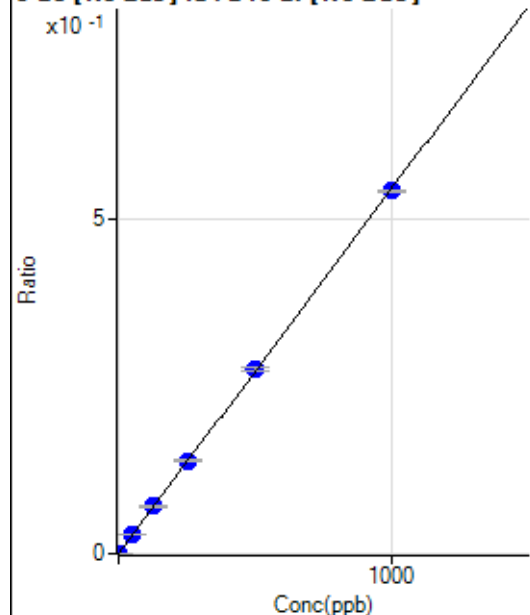


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7052621 MS.b\
Analysis File: P7052621 MS.batch.bin
DA Date-Time: 2021-05-27 12:03:35
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-05-26 12:15:10
2	004CALS.d	S02	2021-05-26 12:18:16
3	006CALS.d	S03	2021-05-26 12:24:24
4	007CALS.d	S04	2021-05-26 12:27:28
5	008CALS.d	S05	2021-05-26 12:30:30
6	009CALS.d	S06	2021-05-26 12:33:29
7	010CALS.d	S07	2021-05-26 12:36:24
8	011CALS.d	S08	2021-05-26 12:39:16

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	46.30	0.0000	P	18.9
2	☐	1.000	1.101	1450.09	0.0006	P	8.6
3	☐	50.000	51.731	67131.02	0.0282	P	1.5
4	☐	125.000	129.456	167663.19	0.0704	P	0.7
5	☐	250.000	255.028	320940.16	0.1387	P	1.1
6	☐	500.000	507.278	623661.27	0.2759	P	1.6
7	☐	1000.000	994.460	1171752.44	0.5408	P	0.6
8	☐			351.86	0.0002	P	9.9

$$y = 5.4383\text{E-}004 * x + 1.9596\text{E-}005$$

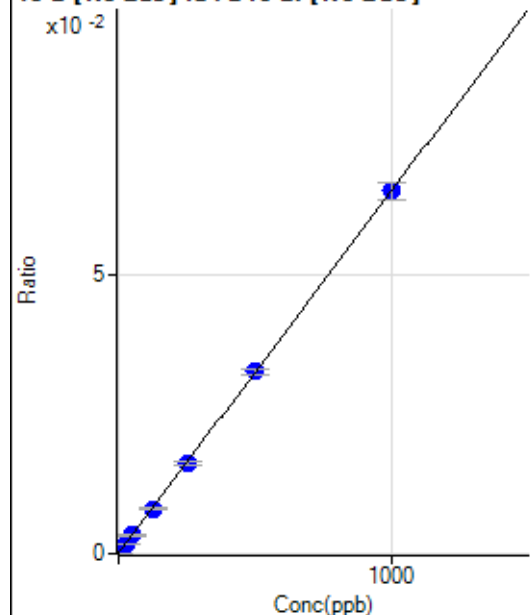
$$R = 0.9999$$

$$DL = 0.0204$$

$$BEC = 0.03603$$

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	194.45	0.0001	P	15.6
2	☐	25.000	24.847	3978.39	0.0017	P	2.9
3	☐	50.000	49.250	7824.42	0.0033	P	5.6
4	☐	125.000	121.717	19020.66	0.0080	P	3.1
5	☐	250.000	247.380	37366.18	0.0162	P	3.8
6	☐	500.000	502.227	73927.52	0.0327	P	2.9
7	☐	1000.000	999.993	140905.09	0.0650	P	4.7
8	☐			6237.57	0.0029	P	5.9

$$y = 6.4962\text{E-}005 * x + 8.2303\text{E-}005$$

$$R = 1.0000$$

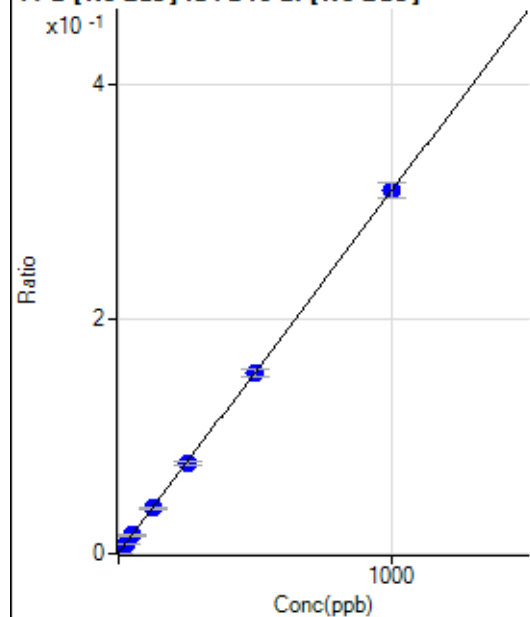
$$DL = 0.5919$$

$$BEC = 1.267$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	766.71	0.0003	P	9.9
2	☐	25.000	25.473	19204.20	0.0082	P	5.5
3	☐	50.000	49.765	37416.11	0.0157	P	3.5
4	☐	125.000	124.470	92286.06	0.0388	P	3.3
5	☐	250.000	249.994	179343.06	0.0775	P	4.6
6	☐	500.000	499.532	349361.84	0.1546	P	4.5
7	☐	1000.000	1000.302	669926.71	0.3092	P	4.1
8	☐			29470.89	0.0137	P	9.0

$$y = 3.0883E-004 * x + 3.2416E-004$$

$$R = 1.0000$$

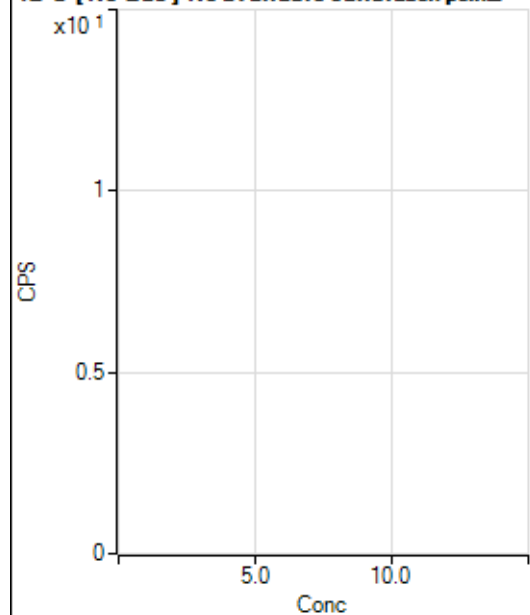
$$DL = 0.3114$$

$$BEC = 1.05$$

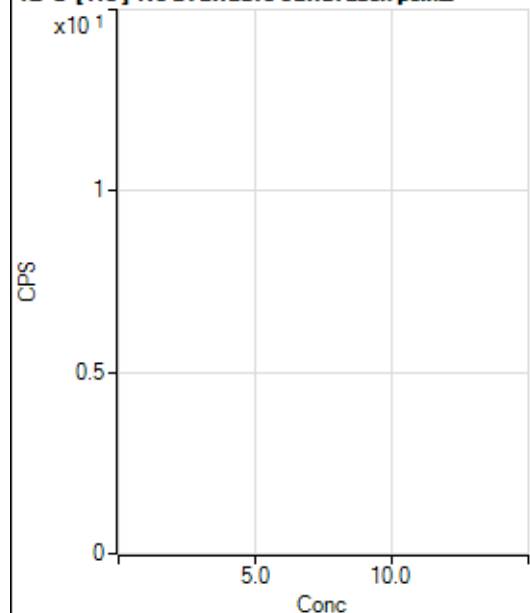
Weight: <None>

Min Conc: 0

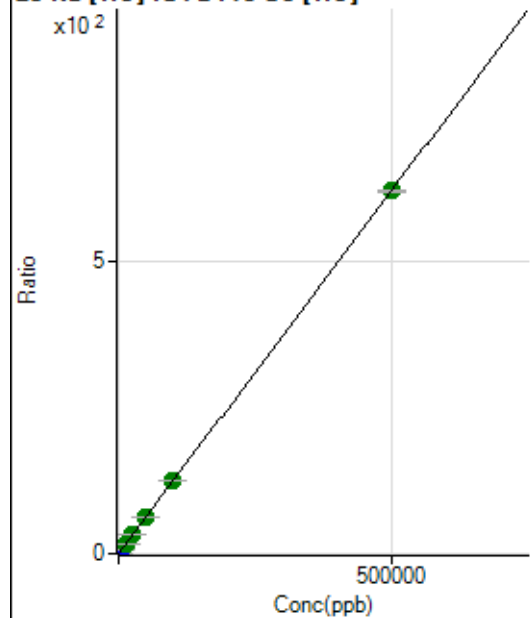
12 C [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

23 Na [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	14401.63	0.0378	P	2.3
2	☐	500.000	542.068	268859.50	0.7108	P	0.9
3	☐	5000.000	5269.547	2469024.64	6.5810	P	1.0
4	☐	12500.000	12681.722	5835505.99	15.7848	A	0.7
5	☐	25000.000	25405.563	11419857.98	31.5841	A	0.8
6	☐	50000.000	50316.498	21990150.14	62.5162	A	0.8
7	☐	100000.00	100211.69	42638883.59	124.4715	A	1.2
8	☐	500000.00	499898.45	221666460.5	620.7659	A	0.5

$$y = 0.0012 * x + 0.0378$$

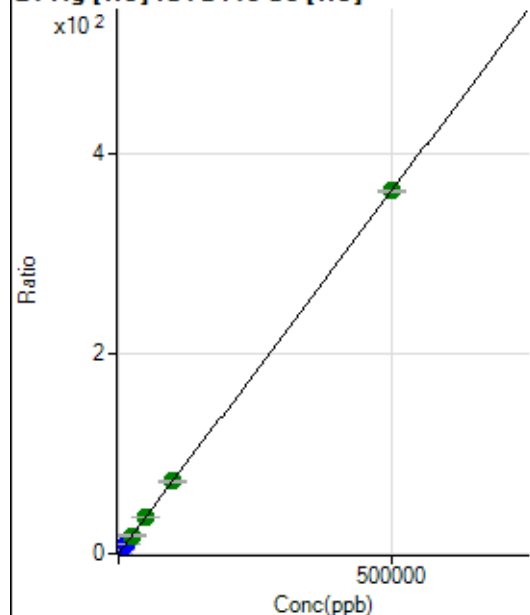
$$R = 1.0000$$

$$DL = 2.139$$

$$BEC = 30.41$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	397.24	0.0010	P	9.5
2	☐	500.000	537.660	148173.07	0.3918	P	1.7
3	☐	5000.000	5298.491	1445001.10	3.8514	P	0.5
4	☐	12500.000	13078.553	3513962.27	9.5052	P	0.6
5	☐	25000.000	25169.124	6613619.11	18.2914	A	1.0
6	☐	50000.000	50116.360	12810305.76	36.4205	A	1.1
7	☐	100000.00	99472.543	24762266.70	72.2876	A	1.2
8	☐	500000.00	500067.91	129759425.1	363.3997	A	0.9

$$y = 7.2670\text{E-}004 * x + 0.0010$$

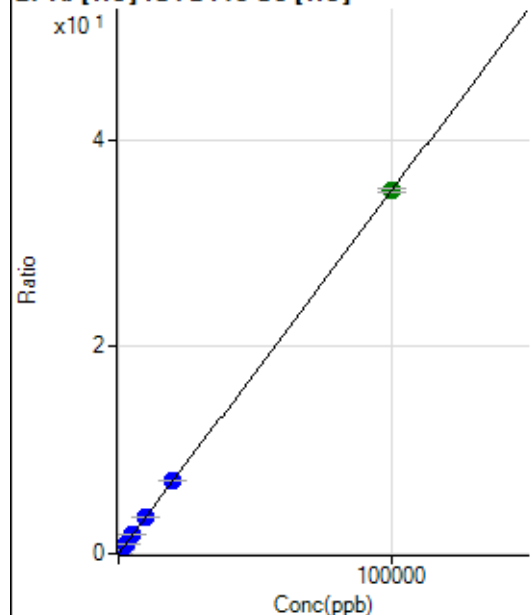
$$R = 1.0000$$

$$DL = 0.4107$$

$$BEC = 1.434$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	80.56	0.0002	P	20.7
2	☐	20.000	23.870	3244.87	0.0086	P	5.4
3	☐	1000.000	1041.006	137041.23	0.3653	P	1.7
4	☐	2500.000	2567.403	332901.13	0.9005	P	1.3
5	☐	5000.000	5097.523	646391.38	1.7878	P	1.0
6	☐	10000.000	10059.813	1240936.46	3.5279	P	0.9
7	☐	20000.000	19980.444	2400285.51	7.0067	P	0.6
8	☐	100000.00	99990.958	12520264.86	35.0639	A	0.9

$$y = 3.5067\text{E-}004 * x + 2.1094\text{E-}004$$

$$R = 1.0000$$

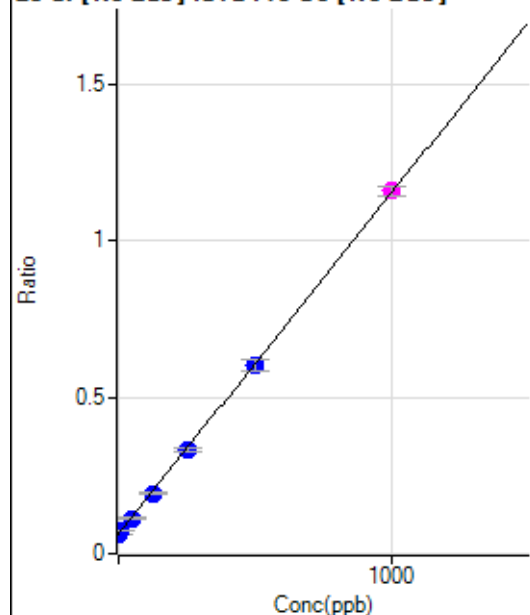
$$DL = 0.3732$$

$$BEC = 0.6015$$

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	288098.98	0.0632	P	0.9
2	☐	10.000	8.417	325835.20	0.0724	P	1.2
3	☐	50.000	45.744	510797.70	0.1131	P	2.1
4	☐	125.000	118.494	849163.61	0.1923	P	3.4
5	☐	250.000	244.195	1434375.52	0.3293	P	4.0
6	☐	500.000	493.883	2563850.71	0.6014	P	5.4
7	☐	1000.000	1005.552	4739893.25	1.1590	M	2.5
8	☐			477857.62	0.1150	P	5.8

$$y = 0.0011 * x + 0.0632$$

$$R = 0.9999$$

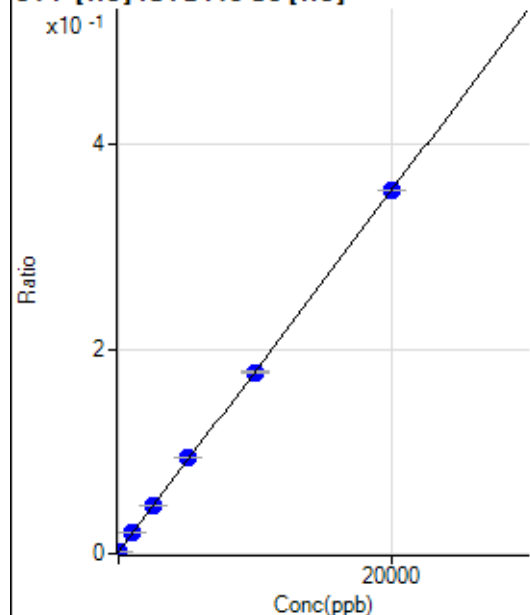
$$DL = 1.588$$

$$BEC = 58.01$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.840	652.81	0.0017	P	14.4
2	☐	0.000	-0.840	636.14	0.0017	P	9.0
3	☐	1000.000	1056.837	7638.25	0.0204	P	4.3
4	☐	2500.000	2567.938	17388.29	0.0470	P	3.2
5	☐	5000.000	5192.434	33763.63	0.0934	P	0.7
6	☐	10000.000	9938.206	62321.82	0.1772	P	0.4
7	☐	20000.000	19971.454	121389.57	0.3543	P	0.2
8	☐			619.47	0.0017	P	5.3

