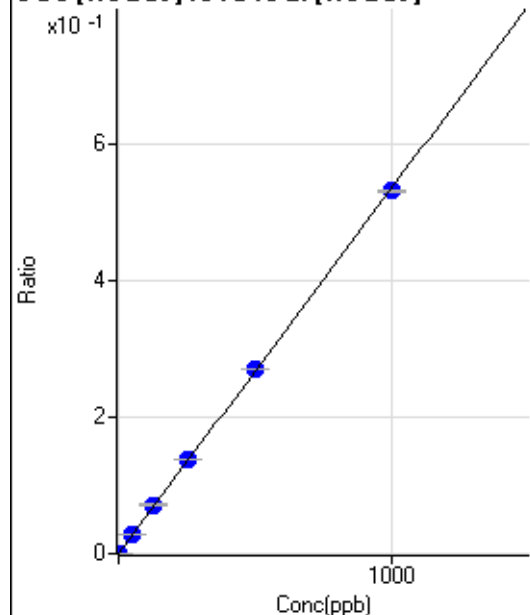


Batch Folder: D:\ICP-MS Data\P7081919MS.b\
Analysis File: P7081919MS.batch.bin
DA Date-Time: 2019-08-19 12:57:43
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-08-19 11:34:21
2	003CALS.d	S02	2019-08-19 11:37:56
3	004CALS.d	S03	2019-08-19 11:42:34
4	005CALS.d	S04	2019-08-19 11:46:30
5	006CALS.d	S05	2019-08-19 11:50:23
6	007CALS.d	S06	2019-08-19 11:54:12
7	008CALS.d	S07	2019-08-19 11:58:01
8	009CALS.d	S08	2019-08-19 12:01:48

9 Be [NoGas] ISTD:6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	38.89	0.0000	P	38.6
2	☐	1.000	0.961	1188.95	0.0005	P	4.7
3	☐	50.000	52.095	63786.64	0.0279	P	0.4
4	☐	125.000	132.994	158289.03	0.0711	P	2.2
5	☐	250.000	257.676	287887.45	0.1377	P	0.4
6	☐	500.000	507.522	552821.87	0.2712	P	0.1
7	☐	1000.000	993.216	1089169.59	0.5308	P	0.3
8	☐			456.68	0.0002	P	17.3

$$y = 5.3436\text{E-}004 * x + 1.7754\text{E-}005$$

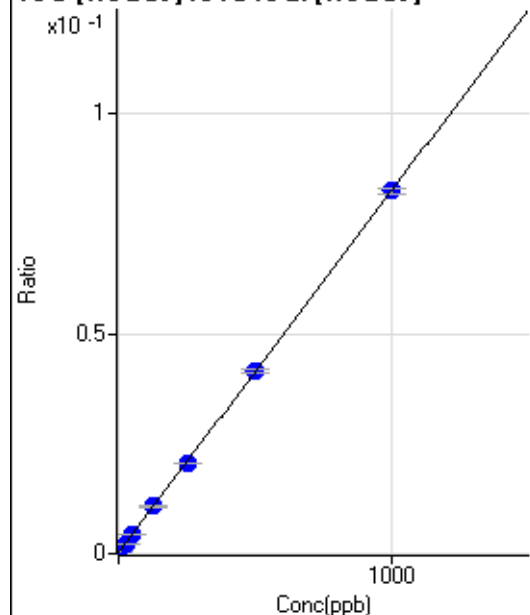
$$R = 0.9999$$

$$DL = 0.03852$$

$$BEC = 0.03323$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	602.82	0.0003	P	8.0
2	☐	25.000	20.989	4475.84	0.0020	P	2.0
3	☐	50.000	48.009	9667.38	0.0042	P	0.5
4	☐	125.000	128.827	24186.76	0.0109	P	4.2
5	☐	250.000	247.325	43073.30	0.0206	P	0.8
6	☐	500.000	501.014	84496.95	0.0415	P	1.9
7	☐	1000.000	999.883	169225.11	0.0825	P	1.6
8	☐			9258.73	0.0044	P	5.7

$$y = 8.2197\text{E-}005 * x + 2.7527\text{E-}004$$

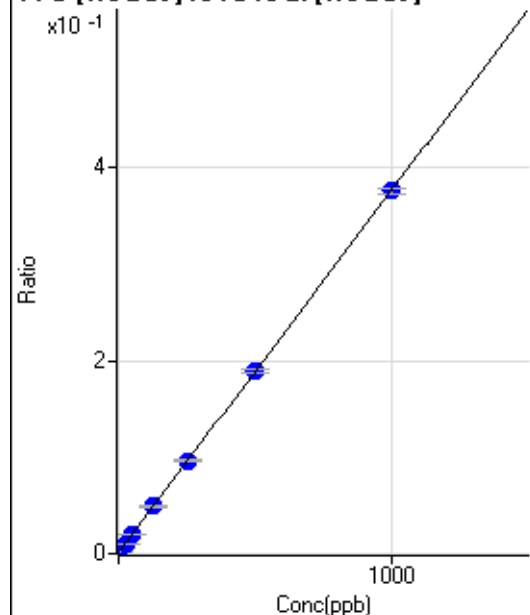
$$R = 1.0000$$

$$DL = 0.7997$$

$$BEC = 3.349$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD: 6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2516.98	0.0011	P	6.9
2	☐	25.000	22.839	21752.45	0.0097	P	1.6
3	☐	50.000	49.133	44861.98	0.0196	P	3.6
4	☐	125.000	127.528	109144.76	0.0490	P	3.3
5	☐	250.000	252.795	200764.07	0.0960	P	1.9
6	☐	500.000	501.114	385733.40	0.1893	P	1.4
7	☐	1000.000	998.526	771526.56	0.3760	P	1.8
8	☐			42399.40	0.0200	P	6.4

$$y = 3.7537E-004 * x + 0.0011$$

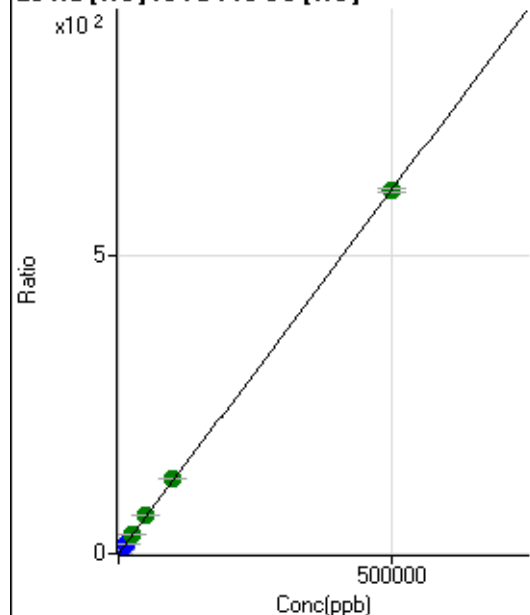
$$R = 1.0000$$

$$DL = 0.6371$$

$$BEC = 3.062$$

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	3836.77	0.0239	P	2.0
2	☐	500.000	485.816	101520.28	0.6155	P	0.6
3	☐	5000.000	5045.784	1032455.13	6.1676	P	1.0
4	☐	12500.000	12941.684	2569564.10	15.7815	P	4.6
5	☐	25000.000	26024.080	4797206.01	31.7104	A	0.2
6	☐	50000.000	52300.004	9469286.76	63.7035	A	0.2
7	☐	100000.00	102923.74	19081957.54	125.3421	A	0.3
8	☐	500000.00	499122.56	97085318.14	607.7469	A	1.0

$$y = 0.0012 * x + 0.0239$$

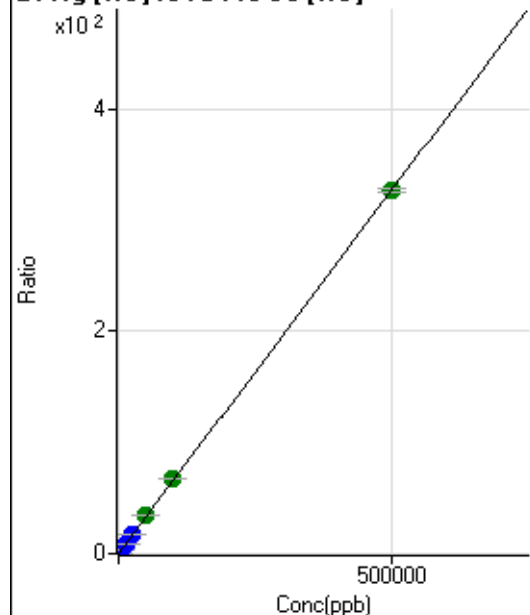
$$R = 1.0000$$

$$DL = 1.2$$

$$BEC = 19.66$$

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	125.00	0.0008	P	16.8
2	☐	500.000	487.510	52674.11	0.3193	P	0.1
3	☐	5000.000	5039.512	551410.79	3.2938	P	0.6
4	☐	12500.000	12805.153	1362475.02	8.3683	P	4.7
5	☐	25000.000	25875.544	2558050.42	16.9091	P	0.2
6	☐	50000.000	52014.006	5052449.51	33.9893	A	0.2
7	☐	100000.00	102183.87	10165407.43	66.7727	A	0.3
8	☐	500000.00	499310.03	52121393.88	326.2744	A	1.0

$$y = 6.5345E-004 * x + 7.7930E-004$$

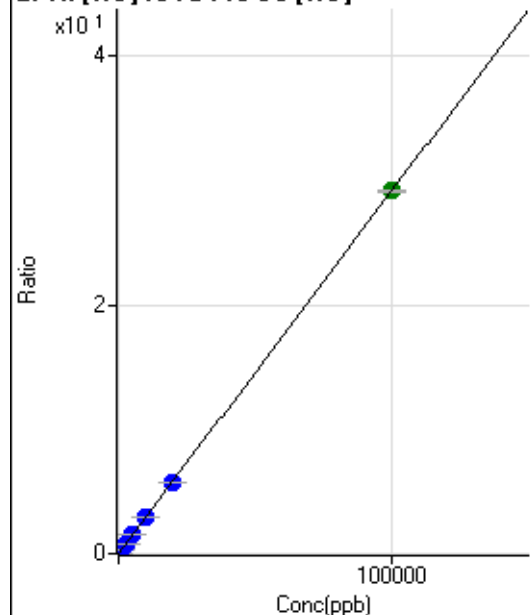
R = 1.0000

DL = 0.602

BEC = 1.193

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	19.44	0.0001	P	65.0
2	☐	20.000	19.879	975.07	0.0059	P	5.2
3	☐	1000.000	988.461	48223.37	0.2881	P	3.3
4	☐	2500.000	2491.595	118192.15	0.7261	P	5.3
5	☐	5000.000	5053.092	222742.59	1.4724	P	0.4
6	☐	10000.000	10056.276	435541.97	2.9301	P	0.3
7	☐	20000.000	19587.311	868819.48	5.7070	P	0.4
8	☐	100000.00	100074.58	4657874.50	29.1573	A	0.8

$$y = 2.9135E-004 * x + 1.2097E-004$$

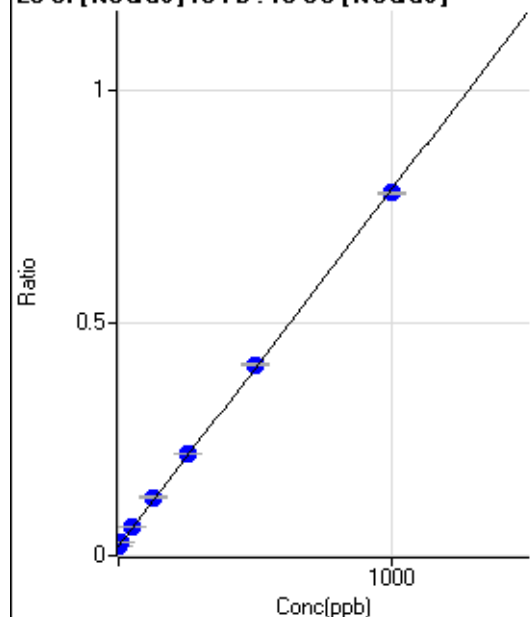
R = 1.0000

DL = 0.8096

BEC = 0.4152

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	79469.48	0.0201	P	1.0
2	☐	10.000	9.514	111796.65	0.0274	P	0.9
3	☐	50.000	54.965	261201.80	0.0623	P	0.5
4	☐	125.000	136.072	501693.71	0.1246	P	2.9
5	☐	250.000	258.674	829865.94	0.2187	P	0.4
6	☐	500.000	509.655	1516632.27	0.4113	P	0.5
7	☐	1000.000	991.377	2934199.83	0.7811	P	0.8
8	☐			141535.83	0.0368	P	1.2

$$y = 7.6756E-004 * x + 0.0201$$

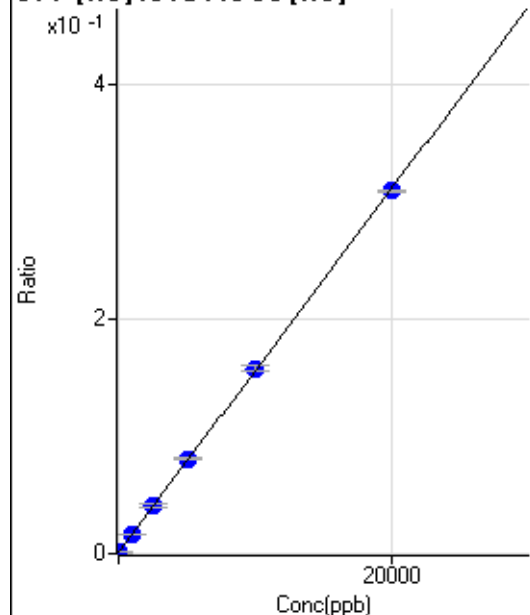
R = 0.9998

DL = 0.8034

BEC = 26.24

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-22.806	97.23	0.0006	P	17.2
2	☐	0.000	22.806	216.68	0.0013	P	23.7
3	☐	1000.000	1027.456	2825.40	0.0169	P	3.5
4	☐	2500.000	2602.883	6718.48	0.0413	P	6.8
5	☐	5000.000	5169.160	12261.07	0.0810	P	2.8
6	☐	10000.000	10111.407	23424.67	0.1576	P	2.9
7	☐	20000.000	19887.773	47053.13	0.3091	P	0.6
8	☐			113.89	0.0007	P	19.3

$$y = 1.5493E-005 * x + 9.5965E-004$$

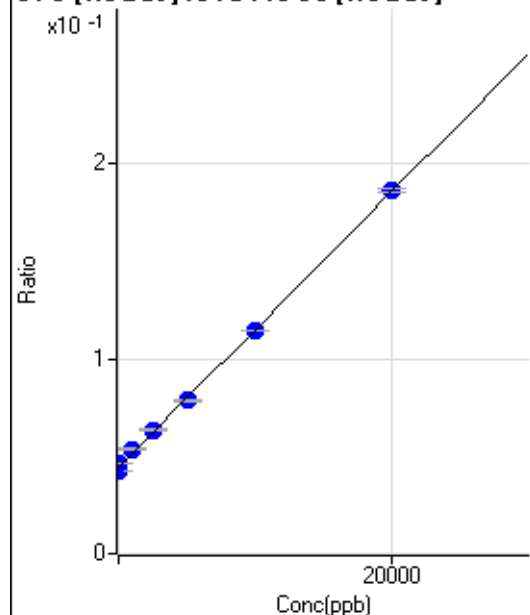
R = 0.9999

DL = 40.26

BEC = 61.94

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-266.764	168028.32	0.0426	P	0.7
2	☐	0.000	266.764	188854.77	0.0464	P	0.4
3	☐	1000.000	1315.960	225346.64	0.0538	P	1.7
4	☐	2500.000	2698.504	255938.79	0.0636	P	2.7
5	☐	5000.000	4814.415	297973.98	0.0785	P	1.0
6	☐	10000.000	9907.117	422306.46	0.1145	P	0.4
7	☐	20000.000	20052.227	699768.79	0.1863	P	1.1
8	☐			149538.06	0.0388	P	1.1

