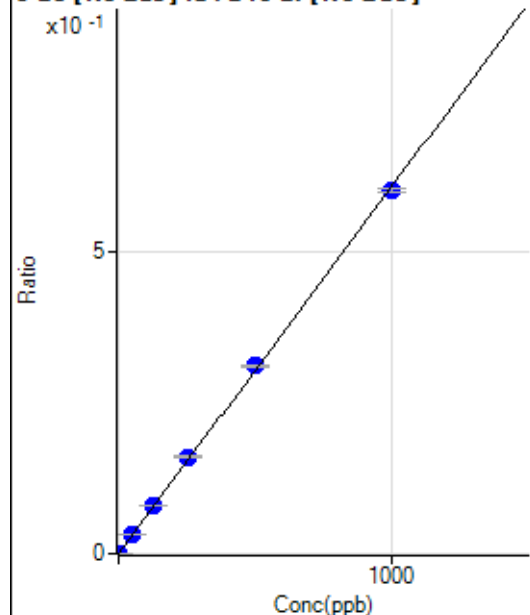


Calibration for 007CALS.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7040120-MS.b\
 Analysis File: P7040120-MS.batch.bin
 DA Date-Time: 2020-04-02 00:34:30
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-04-01 14:35:51
2	004CALS.d	S02	2020-04-01 14:39:24
3	006CALS.d	S03	2020-04-01 14:48:08
4	007CALS.d	S04	2020-04-01 14:52:29
5	008CALS.d	S05	2020-04-01 14:56:11
6	009CALS.d	S06	2020-04-01 14:59:45
7	010CALS.d	S07	2020-04-01 15:03:15
8	011CALS.d	S08	2020-04-01 15:06:45

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	127.78	0.0000	P	18.5
2	☐	1.000	0.999	3898.75	0.0006	P	6.3
3	☐	50.000	53.528	200170.47	0.0325	P	1.8
4	☐	125.000	130.668	478019.15	0.0793	P	0.4
5	☐	250.000	264.729	912676.43	0.1606	P	1.3
6	☐	500.000	512.443	1737281.64	0.3109	P	1.2
7	☐	1000.000	989.211	3305697.61	0.6001	P	1.1
8	☐			633.36	0.0001	P	7.7

$$y = 6.0666\text{E-}004 * x + 2.0444\text{E-}005$$

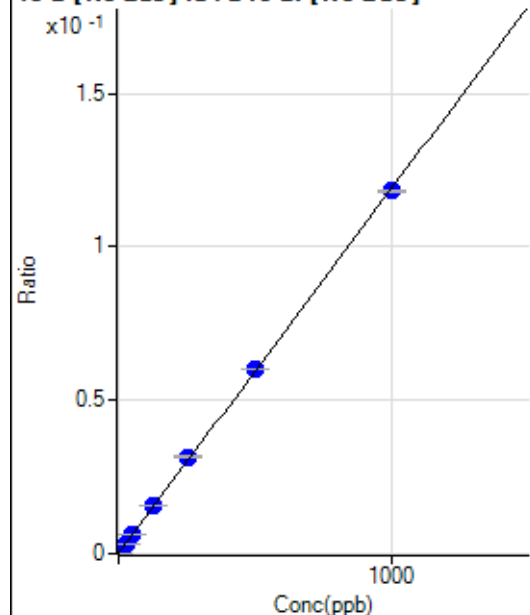
$$R = 0.9998$$

$$DL = 0.01872$$

$$BEC = 0.0337$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	611.15	0.0001	P	23.2
2	☐	25.000	25.477	19460.42	0.0031	P	2.3
3	☐	50.000	53.100	39494.16	0.0064	P	1.7
4	☐	125.000	128.804	92900.00	0.0154	P	0.4
5	☐	250.000	264.492	179218.60	0.0315	P	1.2
6	☐	500.000	504.007	335365.89	0.0600	P	0.5
7	☐	1000.000	993.731	651321.82	0.1182	P	0.5
8	☐			13812.37	0.0028	P	4.8

$$y = 1.1888\text{E-}004 * x + 9.7966\text{E-}005$$

$$R = 0.9999$$

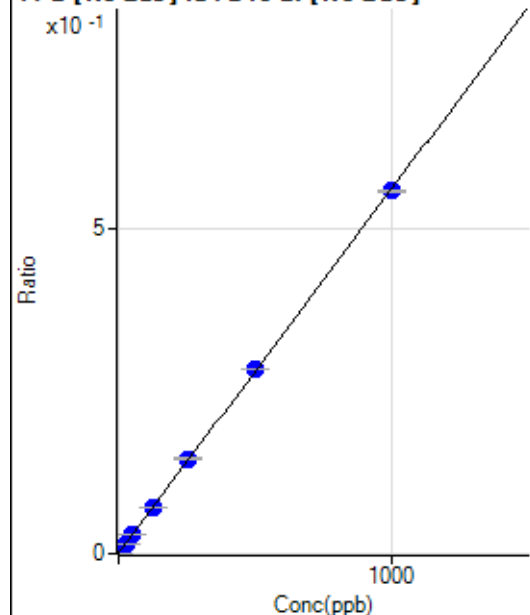
$$DL = 0.5742$$

$$BEC = 0.8241$$

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	3011.53	0.0005	P	2.1
2	☐	25.000	24.815	89387.24	0.0144	P	1.7
3	☐	50.000	53.200	186274.08	0.0302	P	1.1
4	☐	125.000	127.782	433761.58	0.0719	P	0.4
5	☐	250.000	259.637	827821.22	0.1457	P	1.6
6	☐	500.000	504.234	1578599.65	0.2825	P	0.3
7	☐	1000.000	994.971	3068084.16	0.5570	P	0.2
8	☐			64994.04	0.0131	P	6.0

$$y = 5.5929E-004 * x + 4.8215E-004$$

R = 0.9999

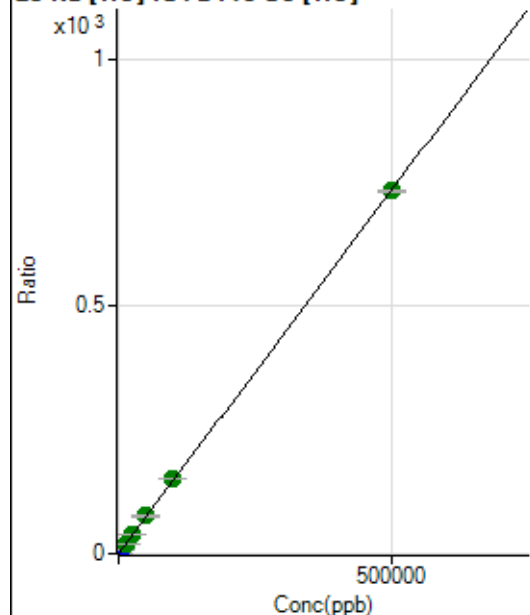
DL = 0.05467

BEC = 0.8621

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	12272.14	0.0276	P	2.3
2	☐	500.000	536.674	352735.81	0.8164	P	2.7
3	☐	5000.000	5423.333	3402650.12	7.9995	P	0.7
4	☐	12500.000	12647.914	8107447.58	18.6192	A	2.4
5	☐	25000.000	26193.493	15726619.28	38.5304	A	0.5
6	☐	50000.000	51664.495	30817393.75	75.9712	A	2.0
7	☐	100000.00	102981.91	60261033.99	151.4046	A	1.7
8	☐	500000.00	499169.52	279213475.6	733.7760	A	0.7

$$y = 0.0015 * x + 0.0276$$

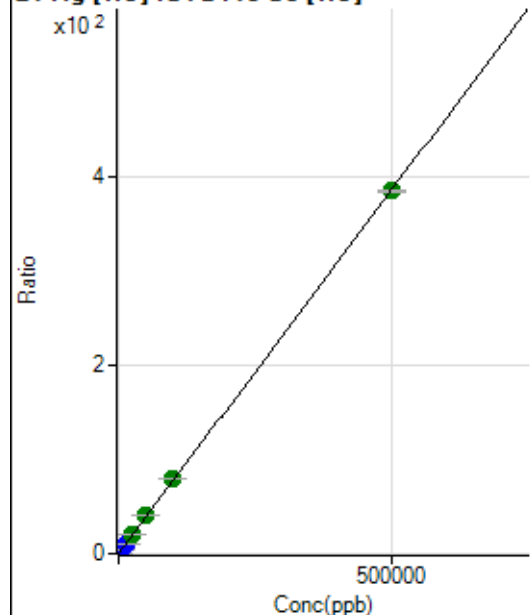
R = 1.0000

DL = 1.301

BEC = 18.75

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	641.71	0.0014	P	9.8
2	☐	500.000	549.250	183673.14	0.4251	P	2.3
3	☐	5000.000	5564.222	1826185.91	4.2933	P	0.6
4	☐	12500.000	12914.138	4338244.54	9.9625	P	1.8
5	☐	25000.000	26809.334	8441037.43	20.6803	A	0.3
6	☐	50000.000	52306.862	16367673.98	40.3472	A	0.9
7	☐	100000.00	103494.35	31774879.18	79.8296	A	1.0
8	☐	500000.00	498963.93	146447178.2	384.8668	A	0.5

$$y = 7.7133\text{E-}004 * x + 0.0014$$

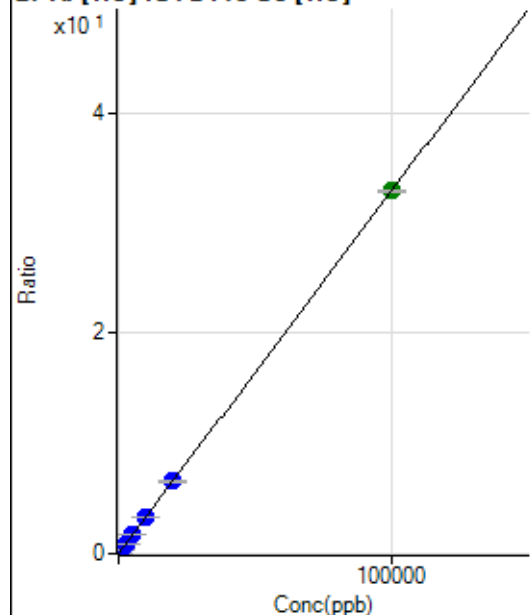
$$R = 1.0000$$

$$DL = 0.5491$$

$$BEC = 1.868$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	66.67	0.0001	P	45.0
2	☐	20.000	21.909	3181.05	0.0074	P	5.1
3	☐	1000.000	1058.116	148312.77	0.3487	P	1.9
4	☐	2500.000	2479.108	355680.62	0.8168	P	1.4
5	☐	5000.000	5132.375	690083.37	1.6907	P	0.5
6	☐	10000.000	10076.019	1346476.82	3.3191	P	0.8
7	☐	20000.000	19889.924	2607805.62	6.5517	P	0.9
8	☐	100000.00	100007.73	12534903.75	32.9420	A	0.5

$$y = 3.2939\text{E-}004 * x + 1.4969\text{E-}004$$

$$R = 1.0000$$

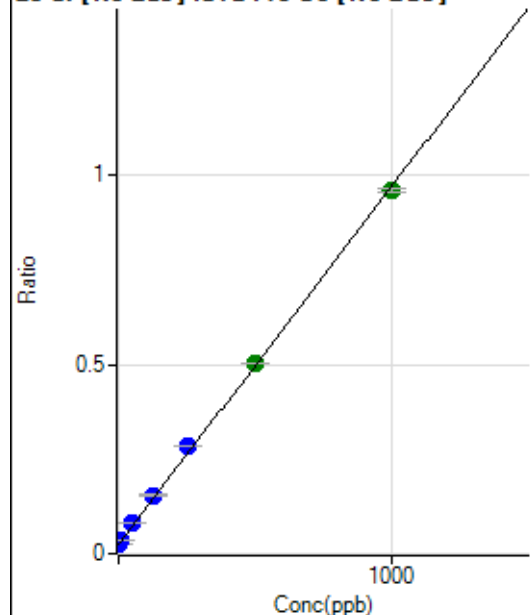
$$DL = 0.6137$$

$$BEC = 0.4544$$

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	294874.37	0.0247	P	0.6
2	☐	10.000	10.313	415384.91	0.0345	P	1.3
3	☐	50.000	57.947	922657.24	0.0795	P	1.1
4	☐	125.000	137.340	1777512.60	0.1547	P	1.5
5	☐	250.000	275.203	3141697.90	0.2851	P	0.5
6	☐	500.000	506.697	5553611.06	0.5041	A	0.5
7	☐	1000.000	988.408	10474757.79	0.9599	A	1.2
8	☐			748181.99	0.0751	P	5.4