$$y = 1.7657E-005 * x + 0.0017$$

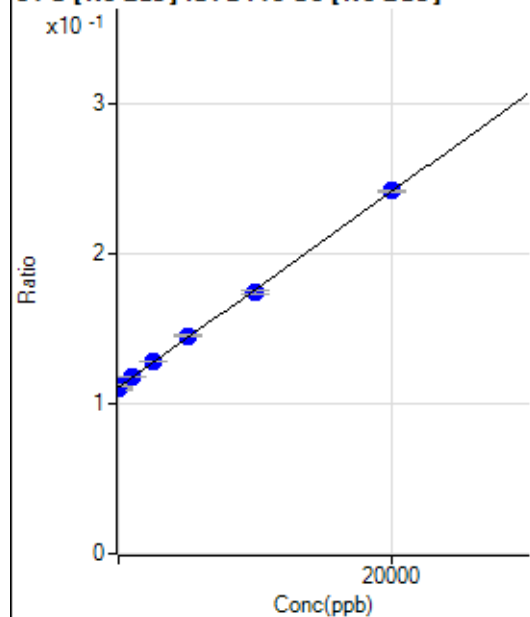
$$R = 0.9999$$

$$DL = 33.74$$

$$BEC = 96.12$$

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	-206.122	499500.93	0.1096	P	0.8
2	☐	0.000	206.122	505477.38	0.1123	P	0.6
3	☐	1000.000	1045.620	532104.18	0.1178	P	0.7
4	☐	2500.000	2666.067	566776.94	0.1283	P	0.2
5	☐	5000.000	5285.467	633619.64	0.1454	P	0.7
6	☐	10000.000	9706.871	743315.04	0.1743	P	1.2
7	☐	20000.000	20052.158	988924.70	0.2418	P	0.3
8	☐			437488.67	0.1052	P	0.9

$$y = 6.5255E-006 * x + 0.1109$$

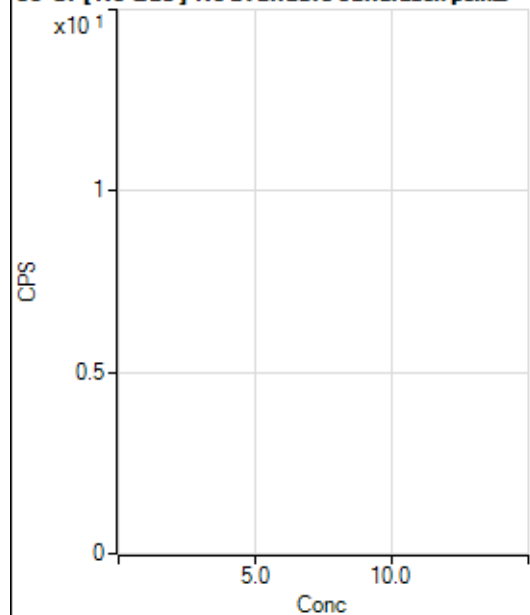
R = 0.9996

DL = 361.9

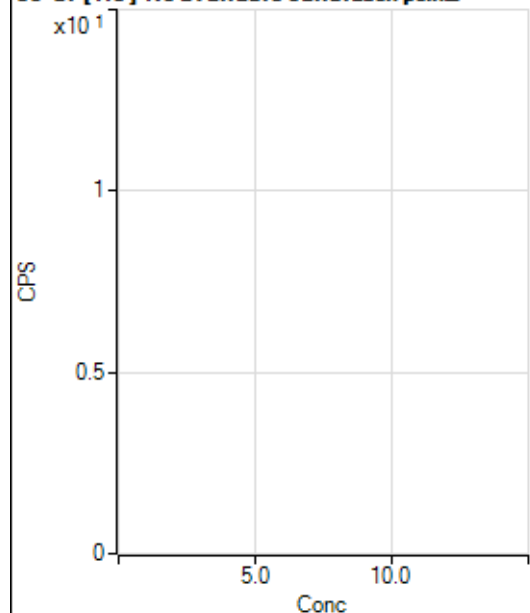
BEC = 1.7E+04

Weight: <None>

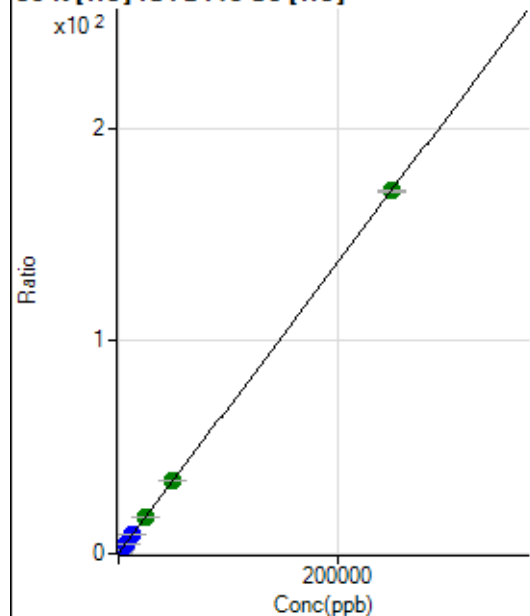
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	53797.91	0.1411	P	2.9
2	☐	500.000	557.206	197091.74	0.5211	P	0.7
3	☐	2500.000	2805.840	770901.80	2.0547	P	0.6
4	☐	6250.000	6908.324	1793978.90	4.8528	P	1.0
5	☐	12500.000	13651.727	3417589.49	9.4520	P	0.7
6	☐	25000.000	25047.117	6058473.10	17.2241	A	0.8
7	☐	50000.000	50216.584	11781187.33	34.3906	A	0.5
8	☐	250000.00	249874.75	60904304.14	170.5649	A	0.7

$$y = 6.8204E-004 * x + 0.1411$$

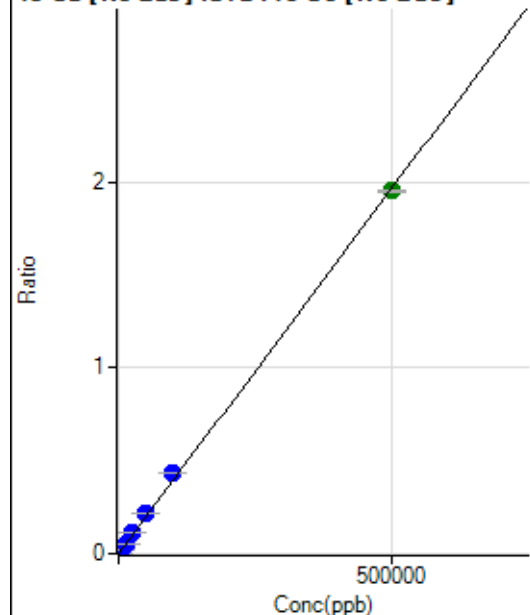
$$R = 1.0000$$

$$DL = 17.92$$

$$BEC = 206.8$$

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	210.95	0.0000	P	35.5
2	☐	500.000	554.410	10005.18	0.0022	P	3.3
3	☐	5000.000	5588.340	99340.53	0.0220	P	0.2
4	☐	12500.000	14133.780	245247.91	0.0555	P	0.8
5	☐	25000.000	28068.103	480284.33	0.1102	P	1.1
6	☐	50000.000	55645.969	931915.02	0.2185	P	1.5
7	☐	100000.00	110755.71	1778617.76	0.4349	P	0.7
8	☐	500000.00	497084.07	8113257.18	1.9516	A	0.8

$$y = 3.9260\text{E-}006 * x + 4.6186\text{E-}005$$

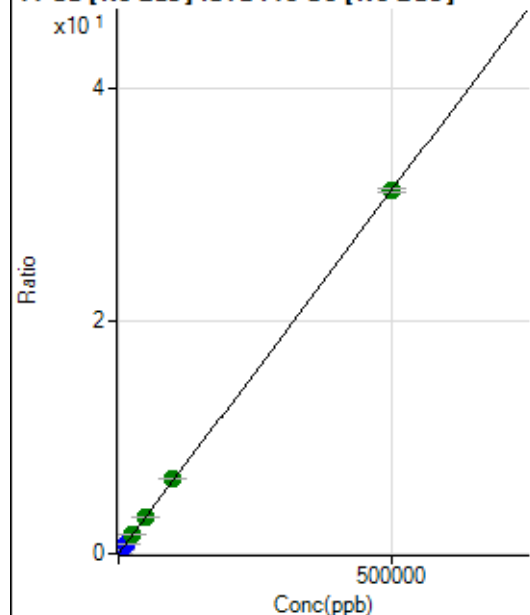
$$R = 0.9997$$

$$DL = 12.53$$

$$BEC = 11.76$$

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	9312.89	0.0020	P	1.8
2	☐	500.000	562.573	167495.24	0.0372	P	1.3
3	☐	5000.000	5570.989	1582600.42	0.3503	P	1.3
4	☐	12500.000	13892.549	3843906.93	0.8705	P	0.9
5	☐	25000.000	25407.290	6927934.29	1.5902	A	1.4
6	☐	50000.000	51156.342	13646923.99	3.1998	A	1.2
7	☐	100000.00	102191.22	26134876.66	6.3900	A	0.5
8	☐	500000.00	499385.17	129780450.8	31.2184	A	1.1

$$y = 6.2510\text{E-}005 * x + 0.0020$$

$$R = 1.0000$$

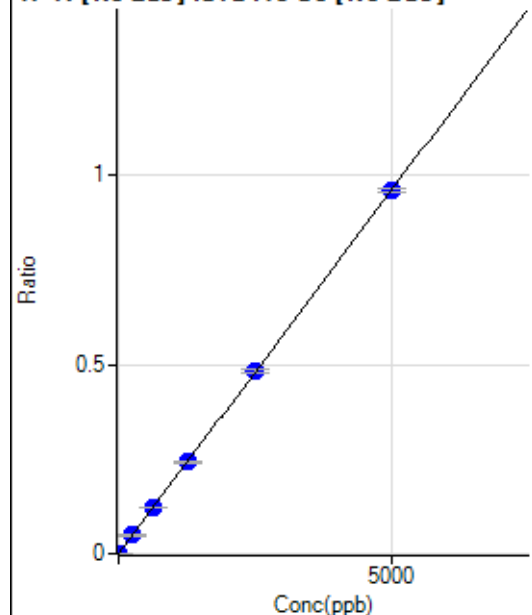
$$DL = 1.81$$

$$BEC = 32.69$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.34	0.0000	P	36.1
2	☐	5.000	5.429	4775.90	0.0011	P	5.2
3	☐	250.000	252.434	219131.65	0.0485	P	1.7
4	☐	625.000	632.218	536289.31	0.1214	P	1.0
5	☐	1250.000	1260.000	1054404.19	0.2420	P	0.9
6	☐	2500.000	2510.578	2056588.78	0.4822	P	1.4
7	☐	5000.000	4991.186	3920773.53	0.9587	P	1.1
8	☐			1319.55	0.0003	P	10.6

$$y = 1.9207\text{E-}004 * x + 1.8282\text{E-}005$$

$$R = 1.0000$$

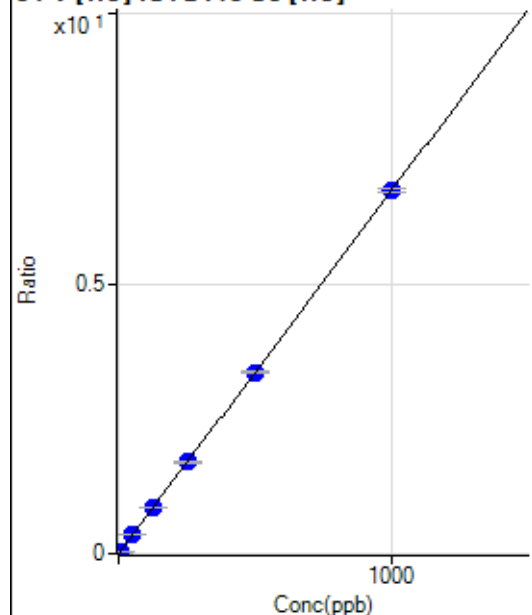
$$DL = 0.1032$$

$$BEC = 0.09518$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	49.5
2	☐	5.000	5.331	13569.66	0.0359	P	0.7
3	☐	50.000	50.547	127575.95	0.3400	P	0.3
4	☐	125.000	126.510	314612.20	0.8510	P	0.7
5	☐	250.000	252.407	613912.32	1.6979	P	0.8
6	☐	500.000	499.330	1181428.38	3.3589	P	1.0
7	☐	1000.000	999.515	2303171.08	6.7235	P	1.2
8	☐			858.92	0.0024	P	11.9

$$y = 0.0067 * x + 1.7457\text{E-}005$$

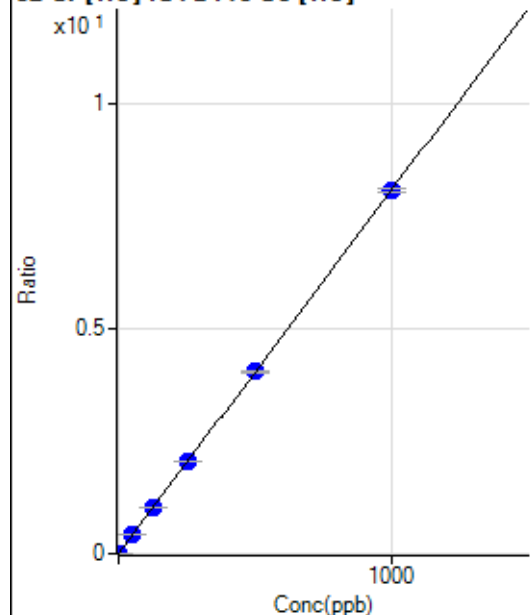
$$R = 1.0000$$

$$DL = 0.003854$$

$$BEC = 0.002595$$

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	1258.96	0.0033	P	6.9
2	☐	2.000	2.179	7902.18	0.0209	P	1.1
3	☐	50.000	51.082	155971.68	0.4157	P	1.0
4	☐	125.000	127.417	381531.52	1.0320	P	0.7
5	☐	250.000	254.732	744824.97	2.0600	P	0.5
6	☐	500.000	500.705	1423084.28	4.0459	P	0.8
7	☐	1000.000	998.108	2761591.56	8.0618	P	1.1
8	☐			20285.13	0.0568	P	1.5

$$y = 0.0081 * x + 0.0033$$

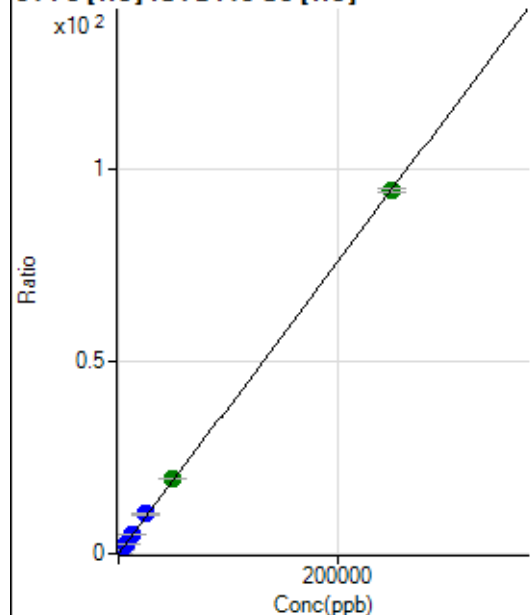
$$R = 1.0000$$

$$DL = 0.08469$$

$$BEC = 0.4089$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1154.58	0.0030	P	2.9
2	☐	50.000	59.139	9619.73	0.0254	P	2.4
3	☐	2500.000	2796.843	398649.95	1.0625	P	0.6
4	☐	6250.000	6900.901	967593.03	2.6172	P	0.2
5	☐	12500.000	13731.782	1881960.91	5.2049	P	0.5
6	☐	25000.000	27157.916	3619630.68	10.2910	P	0.8
7	☐	50000.000	51698.324	6709805.40	19.5874	A	1.4
8	☐	250000.00	249363.71	33731118.68	94.4673	A	1.1

$$y = 3.7882E-004 * x + 0.0030$$

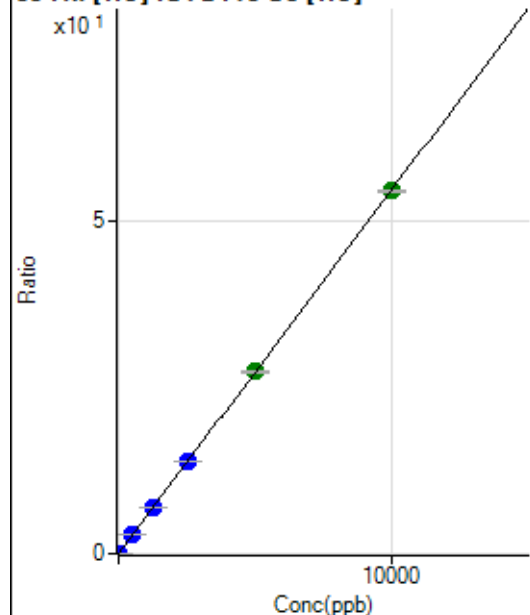
$$R = 0.9999$$

$$DL = 0.7059$$

$$BEC = 7.99$$

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	184.45	0.0005	P	9.0
2	☐	1.000	1.108	2475.79	0.0065	P	2.2
3	☐	500.000	518.802	1065058.10	2.8388	P	0.8
4	☐	1250.000	1287.681	2604546.07	7.0452	P	0.5
5	☐	2500.000	2553.000	5050301.42	13.9676	P	0.7
6	☐	5000.000	5002.622	9626497.77	27.3692	A	1.3
7	☐	10000.000	9979.789	18703778.75	54.5987	A	0.5
8	☐			15290.27	0.0428	P	2.1

