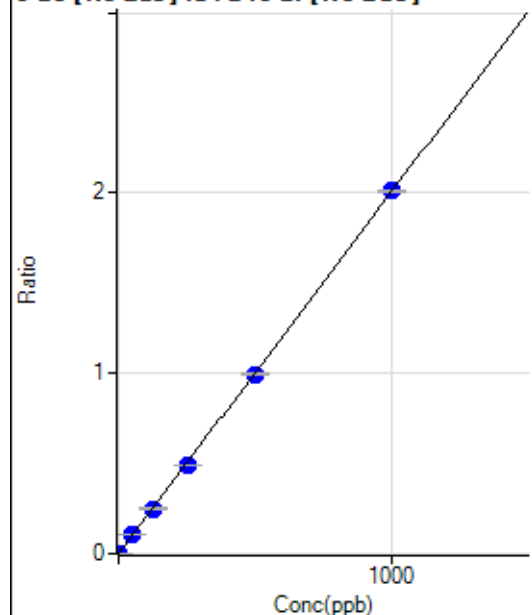


Batch Folder: D:\ICP-MS Data\P7101317-MS.b\
Analysis File: P7101317-MS.batch.bin
DA Date-Time: 2017-10-13 15:21:05
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2017-10-13 11:24:39
2			
3	005CALS.d	S02	2017-10-13 11:32:36
4	006CALS.d	S03	2017-10-13 11:36:21
5	007CALS.d	S04	2017-10-13 11:40:18
6	008CALS.d	S05	2017-10-13 11:43:56
7	009CALS.d	S06	2017-10-13 11:47:31
8	010CALS.d	S07	2017-10-13 11:51:02
9	011CALS.d	S08	2017-10-13 11:54:30

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.52	0.0000	P	45.7
2	☐	0.100					
3	☐	1.000	1.021	1522.34	0.0021	P	7.2
4	☐	50.000	50.737	76062.23	0.1017	P	0.1
5	☐	125.000	124.716	188794.35	0.2500	P	0.4
6	☐	250.000	245.819	367870.09	0.4928	P	0.8
7	☐	500.000	495.813	721591.75	0.9939	P	0.8
8	☐	1000.000	1003.137	1448541.87	2.0109	P	0.8
9	☐			407.42	0.0006	P	8.9

$$y = 0.0020 * x + 2.4815E-005$$

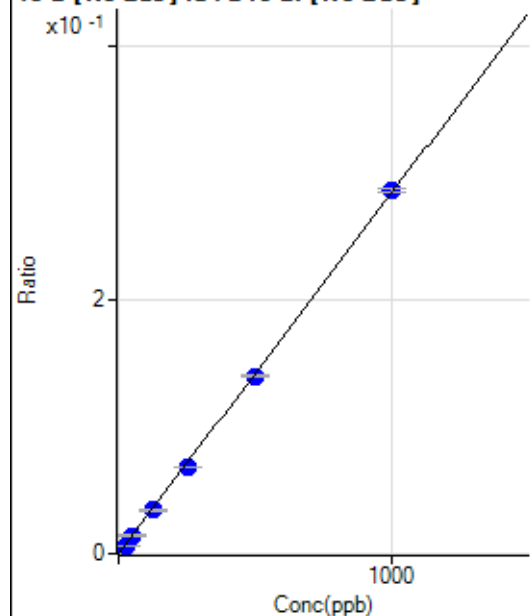
$$R = 1.0000$$

$$DL = 0.01698$$

$$BEC = 0.01238$$

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	61.11	0.0001	P	43.8
2	☐	2.500					
3	☐	25.000	22.072	4664.80	0.0063	P	0.7
4	☐	50.000	49.468	10548.49	0.0141	P	4.3
5	☐	125.000	120.689	25900.86	0.0343	P	3.0
6	☐	250.000	241.908	51268.38	0.0687	P	0.5
7	☐	500.000	491.949	101332.77	0.1396	P	1.2
8	☐	1000.000	1006.687	205678.97	0.2855	P	1.2
9	☐			3909.00	0.0056	P	10.8

$$y = 2.8355E-004 * x + 8.1895E-005$$

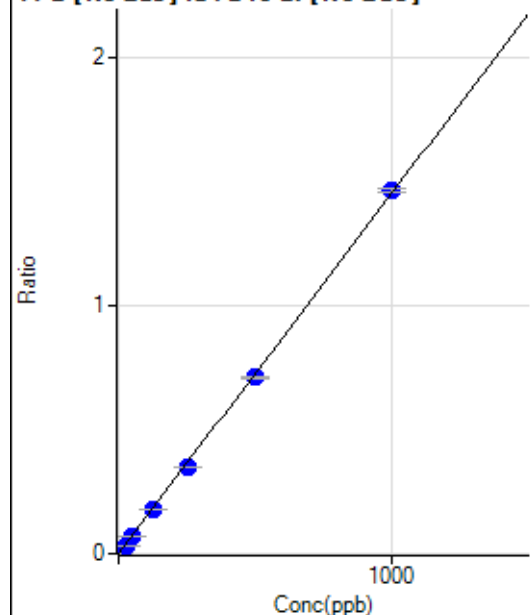
$$R = 0.9999$$

$$DL = 0.3795$$

$$BEC = 0.2888$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	400.02	0.0005	P	16.7
2	☐	2.500					
3	☐	25.000	22.003	23880.71	0.0325	P	3.8
4	☐	50.000	49.473	54083.45	0.0723	P	0.8
5	☐	125.000	121.642	133708.48	0.1771	P	0.3
6	☐	250.000	240.829	261330.20	0.3501	P	0.5
7	☐	500.000	489.936	516623.57	0.7116	P	1.2
8	☐	1000.000	1007.846	1054072.52	1.4633	P	1.1
9	☐			19338.08	0.0277	P	9.4

$$y = 0.0015 * x + 5.3619E-004$$

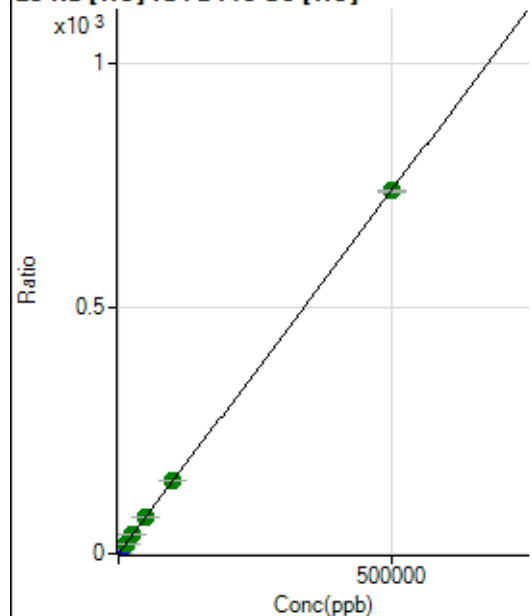
$$R = 0.9999$$

$$DL = 0.1847$$

$$BEC = 0.3694$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	20742.93	0.0675	P	1.9
2	☐	50.000					
3	☐	500.000	471.187	230780.21	0.7648	P	1.1
4	☐	5000.000	5274.201	2363576.29	7.8725	P	1.0
5	☐	12500.000	13023.301	5764009.11	19.3398	A	0.8
6	☐	25000.000	25591.833	11411037.93	37.9391	A	0.3
7	☐	50000.000	50608.123	23056770.31	74.9590	A	0.4
8	☐	100000.00	100961.23	46850420.84	149.4732	A	0.8
9	☐	500000.00	499701.55	241917249.8	739.5418	A	0.6

$$y = 0.0015 * x + 0.0675$$

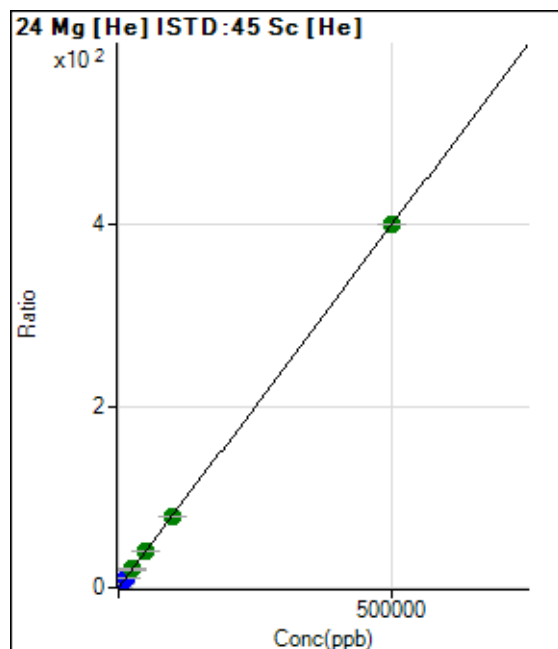
$$R = 1.0000$$

$$DL = 2.591$$

$$BEC = 45.63$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	230.57	0.0008	P	24.4
2	☐	50.000					
3	☐	500.000	460.087	111099.39	0.3682	P	1.0
4	☐	5000.000	5173.735	1240760.15	4.1326	P	0.9
5	☐	12500.000	12866.861	3062877.93	10.2766	P	0.7
6	☐	25000.000	25208.892	6055518.14	20.1333	A	1.1
7	☐	50000.000	49214.271	12089866.59	39.3046	A	0.2
8	☐	100000.00	98770.938	24724683.89	78.8819	A	0.5
9	☐	500000.00	500303.07	130704820.9	399.5564	A	0.1

$$y = 7.9863\text{E-}004 * x + 7.5092\text{E-}004$$

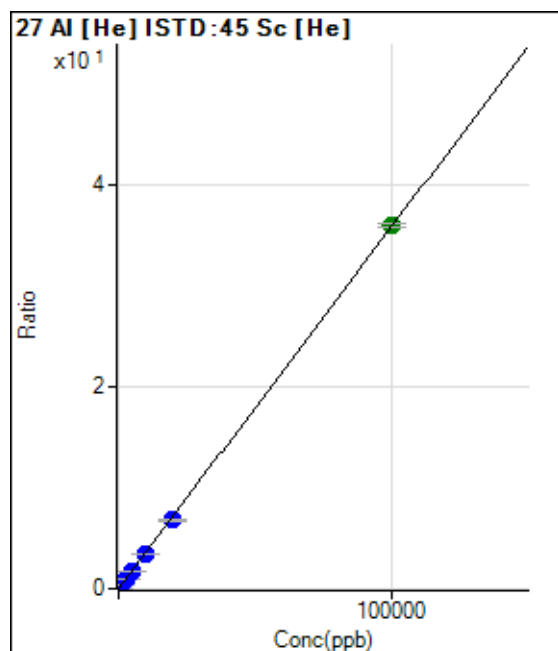
$$R = 1.0000$$

$$DL = 0.6884$$

$$BEC = 0.9403$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136.12	0.0004	P	23.4
2	☐	2.000					
3	☐	20.000	16.144	1883.53	0.0062	P	5.0
4	☐	1000.000	972.235	104970.27	0.3496	P	1.2
5	☐	2500.000	2422.774	259479.16	0.8706	P	0.8
6	☐	5000.000	4771.941	515621.15	1.7143	P	0.3
7	☐	10000.000	9451.603	1044339.61	3.3951	P	0.7
8	☐	20000.000	18881.701	2125762.20	6.7820	P	0.6
9	☐	100000.00	100292.11	11783185.33	36.0212	A	1.0

$$y = 3.5916\text{E-}004 * x + 4.4326\text{E-}004$$

$$R = 0.9999$$

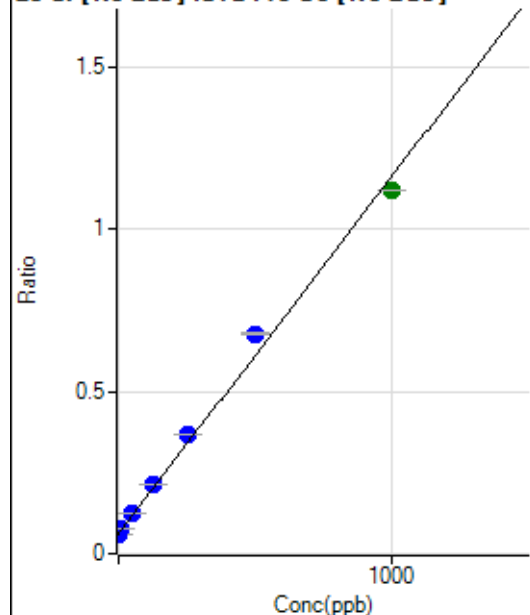
$$DL = 0.8665$$

$$BEC = 1.234$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	400591.32	0.0618	P	1.1
2	☐	1.000					
3	☐	10.000	14.667	488156.53	0.0779	P	1.0
4	☐	50.000	55.436	763870.21	0.1226	P	0.7
5	☐	125.000	137.114	1316002.64	0.2123	P	1.4
6	☐	250.000	277.925	2256080.11	0.3669	P	0.4
7	☐	500.000	560.731	4190165.20	0.6774	P	1.0
8	☐	1000.000	960.820	7097012.48	1.1166	A	0.1
9	☐			507648.15	0.0800	P	0.5

$$y = 0.0011 * x + 0.0618$$

$$R = 0.9967$$

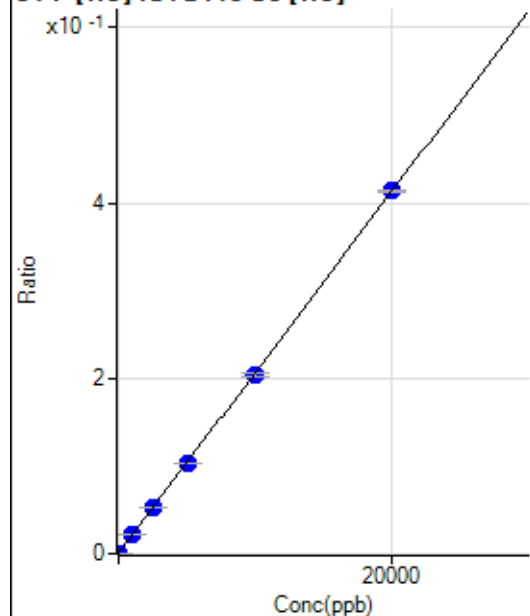
$$DL = 1.775$$

$$BEC = 56.24$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-2.854	125.01	0.0004	P	17.6
2	☐	0.000					
3	☐	0.000	2.854	158.34	0.0005	P	22.7
4	☐	1000.000	1012.952	6404.42	0.0213	P	2.1
5	☐	2500.000	2507.832	15536.42	0.0521	P	0.8
6	☐	5000.000	4965.257	30905.14	0.1028	P	0.7
7	☐	10000.000	9897.690	62863.98	0.2044	P	1.5
8	☐	20000.000	20058.214	129665.75	0.4137	P	0.9
9	☐			219.46	0.0007	P	11.0

