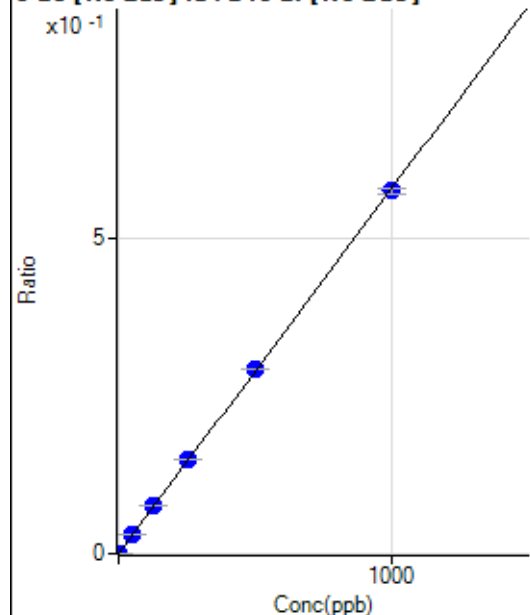


Calibration for 005CALS.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7040320MS.b\
 Analysis File: P7040320MS.batch.bin
 DA Date-Time: 2020-04-03 11:28:29
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-04-03 10:37:35
2	004CALS.d	S02	2020-04-03 10:41:07
3	006CALS.d	S03	2020-04-03 10:49:47
4	007CALS.d	S04	2020-04-03 10:54:02
5	008CALS.d	S05	2020-04-03 10:57:46
6	009CALS.d	S06	2020-04-03 11:01:22
7	010CALS.d	S07	2020-04-03 11:04:53
8	011CALS.d	S08	2020-04-03 11:08:24

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68.52	0.0000	P	15.8
2	☐	1.000	1.139	3928.40	0.0007	P	19.9
3	☐	50.000	53.677	187188.80	0.0311	P	2.6
4	☐	125.000	131.190	458111.91	0.0760	P	0.9
5	☐	250.000	257.498	883655.52	0.1492	P	0.6
6	☐	500.000	506.149	1687982.25	0.2933	P	0.9
7	☐	1000.000	994.093	3224985.46	0.5760	P	1.3
8	☐			592.62	0.0001	P	7.8

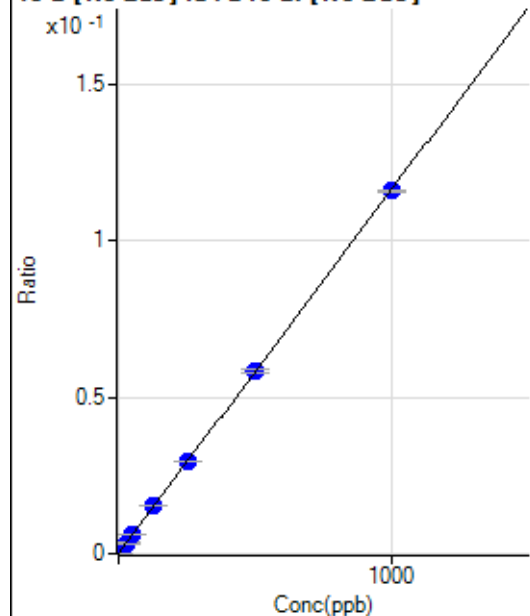
$$y = 5.7946\text{E-}004 * x + 1.1358\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.009317$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	519.48	0.0001	P	7.8
2	☐	25.000	26.804	18653.80	0.0032	P	22.1
3	☐	50.000	52.335	37090.87	0.0062	P	2.0
4	☐	125.000	130.630	91935.45	0.0153	P	1.8
5	☐	250.000	253.912	175153.42	0.0296	P	1.1
6	☐	500.000	503.386	336940.39	0.0586	P	2.2
7	☐	1000.000	996.463	648457.55	0.1158	P	0.2
8	☐			12341.61	0.0024	P	6.5

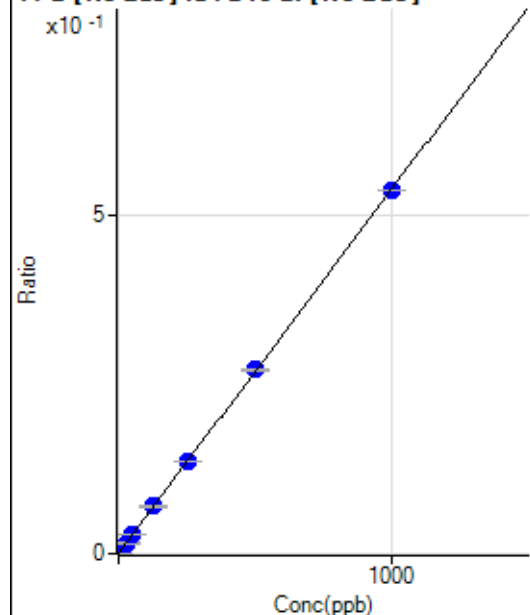
$$y = 1.1615\text{E-}004 * x + 8.6215\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1743$$

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	2600.34	0.0004	P	4.7
2	☐	25.000	27.231	87959.29	0.0151	P	21.1
3	☐	50.000	53.069	174215.35	0.0290	P	2.0
4	☐	125.000	129.352	421509.99	0.0700	P	1.4
5	☐	250.000	253.143	808309.55	0.1365	P	1.5
6	☐	500.000	504.918	1564257.41	0.2718	P	1.5
7	☐	1000.000	996.002	2999692.39	0.5358	P	0.1
8	☐			54536.03	0.0107	P	7.5

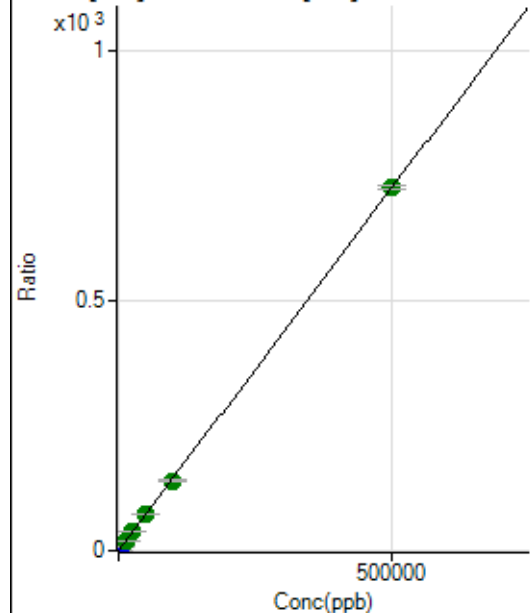
$$y = 5.3749\text{E-}004 * x + 4.3134\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1134$$

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	11232.37	0.0294	P	1.5
2	☐	500.000	531.228	301595.41	0.7992	P	7.3
3	☐	5000.000	5232.329	2846097.63	7.6121	P	0.3
4	☐	12500.000	12771.319	6831045.03	18.5376	A	0.8
5	☐	25000.000	25467.281	13406893.88	36.9366	A	1.1
6	☐	50000.000	50967.110	26447931.15	73.8910	A	2.1
7	☐	100000.00	96541.649	51734182.06	139.9377	A	0.8
8	☐	500000.00	500562.45	245741474.9	725.4454	A	1.0

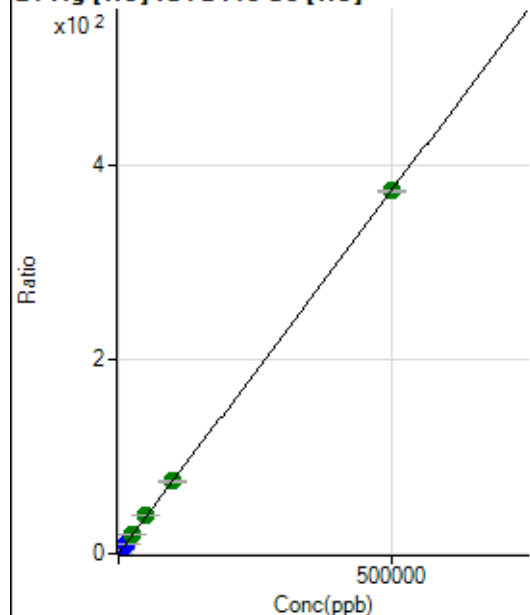
$$y = 0.0014 * x + 0.0294$$

$$R = 1.0000$$

$$DL = 0.9006$$

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	183.34	0.0005	P	23.8
2	☐	500.000	544.713	154059.25	0.4083	P	7.9
3	☐	5000.000	5470.920	1531670.13	4.0965	P	0.4
4	☐	12500.000	13289.637	3666639.67	9.9502	P	0.9
5	☐	25000.000	26316.245	7151637.75	19.7030	A	0.4
6	☐	50000.000	52025.292	13944169.93	38.9510	A	1.1
7	☐	100000.00	99796.677	27621412.42	74.7167	A	1.3
8	☐	500000.00	499747.82	126743877.8	374.1538	A	0.8

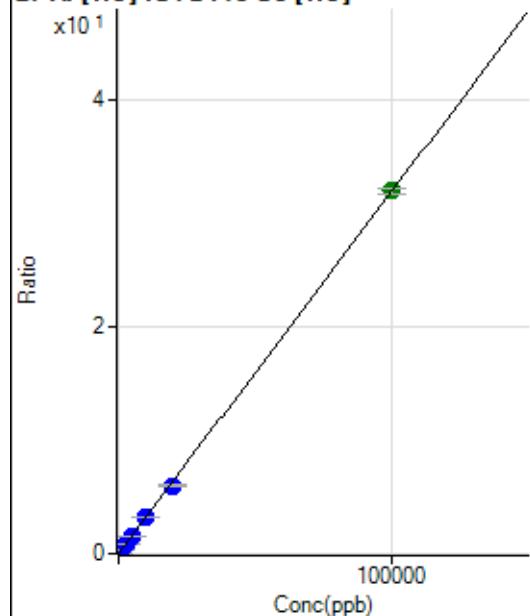
$$y = 7.4868\text{E-}004 * x + 4.7956\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.4581$$

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	75.00	0.0002	P	11.1
2	☐	20.000	20.181	2494.76	0.0066	P	13.1
3	☐	1000.000	1024.906	122172.74	0.3268	P	0.8
4	☐	2500.000	2512.910	295123.03	0.8009	P	1.0
5	☐	5000.000	4985.371	576644.82	1.5887	P	0.4
6	☐	10000.000	9926.227	1132233.13	3.1630	P	1.3
7	☐	20000.000	18795.442	2214049.68	5.9890	P	1.0
8	☐	100000.00	100248.44	10819143.38	31.9423	A	1.8

$$y = 3.1863\text{E-}004 * x + 1.9611\text{E-}004$$

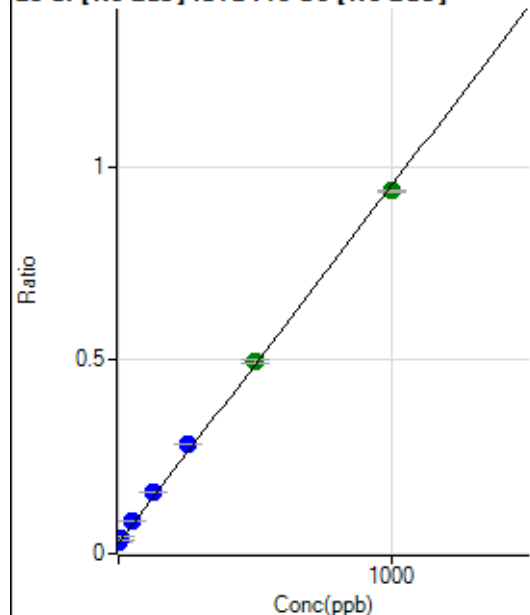
$$R = 0.9999$$

$$DL = 0.2044$$

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	296582.10	0.0278	P	1.7
2	☐	10.000	13.504	405655.99	0.0403	P	23.3
3	☐	50.000	59.706	889646.85	0.0830	P	1.1
4	☐	125.000	143.428	1710877.42	0.1603	P	0.7
5	☐	250.000	279.053	3009040.93	0.2856	P	0.2
6	☐	500.000	508.242	5236625.85	0.4974	A	1.6
7	☐	1000.000	985.792	9985790.07	0.9386	A	0.3
8	☐			440202.72	0.0458	P	1.8

$$y = 9.2392E-004 * x + 0.0278$$

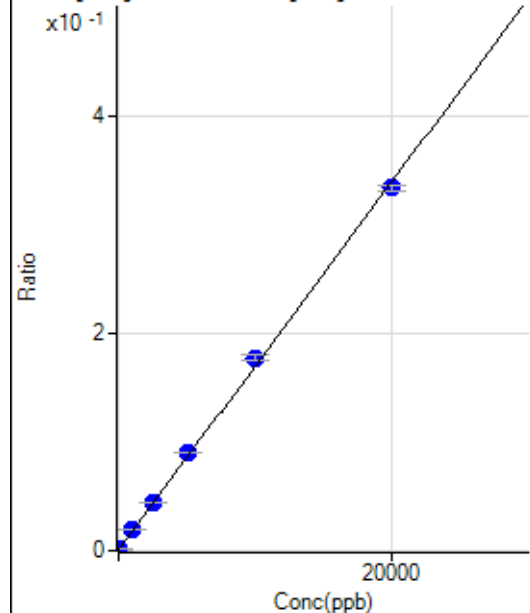
$$R = 0.9994$$

$$DL = 1.546$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-29.914	102.78	0.0003	P	12.9
2	☐	0.000	29.914	483.36	0.0013	P	15.3
3	☐	1000.000	1082.310	7146.45	0.0191	P	3.9
4	☐	2500.000	2568.320	16320.59	0.0443	P	1.0
5	☐	5000.000	5267.126	32672.91	0.0900	P	0.5
6	☐	10000.000	10454.403	63669.88	0.1779	P	2.9
7	☐	20000.000	19693.361	123631.87	0.3344	P	1.7
8	☐			261.13	0.0008	P	14.6

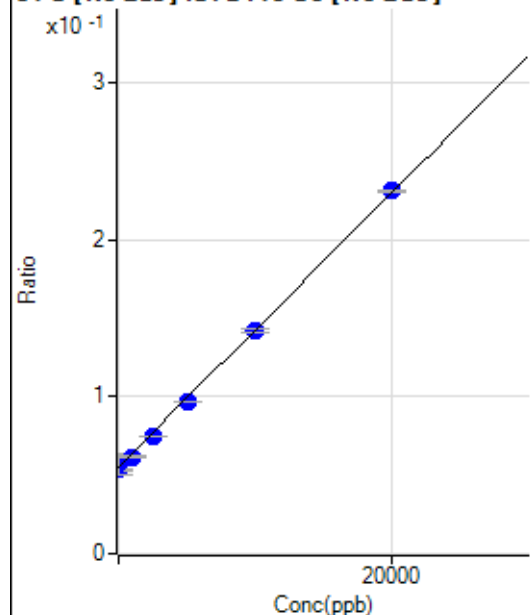
$$y = 1.6943E-005 * x + 7.7568E-004$$

$$R = 0.9995$$

$$DL = 20.38$$

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	-219.869	569242.97	0.0534	P	1.6
2	☐	0.000	219.869	576303.67	0.0572	P	23.2
3	☐	1000.000	712.136	659559.68	0.0615	P	1.5
4	☐	2500.000	2214.895	796479.81	0.0746	P	1.2
5	☐	5000.000	4766.241	1021058.81	0.0969	P	0.7
6	☐	10000.000	9975.733	1499485.95	0.1424	P	1.8
7	☐	20000.000	20120.605	2457912.97	0.2310	P	0.6
8	☐			483055.04	0.0503	P	0.8