$$y = 0.0055 * x + 4.8375E-004$$

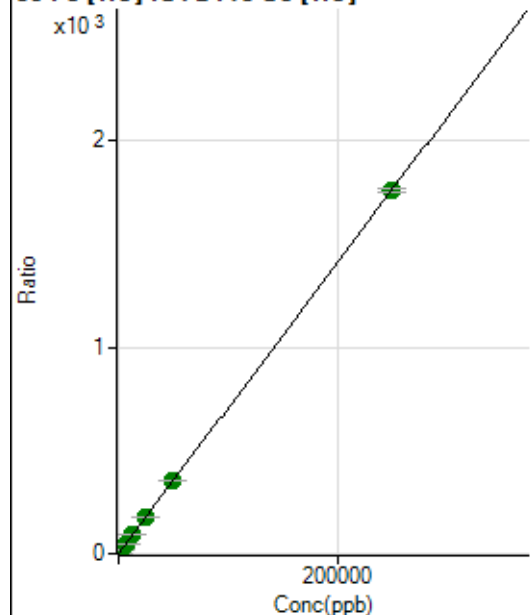
$$R = 1.0000$$

$$DL = 0.024$$

$$BEC = 0.08842$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7993.04	0.0210	P	2.3
2	☐	50.000	56.055	157084.06	0.4153	P	1.2
3	☐	2500.000	2537.634	6706208.31	17.8744	A	1.0
4	☐	6250.000	6334.532	16483797.47	44.5874	A	0.9
5	☐	12500.000	12684.520	32274678.73	89.2627	A	0.8
6	☐	25000.000	25340.888	62718962.98	178.3063	A	0.6
7	☐	50000.000	50674.266	122136805.5	356.5388	A	0.7
8	☐	250000.00	249819.34	627590739.9	1,757.620	A	0.9

$$y = 0.0070 * x + 0.0210$$

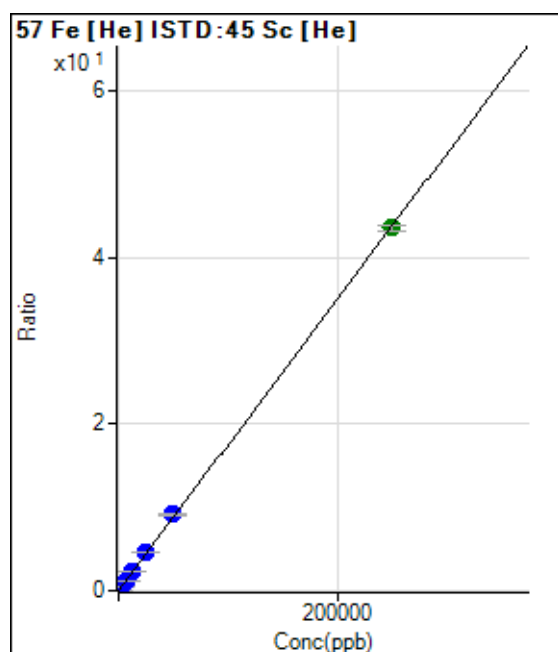
$$R = 1.0000$$

$$DL = 0.2033$$

$$BEC = 2.978$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	240.75	0.0006	P	10.0
2	☐	50.000	58.012	4072.86	0.0108	P	2.9
3	☐	2500.000	2704.450	177546.68	0.4732	P	0.4
4	☐	6250.000	6725.296	434700.46	1.1759	P	0.5
5	☐	12500.000	13391.242	846337.54	2.3407	P	0.7
6	☐	25000.000	26611.334	1635907.37	4.6509	P	0.8
7	☐	50000.000	52470.051	3141023.45	9.1696	P	1.5
8	☐	250000.00	249286.36	15554257.64	43.5625	A	1.4

$$y = 1.7475\text{E-}004 * x + 6.3093\text{E-}004$$

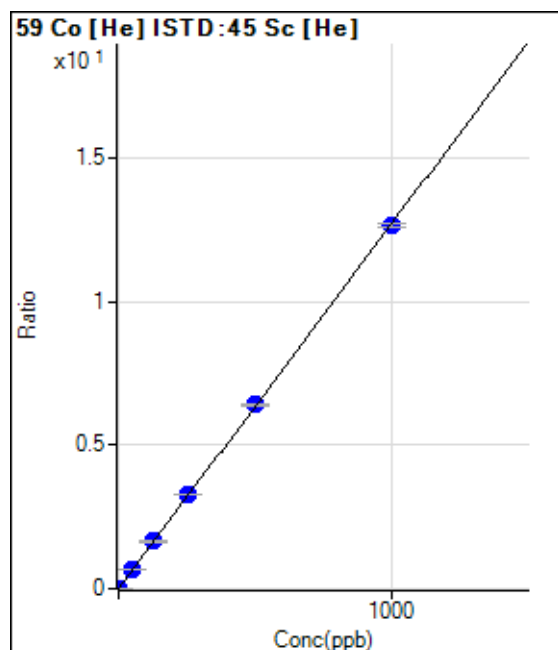
$$R = 0.9999$$

$$DL = 1.08$$

$$BEC = 3.611$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	243.34	0.0006	P	14.9
2	☐	1.000	1.082	5449.96	0.0144	P	1.5
3	☐	50.000	52.065	248824.12	0.6632	P	0.8
4	☐	125.000	129.430	609155.85	1.6477	P	0.6
5	☐	250.000	257.323	1184261.07	3.2753	P	0.4
6	☐	500.000	505.754	2264016.29	6.4368	P	1.0
7	☐	1000.000	994.635	4336060.00	12.6582	P	1.2
8	☐			7744.33	0.0217	P	1.8

$$y = 0.0127 * x + 6.3835\text{E-}004$$

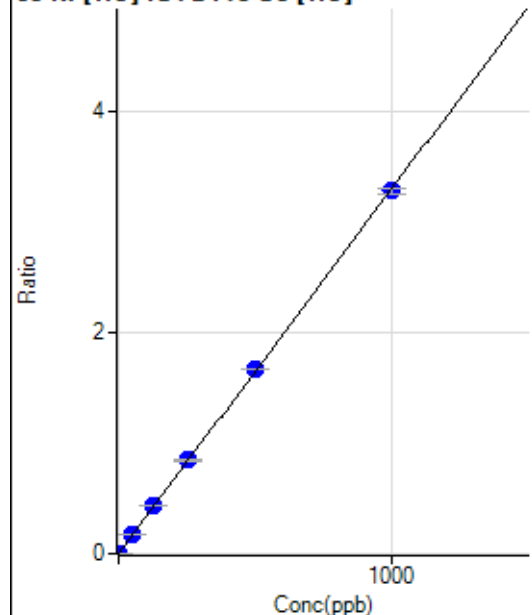
$$R = 0.9999$$

$$DL = 0.02243$$

$$BEC = 0.05016$$

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	143.34	0.0004	P	12.3
2	☐	1.000	1.125	1544.54	0.0041	P	2.6
3	☐	50.000	52.541	65095.53	0.1735	P	1.5
4	☐	125.000	130.403	158997.50	0.4301	P	0.7
5	☐	250.000	256.442	305678.37	0.8454	P	0.6
6	☐	500.000	504.833	585258.59	1.6639	P	0.4
7	☐	1000.000	995.171	1123436.25	3.2797	P	1.5
8	☐			4360.69	0.0122	P	3.6

$$y = 0.0033 * x + 3.7576E-004$$

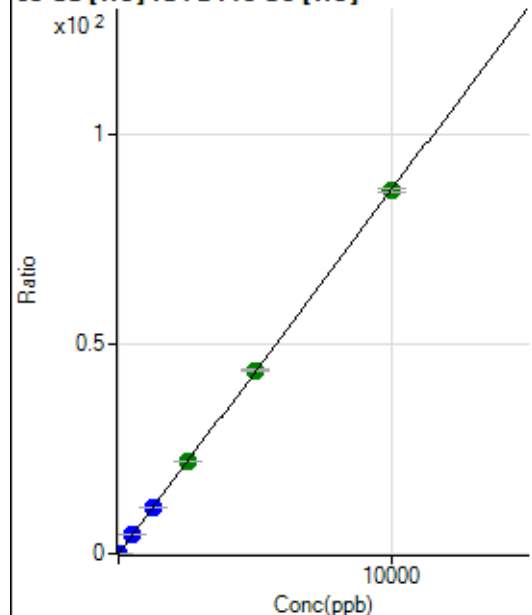
$$R = 1.0000$$

$$DL = 0.04192$$

$$BEC = 0.114$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	717.80	0.0019	P	5.1
2	☐	2.000	2.205	7942.22	0.0210	P	1.5
3	☐	500.000	522.772	1701027.35	4.5339	P	0.7
4	☐	1250.000	1289.344	4132869.84	11.1794	P	0.8
5	☐	2500.000	2540.541	7963829.74	22.0263	A	1.4
6	☐	5000.000	5030.485	15339827.97	43.6120	A	1.3
7	☐	10000.000	9968.566	29603607.62	86.4210	A	1.1
8	☐			25359.82	0.0710	P	0.3

$$y = 0.0087 * x + 0.0019$$

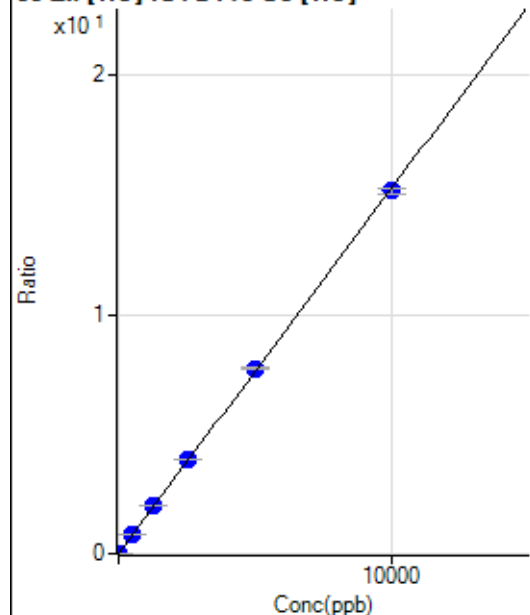
$$R = 1.0000$$

$$DL = 0.0333$$

$$BEC = 0.2171$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	340.01	0.0009	P	3.0
2	☐	2.000	2.406	1725.67	0.0046	P	3.9
3	☐	500.000	527.057	302027.46	0.8050	P	1.0
4	☐	1250.000	1304.913	736346.43	1.9918	P	0.7
5	☐	2500.000	2583.597	1425555.60	3.9427	P	0.9
6	☐	5000.000	5074.816	2723638.85	7.7436	P	0.7
7	☐	10000.000	9933.475	5191755.79	15.1565	P	1.5
8	☐			14287.08	0.0400	P	1.7

$$y = 0.0015 * x + 8.9143E-004$$

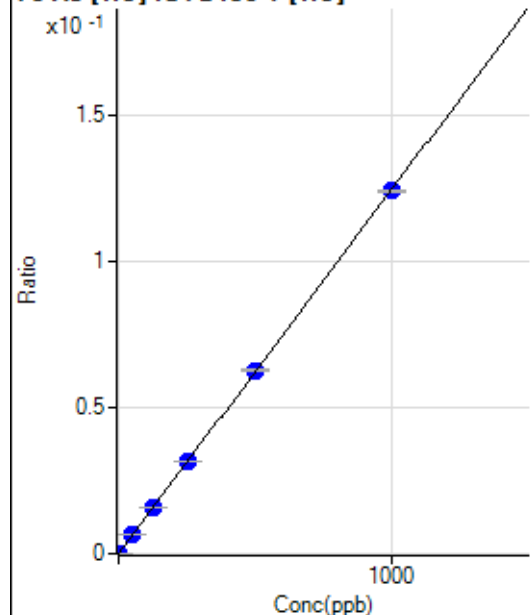
$$R = 0.9999$$

$$DL = 0.05275$$

$$BEC = 0.5843$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.09	0.0000	P	91.8
2	☐	1.000	1.104	391.37	0.0001	P	7.3
3	☐	50.000	51.314	17908.56	0.0064	P	1.2
4	☐	125.000	127.360	43938.23	0.0159	P	1.6
5	☐	250.000	253.807	85888.95	0.0317	P	0.5
6	☐	500.000	503.840	166698.27	0.0629	P	0.9
7	☐	1000.000	996.768	324635.47	0.1244	P	0.7
8	☐			216.67	0.0001	P	14.3

$$y = 1.2478E-004 * x + 1.0867E-006$$

$$R = 1.0000$$

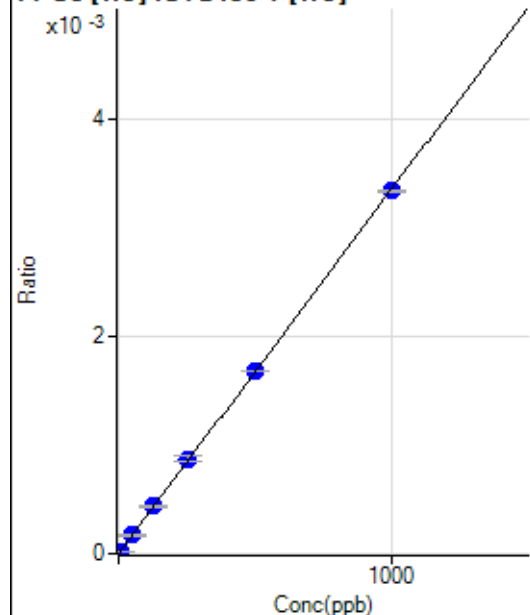
$$DL = 0.02398$$

$$BEC = 0.008709$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	6.011	56.67	0.0000	P	20.8
3	☐	50.000	50.463	472.23	0.0002	P	3.0
4	☐	125.000	129.413	1196.73	0.0004	P	6.0
5	☐	250.000	261.157	2370.22	0.0009	P	6.2
6	☐	500.000	501.468	4449.61	0.0017	P	1.0
7	☐	1000.000	995.897	8699.35	0.0033	P	0.4
8	☐			6.67	0.0000	P	49.2

$$y = 3.3467\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

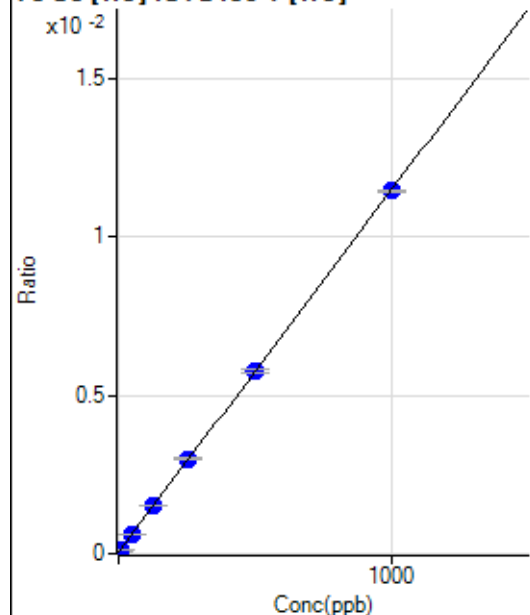
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	135.80	0.0000	P	13.5
2	☐	5.000	5.383	308.65	0.0001	P	1.5
3	☐	50.000	49.211	1706.28	0.0006	P	2.6
4	☐	125.000	128.567	4192.60	0.0015	P	2.9
5	☐	250.000	256.816	8086.24	0.0030	P	2.1
6	☐	500.000	500.638	15292.02	0.0058	P	1.6
7	☐	1000.000	997.568	29870.09	0.0114	P	0.7
8	☐			135.81	0.0001	P	8.7

