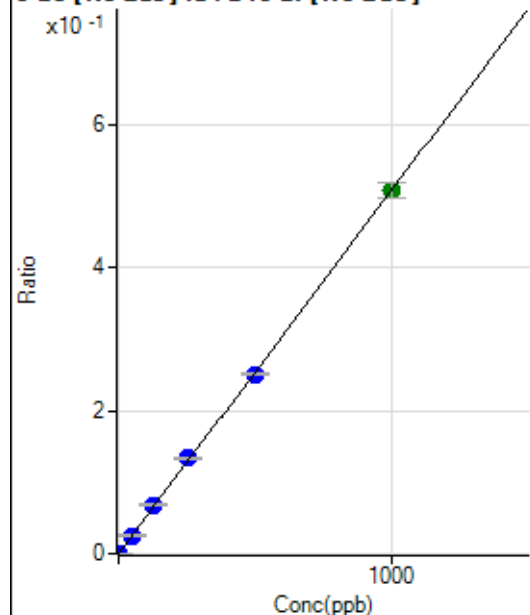


Calibration for 005CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8030522 MSC.b\
 Analysis File: P8030522 MSC.batch.bin
 DA Date-Time: 2022-03-06 15:28:54
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2022-03-05 16:54:35
2	006CALS.d	S02	2022-03-05 17:00:43
3	007CALS.d	S03	2022-03-05 17:03:47
4	008CALS.d	S04	2022-03-05 17:06:52
5	009CALS.d	S05	2022-03-05 17:09:56
6	010CALS.d	S06	2022-03-05 17:13:02
7	011CALS.d	S07	2022-03-05 17:16:05
8	012CALS.d	S08	2022-03-05 17:19:10

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	24.00	0.0000	P	42.7
2	☐	1.000	1.024	1176.49	0.0005	P	8.7
3	☐	50.000	50.211	55139.20	0.0255	P	3.1
4	☐	125.000	132.946	146874.46	0.0675	P	4.6
5	☐	250.000	263.781	294614.35	0.1340	P	1.9
6	☐	500.000	493.757	570808.69	0.2508	P	1.4
7	☐	1000.000	998.673	1153295.29	0.5072	A	4.2
8	☐			357.27	0.0002	P	37.1

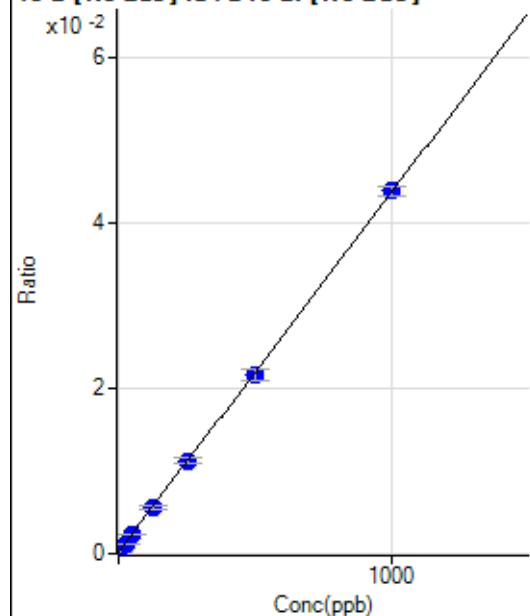
$$y = 5.0787\text{E-}004 * x + 1.1196\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.02826$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	485.91	0.0002	P	3.3
2	☐	25.000	22.400	2661.73	0.0012	P	1.3
3	☐	50.000	47.251	4933.88	0.0023	P	4.7
4	☐	125.000	122.581	12082.63	0.0056	P	8.7
5	☐	250.000	254.036	24792.12	0.0113	P	7.2
6	☐	500.000	491.551	49176.98	0.0216	P	6.2
7	☐	1000.000	1003.721	99916.02	0.0439	P	2.9
8	☐			14051.34	0.0062	P	7.6

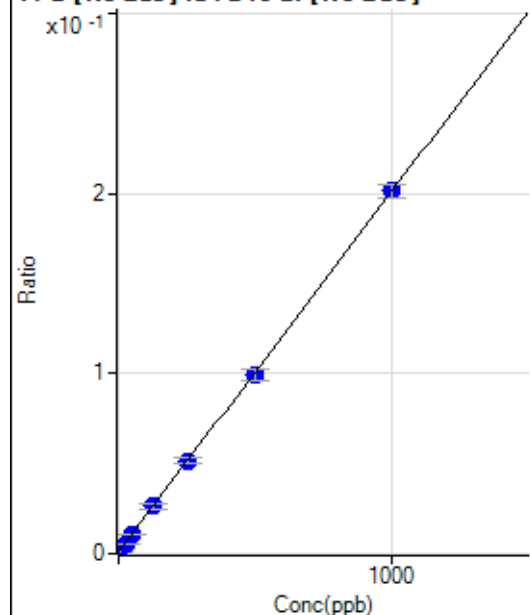
$$y = 4.3511\text{E-}005 * x + 2.2596\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.5219$$

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	2249.07	0.0010	P	3.4
2	☐	25.000	22.002	12082.61	0.0054	P	2.0
3	☐	50.000	47.639	22860.66	0.0106	P	7.1
4	☐	125.000	125.929	57017.91	0.0262	P	9.3
5	☐	250.000	252.818	113509.16	0.0516	P	6.1
6	☐	500.000	493.343	226999.72	0.0998	P	6.6
7	☐	1000.000	1002.701	459116.11	0.2017	P	3.9
8	☐			64698.92	0.0286	P	7.3

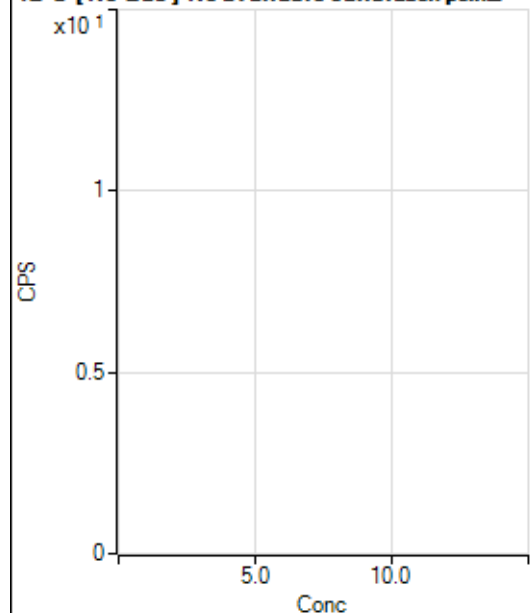
$$y = 2.0010E-004 * x + 0.0010$$

R = 1.0000

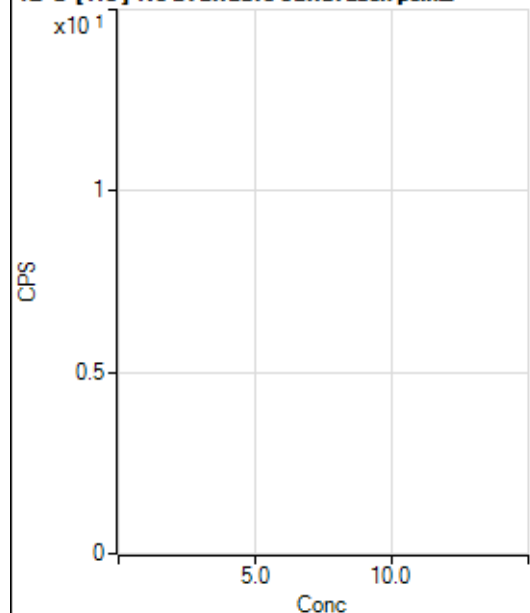
DL = 0.5331

Weight: <None>

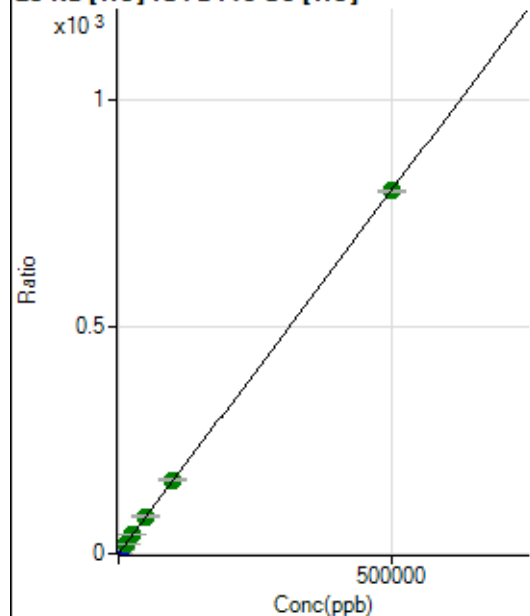
Min Conc: 0

12 C [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			6778248.24		A	1.5
2	☐			7004286.27		A	1.3
3	☐			8700139.69		A	1.1
4	☐			8453250.97		A	1.3
5	☐			8136976.49		A	3.6
6	☐			8697113.74		A	0.6
7	☐			8652079.62		A	1.2
8	☐			7416124.99		A	1.4

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61950.59		P	1.7
2	☐			64603.86		P	1.8
3	☐			83661.04		P	1.0
4	☐			81213.93		P	0.7
5	☐			79147.10		P	0.4
6	☐			83286.10		P	0.7
7	☐			86320.21		P	2.2
8	☐			76354.64		P	1.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	11143.42	0.0970	P	0.8
2	☐	500.000	470.817	97757.77	0.8519	P	1.1
3	☐	5000.000	4927.323	923249.53	7.9977	P	0.7
4	☐	12500.000	13661.724	2471059.54	22.0030	A	0.9
5	☐	25000.000	26874.469	4920040.17	43.1890	A	2.1
6	☐	50000.000	51302.712	9626436.24	82.3587	A	1.8
7	☐	100000.00	101841.93	19843212.08	163.3962	A	2.9
8	☐	500000.00	499379.33	100724191.1	800.8305	A	0.8

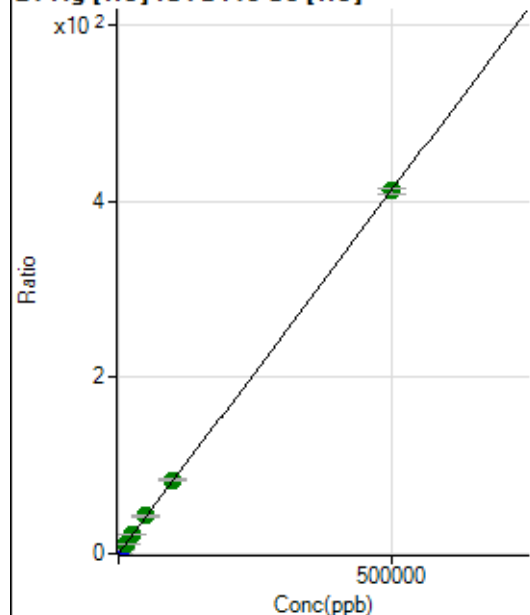
$$y = 0.0016 * x + 0.0970$$

$$R = 1.0000$$

$$DL = 1.448$$

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	208.34	0.0018	P	18.4
2	☐	500.000	490.394	46675.43	0.4067	P	1.6
3	☐	5000.000	5060.783	482522.19	4.1799	P	1.4
4	☐	12500.000	14367.863	1332388.15	11.8638	A	1.5
5	☐	25000.000	27530.954	2589732.22	22.7311	A	1.3
6	☐	50000.000	51889.972	5008021.68	42.8417	A	1.4
7	☐	100000.00	101631.80	10190477.57	83.9080	A	2.3
8	☐	500000.00	499310.80	51842573.38	412.2278	A	1.8

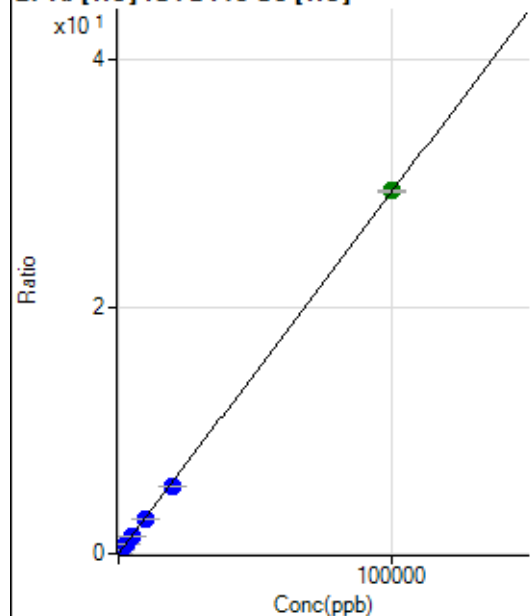
$$y = 8.2559\text{E-}004 * x + 0.0018$$

$$R = 1.0000$$

$$DL = 1.216$$

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	76.66	0.0007	P	21.7
2	☐	20.000	17.886	677.85	0.0059	P	3.1
3	☐	1000.000	960.632	32570.10	0.2821	P	0.8
4	☐	2500.000	2567.220	84554.26	0.7529	P	0.5
5	☐	5000.000	4954.169	165446.88	1.4523	P	0.9
6	☐	10000.000	9471.116	324469.62	2.7758	P	1.6
7	☐	20000.000	18541.420	660006.10	5.4335	P	1.1
8	☐	100000.00	100345.60	3698307.90	29.4030	A	0.3

$$y = 2.9301\text{E-}004 * x + 6.6714\text{E-}004$$

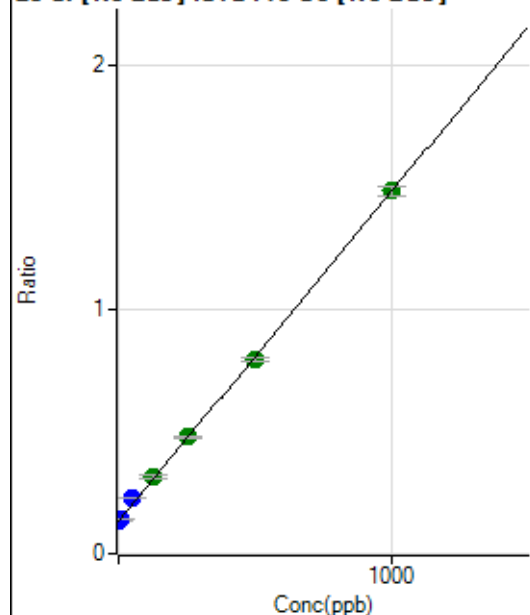
$$R = 0.9999$$

$$DL = 1.48$$

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	498400.98	0.1326	P	1.0
2	☐	10.000	7.047	536409.56	0.1421	P	1.7
3	☐	50.000	70.172	825789.92	0.2272	P	1.6
4	☐	125.000	134.008	1115775.19	0.3133	A	3.6
5	☐	250.000	254.865	1726930.07	0.4763	A	2.3
6	☐	500.000	490.203	2978016.95	0.7937	A	2.1
7	☐	1000.000	1001.577	5719961.41	1.4834	A	2.9
8	☐			739168.55	0.1927	P	1.6

$$y = 0.0013 * x + 0.1326$$

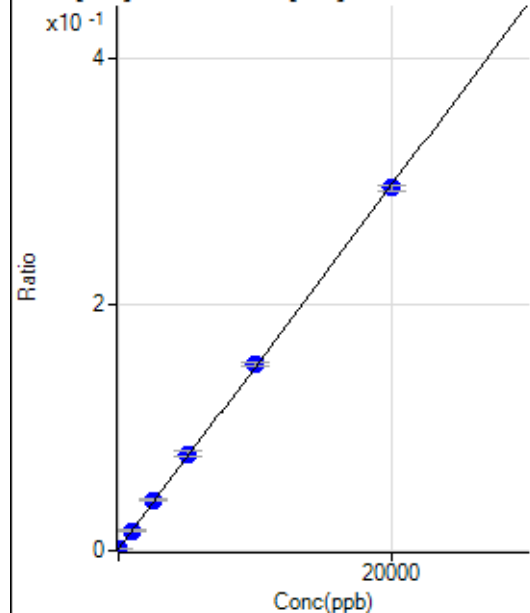
$$R = 0.9997$$

$$DL = 2.832$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-19.020	136.12	0.0012	P	38.8
2	☐	0.000	19.020	200.01	0.0017	P	8.4
3	☐	1000.000	986.241	1850.17	0.0160	P	7.3
4	☐	2500.000	2686.108	4617.53	0.0411	P	5.4
5	☐	5000.000	5216.721	8941.88	0.0785	P	5.5
6	☐	10000.000	10153.475	17702.86	0.1514	P	2.8
7	☐	20000.000	19846.507	35770.10	0.2945	P	1.5
8	☐			166.67	0.0013	P	18.9

