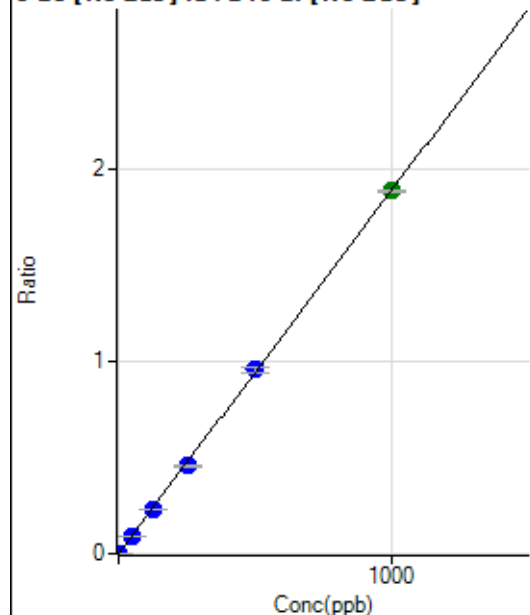


Calibration for 011CAL.S.d

Batch Folder: C:\Agilent\ICPMH\1\DATA\P7120421MS.b\
 Analysis File: P7120421MS.batch.bin
 DA Date-Time: 2021-12-05 12:42:08
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S0	2021-12-04 18:03:07
2	005CAL.S.d	S2	2021-12-04 18:09:00
3	006CAL.S.d	S3	2021-12-04 18:11:56
4	007CAL.S.d	S4	2021-12-04 18:14:43
5	008CAL.S.d	S5	2021-12-04 18:17:31
6	009CAL.S.d	S6	2021-12-04 18:20:19
7	010CAL.S.d	S7	2021-12-04 18:23:06
8	011CAL.S.d	S8	2021-12-04 18:25:55

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	78.89	0.0001	P	10.9
2	☐	1.000	0.866	1834.57	0.0017	P	5.1
3	☐	50.000	48.050	95696.47	0.0909	P	1.4
4	☐	125.000	121.268	236525.25	0.2293	P	2.0
5	☐	250.000	242.115	470951.38	0.4577	P	1.4
6	☐	500.000	506.695	947248.66	0.9578	P	3.3
7	☐	1000.000	999.188	1901765.89	1.8888	A	0.4
8	☐			747.80	0.0007	P	14.0

$$y = 0.0019 * x + 7.4999E-005$$

$$R = 0.9999$$

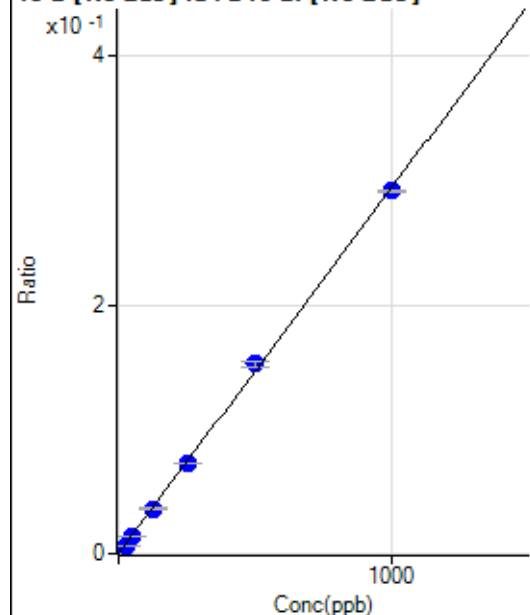
$$DL = 0.01294$$

$$BEC = 0.03968$$

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	119.45	0.0001	P	10.2
2	☐	25.000	22.173	7101.79	0.0066	P	2.6
3	☐	50.000	49.096	15302.29	0.0145	P	1.2
4	☐	125.000	122.934	37359.43	0.0362	P	4.9
5	☐	250.000	245.729	74381.29	0.0723	P	0.7
6	☐	500.000	519.015	150900.85	0.1526	P	2.6
7	☐	1000.000	991.934	293469.49	0.2915	P	0.8
8	☐			2533.60	0.0024	P	6.3

$$y = 2.9374E-004 * x + 1.1363E-004$$

$$R = 0.9997$$

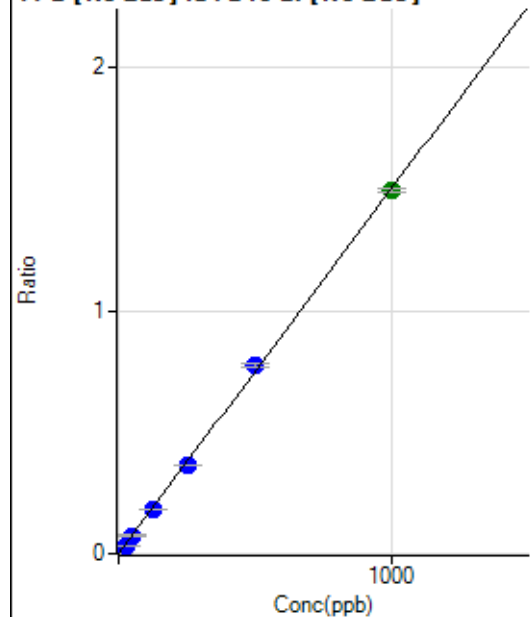
$$DL = 0.1185$$

$$BEC = 0.3868$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	416.68	0.0004	P	10.3
2	☐	25.000	22.119	36053.53	0.0336	P	2.0
3	☐	50.000	49.551	78819.73	0.0749	P	2.5
4	☐	125.000	121.829	189332.10	0.1835	P	1.9
5	☐	250.000	243.016	376199.20	0.3656	P	0.9
6	☐	500.000	516.731	768666.43	0.7770	P	1.8
7	☐	1000.000	993.871	1504565.65	1.4941	A	0.9
8	☐			12413.67	0.0118	P	8.9

$$y = 0.0015 * x + 3.9512E-004$$

$$R = 0.9998$$

$$DL = 0.08095$$

$$BEC = 0.2629$$

Weight: <None>

Min Conc: 0

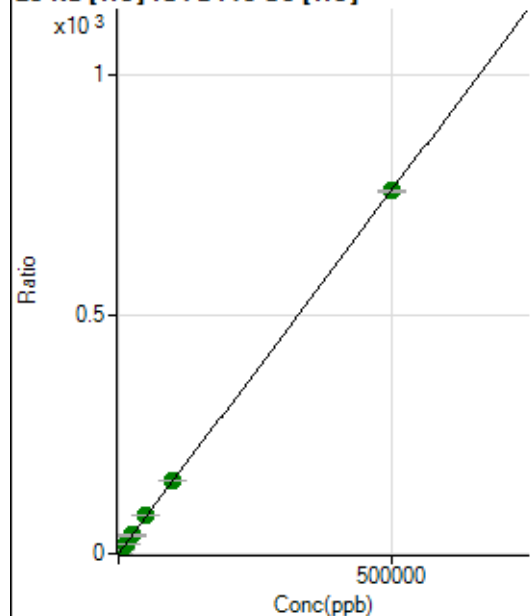
12 C [No Gas] No available calibration points



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

12 C [He] No available calibration points

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

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	63499.08	0.0840	P	0.4
2	☐	500.000	495.941	636377.42	0.8374	P	1.3
3	☐	5000.000	5341.665	6320944.47	8.1984	A	1.0
4	☐	12500.000	13057.832	15433452.66	19.9197	A	1.6
5	☐	25000.000	25371.582	30597356.24	38.6251	A	2.3
6	☐	50000.000	51861.988	63322261.60	78.8658	A	1.0
7	☐	100000.00	100985.49	123555567.58	153.4877	A	1.0
8	☐	500000.00	499580.76	592054494.72	758.9806	A	0.8

$$y = 0.0015 * x + 0.0840$$

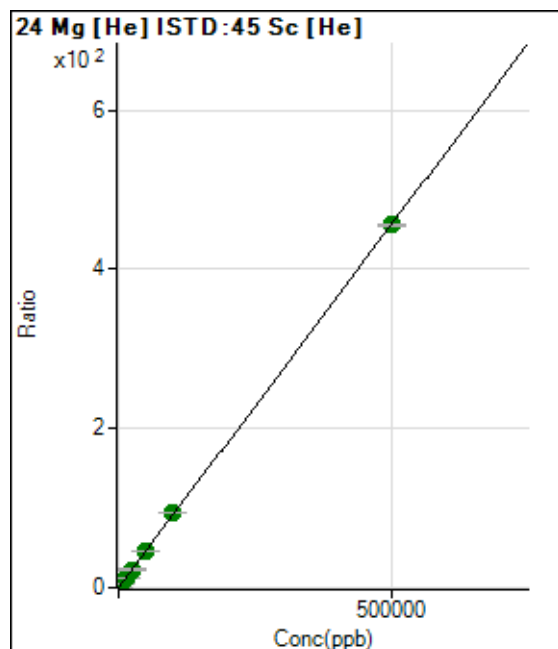
$$R = 1.0000$$

$$DL = 0.693$$

$$BEC = 55.31$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	709.29	0.0009	P	10.2
2	☐	500.000	489.358	339971.51	0.4474	P	1.2
3	☐	5000.000	5240.246	3686504.16	4.7814	A	1.1
4	☐	12500.000	12674.943	8959867.10	11.5638	A	1.5
5	☐	25000.000	25105.484	18144942.07	22.9037	A	1.4
6	☐	50000.000	50405.985	36922863.32	45.9844	A	0.2
7	☐	100000.00	102453.04	75242430.39	93.4650	A	0.2
8	☐	500000.00	499456.75	355427789.43	455.6366	A	0.8

$$y = 9.1226\text{E-}004 * x + 9.3878\text{E-}004$$

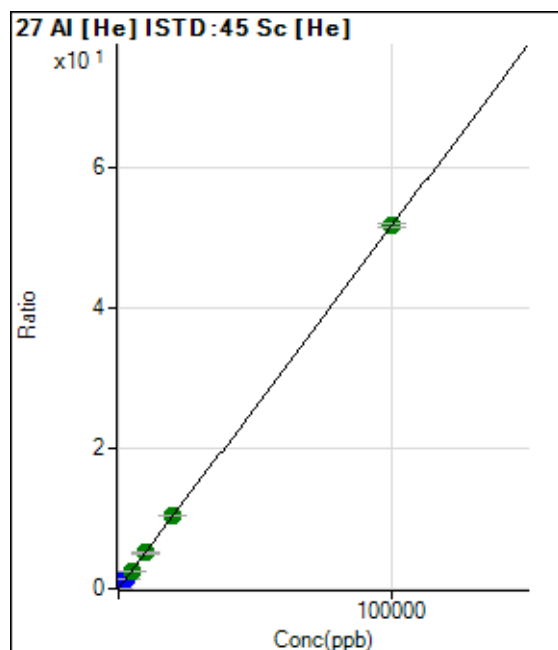
$$R = 1.0000$$

$$DL = 0.3162$$

$$BEC = 1.029$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1733.46	0.0023	P	2.1
2	☐	20.000	15.672	7894.74	0.0104	P	2.5
3	☐	1000.000	2636.974	1051895.65	1.3643	P	1.2
4	☐	2500.000	2438.218	977494.20	1.2617	P	1.7
5	☐	5000.000	4830.734	1978589.99	2.4974	A	1.5
6	☐	10000.000	9808.764	4069787.53	5.0687	A	0.6
7	☐	20000.000	19949.265	8297186.24	10.3064	A	0.6
8	☐	100000.00	100022.91	40302137.01	51.6658	A	1.2

$$y = 5.1652\text{E-}004 * x + 0.0023$$

$$R = 0.9998$$

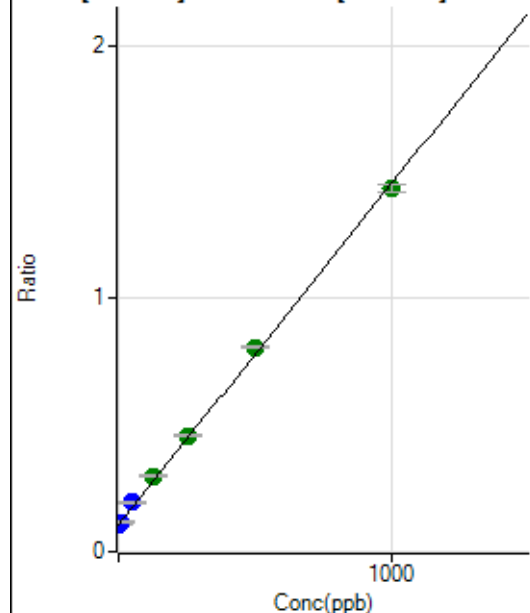
$$DL = 0.2733$$

$$BEC = 4.441$$

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	429916.20	0.1068	P	1.3
2	☐	10.000	7.770	472422.06	0.1173	P	2.6
3	☐	50.000	64.902	775358.21	0.1943	P	2.4
4	☐	125.000	141.970	1218106.15	0.2982	A	3.2
5	☐	250.000	261.232	1903591.84	0.4590	A	2.9
6	☐	500.000	520.453	3275274.16	0.8085	A	0.6
7	☐	1000.000	984.121	6040176.57	1.4337	A	2.3
8	☐			601005.28	0.1372	P	1.8

$$y = 0.0013 * x + 0.1068$$

R = 0.9995

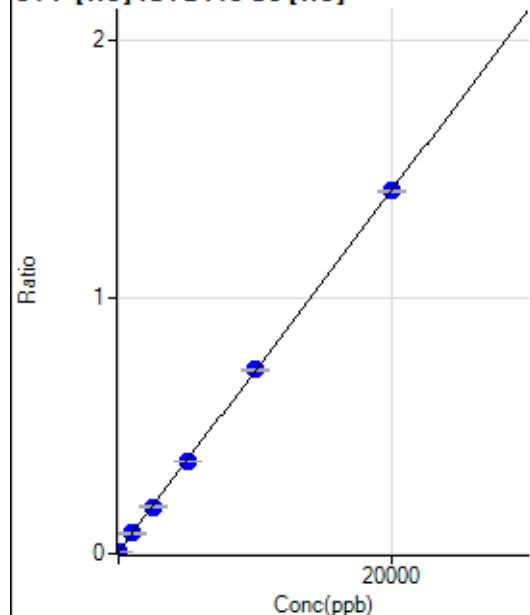
DL = 3.079

BEC = 79.2

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-12.341	5909.63	0.0078	P	1.1
2	☐	0.000	12.341	7263.06	0.0096	P	4.7
3	☐	1000.000	995.470	60751.57	0.0788	P	1.3
4	☐	2500.000	2464.295	141188.82	0.1822	P	2.0
5	☐	5000.000	4953.819	283280.19	0.3576	P	0.5
6	☐	10000.000	10072.245	576537.84	0.7180	P	0.5
7	☐	20000.000	19980.112	1139788.53	1.4158	P	0.7
8	☐			6365.37	0.0082	P	2.7

$$y = 7.0426E-005 * x + 0.0087$$

R = 1.0000

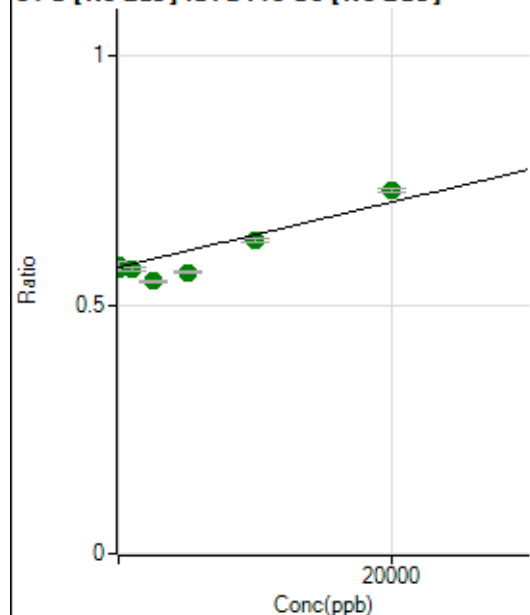
DL = 11.35

BEC = 123.4

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	-433.777	2307727.02	0.5731	A	0.5
2	☐	0.000	433.777	2331867.20	0.5788	A	2.8
3	☐	1000.000	-314.892	2290544.47	0.5739	A	1.3
4	☐	2500.000	-4411.242	2234949.27	0.5471	A	1.0
5	☐	5000.000	-1623.537	2344865.46	0.5653	A	0.9
6	☐	10000.000	8308.785	2553105.96	0.6303	A	1.1
7	☐	20000.000	23431.142	3072646.94	0.7293	A	1.0
8	☐			2261893.73	0.5166	A	3.4

$$y = 6.5440\text{E-}006 * x + 0.5760$$

$$R = 0.9364$$

$$DL = 4394$$

$$BEC = 8.802\text{E}+04$$

Weight: <None>

Min Conc: 0

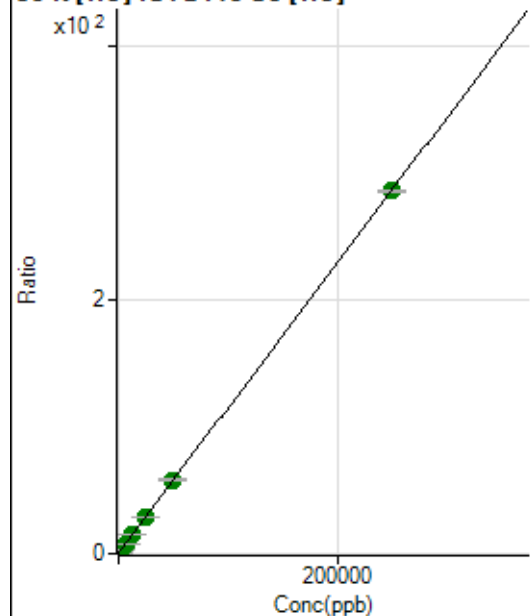
35 Cl [No Gas] No available calibration points



