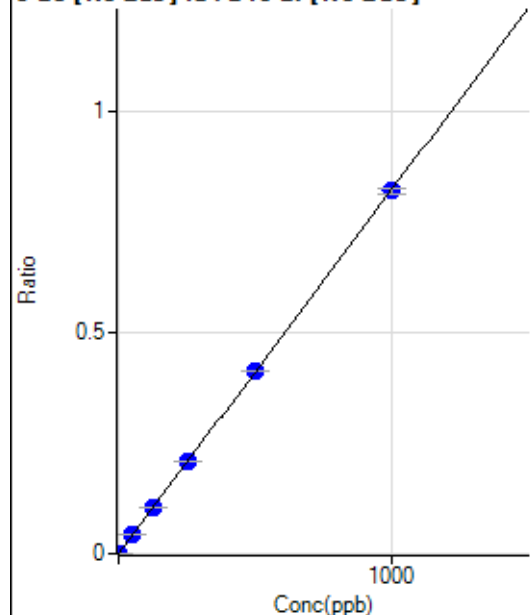


Batch Folder: D:\ICP-MS Data\P7120519-MS1.b\
Analysis File: P7120519-MS1.batch.bin
DA Date-Time: 2019-12-06 01:18:11
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2019-12-05 14:03:08
2	004CALS.d	S02	2019-12-05 14:06:44
3	005CALS.d	S03	2019-12-05 14:11:31
4	006CALS.d	S04	2019-12-05 14:15:41
5	007CALS.d	S05	2019-12-05 14:19:32
6	008CALS.d	S06	2019-12-05 14:23:20
7	009CALS.d	S07	2019-12-05 14:27:07
8	010CALS.d	S08	2019-12-05 14:30:56

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	100.00	0.0000	P	38.9
2	☐	1.000	1.043	3594.96	0.0009	P	5.1
3	☐	50.000	51.712	172095.90	0.0425	P	0.5
4	☐	125.000	129.083	421185.67	0.1060	P	0.3
5	☐	250.000	254.168	798648.61	0.2088	P	1.5
6	☐	500.000	501.533	1499922.82	0.4119	P	0.6
7	☐	1000.000	997.595	2999083.43	0.8193	P	1.3
8	☐			594.47	0.0002	P	17.1

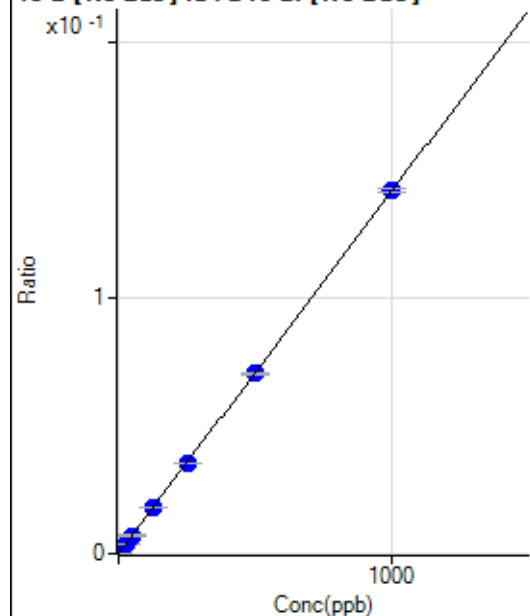
$$y = 8.2128\text{E-}004 * x + 2.4102\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03427$$

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	261.12	0.0001	P	9.4
2	☐	25.000	23.934	14115.48	0.0035	P	1.1
3	☐	50.000	49.458	28658.56	0.0071	P	2.3
4	☐	125.000	125.710	71059.54	0.0179	P	1.9
5	☐	250.000	250.565	136200.97	0.0356	P	0.6
6	☐	500.000	496.335	256528.35	0.0705	P	1.5
7	☐	1000.000	1001.656	520266.76	0.1421	P	0.9
8	☐			12033.03	0.0033	P	7.2

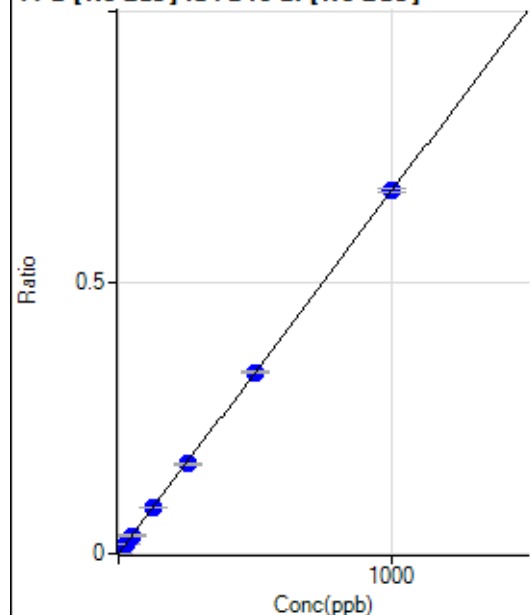
$$y = 1.4182\text{E-}004 * x + 6.2919\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1247$$

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	1458.47	0.0004	P	8.8
2	☐	25.000	24.227	67512.79	0.0165	P	0.5
3	☐	50.000	49.832	136232.28	0.0336	P	0.9
4	☐	125.000	125.291	333820.04	0.0840	P	1.0
5	☐	250.000	246.868	632274.23	0.1653	P	1.7
6	☐	500.000	500.082	1217628.08	0.3344	P	1.3
7	☐	1000.000	1000.734	2448581.54	0.6688	P	1.0
8	☐			58144.49	0.0161	P	12.6

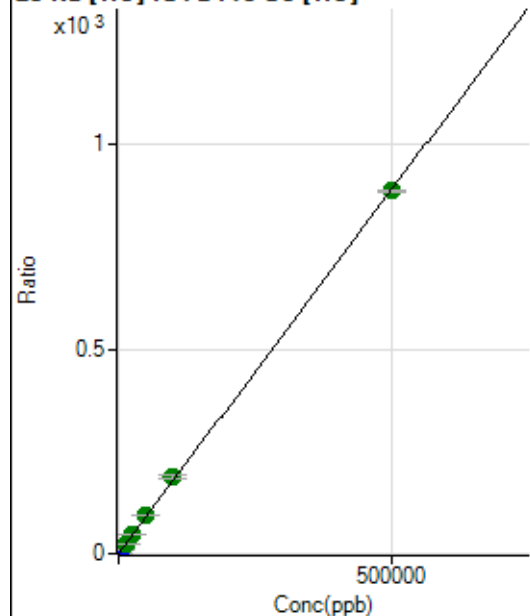
$$y = 6.6799E-004 * x + 3.5143E-004$$

$$R = 1.0000$$

$$DL = 0.1389$$

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	19179.65	0.0502	P	2.1
2	☐	500.000	507.876	362994.02	0.9532	P	1.1
3	☐	5000.000	5277.489	3465642.05	9.4333	P	2.4
4	☐	12500.000	13139.327	8366376.66	23.4112	A	1.2
5	☐	25000.000	26059.209	16249107.66	46.3819	A	0.2
6	☐	50000.000	51835.728	31850858.70	92.2111	A	1.0
7	☐	100000.00	106421.24	65277684.10	189.2609	A	5.1
8	☐	500000.00	498460.45	331824474.0	886.2835	A	0.5

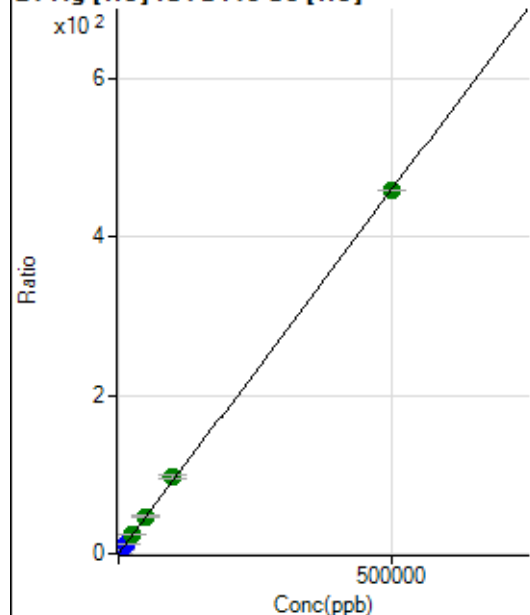
$$y = 0.0018 * x + 0.0502$$

$$R = 0.9999$$

$$DL = 1.756$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	266.68	0.0007	P	18.1
2	☐	500.000	524.546	183505.27	0.4818	P	2.1
3	☐	5000.000	5283.059	1780592.86	4.8466	P	2.4
4	☐	12500.000	13021.082	4268556.48	11.9444	P	1.2
5	☐	25000.000	25848.217	8306366.77	23.7101	A	0.4
6	☐	50000.000	51455.692	16303011.47	47.1987	A	1.0
7	☐	100000.00	105128.99	33263595.54	96.4309	A	4.7
8	☐	500000.00	498770.34	171285859.3	457.5006	A	0.1

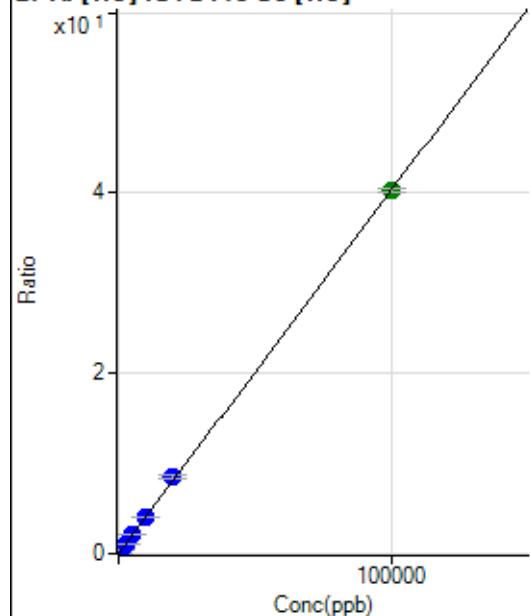
$$y = 9.1726E-004 * x + 6.9874E-004$$

$$R = 0.9999$$

$$DL = 0.4148$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	47.22	0.0001	P	36.6
2	☐	20.000	18.405	2872.61	0.0075	P	5.8
3	☐	1000.000	1048.698	155346.21	0.4228	P	2.2
4	☐	2500.000	2590.248	373170.43	1.0441	P	1.2
5	☐	5000.000	5126.305	723893.09	2.0663	P	0.7
6	☐	10000.000	10223.887	1423405.49	4.1210	P	1.4
7	☐	20000.000	20942.427	2911550.80	8.4412	P	4.9
8	☐	100000.00	99780.068	15058019.44	40.2174	A	1.1

$$y = 4.0306E-004 * x + 1.2354E-004$$

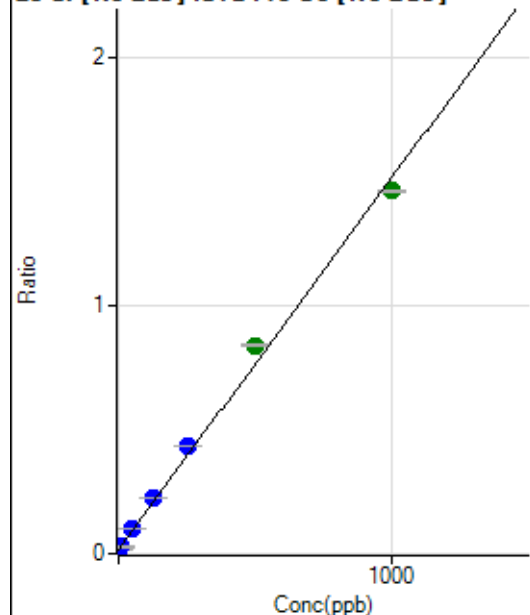
$$R = 1.0000$$

$$DL = 0.3361$$

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	159679.60	0.0163	P	0.8
2	☐	10.000	7.279	261520.57	0.0272	P	1.0
3	☐	50.000	55.422	938861.74	0.0993	P	0.8
4	☐	125.000	140.133	2108764.24	0.2262	P	1.5
5	☐	250.000	277.714	3895987.54	0.4323	P	0.7
6	☐	500.000	550.542	7306607.89	0.8410	A	0.8
7	☐	1000.000	965.665	13053434.06	1.4629	A	0.3
8	☐			1152112.62	0.1304	P	1.6

$$y = 0.0015 * x + 0.0163$$

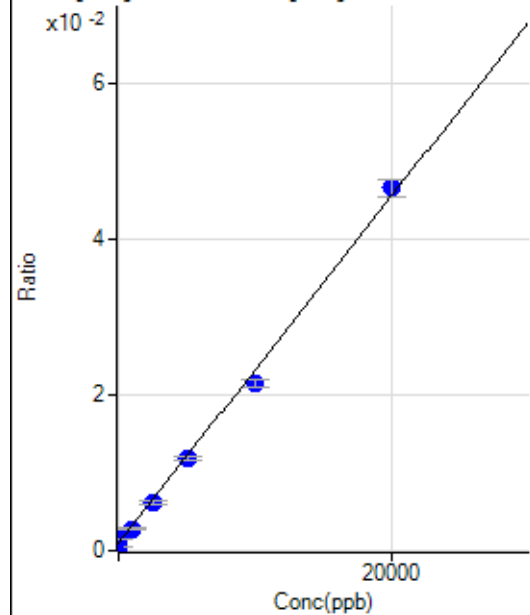
$$R = 0.9975$$

$$DL = 0.2731$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-249.026	161.12	0.0004	P	19.8
2	☐	0.000	249.026	583.37	0.0015	P	8.4
3	☐	1000.000	794.002	1008.41	0.0027	P	10.9
4	☐	2500.000	2294.073	2175.25	0.0061	P	9.1
5	☐	5000.000	4900.881	4170.18	0.0119	P	4.9
6	☐	10000.000	9180.645	7407.67	0.0214	P	4.5
7	☐	20000.000	20470.498	16081.45	0.0466	P	4.8
8	☐			219.46	0.0006	P	14.8

$$y = 2.2297E-006 * x + 9.7713E-004$$

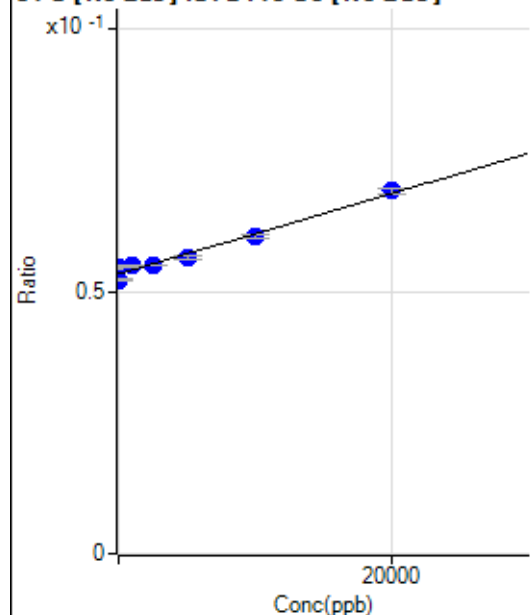
$$R = 0.9986$$

$$DL = 142.7$$

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	-1560.190	511448.85	0.0522	P	1.0
2	☐	0.000	1560.190	524717.13	0.0546	P	0.9
3	☐	1000.000	1942.763	518545.43	0.0548	P	0.4
4	☐	2500.000	2280.296	513772.01	0.0551	P	0.2
5	☐	5000.000	3934.057	508034.49	0.0564	P	1.1
6	☐	10000.000	9233.601	525083.25	0.0604	P	0.9
7	☐	20000.000	20630.010	617229.78	0.0692	P	1.8
8	☐			459703.62	0.0520	P	0.9

$$y = 7.6710E-007 * x + 0.0534$$

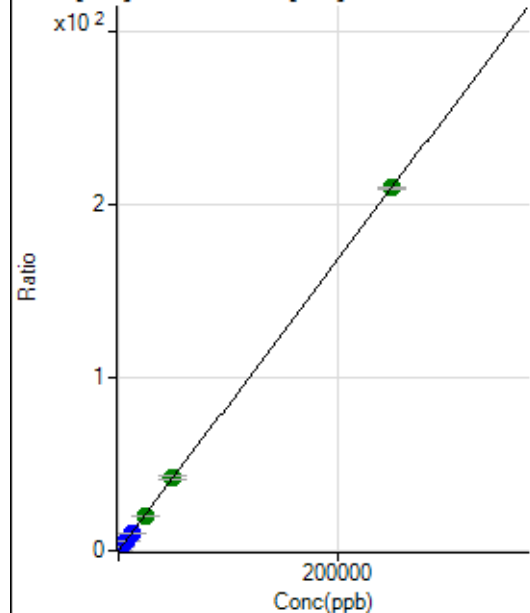
R = 0.9881

DL = 1976

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	19477.31	0.0510	P	1.7
2	☐	500.000	497.182	178269.02	0.4681	P	0.9
3	☐	2500.000	2485.993	785057.65	2.1368	P	2.3
4	☐	6250.000	6122.052	1853771.57	5.1876	P	1.7
5	☐	12500.000	12175.965	3596887.10	10.2671	P	0.4
6	☐	25000.000	24326.860	7067917.87	20.4622	A	0.9
7	☐	50000.000	50164.023	14536330.53	42.1406	A	4.7
8	☐	250000.00	250054.05	78569519.81	209.8562	A	0.7

