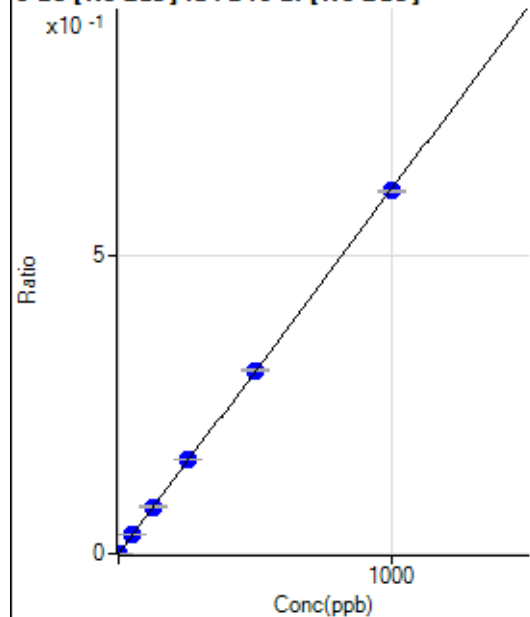


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7072921MS.b\
Analysis File: P7072921MS.batch.bin
DA Date-Time: 2021-07-29 14:40:54
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-07-29 10:16:46
2	005CALS.d	S02	2021-07-29 10:22:52
3	006CALS.d	S03	2021-07-29 10:25:56
4	007CALS.d	S04	2021-07-29 10:29:00
5	008CALS.d	S05	2021-07-29 10:32:01
6	009CALS.d	S06	2021-07-29 10:34:58
7	010CALS.d	S07	2021-07-29 10:37:51
8	011CALS.d	S08	2021-07-29 10:40:43

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	57.41	0.0000	P	24.0
2	☐	1.000	0.995	1605.67	0.0006	P	3.2
3	☐	50.000	52.057	81450.06	0.0319	P	1.6
4	☐	125.000	128.595	197697.87	0.0787	P	1.2
5	☐	250.000	259.284	380024.25	0.1586	P	0.4
6	☐	500.000	503.176	697115.79	0.3077	P	0.8
7	☐	1000.000	995.539	1324481.73	0.6088	P	0.5
8	☐			216.67	0.0001	P	5.8

$$y = 6.1146\text{E-}004 * x + 2.2873\text{E-}005$$

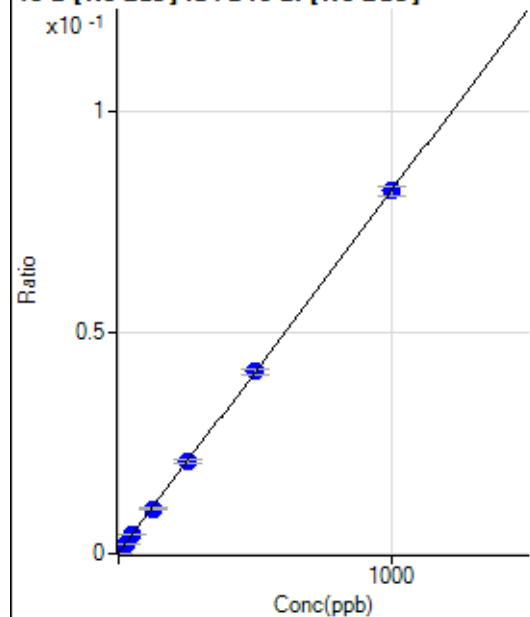
$$R = 0.9999$$

$$DL = 0.02693$$

$$BEC = 0.03741$$

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	491.69	0.0002	P	5.0
2	☐	25.000	25.042	5704.01	0.0022	P	3.4
3	☐	50.000	49.079	10762.35	0.0042	P	2.1
4	☐	125.000	121.655	25488.60	0.0101	P	3.1
5	☐	250.000	252.261	49888.00	0.0208	P	3.3
6	☐	500.000	500.432	93149.57	0.0411	P	3.3
7	☐	1000.000	999.682	178224.93	0.0819	P	2.6
8	☐			6546.03	0.0031	P	16.2

$$y = 8.1748\text{E-}005 * x + 1.9598\text{E-}004$$

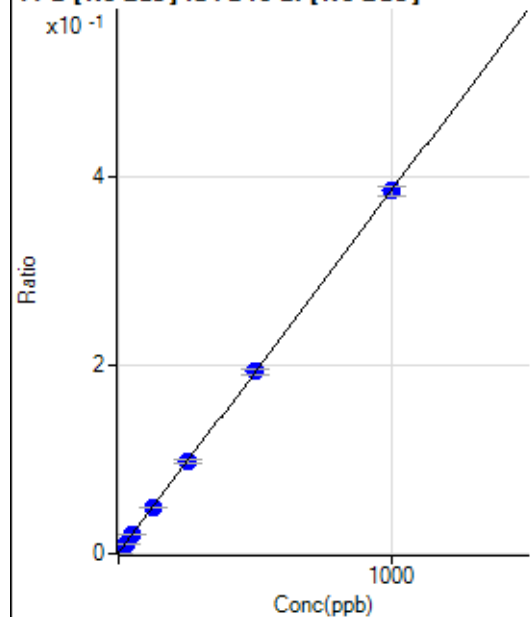
$$R = 1.0000$$

$$DL = 0.3579$$

$$BEC = 2.397$$

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	2422.48	0.0010	P	2.4
2	☐	25.000	24.073	25994.95	0.0102	P	2.9
3	☐	50.000	49.887	51518.45	0.0201	P	1.5
4	☐	125.000	124.542	122787.53	0.0489	P	2.8
5	☐	250.000	252.052	234566.17	0.0979	P	2.7
6	☐	500.000	500.186	438010.02	0.1933	P	2.8
7	☐	1000.000	999.480	838189.70	0.3853	P	2.9
8	☐			31322.18	0.0150	P	10.7

$$y = 3.8450E-004 * x + 9.6564E-004$$

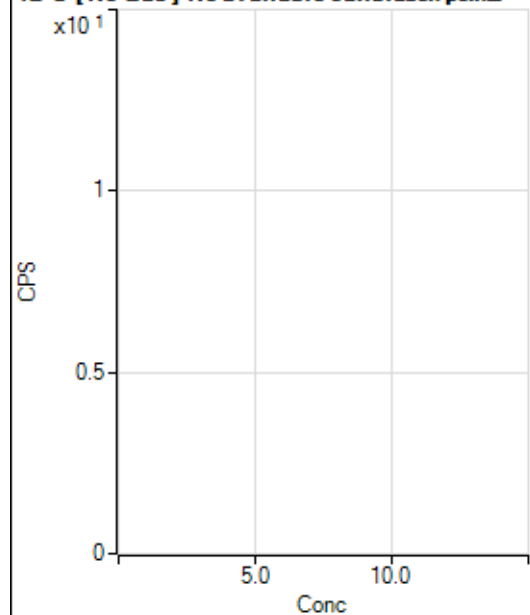
$$R = 1.0000$$

$$DL = 0.1805$$

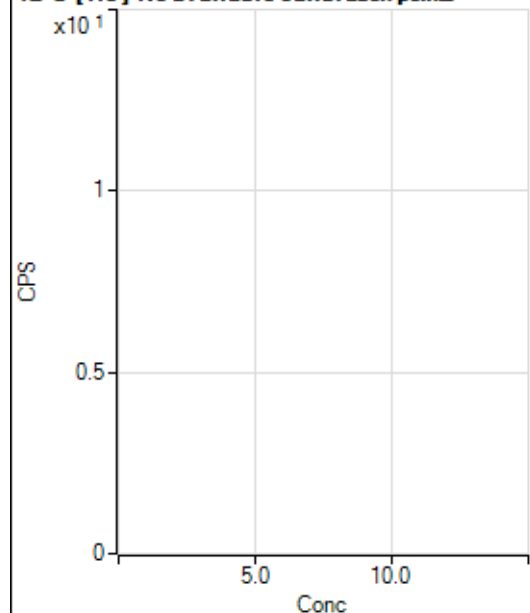
$$BEC = 2.511$$

Weight: <None>

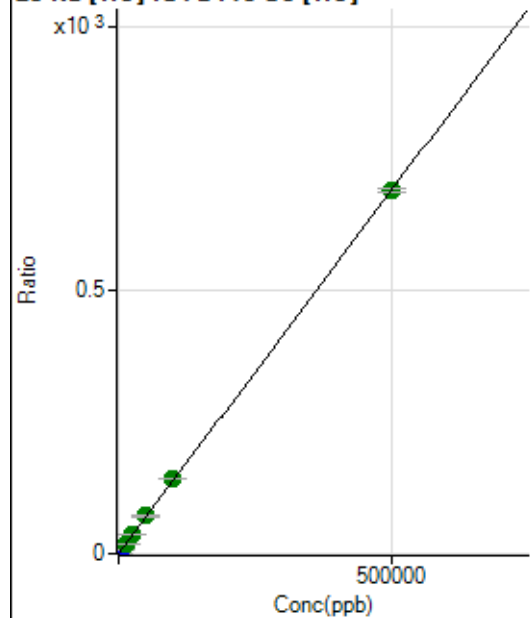
Min Conc: 0

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	13742.67	0.0361	P	1.4
2	☐	500.000	539.733	297536.08	0.7807	P	1.0
3	☐	5000.000	5390.614	2883392.02	7.4722	P	1.8
4	☐	12500.000	13190.780	6626274.67	18.2321	A	1.3
5	☐	25000.000	26109.478	12691477.97	36.0528	A	0.3
6	☐	50000.000	51687.052	23844577.44	71.3358	A	0.8
7	☐	100000.00	103068.35	45771713.17	142.2137	A	0.6
8	☐	500000.00	499140.93	225445538.3	688.5759	A	1.0

$$y = 0.0014 * x + 0.0361$$

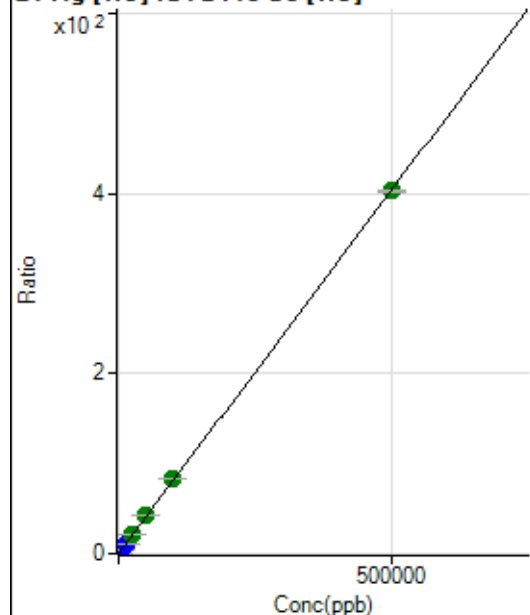
$$R = 1.0000$$

$$DL = 1.067$$

$$BEC = 26.19$$

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	255.56	0.0007	P	7.5
2	☐	500.000	528.801	163084.46	0.4279	P	0.4
3	☐	5000.000	5452.602	1699808.89	4.4058	P	2.3
4	☐	12500.000	13818.530	4057661.98	11.1645	P	0.9
5	☐	25000.000	26467.841	7527149.30	21.3838	A	0.8
6	☐	50000.000	51929.137	14023345.97	41.9537	A	0.8
7	☐	100000.00	103036.69	26791948.69	83.2429	A	0.5
8	☐	500000.00	499088.83	132015461.2	403.2091	A	0.8

$$y = 8.0789E-004 * x + 6.7187E-004$$

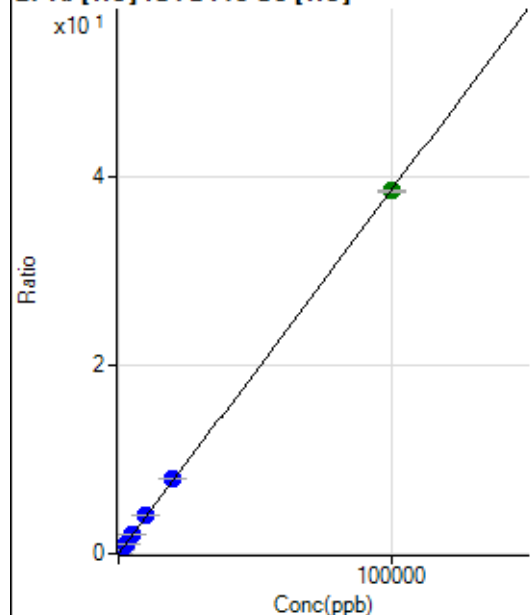
$$R = 1.0000$$

$$DL = 0.1859$$

$$BEC = 0.8316$$

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	94.45	0.0002	P	25.4
2	☐	20.000	21.741	3292.12	0.0086	P	4.5
3	☐	1000.000	1066.358	158921.10	0.4117	P	0.6
4	☐	2500.000	2678.382	375650.89	1.0336	P	1.2
5	☐	5000.000	5326.809	723556.36	2.0554	P	0.6
6	☐	10000.000	10431.284	1345313.36	4.0248	P	0.4
7	☐	20000.000	20634.091	2562254.29	7.9612	P	0.5
8	☐	100000.00	99808.590	12608639.00	38.5079	A	0.5

$$y = 3.8582E-004 * x + 2.4829E-004$$

$$R = 1.0000$$

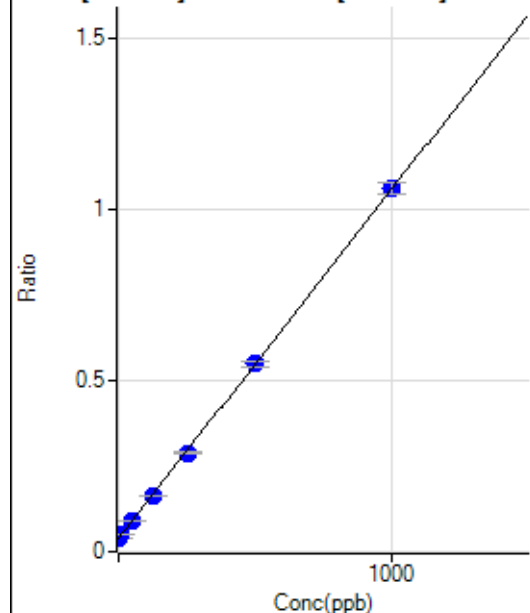
$$DL = 0.4904$$

$$BEC = 0.6435$$

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	192137.69	0.0390	P	1.5
2	☐	10.000	8.802	238598.51	0.0480	P	0.6
3	☐	50.000	50.835	448457.59	0.0909	P	2.0
4	☐	125.000	123.268	804929.71	0.1649	P	1.1
5	☐	250.000	245.472	1361973.39	0.2897	P	1.1
6	☐	500.000	499.534	2414391.00	0.5491	P	2.6
7	☐	1000.000	1001.551	4559615.16	1.0617	P	3.0
8	☐			669171.28	0.1609	P	9.4

$$y = 0.0010 * x + 0.0390$$

$$R = 1.0000$$

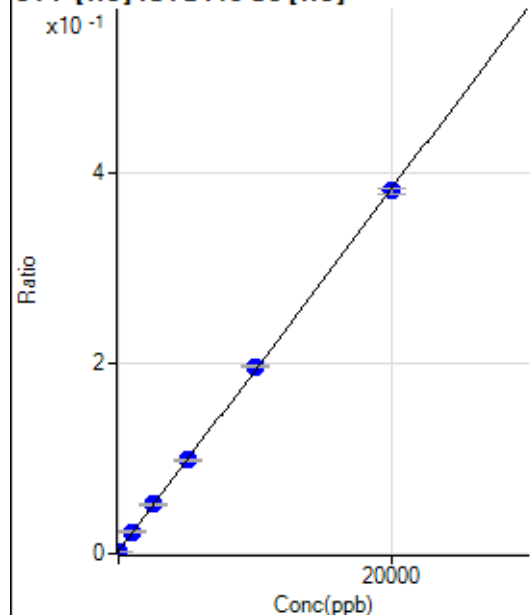
$$DL = 1.751$$

$$BEC = 38.23$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-1.000	944.50	0.0025	P	10.1
2	☐	0.000	1.000	961.16	0.0025	P	3.1
3	☐	1000.000	1070.210	8858.51	0.0229	P	7.4
4	☐	2500.000	2585.868	18815.01	0.0518	P	1.6
5	☐	5000.000	5015.136	34518.29	0.0981	P	0.9
6	☐	10000.000	10187.552	65713.83	0.1966	P	1.0
7	☐	20000.000	19888.196	122753.40	0.3814	P	1.7
8	☐			733.37	0.0022	P	17.8