$$y = 2.0601E-005 * x + 4.6568E-004$$

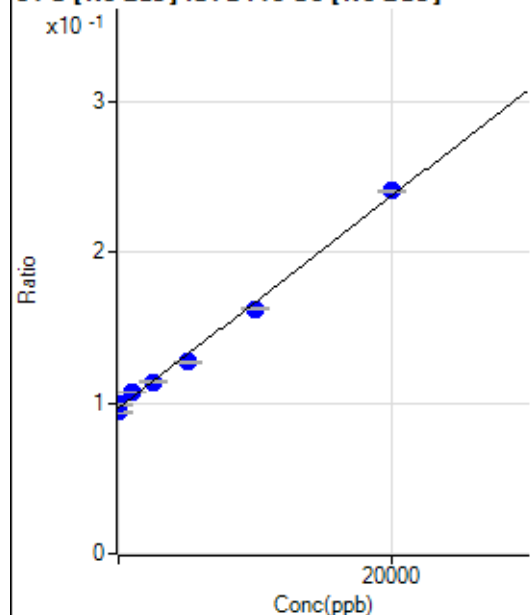
$$R = 1.0000$$

$$DL = 13.85$$

$$BEC = 22.61$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-388.964	608376.29	0.0938	P	1.1
2	☐	0.000					
3	☐	0.000	388.964	622287.88	0.0992	P	1.4
4	☐	1000.000	1476.891	665951.09	0.1069	P	0.4
5	☐	2500.000	2428.471	704105.34	0.1136	P	1.3
6	☐	5000.000	4348.671	781417.13	0.1271	P	0.8
7	☐	10000.000	9362.364	1003994.76	0.1623	P	0.3
8	☐	20000.000	20466.747	1527655.67	0.2404	P	0.7
9	☐			589685.11	0.0930	P	1.9

$$y = 7.0288\text{E-}006 * x + 0.0965$$

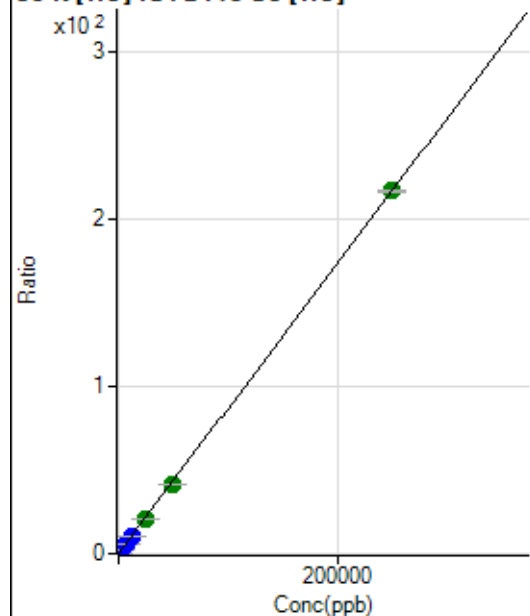
$$R = 0.9976$$

$$DL = 504.4$$

$$BEC = 1.373\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	45930.44	0.1495	P	1.0
2	☐	50.000					
3	☐	500.000	441.877	160536.97	0.5320	P	1.2
4	☐	2500.000	2446.805	680842.75	2.2677	P	0.8
5	☐	6250.000	6082.355	1613857.23	5.4149	P	0.7
6	☐	12500.000	12080.452	3190401.22	10.6073	P	0.3
7	☐	25000.000	23935.939	6419803.53	20.8704	A	0.5
8	☐	50000.000	48228.834	13133178.42	41.9003	A	0.3
9	☐	250000.00	250486.45	70982558.53	216.9910	A	0.6

$$y = 8.6568\text{E-}004 * x + 0.1495$$

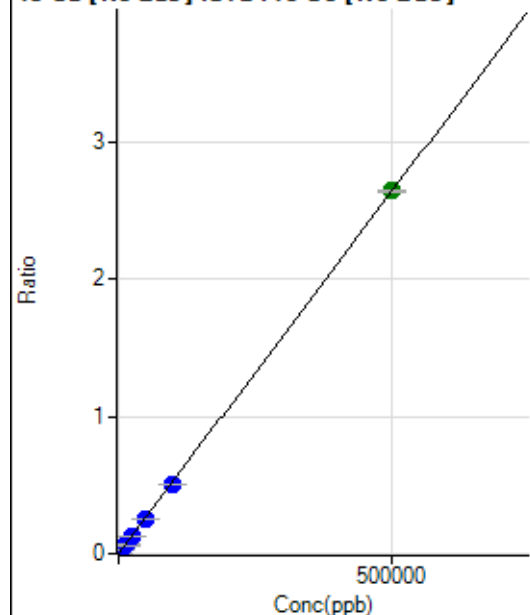
$$R = 1.0000$$

$$DL = 5.005$$

$$BEC = 172.7$$

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	877.85	0.0001	P	13.5
2	☐	50.000					
3	☐	500.000	435.292	15216.64	0.0024	P	2.6
4	☐	5000.000	4729.212	155917.25	0.0250	P	0.8
5	☐	12500.000	11948.702	390681.10	0.0630	P	1.1
6	☐	25000.000	23807.700	771325.69	0.1254	P	1.1
7	☐	50000.000	47135.454	1535318.48	0.2482	P	0.5
8	☐	100000.00	94790.088	3171529.80	0.4990	P	0.5
9	☐	500000.00	501404.60	16741150.72	2.6391	A	0.2

$$y = 5.2631\text{E-}006 * x + 1.3527\text{E-}004$$

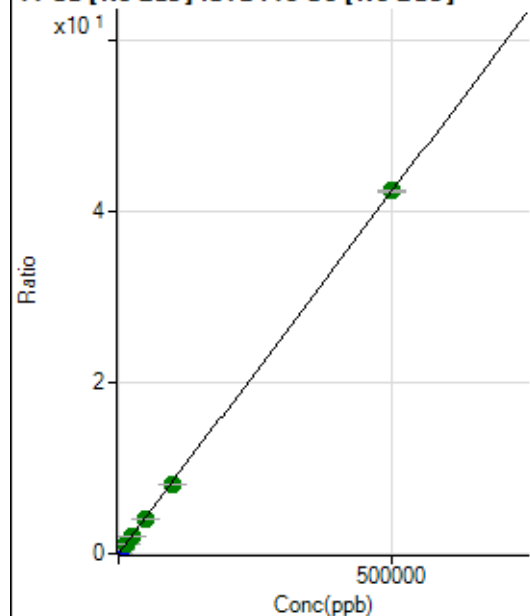
$$R = 0.9999$$

$$DL = 10.37$$

$$BEC = 25.7$$

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	69559.42	0.0107	P	2.0
2	☐	50.000					
3	☐	500.000	438.874	299533.24	0.0478	P	1.4
4	☐	5000.000	4871.302	2628720.33	0.4220	P	1.0
5	☐	12500.000	12014.129	6353518.85	1.0250	A	1.6
6	☐	25000.000	23702.472	12370146.28	2.0117	A	0.4
7	☐	50000.000	47230.626	24726971.39	3.9979	A	0.5
8	☐	100000.00	95303.380	51202631.70	8.0562	A	1.0
9	☐	500000.00	501294.63	268523425.4	42.3300	A	0.3

$$y = 8.4420\text{E-}005 * x + 0.0107$$

$$R = 0.9999$$

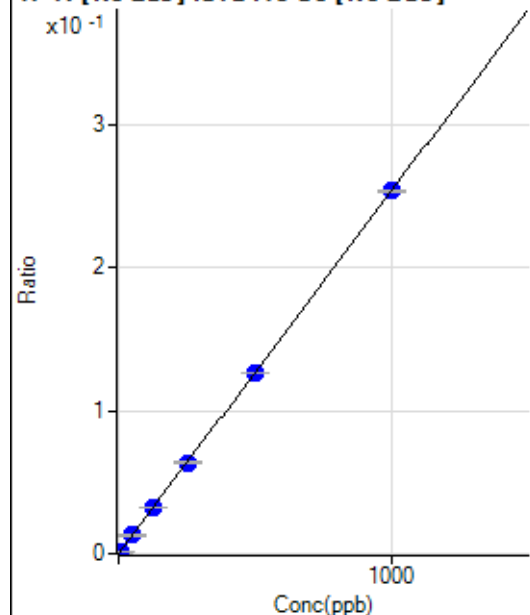
$$DL = 7.434$$

$$BEC = 127$$

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	138.90	0.0000	P	24.4
2	☐	0.500					
3	☐	5.000	4.503	7299.37	0.0012	P	1.8
4	☐	50.000	50.605	80129.39	0.0129	P	2.3
5	☐	125.000	127.225	200255.39	0.0323	P	1.9
6	☐	250.000	251.357	392347.44	0.0638	P	0.4
7	☐	500.000	498.779	782958.99	0.1266	P	0.3
8	☐	1000.000	999.965	1612807.63	0.2538	P	0.8
9	☐			1686.28	0.0003	P	3.5

$$y = 2.5375E-004 * x + 2.1412E-005$$

$$R = 1.0000$$

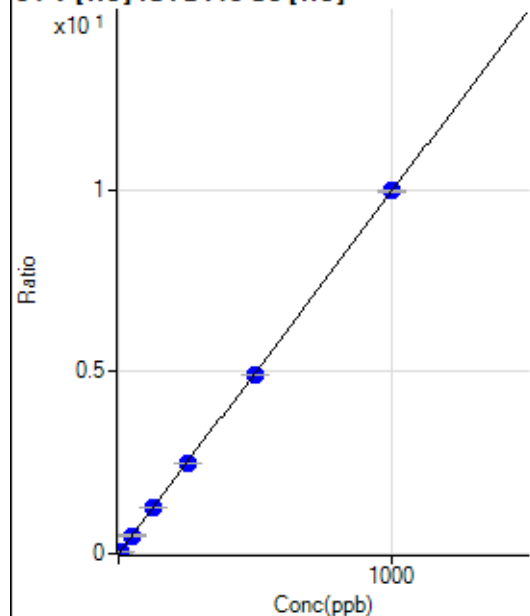
$$DL = 0.0617$$

$$BEC = 0.08438$$

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	43.33	0.0001	P	15.7
2	☐	0.500					
3	☐	5.000	4.494	13530.81	0.0448	P	0.7
4	☐	50.000	50.397	150556.27	0.5015	P	0.6
5	☐	125.000	125.927	373371.17	1.2528	P	0.5
6	☐	250.000	249.509	746535.10	2.4821	P	0.4
7	☐	500.000	496.103	1517989.84	4.9350	P	0.2
8	☐	1000.000	1001.938	3123930.86	9.9666	P	0.5
9	☐			743.37	0.0023	P	7.2

$$y = 0.0099 * x + 1.4110E-004$$

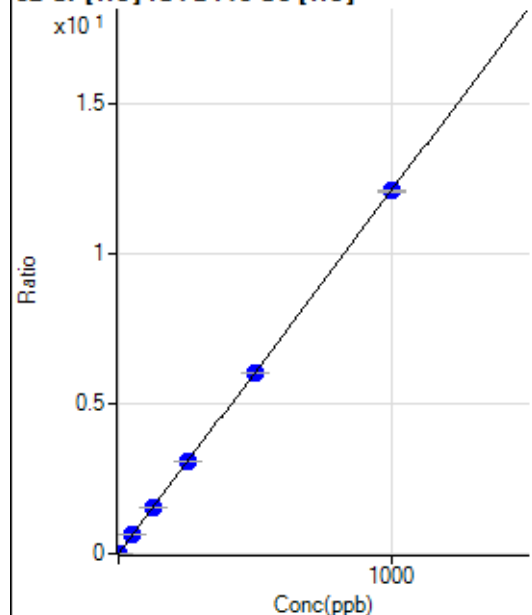
$$R = 1.0000$$

$$DL = 0.006666$$

$$BEC = 0.01418$$

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	1477.88	0.0048	P	4.7
2	☐	0.200					
3	☐	2.000	1.985	8713.81	0.0289	P	3.9
4	☐	50.000	51.816	190039.46	0.6330	P	0.8
5	☐	125.000	128.871	467048.78	1.5671	P	0.7
6	☐	250.000	253.537	925885.95	3.0784	P	0.1
7	☐	500.000	499.243	1863075.75	6.0570	P	0.3
8	☐	1000.000	998.920	3797104.81	12.1144	P	0.6
9	☐			58432.34	0.1786	P	1.2

$$y = 0.0121 * x + 0.0048$$

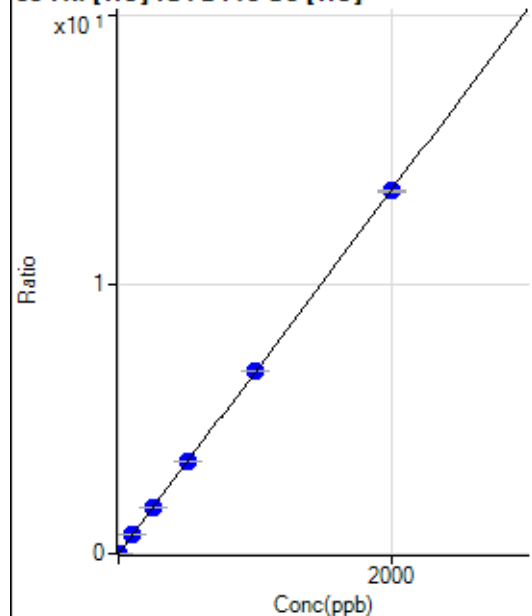
$$R = 1.0000$$

$$DL = 0.05602$$

$$BEC = 0.3968$$

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	183.34	0.0006	P	9.0
2	☐	0.100					
3	☐	1.000	0.971	2155.75	0.0071	P	4.8
4	☐	100.000	103.082	208908.30	0.6958	P	0.7
5	☐	250.000	256.117	514992.11	1.7279	P	0.4
6	☐	500.000	507.474	1029581.05	3.4231	P	0.3
7	☐	1000.000	1002.309	2079472.16	6.7604	P	0.2
8	☐	2000.000	1996.058	4219700.42	13.4624	P	0.4
9	☐			17513.98	0.0535	P	1.0

$$y = 0.0067 * x + 5.9679E-004$$

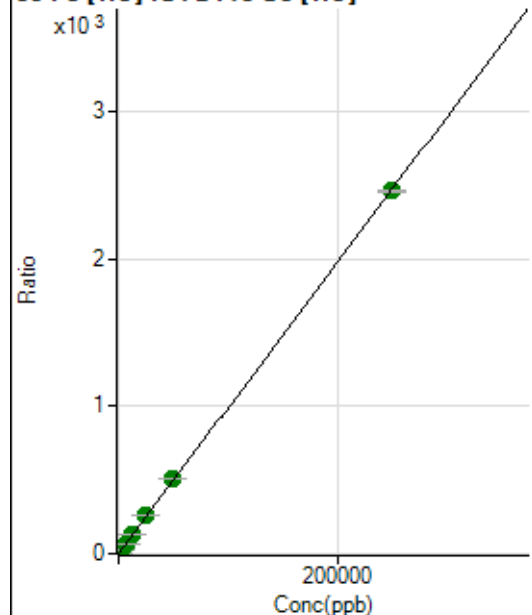
$$R = 1.0000$$

$$DL = 0.02397$$

$$BEC = 0.08849$$

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	6121.82	0.0199	P	2.6
2	☐	5.000					
3	☐	50.000	48.767	151186.69	0.5010	P	0.8
4	☐	2500.000	2728.170	8086873.56	26.9353	A	1.0
5	☐	6250.000	6739.395	19822142.11	66.5091	A	0.7
6	☐	12500.000	13205.833	39192291.16	130.3053	A	0.3
7	☐	25000.000	26030.631	78998739.73	256.8314	A	0.4
8	☐	50000.000	51835.151	160297981.3	511.4121	A	0.3
9	☐	250000.00	249480.09	805137055.0	2,461.325	A	0.7