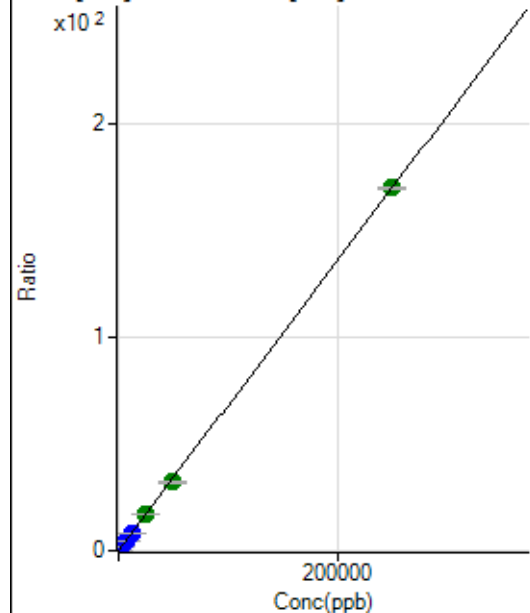
$$y = 8.7342\text{E-}006 * x + 0.0553$$

$$R = 0.9997$$

$$DL = 2429$$

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	20342.50	0.0532	P	0.9
2	☐	500.000	513.812	151352.40	0.4011	P	7.3
3	☐	2500.000	2534.390	661468.48	1.7692	P	0.7
4	☐	6250.000	6266.014	1583034.05	4.2957	P	0.4
5	☐	12500.000	12382.224	3062342.26	8.4369	P	0.4
6	☐	25000.000	24747.772	6017876.35	16.8093	A	0.7
7	☐	50000.000	47323.711	11865583.69	32.0948	A	1.3
8	☐	250000.00	250565.59	57488224.20	169.7046	A	0.8

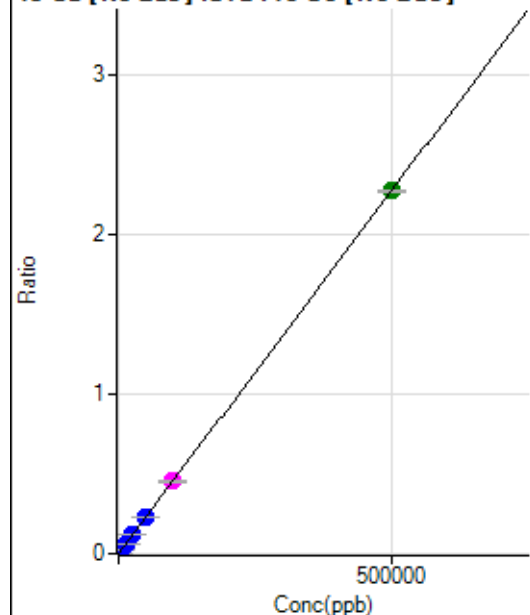
$$y = 6.7707\text{E-}004 * x + 0.0532$$

$$R = 0.9999$$

$$DL = 2.095$$

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	344.46	0.0000	P	11.2
2	☐	500.000	565.366	26098.91	0.0026	P	25.5
3	☐	5000.000	5229.943	255123.62	0.0238	P	0.8
4	☐	12500.000	12973.230	629291.85	0.0590	P	1.2
5	☐	25000.000	25431.061	1217513.67	0.1156	P	0.6
6	☐	50000.000	50902.499	2435103.24	0.2313	P	1.9
7	☐	100000.00	99602.030	4814594.90	0.4526	M	0.8
8	☐	500000.00	499953.59	21827491.46	2.2715	A	0.8

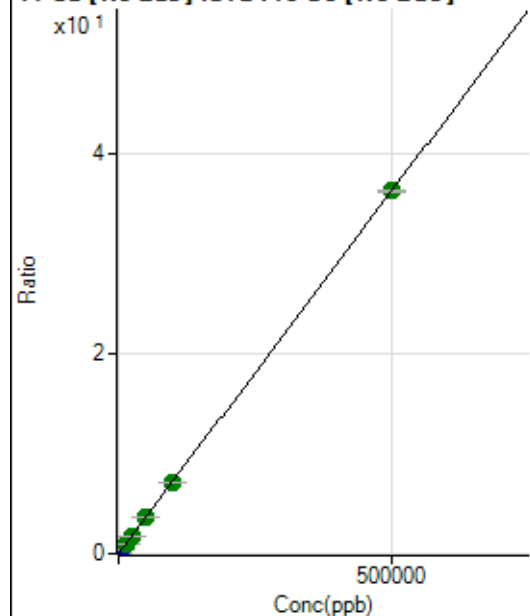
$$y = 4.5433\text{E-}006 * x + 3.2291\text{E-}005$$

$$R = 1.0000$$

$$DL = 2.386$$

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	8133.12	0.0008	P	4.7
2	☐	500.000	555.496	412804.49	0.0411	P	25.0
3	☐	5000.000	5197.740	4055860.16	0.3783	P	1.0
4	☐	12500.000	12682.059	9836703.95	0.9218	A	1.3
5	☐	25000.000	25095.327	19208627.69	1.8234	A	0.5
6	☐	50000.000	50265.674	38440116.83	3.6515	A	3.1
7	☐	100000.00	97329.974	75213017.65	7.0697	A	0.3
8	☐	500000.00	500496.08	349327249.4	36.3510	A	0.4

$$y = 7.2628\text{E-}005 * x + 7.6279\text{E-}004$$

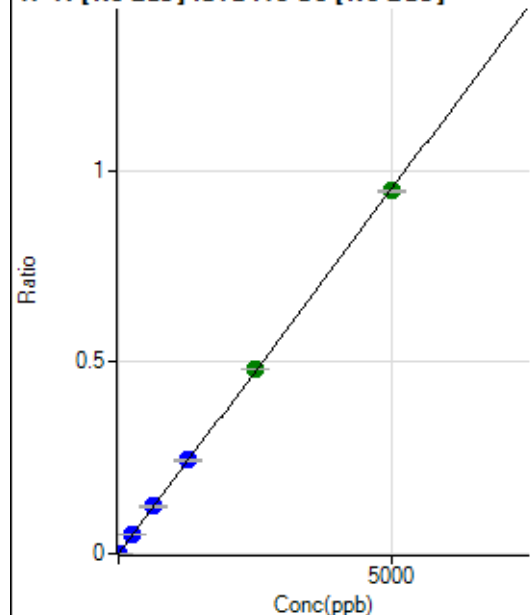
$$R = 1.0000$$

$$DL = 1.472$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	538.92	0.0001	P	4.4
2	☐	5.000	5.868	11774.59	0.0012	P	22.9
3	☐	250.000	260.781	533177.85	0.0497	P	0.7
4	☐	625.000	646.297	1314249.65	0.1232	P	0.7
5	☐	1250.000	1279.939	2568921.67	0.2439	P	0.5
6	☐	2500.000	2527.034	5068951.24	0.4814	A	0.6
7	☐	5000.000	4975.796	10084285.64	0.9479	A	0.6
8	☐			4673.17	0.0005	P	5.7

$$y = 1.9048\text{E-}004 * x + 5.0544\text{E-}005$$

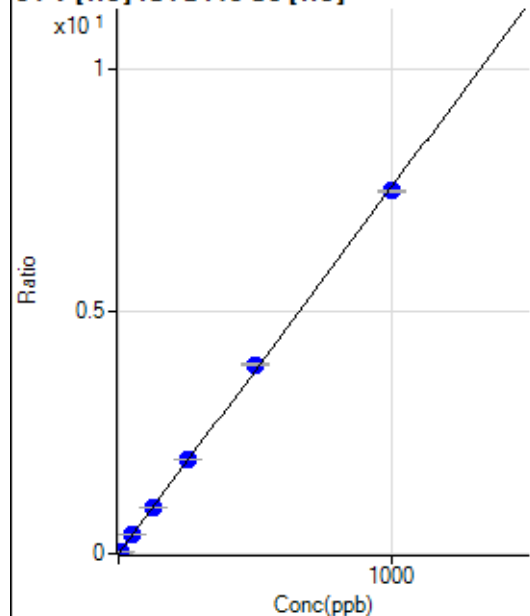
$$R = 1.0000$$

$$DL = 0.03528$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.56	0.0000	P	35.1
2	☐	5.000	5.464	15610.74	0.0414	P	7.4
3	☐	50.000	51.987	147123.97	0.3935	P	0.4
4	☐	125.000	128.078	357223.68	0.9694	P	0.7
5	☐	250.000	257.417	707156.94	1.9483	P	1.4
6	☐	500.000	515.441	1396474.01	3.9012	P	1.5
7	☐	1000.000	989.939	2769945.48	7.4926	P	0.8
8	☐			1142.29	0.0034	P	1.4

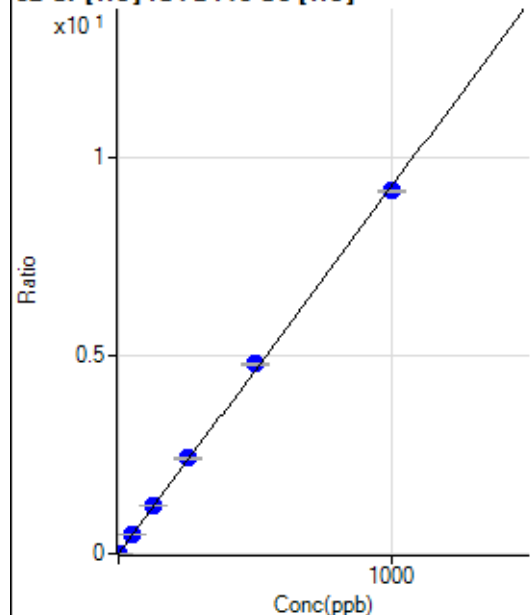
$$y = 0.0076 * x + 1.4548\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.002024$$

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	494.46	0.0013	P	12.4
2	☐	2.000	2.206	8185.72	0.0217	P	6.7
3	☐	50.000	53.248	184512.74	0.4935	P	0.6
4	☐	125.000	130.422	444711.70	1.2068	P	0.8
5	☐	250.000	259.498	871075.68	2.3999	P	1.2
6	☐	500.000	516.469	1709341.24	4.7752	P	1.4
7	☐	1000.000	988.550	3378569.22	9.1388	P	0.7
8	☐			88945.06	0.2626	P	1.7

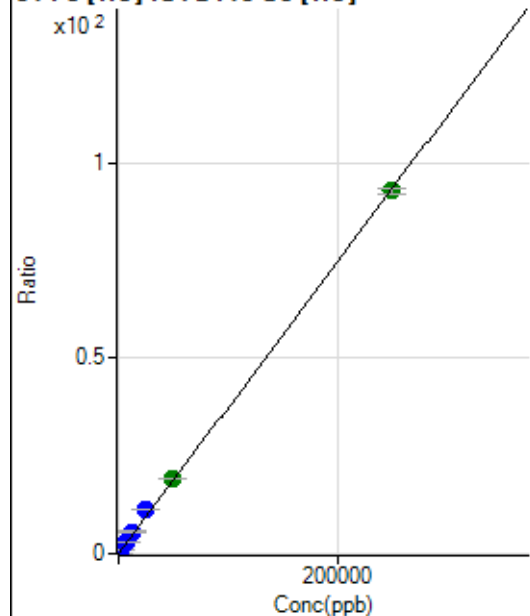
$$y = 0.0092 * x + 0.0013$$

$$R = 0.9997$$

$$DL = 0.05214$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	580.62	0.0015	P	10.1
2	☐	50.000	68.873	10237.58	0.0272	P	9.4
3	☐	2500.000	3107.526	432992.19	1.1581	P	0.5
4	☐	6250.000	7621.390	1045769.98	2.8380	P	1.4
5	☐	12500.000	15115.777	2042489.63	5.6273	P	1.1
6	☐	25000.000	29970.153	3993451.02	11.1558	P	1.2
7	☐	50000.000	51095.167	7030931.31	19.0181	A	0.6
8	☐	250000.00	249112.79	31404507.57	92.7161	A	1.6

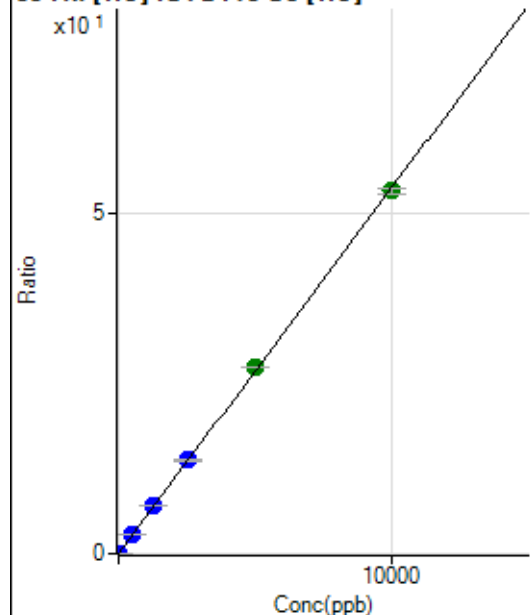
$$y = 3.7218E-004 * x + 0.0015$$

$$R = 0.9998$$

$$DL = 1.239$$

Weight: <None>

Min Conc: 0

⁵⁵Mn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	96.67	0.0003	P	19.4
2	☐	1.000	1.125	2372.45	0.0063	P	11.1
3	☐	500.000	525.827	1056808.89	2.8265	P	0.2
4	☐	1250.000	1295.277	2565583.47	6.9621	P	0.5
5	☐	2500.000	2558.048	4990481.84	13.7493	P	1.0
6	☐	5000.000	5108.293	9829473.26	27.4564	A	0.4
7	☐	10000.000	9924.390	19719527.76	53.3420	A	1.5
8	☐			22338.31	0.0660	P	1.7

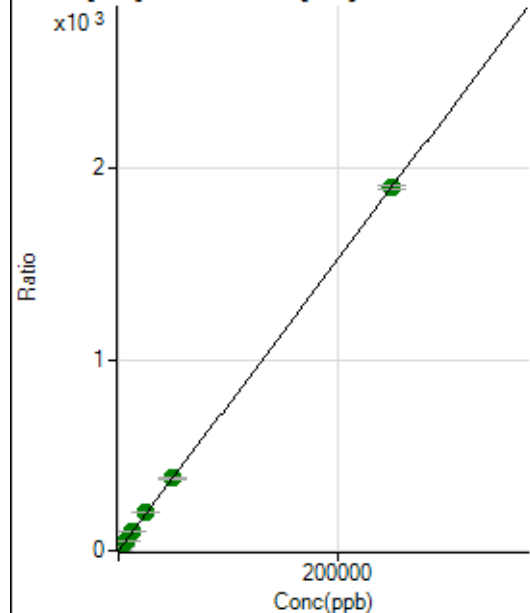
$$y = 0.0054 * x + 2.5283E-004$$

$$R = 0.9999$$

$$DL = 0.02743$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6029.18	0.0158	P	3.0
2	☐	50.000	57.545	171020.51	0.4532	P	7.4
3	☐	2500.000	2667.552	7587716.37	20.2945	A	1.4
4	☐	6250.000	6597.918	18489601.34	50.1731	A	0.6
5	☐	12500.000	13057.866	36036224.41	99.2816	A	0.5
6	☐	25000.000	26335.838	71667662.71	200.2206	A	1.9
7	☐	50000.000	49951.470	140385498.5	379.7465	A	1.2
8	☐	250000.00	249837.85	643358940.3	1,899.281	A	1.0