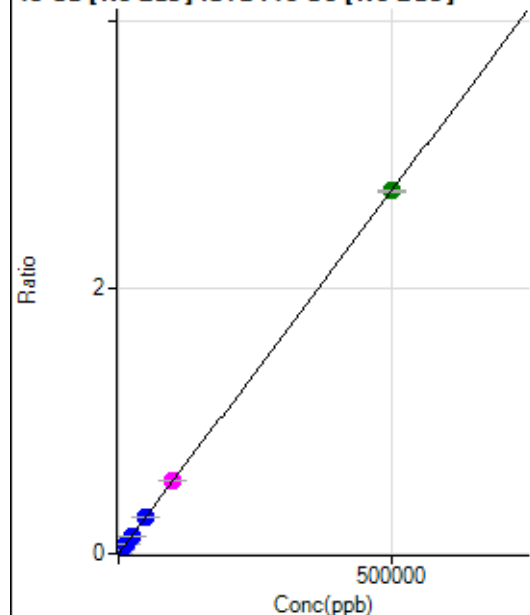
$$y = 8.3904E-004 * x + 0.0510$$

R = 1.0000

DL = 3.063

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	263.90	0.0000	P	15.3
2	☐	500.000	497.544	26366.01	0.0027	P	3.1
3	☐	5000.000	5021.221	259219.92	0.0274	P	0.9
4	☐	12500.000	12667.649	644537.26	0.0691	P	0.2
5	☐	25000.000	24936.436	1226172.48	0.1361	P	1.1
6	☐	50000.000	49880.436	2364292.33	0.2721	P	0.6
7	☐	100000.00	99679.357	4852576.37	0.5438	M	0.2
8	☐	500000.00	500074.86	24110782.48	2.7282	A	0.5

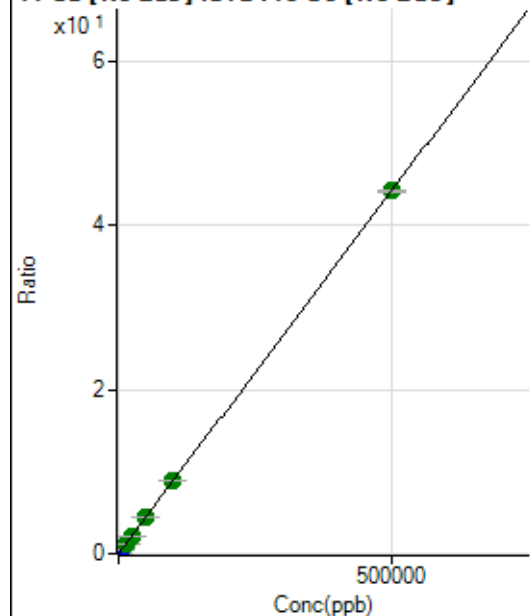
$$y = 5.4554\text{E-}006 * x + 2.6897\text{E-}005$$

$$R = 1.0000$$

$$DL = 2.258$$

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	12745.43	0.0013	P	4.4
2	☐	500.000	499.677	437254.73	0.0455	P	0.6
3	☐	5000.000	5034.073	4218374.05	0.4462	P	0.5
4	☐	12500.000	12591.358	10386659.52	1.1141	A	0.3
5	☐	25000.000	24929.382	19865867.63	2.2045	A	1.3
6	☐	50000.000	49962.401	38372329.68	4.4169	A	0.5
7	☐	100000.00	99637.810	78583814.26	8.8072	A	0.4
8	☐	500000.00	500077.10	390600611.5	44.1975	A	0.7

$$y = 8.8379\text{E-}005 * x + 0.0013$$

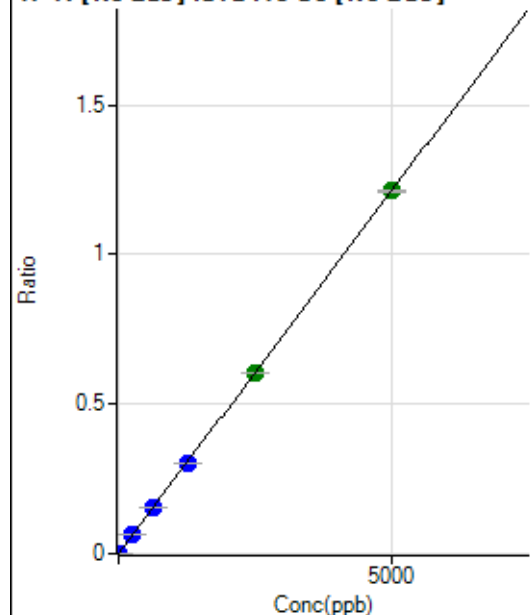
$$R = 1.0000$$

$$DL = 1.959$$

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	144.45	0.0000	P	22.4
2	☐	5.000	5.185	12233.27	0.0013	P	2.9
3	☐	250.000	252.283	578385.22	0.0612	P	0.1
4	☐	625.000	629.550	1423041.38	0.1526	P	0.6
5	☐	1250.000	1246.728	2723927.64	0.3023	P	1.2
6	☐	2500.000	2498.215	5261881.98	0.6057	A	0.1
7	☐	5000.000	5001.027	10818390.35	1.2125	A	0.6
8	☐			3264.38	0.0004	P	9.4

$$y = 2.4244\text{E-}004 * x + 1.4745\text{E-}005$$

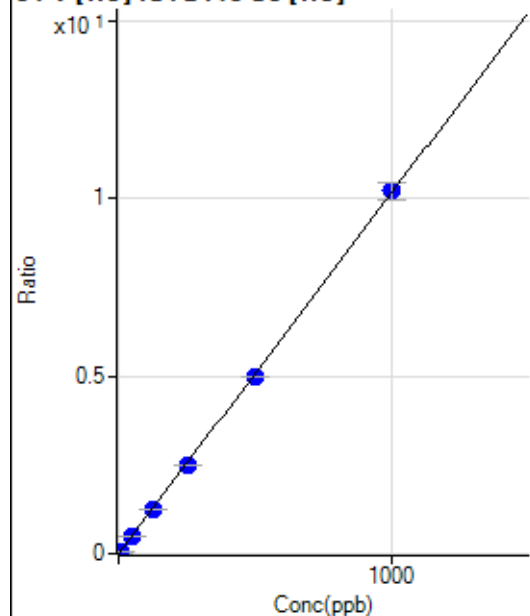
$$R = 1.0000$$

$$DL = 0.0408$$

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	8.89	0.0000	P	21.0
2	☐	5.000	5.156	19970.41	0.0524	P	3.9
3	☐	50.000	49.796	185941.52	0.5061	P	2.7
4	☐	125.000	124.058	450604.11	1.2610	P	1.5
5	☐	250.000	245.892	875581.80	2.4993	P	0.1
6	☐	500.000	490.387	1721665.25	4.9843	P	0.8
7	☐	1000.000	1005.961	3526594.91	10.2247	P	5.0
8	☐			1143.40	0.0031	P	2.6

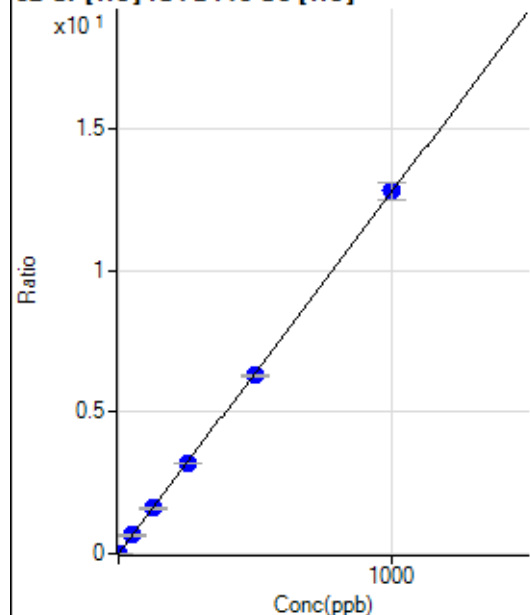
$$y = 0.0102 * x + 2.3247\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.001441$$

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	1111.17	0.0029	P	4.5
2	☐	2.000	2.016	10898.61	0.0286	P	1.8
3	☐	50.000	50.748	238804.00	0.6500	P	2.4
4	☐	125.000	125.592	573298.47	1.6044	P	2.0
5	☐	250.000	249.236	1114390.36	3.1810	P	0.7
6	☐	500.000	492.705	2171124.22	6.2855	P	0.8
7	☐	1000.000	1003.727	4415908.65	12.8017	P	4.8
8	☐			124939.08	0.3337	P	0.4

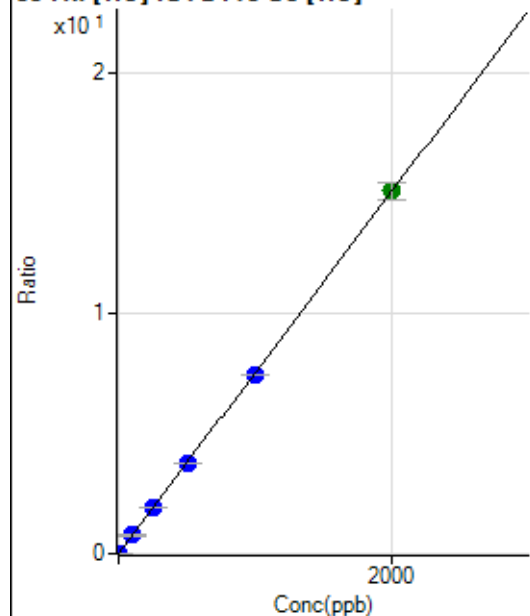
$$y = 0.0128 * x + 0.0029$$

$$R = 1.0000$$

$$DL = 0.03055$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	118.89	0.0003	P	18.4
2	☐	1.000	1.013	3021.47	0.0079	P	0.5
3	☐	100.000	101.681	281154.41	0.7653	P	2.4
4	☐	250.000	252.235	678261.13	1.8980	P	1.2
5	☐	500.000	499.606	1316902.74	3.7590	P	0.4
6	☐	1000.000	990.011	2572906.84	7.4485	P	0.2
7	☐	2000.000	2004.730	5202610.55	15.0825	A	4.8
8	☐			19430.82	0.0519	P	1.4

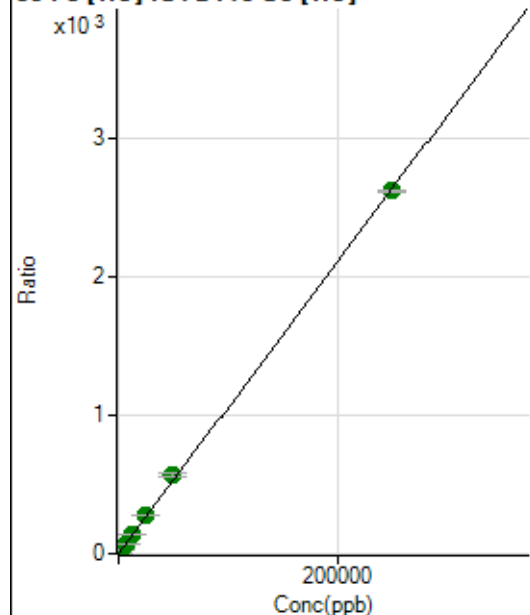
$$y = 0.0075 * x + 3.1092E-004$$

$$R = 1.0000$$

$$DL = 0.02277$$

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	6321.91	0.0165	P	3.9
2	☐	50.000	55.309	227671.64	0.5978	P	2.7
3	☐	2500.000	2695.116	10411889.70	28.3398	A	2.3
4	☐	6250.000	6744.499	25334551.73	70.8953	A	1.5
5	☐	12500.000	13318.034	49038772.86	139.9773	A	0.6
6	☐	25000.000	26381.014	95767062.33	277.2577	A	1.2
7	☐	50000.000	53736.699	194791821.0	564.7418	A	4.9
8	☐	250000.00	249059.34	979932110.7	2,617.410	A	0.4

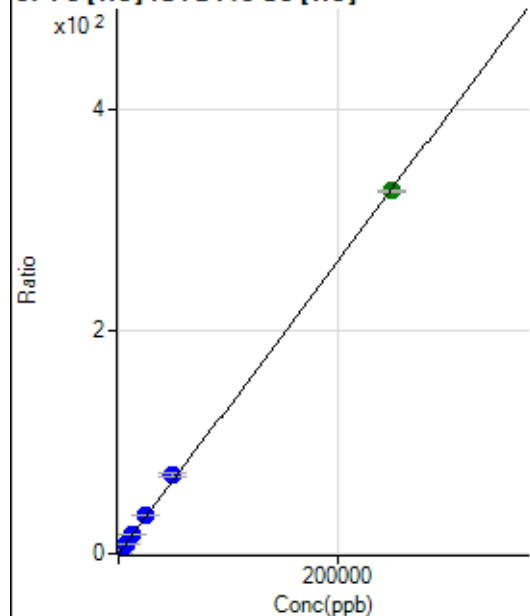
$$y = 0.0105 * x + 0.0165$$

$$R = 0.9999$$

$$DL = 0.182$$

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	828.49	0.0022	P	4.5
2	☐	50.000	55.481	28516.59	0.0749	P	2.1
3	☐	2500.000	2695.564	1298635.15	3.5347	P	2.3
4	☐	6250.000	6744.181	3159162.29	8.8404	P	1.5
5	☐	12500.000	13315.752	6114196.31	17.4525	P	0.6
6	☐	25000.000	26358.918	11932364.30	34.5456	P	1.1
7	☐	50000.000	53632.624	24244197.72	70.2879	P	4.9
8	☐	250000.00	249082.48	122210392.4	326.4256	A	0.3

