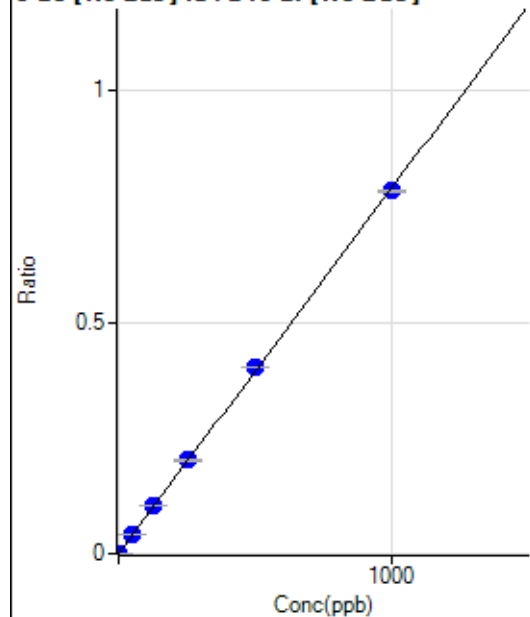


Calibration for 007CALS.d

Batch Folder: D:\ICP-MS Data\P7112519-MS2.b\
 Analysis File: P7112519-MS2.batch.bin
 DA Date-Time: 2019-11-26 01:14:24
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-11-25 17:38:11
2	004CALS.d	S02	2019-11-25 17:41:44
3	005CALS.d	S03	2019-11-25 17:45:58
4	006CALS.d	S04	2019-11-25 17:49:53
5	007CALS.d	S05	2019-11-25 17:53:43
6	008CALS.d	S06	2019-11-25 17:57:32
7	009CALS.d	S07	2019-11-25 18:01:18
8	010CALS.d	S08	2019-11-25 18:05:03

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	77.78	0.0000	P	19.4
2	☐	1.000	1.035	2383.58	0.0008	P	3.7
3	☐	50.000	52.291	116953.54	0.0413	P	0.6
4	☐	125.000	129.517	271551.10	0.1022	P	0.5
5	☐	250.000	255.873	552984.82	0.2019	P	0.5
6	☐	500.000	509.476	1060860.99	0.4021	P	0.2
7	☐	1000.000	993.115	2034449.24	0.7837	P	0.4
8	☐			203.71	0.0001	P	6.4

$$y = 7.8914\text{E-}004 * x + 2.7200\text{E-}005$$

$$R = 0.9999$$

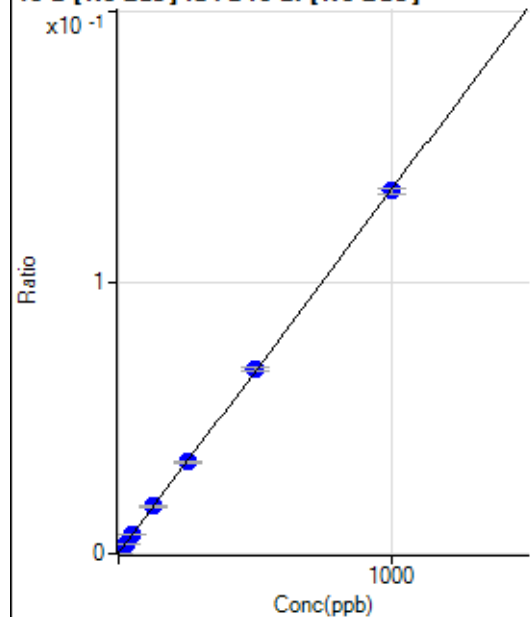
$$DL = 0.02002$$

$$BEC = 0.03447$$

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	580.59	0.0002	P	12.4
2	☐	25.000	24.303	9770.23	0.0035	P	3.9
3	☐	50.000	50.665	19797.00	0.0070	P	2.7
4	☐	125.000	128.986	46421.86	0.0175	P	1.9
5	☐	250.000	251.332	92742.25	0.0339	P	2.2
6	☐	500.000	505.348	179141.60	0.0679	P	2.0
7	☐	1000.000	996.479	346999.90	0.1337	P	1.5
8	☐			6059.77	0.0026	P	6.8

$$y = 1.3396\text{E-}004 * x + 2.0300\text{E-}004$$

$$R = 1.0000$$

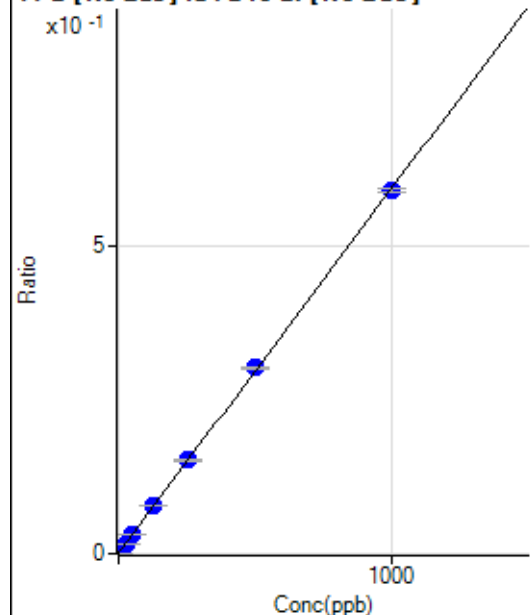
$$DL = 0.5623$$

$$BEC = 1.515$$

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	2750.36	0.0010	P	8.3
2	☐	25.000	23.925	42728.10	0.0151	P	0.9
3	☐	50.000	52.058	89998.25	0.0318	P	1.5
4	☐	125.000	129.384	205925.23	0.0775	P	1.5
5	☐	250.000	256.473	418341.60	0.1528	P	1.7
6	☐	500.000	507.820	795642.07	0.3016	P	1.8
7	☐	1000.000	993.848	1529553.63	0.5893	P	1.0
8	☐			25580.90	0.0109	P	5.7

$$y = 5.9195\text{E-}004 * x + 9.6140\text{E-}004$$

$$R = 0.9999$$

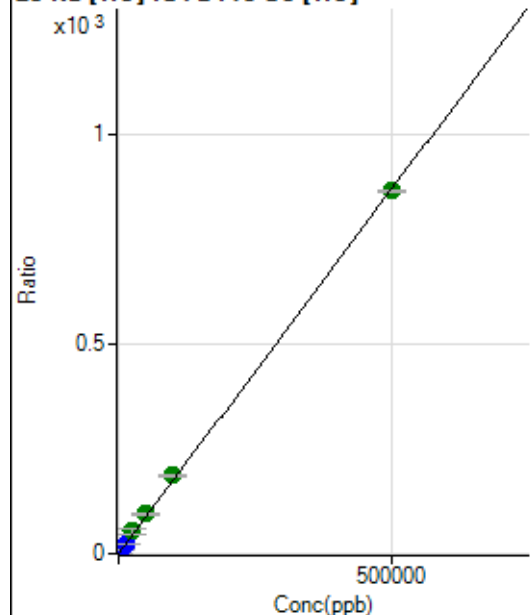
$$DL = 0.4036$$

$$BEC = 1.624$$

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	16256.55	0.0808	P	1.7
2	☐	500.000	532.039	201631.94	1.0038	P	0.7
3	☐	5000.000	5424.004	1886940.12	9.4904	P	0.7
4	☐	12500.000	13777.767	4344979.05	23.9825	P	1.9
5	☐	25000.000	30311.504	8453620.68	52.6653	A	18.5
6	☐	50000.000	54249.282	16919697.60	94.1925	A	0.8
7	☐	100000.00	107208.98	32444431.63	186.0671	A	1.4
8	☐	500000.00	497831.48	142116965.6	863.7195	A	0.8

$$y = 0.0017 * x + 0.0808$$

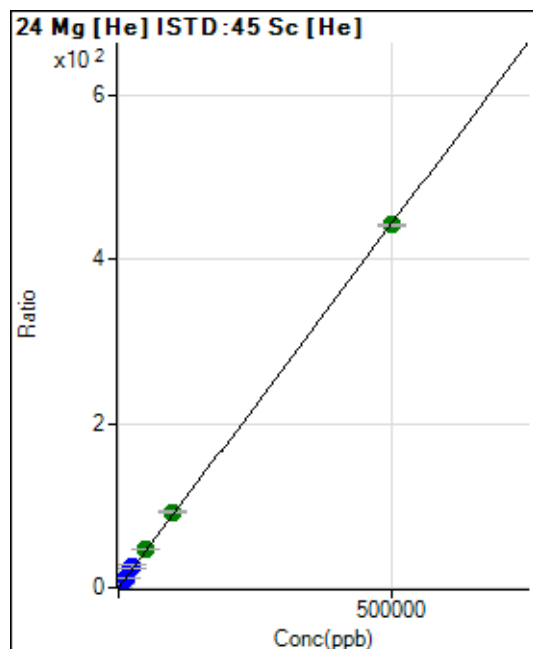
$$R = 0.9998$$

$$DL = 2.331$$

$$BEC = 46.59$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	872.28	0.0043	P	7.2
2	☐	500.000	543.366	97664.51	0.4862	P	1.4
3	☐	5000.000	5370.652	947911.62	4.7675	P	0.5
4	☐	12500.000	13571.933	2181744.80	12.0411	P	0.9
5	☐	25000.000	28979.366	4127412.42	25.7058	P	18.2
6	☐	50000.000	52969.310	8439285.60	46.9823	A	0.7
7	☐	100000.00	104100.04	16099116.16	92.3296	A	1.7
8	☐	500000.00	498653.54	72768909.96	442.2551	A	0.3

$$y = 8.8689\text{E-}004 * x + 0.0043$$

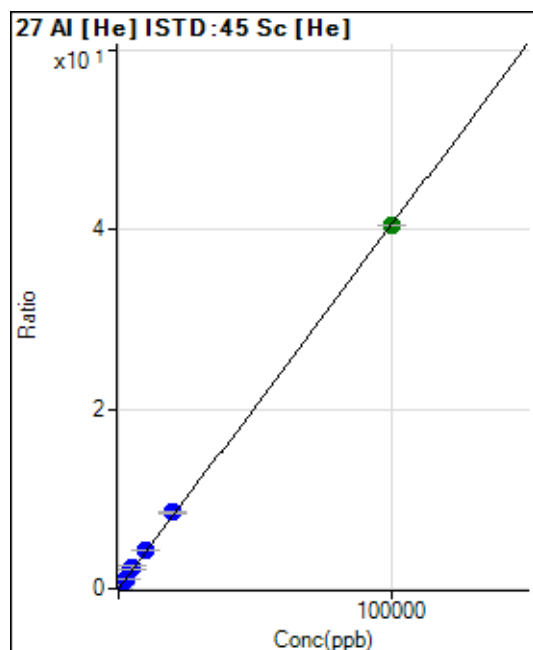
$$R = 0.9999$$

$$DL = 1.06$$

$$BEC = 4.891$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	108.34	0.0005	P	27.0
2	☐	20.000	20.182	1752.95	0.0087	P	6.8
3	☐	1000.000	1084.361	87519.71	0.4402	P	0.8
4	☐	2500.000	2773.288	203822.58	1.1249	P	1.3
5	☐	5000.000	6000.502	390508.59	2.4334	P	18.7
6	☐	10000.000	10612.012	772951.94	4.3031	P	1.3
7	☐	20000.000	20901.192	1477811.21	8.4748	P	0.9
8	☐	100000.00	99700.859	6651339.26	40.4235	A	0.0

$$y = 4.0544\text{E-}004 * x + 5.3915\text{E-}004$$

$$R = 0.9999$$

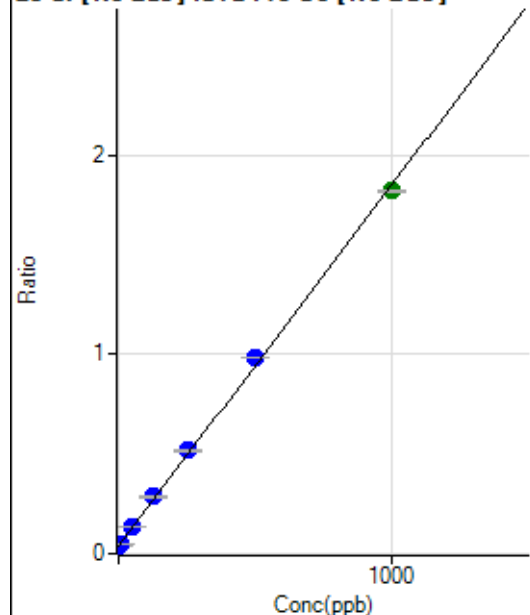
$$DL = 1.079$$

$$BEC = 1.33$$

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	177560.38	0.0396	P	1.2
2	☐	10.000	6.840	232124.19	0.0520	P	1.4
3	☐	50.000	52.396	604460.71	0.1344	P	0.8
4	☐	125.000	135.723	1194480.61	0.2853	P	3.4
5	☐	250.000	264.211	2210156.84	0.5180	P	1.1
6	☐	500.000	522.412	4060175.52	0.9855	P	0.6
7	☐	1000.000	983.813	7477383.33	1.8209	A	0.2
8	☐			830796.28	0.2208	P	0.7

$$y = 0.0018 * x + 0.0396$$

$$R = 0.9994$$

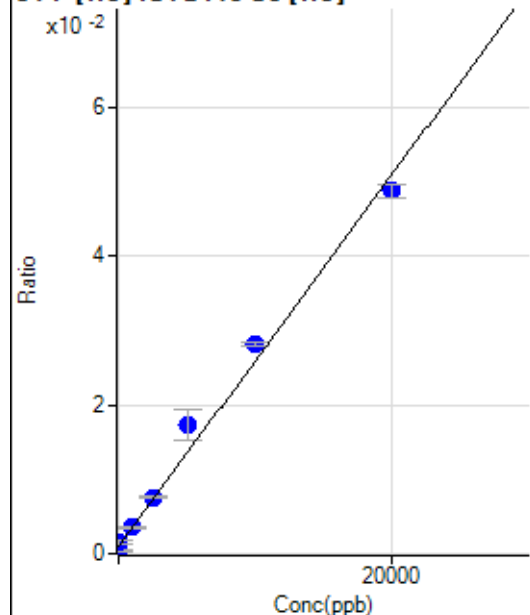
$$DL = 0.7823$$

$$BEC = 21.85$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-230.025	75.00	0.0004	P	38.3
2	☐	0.000	230.025	305.57	0.0015	P	41.9
3	☐	1000.000	1054.542	711.16	0.0036	P	7.2
4	☐	2500.000	2668.381	1377.90	0.0076	P	5.5
5	☐	5000.000	6542.751	2753.13	0.0173	P	24.7
6	☐	10000.000	10864.518	5037.18	0.0280	P	1.7
7	☐	20000.000	19158.278	8494.40	0.0487	P	4.0
8	☐			97.23	0.0006	P	17.5