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

35 Cl [He] No available calibration points

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

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	372477.33	0.4929	P	0.8
2	☐	500.000	502.373	810344.69	1.0663	P	0.8
3	☐	2500.000	2586.043	2656063.10	3.4448	A	0.1
4	☐	6250.000	6269.466	5926589.80	7.6495	A	1.5
5	☐	12500.000	12522.415	11714835.68	14.7872	A	1.0
6	☐	25000.000	25329.129	23610967.54	29.4061	A	0.3
7	☐	50000.000	50377.937	46693814.93	57.9994	A	1.2
8	☐	250000.00	249889.02	222898113.31	285.7419	A	0.2

$$y = 0.0011 * x + 0.4929$$

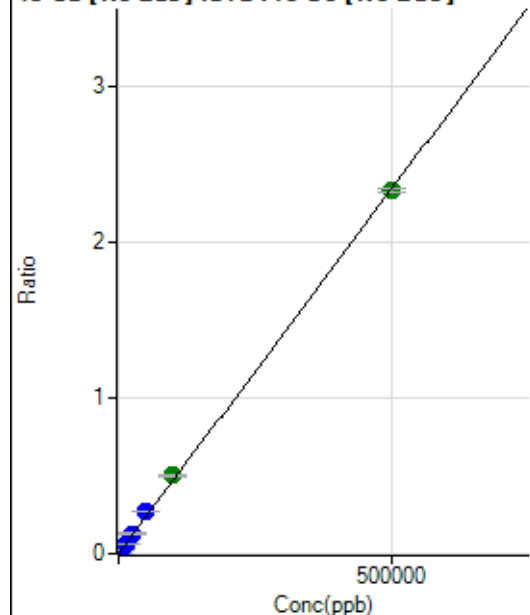
$$R = 1.0000$$

$$DL = 9.959$$

$$BEC = 431.8$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1086.18	0.0003	P	6.5
2	☐	500.000	527.454	11043.17	0.0027	P	3.6
3	☐	5000.000	5820.836	109900.44	0.0275	P	3.1
4	☐	12500.000	13814.280	265480.08	0.0650	P	1.3
5	☐	25000.000	27552.549	536466.46	0.1294	P	2.8
6	☐	50000.000	58070.351	1102969.98	0.2723	P	1.2
7	☐	100000.00	106889.66	2110977.41	0.5010	A	0.7
8	☐	500000.00	497646.31	10211563.42	2.3317	A	0.9

$$y = 4.6849E-006 * x + 2.6989E-004$$

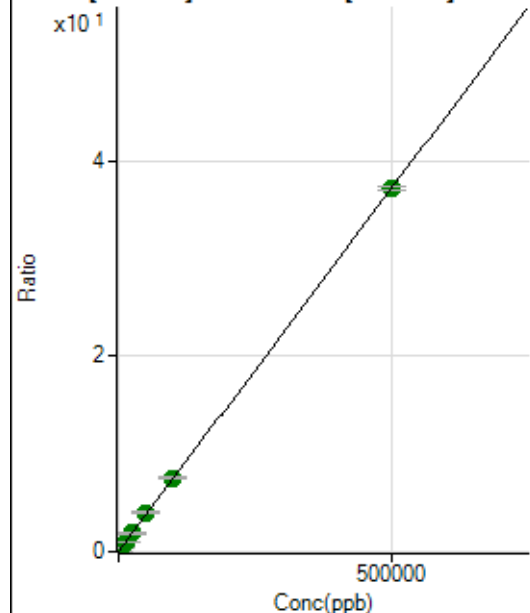
R = 0.9998

DL = 11.18

BEC = 57.61

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	92182.40	0.0229	P	0.8
2	☐	500.000	522.652	248917.39	0.0618	P	1.9
3	☐	5000.000	5325.295	1672396.39	0.4191	A	2.2
4	☐	12500.000	12781.183	3977629.52	0.9737	A	2.1
5	☐	25000.000	25044.349	7822194.99	1.8860	A	2.2
6	☐	50000.000	53549.291	16226227.65	4.0066	A	1.8
7	☐	100000.00	101479.54	31904193.63	7.5723	A	1.2
8	☐	500000.00	499336.63	162784496.63	37.1704	A	1.2

$$y = 7.4394E-005 * x + 0.0229$$

R = 1.0000

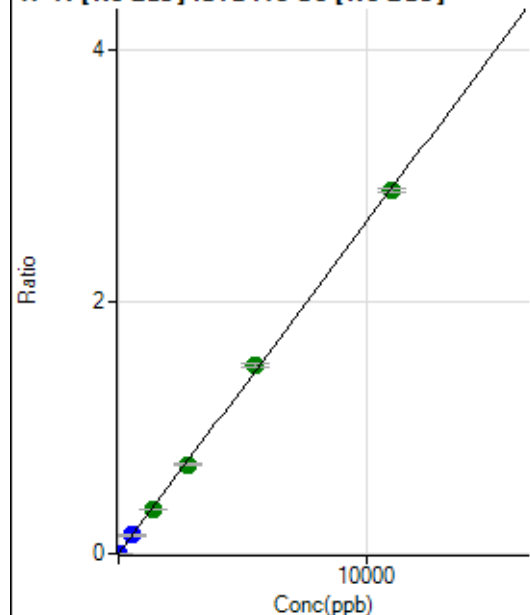
DL = 7.527

BEC = 307.8

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	375.01	0.0001	P	1.2
2	☐	5.000	4.953	5631.75	0.0014	P	2.6
3	☐	550.000	555.748	584582.72	0.1465	P	2.4
4	☐	1375.000	1347.274	1450127.77	0.3550	A	0.5
5	☐	2750.000	2688.609	2937520.92	0.7083	A	3.0
6	☐	5500.000	5682.080	6061253.69	1.4968	A	2.6
7	☐	11000.000	10927.486	12128540.03	2.8785	A	1.1
8	☐			3481.04	0.0008	P	3.0

$$y = 2.6341\text{E-}004 * x + 9.3130\text{E-}005$$

$$R = 0.9998$$

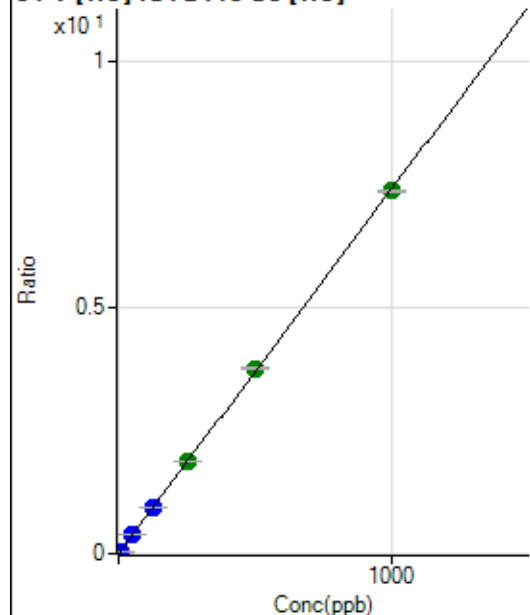
$$DL = 0.01226$$

$$BEC = 0.3536$$

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	72.22	0.0001	P	11.0
2	☐	5.000	4.775	26898.49	0.0354	P	0.4
3	☐	50.000	51.221	292007.29	0.3787	P	0.7
4	☐	125.000	126.269	723295.03	0.9335	P	0.9
5	☐	250.000	252.477	1478676.12	1.8665	A	1.3
6	☐	500.000	507.350	3011445.06	3.7506	A	1.2
7	☐	1000.000	995.487	5924238.11	7.3590	A	0.3
8	☐			1667.89	0.0021	P	2.7

$$y = 0.0074 * x + 9.5586\text{E-}005$$

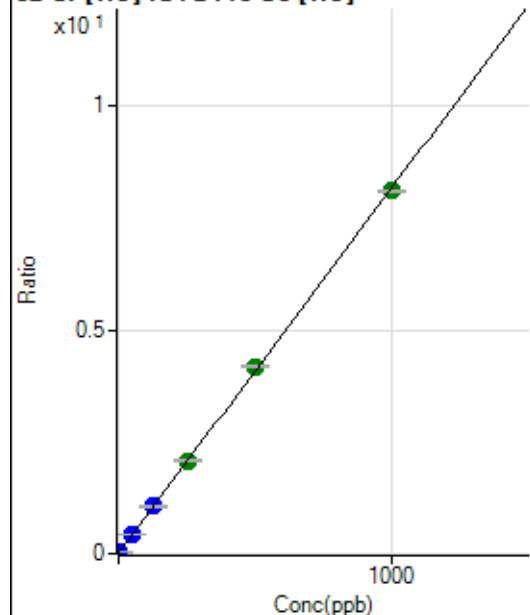
$$R = 1.0000$$

$$DL = 0.004259$$

$$BEC = 0.01293$$

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	6518.13	0.0086	P	1.4
2	☐	2.000	1.953	18662.73	0.0246	P	3.7
3	☐	50.000	53.509	343272.15	0.4452	P	0.1
4	☐	125.000	128.510	819068.58	1.0572	P	1.2
5	☐	250.000	254.394	1651167.56	2.0843	A	1.0
6	☐	500.000	511.048	3354899.40	4.1783	A	1.2
7	☐	1000.000	992.763	6527460.46	8.1087	A	0.9
8	☐			17095.32	0.0219	P	2.3

$$y = 0.0082 * x + 0.0086$$

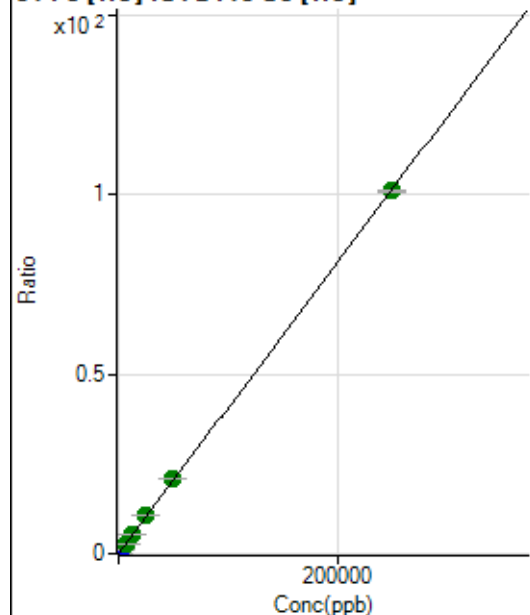
$$R = 0.9999$$

$$DL = 0.04354$$

$$BEC = 1.057$$

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	6304.57	0.0083	P	6.0
2	☐	50.000	52.143	22382.98	0.0295	P	4.4
3	☐	2500.000	2796.571	879493.10	1.1407	P	0.5
4	☐	6250.000	6571.641	2068201.41	2.6692	A	0.8
5	☐	12500.000	12943.526	4158255.35	5.2493	A	3.1
6	☐	25000.000	26385.613	8585364.86	10.6920	A	1.3
7	☐	50000.000	51356.528	16745608.77	20.8029	A	1.5
8	☐	250000.00	249556.95	78829414.97	101.0555	A	0.5

$$y = 4.0491E-004 * x + 0.0083$$

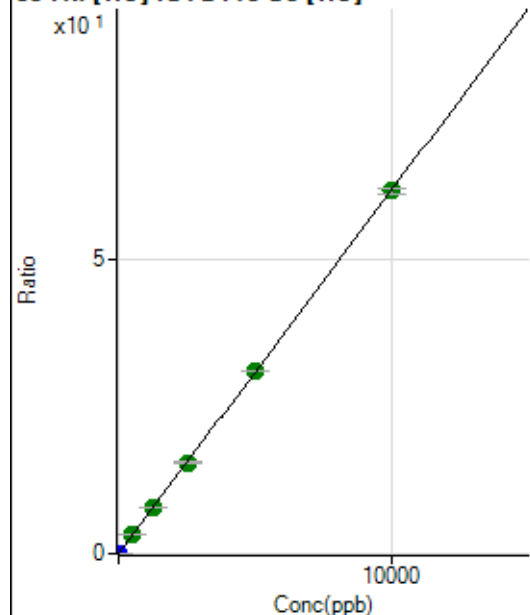
$$R = 1.0000$$

$$DL = 3.708$$

$$BEC = 20.6$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	823.36	0.0011	P	2.2
2	☐	1.000	0.976	5412.14	0.0071	P	2.3
3	☐	500.000	515.161	2455565.31	3.1848	A	0.5
4	☐	1250.000	1254.045	6005839.56	7.7512	A	0.8
5	☐	2500.000	2498.359	12232066.07	15.4413	A	2.2
6	☐	5000.000	5035.419	24987956.57	31.1206	A	0.6
7	☐	10000.000	9981.437	49656634.82	61.6876	A	1.4
8	☐			29455.58	0.0378	P	2.3