$$y = 1.4765E-005 * x + 0.0015$$

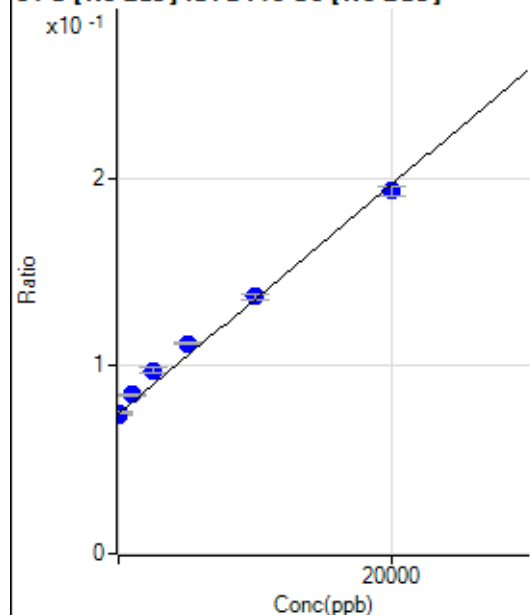
$$R = 0.9999$$

$$DL = 61.34$$

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	-97.294	278338.80	0.0741	P	1.4
2	☐	0.000	97.294	284038.16	0.0752	P	1.2
3	☐	1000.000	1628.880	307438.13	0.0846	P	1.0
4	☐	2500.000	3770.476	347861.39	0.0977	P	2.5
5	☐	5000.000	6109.190	405893.33	0.1120	P	1.1
6	☐	10000.000	10186.829	513451.20	0.1369	P	2.4
7	☐	20000.000	19439.035	745523.24	0.1933	P	2.9
8	☐			256044.08	0.0667	P	1.4

$$y = 6.1060E-006 * x + 0.0747$$

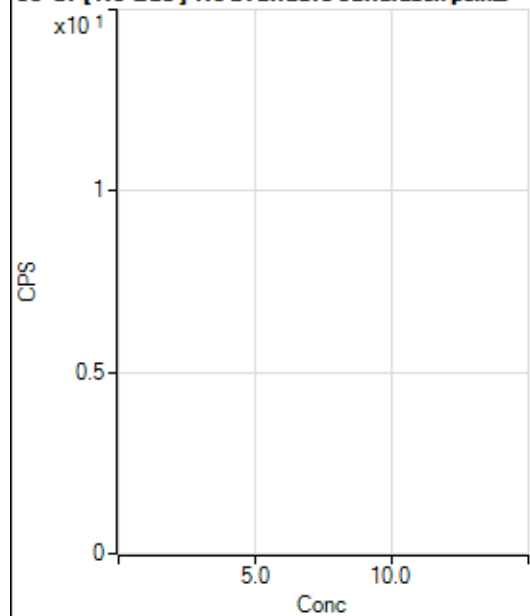
R = 0.9967

DL = 485.7

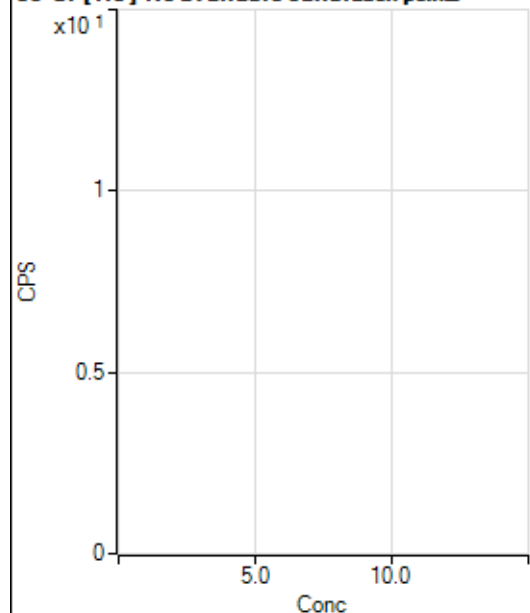
Weight: <None>

Min Conc: 0

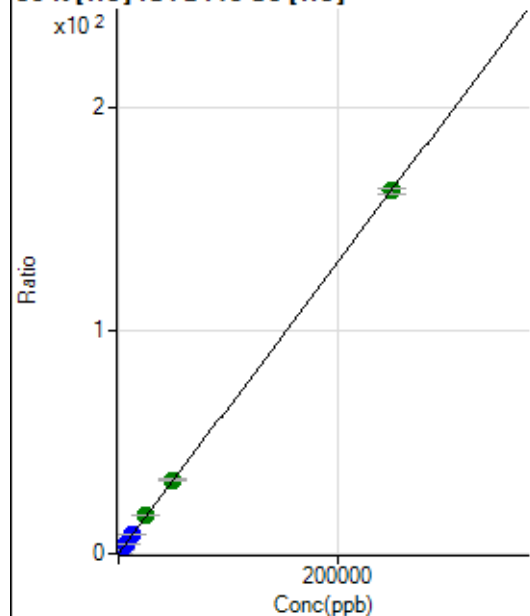
35 Cl [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			2384970.00		A	2.0
2	☐			2002131.97		A	1.2
3	☐			1908584.87		A	1.2
4	☐			1774495.96		A	0.5
5	☐			1624198.09		A	1.7
6	☐			1483331.33		A	1.4
7	☐			1410933.28		A	0.6
8	☐			1341467.32		A	1.1

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			15219.54		P	4.0
2	☐			12995.09		P	3.4
3	☐			11832.89		P	3.1
4	☐			11638.29		P	2.9
5	☐			10287.26		P	3.5
6	☐			9389.44		P	4.7
7	☐			8947.43		P	4.3
8	☐			8989.10		P	5.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	12872.71	0.1120	P	2.3
2	☐	500.000	471.779	48025.06	0.4186	P	1.9
3	☐	2500.000	2529.344	202646.47	1.7554	P	2.3
4	☐	6250.000	6859.400	513065.47	4.5686	P	1.1
5	☐	12500.000	12978.675	973335.75	8.5444	P	2.3
6	☐	25000.000	26127.595	1997764.74	17.0873	A	1.5
7	☐	50000.000	50610.330	4007211.55	32.9940	A	2.4
8	☐	250000.00	249725.76	20421004.45	162.3608	A	1.4

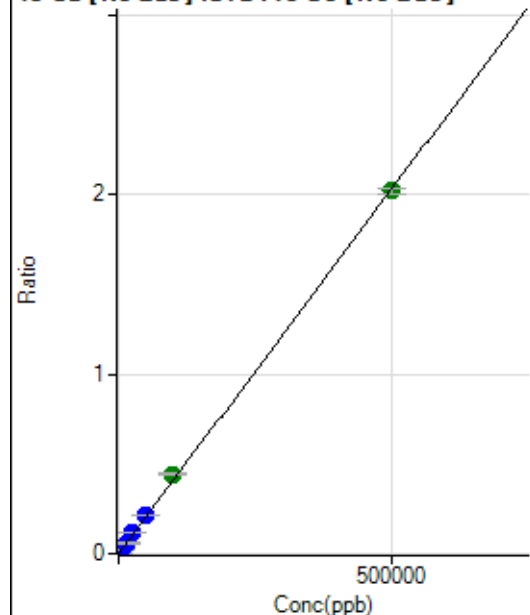
$$y = 6.4971\text{E-}004 * x + 0.1120$$

$$R = 1.0000$$

$$DL = 12.11$$

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	208.72	0.0001	P	11.7
2	☐	500.000	476.416	7516.88	0.0020	P	3.6
3	☐	5000.000	5408.947	80077.17	0.0220	P	0.5
4	☐	12500.000	14369.260	208150.51	0.0584	P	2.5
5	☐	25000.000	27944.459	411879.94	0.1136	P	1.4
6	☐	50000.000	52967.149	807783.14	0.2153	P	1.8
7	☐	100000.00	108781.95	1704609.28	0.4421	A	3.3
8	☐	500000.00	497748.87	7758304.81	2.0227	A	1.8

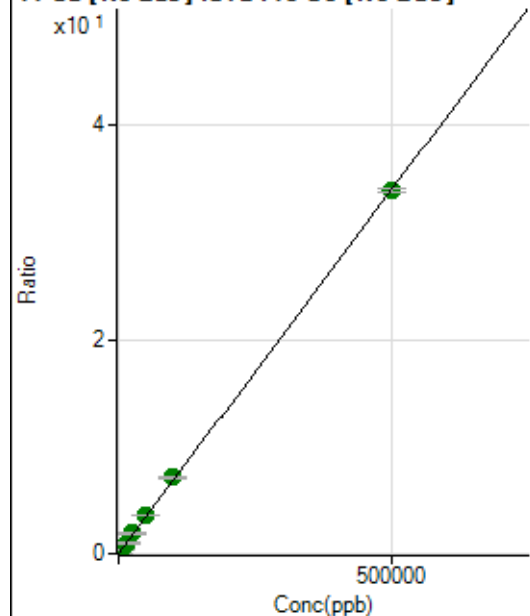
$$y = 4.0636\text{E-}006 * x + 5.5568\text{E-}005$$

$$R = 0.9998$$

$$DL = 4.797$$

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	23470.12	0.0062	P	1.2
2	☐	500.000	468.145	143716.71	0.0381	P	1.3
3	☐	5000.000	5429.057	1364197.89	0.3754	A	1.7
4	☐	12500.000	14410.594	3511969.24	0.9860	A	1.5
5	☐	25000.000	27998.459	6923356.26	1.9098	A	2.4
6	☐	50000.000	52459.564	13408436.99	3.5729	A	0.4
7	☐	100000.00	104611.34	27446757.32	7.1186	A	3.6
8	☐	500000.00	498629.82	130073787.6	33.9071	A	1.2

$$y = 6.7988\text{E-}005 * x + 0.0062$$

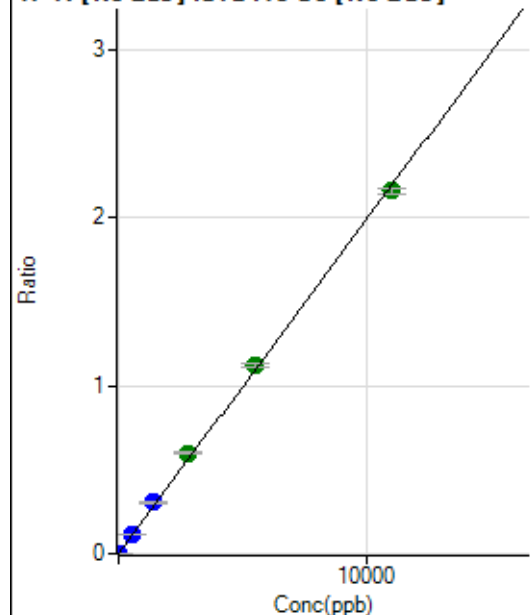
$$R = 0.9999$$

$$DL = 3.333$$

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	177.78	0.0000	P	13.3
2	☐	5.000	4.825	3803.39	0.0010	P	4.1
3	☐	550.000	574.972	415934.20	0.1145	P	0.9
4	☐	1375.000	1532.471	1086262.18	0.3050	P	2.1
5	☐	2750.000	3012.724	2173512.40	0.5995	A	1.5
6	☐	5500.000	5638.339	4209787.68	1.1220	A	1.6
7	☐	11000.000	10844.217	8321846.63	2.1579	A	1.3
8	☐			3795.59	0.0010	P	22.7

$$y = 1.9898E-004 * x + 4.7254E-005$$

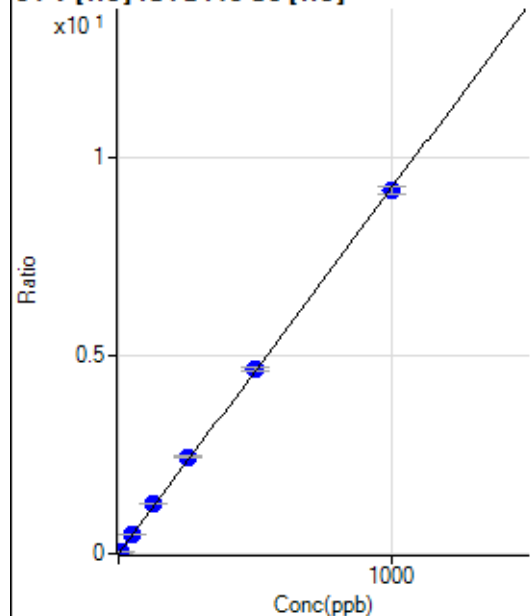
$$R = 0.9995$$

$$DL = 0.09478$$

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	5.55	0.0000	P	68.1
2	☐	5.000	5.028	5331.04	0.0465	P	2.2
3	☐	50.000	50.852	54201.05	0.4695	P	1.3
4	☐	125.000	137.330	142368.64	1.2679	P	2.5
5	☐	250.000	263.497	277128.92	2.4326	P	1.7
6	☐	500.000	505.020	544903.51	4.6624	P	2.4
7	☐	1000.000	992.532	1112859.98	9.1630	P	2.1
8	☐			406.68	0.0032	P	36.7

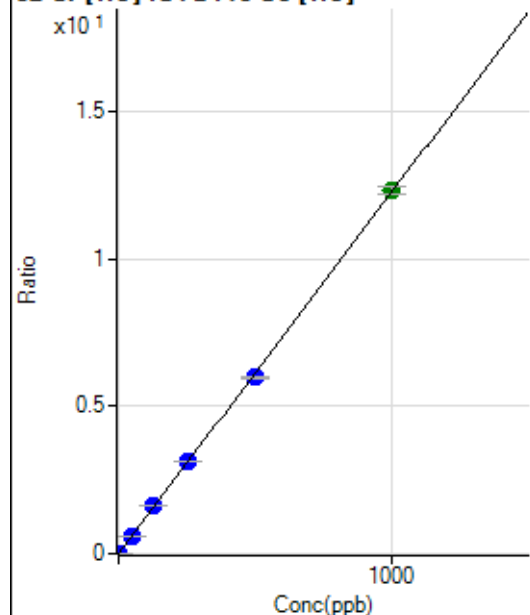
$$y = 0.0092 * x + 4.8083E-005$$

$$R = 0.9998$$

$$DL = 0.01065$$

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	575.57	0.0050	P	7.1
2	☐	2.000	1.902	3248.18	0.0283	P	5.7
3	☐	50.000	49.170	70122.08	0.6074	P	0.5
4	☐	125.000	133.361	184065.48	1.6389	P	0.3
5	☐	250.000	254.353	355583.32	3.1213	P	1.0
6	☐	500.000	487.128	698223.19	5.9733	P	1.7
7	☐	1000.000	1004.344	1495172.32	12.3101	A	2.2
8	☐			4319.58	0.0343	P	1.2

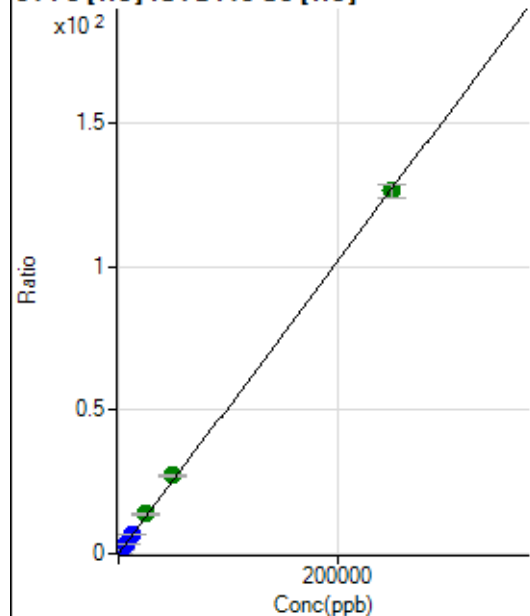
$$y = 0.0123 * x + 0.0050$$

$$R = 0.9998$$

$$DL = 0.08735$$

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	418.53	0.0036	P	7.1
2	☐	50.000	51.886	3439.37	0.0300	P	1.3
3	☐	2500.000	2638.932	155002.57	1.3427	P	0.6
4	☐	6250.000	7131.600	406794.10	3.6224	P	1.4
5	☐	12500.000	13595.256	786287.25	6.9022	P	1.5
6	☐	25000.000	27406.146	1625327.31	13.9103	A	4.2
7	☐	50000.000	53816.424	3317018.51	27.3115	A	2.5
8	☐	250000.00	248917.90	15881765.75	126.3113	A	3.5

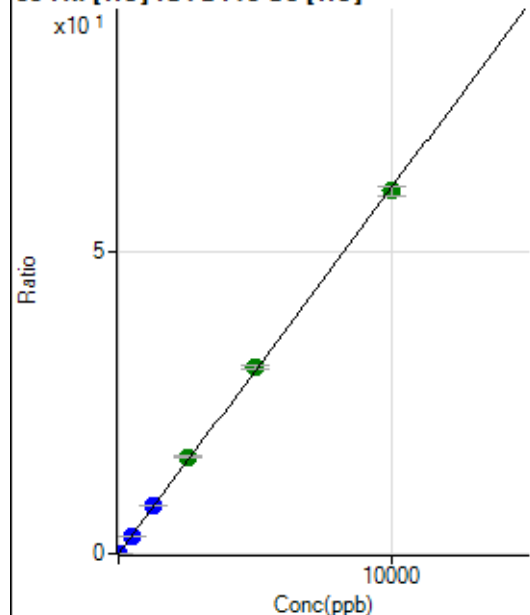
$$y = 5.0743E-004 * x + 0.0036$$

$$R = 0.9999$$

$$DL = 1.528$$

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	48.89	0.0004	P	42.3
2	☐	1.000	0.946	707.80	0.0062	P	2.3
3	☐	500.000	493.552	345834.95	2.9958	P	0.9
4	☐	1250.000	1319.226	899199.85	8.0070	P	1.1
5	☐	2500.000	2645.277	1829067.98	16.0549	A	0.8
6	☐	5000.000	5085.942	3608094.32	30.8676	A	1.5
7	☐	10000.000	9912.379	7306636.49	60.1597	A	2.5
8	☐			4876.52	0.0388	P	16.9

