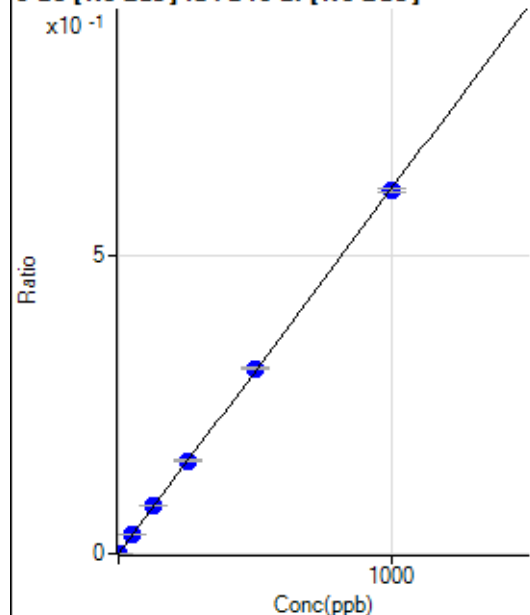


Batch Folder: D:\ICP-MS Data\P7091119-MS.b\
Analysis File: P7091119-MS.batch.bin
DA Date-Time: 2019-09-11 14:05:30
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2019-09-11 13:28:55
2	003CAL.S.d	S02	2019-09-11 13:32:31
3	004CAL.S.d	S03	2019-09-11 13:37:27
4	005CAL.S.d	S04	2019-09-11 13:41:38
5	010CAL.S.d	S05	2019-09-11 14:03:40
6	011CAL.S.d	S06	2019-09-11 14:07:25
7	012CAL.S.d	S07	2019-09-11 14:11:10
8	013CAL.S.d	S08	2019-09-11 14:14:57

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	378.90	0.0001	P	4.5
2	☐	1.000	0.981	3171.49	0.0007	P	1.6
3	☐	50.000	52.583	149439.72	0.0323	P	0.4
4	☐	125.000	129.788	353239.99	0.0796	P	0.6
5	☐	250.000	255.309	713328.77	0.1565	P	0.4
6	☐	500.000	507.992	1360205.88	0.3114	P	0.3
7	☐	1000.000	993.949	2552192.20	0.6092	P	1.2
8	☐			461.13	0.0001	P	19.3

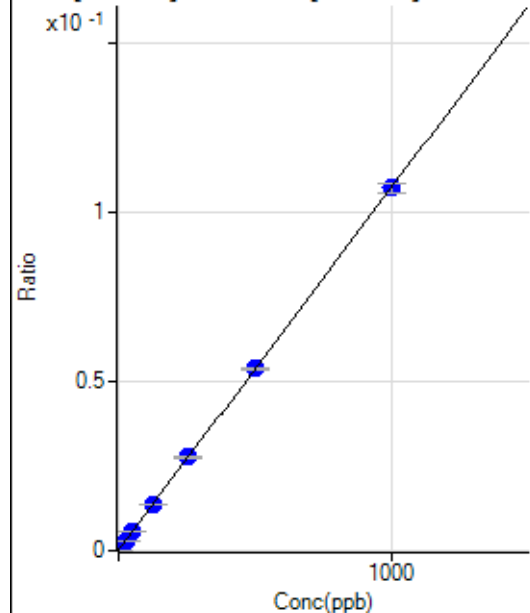
$$y = 6.1284E-004 * x + 8.1162E-005$$

$$R = 0.9999$$

$$DL = 0.01795$$

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	919.51	0.0002	P	9.0
2	☐	25.000	23.885	12825.37	0.0028	P	3.8
3	☐	50.000	50.037	25747.84	0.0056	P	1.7
4	☐	125.000	125.173	60460.66	0.0136	P	1.4
5	☐	250.000	255.548	125845.11	0.0276	P	1.4
6	☐	500.000	500.084	235252.07	0.0539	P	0.8
7	☐	1000.000	998.576	449687.05	0.1073	P	2.4
8	☐			24287.00	0.0061	P	8.1

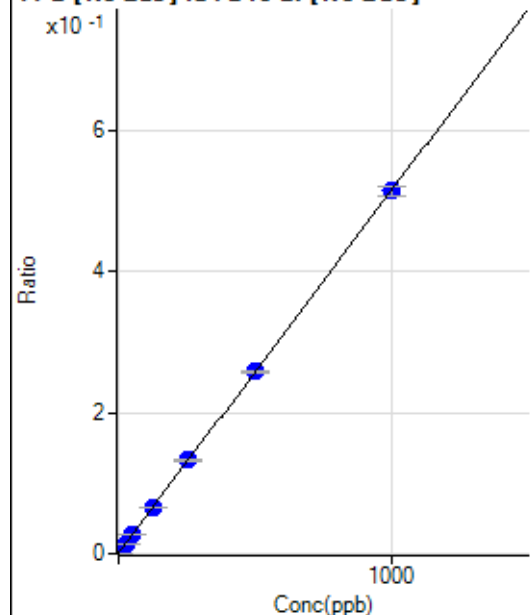
$$y = 1.0730E-004 * x + 1.9695E-004$$

$$R = 1.0000$$

$$DL = 0.4975$$

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	4506.43	0.0010	P	6.8
2	☐	25.000	23.690	61143.79	0.0132	P	1.5
3	☐	50.000	50.066	123622.01	0.0267	P	1.3
4	☐	125.000	124.681	288871.82	0.0651	P	1.6
5	☐	250.000	255.754	603978.31	0.1326	P	1.5
6	☐	500.000	499.859	1127565.63	0.2581	P	1.4
7	☐	1000.000	998.701	2156527.44	0.5148	P	2.6
8	☐			115952.64	0.0291	P	8.6

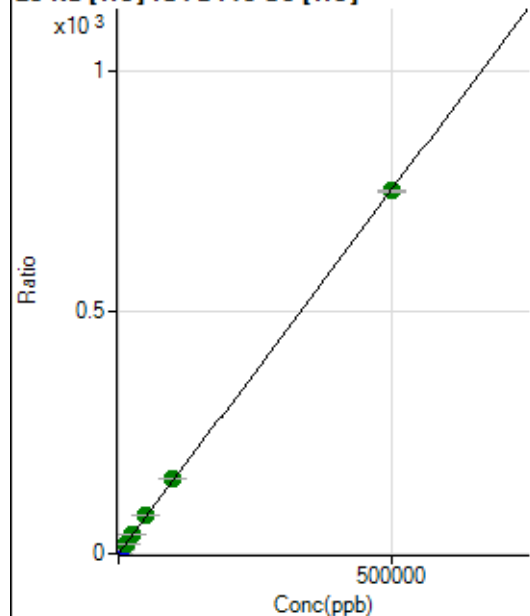
$$y = 5.1450\text{E-}004 * x + 9.6516\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.3836$$

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	23805.75	0.0516	P	1.6
2	☐	500.000	499.336	376236.39	0.8032	P	1.0
3	☐	5000.000	5320.596	3616111.28	8.0593	P	0.4
4	☐	12500.000	13151.379	8462313.12	19.8448	A	0.8
5	☐	25000.000	26025.067	17763101.44	39.2201	A	0.8
6	☐	50000.000	52632.236	34677452.16	79.2647	A	0.2
7	☐	100000.00	104152.06	67079163.31	156.8035	A	0.4
8	☐	500000.00	498835.62	313515107.0	750.8135	A	0.7

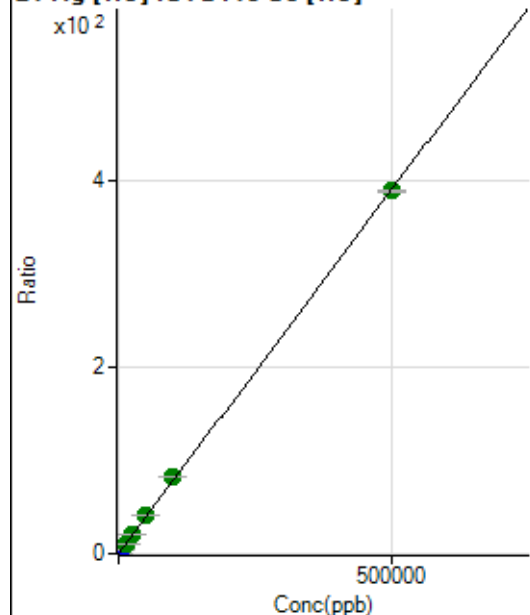
$$y = 0.0015 * x + 0.0516$$

$$R = 1.0000$$

$$DL = 1.622$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	525.03	0.0011	P	16.9
2	☐	500.000	526.049	192943.60	0.4119	P	0.7
3	☐	5000.000	5414.813	1897531.62	4.2291	P	0.5
4	☐	12500.000	13452.048	4479488.51	10.5048	A	0.4
5	☐	25000.000	26494.717	9370110.37	20.6887	A	0.7
6	☐	50000.000	53296.578	18206561.69	41.6161	A	0.4
7	☐	100000.00	104782.90	35000605.99	81.8176	A	0.6
8	☐	500000.00	498611.05	162567152.2	389.3262	A	0.5

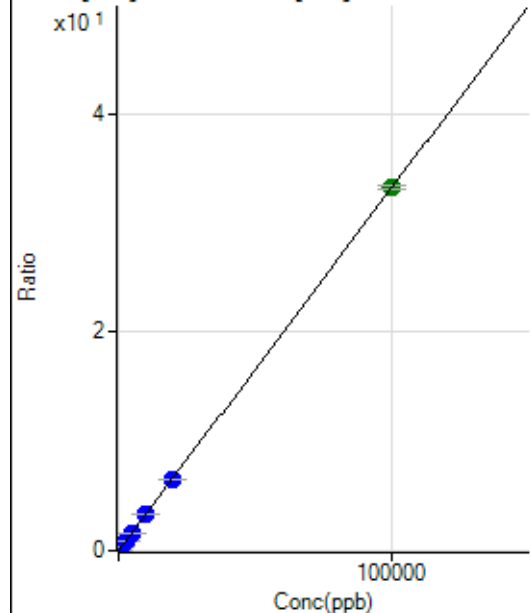
$$y = 7.8082E-004 * x + 0.0011$$

$$R = 0.9999$$

$$DL = 0.7398$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	47.23	0.0001	P	40.8
2	☐	20.000	19.335	3056.01	0.0065	P	8.4
3	☐	1000.000	1023.710	152569.74	0.3400	P	0.6
4	☐	2500.000	2551.041	361276.30	0.8472	P	0.1
5	☐	5000.000	4978.234	748734.18	1.6532	P	0.4
6	☐	10000.000	10002.638	1453156.62	3.3216	P	0.4
7	☐	20000.000	19817.841	2815223.39	6.5808	P	0.4
8	☐	100000.00	100035.74	13870488.33	33.2178	A	1.0

$$y = 3.3206E-004 * x + 1.0247E-004$$

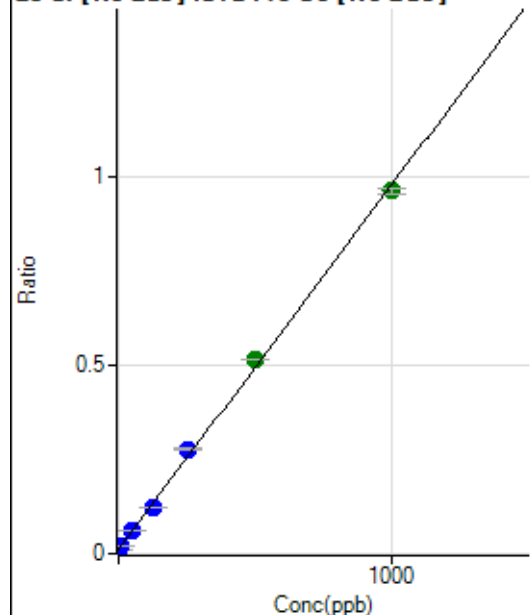
$$R = 1.0000$$

$$DL = 0.3773$$

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	120359.67	0.0114	P	0.4
2	☐	10.000	8.260	203024.54	0.0194	P	0.7
3	☐	50.000	51.486	636317.77	0.0612	P	2.0
4	☐	125.000	116.947	1242945.25	0.1245	P	0.4
5	☐	250.000	275.166	2883842.34	0.2774	P	1.3
6	☐	500.000	521.017	5143353.67	0.5151	A	0.4
7	☐	1000.000	984.150	9260134.32	0.9628	A	1.6
8	☐			455560.87	0.0489	P	1.6

$$y = 9.6667E-004 * x + 0.0114$$

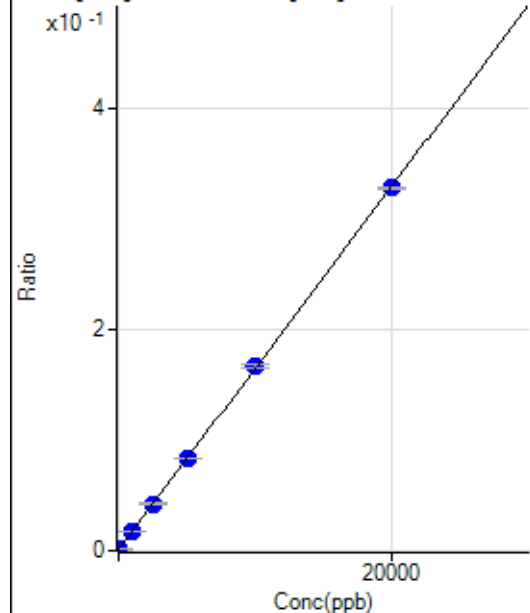
$$R = 0.9992$$

$$DL = 0.1309$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-24.428	155.56	0.0003	P	19.5
2	☐	0.000	24.428	533.37	0.0011	P	15.3
3	☐	1000.000	1030.408	7913.57	0.0176	P	6.0
4	☐	2500.000	2521.693	17944.81	0.0421	P	3.5
5	☐	5000.000	5019.227	37609.50	0.0830	P	1.0
6	☐	10000.000	10111.578	72859.50	0.1665	P	1.3
7	☐	20000.000	19935.172	140159.01	0.3276	P	0.7
8	☐			172.23	0.0004	P	31.1

