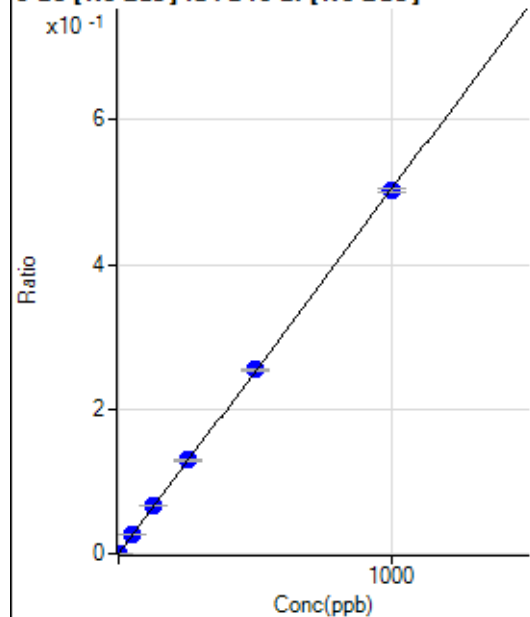


Batch Folder: D:\ICP-MS Data\P7081619-MS.b\
Analysis File: P7081619-MS.batch.bin
DA Date-Time: 2019-08-16 15:32:13
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-08-16 14:29:38
2	004CALS.d	S02	2019-08-16 14:33:14
3	005CALS.d	S03	2019-08-16 14:37:55
4	006CALS.d	S04	2019-08-16 14:41:51
5	007CALS.d	S05	2019-08-16 14:45:44
6	008CALS.d	S06	2019-08-16 14:49:33
7	009CALS.d	S07	2019-08-16 14:53:21
8	010CALS.d	S08	2019-08-16 14:57:07

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.55	0.0000	P	9.1
2	☐	1.000	1.032	1590.11	0.0005	P	1.2
3	☐	50.000	52.670	77614.78	0.0266	P	0.0
4	☐	125.000	132.032	191227.53	0.0666	P	0.7
5	☐	250.000	256.634	363120.00	0.1294	P	0.7
6	☐	500.000	503.911	688478.14	0.2541	P	0.5
7	☐	1000.000	995.374	1341060.98	0.5020	P	1.0
8	☐			402.23	0.0002	P	15.5

$$y = 5.0429\text{E-}004 * x + 2.5958\text{E-}005$$

$$R = 1.0000$$

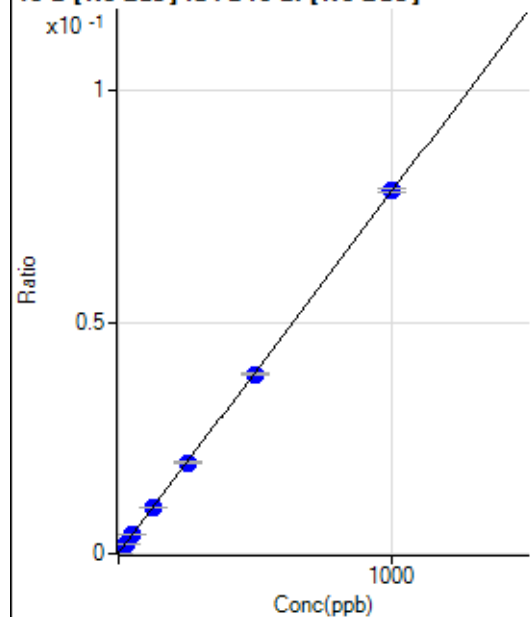
$$DL = 0.01398$$

$$BEC = 0.05148$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	458.36	0.0002	P	7.9
2	☐	25.000	23.167	5723.56	0.0020	P	6.2
3	☐	50.000	49.777	11805.07	0.0040	P	1.1
4	☐	125.000	125.760	28639.07	0.0100	P	2.0
5	☐	250.000	250.727	55355.05	0.0197	P	0.2
6	☐	500.000	495.130	105156.07	0.0388	P	1.4
7	☐	1000.000	1002.215	209473.94	0.0784	P	1.2
8	☐			9967.56	0.0038	P	6.0

$$y = 7.8075\text{E-}005 * x + 1.5746\text{E-}004$$

$$R = 1.0000$$

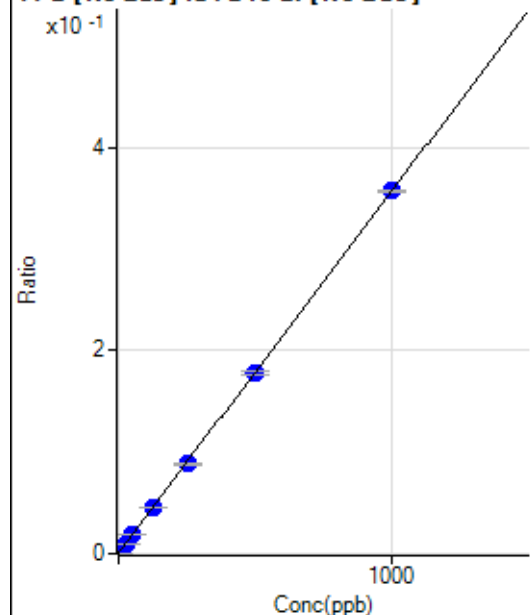
$$DL = 0.48$$

$$BEC = 2.017$$

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	2200.26	0.0008	P	4.2
2	☐	25.000	24.212	27283.87	0.0094	P	3.2
3	☐	50.000	50.399	54557.88	0.0187	P	0.1
4	☐	125.000	127.288	132204.90	0.0460	P	1.4
5	☐	250.000	245.338	247002.34	0.0881	P	0.2
6	☐	500.000	498.468	482557.55	0.1781	P	1.4
7	☐	1000.000	1001.646	954198.18	0.3572	P	0.7
8	☐			45282.83	0.0175	P	7.0

$$y = 3.5582\text{E-}004 * x + 7.5592\text{E-}004$$

$$R = 1.0000$$

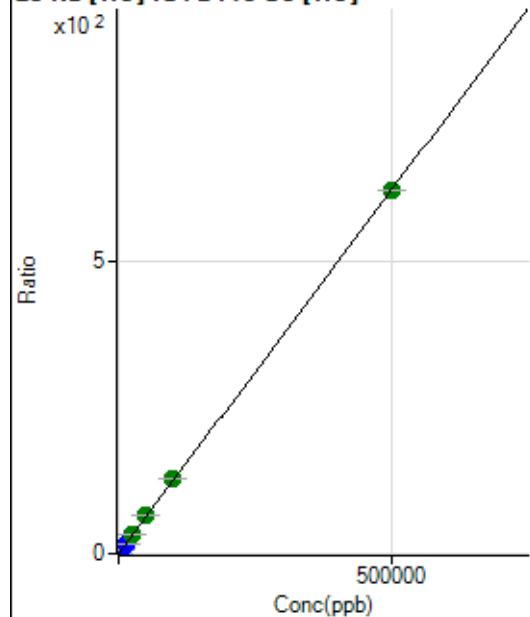
$$DL = 0.2663$$

$$BEC = 2.124$$

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	4664.78	0.0255	P	1.0
2	☐	500.000	495.068	118677.30	0.6403	P	0.5
3	☐	5000.000	5129.348	1153893.86	6.3956	P	0.9
4	☐	12500.000	12960.534	2836888.60	16.1211	P	0.3
5	☐	25000.000	25747.430	5295917.61	32.0011	A	1.1
6	☐	50000.000	52836.657	10346598.24	65.6430	A	0.5
7	☐	100000.00	103482.93	20957845.26	128.5403	A	0.6
8	☐	500000.00	498969.57	103286930.0	619.6930	A	0.1

$$y = 0.0012 * x + 0.0255$$

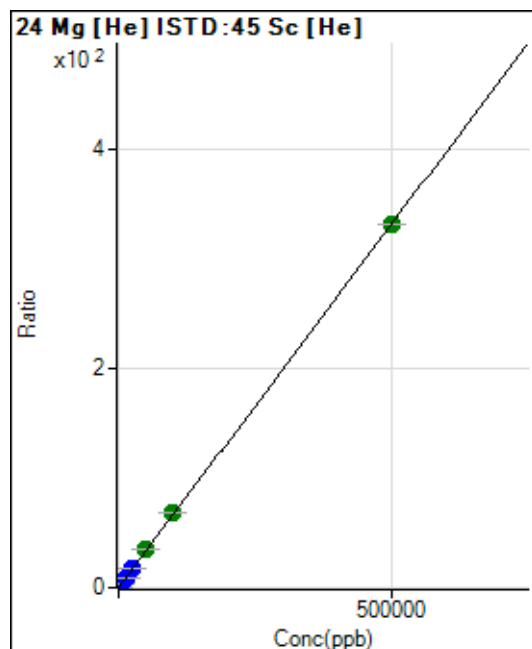
$$R = 1.0000$$

$$DL = 0.6392$$

$$BEC = 20.51$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	88.89	0.0005	P	10.7
2	☐	500.000	500.474	61633.08	0.3325	P	3.2
3	☐	5000.000	5100.854	610683.40	3.3847	P	0.5
4	☐	12500.000	12906.679	1506948.84	8.5635	P	0.5
5	☐	25000.000	25629.538	2814180.62	17.0045	P	0.7
6	☐	50000.000	52694.520	5510484.89	34.9609	A	0.3
7	☐	100000.00	102848.35	11125399.99	68.2356	A	0.7
8	☐	500000.00	499118.22	55192959.57	331.1423	A	0.1

$$y = 6.6345E-004 * x + 4.8525E-004$$

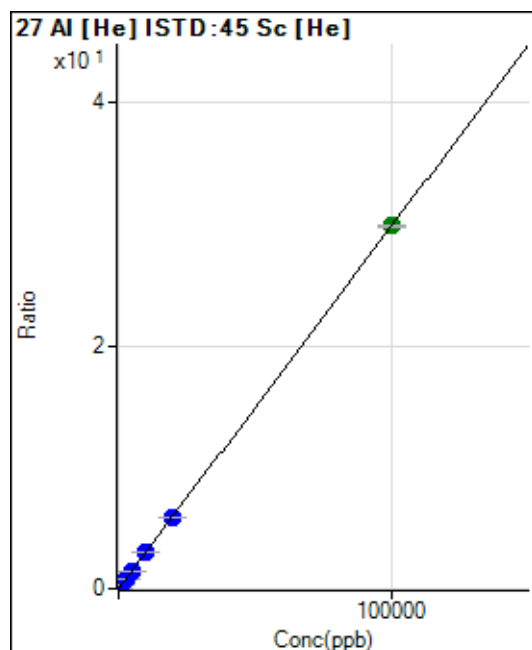
$$R = 1.0000$$

$$DL = 0.234$$

$$BEC = 0.7314$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30.55	0.0002	P	69.0
2	☐	20.000	18.784	1069.53	0.0058	P	16.6
3	☐	1000.000	997.658	53691.75	0.2976	P	1.6
4	☐	2500.000	2512.057	131798.68	0.7490	P	1.1
5	☐	5000.000	4939.271	243690.74	1.4725	P	0.8
6	☐	10000.000	10080.302	473635.52	3.0050	P	0.5
7	☐	20000.000	19627.990	953969.12	5.8510	P	0.6
8	☐	100000.00	100069.13	4971733.49	29.8292	A	0.4

$$y = 2.9808E-004 * x + 1.6710E-004$$

$$R = 1.0000$$

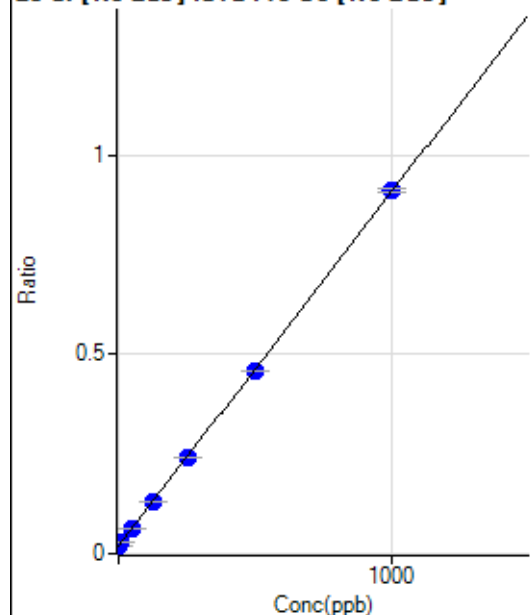
$$DL = 1.161$$

$$BEC = 0.5606$$

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	92792.34	0.0197	P	0.4
2	☐	10.000	8.977	131001.86	0.0276	P	1.0
3	☐	50.000	50.729	303501.65	0.0647	P	0.3
4	☐	125.000	122.745	591785.64	0.1287	P	0.9
5	☐	250.000	250.783	1065057.94	0.2423	P	0.6
6	☐	500.000	493.862	1919423.09	0.4582	P	0.4
7	☐	1000.000	1003.129	3814985.81	0.9104	P	1.1
8	☐			215174.51	0.0521	P	0.4

$$y = 8.8797E-004 * x + 0.0197$$

R = 1.0000

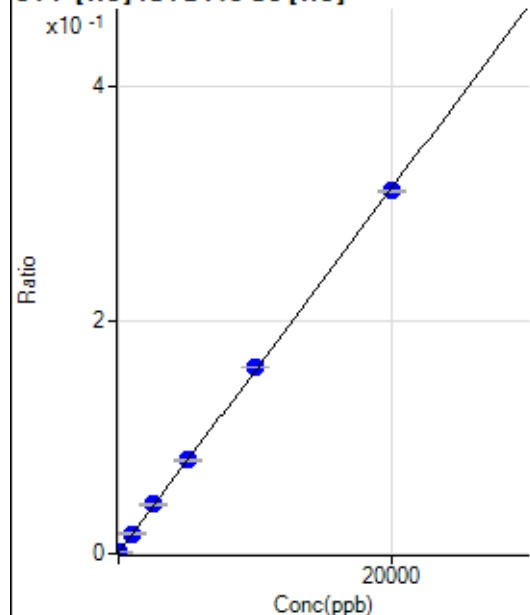
DL = 0.2706

BEC = 22.14

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-30.635	55.56	0.0003	P	22.4
2	☐	0.000	30.635	233.34	0.0013	P	10.8
3	☐	1000.000	1047.547	3089.34	0.0171	P	3.3
4	☐	2500.000	2678.275	7491.07	0.0426	P	3.6
5	☐	5000.000	5073.494	13231.45	0.0799	P	2.7
6	☐	10000.000	10191.441	25185.93	0.1598	P	0.9
7	☐	20000.000	19861.244	50653.51	0.3107	P	0.8
8	☐			77.78	0.0005	P	27.2

