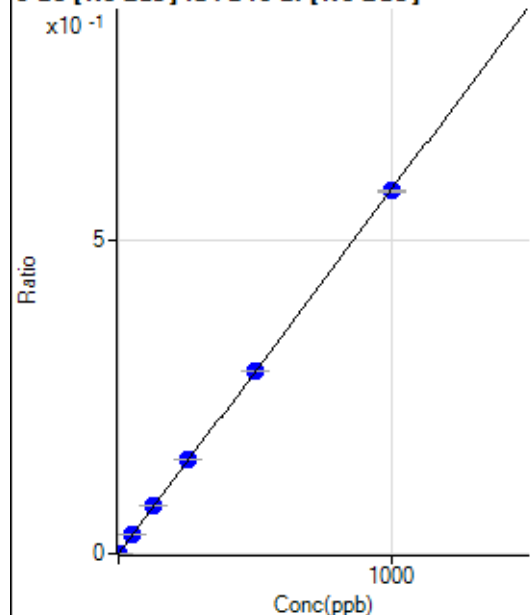


Batch Folder: D:\ICP-MS Data\P7051618-MS.b\
Analysis File: P7051618-MS.batch.bin
DA Date-Time: 2018-05-16 18:29:29
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-05-16 11:57:40
2	004CAL.S.d	S01	2018-05-16 12:01:13
3	005CAL.S.d	S02	2018-05-16 12:05:44
4	006CAL.S.d	S03	2018-05-16 12:09:37
5	007CAL.S.d	S04	2018-05-16 12:13:29
6	008CAL.S.d	S05	2018-05-16 12:17:17
7	009CAL.S.d	S06	2018-05-16 12:21:03
8	010CAL.S.d	S07	2018-05-16 12:24:48
9	011CAL.S.d	S08	2018-05-16 12:28:31

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0000	P	9.5
2	☐	0.100	0.099	235.19	0.0001	P	12.7
3	☐	1.000	1.081	1918.70	0.0007	P	1.6
4	☐	50.000	53.796	94181.48	0.0313	P	0.1
5	☐	125.000	132.058	233585.67	0.0769	P	0.7
6	☐	250.000	257.360	450973.25	0.1499	P	0.5
7	☐	500.000	501.557	862642.25	0.2921	P	0.8
8	☐	1000.000	996.309	1682170.05	0.5802	P	0.5
9	☐			653.74	0.0002	P	8.1

$$y = 5.8237\text{E-}004 * x + 2.0342\text{E-}005$$

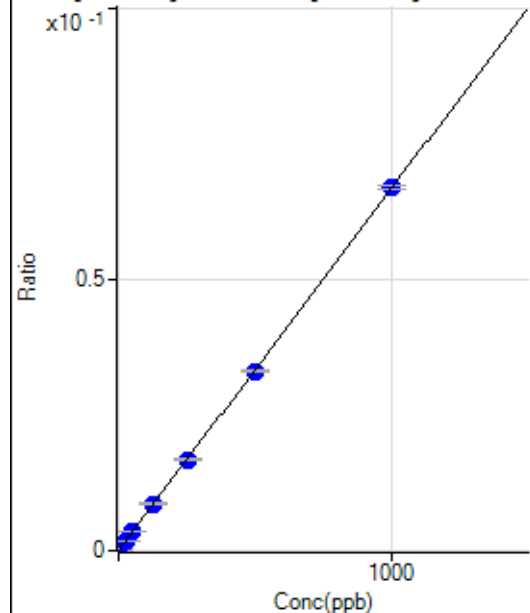
$$R = 1.0000$$

$$DL = 0.009914$$

$$BEC = 0.03493$$

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	127.78	0.0000	P	30.5
2	☐	2.500	2.293	591.70	0.0002	P	12.7
3	☐	25.000	25.209	5095.53	0.0017	P	3.4
4	☐	50.000	52.440	10651.36	0.0035	P	2.1
5	☐	125.000	128.477	26187.30	0.0086	P	1.8
6	☐	250.000	250.152	50395.93	0.0168	P	2.6
7	☐	500.000	495.672	97909.67	0.0332	P	1.6
8	☐	1000.000	1001.565	194075.25	0.0669	P	1.1
9	☐			5109.40	0.0018	P	9.1

$$y = 6.6799\text{E-}005 * x + 4.2496\text{E-}005$$

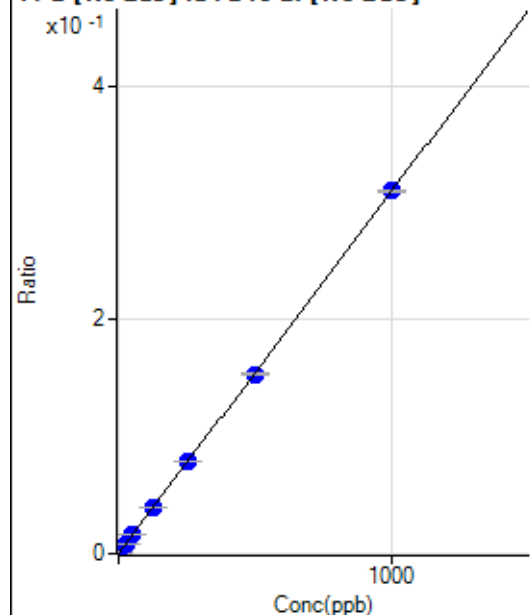
$$R = 1.0000$$

$$DL = 0.5829$$

$$BEC = 0.6362$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	647.26	0.0002	P	10.8
2	☐	2.500	2.521	3014.32	0.0010	P	3.3
3	☐	25.000	23.903	22489.66	0.0076	P	2.4
4	☐	50.000	52.614	49604.43	0.0165	P	1.4
5	☐	125.000	128.224	121244.20	0.0399	P	0.9
6	☐	250.000	252.420	235858.46	0.0784	P	0.4
7	☐	500.000	494.711	453141.24	0.1534	P	0.5
8	☐	1000.000	1001.533	899908.04	0.3104	P	0.6
9	☐			23521.87	0.0084	P	6.3

$$y = 3.0973\text{E-}004 * x + 2.1545\text{E-}004$$

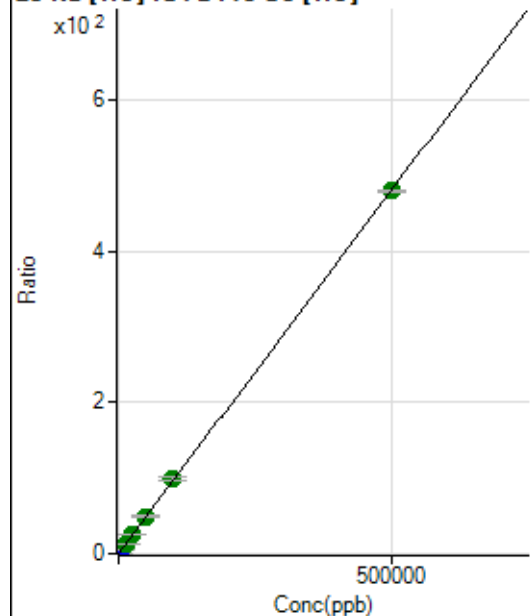
$$R = 1.0000$$

$$DL = 0.2253$$

$$BEC = 0.6956$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15761.69	0.0424	P	2.5
2	☐	50.000	46.706	32511.10	0.0873	P	0.8
3	☐	500.000	493.371	187267.51	0.5172	P	0.3
4	☐	5000.000	5277.621	1836309.78	5.1214	P	1.0
5	☐	12500.000	12993.115	4293977.05	12.5465	A	0.2
6	☐	25000.000	26115.145	7970581.78	25.1748	A	0.7
7	☐	50000.000	51537.723	15245889.40	49.6406	A	0.1
8	☐	100000.00	103196.74	30407566.65	99.3556	A	4.7
9	☐	500000.00	499136.02	159760202.1	480.3948	A	0.4

$$y = 9.6237\text{E-}004 * x + 0.0424$$

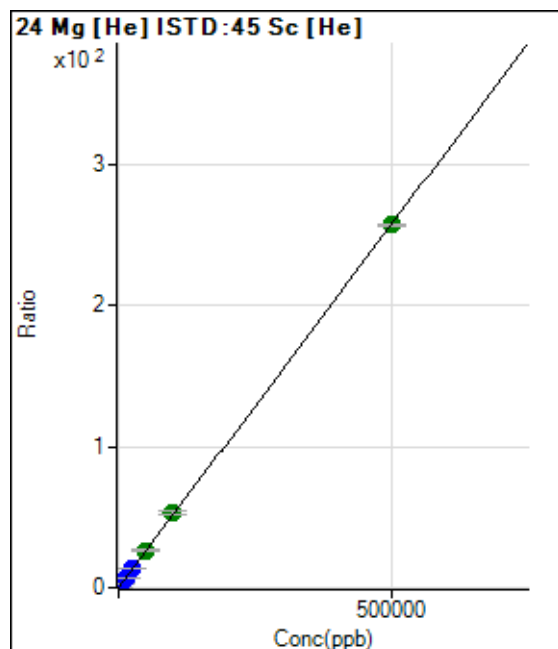
$$R = 1.0000$$

$$DL = 3.282$$

$$BEC = 44.04$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	627.82	0.0017	P	3.8
2	☐	50.000	46.896	9631.23	0.0259	P	1.7
3	☐	500.000	487.314	91603.78	0.2530	P	0.4
4	☐	5000.000	5250.068	971350.38	2.7091	P	1.0
5	☐	12500.000	12985.101	2292310.51	6.6979	P	0.2
6	☐	25000.000	26328.201	4299161.81	13.5787	P	0.6
7	☐	50000.000	51459.714	8150608.43	26.5386	A	0.6
8	☐	100000.00	102565.27	16186909.04	52.8929	A	4.9
9	☐	500000.00	499259.94	85622597.75	257.4617	A	0.5

$$y = 5.1568\text{E-}004 * x + 0.0017$$

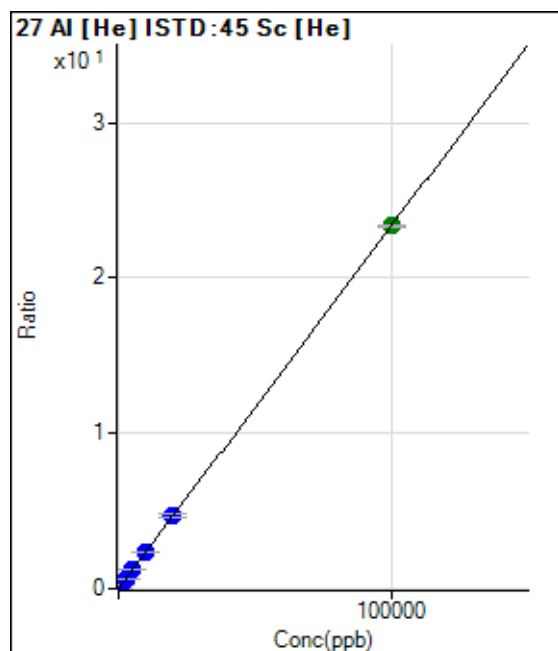
$$R = 1.0000$$

$$DL = 0.3769$$

$$BEC = 3.273$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0001	P	10.0
2	☐	2.000	1.949	216.68	0.0006	P	30.0
3	☐	20.000	18.745	1630.72	0.0045	P	9.0
4	☐	1000.000	1033.139	86561.27	0.2414	P	1.2
5	☐	2500.000	2549.284	203809.20	0.5955	P	0.6
6	☐	5000.000	5068.778	374851.00	1.1839	P	0.7
7	☐	10000.000	10009.257	717995.47	2.3378	P	0.6
8	☐	20000.000	20101.439	1436850.35	4.6949	P	4.8
9	☐	100000.00	99973.784	7765143.66	23.3492	A	0.2

$$y = 2.3355\text{E-}004 * x + 1.2695\text{E-}004$$

$$R = 1.0000$$

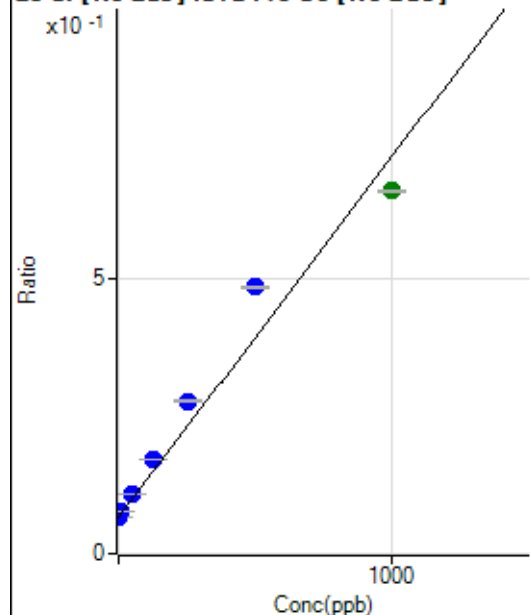
$$DL = 0.1633$$

$$BEC = 0.5435$$

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	455612.95	0.0661	P	1.1
2	☐	1.000	-0.913	464868.65	0.0655	P	0.9
3	☐	10.000	16.493	529321.40	0.0769	P	0.4
4	☐	50.000	63.613	742688.70	0.1077	P	0.5
5	☐	125.000	159.435	1160749.76	0.1705	P	0.5
6	☐	250.000	323.605	1802341.58	0.2780	P	0.5
7	☐	500.000	639.484	3046681.56	0.4850	P	0.5
8	☐	1000.000	906.809	4163374.57	0.6601	A	0.3
9	☐			718613.47	0.1103	P	0.6

$$y = 6.5504\text{E-}004 * x + 0.0661$$

$$R = 0.9818$$

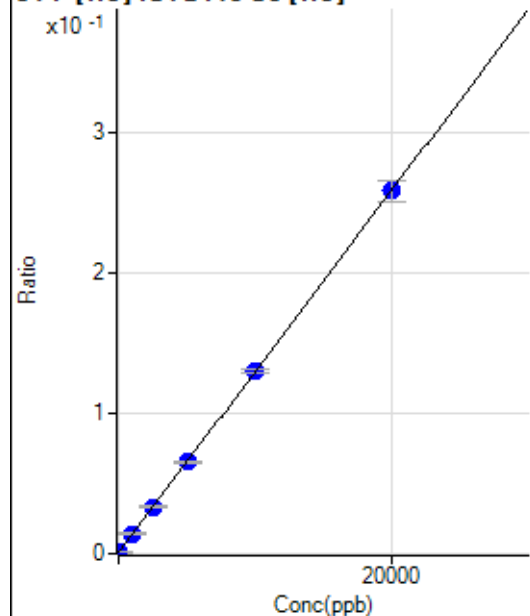
$$DL = 3.346$$

$$BEC = 100.9$$

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	-14.693	205.56	0.0006	P	16.3
2	☐	0.000	2.038	286.13	0.0008	P	2.9
3	☐	0.000	12.655	327.80	0.0009	P	7.7
4	☐	1000.000	1055.199	5148.34	0.0144	P	1.6
5	☐	2500.000	2541.211	11477.06	0.0335	P	1.9
6	☐	5000.000	4989.867	20620.43	0.0651	P	2.1
7	☐	10000.000	10020.257	39937.76	0.1300	P	1.7
8	☐	20000.000	19984.493	79124.23	0.2586	P	5.8
9	☐			250.01	0.0008	P	2.6