$$y = 2.4939E-006 * x + 9.4638E-004$$

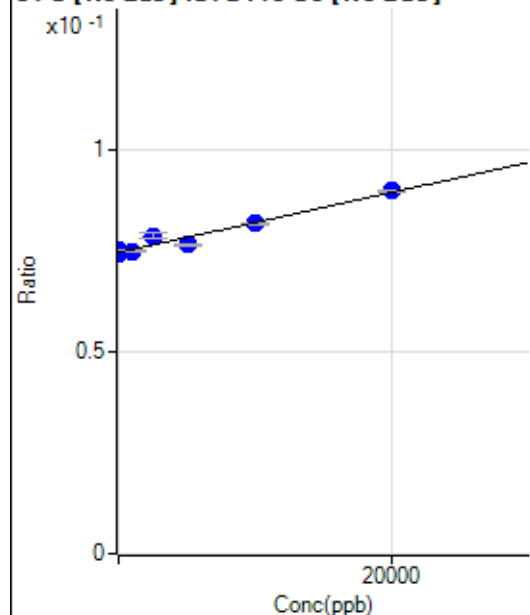
$$R = 0.9947$$

$$DL = 468.7$$

$$BEC = 379.5$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-640.032	333091.72	0.0742	P	1.3
2	☐	0.000	640.032	335942.34	0.0752	P	0.5
3	☐	1000.000	367.955	337108.11	0.0750	P	0.7
4	☐	2500.000	5522.347	330051.36	0.0788	P	2.2
5	☐	5000.000	2581.927	326964.45	0.0766	P	0.6
6	☐	10000.000	9567.521	337110.38	0.0818	P	1.0
7	☐	20000.000	20474.567	369333.92	0.0899	P	0.7
8	☐			284715.80	0.0757	P	1.5

$$y = 7.4419\text{E-}007 * x + 0.0747$$

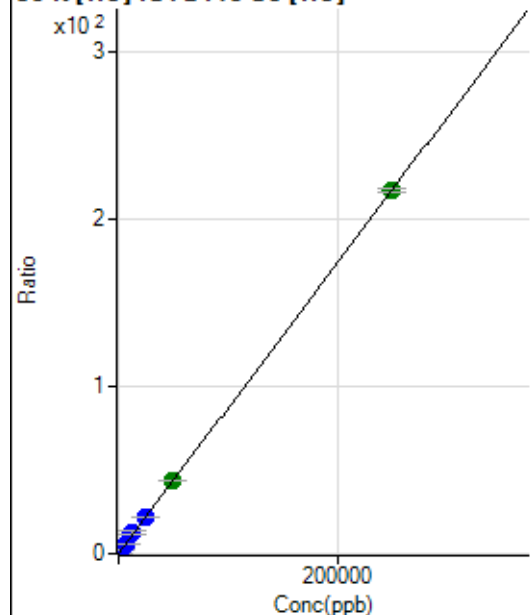
$$R = 0.9750$$

$$DL = 2751$$

$$BEC = 1.004\text{E}+05$$

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	19057.25	0.0948	P	1.7
2	☐	500.000	514.692	108671.13	0.5411	P	1.6
3	☐	2500.000	2599.338	466979.48	2.3487	P	0.7
4	☐	6250.000	6488.294	1036532.25	5.7208	P	1.2
5	☐	12500.000	13960.890	1959521.61	12.2003	P	18.0
6	☐	25000.000	24592.069	3847386.42	21.4186	P	0.6
7	☐	50000.000	49874.089	7557628.21	43.3407	A	0.9
8	☐	250000.00	249985.95	35681730.31	216.8583	A	1.0

$$y = 8.6710\text{E-}004 * x + 0.0948$$

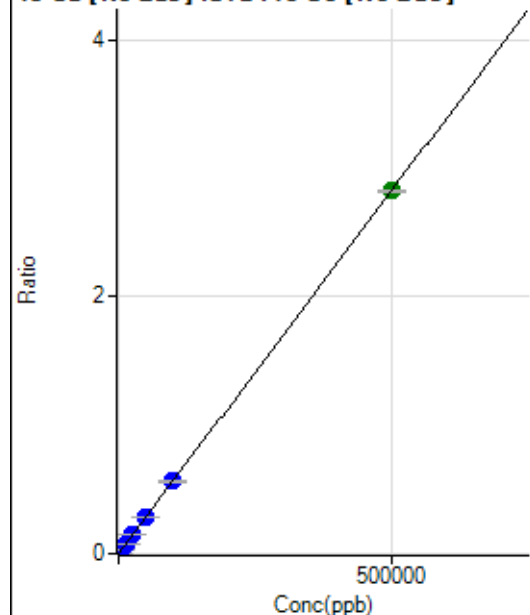
$$R = 1.0000$$

$$DL = 5.593$$

$$BEC = 109.3$$

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	269.46	0.0001	P	12.6
2	☐	500.000	489.175	12605.83	0.0028	P	0.8
3	☐	5000.000	5165.089	131346.41	0.0292	P	1.3
4	☐	12500.000	12734.119	301372.55	0.0719	P	0.7
5	☐	25000.000	25769.587	620918.23	0.1455	P	0.5
6	☐	50000.000	51351.755	1194392.20	0.2899	P	0.5
7	☐	100000.00	99372.556	2303597.92	0.5610	P	0.7
8	☐	500000.00	499944.34	10618692.77	2.8219	A	0.3

$$y = 5.6444\text{E-}006 * x + 6.0050\text{E-}005$$

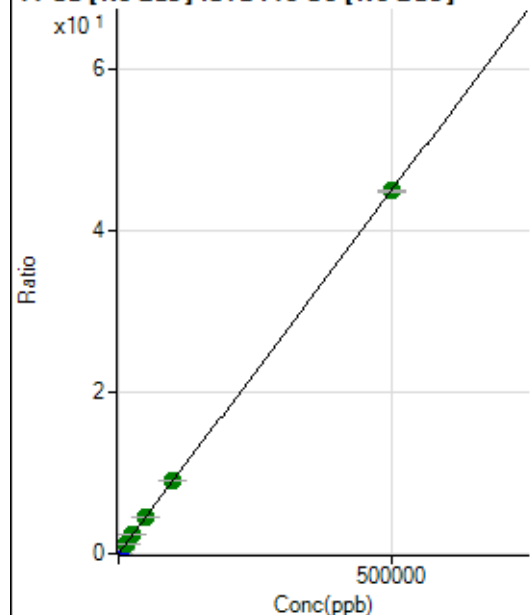
$$R = 1.0000$$

$$DL = 4.036$$

$$BEC = 10.64$$

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	9036.53	0.0020	P	2.5
2	☐	500.000	500.545	210423.68	0.0471	P	0.6
3	☐	5000.000	5129.925	2086227.20	0.4640	P	1.0
4	☐	12500.000	12689.307	4796545.42	1.1448	A	0.4
5	☐	25000.000	25555.040	9829025.74	2.3035	A	0.5
6	☐	50000.000	50855.469	18877546.25	4.5820	A	0.2
7	☐	100000.00	100925.19	37332519.24	9.0912	A	0.4
8	☐	500000.00	499695.62	169341699.6	45.0037	A	0.6

$$y = 9.0058\text{E-}005 * x + 0.0020$$

$$R = 1.0000$$

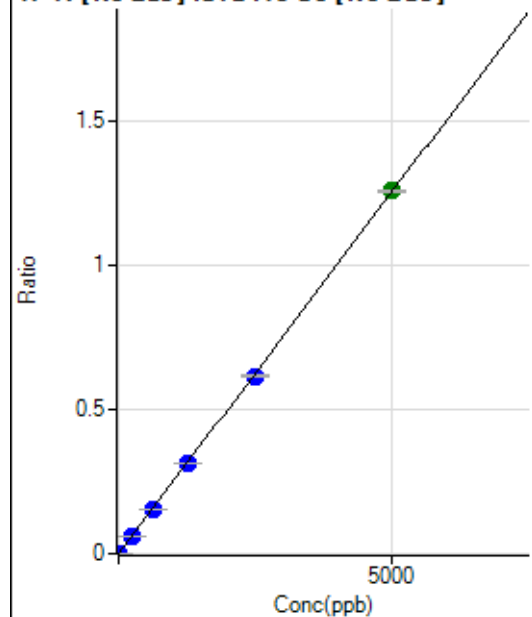
$$DL = 1.656$$

$$BEC = 22.36$$

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	144.45	0.0000	P	17.9
2	☐	5.000	5.140	5898.64	0.0013	P	4.7
3	☐	250.000	251.700	283620.06	0.0631	P	0.5
4	☐	625.000	621.067	651879.33	0.1556	P	0.9
5	☐	1250.000	1244.837	1330702.32	0.3118	P	1.1
6	☐	2500.000	2459.776	2538590.40	0.6162	P	0.3
7	☐	5000.000	5021.809	5165441.78	1.2579	A	0.7
8	☐			1527.93	0.0004	P	9.0

$$y = 2.5049\text{E-}004 * x + 3.2195\text{E-}005$$

$$R = 1.0000$$

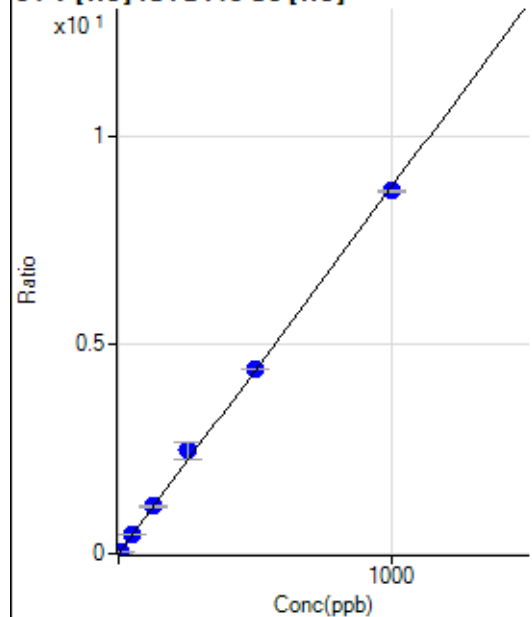
$$DL = 0.06899$$

$$BEC = 0.1285$$

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	14.45	0.0001	P	26.5
2	☐	5.000	5.423	9578.80	0.0477	P	2.1
3	☐	50.000	51.202	89414.46	0.4497	P	0.2
4	☐	125.000	129.767	206458.99	1.1396	P	2.7
5	☐	250.000	280.730	396038.17	2.4653	P	17.8
6	☐	500.000	504.294	795482.50	4.4285	P	0.5
7	☐	1000.000	989.512	1515269.37	8.6895	P	0.8
8	☐			398.90	0.0024	P	0.2

$$y = 0.0088 * x + 7.1803\text{E-}005$$

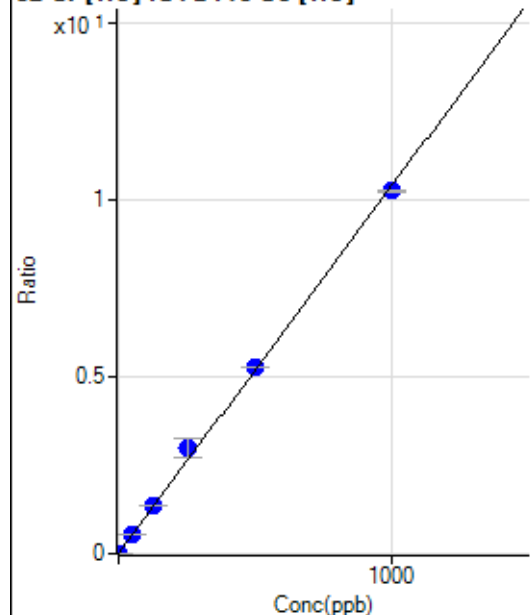
$$R = 0.9994$$

$$DL = 0.006497$$

$$BEC = 0.008177$$

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	727.81	0.0036	P	13.7
2	☐	2.000	2.054	5004.26	0.0249	P	4.0
3	☐	50.000	52.077	108078.12	0.5436	P	0.7
4	☐	125.000	131.747	248154.31	1.3696	P	1.4
5	☐	250.000	285.625	476331.39	2.9651	P	17.8
6	☐	500.000	506.314	943623.22	5.2533	P	0.2
7	☐	1000.000	986.990	1785147.28	10.2372	P	0.7
8	☐			44686.59	0.2716	P	1.4

$$y = 0.0104 * x + 0.0036$$

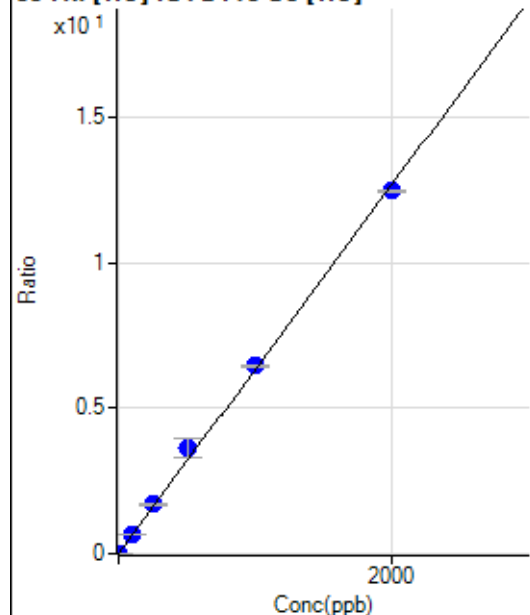
$$R = 0.9992$$

$$DL = 0.1432$$

$$BEC = 0.3492$$

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	312.23	0.0016	P	3.1
2	☐	1.000	1.026	1616.78	0.0081	P	4.9
3	☐	100.000	104.922	132387.31	0.6658	P	0.6
4	☐	250.000	266.525	305992.48	1.6890	P	2.2
5	☐	500.000	575.954	585666.25	3.6481	P	18.4
6	☐	1000.000	1019.119	1159294.25	6.4539	P	0.3
7	☐	2000.000	1969.140	2174388.74	12.4687	P	0.3
8	☐			7263.01	0.0441	P	0.8

