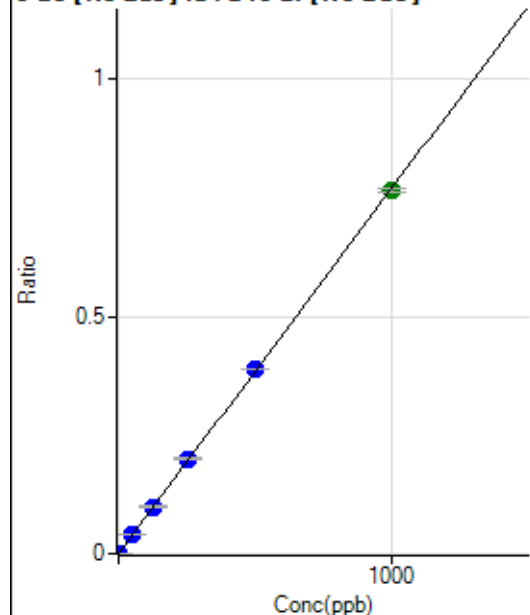


Batch Folder: D:\Agilent\ICPMH\1\DATA\P7041323 MS.b\
Analysis File: P7041323 MS.batch.bin
DA Date-Time: 2023-04-13 18:32:34
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-04-13 13:49:40
2	006CALS.d	S02	2023-04-13 13:56:11
3	007CALS.d	S03	2023-04-13 13:59:26
4	008CALS.d	S04	2023-04-13 14:02:34
5	009CALS.d	S05	2023-04-13 14:05:30
6	010CALS.d	S06	2023-04-13 14:08:22
7	011CALS.d	S07	2023-04-13 14:11:07
8	012CALS.d	S08	2023-04-13 14:13:55

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.22	0.0000	P	39.9
2	☐	1.000	1.187	1816.79	0.0010	P	5.7
3	☐	50.000	54.192	78396.54	0.0417	P	3.3
4	☐	125.000	128.413	188576.49	0.0989	P	2.9
5	☐	250.000	259.223	366311.54	0.1995	P	1.6
6	☐	500.000	506.228	704058.18	0.3896	P	0.6
7	☐	1000.000	993.944	1371693.13	0.7649	A	0.9
8	☐			407.79	0.0003	P	21.0

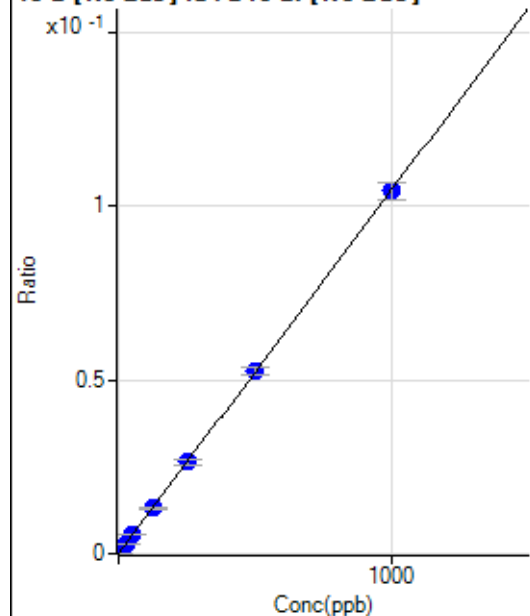
$$y = 7.6949\text{E-}004 * x + 3.7448\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.05824$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	116.67	0.0001	P	7.0
2	☐	25.000	25.906	5297.62	0.0028	P	5.8
3	☐	50.000	53.580	10643.73	0.0057	P	4.8
4	☐	125.000	124.991	25084.86	0.0131	P	3.0
5	☐	250.000	251.969	48490.11	0.0264	P	6.4
6	☐	500.000	502.971	95190.16	0.0527	P	4.7
7	☐	1000.000	997.822	187215.35	0.1044	P	5.1
8	☐			8780.38	0.0057	P	18.8

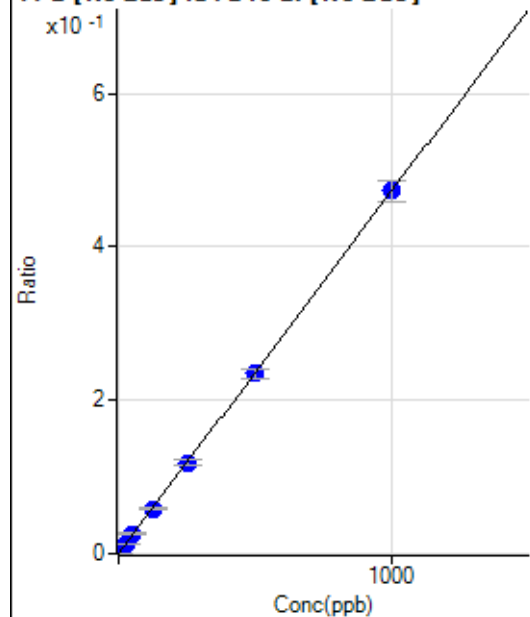
$$y = 1.0461\text{E-}004 * x + 6.0348\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1219$$

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	544.46	0.0003	P	9.8
2	☐	25.000	25.414	23486.76	0.0123	P	6.1
3	☐	50.000	53.600	48094.52	0.0256	P	6.5
4	☐	125.000	123.580	111983.69	0.0586	P	3.3
5	☐	250.000	251.529	218523.59	0.1191	P	6.1
6	☐	500.000	497.317	424866.16	0.2351	P	5.1
7	☐	1000.000	1000.947	847643.01	0.4729	P	5.8
8	☐			39599.36	0.0256	P	18.5

$$y = 4.7222\text{E-}004 * x + 2.8175\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1762$$

Weight: <None>

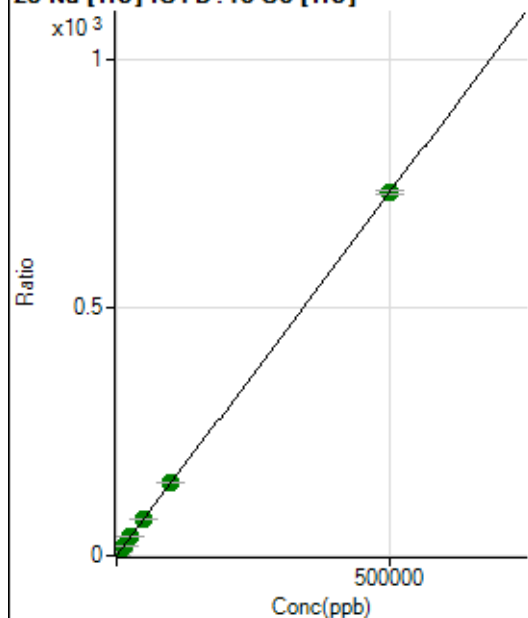
Min Conc: 0

12 C [No Gas] No available calibration points

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11686.74	0.0391	P	1.5
2	☐	500.000	518.043	235108.13	0.7974	P	1.0
3	☐	5000.000	5243.585	2231218.74	7.7145	A	1.3
4	☐	12500.000	12676.103	5259778.98	18.5941	A	0.7
5	☐	25000.000	25373.871	10424816.30	37.1808	A	1.0
6	☐	50000.000	50550.980	20607406.78	74.0344	A	1.2
7	☐	100000.00	100849.09	41111717.72	147.6596	A	1.0
8	☐	500000.00	499749.53	181685415.0	731.5608	A	0.9

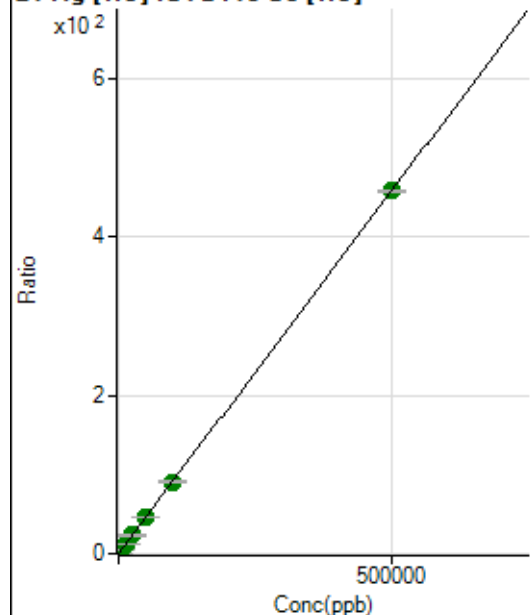
$$y = 0.0015 * x + 0.0391$$

$$R = 1.0000$$

$$DL = 1.208$$

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	266.67	0.0009	P	7.4
2	☐	500.000	513.474	138930.71	0.4712	P	1.1
3	☐	5000.000	5302.011	1404912.51	4.8572	A	0.3
4	☐	12500.000	12804.825	3317417.07	11.7294	A	1.8
5	☐	25000.000	25303.359	6497876.64	23.1773	A	1.6
6	☐	50000.000	50550.651	12888144.39	46.3024	A	0.5
7	☐	100000.00	99167.277	25289940.46	90.8325	A	0.9
8	☐	500000.00	500085.65	113759224.9	458.0509	A	0.8

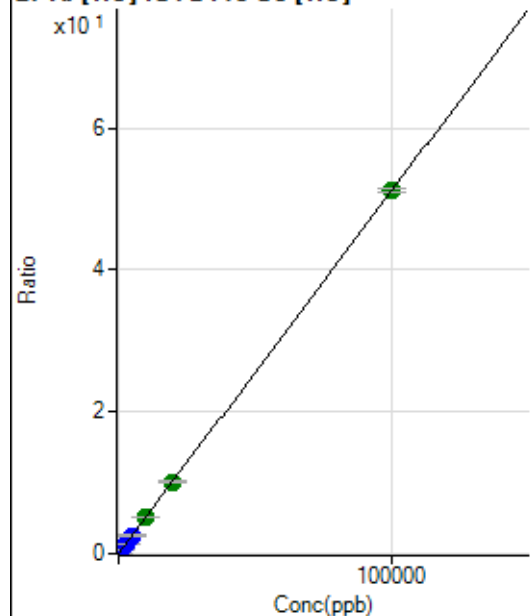
$$y = 9.1594\text{E-}004 * x + 8.9247\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2155$$

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	74.44	0.0002	P	36.7
2	☐	20.000	20.939	3228.15	0.0110	P	6.1
3	☐	1000.000	1046.767	154843.65	0.5354	P	0.6
4	☐	2500.000	2528.567	365660.49	1.2929	P	1.9
5	☐	5000.000	5007.375	717733.53	2.5600	P	1.3
6	☐	10000.000	10119.533	1440068.02	5.1734	A	1.5
7	☐	20000.000	19838.927	2823955.52	10.1420	A	1.8
8	☐	100000.00	100018.71	12699747.31	51.1303	A	1.1

$$y = 5.1121\text{E-}004 * x + 2.4862\text{E-}004$$

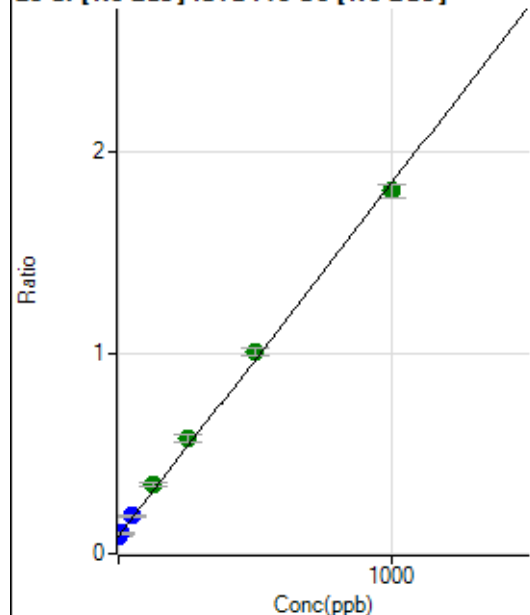
$$R = 1.0000$$

$$DL = 0.5357$$

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	352242.21	0.0879	P	0.5
2	☐	10.000	7.267	396070.26	0.1007	P	0.8
3	☐	50.000	57.359	730182.42	0.1887	P	3.6
4	☐	125.000	147.287	1333187.46	0.3466	A	4.7
5	☐	250.000	277.402	2169600.75	0.5752	A	6.0
6	☐	500.000	522.982	3709313.45	1.0065	A	3.3
7	☐	1000.000	978.532	6669275.11	1.8066	A	3.7
8	☐			1017791.89	0.3031	P	2.4

$$y = 0.0018 * x + 0.0879$$

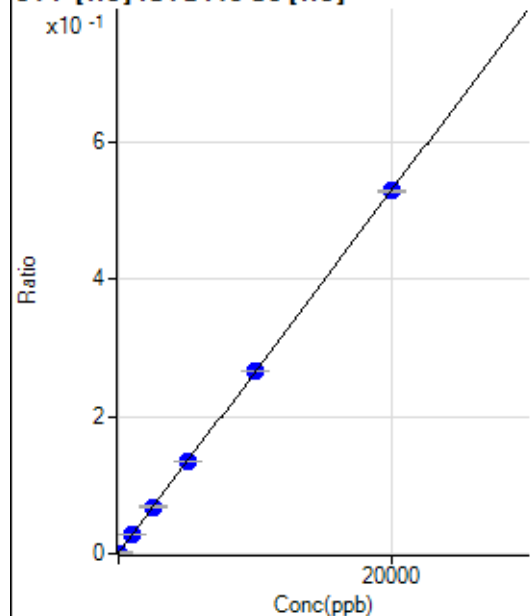
$$R = 0.9990$$

$$DL = 0.7106$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-11.429	225.56	0.0008	P	17.7
2	☐	0.000	11.429	400.01	0.0014	P	9.8
3	☐	1000.000	1026.486	8144.46	0.0282	P	1.6
4	☐	2500.000	2540.421	19270.00	0.0681	P	1.9
5	☐	5000.000	5014.385	37420.15	0.1335	P	0.3
6	☐	10000.000	10032.155	74028.88	0.2660	P	0.7
7	☐	20000.000	19973.949	147141.32	0.5285	P	0.5
8	☐			258.89	0.0010	P	29.2