$$y = 0.0062 * x + 0.0011$$

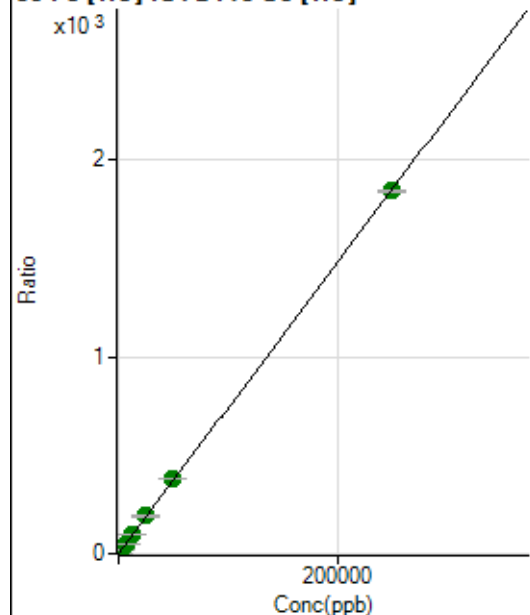
$$R = 1.0000$$

$$DL = 0.01152$$

$$BEC = 0.1763$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	20553.17	0.0272	P	2.2
2	☐	50.000	50.995	306618.08	0.4035	P	0.4
3	☐	2500.000	2627.852	14971059.59	19.4169	A	0.3
4	☐	6250.000	6455.481	36925496.66	47.6593	A	1.3
5	☐	12500.000	12787.513	74767640.56	94.3805	A	1.7
6	☐	25000.000	25869.317	153277879.35	190.9053	A	1.1
7	☐	50000.000	51397.162	305307110.53	379.2638	A	0.7
8	☐	250000.00	249612.84	1436729483.9	1,841.808	A	0.2

$$y = 0.0074 * x + 0.0272$$

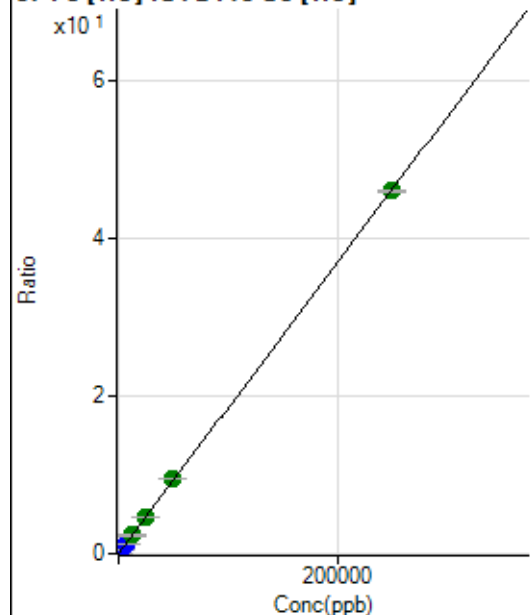
$$R = 1.0000$$

$$DL = 0.2394$$

$$BEC = 3.686$$

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	3124.97	0.0041	P	27.7
2	☐	50.000	48.842	9990.50	0.0131	P	2.0
3	☐	2500.000	2689.508	385815.10	0.5004	P	1.2
4	☐	6250.000	6526.546	936301.98	1.2084	P	0.9
5	☐	12500.000	12630.034	1849564.64	2.3347	A	2.5
6	☐	25000.000	25448.597	3773630.41	4.7000	A	1.0
7	☐	50000.000	51370.425	7634628.35	9.4831	A	1.0
8	☐	250000.00	249665.74	35940248.02	46.0731	A	0.6

$$y = 1.8452\text{E-}004 * x + 0.0041$$

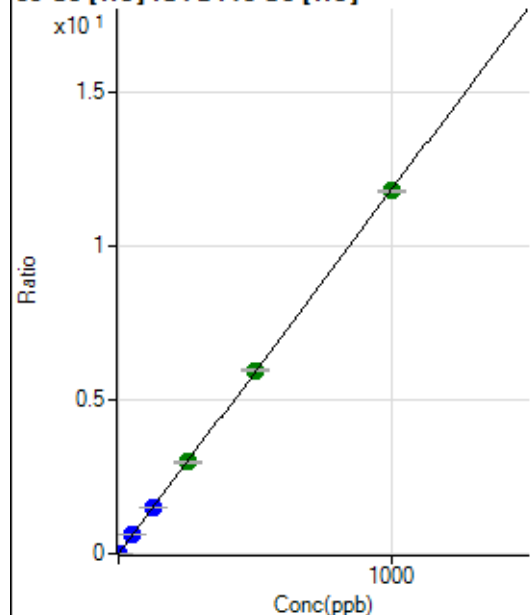
R = 1.0000

DL = 18.59

BEC = 22.4

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	203.34	0.0003	P	22.6
2	☐	1.000	1.003	9238.48	0.0122	P	2.2
3	☐	50.000	52.350	478386.54	0.6205	P	0.6
4	☐	125.000	126.700	1163209.53	1.5013	P	1.0
5	☐	250.000	251.768	2363114.46	2.9830	A	1.6
6	☐	500.000	504.317	4797214.65	5.9750	A	1.6
7	☐	1000.000	997.070	9509269.51	11.8127	A	0.7
8	☐			15980.84	0.0205	P	1.9

$$y = 0.0118 * x + 2.6888\text{E-}004$$

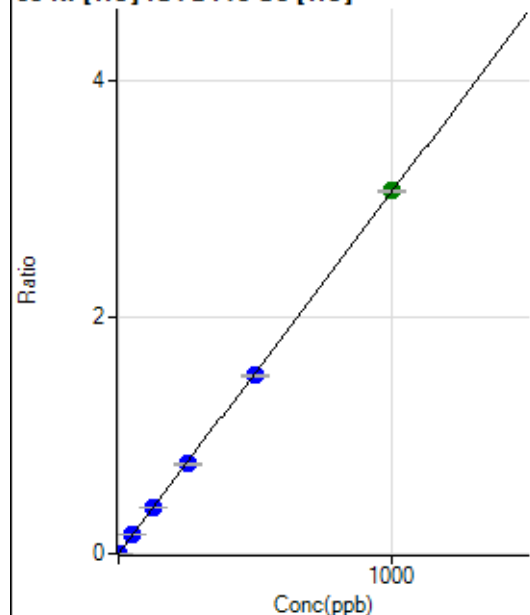
R = 1.0000

DL = 0.01539

BEC = 0.0227

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	777.81	0.0010	P	4.8
2	☐	1.000	0.972	3035.89	0.0040	P	3.4
3	☐	50.000	52.164	123577.28	0.1603	P	0.2
4	☐	125.000	125.806	298377.43	0.3851	P	0.7
5	☐	250.000	247.654	599752.06	0.7571	P	1.2
6	☐	500.000	493.410	1210214.64	1.5073	P	1.3
7	☐	1000.000	1003.673	2467544.44	3.0651	A	0.7
8	☐			4491.83	0.0058	P	4.0

$$y = 0.0031 * x + 0.0010$$

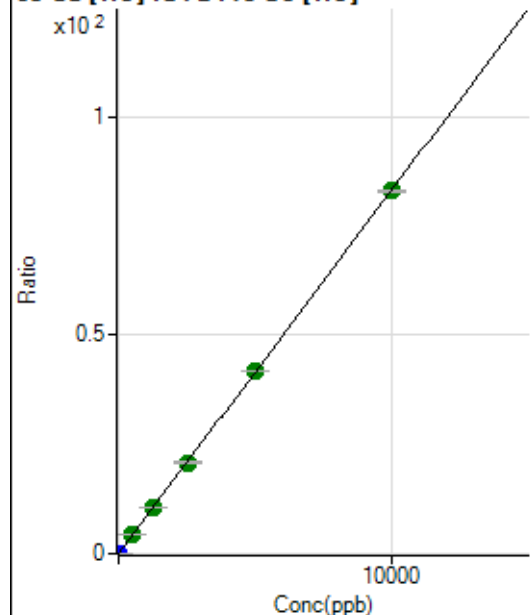
$$R = 1.0000$$

$$DL = 0.04851$$

$$BEC = 0.3371$$

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	4418.47	0.0058	P	1.8
2	☐	2.000	1.950	16775.03	0.0221	P	1.1
3	☐	500.000	518.924	3333867.48	4.3240	A	0.7
4	☐	1250.000	1266.098	8167076.06	10.5414	A	1.6
5	☐	2500.000	2498.882	16477411.84	20.7998	A	1.3
6	☐	5000.000	5025.450	33581083.11	41.8241	A	0.7
7	☐	10000.000	9984.596	66888567.89	83.0905	A	0.7
8	☐			28662.98	0.0367	P	1.9

$$y = 0.0083 * x + 0.0058$$

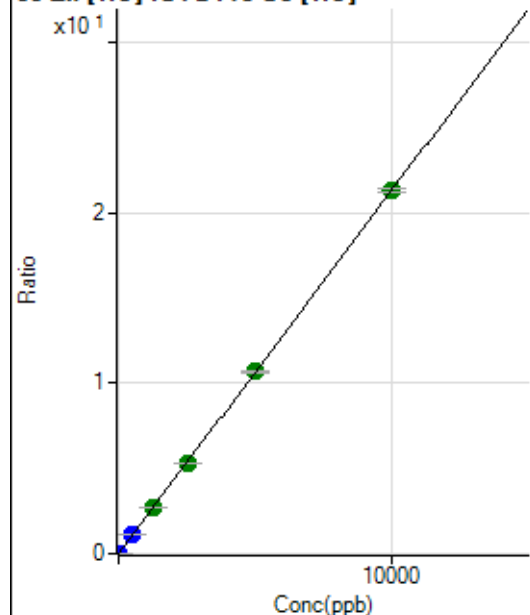
$$R = 1.0000$$

$$DL = 0.03806$$

$$BEC = 0.7025$$

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	635.58	0.0008	P	4.4
2	☐	2.000	1.922	3751.62	0.0049	P	0.8
3	☐	500.000	509.190	837294.72	1.0860	P	0.4
4	☐	1250.000	1253.662	2070721.38	2.6725	A	0.5
5	☐	2500.000	2493.267	4209904.76	5.3142	A	1.0
6	☐	5000.000	5012.922	8578189.52	10.6837	A	1.0
7	☐	10000.000	9994.305	17145769.88	21.2994	A	1.0
8	☐			27022.32	0.0346	P	0.7

$$y = 0.0021 * x + 8.4089E-004$$

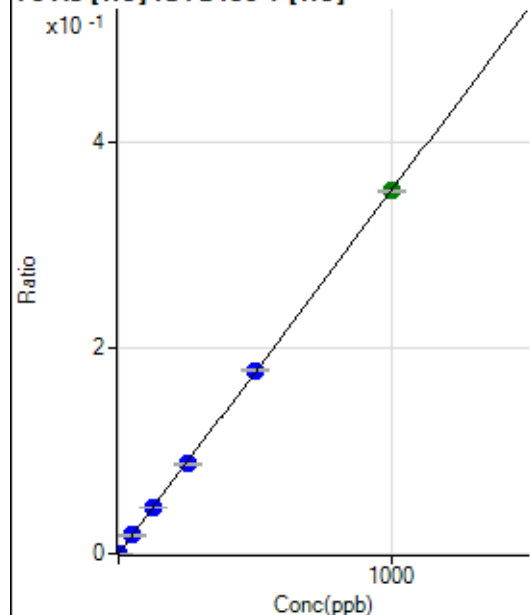
$$R = 1.0000$$

$$DL = 0.05194$$

$$BEC = 0.3946$$

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	31.48	0.0000	P	27.2
2	☐	1.000	0.993	1830.99	0.0004	P	0.5
3	☐	50.000	50.342	91550.43	0.0177	P	0.3
4	☐	125.000	124.933	228299.41	0.0440	P	0.7
5	☐	250.000	247.713	462403.07	0.0873	P	1.3
6	☐	500.000	503.841	957039.48	0.1775	P	0.7
7	☐	1000.000	998.643	1937273.50	0.3518	A	0.4
8	☐			937.69	0.0002	P	6.5

$$y = 3.5231E-004 * x + 6.0622E-006$$

$$R = 1.0000$$

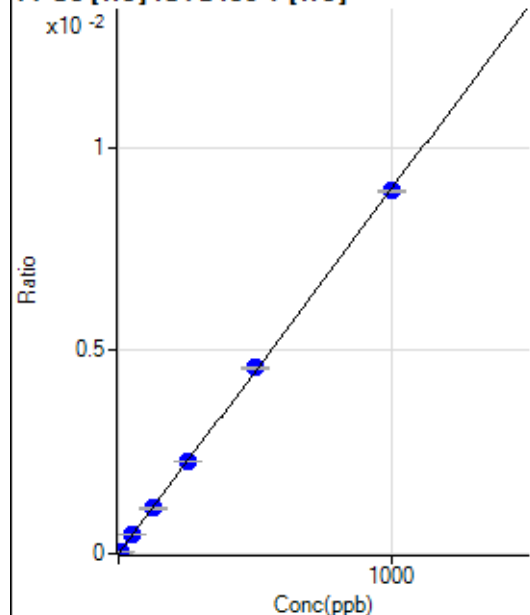
$$DL = 0.01406$$

$$BEC = 0.01721$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.44	0.0000	P	42.6
2	☐	5.000	4.564	215.56	0.0000	P	14.8
3	☐	50.000	51.930	2412.44	0.0005	P	6.6
4	☐	125.000	125.900	5871.22	0.0011	P	4.1
5	☐	250.000	252.022	12004.95	0.0023	P	0.5
6	☐	500.000	509.461	24689.53	0.0046	P	0.6
7	☐	1000.000	994.557	49220.37	0.0089	P	0.7
8	☐			15.56	0.0000	P	65.4

$$y = 8.9873\text{E-}006 * x + 8.5321\text{E-}007$$

$$R = 0.9999$$

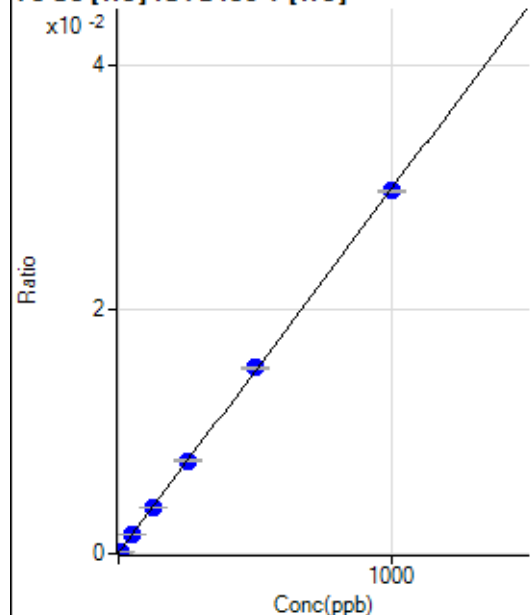
$$DL = 0.1214$$

$$BEC = 0.09493$$

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	332.10	0.0001	P	14.5
2	☐	5.000	4.720	1053.13	0.0002	P	2.5
3	☐	50.000	50.180	8050.98	0.0016	P	2.4
4	☐	125.000	125.515	19739.72	0.0038	P	0.7
5	☐	250.000	252.132	40165.89	0.0076	P	1.9
6	☐	500.000	509.555	82252.13	0.0153	P	1.3
7	☐	1000.000	994.617	163636.25	0.0297	P	0.2
8	☐			415.44	0.0001	P	10.3

$$y = 2.9816\text{E-}005 * x + 6.3954\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.9362$$

