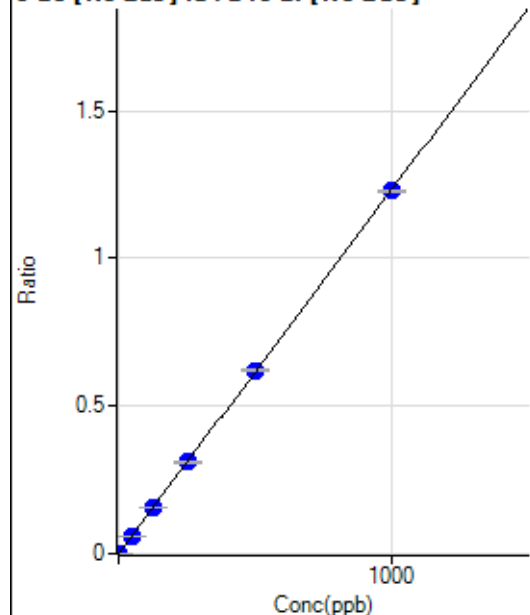


Calibration for 006CALS.d

Batch Folder: D:\ICP-MS Data\P7061417-MS .b\
 Analysis File: P7061417-MS .batch.bin
 DA Date-Time: 2017-06-15 10:59:33
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2017-06-14 12:53:41
2			
3	005CALS.d	S02	2017-06-14 13:01:42
4	006CALS.d	S03	2017-06-14 13:05:29
5	007CALS.d	S04	2017-06-14 13:09:30
6	008CALS.d	S05	2017-06-14 13:13:11
7	009CALS.d	S06	2017-06-14 13:16:50
8	010CALS.d	S07	2017-06-14 13:20:24
9	011CALS.d	S08	2017-06-14 13:23:53

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0001	P	20.7
2	☐	0.100					
3	☐	1.000	0.859	1472.34	0.0011	P	6.7
4	☐	50.000	49.891	81432.65	0.0615	P	1.1
5	☐	125.000	125.131	204013.20	0.1542	P	0.4
6	☐	250.000	251.188	407081.08	0.3094	P	0.5
7	☐	500.000	504.353	811293.67	0.6212	P	0.5
8	☐	1000.000	997.516	1581880.85	1.2286	P	0.4
9	☐			746.34	0.0006	P	13.2

$$y = 0.0012 * x + 5.8013E-005$$

$$R = 1.0000$$

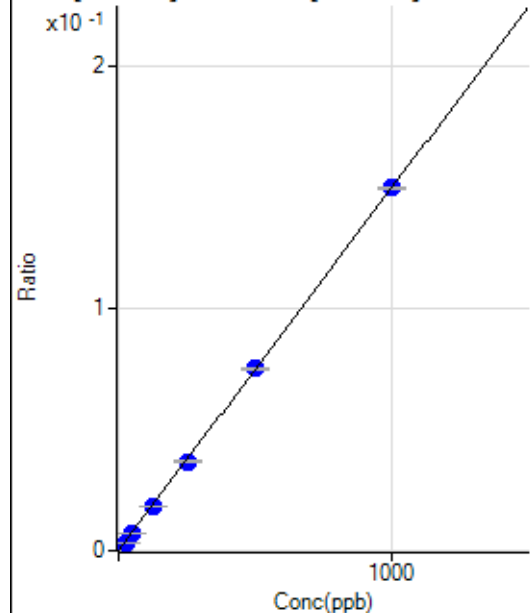
$$DL = 0.02924$$

$$BEC = 0.0471$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0001	P	6.8
2	☐	2.500					
3	☐	25.000	22.540	4581.42	0.0035	P	4.0
4	☐	50.000	47.698	9578.40	0.0072	P	2.0
5	☐	125.000	122.629	24406.60	0.0184	P	2.2
6	☐	250.000	245.525	48445.20	0.0368	P	3.6
7	☐	500.000	502.147	98231.37	0.0752	P	1.6
8	☐	1000.000	1000.518	192841.27	0.1498	P	0.9
9	☐			7235.36	0.0060	P	7.7

$$y = 1.4959E-004 * x + 9.9581E-005$$

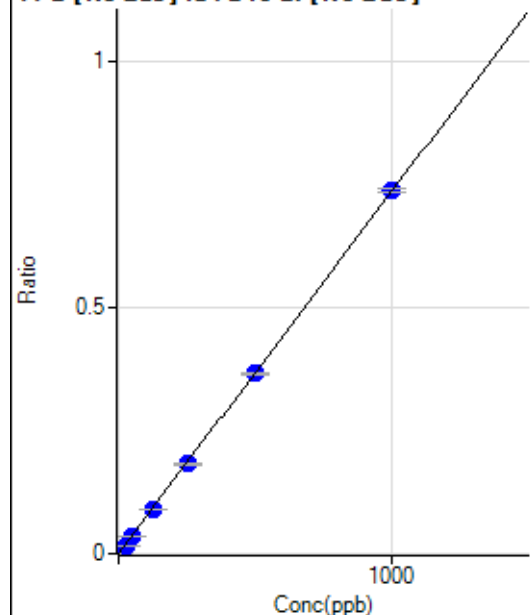
$$R = 1.0000$$

$$DL = 0.1351$$

$$BEC = 0.6657$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	558.37	0.0004	P	9.9
2	☐	2.500					
3	☐	25.000	21.674	21538.29	0.0163	P	0.6
4	☐	50.000	48.917	48074.67	0.0363	P	1.1
5	☐	125.000	122.856	119847.15	0.0906	P	1.1
6	☐	250.000	246.919	238899.83	0.1816	P	2.0
7	☐	500.000	496.850	476666.83	0.3650	P	1.0
8	☐	1000.000	1002.751	947900.74	0.7362	P	1.1
9	☐			34192.47	0.0282	P	5.7

$$y = 7.3377\text{E-}004 * x + 4.1676\text{E-}004$$

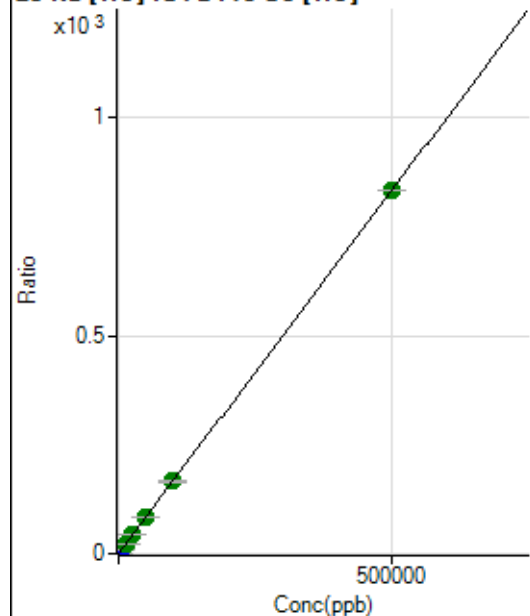
$$R = 1.0000$$

$$DL = 0.169$$

$$BEC = 0.568$$

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	11210.16	0.0551	P	1.3
2	☐	50.000					
3	☐	500.000	466.022	166167.16	0.8298	P	0.9
4	☐	5000.000	5170.686	1729744.33	8.6509	P	0.5
5	☐	12500.000	12759.498	4348945.41	21.2666	A	0.6
6	☐	25000.000	25451.352	8525065.47	42.3657	A	1.0
7	☐	50000.000	50149.290	17010958.71	83.4238	A	0.2
8	☐	100000.00	99700.066	34342077.85	165.7975	A	0.9
9	☐	500000.00	500014.33	173867323.3	831.2840	A	0.1

$$y = 0.0017 * x + 0.0551$$

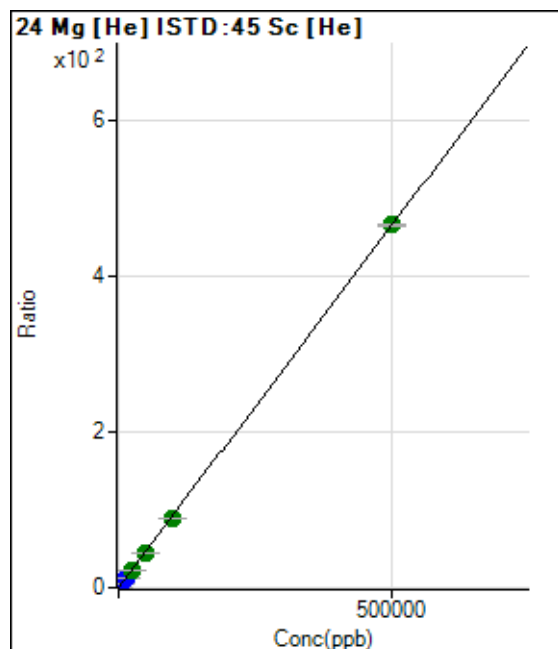
$$R = 1.0000$$

$$DL = 1.326$$

$$BEC = 33.15$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	497.25	0.0024	P	3.8
2	☐	50.000					
3	☐	500.000	439.924	82412.85	0.4116	P	0.7
4	☐	5000.000	4920.419	915449.08	4.5783	P	0.3
5	☐	12500.000	12343.874	2348033.17	11.4819	P	0.2
6	☐	25000.000	24620.590	4607816.99	22.8988	A	1.2
7	☐	50000.000	48313.199	9162089.53	44.9322	A	0.6
8	☐	100000.00	95751.396	18444886.35	89.0483	A	0.9
9	☐	500000.00	501042.13	97456636.90	465.9561	A	0.2

$$y = 9.2997\text{E-}004 * x + 0.0024$$

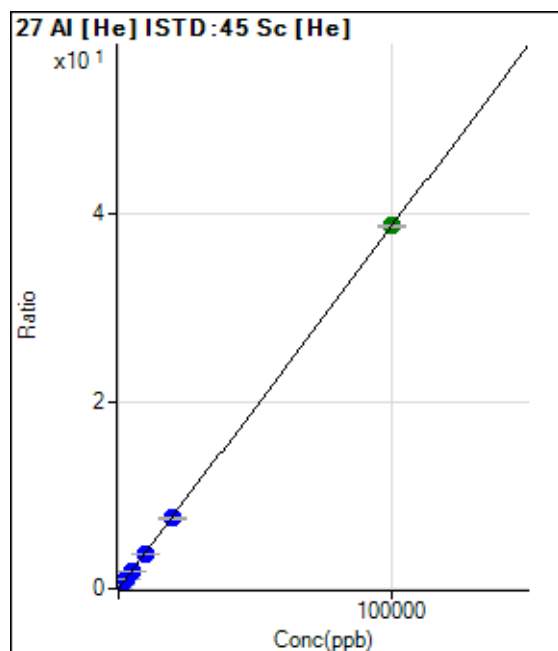
$$R = 1.0000$$

$$DL = 0.2996$$

$$BEC = 2.629$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0003	P	49.3
2	☐	2.000					
3	☐	20.000	16.168	1316.78	0.0066	P	5.5
4	☐	1000.000	983.028	76043.20	0.3803	P	1.1
5	☐	2500.000	2481.621	196241.34	0.9596	P	1.2
6	☐	5000.000	4921.929	382942.02	1.9030	P	0.2
7	☐	10000.000	9720.157	766260.29	3.7578	P	1.0
8	☐	20000.000	19391.981	1552869.31	7.4967	P	0.6
9	☐	100000.00	100154.12	8098118.06	38.7168	A	0.5

$$y = 3.8657\text{E-}004 * x + 3.2677\text{E-}004$$

$$R = 1.0000$$

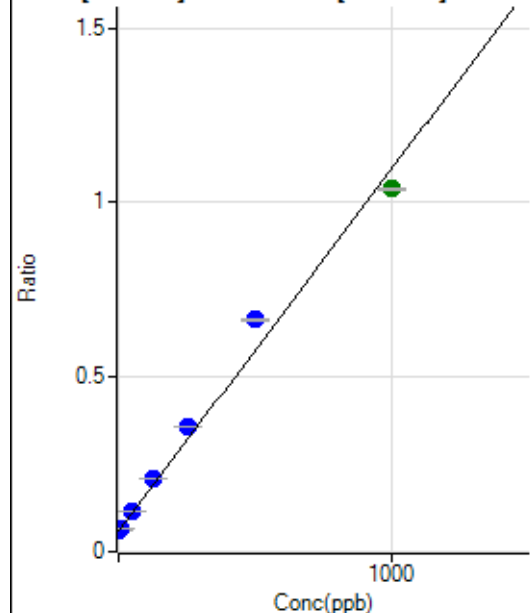
$$DL = 1.25$$

$$BEC = 0.8453$$

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	282497.14	0.0584	P	0.4
2	☐	1.000					
3	☐	10.000	8.163	328187.08	0.0668	P	0.8
4	☐	50.000	55.272	562103.65	0.1157	P	0.1
5	☐	125.000	144.068	1015991.31	0.2077	P	0.6
6	☐	250.000	290.001	1763286.13	0.3590	P	0.3
7	☐	500.000	583.859	3273952.31	0.6637	P	0.5
8	☐	1000.000	945.441	5134854.32	1.0386	A	0.5
9	☐			1129740.45	0.2318	P	3.1

$$y = 0.0010 * x + 0.0584$$

$$R = 0.9934$$

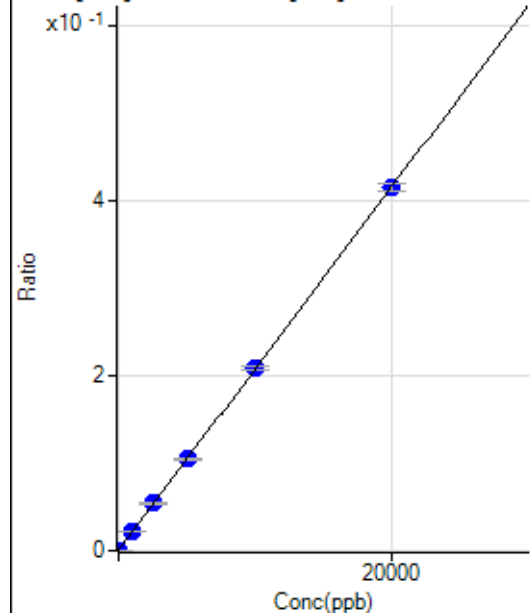
$$DL = 0.6464$$

$$BEC = 56.28$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-1.474	75.00	0.0004	P	11.5
2	☐	0.000					
3	☐	0.000	1.474	86.11	0.0004	P	22.4
4	☐	1000.000	1020.600	4323.02	0.0216	P	2.2
5	☐	2500.000	2575.875	11029.48	0.0539	P	4.8
6	☐	5000.000	5033.167	21132.35	0.1050	P	1.8
7	☐	10000.000	10046.945	42656.63	0.2092	P	2.8
8	☐	20000.000	19957.721	86003.29	0.4152	P	2.0
9	☐			119.45	0.0006	P	40.3