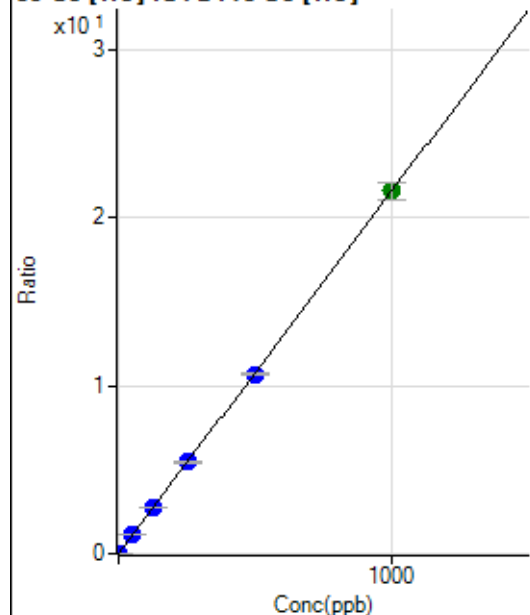
$$y = 0.0013 * x + 0.0022$$

$$R = 0.9999$$

$$DL = 0.2213$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	131.12	0.0003	P	11.3
2	☐	1.000	1.006	8402.53	0.0221	P	4.1
3	☐	50.000	51.709	410039.19	1.1161	P	2.5
4	☐	125.000	128.519	991112.00	2.7735	P	1.6
5	☐	250.000	252.394	1908065.04	5.4465	P	0.3
6	☐	500.000	495.192	3690950.53	10.6855	P	0.8
7	☐	1000.000	1001.280	7452659.47	21.6058	A	4.8
8	☐			14548.50	0.0389	P	1.0

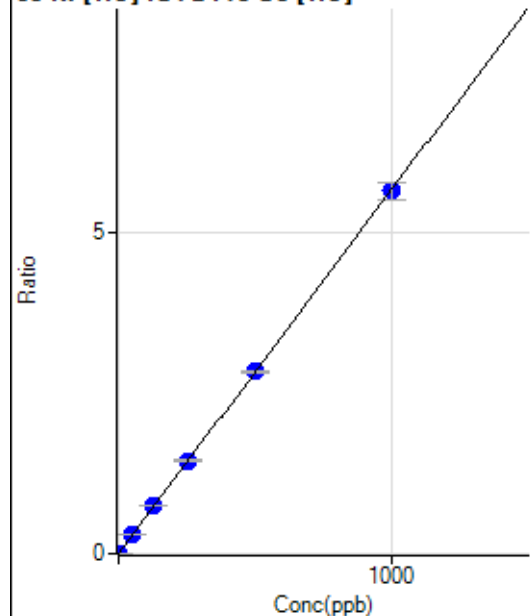
$$y = 0.0216 * x + 3.4301E-004$$

$$R = 1.0000$$

$$DL = 0.005373$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	132.22	0.0003	P	12.7
2	☐	1.000	1.060	2420.24	0.0064	P	4.2
3	☐	50.000	53.052	110643.59	0.3012	P	2.6
4	☐	125.000	130.757	265073.10	0.7418	P	1.9
5	☐	250.000	256.052	508765.51	1.4523	P	0.8
6	☐	500.000	501.475	982322.50	2.8439	P	0.9
7	☐	1000.000	996.877	1949965.89	5.6530	P	4.7
8	☐			39076.56	0.1044	P	0.6

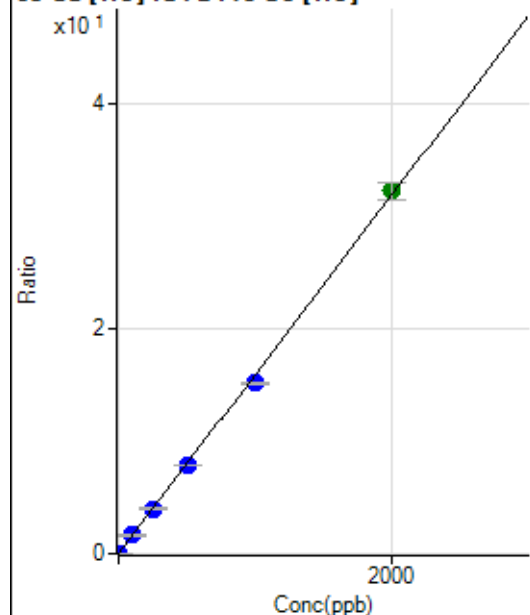
$$y = 0.0057 * x + 3.4635E-004$$

$$R = 1.0000$$

$$DL = 0.02334$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	750.03	0.0020	P	7.2
2	☐	2.000	2.024	13015.96	0.0342	P	4.5
3	☐	100.000	102.676	601163.57	1.6362	P	2.0
4	☐	250.000	251.527	1431351.25	4.0054	P	1.6
5	☐	500.000	496.762	2770676.56	7.9088	P	0.5
6	☐	1000.000	951.105	5229795.76	15.1404	P	0.6
7	☐	2000.000	2024.932	11118440.11	32.2322	A	4.7
8	☐			18221.55	0.0487	P	2.4

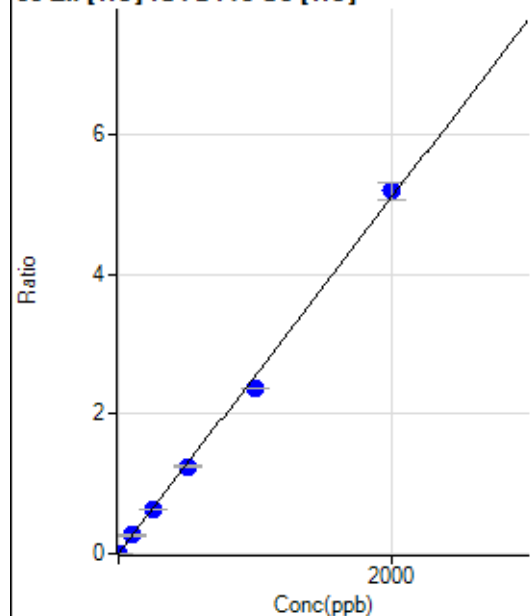
$$y = 0.0159 * x + 0.0020$$

$$R = 0.9996$$

$$DL = 0.0268$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1055.61	0.0028	P	5.2
2	☐	2.000	2.051	3043.70	0.0080	P	4.4
3	☐	100.000	102.143	96706.28	0.2632	P	1.7
4	☐	250.000	249.171	228025.89	0.6381	P	1.3
5	☐	500.000	489.416	438134.54	1.2506	P	0.6
6	☐	1000.000	929.848	819873.38	2.3736	P	0.8
7	☐	2000.000	2037.718	1793041.12	5.1983	P	5.0
8	☐			22211.48	0.0593	P	1.2

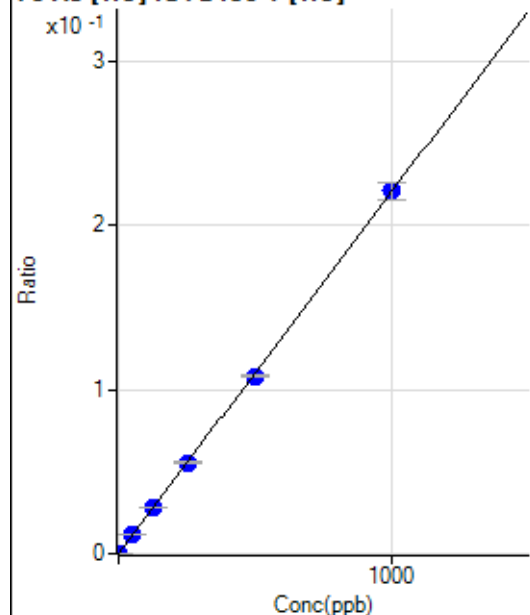
$$y = 0.0025 * x + 0.0028$$

$$R = 0.9991$$

$$DL = 0.1694$$

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	16.05	0.0000	P	40.3
2	☐	1.000	1.007	548.16	0.0002	P	7.4
3	☐	50.000	52.281	26813.00	0.0115	P	1.1
4	☐	125.000	128.250	64250.80	0.0283	P	1.1
5	☐	250.000	252.483	124026.32	0.0556	P	0.1
6	☐	500.000	491.248	237709.15	0.1082	P	0.3
7	☐	1000.000	1003.235	479581.22	0.2210	P	4.9
8	☐			236.42	0.0001	P	3.8

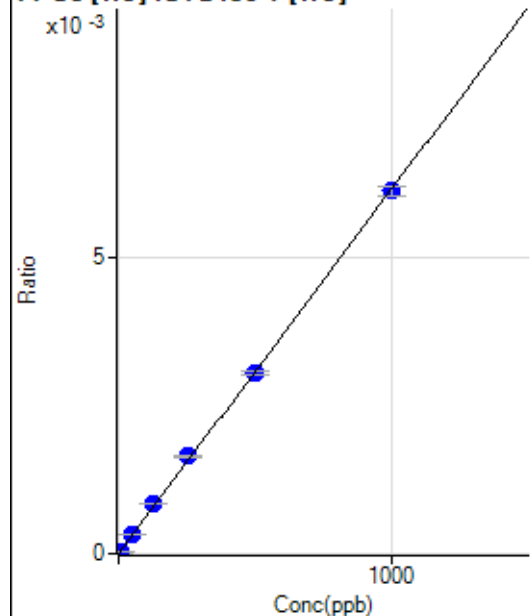
$$y = 2.2029\text{E-}004 * x + 6.6698\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.03657$$

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	1.11	0.0000	P	173.2
2	☐	5.000	6.471	96.67	0.0000	P	3.4
3	☐	50.000	52.578	754.48	0.0003	P	1.1
4	☐	125.000	136.494	1912.38	0.0008	P	1.7
5	☐	250.000	267.823	3678.32	0.0016	P	2.1
6	☐	500.000	496.688	6719.43	0.0031	P	1.6
7	☐	1000.000	995.627	13315.16	0.0061	P	2.5
8	☐			12.22	0.0000	P	41.8

$$y = 6.1583\text{E-}006 * x + 4.6361\text{E-}007$$

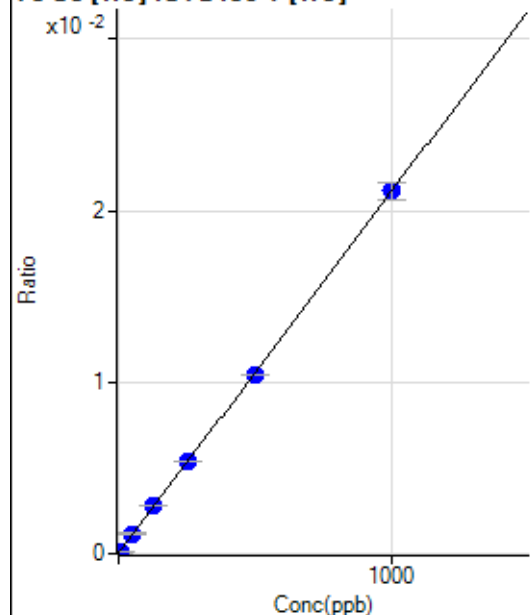
$$R = 0.9998$$

$$DL = 0.3912$$

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	54.94	0.0000	P	10.8
2	☐	5.000	5.911	353.71	0.0001	P	12.4
3	☐	50.000	54.348	2721.27	0.0012	P	2.1
4	☐	125.000	132.790	6422.46	0.0028	P	1.6
5	☐	250.000	255.836	12087.20	0.0054	P	0.6
6	☐	500.000	491.869	22847.07	0.0104	P	0.5
7	☐	1000.000	1001.411	45902.67	0.0212	P	4.8
8	☐			73.46	0.0000	P	18.1

$$y = 2.1100\text{E-}005 * x + 2.2849\text{E-}005$$

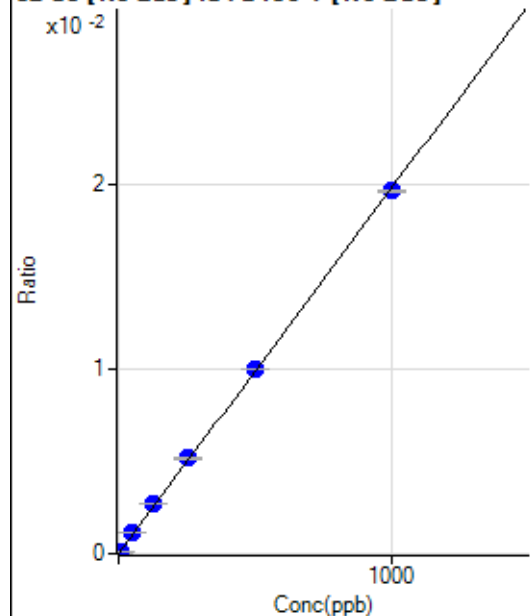
$$R = 0.9999$$

$$DL = 0.3493$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.23	0.0000	P	1270.
2	☐	5.000	5.914	2226.70	0.0001	P	2.4
3	☐	50.000	55.597	20634.94	0.0011	P	0.5
4	☐	125.000	136.446	50239.08	0.0027	P	1.0
5	☐	250.000	262.565	94699.94	0.0052	P	2.3
6	☐	500.000	504.658	174733.96	0.0100	P	0.7
7	☐	1000.000	992.815	346693.70	0.0197	P	0.6
8	☐			84.73	0.0000	P	62.9

