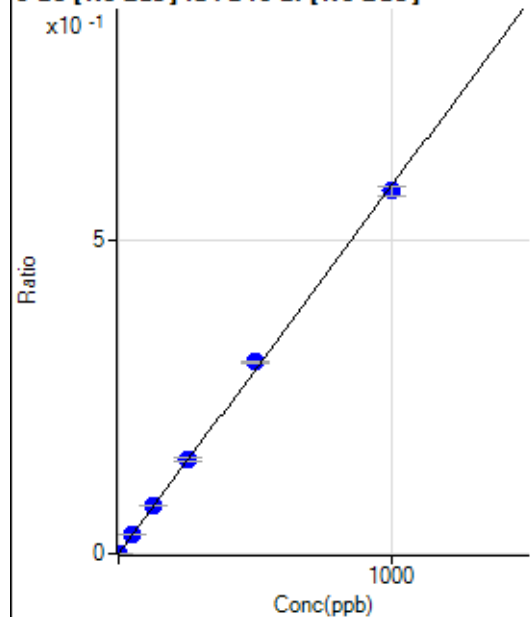


Calibration for 005CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P7053123-MS.b\
 Analysis File: P7053123-MS.batch.bin
 DA Date-Time: 2023-05-31 16:47:03
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-05-31 11:24:32
2	005CALS.d	S01	2023-05-31 11:27:47
3	006CALS.d	S02	2023-05-31 11:31:05
4	007CALS.d	S03	2023-05-31 11:34:21
5	008CALS.d	S04	2023-05-31 11:37:36
6	009CALS.d	S05	2023-05-31 11:40:43
7	010CALS.d	S06	2023-05-31 11:43:43
8	011CALS.d	S07	2023-05-31 11:46:35
9	012CALS.d	S08	2023-05-31 11:49:25

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	23.33	0.0000	P	51.5
2	☐	0.100	0.103	82.22	0.0001	P	9.4
3	☐	1.000	1.083	653.35	0.0007	P	5.6
4	☐	50.000	53.254	32419.33	0.0313	P	2.0
5	☐	125.000	132.560	77893.82	0.0780	P	0.9
6	☐	250.000	256.512	149185.81	0.1509	P	3.5
7	☐	500.000	521.083	290447.90	0.3065	P	1.7
8	☐	1000.000	986.723	549244.93	0.5804	P	2.6
9	☐			474.45	0.0006	P	20.5

$$y = 5.8818\text{E-}004 * x + 2.2827\text{E-}005$$

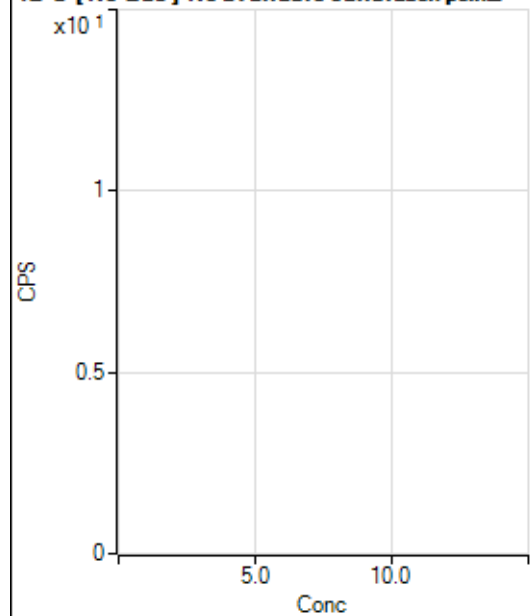
$$R = 0.9996$$

$$DL = 0.05995$$

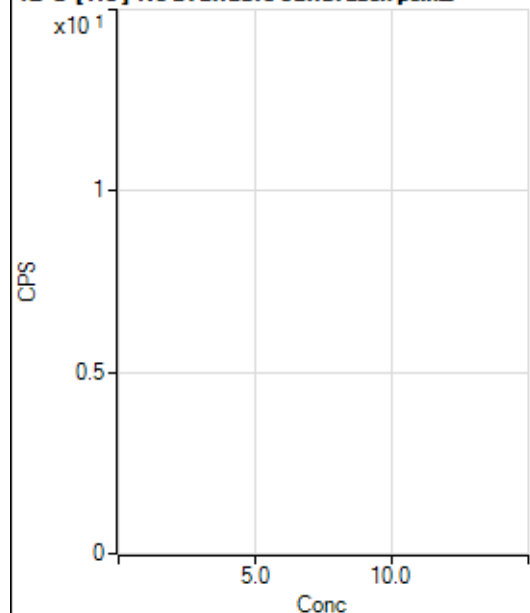
$$BEC = 0.03881$$

Weight: <None>

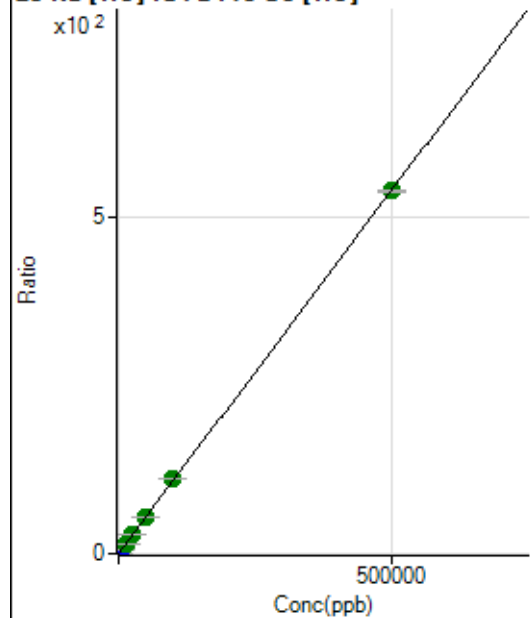
Min Conc: 0

12 C [No Gas] No available calibration points

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5559.95	0.0334	P	2.8
2	☐	50.000	47.768	13924.17	0.0850	P	1.1
3	☐	500.000	489.851	92061.84	0.5626	P	0.4
4	☐	5000.000	5472.384	968988.08	5.9455	P	0.5
5	☐	12500.000	12671.424	2223147.90	13.7231	A	1.0
6	☐	25000.000	25275.283	4338420.53	27.3398	A	0.5
7	☐	50000.000	51197.015	8587618.48	55.3446	A	0.3
8	☐	100000.00	102146.87	16597594.06	110.3888	A	0.2
9	☐	500000.00	499428.16	71169037.27	539.5957	A	0.4

$$y = 0.0011 * x + 0.0334$$

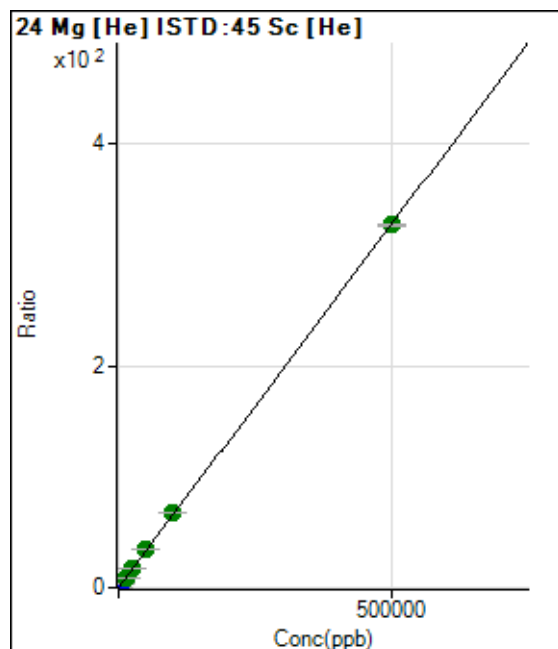
$$R = 1.0000$$

$$DL = 2.571$$

$$BEC = 30.91$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	396.68	0.0024	P	6.1
2	☐	50.000	49.120	5659.98	0.0345	P	3.0
3	☐	500.000	503.896	54387.79	0.3324	P	0.2
4	☐	5000.000	5536.923	591341.41	3.6284	P	0.9
5	☐	12500.000	13249.453	1406004.02	8.6792	A	0.9
6	☐	25000.000	25966.431	2698796.42	17.0072	A	0.4
7	☐	50000.000	52090.070	5293471.48	34.1150	A	0.7
8	☐	100000.00	103057.47	10147559.02	67.4925	A	1.1
9	☐	500000.00	499107.06	43109995.19	326.8568	A	0.4

$$y = 6.5488\text{E-}004 * x + 0.0024$$

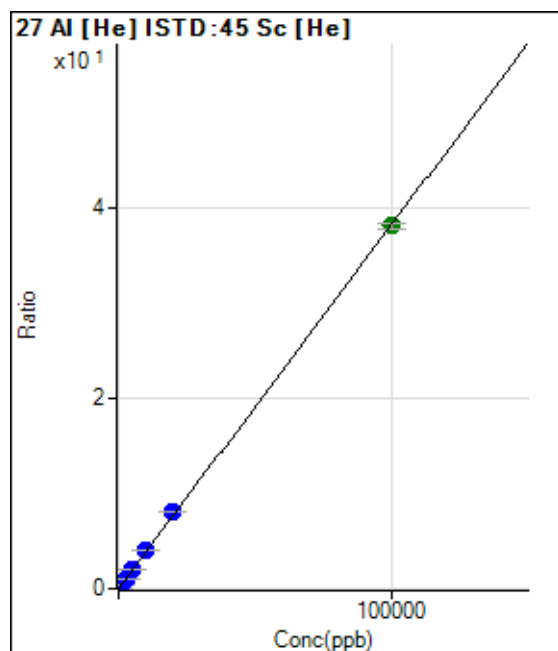
$$R = 1.0000$$

$$DL = 0.6694$$

$$BEC = 3.637$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	104.44	0.0006	P	13.2
2	☒	2.000					
3	☐	20.000	18.128	1238.95	0.0076	P	6.5
4	☐	1000.000	1101.296	68869.03	0.4226	P	0.4
5	☐	2500.000	2613.178	162288.28	1.0018	P	0.5
6	☐	5000.000	5204.178	316492.85	1.9945	P	0.3
7	☐	10000.000	10611.390	630922.52	4.0661	P	0.4
8	☐	20000.000	21187.686	1220599.31	8.1181	P	0.6
9	☐	100000.00	99687.273	5037043.92	38.1932	A	1.6

$$y = 3.8312\text{E-}004 * x + 6.2720\text{E-}004$$

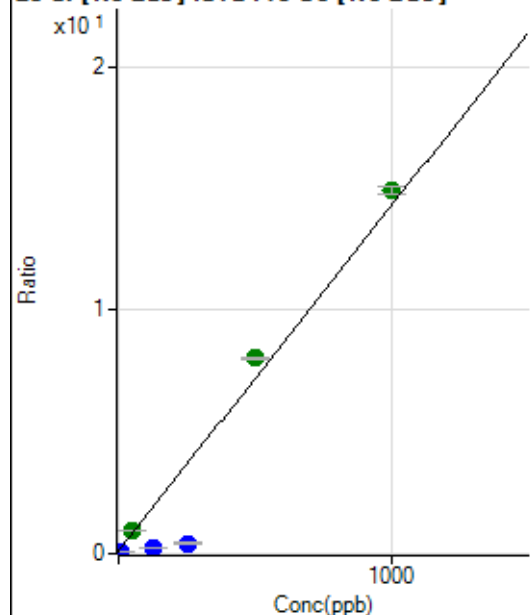
$$R = 0.9999$$

$$DL = 0.649$$

$$BEC = 1.637$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	224531.26	0.1149	P	0.9
2	☐	10.000	-1.334	183116.24	0.0960	P	2.2
3	☐	10.000	-0.856	196566.26	0.1028	P	1.1
4	☐	50.000	58.385	1852512.49	0.9435	A	1.0
5	☐	125.000	10.583	511251.73	0.2651	P	4.4
6	☐	250.000	22.060	812855.07	0.4280	P	5.9
7	☐	500.000	557.275	14907837.56	8.0231	A	1.6
8	☐	1000.000	1042.452	27795761.81	14.9082	A	2.0
9	☐			316248.11	0.1951	P	4.2

$$y = 0.0142 * x + 0.1149$$

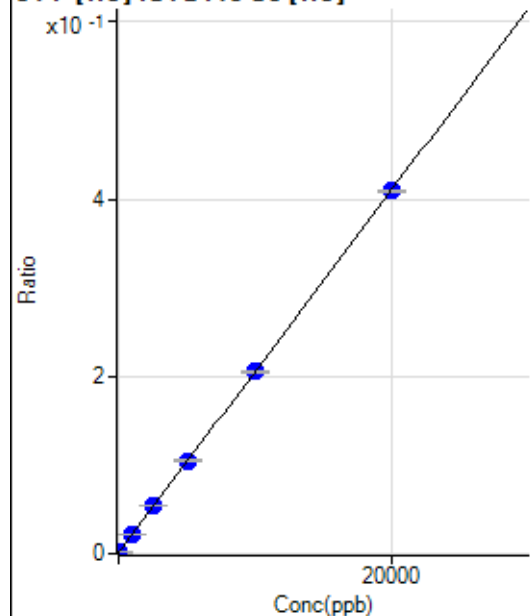
$$R = 0.9720$$

$$DL = 0.2226$$

$$BEC = 8.1$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-10.854	135.56	0.0008	P	3.6
2	☐	0.000	-1.579	164.45	0.0010	P	8.2
3	☐	0.000	12.434	211.12	0.0013	P	7.1
4	☐	1000.000	1023.386	3581.56	0.0220	P	2.3
5	☐	2500.000	2597.171	8777.04	0.0542	P	0.8
6	☐	5000.000	5087.570	16683.62	0.1051	P	2.0
7	☐	10000.000	10015.192	31958.92	0.2060	P	1.2
8	☐	20000.000	19957.196	61555.25	0.4094	P	0.2
9	☐			170.01	0.0013	P	3.8

$$y = 2.0462E-005 * x + 0.0010$$

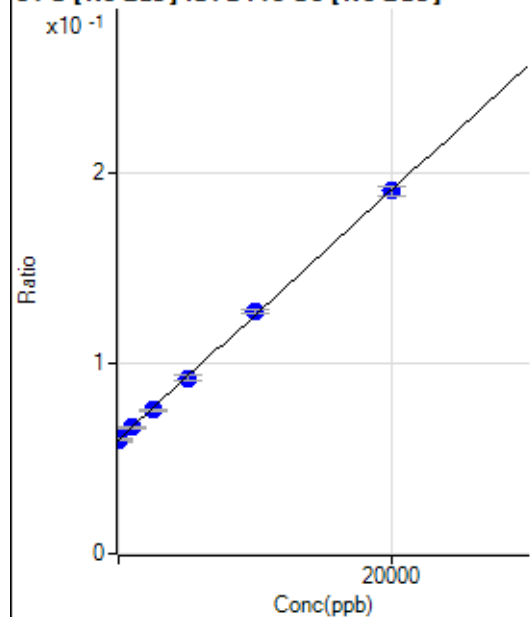
$$R = 1.0000$$

$$DL = 9.941$$

$$BEC = 50.64$$

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	-111.042	116078.74	0.0594	P	1.4
2	☐	0.000	70.588	115623.19	0.0606	P	1.6
3	☐	0.000	40.454	115530.18	0.0604	P	1.4
4	☐	1000.000	930.649	130097.93	0.0663	P	0.8
5	☐	2500.000	2325.281	145445.45	0.0754	P	1.6
6	☐	5000.000	4932.512	175744.50	0.0925	P	3.1
7	☐	10000.000	10244.039	236622.26	0.1273	P	1.0
8	☐	20000.000	19920.160	355717.00	0.1908	P	2.6
9	☐			93669.04	0.0578	P	2.2

