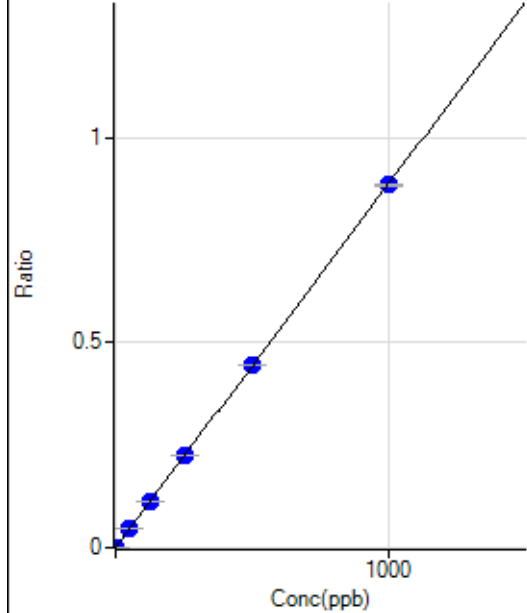


Batch Folder: D:\ICP-MS Data\P7063017-MS .b\
Analysis File: P7063017-MS .batch.bin
DA Date-Time: 2017-06-30 17:25:08
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P7063017-MS.D	S00	2017-06-30 11:13:48
2			
3	005CALS P7063017-MS.D	S02	2017-06-30 11:21:47
4	006CALS P7063017-MS.D	S03	2017-06-30 11:25:33
5	007CALS P7063017-MS.D	S04	2017-06-30 11:29:33
6	008CALS P7063017-MS.D	S05	2017-06-30 11:33:14
7	009CALS P7063017-MS.D	S06	2017-06-30 11:36:53
8	010CALS P7063017-MS.D	S07	2017-06-30 11:40:28
9	011CALS P7063017-MS.D	S08	2017-06-30 11:43:57

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	124.08	0.0001	P	35.0
2	☐	0.100					
3	☐	1.000	0.988	1700.15	0.0009	P	2.7
4	☐	50.000	50.826	80510.91	0.0451	P	0.4
5	☐	125.000	126.325	198190.87	0.1121	P	0.7
6	☐	250.000	252.873	388230.26	0.2243	P	0.5
7	☐	500.000	503.062	745018.85	0.4462	P	0.3
8	☐	1000.000	997.544	1466211.80	0.8847	P	0.4
9	☐			1216.76	0.0007	P	6.9

$$y = 8.8676E-004 * x + 6.7562E-005$$

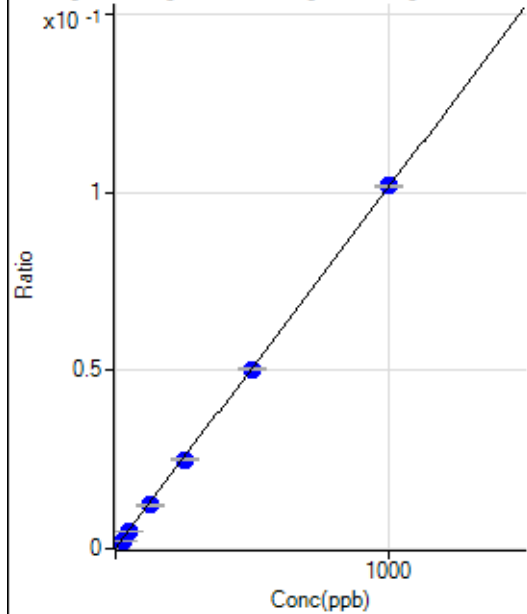
$$R = 1.0000$$

$$DL = 0.07999$$

$$BEC = 0.07619$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	158.34	0.0001	P	47.6
2	☐	2.500					
3	☐	25.000	19.900	3786.74	0.0021	P	4.0
4	☐	50.000	49.001	9011.36	0.0051	P	2.4
5	☐	125.000	119.744	21613.39	0.0122	P	4.8
6	☐	250.000	246.262	43346.18	0.0250	P	1.3
7	☐	500.000	496.418	84155.88	0.0504	P	0.7
8	☐	1000.000	1003.560	168713.75	0.1018	P	0.8
9	☐			9706.29	0.0060	P	10.4

$$y = 1.0135E-004 * x + 8.6293E-005$$

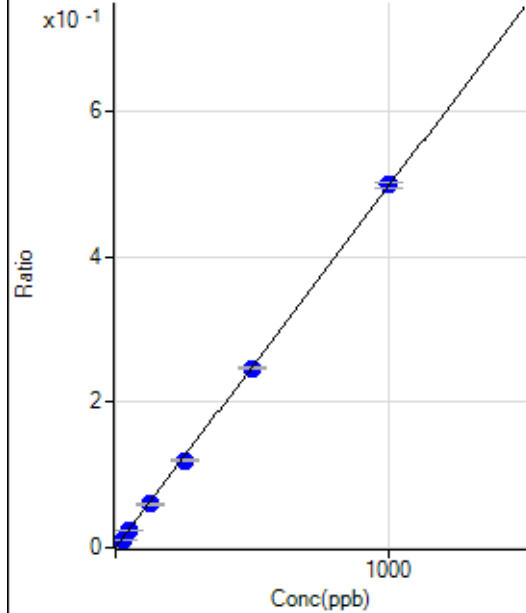
$$R = 1.0000$$

$$DL = 1.217$$

$$BEC = 0.8515$$

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	677.82	0.0004	P	5.9
2	☐	2.500					
3	☐	25.000	21.023	19465.98	0.0108	P	3.2
4	☐	50.000	48.451	43563.80	0.0244	P	2.1
5	☐	125.000	120.554	106479.43	0.0602	P	2.3
6	☐	250.000	241.613	208255.61	0.1203	P	2.0
7	☐	500.000	496.102	411913.77	0.2467	P	1.3
8	☐	1000.000	1004.778	827423.66	0.4992	P	1.4
9	☐			50251.50	0.0308	P	8.3

$$y = 4.9649\text{E-}004 * x + 3.6899\text{E-}004$$

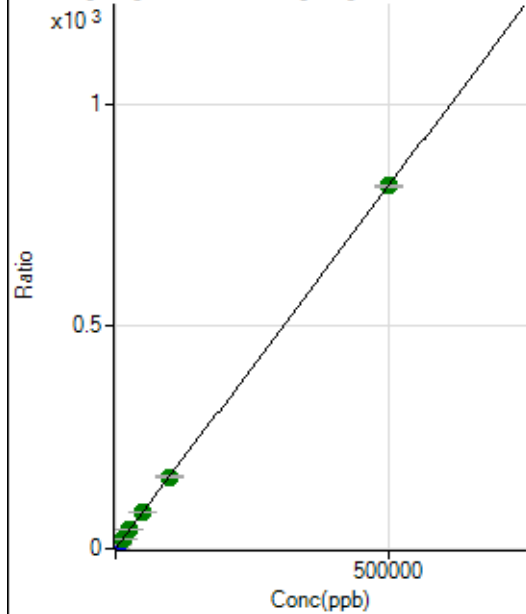
$$R = 1.0000$$

$$DL = 0.1308$$

$$BEC = 0.7432$$

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	14012.59	0.0583	P	1.6
2	☐	50.000					
3	☐	500.000	474.632	199449.66	0.8324	P	0.8
4	☐	5000.000	5243.845	2015103.26	8.6105	P	0.4
5	☐	12500.000	12929.929	4921944.86	21.1458	A	0.5
6	☐	25000.000	25652.948	9666361.76	41.8959	A	1.2
7	☐	50000.000	50587.207	18977173.17	82.5614	A	0.6
8	☐	100000.00	99338.876	37939854.67	162.0709	A	0.7
9	☐	500000.00	500027.69	199394180.8	815.5578	A	0.5

$$y = 0.0016 * x + 0.0583$$

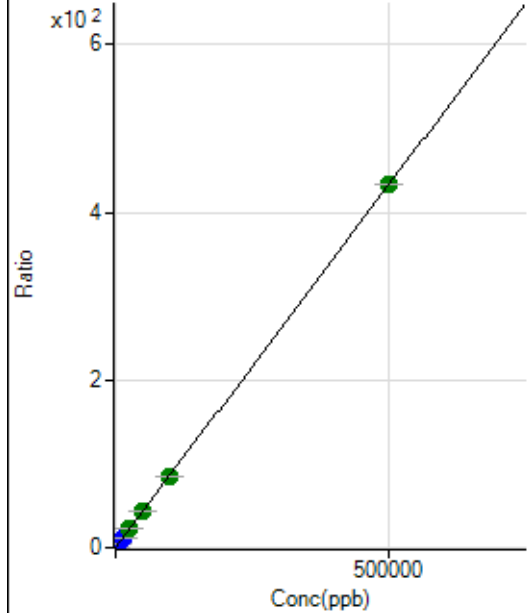
$$R = 1.0000$$

$$DL = 1.694$$

$$BEC = 35.75$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2125.24	0.0088	P	8.9
2	☐	50.000					
3	☐	500.000	463.207	98067.25	0.4093	P	0.4
4	☐	5000.000	5199.490	1053937.01	4.5035	P	0.4
5	☐	12500.000	12985.160	2614776.36	11.2337	P	0.1
6	☐	25000.000	25577.988	5103360.96	22.1194	A	1.4
7	☐	50000.000	50111.083	9958911.68	43.3267	A	0.5
8	☐	100000.00	97940.728	19821224.92	84.6723	A	0.8
9	☐	500000.00	500357.76	105746785.0	432.5360	A	0.1

$$y = 8.6444\text{E-}004 * x + 0.0088$$

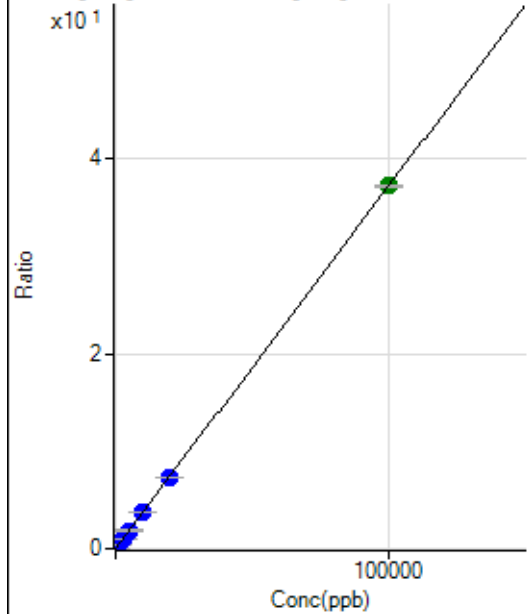
$$R = 1.0000$$

$$DL = 2.727$$

$$BEC = 10.23$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0002	P	79.9
2	☐	2.000					
3	☐	20.000	17.216	1580.71	0.0066	P	9.5
4	☐	1000.000	1016.031	88439.13	0.3779	P	1.2
5	☐	2500.000	2535.499	219435.34	0.9427	P	0.5
6	☐	5000.000	5034.559	431852.92	1.8717	P	1.2
7	☐	10000.000	9971.183	852052.64	3.7069	P	0.5
8	☐	20000.000	19545.904	1700971.83	7.2662	P	0.8
9	☐	100000.00	100090.92	9096426.51	37.2081	A	0.6

$$y = 3.7174\text{E-}004 * x + 1.9715\text{E-}004$$

$$R = 1.0000$$

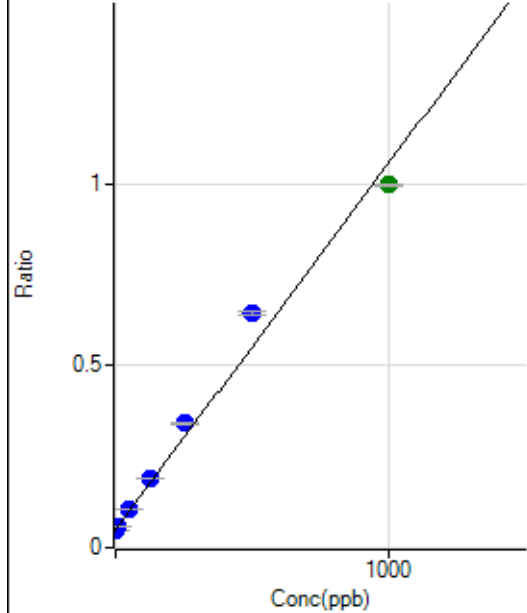
$$DL = 1.271$$

$$BEC = 0.5303$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD : 45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	262439.96	0.0494	P	2.5
2	☐	1.000					
3	☐	10.000	9.450	310970.35	0.0589	P	1.8
4	☐	50.000	57.203	555307.00	0.1070	P	0.9
5	☐	125.000	141.374	994759.31	0.1917	P	0.7
6	☐	250.000	290.681	1738618.94	0.3420	P	0.9
7	☐	500.000	592.088	3198253.56	0.6455	P	1.4
8	☐	1000.000	941.384	5061210.40	0.9971	A	0.7
9	☐			372337.74	0.0724	P	0.9

$$y = 0.0010 * x + 0.0494$$

$$R = 0.9923$$

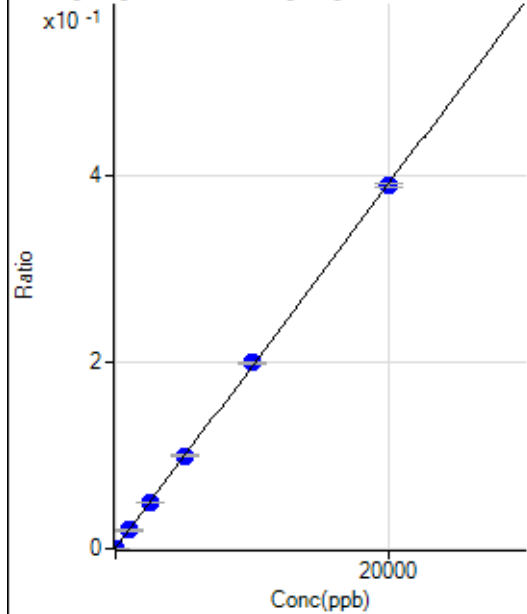
$$DL = 3.639$$

$$BEC = 49.04$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-1.226	122.23	0.0005	P	44.0
2	☐	0.000					
3	☐	0.000	1.226	133.34	0.0006	P	6.8
4	☐	1000.000	978.300	4584.23	0.0196	P	2.9
5	☐	2500.000	2497.482	11446.59	0.0492	P	0.4
6	☐	5000.000	5061.683	22871.23	0.0991	P	1.8
7	☐	10000.000	10184.051	45715.50	0.1989	P	0.9
8	☐	20000.000	19893.953	90831.72	0.3880	P	1.1
9	☐			147.23	0.0006	P	16.0

$$y = 1.9477E-005 * x + 5.3273E-004$$

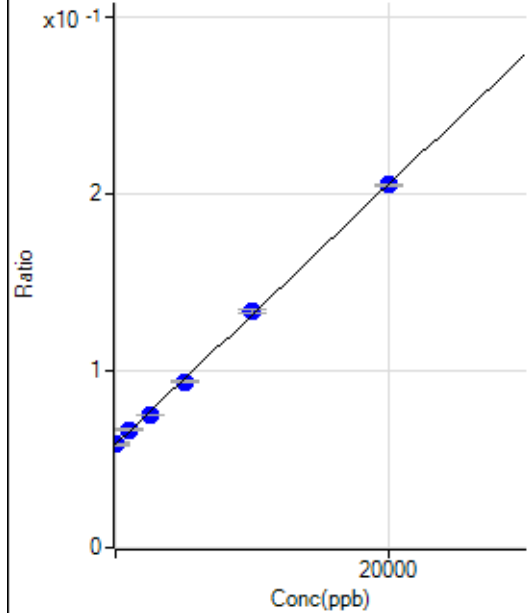
$$R = 0.9999$$

$$DL = 20.16$$

$$BEC = 27.35$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	22.101	311389.39	0.0586	P	2.7
2	☐	0.000					
3	☐	0.000	-22.101	307637.75	0.0583	P	2.2
4	☐	1000.000	1154.142	347471.57	0.0669	P	0.7
5	☐	2500.000	2277.179	390262.99	0.0752	P	0.6
6	☐	5000.000	4832.650	478071.79	0.0940	P	0.5
7	☐	10000.000	10241.689	663550.39	0.1339	P	1.3
8	☐	20000.000	19941.139	1042625.96	0.2054	P	0.5
9	☐			295925.21	0.0576	P	0.2