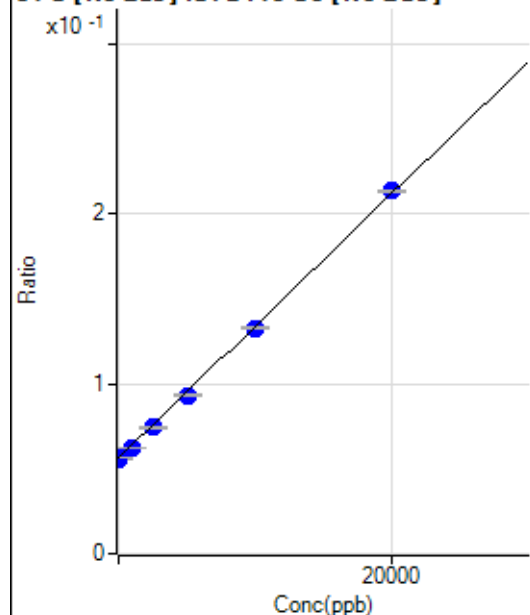
$$y = 1.6397E-005 * x + 7.3842E-004$$

$$R = 1.0000$$

$$DL = 21.93$$

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	-61.396	588870.18	0.0558	P	0.5
2	☐	0.000	61.396	594306.71	0.0568	P	0.5
3	☐	1000.000	758.135	646796.14	0.0622	P	1.0
4	☐	2500.000	2299.781	740635.14	0.0742	P	1.0
5	☐	5000.000	4700.867	964949.37	0.0928	P	1.2
6	☐	10000.000	9812.499	1323690.61	0.1326	P	1.0
7	☐	20000.000	20205.654	2052061.51	0.2133	P	0.4
8	☐			534549.05	0.0574	P	1.1

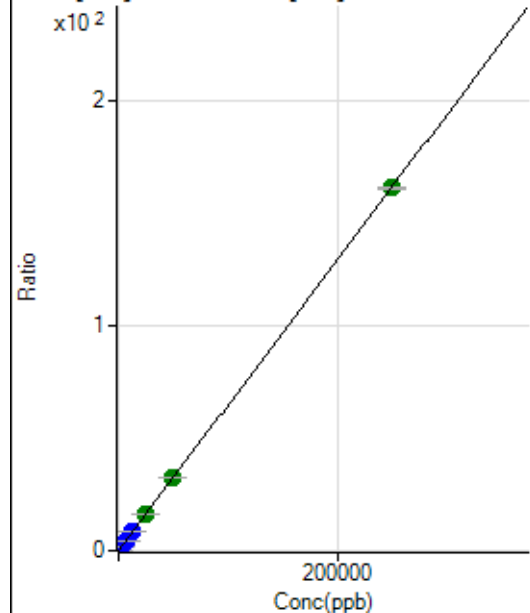
$$y = 7.7728\text{E-}006 * x + 0.0563$$

R = 0.9998

DL = 102.6

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	22042.04	0.0478	P	1.6
2	☐	500.000	488.032	169914.56	0.3627	P	0.7
3	☐	2500.000	2567.249	764703.65	1.7043	P	0.3
4	☐	6250.000	6362.451	1771063.11	4.1531	P	0.3
5	☐	12500.000	12542.323	3686993.57	8.1407	P	0.2
6	☐	25000.000	25341.909	7174557.63	16.3995	A	0.9
7	☐	50000.000	50218.283	13882439.55	32.4508	A	0.2
8	☐	250000.00	249916.57	67357199.42	161.3048	A	0.4

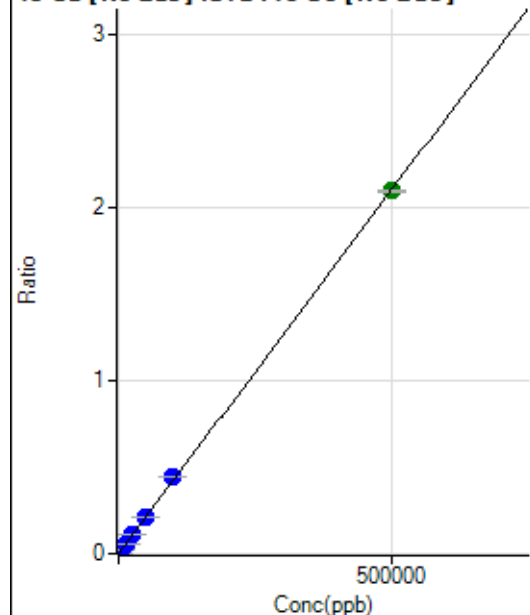
$$y = 6.4524\text{E-}004 * x + 0.0478$$

R = 1.0000

DL = 3.468

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	158.34	0.0000	P	13.6
2	☐	500.000	496.150	21997.71	0.0021	P	1.2
3	☐	5000.000	5205.433	227831.45	0.0219	P	0.2
4	☐	12500.000	13334.528	560082.79	0.0561	P	0.3
5	☐	25000.000	25302.828	1106093.97	0.1064	P	1.0
6	☐	50000.000	51097.220	2145507.51	0.2149	P	0.5
7	☐	100000.00	104892.55	4242267.46	0.4410	P	0.7
8	☐	500000.00	498873.71	19543189.32	2.0975	A	0.5

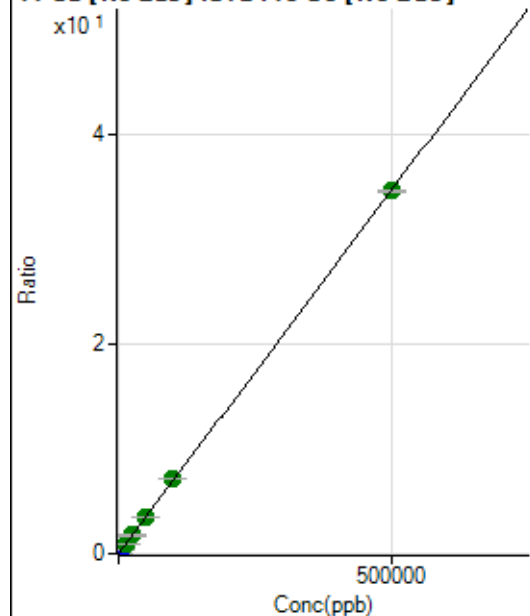
$$y = 4.2045\text{E-}006 * x + 1.5003\text{E-}005$$

$$R = 0.9999$$

$$DL = 1.46$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	15341.95	0.0015	P	1.4
2	☐	500.000	492.627	372765.60	0.0356	P	0.6
3	☐	5000.000	5170.259	3743549.82	0.3599	P	0.6
4	☐	12500.000	13126.238	9102178.85	0.9114	A	0.4
5	☐	25000.000	25164.224	18149206.83	1.7459	A	1.0
6	☐	50000.000	50972.954	35299977.53	3.5350	A	0.6
7	☐	100000.00	103848.81	69259823.08	7.2004	A	0.6
8	☐	500000.00	499107.37	322375446.1	34.6005	A	0.4

$$y = 6.9322\text{E-}005 * x + 0.0015$$

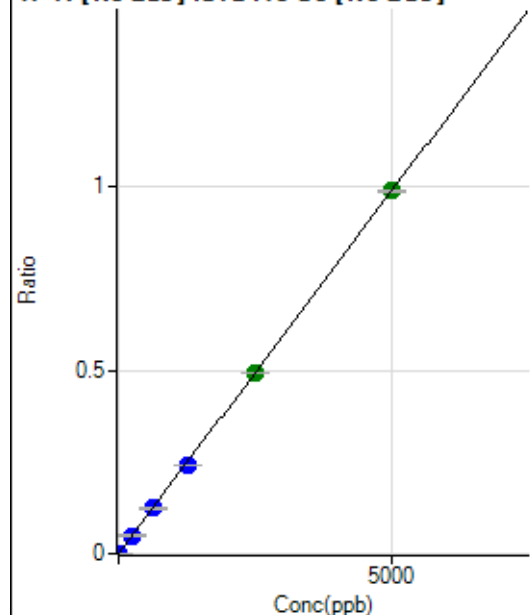
$$R = 1.0000$$

$$DL = 0.8764$$

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	116.67	0.0000	P	18.8
2	☐	5.000	5.059	10576.41	0.0010	P	2.1
3	☐	250.000	251.619	517111.26	0.0497	P	0.3
4	☐	625.000	624.567	1232097.77	0.1234	P	0.5
5	☐	1250.000	1230.851	2527359.97	0.2431	P	0.3
6	☐	2500.000	2500.600	4932124.33	0.4939	A	0.1
7	☐	5000.000	5004.461	9507597.00	0.9884	A	0.6
8	☐			2141.92	0.0002	P	10.9

$$y = 1.9751E-004 * x + 1.1057E-005$$

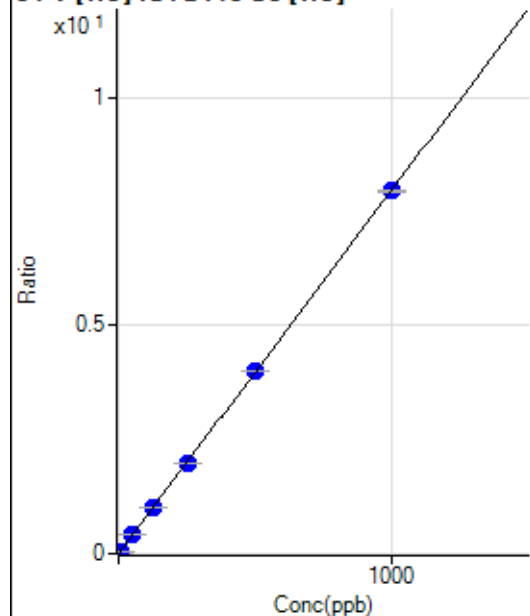
$$R = 1.0000$$

$$DL = 0.03165$$

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	151.12	0.0003	P	29.7
2	☐	5.000	5.182	19500.91	0.0416	P	0.4
3	☐	50.000	51.456	184145.83	0.4104	P	1.2
4	☐	125.000	127.935	434940.18	1.0199	P	0.7
5	☐	250.000	249.022	898997.72	1.9849	P	0.4
6	☐	500.000	502.451	1752001.19	4.0047	P	0.1
7	☐	1000.000	998.578	3404616.37	7.9586	P	0.5
8	☐			707.81	0.0017	P	1.3

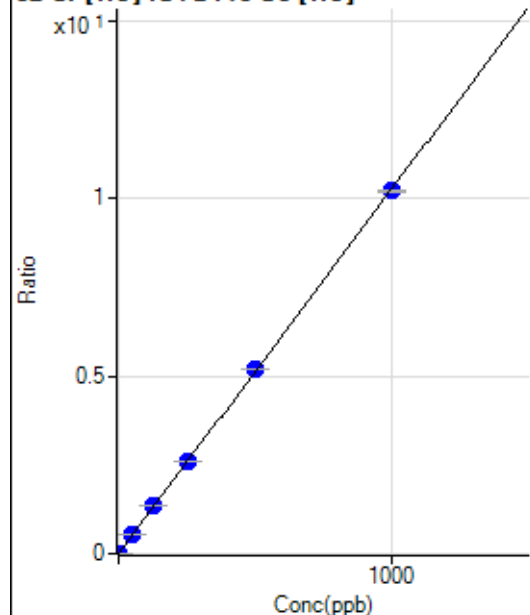
$$y = 0.0080 * x + 3.2742E-004$$

$$R = 1.0000$$

$$DL = 0.03657$$

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	1208.96	0.0026	P	0.2
2	☐	2.000	1.974	10705.14	0.0229	P	2.0
3	☐	50.000	52.338	241878.41	0.5391	P	0.6
4	☐	125.000	129.523	567249.03	1.3302	P	0.3
5	☐	250.000	252.526	1173492.34	2.5910	P	0.7
6	☐	500.000	505.754	2269085.50	5.1866	P	0.4
7	☐	1000.000	995.809	4367607.54	10.2097	P	0.4
8	☐			119653.63	0.2866	P	1.0

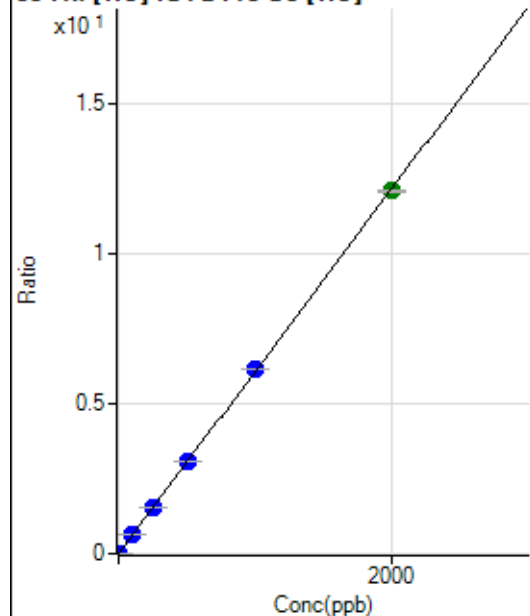
$$y = 0.0103 * x + 0.0026$$

$$R = 1.0000$$

$$DL = 0.001808$$

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	207.78	0.0005	P	5.4
2	☐	1.000	1.022	3127.05	0.0067	P	2.1
3	☐	100.000	103.993	284238.11	0.6335	P	0.1
4	☐	250.000	257.039	667433.43	1.5651	P	0.5
5	☐	500.000	503.897	1389450.35	3.0678	P	0.4
6	☐	1000.000	1015.130	2703621.80	6.1799	P	0.3
7	☐	2000.000	1990.381	5183336.17	12.1165	A	0.7
8	☐			16479.44	0.0395	P	1.2

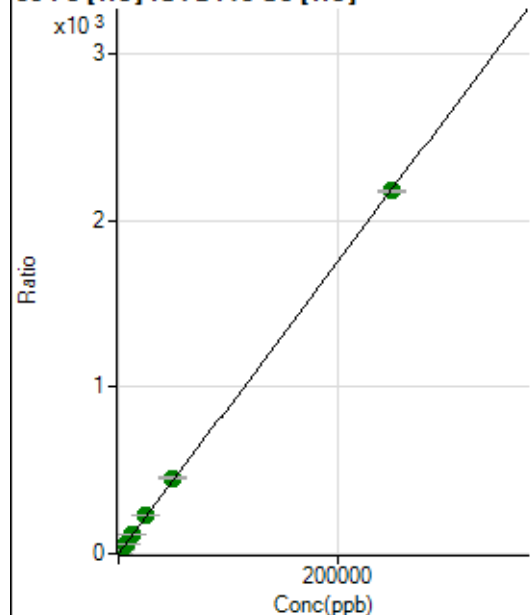
$$y = 0.0061 * x + 4.5093E-004$$

$$R = 1.0000$$

$$DL = 0.01204$$

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	4561.94	0.0099	P	3.5
2	☐	50.000	54.118	226317.53	0.4831	P	0.7
3	☐	2500.000	2713.240	10649930.33	23.7355	A	0.4
4	☐	6250.000	6799.108	25357996.63	59.4640	A	0.4
5	☐	12500.000	13194.373	52259642.84	115.3867	A	0.5
6	☐	25000.000	26577.916	101679657.8	232.4178	A	0.6
7	☐	50000.000	52163.861	195136083.9	456.1514	A	0.6
8	☐	250000.00	249358.85	910499909.2	2,180.502	A	0.7