$$y = 9.4617E-004 * x + 0.0247$$

R = 0.9996

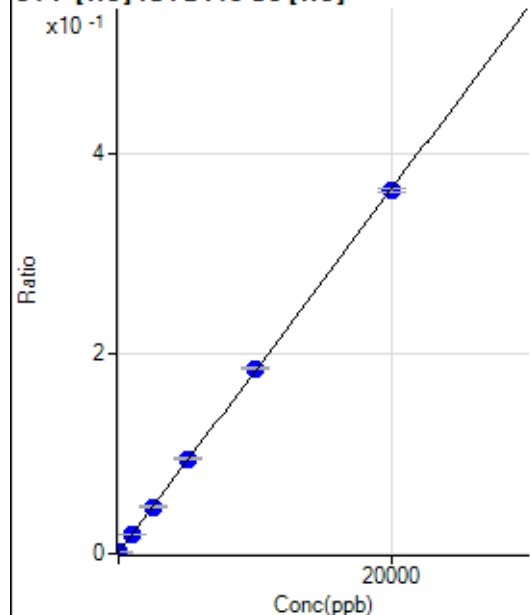
DL = 0.4624

BEC = 26.11

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-26.198	236.12	0.0005	P	25.1
2	☐	0.000	26.198	638.93	0.0015	P	16.1
3	☐	1000.000	1039.797	8458.28	0.0199	P	1.9
4	☐	2500.000	2498.851	20192.10	0.0464	P	4.2
5	☐	5000.000	5167.293	38704.09	0.0948	P	1.2
6	☐	10000.000	10119.350	74944.70	0.1847	P	1.0
7	☐	20000.000	19896.656	144191.34	0.3623	P	1.2
8	☐			291.68	0.0008	P	24.0

$$y = 1.8157E-005 * x + 0.0010$$

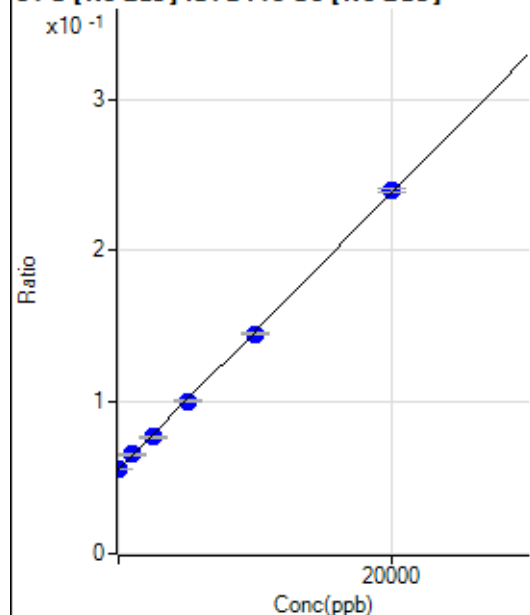
R = 0.9999

DL = 30.72

BEC = 55.4

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	-28.543	661537.75	0.0554	P	0.2
2	☐	0.000	28.543	674312.00	0.0559	P	1.2
3	☐	1000.000	1068.224	759117.30	0.0654	P	0.6
4	☐	2500.000	2359.340	887536.37	0.0772	P	1.3
5	☐	5000.000	4942.889	1110807.85	0.1008	P	0.3
6	☐	10000.000	9803.591	1599141.00	0.1452	P	1.2
7	☐	20000.000	20126.653	2612243.40	0.2394	P	1.0
8	☐			547734.64	0.0550	P	1.1

$$y = 9.1271\text{E-}006 * x + 0.0557$$

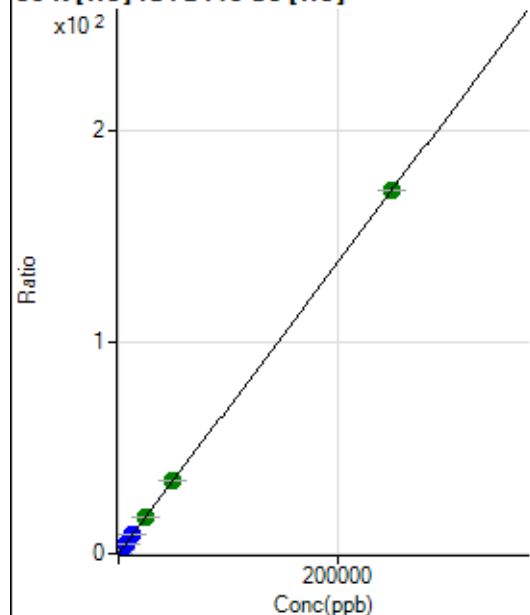
R = 0.9999

DL = 132.7

BEC = 6101

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	24782.51	0.0557	P	1.4
2	☐	500.000	528.928	181003.86	0.4189	P	2.7
3	☐	2500.000	2647.599	797139.95	1.8740	P	0.5
4	☐	6250.000	6220.585	1884699.69	4.3280	P	1.6
5	☐	12500.000	12879.611	3633178.86	8.9015	P	0.7
6	☐	25000.000	25245.260	7056949.29	17.3943	A	0.9
7	☐	50000.000	50220.609	13752016.45	34.5475	A	0.3
8	☐	250000.00	249911.57	65334904.93	171.6966	A	0.1

$$y = 6.8681\text{E-}004 * x + 0.0557$$

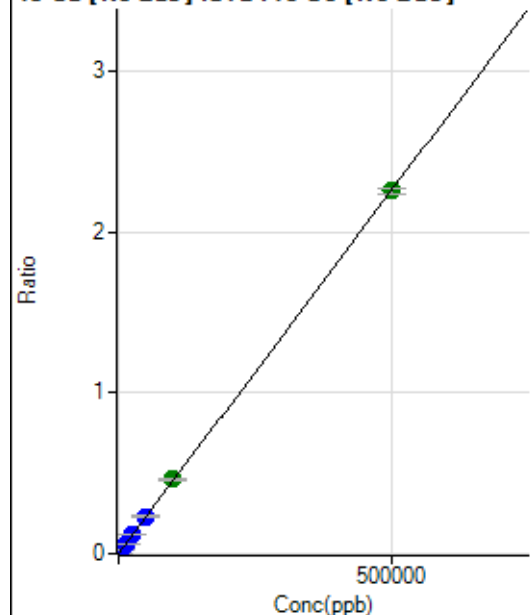
R = 1.0000

DL = 3.364

BEC = 81.03

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	441.69	0.0000	P	20.3
2	☐	500.000	514.184	28414.36	0.0024	P	4.3
3	☐	5000.000	5369.845	281606.47	0.0243	P	0.9
4	☐	12500.000	13011.923	675461.43	0.0588	P	1.5
5	☐	25000.000	26439.222	1315465.28	0.1194	P	0.6
6	☐	50000.000	51546.068	2563455.85	0.2327	P	0.5
7	☐	100000.00	101969.85	5023025.89	0.4603	A	0.4
8	☐	500000.00	499362.95	22454361.44	2.2540	A	1.5

$$y = 4.5136\text{E-}006 * x + 3.7019\text{E-}005$$

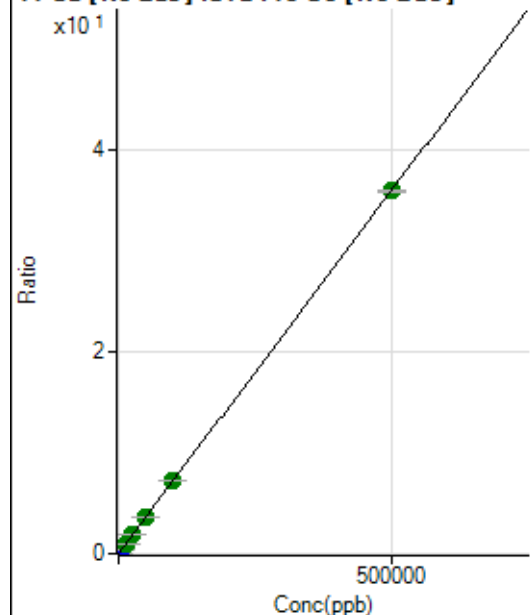
$$R = 1.0000$$

$$DL = 4.988$$

$$BEC = 8.202$$

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	8509.41	0.0007	P	1.3
2	☐	500.000	513.853	453573.75	0.0376	P	1.4
3	☐	5000.000	5353.357	4470474.94	0.3853	P	0.1
4	☐	12500.000	12813.185	10588627.14	0.9213	A	2.7
5	☐	25000.000	26115.255	20685181.60	1.8770	A	0.5
6	☐	50000.000	50959.751	40343944.27	3.6621	A	0.2
7	☐	100000.00	100870.37	79100768.13	7.2481	A	0.4
8	☐	500000.00	499662.81	357663008.5	35.9006	A	0.5

$$y = 7.1848\text{E-}005 * x + 7.1294\text{E-}004$$

$$R = 1.0000$$

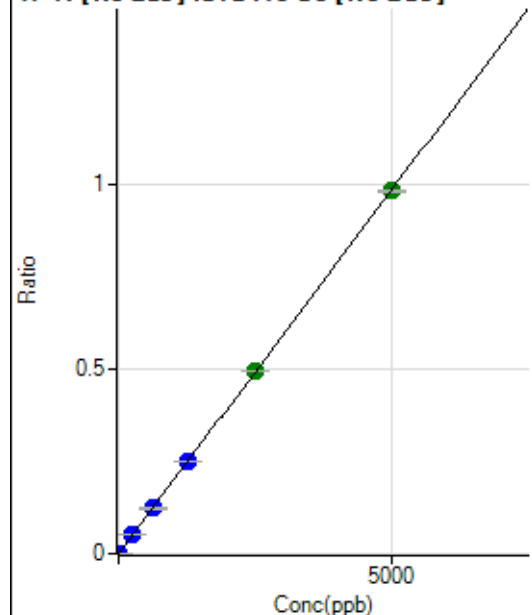
$$DL = 0.3773$$

$$BEC = 9.923$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0000	P	12.3
2	☐	5.000	4.992	12058.19	0.0010	P	1.0
3	☐	250.000	259.190	593450.59	0.0512	P	0.8
4	☐	625.000	625.446	1418480.73	0.1234	P	2.0
5	☐	1250.000	1274.913	2772207.33	0.2516	P	0.2
6	☐	2500.000	2506.401	5448107.24	0.4945	A	0.5
7	☐	5000.000	4990.056	10744625.93	0.9846	A	0.4
8	☐			4434.24	0.0004	P	4.6

$$y = 1.9730E-004 * x + 1.5364E-005$$

$$R = 1.0000$$

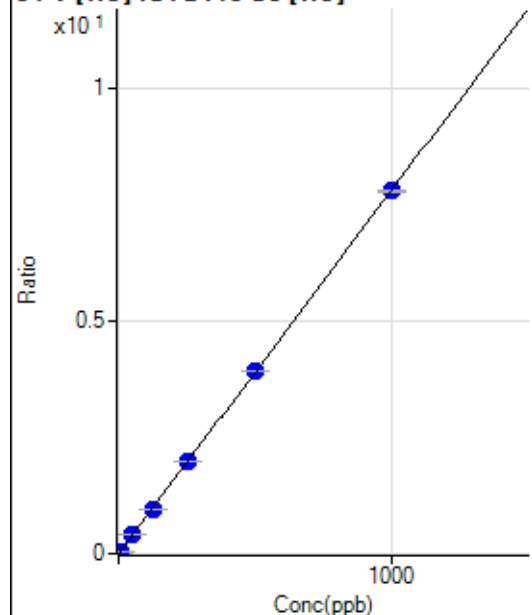
$$DL = 0.02877$$

$$BEC = 0.07787$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0000	P	17.3
2	☐	5.000	5.278	17852.12	0.0413	P	4.6
3	☐	50.000	51.040	169841.26	0.3993	P	0.5
4	☐	125.000	121.349	413356.80	0.9492	P	1.7
5	☐	250.000	252.928	807528.47	1.9784	P	0.3
6	☐	500.000	502.373	1594158.59	3.9296	P	0.6
7	☐	1000.000	998.485	3108766.55	7.8102	P	0.6
8	☐			1384.53	0.0036	P	6.7

$$y = 0.0078 * x + 4.9904E-005$$

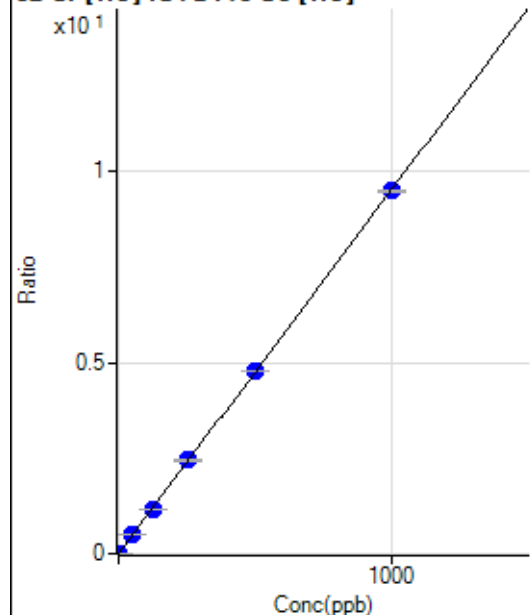
$$R = 1.0000$$

$$DL = 0.003319$$

$$BEC = 0.00638$$

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	607.80	0.0014	P	7.8
2	☐	2.000	2.073	9116.27	0.0211	P	4.7
3	☐	50.000	51.764	210288.00	0.4944	P	1.8
4	☐	125.000	122.809	509934.00	1.1710	P	1.8
5	☐	250.000	256.506	997692.79	2.4444	P	0.7
6	☐	500.000	502.367	1941577.52	4.7860	P	0.7
7	☐	1000.000	997.376	3781666.23	9.5006	P	0.4
8	☐			93383.90	0.2454	P	2.0