$$y = 1.9052E-005 * x + 0.0025$$

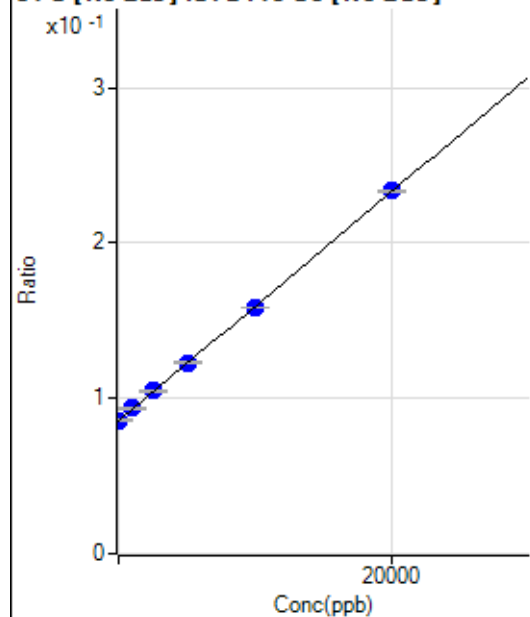
$$R = 0.9999$$

$$DL = 25.91$$

$$BEC = 131.3$$

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	-21.360	420328.83	0.0854	P	0.6
2	☐	0.000	21.360	425777.10	0.0857	P	1.6
3	☐	1000.000	1082.328	461265.01	0.0935	P	1.0
4	☐	2500.000	2595.750	511061.89	0.1047	P	0.5
5	☐	5000.000	5090.651	578825.68	0.1231	P	0.6
6	☐	10000.000	9815.429	694729.79	0.1580	P	0.1
7	☐	20000.000	20053.538	1002982.70	0.2335	P	0.8
8	☐			349543.86	0.0841	P	0.6

$$y = 7.3797\text{E-}006 * x + 0.0855$$

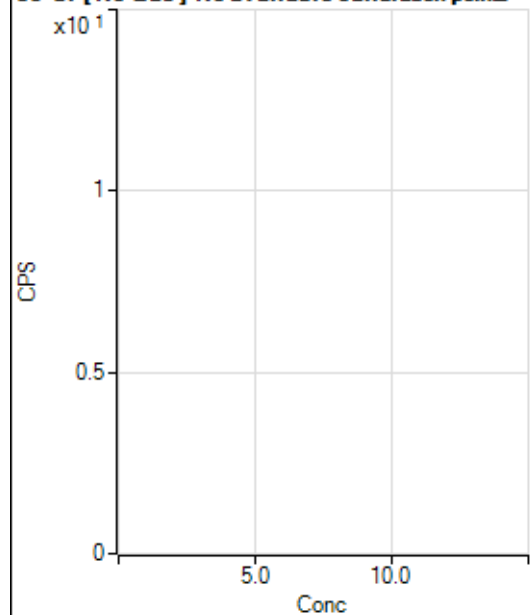
$$R = 0.9999$$

$$DL = 379.4$$

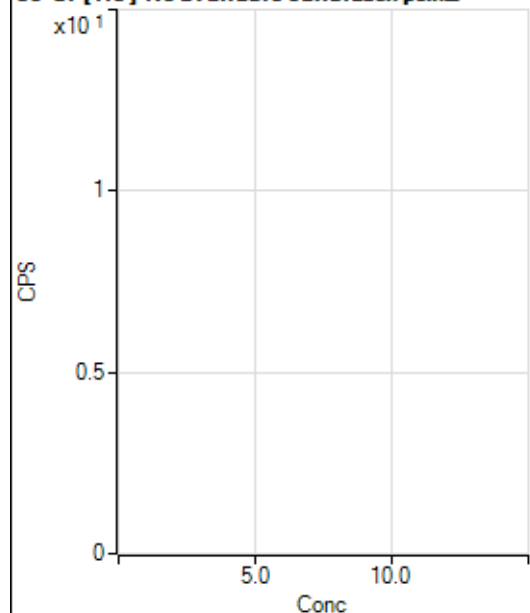
$$BEC = 1.159\text{E}+04$$

Weight: <None>

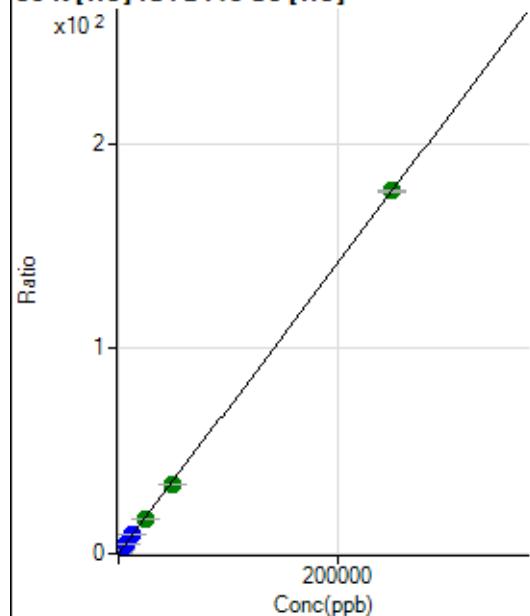
Min Conc: 0

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	39210.83	0.1031	P	2.4
2	☐	500.000	552.907	187949.07	0.4931	P	1.1
3	☐	2500.000	2707.483	777736.25	2.0131	P	1.7
4	☐	6250.000	6722.768	1761174.85	4.8457	P	0.4
5	☐	12500.000	13410.777	3366733.48	9.5637	P	0.3
6	☐	25000.000	24029.208	5700517.56	17.0545	A	0.2
7	☐	50000.000	47758.616	10876306.64	33.7943	A	1.1
8	☐	250000.00	250485.81	57890752.58	176.8080	A	0.6

$$y = 7.0545E-004 * x + 0.1031$$

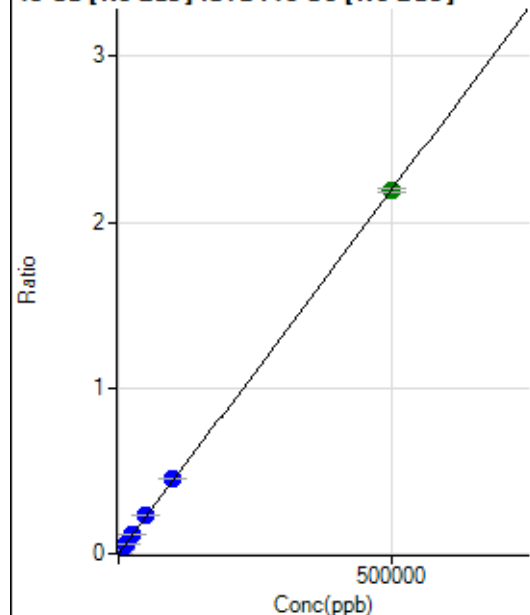
$$R = 0.9999$$

$$DL = 10.4$$

$$BEC = 146.1$$

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	130.49	0.0000	P	46.8
2	☐	500.000	527.099	11612.06	0.0023	P	4.8
3	☐	5000.000	5377.491	116408.97	0.0236	P	0.8
4	☐	12500.000	13119.804	280900.69	0.0576	P	1.7
5	☐	25000.000	26392.359	544179.09	0.1157	P	0.1
6	☐	50000.000	52320.491	1008921.06	0.2294	P	0.1
7	☐	100000.00	103101.60	1941594.45	0.4521	P	0.8
8	☐	500000.00	499058.71	9098237.59	2.1882	A	0.9

$$y = 4.3845\text{E-}006 * x + 2.6481\text{E-}005$$

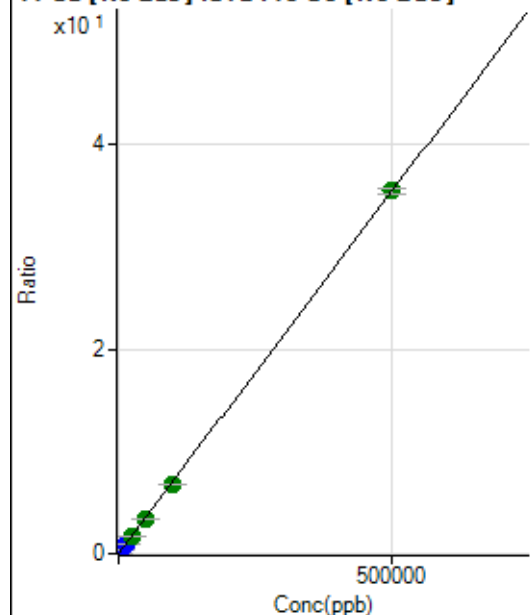
$$R = 1.0000$$

$$DL = 8.483$$

$$BEC = 6.04$$

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	6642.48	0.0013	P	2.4
2	☐	500.000	527.638	192230.79	0.0387	P	0.9
3	☐	5000.000	5303.310	1857616.13	0.3767	P	0.6
4	☐	12500.000	13055.836	4516551.97	0.9253	P	1.0
5	☐	25000.000	23856.624	7944263.35	1.6897	A	0.2
6	☐	50000.000	47767.713	14871760.27	3.3819	A	0.5
7	☐	100000.00	94941.087	28862622.35	6.7204	A	1.2
8	☐	500000.00	501275.22	147511685.9	35.4771	A	1.3

$$y = 7.0771\text{E-}005 * x + 0.0013$$

$$R = 0.9999$$

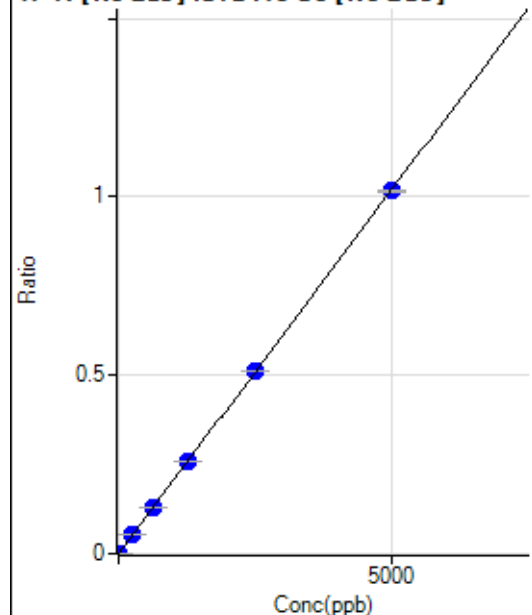
$$DL = 1.367$$

$$BEC = 19.07$$

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	66.67	0.0000	P	25.1
2	☐	5.000	5.056	5187.15	0.0010	P	2.0
3	☐	250.000	254.599	255998.28	0.0519	P	1.2
4	☐	625.000	633.409	630280.38	0.1291	P	0.7
5	☐	1250.000	1267.926	1215198.88	0.2585	P	0.7
6	☐	2500.000	2513.936	2253561.68	0.5125	P	0.2
7	☐	5000.000	4987.269	4366220.41	1.0166	P	0.2
8	☐			800.04	0.0002	P	8.3

$$y = 2.0384\text{E-}004 * x + 1.3549\text{E-}005$$

$$R = 1.0000$$

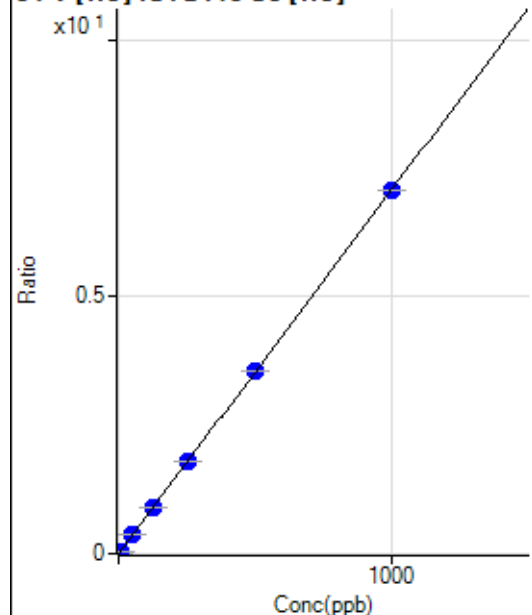
$$DL = 0.05005$$

$$BEC = 0.06647$$

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	6.67	0.0000	P	50.1
2	☐	5.000	5.230	14122.41	0.0371	P	2.0
3	☐	50.000	50.895	139233.09	0.3605	P	1.2
4	☐	125.000	128.036	329569.99	0.9068	P	0.8
5	☐	250.000	255.461	636926.70	1.8092	P	0.6
6	☐	500.000	501.011	1186034.78	3.5483	P	0.3
7	☐	1000.000	997.704	2274216.13	7.0660	P	0.2
8	☐			413.34	0.0013	P	15.6

$$y = 0.0071 * x + 1.7536\text{E-}005$$

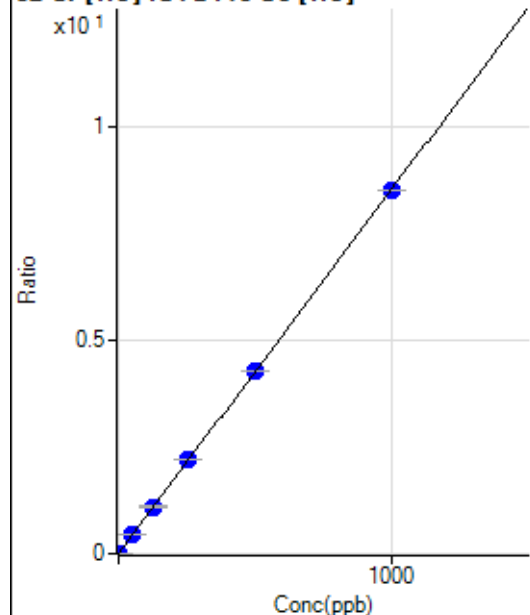
$$R = 1.0000$$

$$DL = 0.003723$$

$$BEC = 0.002476$$

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	1495.65	0.0039	P	3.6
2	☐	2.000	2.091	8306.84	0.0218	P	0.7
3	☐	50.000	51.268	170623.20	0.4419	P	0.4
4	☐	125.000	128.763	401250.50	1.1040	P	0.6
5	☐	250.000	257.139	774743.30	2.2008	P	0.5
6	☐	500.000	502.974	1437636.56	4.3010	P	0.2
7	☐	1000.000	996.194	2740518.95	8.5148	P	0.1
8	☐			15053.34	0.0460	P	0.8

$$y = 0.0085 * x + 0.0039$$

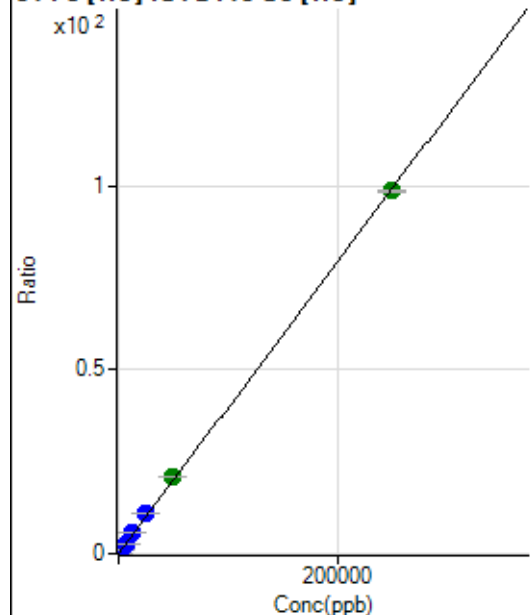
$$R = 1.0000$$

$$DL = 0.05017$$

$$BEC = 0.4603$$

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	1027.76	0.0027	P	4.7
2	☐	50.000	57.548	9713.17	0.0255	P	4.3
3	☐	2500.000	2838.537	434945.60	1.1266	P	0.4
4	☐	6250.000	7127.310	1026653.54	2.8247	P	0.7
5	☐	12500.000	14226.209	1983756.47	5.6354	P	0.3
6	☐	25000.000	27762.817	3675145.07	10.9951	P	0.3
7	☐	50000.000	52508.055	6691969.91	20.7927	A	0.5
8	☐	250000.00	249110.47	32295963.99	98.6352	A	0.6

$$y = 3.9594E-004 * x + 0.0027$$

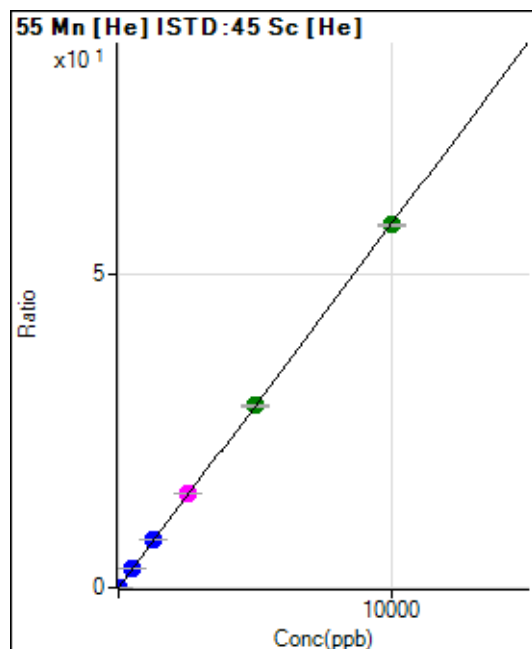
$$R = 0.9999$$

$$DL = 0.9658$$

$$BEC = 6.825$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	83.33	0.0002	P	26.4
2	☐	1.000	1.017	2340.21	0.0061	P	1.2
3	☐	500.000	519.676	1167949.04	3.0248	P	0.2
4	☐	1250.000	1307.526	2765975.34	7.6103	P	0.5
5	☐	2500.000	2580.067	5285720.61	15.0167	M	1.2
6	☐	5000.000	4995.898	9719189.58	29.0773	A	0.4
7	☐	10000.000	9973.860	18682859.03	58.0500	A	0.6
8	☐			11951.62	0.0365	P	1.2

