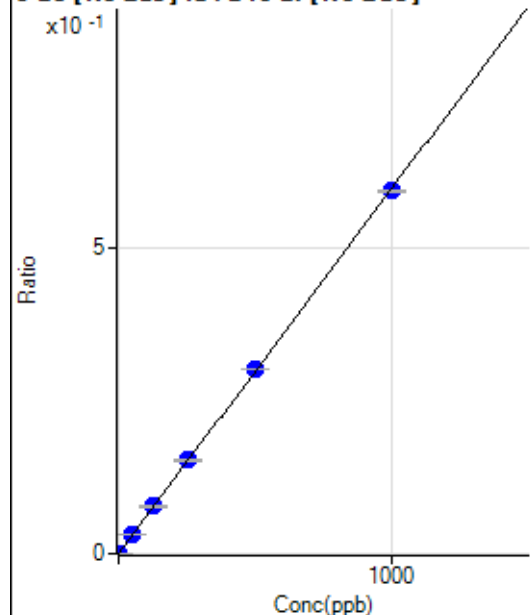


Calibration for 006CALS.d

Batch Folder: D:\ICP-MS Data\P7010820-P7.b\
 Analysis File: P7010820-P7.batch.bin
 DA Date-Time: 2020-01-09 02:21:00
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S0	2020-01-08 16:37:49
2	004CALS.d	S02	2020-01-08 16:41:28
3	005CALS.d	S03	2020-01-08 16:46:17
4	006CALS.d	S04	2020-01-08 16:50:33
5	007CALS.d	S05	2020-01-08 16:54:27
6	008CALS.d	S06	2020-01-08 16:58:18
7	009CALS.d	S07	2020-01-08 17:02:07
8	010CALS.d	S08	2020-01-08 17:05:58

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98.15	0.0000	P	6.4
2	☐	1.000	0.989	3098.56	0.0006	P	6.3
3	☐	50.000	52.692	154393.49	0.0315	P	0.3
4	☐	125.000	129.291	362541.40	0.0772	P	0.8
5	☐	250.000	255.738	641625.77	0.1526	P	0.6
6	☐	500.000	506.699	1238463.06	0.3024	P	0.7
7	☐	1000.000	994.545	2444084.05	0.5935	P	0.5
8	☐			422.24	0.0001	P	11.4

$$y = 5.9675\text{E-}004 * x + 2.0061\text{E-}005$$

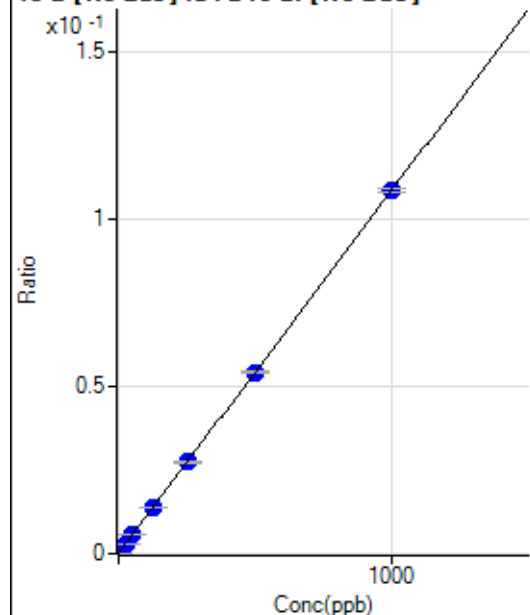
$$R = 0.9999$$

$$DL = 0.006448$$

$$BEC = 0.03362$$

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	438.91	0.0001	P	25.9
2	☐	25.000	24.664	14048.67	0.0028	P	4.6
3	☐	50.000	51.891	28087.92	0.0057	P	2.2
4	☐	125.000	125.074	64215.07	0.0137	P	0.9
5	☐	250.000	251.532	115186.47	0.0274	P	2.1
6	☐	500.000	500.062	222768.87	0.0544	P	1.5
7	☐	1000.000	999.491	447264.94	0.1086	P	1.2
8	☐			10145.45	0.0026	P	8.8

$$y = 1.0858\text{E-}004 * x + 8.9733\text{E-}005$$

$$R = 1.0000$$

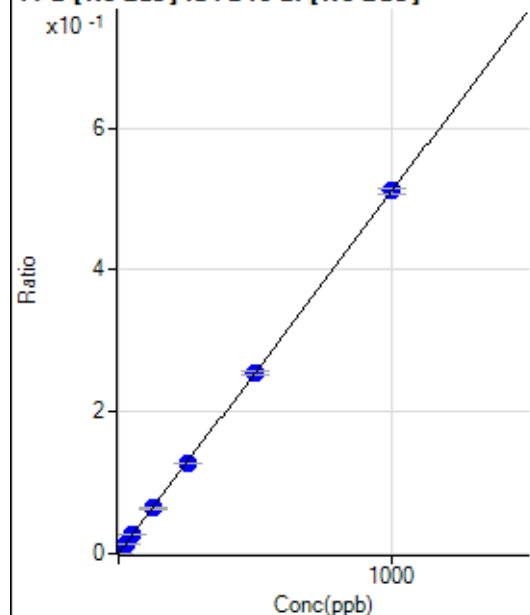
$$DL = 0.6419$$

$$BEC = 0.8264$$

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	1647.38	0.0003	P	6.5
2	☐	25.000	24.358	64770.19	0.0128	P	1.0
3	☐	50.000	50.837	128901.77	0.0263	P	1.6
4	☐	125.000	124.299	299436.59	0.0637	P	0.5
5	☐	250.000	248.545	534360.57	0.1271	P	0.9
6	☐	500.000	497.109	1040085.22	0.2539	P	1.9
7	☐	1000.000	1001.871	2105910.66	0.5114	P	1.7
8	☐			47105.18	0.0122	P	8.7

$$y = 5.1011\text{E-}004 * x + 3.3670\text{E-}004$$

$$R = 1.0000$$

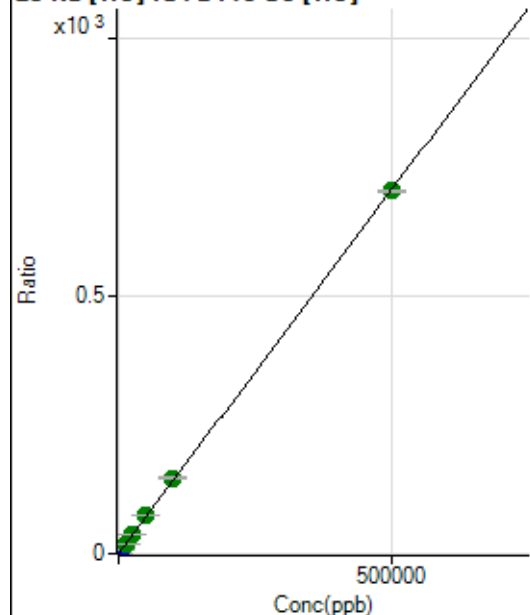
$$DL = 0.1286$$

$$BEC = 0.6601$$

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	10031.54	0.0265	P	2.4
2	☐	500.000	491.984	279922.58	0.7203	P	2.7
3	☐	5000.000	5487.818	2883605.64	7.7661	P	0.9
4	☐	12500.000	13381.878	6495164.90	18.8993	A	0.8
5	☐	25000.000	26551.753	11846139.50	37.4732	A	0.9
6	☐	50000.000	52643.629	24842042.05	74.2713	A	0.7
7	☐	100000.00	104346.09	48778169.49	147.1887	A	0.4
8	☐	500000.00	498761.91	229765538.4	703.4445	A	0.6

$$y = 0.0014 * x + 0.0265$$

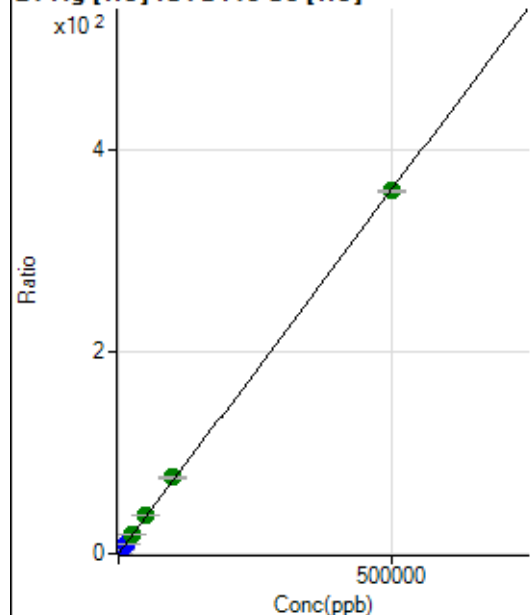
$$R = 1.0000$$

$$DL = 1.332$$

$$BEC = 18.77$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	175.01	0.0005	P	15.3
2	☐	500.000	504.754	141262.64	0.3635	P	4.9
3	☐	5000.000	5572.293	1488336.47	4.0084	P	0.8
4	☐	12500.000	13627.588	3368550.05	9.8021	P	0.4
5	☐	25000.000	26693.993	6069542.67	19.2002	A	1.0
6	☐	50000.000	52879.424	12721477.20	38.0342	A	0.8
7	☐	100000.00	104576.70	24926938.58	75.2176	A	0.6
8	☐	500000.00	498678.10	117155545.6	358.6763	A	0.7

$$y = 7.1925\text{E-}004 * x + 4.6241\text{E-}004$$

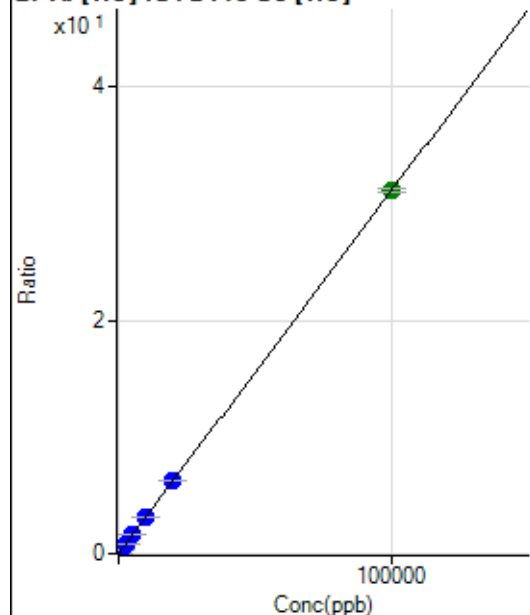
$$R = 0.9999$$

$$DL = 0.2948$$

$$BEC = 0.6429$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	27.78	0.0001	P	75.1
2	☐	20.000	17.332	2122.45	0.0055	P	9.6
3	☐	1000.000	1039.765	120054.60	0.3233	P	1.8
4	☐	2500.000	2575.455	275179.87	0.8008	P	0.2
5	☐	5000.000	5103.970	501656.13	1.5869	P	0.3
6	☐	10000.000	10063.421	1046548.38	3.1288	P	0.5
7	☐	20000.000	20216.417	2082938.37	6.2854	P	1.3
8	☐	100000.00	99942.892	10149335.38	31.0723	A	1.0

$$y = 3.1090\text{E-}004 * x + 7.3389\text{E-}005$$

$$R = 1.0000$$

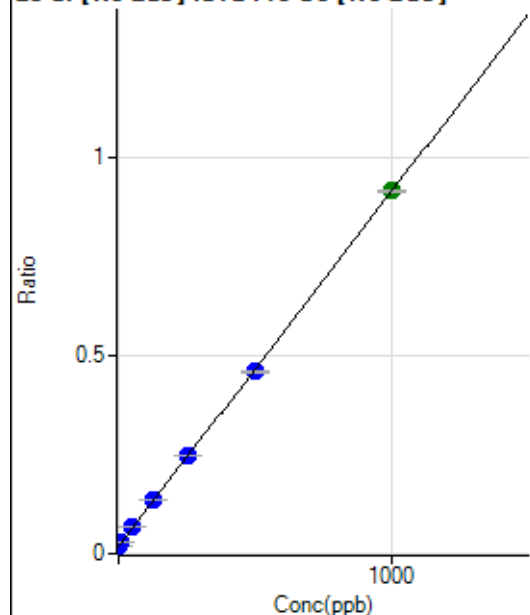
$$DL = 0.532$$

$$BEC = 0.2361$$

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	178239.65	0.0188	P	0.2
2	☐	10.000	9.221	268304.42	0.0270	P	0.1
3	☐	50.000	54.008	642891.97	0.0670	P	0.9
4	☐	125.000	130.223	1250136.91	0.1351	P	0.3
5	☐	250.000	256.183	2069577.69	0.2477	P	0.8
6	☐	500.000	491.418	3822519.18	0.4579	P	1.3
7	☐	1000.000	1001.900	7729304.08	0.9141	A	0.5
8	☐			412107.36	0.0510	P	1.0

$$y = 8.9363\text{E-}004 * x + 0.0188$$

$$R = 0.9999$$

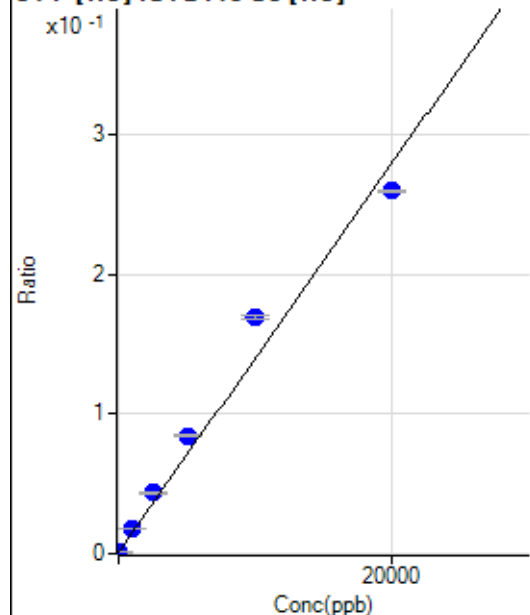
$$DL = 0.1091$$

$$BEC = 20.99$$

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	-37.394	122.23	0.0003	P	33.6
2	☐	0.000	37.394	530.59	0.0014	P	14.1
3	☐	1000.000	1211.930	6582.27	0.0177	P	0.8
4	☐	2500.000	3063.341	14960.80	0.0435	P	2.6
5	☐	5000.000	5999.042	26683.00	0.0844	P	1.5
6	☐	10000.000	12108.176	56700.45	0.1695	P	1.0
7	☐	20000.000	18615.137	86215.51	0.2602	P	0.8
8	☐			183.34	0.0006	P	19.9

