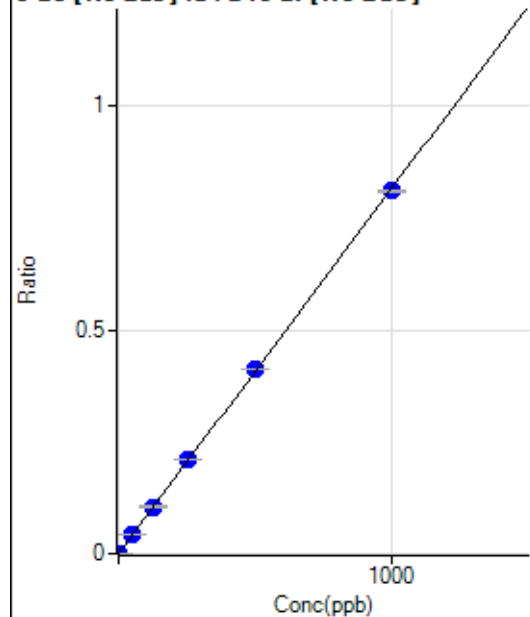


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7012721 MS.b\
Analysis File: P7012721 MS.batch.bin
DA Date-Time: 2021-01-28 16:23:30
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-01-27 12:30:51
2	004CALS.d	S02	2021-01-27 12:34:01
3	005CALS.d	S03	2021-01-27 12:37:10
4	006CALS.d	S04	2021-01-27 12:40:19
5	007CALS.d	S05	2021-01-27 12:43:25
6	008CALS.d	S06	2021-01-27 12:46:31
7	009CALS.d	S07	2021-01-27 12:49:30
8	010CALS.d	S08	2021-01-27 12:52:29

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	18.52	0.0000	P	45.5
2	☐	1.000	1.047	940.79	0.0009	P	4.9
3	☐	50.000	51.442	44964.86	0.0419	P	1.5
4	☐	125.000	128.329	115382.35	0.1046	P	1.7
5	☐	250.000	258.435	233850.36	0.2106	P	0.7
6	☐	500.000	506.568	459239.28	0.4127	P	0.2
7	☐	1000.000	994.119	899102.48	0.8100	P	0.8
8	☐			188.89	0.0002	P	20.5

$$y = 8.1473\text{E-}004 * x + 1.7014\text{E-}005$$

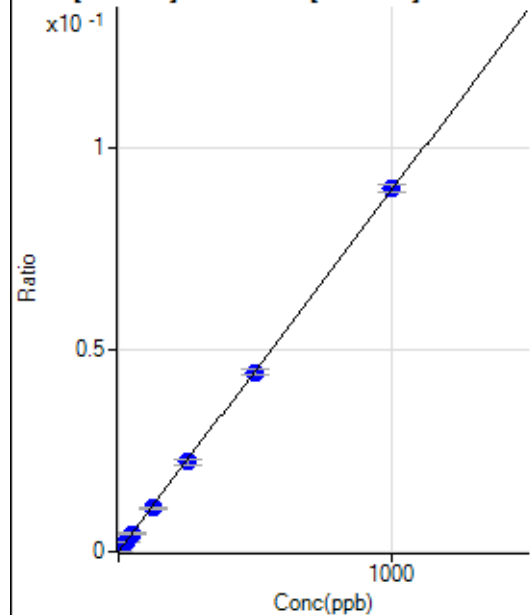
R = 0.9999

DL = 0.02849

BEC = 0.02088

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	66.67	0.0001	P	24.6
2	☐	25.000	24.473	2430.81	0.0022	P	7.5
3	☐	50.000	49.329	4792.54	0.0045	P	8.3
4	☐	125.000	119.497	11857.68	0.0107	P	4.0
5	☐	250.000	247.882	24653.86	0.0222	P	6.6
6	☐	500.000	495.124	49294.77	0.0443	P	3.4
7	☐	1000.000	1003.702	99612.34	0.0897	P	2.0
8	☐			2886.47	0.0026	P	6.5

$$y = 8.9356\text{E-}005 * x + 6.1221\text{E-}005$$

R = 1.0000

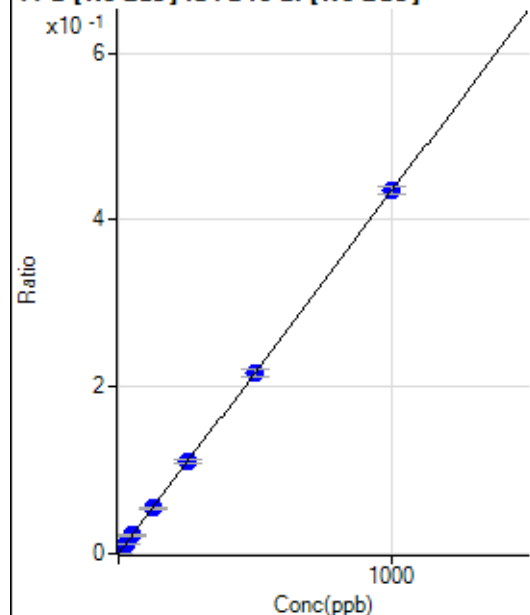
DL = 0.5046

BEC = 0.6851

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	225.01	0.0002	P	4.3
2	☐	25.000	24.479	11715.91	0.0108	P	3.9
3	☐	50.000	50.067	23538.24	0.0219	P	3.1
4	☐	125.000	124.424	59891.23	0.0542	P	3.6
5	☐	250.000	252.639	122021.78	0.1099	P	4.8
6	☐	500.000	497.021	240358.04	0.2160	P	4.2
7	☐	1000.000	1000.911	482669.83	0.4349	P	2.2
8	☐			14532.34	0.0132	P	12.5

$$y = 4.3426\text{E-}004 * x + 2.0673\text{E-}004$$

$$R = 1.0000$$

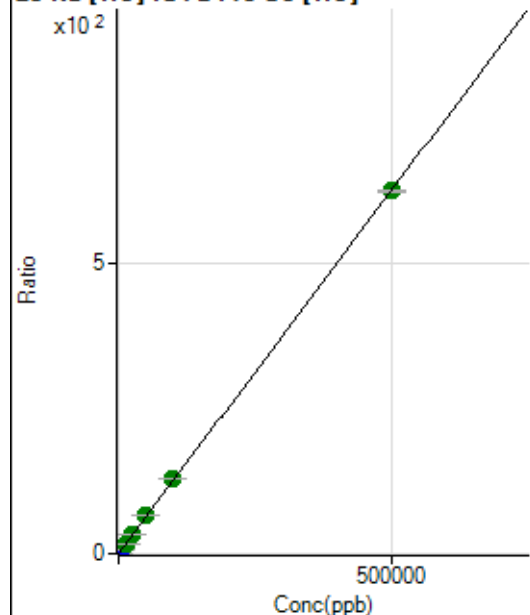
$$DL = 0.06087$$

$$BEC = 0.4761$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19699.38	0.0658	P	2.4
2	☐	500.000	533.125	218586.09	0.7315	P	1.8
3	☐	5000.000	5500.603	2028283.68	6.9345	P	2.7
4	☐	12500.000	12909.800	4636160.22	16.1864	A	0.7
5	☐	25000.000	25784.732	9008933.71	32.2635	A	0.9
6	☐	50000.000	51758.741	17079019.65	64.6975	A	0.2
7	☐	100000.00	102468.17	33686964.29	128.0189	A	0.6
8	☐	500000.00	499275.97	171891941.3	623.5168	A	0.4

$$y = 0.0012 * x + 0.0658$$

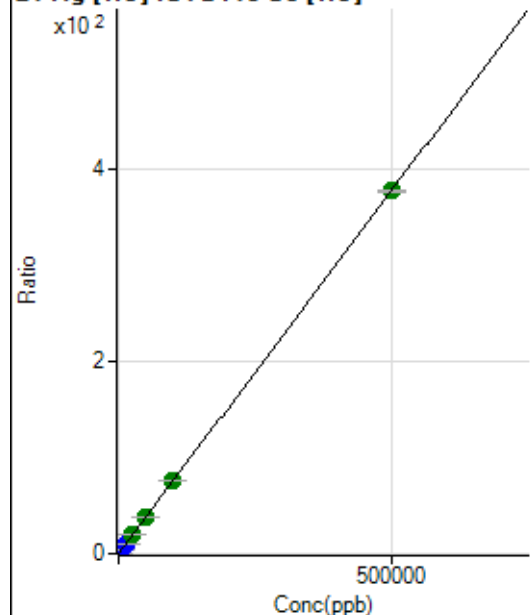
$$R = 1.0000$$

$$DL = 3.753$$

$$BEC = 52.71$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	200.01	0.0007	P	1.2
2	☐	500.000	509.350	114853.20	0.3844	P	1.9
3	☐	5000.000	5343.213	1177542.43	4.0258	P	2.3
4	☐	12500.000	13355.201	2881772.33	10.0613	P	0.8
5	☐	25000.000	25673.120	5400550.55	19.3405	A	1.2
6	☐	50000.000	50745.039	10091401.01	38.2275	A	0.3
7	☐	100000.00	100549.24	19931034.99	75.7456	A	1.2
8	☐	500000.00	499757.16	103787138.4	376.4738	A	0.4

$$y = 7.5331\text{E-}004 * x + 6.6816\text{E-}004$$

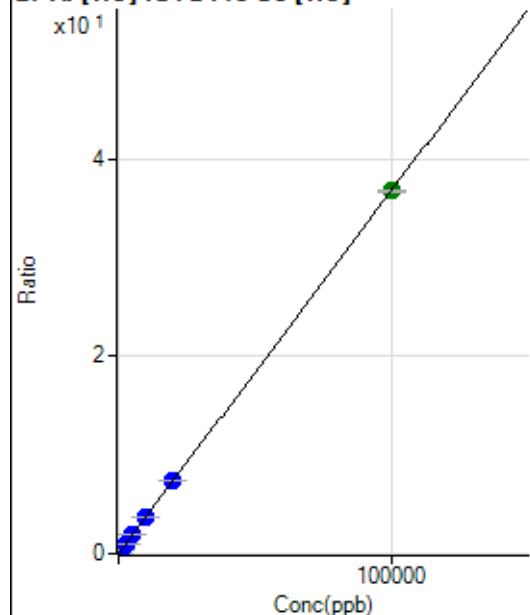
$$R = 1.0000$$

$$DL = 0.03193$$

$$BEC = 0.887$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	411.13	0.0014	P	13.3
2	☐	20.000	19.942	2603.07	0.0087	P	1.8
3	☐	1000.000	1038.735	112229.14	0.3837	P	3.7
4	☐	2500.000	2591.687	273638.90	0.9554	P	1.1
5	☐	5000.000	5184.434	533276.18	1.9098	P	0.4
6	☐	10000.000	10237.613	995166.30	3.7698	P	0.3
7	☐	20000.000	20200.093	1956975.78	7.4370	P	0.2
8	☐	100000.00	99924.319	10140360.21	36.7833	A	0.7

$$y = 3.6810\text{E-}004 * x + 0.0014$$

$$R = 1.0000$$

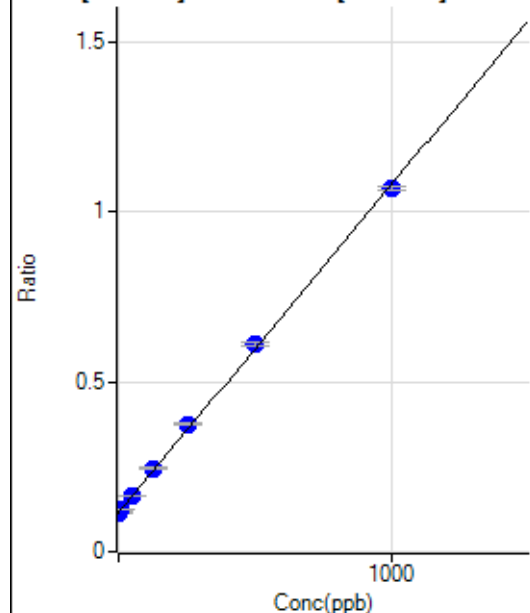
$$DL = 1.484$$

$$BEC = 3.727$$

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	370310.71	0.1150	P	2.0
2	☐	10.000	10.650	401516.22	0.1253	P	2.0
3	☐	50.000	52.370	529868.64	0.1656	P	0.3
4	☐	125.000	135.440	765506.26	0.2458	P	1.0
5	☐	250.000	269.271	1145311.76	0.3751	P	1.7
6	☐	500.000	514.628	1831309.74	0.6120	P	1.2
7	☐	1000.000	986.438	3143476.31	1.0677	P	1.1
8	☐			390198.69	0.1320	P	0.2

$$y = 9.6584\text{E-}004 * x + 0.1150$$

$$R = 0.9996$$

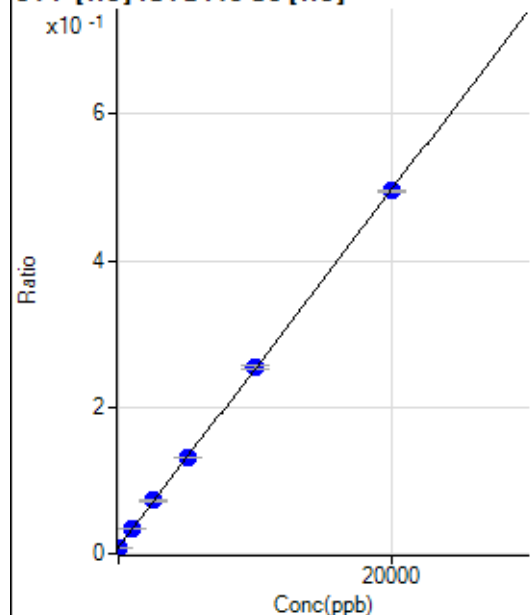
$$DL = 7.316$$

$$BEC = 119.1$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-5.990	2561.40	0.0086	P	5.6
2	☐	0.000	5.990	2644.74	0.0089	P	3.7
3	☐	1000.000	1031.772	9911.83	0.0339	P	1.8
4	☐	2500.000	2604.296	20698.06	0.0723	P	1.0
5	☐	5000.000	5034.215	36737.43	0.1316	P	0.6
6	☐	10000.000	10073.018	67190.24	0.2545	P	2.9
7	☐	20000.000	19940.311	130345.66	0.4953	P	0.8
8	☐			2244.67	0.0081	P	10.5

$$y = 2.4404\text{E-}005 * x + 0.0087$$

$$R = 1.0000$$

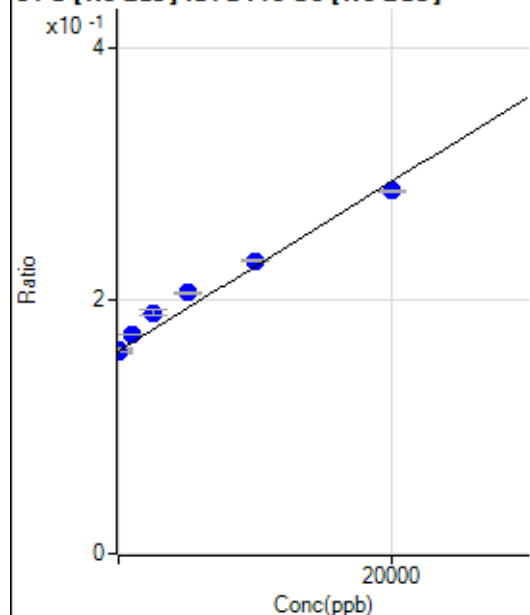
$$DL = 49.58$$

$$BEC = 356.7$$

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	-173.198	511838.69	0.1589	P	1.7
2	☐	0.000	173.198	516802.16	0.1613	P	2.1
3	☐	1000.000	1922.141	553494.03	0.1730	P	0.3
4	☐	2500.000	4548.308	593236.77	0.1905	P	2.4
5	☐	5000.000	6919.432	630315.03	0.2064	P	0.8
6	☐	10000.000	10657.542	692448.40	0.2314	P	0.4
7	☐	20000.000	18889.226	843628.99	0.2865	P	0.4
8	☐			451321.26	0.1527	P	1.4

