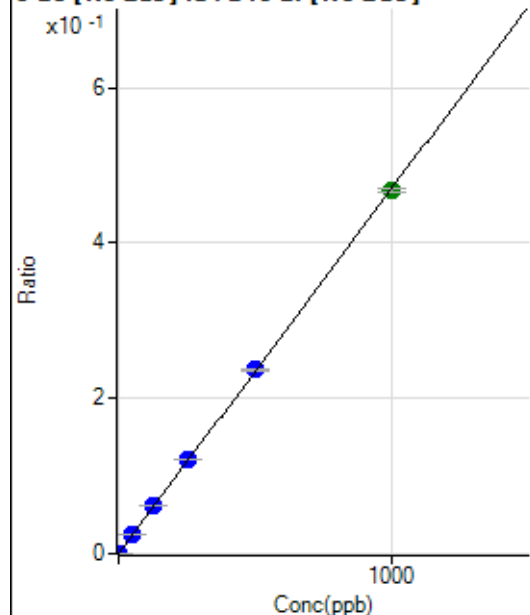


Batch Folder: D:\ICP-MS Data\P7091818-MS.b\
Analysis File: P7091818-MS.batch.bin
DA Date-Time: 2018-09-18 17:35:51
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2018-09-18 14:53:52
2	004CALS.d	S01	2018-09-18 14:57:26
3	005CALS.d	S02	2018-09-18 15:02:19
4	006CALS.d	S03	2018-09-18 15:06:05
5	007CALS.d	S04	2018-09-18 15:10:00
6	008CALS.d	S05	2018-09-18 15:13:46
7	009CALS.d	S06	2018-09-18 15:17:30
8	010CALS.d	S07	2018-09-18 15:21:15
9	011CALS.d	S08	2018-09-18 15:25:04

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	101.85	0.0000	P	3.6
2	☐	0.100	0.101	431.50	0.0001	P	6.9
3	☐	1.000	1.041	3826.51	0.0005	P	1.9
4	☐	50.000	53.606	188034.13	0.0252	P	1.2
5	☐	125.000	133.122	445451.64	0.0625	P	0.2
6	☐	250.000	259.874	835941.01	0.1220	P	0.7
7	☐	500.000	503.693	1556782.31	0.2364	P	0.2
8	☐	1000.000	994.489	3074893.03	0.4668	A	1.2
9	☐			587.06	0.0001	P	2.7

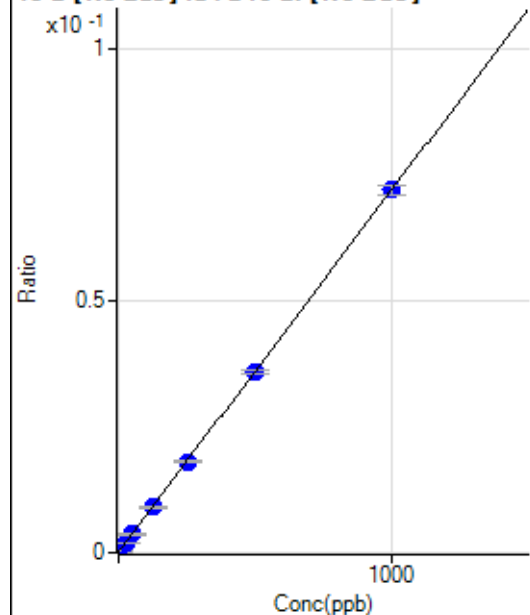
$$y = 4.6938\text{E-}004 * x + 1.3365\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.003079$$

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	969.51	0.0001	P	0.4
2	☐	2.500	2.240	2036.33	0.0003	P	1.5
3	☐	25.000	23.064	13609.44	0.0018	P	5.0
4	☐	50.000	49.206	27375.61	0.0037	P	2.2
5	☐	125.000	124.753	64836.58	0.0091	P	3.0
6	☐	250.000	250.278	124193.36	0.0181	P	0.7
7	☐	500.000	498.805	236948.21	0.0360	P	2.0
8	☐	1000.000	1000.648	474778.50	0.0721	P	2.9
9	☐			30414.78	0.0048	P	9.4

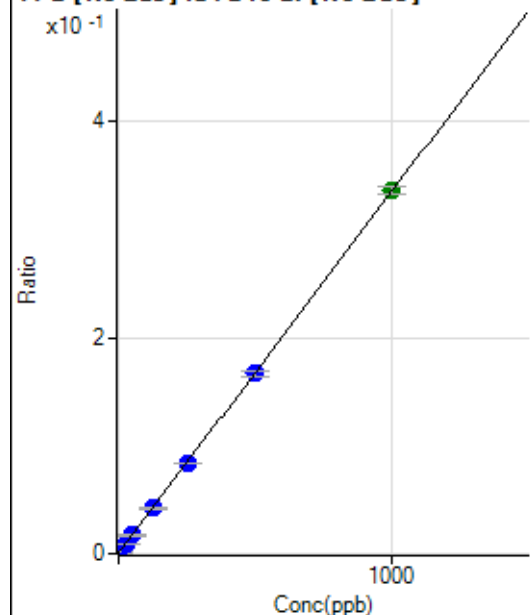
$$y = 7.1908\text{E-}005 * x + 1.2721\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.02334$$

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	4595.31	0.0006	P	5.9
2	☐	2.500	2.504	10142.62	0.0014	P	6.5
3	☐	25.000	22.854	62797.60	0.0082	P	3.1
4	☐	50.000	48.786	126243.94	0.0169	P	2.2
5	☐	125.000	124.080	299747.54	0.0421	P	3.0
6	☐	250.000	248.505	573097.67	0.0836	P	1.3
7	☐	500.000	496.186	1095243.97	0.1664	P	2.3
8	☐	1000.000	1002.510	2210360.40	0.3356	A	2.1
9	☐			138787.08	0.0219	P	10.6

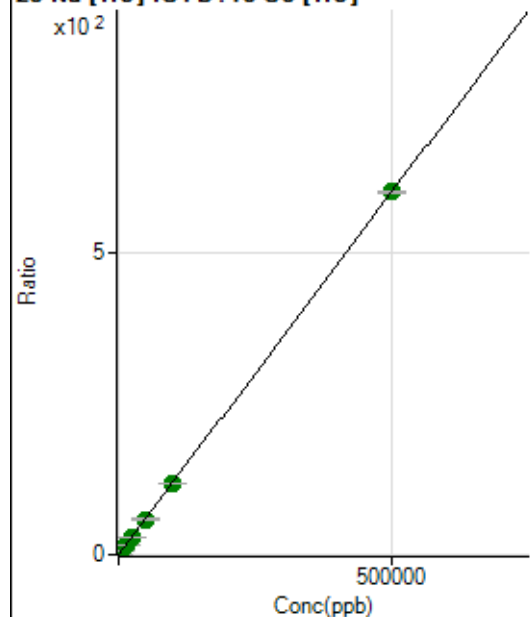
$$y = 3.3412\text{E-}004 * x + 6.0293\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.3205$$

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	13767.88	0.0228	P	3.2
2	☐	50.000	44.013	45227.35	0.0757	P	3.8
3	☐	500.000	489.555	356037.51	0.6103	P	1.3
4	☐	5000.000	4897.460	3372544.48	5.8996	A	2.2
5	☐	12500.000	12515.470	8113352.09	15.0408	A	0.5
6	☐	25000.000	24820.199	15632026.91	29.8058	A	0.3
7	☐	50000.000	48960.263	30442489.92	58.7727	A	0.8
8	☐	100000.00	97595.674	61127094.42	117.1327	A	0.2
9	☐	500000.00	500594.47	319624534.9	600.7110	A	0.9

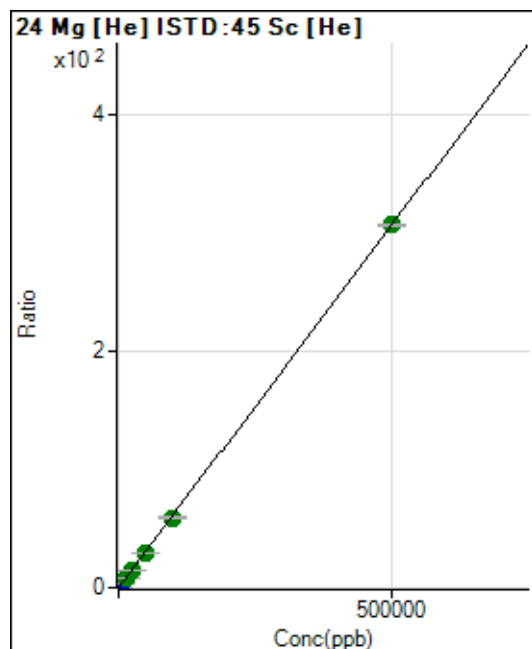
$$y = 0.0012 * x + 0.0228$$

$$R = 1.0000$$

$$DL = 1.843$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	205.56	0.0003	P	8.3
2	☐	50.000	41.009	15230.55	0.0255	P	8.4
3	☐	500.000	497.217	178012.18	0.3052	P	2.1
4	☐	5000.000	4930.264	1727981.61	3.0228	P	2.4
5	☐	12500.000	12555.041	4151966.93	7.6971	A	0.7
6	☐	25000.000	24794.566	7972004.26	15.2004	A	0.5
7	☐	50000.000	48702.416	15464231.60	29.8569	A	0.6
8	☐	100000.00	96831.766	30978746.87	59.3621	A	0.1
9	☐	500000.00	500773.00	163347036.9	306.9943	A	0.7

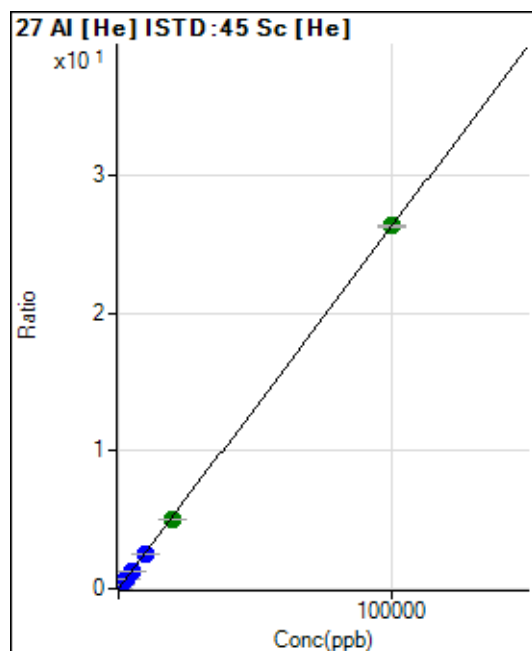
$$y = 6.1304\text{E-}004 * x + 3.4105\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1385$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0001	P	26.6
2	☐	2.000	1.738	322.24	0.0005	P	17.4
3	☐	20.000	19.755	3078.24	0.0053	P	8.3
4	☐	1000.000	985.869	148081.32	0.2590	P	2.4
5	☐	2500.000	2500.404	354327.63	0.6569	P	0.9
6	☐	5000.000	4919.777	677803.04	1.2924	P	0.2
7	☐	10000.000	9650.467	1312935.04	2.5350	P	0.3
8	☐	20000.000	19220.587	2634771.84	5.0488	A	0.3
9	☐	100000.00	100194.97	14003339.03	26.3185	A	0.9

$$y = 2.6267\text{E-}004 * x + 8.2514\text{E-}005$$

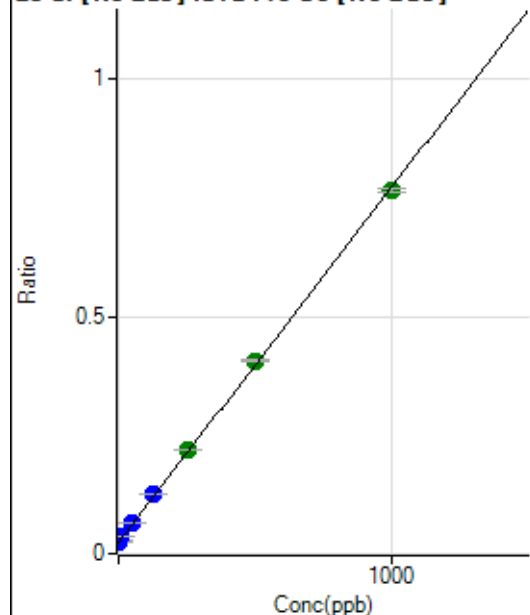
$$R = 1.0000$$

$$DL = 0.2503$$

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	306812.01	0.0240	P	0.6
2	☐	1.000	4.143	321164.61	0.0271	P	3.6
3	☐	10.000	14.745	447573.53	0.0351	P	1.7
4	☐	50.000	55.340	802583.03	0.0654	P	1.7
5	☐	125.000	137.050	1473018.46	0.1265	P	0.3
6	☐	250.000	260.228	2455919.61	0.2186	A	0.3
7	☐	500.000	510.442	4438591.42	0.4057	A	1.1
8	☐	1000.000	990.398	8481484.91	0.7646	A	1.1
9	☐			625163.36	0.0566	P	2.6

$$y = 7.4771\text{E-}004 * x + 0.0240$$

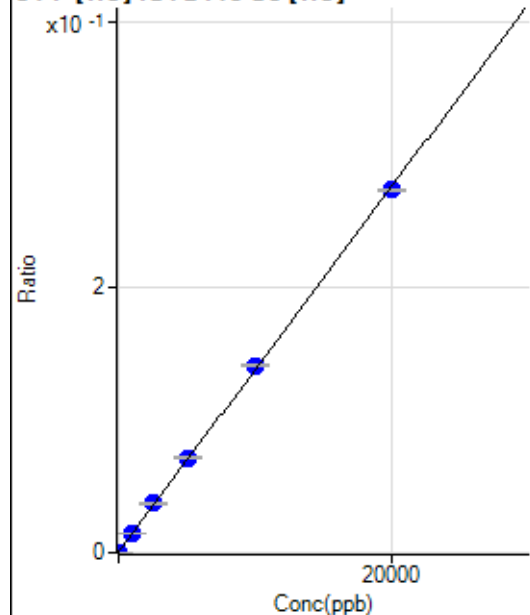
$$R = 0.9998$$

$$DL = 0.5956$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-2.300	261.12	0.0004	P	24.2
2	☐	0.000	-4.253	244.46	0.0004	P	29.4
3	☐	0.000	6.553	325.02	0.0006	P	17.6
4	☐	1000.000	1038.410	8444.41	0.0148	P	3.3
5	☐	2500.000	2667.255	20069.68	0.0372	P	2.0
6	☐	5000.000	5152.041	37461.86	0.0714	P	1.2
7	☐	10000.000	10211.626	73090.65	0.1411	P	0.7
8	☐	20000.000	19833.350	142803.41	0.2736	P	0.6
9	☐			308.35	0.0006	P	15.3