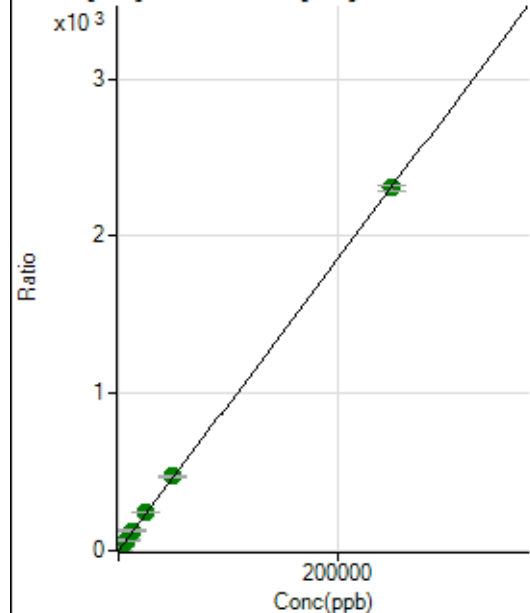
$$y = 0.0061 * x + 4.2667E-004$$

$$R = 0.9998$$

$$DL = 0.08921$$

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	2342.82	0.0204	P	3.0
2	☐	50.000	50.154	55530.19	0.4839	P	0.7
3	☐	2500.000	2718.646	2902622.20	25.1438	A	0.4
4	☐	6250.000	7257.796	7534921.64	67.0907	A	0.9
5	☐	12500.000	13859.945	14594032.85	128.1021	A	0.6
6	☐	25000.000	26571.147	28696885.83	245.5681	A	3.0
7	☐	50000.000	51227.476	57503752.21	473.4208	A	1.5
8	☐	250000.00	249502.01	289978999.0	2,305.704	A	1.4

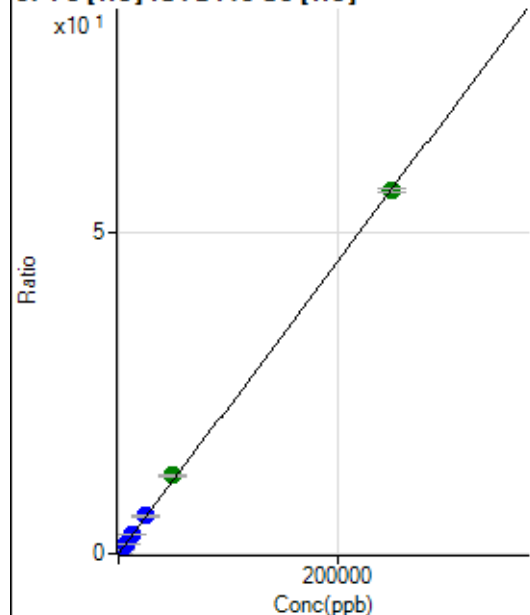
$$y = 0.0092 * x + 0.0204$$

$$R = 1.0000$$

$$DL = 0.2004$$

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	137.04	0.0012	P	9.1
2	☐	50.000	50.132	1440.84	0.0126	P	5.1
3	☐	2500.000	2608.846	68392.86	0.5924	P	1.5
4	☐	6250.000	7057.525	179770.79	1.6006	P	0.3
5	☐	12500.000	13506.997	348856.41	3.0623	P	1.2
6	☐	25000.000	25806.632	683713.55	5.8498	P	2.1
7	☐	50000.000	53602.870	1475570.82	12.1492	A	2.7
8	☐	250000.00	249127.13	7101086.15	56.4610	A	1.1

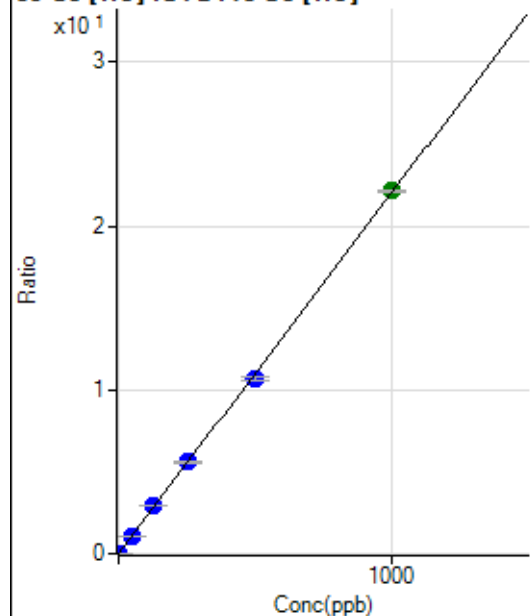
$$y = 2.2663E-004 * x + 0.0012$$

$$R = 0.9999$$

$$DL = 1.439$$

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	42.22	0.0004	P	36.3
2	☐	1.000	0.960	2465.80	0.0215	P	1.5
3	☐	50.000	50.184	127532.80	1.1048	P	1.3
4	☐	125.000	133.183	329188.70	2.9313	P	1.1
5	☐	250.000	253.401	635321.99	5.5770	P	1.3
6	☐	500.000	484.592	1246478.19	10.6648	P	2.2
7	☐	1000.000	1005.822	2688798.68	22.1355	A	0.7
8	☐			6438.18	0.0512	P	4.0

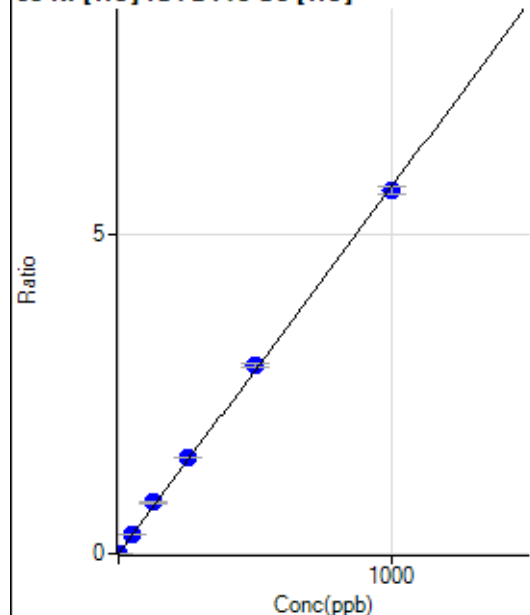
$$y = 0.0220 * x + 3.6828E-004$$

$$R = 0.9998$$

$$DL = 0.01821$$

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	16.67	0.0001	P	72.8
2	☐	1.000	0.996	673.36	0.0059	P	9.4
3	☐	50.000	52.767	35023.12	0.3034	P	2.4
4	☐	125.000	139.179	89847.38	0.8000	P	1.1
5	☐	250.000	263.098	172276.96	1.5122	P	0.1
6	☐	500.000	512.165	344042.33	2.9436	P	2.1
7	☐	1000.000	988.732	690162.63	5.6825	P	2.0
8	☐			2197.97	0.0175	P	5.0

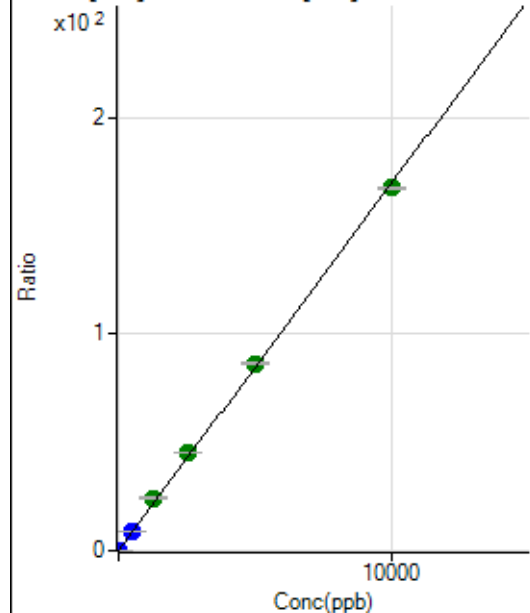
$$y = 0.0057 * x + 1.4536E-004$$

$$R = 0.9997$$

$$DL = 0.05527$$

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	453.35	0.0039	P	10.0
2	☐	2.000	2.101	4537.44	0.0395	P	1.5
3	☐	500.000	509.563	996959.45	8.6361	P	0.7
4	☐	1250.000	1437.364	2734926.63	24.3535	A	1.0
5	☐	2500.000	2682.171	5176854.65	45.4410	A	0.3
6	☐	5000.000	5104.138	10107364.29	86.4701	A	1.7
7	☐	10000.000	9878.490	20331110.12	167.3496	A	0.8
8	☐			13024.51	0.1036	P	13.7

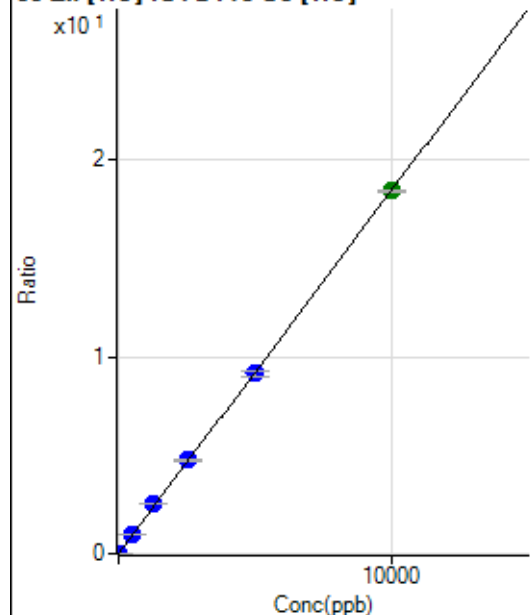
$$y = 0.0169 * x + 0.0039$$

$$R = 0.9996$$

$$DL = 0.06977$$

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	0.0011	P	21.9
2	☐	2.000	2.098	566.68	0.0049	P	11.1
3	☐	500.000	508.822	108361.33	0.9387	P	1.3
4	☐	1250.000	1359.537	281469.29	2.5063	P	0.9
5	☐	2500.000	2580.893	541911.58	4.7569	P	1.5
6	☐	5000.000	4954.226	1067059.38	9.1303	P	2.6
7	☐	10000.000	9988.530	2235981.43	18.4072	A	0.5
8	☐			3700.53	0.0294	P	6.9

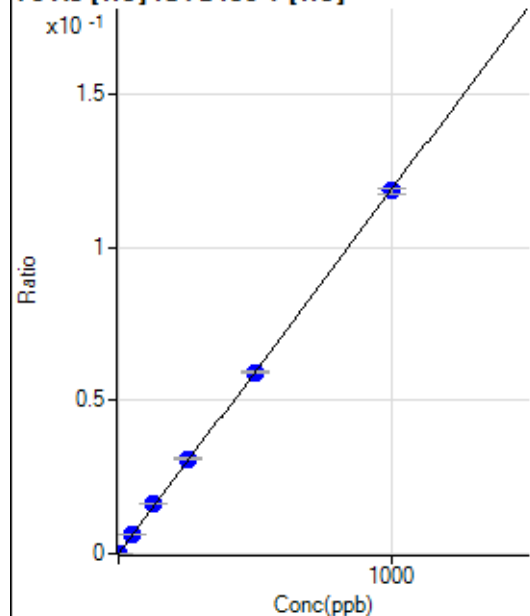
$$y = 0.0018 * x + 0.0011$$

$$R = 0.9999$$

$$DL = 0.3824$$

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	3.33	0.0000	P	33.8
2	☐	1.000	1.159	144.69	0.0001	P	4.5
3	☐	50.000	51.167	6221.01	0.0061	P	1.0
4	☐	125.000	135.453	16179.53	0.0161	P	0.8
5	☐	250.000	261.272	31325.35	0.0310	P	0.7
6	☐	500.000	498.486	62297.27	0.0592	P	1.6
7	☐	1000.000	996.574	126668.93	0.1183	P	1.6
8	☐			84.01	0.0001	P	31.0

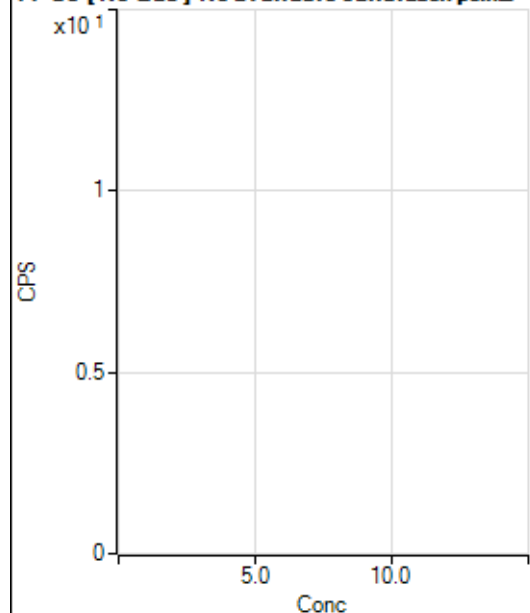
$$y = 1.1874E-004 * x + 3.2576E-006$$

$$R = 0.9999$$

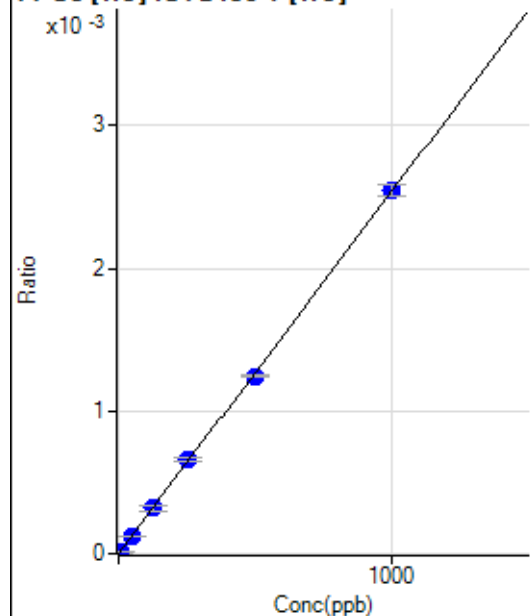
$$DL = 0.02782$$

Weight: <None>

Min Conc: 0

77 Se [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			120.12		P	16.7
2	☐			490.52		P	20.4
3	☐			3347.18		P	9.3
4	☐			8381.18		P	2.0
5	☐			15922.14		P	0.8
6	☐			31290.45		P	5.8
7	☐			61001.30		P	2.0
8	☐			156.83		P	9.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.2
2	☐	5.000	3.433	10.00	0.0000	P	58.2
3	☐	50.000	47.505	124.45	0.0001	P	7.4
4	☐	125.000	126.327	323.34	0.0003	P	13.3
5	☐	250.000	259.982	666.69	0.0007	P	3.5
6	☐	500.000	490.437	1310.08	0.0012	P	1.2
7	☐	1000.000	1002.252	2721.40	0.0025	P	3.1
8	☐			4.45	0.0000	P	86.6

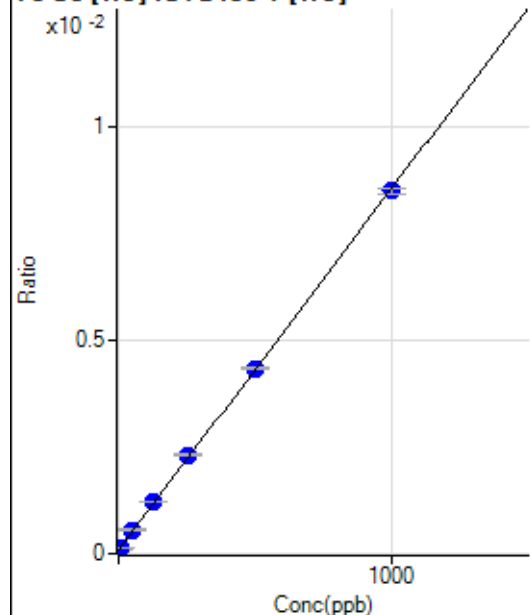
$$y = 2.5357E-006 * x + 1.0743E-006$$

$$R = 0.9999$$

$$DL = 2.201$$

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	92.68	0.0001	P	11.0
2	☐	5.000	4.781	134.68	0.0001	P	1.6
3	☐	50.000	54.219	561.74	0.0005	P	8.5
4	☐	125.000	132.525	1217.51	0.0012	P	1.5
5	☐	250.000	262.722	2332.77	0.0023	P	2.1
6	☐	500.000	502.797	4566.88	0.0043	P	1.0
7	☐	1000.000	994.271	9089.19	0.0085	P	1.6
8	☐			100.34	0.0001	P	11.6

