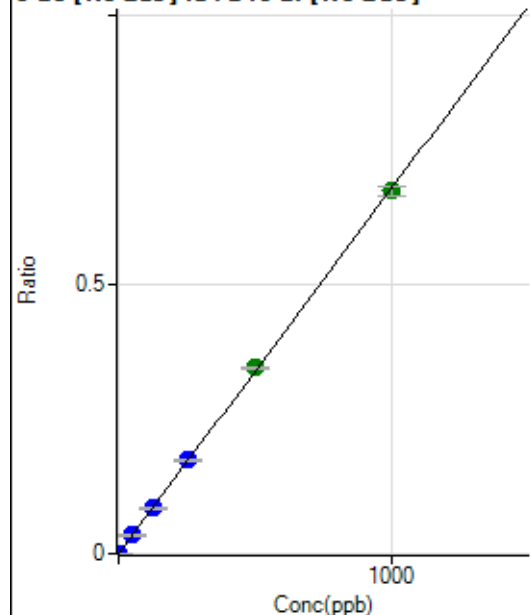


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8100621IMS.b\
Analysis File: P8100621IMS.batch.bin
DA Date-Time: 2021-10-06 14:17:47
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-10-06 10:19:43
2	004CALS.d	S02	2021-10-06 10:22:49
3	006CALS.d	S03	2021-10-06 10:28:57
4	007CALS.d	S04	2021-10-06 10:32:00
5	008CALS.d	S05	2021-10-06 10:35:06
6	009CALS.d	S06	2021-10-06 10:38:09
7	010CALS.d	S07	2021-10-06 10:41:15
8	013CALS.d	S08	2021-10-06 10:51:12

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	31.99	0.0000	P	17.4
2	☐	1.000	0.973	3219.73	0.0007	P	4.9
3	☐	50.000	50.318	167504.77	0.0341	P	1.2
4	☐	125.000	124.377	422497.55	0.0843	P	1.1
5	☐	250.000	256.468	835904.79	0.1738	P	2.1
6	☐	500.000	509.770	1709923.15	0.3455	A	1.3
7	☐	1000.000	993.560	3241462.41	0.6734	A	2.5
8	☐			165.97	0.0000	P	4.4

$$y = 6.7781E-004 * x + 6.7957E-006$$

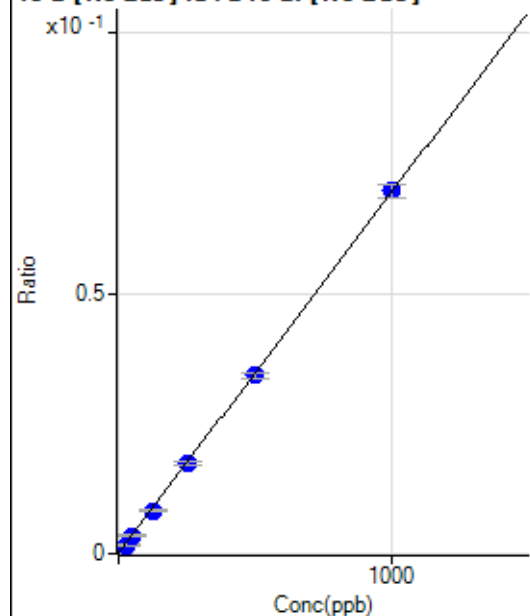
$$R = 0.9999$$

$$DL = 0.005244$$

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	445.25	0.0001	P	11.2
2	☐	25.000	22.051	7827.90	0.0016	P	8.9
3	☐	50.000	49.154	17168.01	0.0035	P	4.9
4	☐	125.000	117.341	41182.08	0.0082	P	5.6
5	☐	250.000	250.180	83730.78	0.0174	P	5.1
6	☐	500.000	492.293	169097.47	0.0342	P	3.6
7	☐	1000.000	1004.882	335233.75	0.0696	P	3.5
8	☐			9977.44	0.0022	P	6.3

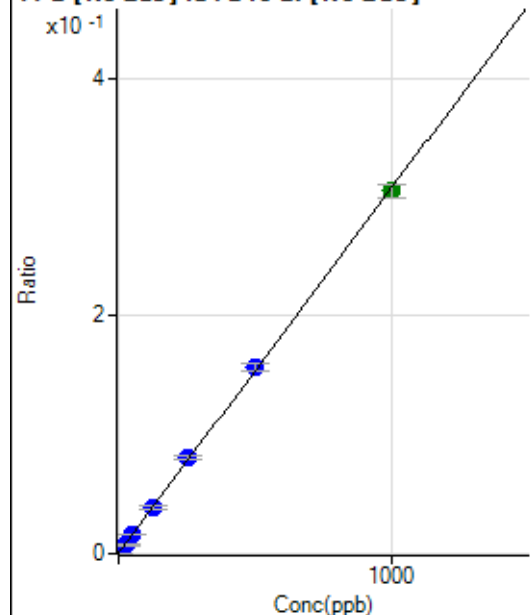
$$y = 6.9212E-005 * x + 9.4554E-005$$

$$R = 0.9999$$

$$DL = 0.4603$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2003.75	0.0004	P	2.3
2	☐	25.000	22.484	35431.02	0.0073	P	5.6
3	☐	50.000	50.991	79027.00	0.0161	P	5.2
4	☐	125.000	124.385	193717.83	0.0386	P	5.4
5	☐	250.000	262.382	389737.55	0.0811	P	4.3
6	☐	500.000	509.554	777141.06	0.1570	P	3.4
7	☐	1000.000	992.218	1469703.83	0.3053	A	4.0
8	☐			46014.57	0.0103	P	3.5

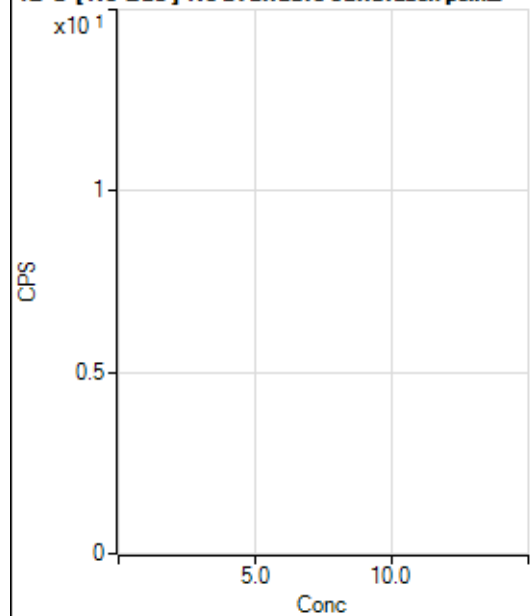
$$y = 3.0729E-004 * x + 4.2528E-004$$

$$R = 0.9998$$

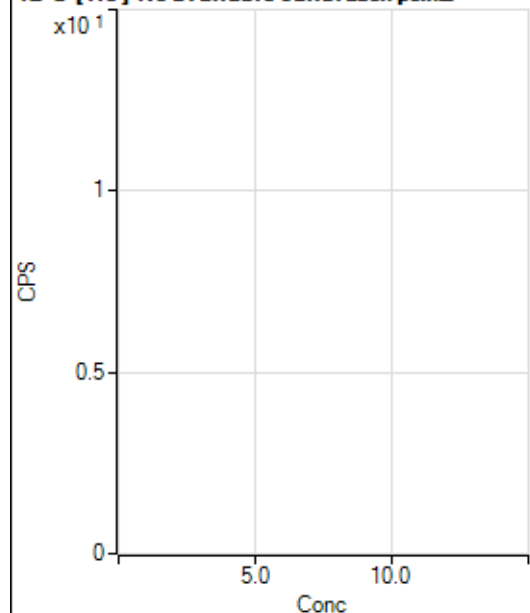
$$DL = 0.09599$$

Weight: <None>

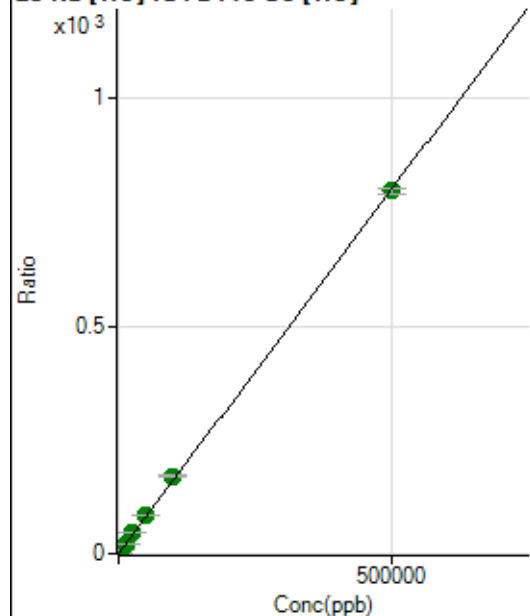
Min Conc: 0

12 C [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6591655.96		A	1.1
2	☐			6502021.63		A	0.6
3	☐			6784874.98		A	1.5
4	☐			7123846.77		A	1.4
5	☐			7102830.45		A	1.1
6	☐			7092022.73		A	1.0
7	☐			7336004.85		A	2.3
8	☐			7561305.55		A	2.7

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58862.71		P	1.5
2	☐			59208.89		P	0.9
3	☐			64171.35		P	1.1
4	☐			66283.18		P	1.3
5	☐			68153.38		P	0.8
6	☐			67753.72		P	1.8
7	☐			71552.55		P	0.9
8	☐			82587.68		P	0.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	35883.64	0.1459	P	3.3
2	☐	500.000	519.578	244088.34	0.9775	P	2.0
3	☐	5000.000	5563.281	2214771.34	9.0503	A	2.0
4	☐	12500.000	13540.401	5356723.47	21.8181	A	2.5
5	☐	25000.000	27809.617	10812563.96	44.6569	A	0.3
6	☐	50000.000	52806.247	20924195.78	84.6656	A	2.5
7	☐	100000.00	106530.75	42029254.41	170.6550	A	2.5
8	☐	500000.00	498241.08	207714407.4	797.6116	A	1.3

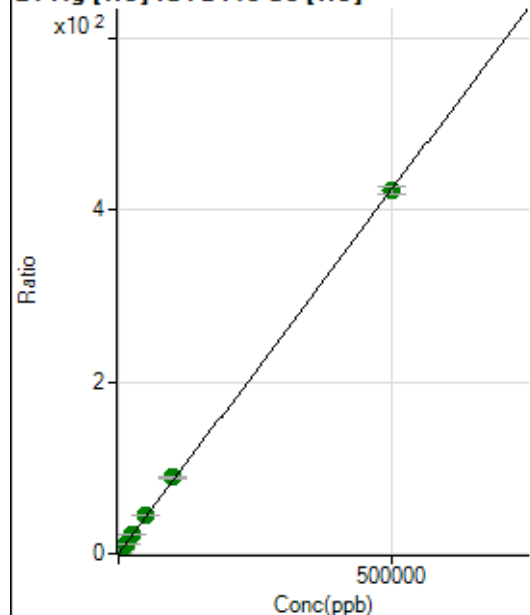
$$y = 0.0016 * x + 0.1459$$

$$R = 0.9999$$

$$DL = 8.959$$

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	330.57	0.0013	P	9.6
2	☐	500.000	514.013	109144.51	0.4371	P	2.8
3	☐	5000.000	5588.704	1159450.17	4.7395	A	4.0
4	☐	12500.000	13586.580	2827764.02	11.5201	A	3.0
5	☐	25000.000	27100.632	5563346.78	22.9773	A	0.7
6	☐	50000.000	52237.477	10946565.44	44.2884	A	1.5
7	☐	100000.00	105087.14	21942127.05	89.0945	A	2.6
8	☐	500000.00	498620.72	110079995.5	422.7332	A	2.0

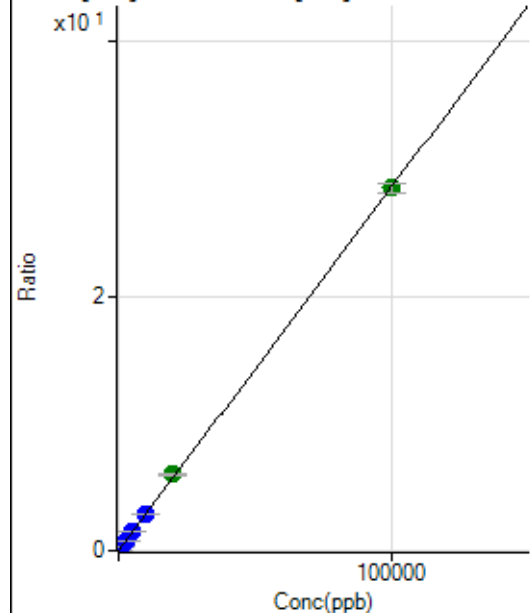
$$y = 8.4780\text{E-}004 * x + 0.0013$$

$$R = 0.9999$$

$$DL = 0.4542$$

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	118.74	0.0005	P	3.7
2	☐	20.000	21.313	1642.39	0.0066	P	0.9
3	☐	1000.000	1054.847	73894.54	0.3020	P	3.5
4	☐	2500.000	2622.586	184176.48	0.7502	P	1.7
5	☐	5000.000	5269.216	364822.39	1.5068	P	1.0
6	☐	10000.000	10065.235	711302.56	2.8778	P	1.5
7	☐	20000.000	20921.515	1472972.64	5.9813	A	3.0
8	☐	100000.00	99792.099	7428341.73	28.5279	A	2.7

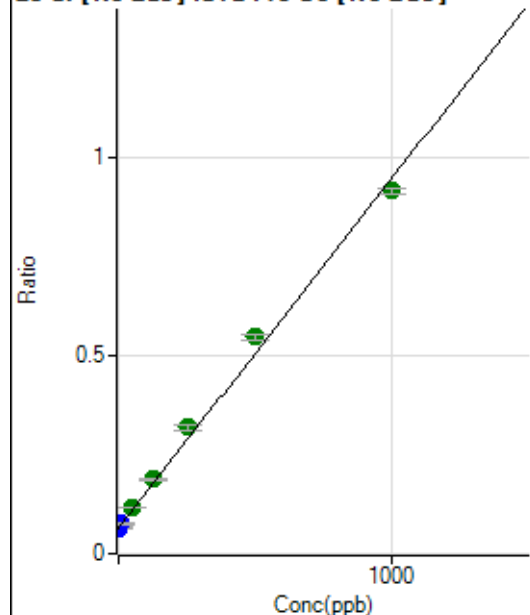
$$y = 2.8587\text{E-}004 * x + 4.8274\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.1888$$

Weight: <None>

Min Conc: 0

28 Si [No Gas] ISTD : 45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	582982.74	0.0650	P	3.5
2	☐	10.000	12.165	690773.12	0.0757	P	3.0
3	☐	50.000	57.500	1073108.59	0.1156	A	0.7
4	☐	125.000	138.790	1725242.44	0.1872	A	1.5
5	☐	250.000	287.205	2873613.28	0.3178	A	4.1
6	☐	500.000	547.088	5049124.72	0.5466	A	2.5
7	☐	1000.000	965.035	8649556.27	0.9146	A	1.9
8	☐			1371402.13	0.1505	A	10.7

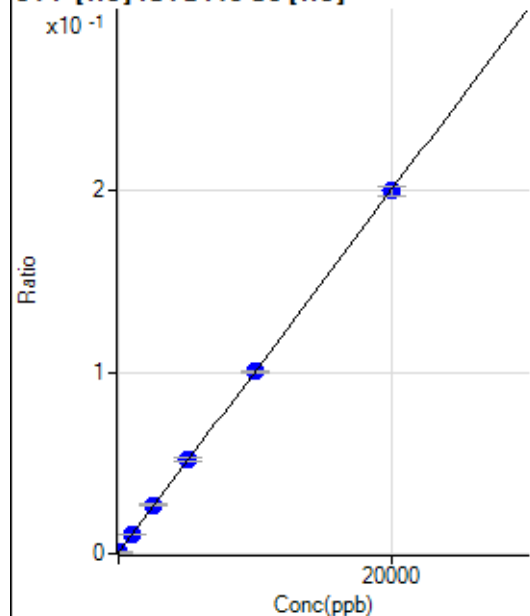
$$y = 8.8041\text{E-}004 * x + 0.0650$$

$$R = 0.9975$$

$$DL = 7.639$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-1.979	122.23	0.0005	P	26.9
2	☐	0.000	1.979	133.34	0.0005	P	39.0
3	☐	1000.000	1007.082	2589.20	0.0106	P	3.6
4	☐	2500.000	2649.357	6618.39	0.0270	P	4.6
5	☐	5000.000	5115.344	12491.82	0.0516	P	4.9
6	☐	10000.000	9996.645	24799.58	0.1003	P	1.5
7	☐	20000.000	19953.818	49186.99	0.1997	P	2.7
8	☐			169.45	0.0007	P	1.9

