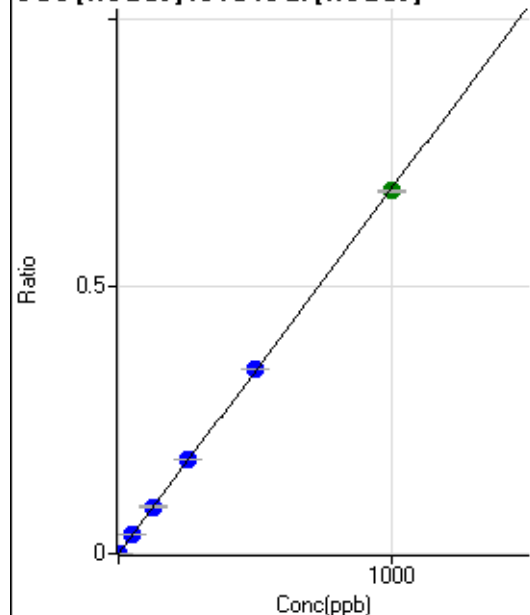


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\P7012920 MS.b\
 Analysis File: P7012920 MS.batch.bin
 DA Date-Time: 2020-01-29 18:33:40
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-01-29 15:21:07
2	004CALS.d	S02	2020-01-29 15:24:48
3	005CALS.d	S03	2020-01-29 15:29:51
4	006CALS.d	S04	2020-01-29 15:34:12
5	007CALS.d	S05	2020-01-29 15:38:05
6	008CALS.d	S06	2020-01-29 15:41:56
7	009CALS.d	S07	2020-01-29 15:45:49
8	010CALS.d	S08	2020-01-29 15:49:43

9 Be [NoGas] ISTD:6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	98.15	0.0000	P	28.5
2	☐	1.000	1.022	5417.77	0.0007	P	2.4
3	☐	50.000	51.492	263178.97	0.0352	P	1.1
4	☐	125.000	128.658	640325.40	0.0879	P	0.7
5	☐	250.000	258.657	1243183.80	0.1767	P	0.4
6	☐	500.000	506.076	2391384.89	0.3457	P	0.4
7	☐	1000.000	994.266	4637151.90	0.6792	A	0.8
8	☐			831.52	0.0001	P	8.2

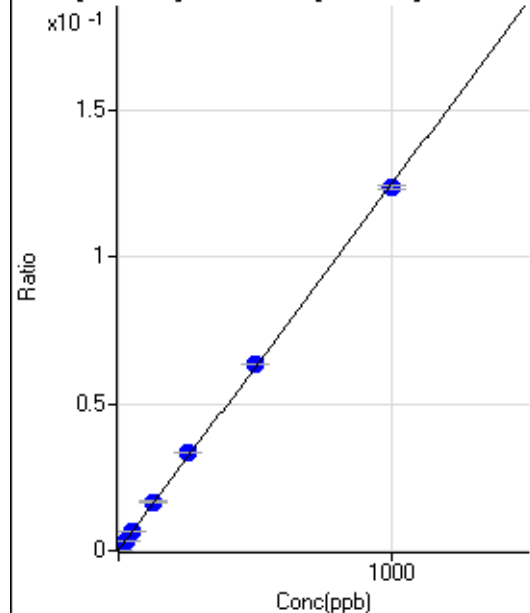
$$y = 6.8312\text{E-}004 * x + 1.2954\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.01622$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1030.64	0.0001	P	6.4
2	☐	25.000	24.659	24462.14	0.0032	P	2.6
3	☐	50.000	52.556	50003.10	0.0067	P	1.1
4	☐	125.000	132.889	121637.00	0.0167	P	1.2
5	☐	250.000	267.521	235498.15	0.0335	P	1.4
6	☐	500.000	508.623	439377.30	0.0635	P	1.0
7	☐	1000.000	990.203	843454.61	0.1235	P	1.2
8	☐			18648.38	0.0029	P	7.0

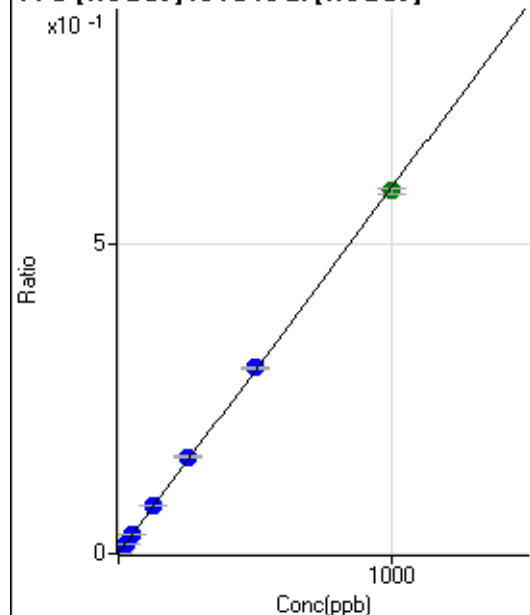
$$y = 1.2462\text{E-}004 * x + 1.3600\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.2099$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD: 6 Li [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4951.02	0.0007	P	5.6
2	☐	25.000	24.455	115262.60	0.0151	P	1.7
3	☐	50.000	52.844	238713.78	0.0319	P	0.2
4	☐	125.000	131.488	571468.11	0.0784	P	1.3
5	☐	250.000	264.515	1105551.93	0.1571	P	1.2
6	☐	500.000	507.950	2083221.51	0.3012	P	1.4
7	☐	1000.000	991.457	4009452.82	0.5872	A	1.8
8	☐			88993.70	0.0139	P	8.2

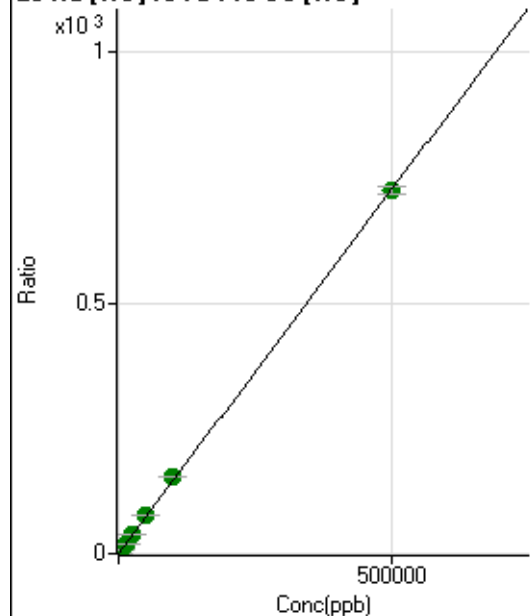
$$y = 5.9161E-004 * x + 6.5355E-004$$

$$R = 0.9998$$

$$DL = 0.1867$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	25369.43	0.0376	P	1.0
2	☐	500.000	507.722	528362.25	0.7739	P	4.2
3	☐	5000.000	5432.072	5233179.98	7.9150	A	1.1
4	☐	12500.000	13518.325	12906626.33	19.6415	A	0.4
5	☐	25000.000	26911.846	25155446.92	39.0644	A	0.4
6	☐	50000.000	53464.377	49725599.72	77.5702	A	0.1
7	☐	100000.00	104878.31	100302014.74	152.1292	A	0.2
8	☐	500000.00	498552.52	482082455.22	723.0246	A	2.1

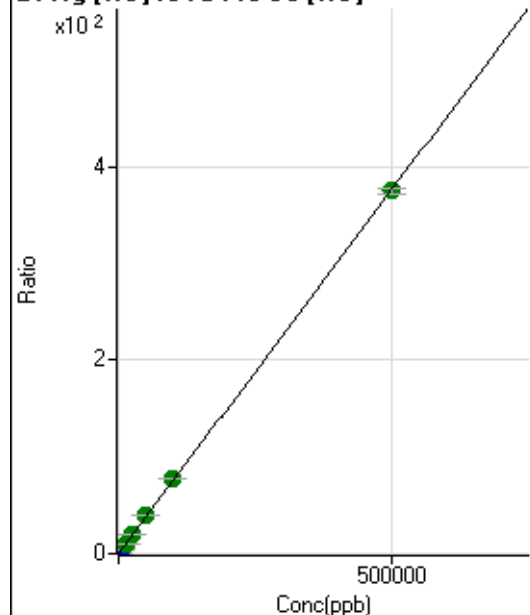
$$y = 0.0015 * x + 0.0376$$

$$R = 0.9999$$

$$DL = 0.7824$$

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	1013.96	0.0015	P	12.6
2	☐	500.000	492.449	253959.62	0.3720	P	6.1
3	☐	5000.000	5507.631	2740363.38	4.1448	P	1.5
4	☐	12500.000	13569.308	6708835.31	10.2095	A	0.2
5	☐	25000.000	26995.912	13078550.12	20.3102	A	0.8
6	☐	50000.000	53447.842	25776174.88	40.2096	A	0.5
7	☐	100000.00	103535.04	51354224.76	77.8895	A	0.2
8	☐	500000.00	498816.61	250230500.04	375.2544	A	1.6

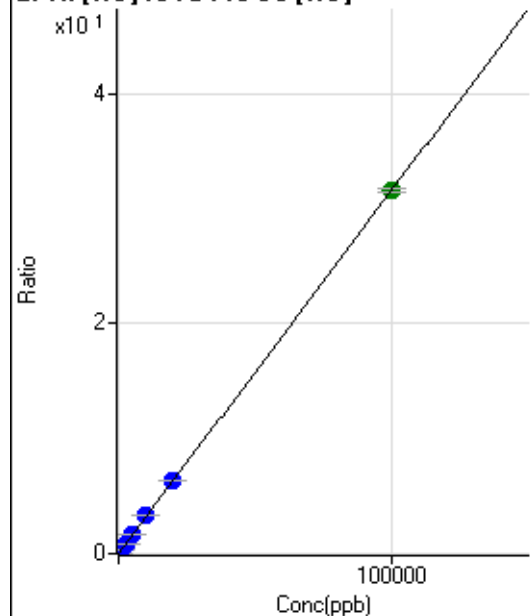
$$y = 7.5229E-004 * x + 0.0015$$

$$R = 1.0000$$

$$DL = 0.7554$$

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	247.24	0.0004	P	18.6
2	☐	20.000	18.713	4284.13	0.0063	P	6.7
3	☐	1000.000	1059.790	221464.75	0.3350	P	1.8
4	☐	2500.000	2639.901	547939.30	0.8339	P	0.4
5	☐	5000.000	5250.962	1067791.65	1.6582	P	1.1
6	☐	10000.000	10370.181	2099087.26	3.2745	P	0.0
7	☐	20000.000	20162.992	4197471.62	6.3664	P	0.3
8	☐	100000.00	99913.740	21036848.21	31.5458	A	1.0

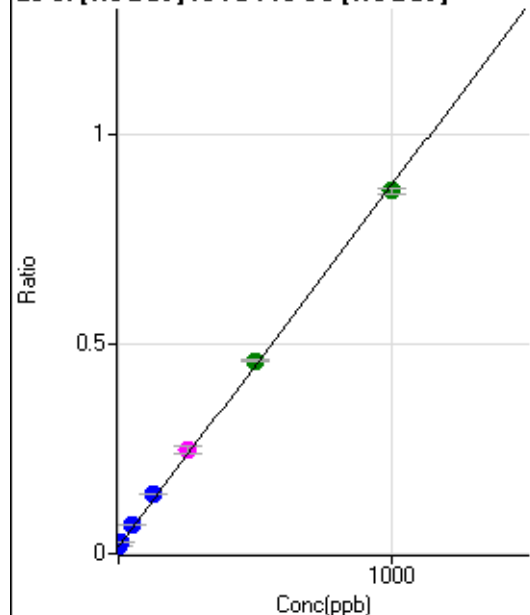
$$y = 3.1573E-004 * x + 3.6651E-004$$

$$R = 1.0000$$

$$DL = 0.6461$$

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	319041.71	0.0174	P	1.4
2	☐	10.000	11.548	501391.47	0.0273	P	0.8
3	☐	50.000	60.639	1252937.89	0.0695	P	1.5
4	☐	125.000	146.691	2553157.46	0.1435	P	0.8
5	☐	250.000	268.792	4326914.03	0.2485	M	7.1
6	☐	500.000	514.781	7989795.58	0.4599	A	0.5
7	☐	1000.000	984.653	15244782.98	0.8638	A	1.2
8	☐			683049.16	0.0407	P	1.3

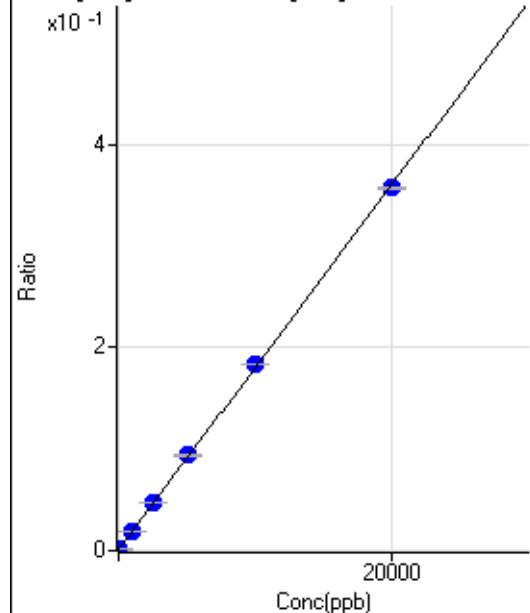
$$y = 8.5960E-004 * x + 0.0174$$

$$R = 0.9995$$

$$DL = 0.8707$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-24.031	205.57	0.0003	P	19.1
2	☐	0.000	24.031	797.27	0.0012	P	8.3
3	☐	1000.000	995.397	12302.70	0.0186	P	1.9
4	☐	2500.000	2598.173	31136.36	0.0474	P	0.5
5	☐	5000.000	5194.991	60532.15	0.0940	P	0.8
6	☐	10000.000	10187.642	117722.62	0.1836	P	0.3
7	☐	20000.000	19845.390	235400.23	0.3570	P	0.4
8	☐			269.46	0.0004	P	21.7

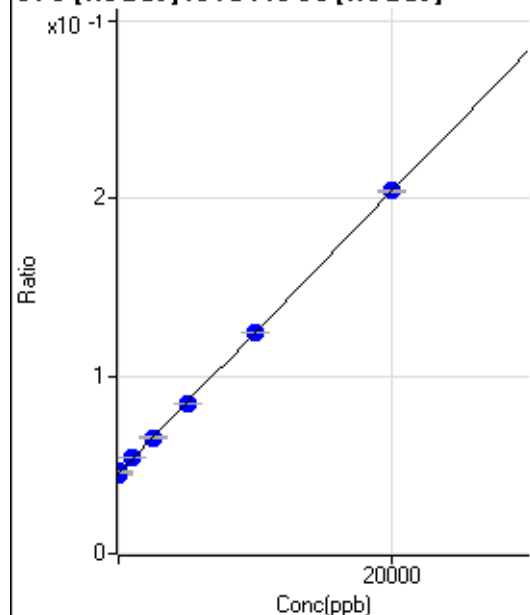
$$y = 1.7954E-005 * x + 7.3618E-004$$

$$R = 0.9999$$

$$DL = 12.95$$

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-87.487	818712.41	0.0447	P	0.8
2	☐	0.000	87.487	845056.06	0.0461	P	0.4
3	☐	1000.000	1111.778	976824.11	0.0542	P	0.4
4	☐	2500.000	2495.333	1159586.91	0.0652	P	1.8
5	☐	5000.000	4934.216	1472039.51	0.0845	P	0.2
6	☐	10000.000	9959.286	2160809.77	0.1244	P	0.1
7	☐	20000.000	20031.798	3605001.12	0.2043	P	0.6
8	☐			713600.15	0.0425	P	0.5