$$y = 1.5602E-005 * x + 7.8103E-004$$

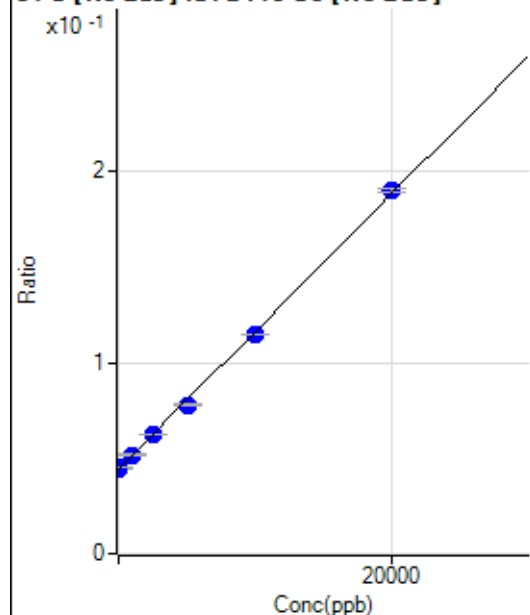
R = 0.9999

DL = 19.61

BEC = 50.06

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	-78.261	206858.91	0.0438	P	0.1
2	☐	0.000	78.261	213137.83	0.0450	P	0.4
3	☐	1000.000	1015.656	242544.38	0.0517	P	1.0
4	☐	2500.000	2458.627	285682.33	0.0621	P	0.4
5	☐	5000.000	4649.476	342340.52	0.0779	P	0.9
6	☐	10000.000	9779.375	481151.54	0.1149	P	0.1
7	☐	20000.000	20202.332	796007.25	0.1900	P	1.0
8	☐			155438.95	0.0376	P	1.7

$$y = 7.2054\text{E-}006 * x + 0.0444$$

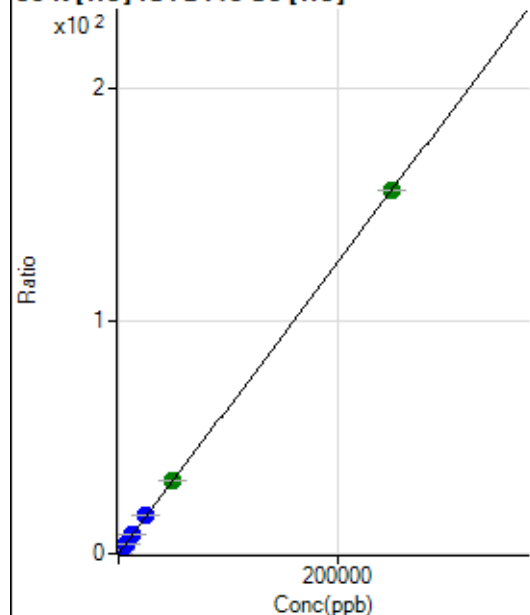
$$R = 0.9997$$

$$DL = 46.21$$

$$BEC = 6161$$

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	9672.96	0.0528	P	4.1
2	☐	500.000	505.992	68349.65	0.3688	P	1.0
3	☐	2500.000	2586.597	300942.58	1.6680	P	1.2
4	☐	6250.000	6509.924	724651.93	4.1180	P	0.4
5	☐	12500.000	12769.986	1328407.91	8.0271	P	1.2
6	☐	25000.000	25834.700	2551109.06	16.1854	P	0.4
7	☐	50000.000	50711.555	5171768.17	31.7198	A	0.5
8	☐	250000.00	249753.34	26003134.96	156.0119	A	0.1

$$y = 6.2445\text{E-}004 * x + 0.0528$$

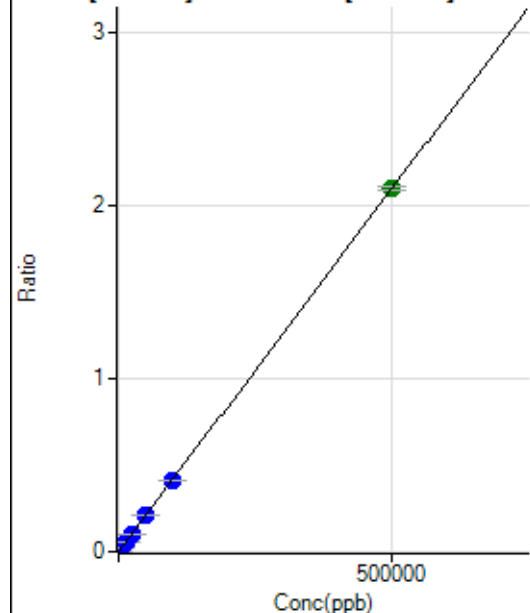
$$R = 1.0000$$

$$DL = 10.29$$

$$BEC = 84.58$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	33.2
2	☐	500.000	476.631	9547.87	0.0020	P	0.3
3	☐	5000.000	4877.444	96046.83	0.0205	P	1.4
4	☐	12500.000	12358.232	238563.10	0.0519	P	0.6
5	☐	25000.000	24650.475	454595.09	0.1034	P	0.6
6	☐	50000.000	49907.098	877188.85	0.2094	P	0.8
7	☐	100000.00	98867.395	1738260.48	0.4148	P	0.9
8	☐	500000.00	500258.08	8671162.96	2.0989	A	0.9

$$y = 4.1955\text{E-}006 * x + 1.4128\text{E-}005$$

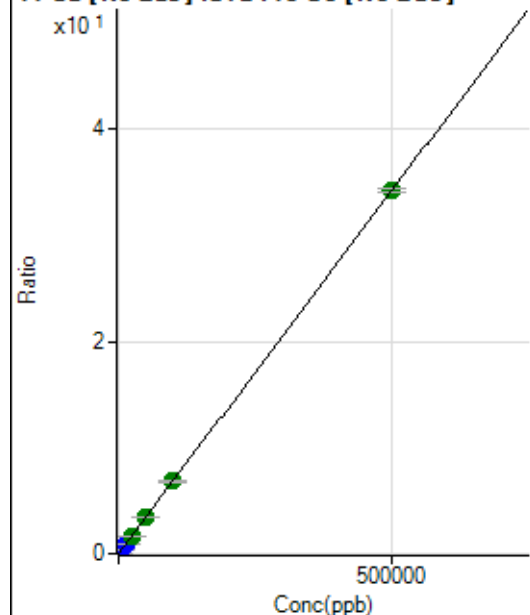
$$R = 1.0000$$

$$DL = 3.352$$

$$BEC = 3.367$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8173.89	0.0017	P	5.2
2	☐	500.000	473.829	161851.73	0.0341	P	1.2
3	☐	5000.000	4891.345	1577260.73	0.3363	P	0.3
4	☐	12500.000	12283.108	3872244.10	0.8418	P	0.1
5	☐	25000.000	24535.440	7382562.06	1.6798	A	0.5
6	☐	50000.000	49955.660	14320330.88	3.4184	A	0.3
7	☐	100000.00	99627.202	28559647.17	6.8156	A	1.3
8	☐	500000.00	500108.75	141317685.1	34.2061	A	1.0

$$y = 6.8394\text{E-}005 * x + 0.0017$$

$$R = 1.0000$$

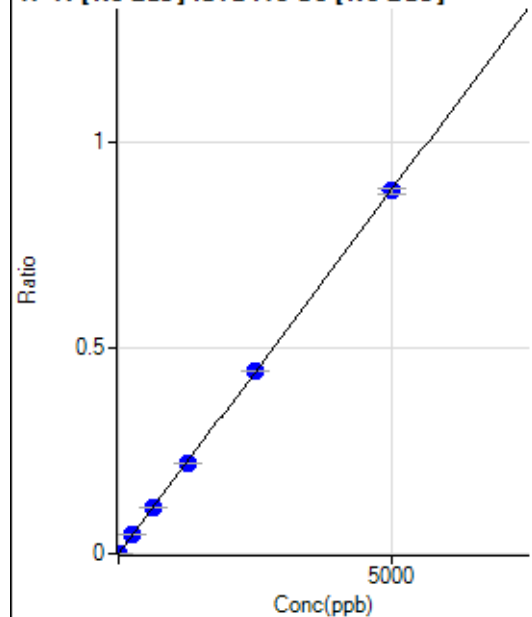
$$DL = 3.965$$

$$BEC = 25.32$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	47.22	0.0000	P	10.5
2	☐	5.000	5.159	4378.63	0.0009	P	3.1
3	☐	250.000	252.761	209987.35	0.0448	P	0.2
4	☐	625.000	633.705	516227.13	0.1122	P	0.2
5	☐	1250.000	1251.473	973984.22	0.2216	P	0.4
6	☐	2500.000	2519.948	1869388.80	0.4462	P	0.2
7	☐	5000.000	4988.431	3701504.47	0.8834	P	1.5
8	☐			1547.37	0.0004	P	8.9

$$y = 1.7708\text{E-}004 * x + 1.0008\text{E-}005$$

$$R = 1.0000$$

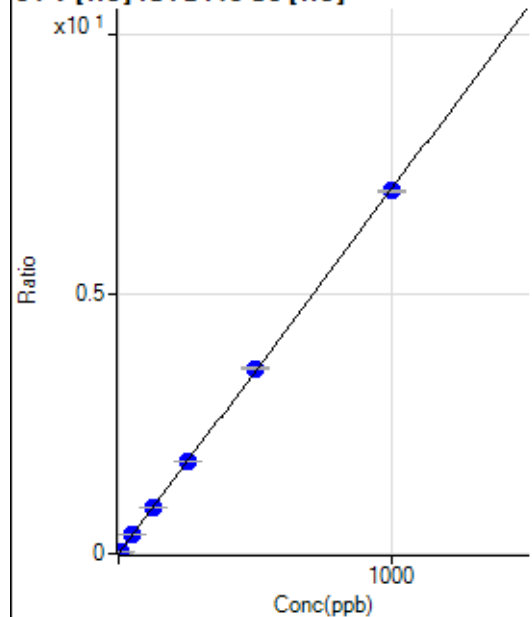
$$DL = 0.01778$$

$$BEC = 0.05651$$

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	2.22	0.0000	P	173.
2	☐	5.000	5.293	6900.59	0.0372	P	4.0
3	☐	50.000	51.262	65048.17	0.3605	P	1.5
4	☐	125.000	128.103	158546.57	0.9010	P	0.5
5	☐	250.000	251.455	292687.16	1.7685	P	0.6
6	☐	500.000	508.276	563448.64	3.5748	P	0.7
7	☐	1000.000	995.046	1141027.62	6.9983	P	0.7
8	☐			251.12	0.0015	P	16.3

$$y = 0.0070 * x + 1.2115\text{E-}005$$

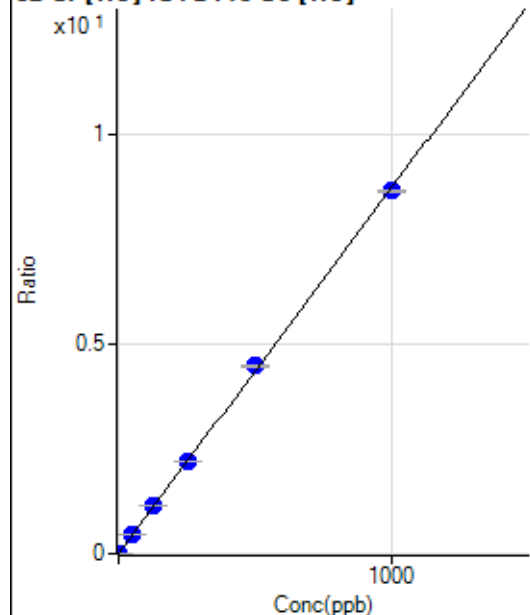
$$R = 0.9999$$

$$DL = 0.008951$$

$$BEC = 0.001723$$

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	253.34	0.0014	P	11.1
2	☐	2.000	1.982	3459.35	0.0187	P	3.8
3	☐	50.000	51.599	81427.75	0.4513	P	1.0
4	☐	125.000	129.349	198730.38	1.1293	P	0.5
5	☐	250.000	253.726	366385.31	2.2139	P	0.8
6	☐	500.000	512.898	705161.02	4.4738	P	0.4
7	☐	1000.000	991.996	1410607.10	8.6516	P	0.4
8	☐			27051.67	0.1623	P	0.5

$$y = 0.0087 * x + 0.0014$$

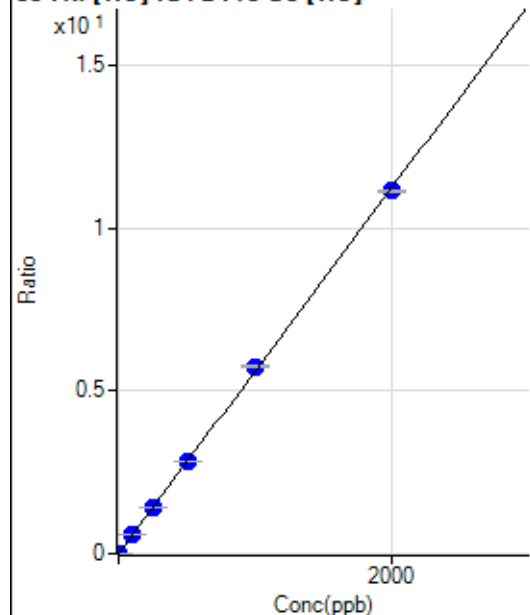
$$R = 0.9999$$

$$DL = 0.05298$$

$$BEC = 0.1587$$

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	23.33	0.0001	P	14.9
2	☐	1.000	0.999	1063.39	0.0057	P	6.0
3	☐	100.000	101.670	103009.58	0.5709	P	0.9
4	☐	250.000	256.098	253037.36	1.4379	P	0.6
5	☐	500.000	506.295	470443.67	2.8426	P	0.8
6	☐	1000.000	1024.363	906503.27	5.7512	P	0.5
7	☐	2000.000	1985.399	1817424.43	11.1468	P	0.6
8	☐			6972.86	0.0418	P	2.4