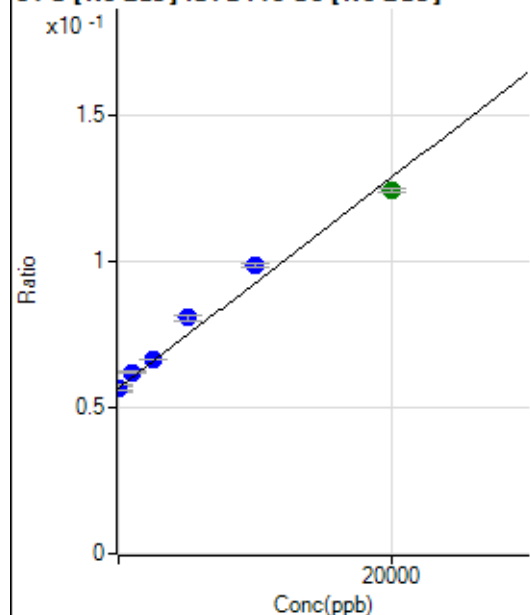
$$y = 9.9836\text{E-}006 * x + 5.1607\text{E-}004$$

$$R = 1.0000$$

$$DL = 51.39$$

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	-56.282	507122.46	0.0565	P	3.4
2	☐	0.000	56.282	519562.23	0.0569	P	2.9
3	☐	1000.000	1509.887	576979.38	0.0622	P	1.8
4	☐	2500.000	2748.915	614164.40	0.0666	P	0.1
5	☐	5000.000	6649.522	728990.32	0.0807	P	2.2
6	☐	10000.000	11635.412	911251.19	0.0986	P	1.8
7	☐	20000.000	18713.305	1174266.45	0.1242	A	1.0
8	☐			418978.44	0.0460	P	5.5

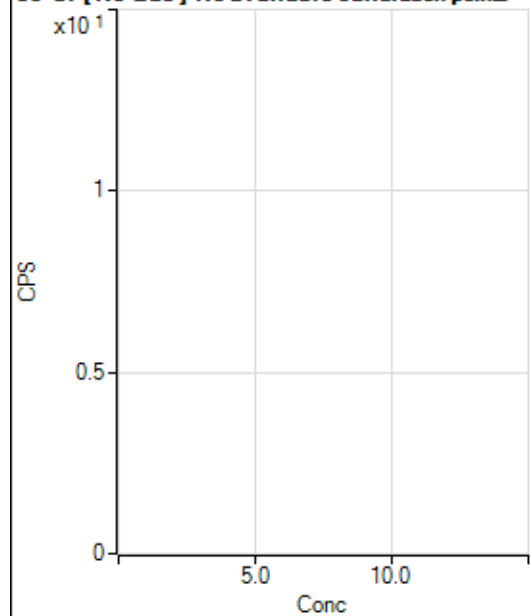
$$y = 3.6038E-006 * x + 0.0567$$

R = 0.9906

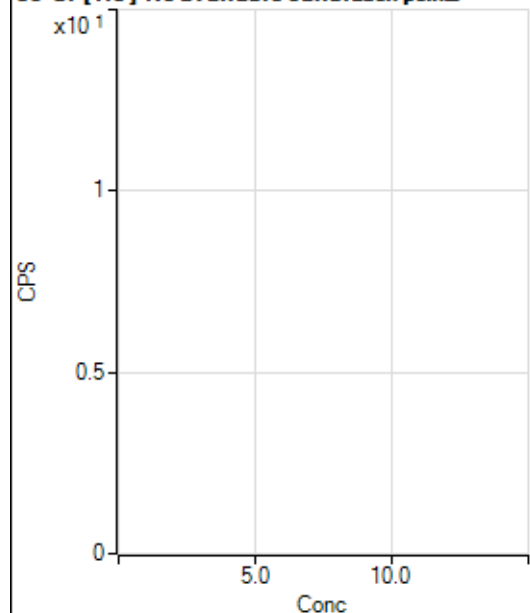
DL = 1488

Weight: <None>

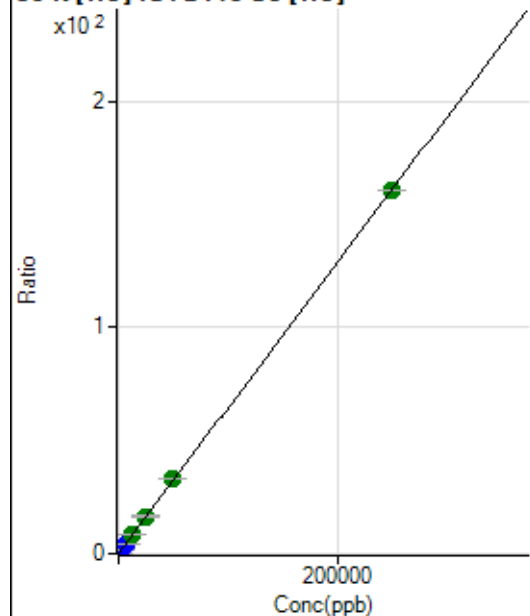
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			2253014.70		A	5.5
2	☐			2065685.33		A	4.7
3	☐			2084989.93		A	2.7
4	☐			1980728.04		A	5.1
5	☐			1938540.15		A	2.9
6	☐			1837673.07		A	4.1
7	☐			1842295.12		A	2.0
8	☐			3786154.12		A	2.1

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11310.25		P	4.8
2	☐			11085.10		P	1.1
3	☐			11185.16		P	4.2
4	☐			10709.79		P	4.3
5	☐			9992.59		P	4.5
6	☐			9709.09		P	1.4
7	☐			9520.05		P	1.1
8	☐			24593.71		P	3.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	18278.66	0.0743	P	2.7
2	☐	500.000	493.426	97744.61	0.3914	P	1.2
3	☐	2500.000	2669.494	437922.71	1.7898	P	3.1
4	☐	6250.000	6576.183	1055526.24	4.3004	P	3.4
5	☐	12500.000	13377.467	2099391.95	8.6712	A	1.9
6	☐	25000.000	25629.187	4089658.64	16.5446	A	0.7
7	☐	50000.000	51359.616	8147483.25	33.0800	A	2.0
8	☐	250000.00	249611.44	41797226.97	160.4845	A	0.2

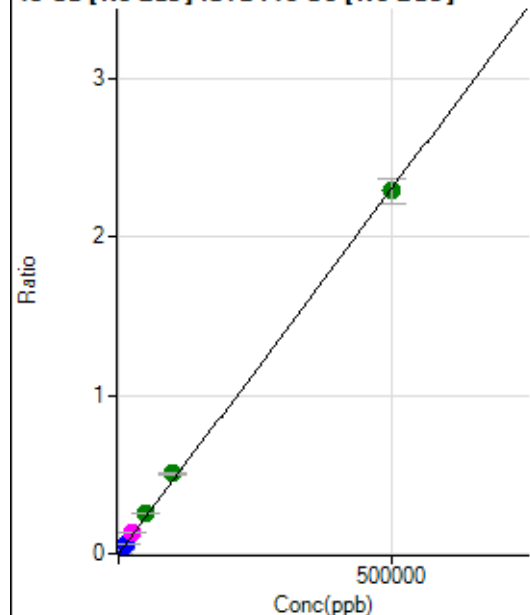
$$y = 6.4264E-004 * x + 0.0743$$

$$R = 1.0000$$

$$DL = 9.483$$

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	569.94	0.0001	P	14.4
2	☐	500.000	469.508	20325.95	0.0022	P	2.6
3	☐	5000.000	5390.307	231110.34	0.0249	P	1.3
4	☐	12500.000	13555.914	576294.84	0.0625	P	0.4
5	☐	25000.000	28090.884	1169852.43	0.1295	M	2.9
6	☐	50000.000	55688.601	2370704.11	0.2566	A	0.7
7	☐	100000.00	109404.96	4767684.05	0.5041	A	1.0
8	☐	500000.00	497365.33	20878530.84	2.2915	A	6.7

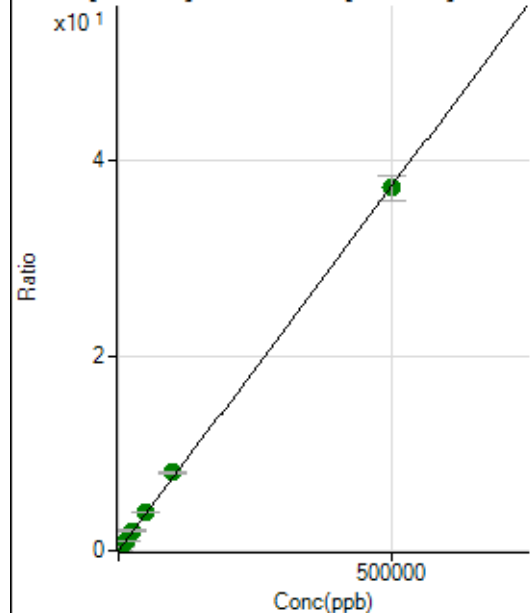
$$y = 4.6071\text{E-}006 * x + 6.3632\text{E-}005$$

$$R = 0.9998$$

$$DL = 5.976$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	52970.38	0.0059	P	3.3
2	☐	500.000	471.400	375323.04	0.0411	P	3.6
3	☐	5000.000	5487.019	3860371.16	0.4159	A	1.4
4	☐	12500.000	13616.412	9432586.67	1.0233	A	1.3
5	☐	25000.000	27643.858	18717861.13	2.0714	A	1.4
6	☐	50000.000	53393.320	36909621.77	3.9953	A	0.7
7	☐	100000.00	107065.42	75715430.69	8.0055	A	1.0
8	☐	500000.00	498082.63	339130572.5	37.2209	A	6.7

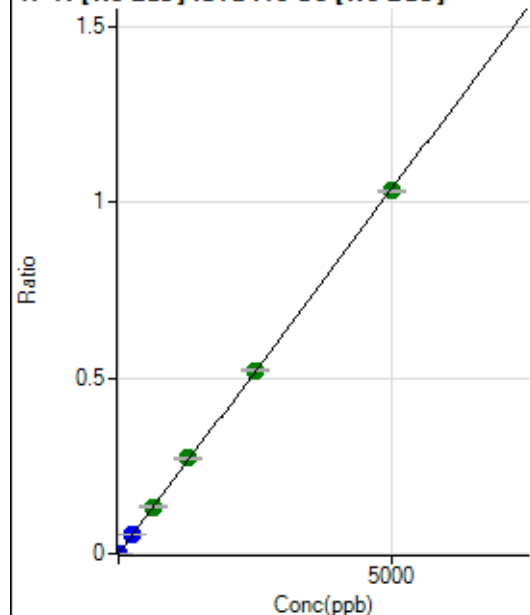
$$y = 7.4716\text{E-}005 * x + 0.0059$$

$$R = 0.9999$$

$$DL = 7.752$$

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	313.90	0.0000	P	7.1
2	☐	5.000	5.040	9864.71	0.0011	P	4.4
3	☐	250.000	252.043	485908.86	0.0523	P	0.5
4	☐	625.000	641.618	1227778.03	0.1332	A	2.0
5	☐	1250.000	1306.481	2450273.49	0.2712	A	2.0
6	☐	2500.000	2511.549	4815888.56	0.5213	A	1.2
7	☐	5000.000	4977.926	9771672.18	1.0332	A	0.8
8	☐			1564.02	0.0002	P	11.5

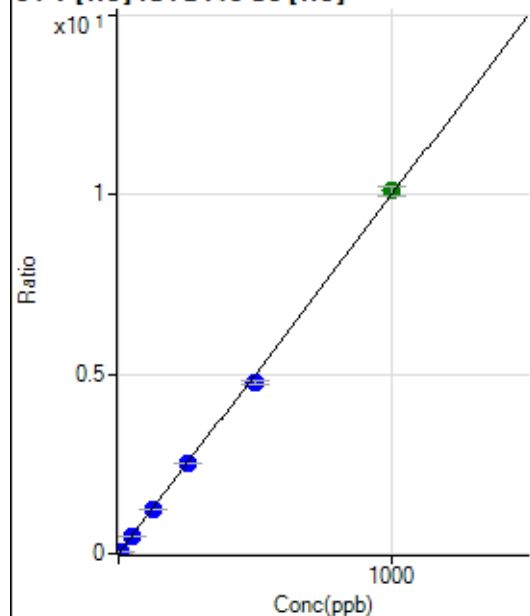
$$y = 2.0754\text{E-}004 * x + 3.5010\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.03589$$

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	0.0001	P	24.7
2	☐	5.000	4.799	11997.36	0.0480	P	1.7
3	☐	50.000	49.640	121385.41	0.4962	P	3.6
4	☐	125.000	123.000	301761.58	1.2292	P	2.3
5	☐	250.000	250.495	606111.89	2.5033	P	0.5
6	☐	500.000	477.642	1179625.62	4.7732	P	2.6
7	☐	1000.000	1011.324	2488852.51	10.1064	A	2.9
8	☐			387.79	0.0015	P	14.5

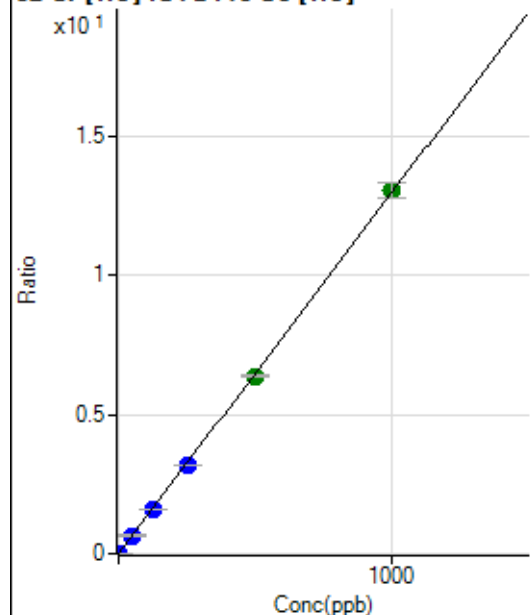
$$y = 0.0100 * x + 8.5898\text{E-}005$$

$$R = 0.9996$$

$$DL = 0.00638$$

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	1082.27	0.0044	P	1.9
2	☐	2.000	1.897	7228.56	0.0290	P	3.2
3	☐	50.000	49.925	159208.43	0.6507	P	3.0
4	☐	125.000	121.493	387183.05	1.5771	P	1.9
5	☐	250.000	245.454	770371.37	3.1818	P	1.3
6	☐	500.000	492.540	1577258.62	6.3804	A	1.1
7	☐	1000.000	1005.309	3205464.22	13.0182	A	4.1
8	☐			10701.87	0.0411	P	2.3

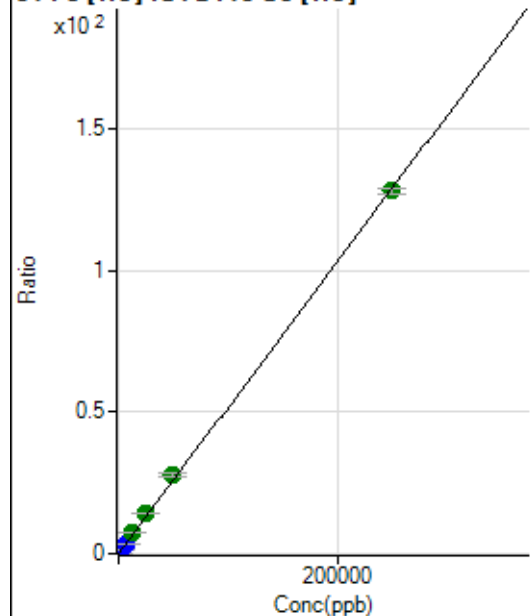
$$y = 0.0129 * x + 0.0044$$

$$R = 0.9999$$

$$DL = 0.01924$$

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	640.77	0.0026	P	10.4
2	☐	50.000	52.362	7376.11	0.0295	P	1.7
3	☐	2500.000	2747.635	346444.50	1.4160	P	3.3
4	☐	6250.000	6749.153	853000.85	3.4743	P	1.5
5	☐	12500.000	14046.826	1750072.81	7.2282	A	2.1
6	☐	25000.000	27283.914	3469528.38	14.0373	A	1.8
7	☐	50000.000	53990.283	6839857.56	27.7750	A	3.2
8	☐	250000.00	248881.25	33338985.01	128.0261	A	1.6

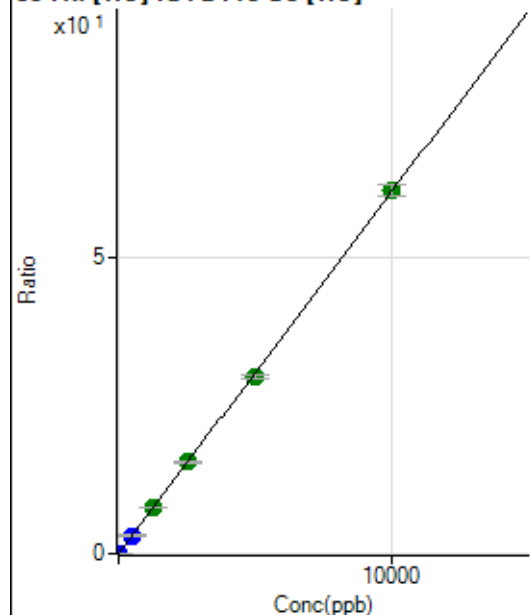
$$y = 5.1440E-004 * x + 0.0026$$

$$R = 0.9998$$

$$DL = 1.575$$

Weight: <None>

Min Conc: 0

55 Mn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	178.89	0.0007	P	17.4
2	☐	1.000	0.937	1614.55	0.0065	P	1.8
3	☐	500.000	502.415	752621.07	3.0763	P	3.6
4	☐	1250.000	1279.577	1923171.29	7.8337	A	2.0
5	☐	2500.000	2542.979	3769125.71	15.5677	A	1.7
6	☐	5000.000	4906.453	7422767.81	30.0357	A	2.6
7	☐	10000.000	10032.211	15123520.06	61.4132	A	3.2
8	☐			16555.26	0.0636	P	1.0