$$y = 6.5586E-006 * x + 0.0602$$

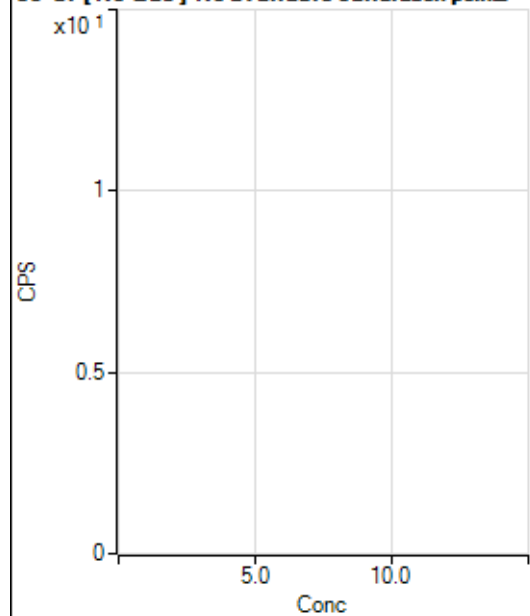
R = 0.9998

DL = 398.8

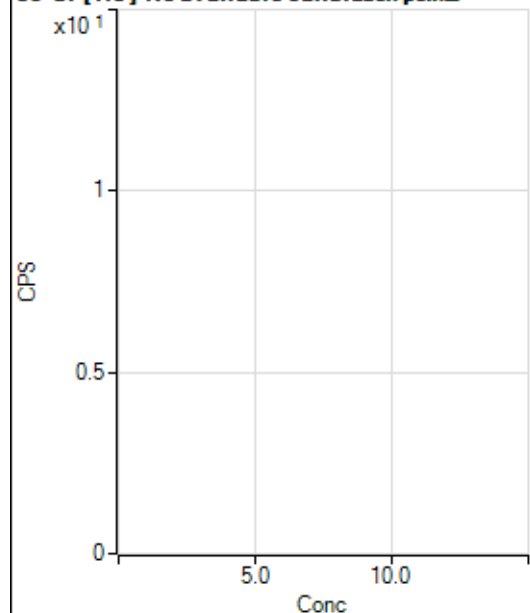
BEC = 9172

Weight: <None>

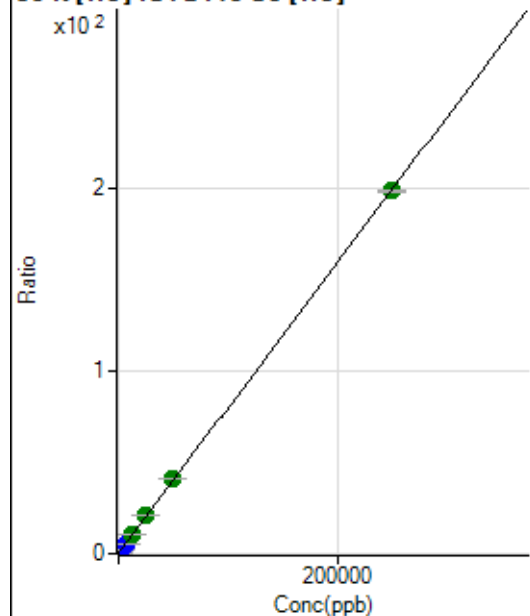
Min Conc: 0

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	☐						
9	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						
9	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	31636.18	0.1900	P	1.8
2	☐	50.000	50.923	37768.96	0.2306	P	0.7
3	☐	500.000	511.545	97766.64	0.5975	P	0.6
4	☐	2500.000	2818.120	396826.42	2.4348	P	0.4
5	☐	6250.000	6952.575	927975.71	5.7283	P	0.5
6	☐	12500.000	12874.472	1657540.24	10.4455	A	1.4
7	☐	25000.000	25706.863	3206887.14	20.6675	A	0.5
8	☐	50000.000	51348.666	6178670.12	41.0932	A	0.8
9	☐	250000.00	249620.08	26251291.00	199.0319	A	0.4

$$y = 7.9658E-004 * x + 0.1900$$

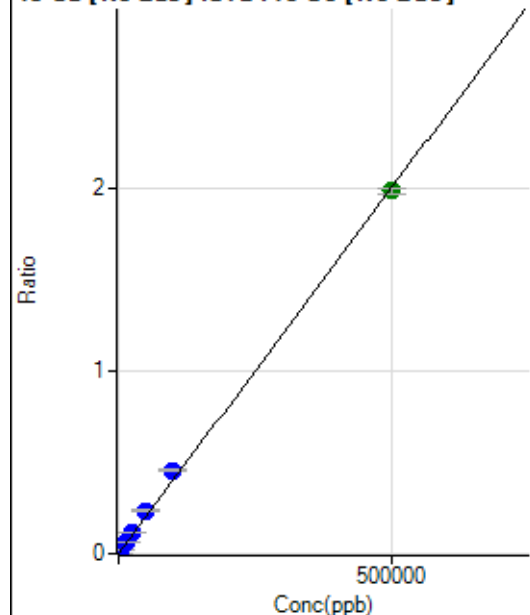
$$R = 1.0000$$

$$DL = 12.91$$

$$BEC = 238.5$$

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	93.33	0.0000	P	19.3
2	☐	50.000	42.266	413.34	0.0002	P	11.6
3	☐	500.000	508.181	3980.56	0.0021	P	1.8
4	☐	5000.000	6071.325	47808.35	0.0243	P	0.6
5	☐	12500.000	14866.501	114857.00	0.0596	P	2.4
6	☐	25000.000	29339.576	223169.71	0.1175	P	3.8
7	☐	50000.000	59048.835	439242.85	0.2364	P	1.5
8	☐	100000.00	114329.23	853137.37	0.4577	P	3.3
9	☐	500000.00	495942.40	3219163.46	1.9851	A	1.8

$$y = 4.0025\text{E-}006 * x + 4.7811\text{E-}005$$

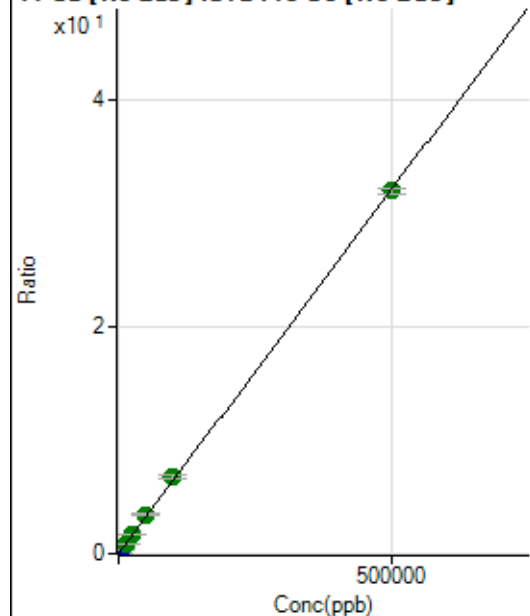
$$R = 0.9994$$

$$DL = 6.924$$

$$BEC = 11.95$$

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	5625.55	0.0029	P	4.3
2	☐	50.000	50.077	11623.41	0.0061	P	2.3
3	☐	500.000	512.958	68459.11	0.0358	P	0.4
4	☐	5000.000	5845.260	742160.99	0.3780	P	1.2
5	☐	12500.000	13589.811	1687704.76	0.8750	A	2.0
6	☐	25000.000	26661.539	3255792.63	1.7138	A	3.4
7	☐	50000.000	53744.519	6413436.23	3.4518	A	2.7
8	☐	100000.00	106203.27	12709415.78	6.8181	A	3.7
9	☐	500000.00	498266.10	51856848.12	31.9774	A	1.7

$$y = 6.4172\text{E-}005 * x + 0.0029$$

$$R = 0.9999$$

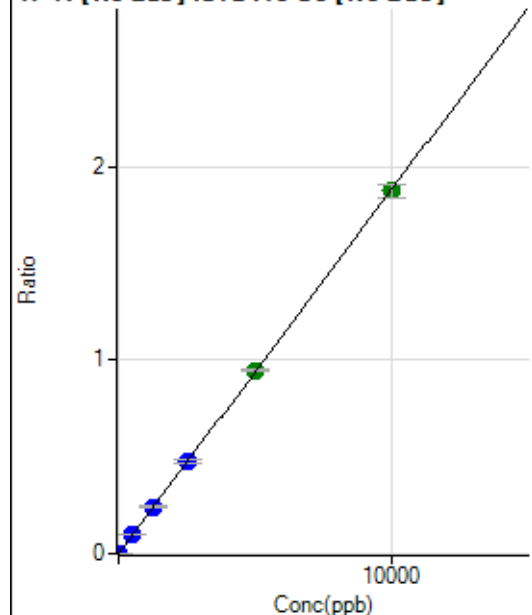
$$DL = 5.802$$

$$BEC = 44.88$$

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	35.55	0.0000	P	11.6
2	☐	0.500	0.532	225.56	0.0001	P	13.7
3	☐	5.000	4.782	1753.45	0.0009	P	3.0
4	☐	500.000	522.550	192910.47	0.0982	P	1.1
5	☐	1250.000	1287.040	466681.85	0.2420	P	2.1
6	☐	2500.000	2532.122	904227.96	0.4760	P	4.0
7	☐	5000.000	5035.076	1758756.82	0.9465	A	1.6
8	☐	10000.000	9968.674	3493266.72	1.8740	A	3.7
9	☐			723.36	0.0004	P	14.8

$$y = 1.8798E-004 * x + 1.8210E-005$$

$$R = 1.0000$$

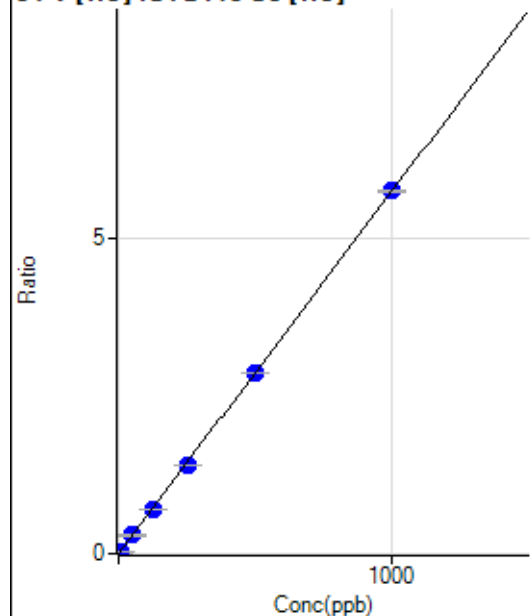
$$DL = 0.03364$$

$$BEC = 0.09687$$

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	4.44	0.0000	P	115.
2	☐	0.500	0.476	453.35	0.0028	P	3.4
3	☐	5.000	4.680	4411.80	0.0270	P	3.5
4	☐	50.000	50.750	47598.16	0.2921	P	1.6
5	☐	125.000	122.694	114379.05	0.7060	P	1.2
6	☐	250.000	246.116	224738.83	1.4163	P	0.3
7	☐	500.000	497.796	444471.70	2.8645	P	0.4
8	☐	1000.000	1002.325	867191.02	5.7677	P	0.7
9	☐			283.34	0.0021	P	2.0

$$y = 0.0058 * x + 2.6751E-005$$

$$R = 1.0000$$

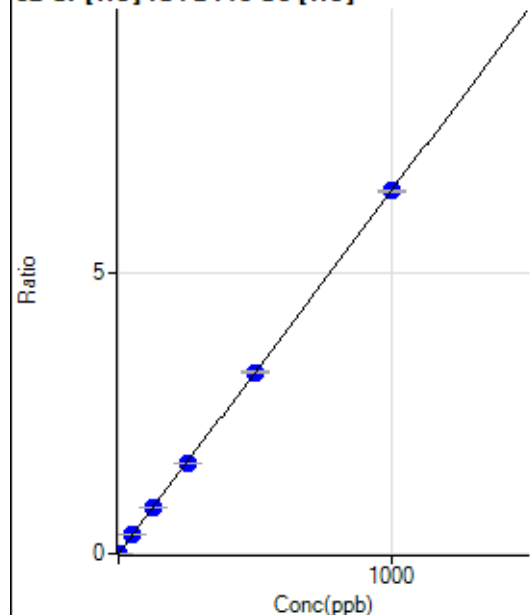
$$DL = 0.01604$$

$$BEC = 0.004649$$

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	396.67	0.0024	P	9.8
2	☒	0.200					
3	☐	2.000	2.097	2613.58	0.0160	P	1.4
4	☐	50.000	51.496	54781.31	0.3361	P	0.6
5	☐	125.000	125.647	132303.93	0.8167	P	0.8
6	☐	250.000	249.735	257211.20	1.6209	P	0.9
7	☐	500.000	500.181	503361.09	3.2440	P	0.2
8	☐	1000.000	999.820	974604.64	6.4821	P	0.8
9	☐			6704.88	0.0508	P	2.2

$$y = 0.0065 * x + 0.0024$$

$$R = 1.0000$$

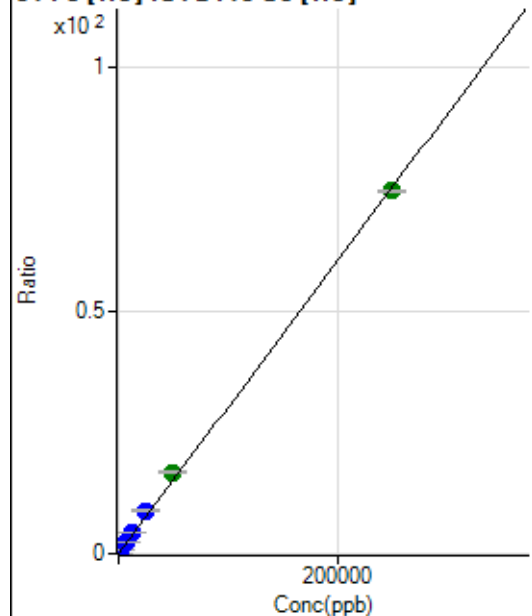
$$DL = 0.1083$$

$$BEC = 0.3676$$

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	967.82	0.0058	P	1.2
2	☐	5.000	5.549	1225.62	0.0075	P	4.7
3	☐	50.000	59.043	3857.20	0.0236	P	1.7
4	☐	2500.000	3045.104	150212.42	0.9217	P	0.5
5	☐	6250.000	7468.354	364826.40	2.2520	P	0.2
6	☐	12500.000	14861.228	710206.62	4.4756	P	0.2
7	☐	25000.000	29522.983	1378708.09	8.8853	P	0.6
8	☐	50000.000	55597.217	2515089.18	16.7276	A	1.4
9	☐	250000.00	248274.28	9849529.92	74.6783	A	0.7

$$y = 3.0077E-004 * x + 0.0058$$

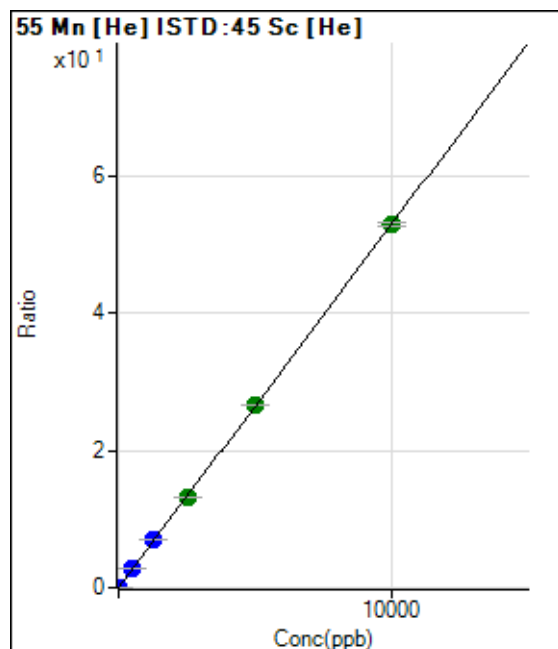
$$R = 0.9996$$

$$DL = 0.6927$$

$$BEC = 19.32$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	113.34	0.0007	P	20.3
2	☒	0.100					
3	☐	1.000	1.064	1033.38	0.0063	P	15.0
4	☐	500.000	532.482	460065.56	2.8229	P	0.4
5	☐	1250.000	1297.941	1114531.82	6.8799	P	0.2
6	☐	2500.000	2493.619	2097344.99	13.2170	A	1.1
7	☐	5000.000	5019.311	4127947.99	26.6034	A	0.5
8	☐	10000.000	9984.323	7956405.78	52.9183	A	1.0
9	☐			4075.04	0.0309	P	3.1

$$y = 0.0053 * x + 6.8030E-004$$

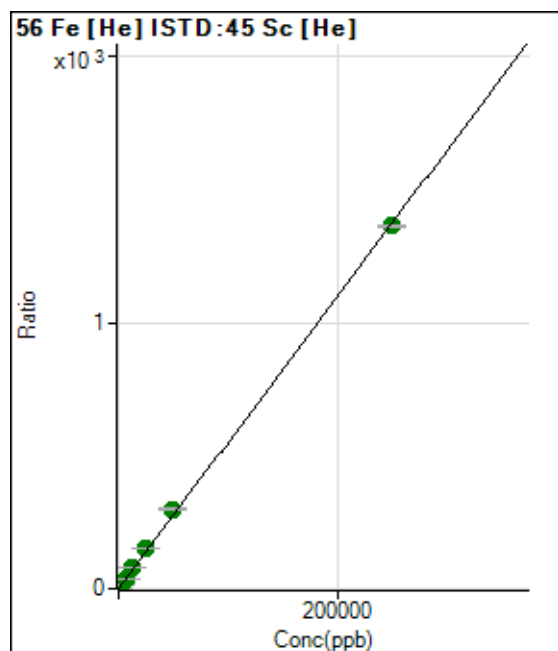
$$R = 1.0000$$

$$DL = 0.07806$$

$$BEC = 0.1284$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7181.77	0.0431	P	3.7
2	☐	5.000	6.082	12530.85	0.0765	P	0.5
3	☐	50.000	55.471	56839.12	0.3474	P	0.8
4	☐	2500.000	2833.355	2539560.81	15.5827	A	1.6
5	☐	6250.000	6869.759	6110634.70	37.7204	A	1.2
6	☐	12500.000	13864.074	12072872.32	76.0807	A	0.3
7	☐	25000.000	27465.342	23379964.10	150.6769	A	0.3
8	☐	50000.000	54600.247	45030687.66	299.4984	A	0.7
9	☐	250000.00	248746.38	179946526.2	1,364.293	A	0.4