$$y = 1.1424\text{E-}005 * x + 4.7995\text{E-}005$$

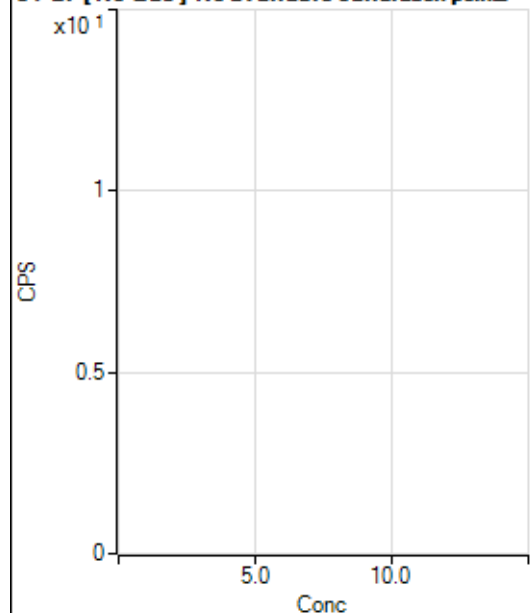
$$R = 1.0000$$

$$DL = 1.704$$

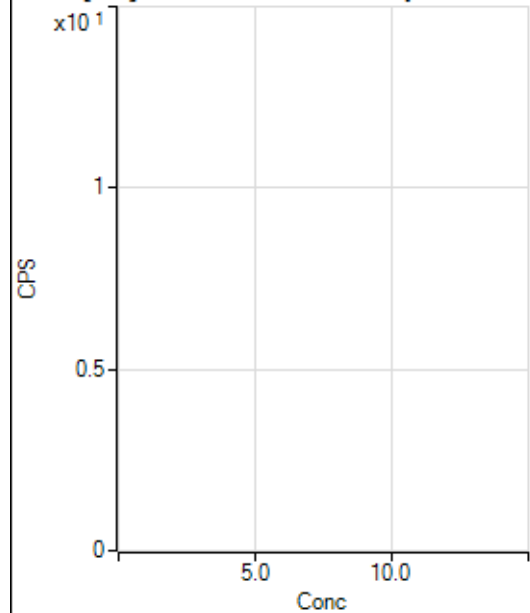
$$BEC = 4.201$$

Weight: <None>

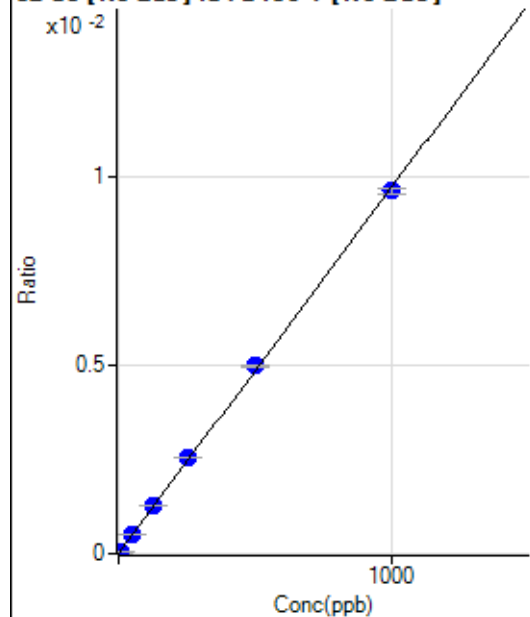
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6676.70		P	6.3
2	☐			6548.87		P	1.2
3	☐			6151.52		P	3.2
4	☐			6109.80		P	4.9
5	☐			6471.04		P	4.0
6	☐			6109.78		P	6.0
7	☐			5673.49		P	1.0
8	☐			5817.99		P	1.9

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			96.76		P	23.9
2	☐			83.42		P	68.2
3	☐			46.71		P	32.7
4	☐			70.07		P	28.6
5	☐			56.72		P	40.8
6	☐			80.08		P	25.0
7	☐			90.09		P	29.4
8	☐			136.81		P	48.7

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.50	0.0000	P	268.
2	☐	5.000	4.970	618.85	0.0001	P	27.8
3	☐	50.000	52.365	5897.02	0.0005	P	1.8
4	☐	125.000	130.272	14399.01	0.0013	P	1.0
5	☐	250.000	259.847	28402.10	0.0025	P	0.2
6	☐	500.000	511.868	55161.93	0.0050	P	1.8
7	☐	1000.000	990.827	104650.46	0.0096	P	1.4
8	☐			147.66	0.0000	P	8.1

$$y = 9.7305E-006 * x + 5.7349E-006$$

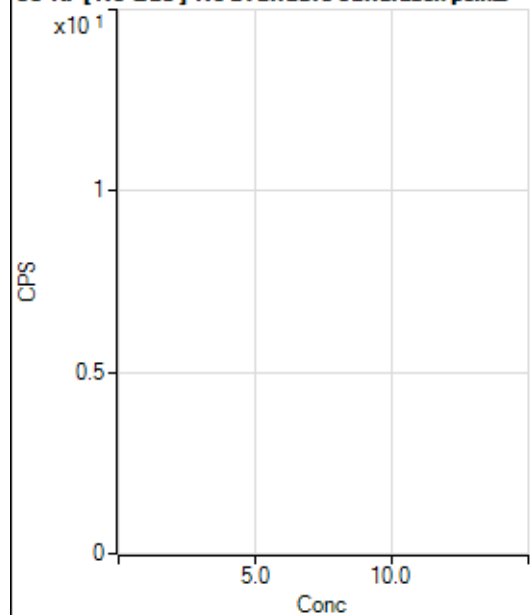
$$R = 0.9998$$

$$DL = 4.744$$

$$BEC = 0.5894$$

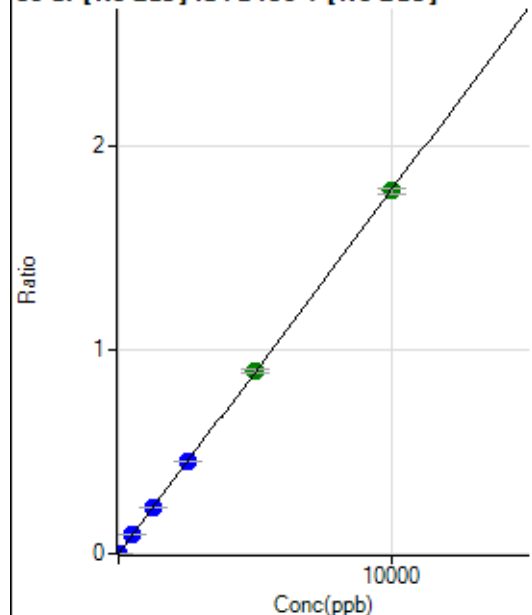
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			1835.69		P	7.2
2	☐			1913.48		P	3.5
3	☐			1877.92		P	4.3
4	☐			1910.15		P	4.6
5	☐			1801.24		P	2.0
6	☐			1742.35		P	3.3
7	☐			1691.23		P	3.3
8	☐			1662.34		P	2.1

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3030.97	0.0003	P	2.7
2	☐	1.000	1.147	5356.70	0.0005	P	2.6
3	☐	500.000	521.846	1066021.99	0.0932	P	1.6
4	☐	1250.000	1282.795	2584897.50	0.2286	P	1.1
5	☐	2500.000	2543.041	5076551.50	0.4530	P	0.3
6	☐	5000.000	5010.488	9870322.53	0.8922	A	1.7
7	☐	10000.000	9978.804	19272791.57	1.7766	A	1.4
8	☐			10901.68	0.0010	P	5.5

$$y = 1.7801\text{E-}004 * x + 2.6382\text{E-}004$$

R = 1.0000

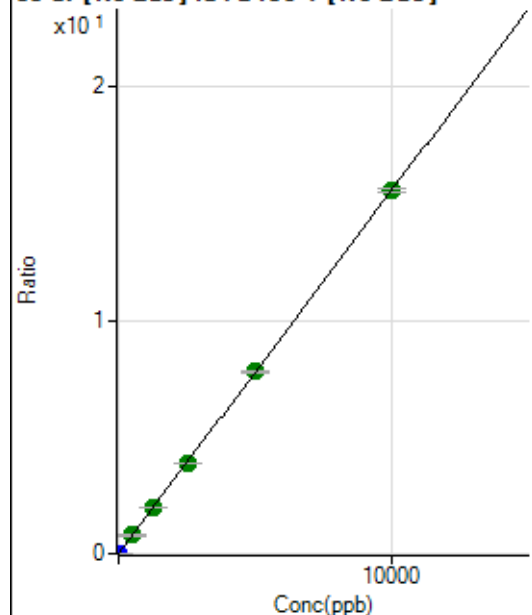
DL = 0.1206

BEC = 1.482

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	283.35	0.0000	P	10.2
2	☐	1.000	1.092	19727.84	0.0017	P	1.4
3	☐	500.000	504.730	8984568.60	0.7851	A	1.6
4	☐	1250.000	1261.669	22189990.95	1.9626	A	1.2
5	☐	2500.000	2500.428	43592576.67	3.8895	A	0.5
6	☐	5000.000	5010.888	86226541.51	7.7946	A	1.7
7	☐	10000.000	9992.754	168622828.7	15.5440	A	1.1
8	☐			68974.59	0.0064	P	6.4

$$y = 0.0016 * x + 2.4657\text{E-}005$$

R = 1.0000

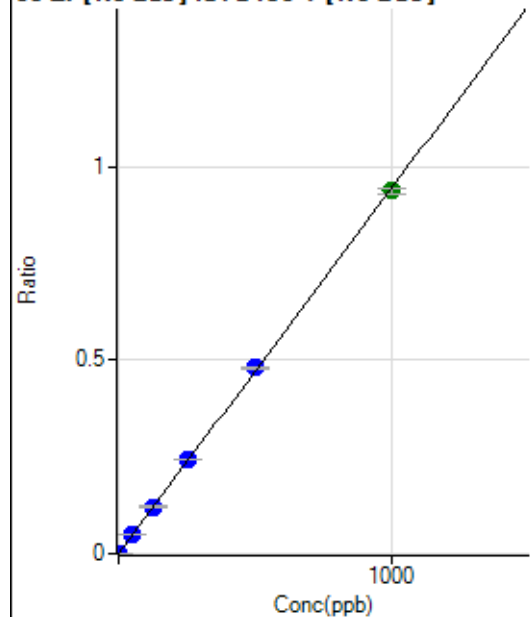
DL = 0.004855

BEC = 0.01585

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	686.15	0.0001	P	4.6
2	☐	1.000	1.019	11691.12	0.0010	P	2.8
3	☐	50.000	51.341	555182.54	0.0485	P	1.0
4	☐	125.000	128.876	1375898.13	0.1217	P	1.5
5	☐	250.000	257.454	2723943.33	0.2430	P	0.3
6	☐	500.000	508.322	5307999.64	0.4798	P	1.6
7	☐	1000.000	993.424	10171680.17	0.9377	A	1.4
8	☐			3828.40	0.0004	P	2.6

$$y = 9.4380\text{E-}004 * x + 5.9739\text{E-}005$$

$$R = 0.9999$$

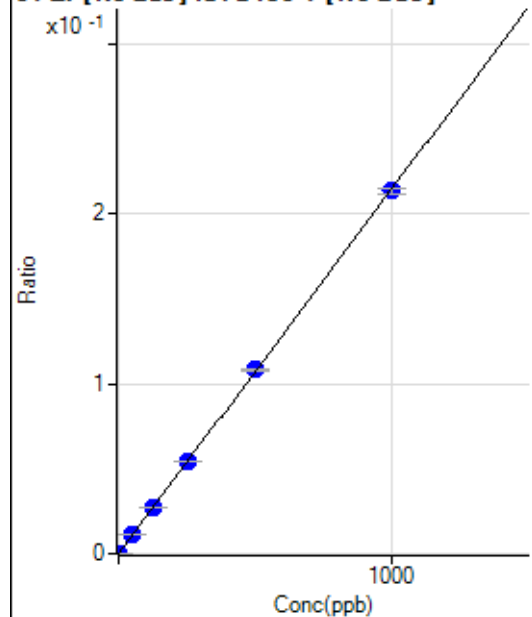
$$DL = 0.008798$$

$$BEC = 0.0633$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	147.23	0.0000	P	18.1
2	☐	1.000	1.060	2750.34	0.0002	P	3.2
3	☐	50.000	50.614	124461.15	0.0109	P	1.9
4	☐	125.000	126.897	308087.77	0.0272	P	1.7
5	☐	250.000	254.367	612022.18	0.0546	P	1.0
6	☐	500.000	505.780	1201125.25	0.1086	P	1.3
7	☐	1000.000	995.750	2318621.49	0.2137	P	1.3
8	☐			855.61	0.0001	P	7.0

$$y = 2.1464\text{E-}004 * x + 1.2827\text{E-}005$$

$$R = 1.0000$$

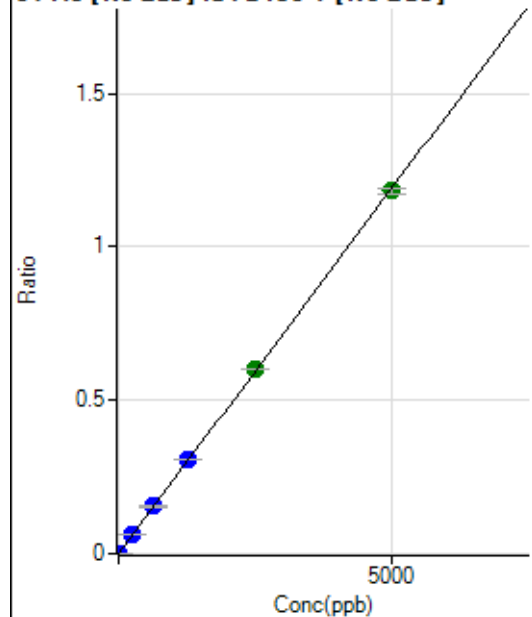
$$DL = 0.03241$$

$$BEC = 0.05976$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	252.79	0.0000	P	8.4
2	☐	5.000	5.275	14610.52	0.0013	P	1.6
3	☐	250.000	260.885	710377.55	0.0621	P	0.7
4	☐	625.000	649.275	1746329.71	0.1545	P	1.8
5	☐	1250.000	1294.747	3451799.08	0.3080	P	0.6
6	☐	2500.000	2531.003	6660883.48	0.6020	A	0.8
7	☐	5000.000	4969.733	12823730.24	1.1821	A	1.4
8	☐			5370.60	0.0005	P	10.5

$$y = 2.3786E-004 * x + 2.2013E-005$$

$$R = 0.9999$$

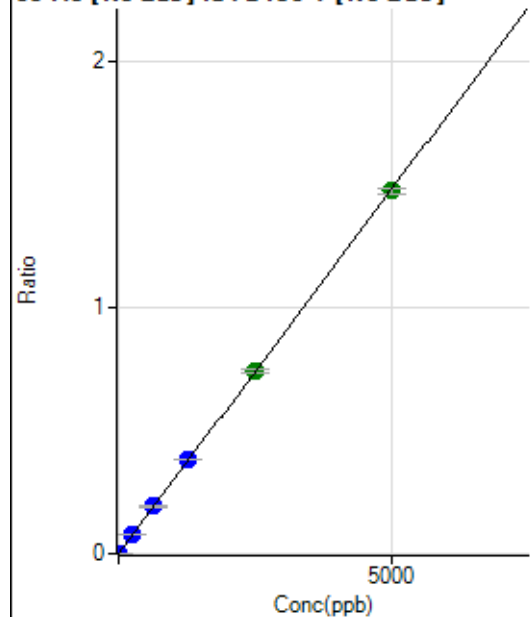
$$DL = 0.02327$$

$$BEC = 0.09254$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.0
2	☐	5.000	5.281	17919.98	0.0016	P	2.0
3	☐	250.000	260.408	882515.44	0.0771	P	1.0
4	☐	625.000	646.808	2165658.03	0.1915	P	1.9
5	☐	1250.000	1286.233	4269023.58	0.3809	P	0.8
6	☐	2500.000	2514.479	8237434.56	0.7446	A	1.9
7	☐	5000.000	4980.456	15999964.77	1.4749	A	1.5
8	☐			7443.76	0.0007	P	2.8

$$y = 2.9614E-004 * x + 1.9324E-006$$

$$R = 1.0000$$

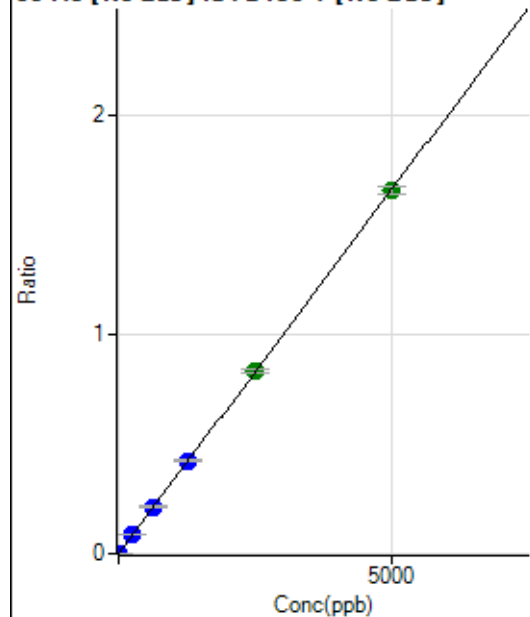
$$DL = 0.004115$$

$$BEC = 0.006525$$

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	158.34	0.0000	P	45.3
2	☐	5.000	5.260	20097.94	0.0018	P	2.9
3	☐	250.000	259.846	985271.88	0.0861	P	1.4
4	☐	625.000	646.400	2421421.39	0.2142	P	1.6
5	☐	1250.000	1279.416	4750663.95	0.4239	P	0.9
6	☐	2500.000	2508.428	9193273.12	0.8311	A	2.2
7	☐	5000.000	4985.265	17916484.25	1.6516	A	2.2
8	☐			9319.95	0.0009	P	1.7