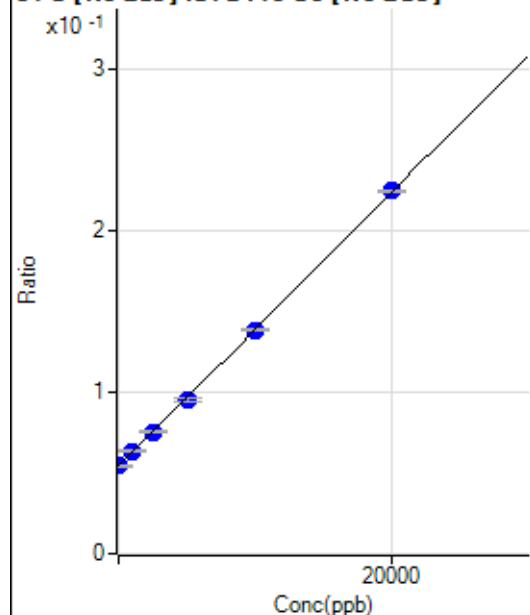
$$y = 2.6405E-005 * x + 0.0011$$

$$R = 1.0000$$

$$DL = 15.15$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.522	218143.65	0.0544	P	0.5
2	☐	0.000	-0.522	214169.76	0.0544	P	1.0
3	☐	1000.000	1057.095	245376.18	0.0634	P	1.3
4	☐	2500.000	2492.222	290688.75	0.0756	P	0.9
5	☐	5000.000	4822.529	359673.99	0.0953	P	2.5
6	☐	10000.000	9912.683	510238.96	0.1384	P	0.5
7	☐	20000.000	20086.144	829397.59	0.2247	P	0.7
8	☐			188425.66	0.0561	P	1.2

$$y = 8.4744\text{E-}006 * x + 0.0544$$

R = 0.9999

DL = 142.9

Weight: <None>

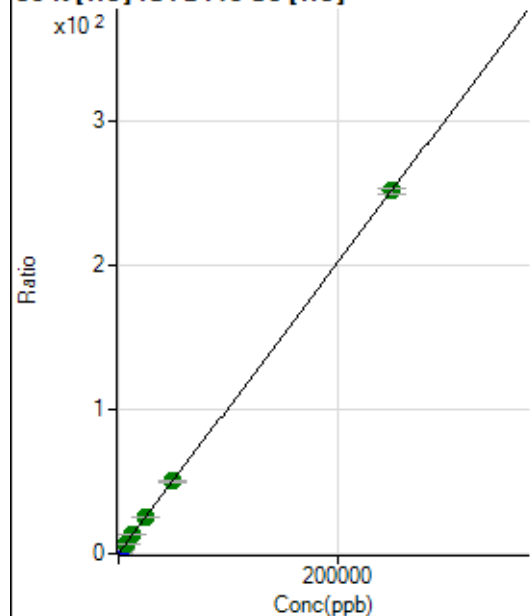
Min Conc: 0

35 Cl [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

39 K [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	49959.46	0.1671	P	0.4
2	☐	500.000	526.117	205178.82	0.6959	P	1.3
3	☐	2500.000	2698.670	832825.93	2.8794	P	0.4
4	☐	6250.000	6331.777	1847001.43	6.5308	A	2.3
5	☐	12500.000	12739.887	3636928.56	12.9712	A	0.4
6	☐	25000.000	24907.714	7014476.28	25.2002	A	0.5
7	☐	50000.000	49700.567	13954093.54	50.1179	A	1.2
8	☐	250000.00	250053.03	62454002.96	251.4788	A	1.3

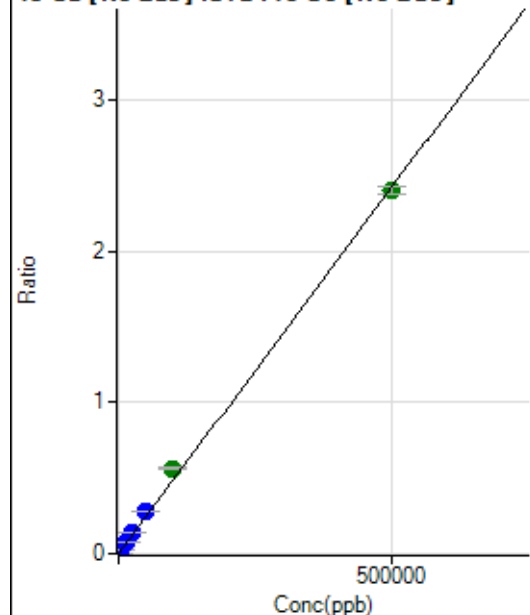
$$y = 0.0010 * x + 0.1671$$

$$R = 1.0000$$

$$DL = 2.206$$

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	68.89	0.0000	P	10.3
2	☐	500.000	558.994	10724.98	0.0027	P	3.3
3	☐	5000.000	6077.944	114093.85	0.0295	P	0.8
4	☐	12500.000	14635.294	272963.69	0.0710	P	1.1
5	☐	25000.000	29181.396	533819.62	0.1415	P	2.8
6	☐	50000.000	58477.806	1044745.97	0.2835	P	0.1
7	☐	100000.00	116855.82	2091249.99	0.5665	A	0.6
8	☐	500000.00	495507.76	8063866.13	2.4020	A	2.3

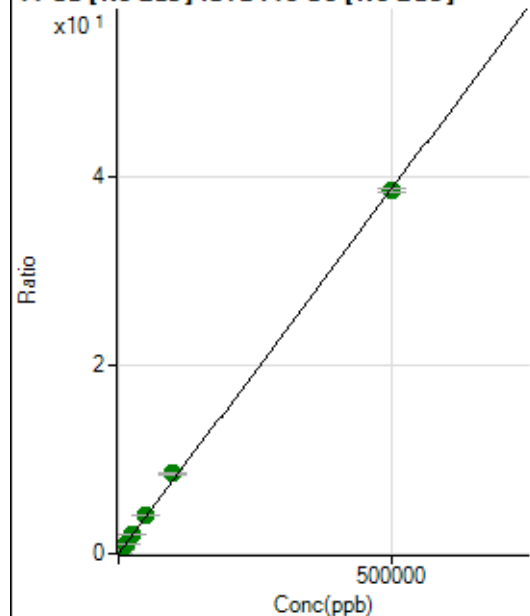
$$y = 4.8475\text{E-}006 * x + 1.7198\text{E-}005$$

$$R = 0.9993$$

$$DL = 1.095$$

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	6788.34	0.0017	P	1.5
2	☐	500.000	551.452	174740.17	0.0444	P	2.0
3	☐	5000.000	5580.736	1680383.60	0.4341	A	0.4
4	☐	12500.000	13506.717	4032592.75	1.0483	A	0.4
5	☐	25000.000	27227.903	7968580.71	2.1116	A	2.0
6	☐	50000.000	53495.501	15283306.72	4.1470	A	1.8
7	☐	100000.00	109548.50	31345718.15	8.4905	A	1.0
8	☐	500000.00	497598.32	129474685.8	38.5602	A	1.1

$$y = 7.7489\text{E-}005 * x + 0.0017$$

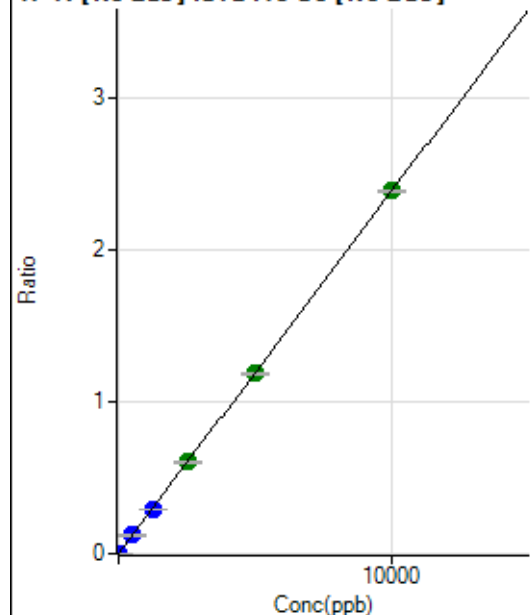
$$R = 0.9998$$

$$DL = 0.9922$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	101.11	0.0000	P	18.4
2	☐	5.000	5.036	4834.15	0.0012	P	3.3
3	☐	500.000	505.998	467992.69	0.1209	P	1.2
4	☐	1250.000	1225.319	1126268.65	0.2928	P	0.6
5	☐	2500.000	2528.248	2279796.48	0.6041	A	1.8
6	☐	5000.000	4966.102	4372953.06	1.1866	A	1.0
7	☐	10000.000	10012.672	8832076.05	2.3923	A	0.8
8	☐			1110.05	0.0003	P	1.4

$$y = 2.3893E-004 * x + 2.5245E-005$$

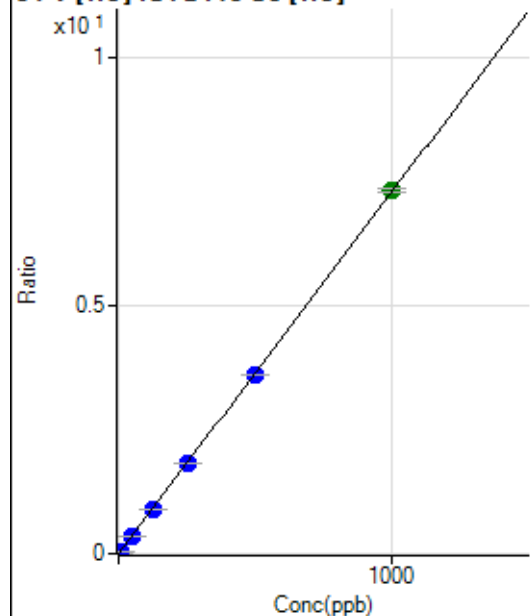
$$R = 1.0000$$

$$DL = 0.05825$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	4.931	10576.00	0.0359	P	1.4
3	☐	50.000	50.338	105879.06	0.3661	P	0.7
4	☐	125.000	124.051	255144.56	0.9021	P	1.2
5	☐	250.000	248.752	507161.98	1.8089	P	0.9
6	☐	500.000	493.279	998459.18	3.5871	P	0.0
7	☐	1000.000	1003.775	2032261.67	7.2993	A	1.1
8	☐			618.91	0.0025	P	5.2

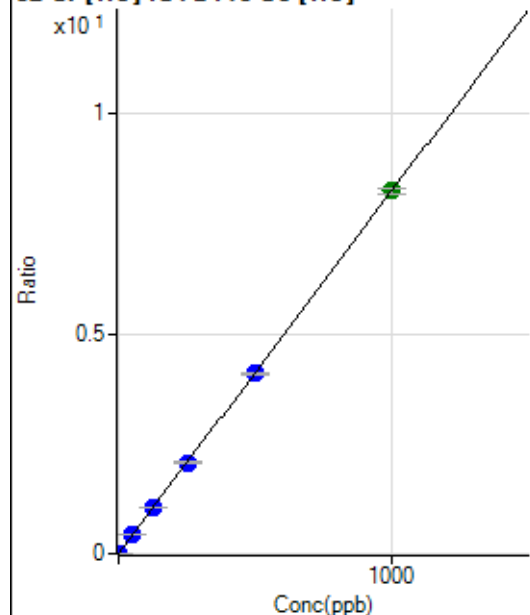
$$y = 0.0073 * x + 7.4591E-006$$

$$R = 1.0000$$

$$DL = 0.002665$$

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	753.36	0.0025	P	4.6
2	☐	2.000	1.969	5527.73	0.0187	P	1.4
3	☐	50.000	51.608	123765.61	0.4279	P	0.7
4	☐	125.000	127.222	297291.84	1.0511	P	1.6
5	☐	250.000	251.609	582152.27	2.0764	P	0.8
6	☐	500.000	496.300	1139339.36	4.0932	P	0.3
7	☐	1000.000	1001.089	2297972.73	8.2539	A	1.4
8	☐			15632.63	0.0629	P	1.4

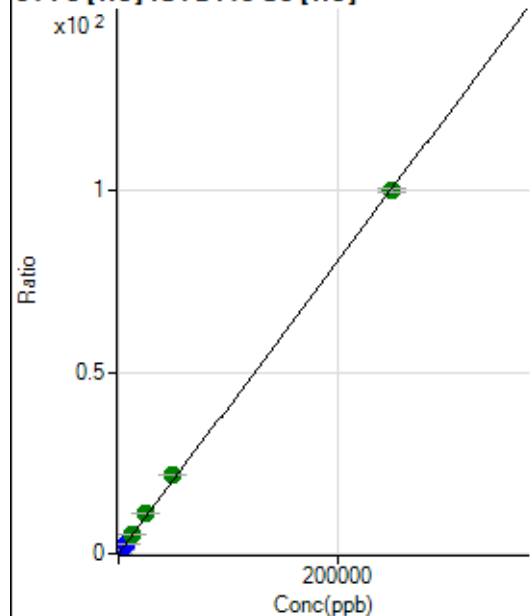
$$y = 0.0082 * x + 0.0025$$

$$R = 1.0000$$

$$DL = 0.0422$$

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	1393.41	0.0047	P	2.9
2	☐	50.000	56.710	8083.33	0.0274	P	2.3
3	☐	2500.000	2895.865	337445.16	1.1667	P	0.5
4	☐	6250.000	7055.519	802055.52	2.8358	P	1.5
5	☐	12500.000	13695.378	1542036.05	5.5002	A	1.4
6	☐	25000.000	27329.735	3053867.73	10.9713	A	0.6
7	☐	50000.000	53830.392	6015301.30	21.6053	A	1.0
8	☐	250000.00	248917.08	24809648.80	99.8881	A	0.9

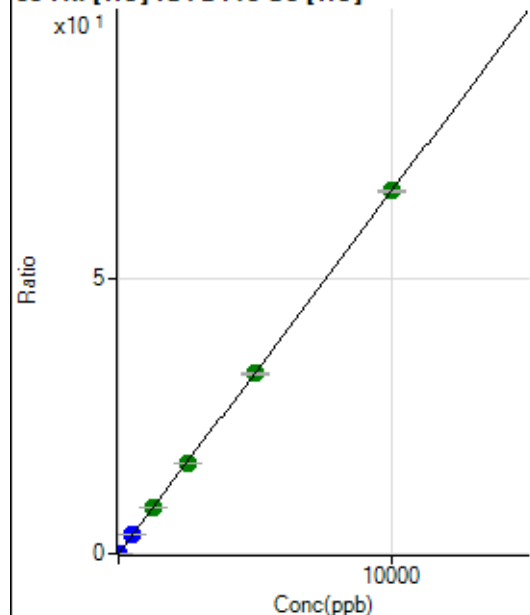
$$y = 4.0127E-004 * x + 0.0047$$

$$R = 0.9999$$

$$DL = 0.9953$$

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	42.22	0.0001	P	37.9
2	☐	1.000	1.047	2079.05	0.0071	P	1.1
3	☐	500.000	511.353	976585.65	3.3764	P	0.4
4	☐	1250.000	1272.630	2376379.81	8.4028	A	2.2
5	☐	2500.000	2502.902	4633638.34	16.5258	A	1.3
6	☐	5000.000	4966.728	9127870.21	32.7934	A	1.3
7	☐	10000.000	10012.514	18406656.67	66.1087	A	0.6
8	☐			7948.83	0.0320	P	2.4