$$y = 1.3930\text{E-}005 * x + 8.4445\text{E-}004$$

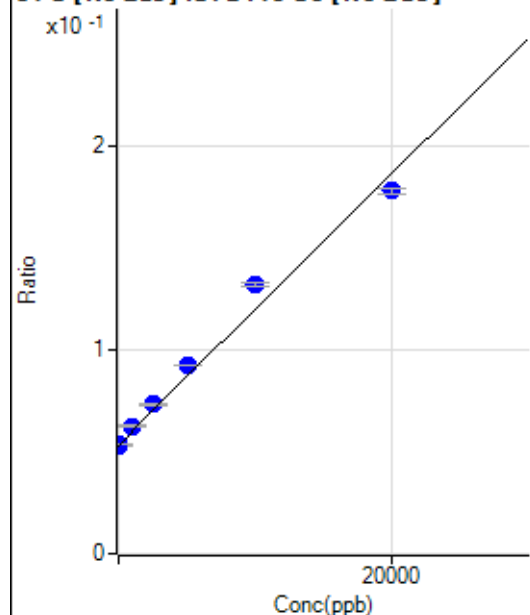
$$R = 0.9895$$

$$DL = 32.48$$

$$BEC = 60.62$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-57.149	503694.01	0.0530	P	0.8
2	☐	0.000	57.149	534394.26	0.0538	P	0.3
3	☐	1000.000	1417.052	602757.26	0.0628	P	0.4
4	☐	2500.000	2999.958	678962.38	0.0734	P	0.7
5	☐	5000.000	5865.786	772708.08	0.0925	P	0.6
6	☐	10000.000	11885.086	1106650.61	0.1326	P	1.1
7	☐	20000.000	18757.663	1508122.04	0.1784	P	1.5
8	☐			425709.16	0.0527	P	1.2

$$y = 6.6619\text{E-}006 * x + 0.0534$$

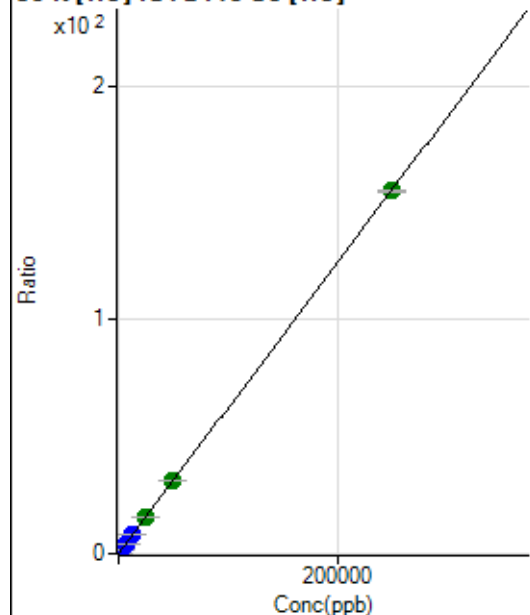
R = 0.9918

DL = 132.1

BEC = 8016

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19805.64	0.0523	P	3.1
2	☐	500.000	493.690	139324.38	0.3585	P	2.7
3	☐	2500.000	2704.986	642421.23	1.7302	P	1.2
4	☐	6250.000	6579.004	1420407.38	4.1332	P	1.1
5	☐	12500.000	13139.274	2592909.30	8.2026	P	1.0
6	☐	25000.000	25591.223	5327240.61	15.9265	A	0.6
7	☐	50000.000	50787.862	10457668.55	31.5560	A	0.1
8	☐	250000.00	249741.07	50618051.13	154.9665	A	0.8

$$y = 6.2030\text{E-}004 * x + 0.0523$$

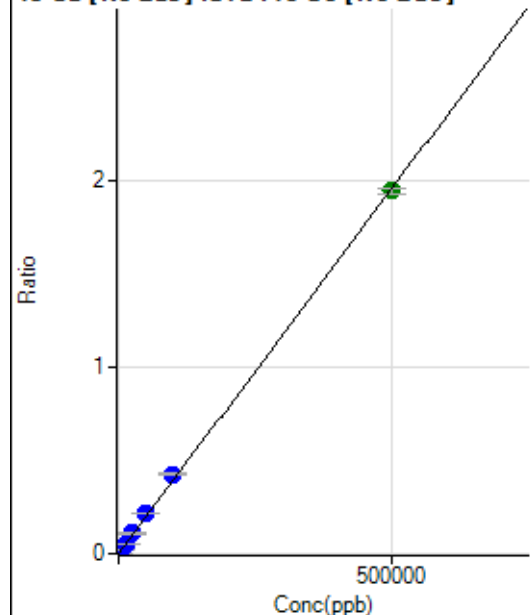
R = 1.0000

DL = 7.941

BEC = 84.3

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	277.79	0.0000	P	3.7
2	☐	500.000	527.500	20790.38	0.0021	P	1.7
3	☐	5000.000	5600.820	210386.56	0.0219	P	0.7
4	☐	12500.000	13857.233	501653.66	0.0542	P	0.5
5	☐	25000.000	27683.613	904908.73	0.1083	P	0.5
6	☐	50000.000	55053.638	1797619.85	0.2153	P	1.1
7	☐	100000.00	109145.54	3609806.76	0.4269	P	0.6
8	☐	500000.00	497491.38	15718720.49	1.9458	A	1.5

$$y = 3.9111\text{E-}006 * x + 2.9242\text{E-}005$$

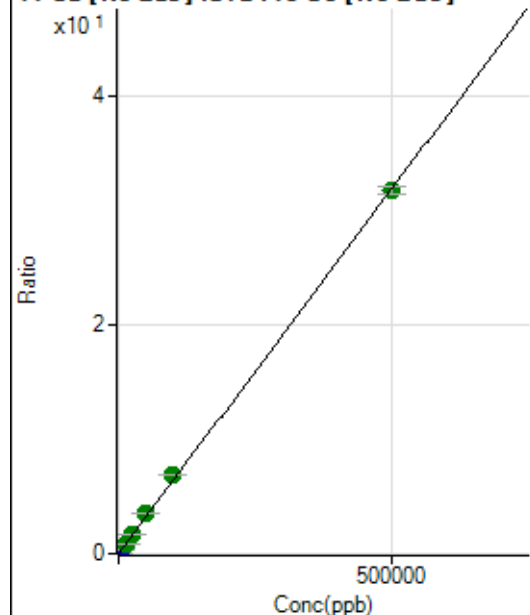
$$R = 0.9998$$

$$DL = 0.8211$$

$$BEC = 7.477$$

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	11368.94	0.0012	P	4.0
2	☐	500.000	513.130	336709.55	0.0339	P	0.6
3	☐	5000.000	5580.823	3421713.05	0.3567	P	0.1
4	☐	12500.000	13648.019	8055033.17	0.8707	A	0.2
5	☐	25000.000	27371.747	14579600.15	1.7450	A	0.4
6	☐	50000.000	54332.618	28906733.28	3.4626	A	0.2
7	☐	100000.00	108248.06	58323217.28	6.8974	A	0.3
8	☐	500000.00	497764.01	256180747.3	31.7123	A	2.1

$$y = 6.3707\text{E-}005 * x + 0.0012$$

$$R = 0.9998$$

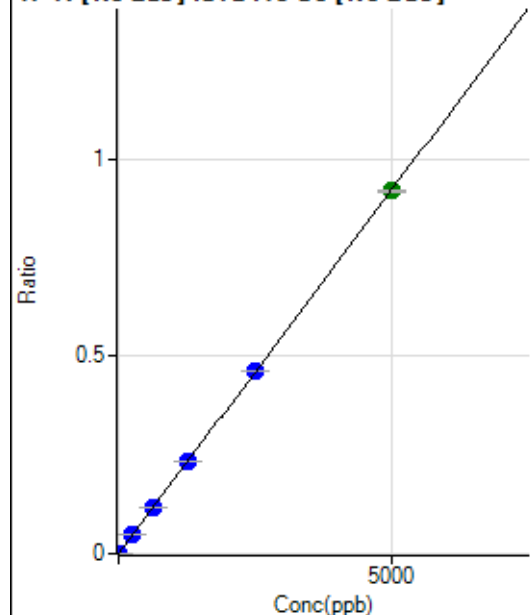
$$DL = 2.275$$

$$BEC = 18.79$$

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	116.67	0.0000	P	44.7
2	☐	5.000	5.117	9486.72	0.0010	P	3.9
3	☐	250.000	254.794	450287.19	0.0469	P	0.6
4	☐	625.000	633.418	1079531.70	0.1167	P	0.4
5	☐	1250.000	1264.681	1946504.08	0.2330	P	0.4
6	☐	2500.000	2510.586	3860429.12	0.4625	P	0.7
7	☐	5000.000	4989.745	7772004.08	0.9191	A	0.6
8	☐			2244.72	0.0003	P	7.9

$$y = 1.8420\text{E-}004 * x + 1.2292\text{E-}005$$

$$R = 1.0000$$

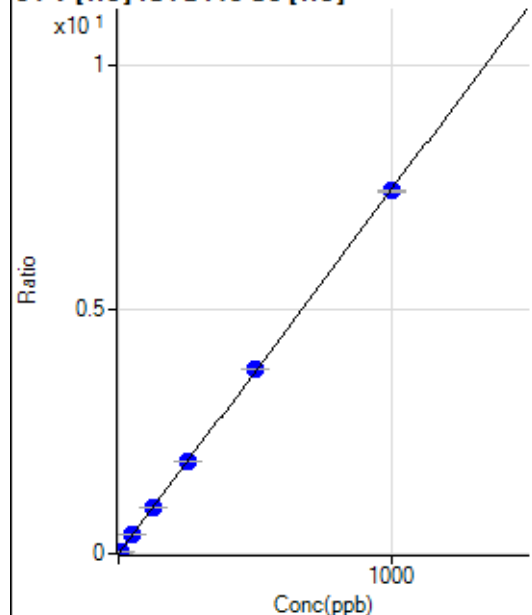
$$DL = 0.08953$$

$$BEC = 0.06673$$

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	4.44	0.0000	P	42.4
2	☐	5.000	4.751	13773.30	0.0354	P	5.7
3	☐	50.000	51.214	141819.52	0.3819	P	0.5
4	☐	125.000	127.028	325534.22	0.9473	P	1.3
5	☐	250.000	253.953	598692.12	1.8939	P	0.6
6	☐	500.000	504.992	1259676.30	3.7660	P	0.3
7	☐	1000.000	996.203	2462053.68	7.4293	P	0.8
8	☐			1100.06	0.0034	P	5.8

$$y = 0.0075 * x + 1.1700\text{E-}005$$

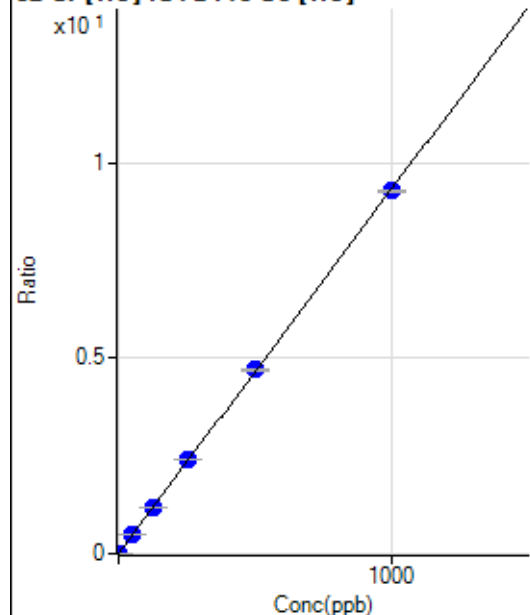
$$R = 1.0000$$

$$DL = 0.001996$$

$$BEC = 0.001569$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1257.85	0.0033	P	8.1
2	☐	2.000	1.789	7761.06	0.0200	P	4.8
3	☐	50.000	52.167	181590.61	0.4891	P	1.3
4	☐	125.000	127.965	410554.21	1.1948	P	0.5
5	☐	250.000	256.098	754890.17	2.3879	P	0.1
6	☐	500.000	504.643	1572791.38	4.7022	P	0.9
7	☐	1000.000	995.675	3073534.88	9.2744	P	0.2
8	☐			80109.88	0.2453	P	1.5

$$y = 0.0093 * x + 0.0033$$

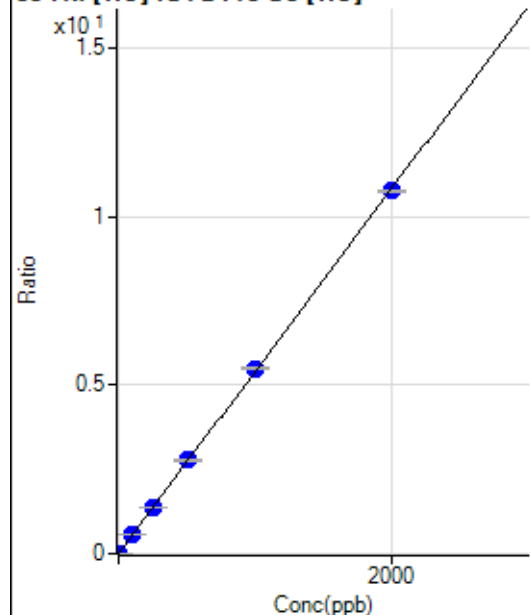
$$R = 1.0000$$

$$DL = 0.08661$$

$$BEC = 0.3563$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	51.11	0.0001	P	36.7
2	☐	1.000	0.930	2007.95	0.0052	P	7.1
3	☐	100.000	103.677	208397.59	0.5612	P	0.7
4	☐	250.000	255.348	474948.58	1.3821	P	0.2
5	☐	500.000	513.355	878306.34	2.7785	P	0.8
6	☐	1000.000	1013.632	1834943.76	5.4860	P	1.0
7	☐	2000.000	1988.993	3567488.25	10.7648	P	0.3
8	☐			14329.36	0.0439	P	2.1

$$y = 0.0054 * x + 1.3464E-004$$

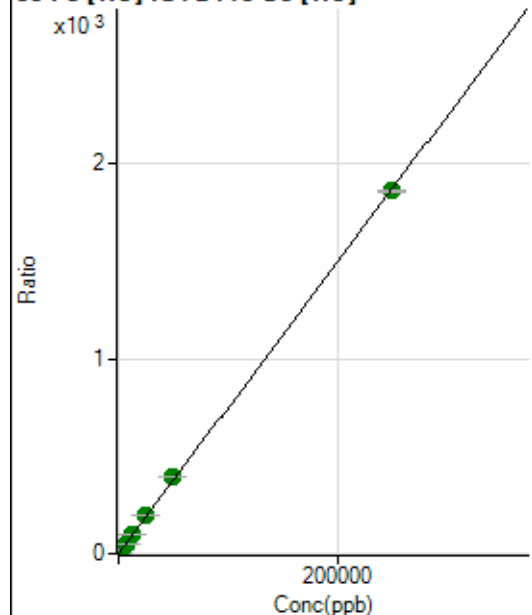
$$R = 0.9999$$

$$DL = 0.02737$$

$$BEC = 0.02488$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3583.88	0.0095	P	0.5
2	☐	50.000	50.310	149834.89	0.3856	P	5.5
3	☐	2500.000	2747.055	7628894.79	20.5457	A	0.9
4	☐	6250.000	6768.782	17390981.18	50.6111	A	0.6
5	☐	12500.000	13576.381	32086448.40	101.5030	A	0.9
6	☐	25000.000	26930.467	67342884.84	201.3347	A	0.5
7	☐	50000.000	52585.606	130280255.6	393.1259	A	0.7
8	☐	250000.00	249220.57	608543702.4	1,863.118	A	0.8