$$y = 7.3713\text{E-}006 * x + 0.0584$$

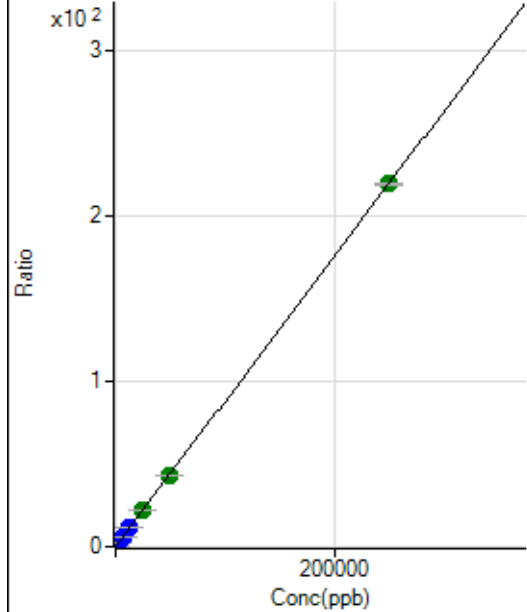
$$R = 0.9997$$

$$DL = 587$$

$$BEC = 7926$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	29510.74	0.1228	P	1.7
2	☐	50.000					
3	☐	500.000	450.138	124050.57	0.5177	P	0.1
4	☐	2500.000	2508.791	543826.41	2.3238	P	0.6
5	☐	6250.000	6309.706	1317052.25	5.6584	P	0.6
6	☐	12500.000	12588.807	2576462.14	11.1671	P	1.4
7	☐	25000.000	24825.017	5034308.10	21.9021	A	0.5
8	☐	50000.000	48735.678	10037821.49	42.8792	A	0.5
9	☐	250000.00	250264.44	53708415.78	219.6831	A	0.3

$$y = 8.7731\text{E-}004 * x + 0.1228$$

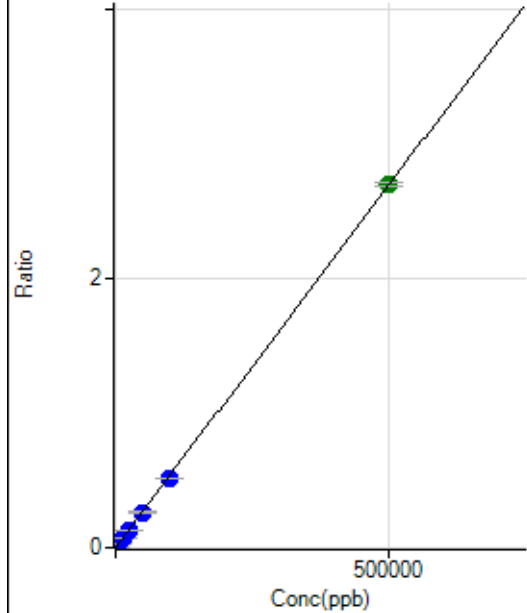
$$R = 1.0000$$

$$DL = 6.962$$

$$BEC = 139.9$$

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	172.23	0.0000	P	19.3
2	☐	50.000					
3	☐	500.000	439.615	12669.82	0.0024	P	4.5
4	☐	5000.000	4937.192	138223.88	0.0266	P	0.4
5	☐	12500.000	12077.986	337728.00	0.0651	P	0.7
6	☐	25000.000	24338.585	666565.60	0.1311	P	0.4
7	☐	50000.000	48964.897	1306890.91	0.2638	P	1.5
8	☐	100000.00	96255.387	2631609.46	0.5185	P	0.2
9	☐	500000.00	500896.74	13866876.35	2.6979	A	1.1

$$y = 5.3860\text{E-}006 * x + 3.2437\text{E-}005$$

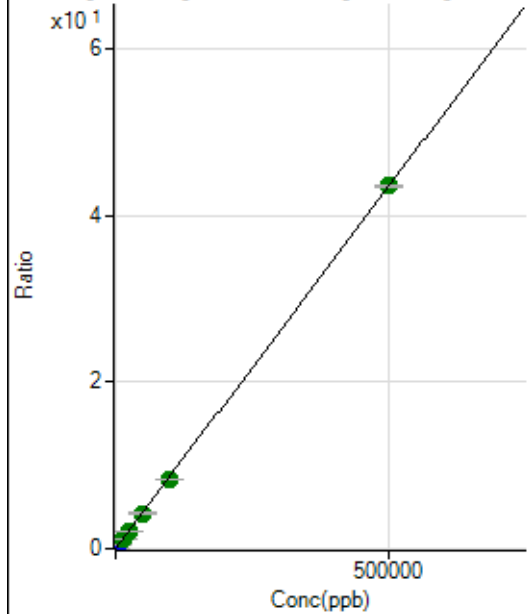
$$R = 1.0000$$

$$DL = 3.484$$

$$BEC = 6.022$$

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	6543.50	0.0012	P	1.2
2	☐	50.000					
3	☐	500.000	437.251	207124.48	0.0392	P	2.3
4	☐	5000.000	4942.257	2235912.27	0.4307	P	0.6
5	☐	12500.000	12150.086	5484747.09	1.0570	A	0.5
6	☐	25000.000	24326.160	10751833.14	2.1150	A	0.3
7	☐	50000.000	48888.601	21054853.08	4.2493	A	1.6
8	☐	100000.00	95901.051	42303749.90	8.3344	A	0.5
9	☐	500000.00	500974.01	223754791.1	43.5328	A	0.6

$$y = 8.6894\text{E-}005 * x + 0.0012$$

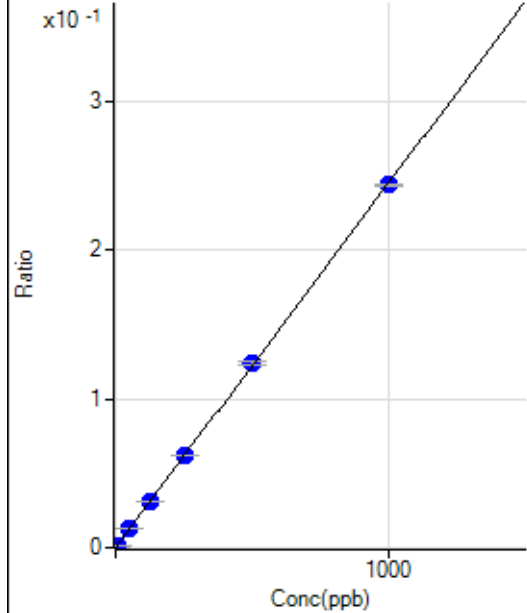
$$R = 1.0000$$

$$DL = 0.5227$$

$$BEC = 14.16$$

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	83.34	0.0000	P	2.2
2	☐	0.500					
3	☐	5.000	4.441	5815.27	0.0011	P	6.3
4	☐	50.000	50.591	64302.17	0.0124	P	1.8
5	☐	125.000	125.401	159174.99	0.0307	P	1.2
6	☐	250.000	253.248	314846.35	0.0619	P	0.2
7	☐	500.000	506.887	614134.73	0.1240	P	2.1
8	☐	1000.000	995.667	1235739.96	0.2435	P	0.2
9	☐			2080.79	0.0004	P	4.0

$$y = 2.4450\text{E-}004 * x + 1.5679\text{E-}005$$

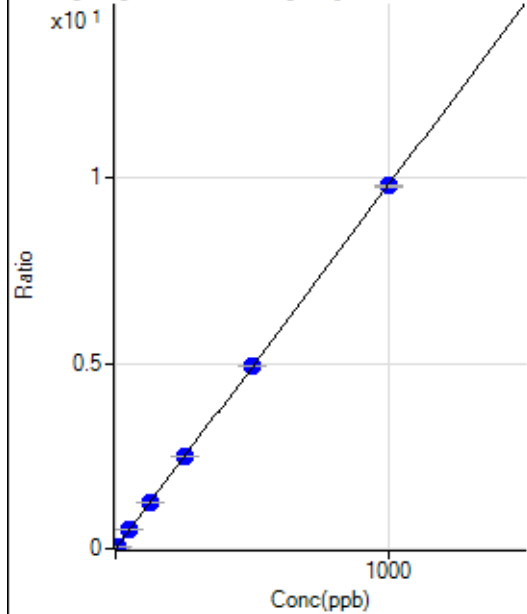
$$R = 1.0000$$

$$DL = 0.004189$$

$$BEC = 0.06412$$

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	20.00	0.0001	P	43.4
2	☐	0.500					
3	☐	5.000	4.623	10894.17	0.0455	P	0.6
4	☐	50.000	50.817	116747.30	0.4989	P	0.5
5	☐	125.000	127.713	291791.86	1.2536	P	0.3
6	☐	250.000	252.820	572562.23	2.4816	P	0.8
7	☐	500.000	503.325	1135570.55	4.9403	P	0.2
8	☐	1000.000	997.255	2291398.28	9.7883	P	0.2
9	☐			1321.19	0.0054	P	3.9

$$y = 0.0098 * x + 8.3066\text{E-}005$$

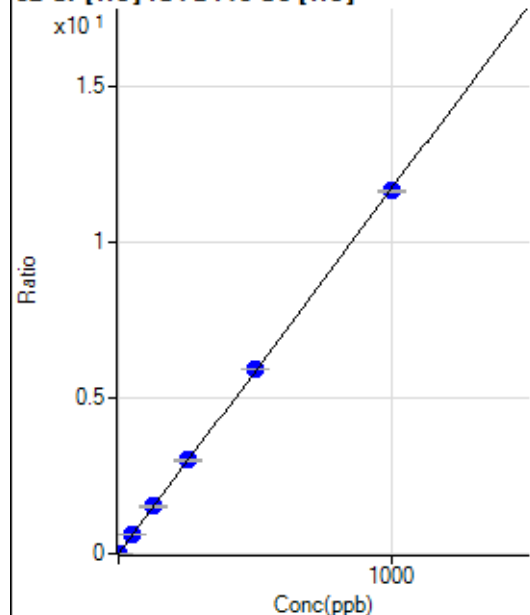
$$R = 1.0000$$

$$DL = 0.01103$$

$$BEC = 0.008463$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	447.79	0.0019	P	3.3
2	☐	0.200					
3	☐	2.000	2.012	6094.69	0.0254	P	1.0
4	☐	50.000	51.788	142410.31	0.6085	P	0.1
5	☐	125.000	129.119	352487.58	1.5144	P	0.5
6	☐	250.000	256.126	692674.82	3.0021	P	0.9
7	☐	500.000	506.963	1365456.52	5.9405	P	0.4
8	☐	1000.000	994.383	2727247.01	11.6501	P	0.3
9	☐			68136.61	0.2787	P	0.9

$$y = 0.0117 * x + 0.0019$$

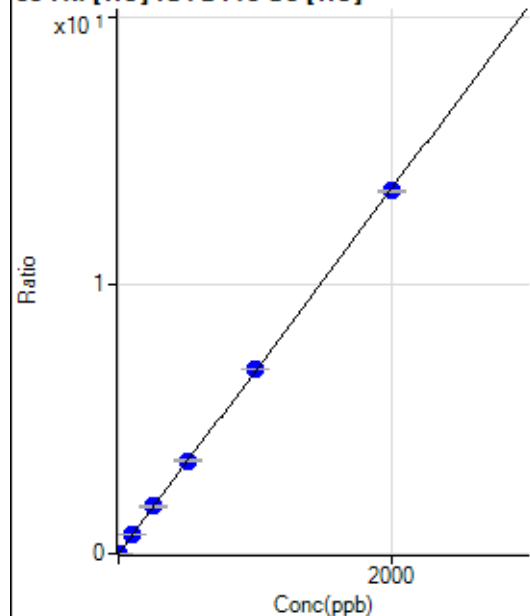
$$R = 0.9999$$

$$DL = 0.01568$$

$$BEC = 0.159$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	486.68	0.0020	P	14.2
2	☐	0.100					
3	☐	1.000	0.897	1944.60	0.0081	P	4.1
4	☐	100.000	103.353	164746.67	0.7040	P	0.1
5	☐	250.000	258.304	408806.23	1.7563	P	0.2
6	☐	500.000	510.346	800192.21	3.4681	P	0.7
7	☐	1000.000	1013.590	1582785.05	6.8859	P	0.3
8	☐	2000.000	1989.413	3163427.83	13.5133	P	0.3
9	☐			17199.18	0.0703	P	0.7

$$y = 0.0068 * x + 0.0020$$

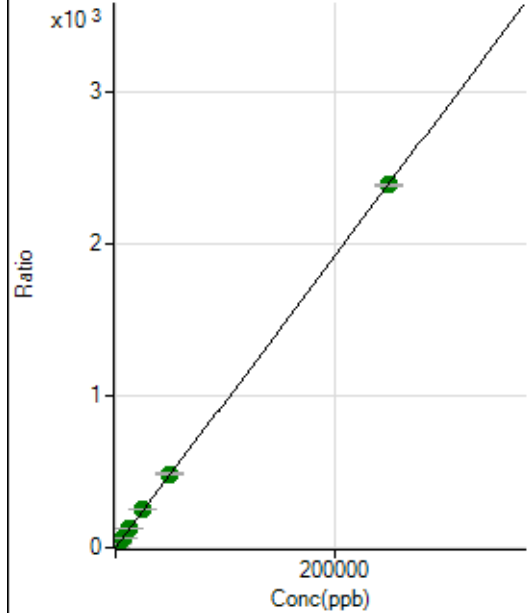
$$R = 0.9999$$

$$DL = 0.1273$$

$$BEC = 0.2979$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5006.53	0.0208	P	3.4
2	☐	5.000					
3	☐	50.000	47.757	114267.13	0.4769	P	0.4
4	☐	2500.000	2680.069	5994286.71	25.6135	A	0.3
5	☐	6250.000	6671.012	14832515.84	63.7239	A	0.6
6	☐	12500.000	13202.413	29093305.74	126.0939	A	0.8
7	☐	25000.000	26070.960	57230029.52	248.9788	A	0.2
8	☐	50000.000	50910.372	113811375.6	486.1764	A	0.4
9	☐	250000.00	249663.38	582858990.8	2,384.117	A	0.5

