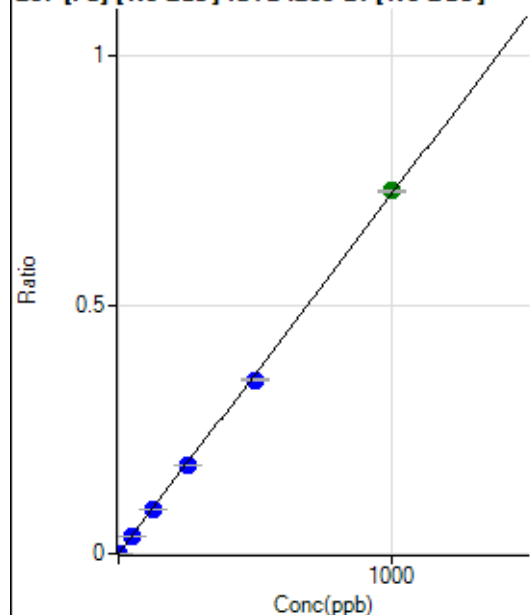
$$DL = 0.03315$$

$$BEC = 0.1286$$

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	1637.19	0.0001	P	9.7
2	☐	1.000	0.921	13564.64	0.0008	P	2.5
3	☐	50.000	48.599	619703.40	0.0352	P	0.9
4	☐	125.000	123.147	1572935.79	0.0891	P	0.7
5	☐	250.000	245.009	3100753.43	0.1772	P	0.4
6	☐	500.000	483.702	5994689.14	0.3497	P	1.2
7	☐	1000.000	1009.699	12369116.48	0.7298	A	0.2
8	☐			39247.49	0.0027	P	1.5

$$y = 7.2268\text{E-}004 * x + 9.7378\text{E-}005$$

R = 0.9998

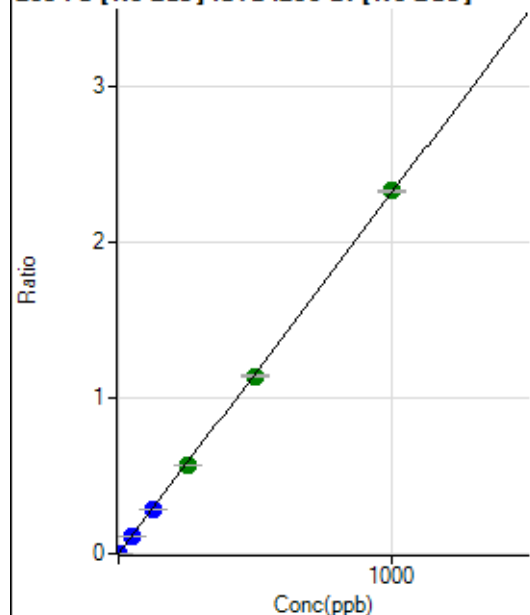
DL = 0.0394

BEC = 0.1347

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5969.25	0.0004	P	5.1
2	☐	1.000	0.935	44774.86	0.0025	P	0.8
3	☐	50.000	48.688	1988827.76	0.1130	P	0.8
4	☐	125.000	123.032	5032925.43	0.2851	P	0.1
5	☐	250.000	245.898	9965695.87	0.5694	A	0.2
6	☐	500.000	492.215	19534696.12	1.1394	A	0.6
7	☐	1000.000	1005.230	39434073.42	2.3266	A	0.2
8	☐			168832.64	0.0116	P	0.5