$$y = 6.6918\text{E-}006 * x + 0.1601$$

$$R = 0.9896$$

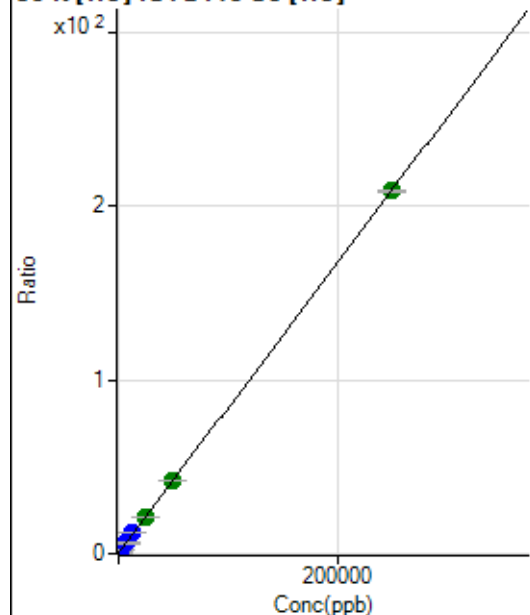
$$DL = 1379$$

$$BEC = 2.392\text{E}+04$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	102054.41	0.3409	P	1.2
2	☐	500.000	533.908	235047.65	0.7867	P	0.6
3	☐	2500.000	2803.071	784272.48	2.6811	P	1.6
4	☐	6250.000	6891.586	1745631.92	6.0945	P	0.2
5	☐	12500.000	13705.120	3290054.80	11.7829	P	0.8
6	☐	25000.000	25238.222	5652266.97	21.4115	A	0.4
7	☐	50000.000	49801.576	11030555.37	41.9187	A	0.3
8	☐	250000.00	249936.46	57618214.48	209.0053	A	0.6

$$y = 8.3487\text{E-}004 * x + 0.3409$$

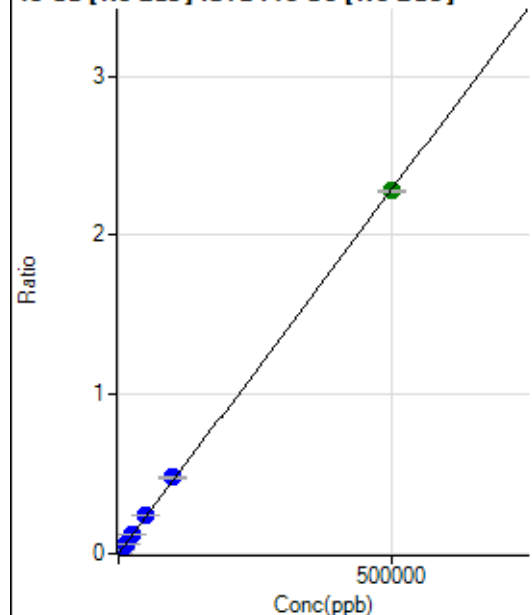
$$R = 1.0000$$

$$DL = 15.15$$

$$BEC = 408.4$$

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	252.78	0.0001	P	1.8
2	☐	500.000	502.572	7616.05	0.0024	P	1.6
3	☐	5000.000	5309.718	77924.10	0.0244	P	2.0
4	☐	12500.000	13385.330	190793.06	0.0613	P	1.2
5	☐	25000.000	26779.126	374117.66	0.1225	P	0.6
6	☐	50000.000	52887.740	723636.74	0.2419	P	1.3
7	☐	100000.00	104485.55	1406511.86	0.4777	P	1.1
8	☐	500000.00	498699.92	6740650.76	2.2799	A	0.2

$$y = 4.5715E-006 * x + 7.8458E-005$$

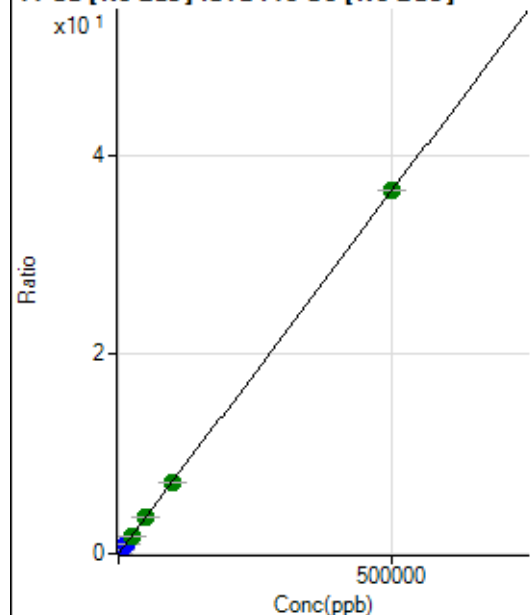
$$R = 0.9999$$

$$DL = 0.9031$$

$$BEC = 17.16$$

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	12530.65	0.0039	P	1.9
2	☐	500.000	520.409	133817.14	0.0417	P	1.1
3	☐	5000.000	5390.592	1267406.12	0.3960	P	0.2
4	☐	12500.000	13572.117	3086222.92	0.9912	P	2.4
5	☐	25000.000	24948.905	5554872.08	1.8189	A	0.2
6	☐	50000.000	49479.183	10781788.78	3.6034	A	0.8
7	☐	100000.00	97239.260	20839765.40	7.0778	A	0.4
8	☐	500000.00	500576.05	107678410.7	36.4198	A	0.2

$$y = 7.2748E-005 * x + 0.0039$$

$$R = 1.0000$$

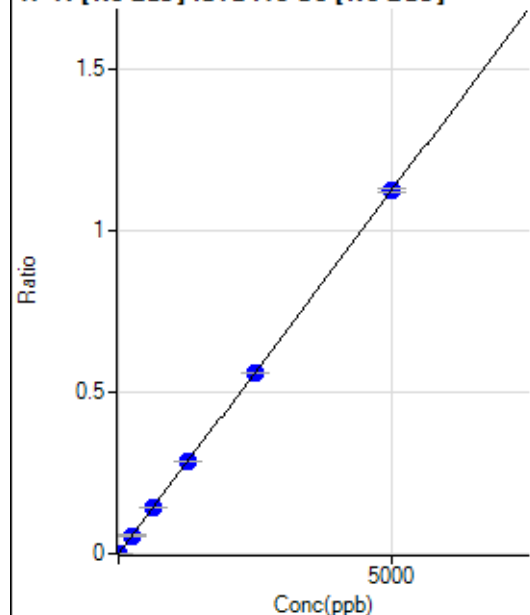
$$DL = 3.038$$

$$BEC = 53.48$$

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	80.56	0.0000	P	31.3
2	☐	5.000	5.017	3686.66	0.0012	P	2.5
3	☐	250.000	250.059	179560.52	0.0561	P	2.2
4	☐	625.000	627.688	438489.30	0.1408	P	1.3
5	☐	1250.000	1270.686	870442.49	0.2850	P	0.8
6	☐	2500.000	2492.923	1673147.02	0.5592	P	0.6
7	☐	5000.000	4998.028	3300542.83	1.1211	P	1.0
8	☐			613.92	0.0002	P	19.5

$$y = 2.2430\text{E-}004 * x + 2.5014\text{E-}005$$

$$R = 1.0000$$

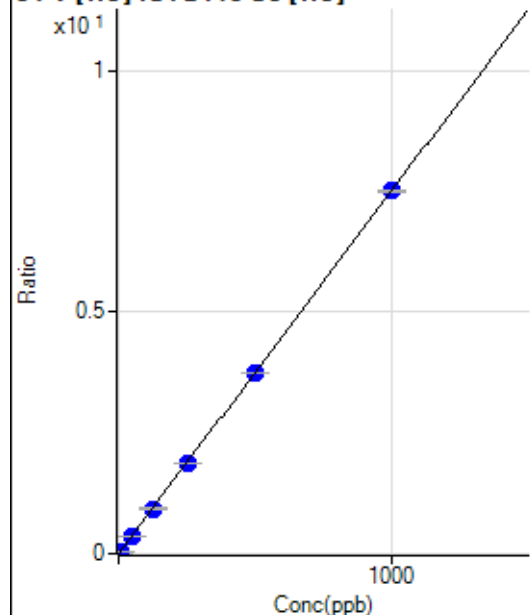
$$DL = 0.1047$$

$$BEC = 0.1115$$

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	14.44	0.0000	P	13.1
2	☐	5.000	4.871	10935.24	0.0366	P	1.2
3	☐	50.000	49.918	109605.03	0.3747	P	0.5
4	☐	125.000	124.226	267039.06	0.9323	P	0.8
5	☐	250.000	249.718	523312.59	1.8741	P	0.3
6	☐	500.000	500.248	991053.40	3.7542	P	0.2
7	☐	1000.000	1000.048	1974852.85	7.5050	P	0.6
8	☐			265.56	0.0010	P	10.4

$$y = 0.0075 * x + 4.8239\text{E-}005$$

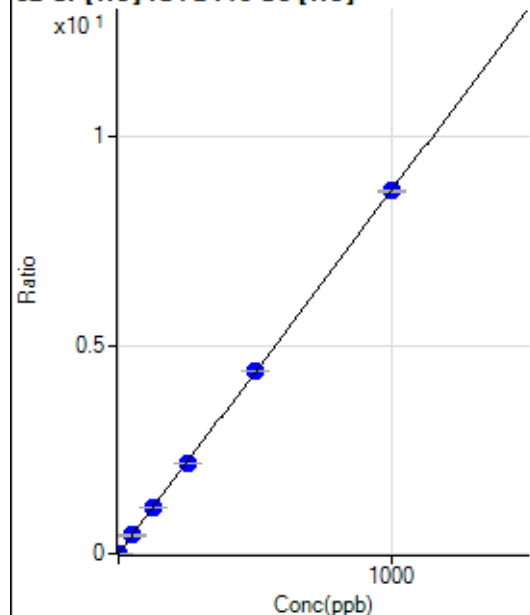
$$R = 1.0000$$

$$DL = 0.002533$$

$$BEC = 0.006428$$

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	1211.17	0.0040	P	1.6
2	☐	2.000	1.898	6149.11	0.0206	P	1.3
3	☐	50.000	50.061	128777.87	0.4402	P	0.8
4	☐	125.000	125.165	313517.60	1.0946	P	0.3
5	☐	250.000	249.377	607836.97	2.1768	P	0.6
6	☐	500.000	502.191	1156109.73	4.3795	P	0.5
7	☐	1000.000	999.037	2291515.26	8.7084	P	0.3
8	☐			14157.98	0.0514	P	1.7

$$y = 0.0087 * x + 0.0040$$

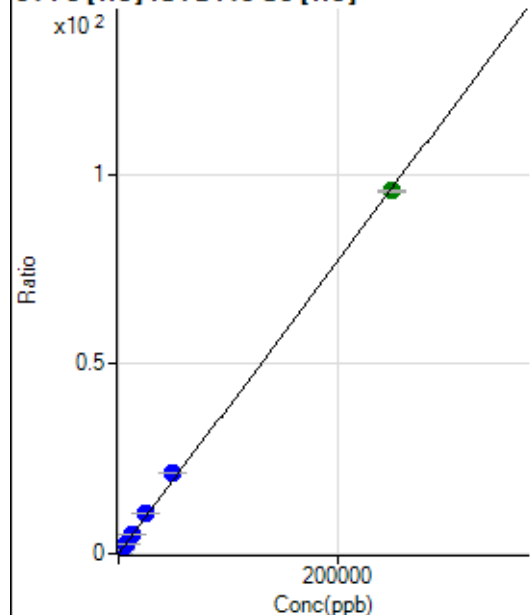
$$R = 1.0000$$

$$DL = 0.02171$$

$$BEC = 0.4644$$

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	1388.16	0.0046	P	1.2
2	☐	50.000	56.127	7830.12	0.0262	P	6.2
3	☐	2500.000	2774.971	313276.47	1.0709	P	0.5
4	☐	6250.000	6861.430	756451.32	2.6410	P	0.8
5	☐	12500.000	13761.766	1477824.97	5.2924	P	0.9
6	☐	25000.000	27684.536	2809283.30	10.6420	P	0.5
7	☐	50000.000	55044.707	5566502.40	21.1547	P	0.9
8	☐	250000.00	248641.48	26338509.25	95.5410	A	0.7

$$y = 3.8423E-004 * x + 0.0046$$

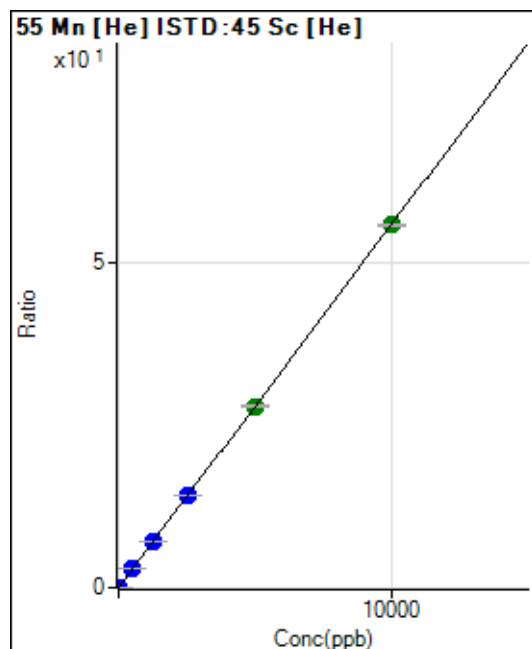
$$R = 0.9998$$

$$DL = 0.4218$$

$$BEC = 12.07$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	61.11	0.0002	P	18.6
2	☐	1.000	1.045	1809.02	0.0061	P	5.6
3	☐	500.000	509.421	834385.50	2.8521	P	0.4
4	☐	1250.000	1263.363	2025833.03	7.0729	P	0.8
5	☐	2500.000	2539.658	3970197.13	14.2180	P	0.6
6	☐	5000.000	4997.707	7385943.36	27.9789	A	0.6
7	☐	10000.000	9989.091	14715123.39	55.9223	A	0.7
8	☐			9246.31	0.0335	P	2.0

$$y = 0.0056 * x + 2.0396E-004$$

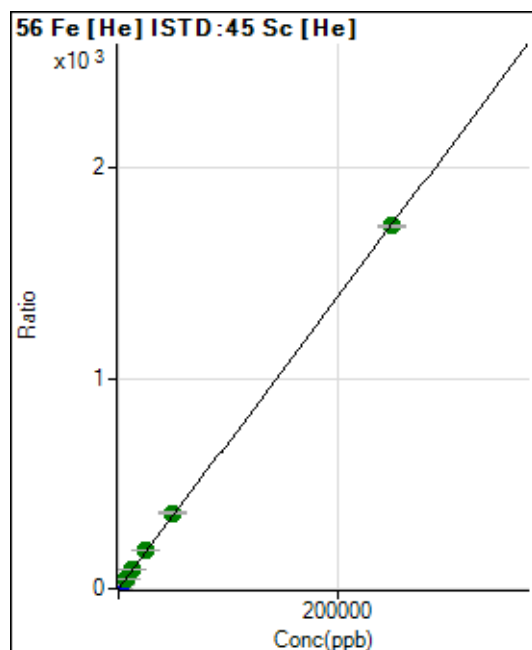
$$R = 1.0000$$

$$DL = 0.02027$$

$$BEC = 0.03643$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6773.90	0.0226	P	2.9
2	☐	50.000	52.819	115956.33	0.3881	P	1.5
3	☐	2500.000	2728.985	5530403.77	18.9048	P	0.6
4	☐	6250.000	6469.518	12828119.96	44.7860	A	1.0
5	☐	12500.000	13017.568	25157007.74	90.0928	A	0.1
6	☐	25000.000	26284.420	48014900.61	181.8878	A	0.7
7	☐	50000.000	52196.042	95035694.72	361.1735	A	1.4
8	☐	250000.00	249398.69	475720862.4	1,725.643	A	0.8