$$y = 0.0075 * x + 0.0095$$

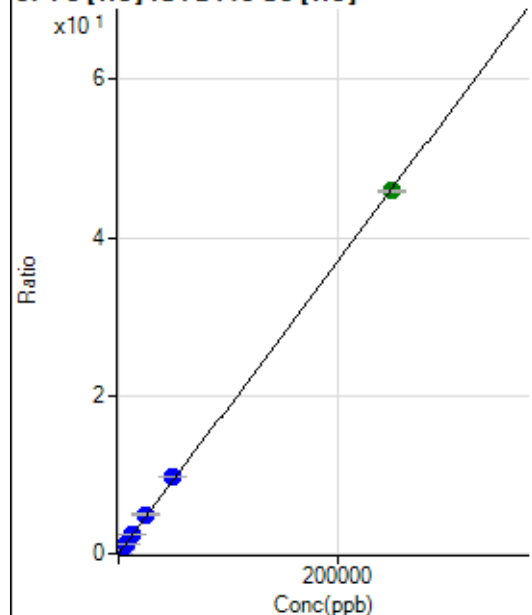
$$R = 0.9999$$

$$DL = 0.01966$$

$$BEC = 1.265$$

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	188.90	0.0005	P	29.8
2	☐	50.000	50.399	3802.46	0.0098	P	7.7
3	☐	2500.000	2753.865	188609.01	0.5080	P	0.8
4	☐	6250.000	6880.489	435816.40	1.2684	P	1.3
5	☐	12500.000	13724.423	799628.84	2.5295	P	0.5
6	☐	25000.000	27055.561	1667783.13	4.9861	P	0.4
7	☐	50000.000	53267.296	3253037.02	9.8161	P	0.5
8	☐	250000.00	249061.46	14990809.02	45.8954	A	0.5

$$y = 1.8427E-004 * x + 4.9746E-004$$

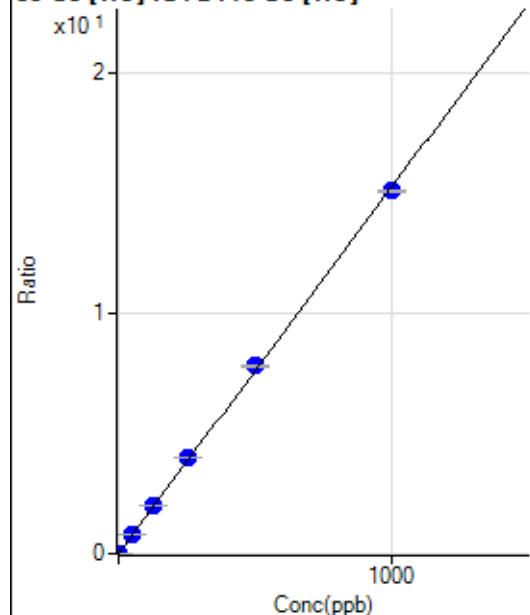
$$R = 0.9999$$

$$DL = 2.415$$

$$BEC = 2.7$$

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	84.45	0.0002	P	21.9
2	☐	1.000	0.927	5582.27	0.0144	P	4.4
3	☐	50.000	53.119	300838.64	0.8102	P	0.8
4	☐	125.000	131.351	688311.26	2.0031	P	0.6
5	☐	250.000	260.567	1256124.69	3.9735	P	0.3
6	☐	500.000	512.290	2612953.55	7.8120	P	0.3
7	☐	1000.000	990.264	5004252.39	15.1004	P	0.7
8	☐			9140.75	0.0280	P	2.0

$$y = 0.0152 * x + 2.2301E-004$$

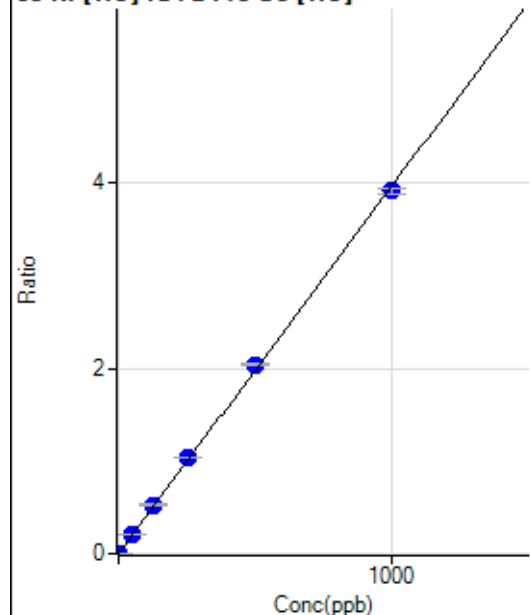
$$R = 0.9998$$

$$DL = 0.009629$$

$$BEC = 0.01462$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	65.56	0.0002	P	19.0
2	☐	1.000	1.038	1665.68	0.0043	P	3.7
3	☐	50.000	54.028	79579.09	0.2143	P	0.4
4	☐	125.000	133.005	181188.86	0.5274	P	1.3
5	☐	250.000	262.467	328914.75	1.0405	P	0.7
6	☐	500.000	514.849	682637.19	2.0408	P	0.7
7	☐	1000.000	988.257	1298162.07	3.9173	P	1.4
8	☐			24518.46	0.0751	P	2.0

$$y = 0.0040 * x + 1.7331E-004$$

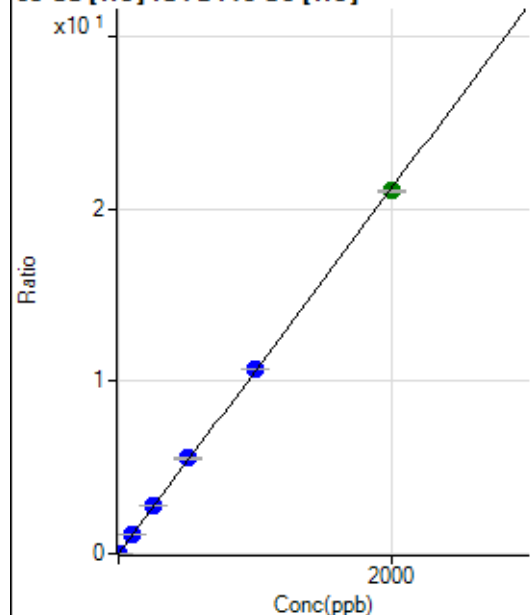
$$R = 0.9997$$

$$DL = 0.02498$$

$$BEC = 0.04372$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	791.14	0.0021	P	5.0
2	☐	2.000	1.860	8480.38	0.0218	P	1.8
3	☐	100.000	107.692	425062.66	1.1448	P	0.5
4	☐	250.000	262.894	959272.55	2.7916	P	0.7
5	☐	500.000	521.753	1750730.05	5.5383	P	0.7
6	☐	1000.000	1012.258	3593333.80	10.7429	P	0.1
7	☐	2000.000	1986.436	6985834.48	21.0796	A	0.8
8	☐			12655.65	0.0387	P	1.5

$$y = 0.0106 * x + 0.0021$$

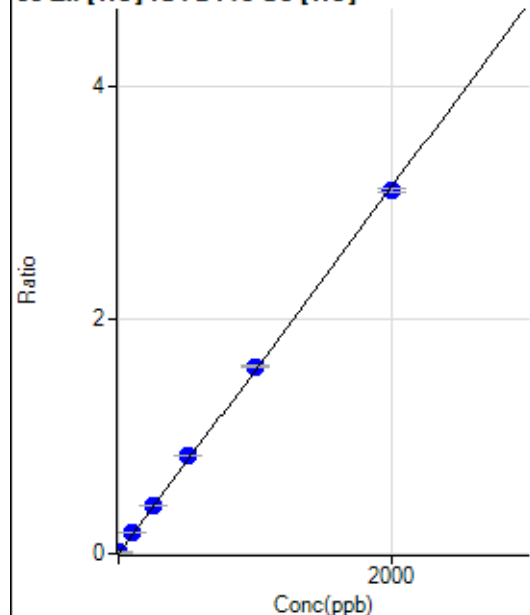
$$R = 0.9999$$

$$DL = 0.02975$$

$$BEC = 0.1968$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	235.56	0.0006	P	1.2
2	☐	2.000	4.988	3277.09	0.0084	P	7.2
3	☐	100.000	111.691	65180.59	0.1755	P	1.1
4	☐	250.000	263.584	142039.32	0.4134	P	0.9
5	☐	500.000	534.112	264611.22	0.8371	P	0.7
6	☐	1000.000	1020.789	534922.16	1.5992	P	0.4
7	☐	2000.000	1978.792	1027181.63	3.0995	P	1.2
8	☐			14590.81	0.0447	P	1.9

$$y = 0.0016 * x + 6.2181E-004$$

$$R = 0.9998$$

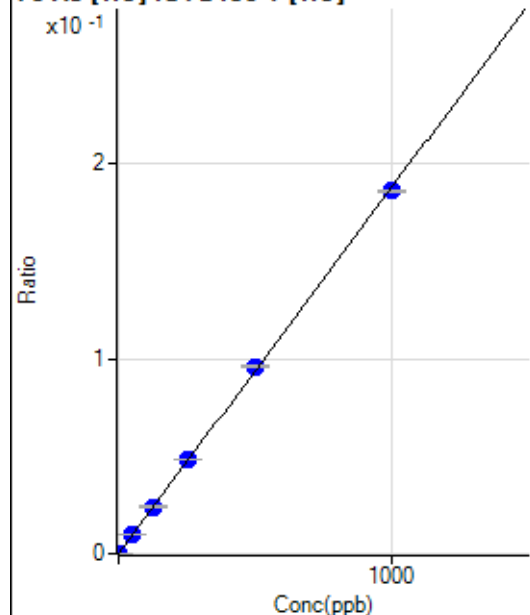
$$DL = 0.01394$$

$$BEC = 0.3971$$

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	12.96	0.0000	P	43.3
2	☐	1.000	0.915	346.30	0.0002	P	7.9
3	☐	50.000	52.618	18489.01	0.0099	P	0.8
4	☐	125.000	128.487	42434.59	0.0241	P	1.7
5	☐	250.000	257.858	78829.94	0.0484	P	0.6
6	☐	500.000	512.262	165047.92	0.0961	P	0.7
7	☐	1000.000	991.338	318729.68	0.1860	P	0.7
8	☐			211.12	0.0001	P	3.0

$$y = 1.8761E-004 * x + 6.8522E-006$$

$$R = 0.9999$$

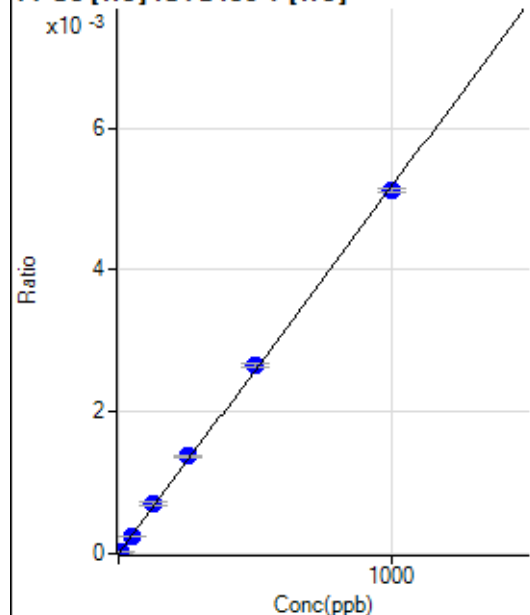
$$DL = 0.04742$$

$$BEC = 0.03652$$

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	2.22	0.0000	P	173.2
2	☐	5.000	4.532	47.78	0.0000	P	14.1
3	☐	50.000	46.816	455.57	0.0002	P	7.9
4	☐	125.000	135.652	1237.85	0.0007	P	4.9
5	☐	250.000	264.641	2232.43	0.0014	P	1.9
6	☐	500.000	513.278	4561.91	0.0027	P	2.5
7	☐	1000.000	988.531	8766.11	0.0051	P	0.9
8	☐			5.56	0.0000	P	35.0

$$y = 5.1736E-006 * x + 1.1765E-006$$

$$R = 0.9997$$

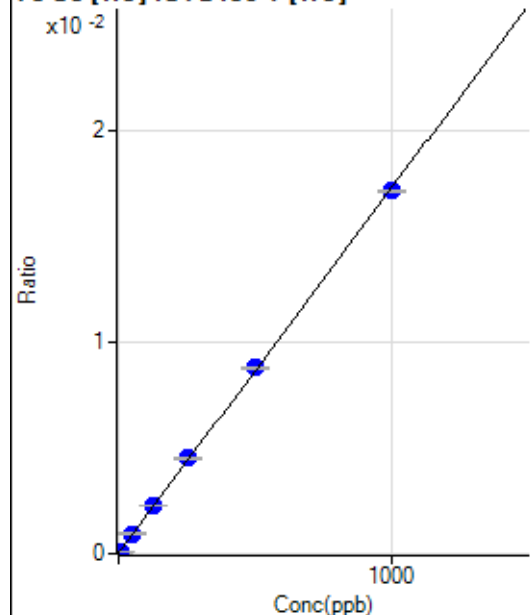
$$DL = 1.182$$

$$BEC = 0.2274$$

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	46.91	0.0000	P	15.5
2	☐	5.000	5.250	223.46	0.0001	P	5.4
3	☐	50.000	53.648	1776.67	0.0009	P	3.1
4	☐	125.000	130.850	4011.08	0.0023	P	2.0
5	☐	250.000	259.719	7332.77	0.0045	P	1.7
6	☐	500.000	508.578	15093.11	0.0088	P	1.2
7	☐	1000.000	992.366	29348.80	0.0171	P	0.5
8	☐			62.96	0.0000	P	13.9