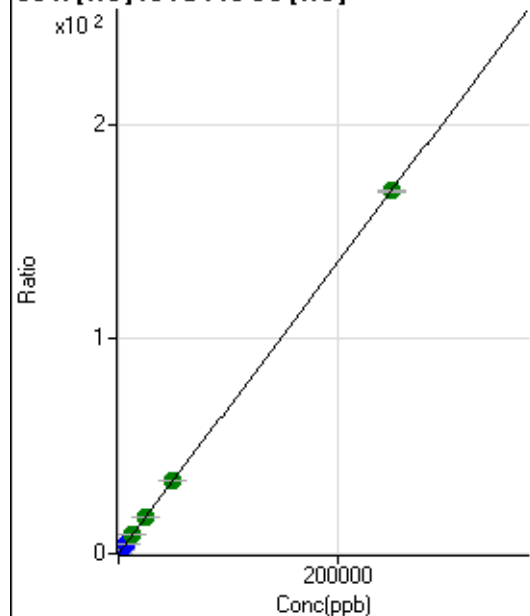
$$y = 7.9314\text{E-}006 * x + 0.0454$$

$$R = 0.9999$$

$$DL = 107.9$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	32617.50	0.0484	P	2.6
2	☐	500.000	487.316	257934.22	0.3778	P	4.5
3	☐	2500.000	2655.292	1218805.54	1.8434	P	1.0
4	☐	6250.000	6536.024	2935287.96	4.4669	P	0.7
5	☐	12500.000	12945.205	5666540.75	8.7997	A	0.1
6	☐	25000.000	25320.628	11003975.16	17.1659	A	0.5
7	☐	50000.000	50001.938	22319020.99	33.8513	A	0.4
8	☐	250000.00	249936.61	112713584.47	169.0135	A	0.6

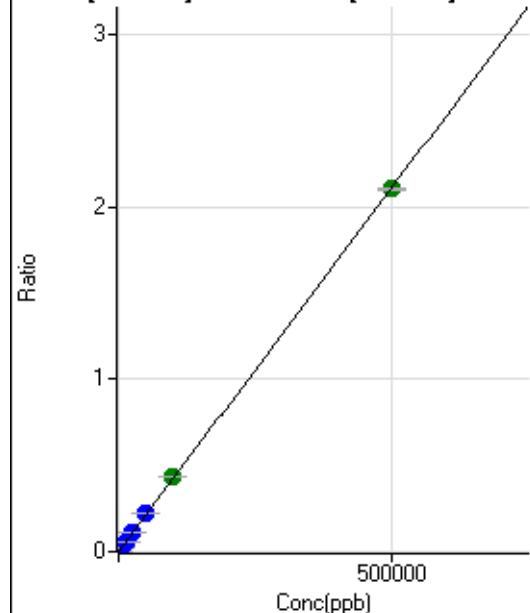
$$y = 6.7603\text{E-}004 * x + 0.0484$$

$$R = 1.0000$$

$$DL = 5.53$$

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	555.59	0.0000	P	4.3
2	☐	500.000	532.146	41723.99	0.0023	P	1.3
3	☐	5000.000	5374.146	409137.28	0.0227	P	0.6
4	☐	12500.000	13333.981	1001452.62	0.0563	P	0.9
5	☐	25000.000	26692.487	1961853.58	0.1127	P	0.7
6	☐	50000.000	52480.123	3847478.43	0.2215	P	0.6
7	☐	100000.00	102927.68	7665184.81	0.4343	A	0.8
8	☐	500000.00	499057.20	35317606.35	2.1059	A	0.8

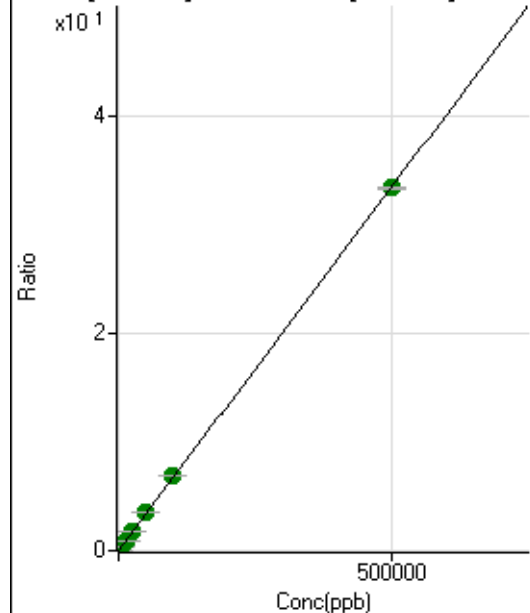
$$y = 4.2196\text{E-}006 * x + 3.0335\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.9376$$

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19524.70	0.0011	P	3.0
2	☐	500.000	542.429	684038.09	0.0373	P	0.5
3	☐	5000.000	5326.069	6431051.49	0.3569	A	0.2
4	☐	12500.000	13218.518	15731847.23	0.8843	A	0.3
5	☐	25000.000	26595.233	30962746.88	1.7781	A	0.2
6	☐	50000.000	52521.022	60980747.89	3.5103	A	0.4
7	☐	100000.00	102825.25	121263902.71	6.8715	A	0.5
8	☐	500000.00	499081.81	559280845.84	33.3479	A	0.9

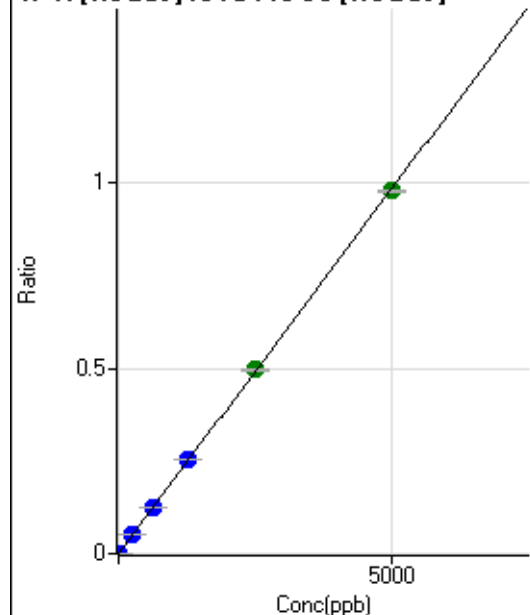
$$y = 6.6816\text{E-}005 * x + 0.0011$$

$$R = 1.0000$$

$$DL = 1.44$$

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD : 45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	305.57	0.0000	P	8.1
2	☐	5.000	5.198	19071.28	0.0010	P	1.9
3	☐	250.000	258.173	916200.51	0.0509	P	0.2
4	☐	625.000	642.913	2252305.26	0.1266	P	0.5
5	☐	1250.000	1296.133	4444300.58	0.2552	P	0.9
6	☐	2500.000	2520.786	8622151.76	0.4964	A	0.6
7	☐	5000.000	4975.426	17288318.62	0.9797	A	0.4
8	☐			4609.26	0.0003	P	4.1

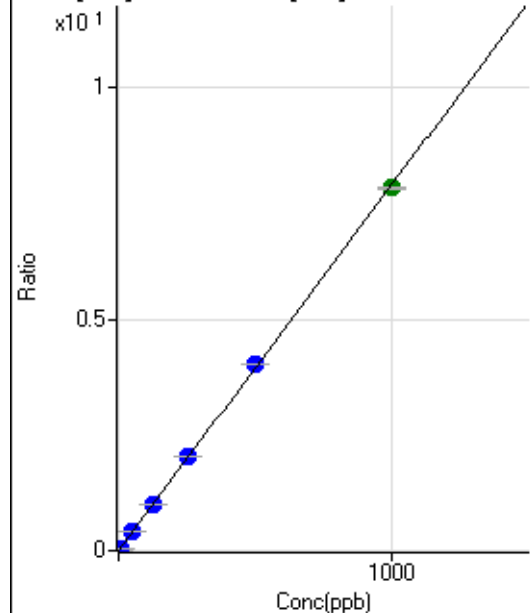
$$y = 1.9690E-004 * x + 1.6684E-005$$

$$R = 0.9999$$

$$DL = 0.02068$$

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	21.11	0.0000	P	24.0
2	☐	5.000	4.718	25443.34	0.0373	P	7.1
3	☐	50.000	51.230	267311.44	0.4043	P	1.5
4	☐	125.000	128.136	664491.37	1.0112	P	0.1
5	☐	250.000	258.796	1315144.25	2.0423	P	0.5
6	☐	500.000	509.991	2579946.23	4.0246	P	0.1
7	☐	1000.000	992.354	5163270.20	7.8312	A	0.4
8	☐			1932.38	0.0029	P	2.9

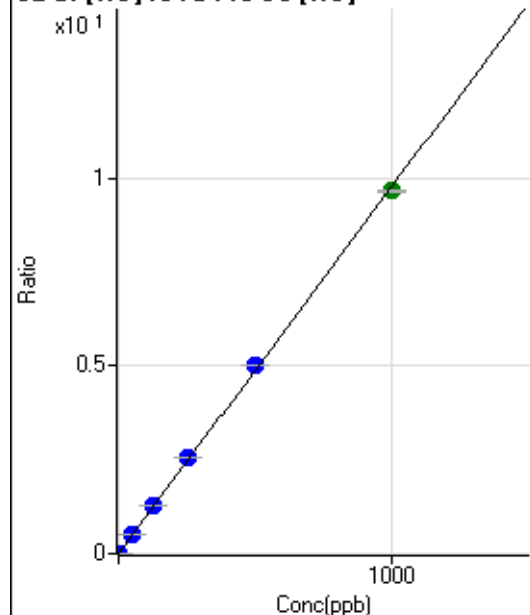
$$y = 0.0079 * x + 3.1295E-005$$

$$R = 0.9999$$

$$DL = 0.002858$$

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	2085.74	0.0031	P	4.2
2	☐	2.000	1.819	14233.75	0.0208	P	8.6
3	☐	50.000	52.492	340769.82	0.5154	P	1.8
4	☐	125.000	130.206	837098.04	1.2739	P	1.0
5	☐	250.000	262.956	1654663.15	2.5696	P	0.7
6	☐	500.000	512.885	3210935.33	5.0090	P	0.2
7	☐	1000.000	989.543	6369890.95	9.6613	A	0.3
8	☐			111273.79	0.1669	P	0.8

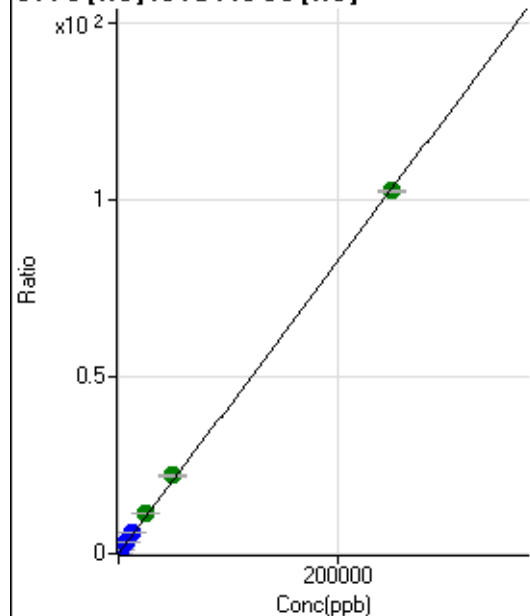
$$y = 0.0098 * x + 0.0031$$

$$R = 0.9998$$

$$DL = 0.03973$$

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	1111.21	0.0016	P	16.4
2	☐	50.000	53.202	16098.87	0.0236	P	3.0
3	☐	2500.000	2933.401	800628.30	1.2110	P	1.4
4	☐	6250.000	7290.121	1975928.92	3.0070	P	0.9
5	☐	12500.000	14502.965	3851125.31	5.9805	P	0.3
6	☐	25000.000	27544.421	7280236.23	11.3569	A	0.3
7	☐	50000.000	53562.946	14559840.58	22.0831	A	0.9
8	☐	250000.00	248902.48	68429306.90	102.6124	A	0.7

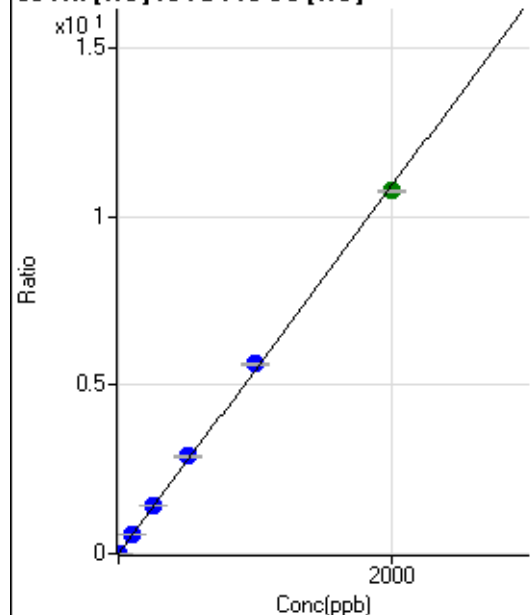
$$y = 4.1225E-004 * x + 0.0016$$

$$R = 0.9999$$

$$DL = 1.971$$

Weight: <None>

Min Conc: 0

⁵⁵Mn [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	147.78	0.0002	P	12.5
2	☐	1.000	0.964	3742.76	0.0055	P	11.4
3	☐	100.000	106.567	384741.07	0.5819	P	1.4
4	☐	250.000	264.595	949219.08	1.4445	P	0.7
5	☐	500.000	529.251	1860503.20	2.8892	P	0.3
6	☐	1000.000	1031.293	3608796.89	5.6296	P	0.1
7	☐	2000.000	1974.888	7107744.20	10.7803	A	0.5
8	☐			36362.86	0.0545	P	1.9

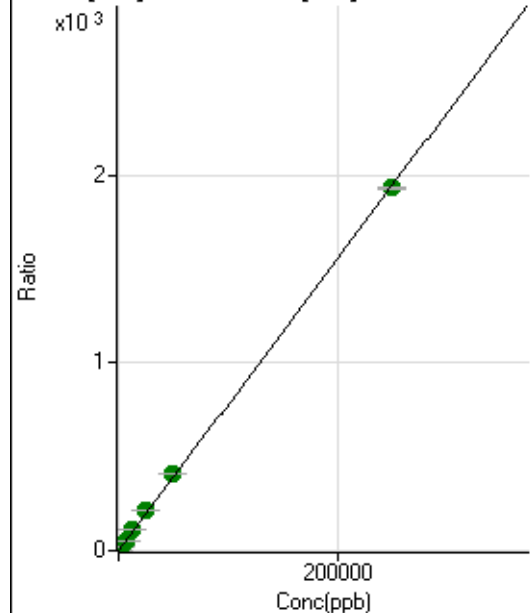
$$y = 0.0055 * x + 2.1908E-004$$

$$R = 0.9997$$

$$DL = 0.01499$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11760.58	0.0174	P	3.8
2	☐	50.000	50.253	278304.72	0.4076	P	8.0
3	☐	2500.000	2791.110	14339584.00	21.6890	A	1.7
4	☐	6250.000	6964.366	35544385.06	54.0922	A	0.4
5	☐	12500.000	13953.081	69775522.86	108.3559	A	0.2
6	☐	25000.000	27297.646	135879066.93	211.9696	A	0.5
7	☐	50000.000	53234.412	272534072.76	413.3553	A	0.1
8	☐	250000.00	249029.92	1289407154.7	1,933.606	A	0.9

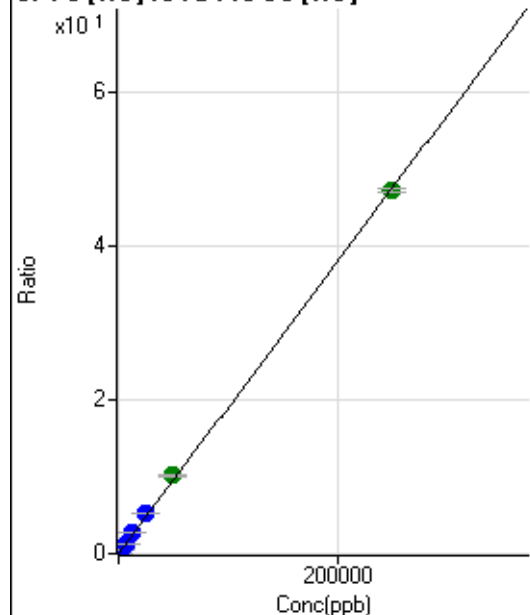
$$y = 0.0078 * x + 0.0174$$

$$R = 0.9999$$

$$DL = 0.2549$$

Weight: <None>

Min Conc: 0

⁵⁷Fe [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	429.65	0.0006	P	24.2
2	☐	50.000	52.522	7235.32	0.0106	P	5.5
3	☐	2500.000	2841.416	356704.40	0.5395	P	1.6
4	☐	6250.000	7089.231	883909.64	1.3451	P	0.1
5	☐	12500.000	14058.937	1717407.15	2.6670	P	0.4
6	☐	25000.000	27998.942	3404399.12	5.3107	P	0.5
7	☐	50000.000	53474.547	6687048.76	10.1422	A	0.5
8	☐	250000.00	248902.85	31478634.50	47.2058	A	1.1