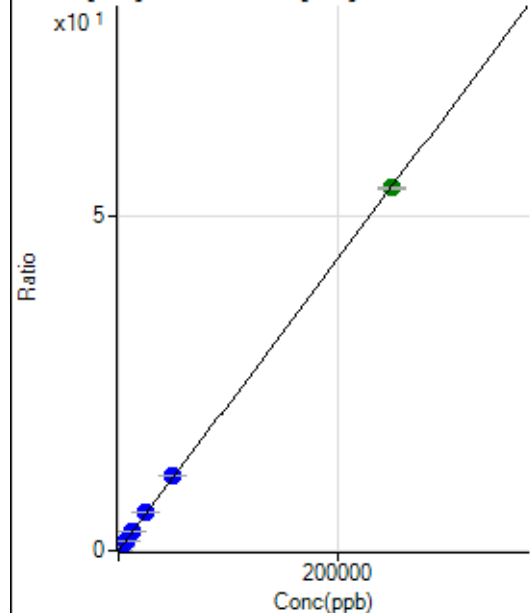
$$y = 0.0087 * x + 0.0099$$

$$R = 1.0000$$

$$DL = 0.1172$$

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	142.60	0.0003	P	8.4
2	☐	50.000	54.482	5686.46	0.0121	P	1.0
3	☐	2500.000	2716.825	264820.83	0.5902	P	1.0
4	☐	6250.000	6769.027	626886.41	1.4701	P	0.6
5	☐	12500.000	13092.353	1287663.89	2.8431	P	0.2
6	☐	25000.000	26295.105	2497979.10	5.7098	P	0.5
7	☐	50000.000	51940.876	4824748.55	11.2784	P	0.6
8	☐	250000.00	249437.55	22615737.77	54.1613	A	0.3

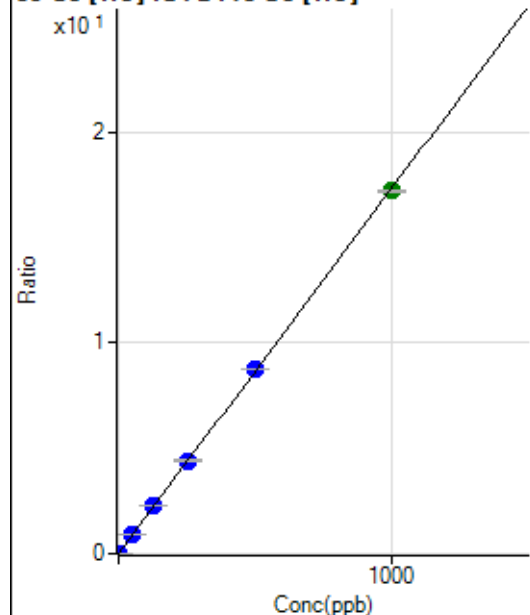
$$y = 2.1713E-004 * x + 3.0930E-004$$

$$R = 1.0000$$

$$DL = 0.3592$$

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	792.26	0.0017	P	10.7
2	☐	1.000	0.970	8676.03	0.0185	P	0.9
3	☐	50.000	53.218	414191.12	0.9231	P	0.6
4	☐	125.000	130.936	967490.93	2.2687	P	0.5
5	☐	250.000	255.398	2003527.73	4.4237	P	0.3
6	☐	500.000	507.768	3846942.34	8.7932	P	0.2
7	☐	1000.000	993.863	7362139.62	17.2095	A	0.3
8	☐			83255.64	0.1994	P	0.4

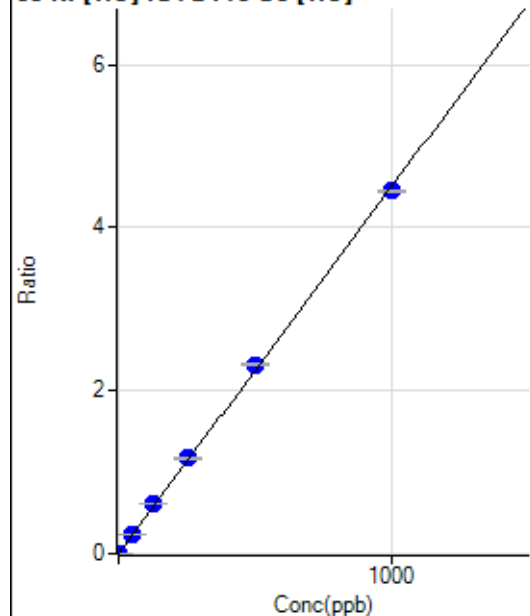
$$y = 0.0173 * x + 0.0017$$

$$R = 0.9999$$

$$DL = 0.03189$$

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	367.79	0.0008	P	6.7
2	☐	1.000	1.095	2680.29	0.0057	P	2.5
3	☐	50.000	54.612	110550.53	0.2464	P	0.5
4	☐	125.000	133.957	257233.59	0.6032	P	0.4
5	☐	250.000	259.424	528742.48	1.1674	P	0.5
6	☐	500.000	514.746	1013059.30	2.3156	P	0.6
7	☐	1000.000	988.921	1902801.20	4.4480	P	0.7
8	☐			49172.27	0.1178	P	0.5

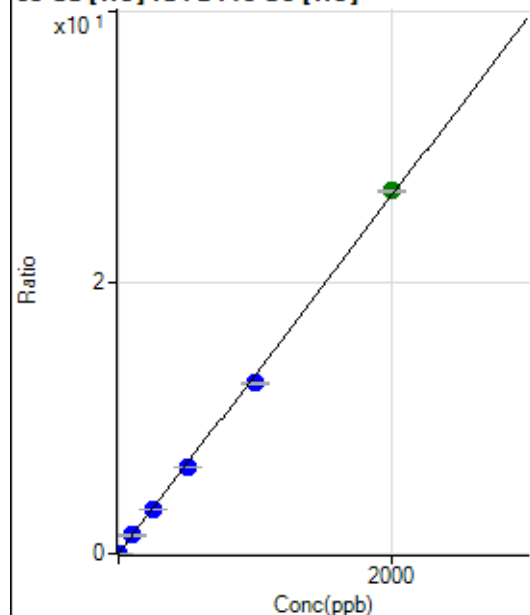
$$y = 0.0045 * x + 7.9777E-004$$

$$R = 0.9998$$

$$DL = 0.03581$$

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	1785.70	0.0039	P	4.4
2	☐	2.000	1.879	13436.34	0.0287	P	1.5
3	☐	100.000	101.859	605051.59	1.3485	P	0.2
4	☐	250.000	250.552	1412096.44	3.3113	P	0.9
5	☐	500.000	482.604	2887088.43	6.3746	P	0.8
6	☐	1000.000	952.472	5502353.04	12.5771	P	0.3
7	☐	2000.000	2027.952	11453666.08	26.7741	A	0.6
8	☐			15898.85	0.0381	P	1.2

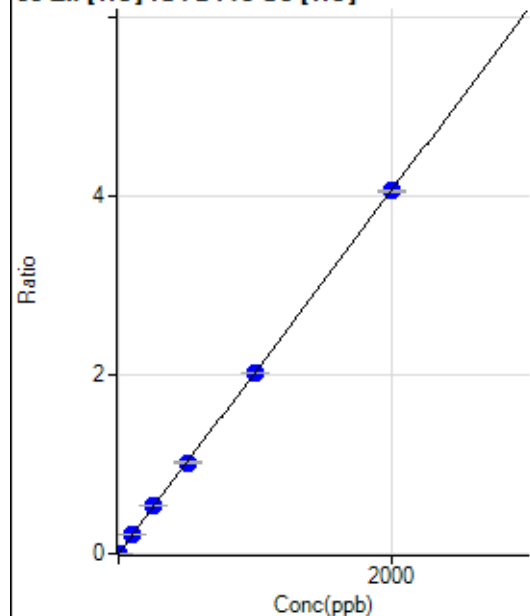
$$y = 0.0132 * x + 0.0039$$

$$R = 0.9995$$

$$DL = 0.03907$$

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	573.36	0.0012	P	6.5
2	☐	2.000	1.908	2399.13	0.0051	P	3.4
3	☐	100.000	106.802	97952.47	0.2183	P	0.7
4	☐	250.000	261.371	227056.82	0.5325	P	0.4
5	☐	500.000	502.232	462867.17	1.0220	P	0.8
6	☐	1000.000	998.656	888509.42	2.0309	P	0.2
7	☐	2000.000	1998.353	1737973.85	4.0627	P	0.8
8	☐			13841.16	0.0332	P	2.8

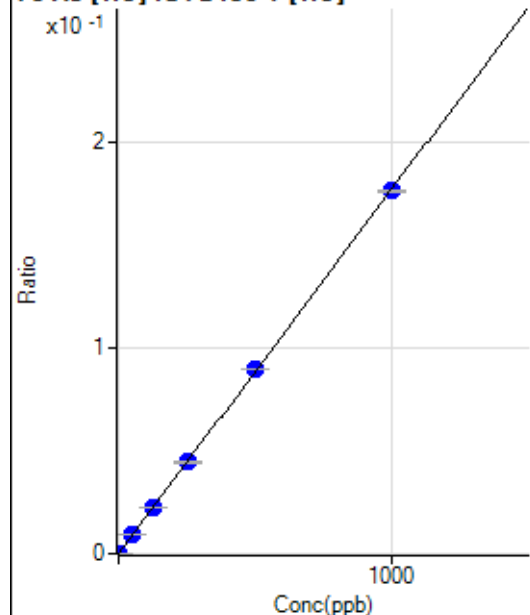
$$y = 0.0020 * x + 0.0012$$

$$R = 1.0000$$

$$DL = 0.1191$$

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	30.25	0.0000	P	9.0
2	☐	1.000	0.998	522.85	0.0002	P	2.8
3	☐	50.000	51.321	24562.13	0.0091	P	1.2
4	☐	125.000	128.227	58460.64	0.0227	P	0.6
5	☐	250.000	251.039	119798.71	0.0444	P	0.4
6	☐	500.000	506.410	233874.37	0.0895	P	0.4
7	☐	1000.000	996.066	450016.70	0.1761	P	0.7
8	☐			594.46	0.0002	P	1.8

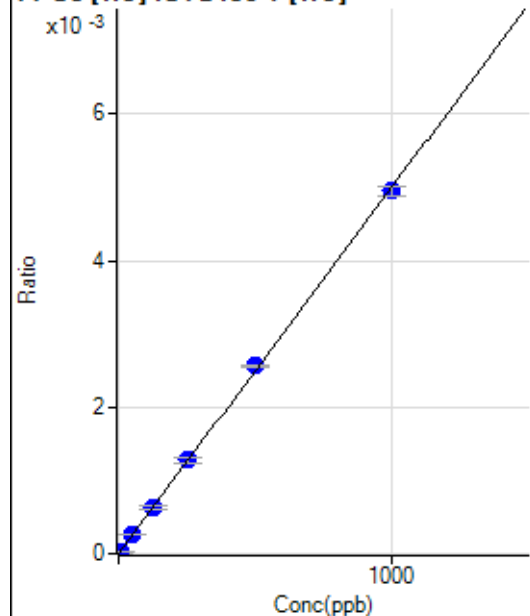
$$y = 1.7679E-004 * x + 1.1066E-005$$

$$R = 1.0000$$

$$DL = 0.01684$$

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	5.024	71.11	0.0000	P	17.8
3	☐	50.000	52.668	712.25	0.0003	P	4.5
4	☐	125.000	127.286	1639.01	0.0006	P	7.1
5	☐	250.000	254.790	3436.02	0.0013	P	6.3
6	☐	500.000	514.366	6711.66	0.0026	P	0.9
7	☐	1000.000	991.200	12653.45	0.0050	P	2.7
8	☐			8.89	0.0000	P	44.3

$$y = 4.9948E-006 * x + 4.0895E-007$$

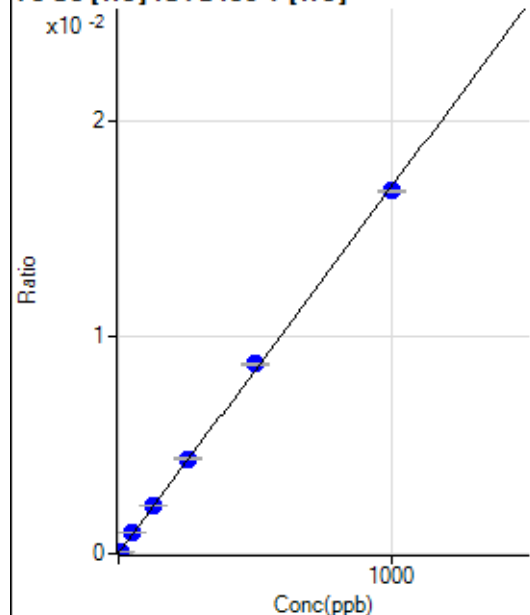
$$R = 0.9998$$

$$DL = 0.4254$$

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	40.74	0.0000	P	39.6
2	☐	5.000	5.723	311.73	0.0001	P	4.1
3	☐	50.000	55.110	2563.83	0.0009	P	2.7
4	☐	125.000	130.078	5715.37	0.0022	P	2.0
5	☐	250.000	257.952	11826.49	0.0044	P	1.1
6	☐	500.000	516.426	22877.97	0.0088	P	0.7
7	☐	1000.000	988.905	42824.72	0.0168	P	0.6
8	☐			54.32	0.0000	P	12.0

$$y = 1.6932\text{E-}005 * x + 1.4909\text{E-}005$$

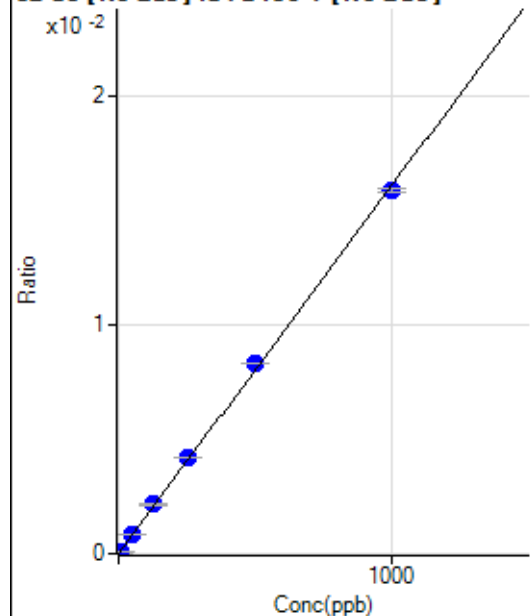
$$R = 0.9998$$

$$DL = 1.046$$

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	-185.76	0.0000	P	-115.
2	☐	5.000	5.179	1585.37	0.0001	P	9.3
3	☐	50.000	54.185	18225.08	0.0009	P	0.3
4	☐	125.000	133.419	43705.51	0.0021	P	0.2
5	☐	250.000	262.970	88488.38	0.0042	P	0.6
6	☐	500.000	517.697	169294.00	0.0083	P	0.4
7	☐	1000.000	986.647	312464.65	0.0159	P	1.0
8	☐			-33.16	0.0000	P	-410.

