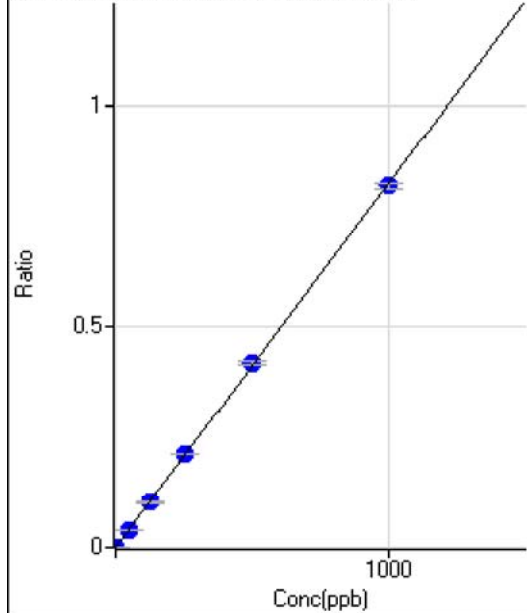


Batch Folder: D:\ICP-MS Data\P7062918-MS .b\
Analysis File: P7062918-MS .batch.bin
DA Date-Time: 2018-06-30 01:46:39
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB P7062918-MS.D	S00	2018-06-29 16:31:07
2			
3	005CALS P7062918-MS.D	S02	2018-06-29 16:38:52
4	006CALS P7062918-MS.D	S03	2018-06-29 16:42:45
5	007CALS P7062918-MS.D	S04	2018-06-29 16:46:38
6	008CALS P7062918-MS.D	S05	2018-06-29 16:50:29
7	009CALS P7062918-MS.D	S06	2018-06-29 16:54:16
8	010CALS P7062918-MS.D	S07	2018-06-29 16:58:02
9	011CALS P7062918-MS.D	S08	2018-06-29 17:01:46

9 Be [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	43.0
2	☐	0.100					
3	☐	1.000	1.005	1083.40	0.0008	P	5.1
4	☐	50.000	49.316	54161.62	0.0406	P	1.8
5	☐	125.000	124.478	137380.80	0.1025	P	1.8
6	☐	250.000	257.477	274329.84	0.2120	P	0.9
7	☐	500.000	506.733	526791.22	0.4173	P	1.3
8	☐	1000.000	994.863	1026241.20	0.8192	P	1.5
9	☐			783.38	0.0007	P	8.6

$$y = 8.2338\text{E-}004 * x + 1.7267\text{E-}005$$

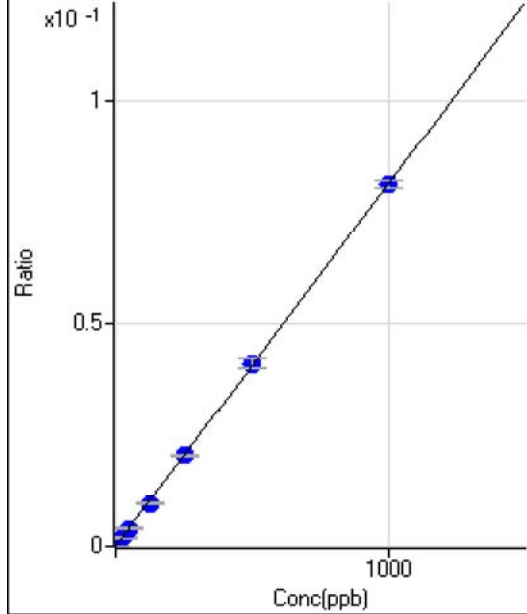
$$R = 0.9999$$

$$DL = 0.02702$$

$$BEC = 0.02097$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	16.9
2	☐	2.500					
3	☐	25.000	23.336	2494.76	0.0019	P	11.1
4	☐	50.000	49.712	5462.33	0.0041	P	3.6
5	☐	125.000	118.084	12958.82	0.0097	P	0.9
6	☐	250.000	251.335	26562.93	0.0205	P	3.7
7	☐	500.000	504.422	51937.32	0.0412	P	5.3
8	☐	1000.000	998.376	102012.19	0.0814	P	2.2
9	☐			6787.92	0.0057	P	7.1

$$y = 8.1515\text{E-}005 * x + 4.3181\text{E-}005$$

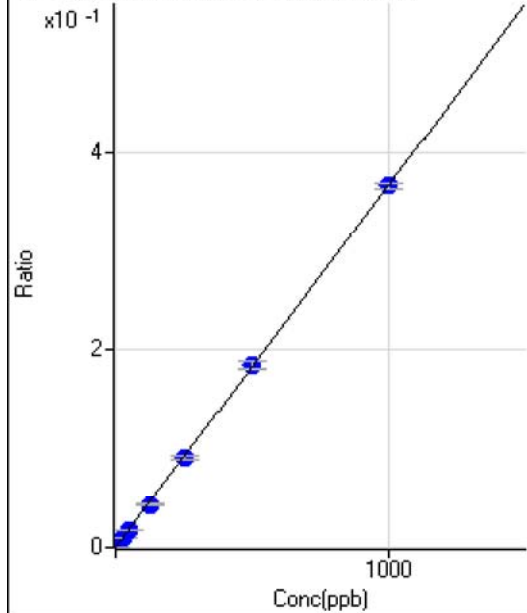
$$R = 1.0000$$

$$DL = 0.2682$$

$$BEC = 0.5297$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD: 6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	191.67	0.0001	P	7.3
2	☐	2.500					
3	☐	25.000	24.422	11657.71	0.0091	P	3.4
4	☐	50.000	46.808	23034.99	0.0173	P	3.1
5	☐	125.000	118.712	58414.00	0.0436	P	1.3
6	☐	250.000	249.773	118402.19	0.0915	P	3.1
7	☐	500.000	502.338	232097.13	0.1839	P	3.9
8	☐	1000.000	999.848	458402.01	0.3659	P	1.5
9	☐			30509.66	0.0255	P	9.3

$$y = 3.6580E-004 * x + 1.4903E-004$$

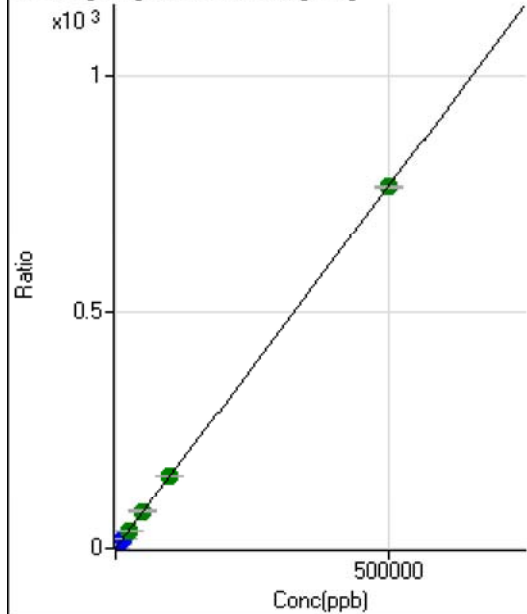
$$R = 1.0000$$

$$DL = 0.08866$$

$$BEC = 0.4074$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4500.85	0.0347	P	3.4
2	☐	50.000					
3	☐	500.000	458.029	93865.06	0.7384	P	1.6
4	☐	5000.000	4743.396	959308.54	7.3220	P	0.8
5	☐	12500.000	12024.833	2401222.28	18.5085	P	1.0
6	☐	25000.000	25039.448	4602430.01	38.5029	A	0.3
7	☐	50000.000	51483.179	8965824.77	79.1284	A	1.6
8	☐	100000.00	100382.03	17509100.39	154.2518	A	1.3
9	☐	500000.00	499787.78	87252665.14	767.8596	A	0.8

$$y = 0.0015 * x + 0.0347$$

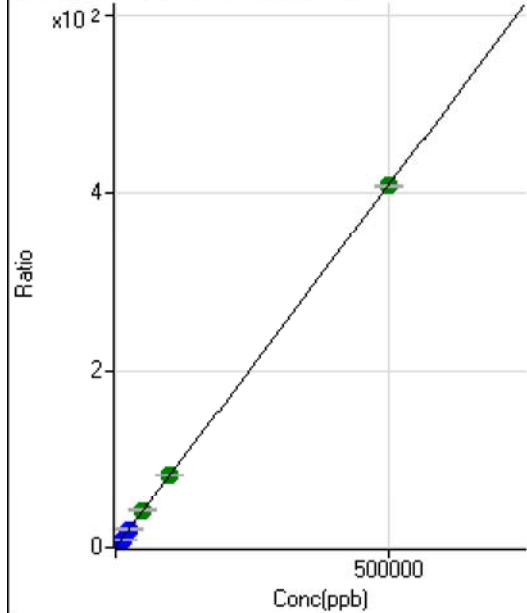
$$R = 1.0000$$

$$DL = 2.32$$

$$BEC = 22.59$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	727.83	0.0056	P	9.5
2	☐	50.000					
3	☐	500.000	455.190	48010.99	0.3777	P	0.8
4	☐	5000.000	4725.302	506763.92	3.8679	P	0.6
5	☐	12500.000	11834.089	1255629.30	9.6783	P	1.3
6	☐	25000.000	25158.734	2458737.10	20.5693	P	0.5
7	☐	50000.000	51422.246	4763031.58	42.0361	A	1.4
8	☐	100000.00	100311.56	9307276.16	81.9962	A	1.3
9	☐	500000.00	499806.96	46421491.66	408.5277	A	0.6

$$y = 8.1736\text{E-}004 * x + 0.0056$$

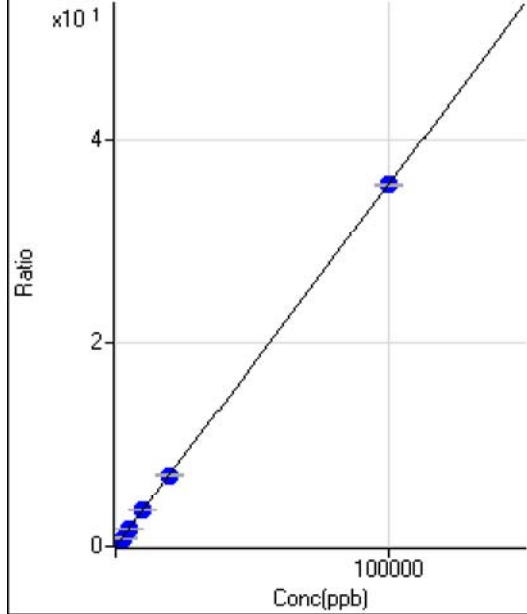
$$R = 1.0000$$

$$DL = 1.956$$

$$BEC = 6.867$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0003	P	49.3
2	☐	2.000					
3	☐	20.000	19.445	919.51	0.0072	P	12.1
4	☐	1000.000	947.385	44283.32	0.3380	P	0.8
5	☐	2500.000	2365.272	109420.39	0.8434	P	2.4
6	☐	5000.000	4994.566	212841.42	1.7806	P	0.8
7	☐	10000.000	10135.466	409398.56	3.6131	P	1.2
8	☐	20000.000	19806.583	801410.00	7.0604	P	1.4
9	☐	100000.00	100029.30	4051601.30	35.6558	P	0.7

$$y = 3.5645\text{E-}004 * x + 2.9965\text{E-}004$$

$$R = 1.0000$$

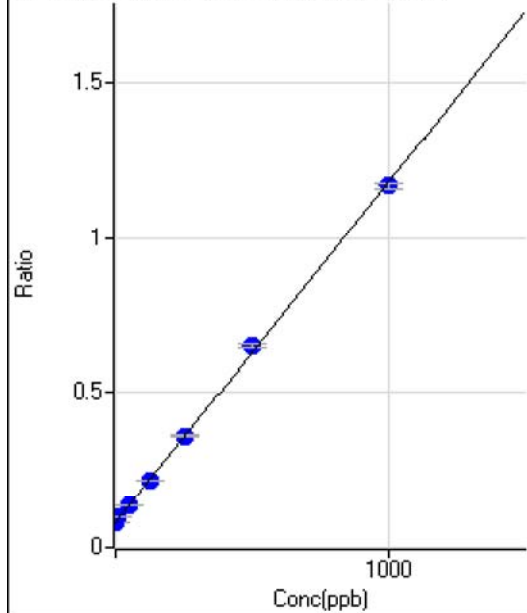
$$DL = 1.243$$

$$BEC = 0.8406$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	245495.03	0.0810	P	0.9
2	☐	1.000					
3	☐	10.000	15.911	291655.99	0.0985	P	2.3
4	☐	50.000	51.535	416444.06	0.1376	P	0.4
5	☐	125.000	123.881	650117.03	0.2171	P	2.0
6	☐	250.000	255.760	1016062.60	0.3619	P	0.9
7	☐	500.000	516.312	1687033.44	0.6480	P	1.8
8	☐	1000.000	990.408	3038894.47	1.1687	P	1.6
9	☐			291024.56	0.1136	P	0.8

$$y = 0.0011 * x + 0.0810$$

$$R = 0.9998$$

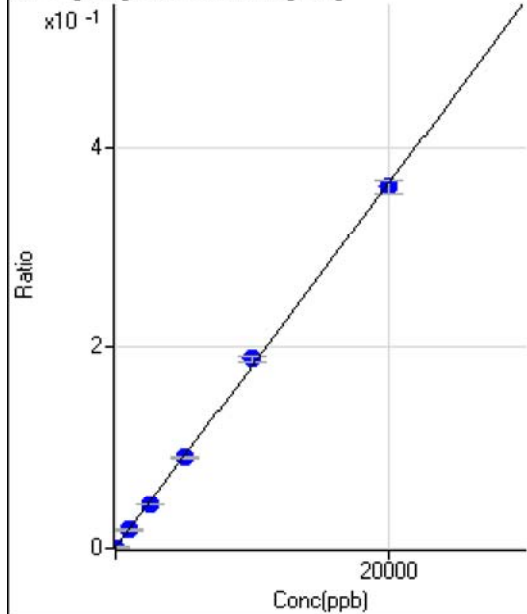
$$DL = 1.994$$

$$BEC = 73.79$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-5.181	86.11	0.0007	P	58.8
2	☐	0.000					
3	☐	0.000	5.181	108.34	0.0009	P	42.5
4	☐	1000.000	1000.125	2478.10	0.0189	P	10.5
5	☐	2500.000	2357.638	5651.31	0.0436	P	1.2
6	☐	5000.000	5002.496	10946.08	0.0916	P	2.0
7	☐	10000.000	10353.802	21385.56	0.1887	P	2.7
8	☐	20000.000	19840.264	40965.72	0.3609	P	3.4
9	☐			122.23	0.0011	P	13.9

$$y = 1.8155E-005 * x + 7.5721E-004$$

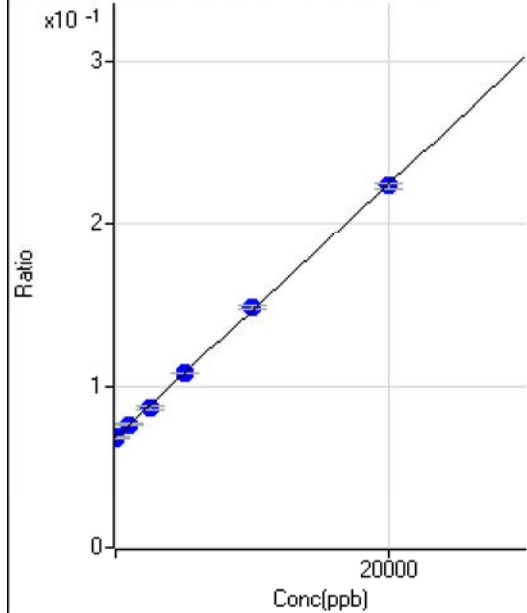
$$R = 0.9997$$

$$DL = 62.07$$

$$BEC = 41.71$$

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	26.455	207581.14	0.0685	P	1.2
2	☐	0.000					
3	☐	0.000	-26.455	201655.51	0.0681	P	1.9
4	☐	1000.000	1040.123	231331.17	0.0764	P	0.3
5	☐	2500.000	2355.538	259790.02	0.0867	P	2.0
6	☐	5000.000	5072.585	303226.97	0.1080	P	0.9
7	☐	10000.000	10250.896	386704.45	0.1485	P	1.5
8	☐	20000.000	19872.458	582037.94	0.2238	P	1.3
9	☐			178199.73	0.0696	P	2.1