$$y = 0.0099 * x + 0.0199$$

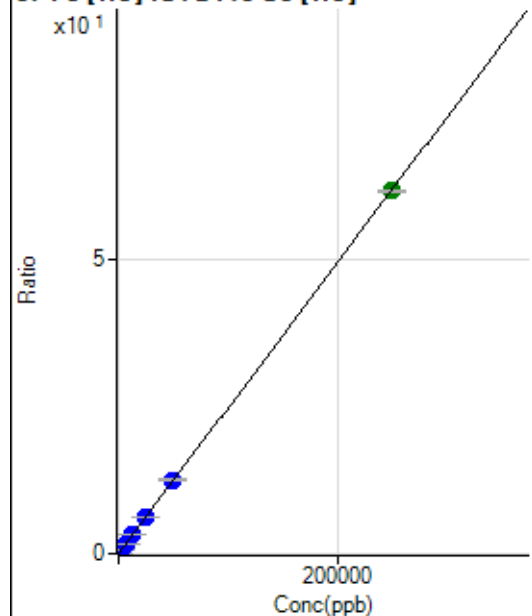
$$R = 1.0000$$

$$DL = 0.1553$$

$$BEC = 2.02$$

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	300.01	0.0010	P	14.3
2	☐	5.000					
3	☐	50.000	50.670	4069.21	0.0135	P	2.4
4	☐	2500.000	2676.281	198662.39	0.6617	P	0.7
5	☐	6250.000	6611.324	486741.12	1.6331	P	0.3
6	☐	12500.000	13042.050	968695.84	3.2207	P	0.5
7	☐	25000.000	25592.457	1943732.73	6.3191	P	0.2
8	☐	50000.000	50944.121	3942355.12	12.5777	P	0.1
9	☐	250000.00	249714.03	20166203.69	61.6485	A	0.7

$$y = 2.4687E-004 * x + 9.7642E-004$$

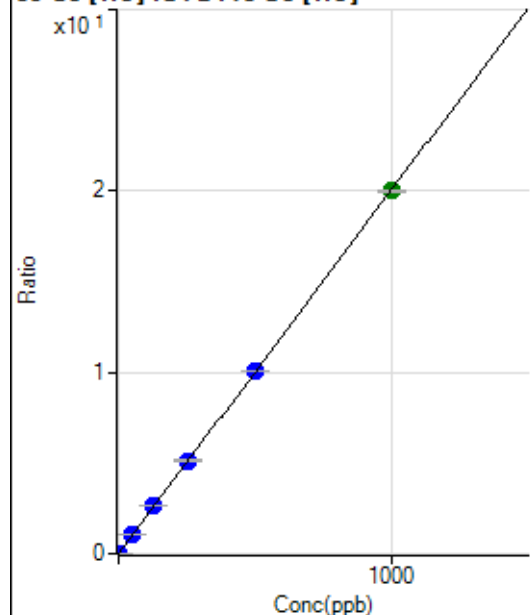
$$R = 1.0000$$

$$DL = 1.691$$

$$BEC = 3.955$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.56	0.0002	P	7.0
2	☐	0.100					
3	☐	1.000	0.946	5804.58	0.0192	P	2.9
4	☐	50.000	52.587	316984.80	1.0558	P	1.5
5	☐	125.000	130.587	781324.10	2.6215	P	0.3
6	☐	250.000	256.265	1547260.78	5.1443	P	0.3
7	☐	500.000	500.853	3092472.94	10.0539	P	0.5
8	☐	1000.000	997.180	6273983.38	20.0167	A	0.3
9	☐			7986.75	0.0244	P	1.4

$$y = 0.0201 * x + 2.4598E-004$$

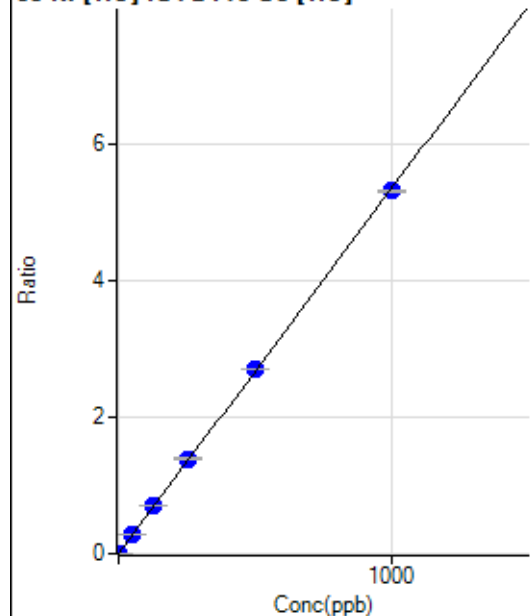
$$R = 1.0000$$

$$DL = 0.002563$$

$$BEC = 0.01225$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0004	P	0.3
2	☐	0.100					
3	☐	1.000	1.111	1925.72	0.0064	P	2.8
4	☐	50.000	53.803	86609.63	0.2885	P	1.2
5	☐	125.000	132.541	211616.41	0.7100	P	0.3
6	☐	250.000	260.452	419522.82	1.3948	P	0.5
7	☐	500.000	504.890	831560.26	2.7035	P	0.4
8	☐	1000.000	993.809	1667810.69	5.3210	P	0.4
9	☐			16867.69	0.0516	P	1.4

$$y = 0.0054 * x + 4.3405E-004$$

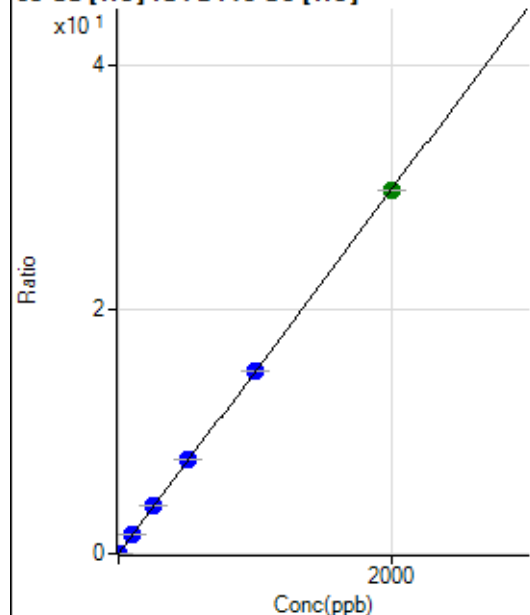
$$R = 0.9999$$

$$DL = 0.0008307$$

$$BEC = 0.08108$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	674.47	0.0022	P	11.1
2	☐	0.200					
3	☐	2.000	1.972	9517.69	0.0315	P	1.3
4	☐	100.000	106.611	477087.29	1.5891	P	1.5
5	☐	250.000	264.139	1172477.30	3.9339	P	0.3
6	☐	500.000	514.778	2305341.91	7.6647	P	0.4
7	☐	1000.000	1002.824	4592191.60	14.9293	P	0.1
8	☐	2000.000	1992.796	9298248.75	29.6651	A	0.1
9	☐			12041.80	0.0368	P	3.7

$$y = 0.0149 * x + 0.0022$$

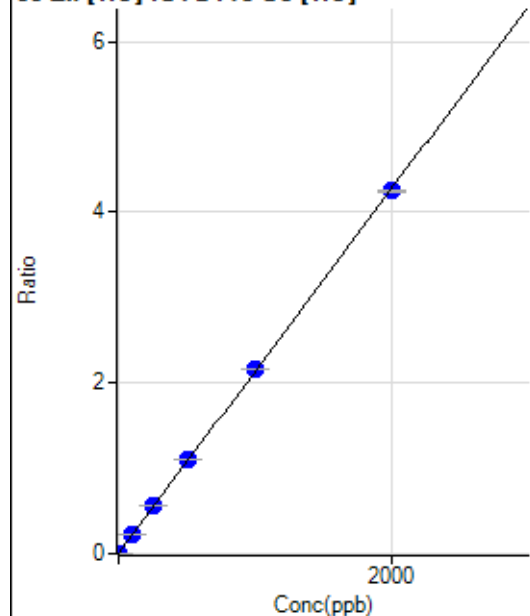
$$R = 1.0000$$

$$DL = 0.04898$$

$$BEC = 0.1475$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	866.71	0.0028	P	9.1
2	☐	0.200					
3	☐	2.000	2.025	2155.75	0.0071	P	4.9
4	☐	100.000	106.883	69368.65	0.2311	P	1.8
5	☐	250.000	265.880	170058.17	0.5706	P	0.5
6	☐	500.000	518.233	333694.96	1.1095	P	0.5
7	☐	1000.000	1008.535	663312.75	2.1565	P	0.4
8	☐	2000.000	1988.845	1332053.35	4.2498	P	0.4
9	☐			4209.56	0.0129	P	4.9

$$y = 0.0021 * x + 0.0028$$

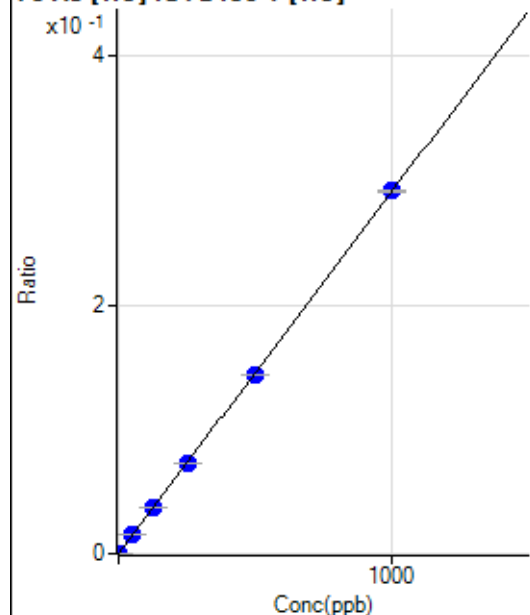
$$R = 0.9999$$

$$DL = 0.3618$$

$$BEC = 1.321$$

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	11.11	0.0000	P	33.4
2	☐	0.100					
3	☐	1.000	0.853	421.61	0.0003	P	10.5
4	☐	50.000	50.753	24504.63	0.0148	P	0.3
5	☐	125.000	125.666	60128.56	0.0365	P	0.9
6	☐	250.000	248.216	119940.72	0.0722	P	0.3
7	☐	500.000	494.121	243355.93	0.1437	P	0.4
8	☐	1000.000	1003.265	498256.75	0.2917	P	0.5
9	☐			309.88	0.0002	P	7.6

$$y = 2.9077\text{E-}004 * x + 6.5677\text{E-}006$$

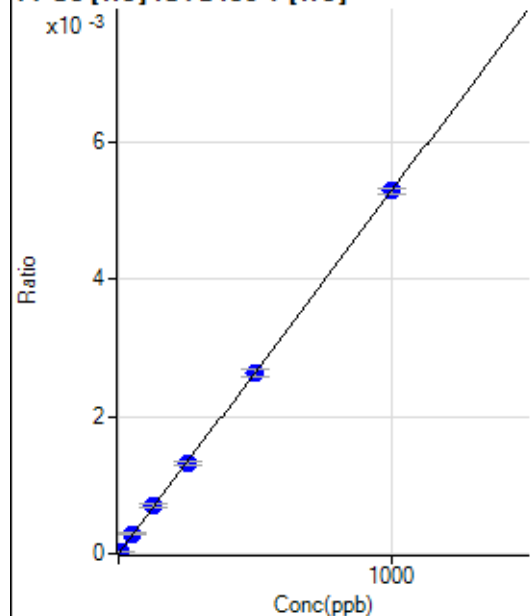
$$R = 1.0000$$

$$DL = 0.02264$$

$$BEC = 0.02259$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	3.432	30.00	0.0000	P	40.8
4	☐	50.000	53.690	471.13	0.0003	P	8.4
5	☐	125.000	131.246	1141.18	0.0007	P	8.1
6	☐	250.000	249.527	2191.31	0.0013	P	4.2
7	☐	500.000	498.490	4461.87	0.0026	P	3.7
8	☐	1000.000	999.916	9027.39	0.0053	P	1.9
9	☐			6.66	0.0000	P	86.8

$$y = 5.2851\text{E-}006 * x + 0.0000\text{E+}000$$

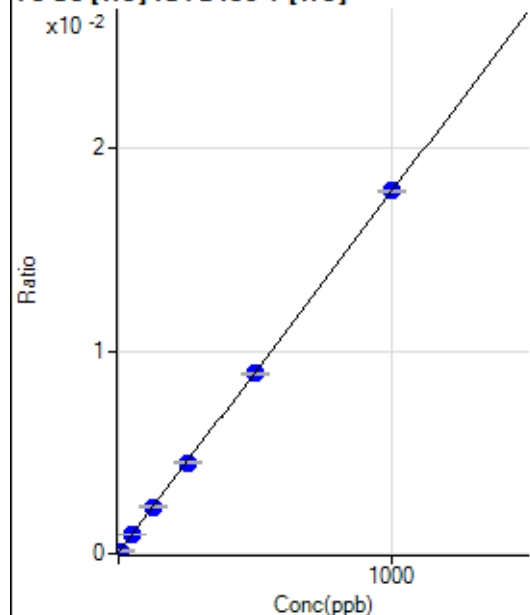
$$R = 1.0000$$

$$DL = 0$$

$$BEC = 0$$

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	95.68	0.0001	P	7.9
2	☐	0.500					
3	☐	5.000	4.657	230.87	0.0001	P	14.9
4	☐	50.000	51.133	1604.42	0.0010	P	5.2
5	☐	125.000	126.498	3796.83	0.0023	P	2.7
6	☐	250.000	249.593	7474.82	0.0045	P	2.2
7	☐	500.000	495.523	15031.32	0.0089	P	1.9
8	☐	1000.000	1002.098	30556.87	0.0179	P	0.2
9	☐			123.46	0.0001	P	2.1

$$y = 1.7796E-005 * x + 5.6555E-005$$

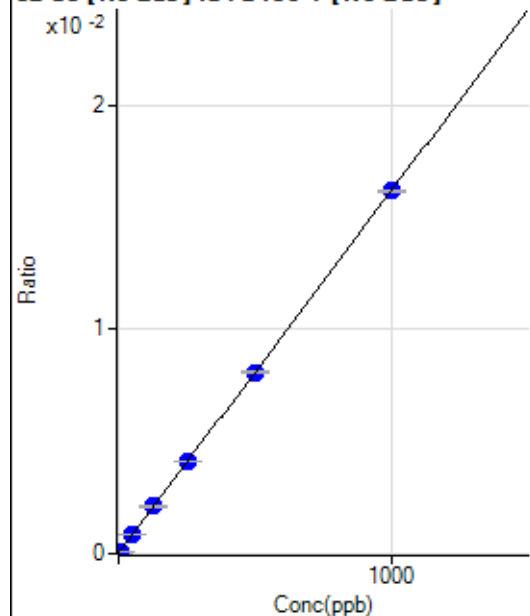
$$R = 1.0000$$

$$DL = 0.7513$$

$$BEC = 3.178$$

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	213.59	0.0000	P	21.4
2	☐	0.500					
3	☐	5.000	5.056	1142.24	0.0001	P	2.6
4	☐	50.000	51.878	9866.08	0.0009	P	1.2
5	☐	125.000	128.802	24084.75	0.0021	P	0.6
6	☐	250.000	254.421	47108.01	0.0041	P	0.2
7	☐	500.000	498.457	92200.33	0.0081	P	0.8
8	☐	1000.000	999.097	188096.02	0.0162	P	0.4
9	☐			423.32	0.0000	P	4.8