$$y = 3.3130E-004 * x + 1.3759E-005$$

$$R = 1.0000$$

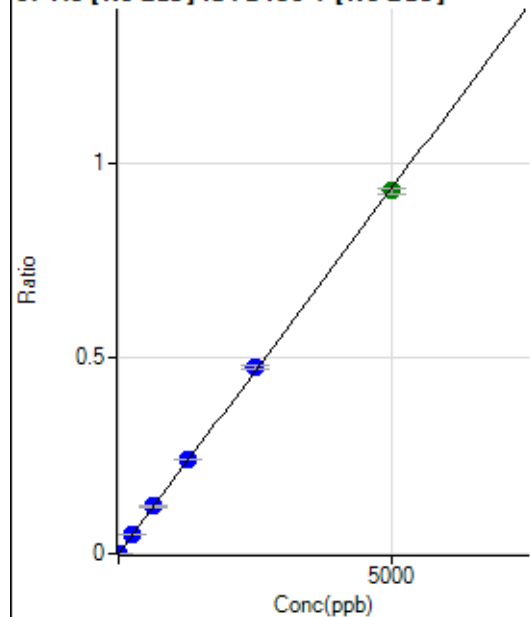
$$DL = 0.05645$$

$$BEC = 0.04153$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	49.8
2	☐	5.000	5.272	11296.39	0.0010	P	2.0
3	☐	250.000	261.785	559969.67	0.0489	P	1.2
4	☐	625.000	647.309	1368041.39	0.1210	P	1.4
5	☐	1250.000	1285.650	2693295.50	0.2403	P	0.9
6	☐	2500.000	2542.034	5256199.94	0.4752	P	2.0
7	☐	5000.000	4966.692	10071012.20	0.9284	A	1.4
8	☐			4495.28	0.0004	P	5.7

$$y = 1.8692E-004 * x + 1.6953E-006$$

$$R = 0.9999$$

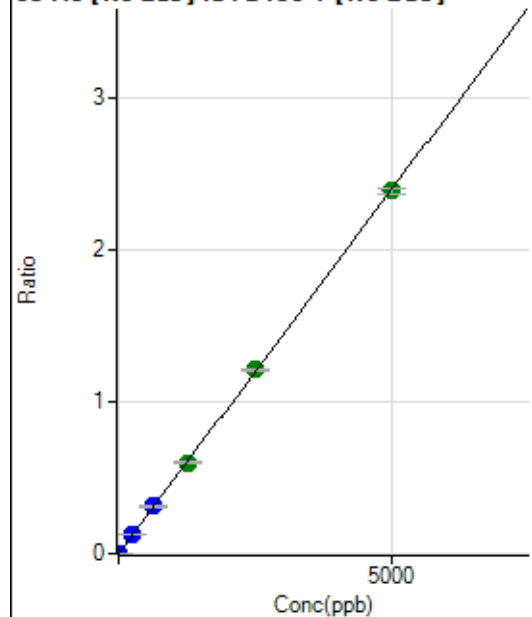
$$DL = 0.01354$$

$$BEC = 0.00907$$

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	61.11	0.0000	P	33.9
2	☐	5.000	5.248	28837.95	0.0025	P	0.4
3	☐	250.000	262.874	1441471.10	0.1260	P	1.1
4	☐	625.000	650.937	3526429.24	0.3119	P	2.2
5	☐	1250.000	1254.652	6737776.19	0.6012	A	1.0
6	☐	2500.000	2522.968	13373336.50	1.2089	A	1.8
7	☐	5000.000	4983.467	25903774.37	2.3879	A	1.7
8	☐			11682.88	0.0011	P	7.8

$$y = 4.7917E-004 * x + 5.3137E-006$$

$$R = 1.0000$$

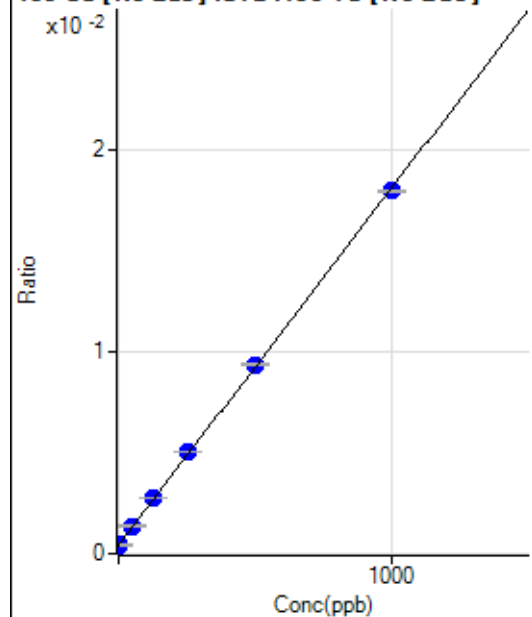
$$DL = 0.01129$$

$$BEC = 0.01109$$

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	4750.92	0.0004	P	4.4
2	☐	1.000	1.088	4948.24	0.0004	P	4.2
3	☐	50.000	53.831	15511.56	0.0014	P	3.2
4	☐	125.000	133.822	31426.99	0.0028	P	1.5
5	☐	250.000	262.381	57006.69	0.0051	P	0.5
6	☐	500.000	505.575	106153.00	0.0094	P	1.0
7	☐	1000.000	992.823	199232.86	0.0180	P	0.6
8	☐			4673.11	0.0004	P	7.5

$$y = 1.7695E-005 * x + 4.1756E-004$$

$$R = 0.9999$$

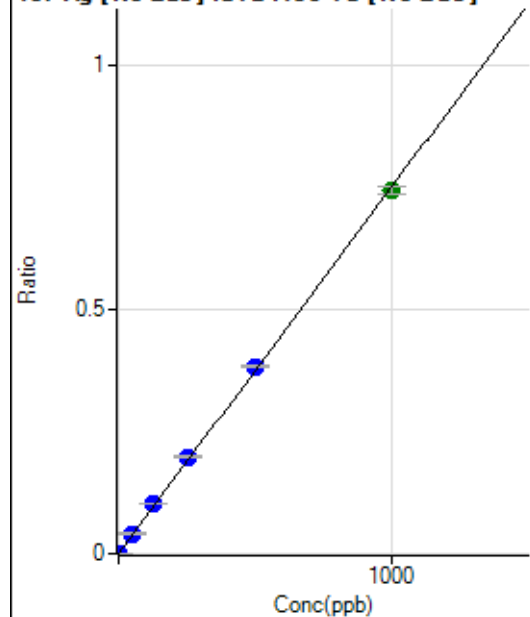
$$DL = 3.088$$

$$BEC = 23.6$$

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	44.45	0.0000	P	9.7
2	☐	1.000	1.062	9075.34	0.0008	P	2.9
3	☐	50.000	54.817	466192.59	0.0412	P	2.3
4	☐	125.000	135.199	1145673.81	0.1015	P	1.3
5	☐	250.000	264.610	2238894.80	0.1987	P	0.4
6	☐	500.000	509.758	4340351.62	0.3829	P	0.7
7	☐	1000.000	989.953	8235925.36	0.7435	A	2.0
8	☐			3180.99	0.0003	P	1.7

$$y = 7.5108\text{E-}004 * x + 3.9043\text{E-}006$$

$$R = 0.9998$$

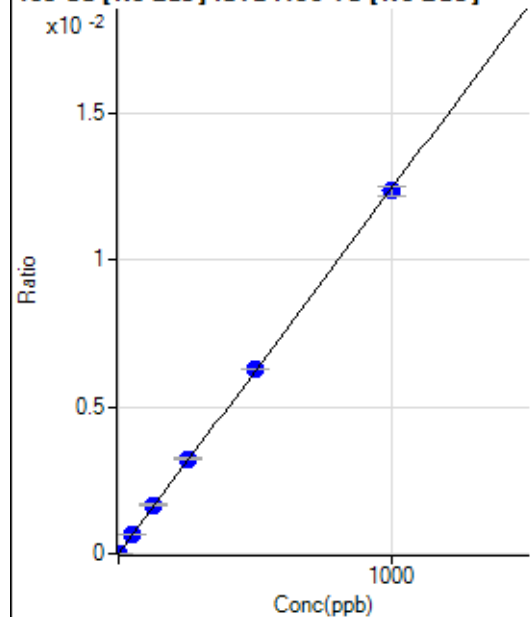
$$DL = 0.001515$$

$$BEC = 0.005198$$

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	59.72	0.0000	P	34.7
2	☐	1.000	1.145	220.84	0.0000	P	14.1
3	☐	50.000	52.506	7456.21	0.0007	P	0.6
4	☐	125.000	132.272	18624.82	0.0017	P	3.1
5	☐	250.000	259.979	36495.44	0.0032	P	2.1
6	☐	500.000	505.590	71365.15	0.0063	P	0.8
7	☐	1000.000	993.676	136990.96	0.0124	P	2.3
8	☐			154.17	0.0000	P	17.7

$$y = 1.2441\text{E-}005 * x + 5.2368\text{E-}006$$

$$R = 0.9999$$

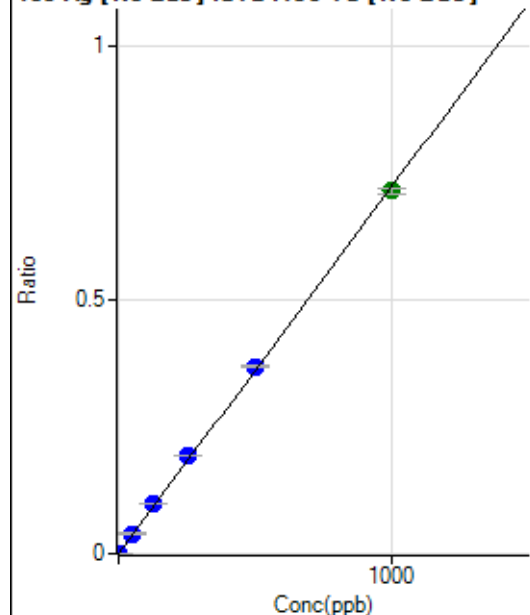
$$DL = 0.4376$$

$$BEC = 0.4209$$

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	33.33	0.0000	P	75.2
2	☐	1.000	1.083	8889.09	0.0008	P	2.9
3	☐	50.000	54.744	447638.45	0.0395	P	1.4
4	☐	125.000	136.160	1109322.94	0.0983	P	1.0
5	☐	250.000	265.766	2161966.00	0.1919	P	0.1
6	☐	500.000	510.213	4176451.27	0.3684	P	1.5
7	☐	1000.000	989.320	7913432.90	0.7144	A	1.3
8	☐			3233.80	0.0003	P	4.6

$$y = 7.2211\text{E-}004 * x + 2.9419\text{E-}006$$

$$R = 0.9998$$

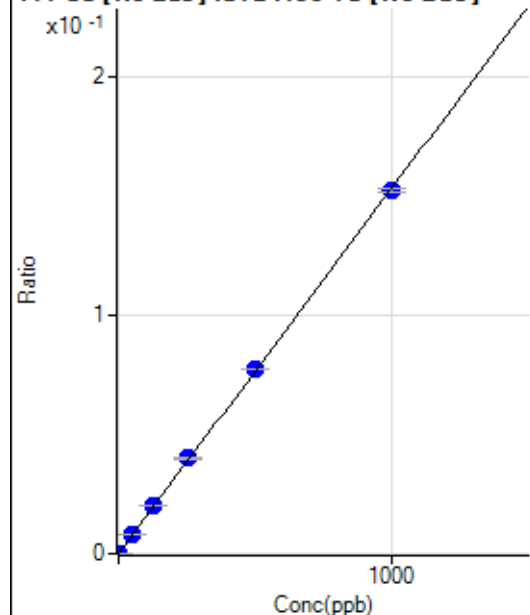
$$DL = 0.00919$$

$$BEC = 0.004074$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	438.84	0.0000	P	3.3
2	☐	1.000	1.152	2433.48	0.0002	P	0.6
3	☐	50.000	53.101	92446.01	0.0082	P	1.0
4	☐	125.000	132.515	229206.24	0.0203	P	1.3
5	☐	250.000	260.925	450219.88	0.0400	P	0.5
6	☐	500.000	504.812	876149.46	0.0773	P	0.6
7	☐	1000.000	993.768	1684897.04	0.1521	P	1.1
8	☐			949.69	0.0001	P	8.1

$$y = 1.5302\text{E-}004 * x + 3.8576\text{E-}005$$

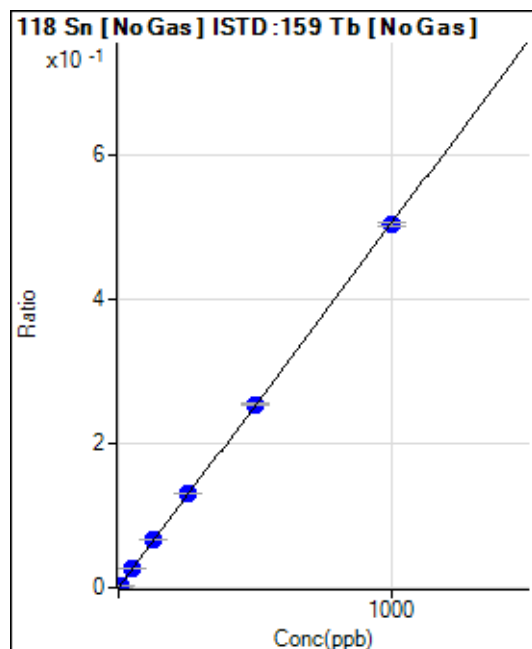
$$R = 0.9999$$

$$DL = 0.0246$$

$$BEC = 0.2521$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	944.50	0.0001	P	10.1
2	☐	5.000	5.345	31580.40	0.0028	P	0.5
3	☐	50.000	53.240	306110.44	0.0270	P	1.0
4	☐	125.000	131.119	749770.93	0.0665	P	0.7
5	☐	250.000	258.785	1476630.09	0.1311	P	0.7
6	☐	500.000	502.800	2886262.37	0.2546	P	0.8
7	☐	1000.000	995.475	5582867.27	0.5040	P	0.9
8	☐			5067.72	0.0005	P	5.6

$$y = 5.0620\text{E-}004 * x + 8.3018\text{E-}005$$

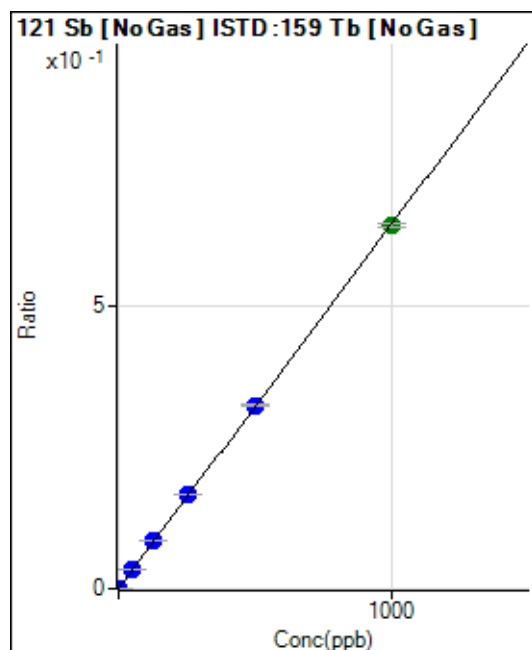
$$R = 0.9999$$

$$DL = 0.04965$$

$$BEC = 0.164$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	75.00	0.0000	P	69.7
2	☐	2.000	2.127	15600.70	0.0014	P	3.4
3	☐	50.000	51.805	378054.80	0.0334	P	1.3
4	☐	125.000	130.255	946994.79	0.0839	P	1.4
5	☐	250.000	258.016	1872974.07	0.1663	P	0.8
6	☐	500.000	503.172	3675629.42	0.3242	P	1.0
7	☐	1000.000	995.662	7106867.17	0.6416	A	1.1
8	☐			6112.58	0.0006	P	3.5

$$y = 6.4437\text{E-}004 * x + 6.6102\text{E-}006$$

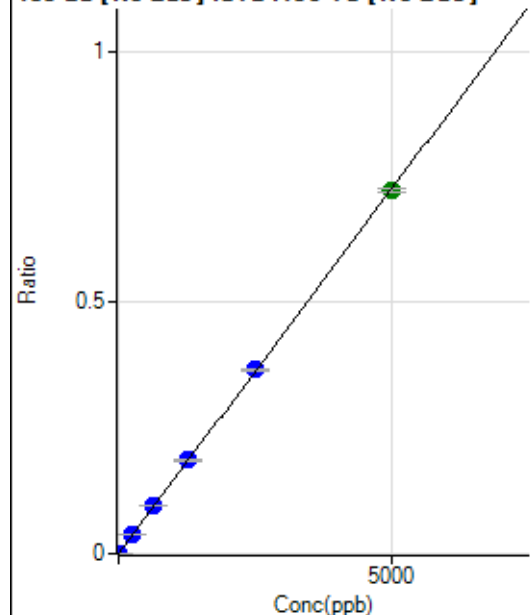
$$R = 1.0000$$

$$DL = 0.02145$$

$$BEC = 0.01026$$

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	61.11	0.0000	P	78.9
2	☐	10.000	10.810	17834.09	0.0016	P	2.6
3	☐	250.000	262.484	431608.96	0.0381	P	1.0
4	☐	625.000	650.590	1065812.16	0.0945	P	0.7
5	☐	1250.000	1281.933	2096814.78	0.1861	P	0.9
6	☐	2500.000	2524.021	4154483.12	0.3665	P	1.0
7	☐	5000.000	4976.181	8003515.97	0.7225	A	1.2
8	☐			4095.17	0.0004	P	1.3