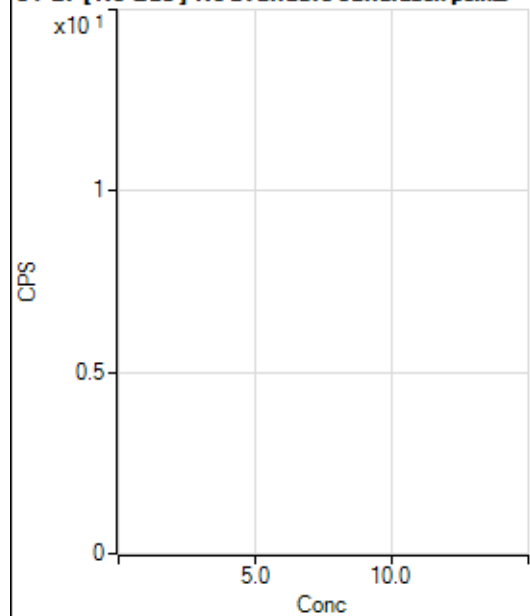
$$y = 8.4484\text{E-}006 * x + 9.0811\text{E-}005$$

$$R = 0.9999$$

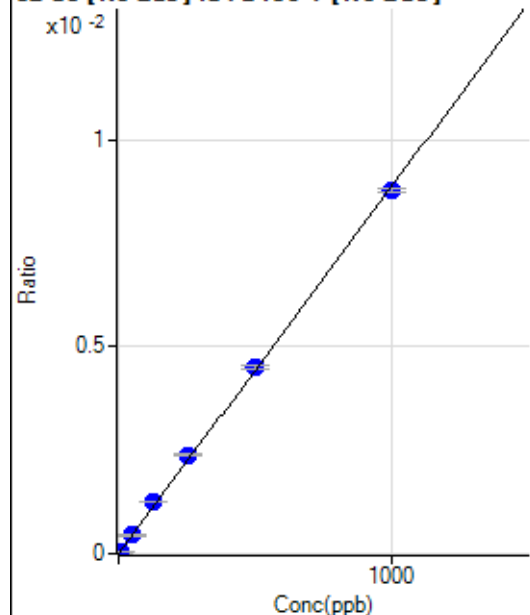
$$DL = 3.543$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			13687.59		P	2.8
2	☐			13597.26		P	3.4
3	☐			13236.68		P	4.3
4	☐			13383.59		P	5.8
5	☐			12759.03		P	2.7
6	☐			12672.20		P	1.4
7	☐			13440.35		P	3.7
8	☐			14268.70		P	1.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-102.88	0.0000	P	-243.
2	☐	5.000	4.908	291.22	0.0000	P	74.6
3	☐	50.000	50.509	3901.28	0.0004	P	4.8
4	☐	125.000	140.634	10828.95	0.0012	P	1.9
5	☐	250.000	269.594	21065.95	0.0024	P	1.0
6	☐	500.000	508.053	41776.10	0.0045	P	2.2
7	☐	1000.000	989.096	82721.91	0.0088	P	1.1
8	☐			-95.71	0.0000	P	-390.

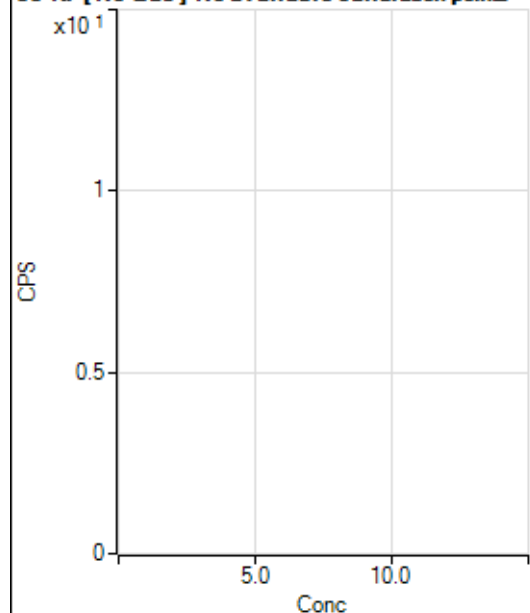
$$y = 8.8817E-006 * x - 1.1475E-005$$

R = 0.9996

DL = 9.446

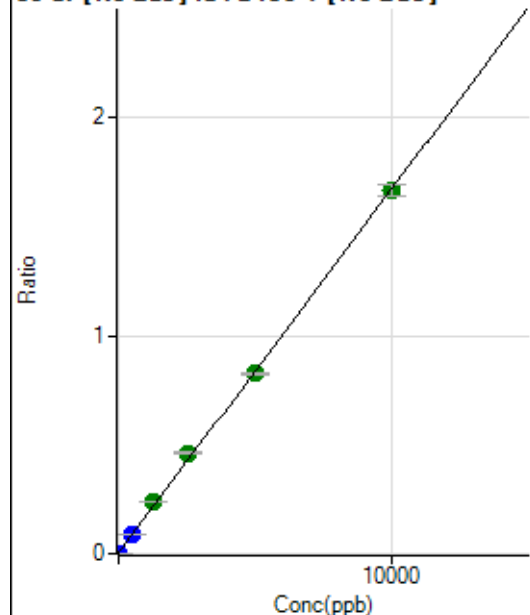
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			23153.61		P	0.8
2	☐			23455.73		P	1.5
3	☐			23362.68		P	0.6
4	☐			23154.04		P	1.0
5	☐			23081.00		P	0.5
6	☐			22880.69		P	1.2
7	☐			23359.76		P	0.8
8	☐			23884.74		P	0.4

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36289.37	0.0041	P	0.5
2	☐	1.000	0.534	38038.56	0.0042	P	1.9
3	☐	500.000	510.778	797139.53	0.0893	P	1.1
4	☐	1250.000	1392.850	2069627.09	0.2365	A	1.6
5	☐	2500.000	2742.989	4082634.94	0.4619	A	1.1
6	☐	5000.000	4932.261	7678971.09	0.8273	A	1.6
7	☐	10000.000	9954.727	15703049.48	1.6656	A	3.1
8	☐			50706.72	0.0054	P	5.4

$$y = 1.6690E-004 * x + 0.0041$$

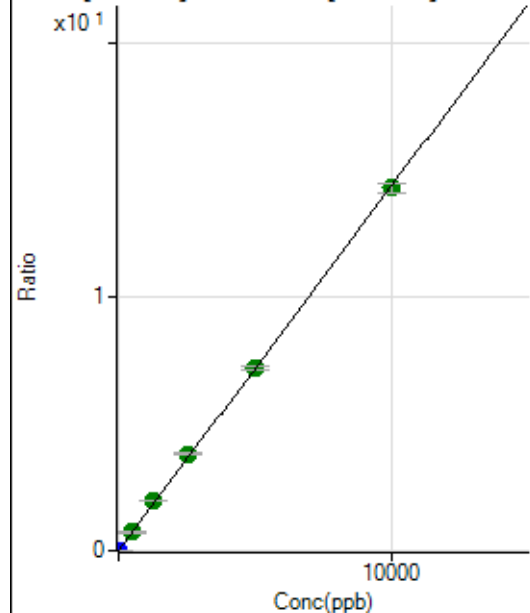
$$R = 0.9996$$

$$DL = 0.3443$$

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	183.34	0.0000	P	24.0
2	☐	1.000	0.978	13025.92	0.0014	P	2.4
3	☐	500.000	503.368	6451171.98	0.7229	A	1.2
4	☐	1250.000	1361.912	17110840.31	1.9558	A	2.3
5	☐	2500.000	2653.255	33679217.42	3.8103	A	1.1
6	☐	5000.000	5000.730	66666052.88	7.1815	A	2.1
7	☐	10000.000	9947.164	134705741.9	14.2850	A	2.4
8	☐			114319.83	0.0121	P	17.2

$$y = 0.0014 * x + 2.0596E-005$$

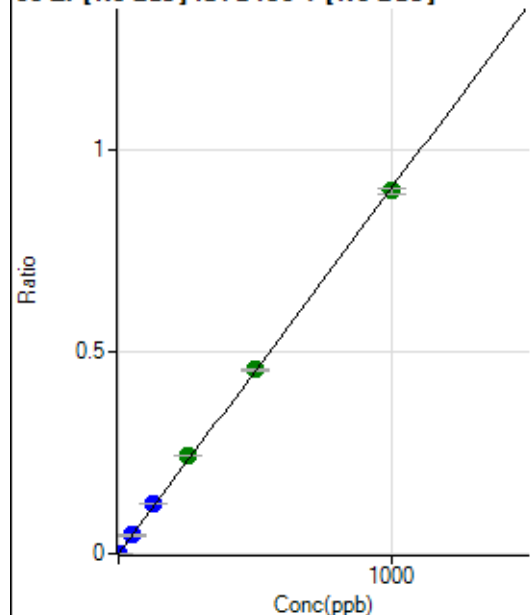
$$R = 0.9998$$

$$DL = 0.01031$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	422.24	0.0000	P	4.8
2	☐	1.000	0.947	8255.48	0.0009	P	2.3
3	☐	50.000	50.085	404547.15	0.0453	P	1.9
4	☐	125.000	136.726	1081875.35	0.1237	P	3.0
5	☐	250.000	267.910	2141734.68	0.2423	A	0.2
6	☐	500.000	502.527	4218595.37	0.4544	A	0.4
7	☐	1000.000	992.789	8464352.27	0.8977	A	1.3
8	☐			6390.84	0.0007	P	12.9

$$y = 9.0419\text{E-}004 * x + 4.7407\text{E-}005$$

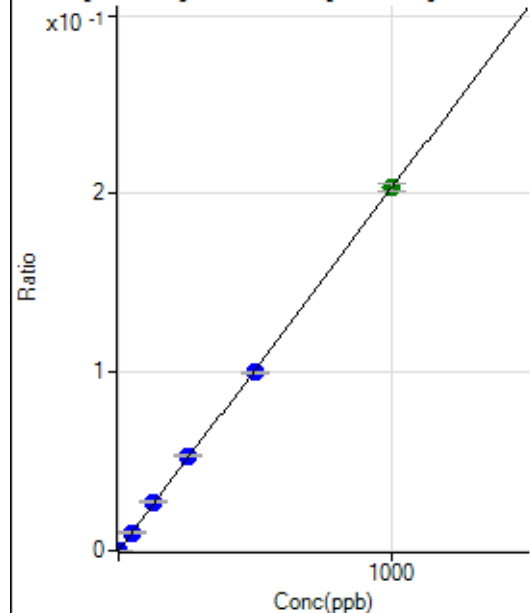
$$R = 0.9998$$

$$DL = 0.007561$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	27.0
2	☐	1.000	0.905	1744.60	0.0002	P	5.9
3	☐	50.000	50.353	91355.45	0.0102	P	0.5
4	☐	125.000	134.371	238910.52	0.0273	P	1.5
5	☐	250.000	260.422	467705.90	0.0529	P	2.0
6	☐	500.000	490.843	925788.04	0.0997	P	0.5
7	☐	1000.000	1000.784	1917216.95	0.2033	A	2.1
8	☐			1341.78	0.0001	P	10.2

$$y = 2.0316\text{E-}004 * x + 7.1718\text{E-}006$$

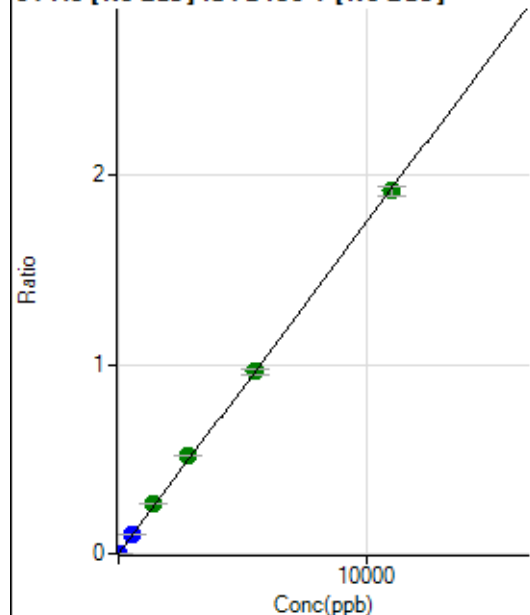
$$R = 0.9998$$

$$DL = 0.02862$$

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	147.23	0.0000	P	35.7
2	☐	5.000	5.884	9575.79	0.0010	P	3.5
3	☐	550.000	555.228	868935.11	0.0974	P	1.6
4	☐	1375.000	1503.795	2306846.53	0.2637	A	2.9
5	☐	2750.000	2963.289	4593052.58	0.5196	A	0.3
6	☐	5500.000	5484.058	8924667.04	0.9616	A	2.7
7	☐	11000.000	10938.288	18086133.04	1.9179	A	2.3
8	☐			9449.30	0.0010	P	26.9

$$y = 1.7534\text{E-}004 * x + 1.6520\text{E-}005$$

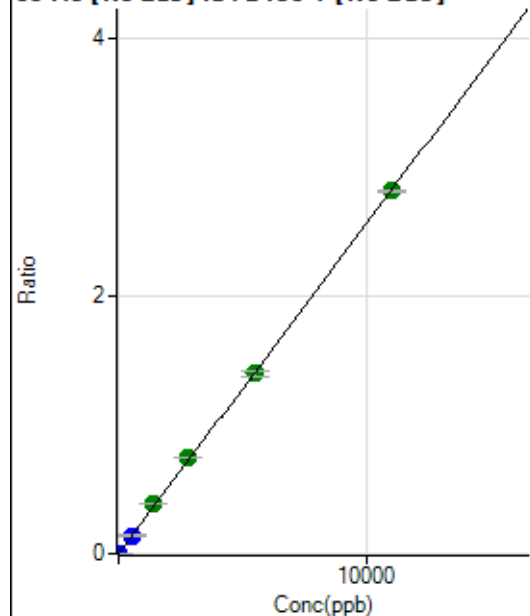
$$R = 0.9997$$

$$DL = 0.1009$$

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	30.55	0.0000	P	16.1
2	☐	5.000	4.962	11666.34	0.0013	P	0.7
3	☐	550.000	549.873	1259311.66	0.1411	P	2.0
4	☐	1375.000	1497.637	3362514.01	0.3843	A	1.7
5	☐	2750.000	2887.711	6550512.60	0.7410	A	0.3
6	☐	5500.000	5444.667	12968665.83	1.3972	A	2.5
7	☐	11000.000	10977.915	26563793.30	2.8171	A	0.3
8	☐			12035.05	0.0013	P	43.5

$$y = 2.5662\text{E-}004 * x + 3.4316\text{E-}006$$

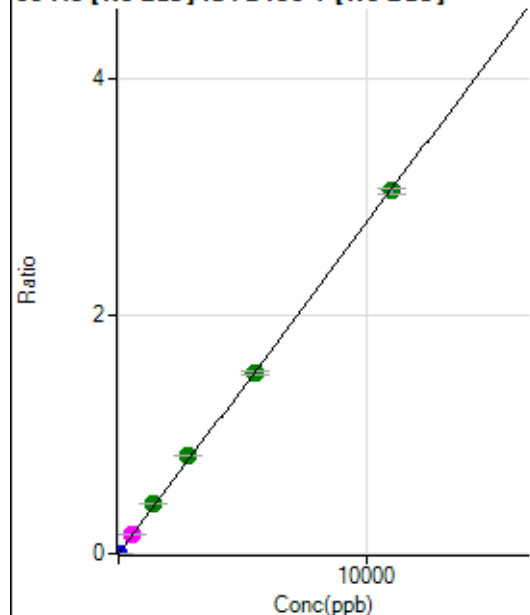
$$R = 0.9998$$

$$DL = 0.006461$$

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	91.67	0.0000	P	16.1
2	☐	5.000	4.959	12711.71	0.0014	P	3.9
3	☐	550.000	559.748	1391401.21	0.1559	M	2.0
4	☐	1375.000	1505.668	3669156.55	0.4194	A	3.0
5	☐	2750.000	2952.613	7269710.49	0.8225	A	1.4
6	☐	5500.000	5463.406	14124532.78	1.5219	A	2.9
7	☐	11000.000	10950.822	28760340.57	3.0504	A	1.4
8	☐			18991.93	0.0020	P	17.9

$$y = 2.7855E-004 * x + 1.0295E-005$$

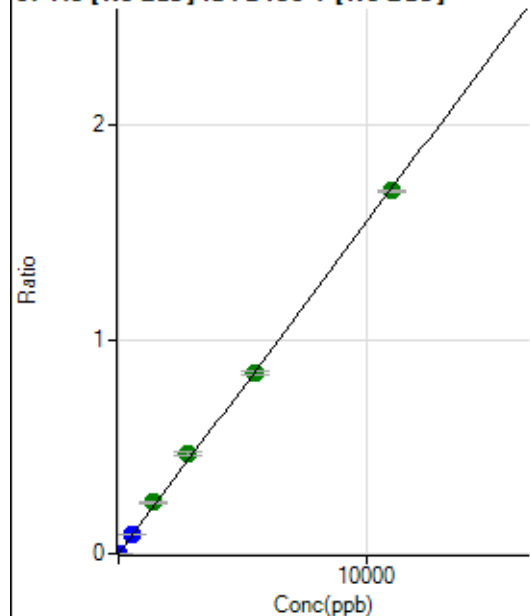
$$R = 0.9998$$

$$DL = 0.01786$$

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	11.11	0.0000	P	86.6
2	☐	5.000	4.876	6918.59	0.0008	P	4.2
3	☐	550.000	561.389	776728.71	0.0870	P	2.4
4	☐	1375.000	1537.135	2084960.16	0.2383	A	3.2
5	☐	2750.000	3010.205	4124707.38	0.4668	A	3.9
6	☐	5500.000	5469.484	7871588.29	0.8481	A	2.2
7	☐	11000.000	10929.370	15979271.88	1.6947	A	0.2
8	☐			7206.06	0.0008	P	32.0