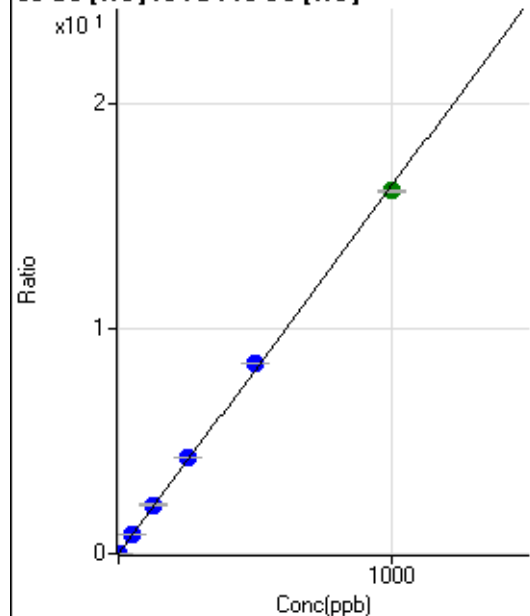
$$y = 1.8965E-004 * x + 6.3683E-004$$

$$R = 0.9999$$

$$DL = 2.436$$

Weight: <None>

Min Conc: 0

⁵⁹Co [He] ISTD: ⁴⁵Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	153.34	0.0002	P	11.2
2	☐	1.000	0.932	10540.62	0.0154	P	7.6
3	☐	50.000	53.403	576499.89	0.8720	P	1.6
4	☐	125.000	132.720	1423786.44	2.1667	P	1.2
5	☐	250.000	262.826	2762840.38	4.2905	P	0.3
6	☐	500.000	516.823	5408248.46	8.4367	P	0.1
7	☐	1000.000	987.247	10625500.39	16.1158	A	0.4
8	☐			19528.79	0.0293	P	1.5

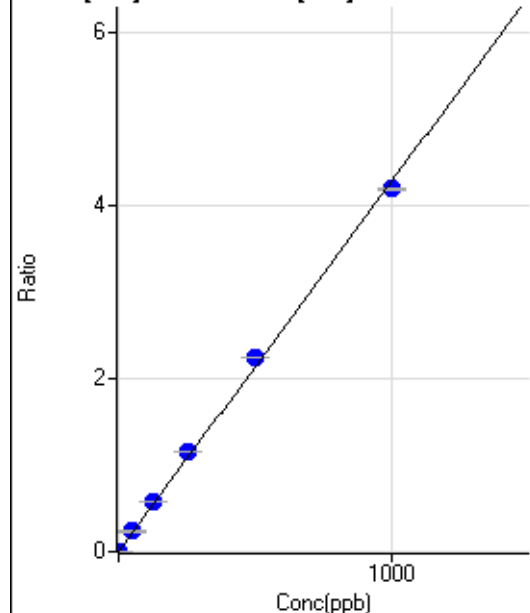
$$y = 0.0163 * x + 2.2731E-004$$

$$R = 0.9997$$

$$DL = 0.004683$$

Weight: <None>

Min Conc: 0

⁶⁰Ni [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	114.45	0.0002	P	11.1
2	☐	1.000	1.103	3338.22	0.0049	P	7.5
3	☐	50.000	54.815	155142.77	0.2347	P	1.5
4	☐	125.000	136.267	383159.57	0.5831	P	0.3
5	☐	250.000	269.438	742319.57	1.1528	P	0.1
6	☐	500.000	525.865	1442142.48	2.2497	P	0.4
7	☐	1000.000	980.559	2765714.37	4.1948	P	0.6
8	☐			31775.71	0.0476	P	1.2

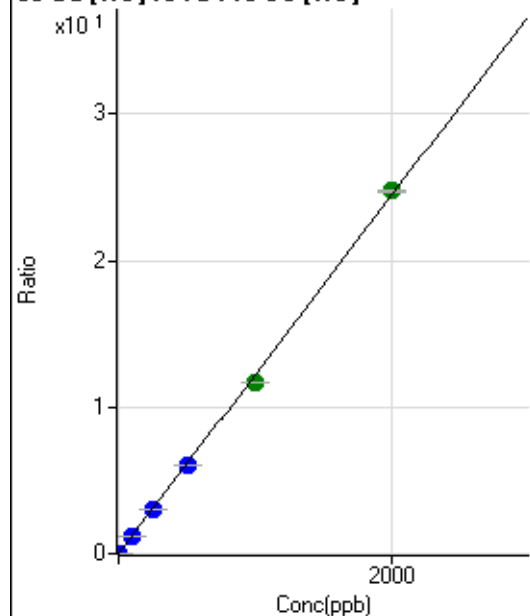
$$y = 0.0043 * x + 1.6967E-004$$

$$R = 0.9993$$

$$DL = 0.01316$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1454.54	0.0022	P	5.2
2	☐	2.000	1.881	17165.86	0.0251	P	5.5
3	☐	100.000	101.070	818161.19	1.2375	P	1.3
4	☐	250.000	249.930	2008723.89	3.0569	P	0.6
5	☐	500.000	493.240	3883315.50	6.0307	P	0.7
6	☐	1000.000	952.067	7460757.18	11.6386	A	0.2
7	☐	2000.000	2025.612	16324756.84	24.7598	A	0.2
8	☐			35437.50	0.0531	P	1.3

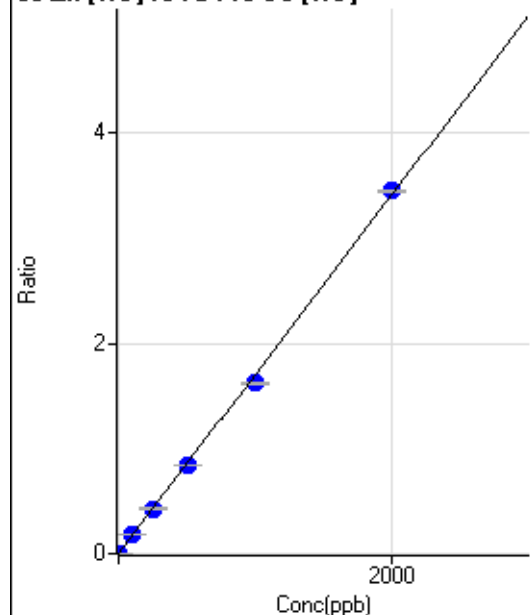
$$y = 0.0122 * x + 0.0022$$

$$R = 0.9996$$

$$DL = 0.02762$$

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	456.68	0.0007	P	6.6
2	☐	2.000	2.603	3487.14	0.0051	P	7.1
3	☐	100.000	103.352	116792.56	0.1766	P	1.4
4	☐	250.000	251.557	281889.52	0.4290	P	0.9
5	☐	500.000	494.658	542752.16	0.8429	P	0.9
6	☐	1000.000	952.815	1040399.51	1.6230	P	0.7
7	☐	2000.000	2024.565	2273202.31	3.4478	P	0.6
8	☐			24866.90	0.0373	P	1.2

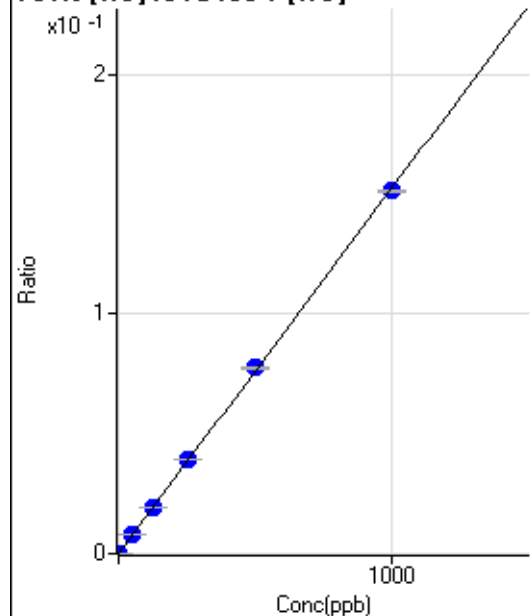
$$y = 0.0017 * x + 6.7698E-004$$

$$R = 0.9996$$

$$DL = 0.07856$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9.88	0.0000	P	28.5
2	☐	1.000	0.952	630.88	0.0001	P	6.0
3	☐	50.000	50.337	32418.81	0.0077	P	0.5
4	☐	125.000	127.337	81296.54	0.0194	P	0.5
5	☐	250.000	256.711	161212.28	0.0391	P	0.5
6	☐	500.000	508.478	315402.75	0.0774	P	0.1
7	☐	1000.000	993.774	628071.99	0.1513	P	0.6
8	☐			341.37	0.0001	P	3.2

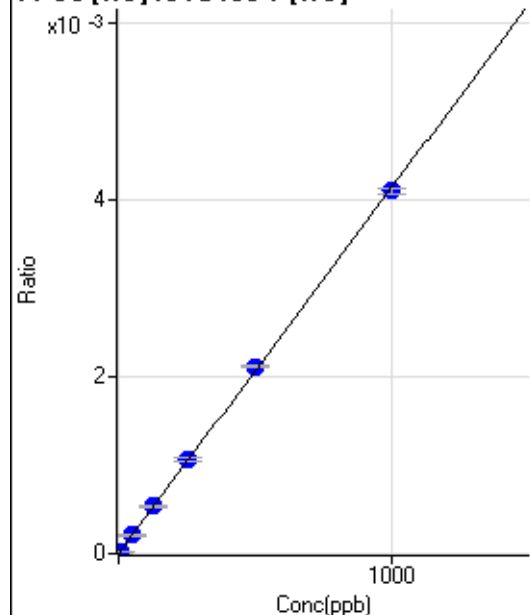
$$y = 1.5227E-004 * x + 2.3260E-006$$

$$R = 0.9999$$

$$DL = 0.01306$$

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	3.33	0.0000	P	100.0
2	☐	5.000	4.890	90.00	0.0000	P	22.4
3	☐	50.000	51.449	903.38	0.0002	P	10.2
4	☐	125.000	130.556	2268.00	0.0005	P	3.5
5	☐	250.000	258.928	4421.85	0.0011	P	3.3
6	☐	500.000	510.407	8606.03	0.0021	P	0.8
7	☐	1000.000	991.798	17035.78	0.0041	P	1.8
8	☐			5.56	0.0000	P	35.5

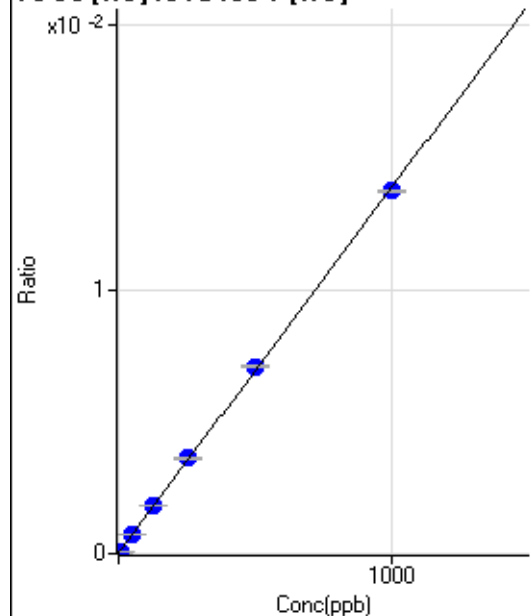
$$y = 4.1377\text{E-}006 * x + 7.8357\text{E-}007$$

$$R = 0.9999$$

$$DL = 0.5684$$

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	95.06	0.0000	P	5.3
2	☐	5.000	5.315	410.50	0.0001	P	0.7
3	☐	50.000	53.239	3207.18	0.0008	P	0.2
4	☐	125.000	129.986	7627.98	0.0018	P	1.3
5	☐	250.000	259.162	14870.05	0.0036	P	0.6
6	☐	500.000	510.951	28870.08	0.0071	P	0.4
7	☐	1000.000	991.447	56990.40	0.0137	P	0.8
8	☐			120.99	0.0000	P	12.3

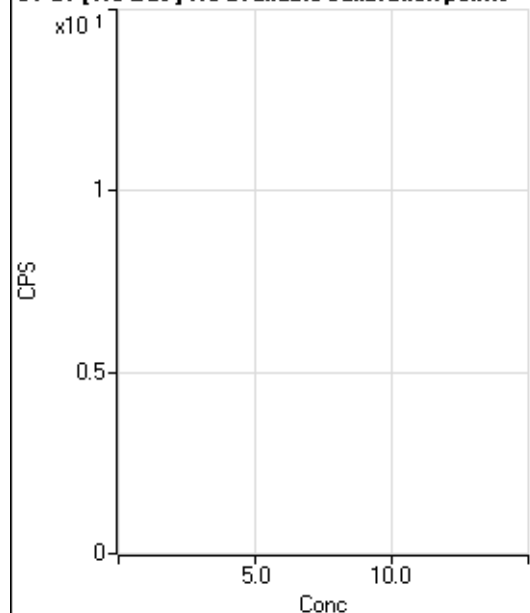
$$y = 1.3827\text{E-}005 * x + 2.2388\text{E-}005$$

$$R = 0.9999$$

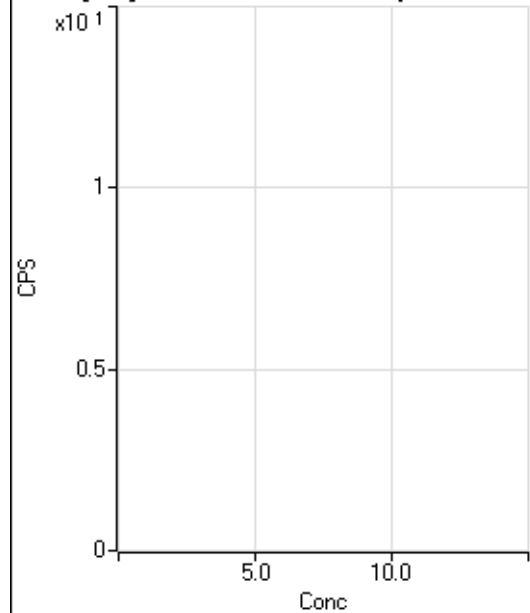
$$DL = 0.2575$$

Weight: <None>

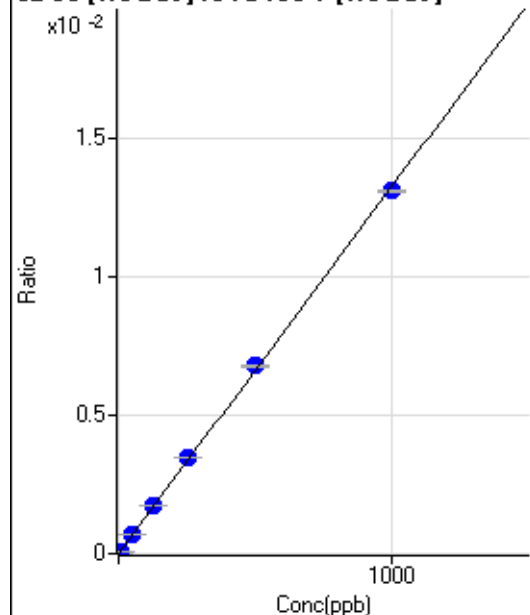
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			62090.06		P	1.1
2	☐			61708.36		P	1.7
3	☐			59717.84		P	0.6
4	☐			59117.79		P	1.8
5	☐			57108.17		P	0.6
6	☐			56695.80		P	2.7
7	☐			56424.84		P	3.0
8	☐			57814.53		P	1.0