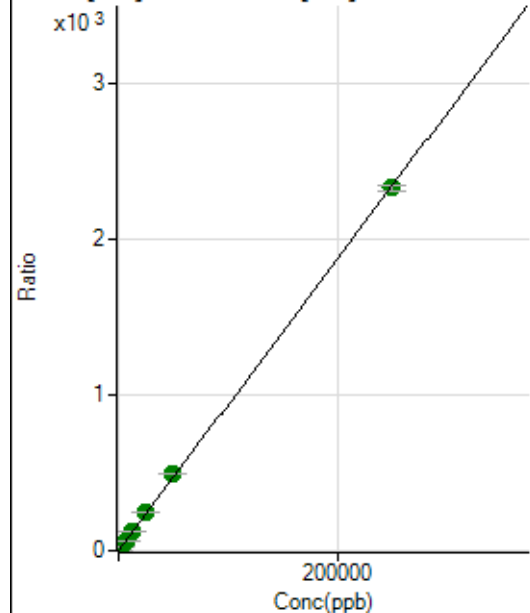
$$y = 0.0061 * x + 7.2688E-004$$

$$R = 0.9999$$

$$DL = 0.06209$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5060.25	0.0206	P	5.4
2	☐	50.000	52.773	128300.26	0.5139	P	3.4
3	☐	2500.000	2759.303	6315145.46	25.8131	A	3.7
4	☐	6250.000	6841.783	15704251.74	63.9740	A	2.7
5	☐	12500.000	13650.220	30898452.31	127.6158	A	0.7
6	☐	25000.000	26385.173	60954186.55	246.6555	A	2.9
7	☐	50000.000	53018.964	122072678.6	495.6144	A	1.7
8	☐	250000.00	249182.79	606556006.1	2,329.252	A	1.7

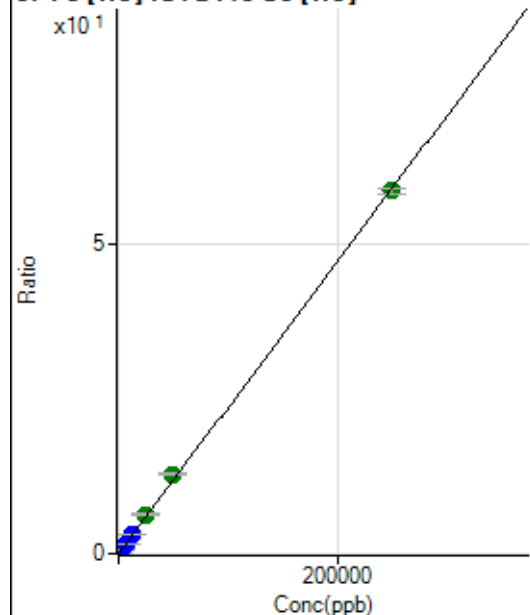
$$y = 0.0093 * x + 0.0206$$

$$R = 0.9999$$

$$DL = 0.3589$$

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	166.67	0.0007	P	14.9
2	☐	50.000	52.280	3241.17	0.0130	P	4.7
3	☐	2500.000	2712.168	156368.76	0.6391	P	2.7
4	☐	6250.000	6584.582	380596.96	1.5505	P	2.8
5	☐	12500.000	13432.472	765689.12	3.1623	P	0.3
6	☐	25000.000	26802.882	1559231.44	6.3094	A	2.7
7	☐	50000.000	54385.465	3152730.71	12.8016	A	2.6
8	☐	250000.00	248885.50	15254984.49	58.5820	A	1.8

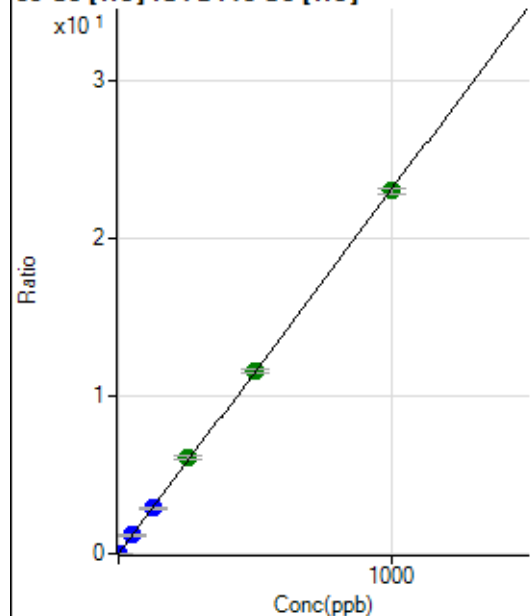
$$y = 2.3537E-004 * x + 6.7718E-004$$

$$R = 0.9998$$

$$DL = 1.283$$

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	74.44	0.0003	P	14.3
2	☐	1.000	0.973	5685.63	0.0228	P	1.0
3	☐	50.000	50.610	286029.47	1.1691	P	3.8
4	☐	125.000	124.730	707323.49	2.8809	P	1.3
5	☐	250.000	264.712	1480211.89	6.1137	A	2.5
6	☐	500.000	500.219	2855375.34	11.5527	A	2.1
7	☐	1000.000	996.216	5666927.56	23.0076	A	1.6
8	☐			12965.99	0.0498	P	2.2

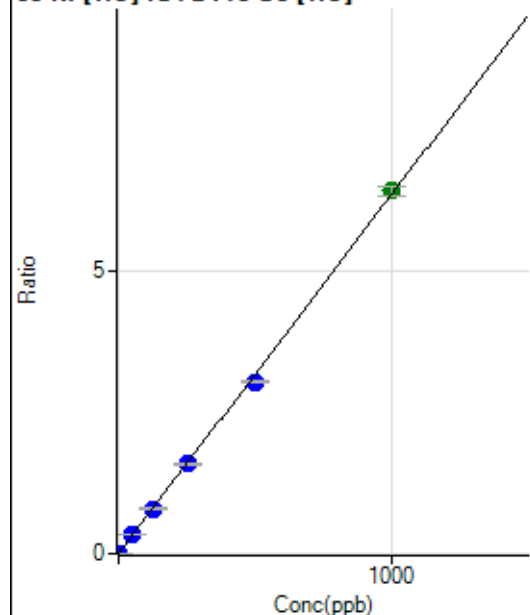
$$y = 0.0231 * x + 3.0280E-004$$

$$R = 0.9999$$

$$DL = 0.005608$$

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	138.89	0.0006	P	18.0
2	☐	1.000	0.988	1709.01	0.0068	P	1.9
3	☐	50.000	51.228	79838.17	0.3262	P	1.7
4	☐	125.000	124.796	194894.24	0.7939	P	2.4
5	☐	250.000	250.433	385581.06	1.5925	P	1.2
6	☐	500.000	478.771	752384.83	3.0441	P	1.7
7	☐	1000.000	1010.470	1582088.45	6.4240	A	2.8
8	☐			5767.89	0.0221	P	0.8

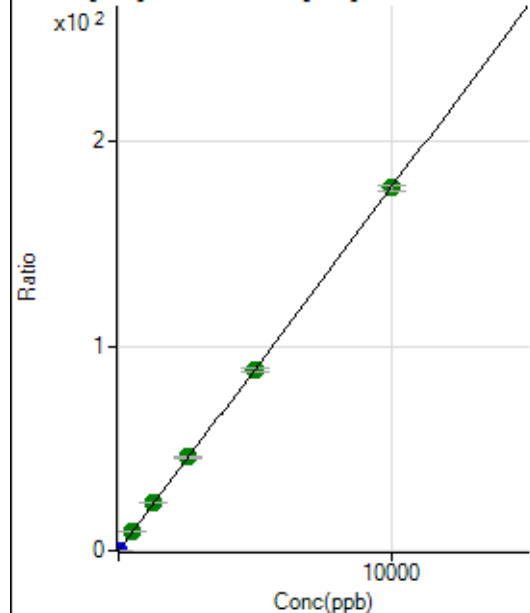
$$y = 0.0064 * x + 5.6447E-004$$

$$R = 0.9997$$

$$DL = 0.04791$$

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	1074.50	0.0044	P	8.4
2	☐	2.000	2.485	12115.27	0.0485	P	1.2
3	☐	500.000	543.710	2364965.02	9.6655	A	3.0
4	☐	1250.000	1317.893	5749541.86	23.4218	A	2.6
5	☐	2500.000	2566.596	11043096.50	45.6099	A	0.8
6	☐	5000.000	4986.702	21900755.51	88.6124	A	2.0
7	☐	10000.000	9979.328	43675241.57	177.3257	A	1.8
8	☐			11132.25	0.0427	P	2.5

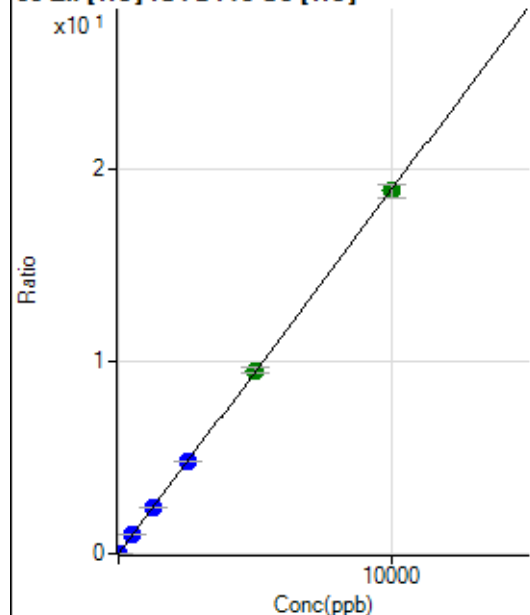
$$y = 0.0178 * x + 0.0044$$

$$R = 1.0000$$

$$DL = 0.06157$$

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	537.80	0.0022	P	1.0
2	☐	2.000	2.252	1610.11	0.0064	P	3.4
3	☐	500.000	523.642	243062.84	0.9935	P	3.4
4	☐	1250.000	1271.576	591523.25	2.4093	P	1.7
5	☐	2500.000	2550.593	1169583.62	4.8306	P	0.6
6	☐	5000.000	5031.645	2354559.93	9.5273	A	2.8
7	☐	10000.000	9967.650	4646949.96	18.8713	A	3.7
8	☐			12447.80	0.0478	P	1.1

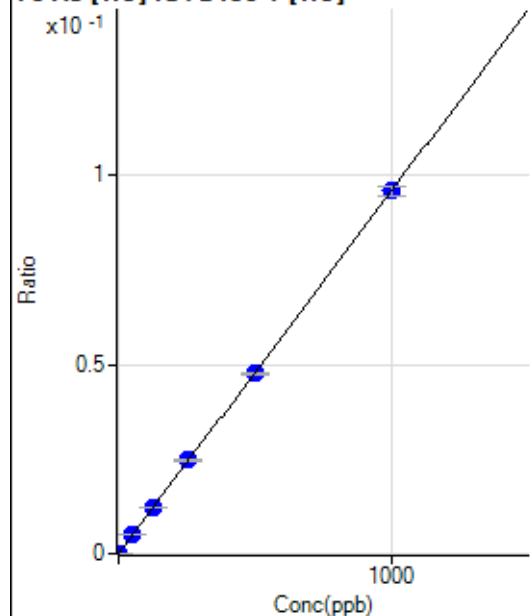
$$y = 0.0019 * x + 0.0022$$

$$R = 1.0000$$

$$DL = 0.03423$$

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	9.00	0.0000	P	40.5
2	☐	1.000	0.970	276.70	0.0001	P	6.3
3	☐	50.000	51.448	14173.85	0.0049	P	2.4
4	☐	125.000	127.413	34651.73	0.0122	P	1.7
5	☐	250.000	257.436	69112.65	0.0247	P	1.4
6	☐	500.000	495.667	136152.85	0.0475	P	1.0
7	☐	1000.000	999.933	273589.74	0.0959	P	2.7
8	☐			95.34	0.0000	P	3.8

$$y = 9.5905E-005 * x + 3.1518E-006$$

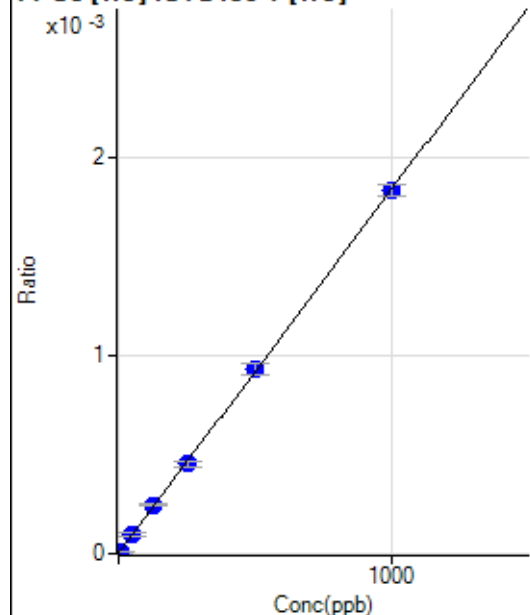
$$R = 1.0000$$

$$DL = 0.0399$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.44	0.0000	P	115.
2	☐	5.000	5.002	31.11	0.0000	P	24.5
3	☐	50.000	51.378	275.56	0.0001	P	16.2
4	☐	125.000	133.663	701.14	0.0002	P	6.6
5	☐	250.000	246.260	1271.18	0.0005	P	7.2
6	☐	500.000	507.453	2676.95	0.0009	P	5.9
7	☐	1000.000	996.057	5231.02	0.0018	P	3.2
8	☐			2.22	0.0000	P	173.

$$y = 1.8394E-006 * x + 1.5587E-006$$

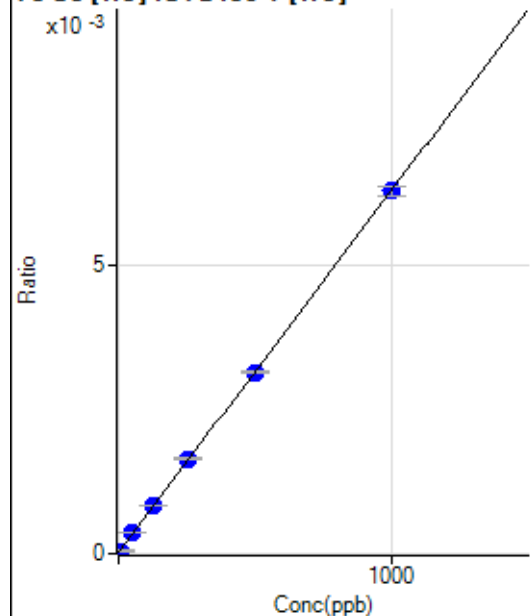
$$R = 0.9999$$

$$DL = 2.923$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.34	0.0000	P	27.3
2	☐	5.000	4.828	143.02	0.0000	P	10.1
3	☐	50.000	55.431	1055.15	0.0004	P	1.9
4	☐	125.000	128.724	2347.10	0.0008	P	2.2
5	☐	250.000	258.228	4594.22	0.0016	P	1.7
6	☐	500.000	496.986	8996.45	0.0031	P	0.7
7	☐	1000.000	998.714	17952.87	0.0063	P	2.8
8	☐			69.34	0.0000	P	8.4