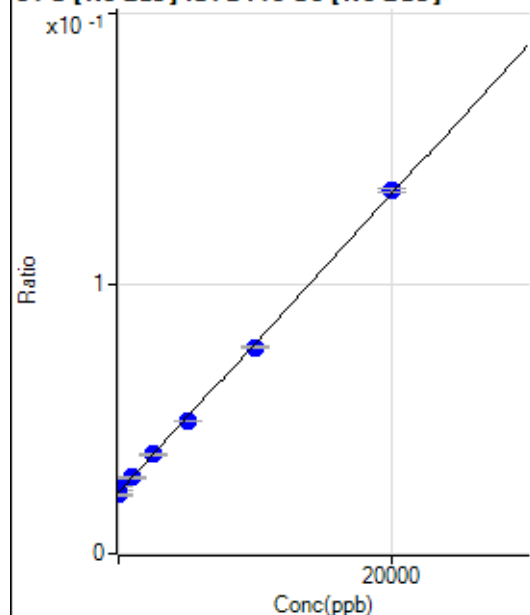
$$y = 1.3774\text{E-}005 * x + 4.6724\text{E-}004$$

$$R = 0.9999$$

$$DL = 23.48$$

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	-102.990	283175.54	0.0222	P	0.7
2	☐	0.000	268.142	286778.42	0.0242	P	4.4
3	☐	0.000	-165.152	278800.77	0.0218	P	1.5
4	☐	1000.000	977.395	345450.42	0.0282	P	0.9
5	☐	2500.000	2542.844	428550.56	0.0368	P	1.3
6	☐	5000.000	4763.143	551342.99	0.0491	P	0.2
7	☐	10000.000	9703.262	835675.71	0.0764	P	1.0
8	☐	20000.000	20203.358	1491136.23	0.1344	P	0.9
9	☐			228252.84	0.0207	P	3.0

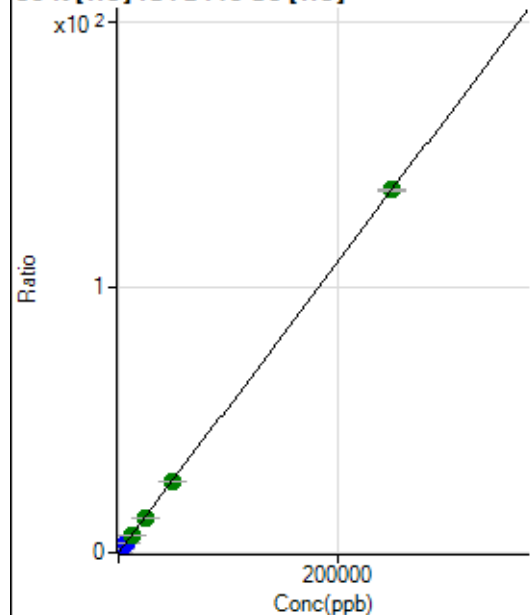
$$y = 5.5271\text{E-}006 * x + 0.0227$$

$$R = 0.9996$$

$$DL = 282.1$$

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	17152.20	0.0285	P	3.4
2	☐	50.000	49.604	33221.27	0.0556	P	3.4
3	☐	500.000	496.854	175005.30	0.3000	P	2.3
4	☐	2500.000	2472.560	788756.84	1.3797	P	2.2
5	☐	6250.000	6191.917	1840725.43	3.4124	P	0.5
6	☐	12500.000	12241.266	3523551.69	6.7184	A	0.7
7	☐	25000.000	24263.164	6882298.07	13.2885	A	0.4
8	☐	50000.000	48797.942	13932116.63	26.6970	A	0.3
9	☐	250000.00	250328.76	72807980.10	136.8353	A	0.9

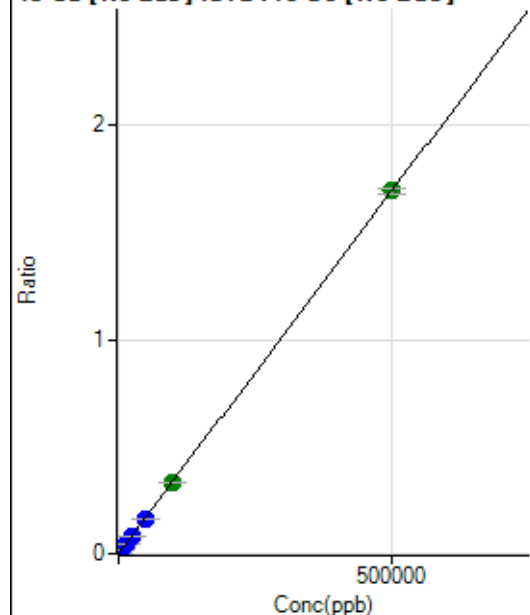
$$y = 5.4651\text{E-}004 * x + 0.0285$$

$$R = 1.0000$$

$$DL = 5.268$$

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	144.45	0.0000	P	19.9
2	☐	50.000	49.220	2111.34	0.0002	P	9.4
3	☐	500.000	483.649	21032.29	0.0016	P	3.1
4	☐	5000.000	4993.902	207464.56	0.0169	P	1.0
5	☐	12500.000	12580.607	495740.06	0.0426	P	0.4
6	☐	25000.000	24990.918	950016.31	0.0846	P	1.0
7	☐	50000.000	48724.774	1803895.63	0.1649	P	0.5
8	☐	100000.00	97685.408	3666407.02	0.3305	A	1.3
9	☐	500000.00	500588.95	18703667.95	1.6937	A	1.4

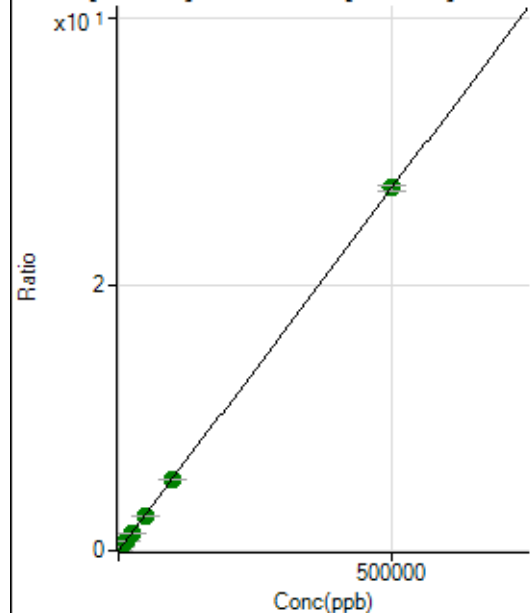
$$y = 3.3833\text{E-}006 * x + 1.1309\text{E-}005$$

$$R = 1.0000$$

$$DL = 1.998$$

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	9190.07	0.0007	P	1.7
2	☐	50.000	49.285	40320.49	0.0034	P	2.4
3	☐	500.000	480.260	343035.43	0.0269	P	3.1
4	☐	5000.000	4880.905	3270447.88	0.2665	A	0.5
5	☐	12500.000	12281.534	7795723.35	0.6695	A	0.1
6	☐	25000.000	24629.984	15075787.32	1.3419	A	0.4
7	☐	50000.000	48390.657	28841780.16	2.6358	A	0.3
8	☐	100000.00	97378.560	58833633.26	5.3035	A	0.8
9	☐	500000.00	500710.39	301117940.0	27.2669	A	1.4

$$y = 5.4455\text{E-}005 * x + 7.1983\text{E-}004$$

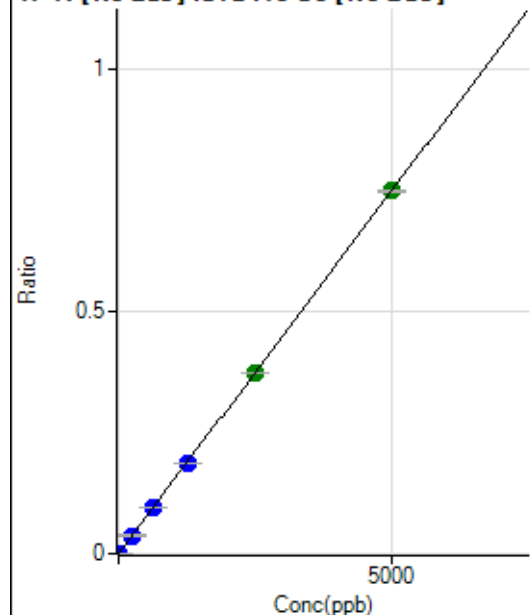
$$R = 1.0000$$

$$DL = 0.6929$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	29.1
2	☐	0.500	0.537	1072.31	0.0001	P	9.7
3	☐	5.000	4.867	9433.88	0.0007	P	5.8
4	☐	250.000	250.921	461557.24	0.0376	P	1.4
5	☐	625.000	631.239	1101669.06	0.0946	P	0.4
6	☐	1250.000	1244.605	2095647.79	0.1865	P	0.1
7	☐	2500.000	2497.279	4095330.26	0.3743	A	0.4
8	☐	5000.000	5001.883	8316191.07	0.7496	A	0.7
9	☐			4606.48	0.0004	P	5.3

$$y = 1.4987E-004 * x + 9.7920E-006$$

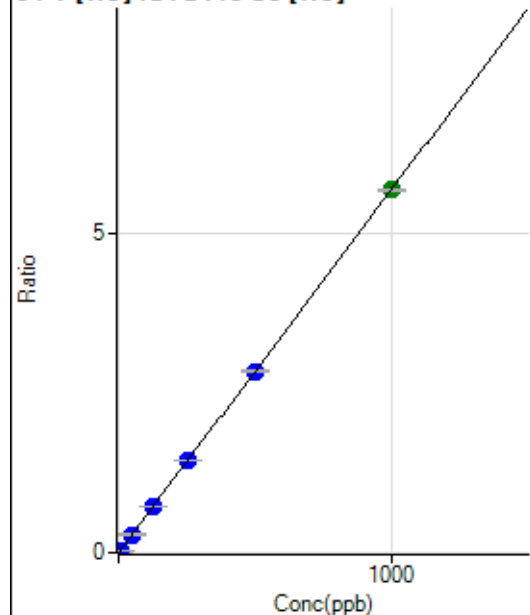
$$R = 1.0000$$

$$DL = 0.05702$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.89	0.0000	P	19.1
2	☐	0.500	0.420	1433.43	0.0024	P	11.2
3	☐	5.000	5.009	16589.48	0.0284	P	2.7
4	☐	50.000	50.236	162955.94	0.2851	P	2.6
5	☐	125.000	128.193	392391.59	0.7274	P	0.3
6	☐	250.000	253.110	753262.58	1.4362	P	0.1
7	☐	500.000	499.106	1467012.44	2.8321	P	0.7
8	☐	1000.000	999.259	2959002.63	5.6702	A	0.5
9	☐			1630.11	0.0031	P	5.8

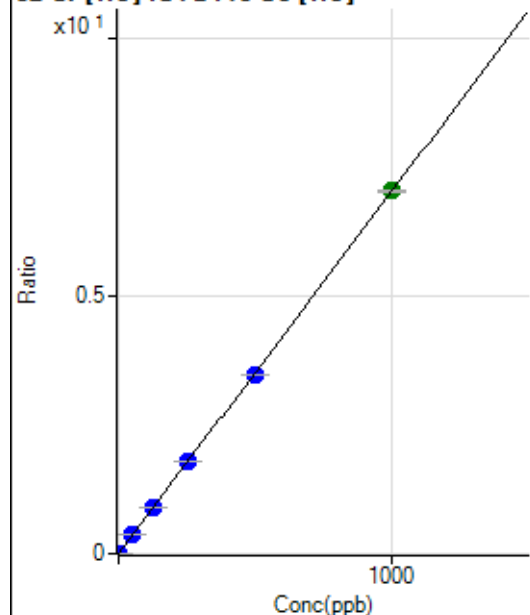
$$y = 0.0057 * x + 1.4692E-005$$

$$R = 1.0000$$

$$DL = 0.001486$$

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	772.26	0.0013	P	7.9
2	☐	0.200	0.159	1435.65	0.0024	P	11.5
3	☐	2.000	2.151	9558.79	0.0164	P	2.6
4	☐	50.000	50.905	205002.73	0.3586	P	2.1
5	☐	125.000	128.503	487248.33	0.9033	P	0.3
6	☐	250.000	253.073	932323.27	1.7777	P	0.4
7	☐	500.000	493.197	1793810.18	3.4632	P	0.5
8	☐	1000.000	1002.150	3671617.86	7.0356	A	0.3
9	☐			163187.95	0.3067	P	1.2

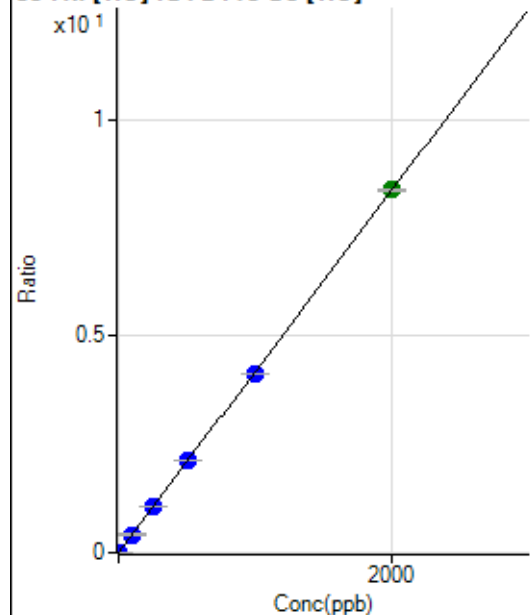
$$y = 0.0070 * x + 0.0013$$

$$R = 1.0000$$

$$DL = 0.04343$$

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	61.11	0.0001	P	39.5
2	☐	0.100	0.087	278.90	0.0005	P	11.9
3	☐	1.000	1.029	2566.93	0.0044	P	3.2
4	☐	100.000	100.842	241012.82	0.4216	P	2.3
5	☐	250.000	255.716	576612.84	1.0689	P	0.3
6	☐	500.000	505.157	1107428.11	2.1115	P	0.2
7	☐	1000.000	988.003	2139070.06	4.1297	P	0.5
8	☐	2000.000	2003.953	4371174.48	8.3762	A	0.3
9	☐			22431.72	0.0422	P	1.1

