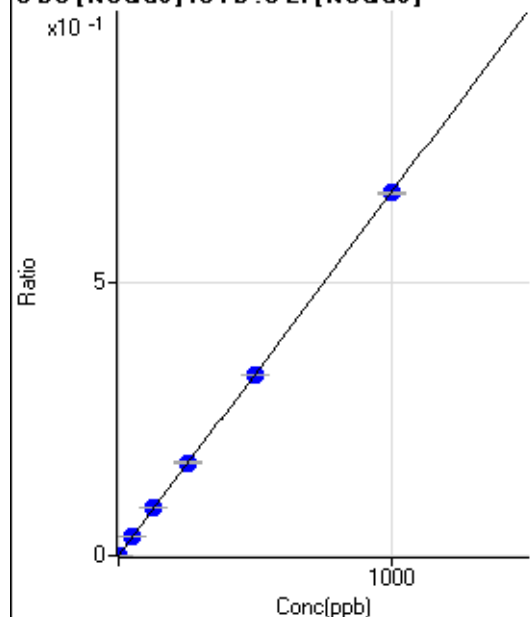


Calibration for 006CALS.d

Batch Folder: D:\ICP-MS Data\P7042618-MS.b\
 Analysis File: P7042618-MS.batch.bin
 DA Date-Time: 2018-04-27 00:20:06
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-04-26 13:06:58
2			
3	005CALS.d	S02	2018-04-26 13:15:15
4	006CALS.d	S03	2018-04-26 13:19:08
5	007CALS.d	S04	2018-04-26 13:23:18
6	008CALS.d	S05	2018-04-26 13:27:06
7	009CALS.d	S06	2018-04-26 13:30:52
8	010CALS.d	S07	2018-04-26 13:34:35
9	011CALS.d	S08	2018-04-26 13:38:18

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68.52	0.0000	P	47.3
2	☐	0.100					
3	☐	1.000	1.047	2220.59	0.0007	P	7.3
4	☐	50.000	52.847	112749.38	0.0352	P	0.5
5	☐	125.000	130.280	282404.60	0.0868	P	0.9
6	☐	250.000	256.460	548080.95	0.1709	P	0.8
7	☐	500.000	498.582	1042890.03	0.3322	P	0.4
8	☐	1000.000	998.291	2001902.10	0.6651	P	0.3
9	☐			540.76	0.0002	P	17.2

$$y = 6.6624\text{E-}004 * x + 2.1691\text{E-}005$$

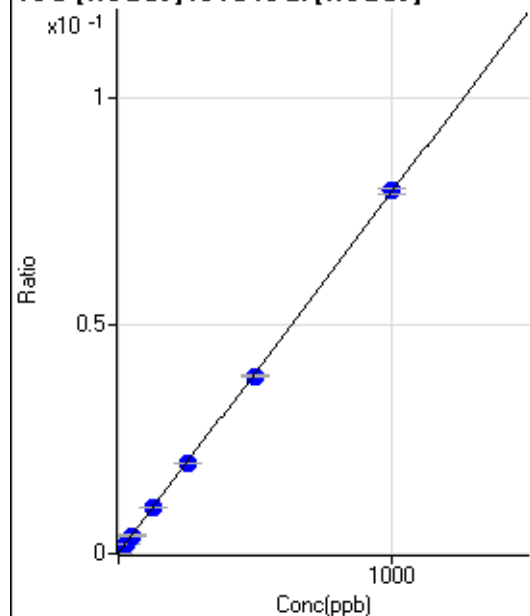
$$R = 1.0000$$

$$DL = 0.04618$$

$$BEC = 0.03256$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	230.57	0.0001	P	4.8
2	☐	2.500					
3	☐	25.000	24.773	6282.10	0.0020	P	5.0
4	☐	50.000	49.109	12675.18	0.0040	P	3.7
5	☐	125.000	126.098	32711.37	0.0101	P	0.6
6	☐	250.000	249.305	63541.83	0.0198	P	0.8
7	☐	500.000	491.355	122357.30	0.0390	P	1.0
8	☐	1000.000	1004.409	239570.38	0.0796	P	1.5
9	☐			5226.12	0.0018	P	3.6

$$y = 7.9172\text{E-}005 * x + 7.2990\text{E-}005$$

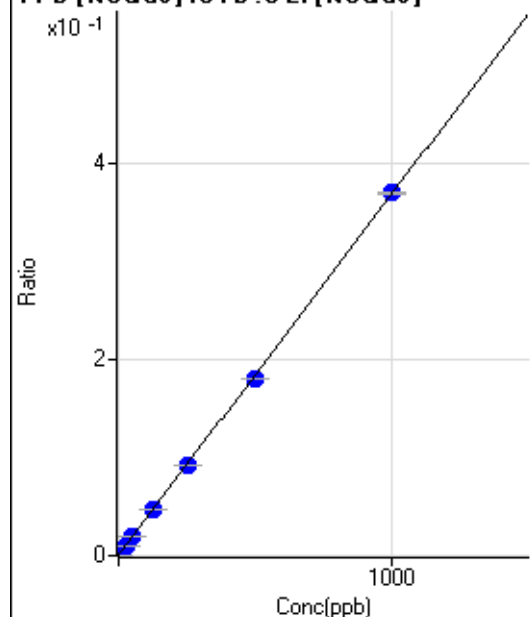
$$R = 0.9999$$

$$DL = 0.1329$$

$$BEC = 0.9219$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1105.65	0.0004	P	15.8
2	☐	2.500					
3	☐	25.000	23.567	27882.24	0.0090	P	2.9
4	☐	50.000	50.346	60480.02	0.0189	P	0.4
5	☐	125.000	125.100	151052.52	0.0464	P	1.2
6	☐	250.000	250.581	297212.62	0.0927	P	0.9
7	☐	500.000	490.275	568136.45	0.1810	P	0.7
8	☐	1000.000	1004.723	1115152.20	0.3705	P	0.8
9	☐			24567.93	0.0085	P	7.8

$$y = 3.6841\text{E-}004 * x + 3.5042\text{E-}004$$

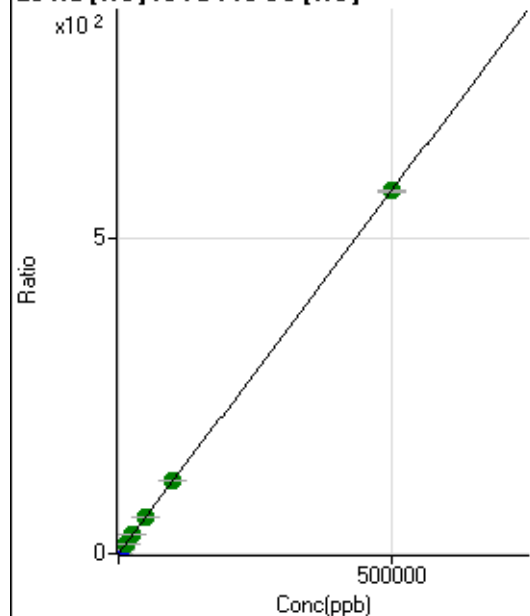
$$R = 0.9999$$

$$DL = 0.4502$$

$$BEC = 0.9512$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	26087.30	0.0608	P	0.8
2	☐	50.000					
3	☐	500.000	472.332	262641.80	0.6057	P	0.9
4	☐	5000.000	5048.180	2503969.87	5.8845	P	0.3
5	☐	12500.000	12944.960	5965723.48	14.9943	A	0.0
6	☐	25000.000	25528.446	11395696.78	29.5108	A	0.5
7	☐	50000.000	50556.317	21941133.30	58.3833	A	0.4
8	☐	100000.00	99804.704	44058999.94	115.1970	A	0.1
9	☐	500000.00	499945.42	232317577.4	576.8053	A	0.7

$$y = 0.0012 * x + 0.0608$$

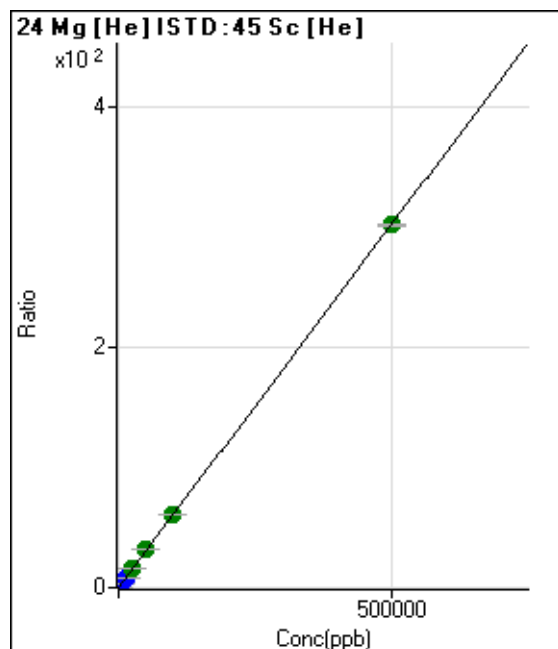
$$R = 1.0000$$

$$DL = 1.239$$

$$BEC = 52.73$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	347.24	0.0008	P	9.7
2	☐	50.000					
3	☐	500.000	473.020	124174.30	0.2864	P	0.6
4	☐	5000.000	5185.991	1332563.87	3.1316	P	0.5
5	☐	12500.000	13355.334	3208243.21	8.0635	P	0.3
6	☐	25000.000	26188.241	6105474.66	15.8109	A	0.3
7	☐	50000.000	51763.740	11744402.61	31.2510	A	0.2
8	☐	100000.00	101302.57	23390826.04	61.1580	A	0.3
9	☐	500000.00	499480.48	121451333.2	301.5411	A	0.6

$$y = 6.0371\text{E-}004 * x + 8.0994\text{E-}004$$

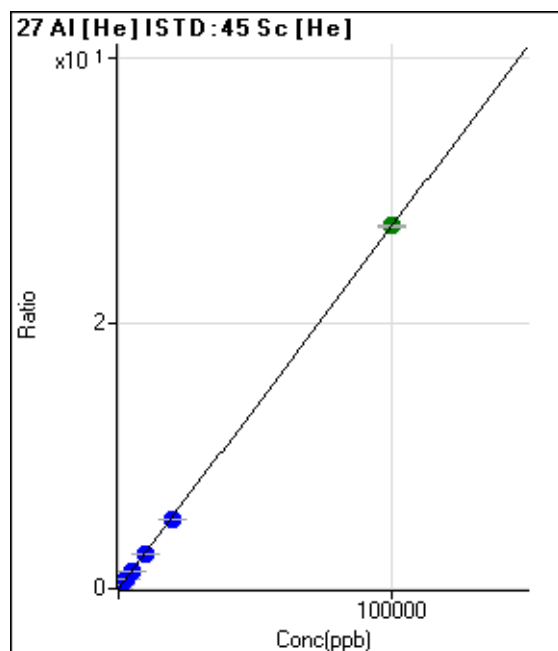
$$R = 1.0000$$

$$\text{DL} = 0.391$$

$$\text{BEC} = 1.342$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69.45	0.0002	P	7.6
2	☐	2.000					
3	☐	20.000	18.394	2250.27	0.0052	P	5.0
4	☐	1000.000	983.483	114460.60	0.2690	P	1.0
5	☐	2500.000	2509.153	272950.95	0.6860	P	0.1
6	☐	5000.000	4948.251	522359.49	1.3528	P	0.9
7	☐	10000.000	9734.829	1000088.76	2.6612	P	0.3
8	☐	20000.000	19240.505	2011539.41	5.2595	P	0.5
9	☐	100000.00	100180.94	11029467.78	27.3845	A	0.7

$$y = 2.7335\text{E-}004 * x + 1.6197\text{E-}004$$

$$R = 1.0000$$

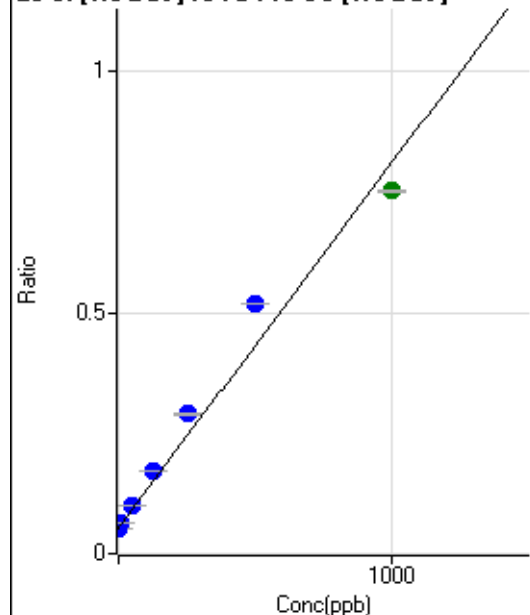
$$\text{DL} = 0.1346$$

$$\text{BEC} = 0.5926$$

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	421260.38	0.0535	P	0.6
2	☐	1.000					
3	☐	10.000	16.131	511044.61	0.0657	P	0.3
4	☐	50.000	59.406	768973.50	0.0984	P	0.5
5	☐	125.000	154.730	1292523.10	0.1705	P	0.4
6	☐	250.000	312.761	2131537.31	0.2900	P	1.0
7	☐	500.000	612.279	3718370.70	0.5166	P	0.0
8	☐	1000.000	923.922	5337818.04	0.7523	A	0.5
9	☐			665302.53	0.0912	P	0.9

$$y = 7.5640\text{E-}004 * x + 0.0535$$

$$R = 0.9874$$

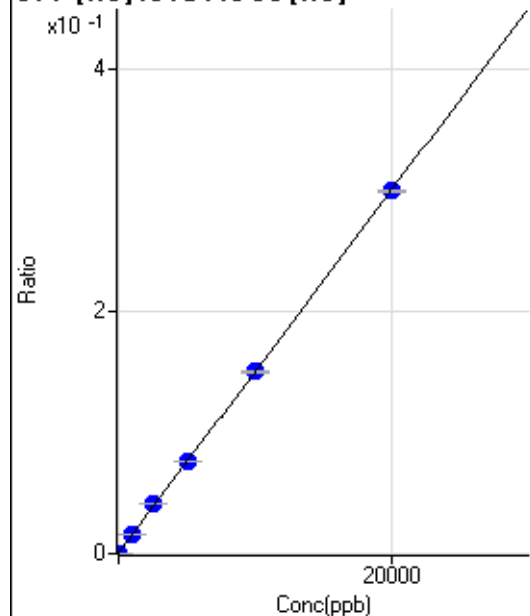
$$DL = 1.239$$

$$BEC = 70.68$$

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	-2.132	247.23	0.0006	P	12.3
2	☐	0.000					
3	☐	0.000	2.132	277.79	0.0006	P	11.2
4	☐	1000.000	1012.496	6712.89	0.0158	P	5.2
5	☐	2500.000	2698.679	16331.70	0.0410	P	2.6
6	☐	5000.000	5051.041	29460.43	0.0763	P	1.3
7	☐	10000.000	10009.467	56591.86	0.1506	P	1.4
8	☐	20000.000	19957.047	114595.66	0.2996	P	0.2
9	☐			341.69	0.0008	P	6.4

