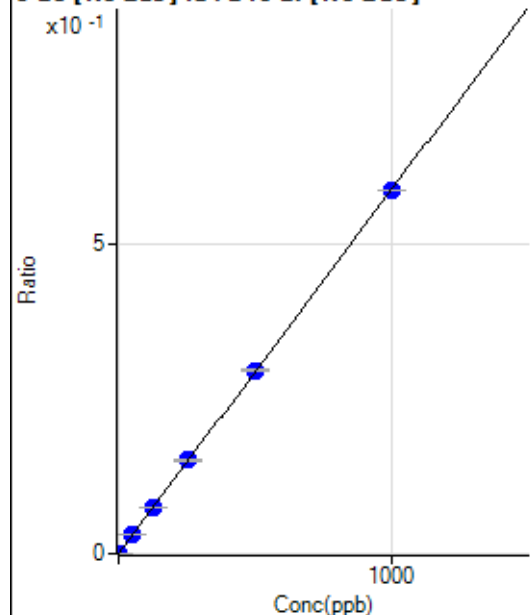


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7073021EPA.b\
Analysis File: P7073021EPA.batch.bin
DA Date-Time: 2021-07-30 23:01:36
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	007CALB.d	S00	2021-07-30 07:45:49
2	008CAL.S.d	S02	2021-07-30 07:48:52
3	010CAL.S.d	S03	2021-07-30 07:54:58
4	011CAL.S.d	S04	2021-07-30 07:58:00
5	012CAL.S.d	S05	2021-07-30 08:01:01
6	013CAL.S.d	S06	2021-07-30 08:03:59
7	016CAL.S.d	S07	2021-07-30 08:12:48
8	017CAL.S.d	S08	2021-07-30 08:15:41

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.82	0.0000	P	22.5
2	☐	1.000	0.996	1761.24	0.0006	P	11.4
3	☐	50.000	51.808	87686.44	0.0304	P	1.2
4	☐	125.000	127.655	208148.22	0.0749	P	0.4
5	☐	250.000	256.949	397230.14	0.1507	P	0.9
6	☐	500.000	502.236	741947.16	0.2946	P	1.1
7	☐	1000.000	996.722	1455489.64	0.5846	P	0.1
8	☐			322.23	0.0001	P	22.4

$$y = 5.8651\text{E-}004 * x + 2.3748\text{E-}005$$

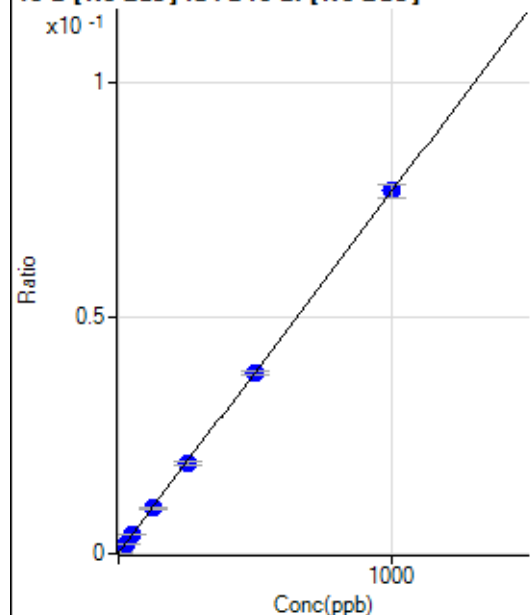
$$R = 1.0000$$

$$DL = 0.02728$$

$$BEC = 0.04049$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	519.47	0.0002	P	22.3
2	☐	25.000	23.385	5742.88	0.0020	P	4.5
3	☐	50.000	50.184	11624.17	0.0040	P	1.2
4	☐	125.000	123.893	26888.19	0.0097	P	4.2
5	☐	250.000	249.123	50752.04	0.0193	P	4.7
6	☐	500.000	497.261	96369.43	0.0383	P	2.0
7	☐	1000.000	1001.758	191401.72	0.0769	P	3.6
8	☐			6434.85	0.0027	P	9.4

$$y = 7.6555\text{E-}005 * x + 1.8952\text{E-}004$$

$$R = 1.0000$$

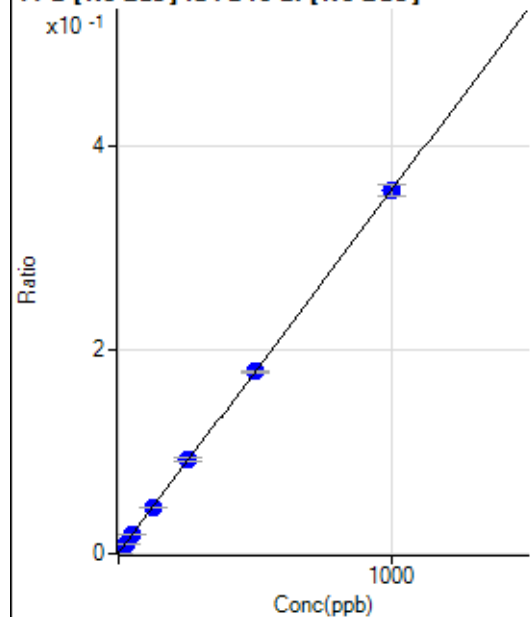
$$DL = 1.656$$

$$BEC = 2.476$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2227.99	0.0008	P	7.8
2	☐	25.000	24.129	27241.72	0.0094	P	3.3
3	☐	50.000	50.664	54250.59	0.0188	P	4.0
4	☐	125.000	125.199	125912.03	0.0453	P	3.3
5	☐	250.000	255.795	241651.22	0.0917	P	4.4
6	☐	500.000	500.180	449753.55	0.1785	P	1.1
7	☐	1000.000	998.425	885331.74	0.3556	P	3.3
8	☐			30208.66	0.0126	P	10.6

$$y = 3.5534\text{E-}004 * x + 8.1481\text{E-}004$$

$$R = 1.0000$$

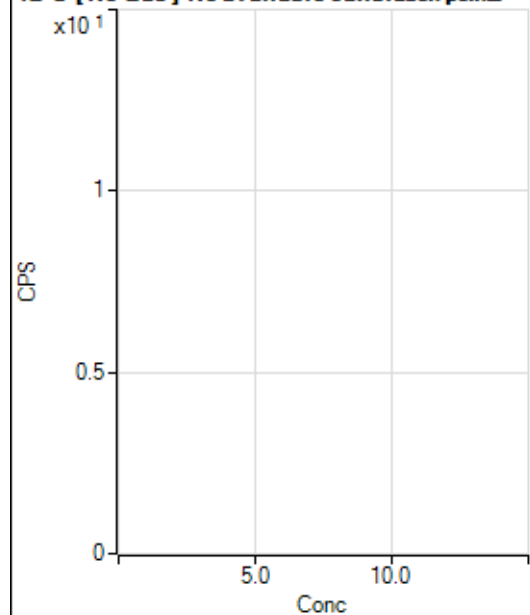
$$DL = 0.5381$$

$$BEC = 2.293$$

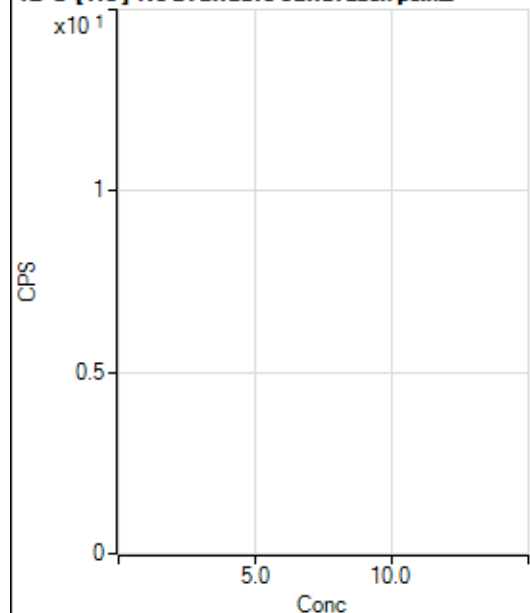
Weight: <None>

Min Conc: 0

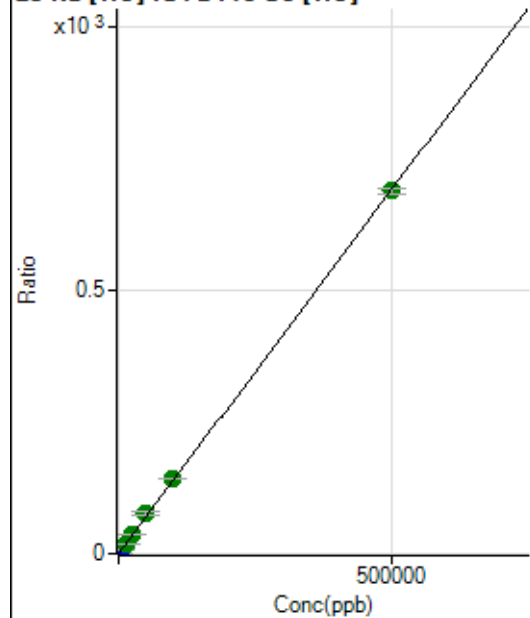
12 C [No Gas] No available calibration points



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

12 C [He] No available calibration points

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

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	21407.47	0.0509	P	3.5
2	☐	500.000	533.835	330618.06	0.7879	P	1.1
3	☐	5000.000	5453.809	3058818.43	7.5799	P	0.6
4	☐	12500.000	13050.370	7065962.31	18.0670	A	0.8
5	☐	25000.000	26189.183	13305899.17	36.2052	A	1.0
6	☐	50000.000	55821.024	25600043.11	77.1121	A	6.2
7	☐	100000.00	103406.97	50913408.78	142.8048	A	1.1
8	☐	500000.00	498658.71	246350366.6	688.4518	A	1.4

$$y = 0.0014 * x + 0.0509$$

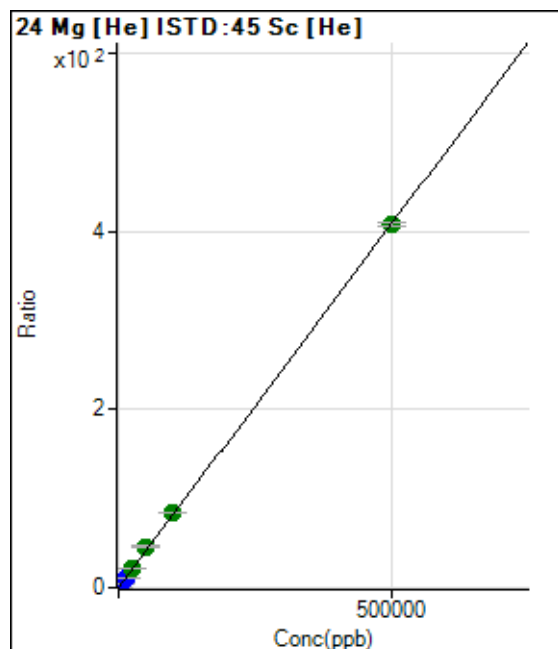
$$R = 0.9999$$

$$DL = 3.881$$

$$BEC = 36.9$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	447.24	0.0011	P	7.7
2	☐	500.000	525.974	180754.80	0.4307	P	0.4
3	☐	5000.000	5463.147	1801386.89	4.4640	P	0.9
4	☐	12500.000	13456.458	4299696.62	10.9938	P	0.9
5	☐	25000.000	26290.447	7893459.90	21.4780	A	1.0
6	☐	50000.000	55986.349	15185870.30	45.7369	A	5.9
7	☐	100000.00	103118.06	30034923.24	84.2393	A	0.2
8	☐	500000.00	498684.66	145776176.8	407.3820	A	1.2

$$y = 8.1691\text{E-}004 * x + 0.0011$$

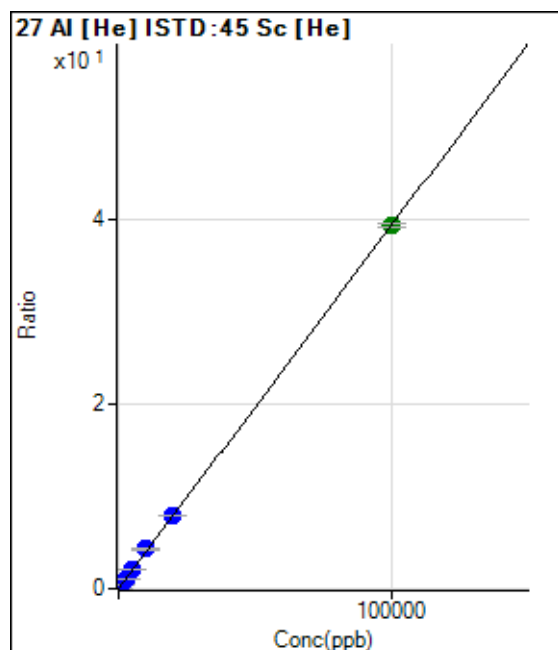
R = 0.9999

DL = 0.2997

BEC = 1.302

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	136.12	0.0003	P	4.1
2	☐	20.000	23.079	3953.42	0.0094	P	5.6
3	☐	1000.000	1059.690	168682.01	0.4180	P	0.7
4	☐	2500.000	2586.146	398797.81	1.0197	P	1.1
5	☐	5000.000	5165.936	748434.84	2.0365	P	1.1
6	☐	10000.000	11028.715	1443539.65	4.3473	P	5.7
7	☐	20000.000	20316.712	2855332.33	8.0082	P	0.2
8	☐	100000.00	99822.738	14079518.72	39.3457	A	1.0

$$y = 3.9415\text{E-}004 * x + 3.2394\text{E-}004$$

R = 0.9999

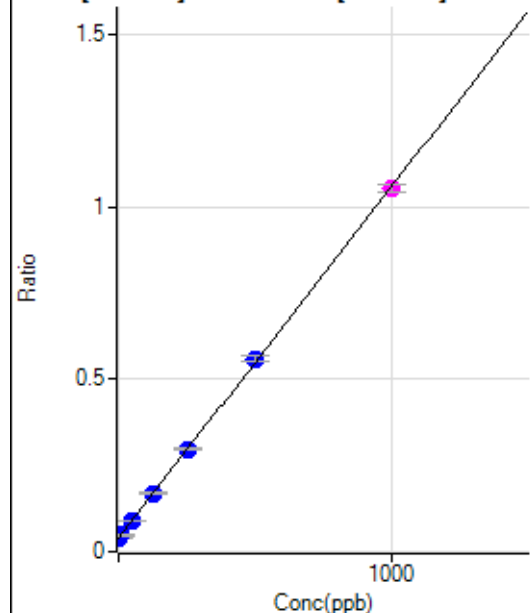
DL = 0.1008

BEC = 0.8219

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	206177.38	0.0400	P	0.8
2	☐	10.000	7.481	250639.18	0.0476	P	1.9
3	☐	50.000	48.682	461721.96	0.0895	P	1.1
4	☐	125.000	126.790	835906.24	0.1690	P	2.4
5	☐	250.000	253.236	1416454.11	0.2978	P	2.3
6	☐	500.000	510.769	2503093.65	0.5599	P	2.6
7	☐	1000.000	993.674	4654199.45	1.0515	M	2.1
8	☐			436054.28	0.0980	P	8.8

$$y = 0.0010 * x + 0.0400$$

$$R = 0.9999$$

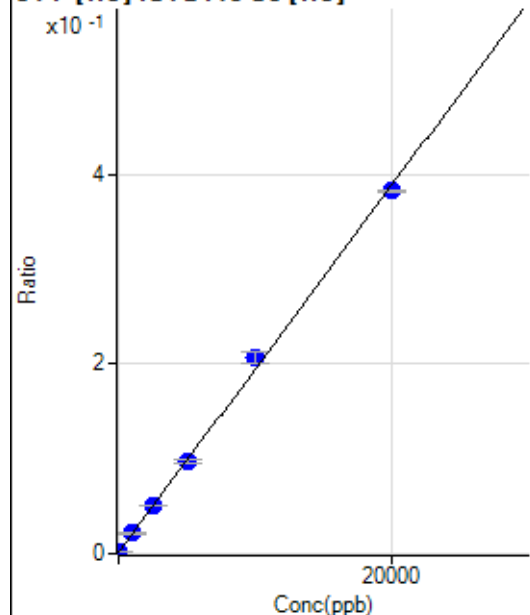
$$DL = 0.9137$$

$$BEC = 39.28$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-0.021	494.46	0.0012	P	12.2
2	☐	0.000	0.021	494.46	0.0012	P	10.4
3	☐	1000.000	1042.529	8611.03	0.0213	P	2.3
4	☐	2500.000	2548.089	19732.85	0.0505	P	0.9
5	☐	5000.000	4962.610	35701.62	0.0971	P	2.6
6	☐	10000.000	10583.096	68342.74	0.2058	P	5.9
7	☐	20000.000	19709.662	136325.22	0.3823	P	0.6
8	☐			463.91	0.0013	P	4.3