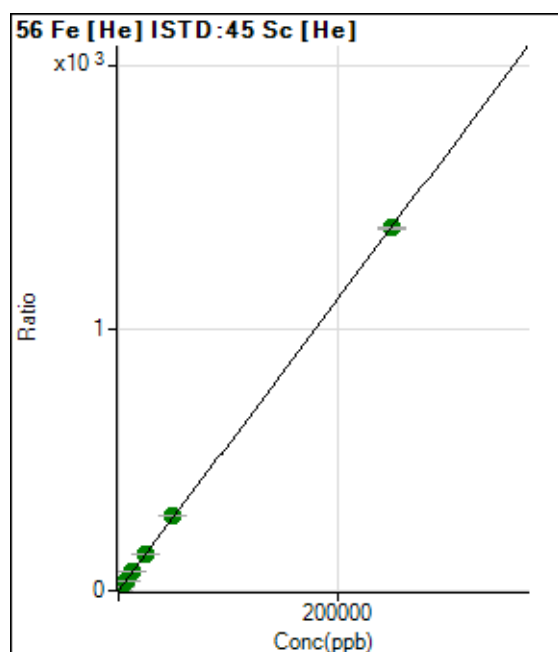
$$y = 0.0042 * x + 1.0126E-004$$

$$R = 1.0000$$

$$DL = 0.02871$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4623.07	0.0077	P	7.7
2	☐	5.000	4.420	19226.04	0.0322	P	7.0
3	☐	50.000	53.629	177797.65	0.3048	P	1.8
4	☐	2500.000	2588.632	8202490.12	14.3484	A	2.3
5	☐	6250.000	6606.383	19746239.79	36.6062	A	0.3
6	☐	12500.000	13063.118	37958398.53	72.3756	A	0.2
7	☐	25000.000	25767.499	73935888.69	142.7562	A	0.1
8	☐	50000.000	51686.303	149429575.5	286.3429	A	0.4
9	☐	250000.00	249548.03	735590305.3	1,382.470	A	0.6

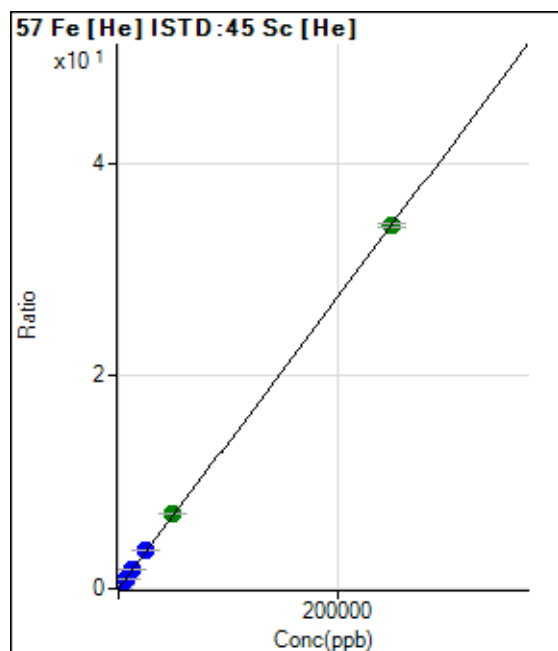
$$y = 0.0055 * x + 0.0077$$

$$R = 1.0000$$

$$DL = 0.3219$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	244.46	0.0004	P	9.0
2	☐	5.000	3.388	518.54	0.0009	P	3.7
3	☐	50.000	56.127	4710.16	0.0081	P	0.2
4	☐	2500.000	2628.236	205494.39	0.3595	P	2.5
5	☐	6250.000	6688.138	493103.35	0.9141	P	0.2
6	☐	12500.000	13224.130	947744.15	1.8071	P	0.3
7	☐	25000.000	26032.628	1842382.07	3.5569	P	0.5
8	☐	50000.000	51690.039	3685482.00	7.0622	A	0.2
9	☐	250000.00	249510.28	18137135.13	34.0881	A	1.0

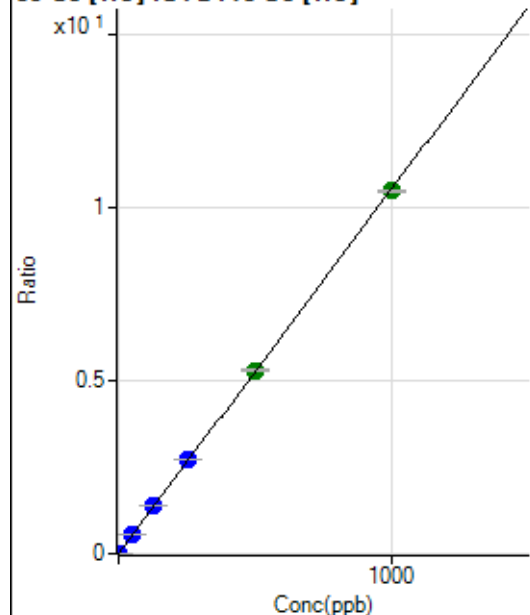
$$y = 1.3662E-004 * x + 4.0470E-004$$

$$R = 1.0000$$

$$DL = 0.7972$$

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	87.78	0.0001	P	20.2
2	☐	0.100	0.083	612.25	0.0010	P	7.3
3	☐	1.000	1.054	6561.57	0.0112	P	1.4
4	☐	50.000	52.497	316098.37	0.5529	P	2.4
5	☐	125.000	131.828	748888.82	1.3883	P	0.1
6	☐	250.000	258.569	1428060.05	2.7229	P	0.3
7	☐	500.000	502.907	2742592.42	5.2958	A	0.5
8	☐	1000.000	995.426	5470156.17	10.4821	A	0.3
9	☐			68878.57	0.1295	P	1.3

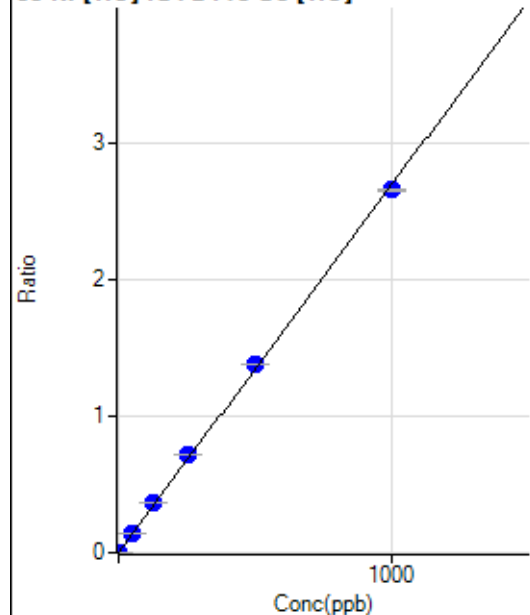
$$y = 0.0105 * x + 1.4616E-004$$

$$R = 0.9999$$

$$DL = 0.008428$$

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	86.67	0.0001	P	8.1
2	☐	0.100	0.100	246.67	0.0004	P	10.7
3	☐	1.000	1.171	1922.38	0.0033	P	5.4
4	☐	50.000	53.706	82758.52	0.1448	P	2.2
5	☐	125.000	136.730	198692.39	0.3683	P	0.3
6	☐	250.000	267.592	377998.74	0.7207	P	0.2
7	☐	500.000	514.401	717515.70	1.3854	P	0.2
8	☐	1000.000	986.750	1386756.75	2.6573	P	0.5
9	☐			50145.44	0.0942	P	0.7

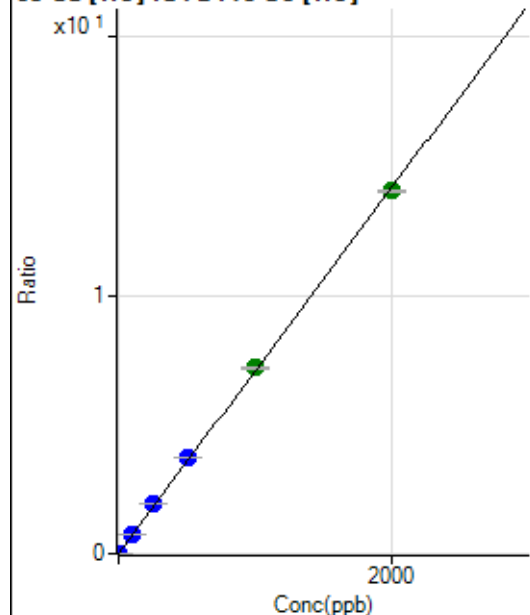
$$y = 0.0027 * x + 1.4361E-004$$

$$R = 0.9996$$

$$DL = 0.01288$$

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	1520.10	0.0025	P	1.0
2	☐	0.200	0.200	2351.34	0.0039	P	3.4
3	☐	2.000	2.190	10512.82	0.0180	P	2.4
4	☐	100.000	107.215	435126.48	0.7612	P	2.7
5	☐	250.000	270.081	1032301.69	1.9137	P	0.5
6	☐	500.000	523.073	1942599.73	3.7040	P	0.2
7	☐	1000.000	1015.313	3722407.44	7.1872	A	0.3
8	☐	2000.000	1983.704	7326781.77	14.0399	A	0.5
9	☐			15579.58	0.0293	P	1.5

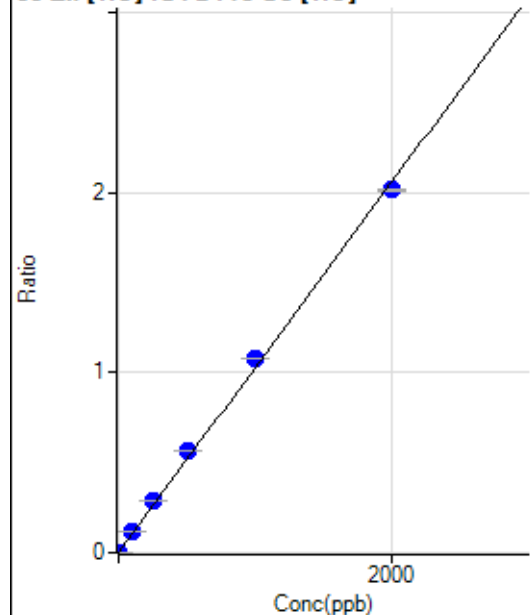
$$y = 0.0071 * x + 0.0025$$

$$R = 0.9999$$

$$DL = 0.01071$$

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	461.12	0.0008	P	18.2
2	☐	0.200	0.546	794.48	0.0013	P	4.9
3	☐	2.000	2.428	1903.49	0.0033	P	3.3
4	☐	100.000	110.183	65118.95	0.1139	P	2.4
5	☐	250.000	280.641	155868.73	0.2890	P	0.4
6	☐	500.000	546.568	294764.27	0.5620	P	0.2
7	☐	1000.000	1048.589	558139.72	1.0775	P	0.6
8	☐	2000.000	1959.724	1050604.72	2.0132	P	0.3
9	☐			8231.32	0.0155	P	2.4

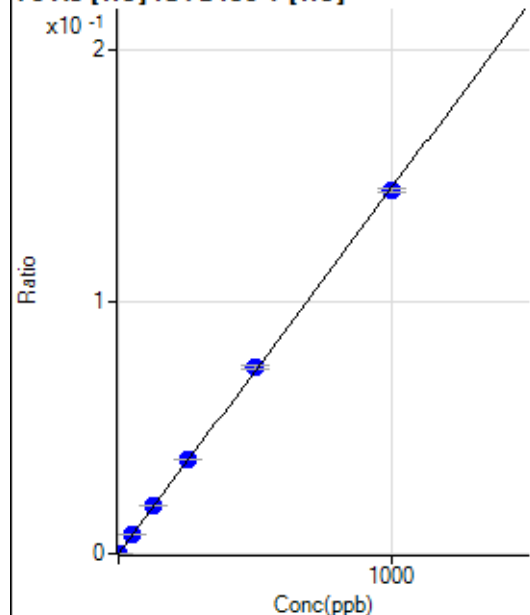
$$y = 0.0010 * x + 7.6802E-004$$

$$R = 0.9992$$

$$DL = 0.409$$

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	6.17	0.0000	P	61.9
2	☐	0.100	0.081	38.89	0.0000	P	41.9
3	☐	1.000	1.043	424.70	0.0002	P	7.6
4	☐	50.000	52.243	20432.92	0.0076	P	1.5
5	☐	125.000	133.308	49445.42	0.0194	P	0.7
6	☐	250.000	258.852	94309.07	0.0376	P	0.2
7	☐	500.000	509.147	183271.54	0.0739	P	1.7
8	☐	1000.000	992.063	358516.05	0.1440	P	1.0
9	☐			572.86	0.0002	P	8.4

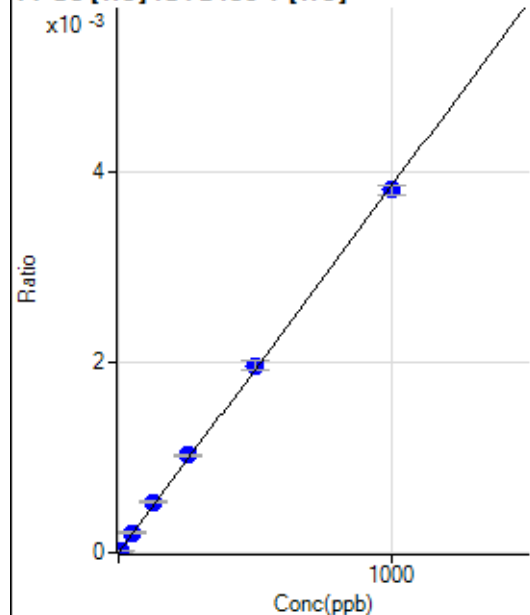
$$y = 1.4516\text{E-}004 * x + 2.1119\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.027$$

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	☐	0.500	0.416	5.56	0.0000	P	91.5
3	☐	5.000	5.448	58.89	0.0000	P	21.4
4	☐	50.000	52.783	547.80	0.0002	P	8.7
5	☐	125.000	137.414	1352.31	0.0005	P	2.5
6	☐	250.000	264.821	2559.15	0.0010	P	2.0
7	☐	500.000	510.682	4876.44	0.0020	P	4.8
8	☐	1000.000	989.261	9479.88	0.0038	P	2.8
9	☐			5.56	0.0000	P	91.8

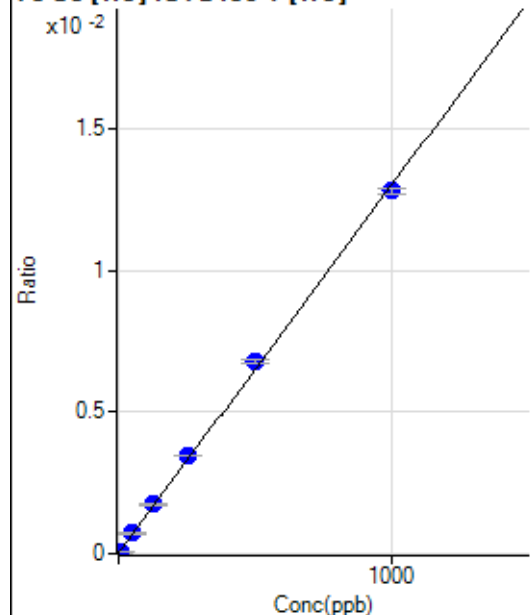
$$y = 3.8492\text{E-}006 * x + 3.8374\text{E-}007$$

$$R = 0.9997$$

$$DL = 0.518$$

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	60.50	0.0000	P	7.4
2	☐	0.500	0.956	93.21	0.0000	P	9.6
3	☐	5.000	5.368	250.62	0.0001	P	5.8
4	☐	50.000	54.474	1961.88	0.0007	P	4.8
5	☐	125.000	132.513	4451.95	0.0017	P	2.1
6	☐	250.000	265.478	8708.85	0.0035	P	1.1
7	☐	500.000	520.614	16823.40	0.0068	P	1.5
8	☐	1000.000	984.659	31900.45	0.0128	P	1.3
9	☐			82.72	0.0000	P	6.8