$$y = 0.0058 * x + 2.1915E-004$$

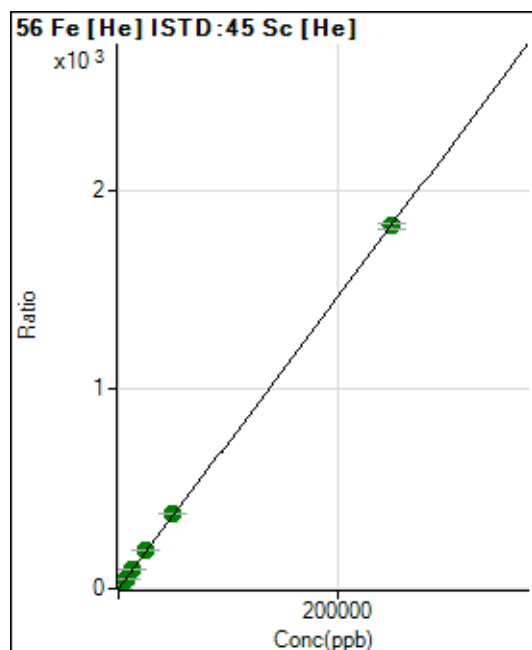
$$R = 1.0000$$

$$DL = 0.02977$$

$$BEC = 0.03765$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5245.46	0.0138	P	1.5
2	☐	50.000	56.162	161346.08	0.4233	P	1.1
3	☐	2500.000	2624.239	7391785.41	19.1503	A	1.0
4	☐	6250.000	6626.588	17566625.62	48.3363	A	1.6
5	☐	12500.000	13260.443	34044335.95	96.7118	A	0.3
6	☐	25000.000	26041.531	63479957.90	189.9142	A	0.4
7	☐	50000.000	51776.056	121522056.4	377.5759	A	0.4
8	☐	250000.00	249491.95	595644665.1	1,819.362	A	1.4

$$y = 0.0073 * x + 0.0138$$

$$R = 1.0000$$

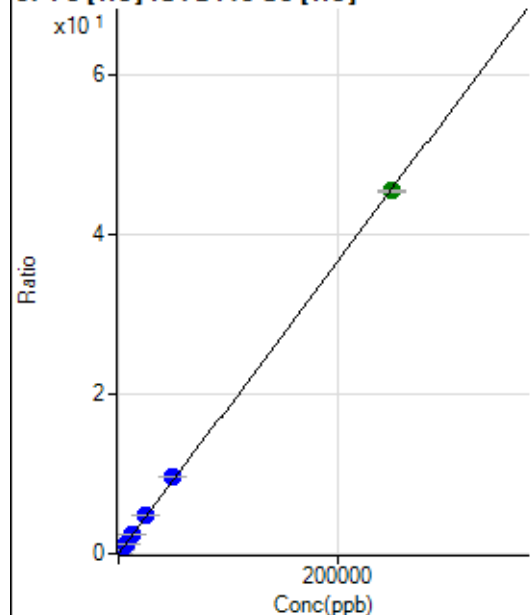
$$DL = 0.08784$$

$$BEC = 1.891$$

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	162.97	0.0004	P	30.6
2	☐	50.000	56.664	4113.61	0.0108	P	4.0
3	☐	2500.000	2738.896	193557.55	0.5014	P	0.5
4	☐	6250.000	6916.493	459912.26	1.2654	P	0.7
5	☐	12500.000	13750.798	885454.72	2.5154	P	0.8
6	☐	25000.000	26937.038	1646904.36	4.9271	P	0.2
7	☐	50000.000	53371.060	3141825.42	9.7617	P	0.2
8	☐	250000.00	249050.49	14913704.27	45.5506	A	0.9

$$y = 1.8290E-004 * x + 4.2834E-004$$

$$R = 0.9999$$

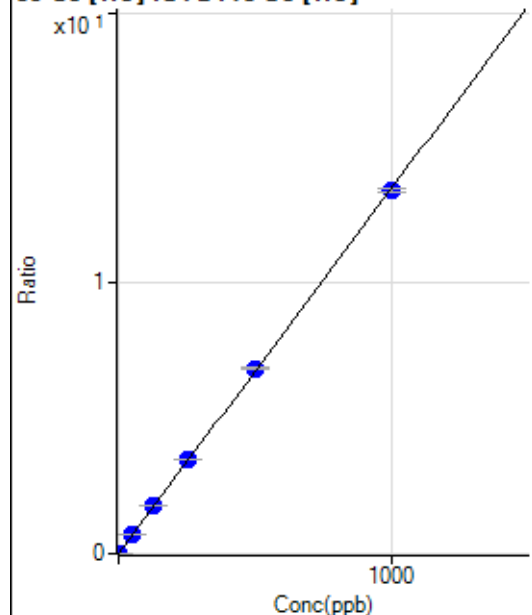
$$DL = 2.151$$

$$BEC = 2.342$$

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	72.22	0.0002	P	30.7
2	☐	1.000	1.028	5368.81	0.0141	P	4.1
3	☐	50.000	52.129	271955.60	0.7046	P	1.1
4	☐	125.000	130.565	641270.12	1.7644	P	0.8
5	☐	250.000	259.275	1233388.45	3.5036	P	0.8
6	☐	500.000	507.031	2290099.10	6.8513	P	0.7
7	☐	1000.000	993.364	4319933.10	13.4227	P	1.0
8	☐			6801.62	0.0208	P	2.1

$$y = 0.0135 * x + 1.8985E-004$$

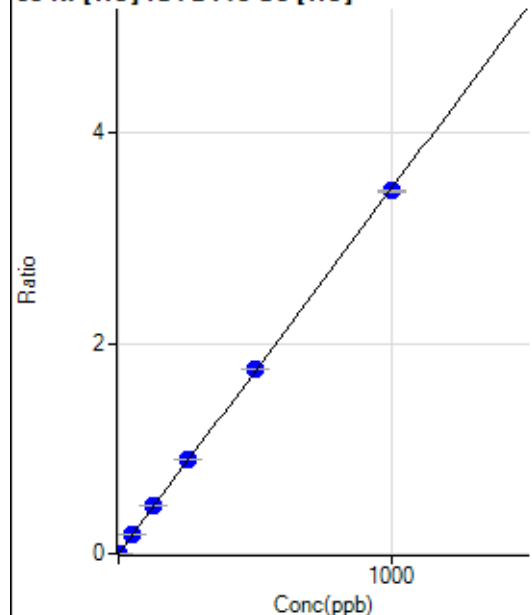
$$R = 0.9999$$

$$DL = 0.01292$$

$$BEC = 0.01405$$

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	156.67	0.0004	P	18.5
2	☐	1.000	1.037	1528.98	0.0040	P	2.8
3	☐	50.000	52.565	70610.25	0.1829	P	0.9
4	☐	125.000	131.632	166193.29	0.4573	P	1.0
5	☐	250.000	259.247	316906.88	0.9002	P	1.0
6	☐	500.000	505.936	587092.12	1.7564	P	0.6
7	☐	1000.000	993.763	1110270.43	3.4496	P	0.4
8	☐			4890.87	0.0149	P	3.5

$$y = 0.0035 * x + 4.1185E-004$$

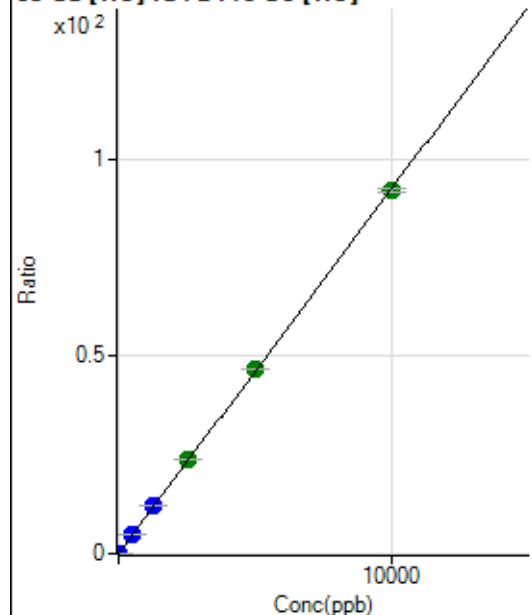
$$R = 0.9999$$

$$DL = 0.0657$$

$$BEC = 0.1187$$

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	730.03	0.0019	P	4.9
2	☐	2.000	2.148	8302.44	0.0218	P	2.3
3	☐	500.000	524.901	1874692.18	4.8561	P	0.6
4	☐	1250.000	1302.842	4379693.69	12.0502	P	0.4
5	☐	2500.000	2574.239	8380867.37	23.8077	A	0.2
6	☐	5000.000	5053.291	15620865.46	46.7333	A	0.2
7	☐	10000.000	9946.944	29605349.84	91.9884	A	1.0
8	☐			9048.43	0.0276	P	1.6

$$y = 0.0092 * x + 0.0019$$

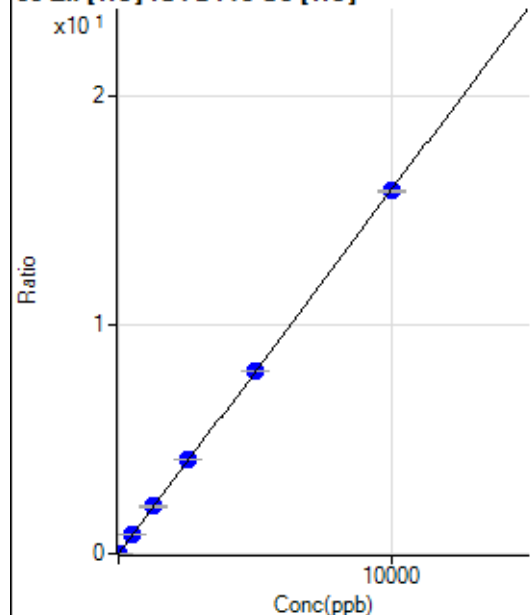
$$R = 0.9999$$

$$DL = 0.03076$$

$$BEC = 0.2076$$

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	501.12	0.0013	P	6.4
2	☐	2.000	2.588	2067.95	0.0054	P	1.3
3	☐	500.000	527.999	324350.27	0.8394	P	2.2
4	☐	1250.000	1299.938	750388.64	2.0647	P	1.2
5	☐	2500.000	2571.495	1437282.22	4.0830	P	0.6
6	☐	5000.000	5004.466	2655612.75	7.9449	P	0.2
7	☐	10000.000	9972.251	5094797.18	15.8302	P	0.6
8	☐			10609.50	0.0324	P	0.6

$$y = 0.0016 * x + 0.0013$$

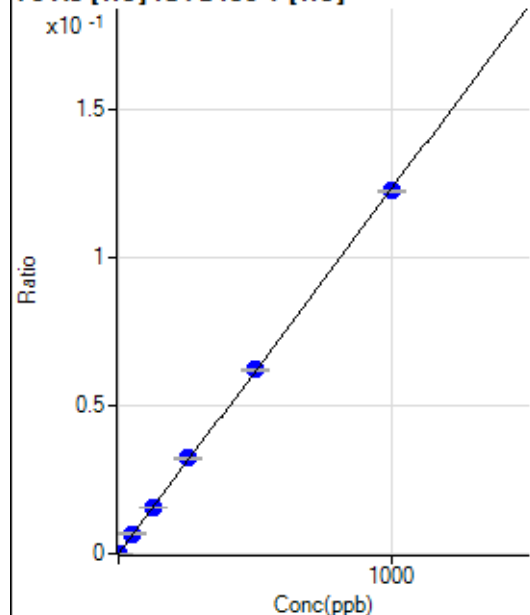
$$R = 1.0000$$

$$DL = 0.1587$$

$$BEC = 0.83$$

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	11.73	0.0000	P	23.9
2	☐	1.000	1.024	369.14	0.0001	P	1.5
3	☐	50.000	54.616	19384.17	0.0067	P	8.9
4	☐	125.000	128.722	43319.03	0.0159	P	0.4
5	☐	250.000	261.230	84867.70	0.0322	P	1.6
6	☐	500.000	503.705	156817.07	0.0621	P	0.8
7	☐	1000.000	994.644	301144.63	0.1227	P	0.4
8	☐			106.18	0.0000	P	2.6

$$y = 1.2332E-004 * x + 4.1707E-006$$

$$R = 0.9999$$

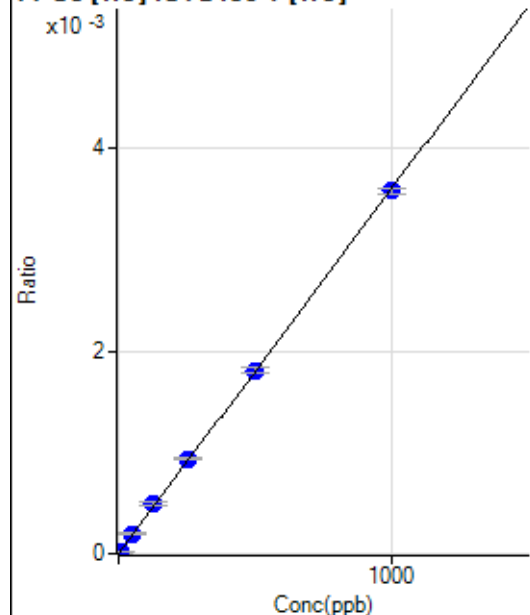
$$DL = 0.02421$$

$$BEC = 0.03382$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	5.000	6.445	66.67	0.0000	P	17.8
3	☐	50.000	54.143	557.80	0.0002	P	6.9
4	☐	125.000	136.777	1343.41	0.0005	P	8.6
5	☐	250.000	259.928	2463.57	0.0009	P	1.7
6	☐	500.000	502.810	4566.31	0.0018	P	3.2
7	☐	1000.000	994.427	8781.64	0.0036	P	1.8
8	☐			1.11	0.0000	P	173.