$$y = 0.0063 * x + 0.0016$$

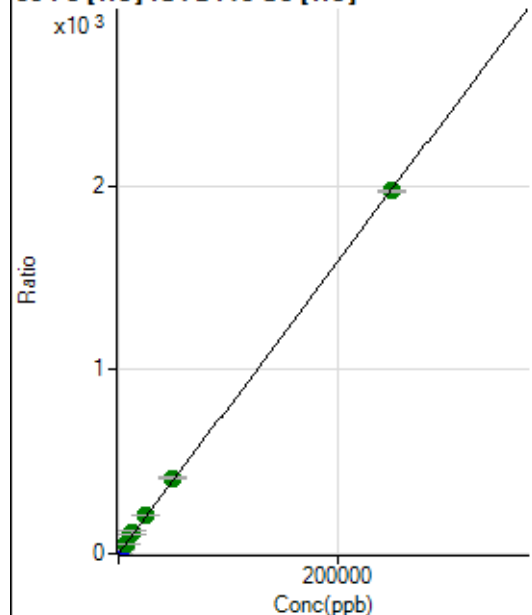
$$R = 0.9991$$

$$DL = 0.023$$

$$BEC = 0.2452$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	12309.17	0.0612	P	0.8
2	☐	50.000	57.618	103876.17	0.5172	P	2.7
3	☐	2500.000	2703.959	4267221.77	21.4619	P	0.3
4	☐	6250.000	6857.561	9844591.77	54.3359	A	1.6
5	☐	12500.000	14798.369	18803887.46	117.1841	A	18.8
6	☐	25000.000	26477.025	37652364.73	209.6158	A	0.6
7	☐	50000.000	52115.784	71938093.74	412.5359	A	0.8
8	☐	250000.00	249296.99	324666692.4	1,973.143	A	0.6

$$y = 0.0079 * x + 0.0612$$

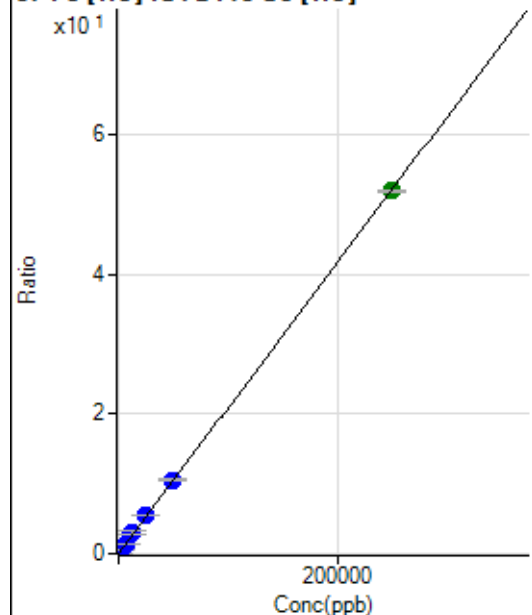
$$R = 0.9999$$

$$DL = 0.1788$$

$$BEC = 7.733$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	481.50	0.0024	P	6.7
2	☐	50.000	56.242	2829.99	0.0141	P	4.8
3	☐	2500.000	2690.556	111758.89	0.5621	P	0.3
4	☐	6250.000	6787.709	256242.35	1.4144	P	2.1
5	☐	12500.000	14792.289	494405.07	3.0795	P	18.3
6	☐	25000.000	26152.847	977642.98	5.4427	P	0.3
7	☐	50000.000	50902.665	1846944.01	10.5911	P	0.4
8	☐	250000.00	249574.21	8542735.44	51.9186	A	0.7

$$y = 2.0802E-004 * x + 0.0024$$

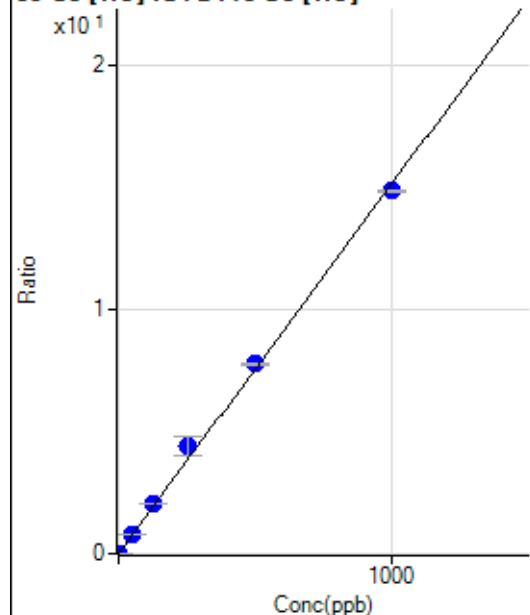
$$R = 1.0000$$

$$DL = 2.296$$

$$BEC = 11.51$$

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	153.34	0.0008	P	14.6
2	☐	1.000	1.089	3460.47	0.0172	P	1.1
3	☐	50.000	53.477	160854.47	0.8090	P	0.8
4	☐	125.000	135.129	370164.79	2.0431	P	1.8
5	☐	250.000	290.054	704066.07	4.3847	P	18.2
6	☐	500.000	513.248	1393550.38	7.7581	P	0.6
7	☐	1000.000	981.922	2588127.82	14.8417	P	0.5
8	☐			4886.45	0.0297	P	5.0

$$y = 0.0151 * x + 7.6269E-004$$

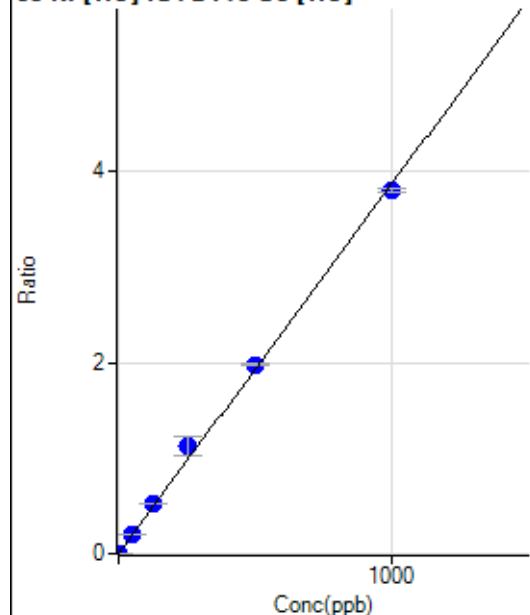
$$R = 0.9989$$

$$DL = 0.02212$$

$$BEC = 0.05046$$

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	34.44	0.0002	P	14.9
2	☐	1.000	1.074	868.93	0.0043	P	8.8
3	☐	50.000	53.487	41191.23	0.2072	P	0.6
4	☐	125.000	134.800	94549.17	0.5219	P	1.9
5	☐	250.000	290.659	180681.40	1.1251	P	18.1
6	☐	500.000	512.384	356225.42	1.9832	P	0.2
7	☐	1000.000	982.244	662911.95	3.8016	P	1.1
8	☐			12040.63	0.0732	P	0.8

$$y = 0.0039 * x + 1.7127E-004$$

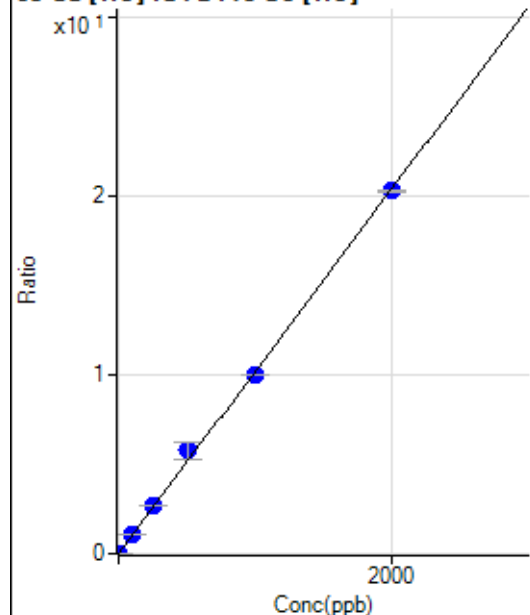
$$R = 0.9989$$

$$DL = 0.01977$$

$$BEC = 0.04425$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	300.01	0.0015	P	3.3
2	☐	2.000	2.137	4675.26	0.0233	P	2.6
3	☐	100.000	103.936	210951.96	1.0610	P	0.3
4	☐	250.000	263.966	487777.04	2.6922	P	2.0
5	☐	500.000	564.823	924406.48	5.7590	P	18.5
6	☐	1000.000	981.031	1796541.31	10.0016	P	0.3
7	☐	2000.000	1991.336	3540144.60	20.3001	P	0.6
8	☐			4836.43	0.0294	P	2.3

$$y = 0.0102 * x + 0.0015$$

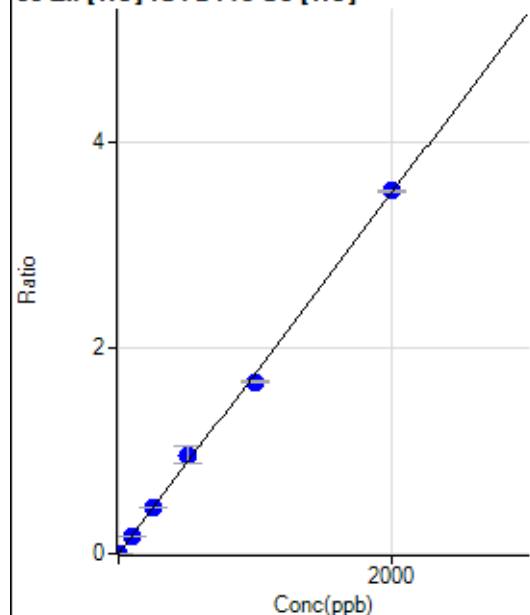
$$R = 0.9993$$

$$DL = 0.01432$$

$$BEC = 0.1463$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	245.56	0.0012	P	6.6
2	☐	2.000	2.234	1030.05	0.0051	P	6.8
3	☐	100.000	98.946	34656.86	0.1743	P	0.7
4	☐	250.000	254.986	81033.40	0.4473	P	2.2
5	☐	500.000	545.782	153503.28	0.9559	P	18.2
6	☐	1000.000	953.646	299865.35	1.6694	P	0.8
7	☐	2000.000	2011.161	613706.52	3.5193	P	0.7
8	☐			5999.11	0.0365	P	2.9

$$y = 0.0017 * x + 0.0012$$

$$R = 0.9993$$

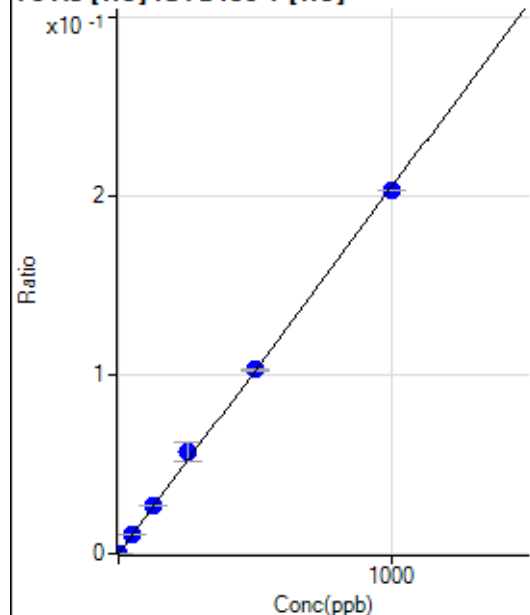
$$DL = 0.1374$$

$$BEC = 0.6981$$

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	11.11	0.0000	P	43.0
2	☐	1.000	1.113	253.09	0.0002	P	2.6
3	☐	50.000	51.872	11196.96	0.0106	P	1.1
4	☐	125.000	130.902	26193.36	0.0269	P	1.9
5	☐	250.000	280.050	49994.82	0.0575	P	18.5
6	☐	500.000	503.207	99748.38	0.1032	P	1.2
7	☐	1000.000	990.052	189091.00	0.2031	P	0.1
8	☐			69.75	0.0001	P	19.5

$$y = 2.0511\text{E-}004 * x + 1.0446\text{E-}005$$

$$R = 0.9995$$

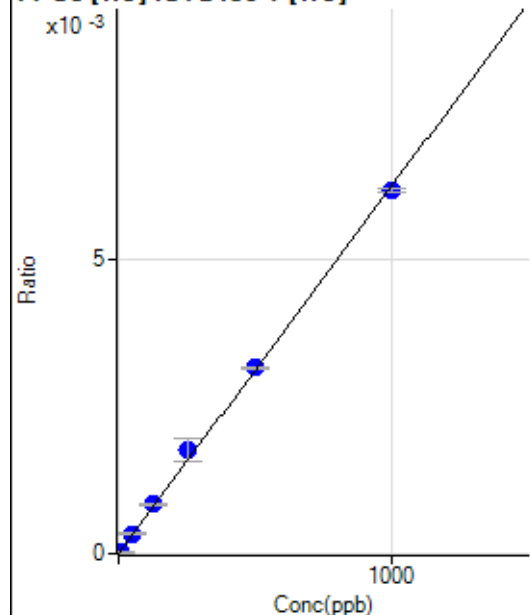
$$DL = 0.06565$$

$$BEC = 0.05093$$

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	4.330	30.00	0.0000	P	90.4
3	☐	50.000	53.760	354.45	0.0003	P	12.2
4	☐	125.000	133.956	817.81	0.0008	P	4.2
5	☐	250.000	282.588	1532.33	0.0018	P	22.4
6	☐	500.000	505.697	3057.04	0.0032	P	0.8
7	☐	1000.000	987.700	5752.34	0.0062	P	1.1
8	☐			5.56	0.0000	P	34.6

$$y = 6.2535\text{E-}006 * x + 1.0450\text{E-}006$$

$$R = 0.9994$$

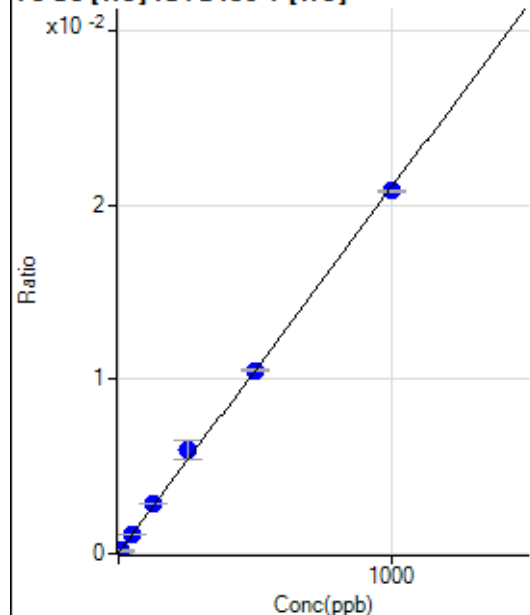
$$DL = 0.8683$$

$$BEC = 0.1671$$

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	23.1
2	☐	5.000	5.996	176.55	0.0002	P	6.9
3	☐	50.000	50.812	1164.87	0.0011	P	2.5
4	☐	125.000	135.884	2823.14	0.0029	P	2.3
5	☐	250.000	282.430	5199.74	0.0060	P	18.2
6	☐	500.000	499.926	10186.96	0.0105	P	0.9
7	☐	1000.000	990.524	19410.57	0.0208	P	0.4
8	☐			47.53	0.0001	P	8.1

