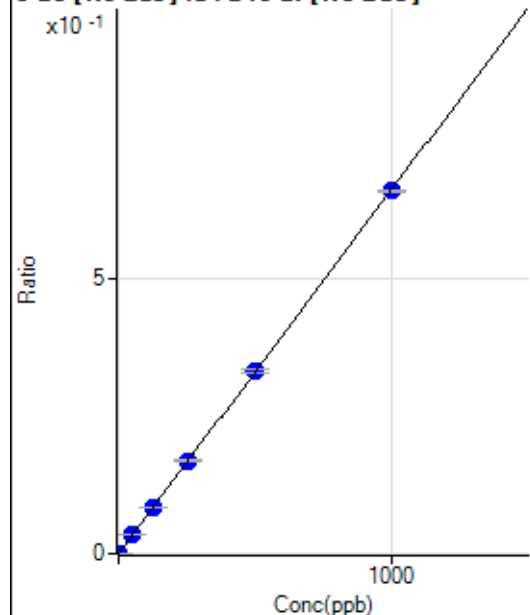


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7032023MS.b\
 Analysis File: P7032023MS.batch.bin
 DA Date-Time: 2020-03-23 16:28:32
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-03-23 13:25:59
2	004CALS.d	S02	2020-03-23 13:29:31
3	005CALS.d	S03	2020-03-23 13:34:15
4	006CALS.d	S04	2020-03-23 13:38:41
5	007CALS.d	S05	2020-03-23 13:42:22
6	008CALS.d	S06	2020-03-23 13:45:54
7	009CALS.d	S07	2020-03-23 13:49:23
8	010CALS.d	S08	2020-03-23 13:52:52

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68.52	0.0000	P	18.3
2	☐	1.000	1.094	4267.38	0.0007	P	3.1
3	☐	50.000	52.716	199676.48	0.0349	P	1.3
4	☐	125.000	125.699	495234.18	0.0832	P	1.5
5	☐	250.000	255.725	958864.11	0.1692	P	1.9
6	☐	500.000	503.119	1850796.22	0.3329	P	1.7
7	☐	1000.000	996.786	3518873.98	0.6596	P	0.6
8	☐			663.00	0.0001	P	11.3

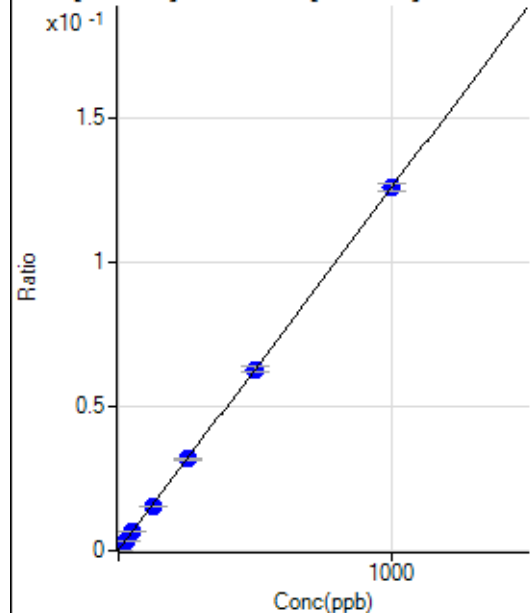
$$y = 6.6169\text{E-}004 * x + 1.1761\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.009754$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	800.06	0.0001	P	2.1
2	☐	25.000	25.108	19126.63	0.0033	P	1.8
3	☐	50.000	52.248	38433.16	0.0067	P	0.8
4	☐	125.000	122.147	92385.88	0.0155	P	1.0
5	☐	250.000	252.222	180736.71	0.0319	P	1.8
6	☐	500.000	499.687	350510.65	0.0631	P	2.9
7	☐	1000.000	999.842	672422.51	0.1260	P	2.0
8	☐			15180.47	0.0032	P	7.6

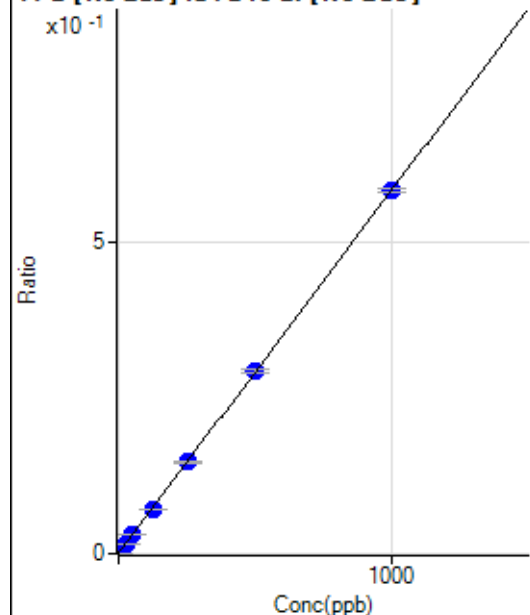
$$y = 1.2592\text{E-}004 * x + 1.3739\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.06812$$

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	3178.25	0.0005	P	3.2
2	☐	25.000	25.422	89076.91	0.0154	P	1.0
3	☐	50.000	51.788	175855.68	0.0307	P	0.3
4	☐	125.000	122.252	427479.38	0.0718	P	0.8
5	☐	250.000	251.637	834248.66	0.1472	P	1.0
6	☐	500.000	502.118	1629891.44	0.2932	P	2.8
7	☐	1000.000	998.775	3108786.81	0.5827	P	1.1
8	☐			68559.85	0.0142	P	6.1

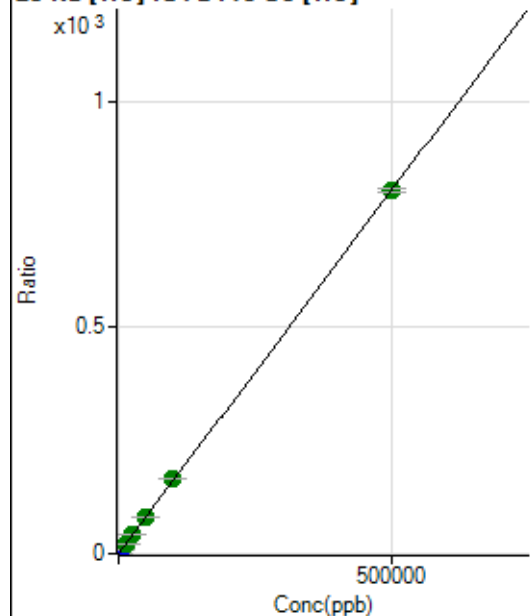
$$y = 5.8286\text{E-}004 * x + 5.4584\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.09003$$

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	12719.73	0.0285	P	1.8
2	☐	500.000	533.384	372034.18	0.8860	P	1.4
3	☐	5000.000	5155.775	3561568.31	8.3168	P	1.0
4	☐	12500.000	12835.832	8790910.53	20.6630	A	1.9
5	☐	25000.000	26111.553	17195354.37	42.0046	A	1.1
6	☐	50000.000	51087.973	34283587.22	82.1559	A	1.7
7	☐	100000.00	102366.66	67627477.21	164.5898	A	0.9
8	☐	500000.00	499352.30	304147009.5	802.7708	A	1.1

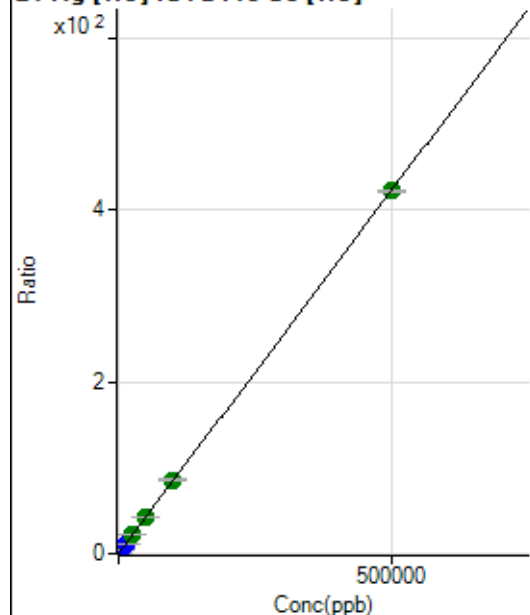
$$y = 0.0016 * x + 0.0285$$

$$R = 1.0000$$

$$DL = 0.9811$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	525.03	0.0012	P	18.4
2	☐	500.000	540.083	192223.50	0.4578	P	1.1
3	☐	5000.000	5293.695	1917081.51	4.4766	P	1.3
4	☐	12500.000	13110.361	4716229.23	11.0851	P	1.3
5	☐	25000.000	26314.563	9108468.35	22.2484	A	1.0
6	☐	50000.000	51255.851	18083642.77	43.3345	A	1.4
7	☐	100000.00	101746.08	35344220.58	86.0206	A	0.7
8	☐	500000.00	499441.23	159980266.0	422.2448	A	0.8

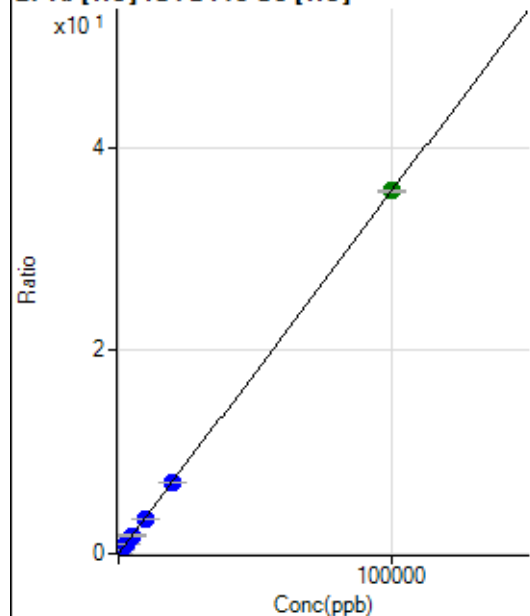
$$y = 8.4543\text{E-}004 * x + 0.0012$$

$$R = 1.0000$$

$$DL = 0.7715$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0001	P	20.9
2	☐	20.000	19.378	2961.53	0.0071	P	5.4
3	☐	1000.000	994.453	152055.45	0.3551	P	0.5
4	☐	2500.000	2516.086	382156.87	0.8982	P	0.6
5	☐	5000.000	5038.441	736231.79	1.7984	P	0.9
6	☐	10000.000	9777.889	1456434.80	3.4900	P	0.6
7	☐	20000.000	19437.572	2850565.51	6.9377	P	0.4
8	☐	100000.00	100132.42	13540898.91	35.7390	A	0.2

$$y = 3.5692\text{E-}004 * x + 1.3716\text{E-}004$$

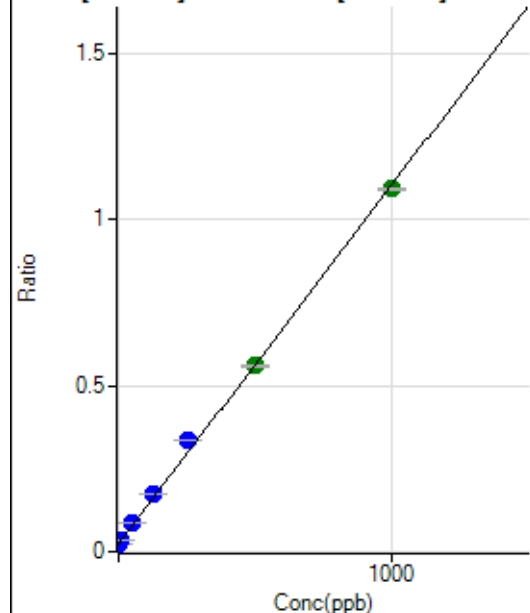
$$R = 1.0000$$

$$DL = 0.2409$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	265230.30	0.0235	P	1.0
2	☐	10.000	9.800	391780.82	0.0341	P	0.2
3	☐	50.000	57.828	999971.37	0.0860	P	0.8
4	☐	125.000	138.432	2085991.91	0.1731	P	2.2
5	☐	250.000	289.065	3905352.00	0.3359	P	0.4
6	☐	500.000	496.557	6497651.45	0.5602	A	1.2
7	☐	1000.000	989.887	12319588.12	1.0935	A	0.5
8	☐			560642.81	0.0543	P	0.3

$$y = 0.0011 * x + 0.0235$$

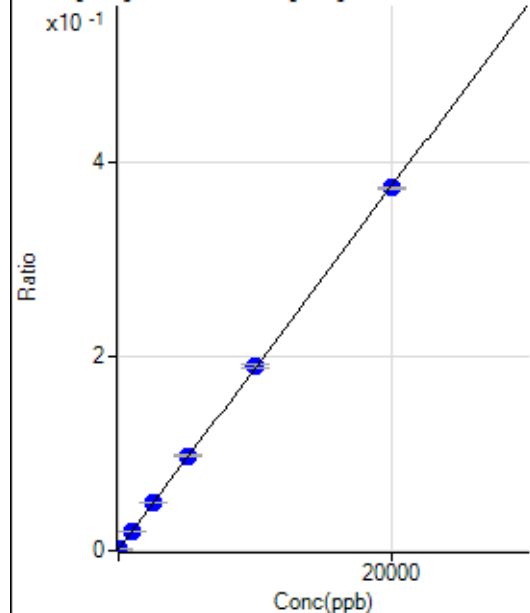
$$R = 0.9991$$

$$DL = 0.6657$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-23.868	316.68	0.0007	P	11.1
2	☐	0.000	23.868	672.26	0.0016	P	7.6
3	☐	1000.000	1012.578	8586.18	0.0200	P	1.7
4	☐	2500.000	2575.677	20940.51	0.0492	P	1.2
5	☐	5000.000	5161.584	39896.24	0.0975	P	2.9
6	☐	10000.000	10074.719	78928.83	0.1891	P	1.6
7	☐	20000.000	19912.156	153131.97	0.3727	P	0.5
8	☐			272.23	0.0007	P	15.3

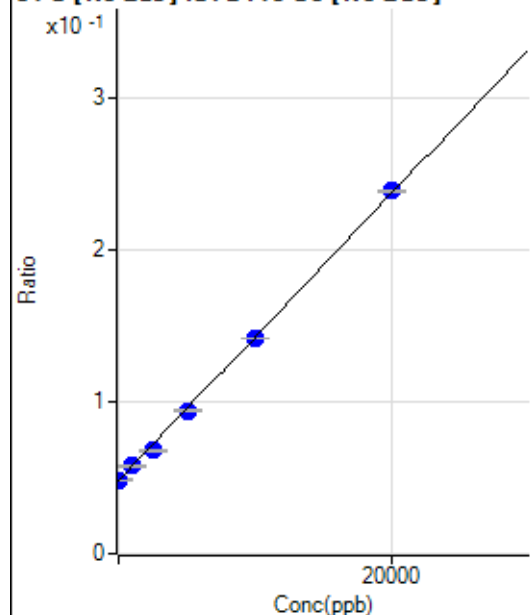
$$y = 1.8659E-005 * x + 0.0012$$

$$R = 0.9999$$

$$DL = 16.1$$

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	21.183	546770.79	0.0484	P	1.6
2	☐	0.000	-21.183	551835.98	0.0480	P	0.7
3	☐	1000.000	996.725	669676.23	0.0576	P	0.9
4	☐	2500.000	2083.413	817310.12	0.0678	P	2.9
5	☐	5000.000	4833.572	1090294.29	0.0938	P	1.5
6	☐	10000.000	9872.997	1639512.49	0.1414	P	0.5
7	☐	20000.000	20157.345	2686210.15	0.2384	P	0.8
8	☐			485330.00	0.0470	P	0.8