$$y = 7.0721\text{E-}006 * x + 0.0445$$

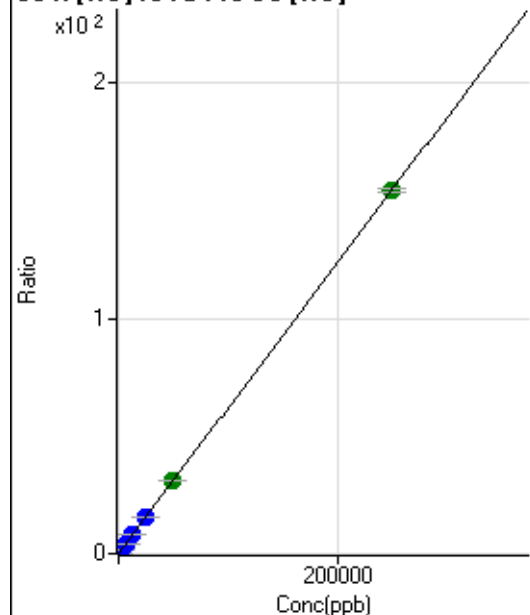
R = 0.9995

DL = 98.85

BEC = 6288

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	8247.09	0.0515	P	4.6
2	☐	500.000	490.159	58326.31	0.3536	P	0.7
3	☐	2500.000	2538.806	270596.63	1.6164	P	0.5
4	☐	6250.000	6421.608	652964.07	4.0098	P	4.3
5	☐	12500.000	12908.053	1211507.54	8.0082	P	1.0
6	☐	25000.000	25563.252	2349880.33	15.8090	P	0.6
7	☐	50000.000	50163.886	4715302.71	30.9731	A	0.6
8	☐	250000.00	249885.83	24614308.88	154.0843	A	1.1

$$y = 6.1641\text{E-}004 * x + 0.0515$$

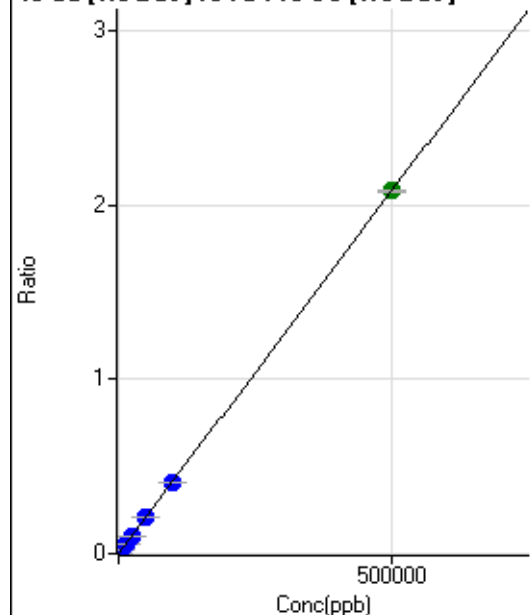
R = 1.0000

DL = 11.6

BEC = 83.51

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	108.34	0.0000	P	13.1
2	☐	500.000	472.746	8113.66	0.0020	P	2.7
3	☐	5000.000	4808.218	83837.42	0.0200	P	0.4
4	☐	12500.000	12660.300	211947.41	0.0526	P	2.8
5	☐	25000.000	24793.438	391043.09	0.1030	P	0.8
6	☐	50000.000	49699.796	761525.46	0.2065	P	0.8
7	☐	100000.00	97801.124	1526678.66	0.4064	P	0.5
8	☐	500000.00	500478.06	8005361.64	2.0795	A	0.9

$$y = 4.1550\text{E-}006 * x + 2.7453\text{E-}005$$

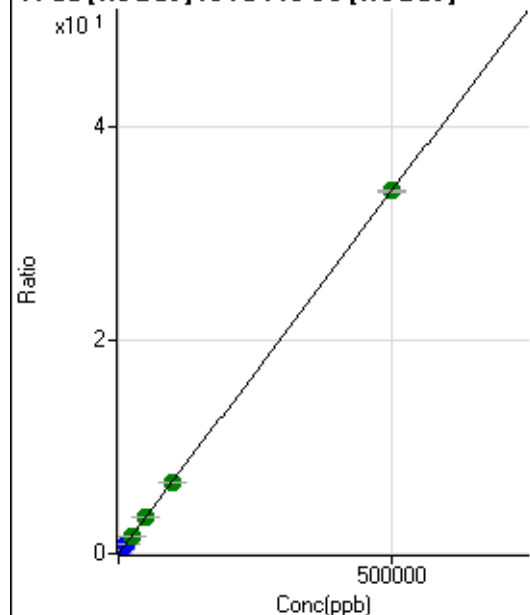
$$R = 1.0000$$

$$DL = 2.604$$

$$BEC = 6.607$$

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6146.81	0.0016	P	7.5
2	☐	500.000	463.543	134898.75	0.0331	P	0.6
3	☐	5000.000	4769.417	1367070.76	0.3262	P	0.5
4	☐	12500.000	12520.957	3438873.47	0.8539	P	2.4
5	☐	25000.000	24707.340	6388464.77	1.6835	A	0.4
6	☐	50000.000	49646.257	12466786.65	3.3811	A	0.3
7	☐	100000.00	98001.277	25067209.06	6.6728	A	0.6
8	☐	500000.00	500451.57	131151429.3	34.0689	A	0.8

$$y = 6.8073\text{E-}005 * x + 0.0016$$

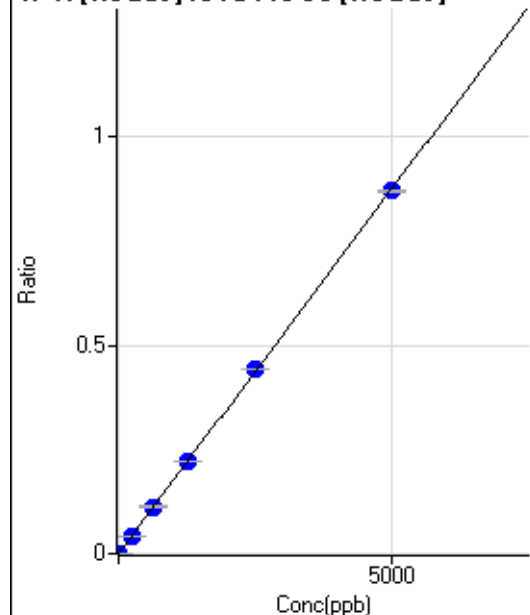
$$R = 1.0000$$

$$DL = 5.157$$

$$BEC = 22.88$$

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD: 45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	38.89	0.0000	P	86.4
2	☐	5.000	4.967	3581.14	0.0009	P	1.7
3	☐	250.000	248.351	182154.69	0.0435	P	1.3
4	☐	625.000	645.891	455244.63	0.1130	P	1.6
5	☐	1250.000	1267.494	841656.40	0.2218	P	0.1
6	☐	2500.000	2528.351	1631237.83	0.4424	P	0.2
7	☐	5000.000	4978.922	3272724.27	0.8712	P	0.9
8	☐			1972.44	0.0005	P	4.8

$$y = 1.7498\text{E-}004 * x + 9.8548\text{E-}006$$

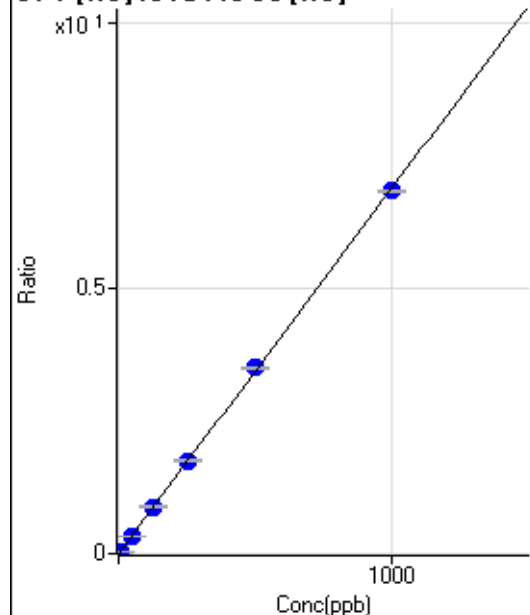
$$R = 1.0000$$

$$DL = 0.146$$

$$BEC = 0.05632$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8.89	0.0001	P	56.9
2	☐	5.000	5.011	5695.63	0.0345	P	1.7
3	☐	50.000	49.830	57400.26	0.3429	P	0.4
4	☐	125.000	127.525	142865.71	0.8774	P	4.5
5	☐	250.000	255.369	265800.72	1.7570	P	0.5
6	☐	500.000	508.810	520366.88	3.5006	P	0.4
7	☐	1000.000	993.946	1041072.85	6.8384	P	0.4
8	☐			303.34	0.0019	P	18.4

$$y = 0.0069 * x + 5.5276\text{E-}005$$

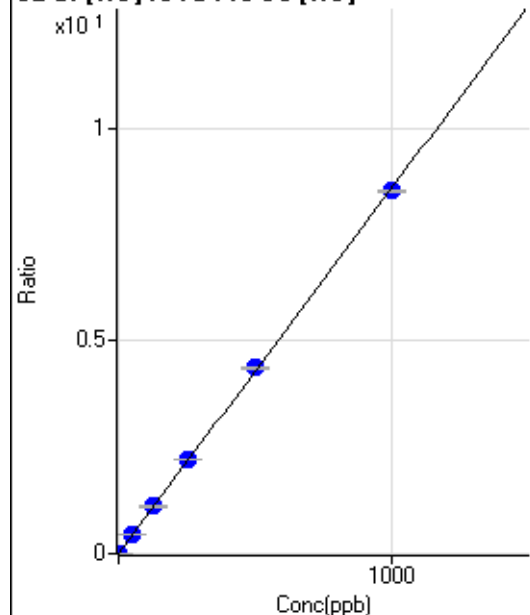
$$R = 0.9999$$

$$DL = 0.0137$$

$$BEC = 0.008034$$

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	201.12	0.0013	P	14.3
2	☐	2.000	1.929	2937.01	0.0178	P	0.9
3	☐	50.000	50.844	73244.04	0.4375	P	0.6
4	☐	125.000	129.375	180997.48	1.1114	P	3.8
5	☐	250.000	256.538	333198.34	2.2025	P	0.6
6	☐	500.000	508.713	649015.27	4.3663	P	0.5
7	☐	1000.000	993.420	1297905.11	8.5253	P	0.5
8	☐			25744.92	0.1612	P	1.2

$$y = 0.0086 * x + 0.0013$$

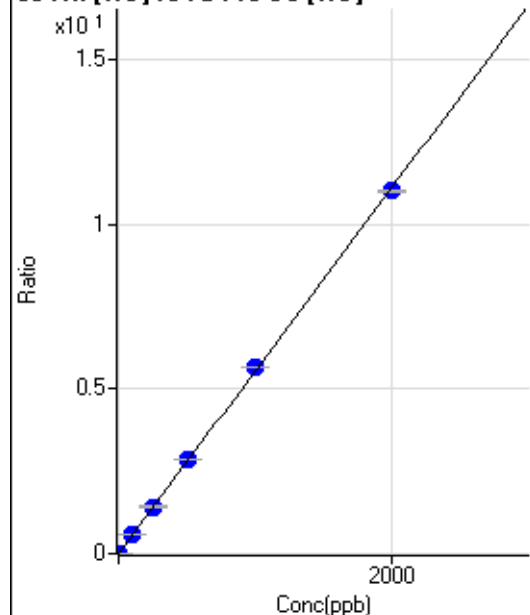
$$R = 0.9999$$

$$DL = 0.06292$$

$$BEC = 0.1462$$

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	46.67	0.0003	P	37.2
2	☐	1.000	0.975	940.05	0.0057	P	7.2
3	☐	100.000	101.066	93898.02	0.5609	P	0.6
4	☐	250.000	255.742	231024.69	1.4189	P	4.5
5	☐	500.000	514.269	431590.52	2.8529	P	0.2
6	☐	1000.000	1020.991	841846.17	5.6636	P	0.6
7	☐	2000.000	1985.166	1676428.66	11.0118	P	0.4
8	☐			7071.80	0.0443	P	2.1

$$y = 0.0055 * x + 2.9080E-004$$

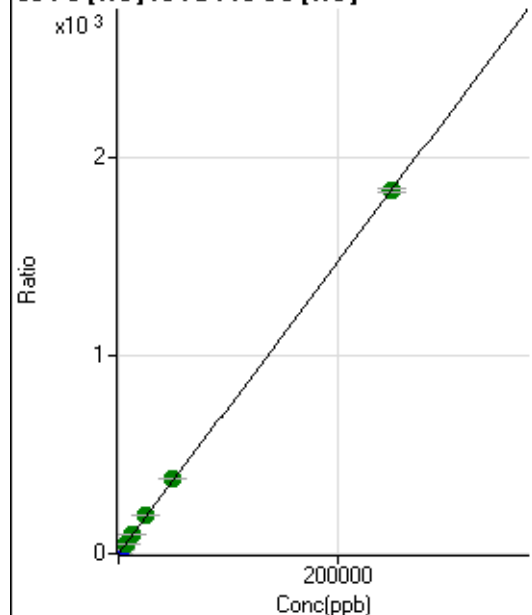
$$R = 0.9999$$

$$DL = 0.05857$$

$$BEC = 0.05243$$

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	1748.30	0.0109	P	1.8
2	☐	50.000	53.425	66591.70	0.4037	P	1.2
3	☐	2500.000	2607.226	3211090.15	19.1815	P	0.5
4	☐	6250.000	6576.515	7876880.96	48.3671	A	3.9
5	☐	12500.000	13250.133	14740479.03	97.4374	A	0.1
6	☐	25000.000	26365.865	28818299.49	193.8756	A	0.4
7	☐	50000.000	51371.527	57506411.93	377.7389	A	0.7
8	☐	250000.00	249542.36	293112425.0	1,834.862	A	1.0

$$y = 0.0074 * x + 0.0109$$

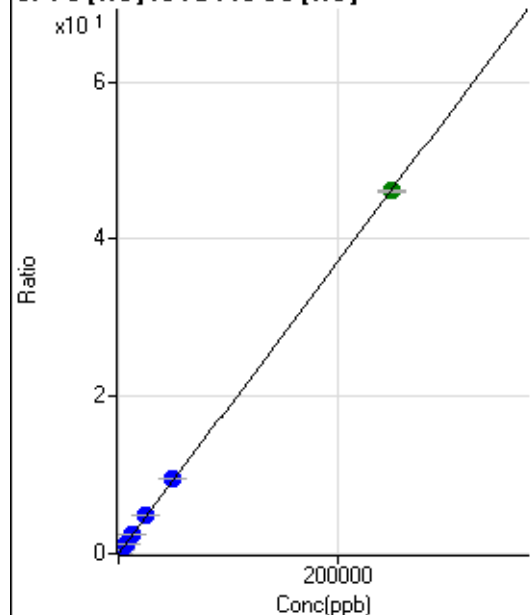
$$R = 1.0000$$

$$DL = 0.07818$$

$$BEC = 1.484$$

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	114.82	0.0007	P	31.5
2	☐	50.000	53.094	1737.19	0.0105	P	8.5
3	☐	2500.000	2604.010	80730.67	0.4822	P	0.9
4	☐	6250.000	6666.439	200840.93	1.2335	P	4.5
5	☐	12500.000	13321.560	372779.72	2.4641	P	1.0
6	☐	25000.000	26466.780	727599.95	4.8950	P	0.4
7	☐	50000.000	51348.196	1445661.83	9.4960	P	0.6
8	☐	250000.00	249531.15	7371486.04	46.1441	A	0.8