$$y = 1.9339E-005 * x + 0.0012$$

$$R = 0.9994$$

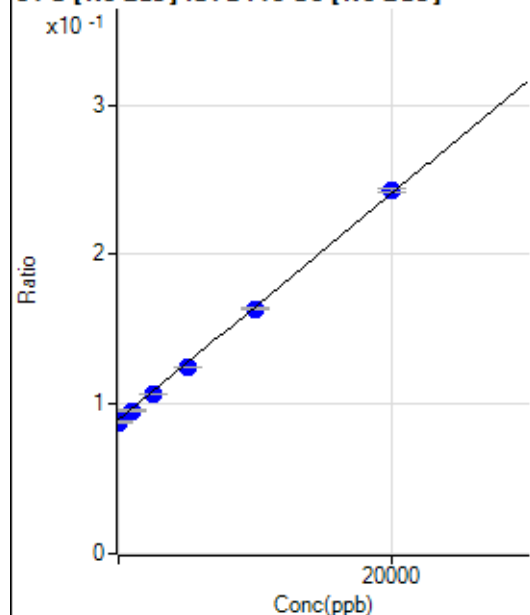
$$DL = 20.67$$

$$BEC = 60.87$$

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	236.800	471421.26	0.0914	P	0.4
2	☐	0.000	-236.800	462521.78	0.0878	P	1.2
3	☐	1000.000	812.114	493879.67	0.0958	P	0.2
4	☐	2500.000	2293.346	529018.81	0.1070	P	0.2
5	☐	5000.000	4648.515	593710.42	0.1248	P	0.3
6	☐	10000.000	9792.054	731840.35	0.1637	P	1.0
7	☐	20000.000	20227.070	1073992.72	0.2426	P	1.1
8	☐			380500.71	0.0855	P	1.4

$$y = 7.5648\text{E-}006 * x + 0.0896$$

$$R = 0.9996$$

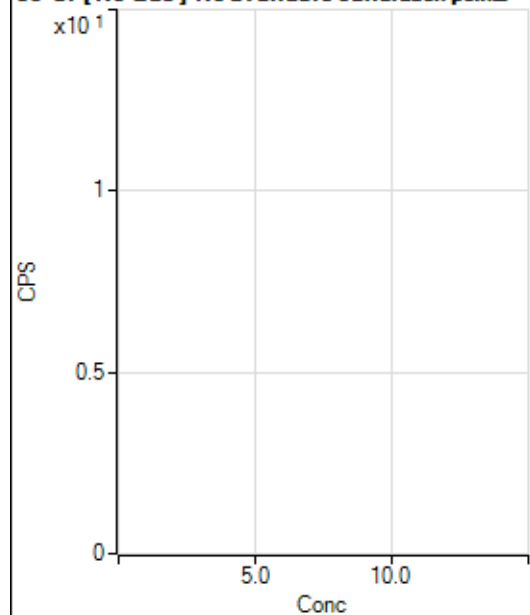
$$DL = 280.2$$

$$BEC = 1.185\text{E}+04$$

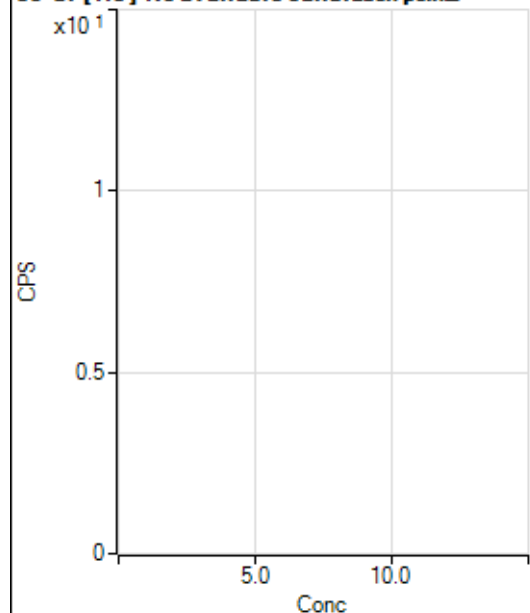
Weight: <None>

Min Conc: 0

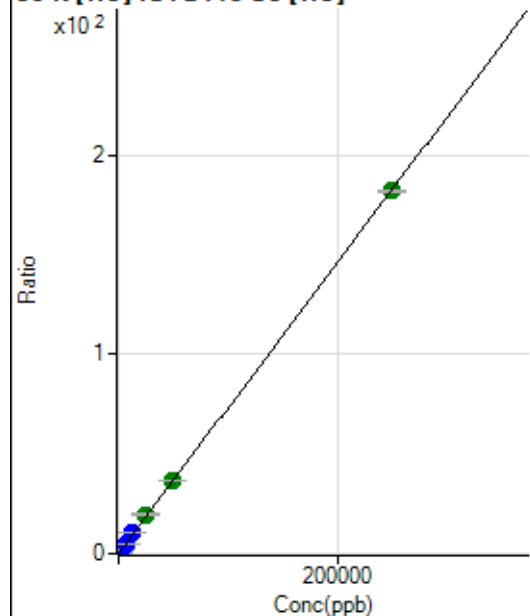
35 Cl [No Gas] No available calibration points



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

35 Cl [He] No available calibration points

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

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	50925.05	0.1212	P	3.7
2	☐	500.000	530.448	212855.25	0.5072	P	0.1
3	☐	2500.000	2769.768	862357.76	2.1370	P	0.6
4	☐	6250.000	6836.979	1993427.60	5.0970	P	0.8
5	☐	12500.000	13809.156	3738119.61	10.1712	P	0.5
6	☐	25000.000	26874.541	6533960.56	19.6800	A	6.0
7	☐	50000.000	50070.439	13035755.85	36.5615	A	0.3
8	☐	250000.00	249715.56	65079984.79	181.8596	A	0.5

$$y = 7.2778\text{E-}004 * x + 0.1212$$

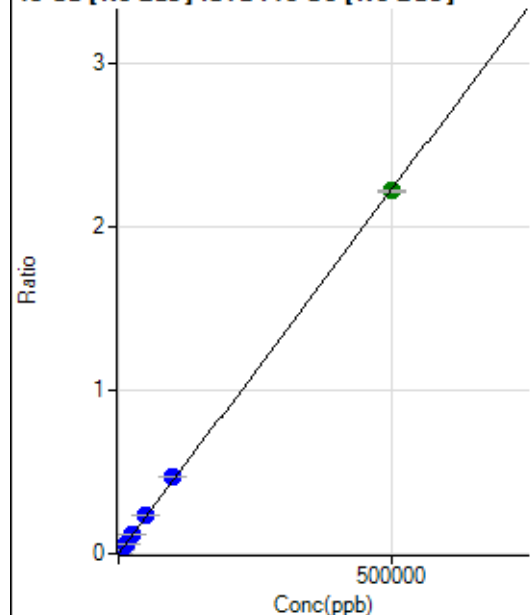
$$R = 1.0000$$

$$DL = 18.65$$

$$BEC = 166.5$$

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	133.34	0.0000	P	10.1
2	☐	500.000	520.249	12360.99	0.0023	P	1.2
3	☐	5000.000	5459.235	125755.39	0.0244	P	0.7
4	☐	12500.000	13394.747	295696.42	0.0598	P	1.0
5	☐	25000.000	26269.688	557790.34	0.1172	P	1.1
6	☐	50000.000	52994.009	1057280.16	0.2365	P	1.1
7	☐	100000.00	106095.76	2095631.04	0.4734	P	0.4
8	☐	500000.00	498390.98	9896305.52	2.2240	A	0.6

$$y = 4.4622\text{E-}006 * x + 2.5843\text{E-}005$$

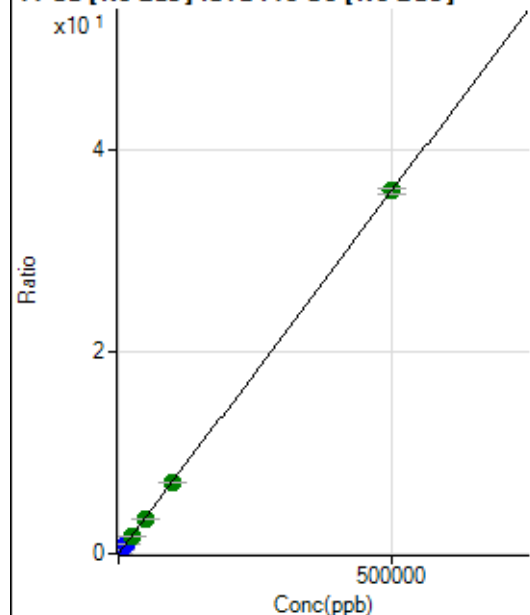
$$R = 0.9999$$

$$DL = 1.754$$

$$BEC = 5.792$$

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	8252.53	0.0016	P	2.3
2	☐	500.000	518.881	204993.82	0.0389	P	0.6
3	☐	5000.000	5373.253	2001654.84	0.3882	P	1.3
4	☐	12500.000	13149.303	4685990.38	0.9476	P	0.4
5	☐	25000.000	24170.903	8280398.36	1.7405	A	0.9
6	☐	50000.000	48662.390	15658343.06	3.5025	A	1.1
7	☐	100000.00	98930.518	31510315.64	7.1188	A	0.3
8	☐	500000.00	500369.12	160177492.4	35.9990	A	1.6

$$y = 7.1942\text{E-}005 * x + 0.0016$$

$$R = 1.0000$$

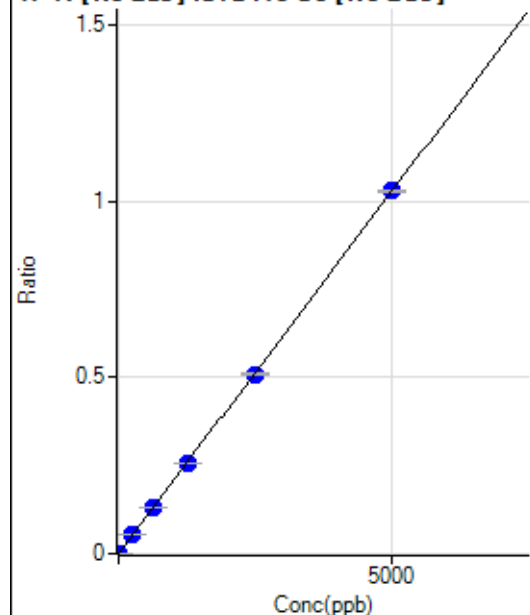
$$DL = 1.529$$

$$BEC = 22.24$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.11	0.0000	P	30.3
2	☐	5.000	5.269	5790.19	0.0011	P	2.6
3	☐	250.000	255.261	270639.77	0.0525	P	1.0
4	☐	625.000	632.860	643338.60	0.1301	P	0.6
5	☐	1250.000	1242.637	1215215.29	0.2554	P	0.6
6	☐	2500.000	2476.334	2275523.14	0.5090	P	0.6
7	☐	5000.000	5012.428	4560240.03	1.0303	P	0.3
8	☐			950.06	0.0002	P	12.0

$$y = 2.0554\text{E-}004 * x + 1.6728\text{E-}005$$

$$R = 1.0000$$

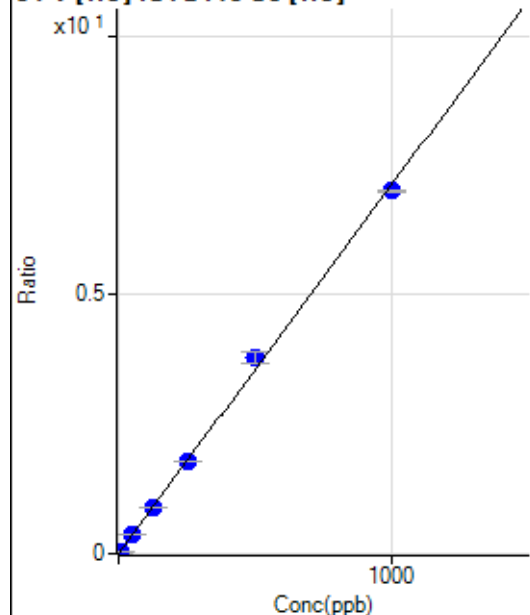
$$DL = 0.07403$$

$$BEC = 0.08139$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	10.00	0.0000	P	33.5
2	☐	5.000	5.248	15690.65	0.0374	P	1.9
3	☐	50.000	50.959	146437.91	0.3629	P	1.1
4	☐	125.000	124.304	346180.60	0.8851	P	0.6
5	☐	250.000	250.329	655097.76	1.7825	P	0.9
6	☐	500.000	532.090	1258079.88	3.7888	P	5.8
7	☐	1000.000	983.911	2497959.39	7.0061	P	0.4
8	☐			558.91	0.0016	P	4.1

$$y = 0.0071 * x + 2.3798\text{E-}005$$

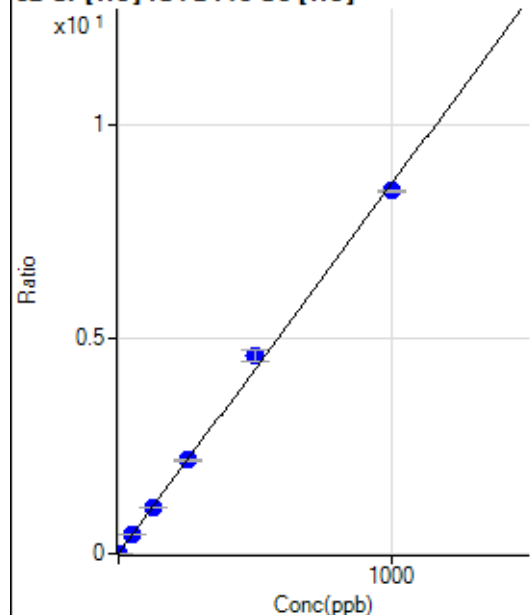
$$R = 0.9992$$

$$DL = 0.003361$$

$$BEC = 0.003342$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1880.14	0.0045	P	4.1
2	☐	2.000	2.025	9188.48	0.0219	P	1.5
3	☐	50.000	51.220	179619.85	0.4451	P	0.7
4	☐	125.000	125.123	422737.56	1.0809	P	0.4
5	☐	250.000	252.079	798628.51	2.1731	P	0.8
6	☐	500.000	535.384	1530748.41	4.6103	P	5.9
7	☐	1000.000	981.712	3012712.04	8.4500	P	0.6
8	☐			16693.98	0.0467	P	2.2

$$y = 0.0086 * x + 0.0045$$

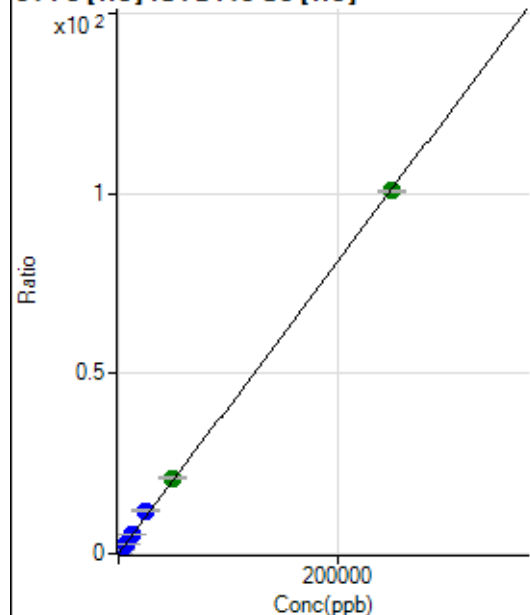
$$R = 0.9991$$

$$DL = 0.06329$$

$$BEC = 0.52$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1304.74	0.0031	P	17.6
2	☐	50.000	57.586	11065.51	0.0264	P	3.3
3	☐	2500.000	2870.681	469231.78	1.1628	P	0.7
4	☐	6250.000	6859.062	1084916.66	2.7740	P	0.5
5	☐	12500.000	13719.745	2038053.97	5.5455	P	1.1
6	☐	25000.000	29236.313	3922722.66	11.8139	P	5.7
7	☐	50000.000	52020.462	7493618.93	21.0181	A	0.8
8	☐	250000.00	249092.35	36009819.80	100.6303	A	0.5