$$y = 1.6102\text{E-}005 * x - 8.7114\text{E-}006$$

$$R = 0.9997$$

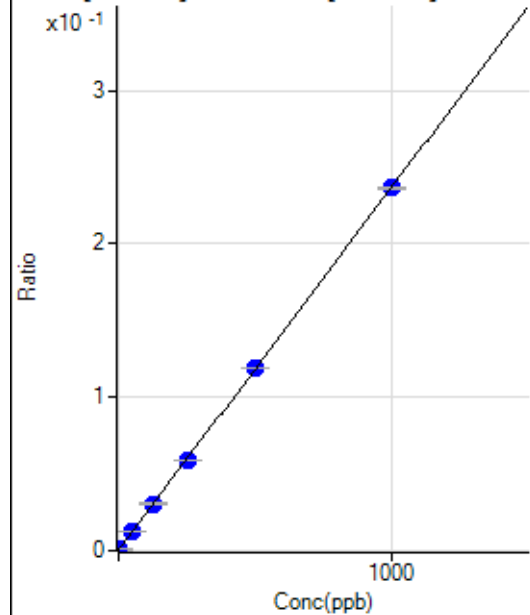
$$DL = 1.874$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5326.62		P	1.2
2	☐			5660.10		P	1.3
3	☐			5345.52		P	0.9
4	☐			5227.70		P	1.2
5	☐			5132.11		P	1.6
6	☐			5066.52		P	2.7
7	☐			4919.80		P	1.6
8	☐			4836.45		P	2.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	8658.52	0.0004	P	4.4
2	☐	1.000	1.015	13709.91	0.0006	P	2.3
3	☐	50.000	50.757	261553.82	0.0124	P	1.5
4	☐	125.000	127.984	625840.07	0.0306	P	1.3
5	☐	250.000	248.855	1239567.43	0.0592	P	0.3
6	☐	500.000	502.097	2419669.24	0.1190	P	0.4
7	☐	1000.000	998.827	4651469.51	0.2364	P	0.4
8	☐			25718.43	0.0014	P	0.6

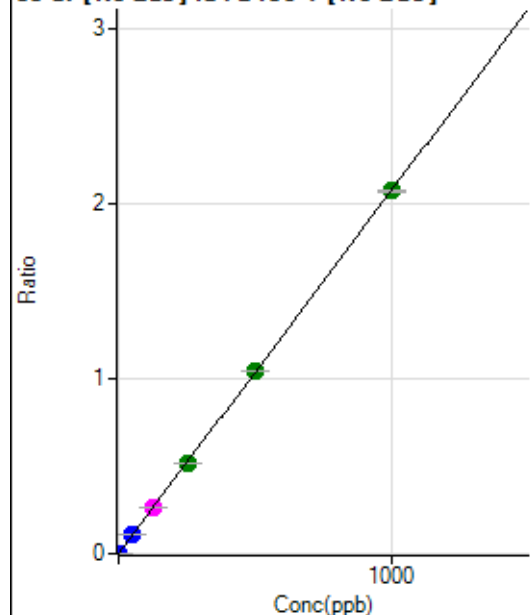
$$y = 2.3623E-004 * x + 4.0585E-004$$

$$R = 1.0000$$

$$DL = 0.2255$$

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	208.34	0.0000	P	17.6
2	☐	1.000	0.966	42748.12	0.0020	P	1.5
3	☐	50.000	50.803	2223413.61	0.1054	P	0.5
4	☐	125.000	127.108	5385324.12	0.2636	M	0.4
5	☐	250.000	247.595	10753957.97	0.5135	A	0.4
6	☐	500.000	502.754	21199600.99	1.0427	A	0.1
7	☐	1000.000	998.921	40772058.20	2.0718	A	0.6
8	☐			154743.09	0.0083	P	0.3

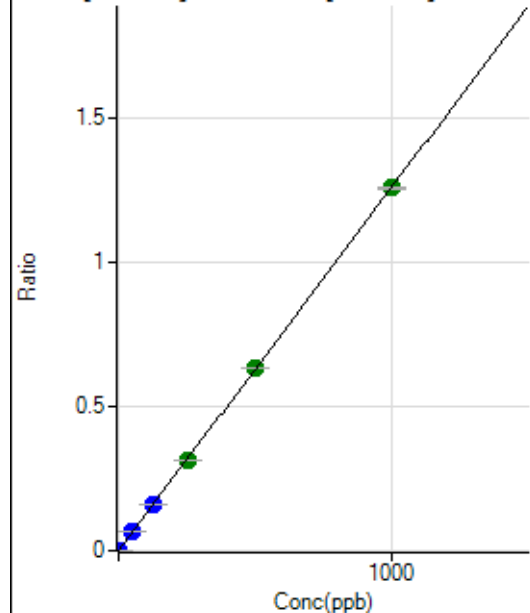
$$y = 0.0021 * x + 9.7564E-006$$

$$R = 1.0000$$

$$DL = 0.00249$$

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	1691.83	0.0001	P	5.7
2	☐	1.000	0.840	24154.45	0.0011	P	1.6
3	☐	50.000	50.379	1340801.02	0.0635	P	0.2
4	☐	125.000	126.120	3247261.92	0.1590	P	0.2
5	☐	250.000	249.300	6578686.52	0.3142	A	0.4
6	☐	500.000	501.556	12847737.44	0.6319	A	0.2
7	☐	1000.000	999.238	24774814.44	1.2589	A	0.8
8	☐			6379.47	0.0003	P	4.1

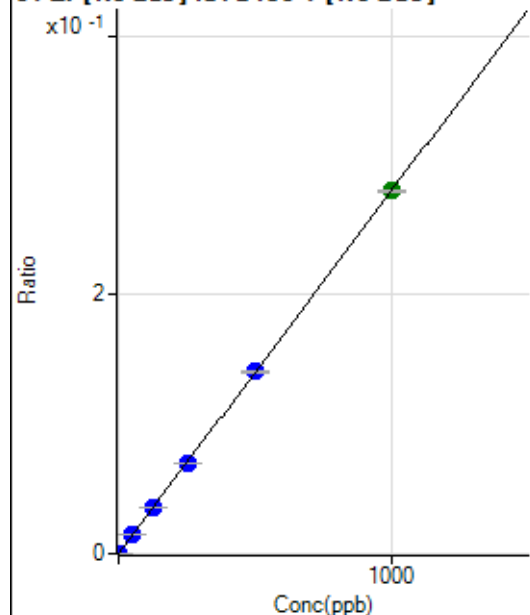
$$y = 0.0013 * x + 7.9276E-005$$

$$R = 1.0000$$

$$DL = 0.01073$$

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	319.46	0.0000	P	10.1
2	☐	1.000	0.842	5328.99	0.0003	P	2.5
3	☐	50.000	50.640	299689.24	0.0142	P	0.6
4	☐	125.000	127.052	727507.86	0.0356	P	0.1
5	☐	250.000	248.020	1455589.55	0.0695	P	0.5
6	☐	500.000	500.977	2854134.57	0.1404	P	0.2
7	☐	1000.000	999.718	5512704.51	0.2801	A	0.8
8	☐			1397.36	0.0001	P	6.4

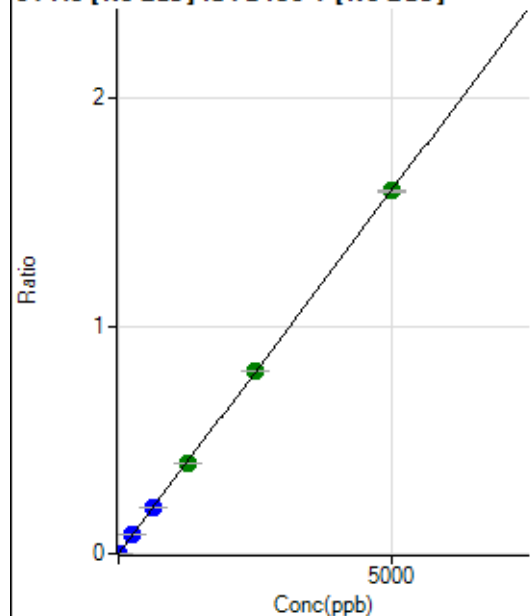
$$y = 2.8019E-004 * x + 1.4964E-005$$

$$R = 1.0000$$

$$DL = 0.01625$$

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	852.85	0.0000	P	14.0
2	☐	5.000	4.674	32490.72	0.0015	P	0.4
3	☐	250.000	254.478	1712508.03	0.0812	P	0.9
4	☐	625.000	637.537	4152499.10	0.2033	P	0.1
5	☐	1250.000	1244.373	8308115.38	0.3967	A	0.5
6	☐	2500.000	2509.245	16263690.64	0.8000	A	0.2
7	☐	5000.000	4994.994	31337011.12	1.5924	A	0.9
8	☐			24137.85	0.0013	P	1.4

$$y = 3.1879E-004 * x + 3.9987E-005$$

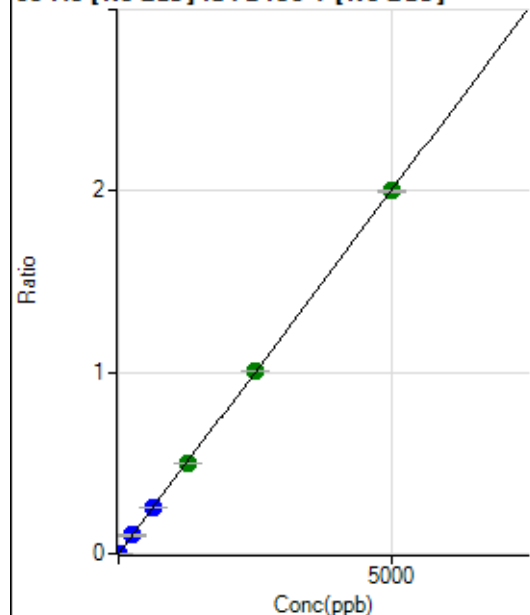
$$R = 1.0000$$

$$DL = 0.05262$$

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	508.37	0.0000	P	10.4
2	☐	5.000	4.735	40781.59	0.0019	P	1.1
3	☐	250.000	252.337	2133071.40	0.1011	P	0.8
4	☐	625.000	636.534	5208734.27	0.2550	P	0.4
5	☐	1250.000	1243.903	10434512.73	0.4983	A	0.6
6	☐	2500.000	2512.946	20464566.61	1.0066	A	0.3
7	☐	5000.000	4993.493	39362288.73	2.0002	A	0.8
8	☐			37575.49	0.0020	P	2.3

$$y = 4.0056\text{E-}004 * x + 2.3830\text{E-}005$$

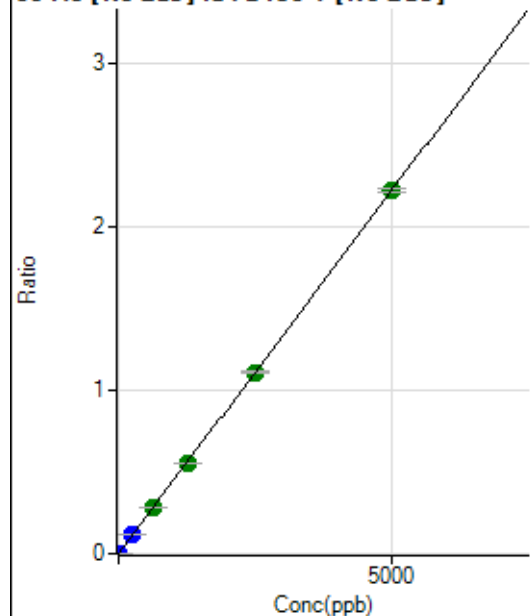
$$R = 1.0000$$

$$DL = 0.01848$$

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	791.72	0.0000	P	6.1
2	☐	5.000	4.747	45582.22	0.0021	P	0.7
3	☐	250.000	253.612	2378290.55	0.1127	P	0.7
4	☐	625.000	629.823	5717112.89	0.2799	A	0.4
5	☐	1250.000	1246.786	11601461.11	0.5540	A	0.5
6	☐	2500.000	2503.292	22613403.98	1.1123	A	0.2
7	☐	5000.000	4998.375	43704677.71	2.2209	A	1.1
8	☐			42503.37	0.0023	P	3.1

$$y = 4.4431\text{E-}004 * x + 3.7114\text{E-}005$$

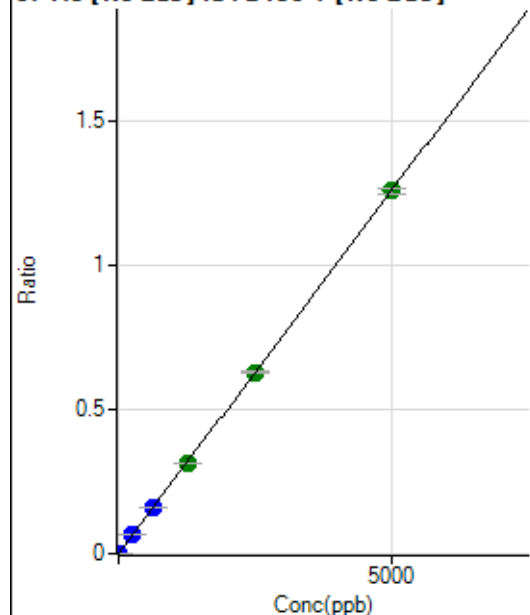
$$R = 1.0000$$

$$DL = 0.01539$$

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	452.81	0.0000	P	8.1
2	☐	5.000	4.682	25493.12	0.0012	P	0.3
3	☐	250.000	252.830	1343898.69	0.0637	P	0.6
4	☐	625.000	632.018	3251753.61	0.1592	P	0.5
5	☐	1250.000	1246.872	6576273.19	0.3140	A	0.5
6	☐	2500.000	2502.260	12812287.79	0.6302	A	0.4
7	☐	5000.000	4998.634	24773207.32	1.2589	A	1.2
8	☐			23673.26	0.0013	P	0.8