$$y = 7.8259\text{E-}006 * x + 0.0683$$

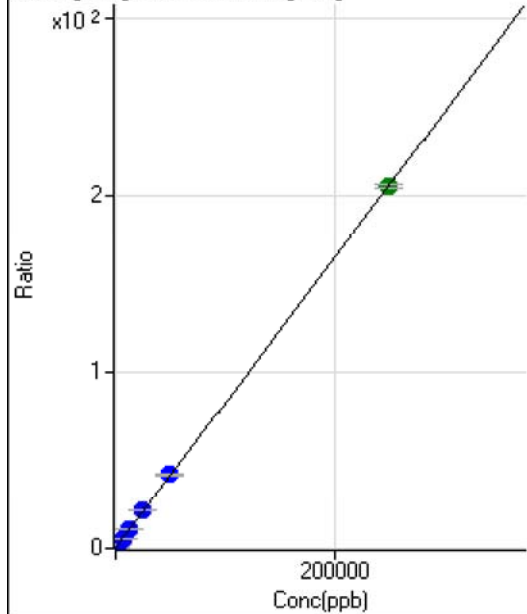
R = 0.9998

DL = 403.5

BEC = 8729

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	18717.99	0.1444	P	1.9
2	☐	50.000					
3	☐	500.000	480.549	68410.65	0.5381	P	1.8
4	☐	2500.000	2423.381	279078.68	2.1301	P	1.5
5	☐	6250.000	6111.629	668440.39	5.1523	P	1.6
6	☐	12500.000	12756.917	1266770.93	10.5976	P	0.1
7	☐	25000.000	25849.887	2416463.94	21.3262	P	1.1
8	☐	50000.000	50915.664	4752064.17	41.8654	P	1.4
9	☐	250000.00	249723.29	23268254.17	204.7713	A	0.9

$$y = 8.1941\text{E-}004 * x + 0.1444$$

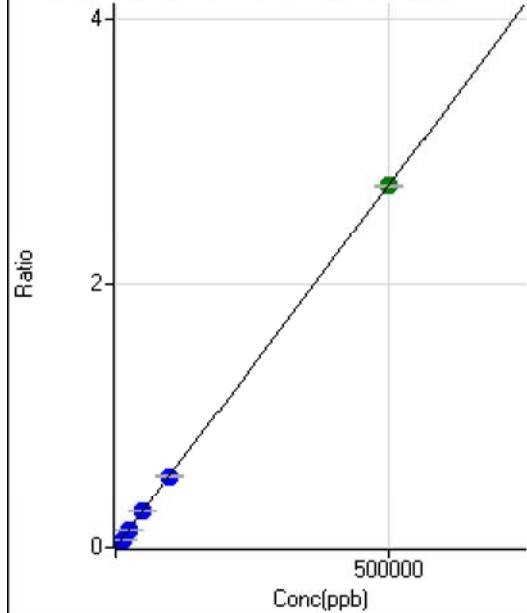
R = 1.0000

DL = 9.976

BEC = 176.2

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.56	0.0000	P	32.6
2	☐	50.000					
3	☐	500.000	457.631	7516.11	0.0025	P	2.3
4	☐	5000.000	4614.923	76699.16	0.0253	P	0.3
5	☐	12500.000	11720.128	192672.73	0.0643	P	1.6
6	☐	25000.000	24671.271	380127.89	0.1354	P	1.6
7	☐	50000.000	50339.440	719116.57	0.2762	P	1.6
8	☐	100000.00	99090.817	1413865.82	0.5437	P	0.9
9	☐	500000.00	500187.71	7031347.99	2.7444	A	0.3

$$y = 5.4867\text{E-}006 * x + 2.6644\text{E-}005$$

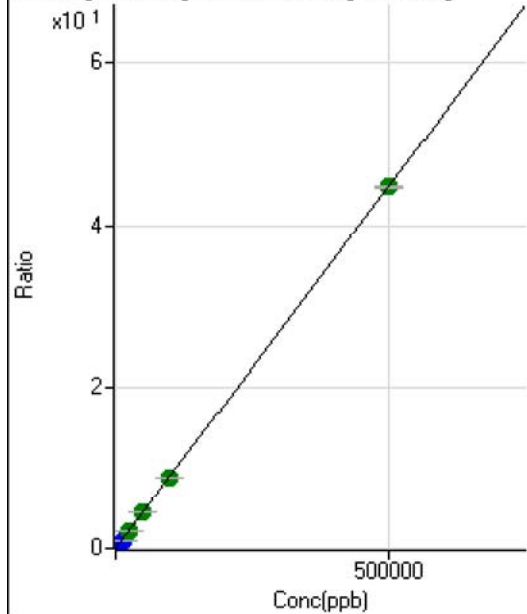
$$R = 1.0000$$

$$DL = 4.744$$

$$BEC = 4.856$$

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3156.04	0.0010	P	3.4
2	☐	50.000					
3	☐	500.000	441.744	120227.54	0.0406	P	1.0
4	☐	5000.000	4631.670	1258244.32	0.4158	P	0.9
5	☐	12500.000	11760.619	3157333.03	1.0542	P	2.0
6	☐	25000.000	24463.120	6153640.29	2.1918	A	1.0
7	☐	50000.000	49911.374	11639217.10	4.4707	A	1.5
8	☐	100000.00	98666.730	22979797.04	8.8369	A	0.9
9	☐	500000.00	500324.58	114796637.2	44.8065	A	0.4

$$y = 8.9553\text{E-}005 * x + 0.0010$$

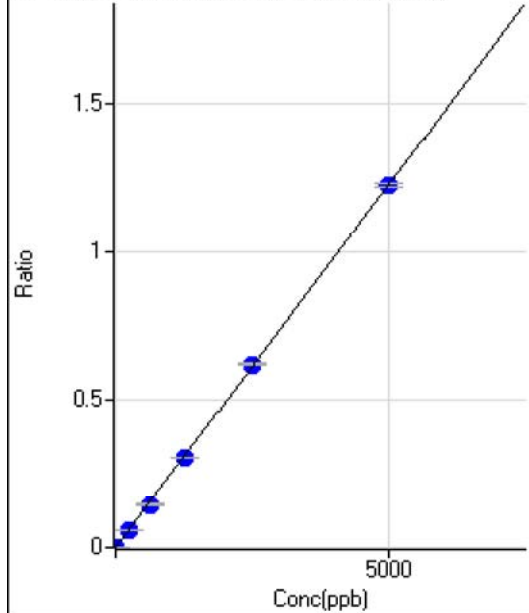
$$R = 1.0000$$

$$DL = 1.192$$

$$BEC = 11.63$$

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD : 45 Sc [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	24.2
2	☐	0.500					
3	☐	5.000	4.521	3342.18	0.0011	P	6.1
4	☐	250.000	235.555	175187.92	0.0579	P	1.1
5	☐	625.000	591.463	435288.56	0.1453	P	2.1
6	☐	1250.000	1243.320	857770.95	0.3055	P	0.8
7	☐	2500.000	2523.064	1614008.14	0.6200	P	1.5
8	☐	5000.000	4995.053	3191599.49	1.2273	P	1.0
9	☐			1930.77	0.0008	P	7.9

$$y = 2.4571E-004 * x + 1.7427E-005$$

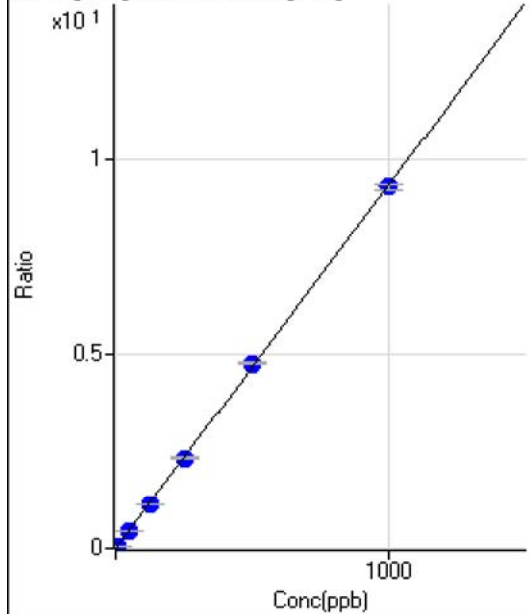
$$R = 1.0000$$

$$DL = 0.05158$$

$$BEC = 0.07093$$

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	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	4.677	5548.90	0.0436	P	1.1
4	☐	50.000	48.453	59242.71	0.4522	P	1.0
5	☐	125.000	120.461	145845.57	1.1242	P	1.3
6	☐	250.000	249.897	278772.59	2.3321	P	0.9
7	☐	500.000	508.180	537370.76	4.7425	P	1.1
8	☐	1000.000	996.582	1055655.65	9.3004	P	1.5
9	☐			366.68	0.0032	P	9.7

$$y = 0.0093 * x + 0.0000E+000$$

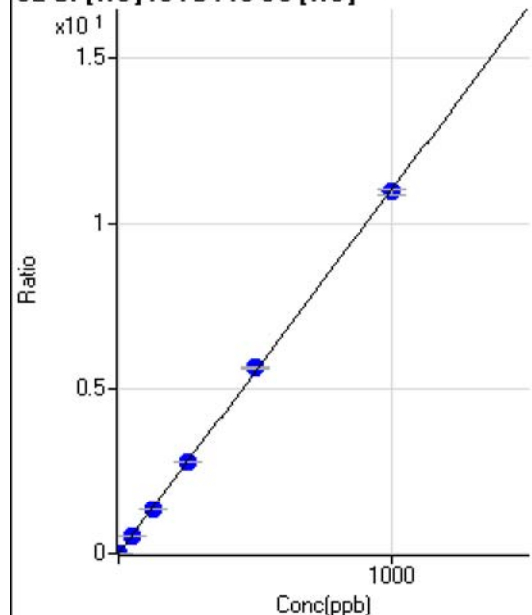
$$R = 0.9999$$

$$DL = 0$$

$$BEC = 0$$

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	160.00	0.0012	P	21.5
2	☐	0.200					
3	☐	2.000	2.063	3052.59	0.0240	P	3.4
4	☐	50.000	48.627	70494.17	0.5381	P	1.0
5	☐	125.000	121.444	174096.24	1.3419	P	1.3
6	☐	250.000	252.564	333437.33	2.7894	P	0.6
7	☐	500.000	509.732	637741.05	5.6285	P	1.7
8	☐	1000.000	995.006	1246966.53	10.9857	P	1.4
9	☐			41553.30	0.3657	P	1.6

$$y = 0.0110 * x + 0.0012$$

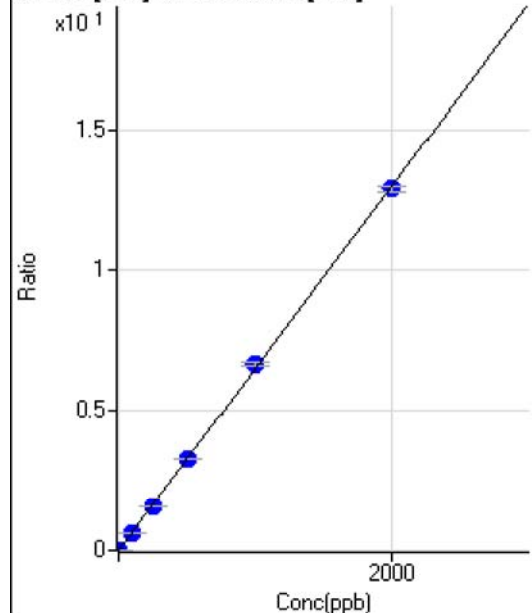
$$R = 0.9999$$

$$DL = 0.07222$$

$$BEC = 0.1117$$

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	34.45	0.0003	P	48.5
2	☐	0.100					
3	☐	1.000	1.013	868.93	0.0068	P	5.8
4	☐	100.000	96.212	81747.60	0.6239	P	0.4
5	☐	250.000	241.773	203364.21	1.5675	P	1.3
6	☐	500.000	503.656	390298.77	3.2651	P	0.7
7	☐	1000.000	1021.332	750196.42	6.6209	P	1.5
8	☐	2000.000	1989.638	1464004.16	12.8977	P	1.3
9	☐			6738.31	0.0593	P	2.8

$$y = 0.0065 * x + 2.6552E-004$$

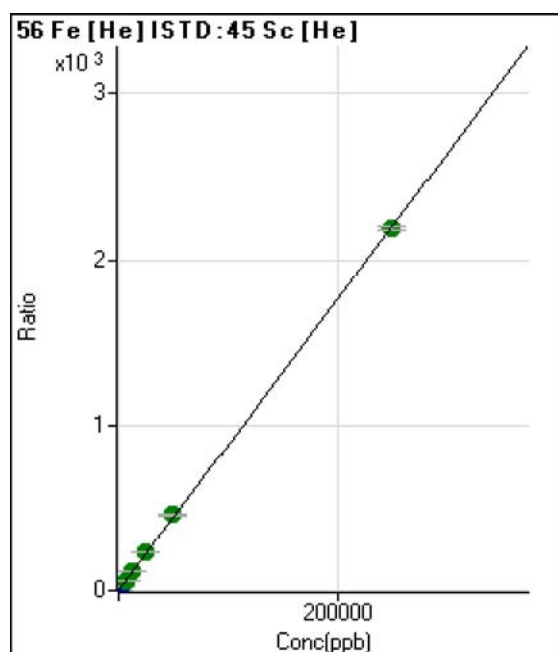
$$R = 0.9999$$

$$DL = 0.05955$$

$$BEC = 0.04096$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1892.77	0.0146	P	2.2
2	☐	5.000					
3	☐	50.000	50.488	58215.39	0.4579	P	2.2
4	☐	2500.000	2562.100	2949496.45	22.5126	P	1.5
5	☐	6250.000	6385.510	7276434.36	56.0864	A	1.5
6	☐	12500.000	13321.625	13984701.59	116.9931	A	0.3
7	☐	25000.000	26870.500	26736613.10	235.9671	A	1.6
8	☐	50000.000	52359.052	52189789.59	459.7845	A	1.2
9	☐	250000.00	249296.05	248749109.2	2,189.107	A	0.9

$$y = 0.0088 * x + 0.0146$$

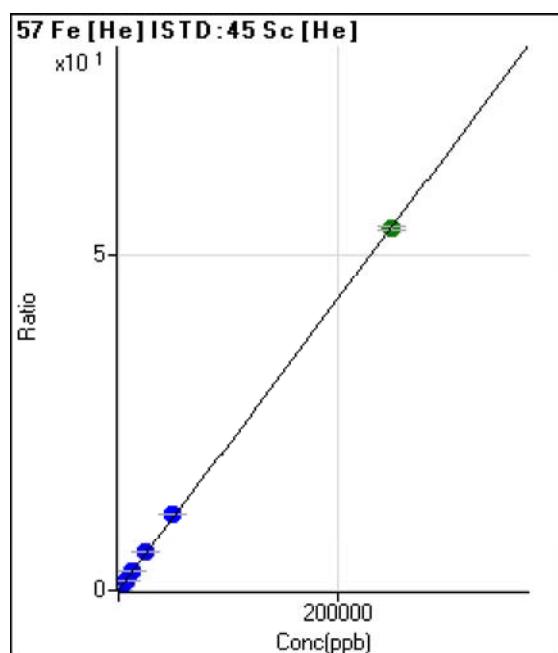
$$R = 0.9999$$

$$DL = 0.1094$$

$$BEC = 1.663$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	250.01	0.0019	P	5.6
2	☐	5.000					
3	☐	50.000	49.759	1613.10	0.0127	P	6.3
4	☐	2500.000	2593.792	73734.64	0.5628	P	1.5
5	☐	6250.000	6388.666	179474.73	1.3834	P	1.1
6	☐	12500.000	13357.890	345492.80	2.8904	P	0.6
7	☐	25000.000	26854.588	658197.07	5.8088	P	1.1
8	☐	50000.000	52564.098	1290377.33	11.3681	P	1.3
9	☐	250000.00	249254.42	6124620.68	53.8995	A	0.9