$$y = 4.0398E-004 * x + 0.0031$$

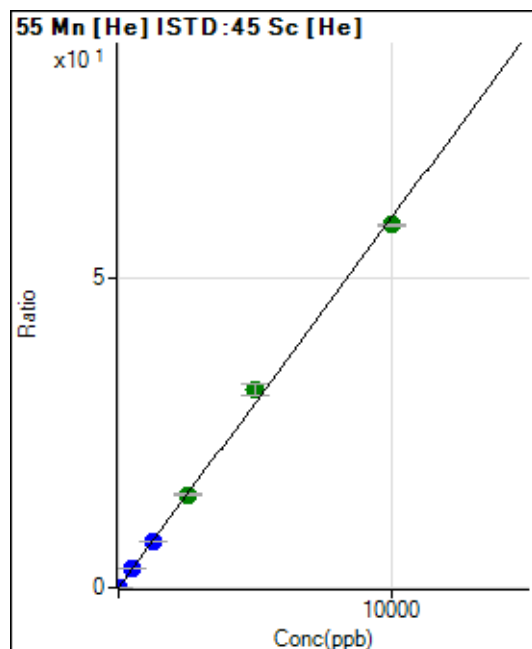
$$R = 0.9998$$

$$DL = 4.056$$

$$BEC = 7.678$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	106.67	0.0003	P	22.3
2	☐	1.000	1.043	2722.50	0.0065	P	4.2
3	☐	500.000	512.589	1236424.39	3.0639	P	0.5
4	☐	1250.000	1259.116	2943381.52	7.5258	P	0.4
5	☐	2500.000	2516.579	5527940.33	15.0415	A	0.9
6	☐	5000.000	5365.118	10647665.12	32.0668	A	5.7
7	☐	10000.000	9811.527	20908028.58	58.6424	A	0.6
8	☐			13353.92	0.0373	P	1.6

$$y = 0.0060 * x + 2.5394E-004$$

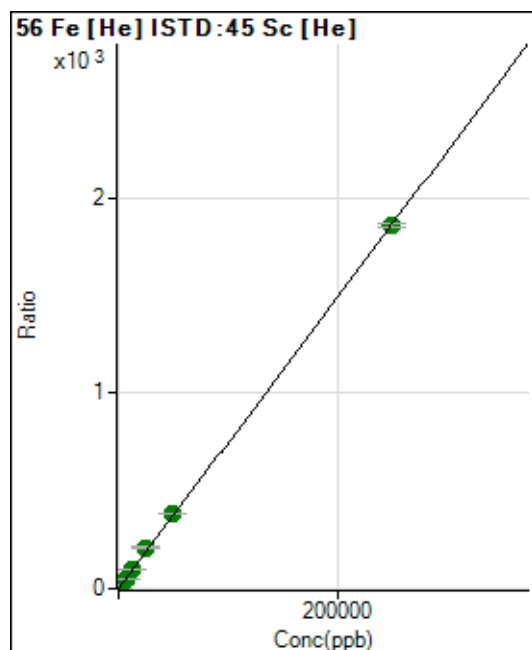
$$R = 0.9990$$

$$DL = 0.02837$$

$$BEC = 0.04249$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6331.07	0.0151	P	2.0
2	☐	50.000	55.339	179248.46	0.4272	P	1.3
3	☐	2500.000	2682.706	8067986.17	19.9931	A	1.0
4	☐	6250.000	6420.403	18705332.83	47.8276	A	0.5
5	☐	12500.000	13027.836	35661257.28	97.0329	A	0.7
6	☐	25000.000	27937.035	69088356.17	208.0612	A	5.7
7	☐	50000.000	51075.975	135621487.2	380.3761	A	0.1
8	☐	250000.00	249458.62	664746333.3	1,857.725	A	1.1

$$y = 0.0074 * x + 0.0151$$

$$R = 0.9999$$

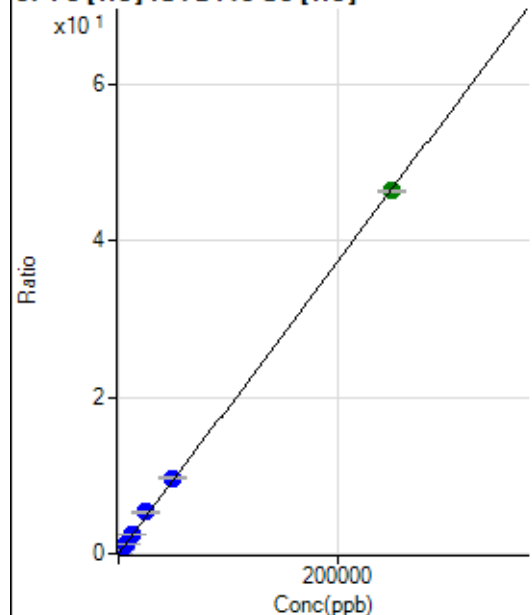
$$DL = 0.1187$$

$$BEC = 2.023$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	220.38	0.0005	P	26.2
2	☐	50.000	55.166	4530.39	0.0108	P	2.8
3	☐	2500.000	2765.736	207996.32	0.5154	P	1.2
4	☐	6250.000	6685.258	486977.94	1.2451	P	0.6
5	☐	12500.000	13413.037	917937.76	2.4977	P	1.1
6	☐	25000.000	28451.870	1758939.19	5.2975	P	5.9
7	☐	50000.000	52044.493	3454674.90	9.6898	P	1.2
8	☐	250000.00	249186.72	16600996.67	46.3926	A	0.7

$$y = 1.8617\text{E-}004 * x + 5.2456\text{E-}004$$

$$R = 0.9999$$

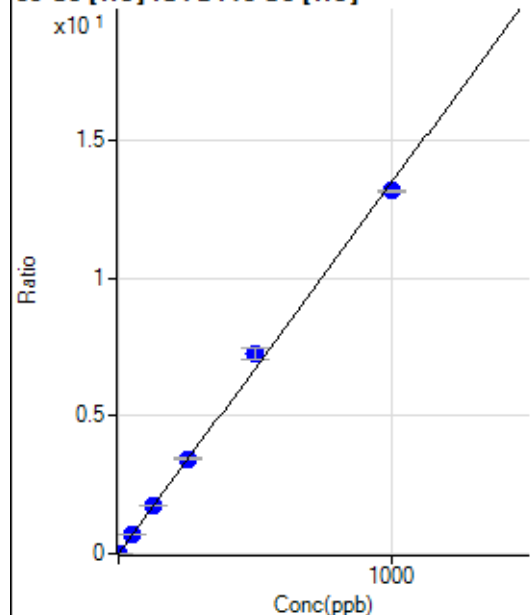
$$DL = 2.211$$

$$BEC = 2.818$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	75.56	0.0002	P	9.8
2	☐	1.000	1.037	5936.81	0.0141	P	0.7
3	☐	50.000	52.191	283606.53	0.7028	P	0.7
4	☐	125.000	127.648	672150.24	1.7186	P	0.6
5	☐	250.000	255.720	1265269.97	3.4428	P	0.8
6	☐	500.000	539.284	2410728.14	7.2602	P	5.8
7	☐	1000.000	978.488	4696579.93	13.1729	P	0.8
8	☐			7169.59	0.0200	P	1.4

$$y = 0.0135 * x + 1.7974\text{E-}004$$

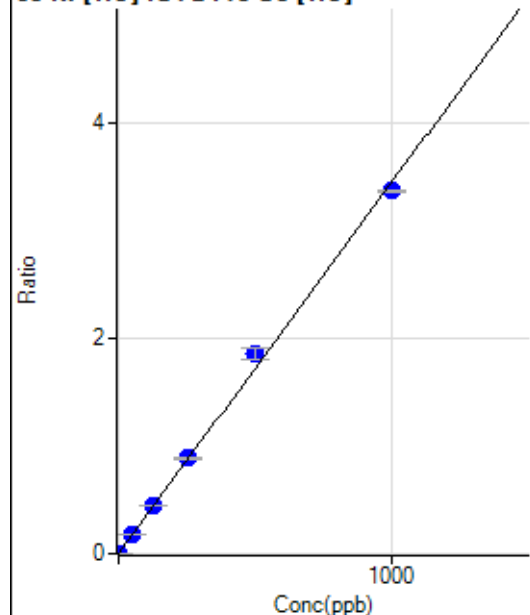
$$R = 0.9988$$

$$DL = 0.003939$$

$$BEC = 0.01335$$

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	298.89	0.0007	P	20.6
2	☐	1.000	1.118	1911.26	0.0046	P	2.6
3	☐	50.000	52.541	73204.55	0.1814	P	0.9
4	☐	125.000	127.567	171863.25	0.4394	P	1.2
5	☐	250.000	257.027	325121.76	0.8847	P	0.9
6	☐	500.000	539.873	616756.30	1.8574	P	5.7
7	☐	1000.000	977.859	1199281.65	3.3637	P	0.5
8	☐			5003.12	0.0140	P	3.3

$$y = 0.0034 * x + 7.1100E-004$$

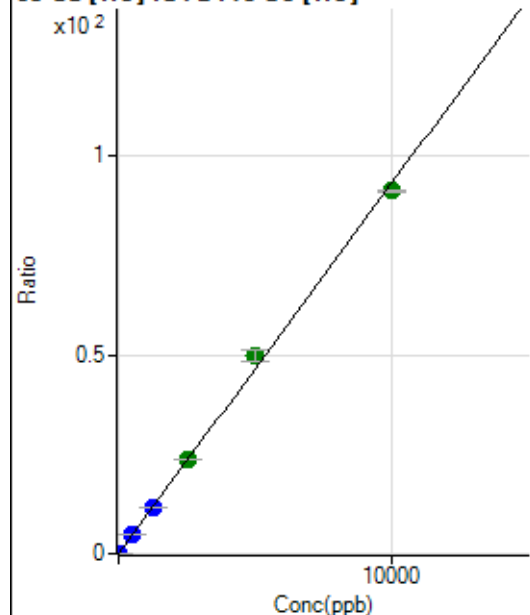
$$R = 0.9988$$

$$DL = 0.1277$$

$$BEC = 0.2067$$

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	1105.61	0.0026	P	0.8
2	☐	2.000	2.066	9180.72	0.0219	P	1.3
3	☐	500.000	516.872	1944170.63	4.8177	P	0.2
4	☐	1250.000	1249.616	4553896.60	11.6439	P	0.7
5	☐	2500.000	2542.397	8705297.93	23.6873	A	1.3
6	☐	5000.000	5374.105	16623947.67	50.0671	A	5.8
7	☐	10000.000	9801.553	32556010.35	91.3126	A	0.8
8	☐			10620.59	0.0297	P	1.2

$$y = 0.0093 * x + 0.0026$$

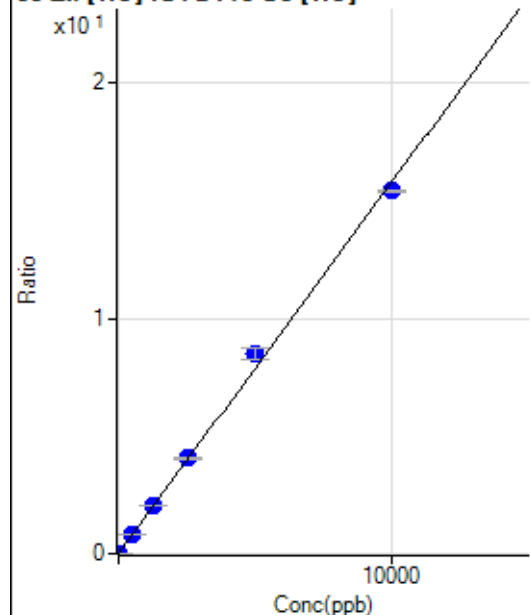
$$R = 0.9989$$

$$DL = 0.007154$$

$$BEC = 0.2824$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	472.23	0.0011	P	7.4
2	☐	2.000	2.542	2154.62	0.0051	P	2.4
3	☐	500.000	521.163	332317.73	0.8235	P	0.6
4	☐	1250.000	1275.354	787509.10	2.0136	P	0.6
5	☐	2500.000	2571.075	1491427.55	4.0582	P	0.9
6	☐	5000.000	5407.446	2833480.20	8.5338	P	5.8
7	☐	10000.000	9774.281	5499325.20	15.4245	P	0.8
8	☐			10146.95	0.0284	P	2.0

$$y = 0.0016 * x + 0.0011$$

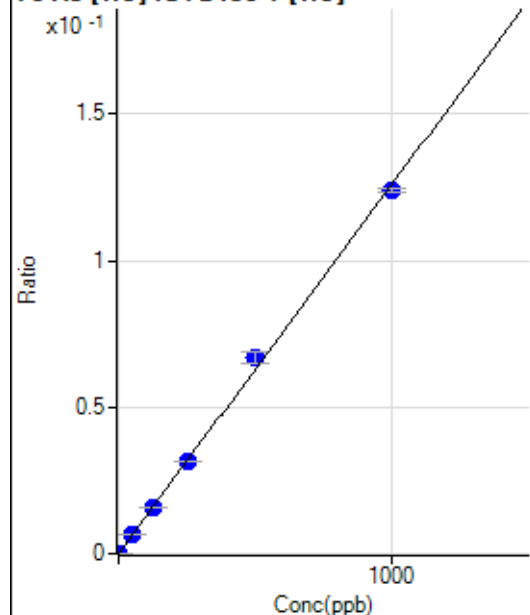
$$R = 0.9987$$

$$DL = 0.1572$$

$$BEC = 0.7118$$

Weight: <None>

Min Conc: 0

⁷⁵As [He] ISTD: ⁸⁹Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	10.49	0.0000	P	40.1
2	☐	1.000	1.045	425.93	0.0001	P	2.2
3	☐	50.000	51.086	19520.49	0.0064	P	1.1
4	☐	125.000	125.823	46469.41	0.0158	P	0.2
5	☐	250.000	251.645	87985.67	0.0317	P	0.5
6	☐	500.000	530.834	168591.70	0.0668	P	5.4
7	☐	1000.000	984.015	334232.69	0.1238	P	0.9
8	☐			132.10	0.0000	P	13.2

$$y = 1.2581E-004 * x + 3.3312E-006$$

$$R = 0.9993$$

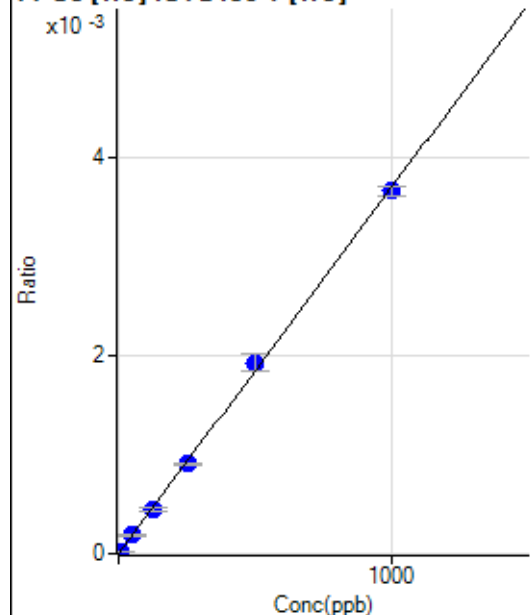
$$DL = 0.03186$$

$$BEC = 0.02648$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.225	61.11	0.0000	P	22.4
3	☐	50.000	49.943	561.13	0.0002	P	3.5
4	☐	125.000	121.996	1325.63	0.0005	P	8.8
5	☐	250.000	245.452	2524.69	0.0009	P	2.2
6	☐	500.000	521.691	4869.75	0.0019	P	8.6
7	☐	1000.000	990.669	9900.11	0.0037	P	2.8
8	☐			2.22	0.0000	P	86.6

$$y = 3.7013\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9996$$

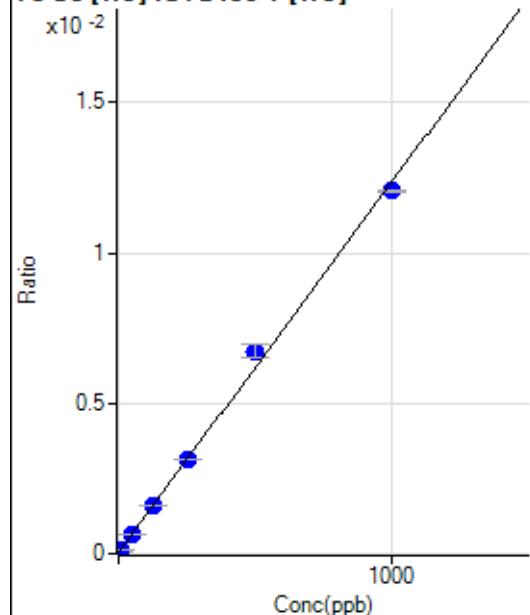
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	132.72	0.0000	P	22.2
2	☐	5.000	6.049	368.53	0.0001	P	4.6
3	☐	50.000	49.449	1974.84	0.0007	P	3.5
4	☐	125.000	126.677	4697.08	0.0016	P	1.4
5	☐	250.000	251.240	8704.49	0.0031	P	0.8
6	☐	500.000	544.438	17005.68	0.0067	P	6.1
7	☐	1000.000	977.284	32567.26	0.0121	P	0.7
8	☐			111.11	0.0000	P	19.6