$$y = 2.0785E-005 * x + 3.9946E-004$$

$$R = 1.0000$$

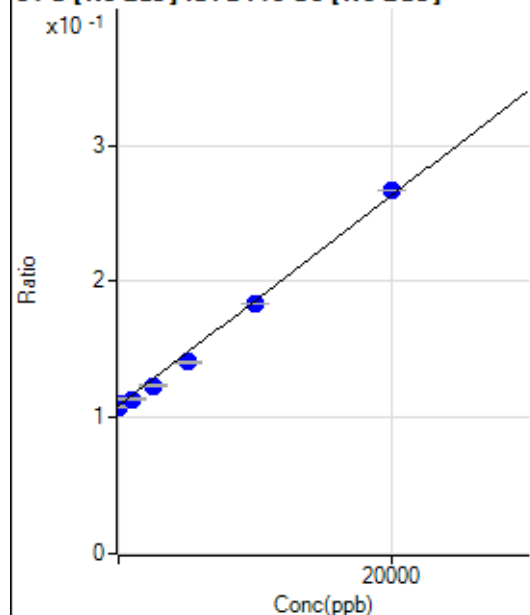
$$DL = 10.04$$

$$BEC = 19.22$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	153.980	532125.84	0.1099	P	1.1
2	☐	0.000					
3	☐	0.000	-153.980	528235.25	0.1076	P	1.2
4	☐	1000.000	635.897	552317.12	0.1136	P	0.3
5	☐	2500.000	1879.647	602786.43	0.1232	P	0.8
6	☐	5000.000	4175.245	692298.90	0.1410	P	1.0
7	☐	10000.000	9749.861	907620.24	0.1840	P	0.1
8	☐	20000.000	20427.007	1317115.97	0.2664	P	0.1
9	☐			496893.78	0.1019	P	0.8

$$y = 7.7184\text{E-}006 * x + 0.1087$$

$$R = 0.9987$$

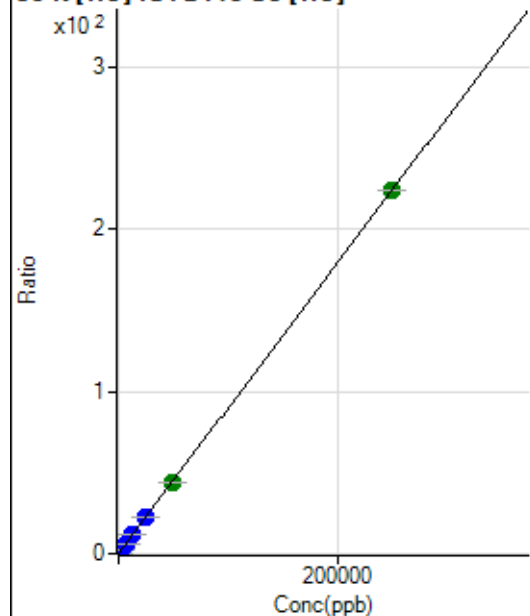
$$DL = 497.2$$

$$BEC = 1.409\text{E}+04$$

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	33174.25	0.1631	P	1.5
2	☐	50.000					
3	☐	500.000	451.816	113565.39	0.5671	P	0.9
4	☐	2500.000	2503.848	480345.51	2.4023	P	0.5
5	☐	6250.000	6276.122	1181185.60	5.7760	P	0.5
6	☐	12500.000	12634.896	2306664.18	11.4629	P	0.6
7	☐	25000.000	25217.899	4632115.90	22.7164	P	0.2
8	☐	50000.000	49436.382	9192049.60	44.3760	A	0.5
9	☐	250000.00	250083.59	46814251.39	223.8228	A	0.2

$$y = 8.9434\text{E-}004 * x + 0.1631$$

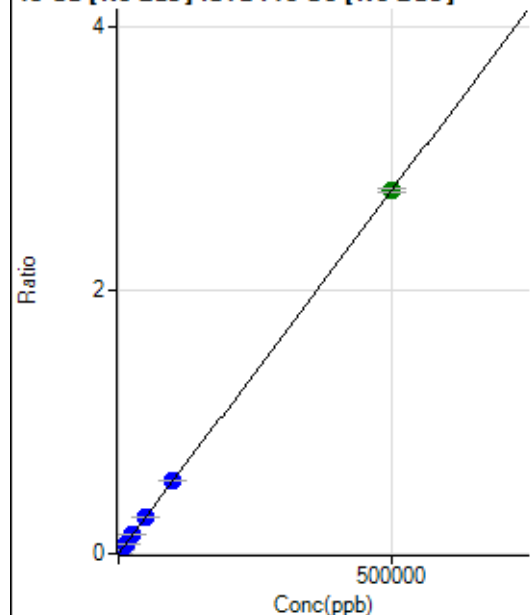
$$R = 1.0000$$

$$DL = 8.351$$

$$BEC = 182.3$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	313.91	0.0001	P	25.6
2	☐	50.000					
3	☐	500.000	445.105	12352.87	0.0025	P	3.7
4	☐	5000.000	5049.547	135392.93	0.0279	P	1.1
5	☐	12500.000	12738.895	343265.44	0.0702	P	0.8
6	☐	25000.000	25266.570	683337.28	0.1391	P	0.8
7	☐	50000.000	50353.775	1367521.78	0.2772	P	0.6
8	☐	100000.00	100283.09	2729396.89	0.5521	P	0.2
9	☐	500000.00	499888.26	13410851.43	2.7516	A	1.1

$$y = 5.5043\text{E-}006 * x + 6.4948\text{E-}005$$

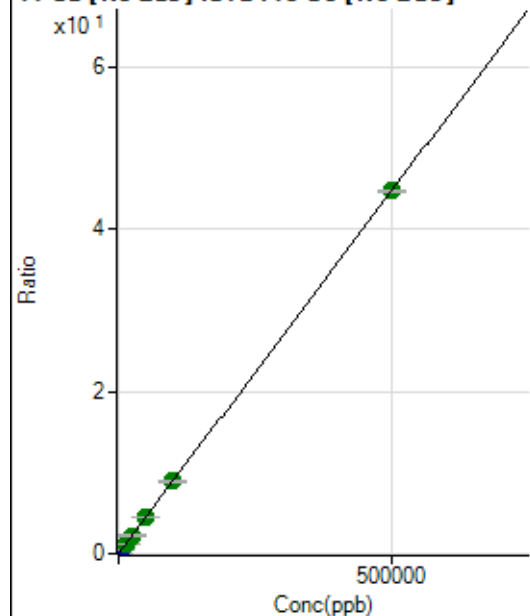
$$R = 1.0000$$

$$DL = 9.052$$

$$BEC = 11.8$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9764.96	0.0020	P	3.2
2	☐	50.000					
3	☐	500.000	435.248	201098.93	0.0409	P	1.0
4	☐	5000.000	5058.939	2208711.10	0.4545	P	0.1
5	☐	12500.000	12586.514	5515748.91	1.1277	A	0.2
6	☐	25000.000	25149.432	11056981.15	2.2513	A	0.1
7	☐	50000.000	49841.201	21999131.92	4.4597	A	0.2
8	☐	100000.00	99446.548	43983525.29	8.8962	A	0.2
9	☐	500000.00	500116.41	218015288.2	44.7308	A	0.5

$$y = 8.9437\text{E-}005 * x + 0.0020$$

$$R = 1.0000$$

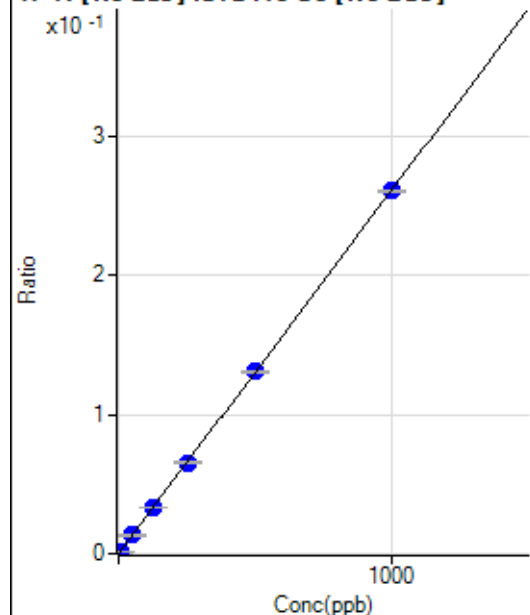
$$DL = 2.198$$

$$BEC = 22.55$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	88.90	0.0000	P	21.1
2	☐	0.500					
3	☐	5.000	4.274	5565.22	0.0011	P	4.4
4	☐	50.000	50.326	63883.59	0.0131	P	1.0
5	☐	125.000	125.857	160654.45	0.0328	P	0.8
6	☐	250.000	251.401	322144.77	0.0656	P	0.6
7	☐	500.000	501.435	645279.14	0.1308	P	0.8
8	☐	1000.000	998.813	1288173.62	0.2605	P	0.3
9	☐			1697.40	0.0003	P	9.5

$$y = 2.6084\text{E-}004 * x + 1.8347\text{E-}005$$

$$R = 1.0000$$

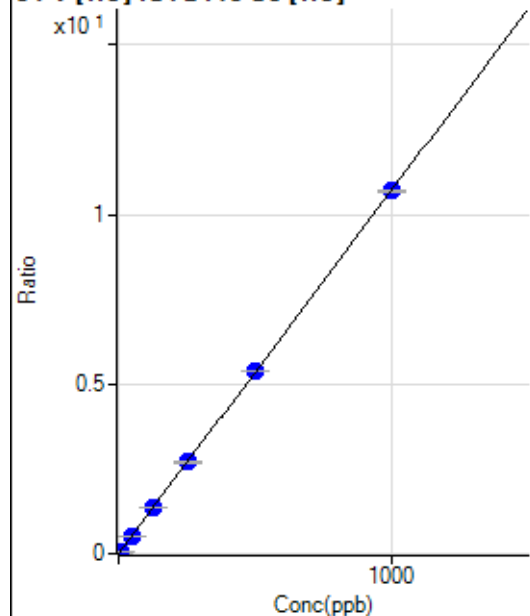
$$DL = 0.04457$$

$$BEC = 0.07034$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	33.1
2	☐	0.500					
3	☐	5.000	4.566	9800.06	0.0489	P	1.1
4	☐	50.000	50.012	107095.05	0.5356	P	0.4
5	☐	125.000	125.730	275345.10	1.3464	P	0.2
6	☐	250.000	252.429	543954.06	2.7032	P	0.9
7	☐	500.000	501.257	1094536.55	5.3678	P	0.2
8	☐	1000.000	998.675	2215367.36	10.6945	P	0.4
9	☐			1203.40	0.0058	P	1.7

$$y = 0.0107 * x + 4.9111\text{E-}005$$

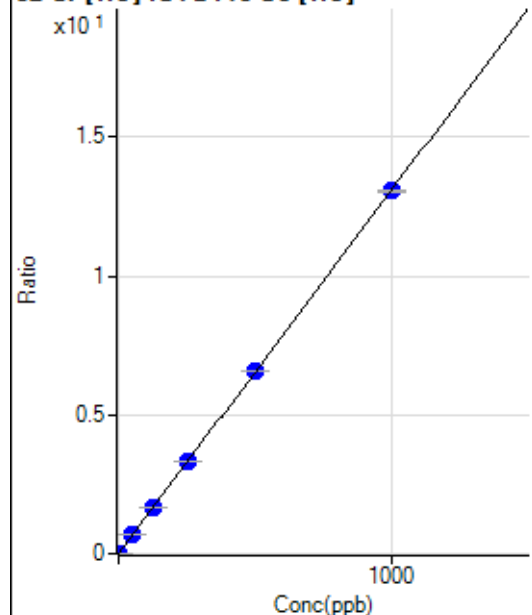
$$R = 1.0000$$

$$DL = 0.004549$$

$$BEC = 0.004586$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	553.35	0.0027	P	2.7
2	☐	0.200					
3	☐	2.000	1.974	5720.10	0.0286	P	1.4
4	☐	50.000	50.885	133748.19	0.6689	P	0.8
5	☐	125.000	127.564	342102.16	1.6729	P	0.6
6	☐	250.000	252.991	667091.16	3.3151	P	0.4
7	☐	500.000	501.803	1340221.72	6.5727	P	0.2
8	☐	1000.000	997.986	2707078.75	13.0691	P	0.8
9	☐			70268.65	0.3359	P	1.0

$$y = 0.0131 * x + 0.0027$$

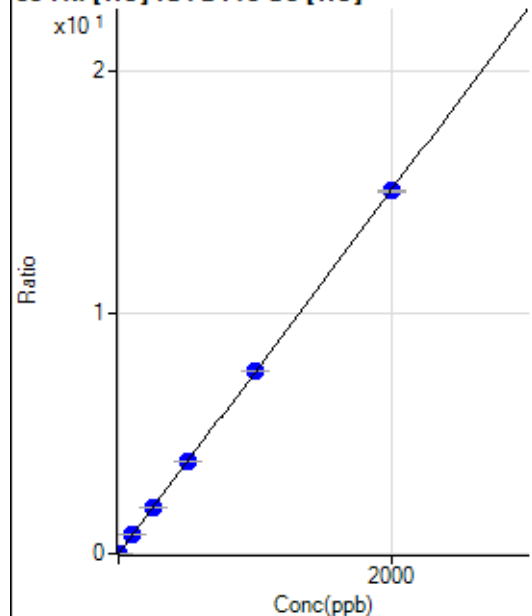
$$R = 1.0000$$

$$DL = 0.0167$$

$$BEC = 0.2078$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	85.56	0.0004	P	7.5
2	☐	0.100					
3	☐	1.000	0.975	1556.77	0.0078	P	4.6
4	☐	100.000	101.243	152775.99	0.7641	P	0.8
5	☐	250.000	254.455	392591.84	1.9198	P	0.4
6	☐	500.000	505.960	768077.35	3.8169	P	0.2
7	☐	1000.000	1004.441	1545004.75	7.5769	P	0.6
8	☐	2000.000	1995.671	3118266.62	15.0538	P	0.7
9	☐			11575.83	0.0553	P	1.4

$$y = 0.0075 * x + 4.2044E-004$$

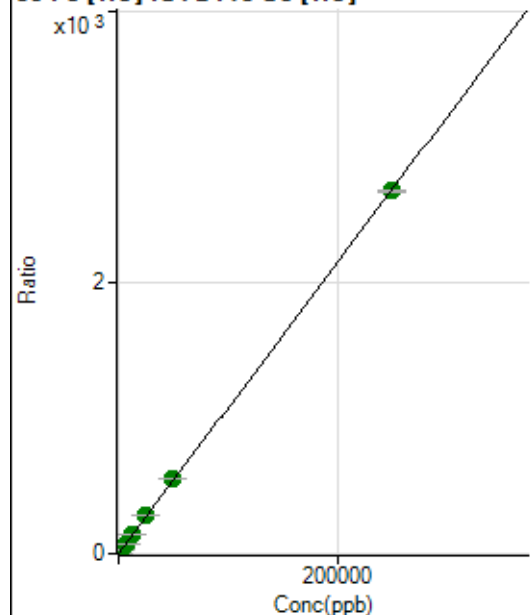
$$R = 1.0000$$

$$DL = 0.01247$$

$$BEC = 0.05574$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4534.15	0.0223	P	4.1
2	☐	5.000					
3	☐	50.000	47.053	105647.90	0.5276	P	0.1
4	☐	2500.000	2637.433	5667561.70	28.3457	A	0.7
5	☐	6250.000	6619.793	14542376.37	71.1124	A	0.3
6	☐	12500.000	13108.190	28331115.91	140.7915	A	0.8
7	☐	25000.000	25864.886	56642794.78	277.7860	A	0.1
8	☐	50000.000	51346.569	114218598.8	551.4345	A	1.0
9	☐	250000.00	249603.16	560636986.6	2,680.517	A	0.4