$$y = 1.4983\text{E-}005 * x + 6.0861\text{E-}004$$

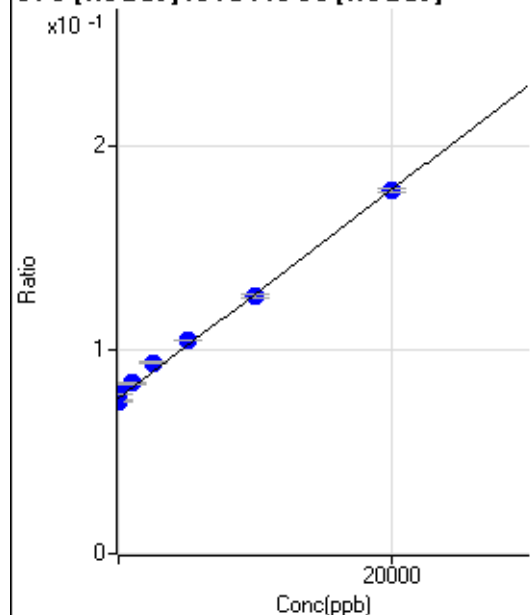
$$R = 1.0000$$

$$DL = 14.25$$

$$BEC = 40.62$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-319.742	589507.43	0.0748	P	0.8
2	☐	0.000					
3	☐	0.000	319.742	607740.65	0.0781	P	0.3
4	☐	1000.000	1417.499	654201.55	0.0837	P	0.3
5	☐	2500.000	3358.424	709920.58	0.0936	P	0.8
6	☐	5000.000	5520.707	769662.05	0.1047	P	0.6
7	☐	10000.000	9737.481	909181.53	0.1263	P	1.2
8	☐	20000.000	19872.905	1264417.82	0.1782	P	1.2
9	☐			495785.29	0.0680	P	0.9

$$y = 5.1208\text{E-}006 * x + 0.0765$$

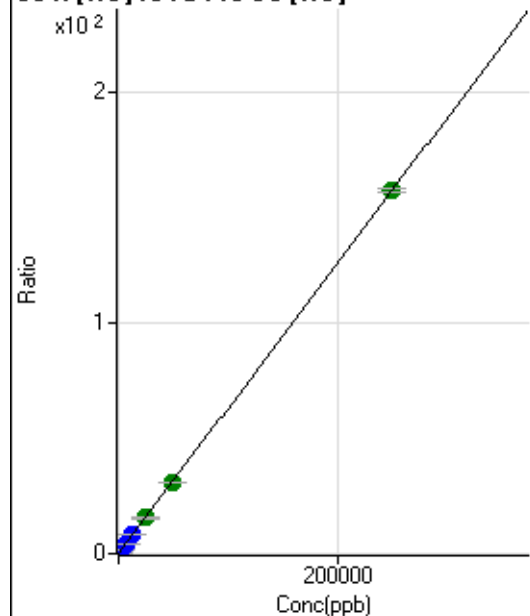
$$R = 0.9984$$

$$DL = 230$$

$$BEC = 1.493\text{E}+04$$

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	54885.60	0.1280	P	1.7
2	☐	50.000					
3	☐	500.000	474.993	184614.13	0.4258	P	0.4
4	☐	2500.000	2481.973	716572.90	1.6840	P	0.2
5	☐	6250.000	6341.994	1632776.59	4.1039	P	0.2
6	☐	12500.000	12480.629	3070765.93	7.9523	P	0.5
7	☐	25000.000	24381.911	5792507.73	15.4134	A	0.3
8	☐	50000.000	48498.554	11677432.90	30.5325	A	0.4
9	☐	250000.00	250360.99	63268210.44	157.0835	A	0.9

$$y = 6.2692\text{E-}004 * x + 0.1280$$

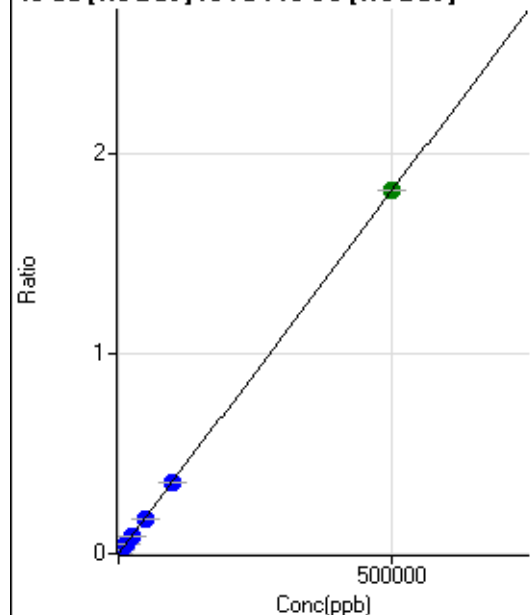
$$R = 1.0000$$

$$DL = 10.51$$

$$BEC = 204.1$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	133.34	0.0000	P	10.5
2	☐	50.000					
3	☐	500.000	450.958	12878.29	0.0017	P	2.4
4	☐	5000.000	4858.885	138039.49	0.0177	P	0.5
5	☐	12500.000	12245.501	337262.02	0.0445	P	0.4
6	☐	25000.000	24353.089	650158.20	0.0885	P	0.4
7	☐	50000.000	48019.972	1255403.06	0.1744	P	0.9
8	☐	100000.00	97845.974	2521308.91	0.3554	P	0.9
9	☐	500000.00	500668.97	13262010.97	1.8183	A	0.1

$$y = 3.6317\text{E-}006 * x + 1.6917\text{E-}005$$

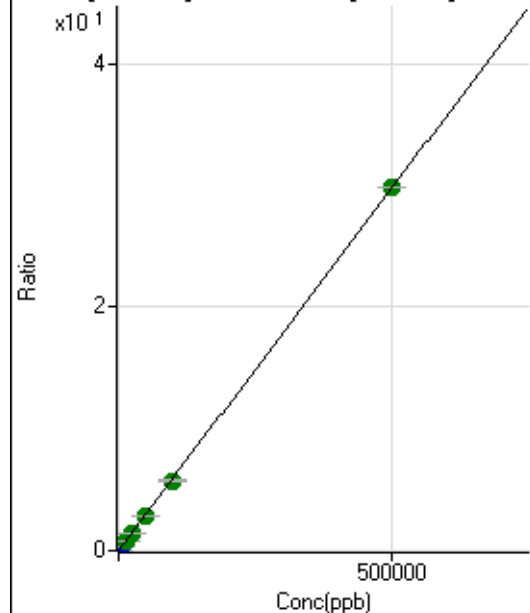
$$R = 1.0000$$

$$DL = 1.469$$

$$BEC = 4.658$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	12972.95	0.0016	P	1.4
2	☐	50.000					
3	☐	500.000	447.989	220243.85	0.0283	P	0.5
4	☐	5000.000	4776.811	2233860.69	0.2858	P	0.2
5	☐	12500.000	12202.964	5516088.06	0.7276	A	0.6
6	☐	25000.000	24380.616	10672667.43	1.4521	A	0.1
7	☐	50000.000	47814.247	20487215.74	2.8463	A	0.3
8	☐	100000.00	96690.027	40824757.16	5.7541	A	0.9
9	☐	500000.00	500921.24	217371210.4	29.8032	A	0.1

$$y = 5.9493\text{E-}005 * x + 0.0016$$

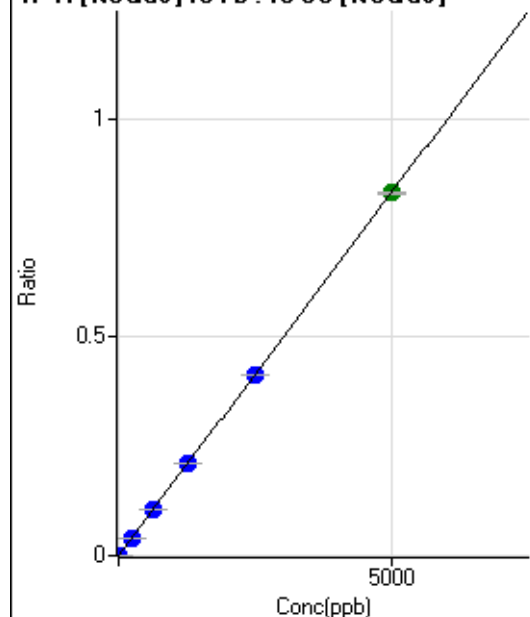
$$R = 1.0000$$

$$DL = 1.185$$

$$BEC = 27.67$$

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	91.67	0.0000	P	14.9
2	☐	0.500					
3	☐	5.000	4.673	6132.07	0.0008	P	2.7
4	☐	250.000	248.178	322259.94	0.0412	P	0.4
5	☐	625.000	633.774	798147.33	0.1053	P	0.6
6	☐	1250.000	1270.900	1551624.26	0.2111	P	0.2
7	☐	2500.000	2493.153	2980940.93	0.4141	P	0.4
8	☐	5000.000	4997.193	5889425.44	0.8301	A	0.8
9	☐			1814.08	0.0002	P	5.5

$$y = 1.6611\text{E-}004 * x + 1.1625\text{E-}005$$

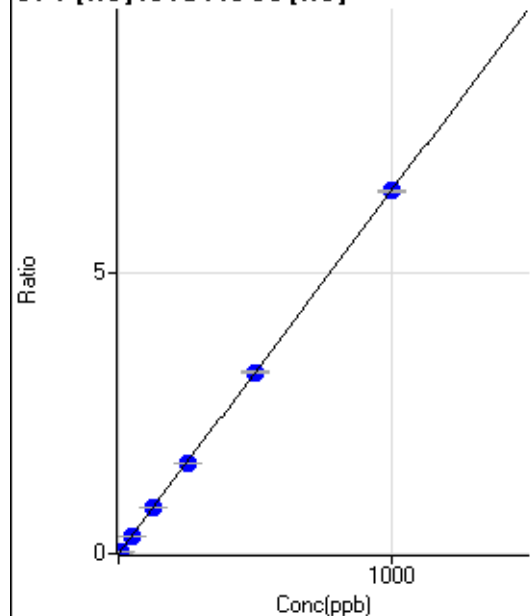
$$R = 1.0000$$

$$DL = 0.03127$$

$$BEC = 0.06998$$

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	12.22	0.0000	P	41.2
2	☐	0.500					
3	☐	5.000	4.592	12921.36	0.0298	P	1.1
4	☐	50.000	49.186	135702.64	0.3189	P	0.6
5	☐	125.000	126.117	325327.23	0.8177	P	0.1
6	☐	250.000	250.275	626597.21	1.6226	P	0.3
7	☐	500.000	500.580	1219652.38	3.2454	P	0.1
8	☐	1000.000	999.545	2478510.16	6.4804	P	0.6
9	☐			1007.82	0.0025	P	4.2

$$y = 0.0065 * x + 2.8451\text{E-}005$$

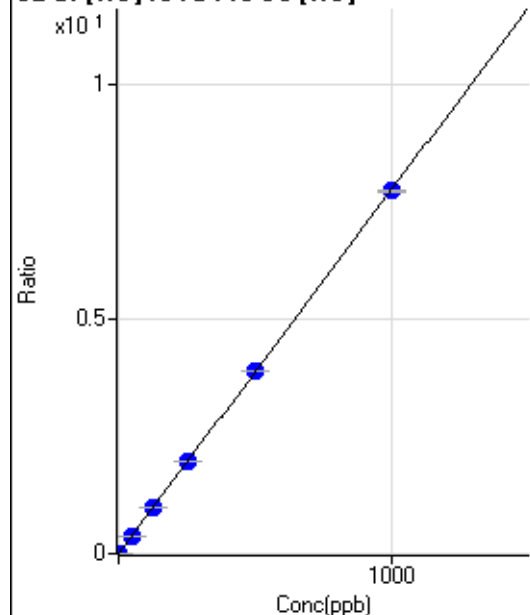
$$R = 1.0000$$

$$DL = 0.005421$$

$$BEC = 0.004388$$

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	301.12	0.0007	P	8.1
2	☐	0.200					
3	☐	2.000	2.023	7105.14	0.0164	P	1.7
4	☐	50.000	49.718	164296.08	0.3861	P	0.4
5	☐	125.000	128.229	395761.58	0.9947	P	0.4
6	☐	250.000	253.551	759262.31	1.9662	P	0.4
7	☐	500.000	503.602	1467353.48	3.9046	P	0.3
8	☐	1000.000	996.922	2955978.50	7.7288	P	0.7
9	☐			123043.78	0.3055	P	1.0

$$y = 0.0078 * x + 7.0190E-004$$

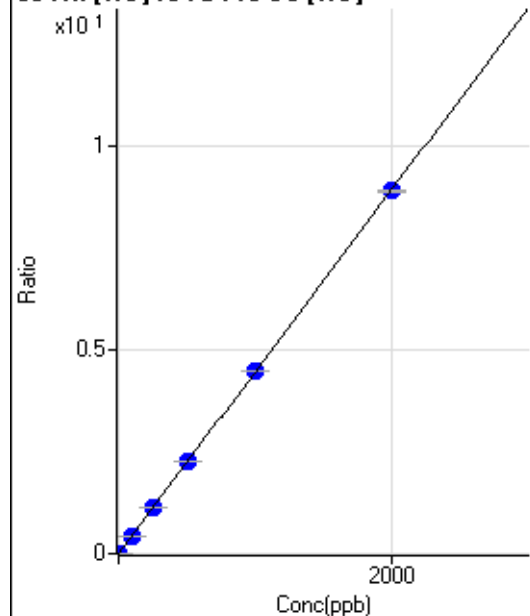
$$R = 1.0000$$

$$DL = 0.02188$$

$$BEC = 0.09054$$

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	63.34	0.0001	P	5.8
2	☐	0.100					
3	☐	1.000	0.994	1991.28	0.0046	P	1.9
4	☐	100.000	98.968	188373.28	0.4427	P	0.2
5	☐	250.000	256.128	455721.19	1.1454	P	0.6
6	☐	500.000	506.016	873799.89	2.2628	P	0.1
7	☐	1000.000	1005.814	1690253.05	4.4977	P	0.2
8	☐	2000.000	1994.875	3411704.64	8.9203	P	0.4
9	☐			15391.58	0.0382	P	1.3

$$y = 0.0045 * x + 1.4770E-004$$

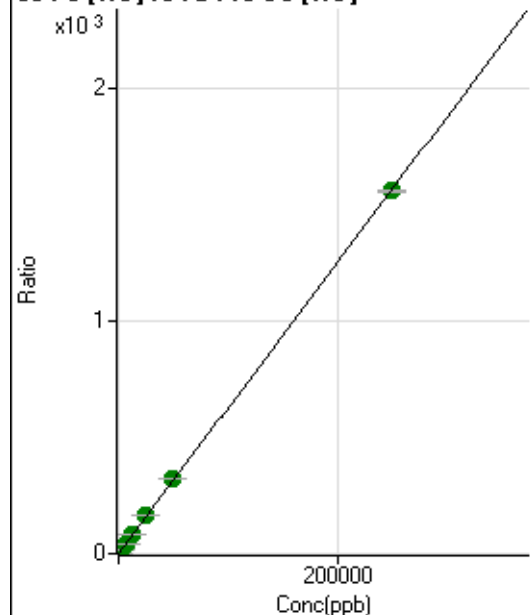
$$R = 1.0000$$

$$DL = 0.005707$$

$$BEC = 0.03303$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4647.17	0.0108	P	3.4
2	☐	5.000					
3	☐	50.000	48.341	135665.59	0.3129	P	0.7
4	☐	2500.000	2559.733	6810203.74	16.0045	A	0.4
5	☐	6250.000	6643.731	16519884.28	41.5221	A	0.5
6	☐	12500.000	13128.019	31679631.96	82.0372	A	0.3
7	☐	25000.000	26029.345	61123321.73	162.6471	A	0.3
8	☐	50000.000	51424.617	122894605.5	321.3216	A	0.3
9	☐	250000.00	249570.30	628055999.2	1,559.373	A	0.8