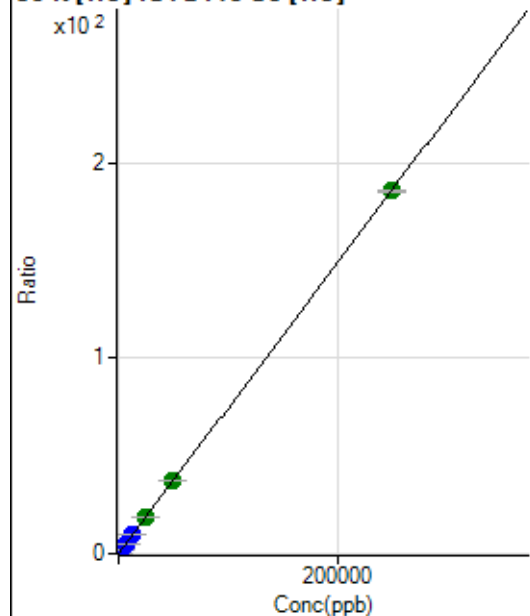
$$y = 9.4393\text{E-}006 * x + 0.0482$$

$$R = 0.9997$$

$$DL = 174$$

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	20142.13	0.0452	P	2.7
2	☐	500.000	538.050	186626.05	0.4444	P	0.4
3	☐	2500.000	2564.838	834374.80	1.9483	P	0.8
4	☐	6250.000	6400.495	2039916.06	4.7944	P	0.6
5	☐	12500.000	12921.105	3943328.64	9.6328	P	1.2
6	☐	25000.000	24998.257	7759406.16	18.5941	A	1.3
7	☐	50000.000	50168.426	15313499.30	37.2706	A	0.6
8	☐	250000.00	249940.94	70285609.21	185.5033	A	0.7

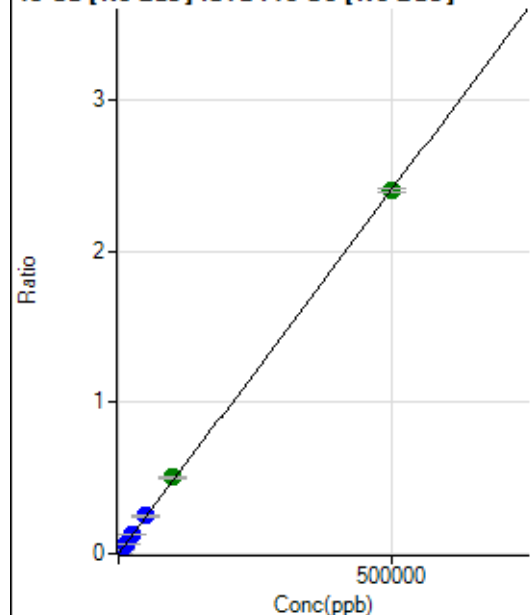
$$y = 7.4201\text{E-}004 * x + 0.0452$$

$$R = 1.0000$$

$$DL = 4.943$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	422.24	0.0000	P	10.7
2	☐	500.000	543.583	30498.96	0.0027	P	1.6
3	☐	5000.000	5301.442	296933.28	0.0255	P	0.4
4	☐	12500.000	12722.076	737442.68	0.0612	P	3.4
5	☐	25000.000	26163.542	1462875.39	0.1258	P	1.4
6	☐	50000.000	51654.860	2881118.25	0.2484	P	0.5
7	☐	100000.00	104514.42	5662048.96	0.5026	A	0.7
8	☐	500000.00	498864.84	24761446.73	2.3988	A	1.1

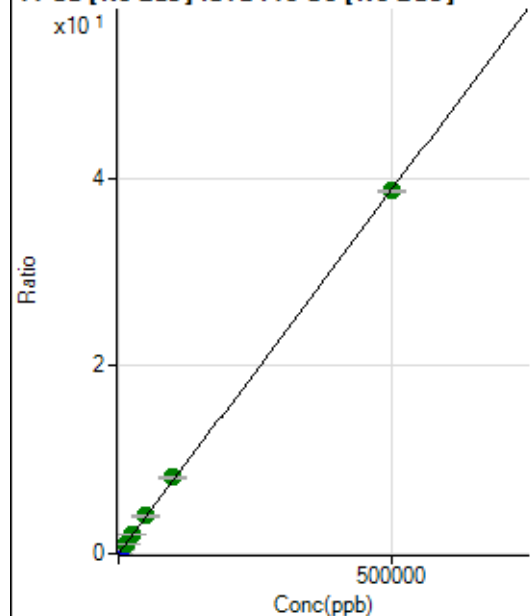
$$y = 4.8084\text{E-}006 * x + 3.7371\text{E-}005$$

$$R = 1.0000$$

$$DL = 2.5$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	8141.43	0.0007	P	2.3
2	☐	500.000	546.168	495075.94	0.0430	P	0.3
3	☐	5000.000	5258.599	4746990.82	0.4081	P	0.4
4	☐	12500.000	12692.090	11855034.29	0.9840	A	3.4
5	☐	25000.000	25932.816	23364080.73	2.0098	A	0.5
6	☐	50000.000	51773.329	46526411.46	4.0117	A	1.1
7	☐	100000.00	104646.41	91341959.68	8.1080	A	1.3
8	☐	500000.00	498839.30	398948861.6	38.6472	A	0.6

$$y = 7.7473\text{E-}005 * x + 7.2025\text{E-}004$$

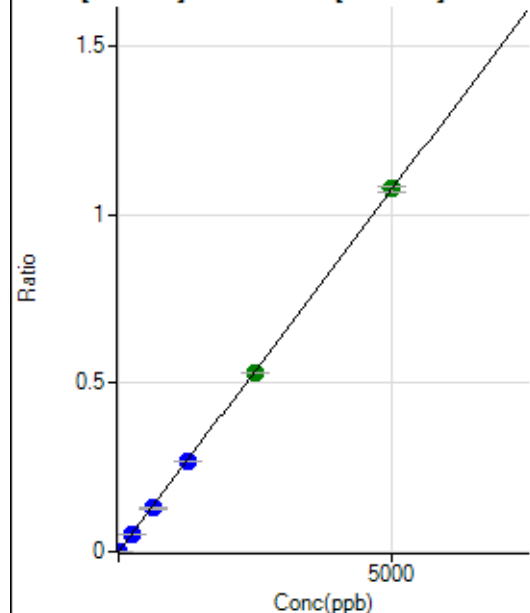
$$R = 1.0000$$

$$DL = 0.6469$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	508.37	0.0000	P	5.3
2	☐	5.000	5.351	13723.58	0.0012	P	3.2
3	☐	250.000	251.006	626899.34	0.0539	P	0.9
4	☐	625.000	604.237	1562390.76	0.1297	P	3.3
5	☐	1250.000	1244.952	3105494.82	0.2671	P	1.2
6	☐	2500.000	2475.331	6159743.76	0.5311	A	0.2
7	☐	5000.000	5016.141	12124298.79	1.0762	A	1.4
8	☐			4615.20	0.0004	P	2.6

$$y = 2.1454\text{E-}004 * x + 4.4956\text{E-}005$$

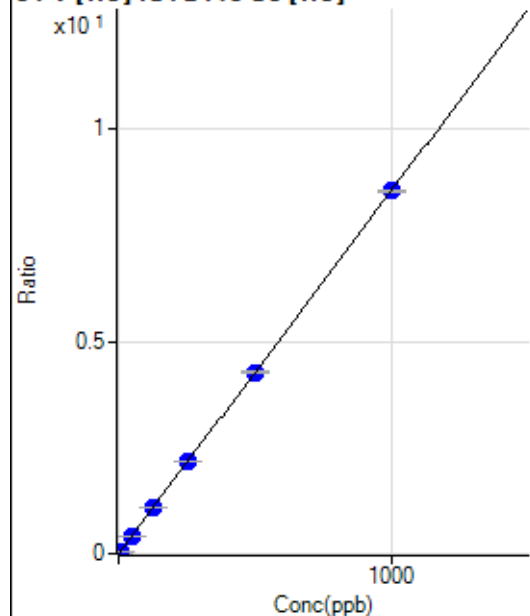
$$R = 1.0000$$

$$DL = 0.03317$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	49.4
2	☐	5.000	5.469	19667.74	0.0468	P	0.9
3	☐	50.000	49.929	183060.06	0.4275	P	0.4
4	☐	125.000	125.660	457731.89	1.0758	P	0.7
5	☐	250.000	254.556	892168.70	2.1793	P	0.9
6	☐	500.000	499.095	1783124.58	4.2729	P	1.0
7	☐	1000.000	999.232	3514912.83	8.5547	P	0.4
8	☐			1411.20	0.0037	P	5.0

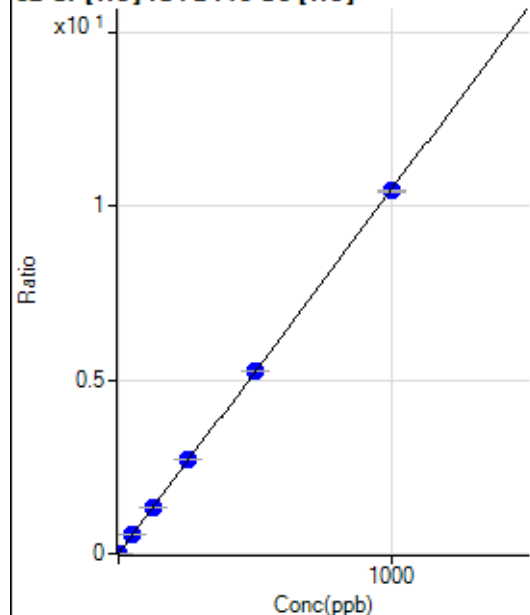
$$y = 0.0086 * x + 1.4935\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.002587$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1076.72	0.0024	P	5.7
2	☐	2.000	2.194	10676.22	0.0254	P	2.7
3	☐	50.000	51.568	232615.72	0.5432	P	1.0
4	☐	125.000	128.325	573595.91	1.3481	P	0.5
5	☐	250.000	260.734	1120351.66	2.7366	P	0.3
6	☐	500.000	501.146	2194113.56	5.2578	P	0.9
7	☐	1000.000	996.249	4293545.11	10.4497	P	0.2
8	☐			102725.55	0.2711	P	0.9

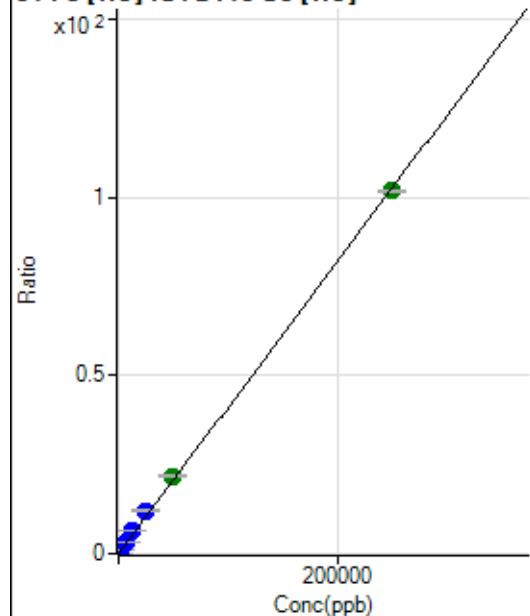
$$y = 0.0105 * x + 0.0024$$

$$R = 0.9999$$

$$DL = 0.03907$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	677.40	0.0015	P	10.1
2	☐	50.000	67.779	12294.65	0.0293	P	2.7
3	☐	2500.000	3066.556	538504.45	1.2575	P	1.0
4	☐	6250.000	7627.404	1329799.18	3.1256	P	1.3
5	☐	12500.000	15421.311	2586394.51	6.3178	P	0.6
6	☐	25000.000	29653.156	5069040.95	12.1469	P	0.9
7	☐	50000.000	53178.742	8950142.01	21.7826	A	0.9
8	☐	250000.00	248712.76	38595673.06	101.8699	A	0.6

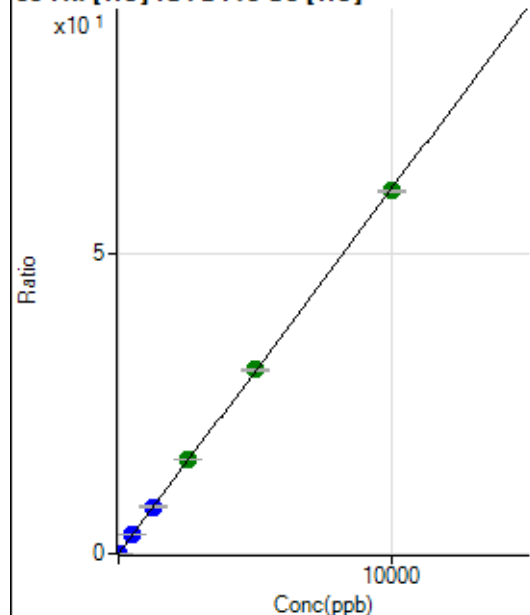
$$y = 4.0958E-004 * x + 0.0015$$

$$R = 0.9998$$

$$DL = 1.127$$

Weight: <None>

Min Conc: 0

⁵⁵Mn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	136.67	0.0003	P	13.3
2	☐	1.000	1.067	2859.22	0.0068	P	1.2
3	☐	500.000	514.661	1343739.74	3.1379	P	1.2
4	☐	1250.000	1288.306	3341674.15	7.8543	P	1.3
5	☐	2500.000	2590.708	6465762.89	15.7943	A	0.9
6	☐	5000.000	5054.016	12858004.11	30.8115	A	1.2
7	☐	10000.000	9944.794	24910176.30	60.6276	A	0.8
8	☐			23699.24	0.0626	P	0.7

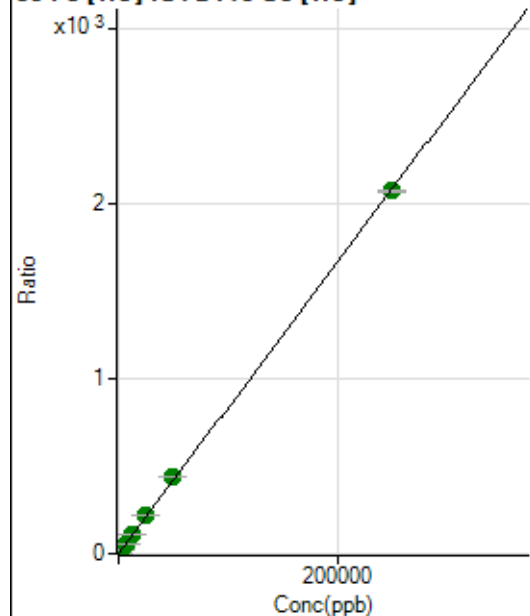
$$y = 0.0061 * x + 3.0692E-004$$

$$R = 0.9999$$

$$DL = 0.02013$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6501.61	0.0146	P	2.5
2	☐	50.000	59.021	212505.54	0.5061	P	1.9
3	☐	2500.000	2697.843	9627827.53	22.4810	A	1.0
4	☐	6250.000	6714.907	23797469.05	55.9332	A	1.1
5	☐	12500.000	13595.667	46355436.22	113.2330	A	0.7
6	☐	25000.000	26423.025	91829724.27	220.0532	A	1.2
7	☐	50000.000	52812.516	180709468.8	439.8125	A	0.5
8	☐	250000.00	249226.80	786368699.0	2,075.459	A	0.6

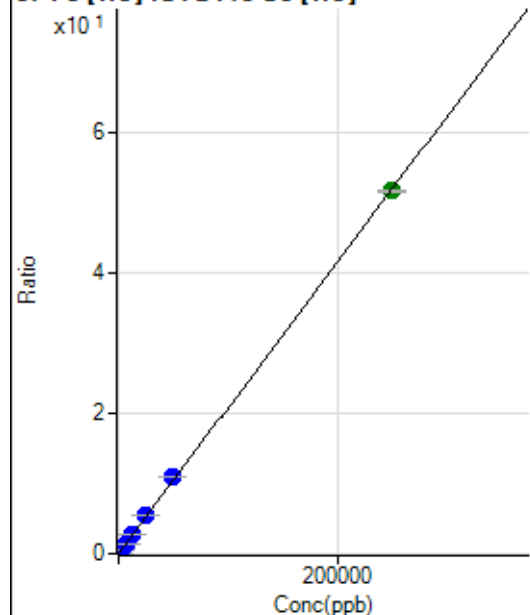
$$y = 0.0083 * x + 0.0146$$

$$R = 0.9999$$

$$DL = 0.1309$$

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	255.57	0.0006	P	15.7
2	☐	50.000	61.333	5571.58	0.0133	P	4.6
3	☐	2500.000	2718.698	241256.21	0.5633	P	0.5
4	☐	6250.000	6766.873	596217.00	1.4013	P	1.0
5	☐	12500.000	13684.833	1159898.64	2.8333	P	0.8
6	☐	25000.000	26312.515	2273197.82	5.4473	P	1.0
7	☐	50000.000	52257.470	4444829.09	10.8179	P	0.1
8	☐	250000.00	249342.90	19556238.17	51.6146	A	0.6