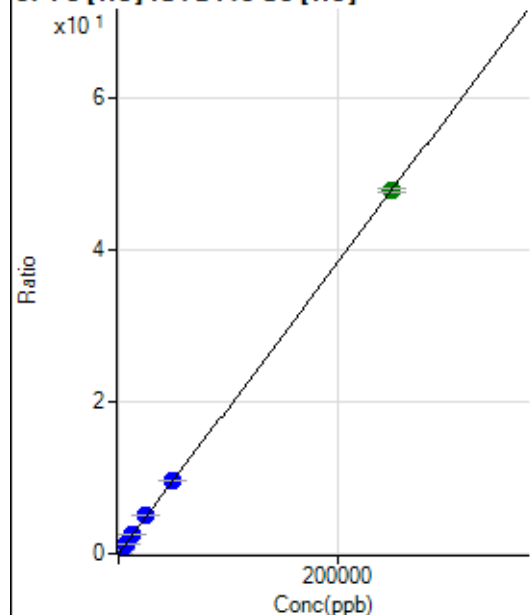
$$y = 0.0076 * x + 0.0158$$

$$R = 1.0000$$

$$DL = 0.1878$$

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	192.60	0.0005	P	16.9
2	☐	50.000	57.749	4358.18	0.0115	P	4.6
3	☐	2500.000	2706.256	193491.64	0.5175	P	0.4
4	☐	6250.000	6695.027	471504.25	1.2795	P	0.6
5	☐	12500.000	13183.699	914368.58	2.5191	P	0.4
6	☐	25000.000	26284.326	1797629.38	5.0218	P	1.5
7	☐	50000.000	49828.802	3519498.69	9.5198	P	0.4
8	☐	250000.00	249858.43	16169675.25	47.7333	A	1.0

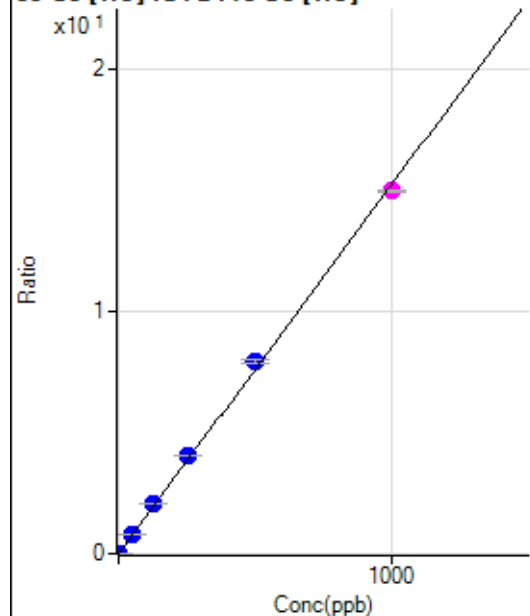
$$y = 1.9104\text{E-}004 * x + 5.0336\text{E-}004$$

$$R = 1.0000$$

$$DL = 1.335$$

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	91.11	0.0002	P	20.3
2	☐	1.000	1.083	6298.10	0.0167	P	8.8
3	☐	50.000	54.371	309025.15	0.8265	P	0.5
4	☐	125.000	134.017	750601.58	2.0369	P	0.4
5	☐	250.000	265.892	1466749.75	4.0409	P	0.5
6	☐	500.000	522.289	2841276.97	7.9374	P	1.4
7	☐	1000.000	983.537	5526026.86	14.9469	M	0.2
8	☐			10830.80	0.0320	P	2.3

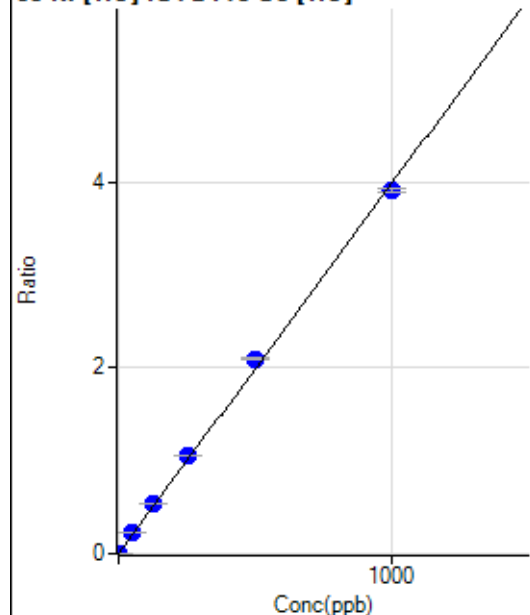
$$y = 0.0152 * x + 2.3828\text{E-}004$$

$$R = 0.9995$$

$$DL = 0.009568$$

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	150.01	0.0004	P	10.7
2	☐	1.000	1.270	2055.74	0.0054	P	4.4
3	☐	50.000	56.036	83457.95	0.2232	P	0.8
4	☐	125.000	135.413	198568.19	0.5388	P	0.8
5	☐	250.000	267.199	385800.13	1.0629	P	0.1
6	☐	500.000	526.196	749123.03	2.0928	P	1.4
7	☐	1000.000	980.999	1442233.76	3.9012	P	1.0
8	☐			24557.43	0.0725	P	1.7

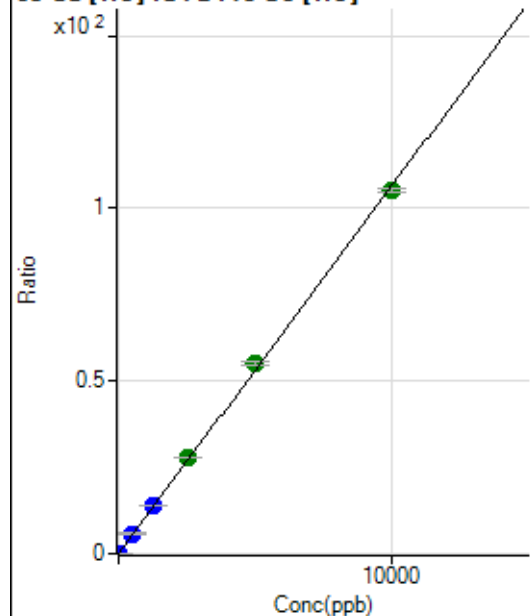
$$y = 0.0040 * x + 3.9239E-004$$

$$R = 0.9993$$

$$DL = 0.0317$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	770.03	0.0020	P	3.1
2	☐	2.000	2.229	9710.01	0.0257	P	7.0
3	☐	500.000	547.436	2178029.95	5.8254	P	0.7
4	☐	1250.000	1315.428	5156980.37	13.9949	P	1.3
5	☐	2500.000	2617.405	10106617.83	27.8446	A	1.2
6	☐	5000.000	5169.736	19686464.84	54.9951	A	1.9
7	☐	10000.000	9875.230	38835104.70	105.0497	A	1.1
8	☐			19087.11	0.0563	P	0.8

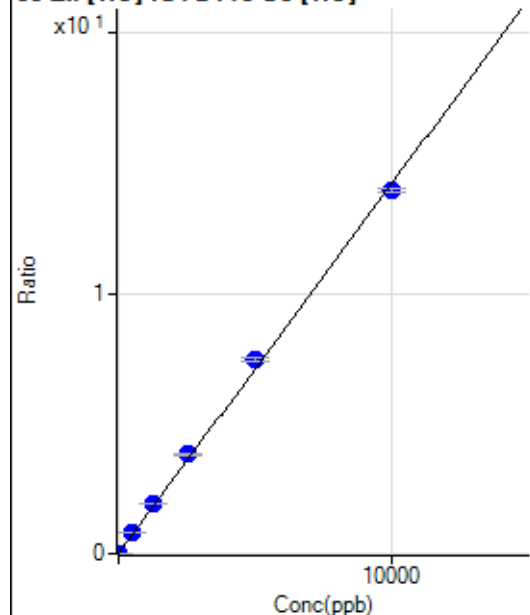
$$y = 0.0106 * x + 0.0020$$

$$R = 0.9997$$

$$DL = 0.01774$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1241.19	0.0032	P	3.7
2	☐	2.000	2.337	2485.81	0.0066	P	0.6
3	☐	500.000	561.673	299514.20	0.8011	P	0.4
4	☐	1250.000	1362.549	714371.00	1.9387	P	1.5
5	☐	2500.000	2678.361	1382065.50	3.8077	P	0.8
6	☐	5000.000	5246.843	2668936.24	7.4561	P	1.6
7	☐	10000.000	9814.836	5155099.26	13.9446	P	1.1
8	☐			23987.69	0.0708	P	2.7

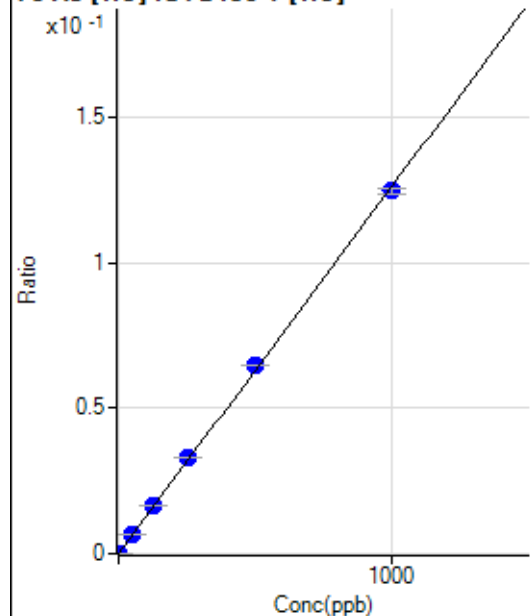
$$y = 0.0014 * x + 0.0032$$

$$R = 0.9993$$

$$DL = 0.2515$$

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	9.26	0.0000	P	71.9
2	☐	1.000	1.064	364.82	0.0001	P	4.7
3	☐	50.000	53.290	17920.38	0.0067	P	0.9
4	☐	125.000	131.119	43475.29	0.0165	P	0.7
5	☐	250.000	261.367	85315.59	0.0330	P	0.8
6	☐	500.000	513.464	167622.66	0.0648	P	0.5
7	☐	1000.000	989.497	328208.27	0.1248	P	1.6
8	☐			175.31	0.0001	P	18.8

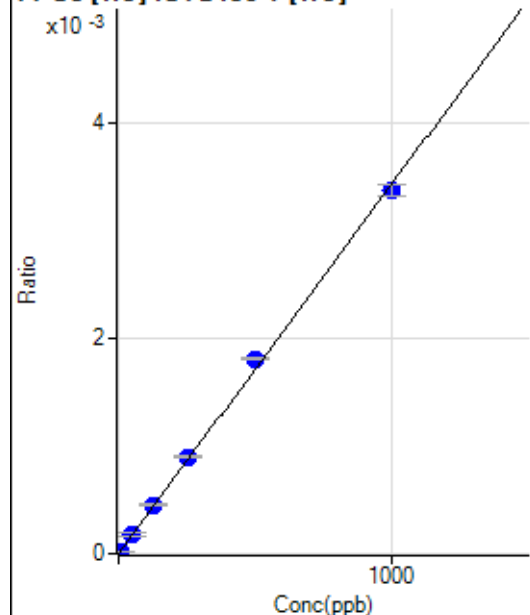
$$y = 1.2616E-004 * x + 3.4346E-006$$

$$R = 0.9998$$

$$DL = 0.05872$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.737	52.22	0.0000	P	13.9
3	☐	50.000	51.956	474.46	0.0002	P	11.7
4	☐	125.000	132.128	1190.07	0.0005	P	3.9
5	☐	250.000	262.047	2323.55	0.0009	P	2.7
6	☐	500.000	526.505	4669.72	0.0018	P	1.1
7	☐	1000.000	982.743	8855.07	0.0034	P	3.3
8	☐			3.33	0.0000	P	173.2

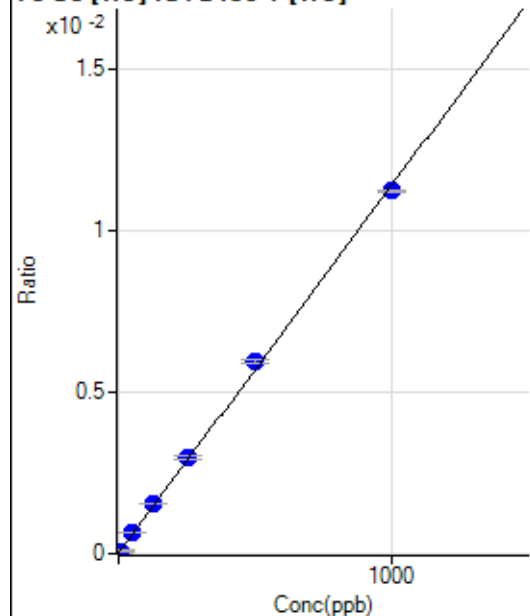
$$y = 3.4276\text{E-}006 * x + 0.0000\text{E}+000$$

$$R = 0.9994$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	46.91	0.0000	P	18.0
2	☐	5.000	6.060	228.40	0.0001	P	7.1
3	☐	50.000	54.772	1705.06	0.0006	P	3.9
4	☐	125.000	134.074	4050.60	0.0015	P	2.3
5	☐	250.000	261.216	7727.43	0.0030	P	3.4
6	☐	500.000	520.548	15353.87	0.0059	P	2.0
7	☐	1000.000	985.544	29500.41	0.0112	P	0.9
8	☐			58.02	0.0000	P	12.2

$$y = 1.1367\text{E-}005 * x + 1.7429\text{E-}005$$

$$R = 0.9996$$

$$DL = 0.8286$$

Weight: <None>

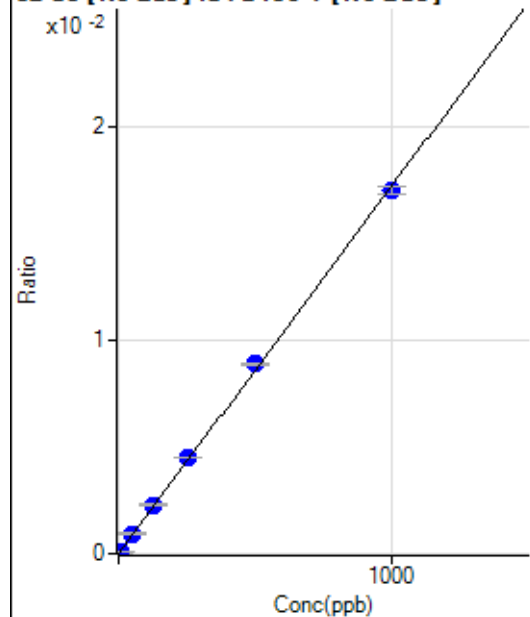
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58230.90		P	0.6
2	☐			59128.73		P	0.7
3	☐			58589.10		P	1.0
4	☐			57084.73		P	2.5
5	☐			57905.15		P	0.6
6	☐			57499.98		P	1.3
7	☐			58896.85		P	1.8
8	☐			54053.20		P	1.3

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			23.36		P	49.5
2	☐			26.69		P	57.3
3	☐			40.04		P	25.0
4	☐			43.38		P	35.3
5	☐			36.70		P	31.5
6	☐			13.35		P	114.6
7	☐			36.70		P	41.7
8	☐			36.70		P	15.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-62.33	0.0000	P	-113.
2	☐	5.000	4.666	1619.01	0.0001	P	28.8
3	☐	50.000	54.648	20981.24	0.0009	P	2.1
4	☐	125.000	133.252	51695.28	0.0023	P	0.5
5	☐	250.000	261.316	101406.27	0.0045	P	0.3
6	☐	500.000	515.981	199941.55	0.0089	P	0.6
7	☐	1000.000	987.918	385051.10	0.0170	P	2.2
8	☐			315.19	0.0000	P	29.9