$$y = 0.0062 * x + 0.0108$$

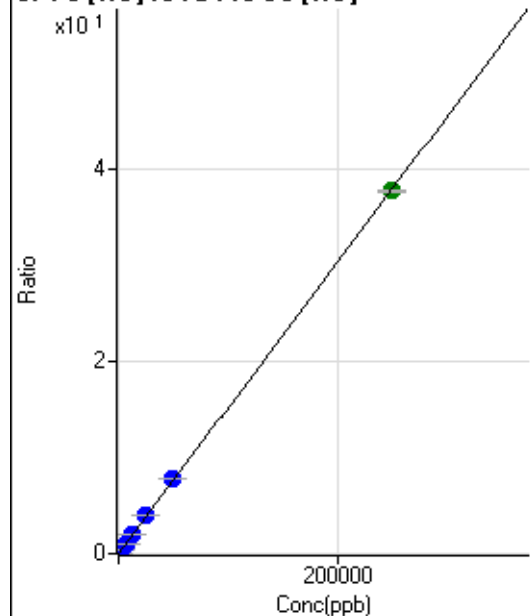
$$R = 1.0000$$

$$DL = 0.1747$$

$$BEC = 1.734$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	483.35	0.0011	P	3.7
2	☐	5.000					
3	☐	50.000	50.863	3824.68	0.0088	P	1.7
4	☐	2500.000	2584.004	166791.56	0.3920	P	0.7
5	☐	6250.000	6699.953	403632.60	1.0145	P	1.4
6	☐	12500.000	13237.040	773569.97	2.0033	P	0.5
7	☐	25000.000	26298.596	1495271.72	3.9789	P	0.5
8	☐	50000.000	51969.184	3006833.77	7.8617	P	0.1
9	☐	250000.00	249427.36	15195536.91	37.7281	A	0.6

$$y = 1.5125E-004 * x + 0.0011$$

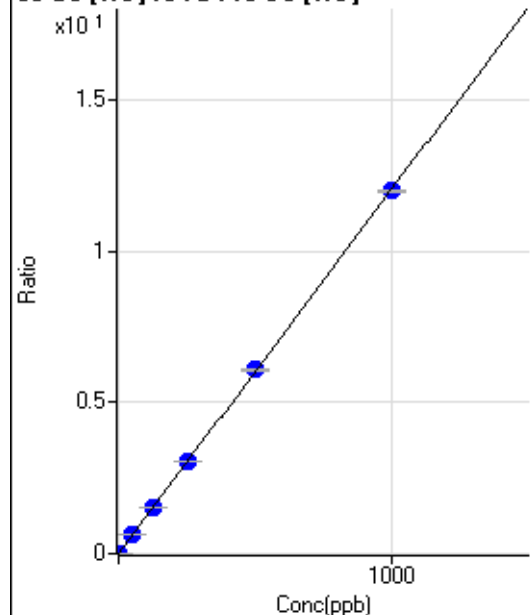
$$R = 1.0000$$

$$DL = 0.8247$$

$$BEC = 7.452$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	66.67	0.0002	P	18.3
2	☐	0.100					
3	☐	1.000	0.957	5068.74	0.0117	P	3.0
4	☐	50.000	50.253	257792.39	0.6058	P	0.1
5	☐	125.000	128.259	615086.51	1.5460	P	0.3
6	☐	250.000	254.704	1185457.93	3.0699	P	0.3
7	☐	500.000	504.724	2286094.81	6.0832	P	0.3
8	☐	1000.000	996.042	4591398.16	12.0047	P	0.2
9	☐			8013.41	0.0199	P	1.4

$$y = 0.0121 * x + 1.5550E-004$$

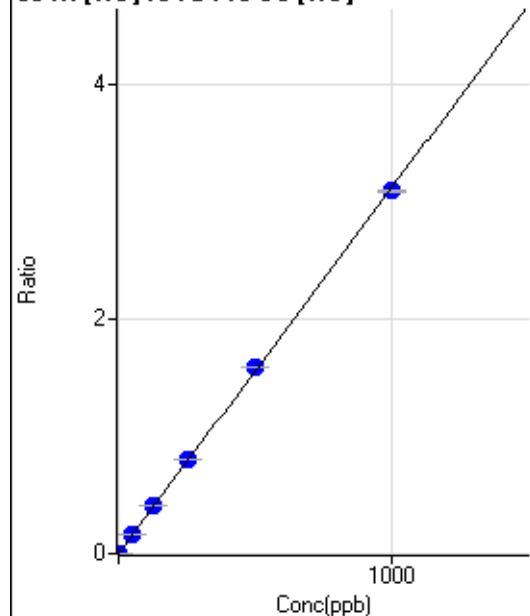
$$R = 1.0000$$

$$DL = 0.00707$$

$$BEC = 0.0129$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	93.34	0.0002	P	19.0
2	☐	0.100					
3	☐	1.000	1.024	1478.99	0.0034	P	3.3
4	☐	50.000	51.319	68167.67	0.1602	P	0.8
5	☐	125.000	130.402	161816.97	0.4067	P	1.0
6	☐	250.000	258.511	311274.55	0.8061	P	0.4
7	☐	500.000	509.584	597065.47	1.5888	P	0.6
8	☐	1000.000	992.339	1183227.54	3.0937	P	0.3
9	☐			31126.54	0.0773	P	2.1

$$y = 0.0031 * x + 2.1775E-004$$

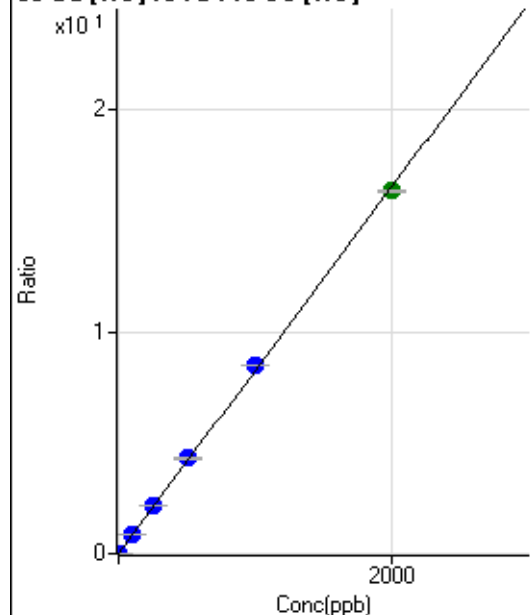
$$R = 0.9999$$

$$DL = 0.03972$$

$$BEC = 0.06985$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1032.28	0.0024	P	4.7
2	☐	0.200					
3	☐	2.000	1.967	8085.67	0.0186	P	3.1
4	☐	100.000	102.078	359626.67	0.8451	P	0.2
5	☐	250.000	262.239	862318.02	2.1674	P	0.5
6	☐	500.000	519.656	1657572.37	4.2926	P	0.6
7	☐	1000.000	1026.434	3185484.29	8.4765	P	0.4
8	☐	2000.000	1980.235	6253606.78	16.3509	A	0.6
9	☐			9687.78	0.0241	P	6.5

$$y = 0.0083 * x + 0.0024$$

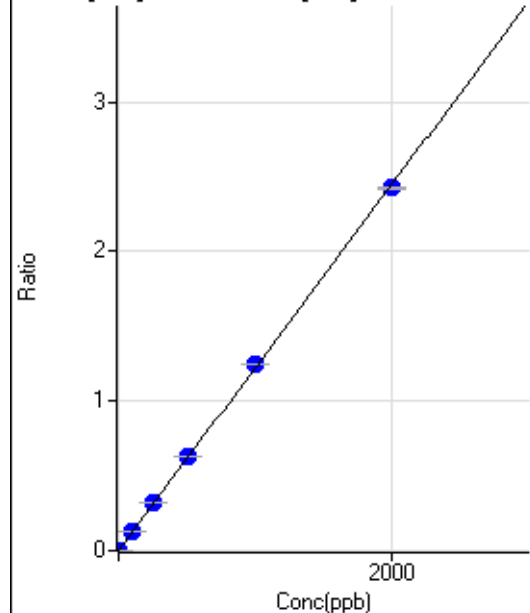
$$R = 0.9998$$

$$DL = 0.04134$$

$$BEC = 0.2915$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0003	P	13.3
2	☐	0.200					
3	☐	2.000	2.144	1282.30	0.0030	P	5.9
4	☐	100.000	101.239	52795.30	0.1241	P	0.5
5	☐	250.000	259.374	126259.77	0.3173	P	0.1
6	☐	500.000	516.944	244109.23	0.6321	P	0.1
7	☐	1000.000	1021.733	469415.85	1.2491	P	0.3
8	☐	2000.000	1983.664	927376.20	2.4248	P	0.3
9	☐			3217.08	0.0080	P	1.7

$$y = 0.0012 * x + 3.3661E-004$$

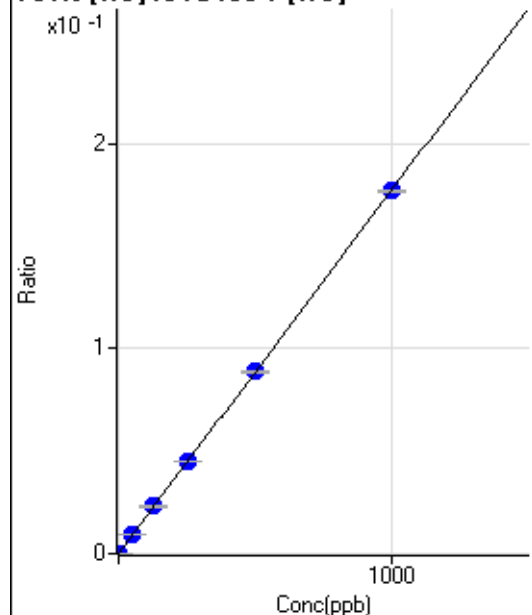
$$R = 0.9999$$

$$DL = 0.11$$

$$BEC = 0.2754$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	8.02	0.0000	P	70.4
2	☐	0.100					
3	☐	1.000	1.031	402.48	0.0002	P	5.9
4	☐	50.000	51.483	19383.96	0.0091	P	0.6
5	☐	125.000	129.657	46208.22	0.0230	P	0.7
6	☐	250.000	252.452	88744.91	0.0447	P	0.4
7	☐	500.000	500.730	172928.83	0.0887	P	0.3
8	☐	1000.000	998.366	349317.07	0.1769	P	0.8
9	☐			161.11	0.0001	P	4.8

$$y = 1.7718\text{E-}004 * x + 3.7576\text{E-}006$$

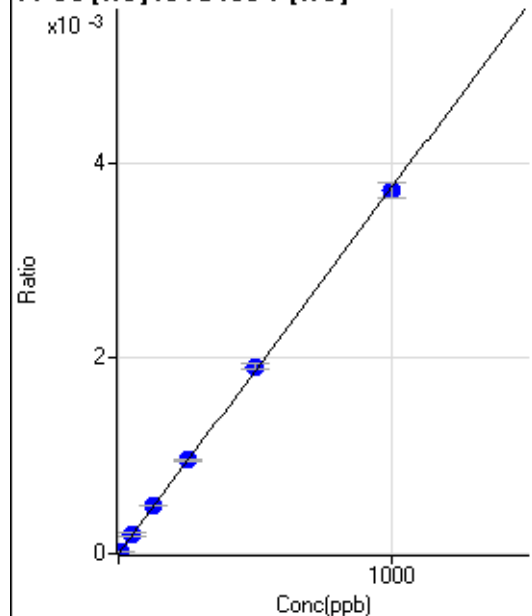
$$R = 1.0000$$

$$DL = 0.04479$$

$$BEC = 0.02121$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	4.402	35.55	0.0000	P	19.8
4	☐	50.000	50.891	404.46	0.0002	P	19.1
5	☐	125.000	130.828	984.50	0.0005	P	3.1
6	☐	250.000	256.413	1903.50	0.0010	P	1.8
7	☐	500.000	512.039	3733.88	0.0019	P	3.9
8	☐	1000.000	991.607	7328.63	0.0037	P	4.1
9	☐			3.33	0.0000	P	99.6

$$y = 3.7417\text{E-}006 * x + 0.0000\text{E+}000$$

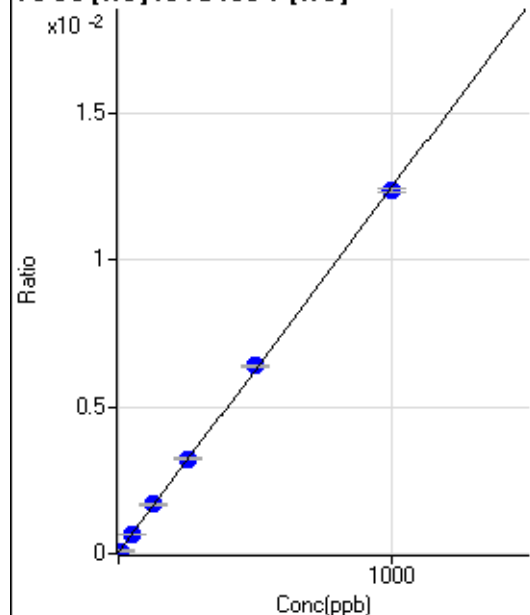
$$R = 0.9999$$

$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	103.09	0.0000	P	21.6
2	☐	0.500					
3	☐	5.000	3.887	208.65	0.0001	P	3.5
4	☐	50.000	50.823	1443.30	0.0007	P	1.5
5	☐	125.000	132.482	3405.37	0.0017	P	2.8
6	☐	250.000	256.340	6410.73	0.0032	P	0.8
7	☐	500.000	512.533	12498.67	0.0064	P	1.1
8	☐	1000.000	991.178	24402.11	0.0124	P	1.0
9	☐			99.38	0.0000	P	16.5

$$y = 1.2417\text{E-}005 * x + 4.8364\text{E-}005$$

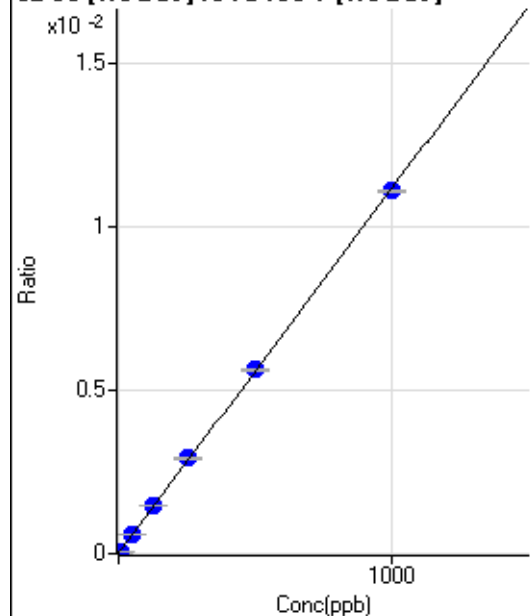
$$R = 0.9998$$

$$DL = 2.528$$

$$BEC = 3.895$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	116.54	0.0000	P	28.6
2	☐	0.500					
3	☐	5.000	5.656	874.67	0.0001	P	4.1
4	☐	50.000	52.334	7218.97	0.0006	P	1.2
5	☐	125.000	132.218	17612.28	0.0015	P	0.5
6	☐	250.000	260.793	34032.19	0.0029	P	0.5
7	☐	500.000	503.351	65590.99	0.0056	P	0.5
8	☐	1000.000	994.604	128159.96	0.0111	P	0.6
9	☐			276.22	0.0000	P	20.3