$$y = 3.5968\text{E-}006 * x + 3.9458\text{E-}007$$

$$R = 0.9999$$

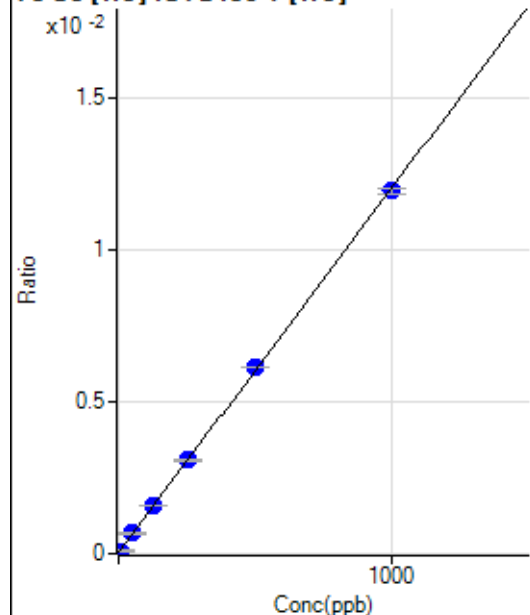
$$DL = 0.57$$

$$BEC = 0.1097$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	107.41	0.0000	P	11.4
2	☐	5.000	4.664	266.05	0.0001	P	10.6
3	☐	50.000	52.530	1914.95	0.0007	P	3.8
4	☐	125.000	128.374	4297.57	0.0016	P	0.6
5	☐	250.000	254.963	8139.35	0.0031	P	2.3
6	☐	500.000	510.204	15517.56	0.0061	P	0.2
7	☐	1000.000	993.111	29281.95	0.0119	P	1.6
8	☐			78.39	0.0000	P	23.6

$$y = 1.1973\text{E-}005 * x + 3.8219\text{E-}005$$

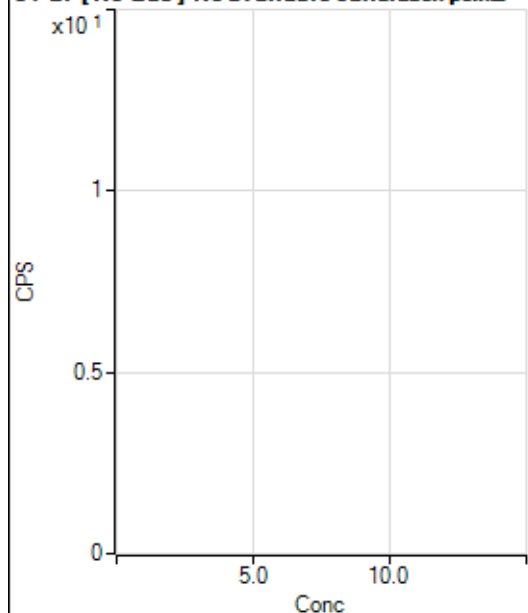
$$R = 0.9999$$

$$DL = 1.091$$

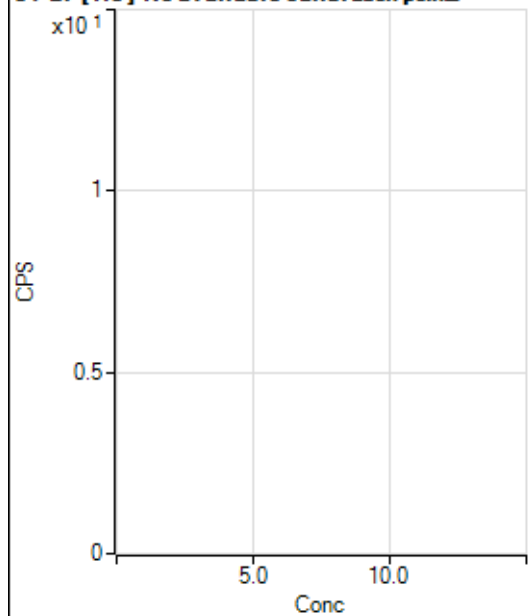
$$BEC = 3.192$$

Weight: <None>

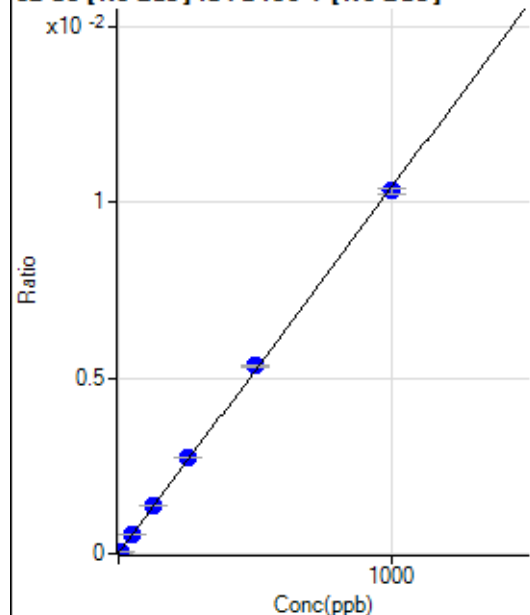
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6782.32		P	4.2
2	☐			6901.79		P	3.7
3	☐			6621.15		P	4.9
4	☐			6743.43		P	1.3
5	☐			6284.86		P	0.4
6	☐			5709.61		P	6.7
7	☐			5590.13		P	1.5
8	☐			5365.01		P	4.2

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			40.04		P	66.1
2	☐			53.39		P	10.8
3	☐			33.37		P	45.8
4	☐			53.39		P	39.0
5	☐			46.71		P	24.7
6	☐			56.72		P	36.7
7	☐			46.71		P	44.6
8	☐			60.06		P	66.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	128.44	0.0000	P	66.0
2	☐	5.000	4.387	715.36	0.0001	P	16.9
3	☐	50.000	52.122	7008.86	0.0006	P	2.0
4	☐	125.000	130.598	17088.18	0.0014	P	0.4
5	☐	250.000	261.313	32865.33	0.0027	P	0.4
6	☐	500.000	512.079	61131.79	0.0053	P	1.4
7	☐	1000.000	990.329	117324.35	0.0103	P	1.8
8	☐			23.66	0.0000	P	419.

$$y = 1.0419\text{E-}005 * x + 1.0032\text{E-}005$$

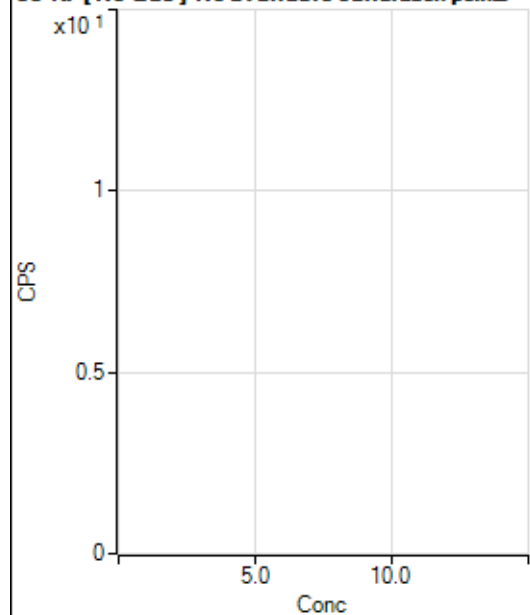
$$R = 0.9998$$

$$DL = 1.907$$

$$BEC = 0.9629$$

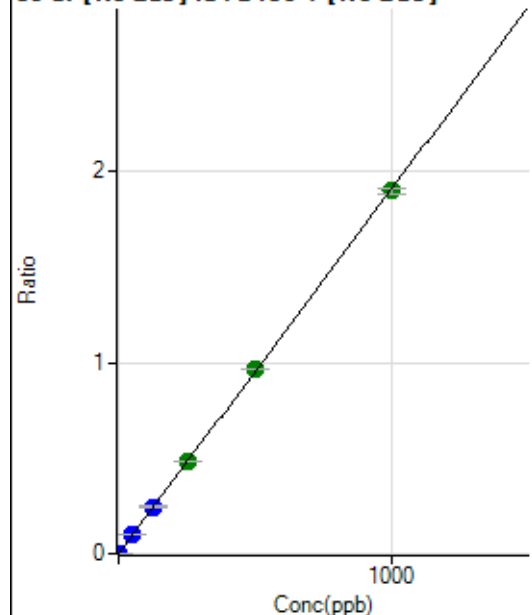
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			774.47		P	5.8
2	☐			793.36		P	13.4
3	☐			761.14		P	11.0
4	☐			754.47		P	9.8
5	☐			775.59		P	8.3
6	☐			754.47		P	10.2
7	☐			725.58		P	1.9
8	☐			738.92		P	9.4

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1402.89	0.0001	P	11.7
2	☐	1.000	0.104	3959.00	0.0003	P	6.6
3	☐	50.000	51.437	1244660.62	0.0982	P	0.4
4	☐	125.000	129.027	3069155.25	0.2462	P	1.0
5	☐	250.000	254.919	5848781.38	0.4863	A	0.3
6	☐	500.000	505.838	11035074.38	0.9649	A	0.8
7	☐	1000.000	995.277	21565288.68	1.8983	A	1.2
8	☐			6276.53	0.0006	P	1.3

$$y = 0.0019 * x + 1.0972E-004$$

$$R = 1.0000$$

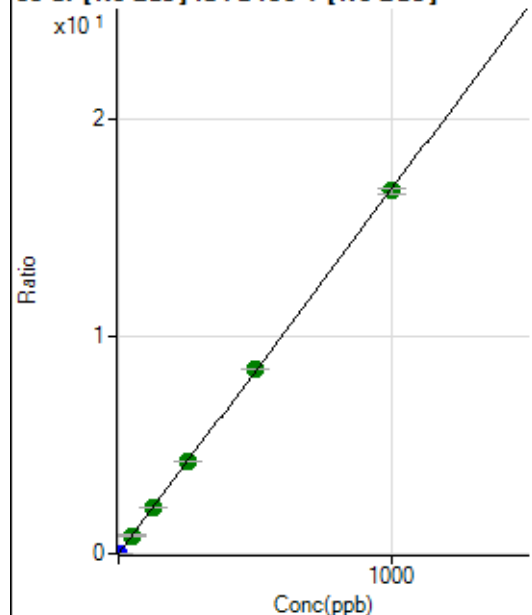
$$DL = 0.02016$$

$$BEC = 0.05753$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	247.23	0.0000	P	7.4
2	☐	1.000	0.103	22353.97	0.0017	P	2.4
3	☐	50.000	50.104	10641410.31	0.8397	A	1.3
4	☐	125.000	125.871	26298017.08	2.1095	A	0.5
5	☐	250.000	253.883	51173369.90	4.2548	A	0.5
6	☐	500.000	507.400	97256488.98	8.5035	A	0.3
7	☐	1000.000	995.216	189475550.0	16.6789	A	1.3
8	☐			47827.10	0.0044	P	0.4

$$y = 0.0168 * x + 1.9345E-005$$

$$R = 0.9999$$

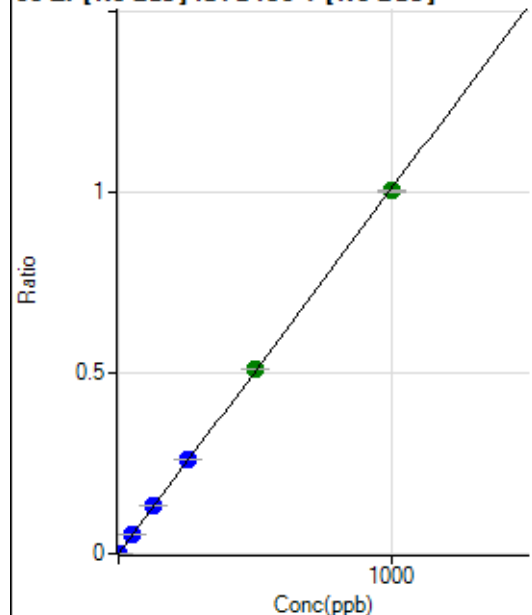
$$DL = 0.0002574$$

$$BEC = 0.001154$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	775.04	0.0001	P	11.7
2	☐	1.000	0.998	13731.86	0.0011	P	3.1
3	☐	50.000	51.075	654703.36	0.0517	P	0.3
4	☐	125.000	129.503	1631815.86	0.1309	P	0.2
5	☐	250.000	259.778	3157211.01	0.2625	P	0.1
6	☐	500.000	506.213	5850054.73	0.5115	A	0.7
7	☐	1000.000	993.832	11406969.18	1.0041	A	0.6
8	☐			2636.43	0.0002	P	8.5

$$y = 0.0010 * x + 6.0617E-005$$

$$R = 0.9999$$

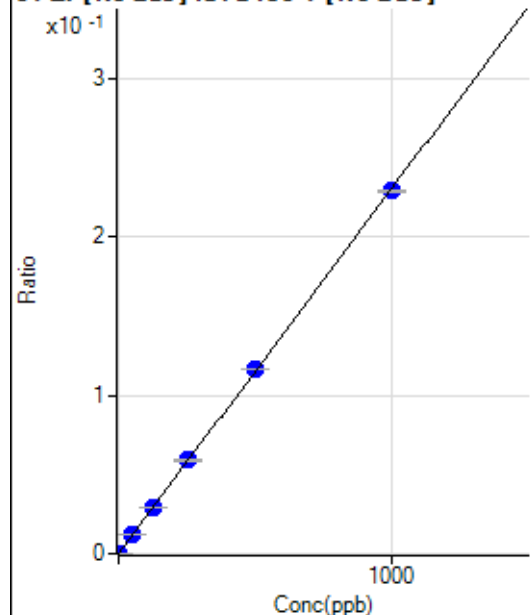
$$DL = 0.02103$$

$$BEC = 0.06$$

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	161.11	0.0000	P	16.5
2	☐	1.000	0.964	3011.50	0.0002	P	2.9
3	☐	50.000	50.647	147919.89	0.0117	P	1.1
4	☐	125.000	127.553	366223.80	0.0294	P	0.9
5	☐	250.000	256.043	709065.20	0.0590	P	0.6
6	☐	500.000	506.763	1334434.01	0.1167	P	0.1
7	☐	1000.000	994.757	2601657.31	0.2290	P	0.9
8	☐			600.03	0.0001	P	7.9

$$y = 2.3021E-004 * x + 1.2602E-005$$

$$R = 0.9999$$

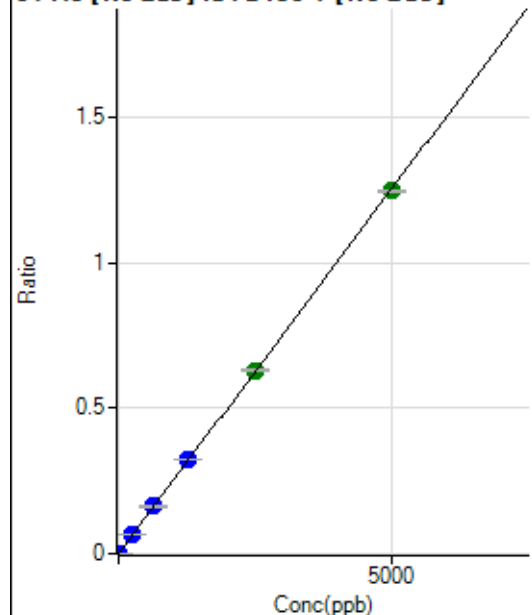
$$DL = 0.02707$$

$$BEC = 0.05474$$

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	277.79	0.0000	P	14.7
2	☐	5.000	5.127	16774.14	0.0013	P	4.7
3	☐	250.000	257.057	816479.97	0.0644	P	0.3
4	☐	625.000	647.584	2022930.15	0.1623	P	0.7
5	☐	1250.000	1297.070	3908722.48	0.3250	P	0.2
6	☐	2500.000	2515.885	7209472.82	0.6304	A	0.8
7	☐	5000.000	4977.114	14166448.23	1.2470	A	0.8
8	☐			4959.31	0.0005	P	3.6

$$y = 2.5054\text{E-}004 * x + 2.1729\text{E-}005$$

$$R = 0.9999$$

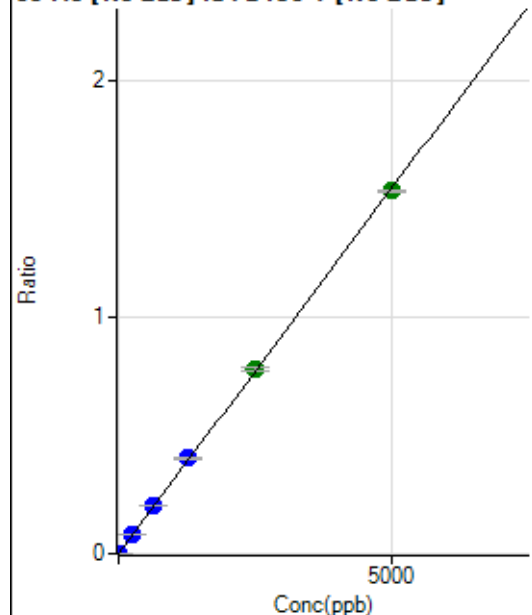
$$DL = 0.03817$$

$$BEC = 0.08673$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.11	0.0000	P	31.0
2	☐	5.000	5.037	20025.47	0.0016	P	1.3
3	☐	250.000	259.119	1012139.76	0.0799	P	0.9
4	☐	625.000	649.506	2495593.02	0.2002	P	0.2
5	☐	1250.000	1305.301	4838411.82	0.4023	P	0.5
6	☐	2500.000	2529.585	8916177.89	0.7796	A	1.2
7	☐	5000.000	4967.863	17394007.51	1.5311	A	0.6
8	☐			6821.27	0.0006	P	10.8

$$y = 3.0820\text{E-}004 * x + 6.7346\text{E-}006$$

$$R = 0.9999$$

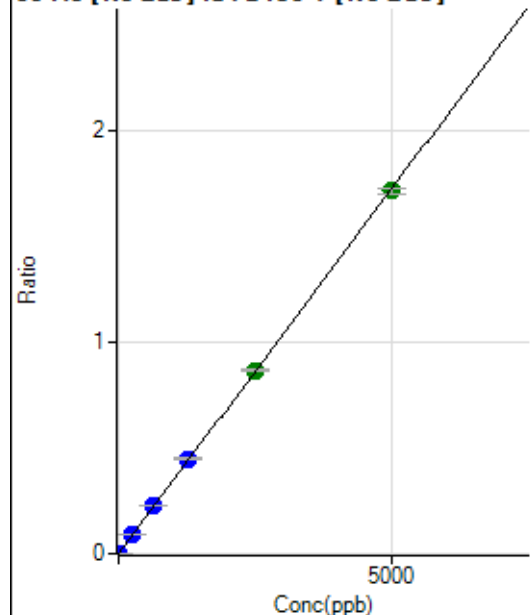
$$DL = 0.0203$$

$$BEC = 0.02185$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	122.23	0.0000	P	7.6
2	☐	5.000	5.041	22420.74	0.0017	P	3.2
3	☐	250.000	257.765	1125320.11	0.0888	P	0.4
4	☐	625.000	649.004	2786967.21	0.2236	P	0.4
5	☐	1250.000	1303.471	5399927.16	0.4490	P	0.5
6	☐	2500.000	2517.893	9919303.17	0.8673	A	0.4
7	☐	5000.000	4974.297	19463423.18	1.7134	A	1.7
8	☐			7996.86	0.0007	P	4.8