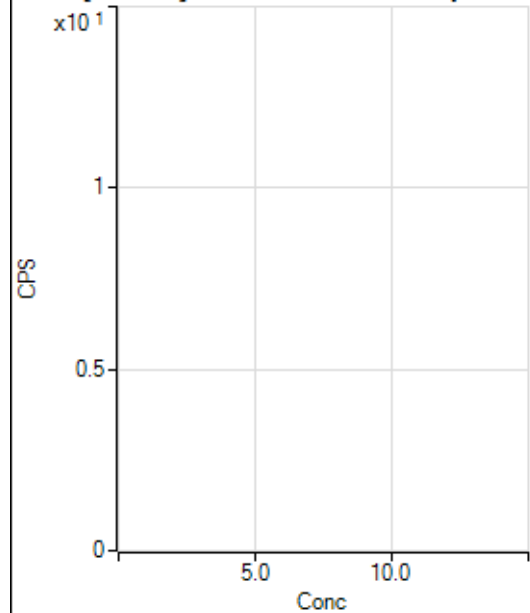
$$y = 1.7203E-005 * x - 2.7459E-006$$

$$R = 0.9997$$

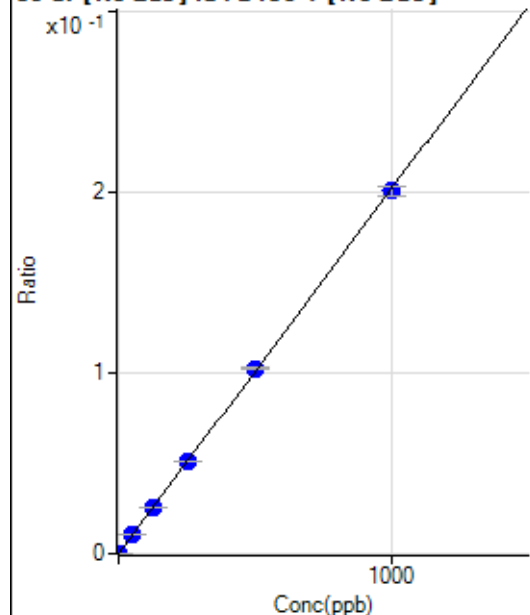
$$DL = 0.5435$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			495.57		P	13.3
2	☐			541.13		P	4.5
3	☐			501.13		P	3.4
4	☐			502.24		P	5.0
5	☐			551.13		P	8.6
6	☐			547.80		P	2.3
7	☐			606.69		P	2.9
8	☐			545.57		P	11.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	741.72	0.0000	P	5.9
2	☐	1.000	1.107	5390.13	0.0003	P	25.3
3	☐	50.000	52.692	238643.06	0.0107	P	0.8
4	☐	125.000	128.256	584773.22	0.0259	P	0.4
5	☐	250.000	254.673	1160048.44	0.0514	P	0.3
6	☐	500.000	507.798	2308324.64	0.1024	P	0.4
7	☐	1000.000	994.391	4544743.46	0.2006	P	2.8
8	☐			10065.03	0.0005	P	0.8

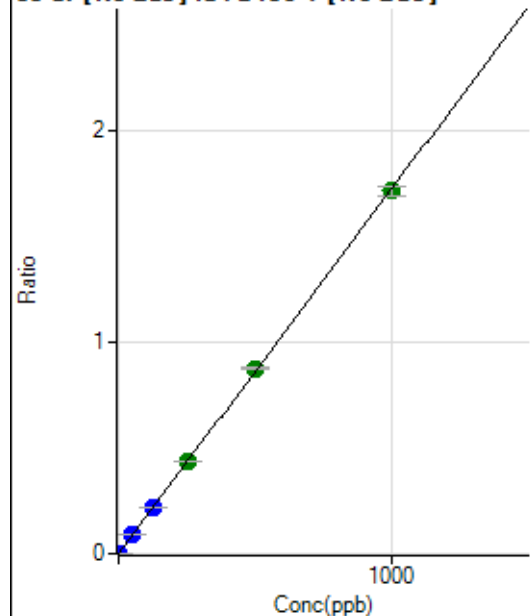
$$y = 2.0168\text{E-}004 * x + 3.2682\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.02855$$

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	297.24	0.0000	P	8.1
2	☐	1.000	1.132	41129.91	0.0020	P	26.8
3	☐	50.000	52.710	2033090.74	0.0908	P	1.7
4	☐	125.000	128.676	5005575.94	0.2217	P	0.4
5	☐	250.000	252.022	9800287.81	0.4342	A	1.1
6	☐	500.000	507.954	19717607.56	0.8751	A	1.0
7	☐	1000.000	994.922	38837382.81	1.7141	A	2.8
8	☐			81668.50	0.0039	P	0.3

$$y = 0.0017 * x + 1.3097\text{E-}005$$

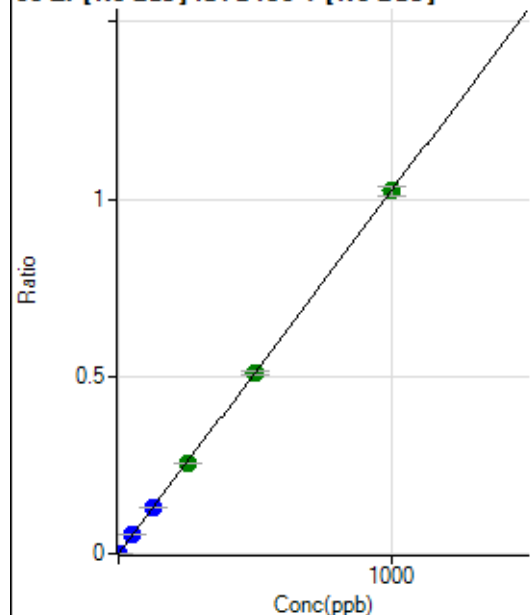
$$R = 0.9999$$

$$DL = 0.001839$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1280.66	0.0001	P	5.8
2	☐	1.000	0.895	20557.10	0.0010	P	20.9
3	☐	50.000	51.187	1173275.10	0.0524	P	2.4
4	☐	125.000	127.971	2957019.53	0.1310	P	0.5
5	☐	250.000	248.521	5739413.32	0.2543	A	1.0
6	☐	500.000	500.347	11532838.71	0.5119	A	2.3
7	☐	1000.000	999.766	23174490.62	1.0228	A	2.6
8	☐			9678.62	0.0005	P	2.7

$$y = 0.0010 * x + 5.6429E-005$$

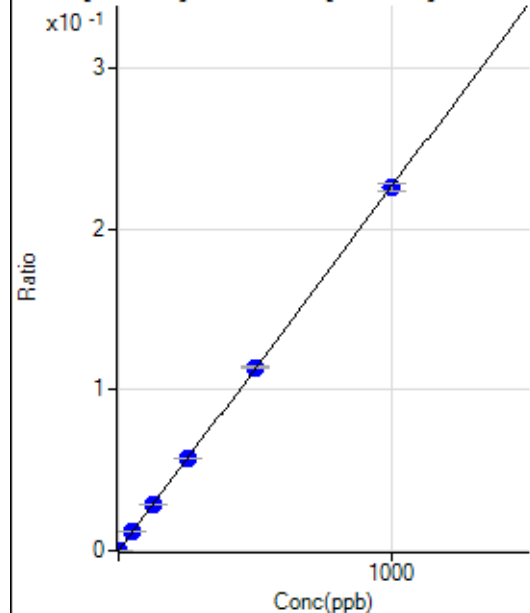
$$R = 1.0000$$

$$DL = 0.009594$$

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	269.46	0.0000	P	7.2
2	☐	1.000	0.876	4453.67	0.0002	P	20.0
3	☐	50.000	51.377	260883.01	0.0117	P	2.2
4	☐	125.000	128.514	657854.33	0.0291	P	0.3
5	☐	250.000	253.539	1297164.62	0.0575	P	0.6
6	☐	500.000	503.984	2573679.46	0.1142	P	1.1
7	☐	1000.000	996.615	5118190.61	0.2259	P	2.2
8	☐			1975.22	0.0001	P	6.9

$$y = 2.2663E-004 * x + 1.1874E-005$$

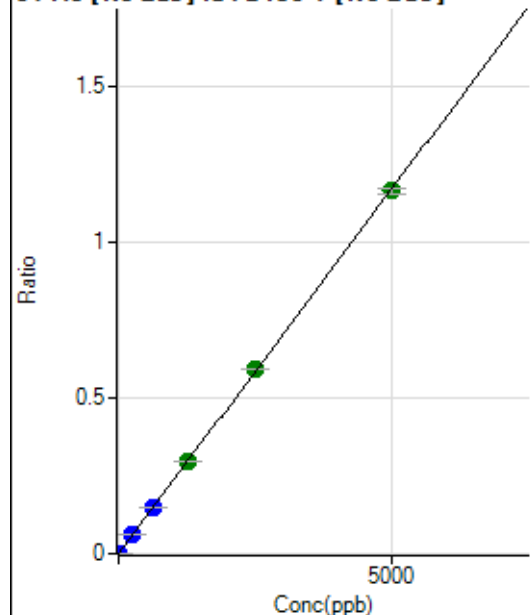
$$R = 1.0000$$

$$DL = 0.01136$$

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	444.47	0.0000	P	22.5
2	☐	5.000	5.563	27727.97	0.0013	P	25.7
3	☐	250.000	260.524	1365524.93	0.0610	P	2.1
4	☐	625.000	644.749	3408212.32	0.1510	P	0.4
5	☐	1250.000	1265.436	6686618.90	0.2963	A	0.8
6	☐	2500.000	2531.416	13352573.39	0.5926	A	0.8
7	☐	5000.000	4977.438	26405009.27	1.1652	A	1.9
8	☐			26294.57	0.0013	P	1.0

$$y = 2.3409E-004 * x + 1.9587E-005$$

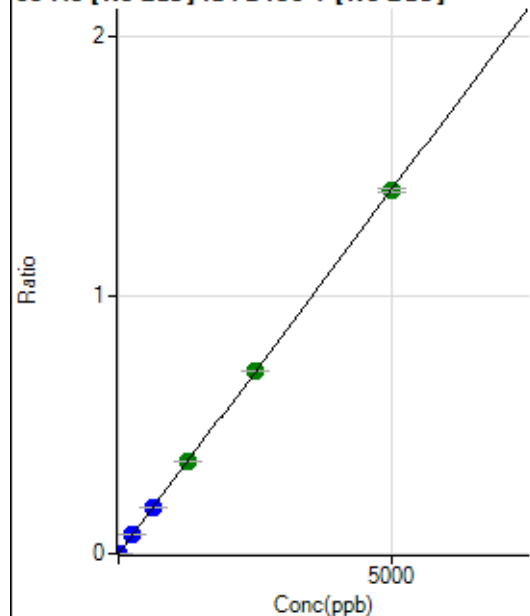
$$R = 1.0000$$

$$DL = 0.05637$$

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	52.78	0.0000	P	55.5
2	☐	5.000	5.957	35294.61	0.0017	P	24.5
3	☐	250.000	262.706	1656121.66	0.0740	P	1.9
4	☐	625.000	645.206	4102749.79	0.1817	P	0.3
5	☐	1250.000	1266.143	8048508.86	0.3566	A	0.3
6	☐	2500.000	2511.977	15940019.97	0.7075	A	0.9
7	☐	5000.000	4986.814	31830559.04	1.4044	A	1.0
8	☐			39438.92	0.0019	P	1.5

$$y = 2.8163E-004 * x + 2.3264E-006$$

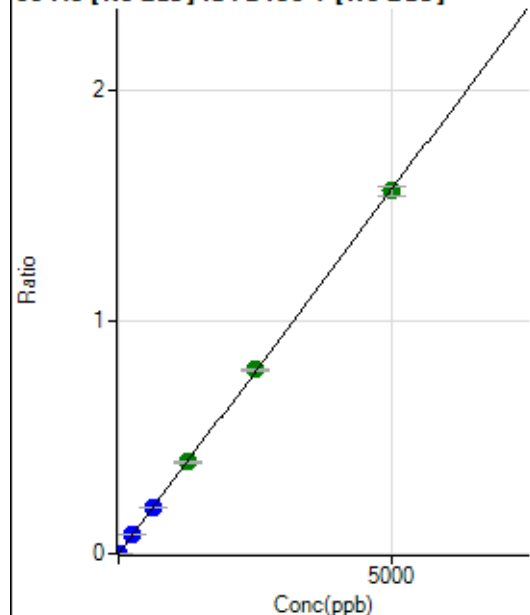
$$R = 1.0000$$

$$DL = 0.01376$$

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	258.35	0.0000	P	12.8
2	☐	5.000	5.850	38764.99	0.0018	P	25.5
3	☐	250.000	261.652	1838598.00	0.0821	P	1.4
4	☐	625.000	640.682	4540412.78	0.2011	P	0.3
5	☐	1250.000	1255.015	8890940.48	0.3939	A	0.8
6	☐	2500.000	2523.923	17847721.75	0.7922	A	2.0
7	☐	5000.000	4984.241	35445739.34	1.5644	A	2.7
8	☐			61489.32	0.0029	P	0.9

$$y = 3.1386\text{E-}004 * x + 1.1383\text{E-}005$$

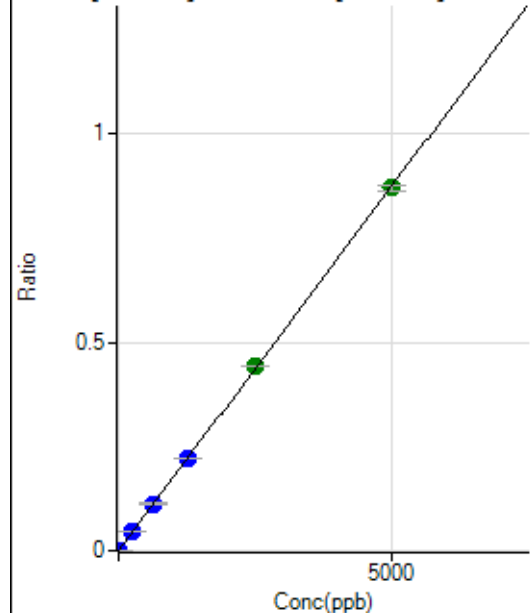
$$R = 1.0000$$

$$DL = 0.01397$$

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	77.78	0.0000	P	22.3
2	☐	5.000	5.928	21925.93	0.0010	P	22.7
3	☐	250.000	262.372	1027516.34	0.0459	P	1.7
4	☐	625.000	645.379	2549217.87	0.1129	P	0.9
5	☐	1250.000	1260.210	4976160.92	0.2205	P	0.7
6	☐	2500.000	2528.053	9965260.99	0.4423	A	0.4
7	☐	5000.000	4980.254	19743684.64	0.8713	A	1.9
8	☐			24393.94	0.0012	P	1.1

$$y = 1.7494\text{E-}004 * x + 3.4276\text{E-}006$$

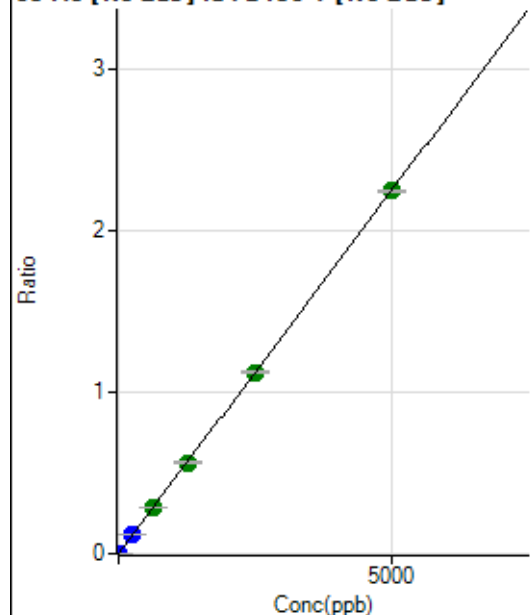
$$R = 1.0000$$

$$DL = 0.01312$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	119.45	0.0000	P	21.3
2	☐	5.000	5.906	55805.03	0.0027	P	25.6
3	☐	250.000	261.995	2635507.78	0.1177	P	2.1
4	☐	625.000	634.019	6433157.13	0.2849	A	0.7
5	☐	1250.000	1257.200	12752274.24	0.5650	A	0.4
6	☐	2500.000	2498.258	25296258.55	1.1227	A	0.6
7	☐	5000.000	4997.343	50902216.41	2.2458	A	0.6
8	☐			61138.13	0.0029	P	1.5

