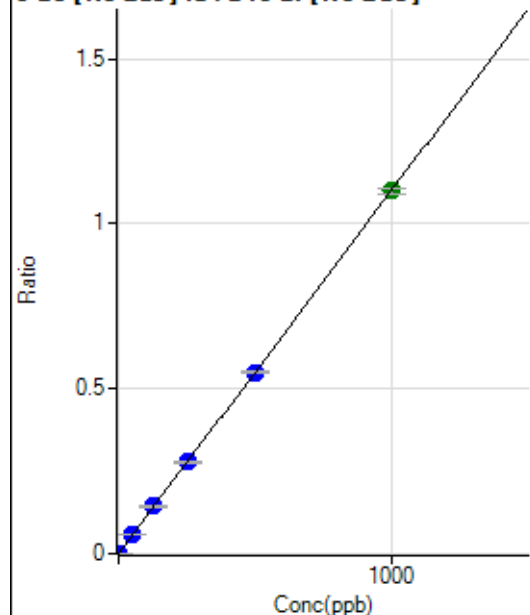


Calibration for 002CALB.d

Batch Folder: D:\P8092818ICPMS.b\
 Analysis File: P8092818ICPMS.batch.bin
 DA Date-Time: 2018-09-28 15:53:50
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-09-28 14:41:47
2	004CALS.d	S01	2018-09-28 14:45:10
3	005CALS.d	S02	2018-09-28 14:49:24
4	006CALS.d	S03	2018-09-28 14:53:09
5	007CALS.d	S04	2018-09-28 14:56:52
6	008CALS.d	S05	2018-09-28 15:00:28
7	009CALS.d	S06	2018-09-28 15:04:00
8	010CALS.d	S07	2018-09-28 15:07:27
9	011CALS.d	S08	2018-09-28 15:10:49

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	162.97	0.0001	P	19.3
2	☐	0.100	0.097	288.90	0.0002	P	13.0
3	☐	1.000	1.095	1616.80	0.0013	P	4.7
4	☐	50.000	52.541	70072.11	0.0579	P	1.5
5	☐	125.000	130.031	174635.03	0.1432	P	1.0
6	☐	250.000	252.286	341176.00	0.2776	P	0.9
7	☐	500.000	499.230	661747.80	0.5493	P	0.8
8	☐	1000.000	999.058	1301492.61	1.0990	A	1.3
9	☐			825.98	0.0007	P	7.5

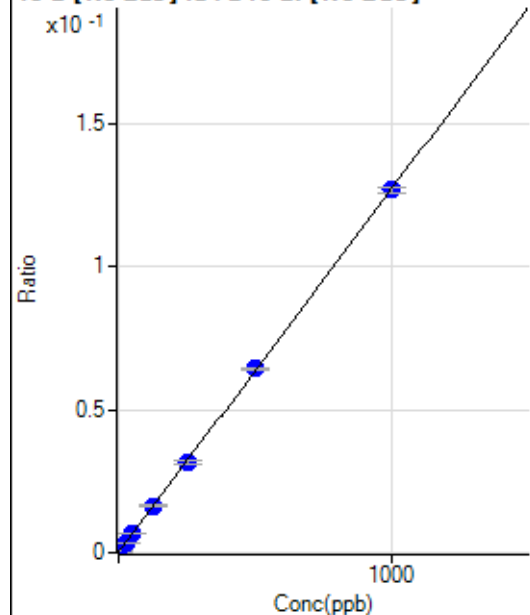
$$y = 0.0011 * x + 1.3517E-004$$

$$R = 1.0000$$

$$DL = 0.07133$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	177.79	0.0001	P	30.7
2	☐	2.500	2.092	494.47	0.0004	P	17.8
3	☐	25.000	25.190	4039.64	0.0033	P	2.1
4	☐	50.000	51.639	8116.51	0.0067	P	4.3
5	☐	125.000	126.920	19850.72	0.0163	P	4.9
6	☐	250.000	248.415	38967.94	0.0317	P	2.9
7	☐	500.000	504.514	77411.85	0.0643	P	1.4
8	☐	1000.000	997.814	150330.88	0.1269	P	1.4
9	☐			6999.21	0.0061	P	8.0

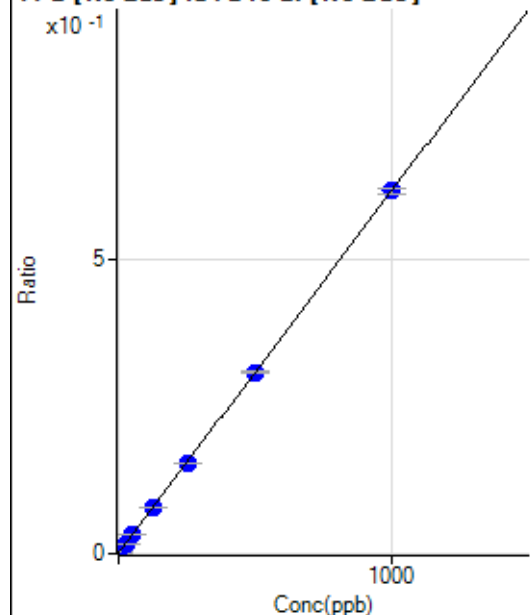
$$y = 1.2707E-004 * x + 1.4751E-004$$

$$R = 1.0000$$

$$DL = 1.068$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	800.06	0.0007	P	2.0
2	☐	2.500	2.450	2592.02	0.0022	P	5.2
3	☐	25.000	24.789	19163.50	0.0159	P	4.0
4	☐	50.000	51.239	38861.98	0.0321	P	1.7
5	☐	125.000	126.328	95436.25	0.0782	P	1.6
6	☐	250.000	248.456	188288.56	0.1532	P	2.1
7	☐	500.000	499.399	370256.80	0.3073	P	1.6
8	☐	1000.000	1000.464	728335.95	0.6150	P	1.4
9	☐			32980.71	0.0288	P	10.5

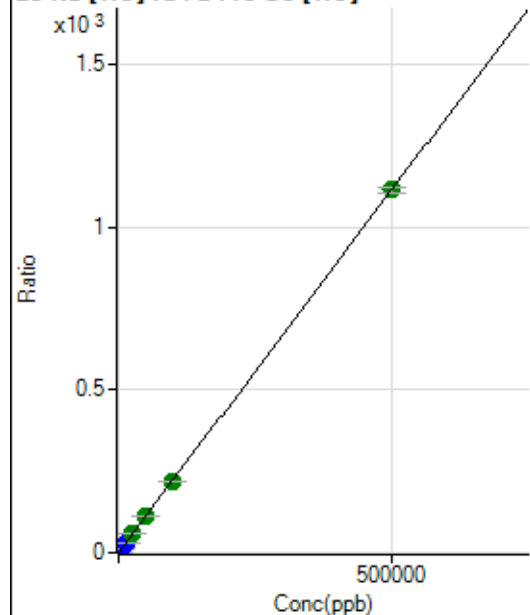
$$y = 6.1405\text{E-}004 * x + 6.6359\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.06521$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8358.38	0.2345	P	4.3
2	☐	50.000	47.183	12380.91	0.3395	P	4.4
3	☐	500.000	489.354	48414.10	1.3234	P	1.9
4	☐	5000.000	5005.192	403000.82	11.3724	P	0.7
5	☐	12500.000	12731.531	960264.81	28.5656	P	0.9
6	☐	25000.000	26105.431	1839886.65	58.3262	A	1.2
7	☐	50000.000	50070.657	3440978.77	111.6553	A	2.5
8	☐	100000.00	98146.681	6617370.38	218.6375	A	1.4
9	☐	500000.00	500302.49	34690205.64	1,113.543	A	1.4

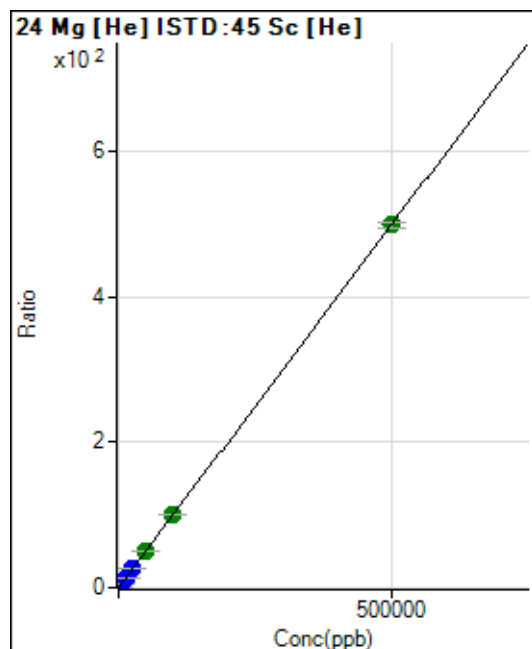
$$y = 0.0022 * x + 0.2345$$

$$R = 1.0000$$

$$DL = 13.65$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	247.24	0.0069	P	17.3
2	☐	50.000	52.345	2158.59	0.0592	P	7.0
3	☐	500.000	479.303	17761.84	0.4856	P	3.6
4	☐	5000.000	5007.068	177427.80	5.0070	P	1.6
5	☐	12500.000	12821.648	430641.71	12.8108	P	1.1
6	☐	25000.000	25800.966	812949.72	25.7720	P	1.6
7	☐	50000.000	50712.453	1561029.32	50.6489	A	2.0
8	☐	100000.00	99949.550	3021216.82	99.8176	A	0.9
9	☐	500000.00	499890.70	15551897.74	499.2030	A	1.4

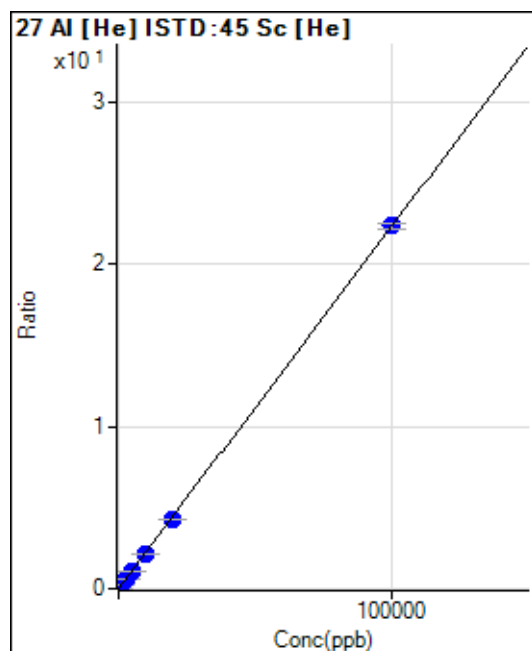
$$y = 9.9861\text{E-}004 * x + 0.0069$$

$$R = 1.0000$$

$$DL = 3.598$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	21.67	0.0006	P	56.6
2	☐	2.000	1.686	35.84	0.0010	P	15.8
3	☐	20.000	18.153	170.04	0.0047	P	15.2
4	☐	1000.000	981.995	7777.50	0.2195	P	2.1
5	☐	2500.000	2447.157	18356.54	0.5461	P	0.8
6	☐	5000.000	4989.491	35100.28	1.1127	P	1.5
7	☐	10000.000	9668.124	66444.54	2.1555	P	1.2
8	☐	20000.000	19152.165	129222.31	4.2695	P	1.3
9	☐	100000.00	100204.78	695827.52	22.3354	P	1.4

$$y = 2.2289\text{E-}004 * x + 6.0677\text{E-}004$$

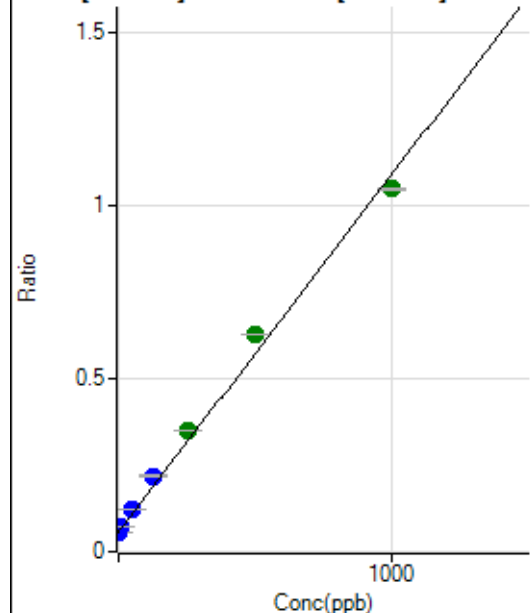
$$R = 1.0000$$

$$DL = 4.621$$

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	232708.20	0.0567	P	0.6
2	☐	1.000	0.793	232984.85	0.0575	P	1.3
3	☐	10.000	14.341	293240.00	0.0715	P	1.5
4	☐	50.000	63.217	498160.27	0.1219	P	2.4
5	☐	125.000	157.166	887512.75	0.2189	P	2.6
6	☐	250.000	284.516	1392366.46	0.3503	A	0.9
7	☐	500.000	552.224	2414257.28	0.6265	A	0.5
8	☐	1000.000	960.534	3970221.31	1.0478	A	0.3
9	☐			309301.00	0.0832	P	1.5

$$y = 0.0010 * x + 0.0567$$

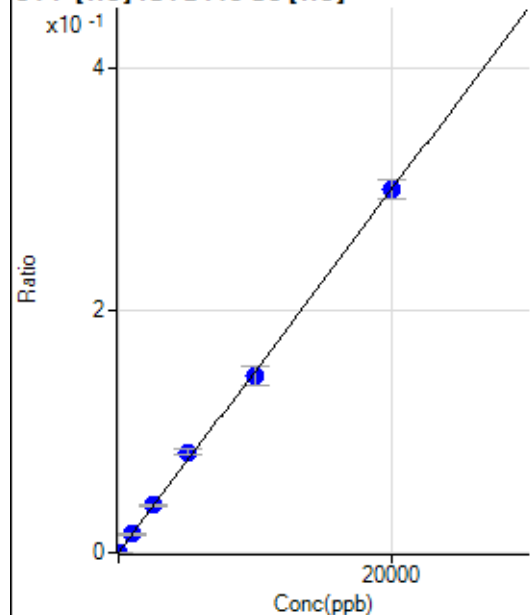
$$R = 0.9970$$

$$DL = 0.9215$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.151	5.55	0.0002	P	86.6
2	☐	0.000	5.024	8.33	0.0002	P	0.6
3	☐	0.000	-5.176	2.78	0.0001	P	173.
4	☐	1000.000	1010.323	541.70	0.0153	P	9.8
5	☐	2500.000	2607.073	1316.78	0.0392	P	6.4
6	☐	5000.000	5543.134	2622.59	0.0832	P	6.2
7	☐	10000.000	9728.716	4489.80	0.1458	P	10.3
8	☐	20000.000	19985.959	9064.37	0.2994	P	5.3
9	☐			2.78	0.0001	P	173.