$$y = 1.8492E-004 * x + 7.1513E-004$$

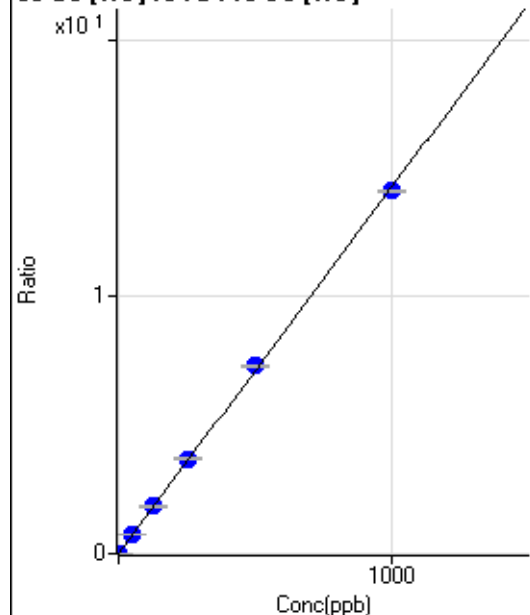
$$R = 1.0000$$

$$DL = 3.657$$

$$BEC = 3.867$$

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	33.33	0.0002	P	25.7
2	☐	1.000	0.984	2348.00	0.0142	P	3.0
3	☐	50.000	51.844	123818.02	0.7396	P	1.0
4	☐	125.000	130.365	302806.71	1.8595	P	4.2
5	☐	250.000	259.373	559671.30	3.6995	P	0.6
6	☐	500.000	512.155	1085780.20	7.3048	P	0.7
7	☐	1000.000	990.816	2151399.97	14.1317	P	0.2
8	☐			26582.08	0.1664	P	1.4

$$y = 0.0143 * x + 2.0770E-004$$

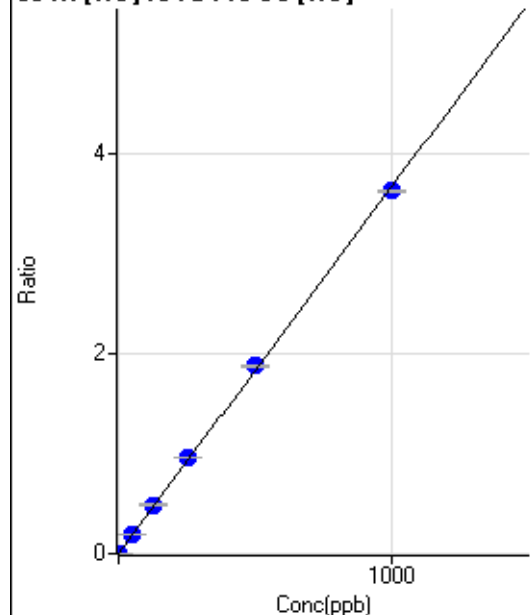
R = 0.9998

DL = 0.01124

BEC = 0.01456

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	100.01	0.0006	P	16.0
2	☐	1.000	1.156	802.26	0.0049	P	2.2
3	☐	50.000	52.770	32507.19	0.1942	P	1.7
4	☐	125.000	132.658	79332.07	0.4872	P	4.5
5	☐	250.000	262.090	145529.13	0.9620	P	0.5
6	☐	500.000	512.818	279686.33	1.8817	P	0.8
7	☐	1000.000	989.473	552640.04	3.6300	P	0.3
8	☐			11531.35	0.0722	P	1.2

$$y = 0.0037 * x + 6.2458E-004$$

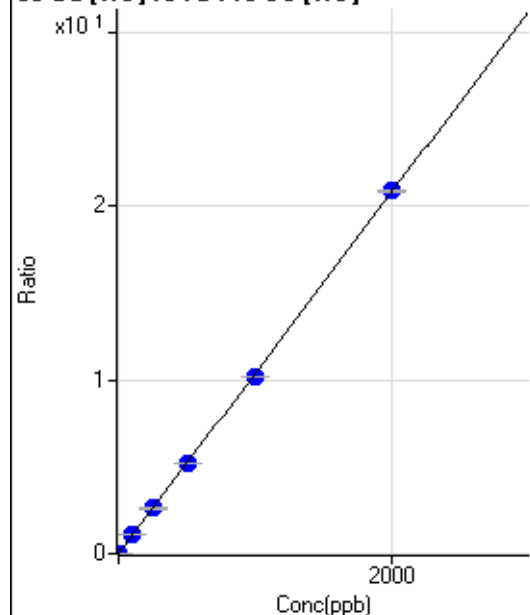
R = 0.9998

DL = 0.08166

BEC = 0.1703

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD: 45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	401.13	0.0025	P	12.2
2	☐	2.000	1.930	3720.53	0.0226	P	0.7
3	☐	100.000	101.502	176985.69	1.0572	P	0.6
4	☐	250.000	253.880	429925.83	2.6406	P	4.7
5	☐	500.000	502.323	790032.21	5.2223	P	0.2
6	☐	1000.000	979.890	1513874.75	10.1848	P	0.6
7	☐	2000.000	2008.914	3178424.85	20.8776	P	0.3
8	☐			5277.70	0.0330	P	2.6

$$y = 0.0104 * x + 0.0025$$

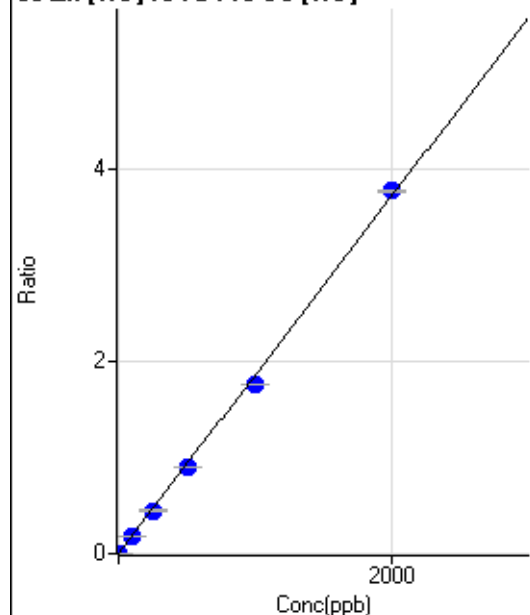
$$R = 0.9999$$

$$DL = 0.08829$$

$$BEC = 0.2408$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD: 45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	245.56	0.0015	P	11.7
2	☐	2.000	1.782	800.03	0.0049	P	7.1
3	☐	100.000	95.456	29993.28	0.1792	P	0.7
4	☐	250.000	240.662	73146.56	0.4494	P	5.5
5	☐	500.000	481.715	135842.23	0.8979	P	0.9
6	☐	1000.000	948.946	262722.22	1.7674	P	0.2
7	☐	2000.000	2031.493	575755.54	3.7819	P	0.5
8	☐			7155.19	0.0448	P	2.4

$$y = 0.0019 * x + 0.0015$$

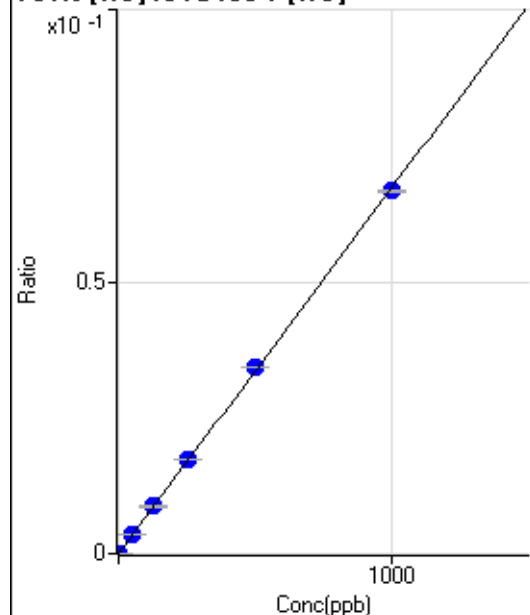
$$R = 0.9995$$

$$DL = 0.2898$$

$$BEC = 0.824$$

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	7.41	0.0000	P	86.8
2	☐	1.000	0.955	166.05	0.0001	P	15.9
3	☐	50.000	51.353	8690.94	0.0035	P	2.7
4	☐	125.000	129.668	21506.70	0.0087	P	4.7
5	☐	250.000	256.712	39804.94	0.0172	P	0.5
6	☐	500.000	509.507	78072.65	0.0342	P	0.4
7	☐	1000.000	992.917	154312.21	0.0667	P	0.9
8	☐			219.76	0.0001	P	10.2

$$y = 6.7166\text{E-}005 * x + 3.0875\text{E-}006$$

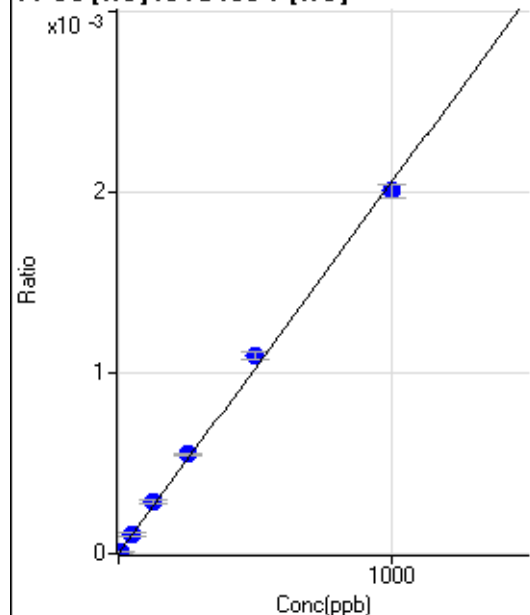
$$R = 0.9999$$

$$DL = 0.1198$$

$$BEC = 0.04597$$

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	1.11	0.0000	P	173.
2	☐	5.000	5.034	26.67	0.0000	P	21.4
3	☐	50.000	52.012	270.01	0.0001	P	25.6
4	☐	125.000	138.035	701.14	0.0003	P	6.8
5	☐	250.000	268.047	1271.19	0.0006	P	2.3
6	☐	500.000	532.690	2495.81	0.0011	P	4.2
7	☐	1000.000	977.413	4644.16	0.0020	P	3.5
8	☐			4.44	0.0000	P	115.

$$y = 2.0528\text{E-}006 * x + 4.6313\text{E-}007$$

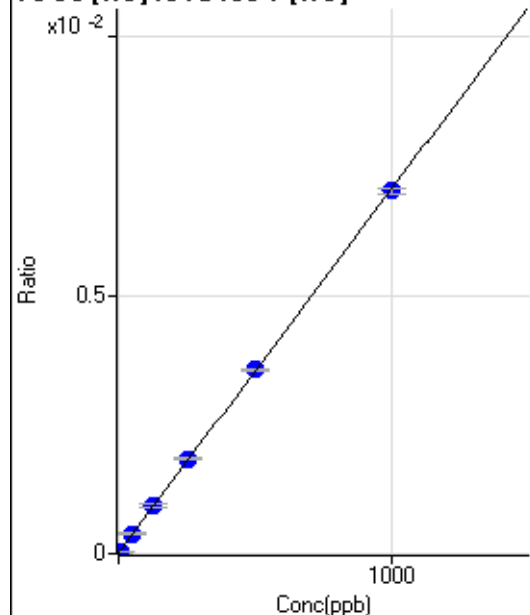
$$R = 0.9989$$

$$DL = 1.172$$

$$BEC = 0.2256$$

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	41.36	0.0000	P	15.7
2	☐	5.000	4.548	121.61	0.0000	P	17.1
3	☐	50.000	52.293	969.79	0.0004	P	3.2
4	☐	125.000	129.702	2295.88	0.0009	P	5.6
5	☐	250.000	259.148	4249.43	0.0018	P	1.1
6	☐	500.000	503.660	8125.17	0.0036	P	1.1
7	☐	1000.000	995.183	16246.21	0.0070	P	1.4
8	☐			38.89	0.0000	P	13.5

$$y = 7.0379\text{E-}006 * x + 1.7224\text{E-}005$$

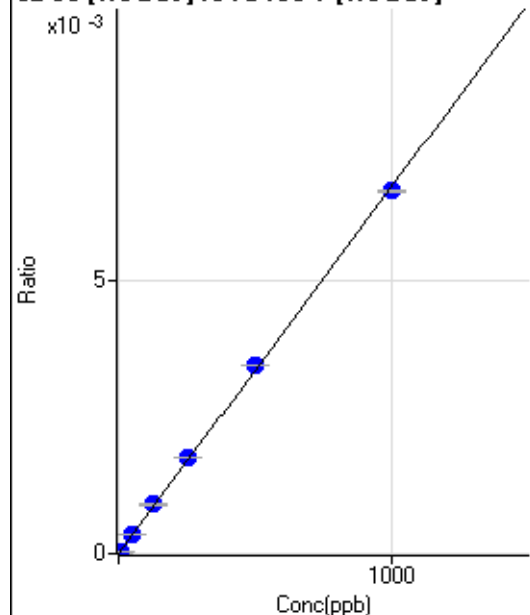
$$R = 0.9999$$

$$DL = 1.151$$

$$BEC = 2.447$$

Weight: <None>

Min Conc: 0

82 Se [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	44.44	0.0000	P	26.5
2	☐	5.000	5.281	682.95	0.0000	P	5.0
3	☐	50.000	52.340	6532.48	0.0004	P	2.0
4	☐	125.000	133.877	16099.85	0.0009	P	4.0
5	☐	250.000	262.376	30271.84	0.0018	P	0.3
6	☐	500.000	512.930	58510.34	0.0034	P	0.7
7	☐	1000.000	989.213	115004.34	0.0066	P	0.5
8	☐			154.98	0.0000	P	30.7

$$y = 6.6926\text{E-}006 * x + 2.5563\text{E-}006$$

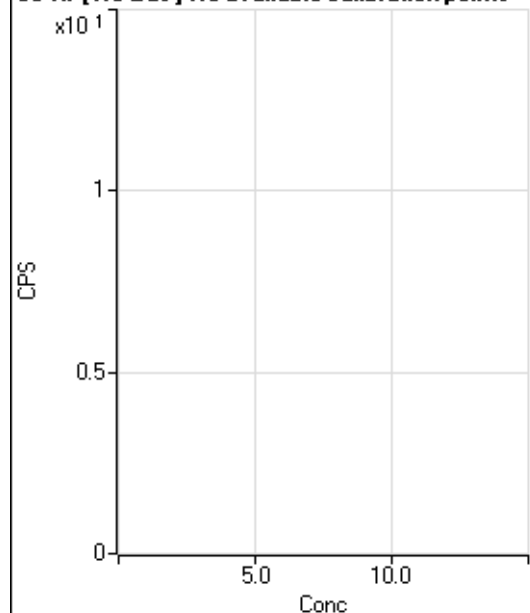
$$R = 0.9998$$

$$DL = 0.3032$$

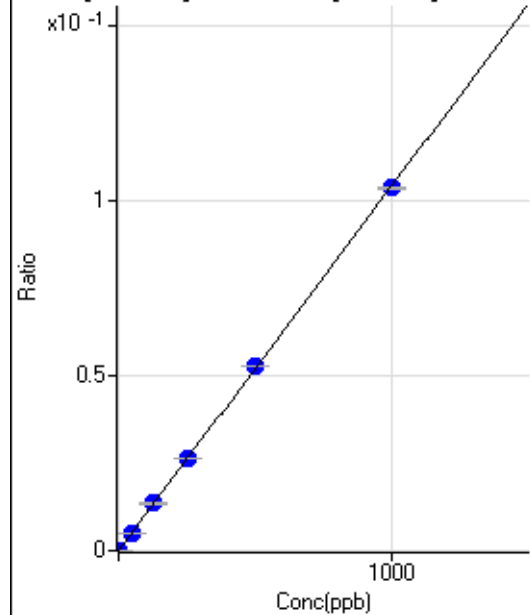
$$BEC = 0.382$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			155.56		P	15.8
2	☐			172.23		P	14.7
3	☐			163.34		P	10.2
4	☐			164.45		P	26.5
5	☐			188.89		P	15.2
6	☐			171.11		P	9.6
7	☐			145.56		P	9.3
8	☐			180.00		P	13.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	275.01	0.0000	P	6.1
2	☐	1.000	0.993	2150.25	0.0001	P	1.5
3	☐	50.000	49.026	94828.69	0.0051	P	0.6
4	☐	125.000	129.620	242276.53	0.0135	P	2.1
5	☐	250.000	253.524	454895.40	0.0264	P	0.7
6	☐	500.000	505.812	897681.36	0.0527	P	0.6
7	☐	1000.000	995.684	1801350.80	0.1037	P	0.4
8	☐			8158.19	0.0005	P	3.2