$$y = 0.0095 * x + 0.0014$$

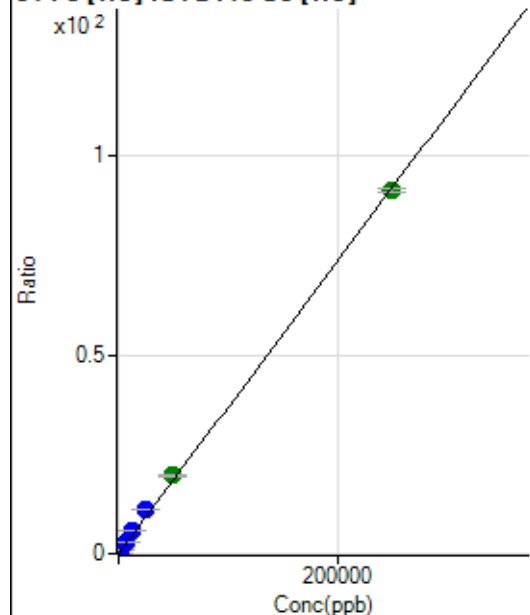
$$R = 1.0000$$

$$DL = 0.03333$$

$$BEC = 0.1433$$

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	710.77	0.0016	P	11.2
2	☐	50.000	69.091	11633.48	0.0269	P	6.1
3	☐	2500.000	3175.326	496211.81	1.1666	P	0.8
4	☐	6250.000	7559.143	1208362.35	2.7749	P	1.6
5	☐	12500.000	15616.469	2339146.80	5.7310	P	0.5
6	☐	25000.000	30586.536	4553028.18	11.2232	P	0.4
7	☐	50000.000	53707.427	7843040.11	19.7058	A	1.8
8	☐	250000.00	248504.55	34691261.29	91.1729	A	1.0

$$y = 3.6688E-004 * x + 0.0016$$

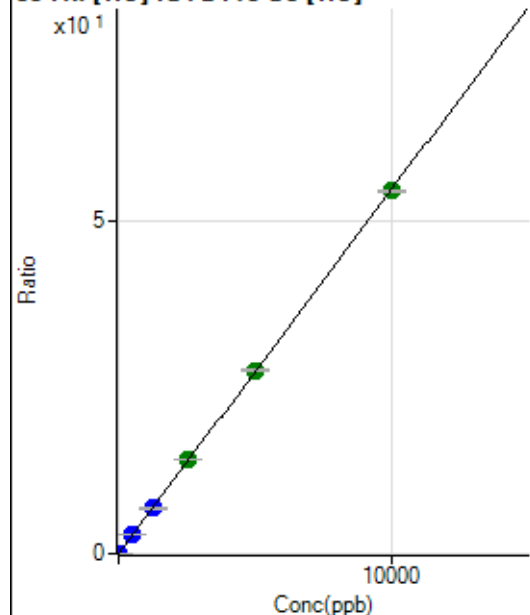
$$R = 0.9997$$

$$DL = 1.466$$

$$BEC = 4.35$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	170.00	0.0004	P	19.8
2	☐	1.000	1.177	2949.24	0.0068	P	6.4
3	☐	500.000	523.691	1220882.56	2.8702	P	0.8
4	☐	1250.000	1242.042	2964175.16	6.8067	P	1.3
5	☐	2500.000	2574.029	5757512.00	14.1060	A	0.4
6	☐	5000.000	5037.675	11199704.00	27.6067	A	0.8
7	☐	10000.000	9962.465	21731204.95	54.5945	A	0.3
8	☐			22219.18	0.0584	P	0.9

$$y = 0.0055 * x + 3.8173E-004$$

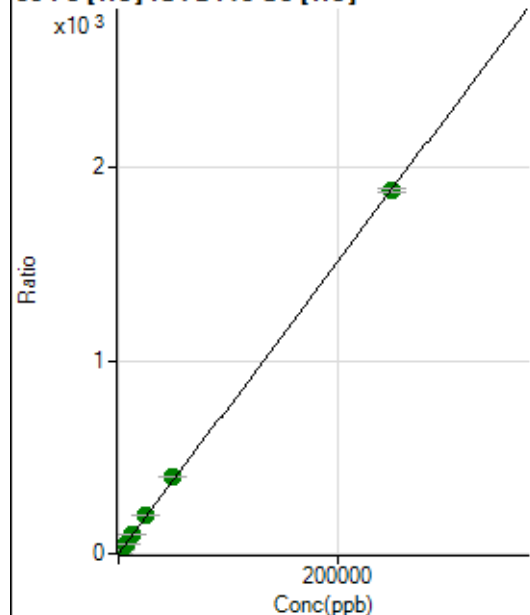
$$R = 1.0000$$

$$DL = 0.04147$$

$$BEC = 0.06966$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7363.14	0.0165	P	2.1
2	☐	50.000	58.541	197622.50	0.4575	P	3.3
3	☐	2500.000	2752.824	8826786.08	20.7511	A	0.4
4	☐	6250.000	6514.825	21376488.90	49.0869	A	1.2
5	☐	12500.000	13578.087	41749620.84	102.2881	A	0.6
6	☐	25000.000	26738.430	81706759.23	201.4132	A	1.2
7	☐	50000.000	52610.932	157741227.6	396.2877	A	0.5
8	☐	250000.00	249240.91	714322467.8	1,877.325	A	1.0

$$y = 0.0075 * x + 0.0165$$

$$R = 0.9999$$

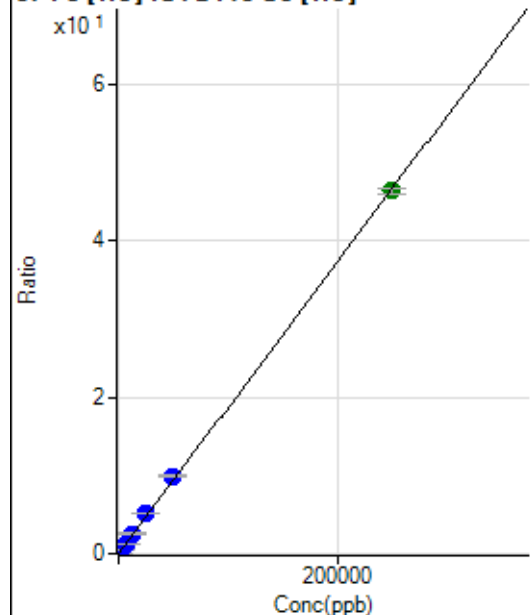
$$DL = 0.1384$$

$$BEC = 2.195$$

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	288.90	0.0006	P	13.5
2	☐	50.000	59.201	5038.05	0.0117	P	5.1
3	☐	2500.000	2787.751	220927.63	0.5194	P	1.4
4	☐	6250.000	6633.237	537801.00	1.2350	P	1.4
5	☐	12500.000	13804.619	1048709.12	2.5694	P	1.2
6	☐	25000.000	27165.729	2050975.44	5.0557	P	0.7
7	☐	50000.000	53282.689	3946648.99	9.9156	P	1.1
8	☐	250000.00	249049.19	17633563.24	46.3441	A	1.3

$$y = 1.8608\text{E-}004 * x + 6.4876\text{E-}004$$

$$R = 0.9999$$

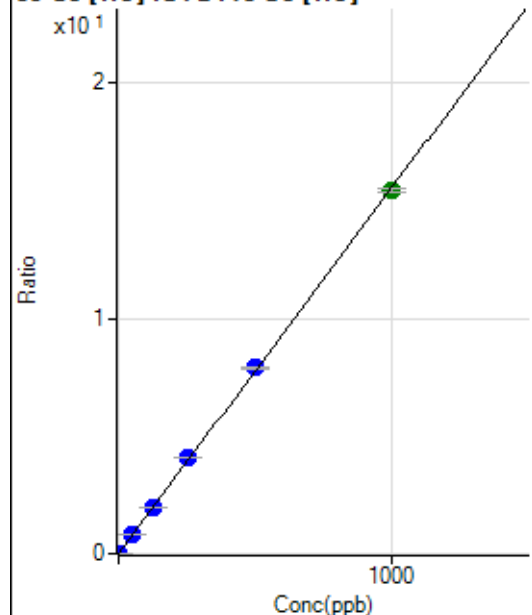
$$DL = 1.412$$

$$BEC = 3.486$$

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	123.34	0.0003	P	16.4
2	☐	1.000	1.054	7196.32	0.0167	P	2.3
3	☐	50.000	53.366	352778.87	0.8294	P	0.4
4	☐	125.000	126.541	856175.40	1.9662	P	2.0
5	☐	250.000	261.395	1657630.15	4.0612	P	0.7
6	☐	500.000	508.886	3207348.67	7.9062	P	1.2
7	☐	1000.000	992.347	6136460.46	15.4172	A	1.1
8	☐			11864.97	0.0312	P	1.4

$$y = 0.0155 * x + 2.7695\text{E-}004$$

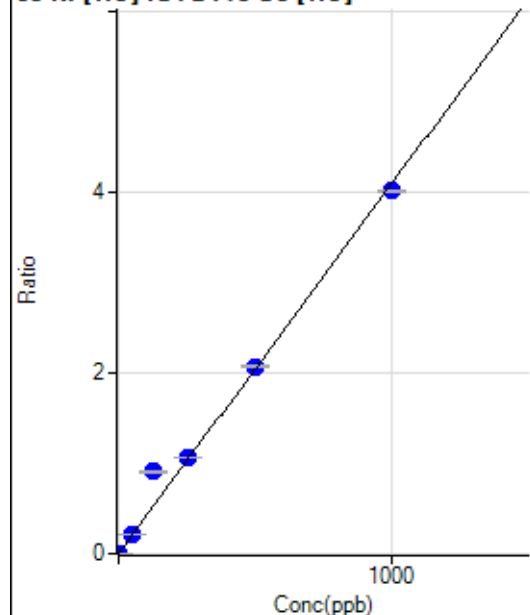
$$R = 0.9999$$

$$DL = 0.008785$$

$$BEC = 0.01783$$

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	115.56	0.0003	P	17.7
2	☐	1.000	1.201	2235.77	0.0052	P	5.1
3	☐	50.000	53.741	93740.51	0.2204	P	0.4
4	☐	125.000	222.875	397616.11	0.9131	P	2.3
5	☐	250.000	261.895	437946.88	1.0730	P	0.6
6	☐	500.000	506.289	841387.23	2.0740	P	0.7
7	☐	1000.000	981.460	1600210.29	4.0203	P	0.7
8	☐			25865.23	0.0680	P	1.6

$$y = 0.0041 * x + 2.5951E-004$$

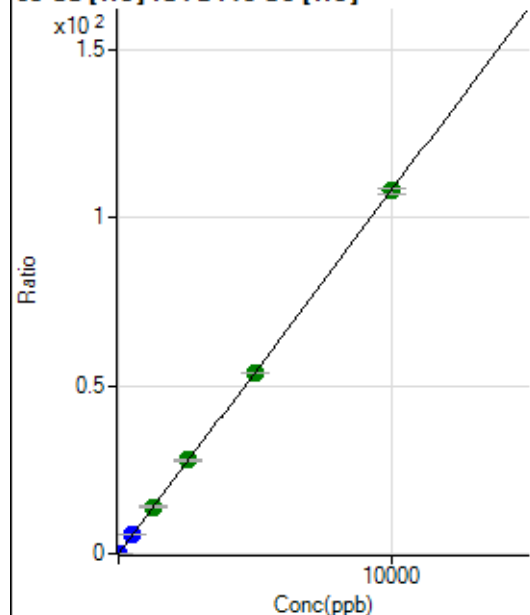
$$R = 0.9949$$

$$DL = 0.03359$$

$$BEC = 0.06336$$

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	926.71	0.0021	P	4.7
2	☐	2.000	2.137	10880.87	0.0252	P	2.6
3	☐	500.000	538.733	2477968.44	5.8256	P	0.2
4	☐	1250.000	1292.303	6083666.72	13.9713	A	2.3
5	☐	2500.000	2572.793	11352116.91	27.8129	A	0.7
6	☐	5000.000	4982.213	21849101.34	53.8578	A	0.7
7	☐	10000.000	9983.471	42953552.14	107.9193	A	1.5
8	☐			14942.27	0.0393	P	1.5