$$y = 1.2904\text{E-}005 * x + 7.4218\text{E-}004$$

$$R = 1.0000$$

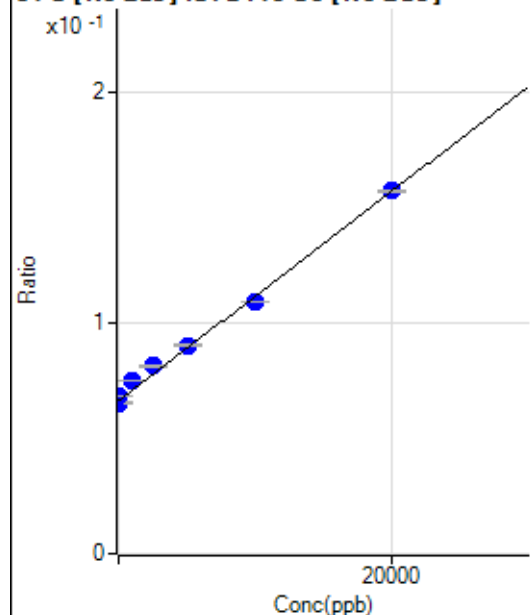
$$DL = 14.11$$

$$BEC = 57.52$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-232.735	449409.85	0.0652	P	1.3
2	☐	0.000	-194.808	463942.29	0.0653	P	0.7
3	☐	0.000	427.543	469346.83	0.0682	P	0.3
4	☐	1000.000	1904.931	516048.76	0.0749	P	0.2
5	☐	2500.000	3317.573	553217.86	0.0813	P	0.3
6	☐	5000.000	5298.386	585016.14	0.0902	P	1.0
7	☐	10000.000	9493.388	686432.36	0.1093	P	0.2
8	☐	20000.000	20031.267	990528.38	0.1570	P	0.7
9	☐			398171.71	0.0611	P	1.3

$$y = 4.5337\text{E-}006 * x + 0.0662$$

$$R = 0.9975$$

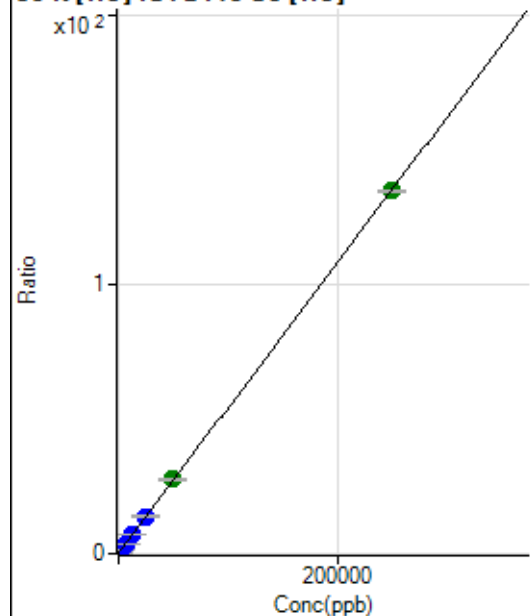
$$DL = 328.7$$

$$BEC = 1.461\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	44473.24	0.1196	P	0.4
2	☐	50.000	53.339	55231.31	0.1484	P	0.4
3	☐	500.000	510.926	143137.11	0.3953	P	0.5
4	☐	2500.000	2643.554	554411.26	1.5462	P	1.0
5	☐	6250.000	6496.454	1240803.09	3.6255	P	0.2
6	☐	12500.000	12863.421	2235768.08	7.0616	P	0.6
7	☐	25000.000	25571.957	4275151.53	13.9200	P	0.6
8	☐	50000.000	50869.525	8438590.21	27.5723	A	4.7
9	☐	250000.00	249743.10	44862785.03	134.8985	A	0.2

$$y = 5.3967\text{E-}004 * x + 0.1196$$

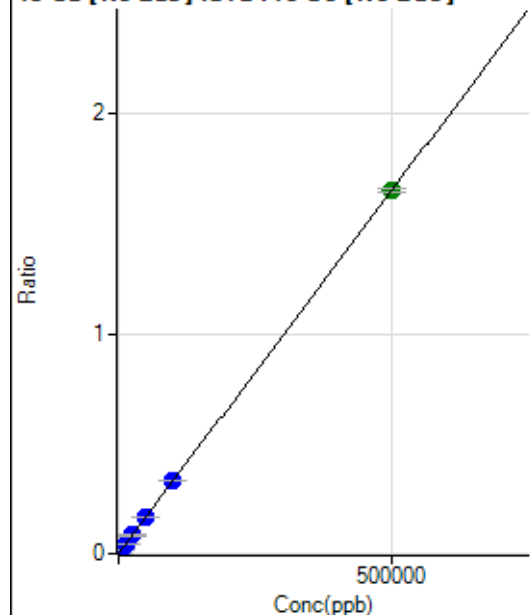
$$R = 1.0000$$

$$DL = 2.496$$

$$BEC = 221.6$$

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	188.90	0.0000	P	29.3
2	☐	50.000	43.297	1208.44	0.0002	P	6.5
3	☐	500.000	453.045	10473.54	0.0015	P	2.3
4	☐	5000.000	5037.231	114675.88	0.0166	P	1.7
5	☐	12500.000	12544.148	281723.12	0.0414	P	1.0
6	☐	25000.000	25182.232	538344.63	0.0830	P	0.4
7	☐	50000.000	50361.863	1043238.91	0.1661	P	1.2
8	☐	100000.00	99900.017	2077565.15	0.3294	P	0.3
9	☐	500000.00	499973.27	10742094.86	1.6483	A	1.1

$$y = 3.2968\text{E-}006 * x + 2.7436\text{E-}005$$

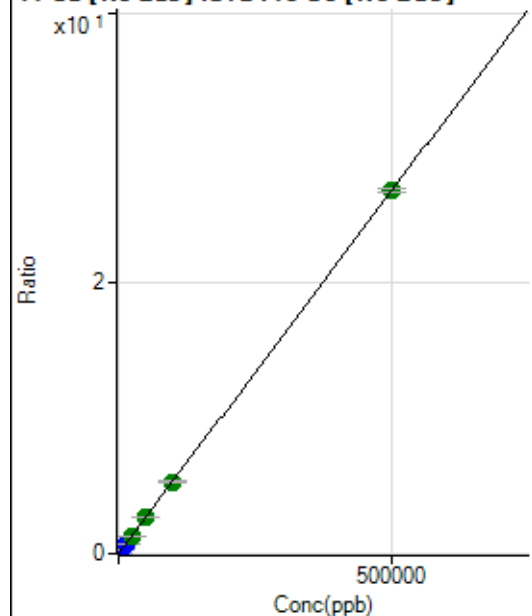
$$R = 1.0000$$

$$DL = 7.316$$

$$BEC = 8.322$$

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	10615.36	0.0015	P	3.2
2	☐	50.000	43.588	27535.16	0.0039	P	0.5
3	☐	500.000	452.019	177601.72	0.0258	P	1.1
4	☐	5000.000	5045.765	1876901.58	0.2723	P	0.1
5	☐	12500.000	12662.401	4635672.63	0.6809	P	0.3
6	☐	25000.000	25053.112	8723512.00	1.3457	A	0.2
7	☐	50000.000	50032.407	16874026.24	2.6859	A	0.7
8	☐	100000.00	99363.965	33636575.06	5.3327	A	0.3
9	☐	500000.00	500116.84	174878634.4	26.8344	A	1.2

$$y = 5.3653\text{E-}005 * x + 0.0015$$

$$R = 1.0000$$

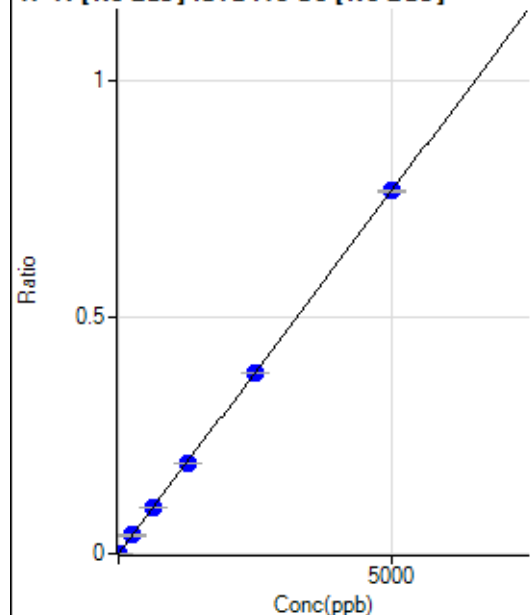
$$DL = 2.777$$

$$BEC = 28.69$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	91.67	0.0000	P	46.1
2	☐	0.500	0.395	525.03	0.0001	P	8.5
3	☐	5.000	4.878	5245.61	0.0008	P	4.5
4	☐	250.000	252.429	267089.98	0.0387	P	1.5
5	☐	625.000	626.416	654429.21	0.0961	P	0.4
6	☐	1250.000	1252.480	1245826.33	0.1922	P	0.4
7	☐	2500.000	2496.211	2406262.90	0.3830	P	0.7
8	☐	5000.000	5000.976	4839955.06	0.7673	P	0.6
9	☐			1602.93	0.0002	P	10.6

$$y = 1.5343\text{E-}004 * x + 1.3315\text{E-}005$$

$$R = 1.0000$$

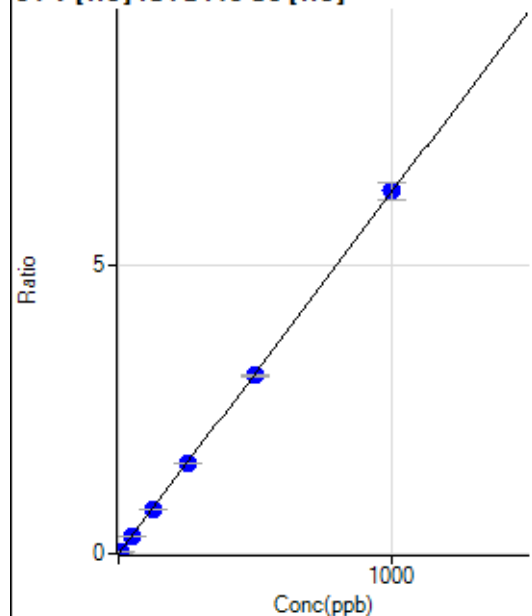
$$DL = 0.1201$$

$$BEC = 0.08678$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6.67	0.0000	P	49.7
2	☐	0.500	0.412	966.72	0.0026	P	10.3
3	☐	5.000	4.539	10290.39	0.0284	P	1.6
4	☐	50.000	49.832	111823.96	0.3119	P	0.8
5	☐	125.000	122.961	263349.26	0.7695	P	0.6
6	☐	250.000	248.161	491693.59	1.5530	P	0.5
7	☐	500.000	493.138	947791.44	3.0860	P	0.7
8	☐	1000.000	1004.156	1923315.60	6.2839	P	4.6
9	☐			1096.73	0.0033	P	2.9

$$y = 0.0063 * x + 1.7906\text{E-}005$$

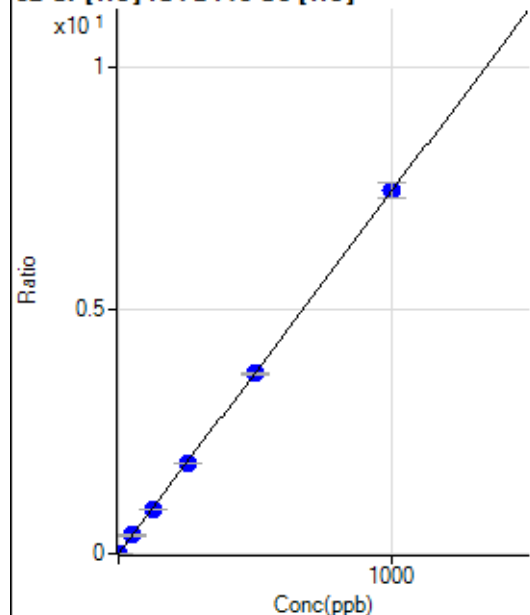
$$R = 1.0000$$

$$DL = 0.00427$$

$$BEC = 0.002861$$

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	193.34	0.0005	P	16.2
2	☐	0.200	0.183	700.03	0.0019	P	3.4
3	☐	2.000	1.964	5477.77	0.0151	P	0.7
4	☐	50.000	50.492	134874.60	0.3762	P	1.3
5	☐	125.000	124.264	316572.95	0.9250	P	0.4
6	☐	250.000	250.733	590764.79	1.8659	P	0.7
7	☐	500.000	496.633	1134918.75	3.6953	P	1.0
8	☐	1000.000	1001.567	2280911.55	7.4519	P	4.4
9	☐			117633.21	0.3537	P	0.4

$$y = 0.0074 * x + 5.1966E-004$$

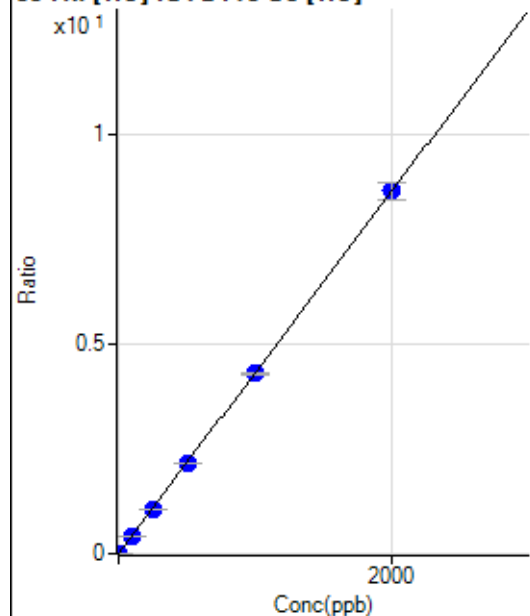
$$R = 1.0000$$

$$DL = 0.03394$$

$$BEC = 0.06985$$

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	90.00	0.0002	P	26.7
2	☐	0.100	0.069	201.12	0.0005	P	6.2
3	☐	1.000	0.933	1550.11	0.0043	P	2.3
4	☐	100.000	99.661	154723.42	0.4315	P	1.0
5	☐	250.000	248.611	368274.30	1.0761	P	0.5
6	☐	500.000	498.413	682952.65	2.1571	P	0.5
7	☐	1000.000	993.876	1320974.78	4.3011	P	0.9
8	☐	2000.000	2003.650	2653877.58	8.6708	P	4.5
9	☐			13874.51	0.0417	P	0.9

$$y = 0.0043 * x + 2.4192E-004$$

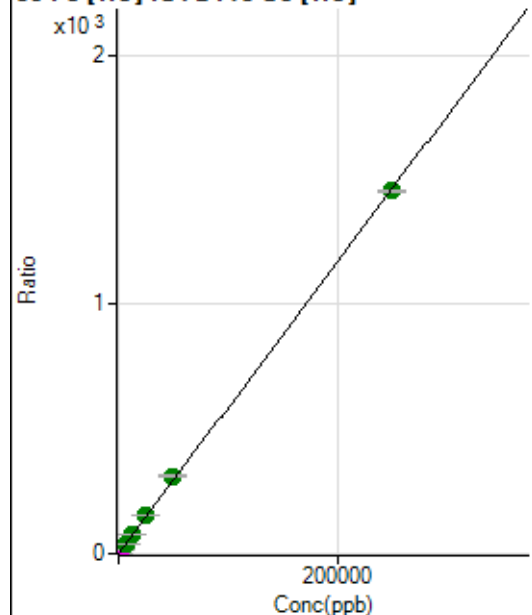
$$R = 1.0000$$

$$DL = 0.04471$$

$$BEC = 0.05591$$

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	5469.69	0.0147	P	2.9
2	☐	5.000	4.250	14726.27	0.0396	P	2.7
3	☐	50.000	48.827	108686.14	0.3002	P	0.3
4	☐	2500.000	2669.485	5601320.03	15.6214	M	0.4
5	☐	6250.000	6617.453	13245689.65	38.7024	A	0.2
6	☐	12500.000	13365.427	24744032.73	78.1532	A	0.9
7	☐	25000.000	26598.056	47762288.11	155.5153	A	0.6
8	☐	50000.000	53468.134	95676200.29	312.6062	A	4.6
9	☐	250000.00	249092.41	484298747.8	1,456.287	A	0.6