$$y = 0.0055 * x + 0.0431$$

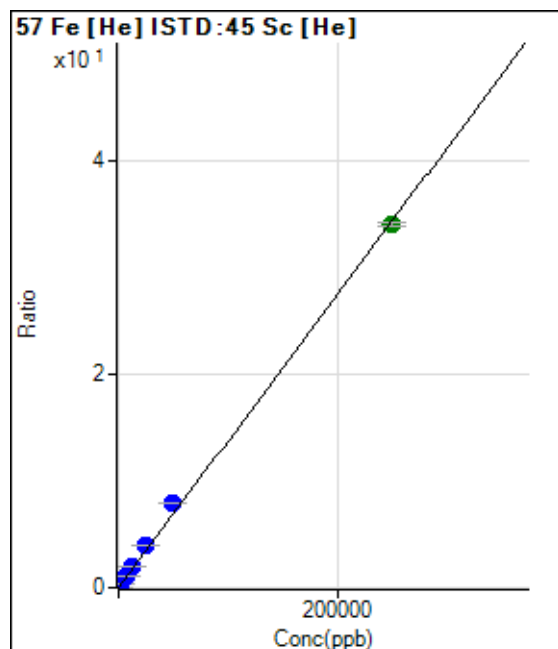
$$R = 0.9998$$

$$DL = 0.8657$$

$$BEC = 7.865$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	256.67	0.0015	P	14.8
2	☐	5.000	4.886	362.23	0.0022	P	10.0
3	☐	50.000	59.055	1576.77	0.0096	P	4.7
4	☐	2500.000	2972.698	66648.01	0.4089	P	0.8
5	☐	6250.000	7355.663	163555.39	1.0096	P	0.6
6	☐	12500.000	14585.353	317438.74	2.0004	P	0.1
7	☐	25000.000	28885.413	614495.83	3.9602	P	0.7
8	☐	50000.000	57656.999	1188285.90	7.9033	P	0.7
9	☐	250000.00	247943.42	4482353.02	33.9816	A	1.2

$$y = 1.3705\text{E-}004 * x + 0.0015$$

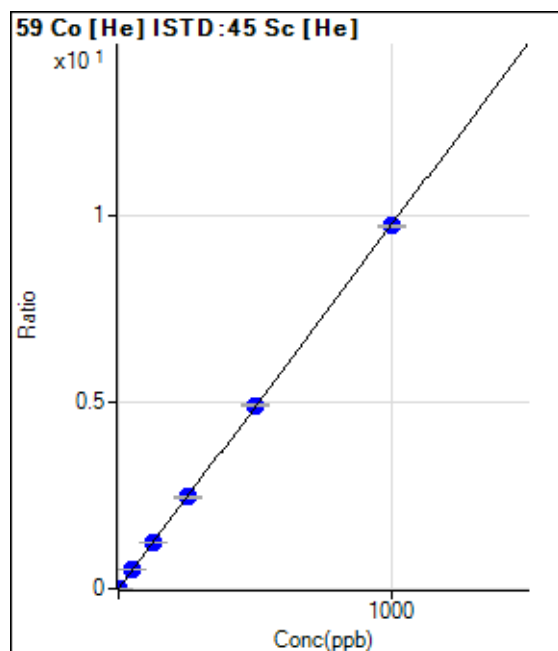
$$R = 0.9994$$

$$DL = 5$$

$$BEC = 11.25$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.11	0.0003	P	29.6
2	☒	0.100					
3	☐	1.000	0.952	1566.76	0.0096	P	3.1
4	☐	50.000	52.359	83146.44	0.5102	P	1.3
5	☐	125.000	127.752	201583.19	1.2444	P	0.4
6	☐	250.000	251.635	388892.96	2.4507	P	0.5
7	☐	500.000	504.004	761602.66	4.9083	P	0.9
8	☐	1000.000	997.127	1459982.25	9.7103	P	0.6
9	☐			1556.77	0.0118	P	4.8

$$y = 0.0097 * x + 3.0712\text{E-}004$$

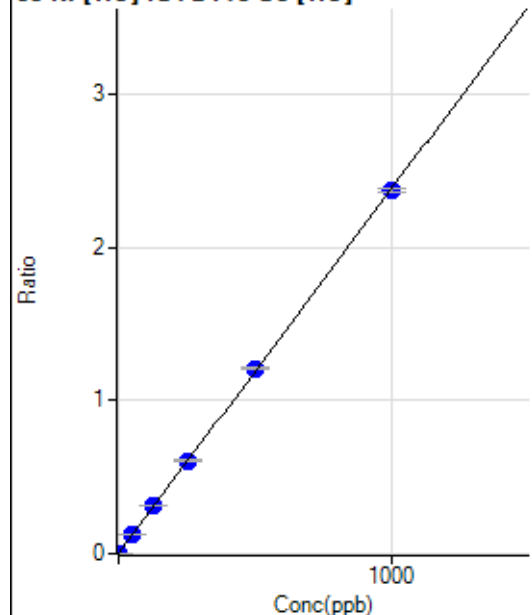
$$R = 1.0000$$

$$DL = 0.02798$$

$$BEC = 0.03154$$

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	257.78	0.0015	P	19.3
2	☒	0.100					
3	☐	1.000	1.106	684.47	0.0042	P	11.6
4	☐	50.000	54.094	21268.47	0.1305	P	1.2
5	☐	125.000	129.000	50067.64	0.3091	P	0.6
6	☐	250.000	254.842	96646.55	0.6090	P	0.7
7	☐	500.000	507.268	187872.04	1.2108	P	0.5
8	☐	1000.000	994.451	356654.27	2.3721	P	1.0
9	☐			1271.18	0.0096	P	2.4

$$y = 0.0024 * x + 0.0015$$

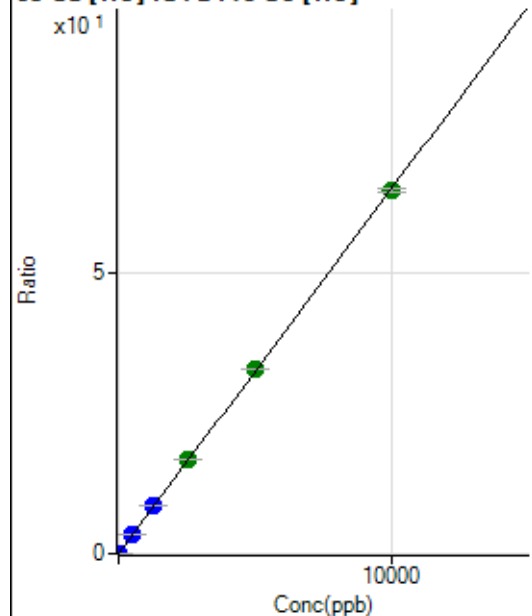
$$R = 0.9999$$

$$DL = 0.3762$$

$$BEC = 0.6499$$

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	431.12	0.0026	P	1.1
2	☐	0.200	0.258	697.80	0.0043	P	2.5
3	☐	2.000	1.958	2499.12	0.0153	P	1.8
4	☐	500.000	542.916	573675.62	3.5200	P	0.8
5	☐	1250.000	1320.432	1386279.79	8.5573	P	0.4
6	☐	2500.000	2563.360	2635751.65	16.6099	A	0.5
7	☐	5000.000	5065.442	5092611.14	32.8202	A	0.6
8	☐	10000.000	9940.489	9683387.84	64.4044	A	1.2
9	☐			2025.71	0.0154	P	0.2

$$y = 0.0065 * x + 0.0026$$

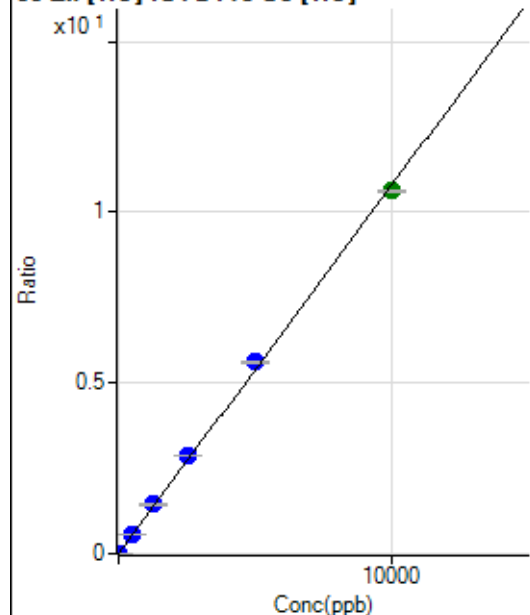
$$R = 0.9999$$

$$DL = 0.01366$$

$$BEC = 0.3996$$

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	63.33	0.0004	P	18.5
2	☒	0.200					
3	☐	2.000	2.247	458.90	0.0028	P	9.6
4	☐	500.000	542.049	95347.28	0.5850	P	0.5
5	☐	1250.000	1334.493	233238.68	1.4398	P	0.8
6	☐	2500.000	2643.852	452576.07	2.8520	P	0.2
7	☐	5000.000	5196.737	869797.40	5.6056	P	0.2
8	☐	10000.000	9853.005	1598004.28	10.6278	A	0.8
9	☐			7904.39	0.0599	P	1.5

$$y = 0.0011 * x + 3.8012E-004$$

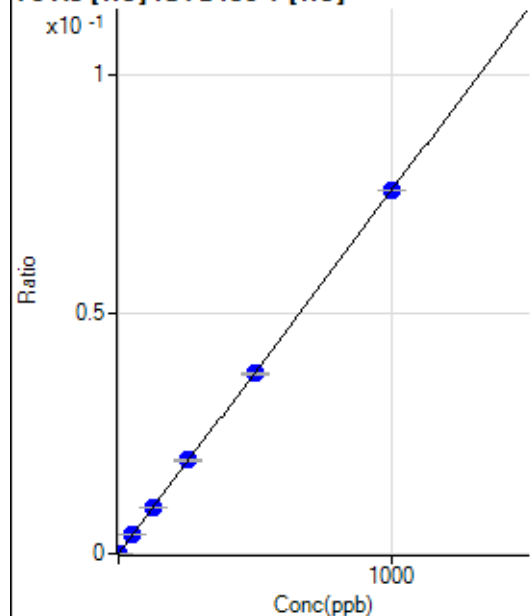
$$R = 0.9996$$

$$DL = 0.1952$$

$$BEC = 0.3524$$

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	0.00	0.0000	P	
2	☐	0.100	0.091	11.11	0.0000	P	34.9
3	☐	1.000	0.864	105.56	0.0001	P	16.4
4	☐	50.000	51.293	6242.49	0.0039	P	2.8
5	☐	125.000	127.532	15474.82	0.0097	P	2.4
6	☐	250.000	258.054	30485.77	0.0196	P	1.8
7	☐	500.000	497.081	58945.33	0.0377	P	1.0
8	☐	1000.000	999.065	114088.90	0.0757	P	0.1
9	☐			18.89	0.0000	P	26.5

$$y = 7.5798E-005 * x + 0.0000E+000$$

$$R = 1.0000$$

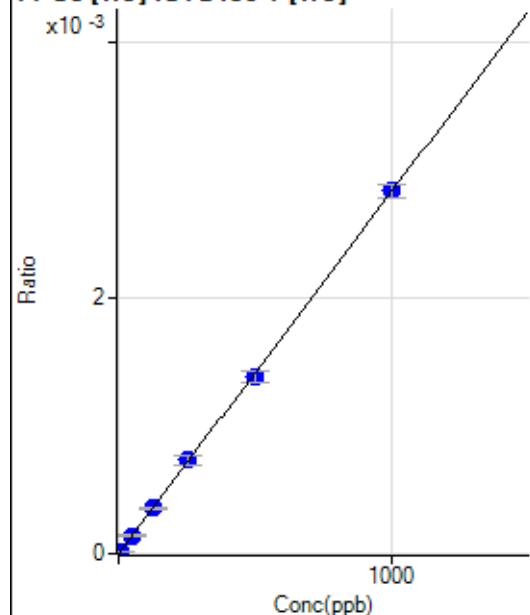
$$DL = 0$$

$$BEC = 0$$

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	☐	0.500	0.000	0.00	0.0000	P	
3	☐	5.000	4.375	20.00	0.0000	P	28.5
4	☐	50.000	48.634	221.11	0.0001	P	8.0
5	☐	125.000	125.409	568.90	0.0004	P	5.7
6	☐	250.000	259.053	1143.39	0.0007	P	9.2
7	☐	500.000	489.499	2169.07	0.0014	P	5.7
8	☐	1000.000	1003.008	4279.55	0.0028	P	3.5
9	☐			5.55	0.0000	P	69.9

$$y = 2.8318\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

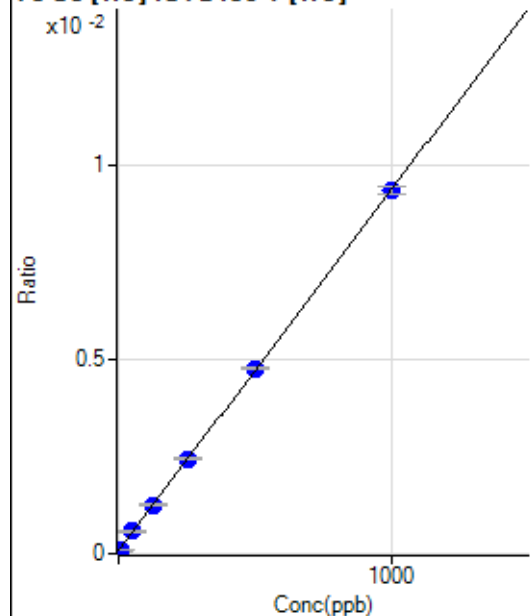
$$DL = 0$$

$$BEC = 0$$

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	127.78	0.0001	P	11.4
2	☐	0.500	-0.125	125.56	0.0001	P	7.7
3	☐	5.000	2.800	168.89	0.0001	P	2.4
4	☐	50.000	52.920	916.70	0.0006	P	1.8
5	☐	125.000	125.736	1999.04	0.0012	P	3.0
6	☐	250.000	254.655	3814.97	0.0024	P	3.3
7	☐	500.000	504.674	7466.38	0.0048	P	1.4
8	☐	1000.000	996.273	14077.91	0.0093	P	2.1
9	☐			122.22	0.0001	P	25.0

$$y = 9.3009\text{E-}006 * x + 7.8693\text{E-}005$$

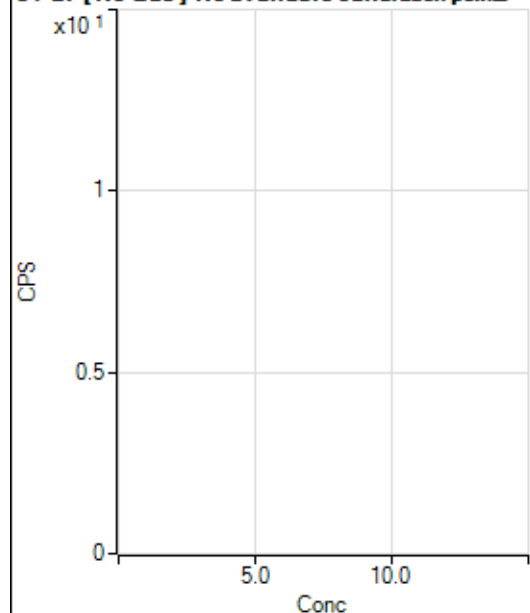
$$R = 1.0000$$

$$DL = 2.881$$

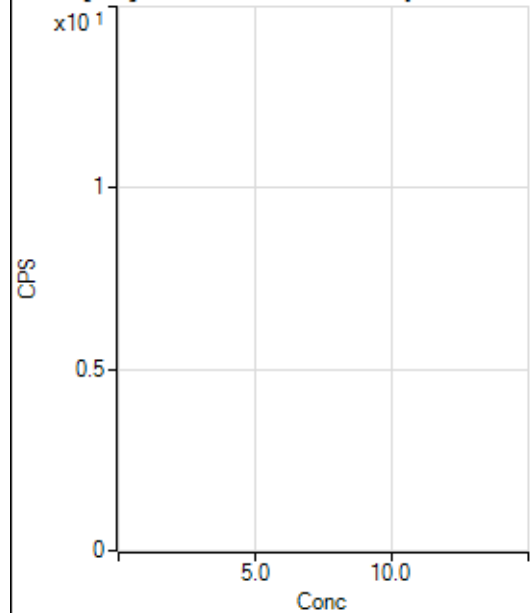
$$BEC = 8.461$$

Weight: <None>

Min Conc: 0

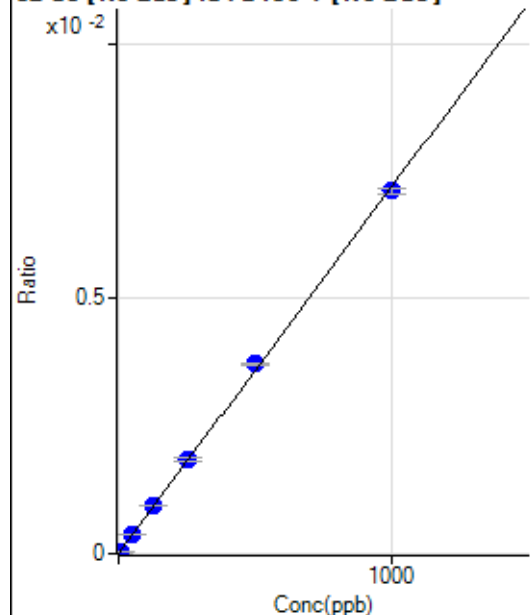
81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			26492.83		P	0.5
2	☐			25978.52		P	2.5
3	☐			26597.41		P	2.5
4	☐			26422.68		P	1.6
5	☐			25823.84		P	0.8
6	☐			25547.78		P	1.6
7	☐			24922.32		P	0.6
8	☐			24054.21		P	2.9
9	☐			21993.21		P	3.9