$$y = 0.0107 * x + 0.0223$$

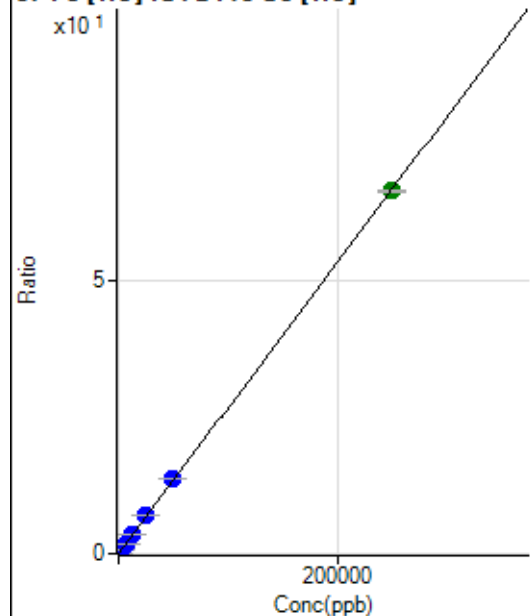
$$R = 1.0000$$

$$DL = 0.2567$$

$$BEC = 2.075$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	142.60	0.0007	P	20.6
2	☐	5.000					
3	☐	50.000	49.086	2754.04	0.0138	P	4.8
4	☐	2500.000	2625.467	139722.95	0.6988	P	0.8
5	☐	6250.000	6636.797	361025.00	1.7654	P	0.4
6	☐	12500.000	13241.360	708636.26	3.5216	P	0.8
7	☐	25000.000	26205.536	1420976.62	6.9688	P	0.4
8	☐	50000.000	51876.212	2857435.25	13.7946	P	0.6
9	☐	250000.00	249456.21	13873479.48	66.3312	A	0.2

$$y = 2.6590E-004 * x + 7.0017E-004$$

$$R = 1.0000$$

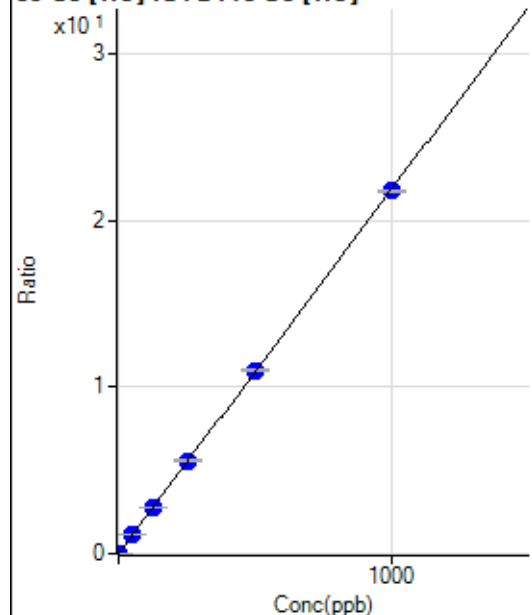
$$DL = 1.627$$

$$BEC = 2.633$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	67.78	0.0003	P	37.2
2	☐	0.100					
3	☐	1.000	0.949	4227.34	0.0211	P	4.6
4	☐	50.000	51.513	225491.62	1.1278	P	0.7
5	☐	125.000	128.602	575657.00	2.8150	P	0.5
6	☐	250.000	255.900	1127111.31	5.6011	P	0.5
7	☐	500.000	503.766	2248350.94	11.0261	P	0.4
8	☐	1000.000	996.116	4515953.54	21.8020	P	0.8
9	☐			6413.72	0.0307	P	5.5

$$y = 0.0219 * x + 3.3310E-004$$

$$R = 1.0000$$

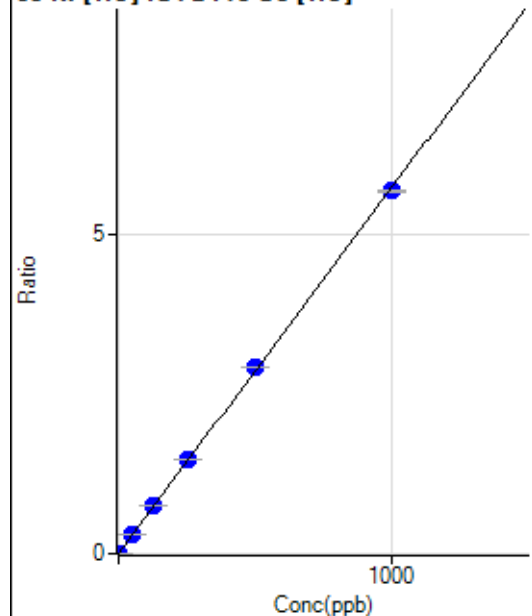
$$DL = 0.01699$$

$$BEC = 0.01522$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	276.67	0.0014	P	6.1
2	☐	0.100					
3	☐	1.000	0.993	1412.31	0.0071	P	5.6
4	☐	50.000	52.747	60710.86	0.3036	P	0.5
5	☐	125.000	131.106	153921.19	0.7527	P	0.3
6	☐	250.000	259.616	299661.38	1.4891	P	0.2
7	☐	500.000	509.552	595695.29	2.9214	P	0.1
8	☐	1000.000	991.920	1177712.80	5.6857	P	0.6
9	☐			18853.42	0.0901	P	2.2

$$y = 0.0057 * x + 0.0014$$

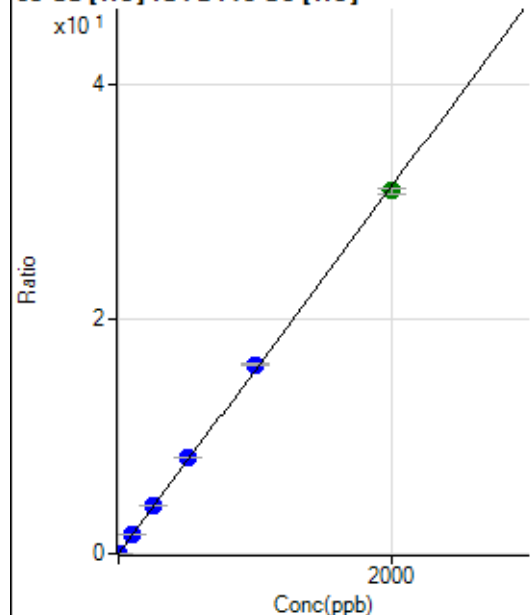
$$R = 0.9999$$

$$DL = 0.04374$$

$$BEC = 0.2374$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1307.86	0.0064	P	5.0
2	☐	0.200					
3	☐	2.000	2.089	7818.87	0.0390	P	1.3
4	☐	100.000	106.019	332317.81	1.6621	P	0.7
5	☐	250.000	264.432	845783.90	4.1359	P	0.2
6	☐	500.000	524.746	1650274.85	8.2011	P	0.7
7	☐	1000.000	1030.758	3283512.94	16.1031	P	0.3
8	☐	2000.000	1976.330	6393643.93	30.8696	A	1.5
9	☐			14244.86	0.0681	P	1.7

$$y = 0.0156 * x + 0.0064$$

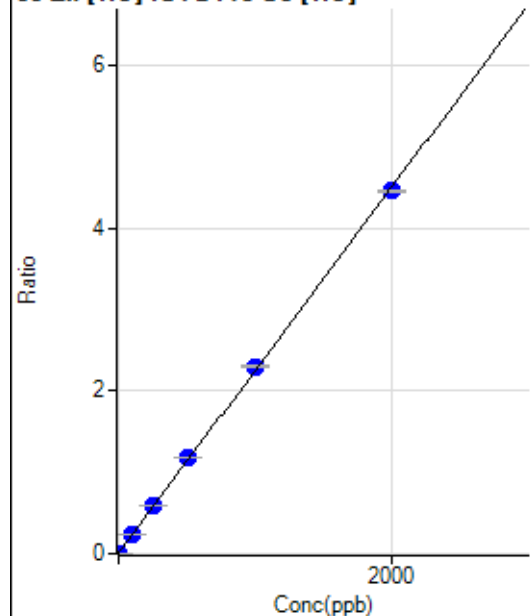
$$R = 0.9997$$

$$DL = 0.06212$$

$$BEC = 0.4117$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1258.97	0.0062	P	5.8
2	☐	0.200					
3	☐	2.000	-0.052	1215.63	0.0061	P	7.9
4	☐	100.000	103.615	47858.33	0.2393	P	0.4
5	☐	250.000	262.470	122035.63	0.5968	P	0.5
6	☐	500.000	523.117	238099.20	1.1832	P	0.7
7	☐	1000.000	1022.084	470201.69	2.3059	P	0.5
8	☐	2000.000	1981.441	924806.71	4.4646	P	0.5
9	☐			4678.60	0.0224	P	1.2

$$y = 0.0023 * x + 0.0062$$

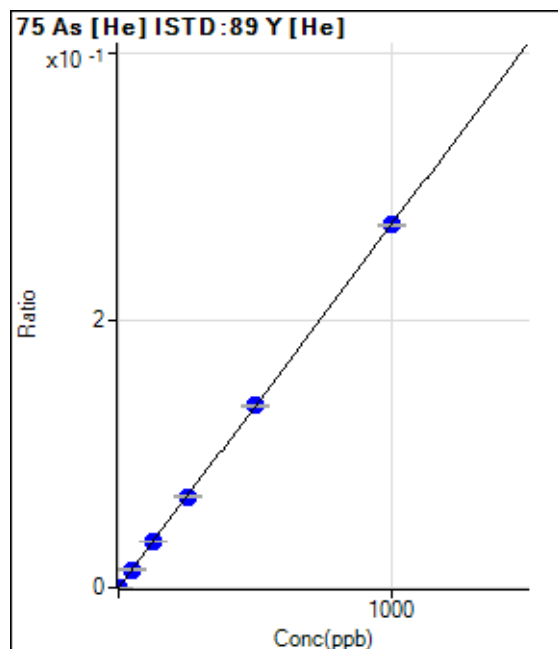
$$R = 0.9998$$

$$DL = 0.4749$$

$$BEC = 2.75$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	9.26	0.0000	P	20.5
2	☐	0.100					
3	☐	1.000	0.998	339.51	0.0003	P	4.2
4	☐	50.000	50.172	16547.78	0.0136	P	0.8
5	☐	125.000	125.564	42283.43	0.0341	P	0.4
6	☐	250.000	251.419	83606.19	0.0683	P	0.6
7	☐	500.000	500.721	167265.38	0.1360	P	0.5
8	☐	1000.000	999.206	338078.84	0.2713	P	0.3
9	☐			305.56	0.0003	P	18.4

$$y = 2.7153\text{E-}004 * x + 7.5119\text{E-}006$$

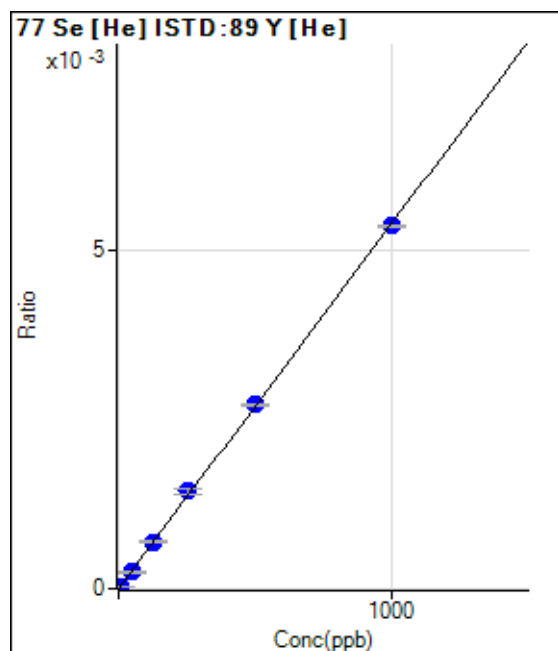
$$R = 1.0000$$

$$DL = 0.01701$$

$$BEC = 0.02767$$

Weight: <None>

Min Conc: 0



	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	3.876	25.56	0.0000	P	32.7
4	☐	50.000	46.707	306.68	0.0003	P	8.3
5	☐	125.000	127.015	851.15	0.0007	P	4.5
6	☐	250.000	266.256	1762.36	0.0014	P	7.6
7	☐	500.000	503.453	3347.11	0.0027	P	1.5
8	☐	1000.000	994.128	6694.99	0.0054	P	0.3
9	☐			4.44	0.0000	P	114.

$$y = 5.4047\text{E-}006 * x + 0.0000\text{E+}000$$

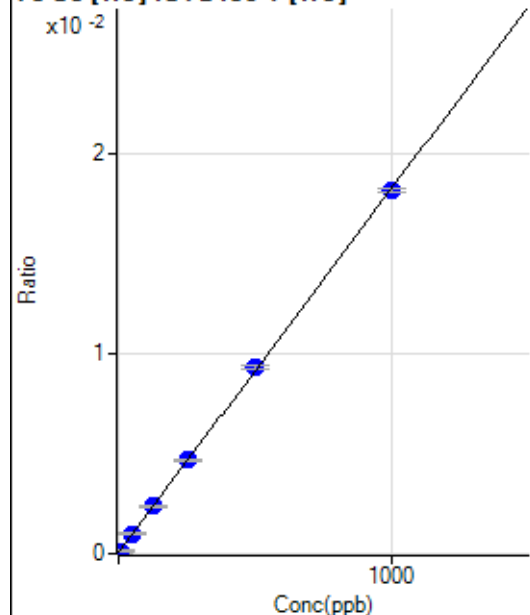
$$R = 0.9998$$

$$DL = 0$$

$$BEC = 0$$

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	60.49	0.0000	P	38.8
2	☐	0.500					
3	☐	5.000	4.677	163.59	0.0001	P	17.8
4	☐	50.000	52.242	1213.65	0.0010	P	5.0
5	☐	125.000	126.924	2923.16	0.0024	P	1.6
6	☐	250.000	253.528	5706.72	0.0047	P	2.9
7	☐	500.000	510.069	11471.28	0.0093	P	1.8
8	☐	1000.000	993.733	22580.60	0.0181	P	1.1
9	☐			83.34	0.0001	P	24.8

$$y = 1.8187\text{E-}005 * x + 4.9103\text{E-}005$$

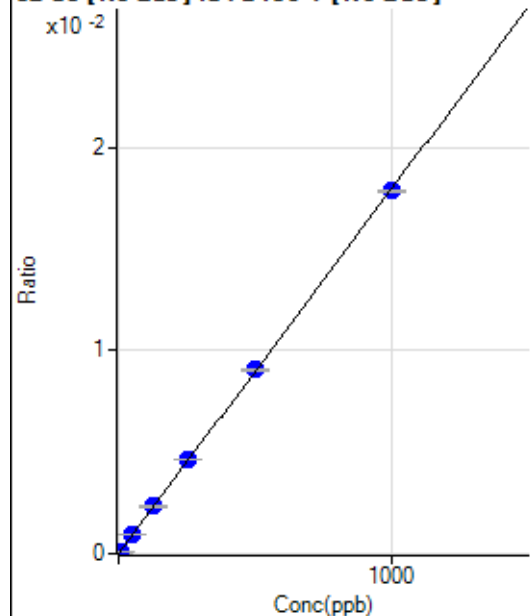
$$R = 0.9999$$

$$DL = 3.14$$

$$BEC = 2.7$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.10	0.0000	P	476.
2	☐	0.500					
3	☐	5.000	4.817	785.63	0.0001	P	11.4
4	☐	50.000	51.607	8128.23	0.0009	P	1.6
5	☐	125.000	129.117	20305.33	0.0023	P	1.4
6	☐	250.000	256.778	40375.63	0.0046	P	0.8
7	☐	500.000	505.459	80070.78	0.0091	P	1.0
8	☐	1000.000	994.982	156316.66	0.0179	P	0.4
9	☐			230.88	0.0000	P	58.6