$$y = 1.2299\text{E-}005 * x + 4.2269\text{E-}005$$

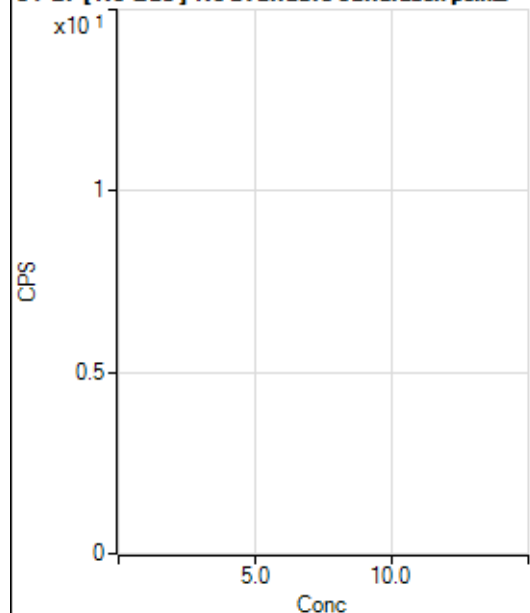
$$R = 0.9985$$

$$DL = 2.286$$

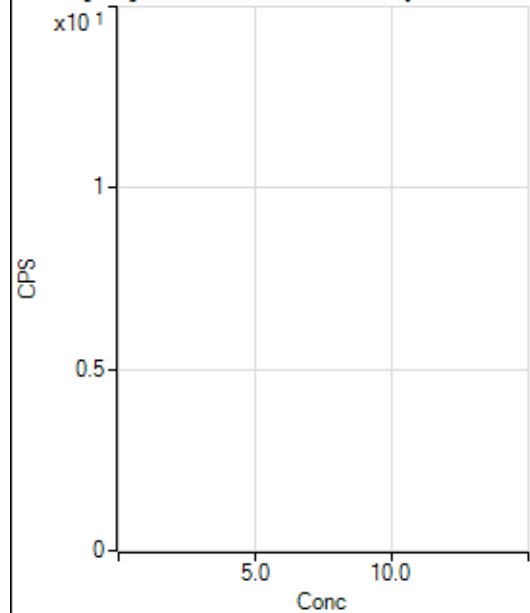
$$BEC = 3.437$$

Weight: <None>

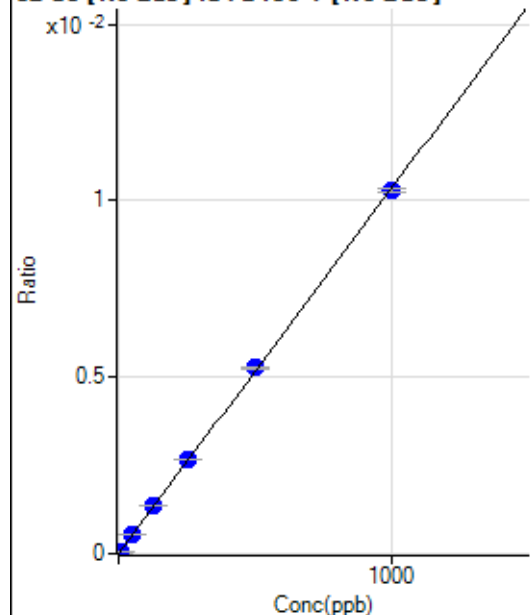
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6743.45		P	4.7
2	☐			7466.05		P	10.1
3	☐			7190.87		P	4.4
4	☐			6690.61		P	7.9
5	☐			6170.93		P	2.0
6	☐			5715.17		P	6.0
7	☐			6059.77		P	3.6
8	☐			5634.57		P	3.1

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.73		P	37.7
2	☐			66.73		P	8.7
3	☐			50.05		P	69.3
4	☐			60.06		P	28.9
5	☐			43.38		P	35.3
6	☐			46.71		P	44.6
7	☐			36.70		P	87.7
8	☐			66.74		P	56.8

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	-3.05	0.0000	P	-632.
2	☐	5.000	5.644	789.73	0.0001	P	14.8
3	☐	50.000	52.631	7273.08	0.0005	P	1.8
4	☐	125.000	130.615	17409.00	0.0014	P	1.0
5	☐	250.000	257.165	32856.58	0.0027	P	0.9
6	☐	500.000	508.213	62004.37	0.0053	P	1.5
7	☐	1000.000	993.265	121938.35	0.0103	P	1.0
8	☐			51.89	0.0000	P	153.6

$$y = 1.0343\text{E-}005 * x - 2.2900\text{E-}007$$

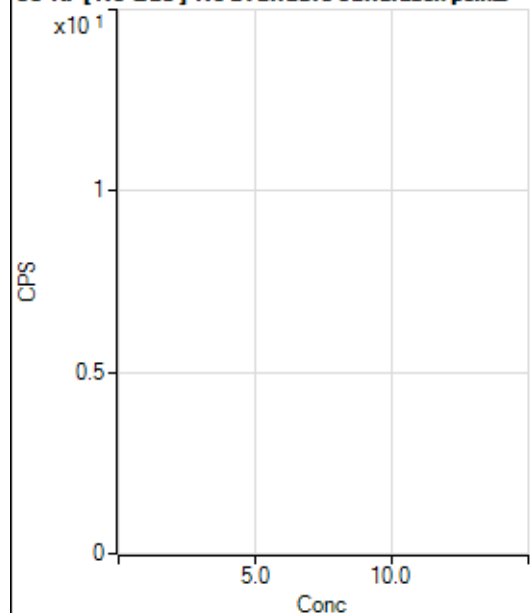
R = 0.9999

DL = 0.4199

BEC = -0.02214

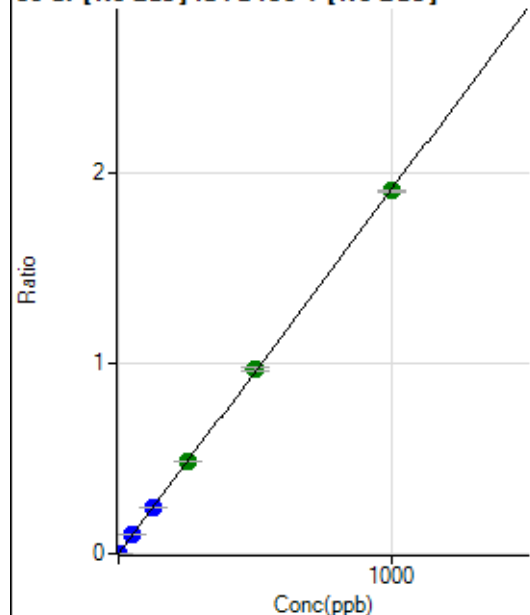
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			868.92		P	2.4
2	☐			825.59		P	6.3
3	☐			771.14		P	4.6
4	☐			756.69		P	10.4
5	☐			756.69		P	7.2
6	☐			734.47		P	4.8
7	☐			700.03		P	10.8
8	☐			707.80		P	9.0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1363.99	0.0001	P	9.2
2	☐	1.000	0.106	4147.93	0.0003	P	3.3
3	☐	50.000	51.146	1310552.78	0.0981	P	1.3
4	☐	125.000	126.797	3131129.02	0.2429	P	0.7
5	☐	250.000	253.320	5995000.09	0.4853	A	0.2
6	☐	500.000	505.448	11419811.54	0.9681	A	1.7
7	☐	1000.000	996.165	22646246.86	1.9080	A	0.6
8	☐			7730.07	0.0007	P	0.6

$$y = 0.0019 * x + 1.0252E-004$$

$$R = 1.0000$$

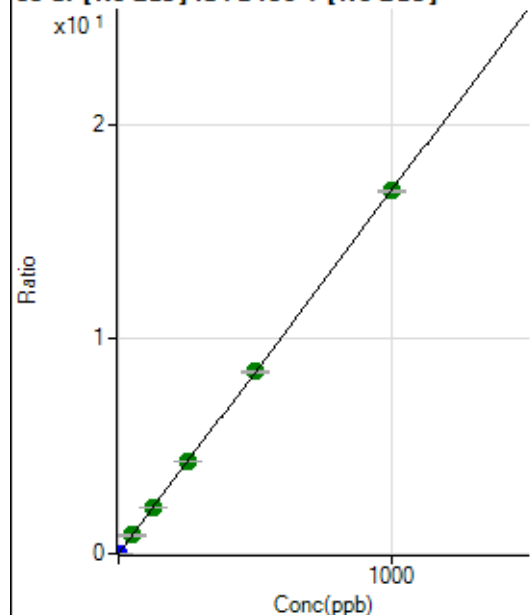
$$DL = 0.0147$$

$$BEC = 0.05353$$

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	202.78	0.0000	P	16.7
2	☐	1.000	0.102	23553.08	0.0017	P	2.4
3	☐	50.000	50.550	11423633.41	0.8547	A	1.3
4	☐	125.000	126.193	27498768.32	2.1337	A	0.7
5	☐	250.000	252.126	52666545.62	4.2629	A	0.2
6	☐	500.000	500.631	99850838.34	8.4647	A	0.9
7	☐	1000.000	998.977	200480721.1	16.8907	A	0.6
8	☐			56246.30	0.0048	P	1.7

$$y = 0.0169 * x + 1.5241E-005$$

$$R = 1.0000$$

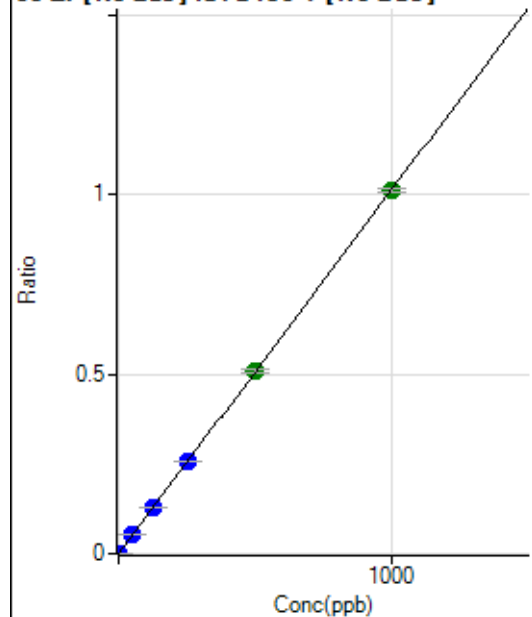
$$DL = 0.0004508$$

$$BEC = 0.0009014$$

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	844.50	0.0001	P	18.6
2	☐	1.000	0.976	14296.31	0.0011	P	3.8
3	☐	50.000	50.890	689833.31	0.0516	P	1.1
4	☐	125.000	126.994	1658773.58	0.1287	P	0.7
5	☐	250.000	253.394	3171617.19	0.2567	P	1.1
6	☐	500.000	502.809	6008732.77	0.5094	A	1.6
7	☐	1000.000	997.453	11993467.80	1.0105	A	0.9
8	☐			3117.09	0.0003	P	6.9

$$y = 0.0010 * x + 6.3447E-005$$

$$R = 1.0000$$

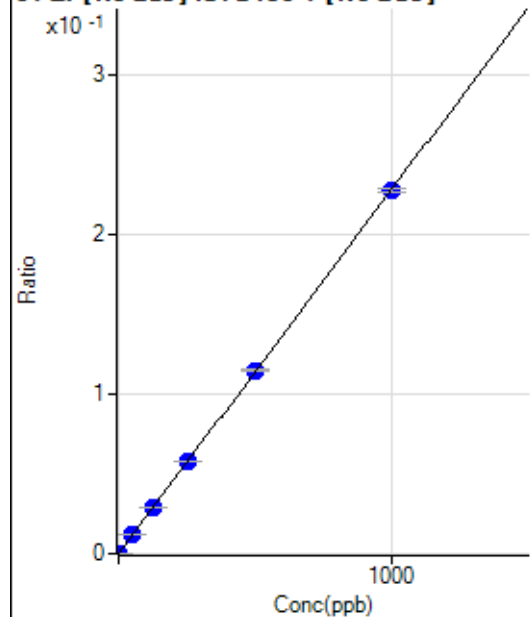
$$DL = 0.03488$$

$$BEC = 0.06263$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	152.78	0.0000	P	27.1
2	☐	1.000	0.977	3180.99	0.0002	P	5.3
3	☐	50.000	50.879	154992.80	0.0116	P	0.5
4	☐	125.000	126.742	372060.25	0.0289	P	0.7
5	☐	250.000	253.783	713936.23	0.0578	P	1.1
6	☐	500.000	504.172	1354211.09	0.1148	P	1.0
7	☐	1000.000	996.706	2693635.26	0.2269	P	1.0
8	☐			675.04	0.0001	P	18.6

$$y = 2.2768E-004 * x + 1.1486E-005$$

$$R = 1.0000$$

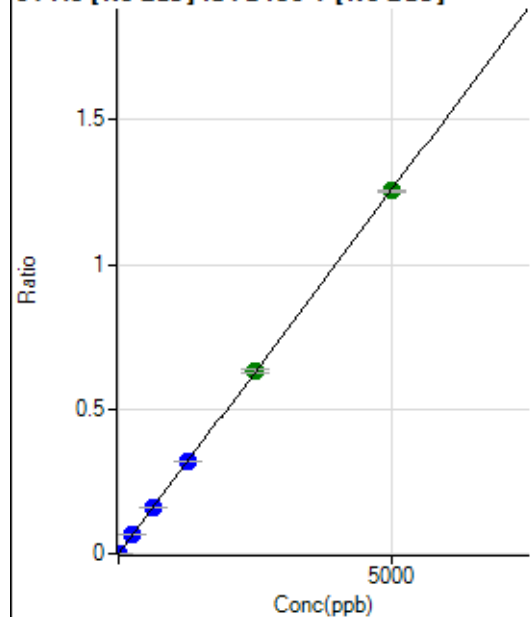
$$DL = 0.04104$$

$$BEC = 0.05045$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	291.68	0.0000	P	20.8
2	☐	5.000	5.111	17772.62	0.0013	P	0.9
3	☐	250.000	255.126	857691.54	0.0642	P	1.1
4	☐	625.000	636.046	2061579.62	0.1600	P	0.9
5	☐	1250.000	1265.437	3930897.53	0.3182	P	1.3
6	☐	2500.000	2511.316	7448976.12	0.6315	A	1.6
7	☐	5000.000	4988.846	14889823.25	1.2545	A	0.6
8	☐			5448.42	0.0005	P	2.9

$$y = 2.5145\text{E-}004 * x + 2.1928\text{E-}005$$

$$R = 1.0000$$

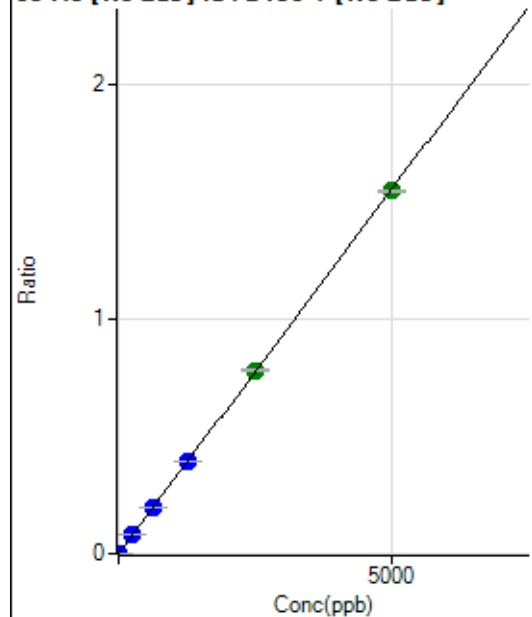
$$DL = 0.05442$$

$$BEC = 0.0872$$

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	38.89	0.0000	P	12.2
2	☐	5.000	5.040	21335.80	0.0016	P	1.6
3	☐	250.000	256.474	1065168.12	0.0797	P	1.3
4	☐	625.000	634.068	2539425.73	0.1970	P	0.8
5	☐	1250.000	1270.163	4875572.59	0.3947	P	1.1
6	☐	2500.000	2521.617	9243165.14	0.7836	A	1.1
7	☐	5000.000	4982.693	18377276.97	1.5483	A	0.6
8	☐			7524.37	0.0006	P	5.3

$$y = 3.1073\text{E-}004 * x + 2.9222\text{E-}006$$

$$R = 1.0000$$

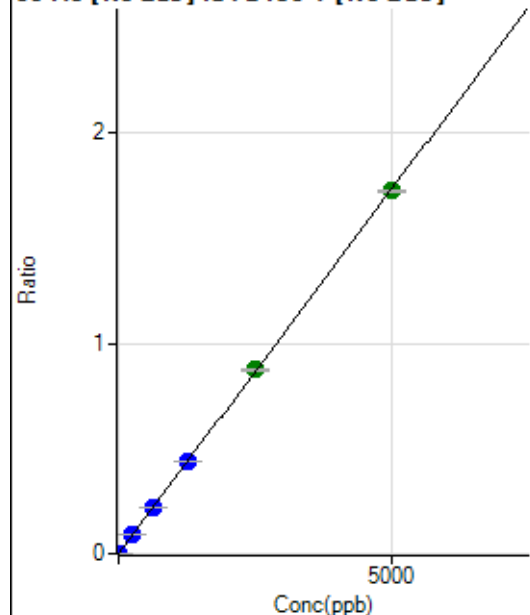
$$DL = 0.003442$$

$$BEC = 0.009404$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0000	P	13.6
2	☐	5.000	5.060	23917.72	0.0018	P	2.9
3	☐	250.000	256.033	1185059.32	0.0887	P	0.9
4	☐	625.000	632.270	2821933.14	0.2190	P	0.4
5	☐	1250.000	1271.684	5439892.96	0.4404	P	1.0
6	☐	2500.000	2528.187	10326856.22	0.8755	A	1.4
7	☐	5000.000	4979.275	20465619.73	1.7242	A	0.6
8	☐			9105.90	0.0008	P	5.7