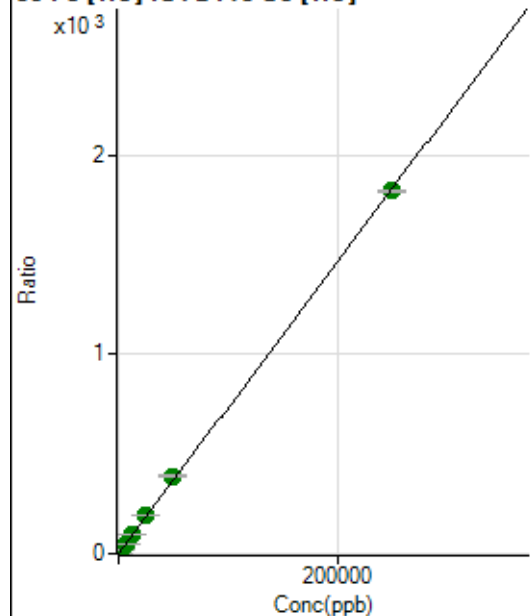
$$y = 0.0066 * x + 1.4142E-004$$

$$R = 1.0000$$

$$DL = 0.02435$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	7786.53	0.0260	P	1.9
2	☐	50.000	56.004	128373.34	0.4354	P	1.0
3	☐	2500.000	2791.928	5910014.84	20.4327	A	0.5
4	☐	6250.000	6855.299	14180065.07	50.1326	A	1.1
5	☐	12500.000	13623.010	27926516.81	99.5990	A	0.5
6	☐	25000.000	26837.999	54608426.96	196.1897	A	0.8
7	☐	50000.000	53179.417	108233616.1	388.7238	A	1.8
8	☐	250000.00	249106.11	452221166.6	1,820.786	A	0.5

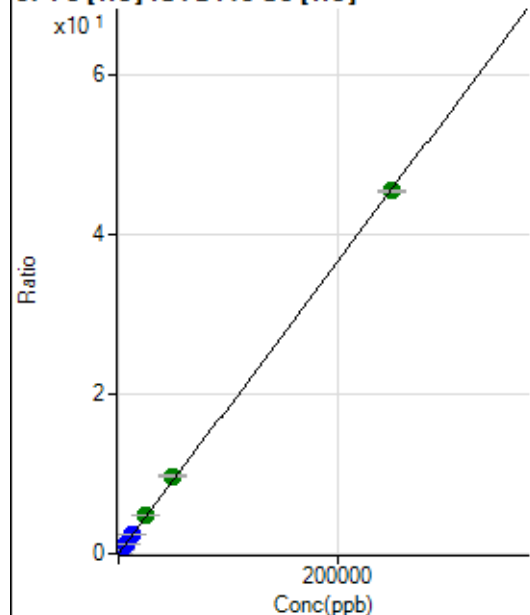
$$y = 0.0073 * x + 0.0260$$

$$R = 0.9999$$

$$DL = 0.1999$$

Weight: <None>

Min Conc: 0

⁵⁷Fe [He] ISTD:45 Sc [He]

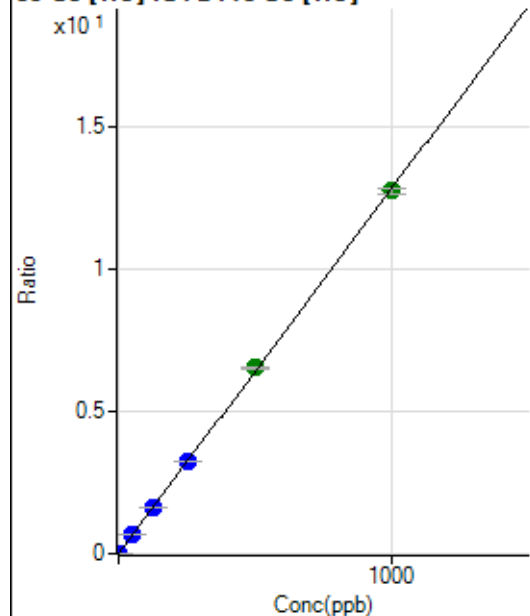
$$y = 1.8220\text{E-}004 * x + 0.0013$$

$$R = 0.9999$$

$$DL = 1.885$$

Weight: <None>

Min Conc: 0

⁵⁹Co [He] ISTD:45 Sc [He]

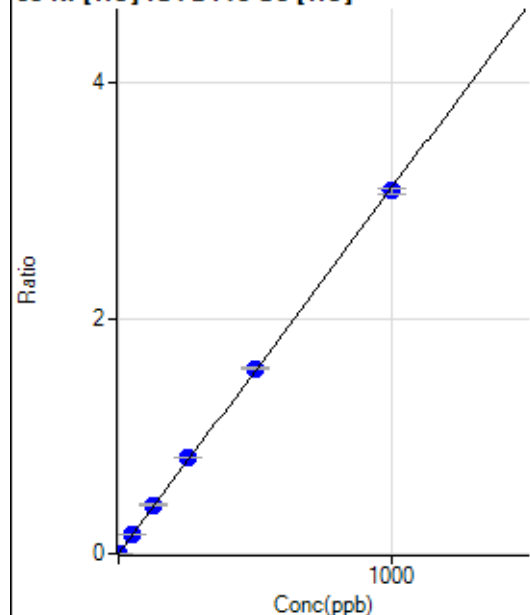
$$y = 0.0128 * x + 1.9357\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.01264$$

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	87.78	0.0003	P	6.5
2	☐	1.000	1.093	1086.72	0.0037	P	2.4
3	☐	50.000	54.678	49173.66	0.1700	P	1.3
4	☐	125.000	132.820	116689.31	0.4126	P	1.8
5	☐	250.000	261.209	227413.13	0.8111	P	0.6
6	☐	500.000	507.438	438516.08	1.5754	P	0.4
7	☐	1000.000	992.267	857596.03	3.0804	P	1.6
8	☐			2217.96	0.0089	P	4.0

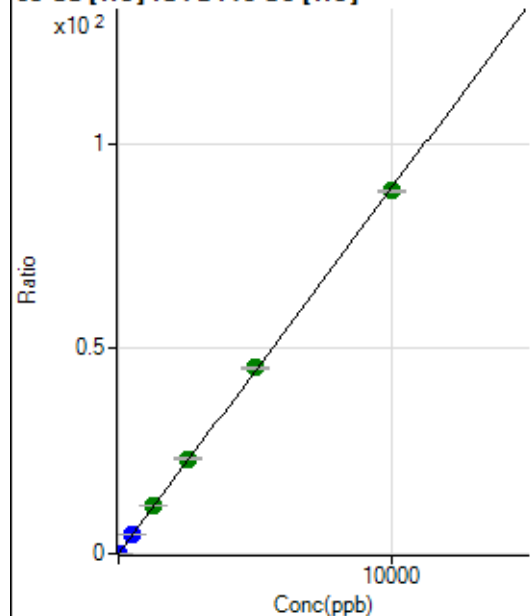
$$y = 0.0031 * x + 2.9374E-004$$

$$R = 0.9999$$

$$DL = 0.01857$$

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	533.35	0.0018	P	8.5
2	☐	2.000	2.118	6093.52	0.0207	P	1.6
3	☐	500.000	524.739	1353270.15	4.6789	P	0.7
4	☐	1250.000	1326.881	3345762.24	11.8285	A	1.2
5	☐	2500.000	2591.759	6476808.51	23.1025	A	1.8
6	☐	5000.000	5083.293	12611828.01	45.3099	A	0.7
7	☐	10000.000	9924.566	24629718.25	88.4609	A	0.8
8	☐			2993.66	0.0121	P	3.3

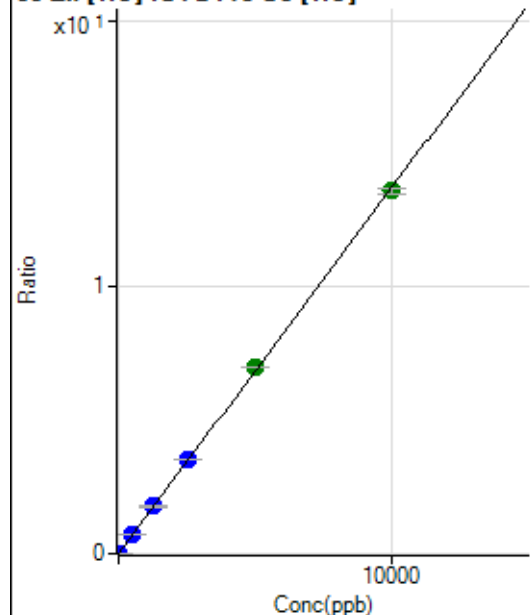
$$y = 0.0089 * x + 0.0018$$

$$R = 0.9999$$

$$DL = 0.05114$$

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	123.34	0.0004	P	6.3
2	☐	2.000	2.468	1120.05	0.0038	P	1.0
3	☐	500.000	531.517	211057.36	0.7297	P	0.4
4	☐	1250.000	1298.288	503918.32	1.7818	P	1.7
5	☐	2500.000	2574.038	990315.97	3.5322	P	0.8
6	☐	5000.000	5107.830	1950861.27	7.0087	A	0.6
7	☐	10000.000	9919.963	3789570.88	13.6113	A	1.6
8	☐			6230.24	0.0251	P	2.9

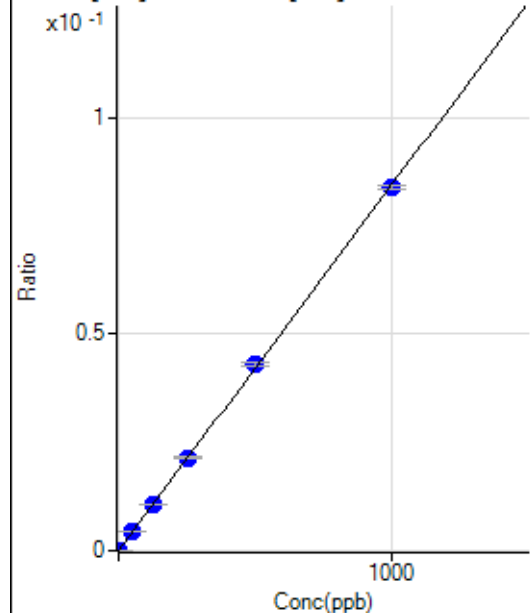
$$y = 0.0014 * x + 4.1247E-004$$

$$R = 0.9999$$

$$DL = 0.05727$$

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	2.22	0.0000	P	173.
2	☐	1.000	1.135	298.90	0.0001	P	18.7
3	☐	50.000	52.706	13613.00	0.0045	P	1.8
4	☐	125.000	128.036	32933.19	0.0108	P	1.3
5	☐	250.000	254.121	64858.60	0.0215	P	2.3
6	☐	500.000	511.498	128398.39	0.0432	P	2.3
7	☐	1000.000	992.706	251661.90	0.0838	P	1.0
8	☐			46.67	0.0000	P	7.9

$$y = 8.4453E-005 * x + 6.7873E-007$$

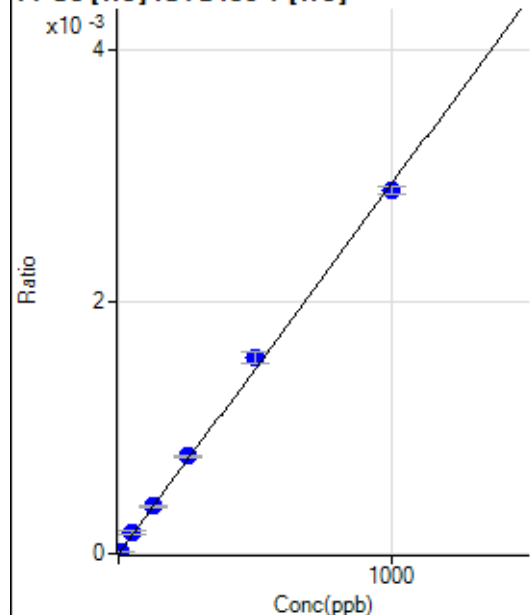
$$R = 0.9999$$

$$DL = 0.04176$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.382	48.89	0.0000	P	29.0
3	☐	50.000	57.221	513.35	0.0002	P	10.7
4	☐	125.000	127.709	1141.17	0.0004	P	6.5
5	☐	250.000	263.030	2332.43	0.0008	P	2.4
6	☐	500.000	529.279	4612.98	0.0016	P	5.4
7	☐	1000.000	981.401	8642.60	0.0029	P	2.1
8	☐			7.78	0.0000	P	66.3

$$y = 2.9332\text{E-}006 * x + 0.0000\text{E+}000$$

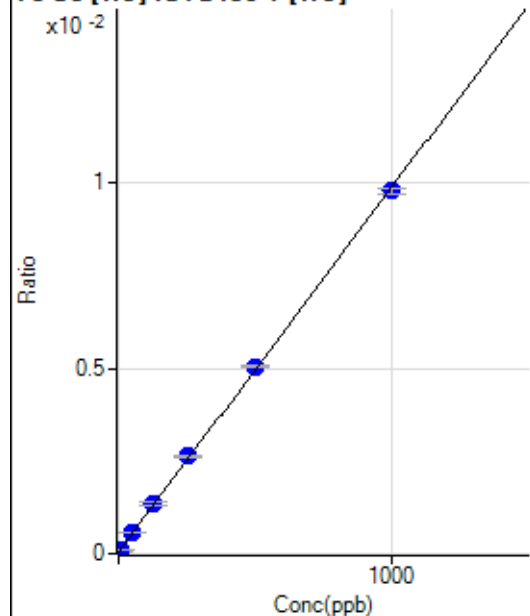
$$R = 0.9993$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	167.78	0.0001	P	15.6
2	☐	5.000	5.629	333.34	0.0001	P	5.6
3	☐	50.000	52.744	1743.46	0.0006	P	1.3
4	☐	125.000	133.098	4138.39	0.0014	P	7.0
5	☐	250.000	263.167	7966.67	0.0026	P	2.5
6	☐	500.000	509.304	15022.16	0.0051	P	0.8
7	☐	1000.000	990.904	29361.36	0.0098	P	1.7
8	☐			175.56	0.0001	P	7.4

$$y = 9.8188\text{E-}006 * x + 5.2252\text{E-}005$$

$$R = 0.9998$$

$$DL = 2.491$$

Weight: <None>

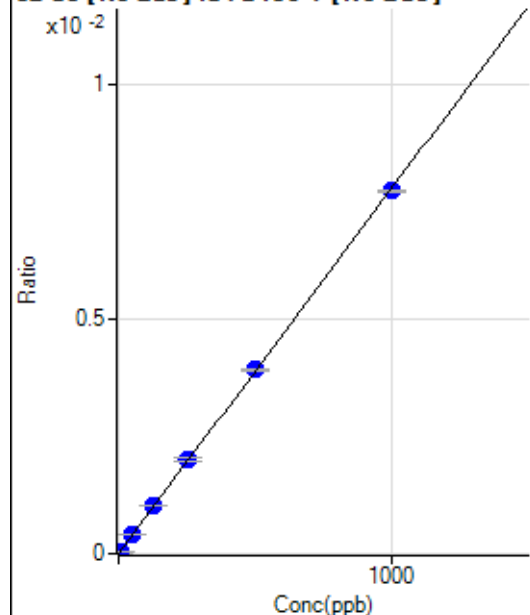
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35099.60		P	1.0
2	☐			35086.39		P	2.7
3	☐			35012.73		P	2.6
4	☐			33347.81		P	3.3
5	☐			33297.65		P	1.5
6	☐			33334.43		P	2.1
7	☐			33119.52		P	1.8
8	☐			32542.70		P	1.6