$$y = 0.0108 * x + 0.0021$$

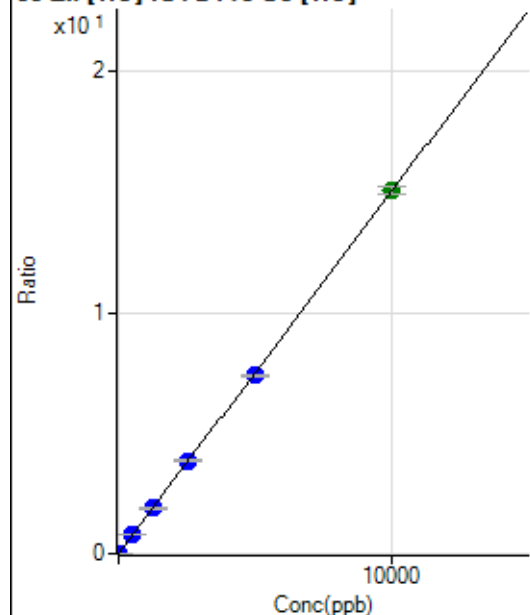
$$R = 1.0000$$

$$DL = 0.02729$$

$$BEC = 0.1925$$

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	1404.54	0.0032	P	7.3
2	☐	2.000	2.164	2766.97	0.0064	P	2.0
3	☐	500.000	536.095	343686.27	0.8080	P	0.7
4	☐	1250.000	1253.899	821116.57	1.8856	P	1.8
5	☐	2500.000	2572.048	1577365.81	3.8646	P	0.6
6	☐	5000.000	4924.436	3000455.20	7.3962	P	0.9
7	☐	10000.000	10017.478	5986941.37	15.0424	A	1.9
8	☐			24810.17	0.0652	P	1.6

$$y = 0.0015 * x + 0.0032$$

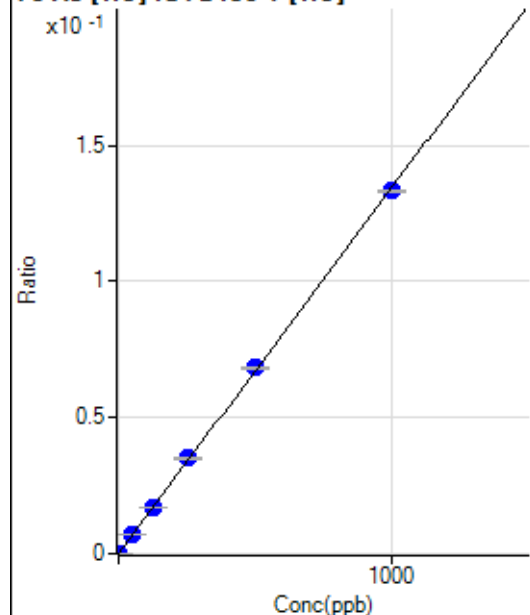
$$R = 0.9999$$

$$DL = 0.4593$$

$$BEC = 2.101$$

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	21.60	0.0000	P	13.5
2	☐	1.000	1.092	444.46	0.0002	P	4.7
3	☐	50.000	53.280	20420.58	0.0072	P	0.7
4	☐	125.000	125.090	49164.23	0.0168	P	1.2
5	☐	250.000	261.201	97059.97	0.0351	P	0.7
6	☐	500.000	509.260	189009.47	0.0684	P	0.8
7	☐	1000.000	992.395	360839.57	0.1333	P	0.5
8	☐			190.13	0.0001	P	4.8

$$y = 1.3433E-004 * x + 7.4209E-006$$

$$R = 0.9999$$

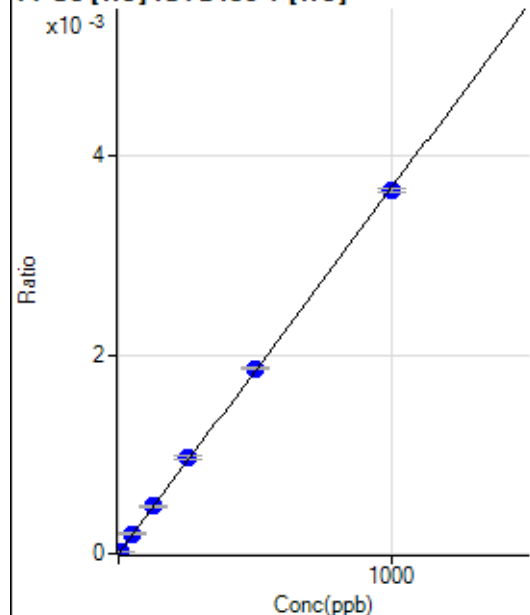
$$DL = 0.02236$$

$$BEC = 0.05525$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.549	58.89	0.0000	P	15.0
3	☐	50.000	54.522	572.24	0.0002	P	6.7
4	☐	125.000	130.468	1405.65	0.0005	P	2.8
5	☐	250.000	263.899	2688.07	0.0010	P	3.9
6	☐	500.000	507.147	5159.88	0.0019	P	0.6
7	☐	1000.000	992.039	9889.09	0.0037	P	1.0
8	☐			5.56	0.0000	P	91.1

$$y = 3.6827\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

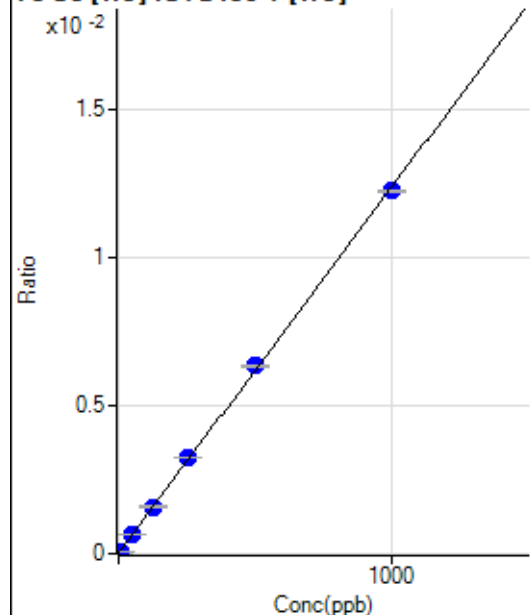
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	50.00	0.0000	P	9.8
2	☐	5.000	5.682	251.86	0.0001	P	8.2
3	☐	50.000	52.378	1894.59	0.0007	P	4.5
4	☐	125.000	126.216	4612.50	0.0016	P	4.1
5	☐	250.000	261.591	8991.13	0.0033	P	1.3
6	☐	500.000	512.802	17562.55	0.0064	P	1.3
7	☐	1000.000	990.427	33186.69	0.0123	P	0.5
8	☐			62.96	0.0000	P	4.4

$$y = 1.2362\text{E-}005 * x + 1.7168\text{E-}005$$

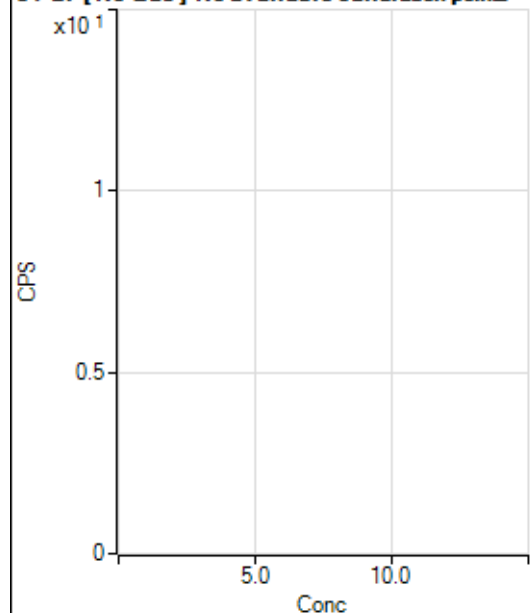
$$R = 0.9998$$

$$DL = 0.4083$$

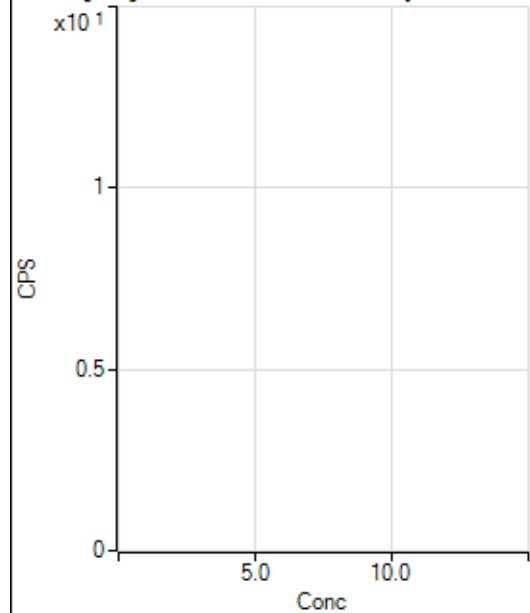
$$BEC = 1.389$$

Weight: <None>

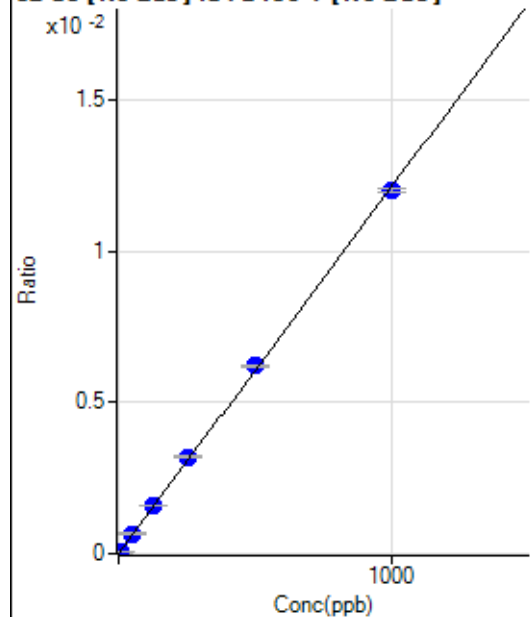
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			65565.69		P	2.6
2	☐			66192.79		P	1.7
3	☐			62613.48		P	1.0
4	☐			61225.62		P	2.0
5	☐			61407.22		P	1.6
6	☐			60760.24		P	1.3
7	☐			59386.20		P	0.7
8	☐			54415.21		P	3.5

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			40.04		P	43.3
2	☐			53.39		P	60.3
3	☐			40.04		P	25.0
4	☐			46.71		P	32.7
5	☐			33.37		P	91.7
6	☐			30.03		P	100.
7	☐			43.38		P	35.3
8	☐			33.37		P	17.3

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	84.69	0.0000	P	51.0
2	☐	5.000	5.212	1745.77	0.0001	P	1.8
3	☐	50.000	54.634	16733.23	0.0007	P	0.9
4	☐	125.000	129.593	40330.95	0.0016	P	1.6
5	☐	250.000	264.249	78140.86	0.0032	P	1.0
6	☐	500.000	512.571	152613.06	0.0062	P	0.6
7	☐	1000.000	989.345	292257.72	0.0120	P	1.2
8	☐			269.80	0.0000	P	20.3

$$y = 1.2106\text{E-}005 * x + 3.2751\text{E-}006$$

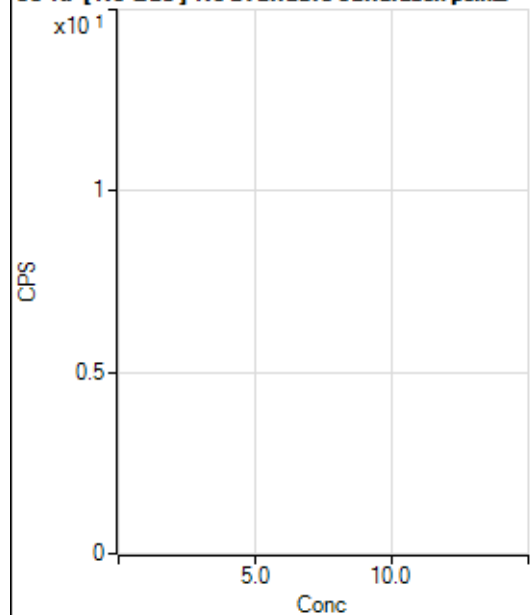
$$R = 0.9998$$

$$DL = 0.4143$$

$$BEC = 0.2705$$

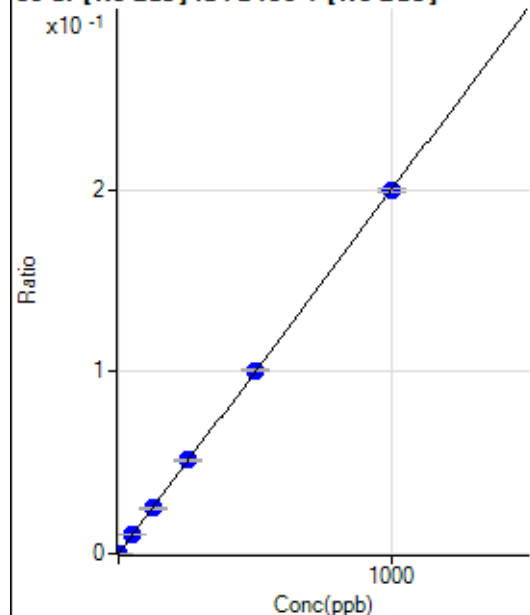
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			406.68		P	8.7
2	☐			495.57		P	4.3
3	☐			422.24		P	7.3
4	☐			456.68		P	2.6
5	☐			441.13		P	5.8
6	☐			476.68		P	6.1
7	☐			518.91		P	9.0
8	☐			502.24		P	9.6