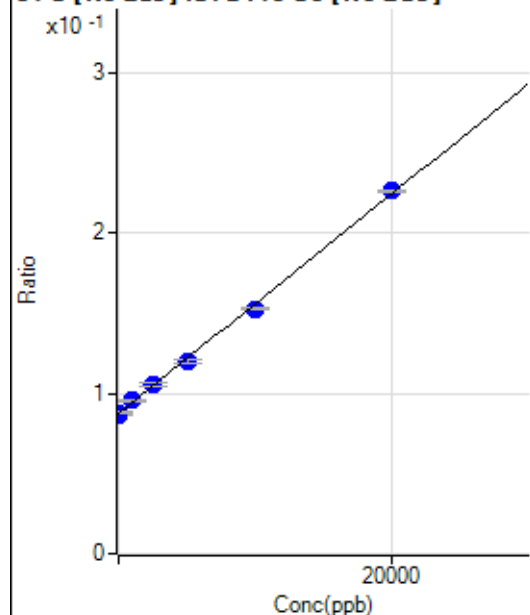
$$y = 1.4975E-005 * x + 1.5320E-004$$

$$R = 0.9995$$

$$DL = 17.83$$

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	-105.025	356428.30	0.0869	P	0.4
2	☐	0.000	83.098	357009.70	0.0882	P	1.0
3	☐	0.000	21.927	359769.58	0.0877	P	1.6
4	☐	1000.000	1197.353	391356.15	0.0958	P	1.6
5	☐	2500.000	2650.166	428811.08	0.1057	P	1.9
6	☐	5000.000	4804.121	478946.19	0.1205	P	2.1
7	☐	10000.000	9532.147	589201.47	0.1529	P	0.8
8	☐	20000.000	20254.258	857749.64	0.2264	P	0.4
9	☐			304095.64	0.0818	P	1.1

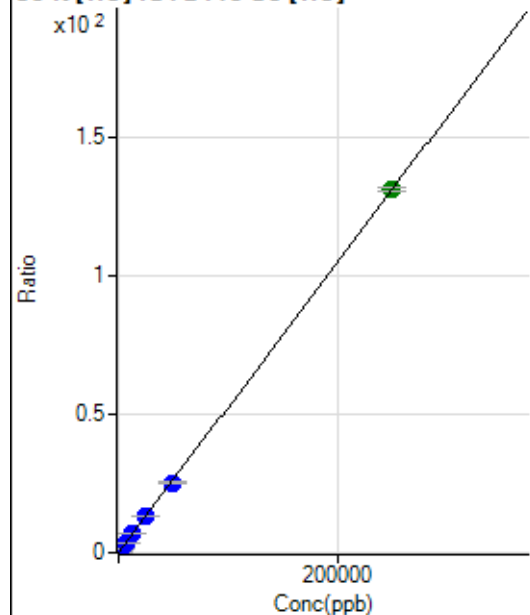
$$y = 6.8525E-006 * x + 0.0876$$

$$R = 0.9994$$

$$DL = 373.9$$

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	3067.15	0.0860	P	4.8
2	☐	50.000	45.209	3997.97	0.1096	P	3.3
3	☐	500.000	510.035	12892.52	0.3524	P	0.3
4	☐	2500.000	2513.583	49563.35	1.3986	P	1.4
5	☐	6250.000	6304.315	113560.96	3.3780	P	0.5
6	☐	12500.000	12702.405	211961.93	6.7190	P	0.7
7	☐	25000.000	24635.847	399159.21	12.9504	P	1.7
8	☐	50000.000	48115.229	763053.79	25.2110	P	1.2
9	☐	250000.00	250401.73	4076324.48	130.8414	A	1.2

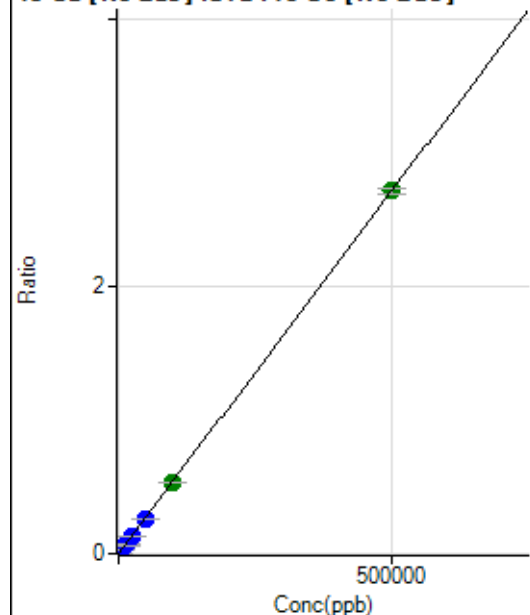
$$y = 5.2218E-004 * x + 0.0860$$

$$R = 1.0000$$

$$DL = 23.59$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	433.36	0.0001	P	2.2
2	☐	50.000	45.214	1419.58	0.0004	P	3.8
3	☐	500.000	465.318	10760.06	0.0026	P	7.9
4	☐	5000.000	4792.048	106434.65	0.0261	P	2.1
5	☐	12500.000	12007.332	264052.95	0.0651	P	2.4
6	☐	25000.000	24111.893	519327.25	0.1307	P	1.7
7	☐	50000.000	48157.163	1005126.47	0.2609	P	1.6
8	☐	100000.00	98013.864	2011253.71	0.5308	A	1.0
9	☐	500000.00	500640.34	10077571.41	2.7109	A	1.3

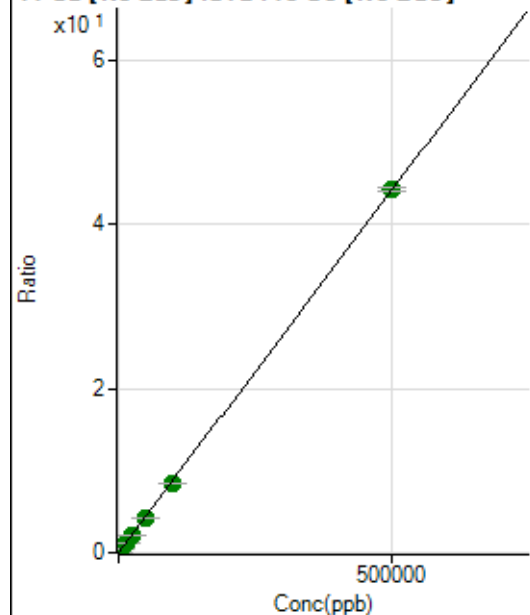
$$y = 5.4146\text{E-}006 * x + 1.0562\text{E-}004$$

$$R = 1.0000$$

$$DL = 1.312$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11435.74	0.0028	P	4.0
2	☐	50.000	47.800	28340.76	0.0070	P	2.8
3	☐	500.000	466.397	179973.18	0.0439	P	0.9
4	☐	5000.000	4879.453	1768096.72	0.4328	A	1.7
5	☐	12500.000	12112.216	4339784.69	1.0701	A	1.7
6	☐	25000.000	24030.435	8427047.06	2.1204	A	2.2
7	☐	50000.000	48139.495	16356408.87	4.2449	A	1.6
8	☐	100000.00	96295.285	32162876.07	8.4885	A	0.1
9	☐	500000.00	500986.40	164131274.5	44.1506	A	1.1

$$y = 8.8122\text{E-}005 * x + 0.0028$$

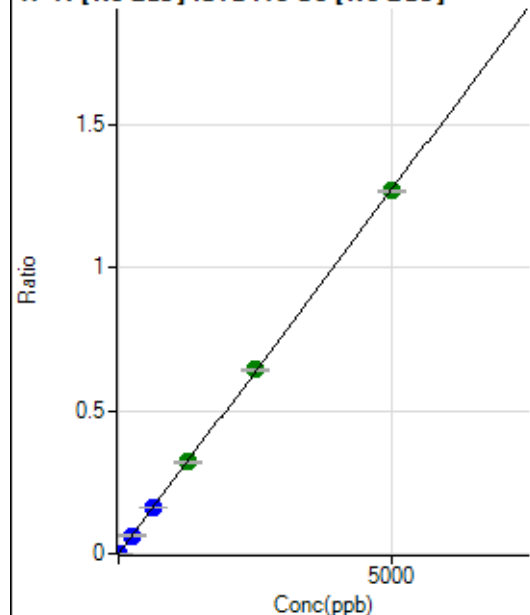
$$R = 1.0000$$

$$DL = 3.77$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	20.1
2	☐	0.500	0.469	605.60	0.0001	P	6.0
3	☐	5.000	4.837	5167.85	0.0013	P	4.4
4	☐	250.000	249.536	259344.21	0.0635	P	1.3
5	☐	625.000	626.809	646399.34	0.1594	P	1.7
6	☐	1250.000	1264.137	1277566.42	0.3214	A	1.8
7	☐	2500.000	2524.010	2472846.43	0.6418	A	1.8
8	☐	5000.000	4984.258	4801810.48	1.2673	A	0.3
9	☐			1033.42	0.0003	P	4.6

$$y = 2.5425\text{E-}004 * x + 3.0469\text{E-}005$$

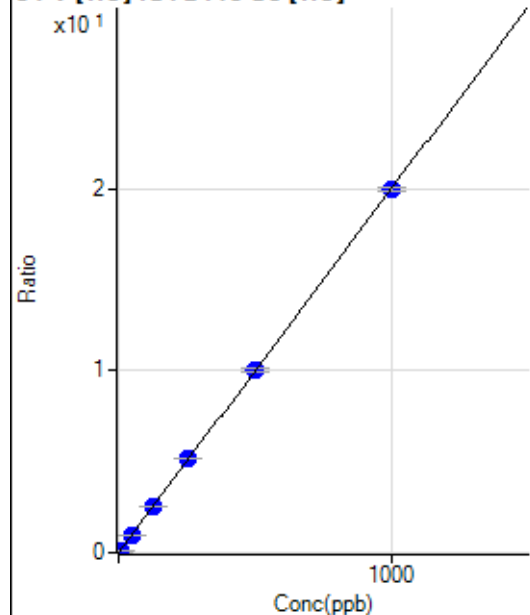
$$R = 1.0000$$

$$DL = 0.07227$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0003	P	56.7
2	☐	0.500	0.427	321.12	0.0088	P	11.1
3	☐	5.000	4.753	3483.83	0.0953	P	7.2
4	☐	50.000	49.757	35249.93	0.9947	P	1.0
5	☐	125.000	126.222	84819.34	2.5230	P	0.4
6	☐	250.000	258.468	162972.20	5.1662	P	0.7
7	☐	500.000	502.728	309669.73	10.0481	P	2.3
8	☐	1000.000	996.380	602748.82	19.9145	P	1.2
9	☐			348.90	0.0112	P	10.4

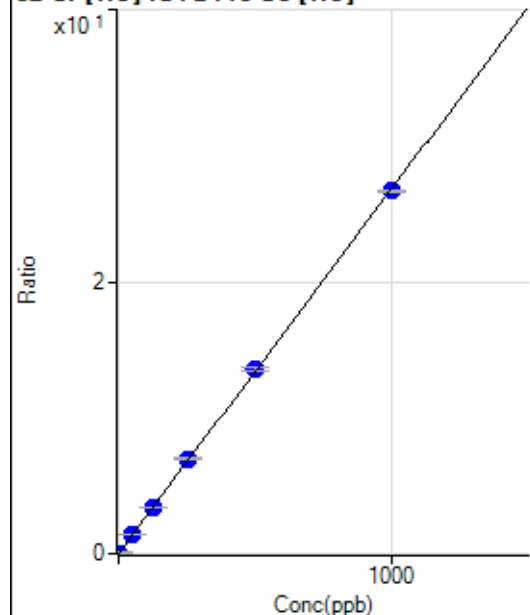
$$y = 0.0200 * x + 2.7969\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.02379$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	555.58	0.0156	P	7.4
2	☐	0.200	0.179	743.36	0.0204	P	4.0
3	☐	2.000	2.046	2578.06	0.0704	P	3.4
4	☐	50.000	50.874	48878.45	1.3793	P	1.1
5	☐	125.000	127.677	115569.77	3.4381	P	1.4
6	☐	250.000	259.203	219667.24	6.9638	P	1.6
7	☐	500.000	504.601	417333.71	13.5420	P	2.5
8	☐	1000.000	995.021	807803.09	26.6883	P	0.7
9	☐			38520.77	1.2365	P	1.6

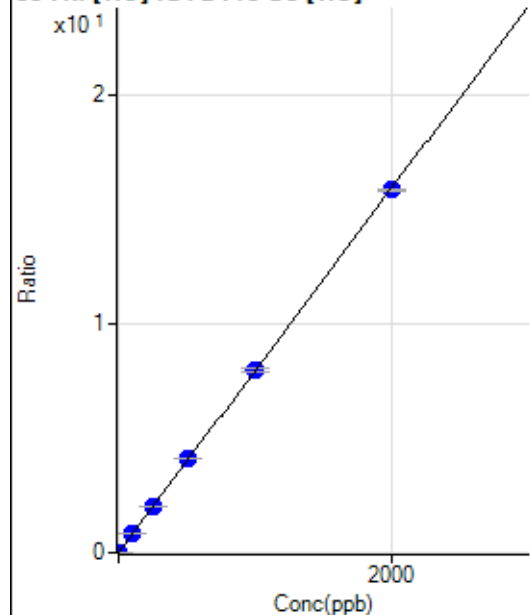
$$y = 0.0268 * x + 0.0156$$

$$R = 0.9999$$

$$DL = 0.1295$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0014	P	20.2
2	☐	0.100	0.100	80.00	0.0022	P	4.7
3	☐	1.000	0.985	337.79	0.0092	P	6.5
4	☐	100.000	102.158	28818.75	0.8133	P	1.4
5	☐	250.000	256.776	68646.72	2.0420	P	0.8
6	☐	500.000	518.731	130088.73	4.1238	P	0.8
7	☐	1000.000	1005.077	246215.45	7.9889	P	2.1
8	☐	2000.000	1991.824	479160.15	15.8306	P	0.8
9	☐			2997.04	0.0962	P	3.5

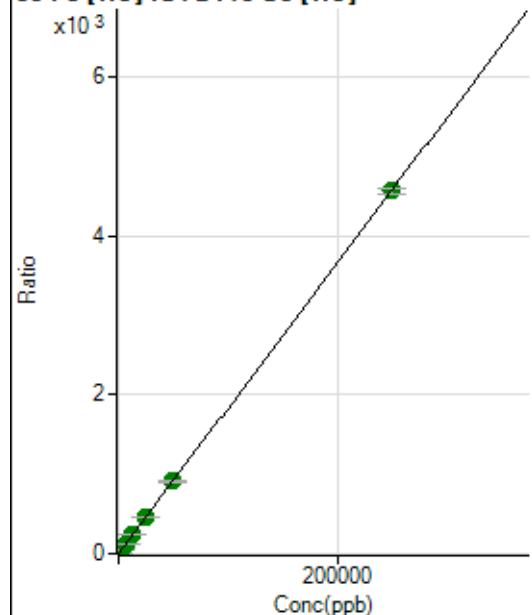
$$y = 0.0079 * x + 0.0014$$

$$R = 0.9999$$

$$DL = 0.107$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1370.48	0.0385	P	5.5
2	☐	5.000	4.707	4536.06	0.1244	P	6.1
3	☐	50.000	50.091	34869.95	0.9532	P	2.2
4	☐	2500.000	2557.692	1656529.65	46.7472	A	1.3
5	☐	6250.000	6431.432	3949488.37	117.4898	A	1.0
6	☐	12500.000	12888.357	7426067.24	235.4067	A	1.0
7	☐	25000.000	25254.856	14215707.38	461.2448	A	2.0
8	☐	50000.000	49919.143	27593493.67	911.6662	A	1.1
9	☐	250000.00	249966.15	142205592.0	4,564.942	A	1.8