$$y = 0.0069 * x + 0.0226$$

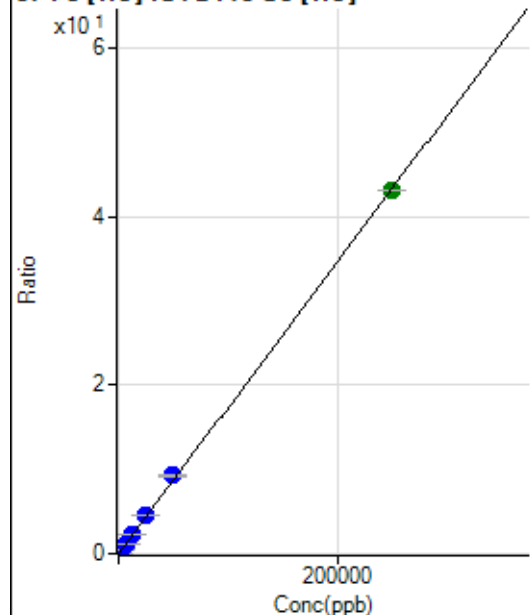
$$R = 1.0000$$

$$DL = 0.2847$$

$$BEC = 3.27$$

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	392.60	0.0013	P	8.7
2	☐	50.000	49.203	2935.53	0.0098	P	5.4
3	☐	2500.000	2702.877	137223.54	0.4691	P	1.5
4	☐	6250.000	6705.832	332800.73	1.1619	P	0.7
5	☐	12500.000	13440.387	649917.83	2.3275	P	0.6
6	☐	25000.000	27009.895	1234394.68	4.6760	P	0.3
7	☐	50000.000	53460.797	2435041.08	9.2540	P	0.9
8	☐	250000.00	249046.40	11883313.23	43.1049	A	0.1

$$y = 1.7307\text{E-}004 * x + 0.0013$$

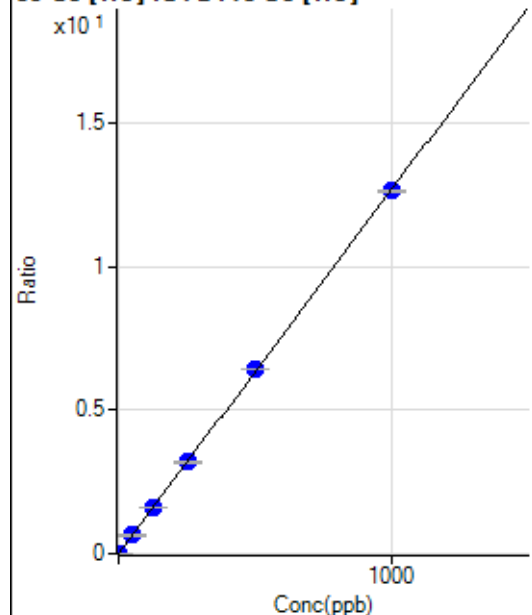
R = 0.9999

DL = 1.976

BEC = 7.573

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	42.22	0.0001	P	44.9
2	☐	1.000	0.988	3787.20	0.0127	P	3.5
3	☐	50.000	50.564	187643.68	0.6416	P	3.1
4	☐	125.000	125.866	457351.79	1.5968	P	0.8
5	☐	250.000	251.591	891212.52	3.1916	P	0.8
6	☐	500.000	505.813	1693841.48	6.4165	P	0.4
7	☐	1000.000	996.559	3326543.84	12.6417	P	0.3
8	☐			5097.59	0.0185	P	0.7

$$y = 0.0127 * x + 1.4055\text{E-}004$$

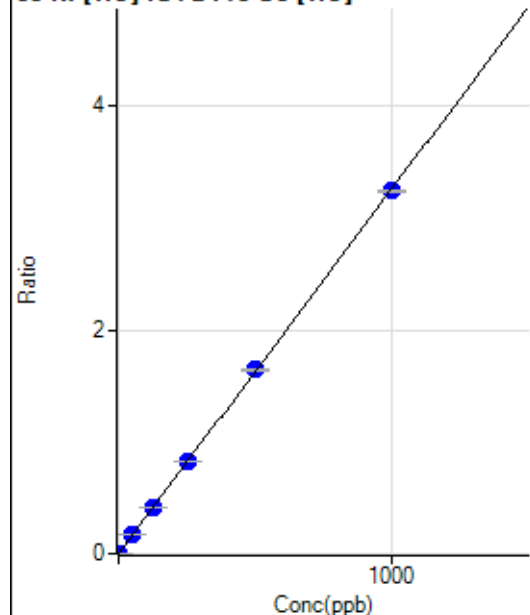
R = 1.0000

DL = 0.01492

BEC = 0.01108

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	83.33	0.0003	P	16.4
2	☐	1.000	0.931	990.04	0.0033	P	5.5
3	☐	50.000	51.363	49039.36	0.1677	P	3.5
4	☐	125.000	127.113	118732.01	0.4145	P	0.7
5	☐	250.000	253.851	231086.89	0.8276	P	0.4
6	☐	500.000	505.903	435303.54	1.6490	P	0.8
7	☐	1000.000	995.754	853990.14	3.2454	P	0.3
8	☐			3590.48	0.0130	P	4.9

$$y = 0.0033 * x + 2.7807E-004$$

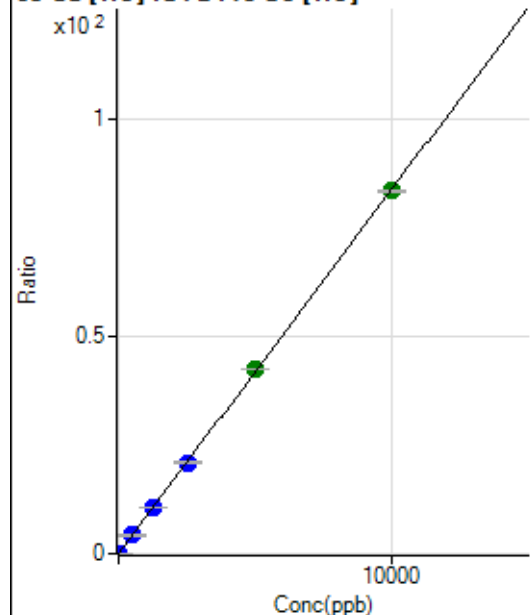
$$R = 1.0000$$

$$DL = 0.04202$$

$$BEC = 0.08532$$

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	1213.09	0.0041	P	8.2
2	☐	2.000	2.011	6244.26	0.0209	P	2.3
3	☐	500.000	504.668	1237784.22	4.2318	P	2.7
4	☐	1250.000	1254.370	3011052.84	10.5124	P	0.0
5	☐	2500.000	2503.178	5856630.57	20.9741	P	0.8
6	☐	5000.000	5064.567	11201289.06	42.4318	A	0.5
7	☐	10000.000	9966.142	21970420.09	83.4941	A	0.5
8	☐			12022.75	0.0436	P	0.7

$$y = 0.0084 * x + 0.0041$$

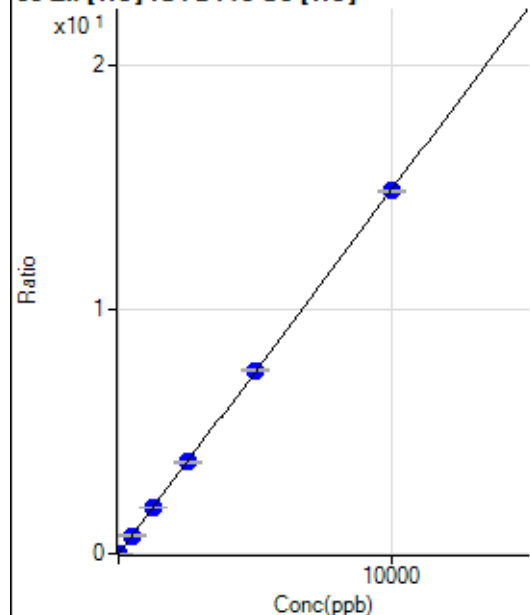
$$R = 1.0000$$

$$DL = 0.1185$$

$$BEC = 0.4837$$

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	176.67	0.0006	P	18.0
2	☐	2.000	2.092	1107.83	0.0037	P	0.4
3	☐	500.000	498.863	217689.99	0.7442	P	2.1
4	☐	1250.000	1254.717	535892.69	1.8709	P	0.2
5	☐	2500.000	2510.940	1045325.29	3.7435	P	0.5
6	☐	5000.000	5047.714	1986459.68	7.5250	P	0.8
7	☐	10000.000	9972.876	3911970.81	14.8668	P	0.7
8	☐			4544.09	0.0165	P	1.2

$$y = 0.0015 * x + 5.8935E-004$$

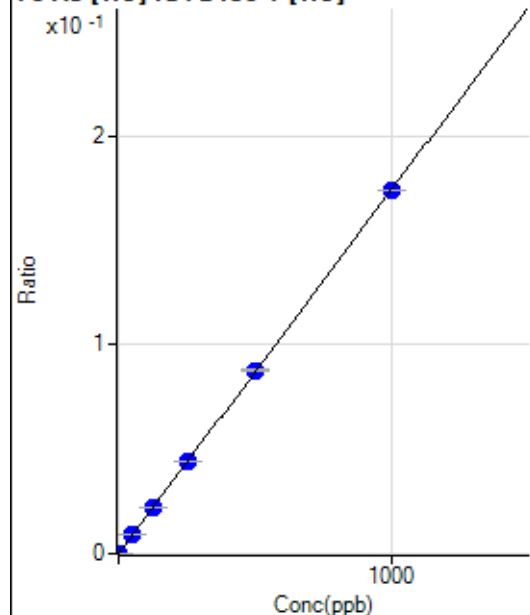
$$R = 1.0000$$

$$DL = 0.214$$

$$BEC = 0.3954$$

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	3.71	0.0000	P	86.6
2	☐	1.000	1.020	337.66	0.0002	P	1.3
3	☐	50.000	51.274	16540.89	0.0089	P	1.4
4	☐	125.000	127.854	40437.97	0.0223	P	0.6
5	☐	250.000	253.754	78785.44	0.0442	P	0.3
6	☐	500.000	503.355	150763.83	0.0877	P	0.7
7	☐	1000.000	996.964	299996.64	0.1737	P	0.1
8	☐			128.40	0.0001	P	16.5

$$y = 1.7422E-004 * x + 1.9669E-006$$

$$R = 1.0000$$

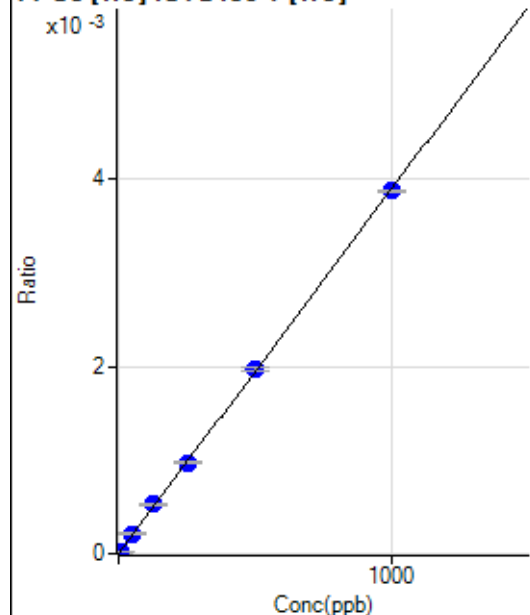
$$DL = 0.02935$$

$$BEC = 0.01129$$

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	1.11	0.0000	P	173.
2	☐	5.000	4.402	33.33	0.0000	P	8.5
3	☐	50.000	53.675	387.79	0.0002	P	11.7
4	☐	125.000	136.316	964.49	0.0005	P	2.9
5	☐	250.000	249.513	1732.34	0.0010	P	2.1
6	☐	500.000	506.994	3394.88	0.0020	P	2.1
7	☐	1000.000	995.030	6692.72	0.0039	P	0.7
8	☐			1.11	0.0000	P	173.

$$y = 3.8937\text{E-}006 * x + 5.7816\text{E-}007$$

$$R = 0.9999$$

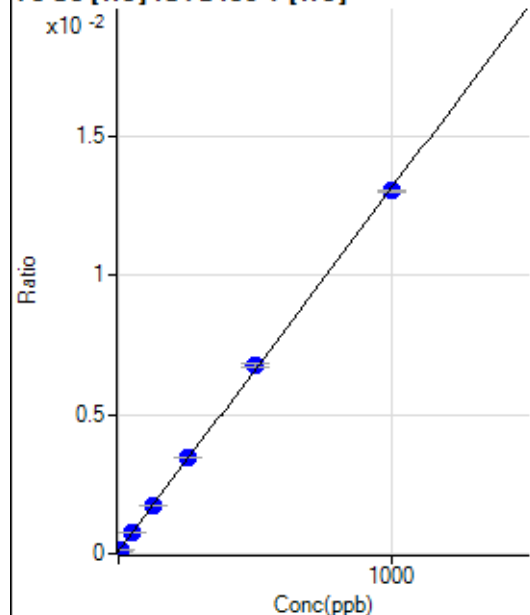
$$DL = 0.7716$$

$$BEC = 0.1485$$

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	175.93	0.0001	P	8.0
2	☐	5.000	4.973	297.53	0.0002	P	2.6
3	☐	50.000	51.791	1421.07	0.0008	P	3.9
4	☐	125.000	126.090	3149.12	0.0017	P	1.5
5	☐	250.000	258.484	6162.45	0.0035	P	1.3
6	☐	500.000	510.449	11583.65	0.0067	P	2.0
7	☐	1000.000	992.429	22473.56	0.0130	P	0.2
8	☐			165.44	0.0001	P	7.4

$$y = 1.3017\text{E-}005 * x + 9.3548\text{E-}005$$

$$R = 0.9999$$

$$DL = 1.723$$

$$BEC = 7.187$$

Weight: <None>

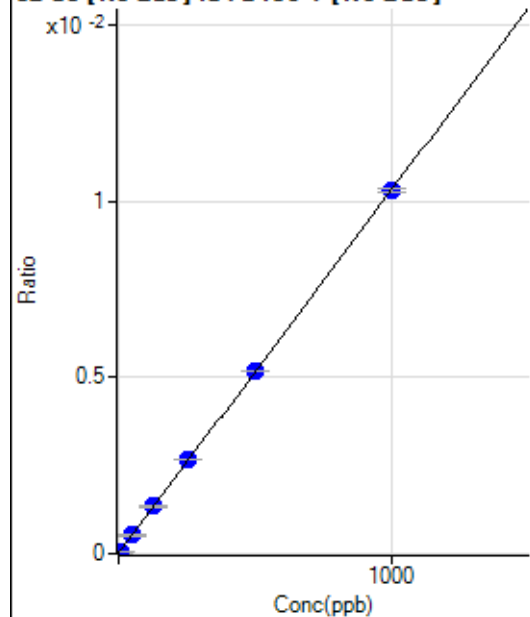
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3450.51		P	2.0
2	☐			3358.83		P	9.3
3	☐			3275.46		P	9.4
4	☐			3261.58		P	7.9
5	☐			3267.13		P	3.3
6	☐			2872.58		P	4.6
7	☐			3017.07		P	4.8
8	☐			3211.56		P	4.4

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			53.39		P	10.8
2	☐			73.41		P	55.1
3	☐			40.04		P	43.3
4	☐			46.71		P	44.6
5	☐			20.02		P	50.0
6	☐			53.39		P	65.8
7	☐			36.70		P	56.8
8	☐			53.39		P	10.8

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	64.60	0.0000	P	58.9
2	☐	5.000	4.618	417.66	0.0001	P	17.3
3	☐	50.000	50.272	3927.71	0.0005	P	4.7
4	☐	125.000	129.337	9719.50	0.0013	P	2.2
5	☐	250.000	257.124	19021.04	0.0027	P	1.0
6	☐	500.000	500.203	36608.49	0.0052	P	0.3
7	☐	1000.000	997.564	72714.62	0.0103	P	1.1
8	☐			38.67	0.0000	P	238.