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.33		P	36.8
2	☐			48.89		P	27.5
3	☐			50.00		P	20.0
4	☐			63.33		P	22.9
5	☐			57.78		P	14.5
6	☐			54.44		P	15.4
7	☐			66.67		P	25.0
8	☐			81.11		P	23.4

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	14.93	0.0000	P	79.3
2	☐	5.000	5.528	596.19	0.0000	P	6.7
3	☐	50.000	54.103	5664.77	0.0004	P	1.6
4	☐	125.000	132.275	13867.01	0.0010	P	2.2
5	☐	250.000	258.593	26744.78	0.0020	P	4.1
6	☐	500.000	505.611	52180.84	0.0039	P	1.0
7	☐	1000.000	993.929	102068.51	0.0077	P	0.4
8	☐			200.21	0.0000	P	14.4

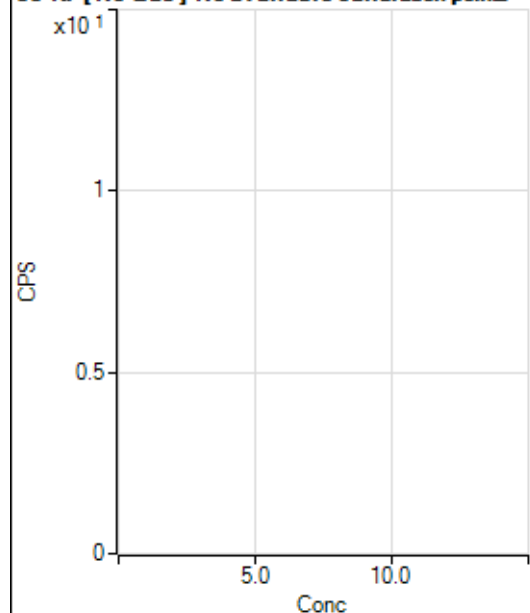
$$y = 7.7814\text{E-}006 * x + 1.0690\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.327$$

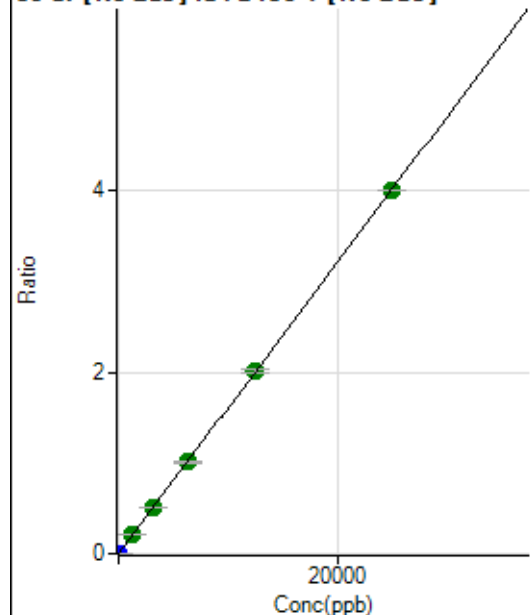
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			112.23		P	14.7
2	☐			110.00		P	24.8
3	☐			113.33		P	13.5
4	☐			95.55		P	21.3
5	☐			103.33		P	19.4
6	☐			102.22		P	16.1
7	☐			128.89		P	6.5
8	☐			127.78		P	19.6

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	167.78	0.0000	P	13.5
2	☐	1.000	1.013	2357.99	0.0002	P	4.4
3	☐	1250.000	1306.970	2811858.99	0.2095	A	0.4
4	☐	3125.000	3128.277	6749108.03	0.5014	A	0.5
5	☐	6250.000	6318.435	13455668.97	1.0127	A	2.4
6	☐	12500.000	12564.403	26701510.99	2.0137	A	1.7
7	☐	25000.000	24947.431	52759248.66	3.9983	A	0.1
8	☐			11989.42	0.0010	P	0.7

$$y = 1.6027E-004 * x + 1.2044E-005$$

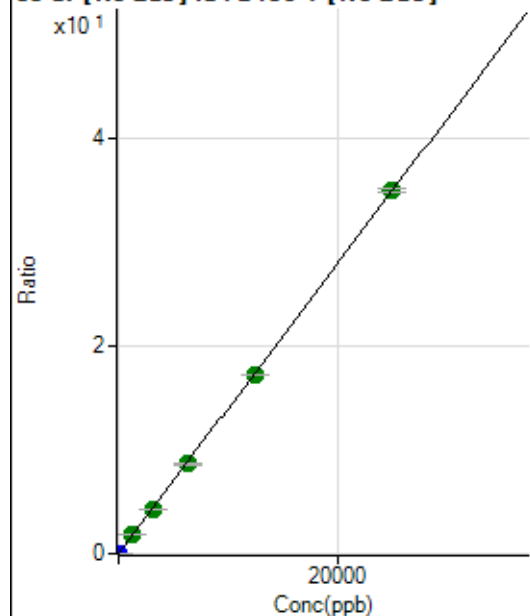
$$R = 1.0000$$

$$DL = 0.03052$$

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	113.33	0.0000	P	13.4
2	☐	1.000	0.991	18801.01	0.0014	P	1.7
3	☐	1250.000	1265.434	23689257.15	1.7649	A	0.5
4	☐	3125.000	3048.049	57210828.03	4.2510	A	2.4
5	☐	6250.000	6224.469	115346456.0	8.6810	A	2.6
6	☐	12500.000	12402.864	229367963.2	17.2978	A	0.3
7	☐	25000.000	25063.798	461237153.1	34.9555	A	0.9
8	☐			101401.59	0.0087	P	2.4

$$y = 0.0014 * x + 8.1398E-006$$

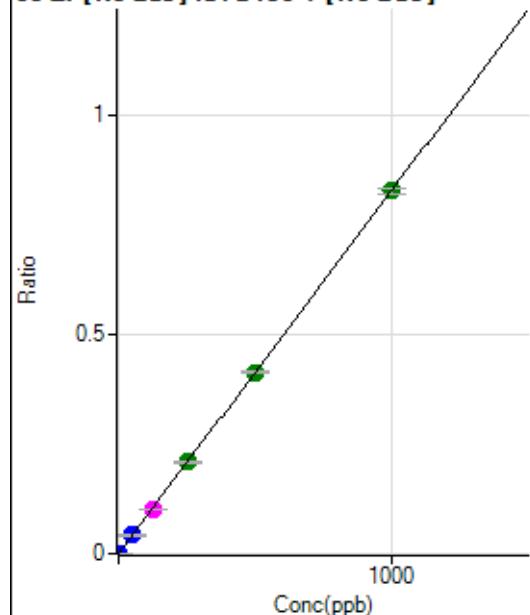
$$R = 1.0000$$

$$DL = 0.002354$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	398.90	0.0000	P	2.9
2	☐	1.000	0.978	11321.11	0.0008	P	2.4
3	☐	50.000	50.574	561620.00	0.0418	P	1.9
4	☐	125.000	123.682	1376965.94	0.1023	M	0.8
5	☐	250.000	251.841	2766997.60	0.2083	A	3.1
6	☐	500.000	499.775	5479734.19	0.4133	A	1.2
7	☐	1000.000	999.789	10908003.59	0.8267	A	1.5
8	☐			2239.08	0.0002	P	6.6

$$y = 8.2685E-004 * x + 2.8649E-005$$

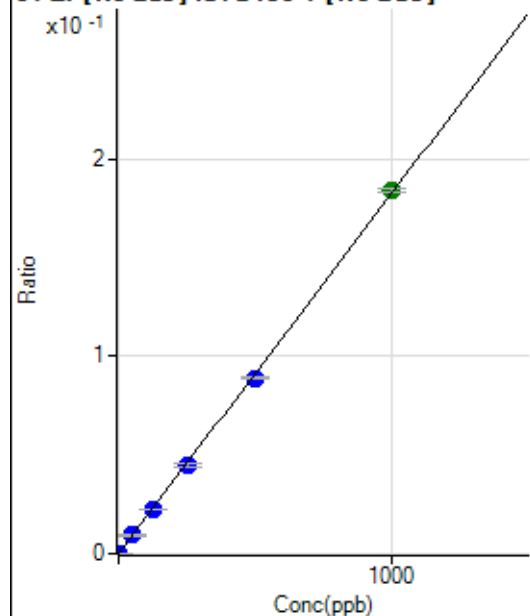
$$R = 1.0000$$

$$DL = 0.003047$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	76.67	0.0000	P	56.1
2	☐	1.000	0.967	2463.57	0.0002	P	1.4
3	☐	50.000	50.716	124421.47	0.0093	P	0.6
4	☐	125.000	122.176	300445.92	0.0223	P	0.8
5	☐	250.000	245.159	594943.50	0.0448	P	3.8
6	☐	500.000	488.269	1182612.18	0.0892	P	0.9
7	☐	1000.000	1007.393	2428028.09	0.1840	A	1.2
8	☐			487.79	0.0000	P	8.5

$$y = 1.8265E-004 * x + 5.4972E-006$$

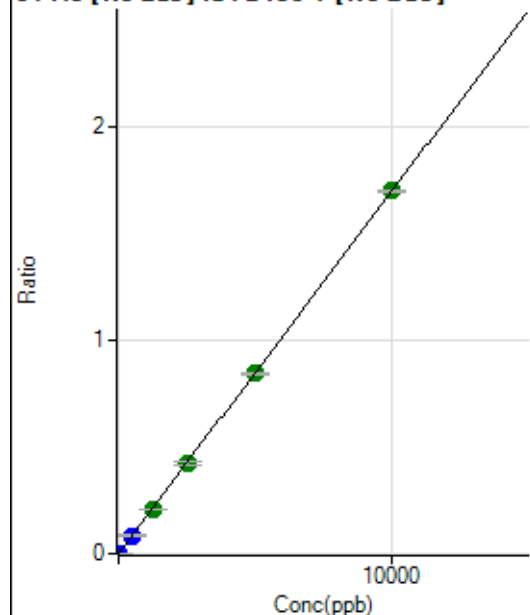
$$R = 0.9999$$

$$DL = 0.05061$$

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	105.56	0.0000	P	5.4
2	☐	5.000	5.747	13295.02	0.0010	P	0.9
3	☐	500.000	504.417	1148937.40	0.0856	P	0.6
4	☐	1250.000	1239.837	2831724.30	0.2104	A	0.9
5	☐	2500.000	2490.476	5614971.72	0.4226	A	2.6
6	☐	5000.000	4967.731	11176362.54	0.8429	A	1.6
7	☐	10000.000	10019.565	22433762.30	1.7001	A	0.3
8	☐			4067.27	0.0004	P	6.8

$$y = 1.6968\text{E-}004 * x + 7.5827\text{E-}006$$

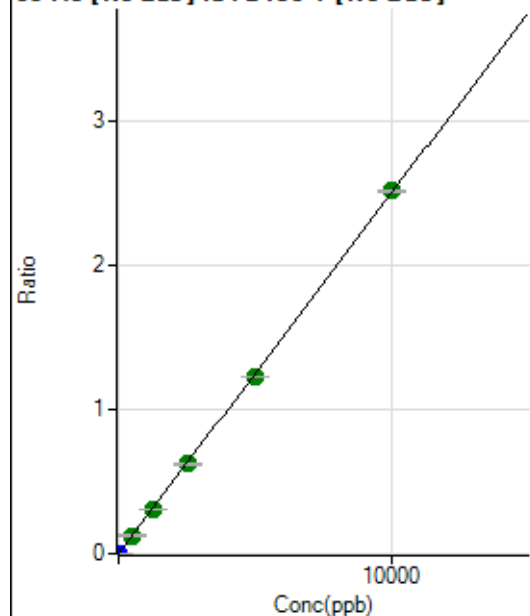
$$R = 1.0000$$

$$DL = 0.007231$$

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	37.78	0.0000	P	33.8
2	☐	5.000	4.756	16148.97	0.0012	P	0.1
3	☐	500.000	505.338	1697941.22	0.1265	A	4.1
4	☐	1250.000	1231.382	4149887.89	0.3083	A	0.8
5	☐	2500.000	2481.514	8254998.21	0.6213	A	3.0
6	☐	5000.000	4900.992	16271101.28	1.2271	A	0.3
7	☐	10000.000	10056.186	33224348.12	2.5179	A	0.2
8	☐			4456.28	0.0004	P	7.8

$$y = 2.5038\text{E-}004 * x + 2.7161\text{E-}006$$

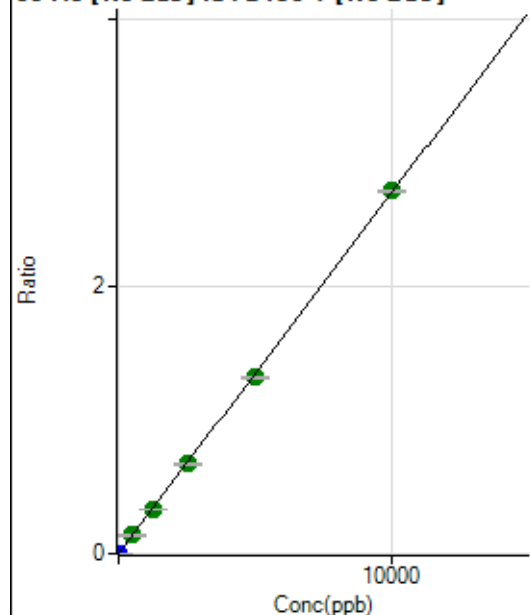
$$R = 0.9999$$

$$DL = 0.011$$

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	94.45	0.0000	P	12.0
2	☐	5.000	4.880	17885.52	0.0013	P	2.2
3	☐	500.000	512.886	1855235.84	0.1382	A	3.7
4	☐	1250.000	1240.910	4501773.23	0.3345	A	1.5
5	☐	2500.000	2483.170	8892327.86	0.6693	A	3.3
6	☐	5000.000	4882.817	17450321.13	1.3161	A	1.3
7	☐	10000.000	10063.291	35791666.41	2.7125	A	0.3
8	☐			16373.74	0.0014	P	1.2