$$y = 0.0023 * x + 3.5508\text{E-}004$$

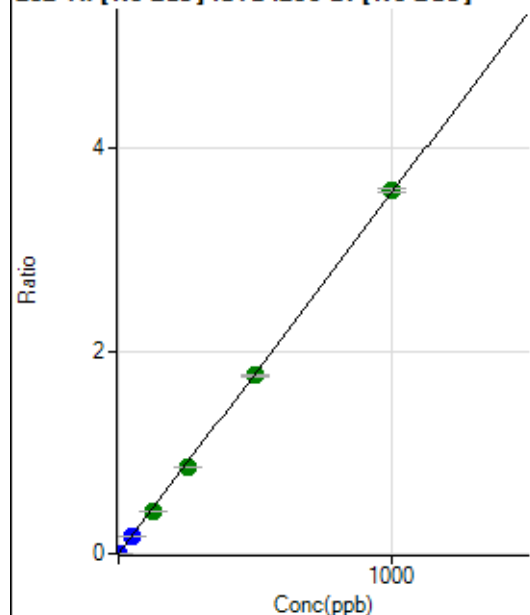
R = 0.9999

DL = 0.02344

BEC = 0.1534

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	2370.67	0.0001	P	6.6
2	☐	1.000	0.776	51576.19	0.0029	P	1.6
3	☐	50.000	46.180	2892625.79	0.1644	P	0.8
4	☐	125.000	118.040	7414846.63	0.4200	A	0.2
5	☐	250.000	241.324	15025606.01	0.8585	A	0.2
6	☐	500.000	494.272	30142837.02	1.7582	A	0.8
7	☐	1000.000	1006.094	60650726.36	3.5786	A	1.1
8	☐			11620.30	0.0008	P	2.5

$$y = 0.0036 * x + 1.4104E-004$$

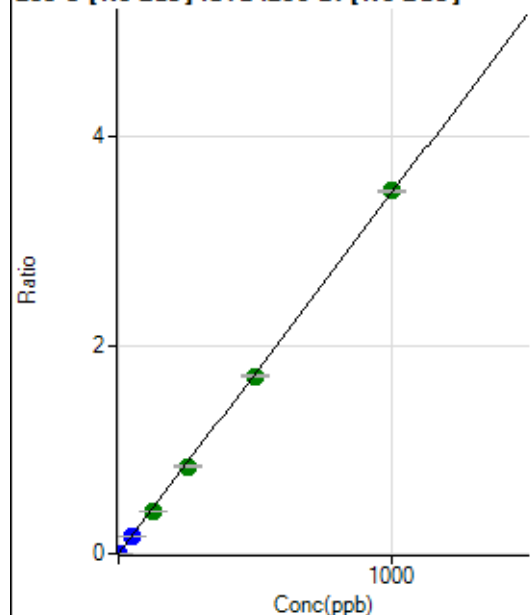
$$R = 0.9999$$

$$DL = 0.007866$$

$$BEC = 0.03965$$

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	2139.15	0.0001	P	5.3
2	☐	1.000	0.875	55999.24	0.0031	P	1.0
3	☐	50.000	46.946	2856907.51	0.1624	P	0.5
4	☐	125.000	119.064	7266341.39	0.4116	A	0.5
5	☐	250.000	242.555	14672872.03	0.8383	A	0.4
6	☐	500.000	492.116	29158379.47	1.7008	A	0.9
7	☐	1000.000	1006.698	58964347.15	3.4790	A	0.6
8	☐			8661.54	0.0006	P	3.7