$$y = 1.7950\text{E-}005 * x + 3.0579\text{E-}006$$

$$R = 0.9999$$

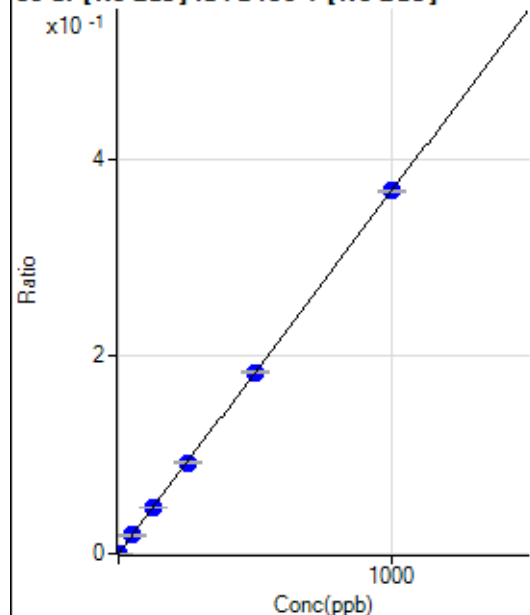
$$DL = 2.436$$

$$BEC = 0.1704$$

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	2044.68	0.0002	P	5.9
2	☐	0.100					
3	☐	1.000	0.850	4789.89	0.0005	P	4.5
4	☐	50.000	49.845	162322.42	0.0186	P	0.7
5	☐	125.000	125.303	405142.11	0.0463	P	0.7
6	☐	250.000	250.913	809635.05	0.0925	P	1.0
7	☐	500.000	498.453	1618889.48	0.1835	P	1.0
8	☐	1000.000	1000.515	3221098.55	0.3681	P	0.7
9	☐			103462.73	0.0124	P	0.3

$$y = 3.6768\text{E-}004 * x + 2.3347\text{E-}004$$

$$R = 1.0000$$

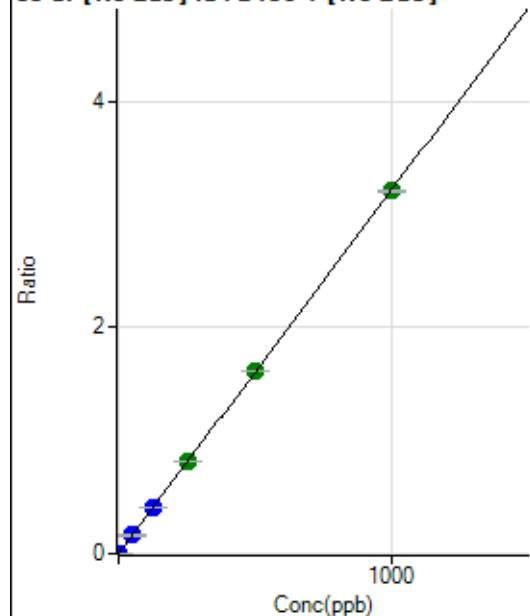
$$DL = 0.1117$$

$$BEC = 0.635$$

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	802.85	0.0001	P	8.7
2	☐	0.100					
3	☐	1.000	0.901	26222.02	0.0030	P	2.6
4	☐	50.000	50.333	1416059.00	0.1619	P	0.5
5	☐	125.000	127.529	3588136.89	0.4101	P	0.3
6	☐	250.000	252.822	7116341.56	0.8129	A	0.5
7	☐	500.000	502.229	14246489.21	1.6148	A	0.3
8	☐	1000.000	997.847	28074382.22	3.2083	A	0.6
9	☐			883254.51	0.1059	P	0.4

$$y = 0.0032 * x + 9.1700\text{E-}005$$

$$R = 1.0000$$

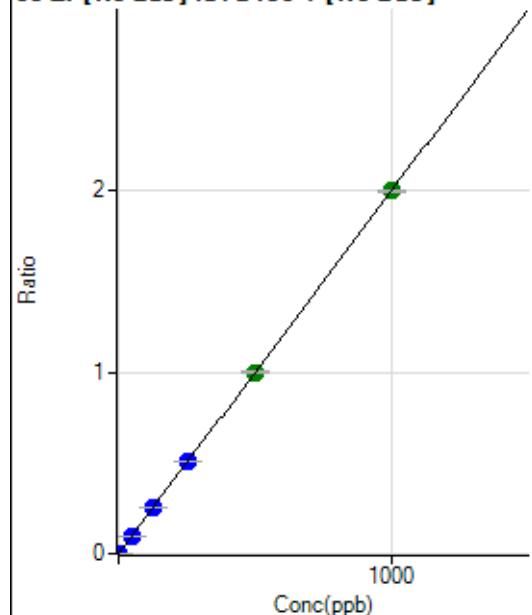
$$DL = 0.007481$$

$$BEC = 0.02852$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	522.26	0.0001	P	9.2
2	☐	0.100					
3	☐	1.000	0.752	13712.76	0.0016	P	2.0
4	☐	50.000	48.579	849535.83	0.0971	P	0.9
5	☐	125.000	125.273	2190823.47	0.2504	P	1.0
6	☐	250.000	253.405	4433443.80	0.5065	P	0.4
7	☐	500.000	498.802	8794187.52	0.9969	A	1.2
8	☐	1000.000	999.785	17483689.45	1.9980	A	0.5
9	☐			6382.30	0.0008	P	8.9

$$y = 0.0020 * x + 5.9653E-005$$

$$R = 1.0000$$

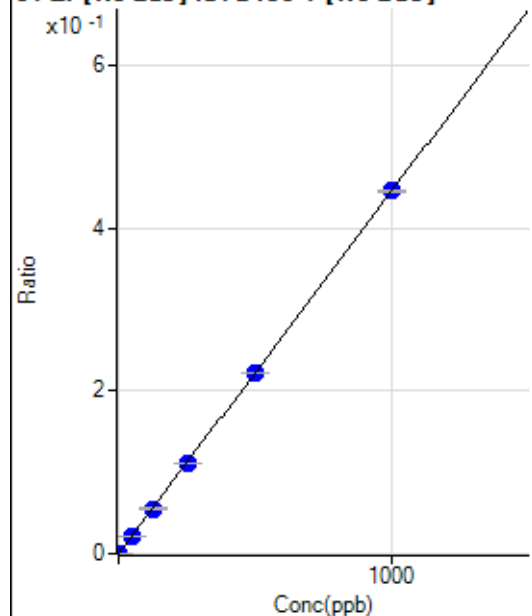
$$DL = 0.0082$$

$$BEC = 0.02985$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	102.78	0.0000	P	5.0
2	☐	0.100					
3	☐	1.000	0.807	3256.08	0.0004	P	5.8
4	☐	50.000	48.260	188056.14	0.0215	P	0.9
5	☐	125.000	124.338	484552.19	0.0554	P	0.8
6	☐	250.000	250.345	976016.29	0.1115	P	0.1
7	☐	500.000	497.635	1955168.18	0.2216	P	0.5
8	☐	1000.000	1001.266	3901777.65	0.4459	P	0.7
9	☐			1416.81	0.0002	P	12.0

$$y = 4.4532E-004 * x + 1.1738E-005$$

$$R = 1.0000$$

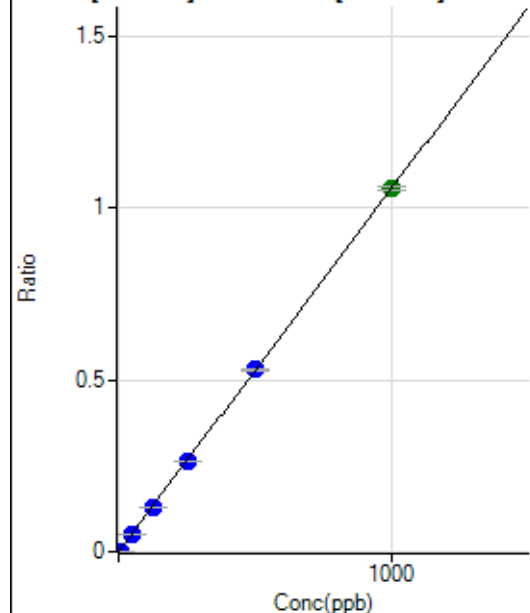
$$DL = 0.003929$$

$$BEC = 0.02636$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	227.79	0.0000	P	16.1
2	☐	0.500					
3	☐	5.000	1.850	17372.38	0.0020	P	0.5
4	☐	50.000	48.468	447903.22	0.0512	P	0.2
5	☐	125.000	123.747	1143687.39	0.1307	P	1.0
6	☐	250.000	249.601	2307834.30	0.2636	P	0.3
7	☐	500.000	502.058	4678061.13	0.5303	P	0.7
8	☐	1000.000	999.320	9235332.15	1.0554	A	1.1
9	☐			16485.26	0.0020	P	1.8

$$y = 0.0011 * x + 2.6002E-005$$

$$R = 1.0000$$

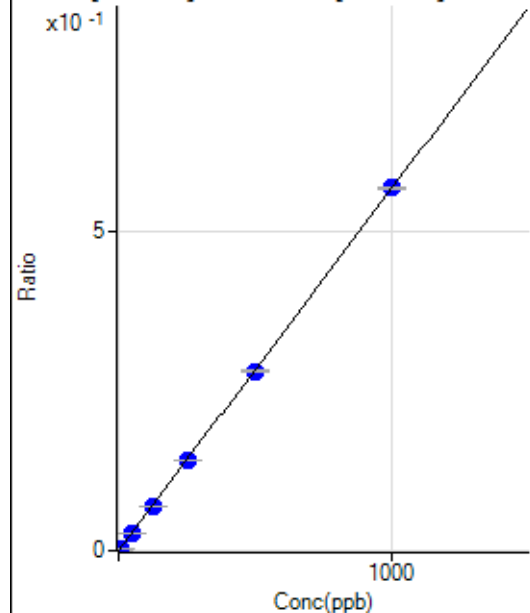
$$DL = 0.0119$$

$$BEC = 0.02462$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	37.7
2	☐	0.500					
3	☐	5.000	4.343	21683.86	0.0025	P	2.7
4	☐	50.000	48.356	239891.57	0.0274	P	1.1
5	☐	125.000	123.891	614752.47	0.0703	P	0.9
6	☐	250.000	249.096	1236612.87	0.1413	P	0.6
7	☐	500.000	496.557	2484285.37	0.2816	P	0.5
8	☐	1000.000	1002.172	4973084.92	0.5683	P	0.5
9	☐			24775.06	0.0030	P	2.9

$$y = 5.6708E-004 * x + 7.6186E-006$$

$$R = 1.0000$$

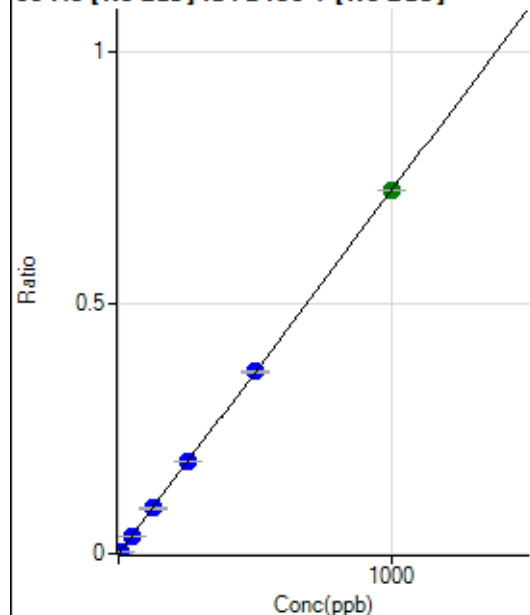
$$DL = 0.01519$$

$$BEC = 0.01343$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	138.90	0.0000	P	54.7
2	☐	0.500					
3	☐	5.000	3.861	24688.87	0.0028	P	1.2
4	☐	50.000	48.978	310463.75	0.0355	P	0.8
5	☐	125.000	124.505	789328.73	0.0902	P	0.9
6	☐	250.000	251.760	1596819.63	0.1824	P	0.3
7	☐	500.000	502.048	3208951.89	0.3637	P	0.8
8	☐	1000.000	998.655	6331443.33	0.7235	A	0.1
9	☐			31137.71	0.0037	P	3.1

$$y = 7.2448\text{E-}004 * x + 1.5884\text{E-}005$$

$$R = 1.0000$$

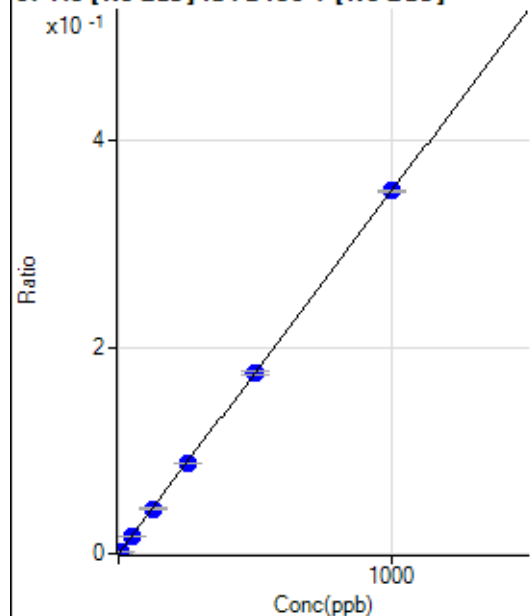
$$DL = 0.03597$$

$$BEC = 0.02192$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	77.78	0.0000	P	50.4
2	☐	0.500					
3	☐	5.000	4.383	13581.97	0.0015	P	2.7
4	☐	50.000	49.631	152429.85	0.0174	P	1.6
5	☐	125.000	124.370	382021.12	0.0437	P	0.8
6	☐	250.000	250.346	769308.75	0.0879	P	0.2
7	☐	500.000	498.768	1544535.81	0.1751	P	1.2
8	☐	1000.000	1000.630	3073555.13	0.3512	P	0.4
9	☐			15325.61	0.0018	P	3.5

$$y = 3.5101\text{E-}004 * x + 8.8725\text{E-}006$$

$$R = 1.0000$$

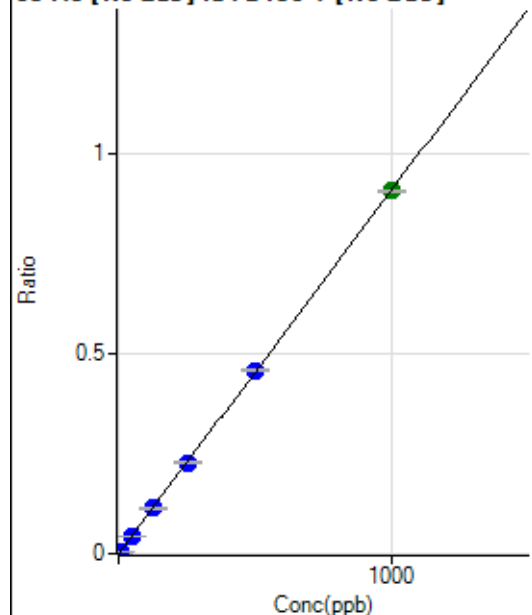
$$DL = 0.03823$$

$$BEC = 0.02528$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	33.3
2	☐	0.500					
3	☐	5.000	4.470	35704.18	0.0041	P	1.6
4	☐	50.000	49.186	390824.59	0.0447	P	0.3
5	☐	125.000	124.709	991213.85	0.1133	P	0.8
6	☐	250.000	250.907	1995235.81	0.2279	P	0.4
7	☐	500.000	503.179	4032393.93	0.4571	P	0.9
8	☐	1000.000	998.263	7934955.30	0.9068	A	0.7
9	☐			38422.17	0.0046	P	0.8