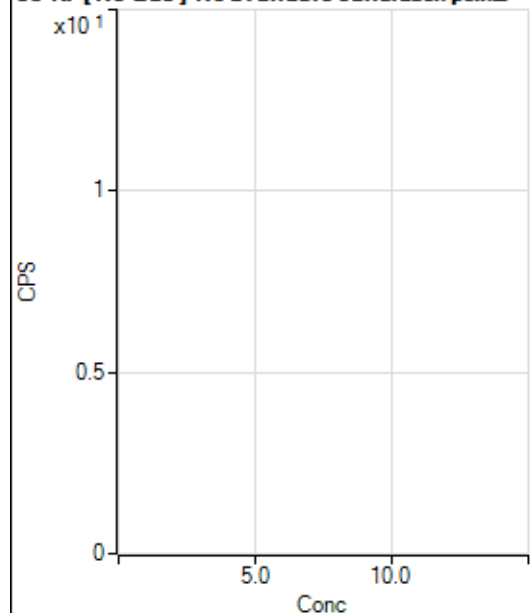
$$y = 1.9835\text{E-}005 * x + 2.1532\text{E-}007$$

$$R = 0.9999$$

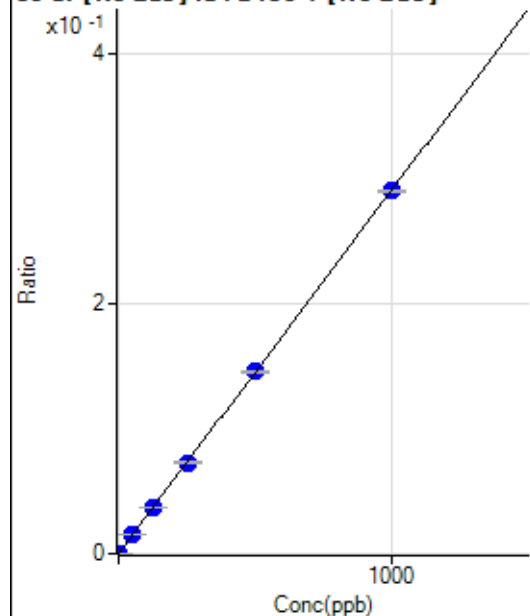
$$DL = 0.4136$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			1223.40		P	3.2
2	☐			1255.63		P	6.8
3	☐			1247.85		P	7.3
4	☐			1280.08		P	1.6
5	☐			1117.84		P	0.6
6	☐			1180.07		P	3.9
7	☐			1168.96		P	6.1
8	☐			1325.64		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	1889.10	0.0001	P	7.3
2	☐	1.000	1.082	7796.86	0.0004	P	2.0
3	☐	50.000	51.164	280287.78	0.0150	P	1.2
4	☐	125.000	126.991	687577.77	0.0370	P	0.5
5	☐	250.000	250.192	1325415.64	0.0729	P	1.3
6	☐	500.000	501.467	2548360.13	0.1460	P	0.5
7	☐	1000.000	998.911	5118074.59	0.2907	P	0.6
8	☐			23269.54	0.0013	P	0.8

$$y = 2.9094E-004 * x + 9.6818E-005$$

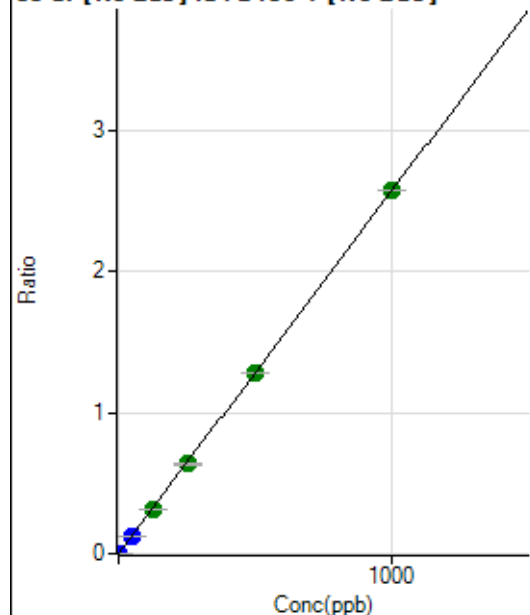
$$R = 1.0000$$

$$DL = 0.07272$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	197.23	0.0000	P	25.7
2	☐	1.000	1.042	50944.08	0.0027	P	2.2
3	☐	50.000	50.313	2420454.35	0.1294	P	0.2
4	☐	125.000	124.328	5933790.11	0.3197	A	0.5
5	☐	250.000	247.383	11566331.51	0.6361	A	1.7
6	☐	500.000	499.548	22420805.54	1.2845	A	0.4
7	☐	1000.000	1000.948	45310092.68	2.5737	A	0.1
8	☐			189548.16	0.0109	P	0.5

$$y = 0.0026 * x + 1.0104E-005$$

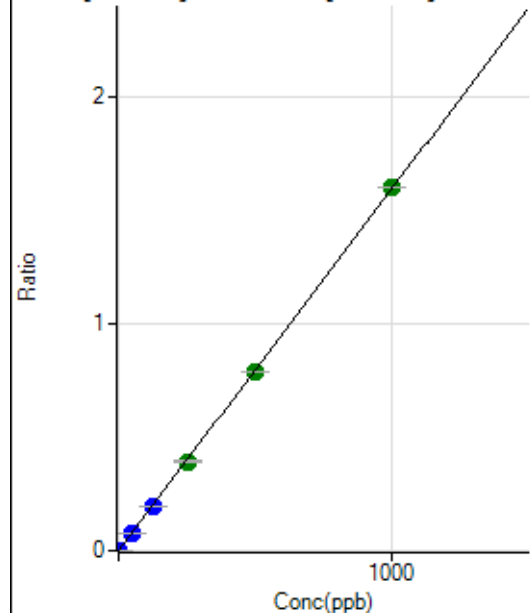
$$R = 1.0000$$

$$DL = 0.003027$$

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	1061.20	0.0001	P	8.4
2	☐	1.000	0.809	25512.57	0.0013	P	0.6
3	☐	50.000	49.124	1468075.53	0.0785	P	0.5
4	☐	125.000	124.436	3688040.19	0.1987	P	0.3
5	☐	250.000	245.919	7139044.78	0.3926	A	2.0
6	☐	500.000	494.918	13791414.03	0.7901	A	0.5
7	☐	1000.000	1003.676	28207614.87	1.6022	A	0.2
8	☐			8697.44	0.0005	P	2.5

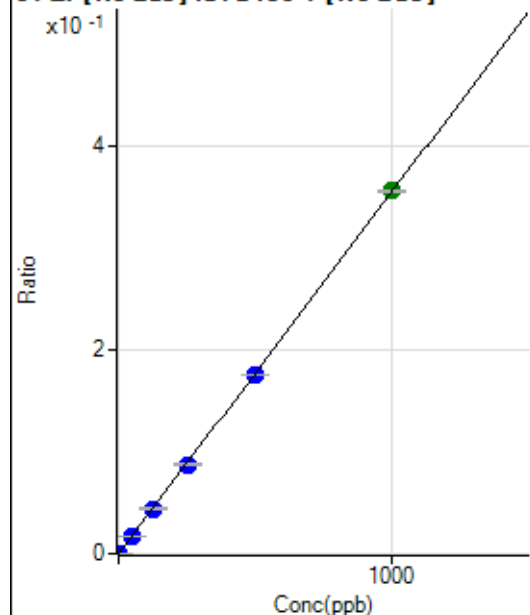
$$y = 0.0016 * x + 5.4375E-005$$

$$R = 1.0000$$

$$DL = 0.008603$$

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	205.57	0.0000	P	36.5
2	☐	1.000	0.827	5754.18	0.0003	P	4.0
3	☐	50.000	49.190	326597.78	0.0175	P	0.6
4	☐	125.000	124.932	822695.21	0.0443	P	0.7
5	☐	250.000	245.288	1582148.49	0.0870	P	1.8
6	☐	500.000	493.946	3058277.00	0.1752	P	0.4
7	☐	1000.000	1004.254	6270996.36	0.3562	A	0.6
8	☐			1702.96	0.0001	P	2.4

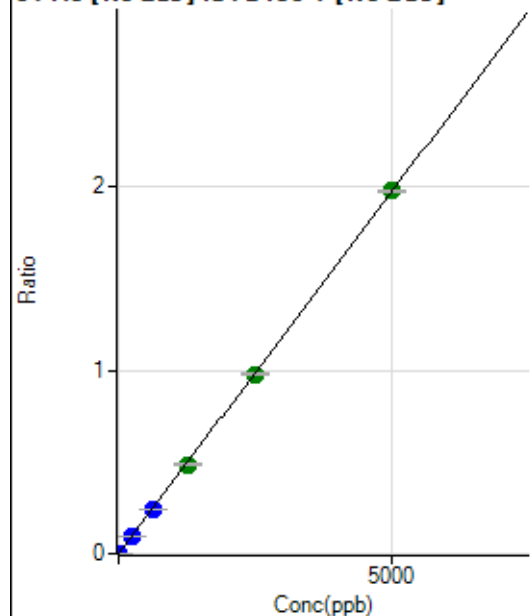
$$y = 3.5469\text{E-}004 * x + 1.0532\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03252$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	405.58	0.0000	P	2.1
2	☐	5.000	4.670	35252.80	0.0019	P	3.4
3	☐	250.000	247.828	1827022.42	0.0977	P	0.5
4	☐	625.000	622.145	4549907.52	0.2451	P	0.6
5	☐	1250.000	1229.543	8808764.43	0.4844	A	1.7
6	☐	2500.000	2478.002	17041181.63	0.9763	A	0.8
7	☐	5000.000	5016.579	34795312.59	1.9764	A	0.6
8	☐			26475.43	0.0015	P	1.7

$$y = 3.9397\text{E-}004 * x + 2.0784\text{E-}005$$

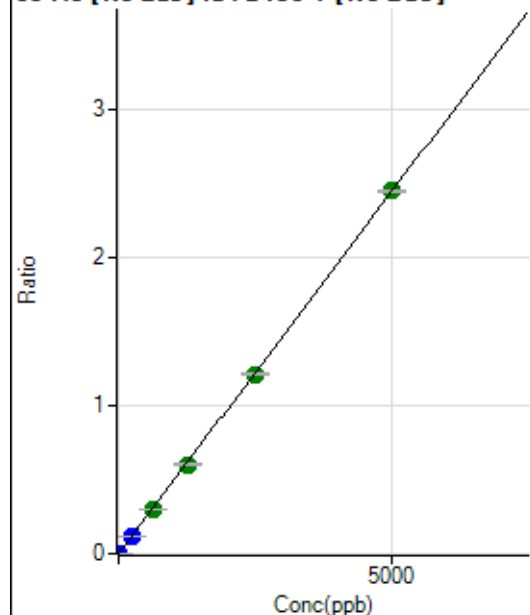
$$R = 1.0000$$

$$DL = 0.003272$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	177.78	0.0000	P	5.7
2	☐	5.000	4.922	45740.82	0.0024	P	1.7
3	☐	250.000	248.784	2274644.93	0.1216	P	0.5
4	☐	625.000	617.064	5597330.33	0.3016	A	0.5
5	☐	1250.000	1228.502	10916668.30	0.6004	A	1.7
6	☐	2500.000	2482.574	21176705.68	1.2132	A	0.6
7	☐	5000.000	5015.140	43146814.85	2.4508	A	0.4
8	☐			40923.43	0.0024	P	0.7

$$y = 4.8869E-004 * x + 9.1122E-006$$

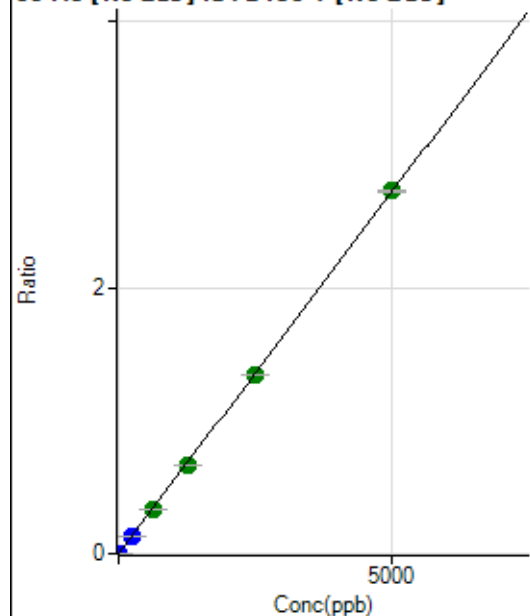
$$R = 1.0000$$

$$DL = 0.003195$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	288.90	0.0000	P	2.0
2	☐	5.000	4.999	51755.83	0.0027	P	1.7
3	☐	250.000	246.439	2506240.88	0.1340	P	0.3
4	☐	625.000	620.614	6261467.85	0.3373	A	0.1
5	☐	1250.000	1225.515	12112755.22	0.6661	A	1.5
6	☐	2500.000	2473.015	23462893.58	1.3442	A	0.4
7	☐	5000.000	5020.340	48037979.20	2.7287	A	0.8
8	☐			50738.25	0.0029	P	2.4

$$y = 5.4353E-004 * x + 1.4806E-005$$

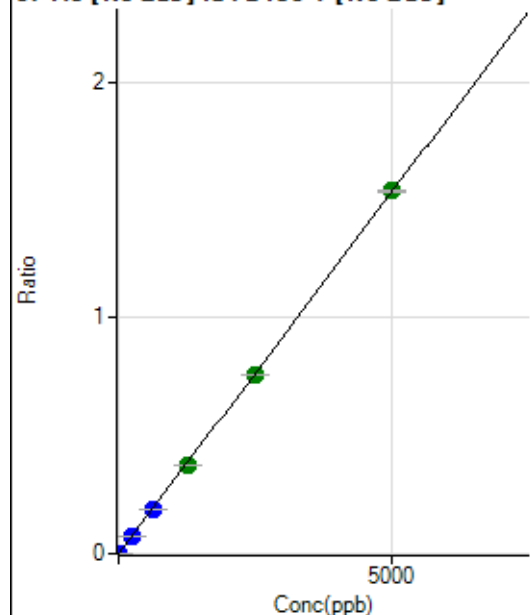
$$R = 1.0000$$

$$DL = 0.001613$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	105.56	0.0000	P	31.6
2	☐	5.000	4.966	28919.21	0.0015	P	1.7
3	☐	250.000	246.266	1411263.65	0.0754	P	0.1
4	☐	625.000	621.241	3532016.57	0.1903	P	0.1
5	☐	1250.000	1221.328	6802635.57	0.3741	A	1.3
6	☐	2500.000	2470.331	13207723.04	0.7566	A	0.3
7	☐	5000.000	5022.660	27083744.01	1.5384	A	0.6
8	☐			25017.22	0.0014	P	1.3

$$y = 3.0629E-004 * x + 5.4057E-006$$

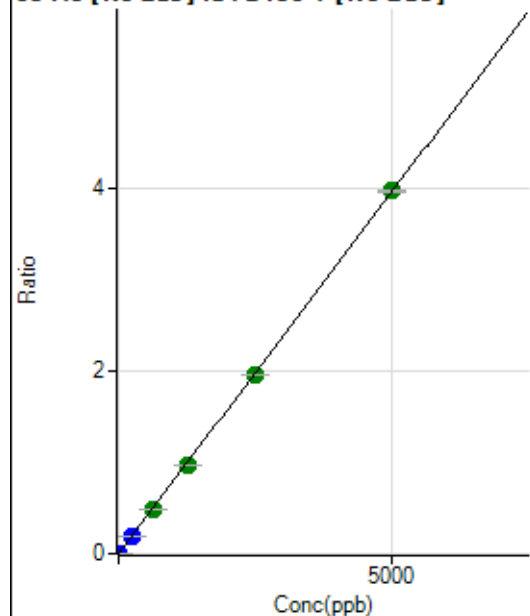
$$R = 1.0000$$

$$DL = 0.01671$$

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	247.24	0.0000	P	10.8
2	☐	5.000	4.990	74984.05	0.0040	P	1.3
3	☐	250.000	245.195	3626704.59	0.1939	P	0.6
4	☐	625.000	620.704	9108424.94	0.4907	A	0.5
5	☐	1250.000	1221.850	17566204.91	0.9660	A	1.0
6	☐	2500.000	2479.393	34214814.31	1.9601	A	0.6
7	☐	5000.000	5018.118	69841707.81	3.9672	A	0.4
8	☐			63865.70	0.0037	P	1.0

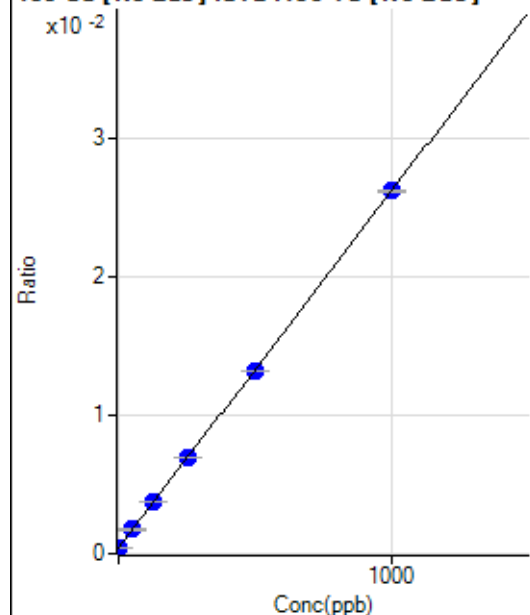
$$y = 7.9056E-004 * x + 1.2670E-005$$

$$R = 1.0000$$

$$DL = 0.005174$$

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	9553.67	0.0004	P	3.7
2	☐	1.000	1.065	9873.31	0.0004	P	2.1
3	☐	50.000	52.284	39074.15	0.0018	P	3.4
4	☐	125.000	130.147	83534.86	0.0038	P	0.5
5	☐	250.000	252.548	151595.58	0.0069	P	1.4
6	☐	500.000	497.097	278615.64	0.0132	P	0.4
7	☐	1000.000	1000.057	556429.06	0.0262	P	0.6
8	☐			8858.67	0.0005	P	2.5