$$y = 1.0417\text{E-}004 * x + 1.5818\text{E-}005$$

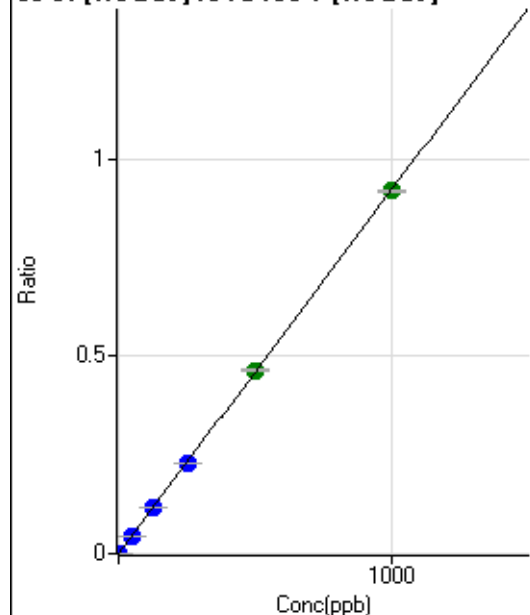
$$R = 1.0000$$

$$DL = 0.02792$$

$$BEC = 0.1519$$

Weight: <None>

Min Conc: 0

88 Sr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	12.0
2	☐	1.000	0.940	15767.52	0.0009	P	1.5
3	☐	50.000	48.824	833050.61	0.0450	P	0.7
4	☐	125.000	128.064	2115343.62	0.1180	P	2.1
5	☐	250.000	249.920	3964946.66	0.2303	P	0.4
6	☐	500.000	504.461	7918232.81	0.4649	A	0.2
7	☐	1000.000	997.465	15962368.59	0.9192	A	0.7
8	☐			69775.78	0.0040	P	1.2

$$y = 9.2158\text{E-}004 * x + 8.3086\text{E-}006$$

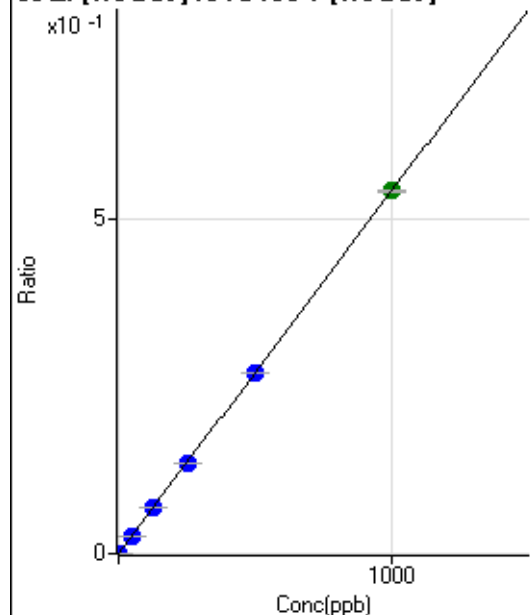
$$R = 1.0000$$

$$DL = 0.003249$$

$$BEC = 0.009016$$

Weight: <None>

Min Conc: 0

90 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	702.83	0.0000	P	7.6
2	☐	1.000	0.767	8205.48	0.0005	P	2.9
3	☐	50.000	48.710	488407.09	0.0264	P	0.2
4	☐	125.000	128.117	1242638.12	0.0693	P	1.7
5	☐	250.000	249.700	2325449.38	0.1351	P	0.5
6	☐	500.000	498.289	4590673.06	0.2695	P	0.1
7	☐	1000.000	1000.606	9397926.08	0.5412	A	0.3
8	☐			4631.53	0.0003	P	1.7

$$y = 5.4084\text{E-}004 * x + 4.0426\text{E-}005$$

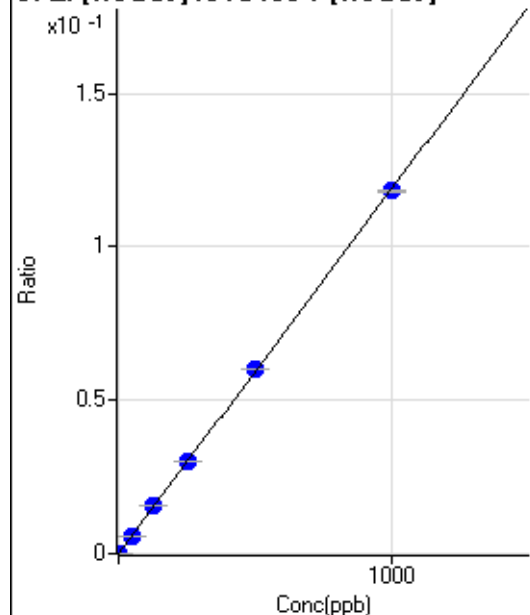
$$R = 1.0000$$

$$DL = 0.01699$$

$$BEC = 0.07475$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	161.12	0.0000	P	43.9
2	☐	1.000	0.789	1855.75	0.0001	P	3.2
3	☐	50.000	49.376	108677.00	0.0059	P	0.9
4	☐	125.000	130.812	278514.92	0.0155	P	1.7
5	☐	250.000	253.252	517731.74	0.0301	P	0.1
6	☐	500.000	506.176	1023652.19	0.0601	P	0.3
7	☐	1000.000	995.404	2052214.24	0.1182	P	0.3
8	☐			983.41	0.0001	P	28.5

$$y = 1.1872\text{E-}004 * x + 9.2662\text{E-}006$$

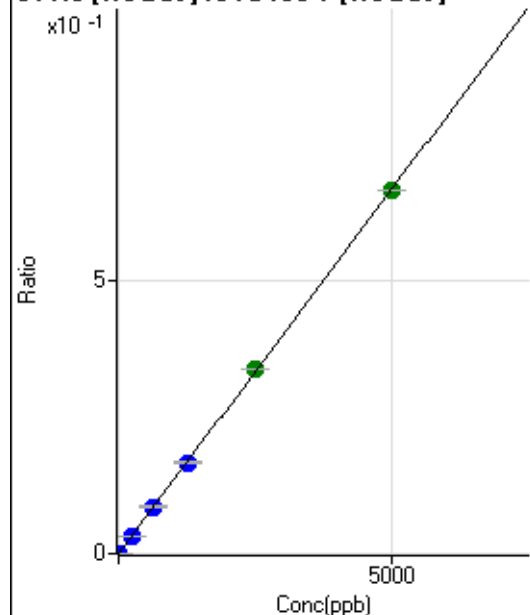
$$R = 0.9999$$

$$DL = 0.1029$$

$$BEC = 0.07805$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	294.46	0.0000	P	9.9
2	☐	5.000	4.489	11110.30	0.0006	P	0.8
3	☐	250.000	244.153	603889.19	0.0326	P	0.2
4	☐	625.000	640.523	1533273.54	0.0856	P	2.6
5	☐	1250.000	1253.819	2882844.53	0.1675	P	0.6
6	☐	2500.000	2530.257	5755597.61	0.3379	A	0.2
7	☐	5000.000	4982.269	11554361.37	0.6654	A	0.2
8	☐			10095.61	0.0006	P	7.1

$$y = 1.3355\text{E-}004 * x + 1.6936\text{E-}005$$

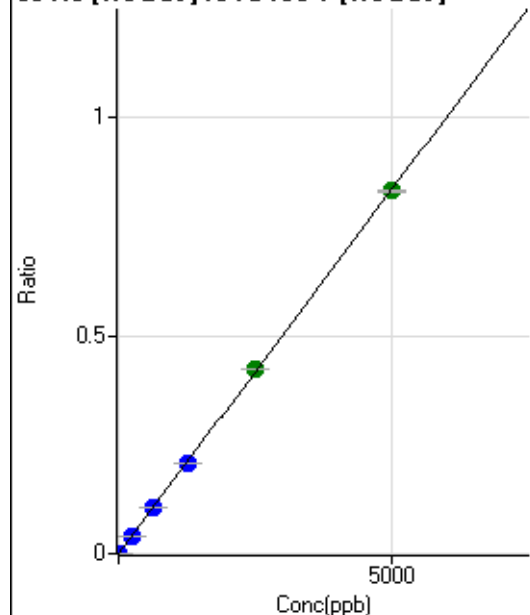
$$R = 1.0000$$

$$DL = 0.03773$$

$$BEC = 0.1268$$

Weight: <None>

Min Conc: 0

95 Mo [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	163.90	0.0000	P	10.7
2	☐	5.000	4.606	14012.98	0.0008	P	1.9
3	☐	250.000	242.976	750201.11	0.0405	P	0.4
4	☐	625.000	635.287	1898767.81	0.1059	P	2.1
5	☐	1250.000	1244.328	3572130.46	0.2075	P	0.2
6	☐	2500.000	2528.224	7180632.45	0.4216	A	0.1
7	☐	5000.000	4986.372	14438723.76	0.8315	A	0.5
8	☐			14224.28	0.0008	P	5.3

$$y = 1.6675E-004 * x + 9.4274E-006$$

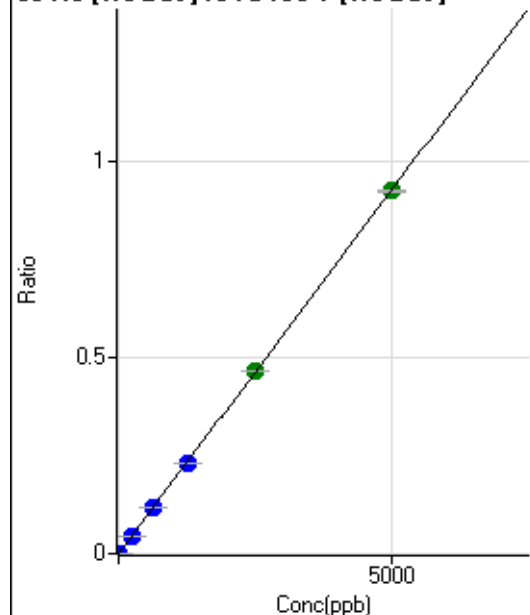
R = 1.0000

DL = 0.01808

BEC = 0.05653

Weight: <None>

Min Conc: 0

96 Mo [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	169.45	0.0000	P	28.3
2	☐	5.000	4.490	15133.61	0.0008	P	0.8
3	☐	250.000	243.866	834656.91	0.0451	P	0.5
4	☐	625.000	637.221	2111334.66	0.1178	P	1.8
5	☐	1250.000	1244.411	3960037.28	0.2300	P	0.3
6	☐	2500.000	2516.335	7922489.24	0.4652	A	0.2
7	☐	5000.000	4992.009	16023702.27	0.9228	A	0.7
8	☐			20779.81	0.0012	P	5.3

$$y = 1.8485E-004 * x + 9.7455E-006$$

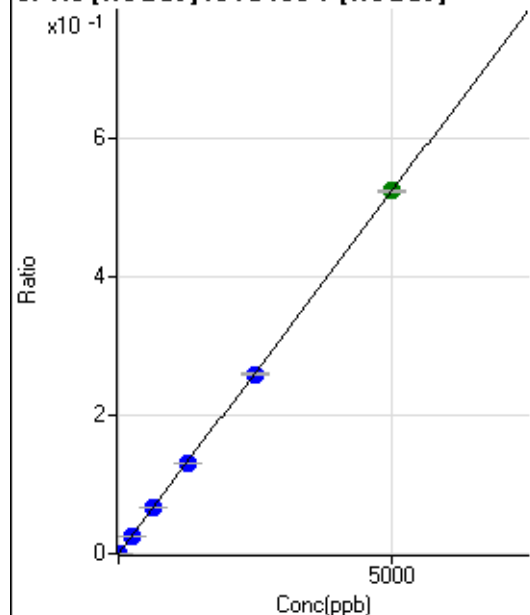
R = 1.0000

DL = 0.04483

BEC = 0.05272

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	69.45	0.0000	P	49.9
2	☐	5.000	4.699	8914.32	0.0005	P	1.9
3	☐	250.000	243.845	471414.98	0.0255	P	0.5
4	☐	625.000	638.090	1194246.45	0.0666	P	2.1
5	☐	1250.000	1245.814	2239526.53	0.1301	P	0.6
6	☐	2500.000	2482.017	4414376.45	0.2592	P	0.0
7	☐	5000.000	5008.710	9082219.99	0.5230	A	0.5
8	☐			8855.86	0.0005	P	3.4

$$y = 1.0442\text{E-}004 * x + 3.9941\text{E-}006$$

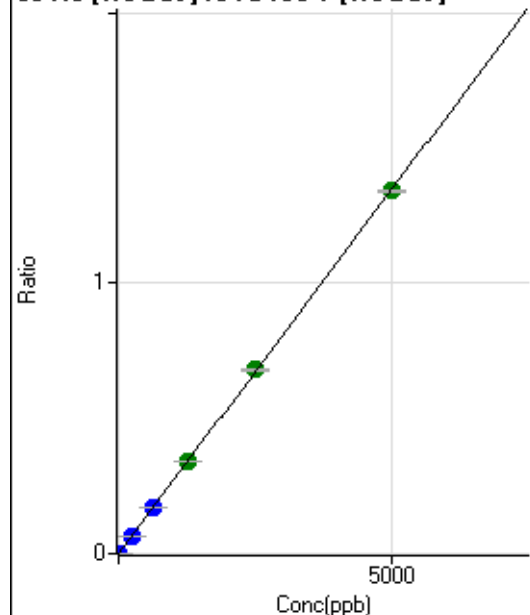
$$R = 1.0000$$

$$DL = 0.05729$$

$$BEC = 0.03825$$

Weight: <None>

Min Conc: 0

98 Mo [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	202.79	0.0000	P	23.4
2	☐	5.000	4.501	22053.84	0.0012	P	1.6
3	☐	250.000	243.414	1213496.94	0.0656	P	0.7
4	☐	625.000	636.250	3070578.45	0.1713	P	2.1
5	☐	1250.000	1262.492	5852034.33	0.3399	A	0.3
6	☐	2500.000	2523.712	11573895.92	0.6795	A	0.2
7	☐	5000.000	4983.945	23303026.56	1.3420	A	0.6
8	☐			22401.67	0.0013	P	3.7