$$y = 1.4520\text{E-}004 * x + 5.3416\text{E-}006$$

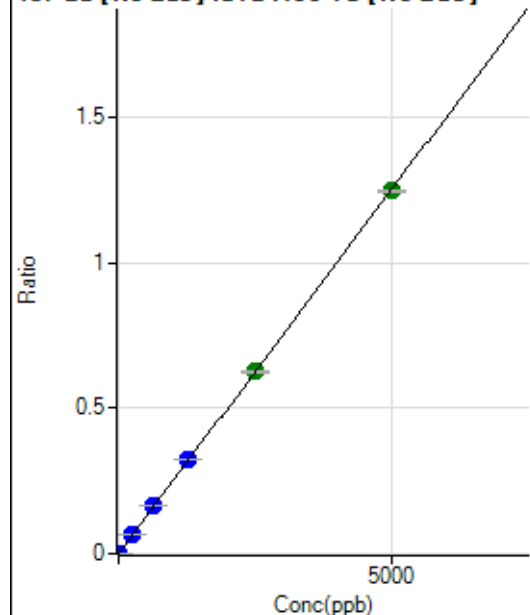
$$R = 1.0000$$

$$DL = 0.08703$$

$$BEC = 0.03679$$

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	72.22	0.0000	P	6.4
2	☐	10.000	11.052	31358.09	0.0028	P	2.3
3	☐	250.000	264.394	748381.22	0.0661	P	1.0
4	☐	625.000	653.641	1843374.28	0.1634	P	0.5
5	☐	1250.000	1292.381	3639020.57	0.3230	P	0.9
6	☐	2500.000	2504.580	7096765.35	0.6260	A	1.0
7	☐	5000.000	4982.813	13796289.55	1.2455	A	0.7
8	☐			6982.53	0.0006	P	8.8

$$y = 2.4995\text{E-}004 * x + 6.3482\text{E-}006$$

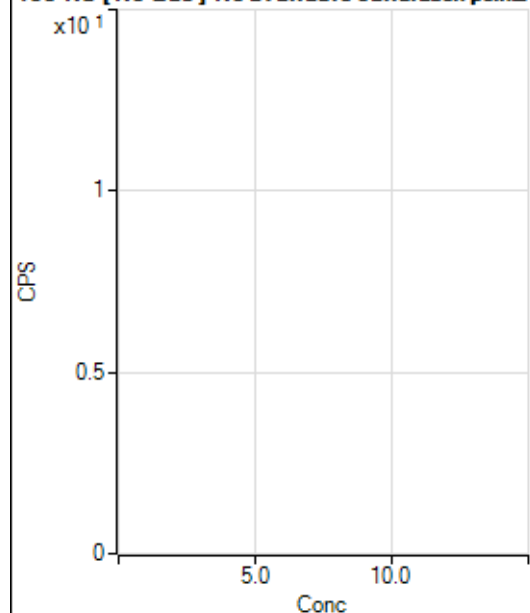
$$R = 1.0000$$

$$DL = 0.00491$$

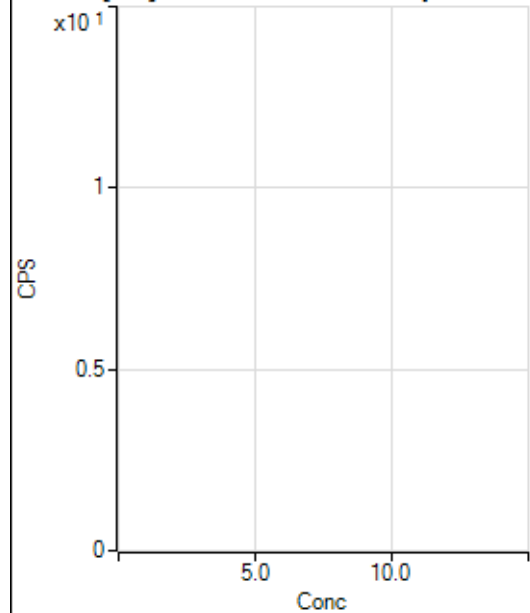
$$BEC = 0.0254$$

Weight: <None>

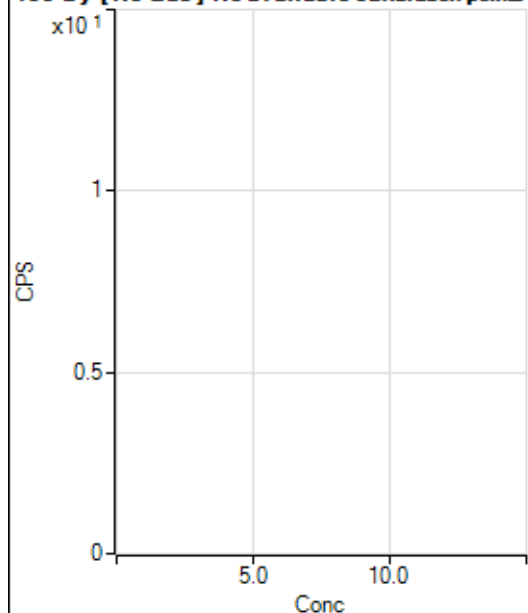
Min Conc: 0

150 Nd [No Gas] No available calibration points

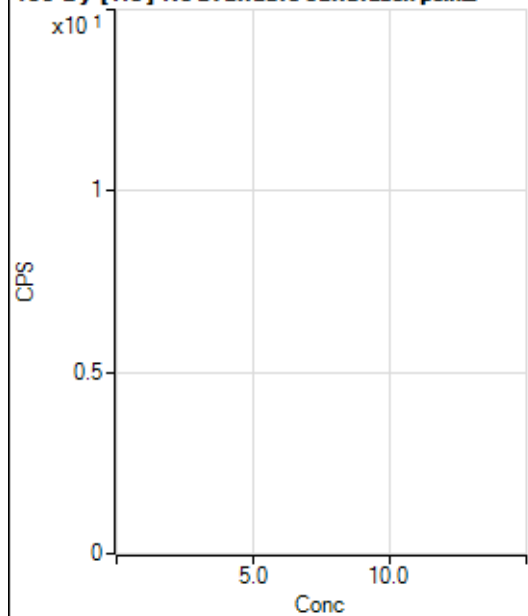
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			2.22		P	173.
3	☐			26.67		P	66.2
4	☐			55.56		P	48.5
5	☐			144.45		P	7.0
6	☐			262.23		P	9.6
7	☐			486.68		P	12.6
8	☐			44.45		P	34.6

150 Nd [He] No available calibration points

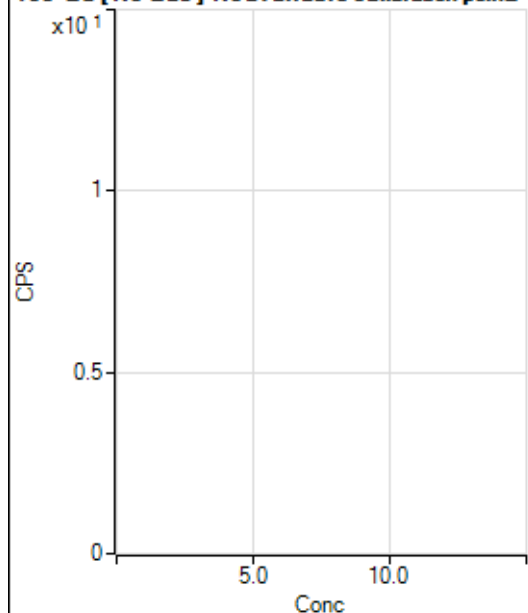
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			3.33		P	173.
3	☐			8.89		P	21.6
4	☐			14.44		P	13.4
5	☐			20.00		P	33.4
6	☐			51.11		P	16.4
7	☐			80.00		P	14.4
8	☐			27.78		P	25.0

156 Dy [No Gas] No available calibration points

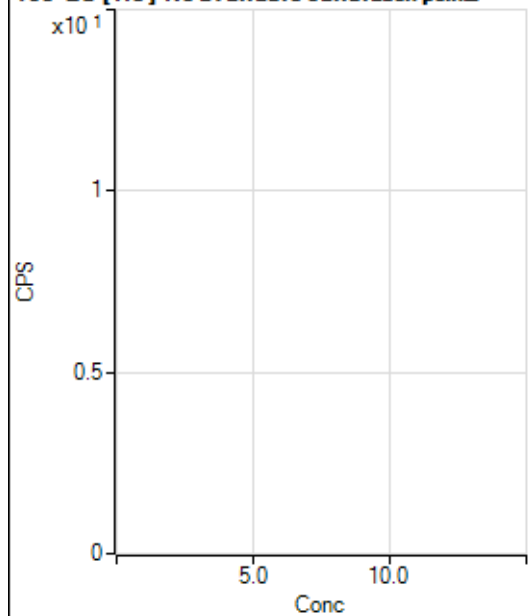
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	56.8
2	☐			19.44		P	49.5
3	☐			33.33		P	25.0
4	☐			83.33		P	60.8
5	☐			177.79		P	11.8
6	☐			266.68		P	34.4
7	☐			591.70		P	2.8
8	☐			2166.88		P	10.0

156 Dy [He] No available calibration points

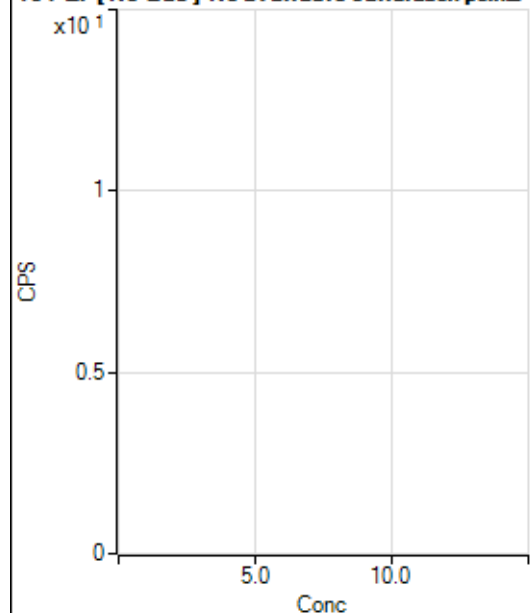
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			2.22		P	86.6
3	☐			26.67		P	25.0
4	☐			88.89		P	37.0
5	☐			104.45		P	42.5
6	☐			177.78		P	24.8
7	☐			362.23		P	10.6
8	☐			1375.64		P	1.2

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

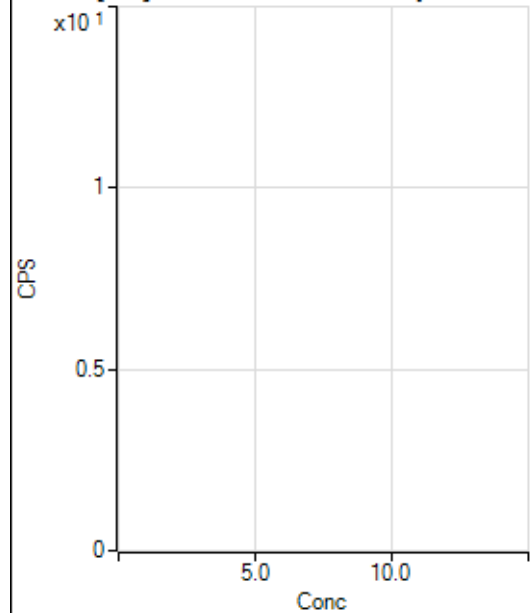
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.78		P	24.1
2	☐			58.34		P	37.8
3	☐			83.34		P	30.0
4	☐			136.12		P	9.3
5	☐			225.01		P	14.8
6	☐			272.23		P	28.9
7	☐			586.14		P	5.0
8	☐			2525.31		P	2.0

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			96.67		P	18.2
2	☐			71.11		P	25.8
3	☐			106.67		P	33.1
4	☐			128.89		P	16.6
5	☐			155.56		P	17.3
6	☐			261.12		P	3.9
7	☐			416.68		P	5.5
8	☐			1677.90		P	4.6

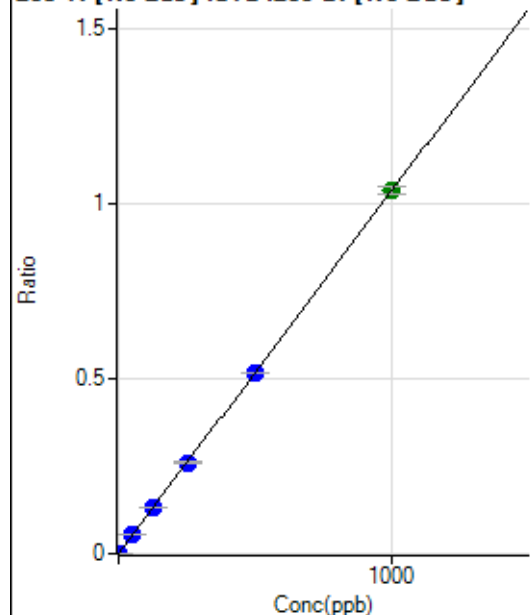
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.89		P	30.1
2	☐			77.78		P	27.0
3	☐			77.78		P	34.4
4	☐			83.34		P	55.7
5	☐			125.01		P	17.6
6	☐			130.56		P	13.3
7	☐			180.56		P	16.2
8	☐			341.68		P	15.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.22		P	9.7
2	☐			42.22		P	29.9
3	☐			88.89		P	36.4
4	☐			61.11		P	22.0
5	☐			53.33		P	38.0
6	☐			71.11		P	35.5
7	☐			104.45		P	15.7
8	☐			256.67		P	18.3

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	202.79	0.0000	P	43.7
2	☐	1.000	1.054	8775.35	0.0011	P	2.4
3	☐	50.000	51.027	415989.40	0.0529	P	1.4
4	☐	125.000	126.683	1033635.71	0.1312	P	1.3
5	☐	250.000	250.862	2034473.25	0.2597	P	1.1
6	☐	500.000	498.448	4026055.77	0.5161	P	0.8
7	☐	1000.000	1000.299	7871609.46	1.0356	A	2.1
8	☐			3836.78	0.0006	P	8.1

$$y = 0.0010 * x + 2.5465E-005$$

$$R = 1.0000$$

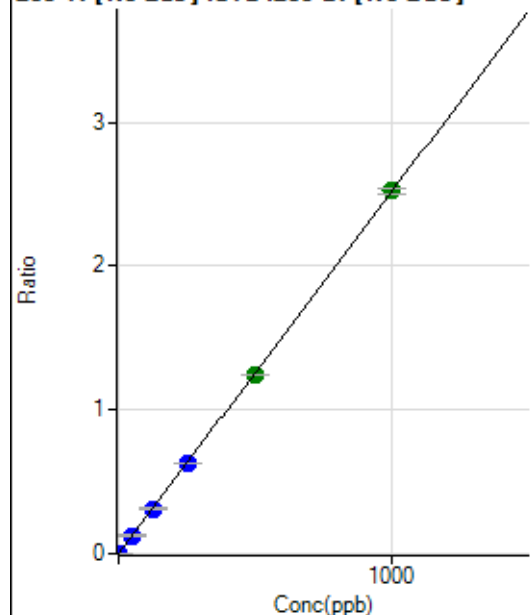
$$DL = 0.03225$$

$$BEC = 0.0246$$

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	575.03	0.0001	P	8.8
2	☐	1.000	1.063	21565.11	0.0027	P	3.2
3	☐	50.000	50.319	996673.28	0.1266	P	1.6
4	☐	125.000	124.695	2471792.50	0.3137	P	1.9
5	☐	250.000	248.755	4901293.38	0.6257	P	0.4
6	☐	500.000	494.146	9696672.01	1.2429	A	0.9
7	☐	1000.000	1003.260	19180685.67	2.5234	A	1.5
8	☐			9083.87	0.0013	P	5.2