$$y = 2.1005\text{E-}005 * x + 4.0678\text{E-}005$$

$$R = 0.9994$$

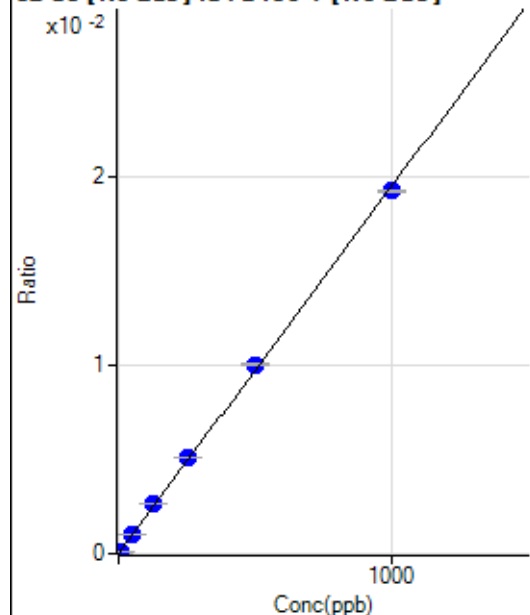
$$DL = 1.342$$

$$BEC = 1.937$$

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	79.79	0.0000	P	137.
2	☐	5.000	6.030	881.17	0.0001	P	6.9
3	☐	50.000	53.261	7217.18	0.0010	P	2.0
4	☐	125.000	134.885	16962.99	0.0026	P	0.7
5	☐	250.000	261.789	34157.90	0.0051	P	0.8
6	☐	500.000	514.827	65170.80	0.0100	P	0.9
7	☐	1000.000	988.235	125464.20	0.0192	P	0.8
8	☐			176.18	0.0000	P	12.7

$$y = 1.9440\text{E-}005 * x + 1.1471\text{E-}005$$

$$R = 0.9997$$

$$DL = 2.429$$

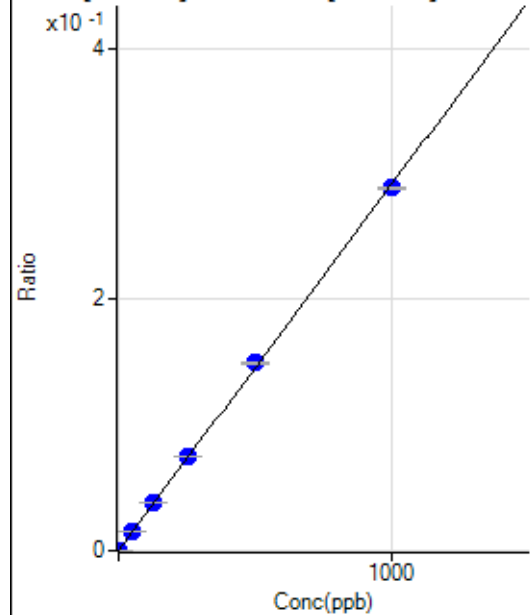
$$BEC = 0.5901$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			547.80		P	18.7
2	☐			496.68		P	4.2
3	☐			510.02		P	11.0
4	☐			508.91		P	5.7
5	☐			486.68		P	8.6
6	☐			442.24		P	2.9
7	☐			541.13		P	6.8
8	☐			474.46		P	1.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	722.27	0.0001	P	3.5
2	☐	1.000	1.146	2994.88	0.0004	P	3.4
3	☐	50.000	51.692	104501.18	0.0152	P	1.2
4	☐	125.000	128.689	242087.35	0.0376	P	0.5
5	☐	250.000	258.172	504247.39	0.0753	P	0.8
6	☐	500.000	513.080	972673.17	0.1495	P	0.6
7	☐	1000.000	990.871	1884329.88	0.2887	P	0.4
8	☐			8041.46	0.0013	P	5.9

$$y = 2.9124\text{E-}004 * x + 1.0384\text{E-}004$$

$$R = 0.9998$$

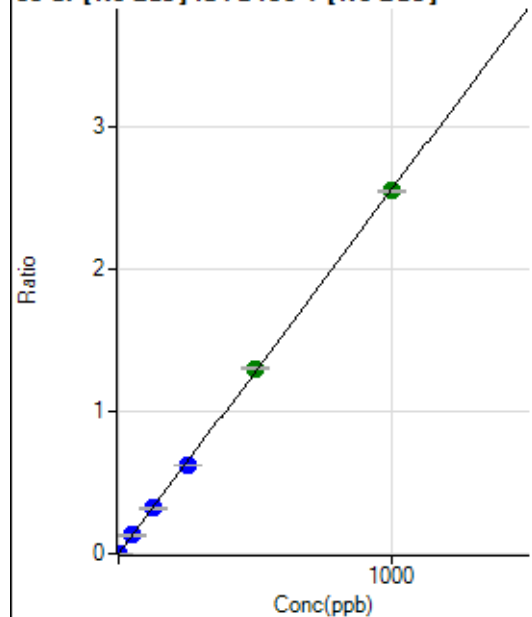
$$DL = 0.03789$$

$$BEC = 0.3565$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	216.67	0.0000	P	13.3
2	☐	1.000	1.025	18145.39	0.0027	P	1.8
3	☐	50.000	50.408	888520.17	0.1289	P	1.2
4	☐	125.000	124.382	2048333.23	0.3180	P	0.3
5	☐	250.000	242.646	4154288.29	0.6203	P	0.5
6	☐	500.000	509.479	8471957.65	1.3024	A	0.5
7	☐	1000.000	997.156	16638214.26	2.5491	A	0.3
8	☐			63711.44	0.0106	P	0.2

$$y = 0.0026 * x + 3.1148E-005$$

$$R = 0.9999$$

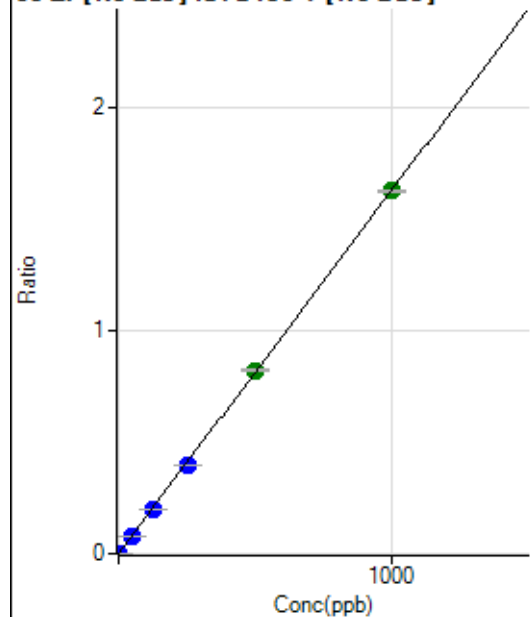
$$DL = 0.004851$$

$$BEC = 0.01218$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	405.58	0.0001	P	11.2
2	☐	1.000	0.843	9792.59	0.0014	P	1.1
3	☐	50.000	49.306	553473.25	0.0803	P	0.5
4	☐	125.000	123.422	1293928.66	0.2009	P	0.3
5	☐	250.000	244.515	2664828.01	0.3979	P	0.2
6	☐	500.000	504.782	5342869.04	0.8214	A	0.4
7	☐	1000.000	999.212	10611708.66	1.6259	A	0.8
8	☐			2444.75	0.0004	P	6.8

$$y = 0.0016 * x + 5.8303E-005$$

$$R = 1.0000$$

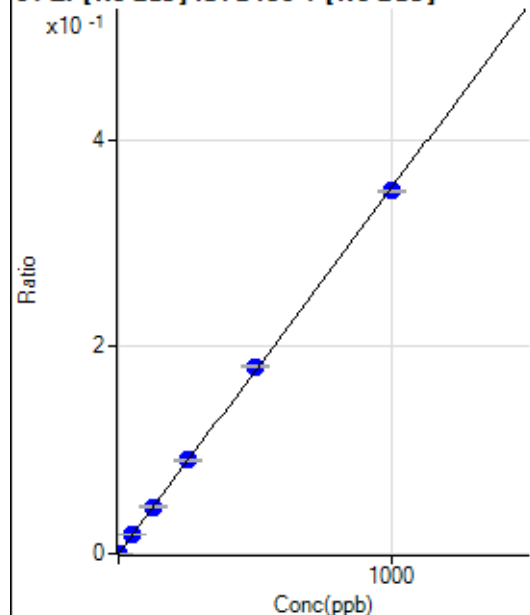
$$DL = 0.01204$$

$$BEC = 0.03583$$

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	88.89	0.0000	P	23.7
2	☐	1.000	0.891	2241.93	0.0003	P	6.6
3	☐	50.000	50.898	124029.00	0.0180	P	0.5
4	☐	125.000	128.261	291872.37	0.0453	P	0.9
5	☐	250.000	255.208	603816.09	0.0902	P	0.4
6	☐	500.000	511.796	1175960.15	0.1808	P	1.2
7	☐	1000.000	992.348	2288001.11	0.3505	P	0.6
8	☐			536.14	0.0001	P	18.9

$$y = 3.5324\text{E-}004 * x + 1.2782\text{E-}005$$

$$R = 0.9999$$

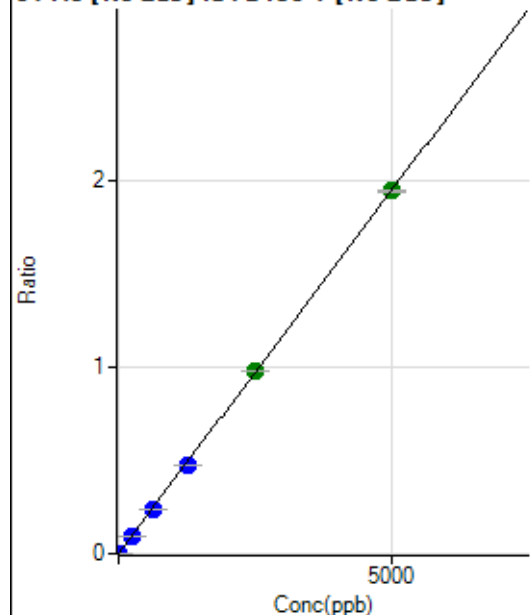
$$DL = 0.02573$$

$$BEC = 0.03619$$

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	222.23	0.0000	P	37.9
2	☐	5.000	4.840	13092.61	0.0019	P	1.9
3	☐	250.000	248.281	665586.96	0.0965	P	0.5
4	☐	625.000	619.994	1552465.12	0.2410	P	0.5
5	☐	1250.000	1221.265	3179690.17	0.4748	P	0.7
6	☐	2500.000	2522.280	6378272.93	0.9805	A	0.3
7	☐	5000.000	4996.756	12678254.88	1.9425	A	0.6
8	☐			9278.43	0.0015	P	4.7

$$y = 3.8874\text{E-}004 * x + 3.1960\text{E-}005$$

$$R = 1.0000$$

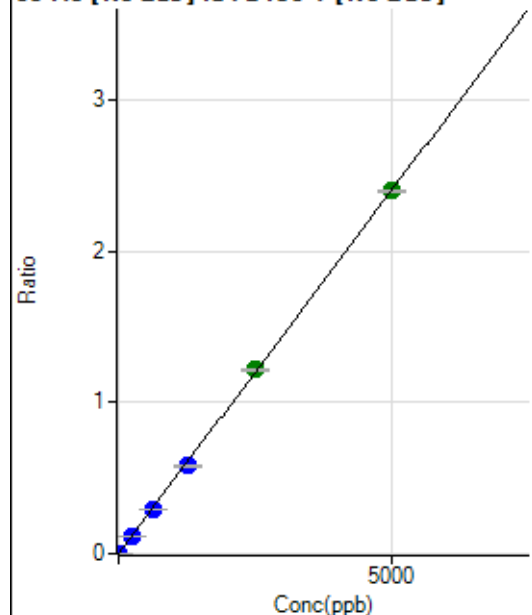
$$DL = 0.09336$$

$$BEC = 0.08222$$

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	150.01	0.0000	P	19.3
2	☐	5.000	4.873	16159.76	0.0024	P	2.7
3	☐	250.000	248.118	821332.97	0.1191	P	0.8
4	☐	625.000	616.330	1905911.39	0.2959	P	0.3
5	☐	1250.000	1205.707	3876819.36	0.5789	P	0.2
6	☐	2500.000	2531.368	7905248.01	1.2153	A	0.7
7	☐	5000.000	4996.567	15657877.96	2.3989	A	0.3
8	☐			14338.27	0.0024	P	2.8

$$y = 4.8010E-004 * x + 2.1567E-005$$

$$R = 0.9999$$

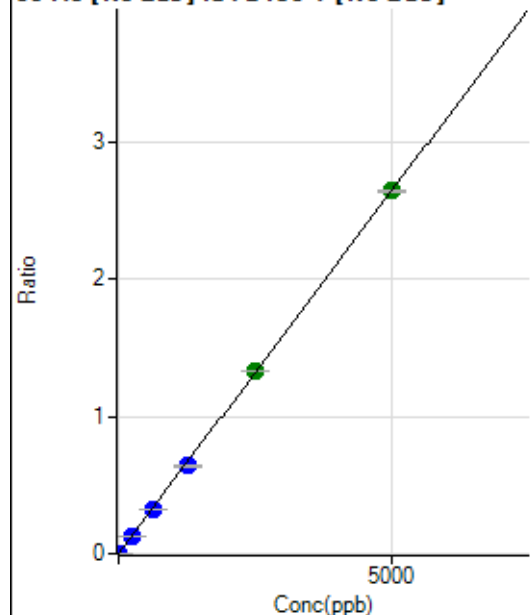
$$DL = 0.02602$$

$$BEC = 0.04492$$

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	341.69	0.0000	P	6.5
2	☐	5.000	4.907	18062.08	0.0026	P	1.5
3	☐	250.000	247.860	902420.41	0.1309	P	0.6
4	☐	625.000	619.752	2107759.62	0.3272	P	0.0
5	☐	1250.000	1208.526	4273268.20	0.6381	P	0.5
6	☐	2500.000	2517.422	8645359.48	1.3291	A	0.5
7	☐	5000.000	5002.420	17237987.71	2.6411	A	0.6
8	☐			21419.62	0.0036	P	2.2