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	797.28	0.0000	P	11.6
2	☐	1.000	0.965	5893.17	0.0002	P	3.5
3	☐	50.000	52.408	264838.69	0.0105	P	0.4
4	☐	125.000	124.210	638534.32	0.0249	P	0.8
5	☐	250.000	256.253	1252187.87	0.0513	P	0.8
6	☐	500.000	503.134	2475900.32	0.1007	P	1.0
7	☐	1000.000	996.848	4867687.65	0.1995	P	1.0
8	☐			10376.37	0.0005	P	4.1

$$y = 2.0013\text{E-}004 * x + 3.0844\text{E-}005$$

$$R = 1.0000$$

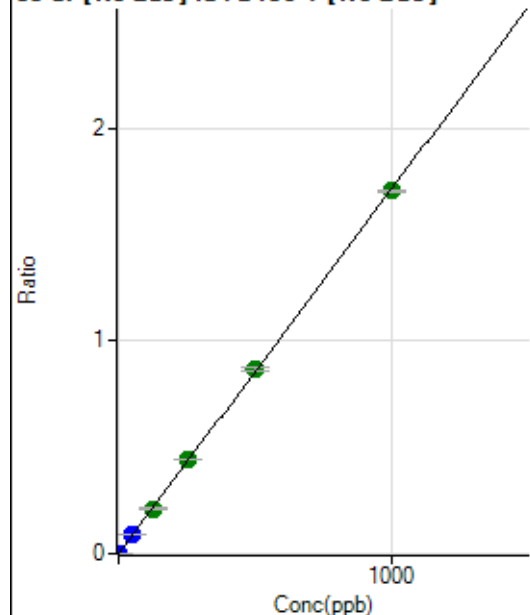
$$DL = 0.05376$$

$$BEC = 0.1541$$

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	455.58	0.0000	P	8.5
2	☐	1.000	0.981	44645.38	0.0017	P	2.5
3	☐	50.000	52.351	2256472.99	0.0896	P	0.9
4	☐	125.000	123.965	5444461.45	0.2122	A	1.3
5	☐	250.000	257.351	10750696.07	0.4405	A	0.7
6	☐	500.000	505.511	21270530.34	0.8653	A	1.5
7	☐	1000.000	995.419	41570642.94	1.7039	A	0.5
8	☐			86449.51	0.0039	P	1.7

$$y = 0.0017 * x + 1.7621\text{E-}005$$

$$R = 0.9999$$

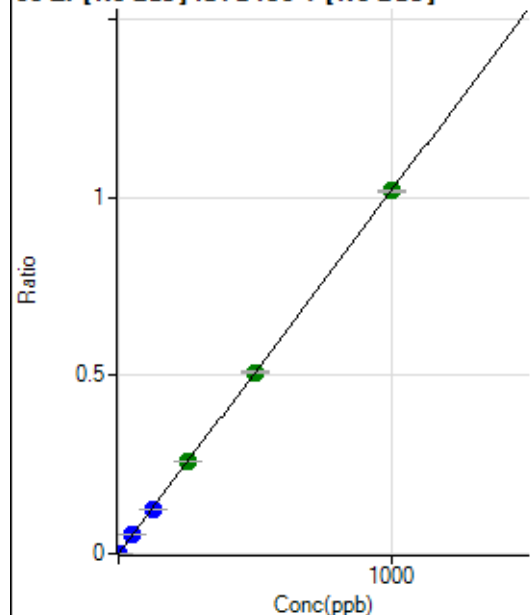
$$DL = 0.002631$$

$$BEC = 0.01029$$

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	1547.37	0.0001	P	3.7
2	☐	1.000	0.749	21647.65	0.0008	P	2.2
3	☐	50.000	51.183	1314243.07	0.0522	P	0.4
4	☐	125.000	123.147	3220167.28	0.1255	P	1.1
5	☐	250.000	255.569	6355274.32	0.2604	A	0.3
6	☐	500.000	499.064	12499494.37	0.5085	A	0.6
7	☐	1000.000	999.249	24837288.58	1.0180	A	0.4
8	☐			10445.92	0.0005	P	3.5

$$y = 0.0010 * x + 5.9856E-005$$

$$R = 1.0000$$

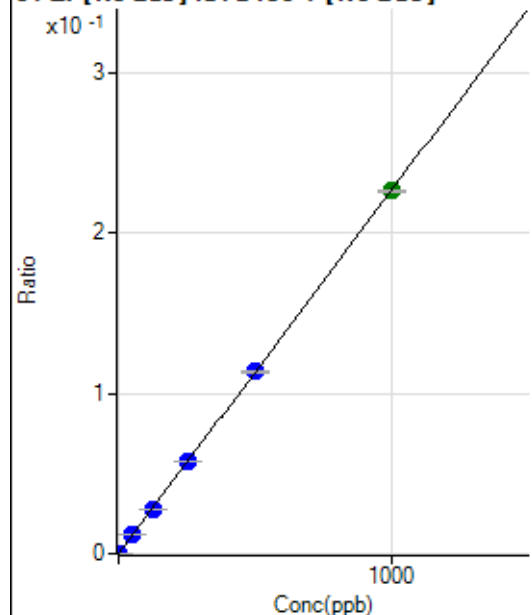
$$DL = 0.006506$$

$$BEC = 0.05875$$

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	316.68	0.0000	P	36.0
2	☐	1.000	0.757	4837.11	0.0002	P	1.2
3	☐	50.000	50.712	289982.80	0.0115	P	1.3
4	☐	125.000	123.026	716426.81	0.0279	P	1.7
5	☐	250.000	255.634	1415714.82	0.0580	P	0.3
6	☐	500.000	500.880	2793890.02	0.1137	P	0.7
7	☐	1000.000	998.363	5526703.55	0.2265	A	0.3
8	☐			2275.28	0.0001	P	8.7

$$y = 2.2689E-004 * x + 1.2247E-005$$

$$R = 1.0000$$

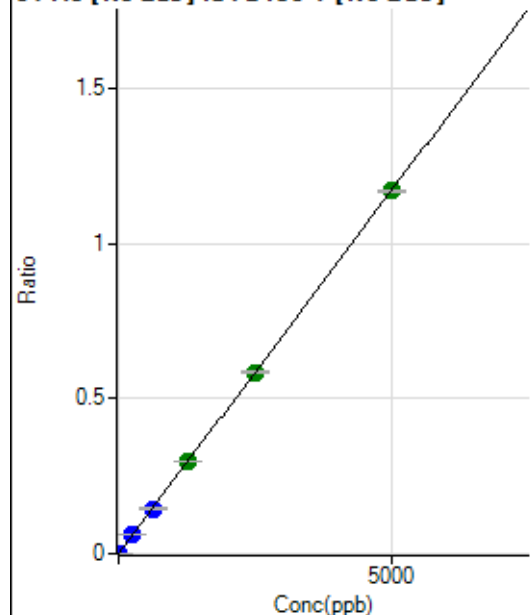
$$DL = 0.05835$$

$$BEC = 0.05398$$

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	713.94	0.0000	P	12.2
2	☐	5.000	4.645	29333.79	0.0011	P	1.2
3	☐	250.000	259.391	1529781.45	0.0608	P	0.3
4	☐	625.000	621.954	3736805.08	0.1457	P	1.3
5	☐	1250.000	1269.315	7253808.32	0.2972	A	0.6
6	☐	2500.000	2498.447	14381236.95	0.5850	A	0.8
7	☐	5000.000	4995.859	28540182.93	1.1698	A	0.4
8	☐			27018.18	0.0012	P	2.6

$$y = 2.3415E-004 * x + 2.7617E-005$$

$$R = 1.0000$$

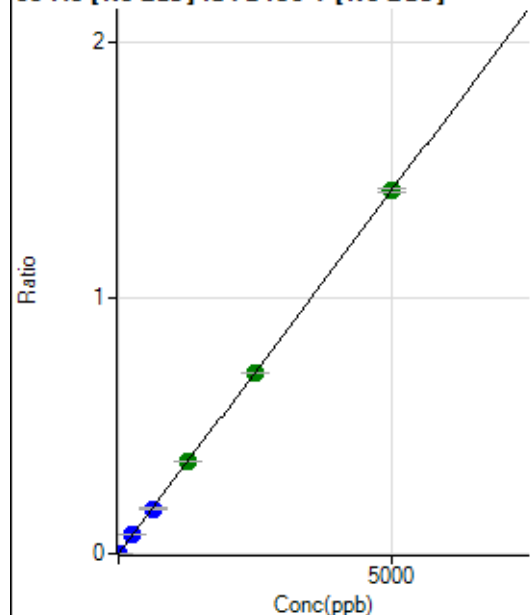
$$DL = 0.04302$$

$$BEC = 0.1179$$

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	272.24	0.0000	P	14.0
2	☐	5.000	5.094	38238.16	0.0015	P	2.4
3	☐	250.000	259.290	1849619.27	0.0735	P	0.5
4	☐	625.000	620.621	4511088.38	0.1758	P	1.1
5	☐	1250.000	1276.295	8824086.92	0.3616	A	0.4
6	☐	2500.000	2490.183	17342637.37	0.7055	A	0.3
7	☐	5000.000	4998.418	34546745.91	1.4161	A	1.0
8	☐			39781.50	0.0018	P	2.3

$$y = 2.8330E-004 * x + 1.0532E-005$$

$$R = 1.0000$$

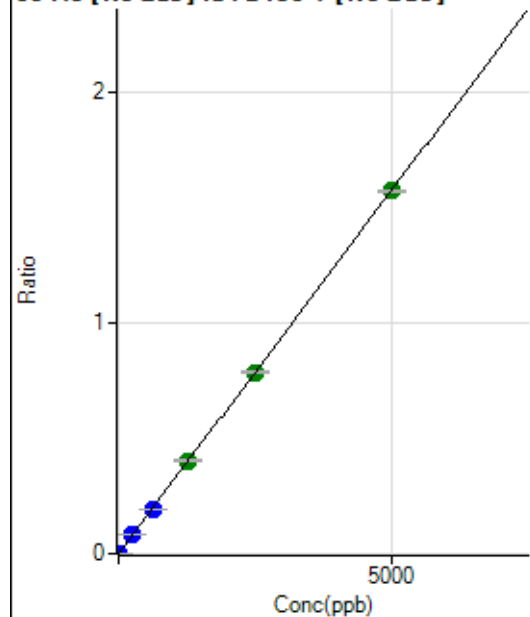
$$DL = 0.01561$$

$$BEC = 0.03718$$

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	480.58	0.0000	P	15.4
2	☐	5.000	5.015	41973.88	0.0016	P	1.1
3	☐	250.000	258.181	2044577.13	0.0812	P	0.3
4	☐	625.000	615.356	4965239.43	0.1935	P	0.9
5	☐	1250.000	1282.993	9846564.89	0.4035	A	0.5
6	☐	2500.000	2494.781	19285782.38	0.7846	A	1.5
7	☐	5000.000	4995.158	38324283.15	1.5709	A	0.7
8	☐			62016.52	0.0028	P	0.7

$$y = 3.1448\text{E-}004 * x + 1.8587\text{E-}005$$

$$R = 1.0000$$

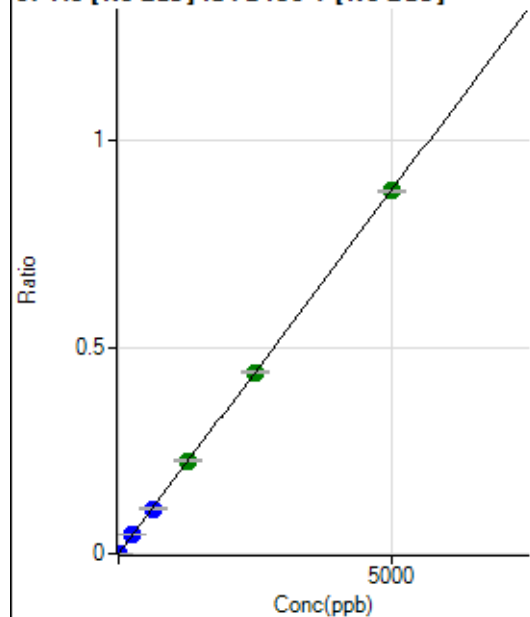
$$DL = 0.02725$$

$$BEC = 0.0591$$

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	208.34	0.0000	P	4.0
2	☐	5.000	5.151	24079.61	0.0009	P	2.9
3	☐	250.000	260.594	1155522.87	0.0459	P	0.5
4	☐	625.000	620.087	2801663.56	0.1092	P	0.9
5	☐	1250.000	1282.195	5510204.59	0.2258	A	0.5
6	☐	2500.000	2500.108	10823075.50	0.4403	A	0.8
7	☐	5000.000	4991.982	21446819.92	0.8791	A	0.8
8	☐			23854.22	0.0011	P	3.1