$$y = 2.6954E-004 * x + 6.7865E-006$$

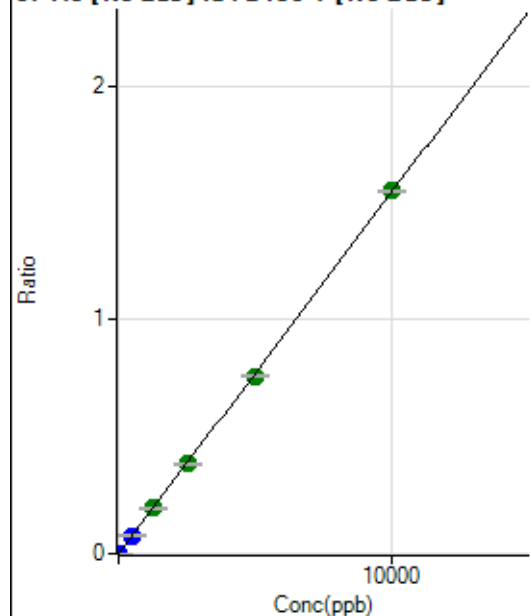
$$R = 0.9999$$

$$DL = 0.009062$$

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	20.00	0.0000	P	28.4
2	☐	5.000	4.835	10132.49	0.0007	P	0.5
3	☐	500.000	505.096	1048109.62	0.0781	P	1.1
4	☐	1250.000	1252.608	2606307.63	0.1937	A	2.5
5	☐	2500.000	2490.496	5116315.06	0.3850	A	2.1
6	☐	5000.000	4918.376	10081585.13	0.7604	A	1.8
7	☐	10000.000	10042.607	20486317.20	1.5526	A	0.6
8	☐			2991.45	0.0003	P	6.3

$$y = 1.5460E-004 * x + 1.4355E-006$$

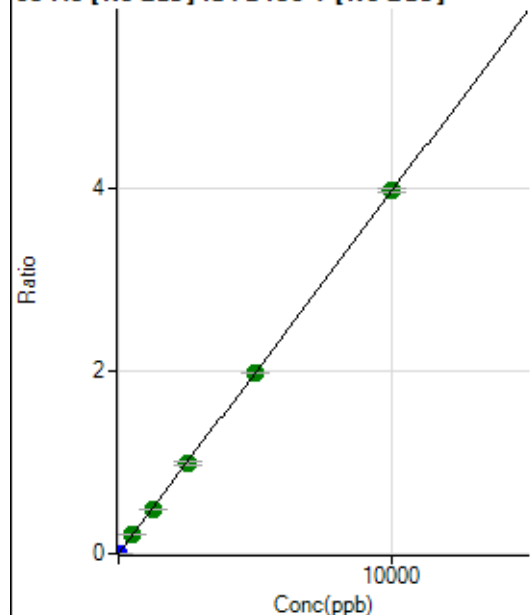
$$R = 0.9999$$

$$DL = 0.00791$$

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	48.89	0.0000	P	10.4
2	☐	5.000	4.845	26032.16	0.0019	P	1.5
3	☐	500.000	518.432	2758813.92	0.2055	A	1.2
4	☐	1250.000	1233.059	6579357.33	0.4889	A	2.1
5	☐	2500.000	2486.952	13098215.64	0.9860	A	3.9
6	☐	5000.000	4976.901	26162829.61	1.9731	A	0.5
7	☐	10000.000	10016.007	52395167.55	3.9709	A	1.2
8	☐			7140.70	0.0006	P	7.6

$$y = 3.9646E-004 * x + 3.5112E-006$$

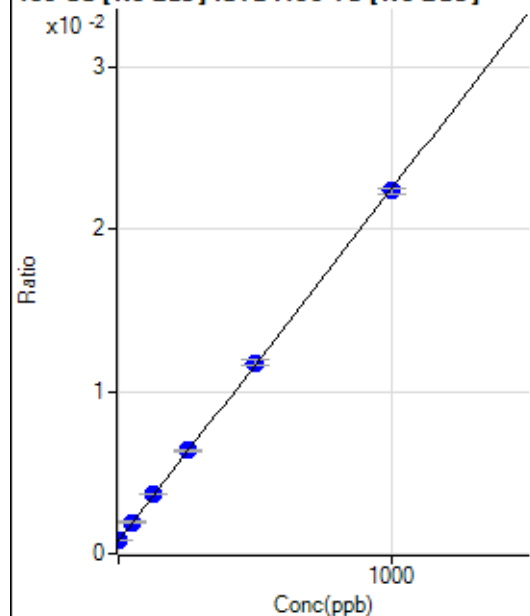
$$R = 1.0000$$

$$DL = 0.002766$$

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	6390.35	0.0008	P	4.1
2	☐	1.000	1.738	6452.61	0.0008	P	1.6
3	☐	50.000	52.983	15370.47	0.0019	P	2.9
4	☐	125.000	132.118	29216.13	0.0037	P	2.0
5	☐	250.000	256.547	51030.49	0.0064	P	1.1
6	☐	500.000	505.868	93354.29	0.0118	P	2.6
7	☐	1000.000	994.389	178155.13	0.0224	P	1.9
8	☐			5633.36	0.0008	P	1.4

$$y = 2.1684E-005 * x + 7.8899E-004$$

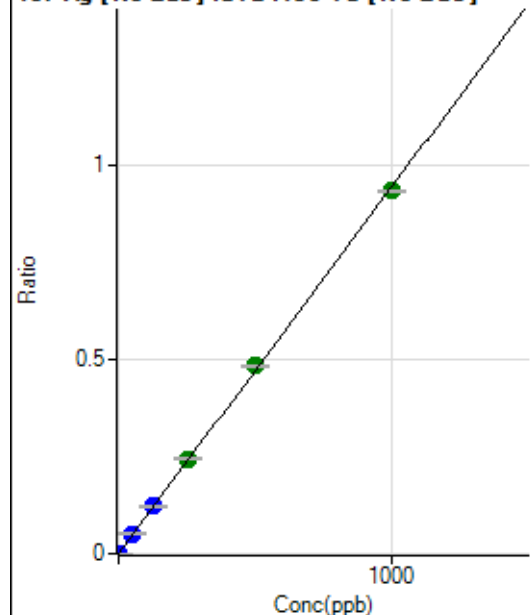
$$R = 0.9999$$

$$DL = 4.482$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.56	0.0000	P	14.1
2	☐	1.000	1.119	8302.44	0.0011	P	1.3
3	☐	50.000	53.980	403047.16	0.0509	P	4.9
4	☐	125.000	128.701	969404.12	0.1212	P	1.0
5	☐	250.000	258.748	1957978.91	0.2437	A	1.5
6	☐	500.000	513.938	3844050.67	0.4841	A	1.0
7	☐	1000.000	990.182	7434825.24	0.9327	A	0.7
8	☐			2555.81	0.0004	P	2.6

$$y = 9.4190\text{E-}004 * x + 9.3330\text{E-}006$$

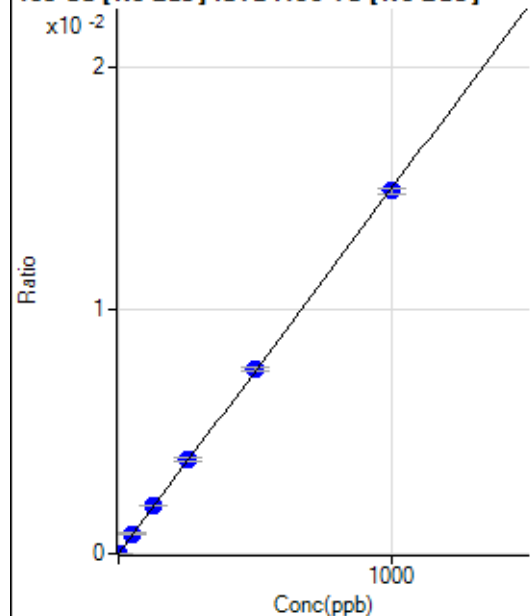
$$R = 0.9998$$

$$DL = 0.0042$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	64.8
2	☐	1.000	1.160	143.34	0.0000	P	15.7
3	☐	50.000	54.859	6529.30	0.0008	P	3.2
4	☐	125.000	132.072	15837.64	0.0020	P	1.7
5	☐	250.000	257.667	31032.18	0.0039	P	3.8
6	☐	500.000	506.499	60294.92	0.0076	P	1.5
7	☐	1000.000	993.707	118744.82	0.0149	P	1.3
8	☐			72.22	0.0000	P	4.7

$$y = 1.4990\text{E-}005 * x + 9.5710\text{E-}007$$

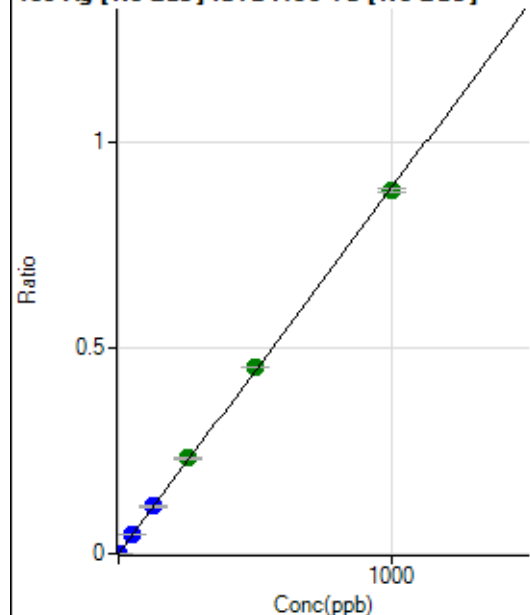
$$R = 0.9999$$

$$DL = 0.1242$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.44	0.0000	P	66.8
2	☐	1.000	1.113	7747.69	0.0010	P	0.1
3	☐	50.000	53.668	378710.66	0.0478	P	2.5
4	☐	125.000	129.167	919016.05	0.1149	P	0.9
5	☐	250.000	260.589	1862666.72	0.2319	A	2.1
6	☐	500.000	509.249	3598376.23	0.4531	A	0.2
7	☐	1000.000	992.024	7036346.14	0.8827	A	1.0
8	☐			2409.11	0.0003	P	6.2

$$y = 8.8977\text{E-}004 * x + 1.7883\text{E-}006$$

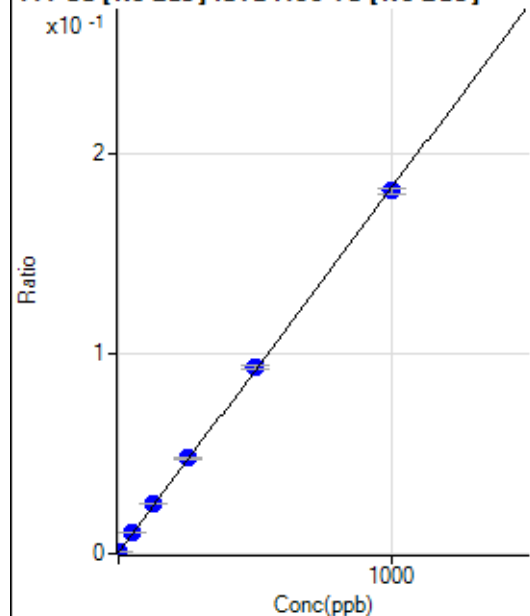
$$R = 0.9999$$

$$DL = 0.004031$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4472.24	0.0006	P	4.2
2	☐	1.000	1.226	6057.71	0.0008	P	1.6
3	☐	50.000	54.640	83464.77	0.0105	P	5.4
4	☐	125.000	132.432	197829.17	0.0247	P	1.4
5	☐	250.000	258.952	384389.79	0.0478	P	2.0
6	☐	500.000	508.989	742532.86	0.0935	P	2.1
7	☐	1000.000	992.106	1448845.34	0.1818	P	1.3
8	☐			4331.70	0.0006	P	1.1

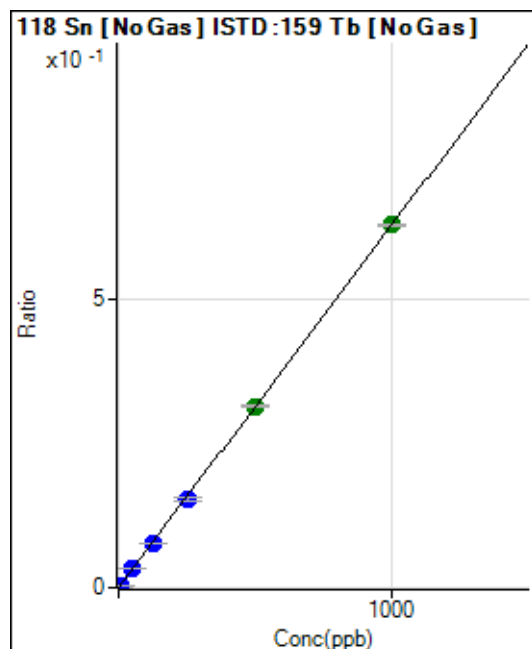
$$y = 1.8265\text{E-}004 * x + 5.5217\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.381$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	503.35	0.0001	P	10.2
2	☐	5.000	5.059	25302.29	0.0032	P	1.3
3	☐	50.000	51.231	255851.07	0.0323	P	1.8
4	☐	125.000	122.623	616685.68	0.0771	P	1.0
5	☐	250.000	244.062	1232528.66	0.1534	P	2.6
6	☐	500.000	500.771	2499647.90	0.3148	A	0.4
7	☐	1000.000	1001.334	5017044.51	0.6293	A	0.2
8	☐			2425.78	0.0003	P	4.6