$$y = 0.0056 * x + 1.2746E-004$$

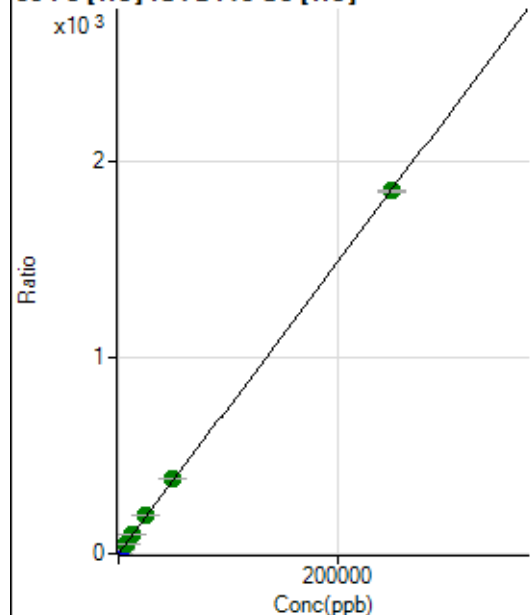
$$R = 0.9999$$

$$DL = 0.01015$$

$$BEC = 0.0227$$

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	2120.59	0.0116	P	1.7
2	☐	50.000	55.065	77647.10	0.4189	P	1.5
3	☐	2500.000	2655.347	3546102.02	19.6547	P	0.9
4	☐	6250.000	6664.281	8677444.46	49.3112	A	0.8
5	☐	12500.000	13148.189	16098497.23	97.2764	A	1.1
6	☐	25000.000	26664.951	31093228.71	197.2679	A	0.7
7	☐	50000.000	51626.048	62269766.67	381.9197	A	0.7
8	☐	250000.00	249463.97	307585929.1	1,845.442	A	0.4

$$y = 0.0074 * x + 0.0116$$

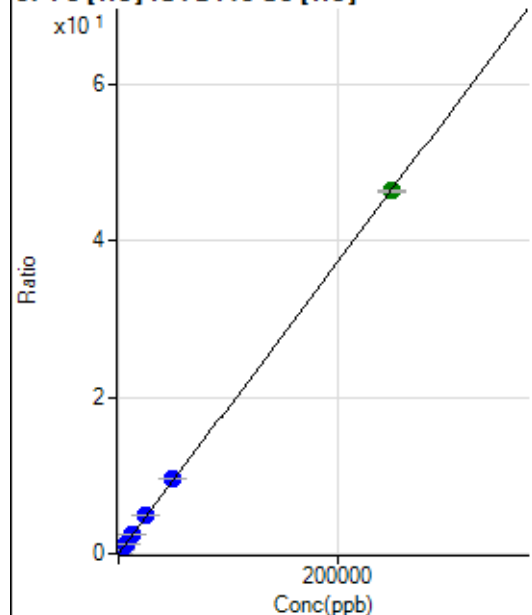
$$R = 1.0000$$

$$DL = 0.08092$$

$$BEC = 1.565$$

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	144.45	0.0008	P	24.2
2	☐	50.000	56.530	2096.50	0.0113	P	6.0
3	☐	2500.000	2669.041	89778.67	0.4976	P	1.0
4	☐	6250.000	6672.005	218686.51	1.2427	P	0.6
5	☐	12500.000	13187.390	406354.96	2.4555	P	1.5
6	☐	25000.000	26686.502	783086.06	4.9682	P	0.6
7	☐	50000.000	51565.587	1565114.56	9.5992	P	0.4
8	☐	250000.00	249471.62	7739851.21	46.4375	A	0.6

$$y = 1.8614E-004 * x + 7.8902E-004$$

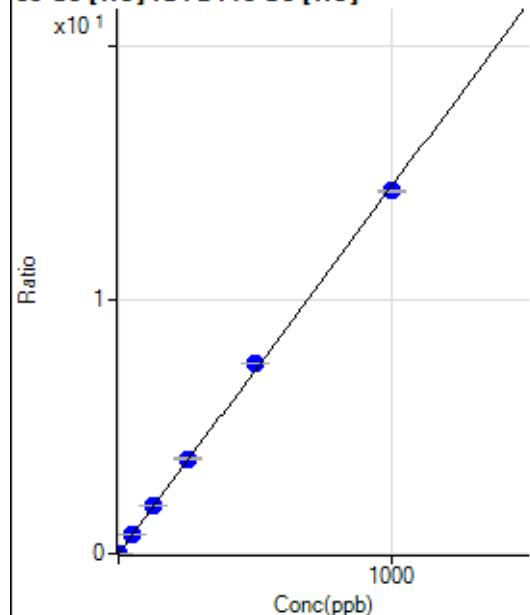
$$R = 1.0000$$

$$DL = 3.083$$

$$BEC = 4.239$$

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	30.00	0.0002	P	0.6
2	☐	1.000	0.996	2702.52	0.0146	P	2.9
3	☐	50.000	53.238	139093.86	0.7710	P	1.3
4	☐	125.000	132.447	337480.49	1.9178	P	0.6
5	☐	250.000	258.240	618795.38	3.7390	P	0.9
6	☐	500.000	516.897	1179613.33	7.4840	P	0.2
7	☐	1000.000	988.399	2333265.40	14.3106	P	0.6
8	☐			27649.56	0.1659	P	2.3

$$y = 0.0145 * x + 1.6378E-004$$

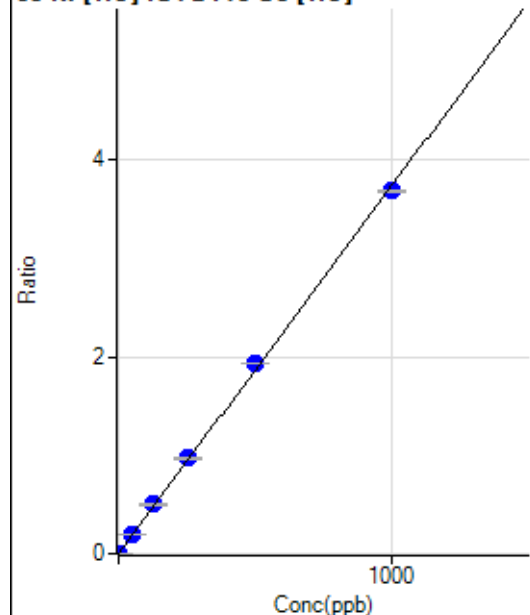
$$R = 0.9997$$

$$DL = 0.0002097$$

$$BEC = 0.01131$$

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	31.11	0.0002	P	11.8
2	☐	1.000	1.170	841.15	0.0045	P	10.1
3	☐	50.000	54.258	36550.09	0.2026	P	0.6
4	☐	125.000	133.690	87791.74	0.4989	P	0.6
5	☐	250.000	260.074	160590.17	0.9704	P	0.9
6	☐	500.000	518.078	304651.05	1.9328	P	0.3
7	☐	1000.000	987.143	600439.25	3.6827	P	0.6
8	☐			12078.47	0.0725	P	0.9

$$y = 0.0037 * x + 1.6976E-004$$

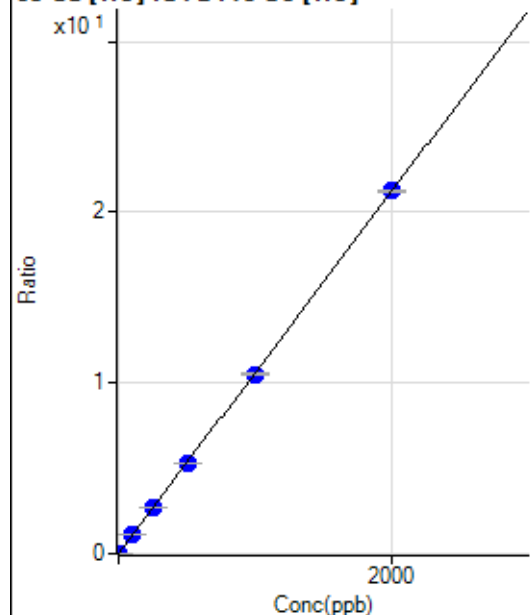
$$R = 0.9997$$

$$DL = 0.01613$$

$$BEC = 0.04551$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	431.13	0.0024	P	6.1
2	☐	2.000	1.991	4348.49	0.0235	P	4.4
3	☐	100.000	103.057	197469.10	1.0945	P	1.3
4	☐	250.000	256.816	479360.87	2.7240	P	0.4
5	☐	500.000	498.248	874239.15	5.2827	P	1.1
6	☐	1000.000	991.171	1656035.63	10.5066	P	0.4
7	☐	2000.000	2003.848	3462839.50	21.2387	P	0.7
8	☐			5206.57	0.0312	P	3.0

$$y = 0.0106 * x + 0.0024$$

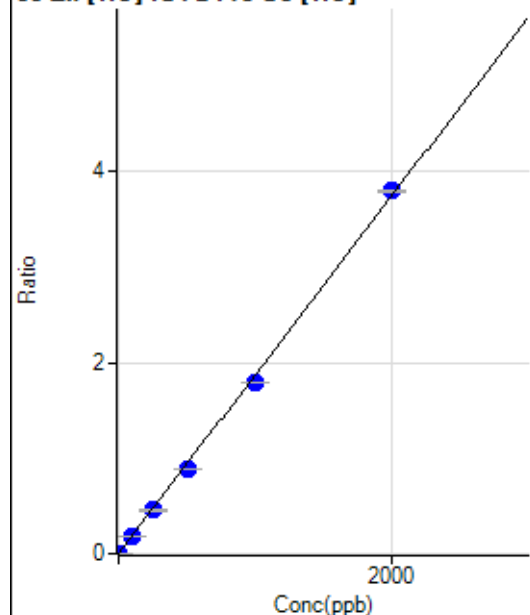
$$R = 1.0000$$

$$DL = 0.04037$$

$$BEC = 0.2221$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	192.23	0.0010	P	11.4
2	☐	2.000	2.018	894.49	0.0048	P	8.2
3	☐	100.000	96.937	32892.76	0.1823	P	1.1
4	☐	250.000	242.325	79922.69	0.4542	P	0.9
5	☐	500.000	475.120	147206.17	0.8895	P	0.8
6	☐	1000.000	955.249	281710.35	1.7873	P	0.6
7	☐	2000.000	2029.708	618984.55	3.7964	P	0.8
8	☐			7534.26	0.0452	P	0.9

$$y = 0.0019 * x + 0.0010$$

$$R = 0.9995$$

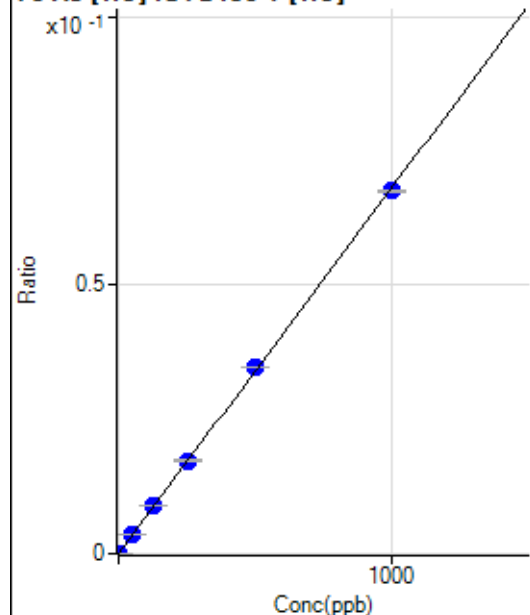
$$DL = 0.1927$$

$$BEC = 0.5613$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11.73	0.0000	P	18.0
2	☐	1.000	1.026	202.47	0.0001	P	20.2
3	☐	50.000	52.875	9666.86	0.0036	P	1.6
4	☐	125.000	131.314	23569.17	0.0089	P	1.4
5	☐	250.000	254.593	43502.40	0.0173	P	0.8
6	☐	500.000	510.378	83501.92	0.0348	P	0.7
7	☐	1000.000	992.730	166775.67	0.0676	P	0.3
8	☐			241.36	0.0001	P	14.3

$$y = 6.8087E-005 * x + 4.3374E-006$$

$$R = 0.9999$$

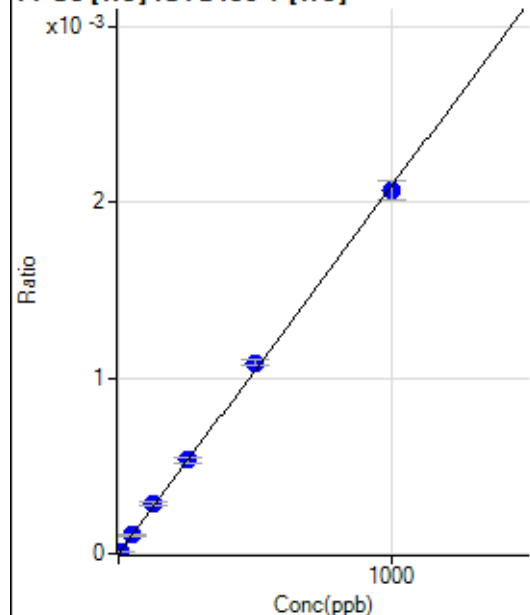
$$DL = 0.03441$$

$$BEC = 0.0637$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.279	30.00	0.0000	P	40.9
3	☐	50.000	51.169	286.68	0.0001	P	10.0
4	☐	125.000	136.215	750.03	0.0003	P	8.3
5	☐	250.000	254.102	1332.30	0.0005	P	4.4
6	☐	500.000	519.501	2608.06	0.0011	P	3.1
7	☐	1000.000	987.763	5092.09	0.0021	P	5.4
8	☐			2.22	0.0000	P	173.