$$y = 2.1624E-004 * x + 0.0019$$

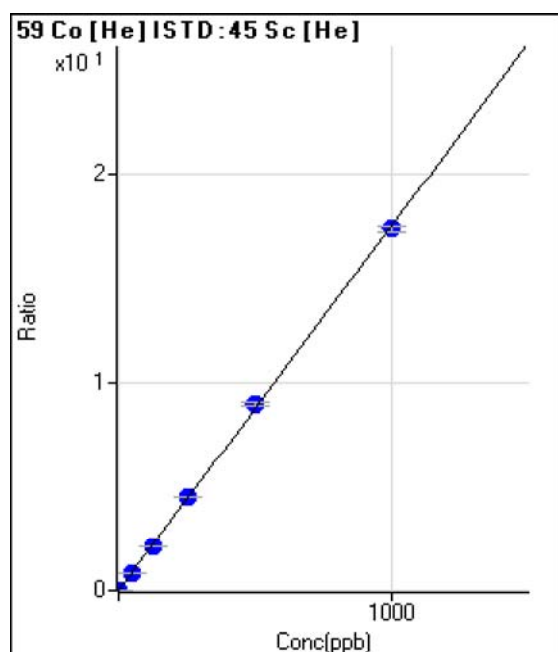
$$R = 0.9999$$

$$DL = 1.506$$

$$BEC = 8.917$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	71.11	0.0005	P	12.0
2	☐	0.100					
3	☐	1.000	1.006	2313.56	0.0182	P	2.0
4	☐	50.000	49.371	113569.64	0.8668	P	1.0
5	☐	125.000	122.541	279020.83	2.1507	P	1.3
6	☐	250.000	256.077	537166.18	4.4938	P	0.6
7	☐	500.000	511.630	1017254.00	8.9778	P	1.5
8	☐	1000.000	993.005	1977779.21	17.4242	P	1.4
9	☐			22982.62	0.2023	P	0.8

$$y = 0.0175 * x + 5.4857E-004$$

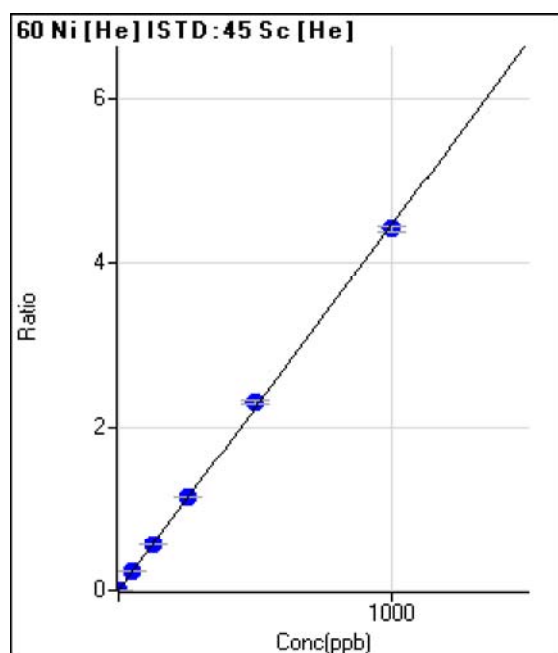
$$R = 0.9999$$

$$DL = 0.01128$$

$$BEC = 0.03126$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	98.89	0.0008	P	39.1
2	☐	0.100					
3	☐	1.000	1.095	717.81	0.0056	P	7.4
4	☐	50.000	50.950	29877.24	0.2280	P	0.9
5	☐	125.000	124.292	72030.23	0.5552	P	1.5
6	☐	250.000	258.458	137905.03	1.1537	P	0.3
7	☐	500.000	514.805	260286.88	2.2972	P	1.7
8	☐	1000.000	990.524	501626.01	4.4193	P	1.3
9	☐			14288.24	0.1257	P	0.7

$$y = 0.0045 * x + 7.6242E-004$$

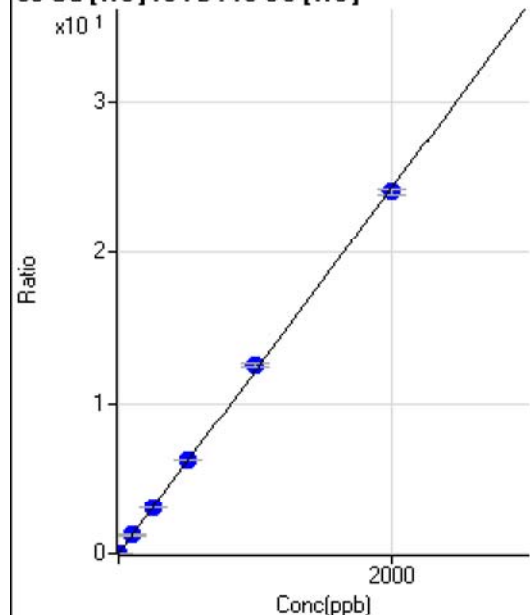
$$R = 0.9998$$

$$DL = 0.2007$$

$$BEC = 0.1709$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	260.01	0.0020	P	8.0
2	☐	0.200					
3	☐	2.000	2.072	3450.46	0.0271	P	3.1
4	☐	100.000	100.403	159865.40	1.2202	P	1.8
5	☐	250.000	249.516	393023.62	3.0294	P	0.9
6	☐	500.000	517.733	751124.33	6.2837	P	0.5
7	☐	1000.000	1027.758	1413176.63	12.4719	P	1.3
8	☐	2000.000	1981.728	2729420.55	24.0465	P	1.6
9	☐			5767.89	0.0508	P	2.6

$$y = 0.0121 * x + 0.0020$$

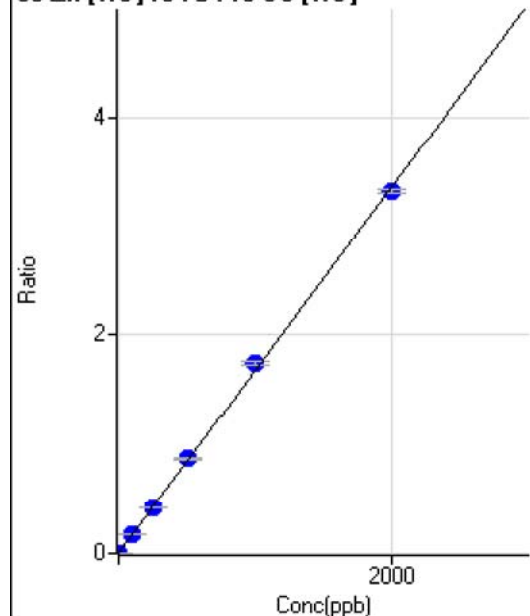
$$R = 0.9998$$

$$DL = 0.03954$$

$$BEC = 0.1653$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	238.90	0.0018	P	3.9
2	☐	0.200					
3	☐	2.000	1.803	618.91	0.0049	P	4.3
4	☐	100.000	99.978	22225.96	0.1696	P	1.2
5	☐	250.000	248.626	54375.46	0.4191	P	2.0
6	☐	500.000	518.117	104166.53	0.8714	P	0.5
7	☐	1000.000	1035.587	197144.29	1.7399	P	1.8
8	☐	2000.000	1977.851	377008.69	3.3214	P	1.2
9	☐			2360.23	0.0208	P	6.2

$$y = 0.0017 * x + 0.0018$$

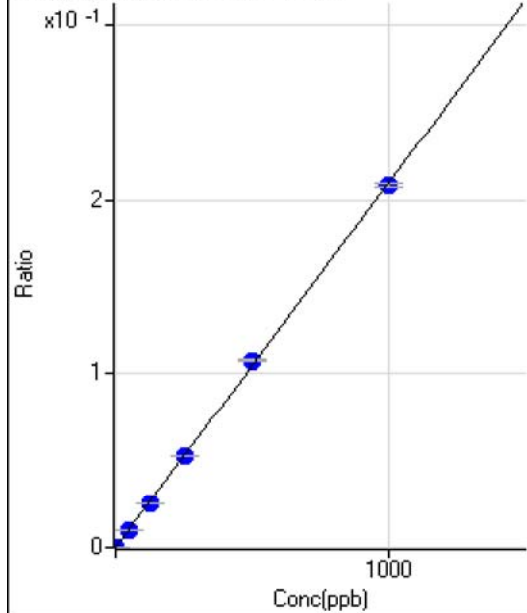
$$R = 0.9997$$

$$DL = 0.1288$$

$$BEC = 1.098$$

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	1.23	0.0000	P	86.6
2	☐	0.100					
3	☐	1.000	1.024	165.44	0.0002	P	14.8
4	☐	50.000	48.451	7939.26	0.0101	P	0.6
5	☐	125.000	121.230	19799.33	0.0254	P	1.9
6	☐	250.000	254.044	38077.49	0.0532	P	0.5
7	☐	500.000	512.139	72394.26	0.1072	P	1.6
8	☐	1000.000	993.468	141645.93	0.2079	P	1.2
9	☐			202.47	0.0003	P	6.0

$$y = 2.0926E-004 * x + 1.5626E-006$$

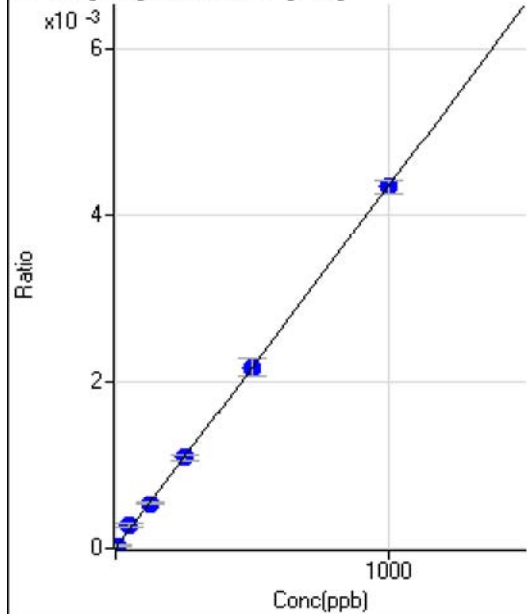
$$R = 0.9999$$

$$DL = 0.0194$$

$$BEC = 0.007467$$

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	7.660	25.56	0.0000	P	19.8
4	☐	50.000	62.927	214.45	0.0003	P	12.9
5	☐	125.000	122.986	417.79	0.0005	P	5.4
6	☐	250.000	253.170	788.92	0.0011	P	6.0
7	☐	500.000	499.897	1470.10	0.0022	P	9.4
8	☐	1000.000	998.851	2962.57	0.0043	P	3.5
9	☐			3.33	0.0000	P	1.8

$$y = 4.3526E-006 * x + 0.0000E+000$$

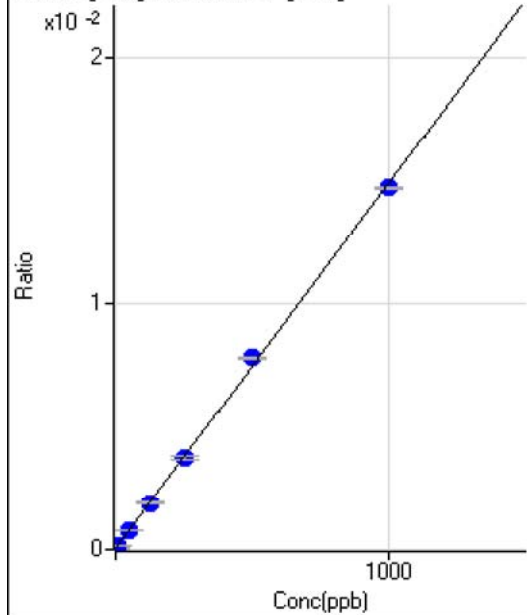
$$R = 0.9999$$

$$DL = 0$$

$$BEC = 0$$

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	33.33	0.0000	P	19.6
2	☐	0.500					
3	☐	5.000	7.247	114.82	0.0001	P	11.5
4	☐	50.000	50.317	618.54	0.0008	P	4.1
5	☐	125.000	125.263	1485.89	0.0019	P	5.2
6	☐	250.000	250.301	2695.34	0.0038	P	3.5
7	☐	500.000	520.899	5259.02	0.0078	P	1.5
8	☐	1000.000	989.415	10050.47	0.0147	P	0.6
9	☐			37.04	0.0001	P	20.5

$$y = 1.4864\text{E-}005 * x + 4.2144\text{E-}005$$

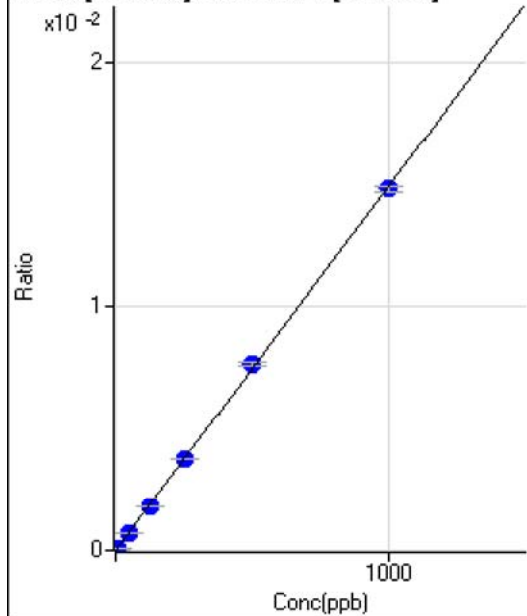
$$R = 0.9997$$

$$DL = 1.669$$

$$BEC = 2.835$$

Weight: <None>

Min Conc: 0

82 Se [NoGas] ISTD:89 Y [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-32.68	0.0000	P	-129.
2	☐	0.500					
3	☐	5.000	5.523	379.60	0.0001	P	5.2
4	☐	50.000	49.304	3685.89	0.0007	P	2.4
5	☐	125.000	122.481	9139.12	0.0018	P	1.1
6	☐	250.000	251.974	17731.71	0.0038	P	0.9
7	☐	500.000	510.071	33294.90	0.0076	P	2.1
8	☐	1000.000	994.818	64431.61	0.0148	P	1.4
9	☐			33.62	0.0000	P	67.4