$$y = 2.5184\text{E-}004 * x + 2.1226\text{E-}005$$

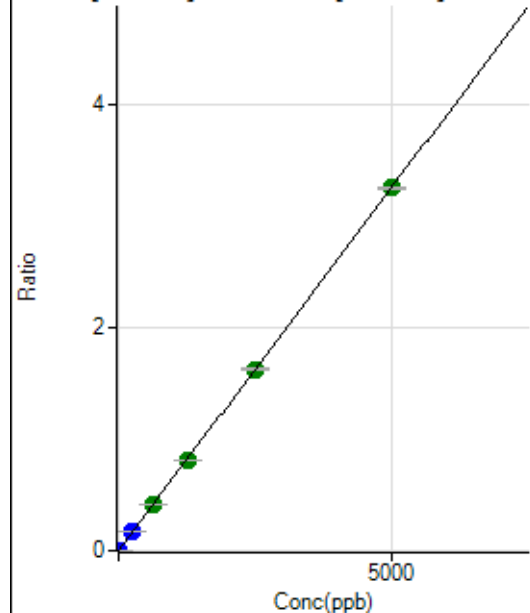
$$R = 1.0000$$

$$DL = 0.02054$$

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	927.85	0.0000	P	13.9
2	☐	5.000	4.779	66857.44	0.0031	P	1.1
3	☐	250.000	252.126	3457011.27	0.1638	P	0.1
4	☐	625.000	628.429	8340605.05	0.4083	A	1.1
5	☐	1250.000	1248.324	16984413.92	0.8111	A	0.3
6	☐	2500.000	2503.022	33061872.96	1.6262	A	0.1
7	☐	5000.000	4998.373	63906248.65	3.2474	A	0.7
8	☐			59812.42	0.0032	P	2.6

$$y = 6.4968\text{E-}004 * x + 4.3467\text{E-}005$$

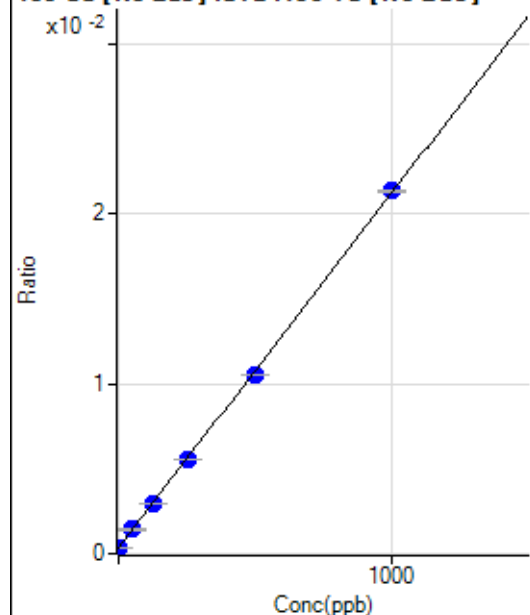
$$R = 1.0000$$

$$DL = 0.02792$$

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	9659.25	0.0004	P	1.2
2	☐	1.000	1.639	10598.85	0.0004	P	1.9
3	☐	50.000	51.319	38829.15	0.0014	P	2.1
4	☐	125.000	125.141	79737.81	0.0030	P	0.6
5	☐	250.000	247.848	150331.19	0.0055	P	1.1
6	☐	500.000	487.797	280966.86	0.0105	P	0.3
7	☐	1000.000	1006.555	554586.34	0.0214	P	0.8
8	☐			9031.04	0.0004	P	3.3

$$y = 2.0875\text{E-}005 * x + 3.5476\text{E-}004$$

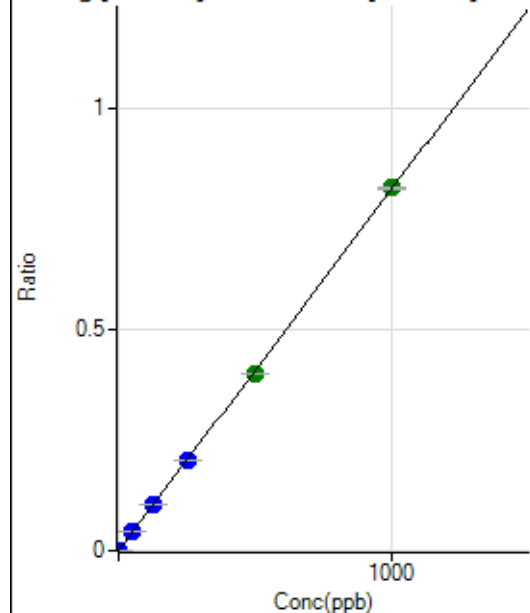
$$R = 0.9999$$

$$DL = 0.6256$$

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	316.68	0.0000	P	18.4
2	☐	1.000	0.924	20835.54	0.0008	P	3.6
3	☐	50.000	52.704	1170497.61	0.0430	P	0.6
4	☐	125.000	127.643	2797138.76	0.1041	P	1.1
5	☐	250.000	248.954	5520031.85	0.2030	P	1.1
6	☐	500.000	490.391	10661643.64	0.3999	A	0.9
7	☐	1000.000	1004.600	21261569.05	0.8191	A	0.8
8	☐			1258.44	0.0001	P	4.8

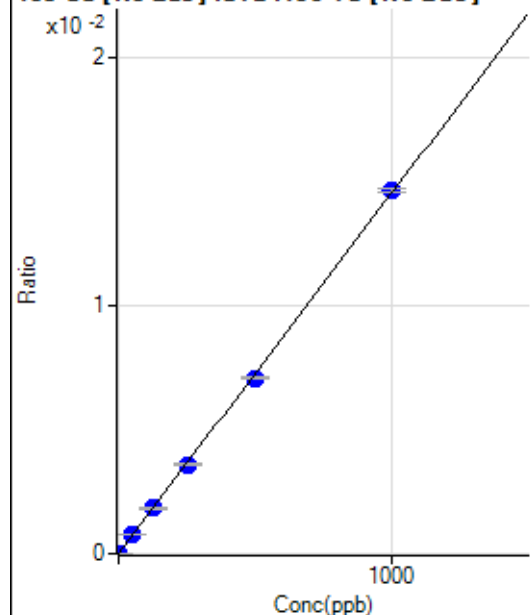
$$y = 8.1537\text{E-}004 * x + 1.1631\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.007872$$

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	58.34	0.0000	P	6.8
2	☐	1.000	0.927	425.02	0.0000	P	3.1
3	☐	50.000	50.910	20171.61	0.0007	P	1.1
4	☐	125.000	125.648	49043.11	0.0018	P	0.9
5	☐	250.000	247.553	97713.29	0.0036	P	1.1
6	☐	500.000	487.328	188556.19	0.0071	P	1.6
7	☐	1000.000	1006.822	379175.92	0.0146	P	1.0
8	☐			104.17	0.0000	P	28.6

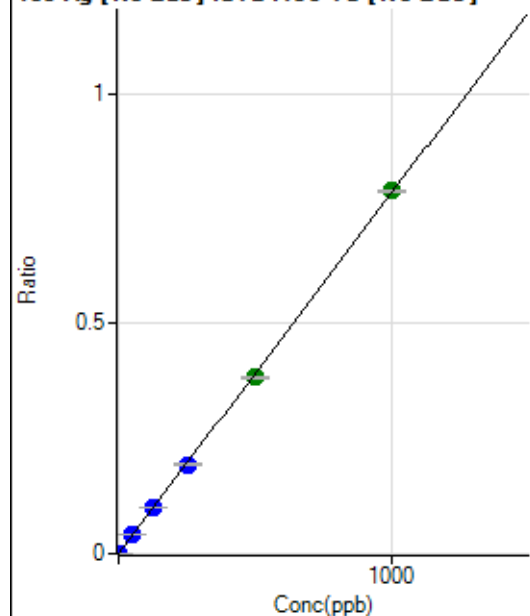
$$y = 1.4507\text{E-}005 * x + 2.1422\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.03006$$

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	147.23	0.0000	P	44.2
2	☐	1.000	0.899	19358.35	0.0007	P	2.6
3	☐	50.000	52.346	1118134.23	0.0411	P	0.7
4	☐	125.000	127.535	2688152.19	0.1000	P	0.8
5	☐	250.000	247.677	5282360.75	0.1943	P	0.8
6	☐	500.000	488.057	10206342.07	0.3828	A	1.1
7	☐	1000.000	1006.118	20481951.50	0.7891	A	0.9
8	☐			1122.31	0.0000	P	9.7

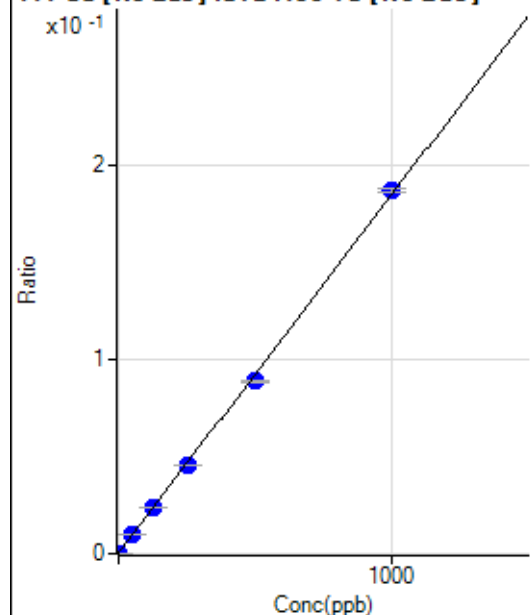
$$y = 7.8431\text{E-}004 * x + 5.4120\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.009156$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6930.37	0.0003	P	1.4
2	☐	1.000	1.049	12219.94	0.0004	P	1.0
3	☐	50.000	51.435	265874.11	0.0098	P	1.4
4	☐	125.000	125.610	630929.86	0.0235	P	1.0
5	☐	250.000	245.917	1243272.42	0.0457	P	0.8
6	☐	500.000	479.316	2369735.50	0.0889	P	0.3
7	☐	1000.000	1011.215	4859297.68	0.1872	P	1.1
8	☐			6844.67	0.0003	P	3.4

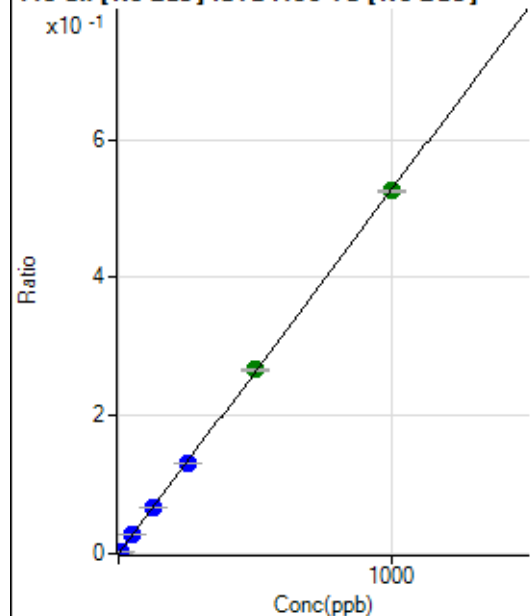
$$y = 1.8489\text{E-}004 * x + 2.5454\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.05904$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD :159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2041.92	0.0001	P	3.7
2	☐	5.000	5.099	75238.72	0.0028	P	0.7
3	☐	50.000	51.513	741084.98	0.0272	P	0.9
4	☐	125.000	127.169	1802564.28	0.0671	P	0.4
5	☐	250.000	249.135	3571379.16	0.1313	P	0.4
6	☐	500.000	505.597	7104630.11	0.2665	A	0.8
7	☐	1000.000	997.071	13637177.04	0.5254	A	0.9
8	☐			6212.75	0.0003	P	2.8

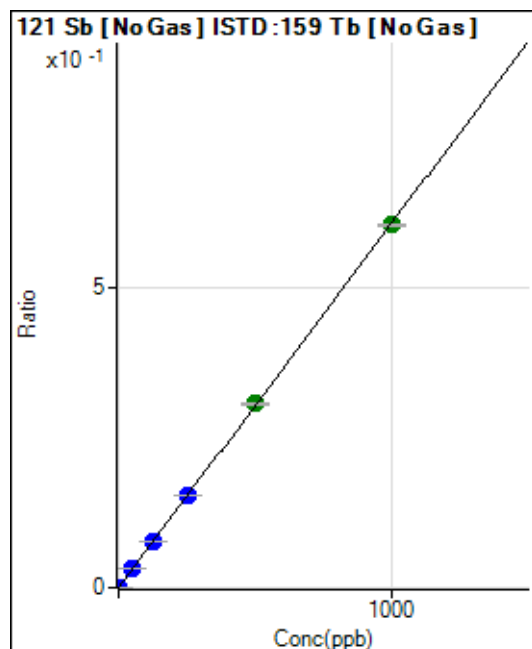
$$y = 5.2687\text{E-}004 * x + 7.4999\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01566$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	519.47	0.0000	P	4.8
2	☐	2.000	1.888	31708.97	0.0012	P	0.9
3	☐	50.000	51.766	855256.35	0.0314	P	0.9
4	☐	125.000	128.146	2088669.86	0.0777	P	0.4
5	☐	250.000	251.974	4155179.00	0.1528	P	0.8
6	☐	500.000	506.171	8184114.94	0.3069	A	0.8
7	☐	1000.000	995.940	15675555.38	0.6039	A	0.5
8	☐			21642.36	0.0009	P	3.9