$$y = 1.1168\text{E-}005 * x + 9.5006\text{E-}006$$

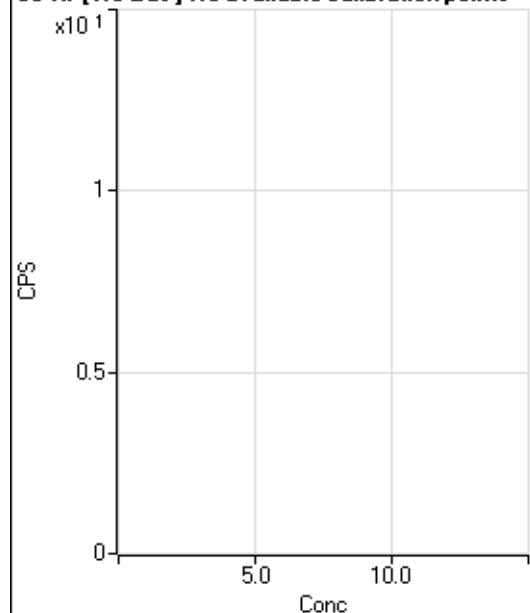
$$R = 0.9999$$

$$DL = 0.7296$$

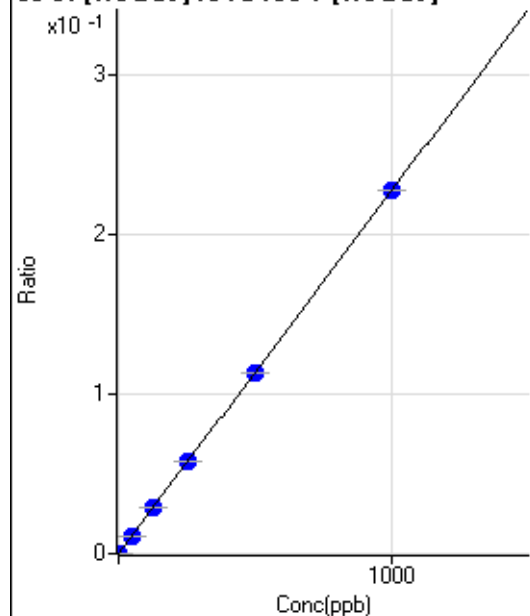
$$BEC = 0.8507$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			515.57		P	8.8
2	☐						
3	☐			534.46		P	7.2
4	☐			463.35		P	3.3
5	☐			475.57		P	5.1
6	☐			520.02		P	7.8
7	☐			466.68		P	11.8
8	☐			510.02		P	9.1
9	☐			526.69		P	4.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	880.63	0.0001	P	11.9
2	☐	0.100					
3	☐	1.000	0.955	3481.13	0.0003	P	6.1
4	☐	50.000	49.546	137921.54	0.0113	P	1.6
5	☐	125.000	127.280	344139.16	0.0290	P	1.2
6	☐	250.000	252.830	670986.21	0.0576	P	0.4
7	☐	500.000	498.162	1321434.47	0.1134	P	0.4
8	☐	1000.000	999.949	2624287.41	0.2276	P	0.1
9	☐			88335.84	0.0076	P	1.5

$$y = 2.2757\text{E-}004 * x + 7.1861\text{E-}005$$

$$R = 1.0000$$

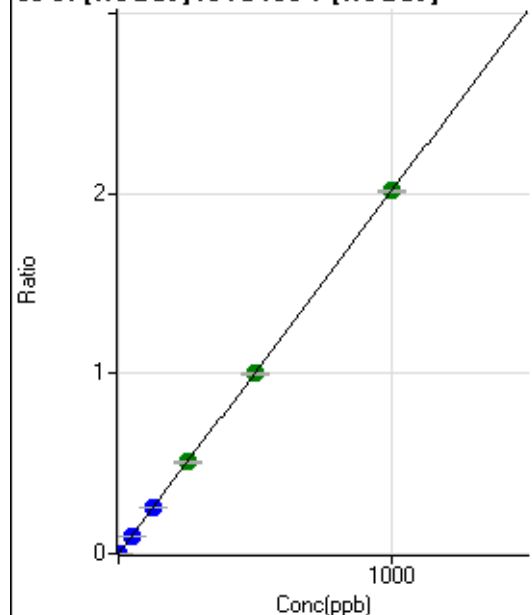
$$DL = 0.1125$$

$$BEC = 0.3158$$

Weight: <None>

Min Conc: 0

88 Sr [NoGas] ISTD:89 Y [NoGas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	163.89	0.0000	P	12.8
2	☐	0.100					
3	☐	1.000	0.948	23172.37	0.0019	P	1.1
4	☐	50.000	49.639	1216547.54	0.1001	P	0.9
5	☐	125.000	127.612	3049316.41	0.2573	P	0.4
6	☐	250.000	252.400	5926947.01	0.5089	A	0.5
7	☐	500.000	496.802	11667298.00	1.0016	A	0.6
8	☐	1000.000	1000.691	23258505.03	2.0175	A	0.4
9	☐			781156.62	0.0676	P	0.4

$$y = 0.0020 * x + 1.3369E-005$$

$$R = 1.0000$$

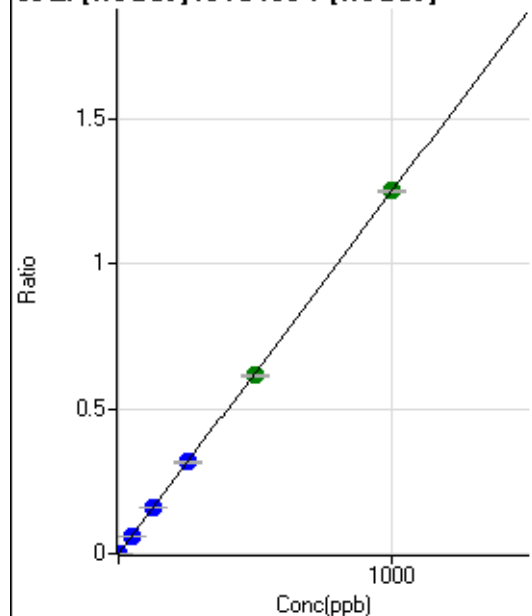
$$DL = 0.002556$$

$$BEC = 0.006631$$

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	761.17	0.0001	P	17.3
2	☐	0.100					
3	☐	1.000	0.950	15014.03	0.0012	P	0.8
4	☐	50.000	48.897	741724.42	0.0610	P	0.3
5	☐	125.000	125.359	1853067.38	0.1564	P	0.7
6	☐	250.000	252.481	3666978.12	0.3148	P	0.1
7	☐	500.000	492.944	7159604.24	0.6146	A	0.8
8	☐	1000.000	1002.918	14415640.77	1.2504	A	0.3
9	☐			4228.60	0.0004	P	3.0

$$y = 0.0012 * x + 6.2096E-005$$

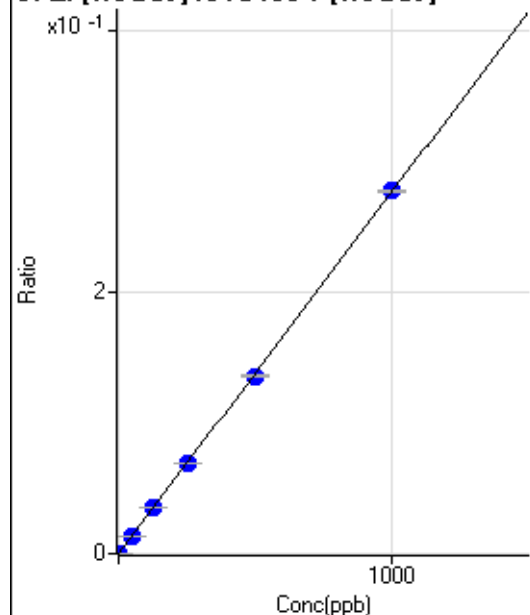
$$R = 1.0000$$

$$DL = 0.02588$$

$$BEC = 0.04981$$

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	175.01	0.0000	P	4.3
2	☐	0.100					
3	☐	1.000	0.923	3239.41	0.0003	P	4.9
4	☐	50.000	49.149	165229.03	0.0136	P	1.3
5	☐	125.000	125.596	411450.82	0.0347	P	0.2
6	☐	250.000	251.667	810070.60	0.0695	P	0.8
7	☐	500.000	490.616	1579217.68	0.1356	P	0.9
8	☐	1000.000	1004.243	3199015.41	0.2775	P	0.3
9	☐			936.18	0.0001	P	2.7

$$y = 2.7630E-004 * x + 1.4274E-005$$

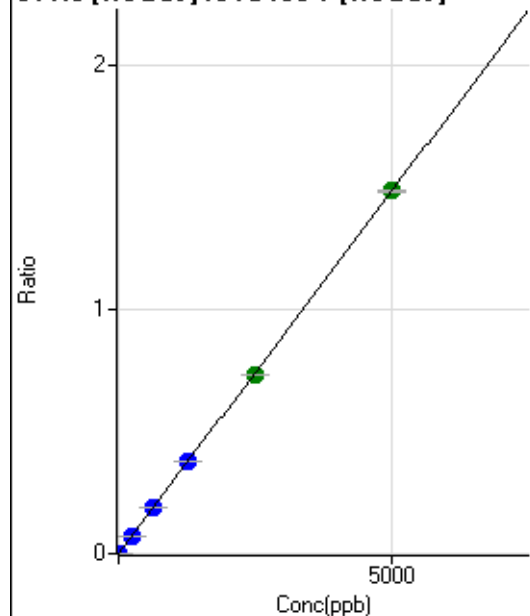
$$R = 0.9999$$

$$DL = 0.006639$$

$$BEC = 0.05166$$

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	277.79	0.0000	P	29.4
2	☐	0.500					
3	☐	5.000	4.672	16944.01	0.0014	P	2.0
4	☐	250.000	245.607	885217.60	0.0728	P	0.7
5	☐	625.000	633.348	2225424.98	0.1878	P	0.3
6	☐	1250.000	1273.177	4396185.04	0.3774	P	0.6
7	☐	2500.000	2471.132	8533342.47	0.7326	A	0.7
8	☐	5000.000	5007.816	17114513.41	1.4845	A	0.3
9	☐			18089.88	0.0016	P	2.6

$$y = 2.9644E-004 * x + 2.2649E-005$$

$$R = 1.0000$$

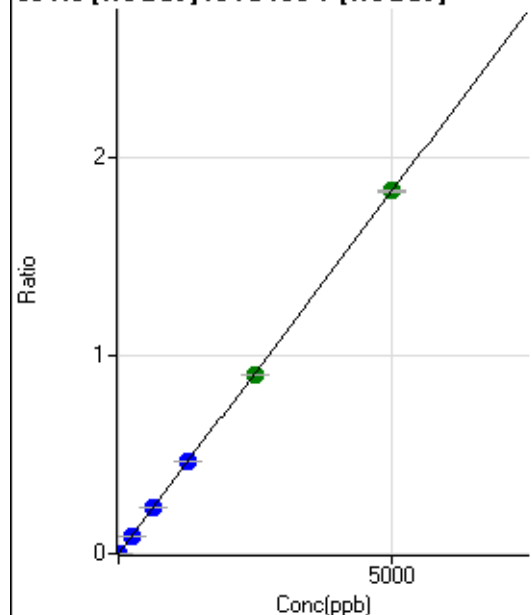
$$DL = 0.06735$$

$$BEC = 0.0764$$

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	30.56	0.0000	P	15.5
2	☐	0.500					
3	☐	5.000	4.791	21141.39	0.0018	P	2.2
4	☐	250.000	245.703	1093344.57	0.0900	P	0.9
5	☐	625.000	630.628	2736212.39	0.2309	P	0.4
6	☐	1250.000	1271.214	5420424.60	0.4654	P	0.5
7	☐	2500.000	2467.566	10522853.53	0.9034	A	0.7
8	☐	5000.000	5010.425	21146406.03	1.8343	A	0.4
9	☐			29294.65	0.0025	P	1.0

$$y = 3.6609\text{E-}004 * x + 2.4917\text{E-}006$$

$$R = 1.0000$$

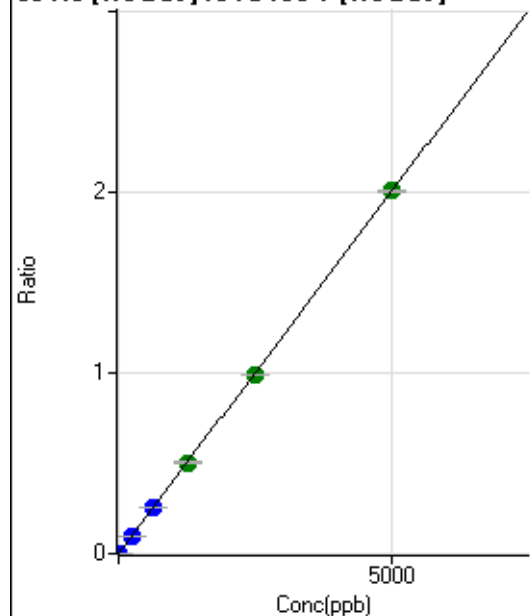
$$DL = 0.00316$$

$$BEC = 0.006806$$

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	66.67	0.0000	P	33.0
2	☐	0.500					
3	☐	5.000	4.659	22510.24	0.0019	P	3.7
4	☐	250.000	246.937	1201445.60	0.0988	P	0.5
5	☐	625.000	630.855	2992799.05	0.2525	P	0.4
6	☐	1250.000	1259.542	5872145.88	0.5042	A	0.3
7	☐	2500.000	2474.643	11538469.44	0.9905	A	0.5
8	☐	5000.000	5009.715	23117559.37	2.0053	A	0.6
9	☐			34448.17	0.0030	P	1.0

$$y = 4.0027\text{E-}004 * x + 5.4371\text{E-}006$$

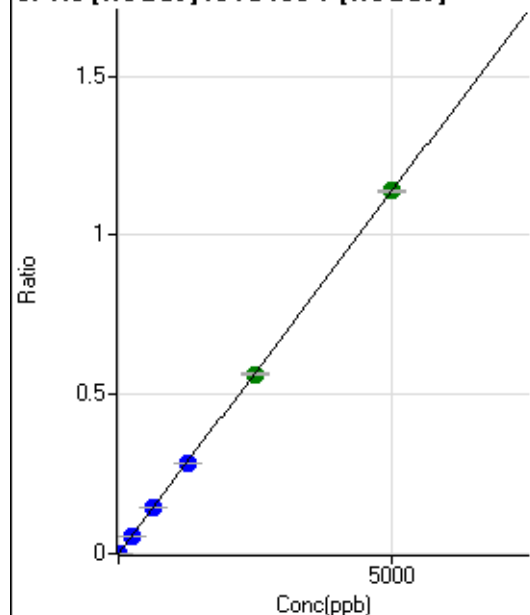
$$R = 1.0000$$

$$DL = 0.01347$$

$$BEC = 0.01358$$

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	52.78	0.0000	P	50.2
2	☐	0.500					
3	☐	5.000	4.638	12756.21	0.0011	P	4.8
4	☐	250.000	244.906	677484.85	0.0557	P	0.7
5	☐	625.000	626.771	1690544.77	0.1426	P	0.3
6	☐	1250.000	1250.702	3315157.91	0.2846	P	0.6
7	☐	2500.000	2481.130	6577343.38	0.5646	A	0.5
8	☐	5000.000	5009.293	13142363.23	1.1400	A	0.6
9	☐			17897.95	0.0015	P	3.0

$$y = 2.2757\text{E-}004 * x + 4.2981\text{E-}006$$

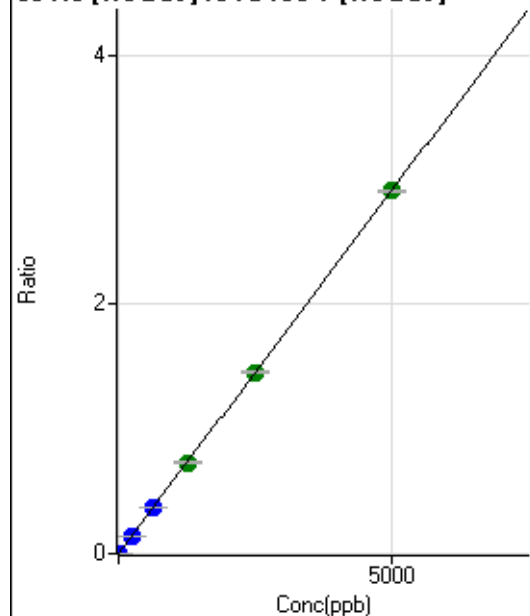
$$R = 1.0000$$

$$DL = 0.02844$$

$$BEC = 0.01889$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	43.6
2	☐	0.500					
3	☐	5.000	4.551	31922.87	0.0027	P	1.4
4	☐	250.000	246.581	1745214.41	0.1436	P	0.5
5	☐	625.000	636.636	4393573.27	0.3707	P	0.2
6	☐	1250.000	1257.825	8530599.76	0.7324	A	0.3
7	☐	2500.000	2493.670	16914260.97	1.4520	A	0.9
8	☐	5000.000	4999.926	33564299.36	2.9114	A	0.6
9	☐			45687.97	0.0040	P	0.8