$$y = 1.7233\text{E-}005 * x + 2.4773\text{E-}005$$

$$R = 0.9999$$

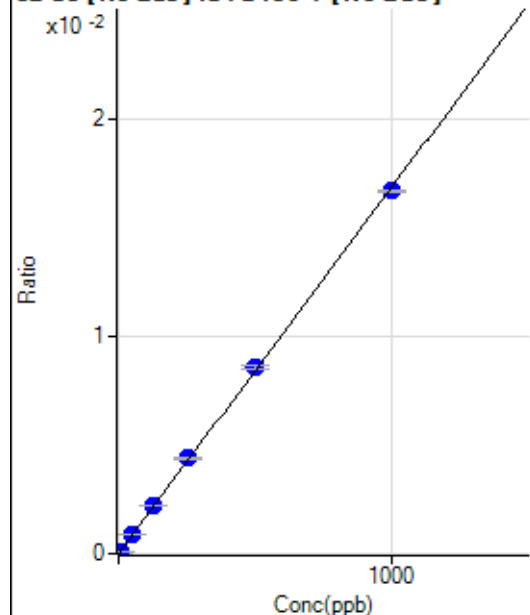
$$DL = 0.6679$$

$$BEC = 1.438$$

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	-9.59	0.0000	P	-528.
2	☐	5.000	5.669	1536.82	0.0001	P	4.1
3	☐	50.000	53.456	14101.03	0.0009	P	1.1
4	☐	125.000	132.014	34169.03	0.0022	P	1.3
5	☐	250.000	260.918	62177.57	0.0044	P	0.9
6	☐	500.000	510.618	122362.02	0.0086	P	1.7
7	☐	1000.000	990.909	239658.02	0.0167	P	0.6
8	☐			239.51	0.0000	P	34.0

$$y = 1.6822\text{E-}005 * x - 6.0479\text{E-}007$$

$$R = 0.9998$$

$$DL = 0.5699$$

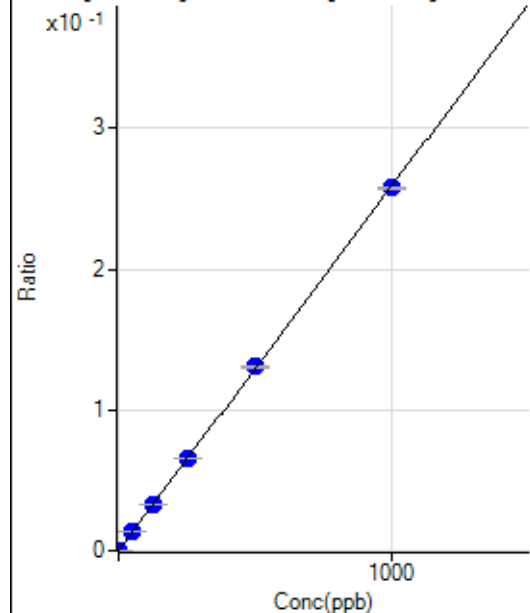
$$BEC = -0.03595$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			621.13		P	6.4
2	☐			607.80		P	6.9
3	☐			538.91		P	10.6
4	☐			610.03		P	5.5
5	☐			532.24		P	4.4
6	☐			500.01		P	4.2
7	☐			537.80		P	8.8
8	☐			522.24		P	10.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1005.63	0.0001	P	2.8
2	☐	1.000	0.990	5217.86	0.0003	P	4.8
3	☐	50.000	51.524	210307.41	0.0134	P	0.5
4	☐	125.000	127.246	507950.58	0.0330	P	0.8
5	☐	250.000	254.262	933466.42	0.0659	P	0.1
6	☐	500.000	505.547	1865289.76	0.1309	P	1.3
7	☐	1000.000	995.804	3707088.80	0.2578	P	0.3
8	☐			8069.28	0.0006	P	3.0

$$y = 2.5885E-004 * x + 6.5421E-005$$

$$R = 1.0000$$

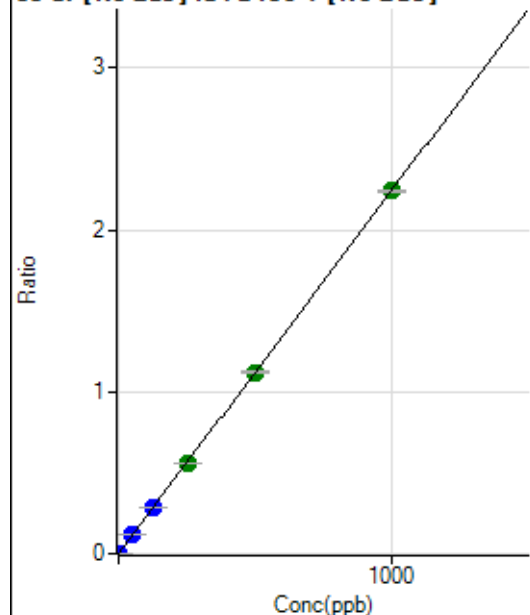
$$DL = 0.02151$$

$$BEC = 0.2527$$

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	216.68	0.0000	P	11.0
2	☐	1.000	0.989	36216.14	0.0022	P	1.3
3	☐	50.000	51.758	1821518.20	0.1161	P	0.7
4	☐	125.000	127.666	4406662.77	0.2863	P	0.2
5	☐	250.000	250.044	7944769.19	0.5607	A	0.8
6	☐	500.000	499.975	15973085.95	1.1212	A	1.1
7	☐	1000.000	999.580	32228720.51	2.2415	A	0.6
8	☐			63745.52	0.0047	P	2.0

$$y = 0.0022 * x + 1.4089E-005$$

$$R = 1.0000$$

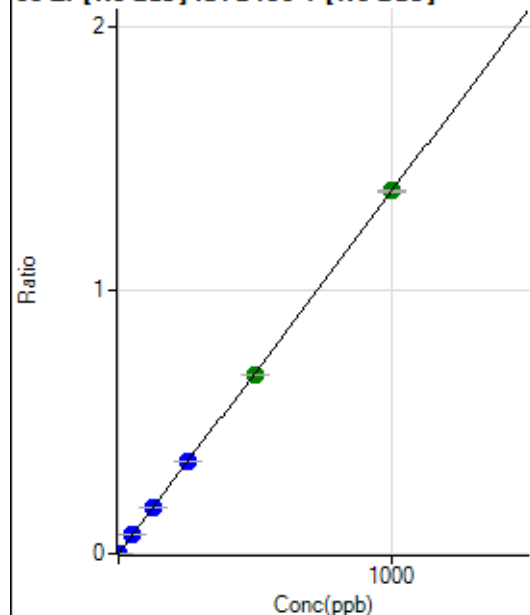
$$DL = 0.002076$$

$$BEC = 0.006283$$

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	1025.08	0.0001	P	6.2
2	☐	1.000	0.747	17725.61	0.0011	P	1.3
3	☐	50.000	51.021	1101745.09	0.0702	P	0.6
4	☐	125.000	126.126	2669814.80	0.1735	P	0.2
5	☐	250.000	253.183	4932744.03	0.3481	P	0.6
6	☐	500.000	495.022	9696599.00	0.6806	A	0.2
7	☐	1000.000	1001.502	19797383.43	1.3769	A	0.5
8	☐			5790.29	0.0004	P	4.5

$$y = 0.0014 * x + 6.6654E-005$$

$$R = 1.0000$$

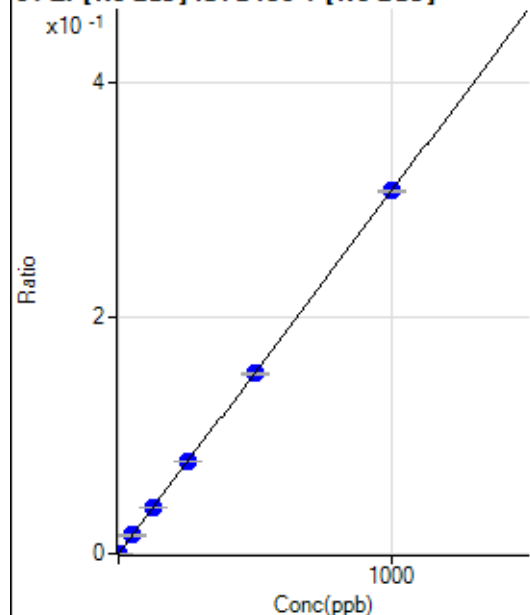
$$DL = 0.009064$$

$$BEC = 0.04848$$

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	186.12	0.0000	P	25.8
2	☐	1.000	0.760	3989.61	0.0002	P	2.6
3	☐	50.000	50.511	244151.49	0.0156	P	0.9
4	☐	125.000	125.565	594989.28	0.0387	P	0.9
5	☐	250.000	254.077	1108234.84	0.0782	P	0.7
6	☐	500.000	497.392	2181347.86	0.1531	P	1.1
7	☐	1000.000	1000.189	4426475.40	0.3079	P	0.3
8	☐			1358.46	0.0001	P	18.2

$$y = 3.0779\text{E-}004 * x + 1.2106\text{E-}005$$

$$R = 1.0000$$

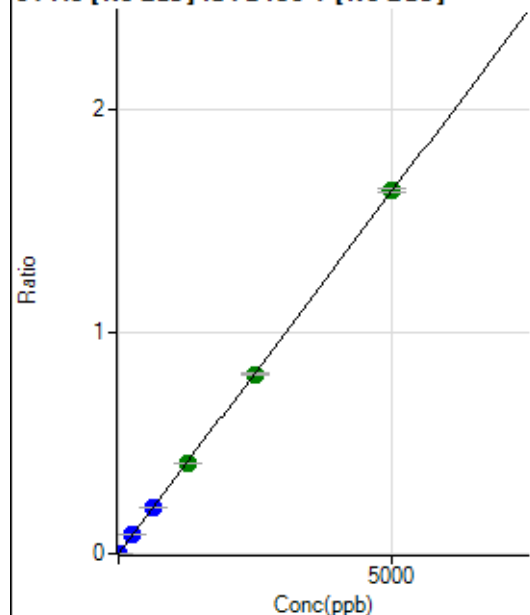
$$DL = 0.03047$$

$$BEC = 0.03933$$

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	380.58	0.0000	P	9.8
2	☐	5.000	4.693	25256.45	0.0016	P	1.6
3	☐	250.000	253.503	1299312.13	0.0828	P	0.3
4	☐	625.000	625.294	3143026.22	0.2042	P	0.3
5	☐	1250.000	1248.920	5778499.56	0.4078	A	0.5
6	☐	2500.000	2473.945	11509003.82	0.8078	A	0.9
7	☐	5000.000	5013.086	23535437.50	1.6369	A	1.1
8	☐			15639.79	0.0011	P	2.4

$$y = 3.2653\text{E-}004 * x + 2.4768\text{E-}005$$

$$R = 1.0000$$

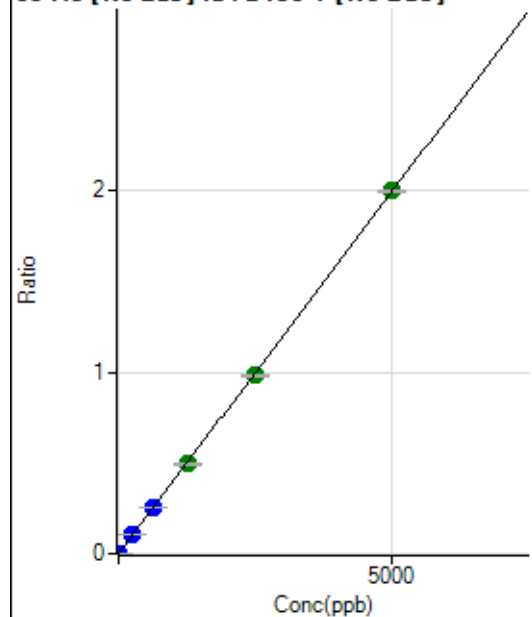
$$DL = 0.0224$$

$$BEC = 0.07585$$

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	63.89	0.0000	P	20.4
2	☐	5.000	5.103	33050.30	0.0020	P	0.6
3	☐	250.000	253.814	1587169.82	0.1011	P	0.5
4	☐	625.000	628.427	3854431.64	0.2504	P	0.3
5	☐	1250.000	1240.345	7003153.28	0.4943	A	0.7
6	☐	2500.000	2468.435	14013496.49	0.9836	A	1.0
7	☐	5000.000	5017.577	28748924.26	1.9994	A	0.2
8	☐			23036.05	0.0017	P	0.8

$$y = 3.9849\text{E-}004 * x + 4.1582\text{E-}006$$

$$R = 1.0000$$

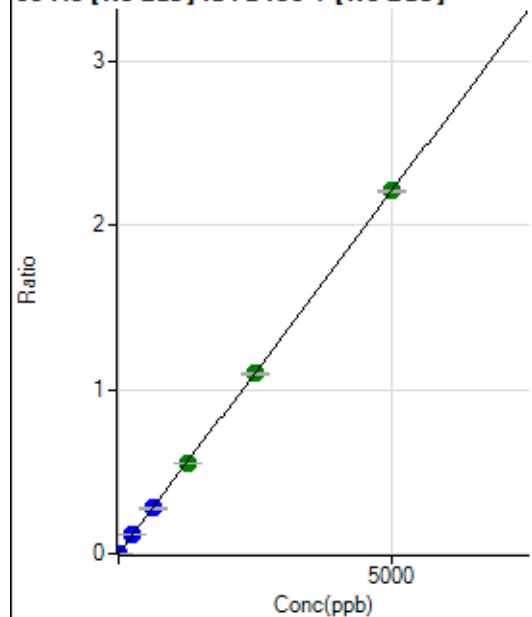
$$DL = 0.006392$$

$$BEC = 0.01043$$

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	158.34	0.0000	P	22.2
2	☐	5.000	5.038	36258.27	0.0022	P	0.0
3	☐	250.000	253.371	1756347.02	0.1119	P	0.8
4	☐	625.000	624.249	4244166.41	0.2757	P	0.2
5	☐	1250.000	1248.330	7813216.67	0.5514	A	0.6
6	☐	2500.000	2487.654	15654270.14	1.0988	A	0.7
7	☐	5000.000	5006.516	31797611.82	2.2115	A	0.3
8	☐			31263.33	0.0023	P	2.8

$$y = 4.4171\text{E-}004 * x + 1.0286\text{E-}005$$

$$R = 1.0000$$

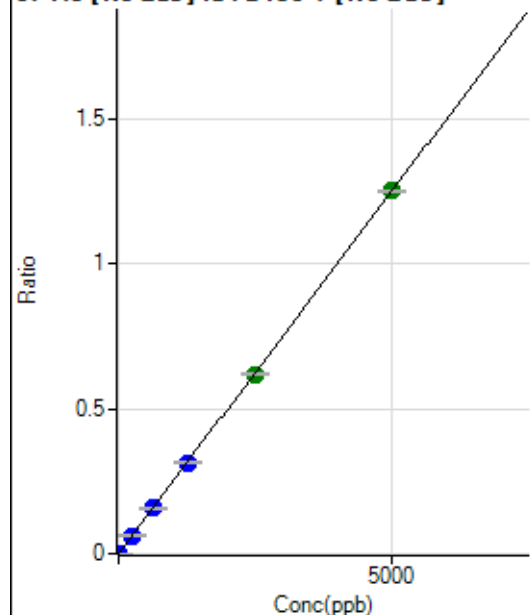
$$DL = 0.01552$$

$$BEC = 0.02329$$

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	94.45	0.0000	P	49.6
2	☐	5.000	5.036	20471.05	0.0013	P	1.9
3	☐	250.000	251.478	984413.20	0.0627	P	0.7
4	☐	625.000	625.337	2400732.76	0.1560	P	1.0
5	☐	1250.000	1255.381	4436686.86	0.3131	P	1.2
6	☐	2500.000	2477.514	8804233.62	0.6180	A	0.7
7	☐	5000.000	5009.782	17967231.30	1.2496	A	0.7
8	☐			14588.62	0.0011	P	0.2