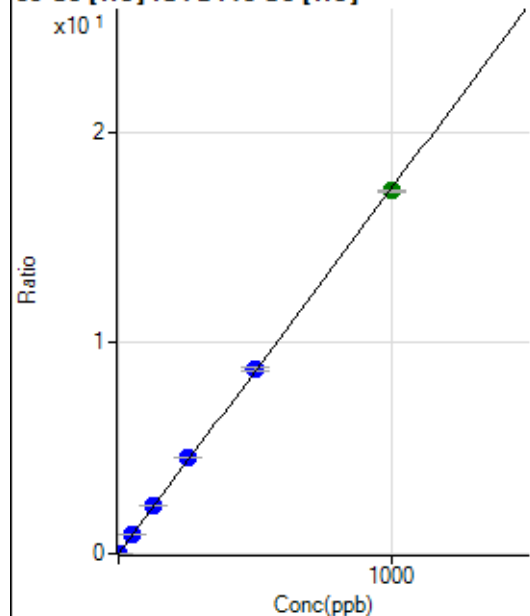
$$y = 2.0700\text{E-}004 * x + 5.7400\text{E-}004$$

$$R = 0.9999$$

$$DL = 1.306$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	107.78	0.0002	P	6.5
2	☐	1.000	1.073	7912.24	0.0188	P	1.8
3	☐	50.000	52.445	389512.49	0.9096	P	0.4
4	☐	125.000	130.480	962649.97	2.2626	P	1.0
5	☐	250.000	263.700	1871842.86	4.5724	P	0.8
6	☐	500.000	505.196	3655400.12	8.7596	P	1.3
7	☐	1000.000	993.170	7075434.48	17.2202	A	0.2
8	☐			13196.11	0.0348	P	0.9

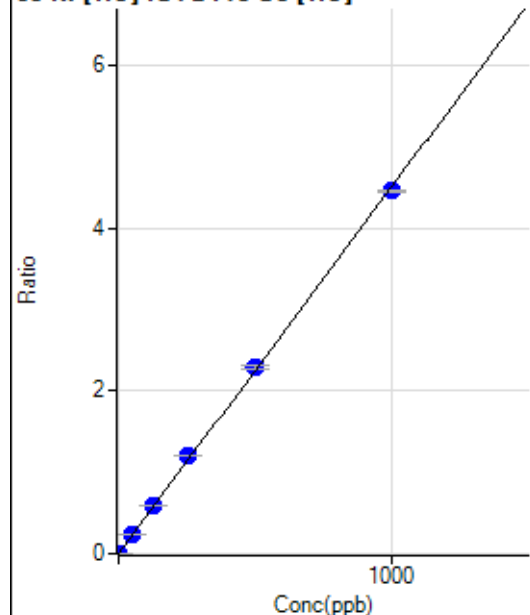
$$y = 0.0173 * x + 2.4189\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.0027$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	132.22	0.0003	P	14.5
2	☐	1.000	1.236	2462.47	0.0059	P	2.8
3	☐	50.000	53.347	103025.52	0.2406	P	0.8
4	☐	125.000	132.764	254556.96	0.5983	P	0.9
5	☐	250.000	267.280	492975.26	1.2042	P	0.5
6	☐	500.000	509.601	957977.28	2.2957	P	1.6
7	☐	1000.000	989.741	1831817.32	4.4583	P	0.3
8	☐			28311.97	0.0747	P	1.2

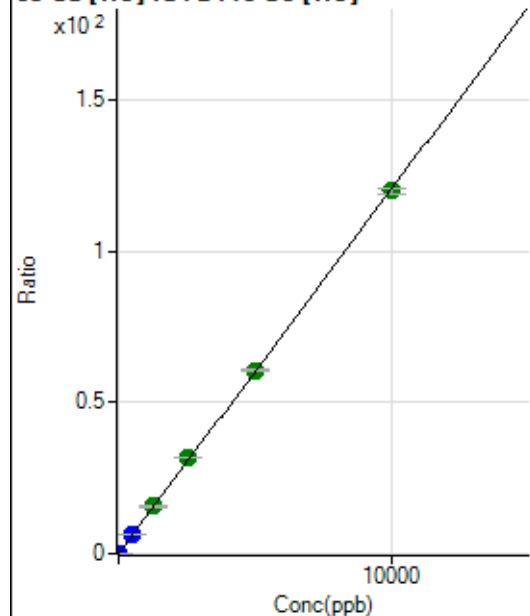
$$y = 0.0045 * x + 2.9665E-004$$

$$R = 0.9998$$

$$DL = 0.02857$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	858.93	0.0019	P	5.4
2	☐	2.000	2.242	12161.90	0.0290	P	3.3
3	☐	500.000	528.542	2729983.64	6.3750	P	0.7
4	☐	1250.000	1301.638	6678037.12	15.6968	A	2.0
5	☐	2500.000	2615.442	12911572.17	31.5383	A	0.0
6	☐	5000.000	5024.150	25281633.51	60.5819	A	1.0
7	☐	10000.000	9951.183	49300473.71	119.9909	A	1.2
8	☐			16586.26	0.0438	P	1.7

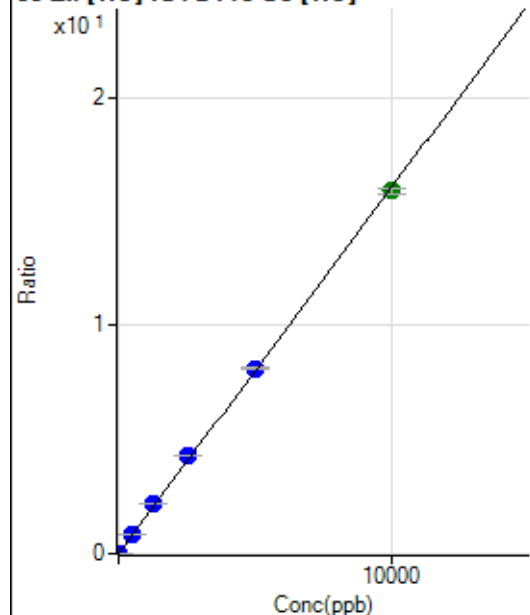
$$y = 0.0121 * x + 0.0019$$

$$R = 0.9999$$

$$DL = 0.02596$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1249.03	0.0028	P	5.0
2	☐	2.000	2.541	2889.90	0.0069	P	4.6
3	☐	500.000	540.175	372622.61	0.8701	P	0.6
4	☐	1250.000	1351.446	924415.33	2.1728	P	1.3
5	☐	2500.000	2689.304	1768902.30	4.3209	P	0.6
6	☐	5000.000	5058.824	3390888.65	8.1255	P	0.7
7	☐	10000.000	9908.573	6537939.76	15.9126	A	1.5
8	☐			22420.59	0.0592	P	1.1

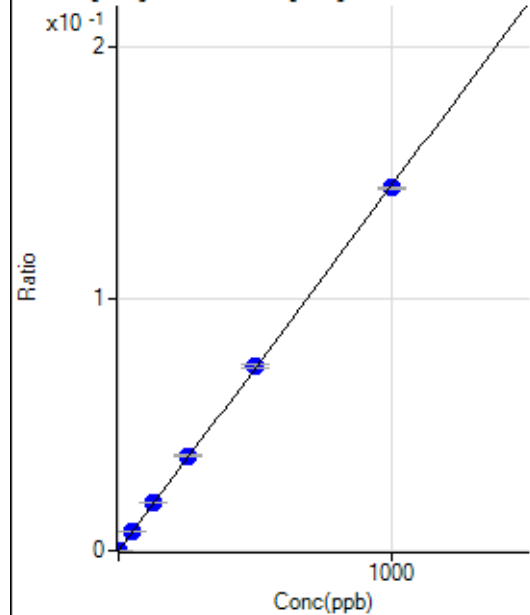
$$y = 0.0016 * x + 0.0028$$

$$R = 0.9998$$

$$DL = 0.2644$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.94	0.0000	P	57.4
2	☐	1.000	1.138	492.61	0.0002	P	6.0
3	☐	50.000	51.667	22525.53	0.0075	P	0.6
4	☐	125.000	130.741	55893.86	0.0190	P	2.3
5	☐	250.000	259.929	108970.45	0.0377	P	1.9
6	☐	500.000	505.851	214115.67	0.0734	P	1.3
7	☐	1000.000	993.791	413253.32	0.1443	P	0.7
8	☐			214.82	0.0001	P	15.5

$$y = 1.4516E-004 * x + 1.6049E-006$$

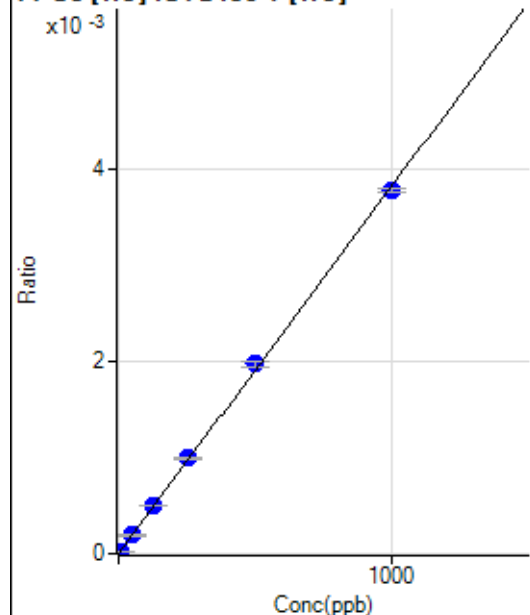
$$R = 0.9999$$

$$DL = 0.01903$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.611	63.33	0.0000	P	13.5
3	☐	50.000	50.086	574.47	0.0002	P	6.5
4	☐	125.000	130.795	1471.21	0.0005	P	1.5
5	☐	250.000	260.862	2878.11	0.0010	P	2.1
6	☐	500.000	517.007	5756.79	0.0020	P	2.8
7	☐	1000.000	988.049	10809.77	0.0038	P	1.1
8	☐			3.33	0.0000	P	100.2

$$y = 3.8190\text{E-}006 * x + 0.0000\text{E+}000$$

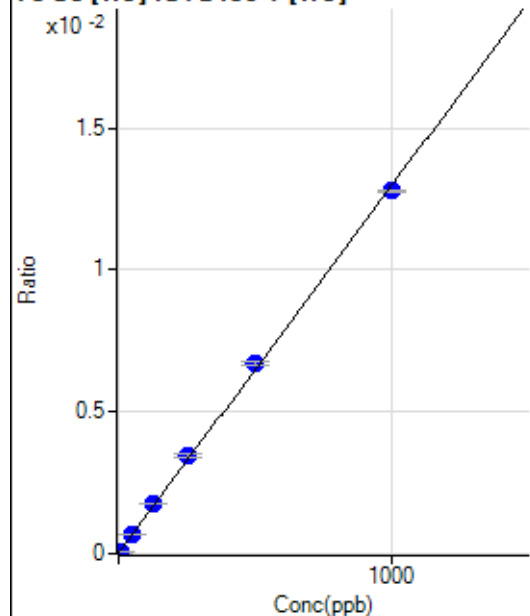
$$R = 0.9997$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.56	0.0000	P	16.1
2	☐	5.000	5.608	267.91	0.0001	P	8.8
3	☐	50.000	52.785	2106.35	0.0007	P	2.6
4	☐	125.000	134.792	5193.56	0.0018	P	0.1
5	☐	250.000	266.202	10005.99	0.0035	P	2.5
6	☐	500.000	516.334	19548.43	0.0067	P	1.6
7	☐	1000.000	986.416	36637.56	0.0128	P	0.2
8	☐			73.46	0.0000	P	9.4

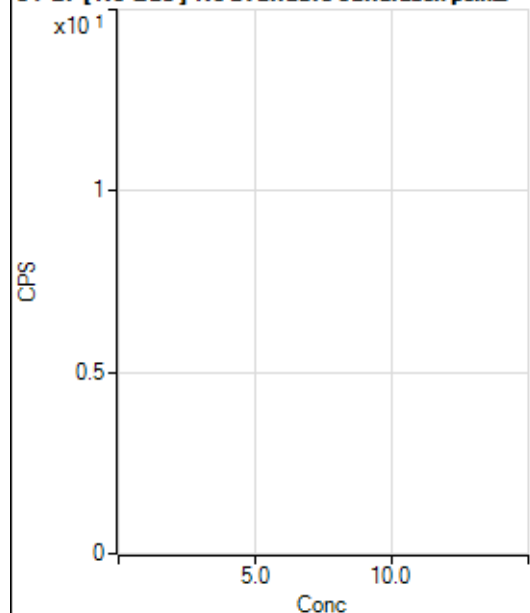
$$y = 1.2947\text{E-}005 * x + 1.8087\text{E-}005$$

$$R = 0.9996$$

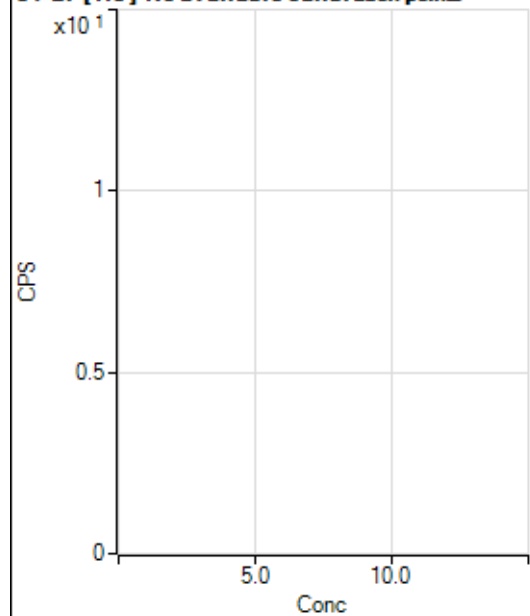
$$DL = 0.6747$$

Weight: <None>

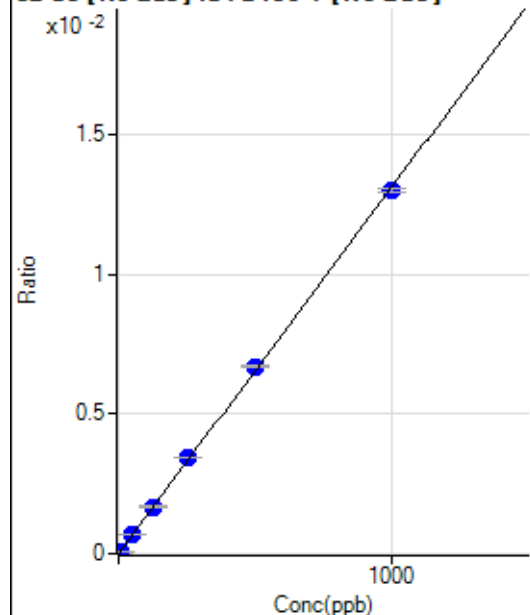
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			54197.28		P	2.6
2	☐			55115.57		P	1.5
3	☐			56699.39		P	1.3
4	☐			56207.33		P	2.3
5	☐			56126.90		P	1.6
6	☐			56729.65		P	2.7
7	☐			57533.04		P	0.9
8	☐			51527.91		P	1.8