$$y = 0.0035 * x + 1.2729E-004$$

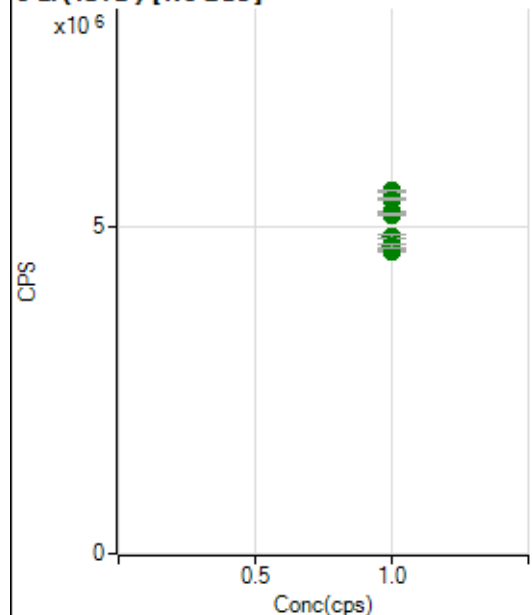
$$R = 0.9999$$

$$DL = 0.005857$$

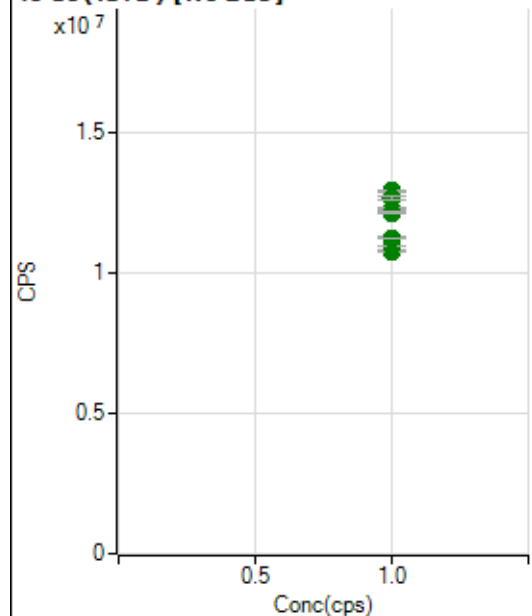
$$BEC = 0.03683$$

Weight: <None>

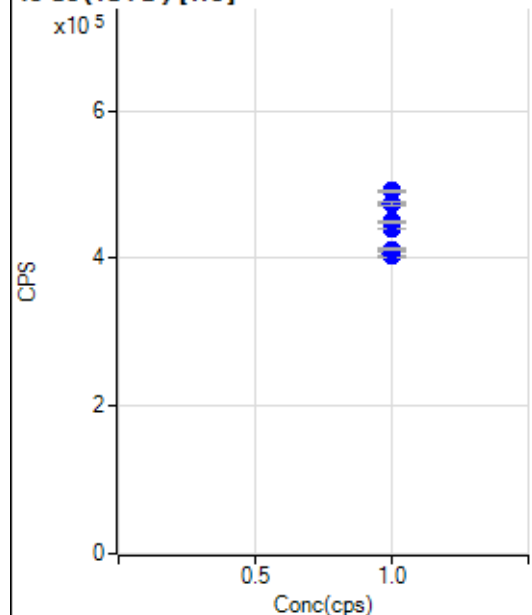
Min Conc: 0

6 Li (ISTD) [No Gas]

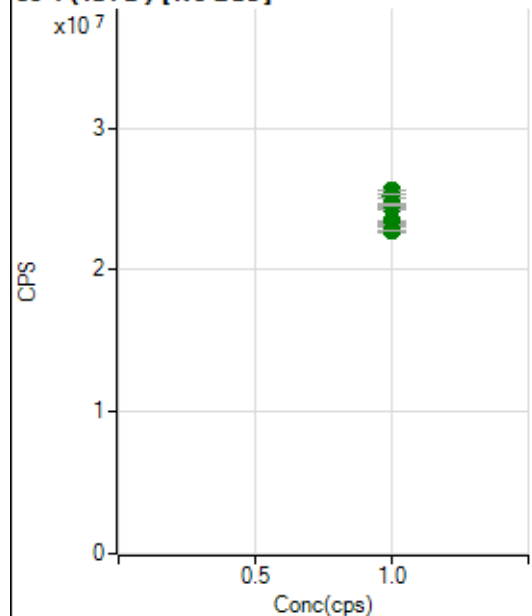
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5229391.42		A	0.6
2	☐	1.000		5552141.86		A	0.6
3	☐	1.000		5428257.98		A	0.6
4	☐	1.000		5190740.83		A	0.7
5	☐	1.000		4851447.70		A	1.0
6	☐	1.000		4624886.73		A	0.6
7	☐	1.000		4673075.52		A	0.6
8	☐	1.000		4712421.88		A	1.3