$$y = 1.5506E-004 * x + 1.2432E-006$$

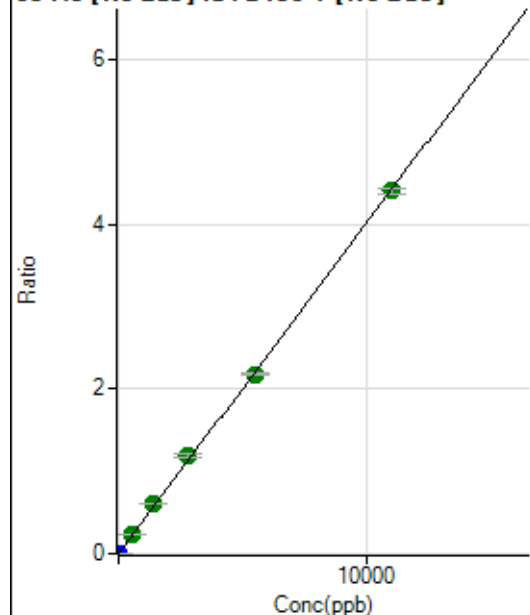
$$R = 0.9996$$

$$DL = 0.02083$$

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	50.00	0.0000	P	16.2
2	☐	5.000	4.942	18223.54	0.0020	P	2.5
3	☐	550.000	572.824	2057313.65	0.2306	A	2.2
4	☐	1375.000	1513.784	5330431.06	0.6093	A	2.1
5	☐	2750.000	2965.736	10548149.63	1.1936	A	4.0
6	☐	5500.000	5428.284	20278625.45	2.1848	A	1.9
7	☐	11000.000	10963.435	41604957.53	4.4125	A	1.4
8	☐			18831.33	0.0020	P	40.3

$$y = 4.0248\text{E-}004 * x + 5.6103\text{E-}006$$

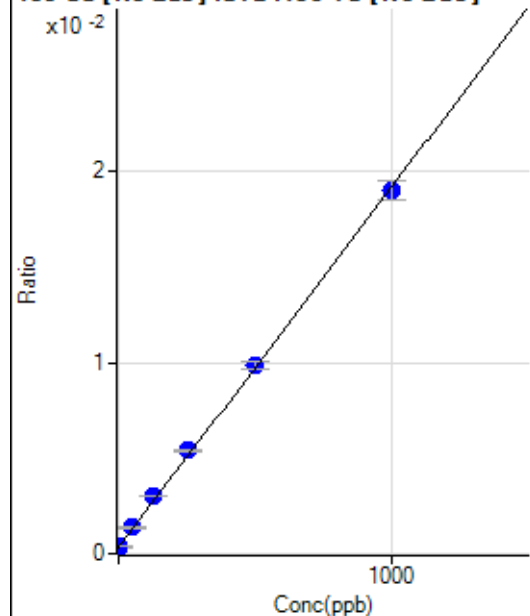
$$R = 0.9997$$

$$DL = 0.006787$$

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	1627.92	0.0003	P	6.4
2	☐	1.000	1.671	1833.51	0.0004	P	1.4
3	☐	50.000	55.509	6974.19	0.0014	P	8.6
4	☐	125.000	142.758	15117.04	0.0030	P	0.5
5	☐	250.000	269.441	28218.49	0.0054	P	1.0
6	☐	500.000	505.168	53373.78	0.0099	P	4.5
7	☐	1000.000	990.060	104869.38	0.0190	P	5.5
8	☐			1875.18	0.0003	P	9.1

$$y = 1.8862\text{E-}005 * x + 3.2424\text{E-}004$$

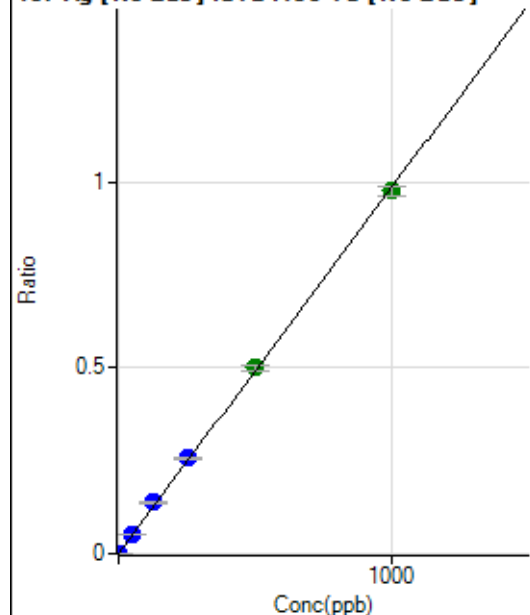
$$R = 0.9997$$

$$DL = 3.286$$

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	122.23	0.0000	P	11.5
2	☐	1.000	1.015	5281.71	0.0010	P	3.1
3	☐	50.000	52.144	261839.12	0.0514	P	5.2
4	☐	125.000	139.445	688977.75	0.1375	P	1.4
5	☐	250.000	260.361	1339724.41	0.2568	P	1.8
6	☐	500.000	508.400	2715814.30	0.5014	A	3.1
7	☐	1000.000	991.297	5397924.69	0.9775	A	2.9
8	☐			2061.32	0.0004	P	2.3

$$y = 9.8609E-004 * x + 2.4362E-005$$

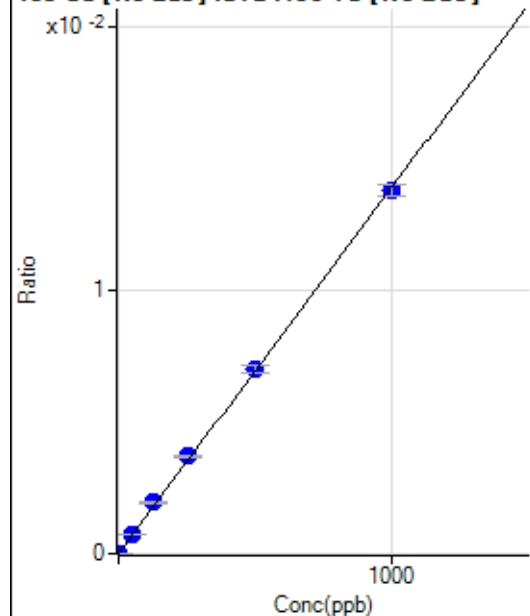
$$R = 0.9998$$

$$DL = 0.008515$$

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	22.22	0.0000	P	54.7
2	☐	1.000	0.864	84.72	0.0000	P	44.2
3	☐	50.000	52.141	3706.11	0.0007	P	4.0
4	☐	125.000	140.948	9814.73	0.0020	P	2.9
5	☐	250.000	266.110	19284.53	0.0037	P	0.8
6	☐	500.000	504.189	37902.15	0.0070	P	3.8
7	☐	1000.000	991.778	75986.30	0.0138	P	3.1
8	☐			80.56	0.0000	P	16.8

$$y = 1.3870E-005 * x + 4.4442E-006$$

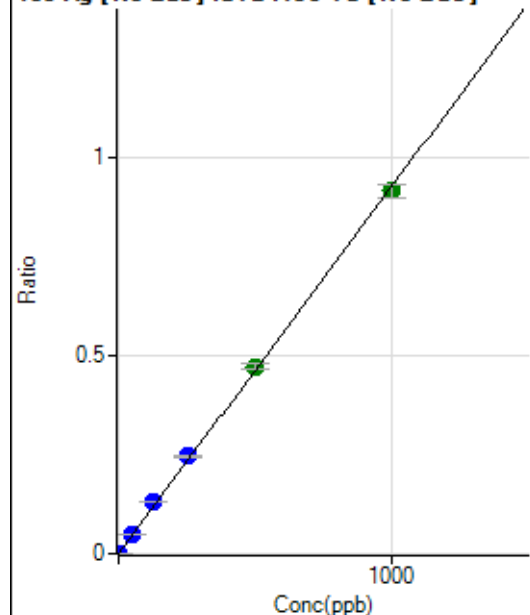
$$R = 0.9998$$

$$DL = 0.5259$$

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	91.67	0.0000	P	22.8
2	☐	1.000	0.969	4712.05	0.0009	P	8.3
3	☐	50.000	52.182	245928.02	0.0483	P	3.0
4	☐	125.000	140.298	650299.53	0.1298	P	0.9
5	☐	250.000	265.136	1279832.13	0.2453	P	1.8
6	☐	500.000	510.865	2560447.04	0.4726	A	2.6
7	☐	1000.000	988.762	5049885.44	0.9146	A	3.7
8	☐			1969.64	0.0004	P	6.4

$$y = 9.2502\text{E-}004 * x + 1.8215\text{E-}005$$

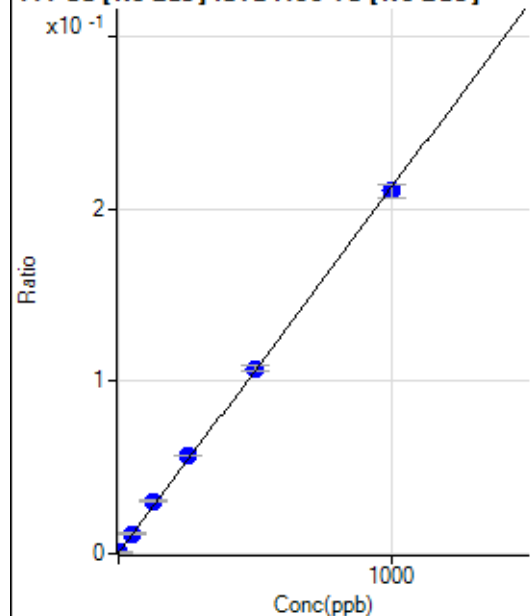
$$R = 0.9997$$

$$DL = 0.0135$$

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	1682.09	0.0003	P	6.0
2	☐	1.000	1.095	2923.84	0.0006	P	5.4
3	☐	50.000	53.135	59091.75	0.0116	P	3.9
4	☐	125.000	142.661	153260.61	0.0306	P	2.5
5	☐	250.000	267.017	297341.99	0.0570	P	0.3
6	☐	500.000	505.411	582599.44	0.1075	P	2.4
7	☐	1000.000	990.676	1162027.90	0.2105	P	3.9
8	☐			2398.81	0.0004	P	11.8

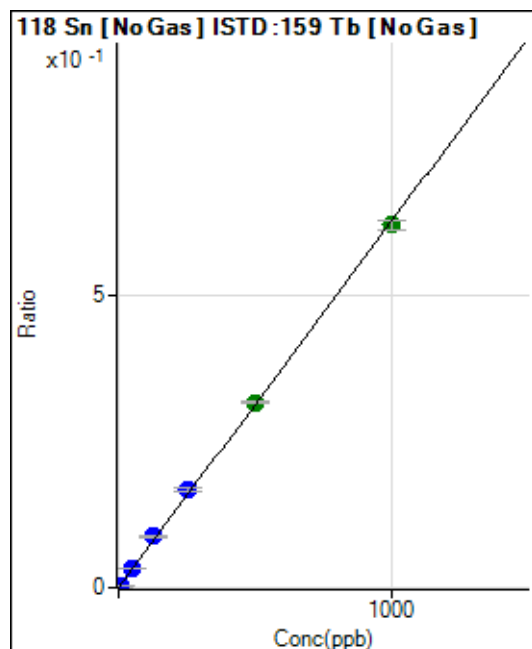
$$y = 2.1212\text{E-}004 * x + 3.3504\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.2822$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	516.69	0.0001	P	7.6
2	☐	5.000	4.962	16557.67	0.0032	P	3.5
3	☐	50.000	52.918	169412.69	0.0333	P	3.4
4	☐	125.000	139.556	438742.48	0.0876	P	1.9
5	☐	250.000	268.598	878837.38	0.1685	P	2.9
6	☐	500.000	506.311	1719859.54	0.3174	A	1.8
7	☐	1000.000	990.230	3427707.11	0.6207	A	2.8
8	☐			3250.51	0.0006	P	18.5

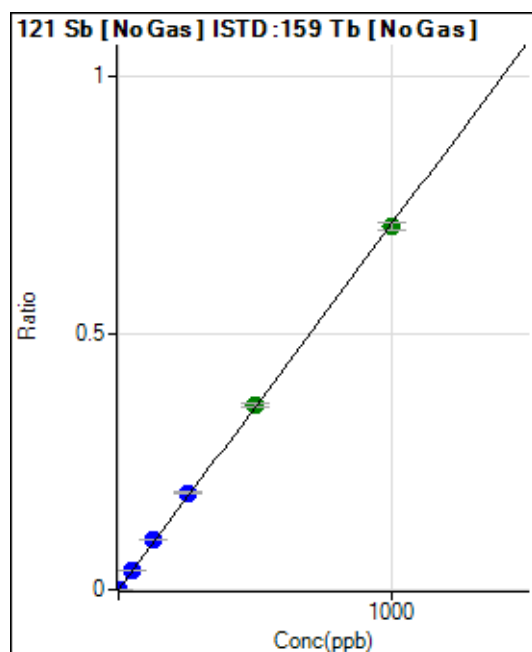
$$y = 6.2676\text{E-}004 * x + 1.0292\text{E-}004$$

$$R = 0.9997$$

$$DL = 0.03724$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	65.6
2	☐	2.000	1.920	7082.58	0.0014	P	5.9
3	☐	50.000	51.643	187397.19	0.0368	P	3.4
4	☐	125.000	137.218	489762.61	0.0978	P	2.4
5	☐	250.000	264.060	981612.44	0.1881	P	2.1
6	☐	500.000	504.395	1947003.30	0.3594	A	1.9
7	☐	1000.000	992.678	3905653.82	0.7073	A	2.3
8	☐			3864.62	0.0007	P	15.1

$$y = 7.1247\text{E-}004 * x + 6.6170\text{E-}006$$

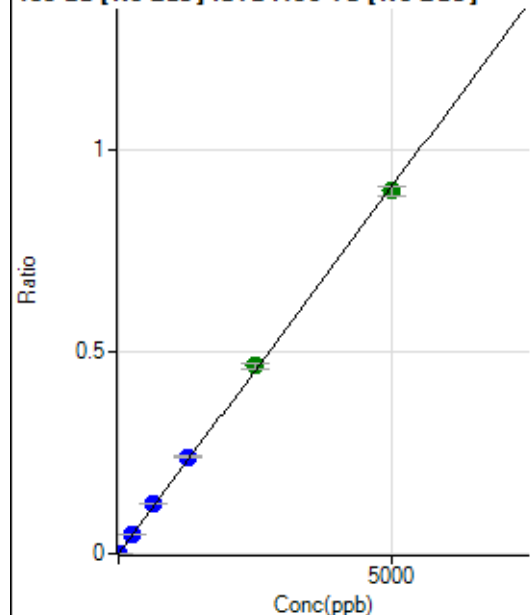
$$R = 0.9998$$

$$DL = 0.01829$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.89	0.0000	P	91.1
2	☐	10.000	9.743	9117.20	0.0018	P	1.5
3	☐	250.000	257.422	237665.99	0.0467	P	2.9
4	☐	625.000	687.539	624420.46	0.1246	P	1.3
5	☐	1250.000	1319.874	1248227.32	0.2393	P	2.9
6	☐	2500.000	2557.751	2511702.88	0.4637	A	2.7
7	☐	5000.000	4945.468	4950518.95	0.8965	A	2.4
8	☐			2742.07	0.0005	P	25.5

$$y = 1.8127\text{E-}004 * x + 2.7777\text{E-}006$$

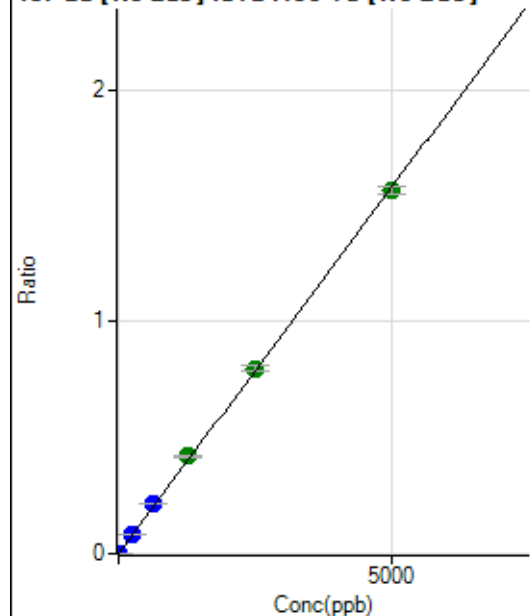
$$R = 0.9997$$

$$DL = 0.04188$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	30.56	0.0000	P	40.5
2	☐	10.000	9.796	15962.69	0.0031	P	2.3
3	☐	250.000	259.286	416707.81	0.0818	P	3.3
4	☐	625.000	688.107	1087934.89	0.2172	P	1.2
5	☐	1250.000	1334.565	2197557.14	0.4212	A	1.7
6	☐	2500.000	2532.160	4329567.46	0.7991	A	3.0
7	☐	5000.000	4954.426	8634492.38	1.5635	A	2.2
8	☐			5042.88	0.0009	P	20.5