$$y = 5.8229\text{E-}004 * x + 1.8144\text{E-}006$$

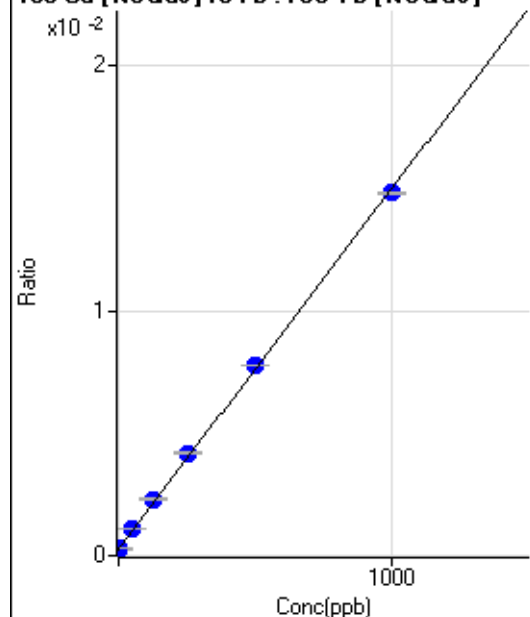
$$R = 1.0000$$

$$DL = 0.004079$$

$$BEC = 0.003116$$

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	4106.32	0.0003	P	4.3
2	☐	0.100					
3	☐	1.000	1.698	4373.08	0.0003	P	3.2
4	☐	50.000	55.785	16465.76	0.0011	P	1.5
5	☐	125.000	138.977	34342.54	0.0023	P	1.8
6	☐	250.000	266.258	62700.74	0.0042	P	2.0
7	☐	500.000	509.602	118204.28	0.0078	P	0.7
8	☐	1000.000	989.097	224220.77	0.0148	P	0.7
9	☐			3884.04	0.0003	P	7.8

$$y = 1.4695E-005 * x + 2.7158E-004$$

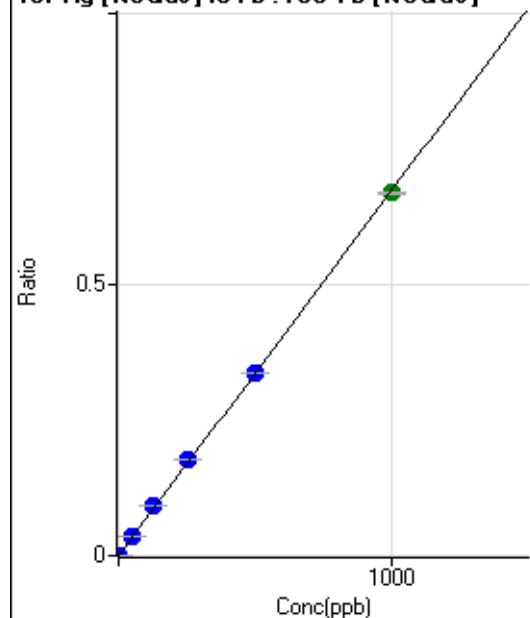
$$R = 0.9997$$

$$DL = 2.401$$

$$BEC = 18.48$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	188.90	0.0000	P	29.3
2	☐	0.100					
3	☐	1.000	1.016	10270.80	0.0007	P	1.8
4	☐	50.000	53.225	540636.48	0.0358	P	0.3
5	☐	125.000	134.957	1348011.99	0.0908	P	0.8
6	☐	250.000	262.058	2643008.81	0.1764	P	0.4
7	☐	500.000	502.955	5155876.85	0.3385	P	0.0
8	☐	1000.000	994.102	10131247.45	0.6690	A	0.6
9	☐			1094.53	0.0001	P	9.2

$$y = 6.7298E-004 * x + 1.2490E-005$$

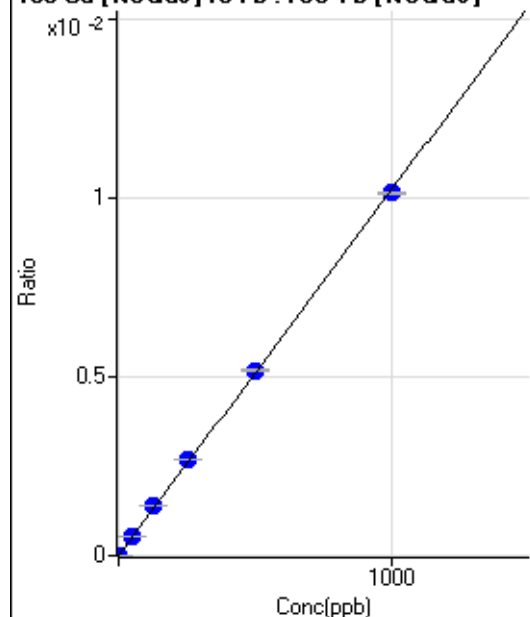
$$R = 0.9999$$

$$DL = 0.01634$$

$$BEC = 0.01856$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9.72	0.0000	P	64.5
2	☐	0.100					
3	☐	1.000	1.042	166.67	0.0000	P	12.3
4	☐	50.000	51.746	7998.26	0.0005	P	2.2
5	☐	125.000	137.027	20815.60	0.0014	P	2.2
6	☐	250.000	264.067	40498.25	0.0027	P	0.7
7	☐	500.000	505.763	78831.57	0.0052	P	1.0
8	☐	1000.000	992.011	153715.48	0.0102	P	0.3
9	☐			40.28	0.0000	P	11.5

$$y = 1.0232\text{E-}005 * x + 6.4005\text{E-}007$$

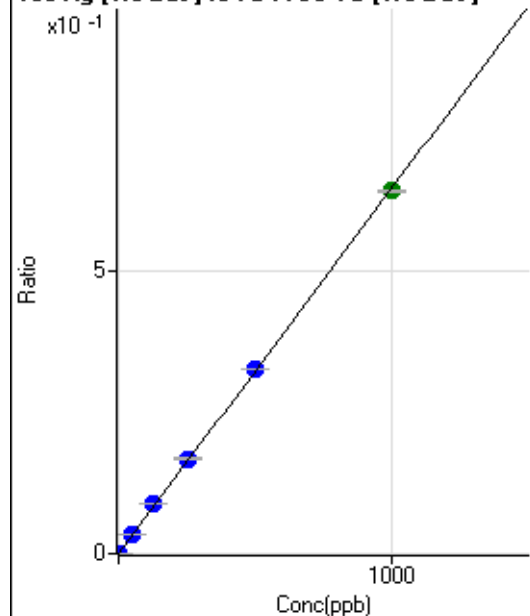
$$R = 0.9998$$

$$DL = 0.121$$

$$BEC = 0.06256$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	191.68	0.0000	P	47.4
2	☐	0.100					
3	☐	1.000	1.041	10090.20	0.0007	P	3.5
4	☐	50.000	53.434	520494.38	0.0345	P	0.6
5	☐	125.000	134.800	1291239.02	0.0870	P	0.6
6	☐	250.000	260.649	2520963.19	0.1682	P	0.4
7	☐	500.000	504.256	4957200.50	0.3254	P	0.0
8	☐	1000.000	993.813	9712934.68	0.6414	A	0.5
9	☐			947.29	0.0001	P	8.2

$$y = 6.4538\text{E-}004 * x + 1.2633\text{E-}005$$

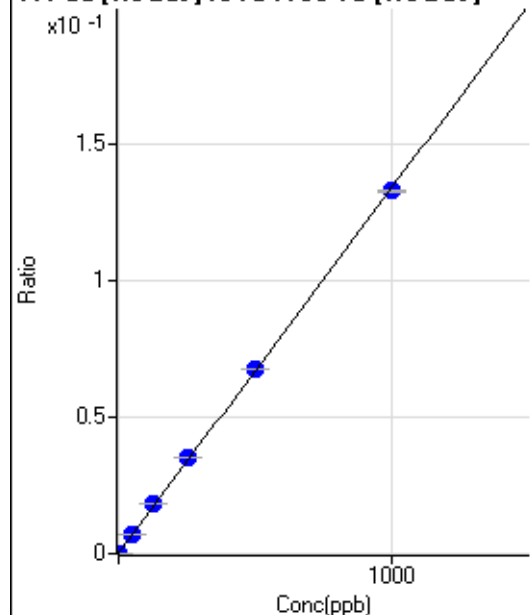
$$R = 0.9999$$

$$DL = 0.02782$$

$$BEC = 0.01957$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2049.14	0.0001	P	4.4
2	☐	0.100					
3	☐	1.000	1.015	3997.82	0.0003	P	1.1
4	☐	50.000	54.018	110910.02	0.0074	P	0.5
5	☐	125.000	135.857	271308.22	0.0183	P	0.9
6	☐	250.000	261.929	526313.36	0.0351	P	0.5
7	☐	500.000	505.777	1031103.38	0.0677	P	0.6
8	☐	1000.000	992.571	2009769.51	0.1327	P	0.4
9	☐			2174.95	0.0001	P	6.4

$$y = 1.3357\text{E-}004 * x + 1.3552\text{E-}004$$

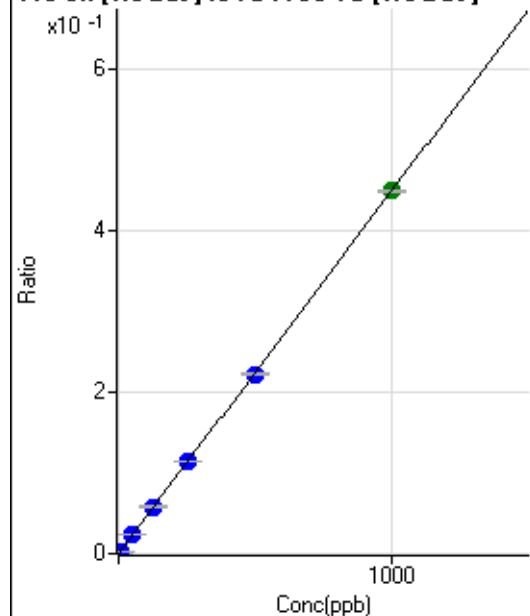
$$R = 0.9999$$

$$DL = 0.1344$$

$$BEC = 1.015$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1364.02	0.0001	P	4.5
2	☐	0.500					
3	☐	5.000	4.803	33061.96	0.0022	P	0.7
4	☐	50.000	50.852	345116.32	0.0229	P	0.6
5	☐	125.000	129.517	862479.05	0.0581	P	1.1
6	☐	250.000	253.721	1704826.08	0.1138	P	0.0
7	☐	500.000	495.609	3383646.69	0.2221	P	0.3
8	☐	1000.000	1000.659	6790728.28	0.4484	A	0.5
9	☐			11619.10	0.0008	P	3.2

$$y = 4.4804\text{E-}004 * x + 9.0174\text{E-}005$$

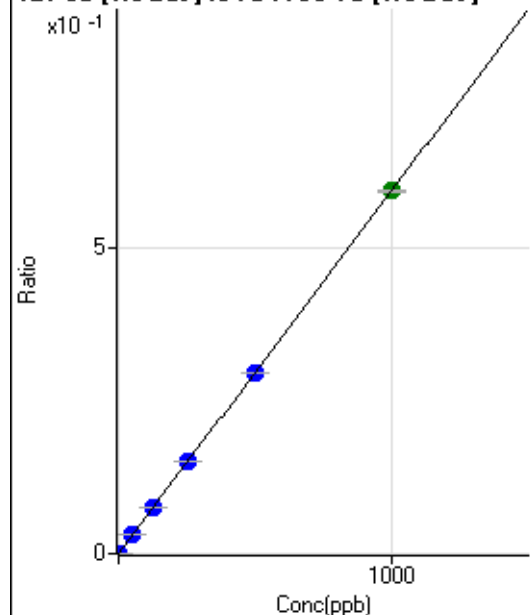
$$R = 1.0000$$

$$DL = 0.02699$$

$$BEC = 0.2013$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	22.6
2	☐	0.200					
3	☐	2.000	1.882	16563.21	0.0011	P	1.1
4	☐	50.000	50.618	454375.28	0.0301	P	0.7
5	☐	125.000	128.636	1135690.80	0.0765	P	0.4
6	☐	250.000	253.612	2260867.78	0.1509	P	0.3
7	☐	500.000	496.836	4501967.20	0.2956	P	0.3
8	☐	1000.000	1000.194	9010259.66	0.5950	A	0.6
9	☐			15156.02	0.0010	P	6.8

$$y = 5.9488\text{E-}004 * x + 3.6714\text{E-}006$$

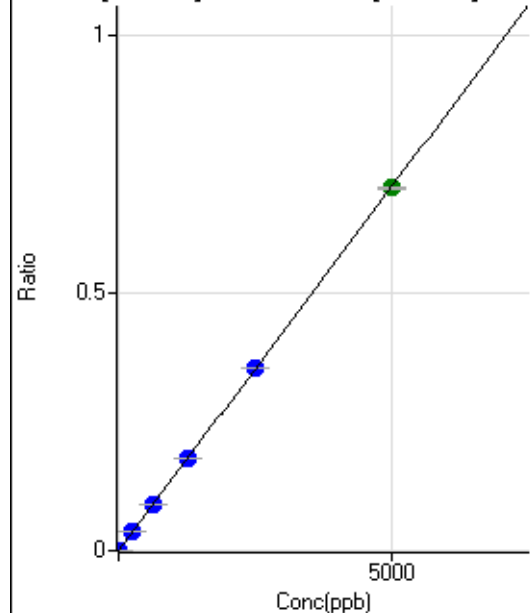
$$R = 1.0000$$

$$DL = 0.004176$$

$$BEC = 0.006172$$

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	44.45	0.0000	P	28.7
2	☐	1.000					
3	☐	10.000	9.316	19436.59	0.0013	P	1.7
4	☐	250.000	253.271	539463.75	0.0358	P	0.2
5	☐	625.000	644.042	1349211.45	0.0909	P	0.6
6	☐	1250.000	1271.783	2690289.51	0.1795	P	0.4
7	☐	2500.000	2507.830	5392190.83	0.3540	P	0.2
8	☐	5000.000	4988.097	10662632.10	0.7041	A	0.8
9	☐			3242.19	0.0002	P	4.6

$$y = 1.4116\text{E-}004 * x + 2.9386\text{E-}006$$

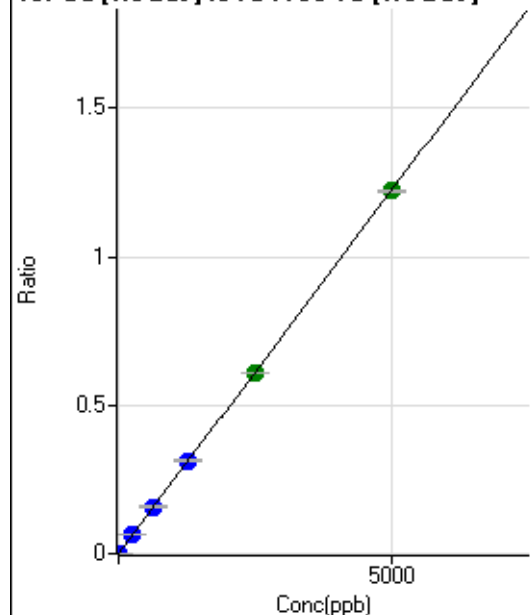
$$R = 1.0000$$

$$DL = 0.0179$$

$$BEC = 0.02082$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	52.78	0.0000	P	108.
2	☐	1.000					
3	☐	10.000	9.638	34816.80	0.0024	P	1.8
4	☐	250.000	254.954	941053.53	0.0624	P	0.5
5	☐	625.000	646.556	2347207.89	0.1582	P	1.0
6	☐	1250.000	1281.387	4697395.94	0.3135	P	0.6
7	☐	2500.000	2492.381	9286918.70	0.6097	A	0.3
8	☐	5000.000	4993.021	18496337.74	1.2214	A	0.6
9	☐			5654.17	0.0004	P	8.7