45 Sc (ISTD) [No Gas]

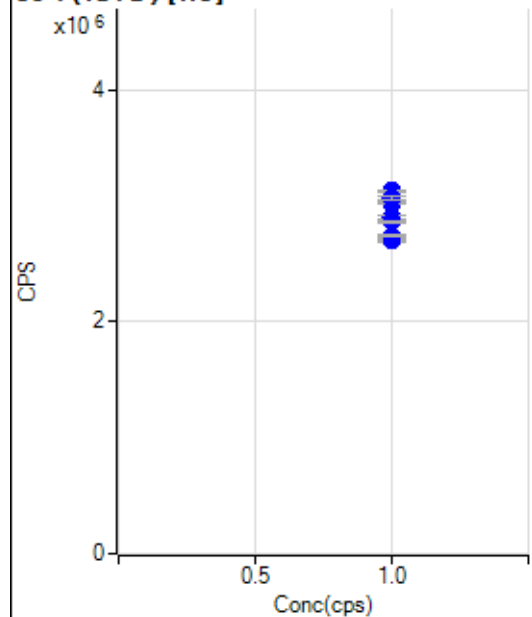
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12261060.52		A	0.4
2	☐	1.000		12912923.72		A	0.2
3	☐	1.000		12645935.53		A	0.9
4	☐	1.000		12144561.04		A	0.8
5	☐	1.000		11234122.91		A	0.6
6	☐	1.000		10765380.88		A	0.7
7	☐	1.000		10954225.33		A	0.6
8	☐	1.000		11229970.39		A	0.2

45 Sc (ISTD) [He]

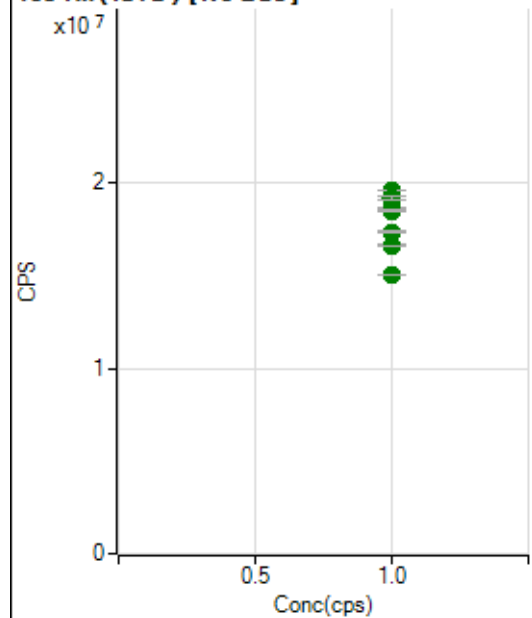
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		473355.16		P	0.1
2	☐	1.000		491166.36		P	0.6
3	☐	1.000		473739.56		P	1.3
4	☐	1.000		439248.68		P	0.2
5	☐	1.000		403932.38		P	0.2
6	☐	1.000		404830.70		P	1.3
7	☐	1.000		412546.25		P	0.1
8	☐	1.000		449815.51		P	0.7

89 Y (ISTD) [No Gas]

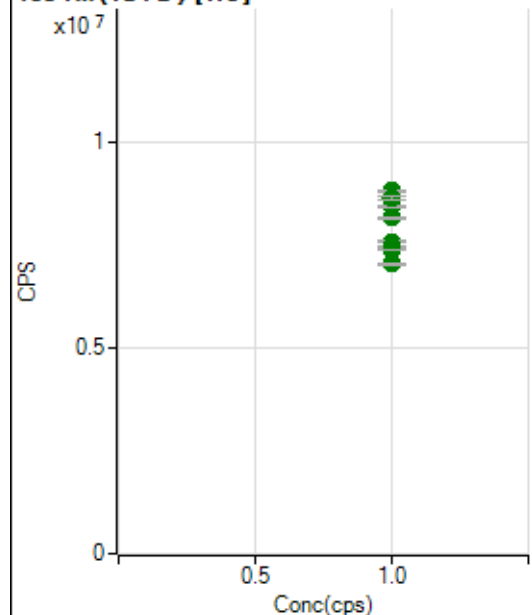
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		24365047.14		A	0.4
2	☐	1.000		25559557.12		A	0.1
3	☐	1.000		25210071.85		A	0.8
4	☐	1.000		24608423.24		A	0.4
5	☐	1.000		23371729.93		A	0.7
6	☐	1.000		22710540.50		A	0.3
7	☐	1.000		23128552.43		A	0.3
8	☐	1.000		22780562.99		A	0.4