$$y = 4.4939E-004 * x + 5.2635E-006$$

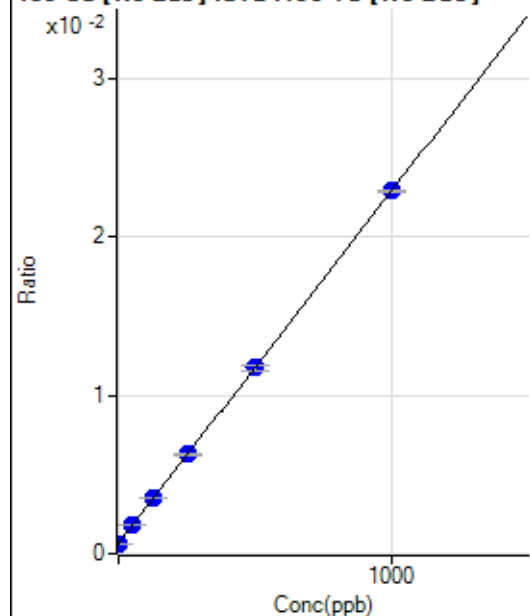
$$R = 1.0000$$

$$DL = 0.007488$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12236.31	0.0006	P	3.6
2	☐	1.000	0.575	12164.44	0.0007	P	0.6
3	☐	50.000	52.757	34487.60	0.0018	P	0.9
4	☐	125.000	127.730	67500.65	0.0035	P	0.5
5	☐	250.000	252.193	120351.27	0.0063	P	2.0
6	☐	500.000	497.559	225899.01	0.0117	P	2.9
7	☐	1000.000	1000.193	440618.86	0.0229	P	0.8
8	☐			11427.59	0.0007	P	5.0

$$y = 2.2285E-005 * x + 6.4484E-004$$

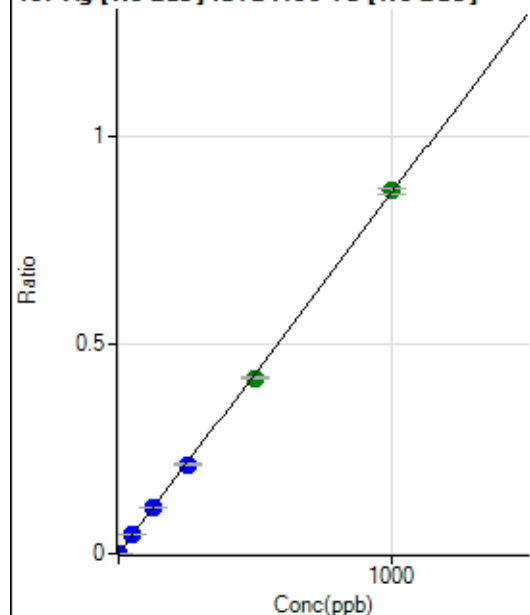
$$R = 1.0000$$

$$DL = 3.145$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	208.34	0.0000	P	39.1
2	☐	1.000	0.980	15250.56	0.0009	P	24.6
3	☐	50.000	52.869	865198.33	0.0457	P	0.5
4	☐	125.000	127.203	2124171.51	0.1099	P	1.2
5	☐	250.000	248.051	4115863.59	0.2142	P	1.1
6	☐	500.000	486.832	8097556.69	0.4205	A	1.0
7	☐	1000.000	1006.652	16703034.58	0.8694	A	1.7
8	☐			4092.42	0.0002	P	2.3

$$y = 8.6366E-004 * x + 1.0914E-005$$

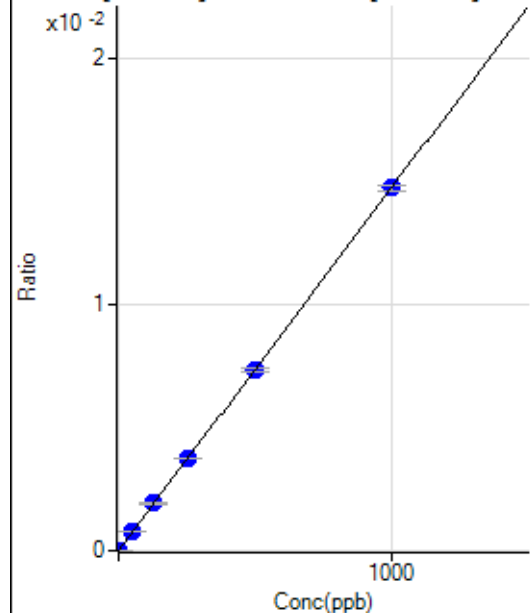
$$R = 0.9999$$

$$DL = 0.01482$$

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	34.72	0.0000	P	31.9
2	☐	1.000	1.104	331.95	0.0000	P	8.3
3	☐	50.000	52.964	14853.87	0.0008	P	2.0
4	☐	125.000	130.152	37199.01	0.0019	P	1.6
5	☐	250.000	255.482	72522.37	0.0038	P	1.1
6	☐	500.000	496.125	141126.87	0.0073	P	2.4
7	☐	1000.000	999.775	283710.80	0.0148	P	1.5
8	☐			156.95	0.0000	P	15.7

$$y = 1.4769E-005 * x + 1.8369E-006$$

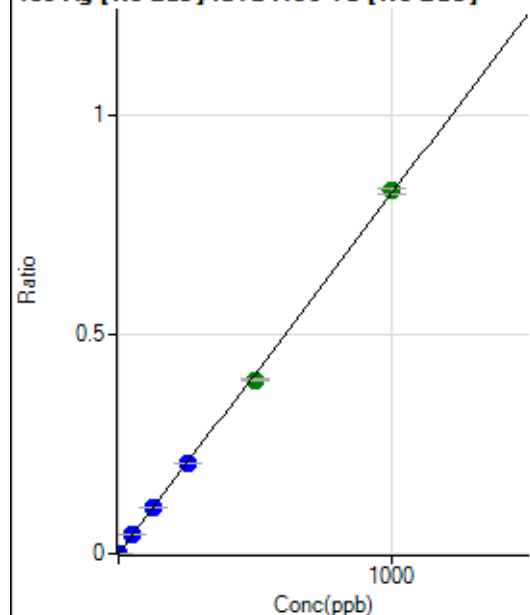
$$R = 1.0000$$

$$DL = 0.119$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0000	P	21.8
2	☐	1.000	0.988	14410.73	0.0008	P	26.2
3	☐	50.000	52.818	821248.43	0.0434	P	0.5
4	☐	125.000	127.387	2021294.40	0.1045	P	1.0
5	☐	250.000	250.576	3950787.37	0.2057	P	1.1
6	☐	500.000	483.310	7639869.09	0.3967	A	0.2
7	☐	1000.000	1007.762	15889534.73	0.8271	A	1.6
8	☐			4031.30	0.0002	P	4.2

$$y = 8.2070E-004 * x + 2.2020E-006$$

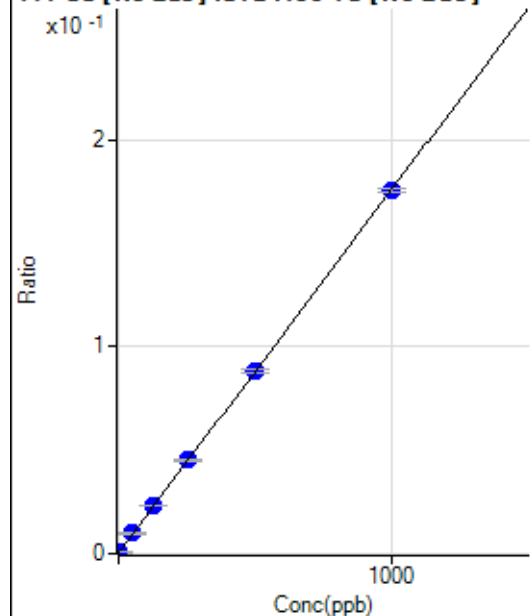
$$R = 0.9998$$

$$DL = 0.001759$$

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	6109.13	0.0003	P	3.5
2	☐	1.000	1.112	9404.55	0.0005	P	11.0
3	☐	50.000	53.832	185130.45	0.0098	P	0.5
4	☐	125.000	130.233	448269.96	0.0232	P	0.8
5	☐	250.000	255.739	868716.35	0.0452	P	1.4
6	☐	500.000	501.420	1701379.51	0.0884	P	1.6
7	☐	1000.000	997.010	3369078.18	0.1754	P	0.9
8	☐			6873.46	0.0004	P	3.5

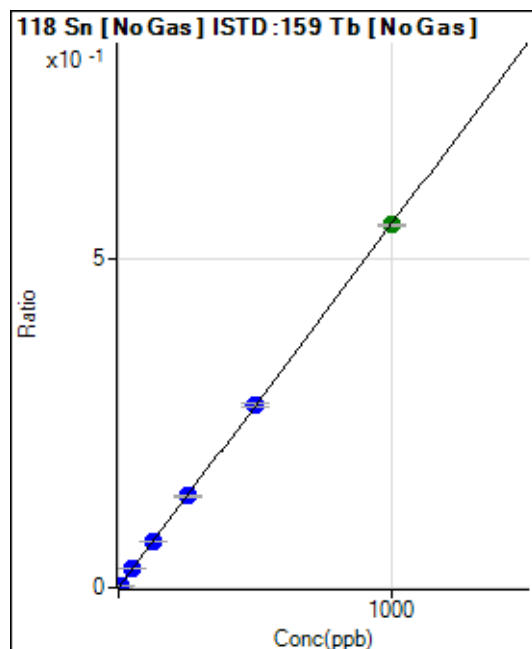
$$y = 1.7556E-004 * x + 3.2193E-004$$

$$R = 1.0000$$

$$DL = 0.1938$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2953.21	0.0002	P	2.6
2	☐	5.000	5.827	60107.31	0.0034	P	24.4
3	☐	50.000	51.948	547227.98	0.0289	P	1.3
4	☐	125.000	128.443	1376534.91	0.0712	P	1.0
5	☐	250.000	252.280	2683644.26	0.1397	P	1.1
6	☐	500.000	502.543	5355124.60	0.2781	P	2.2
7	☐	1000.000	997.627	10604784.44	0.5519	A	0.5
8	☐			14002.02	0.0008	P	1.4

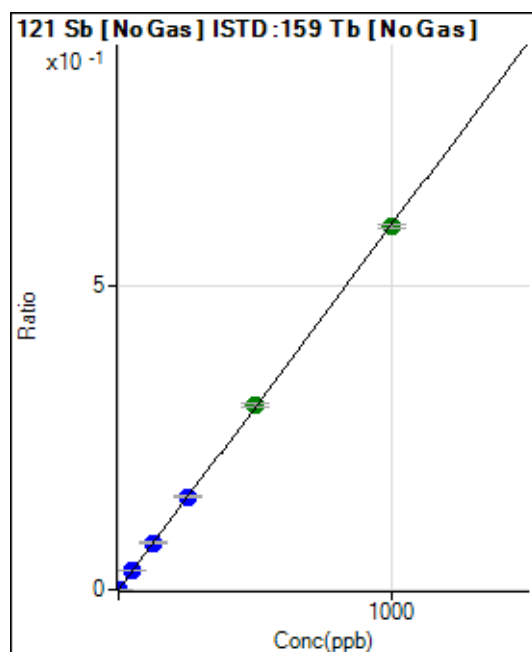
$$y = 5.5310\text{E-}004 * x + 1.5561\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.02154$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	83.8
2	☐	2.000	2.224	23776.63	0.0013	P	26.1
3	☐	50.000	51.945	591182.13	0.0312	P	0.5
4	☐	125.000	129.000	1498251.31	0.0775	P	0.9
5	☐	250.000	255.273	2946053.76	0.1533	P	0.7
6	☐	500.000	507.709	5872622.92	0.3050	A	2.1
7	☐	1000.000	994.229	11474831.33	0.5972	A	0.9
8	☐			15089.23	0.0009	P	6.1

$$y = 6.0071\text{E-}004 * x + 3.3849\text{E-}006$$

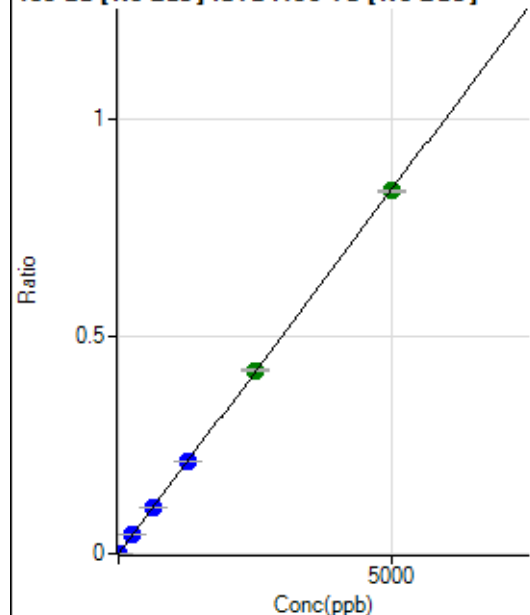
$$R = 0.9999$$

$$DL = 0.01417$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0000	P	25.3
2	☐	10.000	11.430	34040.06	0.0019	P	24.9
3	☐	250.000	261.179	827772.95	0.0437	P	1.0
4	☐	625.000	639.692	2069087.07	0.1070	P	1.0
5	☐	1250.000	1263.737	4061755.17	0.2114	P	0.5
6	☐	2500.000	2519.844	8117735.08	0.4216	A	1.8
7	☐	5000.000	4984.246	16021092.90	0.8339	A	0.5
8	☐			29298.51	0.0017	P	1.9

$$y = 1.6730E-004 * x + 2.4810E-006$$

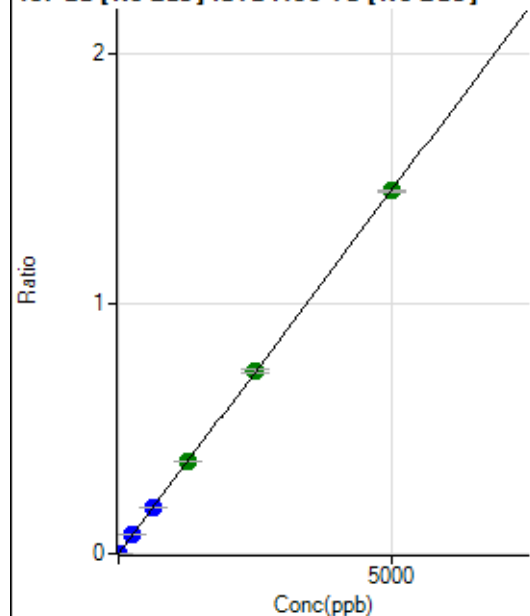
$$R = 1.0000$$

$$DL = 0.01125$$

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	47.22	0.0000	P	27.2
2	☐	10.000	11.576	59944.33	0.0034	P	23.7
3	☐	250.000	262.388	1444105.00	0.0762	P	0.9
4	☐	625.000	637.394	3580255.51	0.1852	P	0.8
5	☐	1250.000	1261.356	7040283.84	0.3665	A	0.7
6	☐	2500.000	2504.842	14013494.59	0.7277	A	1.8
7	☐	5000.000	4992.568	27868817.98	1.4505	A	0.6
8	☐			51000.47	0.0030	P	0.4