$$y = 1.7610\text{E-}004 * x + 8.0589\text{E-}006$$

$$R = 1.0000$$

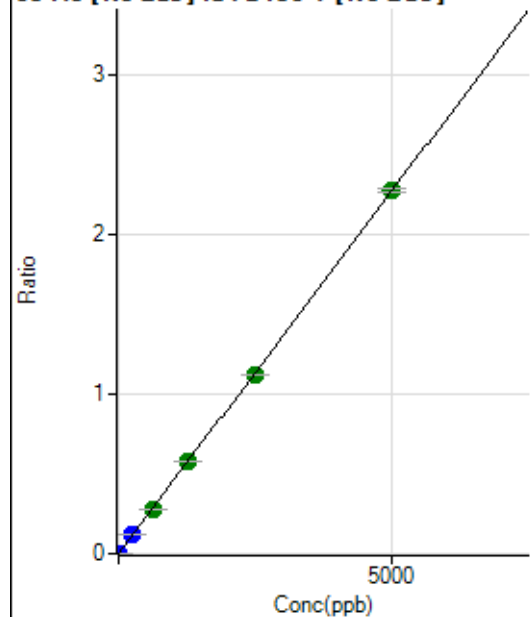
$$DL = 0.005423$$

$$BEC = 0.04576$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	383.36	0.0000	P	9.7
2	☐	5.000	5.034	60518.39	0.0023	P	0.9
3	☐	250.000	257.033	2938755.17	0.1167	P	0.2
4	☐	625.000	615.069	7165547.21	0.2793	A	1.1
5	☐	1250.000	1275.812	14136866.98	0.5793	A	1.0
6	☐	2500.000	2475.043	27629002.01	1.1239	A	0.5
7	☐	5000.000	5006.916	55464635.96	2.2735	A	1.1
8	☐			61499.86	0.0028	P	0.5

$$y = 4.5408\text{E-}004 * x + 1.4831\text{E-}005$$

$$R = 1.0000$$

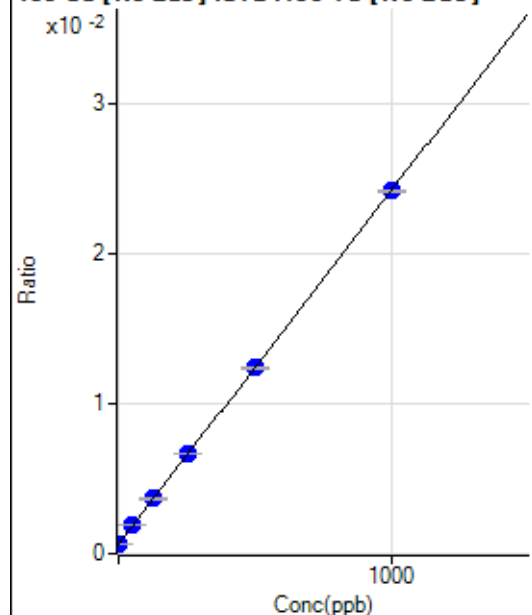
$$DL = 0.009547$$

$$BEC = 0.03266$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13159.42	0.0006	P	1.5
2	☐	1.000	2.203	14299.41	0.0007	P	3.1
3	☐	50.000	53.866	38848.89	0.0019	P	0.2
4	☐	125.000	128.604	76314.29	0.0037	P	1.5
5	☐	250.000	254.623	134097.77	0.0066	P	1.1
6	☐	500.000	499.576	249055.26	0.0124	P	1.1
7	☐	1000.000	998.411	489930.82	0.0242	P	0.4
8	☐			12108.41	0.0007	P	1.3

$$y = 2.3585\text{E-}005 * x + 6.3760\text{E-}004$$

$$R = 1.0000$$

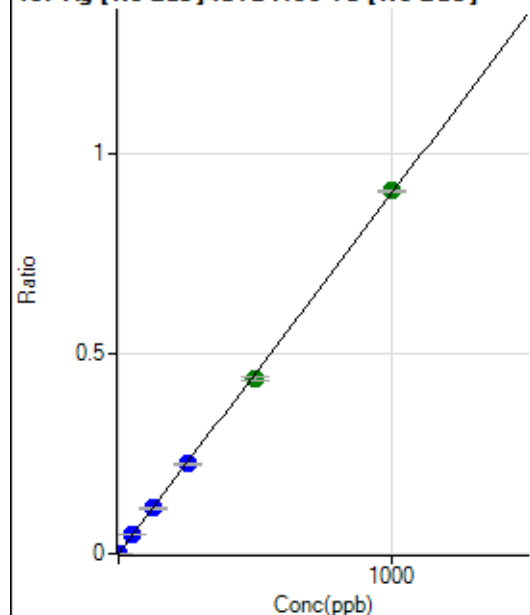
$$DL = 1.23$$

$$BEC = 27.03$$

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	258.35	0.0000	P	17.2
2	☐	1.000	1.011	19141.50	0.0009	P	2.2
3	☐	50.000	53.442	981089.51	0.0482	P	0.6
4	☐	125.000	125.492	2351959.15	0.1131	P	1.4
5	☐	250.000	249.104	4533017.68	0.2246	P	1.3
6	☐	500.000	485.399	8773602.10	0.4375	A	1.8
7	☐	1000.000	1007.291	18393412.39	0.9080	A	0.3
8	☐			4823.26	0.0003	P	4.5

$$y = 9.0138\text{E-}004 * x + 1.2523\text{E-}005$$

$$R = 0.9998$$

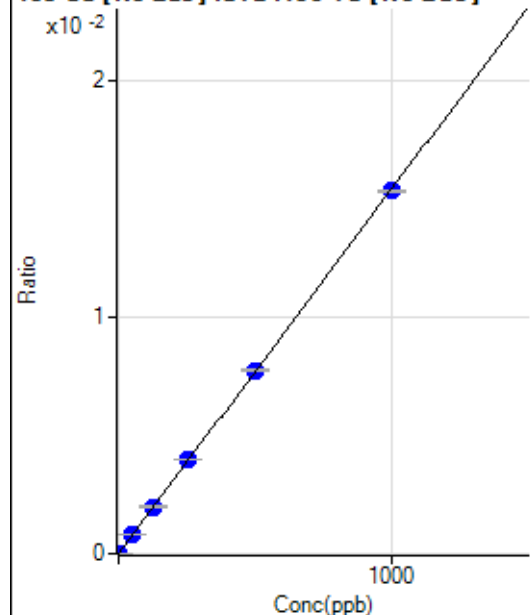
$$DL = 0.00717$$

$$BEC = 0.01389$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	40.28	0.0000	P	34.0
2	☐	1.000	1.105	393.07	0.0000	P	11.2
3	☐	50.000	54.164	17032.71	0.0008	P	1.9
4	☐	125.000	129.042	41377.25	0.0020	P	2.2
5	☐	250.000	258.255	80372.25	0.0040	P	0.6
6	☐	500.000	503.310	155550.12	0.0078	P	1.7
7	☐	1000.000	995.568	310800.91	0.0153	P	0.9
8	☐			154.17	0.0000	P	19.7

$$y = 1.5409\text{E-}005 * x + 1.9560\text{E-}006$$

$$R = 1.0000$$

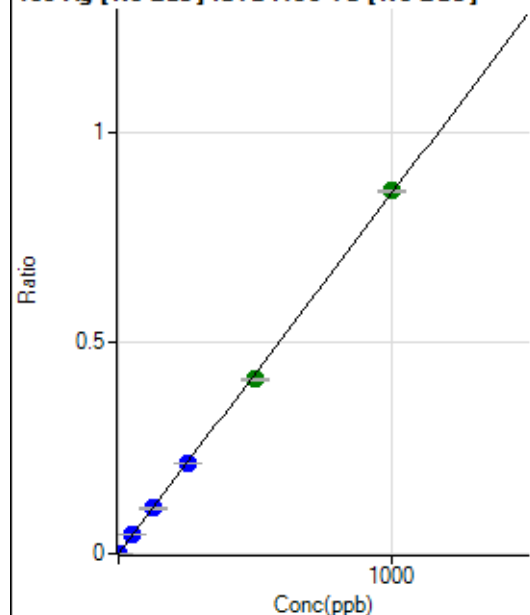
$$DL = 0.1295$$

$$BEC = 0.1269$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	63.89	0.0000	P	19.2
2	☐	1.000	1.011	17959.39	0.0009	P	2.1
3	☐	50.000	53.854	936325.75	0.0460	P	1.2
4	☐	125.000	126.502	2245713.01	0.1080	P	1.7
5	☐	250.000	250.850	4323978.05	0.2142	P	0.6
6	☐	500.000	484.506	8295855.91	0.4137	A	1.5
7	☐	1000.000	1007.154	17421438.41	0.8600	A	0.2
8	☐			4303.61	0.0002	P	0.4

$$y = 8.5387\text{E-}004 * x + 3.0926\text{E-}006$$

$$R = 0.9998$$

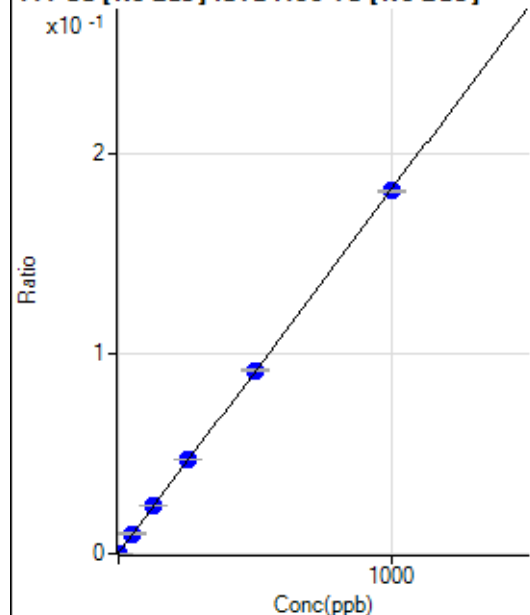
$$DL = 0.002089$$

$$BEC = 0.003622$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5274.46	0.0003	P	1.3
2	☐	1.000	1.117	9518.91	0.0005	P	3.2
3	☐	50.000	54.080	205875.89	0.0101	P	1.1
4	☐	125.000	128.396	491830.04	0.0237	P	0.3
5	☐	250.000	256.690	949532.53	0.0470	P	0.7
6	☐	500.000	503.330	1844546.94	0.0920	P	1.8
7	☐	1000.000	996.034	3682523.54	0.1818	P	0.5
8	☐			5843.85	0.0003	P	1.7

$$y = 1.8225\text{E-}004 * x + 2.5556\text{E-}004$$

$$R = 1.0000$$

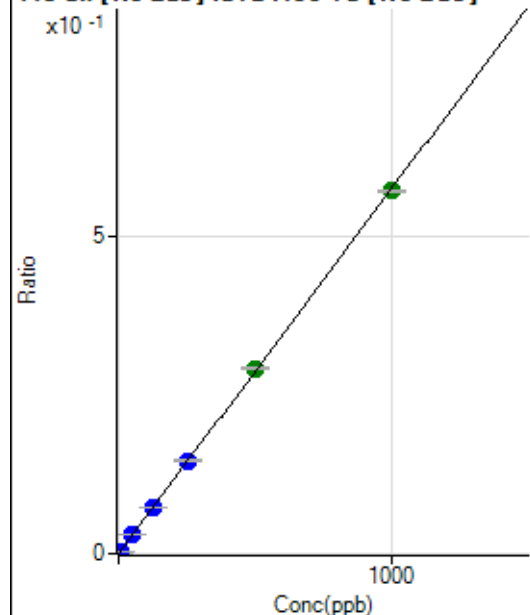
$$DL = 0.05511$$

$$BEC = 1.402$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	969.52	0.0000	P	2.8
2	☐	5.000	5.118	61837.07	0.0030	P	1.3
3	☐	50.000	52.716	616643.64	0.0303	P	0.6
4	☐	125.000	126.809	1513274.12	0.0728	P	1.1
5	☐	250.000	255.463	2959123.35	0.1466	P	0.5
6	☐	500.000	507.666	5840339.54	0.2913	A	1.4
7	☐	1000.000	994.439	11556579.43	0.5705	A	0.8
8	☐			14716.62	0.0008	P	1.9