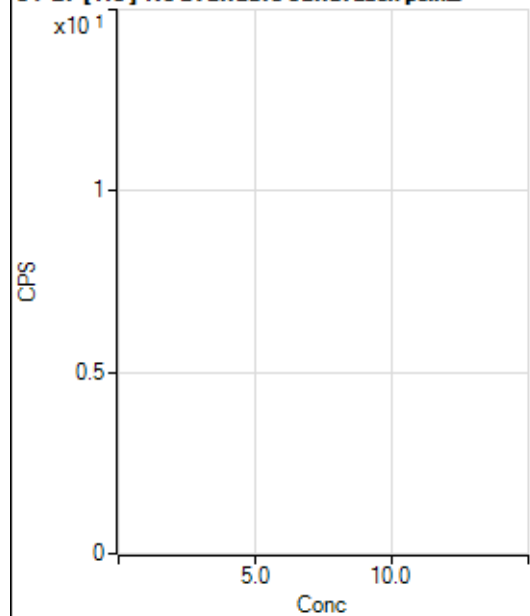
$$BEC = 2.145$$

Weight: <None>

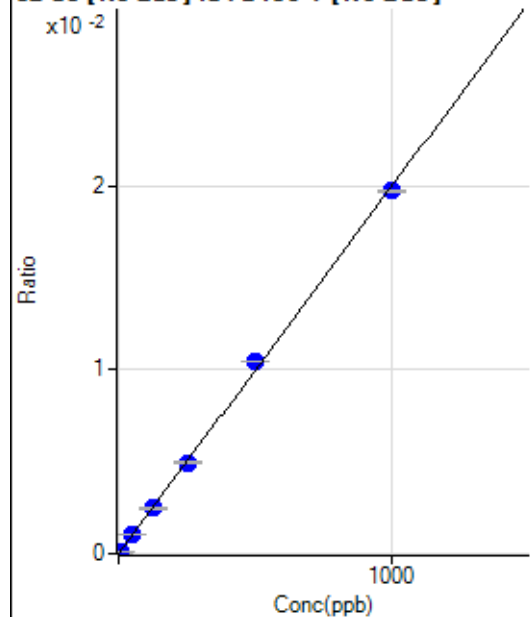
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			605.59		P	5.6
2	☐			600.03		P	6.9
3	☐			747.26		P	8.4
4	☐			836.16		P	14.4
5	☐			844.49		P	12.4
6	☐			761.15		P	2.3
7	☐			1033.40		P	7.2
8	☐			1297.32		P	12.5

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			120.12		P	22.0
2	☐			60.06		P	33.3
3	☐			110.11		P	32.8
4	☐			113.45		P	33.4
5	☐			120.12		P	30.0
6	☐			170.18		P	23.5
7	☐			216.89		P	30.7
8	☐			176.85		P	29.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-58.57	0.0000	P	-107.
2	☐	5.000	4.677	1130.99	0.0001	P	2.2
3	☐	50.000	50.813	12753.75	0.0010	P	2.0
4	☐	125.000	123.781	31704.16	0.0025	P	1.8
5	☐	250.000	248.400	64256.22	0.0050	P	3.3
6	☐	500.000	523.746	132105.77	0.0104	P	0.8
7	☐	1000.000	988.640	263177.12	0.0197	P	0.5
8	☐			7.20	0.0000	P	1474.

$$y = 1.9952E-005 * x - 4.6039E-006$$

$$R = 0.9996$$

$$DL = 0.7434$$

$$BEC = -0.2308$$

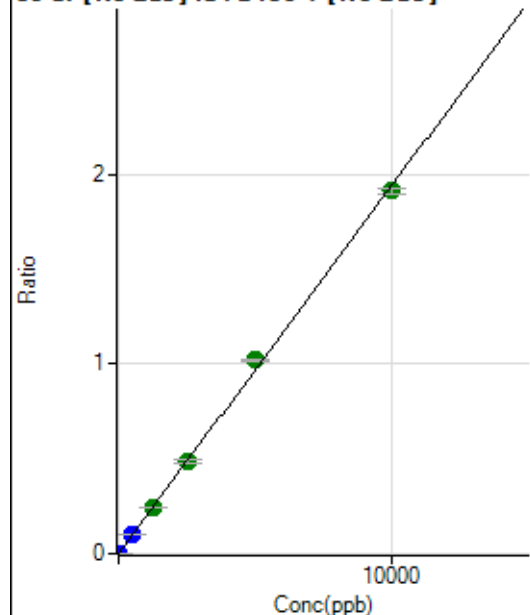
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			698.91		P	5.3
2	☐			674.47		P	5.6
3	☐			706.69		P	3.3
4	☐			723.36		P	3.3
5	☐			682.24		P	5.7
6	☐			768.92		P	4.0
7	☐			760.03		P	6.0
8	☐			794.47		P	7.6

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1116.74	0.0001	P	1.4
2	☐	1.000	0.893	3333.81	0.0003	P	2.7
3	☐	500.000	512.098	1257060.03	0.0995	P	2.1
4	☐	1250.000	1265.788	3160732.86	0.2457	A	1.5
5	☐	2500.000	2500.549	6299140.50	0.4854	A	3.0
6	☐	5000.000	5260.783	12914027.37	1.0211	A	1.0
7	☐	10000.000	9866.893	25554067.94	1.9150	A	1.5
8	☐			19477.18	0.0015	P	2.6

$$y = 1.9407E-004 * x + 8.8292E-005$$

$$R = 0.9995$$

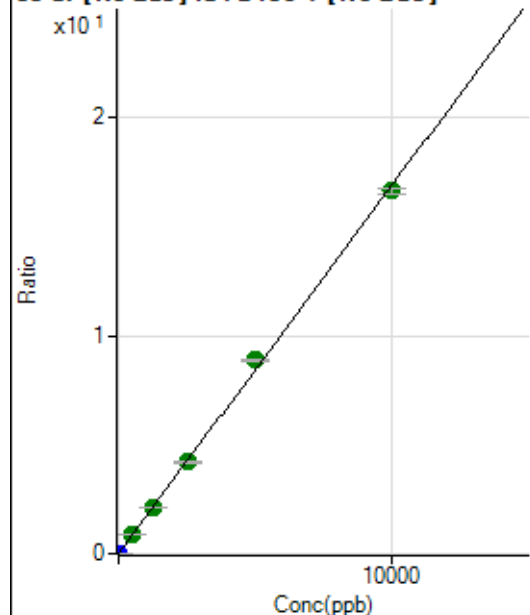
$$DL = 0.01886$$

$$BEC = 0.4549$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	594.47	0.0000	P	3.3
2	☐	1.000	0.947	20979.34	0.0016	P	3.2
3	☐	500.000	517.430	11039066.83	0.8735	A	2.2
4	☐	1250.000	1255.284	27254253.91	2.1190	A	1.2
5	☐	2500.000	2490.189	54565185.94	4.2036	A	2.5
6	☐	5000.000	5272.753	112569996.96	8.9007	A	1.1
7	☐	10000.000	9864.544	222207046.63	16.6519	A	1.3
8	☐			164180.44	0.0124	P	3.0

$$y = 0.0017 * x + 4.6995E-005$$

$$R = 0.9994$$

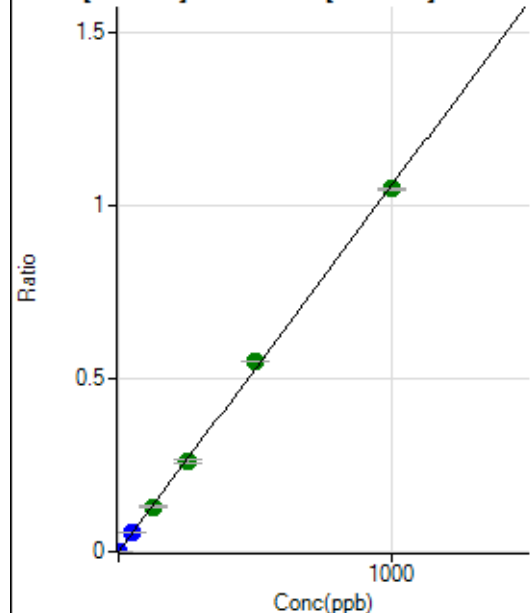
$$DL = 0.002774$$

$$BEC = 0.02784$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	669.49	0.0001	P	10.5
2	☐	1.000	0.901	12808.64	0.0010	P	3.1
3	☐	50.000	50.674	676781.65	0.0536	P	1.9
4	☐	125.000	122.379	1662448.40	0.1293	A	2.3
5	☐	250.000	246.497	3377889.36	0.2603	A	3.7
6	☐	500.000	519.729	6941234.66	0.5488	A	0.5
7	☐	1000.000	991.306	13967922.36	1.0467	A	0.5
8	☐			8391.52	0.0006	P	5.1

$$y = 0.0011 * x + 5.2952E-005$$

$$R = 0.9997$$

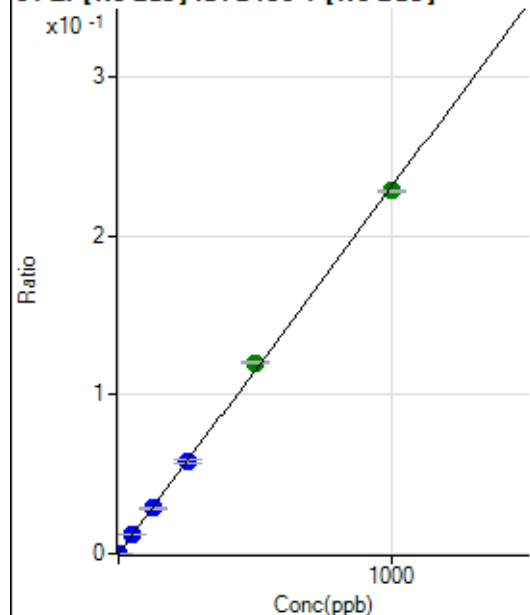
$$DL = 0.01578$$

$$BEC = 0.05015$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	23.2
2	☐	1.000	0.956	2961.49	0.0002	P	4.7
3	☐	50.000	50.930	148892.60	0.0118	P	2.7
4	☐	125.000	124.503	370189.30	0.0288	P	2.2
5	☐	250.000	251.717	755123.65	0.0582	P	2.9
6	☐	500.000	521.044	1523025.57	0.1204	A	1.4
7	☐	1000.000	989.065	3050703.22	0.2286	A	0.6
8	☐			1894.61	0.0001	P	7.7

$$y = 2.3110E-004 * x + 1.1408E-005$$

$$R = 0.9997$$

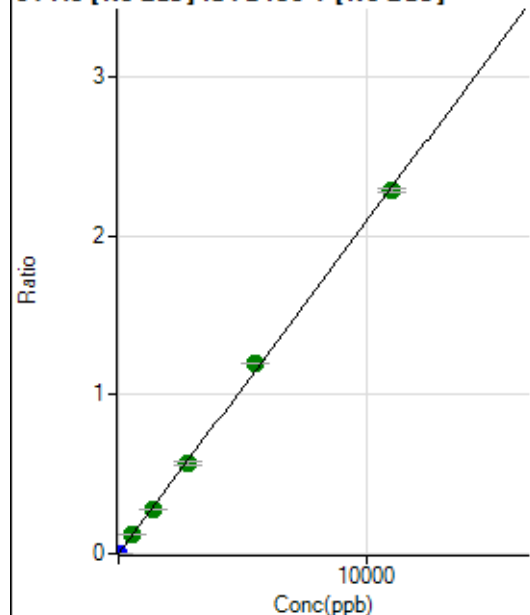
$$DL = 0.0344$$

$$BEC = 0.04936$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	352.79	0.0000	P	10.0
2	☐	5.000	5.726	15642.06	0.0012	P	2.5
3	☐	550.000	553.903	1466317.77	0.1160	A	0.9
4	☐	1375.000	1341.093	3612759.33	0.2809	A	0.6
5	☐	2750.000	2714.249	7377491.40	0.5685	A	2.9
6	☐	5500.000	5717.002	15143352.07	1.1973	A	0.8
7	☐	11000.000	10904.480	30474045.82	2.2837	A	1.2
8	☐			9620.07	0.0007	P	10.8

$$y = 2.0942\text{E-}004 * x + 2.7902\text{E-}005$$

$$R = 0.9997$$

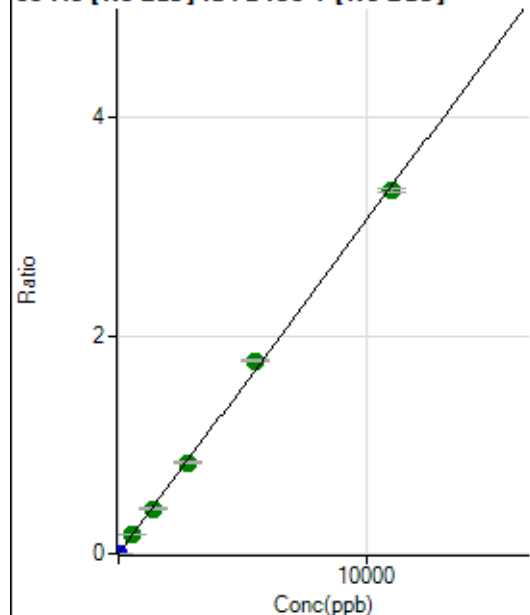
$$DL = 0.03994$$

$$BEC = 0.1332$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	41.67	0.0000	P	68.6
2	☐	5.000	4.698	18378.60	0.0014	P	2.8
3	☐	550.000	550.072	2128058.21	0.1684	A	0.8
4	☐	1375.000	1350.889	5318846.13	0.4135	A	1.5
5	☐	2750.000	2733.316	10858224.90	0.8367	A	3.4
6	☐	5500.000	5785.188	22398080.53	1.7709	A	0.9
7	☐	11000.000	10864.588	44387308.63	3.3258	A	0.9
8	☐			11421.47	0.0009	P	9.7

$$y = 3.0612\text{E-}004 * x + 3.2844\text{E-}006$$

$$R = 0.9995$$

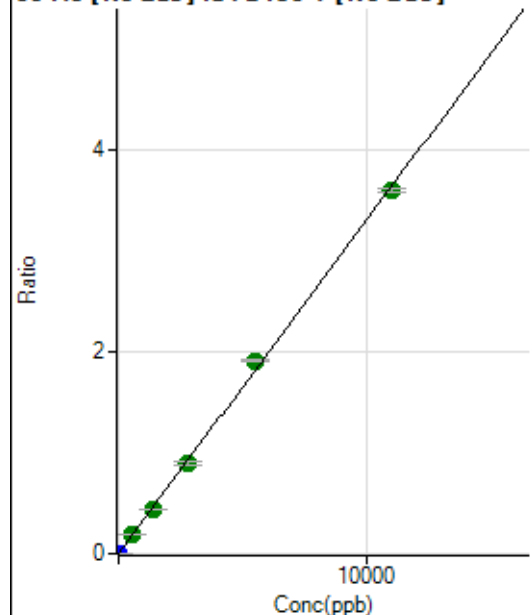
$$DL = 0.02207$$

$$BEC = 0.01073$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	258.34	0.0000	P	28.7
2	☐	5.000	4.910	20932.12	0.0016	P	3.7
3	☐	550.000	555.405	2317908.26	0.1834	A	1.1
4	☐	1375.000	1331.234	5653562.32	0.4396	A	1.8
5	☐	2750.000	2725.514	11678434.11	0.9000	A	4.0
6	☐	5500.000	5784.496	24157330.75	1.9100	A	0.8
7	☐	11000.000	10869.074	47895534.75	3.5890	A	0.9
8	☐			13117.37	0.0010	P	9.2