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			56.73		P	66.8
2	☐			63.40		P	18.2
3	☐			50.05		P	87.2
4	☐			46.71		P	12.4
5	☐			60.06		P	60.1
6	☐			56.72		P	10.2
7	☐			30.03		P	33.3
8	☐			66.74		P	45.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	-21.41	0.0000	P	-358.
2	☐	5.000	5.836	2933.09	0.0001	P	3.1
3	☐	50.000	52.923	26373.18	0.0007	P	0.6
4	☐	125.000	132.181	65101.36	0.0018	P	0.1
5	☐	250.000	263.340	127568.32	0.0035	P	0.5
6	☐	500.000	512.527	247015.98	0.0068	P	0.6
7	☐	1000.000	989.354	482232.09	0.0131	P	0.7
8	☐			356.72	0.0000	P	13.4

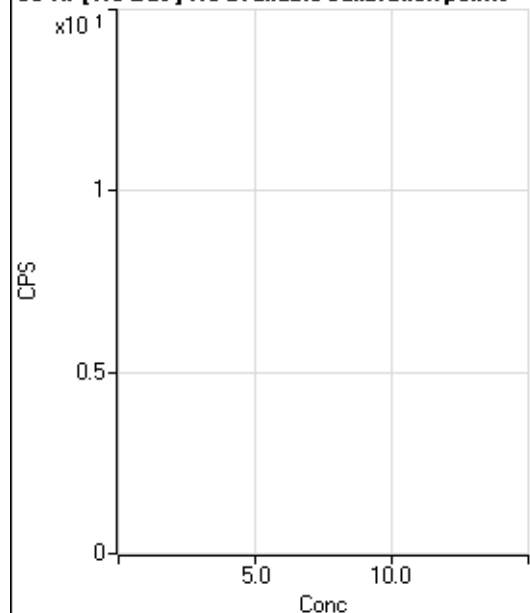
$$y = 1.3265E-005 * x - 5.5441E-007$$

R = 0.9998

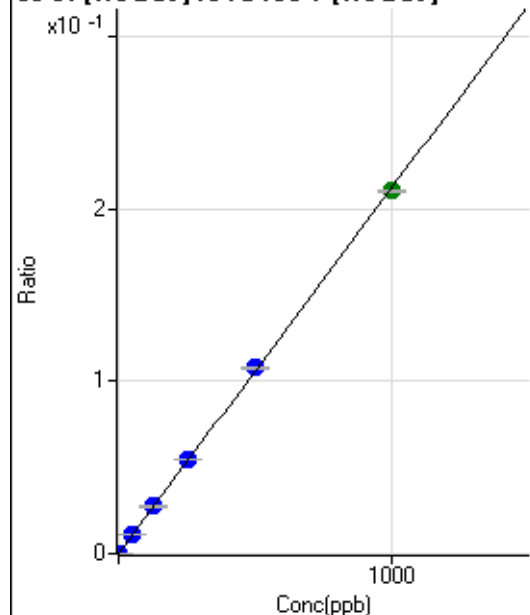
DL = 0.449

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			633.36		P	9.2
2	☐			564.47		P	5.4
3	☐			628.92		P	9.3
4	☐			587.80		P	3.5
5	☐			621.14		P	7.4
6	☐			580.02		P	11.7
7	☐			663.36		P	7.0
8	☐			673.36		P	9.1

⁸⁶Sr [NoGas] ISTD: ⁸⁹Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1080.64	0.0000	P	15.2
2	☐	1.000	0.993	9114.31	0.0002	P	4.5
3	☐	50.000	51.922	414922.47	0.0110	P	1.0
4	☐	125.000	129.051	1017198.08	0.0274	P	0.6
5	☐	250.000	259.154	2007781.58	0.0550	P	0.3
6	☐	500.000	508.739	3920098.22	0.1079	P	0.6
7	☐	1000.000	992.740	7734999.04	0.2105	A	0.6
8	☐			15556.27	0.0004	P	3.5

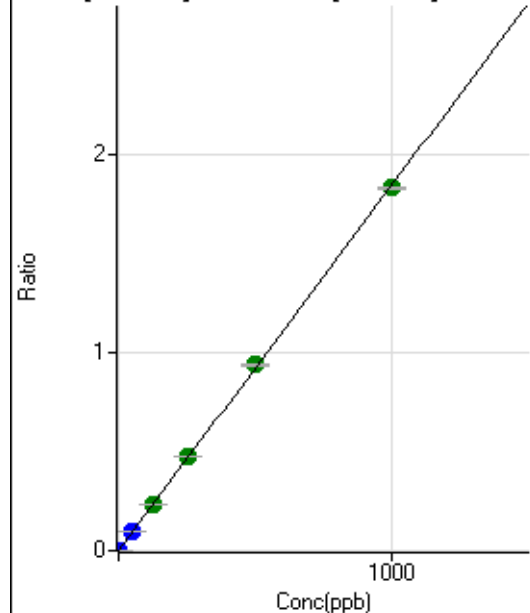
$$y = 2.1200\text{E-}004 * x + 2.8275\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.06086$$

Weight: <None>

Min Conc: 0

⁸⁸Sr [NoGas] ISTD: ⁸⁹Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	694.49	0.0000	P	16.0
2	☐	1.000	1.038	73882.42	0.0019	P	1.4
3	☐	50.000	51.946	3608662.45	0.0960	P	0.2
4	☐	125.000	128.338	8805962.61	0.2371	A	0.2
5	☐	250.000	257.176	17352922.96	0.4751	A	0.6
6	☐	500.000	508.346	34122714.65	0.9391	A	0.2
7	☐	1000.000	993.518	67442629.28	1.8353	A	0.3
8	☐			134411.19	0.0039	P	0.6

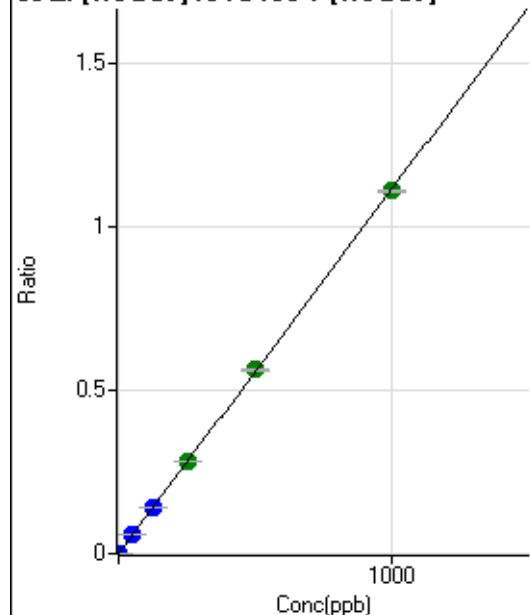
$$y = 0.0018 * x + 1.8158\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.004723$$

Weight: <None>

Min Conc: 0

90 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2214.17	0.0001	P	11.5
2	☐	1.000	0.822	37126.95	0.0010	P	3.7
3	☐	50.000	50.257	2105844.80	0.0560	P	0.2
4	☐	125.000	126.626	5238087.05	0.1410	P	0.3
5	☐	250.000	254.769	10361880.61	0.2837	A	0.6
6	☐	500.000	504.491	20410752.37	0.5617	A	0.9
7	☐	1000.000	996.346	40763221.74	1.1093	A	0.5
8	☐			14124.10	0.0004	P	4.5

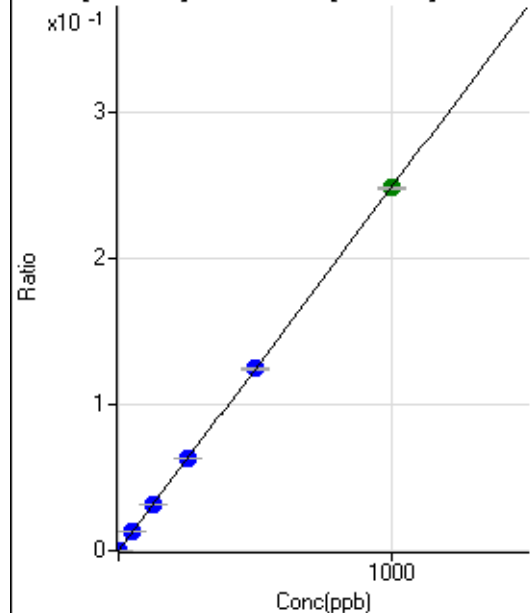
$$y = 0.0011 * x + 5.7857E-005$$

$$R = 1.0000$$

$$DL = 0.01797$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	438.91	0.0000	P	17.5
2	☐	1.000	0.813	8135.98	0.0002	P	4.4
3	☐	50.000	50.533	471790.32	0.0125	P	0.9
4	☐	125.000	126.741	1168220.45	0.0315	P	0.5
5	☐	250.000	253.796	2300130.91	0.0630	P	0.0
6	☐	500.000	500.594	4513104.79	0.1242	P	1.4
7	☐	1000.000	998.510	9102999.42	0.2477	A	0.6
8	☐			2942.12	0.0001	P	7.1

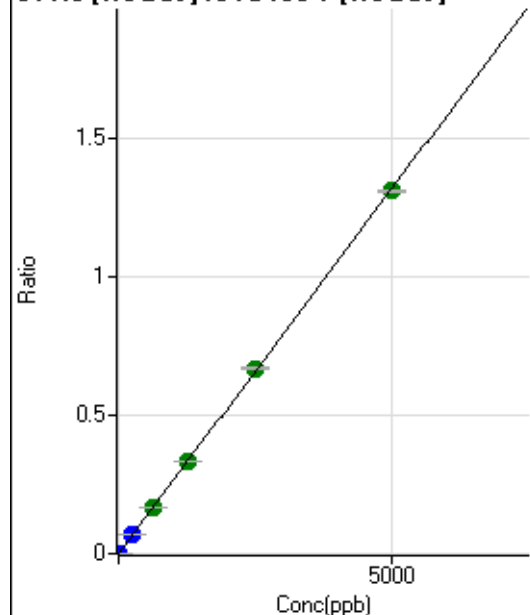
$$y = 2.4808E-004 * x + 1.1475E-005$$

$$R = 1.0000$$

$$DL = 0.0243$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	975.08	0.0000	P	7.4
2	☐	5.000	4.902	50191.78	0.0013	P	2.2
3	☐	250.000	254.726	2521228.03	0.0671	P	0.1
4	☐	625.000	632.629	6184115.29	0.1665	A	0.5
5	☐	1250.000	1272.339	12230150.79	0.3348	A	0.5
6	☐	2500.000	2535.834	24248832.66	0.6673	A	1.1
7	☐	5000.000	4975.308	48112901.07	1.3093	A	0.4
8	☐			29225.18	0.0008	P	1.9

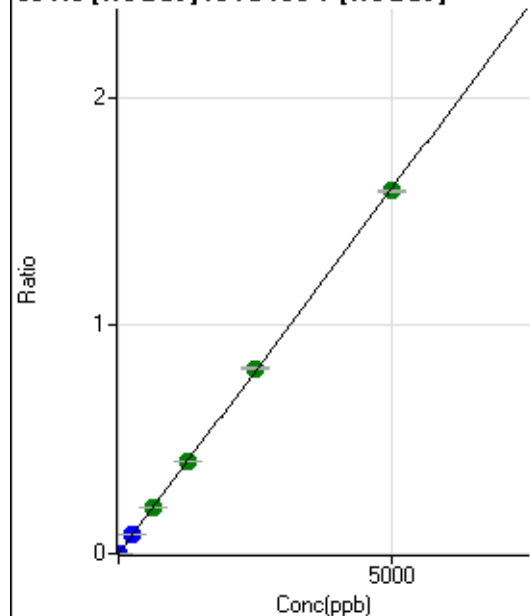
$$y = 2.6315E-004 * x + 2.5484E-005$$

$$R = 1.0000$$

$$DL = 0.02157$$

Weight: <None>

Min Conc: 0

95 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408.35	0.0000	P	12.1
2	☐	5.000	5.253	64535.35	0.0017	P	1.2
3	☐	250.000	256.722	3088648.83	0.0821	P	0.6
4	☐	625.000	635.736	7555081.07	0.2034	A	0.6
5	☐	1250.000	1277.030	14924286.62	0.4086	A	0.1
6	☐	2500.000	2536.297	29487806.21	0.8115	A	0.8
7	☐	5000.000	4973.416	58476737.42	1.5913	A	0.5
8	☐			43773.62	0.0013	P	1.6

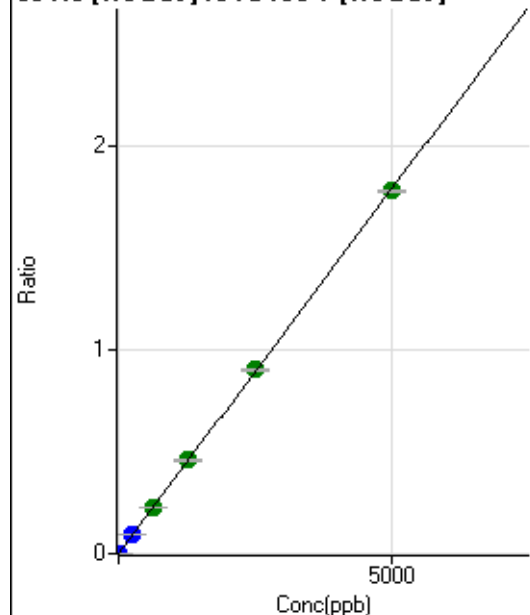
$$y = 3.1995E-004 * x + 1.0672E-005$$

$$R = 0.9999$$

$$DL = 0.01213$$

Weight: <None>

Min Conc: 0

96 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	630.60	0.0000	P	14.1
2	☐	5.000	5.229	71798.14	0.0019	P	1.9
3	☐	250.000	255.699	3430176.16	0.0912	P	0.3
4	☐	625.000	633.270	8390990.55	0.2259	A	0.6
5	☐	1250.000	1280.105	16680023.29	0.4567	A	0.4
6	☐	2500.000	2524.311	32722248.65	0.9005	A	1.0
7	☐	5000.000	4978.999	65272024.38	1.7762	A	0.5
8	☐			67139.82	0.0019	P	0.2

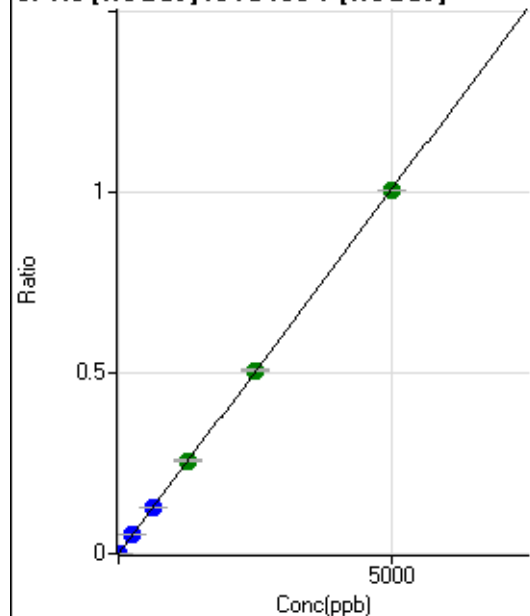
$$y = 3.5673E-004 * x + 1.6477E-005$$

$$R = 1.0000$$

$$DL = 0.01954$$

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	302.80	0.0000	P	18.0
2	☐	5.000	5.259	40784.16	0.0011	P	1.2
3	☐	250.000	254.824	1933056.83	0.0514	P	0.5
4	☐	625.000	632.354	4738217.82	0.1276	P	0.7
5	☐	1250.000	1278.462	9420314.36	0.2579	A	0.7
6	☐	2500.000	2519.046	18465513.26	0.5082	A	0.8
7	☐	5000.000	4982.201	36933336.59	1.0051	A	0.1
8	☐			26116.56	0.0008	P	3.1