$$y = 5.7362\text{E-}004 * x + 4.6962\text{E-}005$$

$$R = 0.9999$$

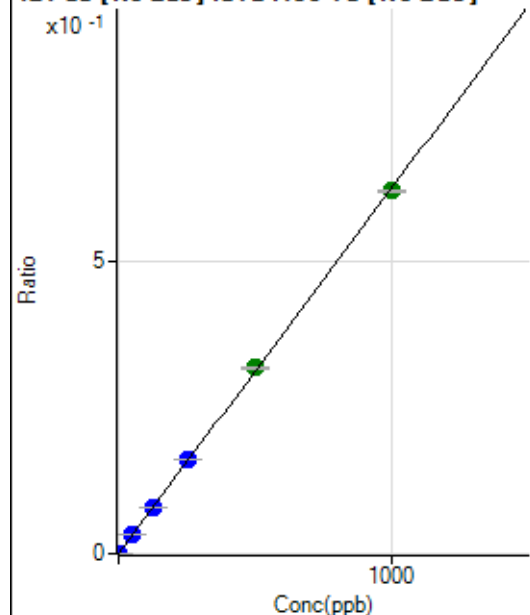
$$DL = 0.006949$$

$$BEC = 0.08187$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	216.68	0.0000	P	17.7
2	☐	2.000	2.033	26589.84	0.0013	P	2.9
3	☐	50.000	52.254	666096.10	0.0327	P	0.3
4	☐	125.000	127.275	1656265.66	0.0797	P	1.6
5	☐	250.000	256.610	3242292.71	0.1606	P	0.6
6	☐	500.000	509.130	6390147.71	0.3187	A	0.9
7	☐	1000.000	993.386	12594771.20	0.6217	A	0.5
8	☐			16896.96	0.0009	P	6.9

$$y = 6.2586\text{E-}004 * x + 1.0498\text{E-}005$$

$$R = 0.9999$$

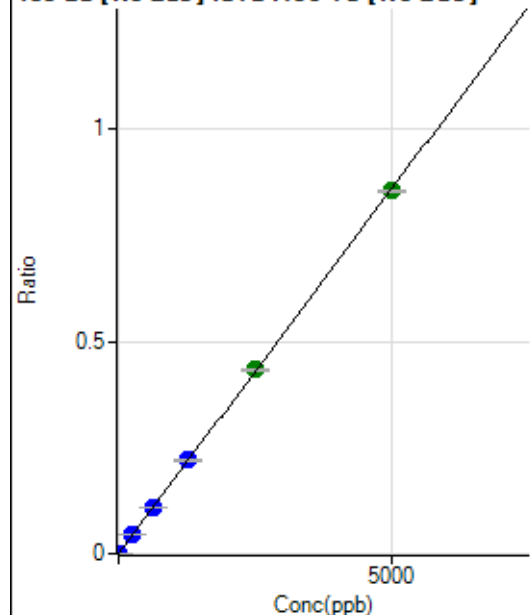
$$DL = 0.008924$$

$$BEC = 0.01677$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	119.45	0.0000	P	23.5
2	☐	10.000	10.609	37888.94	0.0018	P	3.7
3	☐	250.000	263.931	923376.49	0.0454	P	0.4
4	☐	625.000	636.026	2271903.72	0.1093	P	1.5
5	☐	1250.000	1282.777	4449023.62	0.2204	P	1.3
6	☐	2500.000	2527.802	8709082.83	0.4343	A	0.8
7	☐	5000.000	4975.829	17317756.98	0.8549	A	0.9
8	☐			31511.73	0.0018	P	2.9

$$y = 1.7180\text{E-}004 * x + 5.7789\text{E-}006$$

$$R = 1.0000$$

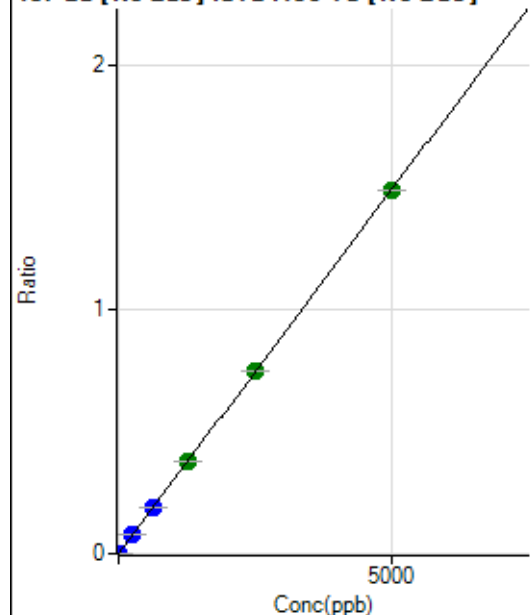
$$DL = 0.02374$$

$$BEC = 0.03364$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.79	0.0000	P	24.7
2	☐	10.000	10.430	64662.99	0.0031	P	2.6
3	☐	250.000	263.828	1603109.60	0.0787	P	0.8
4	☐	625.000	635.478	3942641.06	0.1896	P	1.4
5	☐	1250.000	1272.751	7667136.63	0.3798	A	0.8
6	☐	2500.000	2513.474	15041046.17	0.7500	A	0.6
7	☐	5000.000	4985.573	30138255.53	1.4877	A	0.1
8	☐			53729.88	0.0030	P	2.7

$$y = 2.9840\text{E-}004 * x + 7.4013\text{E-}006$$

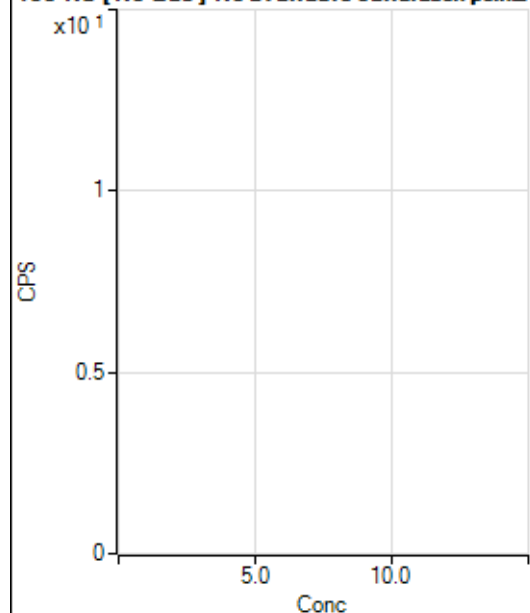
$$R = 1.0000$$

$$DL = 0.01835$$

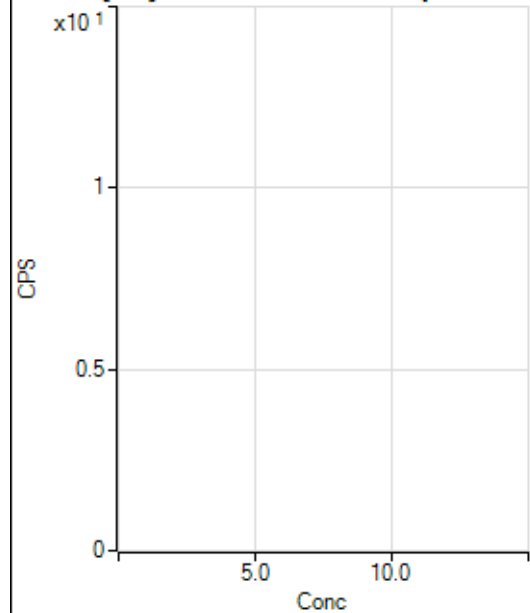
$$BEC = 0.0248$$

Weight: <None>

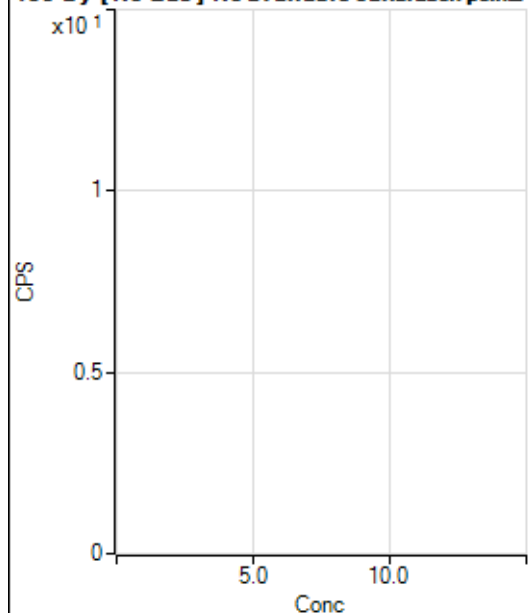
Min Conc: 0

150 Nd [No Gas] No available calibration points

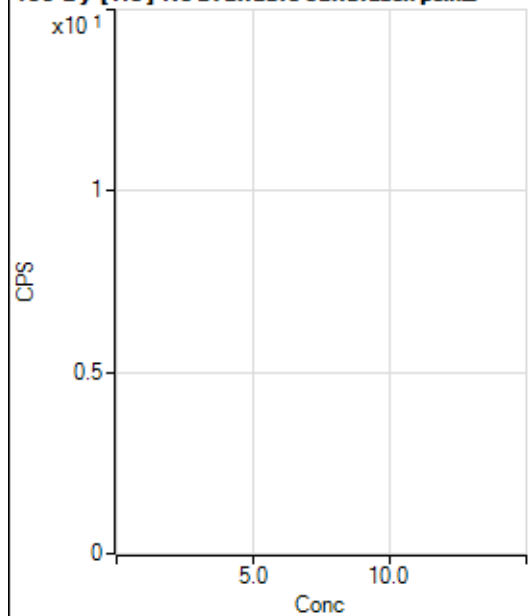
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			11.11		P	91.7
3	☐			151.12		P	37.5
4	☐			324.46		P	12.6
5	☐			657.82		P	10.8
6	☐			1184.54		P	4.6
7	☐			2622.56		P	1.5
8	☐			142.23		P	23.1

150 Nd [He] No available calibration points

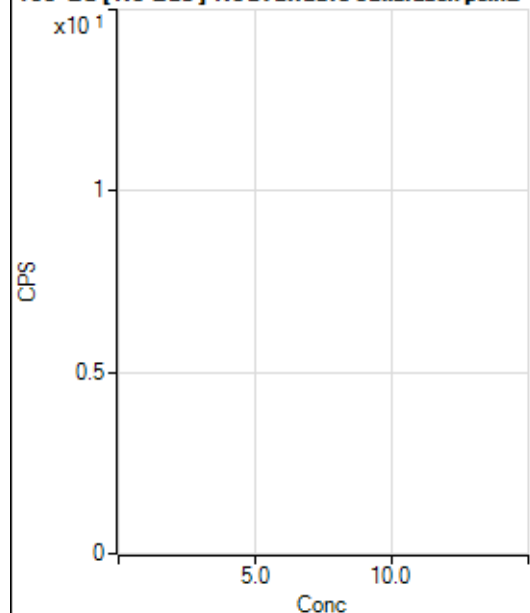
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			1.11		P	173.
3	☐			7.78		P	24.7
4	☐			24.44		P	34.3
5	☐			38.89		P	34.6
6	☐			77.78		P	13.1
7	☐			161.11		P	17.8
8	☐			68.89		P	14.0

156 Dy [No Gas] No available calibration points

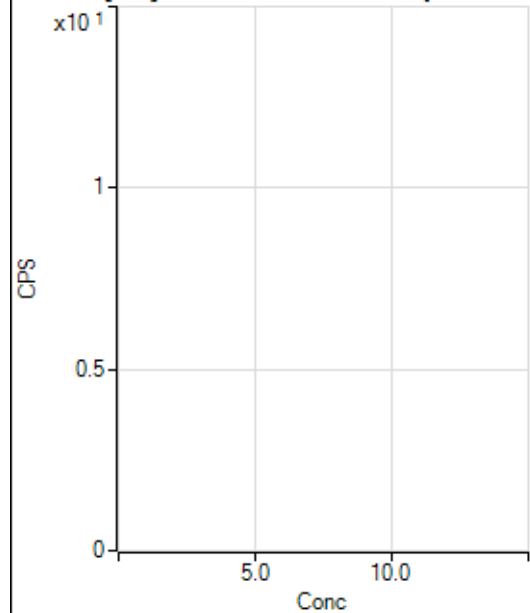
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	0.0
2	☐			44.44		P	43.3
3	☐			77.78		P	24.7
4	☐			100.00		P	8.3
5	☐			152.79		P	16.7
6	☐			311.13		P	17.8
7	☐			516.70		P	10.6
8	☐			872.29		P	2.0

156 Dy [He] No available calibration points

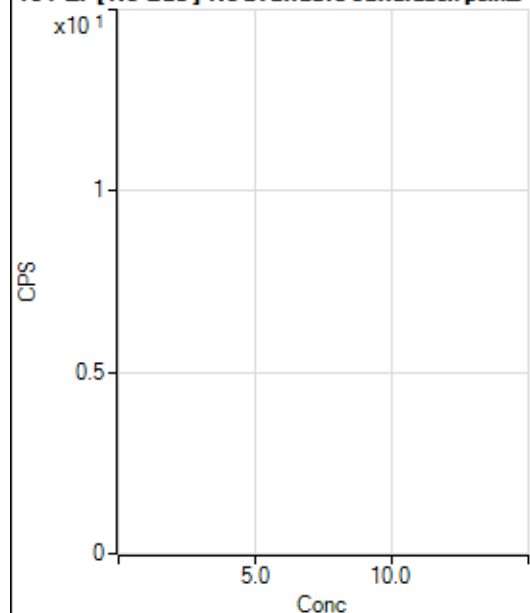
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.33		P	66.1
2	☐			20.00		P	57.7
3	☐			32.22		P	29.8
4	☐			68.89		P	24.8
5	☐			110.00		P	8.0
6	☐			182.23		P	7.4
7	☐			361.12		P	9.8
8	☐			451.13		P	8.4