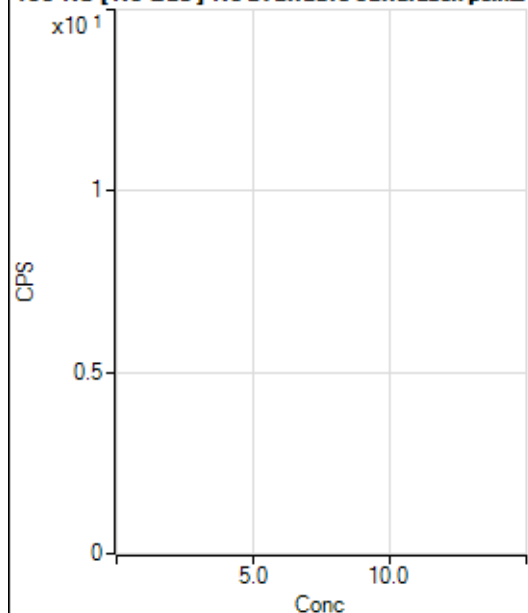
$$y = 2.9053E-004 * x + 2.4880E-006$$

$$R = 1.0000$$

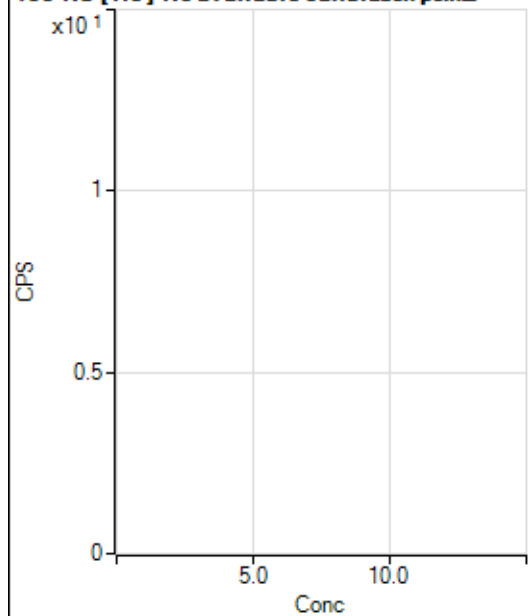
$$DL = 0.006977$$

Weight: <None>

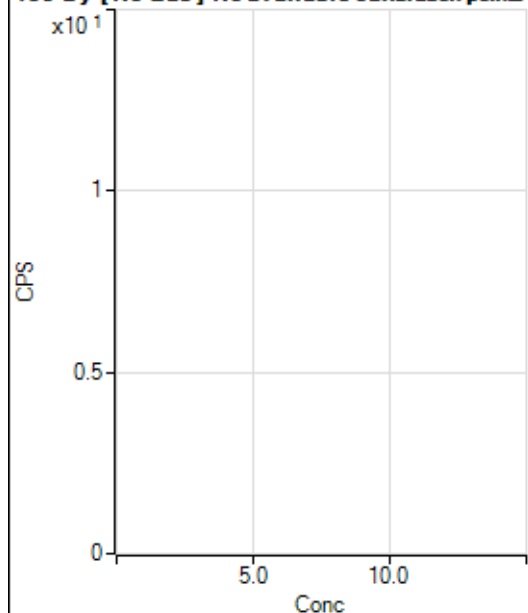
Min Conc: 0

150 Nd [No Gas] No available calibration points

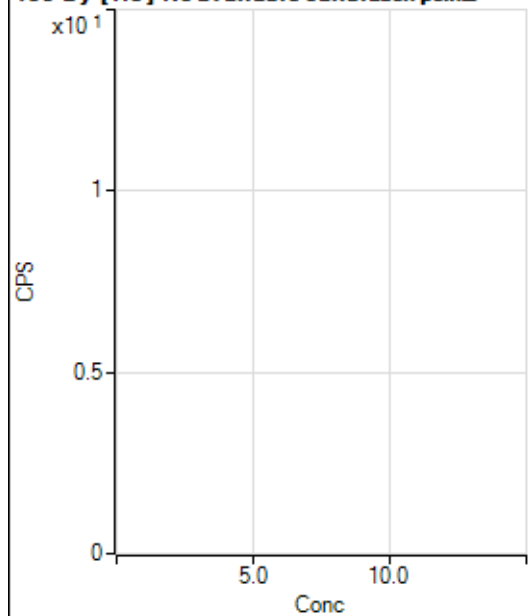
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			17.78		P	57.3
3	☐			151.12		P	27.0
4	☐			273.35		P	17.1
5	☐			582.26		P	4.8
6	☐			1166.76		P	7.2
7	☐			2266.94		P	3.1
8	☐			180.01		P	22.5

150 Nd [He] No available calibration points

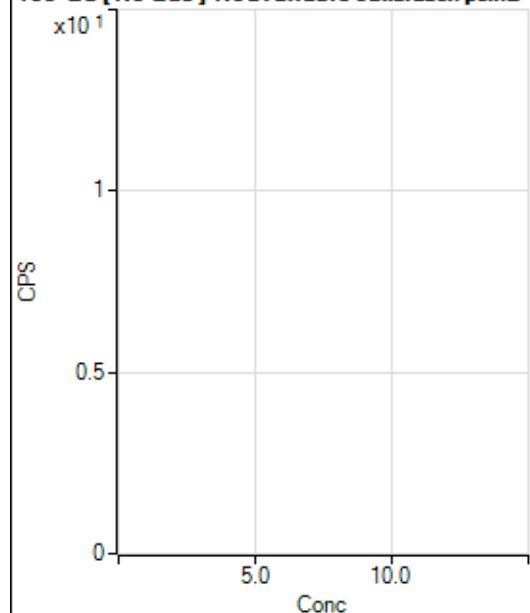
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.1
2	☐			1.11		P	173.2
3	☐			11.11		P	17.3
4	☐			20.00		P	50.0
5	☐			42.22		P	29.9
6	☐			72.22		P	14.8
7	☐			162.23		P	5.2
8	☐			48.89		P	10.4

156 Dy [No Gas] No available calibration points

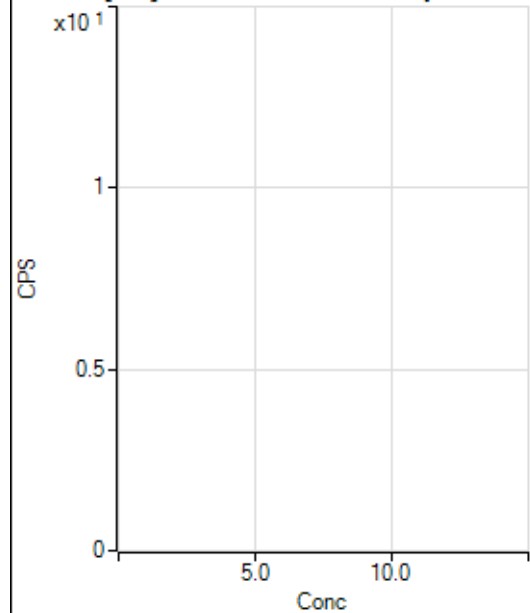
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.55		P	15.7
2	☐			72.23		P	46.6
3	☐			69.45		P	50.0
4	☐			152.79		P	19.2
5	☐			213.90		P	18.4
6	☐			363.91		P	14.7
7	☐			602.82		P	1.6
8	☐			891.74		P	11.0

156 Dy [He] No available calibration points

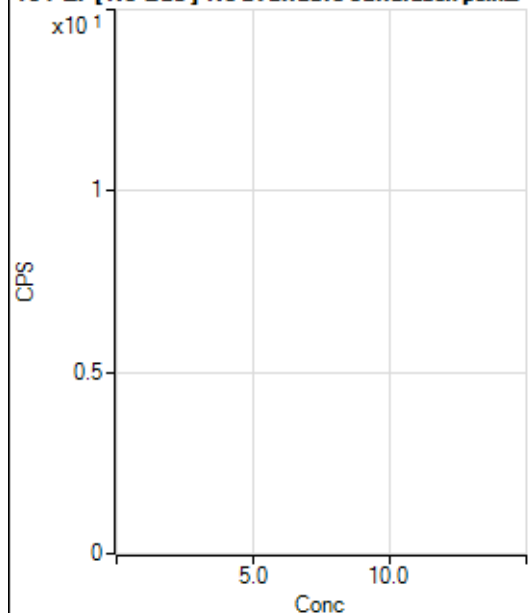
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	94.4
2	☐			11.11		P	17.3
3	☐			24.44		P	41.7
4	☐			57.78		P	26.0
5	☐			103.34		P	28.7
6	☐			170.01		P	12.9
7	☐			316.68		P	17.4
8	☐			427.79		P	7.0

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

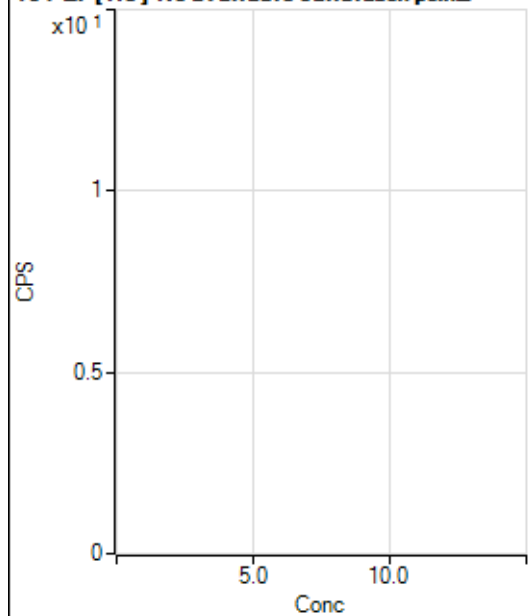
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			130.56		P	13.3
2	☐			133.34		P	25.0
3	☐			152.79		P	22.7
4	☐			191.68		P	26.4
5	☐			200.01		P	20.8
6	☐			263.91		P	32.4
7	☐			355.58		P	12.9
8	☐			986.19		P	15.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			228.90		P	11.9
2	☐			258.90		P	19.3
3	☐			252.23		P	21.4
4	☐			255.56		P	11.8
5	☐			272.23		P	6.3
6	☐			302.23		P	11.0
7	☐			350.01		P	7.2
8	☐			688.92		P	6.8

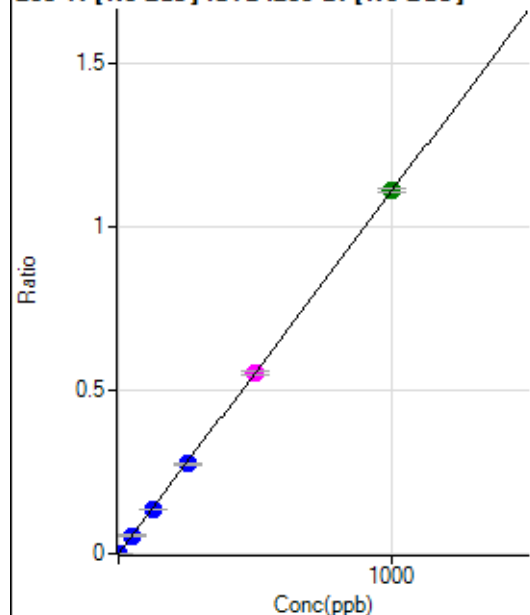
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			91.67		P	9.1
2	☐			111.12		P	15.6
3	☐			63.89		P	32.8
4	☐			113.89		P	18.4
5	☐			105.56		P	45.6
6	☐			91.67		P	15.7
7	☐			136.12		P	3.5
8	☐			211.12		P	26.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.22		P	25.8
2	☐			44.44		P	11.5
3	☐			36.67		P	18.2
4	☐			53.33		P	NaN
5	☐			46.67		P	12.4
6	☐			38.89		P	57.1
7	☐			75.56		P	9.2
8	☐			93.34		P	18.6

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	225.01	0.0000	P	15.6
2	☐	1.000	1.086	12887.38	0.0012	P	22.7
3	☐	50.000	50.408	620862.97	0.0559	P	2.1
4	☐	125.000	123.409	1532816.77	0.1368	P	1.0
5	☐	250.000	246.952	3037870.92	0.2738	P	1.7
6	☐	500.000	498.867	5969833.81	0.5530	M	1.7
7	☐	1000.000	1001.507	11603451.74	1.1102	A	1.1
8	☐			3661.79	0.0004	P	7.6

$$y = 0.0011 * x + 1.9803E-005$$

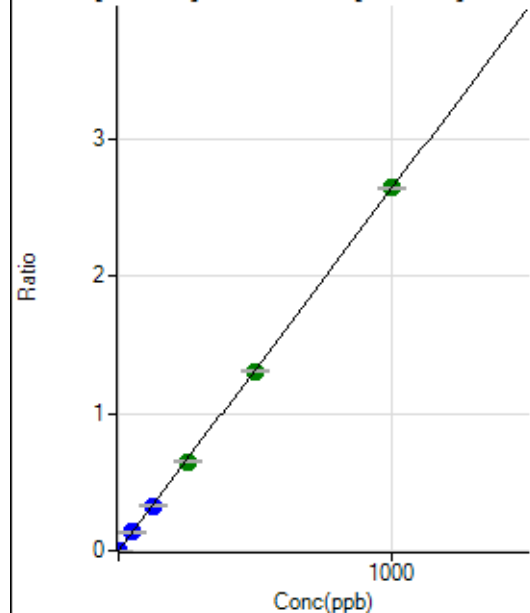
R = 1.0000

DL = 0.008374

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	508.37	0.0000	P	14.2
2	☐	1.000	1.073	30277.27	0.0029	P	23.1
3	☐	50.000	50.541	1481758.52	0.1334	P	2.1
4	☐	125.000	124.561	3682557.77	0.3287	P	1.3
5	☐	250.000	246.960	7231917.44	0.6517	A	0.7
6	☐	500.000	496.500	14142748.23	1.3101	A	1.6
7	☐	1000.000	1002.538	27648539.51	2.6454	A	0.7
8	☐			8625.43	0.0010	P	2.3

$$y = 0.0026 * x + 4.4828E-005$$

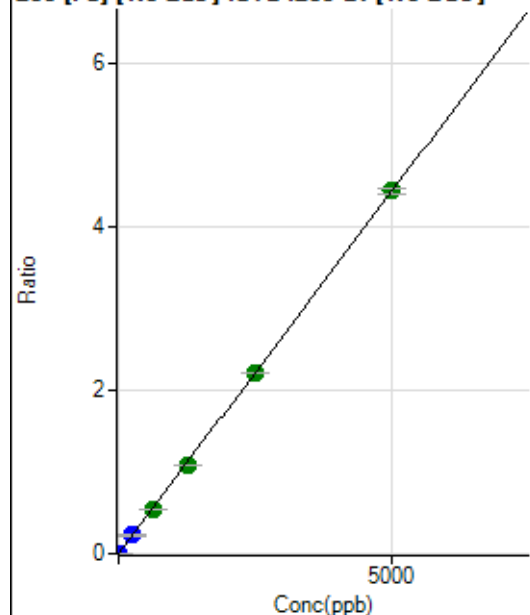
R = 1.0000

DL = 0.007244

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	625.96	0.0001	P	19.6
2	☐	1.000	1.118	10969.61	0.0010	P	24.7
3	☐	250.000	253.792	2494567.50	0.2246	P	2.2
4	☐	625.000	617.085	6116508.64	0.5460	A	2.0
5	☐	1250.000	1232.668	12103166.24	1.0906	A	0.2
6	☐	2500.000	2489.684	23779619.51	2.2027	A	0.4
7	☐	5000.000	5010.291	46329279.28	4.4327	A	1.3
8	☐			44097.75	0.0053	P	0.9