89 Y (ISTD) [He]

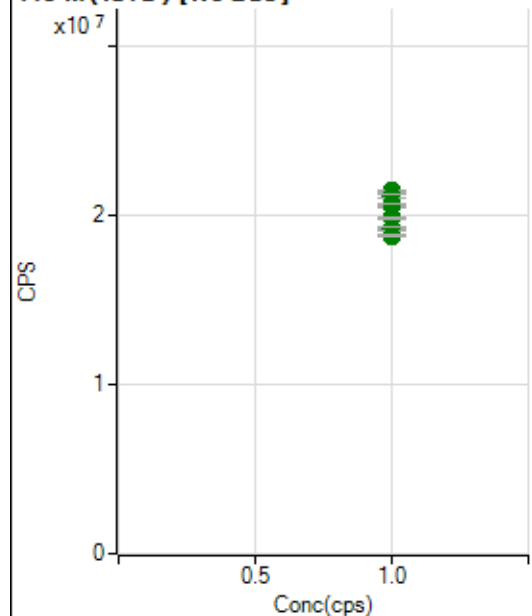
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3019987.14		P	0.5
2	☐	1.000		3128018.57		P	0.4
3	☐	1.000		3062459.29		P	1.1
4	☐	1.000		2894414.99		P	1.2
5	☐	1.000		2695879.30		P	1.0
6	☐	1.000		2708137.74		P	0.3
7	☐	1.000		2739349.82		P	0.8
8	☐	1.000		2860665.03		P	0.8

103 Rh (ISTD) [No Gas]

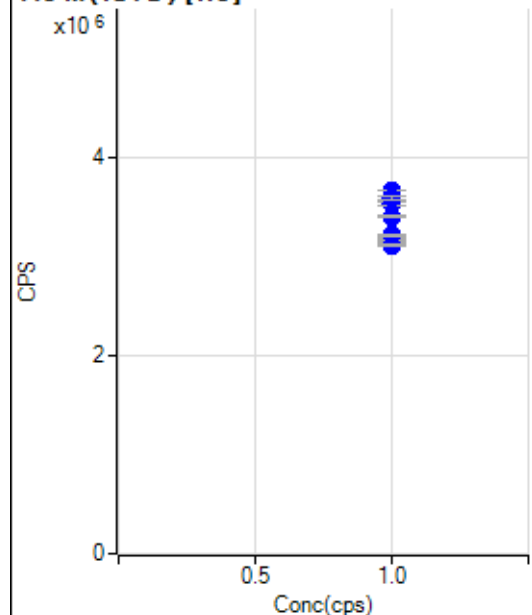
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18618062.39		A	0.1
2	☐	1.000		19555119.71		A	0.2
3	☐	1.000		19153437.23		A	1.2
4	☐	1.000		18494284.62		A	0.8
5	☐	1.000		17354945.01		A	0.9
6	☐	1.000		16627560.79		A	0.2
7	☐	1.000		16569997.59		A	0.2
8	☐	1.000		15039656.59		A	0.2

103 Rh (ISTD) [He]

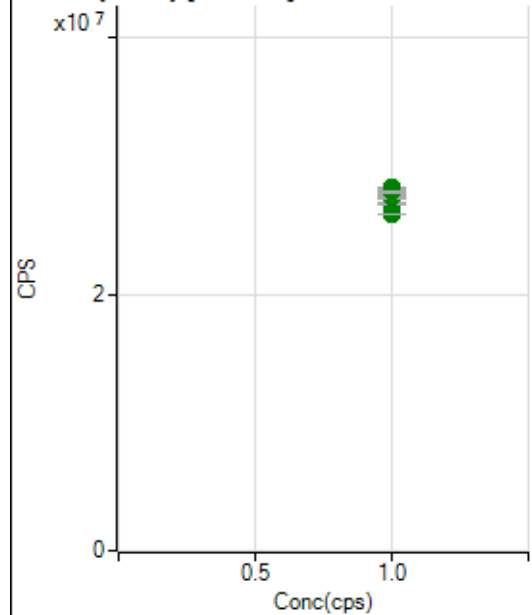
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8434081.82		A	0.5
2	☐	1.000		8807018.83		A	0.2
3	☐	1.000		8620608.21		A	1.3
4	☐	1.000		8151287.73		A	0.8
5	☐	1.000		7573475.72		A	0.5
6	☐	1.000		7465331.35		A	0.6
7	☐	1.000		7377243.43		A	0.3
8	☐	1.000		7039678.51		A	0.6