$$y = 3.4444E-004 * x + 9.5604E-006$$

$$R = 0.9999$$

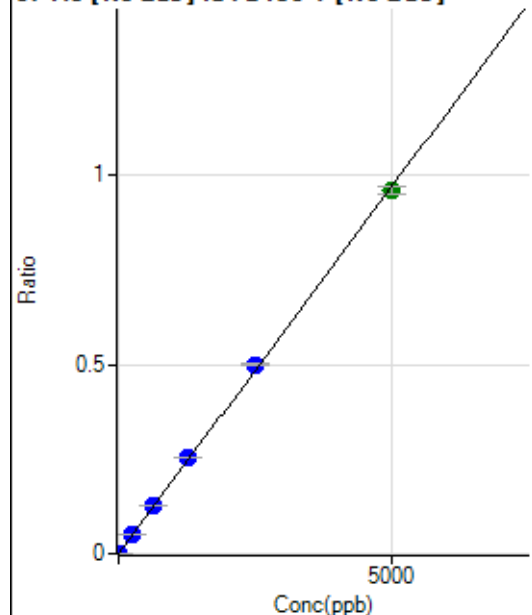
$$DL = 0.006303$$

$$BEC = 0.02776$$

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	38.89	0.0000	P	24.6
2	☐	5.000	5.039	12575.32	0.0010	P	4.0
3	☐	250.000	258.881	635693.29	0.0502	P	0.8
4	☐	625.000	650.461	1571167.72	0.1260	P	0.5
5	☐	1250.000	1301.170	3032093.88	0.2521	P	0.4
6	☐	2500.000	2574.360	5704529.29	0.4988	P	0.9
7	☐	5000.000	4946.401	10886517.08	0.9584	A	2.0
8	☐			4081.24	0.0004	P	6.7

$$y = 1.9375E-004 * x + 3.0417E-006$$

$$R = 0.9998$$

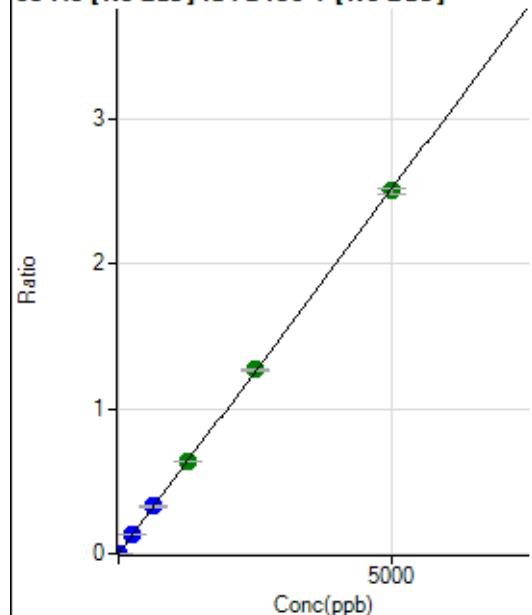
$$DL = 0.01161$$

$$BEC = 0.0157$$

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	138.89	0.0000	P	27.3
2	☐	5.000	5.099	33052.64	0.0026	P	0.3
3	☐	250.000	257.084	1637584.20	0.1292	P	0.8
4	☐	625.000	647.253	4055537.72	0.3253	P	0.4
5	☐	1250.000	1266.785	7657336.28	0.6367	A	0.1
6	☐	2500.000	2530.479	14545233.48	1.2718	A	1.0
7	☐	5000.000	4977.428	28417677.72	2.5016	A	1.3
8	☐			10734.88	0.0010	P	5.4

$$y = 5.0258\text{E-}004 * x + 1.0871\text{E-}005$$

$$R = 1.0000$$

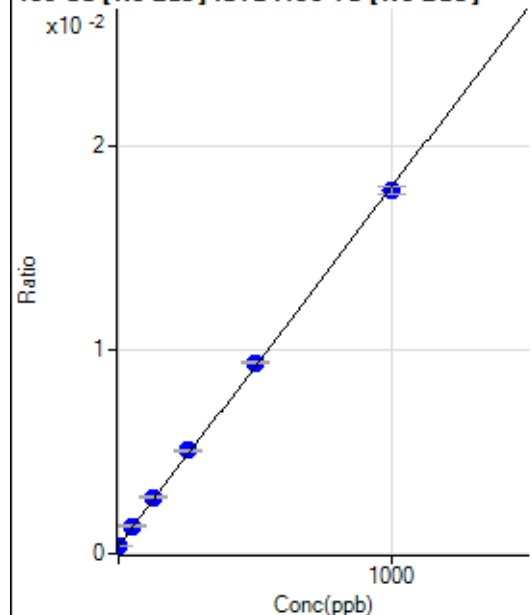
$$DL = 0.01775$$

$$BEC = 0.02163$$

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	5037.14	0.0004	P	2.0
2	☐	1.000	1.767	5367.79	0.0004	P	3.3
3	☐	50.000	55.092	17480.64	0.0014	P	2.8
4	☐	125.000	136.108	35943.36	0.0028	P	0.4
5	☐	250.000	265.848	64404.39	0.0051	P	1.6
6	☐	500.000	510.382	115517.30	0.0094	P	1.3
7	☐	1000.000	989.203	218382.32	0.0178	P	2.0
8	☐			4628.65	0.0004	P	2.1

$$y = 1.7637\text{E-}005 * x + 3.8477\text{E-}004$$

$$R = 0.9998$$

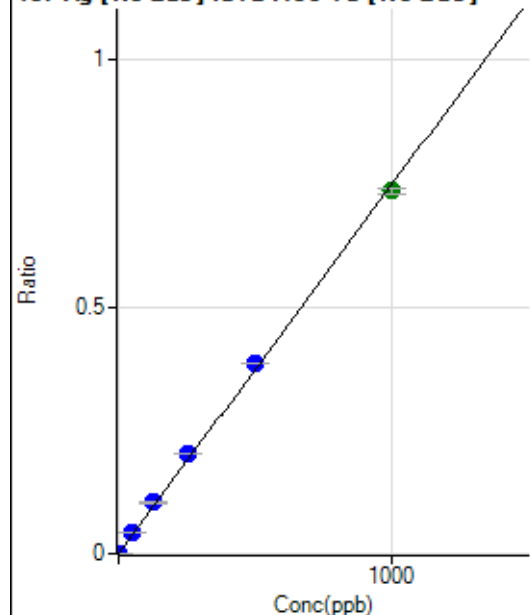
$$DL = 1.312$$

$$BEC = 21.82$$

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	75.00	0.0000	P	28.8
2	☐	1.000	1.107	10740.47	0.0008	P	1.5
3	☐	50.000	55.852	537471.79	0.0417	P	0.7
4	☐	125.000	138.428	1333617.83	0.1033	P	0.9
5	☐	250.000	270.061	2559200.54	0.2016	P	0.5
6	☐	500.000	517.677	4756476.89	0.3865	P	0.4
7	☐	1000.000	984.175	8998385.88	0.7347	A	1.3
8	☐			2391.94	0.0002	P	5.3

$$y = 7.4655\text{E-}004 * x + 5.7206\text{E-}006$$

$$R = 0.9995$$

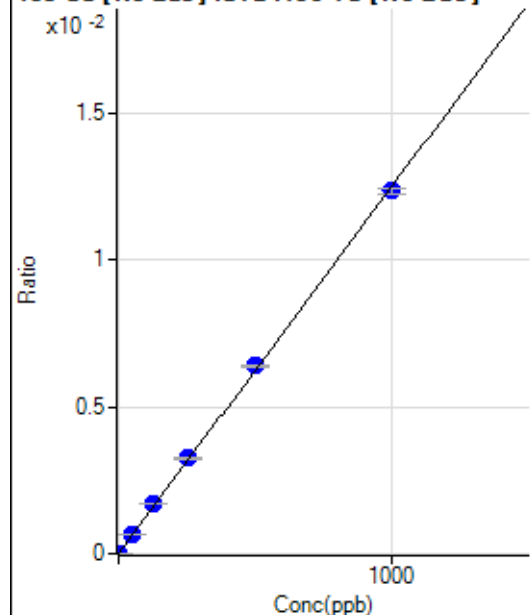
$$DL = 0.006617$$

$$BEC = 0.007663$$

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	30.56	0.0000	P	21.4
2	☐	1.000	1.149	215.28	0.0000	P	10.0
3	☐	50.000	54.265	8758.33	0.0007	P	1.7
4	☐	125.000	135.197	21800.17	0.0017	P	1.0
5	☐	250.000	260.757	41329.39	0.0033	P	1.5
6	☐	500.000	512.850	78787.38	0.0064	P	0.8
7	☐	1000.000	989.398	151228.93	0.0123	P	1.4
8	☐			134.72	0.0000	P	17.2

$$y = 1.2478\text{E-}005 * x + 2.3357\text{E-}006$$

$$R = 0.9998$$

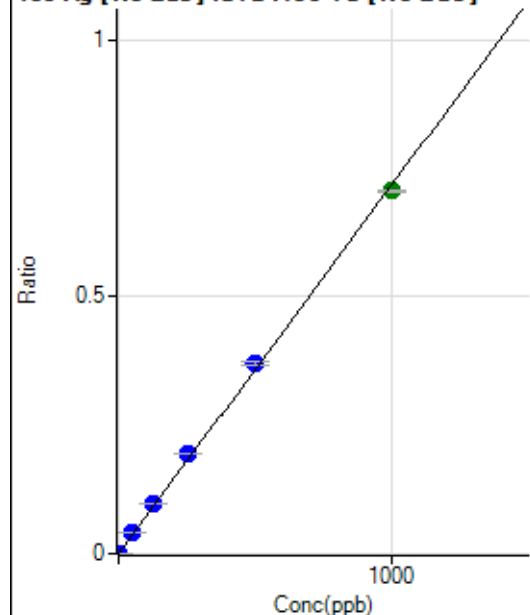
$$DL = 0.1204$$

$$BEC = 0.1872$$

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	13.89	0.0000	P	70.1
2	☐	1.000	1.092	10112.20	0.0008	P	3.5
3	☐	50.000	56.279	519847.73	0.0403	P	0.3
4	☐	125.000	137.518	1271715.00	0.0986	P	0.4
5	☐	250.000	270.582	2461246.69	0.1939	P	1.0
6	☐	500.000	516.540	4555605.01	0.3702	P	1.1
7	☐	1000.000	984.706	8643033.09	0.7057	A	0.8
8	☐			2264.13	0.0002	P	9.6

$$y = 7.1664\text{E-}004 * x + 1.0641\text{E-}006$$

$$R = 0.9995$$

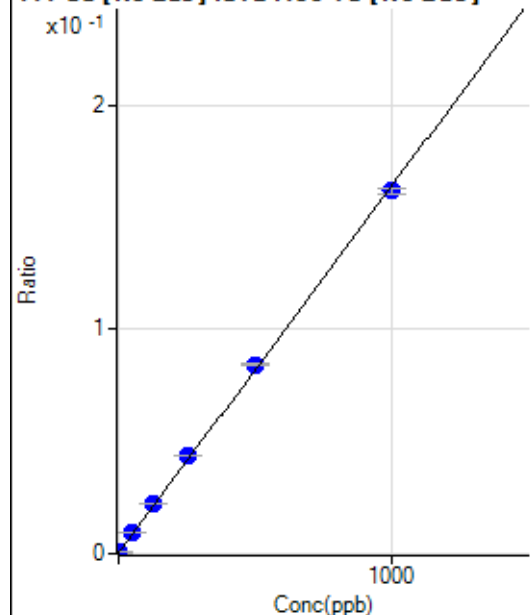
$$DL = 0.00312$$

$$BEC = 0.001485$$

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	3525.44	0.0003	P	1.4
2	☐	1.000	1.208	6022.27	0.0005	P	1.8
3	☐	50.000	54.627	118537.97	0.0092	P	1.0
4	☐	125.000	134.640	287419.16	0.0223	P	1.3
5	☐	250.000	264.559	552245.24	0.0435	P	0.7
6	☐	500.000	514.583	1038348.68	0.0844	P	0.9
7	☐	1000.000	987.632	1980076.80	0.1617	P	1.7
8	☐			3538.82	0.0003	P	2.2

$$y = 1.6344\text{E-}004 * x + 2.6929\text{E-}004$$

$$R = 0.9997$$

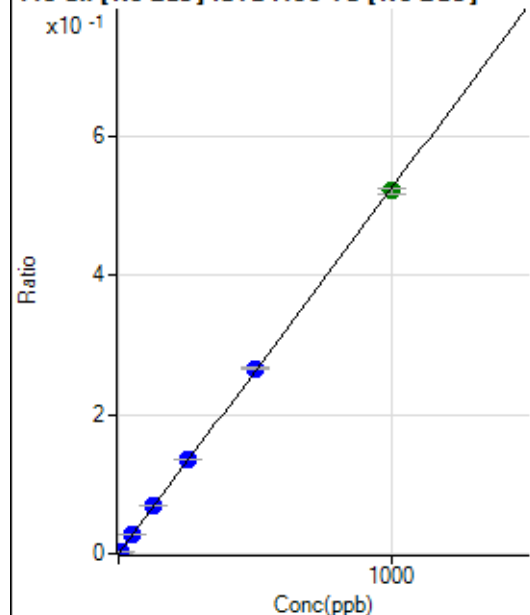
$$DL = 0.07135$$

$$BEC = 1.648$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	925.06	0.0001	P	3.0
2	☐	5.000	5.191	36060.52	0.0028	P	0.9
3	☐	50.000	52.905	358689.00	0.0278	P	0.1
4	☐	125.000	131.668	892397.05	0.0692	P	0.5
5	☐	250.000	258.548	1722855.31	0.1357	P	0.2
6	☐	500.000	507.430	3277451.12	0.2663	P	1.3
7	☐	1000.000	993.168	6382550.71	0.5212	A	1.7
8	☐			3450.52	0.0003	P	6.4

$$y = 5.2469\text{E-}004 * x + 7.0665\text{E-}005$$

$$R = 0.9999$$

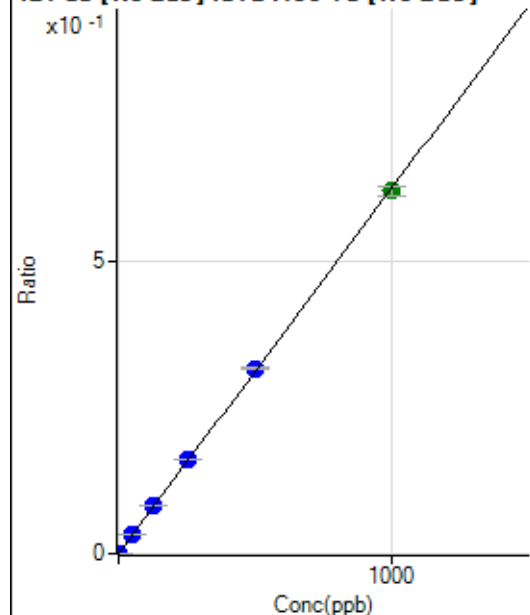
$$DL = 0.01229$$

$$BEC = 0.1347$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	125.00	0.0000	P	0.8
2	☐	2.000	2.067	16760.29	0.0013	P	3.1
3	☐	50.000	52.446	421847.92	0.0327	P	0.5
4	☐	125.000	130.426	1050158.47	0.0814	P	0.4
5	☐	250.000	259.156	2052456.86	0.1617	P	0.5
6	☐	500.000	506.412	3888443.01	0.3160	P	1.1
7	☐	1000.000	993.704	7592140.53	0.6200	A	2.3
8	☐			5434.52	0.0005	P	1.1

$$y = 6.2390\text{E-}004 * x + 9.5478\text{E-}006$$

$$R = 0.9999$$

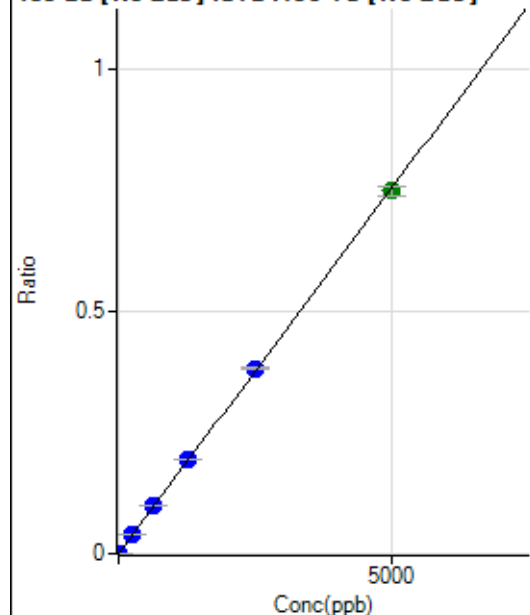
$$DL = 0.0003563$$

$$BEC = 0.0153$$

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	15.1
2	☐	10.000	10.631	20740.84	0.0016	P	1.9
3	☐	250.000	262.879	511582.58	0.0397	P	0.7
4	☐	625.000	652.895	1272028.36	0.0986	P	0.3
5	☐	1250.000	1291.522	2474987.58	0.1950	P	1.3
6	☐	2500.000	2538.180	4716154.14	0.3832	P	1.1
7	☐	5000.000	4966.398	9181653.24	0.7498	A	2.6
8	☐			2675.33	0.0002	P	2.3