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			38.89		P	13.1
2	☐			41.11		P	44.7
3	☐			43.33		P	7.7
4	☐			30.00		P	40.1
5	☐			37.78		P	13.5
6	☐			41.11		P	16.9
7	☐			33.34		P	17.3
8	☐			36.67		P	31.5
9	☐			31.11		P	48.3

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	27.45	0.0000	P	16.1
2	☒	0.500					
3	☐	5.000	5.166	259.22	0.0000	P	9.8
4	☐	50.000	52.853	2465.24	0.0004	P	1.7
5	☐	125.000	130.807	6008.33	0.0009	P	0.7
6	☐	250.000	256.290	11667.52	0.0018	P	4.7
7	☐	500.000	516.277	22907.92	0.0037	P	1.0
8	☐	1000.000	989.420	44014.79	0.0071	P	1.8
9	☐			88.48	0.0000	P	35.3

$$y = 7.1838E-006 * x + 4.3105E-006$$

$$R = 0.9998$$

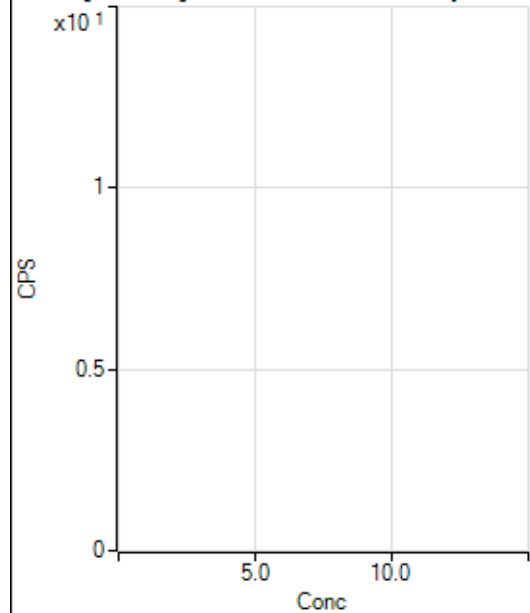
$$DL = 0.2901$$

$$BEC = 0.6$$

Weight: <None>

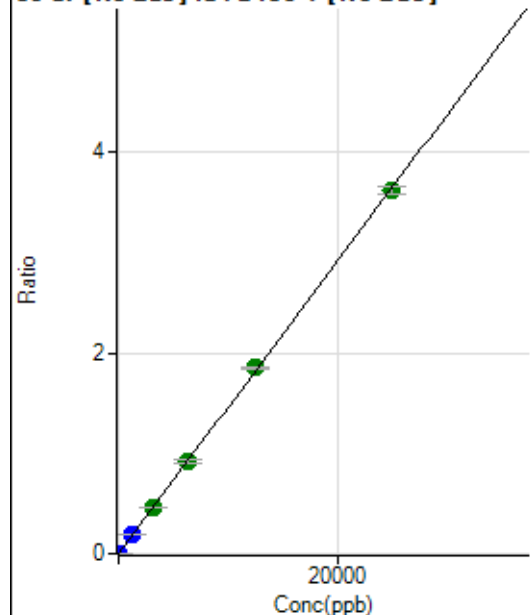
Min Conc: 0

83 Kr [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			32.22		P	26.0
2	☐			43.33		P	27.7
3	☐			25.56		P	19.9
4	☐			44.44		P	4.3
5	☐			37.78		P	5.1
6	☐			28.89		P	33.3
7	☐			52.22		P	7.4
8	☐			46.67		P	28.6
9	☐			66.67		P	39.7

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	106.67	0.0000	P	15.5
2	☐	0.100	0.063	163.34	0.0000	P	19.2
3	☐	1.000	0.936	956.71	0.0002	P	2.2
4	☐	1250.000	1289.996	1205807.57	0.1878	P	0.9
5	☐	3125.000	3205.727	2970360.44	0.4667	A	0.9
6	☐	6250.000	6308.658	5807896.23	0.9185	A	3.5
7	☐	12500.000	12763.177	11463615.52	1.8582	A	1.1
8	☐	25000.000	24841.656	22382177.44	3.6167	A	1.9
9	☐			6539.28	0.0012	P	4.2

$$y = 1.4559\text{E-}004 * x + 1.6729\text{E-}005$$

$$R = 0.9999$$

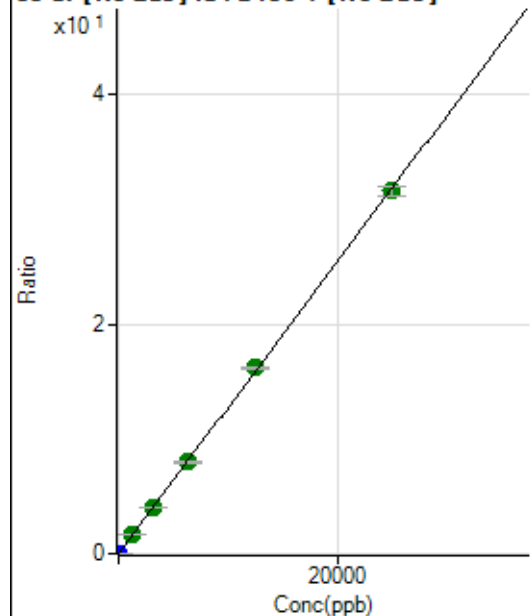
$$DL = 0.05341$$

$$BEC = 0.1149$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	226.67	0.0000	P	10.0
2	☐	0.100	0.075	826.70	0.0001	P	1.2
3	☐	1.000	0.966	7892.18	0.0013	P	1.7
4	☐	1250.000	1283.931	10466034.29	1.6302	A	0.3
5	☐	3125.000	3204.825	25895896.56	4.0690	A	0.7
6	☐	6250.000	6263.852	50286870.36	7.9529	A	3.8
7	☐	12500.000	12724.353	99660792.96	16.1554	A	1.4
8	☐	25000.000	24872.686	195427579.3	31.5795	A	2.4
9	☐			56636.50	0.0107	P	5.7

$$y = 0.0013 * x + 3.5582\text{E-}005$$

$$R = 0.9999$$

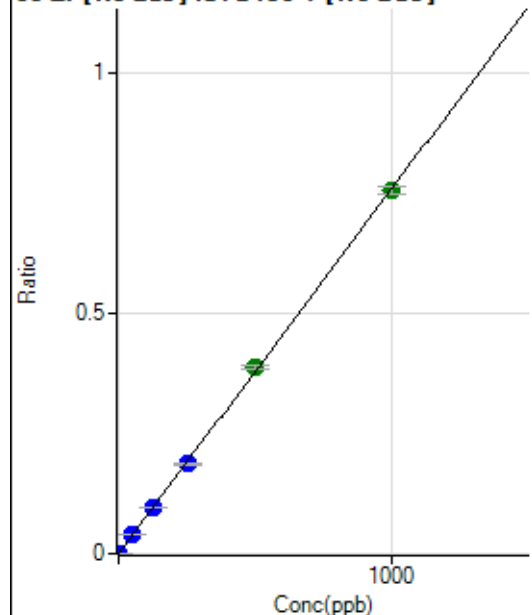
$$DL = 0.008438$$

$$BEC = 0.02803$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	207.78	0.0000	P	9.9
2	☐	0.100	0.091	640.02	0.0001	P	4.9
3	☐	1.000	0.916	4549.64	0.0007	P	0.5
4	☐	50.000	51.781	252457.80	0.0393	P	0.9
5	☐	125.000	124.972	603697.77	0.0949	P	0.8
6	☐	250.000	245.491	1178074.70	0.1863	P	3.5
7	☐	500.000	512.086	2397332.43	0.3886	A	1.5
8	☐	1000.000	994.999	4672477.12	0.7550	A	2.3
9	☐			1197.85	0.0002	P	8.9

$$y = 7.5879\text{E-}004 * x + 3.2598\text{E-}005$$

$$R = 0.9999$$

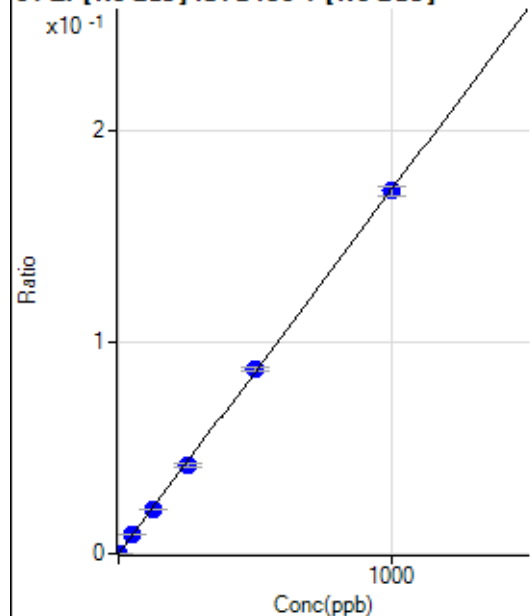
$$DL = 0.01272$$

$$BEC = 0.04296$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	19.7
2	☐	0.100	0.061	98.89	0.0000	P	32.4
3	☐	1.000	0.848	943.37	0.0002	P	9.4
4	☐	50.000	51.380	56711.17	0.0088	P	1.1
5	☐	125.000	122.838	134372.07	0.0211	P	0.4
6	☐	250.000	243.103	264173.77	0.0418	P	3.6
7	☐	500.000	509.238	539839.26	0.0875	P	1.9
8	☐	1000.000	997.307	1060520.59	0.1714	P	2.5
9	☐			232.23	0.0000	P	6.7

$$y = 1.7183\text{E-}004 * x + 5.2322\text{E-}006$$

$$R = 0.9999$$

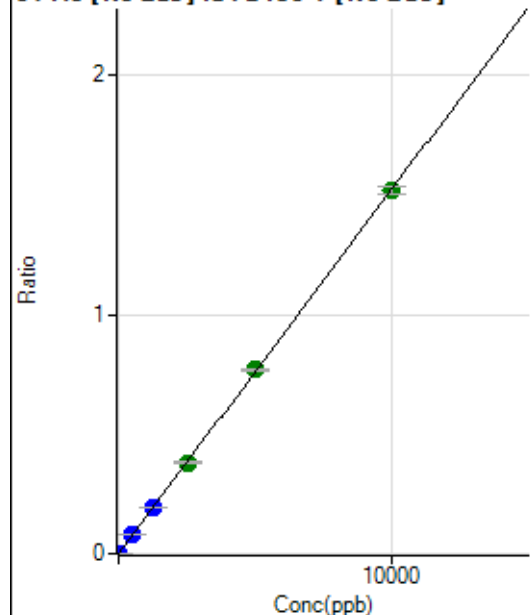
$$DL = 0.01797$$

$$BEC = 0.03045$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	68.89	0.0000	P	17.3
2	☐	0.500	0.541	586.68	0.0001	P	11.3
3	☐	5.000	5.429	5237.66	0.0008	P	4.5
4	☐	500.000	522.726	511069.18	0.0796	P	0.2
5	☐	1250.000	1286.113	1246423.27	0.1958	P	0.4
6	☐	2500.000	2500.399	2407534.23	0.3807	A	3.4
7	☐	5000.000	5056.634	4749919.37	0.7700	A	1.3
8	☐	10000.000	9965.933	9390897.85	1.5175	A	2.3
9	☐			2558.03	0.0005	P	7.2

$$y = 1.5227\text{E-}004 * x + 1.0803\text{E-}005$$

$$R = 1.0000$$

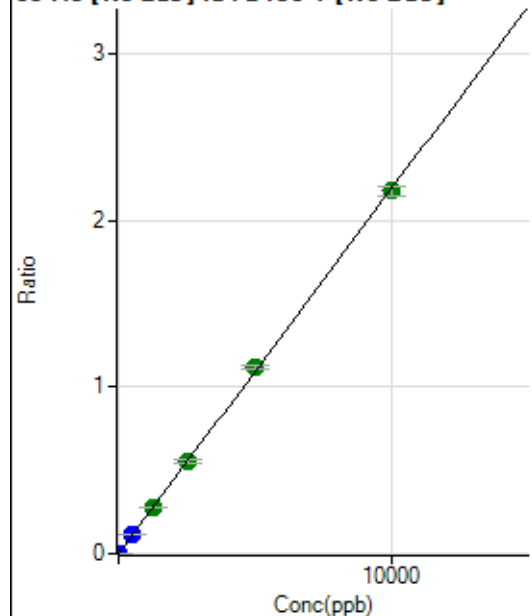
$$DL = 0.03685$$

$$BEC = 0.07095$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	54.44	0.0000	P	18.2
2	☐	0.500	0.435	653.35	0.0001	P	9.5
3	☐	5.000	4.641	6412.57	0.0010	P	4.1
4	☐	500.000	523.806	736846.86	0.1148	P	1.0
5	☐	1250.000	1269.985	1771019.92	0.2783	A	0.5
6	☐	2500.000	2511.774	3479908.38	0.5503	A	3.7
7	☐	5000.000	5106.003	6901479.41	1.1187	A	1.4
8	☐	10000.000	9940.367	13477644.24	2.1780	A	3.0
9	☐			3245.95	0.0006	P	8.1

$$y = 2.1910\text{E-}004 * x + 8.5530\text{E-}006$$

$$R = 0.9999$$

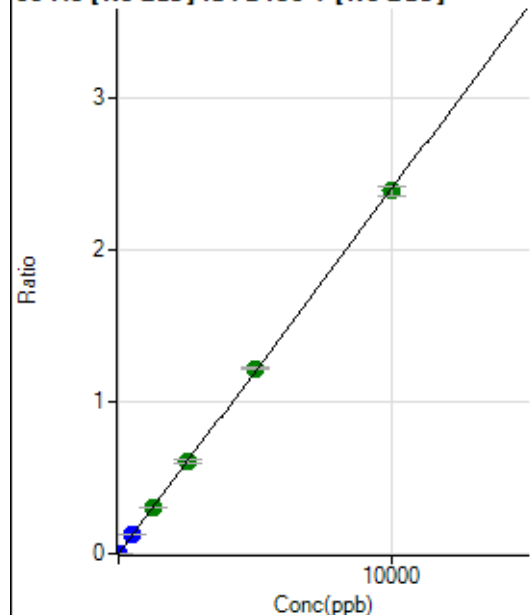
$$DL = 0.02126$$

$$BEC = 0.03904$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	56.67	0.0000	P	36.6
2	☐	0.500	0.451	737.81	0.0001	P	9.4
3	☐	5.000	4.816	7289.64	0.0012	P	1.2
4	☐	500.000	521.065	803403.48	0.1251	P	1.1
5	☐	1250.000	1275.129	1949024.59	0.3062	A	0.3
6	☐	2500.000	2514.498	3818355.71	0.6039	A	3.6
7	☐	5000.000	5086.035	7535093.78	1.2214	A	1.1
8	☐	10000.000	9949.164	14785805.89	2.3893	A	2.5
9	☐			8325.78	0.0016	P	3.4