$$y = 0.0025 * x + 7.2257E-005$$

$$R = 1.0000$$

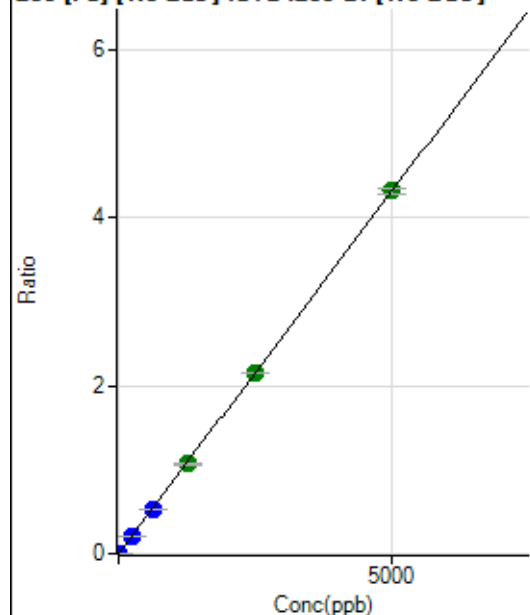
$$DL = 0.007564$$

$$BEC = 0.02873$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	309.27	0.0000	P	6.2
2	☐	1.000	1.022	7222.46	0.0009	P	1.1
3	☐	250.000	248.396	1684296.54	0.2140	P	1.6
4	☐	625.000	613.204	4162261.15	0.5282	P	1.8
5	☐	1250.000	1239.596	8363703.54	1.0678	A	1.4
6	☐	2500.000	2485.353	16702204.54	2.1408	A	0.1
7	☐	5000.000	5011.479	32811977.58	4.3168	A	1.7
8	☐			69132.12	0.0100	P	2.1

$$y = 8.6137E-004 * x + 3.8858E-005$$

$$R = 1.0000$$

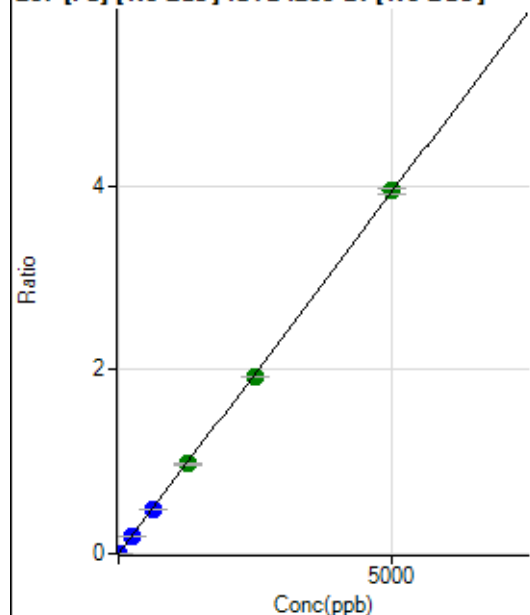
$$DL = 0.008378$$

$$BEC = 0.04511$$

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	218.53	0.0000	P	16.1
2	☐	1.000	1.033	6586.93	0.0008	P	4.8
3	☐	250.000	246.980	1527008.47	0.1940	P	1.1
4	☐	625.000	609.542	3772557.11	0.4788	P	1.3
5	☐	1250.000	1239.272	7624286.52	0.9734	A	0.8
6	☐	2500.000	2460.069	15074451.03	1.9322	A	0.3
7	☐	5000.000	5024.731	29997258.77	3.9465	A	1.9
8	☐			62414.01	0.0090	P	2.1

$$y = 7.8542E-004 * x + 2.7472E-005$$

$$R = 0.9999$$

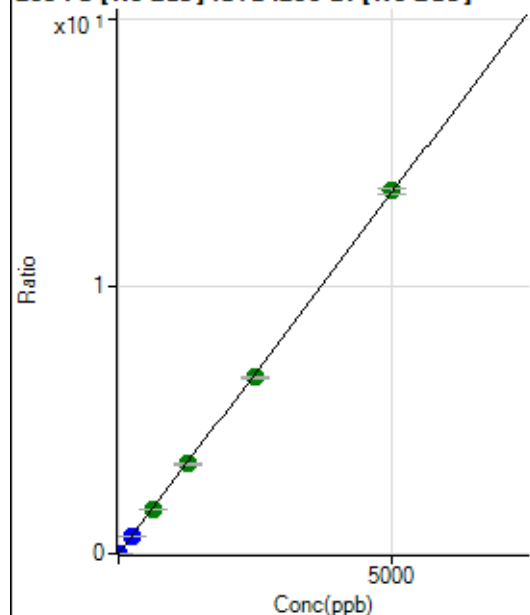
$$DL = 0.01685$$

$$BEC = 0.03498$$

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	856.24	0.0001	P	5.8
2	☐	1.000	1.029	22642.72	0.0029	P	1.1
3	☐	250.000	246.961	5243291.41	0.6662	P	0.8
4	☐	625.000	614.449	13058844.45	1.6573	A	0.8
5	☐	1250.000	1241.030	26218448.26	3.3472	A	0.5
6	☐	2500.000	2448.010	51508856.73	6.6024	A	0.9
7	☐	5000.000	5029.708	103110578.7	13.5652	A	1.4
8	☐			215231.20	0.0310	P	2.5

$$y = 0.0027 * x + 1.0758E-004$$

$$R = 0.9999$$

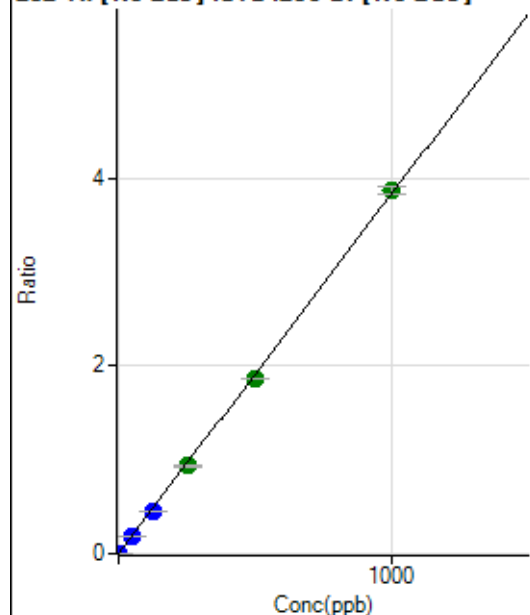
$$DL = 0.006953$$

$$BEC = 0.03989$$

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	151.86	0.0000	P	13.3
2	☐	1.000	-0.001	133.33	0.0000	P	21.8
3	☐	50.000	47.444	1429329.84	0.1816	P	1.2
4	☐	125.000	118.184	3564316.25	0.4523	P	0.8
5	☐	250.000	243.317	7294699.93	0.9313	A	0.6
6	☐	500.000	487.901	14568146.97	1.8673	A	0.4
7	☐	1000.000	1008.701	29343670.10	3.8606	A	2.0
8	☐			7937.73	0.0011	P	5.1

$$y = 0.0038 * x + 1.9065E-005$$

$$R = 0.9999$$

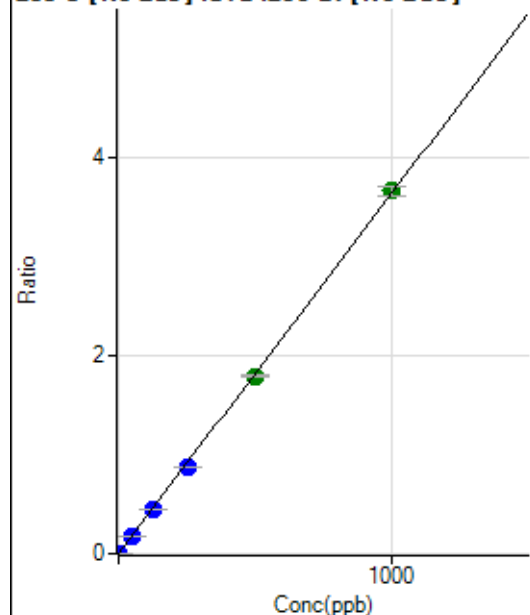
$$DL = 0.001994$$

$$BEC = 0.004981$$

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	22.22	0.0000	P	57.7
2	☐	1.000	0.974	27877.62	0.0035	P	0.8
3	☐	50.000	48.546	1390268.39	0.1766	P	1.3
4	☐	125.000	120.555	3456411.43	0.4386	P	0.2
5	☐	250.000	239.125	6815045.90	0.8701	P	1.0
6	☐	500.000	492.055	13966637.99	1.7903	A	1.4
7	☐	1000.000	1007.320	27857138.47	3.6651	A	2.6
8	☐			6168.31	0.0009	P	13.4

$$y = 0.0036 * x + 2.8001E-006$$

$$R = 0.9999$$

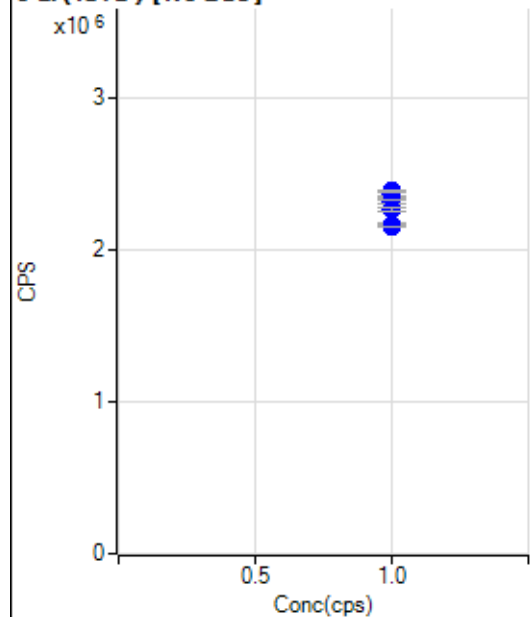
$$DL = 0.001333$$

$$BEC = 0.0007696$$

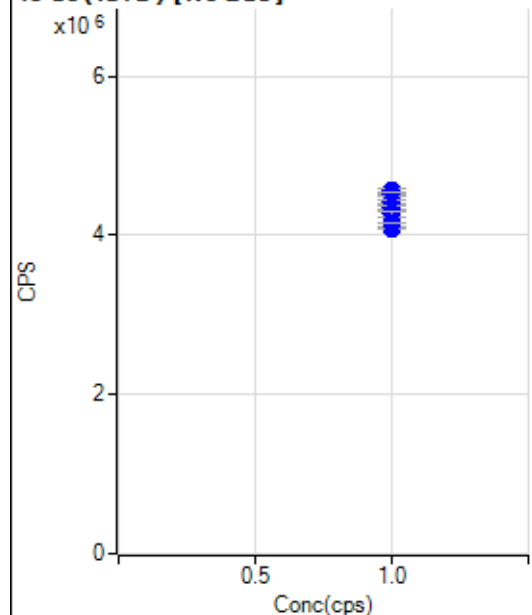
Weight: <None>

Min Conc: 0

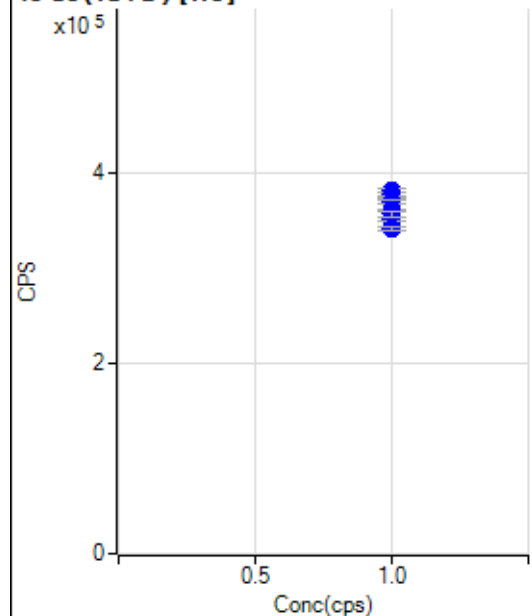
6 Li (ISTD) [No Gas]



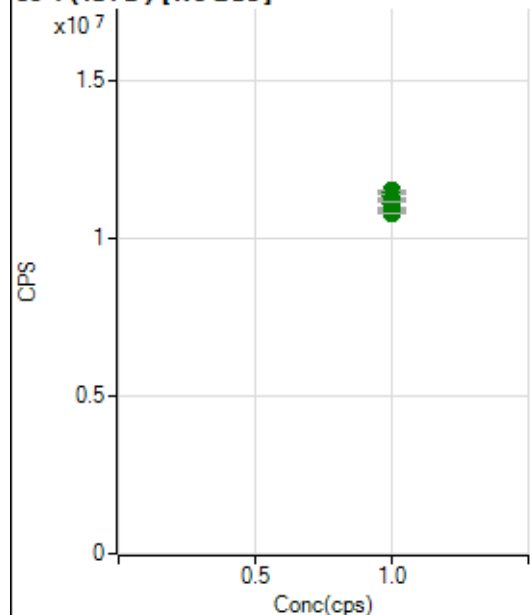
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		2364073.00		P	0.9
2	☐	1.000		2345227.41		P	0.8
3	☐	1.000		2384599.91		P	0.7
4	☐	1.000		2380855.90		P	0.4
5	☐	1.000		2313853.37		P	0.9
6	☐	1.000		2260839.39		P	1.4
7	☐	1.000		2166577.14		P	0.4
8	☐	1.000		2150360.09		P	0.4

45 Sc (ISTD) [No Gas]

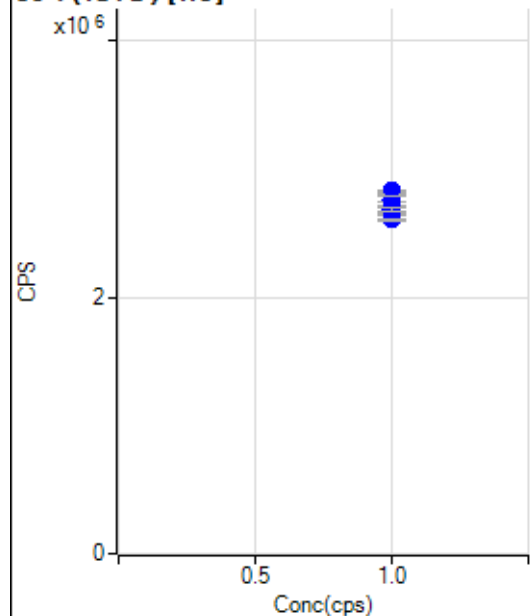
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4557765.28		P	0.9
2	☐	1.000		4501586.81		P	0.6
3	☐	1.000		4518346.11		P	0.7
4	☐	1.000		4416243.06		P	1.2
5	☐	1.000		4356927.71		P	1.1
6	☐	1.000		4265399.07		P	1.5
7	☐	1.000		4089965.11		P	0.3
8	☐	1.000		4157213.03		P	0.1

45 Sc (ISTD) [He]

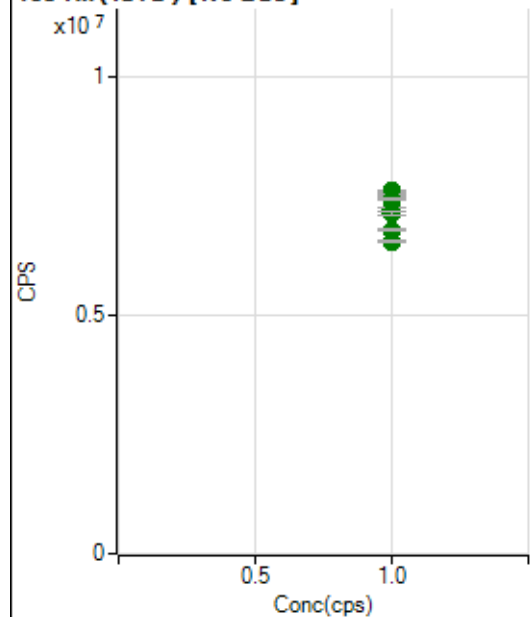
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		381461.74		P	0.9
2	☐	1.000		378239.77		P	0.8
3	☐	1.000		375191.39		P	0.7
4	☐	1.000		369699.22		P	0.8
5	☐	1.000		361580.05		P	0.6
6	☐	1.000		351740.79		P	1.0
7	☐	1.000		342582.48		P	1.2
8	☐	1.000		357100.34		P	1.5

89 Y (ISTD) [No Gas]

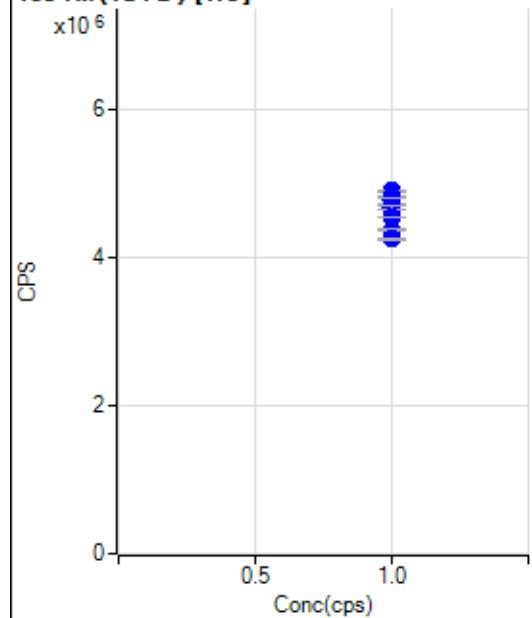
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11488345.24		A	0.8
2	☐	1.000		11443449.69		A	0.3
3	☐	1.000		11444009.41		A	0.8
4	☐	1.000		11307420.11		A	1.0
5	☐	1.000		11207608.72		A	0.4
6	☐	1.000		11064503.86		A	1.7
7	☐	1.000		10848573.31		A	0.6
8	☐	1.000		10771714.70		A	0.4