$$y = 1.5098\text{E-}004 * x + 2.3320\text{E-}006$$

$$R = 0.9999$$

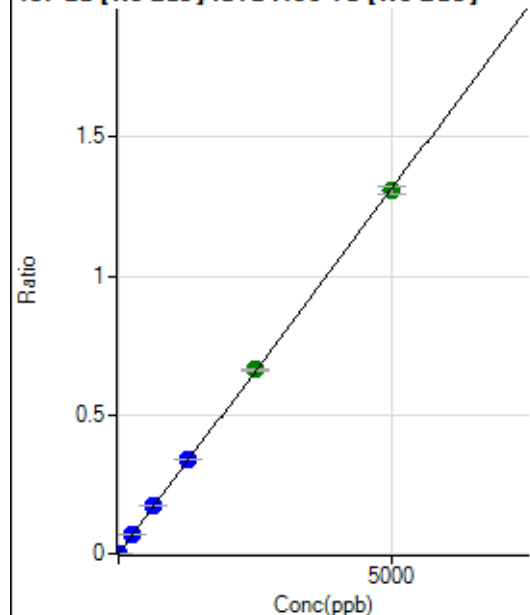
$$DL = 0.00701$$

$$BEC = 0.01545$$

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	52.78	0.0000	P	18.3
2	☐	10.000	10.548	35779.84	0.0028	P	0.2
3	☐	250.000	265.031	896731.73	0.0696	P	0.4
4	☐	625.000	652.655	2210755.37	0.1713	P	1.2
5	☐	1250.000	1298.510	4326629.70	0.3409	P	0.7
6	☐	2500.000	2519.529	8139763.64	0.6614	A	0.9
7	☐	5000.000	4973.898	15988681.44	1.3057	A	2.2
8	☐			4770.40	0.0004	P	9.2

$$y = 2.6250\text{E-}004 * x + 4.0314\text{E-}006$$

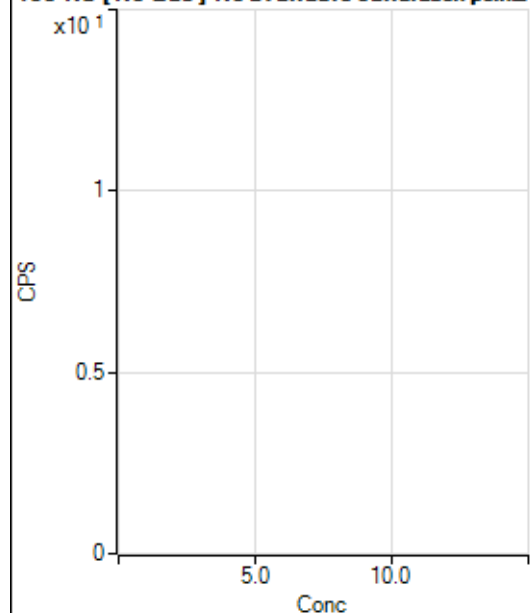
$$R = 0.9999$$

$$DL = 0.008422$$

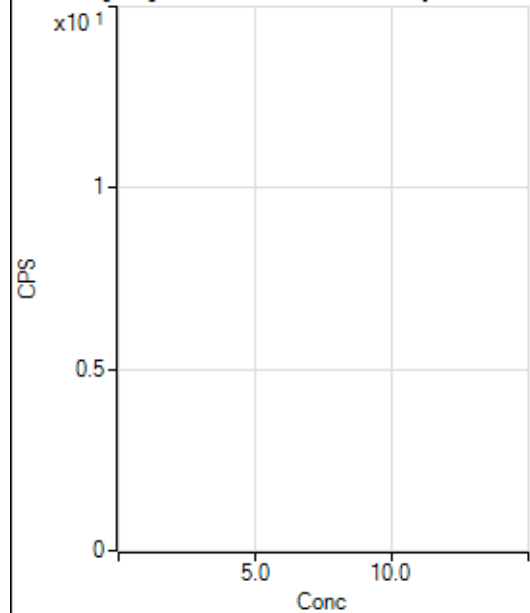
$$BEC = 0.01536$$

Weight: <None>

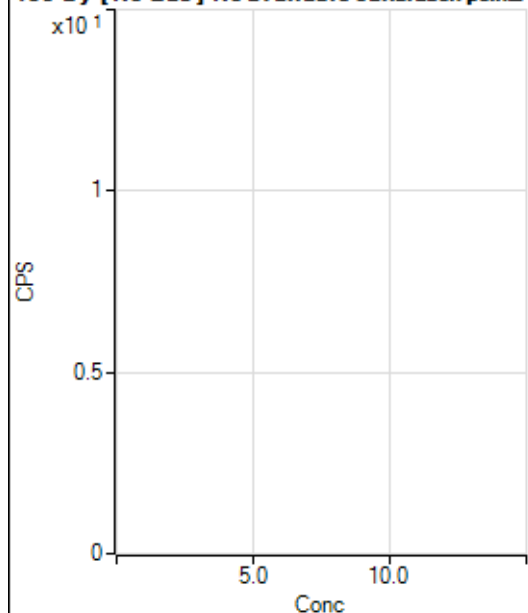
Min Conc: 0

150 Nd [No Gas] No available calibration points

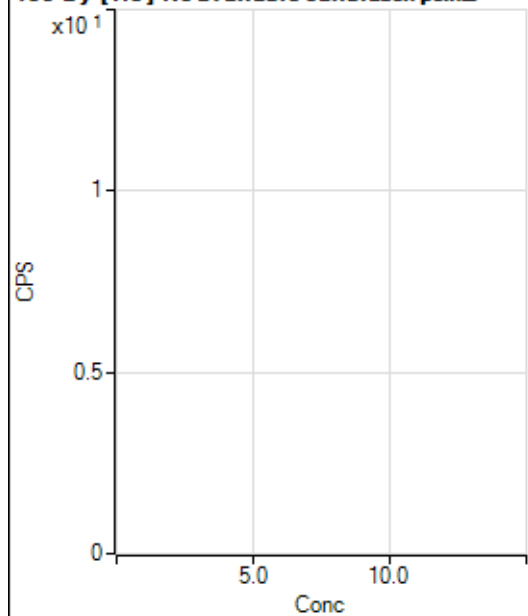
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			2.22		P	173.
3	☐			44.45		P	56.8
4	☐			91.12		P	18.4
5	☐			157.78		P	27.2
6	☐			333.34		P	20.8
7	☐			684.48		P	10.8
8	☐			40.00		P	44.1

150 Nd [He] No available calibration points

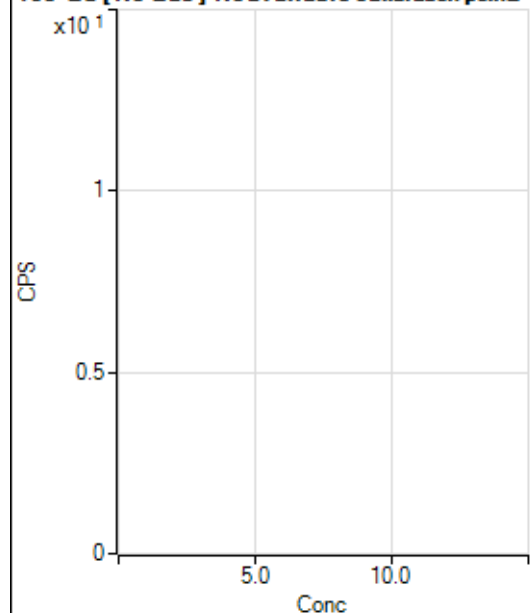
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			1.11		P	173.
3	☐			14.45		P	48.0
4	☐			21.11		P	32.9
5	☐			31.11		P	22.3
6	☐			73.33		P	27.6
7	☐			101.11		P	39.3
8	☐			7.78		P	24.7

156 Dy [No Gas] No available calibration points

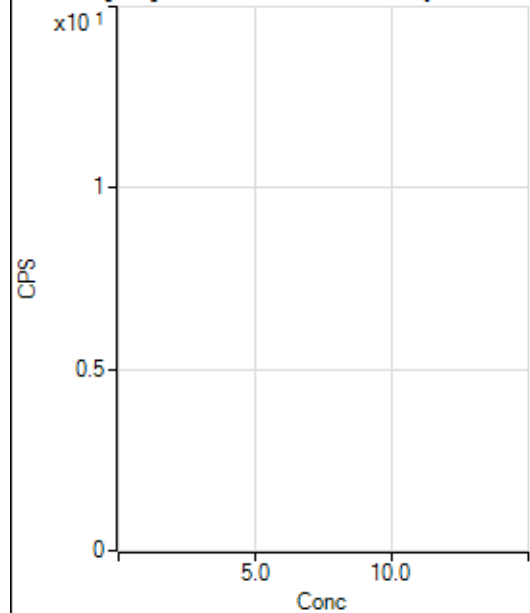
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	100.
2	☐			5.56		P	173.
3	☐			44.44		P	75.8
4	☐			100.00		P	30.0
5	☐			180.56		P	18.7
6	☐			283.34		P	13.5
7	☐			680.59		P	12.1
8	☐			1466.79		P	2.6

156 Dy [He] No available calibration points

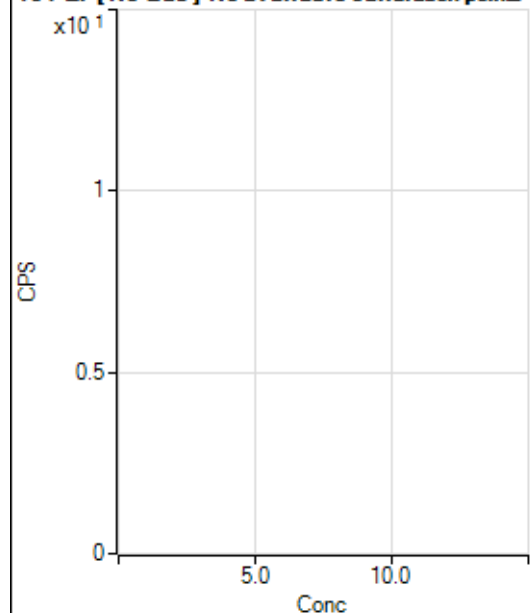
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	69.3
2	☐			5.56		P	34.7
3	☐			32.22		P	12.0
4	☐			52.22		P	38.5
5	☐			120.00		P	18.2
6	☐			201.11		P	2.5
7	☐			398.90		P	9.2
8	☐			956.71		P	5.9

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

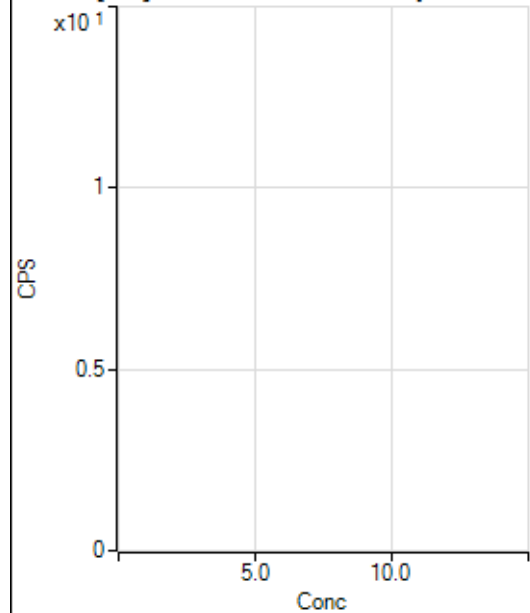
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			94.45		P	5.1
2	☐			66.67		P	25.0
3	☐			102.78		P	40.8
4	☐			141.67		P	11.8
5	☐			250.01		P	20.8
6	☐			347.24		P	9.7
7	☐			641.70		P	0.0
8	☐			1594.58		P	13.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			92.22		P	9.1
2	☐			110.00		P	15.7
3	☐			133.34		P	9.0
4	☐			145.56		P	4.8
5	☐			226.67		P	17.3
6	☐			276.67		P	6.0
7	☐			475.57		P	8.7
8	☐			1135.62		P	9.4

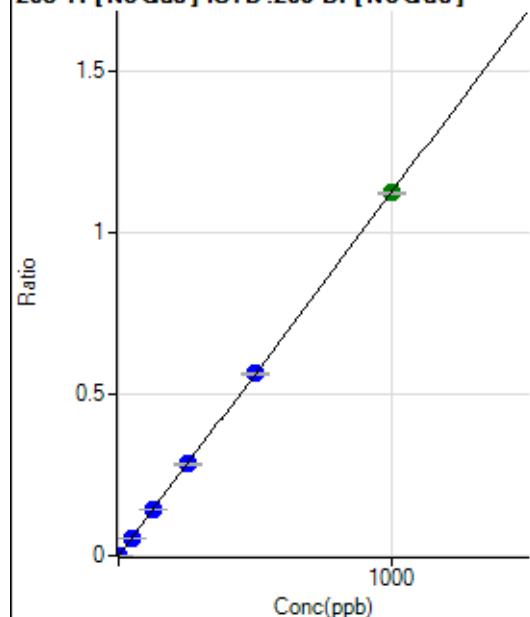
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.12		P	24.4
2	☐			125.00		P	40.0
3	☐			86.11		P	11.2
4	☐			127.78		P	19.9
5	☐			136.12		P	30.8
6	☐			136.12		P	52.1
7	☐			186.12		P	29.8
8	☐			280.56		P	9.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	26.2
2	☐			64.44		P	13.0
3	☐			62.22		P	32.7
4	☐			52.22		P	30.2
5	☐			63.33		P	5.3
6	☐			70.00		P	29.7
7	☐			111.11		P	8.7
8	☐			186.67		P	4.7

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	497.25	0.0001	P	17.4
2	☐	1.000	0.988	10671.20	0.0012	P	0.9
3	☐	50.000	49.628	506879.72	0.0559	P	0.6
4	☐	125.000	125.660	1273829.13	0.1414	P	1.3
5	☐	250.000	252.250	2514825.84	0.2839	P	1.2
6	☐	500.000	502.069	4852656.36	0.5650	P	1.1
7	☐	1000.000	998.339	9509257.94	1.1234	A	0.5
8	☐			3934.02	0.0005	P	12.7

$$y = 0.0011 * x + 5.4410E-005$$

$$R = 1.0000$$

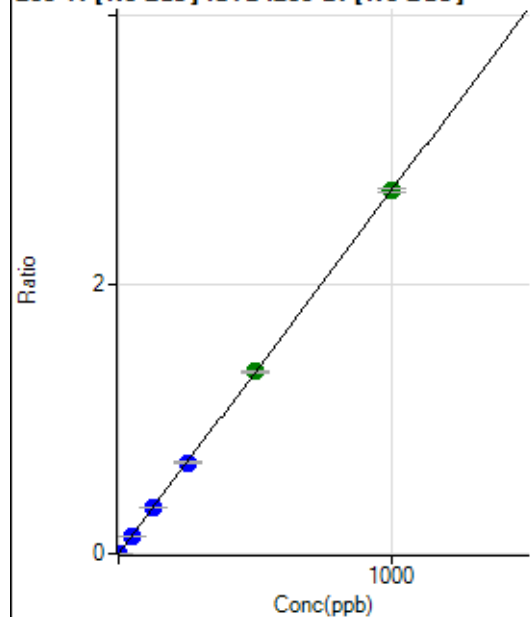
$$DL = 0.02527$$

$$BEC = 0.04836$$

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	1136.19	0.0001	P	11.2
2	☐	1.000	0.999	25808.73	0.0028	P	2.2
3	☐	50.000	49.771	1219870.60	0.1345	P	0.7
4	☐	125.000	125.594	3055418.47	0.3393	P	1.1
5	☐	250.000	250.628	5996606.12	0.6769	P	0.8
6	☐	500.000	501.296	11627931.25	1.3538	A	0.8
7	☐	1000.000	999.132	22838524.30	2.6982	A	1.0
8	☐			9486.94	0.0012	P	10.5