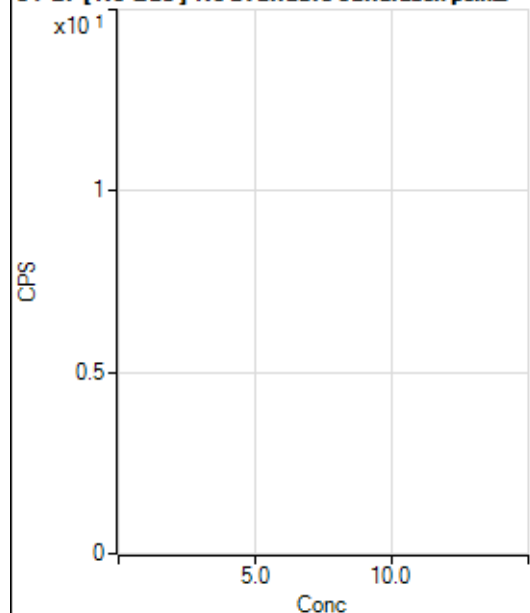
$$y = 6.2816E-006 * x + 1.9339E-005$$

$$R = 0.9999$$

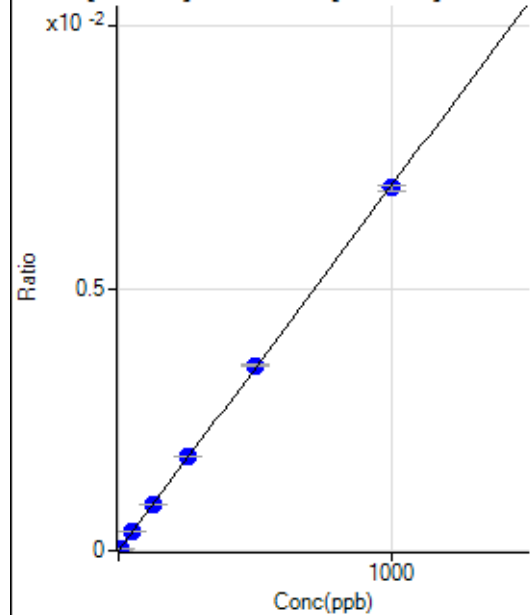
$$DL = 2.524$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			23728.03		P	3.6
2	☐			22875.71		P	1.8
3	☐			23915.12		P	4.6
4	☐			22223.86		P	4.3
5	☐			22608.27		P	4.4
6	☐			23136.32		P	3.2
7	☐			24119.15		P	3.5
8	☐			24332.80		P	3.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	23.33	0.0000	P	41.7
2	☐	5.000	5.228	1102.55	0.0000	P	1.6
3	☐	50.000	51.121	10736.99	0.0004	P	0.5
4	☐	125.000	126.335	26762.55	0.0009	P	1.2
5	☐	250.000	258.893	53661.41	0.0018	P	1.2
6	☐	500.000	507.841	104928.38	0.0035	P	0.2
7	☐	1000.000	993.632	210657.38	0.0069	P	1.8
8	☐			188.22	0.0000	P	8.8

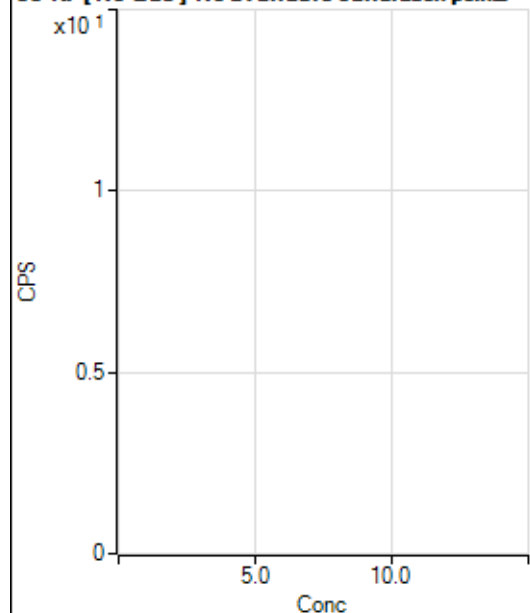
$$y = 6.9626E-006 * x + 8.2091E-007$$

$$R = 0.9999$$

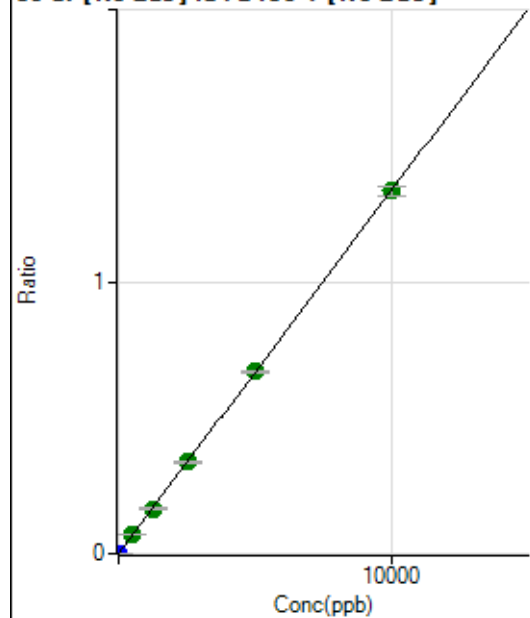
$$DL = 0.1476$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			888.93		P	4.8
2	☐			834.48		P	3.1
3	☐			892.26		P	6.9
4	☐			882.26		P	5.1
5	☐			878.93		P	5.2
6	☐			845.59		P	7.3
7	☐			887.82		P	8.3
8	☐			937.82		P	1.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1627.92	0.0001	P	9.0
2	☐	1.000	0.976	5554.03	0.0002	P	7.1
3	☐	500.000	512.974	2065838.78	0.0686	A	0.4
4	☐	1250.000	1240.728	5043952.46	0.1659	A	1.9
5	☐	2500.000	2527.496	10056746.58	0.3380	A	1.7
6	☐	5000.000	5015.035	19894577.88	0.6706	A	1.1
7	☐	10000.000	9986.119	40647937.02	1.3352	A	2.4
8	☐			16482.34	0.0006	P	7.5

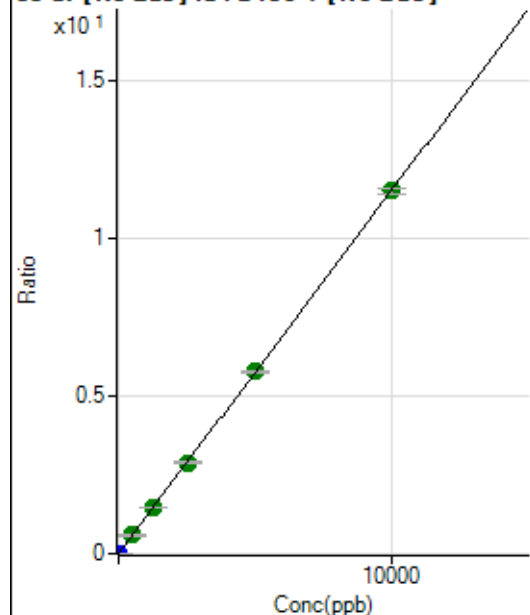
$$y = 1.3370\text{E-}004 * x + 5.7007\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.1148$$

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	716.71	0.0000	P	6.7
2	☐	1.000	1.068	37172.38	0.0013	P	3.5
3	☐	500.000	505.683	17547825.04	0.5831	A	1.7
4	☐	1250.000	1248.192	43750349.94	1.4392	A	0.5
5	☐	2500.000	2512.074	86188299.15	2.8965	A	2.0
6	☐	5000.000	5007.090	171288673.2	5.7733	A	0.9
7	☐	10000.000	9993.378	350809918.9	11.5227	A	1.9
8	☐			131519.32	0.0045	P	4.7

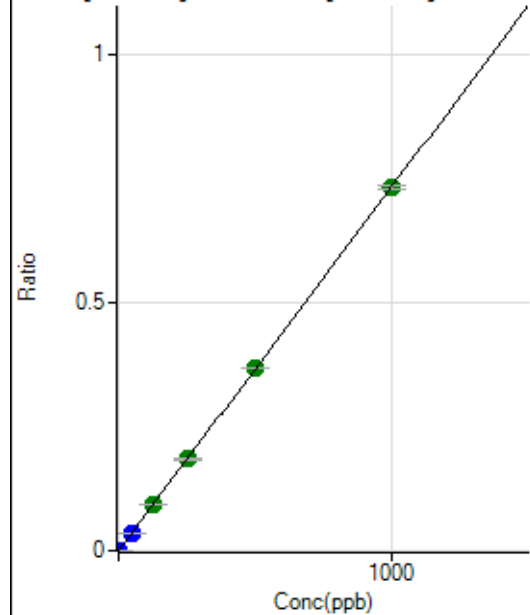
$$y = 0.0012 * x + 2.5063E-005$$

$$R = 1.0000$$

$$DL = 0.004366$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1144.53	0.0000	P	11.6
2	☐	1.000	0.927	21275.06	0.0007	P	3.6
3	☐	50.000	49.730	1097174.64	0.0365	P	0.8
4	☐	125.000	125.751	2800485.39	0.0921	A	0.2
5	☐	250.000	252.411	5501252.60	0.1849	A	1.1
6	☐	500.000	502.802	10924811.70	0.3682	A	0.8
7	☐	1000.000	997.916	22251536.96	0.7308	A	1.2
8	☐			5787.50	0.0002	P	7.4

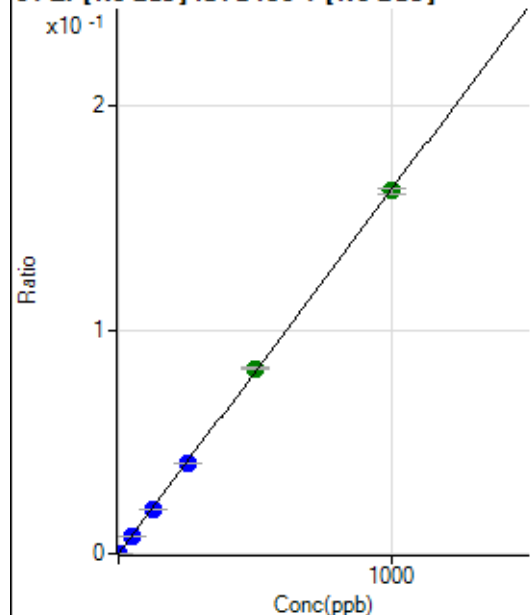
$$y = 7.3228E-004 * x + 3.9989E-005$$

$$R = 1.0000$$

$$DL = 0.01902$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	219.45	0.0000	P	6.2
2	☐	1.000	0.944	4778.71	0.0002	P	4.4
3	☐	50.000	49.502	242531.86	0.0081	P	0.6
4	☐	125.000	122.284	604785.38	0.0199	P	1.3
5	☐	250.000	249.067	1205594.36	0.0405	P	0.7
6	☐	500.000	508.311	2452852.75	0.0827	A	1.0
7	☐	1000.000	996.442	4934279.02	0.1621	A	1.8
8	☐			1236.20	0.0000	P	20.1

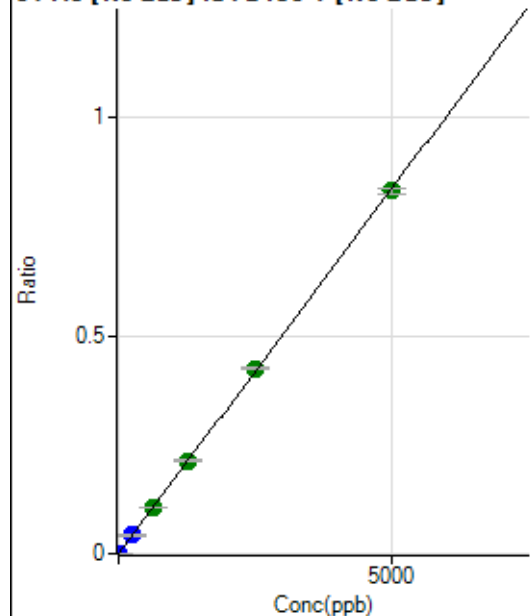
$$y = 1.6264\text{E-}004 * x + 7.6732\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.008716$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408.35	0.0000	P	11.1
2	☐	5.000	4.819	24302.35	0.0008	P	1.1
3	☐	250.000	250.452	1262110.01	0.0419	P	0.3
4	☐	625.000	631.092	3211313.01	0.1056	A	1.4
5	☐	1250.000	1277.050	6360980.92	0.2138	A	0.7
6	☐	2500.000	2536.000	12594391.77	0.4245	A	0.7
7	☐	5000.000	4974.454	25350406.82	0.8327	A	1.8
8	☐			6515.58	0.0002	P	3.7

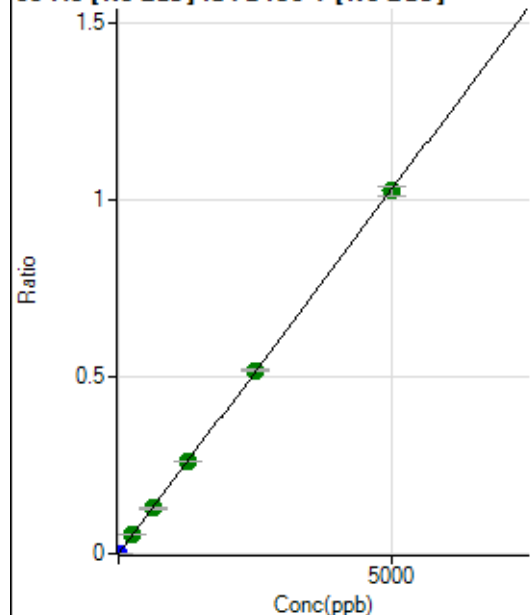
$$y = 1.6738\text{E-}004 * x + 1.4292\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.02845$$

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	105.56	0.0000	P	23.9
2	☐	5.000	4.887	29793.55	0.0010	P	6.2
3	☐	250.000	253.558	1567625.40	0.0521	A	0.8
4	☐	625.000	622.148	3884315.06	0.1278	A	2.4
5	☐	1250.000	1270.140	7763157.81	0.2609	A	0.9
6	☐	2500.000	2520.659	15361300.00	0.5178	A	0.8
7	☐	5000.000	4984.814	31171865.28	1.0239	A	2.4
8	☐			6193.22	0.0002	P	6.7

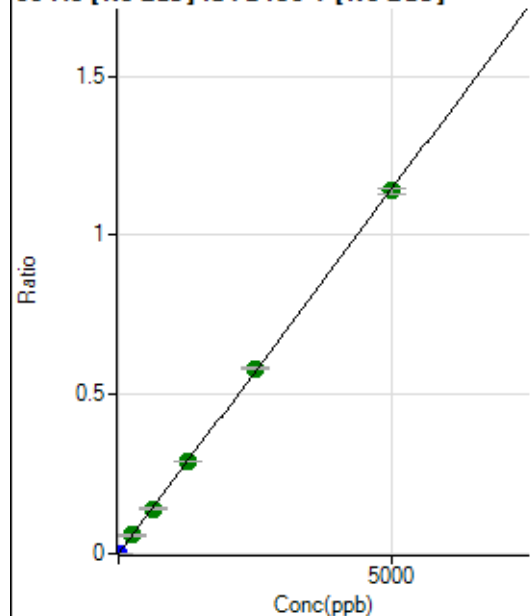
$$y = 2.0540\text{E-}004 * x + 3.6833\text{E-}006$$

$$R = 1.0000$$

$$DL = 0.01284$$

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	216.67	0.0000	P	2.1
2	☐	5.000	4.819	32856.24	0.0011	P	4.2
3	☐	250.000	250.913	1728591.88	0.0574	A	1.5
4	☐	625.000	613.945	4271514.16	0.1405	A	2.2
5	☐	1250.000	1261.596	8592811.82	0.2888	A	0.5
6	☐	2500.000	2541.373	17258011.67	0.5817	A	0.4
7	☐	5000.000	4977.751	34690365.01	1.1394	A	1.4
8	☐			20426.70	0.0007	P	6.0

$$y = 2.2889\text{E-}004 * x + 7.5835\text{E-}006$$

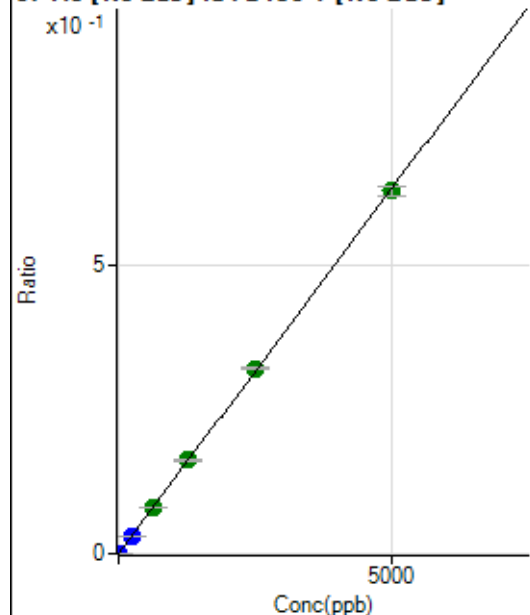
$$R = 0.9999$$

$$DL = 0.00208$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0000	P	22.1
2	☐	5.000	4.931	18446.02	0.0006	P	2.6
3	☐	250.000	248.272	941900.51	0.0313	P	1.1
4	☐	625.000	627.699	2405103.40	0.0791	A	1.5
5	☐	1250.000	1279.935	4801163.56	0.1613	A	0.8
6	☐	2500.000	2538.586	9493648.04	0.3200	A	0.9
7	☐	5000.000	4972.972	19084040.18	0.6269	A	2.4
8	☐			3858.98	0.0001	P	5.0

$$y = 1.2605E-004 * x + 1.6564E-006$$

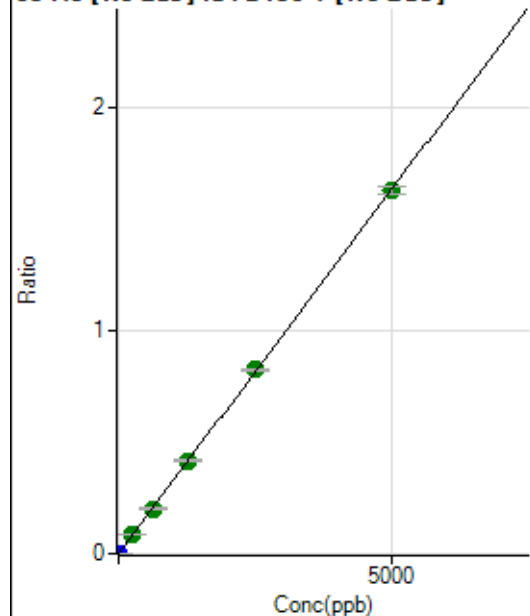
$$R = 0.9999$$

$$DL = 0.008725$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	144.45	0.0000	P	33.2
2	☐	5.000	4.920	47766.26	0.0016	P	3.1
3	☐	250.000	254.745	2507607.15	0.0833	A	0.7
4	☐	625.000	619.841	6161912.38	0.2027	A	2.1
5	☐	1250.000	1273.024	12388866.07	0.4164	A	1.7
6	☐	2500.000	2522.772	24478672.94	0.8251	A	0.8
7	☐	5000.000	4983.266	49619027.50	1.6298	A	2.0
8	☐			8994.82	0.0003	P	3.9