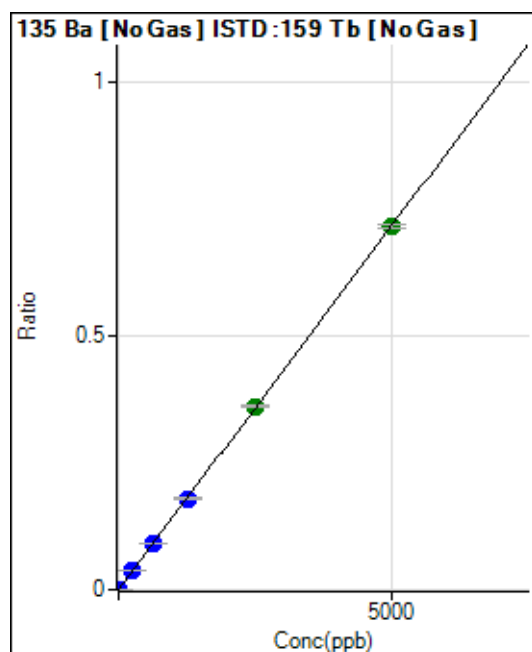
$$y = 6.0637\text{E-}004 * x + 1.9080\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.004564$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	319.46	0.0000	P	14.5
2	☐	10.000	10.076	39641.00	0.0015	P	1.2
3	☐	250.000	258.573	1008803.29	0.0370	P	1.0
4	☐	625.000	639.573	2462109.58	0.0916	P	0.5
5	☐	1250.000	1249.726	4867683.05	0.1790	P	1.4
6	☐	2500.000	2519.126	9620966.45	0.3608	A	0.8
7	☐	5000.000	4988.255	18544774.20	0.7145	A	1.2
8	☐			1811.31	0.0001	P	5.7

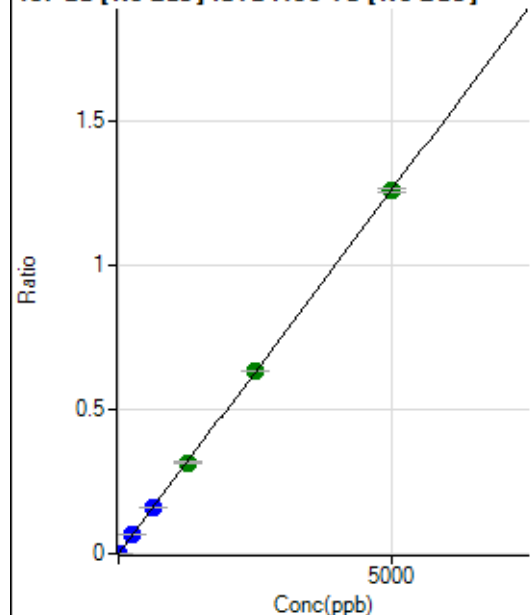
$$y = 1.4323\text{E-}004 * x + 1.1728\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03554$$

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	602.82	0.0000	P	5.4
2	☐	10.000	10.110	69914.94	0.0026	P	0.9
3	☐	250.000	256.505	1757959.76	0.0646	P	0.7
4	☐	625.000	633.950	4286913.81	0.1595	P	0.7
5	☐	1250.000	1254.304	8581925.02	0.3156	A	1.1
6	☐	2500.000	2514.229	16867461.14	0.6326	A	0.5
7	☐	5000.000	4990.365	32589935.10	1.2556	A	1.0
8	☐			3256.08	0.0001	P	6.4

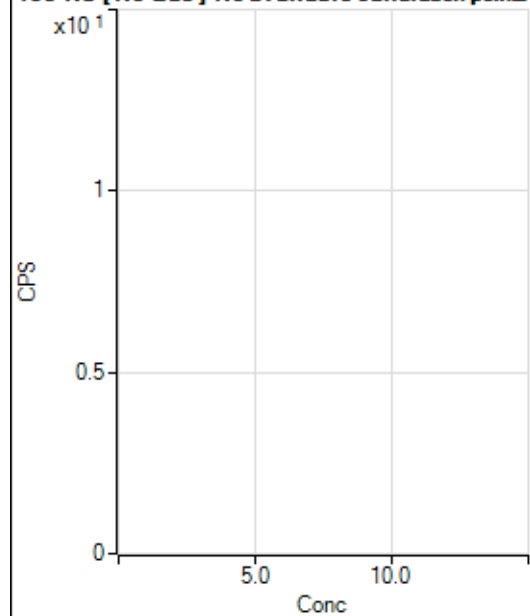
$$y = 2.5160E-004 * x + 2.2141E-005$$

$$R = 1.0000$$

$$DL = 0.01428$$

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	☐			11.11		P	34.6
3	☐			100.00		P	40.5
4	☐			228.90		P	8.9
5	☐			453.35		P	8.2
6	☐			844.50		P	4.6
7	☐			1615.71		P	4.0
8	☐			182.23		P	26.0

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			14.45		P	74.2
2	☐			16.67		P	80.0
3	☐			17.78		P	75.8
4	☐			31.11		P	22.3
5	☐			60.00		P	22.2
6	☐			64.45		P	20.9
7	☐			114.45		P	9.4
8	☐			67.78		P	7.5

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	17.3
2	☐			47.23		P	20.4
3	☐			44.44		P	75.8
4	☐			69.45		P	6.9
5	☐			116.67		P	37.8
6	☐			166.67		P	10.0
7	☐			336.13		P	6.2
8	☐			102.78		P	24.8

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			40.00		P	22.0
2	☐			32.22		P	15.8
3	☐			50.00		P	17.6
4	☐			58.89		P	25.5
5	☐			108.89		P	17.4
6	☐			163.34		P	5.4
7	☐			293.34		P	8.6
8	☐			58.89		P	16.3

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			161.12		P	10.8
2	☐			177.79		P	25.8
3	☐			208.34		P	21.2
4	☐			202.79		P	29.7
5	☐			191.68		P	30.4
6	☐			208.34		P	8.0
7	☐			211.12		P	22.4
8	☐			183.34		P	15.7

160 Gd [He] No available calibration points

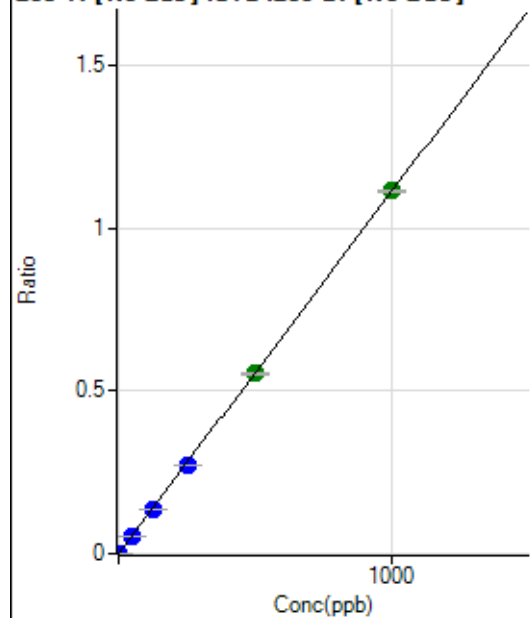
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			304.45		P	10.6
2	☐			306.67		P	10.4
3	☐			344.45		P	10.6
4	☐			323.34		P	12.9
5	☐			341.12		P	20.0
6	☐			331.12		P	12.5
7	☐			306.68		P	14.2
8	☐			302.23		P	16.6

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83.34		P	36.1
2	☐			116.68		P	12.4
3	☐			111.12		P	11.5
4	☐			119.45		P	28.2
5	☐			150.00		P	9.6
6	☐			122.23		P	20.8
7	☐			141.67		P	27.0
8	☐			169.46		P	39.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			80.00		P	12.5
2	☐			76.67		P	11.5
3	☐			82.23		P	18.3
4	☐			87.78		P	21.6
5	☐			97.78		P	21.9
6	☐			68.89		P	23.9
7	☐			83.34		P	16.0
8	☐			94.45		P	20.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2161.39	0.0001	P	4.5
2	☐	1.000	0.951	21470.99	0.0012	P	3.1
3	☐	50.000	49.708	1008330.46	0.0553	P	0.7
4	☐	125.000	123.987	2463441.16	0.1379	P	0.9
5	☐	250.000	246.253	4822497.07	0.2737	P	0.5
6	☐	500.000	497.048	9465448.39	0.5524	A	1.0
7	☐	1000.000	1002.554	18231449.71	1.1141	A	0.8
8	☐			5045.62	0.0004	P	7.1

$$y = 0.0011 * x + 1.1722E-004$$

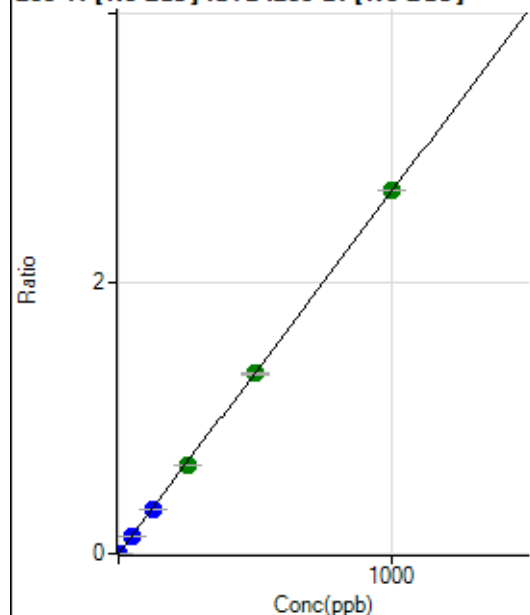
$$R = 1.0000$$

$$DL = 0.01411$$

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	4364.83	0.0002	P	4.7
2	☐	1.000	0.936	50120.31	0.0027	P	1.8
3	☐	50.000	49.679	2426032.80	0.1332	P	0.5
4	☐	125.000	124.115	5937572.79	0.3323	P	0.8
5	☐	250.000	244.892	11547917.71	0.6555	A	0.7
6	☐	500.000	498.679	22867741.48	1.3346	A	0.8
7	☐	1000.000	1002.064	43882346.12	2.6815	A	0.1
8	☐			11547.17	0.0008	P	3.8

$$y = 0.0027 * x + 2.3678E-004$$

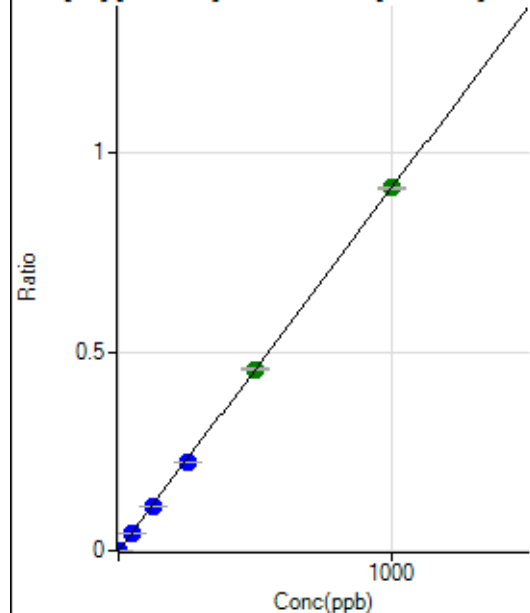
$$R = 1.0000$$

$$DL = 0.01249$$

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	3005.98	0.0002	P	4.1
2	☐	1.000	0.930	18467.06	0.0010	P	3.4
3	☐	50.000	50.052	833362.21	0.0457	P	0.7
4	☐	125.000	124.079	2021665.50	0.1132	P	0.6
5	☐	250.000	245.436	3940446.30	0.2237	P	0.8
6	☐	500.000	500.694	7815514.76	0.4561	A	1.0
7	☐	1000.000	1000.907	14918677.65	0.9116	A	0.5
8	☐			7822.88	0.0006	P	1.2

$$y = 9.1066E-004 * x + 1.6302E-004$$

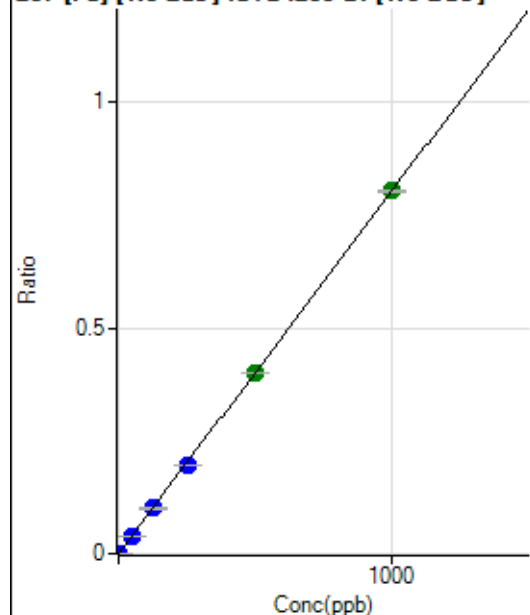
$$R = 1.0000$$

$$DL = 0.0218$$

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	2748.51	0.0001	P	4.9
2	☐	1.000	0.924	16291.90	0.0009	P	2.6
3	☐	50.000	49.560	727476.43	0.0399	P	0.7
4	☐	125.000	124.778	1792218.94	0.1003	P	0.6
5	☐	250.000	244.778	3464275.83	0.1966	P	0.6
6	☐	500.000	499.500	6873108.89	0.4011	A	0.7
7	☐	1000.000	1001.605	13159833.74	0.8042	A	0.7
8	☐			6737.07	0.0005	P	1.9

$$y = 8.0274E-004 * x + 1.4906E-004$$

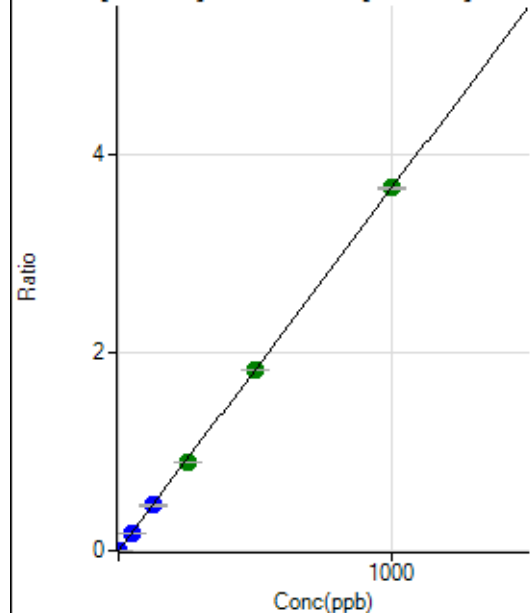
$$R = 1.0000$$

$$DL = 0.02719$$

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	11287.29	0.0006	P	3.8
2	☐	1.000	0.932	73569.81	0.0040	P	1.1
3	☐	50.000	49.947	3340816.30	0.1834	P	0.3
4	☐	125.000	124.863	8174096.28	0.4575	P	0.8
5	☐	250.000	245.839	15858899.11	0.9002	A	0.3
6	☐	500.000	499.471	31328367.54	1.8283	A	0.5
7	☐	1000.000	1001.325	59971118.36	3.6648	A	0.7
8	☐			30395.81	0.0022	P	0.7