$$y = 9.0837\text{E-}004 * x + 7.6192\text{E-}006$$

$$R = 1.0000$$

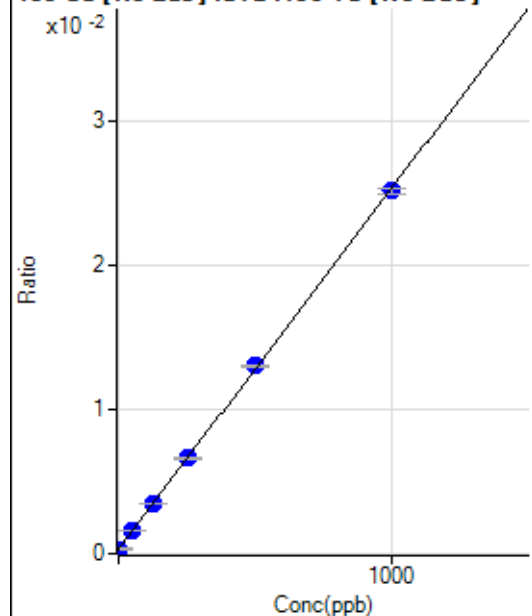
$$DL = 0.008384$$

$$BEC = 0.008388$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3445.02	0.0003	P	4.0
2	☐	0.100					
3	☐	1.000	1.399	3867.38	0.0003	P	5.0
4	☐	50.000	51.004	18445.95	0.0016	P	2.2
5	☐	125.000	127.099	40898.97	0.0035	P	2.0
6	☐	250.000	254.085	78157.27	0.0066	P	1.7
7	☐	500.000	509.413	154168.39	0.0130	P	0.7
8	☐	1000.000	993.959	294403.12	0.0251	P	1.6
9	☐			3256.08	0.0003	P	3.4

$$y = 2.5001\text{E-}005 * x + 2.9285\text{E-}004$$

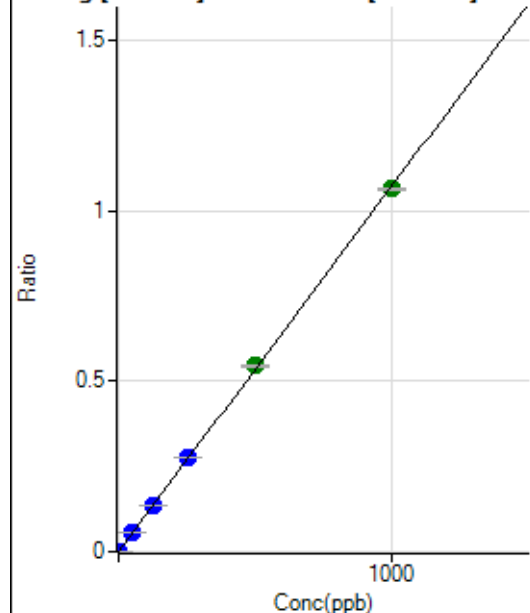
$$R = 0.9999$$

$$DL = 1.389$$

$$BEC = 11.71$$

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	155.56	0.0000	P	25.8
2	☐	0.100					
3	☐	1.000	1.198	15292.19	0.0013	P	1.9
4	☐	50.000	51.056	643318.18	0.0547	P	1.5
5	☐	125.000	127.361	1607445.66	0.1364	P	0.9
6	☐	250.000	257.077	3238115.20	0.2753	P	0.5
7	☐	500.000	508.422	6442646.06	0.5445	A	1.3
8	☐	1000.000	993.672	12460736.48	1.0641	A	0.4
9	☐			2180.82	0.0002	P	5.7

$$y = 0.0011 * x + 1.3209E-005$$

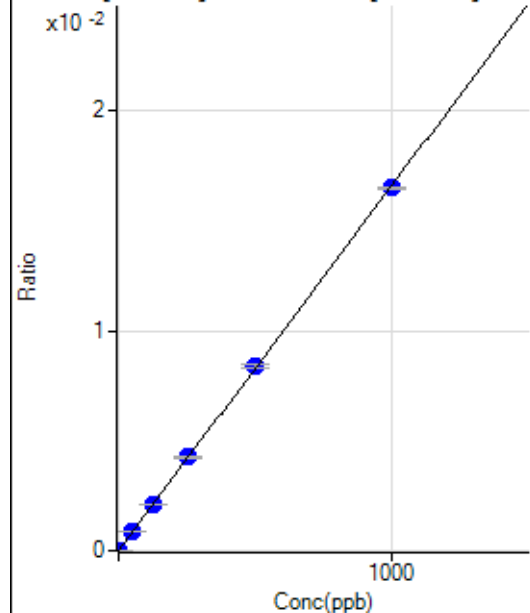
$$R = 0.9999$$

$$DL = 0.009554$$

$$BEC = 0.01233$$

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	16.67	0.0000	P	65.8
2	☐	0.100					
3	☐	1.000	0.674	148.61	0.0000	P	18.3
4	☐	50.000	50.550	9874.44	0.0008	P	1.5
5	☐	125.000	127.997	25021.02	0.0021	P	1.2
6	☐	250.000	256.685	50064.65	0.0043	P	1.0
7	☐	500.000	506.112	99297.41	0.0084	P	1.1
8	☐	1000.000	994.871	193138.82	0.0165	P	0.7
9	☐			73.61	0.0000	P	23.7

$$y = 1.6578E-005 * x + 1.4139E-006$$

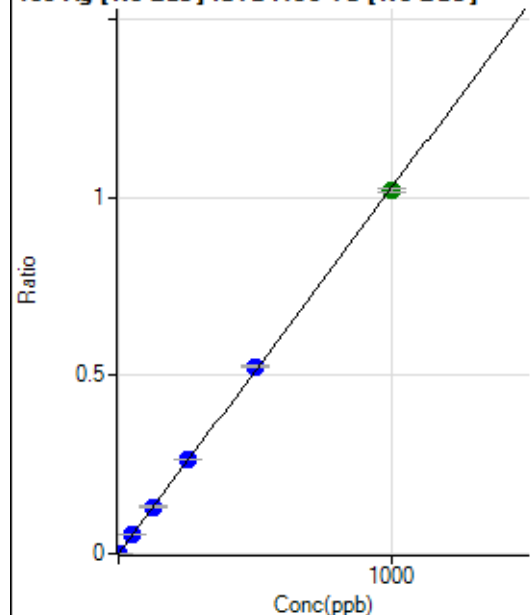
$$R = 0.9999$$

$$DL = 0.1682$$

$$BEC = 0.08529$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	155.57	0.0000	P	7.0
2	☐	0.100					
3	☐	1.000	1.179	14441.29	0.0012	P	5.1
4	☐	50.000	51.549	622860.73	0.0530	P	1.9
5	☐	125.000	128.421	1554279.51	0.1319	P	0.9
6	☐	250.000	257.463	3109771.47	0.2644	P	1.0
7	☐	500.000	511.205	6212023.71	0.5250	P	0.8
8	☐	1000.000	992.026	11928820.76	1.0187	A	0.9
9	☐			2214.17	0.0002	P	3.5

$$y = 0.0010 * x + 1.3231E-005$$

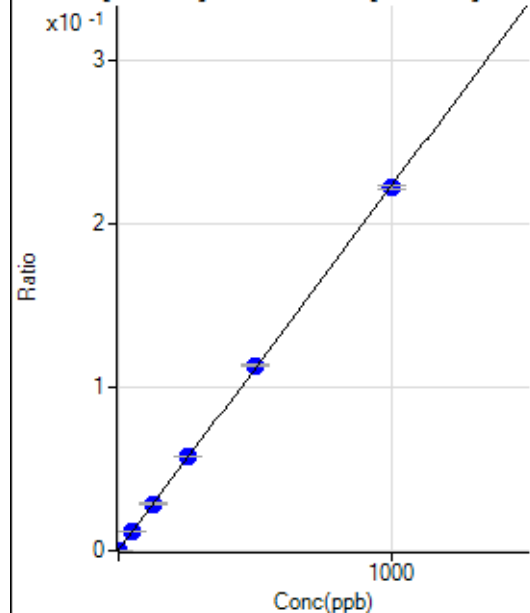
$$R = 0.9999$$

$$DL = 0.002695$$

$$BEC = 0.01288$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2413.74	0.0002	P	3.5
2	☐	0.100					
3	☐	1.000	0.994	5039.51	0.0004	P	6.1
4	☐	50.000	51.394	137434.00	0.0117	P	0.7
5	☐	125.000	128.107	339573.16	0.0288	P	0.7
6	☐	250.000	255.703	674065.92	0.0573	P	0.3
7	☐	500.000	507.087	1342478.51	0.1135	P	0.7
8	☐	1000.000	994.573	2603240.20	0.2223	P	1.1
9	☐			2986.10	0.0003	P	2.2

$$y = 2.2333E-004 * x + 2.0519E-004$$

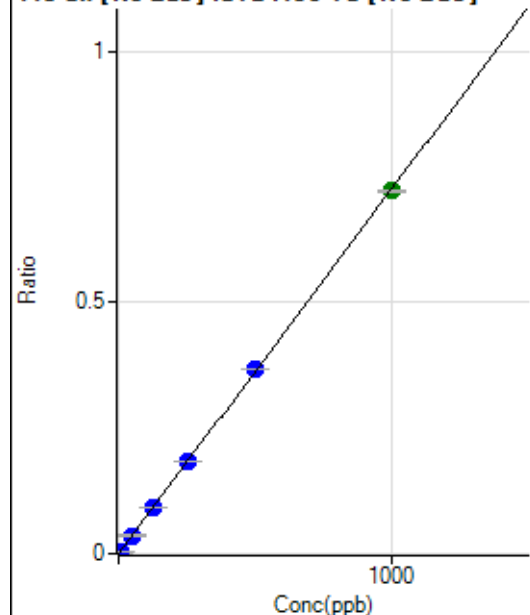
$$R = 0.9999$$

$$DL = 0.09586$$

$$BEC = 0.9188$$

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	597.26	0.0001	P	7.4
2	☐	0.500					
3	☐	5.000	4.466	38829.61	0.0033	P	0.2
4	☐	50.000	49.860	426202.62	0.0362	P	1.3
5	☐	125.000	126.230	1080040.49	0.0916	P	0.6
6	☐	250.000	254.347	2171370.88	0.1846	P	0.5
7	☐	500.000	506.311	4348091.20	0.3675	P	0.7
8	☐	1000.000	995.614	8460684.39	0.7225	A	0.7
9	☐			12269.72	0.0011	P	2.8

$$y = 7.2565E-004 * x + 5.0799E-005$$

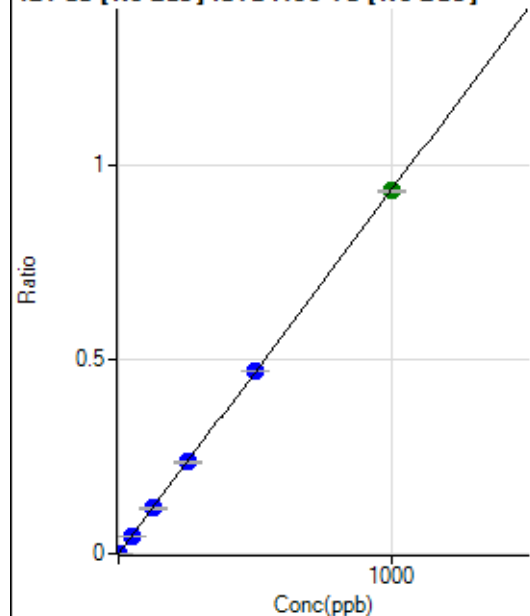
$$R = 1.0000$$

$$DL = 0.01546$$

$$BEC = 0.07001$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.34	0.0000	P	29.3
2	☐	0.200					
3	☐	2.000	1.824	20193.10	0.0017	P	2.6
4	☐	50.000	48.306	531796.31	0.0452	P	0.9
5	☐	125.000	124.454	1372456.91	0.1165	P	0.8
6	☐	250.000	251.494	2767935.15	0.2353	P	0.6
7	☐	500.000	503.990	5580677.86	0.4716	P	0.3
8	☐	1000.000	997.785	10933274.38	0.9337	A	0.4
9	☐			41401.02	0.0038	P	0.9

$$y = 9.3575E-004 * x + 4.9663E-006$$

$$R = 1.0000$$

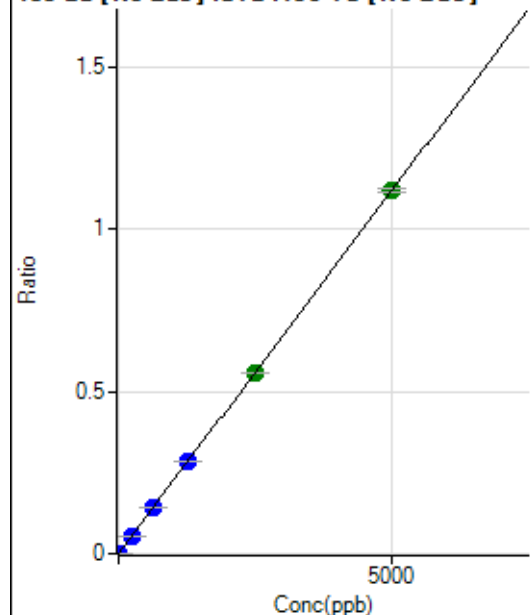
$$DL = 0.004657$$

$$BEC = 0.005307$$

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	94.45	0.0000	P	21.2
2	☐	1.000					
3	☐	10.000	8.913	23601.40	0.0020	P	1.9
4	☐	250.000	248.150	652647.64	0.0555	P	0.9
5	☐	625.000	630.954	1662222.06	0.1411	P	0.8
6	☐	1250.000	1263.436	3321937.49	0.2824	P	0.7
7	☐	2500.000	2489.796	6586152.01	0.5566	A	0.7
8	☐	5000.000	5001.094	13090698.64	1.1180	A	1.2
9	☐			5637.53	0.0005	P	4.4

$$y = 2.2355\text{E-}004 * x + 8.0390\text{E-}006$$

$$R = 1.0000$$

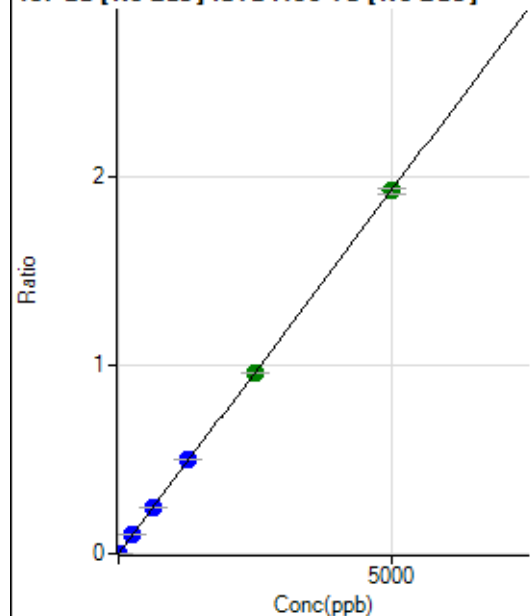
$$DL = 0.02287$$

$$BEC = 0.03596$$

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	172.23	0.0000	P	17.0
2	☐	1.000					
3	☐	10.000	8.889	40674.71	0.0034	P	1.1
4	☐	250.000	253.117	1150075.34	0.0978	P	1.3
5	☐	625.000	637.630	2902043.95	0.2463	P	0.2
6	☐	1250.000	1289.109	5855602.26	0.4979	P	0.4
7	☐	2500.000	2491.065	11384004.59	0.9621	A	0.7
8	☐	5000.000	4992.958	22578254.15	1.9283	A	1.6
9	☐			9992.88	0.0009	P	3.0