$$y = 2.4462\text{E-}004 * x + 3.5062\text{E-}006$$

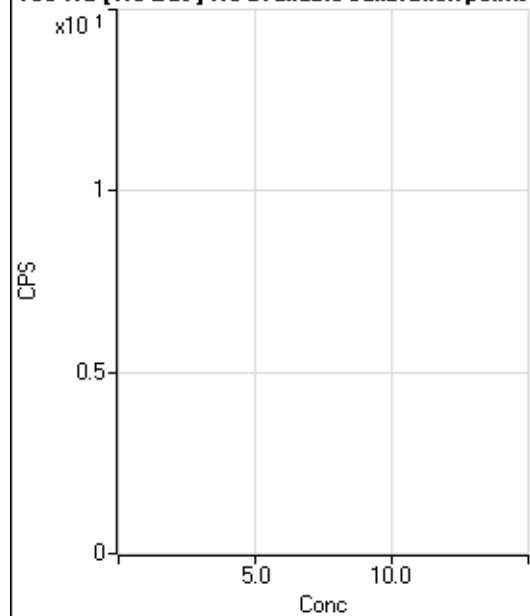
$$R = 1.0000$$

$$DL = 0.04655$$

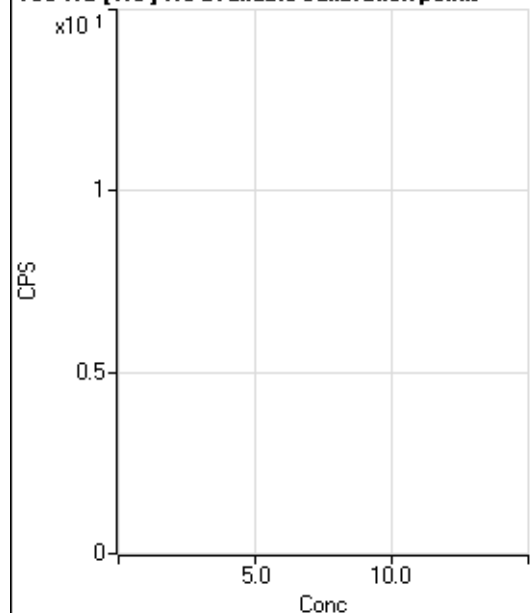
$$BEC = 0.01433$$

Weight: <None>

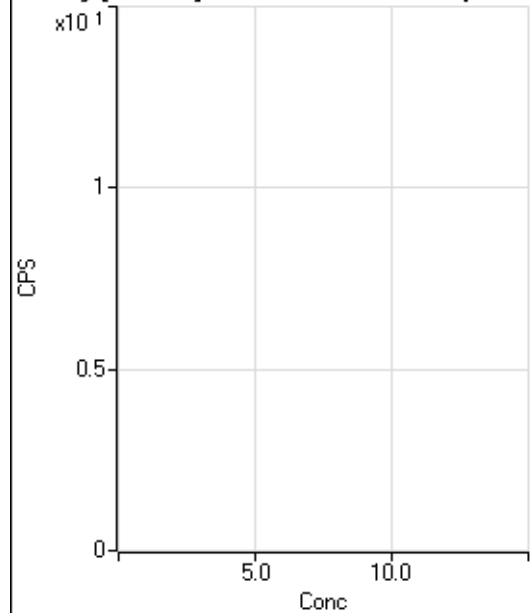
Min Conc: 0

150 Nd [No Gas] No available calibration points

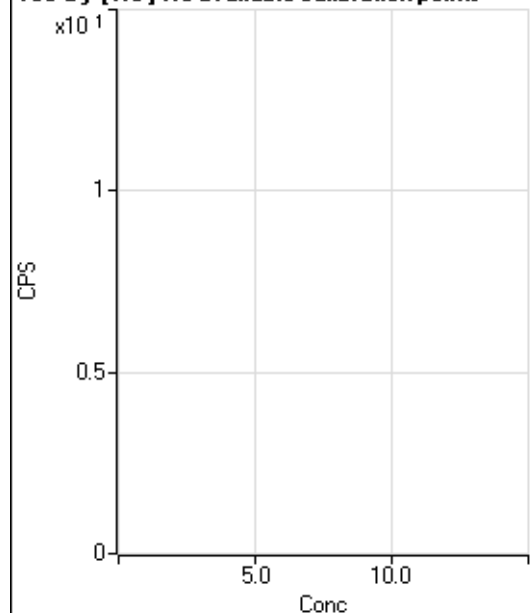
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			13.33		P	50.0
4	☐			31.11		P	65.5
5	☐			91.11		P	41.6
6	☐			208.90		P	20.5
7	☐			322.24		P	17.4
8	☐			695.60		P	3.9
9	☐			117.78		P	27.9

150 Nd [He] No available calibration points

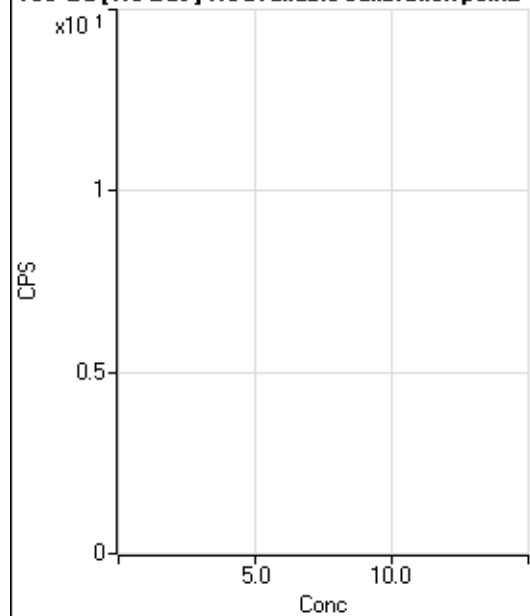
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			5.55		P	124.
5	☐			13.34		P	43.3
6	☐			17.78		P	92.5
7	☐			42.22		P	12.1
8	☐			82.23		P	14.2
9	☐			45.56		P	22.4

156 Dy [No Gas] No available calibration points

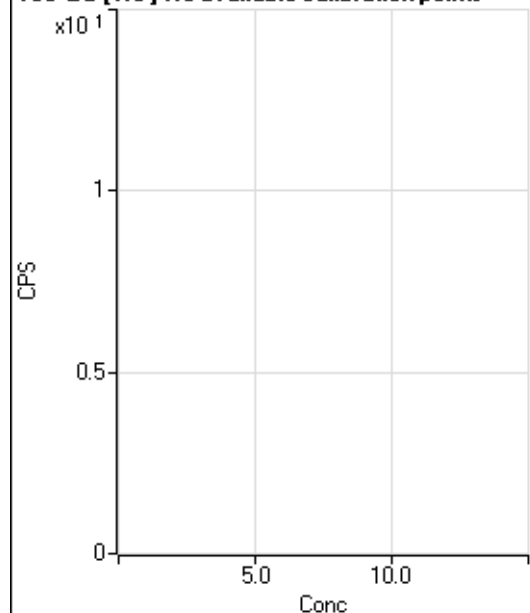
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	100.
2	☐						
3	☐			11.11		P	86.6
4	☐			16.66		P	86.6
5	☐			38.89		P	24.7
6	☐			50.00		P	0.0
7	☐			66.67		P	33.1
8	☐			161.12		P	35.2
9	☐			108.34		P	63.0

156 Dy [He] No available calibration points

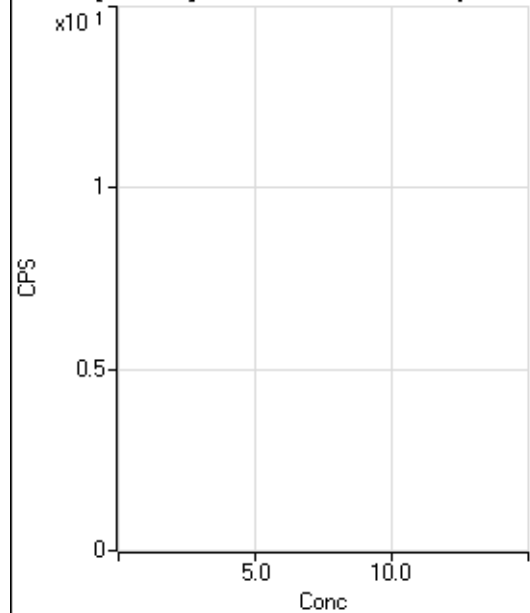
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			2.22		P	173.
4	☐			8.89		P	57.3
5	☐			13.33		P	66.2
6	☐			34.44		P	24.3
7	☐			61.11		P	12.6
8	☐			124.45		P	14.8
9	☐			33.33		P	20.0

160 Gd [No Gas] No available calibration poin_

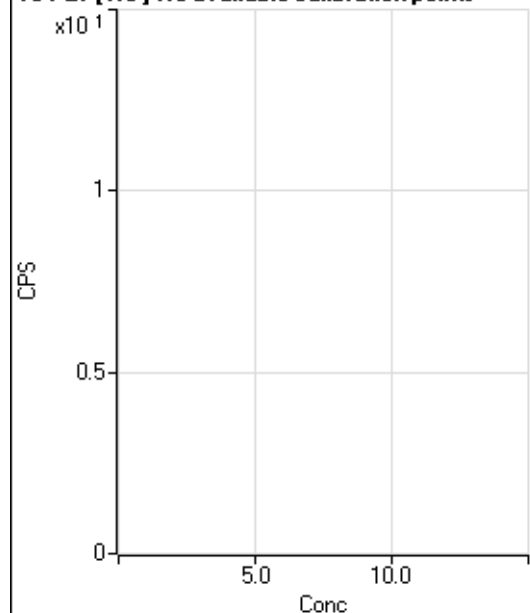
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83.34		P	43.6
2	☐						
3	☐			100.00		P	22.0
4	☐			94.45		P	22.2
5	☐			88.89		P	32.9
6	☐			125.01		P	43.7
7	☐			88.89		P	51.6
8	☐			147.23		P	48.1
9	☐			133.34		P	37.5

160 Gd [He] No available calibration points

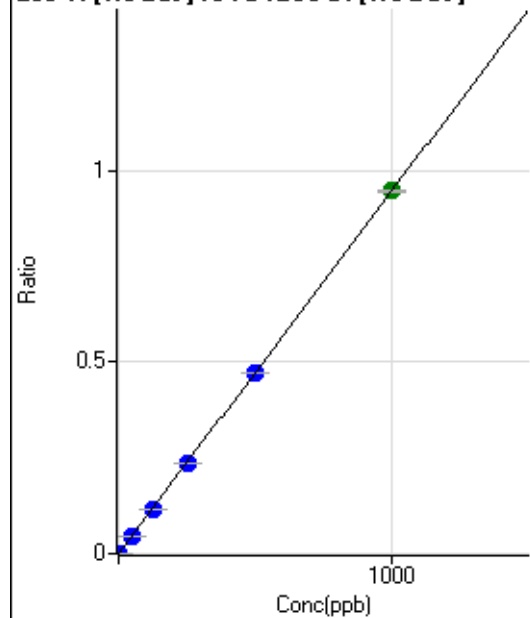
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			173.34		P	15.7
2	☐						
3	☐			178.89		P	11.8
4	☐			166.67		P	20.3
5	☐			175.56		P	12.4
6	☐			187.78		P	8.4
7	☐			188.90		P	16.7
8	☐			198.89		P	5.4
9	☐			177.78		P	3.9

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	32.7
2	☐						
3	☐			61.12		P	61.5
4	☐			69.45		P	36.7
5	☐			58.33		P	37.8
6	☐			58.34		P	14.3
7	☐			80.56		P	31.6
8	☐			97.23		P	30.1
9	☐			52.78		P	32.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			21.11		P	32.9
2	☐						
3	☐			35.56		P	5.4
4	☐			23.33		P	14.3
5	☐			28.89		P	35.2
6	☐			20.00		P	28.9
7	☐			28.89		P	48.0
8	☐			32.22		P	21.5
9	☐			31.11		P	60.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	233.35	0.0000	P	17.1
2	☐	0.100					
3	☐	1.000	0.942	8113.95	0.0009	P	1.2
4	☐	50.000	48.377	406158.34	0.0457	P	0.6
5	☐	125.000	124.509	1039454.99	0.1177	P	0.1
6	☐	250.000	248.584	2073755.80	0.2349	P	1.0
7	☐	500.000	498.169	4206754.39	0.4708	P	0.3
8	☐	1000.000	1001.412	8267077.79	0.9463	A	0.2
9	☐			3053.27	0.0004	P	3.8

$$y = 9.4492\text{E-}004 * x + 2.5466\text{E-}005$$

$$R = 1.0000$$

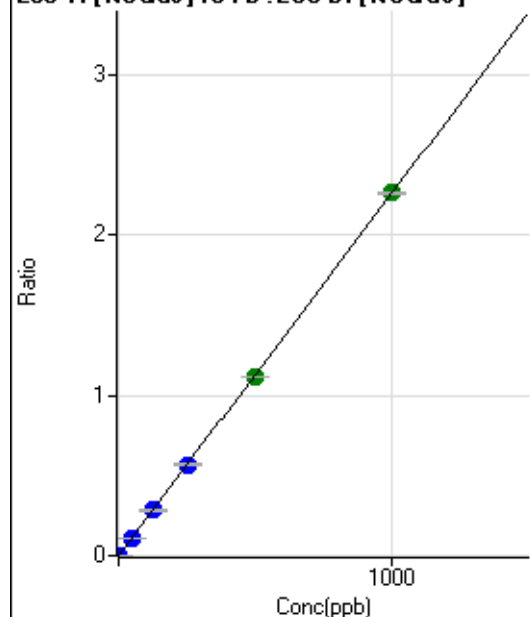
$$DL = 0.01379$$

$$BEC = 0.02695$$

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	447.25	0.0000	P	5.4
2	☐	0.100					
3	☐	1.000	0.939	19223.13	0.0022	P	2.5
4	☐	50.000	48.610	975556.40	0.1099	P	0.5
5	☐	125.000	125.214	2498960.86	0.2829	P	0.7
6	☐	250.000	252.044	5026736.35	0.5694	P	0.3
7	☐	500.000	494.140	9975471.05	1.1163	A	0.6
8	☐	1000.000	1002.462	19784623.01	2.2646	A	0.5
9	☐			7163.34	0.0009	P	2.5

$$y = 0.0023 * x + 4.8763E-005$$

$$R = 1.0000$$

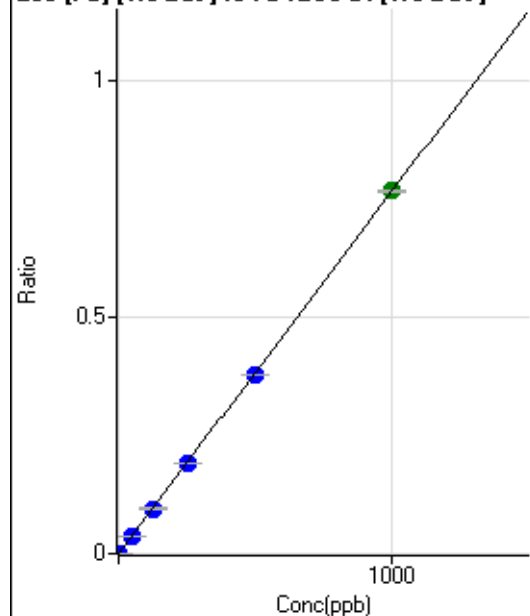
$$DL = 0.003521$$

$$BEC = 0.02159$$

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	290.75	0.0000	P	4.3
2	☐	0.100					
3	☐	1.000	0.936	6624.07	0.0007	P	1.9
4	☐	50.000	48.717	331259.92	0.0373	P	1.1
5	☐	125.000	124.870	844146.35	0.0956	P	1.0
6	☐	250.000	249.140	1682944.83	0.1906	P	0.5
7	☐	500.000	494.546	3381453.02	0.3784	P	0.2
8	☐	1000.000	1003.023	6704521.91	0.7674	A	0.8
9	☐			14319.28	0.0018	P	2.6