$$y = 2.4015E-004 * x + 8.9242E-006$$

$$R = 0.9999$$

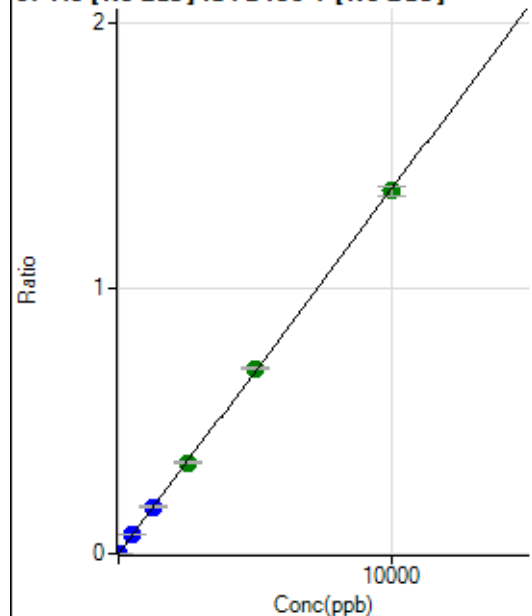
$$DL = 0.04075$$

$$BEC = 0.03716$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.89	0.0000	P	45.5
2	☐	0.500	0.463	418.90	0.0001	P	10.4
3	☐	5.000	4.693	4052.83	0.0006	P	1.7
4	☐	500.000	523.169	461530.86	0.0719	P	0.6
5	☐	1250.000	1291.231	1129197.63	0.1774	P	1.1
6	☐	2500.000	2504.100	2175866.29	0.3441	A	3.0
7	☐	5000.000	5077.954	4304353.23	0.6977	A	1.5
8	☐	10000.000	9953.686	8463848.76	1.3677	A	2.5
9	☐			2179.08	0.0004	P	10.2

$$y = 1.3741E-004 * x + 2.9765E-006$$

$$R = 1.0000$$

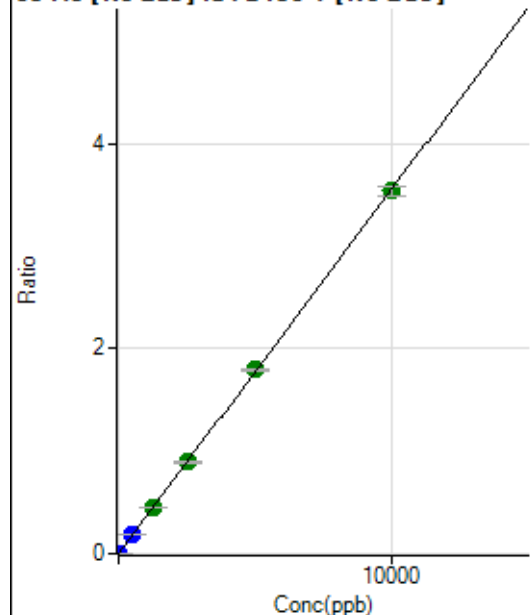
$$DL = 0.02958$$

$$BEC = 0.02166$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	53.33	0.0000	P	10.4
2	☐	0.500	0.460	1081.17	0.0002	P	6.6
3	☐	5.000	4.669	10422.69	0.0017	P	2.4
4	☐	500.000	521.906	1189903.95	0.1853	P	0.8
5	☐	1250.000	1276.330	2884495.62	0.4533	A	0.9
6	☐	2500.000	2511.109	5638768.25	0.8917	A	3.4
7	☐	5000.000	5061.166	11087751.09	1.7973	A	1.3
8	☐	10000.000	9962.254	21893056.76	3.5377	A	2.4
9	☐			4947.55	0.0009	P	8.7

$$y = 3.5511\text{E-}004 * x + 8.3710\text{E-}006$$

$$R = 1.0000$$

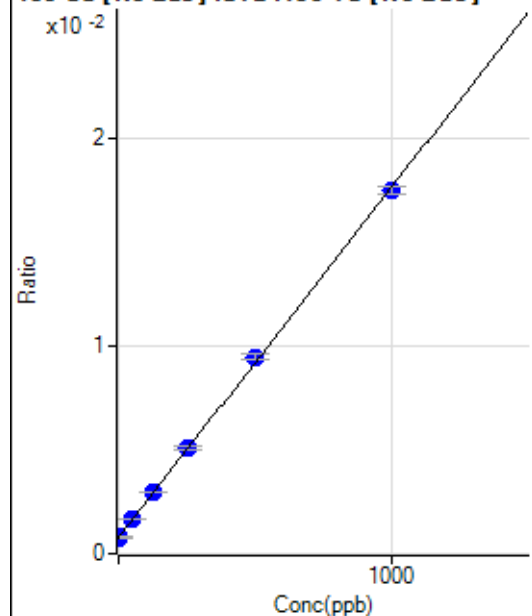
$$DL = 0.007347$$

$$BEC = 0.02357$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3581.59	0.0008	P	0.9
2	☐	0.100	0.410	3529.36	0.0008	P	1.4
3	☐	1.000	1.127	3584.92	0.0008	P	1.6
4	☐	50.000	54.202	7885.54	0.0017	P	2.4
5	☐	125.000	129.743	13748.81	0.0030	P	0.9
6	☐	250.000	257.491	23770.64	0.0051	P	2.9
7	☐	500.000	515.045	43167.24	0.0095	P	3.1
8	☐	1000.000	989.802	79845.96	0.0175	P	2.2
9	☐			2866.97	0.0007	P	3.7

$$y = 1.6872\text{E-}005 * x + 7.7380\text{E-}004$$

$$R = 0.9998$$

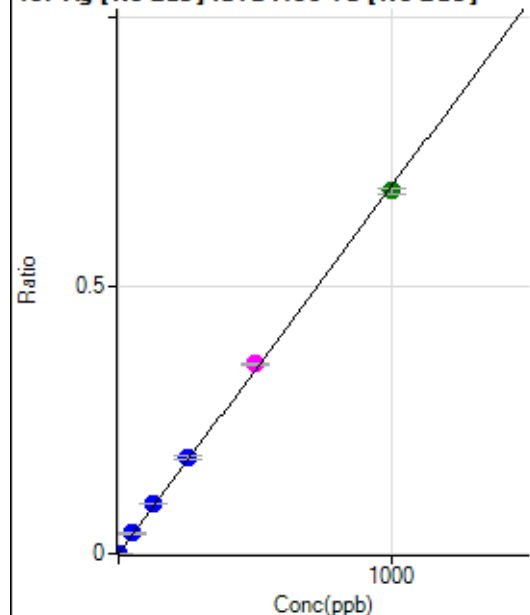
$$DL = 1.261$$

$$BEC = 45.86$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	51.11	0.0000	P	32.6
2	☐	0.100	0.089	326.67	0.0001	P	11.0
3	☐	1.000	1.060	3333.75	0.0007	P	2.6
4	☐	50.000	55.276	177035.35	0.0379	P	1.3
5	☐	125.000	135.486	431080.13	0.0929	P	0.4
6	☐	250.000	260.595	829704.41	0.1787	P	3.3
7	☐	500.000	515.872	1613361.49	0.3537	M	1.9
8	☐	1000.000	987.841	3094687.52	0.6772	A	1.6
9	☐			1352.30	0.0003	P	1.1

$$y = 6.8555E-004 * x + 1.1019E-005$$

$$R = 0.9997$$

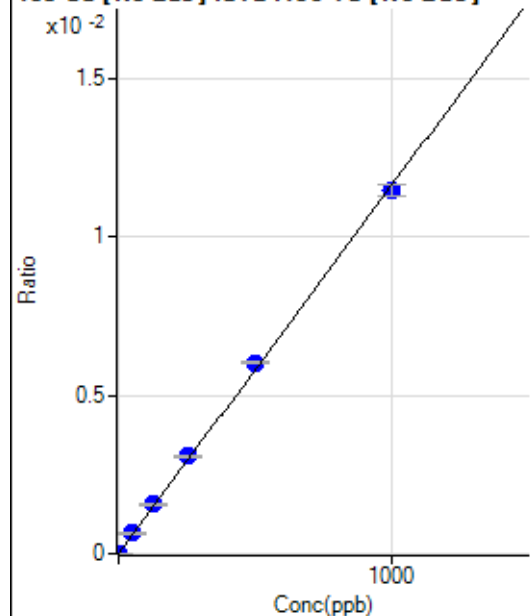
$$DL = 0.0157$$

$$BEC = 0.01607$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.67	0.0000	P	51.2
2	☐	0.100	0.108	12.22	0.0000	P	29.8
3	☐	1.000	1.128	65.55	0.0000	P	28.2
4	☐	50.000	54.756	2979.23	0.0006	P	2.4
5	☐	125.000	133.251	7195.17	0.0016	P	2.5
6	☐	250.000	263.797	14249.32	0.0031	P	2.6
7	☐	500.000	519.468	27552.90	0.0060	P	0.5
8	☐	1000.000	985.547	52347.32	0.0115	P	3.3
9	☐			28.89	0.0000	P	44.2

$$y = 1.1624E-005 * x + 1.4459E-006$$

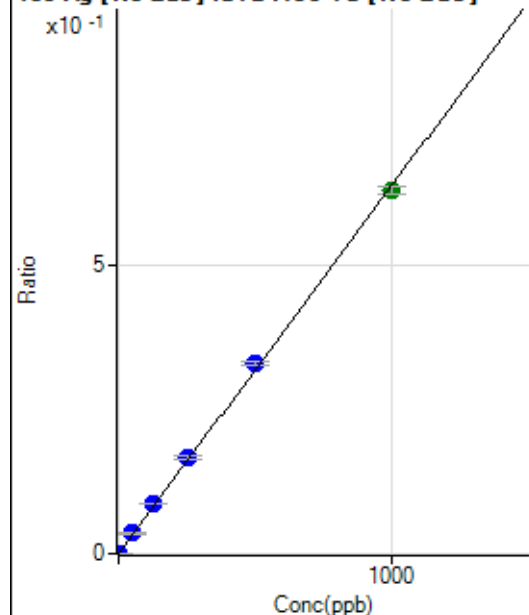
$$R = 0.9996$$

$$DL = 0.1909$$

$$BEC = 0.1244$$

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	11.11	0.0000	P	62.4
2	☐	0.100	0.099	295.56	0.0001	P	3.3
3	☐	1.000	0.979	2833.64	0.0006	P	1.1
4	☐	50.000	55.177	164365.41	0.0352	P	2.2
5	☐	125.000	134.555	398228.73	0.0858	P	0.7
6	☐	250.000	261.273	773871.22	0.1666	P	3.2
7	☐	500.000	518.146	1507470.26	0.3305	P	2.1
8	☐	1000.000	986.656	2875451.04	0.6293	A	1.9
9	☐			1222.29	0.0003	P	6.5

$$y = 6.3778\text{E-}004 * x + 2.4045\text{E-}006$$

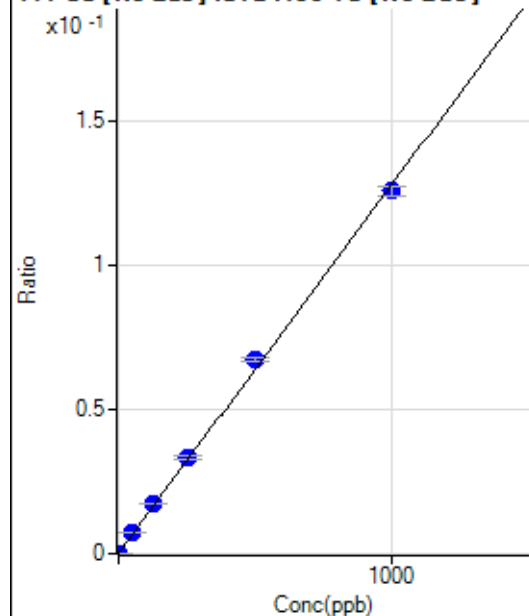
$$R = 0.9997$$

$$DL = 0.007057$$

$$BEC = 0.00377$$

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	716.09	0.0002	P	1.4
2	☐	0.100	0.121	769.54	0.0002	P	1.2
3	☐	1.000	0.989	1272.23	0.0003	P	6.0
4	☐	50.000	55.124	33657.56	0.0072	P	1.3
5	☐	125.000	133.192	79782.21	0.0172	P	0.8
6	☐	250.000	259.005	154584.26	0.0333	P	3.6
7	☐	500.000	524.786	306948.69	0.0673	P	2.3
8	☐	1000.000	984.075	575951.70	0.1260	P	2.3
9	☐			752.07	0.0002	P	6.3

$$y = 1.2793\text{E-}004 * x + 1.5472\text{E-}004$$

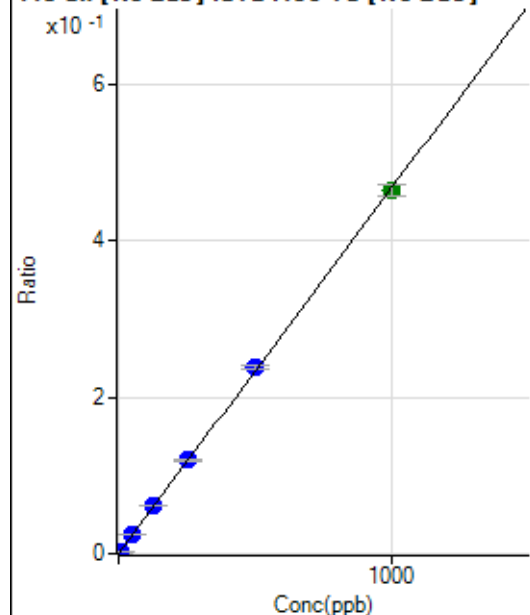
$$R = 0.9995$$

$$DL = 0.05219$$

$$BEC = 1.209$$

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	433.34	0.0001	P	6.7
2	☐	0.500	0.485	1445.64	0.0003	P	5.6
3	☐	5.000	4.910	10787.46	0.0024	P	1.1
4	☐	50.000	52.435	114705.85	0.0246	P	1.3
5	☐	125.000	131.649	285502.64	0.0615	P	0.5
6	☐	250.000	255.196	553405.52	0.1192	P	3.6
7	☐	500.000	510.344	1086719.20	0.2382	P	2.4
8	☐	1000.000	992.577	2116619.67	0.4633	A	3.3
9	☐			1361.19	0.0003	P	3.3

$$y = 4.6662\text{E-}004 * x + 9.3670\text{E-}005$$

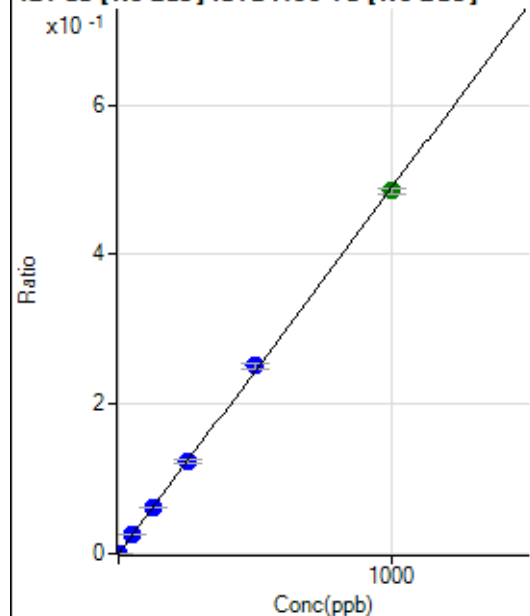
$$R = 0.9999$$

$$DL = 0.04011$$

$$BEC = 0.2007$$

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	13.33	0.0000	P	65.5
2	☐	0.200	0.175	398.90	0.0001	P	5.7
3	☐	2.000	1.909	4233.99	0.0009	P	3.4
4	☐	50.000	51.636	117926.51	0.0252	P	0.8
5	☐	125.000	128.466	291497.75	0.0628	P	0.4
6	☐	250.000	251.269	570528.02	0.1229	P	3.6
7	☐	500.000	513.500	1145296.47	0.2511	P	2.5
8	☐	1000.000	992.418	2217340.90	0.4852	A	1.7
9	☐			1324.52	0.0003	P	1.1

$$y = 4.8894\text{E-}004 * x + 2.8761\text{E-}006$$

$$R = 0.9999$$

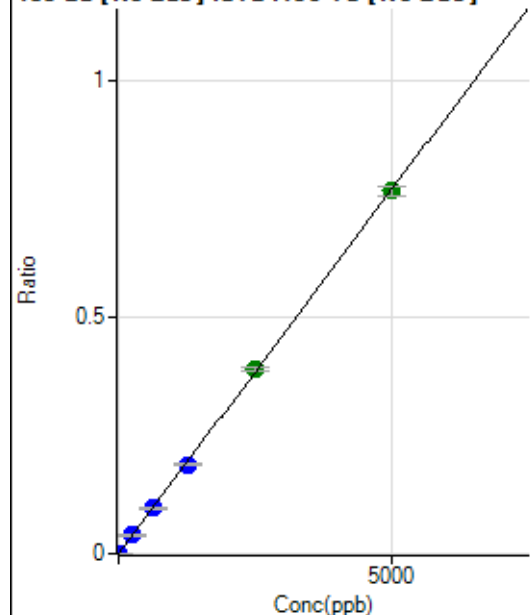
$$DL = 0.01156$$

$$BEC = 0.005882$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.44	0.0000	P	54.7
2	☐	1.000	0.912	648.91	0.0001	P	7.2
3	☐	10.000	9.180	6398.17	0.0014	P	1.1
4	☐	250.000	252.301	181228.33	0.0388	P	1.0
5	☐	625.000	623.388	444892.82	0.0959	P	1.3
6	☐	1250.000	1226.307	875763.00	0.1886	P	3.6
7	☐	2500.000	2540.142	1781945.93	0.3906	A	2.2
8	☐	5000.000	4985.940	3503618.07	0.7668	A	2.5
9	☐			2012.38	0.0005	P	3.3