$$y = 1.0303\text{E-}005 * x + 8.6627\text{E-}006$$

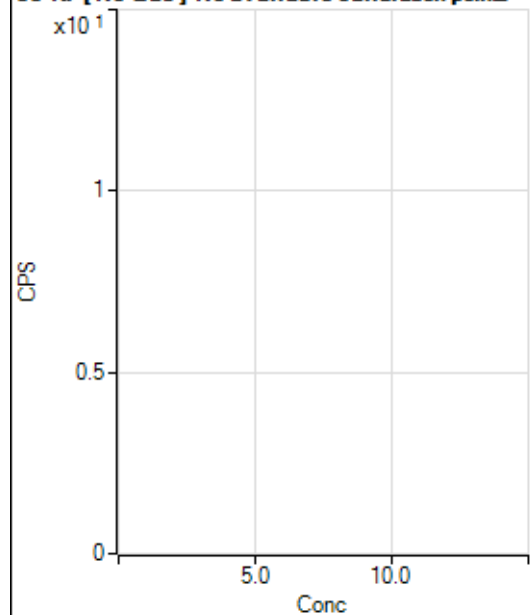
$$R = 1.0000$$

$$DL = 1.486$$

$$BEC = 0.8408$$

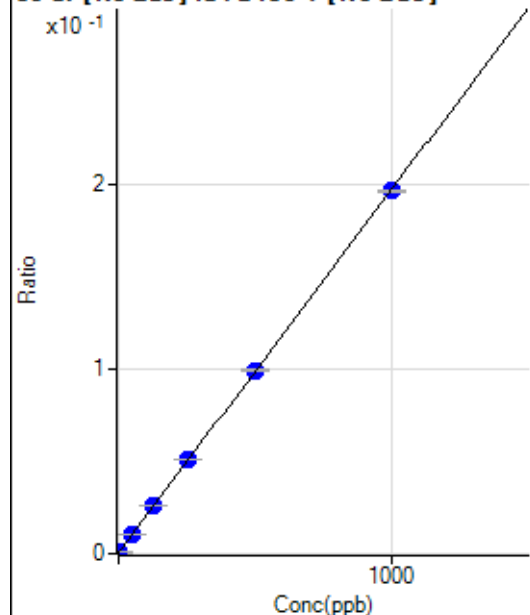
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			2066.83		P	3.1
2	☐			1995.71		P	1.7
3	☐			2065.72		P	7.3
4	☐			2015.72		P	2.3
5	☐			1929.04		P	4.4
6	☐			1883.47		P	3.1
7	☐			1904.59		P	9.6
8	☐			1877.92		P	1.8

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3372.71	0.0005	P	1.4
2	☐	1.000	1.000	4848.20	0.0007	P	2.2
3	☐	50.000	50.561	77561.27	0.0104	P	0.6
4	☐	125.000	128.939	187048.68	0.0258	P	1.9
5	☐	250.000	255.973	363518.78	0.0508	P	0.3
6	☐	500.000	502.908	704610.96	0.0994	P	0.5
7	☐	1000.000	996.532	1388609.14	0.1964	P	0.6
8	☐			11229.67	0.0016	P	1.3

$$y = 1.9666\text{E-}004 * x + 4.5560\text{E-}004$$

$$R = 1.0000$$

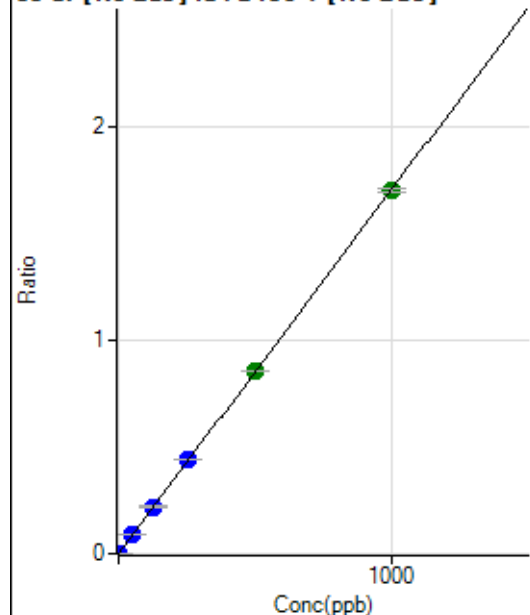
$$DL = 0.09995$$

$$BEC = 2.317$$

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	63.89	0.0000	P	47.6
2	☐	1.000	1.083	13818.06	0.0019	P	2.3
3	☐	50.000	50.958	649493.22	0.0871	P	1.6
4	☐	125.000	128.352	1589381.99	0.2193	P	1.9
5	☐	250.000	257.798	3152718.41	0.4405	P	0.4
6	☐	500.000	501.798	6081032.56	0.8575	A	1.0
7	☐	1000.000	996.685	12039645.75	1.7031	A	1.0
8	☐			73032.71	0.0104	P	0.7

$$y = 0.0017 * x + 8.6787\text{E-}006$$

$$R = 1.0000$$

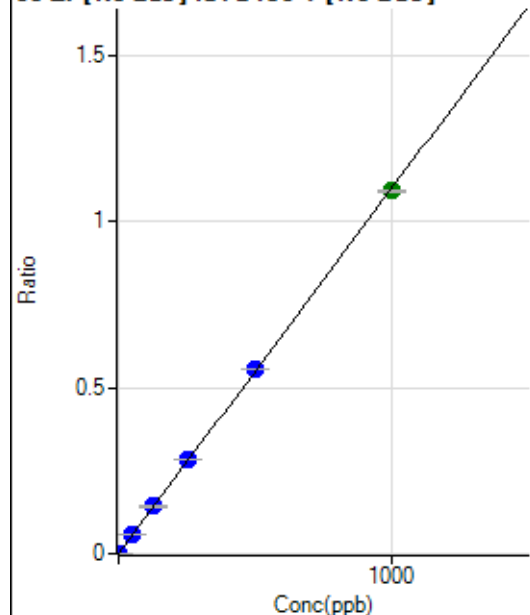
$$DL = 0.007258$$

$$BEC = 0.005079$$

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	291.68	0.0000	P	16.3
2	☐	1.000	0.977	8272.09	0.0011	P	6.9
3	☐	50.000	50.816	417038.70	0.0559	P	0.7
4	☐	125.000	129.351	1030921.00	0.1423	P	2.1
5	☐	250.000	259.060	2038872.98	0.2849	P	0.7
6	☐	500.000	506.391	3949040.54	0.5569	P	0.3
7	☐	1000.000	993.955	7726534.46	1.0930	A	0.9
8	☐			2919.82	0.0004	P	12.2

$$y = 0.0011 * x + 3.9469E-005$$

$$R = 0.9999$$

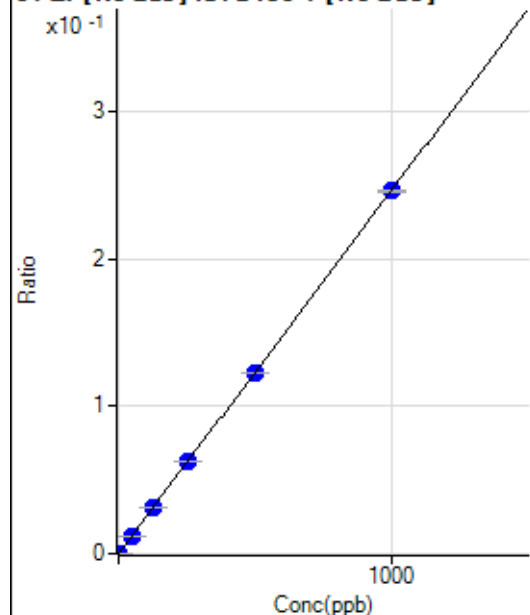
$$DL = 0.01751$$

$$BEC = 0.03589$$

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	75.00	0.0000	P	31.9
2	☐	1.000	0.845	1625.13	0.0002	P	2.3
3	☐	50.000	50.000	92069.19	0.0123	P	0.5
4	☐	125.000	127.506	227999.61	0.0315	P	1.8
5	☐	250.000	255.937	451894.33	0.0631	P	0.3
6	☐	500.000	498.299	871786.02	0.1229	P	0.2
7	☐	1000.000	999.053	1742256.38	0.2465	P	0.6
8	☐			538.91	0.0001	P	14.9

$$y = 2.4668E-004 * x + 1.0178E-005$$

$$R = 1.0000$$

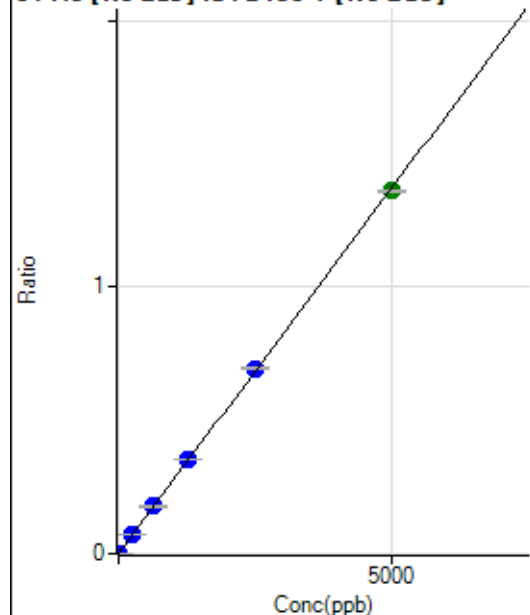
$$DL = 0.03946$$

$$BEC = 0.04126$$

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	138.89	0.0000	P	17.4
2	☐	5.000	4.785	9878.61	0.0013	P	1.8
3	☐	250.000	255.509	521968.51	0.0700	P	0.7
4	☐	625.000	649.032	1287951.90	0.1777	P	2.0
5	☐	1250.000	1293.627	2535166.01	0.3542	P	0.4
6	☐	2500.000	2538.266	4929104.19	0.6951	P	0.3
7	☐	5000.000	4966.681	9614280.94	1.3600	A	0.5
8	☐			3583.89	0.0005	P	1.7

$$y = 2.7383\text{E-}004 * x + 1.8714\text{E-}005$$

$$R = 0.9999$$

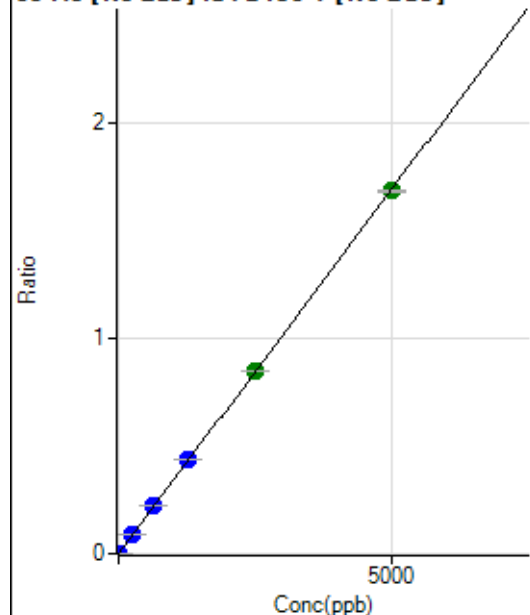
$$DL = 0.03558$$

$$BEC = 0.06834$$

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	27.78	0.0000	P	48.2
2	☐	5.000	4.895	12336.15	0.0017	P	1.5
3	☐	250.000	258.994	653487.03	0.0876	P	1.1
4	☐	625.000	653.278	1601573.43	0.2210	P	1.5
5	☐	1250.000	1303.880	3156680.09	0.4411	P	0.2
6	☐	2500.000	2500.339	5998399.48	0.8458	A	0.3
7	☐	5000.000	4982.376	11915116.76	1.6855	A	0.3
8	☐			4350.77	0.0006	P	7.6

$$y = 3.3829\text{E-}004 * x + 3.7802\text{E-}006$$

$$R = 0.9999$$

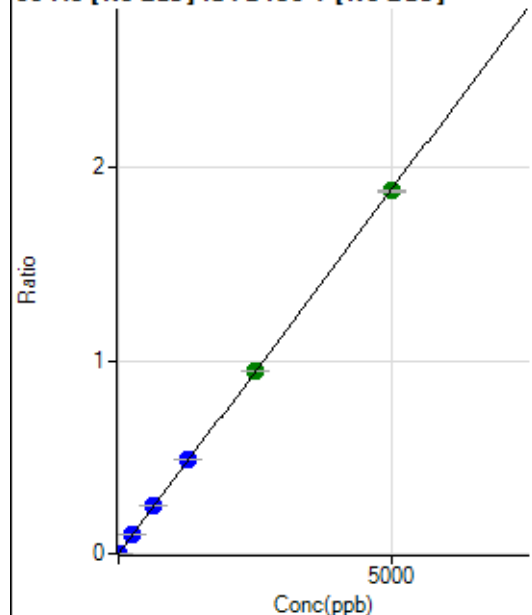
$$DL = 0.01617$$

$$BEC = 0.01117$$

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	72.23	0.0000	P	38.5
2	☐	5.000	5.030	14187.94	0.0019	P	3.1
3	☐	250.000	258.246	727268.42	0.0975	P	1.1
4	☐	625.000	649.337	1776804.16	0.2452	P	0.7
5	☐	1250.000	1298.735	3509198.43	0.4904	P	0.5
6	☐	2500.000	2505.081	6707433.79	0.9458	A	0.5
7	☐	5000.000	4981.822	13296658.63	1.8809	A	0.7
8	☐			5440.06	0.0008	P	9.4

$$y = 3.7755E-004 * x + 9.8008E-006$$

$$R = 0.9999$$

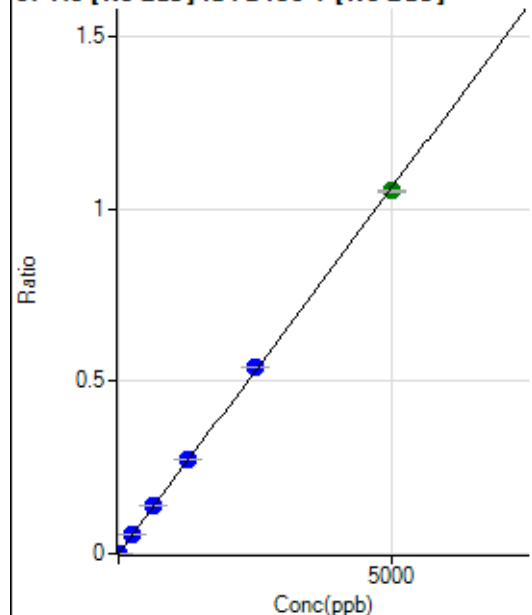
$$DL = 0.03$$

$$BEC = 0.02596$$

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	11.11	0.0000	P	86.6
2	☐	5.000	5.053	7969.08	0.0011	P	1.2
3	☐	250.000	257.610	407105.52	0.0546	P	0.6
4	☐	625.000	649.132	996752.30	0.1375	P	0.8
5	☐	1250.000	1294.646	1963069.42	0.2743	P	0.3
6	☐	2500.000	2545.248	3824365.41	0.5393	P	0.1
7	☐	5000.000	4962.818	7433440.44	1.0515	A	0.6
8	☐			2591.97	0.0004	P	3.9