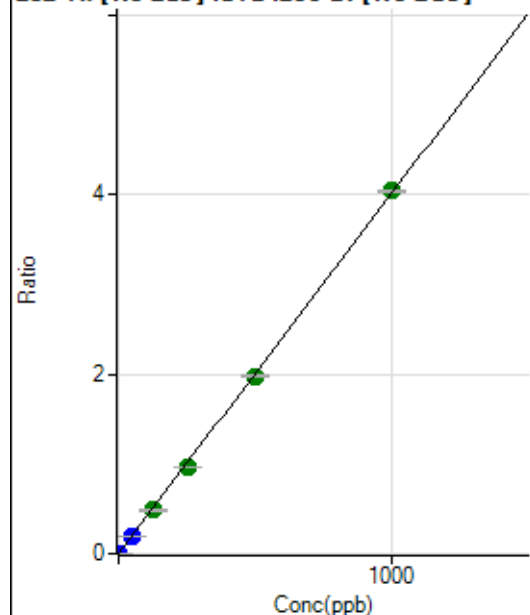
$$y = 0.0037 * x + 6.1214E-004$$

$$R = 1.0000$$

$$DL = 0.01886$$

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	3383.88	0.0002	P	5.0
2	☐	1.000	0.781	60612.72	0.0033	P	0.7
3	☐	50.000	48.002	3510792.78	0.1927	P	1.1
4	☐	125.000	120.428	8633219.58	0.4832	A	0.7
5	☐	250.000	239.103	16898749.80	0.9592	A	0.4
6	☐	500.000	492.663	33862984.32	1.9762	A	0.4
7	☐	1000.000	1007.064	66103656.57	4.0395	A	0.5
8	☐			11416.39	0.0008	P	3.2

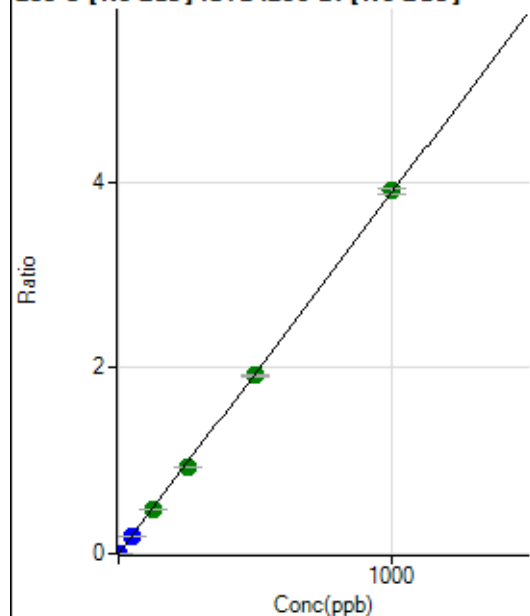
$$y = 0.0040 * x + 1.8354E-004$$

$$R = 0.9999$$

$$DL = 0.006905$$

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	8353.02	0.0005	P	1.3
2	☐	1.000	0.887	71318.43	0.0039	P	1.4
3	☐	50.000	48.960	3473207.20	0.1906	P	0.2
4	☐	125.000	122.813	8531857.14	0.4775	A	0.5
5	☐	250.000	241.610	16542887.35	0.9390	A	0.4
6	☐	500.000	493.970	32888669.83	1.9194	A	0.7
7	☐	1000.000	1005.438	63921354.90	3.9063	A	1.3
8	☐			6221.19	0.0004	P	6.5

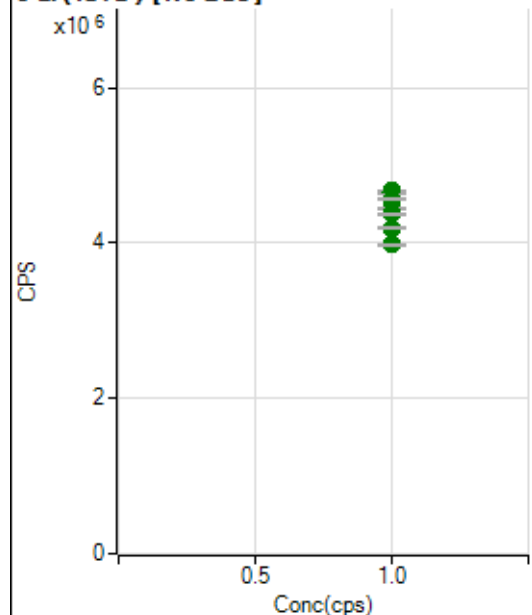
$$y = 0.0039 * x + 4.5304E-004$$

$$R = 0.9999$$

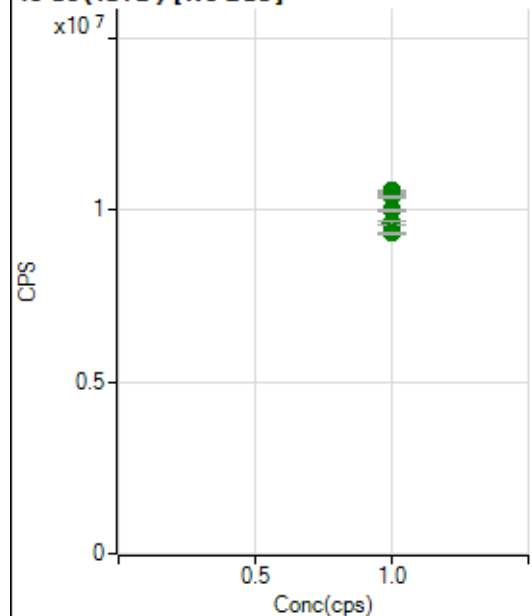
$$DL = 0.004691$$

Weight: <None>

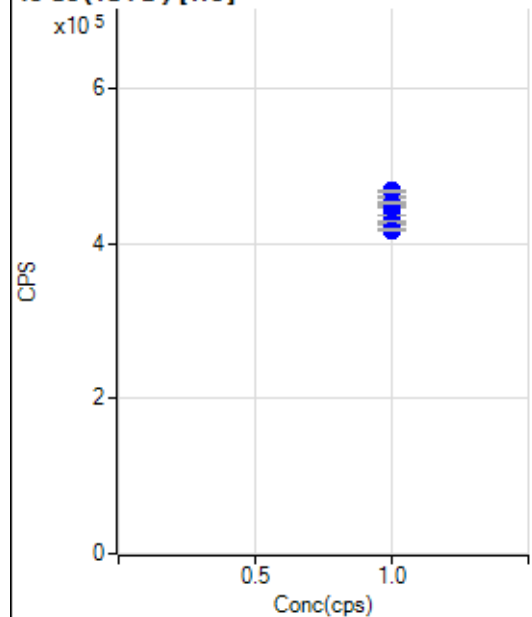
Min Conc: 0

6 Li (ISTD) [No Gas]

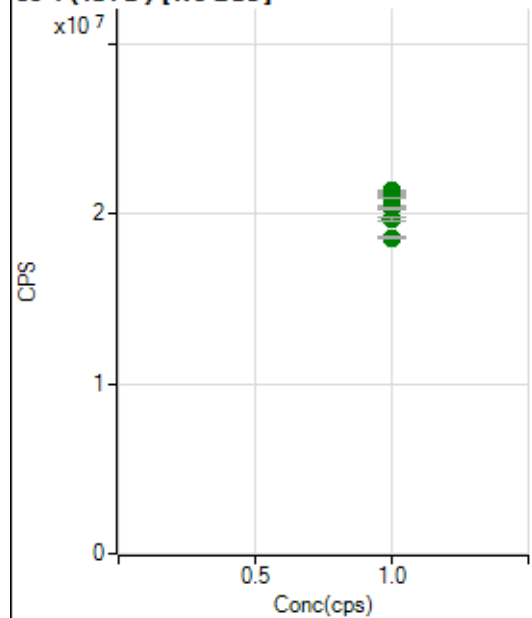
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4668724.35		A	0.2
2	☐	1.000		4648129.29		A	0.8
3	☐	1.000		4625753.93		A	0.3
4	☐	1.000		4436655.84		A	0.7
5	☐	1.000		4556777.39		A	0.5
6	☐	1.000		4368069.89		A	0.3
7	☐	1.000		4189552.82		A	0.7
8	☐	1.000		3980878.75		A	0.5

45 Sc (ISTD) [No Gas]

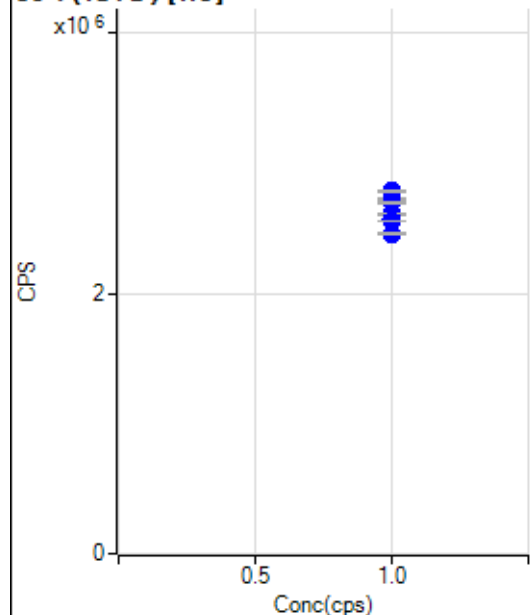
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10551412.91		A	0.3
2	☐	1.000		10469857.52		A	0.2
3	☐	1.000		10402626.62		A	1.0
4	☐	1.000		9987308.47		A	1.0
5	☐	1.000		10395699.37		A	0.5
6	☐	1.000		9985960.90		A	0.3
7	☐	1.000		9618914.45		A	0.7
8	☐	1.000		9317212.28		A	0.5

45 Sc (ISTD) [He]

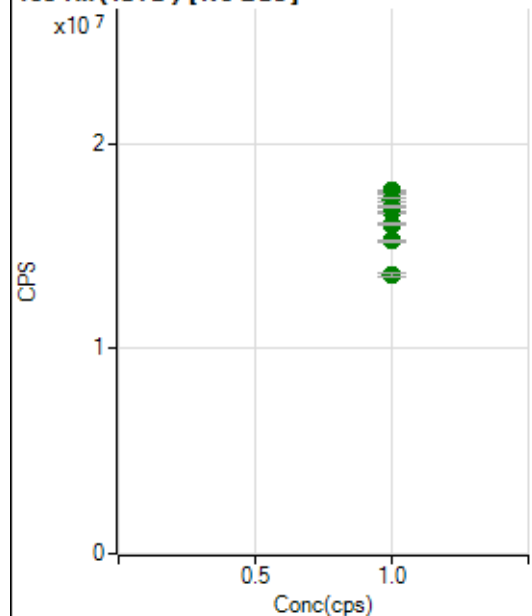
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		460883.41		P	0.8
2	☐	1.000		468448.29		P	0.4
3	☐	1.000		448687.05		P	0.4
4	☐	1.000		426434.83		P	0.8
5	☐	1.000		452910.58		P	0.1
6	☐	1.000		437490.40		P	0.2
7	☐	1.000		427796.99		P	0.5
8	☐	1.000		417569.68		P	0.8

89 Y (ISTD) [No Gas]

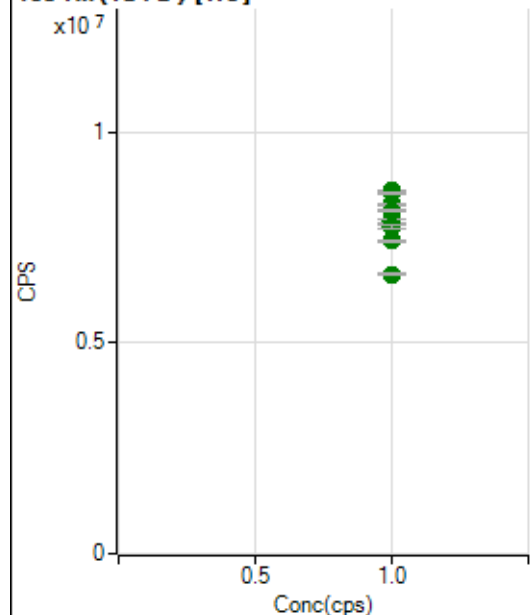
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21338395.24		A	0.7
2	☐	1.000		21237109.54		A	0.7
3	☐	1.000		21099385.80		A	0.5
4	☐	1.000		20427410.94		A	0.8
5	☐	1.000		20941082.88		A	0.2
6	☐	1.000		20330533.17		A	0.4
7	☐	1.000		19680002.35		A	0.8
8	☐	1.000		18566996.81		A	0.4

89 Y (ISTD) [He]

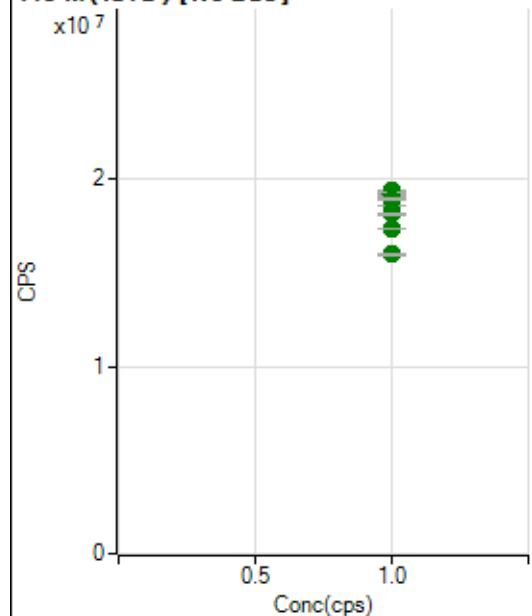
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2732721.66		P	0.6
2	☐	1.000		2788352.46		P	0.7
3	☐	1.000		2704038.95		P	0.9
4	☐	1.000		2577660.83		P	1.3
5	☐	1.000		2698662.84		P	0.4
6	☐	1.000		2611984.49		P	0.1
7	☐	1.000		2555424.93		P	0.4
8	☐	1.000		2459832.84		P	0.9