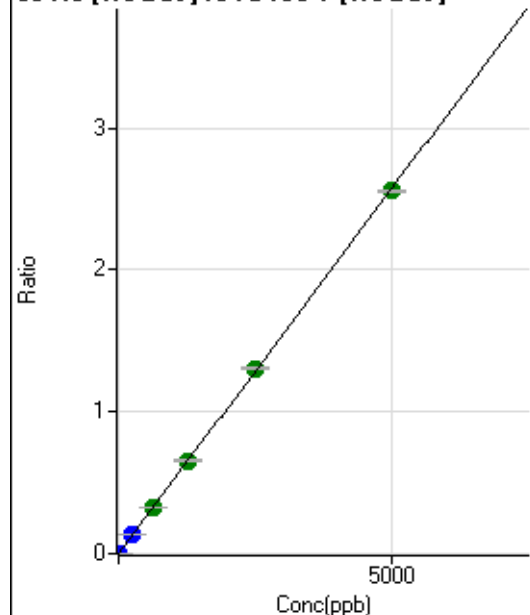
$$y = 2.0173E-004 * x + 7.9098E-006$$

$$R = 1.0000$$

$$DL = 0.02114$$

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	691.72	0.0000	P	19.4
2	☐	5.000	5.261	103880.06	0.0027	P	1.3
3	☐	250.000	254.897	4927205.62	0.1310	P	0.3
4	☐	625.000	634.782	12120225.79	0.3263	A	1.1
5	☐	1250.000	1278.018	23996682.13	0.6570	A	0.5
6	☐	2500.000	2536.960	47388606.61	1.3041	A	0.6
7	☐	5000.000	4973.048	93942152.80	2.5564	A	0.3
8	☐			62281.21	0.0018	P	2.2

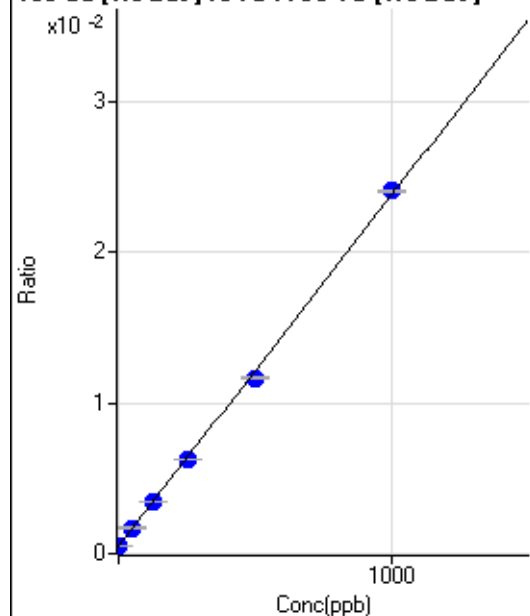
$$y = 5.1405\text{E-}004 * x + 1.8071\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.02043$$

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	17308.38	0.0005	P	2.3
2	☐	1.000	1.386	18448.76	0.0005	P	1.0
3	☐	50.000	51.966	58128.55	0.0017	P	2.4
4	☐	125.000	124.407	115860.06	0.0034	P	0.6
5	☐	250.000	246.944	209722.99	0.0063	P	0.2
6	☐	500.000	477.926	389547.04	0.0116	P	0.9
7	☐	1000.000	1011.777	808038.92	0.0241	P	0.6
8	☐			16972.04	0.0006	P	0.9

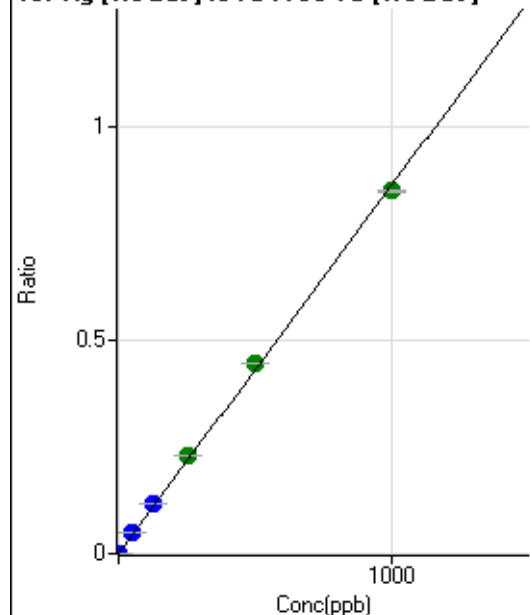
$$y = 2.3316\text{E-}005 * x + 5.0669\text{E-}004$$

$$R = 0.9996$$

$$DL = 1.494$$

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	427.80	0.0000	P	15.9
2	☐	1.000	1.335	39868.35	0.0012	P	1.8
3	☐	50.000	55.701	1626292.93	0.0481	P	0.7
4	☐	125.000	135.768	3983867.80	0.1172	P	0.1
5	☐	250.000	266.808	7707886.80	0.2302	A	1.1
6	☐	500.000	517.555	14932690.44	0.4466	A	0.3
7	☐	1000.000	985.389	28511518.00	0.8503	A	0.2
8	☐			17728.03	0.0006	P	95.4

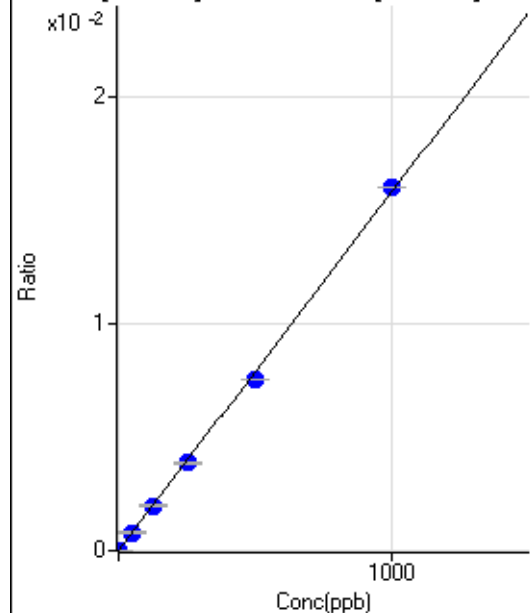
$$y = 8.6286\text{E-}004 * x + 1.2534\text{E-}005$$

$$R = 0.9996$$

$$DL = 0.006936$$

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	48.61	0.0000	P	30.3
2	☐	1.000	1.057	620.86	0.0000	P	2.8
3	☐	50.000	50.773	27220.84	0.0008	P	1.5
4	☐	125.000	125.986	67825.54	0.0020	P	0.7
5	☐	250.000	244.582	129592.03	0.0039	P	0.5
6	☐	500.000	477.471	252638.74	0.0076	P	0.6
7	☐	1000.000	1012.457	537170.08	0.0160	P	0.1
8	☐			213.90	0.0000	P	17.2

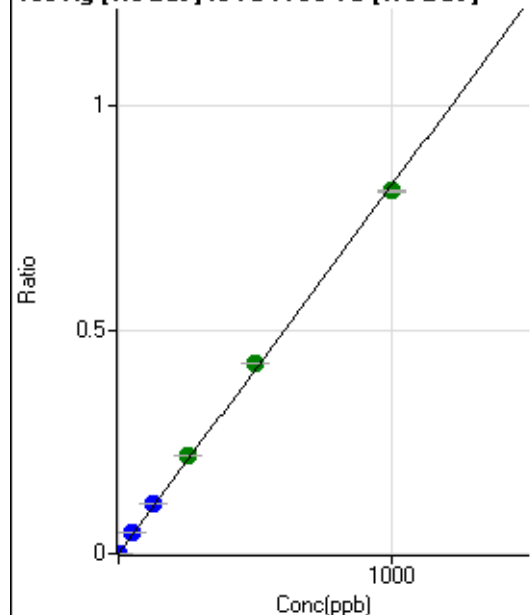
$$y = 1.5821\text{E-}005 * x + 1.4240\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.08168$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	230.57	0.0000	P	28.5
2	☐	1.000	1.334	37762.62	0.0011	P	1.9
3	☐	50.000	56.192	1562829.14	0.0462	P	0.2
4	☐	125.000	136.092	3804107.37	0.1119	P	0.4
5	☐	250.000	267.238	7354634.63	0.2197	A	0.6
6	☐	500.000	516.801	14204940.42	0.4248	A	0.5
7	☐	1000.000	985.593	27167403.38	0.8102	A	0.3
8	☐			6924.21	0.0002	P	2.7

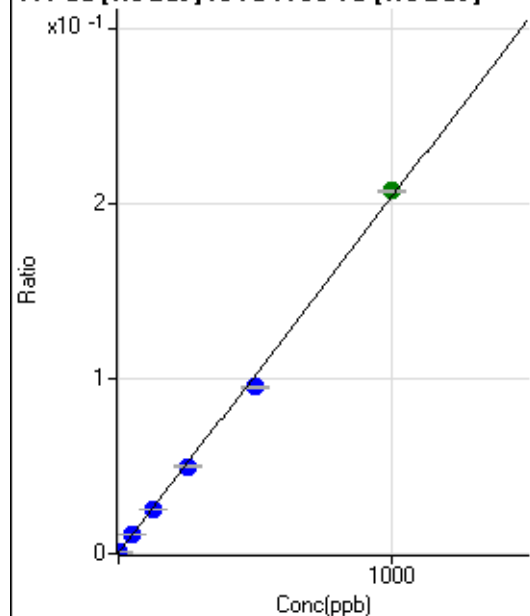
$$y = 8.2202\text{E-}004 * x + 6.7606\text{E-}006$$

$$R = 0.9996$$

$$DL = 0.007027$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12158.23	0.0004	P	2.5
2	☐	1.000	1.035	19379.94	0.0006	P	1.1
3	☐	50.000	50.248	357335.60	0.0106	P	0.6
4	☐	125.000	123.346	863999.18	0.0254	P	1.5
5	☐	250.000	243.408	1667245.99	0.0498	P	0.7
6	☐	500.000	467.796	3189284.42	0.0954	P	0.9
7	☐	1000.000	1017.944	6945768.84	0.2071	A	0.2
8	☐			13243.31	0.0004	P	1.5

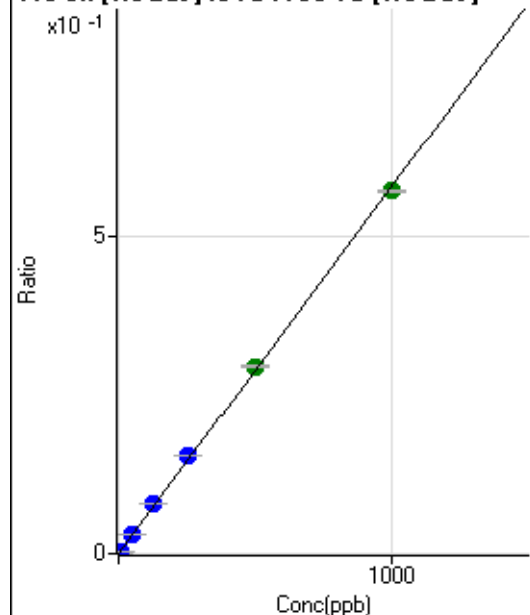
$$y = 2.0313\text{E-}004 * x + 3.5593\text{E-}004$$

$$R = 0.9992$$

$$DL = 0.1303$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2180.81	0.0001	P	8.9
2	☐	5.000	5.315	107338.64	0.0031	P	0.3
3	☐	50.000	54.726	1072258.68	0.0317	P	0.3
4	☐	125.000	134.371	2642912.30	0.0777	P	1.0
5	☐	250.000	267.306	5174767.91	0.1546	P	0.9
6	☐	500.000	509.964	9857867.32	0.2948	A	0.8
7	☐	1000.000	989.282	19177596.61	0.5719	A	0.4
8	☐			14644.33	0.0005	P	3.4

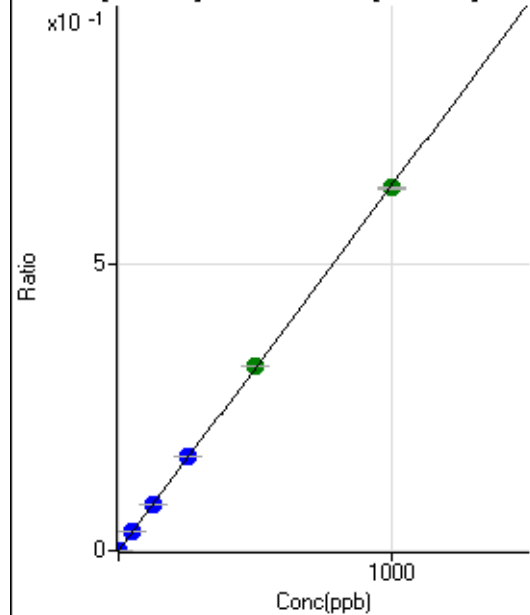
$$y = 5.7801\text{E-}004 * x + 6.3824\text{E-}005$$

$$R = 0.9997$$

$$DL = 0.02938$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD : 159 Tb [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	577.82	0.0000	P	12.7
2	☐	2.000	2.026	44599.76	0.0013	P	0.8
3	☐	50.000	51.330	1102739.38	0.0326	P	0.0
4	☐	125.000	128.022	2763550.82	0.0813	P	0.7
5	☐	250.000	257.139	5464626.42	0.1632	P	0.9
6	☐	500.000	506.647	10753122.20	0.3216	A	0.5
7	☐	1000.000	994.447	21165198.74	0.6312	A	0.8
8	☐			27369.42	0.0009	P	9.4

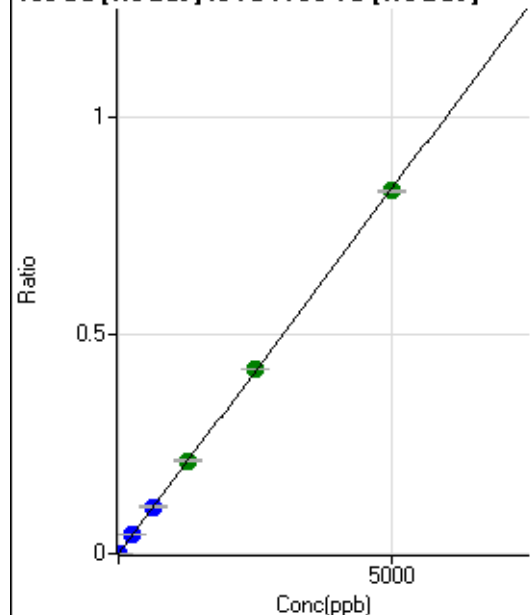
$$y = 6.3472\text{E-}004 * x + 1.6911\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.01017$$

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	152.79	0.0000	P	18.8
2	☐	10.000	10.348	59296.57	0.0017	P	1.1
3	☐	250.000	259.511	1466255.04	0.0433	P	0.7
4	☐	625.000	644.974	3662677.60	0.1077	P	0.9
5	☐	1250.000	1276.384	7136339.14	0.2132	A	0.7
6	☐	2500.000	2531.847	14137851.70	0.4228	A	0.7
7	☐	5000.000	4974.508	27856160.00	0.8308	A	0.7
8	☐			48293.39	0.0016	P	0.5

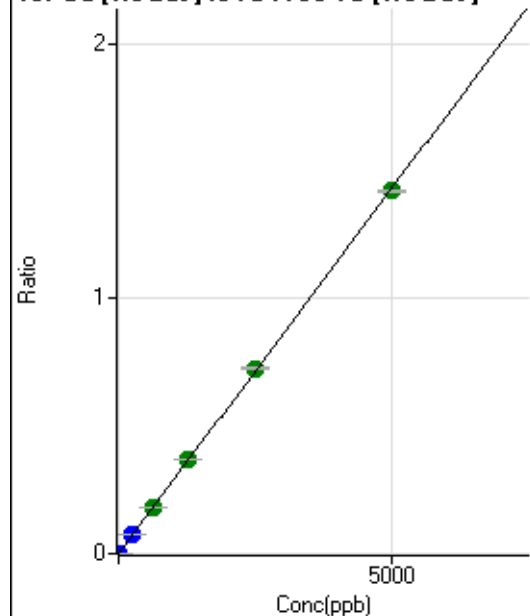
$$y = 1.6700\text{E-}004 * x + 4.4713\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.01509$$