$$y = 0.0095 * x + 0.0208$$

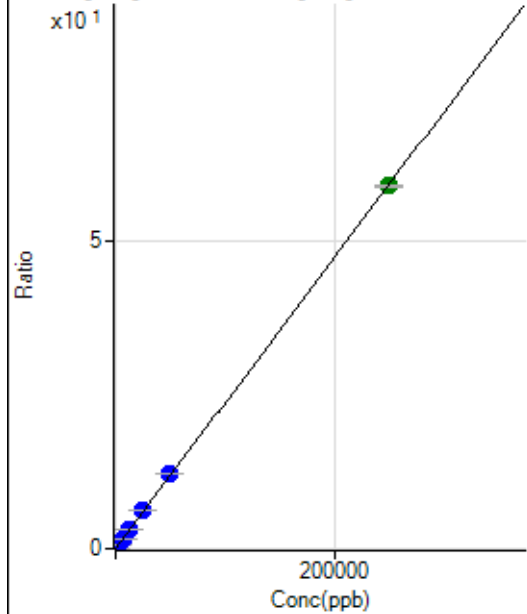
$$R = 1.0000$$

$$DL = 0.2206$$

$$BEC = 2.181$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	174.08	0.0007	P	24.6
2	☐	5.000					
3	☐	50.000	46.863	2820.72	0.0118	P	2.5
4	☐	2500.000	2687.944	148453.50	0.6344	P	1.2
5	☐	6250.000	6668.362	366054.36	1.5727	P	0.2
6	☐	12500.000	13261.030	721424.12	3.1267	P	0.9
7	☐	25000.000	26222.740	1420995.32	6.1822	P	0.7
8	☐	50000.000	51329.057	2832654.46	12.1005	P	0.7
9	☐	250000.00	249561.52	14382444.65	58.8297	A	0.6

$$y = 2.3573E-004 * x + 7.2498E-004$$

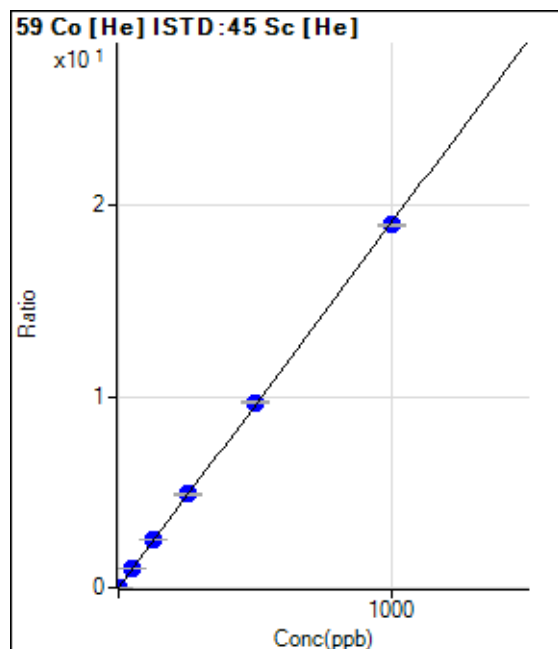
$$R = 1.0000$$

$$DL = 2.266$$

$$BEC = 3.075$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	204.45	0.0009	P	9.3
2	☐	0.100					
3	☐	1.000	0.930	4454.09	0.0186	P	2.9
4	☐	50.000	52.287	233732.13	0.9987	P	0.4
5	☐	125.000	129.981	577594.83	2.4815	P	0.1
6	☐	250.000	257.069	1132119.43	4.9069	P	1.5
7	☐	500.000	507.079	2224596.67	9.6783	P	0.6
8	☐	1000.000	993.956	4440780.14	18.9701	P	0.8
9	☐			7928.93	0.0324	P	0.7

$$y = 0.0191 * x + 8.5071E-004$$

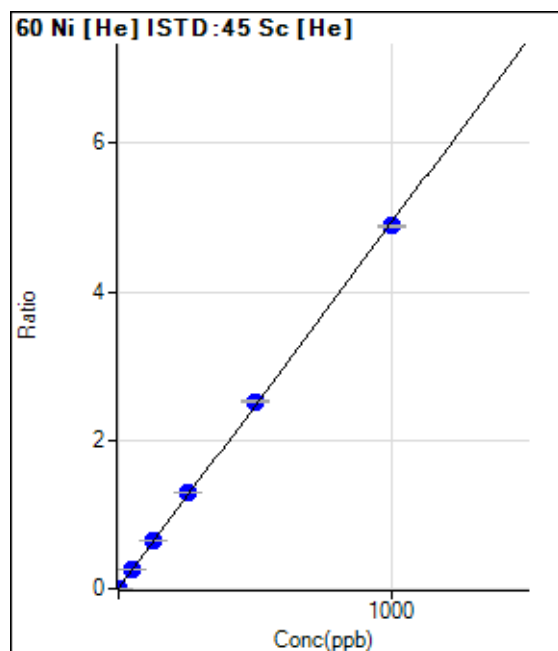
$$R = 0.9999$$

$$DL = 0.0124$$

$$BEC = 0.04458$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	874.49	0.0036	P	3.0
2	☐	0.100					
3	☐	1.000	0.860	1886.82	0.0079	P	2.9
4	☐	50.000	53.421	62469.04	0.2669	P	0.9
5	☐	125.000	132.357	152681.50	0.6560	P	0.4
6	☐	250.000	261.219	297881.33	1.2910	P	0.7
7	☐	500.000	510.700	579368.57	2.5206	P	0.8
8	☐	1000.000	990.755	1143903.12	4.8865	P	0.8
9	☐			17743.17	0.0726	P	0.4

$$y = 0.0049 * x + 0.0036$$

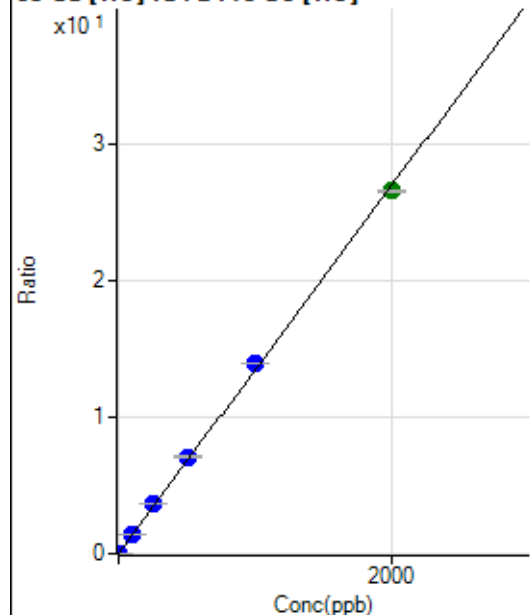
$$R = 0.9998$$

$$DL = 0.0664$$

$$BEC = 0.7381$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1008.94	0.0042	P	6.3
2	☐	0.200					
3	☐	2.000	2.258	8304.72	0.0347	P	3.9
4	☐	100.000	108.298	342817.94	1.4649	P	0.6
5	☐	250.000	267.796	841687.18	3.6161	P	0.2
6	☐	500.000	527.445	1642296.14	7.1181	P	1.2
7	☐	1000.000	1036.636	3214725.72	13.9858	P	0.4
8	☐	2000.000	1972.181	6227840.67	26.6039	A	0.6
9	☐			14112.54	0.0577	P	0.4

$$y = 0.0135 * x + 0.0042$$

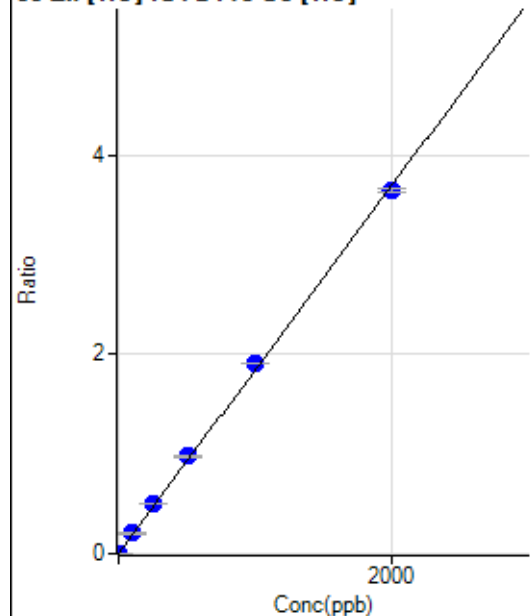
$$R = 0.9996$$

$$DL = 0.05913$$

$$BEC = 0.3113$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	112.22	0.0005	P	30.3
2	☐	0.200					
3	☐	2.000	2.019	1004.49	0.0042	P	7.2
4	☐	100.000	109.952	47563.98	0.2032	P	1.2
5	☐	250.000	269.264	115694.78	0.4971	P	0.4
6	☐	500.000	530.915	226010.05	0.9796	P	1.6
7	☐	1000.000	1032.601	437835.21	1.9048	P	0.4
8	☐	2000.000	1973.065	851923.63	3.6392	P	1.0
9	☐			5439.99	0.0222	P	2.4

$$y = 0.0018 * x + 4.6742E-004$$

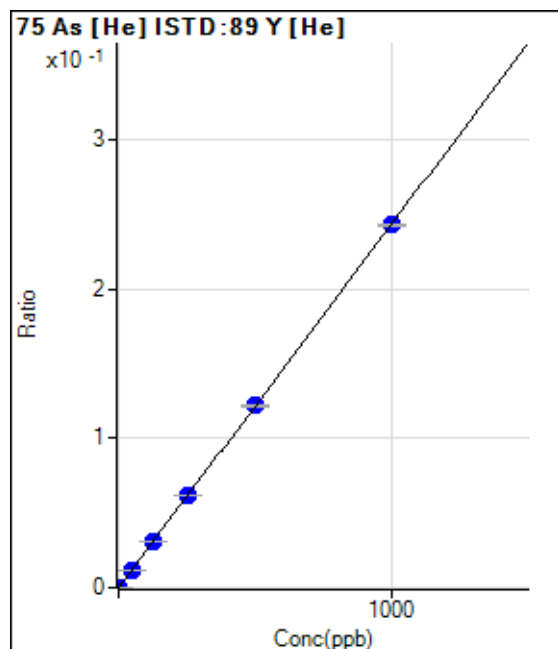
$$R = 0.9997$$

$$DL = 0.2307$$

$$BEC = 0.2535$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.81	0.0000	P	12.7
2	☐	0.100					
3	☐	1.000	0.842	293.83	0.0002	P	11.2
4	☐	50.000	50.043	16345.06	0.0122	P	0.6
5	☐	125.000	127.575	41038.54	0.0311	P	0.6
6	☐	250.000	253.594	80863.16	0.0618	P	1.6
7	☐	500.000	500.728	158826.42	0.1221	P	0.5
8	☐	1000.000	998.414	317883.35	0.2434	P	0.6
9	☐			257.41	0.0002	P	3.9

$$y = 2.4381\text{E-}004 * x + 1.0786\text{E-}005$$

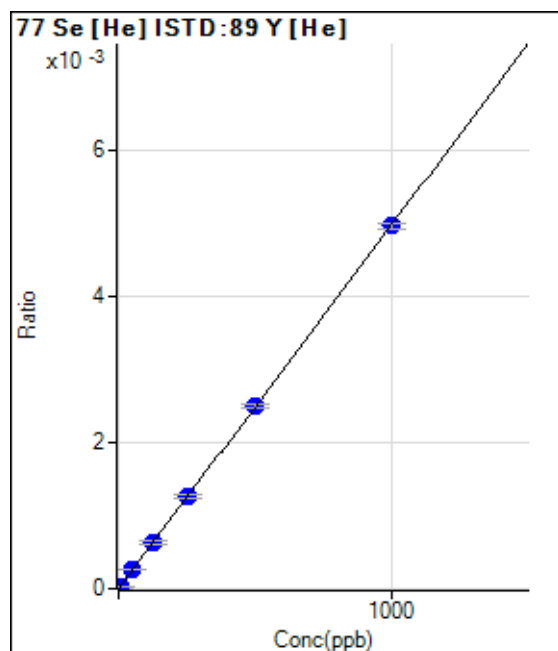
$$R = 1.0000$$

$$DL = 0.01682$$

$$BEC = 0.04424$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	0.500					
3	☐	5.000	4.420	31.11	0.0000	P	49.1
4	☐	50.000	52.685	352.23	0.0003	P	1.0
5	☐	125.000	127.568	838.93	0.0006	P	5.7
6	☐	250.000	253.585	1652.35	0.0013	P	5.4
7	☐	500.000	501.981	3252.64	0.0025	P	1.6
8	☐	1000.000	997.661	6488.22	0.0050	P	1.7
9	☐			4.45	0.0000	P	86.6

$$y = 4.9796\text{E-}006 * x + 8.1082\text{E-}007$$

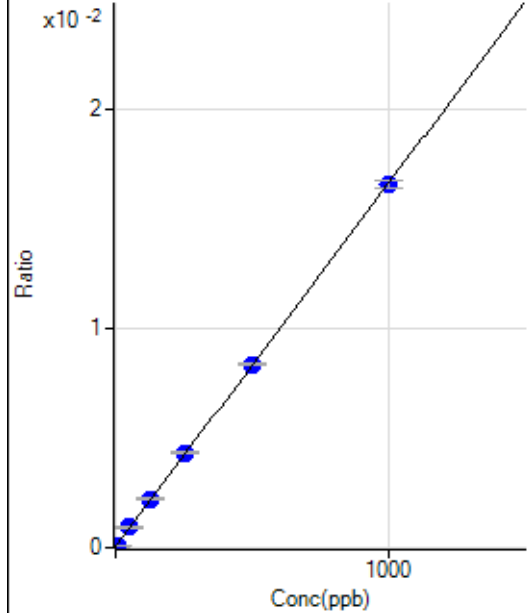
$$R = 1.0000$$

$$DL = 0.8461$$

$$BEC = 0.1628$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	58.64	0.0000	P	6.8
2	☐	0.500					
3	☐	5.000	4.595	161.73	0.0001	P	20.2
4	☐	50.000	53.636	1248.83	0.0009	P	4.3
5	☐	125.000	130.169	2905.88	0.0022	P	3.8
6	☐	250.000	257.540	5644.97	0.0043	P	2.6
7	☐	500.000	502.682	10909.11	0.0084	P	1.1
8	☐	1000.000	995.948	21640.33	0.0166	P	2.2
9	☐			92.60	0.0001	P	17.7

$$y = 1.6598\text{E-}005 * x + 4.2700\text{E-}005$$

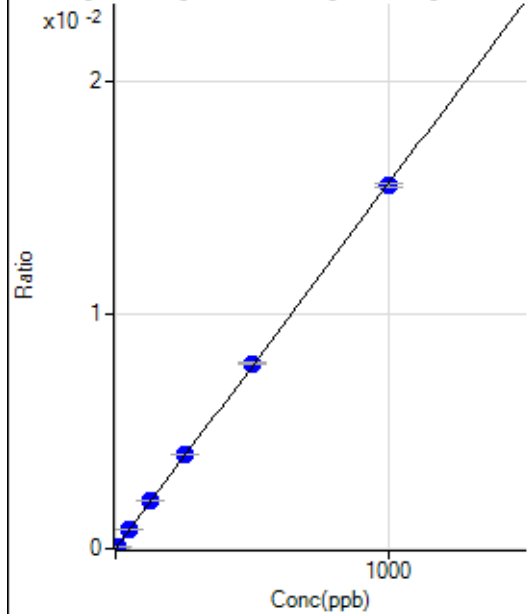
$$R = 1.0000$$

$$DL = 0.5252$$

$$BEC = 2.573$$

Weight: <None>

Min Conc: 0

82 Se [No Gas] ISTD:89 Y [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-22.03	0.0000	P	-196.
2	☐	0.500					
3	☐	5.000	5.098	730.56	0.0001	P	13.4
4	☐	50.000	52.451	7636.91	0.0008	P	2.1
5	☐	125.000	131.509	19004.69	0.0020	P	1.1
6	☐	250.000	257.415	36662.58	0.0040	P	0.4
7	☐	500.000	506.806	70586.29	0.0079	P	0.8
8	☐	1000.000	993.806	139093.89	0.0155	P	1.1
9	☐			166.96	0.0000	P	53.9