$$y = 7.6508E-004 * x + 3.1707E-005$$

$$R = 1.0000$$

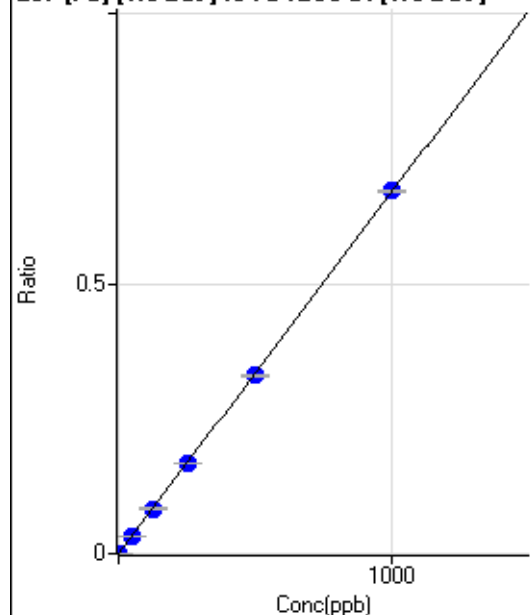
$$DL = 0.005401$$

$$BEC = 0.04144$$

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	235.20	0.0000	P	8.2
2	☐	0.100					
3	☐	1.000	0.909	5619.89	0.0006	P	2.0
4	☐	50.000	48.807	290491.77	0.0327	P	0.7
5	☐	125.000	124.430	736330.99	0.0834	P	1.0
6	☐	250.000	249.515	1475402.70	0.1671	P	1.2
7	☐	500.000	492.394	2947122.92	0.3298	P	0.3
8	☐	1000.000	1004.055	5874926.63	0.6725	P	0.3
9	☐			11905.70	0.0015	P	0.9

$$y = 6.6973E-004 * x + 2.5657E-005$$

$$R = 1.0000$$

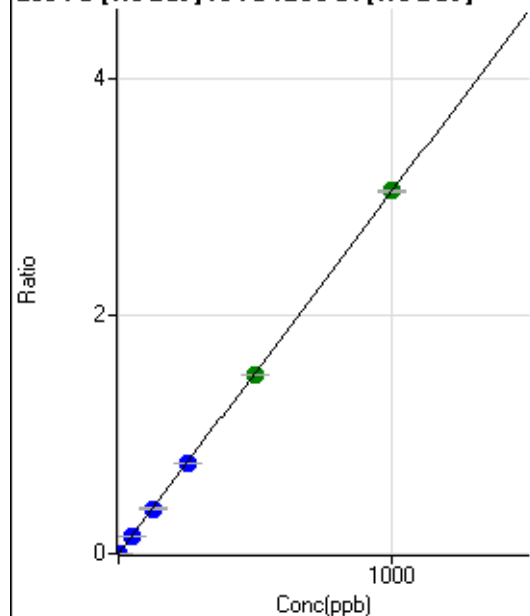
$$DL = 0.009441$$

$$BEC = 0.03831$$

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	1131.54	0.0001	P	9.6
2	☐	0.100					
3	☐	1.000	0.925	26055.31	0.0029	P	0.9
4	☐	50.000	48.732	1318858.72	0.1485	P	0.7
5	☐	125.000	124.789	3357697.97	0.3801	P	0.6
6	☐	250.000	250.070	6723440.64	0.7616	P	0.8
7	☐	500.000	493.833	13439396.70	1.5039	A	0.3
8	☐	1000.000	1003.156	26688695.50	3.0549	A	0.4
9	☐			55402.45	0.0069	P	1.5

$$y = 0.0030 * x + 1.2342E-004$$

$$R = 1.0000$$

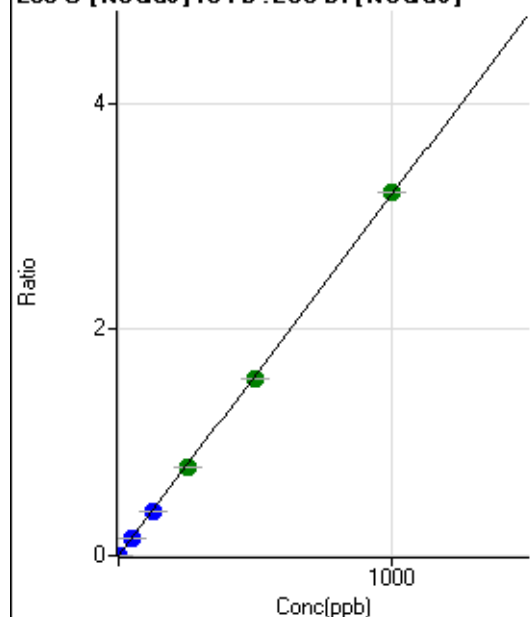
$$DL = 0.01167$$

$$BEC = 0.04053$$

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	19.45	0.0000	P	24.6
2	☐	0.100					
3	☐	1.000	0.875	24721.97	0.0028	P	1.2
4	☐	50.000	46.635	1319766.76	0.1486	P	0.6
5	☐	125.000	121.914	3431896.41	0.3885	P	0.2
6	☐	250.000	247.074	6950821.51	0.7874	A	0.4
7	☐	500.000	491.297	13991381.39	1.5657	A	0.4
8	☐	1000.000	1005.637	27997962.08	3.2048	A	0.2
9	☐			2153.07	0.0003	P	5.6

$$y = 0.0032 * x + 2.1203E-006$$

$$R = 0.9999$$

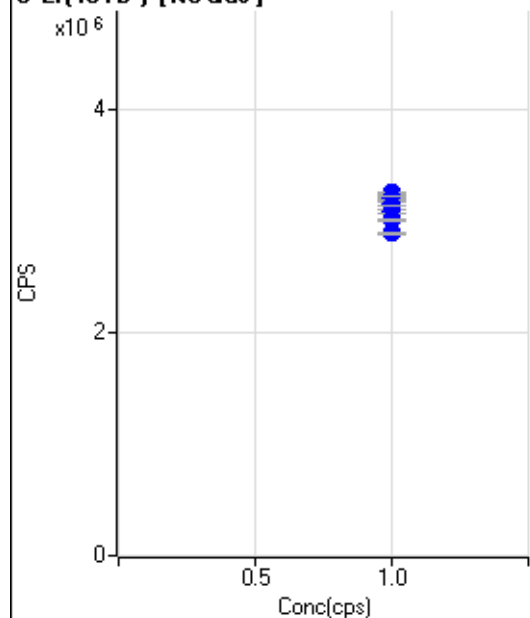
$$DL = 0.0004912$$

$$BEC = 0.0006653$$

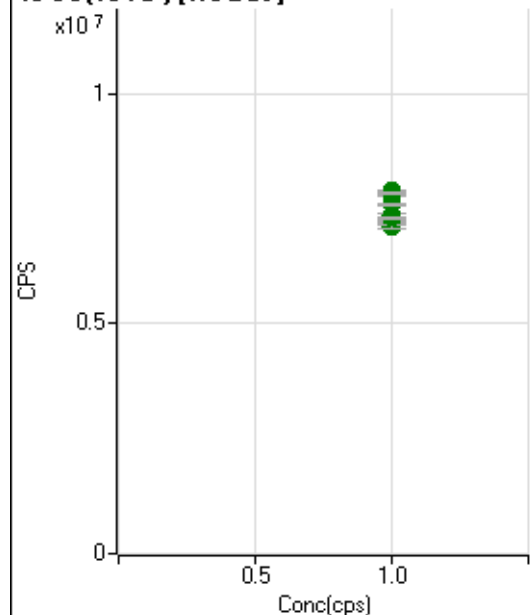
Weight: <None>

Min Conc: 0

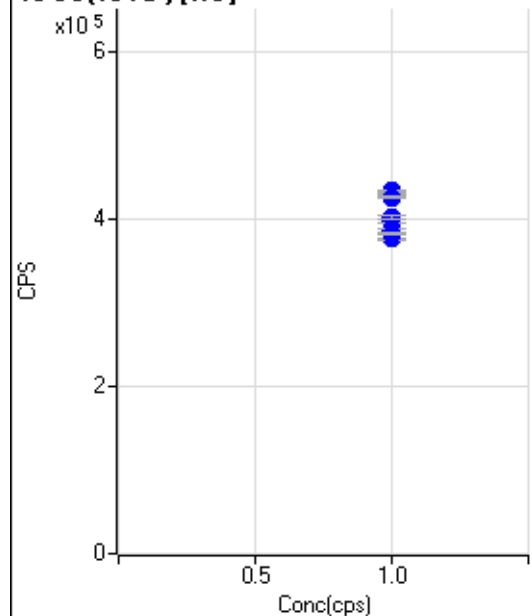
6 Li(ISTD) [No Gas]



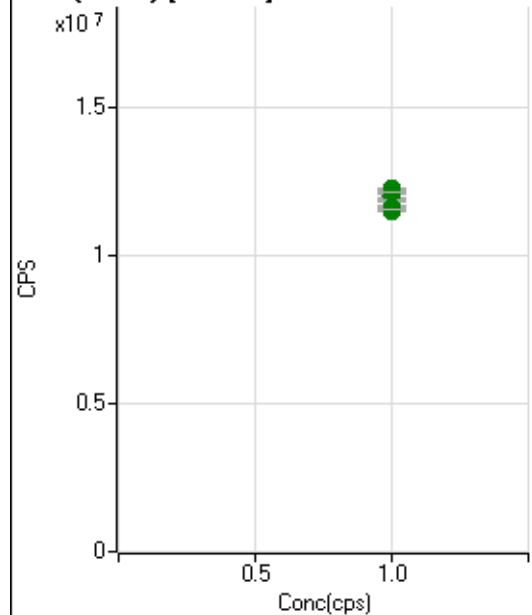
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3158235.61		P	0.9
2	☐	1.000					
3	☐	1.000		3087401.17		P	1.0
4	☐	1.000		3200302.07		P	0.7
5	☐	1.000		3252788.77		P	0.2
6	☐	1.000		3207413.46		P	0.7
7	☐	1.000		3139413.81		P	0.3
8	☐	1.000		3009859.29		P	0.3
9	☐	1.000		2891722.70		P	0.4

45 Sc(ISTD) [NoGas]

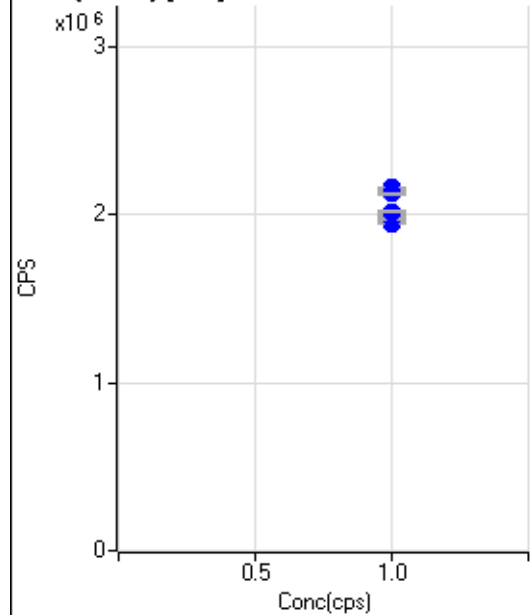
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7879869.45		A	0.8
2	☐	1.000					
3	☐	1.000		7782774.13		A	0.3
4	☐	1.000		7815142.62		A	0.5
5	☐	1.000		7580772.39		A	0.3
6	☐	1.000		7349659.88		A	0.9
7	☐	1.000		7197893.74		A	0.2
8	☐	1.000		7095391.30		A	1.1
9	☐	1.000		7293553.81		A	0.2

45 Sc(ISTD) [He]

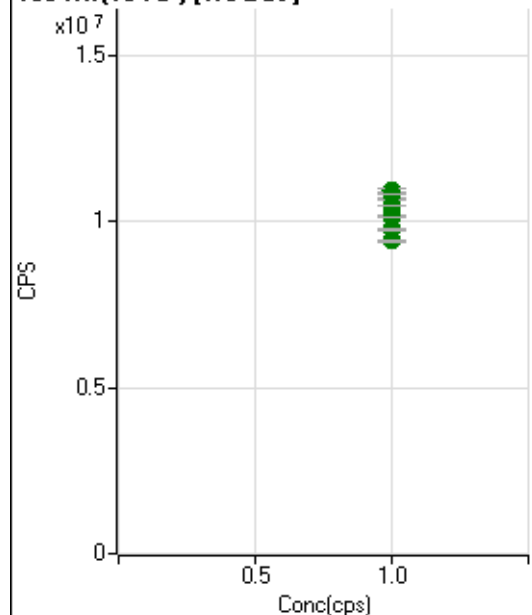
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		428887.39		P	0.6
2	☐	1.000					
3	☐	1.000		433610.34		P	0.2
4	☐	1.000		425525.47		P	0.7
5	☐	1.000		397865.15		P	0.8
6	☐	1.000		386158.10		P	0.9
7	☐	1.000		375806.64		P	0.5
8	☐	1.000		382464.29		P	0.7
9	☐	1.000		402776.70		P	0.9

89 Y (ISTD) [No Gas]

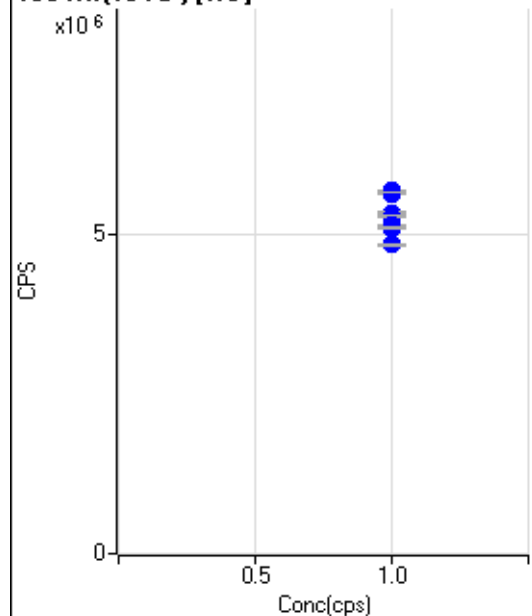
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12259453.01		A	0.5
2	☐	1.000					
3	☐	1.000		12038650.10		A	1.3
4	☐	1.000		12154617.18		A	0.3
5	☐	1.000		11851882.32		A	0.2
6	☐	1.000		11647228.30		A	0.3
7	☐	1.000		11648836.63		A	0.3
8	☐	1.000		11528600.38		A	0.2
9	☐	1.000		11550991.35		A	0.3