$$y = 2.1188E-004 * x + 1.4815E-006$$

$$R = 0.9999$$

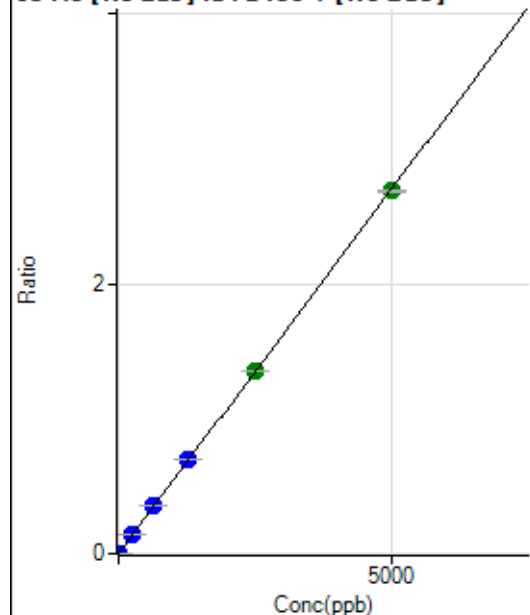
$$DL = 0.01817$$

$$BEC = 0.006992$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	52.78	0.0000	P	31.1
2	☐	5.000	5.007	20145.19	0.0027	P	5.0
3	☐	250.000	258.519	1041056.62	0.1396	P	0.6
4	☐	625.000	659.167	2579121.83	0.3559	P	1.0
5	☐	1250.000	1304.278	5039516.30	0.7042	P	0.2
6	☐	2500.000	2506.210	9595638.93	1.3531	A	0.2
7	☐	5000.000	4978.629	19001946.09	2.6880	A	0.7
8	☐			6618.36	0.0009	P	1.5

$$y = 5.3990\text{E-}004 * x + 7.0954\text{E-}006$$

$$R = 0.9999$$

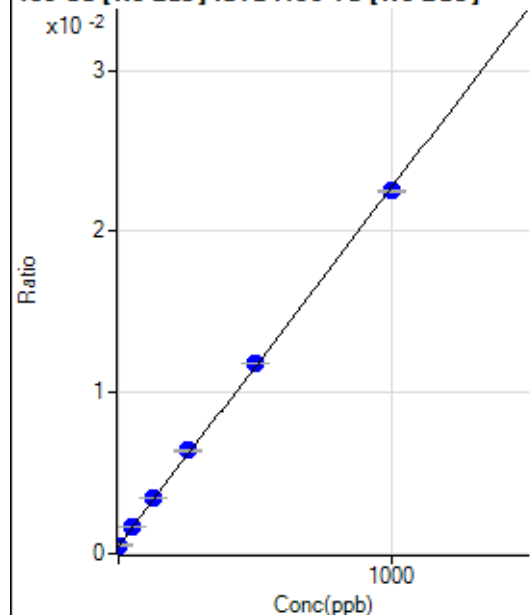
$$DL = 0.01225$$

$$BEC = 0.01314$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2864.25	0.0005	P	5.2
2	☐	1.000	1.417	3019.85	0.0005	P	5.1
3	☐	50.000	53.190	9703.61	0.0017	P	2.8
4	☐	125.000	134.184	19803.14	0.0035	P	2.2
5	☐	250.000	265.439	36335.75	0.0064	P	0.7
6	☐	500.000	507.651	67616.47	0.0118	P	0.3
7	☐	1000.000	991.007	130167.22	0.0225	P	0.8
8	☐			2919.82	0.0005	P	8.4

$$y = 2.2227\text{E-}005 * x + 4.9644\text{E-}004$$

$$R = 0.9998$$

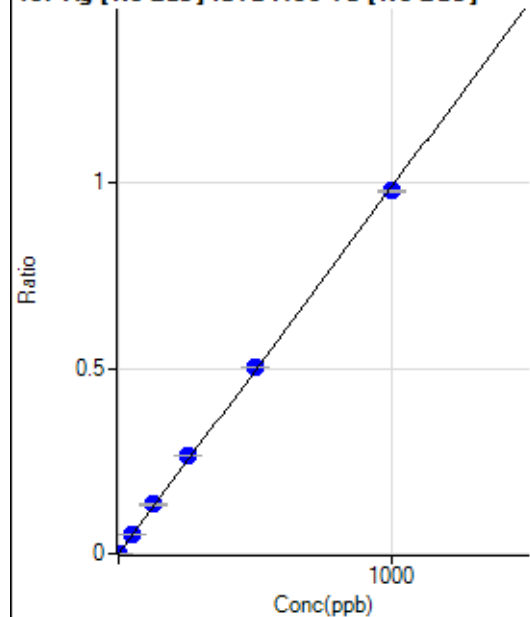
$$DL = 3.468$$

$$BEC = 22.34$$

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	41.67	0.0000	P	38.1
2	☐	1.000	1.057	6031.99	0.0011	P	3.5
3	☐	50.000	54.397	311339.41	0.0539	P	0.3
4	☐	125.000	134.766	759294.19	0.1334	P	2.3
5	☐	250.000	265.939	1495651.78	0.2633	P	0.5
6	☐	500.000	509.302	2894196.23	0.5042	P	0.6
7	☐	1000.000	989.924	5663593.96	0.9800	P	0.5
8	☐			2247.47	0.0004	P	2.9

$$y = 9.9000\text{E-}004 * x + 7.1799\text{E-}006$$

$$R = 0.9998$$

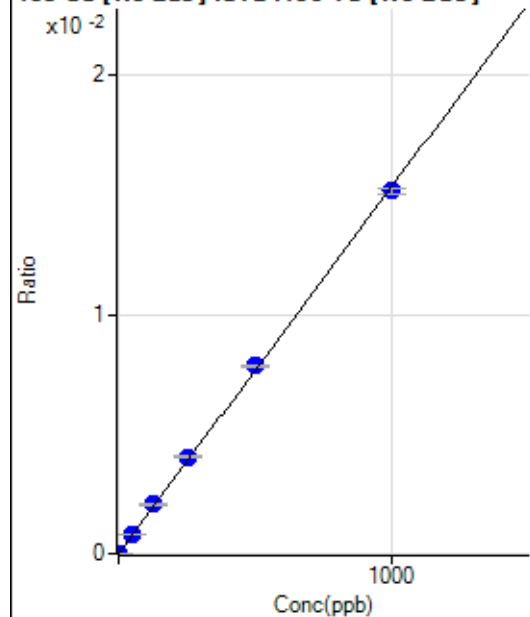
$$DL = 0.008289$$

$$BEC = 0.007252$$

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	19.45	0.0000	P	23.0
2	☐	1.000	1.002	106.94	0.0000	P	21.1
3	☐	50.000	53.539	4763.35	0.0008	P	2.9
4	☐	125.000	134.144	11717.45	0.0021	P	4.3
5	☐	250.000	264.505	23050.74	0.0041	P	1.2
6	☐	500.000	511.749	45043.32	0.0078	P	1.1
7	☐	1000.000	989.179	87638.41	0.0152	P	1.6
8	☐			73.61	0.0000	P	19.9

$$y = 1.5328\text{E-}005 * x + 3.3625\text{E-}006$$

$$R = 0.9998$$

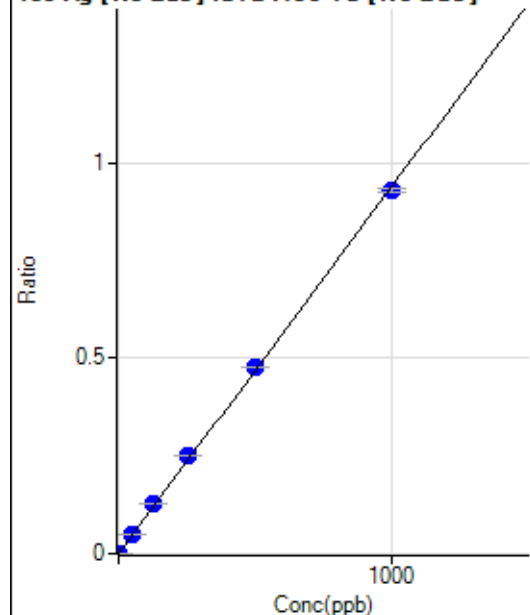
$$DL = 0.1511$$

$$BEC = 0.2194$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	27.78	0.0000	P	63.6
2	☐	1.000	1.036	5598.46	0.0010	P	4.1
3	☐	50.000	54.159	294074.98	0.0509	P	0.5
4	☐	125.000	135.411	723844.27	0.1272	P	1.8
5	☐	250.000	266.974	1424478.71	0.2508	P	0.9
6	☐	500.000	509.644	2747579.49	0.4787	P	0.4
7	☐	1000.000	989.425	5370344.65	0.9293	P	1.0
8	☐			1961.29	0.0003	P	6.8

$$y = 9.3923\text{E-}004 * x + 4.8402\text{E-}006$$

$$R = 0.9997$$

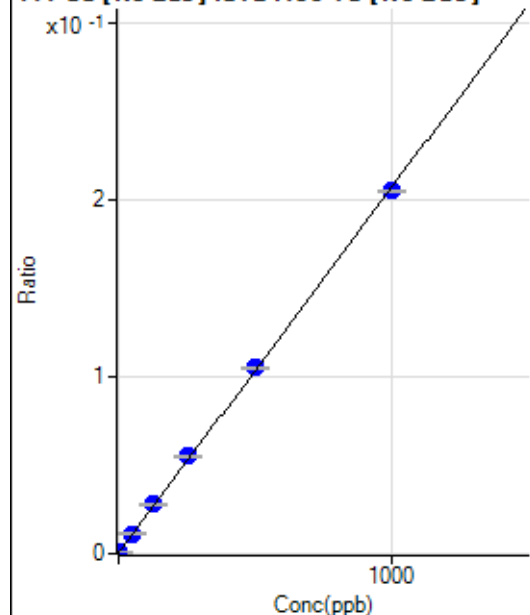
$$DL = 0.009831$$

$$BEC = 0.005153$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1998.30	0.0003	P	5.0
2	☐	1.000	1.161	3351.62	0.0006	P	4.9
3	☐	50.000	53.527	65880.71	0.0114	P	0.3
4	☐	125.000	133.154	158434.01	0.0278	P	1.2
5	☐	250.000	264.524	312196.34	0.0550	P	0.8
6	☐	500.000	507.981	603949.16	0.1052	P	0.7
7	☐	1000.000	991.183	1184548.33	0.2050	P	0.5
8	☐			2536.81	0.0004	P	6.2

$$y = 2.0645\text{E-}004 * x + 3.4635\text{E-}004$$

$$R = 0.9998$$

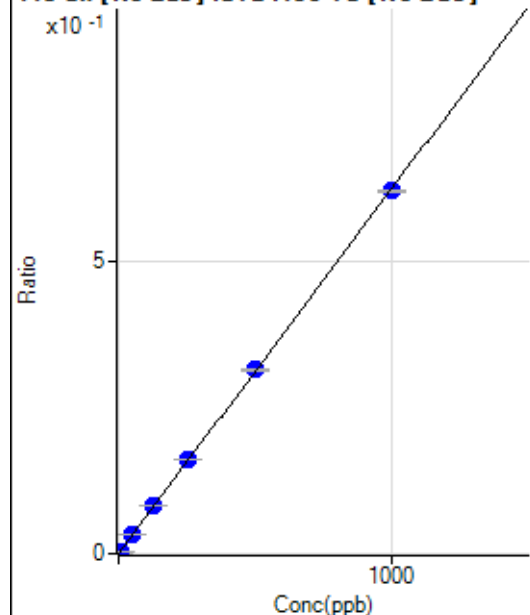
$$DL = 0.2538$$

$$BEC = 1.678$$

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	741.70	0.0001	P	11.5
2	☐	5.000	5.214	19338.67	0.0034	P	3.7
3	☐	50.000	51.613	186915.16	0.0323	P	1.2
4	☐	125.000	131.459	467642.15	0.0822	P	1.0
5	☐	250.000	259.307	919914.85	0.1619	P	0.2
6	☐	500.000	503.734	1805003.28	0.3145	P	0.6
7	☐	1000.000	994.917	3588605.51	0.6210	P	0.6
8	☐			2133.54	0.0004	P	4.1

$$y = 6.2401\text{E-}004 * x + 1.2832\text{E-}004$$

$$R = 0.9999$$

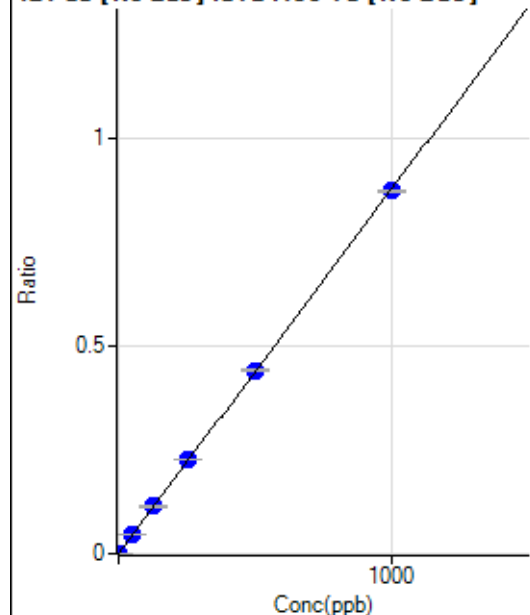
$$DL = 0.07107$$

$$BEC = 0.2056$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	32.1
2	☐	2.000	1.969	9923.20	0.0017	P	3.6
3	☐	50.000	51.900	262896.58	0.0455	P	0.8
4	☐	125.000	129.931	647954.88	0.1138	P	1.2
5	☐	250.000	258.950	1288822.91	0.2269	P	0.2
6	☐	500.000	503.069	2529891.61	0.4408	P	1.0
7	☐	1000.000	995.517	5040459.96	0.8722	P	0.7
8	☐			3236.57	0.0006	P	3.8

$$y = 8.7611\text{E-}004 * x + 8.6354\text{E-}006$$

$$R = 0.9999$$

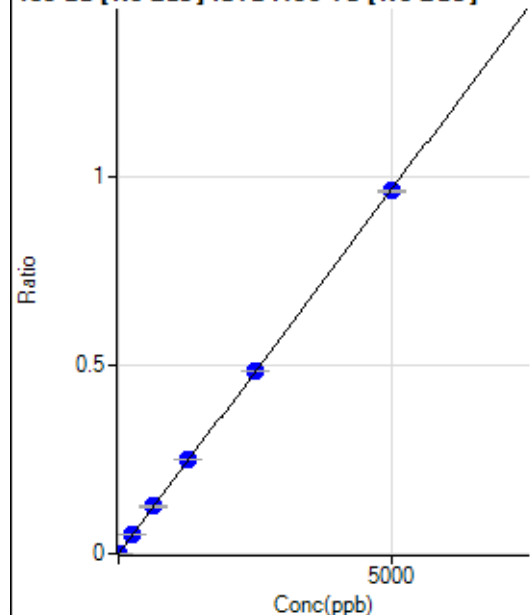
$$DL = 0.009483$$

$$BEC = 0.009856$$

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	5.56	0.0000	P	173.
2	☐	10.000	9.934	10957.38	0.0019	P	2.5
3	☐	250.000	257.823	287263.68	0.0497	P	0.5
4	☐	625.000	650.740	713745.32	0.1254	P	2.6
5	☐	1250.000	1284.160	1406047.05	0.2475	P	0.3
6	☐	2500.000	2509.062	2775839.08	0.4836	P	0.7
7	☐	5000.000	4983.321	5550806.37	0.9605	P	0.6
8	☐			1766.83	0.0003	P	3.7

$$y = 1.9274\text{E-}004 * x + 9.8927\text{E-}007$$

$$R = 1.0000$$

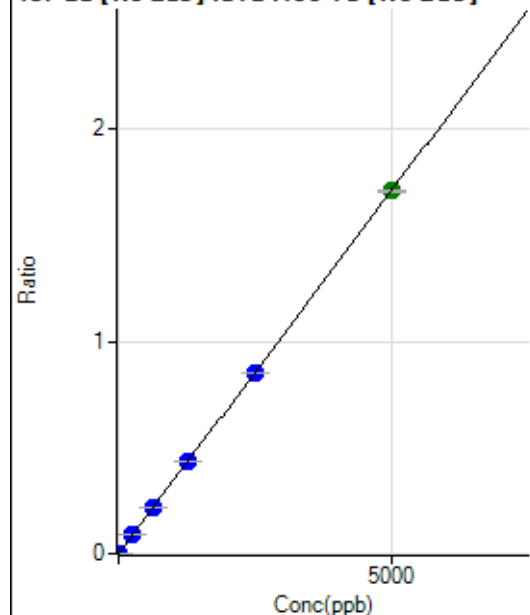
$$DL = 0.02667$$

$$BEC = 0.005133$$

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	16.67	0.0000	P	49.0
2	☐	10.000	9.914	19430.64	0.0034	P	2.3
3	☐	250.000	255.751	506099.20	0.0876	P	0.0
4	☐	625.000	640.956	1248664.13	0.2194	P	2.2
5	☐	1250.000	1271.077	2471787.06	0.4351	P	0.6
6	☐	2500.000	2491.155	4894854.06	0.8528	P	0.8
7	☐	5000.000	4996.872	9885429.13	1.7105	A	0.2
8	☐			2950.39	0.0005	P	14.3