$$y = 0.0058 * x + 0.0147$$

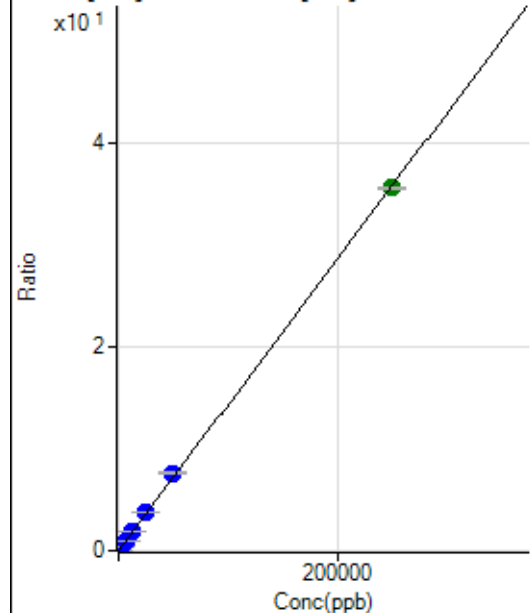
$$R = 0.9999$$

$$DL = 0.2196$$

$$BEC = 2.515$$

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	487.06	0.0013	P	12.8
2	☐	5.000	4.023	701.89	0.0019	P	6.0
3	☐	50.000	51.006	3117.10	0.0086	P	3.7
4	☐	2500.000	2662.705	137113.10	0.3824	P	0.6
5	☐	6250.000	6584.801	322972.49	0.9437	P	0.7
6	☐	12500.000	13358.410	605725.78	1.9132	P	0.5
7	☐	25000.000	26489.337	1164740.43	3.7924	P	1.0
8	☐	50000.000	53463.594	2342302.22	7.6530	P	4.6
9	☐	250000.00	249105.43	11856581.75	35.6531	A	0.7

$$y = 1.4312E-004 * x + 0.0013$$

$$R = 0.9999$$

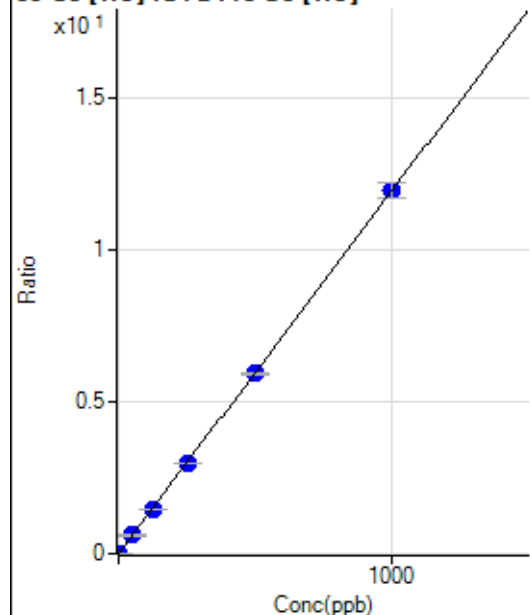
$$DL = 3.521$$

$$BEC = 9.147$$

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	60.00	0.0002	P	14.5
2	☐	0.100	0.091	465.57	0.0013	P	9.5
3	☐	1.000	0.964	4222.90	0.0117	P	1.5
4	☐	50.000	50.540	216188.42	0.6030	P	1.4
5	☐	125.000	124.130	506740.00	1.4807	P	0.4
6	☐	250.000	251.087	948219.81	2.9949	P	0.1
7	☐	500.000	497.047	1820775.09	5.9285	P	0.5
8	☐	1000.000	1001.287	3655829.11	11.9426	P	4.1
9	☐			6897.28	0.0207	P	3.0

$$y = 0.0119 * x + 1.6128E-004$$

$$R = 1.0000$$

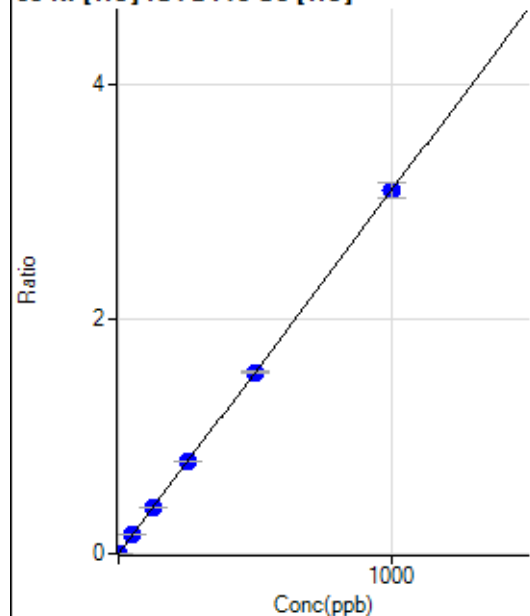
$$DL = 0.005874$$

$$BEC = 0.01352$$

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	196.67	0.0005	P	2.8
2	☐	0.100	0.113	326.68	0.0009	P	2.8
3	☐	1.000	0.991	1300.08	0.0036	P	8.1
4	☐	50.000	51.372	57120.83	0.1593	P	1.6
5	☐	125.000	125.794	133243.08	0.3893	P	0.9
6	☐	250.000	253.786	248522.39	0.7849	P	0.4
7	☐	500.000	499.940	474742.44	1.5458	P	0.6
8	☐	1000.000	998.916	945266.35	3.0880	P	4.2
9	☐			30193.54	0.0908	P	2.1

$$y = 0.0031 * x + 5.2874E-004$$

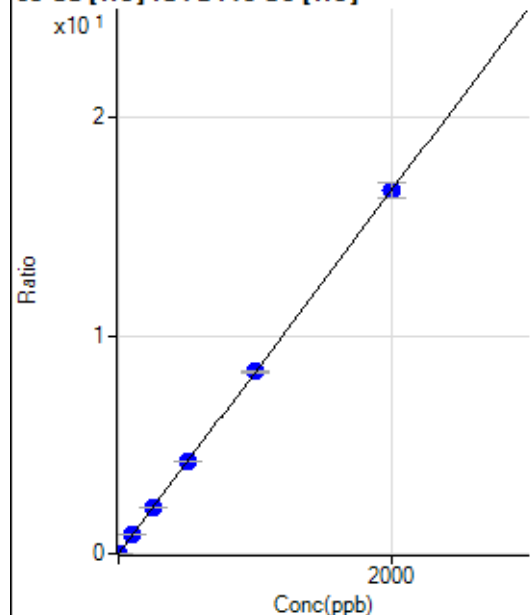
$$R = 1.0000$$

$$DL = 0.01447$$

$$BEC = 0.1711$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	971.16	0.0026	P	8.1
2	☐	0.200	0.213	1631.23	0.0044	P	3.5
3	☐	2.000	1.945	6803.89	0.0188	P	0.9
4	☐	100.000	102.078	305488.61	0.8520	P	1.3
5	☐	250.000	250.660	714700.03	2.0883	P	0.6
6	☐	500.000	507.617	1338125.34	4.2264	P	0.7
7	☐	1000.000	1000.831	2558444.23	8.3304	P	0.7
8	☐	2000.000	1997.494	5088597.25	16.6234	P	4.1
9	☐			11746.01	0.0353	P	0.1

$$y = 0.0083 * x + 0.0026$$

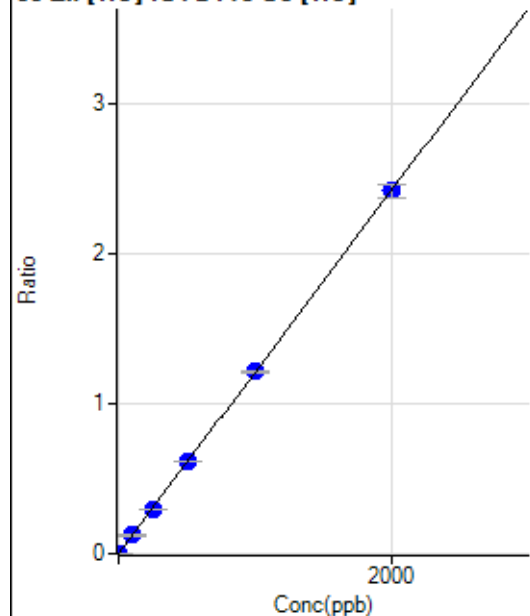
$$R = 1.0000$$

$$DL = 0.07637$$

$$BEC = 0.3138$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	140.00	0.0004	P	33.0
2	☐	0.200	0.194	227.78	0.0006	P	1.7
3	☐	2.000	2.028	1024.50	0.0028	P	7.7
4	☐	100.000	100.375	43657.39	0.1218	P	0.6
5	☐	250.000	247.750	102657.53	0.3000	P	0.6
6	☐	500.000	506.225	193929.76	0.6125	P	0.5
7	☐	1000.000	1002.581	372452.47	1.2127	P	1.0
8	☐	2000.000	1997.416	739550.74	2.4157	P	3.8
9	☐			3222.63	0.0097	P	1.5

$$y = 0.0012 * x + 3.7661E-004$$

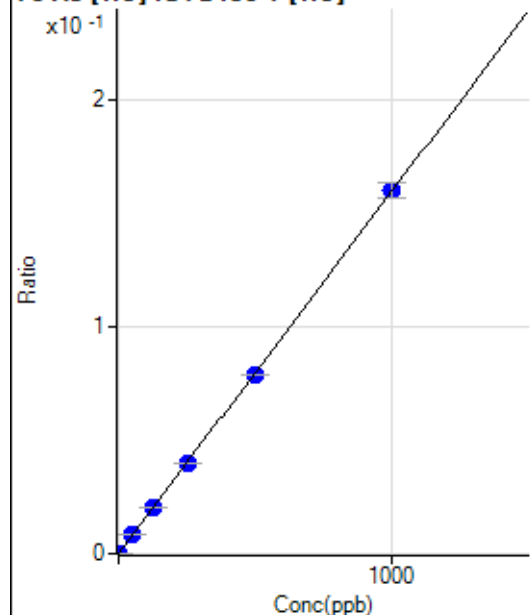
$$R = 1.0000$$

$$DL = 0.3081$$

$$BEC = 0.3115$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.70	0.0000	P	173.
2	☐	0.100	0.124	43.83	0.0000	P	31.9
3	☐	1.000	1.009	318.53	0.0002	P	5.8
4	☐	50.000	51.665	16070.07	0.0082	P	0.8
5	☐	125.000	126.684	37753.19	0.0202	P	0.8
6	☐	250.000	249.641	71171.63	0.0398	P	0.6
7	☐	500.000	494.579	138223.88	0.0789	P	0.5
8	☐	1000.000	1002.507	278672.58	0.1599	P	4.3
9	☐			133.95	0.0001	P	11.3

$$y = 1.5951\text{E-}004 * x + 1.8621\text{E-}006$$

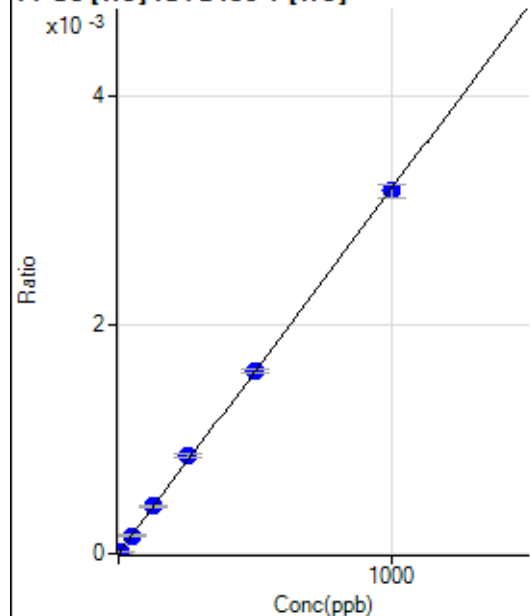
$$R = 1.0000$$

$$DL = 0.06066$$

$$BEC = 0.01167$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4.44	0.0000	P	44.0
2	☐	0.500	-0.183	3.33	0.0000	P	99.7
3	☐	5.000	5.531	38.89	0.0000	P	17.9
4	☐	50.000	48.034	303.34	0.0002	P	10.4
5	☐	125.000	129.141	774.48	0.0004	P	6.0
6	☐	250.000	269.391	1541.22	0.0009	P	3.7
7	☐	500.000	501.066	2806.99	0.0016	P	2.1
8	☐	1000.000	994.198	5537.83	0.0032	P	3.6
9	☐			1.11	0.0000	P	173.

$$y = 3.1929\text{E-}006 * x + 2.2241\text{E-}006$$

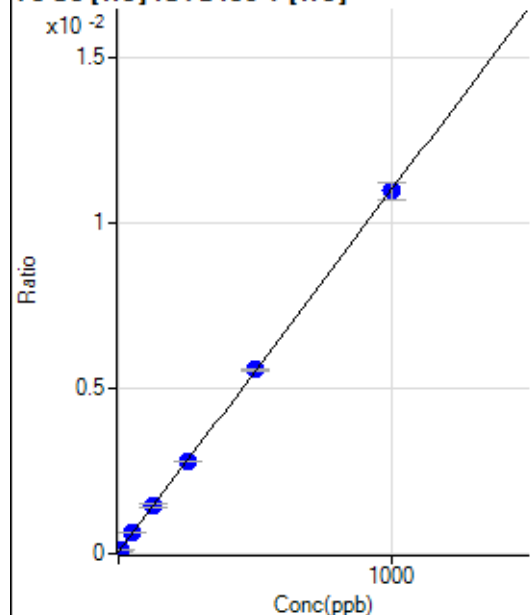
$$R = 0.9998$$

$$DL = 0.9193$$

$$BEC = 0.6966$$

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	96.92	0.0000	P	18.4
2	☐	0.500	0.699	113.58	0.0001	P	7.1
3	☐	5.000	4.565	192.59	0.0001	P	2.6
4	☐	50.000	54.401	1257.47	0.0006	P	1.9
5	☐	125.000	127.809	2708.92	0.0015	P	4.9
6	☐	250.000	250.382	4994.11	0.0028	P	0.5
7	☐	500.000	503.705	9763.23	0.0056	P	1.6
8	☐	1000.000	997.483	19146.64	0.0110	P	4.5
9	☐			86.42	0.0000	P	36.4

$$y = 1.0967\text{E-}005 * x + 4.8405\text{E-}005$$

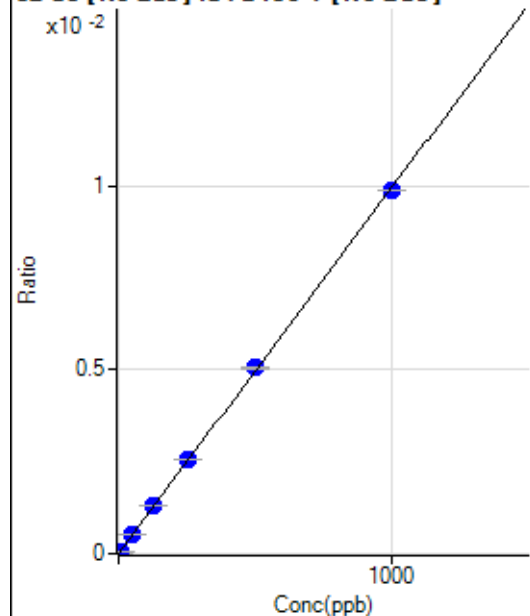
$$R = 1.0000$$

$$DL = 2.437$$

$$BEC = 4.414$$

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	5.22	0.0000	P	877.
2	☐	0.500	0.999	120.08	0.0000	P	40.5
3	☐	5.000	5.430	612.75	0.0001	P	5.9
4	☐	50.000	52.696	5886.53	0.0005	P	2.2
5	☐	125.000	130.748	14486.59	0.0013	P	1.4
6	☐	250.000	258.804	27557.72	0.0026	P	0.8
7	☐	500.000	509.635	53150.06	0.0051	P	1.0
8	☐	1000.000	992.126	104152.92	0.0099	P	0.1
9	☐			136.95	0.0000	P	14.7