$$y = 2.6926\text{E-}004 * x + 1.1665\text{E-}005$$

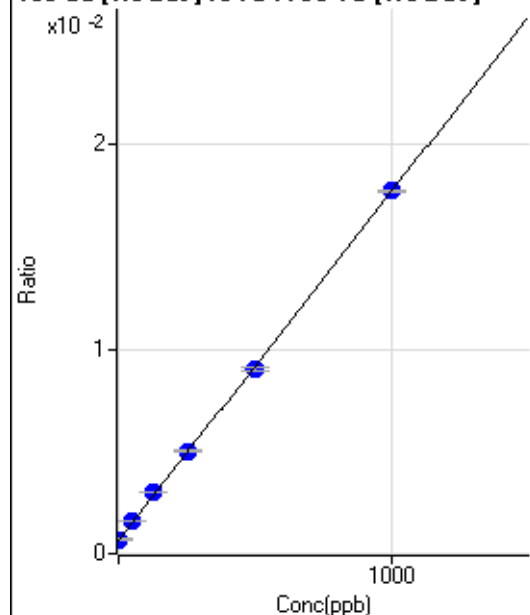
$$R = 1.0000$$

$$DL = 0.0304$$

$$BEC = 0.04332$$

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	6532.33	0.0006	P	4.9
2	☐	1.000	3.071	7116.03	0.0007	P	2.7
3	☐	50.000	54.273	16602.04	0.0016	P	1.6
4	☐	125.000	138.036	31240.67	0.0030	P	1.3
5	☐	250.000	254.503	51357.80	0.0050	P	1.7
6	☐	500.000	490.700	94765.93	0.0090	P	1.4
7	☐	1000.000	1001.679	190577.38	0.0177	P	0.5
8	☐			6490.65	0.0006	P	4.7

$$y = 1.7044\text{E-}005 * x + 6.4828\text{E-}004$$

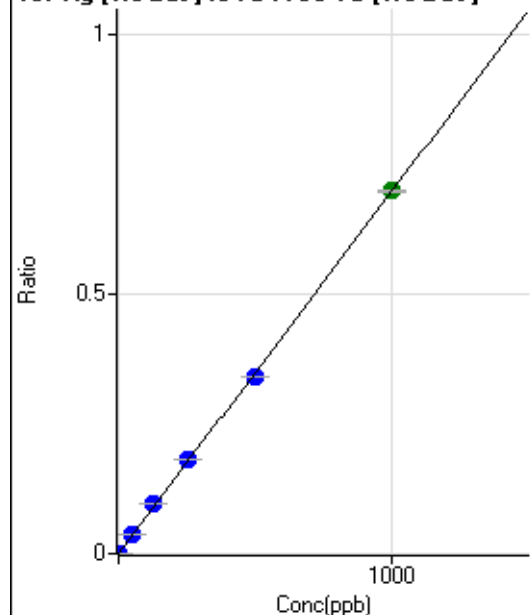
$$R = 0.9998$$

$$DL = 5.568$$

$$BEC = 38.04$$

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	141.67	0.0000	P	27.1
2	☐	1.000	1.136	8188.83	0.0008	P	0.8
3	☐	50.000	53.690	395289.61	0.0375	P	0.4
4	☐	125.000	137.226	996461.97	0.0957	P	1.5
5	☐	250.000	258.323	1855963.91	0.1802	P	0.1
6	☐	500.000	487.816	3577983.37	0.3402	P	0.4
7	☐	1000.000	1002.299	7517970.57	0.6991	A	0.7
8	☐			1614.05	0.0002	P	10.2

$$y = 6.9743\text{E-}004 * x + 1.4064\text{E-}005$$

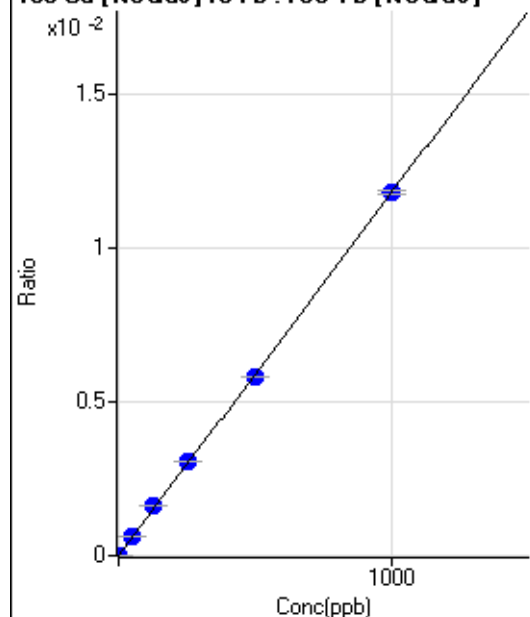
$$R = 0.9998$$

$$DL = 0.01641$$

$$BEC = 0.02017$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	18.05	0.0000	P	26.6
2	☐	1.000	1.100	150.00	0.0000	P	5.0
3	☐	50.000	51.877	6472.44	0.0006	P	1.3
4	☐	125.000	137.048	16837.98	0.0016	P	2.2
5	☐	250.000	258.820	31449.15	0.0031	P	1.0
6	☐	500.000	493.104	61153.67	0.0058	P	0.6
7	☐	1000.000	999.643	126756.37	0.0118	P	1.2
8	☐			51.39	0.0000	P	20.8

$$y = 1.1789E-005 * x + 1.7914E-006$$

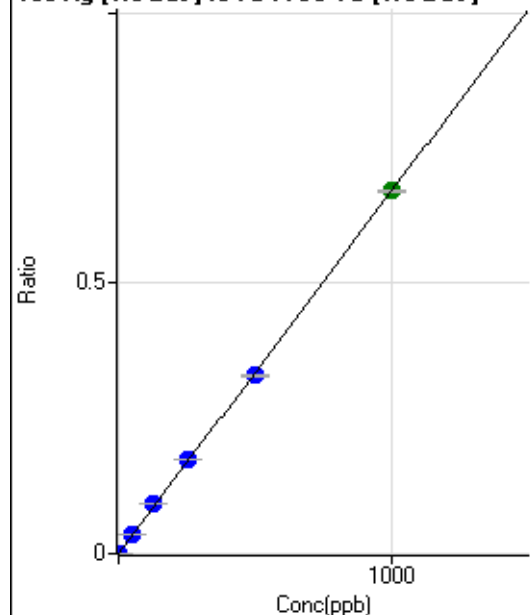
$$R = 0.9999$$

$$DL = 0.1212$$

$$BEC = 0.152$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	47.22	0.0000	P	44.4
2	☐	1.000	1.113	7624.59	0.0008	P	1.6
3	☐	50.000	53.713	380030.11	0.0360	P	0.7
4	☐	125.000	136.489	952562.89	0.0915	P	1.6
5	☐	250.000	259.277	1790458.16	0.1738	P	0.2
6	☐	500.000	490.661	3459099.77	0.3289	P	0.8
7	☐	1000.000	1000.728	7214948.86	0.6709	A	0.4
8	☐			1464.03	0.0001	P	10.0

$$y = 6.7037E-004 * x + 4.6857E-006$$

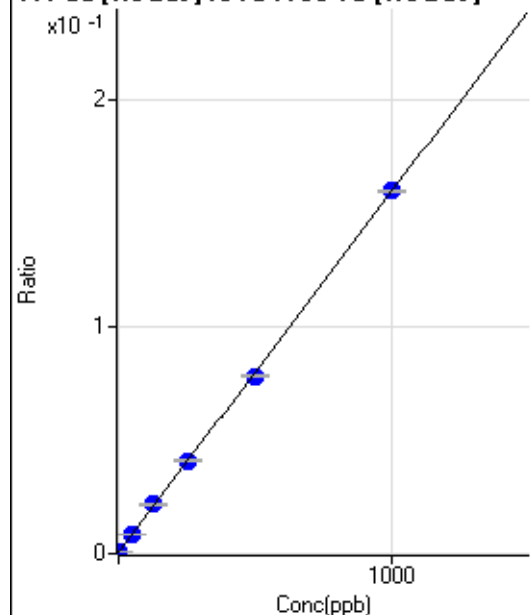
$$R = 0.9998$$

$$DL = 0.009313$$

$$BEC = 0.00699$$

Weight: <None>

Min Conc: 0

111 Cd [NoGas] ISTD:159 Tb [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	4575.27	0.0005	P	4.9
2	☐	1.000	1.195	6543.03	0.0006	P	3.5
3	☐	50.000	52.875	93587.89	0.0089	P	0.3
4	☐	125.000	133.998	226717.39	0.0218	P	1.8
5	☐	250.000	255.111	422874.26	0.0411	P	0.9
6	☐	500.000	490.016	824870.68	0.0784	P	0.4
7	☐	1000.000	1002.446	1720597.70	0.1600	P	0.6
8	☐			5028.34	0.0005	P	4.6

$$y = 1.5914\text{E-}004 * x + 4.5406\text{E-}004$$

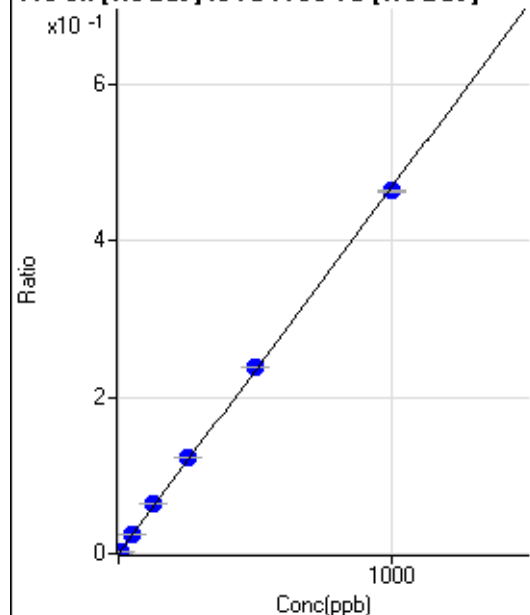
$$R = 0.9999$$

$$DL = 0.4221$$

$$BEC = 2.853$$

Weight: <None>

Min Conc: 0

118 Sn [NoGas] ISTD:159 Tb [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1011.20	0.0001	P	9.3
2	☐	5.000	5.224	25843.94	0.0025	P	1.3
3	☐	50.000	52.672	261074.43	0.0247	P	0.2
4	☐	125.000	136.474	665680.04	0.0639	P	1.5
5	☐	250.000	263.520	1270877.97	0.1234	P	0.3
6	☐	500.000	508.009	2500268.11	0.2378	P	0.4
7	☐	1000.000	991.047	4987114.13	0.4637	P	0.3
8	☐			4070.21	0.0004	P	7.9

$$y = 4.6781\text{E-}004 * x + 1.0036\text{E-}004$$

$$R = 0.9998$$

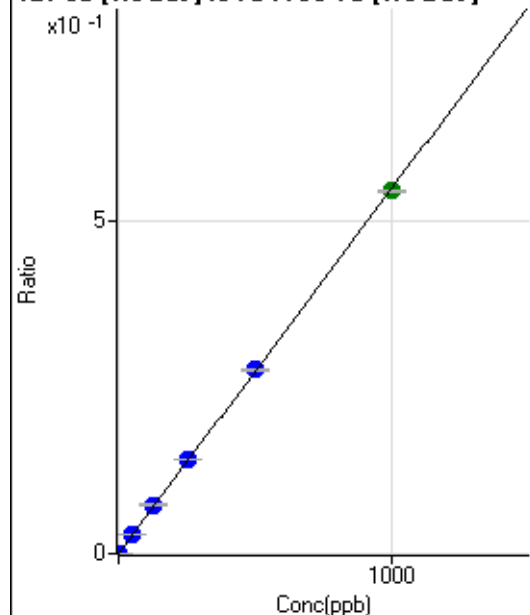
$$DL = 0.06012$$

$$BEC = 0.2145$$

Weight: <None>

Min Conc: 0

121 Sb [NoGas] ISTD : 159 Tb [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	169.45	0.0000	P	10.2
2	☐	2.000	1.915	10807.34	0.0011	P	2.3
3	☐	50.000	51.601	297922.53	0.0282	P	0.4
4	☐	125.000	133.892	762353.62	0.0732	P	1.4
5	☐	250.000	259.422	1461399.97	0.1419	P	0.4
6	☐	500.000	503.578	2895993.03	0.2754	P	0.6
7	☐	1000.000	994.664	5849628.82	0.5439	A	0.3
8	☐			10056.79	0.0010	P	4.0

$$y = 5.4682\text{E-}004 * x + 1.6816\text{E-}005$$

$$R = 0.9999$$

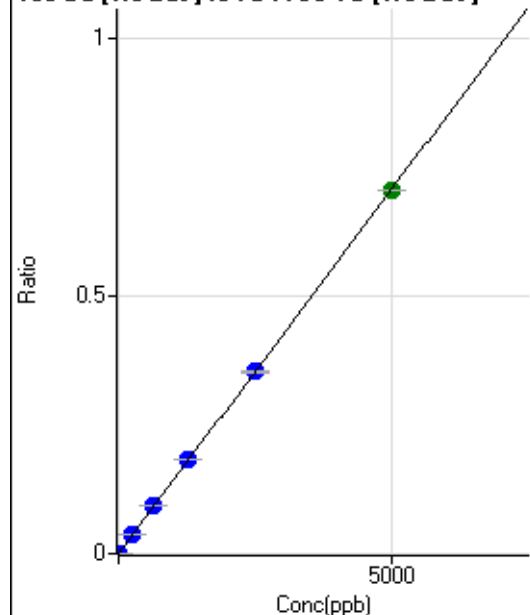
$$DL = 0.009377$$

$$BEC = 0.03075$$

Weight: <None>

Min Conc: 0

135 Ba [NoGas] ISTD : 159 Tb [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	211.12	0.0000	P	5.8
2	☐	10.000	9.952	14491.46	0.0014	P	4.4
3	☐	250.000	256.042	381895.02	0.0362	P	0.4
4	☐	625.000	666.170	979850.49	0.0941	P	1.9
5	☐	1250.000	1291.597	1879648.00	0.1825	P	0.6
6	☐	2500.000	2506.745	3724108.20	0.3541	P	1.0
7	☐	5000.000	4980.780	7567190.28	0.7036	A	0.2
8	☐			3033.81	0.0003	P	6.3

$$y = 1.4126\text{E-}004 * x + 2.0950\text{E-}005$$

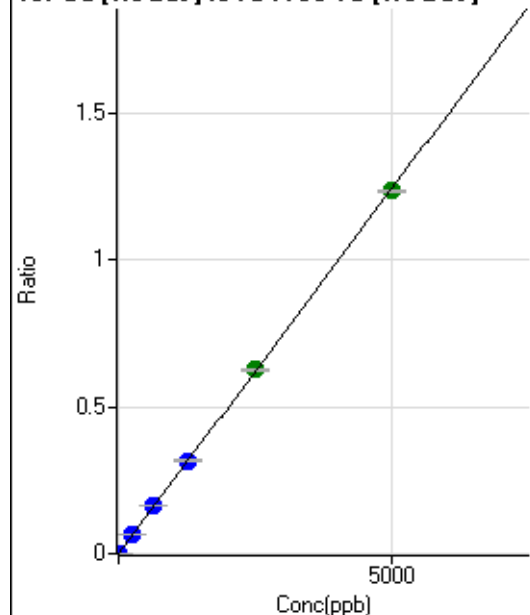
$$R = 0.9999$$

$$DL = 0.02597$$

$$BEC = 0.1483$$

Weight: <None>

Min Conc: 0

¹³⁷Ba [No Gas] ISTD : ¹⁵⁹Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	325.02	0.0000	P	11.9
2	☐	10.000	9.898	25287.67	0.0025	P	2.4
3	☐	250.000	253.945	665625.45	0.0631	P	0.4
4	☐	625.000	660.601	1707745.79	0.1640	P	1.2
5	☐	1250.000	1276.847	3265746.84	0.3170	P	0.4
6	☐	2500.000	2525.781	6594864.34	0.6271	A	0.8
7	☐	5000.000	4975.751	13285995.09	1.2354	A	0.4
8	☐			5017.80	0.0005	P	8.2