$$y = 1.4925\text{E-}005 * x - 6.3988\text{E-}006$$

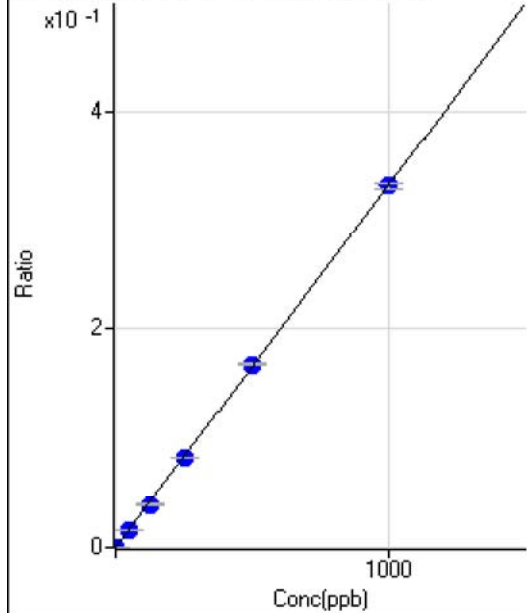
$$R = 0.9999$$

$$DL = 1.661$$

$$BEC = -0.4287$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	322.24	0.0001	P	11.8
2	☐	0.100					
3	☐	1.000	1.044	2044.69	0.0004	P	6.8
4	☐	50.000	47.141	79447.19	0.0157	P	1.1
5	☐	125.000	118.374	197592.89	0.0394	P	1.9
6	☐	250.000	247.810	389122.38	0.0824	P	0.9
7	☐	500.000	503.947	733177.50	0.1675	P	1.0
8	☐	1000.000	999.545	1441850.79	0.3321	P	1.6
9	☐			9492.42	0.0022	P	2.2

$$y = 3.3220\text{E-}004 * x + 6.2857\text{E-}005$$

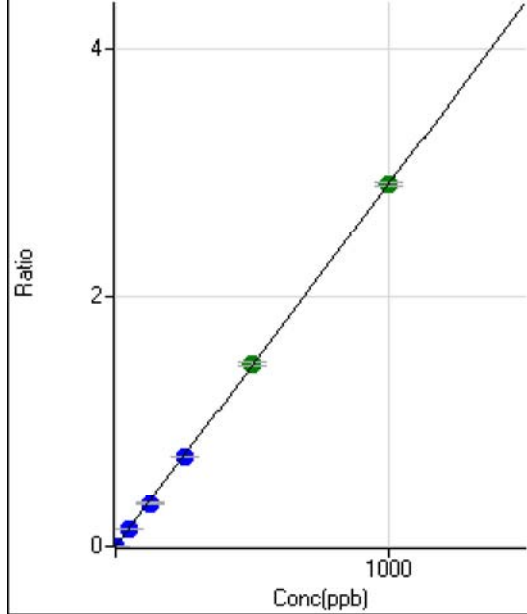
$$R = 1.0000$$

$$DL = 0.06707$$

$$BEC = 0.1892$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.00	0.0000	P	55.2
2	☐	0.100					
3	☐	1.000	0.977	14260.35	0.0029	P	2.7
4	☐	50.000	47.135	693026.90	0.1372	P	1.2
5	☐	125.000	118.495	1729676.99	0.3448	P	1.6
6	☐	250.000	249.610	3430117.44	0.7262	P	0.7
7	☐	500.000	502.995	6406240.77	1.4635	A	1.6
8	☐	1000.000	999.556	12625922.24	2.9082	A	1.2
9	☐			80500.96	0.0190	P	1.2

$$y = 0.0029 * x + 1.4624\text{E-}005$$

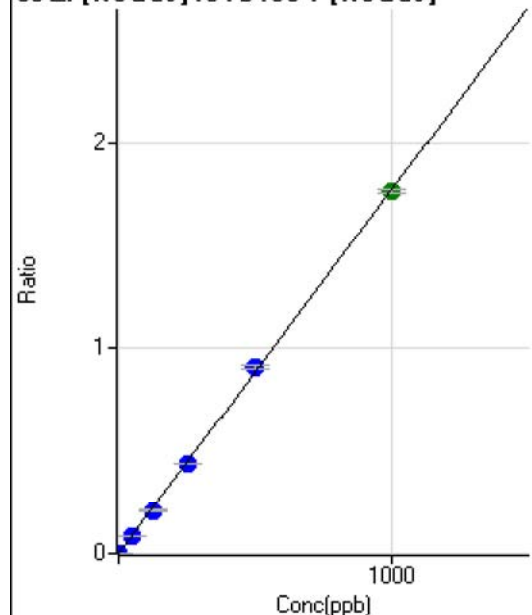
$$R = 1.0000$$

$$DL = 0.008324$$

$$BEC = 0.005026$$

Weight: <None>

Min Conc: 0

90 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	469.47	0.0001	P	14.3
2	☐	0.100					
3	☐	1.000	0.963	8955.93	0.0018	P	4.3
4	☐	50.000	46.887	419728.76	0.0831	P	0.9
5	☐	125.000	117.801	1046309.11	0.2086	P	1.9
6	☐	250.000	248.477	2077308.16	0.4398	P	0.6
7	☐	500.000	511.348	3961875.61	0.9050	P	1.3
8	☐	1000.000	995.762	7651013.10	1.7623	A	0.9
9	☐			1672.39	0.0004	P	1.5

$$y = 0.0018 * x + 9.1556E-005$$

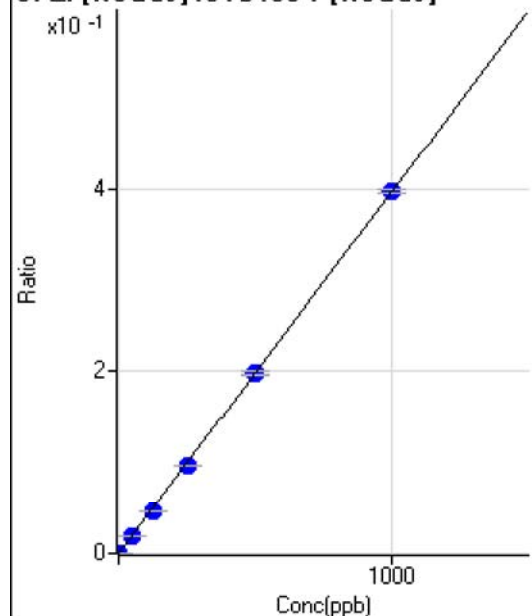
$$R = 0.9999$$

$$DL = 0.0222$$

$$BEC = 0.05174$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	94.45	0.0000	P	9.6
2	☐	0.100					
3	☐	1.000	0.962	1997.45	0.0004	P	3.7
4	☐	50.000	46.516	93415.76	0.0185	P	0.6
5	☐	125.000	117.093	233328.10	0.0465	P	1.9
6	☐	250.000	245.517	460528.50	0.0975	P	1.1
7	☐	500.000	500.379	869774.62	0.1987	P	1.6
8	☐	1000.000	1002.094	1727486.00	0.3979	P	1.0
9	☐			413.92	0.0001	P	2.8

$$y = 3.9705E-004 * x + 1.8422E-005$$

$$R = 1.0000$$

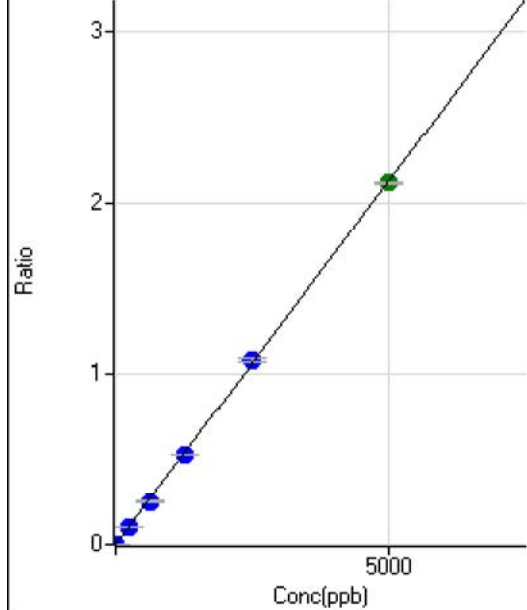
$$DL = 0.01339$$

$$BEC = 0.0464$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD : 89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	136.12	0.0000	P	19.5
2	☐	0.500					
3	☐	5.000	4.771	10245.72	0.0021	P	1.4
4	☐	250.000	232.723	499645.80	0.0989	P	0.9
5	☐	625.000	589.174	1255653.73	0.2503	P	2.1
6	☐	1250.000	1239.959	2487860.86	0.5267	P	0.8
7	☐	2500.000	2544.827	4732154.49	1.0810	P	1.7
8	☐	5000.000	4985.439	9194362.36	2.1177	A	0.7
9	☐			9795.37	0.0023	P	2.0

$$y = 4.2478\text{E-}004 * x + 2.6552\text{E-}005$$

$$R = 0.9999$$

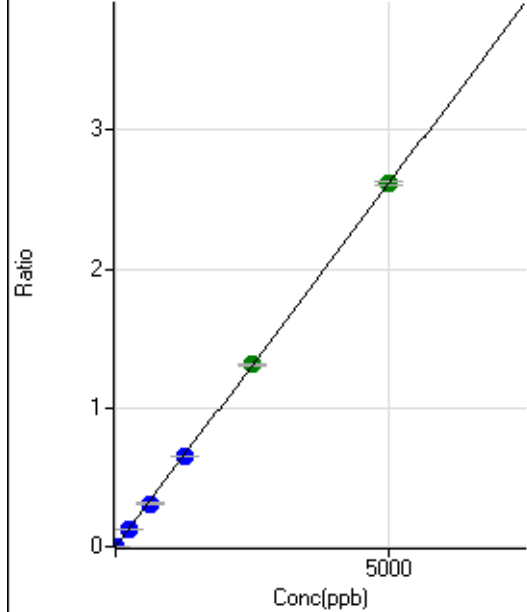
$$DL = 0.03652$$

$$BEC = 0.06251$$

Weight: <None>

Min Conc: 0

95 Mo [NoGas] ISTD : 89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11.11	0.0000	P	42.8
2	☐	0.500					
3	☐	5.000	4.652	12141.76	0.0024	P	3.0
4	☐	250.000	234.387	618882.51	0.1225	P	0.9
5	☐	625.000	590.599	1548224.68	0.3086	P	2.2
6	☐	1250.000	1246.845	3077296.71	0.6515	P	0.8
7	☐	2500.000	2511.735	5745714.97	1.3125	A	1.4
8	☐	5000.000	5000.002	11343349.30	2.6127	A	0.9
9	☐			16604.63	0.0039	P	2.4

$$y = 5.2255\text{E-}004 * x + 2.1648\text{E-}006$$

$$R = 1.0000$$

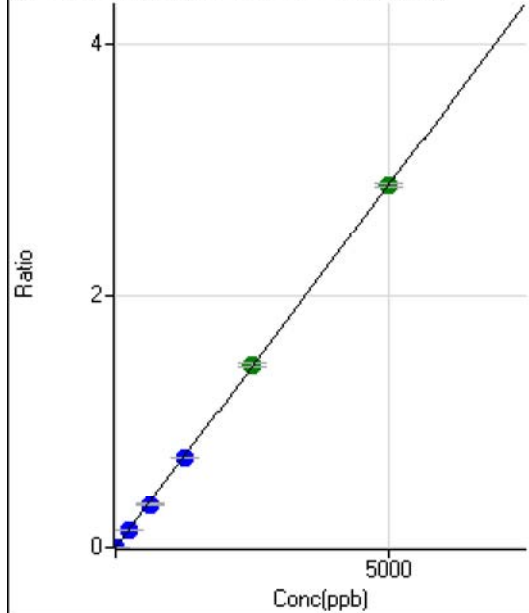
$$DL = 0.00532$$

$$BEC = 0.004143$$

Weight: <None>

Min Conc: 0

96 Mo [NoGas] ISTD : 89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	44.44	0.0000	P	21.1
2	☐	0.500					
3	☐	5.000	4.715	13609.81	0.0027	P	1.4
4	☐	250.000	234.032	681847.74	0.1349	P	0.9
5	☐	625.000	590.428	1707752.66	0.3404	P	2.4
6	☐	1250.000	1244.425	3388723.34	0.7175	P	0.7
7	☐	2500.000	2518.746	6356949.45	1.4522	A	1.6
8	☐	5000.000	4997.141	12508499.58	2.8811	A	1.2
9	☐			20003.70	0.0047	P	0.9

$$y = 5.7655E-004 * x + 8.6643E-006$$

$$R = 1.0000$$

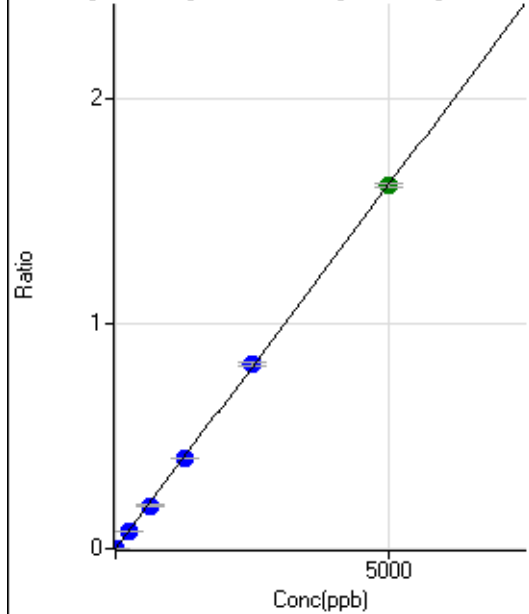
$$DL = 0.009531$$

$$BEC = 0.01503$$

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD : 89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11.11	0.0000	P	86.6
2	☐	0.500					
3	☐	5.000	4.738	7660.70	0.0015	P	3.4
4	☐	250.000	236.350	386530.74	0.0765	P	0.6
5	☐	625.000	591.933	961110.72	0.1916	P	1.9
6	☐	1250.000	1246.261	1905083.79	0.4034	P	0.7
7	☐	2500.000	2535.403	3592073.78	0.8206	P	1.6
8	☐	5000.000	4988.049	7008895.29	1.6144	A	0.9
9	☐			9962.25	0.0023	P	0.5

$$y = 3.2365E-004 * x + 2.1745E-006$$

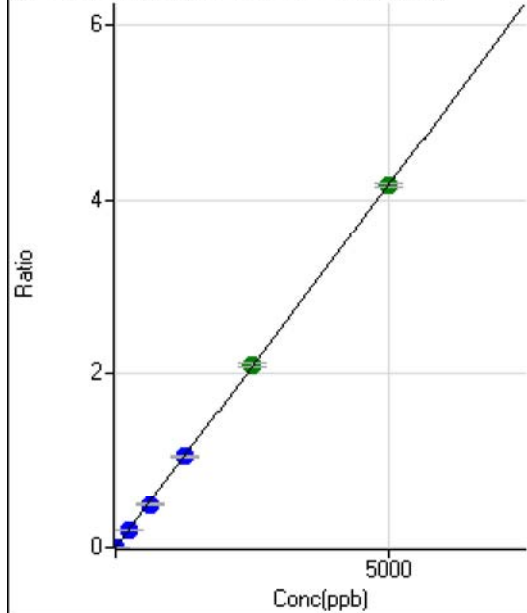
$$R = 0.9999$$

$$DL = 0.01746$$

$$BEC = 0.006719$$

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	13.89	0.0000	P	34.8
2	☐	0.500					
3	☐	5.000	4.638	19327.62	0.0039	P	2.2
4	☐	250.000	235.275	992165.12	0.1964	P	0.9
5	☐	625.000	594.869	2490606.83	0.4965	P	1.9
6	☐	1250.000	1261.331	4971701.80	1.0527	P	0.7
7	☐	2500.000	2512.337	9178561.92	2.0967	A	1.4
8	☐	5000.000	4995.502	18100167.76	4.1691	A	1.0
9	☐			25746.32	0.0061	P	2.0