$$y = 3.3020E-004 * x + 2.0455E-005$$

$$R = 0.9995$$

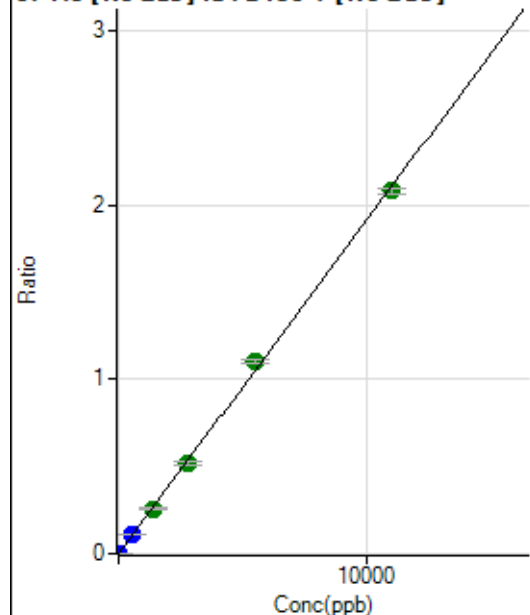
$$DL = 0.05337$$

$$BEC = 0.06195$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	19.44	0.0000	P	98.4
2	☐	5.000	4.797	11729.98	0.0009	P	1.3
3	☐	550.000	555.966	1345391.59	0.1065	P	0.7
4	☐	1375.000	1349.218	3322793.50	0.2584	A	1.2
5	☐	2750.000	2717.958	6753267.12	0.5204	A	4.3
6	☐	5500.000	5776.485	13987011.08	1.1061	A	2.1
7	☐	11000.000	10872.693	27785282.39	2.0819	A	1.6
8	☐			6696.16	0.0005	P	9.5

$$y = 1.9148E-004 * x + 1.5306E-006$$

$$R = 0.9995$$

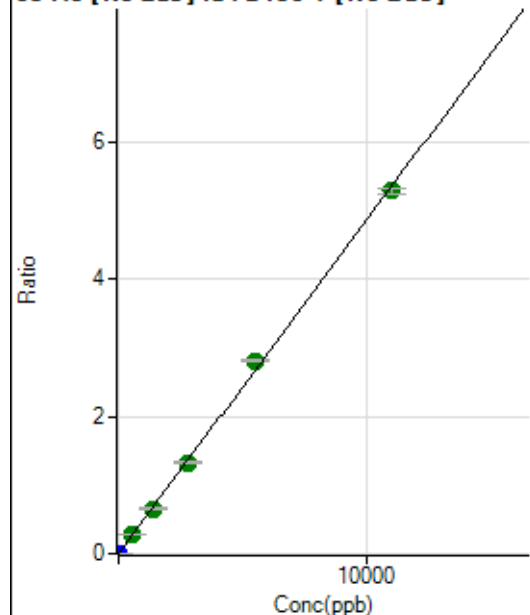
$$DL = 0.02359$$

$$BEC = 0.007994$$

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	111.11	0.0000	P	10.7
2	☐	5.000	4.764	29697.46	0.0023	P	1.5
3	☐	550.000	558.246	3436874.03	0.2720	A	1.1
4	☐	1375.000	1348.527	8449082.74	0.6569	A	1.2
5	☐	2750.000	2734.768	17289864.10	1.3322	A	3.4
6	☐	5500.000	5774.239	35576254.96	2.8129	A	0.7
7	☐	11000.000	10869.586	70658396.02	5.2950	A	1.7
8	☐			17494.21	0.0013	P	6.5

$$y = 4.8714\text{E-}004 * x + 8.7804\text{E-}006$$

$$R = 0.9995$$

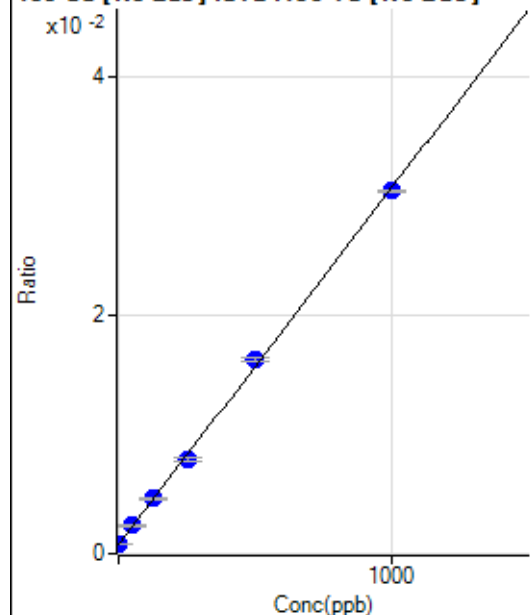
$$DL = 0.005763$$

$$BEC = 0.01802$$

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	7635.57	0.0008	P	5.9
2	☐	1.000	2.236	8202.51	0.0008	P	2.9
3	☐	50.000	53.041	23085.60	0.0023	P	2.5
4	☐	125.000	129.241	45438.61	0.0046	P	3.6
5	☐	250.000	237.909	79912.08	0.0079	P	3.4
6	☐	500.000	520.353	155684.64	0.0163	P	2.2
7	☐	1000.000	992.163	302011.22	0.0304	P	0.5
8	☐			8744.55	0.0009	P	2.9

$$y = 2.9890\text{E-}005 * x + 7.6167\text{E-}004$$

$$R = 0.9996$$

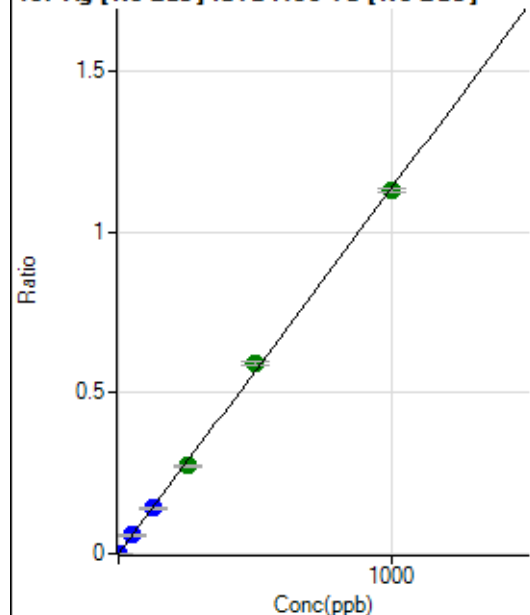
$$DL = 4.506$$

$$BEC = 25.48$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	119.45	0.0000	P	13.0
2	☐	1.000	0.922	10504.10	0.0011	P	3.1
3	☐	50.000	50.005	559462.15	0.0569	P	2.5
4	☐	125.000	124.417	1390238.00	0.1415	P	4.3
5	☐	250.000	240.387	2775544.38	0.2734	A	2.8
6	☐	500.000	519.445	5638176.69	0.5908	A	1.8
7	☐	1000.000	992.753	11211088.97	1.1291	A	1.2
8	☐			4706.44	0.0005	P	7.0

$$y = 0.0011 * x + 1.1899E-005$$

$$R = 0.9997$$

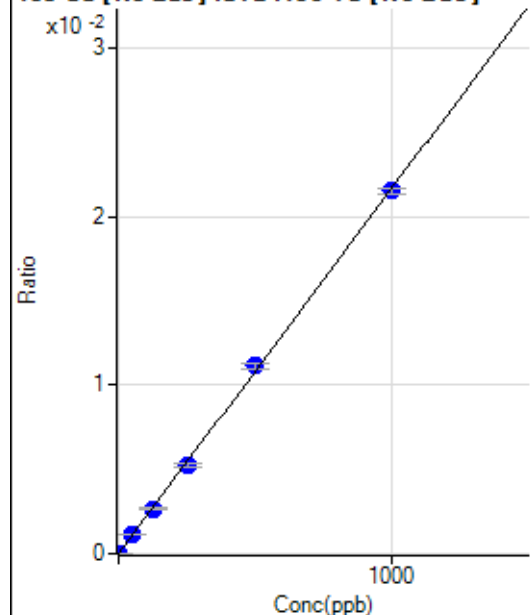
$$DL = 0.004081$$

$$BEC = 0.01046$$

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	62.50	0.0000	P	35.9
2	☐	1.000	0.725	216.67	0.0000	P	15.0
3	☐	50.000	51.560	11032.06	0.0011	P	2.3
4	☐	125.000	123.319	26262.73	0.0027	P	5.5
5	☐	250.000	242.176	53237.60	0.0052	P	3.7
6	☐	500.000	515.758	106508.47	0.0112	P	2.9
7	☐	1000.000	994.209	213592.43	0.0215	P	1.5
8	☐			215.28	0.0000	P	13.4

$$y = 2.1632E-005 * x + 6.2463E-006$$

$$R = 0.9998$$

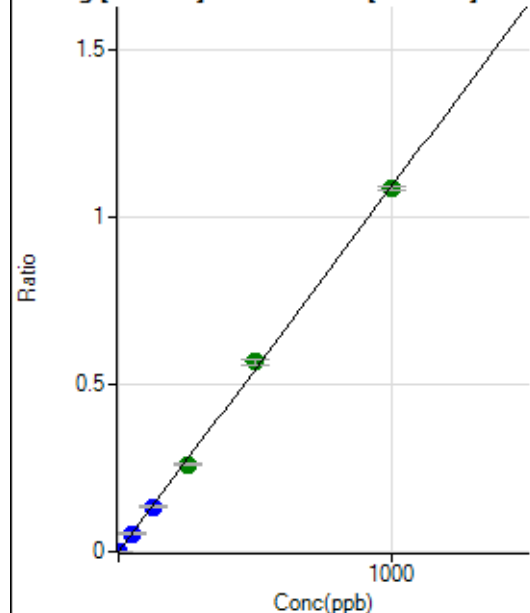
$$DL = 0.3107$$

$$BEC = 0.2888$$

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	30.56	0.0000	P	40.2
2	☐	1.000	0.916	9939.79	0.0010	P	2.5
3	☐	50.000	49.521	532462.04	0.0541	P	2.5
4	☐	125.000	121.289	1302644.64	0.1326	P	4.1
5	☐	250.000	238.772	2649950.41	0.2610	A	2.2
6	☐	500.000	519.373	5416647.69	0.5678	A	3.6
7	☐	1000.000	993.608	10785204.93	1.0862	A	0.9
8	☐			4072.91	0.0004	P	11.8

$$y = 0.0011 * x + 3.0345E-006$$

$$R = 0.9997$$

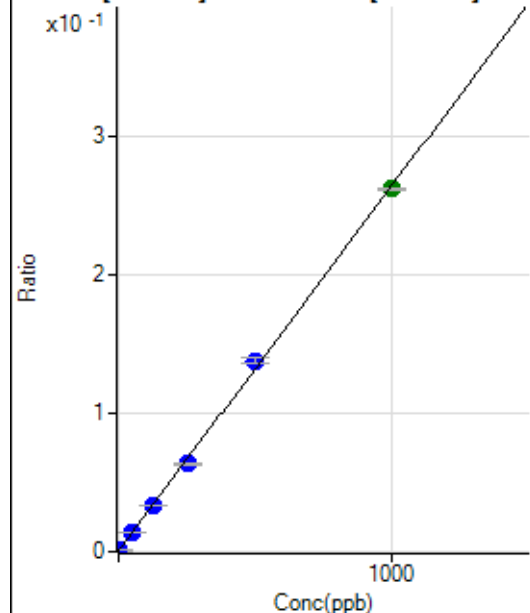
$$DL = 0.003351$$

$$BEC = 0.002776$$

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	5310.87	0.0005	P	5.7
2	☐	1.000	1.048	7972.25	0.0008	P	2.0
3	☐	50.000	50.391	135501.26	0.0138	P	2.3
4	☐	125.000	124.551	326892.77	0.0333	P	3.8
5	☐	250.000	238.279	641316.55	0.0632	P	2.3
6	☐	500.000	520.763	1311169.64	0.1374	P	3.3
7	☐	1000.000	992.585	2596198.05	0.2615	A	0.7
8	☐			6776.07	0.0007	P	3.4

$$y = 2.6289E-004 * x + 5.2977E-004$$

$$R = 0.9996$$

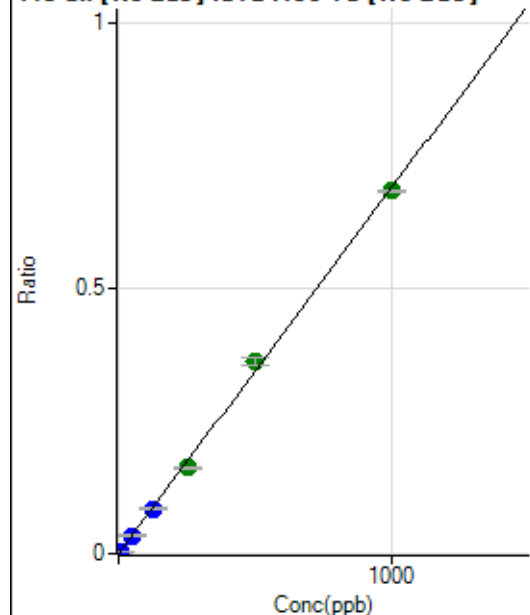
$$DL = 0.3455$$

$$BEC = 2.015$$

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	450.02	0.0000	P	8.4
2	☐	5.000	4.677	32359.18	0.0033	P	1.6
3	☐	50.000	49.650	336990.24	0.0343	P	2.0
4	☐	125.000	122.850	832212.75	0.0847	P	4.1
5	☐	250.000	235.455	1647915.23	0.1623	A	2.4
6	☐	500.000	524.274	3446883.58	0.3614	A	4.4
7	☐	1000.000	991.787	6787287.74	0.6836	A	0.4
8	☐			3531.08	0.0004	P	2.8

$$y = 6.8919E-004 * x + 4.4906E-005$$

$$R = 0.9995$$

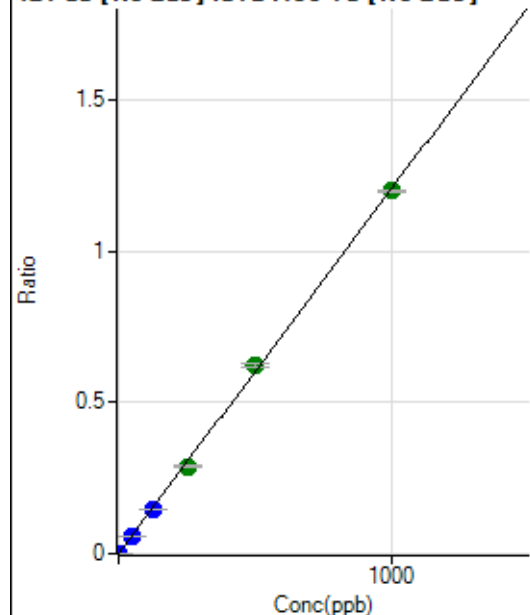
$$DL = 0.01649$$

$$BEC = 0.06516$$

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	80.56	0.0000	P	52.0
2	☐	2.000	1.755	21029.71	0.0021	P	0.9
3	☐	50.000	48.778	578302.26	0.0588	P	2.0
4	☐	125.000	121.287	1436215.17	0.1462	P	4.1
5	☐	250.000	239.659	2932568.19	0.2889	A	2.2
6	☐	500.000	516.799	5943976.65	0.6229	A	2.1
7	☐	1000.000	994.711	11904308.60	1.1989	A	0.7
8	☐			11093.45	0.0011	P	2.5

$$y = 0.0012 * x + 8.0870E-006$$

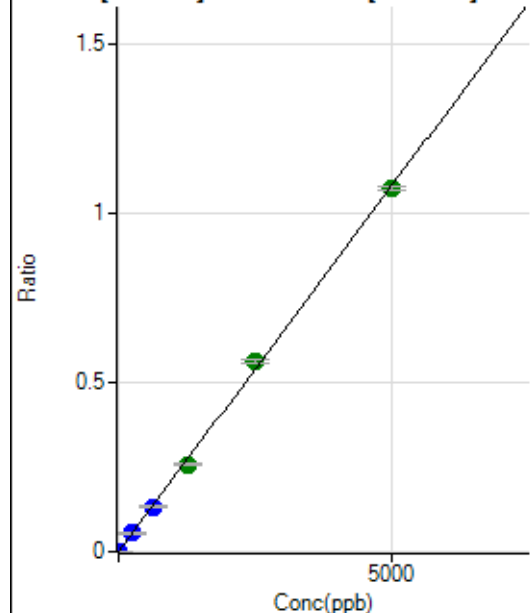
$$R = 0.9997$$

$$DL = 0.01048$$

$$BEC = 0.00671$$

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	100.00	0.0000	P	31.6
2	☐	10.000	8.829	18982.50	0.0019	P	3.1
3	☐	250.000	250.826	533071.13	0.0542	P	3.1
4	☐	625.000	613.705	1302683.84	0.1326	P	4.3
5	☐	1250.000	1190.916	2612219.76	0.2573	A	2.5
6	☐	2500.000	2607.227	5375037.92	0.5633	A	2.6
7	☐	5000.000	4962.530	10646069.86	1.0722	A	0.9
8	☐			4686.98	0.0005	P	1.0