$$y = 3.4232\text{E-}004 * x + 2.8729\text{E-}006$$

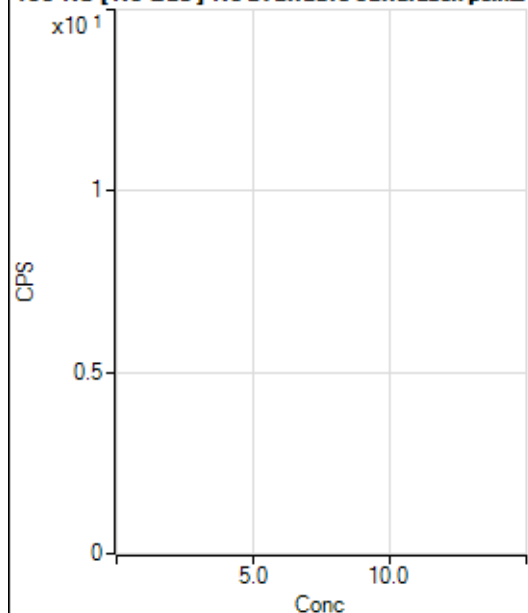
$$R = 1.0000$$

$$DL = 0.01235$$

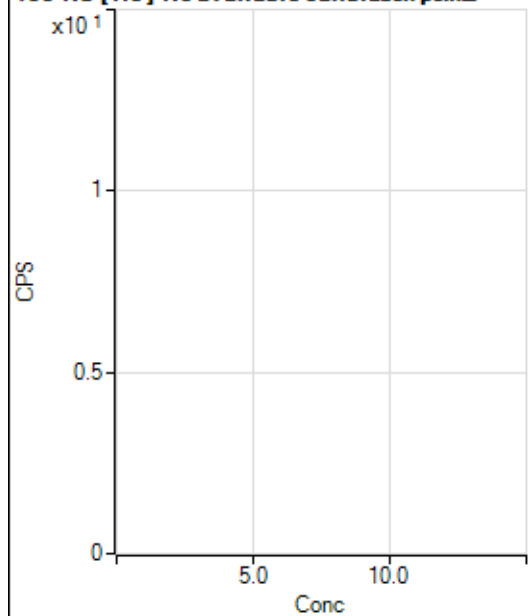
$$BEC = 0.008392$$

Weight: <None>

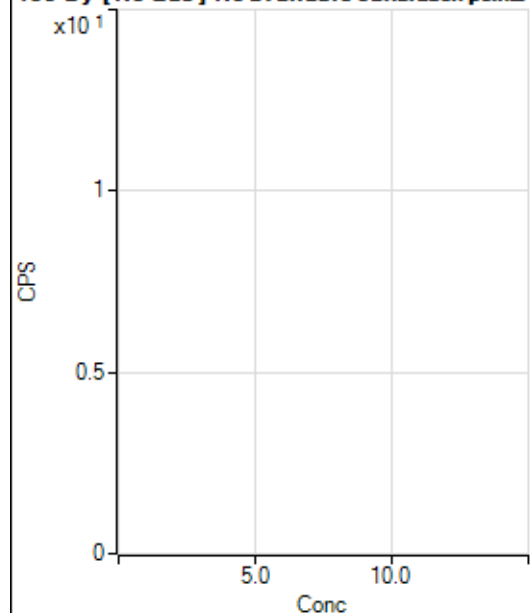
Min Conc: 0

150 Nd [No Gas] No available calibration points

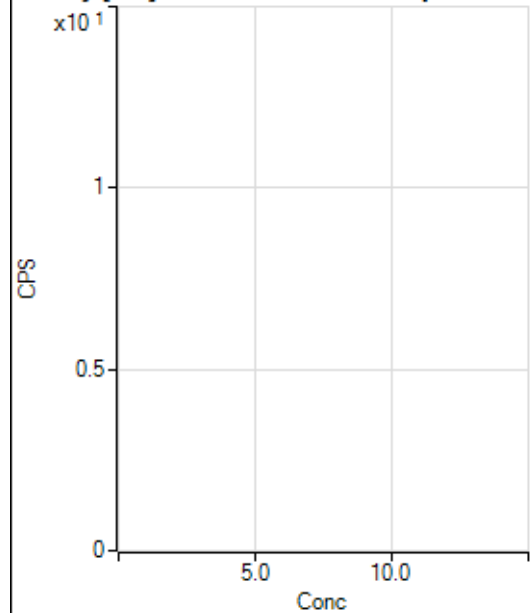
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.45		P	86.6
2	☐			2.22		P	173.
3	☐			11.11		P	124.
4	☐			55.56		P	25.0
5	☐			97.78		P	10.4
6	☐			213.34		P	14.3
7	☐			257.79		P	27.7
8	☐			20.00		P	33.4

150 Nd [He] No available calibration points

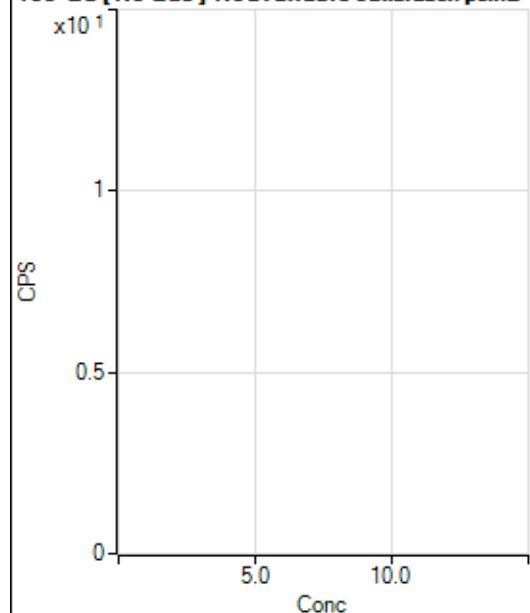
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐			3.33		P	0.0
3	☐			3.33		P	0.0
4	☐			10.00		P	33.3
5	☐			18.89		P	36.7
6	☐			60.00		P	24.2
7	☐			67.78		P	17.3
8	☐			13.33		P	25.0

156 Dy [No Gas] No available calibration points

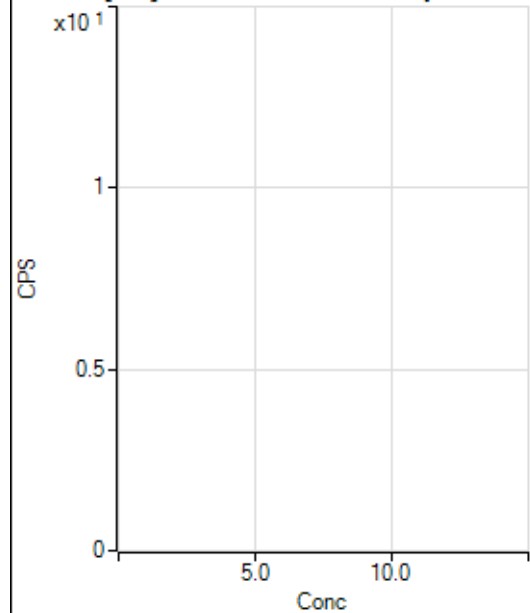
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	173.
2	☐			0.00		P	
3	☐			33.33		P	50.0
4	☐			63.89		P	37.7
5	☐			75.00		P	22.2
6	☐			197.23		P	20.0
7	☐			386.13		P	17.6
8	☐			1258.42		P	8.6

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	49.5
2	☐			4.44		P	173.
3	☐			18.89		P	53.9
4	☐			18.89		P	20.4
5	☐			64.44		P	28.5
6	☐			111.11		P	4.6
7	☐			205.56		P	6.6
8	☐			848.93		P	1.6

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

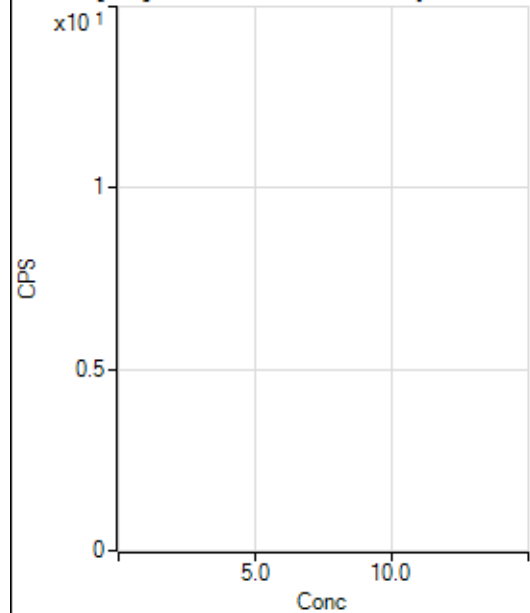
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	10.2
2	☐			58.33		P	62.3
3	☐			69.44		P	27.7
4	☐			108.34		P	15.4
5	☐			119.45		P	8.1
6	☐			213.90		P	16.2
7	☐			347.24		P	9.7
8	☐			1366.77		P	15.3

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.78		P	10.7
2	☐			51.11		P	3.8
3	☐			64.45		P	10.8
4	☐			85.55		P	4.5
5	☐			128.89		P	26.2
6	☐			161.11		P	11.4
7	☐			247.78		P	11.4
8	☐			917.82		P	3.3

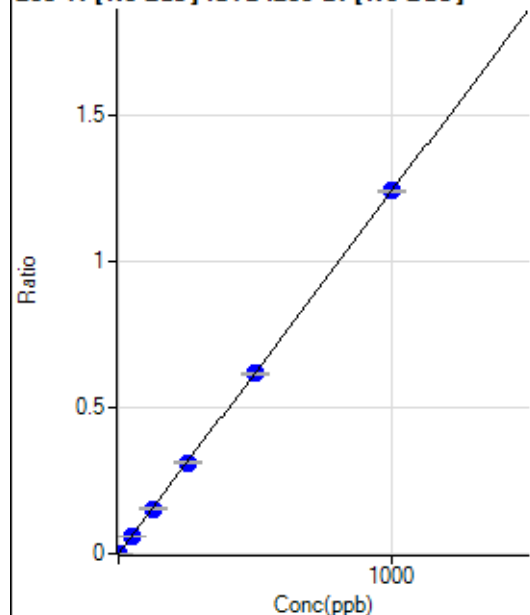
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			41.67		P	40.0
2	☐			30.55		P	15.7
3	☐			47.23		P	20.4
4	☐			33.33		P	43.3
5	☐			41.67		P	52.9
6	☐			83.33		P	36.1
7	☐			88.89		P	32.9
8	☐			205.56		P	19.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			18.89		P	56.7
2	☐			15.56		P	49.5
3	☐			20.00		P	57.7
4	☐			18.89		P	27.0
5	☐			32.22		P	31.6
6	☐			33.33		P	10.0
7	☐			44.45		P	43.9
8	☐			128.89		P	20.9

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	269.46	0.0001	P	2.5
2	☐	1.000	0.899	3997.94	0.0012	P	5.3
3	☐	50.000	49.304	204939.16	0.0613	P	0.6
4	☐	125.000	124.035	510956.15	0.1540	P	1.6
5	☐	250.000	251.833	1027762.39	0.3126	P	0.5
6	☐	500.000	496.495	2047246.55	0.6163	P	0.7
7	☐	1000.000	1001.450	4123944.23	1.2430	P	0.7
8	☐			1961.32	0.0006	P	11.4

$$y = 0.0012 * x + 8.0476E-005$$

$$R = 1.0000$$

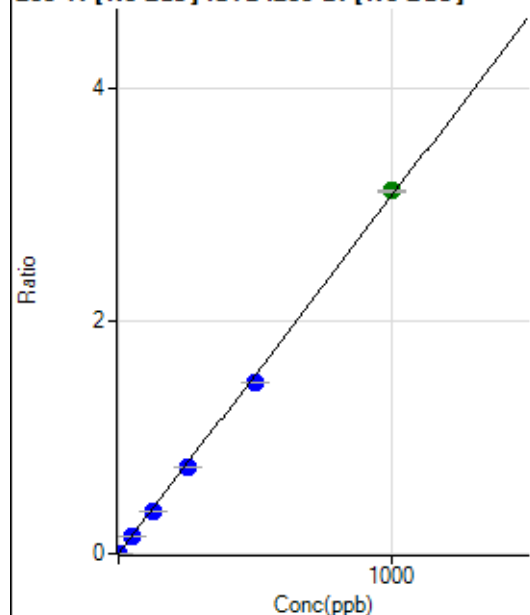
$$DL = 0.004871$$

$$BEC = 0.06484$$

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	713.93	0.0002	P	2.5
2	☐	1.000	0.925	10204.15	0.0031	P	5.7
3	☐	50.000	47.291	485984.15	0.1453	P	1.6
4	☐	125.000	118.637	1208181.38	0.3642	P	1.9
5	☐	250.000	240.910	2430614.27	0.7394	P	0.6
6	☐	500.000	477.453	4866911.52	1.4651	P	0.6
7	☐	1000.000	1014.477	10327466.03	3.1128	A	0.4
8	☐			5192.84	0.0017	P	11.0

$$y = 0.0031 * x + 2.1324E-004$$

$$R = 0.9996$$

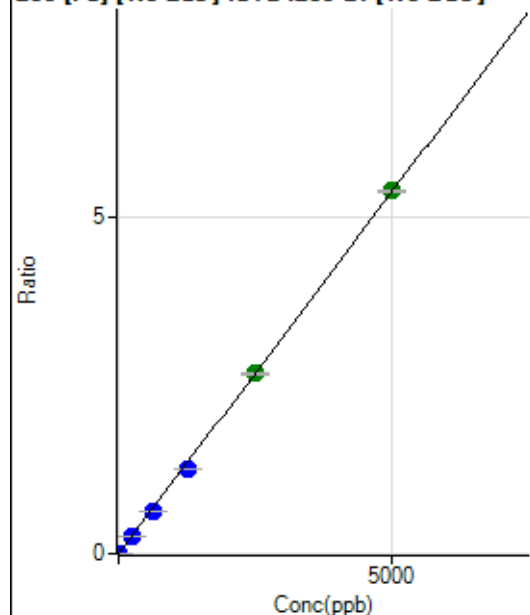
$$DL = 0.005292$$

$$BEC = 0.0695$$

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	238.89	0.0001	P	10.8
2	☐	1.000	0.916	3532.01	0.0011	P	0.7
3	☐	250.000	230.664	830171.82	0.2482	P	1.0
4	☐	625.000	581.011	2073632.02	0.6251	P	1.9
5	☐	1250.000	1180.201	4174113.26	1.2697	P	0.7
6	☐	2500.000	2498.862	8930275.20	2.6883	A	1.3
7	☐	5000.000	5024.484	17933642.99	5.4053	A	0.4
8	☐			31986.62	0.0104	P	1.2