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.70		P	15.7
2	☐			43.38		P	113.8
3	☐			53.39		P	21.7
4	☐			23.36		P	49.5
5	☐			86.76		P	6.7
6	☐			73.41		P	34.3
7	☐			73.41		P	28.4
8	☐			33.37		P	62.4

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-39.68	0.0000	P	-108.
2	☐	5.000	5.933	1916.78	0.0001	P	4.8
3	☐	50.000	53.849	17818.64	0.0007	P	1.9
4	☐	125.000	128.240	44526.47	0.0017	P	1.3
5	☐	250.000	261.963	87017.81	0.0034	P	1.0
6	☐	500.000	511.489	170233.82	0.0067	P	1.3
7	☐	1000.000	990.663	323898.55	0.0130	P	1.2
8	☐			339.89	0.0000	P	10.7

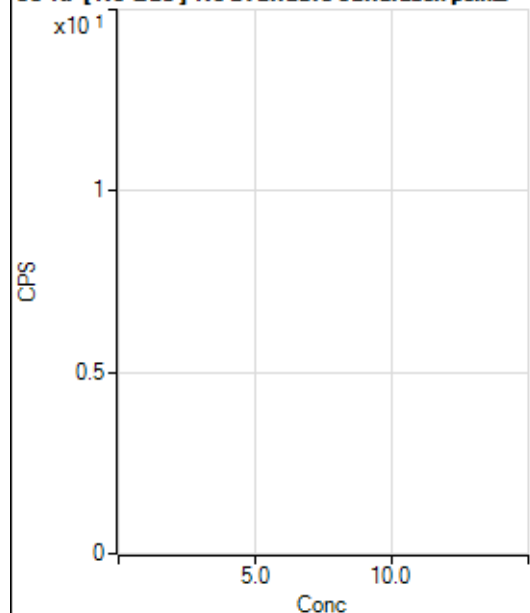
$$y = 1.3121\text{E-}005 * x - 1.6507\text{E-}006$$

$$R = 0.9998$$

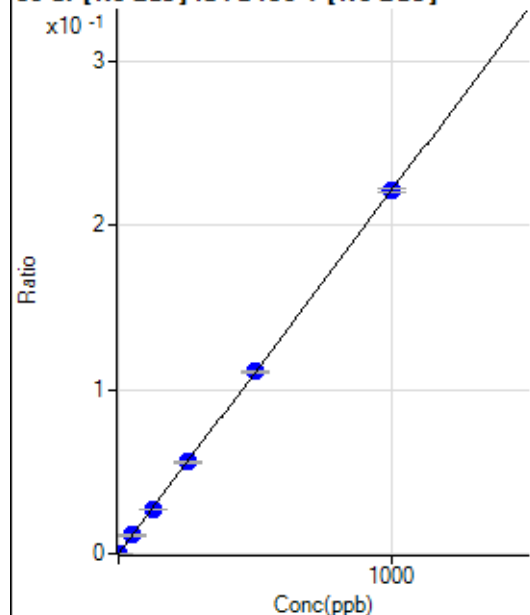
$$DL = 0.4086$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			435.57		P	12.4
2	☐			423.35		P	9.7
3	☐			445.57		P	0.9
4	☐			450.02		P	14.1
5	☐			468.91		P	6.4
6	☐			475.57		P	7.6
7	☐			471.13		P	3.3
8	☐			481.13		P	2.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	563.93	0.0000	P	12.0
2	☐	1.000	1.045	6410.05	0.0003	P	1.0
3	☐	50.000	50.376	282595.57	0.0112	P	0.7
4	☐	125.000	122.731	720393.57	0.0272	P	2.6
5	☐	250.000	252.100	1414583.97	0.0558	P	0.7
6	☐	500.000	501.235	2816698.52	0.1110	P	1.4
7	☐	1000.000	999.122	5514358.85	0.2213	P	1.0
8	☐			11410.58	0.0005	P	0.7

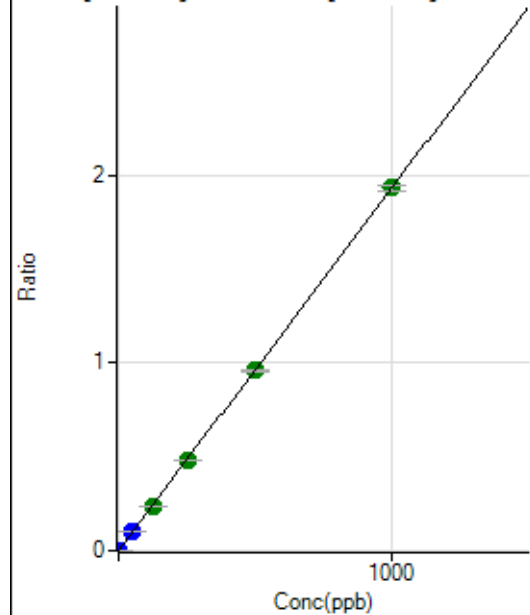
$$y = 2.2143\text{E-}004 * x + 2.3444\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.038$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	369.47	0.0000	P	16.7
2	☐	1.000	1.037	50735.49	0.0020	P	0.4
3	☐	50.000	50.751	2476731.24	0.0980	P	0.3
4	☐	125.000	121.343	6203793.59	0.2342	A	2.3
5	☐	250.000	250.296	12237302.10	0.4831	A	0.7
6	☐	500.000	497.369	24359492.21	0.9600	A	1.1
7	☐	1000.000	1001.661	48184360.80	1.9334	A	1.3
8	☐			94935.59	0.0041	P	0.7

$$y = 0.0019 * x + 1.5349\text{E-}005$$

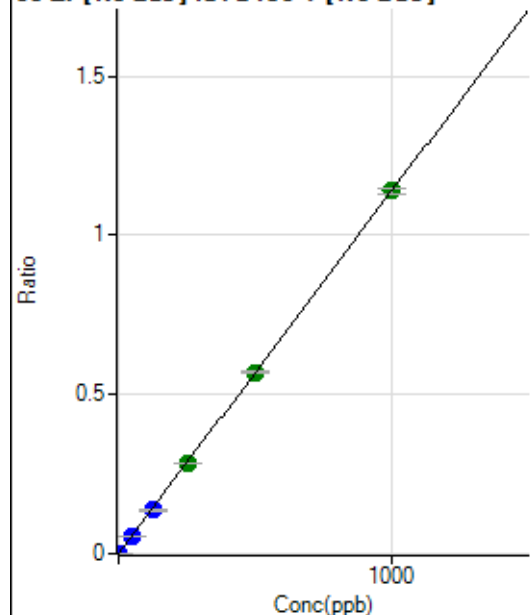
$$R = 1.0000$$

$$DL = 0.003996$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1441.80	0.0001	P	14.3
2	☐	1.000	0.777	23762.10	0.0009	P	2.1
3	☐	50.000	49.382	1422875.28	0.0563	P	0.8
4	☐	125.000	120.661	3640142.23	0.1374	P	2.6
5	☐	250.000	248.742	7175043.22	0.2833	A	0.7
6	☐	500.000	499.930	14443916.29	0.5693	A	1.3
7	☐	1000.000	1000.923	28401421.12	1.1397	A	1.8
8	☐			10640.50	0.0005	P	4.7

$$y = 0.0011 * x + 5.9884E-005$$

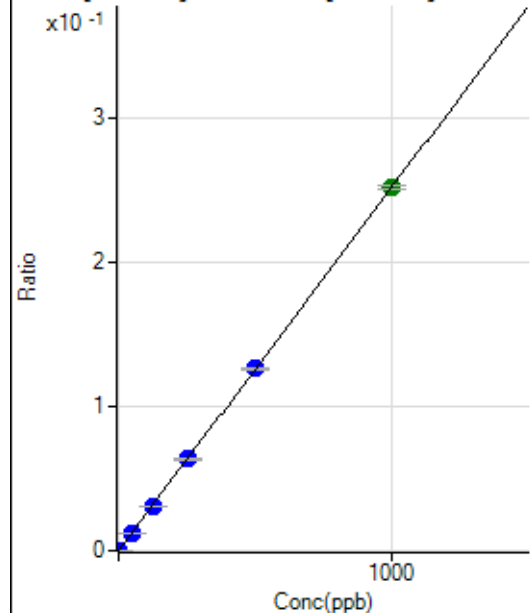
$$R = 1.0000$$

$$DL = 0.02256$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	266.68	0.0000	P	3.7
2	☐	1.000	0.788	5267.88	0.0002	P	4.8
3	☐	50.000	49.163	312705.12	0.0124	P	0.6
4	☐	125.000	120.564	803017.48	0.0303	P	2.3
5	☐	250.000	251.823	1603726.02	0.0633	P	0.3
6	☐	500.000	501.268	3197582.17	0.1260	P	0.8
7	☐	1000.000	999.507	6262146.54	0.2513	A	1.1
8	☐			2447.55	0.0001	P	6.5

$$y = 2.5138E-004 * x + 1.1084E-005$$

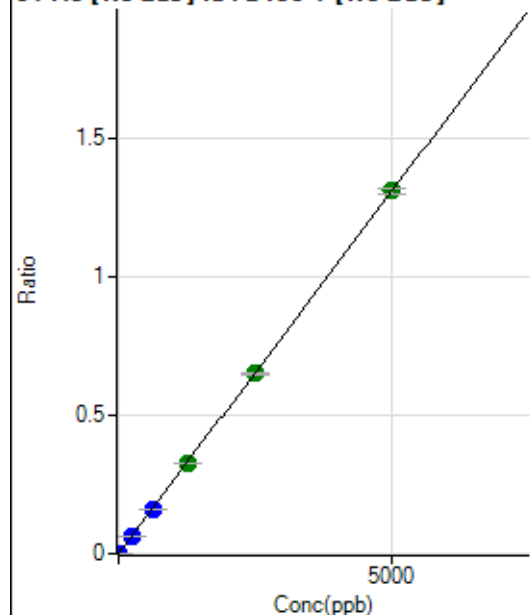
$$R = 1.0000$$

$$DL = 0.004952$$

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	555.59	0.0000	P	11.6
2	☐	5.000	4.913	32844.27	0.0013	P	0.7
3	☐	250.000	250.203	1651440.19	0.0653	P	0.5
4	☐	625.000	606.853	4195666.07	0.1584	P	2.3
5	☐	1250.000	1252.635	8281553.05	0.3270	A	0.9
6	☐	2500.000	2483.360	16446938.91	0.6482	A	0.6
7	☐	5000.000	5009.920	32586997.60	1.3076	A	1.5
8	☐			24243.79	0.0011	P	2.5

$$y = 2.6100\text{E-}004 * x + 2.3101\text{E-}005$$

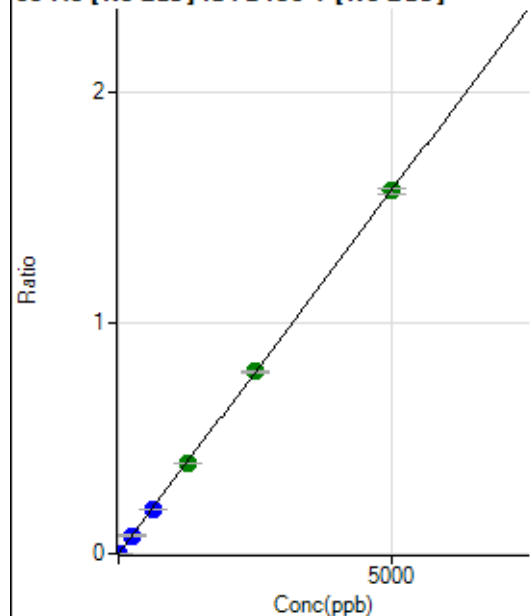
$$R = 1.0000$$

$$DL = 0.03078$$

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	47.23	0.0000	P	56.4
2	☐	5.000	5.490	43453.05	0.0017	P	2.1
3	☐	250.000	250.882	1993261.94	0.0788	P	0.8
4	☐	625.000	605.166	5037713.39	0.1902	P	1.7
5	☐	1250.000	1244.219	9904281.65	0.3910	A	0.9
6	☐	2500.000	2514.720	20052571.28	0.7903	A	1.0
7	☐	5000.000	4996.520	39133567.54	1.5703	A	1.3
8	☐			34818.30	0.0015	P	0.8

$$y = 3.1427\text{E-}004 * x + 1.9574\text{E-}006$$

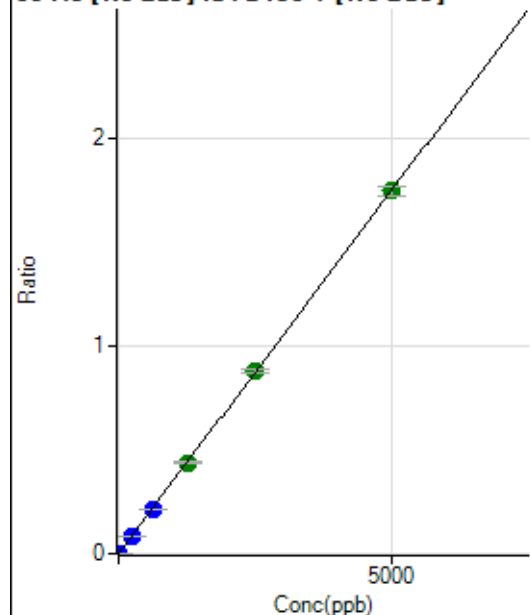
$$R = 1.0000$$

$$DL = 0.01054$$

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	233.35	0.0000	P	31.5
2	☐	5.000	5.312	46956.31	0.0019	P	0.6
3	☐	250.000	250.399	2212363.96	0.0875	P	0.2
4	☐	625.000	602.857	5580585.72	0.2107	P	1.6
5	☐	1250.000	1256.378	11121370.74	0.4391	A	1.1
6	☐	2500.000	2508.411	22240123.24	0.8766	A	2.3
7	☐	5000.000	4996.948	43514442.99	1.7462	A	2.3
8	☐			58337.11	0.0025	P	0.2

$$y = 3.4946\text{E-}004 * x + 9.7052\text{E-}006$$

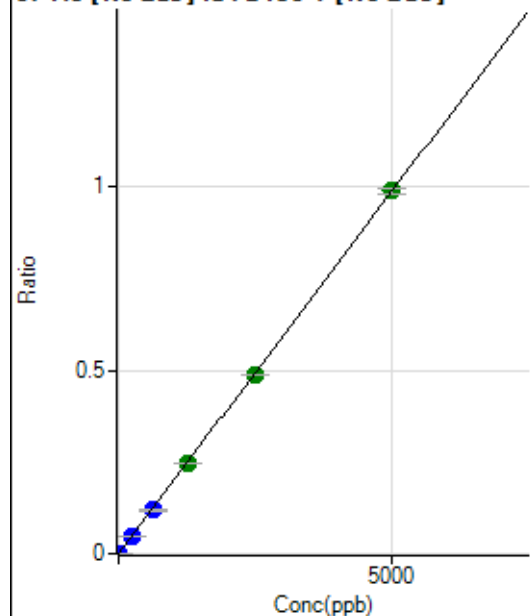
$$R = 1.0000$$

$$DL = 0.02623$$

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	55.56	0.0000	P	37.7
2	☐	5.000	5.472	27187.94	0.0011	P	3.9
3	☐	250.000	251.034	1251009.95	0.0495	P	0.8
4	☐	625.000	601.493	3140750.31	0.1186	P	1.5
5	☐	1250.000	1248.194	6232281.74	0.2460	A	1.3
6	☐	2500.000	2475.960	12383992.72	0.4881	A	0.7
7	☐	5000.000	5015.358	24637096.38	0.9886	A	1.8
8	☐			22206.94	0.0010	P	1.8