$$y = 8.8472E-004 * x + 5.5226E-005$$

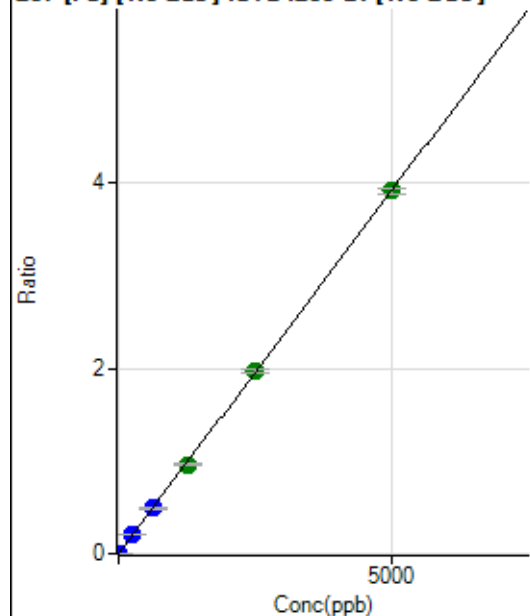
$$R = 1.0000$$

$$DL = 0.03669$$

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	525.95	0.0000	P	13.2
2	☐	1.000	1.076	9279.47	0.0009	P	28.0
3	☐	250.000	254.391	2213225.47	0.1992	P	1.4
4	☐	625.000	622.950	5465363.43	0.4878	P	0.8
5	☐	1250.000	1231.382	10700689.59	0.9643	A	0.7
6	☐	2500.000	2511.169	21228780.34	1.9664	A	1.6
7	☐	5000.000	4999.107	40912691.19	3.9145	A	1.5
8	☐			38729.32	0.0047	P	0.4

$$y = 7.8303E-004 * x + 4.6353E-005$$

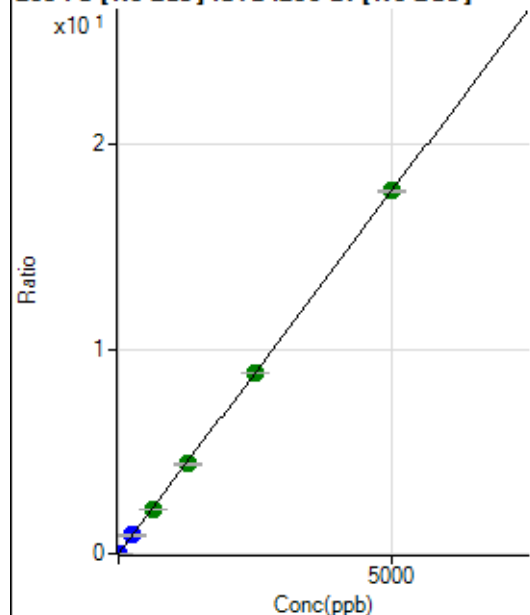
$$R = 1.0000$$

$$DL = 0.02337$$

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	2531.65	0.0002	P	7.2
2	☐	1.000	1.090	42716.79	0.0041	P	26.7
3	☐	250.000	253.141	9958150.79	0.8965	P	1.7
4	☐	625.000	620.092	24600157.90	2.1958	A	0.6
5	☐	1250.000	1235.732	48557615.44	4.3756	A	0.4
6	☐	2500.000	2497.908	95480870.89	8.8445	A	0.7
7	☐	5000.000	5005.070	185217460.6	17.7216	A	0.2
8	☐			173960.40	0.0210	P	0.6

$$y = 0.0035 * x + 2.2305E-004$$

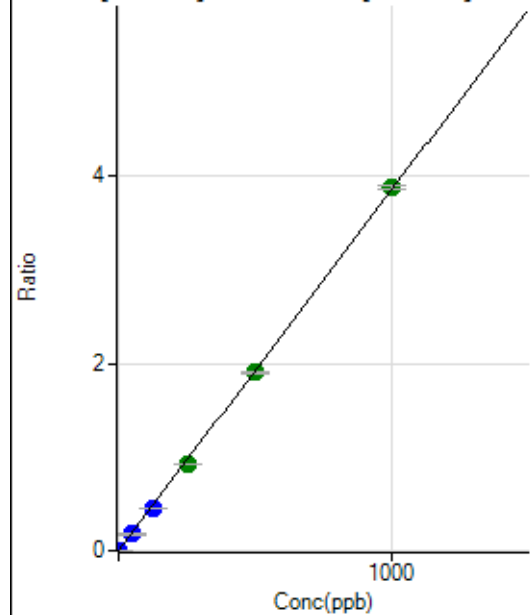
$$R = 1.0000$$

$$DL = 0.01352$$

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	1339.00	0.0001	P	5.8
2	☐	1.000	0.795	33336.38	0.0032	P	26.5
3	☐	50.000	45.449	1947992.19	0.1754	P	1.4
4	☐	125.000	115.348	4984751.61	0.4449	P	0.6
5	☐	250.000	241.952	10354859.61	0.9331	A	0.4
6	☐	500.000	494.541	20586792.71	1.9071	A	1.1
7	☐	1000.000	1006.176	40549867.58	3.8799	A	1.1
8	☐			26984.66	0.0033	P	3.2

$$y = 0.0039 * x + 1.1798E-004$$

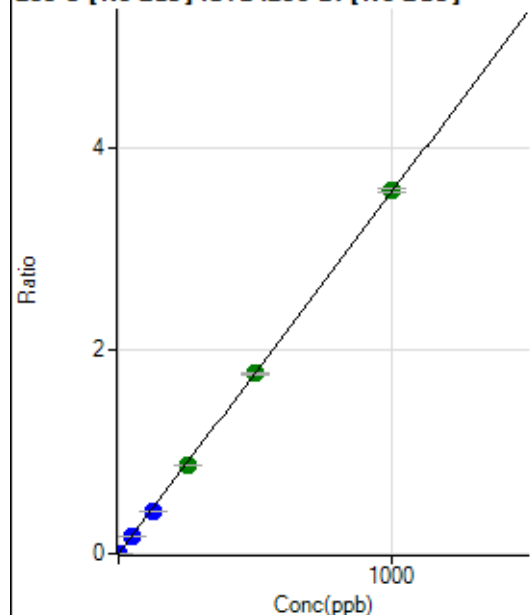
$$R = 0.9999$$

$$DL = 0.005325$$

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	16.67	0.0000	P	86.6
2	☐	1.000	0.972	36328.82	0.0035	P	25.9
3	☐	50.000	46.742	1849831.10	0.1665	P	0.9
4	☐	125.000	116.901	4666005.53	0.4165	P	0.2
5	☐	250.000	245.195	9693558.90	0.8735	A	0.9
6	☐	500.000	497.460	19130740.01	1.7722	A	1.5
7	☐	1000.000	1003.647	37368889.03	3.5755	A	1.1
8	☐			6029.47	0.0007	P	2.4

$$y = 0.0036 * x + 1.4795E-006$$

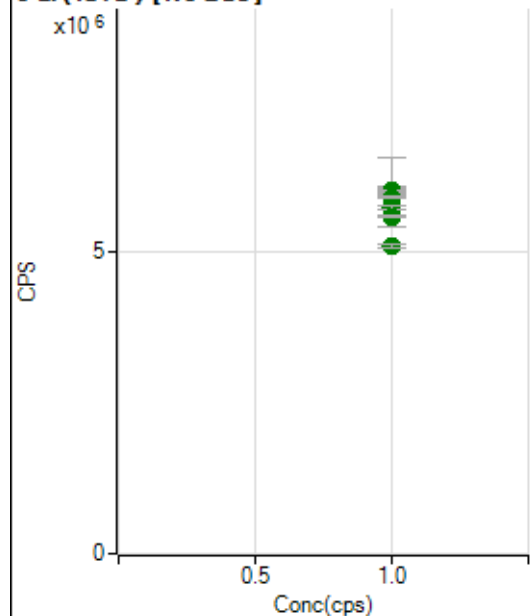
$$R = 1.0000$$

$$DL = 0.001079$$

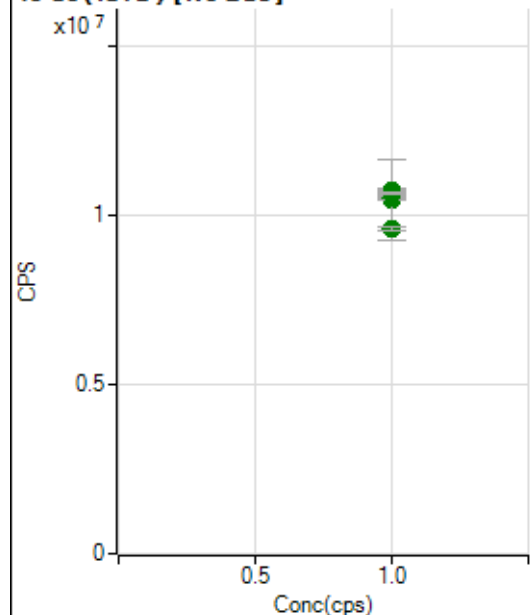
Weight: <None>

Min Conc: 0

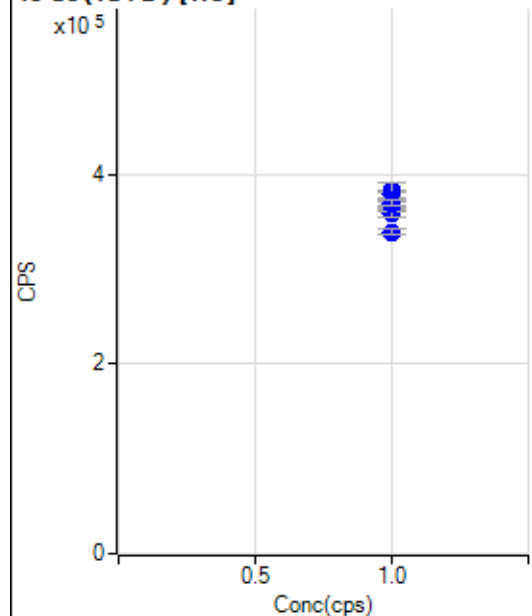
6 Li (ISTD) [No Gas]



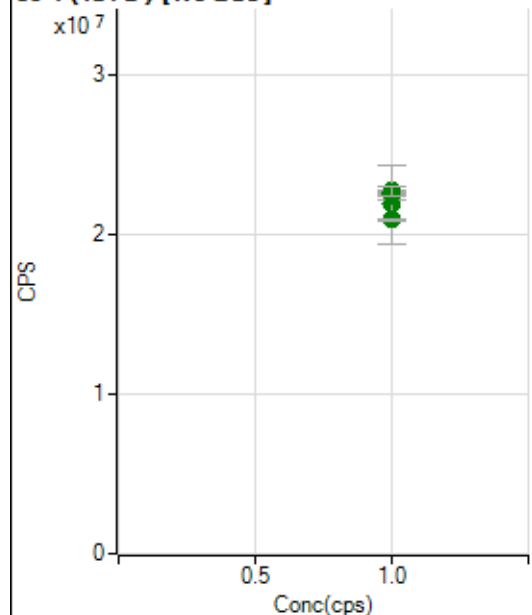
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		6025623.03		A	1.6
2	☐	1.000		6002324.53		A	19.6
3	☐	1.000		6018382.83		A	2.2
4	☐	1.000		6025571.09		A	0.5
5	☐	1.000		5921862.62		A	0.3
6	☐	1.000		5755342.00		A	1.0
7	☐	1.000		5598828.94		A	0.8
8	☐	1.000		5107080.72		A	1.3

45 Sc (ISTD) [No Gas]

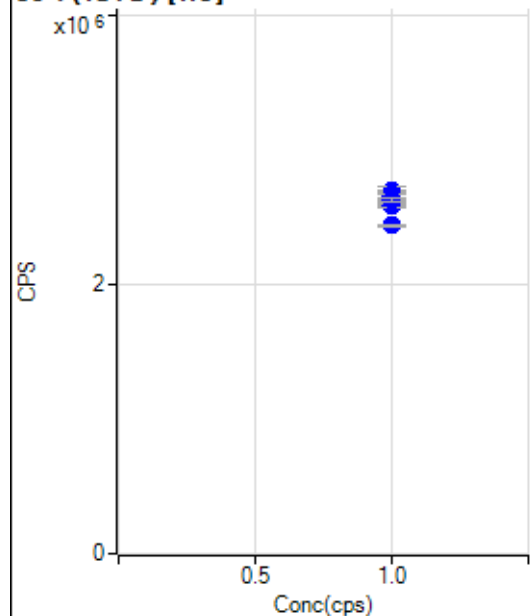
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10666263.94		A	1.2
2	☐	1.000		10437654.50		A	22.9
3	☐	1.000		10723161.30		A	1.3
4	☐	1.000		10671673.87		A	1.1
5	☐	1.000		10534676.65		A	0.4
6	☐	1.000		10530116.37		A	1.6
7	☐	1.000		10638924.63		A	0.4
8	☐	1.000		9609778.19		A	0.7

45 Sc (ISTD) [He]

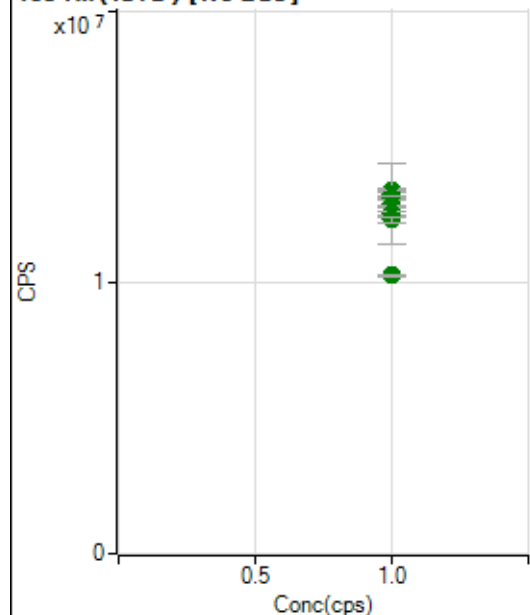
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		382438.60		P	0.6
2	☐	1.000		378498.02		P	6.2
3	☐	1.000		373895.92		P	0.5
4	☐	1.000		368515.20		P	0.9
5	☐	1.000		362976.82		P	0.6
6	☐	1.000		358021.56		P	1.9
7	☐	1.000		369716.65		P	1.3
8	☐	1.000		338776.96		P	1.7

89 Y (ISTD) [No Gas]

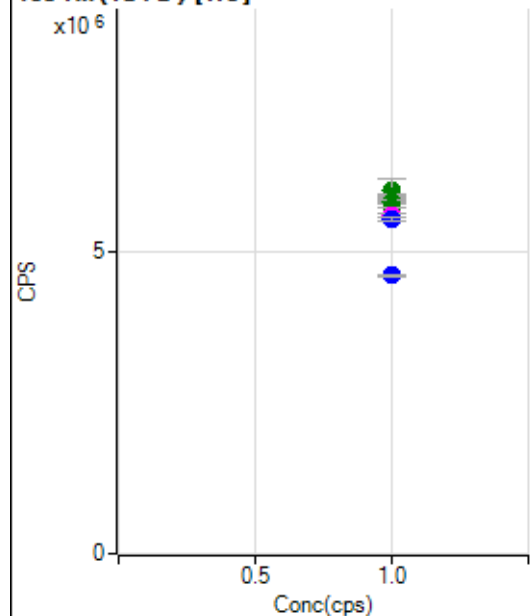
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		22694299.10		A	0.1
2	☐	1.000		21832246.20		A	23.1
3	☐	1.000		22388870.78		A	1.9
4	☐	1.000		22578209.66		A	0.3
5	☐	1.000		22571086.33		A	0.3
6	☐	1.000		22532534.67		A	1.1
7	☐	1.000		22667671.61		A	2.4
8	☐	1.000		20873684.69		A	0.9