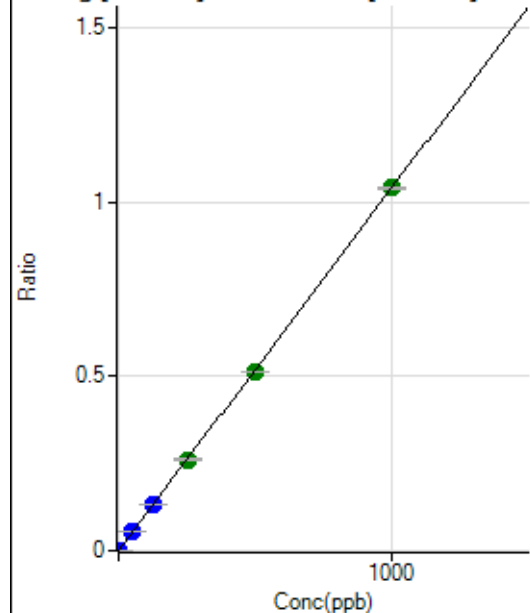
$$y = 2.5771\text{E-}005 * x + 4.1430\text{E-}004$$

$$R = 1.0000$$

$$DL = 1.762$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	238.90	0.0000	P	28.1
2	☐	1.000	0.730	17188.82	0.0008	P	0.8
3	☐	50.000	52.655	1213208.87	0.0547	P	0.5
4	☐	125.000	129.730	2986959.88	0.1347	P	0.4
5	☐	250.000	251.131	5711555.77	0.2608	A	1.6
6	☐	500.000	495.691	10846288.09	0.5148	A	0.2
7	☐	1000.000	1001.148	22093798.76	1.0398	A	0.6
8	☐			3508.93	0.0002	P	7.8

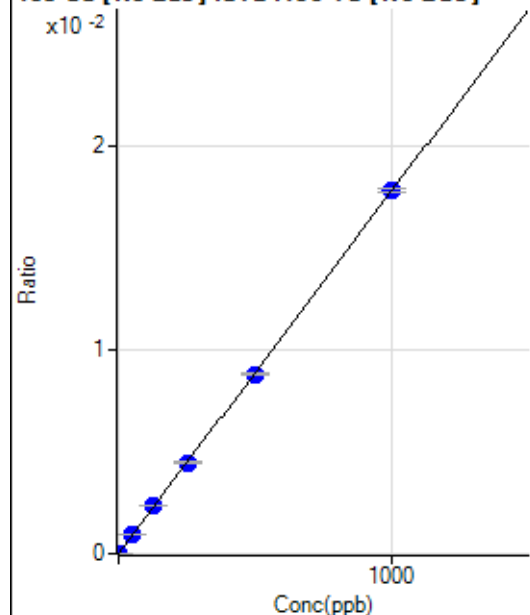
$$y = 0.0010 * x + 1.0362\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.008396$$

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	22.22	0.0000	P	43.3
2	☐	1.000	1.075	448.63	0.0000	P	9.0
3	☐	50.000	52.034	20542.99	0.0009	P	2.0
4	☐	125.000	131.226	51744.51	0.0023	P	0.5
5	☐	250.000	251.876	98087.92	0.0045	P	1.8
6	☐	500.000	495.626	185681.06	0.0088	P	0.4
7	☐	1000.000	1000.838	378135.09	0.0178	P	1.1
8	☐			137.50	0.0000	P	5.9

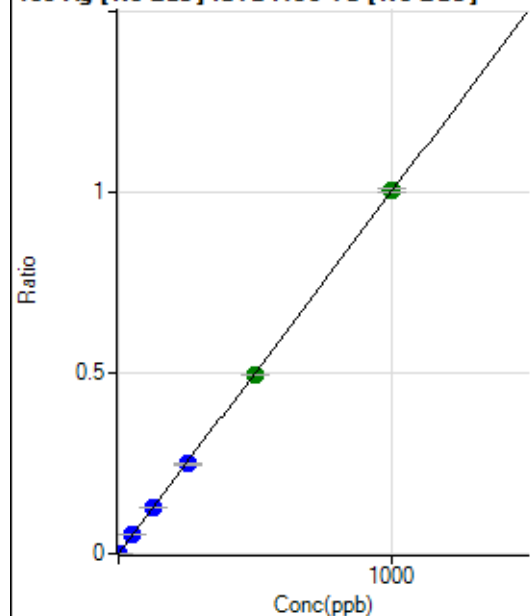
$$y = 1.7781E-005 * x + 9.6384E-007$$

$$R = 1.0000$$

$$DL = 0.07044$$

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	111.12	0.0000	P	34.6
2	☐	1.000	0.723	16273.84	0.0007	P	0.8
3	☐	50.000	52.439	1163817.36	0.0525	P	0.4
4	☐	125.000	128.733	2855254.15	0.1288	P	0.5
5	☐	250.000	248.548	5444415.57	0.2487	P	2.9
6	☐	500.000	494.721	10427936.43	0.4950	A	0.8
7	☐	1000.000	1002.414	21309873.92	1.0029	A	1.0
8	☐			3139.39	0.0002	P	3.7

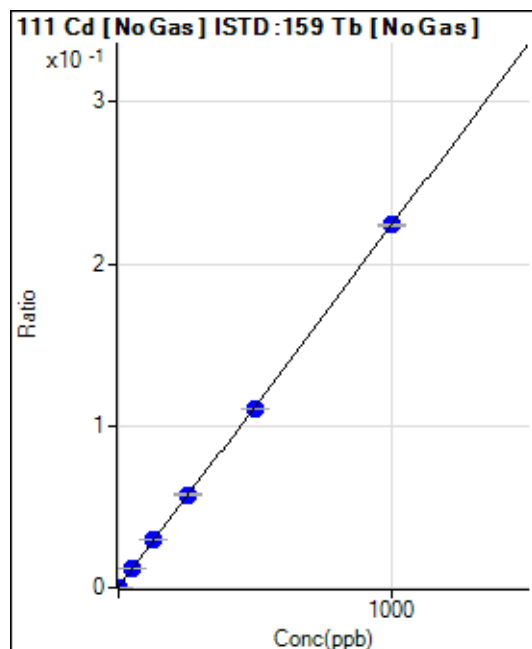
$$y = 0.0010 * x + 4.8184E-006$$

$$R = 1.0000$$

$$DL = 0.005002$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4814.05	0.0002	P	3.8
2	☐	1.000	1.044	9883.43	0.0004	P	1.1
3	☐	50.000	53.029	267630.32	0.0121	P	0.6
4	☐	125.000	131.268	655279.15	0.0296	P	0.1
5	☐	250.000	255.309	1254626.79	0.0573	P	1.7
6	☐	500.000	493.460	2328961.78	0.1105	P	0.3
7	☐	1000.000	1001.008	4760385.35	0.2240	P	0.5
8	☐			5498.43	0.0003	P	2.5

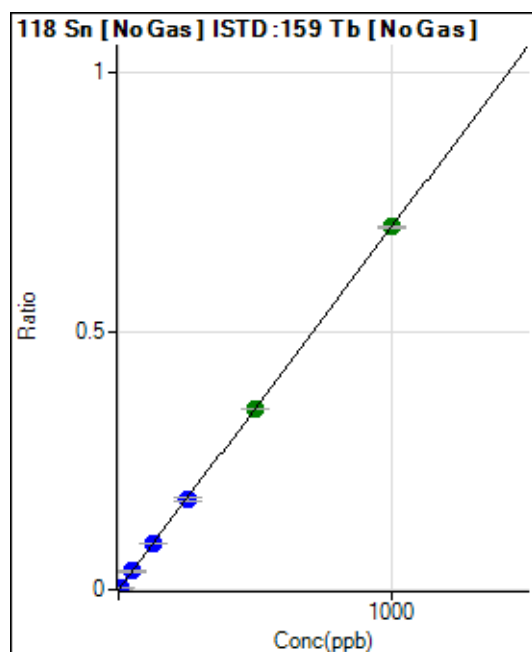
$$y = 2.2360\text{E-}004 * x + 2.0876\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.1075$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1086.20	0.0000	P	10.3
2	☐	5.000	5.085	80823.94	0.0036	P	1.1
3	☐	50.000	50.433	786151.57	0.0354	P	0.9
4	☐	125.000	127.281	1981235.11	0.0894	P	0.4
5	☐	250.000	248.772	3823792.49	0.1746	P	2.5
6	☐	500.000	498.986	7379046.69	0.3503	A	0.4
7	☐	1000.000	1000.507	14921923.25	0.7022	A	0.2
8	☐			10345.87	0.0005	P	3.0

$$y = 7.0184\text{E-}004 * x + 4.7102\text{E-}005$$

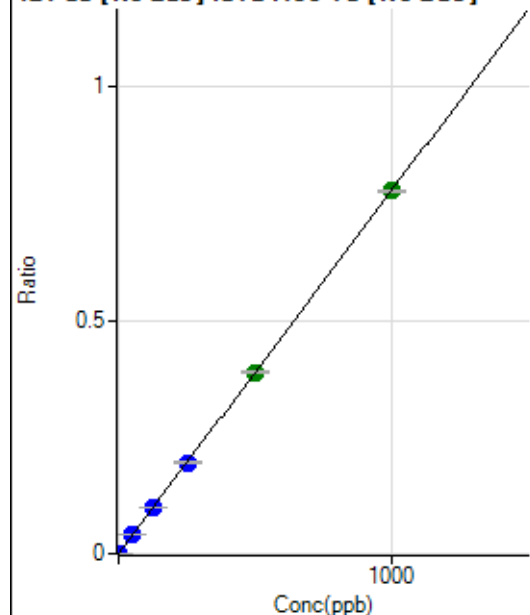
$$R = 1.0000$$

$$DL = 0.02064$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	211.12	0.0000	P	14.9
2	☐	2.000	2.007	35058.56	0.0016	P	2.2
3	☐	50.000	50.392	868553.91	0.0392	P	0.0
4	☐	125.000	127.880	2202440.72	0.0994	P	0.8
5	☐	250.000	249.247	4240180.21	0.1937	P	2.0
6	☐	500.000	500.358	8189765.55	0.3887	A	0.4
7	☐	1000.000	999.630	16502260.26	0.7766	A	0.5
8	☐			17709.04	0.0009	P	9.3

$$y = 7.7690E-004 * x + 9.1557E-006$$

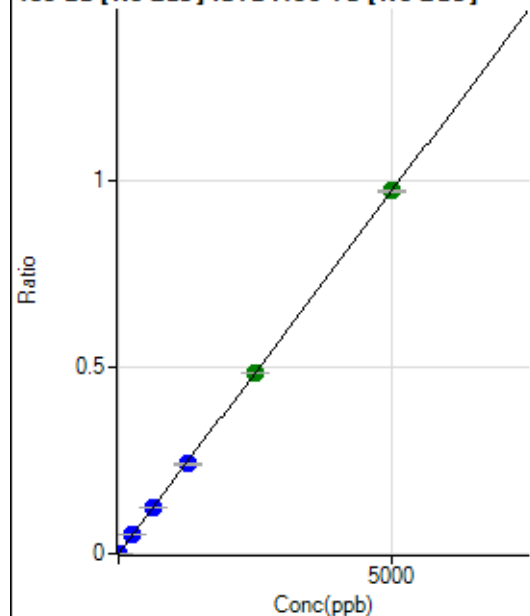
$$R = 1.0000$$

$$DL = 0.005282$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36.11	0.0000	P	48.0
2	☐	10.000	10.345	44937.42	0.0020	P	1.7
3	☐	250.000	256.089	1103063.61	0.0497	P	0.8
4	☐	625.000	636.471	2739676.90	0.1236	P	1.0
5	☐	1250.000	1239.355	5269424.81	0.2407	P	2.5
6	☐	2500.000	2487.152	10175230.44	0.4830	A	0.2
7	☐	5000.000	5007.346	20661450.12	0.9724	A	0.6
8	☐			4211.93	0.0002	P	2.9

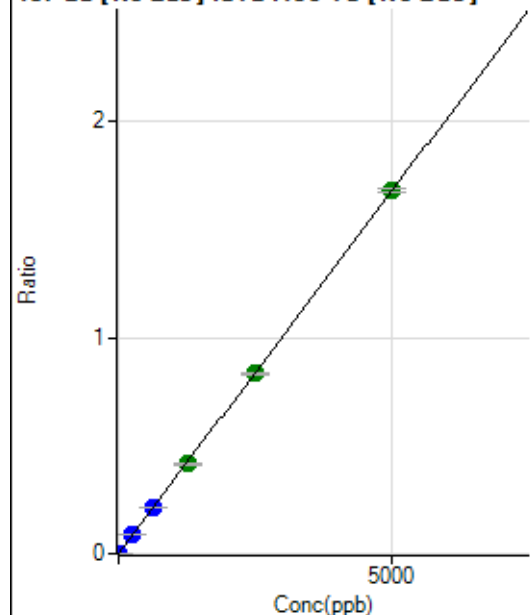
$$y = 1.9419E-004 * x + 1.5658E-006$$

$$R = 1.0000$$

$$DL = 0.0116$$

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	75.01	0.0000	P	38.6
2	☐	10.000	10.337	77500.19	0.0035	P	1.7
3	☐	250.000	253.966	1887796.66	0.0851	P	0.9
4	☐	625.000	632.040	4695046.02	0.2118	P	1.0
5	☐	1250.000	1243.310	9123279.37	0.4167	A	1.9
6	☐	2500.000	2484.665	17541914.63	0.8327	A	0.7
7	☐	5000.000	5008.261	35662002.88	1.6784	A	0.9
8	☐			7741.37	0.0004	P	5.4