$$y = 2.4944\text{E-}004 * x + 6.1655\text{E-}006$$

$$R = 1.0000$$

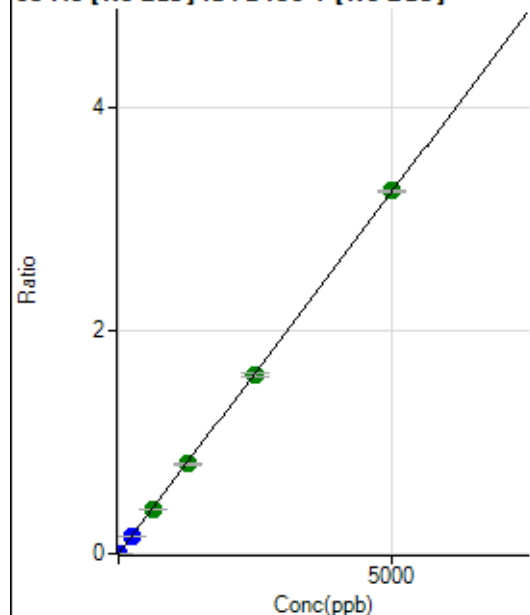
$$DL = 0.03675$$

$$BEC = 0.02472$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	25.4
2	☐	5.000	5.002	52687.29	0.0032	P	0.4
3	☐	250.000	251.927	2560852.40	0.1632	P	0.3
4	☐	625.000	615.962	6141074.31	0.3990	A	0.7
5	☐	1250.000	1240.527	11385100.08	0.8036	A	1.0
6	☐	2500.000	2471.182	22804919.95	1.6007	A	1.3
7	☐	5000.000	5017.811	46732982.99	3.2503	A	0.6
8	☐			37202.34	0.0027	P	0.8

$$y = 6.4775\text{E-}004 * x + 8.6808\text{E-}006$$

$$R = 1.0000$$

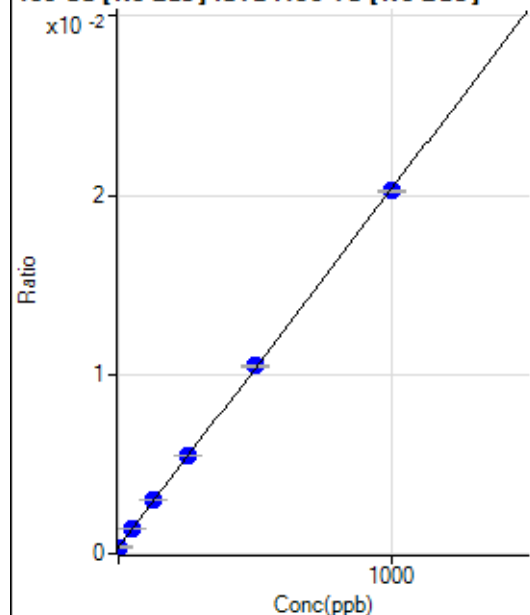
$$DL = 0.0102$$

$$BEC = 0.0134$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7027.04	0.0004	P	1.3
2	☐	1.000	0.489	7707.97	0.0004	P	2.4
3	☐	50.000	53.229	28980.70	0.0014	P	1.5
4	☐	125.000	131.649	60644.76	0.0030	P	2.0
5	☐	250.000	255.286	104343.61	0.0055	P	1.0
6	☐	500.000	506.107	201594.19	0.0105	P	1.7
7	☐	1000.000	994.633	397361.48	0.0202	P	0.7
8	☐			6635.15	0.0004	P	4.5

$$y = 1.9987\text{E-}005 * x + 3.6181\text{E-}004$$

$$R = 0.9999$$

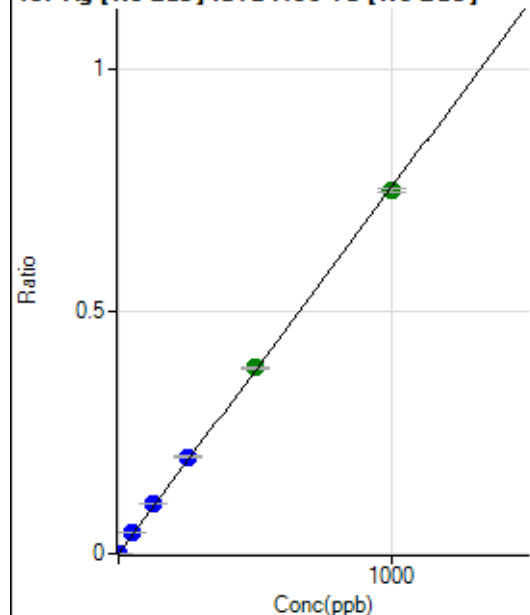
$$DL = 0.7303$$

$$BEC = 18.1$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	136.12	0.0000	P	9.6
2	☐	1.000	1.275	20167.75	0.0010	P	0.8
3	☐	50.000	56.587	870692.28	0.0428	P	0.3
4	☐	125.000	136.528	2093569.10	0.1033	P	1.1
5	☐	250.000	264.606	3824022.70	0.2003	P	0.8
6	☐	500.000	508.101	7398493.39	0.3845	A	1.1
7	☐	1000.000	990.527	14715171.86	0.7496	A	1.1
8	☐			2366.98	0.0001	P	3.6

$$y = 7.5677\text{E-}004 * x + 7.0100\text{E-}006$$

$$R = 0.9998$$

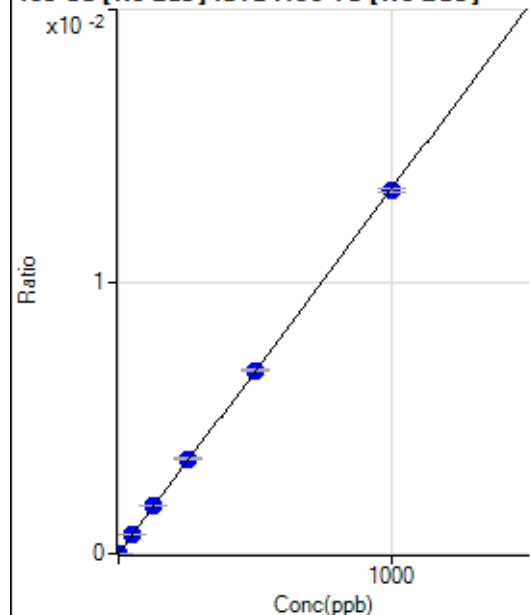
$$DL = 0.002669$$

$$BEC = 0.009263$$

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	22.22	0.0000	P	21.5
2	☐	1.000	1.097	329.18	0.0000	P	5.6
3	☐	50.000	53.578	14638.37	0.0007	P	3.7
4	☐	125.000	133.838	36416.52	0.0018	P	0.5
5	☐	250.000	260.786	66851.74	0.0035	P	1.5
6	☐	500.000	503.230	129966.59	0.0068	P	1.5
7	☐	1000.000	994.405	262004.15	0.0133	P	0.9
8	☐			87.50	0.0000	P	13.5

$$y = 1.3421\text{E-}005 * x + 1.1440\text{E-}006$$

$$R = 0.9999$$

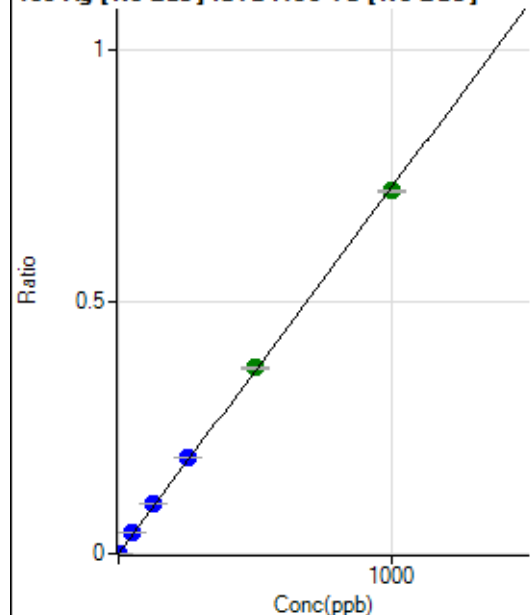
$$DL = 0.05499$$

$$BEC = 0.08524$$

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	58.34	0.0000	P	28.8
2	☐	1.000	1.310	19806.25	0.0010	P	2.4
3	☐	50.000	56.308	831954.66	0.0409	P	0.9
4	☐	125.000	136.389	2008474.41	0.0991	P	0.7
5	☐	250.000	263.344	3654909.63	0.1914	P	0.4
6	☐	500.000	507.521	7097202.94	0.3689	A	1.2
7	☐	1000.000	991.164	14141110.38	0.7204	A	0.5
8	☐			1986.33	0.0001	P	5.8

$$y = 7.2678\text{E-}004 * x + 3.0055\text{E-}006$$

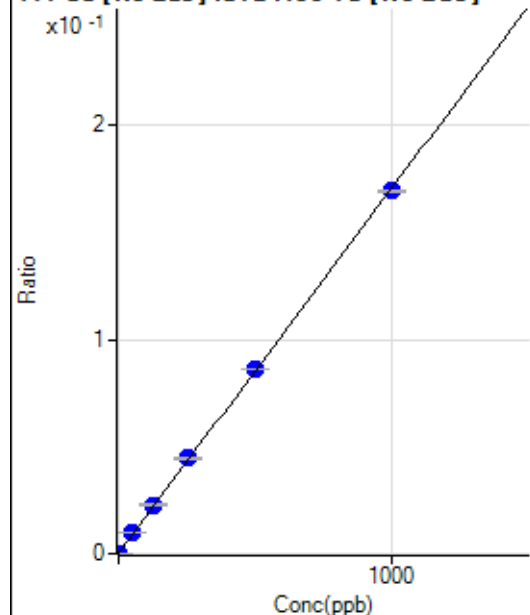
$$R = 0.9998$$

$$DL = 0.003576$$

$$BEC = 0.004135$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4933.93	0.0003	P	1.5
2	☐	1.000	0.975	8714.28	0.0004	P	2.1
3	☐	50.000	54.333	193380.99	0.0095	P	1.0
4	☐	125.000	132.754	463502.94	0.0229	P	0.5
5	☐	250.000	260.065	851099.55	0.0446	P	0.8
6	☐	500.000	505.302	1661617.08	0.0864	P	0.6
7	☐	1000.000	993.647	3328890.82	0.1696	P	0.6
8	☐			5269.50	0.0003	P	4.0

$$y = 1.7041\text{E-}004 * x + 2.5404\text{E-}004$$

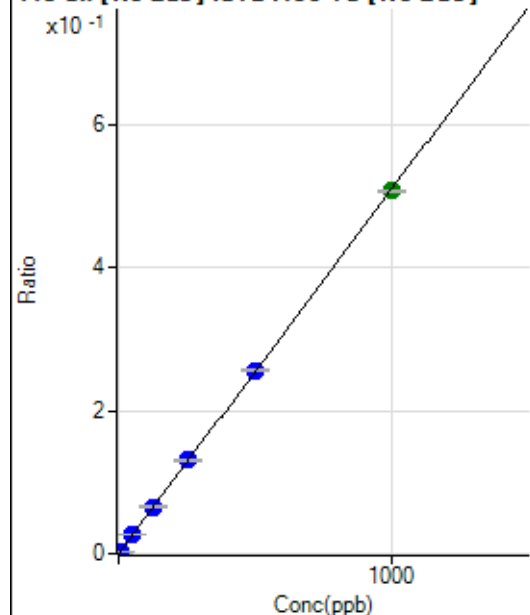
$$R = 0.9999$$

$$DL = 0.06809$$

$$BEC = 1.491$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	980.63	0.0001	P	8.0
2	☐	5.000	5.154	55468.80	0.0027	P	1.7
3	☐	50.000	52.809	547519.54	0.0269	P	0.9
4	☐	125.000	129.230	1333951.98	0.0658	P	0.8
5	☐	250.000	256.835	2497614.59	0.1308	P	0.9
6	☐	500.000	503.304	4930841.21	0.2563	P	1.5
7	☐	1000.000	995.969	9954016.28	0.5071	A	0.5
8	☐			5695.79	0.0003	P	3.8

$$y = 5.0906\text{E-}004 * x + 5.0501\text{E-}005$$

$$R = 1.0000$$

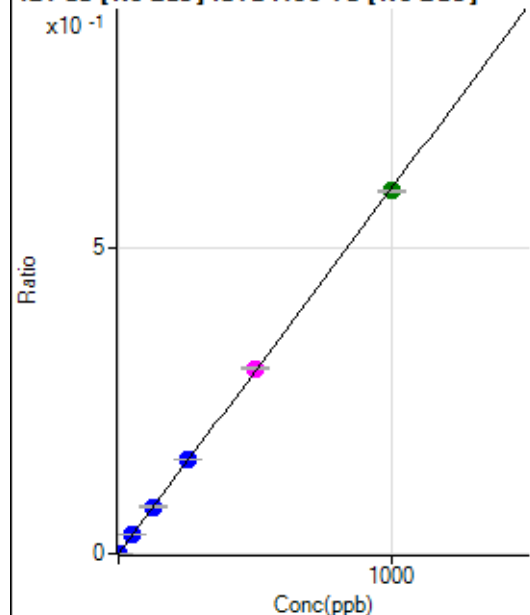
$$DL = 0.02386$$

$$BEC = 0.0992$$

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	27.78	0.0000	P	17.5
2	☐	2.000	1.938	23979.61	0.0012	P	1.5
3	☐	50.000	52.222	632475.19	0.0311	P	0.5
4	☐	125.000	128.867	1555486.04	0.0768	P	0.8
5	☐	250.000	258.567	2941402.45	0.1540	P	1.1
6	☐	500.000	507.901	5821843.01	0.3026	M	1.3
7	☐	1000.000	993.313	11616361.54	0.5917	A	0.2
8	☐			16137.65	0.0009	P	3.3