$$y = 1.5378\text{E-}004 * x + 3.1349\text{E-}006$$

$$R = 0.9999$$

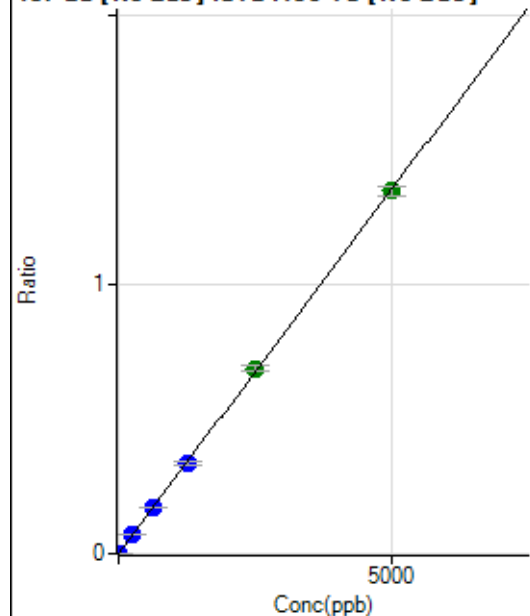
$$DL = 0.03347$$

$$BEC = 0.02039$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	17.4
2	☐	1.000	0.891	1114.50	0.0002	P	4.5
3	☐	10.000	9.058	11085.52	0.0025	P	3.2
4	☐	250.000	253.640	319922.76	0.0685	P	2.0
5	☐	625.000	626.041	784529.35	0.1691	P	0.7
6	☐	1250.000	1229.999	1542357.27	0.3322	P	4.0
7	☐	2500.000	2542.210	3131494.54	0.6865	A	2.8
8	☐	5000.000	4983.585	6149355.95	1.3458	A	2.5
9	☐			3799.44	0.0010	P	3.7

$$y = 2.7004\text{E-}004 * x + 5.9939\text{E-}006$$

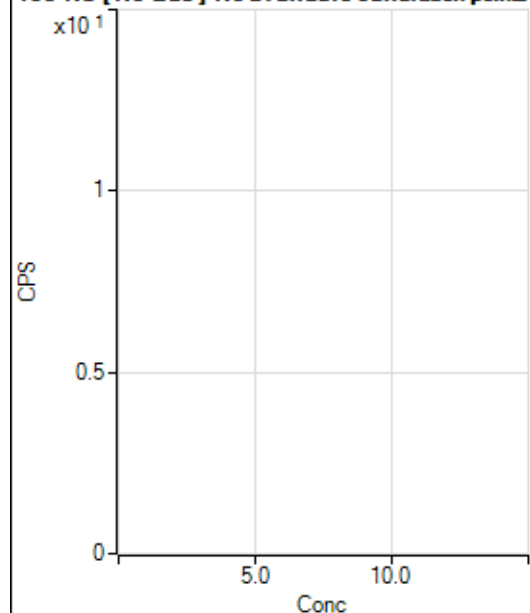
$$R = 0.9999$$

$$DL = 0.01156$$

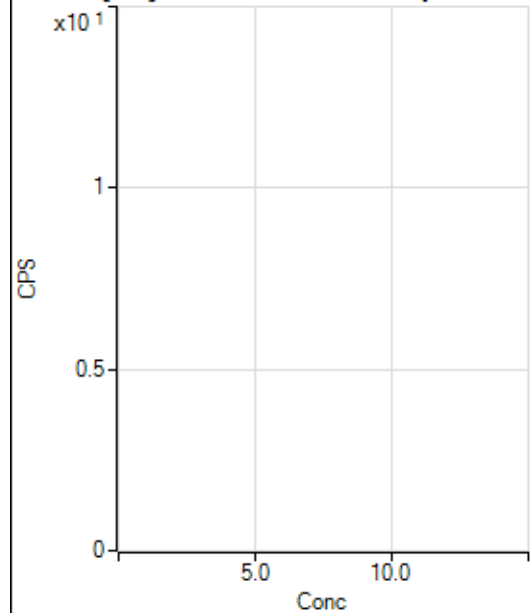
$$BEC = 0.0222$$

Weight: <None>

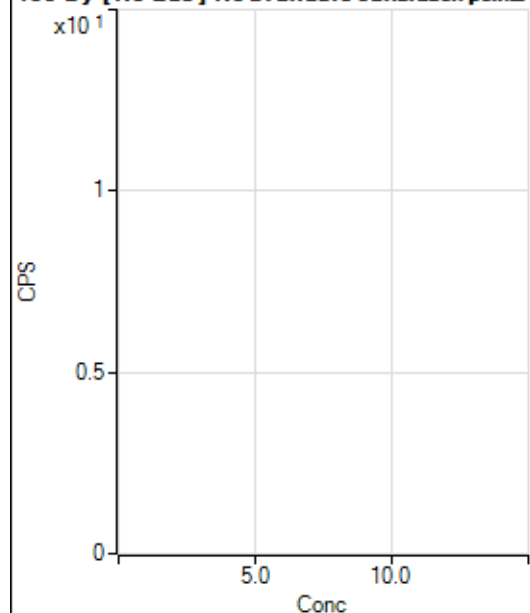
Min Conc: 0

150 Nd [No Gas] No available calibration points

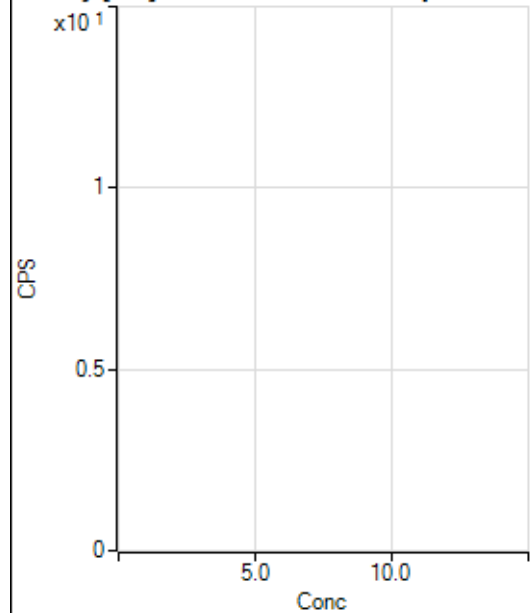
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			2.22		P	173.
3	☐			3.33		P	100.
4	☐			51.11		P	30.1
5	☐			135.56		P	21.2
6	☐			213.34		P	13.6
7	☐			434.46		P	3.8
8	☐			867.81		P	14.0
9	☐			23.33		P	28.6

150 Nd [He] No available calibration points

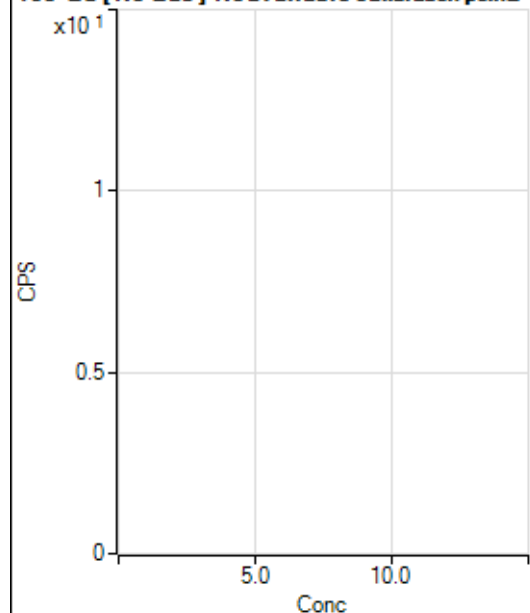
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.
2	☐			1.11		P	173.
3	☐			5.55		P	124.
4	☐			12.22		P	63.0
5	☐			33.33		P	36.1
6	☐			46.67		P	32.7
7	☐			96.67		P	10.3
8	☐			208.89		P	21.3
9	☐			8.89		P	57.3

156 Dy [No Gas] No available calibration points

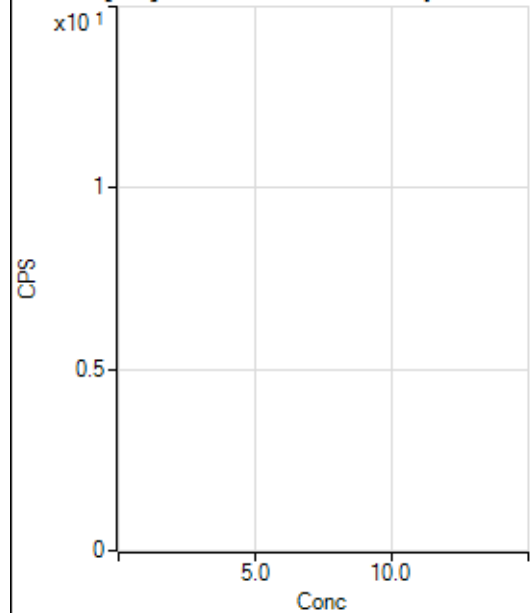
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			2.22		P	86.6
3	☐			2.22		P	173.
4	☐			15.55		P	44.6
5	☐			30.00		P	11.1
6	☐			57.78		P	12.0
7	☐			126.67		P	18.4
8	☐			297.78		P	14.9
9	☐			536.69		P	4.9

156 Dy [He] No available calibration points

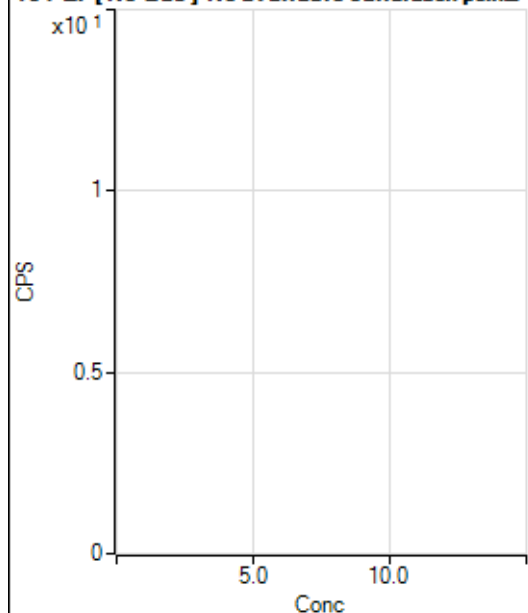
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			1.11		P	173.
3	☐			2.22		P	86.6
4	☐			12.22		P	31.5
5	☐			40.00		P	25.0
6	☐			75.55		P	20.8
7	☐			135.56		P	19.1
8	☐			228.89		P	5.9
9	☐			367.79		P	14.7

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

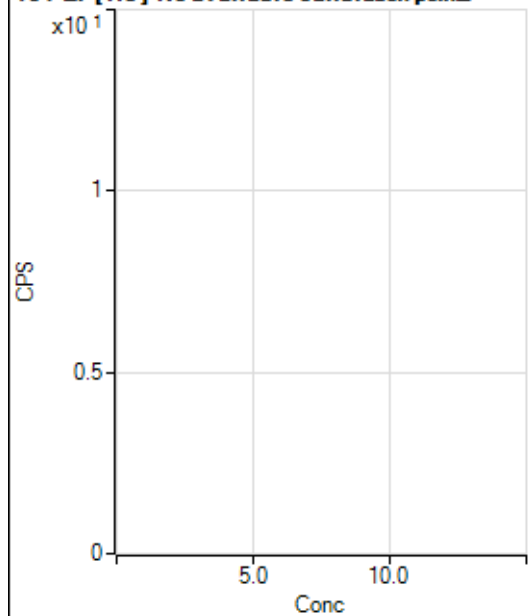
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			34.45		P	11.2
2	☐			22.22		P	34.7
3	☐			26.67		P	33.1
4	☐			38.89		P	17.8
5	☐			43.33		P	27.7
6	☐			57.78		P	34.8
7	☐			92.22		P	5.5
8	☐			198.89		P	17.9
9	☐			624.46		P	9.4

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			133.34		P	13.2
2	☐			132.23		P	27.2
3	☐			123.34		P	7.1
4	☐			168.89		P	19.8
5	☐			153.33		P	10.0
6	☐			156.67		P	8.5
7	☐			185.56		P	4.5
8	☐			254.45		P	17.6
9	☐			625.58		P	5.4

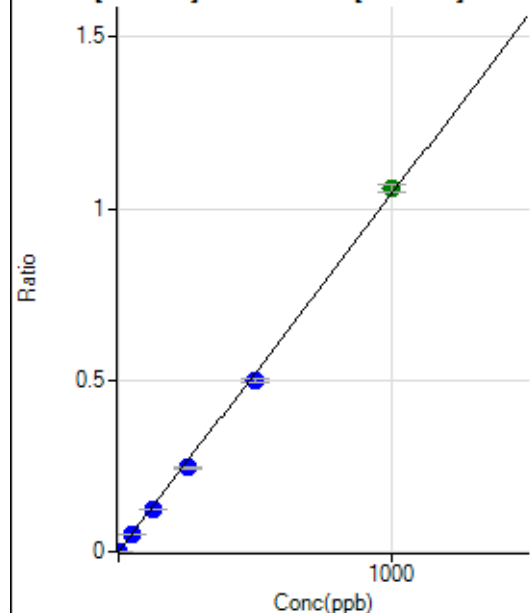
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.00		P	29.4
2	☐			31.11		P	27.0
3	☐			25.56		P	19.9
4	☐			40.00		P	28.9
5	☐			41.11		P	49.5
6	☐			28.89		P	6.7
7	☐			55.55		P	35.2
8	☐			68.89		P	10.1
9	☐			47.78		P	8.1

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.44		P	20.8
2	☐			25.55		P	52.7
3	☐			24.45		P	28.4
4	☐			33.33		P	10.0
5	☐			33.33		P	34.6
6	☐			25.56		P	45.8
7	☐			33.33		P	34.6
8	☐			70.00		P	20.8
9	☐			34.44		P	29.6