$$y = 8.3456E-004 * x + 2.7111E-006$$

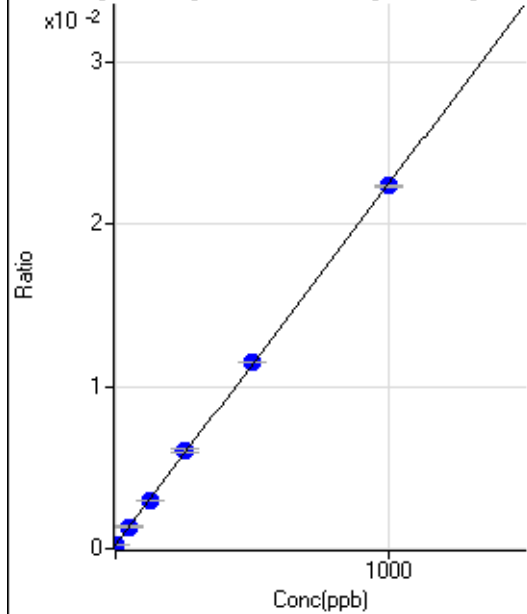
$$R = 1.0000$$

$$DL = 0.003388$$

$$BEC = 0.003249$$

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	1491.81	0.0003	P	4.1
2	☐	0.100					
3	☐	1.000	1.023	1577.93	0.0003	P	7.7
4	☐	50.000	49.632	7780.26	0.0014	P	1.2
5	☐	125.000	121.935	16894.07	0.0030	P	1.2
6	☐	250.000	260.213	32955.96	0.0060	P	3.5
7	☐	500.000	505.761	58900.95	0.0115	P	0.5
8	☐	1000.000	994.968	113860.62	0.0223	P	0.2
9	☐			1364.02	0.0003	P	12.8

$$y = 2.2186E-005 * x + 2.5555E-004$$

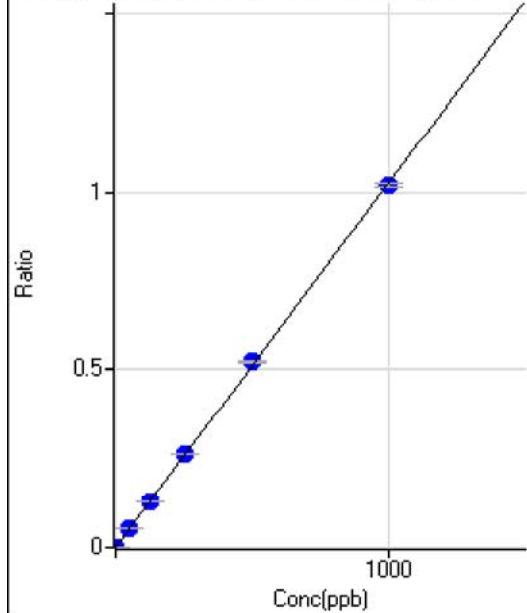
$$R = 0.9999$$

$$DL = 1.416$$

$$BEC = 11.52$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44.45	0.0000	P	29.1
2	☐	0.100					
3	☐	1.000	1.000	5857.01	0.0010	P	3.9
4	☐	50.000	50.674	298127.40	0.0520	P	2.0
5	☐	125.000	125.743	736130.50	0.1290	P	0.9
6	☐	250.000	256.235	1437440.42	0.2629	P	0.6
7	☐	500.000	509.494	2682385.39	0.5227	P	1.3
8	☐	1000.000	993.568	5197562.22	1.0193	P	1.0
9	☐			616.71	0.0001	P	14.0

$$y = 0.0010 * x + 7.6184E-006$$

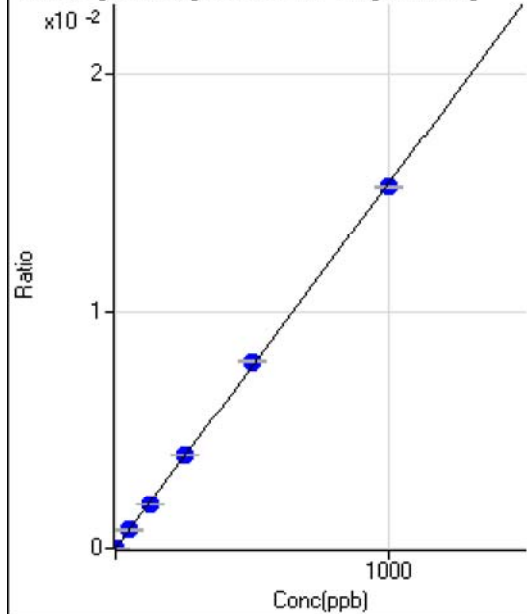
$$R = 0.9999$$

$$DL = 0.006487$$

$$BEC = 0.007426$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	0.8
2	☐	0.100					
3	☐	1.000	1.019	97.23	0.0000	P	16.6
4	☐	50.000	50.562	4470.25	0.0008	P	6.8
5	☐	125.000	123.152	10829.35	0.0019	P	0.4
6	☐	250.000	258.180	21746.09	0.0040	P	1.2
7	☐	500.000	511.777	40448.14	0.0079	P	1.3
8	☐	1000.000	992.269	77916.87	0.0153	P	0.5
9	☐			31.94	0.0000	P	36.7

$$y = 1.5398E-005 * x + 1.4267E-006$$

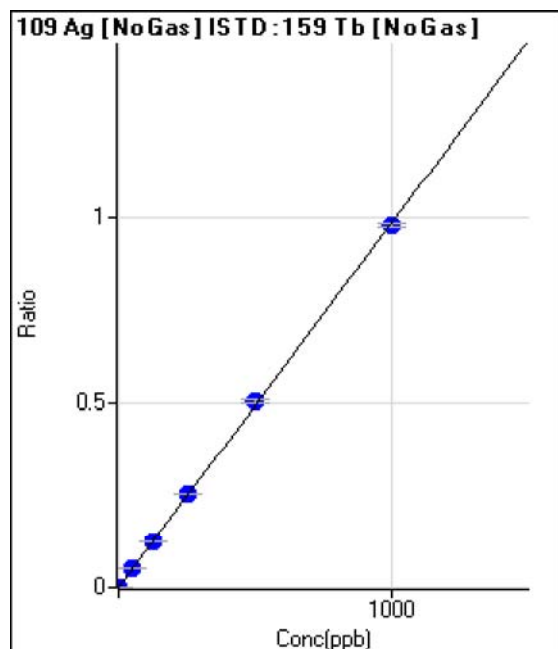
$$R = 0.9998$$

$$DL = 0.00212$$

$$BEC = 0.09265$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	108.7
2	☐	0.100					
3	☐	1.000	1.036	5812.56	0.0010	P	2.2
4	☐	50.000	50.591	286008.26	0.0499	P	1.8
5	☐	125.000	125.812	707712.90	0.1240	P	1.4
6	☐	250.000	256.310	1381717.89	0.2527	P	0.4
7	☐	500.000	509.382	2576831.24	0.5022	P	1.7
8	☐	1000.000	993.601	4994632.14	0.9795	P	0.9
9	☐			602.82	0.0001	P	15.0

$$y = 9.8584\text{E-}004 * x + 3.8212\text{E-}006$$

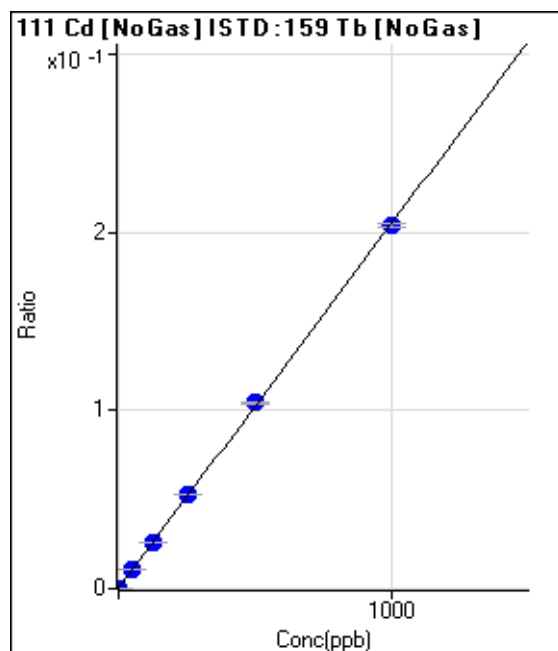
$$R = 0.9999$$

$$DL = 0.01265$$

$$BEC = 0.003876$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1041.22	0.0002	P	4.3
2	☐	0.100					
3	☐	1.000	0.946	2111.56	0.0004	P	6.8
4	☐	50.000	50.152	59978.65	0.0105	P	2.0
5	☐	125.000	125.078	147324.29	0.0258	P	1.5
6	☐	250.000	257.984	290142.36	0.0531	P	1.3
7	☐	500.000	508.971	536329.40	0.1045	P	1.5
8	☐	1000.000	993.501	1039391.22	0.2038	P	1.0
9	☐			1099.12	0.0002	P	14.7

$$y = 2.0500\text{E-}004 * x + 1.7836\text{E-}004$$

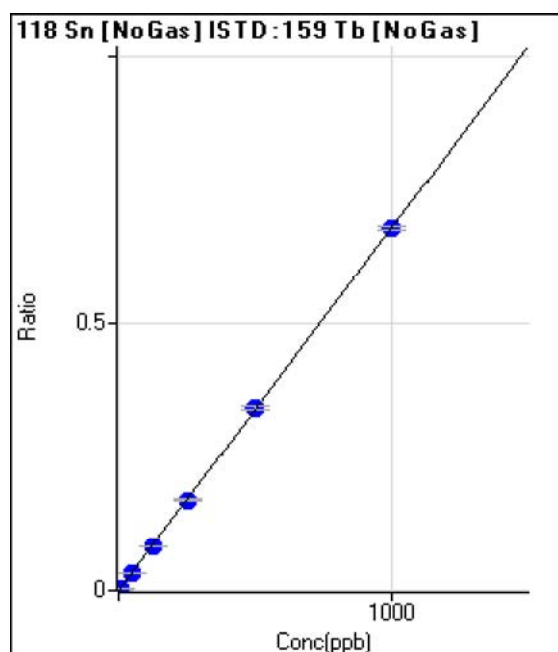
$$R = 0.9999$$

$$DL = 0.1125$$

$$BEC = 0.8701$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	833.39	0.0001	P	6.0
2	☐	0.500					
3	☐	5.000	5.123	20560.13	0.0036	P	3.1
4	☐	50.000	48.610	190325.97	0.0332	P	2.0
5	☐	125.000	121.341	471567.35	0.0826	P	1.1
6	☐	250.000	250.268	931248.84	0.1703	P	1.2
7	☐	500.000	502.564	1754239.38	0.3418	P	1.5
8	☐	1000.000	999.177	3464803.53	0.6795	P	1.0
9	☐			7688.53	0.0016	P	3.5

$$y = 6.7993\text{E-}004 * x + 1.4276\text{E-}004$$

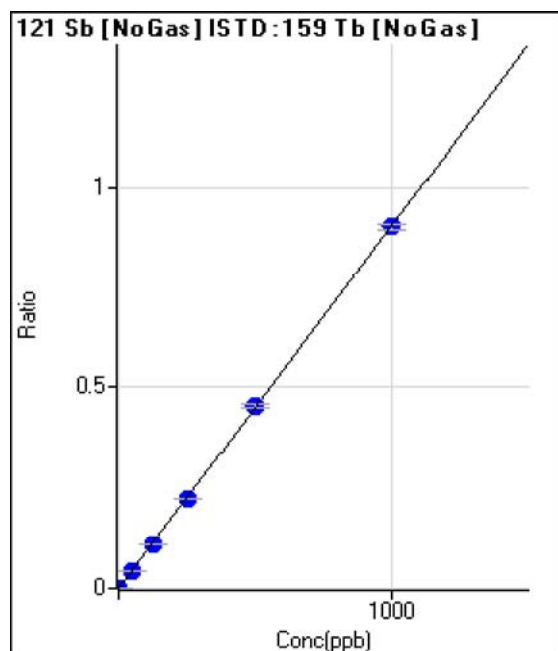
$$R = 1.0000$$

$$DL = 0.03782$$

$$BEC = 0.21$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0000	P	58.2
2	☐	0.200					
3	☐	2.000	1.894	9731.55	0.0017	P	1.0
4	☐	50.000	47.580	246349.23	0.0430	P	3.1
5	☐	125.000	120.639	621531.19	0.1089	P	1.6
6	☐	250.000	247.943	1224132.16	0.2239	P	0.9
7	☐	500.000	503.728	2333760.75	0.4548	P	1.7
8	☐	1000.000	999.317	4600507.00	0.9022	P	1.4
9	☐			9064.46	0.0018	P	11.6

$$y = 9.0286\text{E-}004 * x + 6.1816\text{E-}006$$

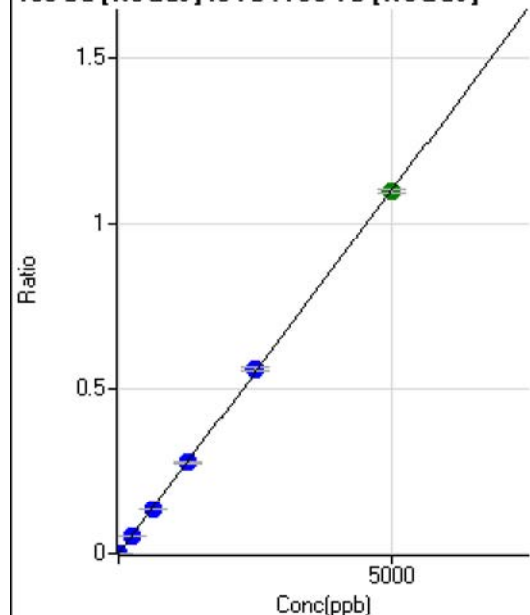
$$R = 1.0000$$

$$DL = 0.01195$$

$$BEC = 0.006847$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	33.3
2	☐	1.000					
3	☐	10.000	9.563	11969.54	0.0021	P	2.5
4	☐	250.000	243.135	307104.51	0.0536	P	2.5
5	☐	625.000	610.394	767254.55	0.1345	P	1.8
6	☐	1250.000	1257.941	1515235.11	0.2771	P	0.9
7	☐	2500.000	2532.074	2862256.53	0.5578	P	1.5
8	☐	5000.000	4984.148	5598361.32	1.0979	A	0.9
9	☐			916.73	0.0002	P	6.4

$$y = 2.2028\text{E-}004 * x + 4.2801\text{E-}006$$

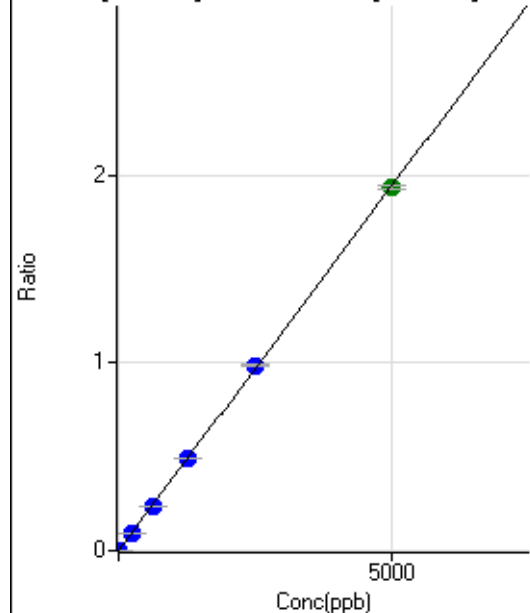
$$R = 1.0000$$

$$DL = 0.01939$$

$$BEC = 0.01943$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13.89	0.0000	P	69.9
2	☐	1.000					
3	☐	10.000	9.385	20666.17	0.0036	P	0.8
4	☐	250.000	242.376	539209.87	0.0940	P	2.1
5	☐	625.000	607.858	1345745.99	0.2358	P	1.1
6	☐	1250.000	1260.923	2675178.79	0.4892	P	0.7
7	☐	2500.000	2542.975	5063306.02	0.9867	P	1.2
8	☐	5000.000	4978.307	9848940.93	1.9315	A	0.9
9	☐			1858.54	0.0004	P	4.6