$$y = 1.9712\text{E-}004 * x + 2.3091\text{E-}006$$

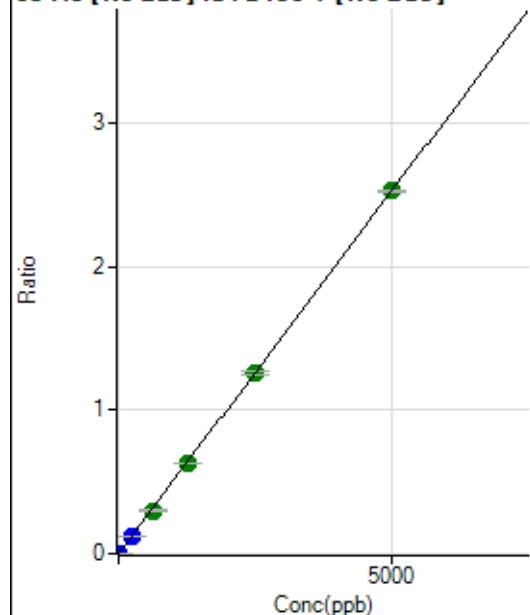
$$R = 1.0000$$

$$DL = 0.01323$$

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	122.23	0.0000	P	22.1
2	☐	5.000	5.403	68732.82	0.0027	P	1.0
3	☐	250.000	250.855	3200269.08	0.1266	P	0.5
4	☐	625.000	596.258	7969819.97	0.3009	A	1.8
5	☐	1250.000	1240.321	15853558.17	0.6259	A	0.4
6	☐	2500.000	2501.564	32028080.92	1.2623	A	1.8
7	☐	5000.000	5005.187	62949199.32	2.5257	A	0.8
8	☐			55461.97	0.0024	P	0.8

$$y = 5.0462\text{E-}004 * x + 5.0814\text{E-}006$$

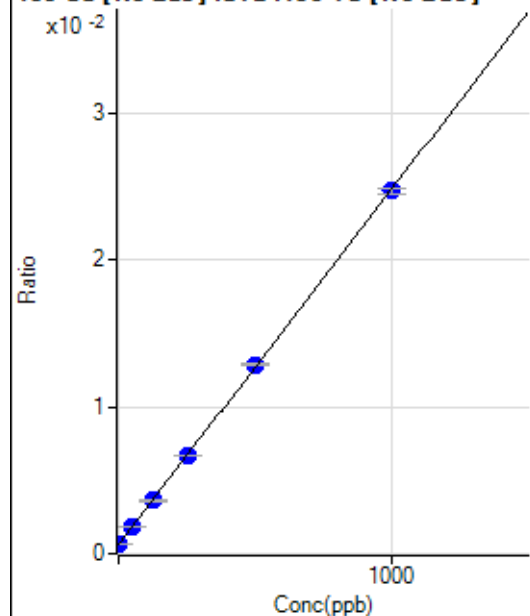
$$R = 1.0000$$

$$DL = 0.006685$$

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	12770.14	0.0006	P	2.1
2	☐	1.000	1.161	13762.90	0.0006	P	2.2
3	☐	50.000	52.230	40063.23	0.0019	P	0.3
4	☐	125.000	125.408	81322.96	0.0036	P	3.9
5	☐	250.000	251.125	146004.75	0.0067	P	0.3
6	☐	500.000	507.450	279253.32	0.0129	P	0.2
7	☐	1000.000	995.831	520274.52	0.0247	P	1.6
8	☐			12133.45	0.0006	P	0.0

$$y = 2.4175\text{E-}005 * x + 6.1720\text{E-}004$$

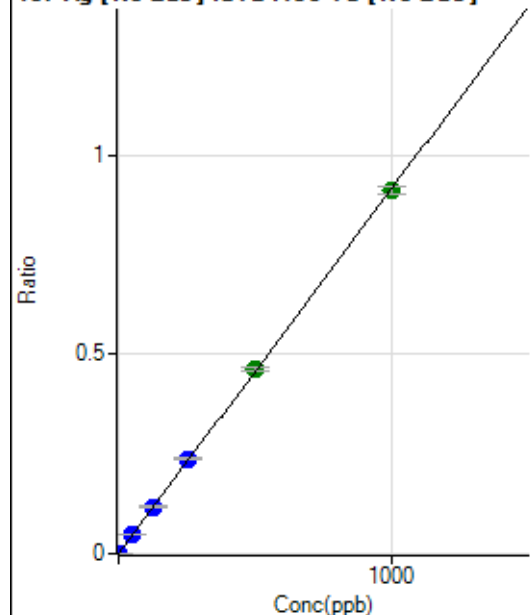
$$R = 1.0000$$

$$DL = 1.612$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0000	P	11.3
2	☐	1.000	1.182	23261.59	0.0011	P	0.6
3	☐	50.000	54.320	1059637.32	0.0497	P	0.4
4	☐	125.000	128.499	2621282.40	0.1176	P	2.6
5	☐	250.000	258.789	5169835.32	0.2368	P	1.9
6	☐	500.000	505.051	10016910.90	0.4622	A	1.5
7	☐	1000.000	994.623	19179620.57	0.9103	A	2.0
8	☐			5117.80	0.0003	P	2.0

$$y = 9.1517E-004 * x + 8.8568E-006$$

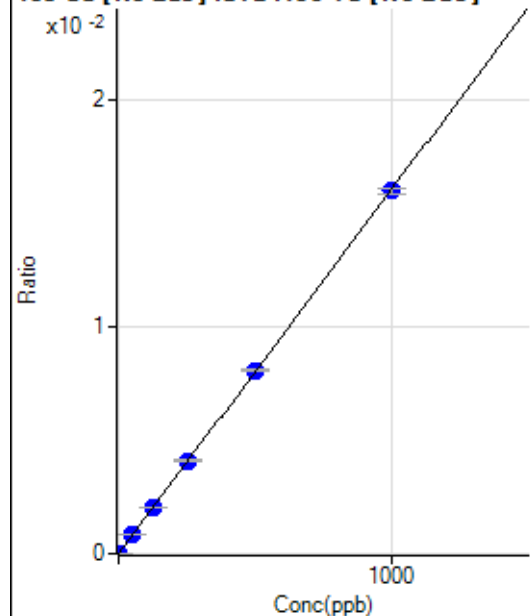
$$R = 0.9999$$

$$DL = 0.003275$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	25.00	0.0000	P	16.1
2	☐	1.000	1.063	388.90	0.0000	P	14.2
3	☐	50.000	53.033	18145.26	0.0009	P	0.3
4	☐	125.000	126.332	45180.40	0.0020	P	1.6
5	☐	250.000	255.793	89544.86	0.0041	P	0.9
6	☐	500.000	503.976	175109.57	0.0081	P	1.8
7	☐	1000.000	996.245	336557.88	0.0160	P	1.7
8	☐			143.06	0.0000	P	36.5

$$y = 1.6032E-005 * x + 1.2076E-006$$

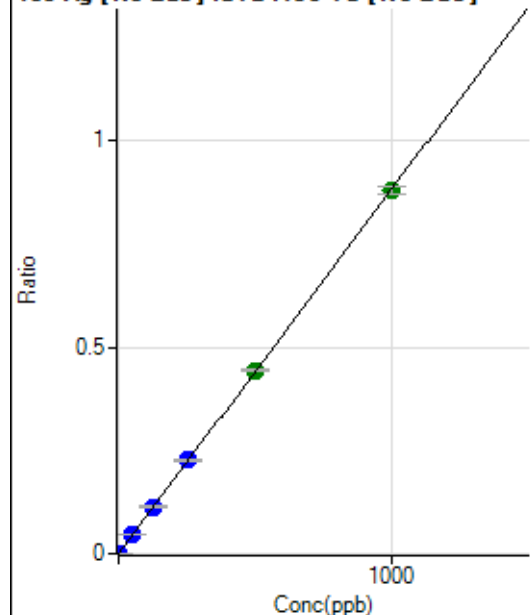
$$R = 1.0000$$

$$DL = 0.03641$$

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	47.23	0.0000	P	56.7
2	☐	1.000	1.138	21467.15	0.0010	P	0.6
3	☐	50.000	53.979	1015085.95	0.0476	P	0.3
4	☐	125.000	128.564	2528379.00	0.1134	P	2.6
5	☐	250.000	257.160	4953227.28	0.2269	P	1.0
6	☐	500.000	503.131	9621004.56	0.4439	A	0.9
7	☐	1000.000	996.000	18516923.33	0.8788	A	2.0
8	☐			4623.17	0.0002	P	7.7

$$y = 8.8233E-004 * x + 2.2838E-006$$

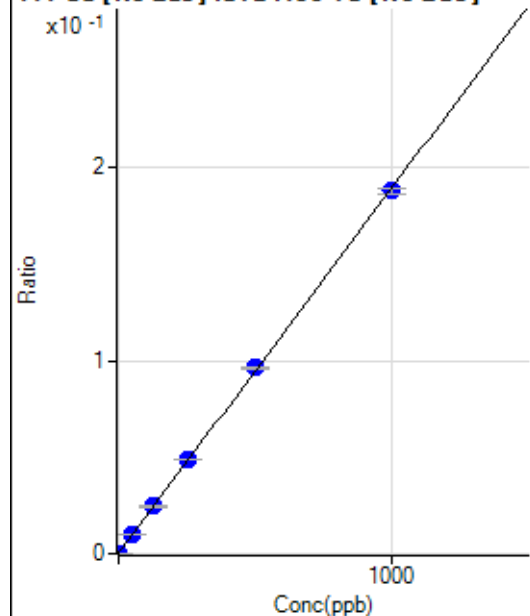
$$R = 1.0000$$

$$DL = 0.0044$$

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	3835.76	0.0002	P	2.0
2	☐	1.000	1.132	8517.24	0.0004	P	4.2
3	☐	50.000	54.048	221798.41	0.0104	P	0.5
4	☐	125.000	128.236	544704.92	0.0244	P	2.5
5	☐	250.000	257.562	1067428.44	0.0489	P	0.8
6	☐	500.000	508.431	2087877.70	0.0963	P	1.3
7	☐	1000.000	993.287	3962444.80	0.1880	P	1.4
8	☐			4714.97	0.0002	P	0.4

$$y = 1.8913E-004 * x + 1.8539E-004$$

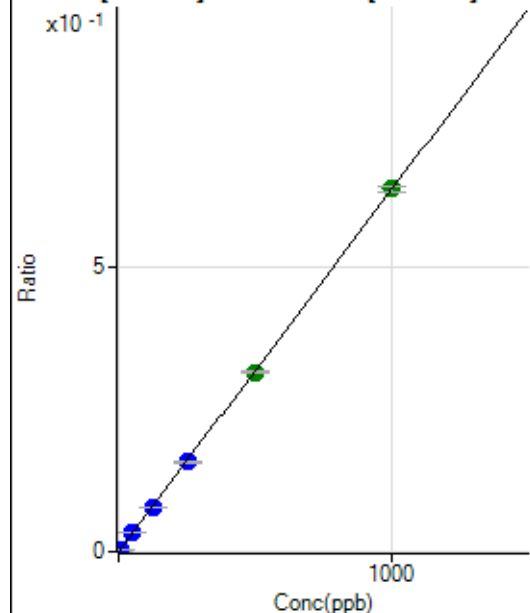
$$R = 0.9999$$

$$DL = 0.05823$$

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	1175.10	0.0001	P	5.3
2	☐	5.000	5.269	72612.87	0.0034	P	1.7
3	☐	50.000	51.219	694791.53	0.0326	P	0.6
4	☐	125.000	122.103	1730391.73	0.0776	P	2.9
5	☐	250.000	247.794	3438306.07	0.1575	P	0.7
6	☐	500.000	496.577	6838922.64	0.3156	A	1.4
7	☐	1000.000	1002.563	13423953.60	0.6371	A	1.8
8	☐			15456.35	0.0008	P	1.2

$$y = 6.3540E-004 * x + 5.6782E-005$$

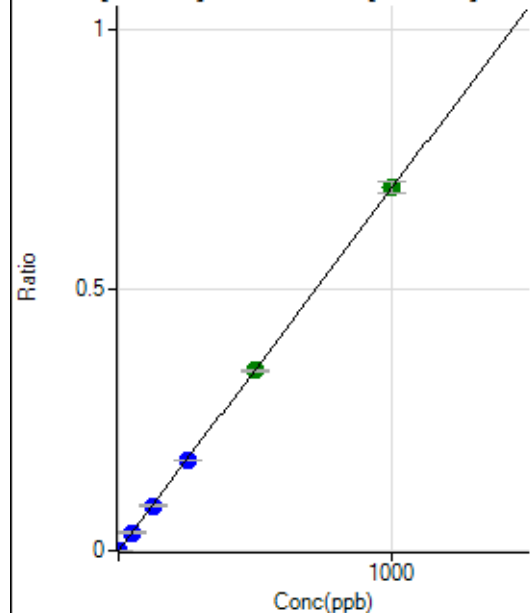
$$R = 1.0000$$

$$DL = 0.01425$$

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	105.56	0.0000	P	31.2
2	☐	2.000	2.085	31015.61	0.0015	P	0.8
3	☐	50.000	50.436	747046.92	0.0351	P	0.5
4	☐	125.000	123.043	1905693.90	0.0855	P	3.0
5	☐	250.000	248.375	3767811.15	0.1726	P	0.9
6	☐	500.000	497.586	7493540.19	0.3458	A	1.1
7	☐	1000.000	1001.836	14666911.44	0.6962	A	3.0
8	☐			17722.96	0.0009	P	7.6

$$y = 6.9490E-004 * x + 5.0933E-006$$

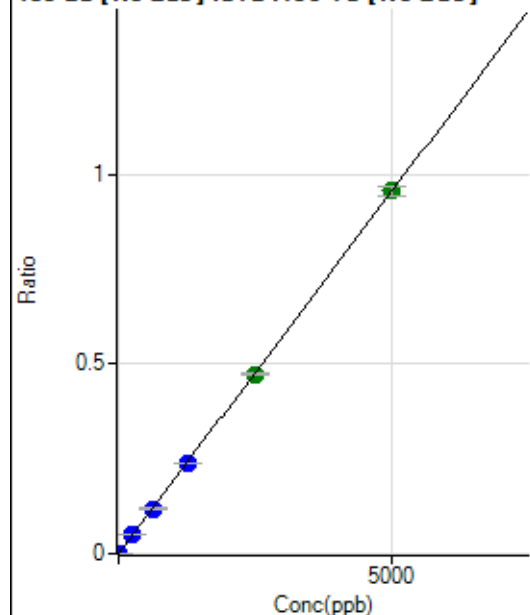
$$R = 1.0000$$

$$DL = 0.006871$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	394.47	0.0000	P	16.6
2	☐	10.000	10.548	43299.20	0.0020	P	0.5
3	☐	250.000	256.154	1041255.88	0.0489	P	0.2
4	☐	625.000	619.691	2633863.34	0.1182	P	2.6
5	☐	1250.000	1246.299	5187722.21	0.2376	P	0.7
6	☐	2500.000	2477.212	10236584.61	0.4723	A	1.2
7	☐	5000.000	5012.674	20136219.55	0.9558	A	2.7
8	☐			36056.13	0.0019	P	2.7

$$y = 1.9066E-004 * x + 1.9056E-005$$

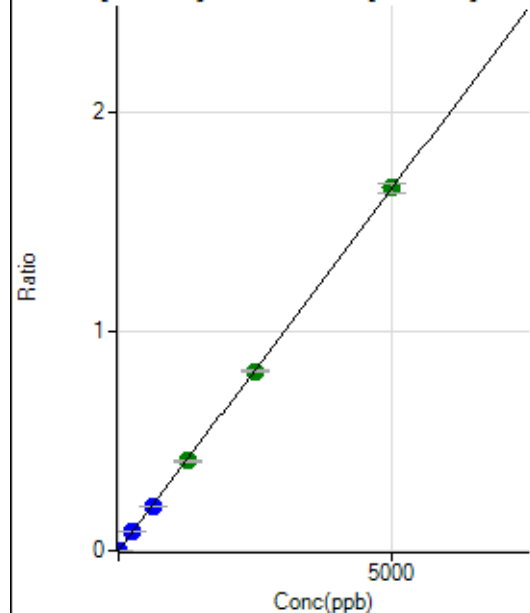
$$R = 1.0000$$

$$DL = 0.04974$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	644.49	0.0000	P	22.1
2	☐	10.000	10.499	74670.47	0.0035	P	1.4
3	☐	250.000	255.319	1799015.53	0.0844	P	0.6
4	☐	625.000	614.368	4526135.91	0.2031	P	2.9
5	☐	1250.000	1237.102	8926266.52	0.4089	A	0.5
6	☐	2500.000	2475.845	17734308.91	0.8183	A	0.9
7	☐	5000.000	5016.364	34930887.24	1.6579	A	2.6
8	☐			60675.16	0.0032	P	1.8