$$y = 3.4628\text{E-}004 * x + 7.0991\text{E-}006$$

$$R = 1.0000$$

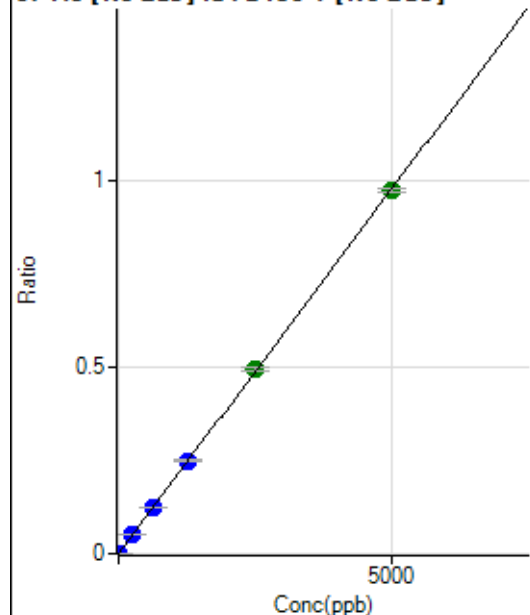
$$DL = 0.008381$$

$$BEC = 0.0205$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	65.2
2	☐	5.000	5.022	13334.31	0.0010	P	2.2
3	☐	250.000	254.532	663388.93	0.0496	P	0.6
4	☐	625.000	634.308	1594102.14	0.1237	P	0.8
5	☐	1250.000	1274.238	3069264.20	0.2485	P	1.6
6	☐	2500.000	2529.399	5817894.96	0.4932	A	1.6
7	☐	5000.000	4977.851	11520836.37	0.9707	A	1.2
8	☐			4614.74	0.0004	P	9.9

$$y = 1.9500\text{E-}004 * x + 1.4595\text{E-}006$$

$$R = 1.0000$$

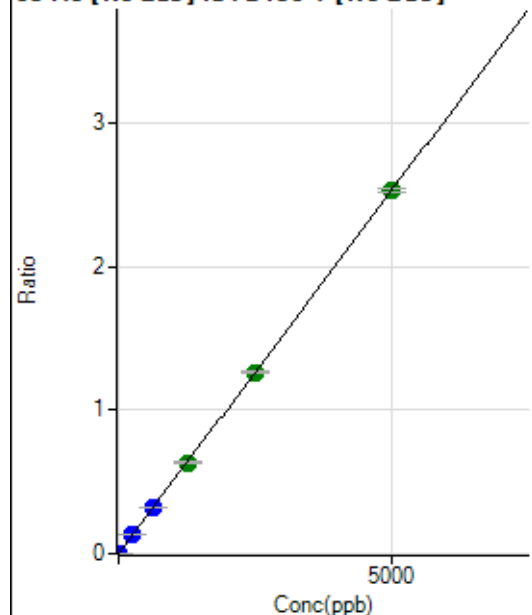
$$DL = 0.01464$$

$$BEC = 0.007485$$

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	58.34	0.0000	P	28.4
2	☐	5.000	5.009	34561.85	0.0025	P	2.0
3	☐	250.000	255.459	1730009.44	0.1294	P	0.4
4	☐	625.000	635.008	4146521.88	0.3217	P	1.1
5	☐	1250.000	1255.193	7856132.30	0.6360	A	1.2
6	☐	2500.000	2499.375	14938059.54	1.2663	A	0.8
7	☐	5000.000	4997.490	30052999.28	2.5321	A	1.2
8	☐			11641.10	0.0010	P	1.9

$$y = 5.0666\text{E-}004 * x + 4.3826\text{E-}006$$

$$R = 1.0000$$

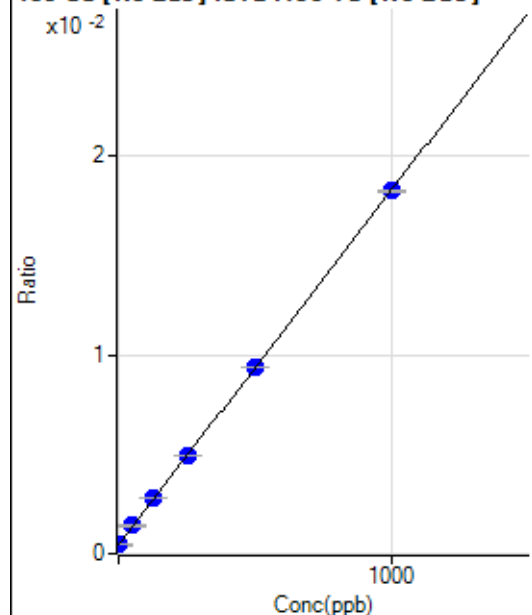
$$DL = 0.007357$$

$$BEC = 0.00865$$

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	5759.62	0.0004	P	2.3
2	☐	1.000	1.389	6254.33	0.0005	P	1.4
3	☐	50.000	54.678	19054.92	0.0014	P	1.5
4	☐	125.000	132.840	37079.53	0.0028	P	2.0
5	☐	250.000	252.864	64616.56	0.0050	P	0.6
6	☐	500.000	500.979	118449.15	0.0094	P	0.8
7	☐	1000.000	997.580	230730.27	0.0182	P	0.4
8	☐			5292.79	0.0004	P	3.4

$$y = 1.7852\text{E-}005 * x + 4.3695\text{E-}004$$

$$R = 1.0000$$

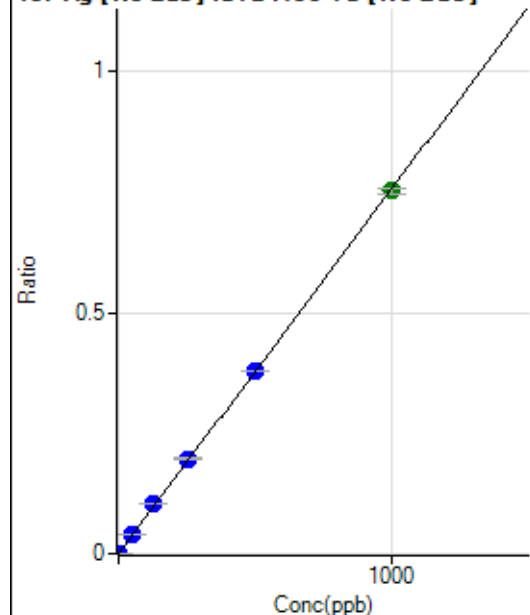
$$DL = 1.685$$

$$BEC = 24.48$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	88.89	0.0000	P	5.3
2	☐	1.000	1.085	11196.38	0.0008	P	2.7
3	☐	50.000	54.926	559614.73	0.0415	P	0.8
4	☐	125.000	135.794	1354526.85	0.1026	P	0.6
5	☐	250.000	260.123	2564393.46	0.1965	P	1.6
6	☐	500.000	500.972	4778989.43	0.3785	P	0.1
7	☐	1000.000	995.388	9508261.06	0.7519	A	1.8
8	☐			2864.26	0.0002	P	8.9

$$y = 7.5543\text{E-}004 * x + 6.7438\text{E-}006$$

$$R = 0.9999$$

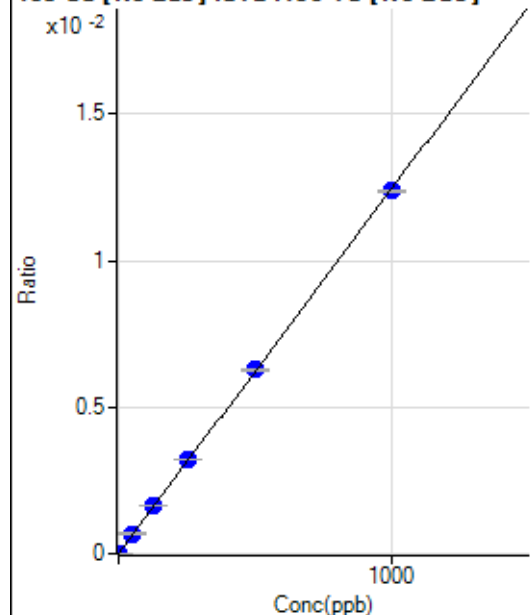
$$DL = 0.001428$$

$$BEC = 0.008927$$

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	40.28	0.0000	P	21.9
2	☐	1.000	1.082	223.62	0.0000	P	10.2
3	☐	50.000	54.665	9215.58	0.0007	P	3.3
4	☐	125.000	132.631	21836.30	0.0017	P	1.1
5	☐	250.000	257.794	41911.55	0.0032	P	0.6
6	☐	500.000	504.151	79270.54	0.0063	P	1.0
7	☐	1000.000	994.789	156606.80	0.0124	P	0.6
8	☐			131.95	0.0000	P	8.4

$$y = 1.2446\text{E-}005 * x + 3.0571\text{E-}006$$

$$R = 0.9999$$

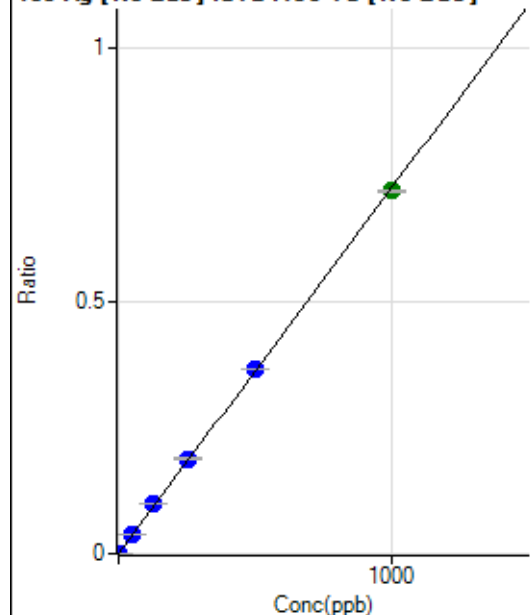
$$DL = 0.1615$$

$$BEC = 0.2456$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16.67	0.0000	P	86.6
2	☐	1.000	1.074	10531.93	0.0008	P	5.8
3	☐	50.000	54.908	535686.29	0.0397	P	0.6
4	☐	125.000	135.583	1295089.02	0.0981	P	1.1
5	☐	250.000	260.011	2454834.69	0.1881	P	1.0
6	☐	500.000	506.545	4627579.97	0.3665	P	0.3
7	☐	1000.000	992.657	9081318.95	0.7181	A	0.9
8	☐			2630.88	0.0002	P	8.1

$$y = 7.2345\text{E-}004 * x + 1.2683\text{E-}006$$

$$R = 0.9999$$

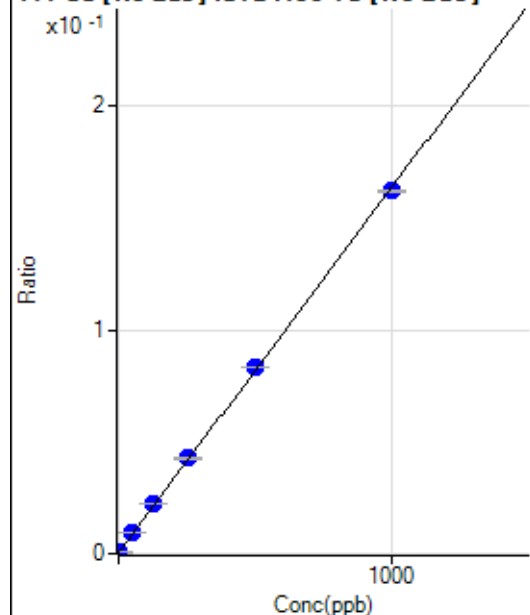
$$DL = 0.004555$$

$$BEC = 0.001753$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4014.66	0.0003	P	2.2
2	☐	1.000	1.145	6656.47	0.0005	P	0.9
3	☐	50.000	54.445	123945.24	0.0092	P	0.4
4	☐	125.000	133.355	291414.13	0.0221	P	0.8
5	☐	250.000	259.886	557525.79	0.0427	P	1.6
6	☐	500.000	509.388	1053761.43	0.0834	P	0.6
7	☐	1000.000	991.568	2050583.71	0.1622	P	0.3
8	☐			4084.83	0.0003	P	3.9

$$y = 1.6322\text{E-}004 * x + 3.0457\text{E-}004$$

$$R = 0.9999$$

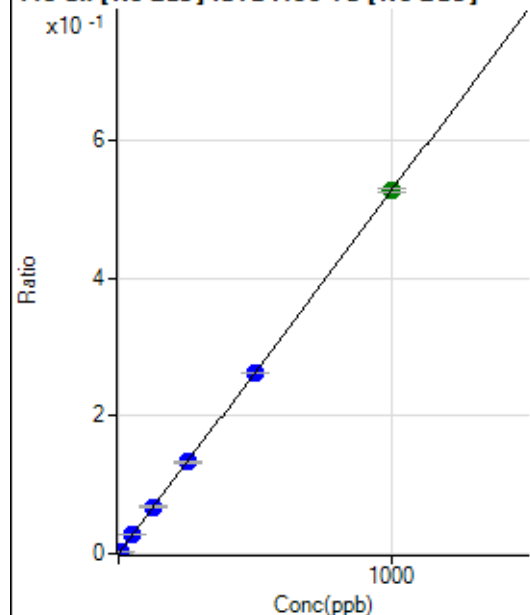
$$DL = 0.1205$$

$$BEC = 1.866$$

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	1002.84	0.0001	P	7.4
2	☐	5.000	5.179	37959.97	0.0028	P	1.5
3	☐	50.000	52.713	375193.78	0.0278	P	0.3
4	☐	125.000	129.634	901920.77	0.0683	P	1.7
5	☐	250.000	253.081	1739413.54	0.1333	P	1.5
6	☐	500.000	497.734	3309401.51	0.2621	P	0.8
7	☐	1000.000	999.647	6654997.33	0.5263	A	1.0
8	☐			3342.15	0.0003	P	0.7

$$y = 5.2638\text{E-}004 * x + 7.6099\text{E-}005$$

$$R = 1.0000$$

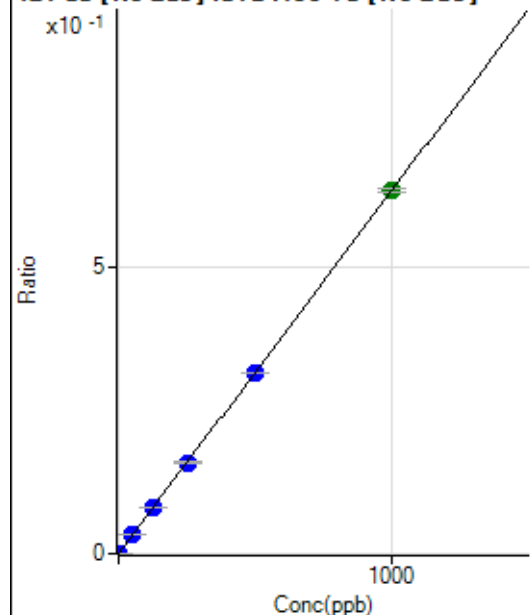
$$DL = 0.03198$$

$$BEC = 0.1446$$

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	105.56	0.0000	P	28.2
2	☐	2.000	2.017	17349.93	0.0013	P	1.3
3	☐	50.000	51.841	441238.55	0.0327	P	0.4
4	☐	125.000	128.241	1068532.53	0.0809	P	1.4
5	☐	250.000	251.024	2067259.68	0.1584	P	0.9
6	☐	500.000	498.423	3971665.28	0.3145	P	0.6
7	☐	1000.000	1000.035	7980221.79	0.6311	A	1.0
8	☐			5745.76	0.0005	P	5.0

$$y = 6.3102\text{E-}004 * x + 8.0167\text{E-}006$$

$$R = 1.0000$$

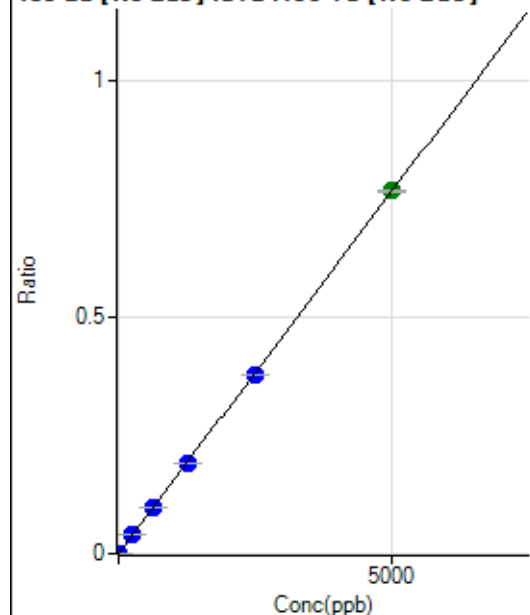
$$DL = 0.01076$$

$$BEC = 0.0127$$

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	30.55	0.0000	P	68.7
2	☐	10.000	10.552	21909.27	0.0016	P	3.3
3	☐	250.000	259.990	536813.80	0.0398	P	0.6
4	☐	625.000	637.380	1288489.40	0.0976	P	1.0
5	☐	1250.000	1251.547	2500613.07	0.1916	P	1.2
6	☐	2500.000	2469.530	4774587.91	0.3781	P	0.9
7	☐	5000.000	5012.800	9705771.05	0.7675	A	0.3
8	☐			3275.47	0.0003	P	6.2