$$y = 1.5603\text{E-}005 * x - 2.2482\text{E-}006$$

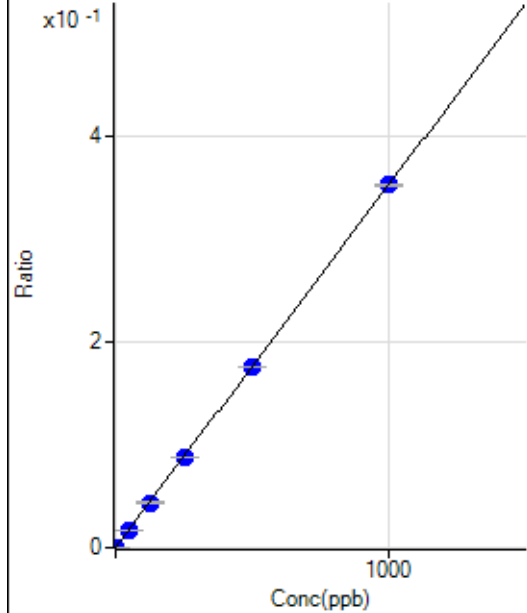
$$R = 0.9999$$

$$DL = 0.8472$$

$$BEC = -0.1441$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1714.06	0.0002	P	3.0
2	☐	0.100					
3	☐	1.000	0.954	4848.24	0.0005	P	5.9
4	☐	50.000	49.336	164250.56	0.0176	P	1.0
5	☐	125.000	124.149	407033.28	0.0439	P	1.7
6	☐	250.000	249.667	804689.75	0.0881	P	0.6
7	☐	500.000	499.076	1570999.03	0.1759	P	0.4
8	☐	1000.000	1000.685	3163378.32	0.3526	P	0.5
9	☐			107380.16	0.0122	P	1.2

$$y = 3.5218\text{E-}004 * x + 1.7758\text{E-}004$$

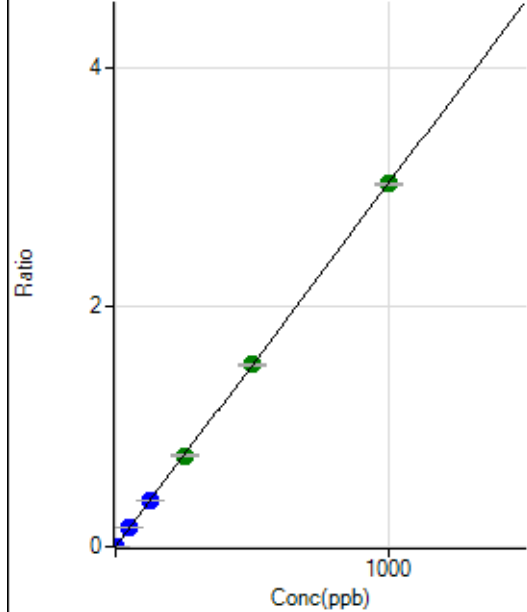
$$R = 1.0000$$

$$DL = 0.04547$$

$$BEC = 0.5042$$

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	233.34	0.0000	P	3.4
2	☐	0.100					
3	☐	1.000	0.936	27034.78	0.0029	P	1.8
4	☐	50.000	50.456	1432317.75	0.1531	P	0.7
5	☐	125.000	126.691	3563140.84	0.3843	P	1.2
6	☐	250.000	251.422	6965120.81	0.7626	A	0.7
7	☐	500.000	501.320	13577548.22	1.5206	A	0.7
8	☐	1000.000	998.751	27177949.22	3.0293	A	0.4
9	☐			914531.65	0.1038	P	0.4

$$y = 0.0030 * x + 2.4169\text{E-}005$$

$$R = 1.0000$$

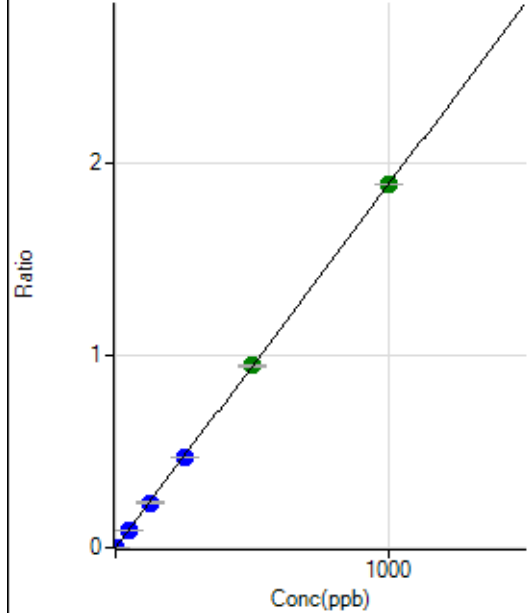
$$DL = 0.0008061$$

$$BEC = 0.007968$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	591.71	0.0001	P	26.6
2	☐	0.100					
3	☐	1.000	0.810	15019.60	0.0016	P	1.4
4	☐	50.000	48.882	864267.53	0.0924	P	0.3
5	☐	125.000	124.129	2173784.27	0.2344	P	0.6
6	☐	250.000	251.013	4329245.58	0.4740	P	0.3
7	☐	500.000	500.983	8446671.63	0.9460	A	0.5
8	☐	1000.000	999.420	16930391.53	1.8871	A	0.1
9	☐			6090.46	0.0007	P	5.2

$$y = 0.0019 * x + 6.1186E-005$$

$$R = 1.0000$$

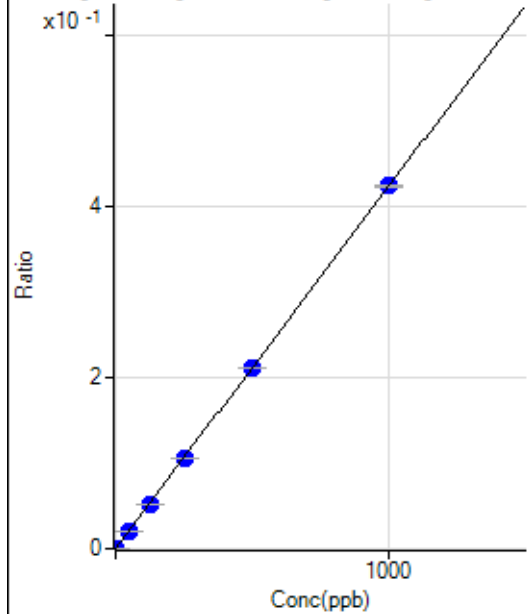
$$DL = 0.0259$$

$$BEC = 0.03241$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	17.5
2	☐	0.100					
3	☐	1.000	0.843	3503.37	0.0004	P	5.1
4	☐	50.000	48.661	192902.35	0.0206	P	1.2
5	☐	125.000	122.876	482491.02	0.0520	P	0.3
6	☐	250.000	248.587	961311.62	0.1053	P	0.5
7	☐	500.000	497.715	1881559.18	0.2107	P	0.2
8	☐	1000.000	1001.828	3805175.13	0.4241	P	0.7
9	☐			1452.91	0.0002	P	12.0

$$y = 4.2335E-004 * x + 1.3790E-005$$

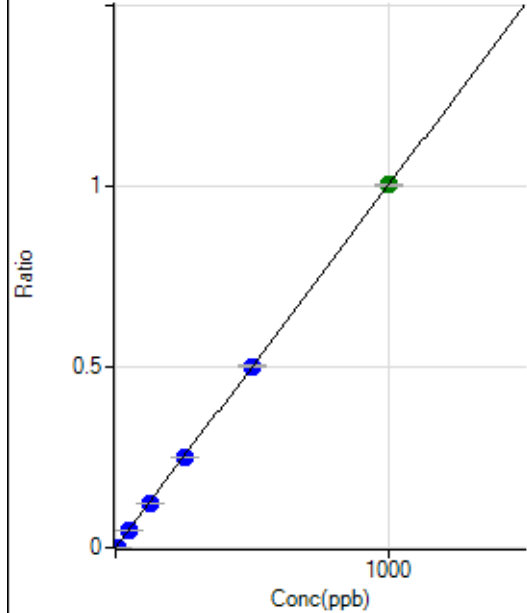
$$R = 1.0000$$

$$DL = 0.0171$$

$$BEC = 0.03257$$

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	316.69	0.0000	P	31.7
2	☐	0.500					
3	☐	5.000	1.883	18123.25	0.0019	P	3.1
4	☐	50.000	48.676	456687.06	0.0488	P	0.6
5	☐	125.000	122.755	1140705.04	0.1230	P	1.0
6	☐	250.000	247.569	2265800.35	0.2481	P	0.2
7	☐	500.000	500.130	4474580.39	0.5011	P	0.5
8	☐	1000.000	1000.905	8997456.10	1.0029	A	0.6
9	☐			15414.46	0.0017	P	1.7

$$y = 0.0010 * x + 3.2728E-005$$

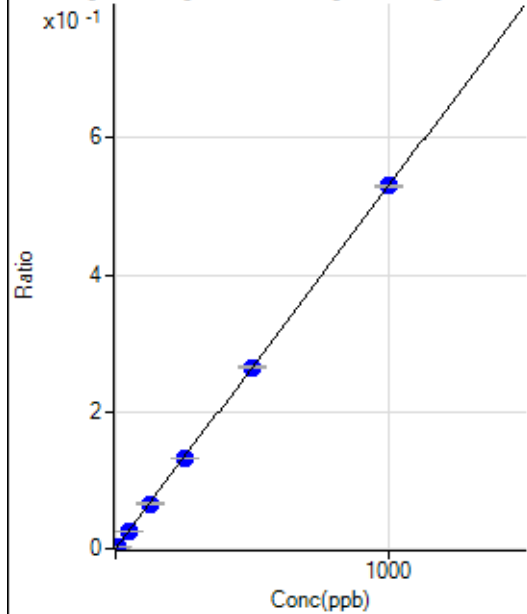
$$R = 1.0000$$

$$DL = 0.03102$$

$$BEC = 0.03267$$

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	133.34	0.0000	P	13.7
2	☐	0.500					
3	☐	5.000	4.344	21867.48	0.0023	P	3.2
4	☐	50.000	49.198	244162.91	0.0261	P	0.6
5	☐	125.000	123.750	608297.03	0.0656	P	1.8
6	☐	250.000	248.121	1201355.16	0.1315	P	0.3
7	☐	500.000	500.948	2371095.11	0.2655	P	0.6
8	☐	1000.000	1000.196	4756607.27	0.5302	P	0.4
9	☐			21519.75	0.0024	P	0.4

$$y = 5.3006E-004 * x + 1.3827E-005$$

$$R = 1.0000$$

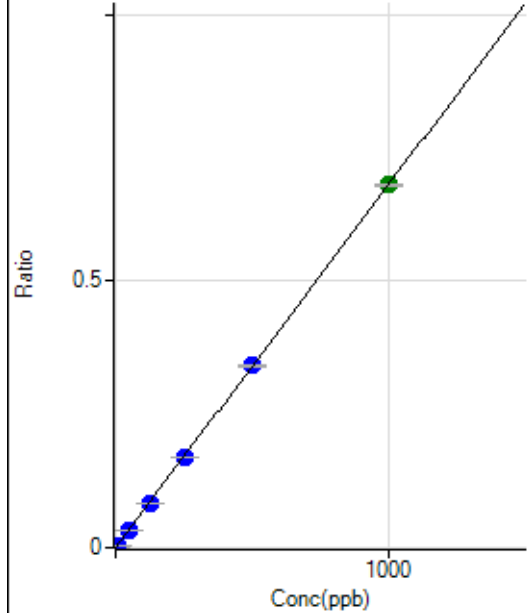
$$DL = 0.01075$$

$$BEC = 0.02609$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	169.45	0.0000	P	3.3
2	☐	0.500					
3	☐	5.000	3.829	24800.19	0.0026	P	1.5
4	☐	50.000	49.172	313671.32	0.0335	P	0.2
5	☐	125.000	123.608	781030.95	0.0842	P	1.2
6	☐	250.000	248.275	1545092.12	0.1692	P	0.3
7	☐	500.000	502.056	3054407.47	0.3421	P	0.7
8	☐	1000.000	999.624	6110361.07	0.6811	A	0.5
9	☐			29628.96	0.0034	P	1.3

$$y = 6.8131\text{E-}004 * x + 1.7554\text{E-}005$$

$$R = 1.0000$$

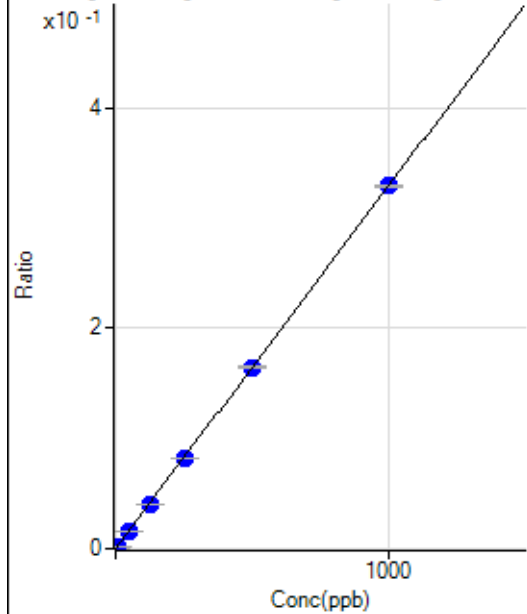
$$DL = 0.002551$$

$$BEC = 0.02576$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	108.34	0.0000	P	54.8
2	☐	0.500					
3	☐	5.000	4.357	13659.89	0.0014	P	2.9
4	☐	50.000	49.572	152900.06	0.0163	P	0.5
5	☐	125.000	123.189	376306.02	0.0406	P	1.6
6	☐	250.000	249.691	751237.72	0.0823	P	0.8
7	☐	500.000	500.269	1471391.70	0.1648	P	0.7
8	☐	1000.000	1000.193	2955698.07	0.3294	P	0.4
9	☐			13796.13	0.0016	P	4.0

$$y = 3.2937\text{E-}004 * x + 1.1273\text{E-}005$$

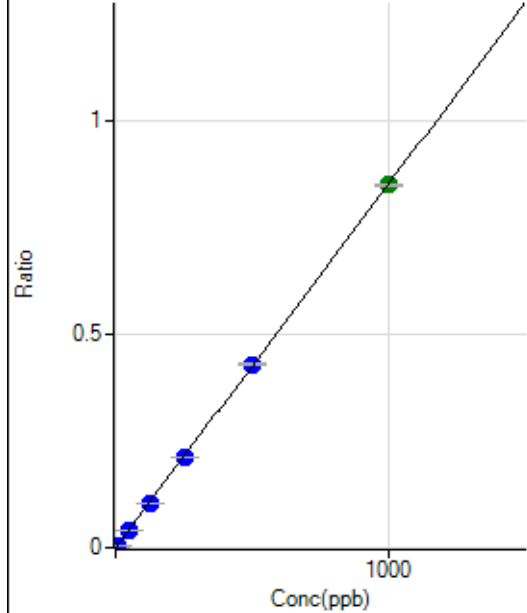
$$R = 1.0000$$

$$DL = 0.05626$$

$$BEC = 0.03423$$

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	197.23	0.0000	P	22.7
2	☐	0.500					
3	☐	5.000	4.459	36041.05	0.0038	P	2.4
4	☐	50.000	49.443	394136.77	0.0421	P	0.2
5	☐	125.000	123.164	972483.73	0.1049	P	1.5
6	☐	250.000	249.230	1938301.35	0.2122	P	0.3
7	☐	500.000	504.880	3838385.50	0.4299	P	1.3
8	☐	1000.000	998.013	7623739.67	0.8498	A	0.5
9	☐			34423.06	0.0039	P	2.5