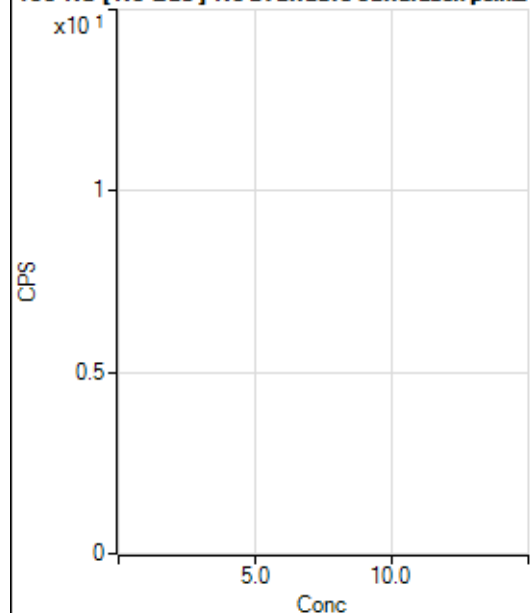
$$y = 3.3050E-004 * x + 3.1149E-005$$

$$R = 1.0000$$

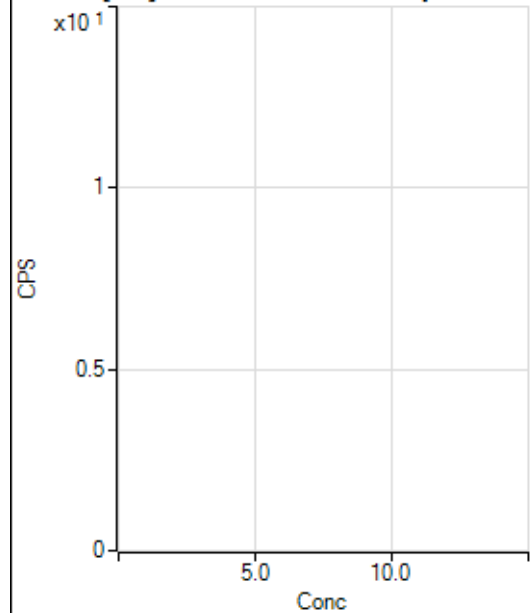
$$DL = 0.06248$$

Weight: <None>

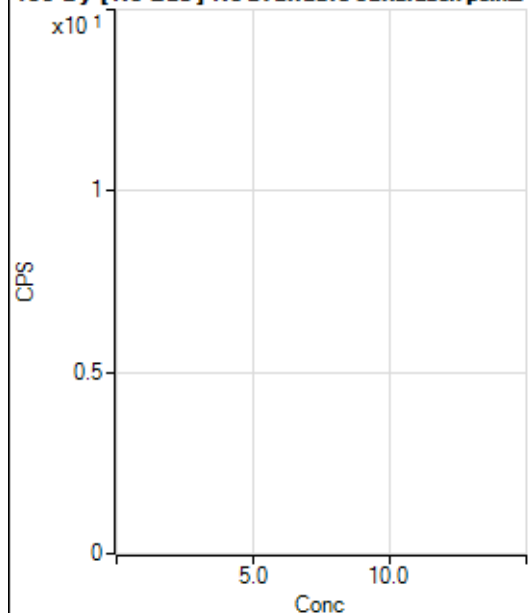
Min Conc: 0

150 Nd [No Gas] No available calibration points

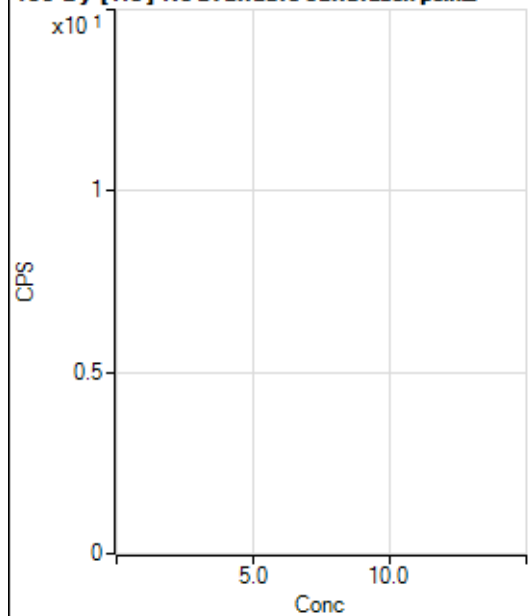
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	173.2
2	☐			11.11		P	69.3
3	☐			108.90		P	30.8
4	☐			333.35		P	8.7
5	☐			711.16		P	4.2
6	☐			1333.45		P	2.3
7	☐			2449.22		P	6.1
8	☐			182.23		P	15.2

150 Nd [He] No available calibration points

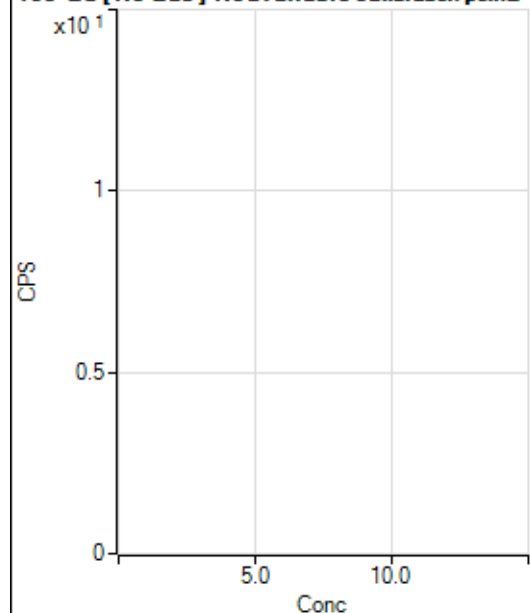
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			2.22		P	173.2
3	☐			11.11		P	45.8
4	☐			24.45		P	15.8
5	☐			57.78		P	17.6
6	☐			78.89		P	10.6
7	☐			140.00		P	8.6
8	☐			75.56		P	18.4

156 Dy [No Gas] No available calibration points

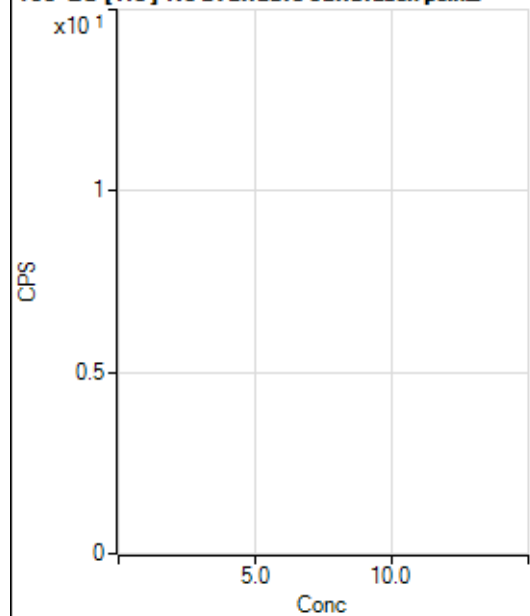
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	61.9
2	☐			36.11		P	48.0
3	☐			52.78		P	55.5
4	☐			116.67		P	14.3
5	☐			222.23		P	17.3
6	☐			322.24		P	10.5
7	☐			594.49		P	7.1
8	☐			983.41		P	12.0

156 Dy [He] No available calibration points

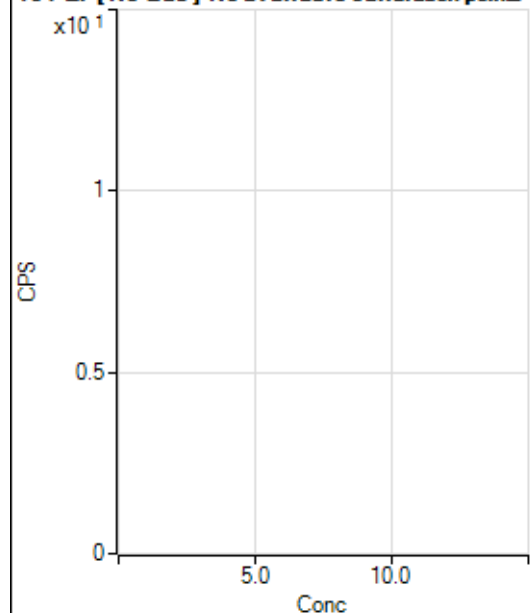
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	43.3
2	☐			12.22		P	83.3
3	☐			28.89		P	24.0
4	☐			64.44		P	26.5
5	☐			113.33		P	10.2
6	☐			216.68		P	2.7
7	☐			391.12		P	1.3
8	☐			502.24		P	8.9

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

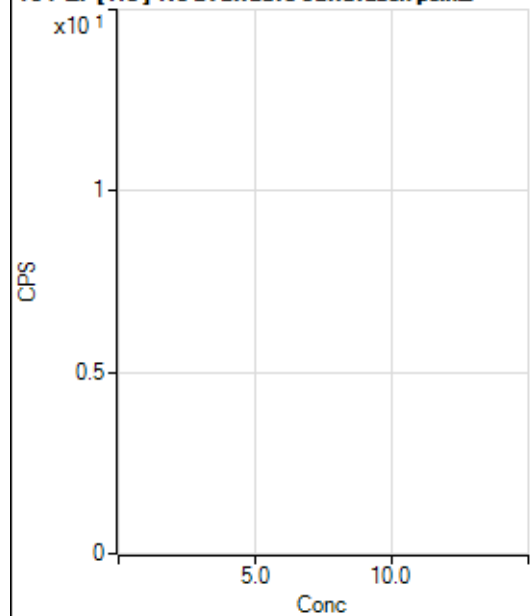
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			113.89		P	18.4
2	☐			133.34		P	6.2
3	☐			155.56		P	39.5
4	☐			197.23		P	19.5
5	☐			252.79		P	18.2
6	☐			261.13		P	36.7
7	☐			441.69		P	9.8
8	☐			1188.99		P	8.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			296.68		P	3.9
2	☐			248.89		P	4.3
3	☐			303.34		P	7.2
4	☐			278.90		P	6.1
5	☐			345.57		P	12.2
6	☐			333.34		P	5.6
7	☐			430.01		P	11.4
8	☐			782.26		P	9.5

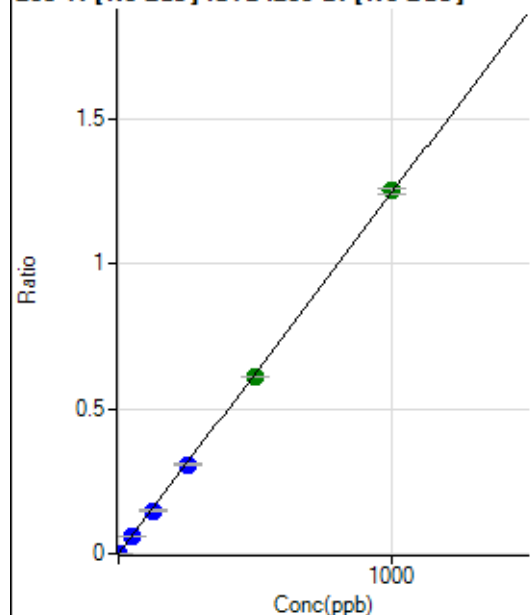
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.12		P	39.1
2	☐			83.33		P	17.3
3	☐			97.23		P	24.7
4	☐			108.34		P	33.5
5	☐			100.00		P	30.0
6	☐			158.34		P	41.8
7	☐			169.45		P	24.8
8	☐			197.23		P	13.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			51.11		P	13.6
2	☐			37.78		P	20.4
3	☐			46.67		P	21.4
4	☐			36.67		P	24.0
5	☐			62.22		P	53.7
6	☐			57.78		P	20.3
7	☐			64.44		P	14.9
8	☐			98.89		P	14.0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	202.79	0.0000	P	25.2
2	☐	1.000	0.956	15818.37	0.0012	P	1.0
3	☐	50.000	49.273	795356.85	0.0614	P	0.7
4	☐	125.000	119.288	1983539.02	0.1486	P	3.2
5	☐	250.000	247.721	3934636.72	0.3086	P	1.5
6	☐	500.000	491.028	7648489.40	0.6117	A	0.4
7	☐	1000.000	1005.806	14849447.56	1.2530	A	1.9
8	☐			4420.36	0.0005	P	5.5

$$y = 0.0012 * x + 1.5897E-005$$

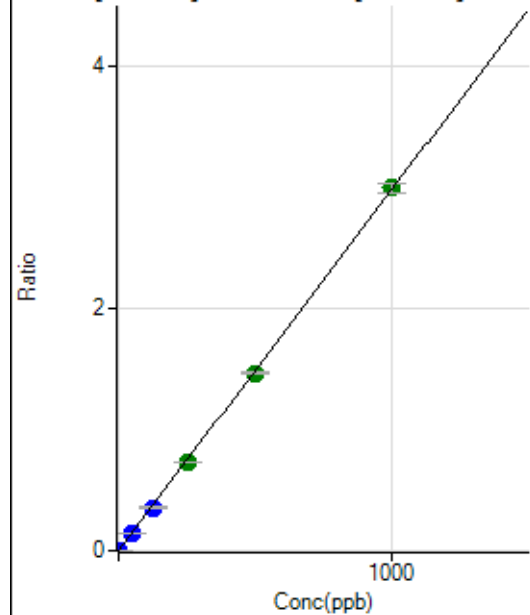
$$R = 0.9999$$

$$DL = 0.009637$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	450.03	0.0000	P	14.8
2	☐	1.000	1.001	39473.65	0.0030	P	0.6
3	☐	50.000	49.365	1902799.30	0.1469	P	0.4
4	☐	125.000	119.296	4736838.86	0.3549	P	3.3
5	☐	250.000	244.971	9291641.09	0.7288	A	0.7
6	☐	500.000	492.687	18326313.26	1.4657	A	0.5
7	☐	1000.000	1005.658	35452532.04	2.9917	A	2.4
8	☐			10838.15	0.0011	P	2.4

$$y = 0.0030 * x + 3.5350E-005$$

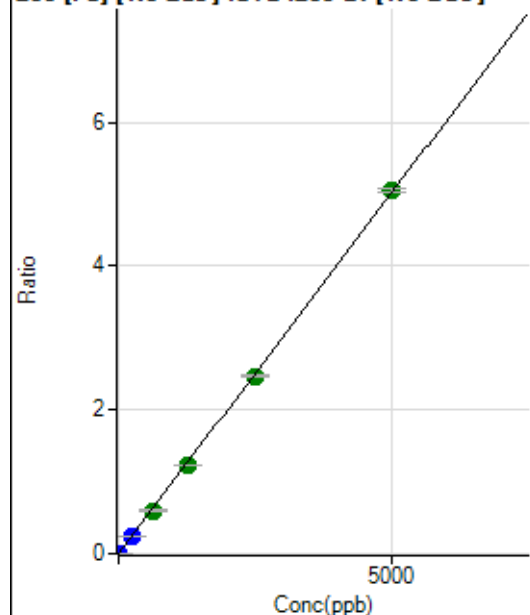
$$R = 0.9999$$

$$DL = 0.005268$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	583.36	0.0000	P	7.4
2	☐	1.000	1.021	14035.57	0.0011	P	1.5
3	☐	250.000	248.832	3236459.33	0.2498	P	0.2
4	☐	625.000	593.103	7947069.16	0.5954	A	3.2
5	☐	1250.000	1224.121	15667592.25	1.2289	A	1.3
6	☐	2500.000	2464.714	30935057.64	2.4743	A	0.7
7	☐	5000.000	5028.158	59826048.10	5.0477	A	1.2
8	☐			54686.61	0.0057	P	1.5