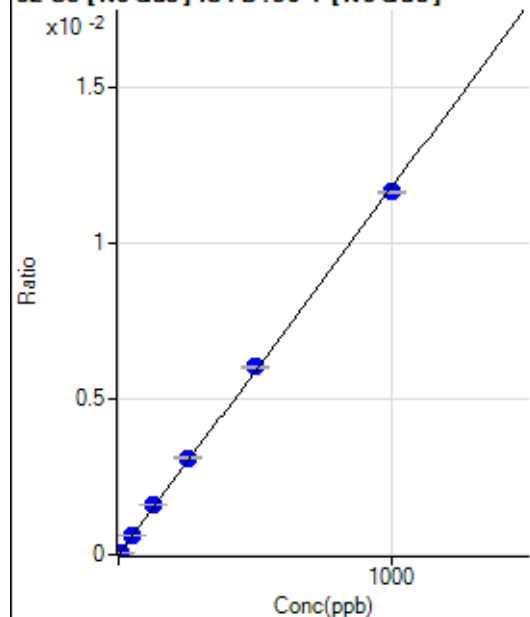
$$y = 1.2992\text{E-}005 * x + 2.0897\text{E-}005$$

$$R = 0.9996$$

$$DL = 0.3564$$

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	-8.36	0.0000	P	-785.
2	☐	0.500	0.785	153.13	0.0000	P	35.4
3	☐	5.000	5.450	1210.37	0.0001	P	2.3
4	☐	50.000	53.998	11734.83	0.0006	P	1.6
5	☐	125.000	136.049	28350.68	0.0016	P	0.8
6	☐	250.000	264.564	53699.58	0.0031	P	0.3
7	☐	500.000	512.346	102121.09	0.0060	P	1.3
8	☐	1000.000	988.602	198900.62	0.0116	P	0.8
9	☐			225.73	0.0000	P	18.1

$$y = 1.1779\text{E-}005 * x - 4.4293\text{E-}007$$

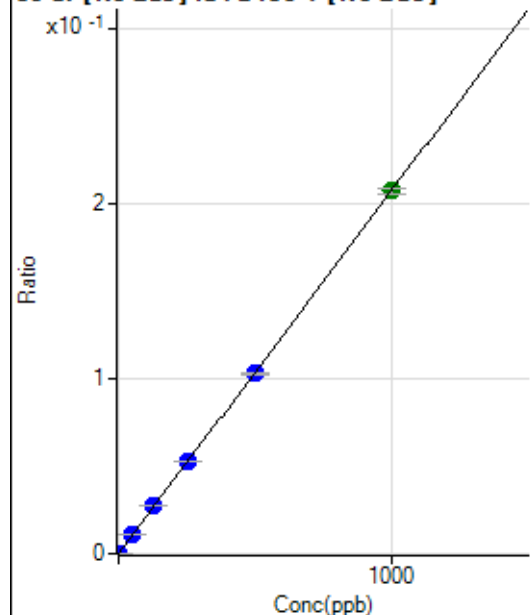
$$R = 0.9997$$

$$DL = 0.8858$$

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	561.15	0.0000	P	19.9
2	☐	0.100	0.137	1019.53	0.0001	P	10.1
3	☐	1.000	1.029	4617.61	0.0002	P	2.9
4	☐	50.000	51.221	196811.37	0.0107	P	1.8
5	☐	125.000	130.225	478791.40	0.0271	P	0.7
6	☐	250.000	255.873	915728.06	0.0531	P	0.4
7	☐	500.000	496.476	1744373.58	0.1031	P	0.7
8	☐	1000.000	999.579	3543912.36	0.2075	A	1.5
9	☐			16396.02	0.0010	P	1.0

$$y = 2.0753\text{E-}004 * x + 2.9612\text{E-}005$$

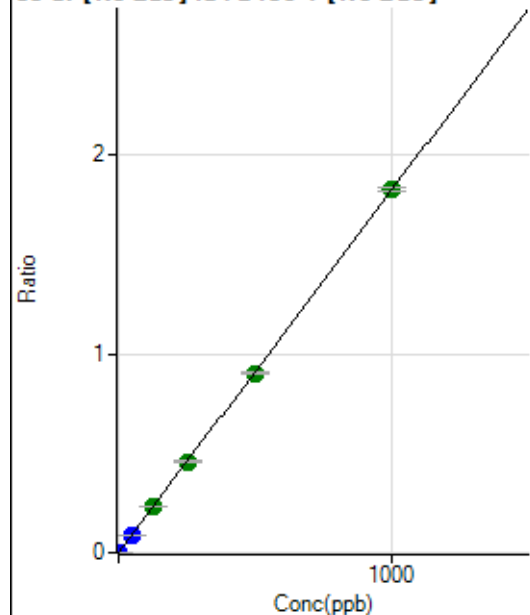
$$R = 1.0000$$

$$DL = 0.0852$$

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	136.12	0.0000	P	33.9
2	☐	0.100	0.100	3336.64	0.0002	P	12.2
3	☐	1.000	1.010	35079.85	0.0018	P	3.3
4	☐	50.000	49.862	1679379.08	0.0910	P	1.2
5	☐	125.000	125.218	4042011.90	0.2284	A	0.5
6	☐	250.000	251.988	7921668.58	0.4596	A	0.4
7	☐	500.000	496.251	15320595.31	0.9052	A	0.4
8	☐	1000.000	1001.357	31199028.13	1.8265	A	1.2
9	☐			141613.97	0.0086	P	1.8

$$y = 0.0018 * x + 7.1848\text{E-}006$$

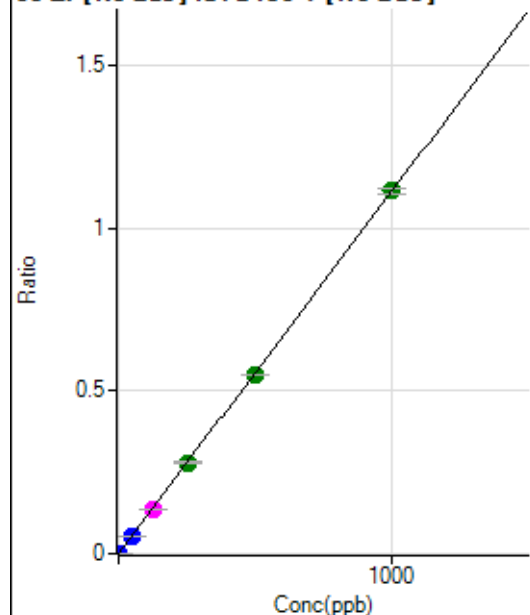
$$R = 1.0000$$

$$DL = 0.004006$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1616.83	0.0001	P	7.0
2	☐	0.100	0.095	3353.32	0.0002	P	3.1
3	☐	1.000	1.002	22788.24	0.0012	P	1.6
4	☐	50.000	49.534	1019379.25	0.0552	P	1.3
5	☐	125.000	124.147	2446578.74	0.1382	M	0.3
6	☐	250.000	251.442	4824099.54	0.2799	A	1.0
7	☐	500.000	495.110	9327857.24	0.5511	A	0.2
8	☐	1000.000	1002.214	19052928.03	1.1154	A	1.3
9	☐			4331.37	0.0003	P	5.4

$$y = 0.0011 * x + 8.5294E-005$$

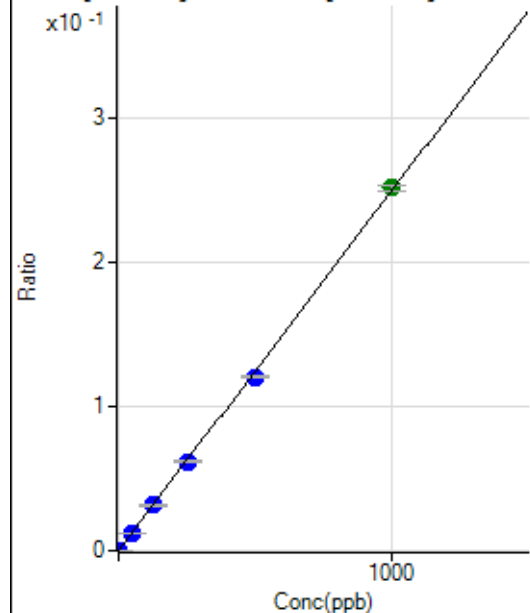
$$R = 1.0000$$

$$DL = 0.01619$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	336.13	0.0000	P	13.6
2	☐	0.100	0.100	755.61	0.0000	P	17.9
3	☐	1.000	0.975	4956.64	0.0003	P	3.4
4	☐	50.000	49.962	230717.92	0.0125	P	1.2
5	☐	125.000	125.658	555703.57	0.0314	P	0.6
6	☐	250.000	248.377	1069428.50	0.0621	P	0.5
7	☐	500.000	483.139	2042590.97	0.1207	P	0.7
8	☐	1000.000	1008.756	4303560.47	0.2520	A	1.7
9	☐			1050.09	0.0001	P	6.0

$$y = 2.4975E-004 * x + 1.7732E-005$$

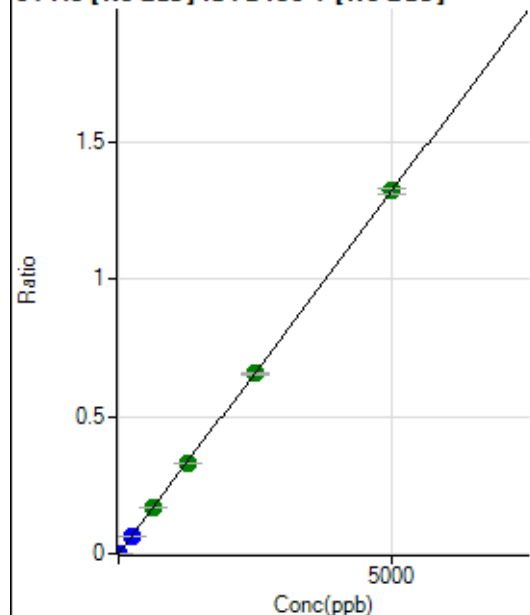
$$R = 0.9998$$

$$DL = 0.02888$$

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	486.14	0.0000	P	21.1
2	☐	0.500	0.508	2808.73	0.0002	P	3.8
3	☐	5.000	4.838	24741.69	0.0013	P	1.1
4	☐	250.000	248.886	1214325.48	0.0658	P	1.5
5	☐	625.000	626.928	2931169.55	0.1656	A	0.2
6	☐	1250.000	1255.083	5714450.48	0.3316	A	0.3
7	☐	2500.000	2482.116	11098746.25	0.6557	A	0.3
8	☐	5000.000	5007.486	22594410.57	1.3228	A	1.4
9	☐			29751.25	0.0018	P	0.7

$$y = 2.6415\text{E-}004 * x + 2.5657\text{E-}005$$

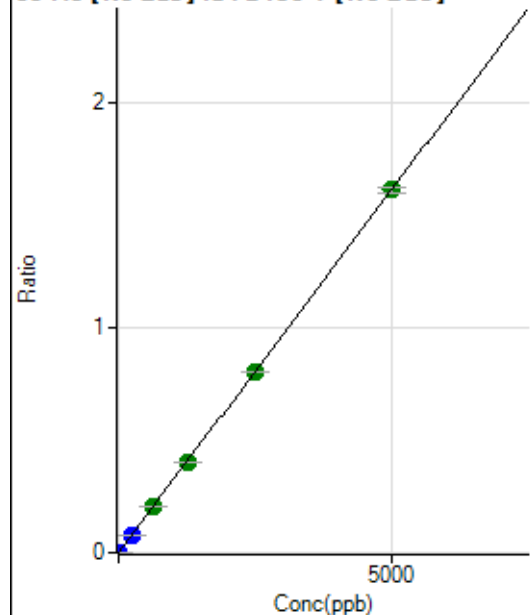
$$R = 1.0000$$

$$DL = 0.06136$$

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	55.56	0.0000	P	38.0
2	☐	0.500	0.502	2900.40	0.0002	P	1.8
3	☐	5.000	4.830	29617.72	0.0016	P	2.5
4	☐	250.000	248.578	1480103.72	0.0802	P	0.9
5	☐	625.000	627.424	3580508.80	0.2023	A	0.6
6	☐	1250.000	1255.461	6977500.07	0.4048	A	0.4
7	☐	2500.000	2494.902	13618011.24	0.8045	A	0.1
8	☐	5000.000	5000.952	27545462.07	1.6127	A	1.5
9	☐			50788.30	0.0031	P	0.5

$$y = 3.2247\text{E-}004 * x + 2.9331\text{E-}006$$

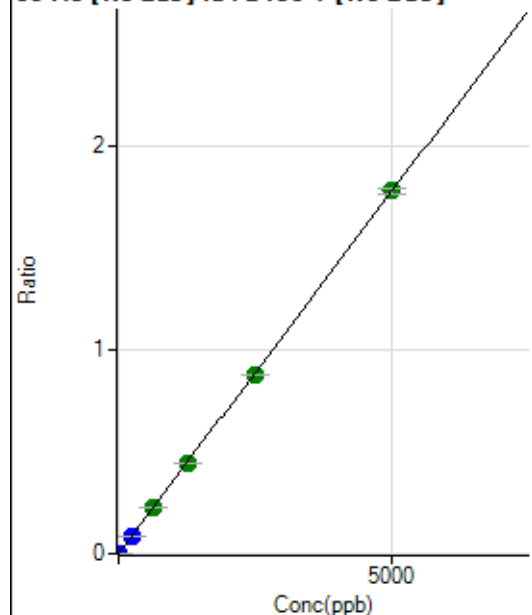
$$R = 1.0000$$

$$DL = 0.01037$$

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	144.45	0.0000	P	21.9
2	☐	0.500	0.492	3222.72	0.0002	P	6.0
3	☐	5.000	4.898	33228.46	0.0018	P	2.0
4	☐	250.000	247.417	1626250.70	0.0881	P	0.9
5	☐	625.000	626.038	3943721.40	0.2228	A	0.3
6	☐	1250.000	1253.622	7690838.80	0.4462	A	0.6
7	☐	2500.000	2476.036	14918511.79	0.8814	A	0.1
8	☐	5000.000	5011.076	30467885.75	1.7837	A	1.4
9	☐			61639.28	0.0037	P	0.8