$$y = 2.1606\text{E-}004 * x + 1.0015\text{E-}005$$

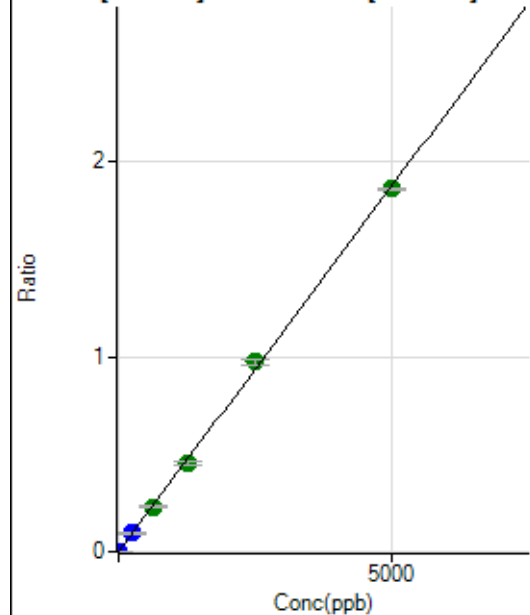
$$R = 0.9996$$

$$DL = 0.0439$$

$$BEC = 0.04635$$

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	83.34	0.0000	P	17.1
2	☐	10.000	9.137	34010.83	0.0034	P	3.1
3	☐	250.000	250.615	924658.08	0.0940	P	2.2
4	☐	625.000	616.582	2272386.01	0.2313	A	3.8
5	☐	1250.000	1204.987	4588385.74	0.4520	A	3.1
6	☐	2500.000	2594.047	9284225.12	0.9731	A	2.9
7	☐	5000.000	4965.253	18493036.35	1.8625	A	0.4
8	☐			8035.80	0.0008	P	4.4

$$y = 3.7511\text{E-}004 * x + 8.3119\text{E-}006$$

$$R = 0.9997$$

$$DL = 0.01138$$

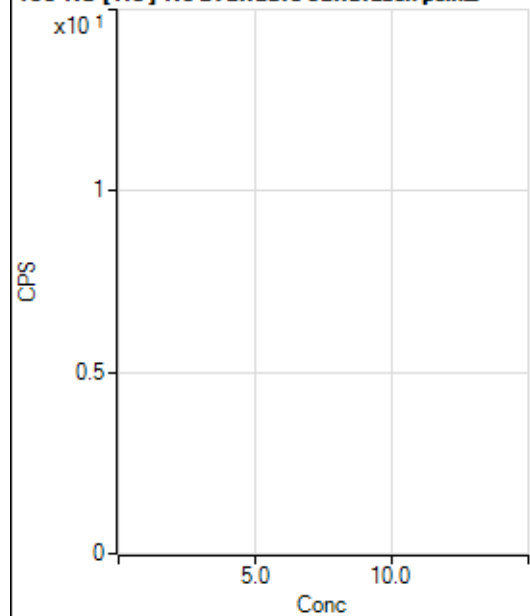
$$BEC = 0.02216$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

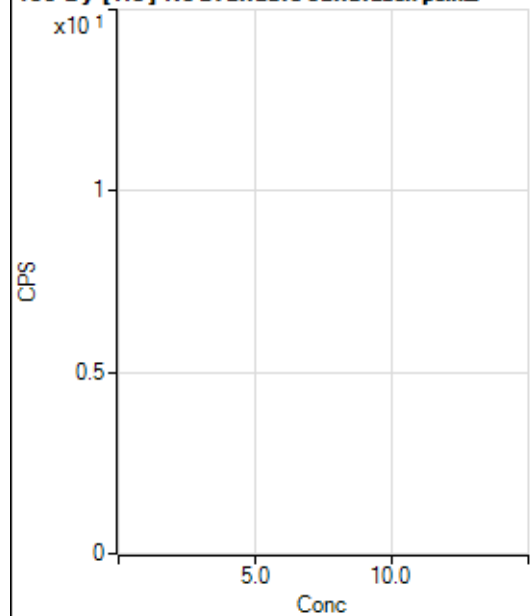
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			17.78		P	21.7
2	☐			22.22		P	45.8
3	☐			62.22		P	16.4
4	☐			113.34		P	5.9
5	☐			186.67		P	7.1
6	☐			348.90		P	11.7
7	☐			600.02		P	5.8
8	☐			93.33		P	12.4

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	0.0
2	☐			4.45		P	86.6
3	☐			16.67		P	20.0
4	☐			30.00		P	33.3
5	☐			37.78		P	10.2
6	☐			94.45		P	14.3
7	☐			164.45		P	11.2
8	☐			41.11		P	4.7

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			75.00		P	61.9
2	☐			66.67		P	37.5
3	☐			83.34		P	55.7
4	☐			158.34		P	32.9
5	☐			222.23		P	29.1
6	☐			319.46		P	37.0
7	☐			700.04		P	12.4
8	☐			2153.00		P	9.2

156 Dy [He] No available calibration points

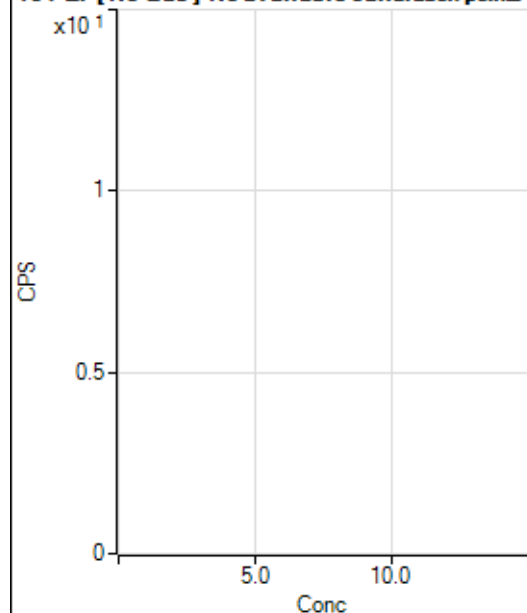
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			24.45		P	43.8
2	☐			24.44		P	41.7
3	☐			56.67		P	10.2
4	☐			92.23		P	20.6
5	☐			163.34		P	13.4
6	☐			333.34		P	13.0
7	☐			606.69		P	4.4
8	☐			1327.86		P	6.6

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

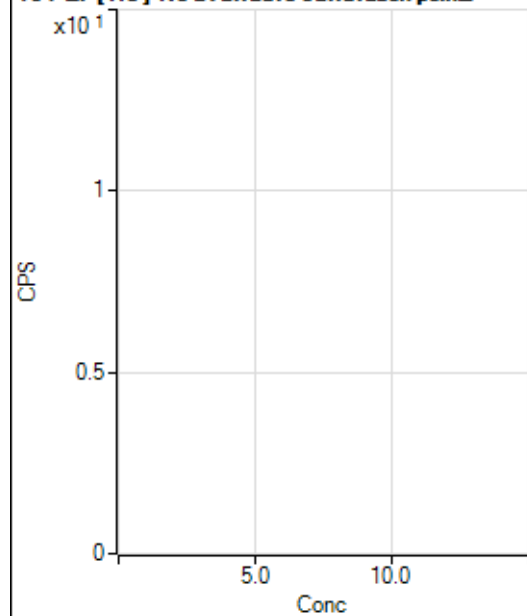
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			116.67		P	32.7
2	☐			91.67		P	24.1
3	☐			111.11		P	17.3
4	☐			127.78		P	22.9
5	☐			172.23		P	29.2
6	☐			277.79		P	21.1
7	☐			347.23		P	16.3
8	☐			1522.35		P	1.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			183.34		P	11.9
2	☐			212.23		P	16.3
3	☐			211.11		P	26.9
4	☐			248.89		P	8.1
5	☐			256.67		P	20.0
6	☐			305.56		P	12.6
7	☐			441.12		P	4.9
8	☐			1268.96		P	2.2

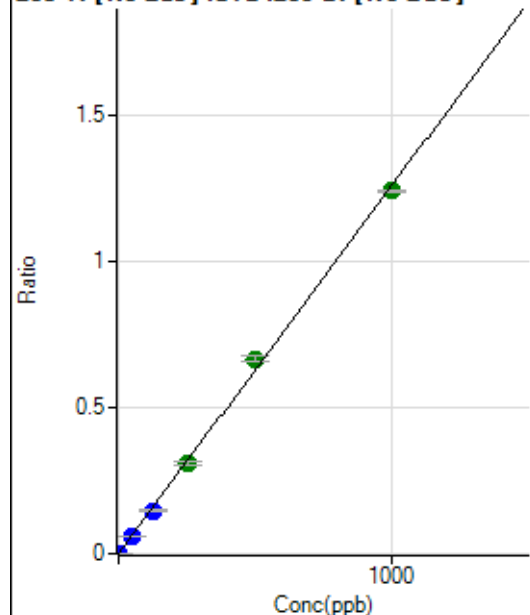
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			69.44		P	13.9
2	☐			55.56		P	82.6
3	☐			75.00		P	22.2
4	☐			83.33		P	17.3
5	☐			75.00		P	19.3
6	☐			102.78		P	28.5
7	☐			91.67		P	9.1
8	☐			258.34		P	8.5

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	20.0
2	☐			43.34		P	53.3
3	☐			43.33		P	27.7
4	☐			52.22		P	14.7
5	☐			66.67		P	18.0
6	☐			66.67		P	20.0
7	☐			75.56		P	22.6
8	☐			167.78		P	13.2

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	772.27	0.0001	P	7.1
2	☐	1.000	0.847	9384.03	0.0012	P	3.3
3	☐	50.000	48.517	486004.91	0.0611	P	2.8
4	☐	125.000	117.414	1165839.47	0.1478	P	2.0
5	☐	250.000	246.147	2437498.88	0.3097	A	2.5
6	☐	500.000	530.490	4914376.37	0.6674	A	2.3
7	☐	1000.000	986.741	9559188.41	1.2414	A	0.6
8	☐			2722.57	0.0004	P	11.4

$$y = 0.0013 * x + 9.6229E-005$$

$$R = 0.9993$$

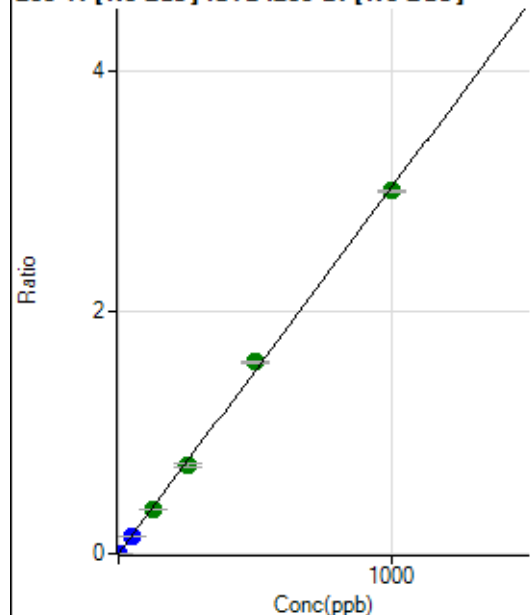
$$DL = 0.01632$$

$$BEC = 0.07649$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1589.02	0.0002	P	5.9
2	☐	1.000	0.871	22903.18	0.0028	P	2.4
3	☐	50.000	48.190	1161833.28	0.1461	P	2.3
4	☐	125.000	120.616	2882680.42	0.3655	A	2.0
5	☐	250.000	242.440	5778279.95	0.7344	A	3.4
6	☐	500.000	523.109	11667060.16	1.5843	A	1.0
7	☐	1000.000	990.974	23110017.53	3.0011	A	0.9
8	☐			6585.13	0.0009	P	13.8

$$y = 0.0030 * x + 1.9797E-004$$

$$R = 0.9996$$

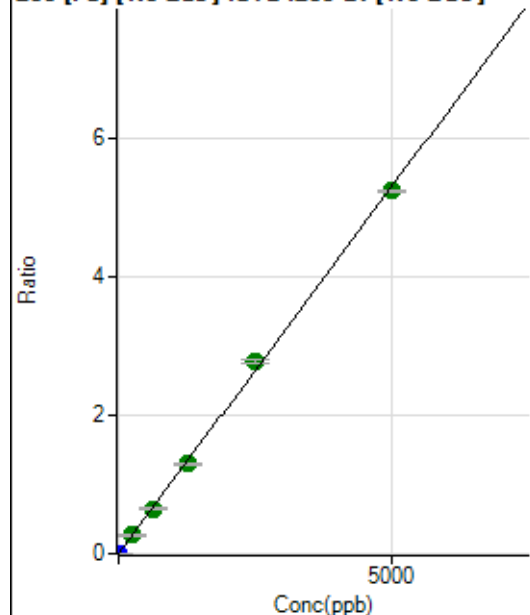
$$DL = 0.01163$$

$$BEC = 0.06537$$

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	2153.92	0.0003	P	2.0
2	☐	1.000	0.879	9681.36	0.0012	P	3.4
3	☐	250.000	249.476	2102078.74	0.2644	A	3.7
4	☐	625.000	608.729	5085726.04	0.6448	A	2.6
5	☐	1250.000	1225.490	10212590.05	1.2978	A	2.9
6	☐	2500.000	2622.946	20451344.20	2.7775	A	1.8
7	☐	5000.000	4946.715	40333790.71	5.2379	A	0.3
8	☐			36525.01	0.0050	P	3.0

$$y = 0.0011 * x + 2.6835E-004$$

$$R = 0.9995$$

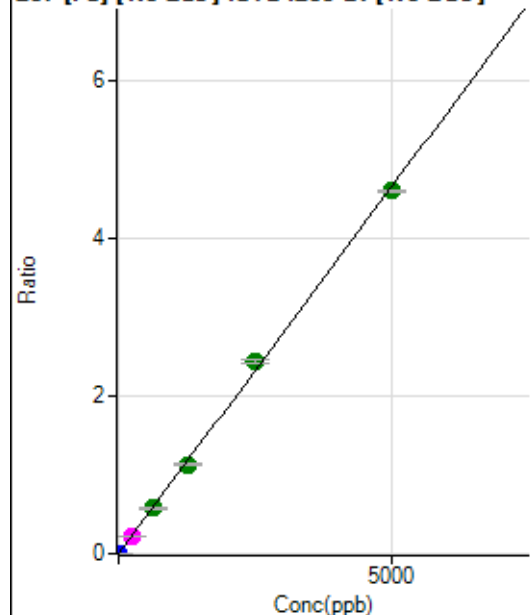
$$DL = 0.01487$$

$$BEC = 0.2534$$

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	1920.54	0.0002	P	5.0
2	☐	1.000	0.859	8374.92	0.0010	P	3.0
3	☐	250.000	237.789	1758070.01	0.2212	M	6.2
4	☐	625.000	617.090	4524087.20	0.5737	A	3.8
5	☐	1250.000	1212.113	8865543.31	1.1266	A	2.8
6	☐	2500.000	2627.667	17980052.48	2.4421	A	2.4
7	☐	5000.000	4947.238	35402615.61	4.5976	A	0.5
8	☐			32134.78	0.0044	P	2.3