$$y = 1.6176E-005 * x + 1.7778E-005$$

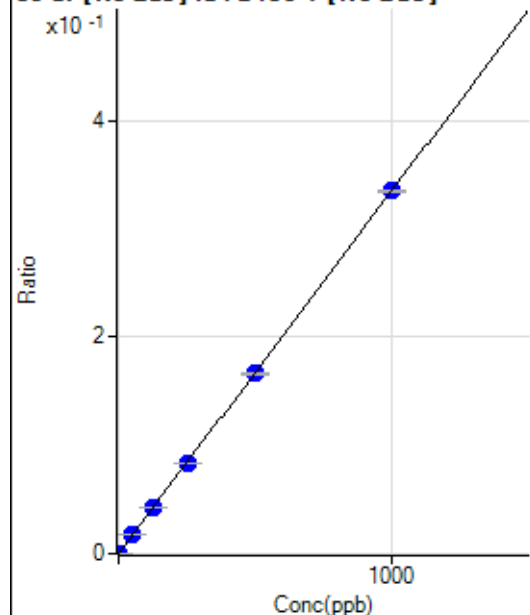
$$R = 1.0000$$

$$DL = 0.7059$$

$$BEC = 1.099$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1172.32	0.0001	P	7.4
2	☐	0.100					
3	☐	1.000	0.929	4684.29	0.0004	P	2.7
4	☐	50.000	50.564	195691.25	0.0170	P	1.0
5	☐	125.000	125.541	482077.17	0.0421	P	0.7
6	☐	250.000	248.861	949082.59	0.0833	P	1.1
7	☐	500.000	498.258	1901241.43	0.1666	P	1.1
8	☐	1000.000	1001.060	3891130.42	0.3347	P	0.3
9	☐			134001.72	0.0118	P	0.8

$$y = 3.3423\text{E-}004 * x + 9.7679\text{E-}005$$

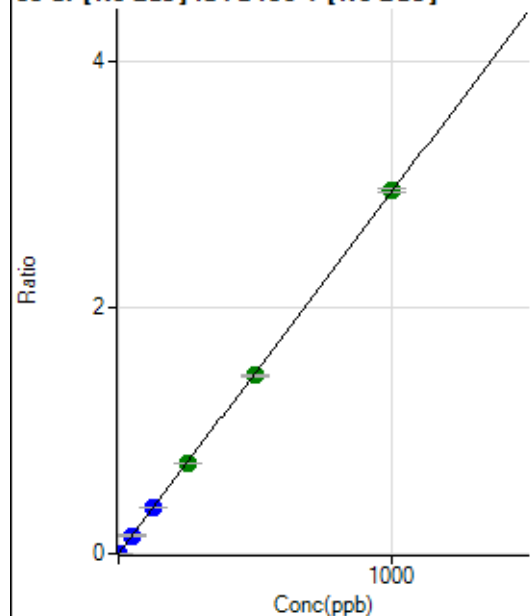
$$R = 1.0000$$

$$DL = 0.06512$$

$$BEC = 0.2922$$

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	775.05	0.0001	P	5.0
2	☐	0.100					
3	☐	1.000	0.926	32003.36	0.0028	P	1.7
4	☐	50.000	50.384	1708141.77	0.1484	P	0.5
5	☐	125.000	125.642	4239588.46	0.3699	P	1.0
6	☐	250.000	248.181	8326741.94	0.7306	A	0.7
7	☐	500.000	493.878	16585749.33	1.4538	A	1.2
8	☐	1000.000	1003.416	34337542.43	2.9536	A	1.1
9	☐			1180479.41	0.1040	P	0.4

$$y = 0.0029 * x + 6.4588\text{E-}005$$

$$R = 1.0000$$

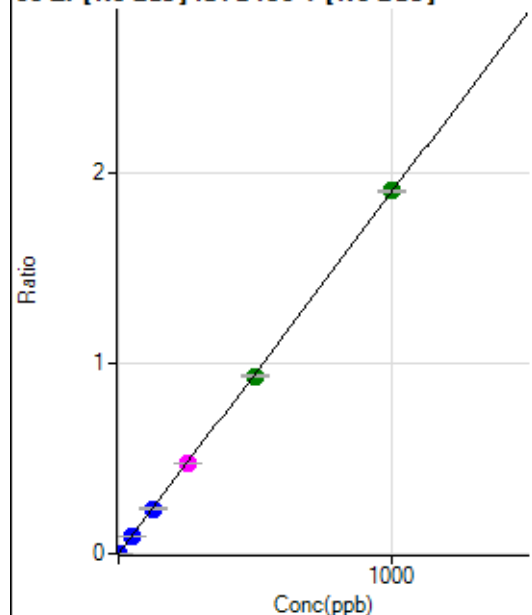
$$DL = 0.003259$$

$$BEC = 0.02194$$

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	652.82	0.0001	P	11.7
2	☐	0.100					
3	☐	1.000	0.781	17625.54	0.0015	P	4.5
4	☐	50.000	49.185	1074975.34	0.0934	P	0.2
5	☐	125.000	124.954	2717845.14	0.2371	P	1.3
6	☐	250.000	249.618	5398241.88	0.4736	M	0.7
7	☐	500.000	491.434	10638592.42	0.9324	A	1.2
8	☐	1000.000	1004.425	22156058.14	1.9057	A	0.5
9	☐			7149.33	0.0006	P	1.0

$$y = 0.0019 * x + 5.4419E-005$$

$$R = 0.9999$$

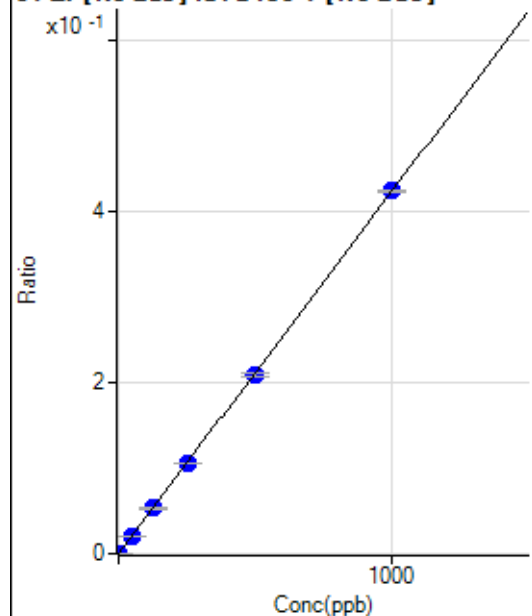
$$DL = 0.01003$$

$$BEC = 0.02868$$

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	158.34	0.0000	P	9.9
2	☐	0.100					
3	☐	1.000	0.799	4025.73	0.0004	P	1.2
4	☐	50.000	49.339	240255.28	0.0209	P	1.0
5	☐	125.000	125.184	606648.33	0.0529	P	1.2
6	☐	250.000	249.200	1200666.78	0.1053	P	0.8
7	☐	500.000	494.324	2384425.44	0.2090	P	1.2
8	☐	1000.000	1003.048	4929421.72	0.4240	P	0.7
9	☐			1577.94	0.0001	P	4.0

$$y = 4.2270E-004 * x + 1.3187E-005$$

$$R = 1.0000$$

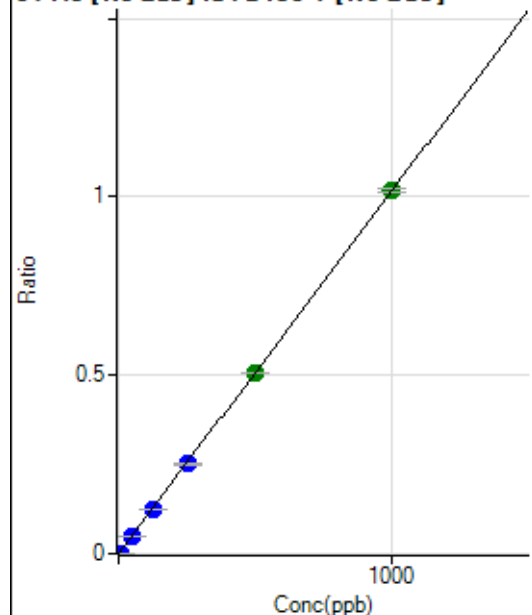
$$DL = 0.009234$$

$$BEC = 0.0312$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.90	0.0000	P	8.0
2	☐	0.500					
3	☐	5.000	1.890	22268.26	0.0019	P	2.2
4	☐	50.000	49.229	575664.74	0.0500	P	0.5
5	☐	125.000	123.247	1434413.70	0.1251	P	1.2
6	☐	250.000	247.587	2864984.85	0.2514	P	1.1
7	☐	500.000	498.573	5775539.62	0.5062	A	0.4
8	☐	1000.000	1001.590	11821989.41	1.0169	A	1.0
9	☐			12450.40	0.0011	P	3.3

$$y = 0.0010 * x + 2.1995E-005$$

$$R = 1.0000$$

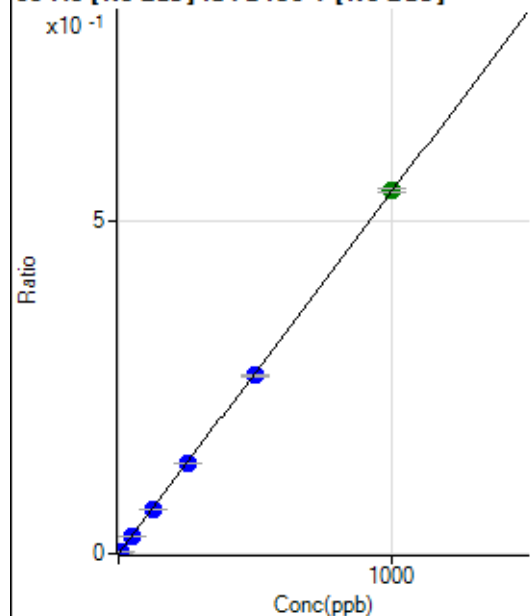
$$DL = 0.005175$$

$$BEC = 0.02166$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	49.3
2	☐	0.500					
3	☐	5.000	4.408	27533.06	0.0024	P	2.6
4	☐	50.000	50.011	313123.63	0.0272	P	0.9
5	☐	125.000	124.208	774184.75	0.0675	P	1.1
6	☐	250.000	248.558	1540450.96	0.1352	P	0.9
7	☐	500.000	494.429	3067603.17	0.2689	P	1.1
8	☐	1000.000	1003.247	6342359.73	0.5455	A	1.1
9	☐			17035.85	0.0015	P	2.8

$$y = 5.4377E-004 * x + 3.2373E-006$$

$$R = 1.0000$$

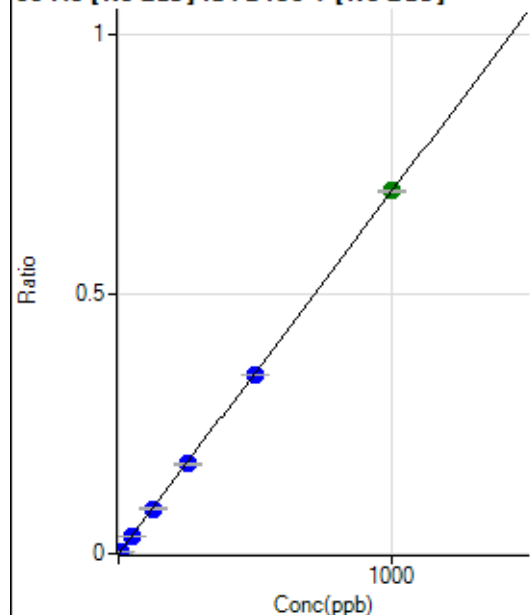
$$DL = 0.008811$$

$$BEC = 0.005953$$

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	177.79	0.0000	P	21.6
2	☐	0.500					
3	☐	5.000	3.734	30065.99	0.0026	P	1.1
4	☐	50.000	49.647	399052.49	0.0347	P	0.2
5	☐	125.000	124.570	996567.40	0.0869	P	1.1
6	☐	250.000	248.322	1975182.36	0.1733	P	1.0
7	☐	500.000	495.230	3943376.30	0.3456	P	0.5
8	☐	1000.000	1002.882	8136698.79	0.6999	A	0.7
9	☐			22949.88	0.0020	P	1.1

$$y = 6.9785E-004 * x + 1.4824E-005$$

$$R = 1.0000$$

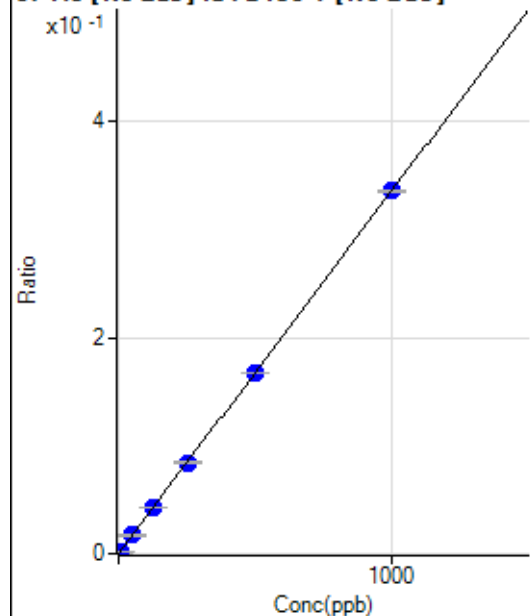
$$DL = 0.01378$$

$$BEC = 0.02124$$

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	36.11	0.0000	P	53.8
2	☐	0.500					
3	☐	5.000	4.517	17436.36	0.0015	P	1.8
4	☐	50.000	50.420	194972.85	0.0169	P	0.5
5	☐	125.000	126.083	485350.47	0.0423	P	0.9
6	☐	250.000	251.131	961194.03	0.0843	P	1.2
7	☐	500.000	497.907	1907851.28	0.1672	P	0.1
8	☐	1000.000	1000.610	3906691.15	0.3360	P	0.2
9	☐			10762.83	0.0009	P	2.5

$$y = 3.3582E-004 * x + 3.0134E-006$$

$$R = 1.0000$$

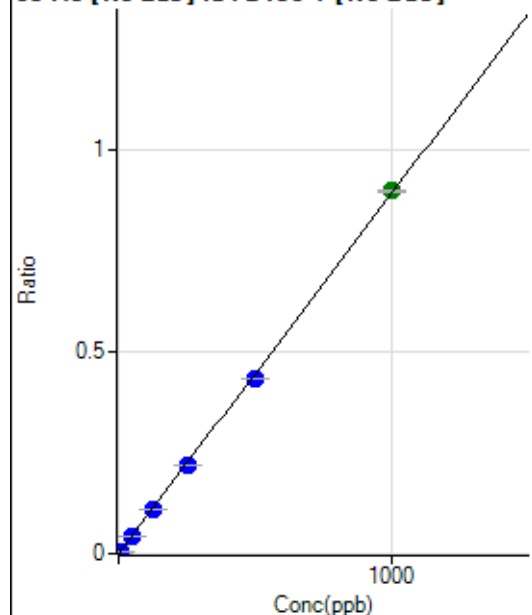
$$DL = 0.01448$$

$$BEC = 0.008973$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.00	0.0000	P	61.4
2	☐	0.500					
3	☐	5.000	4.314	44264.05	0.0039	P	1.2
4	☐	50.000	48.725	500987.35	0.0435	P	0.8
5	☐	125.000	122.583	1254679.20	0.1095	P	1.2
6	☐	250.000	245.097	2494408.61	0.2189	P	0.9
7	☐	500.000	487.698	4969098.07	0.4355	P	0.3
8	☐	1000.000	1007.746	10462060.57	0.8999	A	0.4
9	☐			26728.71	0.0024	P	2.0