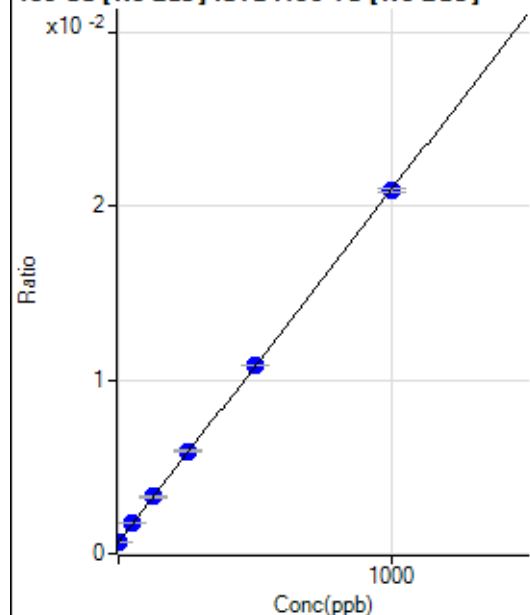
$$y = 3.2706E-004 * x + 5.0761E-006$$

$$R = 1.0000$$

$$DL = 0.01545$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9061.62	0.0007	P	2.8
2	☐	1.000	1.130	9559.09	0.0007	P	3.1
3	☐	50.000	53.107	24349.92	0.0017	P	1.1
4	☐	125.000	128.435	47510.54	0.0033	P	1.1
5	☐	250.000	257.257	85479.01	0.0059	P	1.6
6	☐	500.000	502.047	160612.73	0.0108	P	0.8
7	☐	1000.000	996.577	313413.98	0.0209	P	1.0
8	☐			8894.82	0.0006	P	3.5

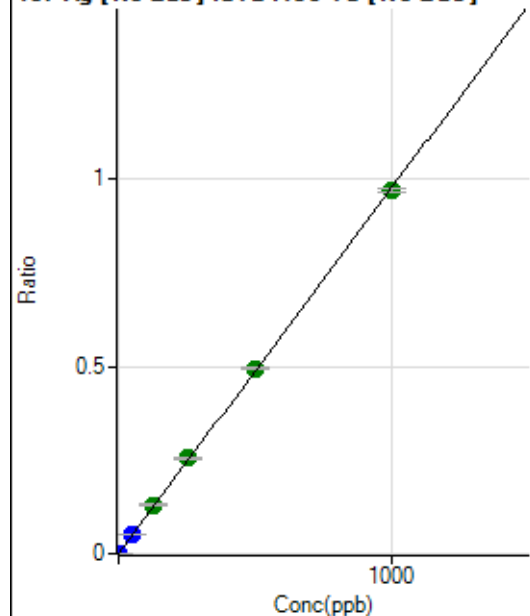
$$y = 2.0288\text{E-}005 * x + 6.6275\text{E-}004$$

$$R = 1.0000$$

$$DL = 2.745$$

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	375.02	0.0000	P	24.7
2	☐	1.000	1.005	14032.55	0.0010	P	8.1
3	☐	50.000	53.043	724068.04	0.0517	P	0.2
4	☐	125.000	133.876	1897779.04	0.1306	A	2.9
5	☐	250.000	261.106	3700032.16	0.2546	A	1.1
6	☐	500.000	506.964	7318165.70	0.4943	A	1.3
7	☐	1000.000	992.480	14525480.88	0.9677	A	1.1
8	☐			2747.57	0.0002	P	10.4

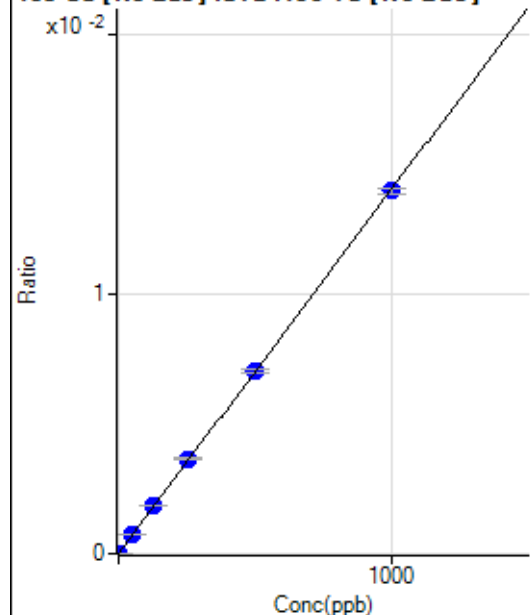
$$y = 9.7498\text{E-}004 * x + 2.7591\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.02099$$

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	59.72	0.0000	P	7.3
2	☐	1.000	1.075	270.84	0.0000	P	13.8
3	☐	50.000	53.636	10609.73	0.0008	P	1.7
4	☐	125.000	130.905	26811.03	0.0018	P	1.5
5	☐	250.000	259.843	53135.16	0.0037	P	1.4
6	☐	500.000	501.682	104450.47	0.0071	P	1.7
7	☐	1000.000	995.778	210110.23	0.0140	P	1.9
8	☐			409.74	0.0000	P	3.5

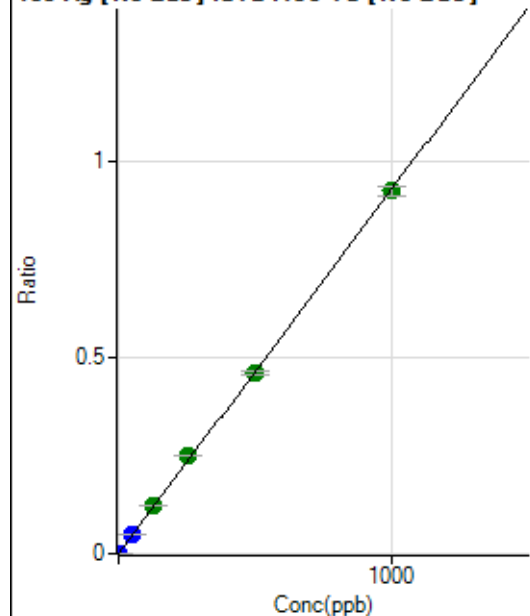
$$y = 1.4054\text{E-}005 * x + 4.3634\text{E-}006$$

$$R = 0.9999$$

$$DL = 0.06841$$

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	316.68	0.0000	P	37.2
2	☐	1.000	0.987	13109.39	0.0009	P	4.1
3	☐	50.000	54.298	706065.76	0.0505	P	1.6
4	☐	125.000	133.014	1796141.58	0.1236	A	2.3
5	☐	250.000	268.884	3629922.13	0.2498	A	0.7
6	☐	500.000	495.452	6813199.46	0.4602	A	1.9
7	☐	1000.000	996.337	13889458.12	0.9255	A	2.3
8	☐			2780.91	0.0002	P	11.7

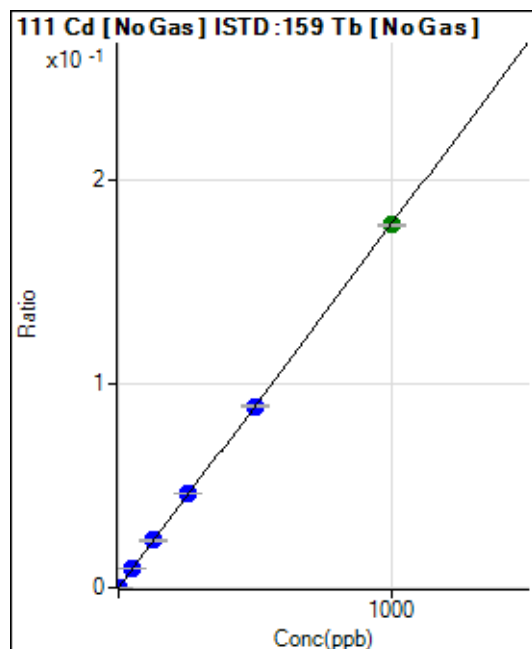
$$y = 9.2884\text{E-}004 * x + 2.3315\text{E-}005$$

$$R = 0.9998$$

$$DL = 0.02799$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	915.74	0.0001	P	2.5
2	☐	1.000	1.030	3498.57	0.0003	P	3.3
3	☐	50.000	53.868	135540.05	0.0097	P	1.5
4	☐	125.000	129.370	336781.01	0.0232	P	2.2
5	☐	250.000	258.729	672452.97	0.0463	P	1.3
6	☐	500.000	499.292	1321122.06	0.0892	P	0.8
7	☐	1000.000	997.432	2674589.17	0.1782	A	0.7
8	☐			1192.97	0.0001	P	7.8

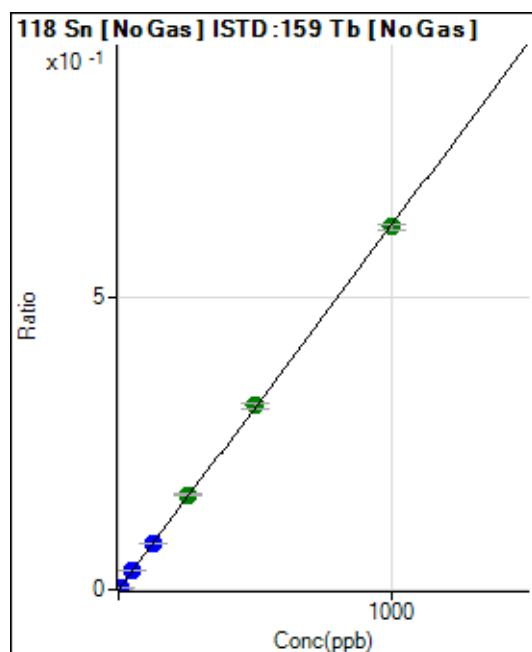
$$y = 1.7858\text{E-}004 * x + 6.6988\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.02844$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1255.65	0.0001	P	18.0
2	☐	5.000	4.912	44035.58	0.0032	P	2.6
3	☐	50.000	52.093	456301.26	0.0326	P	0.4
4	☐	125.000	127.598	1159211.85	0.0797	P	0.7
5	☐	250.000	260.200	2361762.57	0.1625	A	0.8
6	☐	500.000	503.922	4658028.45	0.3146	A	2.3
7	☐	1000.000	995.060	9325670.00	0.6212	A	1.7
8	☐			4901.01	0.0004	P	3.2

$$y = 6.2421\text{E-}004 * x + 9.2167\text{E-}005$$

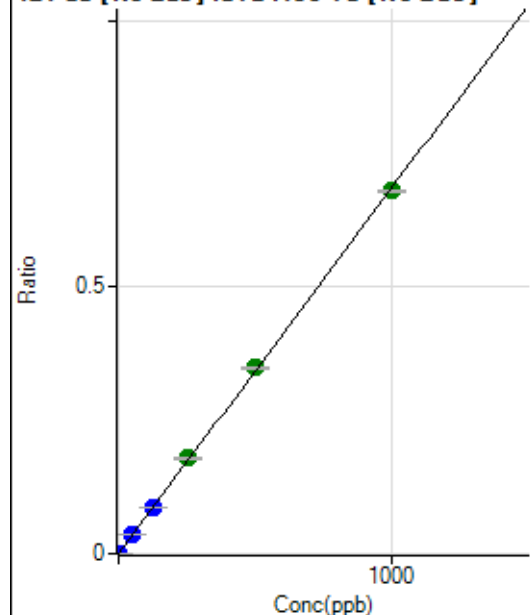
$$R = 0.9999$$

$$DL = 0.07986$$

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	50.00	0.0000	P	14.6
2	☐	2.000	2.003	19208.44	0.0014	P	4.5
3	☐	50.000	51.792	497059.48	0.0355	P	0.1
4	☐	125.000	127.292	1269038.61	0.0873	P	0.5
5	☐	250.000	261.081	2602042.42	0.1790	A	0.7
6	☐	500.000	508.049	5158133.02	0.3484	A	1.5
7	☐	1000.000	992.829	10220424.36	0.6809	A	0.9
8	☐			3917.34	0.0003	P	4.6

$$y = 6.8578E-004 * x + 3.6528E-006$$

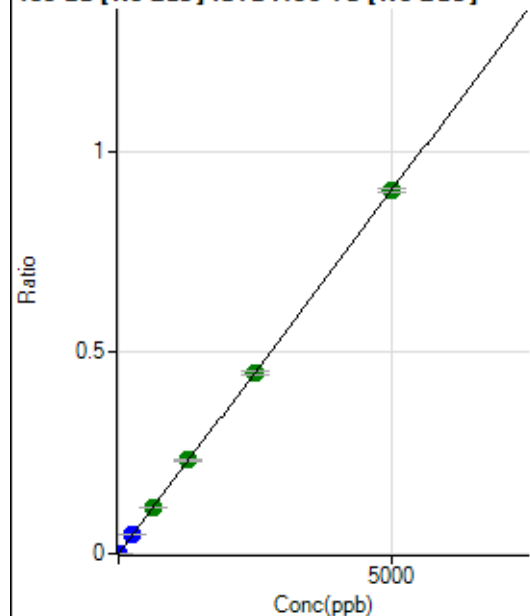
$$R = 0.9999$$

$$DL = 0.00233$$

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	27.78	0.0000	P	34.4
2	☐	10.000	10.114	25494.05	0.0018	P	4.1
3	☐	250.000	255.559	646030.81	0.0462	P	1.5
4	☐	625.000	636.724	1672267.43	0.1150	A	0.7
5	☐	1250.000	1290.142	3387109.84	0.2331	A	1.4
6	☐	2500.000	2484.474	6644376.88	0.4488	A	2.3
7	☐	5000.000	4995.984	13546591.36	0.9025	A	1.1
8	☐			4959.38	0.0004	P	1.5

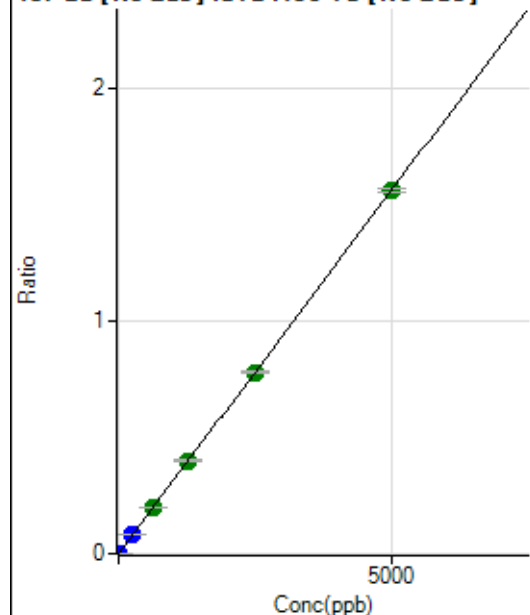
$$y = 1.8065E-004 * x + 2.0311E-006$$

$$R = 1.0000$$

$$DL = 0.0116$$

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	102.78	0.0000	P	19.8
2	☐	10.000	9.856	43049.86	0.0031	P	4.4
3	☐	250.000	261.724	1144954.89	0.0818	P	0.7
4	☐	625.000	635.083	2886251.95	0.1985	A	0.4
5	☐	1250.000	1282.541	5826582.33	0.4009	A	1.8
6	☐	2500.000	2496.848	11557119.18	0.7805	A	0.9
7	☐	5000.000	4991.595	23420526.91	1.5604	A	1.2
8	☐			8527.90	0.0006	P	3.2