115 In (ISTD) [No Gas]

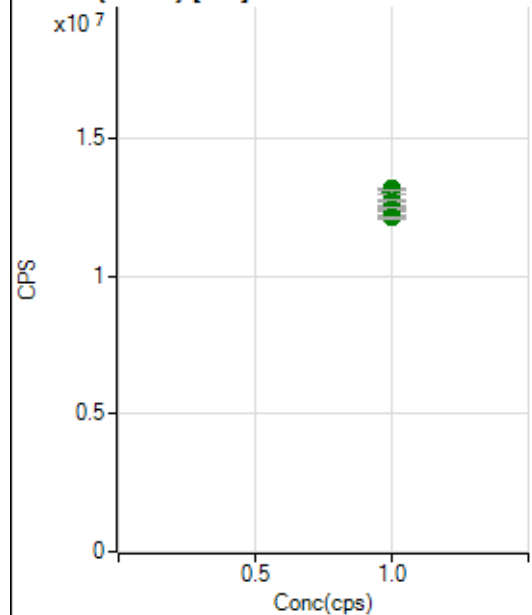
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20535870.11		A	0.2
2	☐	1.000		21452024.68		A	0.3
3	☐	1.000		21168142.86		A	1.1
4	☐	1.000		20697409.18		A	0.4
5	☐	1.000		19878946.99		A	0.6
6	☐	1.000		19253976.46		A	0.3
7	☐	1.000		19215597.02		A	0.7
8	☐	1.000		18799864.26		A	0.3

115 In (ISTD) [He]

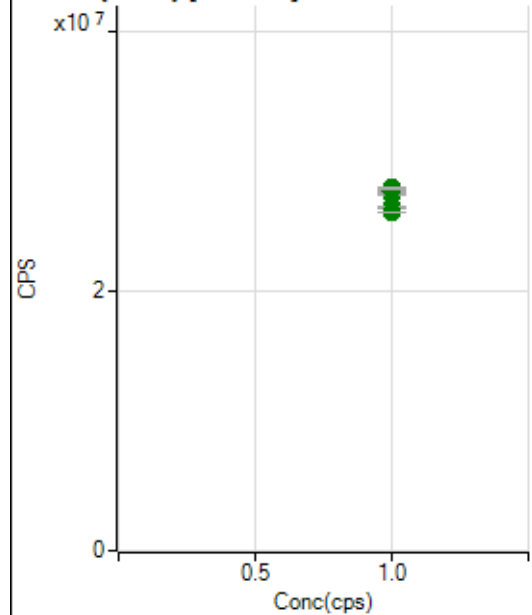
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3536947.07		P	0.6
2	☐	1.000		3666448.35		P	0.1
3	☐	1.000		3597704.79		P	1.2
4	☐	1.000		3402672.82		P	0.7
5	☐	1.000		3175493.82		P	0.6
6	☐	1.000		3156817.71		P	0.8
7	☐	1.000		3118705.82		P	0.5
8	☐	1.000		3220044.63		P	0.8

159 Tb (ISTD) [No Gas]

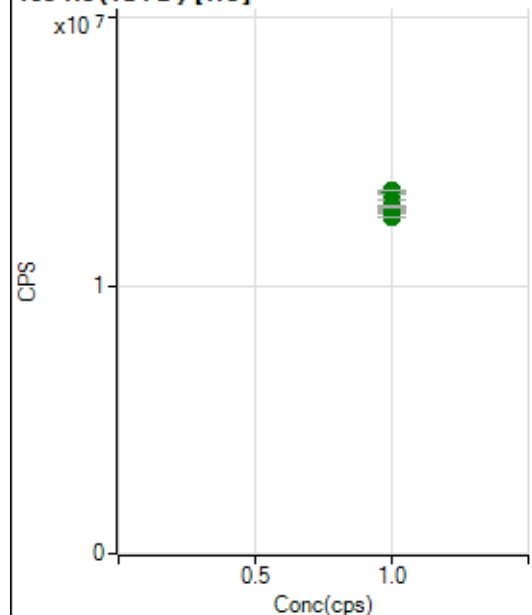
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27045211.82		A	0.6
2	☐	1.000		28308699.58		A	0.2
3	☐	1.000		28232119.02		A	0.4
4	☐	1.000		28177572.91		A	0.6
5	☐	1.000		27822467.64		A	0.7
6	☐	1.000		27560784.31		A	0.3
7	☐	1.000		28004433.19		A	0.8
8	☐	1.000		26282464.33		A	0.1