$$y = 2.4827E-004 * x + 3.2259E-005$$

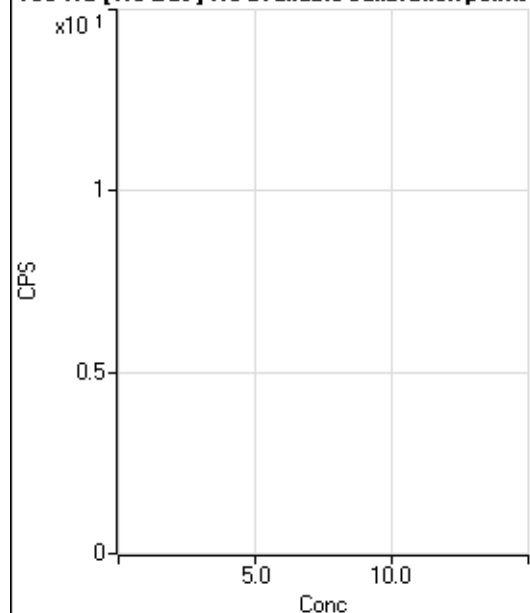
R = 0.9999

DL = 0.04644

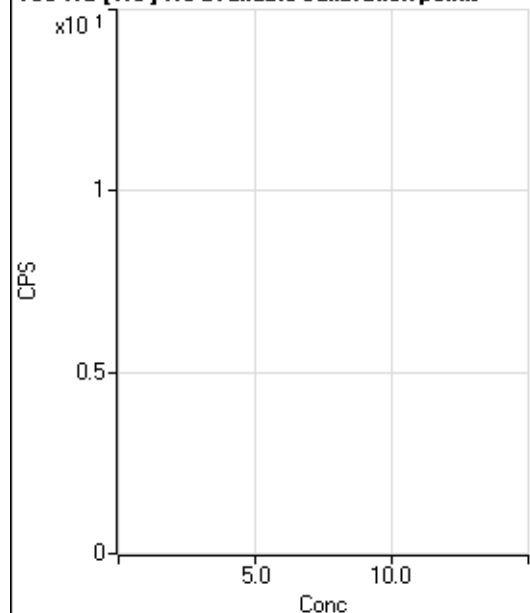
BEC = 0.1299

Weight: <None>

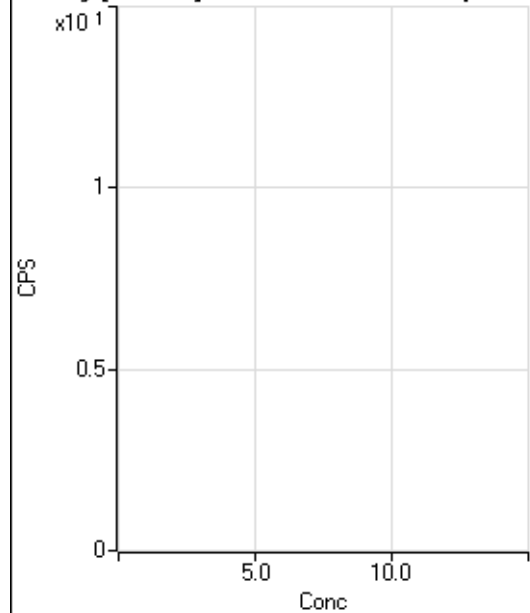
Min Conc: 0

¹⁵⁰Nd [No Gas] No available calibration points

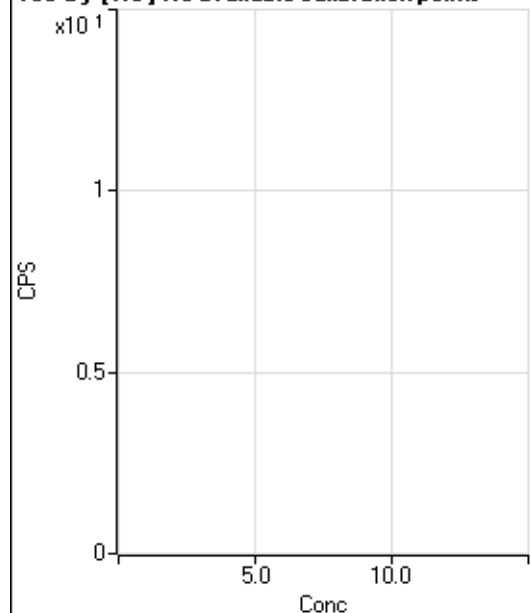
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			6.67		P	173.
3	☐			46.67		P	62.3
4	☐			75.56		P	48.6
5	☐			153.34		P	15.7
6	☐			331.13		P	19.1
7	☐			637.81		P	11.1
8	☐			155.56		P	16.2

150 Nd [He] No available calibration points

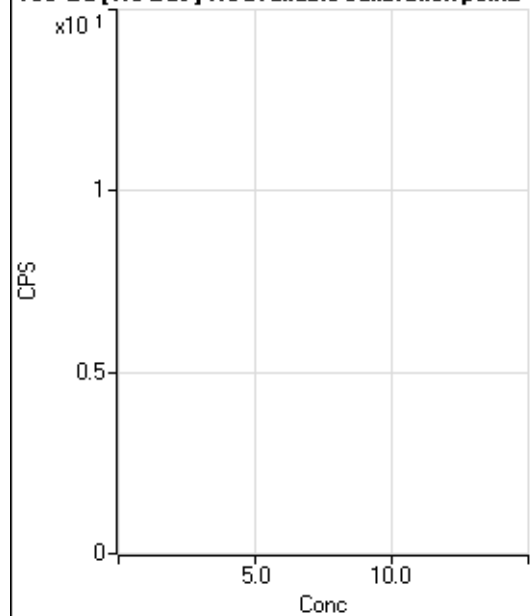
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			12.22		P	56.8
2	☐			10.00		P	57.7
3	☐			15.56		P	53.9
4	☐			21.11		P	36.5
5	☐			21.11		P	9.1
6	☐			47.78		P	10.7
7	☐			70.00		P	23.8
8	☐			65.56		P	12.8

156 Dy [No Gas] No available calibration points

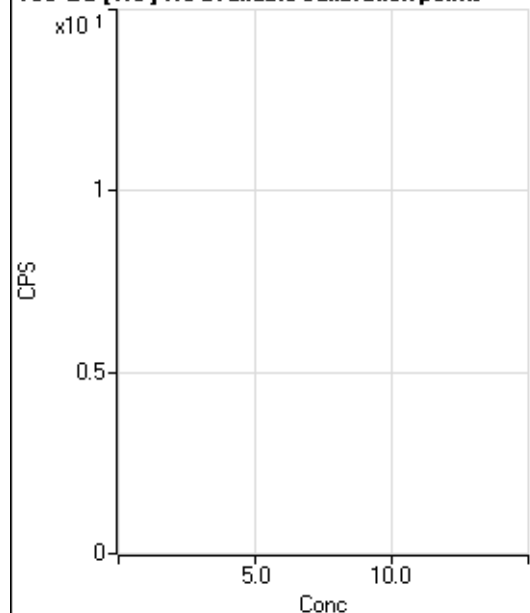
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	50.0
2	☐			8.33		P	100.
3	☐			11.11		P	114.
4	☐			25.00		P	57.7
5	☐			36.11		P	35.3
6	☐			102.78		P	24.8
7	☐			138.90		P	9.2
8	☐			94.45		P	48.6

156 Dy [He] No available calibration points

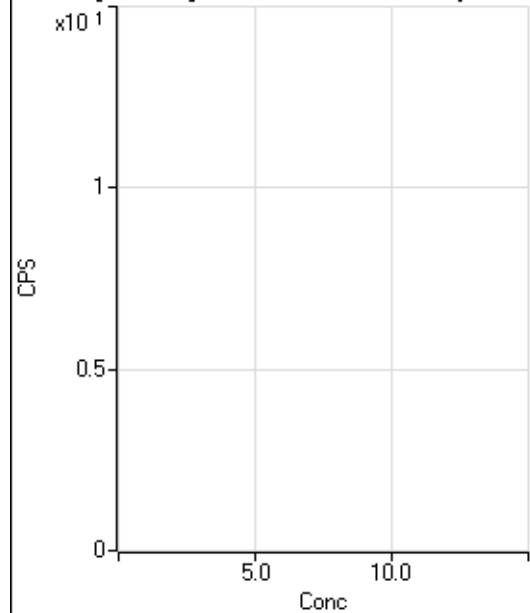
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			26.67		P	33.1
2	☐			14.45		P	48.0
3	☐			24.45		P	28.4
4	☐			45.56		P	36.1
5	☐			51.11		P	16.4
6	☐			103.33		P	5.6
7	☐			150.00		P	12.4
8	☐			52.22		P	13.3

160 Gd [No Gas] No available calibration poin_

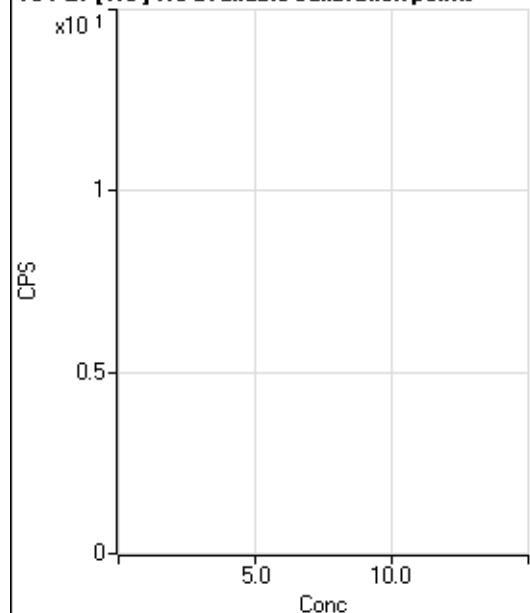
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.45		P	39.0
2	☐			66.67		P	64.9
3	☐			61.11		P	15.7
4	☐			66.67		P	33.1
5	☐			83.34		P	30.0
6	☐			58.33		P	24.7
7	☐			69.45		P	36.7
8	☐			94.45		P	33.4

160 Gd [He] No available calibration points

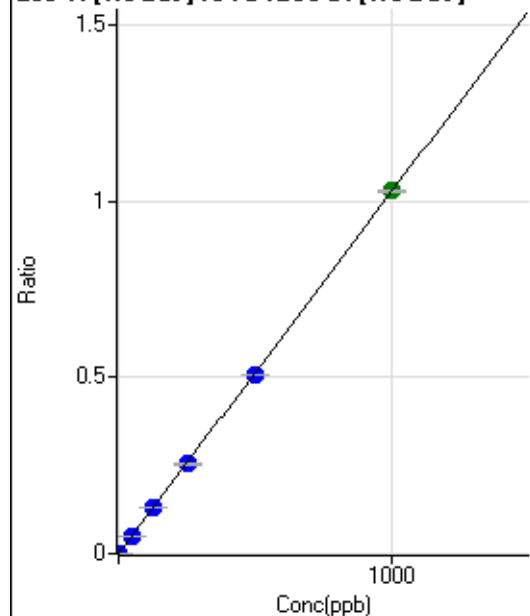
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			195.56		P	19.8
2	☐			195.56		P	4.3
3	☐			186.67		P	9.3
4	☐			192.23		P	8.9
5	☐			166.67		P	32.9
6	☐			163.34		P	17.4
7	☐			164.45		P	18.3
8	☐			192.23		P	23.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.89		P	7.5
2	☐			77.78		P	24.7
3	☐			72.23		P	35.3
4	☐			72.23		P	46.6
5	☐			58.34		P	51.5
6	☐			69.45		P	27.7
7	☐			55.56		P	17.3
8	☐			88.89		P	27.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			43.33		P	42.8
2	☐			50.00		P	11.5
3	☐			66.67		P	22.9
4	☐			67.78		P	10.2
5	☐			46.67		P	12.4
6	☐			56.67		P	5.9
7	☐			66.67		P	13.2
8	☐			73.34		P	24.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	547.26	0.0001	P	12.3
2	☐	1.000	0.890	6613.06	0.0010	P	0.4
3	☐	50.000	47.343	331324.66	0.0486	P	0.6
4	☐	125.000	126.418	868559.44	0.1297	P	1.8
5	☐	250.000	247.457	1697095.15	0.2538	P	0.7
6	☐	500.000	495.129	3437114.62	0.5077	P	0.8
7	☐	1000.000	1003.027	6984891.47	1.0285	A	0.3
8	☐			3006.03	0.0005	P	6.9

$$y = 0.0010 * x + 8.3219E-005$$

$$R = 1.0000$$

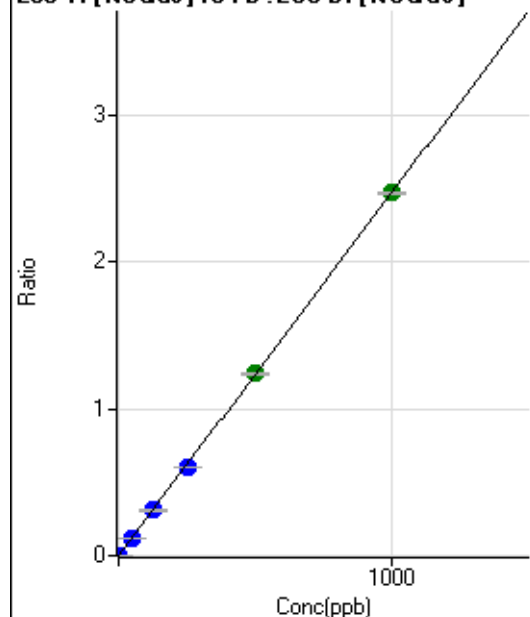
$$DL = 0.02988$$

$$BEC = 0.08117$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	763.95	0.0001	P	2.8
2	☐	1.000	0.874	15111.97	0.0023	P	0.7
3	☐	50.000	47.279	796613.56	0.1169	P	0.4
4	☐	125.000	125.283	2073335.94	0.3096	P	1.9
5	☐	250.000	245.094	4049277.48	0.6056	P	0.6
6	☐	500.000	502.253	8399893.50	1.2408	A	0.5
7	☐	1000.000	1000.201	16781120.17	2.4709	A	0.4
8	☐			6037.77	0.0010	P	10.7

$$y = 0.0025 * x + 1.1616E-004$$

$$R = 1.0000$$

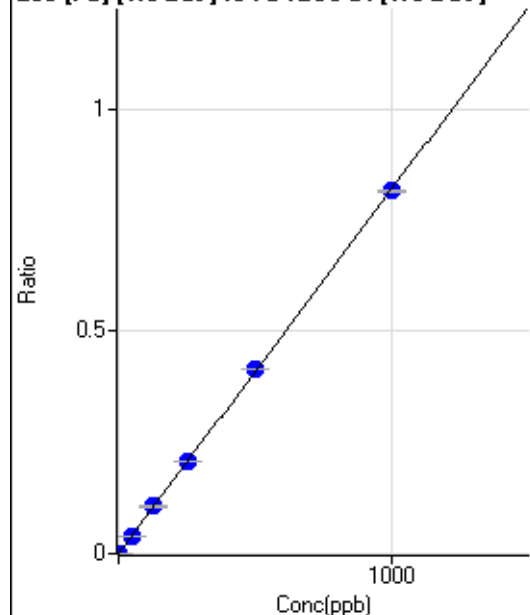
$$DL = 0.004015$$

$$BEC = 0.04702$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	738.93	0.0001	P	9.5
2	☐	1.000	0.927	5781.06	0.0009	P	6.2
3	☐	50.000	48.986	273858.54	0.0402	P	0.4
4	☐	125.000	129.434	709937.47	0.1060	P	1.9
5	☐	250.000	252.477	1382017.16	0.2067	P	0.5
6	☐	500.000	505.642	2801307.15	0.4138	P	0.5
7	☐	1000.000	996.056	5535396.13	0.8150	P	0.3
8	☐			6351.72	0.0011	P	2.2