$$y = 3.8799\text{E-}004 * x + 2.3846\text{E-}006$$

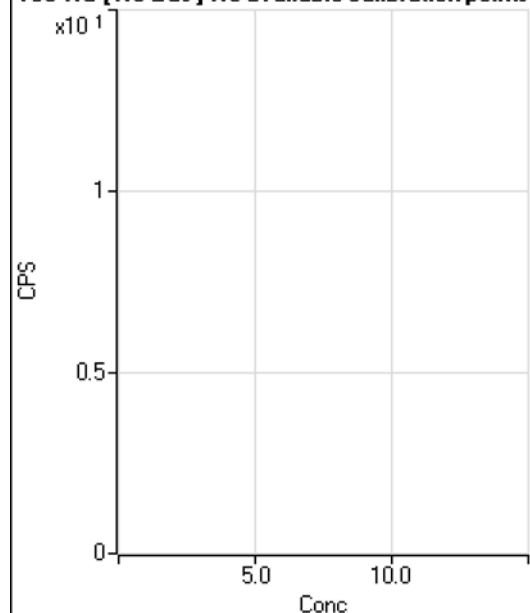
$$R = 0.9999$$

$$DL = 0.01289$$

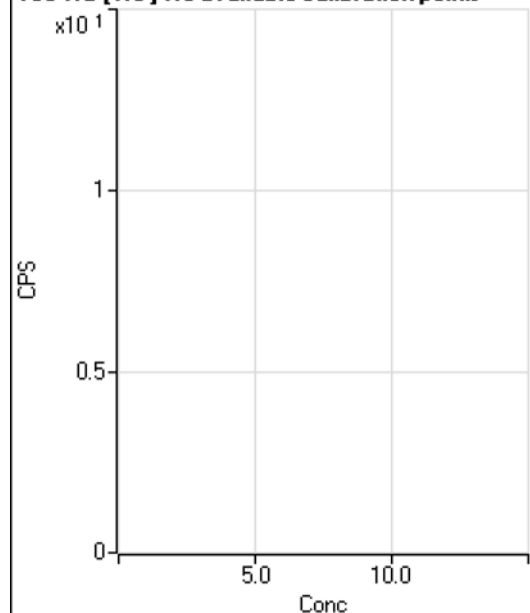
$$BEC = 0.006146$$

Weight: <None>

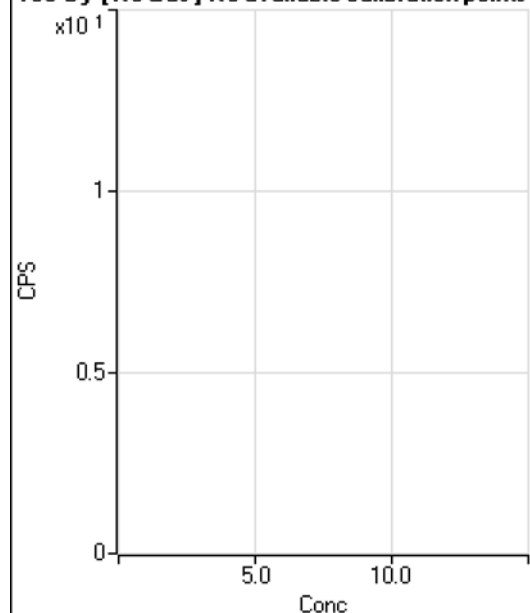
Min Conc: 0

150 Nd [No Gas] No available calibration points

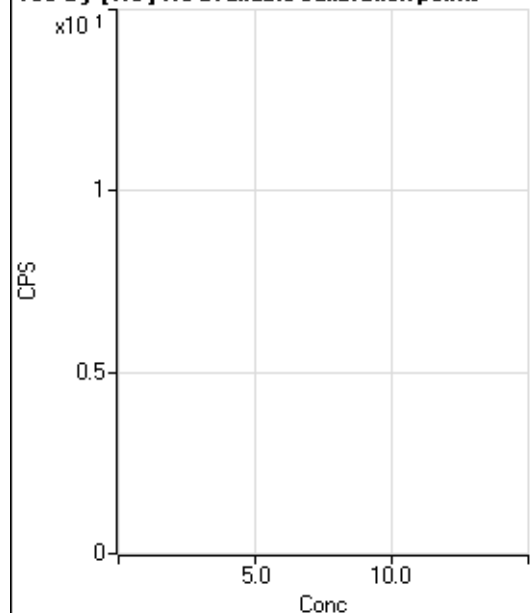
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			2.22		P	173.2
4	☐			17.78		P	43.3
5	☐			53.34		P	33.1
6	☐			104.45		P	14.7
7	☐			211.12		P	24.1
8	☐			424.46		P	5.0
9	☐			66.67		P	17.3

150 Nd [He] No available calibration points

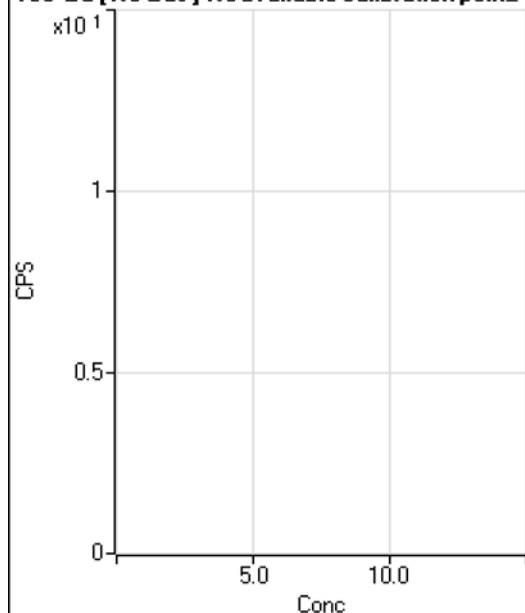
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐						
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			7.78		P	49.5
6	☐			12.22		P	83.3
7	☐			17.78		P	39.0
8	☐			56.67		P	35.8
9	☐			25.55		P	15.1

156 Dy [No Gas] No available calibration points

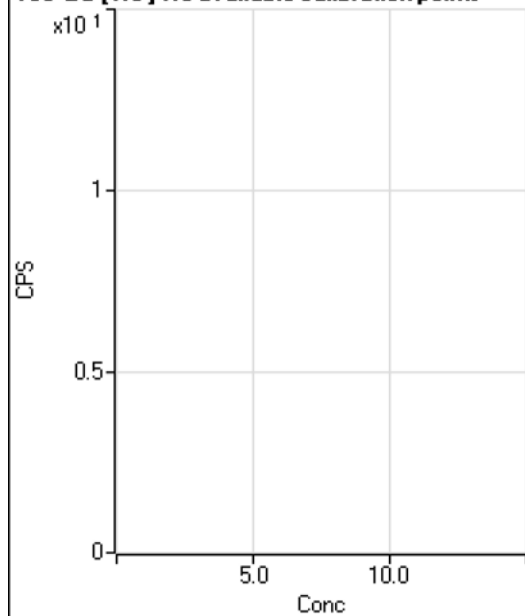
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐						
3	☐			2.78		P	173.2
4	☐			13.89		P	69.3
5	☐			11.11		P	86.6
6	☐			25.00		P	88.2
7	☐			22.22		P	43.3
8	☐			100.01		P	8.3
9	☐			52.78		P	32.9

156 Dy [He] No available calibration points

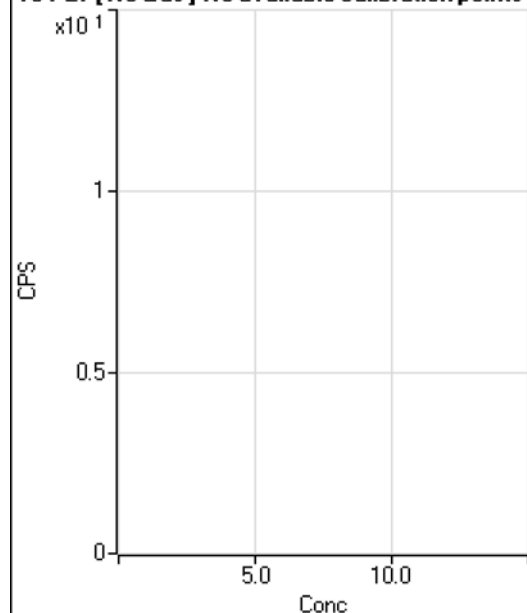
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			6.67		P	0.0
5	☐			10.00		P	0.0
6	☐			27.78		P	48.5
7	☐			34.44		P	24.3
8	☐			101.12		P	13.3
9	☐			24.44		P	7.9

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

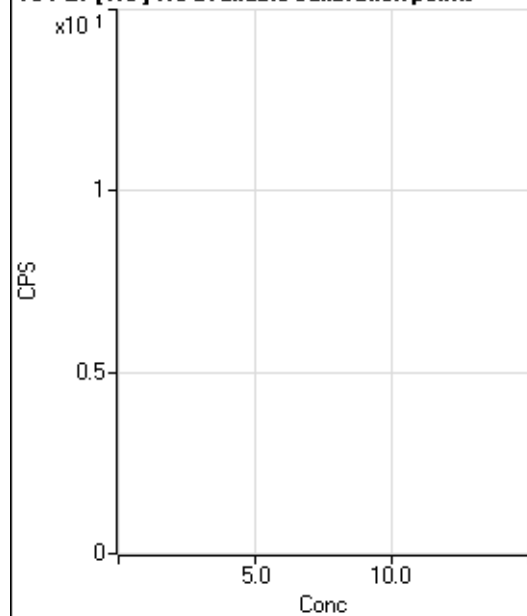
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	33.3
2	☐						
3	☐			19.44		P	89.2
4	☐			33.33		P	0.0
5	☐			27.78		P	69.3
6	☐			19.44		P	65.5
7	☐			25.00		P	88.2
8	☐			52.78		P	24.1
9	☐			72.22		P	35.2

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			91.11		P	13.8
2	☐						
3	☐			68.89		P	7.4
4	☐			80.00		P	20.8
5	☐			83.34		P	18.3
6	☐			80.00		P	23.2
7	☐			72.22		P	51.9
8	☐			103.34		P	18.0
9	☐			96.67		P	21.5

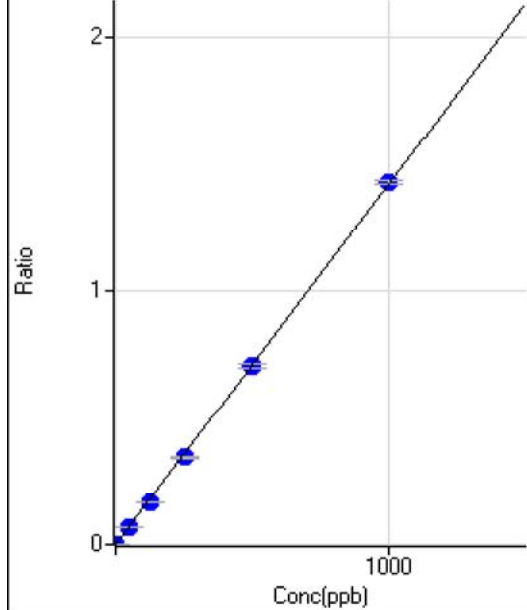
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	33.3
2	☐						
3	☐			41.67		P	20.0
4	☐			11.11		P	114.6
5	☐			13.89		P	69.3
6	☐			27.78		P	75.5
7	☐			13.89		P	91.6
8	☐			44.45		P	28.7
9	☐			19.45		P	24.7

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐						
3	☐			14.44		P	35.3
4	☐			6.67		P	50.0
5	☐			7.78		P	65.5
6	☐			7.78		P	24.7
7	☐			13.33		P	66.2
8	☐			28.89		P	26.6
9	☐			16.67		P	34.6

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.67	0.0000	P	25.1
2	☐	0.100					
3	☐	1.000	0.919	4531.52	0.0013	P	3.9
4	☐	50.000	45.932	224370.26	0.0654	P	1.8
5	☐	125.000	115.533	560531.84	0.1644	P	0.7
6	☐	250.000	243.085	1123727.60	0.3458	P	1.0
7	☐	500.000	495.170	2167589.00	0.7043	P	1.3
8	☐	1000.000	1005.530	4324712.03	1.4303	P	0.9
9	☐			1991.90	0.0007	P	3.3

$$y = 0.0014 * x + 3.3361E-005$$

$$R = 0.9999$$

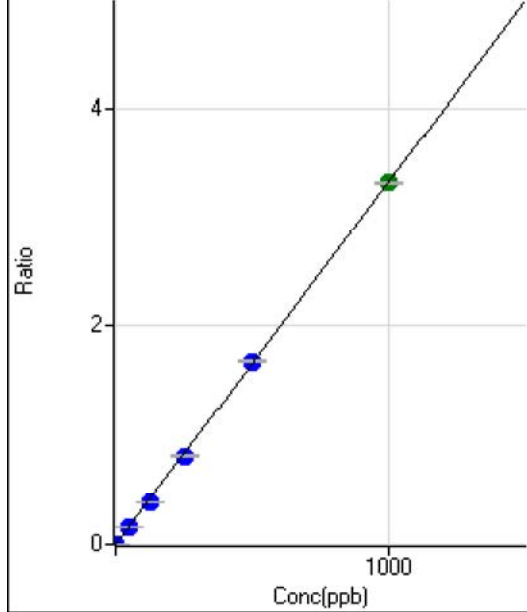
$$DL = 0.01763$$

$$BEC = 0.02345$$

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	305.58	0.0001	P	6.9
2	☐	0.100					
3	☐	1.000	0.913	10549.15	0.0031	P	0.6
4	☐	50.000	46.085	525843.06	0.1532	P	1.1
5	☐	125.000	116.205	1316884.28	0.3862	P	1.6
6	☐	250.000	246.258	2659166.92	0.8182	P	0.4
7	☐	500.000	505.533	5168812.79	1.6796	P	1.4
8	☐	1000.000	999.464	10040687.81	3.3206	A	0.5
9	☐			4767.79	0.0017	P	5.3

$$y = 0.0033 * x + 8.7511E-005$$

$$R = 0.9999$$

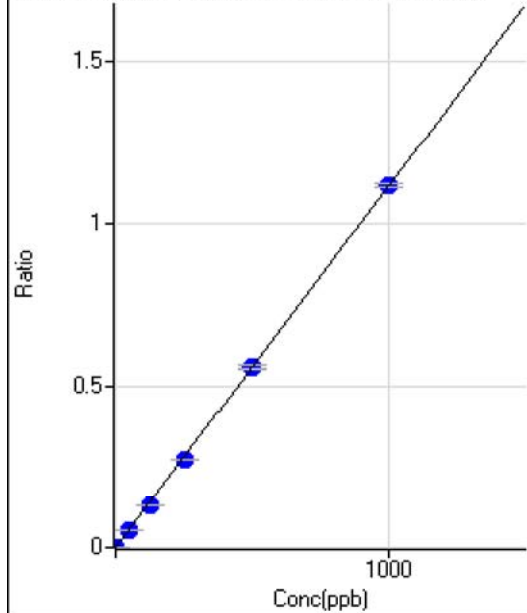
$$DL = 0.005427$$

$$BEC = 0.02634$$

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	125.93	0.0000	P	3.3
2	☐	0.100					
3	☐	1.000	0.913	3563.56	0.0011	P	0.8
4	☐	50.000	46.729	179009.09	0.0522	P	1.1
5	☐	125.000	116.447	442990.33	0.1299	P	1.7
6	☐	250.000	245.793	890996.66	0.2742	P	0.6
7	☐	500.000	499.306	1713804.93	0.5569	P	1.2
8	☐	1000.000	1002.632	3381151.03	1.1182	P	1.1
9	☐			20445.91	0.0074	P	2.1