103 Rh (ISTD) [No Gas]

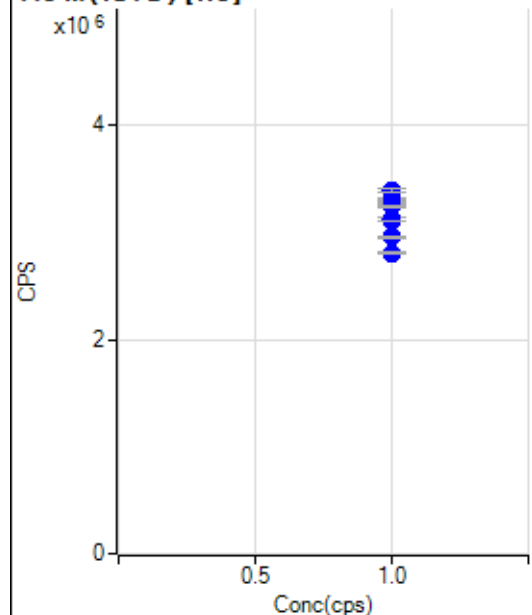
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17690080.43		A	0.4
2	☐	1.000		17535729.73		A	0.3
3	☐	1.000		17234362.02		A	0.8
4	☐	1.000		16648507.66		A	0.4
5	☐	1.000		16922112.18		A	0.5
6	☐	1.000		16073772.93		A	0.4
7	☐	1.000		15242775.17		A	0.9
8	☐	1.000		13569789.19		A	1.2

103 Rh (ISTD) [He]

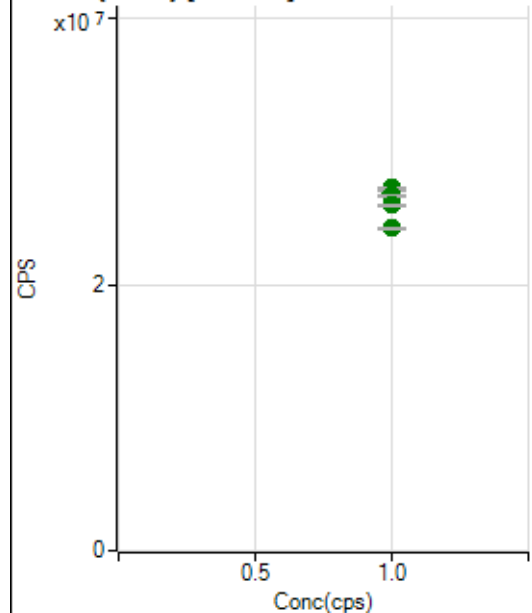
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8606988.00		A	0.4
2	☐	1.000		8562674.25		A	0.4
3	☐	1.000		8296744.32		A	0.6
4	☐	1.000		7896438.15		A	1.2
5	☐	1.000		8126764.32		A	0.7
6	☐	1.000		7761124.05		A	0.7
7	☐	1.000		7414102.39		A	0.4
8	☐	1.000		6631639.27		A	1.1

115 In (ISTD) [No Gas]

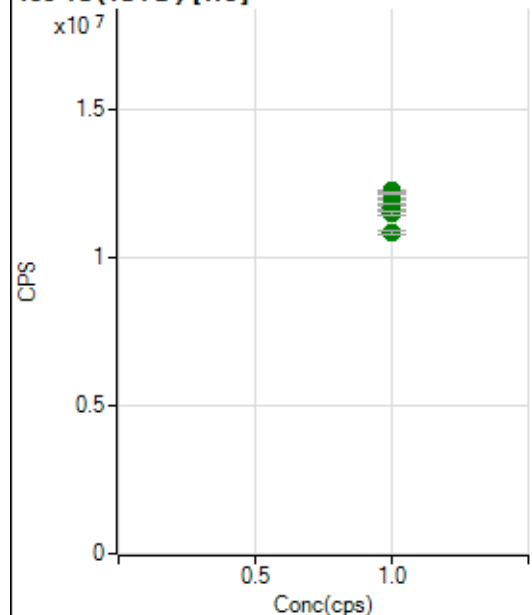
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19380349.59		A	0.7
2	☐	1.000		19243604.23		A	0.5
3	☐	1.000		19203036.30		A	0.8
4	☐	1.000		18583709.76		A	0.3
5	☐	1.000		18936456.16		A	0.2
6	☐	1.000		18149158.00		A	0.2
7	☐	1.000		17364689.88		A	0.4
8	☐	1.000		15997286.45		A	0.3

115 In (ISTD) [He]

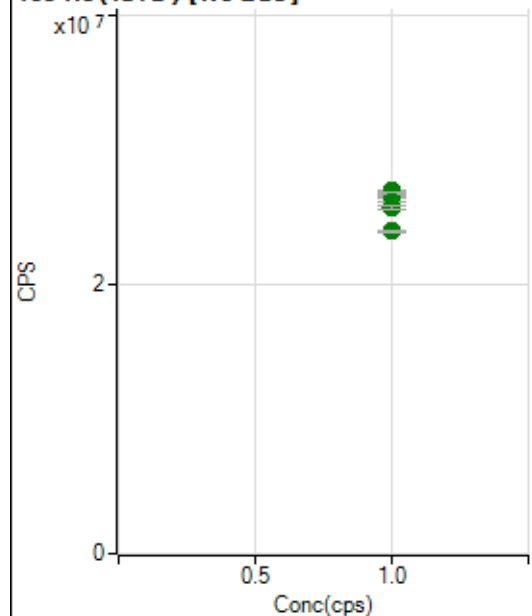
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3324177.92		P	0.5
2	☐	1.000		3391206.52		P	1.0
3	☐	1.000		3283333.68		P	0.4
4	☐	1.000		3129601.91		P	1.0
5	☐	1.000		3249414.30		P	0.4
6	☐	1.000		3107118.48		P	0.3
7	☐	1.000		2965173.46		P	0.6
8	☐	1.000		2804998.29		P	0.7

159 Tb (ISTD) [No Gas]

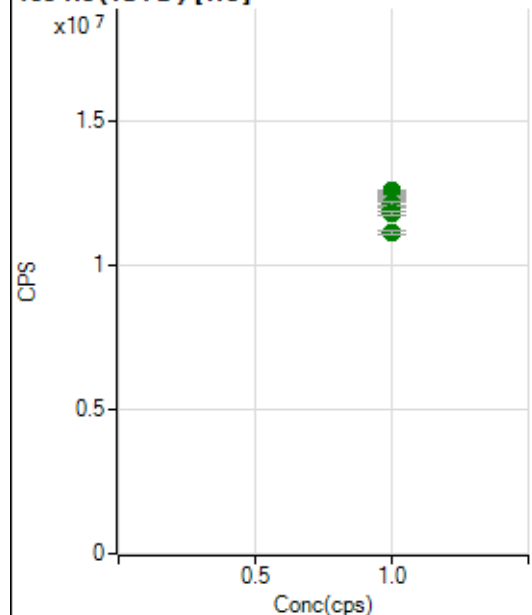
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27228052.37		A	0.4
2	☐	1.000		27247658.76		A	0.8
3	☐	1.000		27231310.71		A	0.8
4	☐	1.000		26873896.82		A	0.7
5	☐	1.000		27192867.37		A	0.5
6	☐	1.000		26663964.32		A	0.6
7	☐	1.000		25956846.56		A	0.7
8	☐	1.000		24212392.14		A	0.3

159 Tb (ISTD) [He]

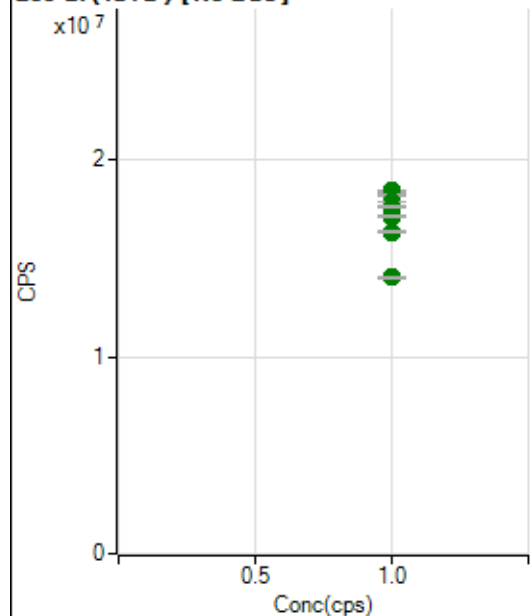
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12227597.46		A	0.1
2	☐	1.000		12242593.84		A	0.1
3	☐	1.000		11994948.57		A	0.5
4	☐	1.000		11672797.46		A	1.2
5	☐	1.000		12154152.18		A	0.5
6	☐	1.000		11800675.10		A	0.4
7	☐	1.000		11479614.00		A	0.8
8	☐	1.000		10814900.33		A	1.2

165 Ho (ISTD) [No Gas]

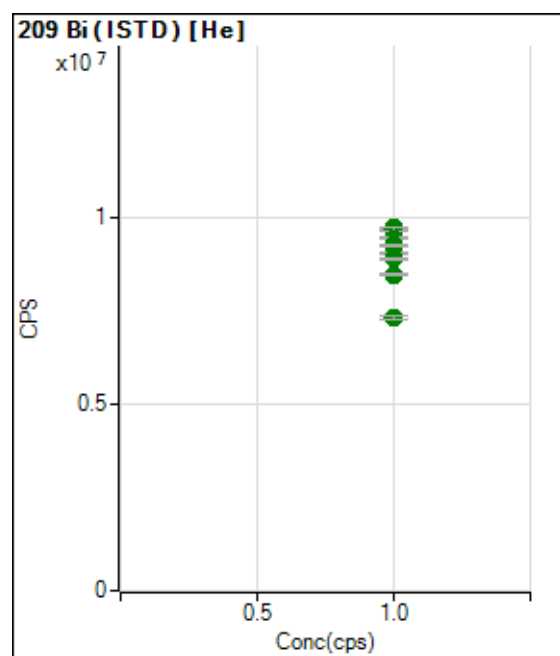
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		26963959.46		A	0.1
2	☐	1.000		26712829.59		A	0.3
3	☐	1.000		26893598.69		A	0.7
4	☐	1.000		26494219.86		A	0.4
5	☐	1.000		26857813.28		A	0.6
6	☐	1.000		26184817.43		A	0.2
7	☐	1.000		25757829.74		A	0.9
8	☐	1.000		23959032.48		A	0.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12605450.51		A	0.2
2	☐	1.000		12520508.84		A	0.6
3	☐	1.000		12257422.04		A	0.7
4	☐	1.000		11944151.21		A	1.0
5	☐	1.000		12420759.68		A	0.5
6	☐	1.000		12164982.18		A	0.7
7	☐	1.000		11833929.55		A	0.7
8	☐	1.000		11161329.56		A	1.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18437005.14		A	0.5
2	☐	1.000		18286726.54		A	0.6
3	☐	1.000		18217964.45		A	0.6
4	☐	1.000		17866353.62		A	0.3
5	☐	1.000		17617070.99		A	0.5
6	☐	1.000		17135379.74		A	0.6
7	☐	1.000		16364775.87		A	0.7
8	☐	1.000		14048093.12		A	0.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9713565.20		A	0.6
2	☐	1.000		9674389.58		A	0.7
3	☐	1.000		9427981.11		A	0.6
4	☐	1.000		9035639.79		A	0.7
5	☐	1.000		9245694.17		A	0.4
6	☐	1.000		8882420.56		A	0.3
7	☐	1.000		8461187.79		A	0.9
8	☐	1.000		7313845.72		A	0.9

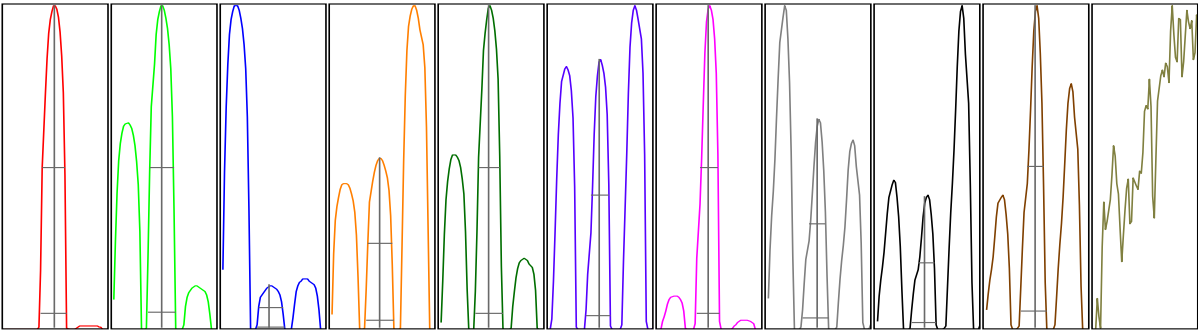
US EPA Tune Check Sample Report

Batch Folder D:\ICP-MS Data\P7091119-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]					
Mass	Count	RSD%	RSD%	RSD%	
	(Mean)	(Actual)	(Required)	(Flag)	
9	15464	2.73	5.00		
24	190989	2.60	5.00		
25	25600	2.75	5.00		
26	30325	2.70	5.00		
59	153387	2.74	5.00		
113	22030	2.60	5.00		
115	253241	2.64	5.00		
206	66535	2.43	5.00		
207	60331	2.73	5.00		
208	143407	2.55	5.00		
220	126	7.43			

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	15625	15680	15734	14718	15561
24	193526	194101	193935	182387	190998
25	25963	25960	26012	24361	25704
26	30635	30679	30920	28885	30505
59	155513	155977	155767	146069	153607
113	22122	22308	22403	21021	22297
115	255227	255948	258751	241612	254667
206	66757	67309	67764	63718	67130
207	60823	60978	61418	57407	61028
208	145579	144809	145060	136901	144685
220	119	115	127	129	139

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	25393	9.00	8.9 - 9.1		0.783	0.900	
24	298497	23.95	23.9 - 24.1		0.832	0.900	
25	39852	24.90	24.9 - 25.1		0.818	0.900	
26	46712	25.95	25.9 - 26.1		0.833	0.900	
59	262192	58.95	58.9 - 59.1		0.816	0.900	
113	43906	113.00	112.9 - 113.1		0.713	0.900	
115	503907	115.00	114.9 - 115.1		0.689	0.900	
206	142074	206.00	205.9 - 206.1		0.762	0.900	
207	125938	206.95	206.9 - 207.1		0.731	0.900	
208	308586	208.00	207.9 - 208.1		0.763	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	7.2	V	Deflect	11.8	V
Extract 2	-150.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	150	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	41604	2.02	
89	48774	2.24	
205	57680	1.79	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	41302	41255	41182	41177	43104
89	48260	48370	48434	48094	50714
205	57173	57428	57377	56932	59491

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	6.8	V	Deflect	1.2	V
Extract 2	-140.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	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	190	V			