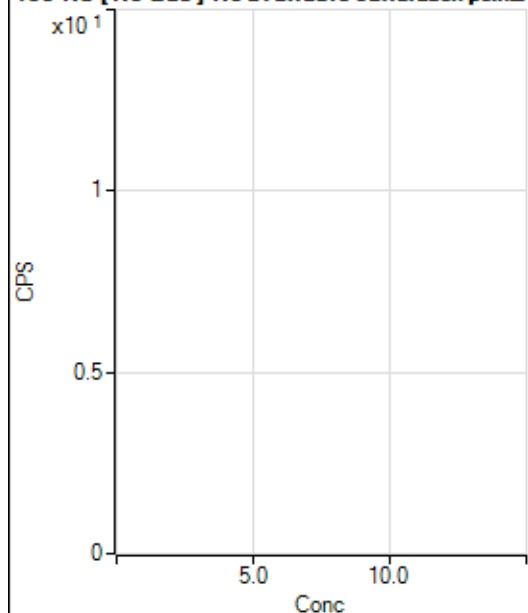
$$y = 3.1558\text{E-}004 * x + 6.0590\text{E-}006$$

$$R = 0.9998$$

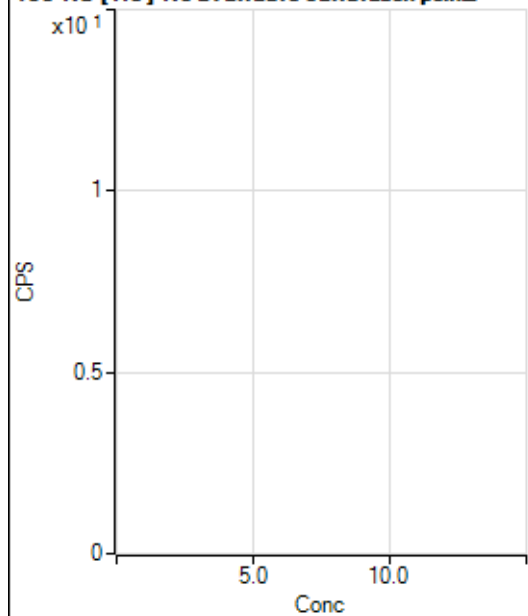
$$DL = 0.02331$$

Weight: <None>

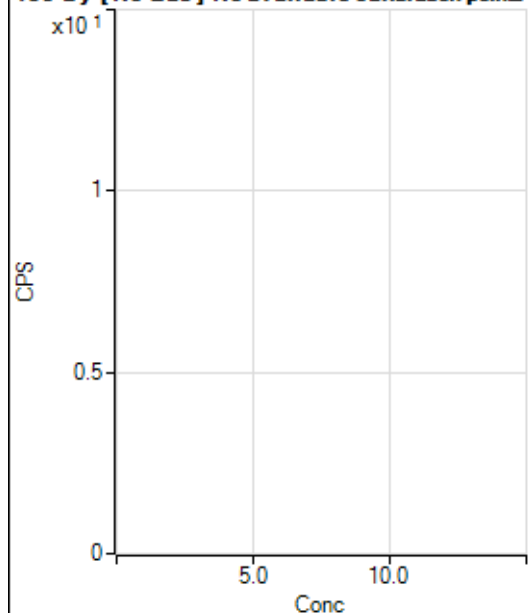
Min Conc: 0

150 Nd [No Gas] No available calibration points

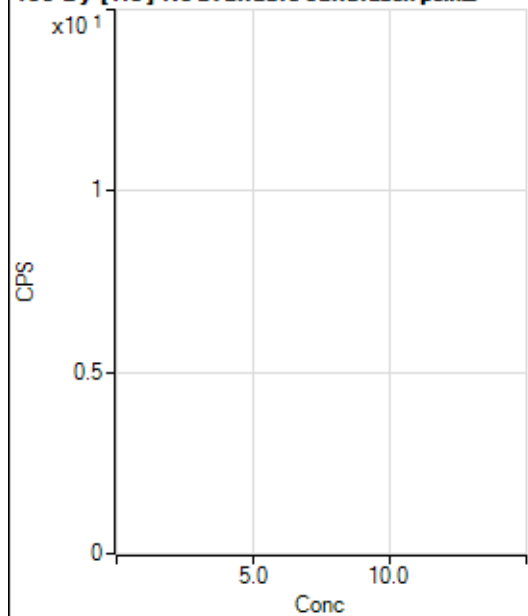
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	43.3
2	☐			6.67		P	100.0
3	☐			8.89		P	43.3
4	☐			22.22		P	17.3
5	☐			42.22		P	18.2
6	☐			84.45		P	19.9
7	☐			220.01		P	32.1
8	☐			64.45		P	26.0

150 Nd [He] No available calibration points

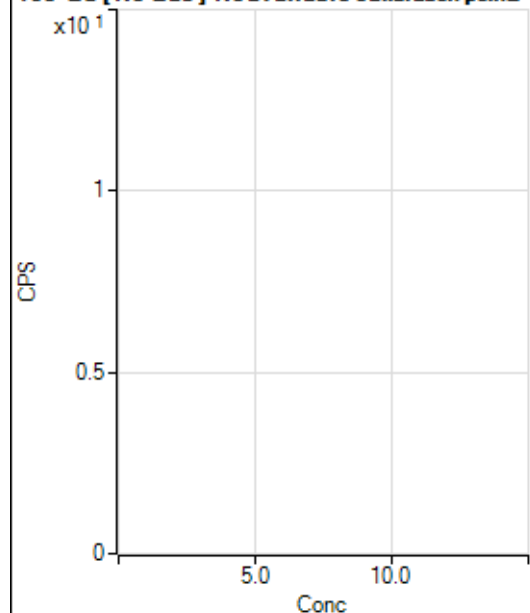
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			1.11		P	173.2
4	☐			2.22		P	173.2
5	☐			4.44		P	114.6
6	☐			8.89		P	21.6
7	☐			12.22		P	83.3
8	☐			17.78		P	28.6

156 Dy [No Gas] No available calibration points

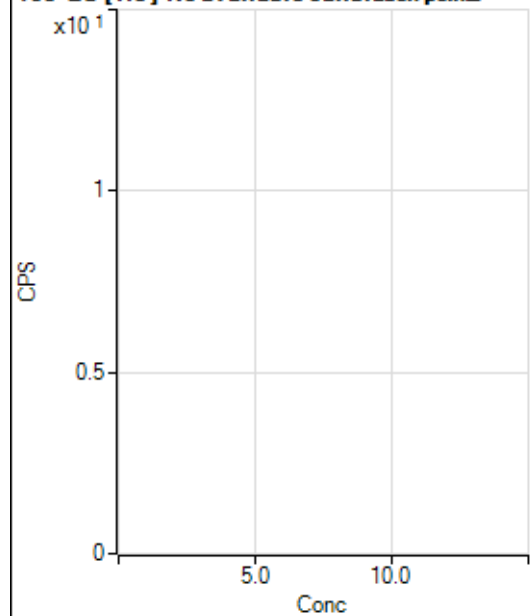
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	173.2
2	☐			13.89		P	91.6
3	☐			25.00		P	100.0
4	☐			30.55		P	15.7
5	☐			77.78		P	44.6
6	☐			69.45		P	6.9
7	☐			186.12		P	9.3
8	☐			744.49		P	14.1

156 Dy [He] No available calibration points

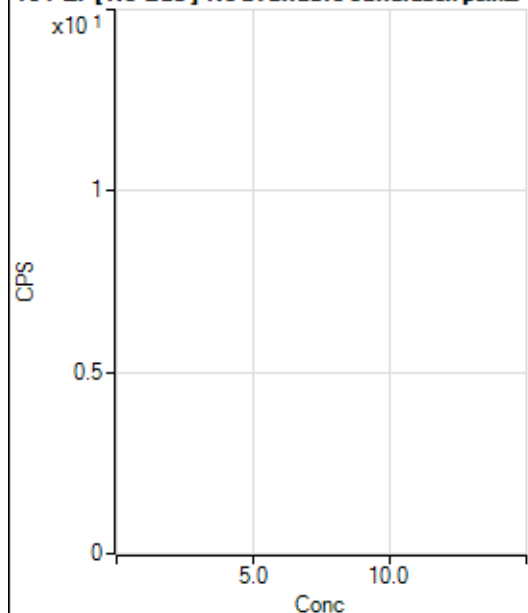
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			16.67		P	40.0
5	☐			28.89		P	13.3
6	☐			45.55		P	8.5
7	☐			123.34		P	15.0
8	☐			330.01		P	17.5

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

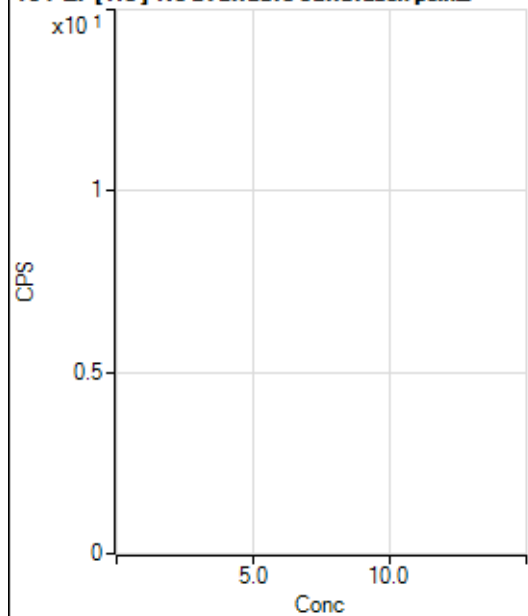
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	45.8
2	☐			41.66		P	34.6
3	☐			55.56		P	17.3
4	☐			61.11		P	20.8
5	☐			88.89		P	51.6
6	☐			127.78		P	16.4
7	☐			169.45		P	18.6
8	☐			600.03		P	20.0

160 Gd [He] No available calibration points

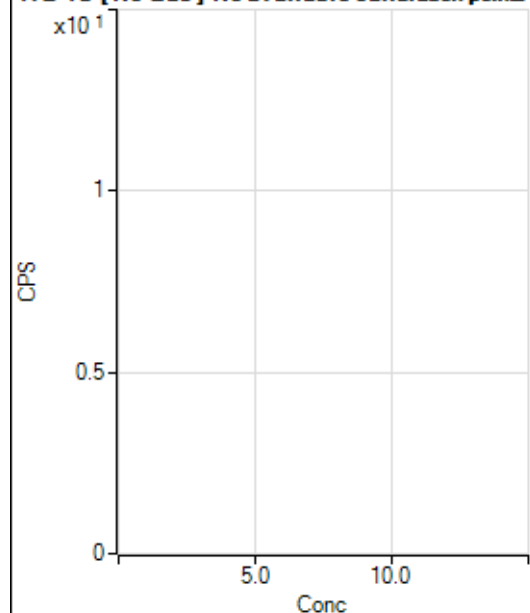
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.67		P	47.2
2	☐			41.11		P	4.7
3	☐			47.78		P	40.9
4	☐			51.11		P	22.9
5	☐			60.00		P	24.2
6	☐			80.00		P	7.2
7	☐			123.34		P	11.8
8	☐			431.12		P	11.6

164 Er [No Gas] No available calibration points

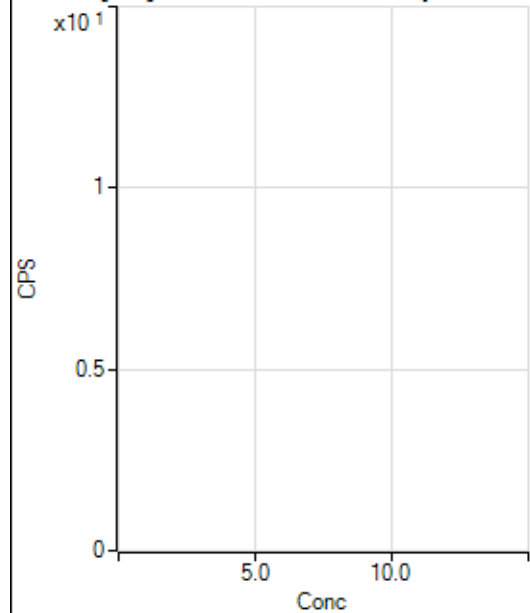
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	66.7
2	☐			41.67		P	40.0
3	☐			47.22		P	62.0
4	☐			63.89		P	15.1
5	☐			61.11		P	28.4
6	☐			55.56		P	22.9
7	☐			69.45		P	36.7
8	☐			125.01		P	30.5

164 Er [He] No available calibration points

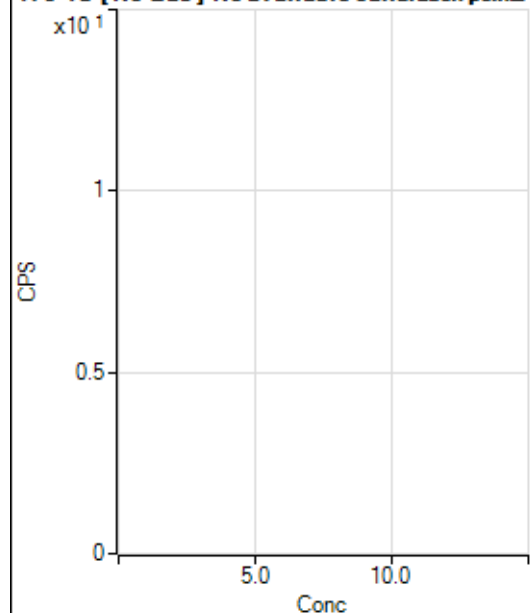
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	66.1
2	☐			21.11		P	9.1
3	☐			17.78		P	10.8
4	☐			20.00		P	44.1
5	☐			20.00		P	16.7
6	☐			38.89		P	4.9
7	☐			45.56		P	22.4
8	☐			60.00		P	9.6

172 Yb [No Gas] No available calibration points

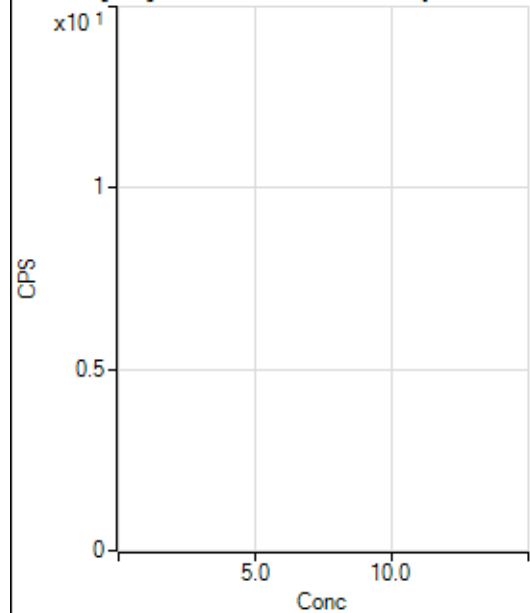
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	86.6
2	☐			13.89		P	124.9
3	☐			27.78		P	34.6
4	☐			22.22		P	57.3
5	☐			8.33		P	173.2
6	☐			19.44		P	99.0
7	☐			38.89		P	44.6
8	☐			86.11		P	20.1

172 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			9.26		P	69.2
2	☐			9.26		P	69.2
3	☐			18.52		P	17.3
4	☐			7.41		P	43.2
5	☐			12.96		P	107.9
6	☐			29.63		P	47.2
7	☐			14.82		P	21.7
8	☐			38.89		P	24.7

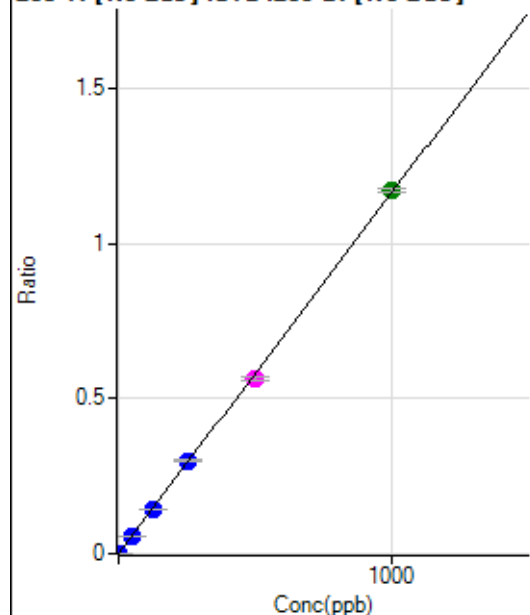
176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			563.92		P	10.5
2	☐			536.14		P	17.1
3	☐			1041.73		P	1.6
4	☐			2194.69		P	2.9
5	☐			4142.44		P	9.1
6	☐			7143.81		P	2.1
7	☐			13977.22		P	2.8
8	☐			525.02		P	16.1

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2967.06		P	2.3
2	☐			2876.31		P	2.6
3	☐			3274.55		P	3.4
4	☐			3822.85		P	7.8
5	☐			4925.08		P	4.0
6	☐			6881.56		P	3.1
7	☐			11343.95		P	3.8
8	☐			3200.45		P	11.6