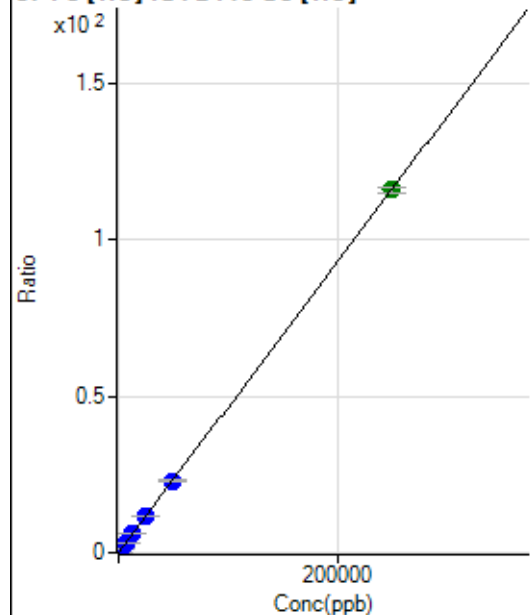
$$y = 0.0183 * x + 0.0385$$

$$R = 1.0000$$

$$DL = 0.3458$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0006	P	50.2
2	☐	5.000	4.790	103.71	0.0028	P	29.5
3	☐	50.000	54.441	946.36	0.0259	P	2.2
4	☐	2500.000	2489.993	40932.90	1.1552	P	2.3
5	☐	6250.000	6385.934	99560.83	2.9616	P	0.5
6	☐	12500.000	12900.389	188706.10	5.9821	P	1.2
7	☐	25000.000	25010.827	357442.91	11.5974	P	1.8
8	☐	50000.000	49614.368	696310.51	23.0053	P	1.0
9	☐	250000.00	250052.72	3612099.24	115.9424	A	1.5

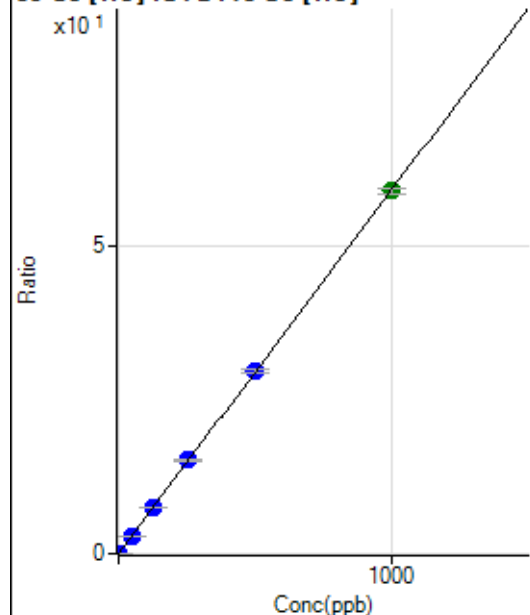
$$y = 4.6367E-004 * x + 6.2337E-004$$

$$R = 1.0000$$

$$DL = 2.026$$

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	70.00	0.0020	P	38.8
2	☐	0.100	0.082	247.79	0.0068	P	4.0
3	☐	1.000	0.956	2134.65	0.0584	P	3.4
4	☐	50.000	49.507	103565.18	2.9226	P	1.0
5	☐	125.000	126.639	251209.98	7.4729	P	1.0
6	☐	250.000	257.198	478694.15	15.1751	P	1.3
7	☐	500.000	500.131	909373.75	29.5068	P	2.2
8	☐	1000.000	997.955	1781953.13	58.8755	A	1.4
9	☐			23212.86	0.7450	P	2.0

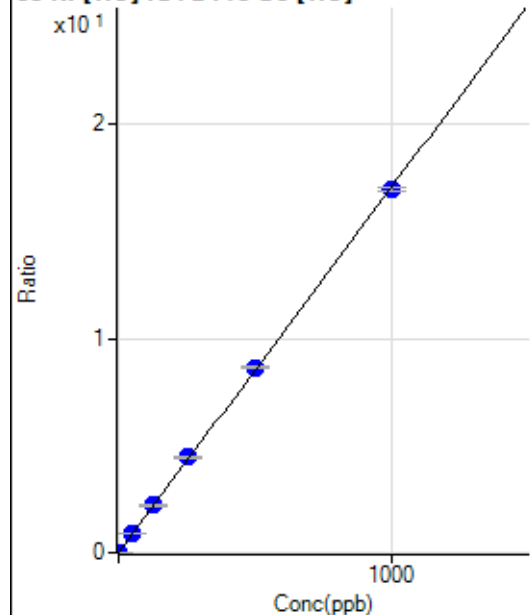
$$y = 0.0590 * x + 0.0020$$

$$R = 1.0000$$

$$DL = 0.03882$$

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	232.23	0.0065	P	11.6
2	☐	0.100	0.115	308.90	0.0085	P	1.0
3	☐	1.000	1.048	892.27	0.0244	P	12.5
4	☐	50.000	50.882	31008.06	0.8751	P	1.9
5	☐	125.000	129.081	74286.81	2.2099	P	1.1
6	☐	250.000	261.842	141196.48	4.4761	P	1.3
7	☐	500.000	507.090	266989.43	8.6624	P	1.7
8	☐	1000.000	992.940	513199.34	16.9557	P	1.1
9	☐			19498.33	0.6258	P	0.3

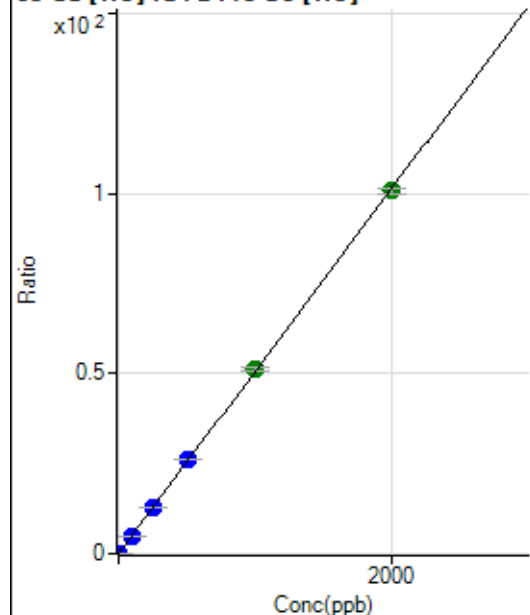
$$y = 0.0171 * x + 0.0065$$

$$R = 0.9999$$

$$DL = 0.1332$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	323.34	0.0091	P	9.6
2	☐	0.200	0.197	695.59	0.0191	P	7.0
3	☐	2.000	1.933	3916.18	0.1071	P	2.6
4	☐	100.000	98.691	177573.52	5.0111	P	1.0
5	☐	250.000	253.477	432156.36	12.8562	P	1.3
6	☐	500.000	516.829	826586.26	26.2038	P	1.4
7	☐	1000.000	1013.643	1583660.60	51.3842	A	2.1
8	☐	2000.000	1988.602	3050799.54	100.7987	A	1.5
9	☐			7113.06	0.2283	P	3.3

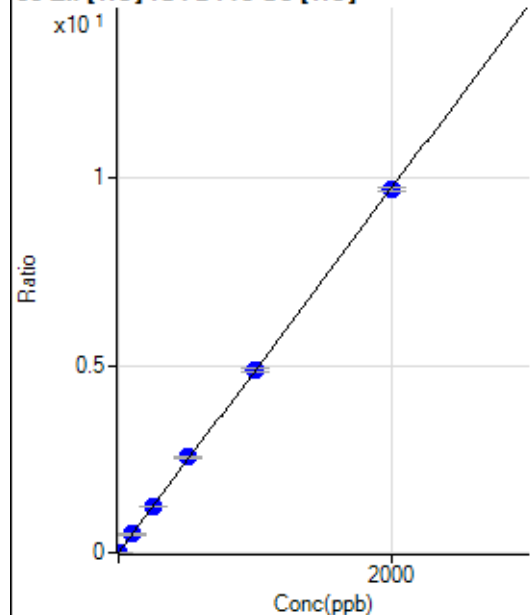
$$y = 0.0507 * x + 0.0091$$

$$R = 0.9999$$

$$DL = 0.05138$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	110.00	0.0031	P	18.1
2	☐	0.200	0.223	152.22	0.0042	P	30.3
3	☐	2.000	1.899	451.13	0.0123	P	4.3
4	☐	100.000	100.443	17438.96	0.4921	P	2.3
5	☐	250.000	255.740	41962.29	1.2483	P	1.2
6	☐	500.000	522.587	80358.81	2.5475	P	1.7
7	☐	1000.000	1006.078	151065.23	4.9016	P	2.2
8	☐	2000.000	1990.575	293443.23	9.6951	P	1.0
9	☐			2134.65	0.0686	P	5.9

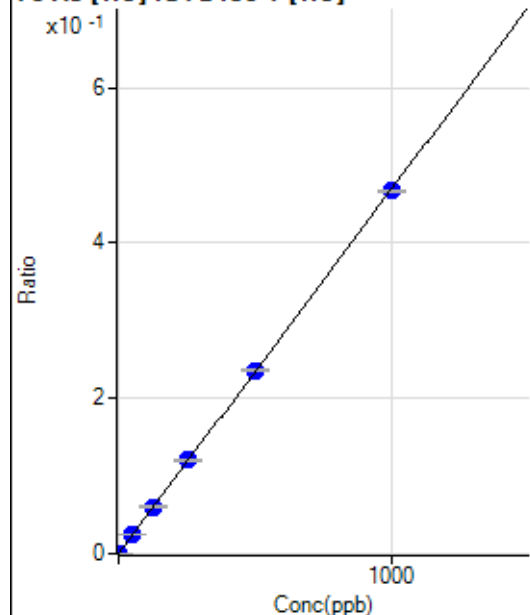
$$y = 0.0049 * x + 0.0031$$

$$R = 0.9999$$

$$DL = 0.3434$$

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	5.56	0.0000	P	33.5
2	☐	0.100	0.061	12.96	0.0001	P	24.7
3	☐	1.000	0.999	124.08	0.0005	P	9.5
4	☐	50.000	51.095	5957.52	0.0240	P	0.0
5	☐	125.000	128.541	14418.71	0.0603	P	1.3
6	☐	250.000	258.137	27798.98	0.1211	P	2.0
7	☐	500.000	503.684	53231.69	0.2363	P	1.5
8	☐	1000.000	995.627	104066.43	0.4670	P	0.3
9	☐			156.18	0.0007	P	23.0

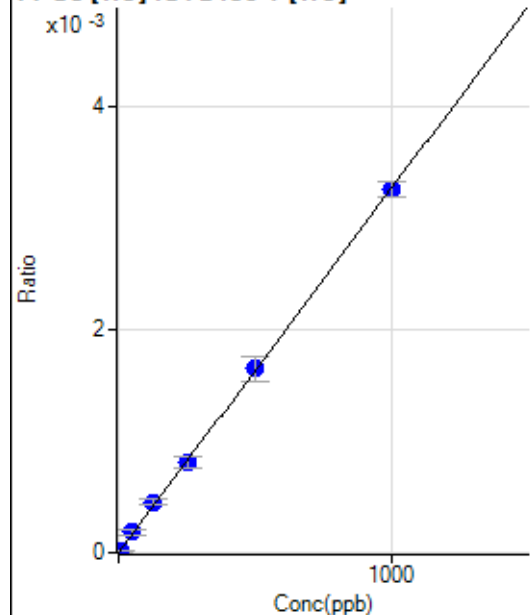
$$y = 4.6905\text{E-}004 * x + 2.2662\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.04856$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500	2.694	2.22	0.0000	P	173.
3	☐	5.000	5.367	4.45	0.0000	P	86.6
4	☐	50.000	56.044	45.55	0.0002	P	23.1
5	☐	125.000	137.722	107.78	0.0005	P	11.6
6	☐	250.000	248.804	186.67	0.0008	P	13.6
7	☐	500.000	505.414	372.23	0.0017	P	13.1
8	☐	1000.000	995.697	725.59	0.0033	P	4.4
9	☐			3.33	0.0000	P	100.

$$y = 3.2706\text{E-}006 * x + 0.0000\text{E+}000$$

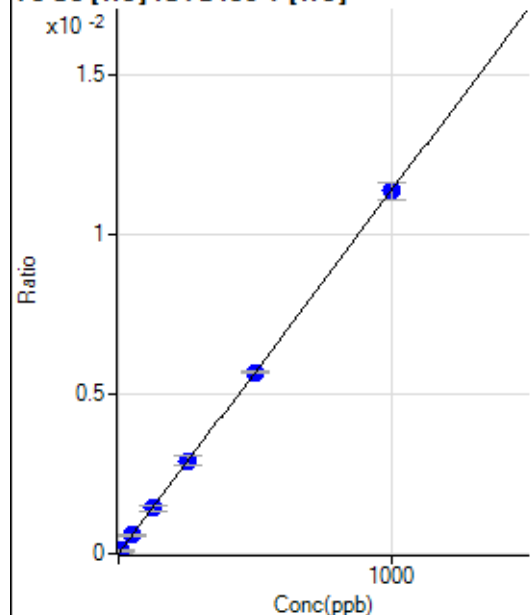
$$R = 0.9999$$

$$DL = 0$$

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	1.23	0.0000	P	86.6
2	☐	0.500	0.633	3.09	0.0000	P	173.
3	☐	5.000	7.918	24.07	0.0001	P	30.6
4	☐	50.000	51.030	145.68	0.0006	P	13.6
5	☐	125.000	124.313	339.51	0.0014	P	9.9
6	☐	250.000	255.147	667.92	0.0029	P	10.1
7	☐	500.000	499.800	1284.02	0.0057	P	1.9
8	☐	1000.000	998.833	2536.68	0.0114	P	4.7
9	☐			2.47	0.0000	P	43.3

$$y = 1.1392\text{E-}005 * x + 5.0213\text{E-}006$$

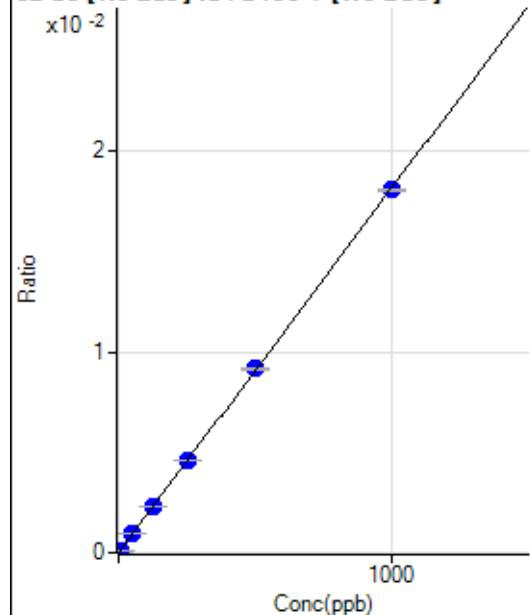
$$R = 1.0000$$

$$DL = 1.145$$

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	-21.07	0.0000	P	-32.
2	☐	0.500	0.587	54.32	0.0000	P	67.2
3	☐	5.000	5.123	644.60	0.0001	P	5.2
4	☐	50.000	51.491	6634.38	0.0009	P	0.7
5	☐	125.000	127.092	16489.96	0.0023	P	2.6
6	☐	250.000	255.021	33014.16	0.0046	P	0.6
7	☐	500.000	505.193	64690.33	0.0092	P	1.2
8	☐	1000.000	995.811	127323.22	0.0181	P	0.4
9	☐			114.16	0.0000	P	35.3