$$y = 8.1815E-004 * x + 1.1233E-004$$

$$R = 1.0000$$

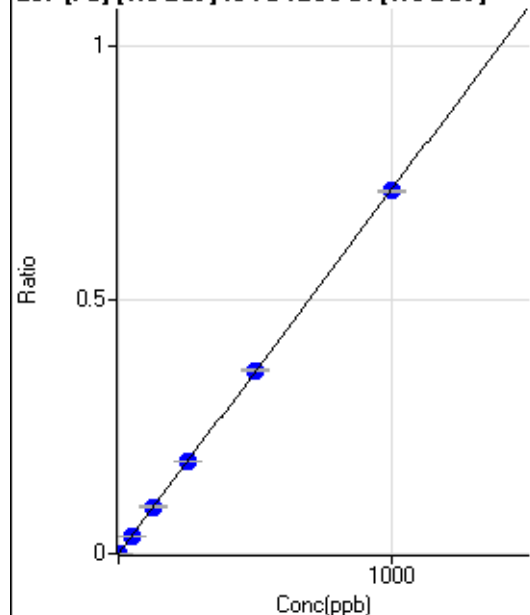
$$DL = 0.03924$$

$$BEC = 0.1373$$

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	733.38	0.0001	P	6.8
2	☐	1.000	0.915	5095.56	0.0008	P	3.7
3	☐	50.000	48.597	238103.42	0.0349	P	0.3
4	☐	125.000	128.625	618089.02	0.0923	P	2.2
5	☐	250.000	252.601	1211306.15	0.1812	P	0.6
6	☐	500.000	504.305	2447586.37	0.3615	P	0.3
7	☐	1000.000	996.814	4852771.12	0.7145	P	0.6
8	☐			5536.50	0.0009	P	4.8

$$y = 7.1670\text{E-}004 * x + 1.1152\text{E-}004$$

$$R = 1.0000$$

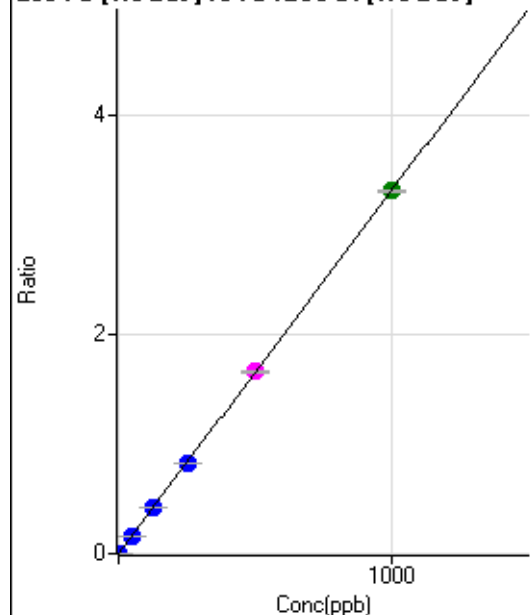
$$DL = 0.03155$$

$$BEC = 0.1556$$

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	2540.90	0.0004	P	4.1
2	☐	1.000	0.902	22368.92	0.0034	P	0.6
3	☐	50.000	48.206	1089013.34	0.1598	P	0.2
4	☐	125.000	126.739	2809504.08	0.4195	P	2.1
5	☐	250.000	248.491	5497816.43	0.8222	P	0.3
6	☐	500.000	500.992	11219425.77	1.6573	M	1.2
7	☐	1000.000	999.754	22458144.25	3.3068	A	0.5
8	☐			24539.04	0.0041	P	3.2

$$y = 0.0033 * x + 3.8631\text{E-}004$$

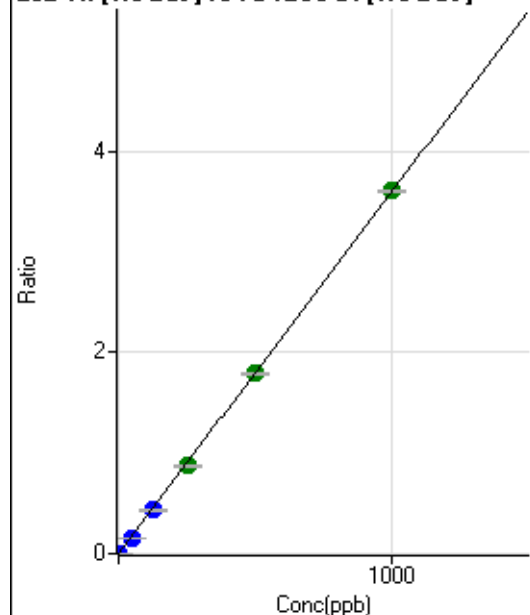
$$R = 1.0000$$

$$DL = 0.01421$$

$$BEC = 0.1168$$

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	2289.15	0.0003	P	3.2
2	☐	1.000	0.740	19963.92	0.0030	P	2.2
3	☐	50.000	44.723	1096764.12	0.1610	P	0.1
4	☐	125.000	120.329	2895928.60	0.4325	P	2.5
5	☐	250.000	242.241	5819295.38	0.8703	A	0.4
6	☐	500.000	498.574	12122876.66	1.7908	A	0.6
7	☐	1000.000	1003.501	24476999.62	3.6040	A	0.4
8	☐			11492.35	0.0019	P	2.6

$$y = 0.0036 * x + 3.4807E-004$$

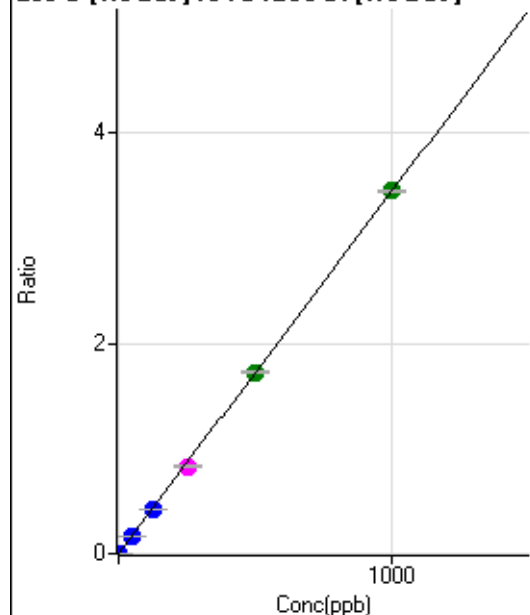
$$R = 1.0000$$

$$DL = 0.009374$$

$$BEC = 0.09693$$

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	2825.45	0.0004	P	5.0
2	☐	1.000	0.842	22102.96	0.0033	P	3.3
3	☐	50.000	45.257	1065082.96	0.1563	P	0.6
4	☐	125.000	121.359	2801888.13	0.4184	P	2.2
5	☐	250.000	240.754	5547271.61	0.8296	M	1.3
6	☐	500.000	500.794	11679110.42	1.7252	A	0.6
7	☐	1000.000	1002.607	23454840.97	3.4535	A	0.8
8	☐			8658.84	0.0015	P	8.4

$$y = 0.0034 * x + 4.2965E-004$$

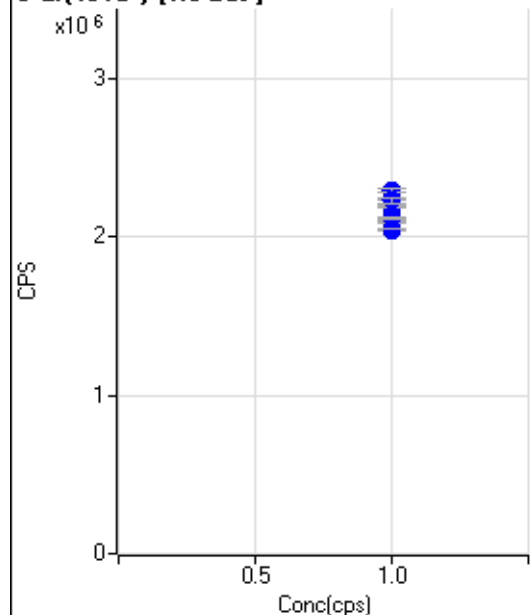
$$R = 1.0000$$

$$DL = 0.01884$$

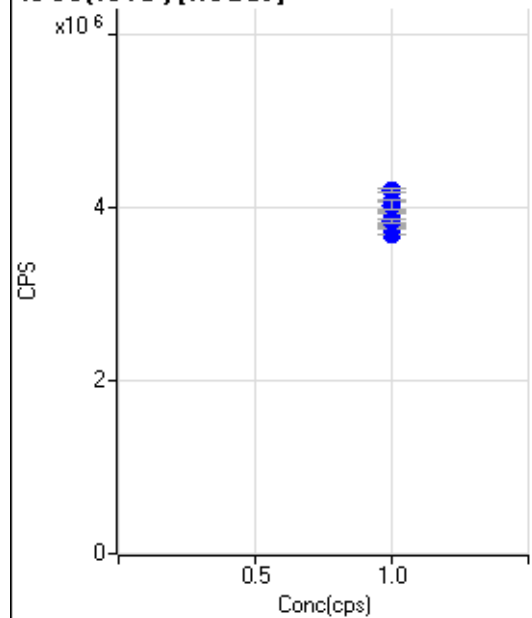
$$BEC = 0.1248$$

Weight: <None>

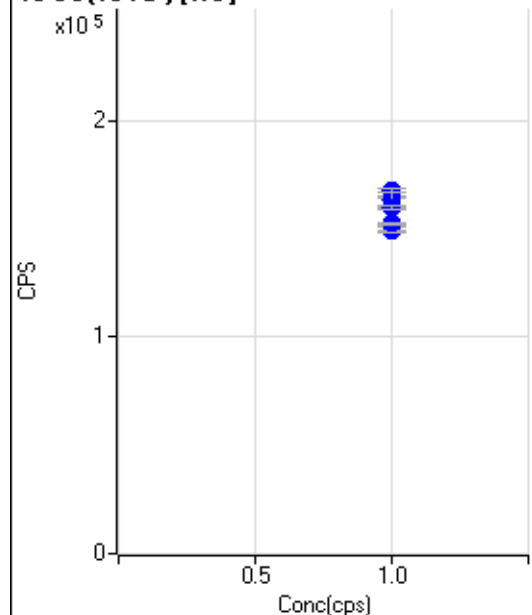
Min Conc: 0

6 Li(ISTD) [No Gas]

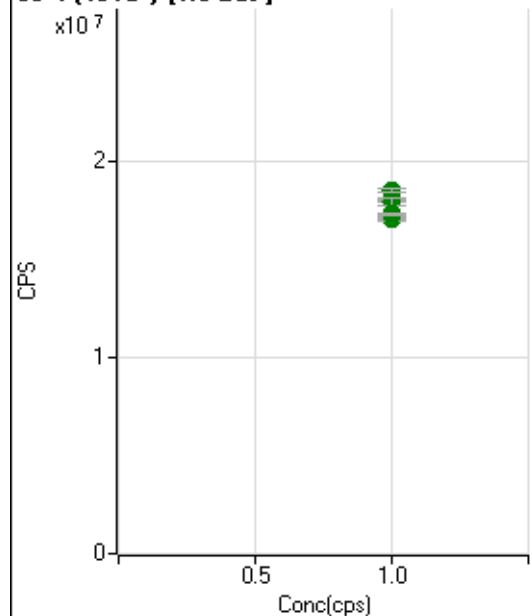
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2190027.38		P	0.1
2	☐	1.000		2237349.89		P	0.2
3	☐	1.000		2289944.07		P	1.2
4	☐	1.000		2227376.04		P	1.9
5	☐	1.000		2090522.32		P	0.6
6	☐	1.000		2038282.46		P	0.5
7	☐	1.000		2052126.26		P	0.3
8	☐	1.000		2120700.97		P	0.6

45 Sc(ISTD) [No Gas]

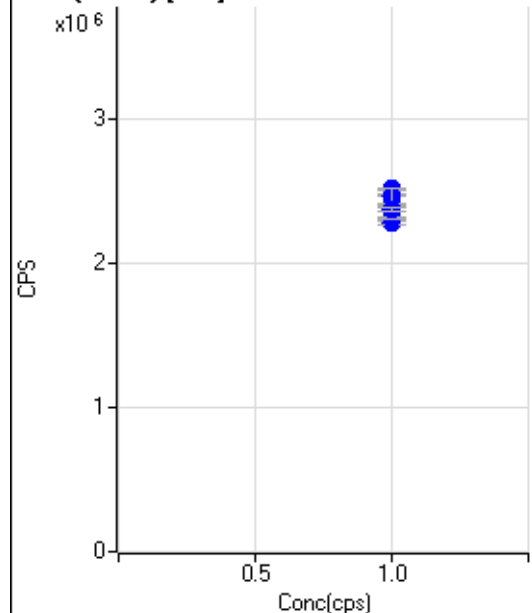
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3945836.68		P	0.4
2	☐	1.000		4073912.11		P	0.6
3	☐	1.000		4190566.24		P	1.0
4	☐	1.000		4028844.40		P	2.5
5	☐	1.000		3794811.41		P	0.7
6	☐	1.000		3687169.61		P	0.1
7	☐	1.000		3756707.81		P	0.7
8	☐	1.000		3849800.00		P	1.0

45 Sc(ISTD) [He]

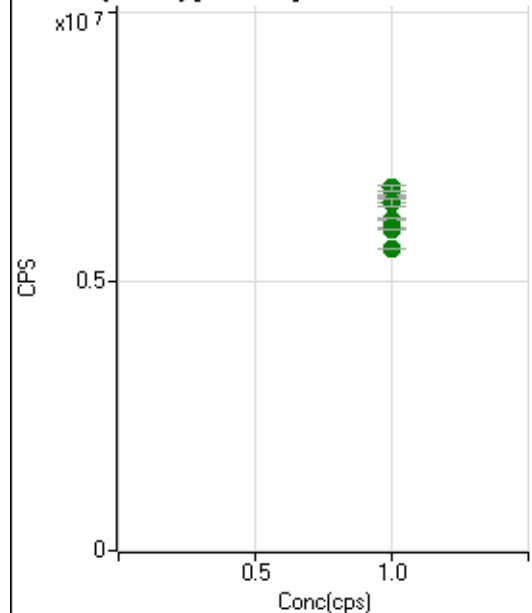
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		160241.25		P	0.9
2	☐	1.000		164945.89		P	0.6
3	☐	1.000		167409.31		P	1.0
4	☐	1.000		163046.49		P	4.6
5	☐	1.000		151281.72		P	0.3
6	☐	1.000		148647.25		P	1.1
7	☐	1.000		152240.37		P	0.4
8	☐	1.000		159762.40		P	1.5

89 Y(ISTD) [No Gas]

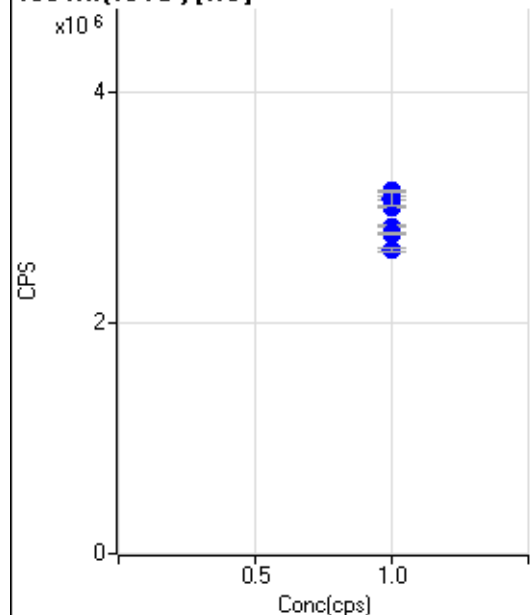
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17386032.80		A	0.1
2	☐	1.000		18022522.93		A	0.4
3	☐	1.000		18510971.39		A	1.1
4	☐	1.000		17927997.37		A	2.3
5	☐	1.000		17214471.13		A	0.5
6	☐	1.000		17031878.50		A	0.2
7	☐	1.000		17364744.05		A	0.5
8	☐	1.000		17307605.02		A	0.6