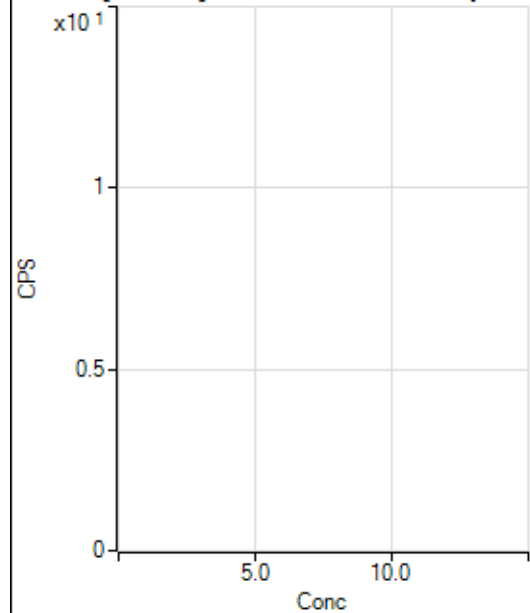
$$y = 3.3512E-004 * x + 3.2537E-006$$

$$R = 1.0000$$

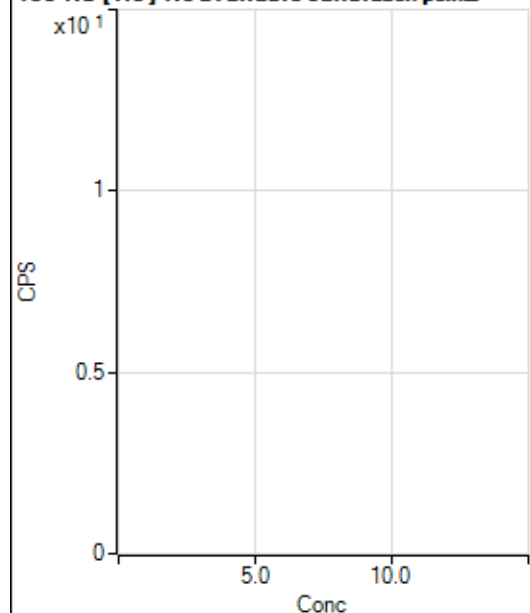
$$DL = 0.01125$$

Weight: <None>

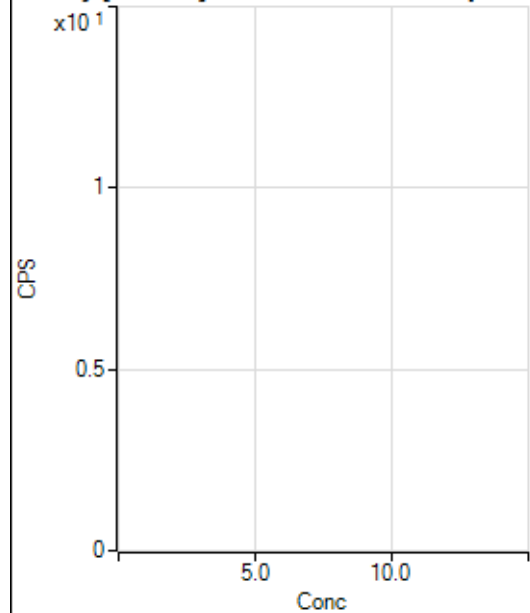
Min Conc: 0

150 Nd [No Gas] No available calibration points

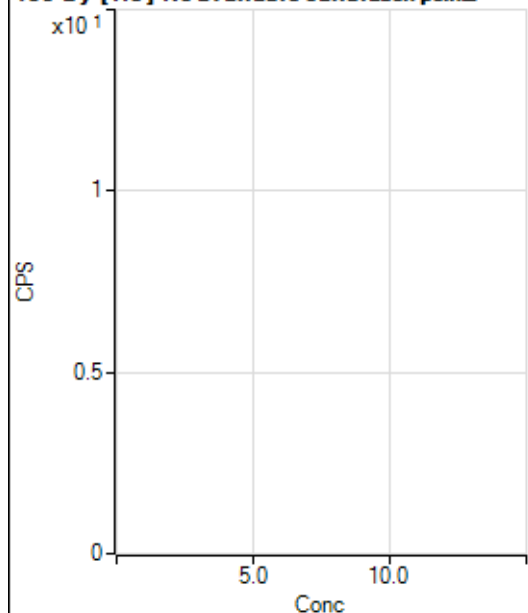
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			8.89		P	43.3
2	☐			13.33		P	50.0
3	☐			102.23		P	24.7
4	☐			317.79		P	22.6
5	☐			464.47		P	13.3
6	☐			882.28		P	10.3
7	☐			1813.52		P	2.6
8	☐			197.79		P	5.1

150 Nd [He] No available calibration points

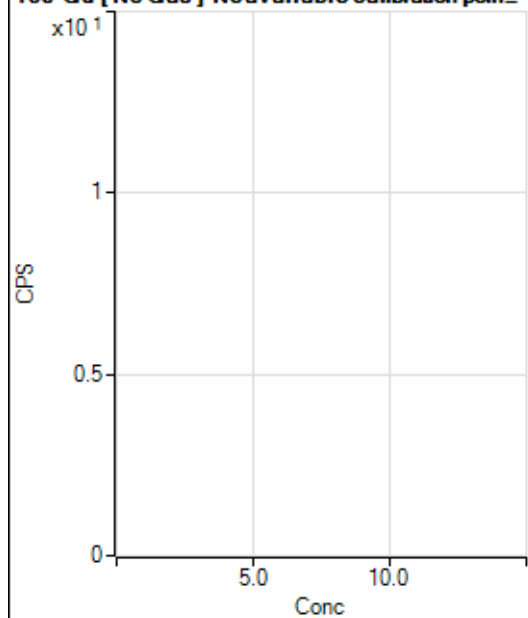
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			6.67		P	50.0
3	☐			15.56		P	65.5
4	☐			32.22		P	29.8
5	☐			47.78		P	16.1
6	☐			94.45		P	21.6
7	☐			173.34		P	13.3
8	☐			65.56		P	2.9

156 Dy [No Gas] No available calibration points

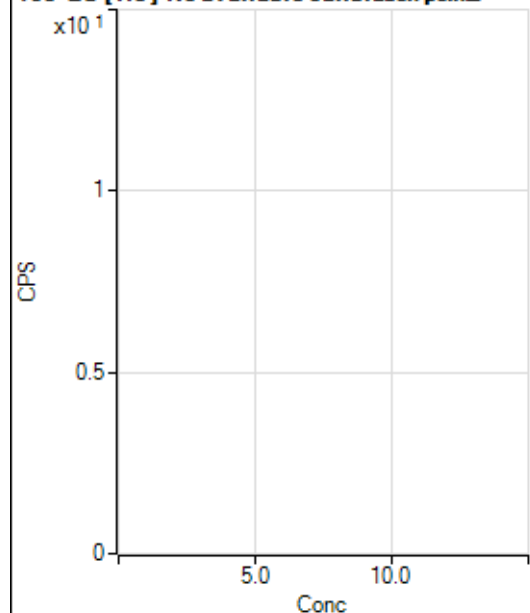
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	50.0
2	☐			38.89		P	32.7
3	☐			47.22		P	27.0
4	☐			66.67		P	33.1
5	☐			111.11		P	8.7
6	☐			208.35		P	10.6
7	☐			411.14		P	29.1
8	☐			63.89		P	7.5

156 Dy [He] No available calibration points

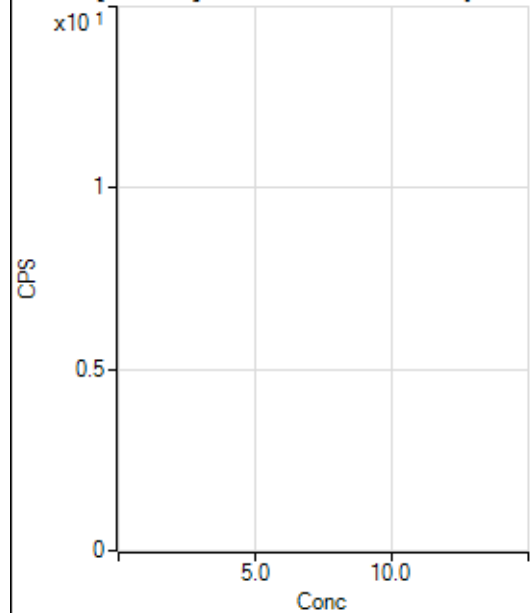
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.45		P	43.8
2	☐			22.22		P	60.6
3	☐			44.45		P	30.3
4	☐			70.00		P	19.0
5	☐			108.89		P	11.6
6	☐			216.67		P	3.1
7	☐			460.01		P	2.5
8	☐			40.00		P	16.7

160 Gd [No Gas] Noavailable calibration poin_

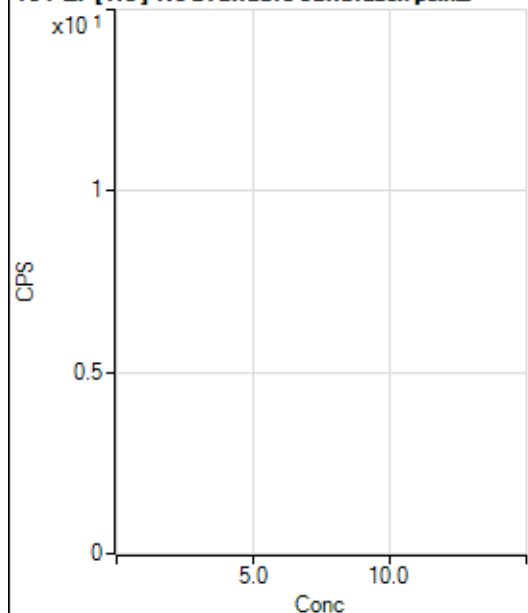
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			197.23		P	20.0
2	☐			188.90		P	11.1
3	☐			236.12		P	8.2
4	☐			197.23		P	6.5
5	☐			213.90		P	19.2
6	☐			225.01		P	9.8
7	☐			297.24		P	7.1
8	☐			200.01		P	11.0

160 Gd [He] No available calibration points

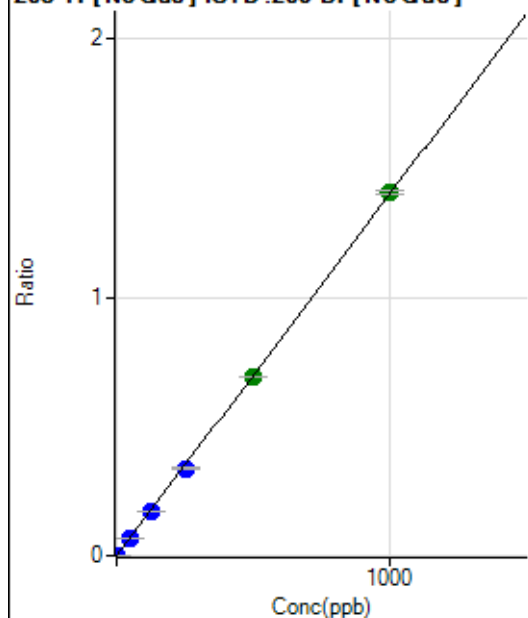
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			326.68		P	11.6
2	☐			323.35		P	3.6
3	☐			392.23		P	12.2
4	☐			380.01		P	12.9
5	☐			376.68		P	7.2
6	☐			385.57		P	3.6
7	☐			355.57		P	9.2
8	☐			382.23		P	11.8

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			125.01		P	40.5
2	☐			94.45		P	13.5
3	☐			163.90		P	26.1
4	☐			113.90		P	27.7
5	☐			97.23		P	17.8
6	☐			122.23		P	41.7
7	☐			161.12		P	21.5
8	☐			116.67		P	18.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			75.56		P	11.1
2	☐			70.00		P	25.2
3	☐			81.11		P	27.4
4	☐			65.55		P	42.6
5	☐			88.89		P	29.1
6	☐			80.00		P	27.3
7	☐			98.89		P	10.3
8	☐			70.00		P	19.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	544.48	0.0000	P	9.4
2	☐	1.000	0.981	19542.90	0.0014	P	2.9
3	☐	50.000	48.551	932777.01	0.0679	P	0.2
4	☐	125.000	122.225	2321831.61	0.1708	P	1.0
5	☐	250.000	241.485	4511480.83	0.3374	P	1.7
6	☐	500.000	495.141	8680754.18	0.6918	A	0.3
7	☐	1000.000	1004.978	17337302.64	1.4041	A	1.0
8	☐			4239.76	0.0004	P	4.2

$$y = 0.0014 * x + 3.7774E-005$$

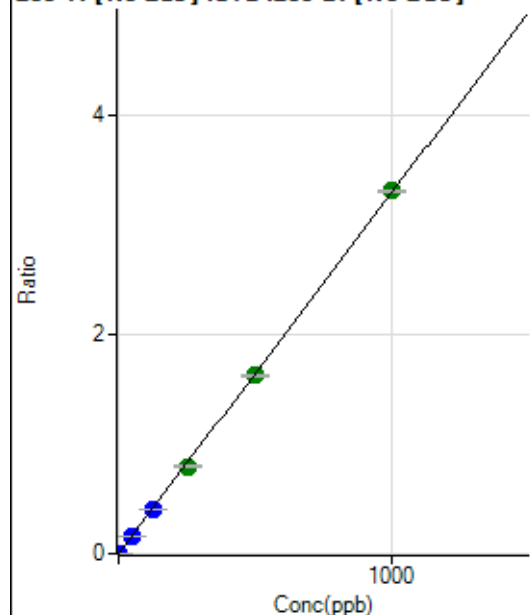
$$R = 0.9999$$

$$DL = 0.007634$$

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	1172.33	0.0001	P	4.0
2	☐	1.000	0.969	45381.35	0.0033	P	1.4
3	☐	50.000	48.319	2185368.08	0.1590	P	0.4
4	☐	125.000	120.752	5400057.72	0.3972	P	0.8
5	☐	250.000	241.727	10631737.56	0.7951	A	1.3
6	☐	500.000	493.817	20381171.81	1.6242	A	0.5
7	☐	1000.000	1005.775	40847243.97	3.3080	A	0.8
8	☐			9414.86	0.0009	P	5.5

$$y = 0.0033 * x + 8.1332E-005$$

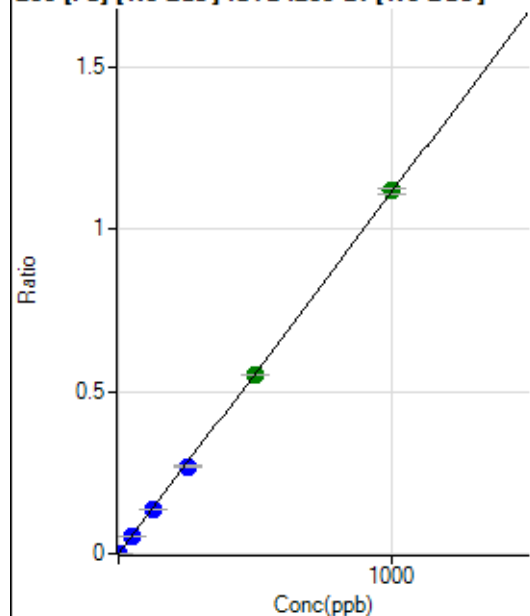
$$R = 0.9999$$

$$DL = 0.003002$$

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	1318.63	0.0001	P	1.9
2	☐	1.000	0.949	15926.59	0.0011	P	1.0
3	☐	50.000	48.740	746543.35	0.0543	P	1.0
4	☐	125.000	122.095	1847856.96	0.1359	P	0.8
5	☐	250.000	241.190	3589192.10	0.2684	P	1.4
6	☐	500.000	495.546	6919286.61	0.5514	A	0.1
7	☐	1000.000	1004.856	13805238.27	1.1180	A	1.5
8	☐			47288.12	0.0045	P	0.6

$$y = 0.0011 * x + 9.1478E-005$$

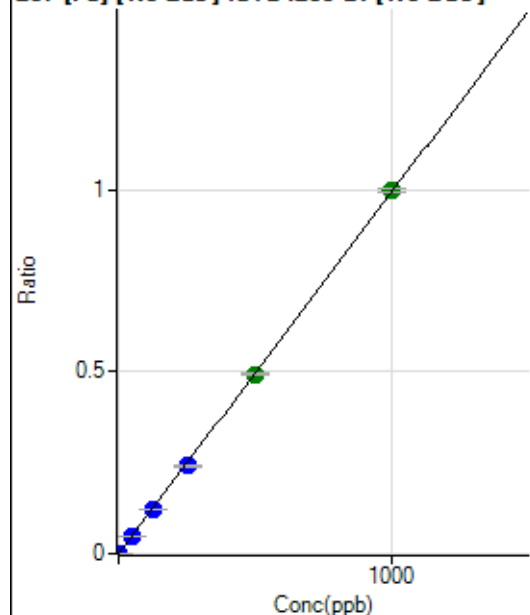
$$R = 0.9999$$

$$DL = 0.00479$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1242.69	0.0001	P	4.1
2	☐	1.000	0.959	14428.59	0.0010	P	0.8
3	☐	50.000	48.754	667297.97	0.0486	P	0.9
4	☐	125.000	122.611	1658133.38	0.1220	P	1.0
5	☐	250.000	242.215	3220547.61	0.2409	P	1.8
6	☐	500.000	496.832	6198552.05	0.4940	A	0.8
7	☐	1000.000	1003.891	12323181.41	0.9980	A	1.2
8	☐			43237.65	0.0042	P	0.8

$$y = 9.9406\text{E-}004 * x + 8.6214\text{E-}005$$

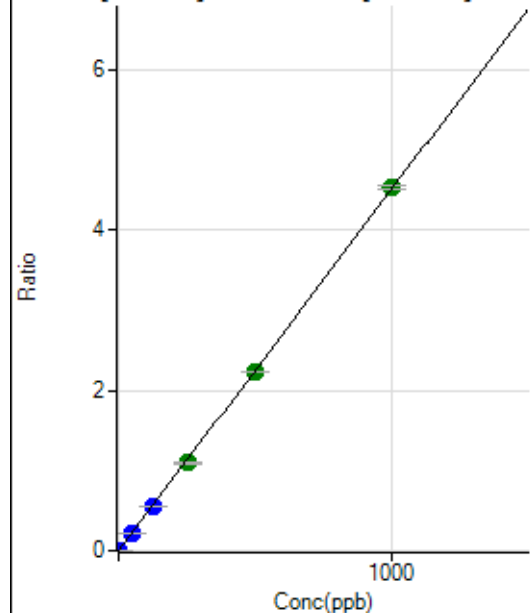
$$R = 1.0000$$

$$DL = 0.01079$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5033.83	0.0003	P	2.4
2	☐	1.000	0.965	65151.22	0.0047	P	1.0
3	☐	50.000	48.881	3028695.64	0.2204	P	0.5
4	☐	125.000	122.479	7499084.44	0.5516	P	0.3
5	☐	250.000	243.002	14628989.31	1.0941	A	1.7
6	☐	500.000	495.006	27962374.99	2.2283	A	0.6
7	☐	1000.000	1004.618	55837562.48	4.5220	A	1.1
8	☐			192627.37	0.0185	P	0.5