$$y = 3.5596E-004 * x + 7.6215E-006$$

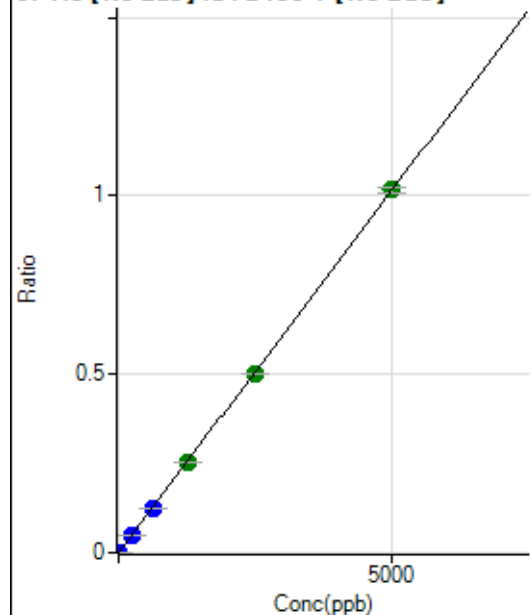
$$R = 1.0000$$

$$DL = 0.01406$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	66.67	0.0000	P	12.8
2	☐	0.500	0.478	1766.85	0.0001	P	6.6
3	☐	5.000	4.760	18376.33	0.0010	P	2.3
4	☐	250.000	247.501	926447.97	0.0502	P	1.2
5	☐	625.000	613.094	2199533.69	0.1243	P	0.5
6	☐	1250.000	1254.535	4383220.80	0.2543	A	0.4
7	☐	2500.000	2469.097	8472711.82	0.5005	A	0.1
8	☐	5000.000	5015.931	17368726.26	1.0168	A	1.3
9	☐			29896.08	0.0018	P	1.3

$$y = 2.0272E-004 * x + 3.5182E-006$$

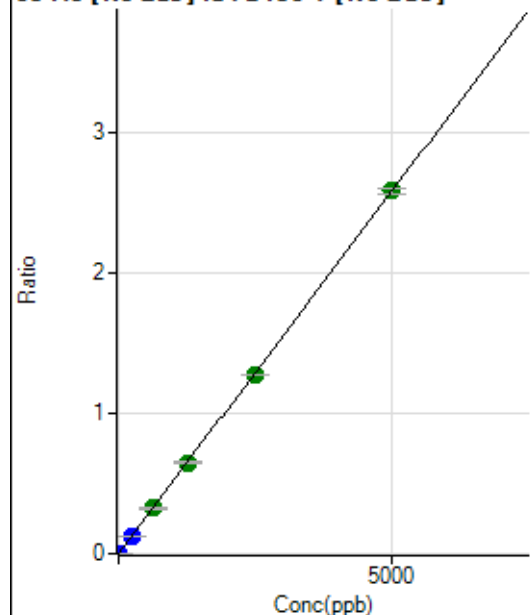
$$R = 1.0000$$

$$DL = 0.006664$$

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	94.45	0.0000	P	20.1
2	☐	0.500	0.506	4681.53	0.0003	P	5.0
3	☐	5.000	4.907	48079.31	0.0025	P	2.4
4	☐	250.000	247.360	2353983.15	0.1275	P	1.1
5	☐	625.000	624.754	5698258.98	0.3220	A	0.7
6	☐	1250.000	1257.361	11168640.27	0.6480	A	0.7
7	☐	2500.000	2476.091	21601309.34	1.2762	A	0.1
8	☐	5000.000	5010.277	44107952.03	2.5823	A	1.3
9	☐			78223.21	0.0047	P	2.0

$$y = 5.1539\text{E-}004 * x + 4.9814\text{E-}006$$

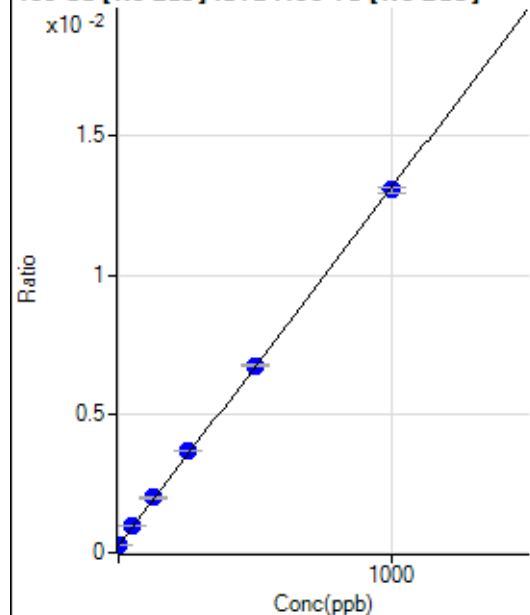
$$R = 1.0000$$

$$DL = 0.005842$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5898.70	0.0003	P	0.4
2	☐	0.100	-0.026	5484.60	0.0003	P	0.7
3	☐	1.000	1.548	6362.80	0.0003	P	3.5
4	☐	50.000	55.020	22098.60	0.0010	P	1.9
5	☐	125.000	133.813	44668.69	0.0020	P	0.7
6	☐	250.000	265.256	81523.26	0.0037	P	1.6
7	☐	500.000	502.720	148054.58	0.0067	P	1.0
8	☐	1000.000	993.473	290860.87	0.0131	P	1.4
9	☐			5281.76	0.0003	P	3.2

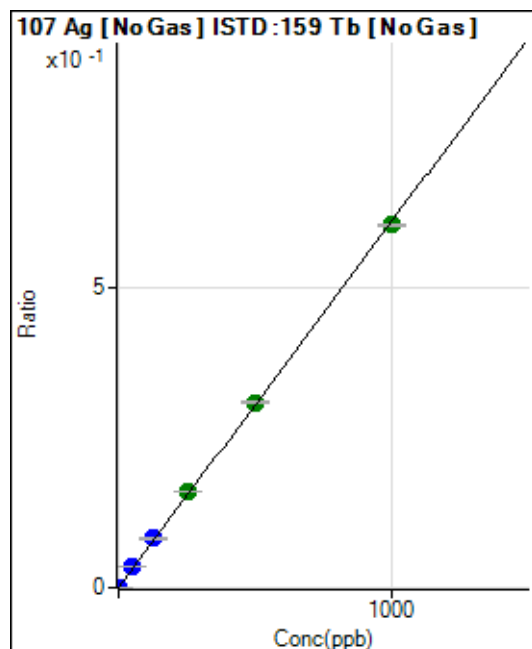
$$y = 1.2891\text{E-}005 * x + 2.5323\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.24$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.01	0.0000	P	13.1
2	☐	0.100	0.112	1602.94	0.0001	P	3.0
3	☐	1.000	1.074	15428.44	0.0007	P	0.4
4	☐	50.000	56.031	786611.79	0.0343	P	0.5
5	☐	125.000	134.192	1852792.12	0.0821	P	0.4
6	☐	250.000	264.592	3591075.56	0.1618	A	0.1
7	☐	500.000	506.873	6814629.36	0.3099	A	0.5
8	☐	1000.000	991.465	13500173.57	0.6062	A	0.5
9	☐			1389.02	0.0001	P	5.2

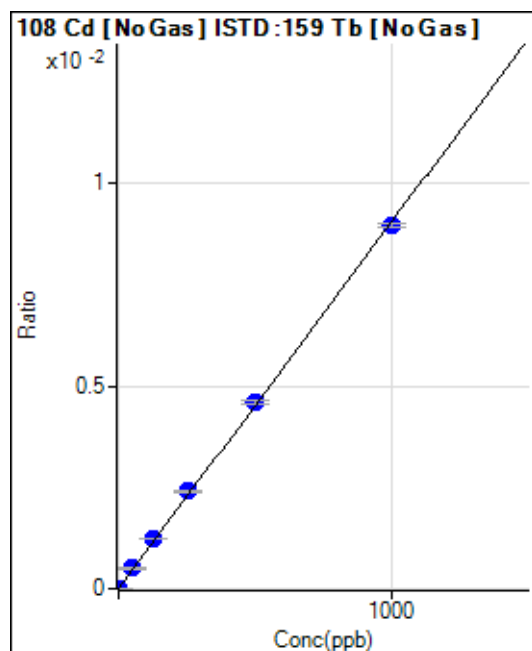
$$y = 6.1141\text{E-}004 * x + 5.3652\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.003445$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	49.6
2	☐	0.100	0.071	31.94	0.0000	P	30.5
3	☐	1.000	0.949	219.45	0.0000	P	10.4
4	☐	50.000	55.743	11600.78	0.0005	P	4.3
5	☐	125.000	137.391	28096.24	0.0012	P	1.0
6	☐	250.000	265.574	53373.69	0.0024	P	1.8
7	☐	500.000	509.258	101357.52	0.0046	P	1.4
8	☐	1000.000	989.641	199478.75	0.0090	P	1.1
9	☐			80.56	0.0000	P	22.9

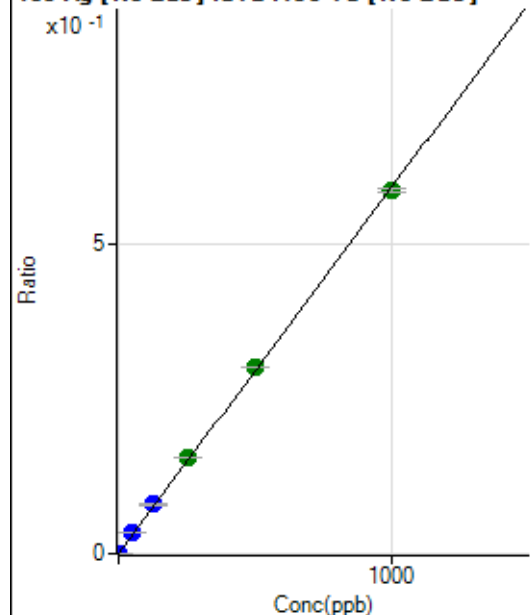
$$y = 9.0505\text{E-}006 * x + 8.3516\text{E-}007$$

$$R = 0.9998$$

$$DL = 0.1373$$

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	97.23	0.0000	P	34.4
2	☐	0.100	0.113	1544.60	0.0001	P	8.1
3	☐	1.000	1.084	15019.63	0.0006	P	2.6
4	☐	50.000	55.625	754757.69	0.0329	P	1.1
5	☐	125.000	134.299	1792181.94	0.0794	P	1.0
6	☐	250.000	264.316	3467299.16	0.1562	A	0.6
7	☐	500.000	508.278	6605288.99	0.3004	A	0.2
8	☐	1000.000	990.839	13039845.17	0.5856	A	1.0
9	☐			1364.01	0.0001	P	9.2

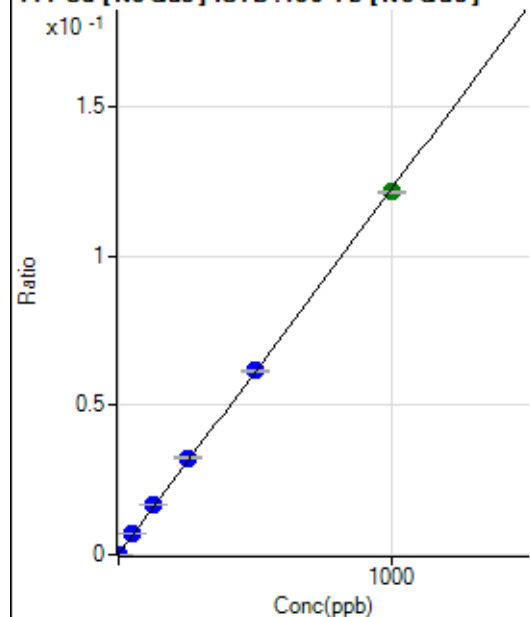
$$y = 5.9096\text{E-}004 * x + 4.1717\text{E-}006$$

$$R = 0.9998$$

$$DL = 0.007294$$

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	4122.42	0.0002	P	0.6
2	☐	0.100	0.112	4136.32	0.0002	P	1.3
3	☐	1.000	1.136	7357.68	0.0003	P	1.1
4	☐	50.000	55.797	160682.24	0.0070	P	1.4
5	☐	125.000	136.869	381876.55	0.0169	P	0.5
6	☐	250.000	264.454	721670.41	0.0325	P	0.5
7	☐	500.000	503.770	1358186.58	0.0618	P	1.0
8	☐	1000.000	992.728	2707032.04	0.1216	A	0.7
9	☐			4236.70	0.0002	P	3.1

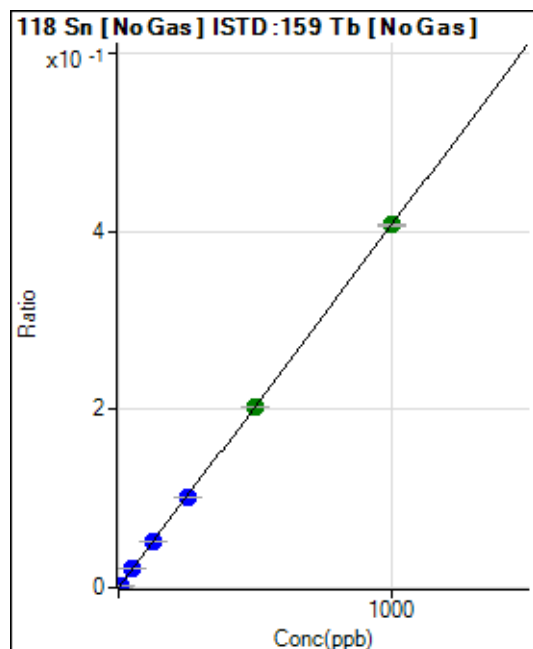
$$y = 1.2227\text{E-}004 * x + 1.7697\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.0248$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1114.02	0.0000	P	7.5
2	☐	0.500	0.511	5545.78	0.0003	P	3.1
3	☐	5.000	5.063	49181.28	0.0021	P	0.9
4	☐	50.000	52.081	488360.36	0.0213	P	1.5
5	☐	125.000	127.838	1177471.45	0.0521	P	1.1
6	☐	250.000	247.800	2242727.83	0.1010	P	0.4
7	☐	500.000	499.421	4476813.82	0.2036	A	0.1
8	☐	1000.000	1000.380	9080183.19	0.4077	A	0.6
9	☐			20162.44	0.0010	P	2.9

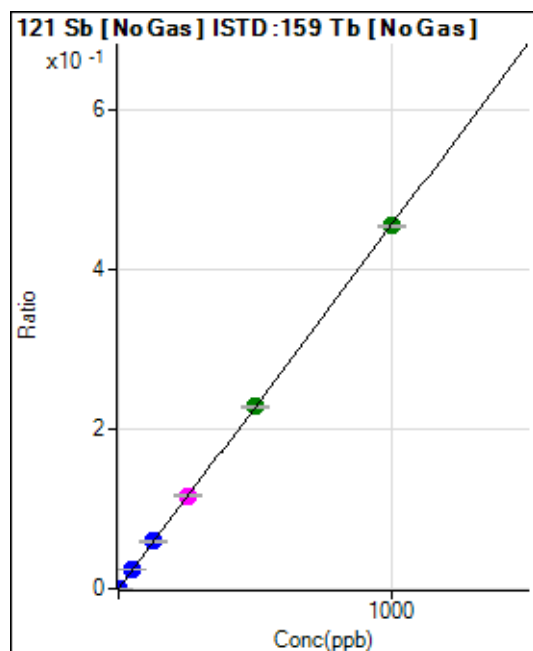
$$y = 4.0754\text{E-}004 * x + 4.7830\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.02639$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	29.2
2	☐	0.200	0.213	2158.60	0.0001	P	7.3
3	☐	2.000	2.044	21775.84	0.0009	P	2.9
4	☐	50.000	52.235	547415.03	0.0238	P	0.3
5	☐	125.000	129.574	1335506.17	0.0591	P	0.9
6	☐	250.000	254.842	2582033.48	0.1163	M	1.4
7	☐	500.000	500.732	5025710.92	0.2286	A	0.4
8	☐	1000.000	997.740	10141830.26	0.4554	A	0.6
9	☐			13345.83	0.0006	P	2.3