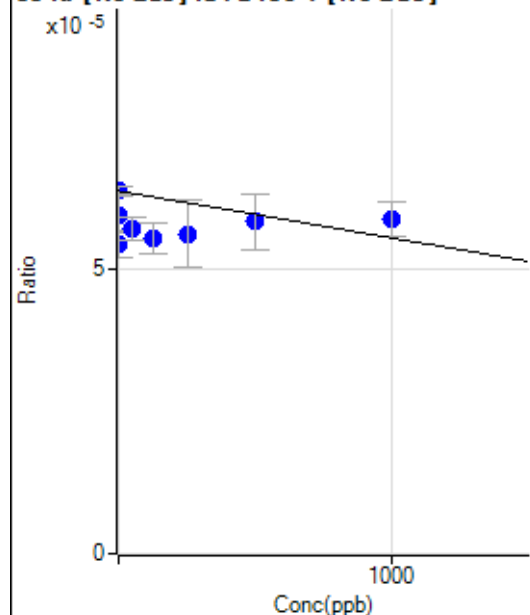
$$y = 1.8150\text{E-}005 * x - 2.9718\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.1605$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] ISTD:89 Y [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	451.13	0.0001	P	2.2
2	☐	0.100	510.797	422.24	0.0001	P	10.7
3	☐	1.000	1138.338	390.01	0.0001	P	9.0
4	☐	50.000	796.263	407.79	0.0001	P	7.1
5	☐	125.000	1008.238	397.80	0.0001	P	10.3
6	☐	250.000	922.806	401.13	0.0001	P	21.0
7	☐	500.000	654.666	412.24	0.0001	P	17.1
8	☐	1000.000	605.559	414.46	0.0001	P	10.0
9	☐			386.68	0.0001	P	7.5

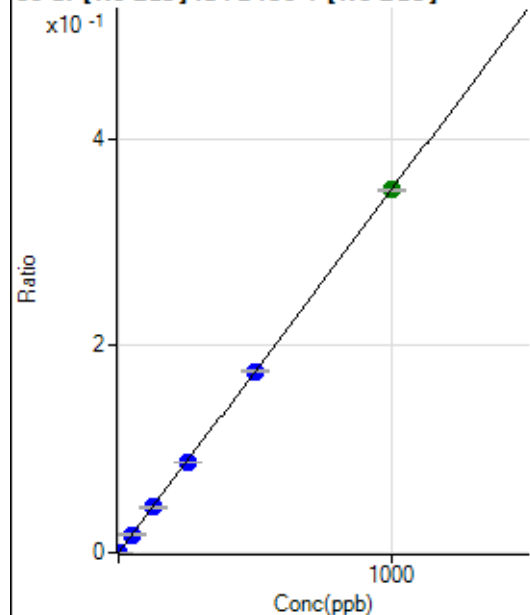
$$y = -8.2693\text{E-}009 * x + 6.3833\text{E-}005$$

$$R = 0.0303$$

$$DL = -509.7$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	697.27	0.0001	P	5.8
2	☐	0.100	0.095	933.41	0.0001	P	9.9
3	☐	1.000	0.981	3172.76	0.0004	P	6.8
4	☐	50.000	49.840	125242.44	0.0176	P	1.0
5	☐	125.000	124.698	313866.48	0.0439	P	2.5
6	☐	250.000	250.118	627027.51	0.0879	P	0.6
7	☐	500.000	500.295	1239467.33	0.1756	P	1.3
8	☐	1000.000	999.869	2472392.18	0.3509	A	0.5
9	☐			11157.83	0.0016	P	4.5

$$y = 3.5086\text{E-}004 * x + 9.8588\text{E-}005$$

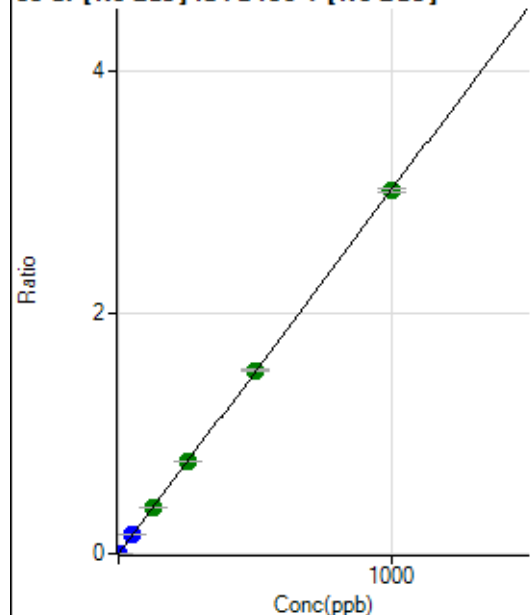
$$R = 1.0000$$

$$DL = 0.04871$$

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	158.34	0.0000	P	19.7
2	☐	0.100	0.096	2211.40	0.0003	P	2.3
3	☐	1.000	1.022	22260.81	0.0031	P	1.9
4	☐	50.000	50.527	1086452.10	0.1526	P	0.4
5	☐	125.000	126.791	2740254.27	0.3828	A	1.3
6	☐	250.000	253.644	5465126.64	0.7658	A	0.8
7	☐	500.000	503.686	10731468.56	1.5206	A	1.1
8	☐	1000.000	996.996	21206195.96	3.0099	A	0.9
9	☐			95262.35	0.0141	P	1.9

$$y = 0.0030 * x + 2.2439E-005$$

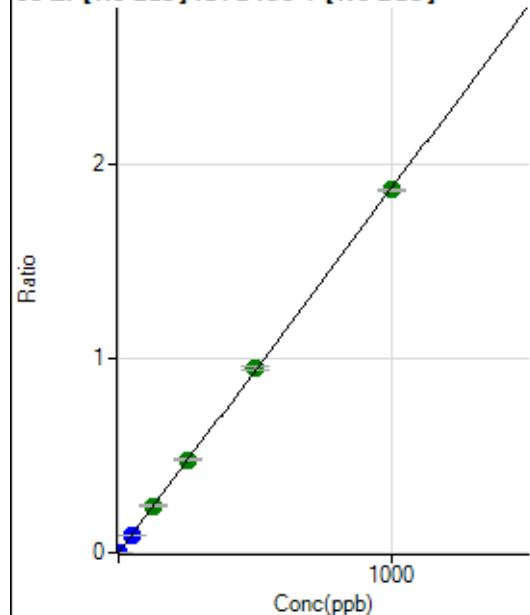
$$R = 1.0000$$

$$DL = 0.004384$$

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	608.38	0.0001	P	14.4
2	☐	0.100	0.086	1755.75	0.0002	P	5.1
3	☐	1.000	0.910	12848.28	0.0018	P	1.7
4	☐	50.000	49.795	665965.25	0.0935	P	0.8
5	☐	125.000	128.003	1719725.06	0.2403	A	2.2
6	☐	250.000	255.101	3416650.16	0.4787	A	1.2
7	☐	500.000	505.631	6695428.71	0.9488	A	2.0
8	☐	1000.000	995.544	13161283.63	1.8680	A	0.4
9	☐			3036.58	0.0004	P	3.9

$$y = 0.0019 * x + 8.5983E-005$$

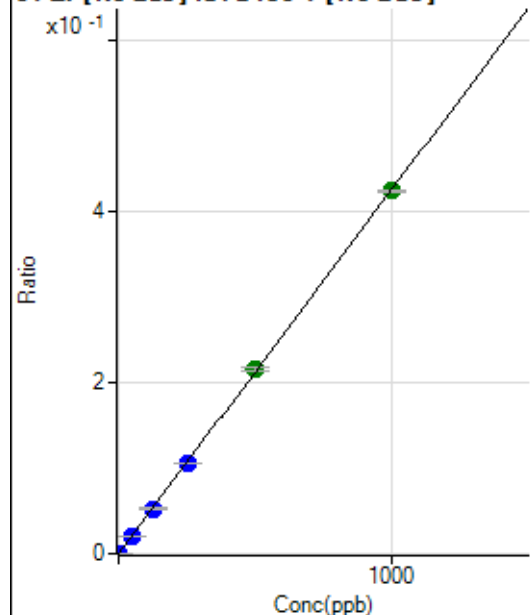
$$R = 1.0000$$

$$DL = 0.01982$$

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	183.34	0.0000	P	3.9
2	☐	0.100	0.069	391.69	0.0001	P	9.6
3	☐	1.000	0.839	2742.06	0.0004	P	3.0
4	☐	50.000	48.778	148033.14	0.0208	P	1.2
5	☐	125.000	123.770	377262.72	0.0527	P	2.1
6	☐	250.000	247.182	751032.51	0.1052	P	0.9
7	☐	500.000	507.081	1523210.81	0.2159	A	2.0
8	☐	1000.000	997.379	2991060.92	0.4245	A	0.7
9	☐			713.94	0.0001	P	6.8

$$y = 4.2562\text{E-}004 * x + 2.5934\text{E-}005$$

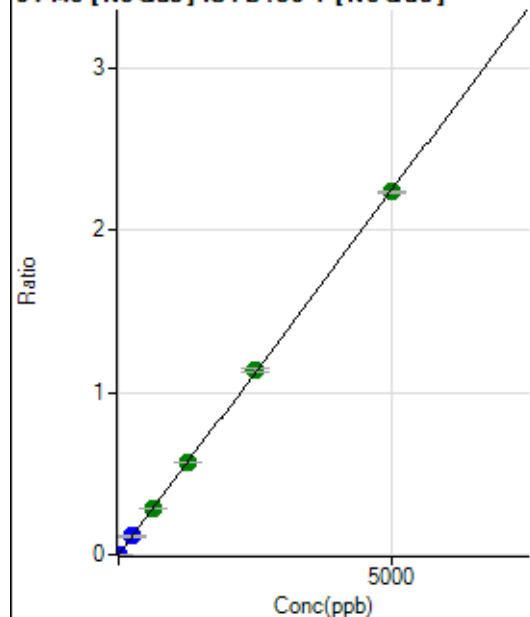
$$R = 1.0000$$

$$DL = 0.007177$$

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	302.79	0.0000	P	23.7
2	☐	0.500	0.509	1925.23	0.0003	P	12.3
3	☐	5.000	4.880	16023.96	0.0022	P	1.6
4	☐	250.000	250.811	803311.35	0.1128	P	0.5
5	☐	625.000	639.987	2059805.60	0.2878	A	2.0
6	☐	1250.000	1263.547	4054447.10	0.5681	A	1.0
7	☐	2500.000	2528.442	8022078.39	1.1368	A	1.5
8	☐	5000.000	4980.478	15775871.88	2.2391	A	0.5
9	☐			17996.03	0.0027	P	0.7

$$y = 4.4957\text{E-}004 * x + 4.2934\text{E-}005$$

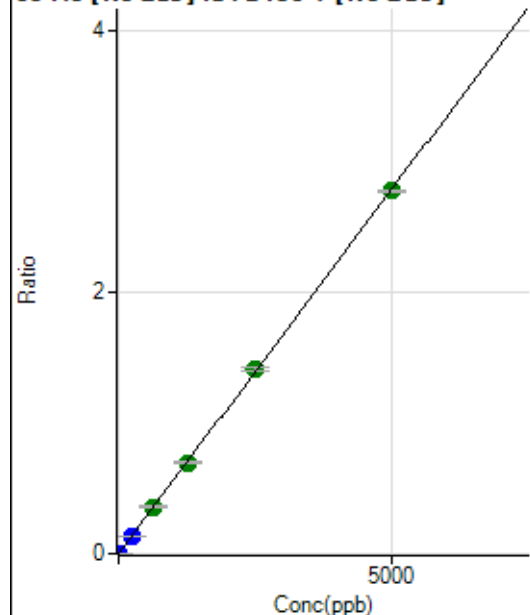
$$R = 1.0000$$

$$DL = 0.06793$$

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	116.67	0.0000	P	31.5
2	☐	0.500	0.486	2033.59	0.0003	P	4.9
3	☐	5.000	4.991	20021.12	0.0028	P	3.2
4	☐	250.000	249.822	990750.20	0.1391	P	0.1
5	☐	625.000	641.880	2558491.79	0.3574	A	2.1
6	☐	1250.000	1253.747	4982378.89	0.6981	A	1.0
7	☐	2500.000	2530.182	9942244.23	1.4088	A	1.6
8	☐	5000.000	4981.871	19544093.32	2.7740	A	0.3
9	☐			30009.06	0.0044	P	0.5

$$y = 5.5681\text{E-}004 * x + 1.6456\text{E-}005$$

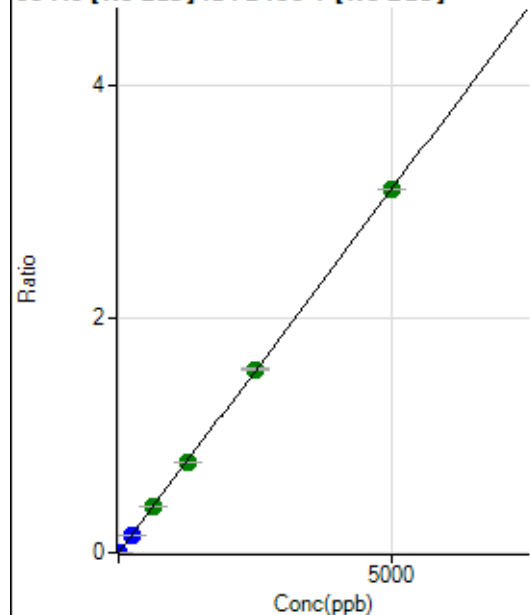
$$R = 1.0000$$

$$DL = 0.02794$$

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	169.45	0.0000	P	10.1
2	☐	0.500	0.473	2250.30	0.0003	P	3.0
3	☐	5.000	4.893	21960.11	0.0031	P	2.3
4	☐	250.000	248.360	1099529.47	0.1544	P	0.4
5	☐	625.000	632.366	2813438.89	0.3931	A	2.7
6	☐	1250.000	1252.400	5555912.80	0.7785	A	0.5
7	☐	2500.000	2513.652	11026361.10	1.5624	A	1.1
8	☐	5000.000	4991.735	21860285.56	3.1027	A	0.0
9	☐			34004.91	0.0050	P	2.6