$$y = 9.2927E-004 * x + 2.3928E-004$$

$$R = 0.9995$$

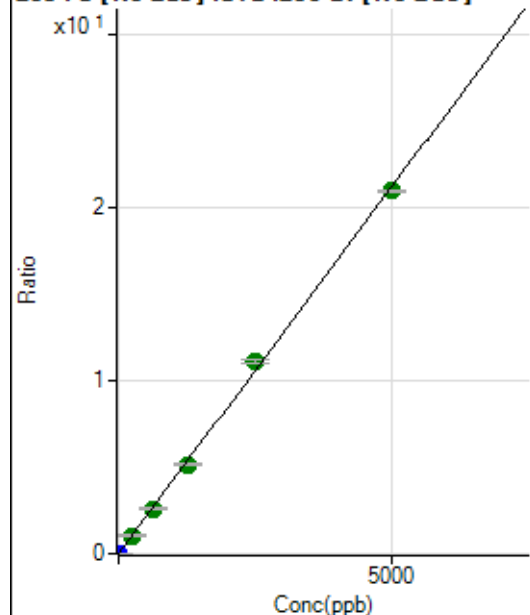
$$DL = 0.03827$$

$$BEC = 0.2575$$

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	8729.03	0.0011	P	3.5
2	☐	1.000	0.865	38367.97	0.0048	P	2.9
3	☐	250.000	247.101	8330338.54	1.0479	A	3.9
4	☐	625.000	609.962	20389128.29	2.5852	A	2.9
5	☐	1250.000	1216.778	40571514.86	5.1559	A	2.9
6	☐	2500.000	2622.986	81826627.28	11.1133	A	2.0
7	☐	5000.000	4948.837	161449278.61	20.9666	A	0.5
8	☐			144500.27	0.0197	P	3.1

$$y = 0.0042 * x + 0.0011$$

$$R = 0.9995$$

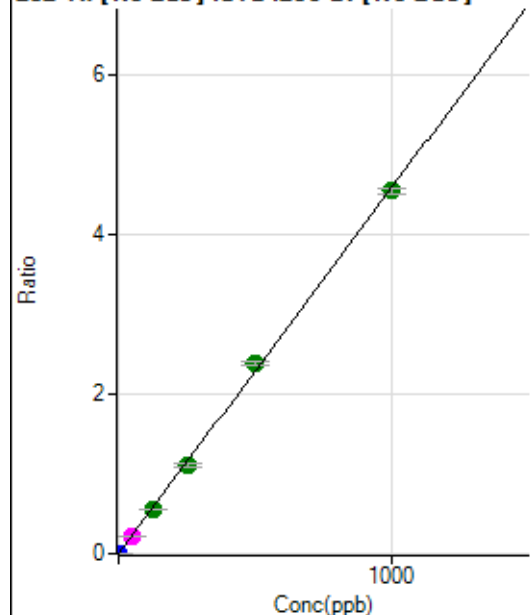
$$DL = 0.02684$$

$$BEC = 0.2567$$

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	183.34	0.0000	P	17.6
2	☐	1.000	0.801	29859.66	0.0037	P	2.6
3	☐	50.000	47.047	1716388.80	0.2159	M	6.3
4	☐	125.000	120.628	4366685.37	0.5536	A	1.9
5	☐	250.000	241.631	8725263.16	1.1089	A	3.7
6	☐	500.000	521.718	17627301.09	2.3942	A	2.4
7	☐	1000.000	991.928	35050843.61	4.5520	A	1.4
8	☐			6976.03	0.0009	P	8.6

$$y = 0.0046 * x + 2.2815E-005$$

$$R = 0.9996$$

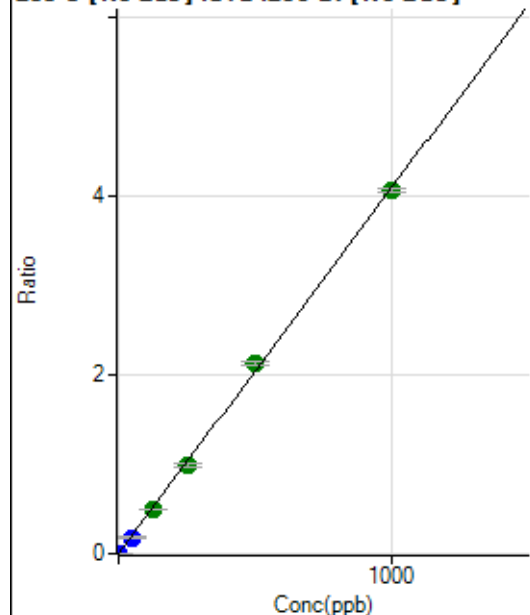
$$DL = 0.002632$$

$$BEC = 0.004972$$

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	33.33	0.0000	P	50.1
2	☐	1.000	0.797	26360.42	0.0033	P	0.8
3	☐	50.000	44.657	1451695.88	0.1826	P	2.8
4	☐	125.000	122.783	3960451.56	0.5020	A	1.2
5	☐	250.000	241.916	7784279.78	0.9891	A	2.5
6	☐	500.000	521.218	15690530.56	2.1312	A	2.4
7	☐	1000.000	991.956	31231168.41	4.0559	A	0.9
8	☐			6018.24	0.0008	P	5.8

$$y = 0.0041 * x + 4.1592E-006$$

$$R = 0.9996$$

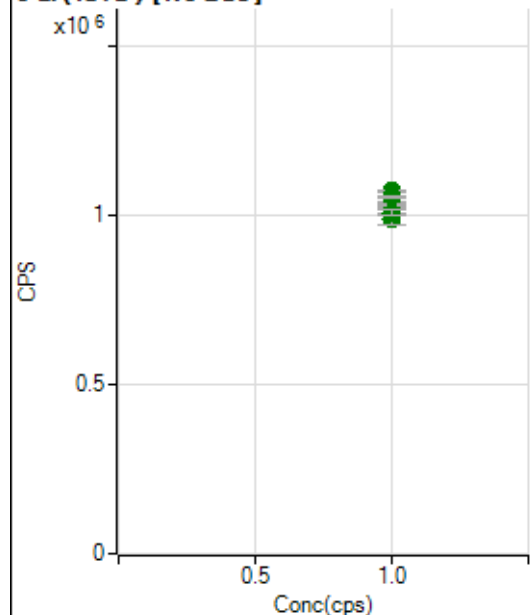
$$DL = 0.001529$$

$$BEC = 0.001017$$

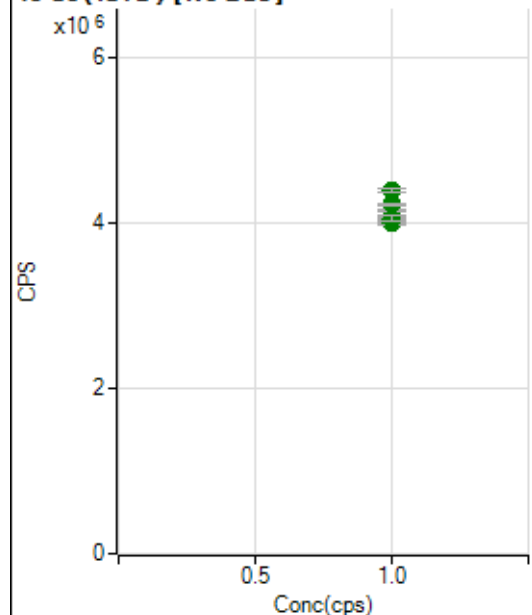
Weight: <None>

Min Conc: 0

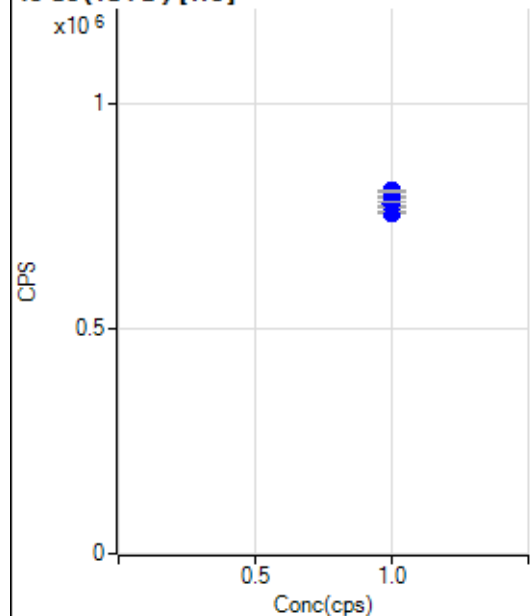
6 Li (ISTD) [No Gas]



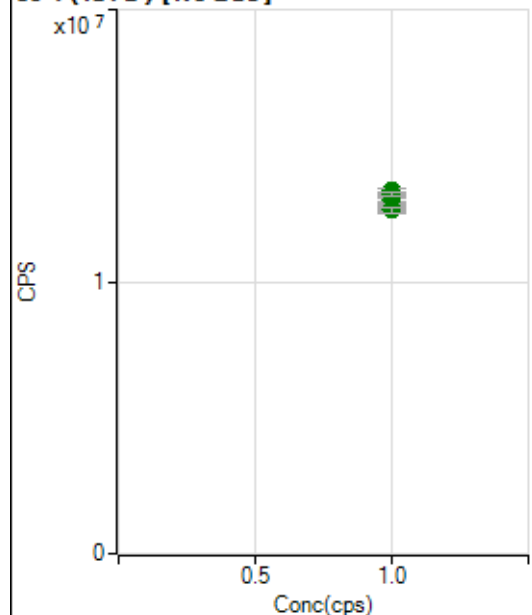
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		1052931.33		A	2.9
2	☐	1.000		1071796.62		A	0.4
3	☐	1.000		1052842.05		A	0.8
4	☐	1.000		1031758.94		A	1.8
5	☐	1.000		1028903.71		A	0.5
6	☐	1.000		989613.53		A	3.2
7	☐	1.000		1006887.86		A	1.7
8	☐	1.000		1054395.68		A	0.8

45 Sc (ISTD) [No Gas]

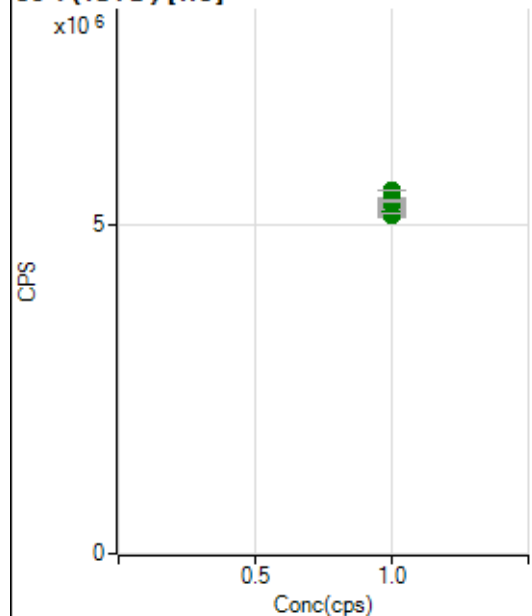
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4026446.36		A	1.1
2	☐	1.000		4030248.83		A	2.0
3	☐	1.000		3991630.91		A	1.5
4	☐	1.000		4085136.99		A	0.4
5	☐	1.000		4147840.32		A	0.7
6	☐	1.000		4050793.34		A	1.9
7	☐	1.000		4213341.71		A	0.8
8	☐	1.000		4379692.57		A	0.9

45 Sc (ISTD) [He]

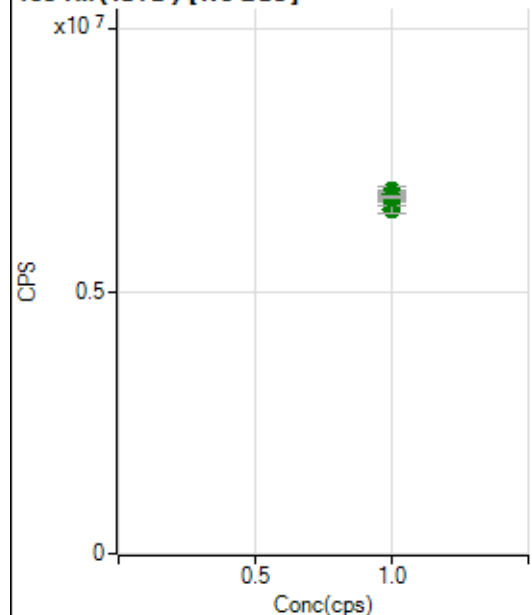
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		755772.93		P	0.5
2	☐	1.000		759956.66		P	0.2
3	☐	1.000		771028.94		P	0.5
4	☐	1.000		774861.61		P	1.2
5	☐	1.000		792248.54		P	0.8
6	☐	1.000		802936.07		P	0.6
7	☐	1.000		805032.57		P	0.9
8	☐	1.000		780067.56		P	0.3

89 Y (ISTD) [No Gas]

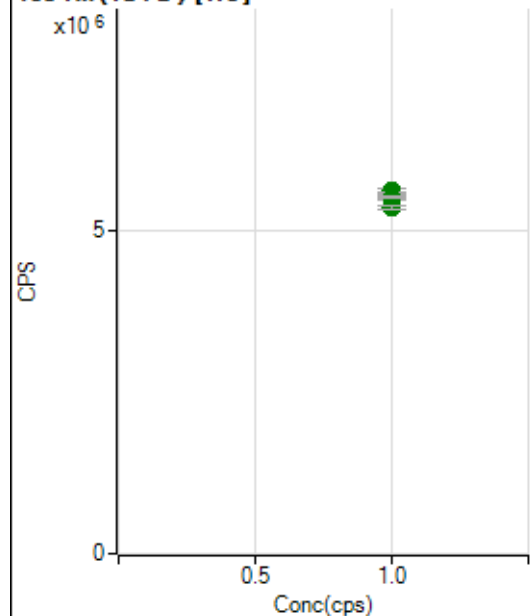
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		12647640.23		A	0.8
2	☐	1.000		12748533.28		A	0.3
3	☐	1.000		12637978.56		A	0.5
4	☐	1.000		12862207.17		A	1.1
5	☐	1.000		12982369.25		A	1.8
6	☐	1.000		12648862.87		A	1.9
7	☐	1.000		13346001.61		A	1.6
8	☐	1.000		13226421.19		A	0.6

89 Y (ISTD) [He]

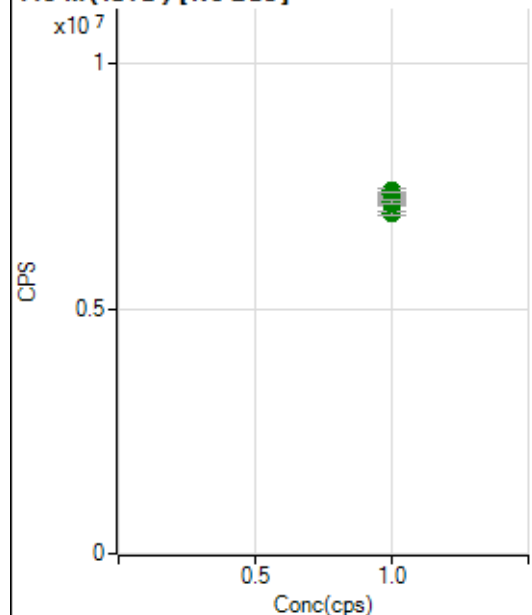
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5198452.25		A	1.7
2	☐	1.000		5146432.60		A	1.3
3	☐	1.000		5160147.98		A	0.8
4	☐	1.000		5186383.46		A	1.3
5	☐	1.000		5298296.63		A	0.7
6	☐	1.000		5391397.31		A	0.5
7	☐	1.000		5506092.73		A	0.2
8	☐	1.000		5346251.73		A	0.4