89 Y (ISTD) [He]

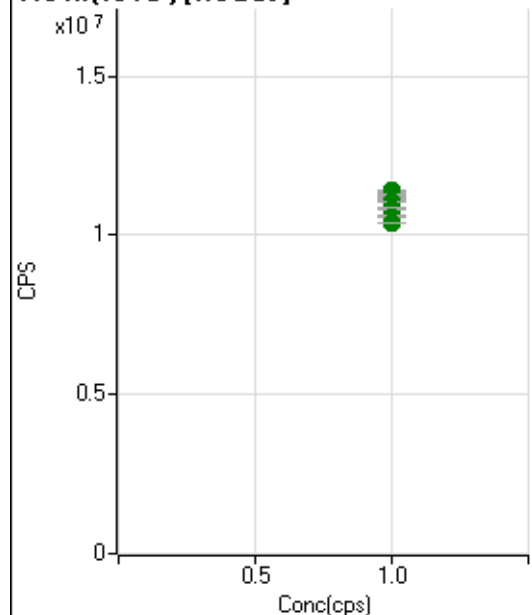
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2131609.83		P	0.4
2	☐	1.000					
3	☐	1.000		2159345.02		P	0.4
4	☐	1.000		2124142.83		P	0.3
5	☐	1.000		2011083.93		P	0.5
6	☐	1.000		1983867.66		P	1.1
7	☐	1.000		1949041.24		P	0.4
8	☐	1.000		1974774.76		P	0.8
9	☐	1.000		2019329.26		P	0.7

103Rh(ISTD) [NoGas]

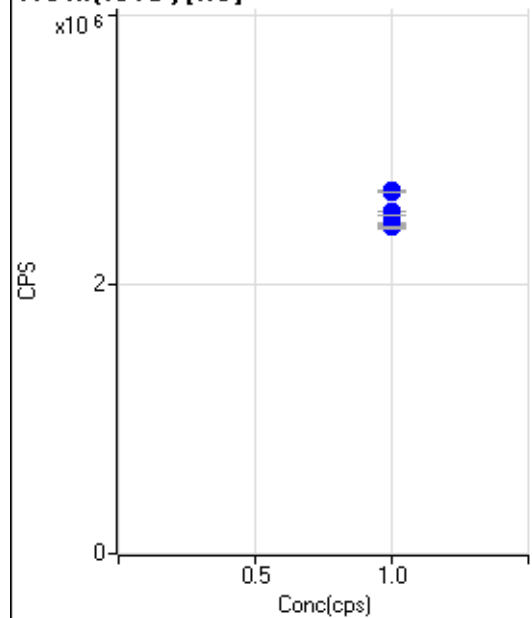
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10933796.86		A	1.0
2	☐	1.000					
3	☐	1.000		10704543.30		A	0.4
4	☐	1.000		10842709.71		A	0.2
5	☐	1.000		10492730.10		A	0.4
6	☐	1.000		10196060.04		A	0.3
7	☐	1.000		10142663.68		A	0.1
8	☐	1.000		9785737.54		A	0.6
9	☐	1.000		9425896.39		A	0.8

103Rh(ISTD) [He]

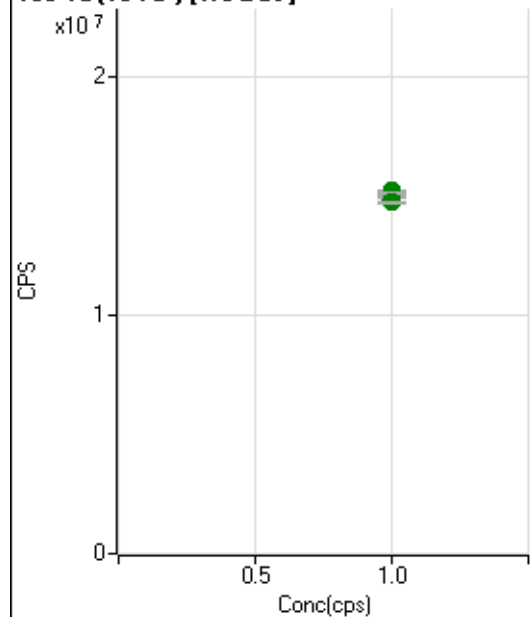
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5621438.59		P	0.3
2	☐	1.000					
3	☐	1.000		5669564.29		P	0.3
4	☐	1.000		5643524.99		P	0.3
5	☐	1.000		5333410.96		P	0.8
6	☐	1.000		5273590.37		P	0.9
7	☐	1.000		5129320.65		P	0.6
8	☐	1.000		5082213.57		P	0.7
9	☐	1.000		4826009.93		P	0.8

115 In(ISTD) [NoGas]

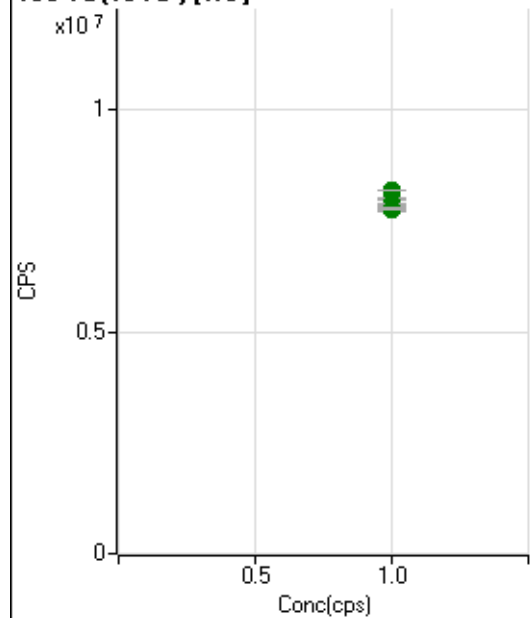
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11396672.06		A	0.5
2	☐	1.000					
3	☐	1.000		11150142.39		A	0.4
4	☐	1.000		11292896.43		A	0.6
5	☐	1.000		11055990.96		A	0.3
6	☐	1.000		10833708.67		A	0.1
7	☐	1.000		10834681.13		A	0.6
8	☐	1.000		10590078.00		A	0.5
9	☐	1.000		10384060.42		A	0.3

115 In(ISTD) [He]

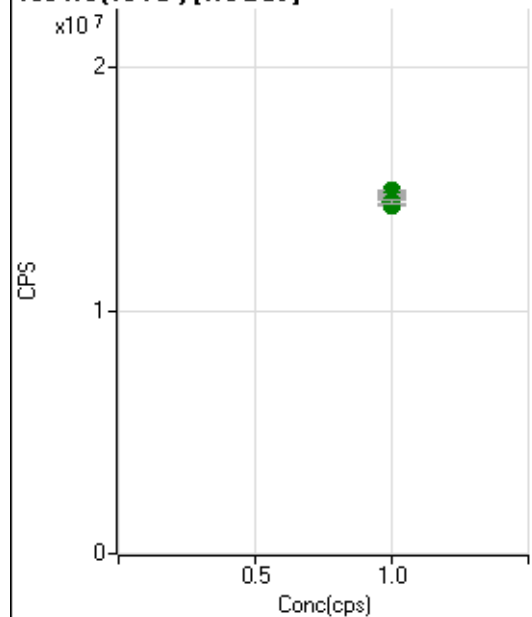
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2685814.37		P	0.3
2	☐	1.000					
3	☐	1.000		2697240.96		P	0.6
4	☐	1.000		2690299.68		P	0.3
5	☐	1.000		2541844.59		P	0.3
6	☐	1.000		2513143.82		P	0.3
7	☐	1.000		2450070.86		P	0.3
8	☐	1.000		2432392.83		P	0.4
9	☐	1.000		2425084.16		P	0.2

159 Tb(ISTD) [NoGas]

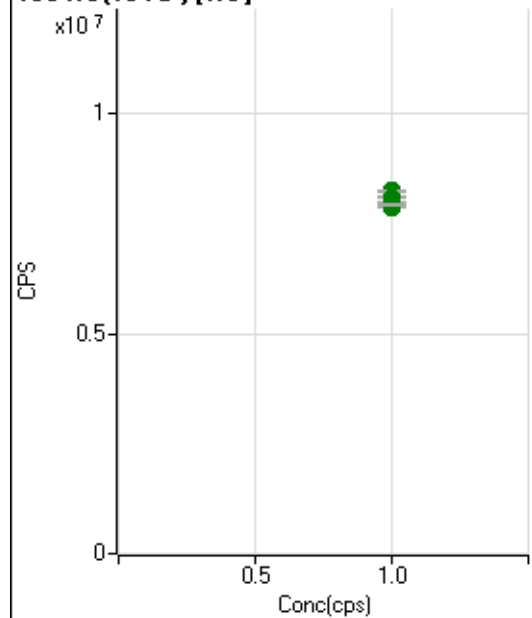
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15121816.44		A	1.1
2	☐	1.000					
3	☐	1.000		14745647.42		A	0.8
4	☐	1.000		15088008.25		A	0.3
5	☐	1.000		14840848.81		A	1.0
6	☐	1.000		14985283.53		A	0.4
7	☐	1.000		15231939.36		A	0.2
8	☐	1.000		15143642.83		A	0.6
9	☐	1.000		14754697.70		A	0.5

159 Tb(ISTD) [He]

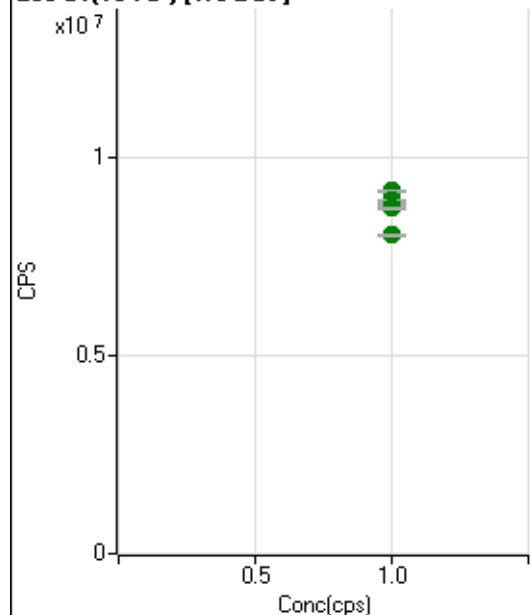
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8184460.92		A	0.1
2	☐	1.000					
3	☐	1.000		7989351.69		A	0.4
4	☐	1.000		8001525.78		A	0.2
5	☐	1.000		7754417.39		A	0.8
6	☐	1.000		7847556.62		A	0.6
7	☐	1.000		7851130.02		A	0.7
8	☐	1.000		7875891.83		A	0.5
9	☐	1.000		7777416.83		A	0.3

165 Ho(ISTD) [NoGas]

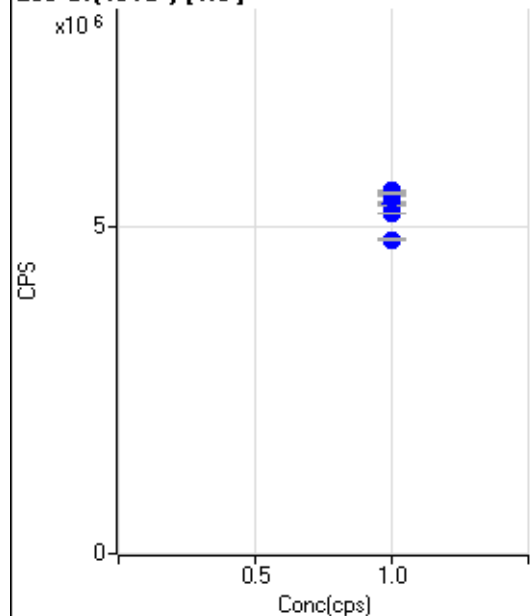
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14821952.24		A	0.5
2	☐	1.000					
3	☐	1.000		14342601.54		A	0.7
4	☐	1.000		14601620.29		A	0.5
5	☐	1.000		14573024.46		A	0.2
6	☐	1.000		14544684.18		A	0.3
7	☐	1.000		14919031.58		A	0.1
8	☐	1.000		14721788.35		A	0.6
9	☐	1.000		14475292.34		A	0.8

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8243511.33		A	0.5
2	☐	1.000					
3	☐	1.000		8098285.71		A	0.4
4	☐	1.000		8092670.09		A	0.1
5	☐	1.000		7880003.22		A	0.6
6	☐	1.000		7972953.56		A	0.8
7	☐	1.000		7978305.51		A	0.9
8	☐	1.000		7985891.55		A	0.3
9	☐	1.000		7936585.92		A	0.6

209 Bi(ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9170078.40		A	0.7
2	☐	1.000					
3	☐	1.000		8858115.91		A	0.5
4	☐	1.000		8880240.28		A	0.6
5	☐	1.000		8833142.44		A	0.4
6	☐	1.000		8827861.12		A	0.7
7	☐	1.000		8936213.89		A	0.4
8	☐	1.000		8736285.64		A	0.7
9	☐	1.000		8049479.26		A	0.7

209 Bi(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5560751.10		P	0.7
2	☐	1.000					
3	☐	1.000		5514901.48		P	0.8
4	☐	1.000		5527976.97		P	0.5
5	☐	1.000		5339051.20		P	0.4
6	☐	1.000		5360483.39		P	1.0
7	☐	1.000		5332491.76		P	0.4
8	☐	1.000		5216374.51		P	0.5
9	☐	1.000		4813083.26		P	0.3

US EPA Tune Check Sample Report

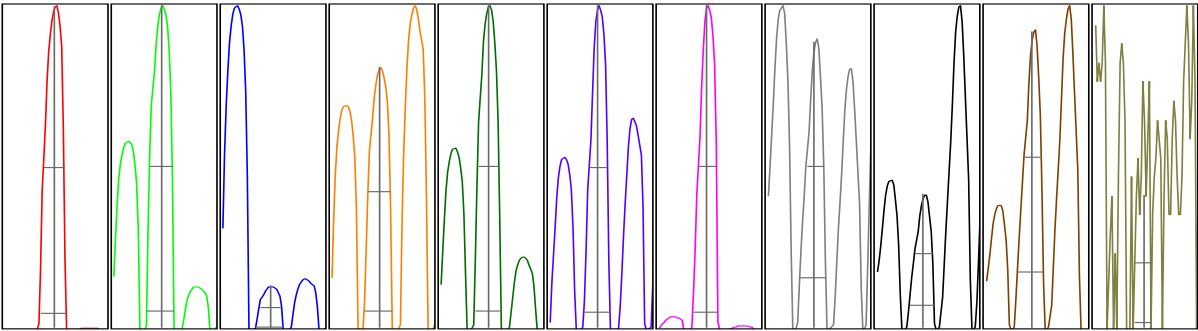
Batch Folder D:\ICP-MS Data\P7042618-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	8378	0.48	5.00	
24	106074	0.72	5.00	
25	14199	0.66	5.00	
26	16405	0.77	5.00	
59	66065	0.98	5.00	
113	9725	0.80	5.00	
115	164733	1.38	5.00	
206	24101	0.75	5.00	
207	23901	0.87	5.00	
208	52814	0.72	5.00	
220	0	56.81		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	8341	8387	8442	8347	8371
24	105737	106340	107286	105402	105604
25	14126	14292	14308	14156	14113
26	16313	16502	16577	16325	16308
59	65703	66682	66836	65672	65429
113	9699	9809	9807	9645	9666
115	166143	166248	166675	162920	161678
206	24022	24293	24298	23960	23930
207	23707	23985	24213	23726	23875
208	52638	53159	53281	52554	52437
220	1	0	1	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	14643	9.00	8.9 - 9.1		0.779	0.900	
24	172462	23.95	23.9 - 24.1		0.787	0.900	
25	22907	24.95	24.9 - 25.1		0.786	0.900	
26	26760	25.95	25.9 - 26.1		0.808	0.900	
59	113603	58.95	58.9 - 59.1		0.781	0.900	
113	18727	112.95	112.9 - 113.1		0.759	0.900	
115	317003	114.95	114.9 - 115.1		0.726	0.900	
206	45274	205.90	205.9 - 206.1		0.748	0.900	
207	41118	206.90	206.9 - 207.1		0.715	0.900	
208	98658	207.90	207.9 - 208.1		0.748	0.900	
220	0	220.00	-		0.496		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.3	V	Deflect	15.0	V
Extract 2	-175.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-80	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	19037	1.27	
89	50234	1.41	
205	16577	1.15	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	19323	19156	19138	18802	18767
89	51037	50672	50481	49427	49555
205	16820	16665	16630	16414	16355

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	9.1	V	Deflect	2.8	V
Extract 2	-200.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-100	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			