$$y = 1.5311E-004 * x + 2.3155E-006$$

$$R = 1.0000$$

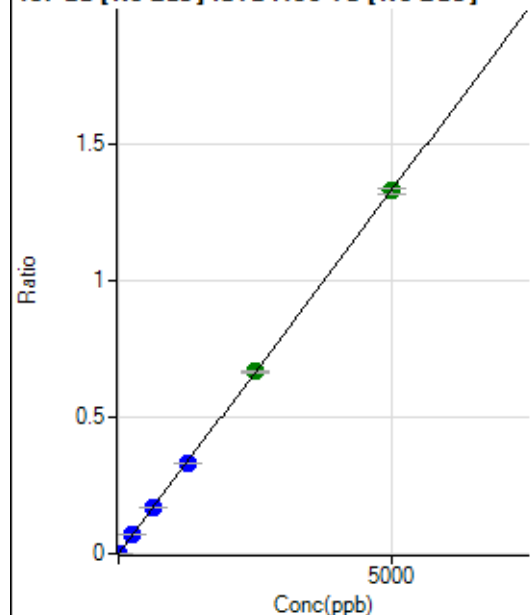
$$DL = 0.03117$$

$$BEC = 0.01512$$

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	55.56	0.0000	P	30.6
2	☐	10.000	10.498	37891.05	0.0028	P	0.4
3	☐	250.000	260.467	934542.08	0.0693	P	0.5
4	☐	625.000	641.444	2253308.19	0.1707	P	1.0
5	☐	1250.000	1248.652	4335388.29	0.3322	P	1.1
6	☐	2500.000	2504.981	8415814.42	0.6665	A	0.8
7	☐	5000.000	4995.267	16805884.92	1.3290	A	1.3
8	☐			5768.03	0.0005	P	3.8

$$y = 2.6605E-004 * x + 4.2101E-006$$

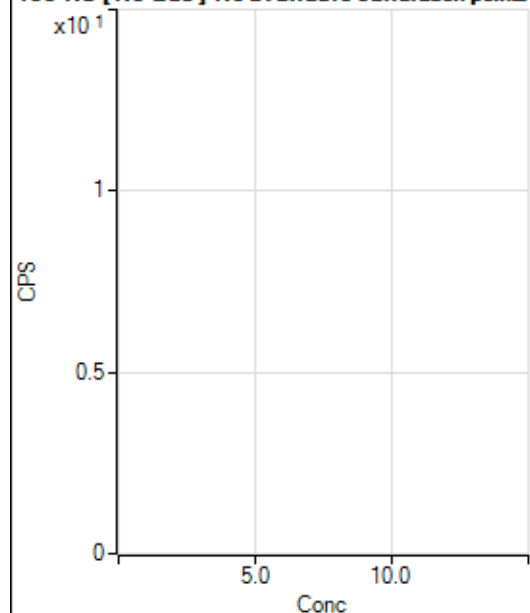
$$R = 1.0000$$

$$DL = 0.01454$$

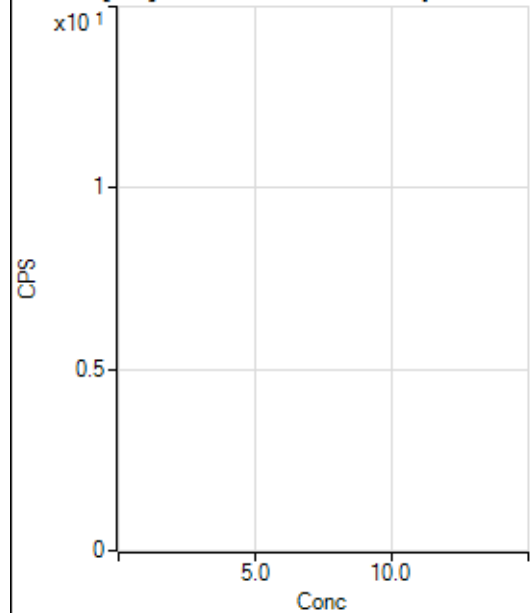
$$BEC = 0.01582$$

Weight: <None>

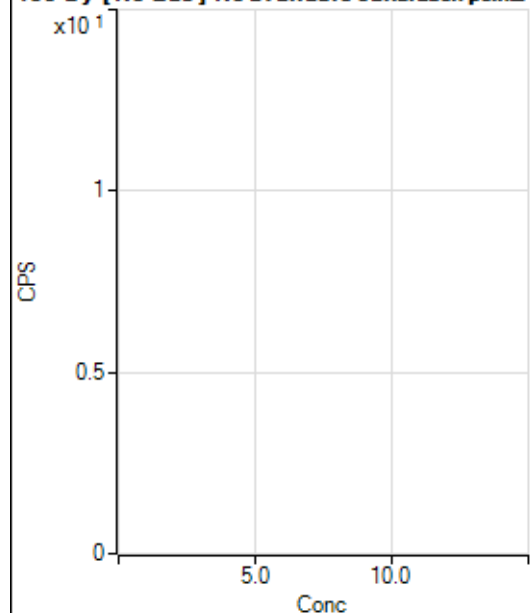
Min Conc: 0

150 Nd [No Gas] No available calibration points

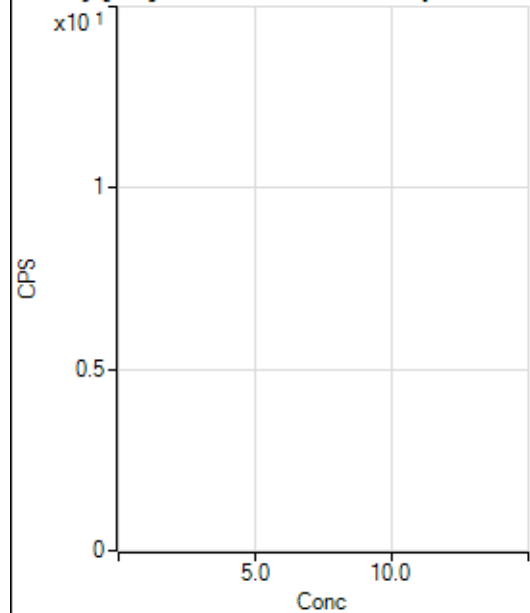
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			2.22		P	173.2
3	☐			57.78		P	33.3
4	☐			100.00		P	24.0
5	☐			177.78		P	15.6
6	☐			351.12		P	6.1
7	☐			755.60		P	5.9
8	☐			22.22		P	69.3

150 Nd [He] No available calibration points

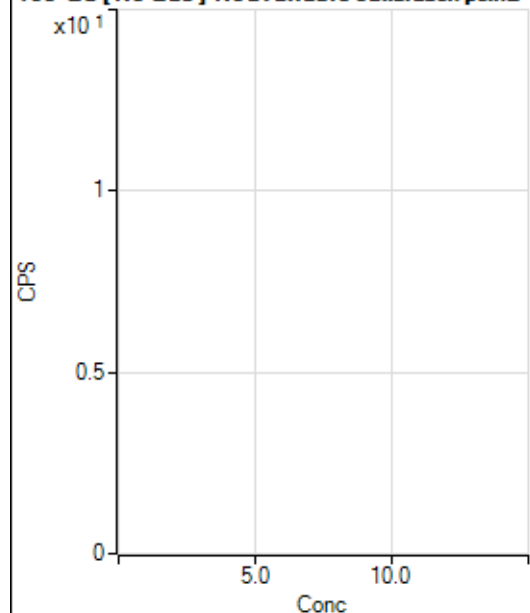
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐			1.11		P	173.2
3	☐			6.67		P	50.0
4	☐			24.45		P	15.8
5	☐			23.33		P	NaN
6	☐			56.67		P	23.5
7	☐			122.22		P	19.2
8	☐			11.11		P	62.5

156 Dy [No Gas] No available calibration points

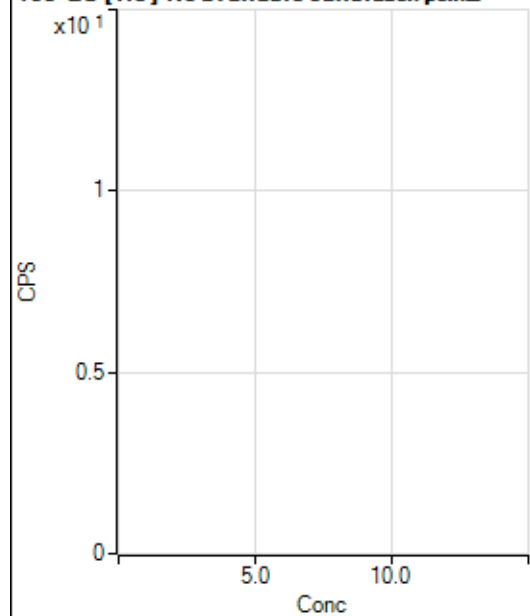
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.78		P	173.2
2	☐			16.67		P	50.0
3	☐			47.22		P	56.7
4	☐			80.56		P	52.1
5	☐			188.90		P	20.8
6	☐			313.90		P	12.0
7	☐			644.48		P	9.7
8	☐			1547.36		P	8.7

156 Dy [He] No available calibration points

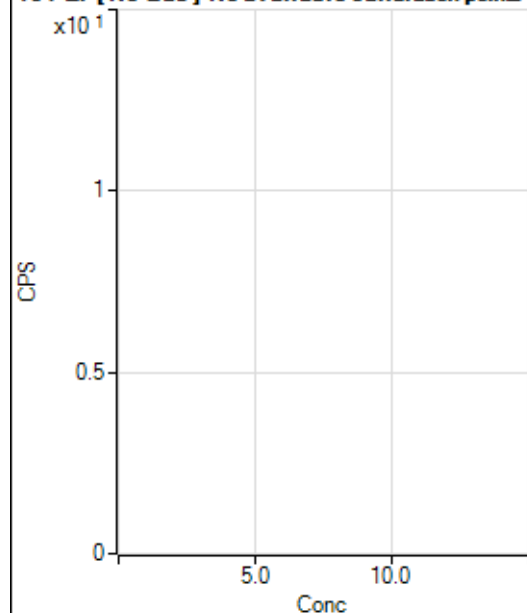
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	0.0
2	☐			4.44		P	114.6
3	☐			24.45		P	43.8
4	☐			52.22		P	13.3
5	☐			122.22		P	16.7
6	☐			222.23		P	12.0
7	☐			430.01		P	6.1
8	☐			1043.38		P	2.8

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

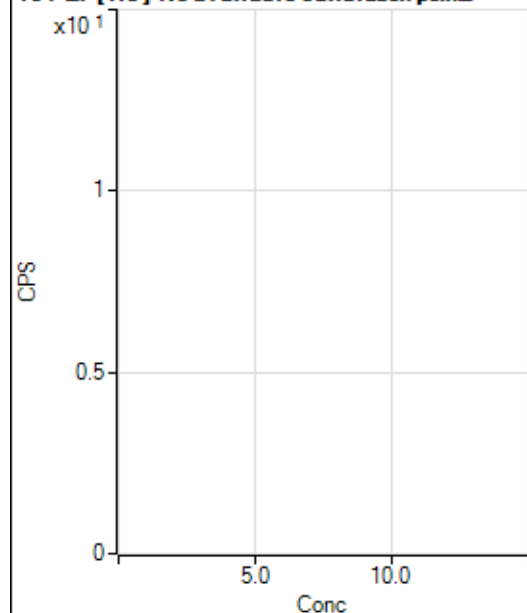
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.12		P	24.4
2	☐			80.56		P	39.2
3	☐			116.67		P	21.4
4	☐			166.67		P	5.0
5	☐			216.67		P	21.4
6	☐			308.35		P	7.2
7	☐			613.92		P	2.8
8	☐			1605.70		P	7.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			96.67		P	24.9
2	☐			118.89		P	14.4
3	☐			158.89		P	17.8
4	☐			164.45		P	28.7
5	☐			204.45		P	16.3
6	☐			274.45		P	5.5
7	☐			502.24		P	4.1
8	☐			1244.51		P	5.1

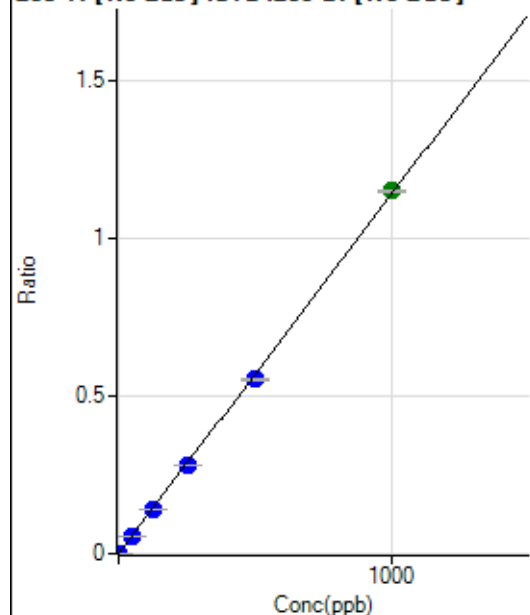
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.11		P	48.7
2	☐			136.12		P	25.5
3	☐			119.45		P	10.7
4	☐			111.12		P	33.8
5	☐			127.78		P	21.0
6	☐			125.00		P	6.7
7	☐			227.78		P	22.4
8	☐			291.68		P	22.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			52.22		P	9.7
2	☐			58.89		P	8.6
3	☐			62.22		P	24.7
4	☐			61.11		P	15.7
5	☐			57.78		P	35.3
6	☐			93.34		P	14.3
7	☐			112.22		P	7.5
8	☐			173.34		P	7.7

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	158.34	0.0000	P	15.3
2	☐	1.000	0.984	10651.67	0.0011	P	1.6
3	☐	50.000	49.352	520487.01	0.0562	P	1.0
4	☐	125.000	121.945	1278626.10	0.1388	P	0.6
5	☐	250.000	244.864	2515262.82	0.2787	P	0.2
6	☐	500.000	484.995	4859842.82	0.5521	P	0.6
7	☐	1000.000	1009.201	9864508.90	1.1488	A	0.4
8	☐			3831.21	0.0005	P	15.1

$$y = 0.0011 * x + 1.7439E-005$$

$$R = 0.9998$$

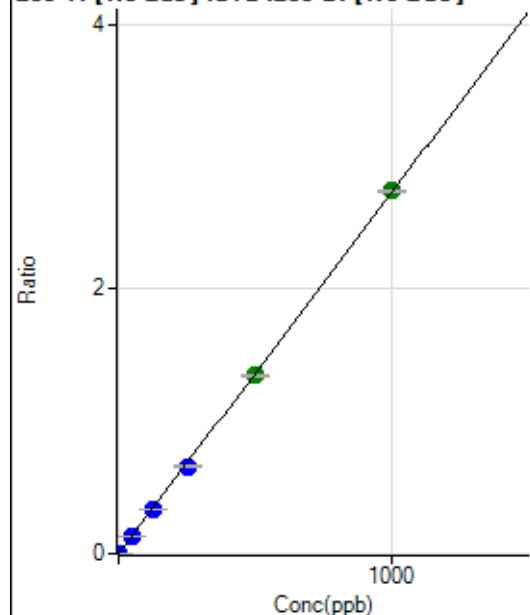
$$DL = 0.007053$$

$$BEC = 0.01532$$

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	313.90	0.0000	P	16.1
2	☐	1.000	0.964	24960.02	0.0027	P	2.4
3	☐	50.000	49.312	1246843.40	0.1346	P	1.3
4	☐	125.000	121.737	3060390.93	0.3323	P	0.9
5	☐	250.000	242.337	5968410.42	0.6614	P	0.6
6	☐	500.000	494.505	11880823.36	1.3497	A	1.1
7	☐	1000.000	1005.105	23556063.02	2.7432	A	0.7
8	☐			9295.18	0.0012	P	10.5