103 Rh (ISTD) [No Gas]

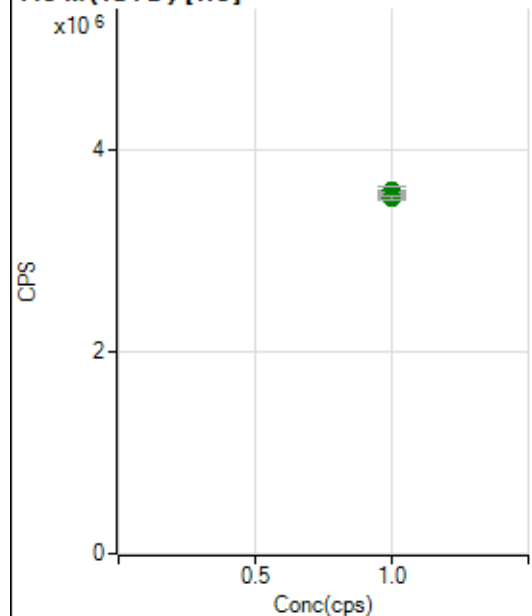
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6917502.19		A	1.9
2	☐	1.000		6843497.33		A	2.0
3	☐	1.000		6755930.25		A	0.9
4	☐	1.000		6795769.07		A	1.2
5	☐	1.000		6872013.79		A	1.3
6	☐	1.000		6560233.31		A	2.4
7	☐	1.000		6864884.69		A	1.1
8	☐	1.000		6797219.48		A	0.9

103 Rh (ISTD) [He]

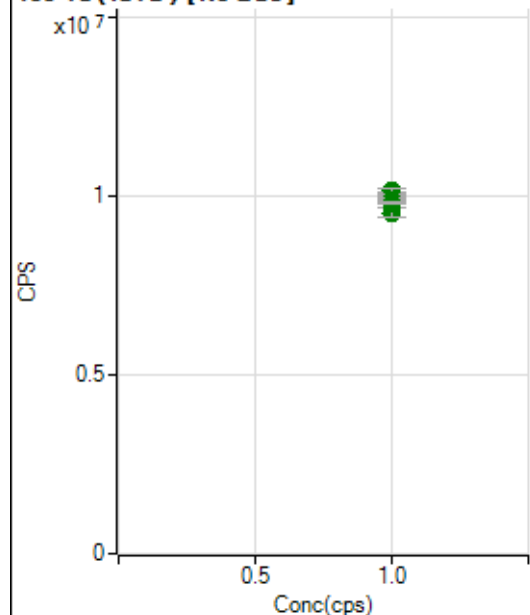
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5613195.13		A	0.9
2	☐	1.000		5610025.33		A	2.0
3	☐	1.000		5587754.99		A	0.1
4	☐	1.000		5490830.61		A	0.8
5	☐	1.000		5552337.38		A	0.5
6	☐	1.000		5569075.33		A	0.6
7	☐	1.000		5517937.52		A	0.9
8	☐	1.000		5356067.35		A	0.8

115 In (ISTD) [No Gas]

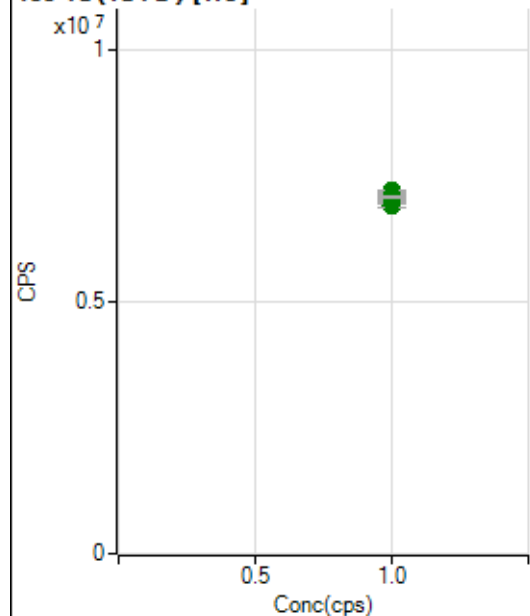
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7316601.22		A	1.1
2	☐	1.000		7410063.89		A	1.3
3	☐	1.000		7298000.70		A	1.1
4	☐	1.000		7274564.28		A	0.8
5	☐	1.000		7334608.76		A	1.4
6	☐	1.000		6953013.02		A	1.6
7	☐	1.000		7162625.37		A	1.1
8	☐	1.000		7190676.63		A	0.9

115 In (ISTD) [He]

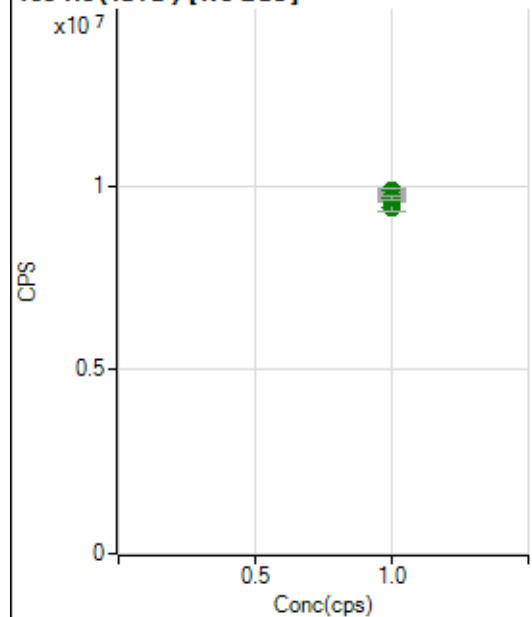
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3558022.56		A	0.5
2	☐	1.000		3585198.58		A	1.1
3	☐	1.000		3540329.46		A	0.6
4	☐	1.000		3518649.66		A	0.6
5	☐	1.000		3591545.06		A	2.1
6	☐	1.000		3548225.25		A	0.4
7	☐	1.000		3546992.29		A	1.3
8	☐	1.000		3521875.06		A	1.3

159 Tb (ISTD) [No Gas]

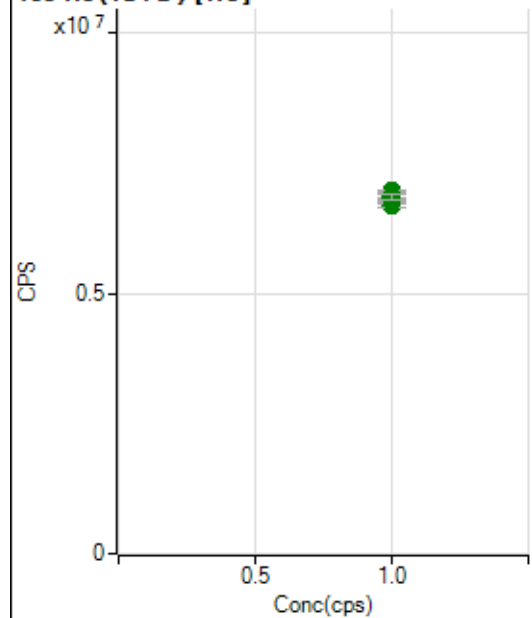
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10024345.47		A	1.9
2	☐	1.000		9902645.41		A	1.9
3	☐	1.000		9836368.88		A	0.9
4	☐	1.000		9831111.31		A	2.7
5	☐	1.000		10154307.42		A	1.7
6	☐	1.000		9546664.79		A	3.1
7	☐	1.000		9928951.94		A	0.6
8	☐	1.000		9812340.55		A	0.8

159 Tb (ISTD) [He]

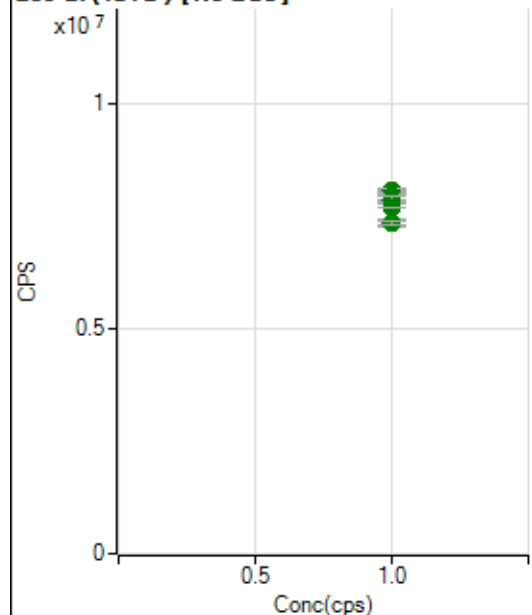
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6915268.58		A	1.2
2	☐	1.000		6931072.54		A	1.3
3	☐	1.000		7009197.46		A	0.9
4	☐	1.000		6994338.44		A	0.3
5	☐	1.000		7094238.44		A	1.0
6	☐	1.000		7042626.70		A	0.5
7	☐	1.000		7208509.06		A	0.3
8	☐	1.000		7093468.58		A	0.6

165 Ho (ISTD) [No Gas]

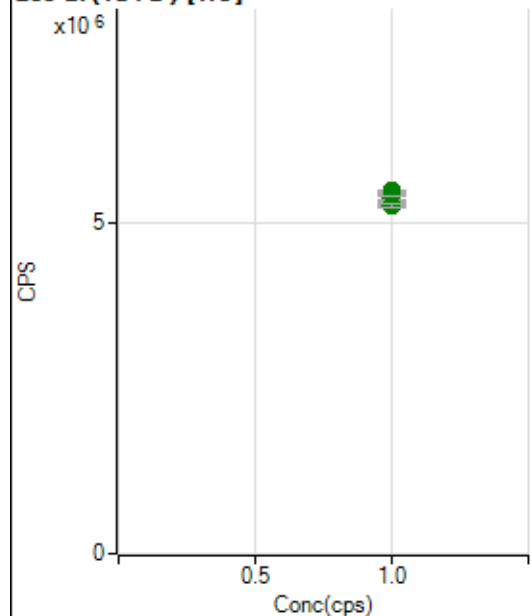
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9726050.41		A	0.8
2	☐	1.000		9818963.60		A	1.4
3	☐	1.000		9708321.87		A	1.2
4	☐	1.000		9799150.69		A	2.2
5	☐	1.000		9857661.45		A	0.9
6	☐	1.000		9430917.01		A	3.0
7	☐	1.000		9857083.18		A	1.0
8	☐	1.000		9662970.97		A	1.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6697054.13		A	0.9
2	☐	1.000		6807517.82		A	0.4
3	☐	1.000		6778319.62		A	0.3
4	☐	1.000		6826517.47		A	0.3
5	☐	1.000		6861167.61		A	0.9
6	☐	1.000		6853002.12		A	1.6
7	☐	1.000		6971993.51		A	0.7
8	☐	1.000		6860366.98		A	1.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8027431.13		A	1.1
2	☐	1.000		8074833.91		A	1.2
3	☐	1.000		7952487.11		A	1.5
4	☐	1.000		7889933.14		A	2.0
5	☐	1.000		7872249.88		A	2.2
6	☐	1.000		7365200.10		A	2.3
7	☐	1.000		7700321.97		A	0.3
8	☐	1.000		7343139.47		A	1.1

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5446181.17		A	1.5
2	☐	1.000		5484565.54		A	0.6
3	☐	1.000		5432063.67		A	0.6
4	☐	1.000		5322398.43		A	1.1
5	☐	1.000		5358521.07		A	1.8
6	☐	1.000		5291395.30		A	0.8
7	☐	1.000		5378008.01		A	1.1
8	☐	1.000		5267031.52		A	0.8

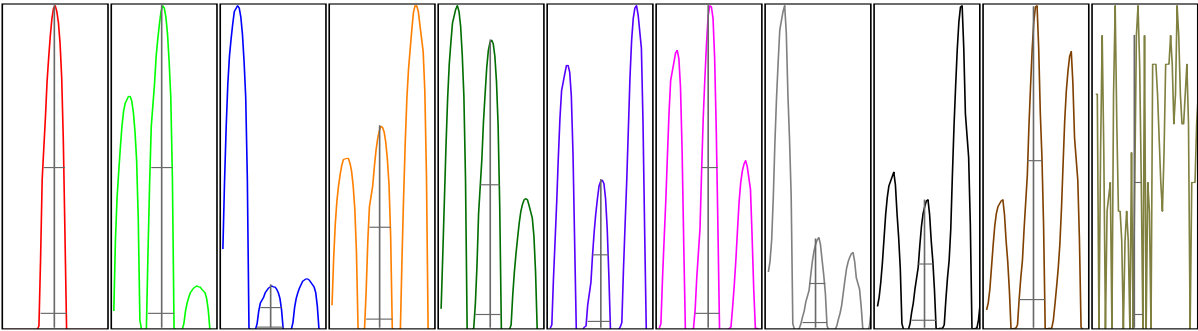
US EPA Tune Check Sample Report

Batch Folder C:\Agilent\ICPMH\1\DATA\P7120421MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]				
Mass	Count	RSD%	RSD%	RSD%
	(Mean)	(Actual)	(Required)	(Flag)
9	9212	0.36	5.00	
24	58748	0.49	5.00	
25	7770	0.53	5.00	
26	9113	0.41	5.00	
59	18506	0.28	5.00	
113	11281	0.53	5.00	
115	27855	0.60	5.00	
206	16312	0.37	5.00	
207	13800	0.32	5.00	
208	33651	0.48	5.00	
220	0	43.38		

	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
Mass	Count	Count	Count	Count	Count
9	9192	9217	9261	9218	9174
24	58934	59157	58452	58586	58609
25	7842	7737	7758	7753	7758
26	9159	9086	9147	9076	9097
59	18491	18525	18426	18520	18566
113	11258	11377	11303	11240	11229
115	27989	28062	27710	27828	27689
206	16363	16291	16273	16385	16246
207	13775	13754	13814	13789	13868
208	33787	33738	33748	33587	33395
220	0	0	0	0	1

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width-X% (Flag)
9	16172	9.00	8.9 - 9.1		0.782	0.900	
24	99310	23.95	23.9 - 24.1		0.785	0.900	
25	13230	24.95	24.9 - 25.1		0.777	0.900	
26	15656	25.95	25.9 - 26.1		0.782	0.900	
59	34420	59.00	58.9 - 59.1		0.765	0.900	
113	24213	113.05	112.9 - 113.1		0.684	0.900	
115	61032	115.00	114.9 - 115.1		0.700	0.900	
206	35398	205.95	205.9 - 206.1		0.733	0.900	
207	29788	206.95	206.9 - 207.1		0.725	0.900	
208	75012	207.95	207.9 - 208.1		0.735	0.900	
220	1	219.70	-		0.243		

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	0.76	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	10.3	V	Deflect	13.0	V
Extract 2	-250.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-100	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	200	V			

[He]

Mass	Count	RSD%	RSD%
	(Mean)	(Actual)	(Required)
59	10747	0.80	
89	49392	0.27	
205	35914	0.25	

	Replicate 1	Replicate 2	Replicate 3	Replicate 4	Replicate 5
Mass	Count	Count	Count	Count	Count
59	10740	10867	10624	10745	10762
89	49478	49543	49197	49364	49378
205	35999	35906	35825	36012	35829

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.76	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	8.9	V	Deflect	2.4	V
Extract 2	-250.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-120	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	3.9	mL/min	OctP RF	200	V			