$$y = 0.0011 * x + 7.1213E-005$$

$$R = 0.9999$$

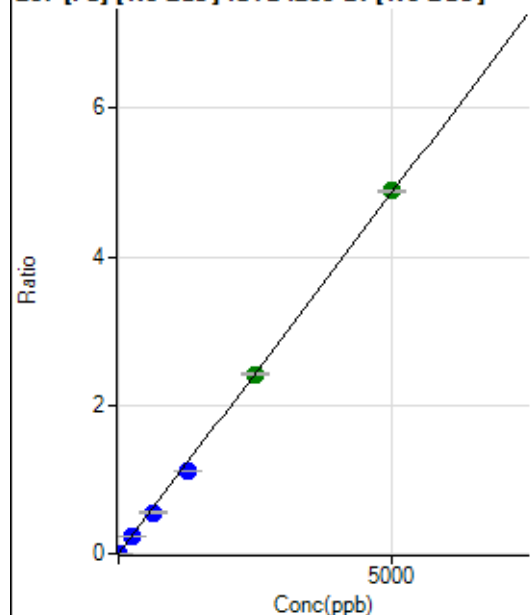
$$DL = 0.02143$$

$$BEC = 0.0662$$

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	205.56	0.0001	P	22.9
2	☐	1.000	0.889	3093.01	0.0009	P	1.2
3	☐	250.000	228.475	742381.00	0.2220	P	0.7
4	☐	625.000	573.145	1846845.40	0.5567	P	1.5
5	☐	1250.000	1157.376	3695538.10	1.1241	P	0.3
6	☐	2500.000	2494.021	8046654.17	2.4223	A	0.2
7	☐	5000.000	5033.704	16220198.16	4.8889	A	0.7
8	☐			28478.81	0.0092	P	1.4

$$y = 9.7122E-004 * x + 6.1343E-005$$

$$R = 0.9998$$

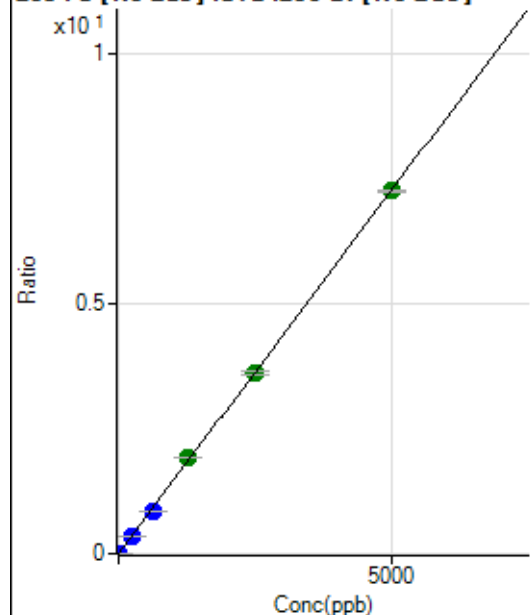
$$DL = 0.04334$$

$$BEC = 0.06316$$

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	277.79	0.0001	P	25.1
2	☐	1.000	0.951	4900.10	0.0015	P	4.7
3	☐	250.000	226.796	1103123.85	0.3298	P	1.1
4	☐	625.000	580.872	2801542.34	0.8446	P	2.6
5	☐	1250.000	1334.253	6377528.24	1.9400	A	0.2
6	☐	2500.000	2487.753	12015622.37	3.6170	A	1.8
7	☐	5000.000	4991.736	24079401.23	7.2576	A	0.4
8	☐			42091.47	0.0136	P	1.2

$$y = 0.0015 * x + 8.2839E-005$$

$$R = 0.9998$$

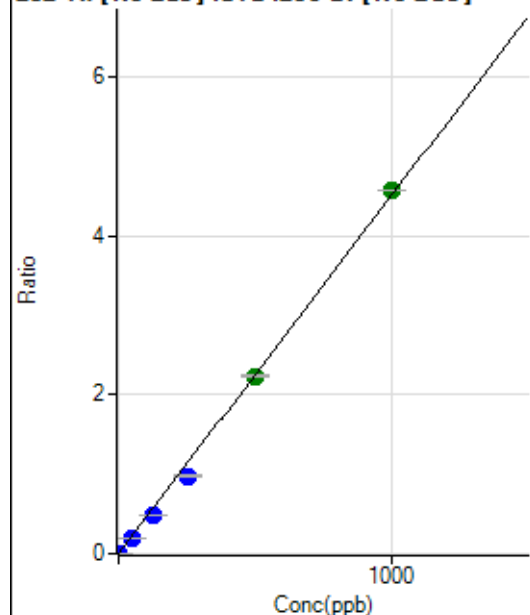
$$DL = 0.04292$$

$$BEC = 0.05698$$

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	192.60	0.0001	P	17.1
2	☐	1.000	0.001	205.56	0.0001	P	14.0
3	☐	50.000	41.909	632296.76	0.1890	P	0.7
4	☐	125.000	106.975	1600485.06	0.4825	P	1.8
5	☐	250.000	217.225	3220625.77	0.9796	P	1.3
6	☐	500.000	496.281	7434608.91	2.2381	A	0.3
7	☐	1000.000	1012.712	15152210.64	4.5669	A	0.2
8	☐			3009.67	0.0010	P	8.2

$$y = 0.0045 * x + 5.7536E-005$$

$$R = 0.9994$$

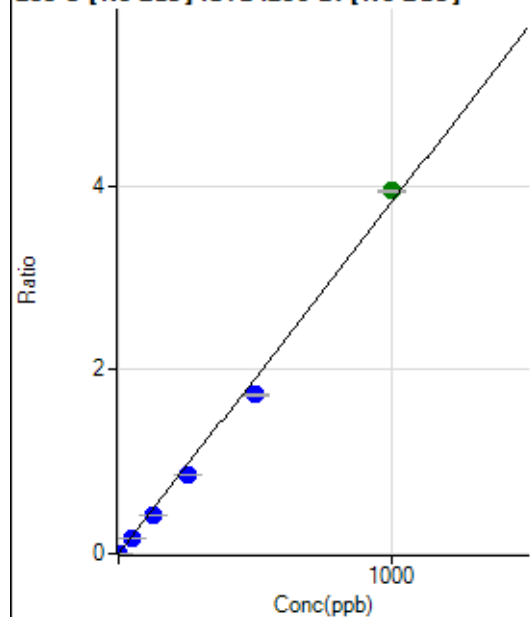
$$DL = 0.006555$$

$$BEC = 0.01276$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	19.45	0.0000	P	23.0
2	☐	1.000	0.880	11263.78	0.0034	P	3.6
3	☐	50.000	43.356	554217.48	0.1657	P	1.3
4	☐	125.000	110.114	1396065.53	0.4208	P	1.8
5	☐	250.000	223.023	2802172.98	0.8524	P	1.0
6	☐	500.000	451.879	5736953.39	1.7270	P	0.6
7	☐	1000.000	1032.998	13098492.74	3.9480	A	0.3
8	☐			1666.83	0.0005	P	12.5

$$y = 0.0038 * x + 5.7927E-006$$

$$R = 0.9980$$

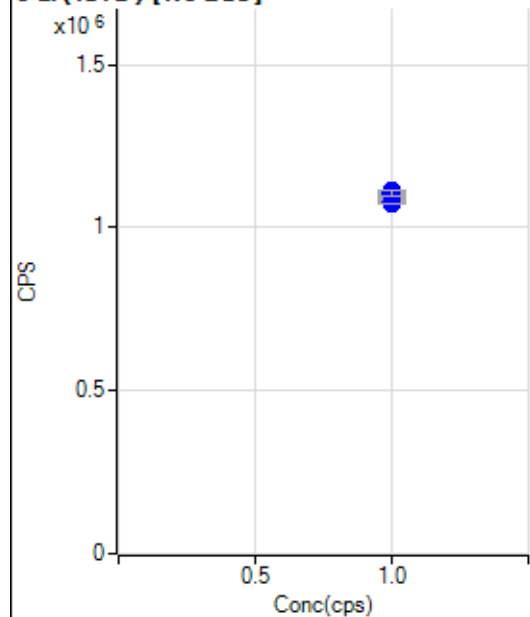
$$DL = 0.001044$$

$$BEC = 0.001516$$

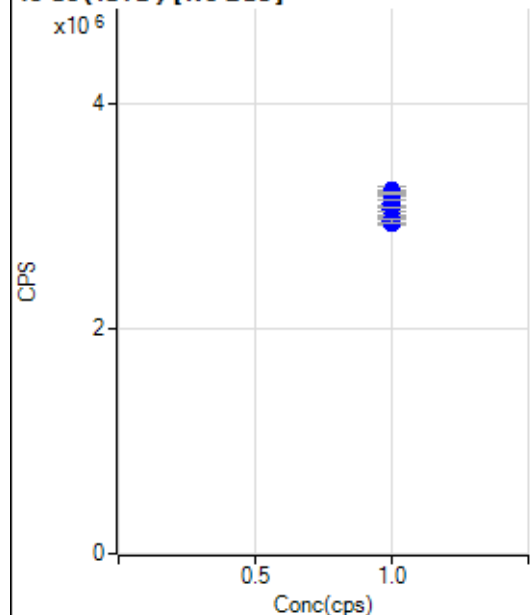
Weight: <None>

Min Conc: 0

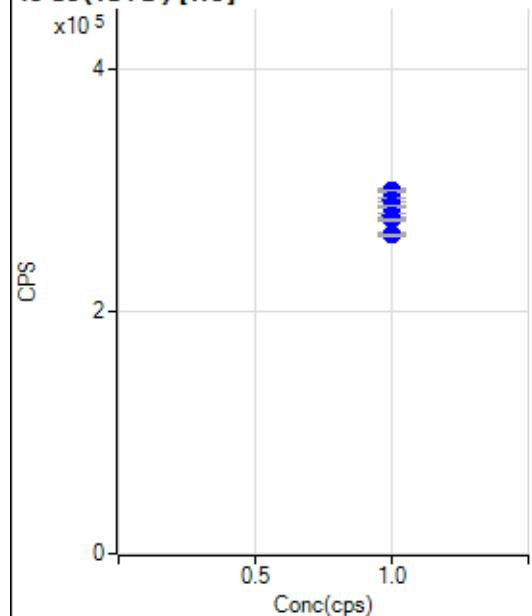
6 Li (ISTD) [No Gas]



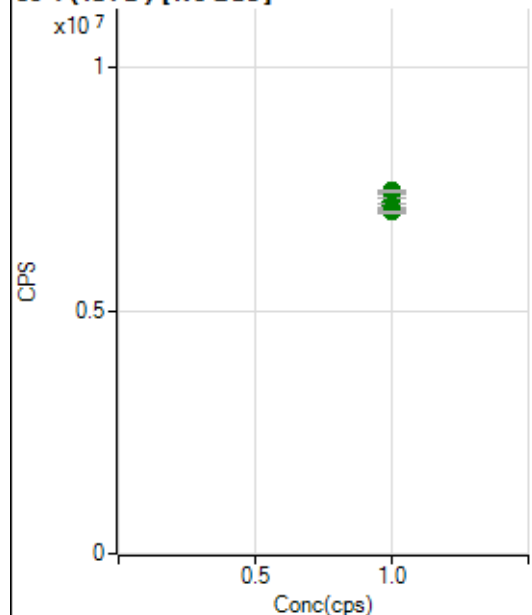
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1088670.21		P	1.6
2	☐	1.000		1080877.67		P	0.9
3	☐	1.000		1072416.70		P	0.0
4	☐	1.000		1103645.86		P	2.1
5	☐	1.000		1110494.47		P	1.3
6	☐	1.000		1112691.01		P	0.7
7	☐	1.000		1110024.52		P	0.8
8	☐	1.000		1105510.08		P	1.4

45 Sc (ISTD) [No Gas]

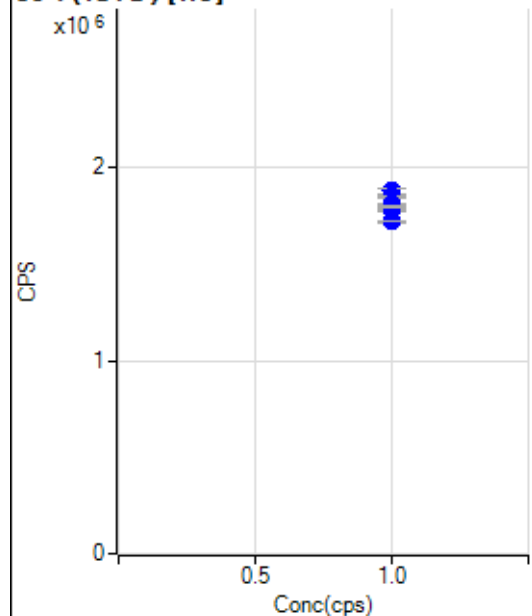
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3221124.02		P	2.1
2	☐	1.000		3205643.95		P	1.8
3	☐	1.000		3200151.86		P	0.5
4	☐	1.000		3114511.34		P	2.0
5	☐	1.000		3054006.69		P	1.2
6	☐	1.000		2992217.87		P	0.7
7	☐	1.000		2944530.09		P	2.2
8	☐	1.000		2956626.14		P	1.0

45 Sc (ISTD) [He]

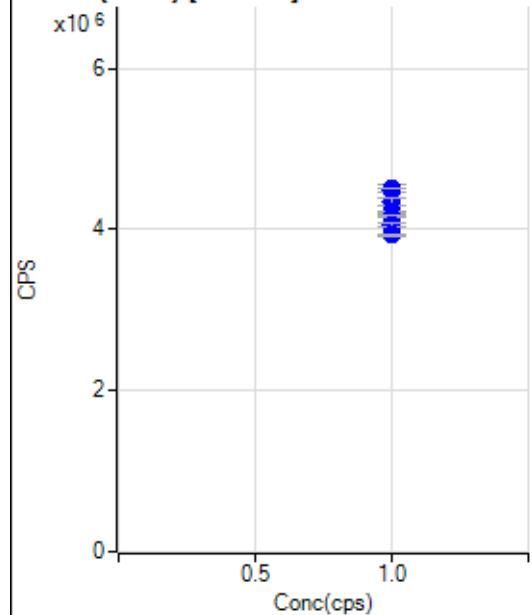
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		299374.95		P	1.2
2	☐	1.000		298782.82		P	0.8
3	☐	1.000		292549.74		P	1.1
4	☐	1.000		286429.56		P	0.6
5	☐	1.000		279232.60		P	0.9
6	☐	1.000		263983.55		P	0.2
7	☐	1.000		263141.85		P	0.5
8	☐	1.000		275684.07		P	0.5

89 Y (ISTD) [No Gas]

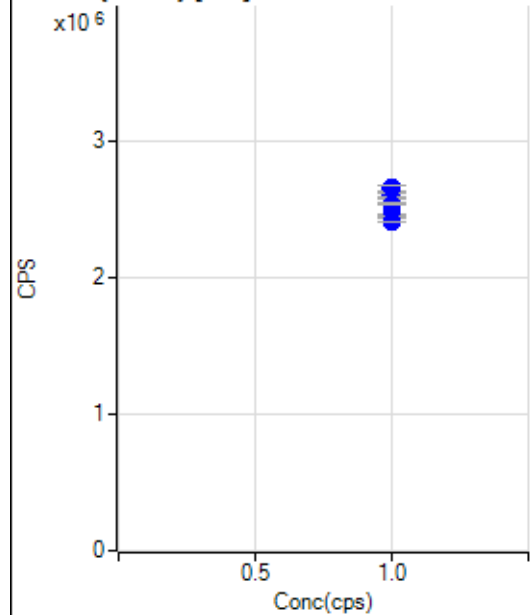
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7403280.24		A	2.3
2	☐	1.000		7433082.95		A	1.0
3	☐	1.000		7458673.98		A	0.8
4	☐	1.000		7247727.81		A	1.5
5	☐	1.000		7156521.56		A	0.6
6	☐	1.000		7091610.52		A	0.4
7	☐	1.000		7069286.49		A	0.6
8	☐	1.000		7026926.84		A	0.4