$$y = 5.2795E-004 * x + 4.9124E-005$$

$$R = 1.0000$$

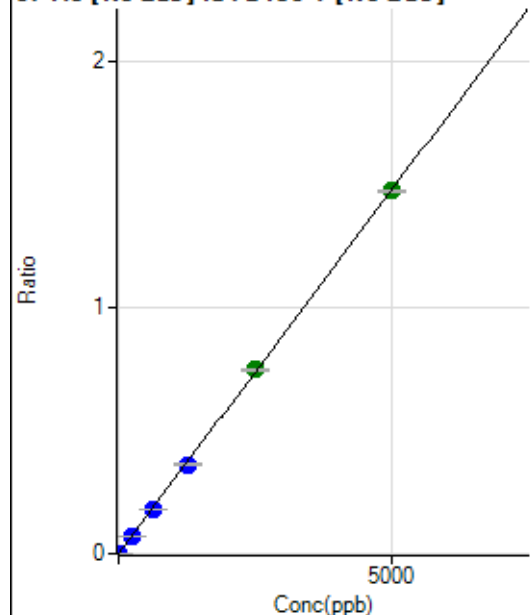
$$DL = 0.0182$$

$$BEC = 0.09305$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.89	0.0000	P	27.1
2	☐	5.000	4.859	9926.08	0.0015	P	0.8
3	☐	250.000	250.186	510304.72	0.0740	P	0.8
4	☐	625.000	619.155	1179887.82	0.1832	P	0.5
5	☐	1250.000	1227.507	2432053.79	0.3632	P	0.7
6	☐	2500.000	2530.537	4869416.47	0.7486	A	1.0
7	☐	5000.000	4991.076	9637917.84	1.4765	A	0.6
8	☐			8939.26	0.0015	P	4.6

$$y = 2.9583E-004 * x + 1.2781E-005$$

$$R = 1.0000$$

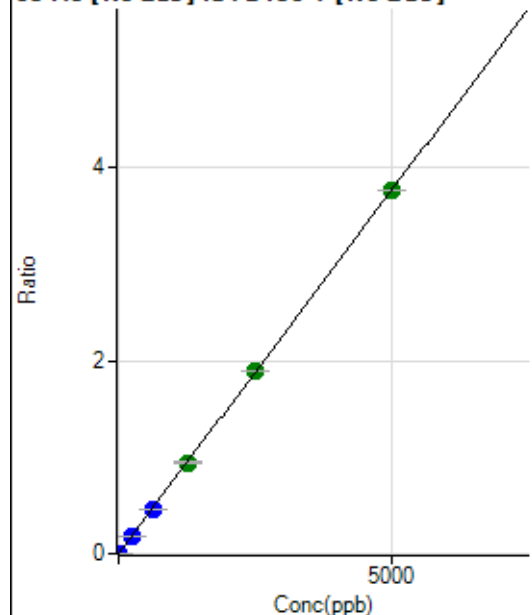
$$DL = 0.03516$$

$$BEC = 0.0432$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	225.01	0.0000	P	9.6
2	☐	5.000	5.127	26634.14	0.0039	P	0.4
3	☐	250.000	248.592	1290300.83	0.1872	P	0.9
4	☐	625.000	614.117	2977889.04	0.4623	P	0.3
5	☐	1250.000	1256.798	6336512.86	0.9462	A	0.2
6	☐	2500.000	2509.256	12287396.54	1.8890	A	0.5
7	☐	5000.000	4995.103	24544843.78	3.7604	A	0.1
8	☐			22474.07	0.0037	P	2.2

$$y = 7.5281E-004 * x + 3.2346E-005$$

$$R = 1.0000$$

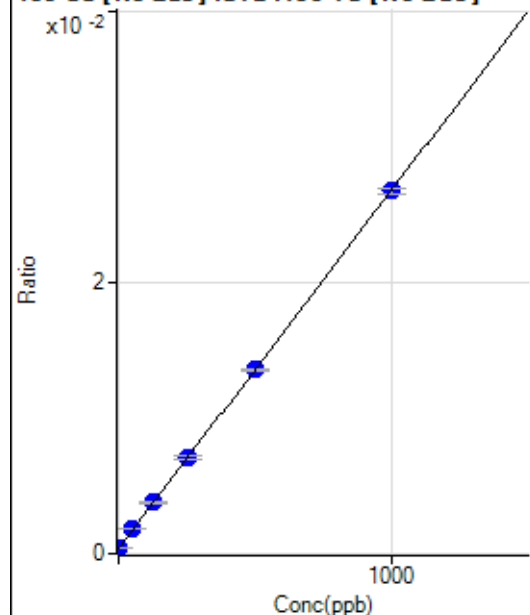
$$DL = 0.01244$$

$$BEC = 0.04297$$

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	2486.43	0.0004	P	1.1
2	☐	1.000	0.669	2578.12	0.0004	P	4.7
3	☐	50.000	54.844	11955.46	0.0018	P	2.3
4	☐	125.000	129.620	23517.61	0.0038	P	3.2
5	☐	250.000	253.646	46494.09	0.0071	P	3.3
6	☐	500.000	500.077	87488.99	0.0136	P	0.8
7	☐	1000.000	998.230	172104.11	0.0268	P	1.5
8	☐			2305.84	0.0004	P	2.6

$$y = 2.6445\text{E-}005 * x + 3.7951\text{E-}004$$

$$R = 1.0000$$

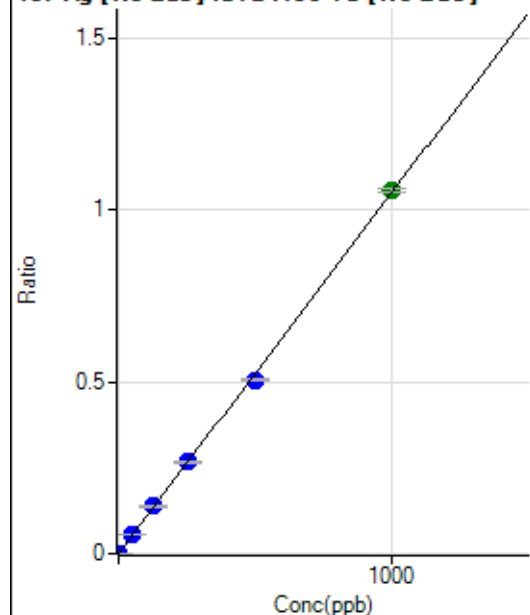
$$DL = 0.4777$$

$$BEC = 14.35$$

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	86.11	0.0000	P	10.6
2	☐	1.000	0.898	6184.94	0.0010	P	3.9
3	☐	50.000	54.232	371093.72	0.0568	P	1.2
4	☐	125.000	131.435	850354.84	0.1376	P	2.1
5	☐	250.000	254.222	1746472.46	0.2662	P	1.0
6	☐	500.000	482.513	3249347.73	0.5053	P	0.3
7	☐	1000.000	1006.672	6774905.01	1.0541	A	1.2
8	☐			811.17	0.0001	P	12.6

$$y = 0.0010 * x + 1.3139\text{E-}005$$

$$R = 0.9997$$

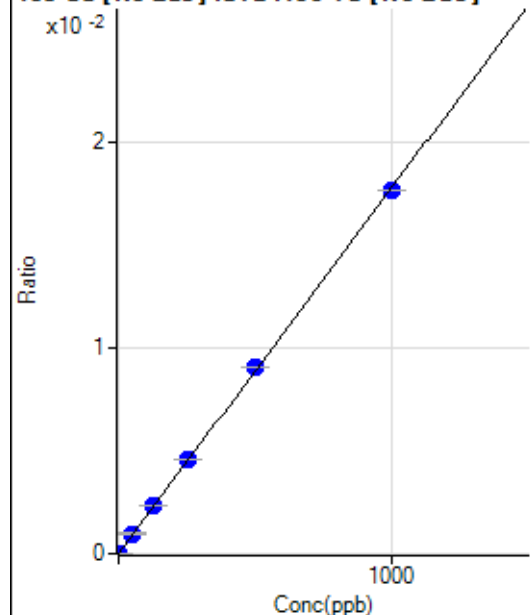
$$DL = 0.004003$$

$$BEC = 0.01255$$

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	11.11	0.0000	P	57.6
2	☐	1.000	1.050	131.95	0.0000	P	7.8
3	☐	50.000	54.778	6355.73	0.0010	P	1.5
4	☐	125.000	130.531	14311.62	0.0023	P	0.7
5	☐	250.000	258.027	30021.00	0.0046	P	0.7
6	☐	500.000	509.551	58104.92	0.0090	P	0.7
7	☐	1000.000	992.288	113077.87	0.0176	P	0.1
8	☐			25.00	0.0000	P	50.8

$$y = 1.7728\text{E-}005 * x + 1.6987\text{E-}006$$

$$R = 0.9999$$

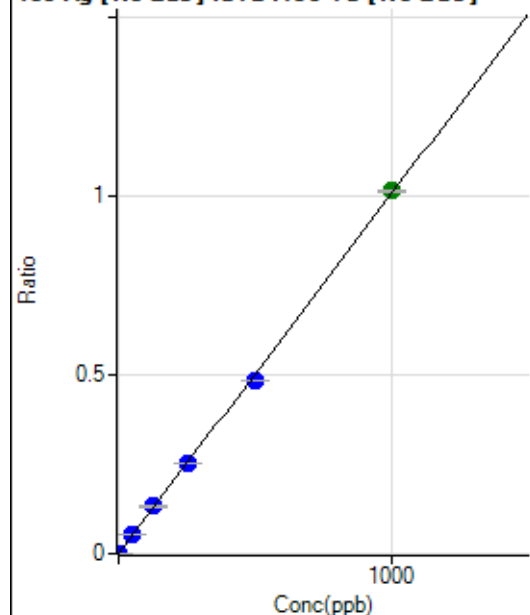
$$DL = 0.1656$$

$$BEC = 0.09582$$

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	61.11	0.0000	P	28.4
2	☐	1.000	0.859	5662.46	0.0009	P	1.6
3	☐	50.000	53.463	351141.35	0.0537	P	0.6
4	☐	125.000	131.760	818254.45	0.1324	P	1.8
5	☐	250.000	251.888	1661029.19	0.2532	P	0.7
6	☐	500.000	480.436	3105587.70	0.4829	P	0.6
7	☐	1000.000	1008.292	6513702.40	1.0135	A	0.8
8	☐			738.94	0.0001	P	21.8

$$y = 0.0010 * x + 9.3294\text{E-}006$$

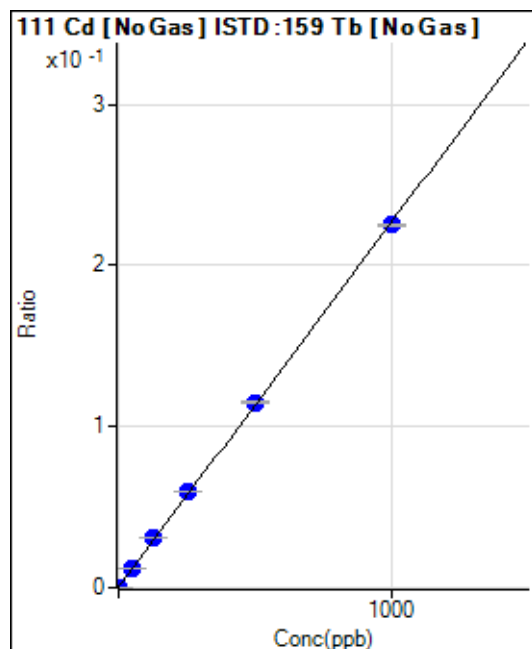
$$R = 0.9997$$

$$DL = 0.007897$$

$$BEC = 0.009282$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1749.39	0.0003	P	1.4
2	☐	1.000	1.041	3263.83	0.0005	P	3.9
3	☐	50.000	53.861	81432.49	0.0125	P	0.4
4	☐	125.000	134.650	190097.71	0.0308	P	0.4
5	☐	250.000	260.454	388710.20	0.0593	P	0.2
6	☐	500.000	506.384	739218.76	0.1149	P	0.5
7	☐	1000.000	992.795	1446856.17	0.2251	P	0.9
8	☐			1878.54	0.0003	P	1.9

$$y = 2.2647\text{E-}004 * x + 2.6701\text{E-}004$$

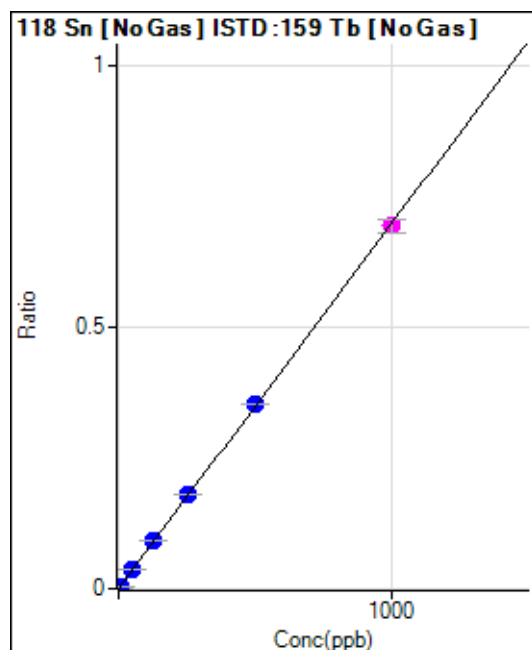
R = 0.9999

DL = 0.0481

BEC = 1.179

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	466.69	0.0001	P	3.5
2	☐	5.000	5.201	23973.97	0.0037	P	0.6
3	☐	50.000	52.669	240155.85	0.0368	P	0.7
4	☐	125.000	132.033	568750.89	0.0920	P	1.4
5	☐	250.000	258.211	1180474.36	0.1799	P	0.7
6	☐	500.000	505.566	2265240.76	0.3522	P	0.8
7	☐	1000.000	994.151	4451169.89	0.6926	M	3.7
8	☐			3745.11	0.0007	P	2.3

$$y = 6.9659\text{E-}004 * x + 7.1244\text{E-}005$$

R = 0.9999

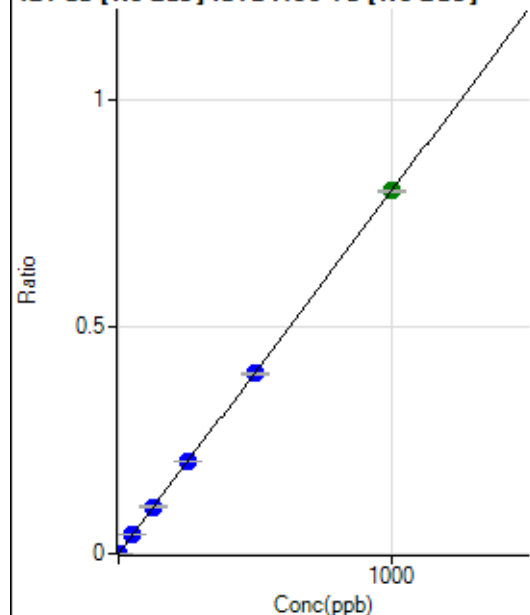
DL = 0.01079

BEC = 0.1023

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	125.01	0.0000	P	42.2
2	☐	2.000	1.974	10345.92	0.0016	P	2.3
3	☐	50.000	51.942	270818.22	0.0415	P	0.7
4	☐	125.000	129.495	638409.62	0.1033	P	1.1
5	☐	250.000	253.938	1329069.47	0.2026	P	0.4
6	☐	500.000	496.412	2546744.37	0.3960	P	0.5
7	☐	1000.000	1000.151	5127966.43	0.7979	A	0.4
8	☐			4859.38	0.0008	P	8.7