$$y = 5.9573\text{E-}004 * x + 1.4305\text{E-}006$$

$$R = 0.9999$$

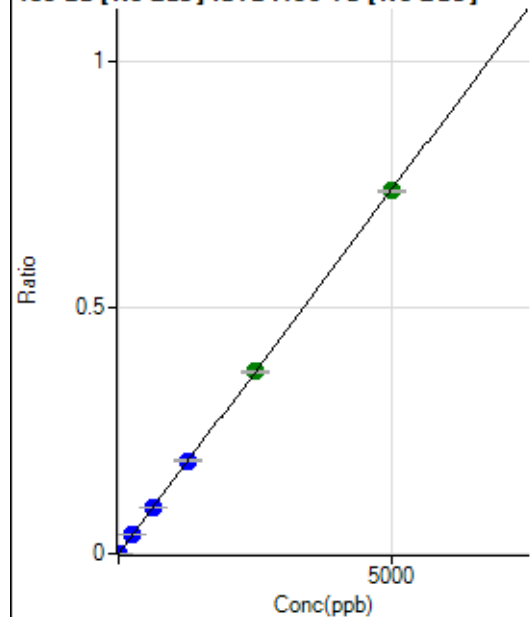
$$DL = 0.00126$$

$$BEC = 0.002401$$

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	34.9
2	☐	10.000	10.574	32433.28	0.0016	P	1.4
3	☐	250.000	262.171	787048.22	0.0387	P	1.1
4	☐	625.000	645.008	1929948.70	0.0953	P	0.6
5	☐	1250.000	1278.818	3606144.09	0.1888	P	0.9
6	☐	2500.000	2506.991	7123179.33	0.3702	A	0.9
7	☐	5000.000	4986.189	14454489.56	0.7363	A	0.3
8	☐			3042.13	0.0002	P	4.1

$$y = 1.4767\text{E-}004 * x + 2.1471\text{E-}006$$

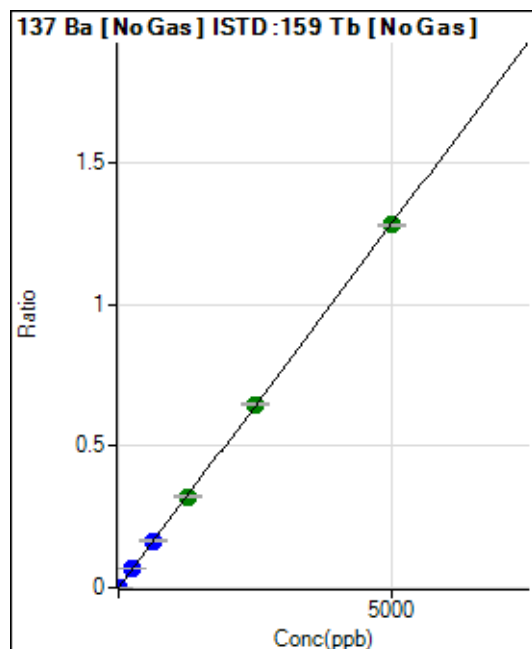
$$R = 1.0000$$

$$DL = 0.01522$$

$$BEC = 0.01454$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	33.34	0.0000	P	25.3
2	☐	10.000	10.207	54410.54	0.0026	P	1.1
3	☐	250.000	262.114	1368400.56	0.0673	P	1.6
4	☐	625.000	646.454	3363894.69	0.1660	P	0.4
5	☐	1250.000	1254.430	6152029.87	0.3222	A	0.7
6	☐	2500.000	2517.056	12437918.33	0.6464	A	1.1
7	☐	5000.000	4987.076	25142538.06	1.2808	A	0.7
8	☐			5192.87	0.0003	P	2.1

$$y = 2.5682E-004 * x + 1.7174E-006$$

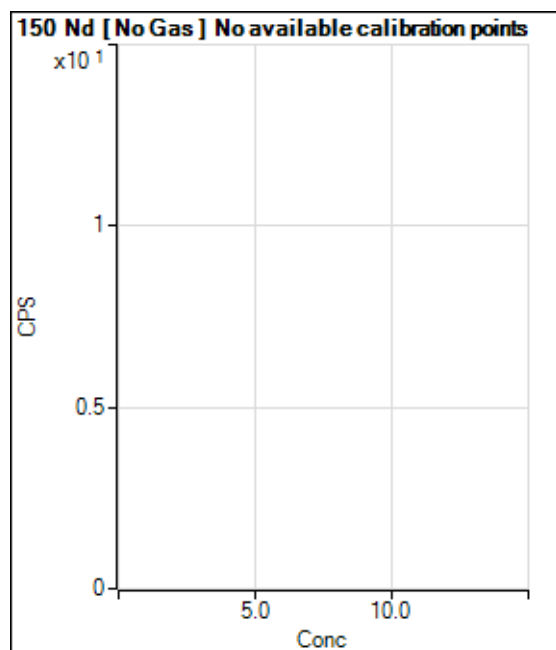
$$R = 1.0000$$

$$DL = 0.00507$$

$$BEC = 0.006687$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	43.3
2	☐			6.67		P	100.0
3	☐			97.78		P	10.4
4	☐			262.23		P	9.6
5	☐			402.25		P	9.1
6	☐			757.83		P	11.8
7	☐			1400.13		P	2.5
8	☐			155.56		P	2.5

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	24.7
2	☐			7.78		P	65.5
3	☐			16.66		P	34.6
4	☐			28.89		P	37.1
5	☐			47.78		P	10.7
6	☐			62.22		P	55.0
7	☐			111.12		P	21.1
8	☐			44.45		P	15.6

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.44		P	21.7
2	☐			44.45		P	28.7
3	☐			55.56		P	31.2
4	☐			86.12		P	39.1
5	☐			161.12		P	20.9
6	☐			138.89		P	3.5
7	☐			308.35		P	16.9
8	☐			575.04		P	25.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	12.4
2	☐			24.44		P	34.3
3	☐			34.44		P	36.6
4	☐			76.67		P	45.2
5	☐			105.56		P	11.1
6	☐			135.56		P	11.1
7	☐			271.12		P	12.3
8	☐			244.45		P	6.9

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			130.56		P	22.4
2	☐			119.45		P	10.7
3	☐			108.34		P	20.4
4	☐			152.79		P	20.7
5	☐			163.90		P	12.8
6	☐			150.01		P	16.7
7	☐			186.12		P	9.3
8	☐			550.04		P	4.0

160 Gd [He] No available calibration points

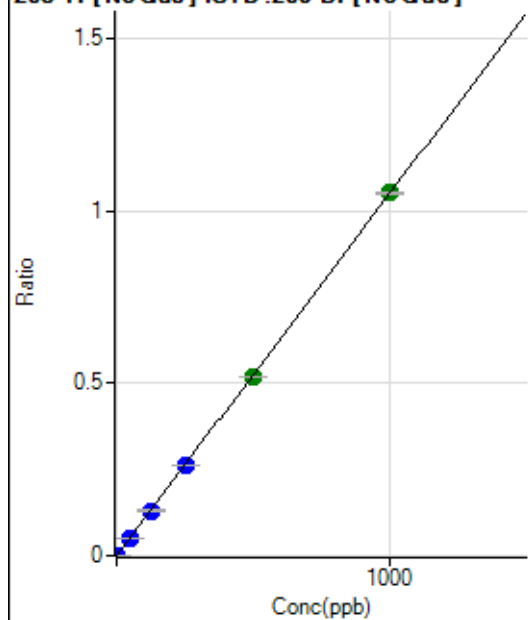
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			294.46		P	12.1
2	☐			328.90		P	11.9
3	☐			283.34		P	11.6
4	☐			267.78		P	23.7
5	☐			286.67		P	17.2
6	☐			300.01		P	8.7
7	☐			296.68		P	3.4
8	☐			542.24		P	10.1

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83.34		P	30.0
2	☐			102.78		P	12.4
3	☐			108.34		P	13.3
4	☐			138.90		P	13.9
5	☐			97.23		P	5.0
6	☐			136.12		P	7.1
7	☐			147.23		P	18.2
8	☐			155.57		P	21.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.33		P	22.9
2	☐			91.11		P	7.6
3	☐			72.22		P	23.7
4	☐			65.55		P	20.6
5	☐			75.56		P	22.2
6	☐			72.22		P	29.3
7	☐			75.56		P	21.8
8	☐			93.34		P	21.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	661.15	0.0001	P	9.9
2	☐	1.000	0.951	13765.94	0.0011	P	1.1
3	☐	50.000	49.308	662192.59	0.0518	P	0.2
4	☐	125.000	124.774	1649852.71	0.1309	P	0.3
5	☐	250.000	250.671	3134319.88	0.2629	P	1.1
6	☐	500.000	493.773	6179232.69	0.5179	A	0.5
7	☐	1000.000	1003.009	12383795.16	1.0519	A	0.6
8	☐			5943.26	0.0006	P	4.8

$$y = 0.0010 * x + 5.4451E-005$$

$$R = 1.0000$$

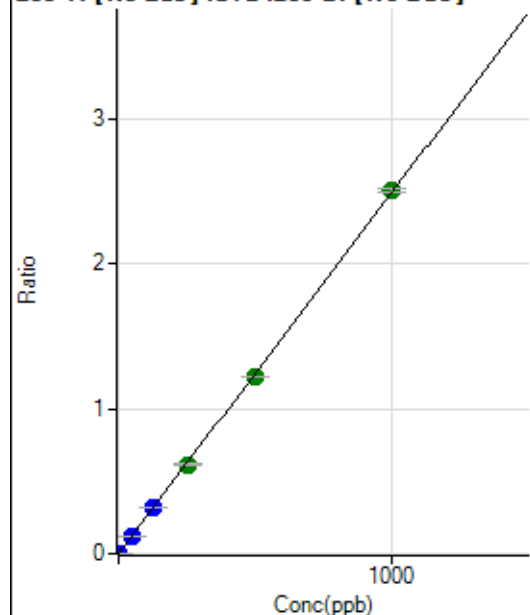
$$DL = 0.01549$$

$$BEC = 0.05192$$

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	1211.22	0.0001	P	8.2
2	☐	1.000	0.942	32078.55	0.0024	P	0.5
3	☐	50.000	50.101	1599519.05	0.1250	P	0.7
4	☐	125.000	126.417	3974256.99	0.3153	P	0.3
5	☐	250.000	247.116	7346702.42	0.6163	A	0.9
6	☐	500.000	490.438	14593631.75	1.2230	A	0.6
7	☐	1000.000	1005.320	29513764.55	2.5069	A	0.9
8	☐			13946.89	0.0014	P	2.2

$$y = 0.0025 * x + 9.9803E-005$$

$$R = 0.9999$$

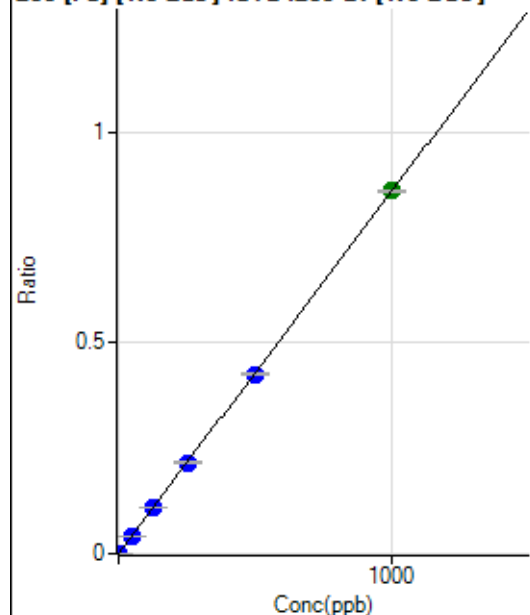
$$DL = 0.0099$$

$$BEC = 0.04003$$

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	1064.89	0.0001	P	1.9
2	☐	1.000	0.908	11355.15	0.0009	P	0.7
3	☐	50.000	50.109	551194.05	0.0431	P	0.3
4	☐	125.000	125.322	1356454.63	0.1076	P	0.7
5	☐	250.000	251.562	2574256.02	0.2159	P	0.9
6	☐	500.000	495.352	5072780.32	0.4251	P	1.0
7	☐	1000.000	1001.888	10122277.42	0.8598	A	0.7
8	☐			32365.94	0.0033	P	0.9

$$y = 8.5806E-004 * x + 8.7714E-005$$

$$R = 1.0000$$

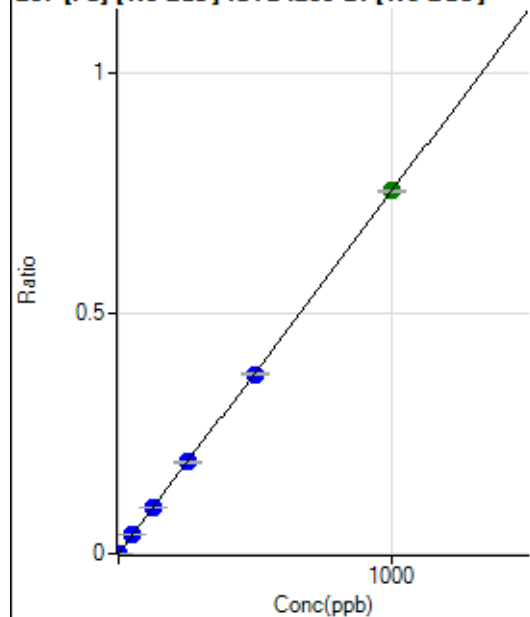
$$DL = 0.005905$$

$$BEC = 0.1022$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	979.69	0.0001	P	5.0
2	☐	1.000	0.916	10117.08	0.0008	P	2.6
3	☐	50.000	50.507	488867.28	0.0382	P	0.3
4	☐	125.000	125.168	1192138.90	0.0946	P	0.4
5	☐	250.000	252.108	2270091.28	0.1904	P	0.9
6	☐	500.000	496.133	4470820.79	0.3747	P	1.2
7	☐	1000.000	1001.361	8902057.38	0.7561	A	0.5
8	☐			29470.36	0.0030	P	2.1

$$y = 7.5502\text{E-}004 * x + 8.0716\text{E-}005$$

$$R = 1.0000$$

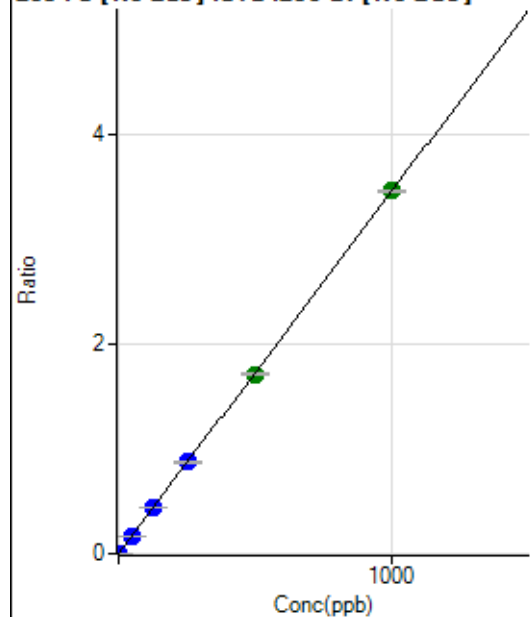
$$DL = 0.0162$$

$$BEC = 0.1069$$

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	3865.14	0.0003	P	6.9
2	☐	1.000	0.912	45370.25	0.0035	P	0.9
3	☐	50.000	50.267	2221647.42	0.1737	P	0.3
4	☐	125.000	125.489	5458256.62	0.4331	P	0.5
5	☐	250.000	252.536	10385417.44	0.8712	P	0.7
6	☐	500.000	495.161	20378364.66	1.7079	A	0.8
7	☐	1000.000	1001.711	40672376.26	3.4547	A	0.5
8	☐			130994.09	0.0133	P	0.7