$$y = 0.0027 * x + 3.4463E-005$$

$$R = 0.9999$$

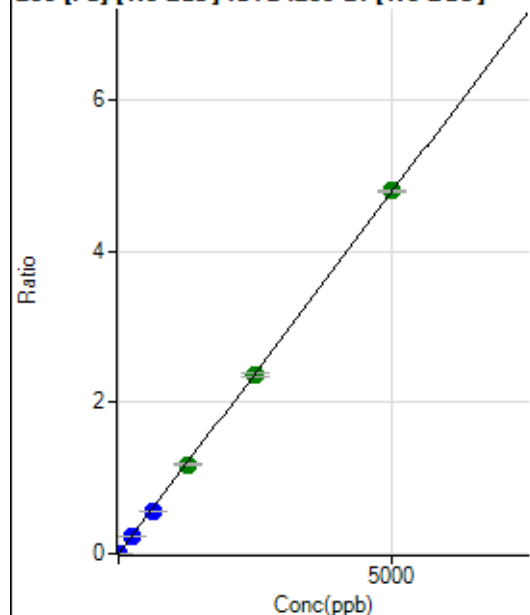
$$DL = 0.006105$$

$$BEC = 0.01263$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	866.71	0.0001	P	11.5
2	☐	1.000	0.968	9555.43	0.0010	P	3.0
3	☐	250.000	240.016	2126033.31	0.2295	P	1.1
4	☐	625.000	591.936	5212501.27	0.5660	P	0.1
5	☐	1250.000	1237.336	10674219.80	1.1829	A	0.7
6	☐	2500.000	2472.792	20807955.33	2.3640	A	1.3
7	☐	5000.000	5021.402	41220172.68	4.8003	A	0.4
8	☐			24172.17	0.0030	P	2.7

$$y = 9.5596E-004 * x + 9.5322E-005$$

$$R = 1.0000$$

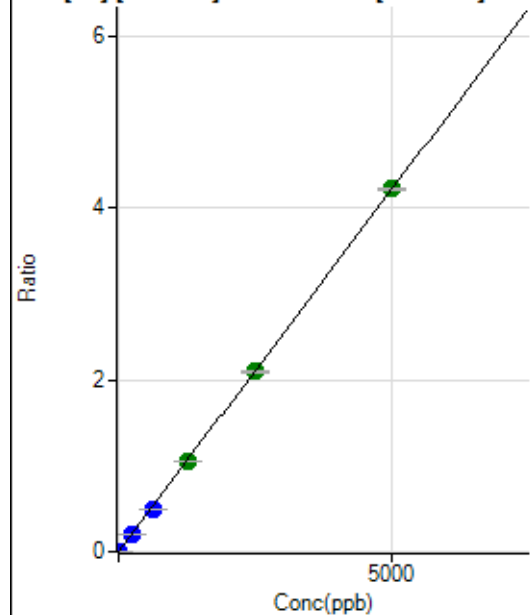
$$DL = 0.03428$$

$$BEC = 0.09971$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	714.85	0.0001	P	1.3
2	☐	1.000	0.983	8491.76	0.0009	P	1.3
3	☐	250.000	240.873	1881393.36	0.2031	P	1.1
4	☐	625.000	594.487	4616243.28	0.5012	P	0.5
5	☐	1250.000	1241.747	9446121.05	1.0468	A	0.2
6	☐	2500.000	2488.941	18469468.70	2.0982	A	0.6
7	☐	5000.000	5011.863	36279200.81	4.2249	A	0.2
8	☐			21317.24	0.0027	P	1.2

$$y = 8.4297E-004 * x + 7.8606E-005$$

$$R = 1.0000$$

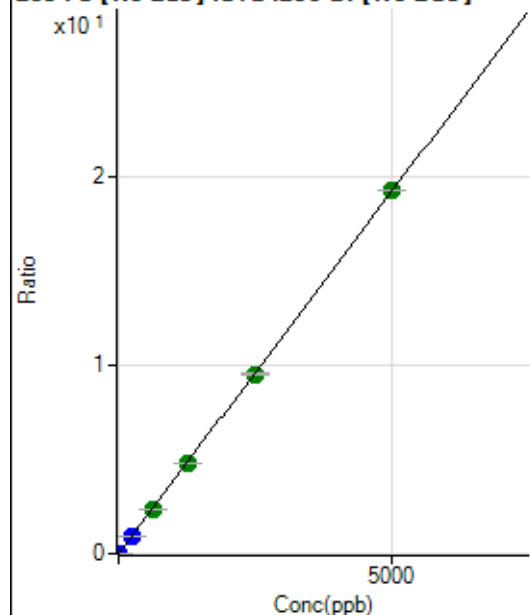
$$DL = 0.003556$$

$$BEC = 0.09325$$

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	3365.05	0.0004	P	4.4
2	☐	1.000	0.979	38720.85	0.0041	P	1.1
3	☐	250.000	240.125	8559327.93	0.9241	P	1.0
4	☐	625.000	607.037	21511158.35	2.3356	A	0.4
5	☐	1250.000	1239.975	43046511.26	4.7705	A	0.2
6	☐	2500.000	2480.321	83994261.13	9.5421	A	0.8
7	☐	5000.000	5015.085	165668123.6	19.2932	A	0.0
8	☐			97113.31	0.0121	P	2.4

$$y = 0.0038 * x + 3.7011E-004$$

$$R = 1.0000$$

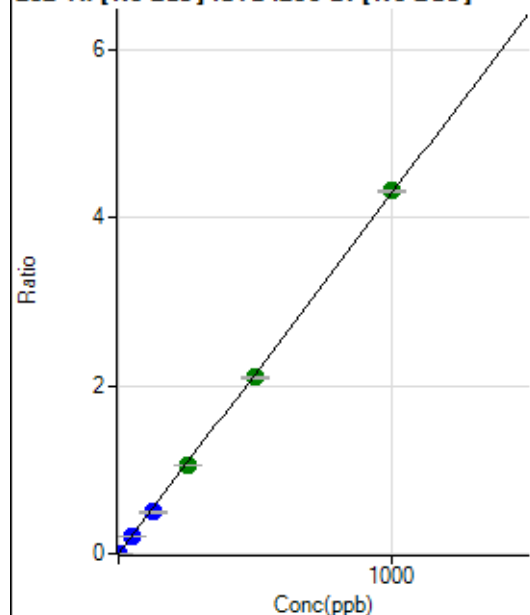
$$DL = 0.01265$$

$$BEC = 0.09621$$

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	157.41	0.0000	P	3.5
2	☐	1.000	0.000	168.52	0.0000	P	20.2
3	☐	50.000	46.013	1826226.73	0.1972	P	0.7
4	☐	125.000	115.293	4550015.61	0.4940	P	1.1
5	☐	250.000	243.538	9416154.03	1.0435	A	0.3
6	☐	500.000	490.058	18483276.80	2.0998	A	1.3
7	☐	1000.000	1008.000	37086699.44	4.3190	A	0.4
8	☐			4639.79	0.0006	P	6.2

$$y = 0.0043 * x + 1.7307E-005$$

$$R = 0.9999$$

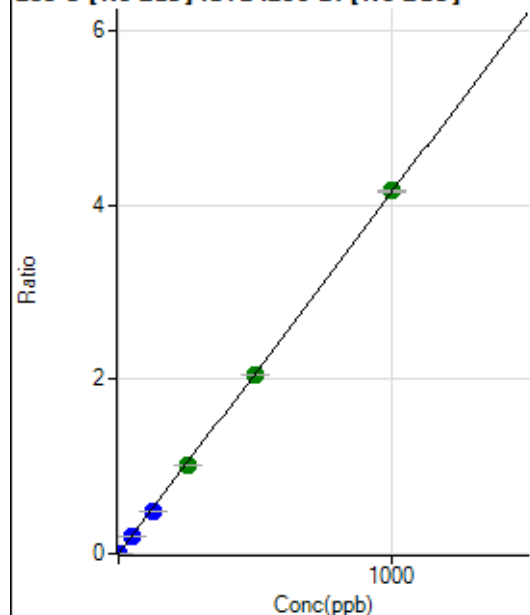
$$DL = 0.0004237$$

$$BEC = 0.004039$$

Weight: <None>

Min Conc: 0

238 U [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	88.8
2	☐	1.000	0.925	35914.03	0.0038	P	3.6
3	☐	50.000	47.195	1811583.51	0.1956	P	0.2
4	☐	125.000	118.449	4521035.60	0.4909	P	1.0
5	☐	250.000	244.051	9126107.06	1.0114	A	0.6
6	☐	500.000	494.857	18052799.71	2.0508	A	0.2
7	☐	1000.000	1005.018	35764084.83	4.1649	A	0.4
8	☐			4876.04	0.0006	P	1.2

$$y = 0.0041 * x + 2.1237E-006$$

$$R = 1.0000$$

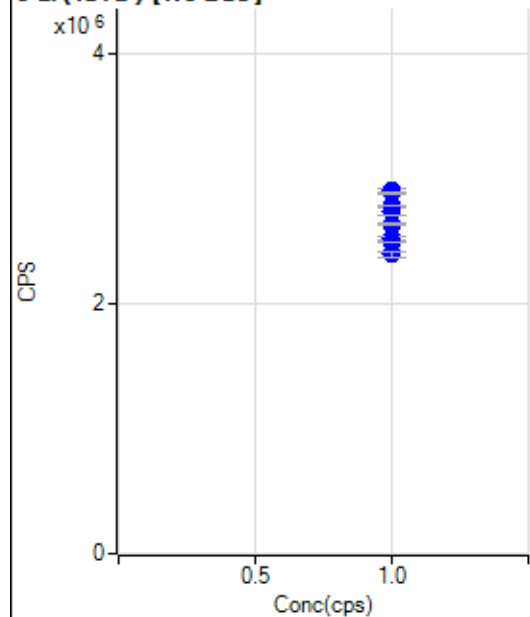
$$DL = 0.001365$$

$$BEC = 0.0005125$$

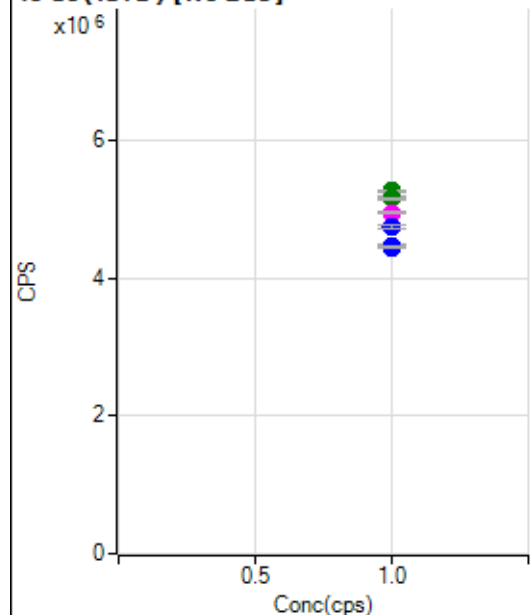
Weight: <None>

Min Conc: 0

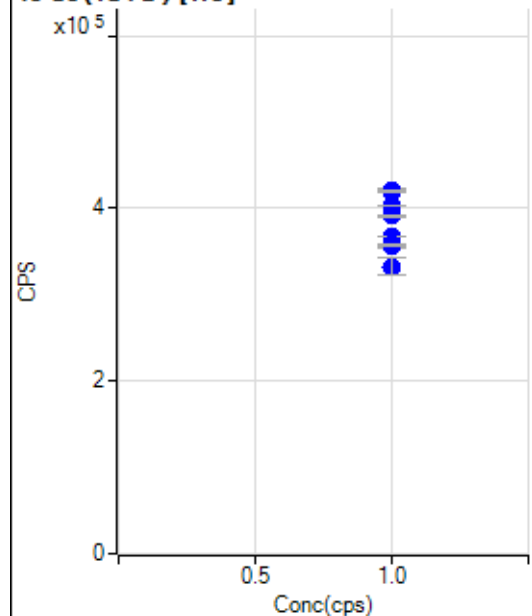
6 Li (ISTD) [No Gas]



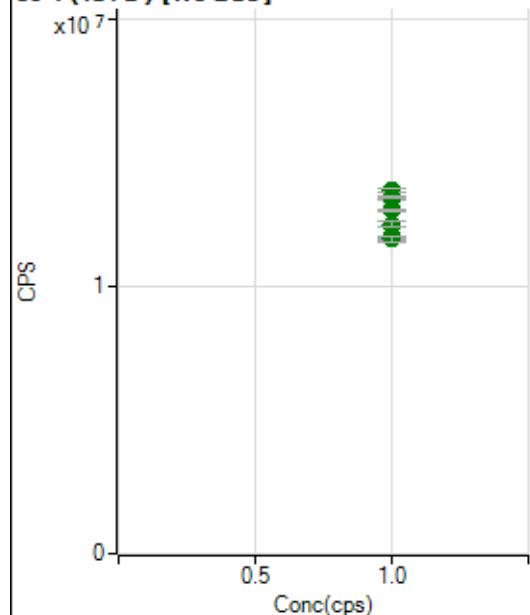
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2732507.08		P	2.2
2	☐	1.000		2900979.19		P	1.7
3	☐	1.000		2883606.38		P	0.9
4	☐	1.000		2779202.70		P	0.2
5	☐	1.000		2635499.98		P	0.7
6	☐	1.000		2518791.16		P	1.1
7	☐	1.000		2489689.27		P	0.5
8	☐	1.000		2393080.36		P	1.9

45 Sc (ISTD) [No Gas]

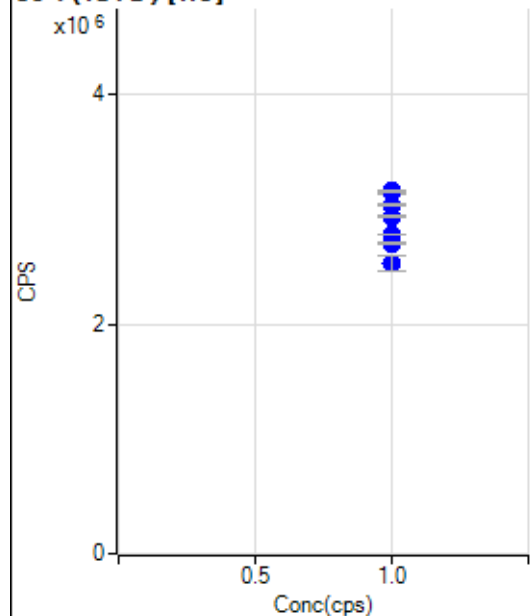
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5156728.54		A	0.9
2	☐	1.000		5265854.64		A	0.4
3	☐	1.000		5156965.38		A	0.6
4	☐	1.000		4945285.07		M	0.6
5	☐	1.000		4757783.82		P	1.2
6	☐	1.000		4470698.37		P	0.5
7	☐	1.000		4426320.04		P	0.1
8	☐	1.000		4449971.67		P	1.1

45 Sc (ISTD) [He]

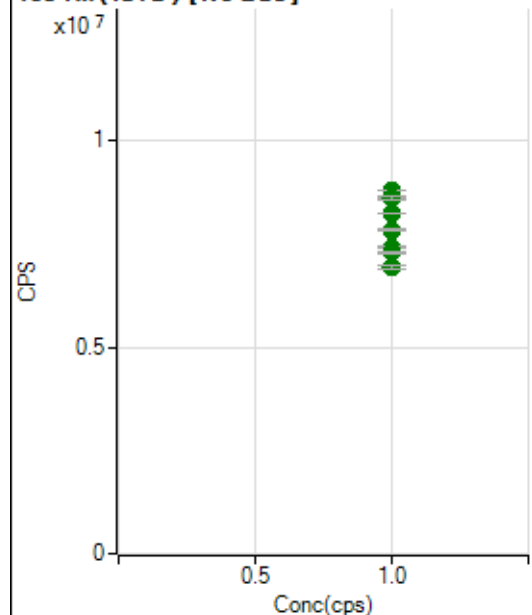
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		420259.67		P	0.9
2	☐	1.000		419648.62		P	0.9
3	☐	1.000		403544.91		P	0.2
4	☐	1.000		391104.85		P	0.5
5	☐	1.000		367519.94		P	0.3
6	☐	1.000		332783.59		P	5.8
7	☐	1.000		356546.68		P	0.8
8	☐	1.000		357852.63		P	1.0

89 Y (ISTD) [No Gas]

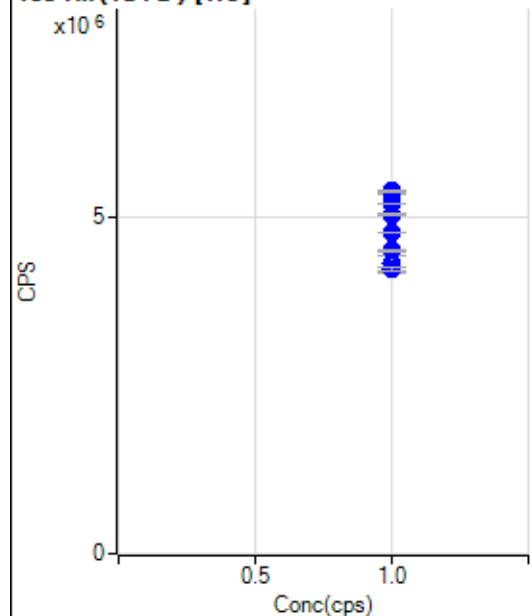
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13306165.08		A	0.3
2	☐	1.000		13597112.30		A	1.2
3	☐	1.000		13366063.97		A	1.0
4	☐	1.000		12888344.67		A	0.6
5	☐	1.000		12354340.37		A	1.5
6	☐	1.000		11796599.96		A	0.8
7	☐	1.000		11869594.55		A	0.6
8	☐	1.000		11784596.22		A	1.8