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	236.12	0.0000	P	14.2
2	☐	10.000	10.550	103613.28	0.0030	P	1.0
3	☐	250.000	259.361	2512197.41	0.0743	P	0.6
4	☐	625.000	636.350	6194839.46	0.1822	A	1.0
5	☐	1250.000	1284.076	12307891.07	0.3676	A	0.1
6	☐	2500.000	2536.722	24284051.93	0.7263	A	0.5
7	☐	5000.000	4971.232	47723853.84	1.4232	A	0.5
8	☐			81606.75	0.0027	P	0.9

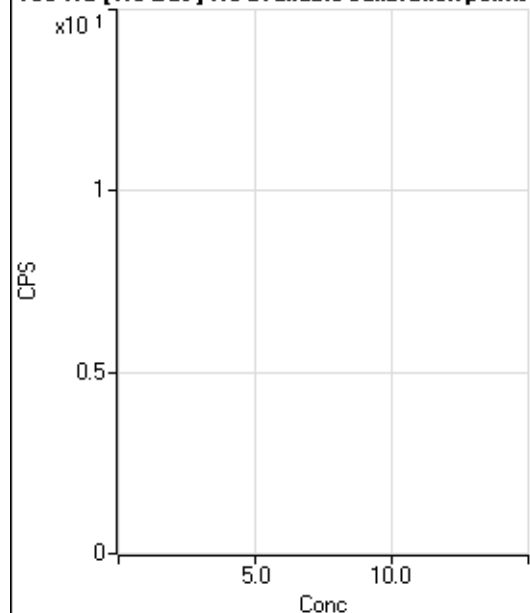
$$y = 2.8630\text{E-}004 * x + 6.9097\text{E-}006$$

$$R = 0.9999$$

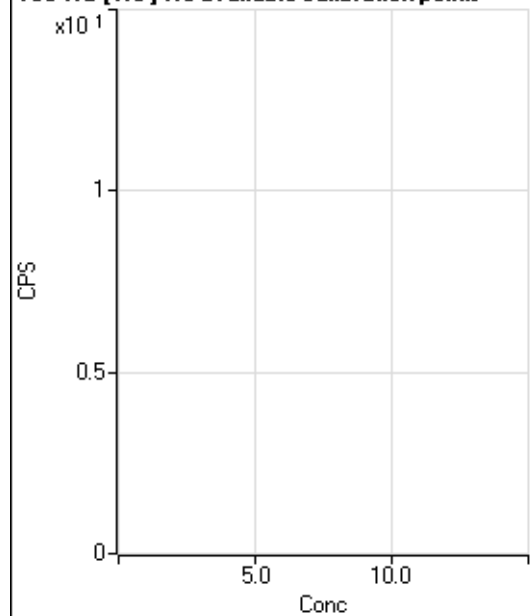
$$DL = 0.01028$$

Weight: <None>

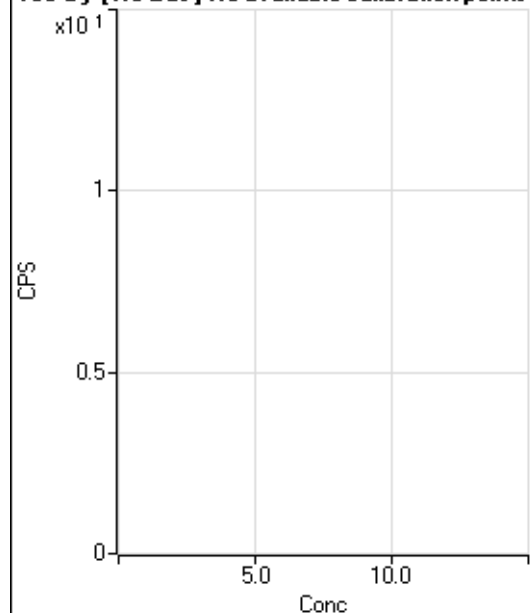
Min Conc: 0

¹⁵⁰Nd [No Gas] No available calibration points

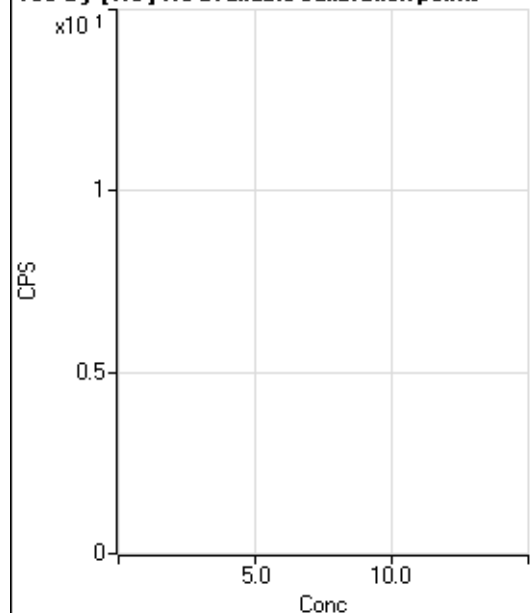
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	100.0
2	☐			15.56		P	49.5
3	☐			173.34		P	19.2
4	☐			460.03		P	3.8
5	☐			775.61		P	4.1
6	☐			1464.57		P	0.5
7	☐			2749.27		P	2.4
8	☐			242.23		P	20.7

¹⁵⁰Nd [He] No available calibration points

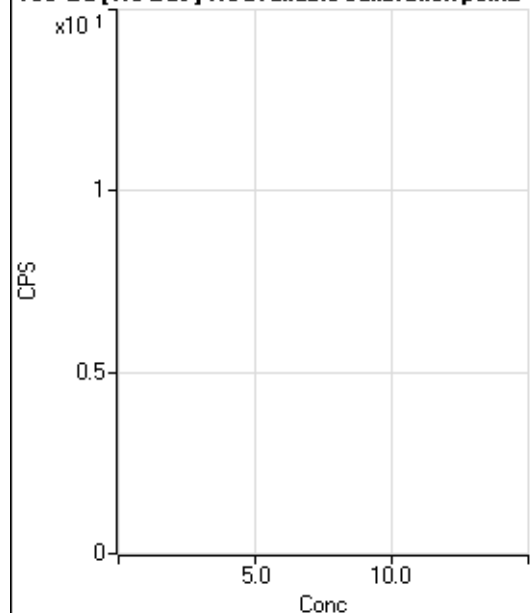
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.6
2	☐			15.56		P	32.7
3	☐			26.67		P	25.0
4	☐			31.11		P	43.3
5	☐			72.22		P	9.6
6	☐			117.78		P	13.1
7	☐			232.23		P	14.2
8	☐			90.00		P	36.5

156 Dy [No Gas] No available calibration points

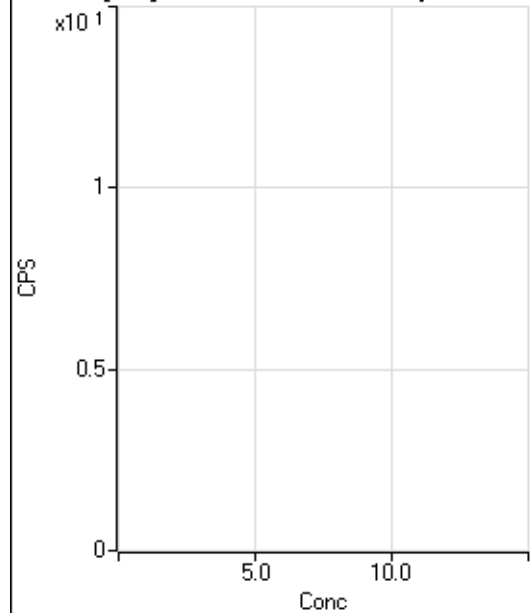
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.67		P	40.0
2	☐			52.78		P	18.2
3	☐			102.78		P	24.8
4	☐			180.57		P	18.7
5	☐			222.23		P	13.2
6	☐			341.68		P	6.5
7	☐			883.40		P	12.5
8	☐			1458.48		P	5.1

156 Dy [He] No available calibration points

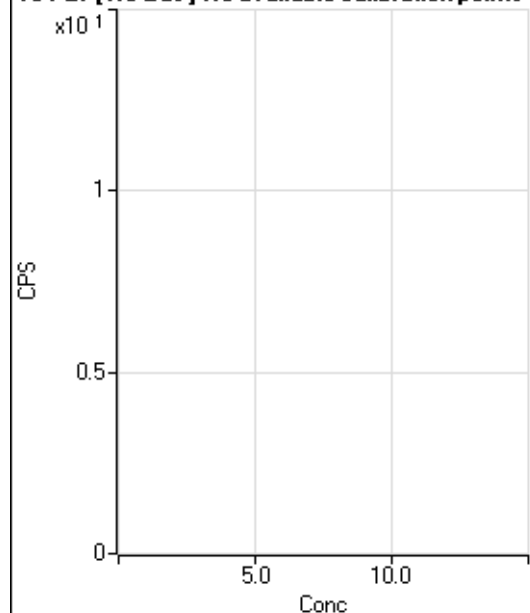
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			31.11		P	12.4
2	☐			27.78		P	25.0
3	☐			66.67		P	0.0
4	☐			97.78		P	3.9
5	☐			161.12		P	14.1
6	☐			292.23		P	4.6
7	☐			623.36		P	3.3
8	☐			655.58		P	5.1

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

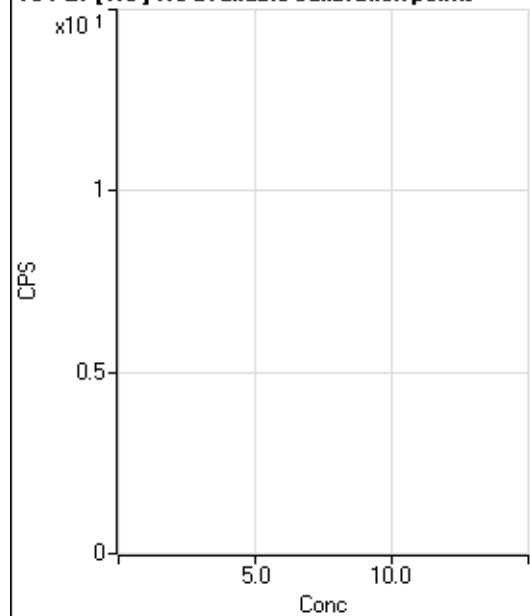
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			291.68		P	17.8
2	☐			277.79		P	21.7
3	☐			227.79		P	5.6
4	☐			244.46		P	11.0
5	☐			416.69		P	14.4
6	☐			425.03		P	13.7
7	☐			494.48		P	13.7
8	☐			1591.84		P	3.1

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			490.02		P	1.4
2	☐			487.80		P	4.2
3	☐			521.13		P	5.6
4	☐			503.35		P	15.8
5	☐			537.80		P	16.6
6	☐			524.46		P	1.6
7	☐			588.91		P	3.6
8	☐			1287.86		P	0.8

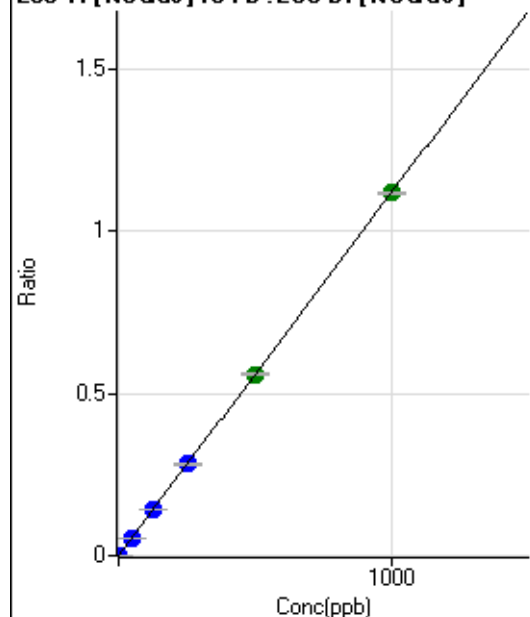
¹⁶⁴Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			175.01		P	12.6
2	☐			166.67		P	10.0
3	☐			188.90		P	20.9
4	☐			191.68		P	13.0
5	☐			183.34		P	27.6
6	☐			208.34		P	0.0
7	☐			247.24		P	16.6
8	☐			358.35		P	10.7

¹⁶⁴Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			92.22		P	11.6
2	☐			94.45		P	16.7
3	☐			85.56		P	20.0
4	☐			88.89		P	20.7
5	☐			108.89		P	7.1
6	☐			127.78		P	9.2
7	☐			158.89		P	21.4
8	☐			170.00		P	5.2

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1100.10	0.0001	P	11.9
2	☐	1.000	0.989	24278.47	0.0012	P	1.3
3	☐	50.000	49.766	1151430.67	0.0557	P	0.1
4	☐	125.000	125.518	2868405.49	0.1404	P	0.4
5	☐	250.000	251.833	5590894.44	0.2816	P	1.2
6	☐	500.000	500.300	10942363.35	0.5595	A	0.4
7	☐	1000.000	999.339	21246561.07	1.1175	A	0.7
8	☐			6349.05	0.0004	P	6.6

$$y = 0.0011 * x + 5.1954E-005$$

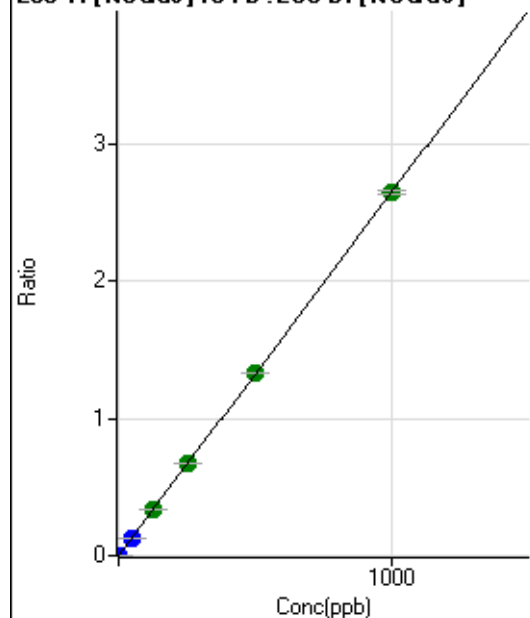
$$R = 1.0000$$

$$DL = 0.01653$$

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	2200.28	0.0001	P	2.8
2	☐	1.000	0.965	55740.00	0.0027	P	0.5
3	☐	50.000	49.754	2723096.31	0.1317	P	0.5
4	☐	125.000	125.074	6762053.36	0.3310	A	0.1
5	☐	250.000	253.185	13298853.34	0.6699	A	0.4
6	☐	500.000	500.704	25908603.19	1.3247	A	0.1
7	☐	1000.000	998.855	50242990.36	2.6426	A	0.9
8	☐			15061.91	0.0010	P	3.5

$$y = 0.0026 * x + 1.0391E-004$$

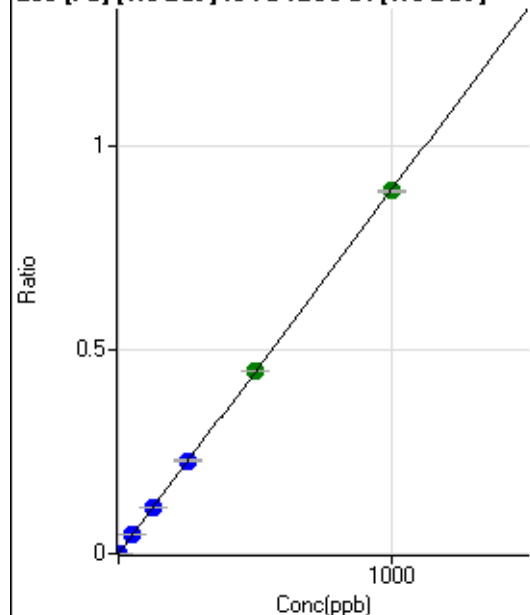
$$R = 1.0000$$

$$DL = 0.003258$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1272.32	0.0001	P	9.1
2	☐	1.000	1.008	20160.19	0.0010	P	0.8
3	☐	50.000	50.499	934028.62	0.0452	P	0.4
4	☐	125.000	126.862	2316961.22	0.1134	P	0.8
5	☐	250.000	254.644	4517816.77	0.2276	P	1.4
6	☐	500.000	502.306	8779420.91	0.4489	A	0.4
7	☐	1000.000	997.428	16945822.14	0.8913	A	0.6
8	☐			68267.67	0.0044	P	0.4