$$y = 2.0895E-006 * x + 0.0000E+000$$

$$R = 0.9997$$

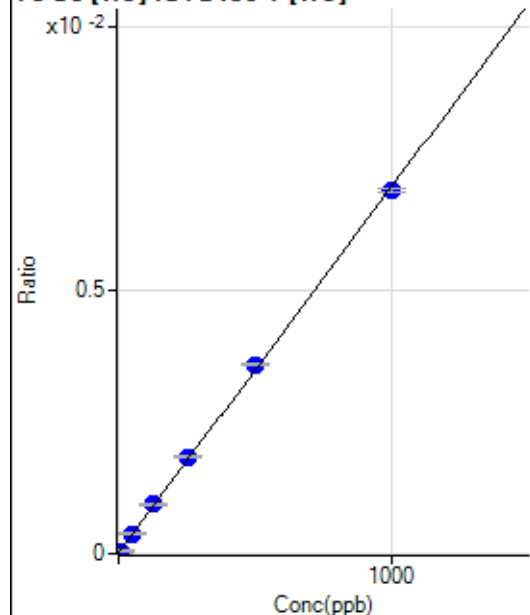
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	43.21	0.0000	P	13.2
2	☐	5.000	5.482	147.54	0.0001	P	15.6
3	☐	50.000	52.576	1023.51	0.0004	P	5.9
4	☐	125.000	132.551	2471.22	0.0009	P	4.1
5	☐	250.000	262.115	4614.36	0.0018	P	1.0
6	☐	500.000	513.959	8627.94	0.0036	P	0.6
7	☐	1000.000	988.917	17010.69	0.0069	P	0.9
8	☐			35.19	0.0000	P	10.0

$$y = 6.9557\text{E-}006 * x + 1.5988\text{E-}005$$

$$R = 0.9998$$

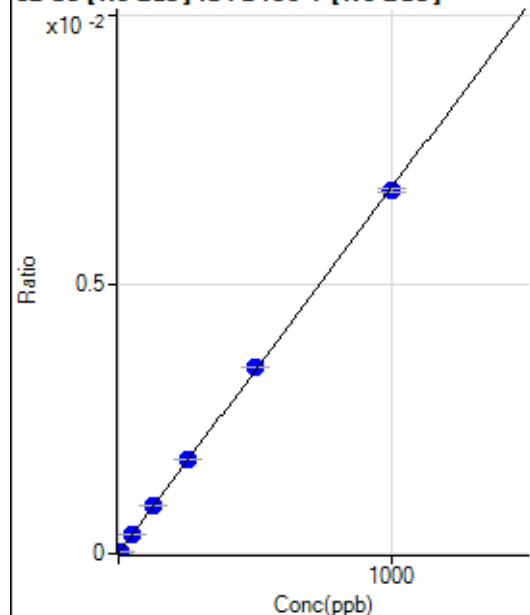
$$DL = 0.91$$

$$BEC = 2.299$$

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	196.51	0.0000	P	13.4
2	☐	5.000	5.655	941.20	0.0000	P	8.3
3	☐	50.000	52.576	7098.27	0.0004	P	2.5
4	☐	125.000	131.368	17111.85	0.0009	P	0.7
5	☐	250.000	258.167	32536.18	0.0018	P	0.5
6	☐	500.000	510.539	62039.79	0.0035	P	0.3
7	☐	1000.000	991.761	120964.49	0.0067	P	1.0
8	☐			248.48	0.0000	P	11.2

$$y = 6.7749\text{E-}006 * x + 1.0206\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.6068$$

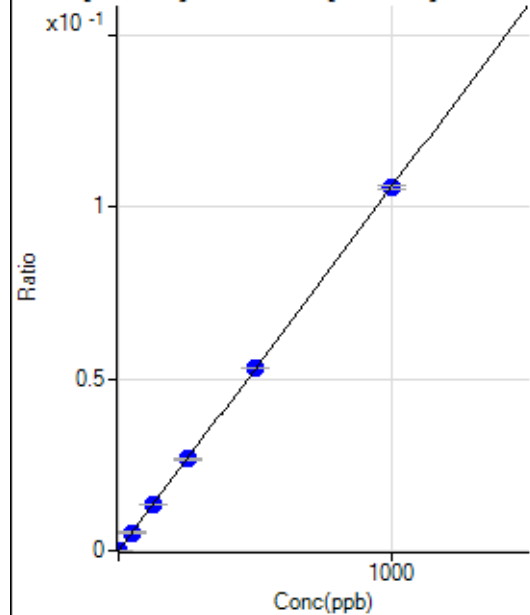
$$BEC = 1.506$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			161.11		P	16.1
2	☐			177.78		P	11.0
3	☐			167.78		P	19.1
4	☐			176.67		P	11.8
5	☐			186.67		P	20.3
6	☐			178.90		P	16.1
7	☐			173.34		P	31.5
8	☐			206.67		P	13.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	322.24	0.0000	P	19.9
2	☐	1.000	0.937	2247.50	0.0001	P	11.1
3	☐	50.000	50.031	102880.55	0.0053	P	0.5
4	☐	125.000	126.976	255709.96	0.0135	P	0.6
5	☐	250.000	251.274	492018.64	0.0266	P	0.6
6	☐	500.000	503.596	953230.37	0.0533	P	0.4
7	☐	1000.000	997.635	1897810.35	0.1056	P	1.2
8	☐			8525.11	0.0005	P	2.0

$$y = 1.0581\text{E-}004 * x + 1.6740\text{E-}005$$

$$R = 1.0000$$

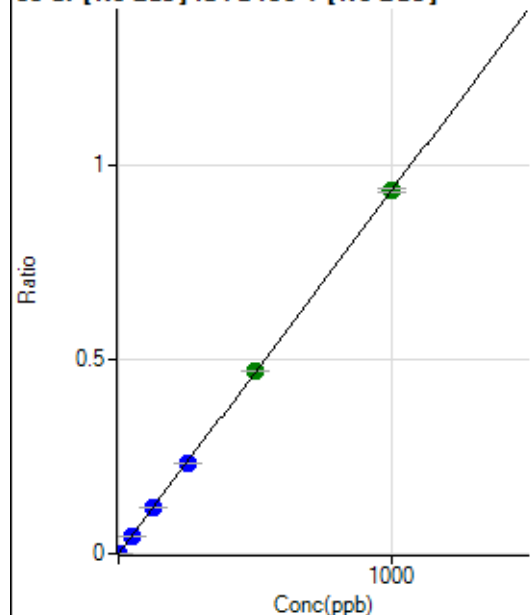
$$DL = 0.09468$$

$$BEC = 0.1582$$

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	83.34	0.0000	P	43.5
2	☐	1.000	0.975	17781.09	0.0009	P	0.8
3	☐	50.000	49.580	898640.29	0.0464	P	0.1
4	☐	125.000	124.915	2221400.24	0.1169	P	0.3
5	☐	250.000	246.926	4272234.78	0.2310	P	0.2
6	☐	500.000	501.919	8397136.82	0.4695	A	0.4
7	☐	1000.000	999.841	16813569.30	0.9354	A	1.1
8	☐			70425.89	0.0040	P	1.3

$$y = 9.3550\text{E-}004 * x + 4.3274\text{E-}006$$

$$R = 1.0000$$

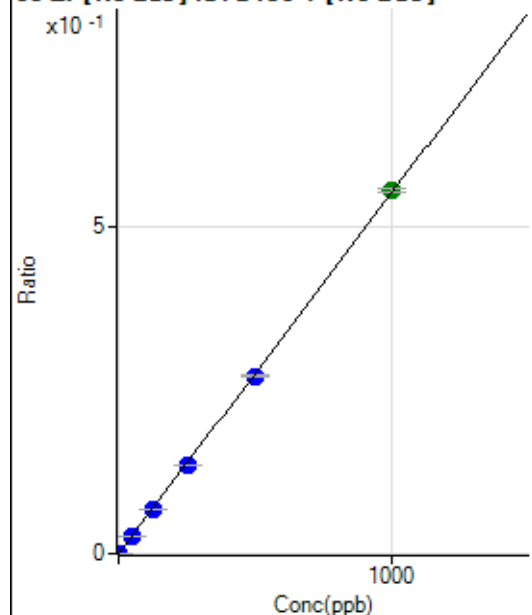
$$DL = 0.006039$$

$$BEC = 0.004626$$

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	697.27	0.0000	P	17.4
2	☐	1.000	0.856	9887.15	0.0005	P	2.1
3	☐	50.000	49.058	526322.43	0.0272	P	0.4
4	☐	125.000	123.910	1303345.01	0.0686	P	0.2
5	☐	250.000	244.147	2497872.63	0.1351	P	0.6
6	☐	500.000	492.191	4868745.07	0.2722	P	0.4
7	☐	1000.000	1005.551	9997248.23	0.5562	A	1.2
8	☐			3934.04	0.0002	P	11.1

$$y = 5.5306\text{E-}004 * x + 3.6217\text{E-}005$$

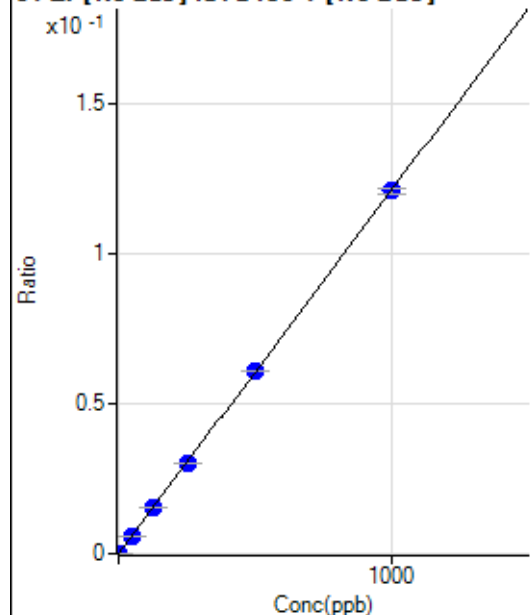
$$R = 0.9999$$

$$DL = 0.0341$$

$$BEC = 0.06548$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.12	0.0000	P	18.8
2	☐	1.000	0.820	2036.35	0.0001	P	8.8
3	☐	50.000	49.927	117122.97	0.0060	P	0.4
4	☐	125.000	126.780	291650.35	0.0153	P	0.1
5	☐	250.000	249.008	557220.95	0.0301	P	0.3
6	☐	500.000	503.706	1089849.39	0.0609	P	0.2
7	☐	1000.000	998.176	2170691.00	0.1208	P	1.4
8	☐			925.07	0.0001	P	16.2

$$y = 1.2097\text{E-}004 * x + 5.7701\text{E-}006$$

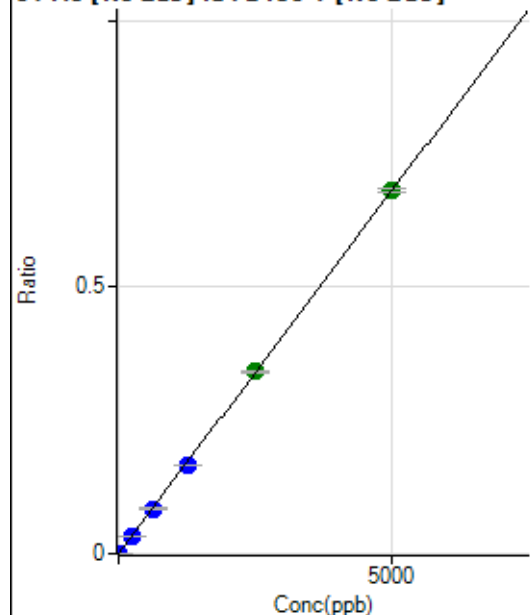
$$R = 1.0000$$

$$DL = 0.02685$$

$$BEC = 0.0477$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	269.46	0.0000	P	24.8
2	☐	5.000	4.542	12264.04	0.0006	P	2.5
3	☐	250.000	246.703	650665.49	0.0336	P	0.7
4	☐	625.000	623.201	1612375.14	0.0848	P	0.3
5	☐	1250.000	1222.589	3077279.08	0.1664	P	0.2
6	☐	2500.000	2506.443	6100193.71	0.3411	A	0.1
7	☐	5000.000	5004.021	12241317.98	0.6810	A	1.0
8	☐			9097.72	0.0005	P	10.7

$$y = 1.3609\text{E-}004 * x + 1.3991\text{E-}005$$

$$R = 1.0000$$

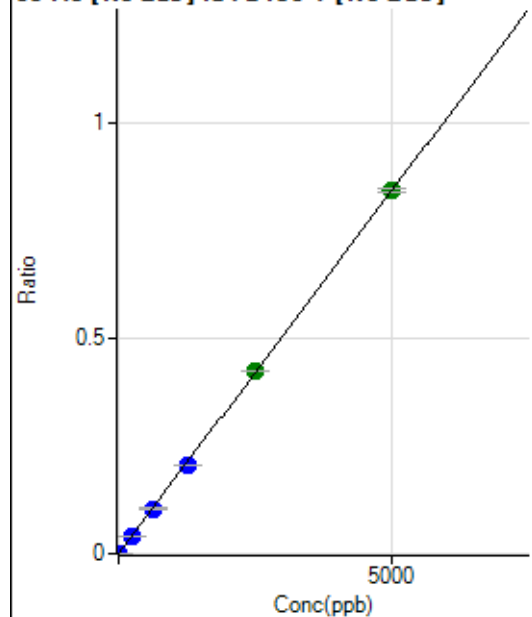
$$DL = 0.07664$$

$$BEC = 0.1028$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	65.9
2	☐	5.000	4.650	15275.39	0.0008	P	0.8
3	☐	250.000	245.978	804228.13	0.0415	P	0.2
4	☐	625.000	621.391	1993400.55	0.1049	P	0.7
5	☐	1250.000	1227.231	3830314.10	0.2071	P	0.2
6	☐	2500.000	2508.486	7570617.09	0.4233	A	0.2
7	☐	5000.000	5002.102	15174095.65	0.8441	A	1.1
8	☐			13381.79	0.0008	P	7.4

$$y = 1.6876\text{E-}004 * x + 2.7433\text{E-}006$$

$$R = 1.0000$$

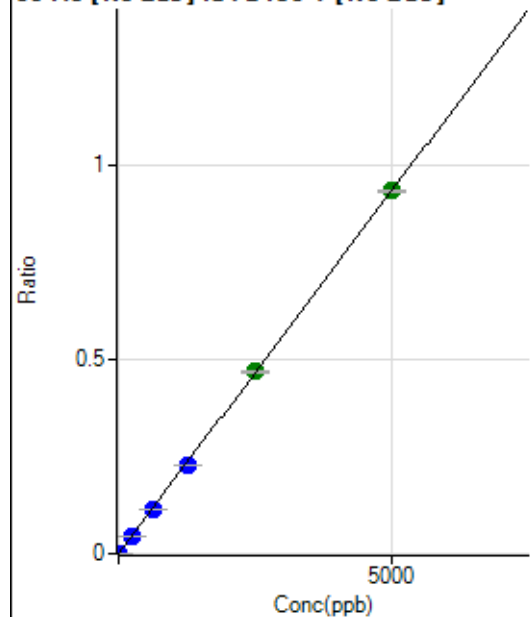
$$DL = 0.03215$$

$$BEC = 0.01626$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	31.4
2	☐	5.000	4.673	17096.96	0.0009	P	1.7
3	☐	250.000	247.502	897347.80	0.0463	P	0.1
4	☐	625.000	621.884	2212147.83	0.1164	P	0.3
5	☐	1250.000	1228.837	4252753.52	0.2299	P	0.1
6	☐	2500.000	2506.375	8387450.53	0.4690	A	0.1
7	☐	5000.000	5002.618	16827565.13	0.9361	A	0.8
8	☐			19422.23	0.0011	P	7.3