89 Y (ISTD) [He]

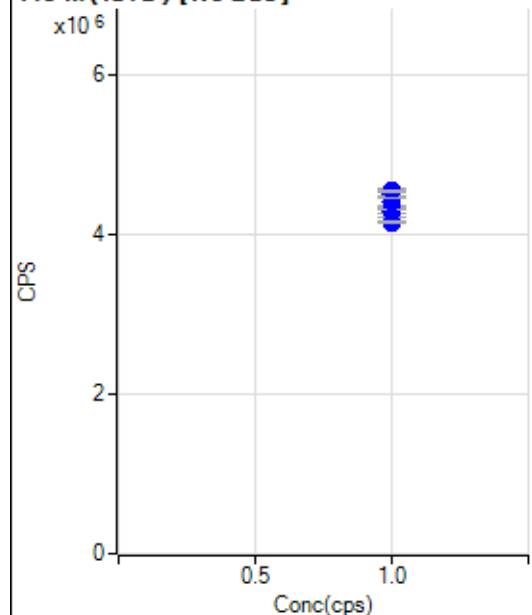
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1880083.22		P	1.9
2	☐	1.000		1879790.55		P	1.5
3	☐	1.000		1851419.52		P	0.7
4	☐	1.000		1815283.69		P	0.3
5	☐	1.000		1782056.19		P	0.6
6	☐	1.000		1719216.95		P	0.5
7	☐	1.000		1727204.85		P	0.1
8	☐	1.000		1795026.20		P	0.4

103 Rh (ISTD) [No Gas]

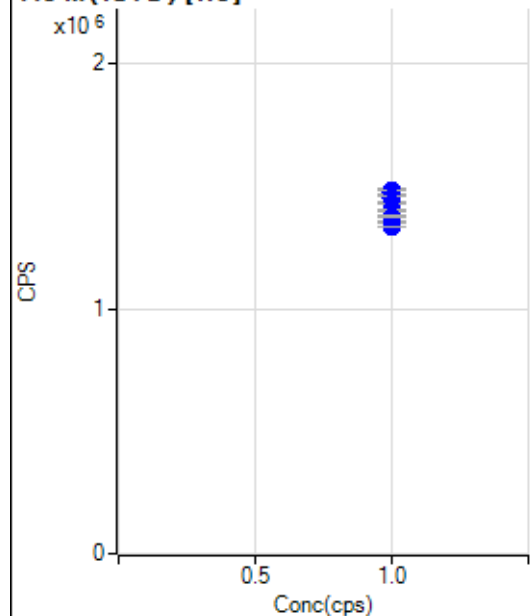
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4501410.83		P	2.1
2	☐	1.000		4479878.54		P	1.2
3	☐	1.000		4502956.05		P	0.0
4	☐	1.000		4347410.80		P	1.8
5	☐	1.000		4217598.79		P	0.8
6	☐	1.000		4163039.07		P	0.6
7	☐	1.000		4064545.18		P	1.2
8	☐	1.000		3927136.12		P	0.7

103 Rh (ISTD) [He]

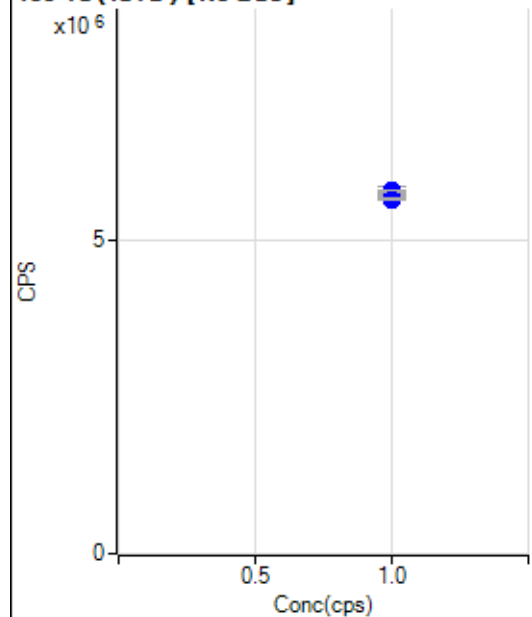
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2653386.28		P	1.8
2	☐	1.000		2649802.96		P	1.2
3	☐	1.000		2602915.99		P	0.7
4	☐	1.000		2579474.55		P	0.7
5	☐	1.000		2537132.67		P	0.6
6	☐	1.000		2456947.29		P	0.6
7	☐	1.000		2439013.33		P	0.4
8	☐	1.000		2403754.77		P	0.3

115 In (ISTD) [No Gas]

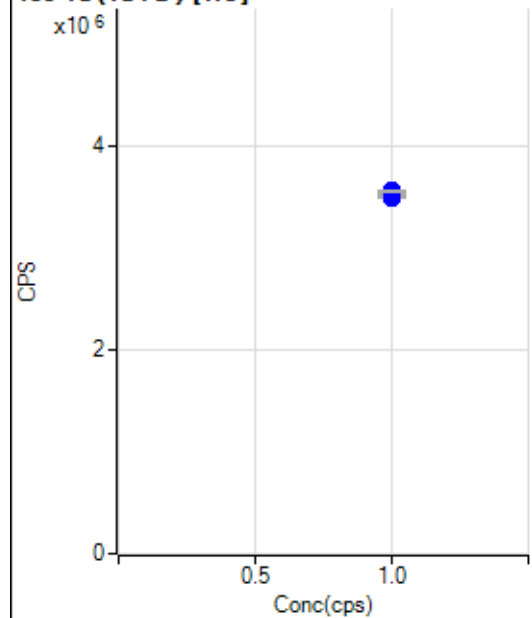
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4529069.54		P	2.1
2	☐	1.000		4510033.24		P	1.5
3	☐	1.000		4539675.85		P	0.2
4	☐	1.000		4403420.16		P	2.2
5	☐	1.000		4321791.32		P	0.6
6	☐	1.000		4283914.13		P	0.8
7	☐	1.000		4213239.78		P	0.2
8	☐	1.000		4150051.88		P	0.5

115 In (ISTD) [He]

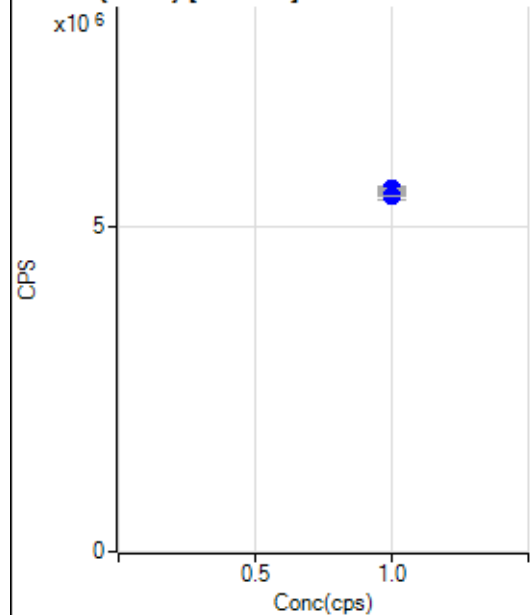
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1482290.92		P	1.4
2	☐	1.000		1473747.29		P	1.2
3	☐	1.000		1450812.00		P	1.3
4	☐	1.000		1429033.85		P	0.2
5	☐	1.000		1402932.78		P	0.5
6	☐	1.000		1354068.00		P	0.5
7	☐	1.000		1334286.14		P	0.3
8	☐	1.000		1378482.67		P	0.9

159 Tb (ISTD) [No Gas]

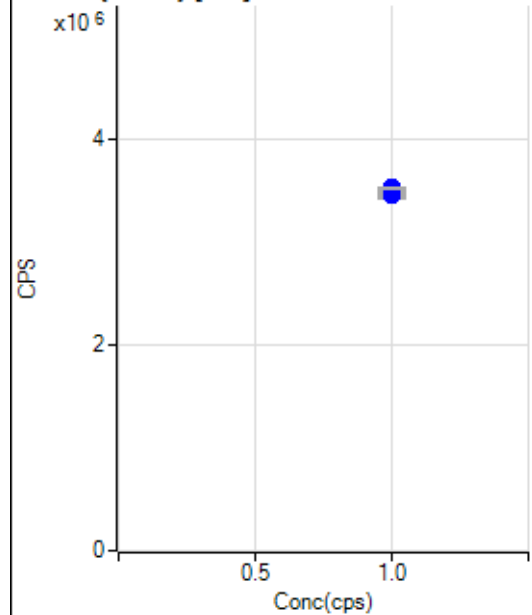
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5769963.66		P	2.4
2	☐	1.000		5720888.46		P	1.7
3	☐	1.000		5780554.08		P	0.3
4	☐	1.000		5692638.80		P	2.2
5	☐	1.000		5680674.64		P	0.2
6	☐	1.000		5739973.39		P	0.3
7	☐	1.000		5779087.83		P	0.5
8	☐	1.000		5650530.40		P	0.8

159 Tb (ISTD) [He]

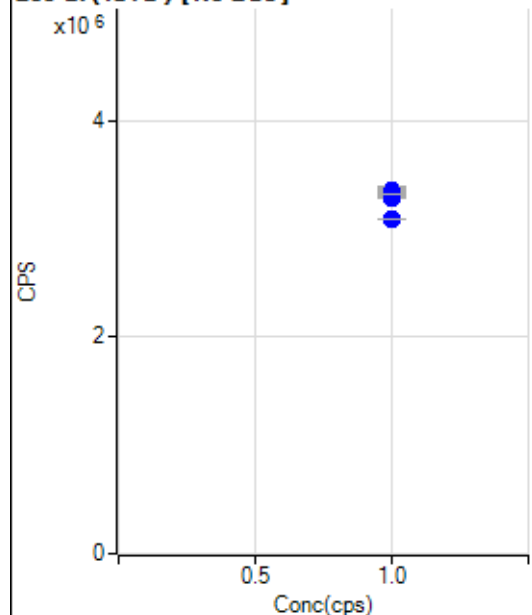
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3517682.38		P	1.5
2	☐	1.000		3520355.26		P	0.9
3	☐	1.000		3492829.81		P	0.4
4	☐	1.000		3528780.09		P	0.1
5	☐	1.000		3519075.75		P	0.7
6	☐	1.000		3500030.99		P	0.6
7	☐	1.000		3531561.58		P	0.1
8	☐	1.000		3558495.16		P	0.4

165 Ho (ISTD) [No Gas]

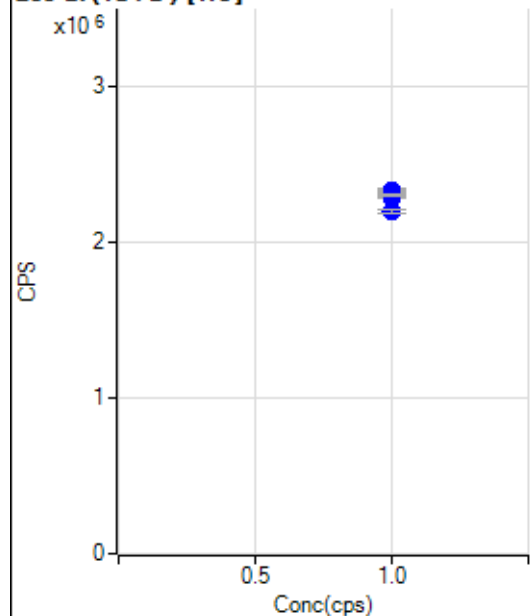
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5556786.65		P	2.7
2	☐	1.000		5523997.76		P	1.8
3	☐	1.000		5587218.60		P	0.5
4	☐	1.000		5487345.47		P	1.9
5	☐	1.000		5499758.53		P	0.7
6	☐	1.000		5550477.35		P	0.3
7	☐	1.000		5594422.21		P	0.2
8	☐	1.000		5483921.38		P	0.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3461021.02		P	1.6
2	☐	1.000		3469583.28		P	0.9
3	☐	1.000		3456022.83		P	0.5
4	☐	1.000		3486015.23		P	0.4
5	☐	1.000		3488566.72		P	0.5
6	☐	1.000		3477637.38		P	0.1
7	☐	1.000		3505151.24		P	0.4
8	☐	1.000		3531992.66		P	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3349222.55		P	2.3
2	☐	1.000		3344187.55		P	1.4
3	☐	1.000		3344730.82		P	0.6
4	☐	1.000		3318082.83		P	2.0
5	☐	1.000		3287455.61		P	0.4
6	☐	1.000		3321889.19		P	0.2
7	☐	1.000		3317801.93		P	0.3
8	☐	1.000		3089161.03		P	0.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2319917.40		P	1.7
2	☐	1.000		2325140.10		P	1.1
3	☐	1.000		2279111.81		P	0.5
4	☐	1.000		2321656.46		P	0.4
5	☐	1.000		2308984.74		P	0.9
6	☐	1.000		2298804.90		P	0.3
7	☐	1.000		2298390.50		P	0.3
8	☐	1.000		2194294.20		P	0.7

US EPA Tune Check Sample Report

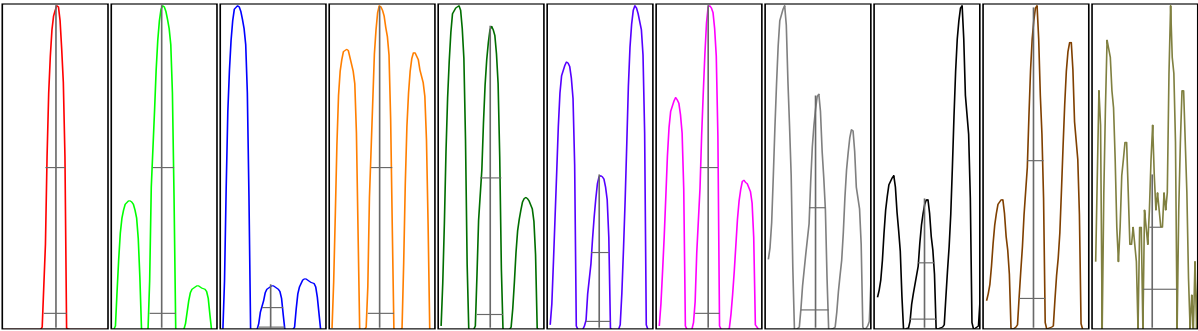
Batch Folder C:\Agilent\ICPMH\1\DATA\P7012721 MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	3893	0.68	5.00	
24	59316	0.41	5.00	
25	7908	0.23	5.00	
26	9031	0.27	5.00	
59	10797	0.59	5.00	
113	5832	0.44	5.00	
115	17194	1.63	5.00	
206	6664	0.71	5.00	
207	5729	0.64	5.00	
208	13879	0.53	5.00	
220	0	39.51		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	3924	3917	3868	3868	3889
24	59331	59670	59191	59013	59372
25	7901	7931	7884	7918	7907
26	9003	9050	9042	9008	9054
59	10735	10834	10734	10801	10881
113	5832	5863	5850	5811	5802
115	17654	17249	17044	17088	16936
206	6640	6730	6634	6695	6619
207	5705	5787	5729	5734	5692
208	13798	13985	13869	13916	13829
220	0	0	1	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	7347	9.05	8.9 - 9.1		0.687	0.900	
24	99686	23.95	23.9 - 24.1		0.777	0.900	
25	13399	24.95	24.9 - 25.1		0.774	0.900	
26	15408	25.95	25.9 - 26.1		0.774	0.900	
59	19839	59.00	58.9 - 59.1		0.776	0.900	
113	11193	113.00	112.9 - 113.1		0.709	0.900	
115	32908	115.00	114.9 - 115.1		0.723	0.900	
206	13730	205.95	205.9 - 206.1		0.785	0.900	
207	11773	206.95	206.9 - 207.1		0.734	0.900	
208	29078	207.95	207.9 - 208.1		0.741	0.900	
220	0	220.25	-		0.973		

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	0.62	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		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.2	V	Deflect	14.4	V
Extract 2	-180.0	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	4279	1.39	
89	34829	0.53	
205	5776	1.24	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	4199	4302	4254	4279	4359
89	34621	34779	34963	34708	35072
205	5710	5797	5747	5733	5891

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.62	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		0.40 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	11.5	V	Deflect	3.0	V
Extract 2	-215.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-110	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	190	V			