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	316.68	0.0001	P	20.3
2	☐	1.000	0.899	3192.16	0.0012	P	6.5
3	☐	50.000	47.724	150036.88	0.0556	P	0.5
4	☐	125.000	124.228	393830.67	0.1445	P	1.4
5	☐	250.000	257.855	806219.45	0.2998	P	3.3
6	☐	500.000	485.418	1607326.00	0.5643	M	1.8
7	☐	1000.000	1005.538	3291295.37	1.1689	A	1.0
8	☐			1497.38	0.0006	P	25.9

$$y = 0.0012 * x + 1.1633E-004$$

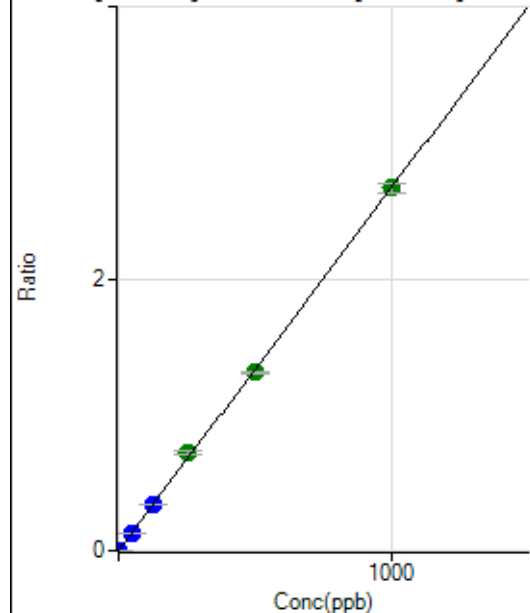
$$R = 0.9998$$

$$DL = 0.06101$$

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	769.49	0.0003	P	27.0
2	☐	1.000	0.906	7430.13	0.0027	P	3.0
3	☐	50.000	49.478	357427.99	0.1325	P	3.0
4	☐	125.000	127.865	931429.20	0.3419	P	2.8
5	☐	250.000	268.812	1931348.55	0.7184	A	3.9
6	☐	500.000	491.069	3736898.26	1.3122	A	0.8
7	☐	1000.000	999.430	7518296.52	2.6702	A	2.7
8	☐			3945.31	0.0015	P	25.2

$$y = 0.0027 * x + 2.8270E-004$$

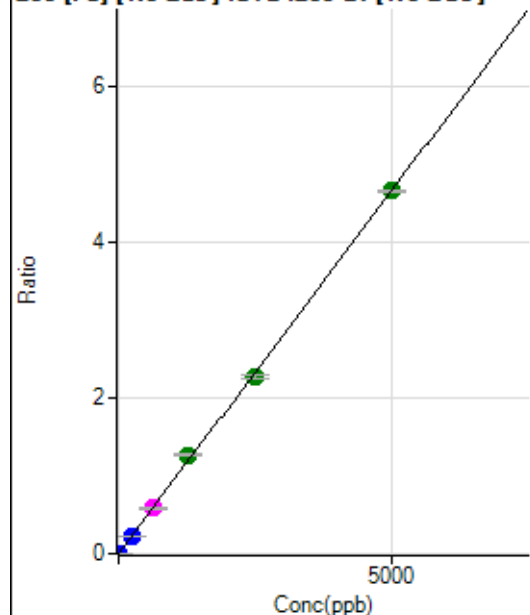
$$R = 0.9997$$

$$DL = 0.08583$$

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	935.24	0.0003	P	13.8
2	☐	1.000	0.901	3250.46	0.0012	P	6.1
3	☐	250.000	239.313	602328.38	0.2232	P	1.3
4	☐	625.000	635.405	1612780.00	0.5920	M	4.1
5	☐	1250.000	1359.944	3406121.29	1.2667	A	2.6
6	☐	2500.000	2443.857	6480594.47	2.2760	A	2.8
7	☐	5000.000	4999.819	13111039.64	4.6561	A	0.7
8	☐			9027.68	0.0034	P	19.2

$$y = 9.3118\text{E-}004 * x + 3.4338\text{E-}004$$

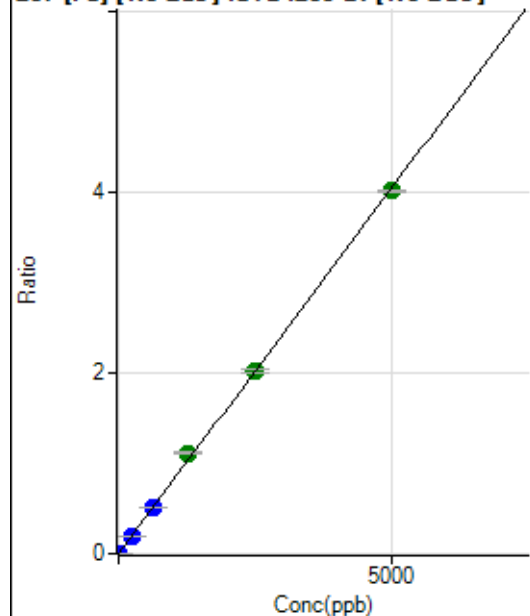
$$R = 0.9996$$

$$DL = 0.1529$$

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	785.22	0.0003	P	5.5
2	☐	1.000	0.925	2846.66	0.0010	P	4.3
3	☐	250.000	240.603	525354.85	0.1947	P	3.0
4	☐	625.000	636.876	1403009.97	0.5149	P	2.2
5	☐	1250.000	1377.204	2994222.18	1.1131	A	1.0
6	☐	2500.000	2504.188	5762640.29	2.0237	A	2.4
7	☐	5000.000	4965.090	11297198.40	4.0121	A	0.5
8	☐			8195.55	0.0031	P	22.7

$$y = 8.0800\text{E-}004 * x + 2.8822\text{E-}004$$

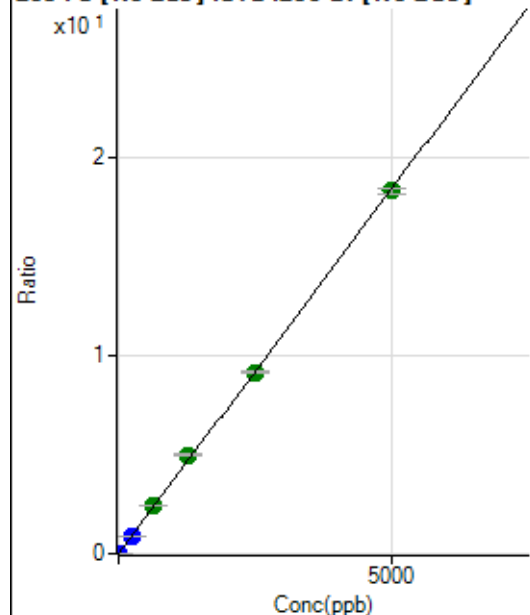
$$R = 0.9996$$

$$DL = 0.05919$$

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	3635.46	0.0013	P	3.5
2	☐	1.000	0.909	12867.51	0.0047	P	4.9
3	☐	250.000	242.119	2410856.51	0.8933	P	1.0
4	☐	625.000	653.201	6561991.99	2.4078	A	1.7
5	☐	1250.000	1357.644	13455764.98	5.0029	A	1.8
6	☐	2500.000	2490.403	26131126.63	9.1761	A	1.4
7	☐	5000.000	4974.756	51605034.02	18.3285	A	1.4
8	☐			37148.77	0.0141	P	19.7

$$y = 0.0037 * x + 0.0013$$

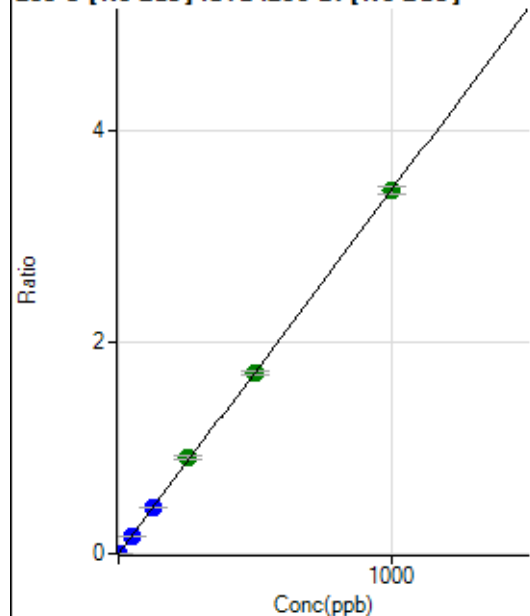
$$R = 0.9997$$

$$DL = 0.03842$$

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	11.11	0.0000	P	86.6
2	☐	1.000	0.943	8931.22	0.0033	P	5.7
3	☐	50.000	48.535	451288.89	0.1672	P	1.1
4	☐	125.000	126.212	1184723.43	0.4348	P	2.5
5	☐	250.000	266.218	2465812.69	0.9171	A	3.4
6	☐	500.000	495.749	4863903.84	1.7079	A	1.7
7	☐	1000.000	997.993	9678851.17	3.4381	A	2.1
8	☐			2961.84	0.0011	P	46.6

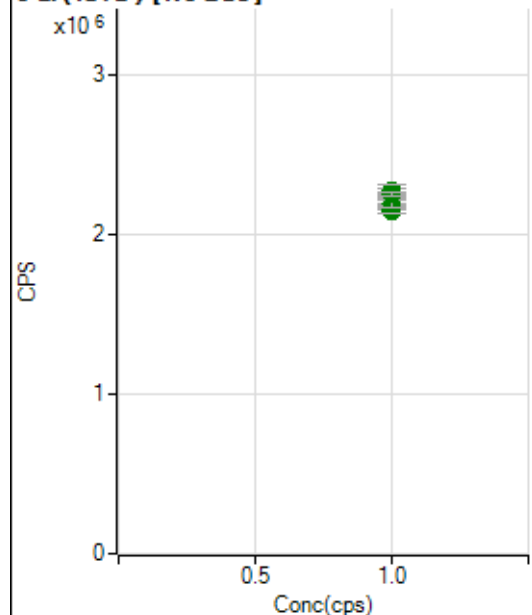
$$y = 0.0034 * x + 4.0907E-006$$

$$R = 0.9998$$

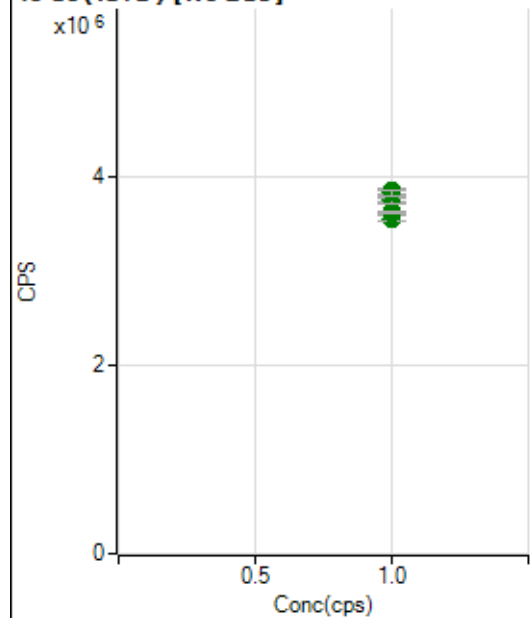
$$DL = 0.003085$$

Weight: <None>

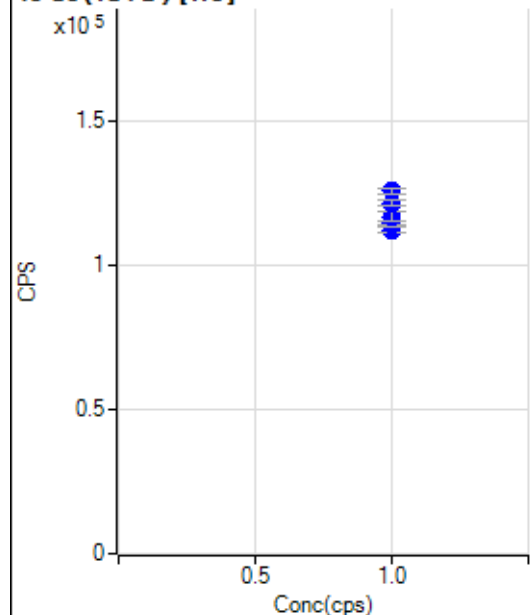
Min Conc: 0

6 Li (ISTD) [No Gas]

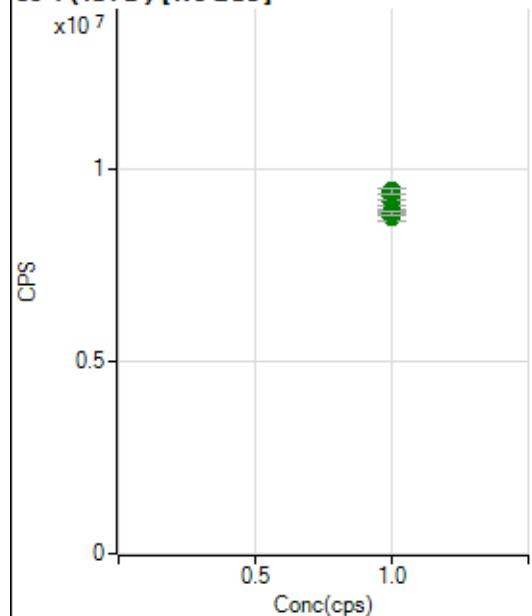
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2150828.89		A	1.2
2	☐	1.000		2217248.29		A	2.4
3	☐	1.000		2162389.16		A	2.4
4	☐	1.000		2177541.98		A	4.1
5	☐	1.000		2199514.83		A	2.0
6	☐	1.000		2276416.42		A	1.3
7	☐	1.000		2275741.66		A	3.6
8	☐	1.000		2258832.49		A	0.8

45 Sc (ISTD) [No Gas]

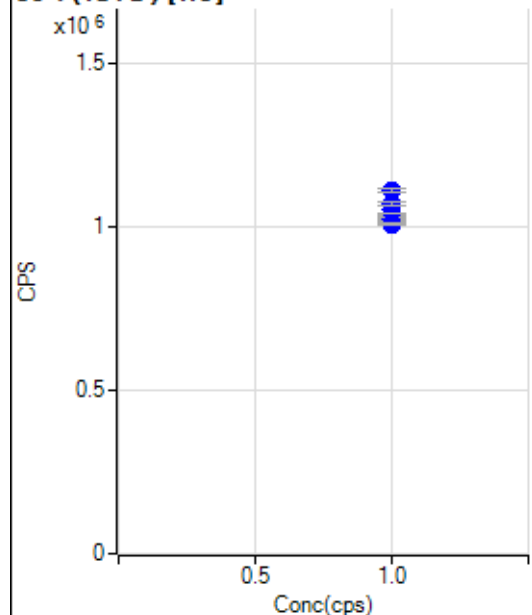
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3758706.06		A	1.1
2	☐	1.000		3775220.25		A	1.6
3	☐	1.000		3634124.63		A	0.7
4	☐	1.000		3562528.97		A	1.9
5	☐	1.000		3625685.12		A	0.9
6	☐	1.000		3752722.58		A	1.5
7	☐	1.000		3857098.73		A	1.7
8	☐	1.000		3836355.50		A	1.7

45 Sc (ISTD) [He]

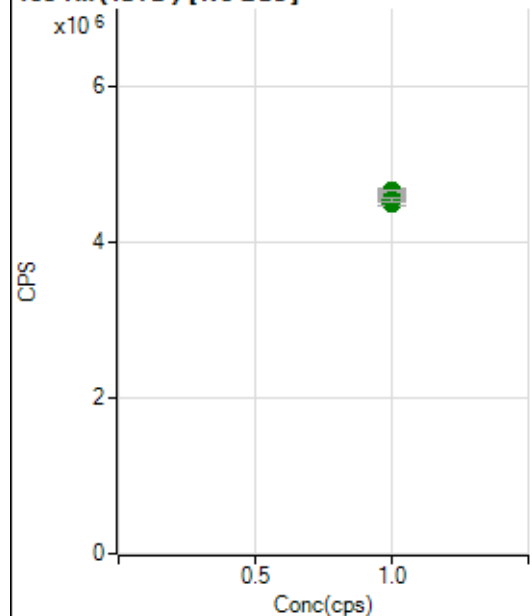
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		114910.64		P	1.1
2	☐	1.000		114757.39		P	1.2
3	☐	1.000		115440.56		P	0.4
4	☐	1.000		112310.75		P	1.3
5	☐	1.000		113925.27		P	0.7
6	☐	1.000		116921.49		P	2.7
7	☐	1.000		121478.69		P	1.6
8	☐	1.000		125780.39		P	1.5