$$y = 3.8620\text{E-}004 * x + 1.4645\text{E-}005$$

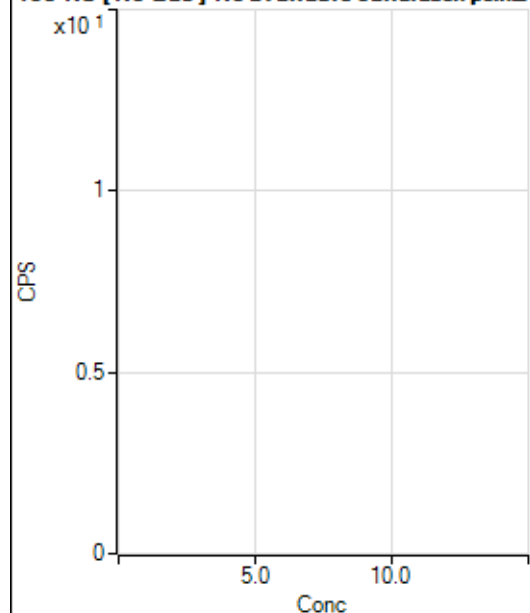
$$R = 1.0000$$

$$DL = 0.01936$$

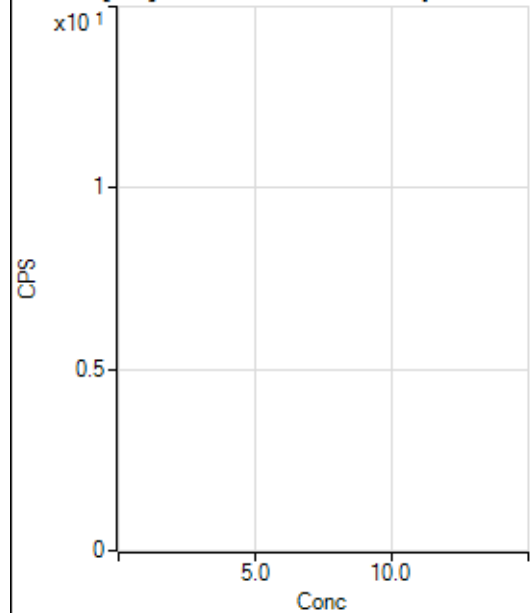
$$BEC = 0.03792$$

Weight: <None>

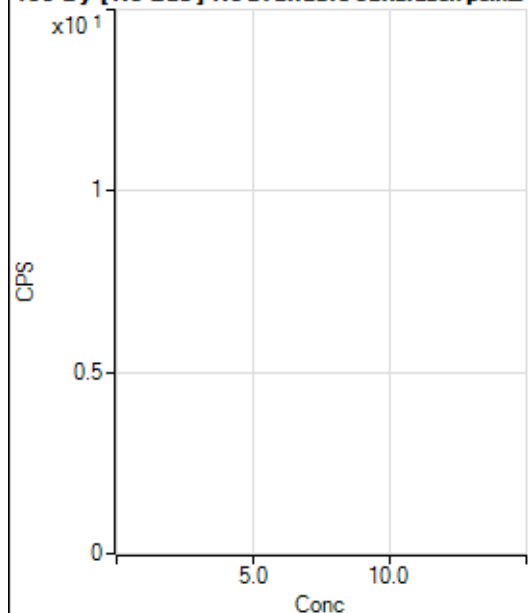
Min Conc: 0

150 Nd [No Gas] No available calibration points

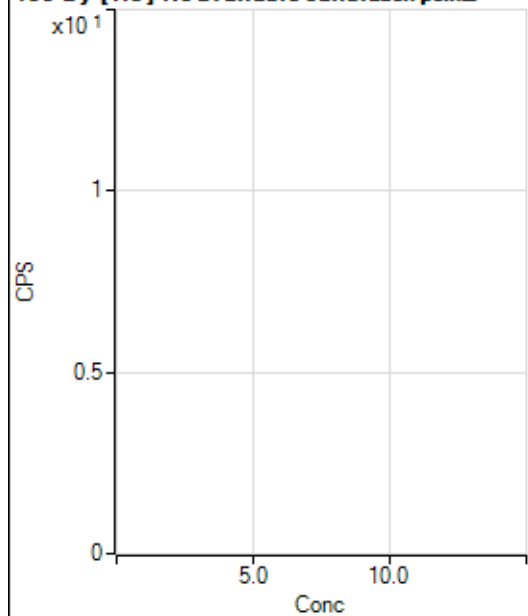
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	173.
2	☐						
3	☐			11.11		P	91.7
4	☐			75.56		P	18.4
5	☐			148.89		P	18.1
6	☐			306.68		P	13.2
7	☐			540.03		P	6.4
8	☐			1060.08		P	2.2
9	☐			140.01		P	37.2

150 Nd [He] No available calibration points

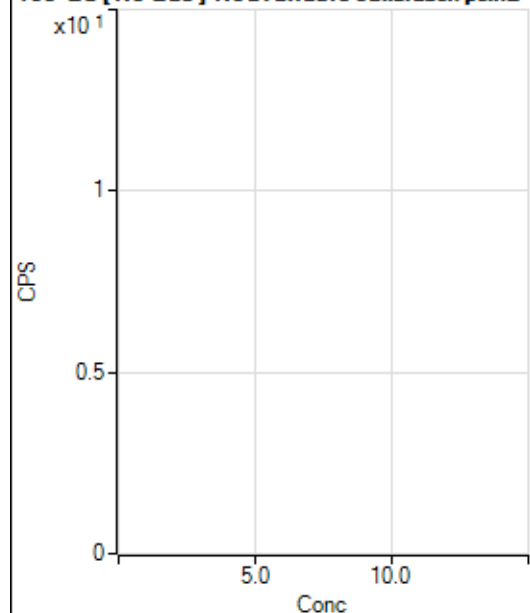
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐						
3	☐			0.00		P	
4	☐			8.89		P	21.6
5	☐			10.00		P	66.7
6	☐			13.33		P	25.0
7	☐			47.78		P	42.1
8	☐			78.89		P	4.9
9	☐			66.67		P	30.4

156 Dy [No Gas] No available calibration points

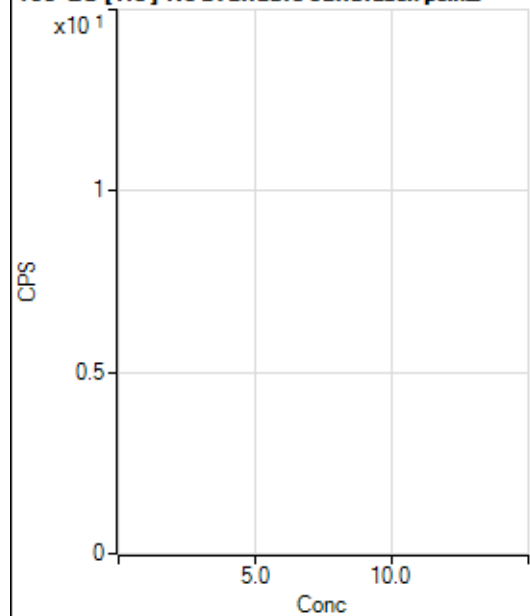
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	173.
2	☐						
3	☐			5.55		P	86.6
4	☐			27.78		P	62.5
5	☐			38.89		P	32.7
6	☐			113.90		P	21.1
7	☐			152.78		P	11.4
8	☐			294.46		P	11.8
9	☐			213.90		P	21.5

156 Dy [He] No available calibration points

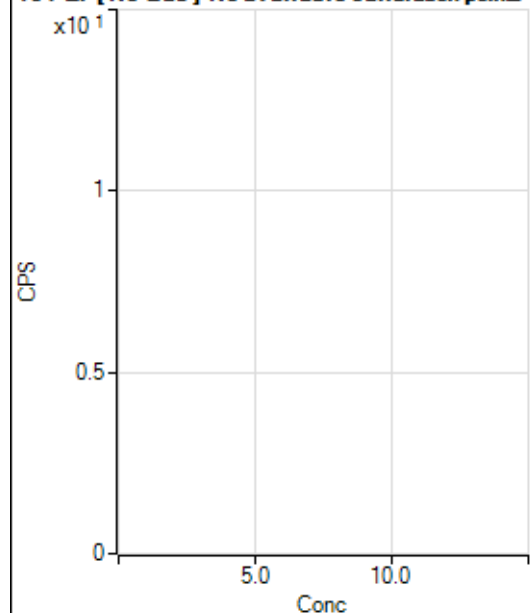
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			1.11		P	173.
4	☐			7.78		P	49.5
5	☐			20.00		P	16.7
6	☐			22.22		P	37.8
7	☐			55.55		P	6.9
8	☐			85.56		P	4.5
9	☐			84.45		P	12.7

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

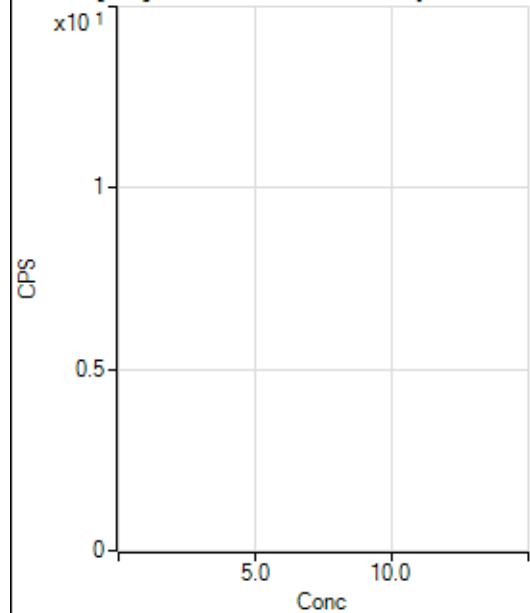
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.00		P	50.9
2	☐						
3	☐			83.34		P	10.0
4	☐			47.22		P	44.4
5	☐			83.34		P	36.1
6	☐			94.45		P	27.0
7	☐			119.45		P	22.4
8	☐			130.56		P	37.4
9	☐			163.90		P	10.6

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.89		P	19.9
2	☐						
3	☐			41.11		P	16.9
4	☐			67.78		P	15.0
5	☐			63.34		P	24.1
6	☐			71.11		P	17.7
7	☐			72.22		P	18.7
8	☐			94.45		P	12.4
9	☐			117.78		P	4.3

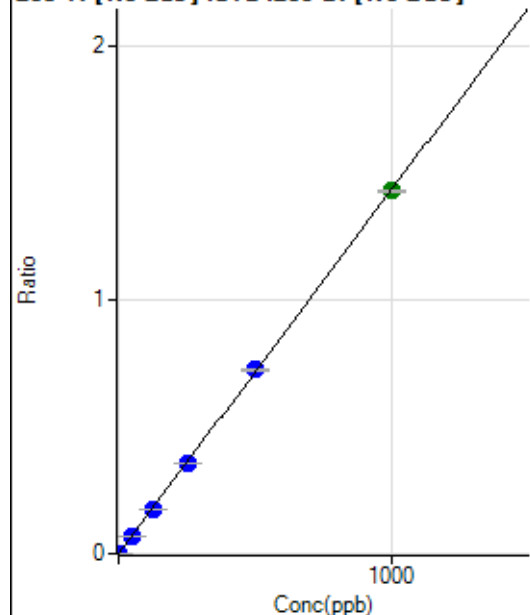
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	69.3
2	☐						
3	☐			72.23		P	75.1
4	☐			52.78		P	39.7
5	☐			38.89		P	12.4
6	☐			52.78		P	24.1
7	☐			66.67		P	12.5
8	☐			63.89		P	39.8
9	☐			80.56		P	58.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	21.6
2	☐						
3	☐			31.11		P	34.4
4	☐			16.67		P	20.0
5	☐			17.78		P	28.6
6	☐			16.67		P	NaN
7	☐			35.55		P	47.2
8	☐			23.33		P	28.6
9	☐			50.00		P	26.7

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	244.46	0.0000	P	11.8
2	☐	0.100					
3	☐	1.000	0.885	10279.36	0.0013	P	2.4
4	☐	50.000	48.724	555661.24	0.0698	P	1.1
5	☐	125.000	123.260	1400659.99	0.1765	P	0.4
6	☐	250.000	249.004	2796749.11	0.3565	P	1.3
7	☐	500.000	506.912	5629313.45	0.7257	P	0.9
8	☐	1000.000	997.074	10883946.42	1.4274	A	0.6
9	☐			5326.32	0.0008	P	7.2

$$y = 0.0014 * x + 3.0334E-005$$

$$R = 1.0000$$

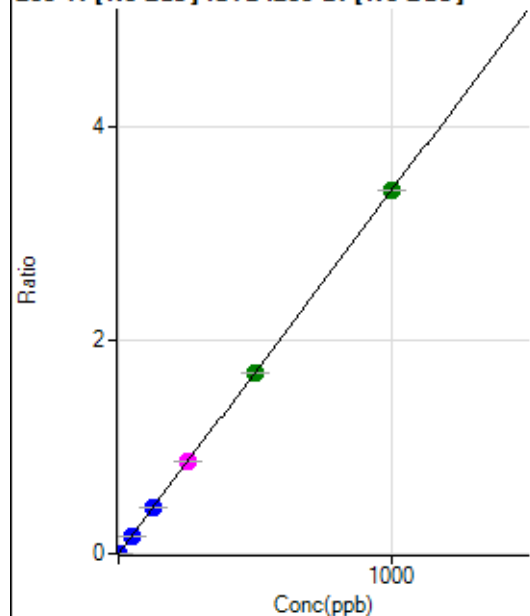
$$DL = 0.007472$$

$$BEC = 0.02119$$

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	625.04	0.0001	P	19.3
2	☐	0.100					
3	☐	1.000	0.910	25130.15	0.0032	P	1.0
4	☐	50.000	49.610	1343413.25	0.1687	P	0.9
5	☐	125.000	125.576	3388177.05	0.4269	P	0.7
6	☐	250.000	254.841	6796485.92	0.8663	M	1.5
7	☐	500.000	498.591	13147087.53	1.6948	A	0.6
8	☐	1000.000	999.442	25905408.57	3.3972	A	0.1
9	☐			12470.28	0.0018	P	5.5

$$y = 0.0034 * x + 7.7466E-005$$

$$R = 1.0000$$

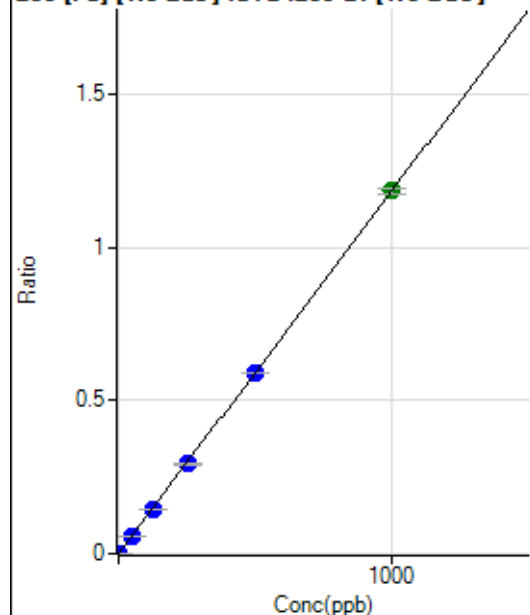
$$DL = 0.01319$$

$$BEC = 0.02279$$

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	985.26	0.0001	P	14.1
2	☐	0.100					
3	☐	1.000	0.935	9726.06	0.0012	P	2.4
4	☐	50.000	48.550	457841.50	0.0575	P	1.0
5	☐	125.000	121.805	1143322.84	0.1441	P	0.6
6	☐	250.000	247.701	2297463.88	0.2928	P	0.9
7	☐	500.000	499.021	4575366.88	0.5898	P	0.9
8	☐	1000.000	1001.536	9025287.99	1.1837	A	1.3
9	☐			18211.08	0.0027	P	3.3