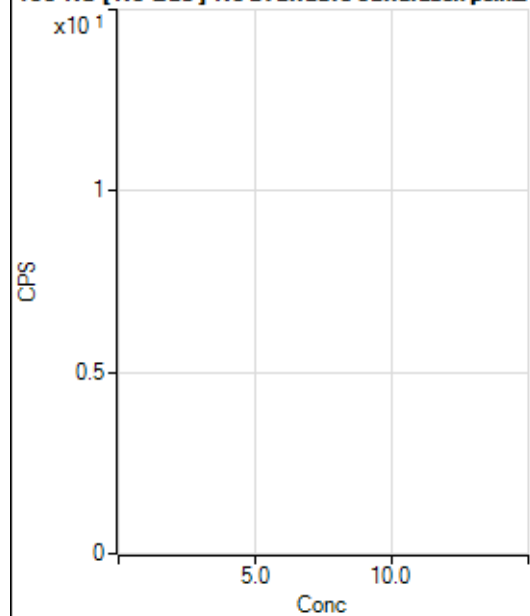
$$y = 3.1260E-004 * x + 7.5538E-006$$

$$R = 1.0000$$

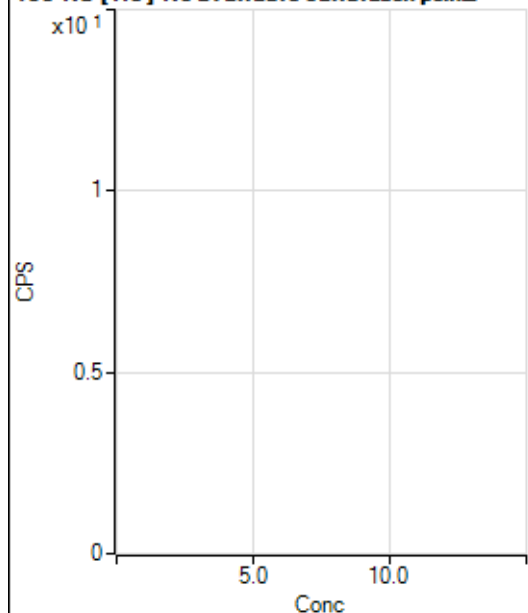
$$DL = 0.01436$$

Weight: <None>

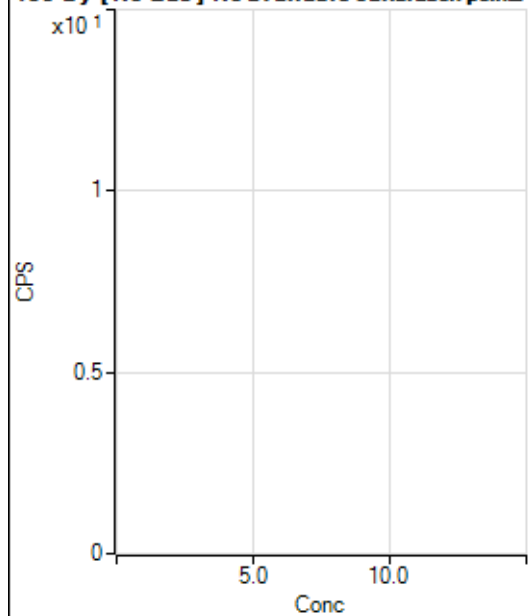
Min Conc: 0

150 Nd [No Gas] No available calibration points

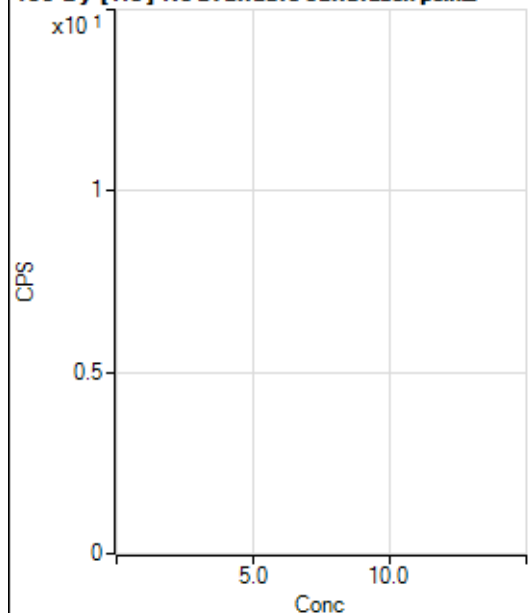
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			13.33		P	50.0
3	☐			46.67		P	49.5
4	☐			84.45		P	4.6
5	☐			215.57		P	17.6
6	☐			317.79		P	14.7
7	☐			602.25		P	4.2
8	☐			84.45		P	9.1

150 Nd [He] No available calibration points

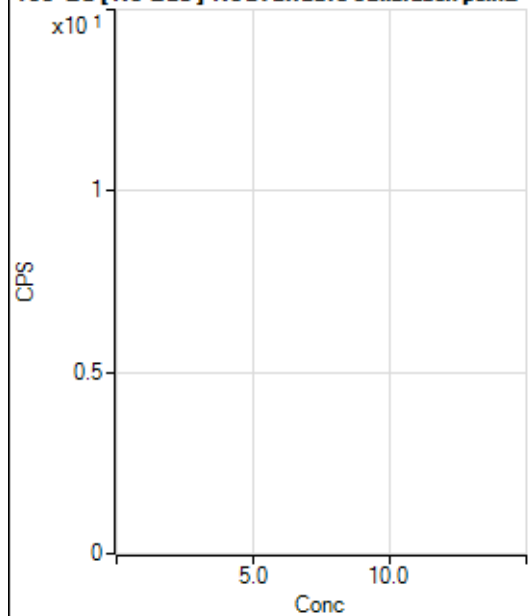
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			2.22		P	86.6
3	☐			7.78		P	65.5
4	☐			6.67		P	132.
5	☐			6.67		P	100.
6	☐			18.89		P	27.0
7	☐			27.78		P	42.1
8	☐			12.22		P	41.7

156 Dy [No Gas] No available calibration points

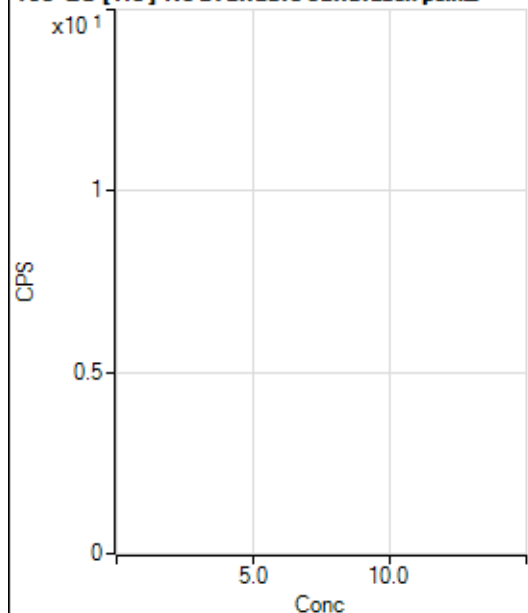
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	100.
2	☐			8.33		P	100.
3	☐			36.11		P	13.3
4	☐			55.56		P	17.3
5	☐			175.01		P	16.5
6	☐			255.57		P	10.0
7	☐			458.36		P	8.3
8	☐			1811.29		P	13.5

156 Dy [He] No available calibration points

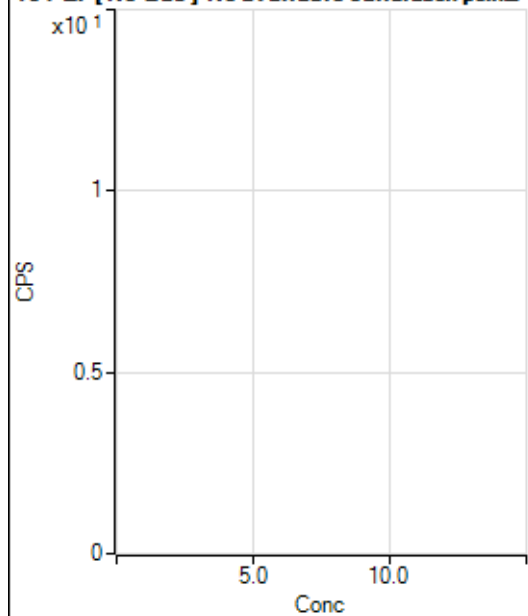
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	132.
2	☐			4.45		P	86.6
3	☐			17.78		P	21.7
4	☐			31.11		P	43.3
5	☐			56.67		P	5.9
6	☐			96.67		P	10.3
7	☐			226.67		P	1.5
8	☐			864.48		P	3.1

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

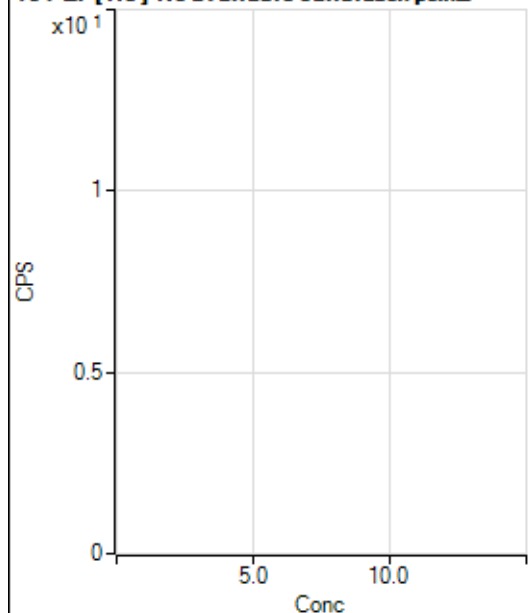
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			130.56		P	7.4
2	☐			130.56		P	26.6
3	☐			188.90		P	16.7
4	☐			222.23		P	9.4
5	☐			241.68		P	32.9
6	☐			352.79		P	18.3
7	☐			680.59		P	13.2
8	☐			2030.77		P	1.3

160 Gd [He] No available calibration points

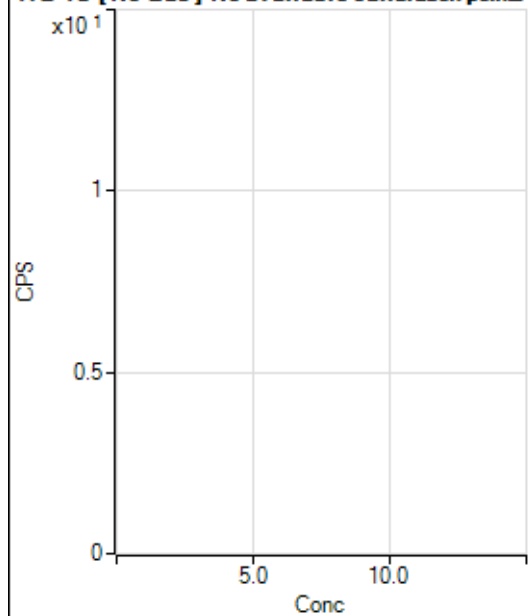
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			63.33		P	5.3
2	☐			72.22		P	11.6
3	☐			66.67		P	5.0
4	☐			77.78		P	9.9
5	☐			133.34		P	40.2
6	☐			165.56		P	19.1
7	☐			288.90		P	0.7
8	☐			1105.62		P	0.5

164 Er [No Gas] No available calibration points

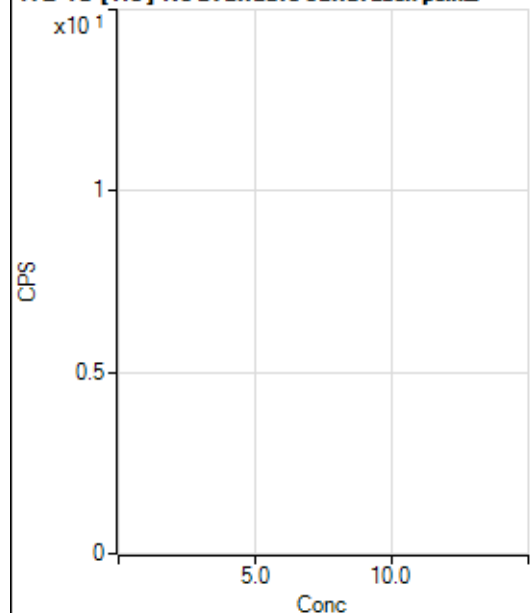
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.00		P	11.1
2	☐			77.78		P	37.6
3	☐			75.00		P	11.1
4	☐			88.89		P	5.4
5	☐			97.22		P	21.6
6	☐			111.11		P	38.5
7	☐			144.45		P	12.0
8	☐			397.24		P	19.5

164 Er [He] No available calibration points

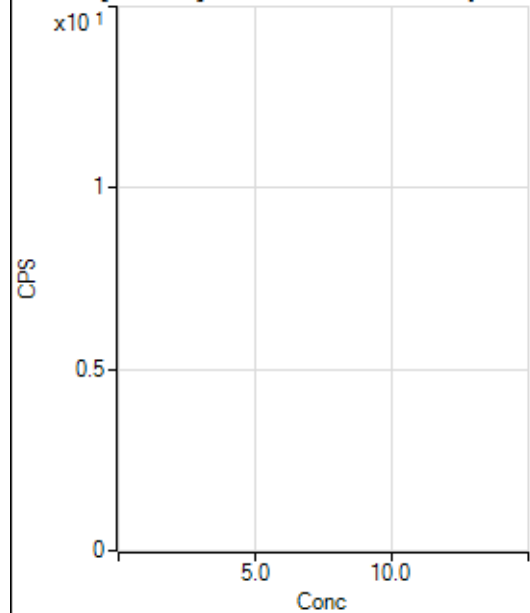
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			31.11		P	65.5
2	☐			28.89		P	46.6
3	☐			37.78		P	10.2
4	☐			31.11		P	44.6
5	☐			45.56		P	18.4
6	☐			57.78		P	12.0
7	☐			75.56		P	28.7
8	☐			164.45		P	17.5

172 Yb [No Gas] No available calibration points

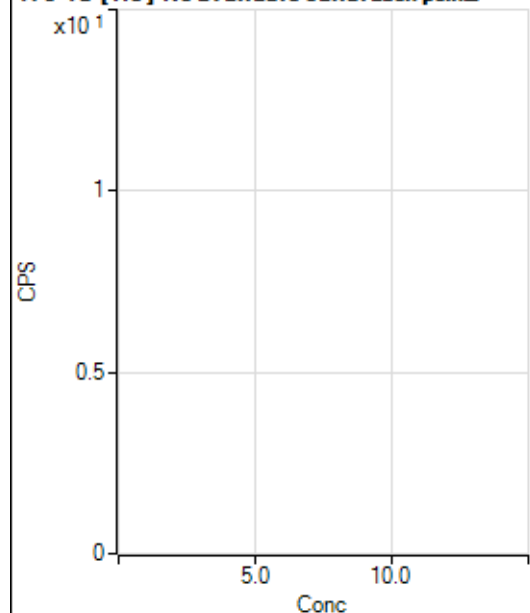
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	89.2
2	☐			30.56		P	41.7
3	☐			22.22		P	21.6
4	☐			30.56		P	31.5
5	☐			25.00		P	88.2
6	☐			38.89		P	24.7
7	☐			47.22		P	27.0
8	☐			80.56		P	29.9

172 Yb [He] No available calibration points

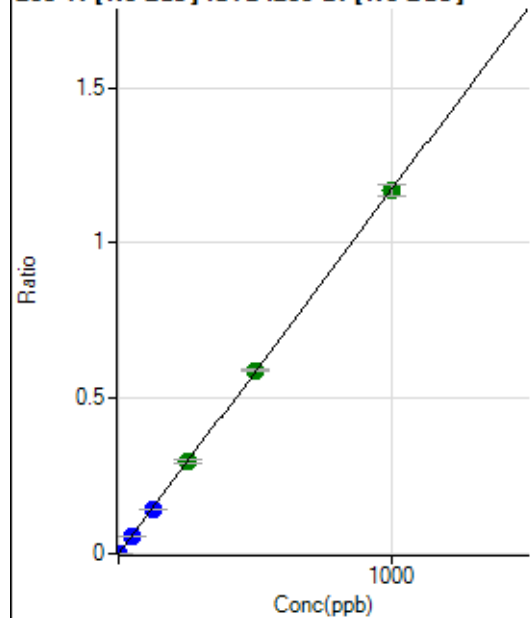
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	57.7
2	☐			9.26		P	91.7
3	☐			20.37		P	31.5
4	☐			14.82		P	57.3
5	☐			18.52		P	45.8
6	☐			12.96		P	107.
7	☐			12.96		P	24.8
8	☐			50.00		P	38.5

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2116.89		P	5.7
2	☐			2180.81		P	7.5
3	☐			3942.38		P	6.0
4	☐			6801.94		P	5.1
5	☐			11772.23		P	0.3
6	☐			21089.61		P	2.0
7	☐			42131.82		P	0.5
8	☐			2025.21		P	4.3