$$y = 8.9295E-004 * x + 6.2364E-006$$

$$R = 0.9999$$

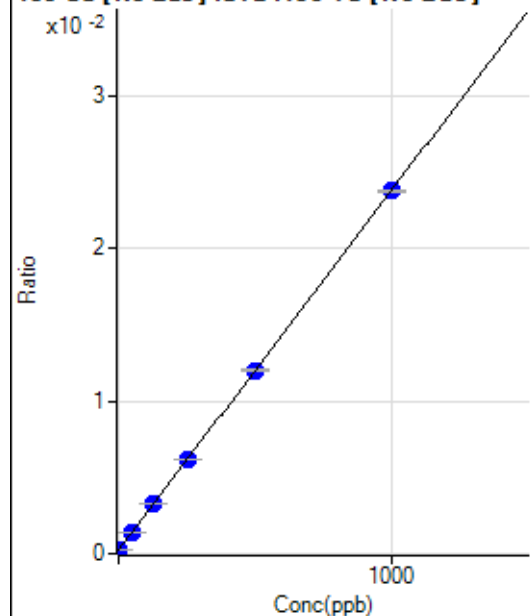
$$DL = 0.01287$$

$$BEC = 0.006984$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3645.08	0.0002	P	6.2
2	☐	0.100					
3	☐	1.000	1.411	3950.72	0.0003	P	8.6
4	☐	50.000	50.940	21391.80	0.0014	P	1.5
5	☐	125.000	130.580	48600.96	0.0033	P	1.3
6	☐	250.000	251.666	90894.57	0.0062	P	0.9
7	☐	500.000	500.236	176466.86	0.0120	P	0.9
8	☐	1000.000	998.721	351842.40	0.0237	P	0.8
9	☐			3859.03	0.0003	P	4.5

$$y = 2.3533E-005 * x + 2.3364E-004$$

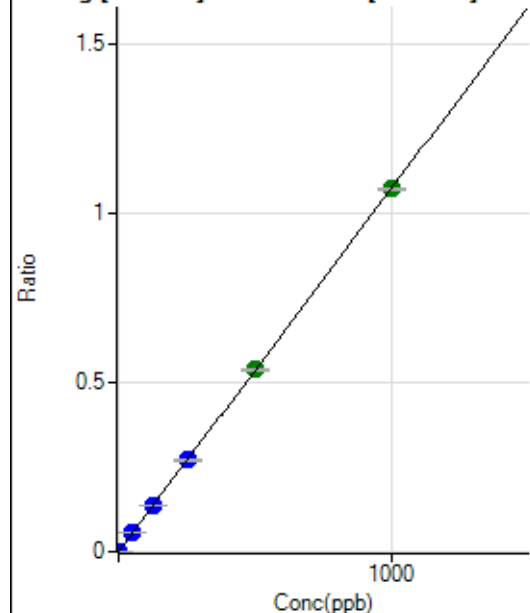
$$R = 1.0000$$

$$DL = 1.853$$

$$BEC = 9.928$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	32.6
2	☐	0.100					
3	☐	1.000	0.949	15144.85	0.0010	P	1.0
4	☐	50.000	51.093	817855.13	0.0548	P	0.6
5	☐	125.000	129.126	2034151.15	0.1384	P	0.5
6	☐	250.000	251.786	3983808.38	0.2699	P	1.6
7	☐	500.000	500.724	7888234.20	0.5366	A	0.9
8	☐	1000.000	998.621	15864244.45	1.0703	A	0.7
9	☐			3483.92	0.0002	P	2.1

$$y = 0.0011 * x + 4.9844E-006$$

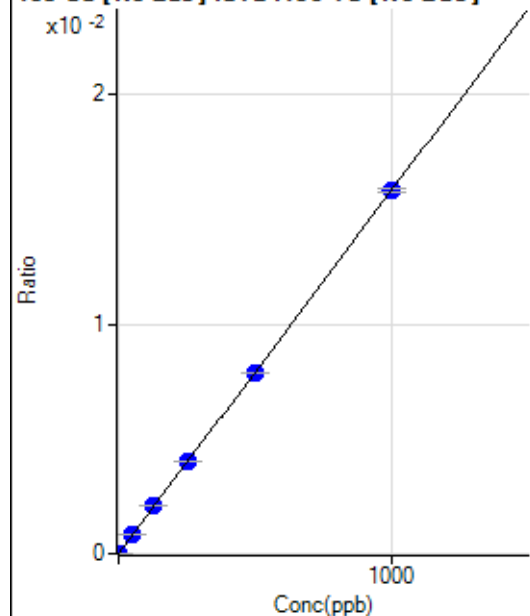
$$R = 1.0000$$

$$DL = 0.004555$$

$$BEC = 0.004651$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.89	0.0000	P	34.7
2	☐	0.100					
3	☐	1.000	0.992	245.84	0.0000	P	7.0
4	☐	50.000	51.951	12298.56	0.0008	P	0.9
5	☐	125.000	130.922	30484.44	0.0021	P	0.5
6	☐	250.000	254.186	59432.81	0.0040	P	1.8
7	☐	500.000	498.646	116073.46	0.0079	P	0.6
8	☐	1000.000	998.793	234442.30	0.0158	P	1.0
9	☐			58.33	0.0000	P	35.8

$$y = 1.5835E-005 * x + 8.9051E-007$$

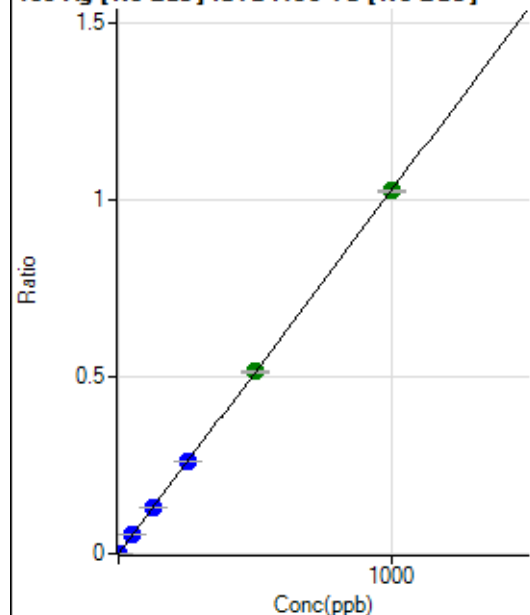
$$R = 1.0000$$

$$DL = 0.05859$$

$$BEC = 0.05624$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0000	P	81.5
2	☐	0.100					
3	☐	1.000	0.954	14555.34	0.0010	P	1.9
4	☐	50.000	51.386	788092.27	0.0528	P	0.8
5	☐	125.000	128.687	1942332.03	0.1321	P	1.0
6	☐	250.000	253.491	3842913.76	0.2603	P	1.6
7	☐	500.000	500.359	7552351.38	0.5138	A	0.6
8	☐	1000.000	998.417	15197078.81	1.0252	A	0.6
9	☐			3278.30	0.0002	P	10.6

$$y = 0.0010 * x + 3.0262E-006$$

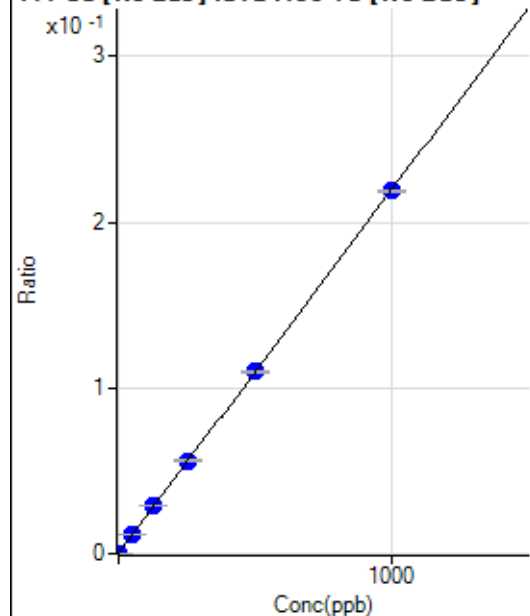
$$R = 1.0000$$

$$DL = 0.007202$$

$$BEC = 0.002947$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2562.67	0.0002	P	6.0
2	☐	0.100					
3	☐	1.000	0.956	5538.22	0.0004	P	4.4
4	☐	50.000	51.682	171662.83	0.0115	P	1.2
5	☐	125.000	130.141	421775.41	0.0287	P	0.4
6	☐	250.000	254.928	827513.35	0.0561	P	1.5
7	☐	500.000	501.190	1617534.31	0.1100	P	1.2
8	☐	1000.000	997.447	3243762.94	0.2188	P	0.8
9	☐			3298.02	0.0002	P	7.0

$$y = 2.1923E-004 * x + 1.6426E-004$$

$$R = 1.0000$$

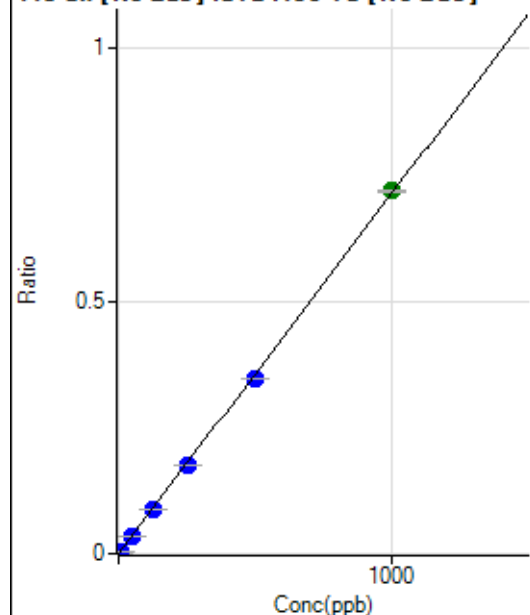
$$DL = 0.1351$$

$$BEC = 0.7493$$

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	1347.35	0.0001	P	6.2
2	☐	0.500					
3	☐	5.000	4.374	47442.39	0.0032	P	2.1
4	☐	50.000	48.970	522234.57	0.0350	P	0.4
5	☐	125.000	124.785	1307738.17	0.0890	P	0.9
6	☐	250.000	245.643	2584395.13	0.1751	P	1.7
7	☐	500.000	485.529	5084816.74	0.3459	P	0.7
8	☐	1000.000	1008.406	10648618.21	0.7184	A	0.3
9	☐			13623.89	0.0010	P	4.2

$$y = 7.1231\text{E-}004 * x + 8.6364\text{E-}005$$

$$R = 0.9998$$

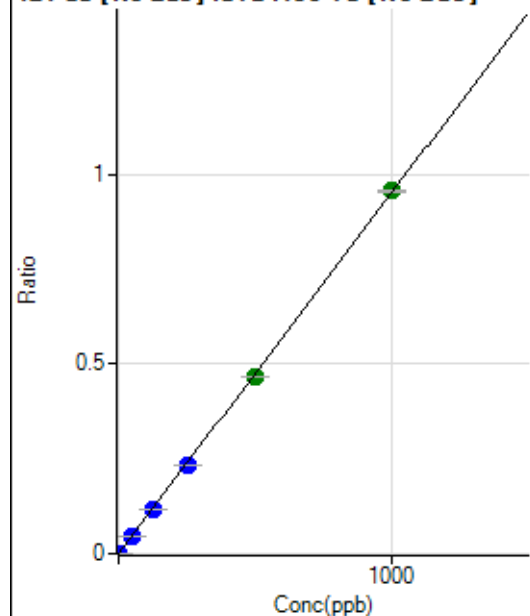
$$DL = 0.02245$$

$$BEC = 0.1212$$

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	119.45	0.0000	P	14.5
2	☐	0.200					
3	☐	2.000	1.775	25126.10	0.0017	P	3.3
4	☐	50.000	48.109	683546.21	0.0458	P	0.6
5	☐	125.000	123.011	1719962.15	0.1170	P	1.1
6	☐	250.000	244.950	3440084.97	0.2330	P	1.3
7	☐	500.000	490.736	6861320.99	0.4668	A	0.2
8	☐	1000.000	1006.238	14188136.60	0.9572	A	0.4
9	☐			34738.36	0.0025	P	2.1

$$y = 9.5123\text{E-}004 * x + 7.6570\text{E-}006$$

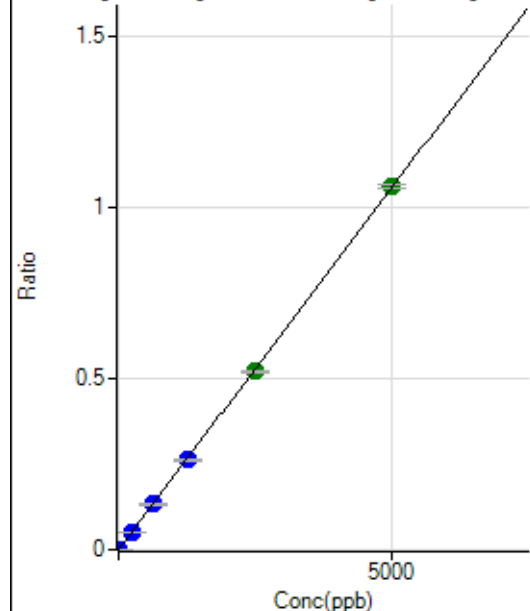
$$R = 0.9999$$

$$DL = 0.003509$$

$$BEC = 0.00805$$

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	75.01	0.0000	P	29.3
2	☐	1.000					
3	☐	10.000	8.835	27717.43	0.0019	P	3.5
4	☐	250.000	246.544	778004.87	0.0521	P	0.7
5	☐	625.000	625.074	1941249.74	0.1321	P	0.4
6	☐	1250.000	1241.280	3871935.37	0.2623	P	1.3
7	☐	2500.000	2470.144	7671293.40	0.5219	A	0.9
8	☐	5000.000	5017.274	15713011.98	1.0601	A	1.2
9	☐			6171.07	0.0004	P	2.3

$$y = 2.1128\text{E-}004 * x + 4.8073\text{E-}006$$

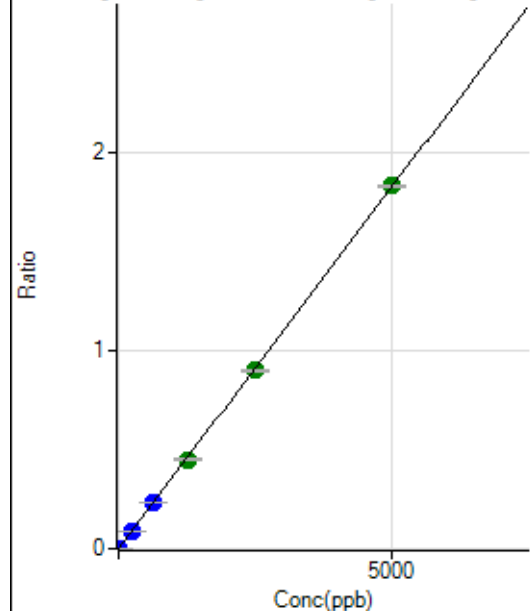
$$R = 1.0000$$

$$DL = 0.02001$$

$$BEC = 0.02275$$

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	122.23	0.0000	P	17.0
2	☐	1.000					
3	☐	10.000	8.987	48655.75	0.0033	P	1.8
4	☐	250.000	250.274	1362878.49	0.0913	P	1.0
5	☐	625.000	632.950	3392166.13	0.2308	P	0.5
6	☐	1250.000	1233.939	6642679.32	0.4499	A	0.7
7	☐	2500.000	2467.633	13224948.04	0.8997	A	0.9
8	☐	5000.000	5019.193	27126426.65	1.8300	A	0.3
9	☐			10915.86	0.0008	P	2.7