$$y = 7.9772\text{E-}004 * x + 1.9110\text{E-}005$$

$$R = 1.0000$$

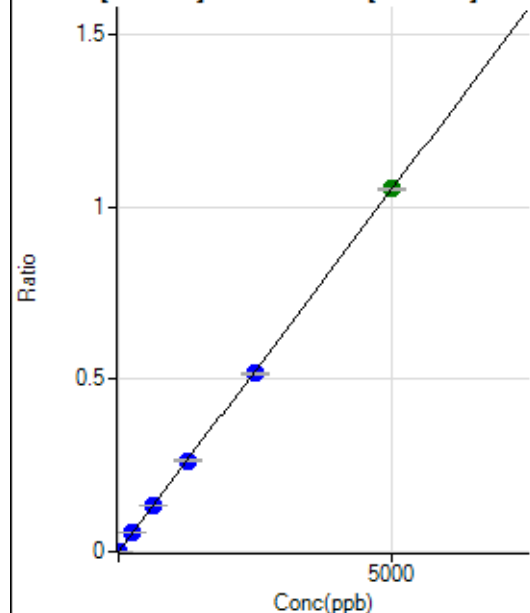
$$DL = 0.03036$$

$$BEC = 0.02396$$

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	44.45	0.0000	P	53.8
2	☐	10.000	10.255	14024.29	0.0022	P	2.5
3	☐	250.000	260.112	357099.09	0.0547	P	0.9
4	☐	625.000	638.115	828490.18	0.1341	P	1.1
5	☐	1250.000	1260.901	1738120.85	0.2649	P	0.6
6	☐	2500.000	2466.410	3332727.90	0.5182	P	0.9
7	☐	5000.000	5011.924	6768253.54	1.0531	A	0.4
8	☐			986.19	0.0002	P	5.0

$$y = 2.1012\text{E-}004 * x + 6.7707\text{E-}006$$

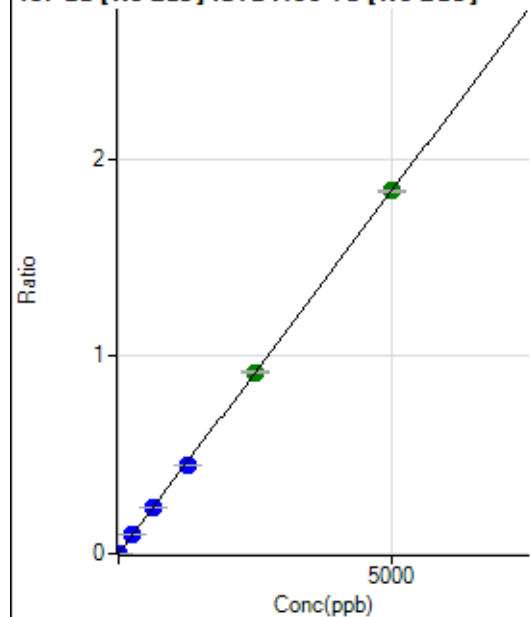
$$R = 1.0000$$

$$DL = 0.05204$$

$$BEC = 0.03222$$

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	52.78	0.0000	P	37.1
2	☐	10.000	10.411	24912.21	0.0038	P	0.3
3	☐	250.000	254.797	612571.68	0.0938	P	0.9
4	☐	625.000	629.772	1432303.97	0.2317	P	0.3
5	☐	1250.000	1230.932	2971585.70	0.4530	P	0.3
6	☐	2500.000	2504.263	5926250.96	0.9215	A	0.7
7	☐	5000.000	5001.798	11829925.18	1.8405	A	0.4
8	☐			1875.22	0.0003	P	5.0

$$y = 3.6797E-004 * x + 8.0680E-006$$

$$R = 1.0000$$

$$DL = 0.02441$$

$$BEC = 0.02193$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			6.67		P	100.
3	☐			40.00		P	28.9
4	☐			55.56		P	25.0
5	☐			117.78		P	17.3
6	☐			311.12		P	6.9
7	☐			542.25		P	10.3
8	☐			64.45		P	21.5

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	50.0
2	☐			10.00		P	66.7
3	☐			13.33		P	25.0
4	☐			16.67		P	20.0
5	☐			17.78		P	21.7
6	☐			53.33		P	6.3
7	☐			57.78		P	18.5
8	☐			24.44		P	7.9

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	103.
2	☐			27.78		P	96.4
3	☐			27.78		P	34.6
4	☐			41.67		P	20.0
5	☐			44.44		P	43.3
6	☐			75.00		P	11.1
7	☐			163.90		P	20.5
8	☐			33.33		P	25.0

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			18.89		P	40.7
2	☐			14.45		P	48.0
3	☐			31.11		P	34.4
4	☐			22.22		P	17.3
5	☐			48.89		P	14.2
6	☐			84.45		P	19.9
7	☐			164.45		P	27.2
8	☐			28.89		P	24.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50.00		P	28.9
2	☐			66.67		P	25.0
3	☐			47.23		P	20.4
4	☐			52.78		P	18.2
5	☐			55.56		P	45.8
6	☐			58.33		P	51.5
7	☐			97.23		P	35.7
8	☐			52.78		P	59.8

160 Gd [He] No available calibration points

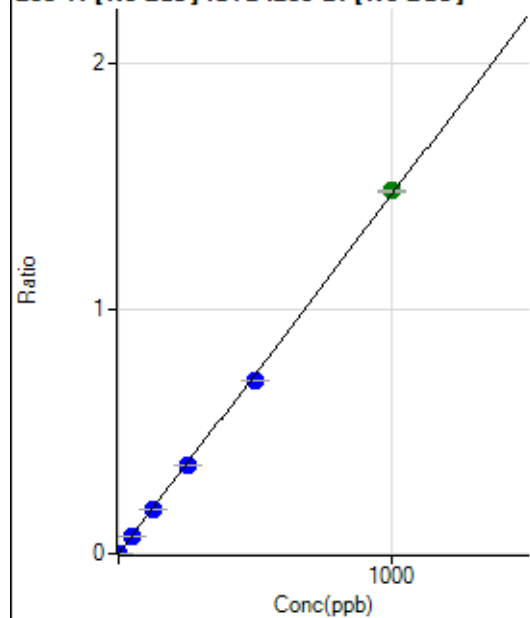
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			153.34		P	14.3
2	☐			136.67		P	6.5
3	☐			144.45		P	16.7
4	☐			146.67		P	15.7
5	☐			126.67		P	4.6
6	☐			158.89		P	14.7
7	☐			134.45		P	10.0
8	☐			133.34		P	5.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	21.6
2	☐			36.11		P	96.1
3	☐			36.11		P	13.3
4	☐			44.45		P	47.2
5	☐			50.00		P	16.7
6	☐			33.33		P	0.0
7	☐			63.89		P	19.9
8	☐			44.45		P	47.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35.56		P	39.0
2	☐			40.00		P	28.9
3	☐			40.00		P	38.2
4	☐			53.33		P	37.5
5	☐			46.66		P	44.6
6	☐			51.11		P	21.0
7	☐			54.44		P	9.4
8	☐			55.55		P	30.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	419.47	0.0001	P	22.8
2	☐	1.000	0.950	5070.64	0.0015	P	3.6
3	☐	50.000	49.330	243037.69	0.0724	P	0.4
4	☐	125.000	121.084	569293.09	0.1775	P	0.3
5	☐	250.000	245.062	1199952.81	0.3591	P	0.6
6	☐	500.000	481.759	2283050.29	0.7058	P	0.5
7	☐	1000.000	1010.878	4639214.47	1.4809	A	0.9
8	☐			1072.32	0.0004	P	8.6

$$y = 0.0015 * x + 1.2394E-004$$

$$R = 0.9997$$

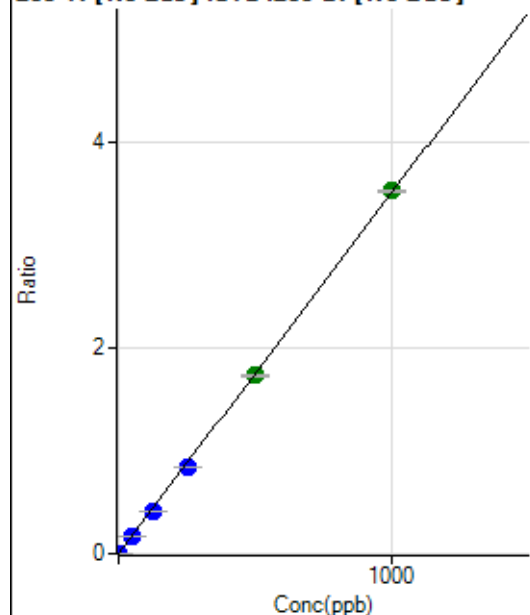
$$DL = 0.05787$$

$$BEC = 0.08461$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	608.38	0.0002	P	2.4
2	☐	1.000	0.949	11711.24	0.0035	P	1.2
3	☐	50.000	48.947	575386.97	0.1714	P	0.8
4	☐	125.000	118.444	1329266.85	0.4144	P	0.8
5	☐	250.000	238.846	2791919.85	0.8355	P	0.4
6	☐	500.000	494.361	5593083.41	1.7291	A	1.1
7	☐	1000.000	1006.480	11028384.45	3.5202	A	0.8
8	☐			2164.17	0.0008	P	5.0

$$y = 0.0035 * x + 1.7958E-004$$

$$R = 0.9999$$

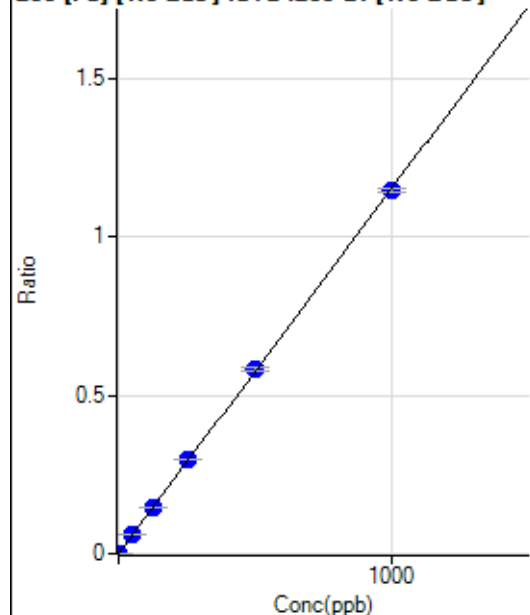
$$DL = 0.003626$$

$$BEC = 0.05135$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	627.81	0.0002	P	6.6
2	☐	1.000	1.009	4506.46	0.0013	P	4.0
3	☐	50.000	51.691	200371.05	0.0597	P	0.3
4	☐	125.000	127.098	469776.65	0.1465	P	0.8
5	☐	250.000	258.562	994975.30	0.2978	P	0.8
6	☐	500.000	506.268	1885267.56	0.5828	P	1.3
7	☐	1000.000	994.378	3585881.16	1.1446	P	0.9
8	☐			11553.46	0.0045	P	1.5

$$y = 0.0012 * x + 1.8524E-004$$

$$R = 0.9999$$

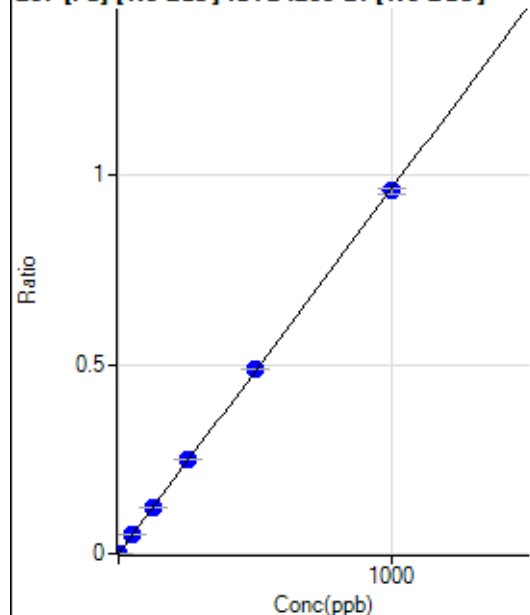
$$DL = 0.03189$$

$$BEC = 0.161$$

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	561.14	0.0002	P	19.1
2	☐	1.000	1.045	3928.48	0.0012	P	5.2
3	☐	50.000	51.181	166390.02	0.0496	P	0.2
4	☐	125.000	127.986	396672.17	0.1237	P	0.4
5	☐	250.000	257.690	831503.72	0.2488	P	0.2
6	☐	500.000	506.975	1583019.03	0.4894	P	0.3
7	☐	1000.000	994.158	3005856.84	0.9595	P	1.4
8	☐			10009.64	0.0039	P	1.8

$$y = 9.6499\text{E-}004 * x + 1.6581\text{E-}004$$

$$R = 0.9999$$

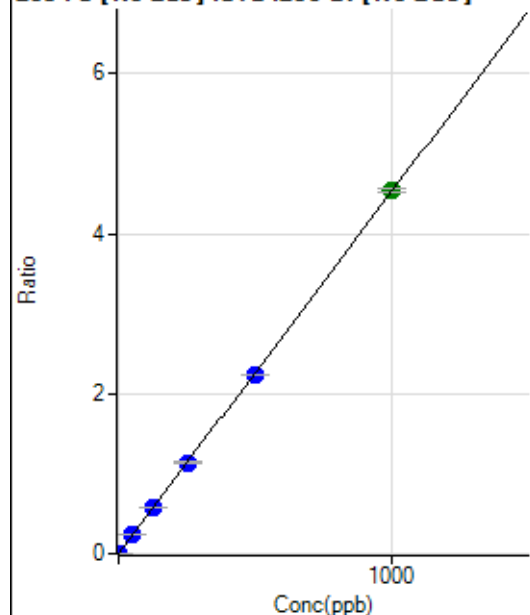
$$DL = 0.09831$$

$$BEC = 0.1718$$

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	2139.01	0.0006	P	3.6
2	☐	1.000	1.003	17288.14	0.0052	P	3.7
3	☐	50.000	50.628	770914.06	0.2296	P	0.4
4	☐	125.000	125.362	1820577.16	0.5676	P	0.5
5	☐	250.000	251.873	3808456.71	1.1397	P	0.5
6	☐	500.000	493.164	7216419.32	2.2310	P	0.3
7	☐	1000.000	1002.873	14210476.88	4.5361	A	1.2
8	☐			44149.66	0.0170	P	1.0