159 Tb (ISTD) [He]

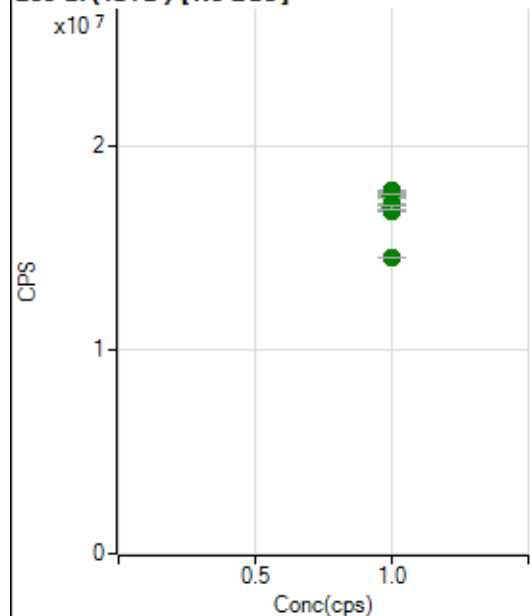
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12513945.65		A	0.6
2	☐	1.000		13181707.86		A	0.7
3	☐	1.000		13087913.97		A	1.0
4	☐	1.000		12749926.61		A	0.8
5	☐	1.000		12236871.90		A	0.2
6	☐	1.000		12379716.07		A	0.3
7	☐	1.000		12456139.40		A	0.3
8	☐	1.000		12129158.85		A	0.7

165 Ho (ISTD) [No Gas]

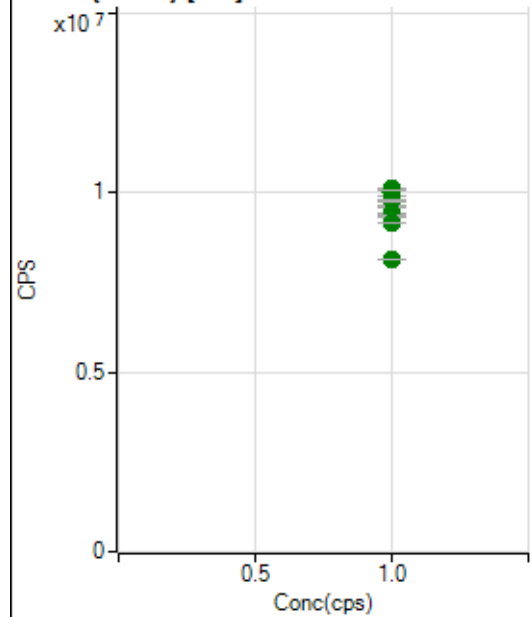
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		26512186.18		A	0.4
2	☐	1.000		27966316.25		A	0.7
3	☐	1.000		27766445.07		A	0.1
4	☐	1.000		27853236.39		A	0.3
5	☐	1.000		27670579.79		A	1.2
6	☐	1.000		27409654.43		A	0.3
7	☐	1.000		27920419.03		A	0.4
8	☐	1.000		26091100.58		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12854208.00		A	0.1
2	☐	1.000		13526637.99		A	0.4
3	☐	1.000		13463312.44		A	0.8
4	☐	1.000		13192761.33		A	0.4
5	☐	1.000		12750168.56		A	0.4
6	☐	1.000		12875936.06		A	0.3
7	☐	1.000		12947743.28		A	0.1
8	☐	1.000		12552871.62		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16808042.80		A	0.5
2	☐	1.000		17779984.88		A	0.7
3	☐	1.000		17596104.88		A	0.5
4	☐	1.000		17654993.77		A	0.7
5	☐	1.000		17502324.18		A	0.9
6	☐	1.000		17144807.94		A	0.5
7	☐	1.000		16949058.91		A	0.9
8	☐	1.000		14544964.92		A	0.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9613415.07		A	0.5
2	☐	1.000		10102904.08		A	0.3
3	☐	1.000		9990843.32		A	1.2
4	☐	1.000		9782357.49		A	0.6
5	☐	1.000		9433821.60		A	0.3
6	☐	1.000		9335912.15		A	0.3
7	☐	1.000		9151234.86		A	0.3
8	☐	1.000		8116692.24		A	0.1