$$y = 0.0010 * x + 4.5838E-005$$

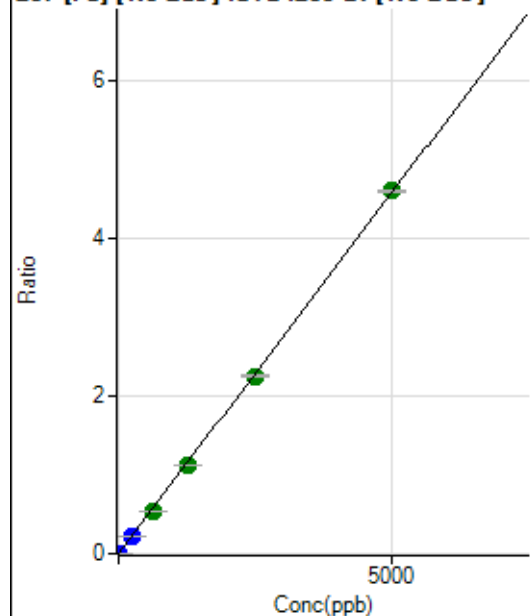
$$R = 0.9999$$

$$DL = 0.01018$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	500.02	0.0000	P	15.1
2	☐	1.000	0.978	12218.86	0.0009	P	3.0
3	☐	250.000	246.137	2911686.12	0.2248	P	0.2
4	☐	625.000	587.534	7160393.04	0.5365	A	3.0
5	☐	1250.000	1224.523	14254610.04	1.1181	A	1.2
6	☐	2500.000	2460.887	28092655.95	2.2469	A	1.2
7	☐	5000.000	5030.802	54444788.25	4.5934	A	0.8
8	☐			49122.43	0.0051	P	1.5

$$y = 9.1304E-004 * x + 3.9260E-005$$

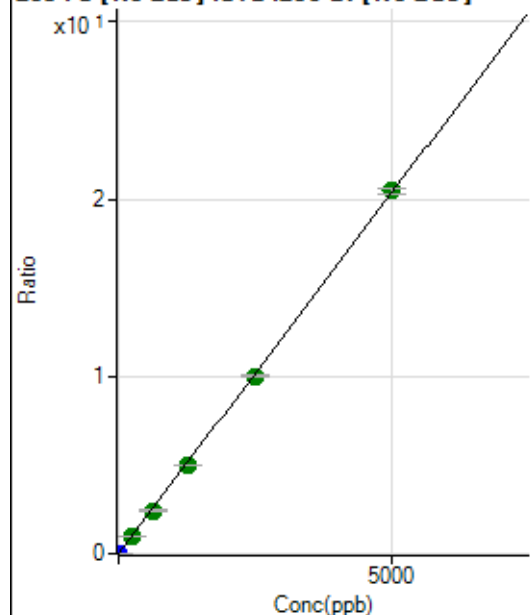
$$R = 0.9999$$

$$DL = 0.01949$$

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	2442.76	0.0002	P	8.4
2	☐	1.000	1.003	56029.07	0.0043	P	1.7
3	☐	250.000	245.874	12966056.77	1.0009	A	0.7
4	☐	625.000	591.743	32148460.15	2.4087	A	3.0
5	☐	1250.000	1224.773	63557751.88	4.9852	A	1.0
6	☐	2500.000	2462.845	125335733.1	10.0243	A	0.6
7	☐	5000.000	5029.248	242594322.5	20.4700	A	1.7
8	☐			220499.66	0.0229	P	1.0

$$y = 0.0041 * x + 1.9181E-004$$

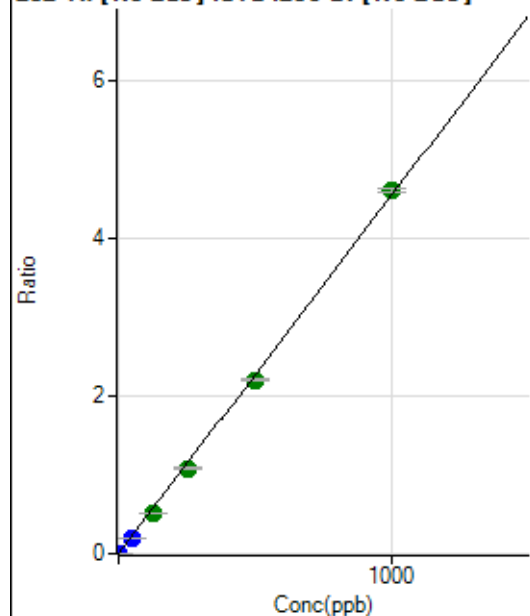
$$R = 0.9999$$

$$DL = 0.01184$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2822.61	0.0002	P	3.8
2	☐	1.000	0.701	44604.32	0.0034	P	2.5
3	☐	50.000	44.521	2619137.65	0.2022	P	0.4
4	☐	125.000	113.176	6855479.49	0.5136	A	3.0
5	☐	250.000	238.477	13795554.24	1.0821	A	0.9
6	☐	500.000	484.407	27475599.22	2.1977	A	1.2
7	☐	1000.000	1012.429	54438390.10	4.5930	A	1.0
8	☐			27110.07	0.0028	P	2.1

$$y = 0.0045 * x + 2.2176E-004$$

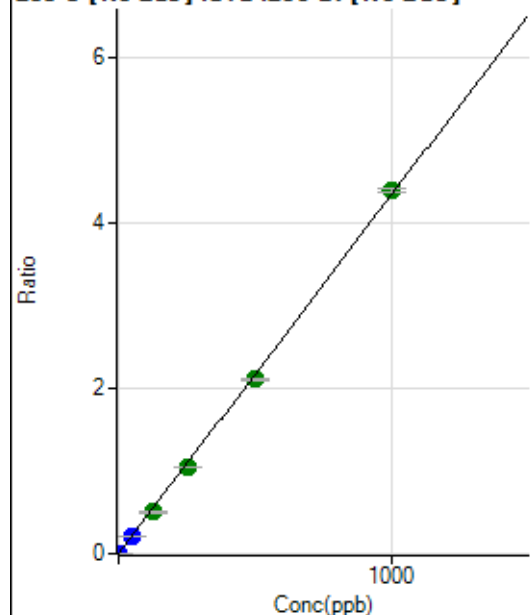
$$R = 0.9997$$

$$DL = 0.005601$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	51.0
2	☐	1.000	0.924	52663.37	0.0040	P	1.3
3	☐	50.000	46.242	2603405.05	0.2010	P	0.3
4	☐	125.000	115.349	6690845.77	0.5013	A	3.2
5	☐	250.000	239.741	13284066.36	1.0419	A	0.9
6	☐	500.000	486.661	26443124.72	2.1151	A	1.4
7	☐	1000.000	1010.629	52058929.29	4.3923	A	1.2
8	☐			8328.03	0.0009	P	3.8

$$y = 0.0043 * x + 1.3135E-006$$

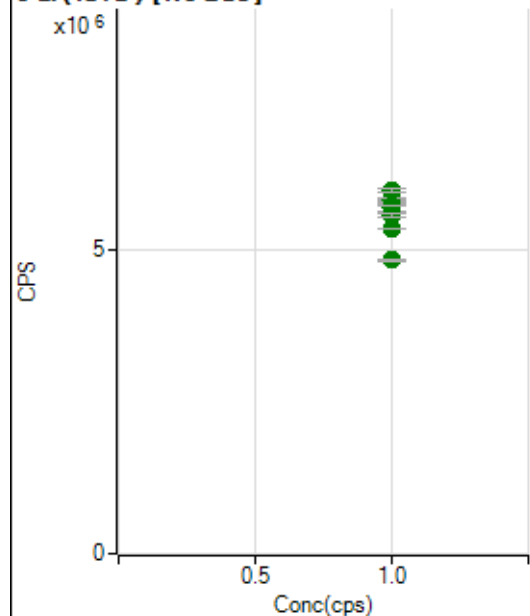
$$R = 0.9998$$

$$DL = 0.0004625$$

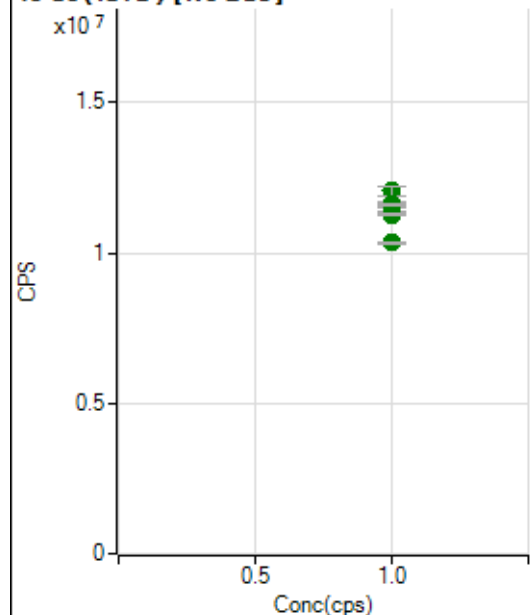
Weight: <None>

Min Conc: 0

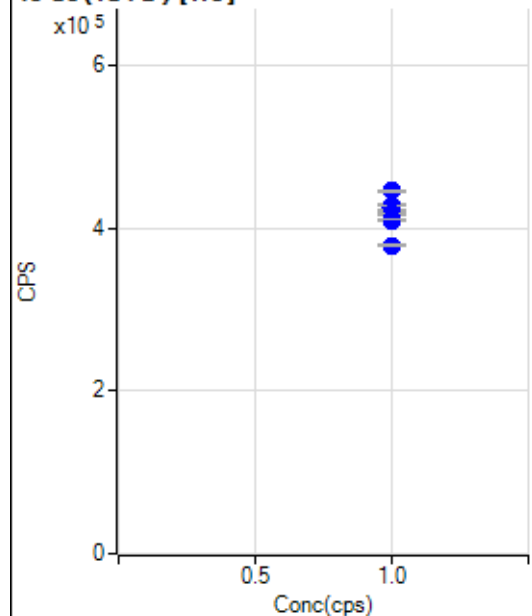
6 Li (ISTD) [No Gas]



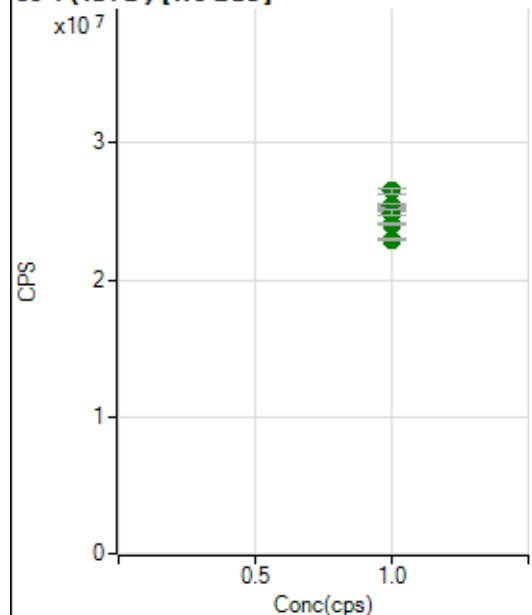
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5823201.65		A	0.4
2	☐	1.000		5798403.24		A	1.1
3	☐	1.000		5722313.87		A	0.4
4	☐	1.000		5953994.49		A	1.2
5	☐	1.000		5667350.61		A	1.4
6	☐	1.000		5560150.20		A	1.4
7	☐	1.000		5335122.38		A	0.2
8	☐	1.000		4817062.08		A	0.8

45 Sc (ISTD) [No Gas]

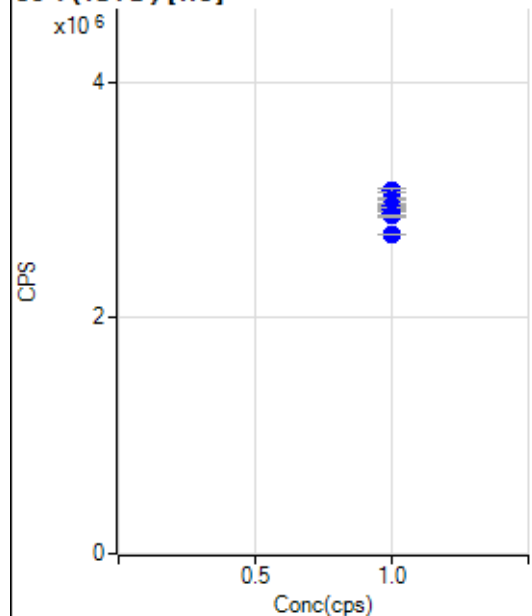
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11306063.16		A	1.5
2	☐	1.000		11504524.55		A	0.4
3	☐	1.000		11631356.49		A	0.2
4	☐	1.000		12055855.37		A	3.0
5	☐	1.000		11625267.33		A	0.7
6	☐	1.000		11597861.63		A	0.4
7	☐	1.000		11266182.19		A	0.7
8	☐	1.000		10322814.92		A	0.4

45 Sc (ISTD) [He]

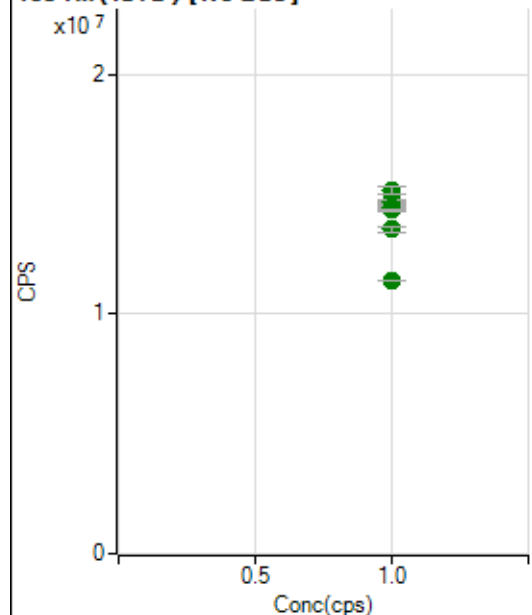
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		445573.62		P	0.7
2	☐	1.000		419912.42		P	0.4
3	☐	1.000		428248.55		P	0.8
4	☐	1.000		425491.91		P	1.0
5	☐	1.000		409392.87		P	0.8
6	☐	1.000		417322.96		P	0.5
7	☐	1.000		410877.29		P	0.3
8	☐	1.000		378878.76		P	0.8

89 Y (ISTD) [No Gas]

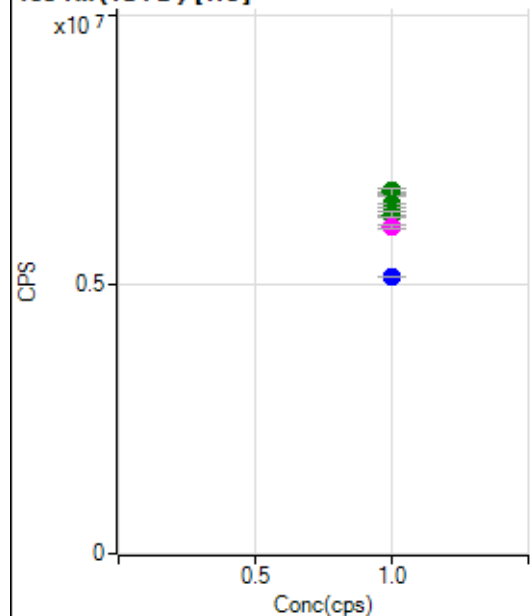
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		24064087.14		A	0.7
2	☐	1.000		25163288.23		A	1.5
3	☐	1.000		25280109.90		A	0.4
4	☐	1.000		26493433.50		A	1.9
5	☐	1.000		25329256.57		A	0.3
6	☐	1.000		25374481.01		A	0.9
7	☐	1.000		24924693.52		A	1.5
8	☐	1.000		22925912.16		A	0.4