$$y = 0.0012 * x + 1.2238E-004$$

$$R = 1.0000$$

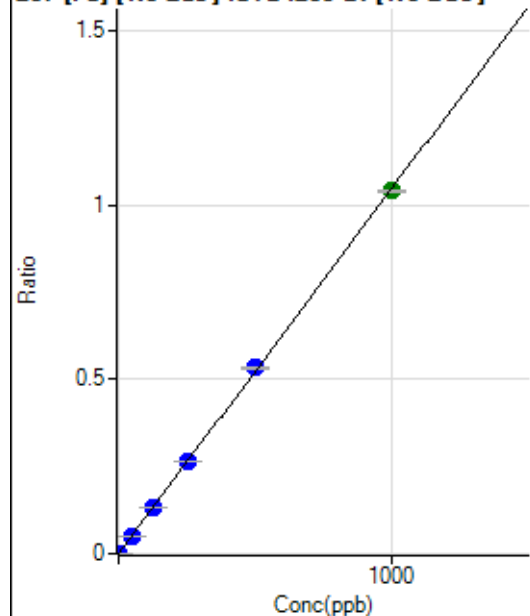
$$DL = 0.0437$$

$$BEC = 0.1036$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	925.99	0.0001	P	8.1
2	☐	0.100					
3	☐	1.000	0.966	8927.35	0.0011	P	0.9
4	☐	50.000	49.508	413605.85	0.0519	P	1.1
5	☐	125.000	124.491	1035189.61	0.1304	P	0.3
6	☐	250.000	252.559	2075179.78	0.2645	P	0.7
7	☐	500.000	509.444	4137769.74	0.5334	P	0.6
8	☐	1000.000	994.726	7940933.22	1.0414	A	0.5
9	☐			15896.92	0.0023	P	1.9

$$y = 0.0010 * x + 1.1493E-004$$

$$R = 0.9999$$

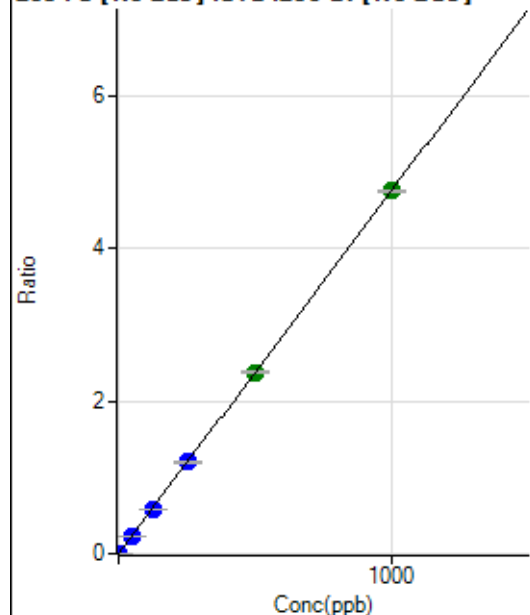
$$DL = 0.02677$$

$$BEC = 0.1098$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4217.08	0.0005	P	1.0
2	☐	0.100					
3	☐	1.000	0.945	39796.60	0.0050	P	0.8
4	☐	50.000	49.083	1864423.28	0.2341	P	0.8
5	☐	125.000	123.825	4681337.16	0.5899	P	0.4
6	☐	250.000	251.868	9408989.72	1.1993	P	0.6
7	☐	500.000	499.729	18453792.74	2.3789	A	0.9
8	☐	1000.000	999.861	36289740.63	4.7593	A	0.7
9	☐			72304.22	0.0106	P	0.6

$$y = 0.0048 * x + 5.2336E-004$$

$$R = 1.0000$$

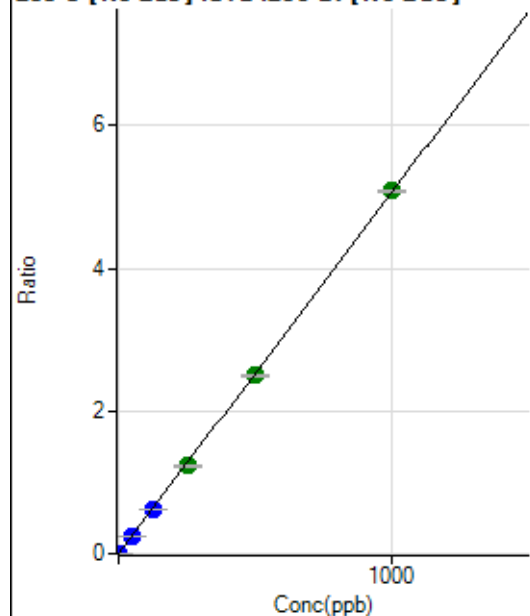
$$DL = 0.003325$$

$$BEC = 0.11$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	261.13	0.0000	P	9.8
2	☐	0.100					
3	☐	1.000	0.874	35321.23	0.0045	P	0.1
4	☐	50.000	48.186	1942341.93	0.2439	P	0.3
5	☐	125.000	124.176	4987827.37	0.6285	P	0.6
6	☐	250.000	243.619	9672938.32	1.2330	A	1.2
7	☐	500.000	493.416	19370895.57	2.4971	A	0.4
8	☐	1000.000	1005.081	38787479.34	5.0866	A	0.4
9	☐			6579.76	0.0010	P	9.4

$$y = 0.0051 * x + 3.2398E-005$$

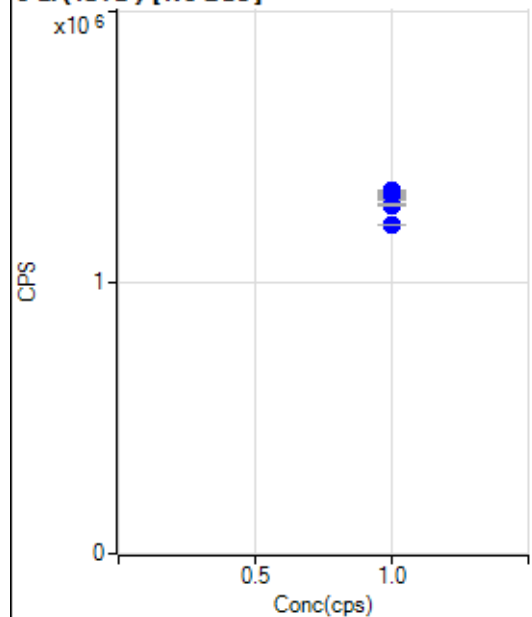
$$R = 0.9999$$

$$DL = 0.001879$$

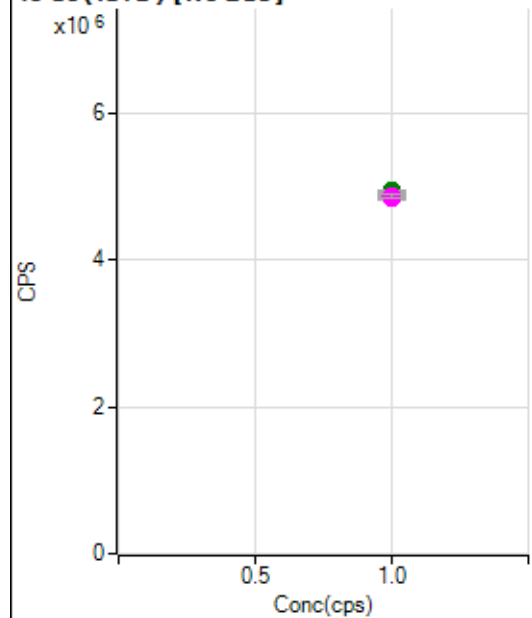
$$BEC = 0.006402$$

Weight: <None>

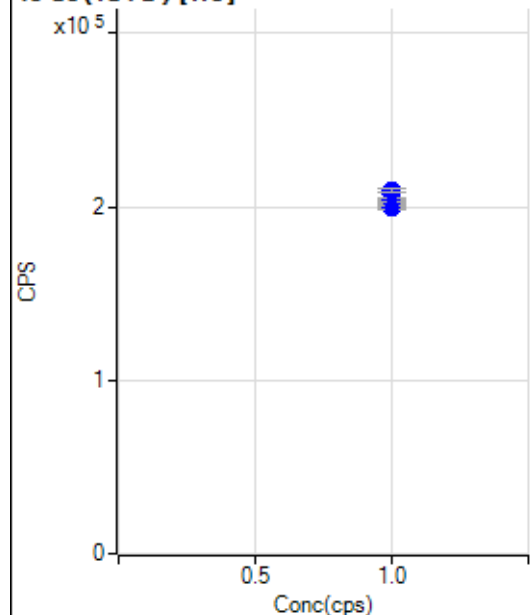
Min Conc: 0

6 Li (ISTD) [No Gas]

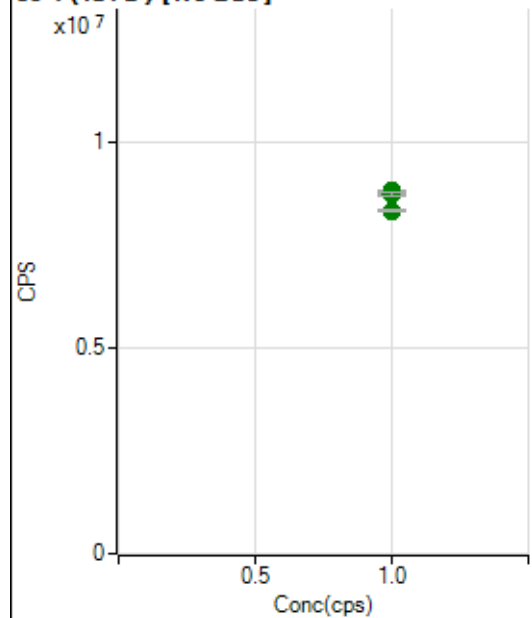
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1339356.51		P	0.8
2	☐	1.000					
3	☐	1.000		1319693.34		P	0.8
4	☐	1.000		1323988.47		P	0.5
5	☐	1.000		1323285.07		P	0.7
6	☐	1.000		1315657.57		P	0.8
7	☐	1.000		1305986.64		P	0.3
8	☐	1.000		1287567.19		P	0.4
9	☐	1.000		1213708.34		P	0.5

45 Sc (ISTD) [No Gas]

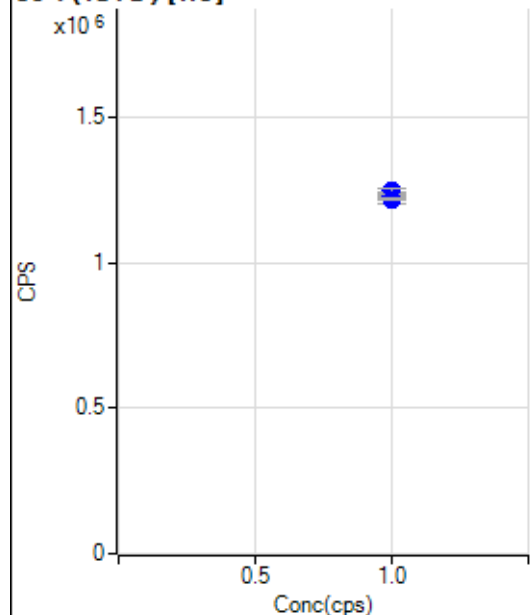
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4841198.63		M	1.3
2	☐	1.000					
3	☐	1.000		4911681.66		A	0.4
4	☐	1.000		4859936.05		M	0.6
5	☐	1.000		4891141.82		A	0.9
6	☐	1.000		4911349.50		M	0.7
7	☐	1.000		4932945.77		A	0.4
8	☐	1.000		4944088.13		A	0.1
9	☐	1.000		4874071.81		M	1.0

45 Sc (ISTD) [He]

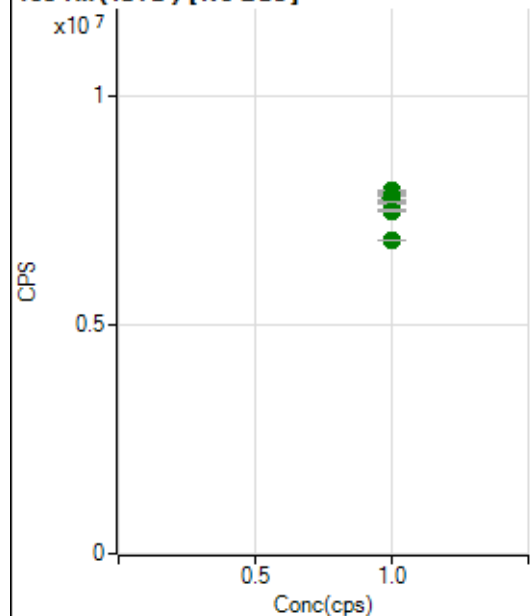
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		203440.60		P	0.9
2	☐	1.000					
3	☐	1.000		200246.11		P	0.4
4	☐	1.000		199961.90		P	2.1
5	☐	1.000		204498.55		P	0.3
6	☐	1.000		201232.77		P	0.6
7	☐	1.000		203908.36		P	0.8
8	☐	1.000		207149.56		P	1.5
9	☐	1.000		209156.99		P	0.9

89 Y (ISTD) [No Gas]

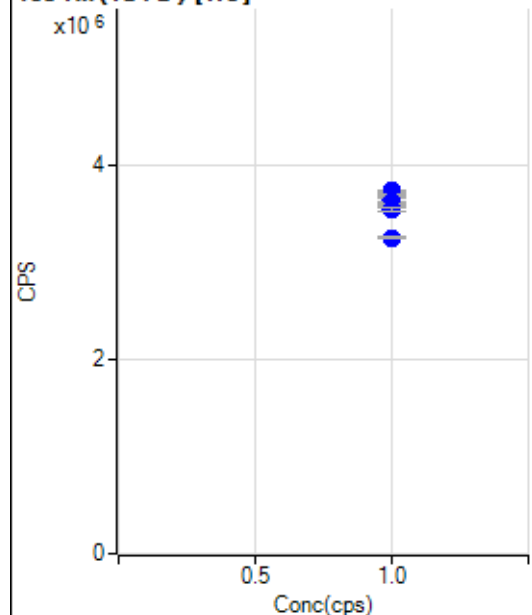
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8756973.41		A	0.4
2	☐	1.000					
3	☐	1.000		8775939.80		A	0.6
4	☐	1.000		8745776.82		A	0.7
5	☐	1.000		8749216.82		A	0.4
6	☐	1.000		8753884.94		A	0.2
7	☐	1.000		8822460.35		A	0.8
8	☐	1.000		8750774.04		A	0.8
9	☐	1.000		8340163.14		A	0.3

89 Y(ISTD) [He]

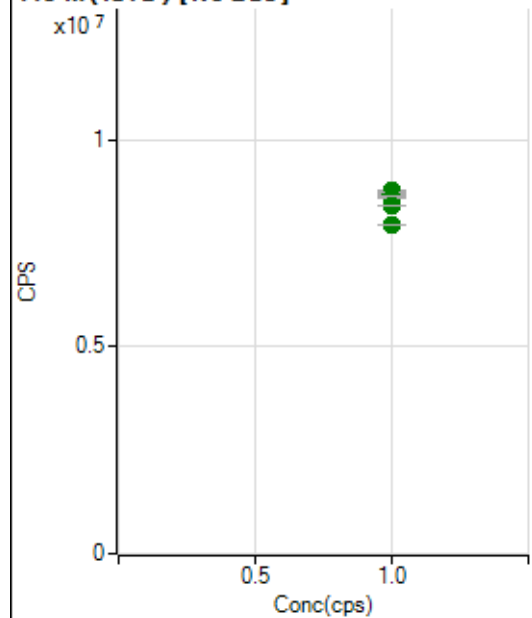
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1233558.34		P	0.6
2	☐	1.000					
3	☐	1.000		1219582.75		P	0.2
4	☐	1.000		1213907.40		P	1.6
5	☐	1.000		1239906.97		P	0.2
6	☐	1.000		1224546.59		P	0.2
7	☐	1.000		1230211.23		P	1.4
8	☐	1.000		1246061.28		P	1.4
9	☐	1.000		1217410.56		P	0.4