89 Y (ISTD) [He]

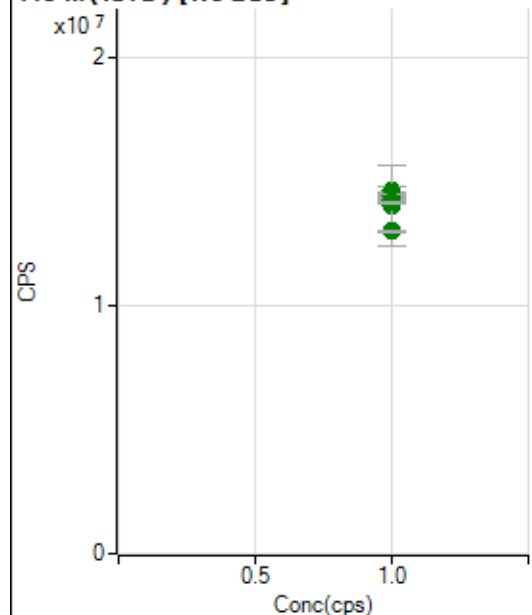
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2690962.68		P	0.5
2	☐	1.000		2653394.29		P	5.9
3	☐	1.000		2664163.10		P	0.2
4	☐	1.000		2627611.89		P	0.3
5	☐	1.000		2587155.52		P	0.6
6	☐	1.000		2587590.47		P	1.3
7	☐	1.000		2629358.83		P	1.2
8	☐	1.000		2434576.93		P	0.3

103 Rh (ISTD) [No Gas]

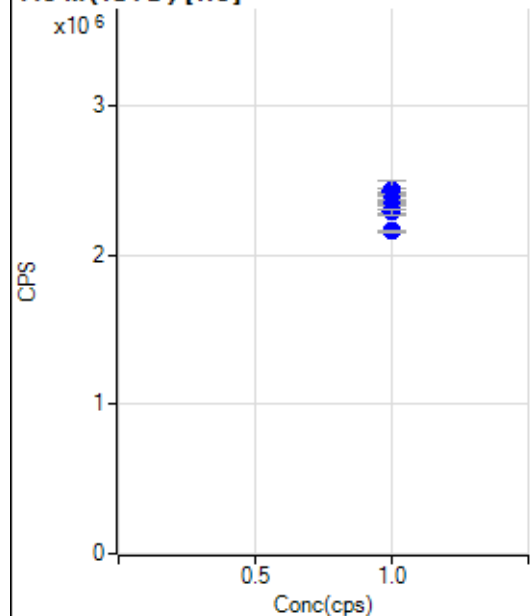
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		13359119.80		A	1.0
2	☐	1.000		12861297.10		A	23.1
3	☐	1.000		13241447.86		A	1.8
4	☐	1.000		13112269.81		A	1.3
5	☐	1.000		12792324.53		A	0.7
6	☐	1.000		12523401.76		A	1.2
7	☐	1.000		12291526.49		A	1.6
8	☐	1.000		10232578.46		A	0.2

103 Rh (ISTD) [He]

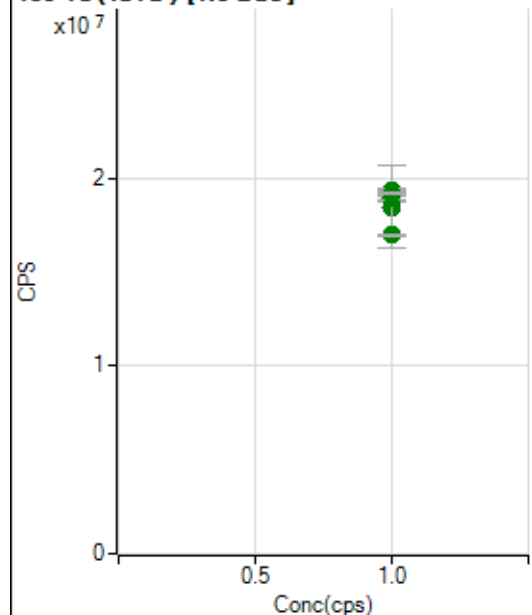
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		5916382.06		A	0.6
2	☐	1.000		6009972.13		A	6.3
3	☐	1.000		5939588.45		A	0.7
4	☐	1.000		5836348.73		A	1.0
5	☐	1.000		5734152.48		A	0.3
6	☐	1.000		5614187.42		M	0.9
7	☐	1.000		5552737.00		P	1.1
8	☐	1.000		4607292.05		P	0.3

115 In (ISTD) [No Gas]

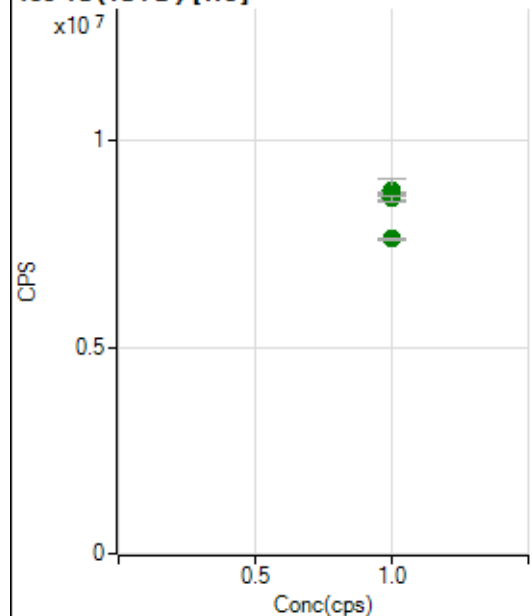
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14642826.73		A	2.4
2	☐	1.000		14064691.83		A	23.2
3	☐	1.000		14364987.93		A	1.6
4	☐	1.000		14556189.26		A	1.0
5	☐	1.000		14291134.49		A	1.5
6	☐	1.000		14419509.99		A	0.8
7	☐	1.000		14174349.75		A	0.3
8	☐	1.000		13030978.32		A	0.6

115 In (ISTD) [He]

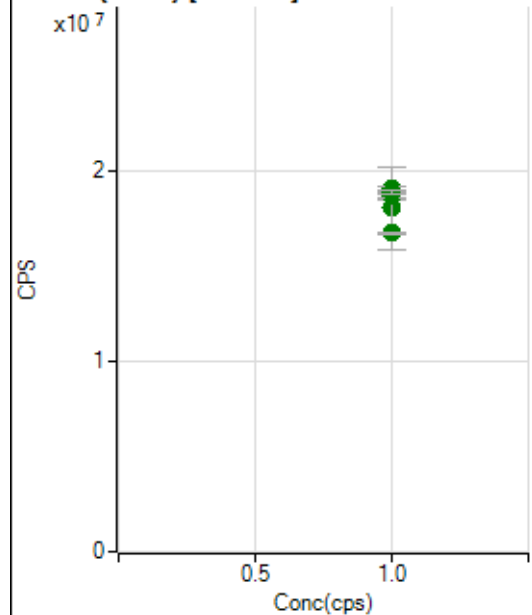
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2432647.24		P	1.1
2	☐	1.000		2421787.66		P	6.5
3	☐	1.000		2405282.88		P	0.3
4	☐	1.000		2370483.33		P	0.4
5	☐	1.000		2332555.42		P	0.4
6	☐	1.000		2296653.16		P	1.2
7	☐	1.000		2290263.02		P	1.4
8	☐	1.000		2161227.34		P	0.1

159 Tb (ISTD) [No Gas]

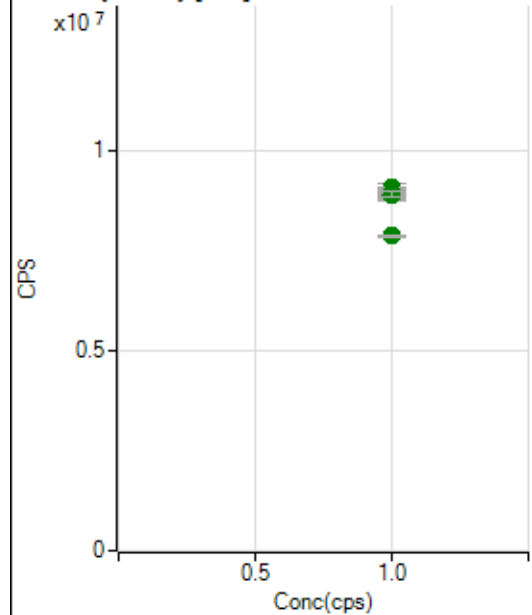
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18978915.41		A	2.2
2	☐	1.000		18490745.00		A	23.5
3	☐	1.000		18944013.88		A	0.8
4	☐	1.000		19334327.49		A	0.7
5	☐	1.000		19212016.24		A	0.7
6	☐	1.000		19260610.55		A	1.9
7	☐	1.000		19213333.88		A	0.9
8	☐	1.000		16964281.00		A	0.8

159 Tb (ISTD) [He]

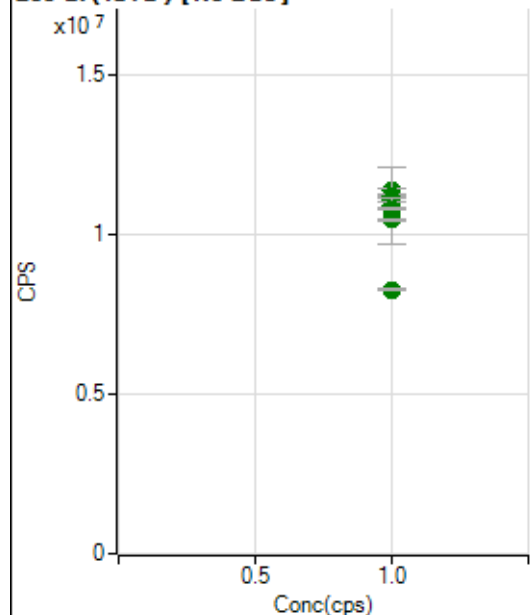
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8715612.23		A	0.8
2	☐	1.000		8793255.29		A	6.5
3	☐	1.000		8713256.96		A	1.2
4	☐	1.000		8734990.63		A	0.9
5	☐	1.000		8673345.50		A	0.6
6	☐	1.000		8603069.04		A	1.1
7	☐	1.000		8602507.02		A	1.6
8	☐	1.000		7627927.25		A	0.6

165 Ho (ISTD) [No Gas]

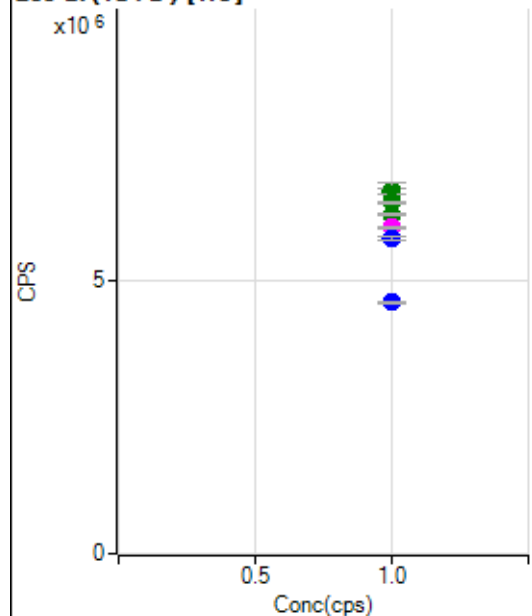
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18691757.92		A	2.1
2	☐	1.000		18057642.51		A	24.3
3	☐	1.000		18684090.84		A	1.5
4	☐	1.000		19059908.60		A	1.5
5	☐	1.000		18861991.11		A	1.1
6	☐	1.000		18871861.25		A	1.3
7	☐	1.000		18916413.33		A	1.3
8	☐	1.000		16725812.39		A	0.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8975428.62		A	1.2
2	☐	1.000		8957082.09		A	4.9
3	☐	1.000		9049936.67		A	0.5
4	☐	1.000		8943685.21		A	0.6
5	☐	1.000		8858122.65		A	0.5
6	☐	1.000		8880698.76		A	2.3
7	☐	1.000		8896556.67		A	1.2
8	☐	1.000		7859488.70		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11357311.92		A	1.9
2	☐	1.000		10897538.45		A	22.4
3	☐	1.000		11109702.75		A	1.7
4	☐	1.000		11203905.25		A	1.1
5	☐	1.000		11097715.39		A	0.9
6	☐	1.000		10795441.16		A	0.7
7	☐	1.000		10451470.61		A	0.3
8	☐	1.000		8266967.86		A	0.8

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6662936.29		A	1.7
2	☐	1.000		6638004.62		A	5.8
3	☐	1.000		6600513.79		A	0.3
4	☐	1.000		6452347.61		A	0.7
5	☐	1.000		6230451.92		A	0.6
6	☐	1.000		5986796.99		M	0.8
7	☐	1.000		5786393.73		P	1.6
8	☐	1.000		4615051.18		P	0.7

US EPA Tune Check Sample Report

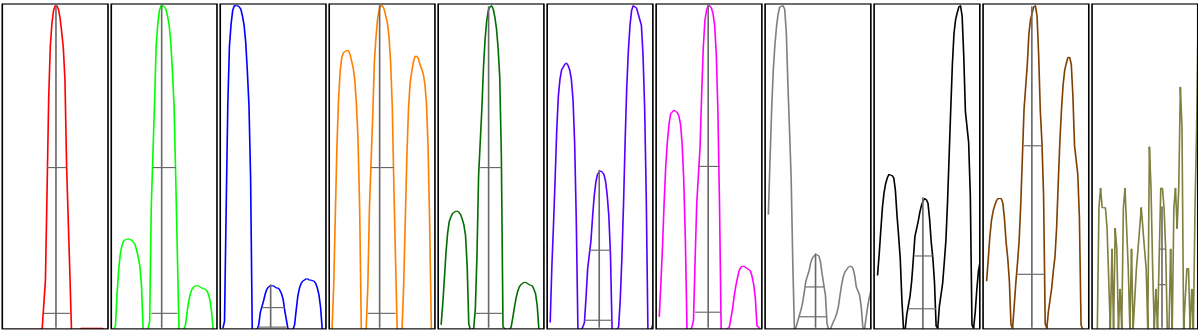
Batch Folder D:\ICP-MS Data\1\DATA\P7040320MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	19711	0.56	5.00	
24	249912	0.50	5.00	
25	33300	0.74	5.00	
26	38561	0.41	5.00	
59	124925	0.65	5.00	
113	21716	0.45	5.00	
115	65085	0.60	5.00	
206	28373	0.82	5.00	
207	26217	0.35	5.00	
208	59500	0.49	5.00	
220	0	36.38		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	19764	19689	19528	19785	19790
24	251481	250796	248439	249062	249781
25	33452	33449	32934	33505	33162
26	38694	38617	38312	38680	38501
59	125350	125593	123597	125345	124740
113	21693	21807	21557	21757	21767
115	65188	65628	64548	64975	65084
206	28139	28369	28280	28318	28759
207	26281	26229	26057	26260	26256
208	59004	59731	59461	59662	59639
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	34784	9.05	8.9 - 9.1		0.770	0.900	
24	388138	23.95	23.9 - 24.1		0.791	0.900	
25	52199	24.95	24.9 - 25.1		0.819	0.900	
26	60475	25.95	25.9 - 26.1		0.826	0.900	
59	202029	58.95	58.9 - 59.1		0.806	0.900	
113	36737	113.00	112.9 - 113.1		0.790	0.900	
115	111266	115.00	114.9 - 115.1		0.786	0.900	
206	49281	205.95	205.9 - 206.1		0.796	0.900	
207	41763	206.90	206.9 - 207.1		0.796	0.900	
208	103046	207.90	207.9 - 208.1		0.809	0.900	
220	0	220.50	-		0.207		

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.4	V	Deflect	11.6	V
Extract 2	-120.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	27558	3.39	
89	78942	3.03	
205	72460	3.16	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	28395	27757	27908	27782	25950
89	80594	80401	79420	79536	74757
205	74689	73271	73480	72170	68690

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	7.9	V	Deflect	1.2	V
Extract 2	-120.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	4.1	mL/min	OctP RF	190	V			