$$y = 9.9303\text{E-}006 * x + 4.6255\text{E-}007$$

$$R = 0.9999$$

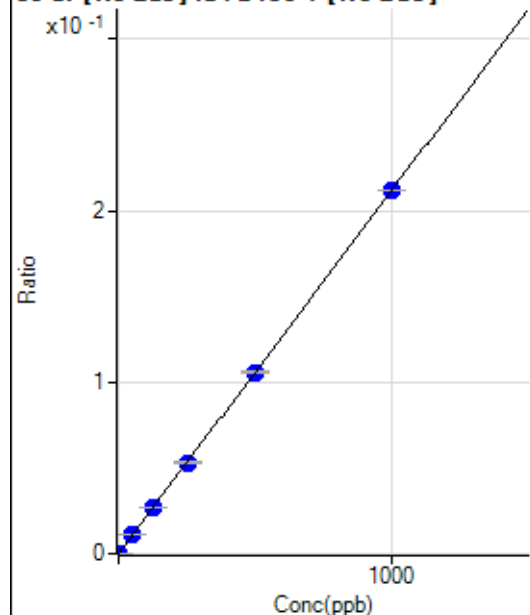
$$DL = 1.227$$

$$BEC = 0.04658$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	725.05	0.0001	P	6.4
2	☐	0.100	0.049	872.29	0.0001	P	8.3
3	☐	1.000	0.936	2964.33	0.0003	P	2.8
4	☐	50.000	50.386	120510.92	0.0107	P	1.0
5	☐	125.000	125.165	296020.46	0.0265	P	0.7
6	☐	250.000	251.298	570584.86	0.0532	P	0.5
7	☐	500.000	499.788	1110866.20	0.1058	P	0.4
8	☐	1000.000	999.741	2236169.56	0.2115	P	0.1
9	☐			76129.57	0.0071	P	0.4

$$y = 2.1152E-004 * x + 6.5114E-005$$

$$R = 1.0000$$

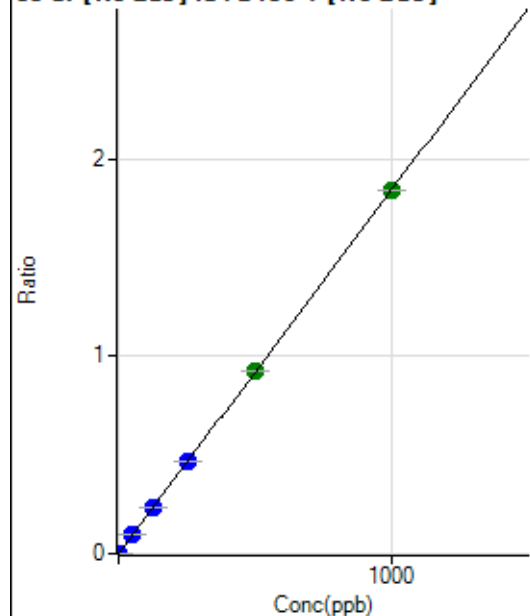
$$DL = 0.05915$$

$$BEC = 0.3078$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	147.23	0.0000	P	3.3
2	☐	0.100	0.087	2003.00	0.0002	P	4.8
3	☐	1.000	0.963	20159.32	0.0018	P	0.9
4	☐	50.000	50.662	1050219.06	0.0934	P	0.3
5	☐	125.000	125.959	2591068.09	0.2323	P	0.6
6	☐	250.000	254.844	5039081.45	0.4700	P	0.4
7	☐	500.000	501.594	9714784.77	0.9251	A	0.2
8	☐	1000.000	997.839	19453982.90	1.8403	A	0.2
9	☐			657876.97	0.0614	P	0.5

$$y = 0.0018 * x + 1.3220E-005$$

$$R = 1.0000$$

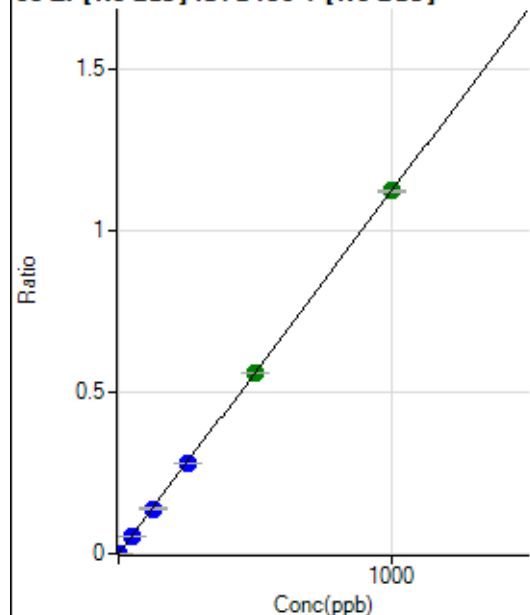
$$DL = 0.0007072$$

$$BEC = 0.007168$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	758.39	0.0001	P	19.1
2	☐	0.100	0.089	1944.66	0.0002	P	4.2
3	☐	1.000	0.961	12906.28	0.0011	P	2.2
4	☐	50.000	50.063	631586.24	0.0562	P	0.4
5	☐	125.000	124.469	1557247.66	0.1396	P	0.7
6	☐	250.000	250.408	3010812.42	0.2808	P	0.1
7	☐	500.000	499.111	5877437.37	0.5597	A	0.2
8	☐	1000.000	1000.406	11857891.67	1.1217	A	0.5
9	☐			4567.73	0.0004	P	2.1

$$y = 0.0011 * x + 6.8101E-005$$

$$R = 1.0000$$

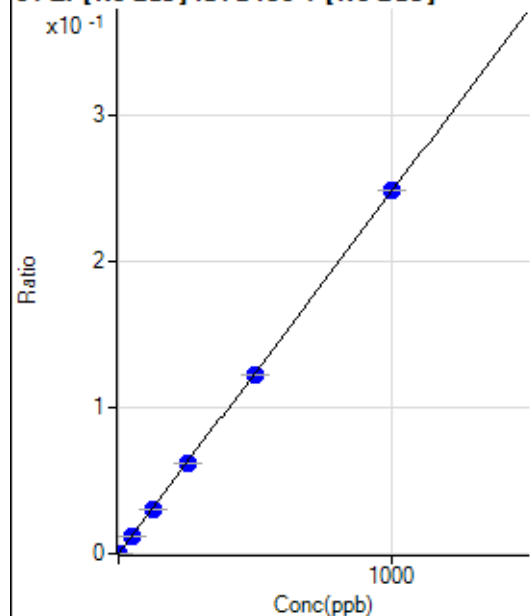
$$DL = 0.03477$$

$$BEC = 0.06074$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	20.2
2	☐	0.100	0.100	416.69	0.0000	P	2.6
3	☐	1.000	0.966	2825.40	0.0003	P	9.9
4	☐	50.000	50.040	139642.09	0.0124	P	1.5
5	☐	125.000	124.481	344564.15	0.0309	P	0.5
6	☐	250.000	249.803	664531.83	0.0620	P	0.8
7	☐	500.000	495.956	1292213.97	0.1231	P	0.2
8	☐	1000.000	1002.134	2628263.01	0.2486	P	0.2
9	☐			958.41	0.0001	P	4.7

$$y = 2.4808E-004 * x + 1.1227E-005$$

$$R = 1.0000$$

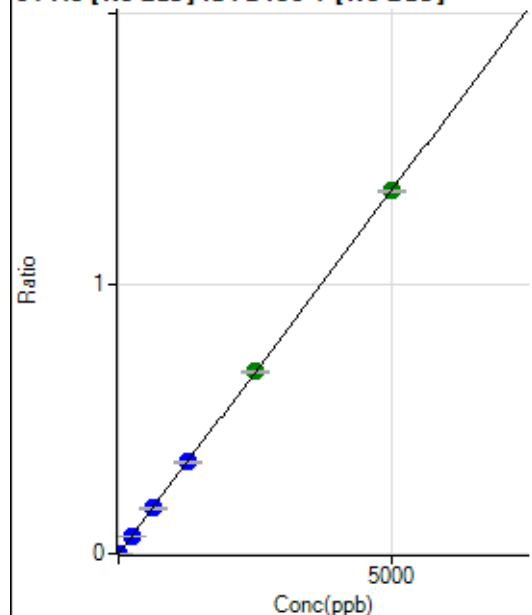
$$DL = 0.02743$$

$$BEC = 0.04526$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	308.35	0.0000	P	12.5
2	☐	0.500	0.456	1736.30	0.0002	P	3.0
3	☐	5.000	4.564	14138.06	0.0013	P	1.3
4	☐	250.000	250.306	756612.12	0.0673	P	0.3
5	☐	625.000	622.906	1868150.95	0.1675	P	0.8
6	☐	1250.000	1259.170	3629756.68	0.3386	P	0.4
7	☐	2500.000	2504.425	7071203.11	0.6734	A	0.2
8	☐	5000.000	4995.742	14198642.85	1.3432	A	0.4
9	☐			19305.40	0.0018	P	2.3

$$y = 2.6885E-004 * x + 2.7691E-005$$

$$R = 1.0000$$

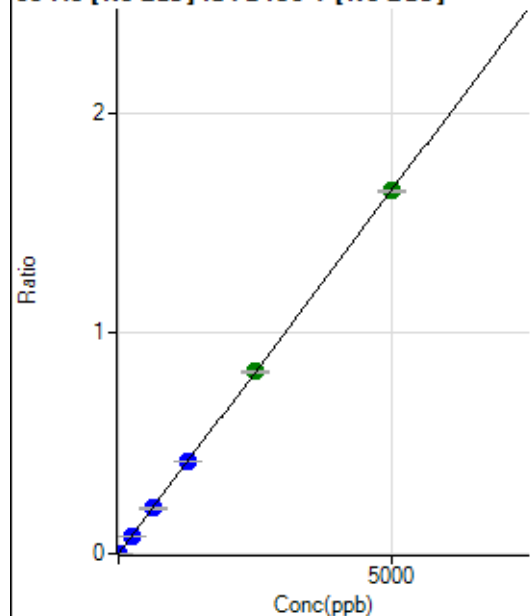
$$DL = 0.03867$$

$$BEC = 0.103$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.12	0.0000	P	5.9
2	☐	0.500	0.459	1833.54	0.0002	P	9.1
3	☐	5.000	4.569	17038.59	0.0015	P	1.8
4	☐	250.000	250.026	925302.17	0.0823	P	0.3
5	☐	625.000	623.009	2288037.66	0.2051	P	0.7
6	☐	1250.000	1264.390	4463545.07	0.4163	P	0.6
7	☐	2500.000	2504.078	8658658.35	0.8245	A	0.3
8	☐	5000.000	4994.611	17385001.08	1.6446	A	0.2
9	☐			29834.90	0.0028	P	1.5

$$y = 3.2927E-004 * x + 7.7336E-006$$

$$R = 1.0000$$

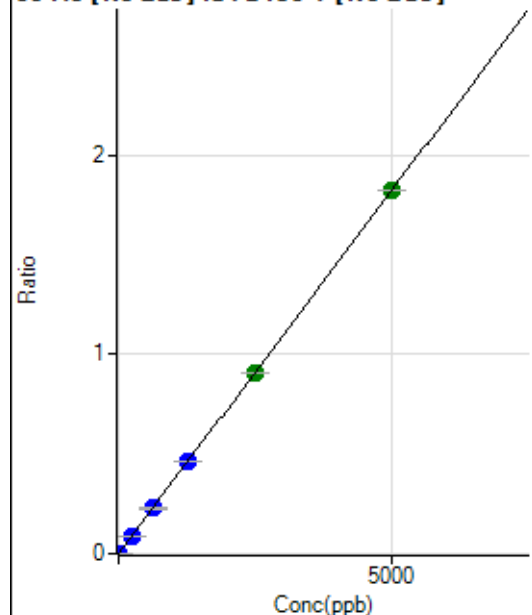
$$DL = 0.004146$$

$$BEC = 0.02349$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0000	P	10.2
2	☐	0.500	0.418	1886.31	0.0002	P	8.4
3	☐	5.000	4.596	18993.86	0.0017	P	1.3
4	☐	250.000	250.236	1024987.20	0.0912	P	0.5
5	☐	625.000	624.370	2537852.29	0.2275	P	0.7
6	☐	1250.000	1268.655	4956693.91	0.4623	P	0.4
7	☐	2500.000	2492.850	9539999.26	0.9085	A	0.5
8	☐	5000.000	4998.979	19257806.16	1.8217	A	0.1
9	☐			34757.10	0.0032	P	1.2

$$y = 3.6442\text{E-}004 * x + 1.0974\text{E-}005$$

$$R = 1.0000$$

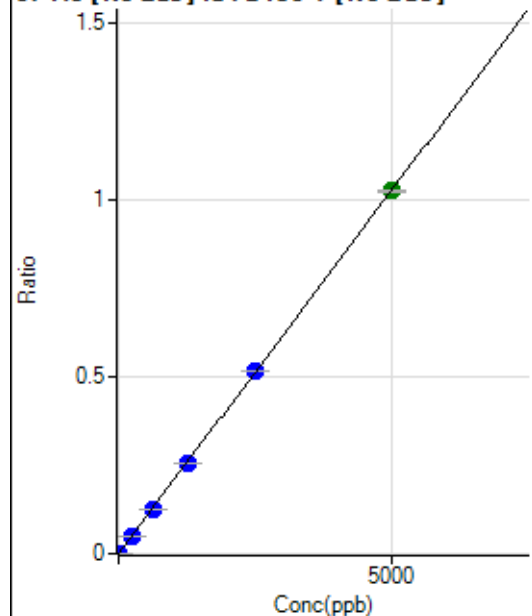
$$DL = 0.009233$$

$$BEC = 0.03011$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	80.56	0.0000	P	36.2
2	☐	0.500	0.440	1125.10	0.0001	P	4.9
3	☐	5.000	4.587	10676.70	0.0009	P	3.6
4	☐	250.000	248.887	573510.19	0.0510	P	0.5
5	☐	625.000	620.169	1418130.30	0.1271	P	0.3
6	☐	1250.000	1249.367	2746150.54	0.2561	P	0.2
7	☐	2500.000	2509.776	5403286.01	0.5145	P	0.4
8	☐	5000.000	4995.930	10827135.92	1.0242	A	0.3
9	☐			18579.45	0.0017	P	2.1

$$y = 2.0501\text{E-}004 * x + 7.2305\text{E-}006$$

$$R = 1.0000$$

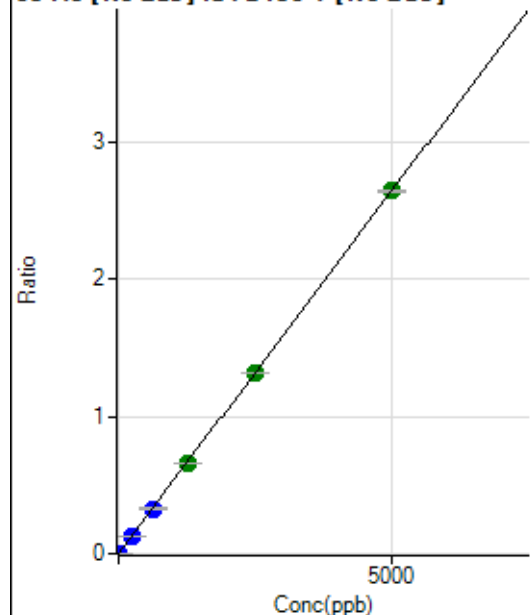
$$DL = 0.03833$$

$$BEC = 0.03527$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.11	0.0000	P	56.3
2	☐	0.500	0.416	2653.15	0.0002	P	1.4
3	☐	5.000	4.574	27374.28	0.0024	P	1.5
4	☐	250.000	249.478	1483277.27	0.1320	P	0.5
5	☐	625.000	621.789	3668699.91	0.3289	P	0.7
6	☐	1250.000	1250.855	7094246.17	0.6617	A	0.3
7	☐	2500.000	2491.788	13842357.43	1.3182	A	0.6
8	☐	5000.000	5004.320	27984807.57	2.6473	A	0.2
9	☐			46763.96	0.0044	P	1.8