89 Y (ISTD) [He]

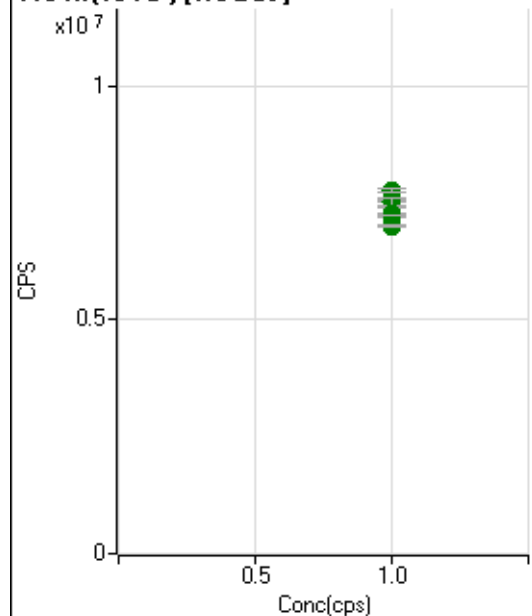
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2401162.74		P	0.2
2	☐	1.000		2468758.64		P	0.5
3	☐	1.000		2517377.64		P	0.3
4	☐	1.000		2471735.66		P	4.1
5	☐	1.000		2308172.00		P	0.4
6	☐	1.000		2281208.71		P	0.8
7	☐	1.000		2313780.56		P	0.7
8	☐	1.000		2374170.52		P	1.1

103 Rh (ISTD) [NoGas]

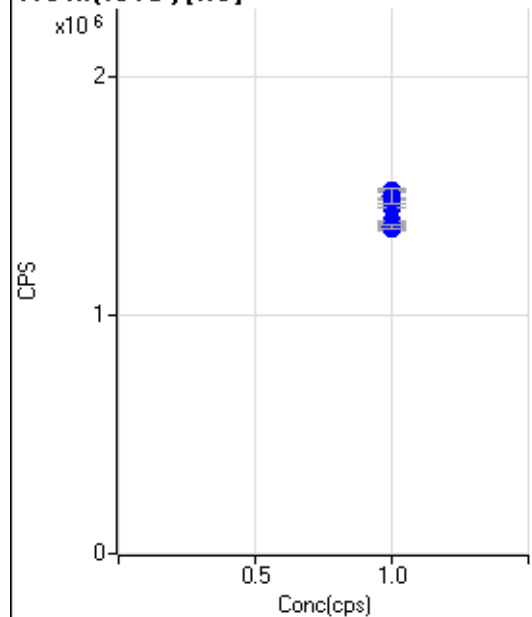
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6470736.38		A	0.3
2	☐	1.000		6590246.11		A	0.4
3	☐	1.000		6742690.86		A	1.3
4	☐	1.000		6481107.96		A	2.3
5	☐	1.000		6155965.94		A	0.6
6	☐	1.000		5996147.61		A	0.5
7	☐	1.000		5970158.51		A	0.5
8	☐	1.000		5616718.74		A	0.4

103Rh(ISTD) [He]

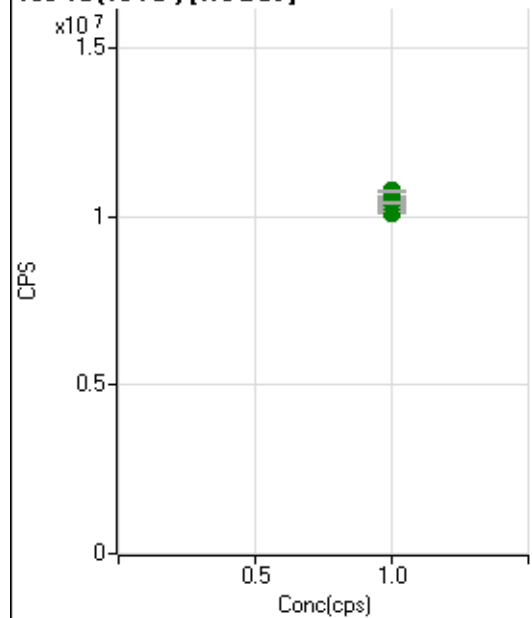
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2996574.23		P	0.1
2	☐	1.000		3080686.38		P	0.8
3	☐	1.000		3140423.70		P	0.4
4	☐	1.000		3066107.94		P	4.0
5	☐	1.000		2835958.08		P	0.5
6	☐	1.000		2774998.12		P	0.8
7	☐	1.000		2771277.80		P	0.7
8	☐	1.000		2624652.32		P	1.1

115In(ISTD) [NoGas]

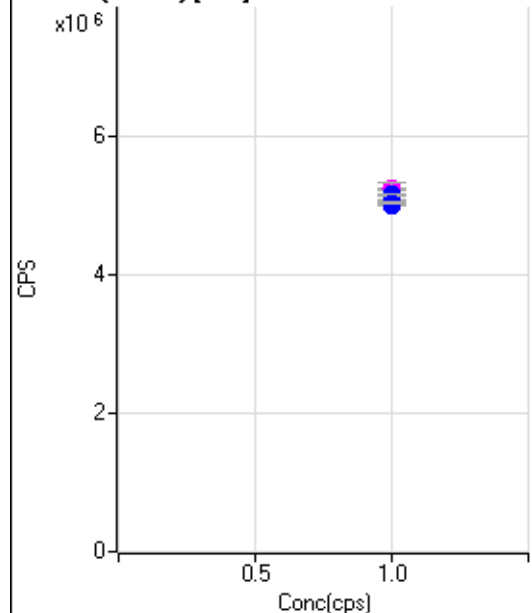
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7412592.66		A	0.1
2	☐	1.000		7550491.26		A	0.4
3	☐	1.000		7752274.12		A	1.2
4	☐	1.000		7521422.74		A	2.1
5	☐	1.000		7268442.96		A	0.1
6	☐	1.000		7183406.54		A	0.1
7	☐	1.000		7235939.75		A	0.4
8	☐	1.000		6988392.55		A	0.6

115 In(ISTD) [He]

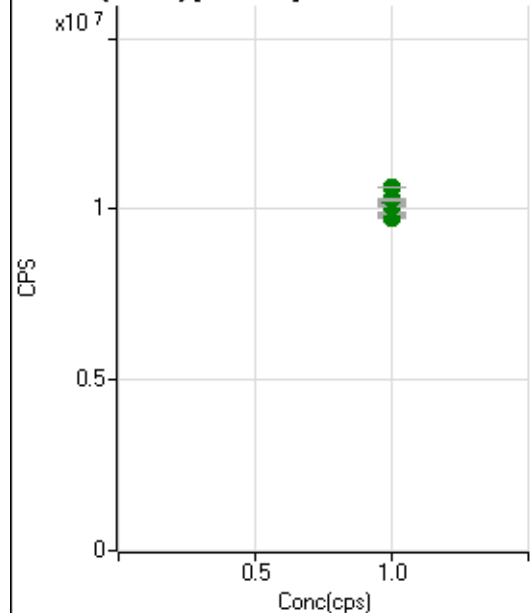
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1455735.36		P	0.2
2	☐	1.000		1489020.57		P	0.5
3	☐	1.000		1524521.12		P	0.5
4	☐	1.000		1504815.19		P	4.2
5	☐	1.000		1394871.49		P	0.6
6	☐	1.000		1371288.12		P	0.9
7	☐	1.000		1365712.27		P	0.6
8	☐	1.000		1370487.60		P	1.2

159 Tb(ISTD) [NoGas]

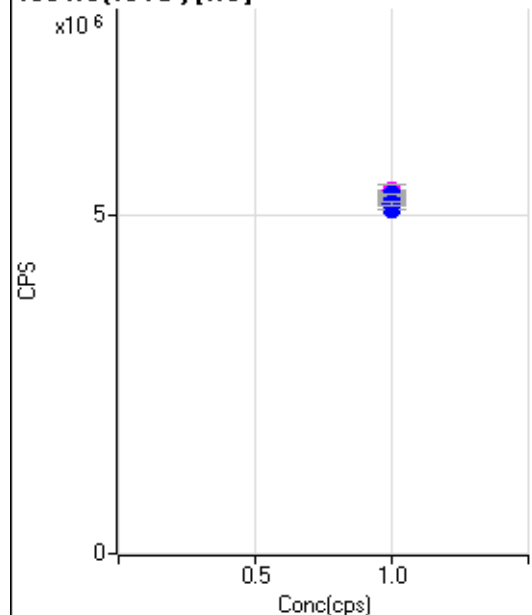
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10076577.97		A	0.2
2	☐	1.000		10157783.81		A	0.6
3	☐	1.000		10552214.15		A	1.2
4	☐	1.000		10411622.97		A	1.4
5	☐	1.000		10300786.65		A	0.4
6	☐	1.000		10516398.52		A	0.4
7	☐	1.000		10754638.87		A	0.4
8	☐	1.000		10412256.09		A	0.5

159 Tb(ISTD) [He]

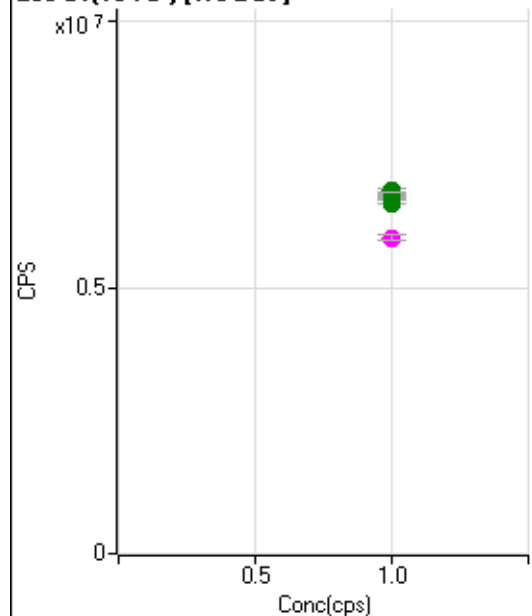
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4994466.04		P	0.5
2	☐	1.000		5056333.12		P	0.8
3	☐	1.000		5233330.51		P	0.4
4	☐	1.000		5229553.61		M	3.5
5	☐	1.000		5042714.68		P	0.8
6	☐	1.000		5044350.66		P	0.8
7	☐	1.000		5147227.46		P	0.6
8	☐	1.000		5026961.07		P	0.6

165 Ho(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9765663.59		A	0.2
2	☐	1.000		9857129.47		A	0.5
3	☐	1.000		10246728.35		A	1.5
4	☐	1.000		10168368.20		A	2.1
5	☐	1.000		10098593.28		A	0.5
6	☐	1.000		10306155.96		A	0.3
7	☐	1.000		10621185.91		A	0.1
8	☐	1.000		10293356.48		A	0.6

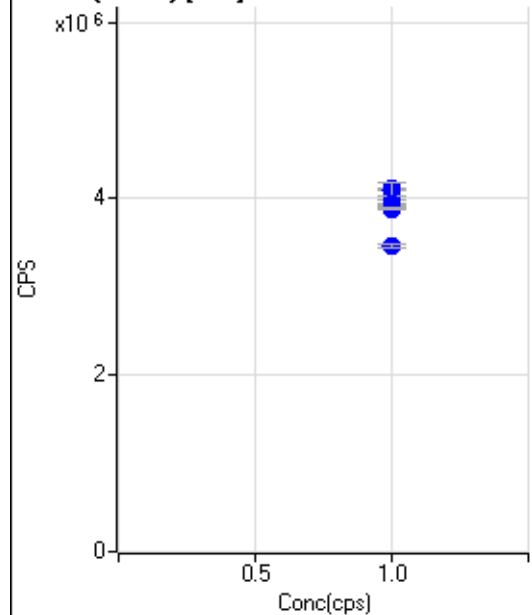
165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5094439.82		P	0.3
2	☐	1.000		5187015.51		P	0.7
3	☐	1.000		5367526.86		P	0.5
4	☐	1.000		5368861.48		M	3.5
5	☐	1.000		5189754.61		P	0.7
6	☐	1.000		5215602.11		P	0.5
7	☐	1.000		5315954.71		P	0.7
8	☐	1.000		5186132.49		P	0.9

209 Bi(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6576602.61		A	0.5
2	☐	1.000		6639067.12		A	0.3
3	☐	1.000		6814210.94		A	1.3
4	☐	1.000		6698257.89		A	1.7
5	☐	1.000		6686860.04		A	0.6
6	☐	1.000		6769702.68		A	0.3
7	☐	1.000		6791647.75		A	0.4
8	☐	1.000		5936109.22		M	1.8

209 Bi(ISTD) [He]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3946466.92		P	0.5
2	☐	1.000		3986509.31		P	0.2
3	☐	1.000		4112505.11		P	0.9
4	☐	1.000		4101316.92		P	3.7
5	☐	1.000		3939569.56		P	0.5
6	☐	1.000		3905169.25		P	0.4
7	☐	1.000		3890130.29		P	0.7
8	☐	1.000		3463786.93		P	0.9

US EPA Tune Check Sample Report

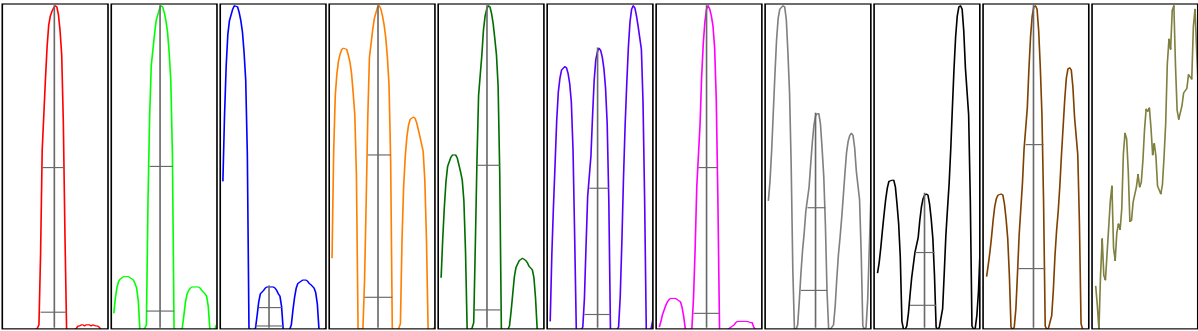
Batch Folder D:\ICP-MS Data\P7081919MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6955	0.27	5.00	
24	212565	0.35	5.00	
25	28069	0.50	5.00	
26	32213	0.49	5.00	
59	57163	0.39	5.00	
113	9504	0.77	5.00	
115	111560	0.66	5.00	
206	30283	0.57	5.00	
207	29437	0.69	5.00	
208	64897	0.47	5.00	
220	121	2.02		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6938	6971	6941	6947	6979
24	211965	213471	211983	212109	213299
25	28028	28272	27946	27951	28148
26	32083	32405	32125	32093	32362
59	57113	57472	56911	57026	57292
113	9512	9607	9472	9408	9525
115	112432	112153	110860	110823	111533
206	30124	30544	30160	30222	30365
207	29327	29661	29241	29299	29655
208	64856	64946	64673	64623	65385
220	121	118	121	125	120

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	11517	9.00	8.9 - 9.1		0.782	0.900	
24	326627	23.90	23.9 - 24.1		0.789	0.900	
25	43345	24.90	24.9 - 25.1		0.788	0.900	
26	49835	25.90	25.9 - 26.1		0.808	0.900	
59	92689	58.90	58.9 - 59.1		0.786	0.900	
113	16998	112.95	112.9 - 113.1		0.772	0.900	
115	202711	114.95	114.9 - 115.1		0.768	0.900	
206	54343	205.95	205.9 - 206.1		0.780	0.900	
207	49399	206.95	206.9 - 207.1		0.755	0.900	
208	117568	207.95	207.9 - 208.1		0.771	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	7.3	V	Deflect	14.4	V
Extract 2	-85.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-45	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	13623	0.22	
89	29027	0.46	
205	27612	0.45	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	13590	13664	13604	13639	13615
89	28930	29088	28894	29226	28996
205	27582	27726	27486	27755	27511

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	7.9	V	Deflect	1.8	V
Extract 2	-90.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-50	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			