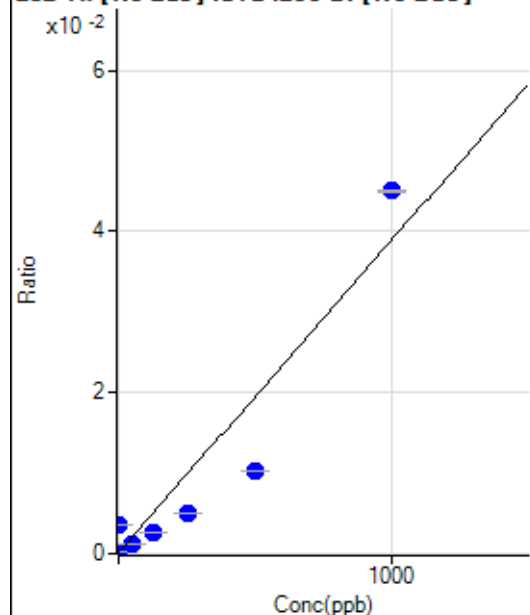
$$y = 0.0045 * x + 3.4923\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.005503$$

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	1876.12	0.0001	P	4.1
2	☐	1.000	90.031	50289.59	0.0036	P	2.2
3	☐	50.000	26.303	15808.09	0.0012	P	1.5
4	☐	125.000	64.543	35795.76	0.0026	P	1.2
5	☐	250.000	127.298	67741.73	0.0051	P	2.4
6	☐	500.000	263.348	129780.19	0.0103	P	0.7
7	☐	1000.000	1157.654	555949.41	0.0450	P	0.5
8	☐			2239.15	0.0002	P	5.6

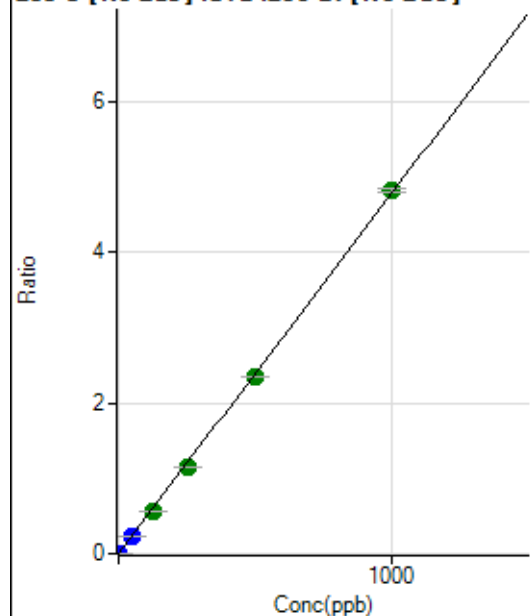
$$y = 3.8779\text{E-}005 * x + 1.3016\text{E-}004$$

$$R = 0.9499$$

$$DL = 0.416$$

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	2208.62	0.0002	P	3.8
2	☐	1.000	0.932	63949.41	0.0046	P	0.5
3	☐	50.000	47.039	3089563.35	0.2248	P	0.6
4	☐	125.000	118.947	7724307.20	0.5682	A	0.5
5	☐	250.000	239.728	15310980.72	1.1450	A	0.8
6	☐	500.000	492.065	29489100.66	2.3500	A	0.4
7	☐	1000.000	1007.440	59408296.46	4.8113	A	1.0
8	☐			8756.10	0.0008	P	0.5

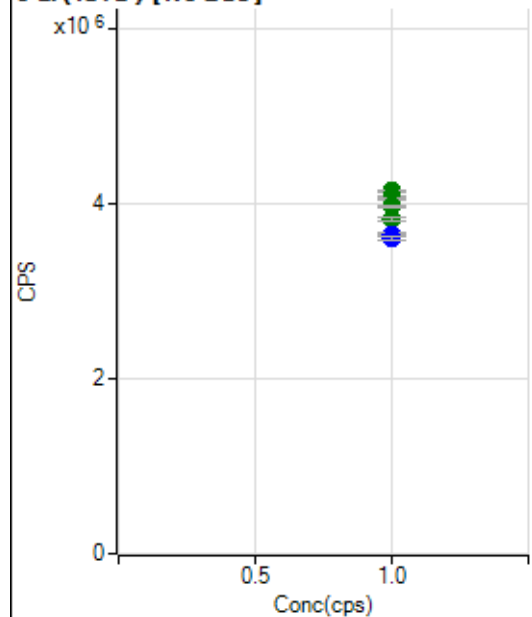
$$y = 0.0048 * x + 1.5321\text{E-}004$$

$$R = 0.9999$$

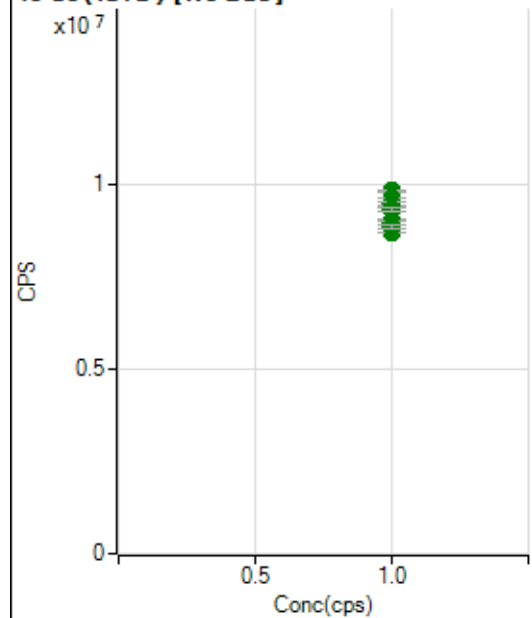
$$DL = 0.003698$$

Weight: <None>

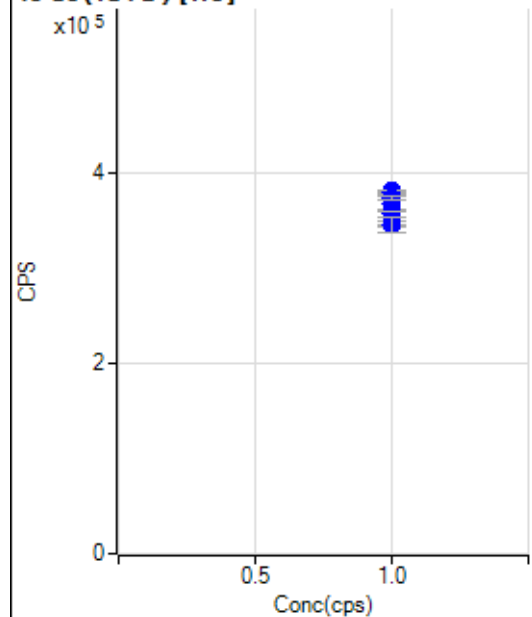
Min Conc: 0

6 Li (ISTD) [No Gas]

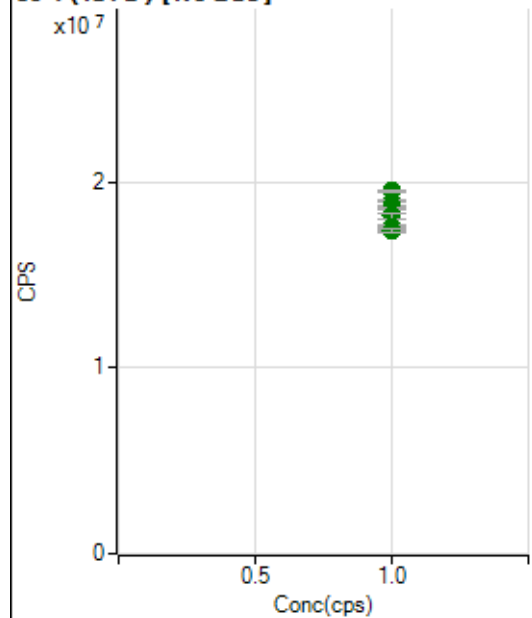
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4149158.80		A	0.4
2	☐	1.000		4083076.40		A	0.1
3	☐	1.000		4049965.74		A	0.6
4	☐	1.000		3972058.38		A	0.3
5	☐	1.000		3826083.07		A	1.4
6	☐	1.000		3641320.40		P	0.3
7	☐	1.000		3660786.12		P	1.2
8	☐	1.000		3605649.08		P	0.9

45 Sc (ISTD) [No Gas]

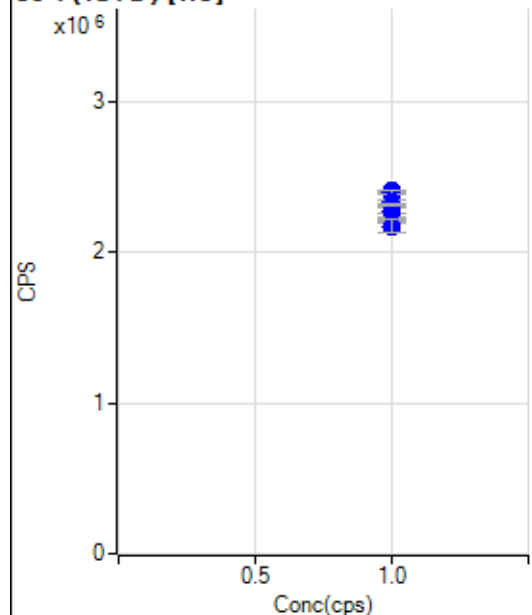
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		9805538.85		A	0.6
2	☐	1.000		9618259.50		A	0.2
3	☐	1.000		9454110.46		A	0.7
4	☐	1.000		9323068.00		A	1.2
5	☐	1.000		9012139.35		A	1.0
6	☐	1.000		8687528.32		A	0.3
7	☐	1.000		8923039.09		A	1.3
8	☐	1.000		8837721.81		A	0.7

45 Sc (ISTD) [He]

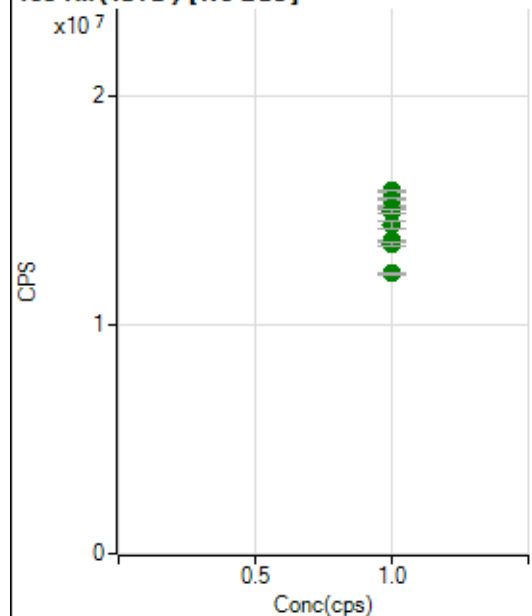
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		382021.92		P	0.8
2	☐	1.000		380803.71		P	0.8
3	☐	1.000		367531.84		P	2.5
4	☐	1.000		357412.90		P	1.7
5	☐	1.000		350332.92		P	0.3
6	☐	1.000		345430.98		P	0.9
7	☐	1.000		345445.71		P	4.6
8	☐	1.000		374392.27		P	0.9

89 Y (ISTD) [No Gas]

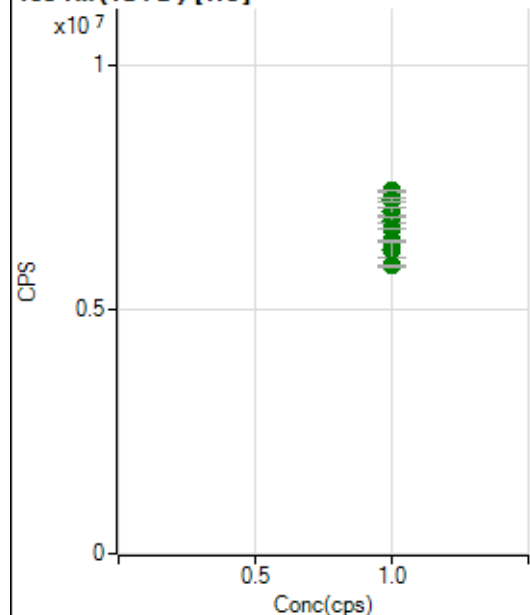
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		19512817.76		A	0.3
2	☐	1.000		18946023.33		A	0.4
3	☐	1.000		18708432.50		A	0.6
4	☐	1.000		18561494.72		A	0.4
5	☐	1.000		18187150.56		A	1.7
6	☐	1.000		17455631.96		A	0.7
7	☐	1.000		17605205.57		A	0.6
8	☐	1.000		17388243.63		A	0.8