$$y = 5.2900\text{E-}004 * x + 9.9774\text{E-}006$$

$$R = 1.0000$$

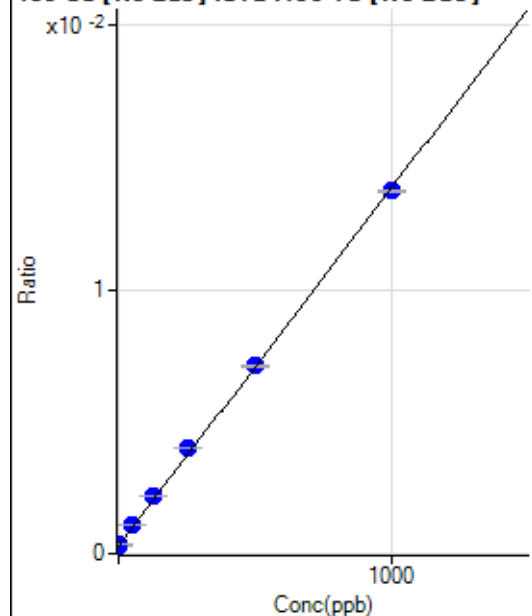
$$DL = 0.03185$$

$$BEC = 0.01886$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3914.61	0.0003	P	2.3
2	☐	0.100	0.332	4042.42	0.0003	P	3.8
3	☐	1.000	3.040	4425.88	0.0003	P	4.9
4	☐	50.000	57.323	14216.02	0.0011	P	2.0
5	☐	125.000	138.264	29130.78	0.0022	P	0.9
6	☐	250.000	271.222	53396.22	0.0040	P	0.3
7	☐	500.000	501.874	97005.46	0.0071	P	1.0
8	☐	1000.000	991.731	188302.86	0.0137	P	0.8
9	☐			3795.12	0.0003	P	3.7

$$y = 1.3550\text{E-}005 * x + 2.9895\text{E-}004$$

$$R = 0.9997$$

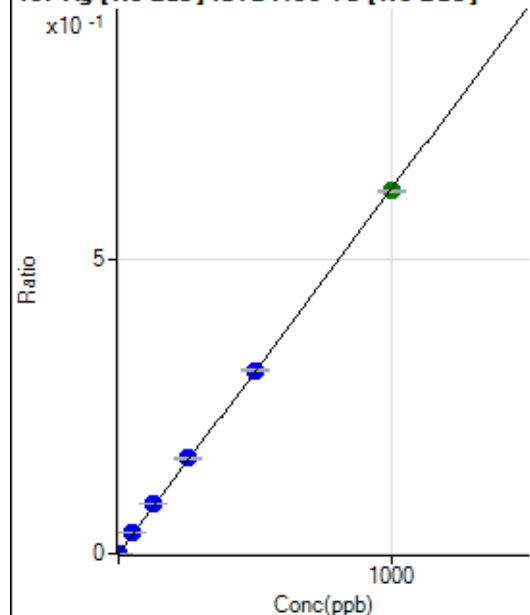
$$DL = 1.524$$

$$BEC = 22.06$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.90	0.0000	P	23.6
2	☐	0.100	0.102	961.19	0.0001	P	15.4
3	☐	1.000	1.071	8767.01	0.0007	P	1.8
4	☐	50.000	56.026	459908.54	0.0348	P	0.6
5	☐	125.000	135.627	1129481.70	0.0842	P	0.4
6	☐	250.000	262.118	2187133.68	0.1628	P	1.0
7	☐	500.000	501.452	4255005.95	0.3114	P	0.9
8	☐	1000.000	994.615	8466665.64	0.6176	A	0.4
9	☐			1016.76	0.0001	P	2.6

$$y = 6.2098\text{E-}004 * x + 8.7000\text{E-}006$$

$$R = 0.9999$$

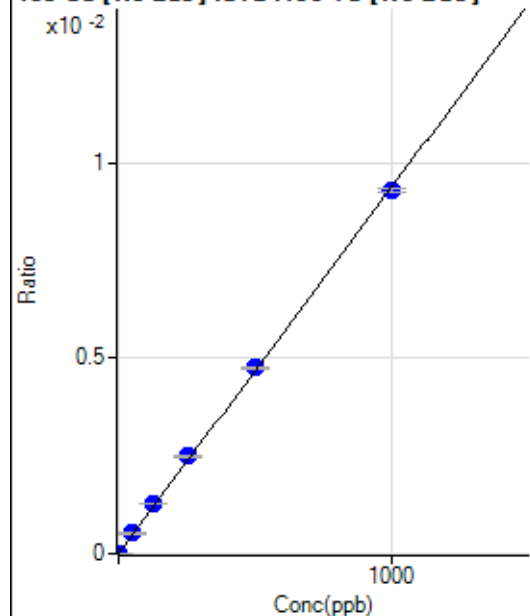
$$DL = 0.009919$$

$$BEC = 0.01401$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9.72	0.0000	P	49.6
2	☐	0.100	0.132	26.39	0.0000	P	45.6
3	☐	1.000	1.048	137.50	0.0000	P	11.2
4	☐	50.000	55.675	6911.54	0.0005	P	2.6
5	☐	125.000	137.378	17289.97	0.0013	P	0.3
6	☐	250.000	266.181	33557.92	0.0025	P	1.3
7	☐	500.000	507.313	65034.70	0.0048	P	0.7
8	☐	1000.000	990.467	127368.87	0.0093	P	0.9
9	☐			45.83	0.0000	P	39.7

$$y = 9.3803\text{E-}006 * x + 7.4325\text{E-}007$$

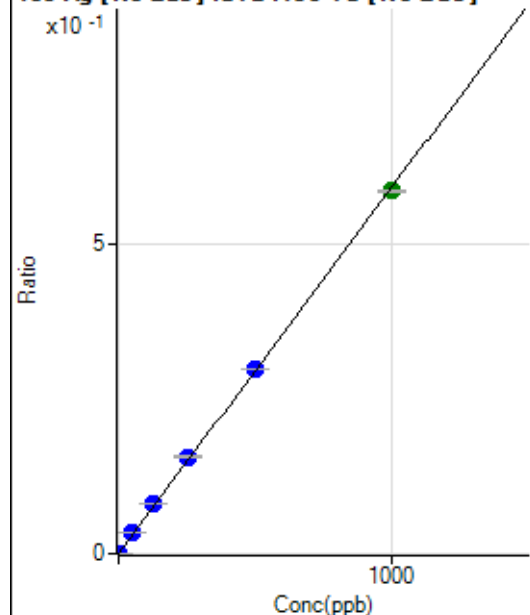
$$R = 0.9998$$

$$DL = 0.1179$$

$$BEC = 0.07923$$

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	47.22	0.0000	P	27.0
2	☐	0.100	0.112	925.08	0.0001	P	7.9
3	☐	1.000	1.076	8313.89	0.0006	P	3.5
4	☐	50.000	56.812	443205.43	0.0335	P	0.3
5	☐	125.000	137.172	1085727.54	0.0810	P	0.2
6	☐	250.000	265.070	2102170.28	0.1565	P	1.5
7	☐	500.000	505.782	4079321.62	0.2985	P	0.3
8	☐	1000.000	991.479	8022160.16	0.5852	A	0.5
9	☐			1088.98	0.0001	P	4.8

$$y = 5.9024\text{E-}004 * x + 3.6073\text{E-}006$$

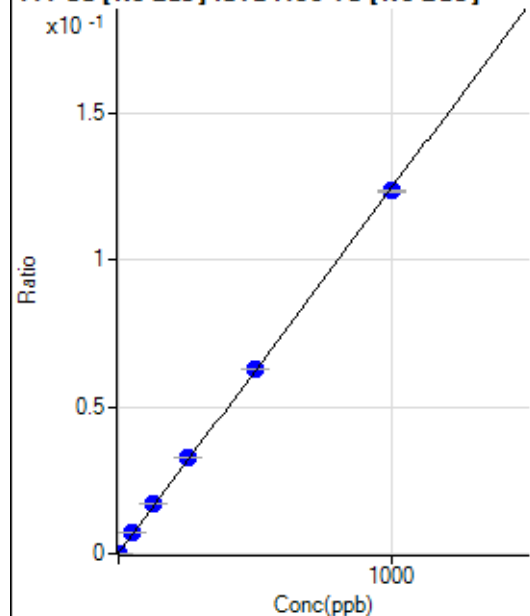
$$R = 0.9998$$

$$DL = 0.004956$$

$$BEC = 0.006112$$

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	1573.07	0.0001	P	1.8
2	☐	0.100	0.105	1774.48	0.0001	P	3.3
3	☐	1.000	1.102	3343.26	0.0003	P	1.4
4	☐	50.000	56.301	93972.11	0.0071	P	1.0
5	☐	125.000	136.401	228712.05	0.0171	P	0.7
6	☐	250.000	263.480	441175.07	0.0328	P	0.7
7	☐	500.000	505.133	858665.03	0.0628	P	0.2
8	☐	1000.000	992.323	1690647.79	0.1233	P	0.4
9	☐			1817.78	0.0001	P	2.7

$$y = 1.2416\text{E-}004 * x + 1.2013\text{E-}004$$

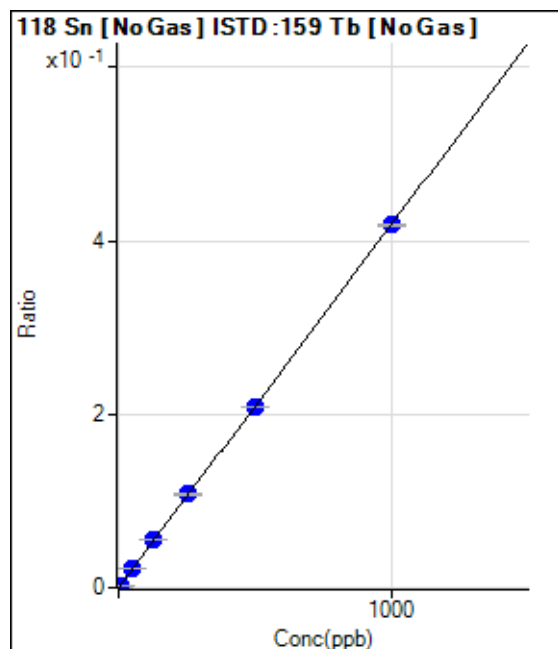
$$R = 0.9998$$

$$DL = 0.05283$$

$$BEC = 0.9675$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	750.05	0.0001	P	8.8
2	☐	0.500	0.480	3439.48	0.0003	P	3.5
3	☐	5.000	5.078	28429.57	0.0022	P	1.4
4	☐	50.000	53.403	296448.92	0.0224	P	2.0
5	☐	125.000	130.665	734874.20	0.0548	P	0.2
6	☐	250.000	256.678	1445737.45	0.1076	P	0.5
7	☐	500.000	497.750	2850491.41	0.2086	P	0.3
8	☐	1000.000	998.577	5735940.62	0.4184	P	0.4
9	☐			10312.51	0.0008	P	1.0

$$y = 4.1898\text{E-}004 * x + 5.7295\text{E-}005$$

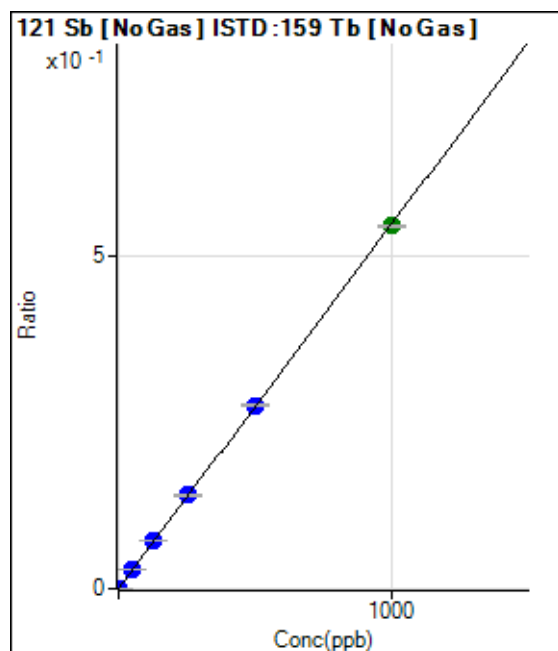
$$R = 1.0000$$

$$DL = 0.03609$$

$$BEC = 0.1367$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	31.0
2	☐	0.200	0.191	1452.92	0.0001	P	2.2
3	☐	2.000	2.007	14380.16	0.0011	P	2.3
4	☐	50.000	53.289	386346.84	0.0292	P	1.3
5	☐	125.000	130.142	957290.15	0.0714	P	0.6
6	☐	250.000	256.719	1892079.47	0.1408	P	0.7
7	☐	500.000	503.744	3775703.82	0.2763	P	0.2
8	☐	1000.000	995.641	7486400.69	0.5461	A	0.4
9	☐			12942.59	0.0010	P	5.4

$$y = 5.4852\text{E-}004 * x + 4.2413\text{E-}006$$

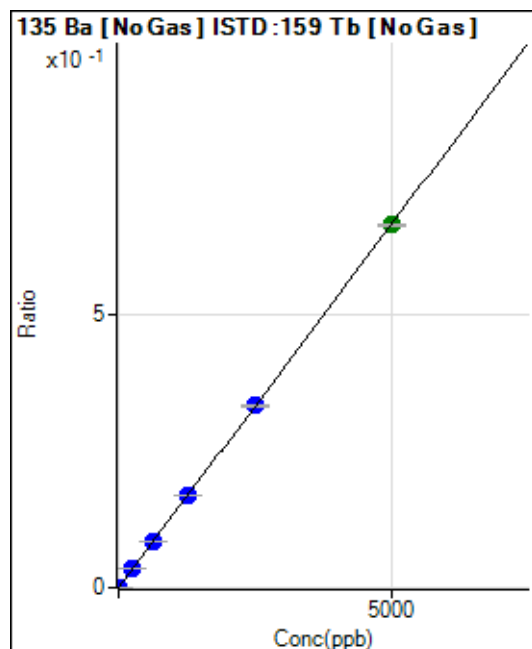
$$R = 1.0000$$

$$DL = 0.007188$$

$$BEC = 0.007732$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.56	0.0000	P	87.8
2	☐	1.000	0.956	1722.41	0.0001	P	5.8
3	☐	10.000	9.644	16685.66	0.0013	P	1.1
4	☐	250.000	261.977	459630.42	0.0348	P	0.3
5	☐	625.000	640.221	1139654.65	0.0850	P	0.6
6	☐	1250.000	1269.106	2263634.23	0.1685	P	0.5
7	☐	2500.000	2501.350	4537246.15	0.3320	P	0.5
8	☐	5000.000	4992.047	9084112.01	0.6627	A	0.3
9	☐			3495.04	0.0003	P	2.8

$$y = 1.3275\text{E-}004 * x + 2.3371\text{E-}006$$

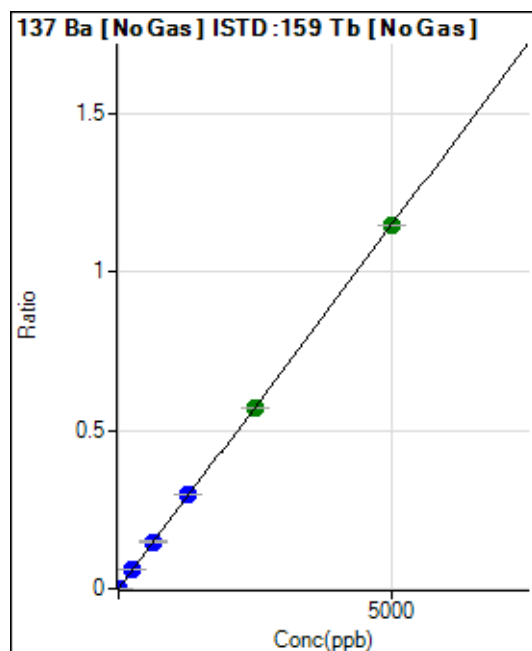
$$R = 1.0000$$

$$DL = 0.04636$$

$$BEC = 0.01761$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52.78	0.0000	P	36.2
2	☐	1.000	0.945	2939.34	0.0002	P	6.9
3	☐	10.000	9.771	29209.45	0.0022	P	0.5
4	☐	250.000	264.350	801313.07	0.0606	P	0.6
5	☐	625.000	647.772	1992244.03	0.1486	P	0.8
6	☐	1250.000	1293.311	3985580.69	0.2966	P	0.3
7	☐	2500.000	2493.897	7815774.74	0.5720	A	0.3
8	☐	5000.000	4988.660	15684259.72	1.1442	A	0.1
9	☐			6012.70	0.0004	P	3.7