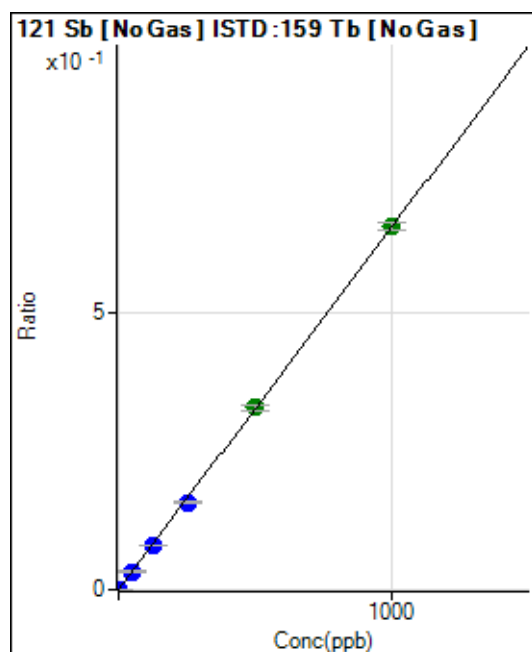
$$y = 6.2843\text{E-}004 * x + 6.2131\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.03012$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	15.56	0.0000	P	32.4
2	☐	2.000	2.033	10412.73	0.0013	P	2.0
3	☐	50.000	50.121	260308.70	0.0328	P	3.2
4	☐	125.000	122.344	640781.59	0.0801	P	1.1
5	☐	250.000	241.510	1270707.84	0.1582	P	2.4
6	☐	500.000	501.770	2609308.76	0.3287	A	2.8
7	☐	1000.000	1001.563	5228932.97	0.6560	A	2.1
8	☐			2768.07	0.0004	P	6.9

$$y = 6.5499\text{E-}004 * x + 1.9190\text{E-}006$$

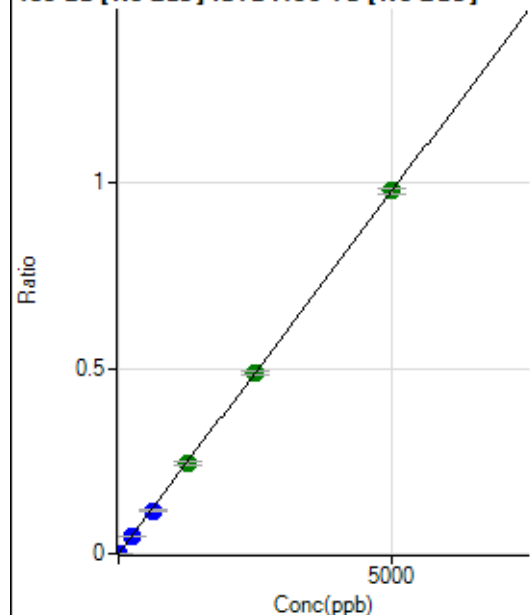
$$R = 1.0000$$

$$DL = 0.002844$$

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	15.56	0.0000	P	54.4
2	☐	10.000	9.770	14925.71	0.0019	P	0.6
3	☐	250.000	243.919	378127.41	0.0477	P	3.5
4	☐	625.000	594.218	929027.23	0.1162	P	1.1
5	☐	1250.000	1248.325	1960532.57	0.2441	A	3.0
6	☐	2500.000	2492.576	3869378.90	0.4873	A	2.4
7	☐	5000.000	5008.283	7805487.04	0.9792	A	1.4
8	☐			3963.93	0.0006	P	2.4

$$y = 1.9552\text{E-}004 * x + 1.9253\text{E-}006$$

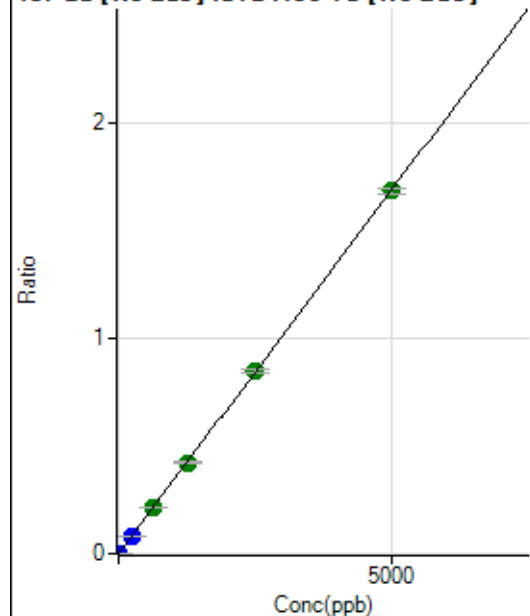
$$R = 1.0000$$

$$DL = 0.01606$$

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	21.11	0.0000	P	32.4
2	☐	10.000	9.886	26032.87	0.0033	P	4.4
3	☐	250.000	245.468	656417.11	0.0828	P	2.4
4	☐	625.000	630.203	1699227.01	0.2125	A	1.1
5	☐	1250.000	1248.669	3382221.93	0.4210	A	2.5
6	☐	2500.000	2520.182	6747505.18	0.8498	A	1.9
7	☐	5000.000	4989.818	13412023.97	1.6826	A	1.3
8	☐			6832.81	0.0010	P	1.8

$$y = 3.3720\text{E-}004 * x + 2.6025\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.007492$$

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	0.0
2	☐			14.45		P	74.2
3	☐			72.22		P	31.4
4	☐			174.45		P	5.5
5	☐			330.01		P	9.1
6	☐			616.69		P	5.9
7	☐			1231.18		P	5.6
8	☐			44.44		P	49.9

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			2.22		P	86.6
3	☐			15.55		P	24.8
4	☐			26.67		P	12.5
5	☐			55.56		P	9.2
6	☐			126.67		P	13.7
7	☐			218.89		P	2.3
8	☐			24.45		P	43.8

156 Dy [No Gas] No available calibration points

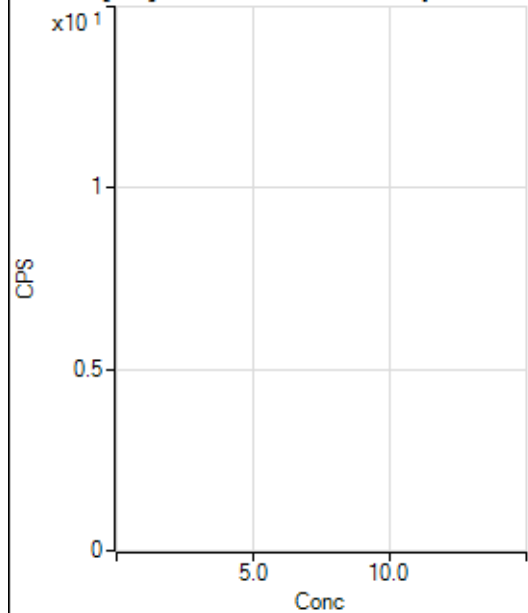
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	91.6
2	☐			6.67		P	50.0
3	☐			30.00		P	22.2
4	☐			64.44		P	31.2
5	☐			132.23		P	9.5
6	☐			225.56		P	10.9
7	☐			495.57		P	10.7
8	☐			1236.74		P	3.5

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			5.55		P	124.
3	☐			30.00		P	29.4
4	☐			66.66		P	8.7
5	☐			116.67		P	10.3
6	☐			211.11		P	7.3
7	☐			471.13		P	8.3
8	☐			802.25		P	9.0

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

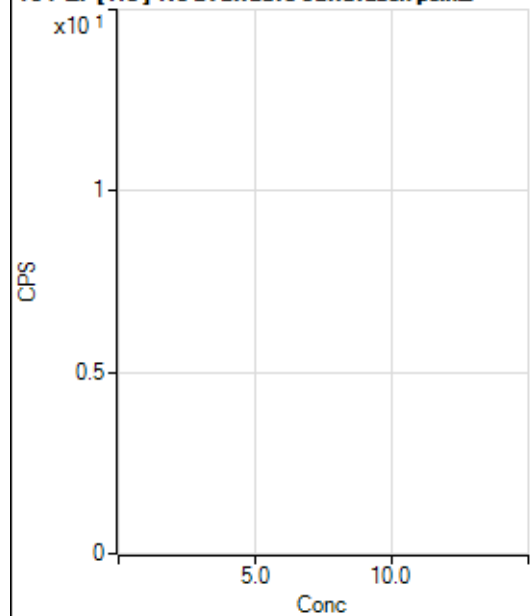
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	19.8
2	☐			43.33		P	20.3
3	☐			54.45		P	12.7
4	☐			82.22		P	9.4
5	☐			114.45		P	8.9
6	☐			180.00		P	3.2
7	☐			336.67		P	10.3
8	☐			1281.18		P	1.2

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			242.23		P	13.6
2	☐			288.89		P	13.9
3	☐			282.23		P	6.1
4	☐			274.45		P	10.1
5	☐			315.56		P	14.8
6	☐			361.12		P	15.0
7	☐			477.79		P	3.1
8	☐			1148.95		P	2.9

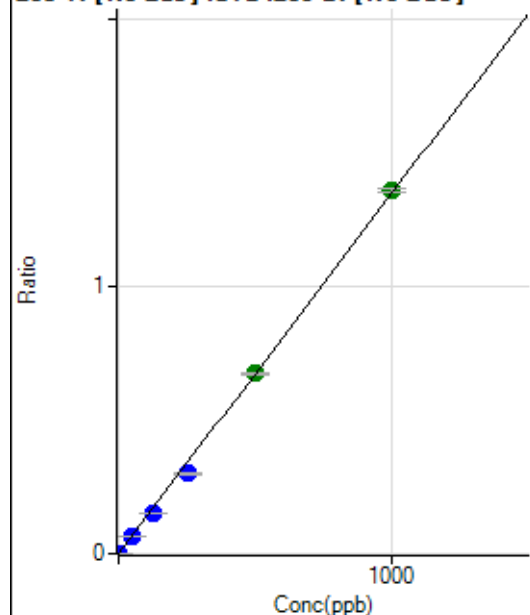
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			74.45		P	21.2
2	☐			41.11		P	12.4
3	☐			74.44		P	2.6
4	☐			57.78		P	18.5
5	☐			61.11		P	13.7
6	☐			76.67		P	11.5
7	☐			70.00		P	4.8
8	☐			95.56		P	28.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			35.56		P	5.4
2	☐			40.00		P	33.3
3	☐			46.67		P	18.9
4	☐			34.45		P	20.1
5	☐			41.11		P	46.1
6	☐			41.11		P	32.8
7	☐			48.89		P	28.4
8	☐			57.78		P	16.6

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.78	0.0000	P	24.0
2	☐	1.000	0.898	6290.40	0.0012	P	2.7
3	☐	50.000	46.991	315239.66	0.0633	P	1.6
4	☐	125.000	111.992	770770.45	0.1510	P	2.1
5	☐	250.000	223.120	1538316.16	0.3007	P	1.8
6	☐	500.000	500.975	3369550.05	0.6752	A	1.5
7	☐	1000.000	1008.009	6610059.97	1.3586	A	0.9
8	☐			597.80	0.0002	P	9.1

$$y = 0.0013 * x + 9.1899E-006$$

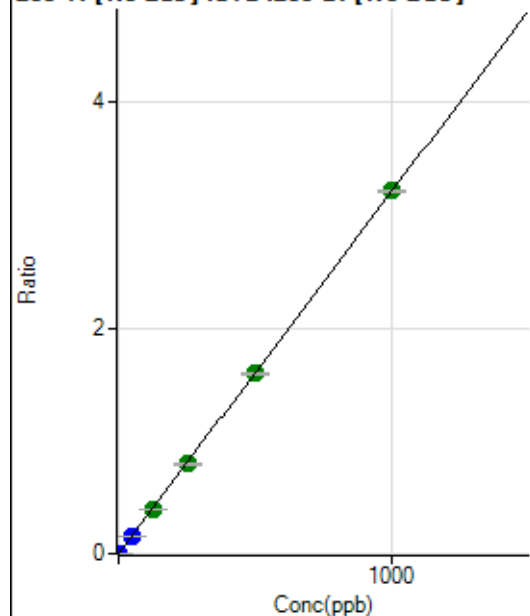
$$R = 0.9996$$

$$DL = 0.004904$$

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	140.00	0.0000	P	7.5
2	☐	1.000	0.883	14743.67	0.0029	P	0.3
3	☐	50.000	46.638	744644.51	0.1496	P	1.7
4	☐	125.000	120.496	1974145.13	0.3866	A	0.4
5	☐	250.000	247.339	4059213.93	0.7935	A	0.8
6	☐	500.000	497.119	7958527.24	1.5949	A	1.1
7	☐	1000.000	1002.837	15652183.24	3.2173	A	0.8
8	☐			1464.54	0.0004	P	7.9

$$y = 0.0032 * x + 2.6951E-005$$

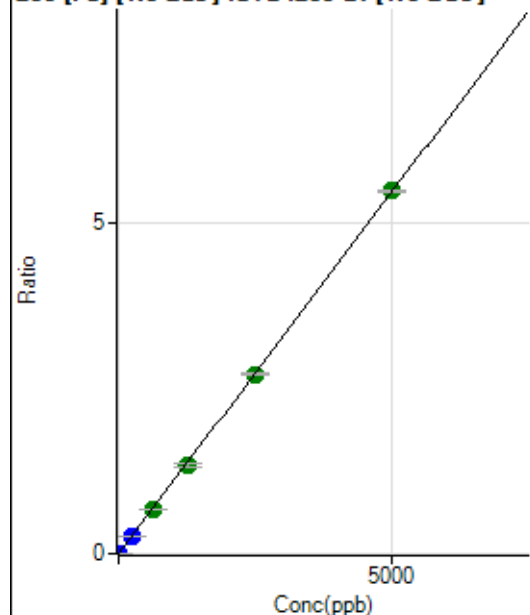
$$R = 1.0000$$

$$DL = 0.001884$$

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	242.23	0.0000	P	7.7
2	☐	1.000	0.875	5168.81	0.0010	P	6.6
3	☐	250.000	231.224	1256775.39	0.2526	P	2.0
4	☐	625.000	607.304	3386963.32	0.6633	A	2.1
5	☐	1250.000	1225.545	6846522.88	1.3386	A	2.6
6	☐	2500.000	2478.048	13505692.16	2.7065	A	1.3
7	☐	5000.000	5020.240	26675510.16	5.4830	A	0.8
8	☐			4127.34	0.0011	P	3.5

$$y = 0.0011 * x + 4.6628E-005$$

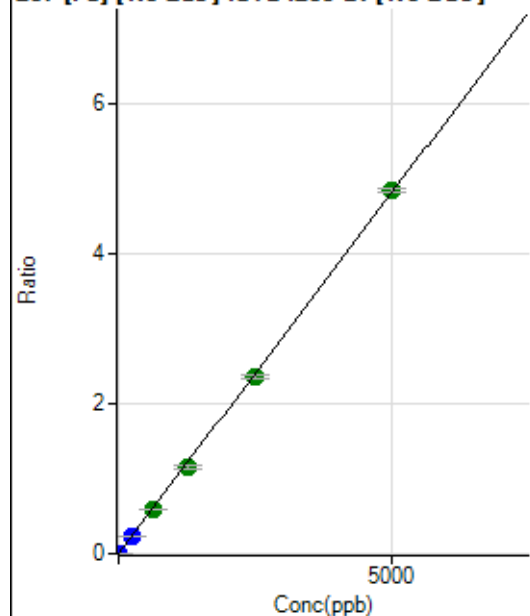
$$R = 1.0000$$

$$DL = 0.009917$$

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	188.89	0.0000	P	25.0
2	☐	1.000	0.858	4439.66	0.0009	P	3.8
3	☐	250.000	229.507	1097318.94	0.2205	P	1.8
4	☐	625.000	619.012	3036556.52	0.5947	A	1.4
5	☐	1250.000	1204.677	5919091.65	1.1573	A	3.4
6	☐	2500.000	2462.276	11803594.97	2.3654	A	1.9
7	☐	5000.000	5031.966	23517522.43	4.8340	A	0.9
8	☐			3436.03	0.0009	P	2.7