103 Rh(ISTD) [No Gas]

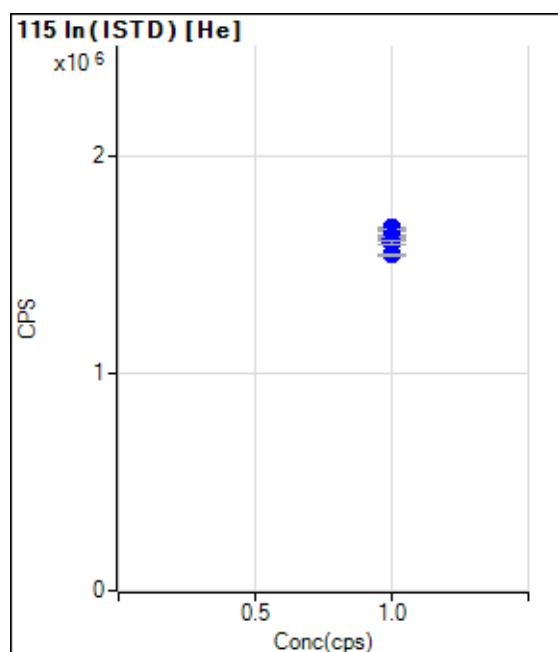
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7879743.75		A	0.2
2	☐	1.000					
3	☐	1.000		7925204.61		A	0.1
4	☐	1.000		7816638.37		A	0.5
5	☐	1.000		7768016.67		A	1.1
6	☐	1.000		7733609.20		A	0.3
7	☐	1.000		7676548.70		A	0.4
8	☐	1.000		7484218.22		A	0.7
9	☐	1.000		6851491.13		A	0.4

103 Rh (ISTD) [He]

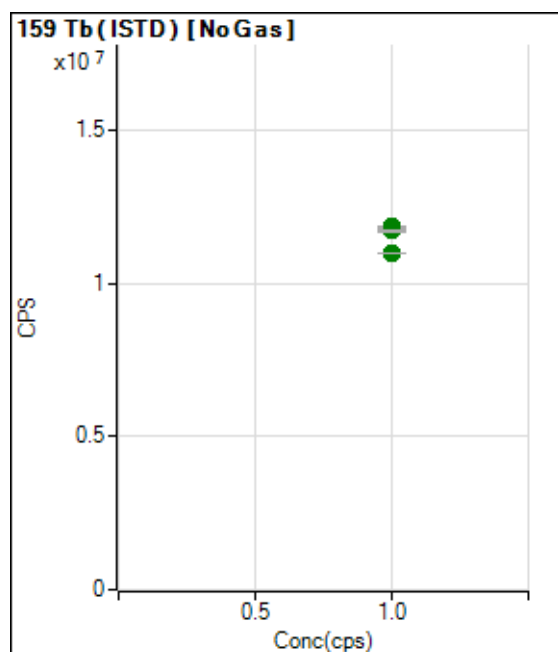
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3732503.63		P	0.7
2	☐	1.000					
3	☐	1.000		3696195.60		P	0.1
4	☐	1.000		3639157.17		P	1.5
5	☐	1.000		3692919.08		P	0.3
6	☐	1.000		3613264.36		P	0.4
7	☐	1.000		3590384.01		P	1.0
8	☐	1.000		3546459.92		P	0.9
9	☐	1.000		3247248.25		P	0.5

115 In (ISTD) [No Gas]

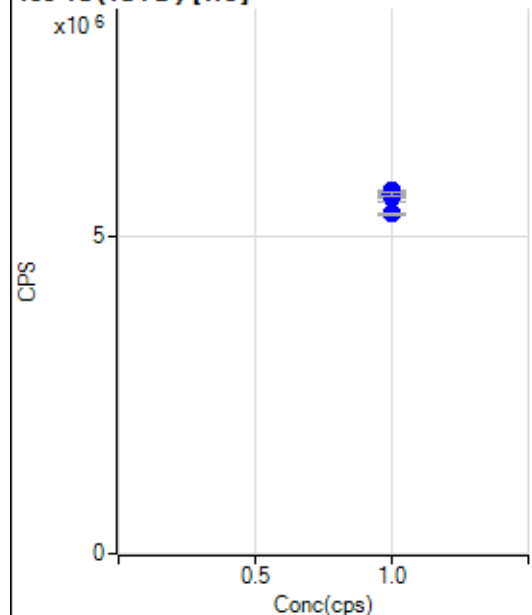
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8763618.94		A	0.6
2	☐	1.000					
3	☐	1.000		8724293.14		A	0.9
4	☐	1.000		8706155.58		A	0.8
5	☐	1.000		8693858.77		A	0.9
6	☐	1.000		8604638.33		A	0.2
7	☐	1.000		8613837.83		A	0.3
8	☐	1.000		8399354.03		A	0.2
9	☐	1.000		7955043.97		A	0.2



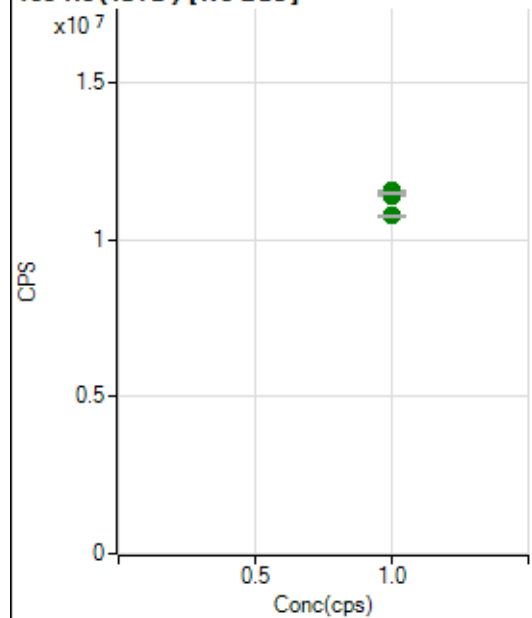
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1666062.44		P	0.6
2	☐	1.000					
3	☐	1.000		1648857.42		P	0.2
4	☐	1.000		1632387.80		P	1.8
5	☐	1.000		1663188.43		P	0.1
6	☐	1.000		1626546.20		P	0.7
7	☐	1.000		1614501.78		P	1.0
8	☐	1.000		1599843.33		P	0.8
9	☐	1.000		1542375.50		P	0.9



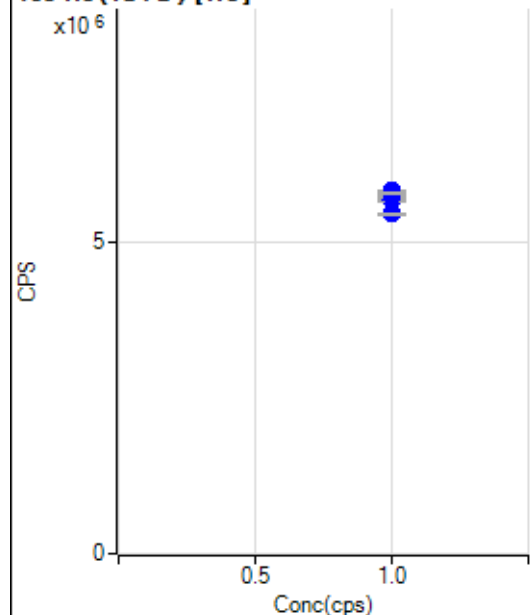
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11761610.66		A	0.8
2	☐	1.000					
3	☐	1.000		11798092.46		A	0.6
4	☐	1.000		11763747.74		A	0.4
5	☐	1.000		11784335.38		A	0.4
6	☐	1.000		11761575.52		A	0.3
7	☐	1.000		11833346.07		A	0.7
8	☐	1.000		11709886.22		A	0.7
9	☐	1.000		10991551.92		A	0.1

159 Tb (ISTD) [He]

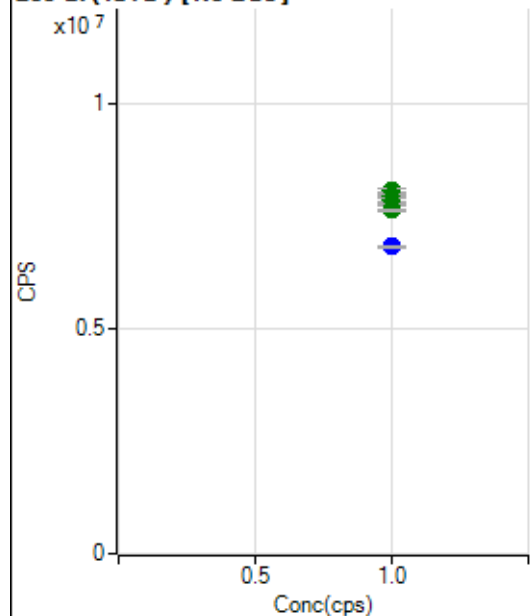
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5676359.78		P	0.6
2	☐	1.000					
3	☐	1.000		5590572.49		P	0.5
4	☐	1.000		5579674.08		P	1.2
5	☐	1.000		5703118.39		P	0.2
6	☐	1.000		5612668.32		P	0.5
7	☐	1.000		5659480.19		P	0.9
8	☐	1.000		5652297.28		P	1.0
9	☐	1.000		5339168.25		P	0.2

165 Ho (ISTD) [No Gas]

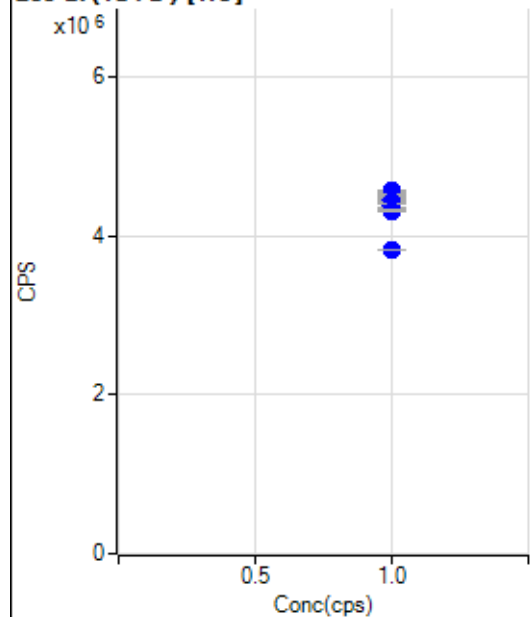
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11540342.53		A	0.6
2	☐	1.000					
3	☐	1.000		11405158.33		A	0.1
4	☐	1.000		11463017.19		A	0.6
5	☐	1.000		11483927.69		A	1.3
6	☐	1.000		11477400.26		A	0.5
7	☐	1.000		11563820.05		A	0.7
8	☐	1.000		11513532.81		A	0.6
9	☐	1.000		10760473.42		A	0.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5771601.72		P	0.7
2	☐	1.000					
3	☐	1.000		5693704.01		P	0.4
4	☐	1.000		5678724.57		P	1.6
5	☐	1.000		5818739.57		P	0.0
6	☐	1.000		5731874.50		P	0.5
7	☐	1.000		5758391.86		P	0.8
8	☐	1.000		5777869.57		P	0.7
9	☐	1.000		5446116.10		P	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8058154.95		A	1.0
2	☐	1.000					
3	☐	1.000		7927294.67		A	0.8
4	☐	1.000		7963733.49		A	1.3
5	☐	1.000		7936610.37		A	0.9
6	☐	1.000		7845912.31		A	1.0
7	☐	1.000		7757336.69		A	0.4
8	☐	1.000		7625386.90		A	0.9
9	☐	1.000		6815290.94		P	0.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4573289.20		P	0.5
2	☐	1.000					
3	☐	1.000		4473210.87		P	0.3
4	☐	1.000		4468305.94		P	1.4
5	☐	1.000		4527386.36		P	0.4
6	☐	1.000		4428540.04		P	0.3
7	☐	1.000		4382296.39		P	0.9
8	☐	1.000		4320570.25		P	0.6
9	☐	1.000		3822720.98		P	0.1

US EPA Tune Check Sample Report

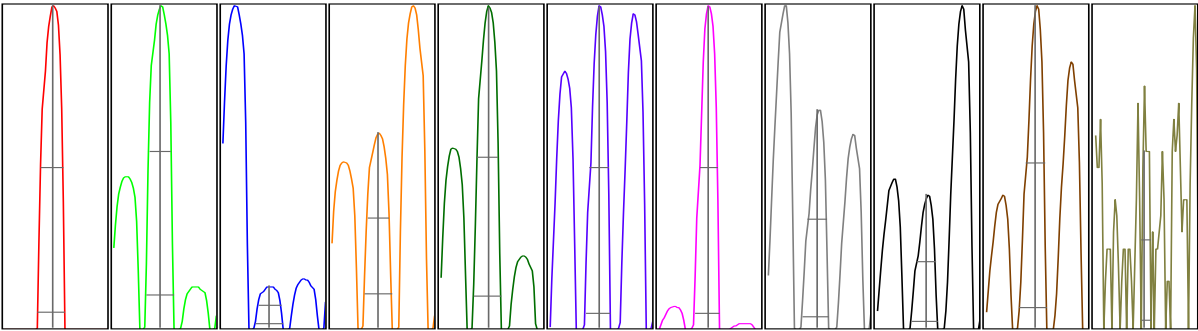
Batch Folder D:\ICP-MS Data\P7061417-MS .b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7349	0.96	5.00	
24	110774	0.87	5.00	
25	15281	0.85	5.00	
26	17740	0.98	5.00	
59	79913	0.91	5.00	
113	12209	0.68	5.00	
115	165707	0.65	5.00	
206	35431	0.81	5.00	
207	31580	0.89	5.00	
208	75839	1.15	5.00	
220	0	38.89		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7228	7370	7355	7385	7408
24	109155	110837	110880	111388	111609
25	15062	15304	15307	15322	15410
26	17455	17718	17802	17815	17909
59	78751	79728	80087	80622	80377
113	12071	12251	12191	12279	12253
115	164034	166714	166153	166390	165246
206	34942	35408	35593	35585	35627
207	31077	31663	31711	31714	31733
208	74342	76206	75875	76211	76560
220	1	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	12188	8.95	8.9 - 9.1		0.785	0.900	
24	176346	23.90	23.9 - 24.1		0.806	0.900	
25	23363	24.90	24.9 - 25.1		0.795	0.900	
26	27407	25.90	25.9 - 26.1		0.785	0.900	
59	135466	58.95	58.9 - 59.1		0.792	0.900	
113	23101	113.00	112.9 - 113.1		0.734	0.900	
115	317899	115.00	114.9 - 115.1		0.731	0.900	
206	68375	206.00	205.9 - 206.1		0.774	0.900	
207	60848	207.00	206.9 - 207.1		0.771	0.900	
208	147225	208.00	207.9 - 208.1		0.780	0.900	
220	1	220.00	-		0.295		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.1	V	Deflect	13.8	V
Extract 2	-160.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	19898	2.16	
89	5400	2.05	
205	29196	2.32	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	19141	19996	20129	20188	20034
89	5204	5440	5449	5473	5436
205	27990	29440	29474	29628	29449

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	2.2	V
Extract 2	-170.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-80	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	200	V			