$$y = 2.2935\text{E-}004 * x + 4.0282\text{E-}006$$

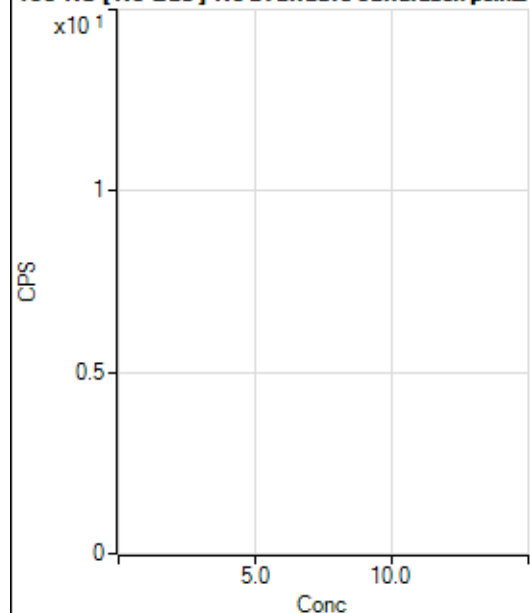
$$R = 1.0000$$

$$DL = 0.01905$$

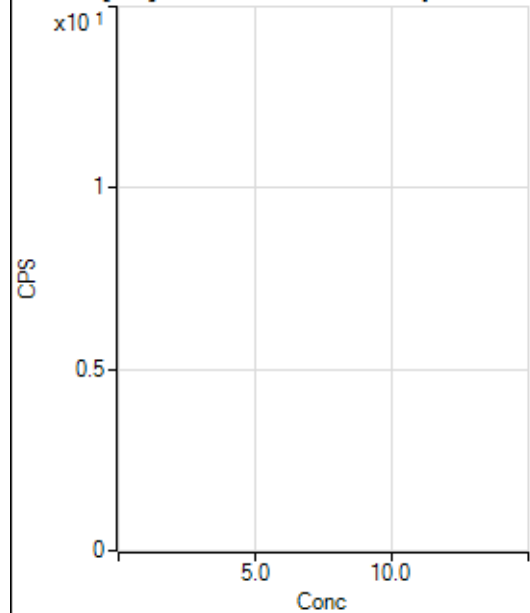
$$BEC = 0.01756$$

Weight: <None>

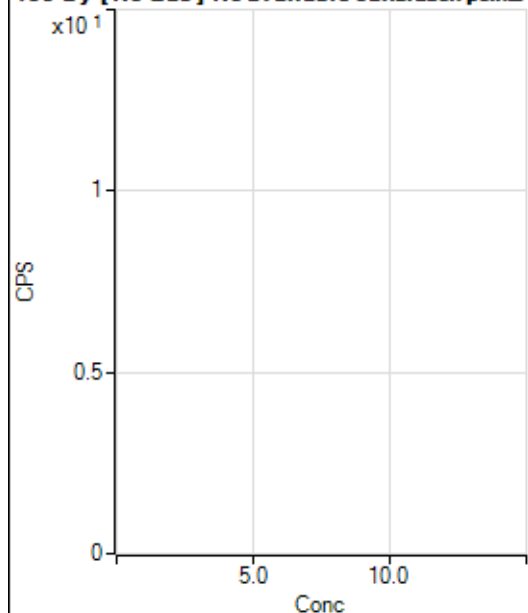
Min Conc: 0

150 Nd [No Gas] No available calibration points

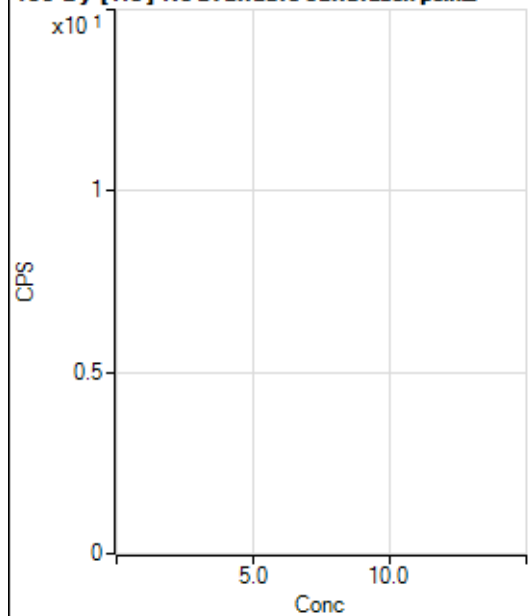
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	86.6
2	☐			8.89		P	43.3
3	☐			4.45		P	86.6
4	☐			37.78		P	10.2
5	☐			73.34		P	39.6
6	☐			140.01		P	4.8
7	☐			351.13		P	17.1
8	☐			606.70		P	1.9
9	☐			95.56		P	38.4

150 Nd [He] No available calibration points

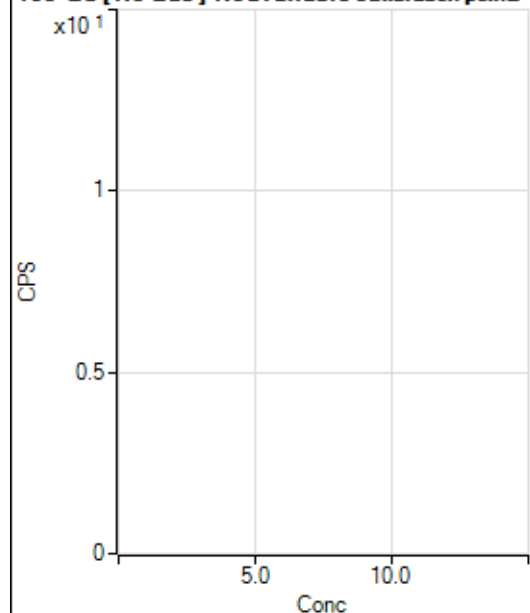
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			1.11		P	173.
3	☐			1.11		P	173.
4	☐			2.22		P	86.6
5	☐			5.56		P	91.6
6	☐			21.11		P	32.9
7	☐			30.00		P	29.4
8	☐			82.23		P	23.4
9	☐			42.22		P	25.4

156 Dy [No Gas] No available calibration points

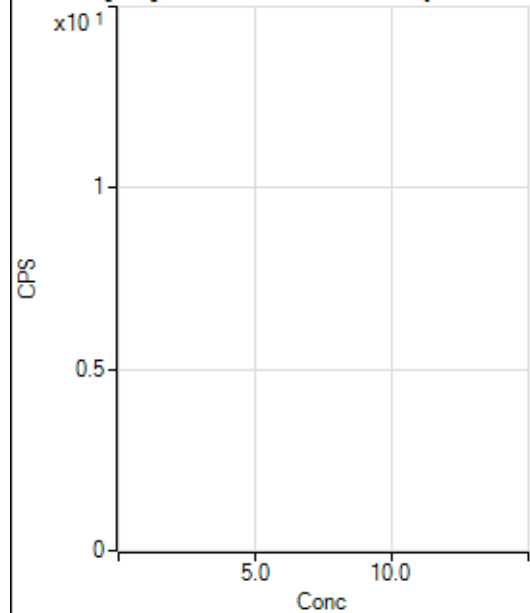
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	91.6
2	☐			8.33		P	173.
3	☐			8.33		P	0.0
4	☐			27.78		P	17.3
5	☐			33.34		P	25.0
6	☐			33.33		P	43.3
7	☐			58.34		P	65.5
8	☐			136.12		P	15.4
9	☐			105.56		P	25.4

156 Dy [He] No available calibration points

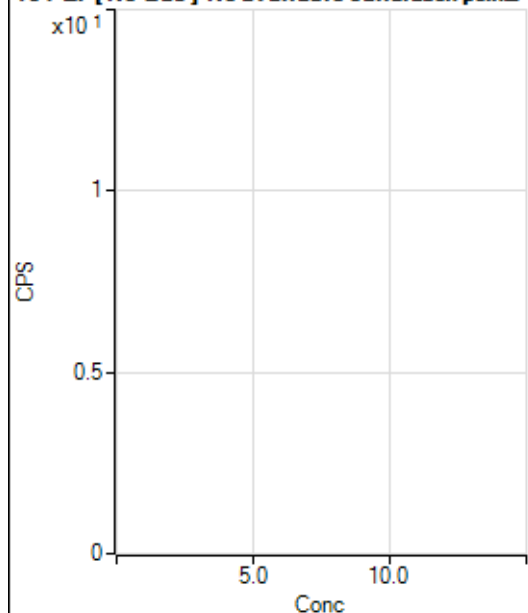
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	91.6
2	☐			6.67		P	50.0
3	☐			3.33		P	100.
4	☐			10.00		P	66.7
5	☐			14.45		P	48.0
6	☐			41.11		P	18.7
7	☐			47.78		P	22.4
8	☐			121.12		P	13.0
9	☐			48.89		P	21.9

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

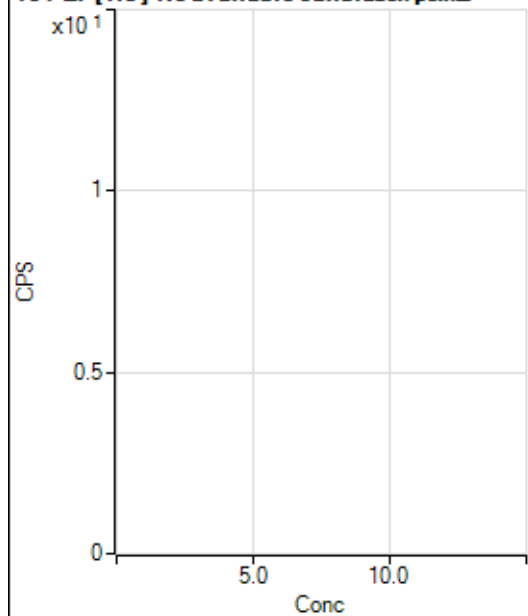
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.12		P	40.3
2	☐			100.00		P	16.7
3	☐			97.23		P	52.4
4	☐			105.56		P	16.4
5	☐			100.01		P	0.0
6	☐			113.89		P	21.1
7	☐			108.34		P	30.8
8	☐			144.45		P	20.3
9	☐			130.56		P	18.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			185.56		P	5.5
2	☐			188.89		P	8.2
3	☐			188.90		P	23.4
4	☐			182.22		P	13.2
5	☐			170.00		P	15.3
6	☐			174.45		P	13.0
7	☐			168.89		P	13.1
8	☐			183.34		P	7.9
9	☐			225.56		P	6.0

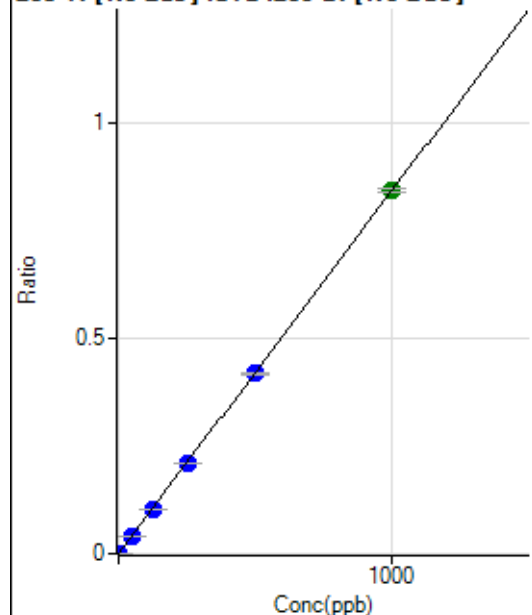
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	15.7
2	☐			47.22		P	10.2
3	☐			61.11		P	28.4
4	☐			58.34		P	14.3
5	☐			33.34		P	50.0
6	☐			36.11		P	35.3
7	☐			61.11		P	55.1
8	☐			88.89		P	27.1
9	☐			72.23		P	17.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35.56		P	53.3
2	☐			24.45		P	28.4
3	☐			33.34		P	17.3
4	☐			25.56		P	74.2
5	☐			21.11		P	36.5
6	☐			26.67		P	25.0
7	☐			31.11		P	24.7
8	☐			30.00		P	29.4
9	☐			40.00		P	25.0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	12.8
2	☐	0.100	0.090	644.49	0.0001	P	6.7
3	☐	1.000	0.922	6084.98	0.0008	P	5.1
4	☐	50.000	49.703	330206.33	0.0419	P	0.6
5	☐	125.000	124.007	835176.02	0.1046	P	0.6
6	☐	250.000	250.121	1730725.73	0.2109	P	0.6
7	☐	500.000	498.372	3551615.88	0.4203	P	1.0
8	☐	1000.000	1000.923	7023524.55	0.8441	A	0.9
9	☐			2844.88	0.0004	P	5.5

$$y = 8.4329\text{E-}004 * x + 4.9548\text{E-}006$$

$$R = 1.0000$$

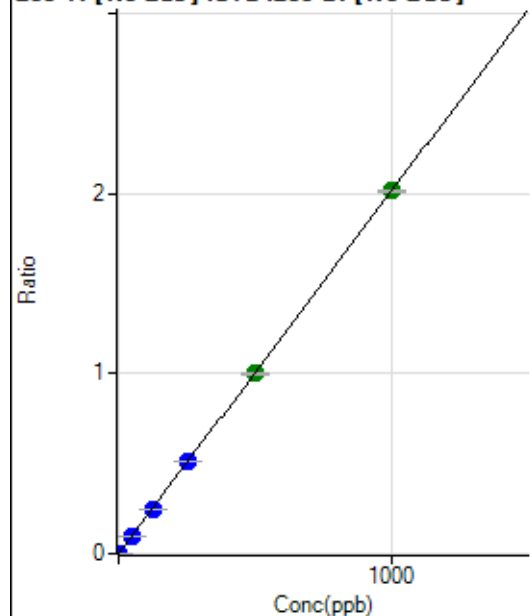
$$DL = 0.002251$$

$$BEC = 0.005876$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.22	0.0000	P	21.2
2	☐	0.100	0.087	1508.48	0.0002	P	7.4
3	☐	1.000	0.930	14647.56	0.0019	P	1.5
4	☐	50.000	49.564	785589.22	0.0997	P	0.4
5	☐	125.000	124.245	1996339.50	0.2500	P	0.2
6	☐	250.000	254.278	4197700.01	0.5116	P	0.4
7	☐	500.000	497.464	8457658.78	1.0008	A	1.3
8	☐	1000.000	1000.315	16746212.70	2.0125	A	0.8
9	☐			6432.39	0.0009	P	6.7

$$y = 0.0020 * x + 1.2375\text{E-}005$$

$$R = 1.0000$$

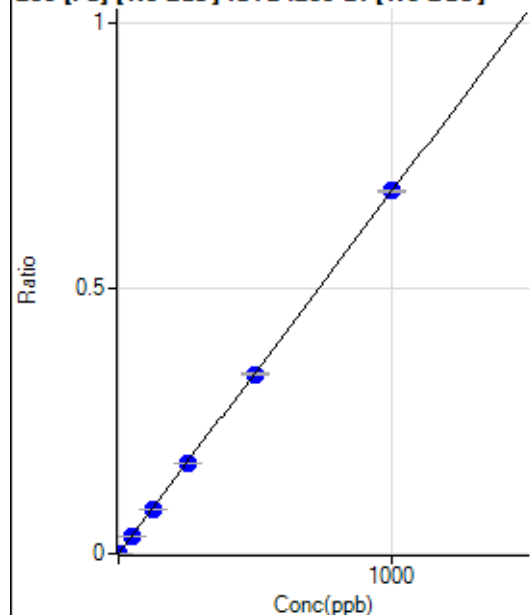
$$DL = 0.003903$$

$$BEC = 0.006151$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	175.93	0.0000	P	15.5
2	☐	0.100	0.090	668.56	0.0001	P	9.8
3	☐	1.000	0.956	5241.93	0.0007	P	5.6
4	☐	50.000	49.719	267393.57	0.0339	P	0.5
5	☐	125.000	123.286	671954.29	0.0841	P	0.2
6	☐	250.000	249.752	1398408.15	0.1704	P	0.6
7	☐	500.000	495.568	2857517.95	0.3381	P	1.3
8	☐	1000.000	1002.506	5691873.97	0.6840	P	0.6
9	☐			11338.47	0.0015	P	0.6