$$y = 0.0027 * x + 1.2428E-004$$

$$R = 1.0000$$

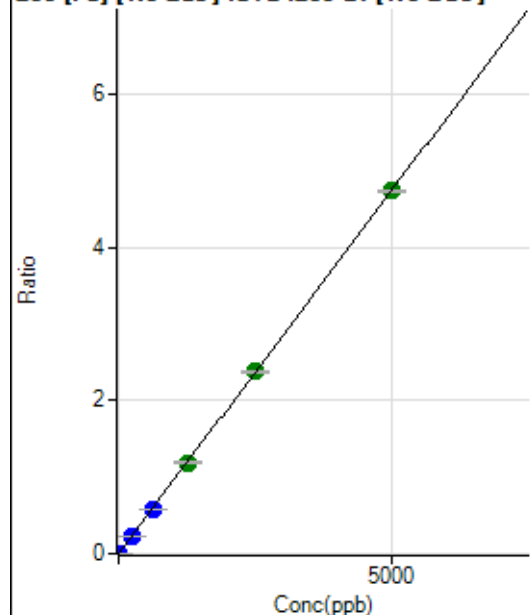
$$DL = 0.01545$$

$$BEC = 0.04602$$

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	905.61	0.0001	P	9.2
2	☐	1.000	0.973	9347.86	0.0010	P	3.3
3	☐	250.000	241.326	2075961.39	0.2289	P	0.7
4	☐	625.000	611.095	5219220.66	0.5796	P	0.6
5	☐	1250.000	1253.757	10532198.38	1.1890	A	1.4
6	☐	2500.000	2506.283	20412365.27	2.3766	A	1.5
7	☐	5000.000	4998.091	40119280.99	4.7394	A	0.2
8	☐			23810.42	0.0031	P	2.5

$$y = 9.4823\text{E-}004 * x + 9.9049\text{E-}005$$

$$R = 1.0000$$

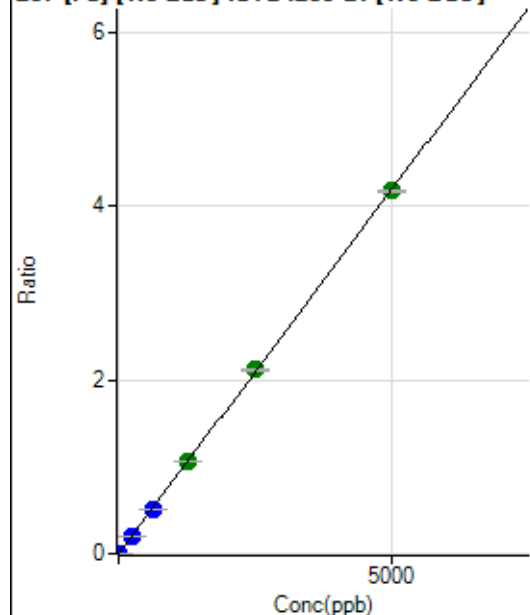
$$DL = 0.02869$$

$$BEC = 0.1045$$

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	820.41	0.0001	P	10.2
2	☐	1.000	0.948	8089.60	0.0009	P	1.3
3	☐	250.000	242.981	1847555.70	0.2037	P	1.3
4	☐	625.000	610.922	4611772.33	0.5121	P	1.3
5	☐	1250.000	1259.066	9349372.78	1.0554	A	0.6
6	☐	2500.000	2528.454	18202702.03	2.1193	A	0.9
7	☐	5000.000	4985.617	35373613.98	4.1788	A	0.4
8	☐			21367.35	0.0028	P	1.0

$$y = 8.3815\text{E-}004 * x + 8.9741\text{E-}005$$

$$R = 1.0000$$

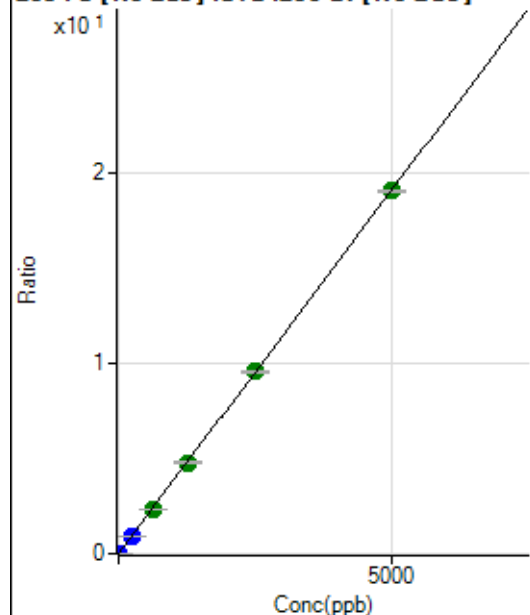
$$DL = 0.03264$$

$$BEC = 0.1071$$

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	3848.45	0.0004	P	6.0
2	☐	1.000	0.968	37645.66	0.0041	P	1.3
3	☐	250.000	242.615	8403917.13	0.9268	P	0.7
4	☐	625.000	618.356	21264759.56	2.3614	A	1.1
5	☐	1250.000	1254.497	42435368.43	4.7903	A	0.9
6	☐	2500.000	2511.648	82370440.50	9.5903	A	0.9
7	☐	5000.000	4994.252	161420774.6	19.0693	A	0.2
8	☐			97300.03	0.0126	P	1.9

$$y = 0.0038 * x + 4.2091E-004$$

$$R = 1.0000$$

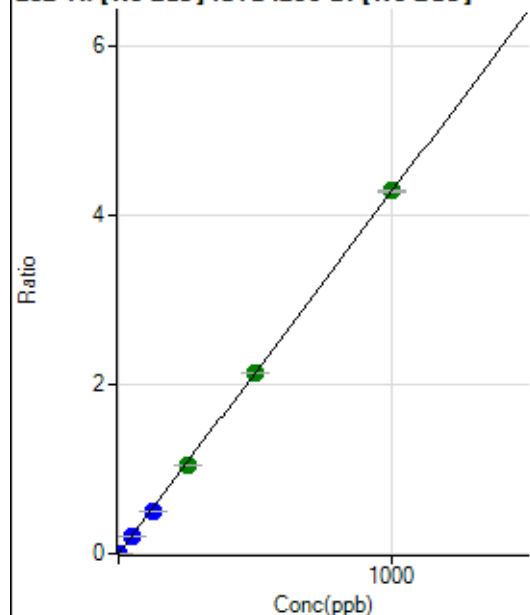
$$DL = 0.01983$$

$$BEC = 0.1102$$

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	387.05	0.0000	P	17.2
2	☐	1.000	-0.002	316.68	0.0000	P	25.0
3	☐	50.000	46.544	1802241.46	0.1987	P	0.4
4	☐	125.000	118.263	4546954.15	0.5049	P	1.6
5	☐	250.000	244.219	9236799.74	1.0427	A	0.6
6	☐	500.000	499.525	18317367.54	2.1326	A	0.1
7	☐	1000.000	1002.699	36235962.85	4.2808	A	0.7
8	☐			3504.23	0.0005	P	6.2

$$y = 0.0043 * x + 4.2350E-005$$

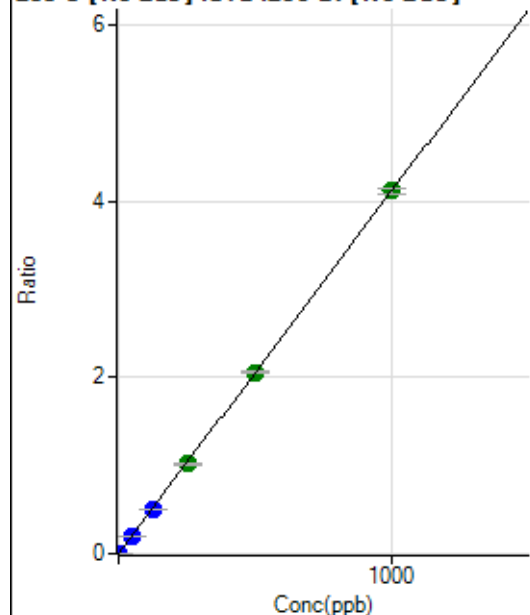
$$R = 1.0000$$

$$DL = 0.00513$$

$$BEC = 0.00992$$

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	66.0
2	☐	1.000	0.914	34409.83	0.0038	P	1.5
3	☐	50.000	47.780	1781058.85	0.1964	P	0.4
4	☐	125.000	121.586	4501115.81	0.4998	P	0.5
5	☐	250.000	247.357	9007519.12	1.0168	A	0.7
6	☐	500.000	500.864	17683654.21	2.0589	A	0.9
7	☐	1000.000	1000.766	34824526.82	4.1138	A	1.3
8	☐			3822.89	0.0005	P	3.9

$$y = 0.0041 * x + 2.1292E-006$$

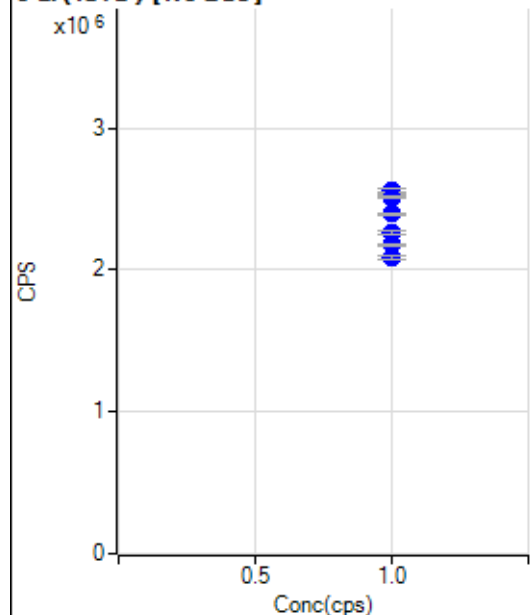
$$R = 1.0000$$

$$DL = 0.001025$$

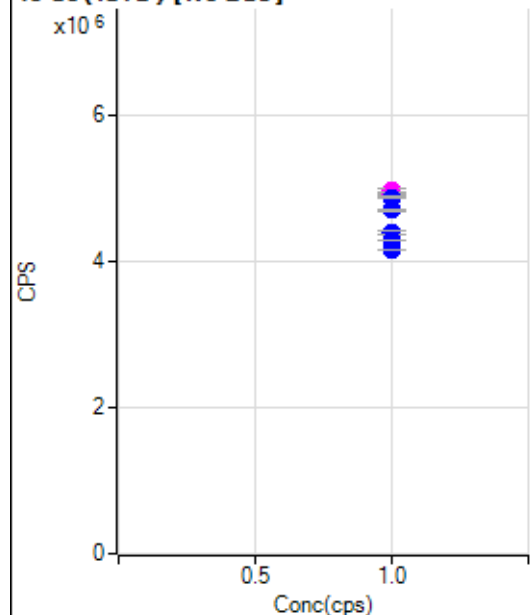
$$BEC = 0.000518$$

Weight: <None>

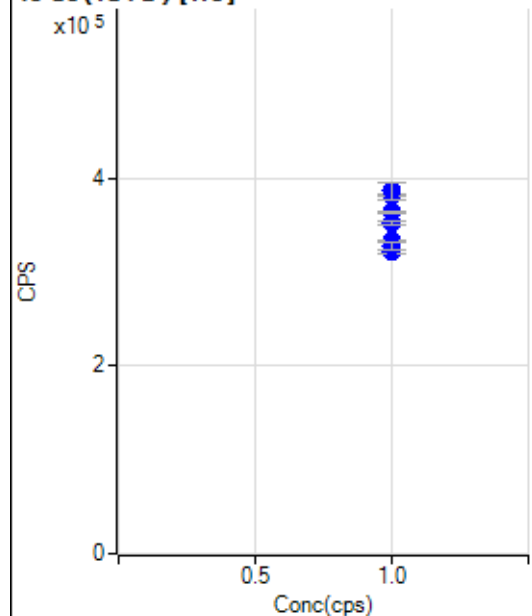
Min Conc: 0

6 Li (ISTD) [No Gas]

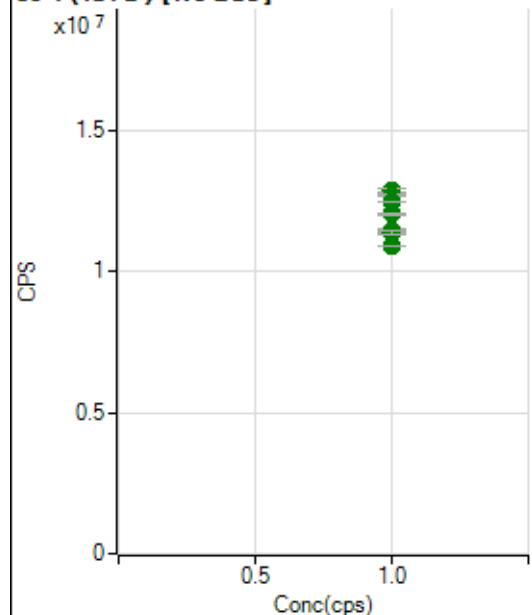
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2508747.62		P	0.4
2	☐	1.000		2543217.91		P	0.6
3	☐	1.000		2557223.92		P	1.0
4	☐	1.000		2513624.91		P	0.4
5	☐	1.000		2396687.67		P	0.5
6	☐	1.000		2265710.82		P	0.9
7	☐	1.000		2175805.07		P	1.1
8	☐	1.000		2081953.86		P	1.2

45 Sc (ISTD) [No Gas]

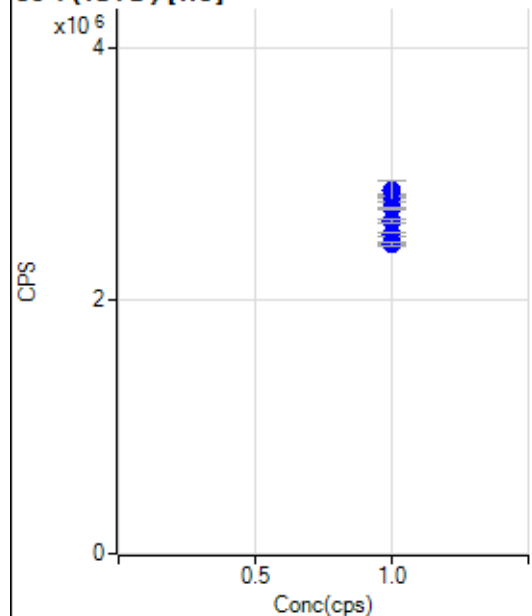
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4922677.91		A	0.8
2	☐	1.000		4968786.25		M	1.5
3	☐	1.000		4931877.01		M	1.0
4	☐	1.000		4881195.07		P	0.5
5	☐	1.000		4701561.21		P	0.0
6	☐	1.000		4397564.17		P	0.9
7	☐	1.000		4294873.69		P	0.4
8	☐	1.000		4157969.35		P	0.2

45 Sc (ISTD) [He]

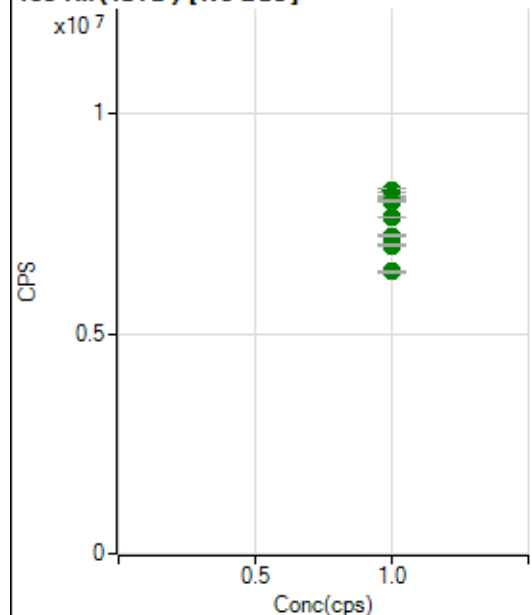
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		380354.72		P	0.2
2	☐	1.000		381142.89		P	0.6
3	☐	1.000		386116.02		P	5.1
4	☐	1.000		363462.95		P	1.0
5	☐	1.000		352024.96		P	1.3
6	☐	1.000		334254.64		P	0.2
7	☐	1.000		321854.83		P	1.1
8	☐	1.000		327446.03		P	1.9

89 Y (ISTD) [No Gas]

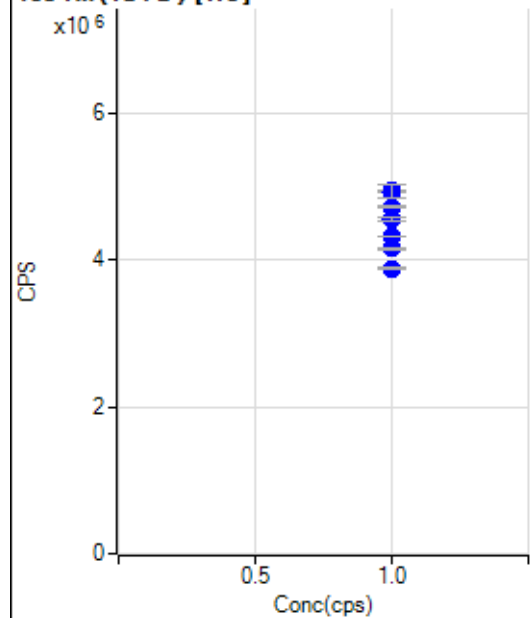
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12782816.20		A	0.4
2	☐	1.000		12843698.98		A	0.9
3	☐	1.000		12673424.39		A	0.6
4	☐	1.000		12466693.43		A	0.4
5	☐	1.000		12027121.07		A	0.3
6	☐	1.000		11437298.44		A	0.7
7	☐	1.000		11360820.25		A	1.0
8	☐	1.000		10901185.25		A	0.4