$$y = 8.5143\text{E-}004 * x + 2.0389\text{E-}005$$

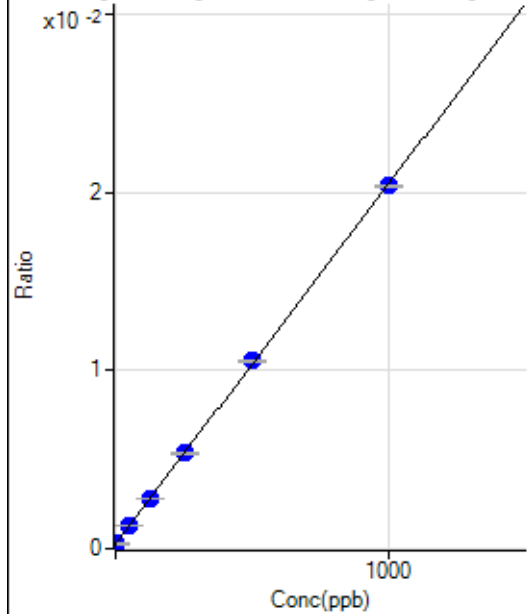
$$R = 1.0000$$

$$DL = 0.0163$$

$$BEC = 0.02395$$

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	3342.23	0.0003	P	9.5
2	☐	0.100					
3	☐	1.000	1.168	3581.18	0.0003	P	4.5
4	☐	50.000	50.613	16568.62	0.0013	P	1.3
5	☐	125.000	127.613	36517.38	0.0028	P	1.1
6	☐	250.000	252.901	67494.70	0.0054	P	2.3
7	☐	500.000	508.814	130005.52	0.0105	P	0.7
8	☐	1000.000	994.510	250452.51	0.0204	P	0.4
9	☐			2981.00	0.0003	P	9.0

$$y = 2.0238\text{E-}005 * x + 2.5059\text{E-}004$$

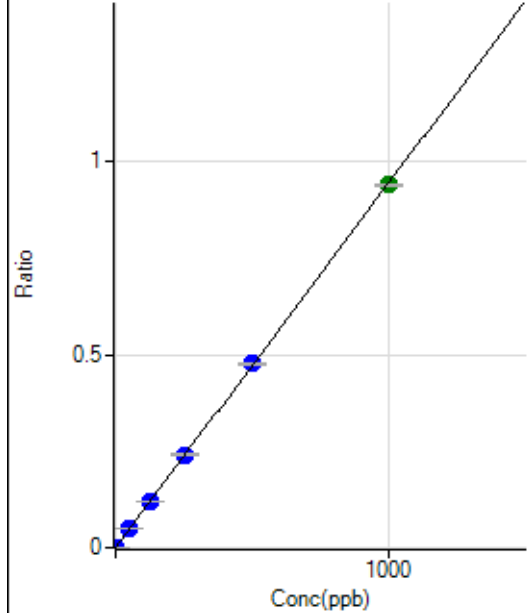
$$R = 0.9999$$

$$DL = 3.542$$

$$BEC = 12.38$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	61.7
2	☐	0.100					
3	☐	1.000	1.229	15267.19	0.0012	P	2.3
4	☐	50.000	51.313	629799.37	0.0485	P	0.5
5	☐	125.000	126.436	1538854.99	0.1194	P	0.8
6	☐	250.000	255.241	3029722.09	0.2410	P	0.7
7	☐	500.000	505.620	5884386.72	0.4774	P	0.8
8	☐	1000.000	995.634	11554673.44	0.9401	A	0.6
9	☐			2678.15	0.0002	P	8.1

$$y = 9.4422\text{E-}004 * x + 7.9104\text{E-}006$$

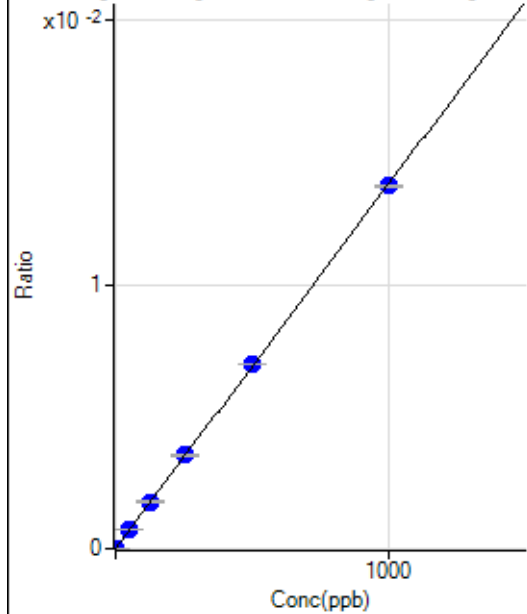
$$R = 1.0000$$

$$DL = 0.0155$$

$$BEC = 0.008378$$

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	15.28	0.0000	P	42.3
2	☐	0.100					
3	☐	1.000	1.049	204.18	0.0000	P	12.3
4	☐	50.000	51.531	9249.01	0.0007	P	1.0
5	☐	125.000	129.159	22968.86	0.0018	P	0.3
6	☐	250.000	255.920	44373.65	0.0035	P	0.5
7	☐	500.000	505.412	85905.93	0.0070	P	0.5
8	☐	1000.000	995.218	168668.47	0.0137	P	0.6
9	☐			55.56	0.0000	P	4.4

$$y = 1.3788\text{E-}005 * x + 1.1480\text{E-}006$$

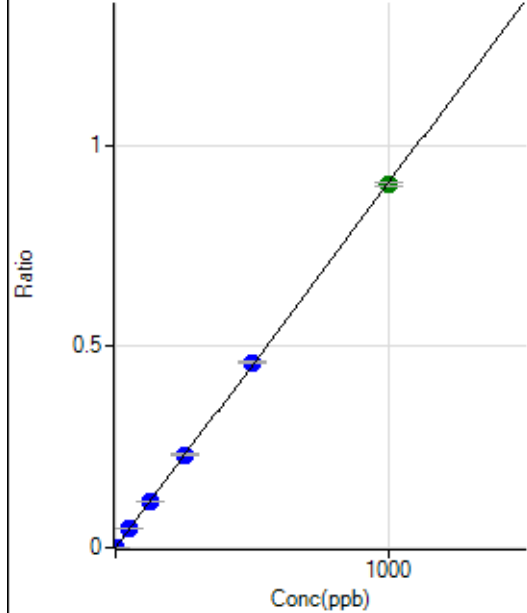
$$R = 1.0000$$

$$DL = 0.1056$$

$$BEC = 0.08326$$

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	69.45	0.0000	P	7.9
2	☐	0.100					
3	☐	1.000	1.209	14380.10	0.0011	P	1.2
4	☐	50.000	51.045	601159.16	0.0463	P	0.3
5	☐	125.000	127.282	1486559.47	0.1153	P	0.5
6	☐	250.000	255.613	2911558.16	0.2316	P	0.2
7	☐	500.000	507.155	5663563.54	0.4595	P	1.3
8	☐	1000.000	994.682	11077126.29	0.9013	A	0.9
9	☐			2564.24	0.0002	P	10.0

$$y = 9.0606\text{E-}004 * x + 5.2059\text{E-}006$$

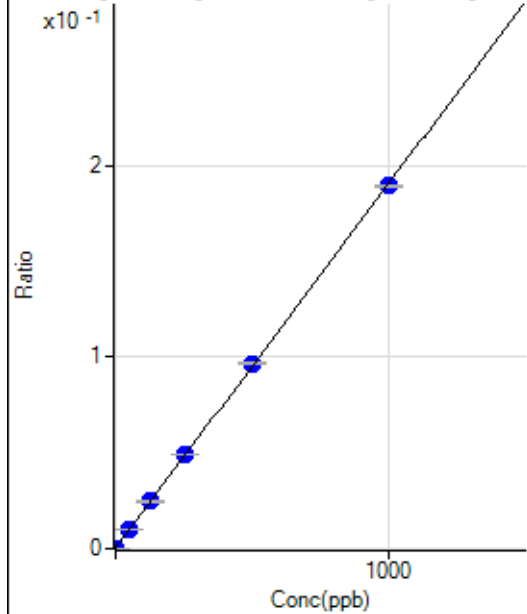
$$R = 0.9999$$

$$DL = 0.001363$$

$$BEC = 0.005746$$

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	2360.81	0.0002	P	8.5
2	☐	0.100					
3	☐	1.000	0.894	4532.17	0.0003	P	3.8
4	☐	50.000	51.697	130185.32	0.0100	P	0.9
5	☐	125.000	128.521	317585.48	0.0246	P	0.8
6	☐	250.000	256.066	614933.78	0.0489	P	0.3
7	☐	500.000	507.236	1192135.20	0.0967	P	0.9
8	☐	1000.000	994.341	2328346.17	0.1894	P	0.7
9	☐			2806.18	0.0002	P	7.2

$$y = 1.9034\text{E-}004 * x + 1.7699\text{E-}004$$

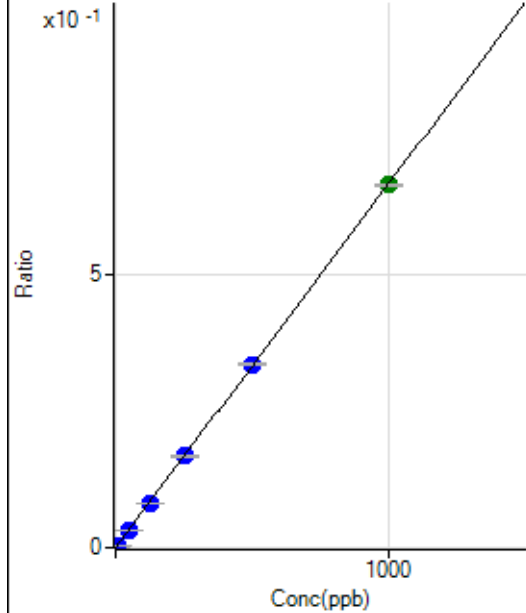
$$R = 0.9999$$

$$DL = 0.2367$$

$$BEC = 0.9299$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1747.41	0.0001	P	12.8
2	☐	0.500					
3	☐	5.000	4.441	40342.53	0.0031	P	0.3
4	☐	50.000	49.865	433416.71	0.0333	P	0.3
5	☐	125.000	123.067	1058349.63	0.0821	P	1.4
6	☐	250.000	251.294	2106035.60	0.1675	P	0.4
7	☐	500.000	504.702	4145449.44	0.3363	P	1.0
8	☐	1000.000	997.577	8169249.06	0.6647	A	0.8
9	☐			13359.67	0.0011	P	4.3

$$y = 6.6615\text{E-}004 * x + 1.3106\text{E-}004$$

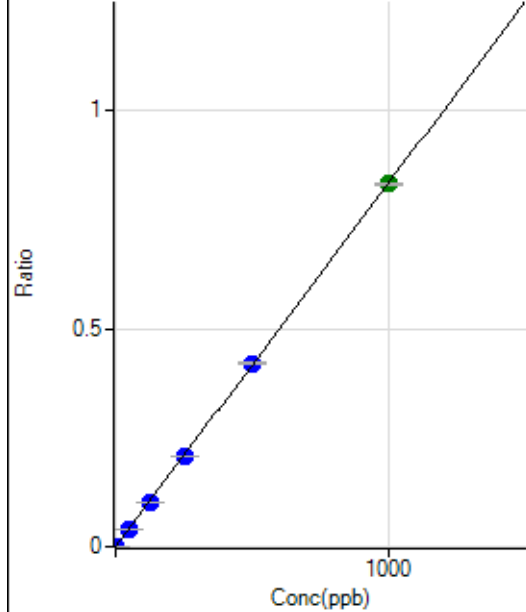
$$R = 1.0000$$

$$DL = 0.07554$$

$$BEC = 0.1967$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0000	P	16.8
2	☐	0.200					
3	☐	2.000	1.810	19803.64	0.0015	P	4.8
4	☐	50.000	48.796	528425.23	0.0407	P	0.4
5	☐	125.000	122.401	1314404.67	0.1020	P	0.6
6	☐	250.000	250.765	2626212.54	0.2089	P	0.4
7	☐	500.000	504.248	5177513.53	0.4201	P	0.9
8	☐	1000.000	998.070	10219325.92	0.8315	A	0.6
9	☐			36640.30	0.0031	P	1.9

$$y = 8.3305\text{E-}004 * x + 9.1535\text{E-}006$$

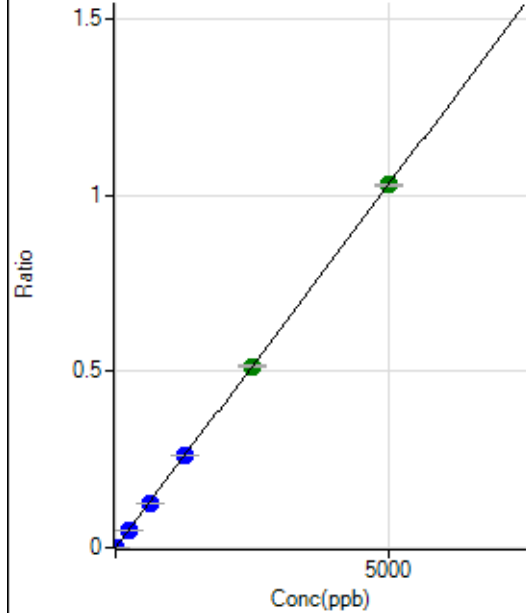
$$R = 1.0000$$

$$DL = 0.005554$$

$$BEC = 0.01099$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.79	0.0000	P	8.4
2	☐	1.000					
3	☐	10.000	9.051	24525.34	0.0019	P	1.5
4	☐	250.000	250.616	671808.11	0.0517	P	0.6
5	☐	625.000	618.645	1644445.43	0.1276	P	0.8
6	☐	1250.000	1263.485	3275421.76	0.2606	P	0.7
7	☐	2500.000	2499.159	6352146.97	0.5154	A	0.8
8	☐	5000.000	4997.815	12667099.42	1.0306	A	0.8
9	☐			6271.16	0.0005	P	7.9

$$y = 2.0621\text{E-}004 * x + 1.1448\text{E-}005$$

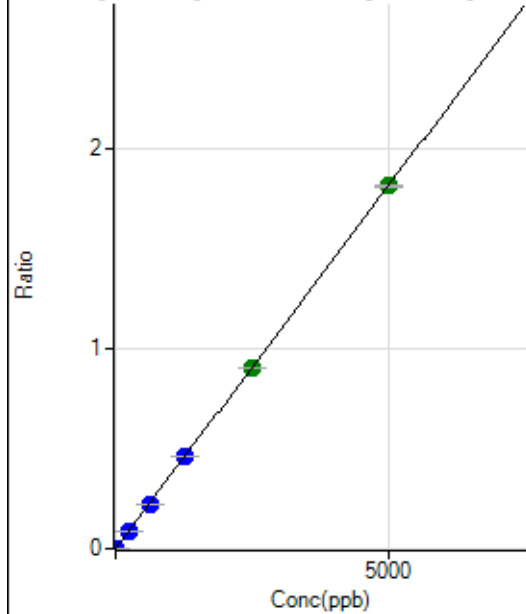
$$R = 1.0000$$

$$DL = 0.01392$$

$$BEC = 0.05551$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	216.68	0.0000	P	18.3
2	☐	1.000					
3	☐	10.000	8.933	42521.81	0.0033	P	1.8
4	☐	250.000	247.760	1168317.33	0.0899	P	0.6
5	☐	625.000	617.896	2889350.78	0.2242	P	0.6
6	☐	1250.000	1271.168	5797053.91	0.4611	P	0.7
7	☐	2500.000	2496.900	11164506.85	0.9058	A	0.4
8	☐	5000.000	4997.260	22281082.27	1.8128	A	0.8
9	☐			10821.34	0.0009	P	2.5