89 Y (ISTD) [He]

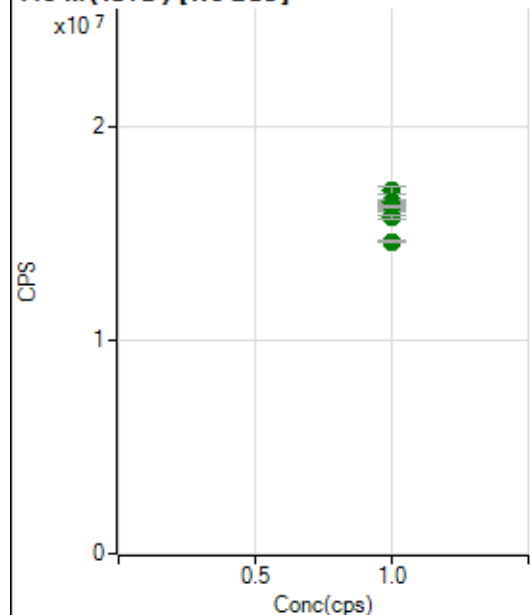
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3074362.45		P	1.0
2	☐	1.000		2954222.81		P	0.4
3	☐	1.000		3002766.66		P	0.4
4	☐	1.000		2945416.80		P	1.3
5	☐	1.000		2888504.96		P	1.6
6	☐	1.000		2916089.09		P	1.0
7	☐	1.000		2864717.39		P	0.8
8	☐	1.000		2703703.33		P	0.4

103 Rh (ISTD) [No Gas]

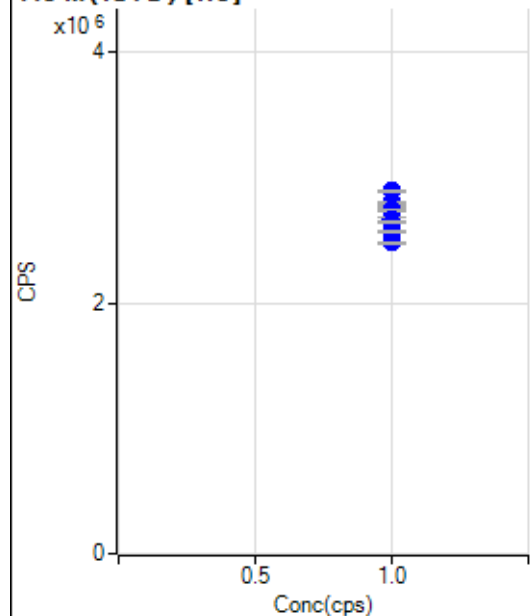
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14412461.31		A	0.9
2	☐	1.000		14744233.53		A	0.5
3	☐	1.000		14706288.95		A	1.2
4	☐	1.000		15134836.86		A	2.0
5	☐	1.000		14431283.26		A	1.4
6	☐	1.000		14330934.51		A	0.9
7	☐	1.000		13519328.83		A	1.9
8	☐	1.000		11406694.69		A	0.1

103 Rh (ISTD) [He]

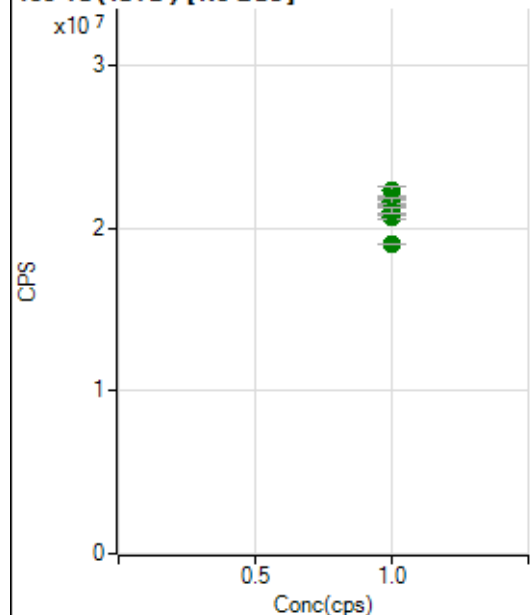
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6748262.33		A	1.4
2	☐	1.000		6711300.53		A	0.2
3	☐	1.000		6717876.15		A	2.0
4	☐	1.000		6511754.56		A	0.3
5	☐	1.000		6356584.56		A	2.1
6	☐	1.000		6304707.34		A	1.5
7	☐	1.000		6069777.55		M	1.2
8	☐	1.000		5143827.32		P	0.1

115 In (ISTD) [No Gas]

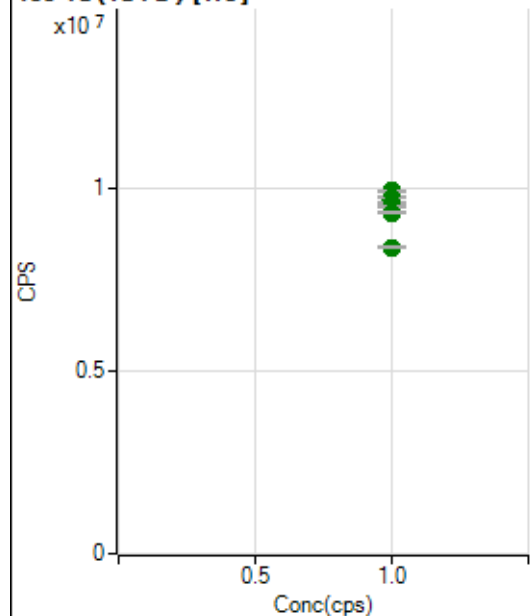
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16091078.56		A	0.7
2	☐	1.000		16309289.25		A	0.8
3	☐	1.000		16508911.28		A	0.6
4	☐	1.000		16978060.32		A	2.1
5	☐	1.000		16445949.02		A	1.2
6	☐	1.000		16246352.22		A	1.1
7	☐	1.000		15722062.14		A	1.2
8	☐	1.000		14618323.43		A	0.7

115 In (ISTD) [He]

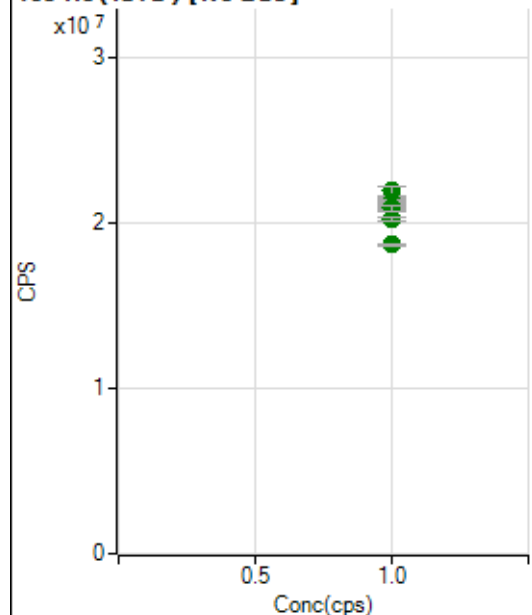
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2891529.63		P	0.6
2	☐	1.000		2766206.44		P	0.2
3	☐	1.000		2799737.90		P	0.3
4	☐	1.000		2739854.17		P	0.6
5	☐	1.000		2668471.59		P	1.1
6	☐	1.000		2640300.48		P	0.4
7	☐	1.000		2565317.35		P	0.8
8	☐	1.000		2475476.53		P	0.6

159 Tb (ISTD) [No Gas]

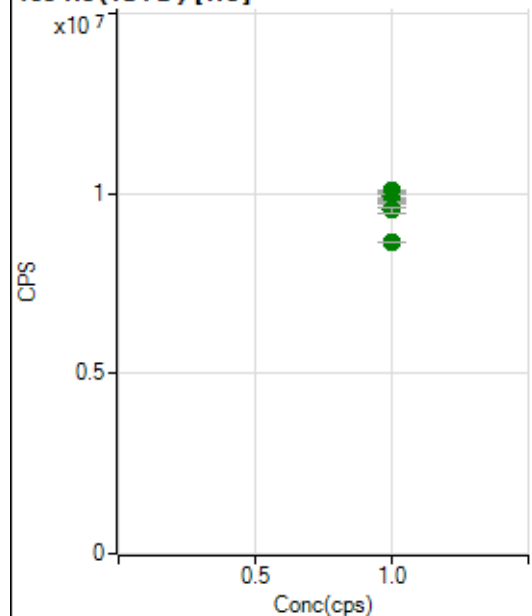
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		20688303.44		A	0.9
2	☐	1.000		21329030.38		A	0.9
3	☐	1.000		21311829.54		A	0.5
4	☐	1.000		22299105.22		A	2.8
5	☐	1.000		21831088.29		A	1.2
6	☐	1.000		21673492.73		A	1.3
7	☐	1.000		21075523.99		A	1.9
8	☐	1.000		19060735.97		A	0.2

159 Tb (ISTD) [He]

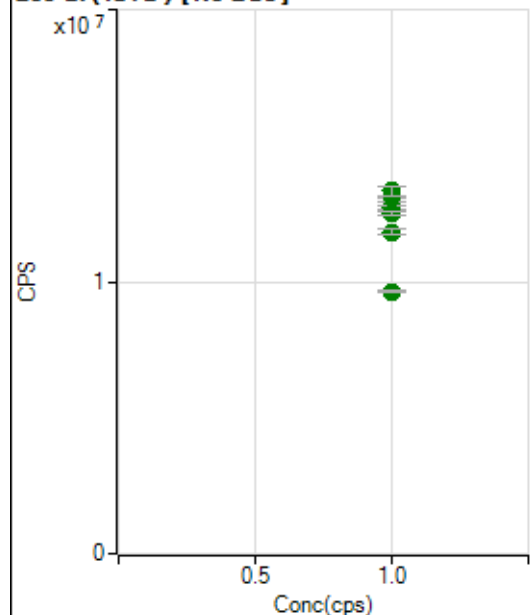
	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9924061.52		A	0.6
2	☐	1.000		9609450.20		A	0.8
3	☐	1.000		9727323.33		A	1.6
4	☐	1.000		9674856.24		A	1.6
5	☐	1.000		9555394.51		A	0.9
6	☐	1.000		9505772.15		A	0.4
7	☐	1.000		9329283.75		A	0.9
8	☐	1.000		8383514.04		A	0.6

165 Ho (ISTD) [No Gas]

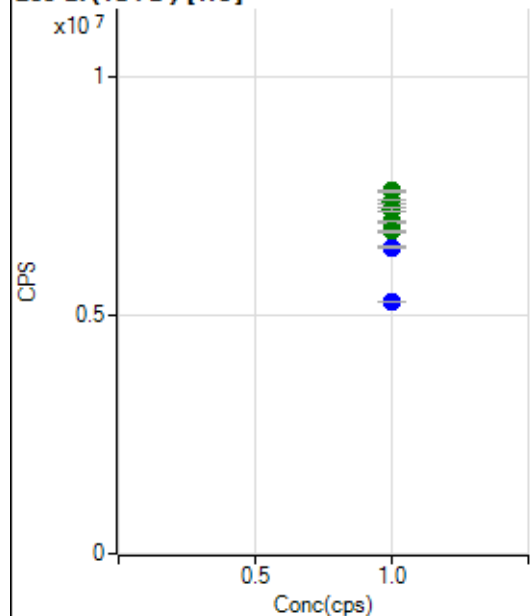
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20235760.25		A	1.6
2	☐	1.000		20901875.80		A	1.2
3	☐	1.000		21026810.80		A	0.8
4	☐	1.000		21940693.29		A	2.9
5	☐	1.000		21320927.88		A	1.6
6	☐	1.000		21321981.77		A	0.5
7	☐	1.000		20875121.77		A	1.5
8	☐	1.000		18691730.56		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10082518.18		A	0.3
2	☐	1.000		9806942.98		A	0.7
3	☐	1.000		10031526.03		A	0.3
4	☐	1.000		9953193.32		A	1.1
5	☐	1.000		9812712.91		A	0.5
6	☐	1.000		9730299.58		A	0.5
7	☐	1.000		9550747.57		A	1.7
8	☐	1.000		8663973.83		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12731947.45		A	1.1
2	☐	1.000		13105116.61		A	0.6
3	☐	1.000		12953991.06		A	0.3
4	☐	1.000		13354718.27		A	2.9
5	☐	1.000		12749996.06		A	0.8
6	☐	1.000		12503069.26		A	1.1
7	☐	1.000		11854112.46		A	2.1
8	☐	1.000		9639524.58		A	0.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7621119.89		A	0.5
2	☐	1.000		7355397.46		A	0.4
3	☐	1.000		7379418.29		A	1.0
4	☐	1.000		7227977.32		A	0.9
5	☐	1.000		6970305.38		A	0.4
6	☐	1.000		6769123.65		A	0.2
7	☐	1.000		6442197.41		P	0.8
8	☐	1.000		5291965.41		P	0.3

US EPA Tune Check Sample Report

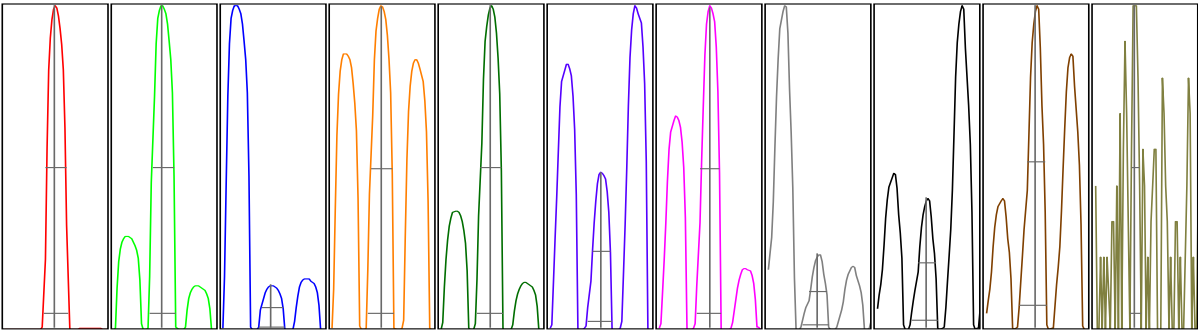
Batch Folder D:\ICP-MS Data\1\DATA\P7032023MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	16861	0.42	5.00	
24	219467	0.35	5.00	
25	29163	0.37	5.00	
26	34198	0.25	5.00	
59	114352	0.31	5.00	
113	19934	0.17	5.00	
115	62336	0.65	5.00	
206	25511	0.59	5.00	
207	21760	0.81	5.00	
208	53271	0.98	5.00	
220	0	38.03		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	16736	16904	16873	16882	16909
24	219097	219336	218775	220766	219359
25	29015	29135	29138	29294	29235
26	34271	34143	34077	34281	34218
59	113964	114495	113990	114714	114596
113	19945	19906	19892	19951	19974
115	62856	62392	62156	62507	61767
206	25308	25535	25560	25713	25438
207	21630	21537	21779	21945	21909
208	52662	52806	53378	53873	53635
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	30525	9.00	8.9 - 9.1		0.732	0.900	
24	361051	23.95	23.9 - 24.1		0.781	0.900	
25	48419	24.95	24.9 - 25.1		0.746	0.900	
26	56555	26.00	25.9 - 26.1		0.782	0.900	
59	194438	59.00	58.9 - 59.1		0.784	0.900	
113	37340	113.05	112.9 - 113.1		0.734	0.900	
115	116412	115.05	114.9 - 115.1		0.731	0.900	
206	51246	206.00	205.9 - 206.1		0.779	0.900	
207	43042	207.00	206.9 - 207.1		0.775	0.900	
208	106548	208.00	207.9 - 208.1		0.786	0.900	
220	0	219.70	-		0.290		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.4	V	Deflect	12.0	V
Extract 2	-110.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-50	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	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	26383	2.36	
89	73213	2.91	
205	64150	1.82	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	26459	26527	27264	25572	26091
89	73599	74169	75955	70380	71962
205	64500	64708	65386	62307	63849

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	7.6	V	Deflect	1.0	V
Extract 2	-110.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	V	Cell Exit	-60	V			

Cell Parameters

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