$$y = 6.2156\text{E-}004 * x + 2.3972\text{E-}005$$

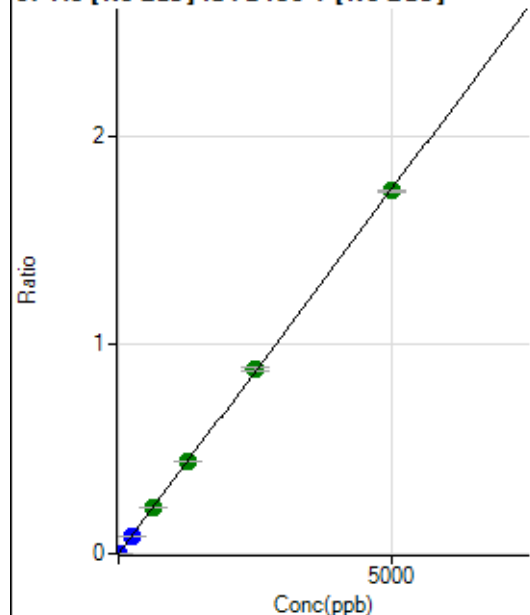
$$R = 1.0000$$

$$DL = 0.01166$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.01	0.0000	P	40.0
2	☐	0.500	0.531	1389.03	0.0002	P	5.4
3	☐	5.000	4.913	12361.70	0.0017	P	6.3
4	☐	250.000	246.246	612432.51	0.0860	P	0.4
5	☐	625.000	636.367	1590707.20	0.2222	A	1.8
6	☐	1250.000	1262.929	3147468.35	0.4410	A	1.1
7	☐	2500.000	2533.805	6244024.31	0.8848	A	1.6
8	☐	5000.000	4978.632	12248725.27	1.7385	A	0.6
9	☐			18560.61	0.0027	P	1.3

$$y = 3.4919\text{E-}004 * x + 1.0648\text{E-}005$$

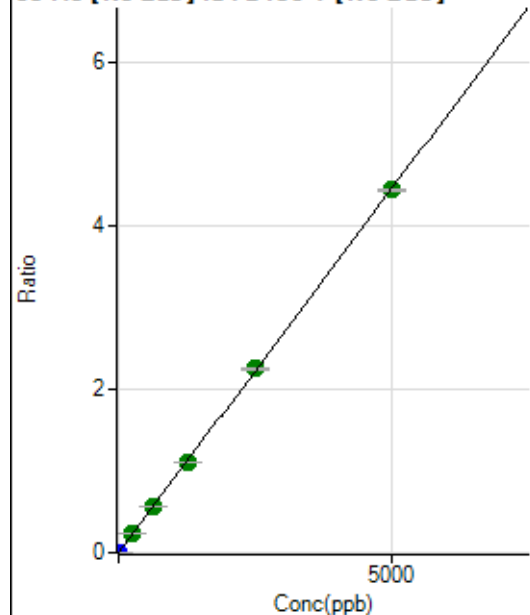
$$R = 1.0000$$

$$DL = 0.03656$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	180.57	0.0000	P	25.2
2	☐	0.500	0.485	3233.89	0.0005	P	2.3
3	☐	5.000	4.896	31370.66	0.0044	P	2.2
4	☐	250.000	252.522	1599395.84	0.2246	A	0.6
5	☐	625.000	628.812	4003023.75	0.5592	A	1.8
6	☐	1250.000	1243.615	7893188.37	1.1060	A	0.4
7	☐	2500.000	2526.584	15856559.90	2.2469	A	1.3
8	☐	5000.000	4987.702	31250650.00	4.4355	A	0.4
9	☐			47194.26	0.0070	P	1.7

$$y = 8.8929\text{E-}004 * x + 2.5537\text{E-}005$$

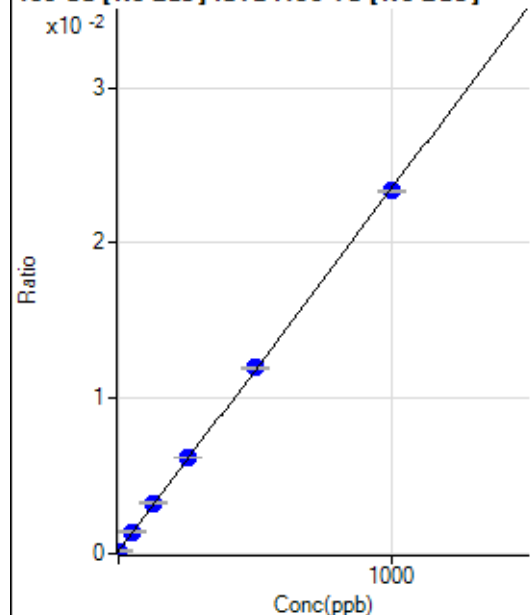
$$R = 1.0000$$

$$DL = 0.02173$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1308.46	0.0001	P	9.9
2	☐	0.100	0.374	1383.47	0.0002	P	8.2
3	☐	1.000	1.584	1655.74	0.0002	P	2.4
4	☐	50.000	53.381	12545.19	0.0014	P	4.2
5	☐	125.000	133.888	30271.25	0.0033	P	2.9
6	☐	250.000	259.647	58223.70	0.0062	P	0.7
7	☐	500.000	505.210	113614.92	0.0120	P	1.9
8	☐	1000.000	993.703	222480.59	0.0234	P	0.5
9	☐			1341.80	0.0001	P	5.2

$$y = 2.3363\text{E-}005 * x + 1.4798\text{E-}004$$

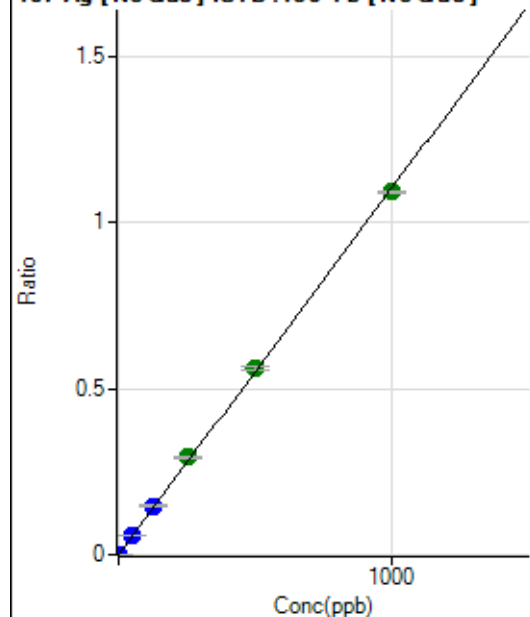
$$R = 0.9999$$

$$DL = 1.888$$

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	44.45	0.0000	P	28.0
2	☐	0.100	0.115	1161.22	0.0001	P	13.7
3	☐	1.000	1.046	10362.85	0.0012	P	3.5
4	☐	50.000	53.739	532652.47	0.0592	P	0.7
5	☐	125.000	132.914	1353482.27	0.1465	P	2.5
6	☐	250.000	265.495	2741188.24	0.2926	A	1.0
7	☐	500.000	508.258	5324348.60	0.5601	A	1.5
8	☐	1000.000	990.821	10396895.46	1.0918	A	0.2
9	☐			1197.33	0.0001	P	23.8

$$y = 0.0011 * x + 5.0195\text{E-}006$$

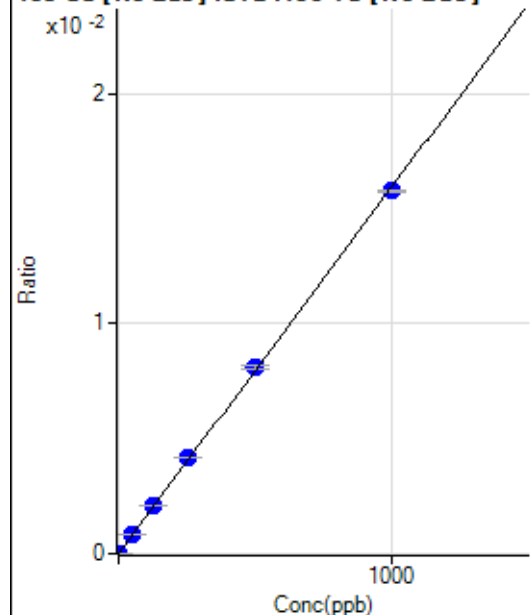
$$R = 0.9998$$

$$DL = 0.003827$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9.72	0.0000	P	49.8
2	☐	0.100	0.089	22.22	0.0000	P	27.8
3	☐	1.000	1.070	162.50	0.0000	P	7.1
4	☐	50.000	53.824	7724.59	0.0009	P	0.8
5	☐	125.000	131.659	19400.37	0.0021	P	2.0
6	☐	250.000	262.800	39247.56	0.0042	P	1.6
7	☐	500.000	510.624	77366.36	0.0081	P	1.8
8	☐	1000.000	990.465	150311.97	0.0158	P	0.8
9	☐			43.06	0.0000	P	5.5

$$y = 1.5936E-005 * x + 1.1014E-006$$

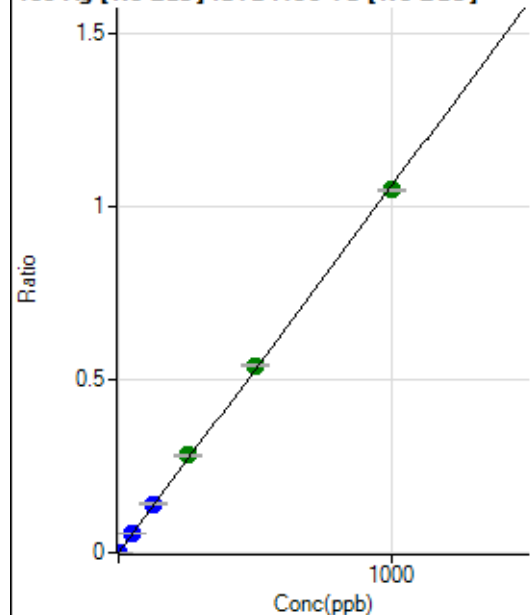
$$R = 0.9998$$

$$DL = 0.1032$$

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	41.67	0.0000	P	53.5
2	☐	0.100	0.109	1061.21	0.0001	P	8.0
3	☐	1.000	1.079	10279.45	0.0011	P	5.1
4	☐	50.000	53.609	511236.17	0.0568	P	0.5
5	☐	125.000	132.581	1298995.22	0.1406	P	2.1
6	☐	250.000	266.183	2644029.29	0.2822	A	1.6
7	☐	500.000	510.347	5143757.49	0.5411	A	1.1
8	☐	1000.000	989.653	9991145.10	1.0492	A	0.3
9	☐			1088.99	0.0001	P	11.0

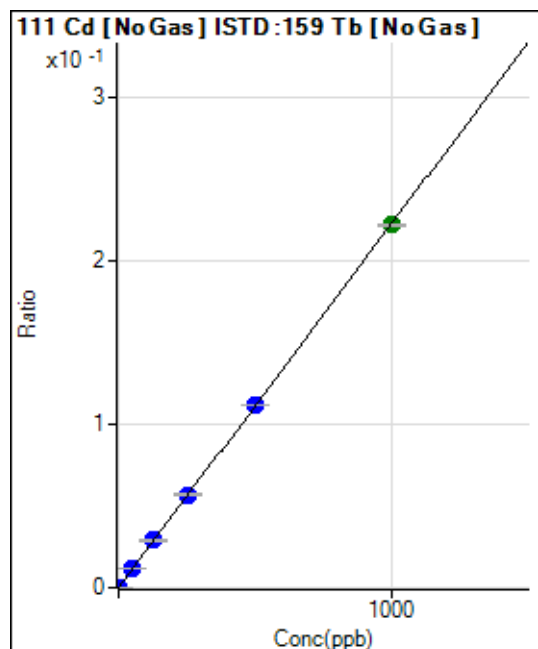
$$y = 0.0011 * x + 4.7203E-006$$

$$R = 0.9998$$

$$DL = 0.007144$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	655.76	0.0001	P	9.2
2	☐	0.100	0.129	908.13	0.0001	P	7.9
3	☐	1.000	1.085	2824.06	0.0003	P	1.0
4	☐	50.000	52.448	105582.39	0.0117	P	0.5
5	☐	125.000	130.072	268020.10	0.0290	P	2.3
6	☐	250.000	255.290	532680.20	0.0569	P	1.1
7	☐	500.000	501.542	1061163.96	0.1116	P	0.9
8	☐	1000.000	997.150	2112549.39	0.2218	A	0.6
9	☐			1001.88	0.0001	P	10.1

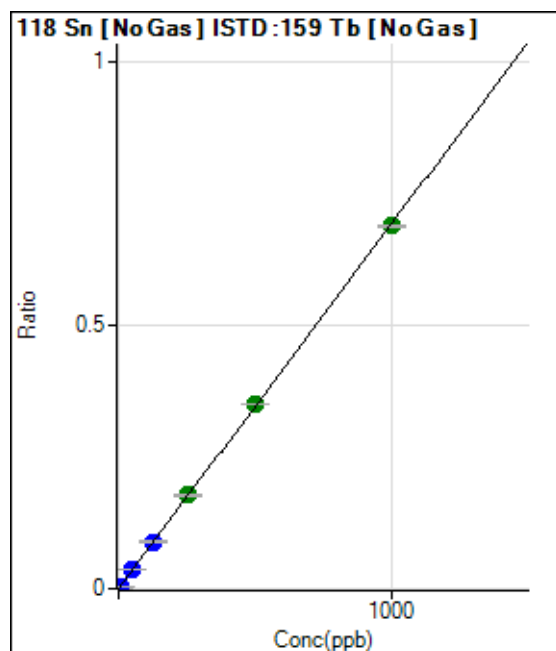
$$y = 2.2241\text{E-}004 * x + 7.4157\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.09194$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1402.93	0.0002	P	8.9
2	☐	0.500	0.453	4167.54	0.0005	P	5.6
3	☐	5.000	5.084	32871.86	0.0037	P	1.5
4	☐	50.000	52.026	324822.05	0.0361	P	1.1
5	☐	125.000	128.778	823959.19	0.0892	P	2.2
6	☐	250.000	256.601	1663042.91	0.1775	A	1.7
7	☐	500.000	506.162	3327230.39	0.3500	A	0.8
8	☐	1000.000	994.695	6547892.94	0.6876	A	0.7
9	☐			8483.63	0.0009	P	3.7