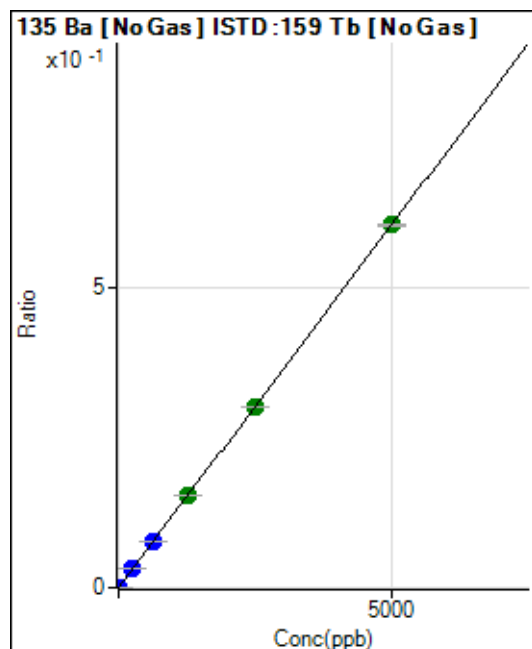
$$y = 4.5644\text{E-}004 * x + 2.1479\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.004124$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	22.22	0.0000	P	21.4
2	☐	1.000	1.002	2642.03	0.0001	P	4.5
3	☐	10.000	10.048	28271.15	0.0012	P	2.5
4	☐	250.000	255.564	708205.83	0.0308	P	1.0
5	☐	625.000	633.564	1726841.25	0.0765	P	0.4
6	☐	1250.000	1266.787	3394088.79	0.1529	A	0.5
7	☐	2500.000	2486.609	6600046.50	0.3001	A	0.2
8	☐	5000.000	5001.150	13443223.56	0.6037	A	0.6
9	☐			2894.87	0.0001	P	6.2

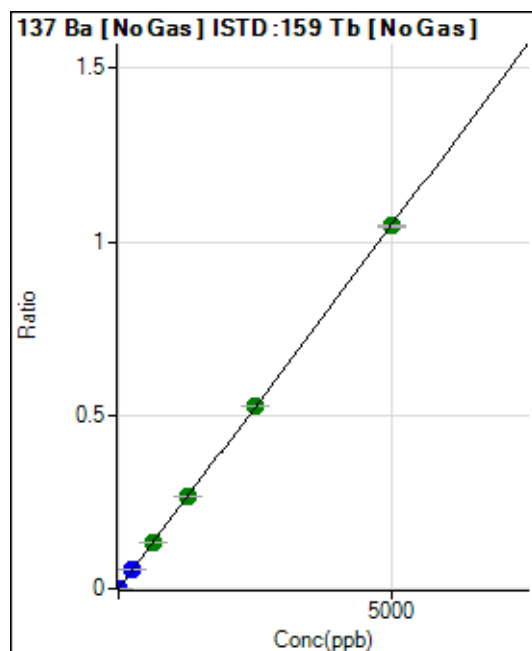
$$y = 1.2070\text{E-}004 * x + 9.5361\text{E-}007$$

$$R = 1.0000$$

$$DL = 0.005067$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30.56	0.0000	P	56.6
2	☐	1.000	1.022	4675.98	0.0002	P	1.8
3	☐	10.000	10.028	48995.80	0.0021	P	1.3
4	☐	250.000	257.759	1240281.46	0.0540	P	1.0
5	☐	625.000	638.234	3020532.06	0.1338	A	0.6
6	☐	1250.000	1272.558	5920325.57	0.2667	A	0.3
7	☐	2500.000	2505.350	11546332.98	0.5251	A	0.4
8	☐	5000.000	4989.643	23288831.25	1.0458	A	0.7
9	☐			4934.42	0.0002	P	1.6

$$y = 2.0959\text{E-}004 * x + 1.3113\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.01062$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.0
2	☐			6.67		P	100.0
3	☐			4.45		P	86.6
4	☐			60.00		P	29.4
5	☐			142.23		P	15.1
6	☐			211.12		P	15.9
7	☐			386.69		P	6.2
8	☐			768.94		P	7.8
9	☐			173.34		P	6.7

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐			0.00		P	
3	☐			1.11		P	173.2
4	☐			6.67		P	50.0
5	☐			11.11		P	45.8
6	☐			26.67		P	37.5
7	☐			46.67		P	21.4
8	☐			85.56		P	25.9
9	☐			85.56		P	19.6

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.55		P	15.7
2	☐			16.67		P	NaN
3	☐			5.56		P	173.2
4	☐			13.89		P	91.6
5	☐			61.11		P	20.8
6	☐			52.78		P	24.1
7	☐			127.79		P	43.4
8	☐			188.90		P	32.5
9	☐			133.34		P	34.8

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	89.2
2	☐			6.67		P	132.3
3	☐			12.22		P	31.5
4	☐			20.00		P	44.1
5	☐			35.56		P	32.9
6	☐			65.55		P	10.6
7	☐			115.56		P	39.4
8	☐			201.12		P	12.4
9	☐			82.23		P	14.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			108.34		P	15.4
2	☐			127.79		P	3.8
3	☐			116.67		P	7.1
4	☐			172.23		P	18.3
5	☐			175.01		P	14.3
6	☐			166.68		P	31.2
7	☐			155.56		P	6.2
8	☐			188.90		P	17.8
9	☐			202.79		P	29.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			307.79		P	9.8
2	☐			307.79		P	11.9
3	☐			275.56		P	13.3
4	☐			326.68		P	10.8
5	☐			295.56		P	14.4
6	☐			278.90		P	12.0
7	☐			307.78		P	15.7
8	☐			297.79		P	5.6
9	☐			330.01		P	4.4

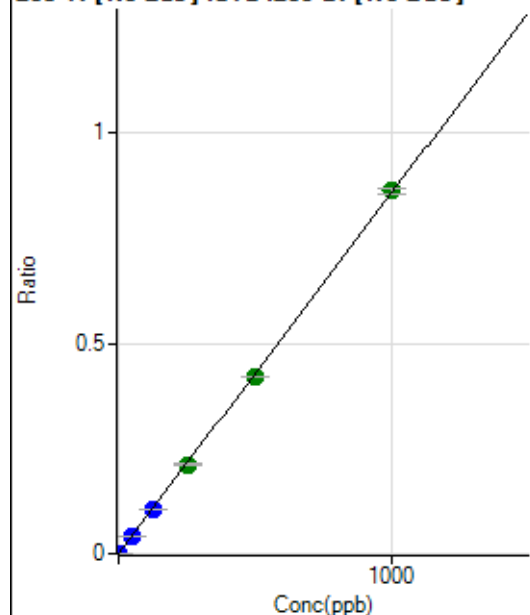
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.34		P	49.5
2	☐			50.00		P	57.7
3	☐			91.67		P	9.1
4	☐			63.89		P	41.9
5	☐			88.89		P	28.6
6	☐			72.22		P	6.7
7	☐			72.22		P	6.7
8	☐			113.90		P	8.5
9	☐			80.56		P	36.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.11		P	24.8
2	☐			36.67		P	15.7
3	☐			52.22		P	35.2
4	☐			32.22		P	15.8
5	☐			52.22		P	13.3
6	☐			36.66		P	15.7
7	☐			53.34		P	28.6
8	☐			54.45		P	24.7
9	☐			50.00		P	54.6

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	91.67	0.0000	P	15.6
2	☐	0.100	0.102	1222.33	0.0001	P	11.1
3	☐	1.000	0.932	11374.82	0.0008	P	3.8
4	☐	50.000	48.588	579117.41	0.0416	P	1.5
5	☐	125.000	121.787	1435549.00	0.1043	P	0.7
6	☐	250.000	247.724	2851241.27	0.2122	A	0.8
7	☐	500.000	490.694	5518835.71	0.4204	A	0.2
8	☐	1000.000	1005.694	11096800.07	0.8616	A	1.7
9	☐			6073.88	0.0006	P	1.9

$$y = 8.5676\text{E-}004 * x + 6.4492\text{E-}006$$

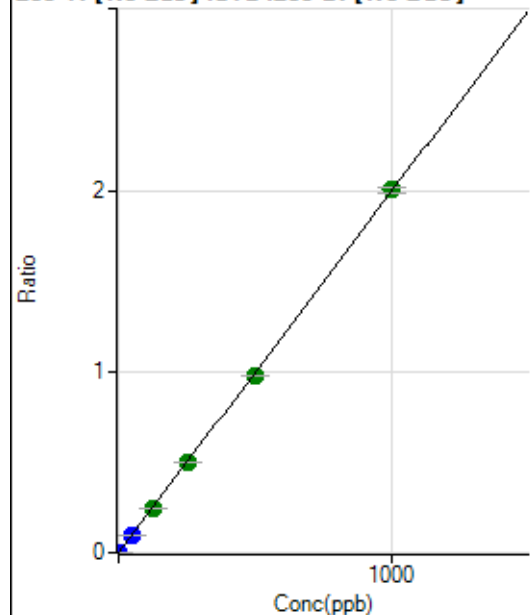
$$R = 0.9999$$

$$DL = 0.003519$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	222.24	0.0000	P	25.1
2	☐	0.100	0.100	2814.31	0.0002	P	2.1
3	☐	1.000	0.967	27459.81	0.0019	P	2.6
4	☐	50.000	49.060	1359805.62	0.0978	P	1.6
5	☐	125.000	122.919	3369402.59	0.2449	A	0.0
6	☐	250.000	249.637	6681805.01	0.4974	A	0.5
7	☐	500.000	490.851	12838112.53	0.9780	A	0.2
8	☐	1000.000	1004.972	25786988.77	2.0023	A	1.6
9	☐			14892.30	0.0014	P	0.7

$$y = 0.0020 * x + 1.5640\text{E-}005$$

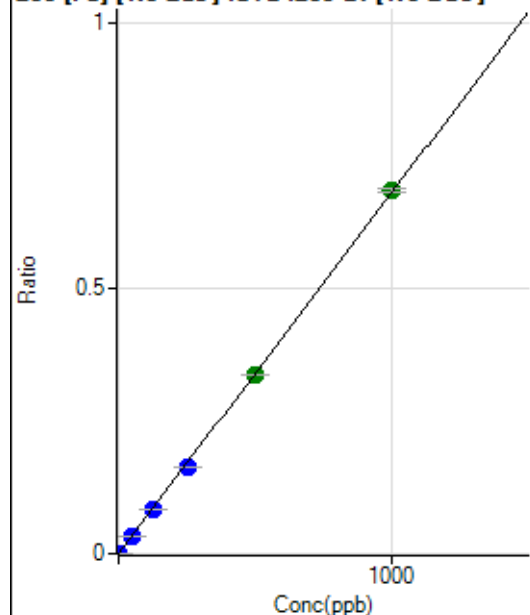
$$R = 0.9999$$

$$DL = 0.005916$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	396.32	0.0000	P	11.5
2	☐	0.100	0.103	1277.88	0.0001	P	5.5
3	☐	1.000	0.971	9716.75	0.0007	P	3.3
4	☐	50.000	49.292	466287.62	0.0335	P	0.8
5	☐	125.000	122.958	1149816.05	0.0836	P	0.3
6	☐	250.000	240.474	2195548.85	0.1634	P	0.7
7	☐	500.000	494.781	4413608.84	0.3362	A	0.7
8	☐	1000.000	1005.281	8797877.68	0.6831	A	1.0
9	☐			44731.17	0.0041	P	1.7

$$y = 6.7950E-004 * x + 2.7888E-005$$

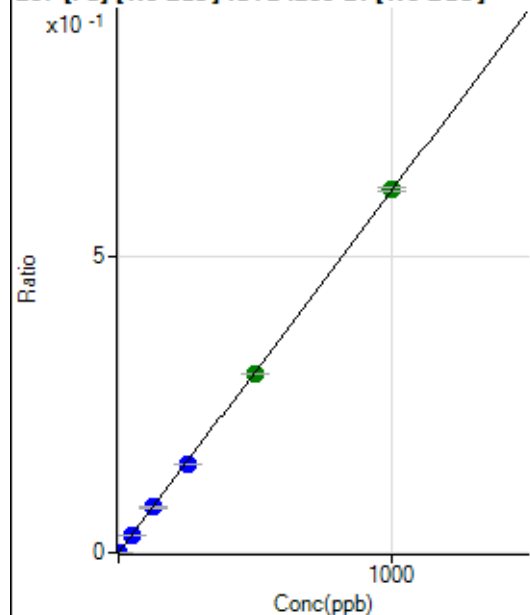
$$R = 0.9999$$

$$DL = 0.01421$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	305.57	0.0000	P	14.6
2	☐	0.100	0.100	1079.71	0.0001	P	12.1
3	☐	1.000	0.985	8829.12	0.0006	P	2.7
4	☐	50.000	49.988	425890.18	0.0306	P	0.7
5	☐	125.000	125.049	1053268.87	0.0766	P	0.5
6	☐	250.000	245.301	2017297.99	0.1502	P	0.2
7	☐	500.000	495.727	3983324.66	0.3034	A	0.3
8	☐	1000.000	1003.306	7909269.10	0.6141	A	0.9
9	☐			38424.38	0.0035	P	2.0

$$y = 6.1208E-004 * x + 2.1503E-005$$

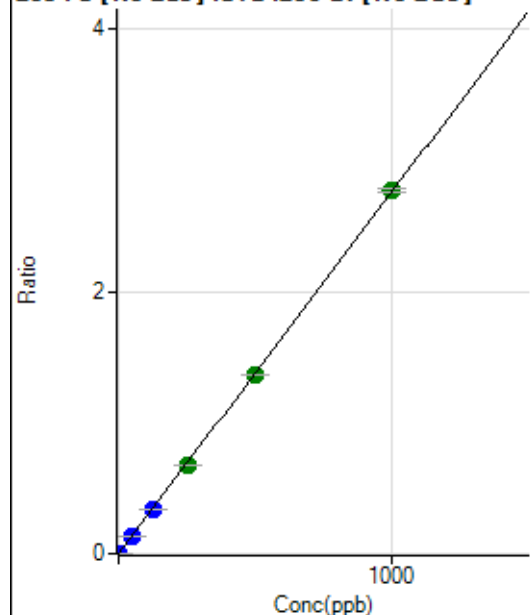
$$R = 1.0000$$

$$DL = 0.01537$$

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	1483.42	0.0001	P	5.7
2	☐	0.100	0.101	4980.16	0.0004	P	3.7
3	☐	1.000	0.969	39249.49	0.0028	P	1.0
4	☐	50.000	49.258	1890748.41	0.1359	P	0.9
5	☐	125.000	122.857	4662031.54	0.3389	P	0.2
6	☐	250.000	245.522	9096331.04	0.6771	A	0.2
7	☐	500.000	494.745	17909933.01	1.3643	A	0.2
8	☐	1000.000	1004.052	35657624.52	2.7687	A	1.2
9	☐			177805.26	0.0164	P	1.7

$$y = 0.0028 * x + 1.0438E-004$$

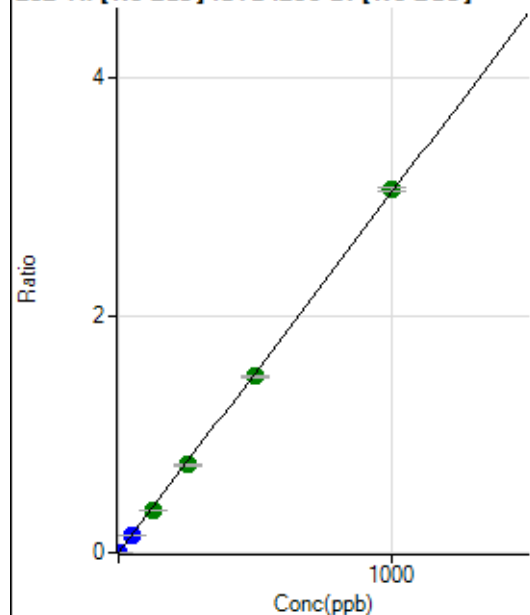
$$R = 1.0000$$

$$DL = 0.006434$$

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	361.33	0.0000	P	53.7
2	☐	0.100	0.088	3806.23	0.0003	P	3.2
3	☐	1.000	0.913	39484.31	0.0028	P	2.6
4	☐	50.000	46.026	1941510.82	0.1396	P	1.6
5	☐	125.000	118.456	4941637.49	0.3592	A	0.5
6	☐	250.000	243.329	9911851.61	0.7378	A	0.5
7	☐	500.000	489.126	19469420.81	1.4831	A	0.4
8	☐	1000.000	1008.121	39368279.58	3.0568	A	0.9
9	☐			5014.07	0.0005	P	13.2