89 Y (ISTD) [He]

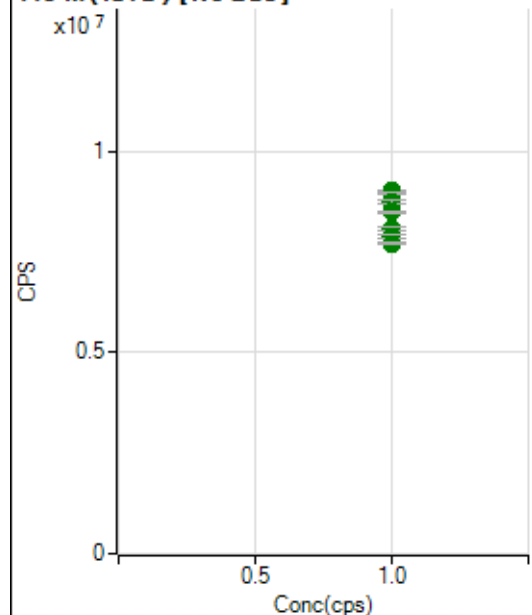
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2810574.19		P	0.3
2	☐	1.000		2829410.03		P	0.5
3	☐	1.000		2866255.55		P	5.9
4	☐	1.000		2728258.19		P	0.3
5	☐	1.000		2633796.07		P	1.1
6	☐	1.000		2524502.50		P	0.8
7	☐	1.000		2454991.85		P	1.1
8	☐	1.000		2444080.45		P	1.7

103 Rh (ISTD) [No Gas]

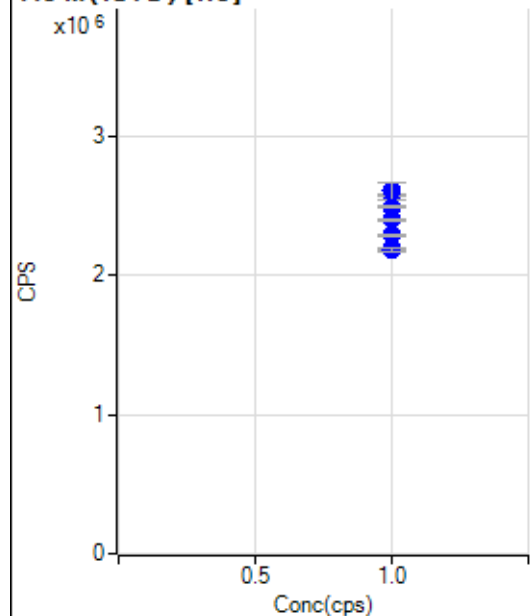
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8211617.65		A	0.2
2	☐	1.000		8249095.99		A	1.1
3	☐	1.000		8118087.93		A	0.7
4	☐	1.000		8007566.69		A	0.5
5	☐	1.000		7646222.04		A	0.2
6	☐	1.000		7235364.89		A	0.4
7	☐	1.000		6999609.83		A	0.6
8	☐	1.000		6412744.77		A	0.4

103 Rh (ISTD) [He]

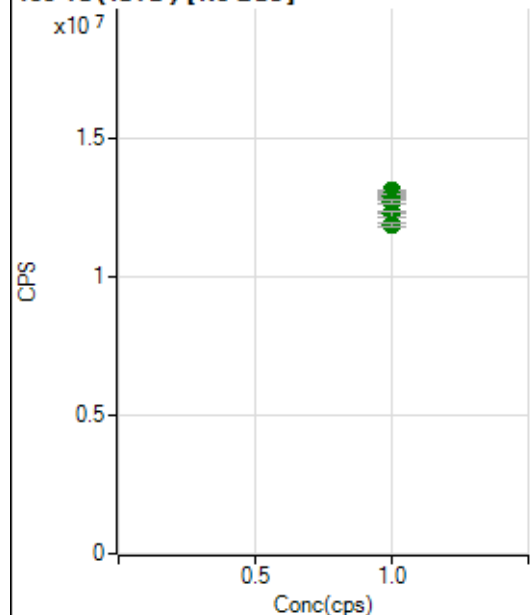
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4929320.17		P	0.5
2	☐	1.000		4940554.51		P	0.4
3	☐	1.000		4927976.91		P	3.7
4	☐	1.000		4722221.46		P	0.2
5	☐	1.000		4550583.68		P	0.9
6	☐	1.000		4324267.72		P	0.4
7	☐	1.000		4150625.74		P	0.8
8	☐	1.000		3880096.47		P	0.7

115 In (ISTD) [No Gas]

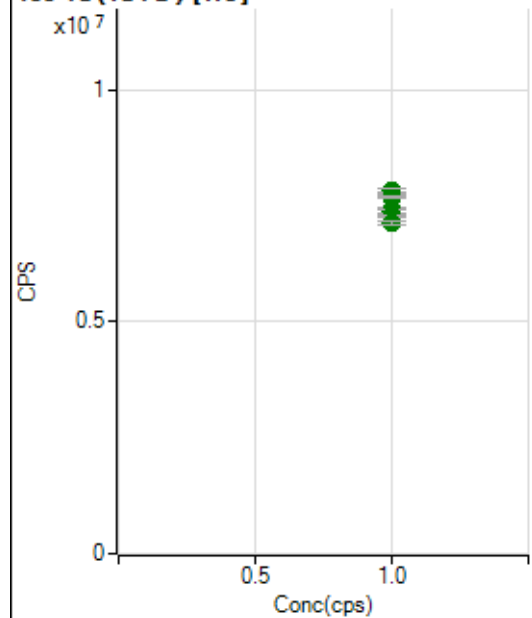
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9012337.95		A	0.3
2	☐	1.000		9012270.40		A	0.7
3	☐	1.000		8953383.26		A	0.6
4	☐	1.000		8742840.62		A	0.7
5	☐	1.000		8482399.48		A	1.0
6	☐	1.000		8068090.07		A	1.0
7	☐	1.000		7889568.72		A	1.1
8	☐	1.000		7699749.69		A	0.6

115 In (ISTD) [He]

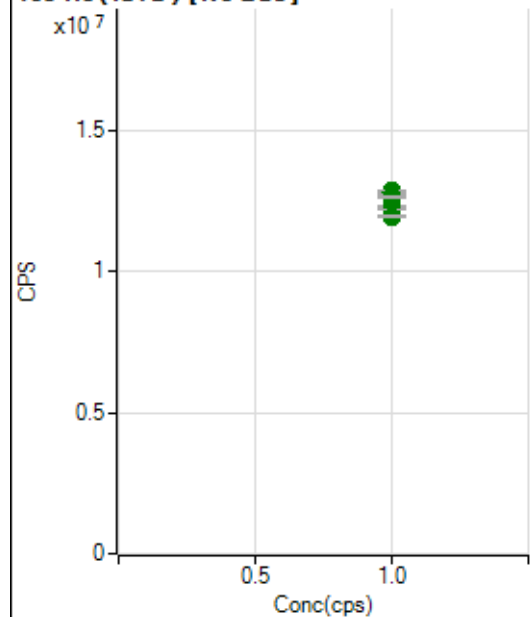
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2580634.07		P	0.2
2	☐	1.000		2576634.20		P	0.3
3	☐	1.000		2604472.88		P	4.6
4	☐	1.000		2485773.35		P	0.5
5	☐	1.000		2395466.79		P	1.0
6	☐	1.000		2285472.06		P	0.8
7	☐	1.000		2188733.01		P	0.9
8	☐	1.000		2181024.29		P	1.1

159 Tb (ISTD) [No Gas]

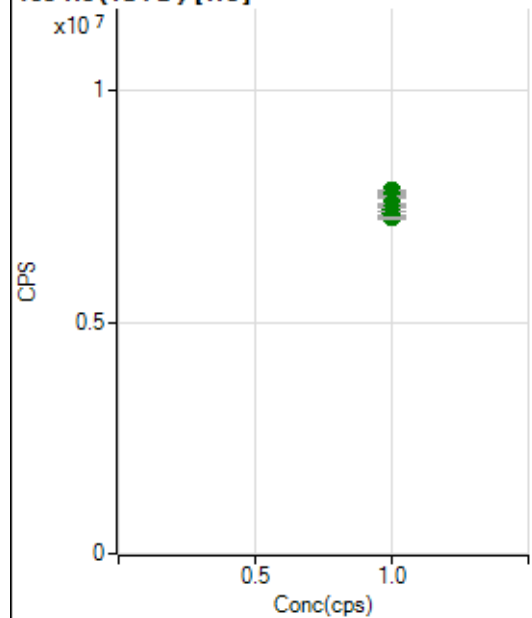
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13092526.06		A	0.8
2	☐	1.000		12903147.31		A	0.9
3	☐	1.000		12888820.50		A	0.8
4	☐	1.000		12904274.11		A	0.7
5	☐	1.000		12693370.51		A	0.7
6	☐	1.000		12307384.40		A	0.7
7	☐	1.000		12248925.37		A	1.8
8	☐	1.000		11873542.05		A	1.1

159 Tb (ISTD) [He]

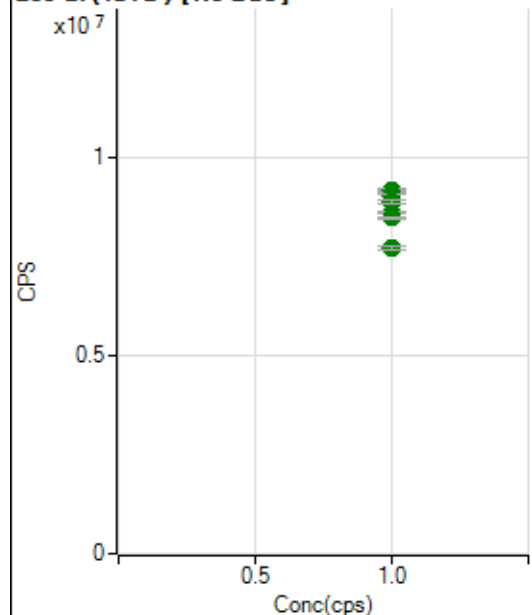
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7754123.56		A	0.6
2	☐	1.000		7779930.02		A	0.4
3	☐	1.000		7815108.49		A	1.7
4	☐	1.000		7675897.39		A	0.5
5	☐	1.000		7427426.07		A	0.6
6	☐	1.000		7387203.78		A	1.0
7	☐	1.000		7274699.47		A	0.9
8	☐	1.000		7137503.30		A	1.0

165 Ho (ISTD) [No Gas]

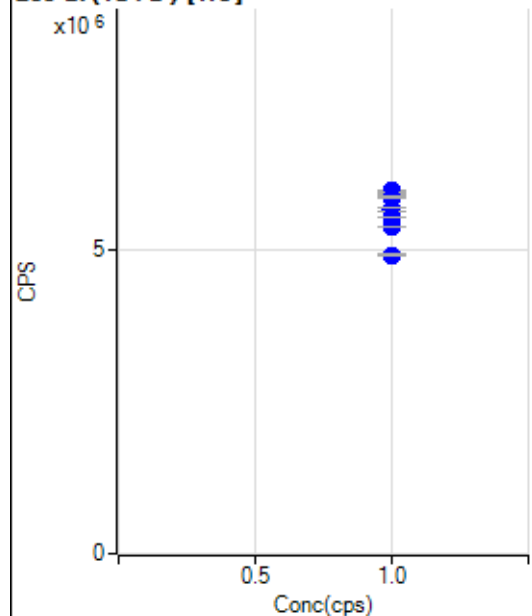
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12837513.28		A	0.6
2	☐	1.000		12737661.20		A	0.6
3	☐	1.000		12792022.45		A	1.1
4	☐	1.000		12648662.45		A	1.1
5	☐	1.000		12604811.20		A	0.6
6	☐	1.000		12267014.82		A	0.4
7	☐	1.000		12186963.01		A	0.0
8	☐	1.000		11933641.07		A	0.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7831090.85		A	0.2
2	☐	1.000		7763535.23		A	0.2
3	☐	1.000		7815433.21		A	0.3
4	☐	1.000		7710244.19		A	0.3
5	☐	1.000		7535983.15		A	0.5
6	☐	1.000		7438708.50		A	1.1
7	☐	1.000		7346545.45		A	0.9
8	☐	1.000		7257382.25		A	0.7

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9145467.50		A	0.7
2	☐	1.000		9149160.98		A	0.9
3	☐	1.000		9068072.92		A	0.4
4	☐	1.000		9006031.26		A	1.4
5	☐	1.000		8859202.99		A	1.1
6	☐	1.000		8589198.28		A	0.7
7	☐	1.000		8464931.05		A	0.8
8	☐	1.000		7717608.15		A	1.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5971048.11		P	0.7
2	☐	1.000		5982388.94		P	0.7
3	☐	1.000		5938529.84		P	0.6
4	☐	1.000		5873639.98		P	0.3
5	☐	1.000		5691351.44		P	1.1
6	☐	1.000		5552160.33		P	0.2
7	☐	1.000		5394422.21		P	0.2
8	☐	1.000		4924955.83		P	1.0

US EPA Tune Check Sample Report

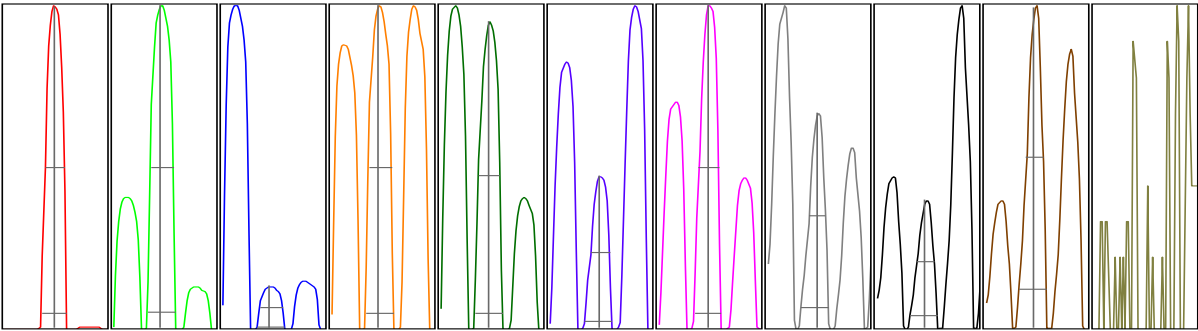
Batch Folder C:\Agilent\ICPMH\1\DATA\P7072921MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	6947	0.27	5.00	
24	90809	0.20	5.00	
25	12010	0.42	5.00	
26	13488	0.38	5.00	
59	17861	0.35	5.00	
113	11566	0.62	5.00	
115	35207	1.79	5.00	
206	18751	0.65	5.00	
207	16436	0.54	5.00	
208	39447	0.84	5.00	
220	0	60.86		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	6954	6958	6953	6955	6914
24	90859	91098	90714	90670	90705
25	12070	12059	11984	11974	11964
26	13443	13539	13538	13493	13428
59	17853	17952	17797	17889	17811
113	11607	11632	11616	11488	11487
115	36093	35471	35254	34662	34554
206	18891	18814	18807	18615	18630
207	16416	16449	16568	16423	16323
208	39399	39833	39673	39366	38964
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	12328	9.00	8.9 - 9.1		0.735	0.900	
24	143606	23.90	23.9 - 24.1		0.825	0.900	
25	18961	24.90	24.9 - 25.1		0.793	0.900	
26	21544	25.90	25.9 - 26.1		0.826	0.900	
59	30125	58.95	58.9 - 59.1		0.821	0.900	
113	20807	113.00	112.9 - 113.1		0.785	0.900	
115	62742	115.00	114.9 - 115.1		0.782	0.900	
206	36273	206.00	205.9 - 206.1		0.793	0.900	
207	30429	206.95	206.9 - 207.1		0.785	0.900	
208	75945	207.95	207.9 - 208.1		0.791	0.900	
220	0	219.60	-		0.175		

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	9.7	V	Deflect	13.2	V
Extract 2	-140.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-80	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	190	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	6205	0.30	
89	27824	0.28	
205	18379	0.13	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	6193	6211	6199	6188	6234
89	27773	27809	27744	27852	27943
205	18363	18376	18414	18354	18390

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	9.4	V	Deflect	1.8	V
Extract 2	-155.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-85	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			