$$y = 6.9113\text{E-}004 * x + 1.5864\text{E-}004$$

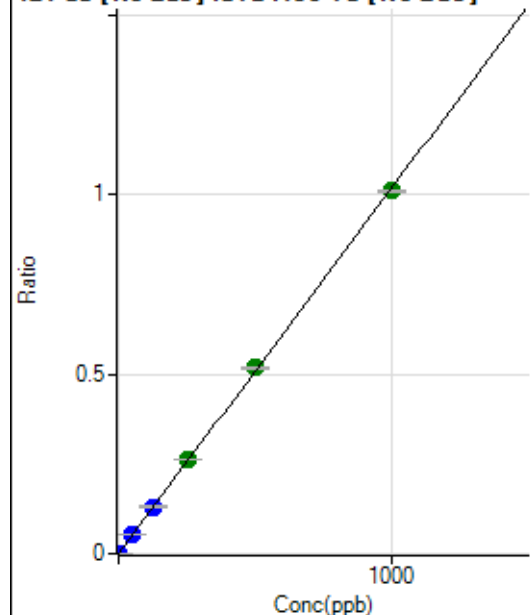
$$R = 0.9999$$

$$DL = 0.06154$$

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	150.01	0.0000	P	51.4
2	☐	0.200	0.201	1953.01	0.0002	P	7.3
3	☐	2.000	2.017	18513.65	0.0021	P	1.4
4	☐	50.000	51.250	468944.59	0.0521	P	1.7
5	☐	125.000	128.537	1208214.53	0.1307	P	2.5
6	☐	250.000	258.615	2464535.54	0.2630	A	1.4
7	☐	500.000	508.407	4915925.54	0.5171	A	1.2
8	☐	1000.000	993.138	9618711.85	1.0101	A	0.4
9	☐			24125.44	0.0026	P	3.6

$$y = 0.0010 * x + 1.6981E-005$$

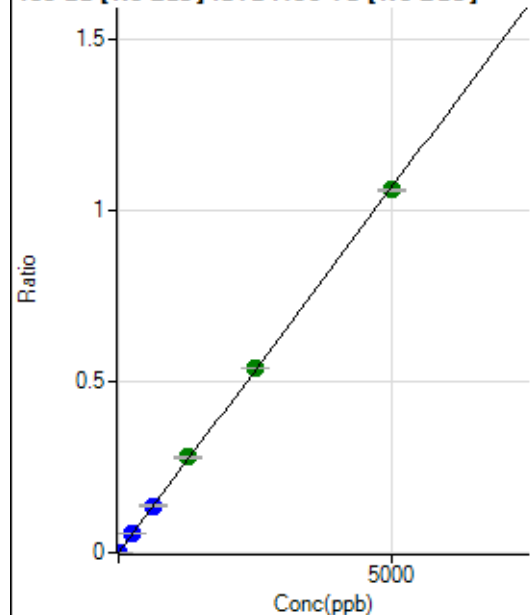
$$R = 0.9999$$

$$DL = 0.02575$$

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	33.33	0.0000	P	49.9
2	☐	1.000	1.080	2066.94	0.0002	P	6.3
3	☐	10.000	10.285	19673.64	0.0022	P	3.1
4	☐	250.000	260.124	499200.22	0.0555	P	1.8
5	☐	625.000	645.037	1271947.61	0.1376	P	1.9
6	☐	1250.000	1303.892	2606777.92	0.2782	A	0.6
7	☐	2500.000	2531.653	5135452.98	0.5402	A	0.6
8	☐	5000.000	4967.689	10093357.86	1.0599	A	0.3
9	☐			2897.67	0.0003	P	5.3

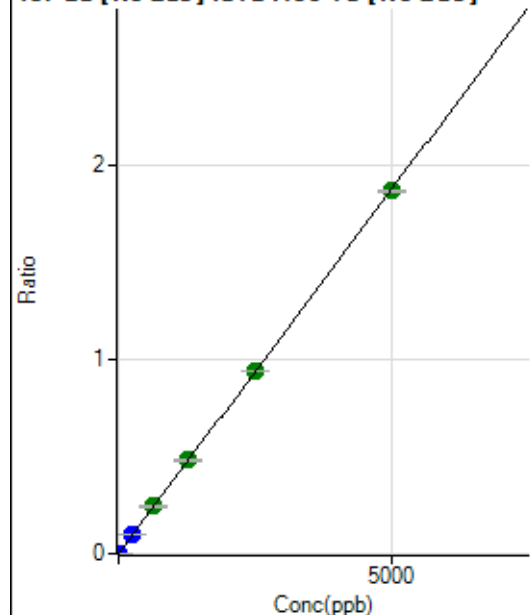
$$y = 2.1337E-004 * x + 3.7653E-006$$

$$R = 0.9999$$

$$DL = 0.02644$$

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	63.89	0.0000	P	7.0
2	☐	1.000	1.022	3442.28	0.0004	P	0.5
3	☐	10.000	10.207	34281.52	0.0038	P	0.2
4	☐	250.000	259.864	875396.77	0.0973	P	1.9
5	☐	625.000	650.541	2252000.16	0.2437	A	1.2
6	☐	1250.000	1285.680	4511790.81	0.4815	A	1.2
7	☐	2500.000	2511.979	8944706.71	0.9408	A	0.3
8	☐	5000.000	4981.404	17766446.05	1.8657	A	0.3
9	☐			5090.12	0.0006	P	9.1

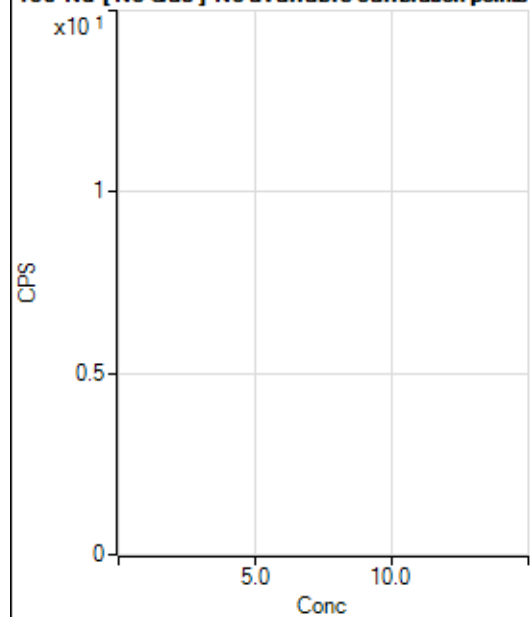
$$y = 3.7454\text{E-}004 * x + 7.2218\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.004078$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	50.0
2	☐			2.22		P	173.
3	☐			8.89		P	173.
4	☐			26.67		P	25.0
5	☐			60.00		P	33.3
6	☐			117.78		P	17.3
7	☐			231.12		P	19.2
8	☐			417.80		P	17.2
9	☐			86.67		P	15.4

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			1.11		P	173.
5	☐			4.44		P	114.
6	☐			1.11		P	173.
7	☐			8.89		P	78.1
8	☐			15.56		P	49.5
9	☐			11.11		P	86.6

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐			11.11		P	43.3
3	☐			25.00		P	33.3
4	☐			30.56		P	41.7
5	☐			41.67		P	40.0
6	☐			33.34		P	43.3
7	☐			100.01		P	44.1
8	☐			125.01		P	40.6
9	☐			102.78		P	16.9

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			0.00		P	
3	☐			2.22		P	86.6
4	☐			0.00		P	
5	☐			1.11		P	173.
6	☐			5.55		P	69.3
7	☐			6.67		P	50.0
8	☐			7.78		P	24.7
9	☐			20.00		P	33.4

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.11		P	13.3
2	☐			38.89		P	24.7
3	☐			47.23		P	56.7
4	☐			55.56		P	48.2
5	☐			69.45		P	50.0
6	☐			63.89		P	7.5
7	☐			77.78		P	34.4
8	☐			47.22		P	10.2
9	☐			105.56		P	24.1

160 Gd [He] No available calibration points

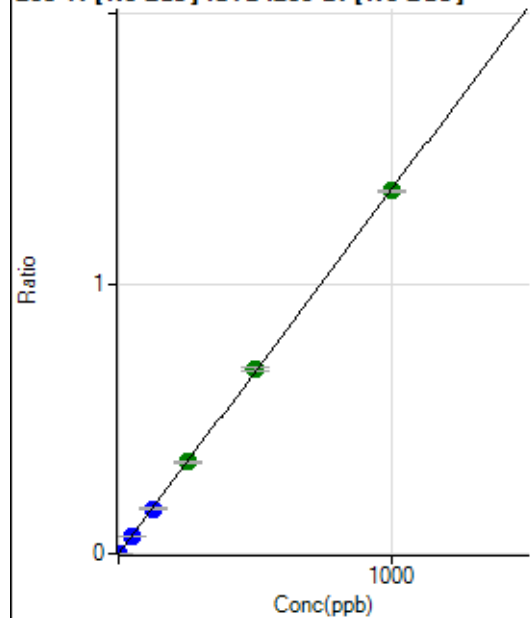
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	89.2
2	☐			6.66		P	86.6
3	☐			4.44		P	43.4
4	☐			8.89		P	78.1
5	☐			6.67		P	50.0
6	☐			12.22		P	15.7
7	☐			11.11		P	17.3
8	☐			24.45		P	55.1
9	☐			26.67		P	75.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	24.7
2	☐			52.78		P	32.9
3	☐			66.67		P	43.3
4	☐			38.89		P	12.4
5	☐			30.55		P	15.7
6	☐			36.11		P	53.3
7	☐			44.45		P	47.2
8	☐			50.00		P	60.1
9	☐			30.56		P	103.

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	43.4
2	☐			8.89		P	57.3
3	☐			7.78		P	107.
4	☐			7.78		P	65.5
5	☐			13.33		P	90.2
6	☐			6.67		P	100.
7	☐			4.45		P	86.6
8	☐			5.56		P	34.7
9	☐			12.22		P	56.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	83.34	0.0000	P	60.3
2	☐	0.100	0.097	833.40	0.0001	P	11.5
3	☐	1.000	0.946	7552.61	0.0013	P	3.0
4	☐	50.000	49.071	384751.94	0.0662	P	1.5
5	☐	125.000	123.593	998943.52	0.1666	P	2.1
6	☐	250.000	252.231	2076505.63	0.3401	A	1.3
7	☐	500.000	506.421	4231475.49	0.6827	A	2.6
8	☐	1000.000	996.454	8295845.76	1.3434	A	0.8
9	☐			3995.26	0.0007	P	2.8

$$y = 0.0013 * x + 1.4448E-005$$

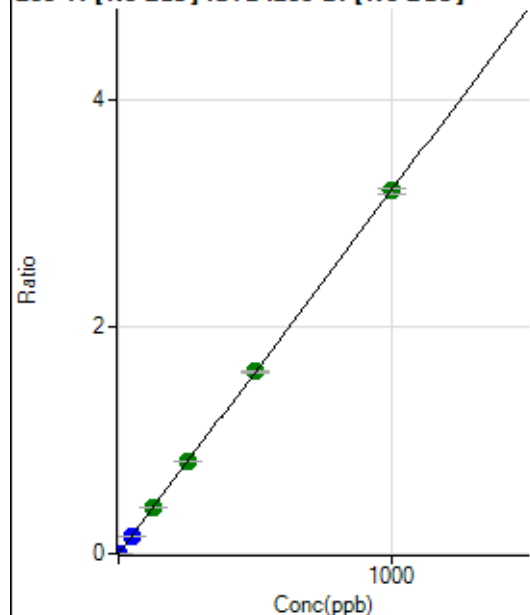
$$R = 1.0000$$

$$DL = 0.01937$$

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	150.01	0.0000	P	10.6
2	☐	0.100	0.108	2139.19	0.0004	P	7.1
3	☐	1.000	0.998	18848.00	0.0032	P	3.4
4	☐	50.000	49.610	923014.21	0.1587	P	1.4
5	☐	125.000	126.743	2431017.59	0.4055	A	1.8
6	☐	250.000	252.794	4938820.29	0.8088	A	0.7
7	☐	500.000	501.128	9937434.94	1.6032	A	1.4
8	☐	1000.000	998.540	19727061.73	3.1945	A	1.4
9	☐			9690.23	0.0017	P	5.8

$$y = 0.0032 * x + 2.6053E-005$$

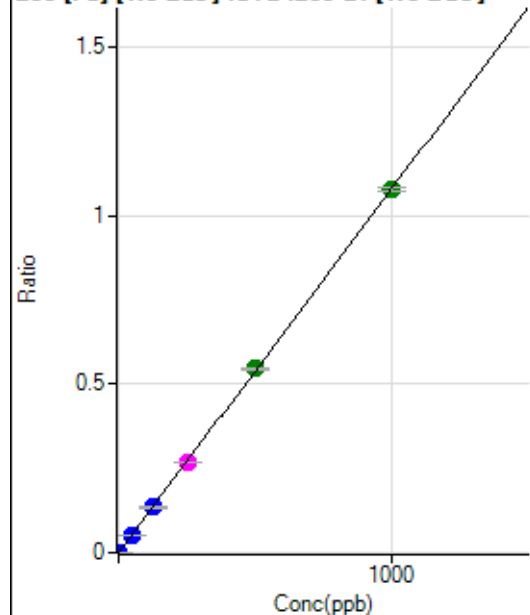
$$R = 1.0000$$

$$DL = 0.002584$$

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	400.02	0.0001	P	9.8
2	☐	0.100	0.092	972.30	0.0002	P	12.1
3	☐	1.000	0.978	6596.37	0.0011	P	2.5
4	☐	50.000	49.672	312435.76	0.0537	P	1.0
5	☐	125.000	124.387	805948.73	0.1344	P	2.1
6	☐	250.000	247.940	1636020.83	0.2679	M	0.8
7	☐	500.000	505.460	3384938.62	0.5461	A	1.4
8	☐	1000.000	997.878	6657311.08	1.0780	A	1.0
9	☐			7033.62	0.0012	P	1.0

$$y = 0.0011 * x + 6.9502E-005$$

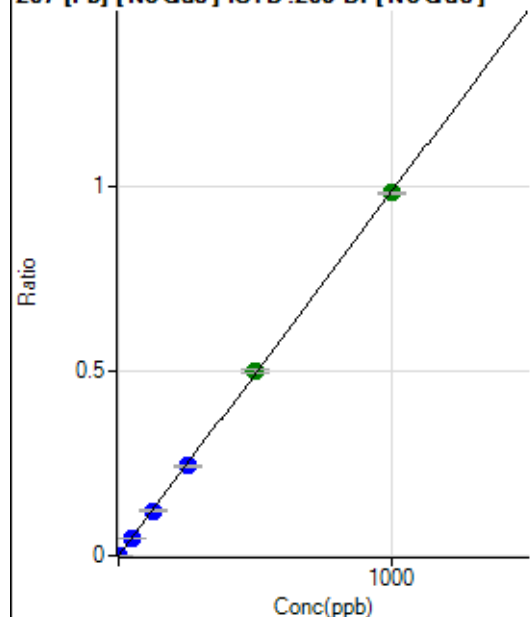
$$R = 1.0000$$

$$DL = 0.01886$$

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	312.98	0.0001	P	11.1
2	☐	0.100	0.096	857.47	0.0001	P	6.8
3	☐	1.000	0.991	6051.64	0.0010	P	2.3
4	☐	50.000	48.910	281183.88	0.0484	P	1.3
5	☐	125.000	123.431	731087.62	0.1220	P	2.2
6	☐	250.000	246.636	1487729.65	0.2436	P	0.8
7	☐	500.000	507.906	3109360.17	0.5017	A	1.7
8	☐	1000.000	997.139	6081846.43	0.9848	A	0.5
9	☐			5792.25	0.0010	P	4.5