$$y = 9.6064E-004 * x + 3.6316E-005$$

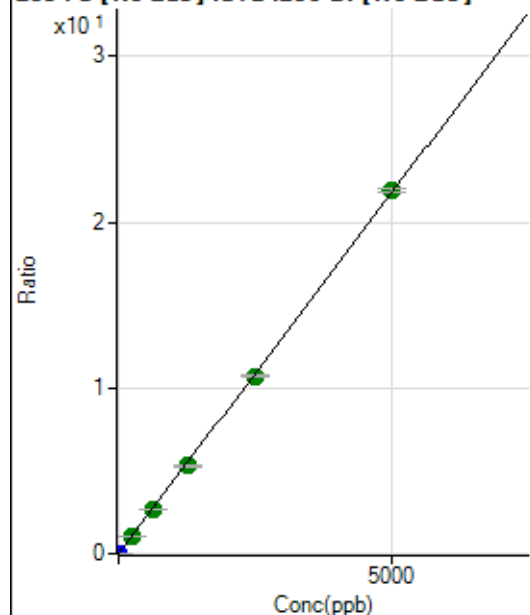
$$R = 0.9999$$

$$DL = 0.02835$$

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	923.36	0.0002	P	5.1
2	☐	1.000	0.872	20482.91	0.0040	P	2.6
3	☐	250.000	243.190	5267190.71	1.0585	A	1.3
4	☐	625.000	615.530	13678213.68	2.6788	A	1.7
5	☐	1250.000	1214.887	27042946.40	5.2871	A	2.4
6	☐	2500.000	2464.318	53516364.76	10.7244	A	0.8
7	☐	5000.000	5028.144	106454839.5	21.8816	A	1.0
8	☐			16057.23	0.0042	P	1.6

$$y = 0.0044 * x + 1.7768E-004$$

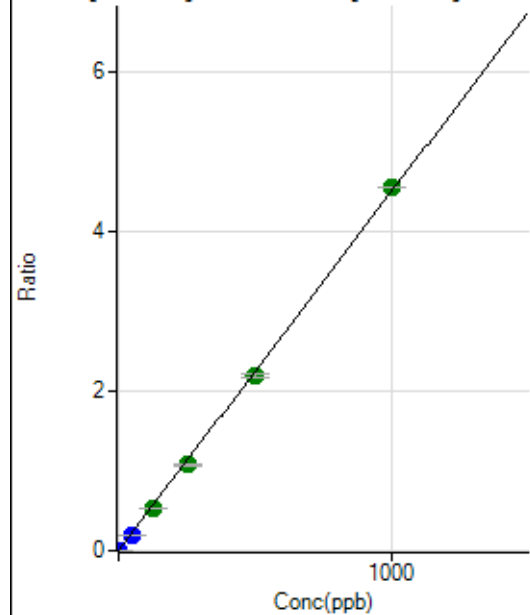
$$R = 0.9999$$

$$DL = 0.006293$$

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	6.66	0.0000	P	86.7
2	☐	1.000	0.801	18557.70	0.0036	P	0.1
3	☐	50.000	42.692	954478.56	0.1918	P	0.9
4	☐	125.000	118.562	2719850.78	0.5327	A	1.3
5	☐	250.000	239.211	5496667.80	1.0747	A	3.3
6	☐	500.000	487.142	10920940.74	2.1885	A	1.7
7	☐	1000.000	1010.297	22081969.53	4.5388	A	0.1
8	☐			1075.61	0.0003	P	10.4

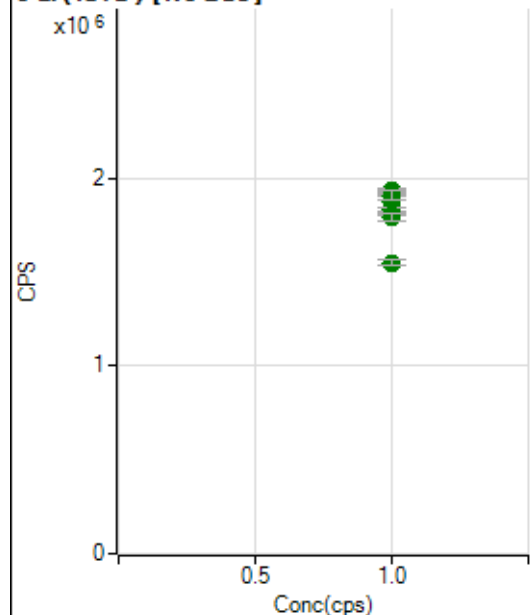
$$y = 0.0045 * x + 1.2831E-006$$

$$R = 0.9998$$

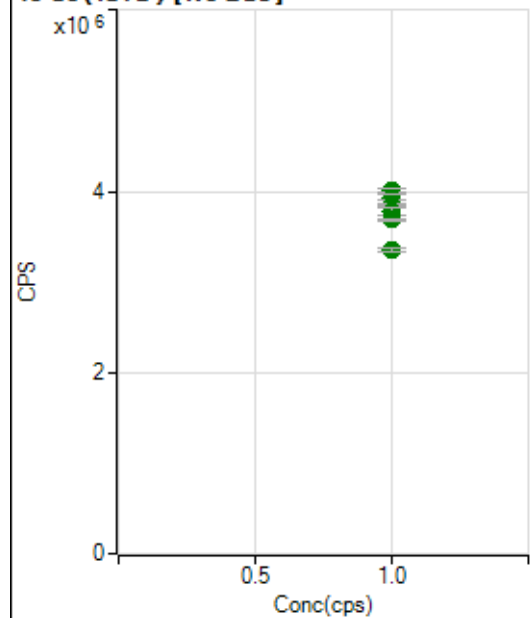
$$DL = 0.0007431$$

Weight: <None>

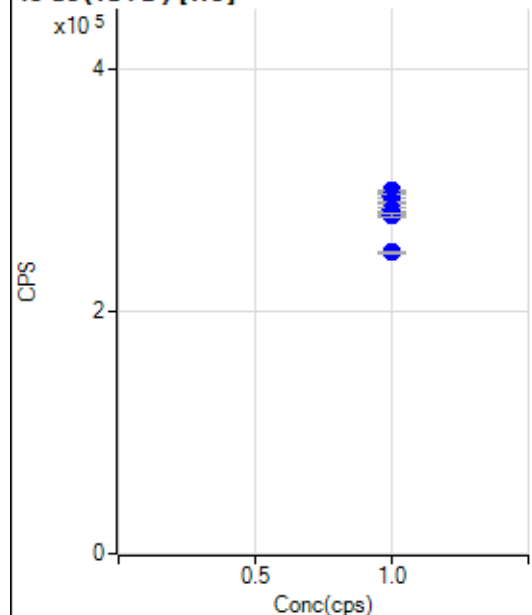
Min Conc: 0

6 Li (ISTD) [No Gas]

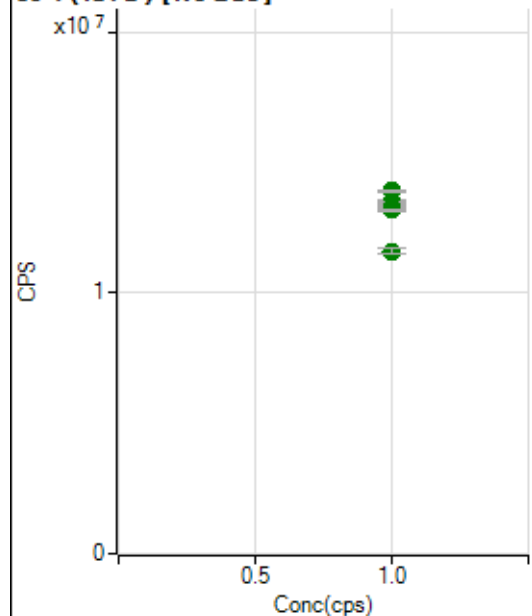
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1932848.44		A	0.9
2	☐	1.000		1911609.70		A	0.8
3	☐	1.000		1879635.56		A	3.3
4	☐	1.000		1908659.80		A	2.6
5	☐	1.000		1836268.88		A	1.2
6	☐	1.000		1807269.63		A	0.5
7	☐	1.000		1793523.59		A	2.3
8	☐	1.000		1549580.06		A	2.2

45 Sc (ISTD) [No Gas]

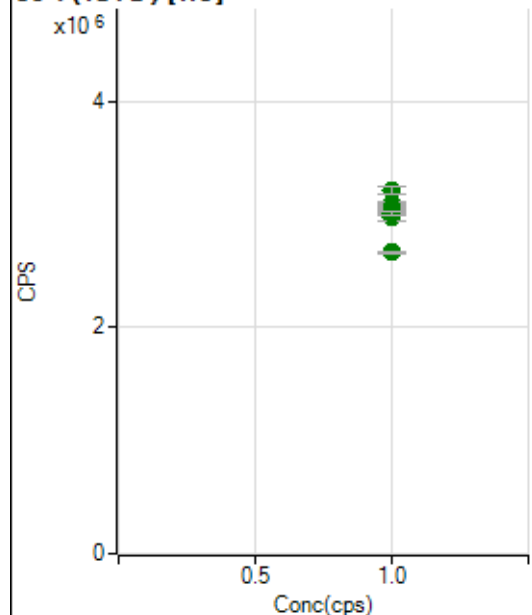
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4006429.80		A	1.1
2	☐	1.000		3934080.12		A	1.6
3	☐	1.000		3870535.95		A	1.5
4	☐	1.000		3846744.80		A	0.4
5	☐	1.000		3775025.85		A	2.5
6	☐	1.000		3685359.63		A	0.1
7	☐	1.000		3691801.40		A	0.6
8	☐	1.000		3357730.96		A	1.1

45 Sc (ISTD) [He]

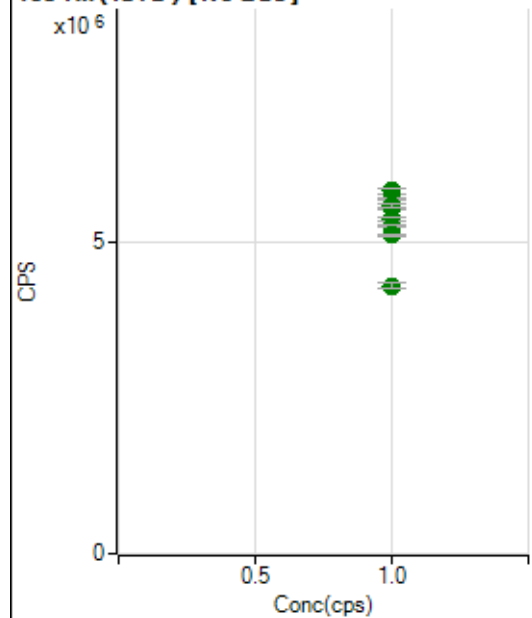
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		298918.16		P	0.8
2	☐	1.000		294865.89		P	1.1
3	☐	1.000		289238.09		P	0.6
4	☐	1.000		282869.22		P	1.5
5	☐	1.000		280385.13		P	1.0
6	☐	1.000		278349.81		P	0.4
7	☐	1.000		278443.61		P	1.3
8	☐	1.000		248364.36		P	0.8

89 Y (ISTD) [No Gas]

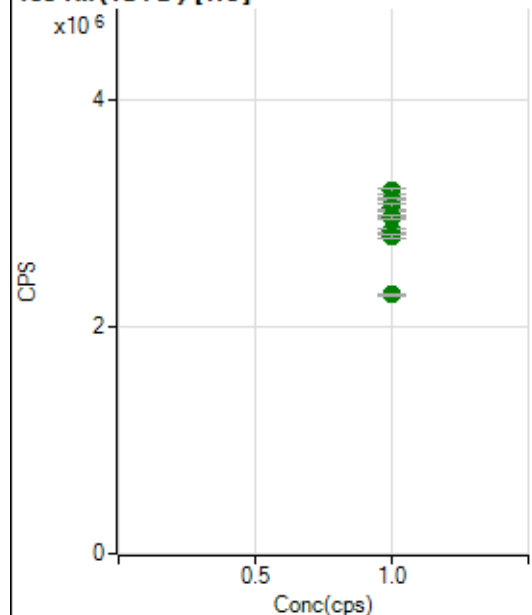
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13923684.51		A	0.6
2	☐	1.000		13529746.88		A	1.1
3	☐	1.000		13423066.47		A	1.1
4	☐	1.000		13460658.83		A	1.2
5	☐	1.000		13292373.55		A	2.4
6	☐	1.000		13259839.94		A	0.8
7	☐	1.000		13195311.47		A	0.6
8	☐	1.000		11607838.86		A	2.1

89 Y(ISTD) [He]

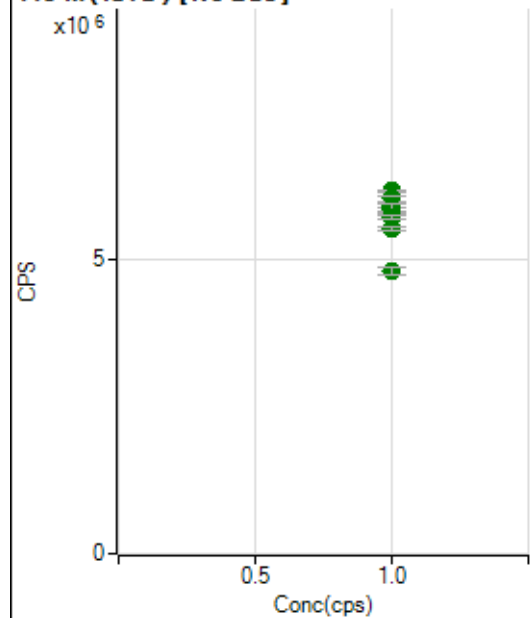
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3205706.79		A	2.0
2	☐	1.000		3100814.23		A	0.9
3	☐	1.000		3057961.66		A	0.7
4	☐	1.000		3045762.35		A	1.1
5	☐	1.000		3022646.13		A	1.4
6	☐	1.000		2973098.95		A	1.8
7	☐	1.000		3001969.78		A	1.0
8	☐	1.000		2660649.40		A	0.9