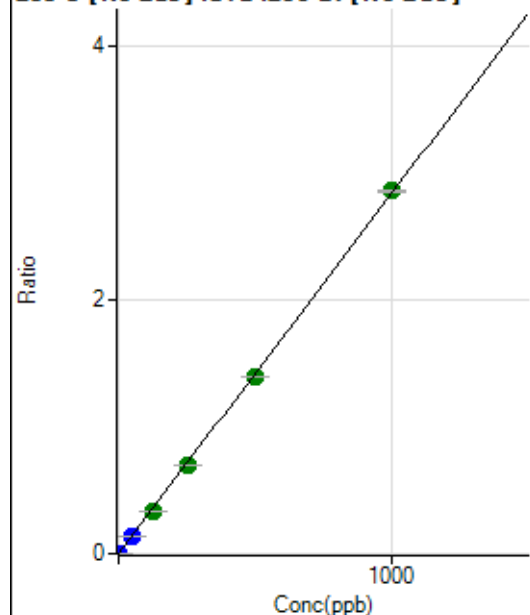
$$y = 0.0030 * x + 2.5438E-005$$

$$R = 0.9999$$

$$DL = 0.01353$$

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	66.67	0.0000	P	12.7
2	☐	0.100	0.097	3670.13	0.0003	P	4.8
3	☐	1.000	0.953	38371.60	0.0027	P	3.1
4	☐	50.000	46.732	1847845.66	0.1328	P	1.0
5	☐	125.000	119.738	4682663.82	0.3404	A	0.5
6	☐	250.000	244.919	9352886.06	0.6962	A	0.3
7	☐	500.000	489.450	18264088.43	1.3913	A	0.3
8	☐	1000.000	1007.367	36880402.56	2.8636	A	0.8
9	☐			3672.91	0.0003	P	4.6

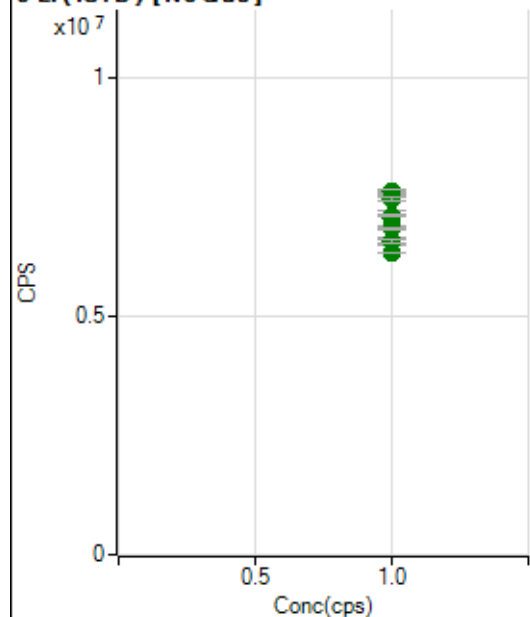
$$y = 0.0028 * x + 4.6916E-006$$

$$R = 0.9999$$

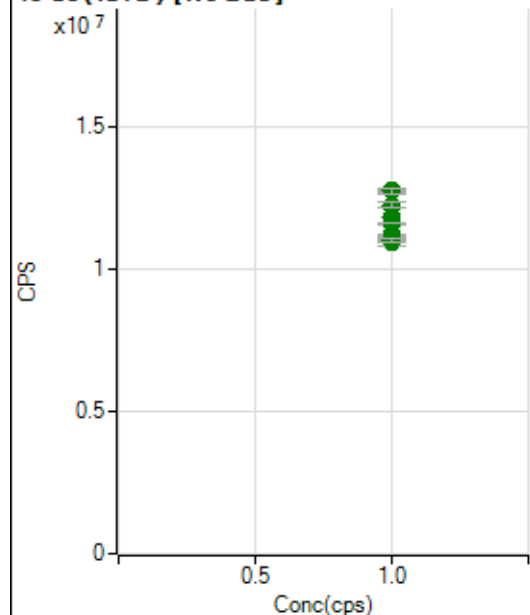
$$DL = 0.0006275$$

Weight: <None>

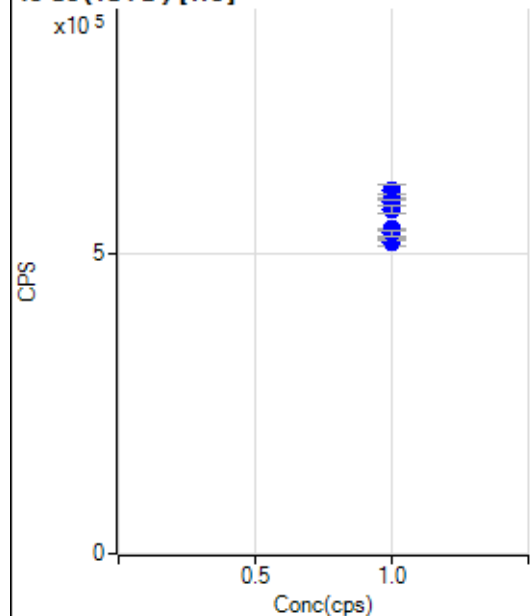
Min Conc: 0

6 Li (ISTD) [No Gas]

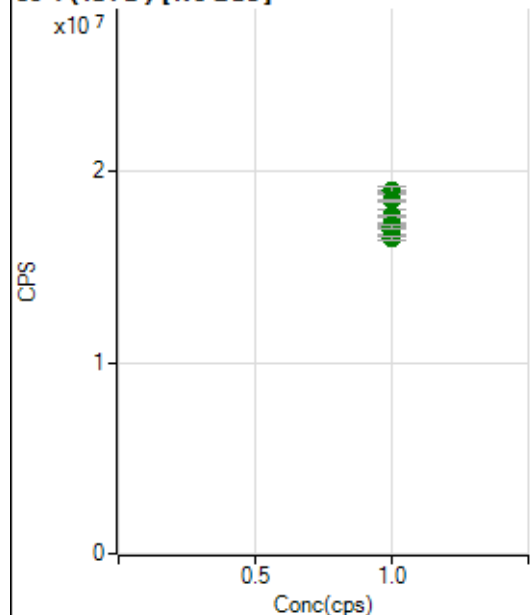
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7621638.91		A	0.4
2	☐	1.000		7059736.14		A	4.8
3	☐	1.000		7622849.12		A	1.3
4	☐	1.000		7469446.69		A	0.9
5	☐	1.000		7127424.48		A	0.7
6	☐	1.000		6852418.44		A	0.2
7	☐	1.000		6584419.97		A	2.0
8	☐	1.000		6587687.33		A	1.2
9	☐	1.000		6338084.97		A	0.4

45 Sc (ISTD) [No Gas]

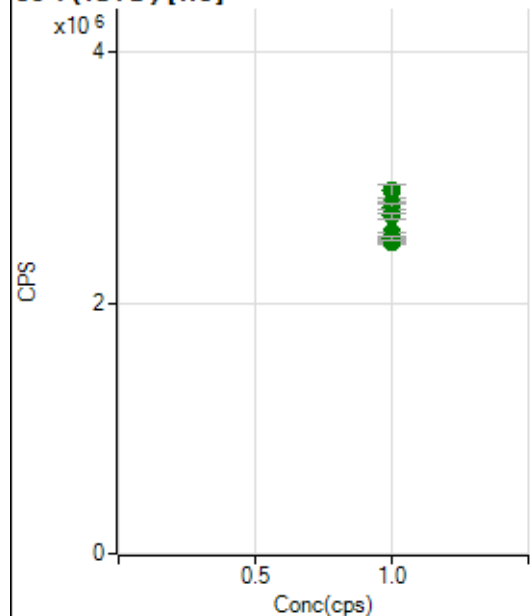
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12766893.43		A	0.3
2	☐	1.000		11852415.37		A	5.1
3	☐	1.000		12769611.48		A	1.8
4	☐	1.000		12271898.97		A	1.4
5	☐	1.000		11643948.61		A	0.5
6	☐	1.000		11234362.23		A	0.4
7	☐	1.000		10942685.31		A	2.5
8	☐	1.000		11093957.89		A	0.9
9	☐	1.000		11044305.98		A	0.9

45 Sc (ISTD) [He]

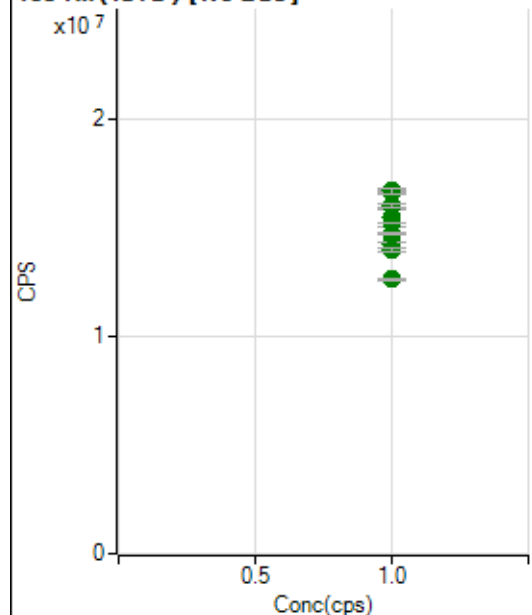
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		602925.00		P	3.5
2	☐	1.000		597802.97		P	0.5
3	☐	1.000		583460.81		P	1.5
4	☐	1.000		571835.98		P	2.1
5	☐	1.000		539424.90		P	0.2
6	☐	1.000		524464.48		P	0.2
7	☐	1.000		517926.26		P	2.8
8	☐	1.000		521860.29		P	0.3
9	☐	1.000		532116.78		P	1.4

89 Y (ISTD) [No Gas]

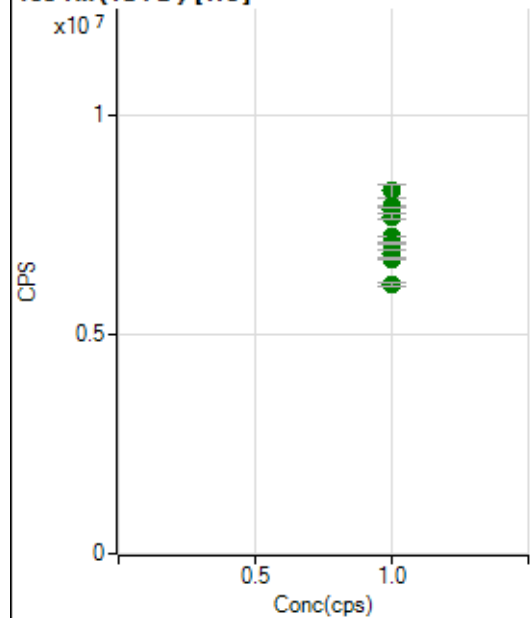
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18955082.36		A	0.3
2	☐	1.000		17597260.99		A	4.9
3	☐	1.000		18979554.58		A	2.0
4	☐	1.000		18464992.09		A	1.0
5	☐	1.000		17696978.49		A	0.6
6	☐	1.000		17234992.94		A	0.6
7	☐	1.000		16926748.50		A	2.2
8	☐	1.000		17083001.27		A	1.3
9	☐	1.000		16520441.98		A	1.1

89 Y (ISTD) [He]

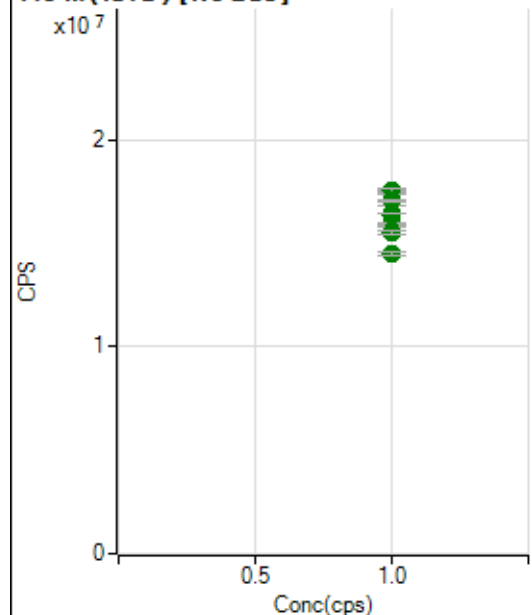
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2893342.29		A	3.6
2	☐	1.000		2798460.20		A	0.3
3	☐	1.000		2764304.79		A	1.6
4	☐	1.000		2693978.57		A	1.9
5	☐	1.000		2554839.53		A	0.1
6	☐	1.000		2509674.29		A	0.1
7	☐	1.000		2479219.83		M	1.4
8	☐	1.000		2489526.40		A	0.5
9	☐	1.000		2514462.07		A	1.2