$$y = 3.6460\text{E-}004 * x + 7.8338\text{E-}006$$

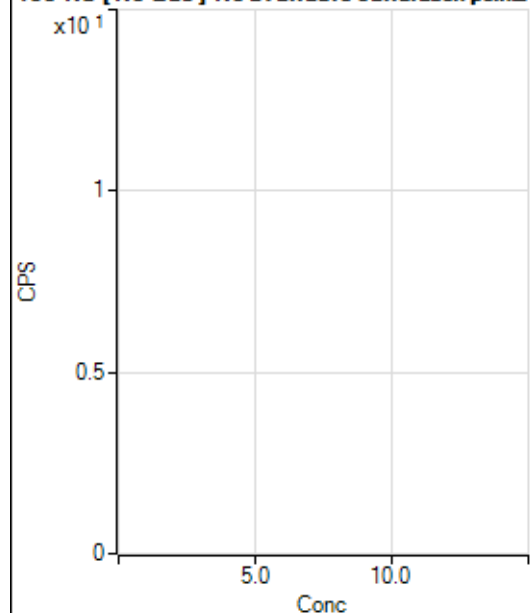
$$R = 1.0000$$

$$DL = 0.01098$$

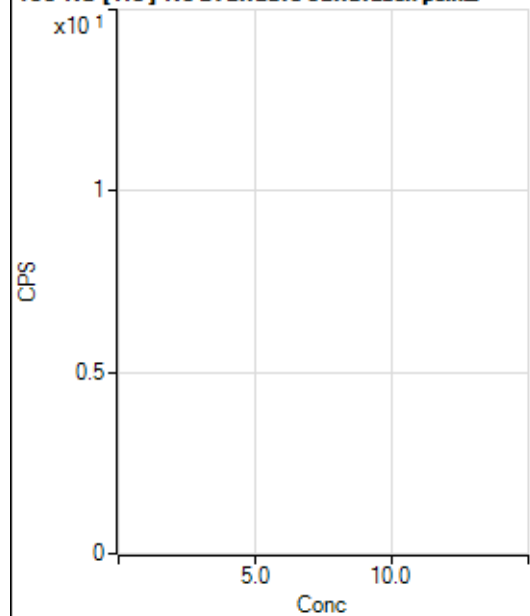
$$BEC = 0.02149$$

Weight: <None>

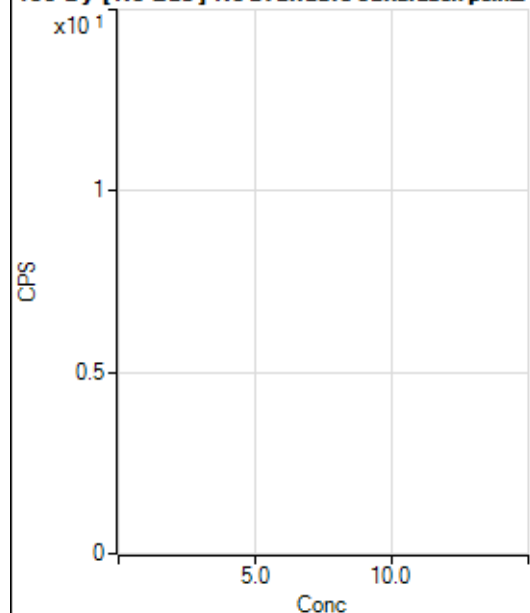
Min Conc: 0

150 Nd [No Gas] No available calibration points

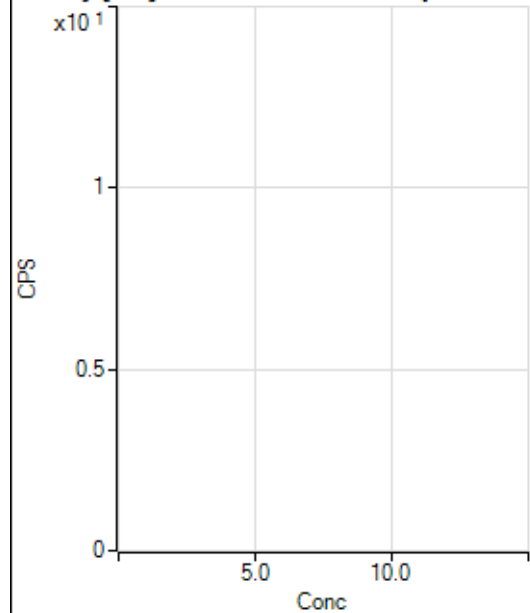
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	173.
2	☐						
3	☐			4.45		P	86.6
4	☐			62.23		P	16.4
5	☐			102.23		P	26.4
6	☐			202.23		P	18.2
7	☐			455.58		P	6.8
8	☐			644.49		P	6.1
9	☐			164.45		P	14.2

150 Nd [He] No available calibration points

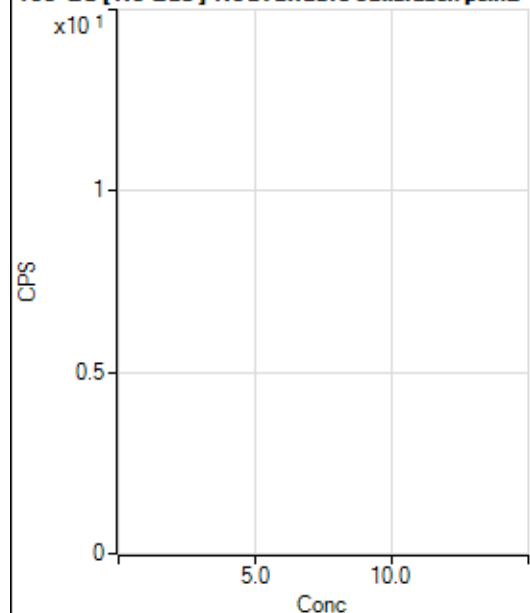
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	173.
2	☐						
3	☐			1.11		P	173.
4	☐			4.44		P	43.4
5	☐			13.33		P	25.0
6	☐			24.44		P	34.3
7	☐			36.67		P	15.7
8	☐			60.00		P	29.4
9	☐			85.56		P	14.7

156 Dy [No Gas] No available calibration points

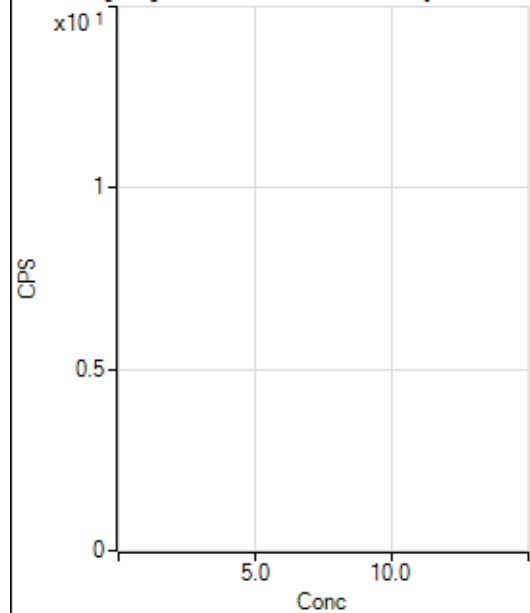
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	0.0
2	☐						
3	☐			11.11		P	114.
4	☐			30.56		P	41.7
5	☐			50.00		P	16.7
6	☐			88.89		P	51.6
7	☐			116.67		P	14.3
8	☐			225.01		P	25.9
9	☐			136.12		P	19.7

156 Dy [He] No available calibration points

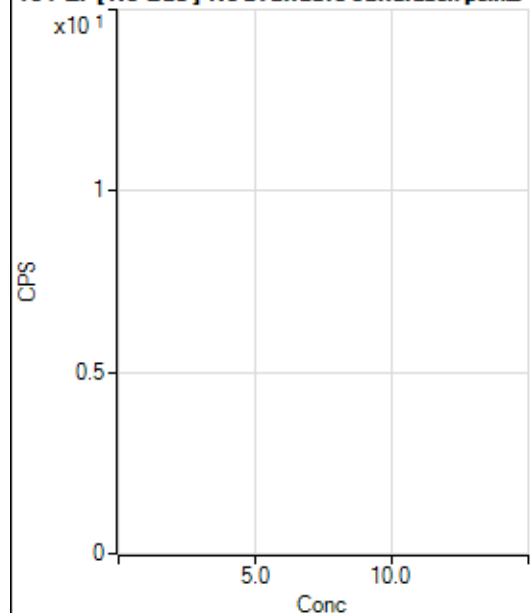
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			10.00		P	33.3
4	☐			13.33		P	50.0
5	☐			16.67		P	72.1
6	☐			33.34		P	17.3
7	☐			83.34		P	20.0
8	☐			141.12		P	28.2
9	☐			38.89		P	30.1

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

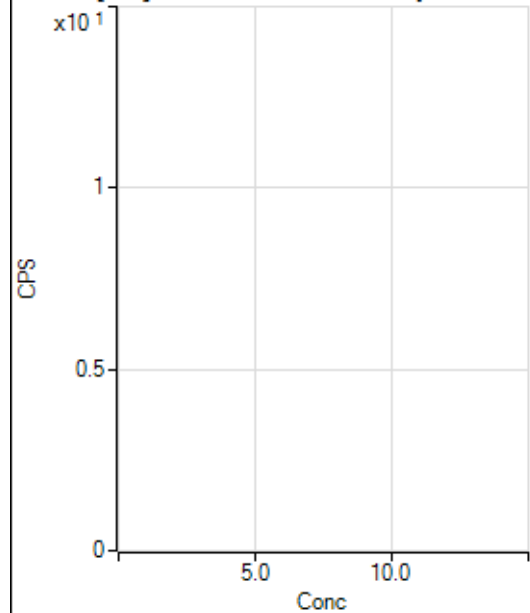
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			136.12		P	9.4
2	☐						
3	☐			105.56		P	27.7
4	☐			163.90		P	24.0
5	☐			141.68		P	32.8
6	☐			122.23		P	20.8
7	☐			202.79		P	15.6
8	☐			163.90		P	10.6
9	☐			169.45		P	5.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			95.56		P	8.1
2	☐						
3	☐			88.89		P	18.5
4	☐			108.89		P	24.9
5	☐			111.12		P	9.6
6	☐			128.89		P	7.9
7	☐			135.56		P	13.5
8	☐			152.22		P	19.1
9	☐			140.00		P	24.9

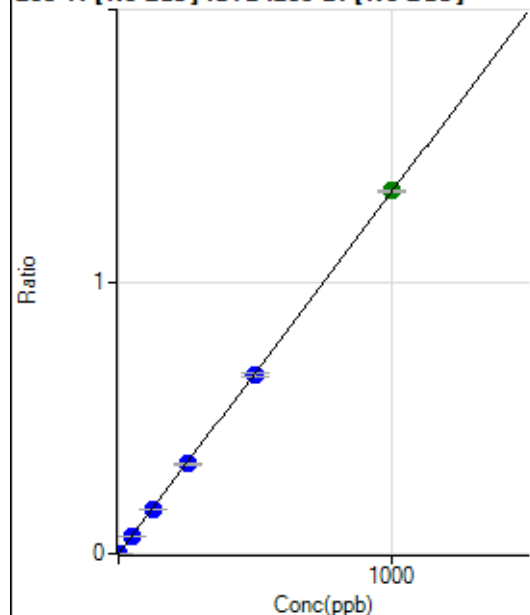
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	27.0
2	☐						
3	☐			63.89		P	32.8
4	☐			47.23		P	36.7
5	☐			52.78		P	55.5
6	☐			44.45		P	28.7
7	☐			88.89		P	32.9
8	☐			97.23		P	17.8
9	☐			91.67		P	18.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.67		P	18.2
2	☐						
3	☐			32.22		P	58.8
4	☐			30.00		P	48.4
5	☐			27.78		P	25.0
6	☐			28.89		P	52.0
7	☐			34.44		P	40.3
8	☐			32.22		P	21.5
9	☐			35.56		P	53.3

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	225.01	0.0000	P	24.9
2	☐	0.100					
3	☐	1.000	0.891	11155.13	0.0012	P	1.3
4	☐	50.000	49.126	606486.96	0.0654	P	0.7
5	☐	125.000	123.993	1518540.07	0.1650	P	1.0
6	☐	250.000	248.553	2991937.42	0.3307	P	1.3
7	☐	500.000	493.887	5836054.73	0.6570	P	1.6
8	☐	1000.000	1003.588	11755675.78	1.3350	A	0.7
9	☐			5887.68	0.0008	P	7.7

$$y = 0.0013 * x + 2.2779E-005$$

$$R = 1.0000$$

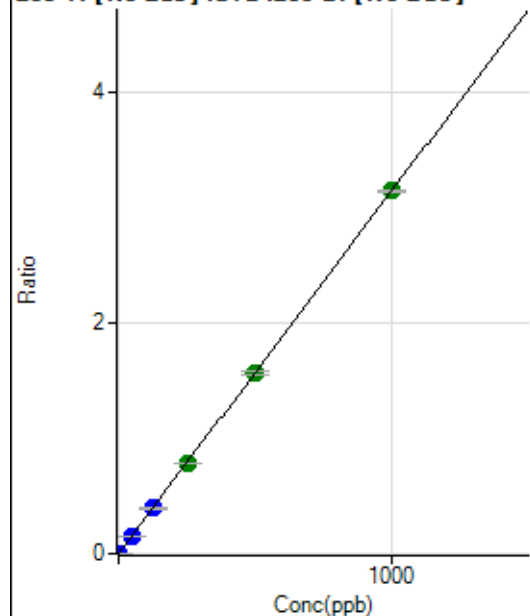
$$DL = 0.01281$$

$$BEC = 0.01712$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	500.04	0.0001	P	19.3
2	☐	0.100					
3	☐	1.000	0.915	27020.35	0.0029	P	1.9
4	☐	50.000	49.408	1440186.23	0.1552	P	0.4
5	☐	125.000	124.891	3611383.76	0.3923	P	1.0
6	☐	250.000	248.857	7072932.19	0.7817	A	1.3
7	☐	500.000	499.120	13925427.22	1.5677	A	1.6
8	☐	1000.000	1000.769	27678770.41	3.1433	A	0.6
9	☐			13838.34	0.0018	P	5.3

$$y = 0.0031 * x + 5.0553E-005$$

$$R = 1.0000$$

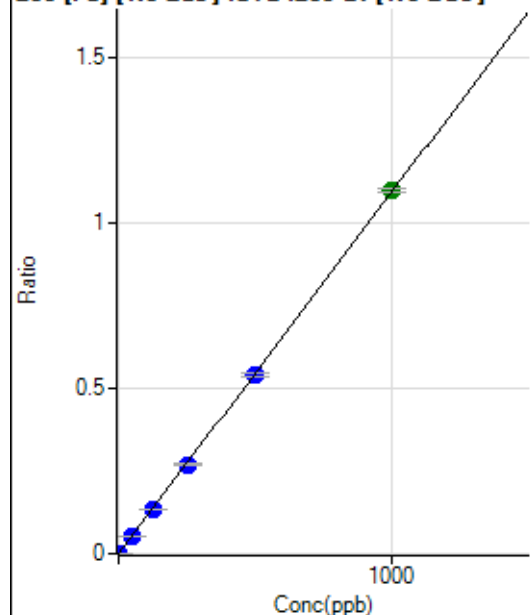
$$DL = 0.009341$$

$$BEC = 0.0161$$

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	898.21	0.0001	P	8.7
2	☐	0.100					
3	☐	1.000	0.907	9989.26	0.0011	P	1.4
4	☐	50.000	48.976	497374.98	0.0536	P	0.2
5	☐	125.000	123.042	1238616.61	0.1345	P	0.5
6	☐	250.000	247.440	2447562.23	0.2705	P	0.9
7	☐	500.000	493.211	4788141.31	0.5391	P	1.9
8	☐	1000.000	1004.331	9664996.97	1.0976	A	1.0
9	☐			11319.99	0.0014	P	4.2