89 Y(ISTD) [He]

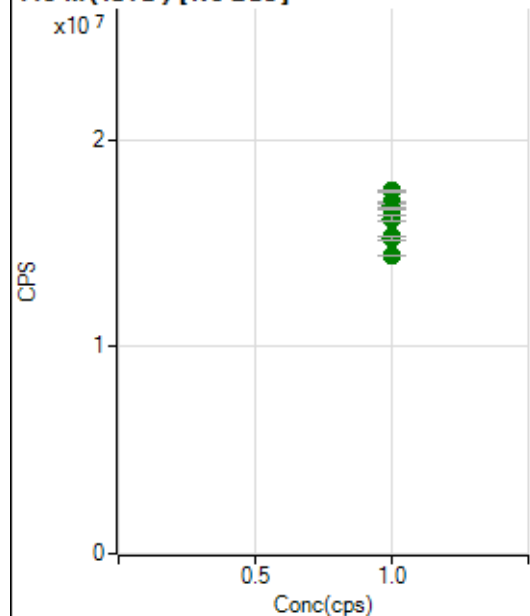
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		2405151.91		P	0.5
2	☐	1.000		2397893.72		P	1.0
3	☐	1.000		2327061.09		P	1.6
4	☐	1.000		2273923.18		P	1.5
5	☐	1.000		2229667.80		P	0.5
6	☐	1.000		2196499.05		P	0.2
7	☐	1.000		2173045.51		P	4.4
8	☐	1.000		2310988.63		P	0.6

103 Rh(ISTD) [No Gas]

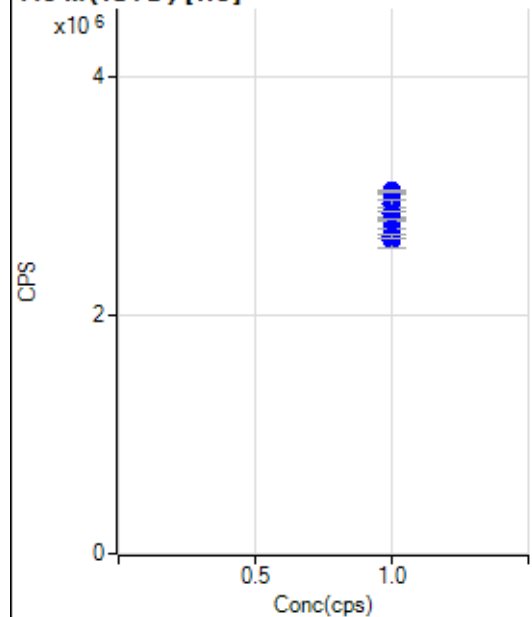
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		15833010.42		A	0.3
2	☐	1.000		15475462.67		A	0.3
3	☐	1.000		15114315.27		A	0.5
4	☐	1.000		14942052.42		A	0.9
5	☐	1.000		14380081.40		A	2.4
6	☐	1.000		13664699.09		A	0.4
7	☐	1.000		13528122.18		A	1.5
8	☐	1.000		12222333.87		A	0.3

103 Rh (ISTD) [He]

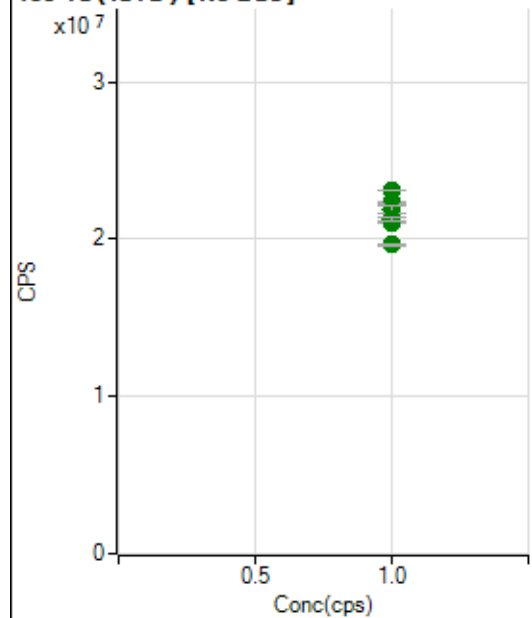
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7414136.42		A	0.4
2	☐	1.000		7231095.86		A	0.9
3	☐	1.000		6996743.71		A	2.2
4	☐	1.000		6814228.72		A	1.4
5	☐	1.000		6634767.33		A	0.3
6	☐	1.000		6406221.01		A	0.5
7	☐	1.000		6212854.35		A	4.7
8	☐	1.000		5885727.20		A	0.7

115 In (ISTD) [No Gas]

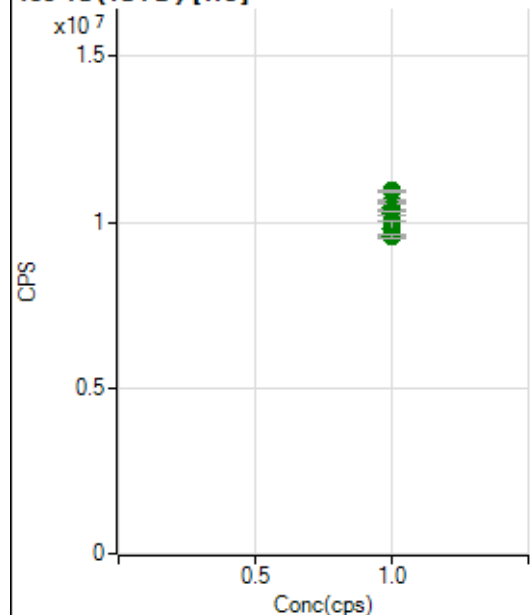
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		17535524.48		A	0.5
2	☐	1.000		16981193.68		A	0.7
3	☐	1.000		16830329.48		A	0.7
4	☐	1.000		16673789.98		A	1.0
5	☐	1.000		16190900.53		A	1.9
6	☐	1.000		15337744.68		A	0.5
7	☐	1.000		15247496.45		A	1.0
8	☐	1.000		14428024.55		A	0.2

115 In (ISTD) [He]

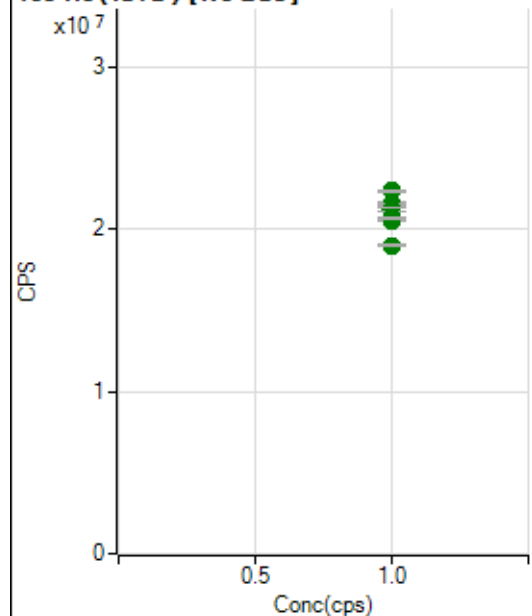
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3016724.80		P	0.5
2	☐	1.000		3037518.79		P	0.6
3	☐	1.000		2935863.18		P	2.2
4	☐	1.000		2842359.77		P	1.3
5	☐	1.000		2790590.34		P	0.2
6	☐	1.000		2714244.38		P	0.1
7	☐	1.000		2620042.70		P	4.0
8	☐	1.000		2655328.06		P	1.2

159 Tb (ISTD) [No Gas]

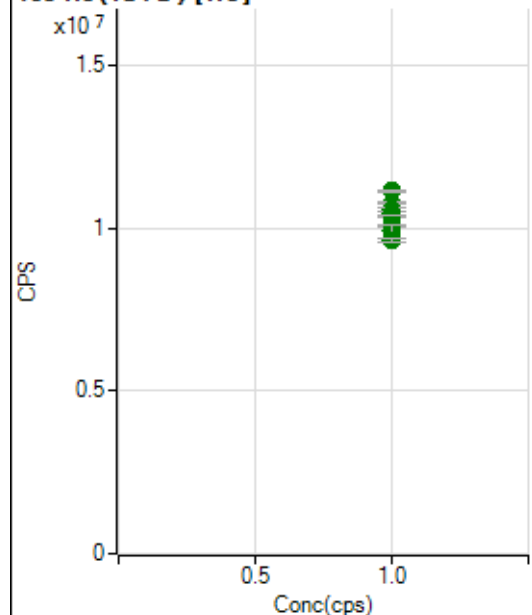
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		23059075.49		A	0.1
2	☐	1.000		22350640.50		A	0.4
3	☐	1.000		22180348.56		A	0.1
4	☐	1.000		22167366.06		A	0.8
5	☐	1.000		21902632.17		A	2.2
6	☐	1.000		21067661.63		A	0.2
7	☐	1.000		21249106.63		A	1.1
8	☐	1.000		19626501.65		A	0.2

159 Tb (ISTD) [He]

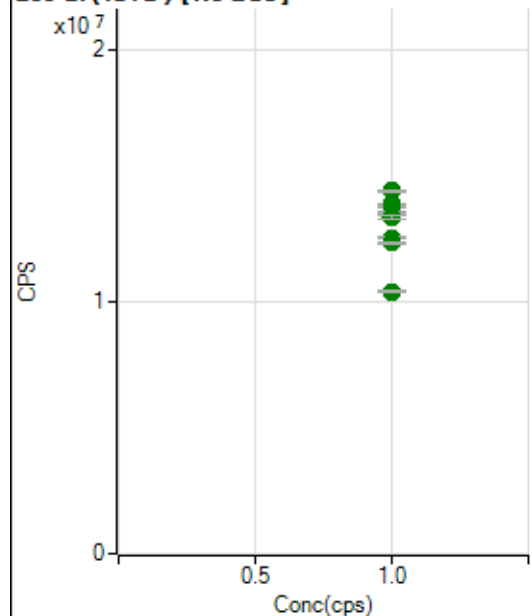
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		10939655.11		A	0.5
2	☐	1.000		10623942.69		A	0.6
3	☐	1.000		10440724.01		A	2.2
4	☐	1.000		10300699.91		A	1.7
5	☐	1.000		10275380.89		A	1.0
6	☐	1.000		10034475.27		A	0.2
7	☐	1.000		9818669.65		A	4.9
8	☐	1.000		9589530.69		A	1.1

165 Ho (ISTD) [No Gas]

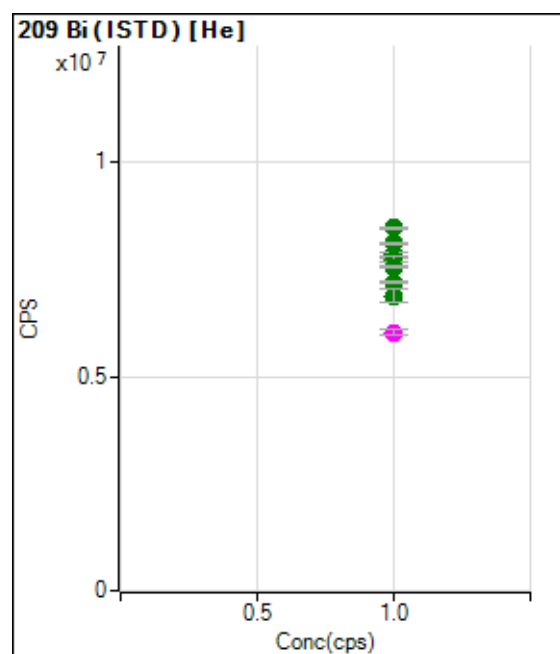
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		22358100.33		A	0.4
2	☐	1.000		21623299.96		A	0.3
3	☐	1.000		21487083.12		A	0.3
4	☐	1.000		21574577.22		A	0.5
5	☐	1.000		21232512.98		A	1.4
6	☐	1.000		20496761.22		A	0.4
7	☐	1.000		20700684.32		A	0.9
8	☐	1.000		19005133.76		A	0.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		11155912.54		A	0.3
2	☐	1.000		10784016.44		A	0.6
3	☐	1.000		10577325.67		A	1.4
4	☐	1.000		10445063.73		A	1.4
5	☐	1.000		10404585.47		A	0.4
6	☐	1.000		10106625.82		A	0.5
7	☐	1.000		9907910.62		A	4.4
8	☐	1.000		9649378.74		A	1.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		14414603.81		A	0.3
2	☐	1.000		13884900.49		A	0.8
3	☐	1.000		13744396.88		A	0.4
4	☐	1.000		13594778.69		A	0.5
5	☐	1.000		13373196.74		A	1.5
6	☐	1.000		12548480.79		A	0.6
7	☐	1.000		12348530.79		A	0.9
8	☐	1.000		10410922.34		A	0.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		8474567.79		A	0.3
2	☐	1.000		8109061.76		A	0.1
3	☐	1.000		7852713.77		A	1.5
4	☐	1.000		7746902.80		A	1.7
5	☐	1.000		7552231.97		A	0.7
6	☐	1.000		7197740.79		A	0.5
7	☐	1.000		6891540.80		A	4.8
8	☐	1.000		6031012.06		M	2.1

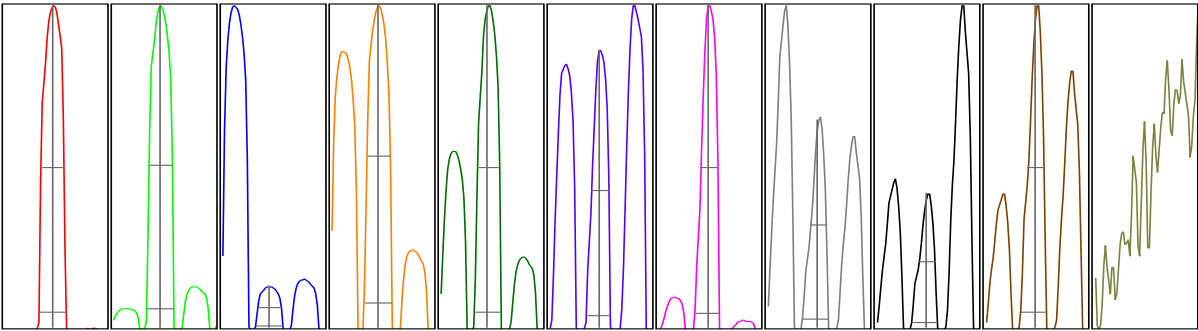
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7120519-MS1.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	16629	0.73	5.00	
24	1613025	0.53	5.00	
25	216873	0.72	5.00	
26	251535	0.74	5.00	
59	157338	0.69	5.00	
113	21785	0.70	5.00	
115	254482	0.50	5.00	
206	58282	0.77	5.00	
207	53983	0.54	5.00	
208	128545	0.75	5.00	
220	99	2.81		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	16439	16617	16725	16625	16742
24	1601931	1608212	1612894	1623991	1618097
25	214174	217035	217605	218126	217426
26	248379	251421	252328	253008	252538
59	155503	157513	157366	158005	158303
113	21543	21786	21767	21906	21925
115	253641	254869	253385	256551	253966
206	57621	58537	58399	58781	58071
207	53616	53932	54111	54398	53855
208	126910	129005	129316	129031	128465
220	98	102	101	95	97

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	26469	8.95	8.9 - 9.1		0.786	0.900	
24	2537751	23.90	23.9 - 24.1		0.788	0.900	
25	336487	24.90	24.9 - 25.1		0.789	0.900	
26	392079	25.90	25.9 - 26.1		0.814	0.900	
59	263001	58.90	58.9 - 59.1		0.779	0.900	
113	42795	113.00	112.9 - 113.1		0.689	0.900	
115	505201	115.00	114.9 - 115.1		0.709	0.900	
206	123658	206.00	205.9 - 206.1		0.752	0.900	
207	114064	207.00	206.9 - 207.1		0.740	0.900	
208	272301	208.00	207.9 - 208.1		0.747	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	8.0	V	Deflect	12.6	V
Extract 2	-140.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	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	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	39367	0.40	
89	555928	0.41	
205	52857	0.31	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	39217	39213	39588	39408	39411
89	553948	554063	556918	559361	555347
205	52644	52908	53000	53005	52728

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	8.1	V	Deflect	2.0	V
Extract 2	-145.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	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			