89 Y (ISTD) [He]

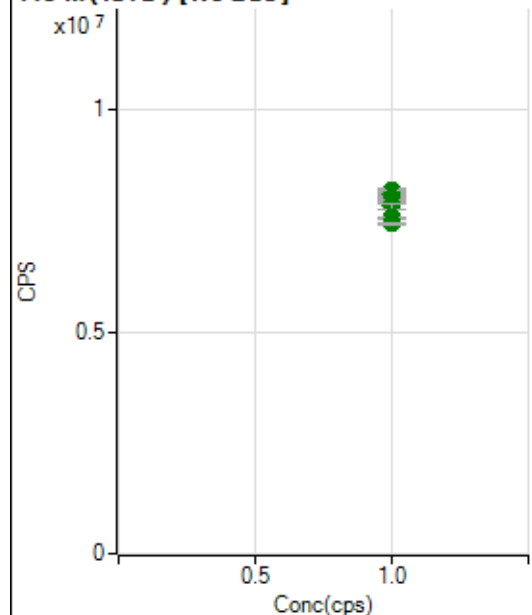
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2831010.34		P	0.7
2	☐	1.000		2818691.34		P	0.4
3	☐	1.000		2796548.01		P	0.7
4	☐	1.000		2765022.70		P	1.7
5	☐	1.000		2711852.46		P	0.4
6	☐	1.000		2651366.37		P	0.4
7	☐	1.000		2610046.23		P	0.6
8	☐	1.000		2685500.18		P	1.0

103 Rh (ISTD) [No Gas]

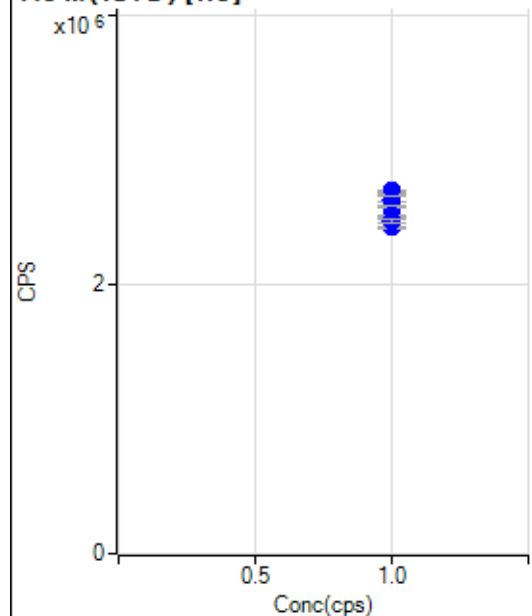
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7596658.01		A	0.6
2	☐	1.000		7496878.50		A	0.7
3	☐	1.000		7520166.35		A	0.5
4	☐	1.000		7428818.99		A	0.7
5	☐	1.000		7215280.03		A	1.2
6	☐	1.000		7122190.73		A	1.4
7	☐	1.000		6782374.34		A	0.1
8	☐	1.000		6541540.81		A	0.1

103 Rh (ISTD) [He]

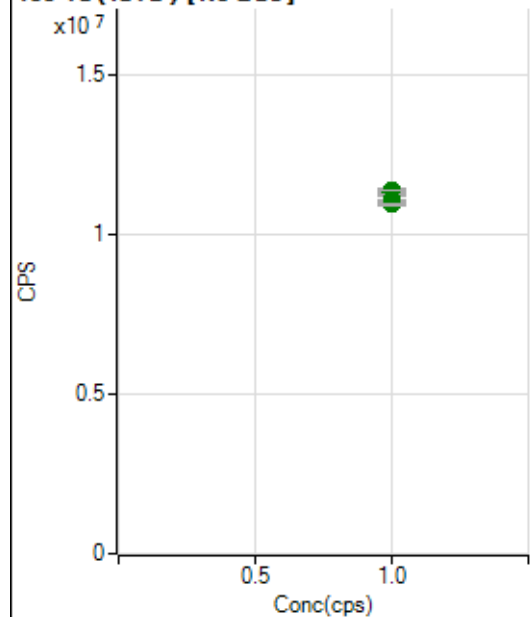
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4904219.20		P	0.6
2	☐	1.000		4895030.17		P	0.6
3	☐	1.000		4834585.93		P	0.5
4	☐	1.000		4775013.58		P	1.6
5	☐	1.000		4678494.10		P	0.8
6	☐	1.000		4542984.83		P	0.3
7	☐	1.000		4369772.23		P	0.5
8	☐	1.000		4250952.05		P	1.0

115 In (ISTD) [No Gas]

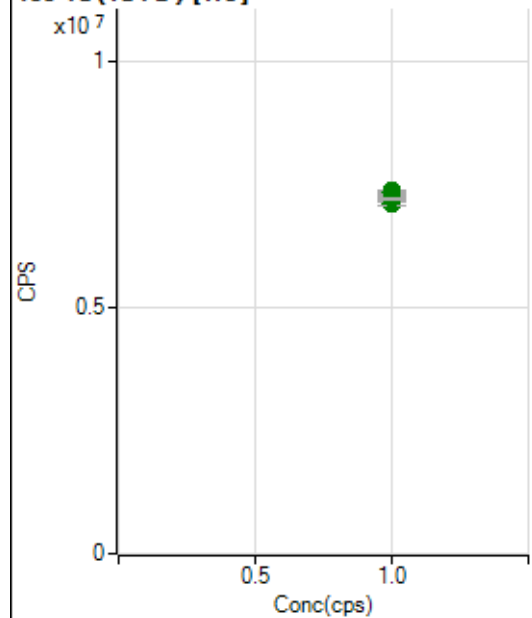
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8180081.90		A	0.9
2	☐	1.000		8126059.82		A	0.8
3	☐	1.000		8117441.75		A	1.4
4	☐	1.000		8023972.76		A	0.2
5	☐	1.000		7950540.75		A	0.9
6	☐	1.000		7826601.50		A	1.2
7	☐	1.000		7566537.67		A	0.7
8	☐	1.000		7439214.82		A	0.2

115 In (ISTD) [He]

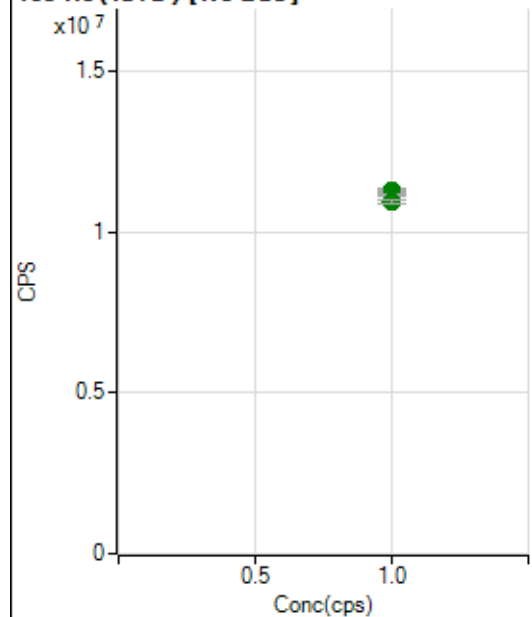
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2688471.69		P	0.5
2	☐	1.000		2690444.06		P	0.8
3	☐	1.000		2662836.56		P	0.7
4	☐	1.000		2627302.69		P	1.6
5	☐	1.000		2577474.24		P	0.6
6	☐	1.000		2504156.65		P	0.8
7	☐	1.000		2419034.35		P	0.5
8	☐	1.000		2463398.93		P	1.1

159 Tb (ISTD) [No Gas]

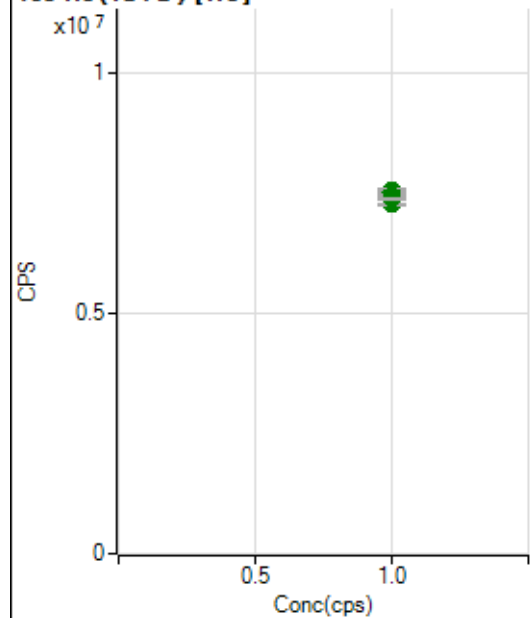
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11376182.75		A	1.1
2	☐	1.000		11325616.64		A	0.7
3	☐	1.000		11324195.80		A	1.3
4	☐	1.000		11282548.44		A	0.7
5	☐	1.000		11265186.08		A	0.4
6	☐	1.000		11336989.00		A	1.1
7	☐	1.000		11077384.42		A	0.4
8	☐	1.000		10954157.20		A	0.4

159 Tb (ISTD) [He]

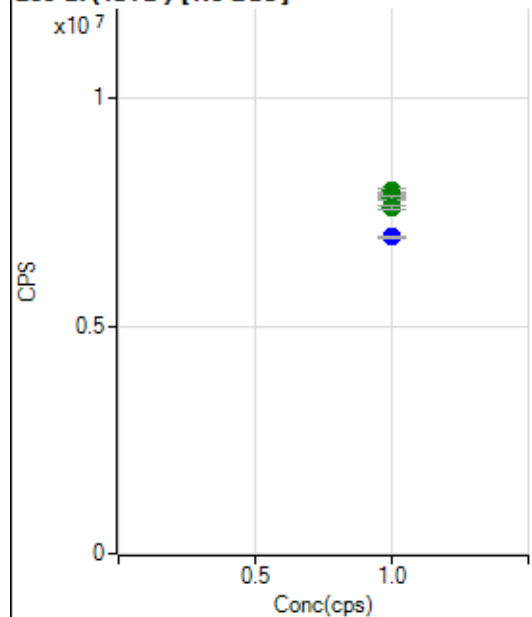
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7360343.71		A	0.7
2	☐	1.000		7289596.97		A	0.2
3	☐	1.000		7342598.71		A	0.9
4	☐	1.000		7318653.71		A	2.0
5	☐	1.000		7280363.15		A	0.8
6	☐	1.000		7239903.23		A	0.4
7	☐	1.000		7089429.27		A	1.1
8	☐	1.000		7209683.43		A	0.4

165 Ho (ISTD) [No Gas]

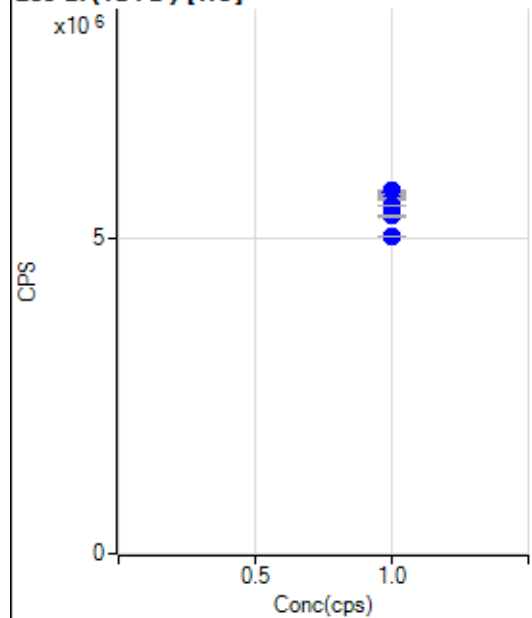
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11289775.80		A	0.7
2	☐	1.000		11246534.42		A	0.6
3	☐	1.000		11294960.80		A	1.6
4	☐	1.000		11296441.36		A	0.6
5	☐	1.000		11191969.69		A	0.7
6	☐	1.000		11212748.30		A	1.0
7	☐	1.000		11144197.89		A	0.5
8	☐	1.000		10964783.31		A	1.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7536888.70		A	0.4
2	☐	1.000		7484006.07		A	1.0
3	☐	1.000		7490136.42		A	1.6
4	☐	1.000		7514118.92		A	1.5
5	☐	1.000		7429016.28		A	0.7
6	☐	1.000		7450274.26		A	0.4
7	☐	1.000		7259129.13		A	0.3
8	☐	1.000		7373619.06		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7961477.18		A	0.9
2	☐	1.000		7856458.98		A	0.4
3	☐	1.000		7871257.87		A	0.8
4	☐	1.000		7879860.02		A	0.3
5	☐	1.000		7833086.27		A	0.5
6	☐	1.000		7801660.79		A	0.8
7	☐	1.000		7601788.64		A	0.9
8	☐	1.000		6946816.15		P	0.9

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5757960.68		P	0.7
2	☐	1.000		5750874.43		P	1.1
3	☐	1.000		5692843.87		P	0.6
4	☐	1.000		5690000.26		P	1.0
5	☐	1.000		5626038.67		P	0.8
6	☐	1.000		5520155.82		P	0.3
7	☐	1.000		5356699.37		P	0.9
8	☐	1.000		5032328.61		P	0.4

US EPA Tune Check Sample Report

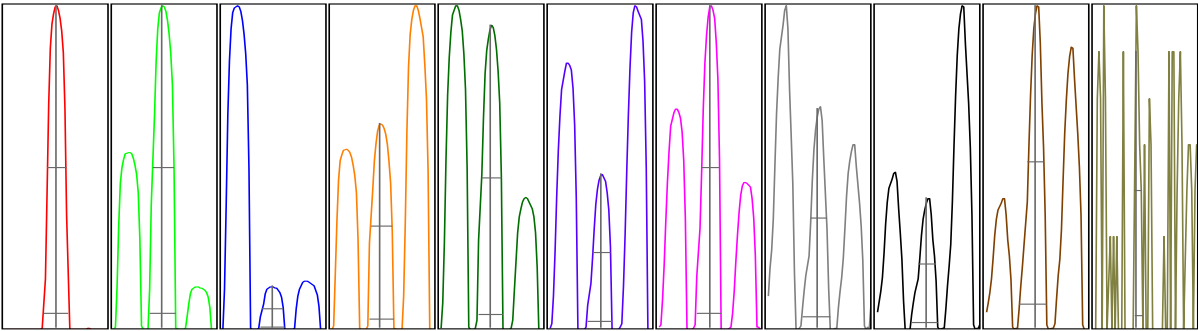
Batch Folder C:\Agilent\ICPMH\1\DATA\P7052621 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6685	0.51	5.00	
24	53636	0.38	5.00	
25	6952	0.30	5.00	
26	7967	0.58	5.00	
59	18233	0.54	5.00	
113	11272	0.37	5.00	
115	34951	2.70	5.00	
206	16777	0.47	5.00	
207	14128	0.38	5.00	
208	34582	0.42	5.00	
220	0	86.40		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6689	6680	6643	6737	6678
24	53783	53572	53314	53692	53820
25	6955	6931	6933	6980	6962
26	7984	7966	7889	8009	7987
59	18253	18158	18107	18321	18326
113	11313	11260	11211	11309	11266
115	35800	35730	35078	34656	33493
206	16713	16780	16684	16850	16860
207	14111	14056	14112	14166	14196
208	34574	34480	34406	34764	34688
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	12245	9.05	8.9 - 9.1		0.728	0.900	
24	89264	23.95	23.9 - 24.1		0.775	0.900	
25	11669	25.00	24.9 - 25.1		0.740	0.900	
26	13430	25.95	25.9 - 26.1		0.741	0.900	
59	31848	59.00	58.9 - 59.1		0.741	0.900	
113	21302	113.05	112.9 - 113.1		0.733	0.900	
115	65436	115.05	114.9 - 115.1		0.733	0.900	
206	34457	206.00	205.9 - 206.1		0.810	0.900	
207	28846	207.00	206.9 - 207.1		0.773	0.900	
208	71490	208.00	207.9 - 208.1		0.782	0.900	
220	0	219.75	-		0.243		

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 256.8 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.65	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		0.45 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.4	V	Deflect	13.6	V
Extract 2	-165.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-80	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination	5.0	V
He Flow	0.0	mL/min	OctP RF	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	6864	1.07	
89	27074	1.06	
205	17365	1.02	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	6875	6886	6786	6970	6804
89	27129	27277	26795	27405	26764
205	17306	17438	17287	17629	17166

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.65	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		0.45 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.2	V	Deflect	1.8	V
Extract 2	-155.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-85	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	3.9	mL/min	OctP RF	190	V			