$$y = 0.0011 * x + 3.6060E-005$$

$$R = 1.0000$$

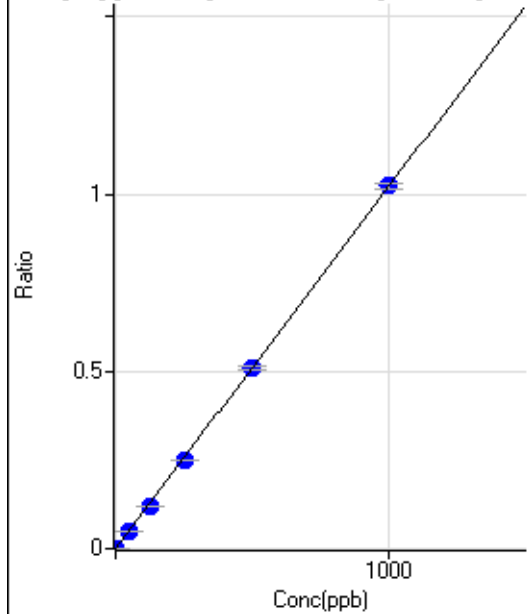
$$DL = 0.003163$$

$$BEC = 0.03233$$

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	83.34	0.0000	P	18.4
2	☐	0.100					
3	☐	1.000	0.946	3339.42	0.0010	P	2.3
4	☐	50.000	46.456	162688.03	0.0474	P	1.4
5	☐	125.000	115.967	403351.78	0.1183	P	1.8
6	☐	250.000	244.641	810824.04	0.2495	P	1.0
7	☐	500.000	498.988	1565942.06	0.5089	P	1.5
8	☐	1000.000	1003.152	3093162.28	1.0230	P	1.3
9	☐			16812.89	0.0061	P	2.9

$$y = 0.0010 * x + 2.3881E-005$$

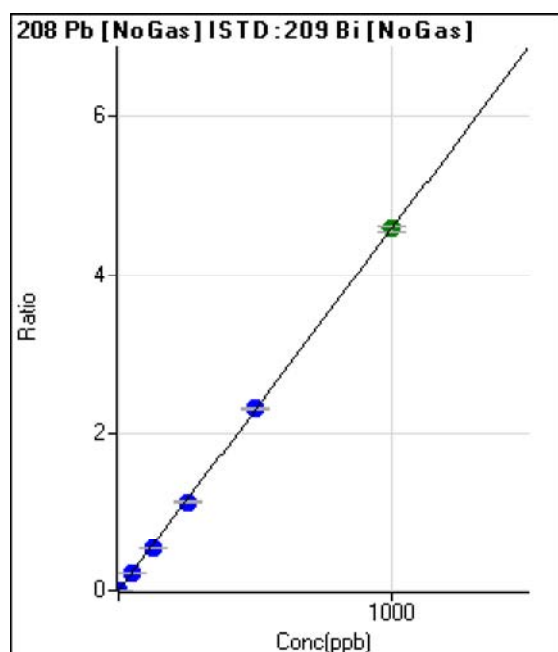
$$R = 1.0000$$

$$DL = 0.0129$$

$$BEC = 0.02342$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	416.68	0.0001	P	4.4
2	☐	0.100					
3	☐	1.000	0.922	14672.11	0.0043	P	2.3
4	☐	50.000	46.497	731816.53	0.2132	P	1.3
5	☐	125.000	116.643	1823299.11	0.5347	P	1.6
6	☐	250.000	246.299	3668657.77	1.1288	P	0.8
7	☐	500.000	502.206	7082937.09	2.3016	P	1.4
8	☐	1000.000	1001.042	13871488.01	4.5877	A	1.4
9	☐			79706.75	0.0290	P	0.5

$$y = 0.0046 * x + 1.1926E-004$$

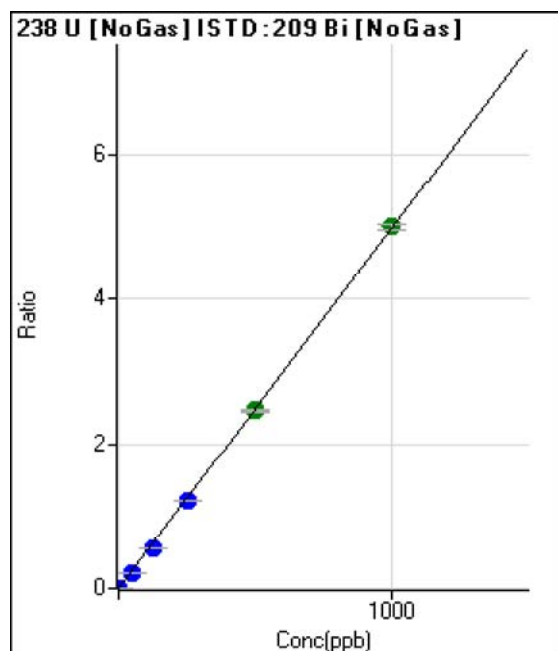
$$R = 1.0000$$

$$DL = 0.003444$$

$$BEC = 0.02602$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	8.33	0.0000	P	99.2
2	☐	0.100					
3	☐	1.000	0.895	15048.21	0.0045	P	0.5
4	☐	50.000	44.027	751357.53	0.2189	P	0.8
5	☐	125.000	112.537	1907996.72	0.5595	P	1.6
6	☐	250.000	244.289	3947058.16	1.2145	P	1.1
7	☐	500.000	494.528	7566254.94	2.4587	A	1.4
8	☐	1000.000	1006.020	15123421.00	5.0017	A	1.2
9	☐			1291.79	0.0005	P	10.6

$$y = 0.0050 * x + 2.3823E-006$$

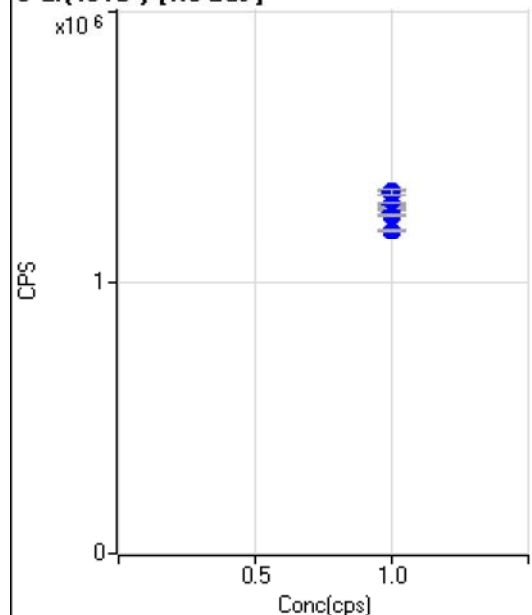
$$R = 0.9999$$

$$DL = 0.001426$$

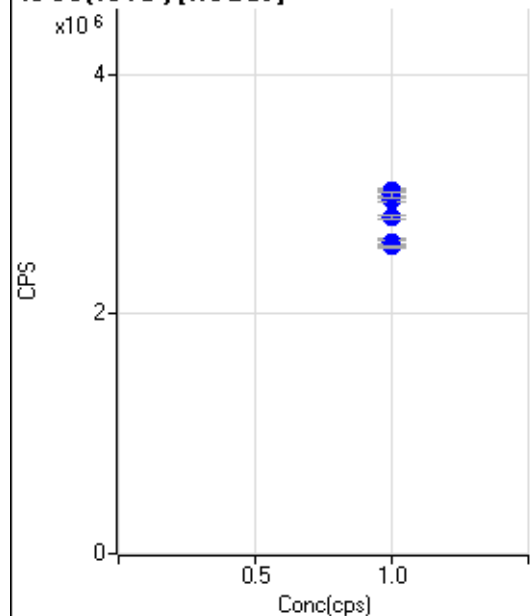
$$BEC = 0.0004792$$

Weight: <None>

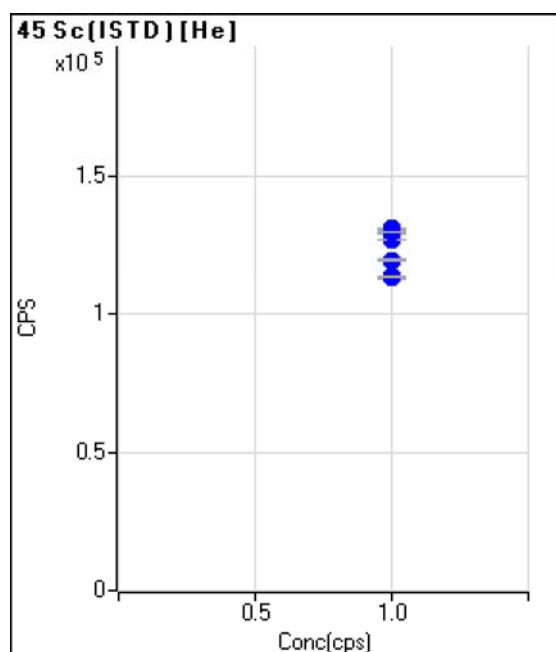
Min Conc: 0

6 Li(ISTD) [No Gas]

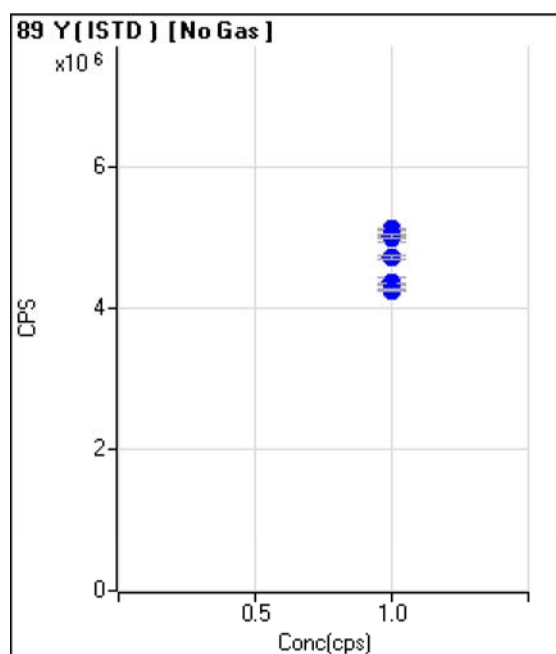
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1286029.10		P	0.7
2	☐	1.000					
3	☐	1.000		1283631.78		P	1.5
4	☐	1.000		1333444.41		P	1.0
5	☐	1.000		1340380.27		P	1.7
6	☐	1.000		1293899.45		P	0.8
7	☐	1.000		1262760.27		P	2.1
8	☐	1.000		1252880.25		P	0.8
9	☐	1.000		1195059.79		P	0.5

45 Sc(ISTD) [No Gas]

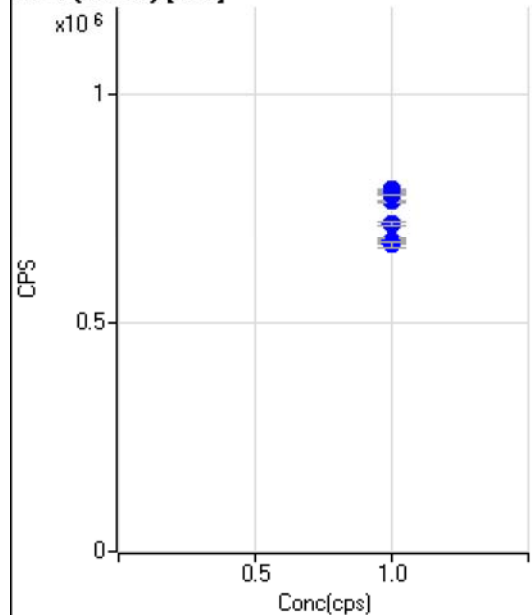
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3029804.26		P	0.9
2	☐	1.000					
3	☐	1.000		2961463.02		P	1.3
4	☐	1.000		3025926.33		P	0.2
5	☐	1.000		2995398.87		P	1.3
6	☐	1.000		2807674.32		P	1.2
7	☐	1.000		2603977.99		P	2.1
8	☐	1.000		2600533.43		P	0.8
9	☐	1.000		2562051.99		P	0.6



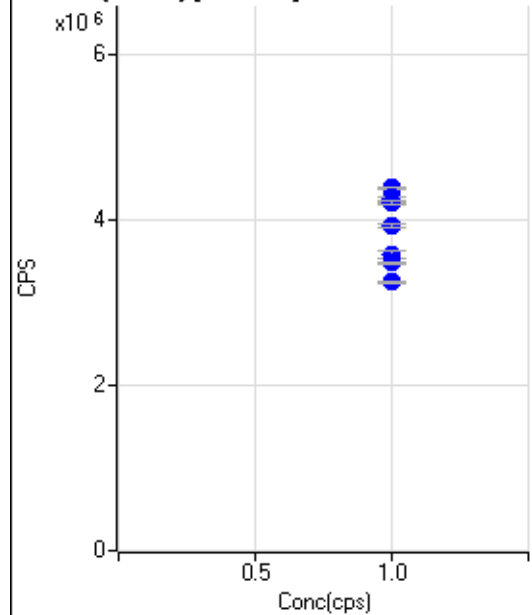
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		129650.00		P	0.4
2	☐	1.000					
3	☐	1.000		127126.12		P	0.4
4	☐	1.000		131019.28		P	0.4
5	☐	1.000		129737.09		P	0.2
6	☐	1.000		119533.80		P	0.4
7	☐	1.000		113316.98		P	0.9
8	☐	1.000		113518.52		P	1.0
9	☐	1.000		113632.30		P	0.3



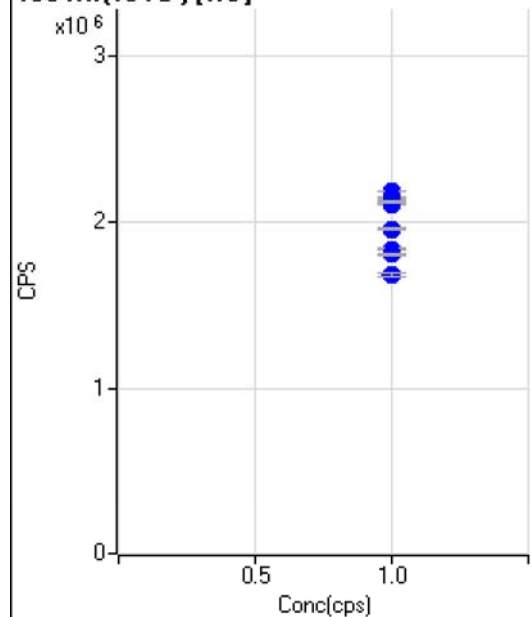
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5125085.48		P	0.6
2	☐	1.000					
3	☐	1.000		4990784.54		P	1.4
4	☐	1.000		5052917.77		P	0.1
5	☐	1.000		5017488.33		P	1.2
6	☐	1.000		4723200.90		P	1.1
7	☐	1.000		4378513.34		P	2.2
8	☐	1.000		4341654.38		P	0.4
9	☐	1.000		4244979.76		P	0.8

89 Y (ISTD) [He]

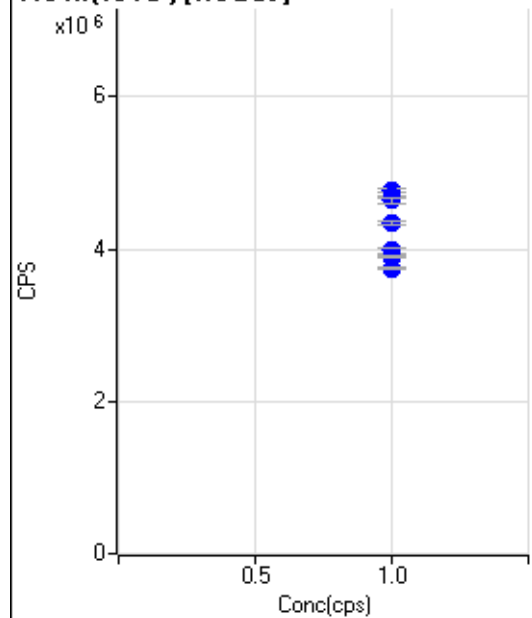
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		791288.31		P	0.5
2	☐	1.000					
3	☐	1.000		766300.36		P	0.3
4	☐	1.000		782908.96		P	0.1
5	☐	1.000		780421.75		P	0.2
6	☐	1.000		716209.55		P	0.9
7	☐	1.000		675552.15		P	1.0
8	☐	1.000		681387.57		P	1.3
9	☐	1.000		670026.13		P	1.8