103 Rh (ISTD) [No Gas]

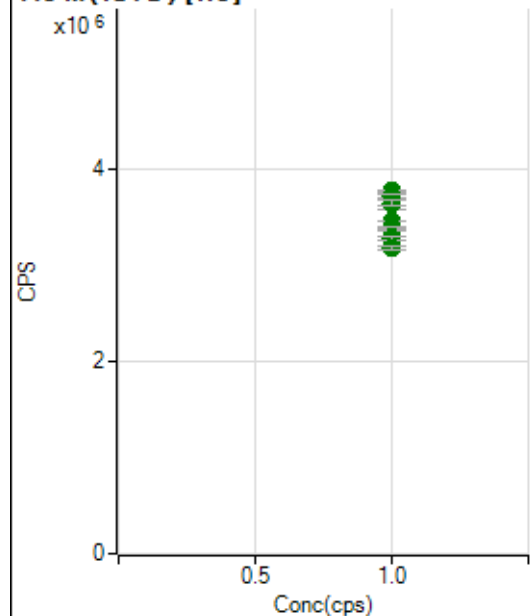
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16645282.84		A	0.3
2	☐	1.000		15434000.00		A	5.1
3	☐	1.000		16682129.54		A	1.5
4	☐	1.000		15983054.87		A	0.9
5	☐	1.000		15208252.42		A	0.5
6	☐	1.000		14702539.04		A	0.5
7	☐	1.000		14197106.39		A	2.0
8	☐	1.000		13982745.97		A	0.9
9	☐	1.000		12603074.94		A	1.0

103 Rh (ISTD) [He]

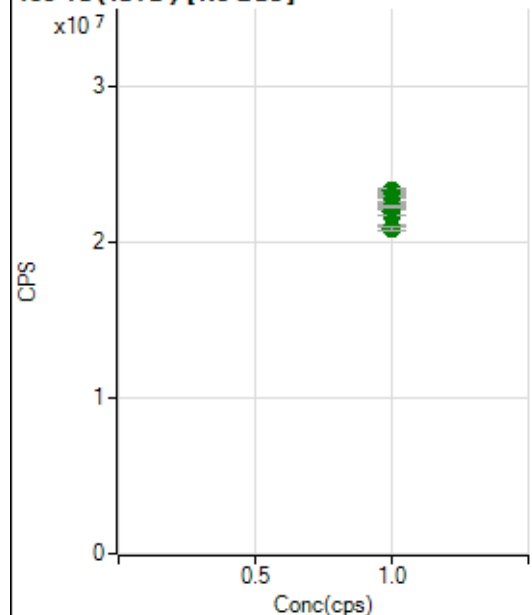
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8290172.03		A	3.6
2	☐	1.000		7965569.88		A	0.2
3	☐	1.000		7852888.91		A	1.5
4	☐	1.000		7704805.23		A	1.9
5	☐	1.000		7253904.82		A	0.3
6	☐	1.000		7091081.35		A	0.3
7	☐	1.000		6833809.55		A	2.8
8	☐	1.000		6729483.72		A	0.7
9	☐	1.000		6140395.74		A	1.2

115 In (ISTD) [No Gas]

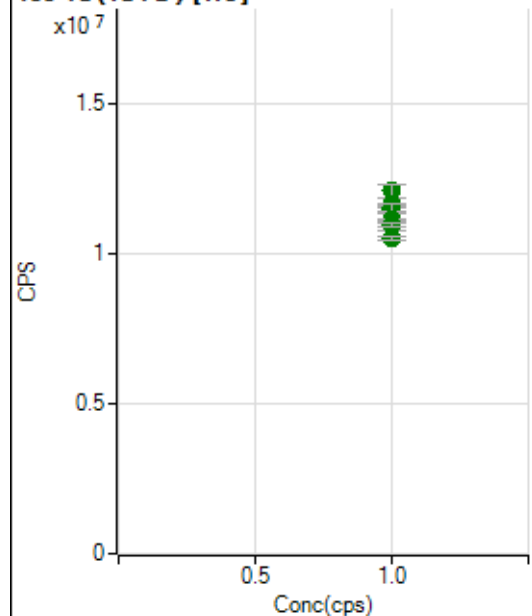
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17493644.78		A	0.3
2	☐	1.000		16333509.81		A	5.5
3	☐	1.000		17517667.57		A	1.5
4	☐	1.000		17043278.27		A	0.6
5	☐	1.000		16422243.36		A	0.2
6	☐	1.000		15949016.74		A	0.6
7	☐	1.000		15635992.68		A	2.3
8	☐	1.000		15503094.09		A	1.0
9	☐	1.000		14470753.01		A	1.4

115 In (ISTD) [He]

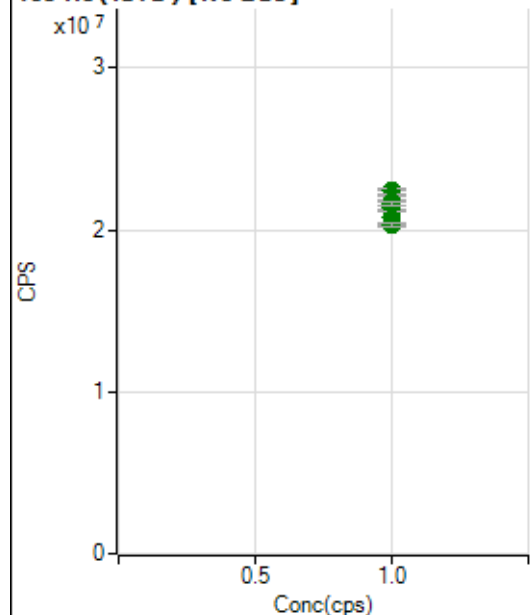
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3642388.45		A	3.5
2	☐	1.000		3777572.99		A	0.5
3	☐	1.000		3714739.04		A	1.4
4	☐	1.000		3653765.39		A	2.0
5	☐	1.000		3462756.41		A	0.4
6	☐	1.000		3393890.21		A	0.2
7	☐	1.000		3313490.38		A	2.8
8	☐	1.000		3281505.95		A	0.8
9	☐	1.000		3190929.03		A	1.3

159 Tb (ISTD) [No Gas]

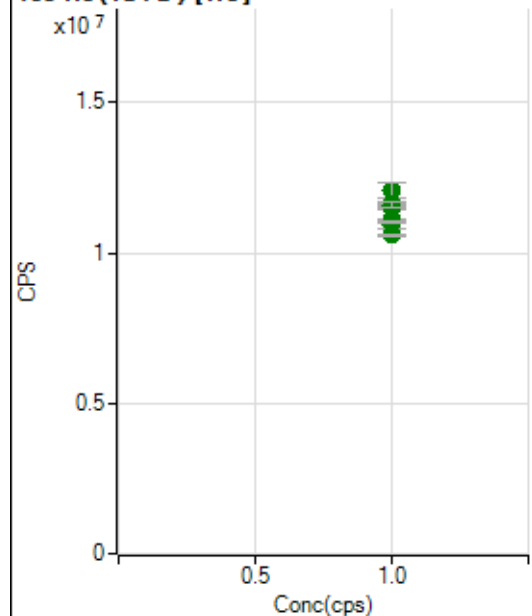
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		23294114.10		A	0.3
2	☐	1.000		21691158.29		A	5.5
3	☐	1.000		23298998.54		A	1.8
4	☐	1.000		22958339.10		A	0.6
5	☐	1.000		22580932.44		A	0.6
6	☐	1.000		22197360.78		A	0.4
7	☐	1.000		21990124.39		A	2.2
8	☐	1.000		22270210.22		A	0.7
9	☐	1.000		20840400.25		A	1.1

159 Tb (ISTD) [He]

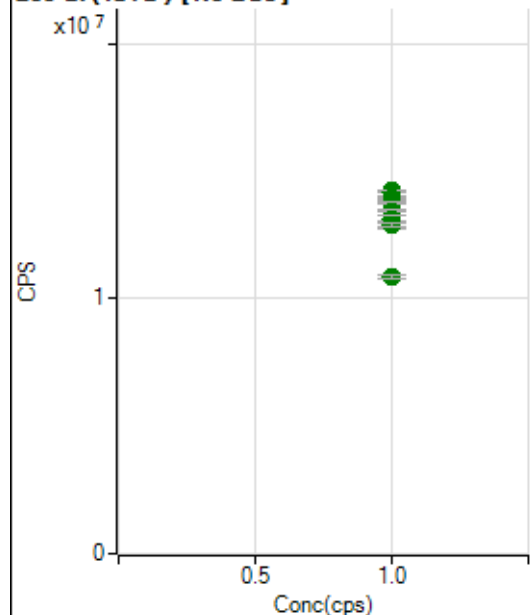
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12087914.54		A	3.8
2	☐	1.000		11644409.69		A	0.4
3	☐	1.000		11466270.11		A	1.7
4	☐	1.000		11516404.13		A	2.0
5	☐	1.000		11157887.06		A	0.3
6	☐	1.000		11104498.72		A	0.4
7	☐	1.000		10882997.06		A	2.3
8	☐	1.000		10964129.42		A	0.9
9	☐	1.000		10514329.78		A	1.0

165 Ho (ISTD) [No Gas]

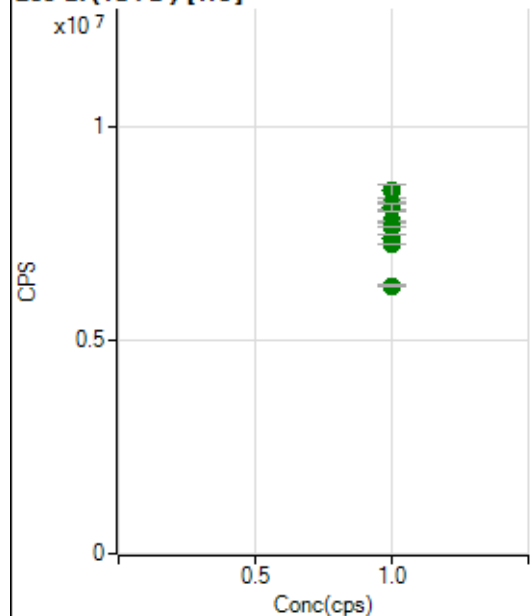
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22404230.36		A	0.1
2	☐	1.000		20798336.92		A	4.8
3	☐	1.000		22409359.01		A	1.7
4	☐	1.000		22109628.97		A	0.7
5	☐	1.000		21780875.49		A	0.3
6	☐	1.000		21537201.87		A	0.1
7	☐	1.000		21400147.35		A	2.6
8	☐	1.000		21625085.38		A	1.3
9	☐	1.000		20270413.99		A	1.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12059669.40		A	4.1
2	☐	1.000		11649965.66		A	0.2
3	☐	1.000		11516310.11		A	1.3
4	☐	1.000		11589334.00		A	1.5
5	☐	1.000		11131545.53		A	0.2
6	☐	1.000		11109134.14		A	0.6
7	☐	1.000		10951467.20		A	3.0
8	☐	1.000		11035688.45		A	0.3
9	☐	1.000		10580236.58		A	0.9

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14212559.65		A	0.2
2	☐	1.000		13065651.61		A	5.2
3	☐	1.000		14137772.29		A	1.3
4	☐	1.000		13910193.40		A	0.5
5	☐	1.000		13757281.60		A	0.3
6	☐	1.000		13433854.38		A	0.4
7	☐	1.000		13127438.83		A	2.0
8	☐	1.000		12879926.75		A	1.2
9	☐	1.000		10839854.07		A	1.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8483245.64		A	3.7
2	☐	1.000		8202842.10		A	0.3
3	☐	1.000		8104415.37		A	1.7
4	☐	1.000		8099153.49		A	1.8
5	☐	1.000		7771595.09		A	0.5
6	☐	1.000		7635801.27		A	0.2
7	☐	1.000		7360731.77		A	2.9
8	☐	1.000		7239338.43		A	0.2
9	☐	1.000		6272355.04		A	1.0

US EPA Tune Check Sample Report

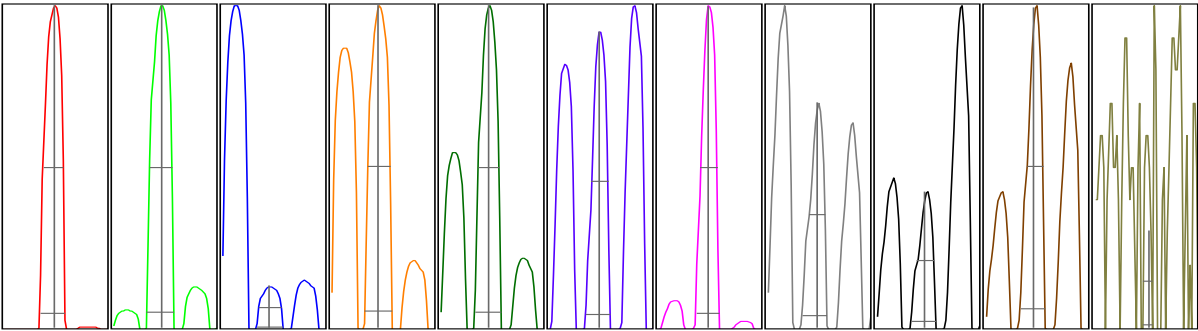
Batch Folder D:\ICP-MS Data\P7091818-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	22018	1.45	5.00	
24	1906797	1.38	5.00	
25	254591	1.22	5.00	
26	286304	1.26	5.00	
59	137691	1.65	5.00	
113	15685	1.60	5.00	
115	188109	1.63	5.00	
206	45154	0.97	5.00	
207	41478	1.36	5.00	
208	96331	0.94	5.00	
220	0	9.32		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	21963	22030	22548	21836	21715
24	1902836	1910029	1949100	1893132	1878888
25	255616	254790	259047	252621	250883
26	287234	287555	291213	283057	282462
59	137586	138315	141176	135966	135413
113	15687	15823	16022	15395	15499
115	188983	189273	192133	184461	185698
206	45040	45247	45863	44864	44754
207	41258	41362	42461	41035	41276
208	95440	96414	97832	96031	95935
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	38911	9.00	8.9 - 9.1		0.734	0.900	
24	3144021	23.95	23.9 - 24.1		0.784	0.900	
25	413055	24.90	24.9 - 25.1		0.776	0.900	
26	475107	25.90	25.9 - 26.1		0.784	0.900	
59	245151	58.95	58.9 - 59.1		0.772	0.900	
113	32810	113.00	112.9 - 113.1		0.711	0.900	
115	395993	115.00	114.9 - 115.1		0.681	0.900	
206	96532	206.00	205.9 - 206.1		0.721	0.900	
207	87082	206.95	206.9 - 207.1		0.724	0.900	
208	205286	207.95	207.9 - 208.1		0.721	0.900	
220	0	220.15	-		0.296		

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	6.6	V	Deflect	14.0	V
Extract 2	-125.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-70	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	35025	0.33	
89	822717	0.35	
205	36869	0.25	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	35175	34942	34932	35120	34955
89	827517	821377	821128	823312	820250
205	36999	36853	36756	36830	36906

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.1	V	Deflect	1.6	V
Extract 2	-120.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	V	Cell Exit	-60	V			

Cell Parameters

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