$$y = 0.0045 * x + 6.3146\text{E-}004$$

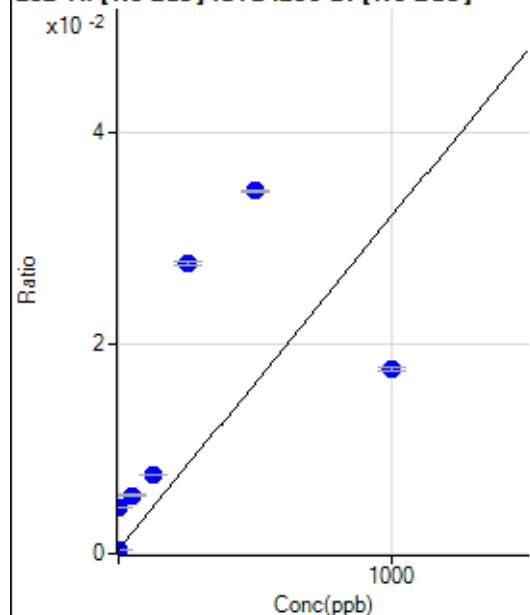
$$R = 1.0000$$

$$DL = 0.01514$$

$$BEC = 0.1396$$

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	1344.55	0.0004	P	6.6
2	☐	1.000	125.802	14664.30	0.0044	P	1.8
3	☐	50.000	162.902	18660.27	0.0056	P	2.5
4	☐	125.000	223.099	23943.15	0.0075	P	1.5
5	☐	250.000	859.425	92302.23	0.0276	P	1.3
6	☐	500.000	1076.005	111543.49	0.0345	P	0.5
7	☐	1000.000	541.609	55012.62	0.0176	P	2.0
8	☐			1416.79	0.0005	P	4.3

$$y = 3.1679\text{E-}005 * x + 3.9704\text{E-}004$$

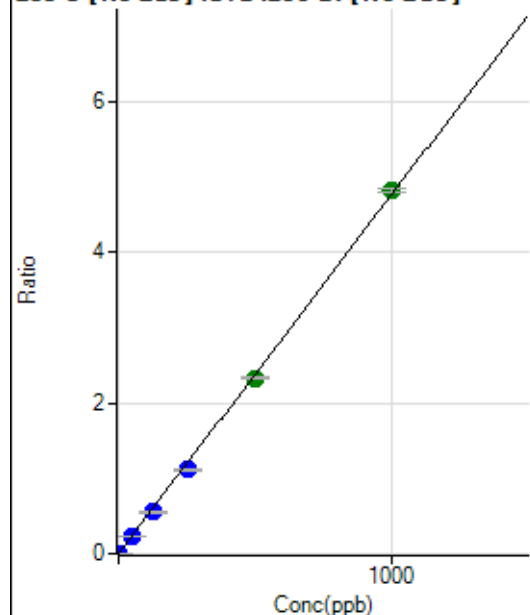
$$R = 0.5664$$

$$DL = 2.496$$

$$BEC = 12.53$$

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	1878.00	0.0006	P	9.7
2	☐	1.000	0.935	16747.84	0.0050	P	2.8
3	☐	50.000	46.709	748397.38	0.2229	P	1.2
4	☐	125.000	115.337	1762993.45	0.5496	P	1.1
5	☐	250.000	233.139	3710244.61	1.1103	P	0.9
6	☐	500.000	489.972	7546143.01	2.3329	A	1.2
7	☐	1000.000	1010.602	15072026.90	4.8111	A	1.2
8	☐			2714.29	0.0010	P	4.4

$$y = 0.0048 * x + 5.5468\text{E-}004$$

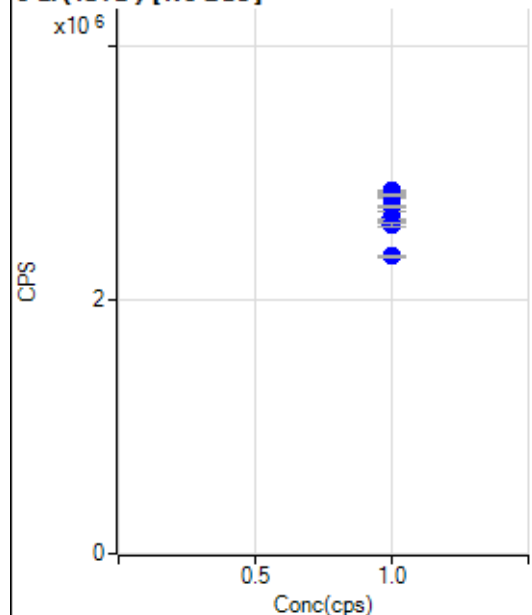
$$R = 0.9998$$

$$DL = 0.03393$$

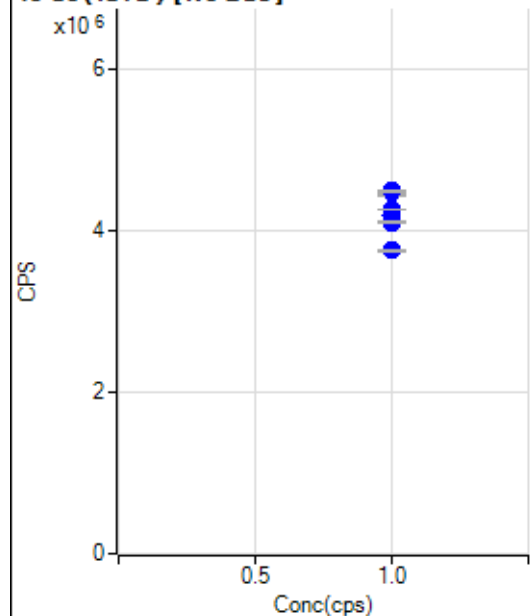
$$BEC = 0.1165$$

Weight: <None>

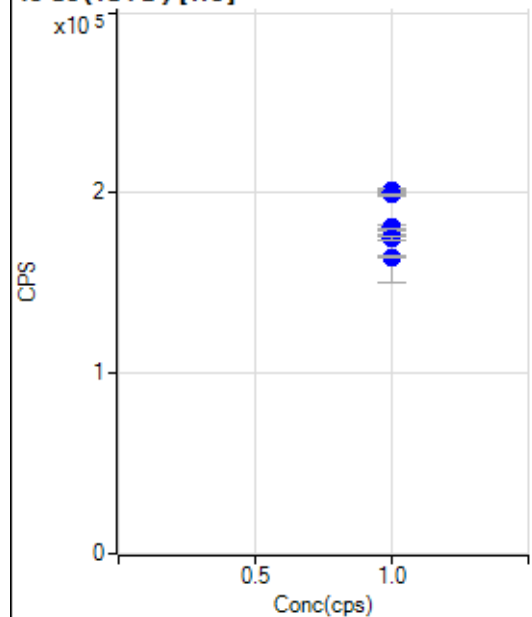
Min Conc: 0

6 Li (ISTD) [No Gas]

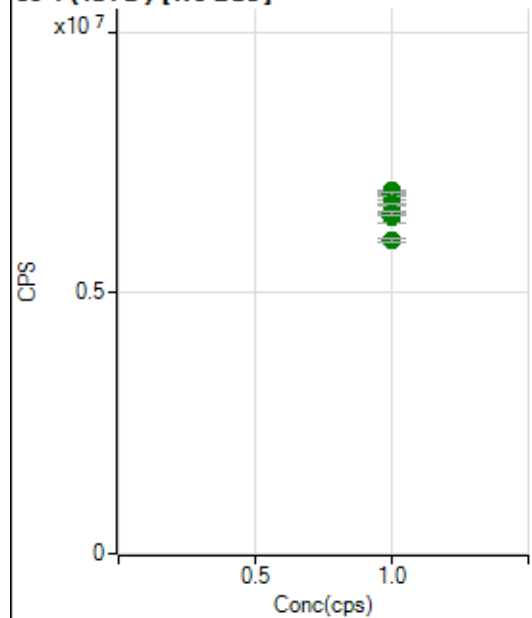
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2861015.03		P	0.7
2	☐	1.000		2825364.19		P	1.3
3	☐	1.000		2832325.10		P	0.6
4	☐	1.000		2656110.10		P	3.0
5	☐	1.000		2738253.54		P	0.3
6	☐	1.000		2638471.07		P	0.5
7	☐	1.000		2595881.12		P	1.1
8	☐	1.000		2347078.21		P	0.6

45 Sc (ISTD) [No Gas]

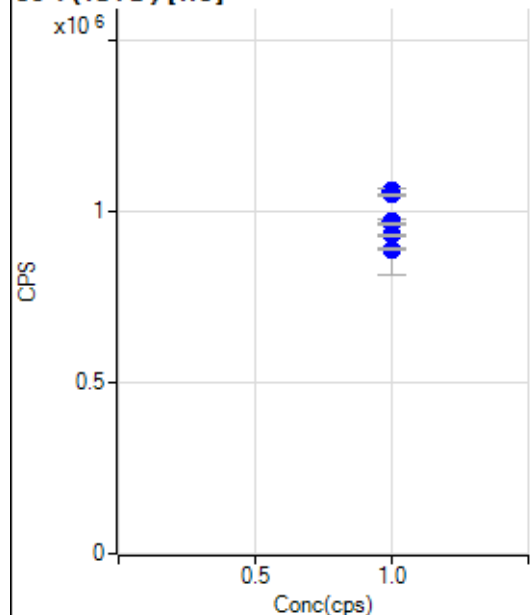
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4487872.75		P	0.9
2	☐	1.000		4468538.38		P	1.3
3	☐	1.000		4496313.03		P	0.6
4	☐	1.000		4190085.60		P	3.8
5	☐	1.000		4267114.68		P	0.3
6	☐	1.000		4119965.02		P	0.5
7	☐	1.000		4106411.07		P	0.8
8	☐	1.000		3762888.02		P	0.6

45 Sc (ISTD) [He]

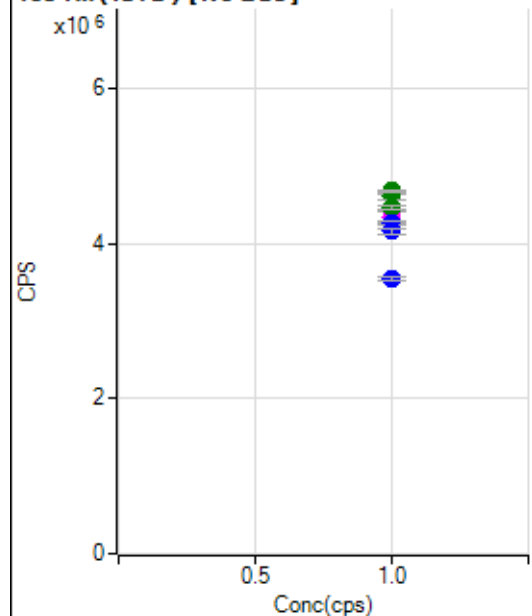
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		201121.77		P	0.5
2	☐	1.000		200876.82		P	1.2
3	☐	1.000		198829.57		P	0.5
4	☐	1.000		181207.19		P	1.5
5	☐	1.000		163798.83		P	16.2
6	☐	1.000		179626.06		P	0.5
7	☐	1.000		174390.31		P	1.3
8	☐	1.000		164541.53		P	0.4

89 Y (ISTD) [No Gas]

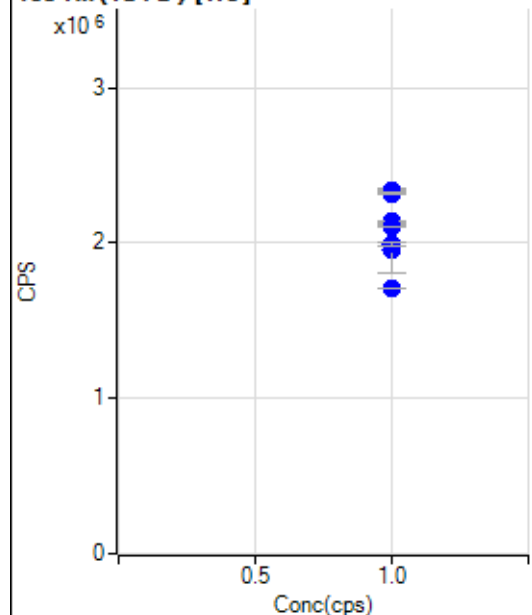
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6955811.70		A	0.1
2	☐	1.000		6843840.38		A	1.4
3	☐	1.000		6893798.16		A	0.7
4	☐	1.000		6440927.61		A	3.1
5	☐	1.000		6697037.33		A	0.3
6	☐	1.000		6504803.59		A	1.0
7	☐	1.000		6527255.46		A	1.5
8	☐	1.000		6022317.62		A	1.1

89 Y (ISTD) [He]

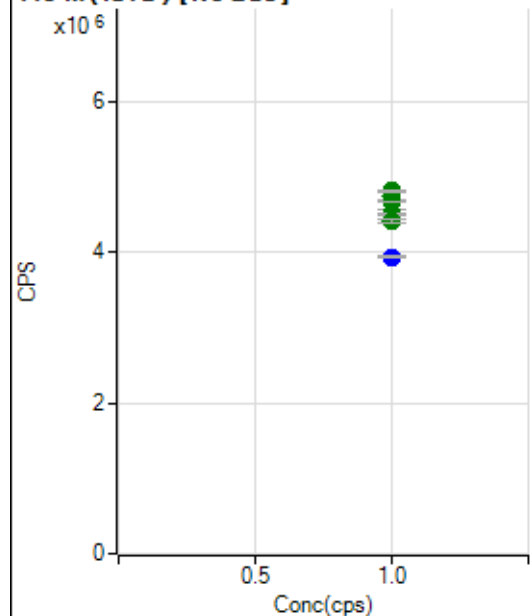
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1061146.02		P	1.3
2	☐	1.000		1060159.57		P	1.2
3	☐	1.000		1051399.91		P	0.5
4	☐	1.000		975316.75		P	1.2
5	☐	1.000		887979.94		P	16.2
6	☐	1.000		966387.28		P	0.5
7	☐	1.000		931126.80		P	0.4
8	☐	1.000		889582.46		P	0.4