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4202.59		P	3.1
2	☐			3524.62		P	2.5
3	☐			3904.35		P	6.1
4	☐			5399.34		P	6.1
5	☐			7594.91		P	3.7
6	☐			12107.59		P	1.2
7	☐			21693.98		P	1.2
8	☐			3020.76		P	4.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	488.91	0.0001	P	22.7
2	☐	1.000	0.907	8878.28	0.0011	P	5.1
3	☐	50.000	47.643	443156.65	0.0559	P	0.3
4	☐	125.000	122.241	1141466.16	0.1433	P	2.0
5	☐	250.000	254.407	2397389.35	0.2981	A	4.7
6	☐	500.000	504.655	4750255.40	0.5912	A	1.7
7	☐	1000.000	997.034	9403485.37	1.1680	A	3.0
8	☐			1205.65	0.0002	P	1.5

$$y = 0.0012 * x + 6.4073E-005$$

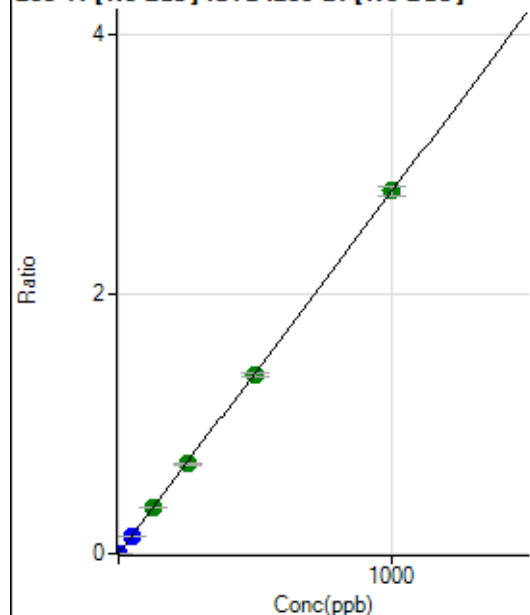
$$R = 1.0000$$

$$DL = 0.03723$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1158.42	0.0002	P	4.9
2	☐	1.000	0.954	22180.59	0.0028	P	1.4
3	☐	50.000	48.127	1065193.56	0.1343	P	0.7
4	☐	125.000	127.310	2828442.66	0.3550	A	3.5
5	☐	250.000	247.323	5547046.13	0.6896	A	2.8
6	☐	500.000	495.407	11095158.58	1.3811	A	1.7
7	☐	1000.000	1002.770	22502106.58	2.7953	A	2.4
8	☐			2967.10	0.0004	P	9.6

$$y = 0.0028 * x + 1.5178E-004$$

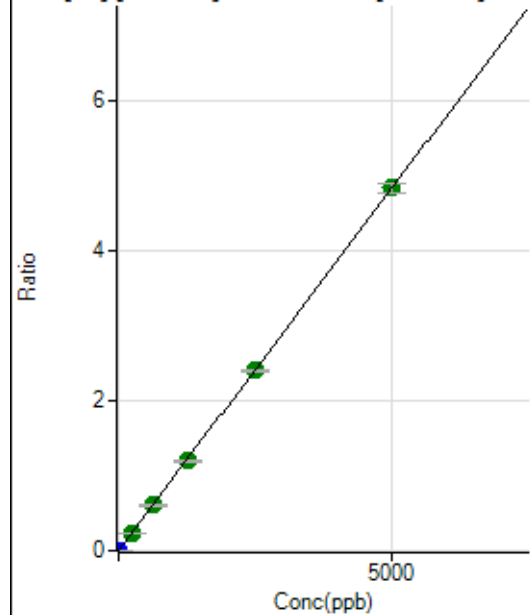
$$R = 1.0000$$

$$DL = 0.00796$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1481.60	0.0002	P	7.9
2	☐	1.000	0.920	8527.05	0.0011	P	0.7
3	☐	250.000	250.079	1913073.52	0.2412	A	0.7
4	☐	625.000	630.645	4843808.50	0.6080	A	3.0
5	☐	1250.000	1242.044	9632062.83	1.1972	A	2.0
6	☐	2500.000	2483.549	19230019.87	2.3937	A	2.0
7	☐	5000.000	5009.505	38865086.06	4.8281	A	2.5
8	☐			11890.82	0.0017	P	2.7

$$y = 9.6374E-004 * x + 1.9420E-004$$

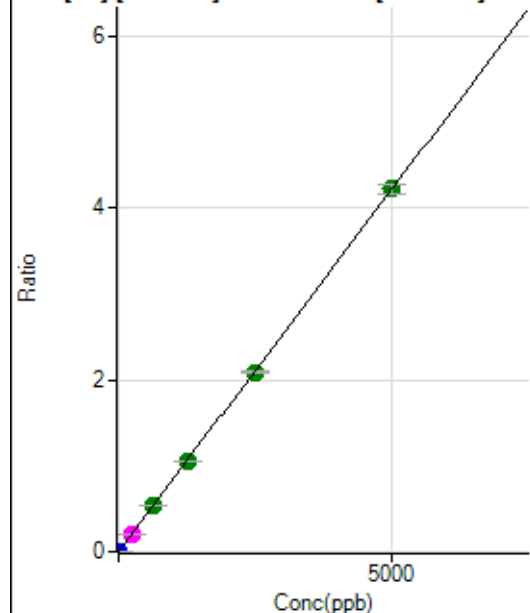
$$R = 1.0000$$

$$DL = 0.0475$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1246.38	0.0002	P	10.4
2	☐	1.000	0.940	7530.12	0.0010	P	1.4
3	☐	250.000	240.281	1606352.15	0.2026	M	4.2
4	☐	625.000	637.589	4280489.88	0.5372	A	1.9
5	☐	1250.000	1246.571	8451133.58	1.0502	A	0.8
6	☐	2500.000	2474.470	16747243.43	2.0845	A	0.9
7	☐	5000.000	5012.535	33989914.65	4.2225	A	2.6
8	☐			10359.89	0.0015	P	4.5

$$y = 8.4235E-004 * x + 1.6293E-004$$

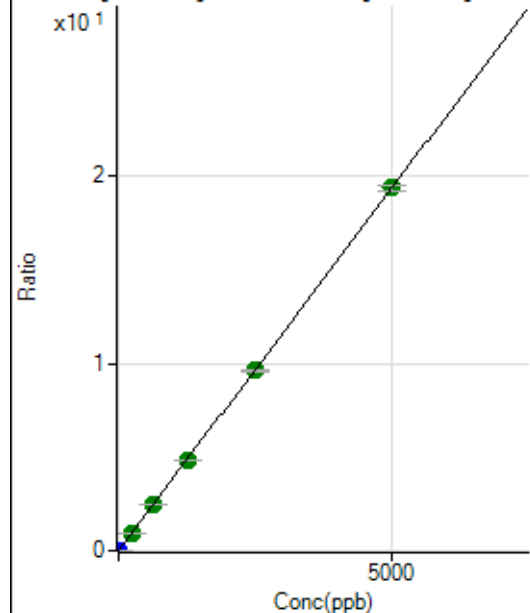
$$R = 1.0000$$

$$DL = 0.06054$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6034.01	0.0008	P	1.4
2	☐	1.000	0.908	33923.51	0.0043	P	1.7
3	☐	250.000	248.472	7621810.86	0.9610	A	0.9
4	☐	625.000	629.013	19374763.08	2.4316	A	1.2
5	☐	1250.000	1246.744	38773579.51	4.8189	A	2.0
6	☐	2500.000	2482.918	77094920.24	9.5961	A	0.9
7	☐	5000.000	5008.930	155845285.8	19.3580	A	1.8
8	☐			47330.74	0.0067	P	3.9

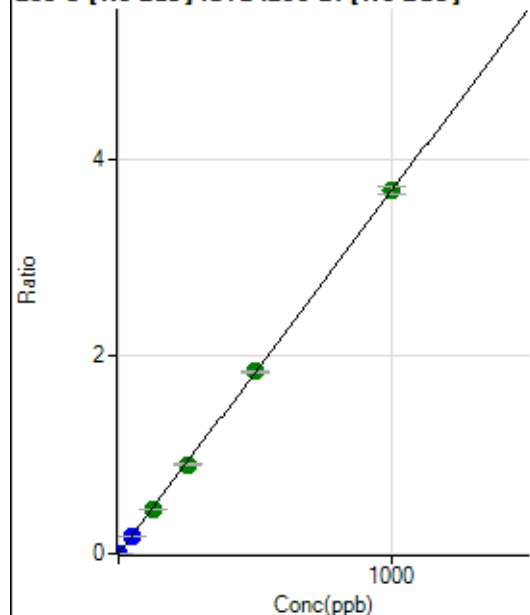
$$y = 0.0039 * x + 7.9022E-004$$

$$R = 1.0000$$

$$DL = 0.008426$$

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	55.56	0.0000	P	45.6
2	☐	1.000	0.888	25813.03	0.0033	P	2.8
3	☐	50.000	46.691	1361990.95	0.1717	P	0.7
4	☐	125.000	122.457	3588710.67	0.4504	A	1.0
5	☐	250.000	246.100	7281289.31	0.9051	A	2.7
6	☐	500.000	502.443	14845909.71	1.8479	A	1.1
7	☐	1000.000	1000.237	29614889.55	3.6787	A	2.0
8	☐			2464.20	0.0004	P	6.4

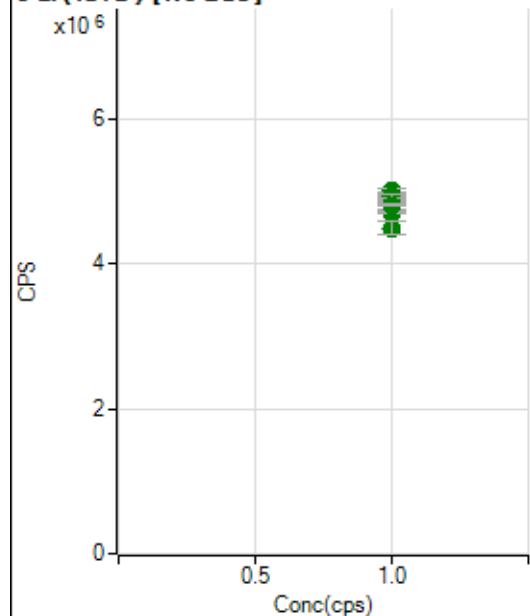
$$y = 0.0037 * x + 7.2838E-006$$

$$R = 1.0000$$

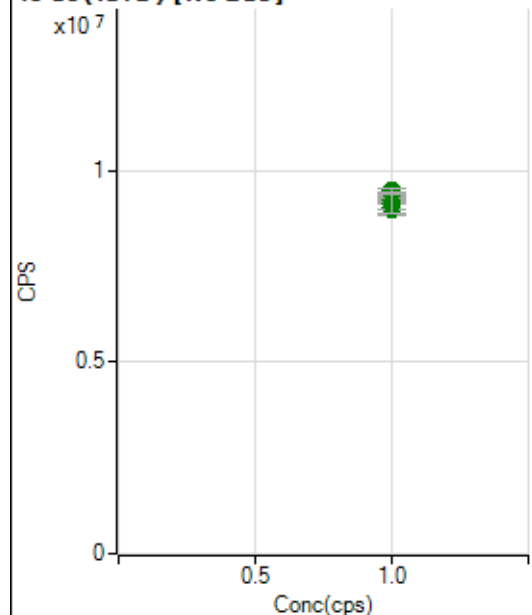
$$DL = 0.002712$$

Weight: <None>

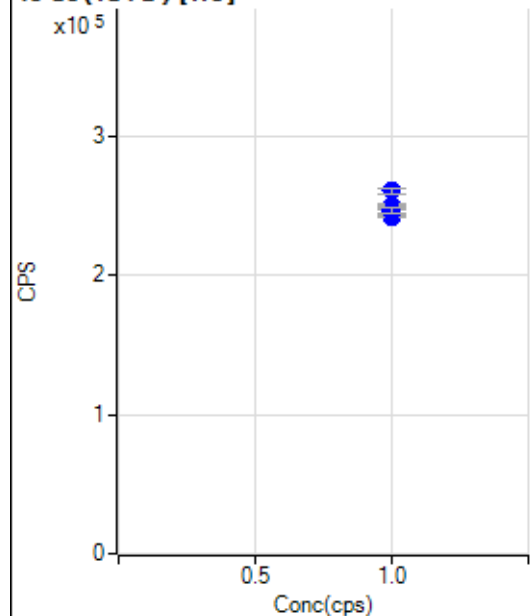
Min Conc: 0

6 Li (ISTD) [No Gas]

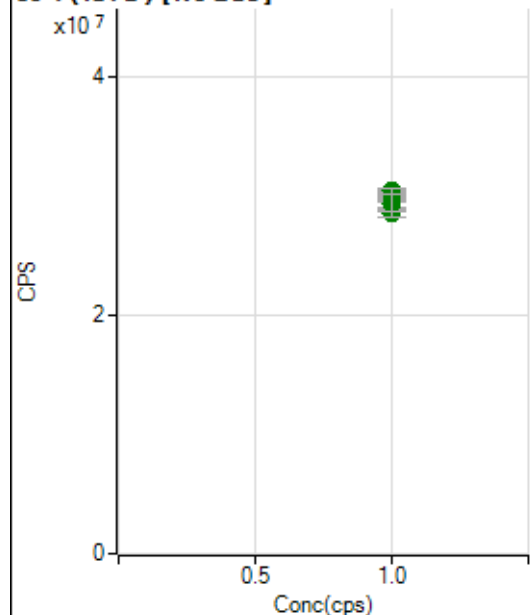
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4712062.35		A	0.9
2	☐	1.000		4831123.53		A	0.9
3	☐	1.000		4910773.51		A	1.3
4	☐	1.000		5011334.03		A	0.9
5	☐	1.000		4809795.67		A	2.2
6	☐	1.000		4948790.12		A	1.1
7	☐	1.000		4813116.68		A	0.3
8	☐	1.000		4491540.04		A	4.1

45 Sc (ISTD) [No Gas]

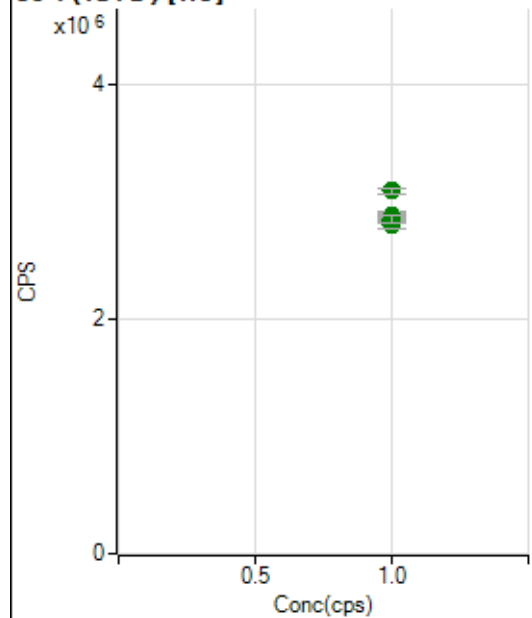
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8980834.80		A	3.8
2	☐	1.000		9133710.28		A	3.4
3	☐	1.000		9283282.85		A	1.0
4	☐	1.000		9218260.00		A	0.4
5	☐	1.000		9037567.92		A	1.6
6	☐	1.000		9238647.85		A	1.3
7	☐	1.000		9458548.33		A	1.2
8	☐	1.000		9132685.70		A	5.3

45 Sc (ISTD) [He]

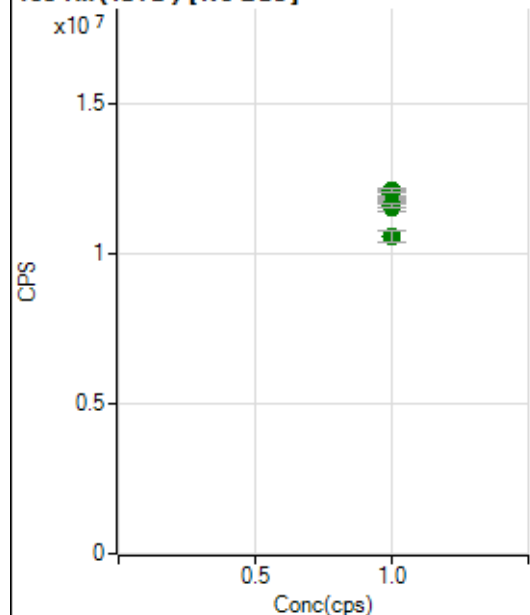
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		246007.85		P	0.9
2	☐	1.000		249752.49		P	1.4
3	☐	1.000		244799.74		P	2.5
4	☐	1.000		245563.31		P	2.1
5	☐	1.000		242126.84		P	0.5
6	☐	1.000		247210.09		P	1.8
7	☐	1.000		246351.15		P	1.8
8	☐	1.000		260445.67		P	1.3