$$y = 0.0011 * x + 9.0804E-005$$

$$R = 1.0000$$

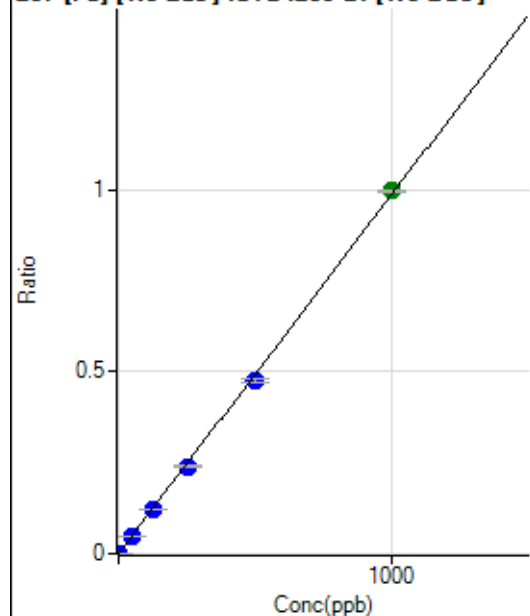
$$DL = 0.02172$$

$$BEC = 0.08309$$

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	748.19	0.0001	P	11.8
2	☐	0.100					
3	☐	1.000	0.894	8832.85	0.0010	P	1.7
4	☐	50.000	47.989	439407.90	0.0474	P	0.3
5	☐	125.000	121.458	1102427.56	0.1198	P	0.7
6	☐	250.000	243.372	2170664.11	0.2399	P	0.7
7	☐	500.000	482.978	4227975.47	0.4760	P	1.9
8	☐	1000.000	1010.711	8770390.71	0.9960	A	0.5
9	☐			9953.98	0.0013	P	3.0

$$y = 9.8536E-004 * x + 7.5662E-005$$

$$R = 0.9998$$

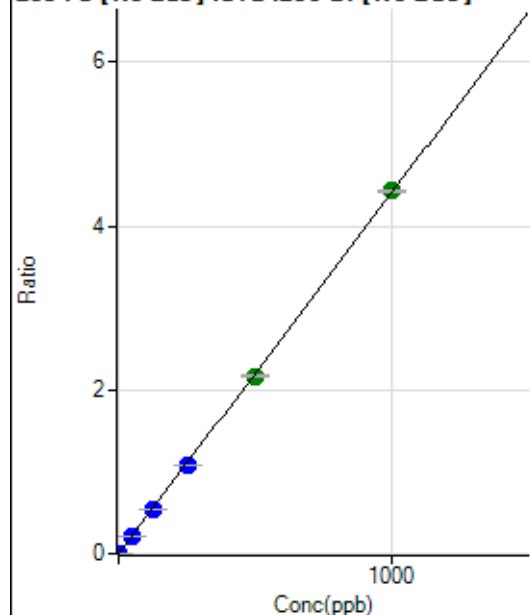
$$DL = 0.02722$$

$$BEC = 0.07679$$

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	3522.52	0.0004	P	1.0
2	☐	0.100					
3	☐	1.000	0.908	40245.50	0.0044	P	1.7
4	☐	50.000	48.571	1989016.19	0.2144	P	0.0
5	☐	125.000	122.598	4976594.72	0.5406	P	0.7
6	☐	250.000	245.775	9803287.86	1.0834	P	0.9
7	☐	500.000	492.523	19281262.50	2.1707	A	1.7
8	☐	1000.000	1005.167	39006886.29	4.4297	A	0.6
9	☐			45485.44	0.0058	P	2.4

$$y = 0.0044 * x + 3.5623E-004$$

$$R = 0.9999$$

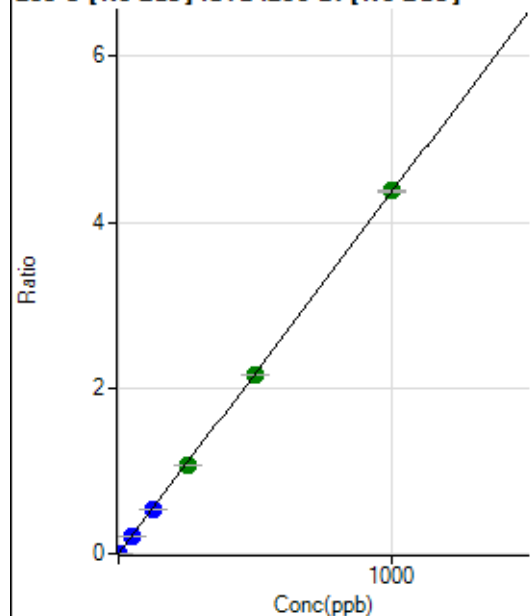
$$DL = 0.002488$$

$$BEC = 0.08084$$

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	83.34	0.0000	P	9.4
2	☐	0.100					
3	☐	1.000	0.833	33628.41	0.0036	P	1.5
4	☐	50.000	47.505	1921580.07	0.2071	P	0.4
5	☐	125.000	120.629	4841378.02	0.5259	P	1.0
6	☐	250.000	245.045	9667180.42	1.0683	A	1.0
7	☐	500.000	495.386	19185764.49	2.1598	A	0.4
8	☐	1000.000	1004.217	38552428.64	4.3782	A	0.7
9	☐			7680.43	0.0010	P	1.7

$$y = 0.0044 * x + 8.4246E-006$$

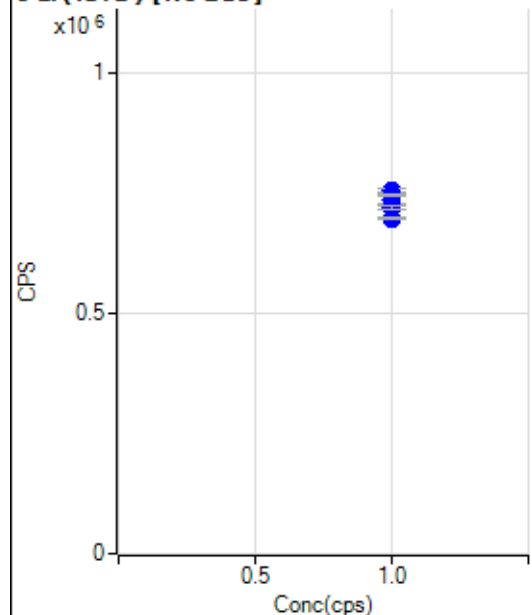
$$R = 1.0000$$

$$DL = 0.0005464$$

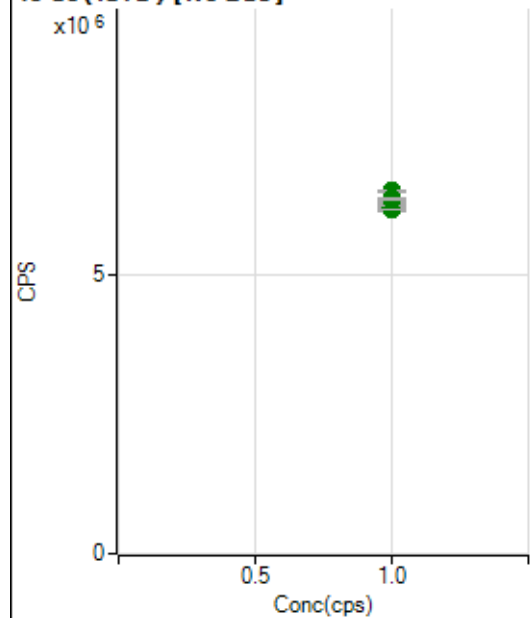
$$BEC = 0.001932$$

Weight: <None>

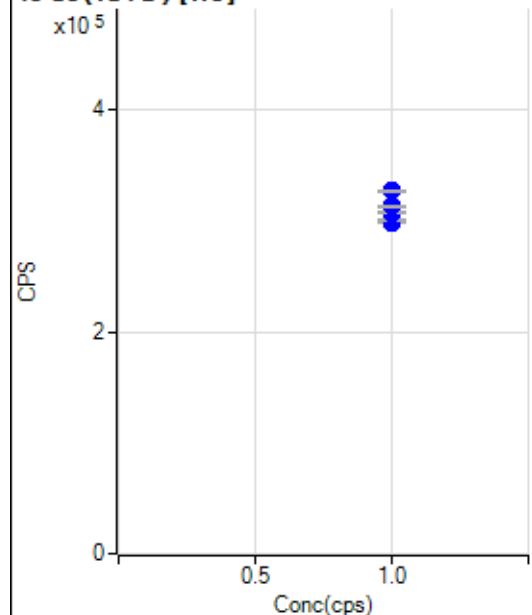
Min Conc: 0

6 Li (ISTD) [No Gas]

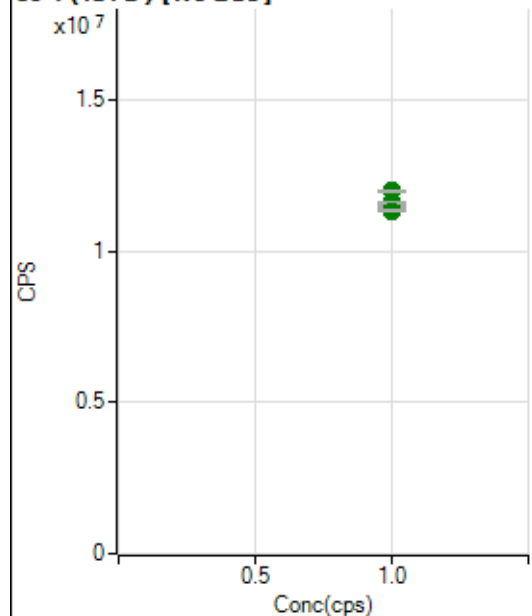
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		746149.16		P	0.1
2	☐	1.000					
3	☐	1.000		735729.65		P	1.8
4	☐	1.000		747661.06		P	0.3
5	☐	1.000		755086.51		P	1.0
6	☐	1.000		746517.31		P	0.7
7	☐	1.000		725977.30		P	0.6
8	☐	1.000		720356.73		P	0.8
9	☐	1.000		697140.03		P	0.4

45 Sc (ISTD) [No Gas]

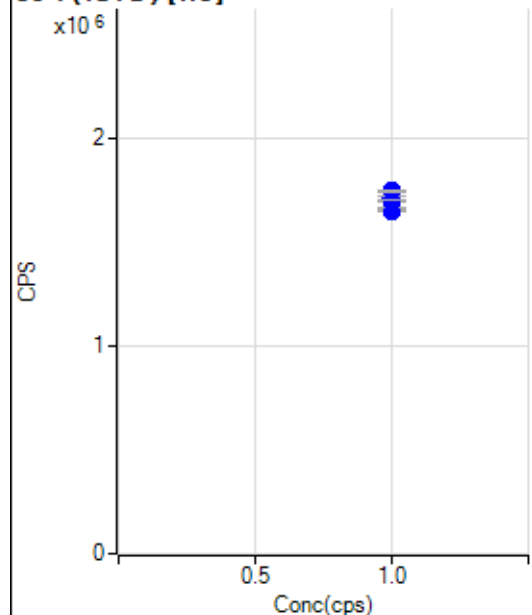
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6487432.48		A	0.5
2	☐	1.000					
3	☐	1.000		6270581.95		A	1.0
4	☐	1.000		6230071.23		A	0.8
5	☐	1.000		6199584.56		A	1.2
6	☐	1.000		6149227.79		A	0.8
7	☐	1.000		6185232.91		A	1.5
8	☐	1.000		6355600.66		A	0.7
9	☐	1.000		6343568.20		A	0.1

45 Sc (ISTD) [He]

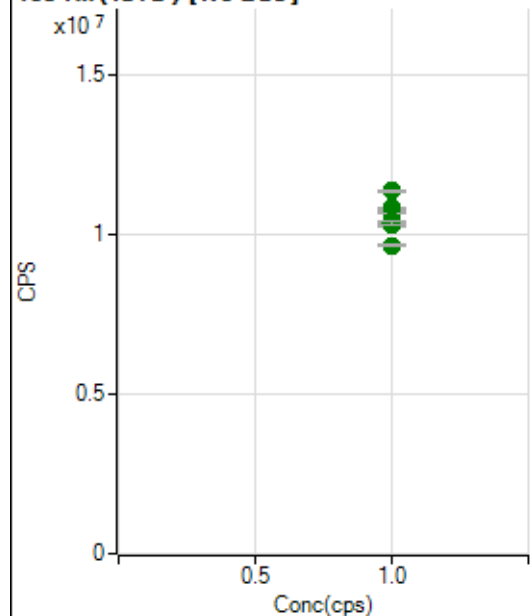
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		307199.93		P	0.3
2	☐	1.000					
3	☐	1.000		301746.33		P	0.3
4	☐	1.000		300253.87		P	1.0
5	☐	1.000		298041.55		P	0.3
6	☐	1.000		300772.78		P	0.1
7	☐	1.000		307596.32		P	0.7
8	☐	1.000		313440.03		P	0.4
9	☐	1.000		327123.93		P	0.6

89 Y (ISTD) [No Gas]

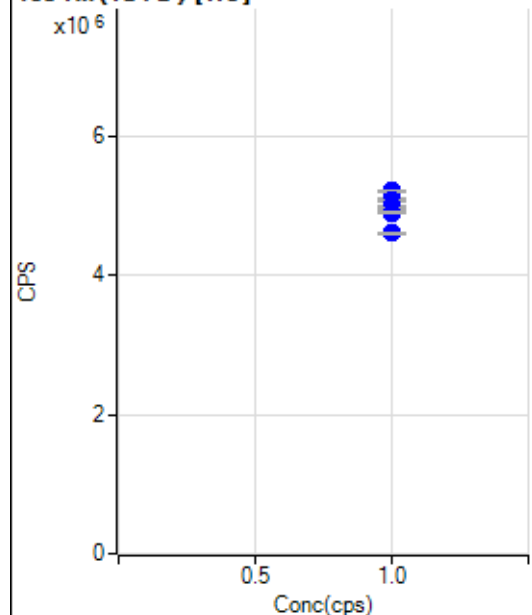
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12002687.05		A	0.7
2	☐	1.000					
3	☐	1.000		11472234.00		A	0.3
4	☐	1.000		11512936.91		A	0.3
5	☐	1.000		11462544.55		A	0.8
6	☐	1.000		11397428.44		A	0.6
7	☐	1.000		11409915.52		A	1.6
8	☐	1.000		11626137.05		A	0.5
9	☐	1.000		11346981.08		A	0.3

89 Y(ISTD) [He]

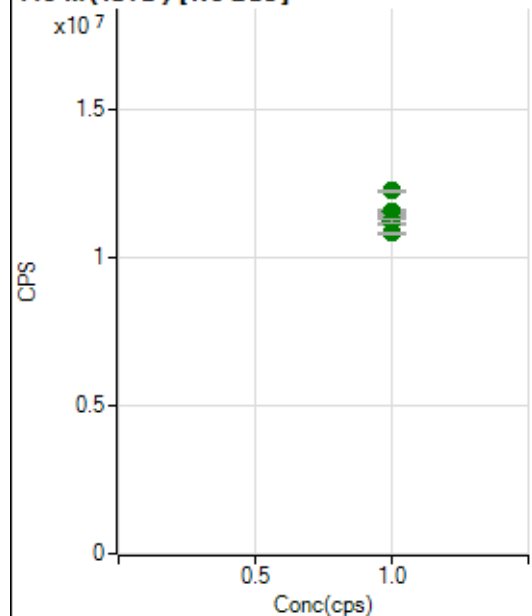
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1691915.81		P	0.2
2	☐	1.000					
3	☐	1.000		1656652.39		P	0.7
4	☐	1.000		1659807.04		P	0.6
5	☐	1.000		1645283.55		P	0.4
6	☐	1.000		1661706.52		P	0.3
7	☐	1.000		1693714.40		P	0.4
8	☐	1.000		1708032.47		P	0.9
9	☐	1.000		1743362.11		P	0.5