$$y = 0.0034 * x + 3.1840\text{E-}004$$

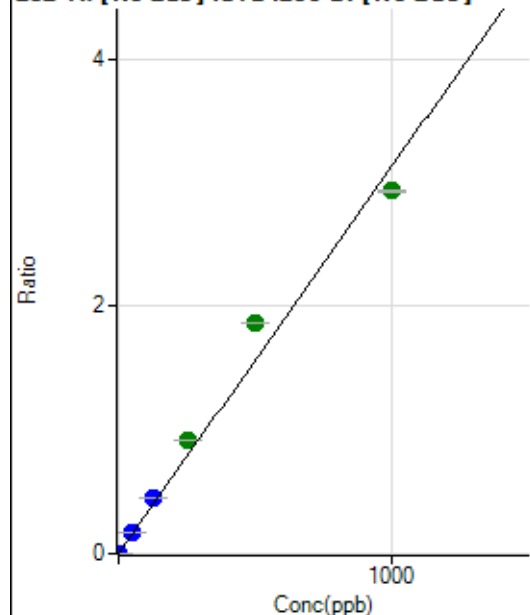
$$R = 1.0000$$

$$DL = 0.01923$$

$$BEC = 0.09233$$

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	2261.38	0.0002	P	4.9
2	☐	1.000	0.839	36800.45	0.0028	P	2.4
3	☐	50.000	56.195	2250227.48	0.1759	P	1.0
4	☐	125.000	144.069	5680152.44	0.4507	P	0.8
5	☐	250.000	294.935	10996151.98	0.9224	A	0.5
6	☐	500.000	596.243	22249903.04	1.8646	A	0.1
7	☐	1000.000	937.952	34531642.20	2.9331	A	0.3
8	☐			9310.94	0.0009	P	5.5

$$y = 0.0031 * x + 1.8626E-004$$

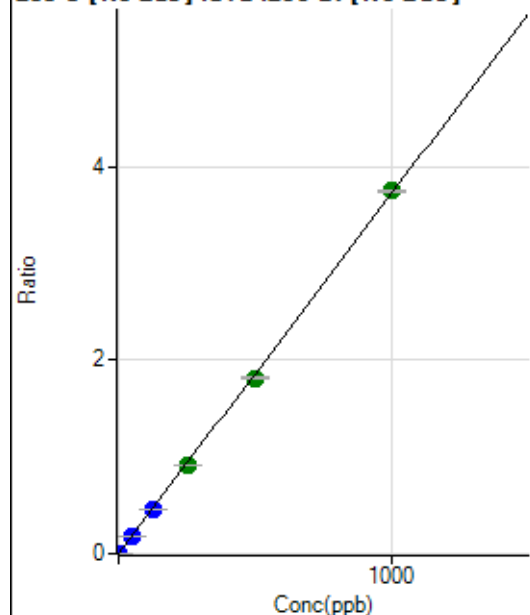
$$R = 0.9914$$

$$DL = 0.008764$$

$$BEC = 0.05957$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2583.69	0.0002	P	0.8
2	☐	1.000	0.886	46026.93	0.0035	P	2.2
3	☐	50.000	47.578	2269944.21	0.1775	P	1.0
4	☐	125.000	121.243	5695118.22	0.4519	P	0.6
5	☐	250.000	244.155	10845272.72	0.9097	A	0.9
6	☐	500.000	488.497	21714805.35	1.8200	A	1.1
7	☐	1000.000	1007.803	44201693.35	3.7545	A	0.6
8	☐			8102.91	0.0008	P	2.2

$$y = 0.0037 * x + 2.1283E-004$$

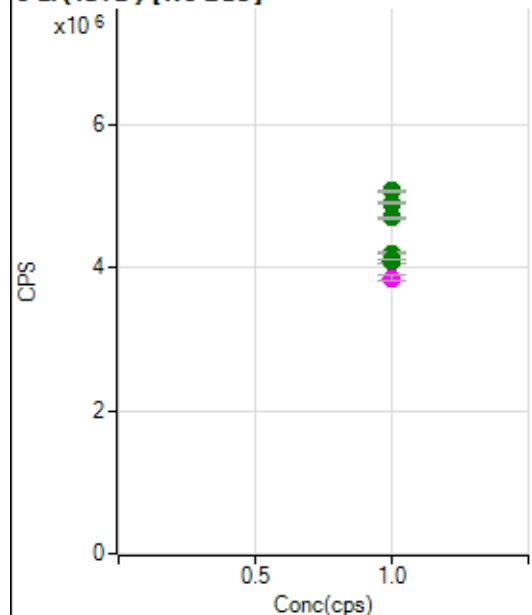
$$R = 0.9999$$

$$DL = 0.001436$$

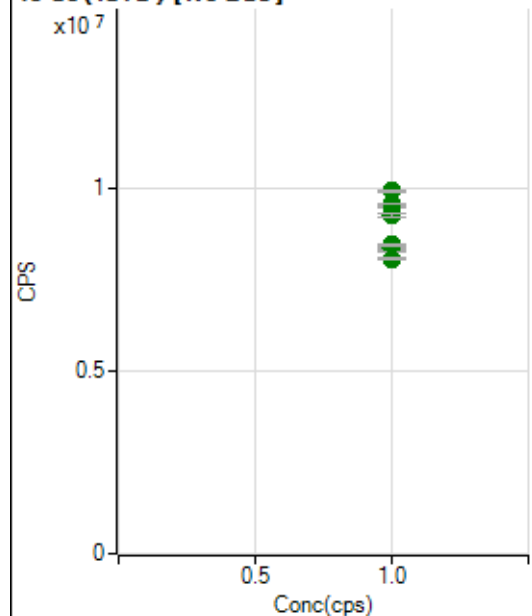
$$BEC = 0.05713$$

Weight: <None>

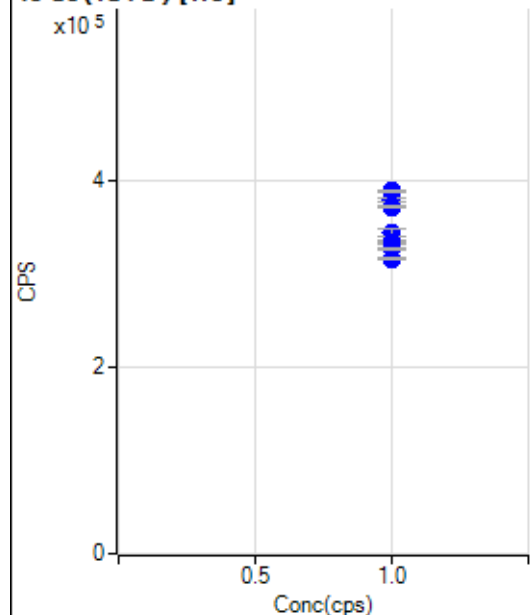
Min Conc: 0

6 Li (ISTD) [No Gas]

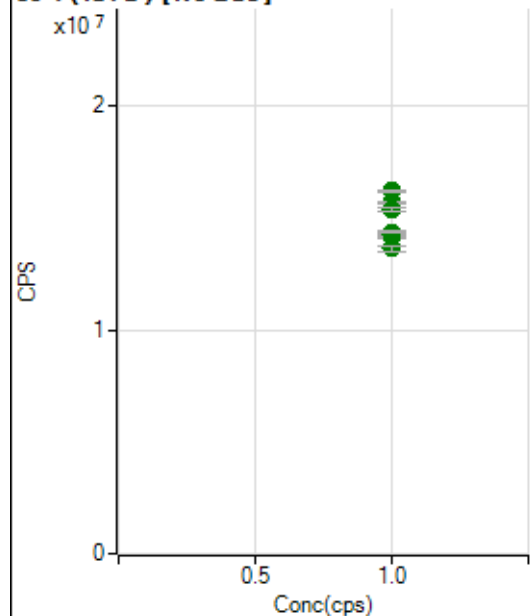
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4892479.06		A	0.1
2	☐	1.000		5075393.64		A	0.4
3	☐	1.000		4906921.80		A	0.2
4	☐	1.000		4697505.00		A	0.9
5	☐	1.000		4203636.78		A	0.8
6	☐	1.000		4095625.01		A	1.1
7	☐	1.000		4117969.04		A	0.1
8	☐	1.000		3855238.35		M	2.0

45 Sc (ISTD) [No Gas]

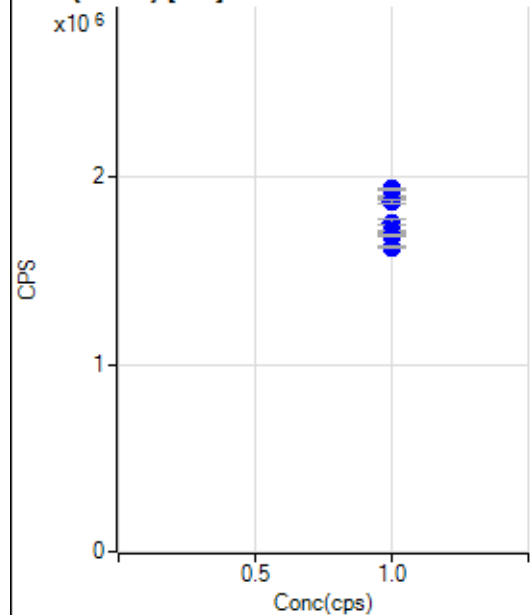
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9500278.16		A	0.6
2	☐	1.000		9936374.61		A	0.2
3	☐	1.000		9591743.27		A	0.3
4	☐	1.000		9251366.96		A	1.1
5	☐	1.000		8355317.20		A	0.7
6	☐	1.000		8348208.09		A	1.7
7	☐	1.000		8455971.02		A	0.8
8	☐	1.000		8077829.17		A	1.0

45 Sc (ISTD) [He]

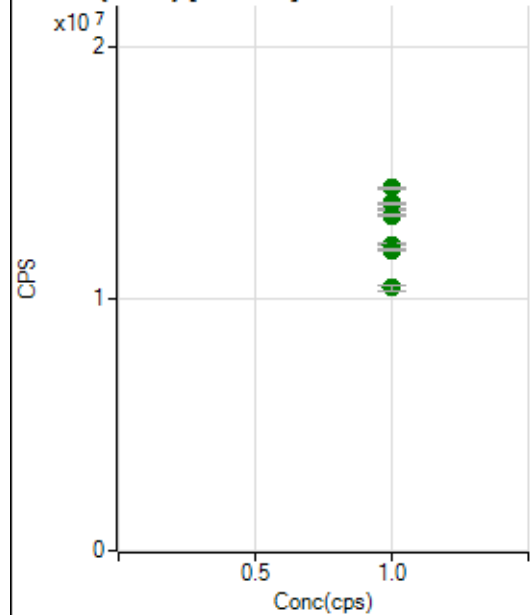
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		378839.27		P	1.3
2	☐	1.000		388595.38		P	0.2
3	☐	1.000		371309.12		P	0.3
4	☐	1.000		343632.00		P	2.6
5	☐	1.000		316129.16		P	1.0
6	☐	1.000		334484.73		P	0.5
7	☐	1.000		331400.93		P	0.4
8	☐	1.000		326637.35		P	0.9

89 Y (ISTD) [No Gas]

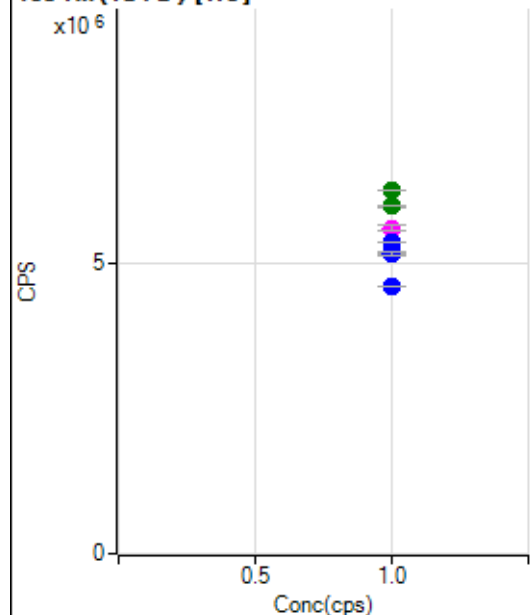
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15374306.58		A	1.1
2	☐	1.000		16218432.26		A	0.8
3	☐	1.000		15692103.93		A	0.4
4	☐	1.000		15391579.77		A	1.1
5	☐	1.000		14169022.43		A	0.8
6	☐	1.000		14246708.82		A	1.0
7	☐	1.000		14378424.78		A	0.6
8	☐	1.000		13634340.77		A	1.7

89 Y(ISTD) [He]

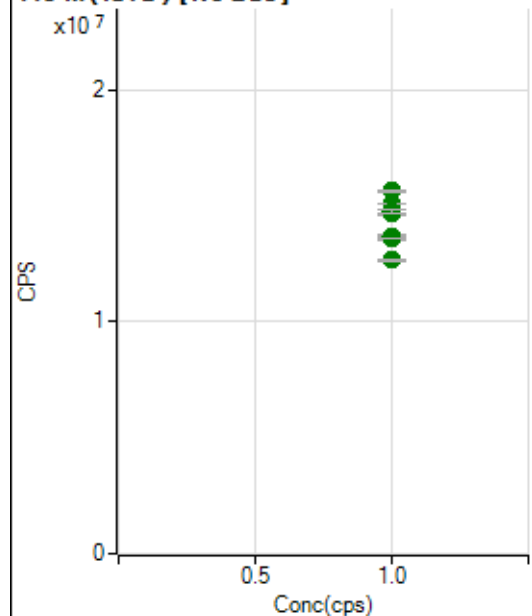
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1894911.24		P	0.6
2	☐	1.000		1939398.27		P	0.5
3	☐	1.000		1871663.08		P	0.7
4	☐	1.000		1759801.08		P	1.8
5	☐	1.000		1629284.72		P	0.9
6	☐	1.000		1717213.34		P	0.2
7	☐	1.000		1713626.66		P	0.3
8	☐	1.000		1689875.95		P	0.5