89 Y (ISTD) [He]

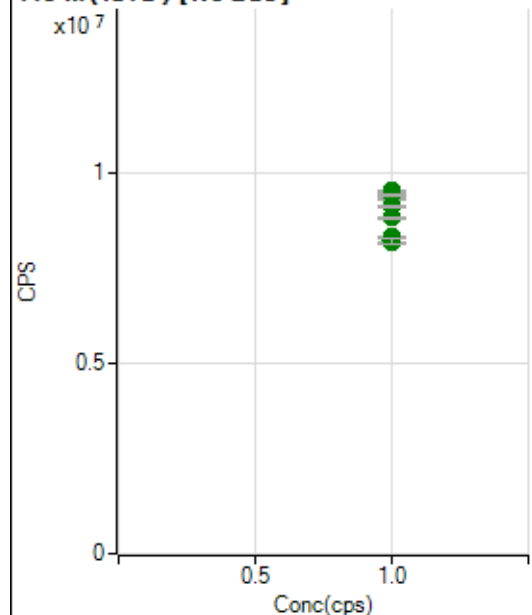
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3142244.29		P	1.0
2	☐	1.000		3158703.74		P	0.3
3	☐	1.000		3035820.99		P	0.5
4	☐	1.000		2935041.24		P	0.5
5	☐	1.000		2778912.46		P	0.2
6	☐	1.000		2529345.49		P	5.6
7	☐	1.000		2699907.56		P	0.7
8	☐	1.000		2703678.45		P	1.1

103 Rh (ISTD) [No Gas]

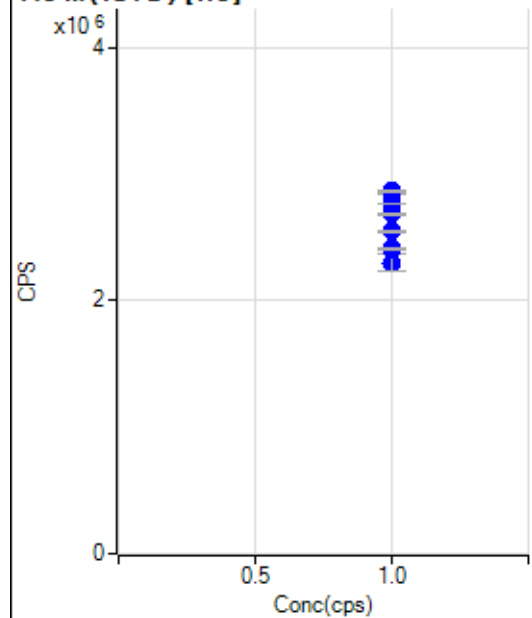
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8610071.05		A	0.4
2	☐	1.000		8776640.01		A	0.1
3	☐	1.000		8622125.84		A	1.2
4	☐	1.000		8231374.12		A	0.3
5	☐	1.000		7833874.12		A	0.2
6	☐	1.000		7417332.46		A	0.6
7	☐	1.000		7295351.35		A	0.8
8	☐	1.000		6922014.06		A	1.6

103 Rh (ISTD) [He]

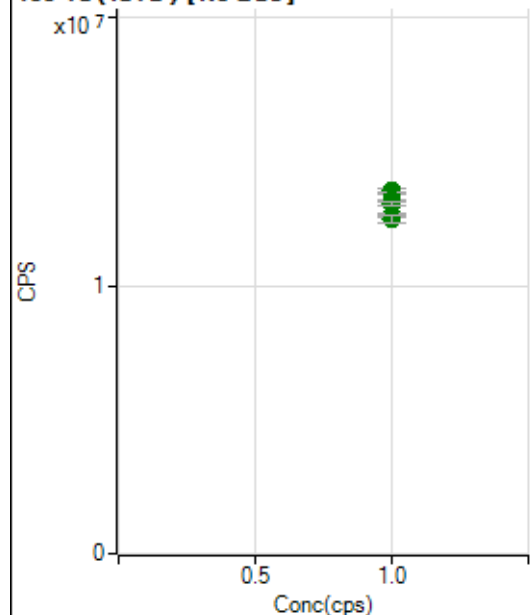
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5341677.97		P	0.7
2	☐	1.000		5378671.55		P	0.4
3	☐	1.000		5192675.48		P	0.1
4	☐	1.000		5031280.20		P	0.7
5	☐	1.000		4765001.60		P	0.2
6	☐	1.000		4297306.67		P	6.0
7	☐	1.000		4491334.41		P	0.2
8	☐	1.000		4220436.74		P	0.8

115 In (ISTD) [No Gas]

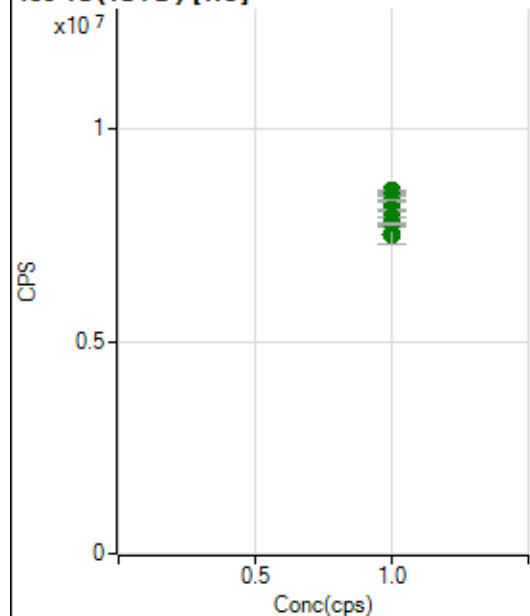
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9284861.56		A	0.5
2	☐	1.000		9505578.62		A	0.9
3	☐	1.000		9400214.93		A	0.6
4	☐	1.000		9109653.31		A	0.4
5	☐	1.000		8801572.89		A	0.4
6	☐	1.000		8318707.81		A	0.3
7	☐	1.000		8163657.10		A	0.3
8	☐	1.000		8187787.16		A	1.4

115 In (ISTD) [He]

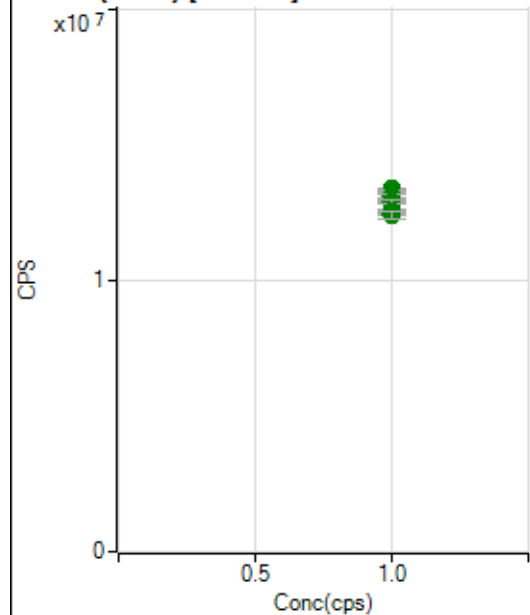
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2846403.82		P	0.6
2	☐	1.000		2865390.60		P	0.2
3	☐	1.000		2767843.04		P	0.3
4	☐	1.000		2682364.56		P	0.4
5	☐	1.000		2545252.78		P	0.2
6	☐	1.000		2298628.73		P	5.8
7	☐	1.000		2412651.28		P	0.5
8	☐	1.000		2407008.48		P	1.0

159 Tb (ISTD) [No Gas]

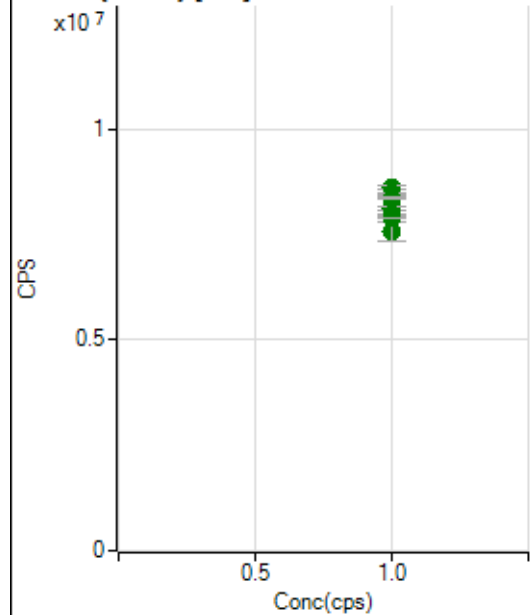
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13181215.77		A	0.6
2	☐	1.000		13546409.52		A	1.5
3	☐	1.000		13485059.11		A	0.1
4	☐	1.000		13203710.64		A	0.6
5	☐	1.000		13051078.83		A	1.2
6	☐	1.000		12627663.56		A	0.3
7	☐	1.000		12646278.14		A	1.0
8	☐	1.000		12504931.06		A	2.0

159 Tb (ISTD) [He]

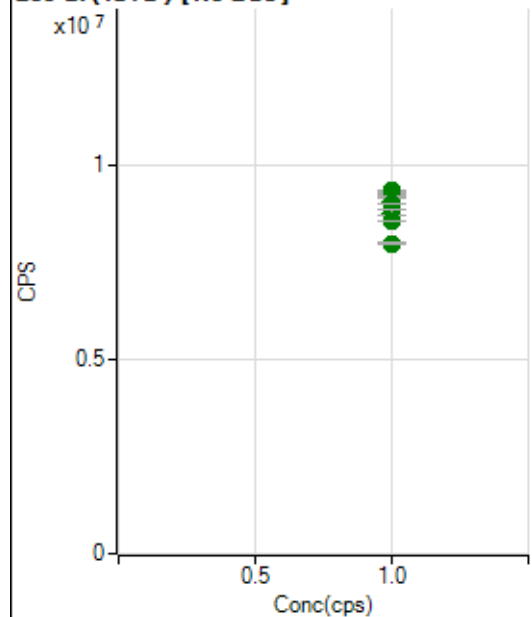
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8454630.50		A	0.8
2	☐	1.000		8545358.14		A	0.7
3	☐	1.000		8431858.48		A	0.3
4	☐	1.000		8309824.53		A	0.7
5	☐	1.000		8090901.82		A	0.7
6	☐	1.000		7498483.85		A	5.7
7	☐	1.000		7924459.19		A	0.4
8	☐	1.000		7777880.09		A	0.3

165 Ho (ISTD) [No Gas]

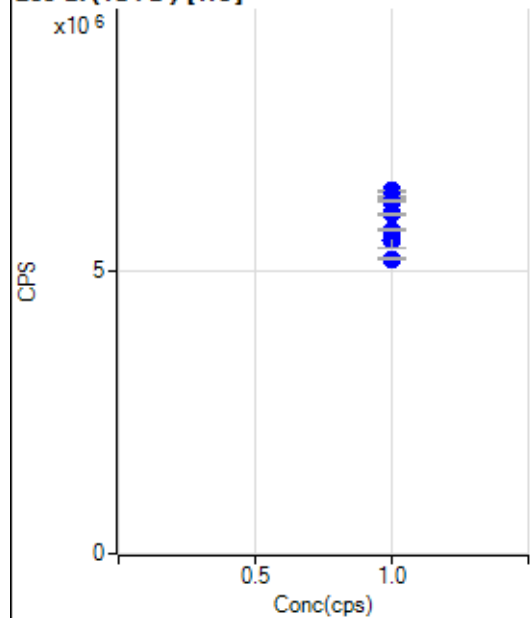
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12952653.97		A	0.7
2	☐	1.000		13364560.77		A	0.6
3	☐	1.000		13276851.75		A	0.2
4	☐	1.000		13119315.36		A	1.3
5	☐	1.000		12897434.81		A	0.8
6	☐	1.000		12553106.06		A	0.8
7	☐	1.000		12480234.54		A	0.9
8	☐	1.000		12404389.40		A	2.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8383989.25		A	0.7
2	☐	1.000		8606082.02		A	1.2
3	☐	1.000		8476317.58		A	0.5
4	☐	1.000		8363418.97		A	0.4
5	☐	1.000		8124741.62		A	1.0
6	☐	1.000		7581132.94		A	5.7
7	☐	1.000		7972137.52		A	0.8
8	☐	1.000		7896808.15		A	0.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9094156.05		A	1.6
2	☐	1.000		9360605.07		A	0.6
3	☐	1.000		9262437.50		A	0.5
4	☐	1.000		9209991.18		A	0.4
5	☐	1.000		9023457.64		A	0.2
6	☐	1.000		8803047.92		A	1.3
7	☐	1.000		8586866.47		A	0.4
8	☐	1.000		8009755.99		A	1.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6268079.97		P	1.2
2	☐	1.000		6419124.76		P	0.5
3	☐	1.000		6321936.57		P	0.5
4	☐	1.000		6241877.48		P	0.6
5	☐	1.000		6011733.59		P	0.6
6	☐	1.000		5554231.52		P	5.5
7	☐	1.000		5731849.36		P	1.1
8	☐	1.000		5221212.60		P	0.6

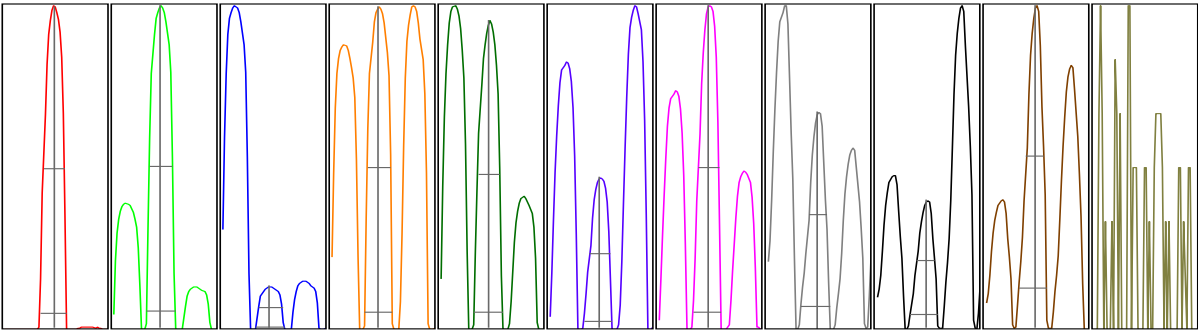
US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\P7073021EPA.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count	RSD%	RSD%	RSD%
	(Mean)	(Actual)	(Required)	(Flag)
9	7943	1.87	5.00	
24	96937	1.97	5.00	
25	12865	1.85	5.00	
26	14532	1.91	5.00	
59	19211	2.02	5.00	
113	12458	2.41	5.00	
115	36267	2.69	5.00	
206	20196	2.22	5.00	
207	17607	2.07	5.00	
208	42177	2.00	5.00	
220	0	63.19		

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
9	8014	8029	7979	8013	7680
24	98089	98238	97118	97626	93616
25	12996	13034	12844	12991	12460
26	14631	14767	14565	14641	14053
59	19441	19425	19270	19393	18526
113	12587	12638	12622	12516	11929
115	36526	36296	36656	37222	34635
206	20351	20397	20538	20285	19411
207	17775	17848	17755	17692	16963
208	42534	42855	42466	42320	40709
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak	Axis	Axis	Axis	Width-X%	Width-X%	Width-
	Height	(Actual)	(Required)	(Flag)	(Actual)	(Required)	X% (Flag)
9	13475	9.00	8.9 - 9.1		0.779	0.900	
24	150955	23.90	23.9 - 24.1		0.827	0.900	
25	19873	24.90	24.9 - 25.1		0.824	0.900	
26	22538	25.90	25.9 - 26.1		0.790	0.900	
59	31558	58.95	58.9 - 59.1		0.825	0.900	
113	21436	113.00	112.9 - 113.1		0.819	0.900	
115	62346	115.00	114.9 - 115.1		0.814	0.900	
206	37358	206.00	205.9 - 206.1		0.831	0.900	
207	31284	207.00	206.9 - 207.1		0.792	0.900	
208	78397	208.00	207.9 - 208.1		0.800	0.900	
220			-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 256.8 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.72	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		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.0	V	Deflect	13.4	V
Extract 2	-140.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-75	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	170	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	6918	0.43	
89	31341	1.12	
205	21032	0.43	

Mass	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
	Count	Count	Count	Count	Count
59	6895	6878	6935	6946	6935
89	31420	30822	31206	31503	31753
205	20980	21024	21190	20990	20974

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.72	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		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.6	V	Deflect	1.8	V
Extract 2	-135.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	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	3.9	mL/min	OctP RF	200	V			