$$y = 9.8758\text{E-}004 * x + 5.4393\text{E-}005$$

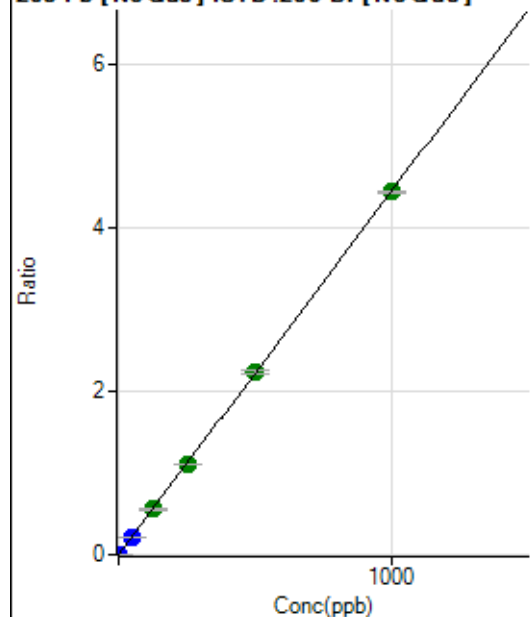
$$R = 1.0000$$

$$DL = 0.01828$$

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	1470.45	0.0003	P	3.2
2	☐	0.100	0.096	3913.34	0.0007	P	3.1
3	☐	1.000	0.980	26982.45	0.0046	P	1.4
4	☐	50.000	49.124	1270100.77	0.2184	P	1.1
5	☐	125.000	125.481	3342356.32	0.5575	A	2.2
6	☐	250.000	249.716	6773945.24	1.1093	A	0.8
7	☐	500.000	503.622	13865115.16	2.2369	A	1.5
8	☐	1000.000	998.244	27379907.26	4.4336	A	0.5
9	☐			27175.12	0.0048	P	1.6

$$y = 0.0044 * x + 2.5549\text{E-}004$$

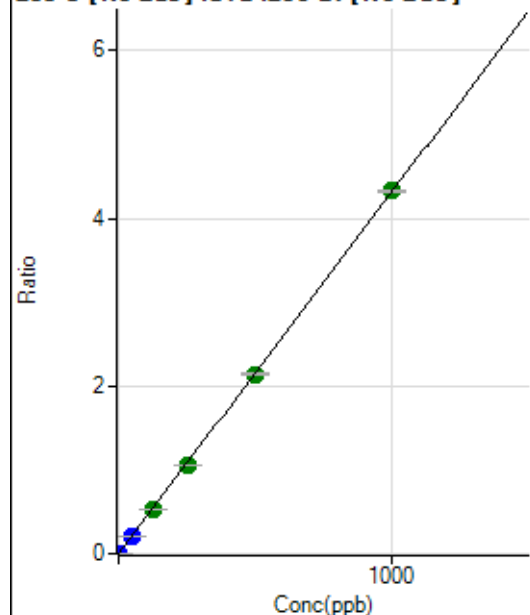
$$R = 1.0000$$

$$DL = 0.005521$$

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	41.67	0.0000	P	19.6
2	☐	0.100	0.096	2417.03	0.0004	P	3.4
3	☐	1.000	0.957	24210.58	0.0041	P	1.3
4	☐	50.000	47.272	1184670.35	0.2037	P	2.0
5	☐	125.000	122.256	3158000.22	0.5269	A	3.5
6	☐	250.000	245.603	6463375.62	1.0585	A	1.4
7	☐	500.000	495.550	13237831.63	2.1356	A	1.1
8	☐	1000.000	1003.804	26715701.29	4.3260	A	0.7
9	☐			4556.61	0.0008	P	2.3

$$y = 0.0043 * x + 7.2359E-006$$

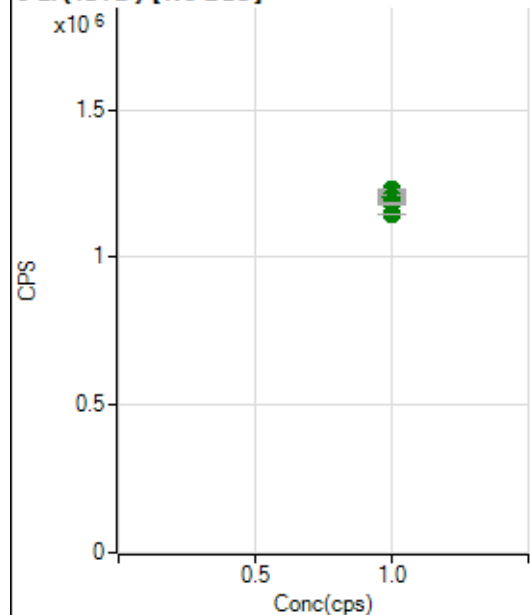
$$R = 1.0000$$

$$DL = 0.0009881$$

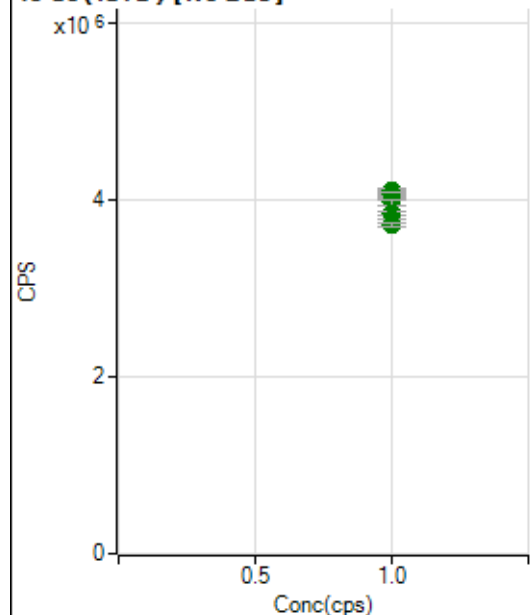
Weight: <None>

Min Conc: 0

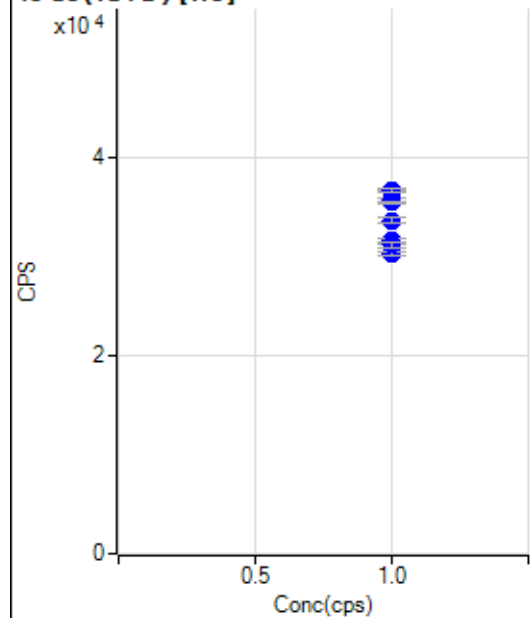
6 Li (ISTD) [No Gas]



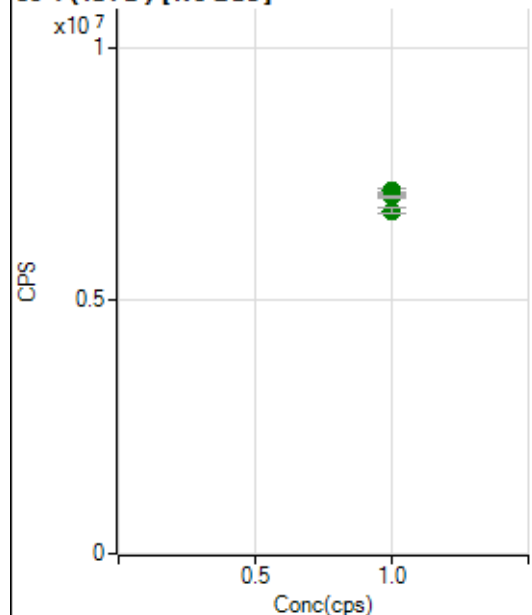
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1205638.57		A	0.2
2	☐	1.000		1195651.26		A	0.5
3	☐	1.000		1206475.53		A	0.4
4	☐	1.000		1209787.01		A	1.2
5	☐	1.000		1219888.24		A	0.7
6	☐	1.000		1228908.89		A	0.8
7	☐	1.000		1204849.25		A	1.0
8	☐	1.000		1184261.93		A	0.7
9	☐	1.000		1144611.78		A	0.1

45 Sc (ISTD) [No Gas]

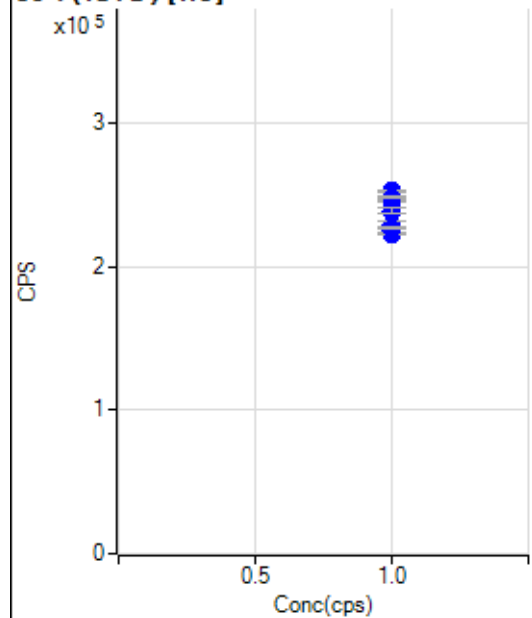
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4103164.37		A	0.3
2	☐	1.000		4050189.72		A	1.7
3	☐	1.000		4101137.37		A	1.3
4	☐	1.000		4086296.23		A	1.8
5	☐	1.000		4056085.90		A	2.0
6	☐	1.000		3975163.37		A	1.5
7	☐	1.000		3853544.19		A	1.0
8	☐	1.000		3788995.61		A	0.2
9	☐	1.000		3717701.08		A	0.9

45 Sc (ISTD) [He]

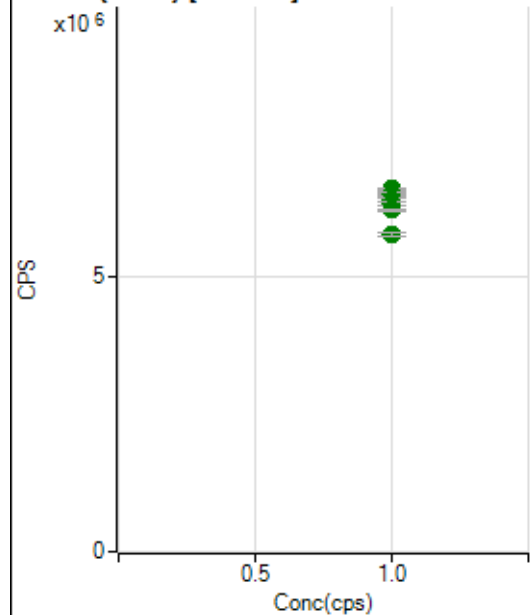
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		35638.55		P	1.0
2	☐	1.000		36466.26		P	0.6
3	☐	1.000		36587.69		P	1.2
4	☐	1.000		35436.99		P	0.4
5	☐	1.000		33619.24		P	1.6
6	☐	1.000		31547.76		P	1.1
7	☐	1.000		30829.57		P	2.3
8	☐	1.000		30269.38		P	1.0
9	☐	1.000		31158.05		P	1.8

89 Y (ISTD) [No Gas]

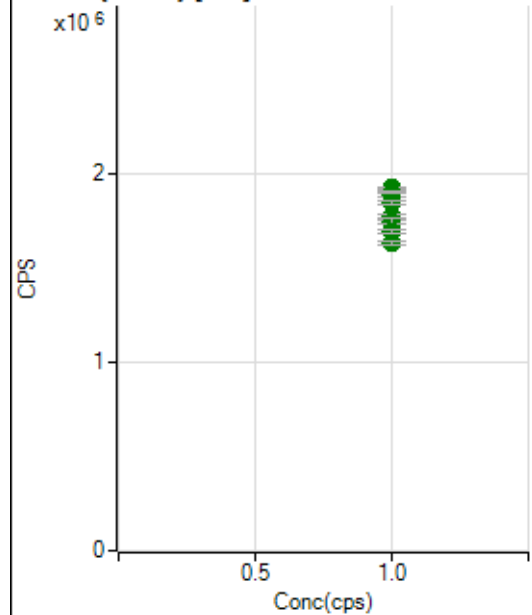
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7068742.53		A	1.4
2	☐	1.000		7083449.27		A	0.5
3	☐	1.000		7163069.06		A	0.9
4	☐	1.000		7121555.80		A	0.5
5	☐	1.000		7159705.38		A	1.8
6	☐	1.000		7137012.81		A	0.2
7	☐	1.000		7057802.05		A	1.1
8	☐	1.000		7045547.32		A	0.1
9	☐	1.000		6767509.90		A	1.5

89 Y (ISTD) [He]

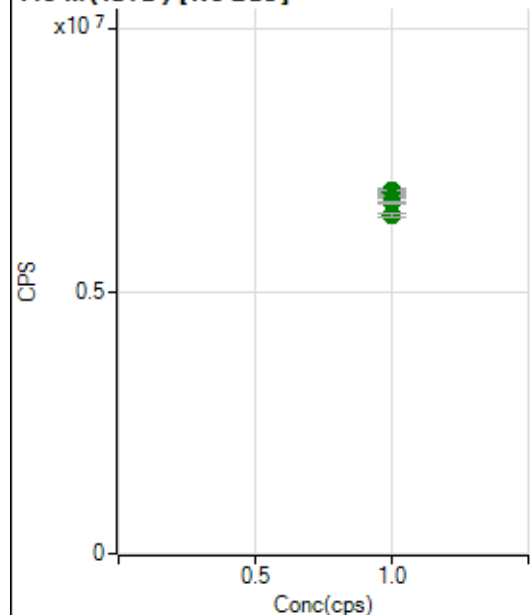
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		245207.71		P	0.6
2	☐	1.000		252545.89		P	0.2
3	☐	1.000		252733.11		P	0.4
4	☐	1.000		248347.18		P	0.5
5	☐	1.000		239078.57		P	1.3
6	☐	1.000		229607.26		P	2.2
7	☐	1.000		225322.16		P	1.3
8	☐	1.000		222828.41		P	0.2
9	☐	1.000		226860.15		P	0.8