US EPA Tune Check Sample Report

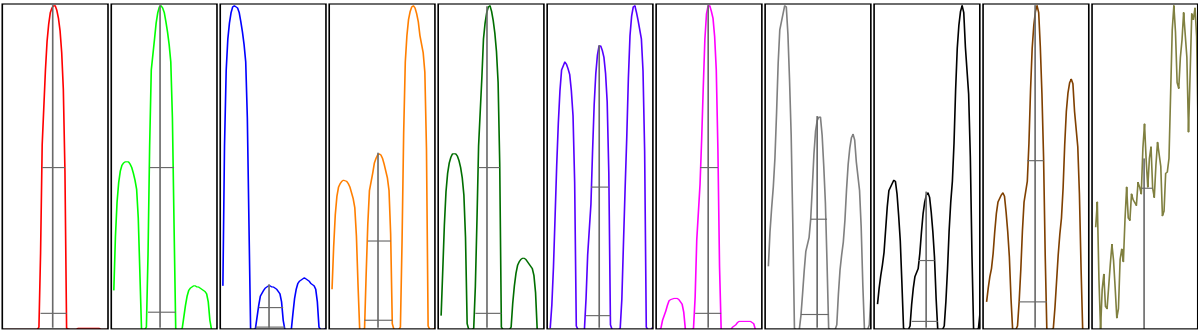
Batch Folder D:\ICP-MS Data\P7122219MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	13748	0.42	5.00	
24	174557	0.50	5.00	
25	23329	0.72	5.00	
26	27059	0.19	5.00	
59	133270	0.49	5.00	
113	18575	0.43	5.00	
115	218733	0.55	5.00	
206	51809	0.41	5.00	
207	47887	0.24	5.00	
208	112835	0.55	5.00	
220	93	3.14		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	13747	13757	13751	13823	13661
24	173208	174336	174876	174829	175533
25	23054	23303	23448	23371	23468
26	26999	27055	27026	27089	27127
59	132537	133070	132878	133743	134121
113	18456	18579	18580	18579	18682
115	217007	219025	218060	219575	219997
206	51680	51657	51643	51948	52117
207	47717	47818	47999	47942	47959
208	112210	113832	112437	112915	112783
220	89	96	93	97	92

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	21866	8.95	8.9 - 9.1		0.785	0.900	
24	267575	23.90	23.9 - 24.1		0.831	0.900	
25	35822	24.90	24.9 - 25.1		0.829	0.900	
26	42257	25.90	25.9 - 26.1		0.791	0.900	
59	225521	58.90	58.9 - 59.1		0.777	0.900	
113	35354	113.00	112.9 - 113.1		0.724	0.900	
115	418779	115.00	114.9 - 115.1		0.762	0.900	
206	105016	206.00	205.9 - 206.1		0.786	0.900	
207	96216	207.00	206.9 - 207.1		0.775	0.900	
208	227903	208.00	207.9 - 208.1		0.780	0.900	
220	95	220.00	-				

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	7.1	V	Deflect	13.0	V
Extract 2	-125.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-60	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	31860	0.90	
89	10772	0.64	
205	45479	0.76	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	32307	31979	31709	31603	31702
89	10880	10755	10749	10694	10780
205	45934	45749	45150	45187	45377

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	7.4	V	Deflect	2.0	V
Extract 2	-135.0	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			