$$y = 1.8712\text{E-}004 * x + 6.9273\text{E-}006$$

$$R = 1.0000$$

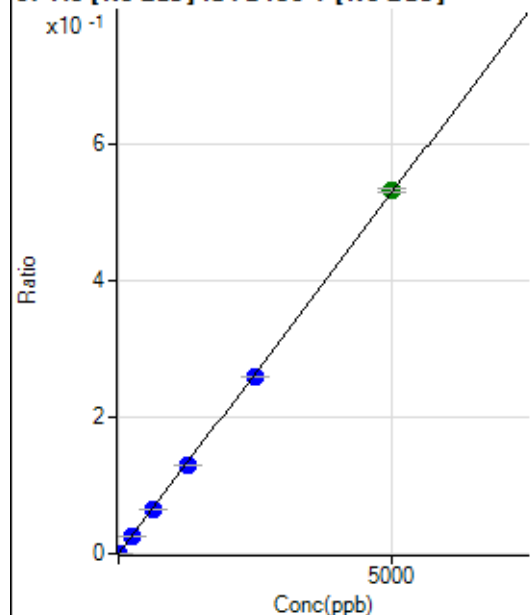
$$DL = 0.03488$$

$$BEC = 0.03702$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.33	0.0000	P	37.9
2	☐	5.000	4.708	9703.70	0.0005	P	4.1
3	☐	250.000	246.438	504145.59	0.0260	P	0.4
4	☐	625.000	622.802	1250055.41	0.0658	P	0.2
5	☐	1250.000	1225.760	2393671.54	0.1294	P	0.4
6	☐	2500.000	2459.970	4645095.29	0.2597	P	0.1
7	☐	5000.000	5026.528	9540421.40	0.5307	A	0.9
8	☐			8233.28	0.0005	P	6.4

$$y = 1.0559\text{E-}004 * x + 3.0308\text{E-}006$$

$$R = 0.9999$$

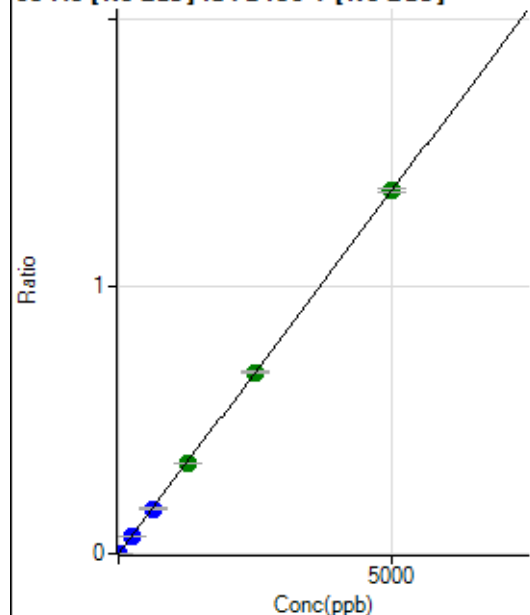
$$DL = 0.03266$$

$$BEC = 0.0287$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.89	0.0000	P	15.1
2	☐	5.000	4.737	25047.87	0.0013	P	0.6
3	☐	250.000	247.594	1301389.54	0.0672	P	0.7
4	☐	625.000	622.567	3210650.20	0.1689	P	0.3
5	☐	1250.000	1237.963	6211434.08	0.3359	A	0.1
6	☐	2500.000	2504.621	12151791.42	0.6795	A	0.1
7	☐	5000.000	5001.124	24388891.52	1.3568	A	1.2
8	☐			20941.23	0.0012	P	8.7

$$y = 2.7129\text{E-}004 * x + 5.9147\text{E-}006$$

$$R = 1.0000$$

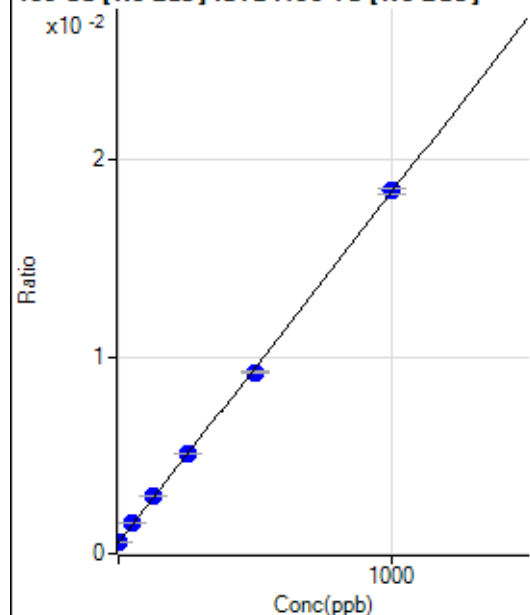
$$DL = 0.009897$$

$$BEC = 0.0218$$

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	5643.04	0.0006	P	5.5
2	☐	1.000	1.793	6026.55	0.0006	P	2.2
3	☐	50.000	54.932	15862.31	0.0015	P	1.1
4	☐	125.000	133.217	30341.69	0.0029	P	1.3
5	☐	250.000	254.912	53295.83	0.0051	P	1.1
6	☐	500.000	486.476	95982.54	0.0092	P	1.0
7	☐	1000.000	1004.259	194004.24	0.0184	P	1.6
8	☐			5795.86	0.0006	P	8.0

$$y = 1.7810\text{E-}005 * x + 5.5510\text{E-}004$$

$$R = 0.9998$$

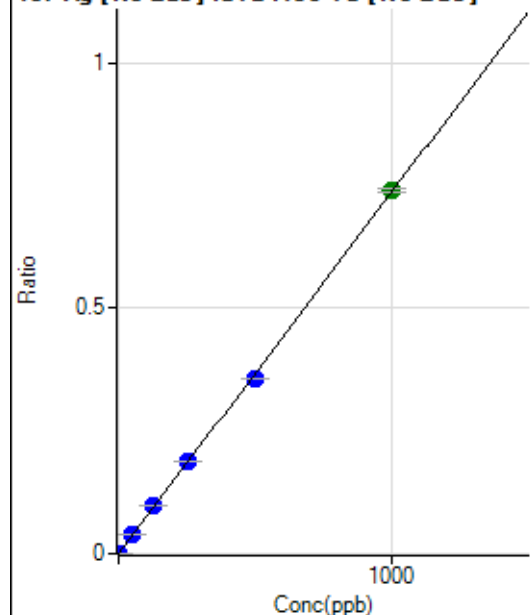
$$DL = 5.161$$

$$BEC = 31.17$$

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	183.34	0.0000	P	55.1
2	☐	1.000	1.113	8591.84	0.0008	P	1.3
3	☐	50.000	54.815	417271.04	0.0403	P	0.5
4	☐	125.000	134.784	1027704.22	0.0992	P	0.6
5	☐	250.000	253.666	1951966.75	0.1866	P	0.4
6	☐	500.000	485.811	3720666.32	0.3574	P	0.5
7	☐	1000.000	1004.714	7775206.68	0.7391	A	1.2
8	☐			1433.48	0.0001	P	21.9

$$y = 7.3557\text{E-}004 * x + 1.8035\text{E-}005$$

$$R = 0.9998$$

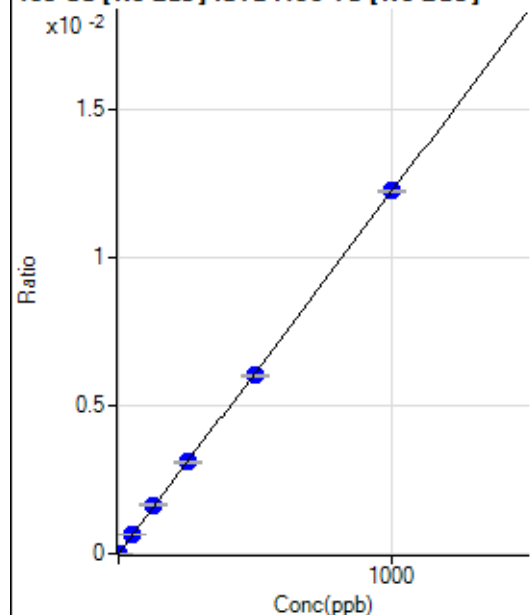
$$DL = 0.04054$$

$$BEC = 0.02452$$

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	13.89	0.0000	P	69.3
2	☐	1.000	1.149	158.34	0.0000	P	5.3
3	☐	50.000	53.863	6829.56	0.0007	P	1.8
4	☐	125.000	133.508	16938.16	0.0016	P	2.8
5	☐	250.000	252.809	32360.76	0.0031	P	0.7
6	☐	500.000	491.628	62619.78	0.0060	P	1.2
7	☐	1000.000	1002.227	128992.56	0.0123	P	0.7
8	☐			33.33	0.0000	P	77.6

$$y = 1.2232\text{E-}005 * x + 1.3662\text{E-}006$$

$$R = 0.9999$$

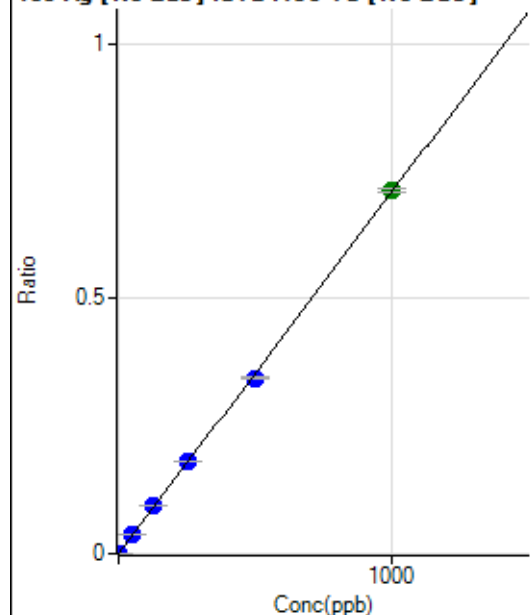
$$DL = 0.2324$$

$$BEC = 0.1117$$

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	80.56	0.0000	P	59.7
2	☐	1.000	1.142	8383.45	0.0008	P	1.7
3	☐	50.000	54.437	398797.31	0.0386	P	0.7
4	☐	125.000	134.244	985198.60	0.0951	P	0.7
5	☐	250.000	253.371	1876658.07	0.1794	P	0.4
6	☐	500.000	486.945	3589741.05	0.3448	P	0.5
7	☐	1000.000	1004.307	7481356.94	0.7111	A	1.1
8	☐			1208.44	0.0001	P	36.9

$$y = 7.0806\text{E-}004 * x + 7.9240\text{E-}006$$

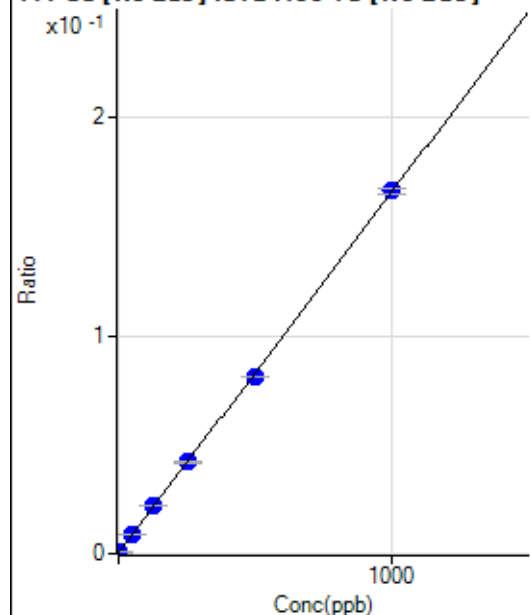
$$R = 0.9998$$

$$DL = 0.02005$$

$$BEC = 0.01119$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3962.63	0.0004	P	5.2
2	☐	1.000	1.115	5894.02	0.0006	P	2.5
3	☐	50.000	52.959	94610.36	0.0091	P	0.8
4	☐	125.000	131.817	229913.74	0.0222	P	0.6
5	☐	250.000	251.237	438584.38	0.0419	P	0.2
6	☐	500.000	488.751	845389.23	0.0812	P	0.8
7	☐	1000.000	1004.315	1751007.35	0.1664	P	1.4
8	☐			4433.78	0.0004	P	8.8

$$y = 1.6534\text{E-}004 * x + 3.8980\text{E-}004$$

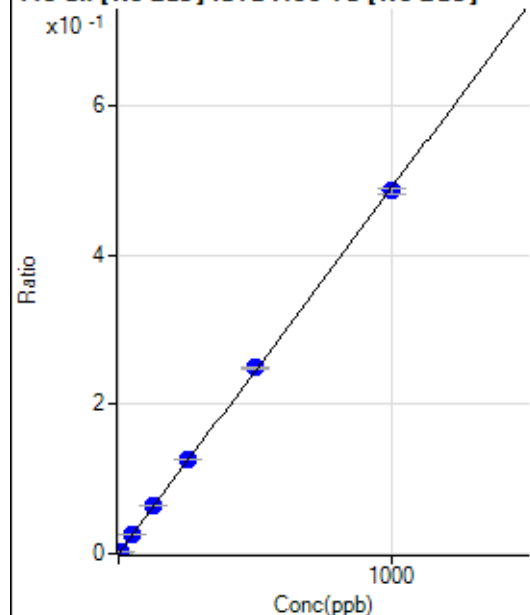
$$R = 0.9999$$

$$DL = 0.3672$$

$$BEC = 2.358$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	744.50	0.0001	P	10.2
2	☐	5.000	5.428	28037.23	0.0027	P	1.5
3	☐	50.000	53.980	274156.57	0.0265	P	0.2
4	☐	125.000	133.589	678647.87	0.0655	P	0.2
5	☐	250.000	258.110	1322691.87	0.1264	P	0.3
6	☐	500.000	508.574	2593269.87	0.2491	P	0.5
7	☐	1000.000	992.411	5112507.19	0.4860	P	1.7
8	☐			3834.03	0.0004	P	3.6

$$y = 4.8962\text{E-}004 * x + 7.3236\text{E-}005$$

$$R = 0.9999$$

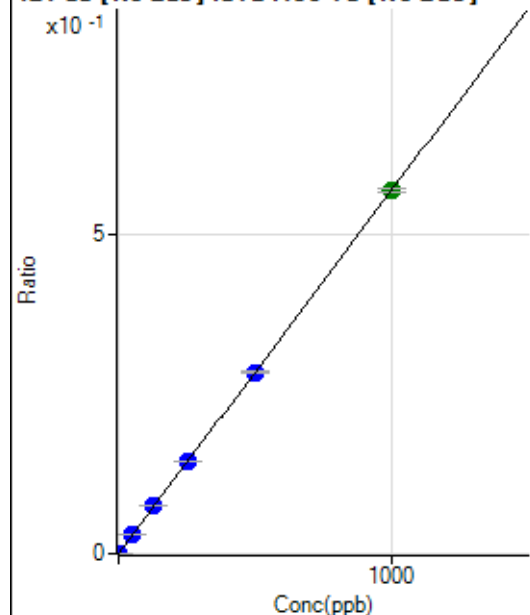
$$DL = 0.0458$$

$$BEC = 0.1496$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	202.79	0.0000	P	10.4
2	☐	2.000	1.964	11652.48	0.0011	P	0.3
3	☐	50.000	52.603	309167.32	0.0299	P	0.9
4	☐	125.000	131.283	772756.98	0.0746	P	0.5
5	☐	250.000	252.858	1501984.81	0.1436	P	0.4
6	☐	500.000	499.579	2953412.24	0.2837	P	0.7
7	☐	1000.000	998.580	5965192.71	0.5670	A	1.1
8	☐			10006.73	0.0010	P	2.1