103 Rh(ISTD) [No Gas]

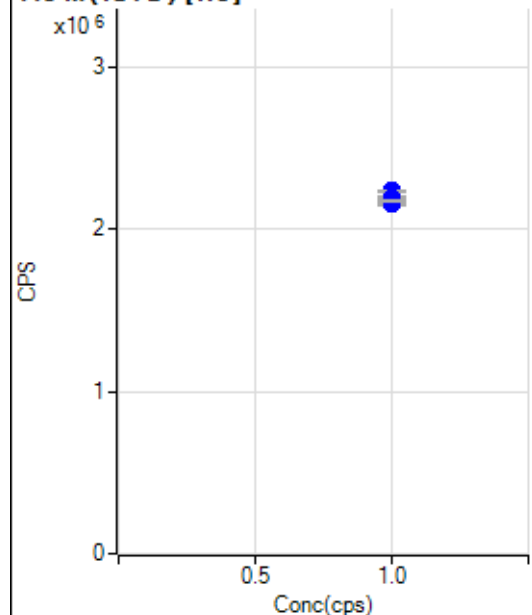
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11380622.13		A	0.8
2	☐	1.000					
3	☐	1.000		10831822.03		A	0.7
4	☐	1.000		10774536.52		A	0.8
5	☐	1.000		10681541.47		A	0.4
6	☐	1.000		10422007.35		A	0.5
7	☐	1.000		10289246.85		A	1.0
8	☐	1.000		10355334.26		A	1.0
9	☐	1.000		9662748.91		A	0.5

103 Rh (ISTD) [He]

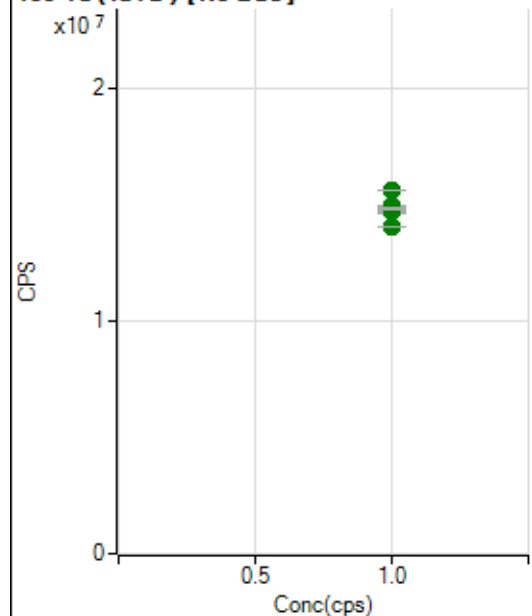
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5211714.09		P	0.3
2	☐	1.000					
3	☐	1.000		5087373.43		P	0.5
4	☐	1.000		5068212.87		P	0.2
5	☐	1.000		4989328.47		P	0.3
6	☐	1.000		5005927.15		P	0.2
7	☐	1.000		4962386.87		P	0.4
8	☐	1.000		4902979.58		P	0.8
9	☐	1.000		4608874.72		P	0.5

115 In (ISTD) [No Gas]

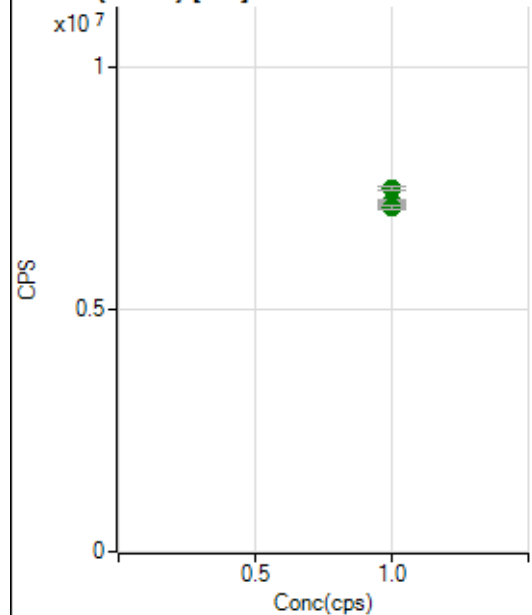
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12270111.78		A	0.4
2	☐	1.000					
3	☐	1.000		11605109.98		A	0.2
4	☐	1.000		11574710.38		A	0.7
5	☐	1.000		11486380.76		A	0.5
6	☐	1.000		11390843.59		A	1.0
7	☐	1.000		11244569.26		A	2.2
8	☐	1.000		11229057.92		A	1.0
9	☐	1.000		10830077.39		A	0.9

115 In (ISTD) [He]

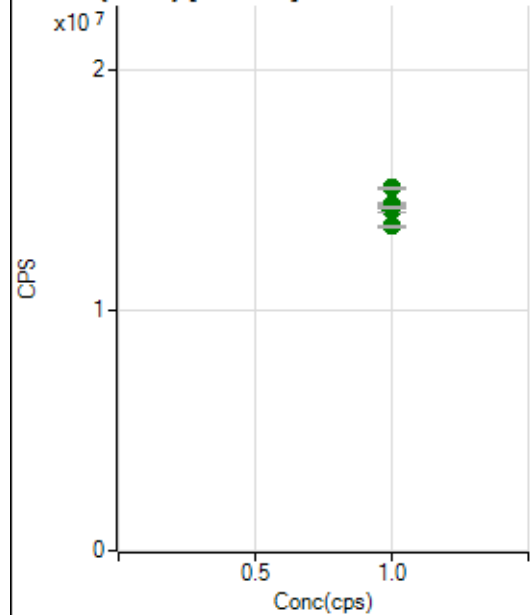
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2235323.60		P	0.8
2	☐	1.000					
3	☐	1.000		2194764.51		P	0.5
4	☐	1.000		2183820.66		P	0.1
5	☐	1.000		2173890.30		P	0.5
6	☐	1.000		2181209.60		P	0.3
7	☐	1.000		2189558.36		P	0.7
8	☐	1.000		2151125.76		P	0.4
9	☐	1.000		2169138.50		P	0.5

159 Tb (ISTD) [No Gas]

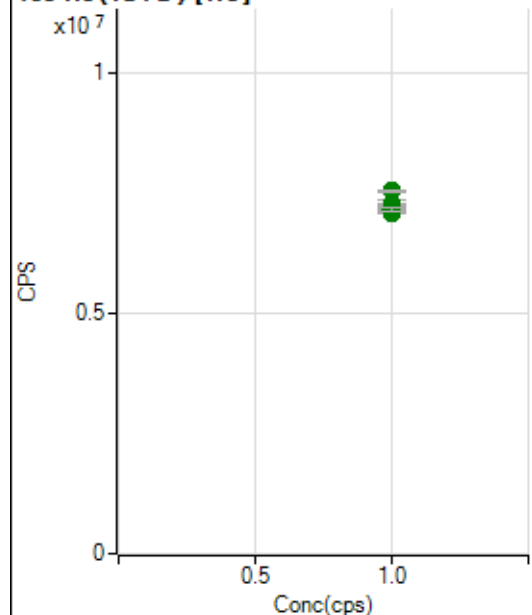
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15600737.13		A	0.1
2	☐	1.000					
3	☐	1.000		14814772.70		A	1.3
4	☐	1.000		14934705.89		A	0.5
5	☐	1.000		14698631.86		A	0.5
6	☐	1.000		14765630.89		A	1.7
7	☐	1.000		14698399.36		A	0.8
8	☐	1.000		14823105.75		A	0.4
9	☐	1.000		14059632.29		A	0.2

159 Tb (ISTD) [He]

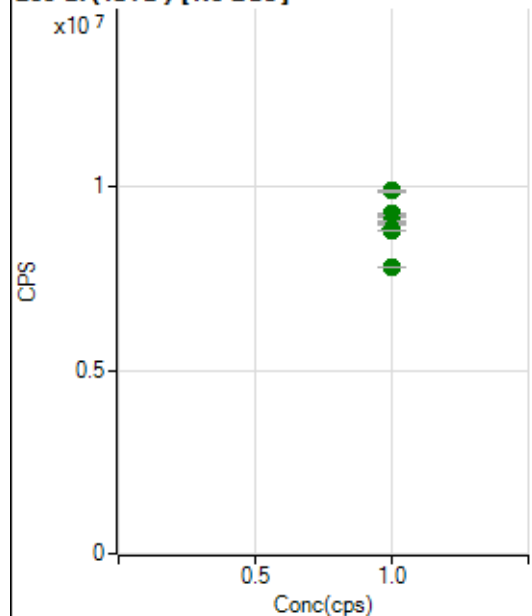
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7485521.35		A	1.0
2	☐	1.000					
3	☐	1.000		7116569.55		A	0.9
4	☐	1.000		7087235.52		A	0.9
5	☐	1.000		7199750.66		A	0.7
6	☐	1.000		7165599.41		A	0.2
7	☐	1.000		7208478.78		A	0.3
8	☐	1.000		7232358.02		A	0.4
9	☐	1.000		7111179.97		A	1.2

165 Ho (ISTD) [No Gas]

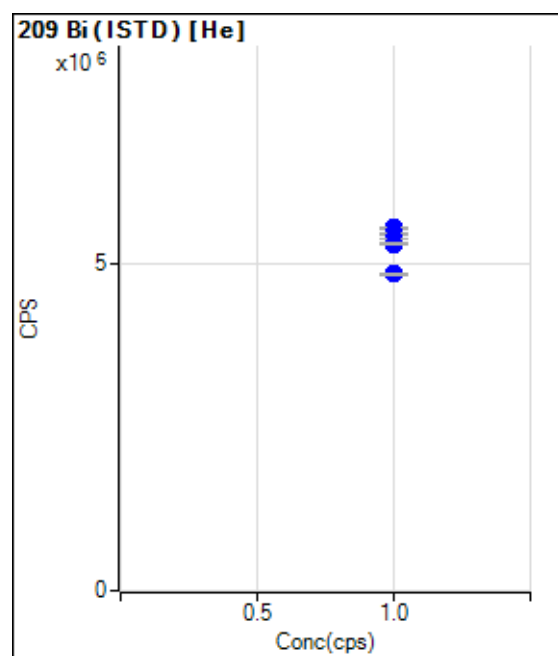
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15102548.95		A	0.7
2	☐	1.000					
3	☐	1.000		14285050.14		A	0.5
4	☐	1.000		14424363.17		A	0.8
5	☐	1.000		14447442.69		A	0.6
6	☐	1.000		14323350.84		A	0.8
7	☐	1.000		14181725.49		A	1.5
8	☐	1.000		14302455.18		A	0.2
9	☐	1.000		13496585.02		A	0.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7536050.03		A	0.7
2	☐	1.000					
3	☐	1.000		7184631.35		A	0.5
4	☐	1.000		7080480.03		A	0.8
5	☐	1.000		7219656.91		A	0.6
6	☐	1.000		7283188.01		A	1.6
7	☐	1.000		7256187.60		A	0.2
8	☐	1.000		7230071.83		A	0.5
9	☐	1.000		7160210.31		A	1.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9888390.83		A	0.6
2	☐	1.000					
3	☐	1.000		9236031.53		A	1.0
4	☐	1.000		9277527.01		A	0.2
5	☐	1.000		9205993.75		A	0.9
6	☐	1.000		9049021.53		A	0.6
7	☐	1.000		8883514.10		A	1.3
8	☐	1.000		8805837.02		A	0.5
9	☐	1.000		7810633.08		A	0.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5543016.83		P	0.6
2	☐	1.000					
3	☐	1.000		5440711.86		P	0.5
4	☐	1.000		5450502.59		P	0.3
5	☐	1.000		5449399.85		P	0.9
6	☐	1.000		5454510.06		P	0.2
7	☐	1.000		5374321.76		P	0.4
8	☐	1.000		5302183.67		P	0.6
9	☐	1.000		4842018.33		P	0.5

US EPA Tune Check Sample Report

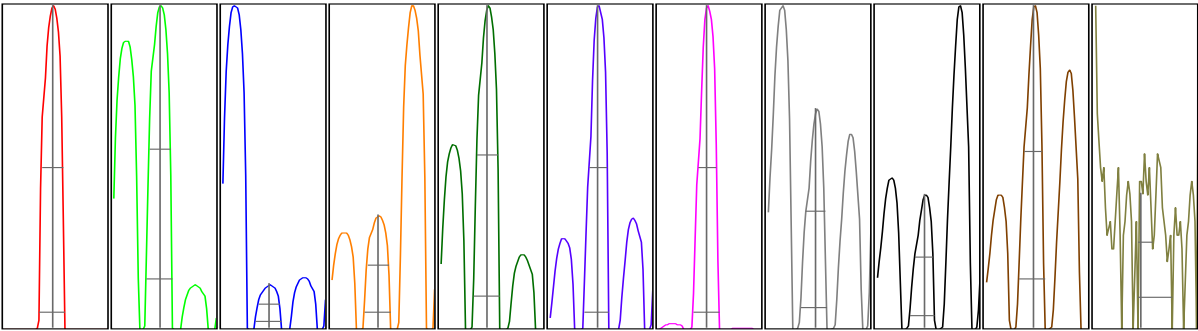
Batch Folder D:\ICP-MS Data\P7101317-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	5666	0.47	5.00	
24	60686	0.23	5.00	
25	8490	0.51	5.00	
26	10354	0.36	5.00	
59	89831	0.37	5.00	
113	38810	0.29	5.00	
115	803946	0.35	5.00	
206	34595	0.33	5.00	
207	32020	0.54	5.00	
208	73499	0.39	5.00	
220	0	18.92		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	5651	5634	5676	5663	5704
24	60560	60604	60595	60821	60850
25	8461	8482	8463	8479	8566
26	10316	10335	10360	10343	10414
59	89446	89663	90007	89742	90296
113	38665	38876	38835	38734	38943
115	802079	805718	801566	808027	802342
206	34459	34506	34623	34641	34746
207	31792	32235	32029	31919	32126
208	73087	73311	73685	73706	73709
220	1	0	1	1	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	9788	8.95	8.9 - 9.1		0.740	0.900	
24	102207	23.90	23.9 - 24.1		0.750	0.900	
25	13991	24.90	24.9 - 25.1		0.746	0.900	
26	16427	25.90	25.9 - 26.1		0.755	0.900	
59	155120	58.90	58.9 - 59.1		0.758	0.900	
113	73984	112.95	112.9 - 113.1		0.729	0.900	
115	1538248	114.95	114.9 - 115.1		0.765	0.900	
206	66169	205.95	205.9 - 206.1		0.755	0.900	
207	58849	206.95	206.9 - 207.1		0.715	0.900	
208	141720	207.95	207.9 - 208.1		0.732	0.900	
220	1	219.90	-		0.972		

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	10.2	V	Deflect	13.6	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-105	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	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	24754	0.26	
89	11519	0.55	
205	31513	0.31	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	24806	24671	24745	24831	24717
89	11512	11459	11527	11622	11475
205	31638	31464	31449	31594	31420

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	10.6	V	Deflect	2.6	V
Extract 2	-245.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-110	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			