$$y = 3.6276\text{E-}004 * x + 1.6247\text{E-}005$$

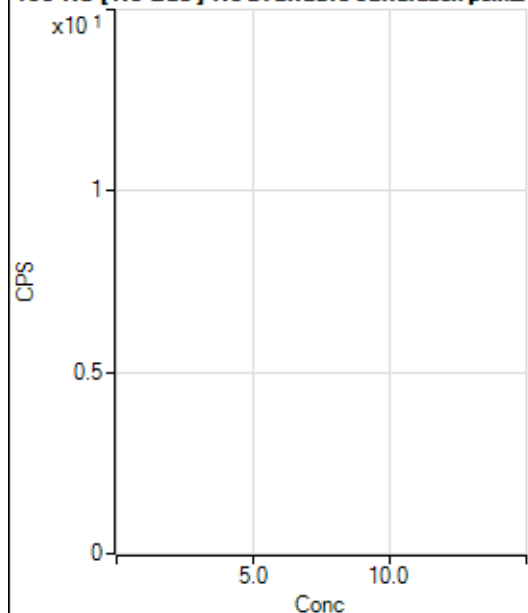
$$R = 1.0000$$

$$DL = 0.02465$$

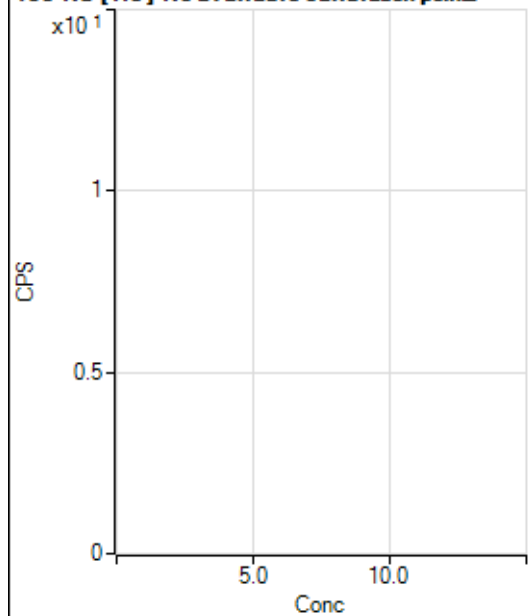
$$BEC = 0.04479$$

Weight: <None>

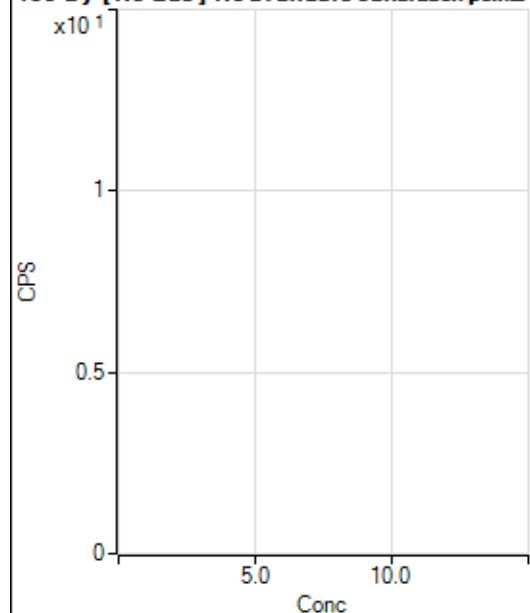
Min Conc: 0

150 Nd [No Gas] No available calibration points

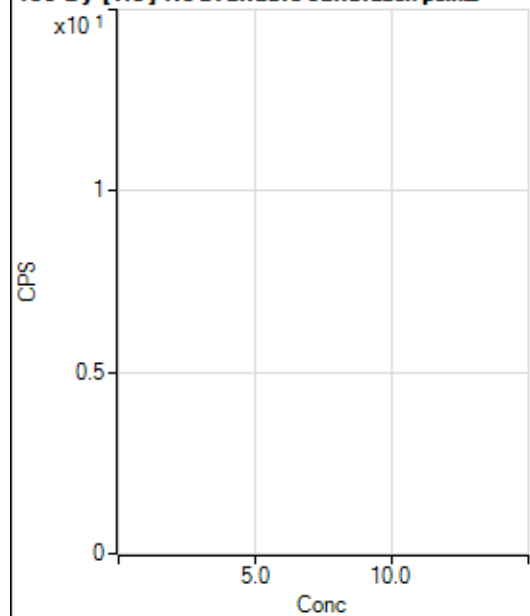
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			15.56		P	107.9
4	☐			82.23		P	16.9
5	☐			113.34		P	21.2
6	☐			264.46		P	6.3
7	☐			446.69		P	19.6
8	☐			868.95		P	7.1
9	☐			160.01		P	11.0

150 Nd [He] No available calibration points

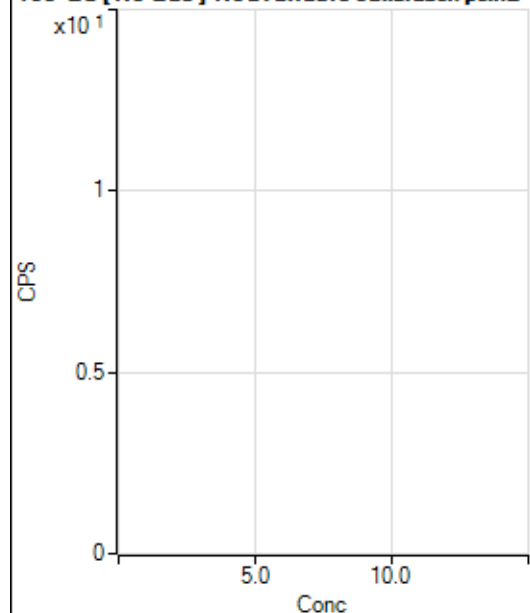
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			1.11		P	173.2
4	☐			10.00		P	57.7
5	☐			12.22		P	56.8
6	☐			24.44		P	34.3
7	☐			43.33		P	23.1
8	☐			90.00		P	16.1
9	☐			53.34		P	21.6

156 Dy [No Gas] No available calibration points

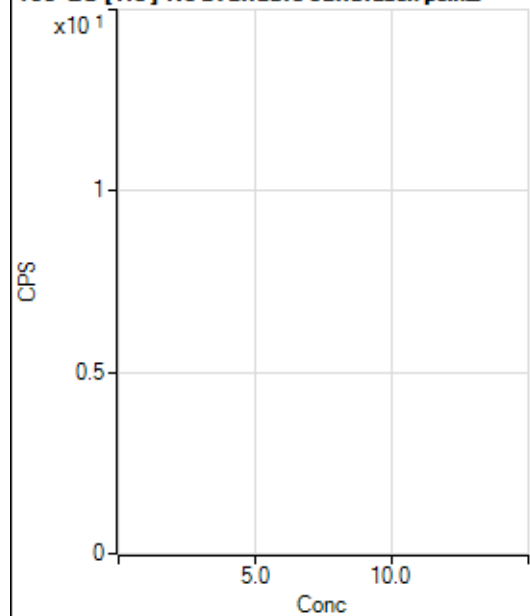
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.11		P	26.7
2	☐						
3	☐			38.89		P	61.9
4	☐			66.67		P	69.6
5	☐			77.78		P	37.6
6	☐			113.89		P	18.4
7	☐			166.68		P	18.0
8	☐			244.46		P	12.9
9	☐			191.68		P	11.5

156 Dy [He] No available calibration points

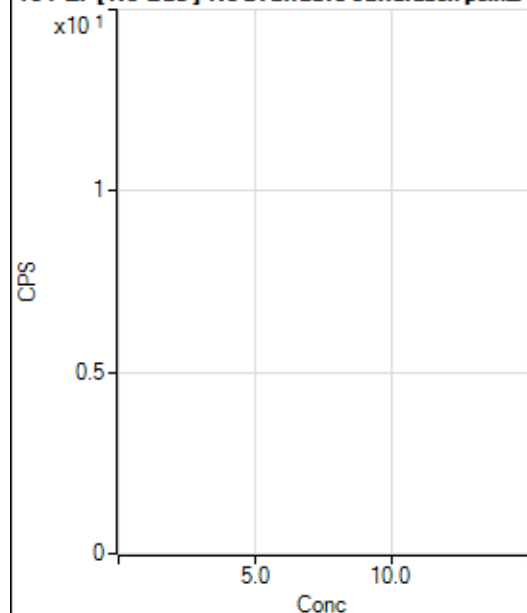
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.66		P	86.6
2	☐						
3	☐			7.78		P	65.5
4	☐			7.78		P	24.7
5	☐			25.56		P	19.9
6	☐			31.11		P	16.4
7	☐			58.89		P	22.9
8	☐			112.23		P	19.1
9	☐			66.67		P	13.2

160 Gd [No Gas] Noavailable calibration poin_

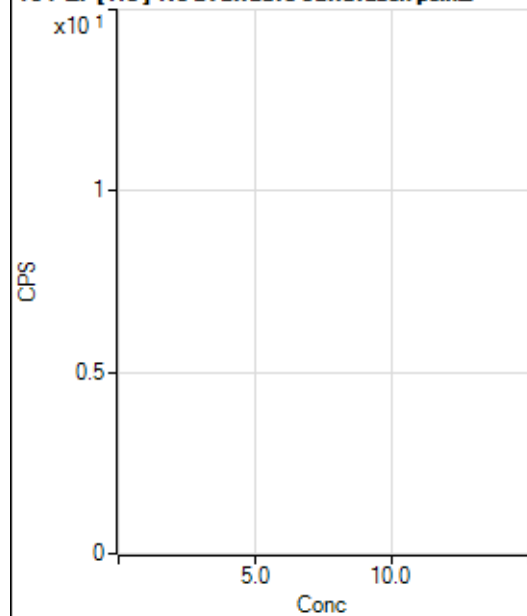
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			69.45		P	13.9
2	☐						
3	☐			72.22		P	29.0
4	☐			80.56		P	43.1
5	☐			94.45		P	31.0
6	☐			61.11		P	15.7
7	☐			147.23		P	38.5
8	☐			161.12		P	15.8
9	☐			172.23		P	10.1

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			84.45		P	42.2
2	☐						
3	☐			64.44		P	34.4
4	☐			87.78		P	7.9
5	☐			83.33		P	25.0
6	☐			82.23		P	11.7
7	☐			87.78		P	26.7
8	☐			107.78		P	13.9
9	☐			114.45		P	7.3

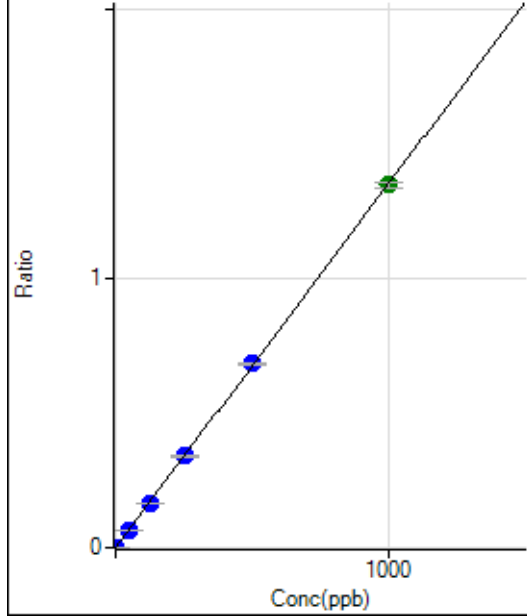
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.45		P	57.3
2	☐						
3	☐			55.56		P	74.0
4	☐			36.11		P	74.2
5	☐			75.01		P	40.1
6	☐			55.56		P	22.9
7	☐			86.11		P	11.2
8	☐			88.89		P	28.6
9	☐			147.23		P	29.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	32.7
2	☐						
3	☐			24.44		P	41.7
4	☐			13.33		P	50.0
5	☐			24.44		P	20.8
6	☐			15.56		P	89.2
7	☐			24.44		P	20.8
8	☐			34.45		P	31.1
9	☐			32.22		P	12.0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	305.57	0.0000	P	4.3
2	☐	0.100					
3	☐	1.000	0.918	10957.75	0.0013	P	3.3
4	☐	50.000	49.263	568018.75	0.0666	P	0.2
5	☐	125.000	123.177	1400044.86	0.1665	P	1.5
6	☐	250.000	251.320	2755254.95	0.3398	P	1.2
7	☐	500.000	505.653	5396841.53	0.6836	P	0.5
8	☐	1000.000	997.109	10429778.36	1.3479	A	1.3
9	☐			5690.37	0.0008	P	3.8

$$y = 0.0014 * x + 3.3959E-005$$

$$R = 1.0000$$

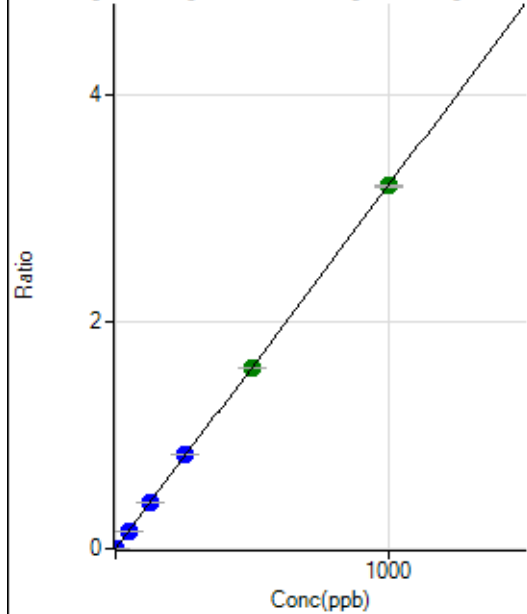
$$DL = 0.003235$$

$$BEC = 0.02512$$

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	758.39	0.0001	P	5.6
2	☐	0.100					
3	☐	1.000	0.930	26335.37	0.0031	P	0.4
4	☐	50.000	49.948	1364338.49	0.1600	P	0.3
5	☐	125.000	125.433	3377371.13	0.4018	P	1.3
6	☐	250.000	259.252	6732652.58	0.8303	P	1.6
7	☐	500.000	498.887	12613420.07	1.5976	A	0.2
8	☐	1000.000	998.192	24734459.41	3.1965	A	0.4
9	☐			13482.46	0.0019	P	4.6

$$y = 0.0032 * x + 8.4298E-005$$

$$R = 0.9999$$

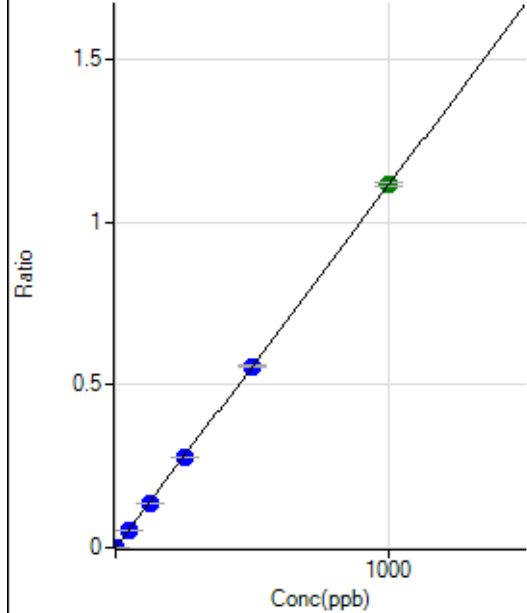
$$DL = 0.004407$$

$$BEC = 0.02632$$

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	1137.12	0.0001	P	7.1
2	☐	0.100					
3	☐	1.000	0.994	10610.11	0.0012	P	2.8
4	☐	50.000	48.820	464782.53	0.0545	P	0.3
5	☐	125.000	122.122	1144784.01	0.1362	P	1.6
6	☐	250.000	248.712	2248026.95	0.2772	P	0.7
7	☐	500.000	499.450	4393907.85	0.5566	P	0.9
8	☐	1000.000	1001.016	8630207.49	1.1153	A	1.1
9	☐			17699.24	0.0025	P	2.0