$$y = 5.6779\text{E-}004 * x + 1.9948\text{E-}005$$

$$R = 1.0000$$

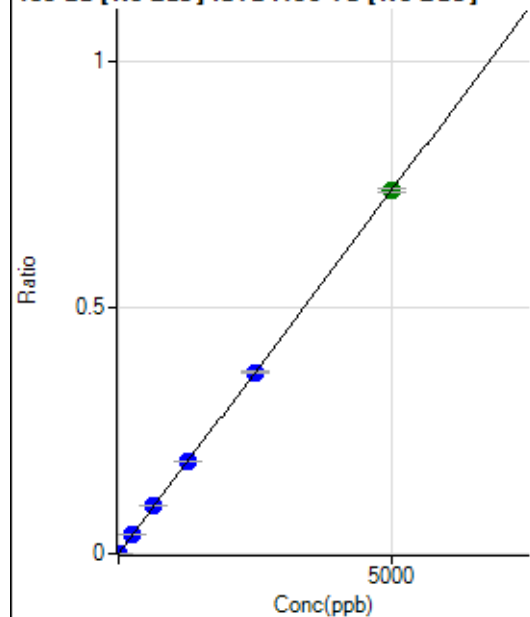
$$DL = 0.01095$$

$$BEC = 0.03513$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.89	0.0000	P	34.7
2	☐	10.000	10.391	15778.98	0.0015	P	1.9
3	☐	250.000	261.141	399206.99	0.0386	P	0.8
4	☐	625.000	650.970	997023.16	0.0962	P	0.3
5	☐	1250.000	1260.740	1948856.55	0.1863	P	0.1
6	☐	2500.000	2494.487	3837873.05	0.3686	P	0.9
7	☐	5000.000	4996.267	7767930.47	0.7383	A	0.9
8	☐			2061.35	0.0002	P	13.7

$$y = 1.4778\text{E-}004 * x + 1.3663\text{E-}006$$

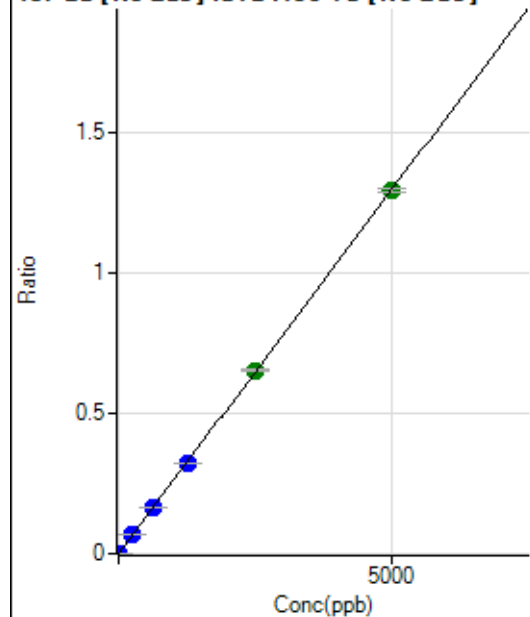
$$R = 1.0000$$

$$DL = 0.009612$$

$$BEC = 0.009245$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8.33	0.0000	P	100.
2	☐	10.000	10.091	26879.63	0.0026	P	1.3
3	☐	250.000	258.937	694772.24	0.0672	P	0.4
4	☐	625.000	643.910	1730983.83	0.1670	P	0.4
5	☐	1250.000	1248.584	3387659.06	0.3239	P	0.3
6	☐	2500.000	2518.038	6799963.09	0.6531	A	0.6
7	☐	5000.000	4988.524	13612898.92	1.2939	A	1.1
8	☐			3417.27	0.0003	P	18.1

$$y = 2.5938E-004 * x + 8.1999E-007$$

$$R = 1.0000$$

$$DL = 0.009487$$

$$BEC = 0.003161$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			8.89		P	43.3
2	☐			6.67		P	100.
3	☐			51.11		P	54.3
4	☐			93.34		P	31.1
5	☐			168.90		P	9.1
6	☐			304.46		P	7.0
7	☐			588.92		P	8.5
8	☐			113.34		P	23.5

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			5.56		P	34.7
3	☐			8.89		P	57.3
4	☐			16.67		P	20.0
5	☐			25.56		P	32.8
6	☐			40.00		P	25.0
7	☐			57.78		P	8.8
8	☐			57.78		P	13.3

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	NaN
2	☐			30.56		P	110.
3	☐			11.11		P	43.3
4	☐			19.45		P	65.5
5	☐			52.78		P	9.1
6	☐			83.34		P	36.1
7	☐			141.68		P	11.8
8	☐			91.67		P	18.2

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	12.4
2	☐			16.67		P	20.0
3	☐			27.78		P	38.6
4	☐			52.22		P	13.3
5	☐			58.89		P	31.2
6	☐			86.67		P	16.8
7	☐			173.34		P	22.7
8	☐			42.22		P	4.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	28.6
2	☐			72.22		P	53.3
3	☐			33.33		P	50.0
4	☐			58.34		P	37.8
5	☐			36.12		P	58.1
6	☐			61.12		P	34.3
7	☐			63.89		P	7.5
8	☐			75.00		P	22.2

160 Gd [He] No available calibration points

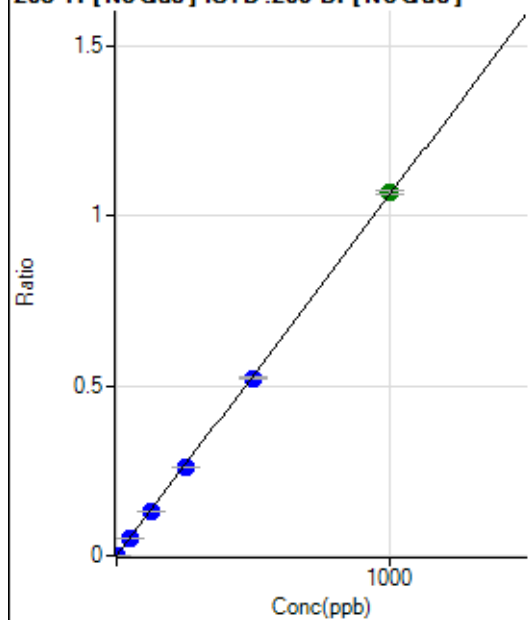
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			168.90		P	14.0
2	☐			187.78		P	3.7
3	☐			186.67		P	13.5
4	☐			157.78		P	7.4
5	☐			174.45		P	12.4
6	☐			162.23		P	17.5
7	☐			183.34		P	34.6
8	☐			178.89		P	10.3

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	57.7
2	☐			55.56		P	8.7
3	☐			63.89		P	19.9
4	☐			72.23		P	17.6
5	☐			33.34		P	86.6
6	☐			36.11		P	35.3
7	☐			47.22		P	44.4
8	☐			72.23		P	33.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			43.33		P	7.7
2	☐			61.11		P	36.3
3	☐			46.67		P	7.1
4	☐			62.22		P	22.3
5	☐			44.44		P	17.3
6	☐			54.44		P	39.4
7	☐			51.11		P	13.6
8	☐			53.33		P	NaN

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	380.58	0.0001	P	7.8
2	☐	1.000	0.920	6379.56	0.0010	P	0.6
3	☐	50.000	49.149	323745.37	0.0523	P	0.1
4	☐	125.000	123.746	816209.37	0.1315	P	0.7
5	☐	250.000	245.342	1643191.47	0.2606	P	0.4
6	☐	500.000	492.301	3284525.40	0.5228	P	0.4
7	☐	1000.000	1005.213	6681119.85	1.0675	A	1.2
8	☐			2286.44	0.0004	P	24.1

$$y = 0.0011 * x + 6.1823E-005$$

$$R = 0.9999$$

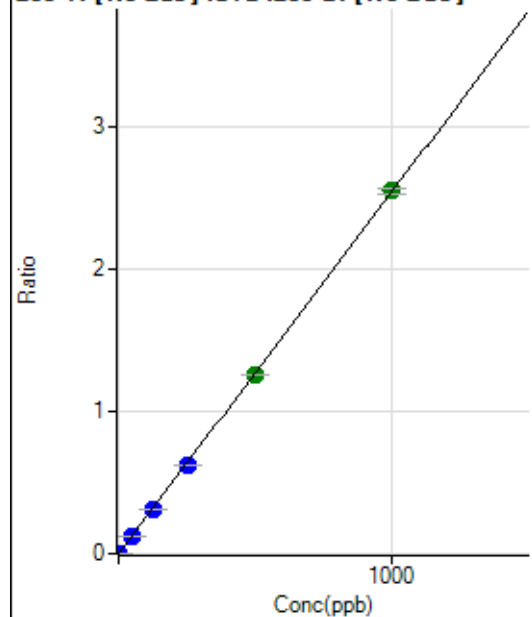
$$DL = 0.01369$$

$$BEC = 0.05822$$

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	641.72	0.0001	P	9.9
2	☐	1.000	0.932	15184.29	0.0025	P	2.3
3	☐	50.000	48.598	766021.98	0.1236	P	1.0
4	☐	125.000	123.562	1950640.04	0.3142	P	0.9
5	☐	250.000	242.970	3895175.00	0.6177	P	0.1
6	☐	500.000	496.460	7928769.10	1.2621	A	0.1
7	☐	1000.000	1003.778	15970051.40	2.5518	A	1.4
8	☐			4973.42	0.0009	P	17.5

$$y = 0.0025 * x + 1.0422E-004$$

$$R = 1.0000$$

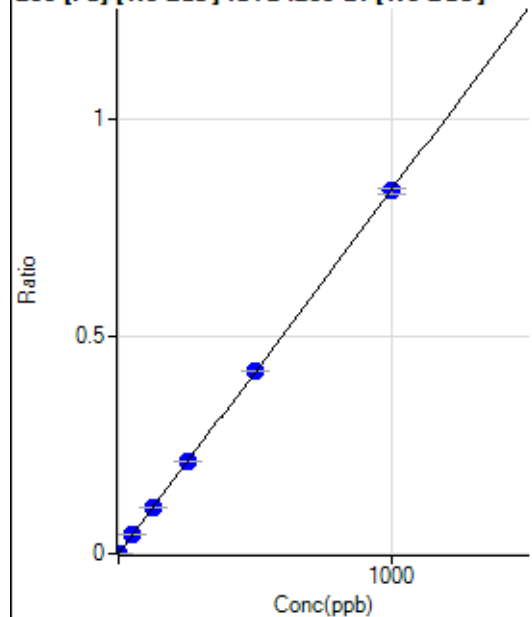
$$DL = 0.01219$$

$$BEC = 0.041$$

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	674.11	0.0001	P	10.1
2	☐	1.000	0.977	5692.14	0.0009	P	2.5
3	☐	50.000	50.277	261416.62	0.0422	P	0.2
4	☐	125.000	127.059	660964.30	0.1065	P	0.4
5	☐	250.000	251.557	1328422.60	0.2107	P	0.1
6	☐	500.000	502.686	2644024.28	0.4209	P	0.1
7	☐	1000.000	997.997	5228897.92	0.8355	P	1.3
8	☐			5829.20	0.0011	P	5.4

$$y = 8.3706E-004 * x + 1.0953E-004$$

$$R = 1.0000$$

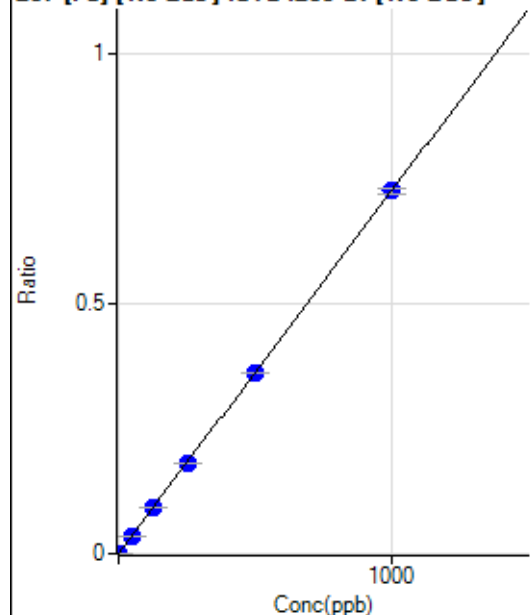
$$DL = 0.03965$$

$$BEC = 0.1309$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	605.59	0.0001	P	3.1
2	☐	1.000	0.946	4817.68	0.0008	P	3.2
3	☐	50.000	49.667	223942.36	0.0361	P	0.3
4	☐	125.000	125.707	567042.04	0.0913	P	0.8
5	☐	250.000	248.911	1139743.67	0.1808	P	0.4
6	☐	500.000	499.846	2279619.06	0.3629	P	0.3
7	☐	1000.000	1000.278	4544199.76	0.7261	P	1.3
8	☐			5014.06	0.0009	P	7.8

$$y = 7.2579\text{E-}004 * x + 9.8360\text{E-}005$$

$$R = 1.0000$$

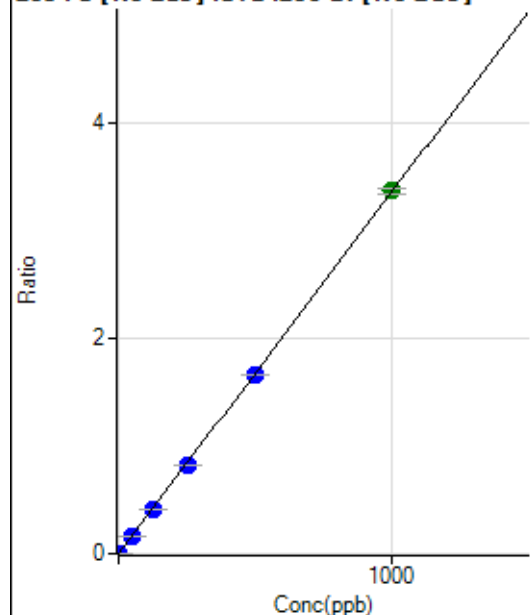
$$DL = 0.01263$$

$$BEC = 0.1355$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2287.18	0.0004	P	6.5
2	☐	1.000	0.936	21564.77	0.0035	P	1.1
3	☐	50.000	49.160	1023946.16	0.1653	P	0.0
4	☐	125.000	124.062	2585866.49	0.4165	P	0.5
5	☐	250.000	246.709	5220383.83	0.8279	P	0.3
6	☐	500.000	493.133	10393570.60	1.6545	P	0.2
7	☐	1000.000	1004.416	21087854.18	3.3695	A	1.4
8	☐			22207.76	0.0041	P	4.4