103 Rh(ISTD) [No Gas]

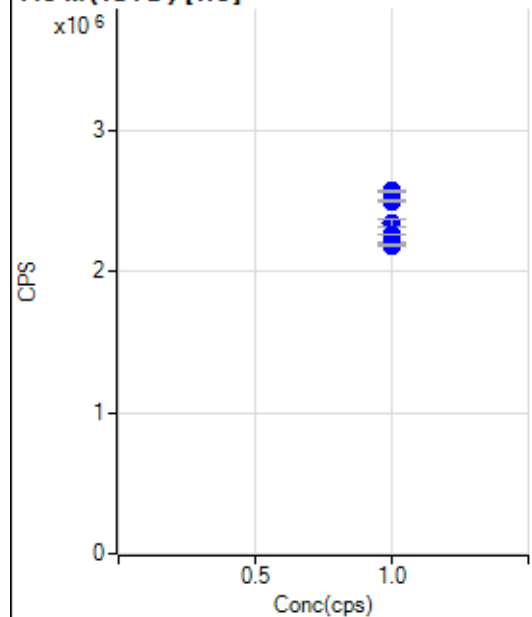
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13568690.93		A	0.6
2	☐	1.000		14410396.33		A	0.5
3	☐	1.000		13788364.54		A	0.5
4	☐	1.000		13319448.30		A	0.8
5	☐	1.000		12145336.21		A	0.5
6	☐	1.000		12117022.58		A	1.8
7	☐	1.000		11945637.68		A	0.4
8	☐	1.000		10443163.86		A	1.8

103 Rh (ISTD) [He]

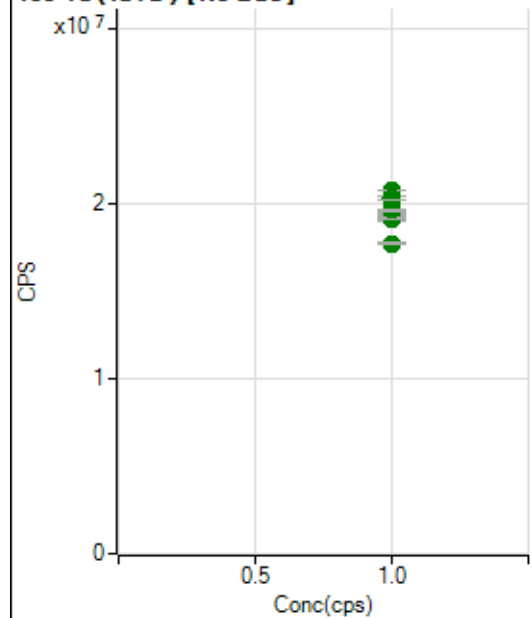
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5992699.14		A	0.5
2	☐	1.000		6262189.83		A	0.1
3	☐	1.000		6004711.79		A	0.2
4	☐	1.000		5614281.10		M	1.7
5	☐	1.000		5207365.06		P	0.6
6	☐	1.000		5371788.88		P	0.2
7	☐	1.000		5180733.57		P	1.0
8	☐	1.000		4617155.56		P	0.4

115 In (ISTD) [No Gas]

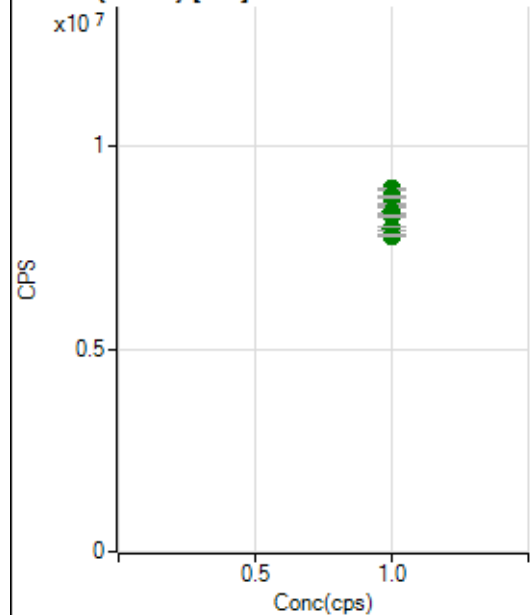
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14645201.03		A	1.1
2	☐	1.000		15654047.85		A	0.4
3	☐	1.000		15110166.19		A	0.2
4	☐	1.000		14749594.16		A	0.8
5	☐	1.000		13662537.01		A	0.5
6	☐	1.000		13657853.13		A	1.5
7	☐	1.000		13607408.79		A	0.5
8	☐	1.000		12666294.63		A	0.9

115 In (ISTD) [He]

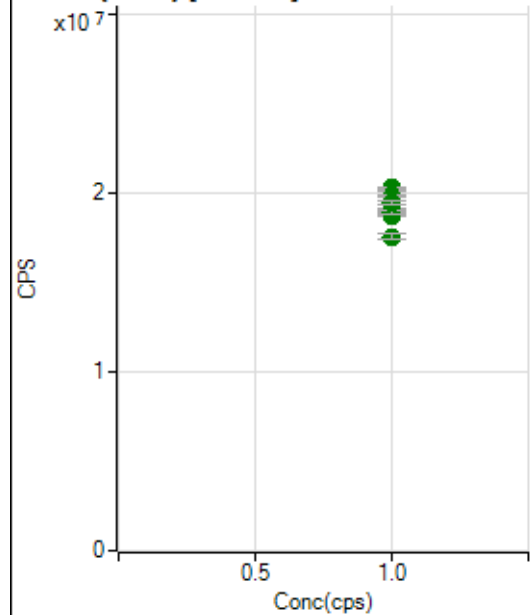
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2500028.94		P	0.4
2	☐	1.000		2567871.74		P	0.5
3	☐	1.000		2494814.07		P	0.6
4	☐	1.000		2341130.73		P	2.0
5	☐	1.000		2182897.02		P	0.5
6	☐	1.000		2257814.48		P	0.3
7	☐	1.000		2196048.46		P	0.6
8	☐	1.000		2178298.71		P	0.6

159 Tb (ISTD) [No Gas]

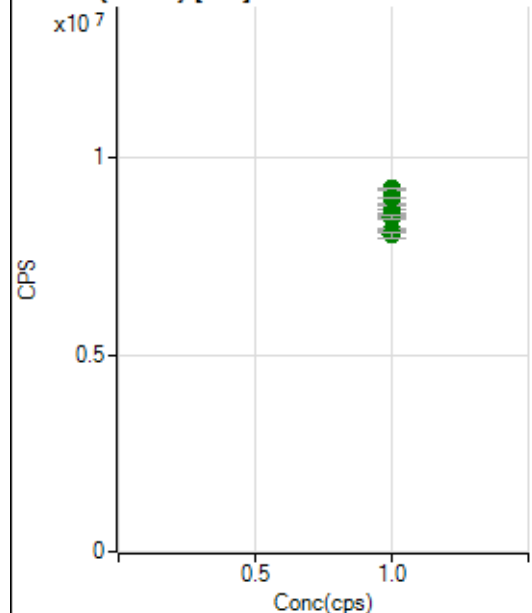
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19421302.90		A	0.3
2	☐	1.000		20743252.33		A	0.1
3	☐	1.000		20329237.89		A	1.1
4	☐	1.000		20261355.53		A	0.1
5	☐	1.000		19096242.35		A	0.8
6	☐	1.000		19240166.38		A	0.6
7	☐	1.000		19630641.37		A	0.2
8	☐	1.000		17755600.29		A	0.8

159 Tb (ISTD) [He]

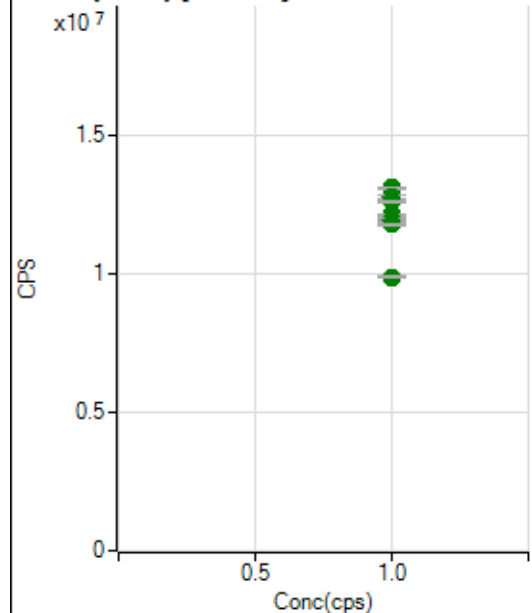
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8579307.86		A	0.7
2	☐	1.000		8955412.71		A	0.6
3	☐	1.000		8771989.73		A	0.4
4	☐	1.000		8394737.10		A	2.3
5	☐	1.000		7984927.66		A	1.0
6	☐	1.000		8354244.18		A	0.5
7	☐	1.000		8300225.29		A	0.5
8	☐	1.000		7807654.12		A	0.7

165 Ho (ISTD) [No Gas]

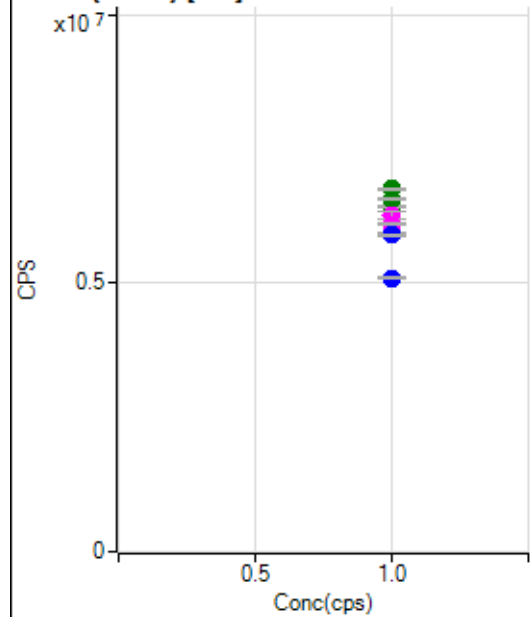
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19048038.45		A	1.2
2	☐	1.000		20273075.11		A	0.8
3	☐	1.000		19930903.05		A	1.2
4	☐	1.000		19806756.52		A	0.6
5	☐	1.000		18748769.34		A	0.2
6	☐	1.000		18904363.10		A	1.5
7	☐	1.000		19475285.85		A	1.4
8	☐	1.000		17551335.11		A	1.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8820119.45		A	0.5
2	☐	1.000		9206458.13		A	0.4
3	☐	1.000		8963758.41		A	0.2
4	☐	1.000		8582035.01		A	2.5
5	☐	1.000		8167971.54		A	0.9
6	☐	1.000		8568377.72		A	0.6
7	☐	1.000		8504151.19		A	1.1
8	☐	1.000		8028963.70		A	1.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12139629.12		A	0.6
2	☐	1.000		13094314.25		A	0.5
3	☐	1.000		12793004.11		A	1.2
4	☐	1.000		12603856.89		A	0.6
5	☐	1.000		11921124.68		A	0.5
6	☐	1.000		11932963.85		A	1.7
7	☐	1.000		11773187.60		A	0.2
8	☐	1.000		9860108.61		A	0.7

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6421280.46		A	0.4
2	☐	1.000		6757031.91		A	0.4
3	☐	1.000		6565155.60		A	0.6
4	☐	1.000		6273450.46		M	2.3
5	☐	1.000		5928068.31		P	0.5
6	☐	1.000		6103800.05		M	0.6
7	☐	1.000		5898136.23		P	0.4
8	☐	1.000		5096524.44		P	1.1

US EPA Tune Check Sample Report

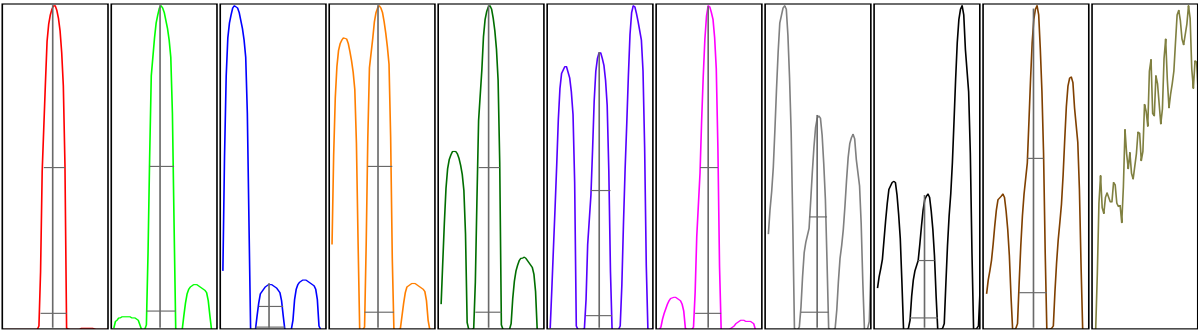
Batch Folder D:\ICP-MS Data\P7010820-P7.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	13435	0.81	5.00	
24	2104022	0.78	5.00	
25	293543	0.75	5.00	
26	318983	0.85	5.00	
59	108047	0.47	5.00	
113	14871	0.77	5.00	
115	173382	0.64	5.00	
206	42652	0.44	5.00	
207	39643	0.54	5.00	
208	92387	0.73	5.00	
220	110	2.21		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	13488	13556	13405	13268	13458
24	2115561	2122031	2095601	2080598	2106317
25	295515	295727	293260	290359	292856
26	321613	321752	317665	315456	318431
59	108300	108753	108053	107514	107616
113	14919	14976	14760	14738	14964
115	173563	175088	172016	173140	173100
206	42706	42903	42530	42411	42710
207	39813	39830	39522	39332	39720
208	92254	93366	92742	91893	91682
220	108	114	109	109	109

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	21677	8.95	8.9 - 9.1		0.783	0.900	
24	3220857	23.90	23.9 - 24.1		0.832	0.900	
25	446130	24.90	24.9 - 25.1		0.834	0.900	
26	494867	25.90	25.9 - 26.1		0.829	0.900	
59	179396	58.95	58.9 - 59.1		0.779	0.900	
113	27712	113.00	112.9 - 113.1		0.766	0.900	
115	326276	115.00	114.9 - 115.1		0.766	0.900	
206	81902	206.00	205.9 - 206.1		0.800	0.900	
207	73669	206.95	206.9 - 207.1		0.779	0.900	
208	176499	207.95	207.9 - 208.1		0.787	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	6.7	V	Deflect	12.8	V
Extract 2	-115.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	25989	0.61	
89	129249	0.39	
205	35073	0.78	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	25930	26100	25758	25994	26161
89	129828	128823	128814	129031	129751
205	35344	34906	34713	35073	35328

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	6.6	V	Deflect	1.4	V
Extract 2	-115.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	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			