89 Y (ISTD) [No Gas]

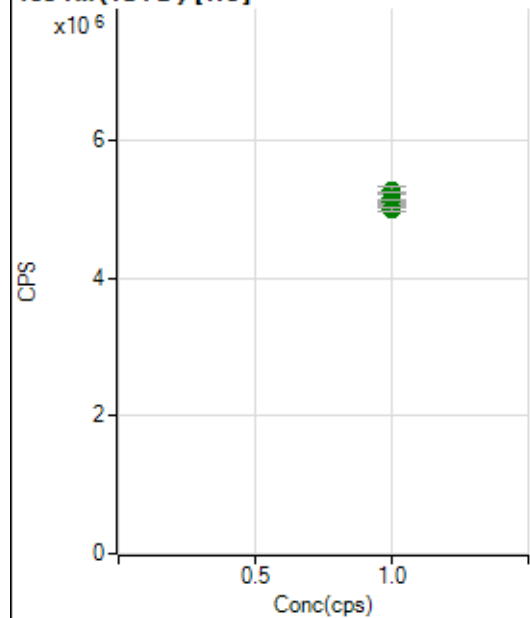
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		28580183.19		A	2.1
2	☐	1.000		29614651.78		A	3.4
3	☐	1.000		30096322.88		A	0.6
4	☐	1.000		30398350.38		A	0.8
5	☐	1.000		29757017.33		A	0.7
6	☐	1.000		29668257.61		A	0.5
7	☐	1.000		30451716.77		A	1.8
8	☐	1.000		29446386.50		A	4.6

89 Y (ISTD) [He]

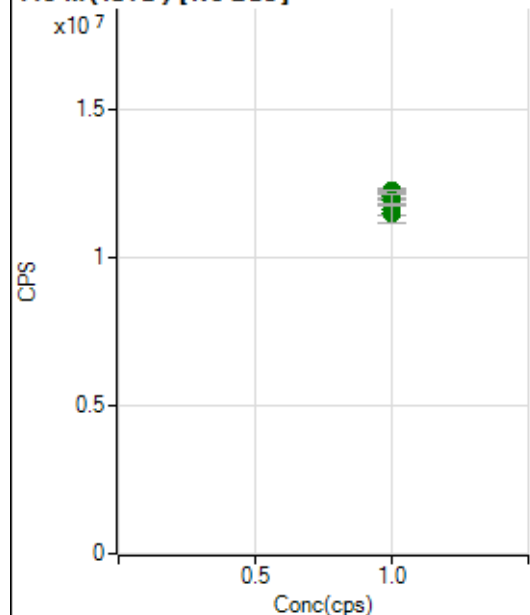
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2859484.61		A	0.5
2	☐	1.000		2880370.34		A	2.6
3	☐	1.000		2871497.77		A	1.8
4	☐	1.000		2835497.21		A	1.5
5	☐	1.000		2799491.14		A	2.1
6	☐	1.000		2864123.43		A	0.9
7	☐	1.000		2853897.01		A	2.1
8	☐	1.000		3095746.48		A	1.8

103 Rh(ISTD) [No Gas]

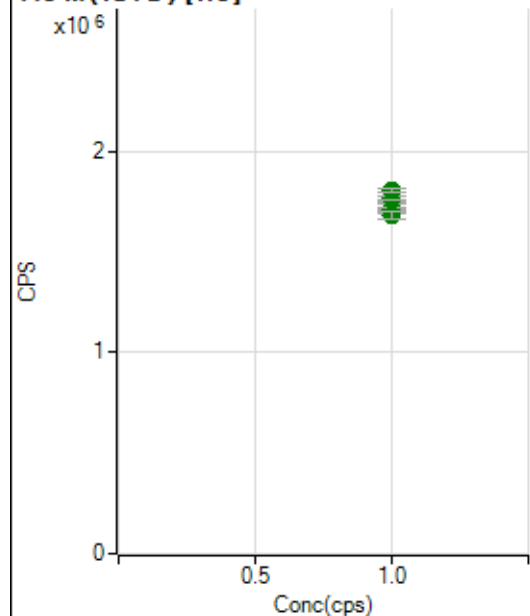
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11531232.98		A	2.3
2	☐	1.000		12009429.70		A	1.7
3	☐	1.000		12088133.43		A	1.2
4	☐	1.000		11747393.32		A	1.6
5	☐	1.000		11672774.39		A	0.7
6	☐	1.000		11672717.45		A	2.0
7	☐	1.000		11574347.66		A	1.0
8	☐	1.000		10573008.22		A	4.2

103 Rh(ISTD) [He]

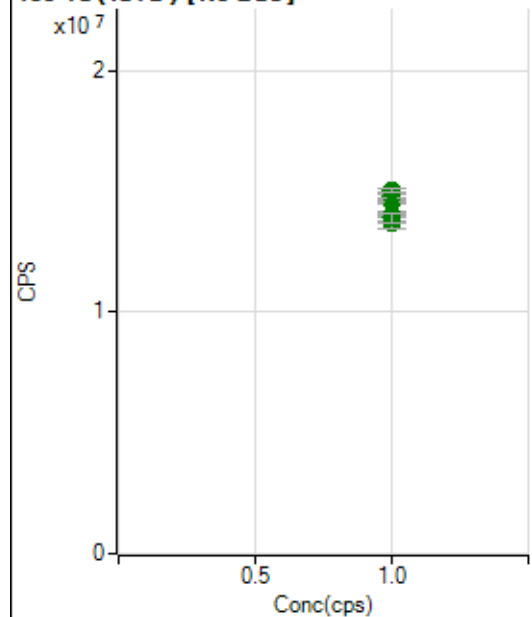
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5236419.16		A	0.3
2	☐	1.000		5259826.21		A	2.0
3	☐	1.000		5170678.64		A	2.7
4	☐	1.000		5091828.50		A	0.1
5	☐	1.000		5062295.48		A	0.6
6	☐	1.000		5104325.51		A	1.3
7	☐	1.000		5003369.37		A	1.6
8	☐	1.000		4996391.52		A	1.2

115 In (ISTD) [No Gas]

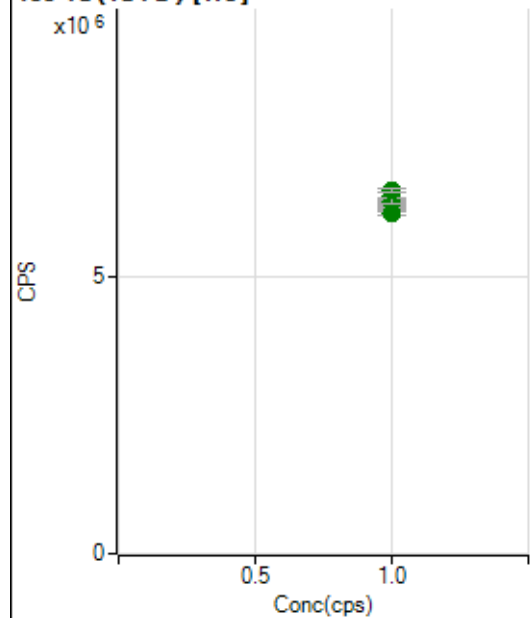
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11615475.15		A	3.2
2	☐	1.000		12011434.80		A	3.5
3	☐	1.000		12093837.82		A	1.3
4	☐	1.000		12215021.92		A	1.1
5	☐	1.000		12023220.55		A	1.4
6	☐	1.000		12227074.28		A	0.7
7	☐	1.000		11945265.76		A	2.5
8	☐	1.000		11444299.75		A	4.8

115 In (ISTD) [He]

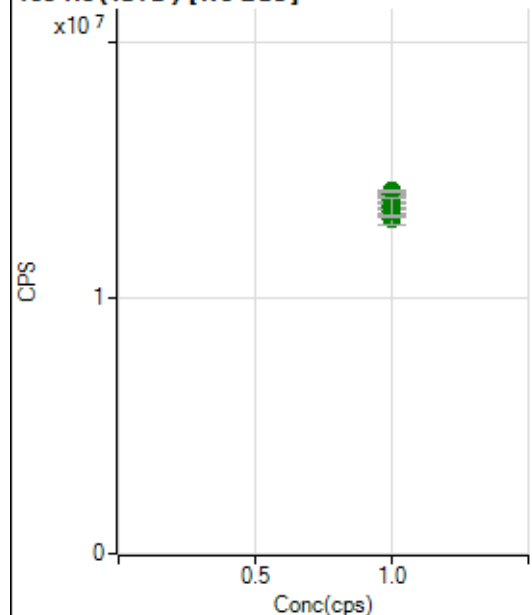
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1741000.31		A	0.6
2	☐	1.000		1770452.91		A	1.0
3	☐	1.000		1708549.52		A	1.8
4	☐	1.000		1709540.73		A	0.8
5	☐	1.000		1709705.59		A	0.4
6	☐	1.000		1706218.14		A	1.4
7	☐	1.000		1684327.44		A	2.2
8	☐	1.000		1802658.01		A	0.9

159 Tb (ISTD) [No Gas]

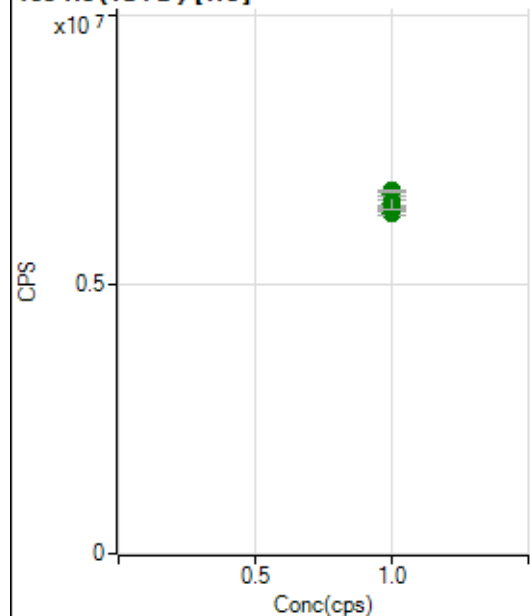
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13665563.69		A	3.3
2	☐	1.000		13949337.02		A	3.2
3	☐	1.000		13993338.54		A	0.6
4	☐	1.000		14537439.37		A	1.0
5	☐	1.000		14532791.31		A	0.2
6	☐	1.000		14806222.83		A	1.0
7	☐	1.000		15010654.08		A	1.1
8	☐	1.000		13886320.63		A	2.9

159 Tb (ISTD) [He]

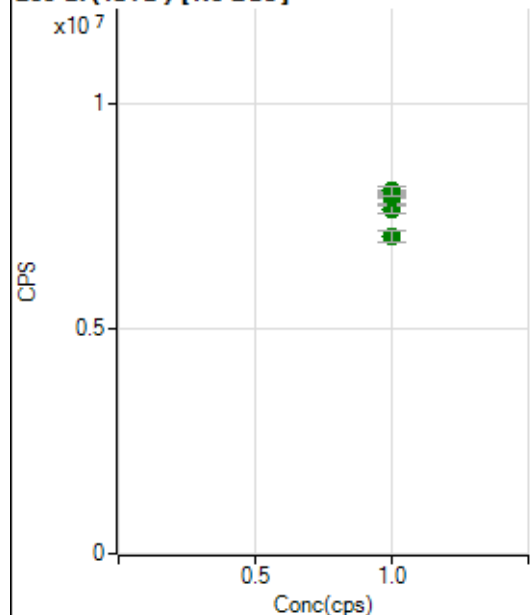
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6168409.56		A	0.9
2	☐	1.000		6291623.94		A	0.8
3	☐	1.000		6280230.67		A	2.4
4	☐	1.000		6212102.82		A	0.7
5	☐	1.000		6280498.45		A	0.6
6	☐	1.000		6467381.99		A	2.4
7	☐	1.000		6386917.82		A	1.4
8	☐	1.000		6568095.81		A	1.1

165 Ho (ISTD) [No Gas]

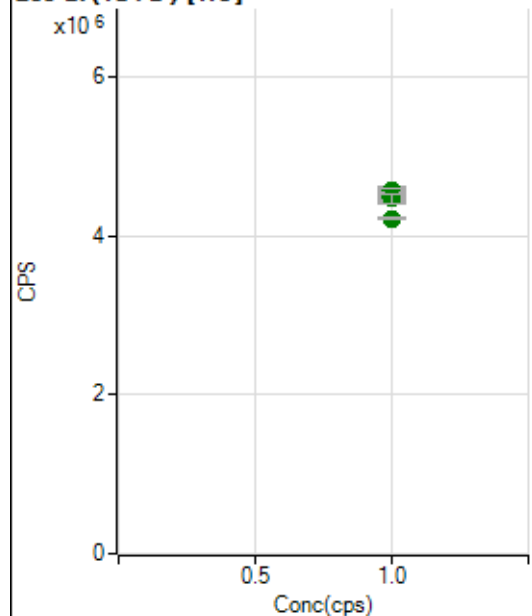
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13093362.97		A	3.0
2	☐	1.000		13380639.71		A	2.8
3	☐	1.000		13561987.98		A	1.8
4	☐	1.000		13748383.12		A	0.9
5	☐	1.000		13860943.37		A	2.8
6	☐	1.000		14075489.03		A	1.2
7	☐	1.000		14204913.51		A	0.4
8	☐	1.000		13621333.90		A	4.9

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6338095.25		A	1.7
2	☐	1.000		6426925.32		A	1.9
3	☐	1.000		6389206.22		A	0.2
4	☐	1.000		6397512.33		A	0.8
5	☐	1.000		6433279.49		A	0.1
6	☐	1.000		6675873.30		A	2.9
7	☐	1.000		6520274.69		A	4.2
8	☐	1.000		6747543.16		A	0.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7637310.58		A	2.4
2	☐	1.000		7889546.83		A	2.6
3	☐	1.000		7931287.66		A	0.8
4	☐	1.000		7968253.00		A	0.7
5	☐	1.000		8047552.03		A	2.1
6	☐	1.000		8034320.30		A	0.7
7	☐	1.000		8052933.28		A	2.3
8	☐	1.000		7038841.70		A	3.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4469064.27		A	1.3
2	☐	1.000		4559815.56		A	2.2
3	☐	1.000		4470943.44		A	2.3
4	☐	1.000		4508960.17		A	1.1
5	☐	1.000		4543290.90		A	1.0
6	☐	1.000		4562713.12		A	1.2
7	☐	1.000		4465161.50		A	2.7
8	☐	1.000		4216909.73		A	0.7

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8100621\IMS.b
Acq. Date-Time 2021-10-06 08:51:41
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		19337	193370.73			2.713	5.000
24		171337	1713374.02			2.040	5.000
25		22562	225623.74			2.423	5.000
26		25882	258816.05			2.666	5.000
59		43254	432535.43			2.253	5.000
113		18137	181371.79			2.631	5.000
115		54762	547620.06			2.479	5.000
206		22989	229892.38			2.444	5.000
207		19156	191558.75			2.444	5.000
208		48096	480961.35			2.217	5.000
220		1	5.90			20.233	

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

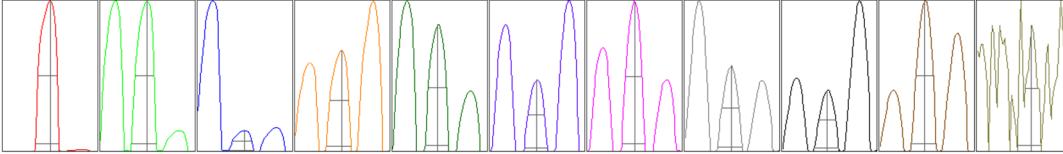
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	19830	19157	18648	19899	19150
24	173490	171728	167196	175717	168556
25	23114	22489	21839	23092	22277
26	26741	25755	25021	26393	25497
59	44293	42979	42206	44263	42527
113	18587	17875	17623	18702	17898
115	56512	54835	53169	55579	53714
206	23523	22864	22253	23581	22724
207	19634	19036	18582	19638	18890
208	49523	47741	47047	48887	47283

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	33461.74	9.05	8.90 - 9.10	
24	295370.91	24.00	23.90 - 24.10	
25	39727.18	25.00	24.90 - 25.10	
26	45408.16	26.00	25.90 - 26.10	
59	79936.90	58.95	58.90 - 59.10	
113	35870.08	113.00	112.90 - 113.10	
115	109723.86	115.05	114.90 - 115.10	
206	44412.20	206.00	205.90 - 206.10	
207	37070.66	206.95	206.90 - 207.10	
208	91316.84	207.95	207.90 - 208.10	
220	1.00	220.25	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.61	0.739	0.900	
24	0.61	0.783	0.900	
25	0.60	0.779	0.900	
26	0.60	0.784	0.900	
59	0.57	0.738	0.900	
113	0.52	0.727	0.900	
115	0.51	0.729	0.900	
206	0.54	0.779	0.900	
207	0.54	0.771	0.900	
208	0.54	0.777	0.900	
220	0.40	0.741		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.75 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	10.4 V	Deflect	14.4 V
Extract 2	-225.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-100 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	190 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.8 mm
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EM

Discriminator	4.0 mV	Analog HV	2255 V	Pulse HV	1537 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		7748	77477.47			3.097	
89		25783	257832.06			3.533	
205		21395	213952.66			3.408	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	7667	7382	7772	7967	7951
89	25594	24370	25807	26438	26708
205	21225	20261	21487	21819	22184

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	10.4 V	Deflect	5.6 V
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US EPA Tune Check Report

Extract 2	-225.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-100 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	-0.01		
Hardware Settings					
Torch					
Torch H	0.9 mm	Torch V	-0.8 mm		
EM					
Discriminator	4.0 mV	Analog HV	2255 V	Pulse HV	1537 V