$$y = 6.8230E-004 * x + 2.2405E-005$$

$$R = 1.0000$$

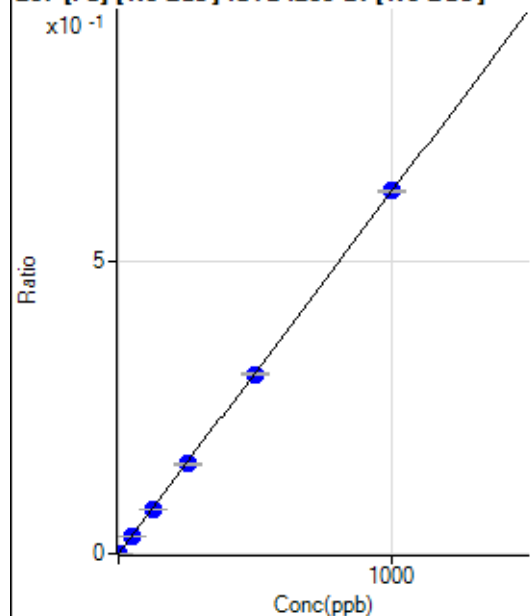
$$DL = 0.01525$$

$$BEC = 0.03284$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	192.60	0.0000	P	18.7
2	☐	0.100	0.092	651.89	0.0001	P	8.6
3	☐	1.000	0.934	4691.70	0.0006	P	2.2
4	☐	50.000	49.484	241787.82	0.0307	P	0.2
5	☐	125.000	123.572	611843.13	0.0766	P	0.2
6	☐	250.000	247.983	1261298.16	0.1537	P	0.8
7	☐	500.000	496.094	2598575.20	0.3075	P	1.0
8	☐	1000.000	1002.662	5171410.76	0.6215	P	0.5
9	☐			9364.68	0.0012	P	1.5

$$y = 6.1979E-004 * x + 2.4540E-005$$

$$R = 1.0000$$

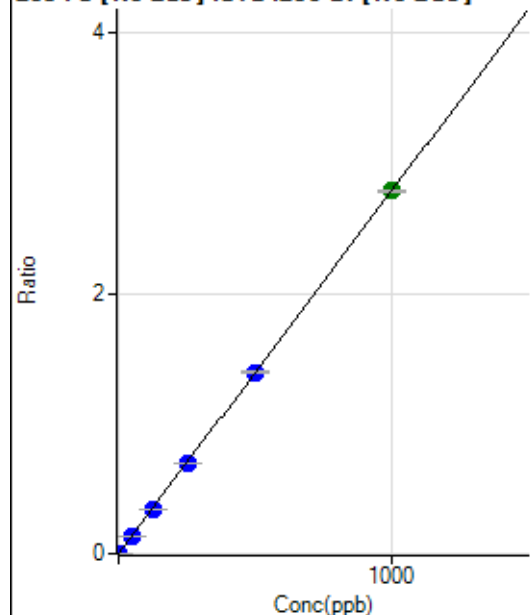
$$DL = 0.02222$$

$$BEC = 0.03959$$

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	803.74	0.0001	P	6.9
2	☐	0.100	0.091	2850.22	0.0004	P	5.4
3	☐	1.000	0.941	21196.13	0.0027	P	1.8
4	☐	50.000	49.395	1085718.38	0.1378	P	0.6
5	☐	125.000	123.434	2749403.43	0.3443	P	0.2
6	☐	250.000	248.531	5686878.77	0.6931	P	0.2
7	☐	500.000	500.482	11793788.90	1.3956	P	0.7
8	☐	1000.000	1000.352	23211137.79	2.7894	A	0.3
9	☐			44241.14	0.0059	P	0.5

$$y = 0.0028 * x + 1.0238E-004$$

$$R = 1.0000$$

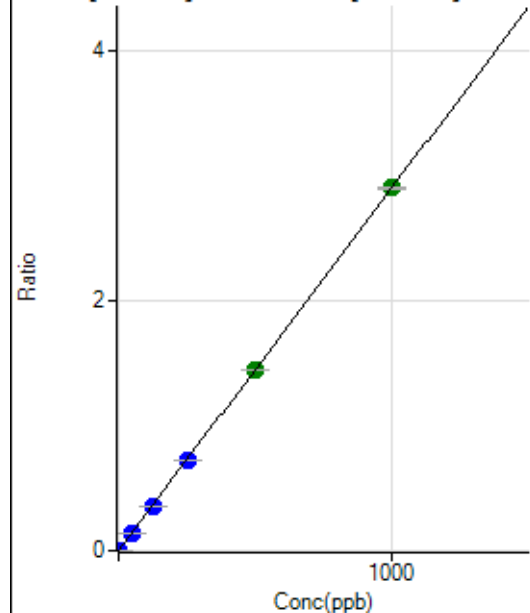
$$DL = 0.007602$$

$$BEC = 0.03672$$

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	25.00	0.0000	P	33.2
2	☐	0.100	0.080	1886.35	0.0002	P	5.5
3	☐	1.000	0.893	20105.30	0.0026	P	0.2
4	☐	50.000	47.297	1078218.58	0.1369	P	0.4
5	☐	125.000	121.112	2799013.43	0.3505	P	0.5
6	☐	250.000	250.772	5954775.83	0.7257	P	1.0
7	☐	500.000	498.083	12181159.39	1.4414	A	0.3
8	☐	1000.000	1001.387	24113896.37	2.8979	A	0.6
9	☐			5556.98	0.0007	P	1.7

$$y = 0.0029 * x + 3.1828E-006$$

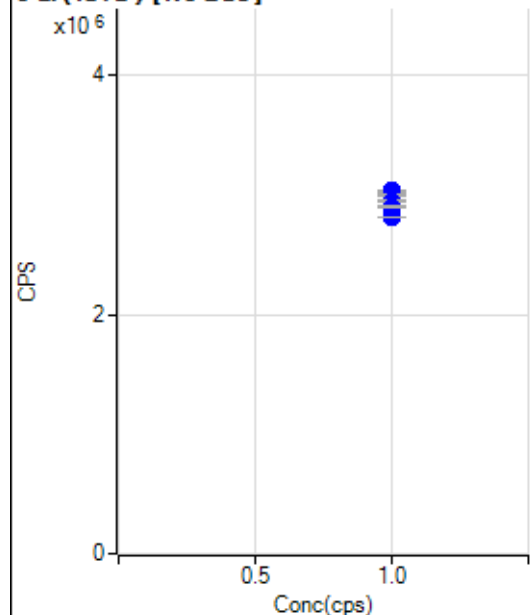
$$R = 1.0000$$

$$DL = 0.001097$$

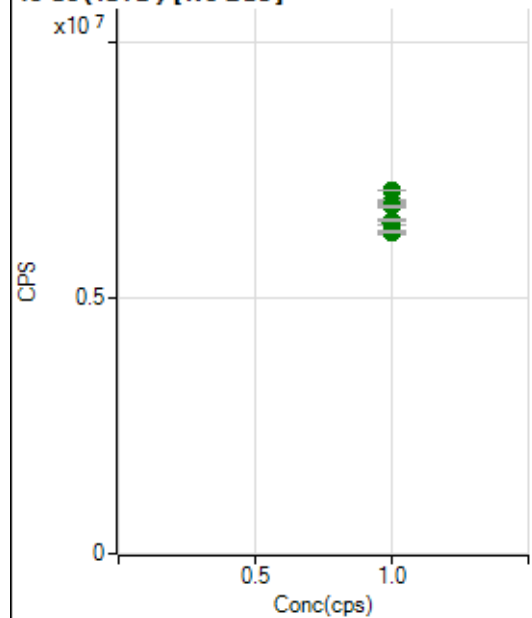
$$BEC = 0.0011$$

Weight: <None>

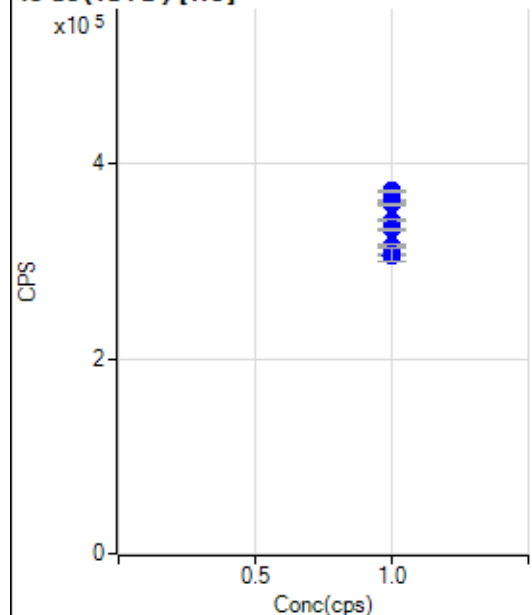
Min Conc: 0

6 Li (ISTD) [No Gas]

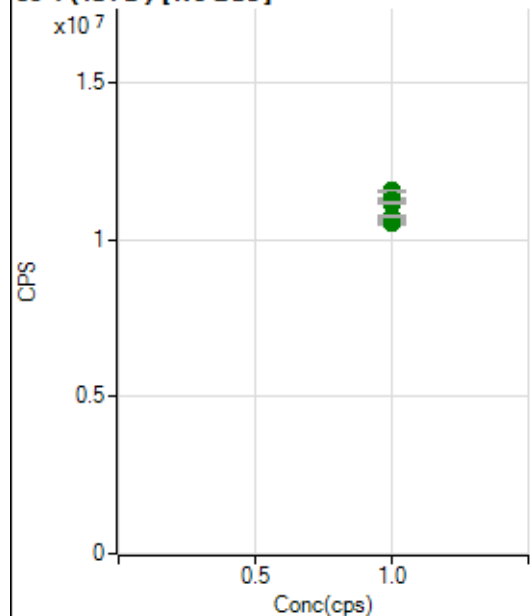
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3005081.90		P	0.5
2	☐	1.000		3025014.36		P	0.5
3	☐	1.000		2951641.03		P	0.6
4	☐	1.000		3004239.99		P	0.1
5	☐	1.000		3036510.72		P	0.4
6	☐	1.000		3008556.31		P	0.5
7	☐	1.000		2953180.58		P	0.5
8	☐	1.000		2899086.38		P	0.5
9	☐	1.000		2815237.32		P	0.3

45 Sc (ISTD) [No Gas]

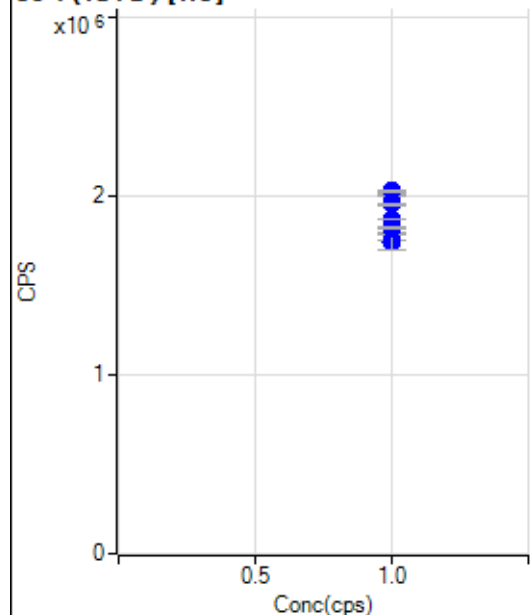
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6896837.83		A	0.9
2	☐	1.000		7100744.43		A	0.1
3	☐	1.000		6886023.42		A	0.2
4	☐	1.000		6893764.30		A	0.4
5	☐	1.000		6807928.80		A	0.5
6	☐	1.000		6482476.45		A	1.0
7	☐	1.000		6282499.49		A	0.5
8	☐	1.000		6307511.29		A	0.4
9	☐	1.000		6516952.06		A	0.6

45 Sc (ISTD) [He]

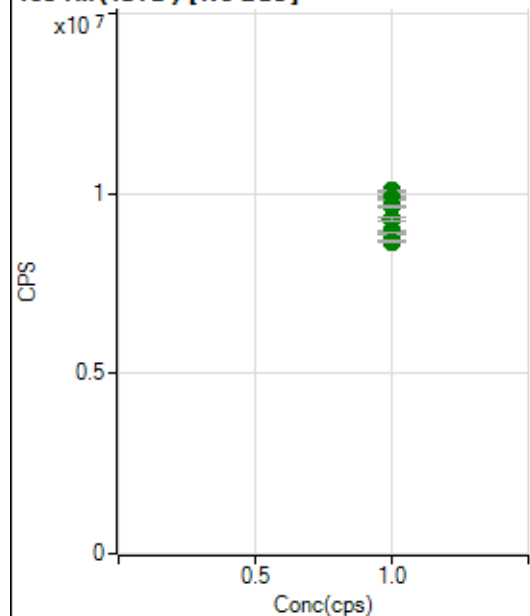
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		371948.81		P	0.3
2	☐	1.000		372300.75		P	0.5
3	☐	1.000		362092.05		P	0.5
4	☐	1.000		358575.87		P	0.8
5	☐	1.000		342244.45		P	0.8
6	☐	1.000		316612.11		P	0.1
7	☐	1.000		307125.44		P	0.2
8	☐	1.000		306521.75		P	4.9
9	☐	1.000		332565.60		P	0.8

89 Y (ISTD) [No Gas]

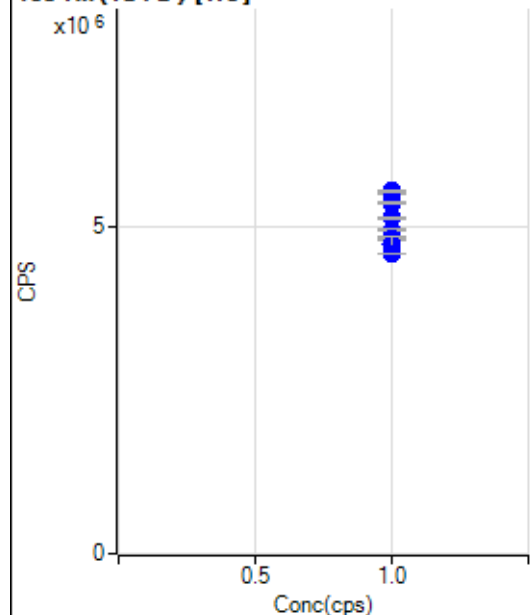
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11136617.06		A	0.3
2	☐	1.000		11546879.27		A	0.7
3	☐	1.000		11267737.19		A	0.5
4	☐	1.000		11238560.94		A	0.4
5	☐	1.000		11153631.78		A	0.7
6	☐	1.000		10721315.67		A	0.9
7	☐	1.000		10501525.54		A	0.5
8	☐	1.000		10571162.07		A	0.2
9	☐	1.000		10717717.06		A	0.5

89 Y (ISTD) [He]

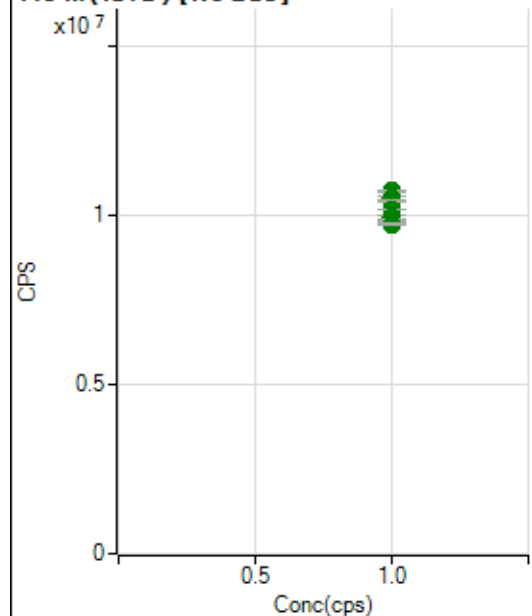
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2000939.41		P	0.5
2	☐	1.000		2026274.67		P	0.6
3	☐	1.000		1956006.88		P	0.3
4	☐	1.000		1949562.47		P	0.2
5	☐	1.000		1868079.59		P	0.2
6	☐	1.000		1787228.86		P	0.1
7	☐	1.000		1752059.85		P	0.4
8	☐	1.000		1745209.40		P	5.2
9	☐	1.000		1819072.44		P	0.4