89 Y (ISTD) [No Gas]

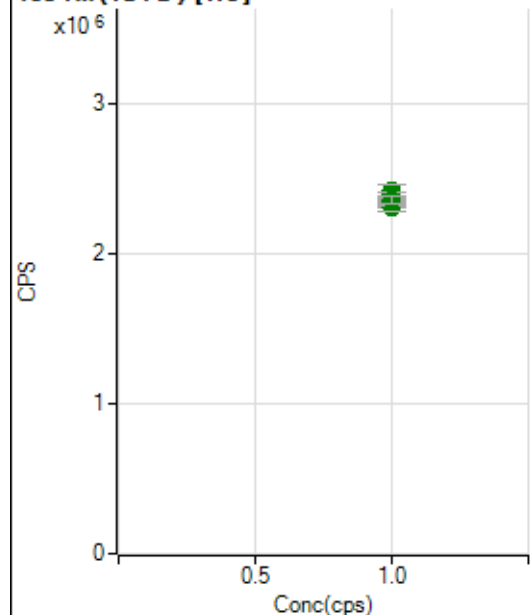
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8907594.31		A	0.6
2	☐	1.000		9138450.07		A	1.6
3	☐	1.000		8924479.87		A	1.1
4	☐	1.000		8750865.22		A	1.7
5	☐	1.000		8839695.49		A	1.2
6	☐	1.000		9283556.60		A	1.5
7	☐	1.000		9429255.28		A	1.2
8	☐	1.000		9441365.76		A	1.8

89 Y(ISTD) [He]

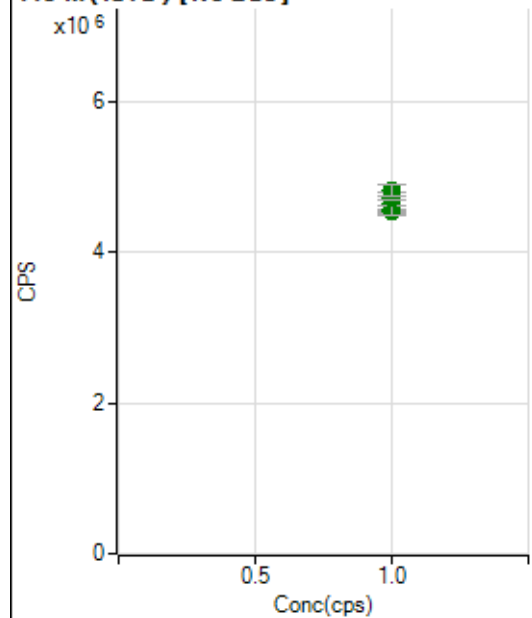
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1020594.32		P	1.3
2	☐	1.000		1026415.56		P	1.1
3	☐	1.000		1023383.69		P	1.4
4	☐	1.000		1005813.56		P	0.4
5	☐	1.000		1009667.95		P	0.3
6	☐	1.000		1052720.50		P	2.2
7	☐	1.000		1070609.65		P	1.5
8	☐	1.000		1109253.16		P	1.0

103 Rh(ISTD) [No Gas]

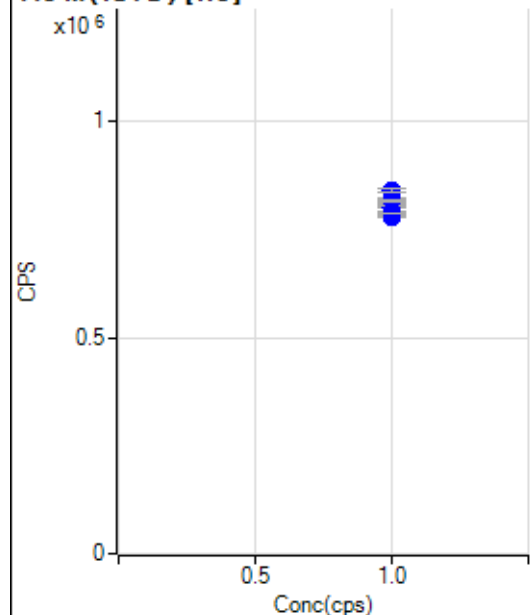
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4555416.77		A	1.6
2	☐	1.000		4645120.33		A	2.1
3	☐	1.000		4653307.44		A	2.0
4	☐	1.000		4512604.61		A	1.2
5	☐	1.000		4511001.40		A	1.5
6	☐	1.000		4607460.04		A	0.3
7	☐	1.000		4668015.47		A	0.5
8	☐	1.000		4555861.73		A	1.0

103 Rh (ISTD) [He]

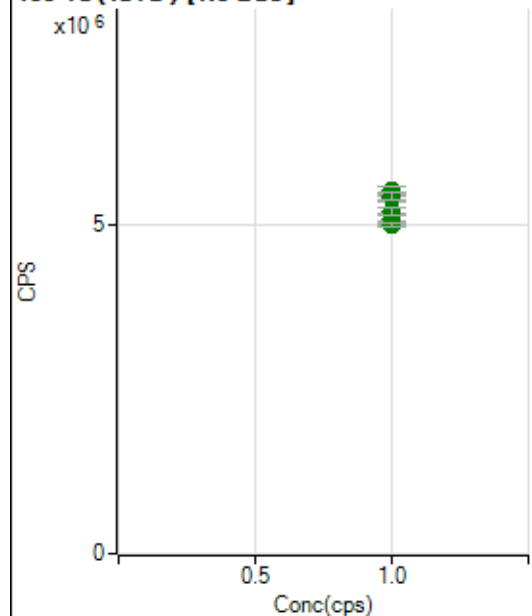
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2338937.33		A	2.2
2	☐	1.000		2369392.74		A	2.2
3	☐	1.000		2368356.87		A	1.1
4	☐	1.000		2308188.27		A	1.6
5	☐	1.000		2349168.14		A	1.9
6	☐	1.000		2423129.15		A	3.1
7	☐	1.000		2401058.13		A	1.6
8	☐	1.000		2359571.34		A	2.3

115 In (ISTD) [No Gas]

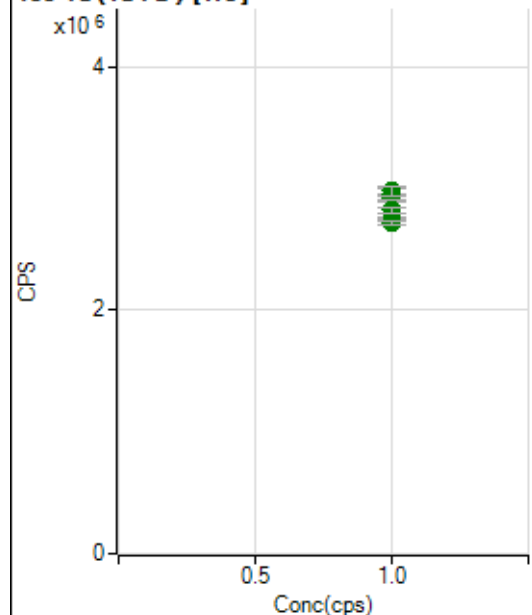
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4569796.11		A	2.4
2	☐	1.000		4641485.93		A	1.7
3	☐	1.000		4535887.28		A	0.4
4	☐	1.000		4538206.77		A	1.4
5	☐	1.000		4557541.56		A	2.7
6	☐	1.000		4712141.45		A	1.0
7	☐	1.000		4738663.43		A	2.1
8	☐	1.000		4807512.67		A	3.2

115 In (ISTD) [He]

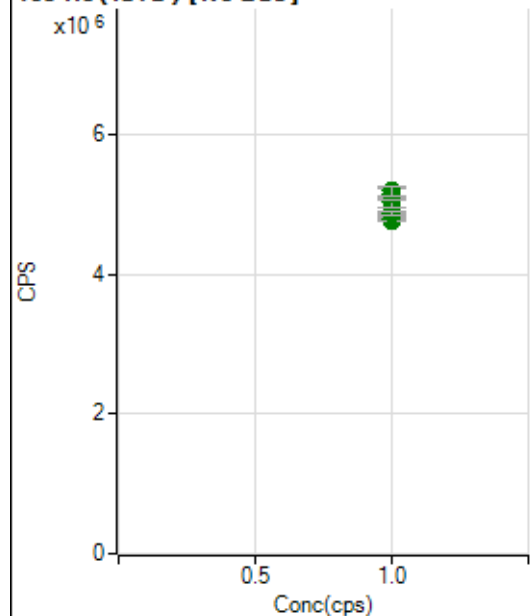
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		801084.81		P	0.4
2	☐	1.000		805785.91		P	0.9
3	☐	1.000		799258.86		P	1.6
4	☐	1.000		780243.63		P	0.4
5	☐	1.000		787512.16		P	0.4
6	☐	1.000		815171.38		P	2.4
7	☐	1.000		816871.70		P	0.8
8	☐	1.000		839431.17		P	1.0

159 Tb (ISTD) [No Gas]

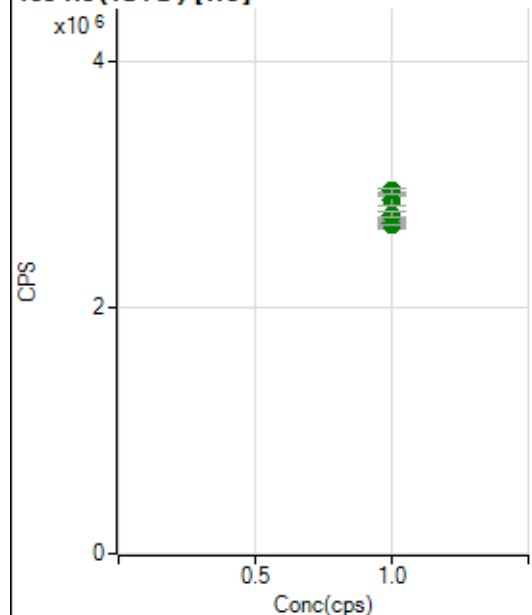
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5021424.02		A	1.6
2	☐	1.000		5153748.71		A	0.2
3	☐	1.000		5096099.51		A	3.5
4	☐	1.000		5010369.26		A	1.4
5	☐	1.000		5218971.10		A	2.1
6	☐	1.000		5419310.75		A	2.2
7	☐	1.000		5524170.89		A	2.3
8	☐	1.000		5445494.02		A	1.9

159 Tb (ISTD) [He]

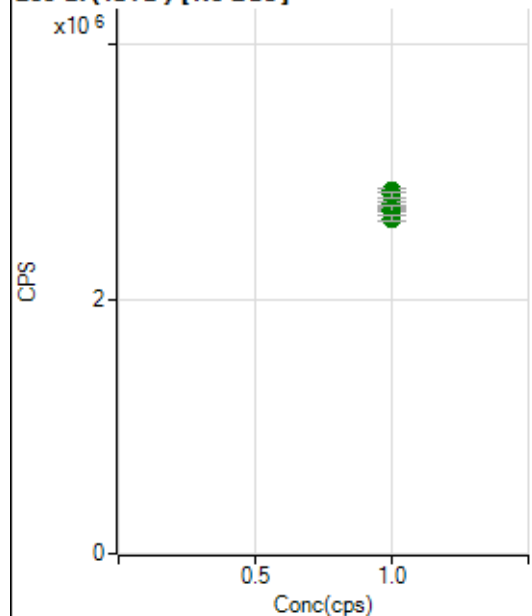
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2747716.56		A	1.1
2	☐	1.000		2712381.26		A	1.1
3	☐	1.000		2738890.29		A	0.8
4	☐	1.000		2720112.53		A	1.1
5	☐	1.000		2818113.40		A	1.9
6	☐	1.000		2924094.99		A	2.2
7	☐	1.000		2950701.41		A	2.9
8	☐	1.000		2978566.90		A	2.6

165 Ho (ISTD) [No Gas]

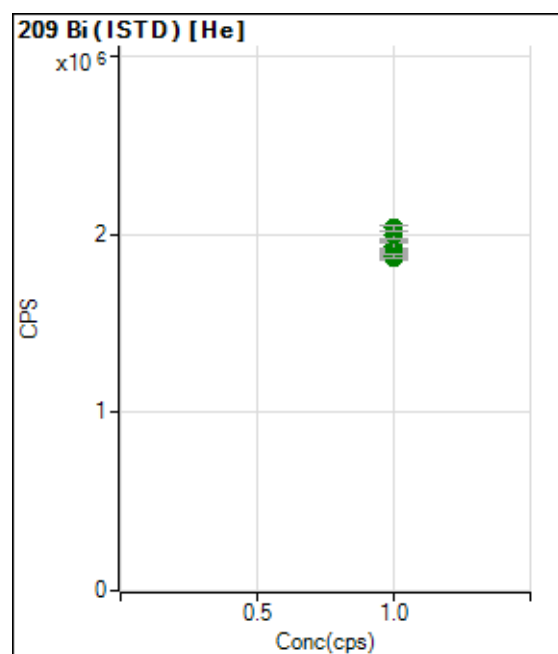
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4781229.71		A	1.0
2	☐	1.000		4844072.76		A	2.0
3	☐	1.000		4813980.66		A	2.1
4	☐	1.000		4786577.62		A	1.3
5	☐	1.000		4876835.79		A	1.6
6	☐	1.000		5035906.06		A	2.4
7	☐	1.000		5142111.62		A	3.2
8	☐	1.000		5199781.54		A	2.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2674658.17		A	2.3
2	☐	1.000		2708011.66		A	0.9
3	☐	1.000		2671690.40		A	1.1
4	☐	1.000		2689958.79		A	1.3
5	☐	1.000		2752423.68		A	1.8
6	☐	1.000		2866805.93		A	3.0
7	☐	1.000		2946036.83		A	1.2
8	☐	1.000		2943450.86		A	1.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2723867.25		A	0.5
2	☐	1.000		2750337.14		A	3.3
3	☐	1.000		2699027.60		A	1.3
4	☐	1.000		2725965.41		A	2.9
5	☐	1.000		2690253.83		A	2.7
6	☐	1.000		2847929.89		A	1.1
7	☐	1.000		2815713.81		A	1.5
8	☐	1.000		2633041.64		A	1.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1911127.73		A	0.9
2	☐	1.000		1934608.58		A	2.5
3	☐	1.000		1902294.44		A	0.8
4	☐	1.000		1862060.91		A	1.0
5	☐	1.000		1926358.48		A	2.4
6	☐	1.000		1990591.69		A	2.2
7	☐	1.000		2034502.49		A	1.8
8	☐	1.000		1878492.65		A	1.2

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8030522 MSC.b
Acq. Date-Time 2022-03-05 16:19:22
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		5323	53226.61			2.546	5.000
24		47135	471346.92			1.632	5.000
25		6358	63577.45			1.999	5.000
26		7345	73449.94			1.991	5.000
59		12111	121106.02			1.573	5.000
113		4680	46795.28			2.603	5.000
115		15916	159160.17			3.255	5.000
206		5421	54210.46			1.210	5.000
207		4550	45500.17			1.326	5.000
208		11306	113060.73			1.286	5.000
220		1	10.40			31.782	

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

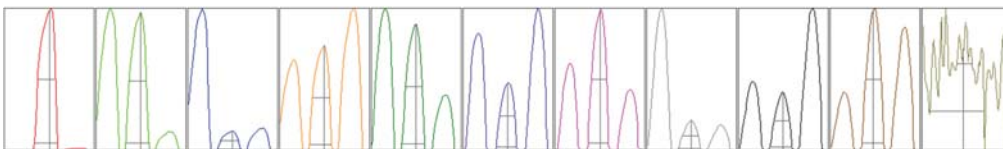
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	5370	5387	5358	5415	5083
24	47046	47939	47377	47428	45883
25	6359	6476	6409	6401	6143
26	7357	7436	7472	7362	7099
59	12182	12246	12199	12151	11775
113	4789	4726	4709	4703	4470
115	16384	16226	16102	15794	15074
206	5409	5434	5457	5490	5316
207	4540	4588	4597	4576	4449
208	11318	11421	11397	11338	11057

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	9439.52	9.05	8.90 - 9.10	
24	86631.40	24.00	23.90 - 24.10	
25	11494.05	25.00	24.90 - 25.10	
26	13331.98	26.00	25.90 - 26.10	
59	23035.87	59.00	58.90 - 59.10	
113	9546.07	113.00	112.90 - 113.10	
115	32723.44	115.05	114.90 - 115.10	
206	10967.58	206.00	205.90 - 206.10	
207	9203.16	207.00	206.90 - 207.10	
208	22329.73	207.95	207.90 - 208.10	
220	1.15	219.90	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.773	0.900	
24	0.58	0.777	0.900	
25	0.59	0.778	0.900	
26	0.59	0.741	0.900	
59	0.55	0.769	0.900	
113	0.51	0.681	0.900	
115	0.51	0.687	0.900	
206	0.51	0.735	0.900	
207	0.52	0.741	0.900	
208	0.52	0.736	0.900	
220	0.51	1.811		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.73 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	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.5 V	Deflect	15.6 V
Extract 2	-190.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-90 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	160 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	1.1 mm	Torch V	-0.8 mm
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EM

Discriminator	4.0 mV	Analog HV	2290 V	Pulse HV	1628 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		2733	27330.55			0.874	
89		9192	91917.16			1.249	
205		18095	180951.21			1.835	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2760	2752	2725	2699	2729
89	9250	9324	9243	9061	9081
205	18051	18587	17999	17668	18171

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.75 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.5 V	Deflect	4.8 V
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US EPA Tune Check Report

Extract 2	-190.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-90 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	1.1 mm	Torch V	-0.8 mm
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EM

Discriminator	4.0 mV	Analog HV	2290 V	Pulse HV	1628 V
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