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.33	0.0000	P	12.2
2	☐	0.100	0.078	308.90	0.0001	P	11.2
3	☐	1.000	0.865	2838.11	0.0009	P	2.3
4	☐	50.000	48.089	156885.41	0.0501	P	0.5
5	☐	125.000	118.874	385827.53	0.1239	P	0.7
6	☐	250.000	234.598	762581.24	0.2445	P	3.6
7	☐	500.000	479.724	1530621.73	0.4999	P	2.0
8	☐	1000.000	1014.850	3152810.40	1.0574	A	2.2
9	☐			615.57	0.0003	P	6.3

$$y = 0.0010 * x + 1.9979E-005$$

$$R = 0.9996$$

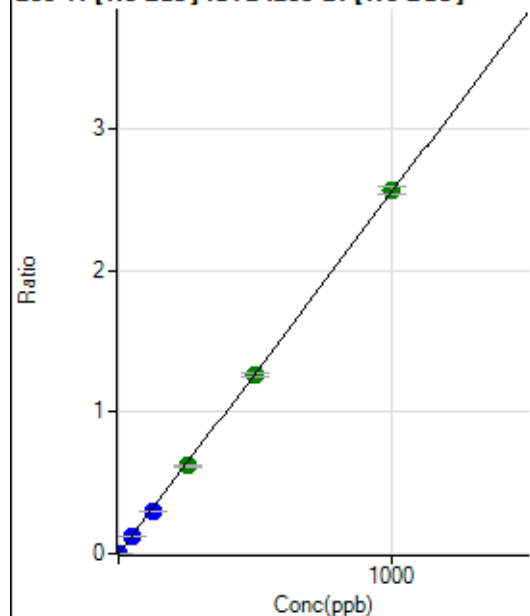
$$DL = 0.007027$$

$$BEC = 0.01917$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	128.89	0.0000	P	29.3
2	☐	0.100	0.081	750.03	0.0002	P	8.7
3	☐	1.000	0.844	6748.41	0.0022	P	4.2
4	☐	50.000	47.183	376327.15	0.1202	P	0.6
5	☐	125.000	116.881	927497.56	0.2978	P	0.5
6	☐	250.000	242.457	1927199.33	0.6177	A	2.5
7	☐	500.000	496.834	3875843.73	1.2658	A	1.8
8	☐	1000.000	1004.625	7631119.40	2.5594	A	2.0
9	☐			1280.08	0.0005	P	5.3

$$y = 0.0025 * x + 4.0580E-005$$

$$R = 0.9999$$

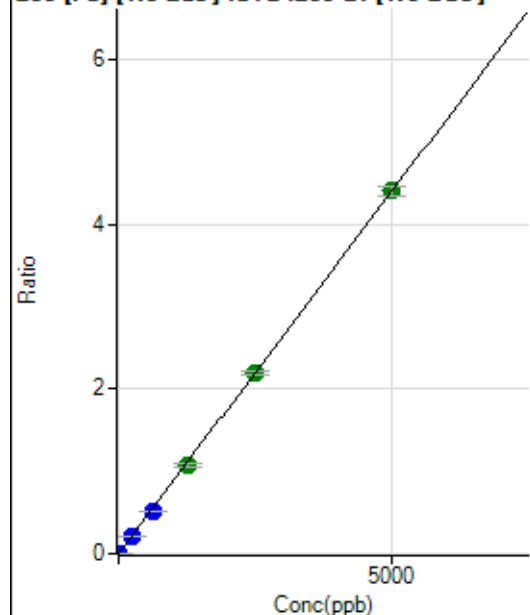
$$DL = 0.01398$$

$$BEC = 0.01593$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	162.23	0.0001	P	10.5
2	☐	0.100	0.093	404.45	0.0001	P	8.3
3	☐	1.000	0.811	2352.45	0.0008	P	5.3
4	☐	250.000	236.711	651245.51	0.2081	P	0.8
5	☐	625.000	586.779	1606290.81	0.5157	P	0.6
6	☐	1250.000	1229.579	3371045.89	1.0807	A	4.0
7	☐	2500.000	2495.254	6714984.69	2.1930	A	2.5
8	☐	5000.000	5012.920	13135197.86	4.4057	A	2.7
9	☐			2979.25	0.0013	P	3.8

$$y = 8.7885\text{E-}004 * x + 5.1257\text{E-}005$$

$$R = 1.0000$$

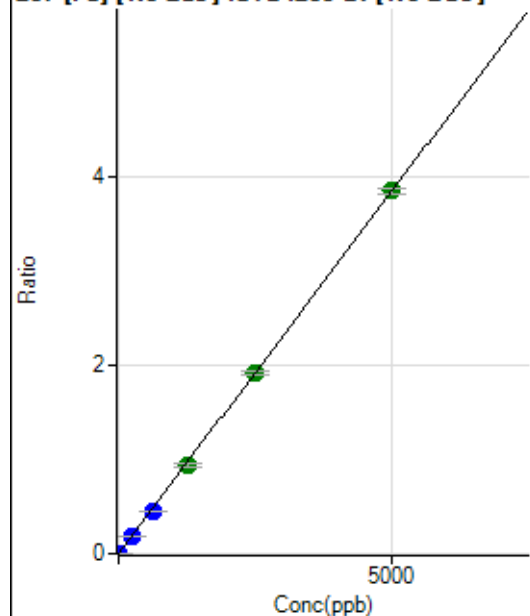
$$DL = 0.01829$$

$$BEC = 0.05832$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	110.00	0.0000	P	24.2
2	☐	0.100	0.090	316.67	0.0001	P	11.7
3	☐	1.000	0.861	2145.75	0.0007	P	2.6
4	☐	250.000	237.474	571398.59	0.1826	P	1.3
5	☐	625.000	586.319	1403764.79	0.4507	P	0.5
6	☐	1250.000	1224.962	2937193.60	0.9416	A	4.1
7	☐	2500.000	2504.111	5894024.98	1.9248	A	1.7
8	☐	5000.000	5009.665	11482191.91	3.8508	A	1.6
9	☐			2566.93	0.0011	P	4.6

$$y = 7.6866\text{E-}004 * x + 3.4787\text{E-}005$$

$$R = 1.0000$$

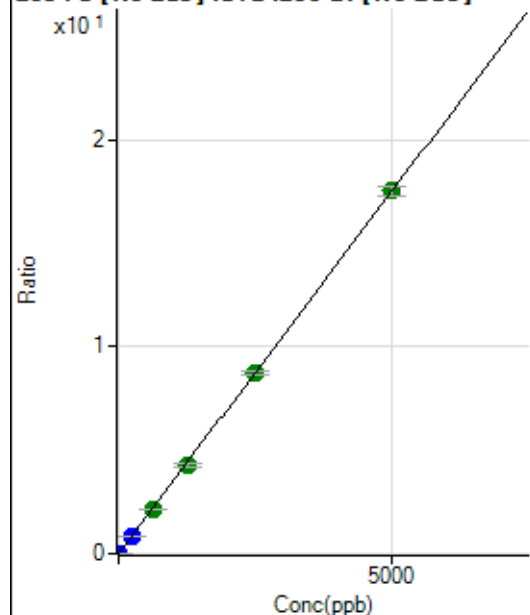
$$DL = 0.03285$$

$$BEC = 0.04526$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	595.57	0.0002	P	13.3
2	☐	0.100	0.088	1514.49	0.0005	P	9.6
3	☐	1.000	0.843	9677.01	0.0031	P	2.8
4	☐	250.000	238.158	2610414.83	0.8341	P	1.1
5	☐	625.000	607.002	6620134.36	2.1256	A	0.8
6	☐	1250.000	1224.030	13370176.61	4.2860	A	3.6
7	☐	2500.000	2495.095	26751948.63	8.7366	A	1.8
8	☐	5000.000	5011.787	52323354.64	17.5485	A	2.3
9	☐			11777.68	0.0050	P	3.0

$$y = 0.0035 * x + 1.8818E-004$$

$$R = 1.0000$$

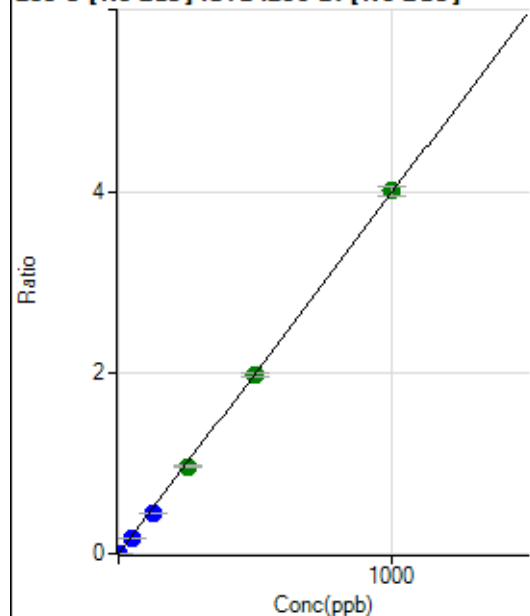
$$DL = 0.02144$$

$$BEC = 0.05374$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	14.44	0.0000	P	34.6
2	☐	0.100	0.083	1018.94	0.0003	P	9.1
3	☐	1.000	0.816	10031.63	0.0033	P	1.0
4	☐	50.000	44.888	559253.97	0.1787	P	0.9
5	☐	125.000	111.358	1380632.65	0.4433	P	0.3
6	☐	250.000	242.419	3010276.17	0.9650	A	3.5
7	☐	500.000	496.164	6047477.69	1.9751	A	3.0
8	☐	1000.000	1005.775	11936562.32	4.0036	A	2.9
9	☐			1186.74	0.0005	P	11.7

$$y = 0.0040 * x + 4.5540E-006$$

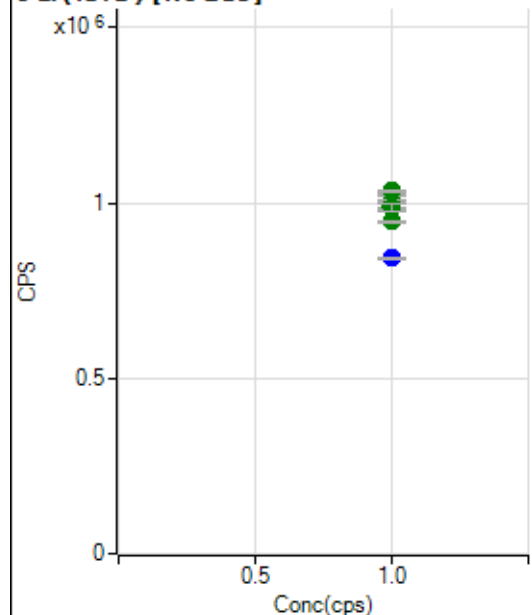
$$R = 0.9999$$

$$DL = 0.001187$$

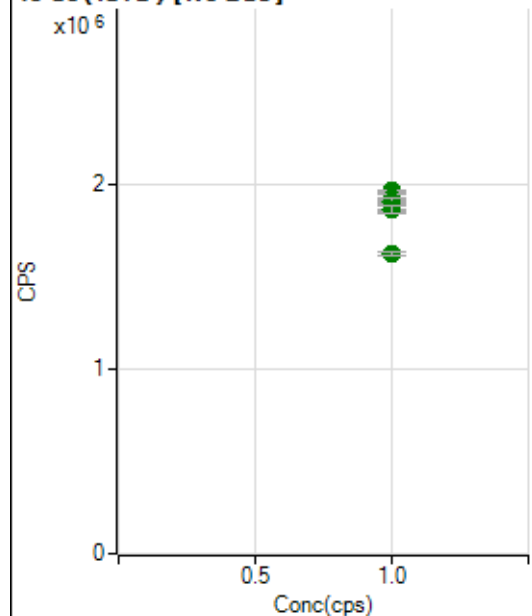
$$BEC = 0.001144$$

Weight: <None>

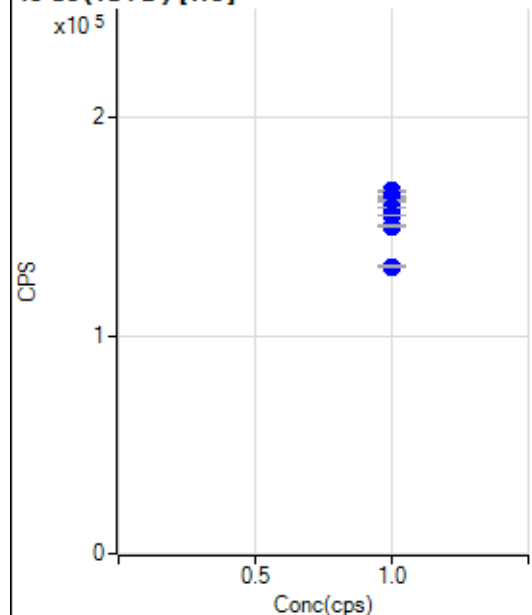
Min Conc: 0

6 Li (ISTD) [No Gas]

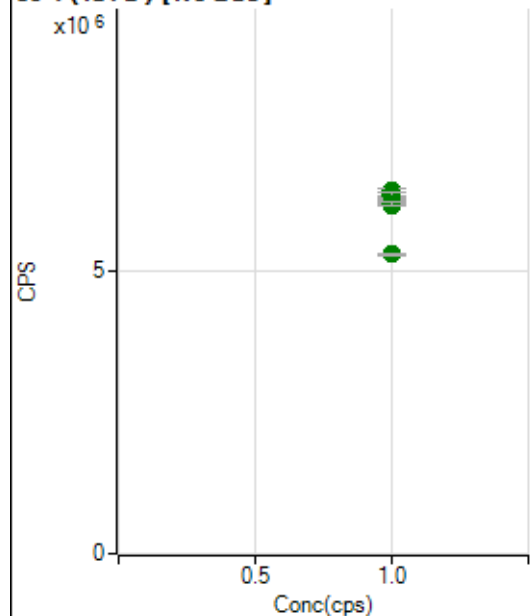
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1021778.37		A	0.5
2	☐	1.000		989564.84		A	1.6
3	☐	1.000		991070.95		A	2.6
4	☐	1.000		1034355.19		A	0.8
5	☐	1.000		998831.15		A	2.0
6	☐	1.000		989164.63		A	2.2
7	☐	1.000		947607.73		A	0.3
8	☐	1.000		946494.78		A	1.0
9	☐	1.000		841566.78		P	1.1

45 Sc (ISTD) [No Gas]

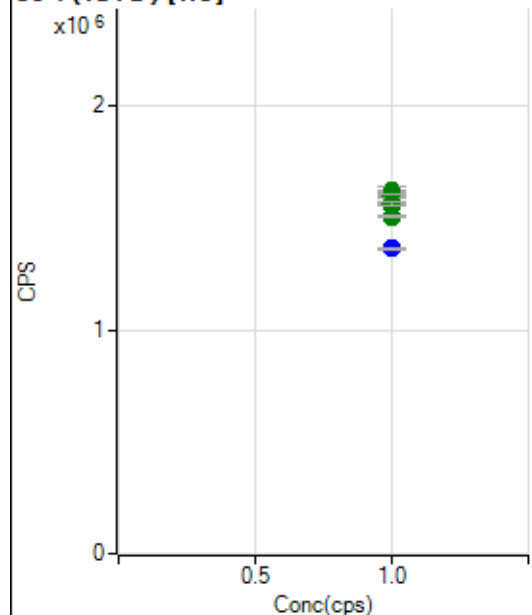
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1953453.46		A	0.8
2	☐	1.000		1907806.05		A	2.0
3	☐	1.000		1912341.05		A	1.3
4	☐	1.000		1963515.53		A	0.2
5	☐	1.000		1929176.57		A	1.5
6	☐	1.000		1900735.77		A	2.3
7	☐	1.000		1858232.86		A	0.6
8	☐	1.000		1864981.12		A	2.1
9	☐	1.000		1621696.08		A	1.1

45 Sc (ISTD) [He]

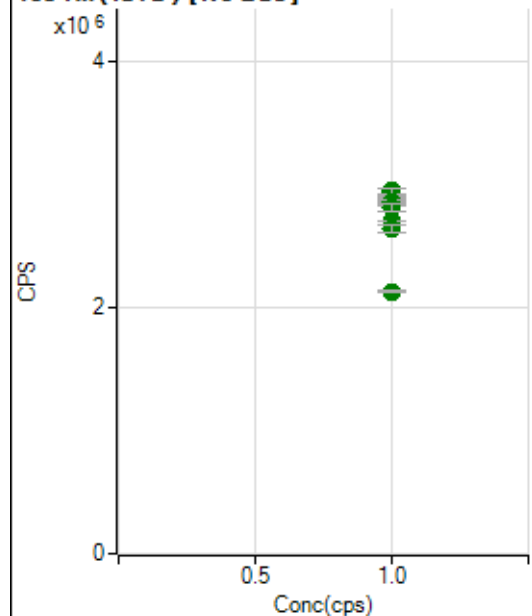
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		166510.91		P	0.5
2	☐	1.000		163813.74		P	0.3
3	☐	1.000		163635.70		P	0.7
4	☐	1.000		162979.11		P	0.4
5	☐	1.000		161998.55		P	0.3
6	☐	1.000		158685.26		P	0.1
7	☐	1.000		155166.17		P	0.1
8	☐	1.000		150356.90		P	0.5
9	☐	1.000		131896.02		P	0.9

89 Y (ISTD) [No Gas]

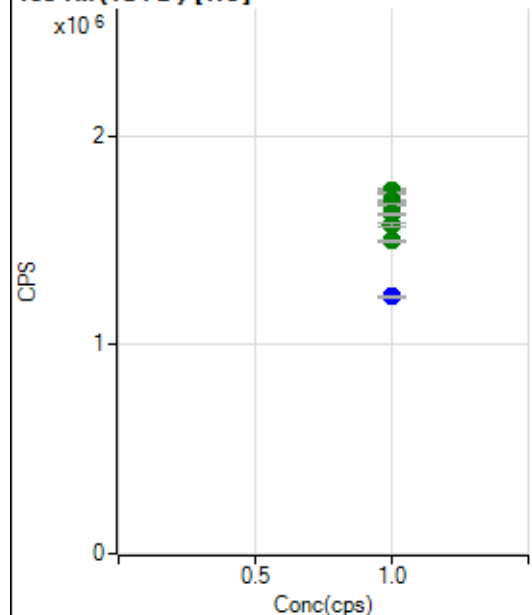
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6369772.82		A	1.3
2	☐	1.000		6294473.80		A	0.5
3	☐	1.000		6255560.95		A	1.5
4	☐	1.000		6420091.43		A	1.0
5	☐	1.000		6364512.54		A	1.3
6	☐	1.000		6326067.06		A	1.9
7	☐	1.000		6169214.70		A	0.8
8	☐	1.000		6189505.26		A	1.1
9	☐	1.000		5299785.48		A	0.8