103 Rh (ISTD) [No Gas]

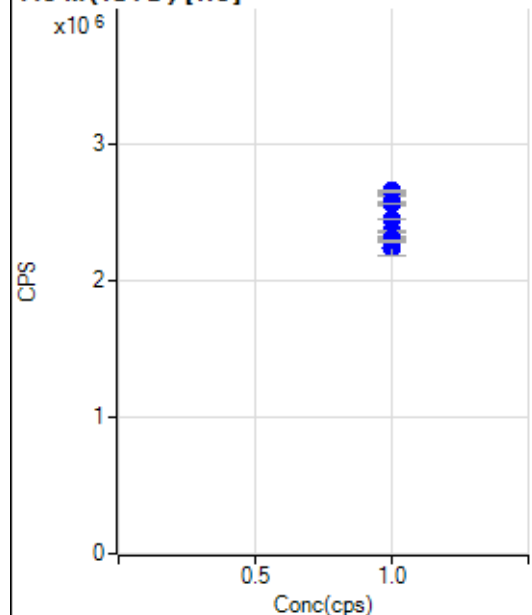
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9870660.64		A	0.8
2	☐	1.000		10064010.47		A	0.4
3	☐	1.000		9852640.32		A	0.1
4	☐	1.000		9815666.54		A	0.1
5	☐	1.000		9637333.46		A	0.2
6	☐	1.000		9290261.23		A	0.8
7	☐	1.000		8947221.03		A	0.1
8	☐	1.000		8899474.07		A	0.4
9	☐	1.000		8666734.83		A	0.7

103 Rh (ISTD) [He]

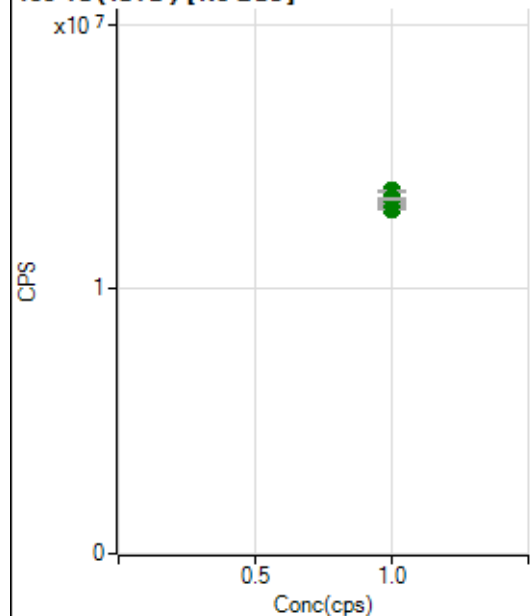
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5500709.78		P	0.4
2	☐	1.000		5538852.07		P	0.6
3	☐	1.000		5360302.07		P	0.2
4	☐	1.000		5355509.16		P	0.3
5	☐	1.000		5128790.90		P	0.6
6	☐	1.000		4942633.29		P	0.3
7	☐	1.000		4803004.13		P	0.9
8	☐	1.000		4712557.81		P	5.5
9	☐	1.000		4584374.93		P	0.3

115 In (ISTD) [No Gas]

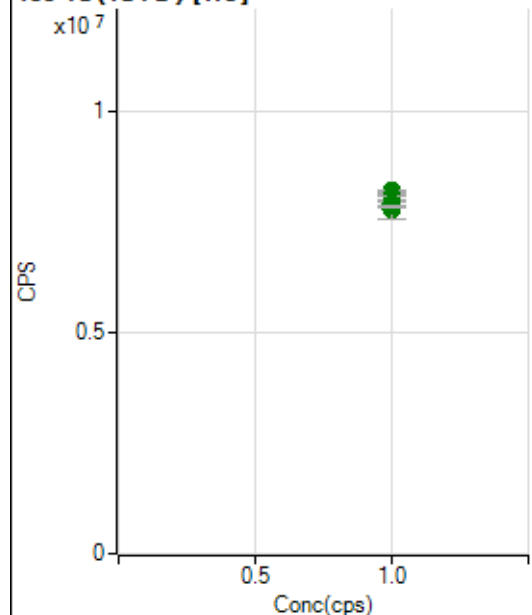
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10433234.41		A	0.4
2	☐	1.000		10701653.73		A	0.3
3	☐	1.000		10437531.99		A	0.3
4	☐	1.000		10493408.56		A	0.9
5	☐	1.000		10419432.39		A	0.6
6	☐	1.000		10151637.55		A	0.5
7	☐	1.000		9946470.58		A	1.1
8	☐	1.000		9864826.13		A	0.6
9	☐	1.000		9720352.08		A	0.5

115 In (ISTD) [He]

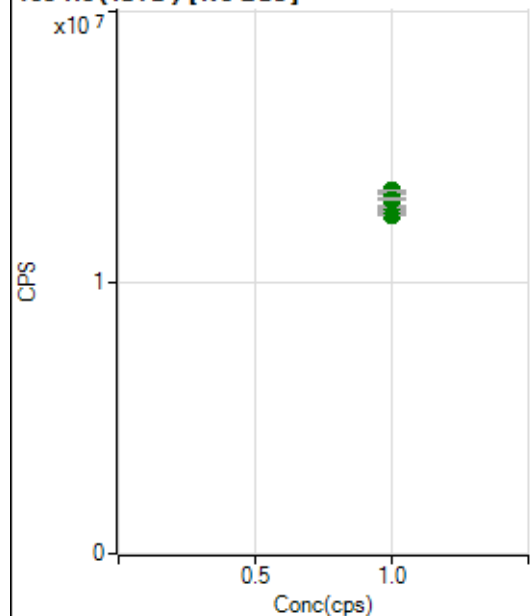
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2624588.95		P	0.4
2	☐	1.000		2654950.33		P	0.6
3	☐	1.000		2560937.67		P	0.6
4	☐	1.000		2560699.68		P	0.3
5	☐	1.000		2448035.21		P	0.5
6	☐	1.000		2359076.85		P	0.6
7	☐	1.000		2304877.19		P	1.0
8	☐	1.000		2242704.95		P	5.2
9	☐	1.000		2291175.78		P	0.7

159 Tb (ISTD) [No Gas]

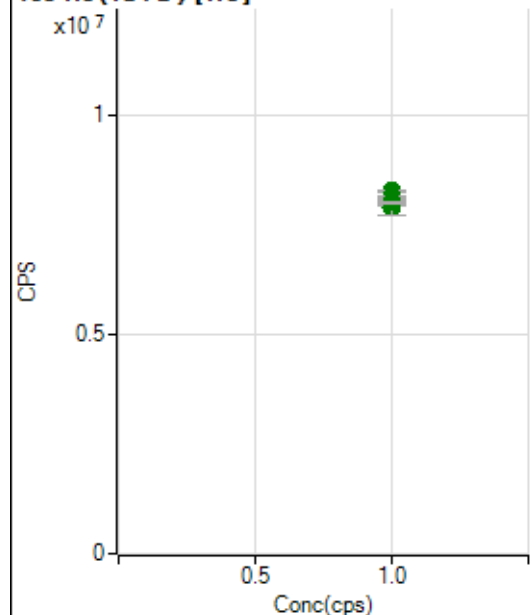
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13094251.89		A	0.5
2	☐	1.000		13320798.41		A	0.2
3	☐	1.000		13010368.83		A	0.4
4	☐	1.000		13215791.61		A	0.3
5	☐	1.000		13409298.69		A	0.1
6	☐	1.000		13436350.91		A	0.3
7	☐	1.000		13664449.52		A	0.6
8	☐	1.000		13708053.82		A	0.6
9	☐	1.000		13425140.77		A	0.4

159 Tb (ISTD) [He]

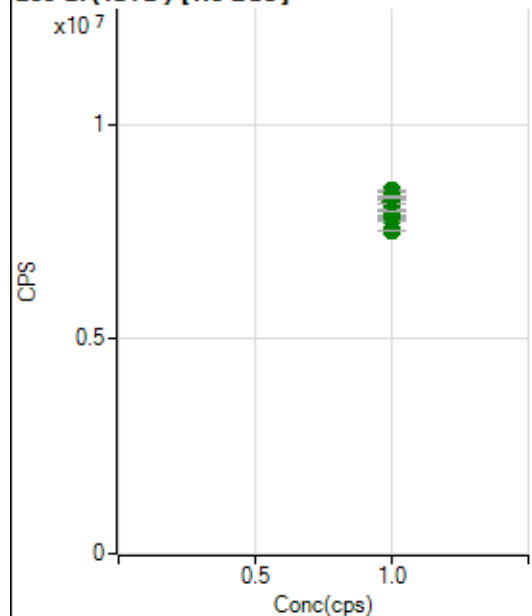
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8103229.05		A	0.1
2	☐	1.000		8190991.62		A	0.4
3	☐	1.000		7990936.76		A	0.3
4	☐	1.000		8064644.88		A	0.2
5	☐	1.000		7898487.59		A	0.6
6	☐	1.000		7833216.06		A	0.4
7	☐	1.000		7825727.59		A	0.3
8	☐	1.000		7759299.33		A	4.8
9	☐	1.000		7840144.05		A	0.4

165 Ho (ISTD) [No Gas]

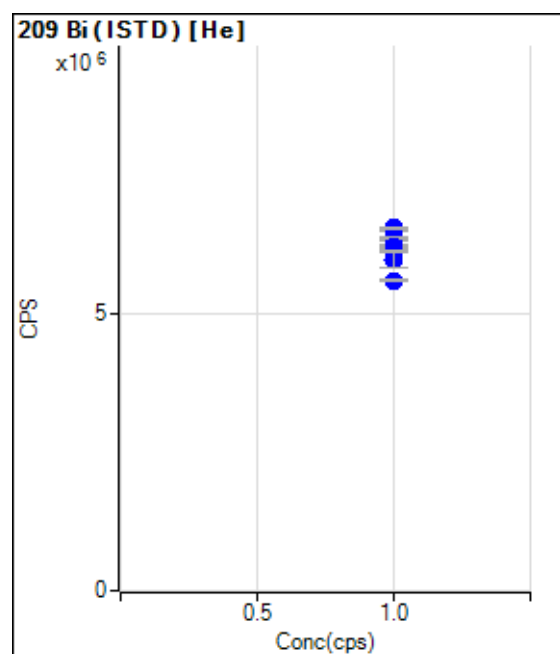
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12527334.74		A	0.8
2	☐	1.000		12829836.31		A	0.2
3	☐	1.000		12503484.74		A	0.5
4	☐	1.000		12659877.28		A	0.2
5	☐	1.000		12819196.12		A	0.5
6	☐	1.000		13073434.32		A	0.4
7	☐	1.000		13259673.04		A	0.6
8	☐	1.000		13369978.25		A	0.8
9	☐	1.000		13065480.67		A	0.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8233947.38		A	0.1
2	☐	1.000		8265408.28		A	0.5
3	☐	1.000		8078455.85		A	0.6
4	☐	1.000		8130957.17		A	0.5
5	☐	1.000		7998891.82		A	0.6
6	☐	1.000		7952258.98		A	0.3
7	☐	1.000		7977286.75		A	0.6
8	☐	1.000		7888069.95		A	4.5
9	☐	1.000		8006407.10		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7851790.72		A	0.5
2	☐	1.000		8007191.89		A	0.6
3	☐	1.000		7773232.11		A	0.3
4	☐	1.000		7877291.41		A	0.2
5	☐	1.000		7986117.94		A	0.3
6	☐	1.000		8205283.70		A	0.8
7	☐	1.000		8450980.98		A	0.6
8	☐	1.000		8321326.82		A	0.7
9	☐	1.000		7536784.06		A	0.2



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6521021.08		P	0.4
2	☐	1.000		6559523.23		P	0.6
3	☐	1.000		6343962.06		P	0.3
4	☐	1.000		6375204.00		P	0.6
5	☐	1.000		6236459.21		P	0.2
6	☐	1.000		6191062.75		P	0.3
7	☐	1.000		6153548.73		P	0.2
8	☐	1.000		5975928.38		P	5.1
9	☐	1.000		5604103.53		P	0.7

US EPA Tune Check Sample Report

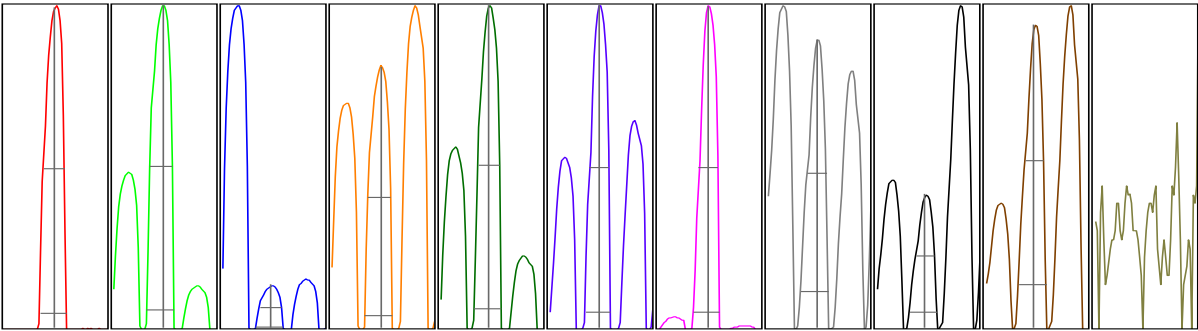
Batch Folder D:\ICP-MS Data\P7051618-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	8262	1.12	5.00	
24	101050	0.74	5.00	
25	13484	0.79	5.00	
26	15862	0.66	5.00	
59	67510	0.45	5.00	
113	10441	0.38	5.00	
115	174040	0.65	5.00	
206	22900	0.85	5.00	
207	21614	0.89	5.00	
208	49911	1.14	5.00	
220	1	12.07		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	8120	8218	8340	8304	8327
24	100040	100591	101786	101121	101711
25	13357	13404	13485	13558	13618
26	15723	15812	15897	15872	16006
59	67129	67461	67900	67351	67708
113	10463	10419	10501	10412	10409
115	175065	174103	175157	172526	173351
206	22667	22902	22935	22800	23194
207	21306	21576	21714	21807	21667
208	49239	49470	50042	50134	50667
220	1	1	1	0	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	14025	9.00	8.9 - 9.1		0.785	0.900	
24	164726	24.00	23.9 - 24.1		0.785	0.900	
25	21927	24.95	24.9 - 25.1		0.787	0.900	
26	25427	26.00	25.9 - 26.1		0.788	0.900	
59	112463	58.95	58.9 - 59.1		0.785	0.900	
113	18934	113.00	112.9 - 113.1		0.738	0.900	
115	321147	115.00	114.9 - 115.1		0.758	0.900	
206	40861	206.00	205.9 - 206.1		0.799	0.900	
207	36539	206.95	206.9 - 207.1		0.801	0.900	
208	88354	207.95	207.9 - 208.1		0.802	0.900	
220			-				

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	8.1	V	Deflect	15.4	V
Extract 2	-160.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-95	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	19324	0.29	
89	53830	0.47	
205	20512	0.37	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	19338	19298	19240	19371	19372
89	53772	53896	53497	54192	53793
205	20561	20404	20521	20477	20598

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.1	V	Deflect	3.0	V
Extract 2	-170.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-85	V	Cell Exit	-60	V			

Cell Parameters

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