103 Rh (ISTD) [No Gas]

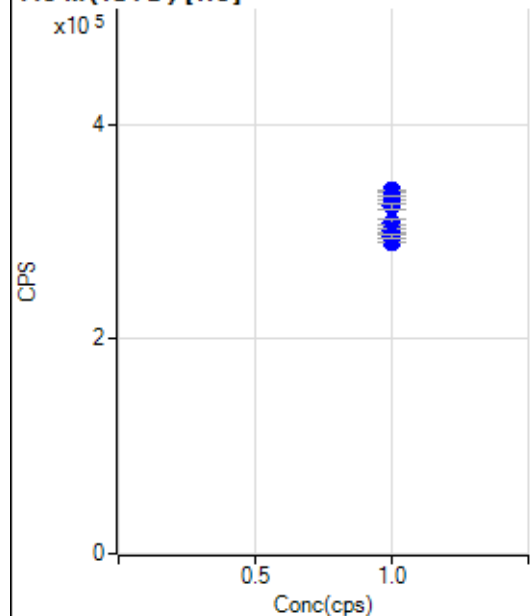
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6459117.81		A	0.6
2	☐	1.000		6491472.32		A	1.1
3	☐	1.000		6606130.14		A	0.3
4	☐	1.000		6481065.68		A	1.4
5	☐	1.000		6513473.63		A	1.1
6	☐	1.000		6419978.31		A	1.1
7	☐	1.000		6339108.56		A	1.0
8	☐	1.000		6226795.37		A	0.7
9	☐	1.000		5788595.70		A	1.1

103 Rh (ISTD) [He]

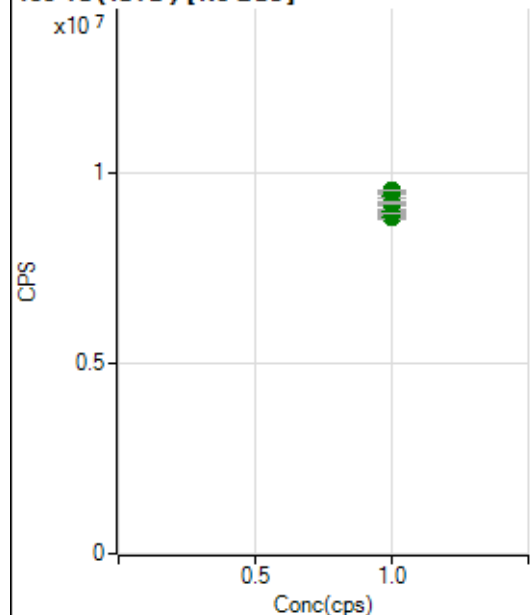
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1888262.72		A	1.1
2	☐	1.000		1908383.01		A	0.6
3	☐	1.000		1927213.83		A	0.4
4	☐	1.000		1903657.66		A	0.7
5	☐	1.000		1847958.57		A	1.2
6	☐	1.000		1772836.59		A	1.7
7	☐	1.000		1750047.02		A	1.6
8	☐	1.000		1698124.83		A	1.3
9	☐	1.000		1635798.59		A	1.0

115 In (ISTD) [No Gas]

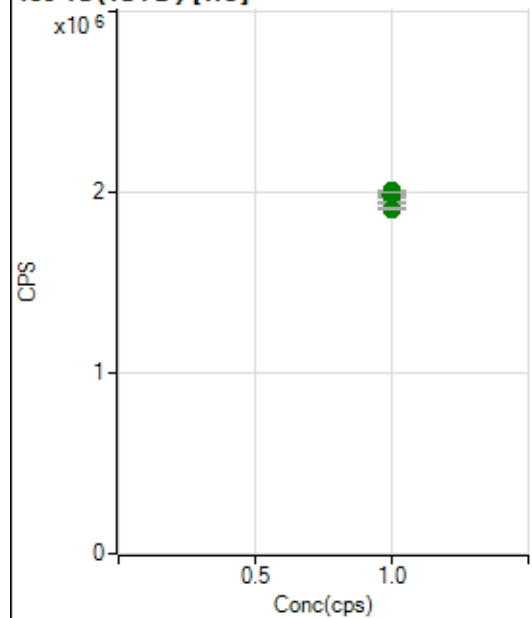
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6830823.79		A	0.5
2	☐	1.000		6833829.38		A	0.6
3	☐	1.000		6911045.66		A	0.6
4	☐	1.000		6864710.74		A	1.3
5	☐	1.000		6915004.10		A	1.4
6	☐	1.000		6876070.12		A	1.1
7	☐	1.000		6792913.65		A	0.5
8	☐	1.000		6704301.19		A	0.5
9	☐	1.000		6452010.14		A	1.3

115 In (ISTD) [He]

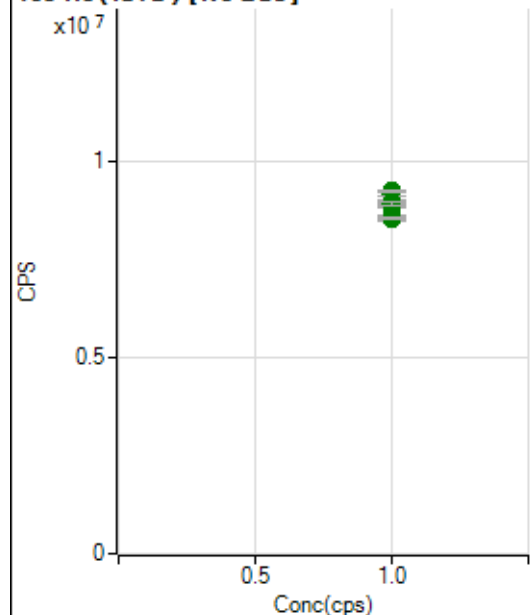
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		330451.07		P	0.0
2	☐	1.000		337881.36		P	0.3
3	☐	1.000		338324.12		P	0.7
4	☐	1.000		333817.59		P	0.2
5	☐	1.000		323748.54		P	1.7
6	☐	1.000		309097.09		P	1.3
7	☐	1.000		301205.07		P	1.4
8	☐	1.000		290858.52		P	0.4
9	☐	1.000		295394.34		P	0.9

159 Tb (ISTD) [No Gas]

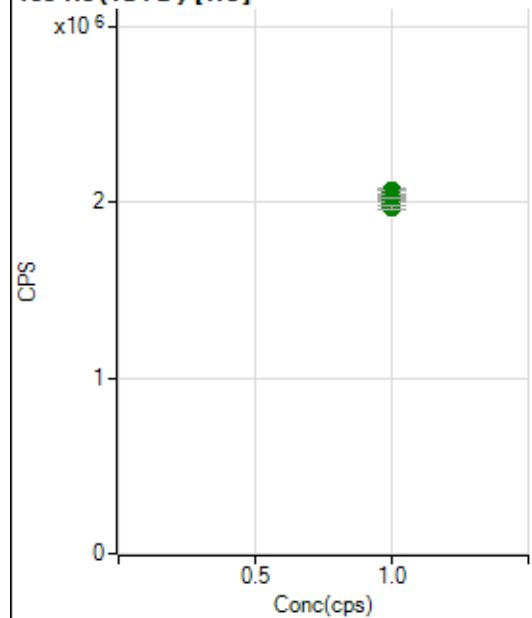
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8845215.01		A	0.6
2	☐	1.000		8829627.44		A	0.9
3	☐	1.000		8950909.10		A	0.8
4	☐	1.000		8994530.77		A	0.9
5	☐	1.000		9243832.08		A	1.9
6	☐	1.000		9370147.15		A	1.0
7	☐	1.000		9507266.73		A	0.7
8	☐	1.000		9522501.32		A	0.1
9	☐	1.000		9191233.82		A	0.6

159 Tb (ISTD) [He]

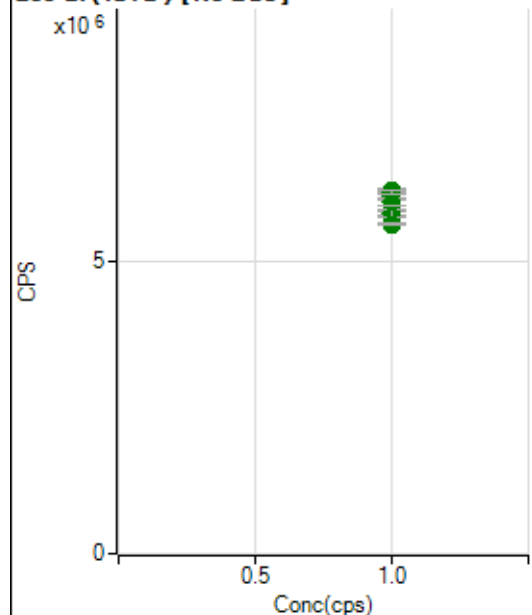
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1983937.50		A	0.2
2	☐	1.000		1981460.19		A	1.2
3	☐	1.000		2008467.96		A	0.9
4	☐	1.000		1991840.09		A	0.7
5	☐	1.000		1980893.43		A	1.6
6	☐	1.000		1919770.95		A	1.5
7	☐	1.000		1947944.67		A	0.5
8	☐	1.000		1943060.72		A	0.5
9	☐	1.000		1908657.56		A	0.3

165 Ho (ISTD) [No Gas]

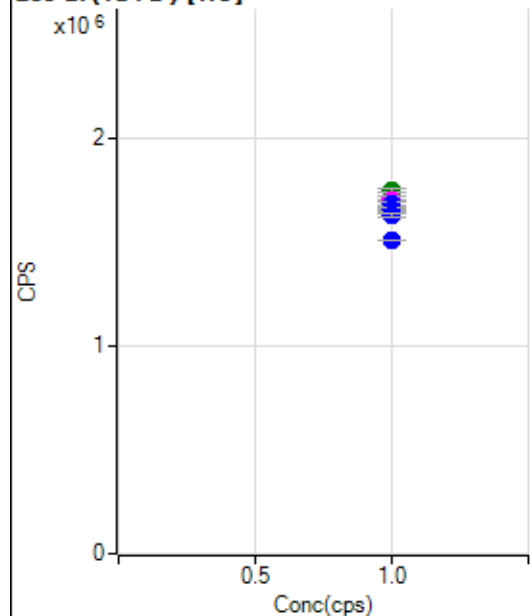
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8550626.84		A	0.9
2	☐	1.000		8556298.37		A	1.0
3	☐	1.000		8615701.06		A	1.0
4	☐	1.000		8585667.55		A	0.6
5	☐	1.000		8856387.61		A	0.9
6	☐	1.000		9002070.95		A	1.0
7	☐	1.000		9191501.51		A	1.0
8	☐	1.000		9263238.57		A	0.6
9	☐	1.000		8939383.62		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2045222.19		A	0.2
2	☐	1.000		2038063.08		A	1.1
3	☐	1.000		2064882.24		A	1.4
4	☐	1.000		2053391.79		A	1.8
5	☐	1.000		2036764.94		A	1.4
6	☐	1.000		1995668.98		A	1.5
7	☐	1.000		2013874.61		A	1.5
8	☐	1.000		2013490.77		A	1.1
9	☐	1.000		1969230.26		A	1.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5755696.93		A	0.5
2	☐	1.000		5756359.29		A	0.4
3	☐	1.000		5857837.90		A	0.8
4	☐	1.000		5815677.97		A	1.8
5	☐	1.000		5996645.40		A	2.1
6	☐	1.000		6106935.12		A	1.0
7	☐	1.000		6198941.64		A	1.0
8	☐	1.000		6175765.05		A	1.0
9	☐	1.000		5631952.49		A	1.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1662419.21		P	0.3
2	☐	1.000		1712407.55		M	1.3
3	☐	1.000		1747394.83		A	1.0
4	☐	1.000		1707778.64		M	1.9
5	☐	1.000		1686272.93		P	1.2
6	☐	1.000		1655936.16		P	1.1
7	☐	1.000		1658376.17		P	1.0
8	☐	1.000		1630591.54		P	0.8
9	☐	1.000		1507852.25		P	0.3

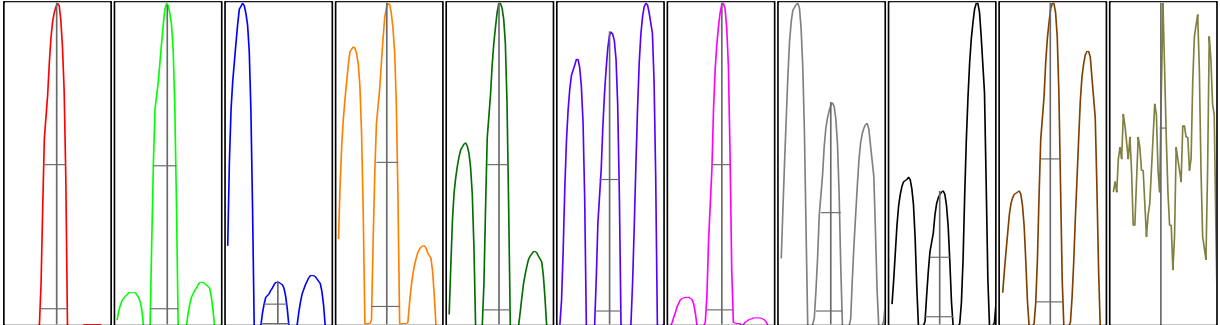
US EPA Tune Check Sample Report

Batch Folder D:\P8092818\CPMS.b
Report Comment
Instrument Name G8403A JP17141814

[No Gas]				
Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7132	0.36	5.00	
24	692203	0.42	5.00	
25	95144	0.23	5.00	
26	109062	0.45	5.00	
59	71100	0.16	5.00	
113	10052	0.26	5.00	
115	125298	0.53	5.00	
206	30684	0.67	5.00	
207	28074	0.65	5.00	
208	66104	0.28	5.00	
220	1	44.25		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7093	7161	7146	7136	7122
24	689799	694086	695874	692442	688815
25	95009	94924	95471	95239	95079
26	109844	108970	108775	108554	109168
59	70999	70950	71199	71192	71162
113	10052	10030	10023	10079	10077
115	126048	125422	125683	124303	125032
206	30347	30727	30838	30654	30855
207	27874	27971	27989	28264	28271
208	65954	65884	66302	66102	66277
220	1	1	1	2	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	12360	9.00	8.9 - 9.1		0.776	0.900	
24	1167715	24.00	23.9 - 24.1		0.784	0.900	
25	159018	25.00	24.9 - 25.1		0.785	0.900	
26	184775	25.95	25.9 - 26.1		0.784	0.900	
59	125264	59.00	58.9 - 59.1		0.774	0.900	
113	19034	113.00	112.9 - 113.1		0.730	0.900	
115	237185	115.05	114.9 - 115.1		0.765	0.900	
206	56180	206.00	205.9 - 206.1		0.775	0.900	
207	50817	206.95	206.9 - 207.1		0.773	0.900	
208	122104	207.95	207.9 - 208.1		0.773	0.900	
220	2	219.95	-				

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
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.0	V	Deflect	14.4	V
Extract 2	-240.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-105	V	Cell Exit	-50	V			

Cell Parameters

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

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	9527	0.49	
89	109673	0.63	
205	14676	0.66	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	9556	9568	9533	9527	9449
89	110521	110041	109128	109855	108820
205	14818	14631	14684	14696	14553

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Plasma Mode		HMI	Aerosol Dilution		HMI-8			

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.0	V	Deflect	2.0	V
Extract 2	-240.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-105	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	5.0	mL/min	OctP RF	200	V			