103 Rh (ISTD) [No Gas]

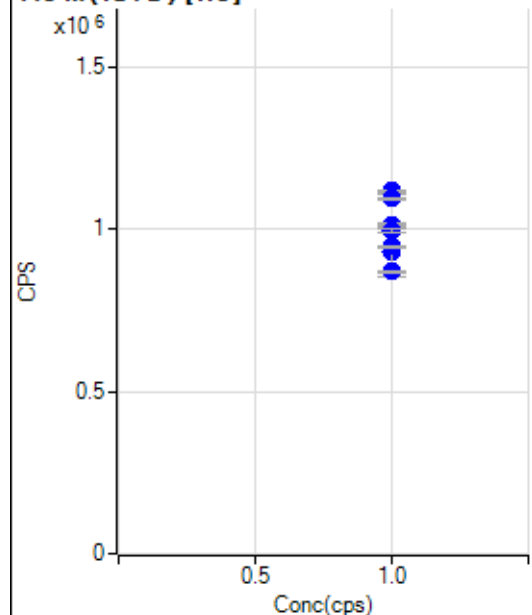
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4676282.70		A	0.1
2	☐	1.000		4601184.39		A	1.4
3	☐	1.000		4671403.36		A	0.2
4	☐	1.000		4341528.40		M	3.5
5	☐	1.000		4471280.39		A	1.1
6	☐	1.000		4259534.38		P	0.9
7	☐	1.000		4158357.60		P	1.6
8	☐	1.000		3545149.86		P	1.0

103 Rh (ISTD) [He]

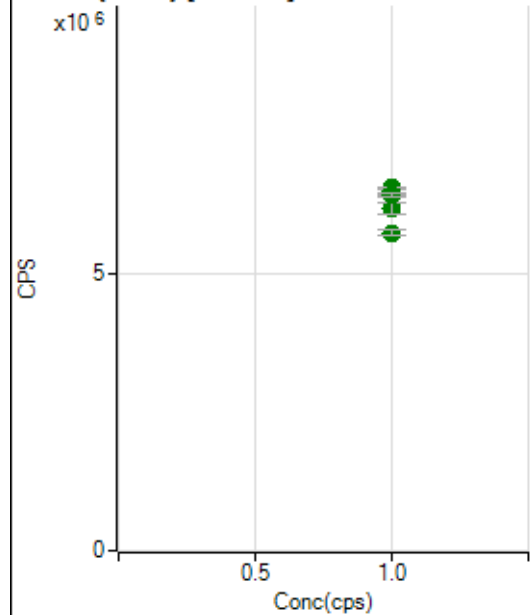
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2336086.74		P	0.9
2	☐	1.000		2335267.67		P	0.3
3	☐	1.000		2321566.79		P	0.7
4	☐	1.000		2138375.89		P	0.8
5	☐	1.000		1961370.82		P	16.2
6	☐	1.000		2105642.70		P	0.4
7	☐	1.000		1992098.89		P	0.9
8	☐	1.000		1709211.71		P	0.5

115 In (ISTD) [No Gas]

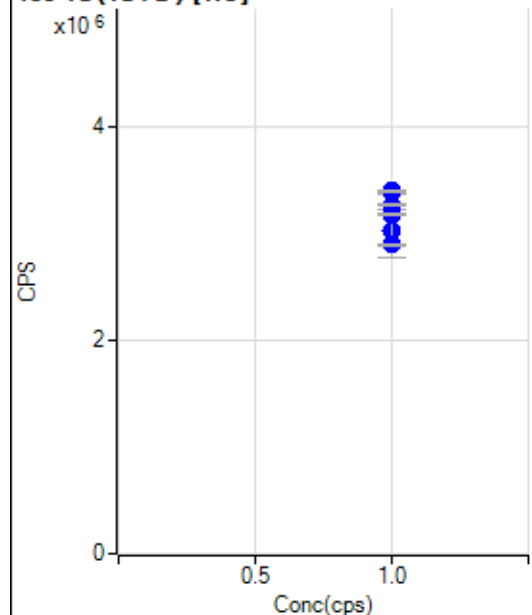
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4821301.46		A	0.7
2	☐	1.000		4760536.58		A	2.4
3	☐	1.000		4814367.13		A	0.5
4	☐	1.000		4509076.68		A	3.1
5	☐	1.000		4669398.73		A	0.1
6	☐	1.000		4513073.76		A	0.2
7	☐	1.000		4426417.93		A	1.2
8	☐	1.000		3943680.38		P	1.0

115 In (ISTD) [He]

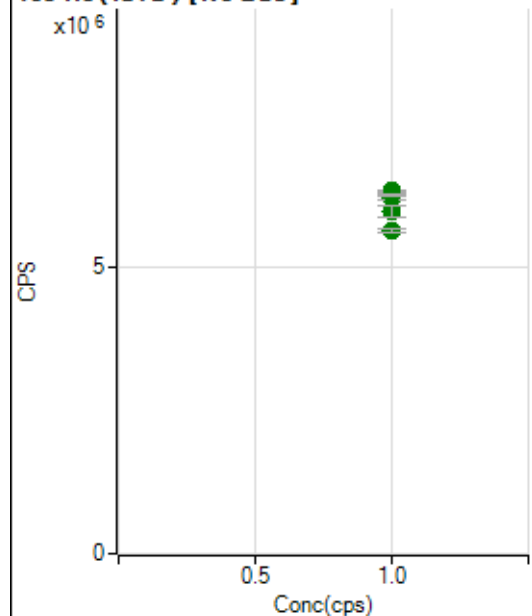
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1111938.44		P	0.4
2	☐	1.000		1119086.70		P	0.6
3	☐	1.000		1095231.89		P	0.8
4	☐	1.000		1016575.20		P	0.3
5	☐	1.000		929702.73		P	16.8
6	☐	1.000		997278.22		P	0.8
7	☐	1.000		948813.55		P	0.6
8	☐	1.000		870185.76		P	0.6

159 Tb (ISTD) [No Gas]

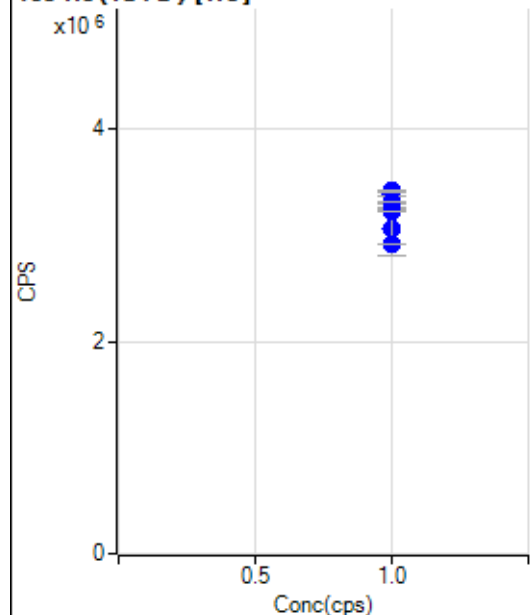
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6551349.49		A	0.6
2	☐	1.000		6489217.19		A	1.2
3	☐	1.000		6533079.90		A	0.4
4	☐	1.000		6180460.05		A	3.5
5	☐	1.000		6560403.31		A	0.2
6	☐	1.000		6430971.85		A	0.2
7	☐	1.000		6427252.12		A	1.2
8	☐	1.000		5749622.62		A	1.5

159 Tb (ISTD) [He]

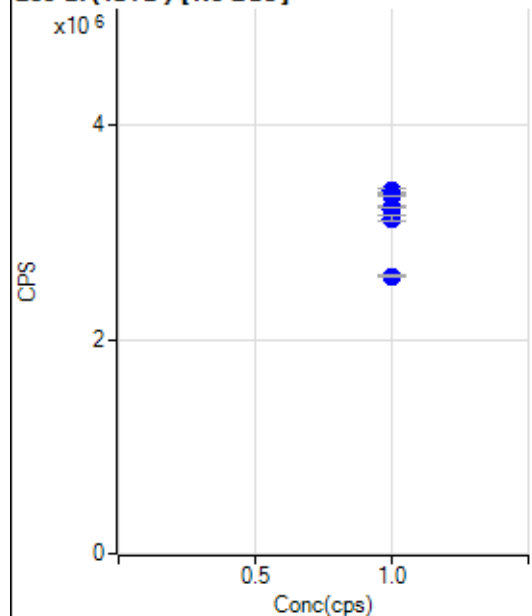
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3390707.28		P	1.2
2	☐	1.000		3382522.28		P	0.5
3	☐	1.000		3397045.85		P	0.5
4	☐	1.000		3222646.58		P	0.3
5	☐	1.000		3022565.58		P	16.9
6	☐	1.000		3263979.78		P	0.3
7	☐	1.000		3174262.59		P	0.5
8	☐	1.000		2890409.54		P	0.5

165 Ho (ISTD) [No Gas]

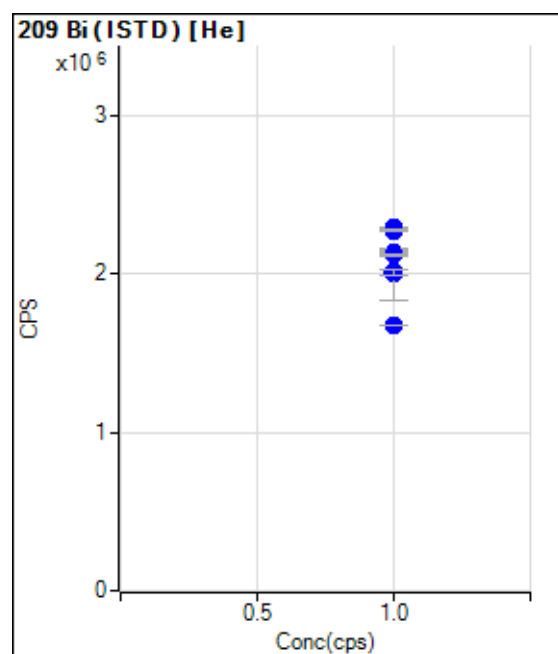
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6307370.32		A	0.6
2	☐	1.000		6220897.67		A	1.6
3	☐	1.000		6285534.64		A	0.6
4	☐	1.000		5975331.08		A	3.8
5	☐	1.000		6333210.43		A	0.8
6	☐	1.000		6273140.51		A	1.3
7	☐	1.000		6268086.99		A	0.6
8	☐	1.000		5634879.86		A	1.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3408977.38		P	0.5
2	☐	1.000		3397087.69		P	1.2
3	☐	1.000		3420339.92		P	0.5
4	☐	1.000		3252790.58		P	0.2
5	☐	1.000		3057290.82		P	16.2
6	☐	1.000		3313939.64		P	0.2
7	☐	1.000		3228582.31		P	0.3
8	☐	1.000		2918023.36		P	0.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3387714.39		P	1.0
2	☐	1.000		3346531.27		P	0.9
3	☐	1.000		3357698.94		P	0.2
4	☐	1.000		3207324.01		P	2.6
5	☐	1.000		3341586.17		P	0.3
6	☐	1.000		3234663.74		P	0.2
7	☐	1.000		3133089.01		P	1.7
8	☐	1.000		2591488.22		P	0.9



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2274682.05		P	0.6
2	☐	1.000		2289158.35		P	0.4
3	☐	1.000		2270325.00		P	0.5
4	☐	1.000		2139815.33		P	0.5
5	☐	1.000		1996426.54		P	16.3
6	☐	1.000		2117347.26		P	0.9
7	☐	1.000		2012049.87		P	1.6
8	☐	1.000		1675681.92		P	0.5

US EPA Tune Check Sample Report

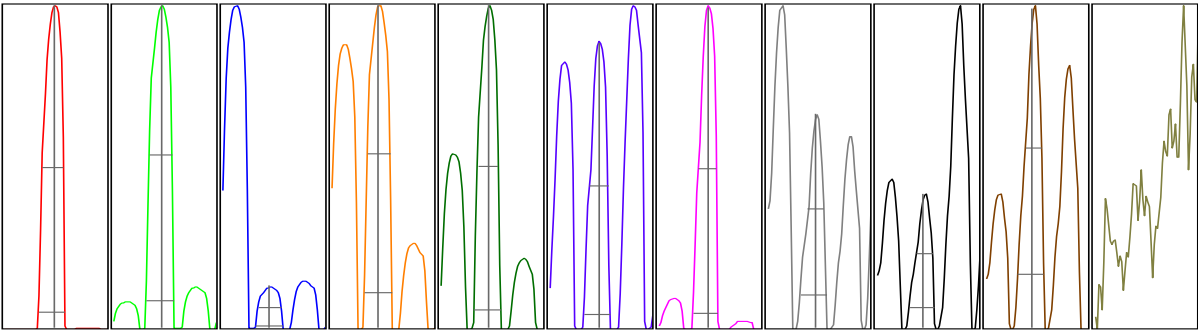
Batch Folder D:\ICP-MS Data\P7112519-MS2.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	10662	1.12	5.00	
24	777627	1.02	5.00	
25	103565	1.21	5.00	
26	114916	1.23	5.00	
59	57602	0.93	5.00	
113	6574	1.12	5.00	
115	77709	1.48	5.00	
206	16015	1.12	5.00	
207	15481	1.79	5.00	
208	34650	1.92	5.00	
220	67	5.22		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	10639	10528	10574	10776	10795
24	781777	772102	766434	783493	784330
25	103715	103150	101672	104330	104960
26	115149	113727	113228	115915	116558
59	57901	57027	57020	57933	58126
113	6547	6539	6485	6641	6660
115	77308	77272	76258	78544	79163
206	15989	15797	15898	16172	16222
207	15490	15162	15312	15544	15894
208	34538	33850	34208	35249	35404
220	68	69	71	68	62

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	17976	9.00	8.9 - 9.1		0.772	0.900	
24	1226860	23.95	23.9 - 24.1		0.810	0.900	
25	160519	24.90	24.9 - 25.1		0.789	0.900	
26	182430	25.90	25.9 - 26.1		0.803	0.900	
59	99813	58.95	58.9 - 59.1		0.778	0.900	
113	12512	113.00	112.9 - 113.1		0.766	0.900	
115	147683	115.00	114.9 - 115.1		0.726	0.900	
206	31540	205.95	205.9 - 206.1		0.756	0.900	
207	28287	206.90	206.9 - 207.1		0.722	0.900	
208	67264	207.90	207.9 - 208.1		0.751	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	7.7	V	Deflect	14.4	V
Extract 2	-130.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	140	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	14127	0.52	
89	208269	0.59	
205	15769	0.35	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	14033	14129	14085	14229	14157
89	208562	206290	209658	208192	208640
205	15773	15675	15813	15790	15794

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	8.3	V	Deflect	1.8	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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			