$$y = 0.0034 * x + 3.7154\text{E-}004$$

$$R = 1.0000$$

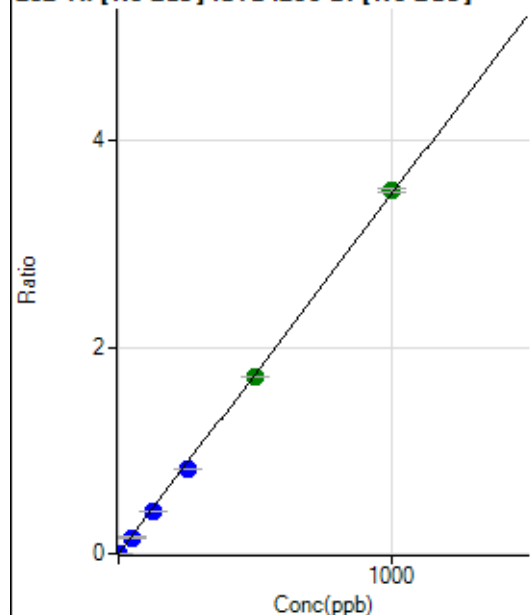
$$DL = 0.02163$$

$$BEC = 0.1108$$

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	1894.64	0.0003	P	4.9
2	☐	1.000	0.788	18723.36	0.0030	P	2.4
3	☐	50.000	45.312	979241.82	0.1581	P	0.7
4	☐	125.000	116.892	2528363.47	0.4073	P	0.6
5	☐	250.000	233.866	5135784.64	0.8145	P	0.6
6	☐	500.000	492.596	10775274.89	1.7152	A	0.4
7	☐	1000.000	1008.984	21986572.02	3.5130	A	1.0
8	☐			9364.78	0.0017	P	5.1

$$y = 0.0035 * x + 3.0767E-004$$

$$R = 0.9998$$

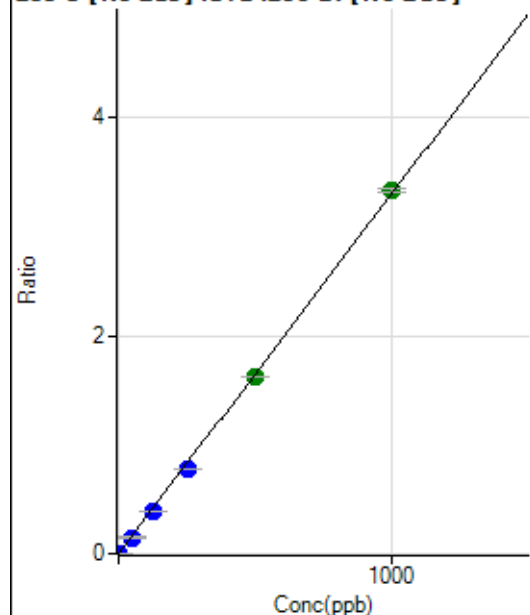
$$DL = 0.01297$$

$$BEC = 0.08837$$

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	2322.55	0.0004	P	0.9
2	☐	1.000	0.858	19690.97	0.0032	P	2.1
3	☐	50.000	45.331	929204.31	0.1500	P	0.3
4	☐	125.000	116.857	2396545.93	0.3860	P	0.7
5	☐	250.000	235.516	4903305.53	0.7776	P	0.5
6	☐	500.000	492.023	10202926.36	1.6241	A	0.2
7	☐	1000.000	1008.861	20839750.81	3.3298	A	1.2
8	☐			5993.34	0.0011	P	16.8

$$y = 0.0033 * x + 3.7723E-004$$

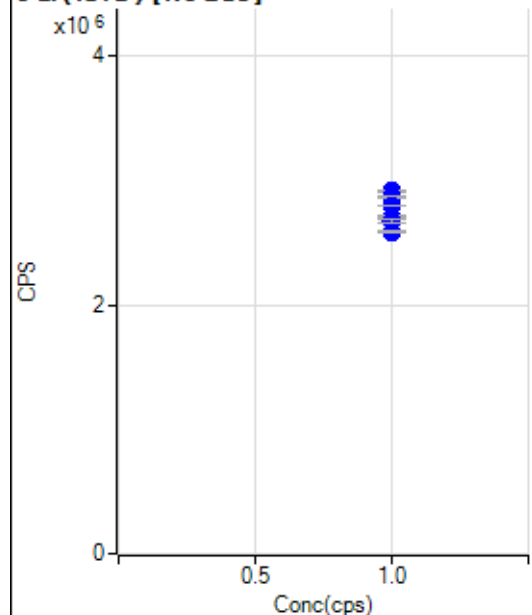
$$R = 0.9998$$

$$DL = 0.002958$$

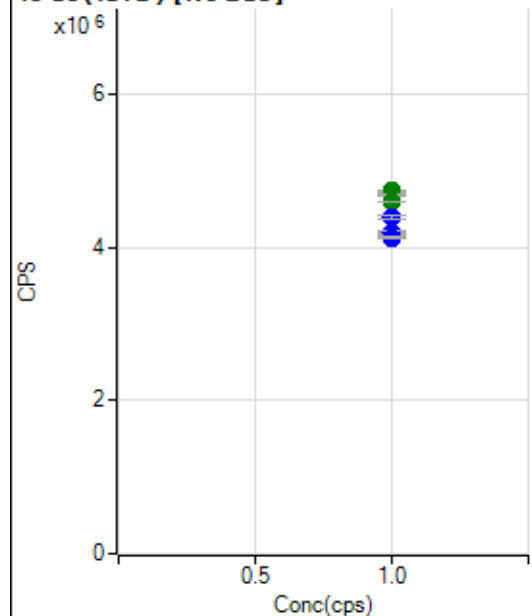
$$BEC = 0.1143$$

Weight: <None>

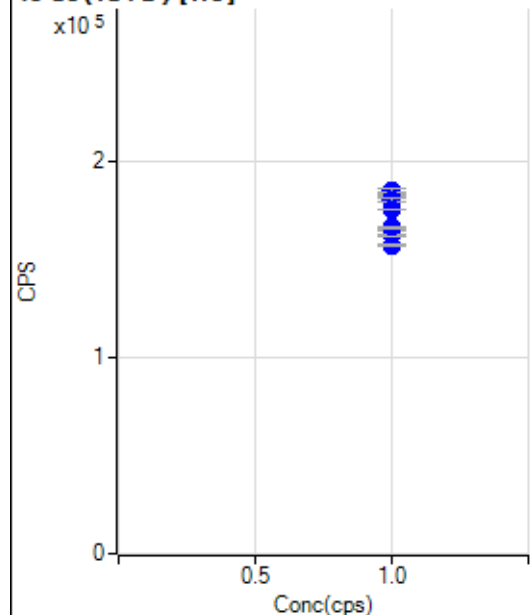
Min Conc: 0

6 Li (ISTD) [No Gas]

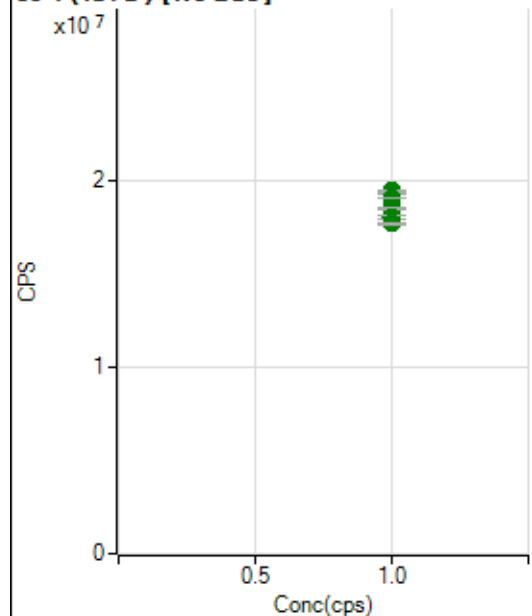
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2910384.71		P	0.4
2	☐	1.000		2911365.93		P	0.4
3	☐	1.000		2919318.25		P	0.2
4	☐	1.000		2871024.09		P	0.7
5	☐	1.000		2805223.17		P	0.2
6	☐	1.000		2709067.49		P	0.5
7	☐	1.000		2671701.26		P	1.0
8	☐	1.000		2591760.83		P	0.7

45 Sc (ISTD) [No Gas]

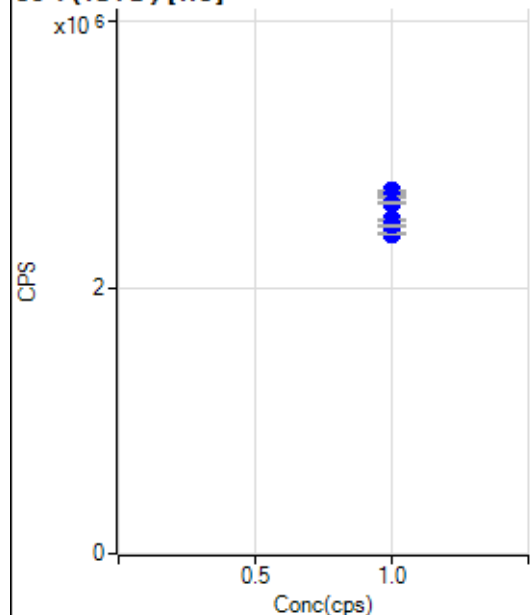
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4719822.03		A	0.3
2	☐	1.000		4741123.98		A	0.4
3	☐	1.000		4690480.49		A	0.3
4	☐	1.000		4599852.14		A	0.2
5	☐	1.000		4394832.52		P	0.8
6	☐	1.000		4189181.13		P	0.7
7	☐	1.000		4190783.99		P	1.3
8	☐	1.000		4131495.62		P	0.8

45 Sc (ISTD) [He]

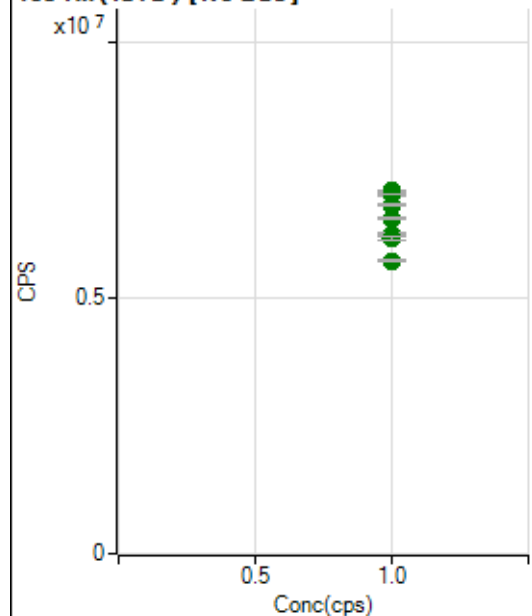
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		183172.00		P	0.6
2	☐	1.000		185350.95		P	1.1
3	☐	1.000		180433.05		P	1.2
4	☐	1.000		175973.91		P	0.3
5	☐	1.000		165504.59		P	1.0
6	☐	1.000		157618.81		P	0.2
7	☐	1.000		163048.73		P	0.6
8	☐	1.000		166674.32		P	0.3

89 Y (ISTD) [No Gas]

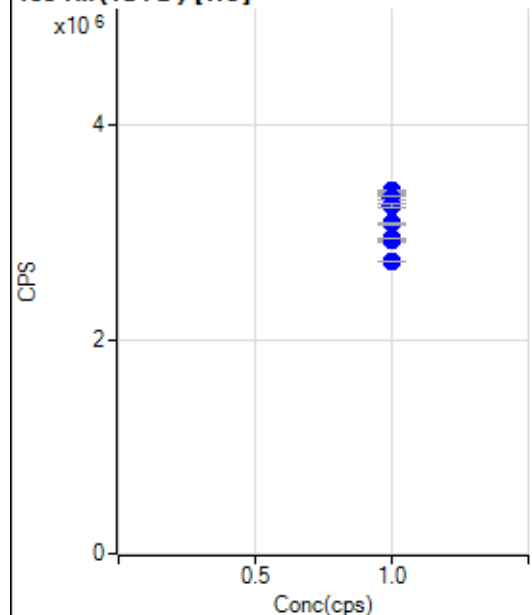
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19254225.69		A	0.2
2	☐	1.000		19400206.24		A	0.1
3	☐	1.000		19372834.71		A	0.2
4	☐	1.000		19008711.52		A	0.3
5	☐	1.000		18494294.31		A	0.6
6	☐	1.000		17883563.20		A	0.4
7	☐	1.000		17977444.60		A	1.4
8	☐	1.000		17678867.24		A	0.6

89 Y(ISTD) [He]

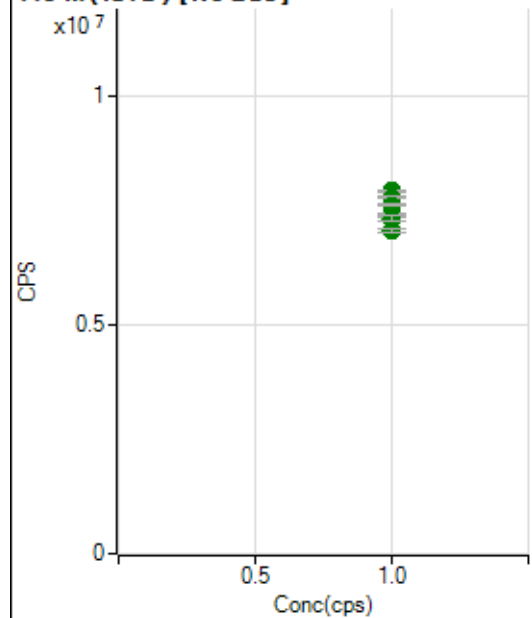
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2702841.94		P	0.3
2	☐	1.000		2726134.85		P	0.9
3	☐	1.000		2682115.27		P	0.9
4	☐	1.000		2634997.70		P	0.5
5	☐	1.000		2508982.91		P	0.4
6	☐	1.000		2402674.62		P	0.4
7	☐	1.000		2467246.70		P	0.2
8	☐	1.000		2465827.99		P	0.5