103 Rh (ISTD) [NoGas]

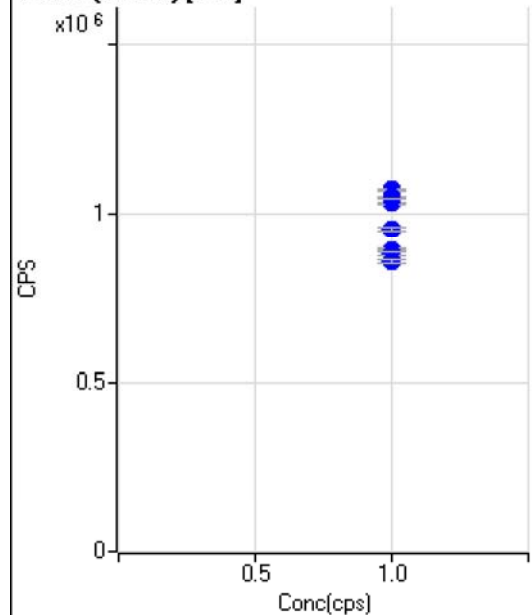
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4384350.31		P	0.7
2	☐	1.000					
3	☐	1.000		4247274.66		P	1.5
4	☐	1.000		4279361.56		P	0.3
5	☐	1.000		4211051.05		P	0.9
6	☐	1.000		3925109.68		P	1.2
7	☐	1.000		3582819.57		P	2.2
8	☐	1.000		3481339.86		P	0.8
9	☐	1.000		3243461.34		P	0.5

103 Rh(ISTD) [He]

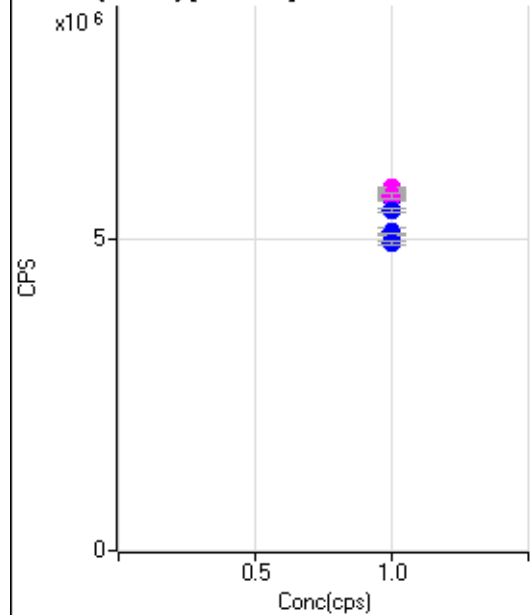
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2182178.59		P	0.1
2	☐	1.000					
3	☐	1.000		2101850.99		P	0.1
4	☐	1.000		2146519.93		P	0.3
5	☐	1.000		2124018.56		P	0.3
6	☐	1.000		1960236.71		P	1.1
7	☐	1.000		1830281.05		P	0.6
8	☐	1.000		1800847.63		P	0.7
9	☐	1.000		1674885.96		P	1.2

115 In(ISTD) [NoGas]

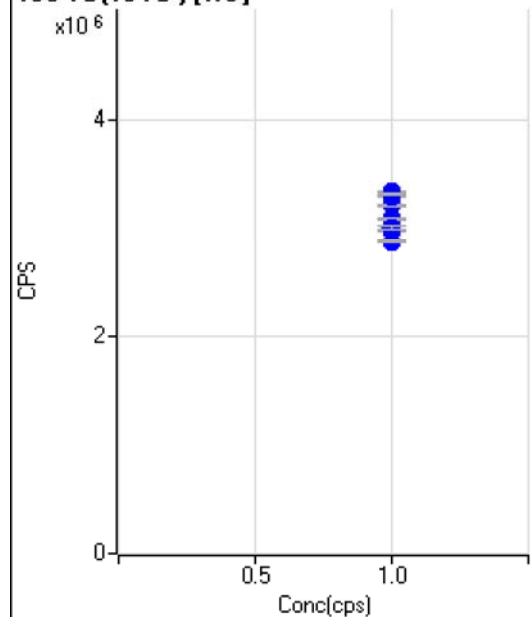
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4765395.90		P	1.1
2	☐	1.000					
3	☐	1.000		4636026.06		P	1.3
4	☐	1.000		4686920.72		P	0.2
5	☐	1.000		4640247.13		P	1.4
6	☐	1.000		4342724.80		P	1.5
7	☐	1.000		3978366.81		P	2.1
8	☐	1.000		3893964.47		P	0.7
9	☐	1.000		3741121.66		P	0.8

115 In(ISTD) [He]

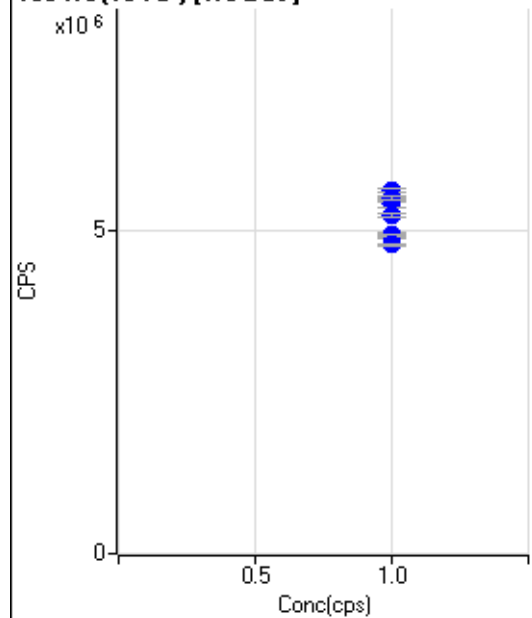
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1070242.93		P	0.3
2	☐	1.000					
3	☐	1.000		1030516.30		P	0.3
4	☐	1.000		1048343.64		P	0.4
5	☐	1.000		1043888.87		P	0.5
6	☐	1.000		952320.95		P	1.3
7	☐	1.000		892575.09		P	0.6
8	☐	1.000		878952.95		P	0.9
9	☐	1.000		857844.83		P	1.0

159 Tb(ISTD) [NoGas]

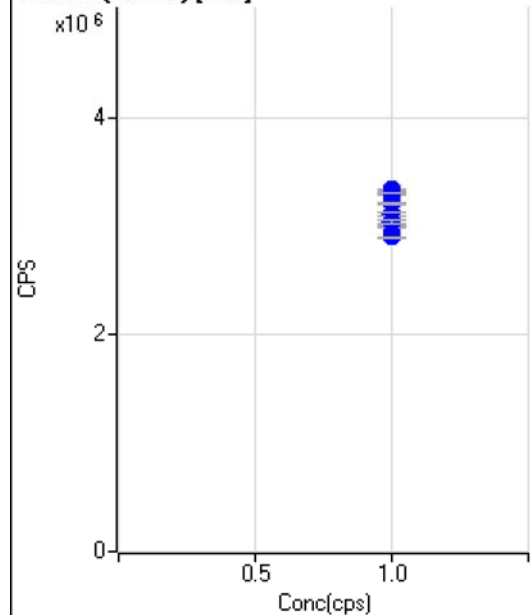
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5838893.46		M	0.8
2	☐	1.000					
3	☐	1.000		5671373.11		P	1.4
4	☐	1.000		5734882.00		M	1.5
5	☐	1.000		5706428.18		M	1.2
6	☐	1.000		5468164.47		P	1.3
7	☐	1.000		5132884.82		P	2.6
8	☐	1.000		5099095.55		P	0.3
9	☐	1.000		4951222.57		P	1.0

159 Tb(ISTD) [He]

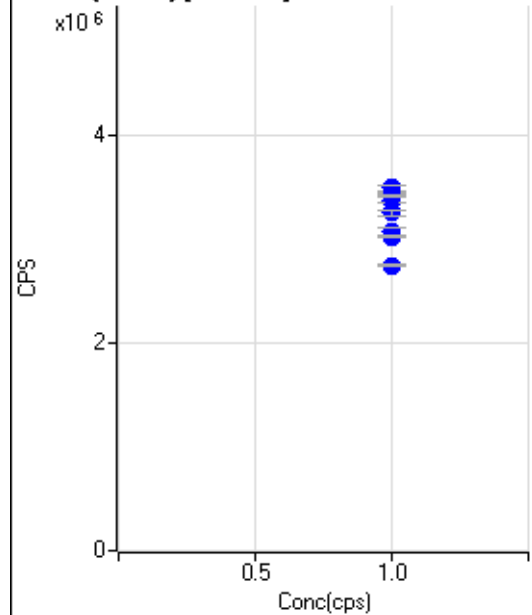
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3344752.45		P	0.4
2	☐	1.000					
3	☐	1.000		3218236.03		P	0.2
4	☐	1.000		3303351.06		P	0.6
5	☐	1.000		3319182.07		P	0.3
6	☐	1.000		3096370.68		P	0.9
7	☐	1.000		2984066.48		P	0.9
8	☐	1.000		3019073.29		P	1.0
9	☐	1.000		2879523.15		P	0.8

165 Ho(ISTD) [NoGas]

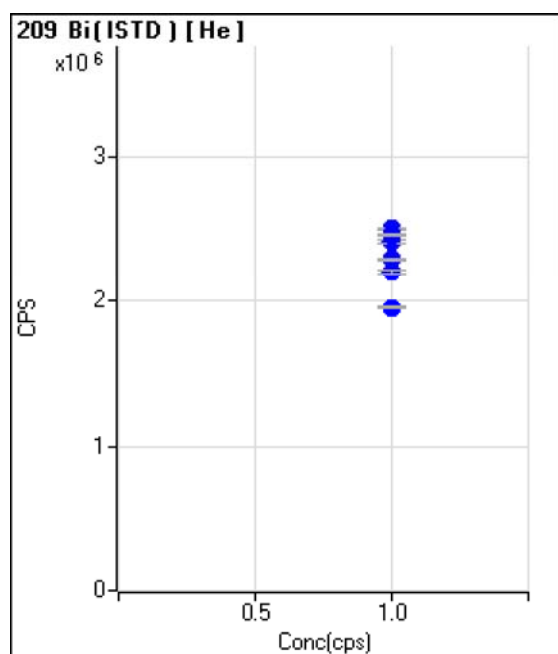
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5631051.47		P	1.0
2	☐	1.000					
3	☐	1.000		5428448.52		P	1.5
4	☐	1.000		5534402.29		P	0.3
5	☐	1.000		5530088.71		P	1.1
6	☐	1.000		5258384.79		P	1.4
7	☐	1.000		4936756.66		P	1.9
8	☐	1.000		4941887.79		P	0.3
9	☐	1.000		4799024.67		P	0.8

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3344222.73		P	0.3
2	☐	1.000					
3	☐	1.000		3221731.86		P	0.5
4	☐	1.000		3314582.34		P	1.0
5	☐	1.000		3319604.74		P	0.2
6	☐	1.000		3118493.60		P	0.8
7	☐	1.000		3001922.49		P	0.4
8	☐	1.000		3051949.54		P	1.1
9	☐	1.000		2900086.66		P	0.6

209 Bi(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3492947.79		P	1.3
2	☐	1.000					
3	☐	1.000		3378482.80		P	1.3
4	☐	1.000		3432648.35		P	0.6
5	☐	1.000		3410433.67		P	0.8
6	☐	1.000		3249935.05		P	1.3
7	☐	1.000		3078072.59		P	2.5
8	☐	1.000		3023775.30		P	0.4
9	☐	1.000		2747915.53		P	0.8



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2500606.70		P	0.3
2	☐	1.000					
3	☐	1.000		2410429.95		P	0.7
4	☐	1.000		2459359.01		P	0.7
5	☐	1.000		2455956.91		P	0.7
6	☐	1.000		2288079.55		P	0.6
7	☐	1.000		2200491.18		P	0.7
8	☐	1.000		2196227.83		P	1.3
9	☐	1.000		1954534.97		P	0.5

US EPA Tune Check Sample Report

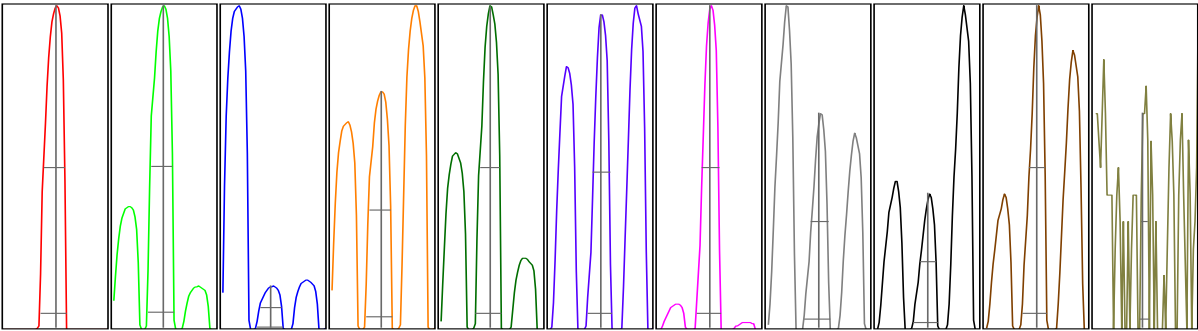
Batch Folder D:\ICP-MS Data\P7062918-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	3820	1.37	5.00	
24	59597	1.47	5.00	
25	7874	1.58	5.00	
26	9027	1.25	5.00	
59	30112	1.79	5.00	
113	3784	2.27	5.00	
115	50396	2.54	5.00	
206	10571	1.48	5.00	
207	9534	1.33	5.00	
208	22658	1.82	5.00	
220	0	51.62		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	3786	3861	3862	3745	3845
24	59271	60010	60489	58231	59983
25	7822	7963	8015	7696	7873
26	8974	9120	9127	8857	9058
59	30224	30497	30529	29203	30107
113	3849	3849	3827	3652	3741
115	51402	51303	51150	48526	49597
206	10603	10702	10691	10317	10541
207	9569	9653	9628	9342	9478
208	22794	23003	22829	21943	22721
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	6420	9.05	8.9 - 9.1		0.782	0.900	
24	97746	24.00	23.9 - 24.1		0.784	0.900	
25	12935	24.95	24.9 - 25.1		0.784	0.900	
26	14910	26.00	25.9 - 26.1		0.783	0.900	
59	52967	59.00	58.9 - 59.1		0.739	0.900	
113	7934	113.05	112.9 - 113.1		0.716	0.900	
115	104529	115.05	114.9 - 115.1		0.712	0.900	
206	22385	206.05	205.9 - 206.1		0.749	0.900	
207	20423	207.05	206.9 - 207.1		0.706	0.900	
208	48911	208.05	207.9 - 208.1		0.719	0.900	
220	0	219.95	-		0.293		

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.9	V	Deflect	15.8	V
Extract 2	-100.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	7825	1.56	
89	20083	1.73	
205	10804	1.62	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	7810	7792	7718	7770	8035
89	20052	19837	19883	19956	20689
205	10701	10706	10743	10758	11114

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	9.2	V	Deflect	2.8	V
Extract 2	-105.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	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			