$$y = 0.0011 * x + 1.2652E-004$$

$$R = 1.0000$$

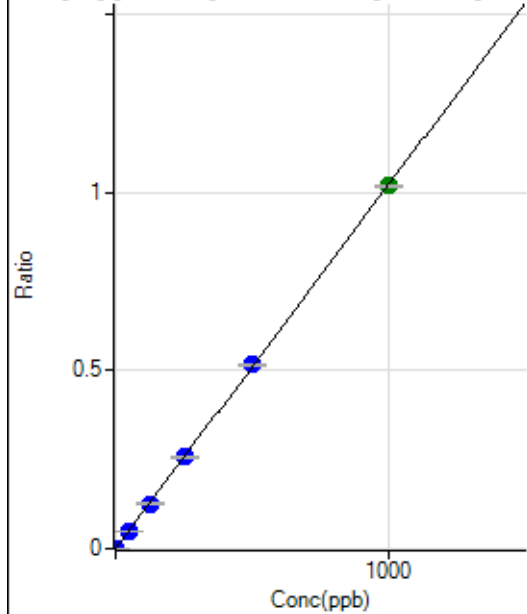
$$DL = 0.0242$$

$$BEC = 0.1136$$

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	992.66	0.0001	P	10.3
2	☐	0.100					
3	☐	1.000	0.994	9672.26	0.0011	P	1.0
4	☐	50.000	49.443	430902.35	0.0505	P	0.5
5	☐	125.000	123.693	1061591.88	0.1263	P	1.4
6	☐	250.000	251.624	2082284.61	0.2568	P	0.9
7	☐	500.000	505.282	4069826.80	0.5155	P	1.4
8	☐	1000.000	997.144	7871238.31	1.0172	A	0.5
9	☐			15635.54	0.0022	P	3.4

$$y = 0.0010 * x + 1.1048E-004$$

$$R = 1.0000$$

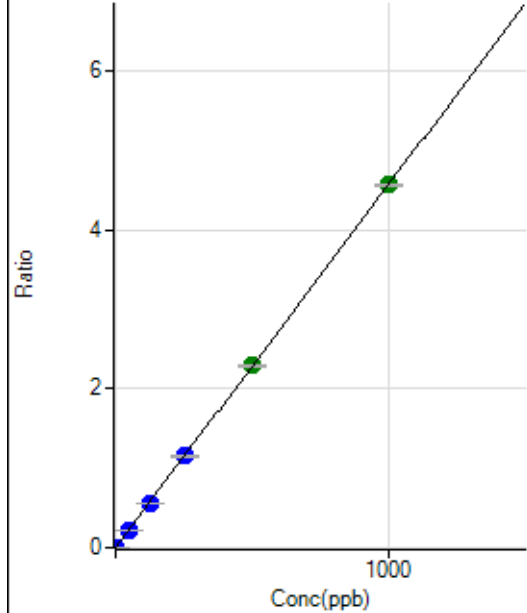
$$DL = 0.0336$$

$$BEC = 0.1083$$

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	4756.04	0.0005	P	6.7
2	☐	0.100					
3	☐	1.000	0.998	43738.77	0.0051	P	2.5
4	☐	50.000	49.378	1927312.28	0.2261	P	0.4
5	☐	125.000	123.419	4743400.13	0.5643	P	1.5
6	☐	250.000	252.005	9338758.54	1.1516	P	0.6
7	☐	500.000	500.671	18058410.68	2.2874	A	1.2
8	☐	1000.000	999.392	35326391.36	4.5654	A	0.7
9	☐			72342.57	0.0103	P	2.3

$$y = 0.0046 * x + 5.2913E-004$$

$$R = 1.0000$$

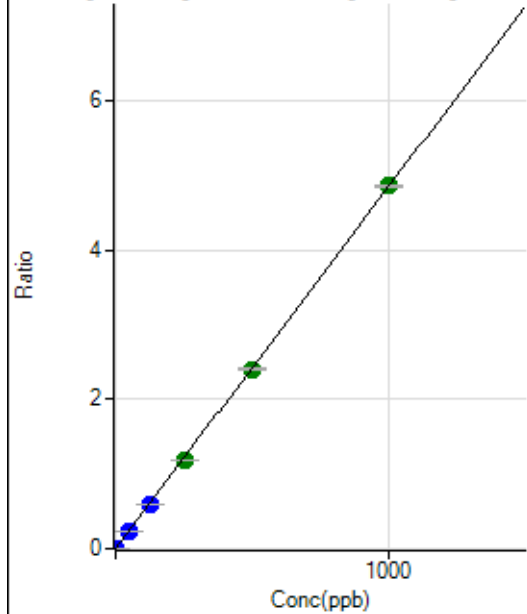
$$DL = 0.02328$$

$$BEC = 0.1158$$

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	788.96	0.0001	P	19.6
2	☐	0.100					
3	☐	1.000	0.886	37703.00	0.0044	P	2.7
4	☐	50.000	48.485	2004543.40	0.2351	P	0.9
5	☐	125.000	123.166	5020333.31	0.5972	P	1.2
6	☐	250.000	245.388	9647654.12	1.1897	A	1.2
7	☐	500.000	496.981	19021667.61	2.4094	A	1.2
8	☐	1000.000	1002.967	37624297.72	4.8624	A	0.7
9	☐			10162.78	0.0015	P	9.6

$$y = 0.0048 * x + 8.7825E-005$$

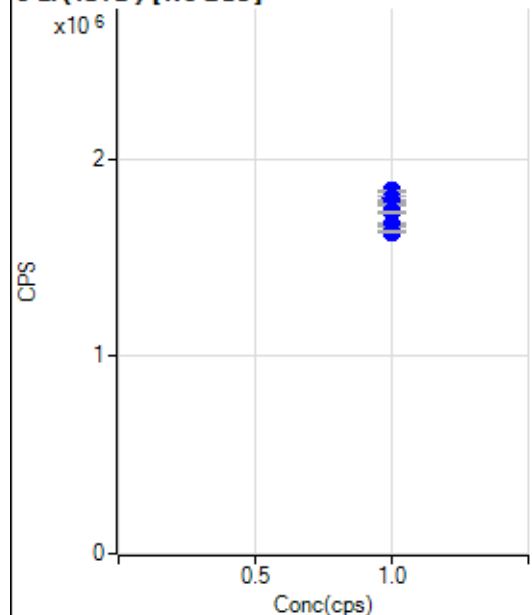
$$R = 1.0000$$

$$DL = 0.01065$$

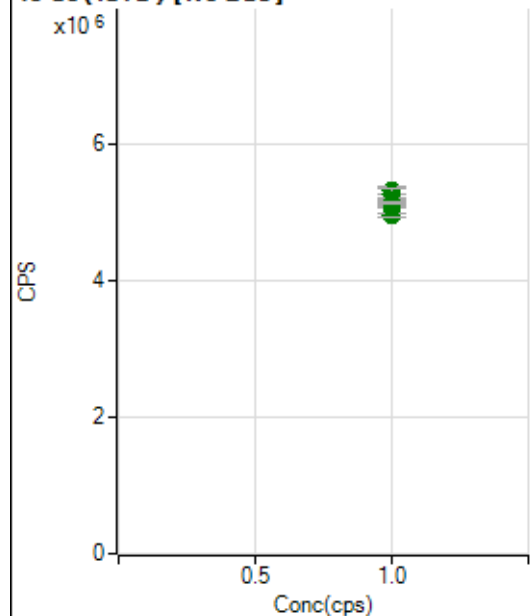
$$BEC = 0.01812$$

Weight: <None>

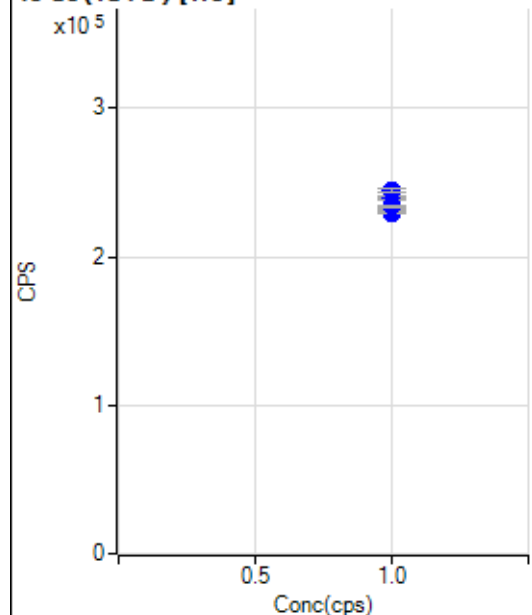
Min Conc: 0

6 Li (ISTD) [No Gas]

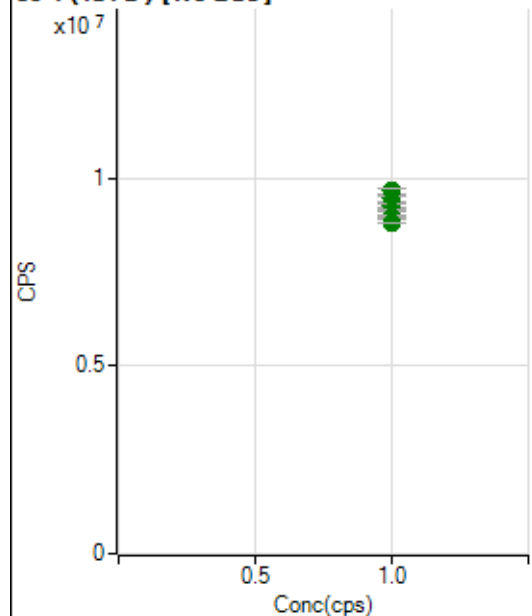
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1837189.07		P	0.4
2	☐	1.000					
3	☐	1.000		1801102.93		P	1.6
4	☐	1.000		1783640.34		P	0.2
5	☐	1.000		1768222.49		P	0.6
6	☐	1.000		1730835.94		P	0.4
7	☐	1.000		1669844.66		P	0.4
8	☐	1.000		1657395.88		P	0.2
9	☐	1.000		1630165.98		P	0.5

45 Sc (ISTD) [No Gas]

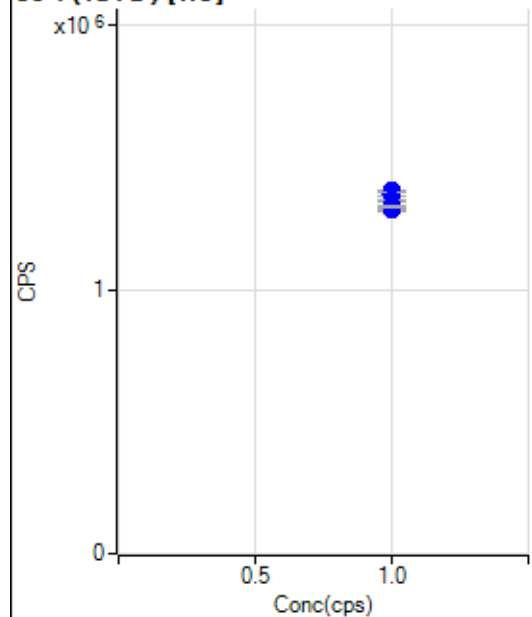
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5317242.31		A	2.2
2	☐	1.000					
3	☐	1.000		5282169.43		A	2.2
4	☐	1.000		5191713.31		A	0.7
5	☐	1.000		5189077.16		A	0.6
6	☐	1.000		5083504.80		A	0.7
7	☐	1.000		4955384.79		A	1.0
8	☐	1.000		5075769.25		A	0.3
9	☐	1.000		5139906.71		A	0.5

45 Sc (ISTD) [He]

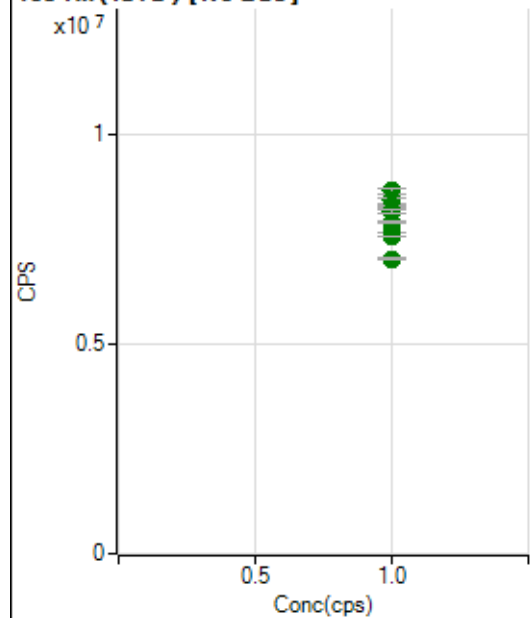
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		240369.37		P	0.7
2	☐	1.000					
3	☐	1.000		239622.43		P	0.8
4	☐	1.000		234029.71		P	0.3
5	☐	1.000		232762.21		P	0.0
6	☐	1.000		230739.18		P	0.9
7	☐	1.000		229860.76		P	0.7
8	☐	1.000		234096.68		P	0.3
9	☐	1.000		244482.25		P	0.9

89 Y (ISTD) [No Gas]

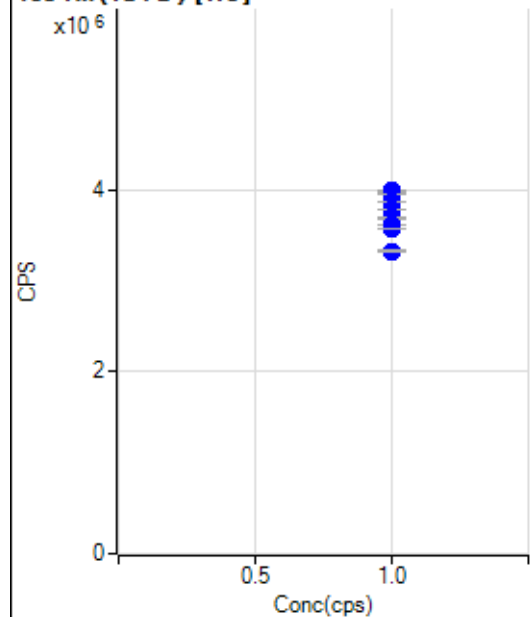
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9654849.93		A	1.3
2	☐	1.000					
3	☐	1.000		9443257.92		A	1.4
4	☐	1.000		9357998.96		A	0.5
5	☐	1.000		9273094.17		A	1.4
6	☐	1.000		9133392.85		A	0.3
7	☐	1.000		8929294.73		A	0.7
8	☐	1.000		8971724.17		A	0.2
9	☐	1.000		8813920.29		A	0.2

89 Y(ISTD) [He]

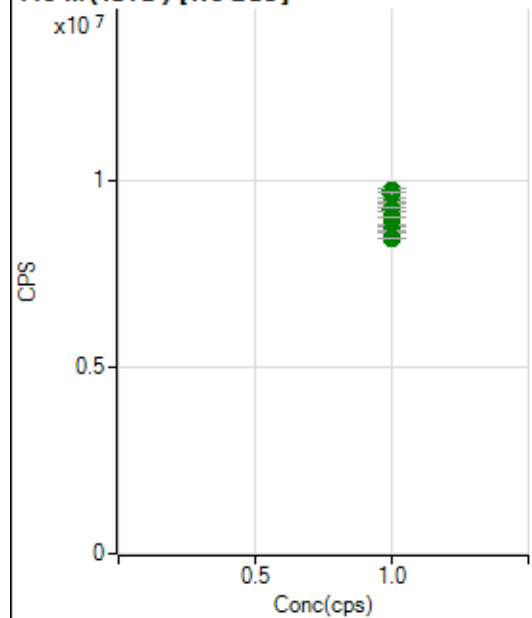
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1373533.40		P	0.4
2	☐	1.000					
3	☐	1.000		1359938.17		P	0.9
4	☐	1.000		1338425.15		P	0.5
5	☐	1.000		1318924.35		P	0.1
6	☐	1.000		1307670.35		P	0.8
7	☐	1.000		1300853.33		P	0.6
8	☐	1.000		1305837.37		P	0.5
9	☐	1.000		1313366.23		P	0.6