103 Rh(ISTD) [No Gas]

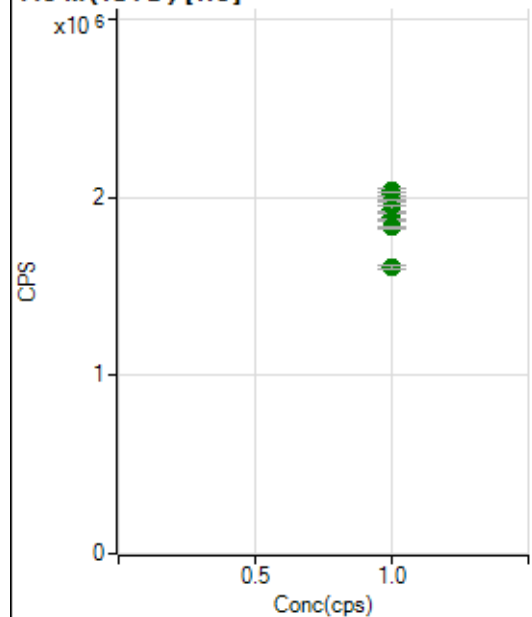
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5830817.48		A	1.4
2	☐	1.000		5703364.78		A	0.5
3	☐	1.000		5572853.39		A	1.9
4	☐	1.000		5590380.89		A	1.0
5	☐	1.000		5384823.53		A	1.1
6	☐	1.000		5260669.43		A	0.4
7	☐	1.000		5126795.10		A	0.5
8	☐	1.000		4297548.27		A	2.1

103 Rh (ISTD) [He]

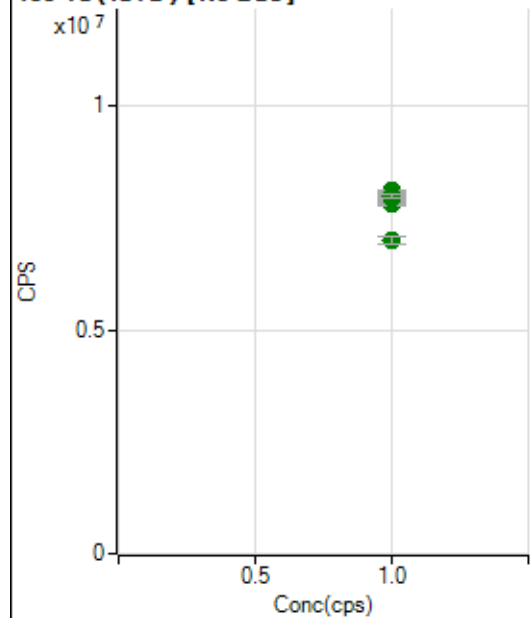
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3204313.46		A	1.8
2	☐	1.000		3128805.65		A	0.5
3	☐	1.000		3065526.65		A	1.6
4	☐	1.000		2995656.65		A	1.5
5	☐	1.000		2969350.82		A	0.8
6	☐	1.000		2856168.05		A	1.1
7	☐	1.000		2805416.24		A	0.9
8	☐	1.000		2287963.34		A	0.4

115 In (ISTD) [No Gas]

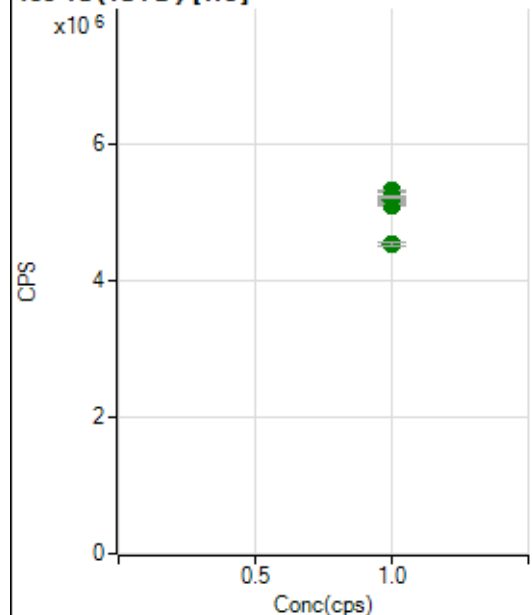
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6155194.97		A	0.7
2	☐	1.000		6023225.28		A	1.7
3	☐	1.000		5849993.42		A	1.1
4	☐	1.000		5913694.09		A	1.5
5	☐	1.000		5856798.57		A	2.8
6	☐	1.000		5702617.42		A	0.8
7	☐	1.000		5510997.49		A	1.4
8	☐	1.000		4801766.90		A	3.0

115 In (ISTD) [He]

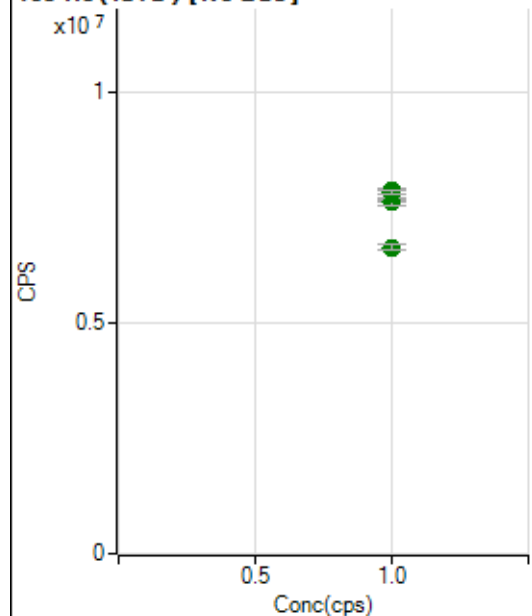
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2036080.32		A	1.1
2	☐	1.000		2018467.48		A	1.4
3	☐	1.000		1977444.72		A	0.3
4	☐	1.000		1932876.88		A	1.6
5	☐	1.000		1890632.35		A	1.6
6	☐	1.000		1871170.42		A	0.2
7	☐	1.000		1833518.47		A	0.5
8	☐	1.000		1605063.60		A	1.5

159 Tb (ISTD) [No Gas]

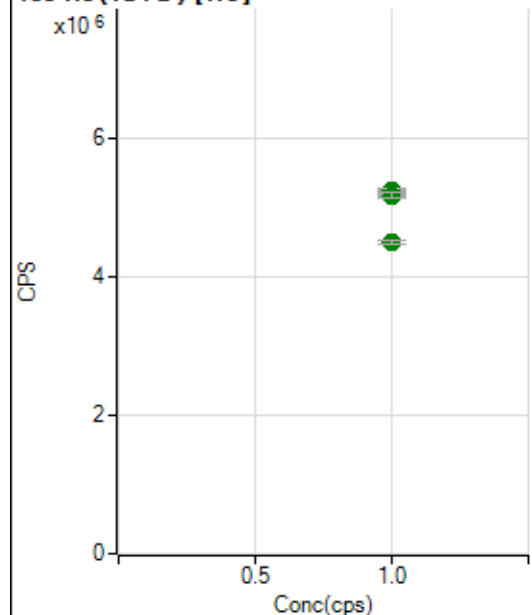
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8100635.44		A	0.7
2	☐	1.000		7806061.97		A	1.3
3	☐	1.000		7934865.85		A	3.6
4	☐	1.000		7996617.24		A	0.7
5	☐	1.000		8034803.35		A	1.5
6	☐	1.000		7941606.83		A	1.5
7	☐	1.000		7972063.21		A	1.3
8	☐	1.000		7001436.28		A	2.8

159 Tb (ISTD) [He]

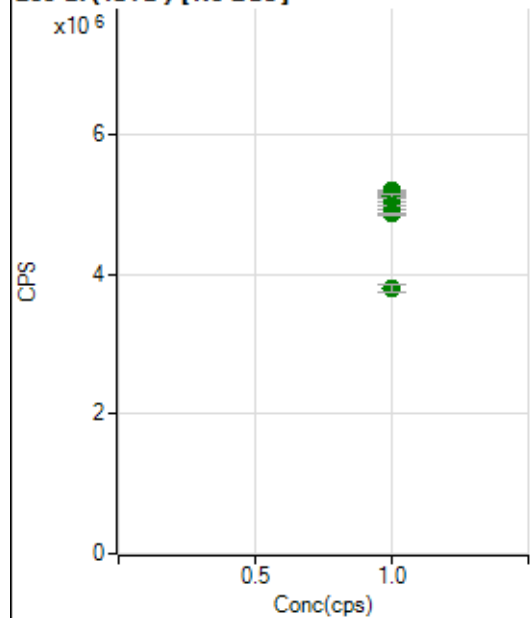
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5303501.03		A	0.8
2	☐	1.000		5205259.75		A	0.7
3	☐	1.000		5099150.89		A	1.0
4	☐	1.000		5173783.26		A	1.6
5	☐	1.000		5233813.32		A	0.3
6	☐	1.000		5122565.79		A	0.4
7	☐	1.000		5202887.53		A	0.5
8	☐	1.000		4515981.11		A	1.3

165 Ho (ISTD) [No Gas]

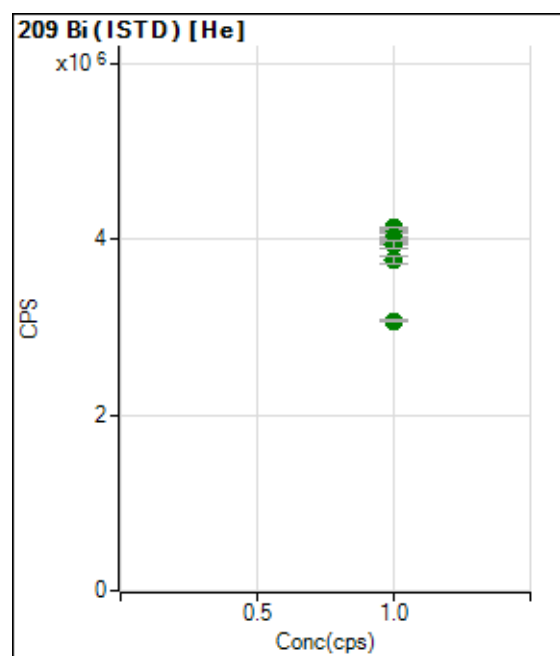
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7845866.90		A	1.4
2	☐	1.000		7624094.13		A	0.6
3	☐	1.000		7594521.21		A	2.1
4	☐	1.000		7845155.09		A	1.7
5	☐	1.000		7803972.73		A	1.1
6	☐	1.000		7763546.41		A	2.1
7	☐	1.000		7812207.94		A	1.1
8	☐	1.000		6632894.48		A	1.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5198899.36		A	1.0
2	☐	1.000		5235125.48		A	0.8
3	☐	1.000		5182467.18		A	0.6
4	☐	1.000		5202800.93		A	0.4
5	☐	1.000		5198289.33		A	0.3
6	☐	1.000		5235411.45		A	1.3
7	☐	1.000		5173113.43		A	1.5
8	☐	1.000		4496834.55		A	1.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5195486.76		A	0.7
2	☐	1.000		5156172.94		A	0.9
3	☐	1.000		4977127.25		A	2.2
4	☐	1.000		5106612.60		A	1.0
5	☐	1.000		5115651.90		A	0.9
6	☐	1.000		4990197.22		A	0.2
7	☐	1.000		4865089.37		A	0.3
8	☐	1.000		3802380.05		A	2.4



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4113797.02		A	0.7
2	☐	1.000		4126235.60		A	0.9
3	☐	1.000		4034711.40		A	1.5
4	☐	1.000		3997450.95		A	1.4
5	☐	1.000		3973697.55		A	1.3
6	☐	1.000		3930901.16		A	2.0
7	☐	1.000		3756121.92		A	2.1
8	☐	1.000		3071323.95		A	0.5

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7041323 MS.b
Acq. Date-Time 2023-04-13 13:00:17
Report Comment ---
Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		8872	88724.44			0.270	5.000
24		84203	842025.07			0.452	5.000
25		11447	114473.69			0.325	5.000
26		13378	133783.10			0.363	5.000
59		61199	611989.20			0.353	5.000
113		7565	75653.92			0.204	5.000
115		98033	980326.16			0.270	5.000
206		22323	223229.05			0.183	5.000
207		20663	206629.01			0.505	5.000
208		48149	481489.09			0.291	5.000
220		0	1.60			40.745	

Mass	RSD% (Flag)
9	
24	
25	
26	
59	
113	
115	
206	
207	
208	
220	

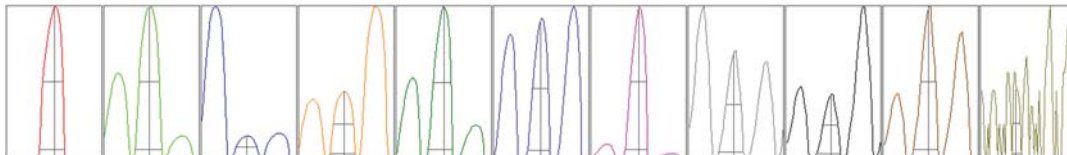
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	8900	8862	8887	8876	8838
24	84458	84332	84318	83528	84377
25	11473	11405	11415	11452	11492
26	13444	13342	13363	13330	13414
59	61302	60936	61062	61199	61496
113	7575	7540	7563	7580	7568
115	98423	98080	97941	97689	98030
206	22269	22334	22366	22353	22293
207	20614	20588	20846	20646	20621
208	48154	48003	48369	48162	48057

US EPA Tune Check Report

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
220	0	0	0	0	0

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	15101.20	9.05	8.90 - 9.10	
24	137221.74	23.95	23.90 - 24.10	
25	18858.94	24.95	24.90 - 25.10	
26	21666.03	25.95	25.90 - 26.10	
59	113243.75	59.05	58.90 - 59.10	
113	15684.95	113.00	112.90 - 113.10	
115	205558.18	115.05	114.90 - 115.10	
206	46869.63	205.95	205.90 - 206.10	
207	42667.82	206.95	206.90 - 207.10	
208	102031.90	207.95	207.90 - 208.10	
220	0.20	219.65	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.789	0.900	
24	0.64	0.835	0.900	
25	0.64	0.829	0.900	
26	0.65	0.791	0.900	
59	0.56	0.773	0.900	
113	0.49	0.713	0.900	
115	0.50	0.711	0.900	
206	0.48	0.771	0.900	
207	0.48	0.755	0.900	
208	0.47	0.778	0.900	
220	0.25	0.295		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.82 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	8.9 V	Deflect	15.6 V
Extract 2	-110.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-70 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	123	Axis Gain	1.0001	QP Bias	-3.0 V
Mass Offset	124	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	-1.1 mm	Torch V	1.0 mm
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EM

Discriminator	3.2 mV	Analog HV	2278 V	Pulse HV	1562 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		19821	198213.16			0.576	
89		28137	281365.06			0.664	
205		23232	232324.07			0.581	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	19960	19899	19731	19832	19685
89	28310	28181	27846	28071	28274
205	23412	23322	23073	23156	23199

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.3 V	Deflect	3.8 V
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US EPA Tune Check Report

Extract 2	-110.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-70 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	1.0001	QP Bias	-13.0 V
Mass Offset	124	Axis Offset	0.01		

Hardware Settings

Torch

Torch H	-1.1 mm	Torch V	1.0 mm
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EM

Discriminator	3.2 mV	Analog HV	2278 V	Pulse HV	1562 V
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