$$y = 8.9353E-004 * x + 6.0086E-005$$

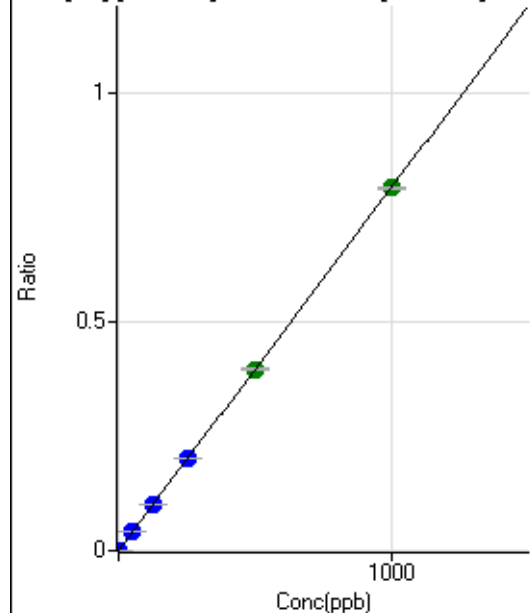
$$R = 1.0000$$

$$DL = 0.0183$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1200.09	0.0001	P	5.2
2	☐	1.000	0.982	17554.53	0.0008	P	1.5
3	☐	50.000	50.524	831105.34	0.0402	P	0.3
4	☐	125.000	127.215	2066399.94	0.1011	P	0.1
5	☐	250.000	253.289	3996539.67	0.2013	P	1.1
6	☐	500.000	499.657	7766554.81	0.3971	A	0.7
7	☐	1000.000	999.046	15095259.83	0.7939	A	0.3
8	☐			61849.42	0.0039	P	0.4

$$y = 7.9463E-004 * x + 5.6676E-005$$

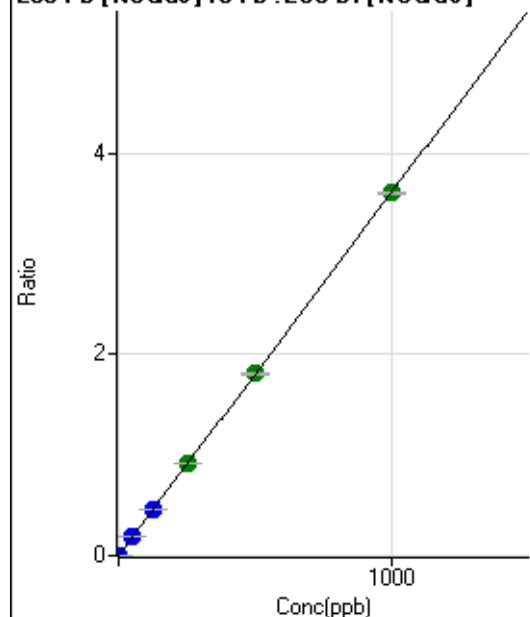
$$R = 1.0000$$

$$DL = 0.01119$$

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	4704.15	0.0002	P	1.8
2	☐	1.000	0.992	79826.35	0.0038	P	0.7
3	☐	50.000	50.632	3783737.29	0.1830	P	0.2
4	☐	125.000	126.968	9370278.41	0.4587	P	0.2
5	☐	250.000	252.556	18106563.25	0.9121	A	0.7
6	☐	500.000	500.363	35337940.03	1.8068	A	0.6
7	☐	1000.000	998.902	68578792.50	3.6069	A	0.4
8	☐			277584.76	0.0177	P	0.4

$$y = 0.0036 * x + 2.2216E-004$$

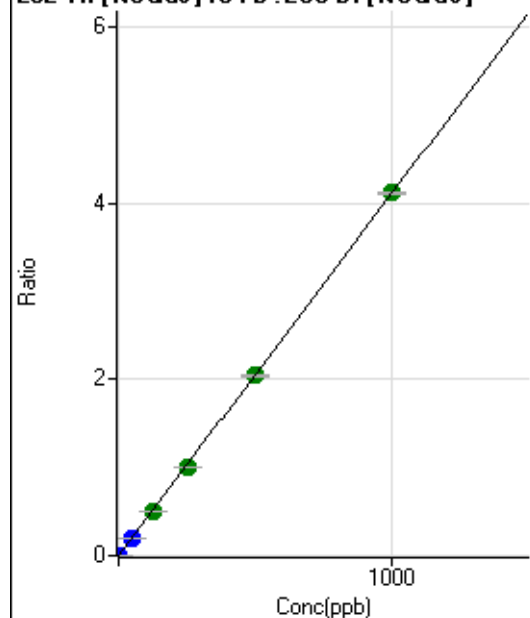
$$R = 1.0000$$

$$DL = 0.003357$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD : 209 Bi [No Gas]



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2750.37	0.0001	P	10.7
2	☐	1.000	0.725	65212.44	0.0031	P	3.5
3	☐	50.000	46.862	3985173.73	0.1928	P	0.2
4	☐	125.000	120.152	10094114.00	0.4941	A	0.3
5	☐	250.000	246.611	20129184.01	1.0140	A	0.4
6	☐	500.000	497.337	39989953.21	2.0447	A	0.1
7	☐	1000.000	1002.942	78395370.27	4.1233	A	0.5
8	☐			18910.40	0.0012	P	5.7

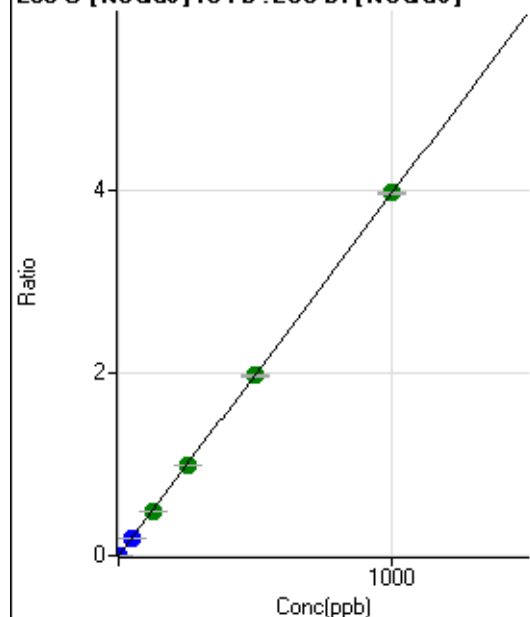
$$y = 0.0041 * x + 1.2988E-004$$

$$R = 1.0000$$

$$DL = 0.01016$$

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	2116.93	0.0001	P	3.3
2	☐	1.000	0.926	79045.95	0.0038	P	1.1
3	☐	50.000	48.368	3962114.11	0.1917	P	1.1
4	☐	125.000	121.052	9797031.47	0.4795	A	0.7
5	☐	250.000	248.460	19537047.66	0.9842	A	0.6
6	☐	500.000	496.859	38487725.51	1.9680	A	0.6
7	☐	1000.000	1002.530	75497369.05	3.9708	A	0.3
8	☐			13449.16	0.0009	P	2.8

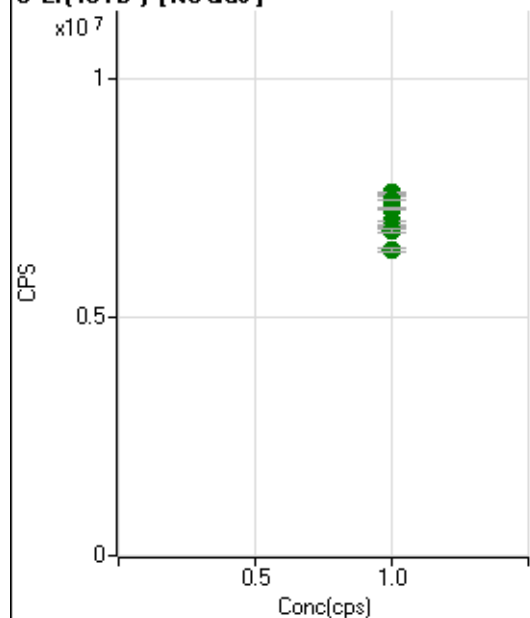
$$y = 0.0040 * x + 9.9976E-005$$

$$R = 1.0000$$

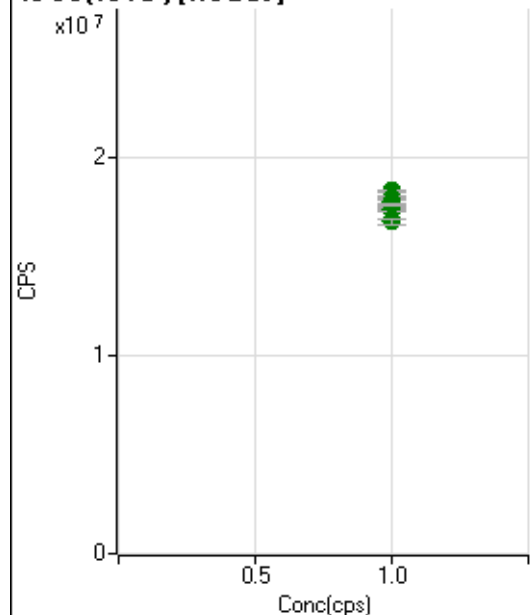
$$DL = 0.002463$$

Weight: <None>

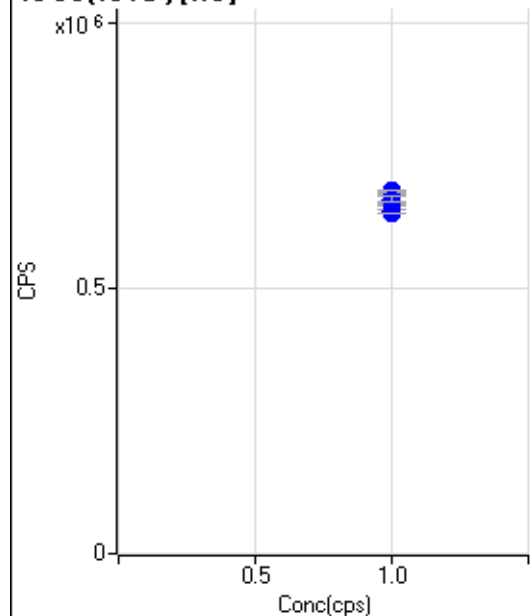
Min Conc: 0

6 Li (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		7575715.44		A	0.8
2	☐	1.000		7622497.59		A	0.4
3	☐	1.000		7479351.56		A	0.2
4	☐	1.000		7284806.56		A	0.9
5	☐	1.000		7035322.67		A	0.4
6	☐	1.000		6916984.69		A	0.7
7	☐	1.000		6827287.74		A	0.9
8	☐	1.000		6411357.61		A	1.4

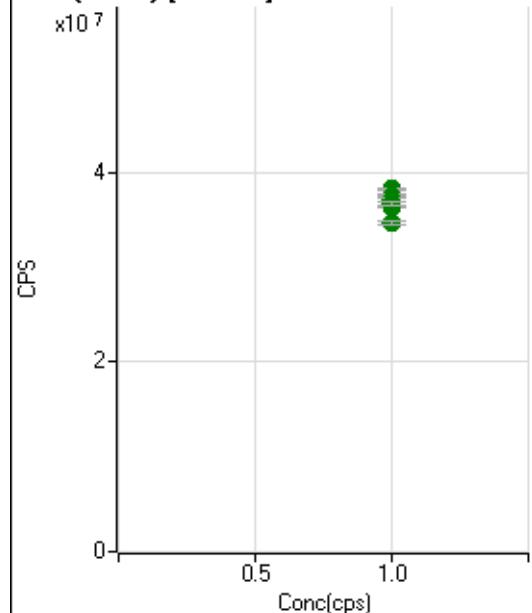
45 Sc(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		18313836.52		A	0.3
2	☐	1.000		18334250.41		A	0.2
3	☐	1.000		18017616.55		A	1.0
4	☐	1.000		17790968.11		A	1.5
5	☐	1.000		17413729.38		A	0.2
6	☐	1.000		17371435.81		A	0.8
7	☐	1.000		17646967.76		A	0.7
8	☐	1.000		16772675.72		A	1.8

45 Sc(ISTD) [He]

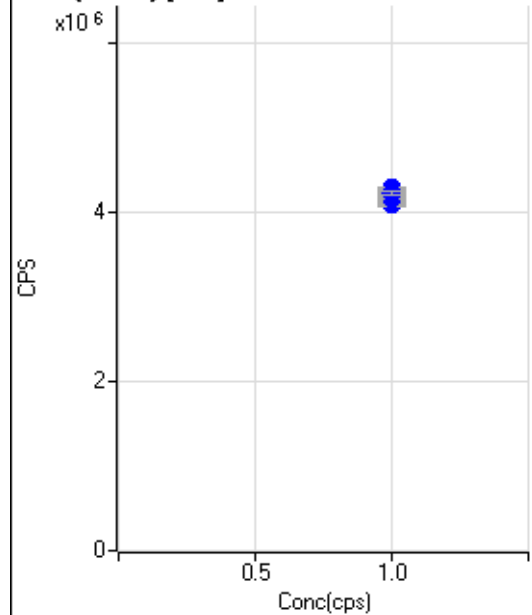
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		674553.98		P	0.1
2	☐	1.000		682729.81		P	0.4
3	☐	1.000		661194.19		P	0.6
4	☐	1.000		657117.84		P	0.5
5	☐	1.000		643943.00		P	0.9
6	☐	1.000		641038.02		P	0.4
7	☐	1.000		659322.19		P	0.2
8	☐	1.000		666898.32		P	1.5

89 Y (ISTD) [No Gas]

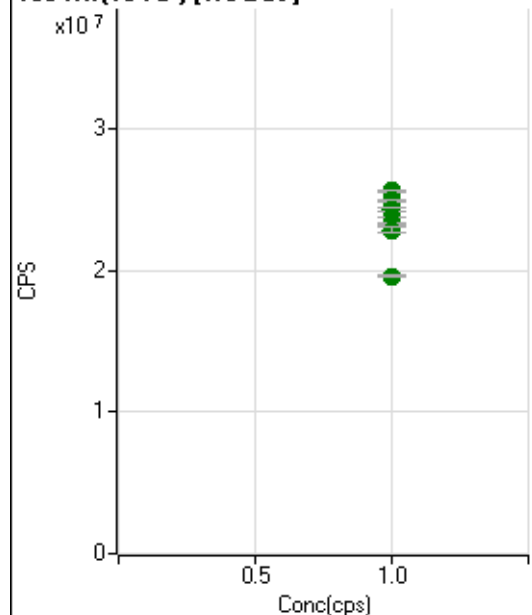


	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		38247768.60		A	0.8
2	☐	1.000		38158306.38		A	0.4
3	☐	1.000		37598916.66		A	0.6
4	☐	1.000		37141914.17		A	0.9
5	☐	1.000		36525677.51		A	0.1
6	☐	1.000		36336835.85		A	0.3
7	☐	1.000		36747734.45		A	1.1
8	☐	1.000		34631024.76		A	1.2

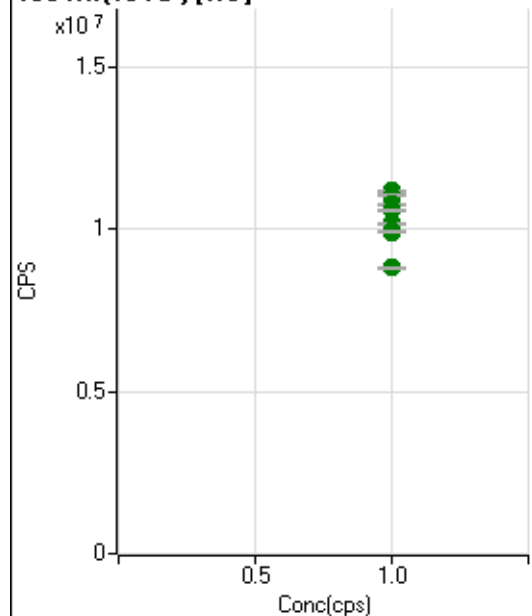
89 Y (ISTD) [He]