103 Rh(ISTD) [No Gas]

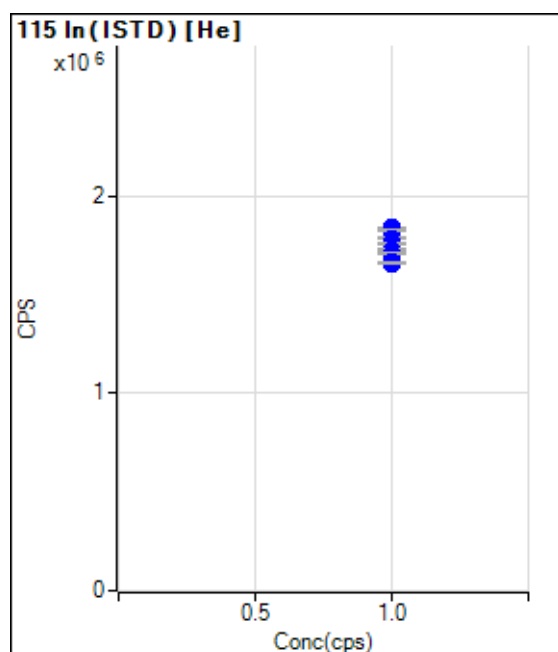
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8635634.22		A	1.5
2	☐	1.000					
3	☐	1.000		8402176.58		A	1.6
4	☐	1.000		8274662.68		A	0.7
5	☐	1.000		8149624.23		A	1.0
6	☐	1.000		7881814.59		A	0.8
7	☐	1.000		7654469.18		A	0.2
8	☐	1.000		7544732.37		A	0.3
9	☐	1.000		7011775.76		A	0.4

103 Rh (ISTD) [He]

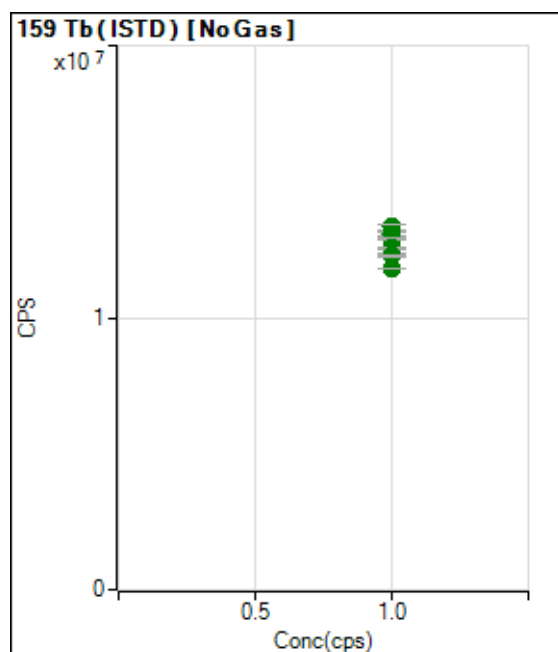
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3985988.00		P	0.6
2	☐	1.000					
3	☐	1.000		3950925.57		P	0.5
4	☐	1.000		3861443.66		P	0.2
5	☐	1.000		3777567.69		P	0.3
6	☐	1.000		3692851.02		P	0.4
7	☐	1.000		3617427.38		P	0.3
8	☐	1.000		3567368.90		P	0.3
9	☐	1.000		3323668.63		P	0.8

115 In (ISTD) [No Gas]

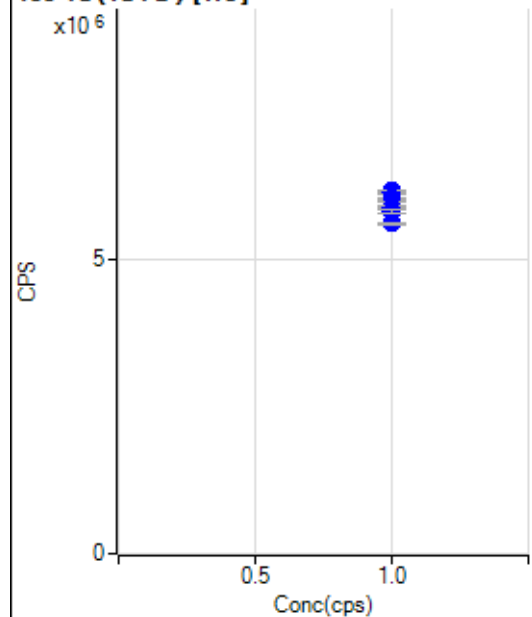
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9726998.50		A	0.9
2	☐	1.000					
3	☐	1.000		9617574.53		A	1.9
4	☐	1.000		9402186.12		A	0.2
5	☐	1.000		9233579.24		A	1.1
6	☐	1.000		9023189.24		A	0.4
7	☐	1.000		8789563.96		A	0.6
8	☐	1.000		8655843.73		A	0.5
9	☐	1.000		8455078.56		A	0.6



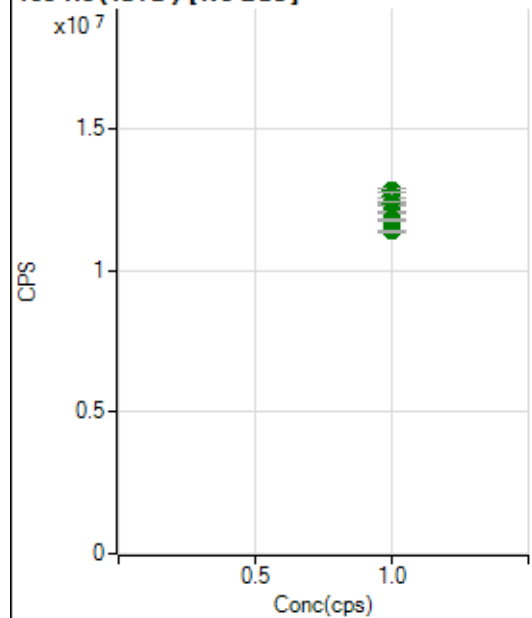
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1839334.91		P	0.6
2	☐	1.000					
3	☐	1.000		1830533.76		P	0.3
4	☐	1.000		1787450.31		P	0.7
5	☐	1.000		1762369.46		P	0.4
6	☐	1.000		1726443.04		P	0.6
7	☐	1.000		1707240.93		P	0.6
8	☐	1.000		1666048.45		P	0.5
9	☐	1.000		1662176.79		P	1.1



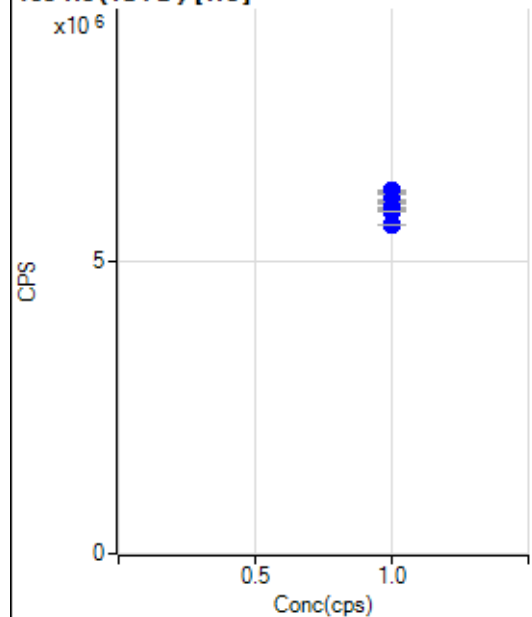
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13347027.44		A	1.3
2	☐	1.000					
3	☐	1.000		13059506.33		A	2.0
4	☐	1.000		12996541.75		A	0.1
5	☐	1.000		12889644.95		A	0.6
6	☐	1.000		12571177.45		A	0.4
7	☐	1.000		12325814.40		A	0.8
8	☐	1.000		12291069.40		A	0.5
9	☐	1.000		11823857.74		A	0.2

159 Tb (ISTD) [He]

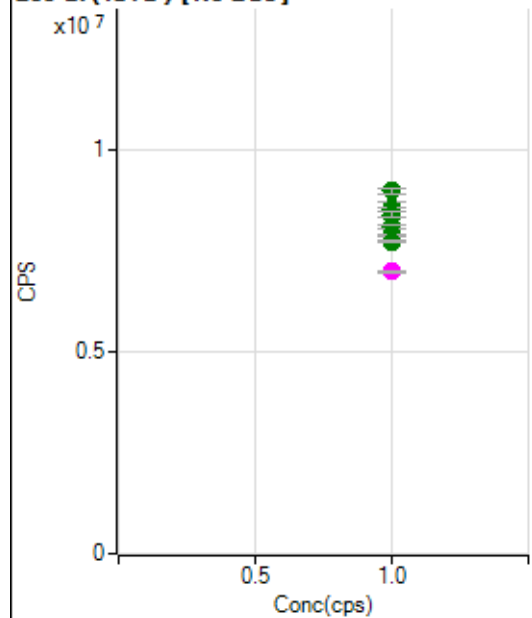
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6166929.70		P	0.3
2	☐	1.000					
3	☐	1.000		6144606.09		P	0.7
4	☐	1.000		6035299.07		P	0.2
5	☐	1.000		5984549.49		P	0.2
6	☐	1.000		5885382.62		P	0.4
7	☐	1.000		5877913.11		P	0.8
8	☐	1.000		5808068.73		P	1.1
9	☐	1.000		5609451.38		P	0.6

165 Ho (ISTD) [No Gas]

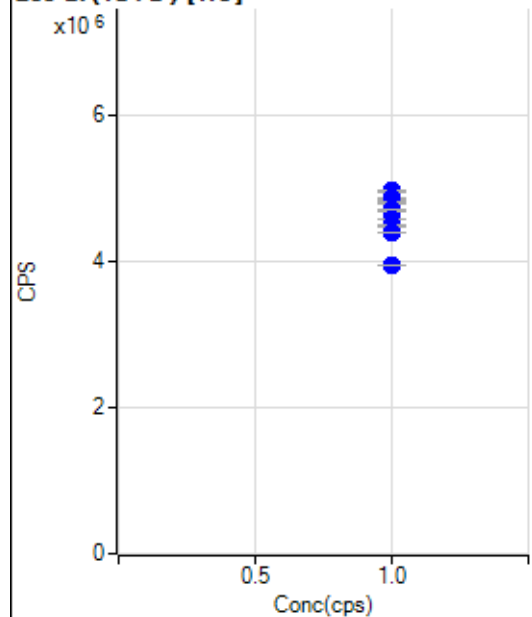
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12794699.94		A	1.1
2	☐	1.000					
3	☐	1.000		12646442.30		A	1.5
4	☐	1.000		12351689.60		A	0.3
5	☐	1.000		12333723.10		A	1.1
6	☐	1.000		12052165.81		A	0.3
7	☐	1.000		11798358.68		A	0.3
8	☐	1.000		11763408.33		A	0.5
9	☐	1.000		11381406.07		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6192654.21		P	0.5
2	☐	1.000					
3	☐	1.000		6138979.63		P	0.2
4	☐	1.000		6037284.63		P	0.4
5	☐	1.000		5984645.33		P	0.5
6	☐	1.000		5892661.65		P	0.4
7	☐	1.000		5855667.07		P	0.8
8	☐	1.000		5844789.36		P	0.3
9	☐	1.000		5616963.74		P	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8995300.63		A	1.7
2	☐	1.000					
3	☐	1.000		8602660.43		A	2.4
4	☐	1.000		8525403.48		A	0.8
5	☐	1.000		8407521.12		A	1.3
6	☐	1.000		8109702.52		A	0.8
7	☐	1.000		7895148.77		A	0.7
8	☐	1.000		7738064.89		A	0.7
9	☐	1.000		6999582.33		M	0.9

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4965721.07		P	0.6
2	☐	1.000					
3	☐	1.000		4856253.26		P	0.6
4	☐	1.000		4810403.40		P	0.7
5	☐	1.000		4705688.33		P	0.7
6	☐	1.000		4578561.50		P	0.5
7	☐	1.000		4492318.41		P	0.7
8	☐	1.000		4397046.43		P	0.3
9	☐	1.000		3948167.37		P	0.4

US EPA Tune Check Sample Report

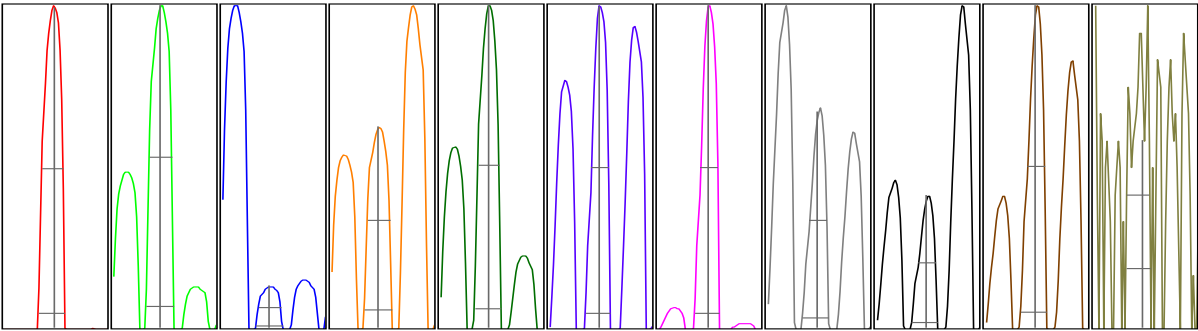
Batch Folder D:\ICP-MS Data\P7063017-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7591	0.32	5.00	
24	122101	0.33	5.00	
25	16085	0.26	5.00	
26	19065	0.48	5.00	
59	82340	0.30	5.00	
113	12451	0.43	5.00	
115	176900	0.11	5.00	
206	37966	0.38	5.00	
207	33830	0.68	5.00	
208	81927	0.51	5.00	
220	0	46.48		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7552	7600	7587	7599	7617
24	121462	121949	122349	122414	122333
25	16034	16048	16118	16130	16097
26	18981	18969	19084	19105	19186
59	82155	82400	82016	82564	82564
113	12467	12454	12363	12508	12462
115	176670	176814	177208	176917	176890
206	37744	37902	38040	38043	38102
207	33529	33657	33920	33942	34100
208	81216	82089	82290	82093	81949
220	1	0	0	0	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	12999	9.00	8.9 - 9.1		0.775	0.900	
24	197144	23.90	23.9 - 24.1		0.811	0.900	
25	26151	24.90	24.9 - 25.1		0.777	0.900	
26	30287	25.90	25.9 - 26.1		0.804	0.900	
59	142848	58.95	58.9 - 59.1		0.780	0.900	
113	24523	113.00	112.9 - 113.1		0.724	0.900	
115	348645	115.00	114.9 - 115.1		0.719	0.900	
206	74751	206.00	205.9 - 206.1		0.762	0.900	
207	67715	207.00	206.9 - 207.1		0.746	0.900	
208	164440	208.00	207.9 - 208.1		0.756	0.900	
220	0	219.95	-		0.711		

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	9.1	V	Deflect	14.4	V
Extract 2	-160.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	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	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	21618	0.29	
89	6112	0.25	
205	31266	0.18	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	21596	21681	21647	21520	21643
89	6123	6117	6087	6124	6106
205	31261	31249	31319	31180	31318

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	8.8	V	Deflect	2.0	V
Extract 2	-160.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-80	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			