89 Y(ISTD) [He]

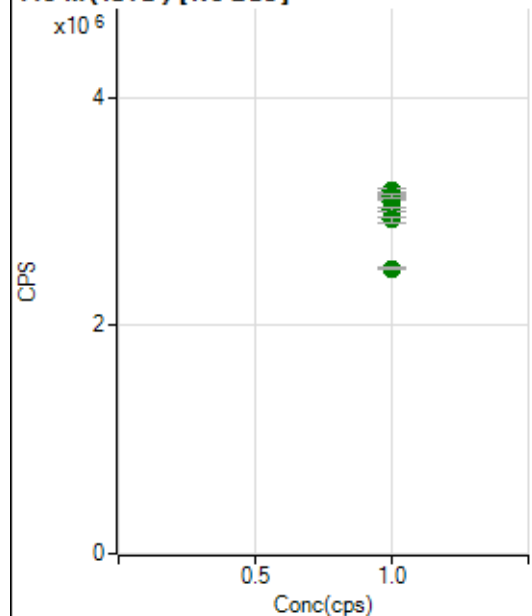
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1622603.40		A	2.6
2	☐	1.000		1619281.09		A	1.1
3	☐	1.000		1612469.49		A	0.8
4	☐	1.000		1605688.38		A	0.4
5	☐	1.000		1601167.08		A	1.4
6	☐	1.000		1558706.64		A	0.7
7	☐	1.000		1564581.17		A	1.2
8	☐	1.000		1506570.90		A	0.5
9	☐	1.000		1365789.46		P	0.7

103 Rh(ISTD) [No Gas]

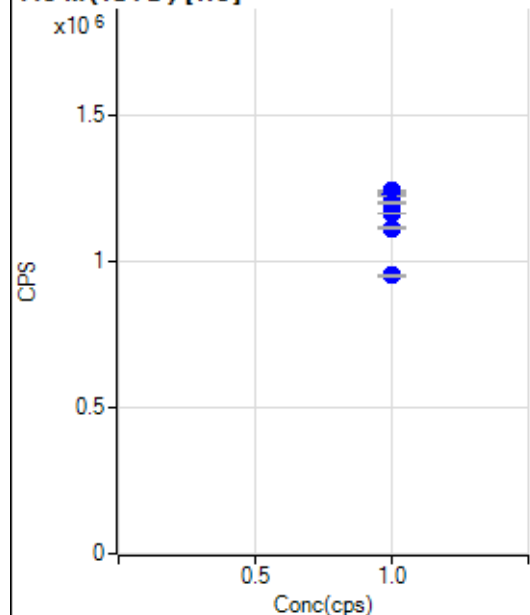
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2936506.62		A	1.9
2	☐	1.000		2866893.88		A	0.9
3	☐	1.000		2865309.02		A	3.0
4	☐	1.000		2942448.46		A	1.5
5	☐	1.000		2858981.14		A	1.3
6	☐	1.000		2805094.50		A	1.9
7	☐	1.000		2696613.79		A	0.5
8	☐	1.000		2633995.71		A	2.0
9	☐	1.000		2128744.40		A	0.9

103 Rh (ISTD) [He]

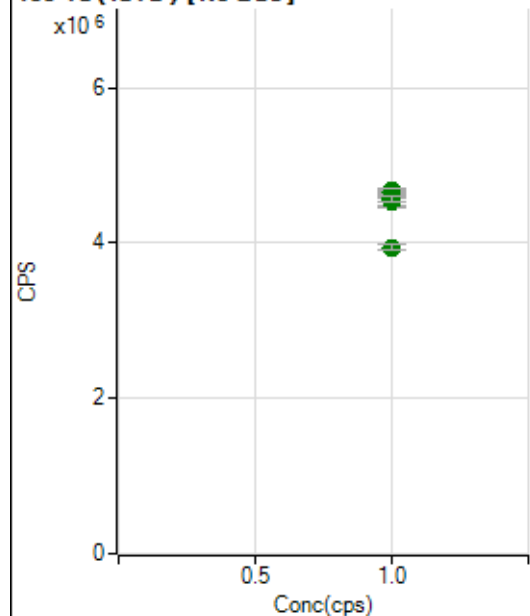
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1737823.01		A	1.0
2	☐	1.000		1735120.56		A	0.4
3	☐	1.000		1724208.25		A	0.7
4	☐	1.000		1693372.49		A	0.6
5	☐	1.000		1673892.93		A	0.4
6	☐	1.000		1626669.78		A	0.2
7	☐	1.000		1573455.06		A	1.0
8	☐	1.000		1499366.97		A	0.6
9	☐	1.000		1233700.55		P	0.8

115 In (ISTD) [No Gas]

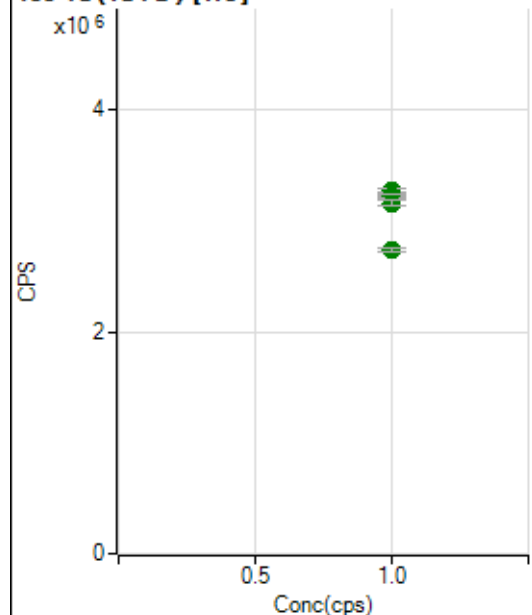
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3162811.05		A	0.2
2	☐	1.000		3124709.98		A	1.2
3	☐	1.000		3080233.58		A	2.6
4	☐	1.000		3181385.10		A	0.9
5	☐	1.000		3133516.90		A	0.5
6	☐	1.000		3131479.18		A	1.2
7	☐	1.000		3018985.56		A	0.7
8	☐	1.000		2925923.51		A	2.0
9	☐	1.000		2496683.35		A	0.7

115 In (ISTD) [He]

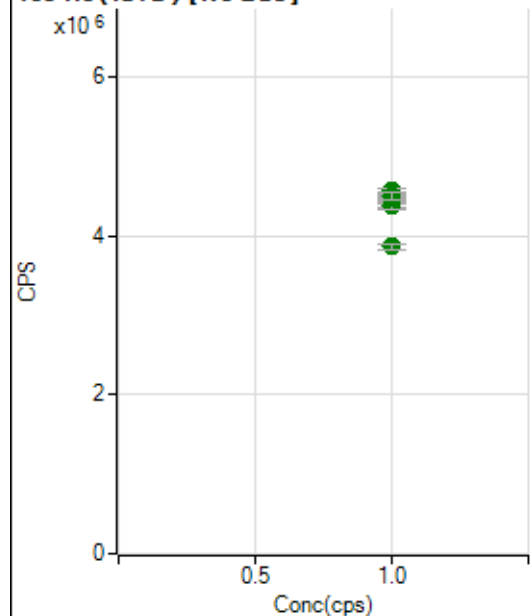
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1239494.59		P	0.4
2	☐	1.000		1224707.13		P	0.5
3	☐	1.000		1224108.99		P	0.5
4	☐	1.000		1228696.27		P	0.8
5	☐	1.000		1220294.22		P	0.1
6	☐	1.000		1196884.91		P	0.5
7	☐	1.000		1163539.98		P	0.2
8	☐	1.000		1111598.56		P	0.8
9	☐	1.000		949566.85		P	0.6

159 Tb (ISTD) [No Gas]

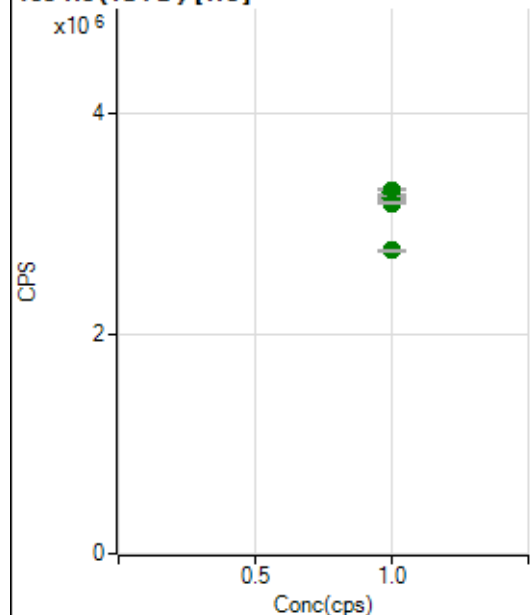
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4628931.04		A	1.3
2	☐	1.000		4521013.37		A	2.1
3	☐	1.000		4522922.33		A	2.5
4	☐	1.000		4670396.80		A	0.7
5	☐	1.000		4640460.10		A	0.9
6	☐	1.000		4645924.16		A	2.0
7	☐	1.000		4562247.60		A	0.9
8	☐	1.000		4570190.32		A	1.2
9	☐	1.000		3947219.49		A	1.3

159 Tb (ISTD) [He]

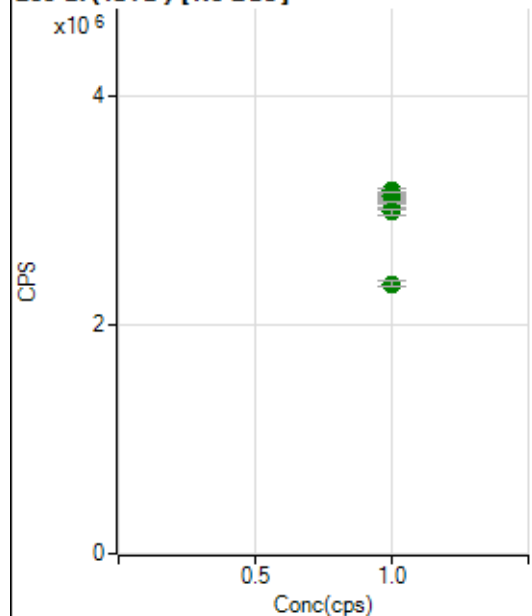
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3257177.24		A	0.6
2	☐	1.000		3235677.66		A	0.3
3	☐	1.000		3226282.83		A	0.3
4	☐	1.000		3261527.25		A	0.2
5	☐	1.000		3272461.79		A	0.9
6	☐	1.000		3270246.06		A	1.3
7	☐	1.000		3222314.71		A	1.0
8	☐	1.000		3160544.61		A	1.4
9	☐	1.000		2739626.84		A	1.8

165 Ho (ISTD) [No Gas]

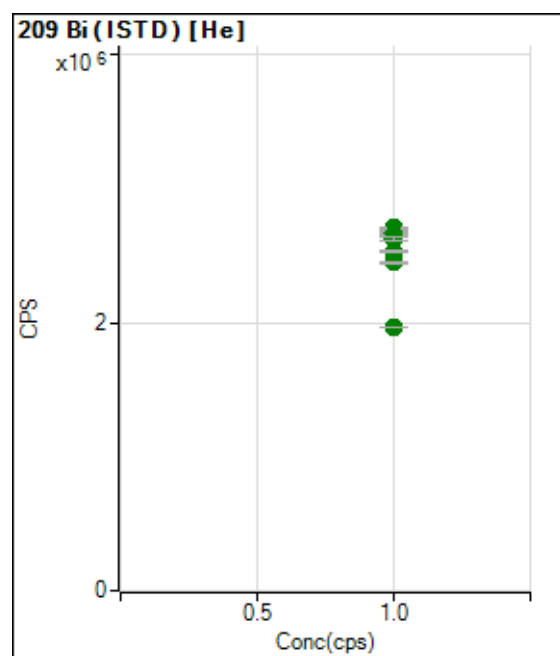
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4494845.62		A	1.7
2	☐	1.000		4377137.99		A	1.3
3	☐	1.000		4380022.85		A	2.0
4	☐	1.000		4562055.42		A	1.0
5	☐	1.000		4563497.85		A	1.0
6	☐	1.000		4560333.37		A	1.5
7	☐	1.000		4485994.07		A	0.7
8	☐	1.000		4492602.57		A	2.1
9	☐	1.000		3866319.49		A	1.8

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3301527.28		A	1.3
2	☐	1.000		3203778.56		A	0.6
3	☐	1.000		3221818.49		A	0.1
4	☐	1.000		3253450.37		A	0.9
5	☐	1.000		3293349.32		A	0.9
6	☐	1.000		3274318.04		A	0.3
7	☐	1.000		3240118.91		A	1.2
8	☐	1.000		3191813.35		A	0.2
9	☐	1.000		2760481.21		A	0.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3165276.24		A	1.9
2	☐	1.000		3052475.16		A	1.7
3	☐	1.000		3082860.75		A	2.2
4	☐	1.000		3129812.56		A	1.2
5	☐	1.000		3114647.59		A	1.6
6	☐	1.000		3120752.42		A	1.7
7	☐	1.000		3062277.63		A	0.6
8	☐	1.000		2982179.19		A	1.4
9	☐	1.000		2356053.31		A	1.9



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2706843.36		A	0.8
2	☐	1.000		2657823.59		A	1.3
3	☐	1.000		2673016.50		A	0.6
4	☐	1.000		2671579.20		A	1.5
5	☐	1.000		2653474.48		A	0.6
6	☐	1.000		2632617.27		A	1.1
7	☐	1.000		2531079.09		A	0.3
8	☐	1.000		2450567.95		A	0.6
9	☐	1.000		1968403.98		A	0.4

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP7053123-MS.b

Acq. Date-Time 2023-05-31 10:34:49

Report Comment ---

Instrument Name G8403A JP14410463

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		4082	40819.63			0.662	5.000
24		42465	424649.05			0.365	5.000
25		5837	58370.84			0.520	5.000
26		6573	65731.37			0.531	5.000
59		29144	291444.60			0.640	5.000
113		3850	38500.55			0.753	5.000
115		48268	482680.54			0.671	5.000
206		13909	139087.02			0.522	5.000
207		12892	128920.80			0.606	5.000
208		30023	300234.59			0.744	5.000
220		0	1.10			49.793	

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

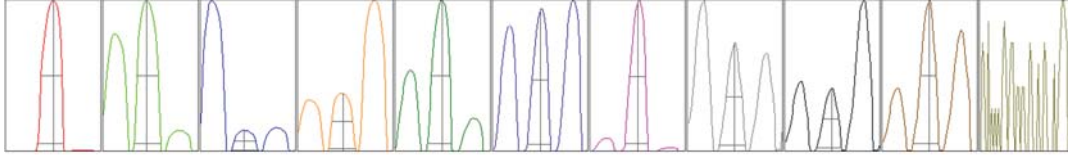
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	4090	4124	4078	4064	4054
24	42496	42702	42355	42471	42300
25	5812	5855	5872	5847	5799
26	6559	6632	6557	6575	6543
59	29146	29456	29087	28959	29075
113	3868	3891	3838	3834	3819
115	48107	48844	48181	48111	48097
206	13884	14032	13877	13844	13906
207	12866	13022	12905	12836	12832
208	29832	30339	30088	30073	29785

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	6653.42	9.05	8.90 - 9.10	
24	67013.87	23.90	23.90 - 24.10	
25	8983.82	24.90	24.90 - 25.10	
26	10105.87	25.95	25.90 - 26.10	
59	52356.55	59.00	58.90 - 59.10	
113	7982.70	113.05	112.90 - 113.10	
115	99590.53	115.05	114.90 - 115.10	
206	28065.84	206.00	205.90 - 206.10	
207	25515.29	207.00	206.90 - 207.10	
208	60807.45	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.65	0.811	0.900	
24	0.67	0.835	0.900	
25	0.68	0.830	0.900	
26	0.68	0.835	0.900	
59	0.58	0.766	0.900	
113	0.50	0.727	0.900	
115	0.50	0.727	0.900	
206	0.50	0.819	0.900	
207	0.50	0.782	0.900	
208	0.50	0.813	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.82 L/min Dilution Gas 0.40 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	7.8 V	Deflect	16.0 V
Extract 2	-85.0 V	Cell Entrance	-30 V	Plate Bias	-35 V
Omega Bias	-60 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	180 V		

QP Parameters

Mass Gain	123	Axis Gain	1.0001	QP Bias	-3.0 V
Mass Offset	125	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	-1.4 mm	Torch V	1.2 mm
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EM

Discriminator	3.2 mV	Analog HV	2294 V	Pulse HV	1644 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		9644	96443.18			0.658	
89		15864	158639.47			0.490	
205		15781	157809.43			0.525	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	9730	9627	9663	9647	9554
89	15907	15814	15964	15870	15765
205	15717	15671	15816	15836	15865

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.82 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	9.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	0.0 V	Omega Lens	9.0 V	Deflect	2.8 V
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US EPA Tune Check Report

Extract 2	-70.0 V	Cell Entrance	-40 V	Plate Bias	-60 V
Omega Bias	-50 V	Cell Exit	-60 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	3.9 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	190 V		

QP Parameters

Mass Gain	123	Axis Gain	1.0001	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	0.03		

Hardware Settings

Torch

Torch H	-1.4 mm	Torch V	1.2 mm
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EM

Discriminator	3.2 mV	Analog HV	2294 V	Pulse HV	1644 V
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