103 Rh(ISTD) [No Gas]

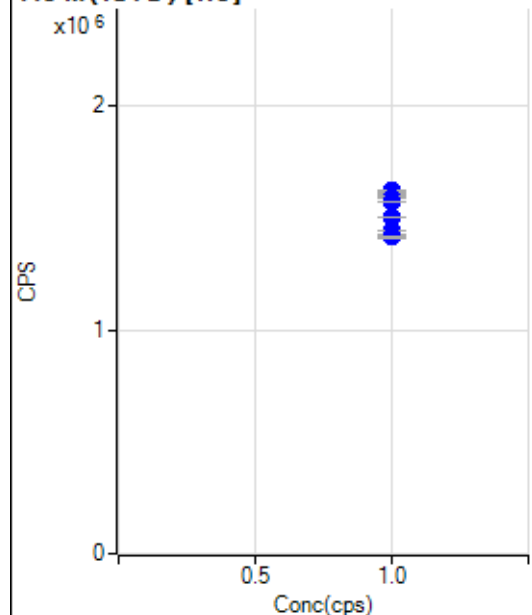
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7020002.41		A	0.3
2	☐	1.000		7094112.92		A	0.4
3	☐	1.000		7039126.20		A	0.2
4	☐	1.000		6824473.07		A	0.8
5	☐	1.000		6560196.68		A	0.4
6	☐	1.000		6243301.79		A	0.6
7	☐	1.000		6170009.64		A	1.5
8	☐	1.000		5726307.38		A	1.0

103 Rh (ISTD) [He]

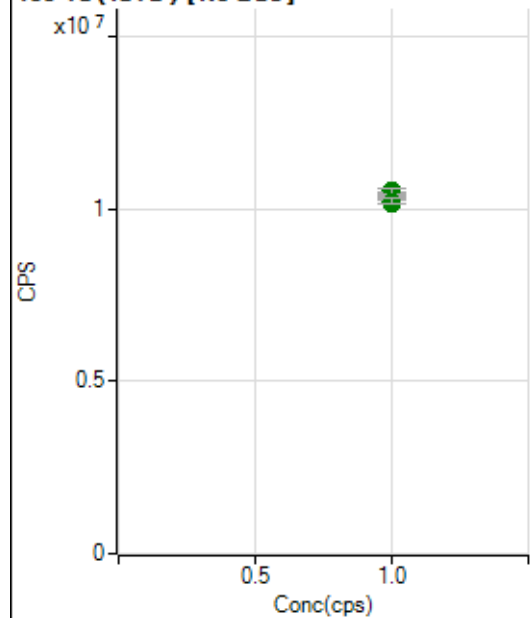
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3370422.62		P	0.4
2	☐	1.000		3389698.73		P	0.2
3	☐	1.000		3320169.95		P	0.9
4	☐	1.000		3252836.69		P	0.6
5	☐	1.000		3084754.02		P	0.4
6	☐	1.000		2924820.06		P	0.5
7	☐	1.000		2940936.35		P	0.2
8	☐	1.000		2731663.57		P	0.4

115 In (ISTD) [No Gas]

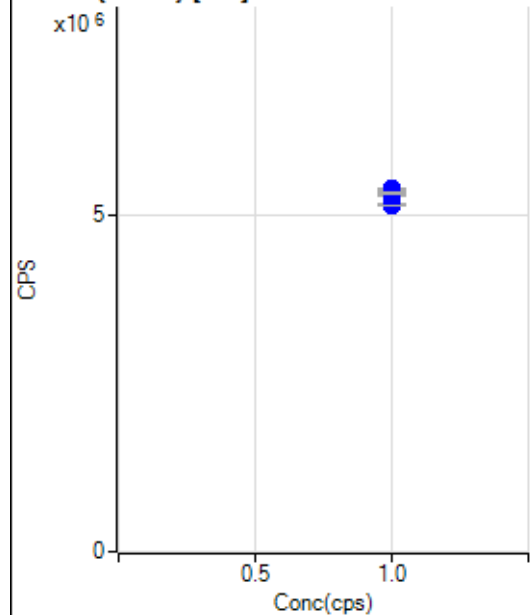
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7927185.34		A	0.4
2	☐	1.000		7932977.87		A	0.2
3	☐	1.000		7914981.06		A	0.4
4	☐	1.000		7792098.98		A	0.5
5	☐	1.000		7618549.05		A	0.5
6	☐	1.000		7398989.13		A	0.7
7	☐	1.000		7323833.74		A	1.7
8	☐	1.000		7051746.90		A	1.3

115 In (ISTD) [He]

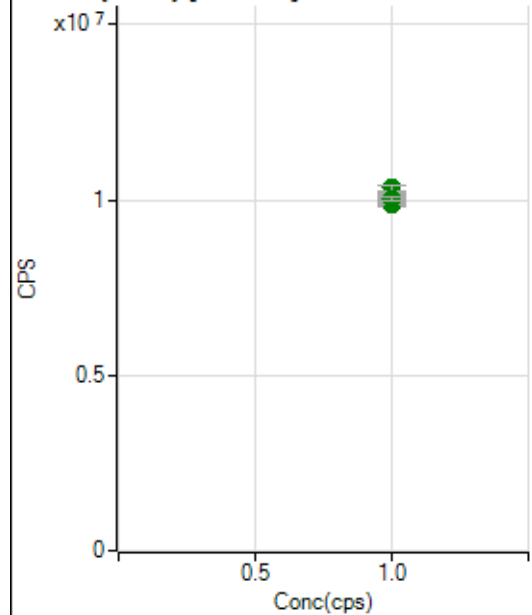
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1610575.42		P	0.6
2	☐	1.000		1621951.61		P	0.6
3	☐	1.000		1594678.36		P	0.7
4	☐	1.000		1573883.08		P	0.1
5	☐	1.000		1501932.20		P	0.1
6	☐	1.000		1428812.86		P	0.2
7	☐	1.000		1443200.75		P	0.4
8	☐	1.000		1415647.23		P	0.3

159 Tb (ISTD) [No Gas]

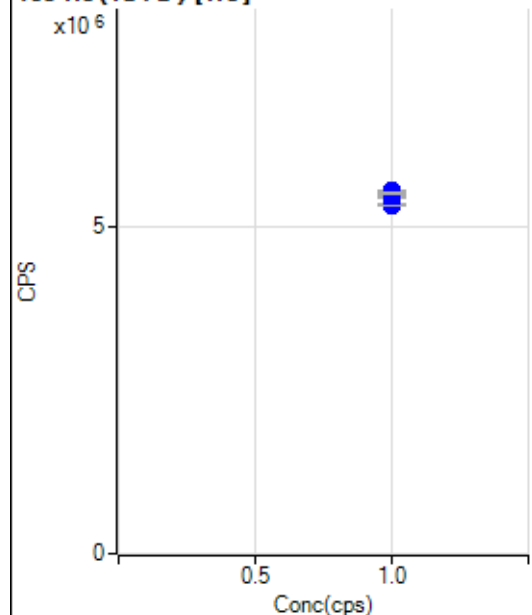
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10166040.96		A	0.1
2	☐	1.000		10266315.75		A	0.1
3	☐	1.000		10344412.70		A	0.3
4	☐	1.000		10364097.62		A	0.4
5	☐	1.000		10460266.09		A	0.1
6	☐	1.000		10411680.82		A	1.0
7	☐	1.000		10521824.84		A	1.6
8	☐	1.000		10226400.61		A	1.5

159 Tb (ISTD) [He]

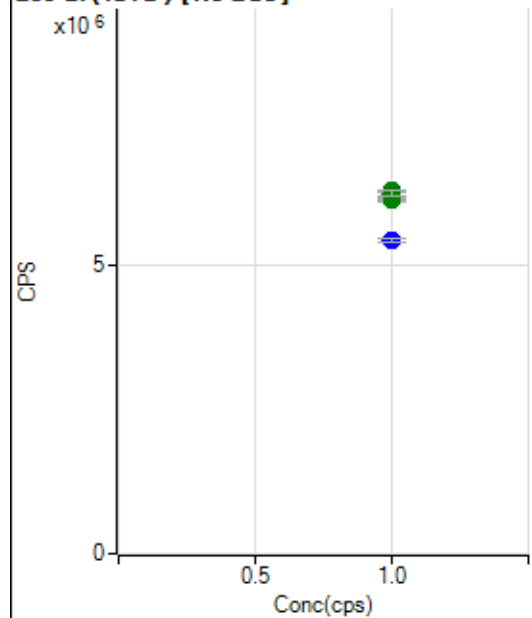
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5329093.57		P	0.2
2	☐	1.000		5373361.31		P	0.4
3	☐	1.000		5357083.88		P	0.6
4	☐	1.000		5396103.18		P	0.1
5	☐	1.000		5299598.84		P	0.3
6	☐	1.000		5166340.06		P	0.6
7	☐	1.000		5335209.78		P	0.4
8	☐	1.000		5147682.98		P	0.1

165 Ho (ISTD) [No Gas]

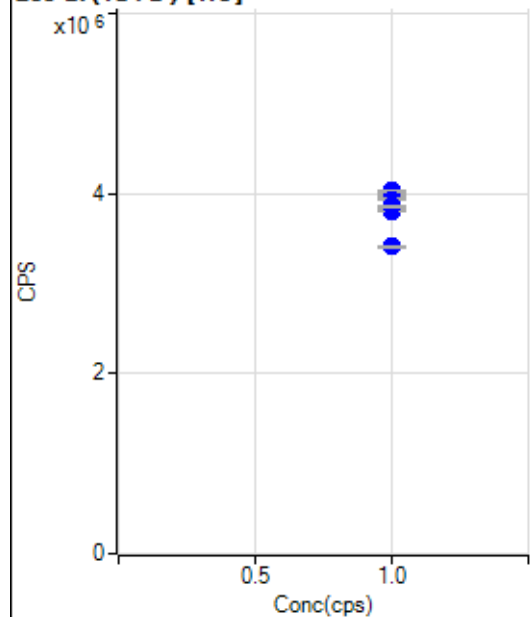
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9855393.02		A	0.5
2	☐	1.000		9874461.68		A	0.4
3	☐	1.000		10017980.61		A	0.4
4	☐	1.000		10059400.40		A	0.8
5	☐	1.000		10183237.38		A	0.6
6	☐	1.000		10172903.18		A	0.6
7	☐	1.000		10340185.13		A	1.8
8	☐	1.000		10005502.65		A	1.1

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5452320.20		P	0.2
2	☐	1.000		5508550.75		P	0.1
3	☐	1.000		5481253.39		P	0.7
4	☐	1.000		5545887.76		P	0.4
5	☐	1.000		5453816.93		P	0.2
6	☐	1.000		5342097.77		P	0.6
7	☐	1.000		5500801.38		P	0.5
8	☐	1.000		5328501.31		P	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6156667.83		A	0.7
2	☐	1.000		6139244.91		A	0.4
3	☐	1.000		6195576.78		A	0.4
4	☐	1.000		6208317.89		A	0.5
5	☐	1.000		6305457.20		A	0.3
6	☐	1.000		6282026.78		A	0.4
7	☐	1.000		6259178.24		A	1.3
8	☐	1.000		5446050.23		P	1.7

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3989494.91		P	0.3
2	☐	1.000		4004400.32		P	0.6
3	☐	1.000		3983572.41		P	0.4
4	☐	1.000		4028071.22		P	0.6
5	☐	1.000		3935584.18		P	0.7
6	☐	1.000		3806645.01		P	0.4
7	☐	1.000		3855592.23		P	0.3
8	☐	1.000		3412226.96		P	0.5

US EPA Tune Check Sample Report

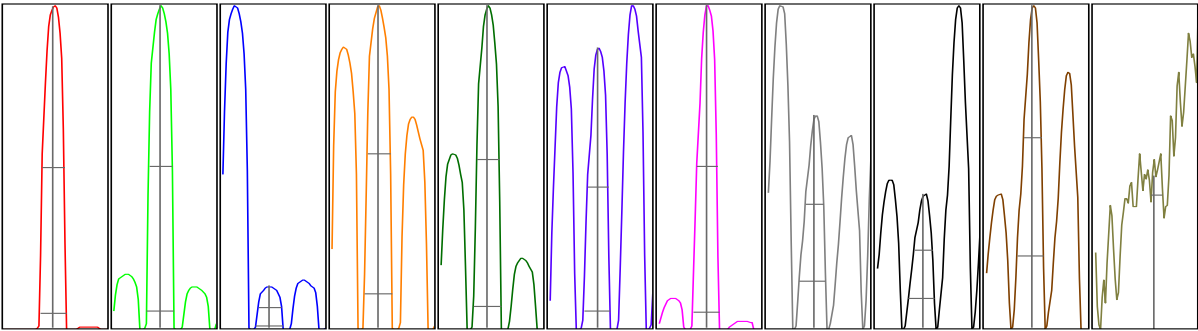
Batch Folder D:\ICP-MS Data\P7081619-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	8007	0.84	5.00	
24	242459	0.48	5.00	
25	32262	0.66	5.00	
26	36574	0.59	5.00	
59	60219	0.61	5.00	
113	9210	0.72	5.00	
115	108313	0.54	5.00	
206	27987	0.73	5.00	
207	28448	0.74	5.00	
208	59529	0.68	5.00	
220	104	3.09		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	8076	8038	7938	7932	8052
24	242736	243076	241547	241046	243888
25	32386	32375	32195	31916	32438
26	36610	36720	36410	36303	36828
59	60266	60484	60065	59674	60606
113	9206	9299	9143	9151	9251
115	108245	108824	107993	107549	108953
206	27822	28043	27984	27790	28297
207	28443	28521	28405	28143	28729
208	59349	59569	59557	59030	60139
220	99	102	105	107	107

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	13325	8.95	8.9 - 9.1		0.781	0.900	
24	374504	23.90	23.9 - 24.1		0.789	0.900	
25	49469	24.90	24.9 - 25.1		0.789	0.900	
26	56766	25.90	25.9 - 26.1		0.806	0.900	
59	98023	58.90	58.9 - 59.1		0.806	0.900	
113	16397	112.95	112.9 - 113.1		0.777	0.900	
115	196061	114.95	114.9 - 115.1		0.774	0.900	
206	49608	205.90	205.9 - 206.1		0.766	0.900	
207	44858	206.90	206.9 - 207.1		0.749	0.900	
208	107612	207.90	207.9 - 208.1		0.766	0.900	
220	104	220.30	-				

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	14.2	V
Extract 2	-75.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-40	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	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	14301	0.60	
89	29993	0.52	
205	27582	0.50	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	14239	14370	14401	14198	14300
89	29953	30226	30052	29814	29922
205	27544	27736	27700	27398	27534

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	7.5	V	Deflect	2.0	V
Extract 2	-90.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-45	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			