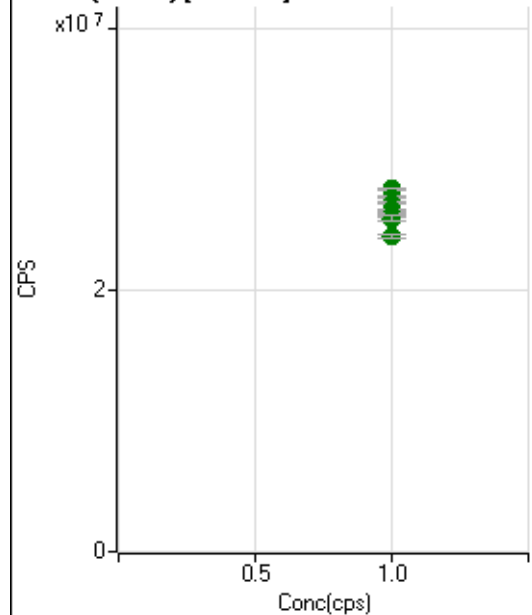
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4245751.19		P	0.3
2	☐	1.000		4281367.54		P	0.6
3	☐	1.000		4228115.39		P	0.7
4	☐	1.000		4192131.78		P	0.8
5	☐	1.000		4123928.38		P	0.4
6	☐	1.000		4073401.95		P	0.4
7	☐	1.000		4150464.69		P	0.2
8	☐	1.000		4217042.75		P	1.2

103Rh(ISTD) [NoGas]

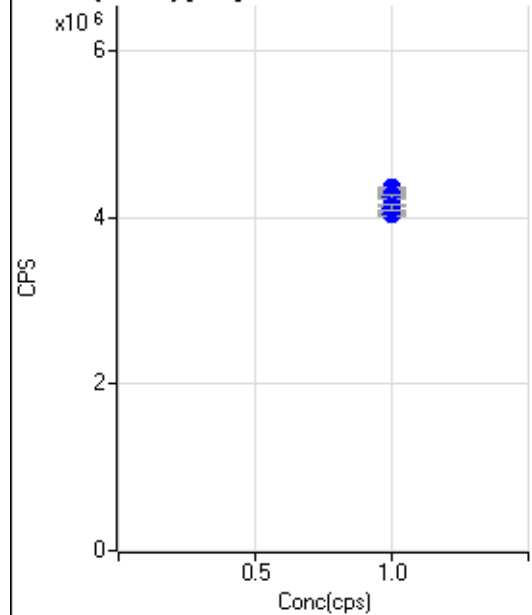
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		25612101.79		A	0.1
2	☐	1.000		25650121.93		A	0.5
3	☐	1.000		24951905.59		A	0.9
4	☐	1.000		24356565.13		A	1.4
5	☐	1.000		23772532.82		A	0.4
6	☐	1.000		23321721.53		A	0.6
7	☐	1.000		22890039.40		A	1.4
8	☐	1.000		19623324.40		A	1.1

103Rh(ISTD) [He]

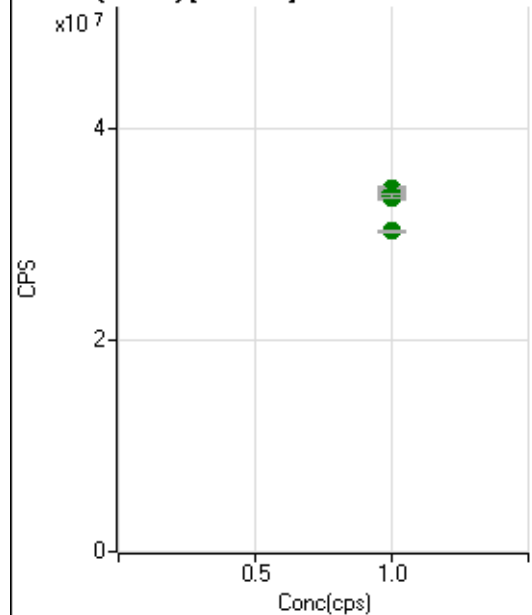
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11180470.67		A	0.5
2	☐	1.000		11034009.98		A	0.7
3	☐	1.000		10781102.90		A	0.5
4	☐	1.000		10588759.01		A	0.7
5	☐	1.000		10181512.00		A	0.8
6	☐	1.000		9960058.88		A	0.5
7	☐	1.000		9921632.84		A	0.3
8	☐	1.000		8820550.77		A	0.5

115 In(ISTD) [NoGas]

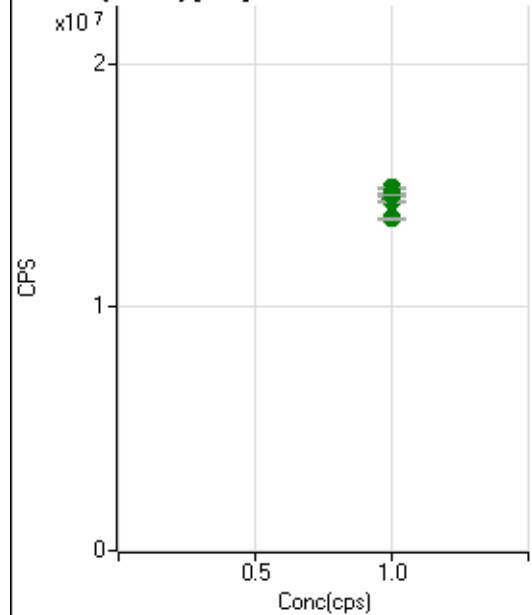
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27768262.94		A	0.2
2	☐	1.000		27687673.96		A	0.5
3	☐	1.000		27134779.19		A	0.4
4	☐	1.000		26657856.14		A	0.5
5	☐	1.000		26138707.78		A	0.6
6	☐	1.000		25752831.84		A	0.7
7	☐	1.000		25531830.49		A	1.3
8	☐	1.000		24119807.57		A	1.1

115 In(ISTD) [He]

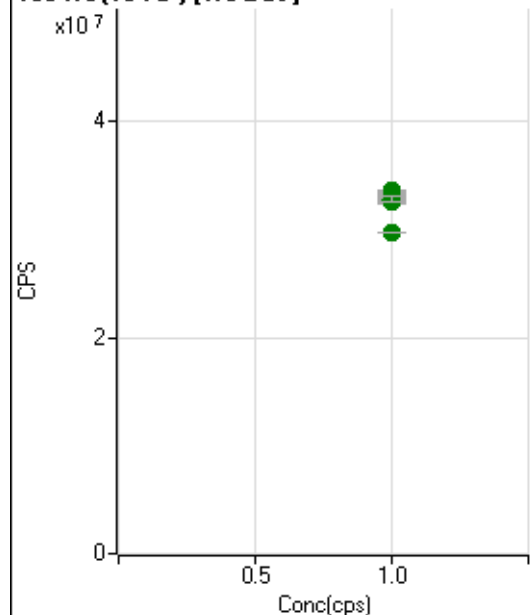
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4300384.79		P	0.5
2	☐	1.000		4351729.64		P	0.3
3	☐	1.000		4256283.27		P	0.8
4	☐	1.000		4236876.82		P	1.1
5	☐	1.000		4136015.70		P	0.5
6	☐	1.000		4042042.38		P	0.5
7	☐	1.000		4042538.52		P	1.0
8	☐	1.000		4115975.19		P	1.4

159 Tb(ISTD) [NoGas]

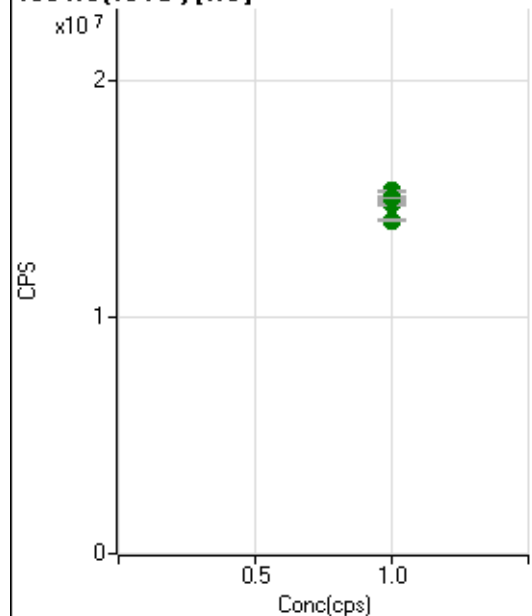
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		34159018.66		A	0.8
2	☐	1.000		34228038.10		A	1.0
3	☐	1.000		33829029.78		A	0.4
4	☐	1.000		34002935.60		A	1.2
5	☐	1.000		33478982.00		A	0.4
6	☐	1.000		33437630.34		A	1.0
7	☐	1.000		33533137.55		A	1.3
8	☐	1.000		30256704.27		A	0.7

159 Tb(ISTD) [He]

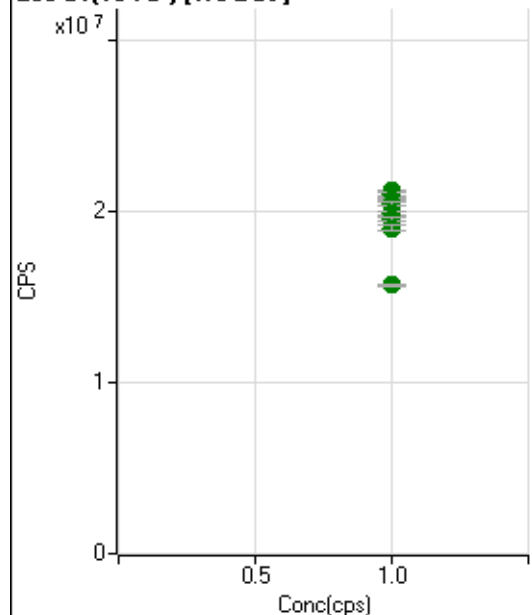
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14898007.56		A	0.4
2	☐	1.000		14667945.89		A	0.7
3	☐	1.000		14568750.06		A	0.8
4	☐	1.000		14676436.59		A	0.5
5	☐	1.000		14412432.01		A	1.2
6	☐	1.000		14346356.45		A	0.3
7	☐	1.000		14608449.23		A	0.2
8	☐	1.000		13638455.49		A	0.8

165 Ho(ISTD) [NoGas]

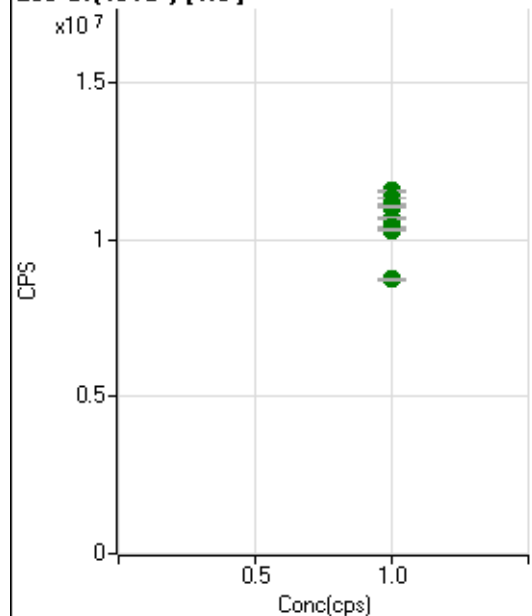
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		33577914.64		A	0.9
2	☐	1.000		33391507.34		A	0.8
3	☐	1.000		33070211.50		A	0.8
4	☐	1.000		33193749.70		A	1.0
5	☐	1.000		32891263.23		A	0.4
6	☐	1.000		32584621.22		A	1.7
7	☐	1.000		32832384.41		A	1.1
8	☐	1.000		29703307.61		A	0.3

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15311780.61		A	0.2
2	☐	1.000		15035034.50		A	0.5
3	☐	1.000		14978421.72		A	0.3
4	☐	1.000		15031949.78		A	0.1
5	☐	1.000		14787477.56		A	1.2
6	☐	1.000		14749335.61		A	0.4
7	☐	1.000		15001320.61		A	0.3
8	☐	1.000		14058750.90		A	0.7

209 Bi(ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21173890.79		A	0.2
2	☐	1.000		20978358.30		A	0.7
3	☐	1.000		20672155.94		A	0.6
4	☐	1.000		20429963.31		A	1.0
5	☐	1.000		19852364.01		A	1.1
6	☐	1.000		19557828.18		A	1.2
7	☐	1.000		19013854.02		A	1.6
8	☐	1.000		15659337.54		A	0.3

209 Bi(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11557494.69		A	0.3
2	☐	1.000		11336757.61		A	0.4
3	☐	1.000		11126965.25		A	0.3
4	☐	1.000		11046972.06		A	0.7
5	☐	1.000		10681359.77		A	0.8
6	☐	1.000		10398537.14		A	0.1
7	☐	1.000		10322035.13		A	0.7
8	☐	1.000		8734234.59		A	0.5

US EPA Tune Check Sample Report

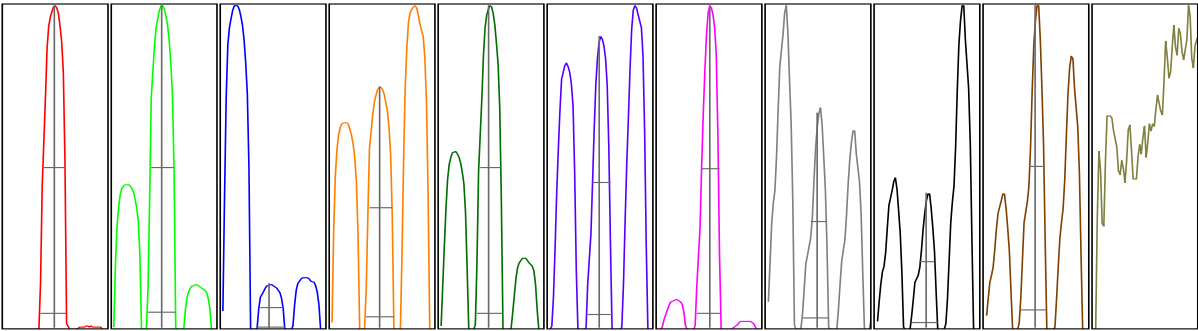
Batch Folder D:\ICP-MS Data\P7012920 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	23557	0.69	5.00	
24	391564	0.39	5.00	
25	53678	0.50	5.00	
26	63170	0.51	5.00	
59	221318	0.38	5.00	
113	26046	0.48	5.00	
115	309055	0.50	5.00	
206	62798	0.63	5.00	
207	57523	0.51	5.00	
208	135767	0.43	5.00	
220	85	1.80		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	23590	23553	23352	23492	23797
24	393657	392423	389648	390820	391273
25	54058	53613	53587	53340	53792
26	63280	63232	63085	62686	63565
59	222043	221649	220217	220639	222041
113	26051	26226	25921	25935	26096
115	308839	310015	306664	309062	310694
206	63181	62874	62382	62390	63164
207	57652	57631	57082	57404	57844
208	135377	136248	135375	135292	136541
220	85	86	86	83	86

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	38176	9.00	8.9 - 9.1		0.780	0.900	
24	601100	23.95	23.9 - 24.1		0.825	0.900	
25	82161	24.90	24.9 - 25.1		0.792	0.900	
26	96281	25.95	25.9 - 26.1		0.829	0.900	
59	369107	58.95	58.9 - 59.1		0.784	0.900	
113	51393	113.00	112.9 - 113.1		0.726	0.900	
115	616446	115.05	114.9 - 115.1		0.724	0.900	
206	135394	206.00	205.9 - 206.1		0.761	0.900	
207	124467	207.00	206.9 - 207.1		0.766	0.900	
208	296379	208.00	207.9 - 208.1		0.763	0.900	
220			-				

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

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.4	V	Deflect	13.4	V
Extract 2	-150.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-65	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	180	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	50761	0.33	
89	78094	0.57	
205	50851	0.60	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	50605	50726	50974	50603	50900
89	77326	78312	78271	78121	78441
205	50567	51356	50755	50891	50685

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

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

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.5	V	Deflect	2.6	V
Extract 2	-150.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-70	V	Cell Exit	-60	V			

Cell Parameters

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