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

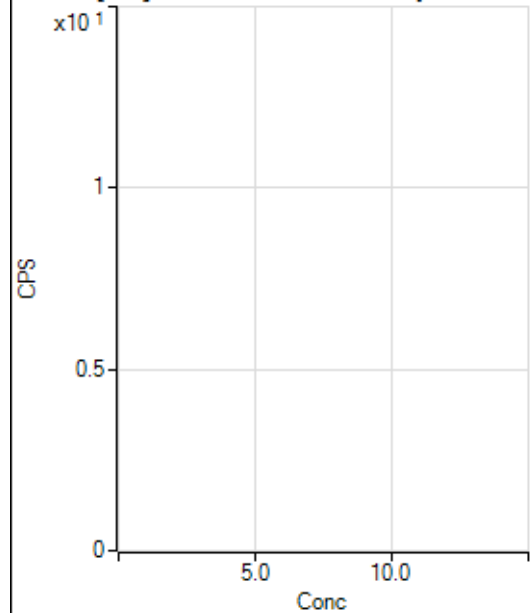
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			127.79		P	13.6
2	☐			152.79		P	8.3
3	☐			138.89		P	40.0
4	☐			169.45		P	22.2
5	☐			175.01		P	8.2
6	☐			280.57		P	23.1
7	☐			394.47		P	14.1
8	☐			1033.42		P	3.7

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			315.56		P	11.6
2	☐			301.12		P	7.0
3	☐			315.56		P	11.2
4	☐			298.90		P	10.4
5	☐			294.45		P	9.2
6	☐			344.45		P	16.0
7	☐			377.79		P	5.3
8	☐			740.04		P	6.3

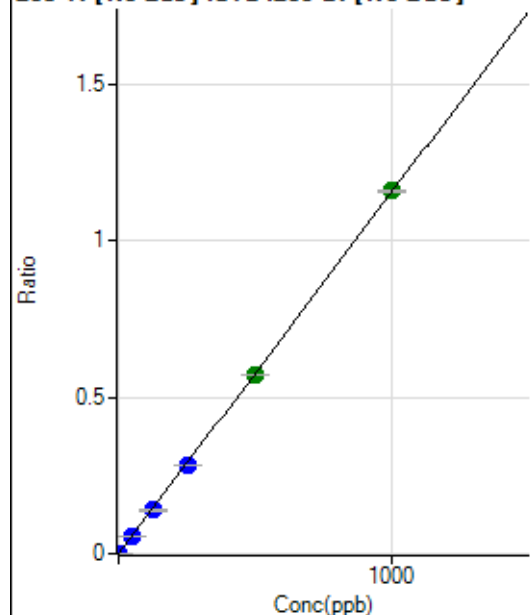
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			102.78		P	16.9
2	☐			100.00		P	50.0
3	☐			108.34		P	7.7
4	☐			119.45		P	4.0
5	☐			138.89		P	33.0
6	☐			169.45		P	37.6
7	☐			180.57		P	22.8
8	☐			211.12		P	16.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			45.56		P	56.8
2	☐			51.11		P	29.4
3	☐			32.22		P	21.5
4	☐			42.22		P	38.9
5	☐			72.22		P	34.0
6	☐			41.11		P	47.5
7	☐			47.78		P	29.0
8	☐			84.45		P	12.7

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	272.24	0.0000	P	11.5
2	☐	1.000	0.916	13118.09	0.0011	P	1.3
3	☐	50.000	49.840	665763.36	0.0576	P	0.6
4	☐	125.000	120.286	1617722.74	0.1389	P	1.0
5	☐	250.000	245.037	3219313.18	0.2829	P	1.5
6	☐	500.000	494.632	6272672.27	0.5711	A	0.1
7	☐	1000.000	1004.522	12374355.22	1.1598	A	0.4
8	☐			3914.64	0.0005	P	3.3

$$y = 0.0012 * x + 2.2960E-005$$

$$R = 1.0000$$

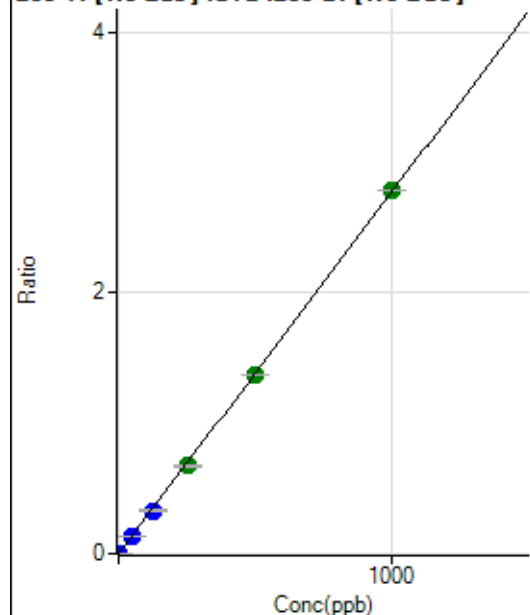
$$DL = 0.006853$$

$$BEC = 0.01989$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	572.26	0.0000	P	6.1
2	☐	1.000	0.899	30839.73	0.0025	P	3.4
3	☐	50.000	49.534	1588030.85	0.1373	P	1.3
4	☐	125.000	119.346	3852561.55	0.3308	P	0.9
5	☐	250.000	243.692	7683998.35	0.6753	A	1.9
6	☐	500.000	496.458	15111459.89	1.3758	A	0.2
7	☐	1000.000	1004.078	29687881.22	2.7825	A	0.1
8	☐			9342.60	0.0011	P	3.0

$$y = 0.0028 * x + 4.8318E-005$$

$$R = 1.0000$$

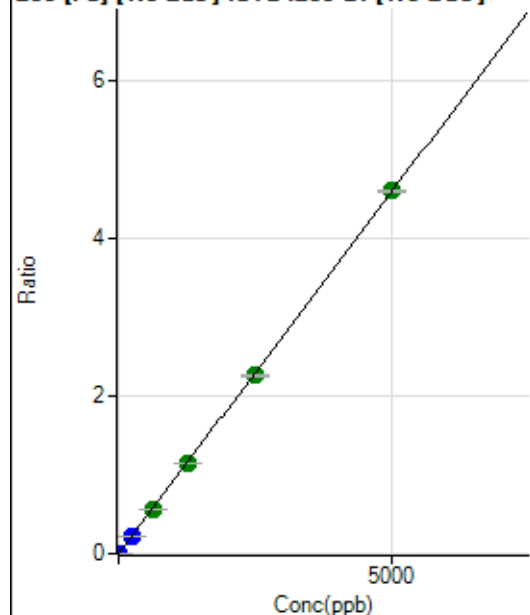
$$DL = 0.0032$$

$$BEC = 0.01744$$

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	827.83	0.0001	P	7.4
2	☐	1.000	0.945	11368.15	0.0009	P	1.7
3	☐	250.000	248.576	2636754.80	0.2280	P	0.2
4	☐	625.000	608.932	6503726.88	0.5584	A	1.4
5	☐	1250.000	1249.062	13033200.64	1.1453	A	0.7
6	☐	2500.000	2471.580	24892126.48	2.2662	A	1.0
7	☐	5000.000	5016.524	49076756.65	4.5997	A	0.6
8	☐			45426.21	0.0053	P	1.1

$$y = 9.1689\text{E-}004 * x + 6.9839\text{E-}005$$

$$R = 1.0000$$

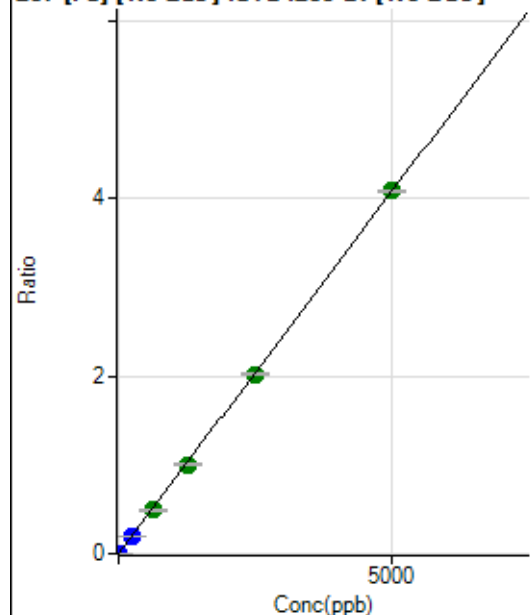
$$DL = 0.01681$$

$$BEC = 0.07617$$

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	720.41	0.0001	P	11.7
2	☐	1.000	0.919	9818.72	0.0008	P	0.4
3	☐	250.000	246.169	2318737.01	0.2005	P	0.5
4	☐	625.000	602.543	5714101.11	0.4906	A	2.0
5	☐	1250.000	1233.392	11427842.85	1.0043	A	1.2
6	☐	2500.000	2484.288	22216993.09	2.0227	A	1.3
7	☐	5000.000	5015.007	43565415.33	4.0832	A	0.6
8	☐			39466.54	0.0046	P	2.1

$$y = 8.1418\text{E-}004 * x + 6.0760\text{E-}005$$

$$R = 1.0000$$

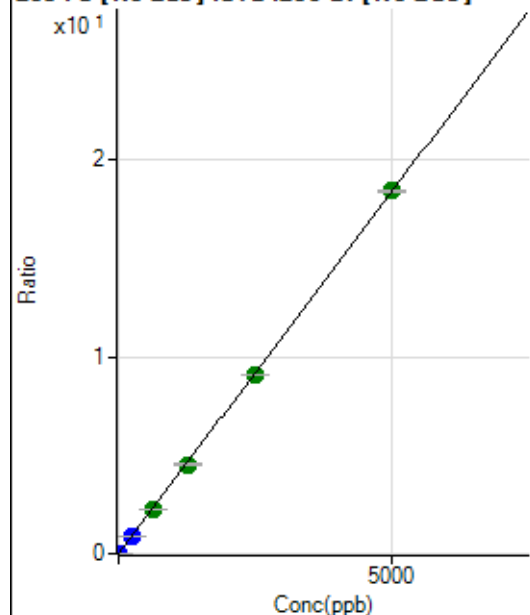
$$DL = 0.02628$$

$$BEC = 0.07463$$

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	3202.11	0.0003	P	4.2
2	☐	1.000	0.925	44509.86	0.0037	P	1.4
3	☐	250.000	245.463	10419469.08	0.9009	P	0.2
4	☐	625.000	607.508	25963711.06	2.2293	A	1.9
5	☐	1250.000	1232.152	51444376.03	4.5213	A	1.5
6	☐	2500.000	2479.794	99943130.93	9.0991	A	0.2
7	☐	5000.000	5016.979	196411019.6	18.4085	A	0.2
8	☐			178449.56	0.0209	P	0.4

$$y = 0.0037 * x + 2.7022E-004$$

$$R = 1.0000$$

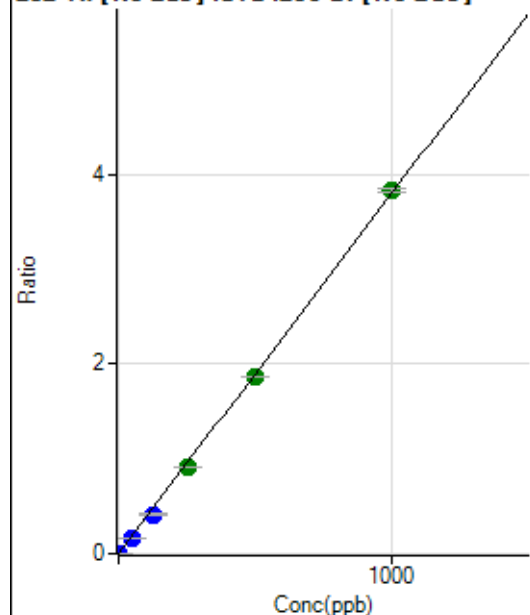
$$DL = 0.009364$$

$$BEC = 0.07365$$

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	4265.66	0.0004	P	5.5
2	☐	1.000	0.612	32522.06	0.0027	P	1.4
3	☐	50.000	44.204	1941809.68	0.1679	P	0.2
4	☐	125.000	109.286	4828423.17	0.4146	P	1.5
5	☐	250.000	241.289	10410666.73	0.9149	A	0.6
6	☐	500.000	492.590	20510450.57	1.8673	A	0.5
7	☐	1000.000	1008.137	40770333.32	3.8213	A	1.2
8	☐			24030.58	0.0028	P	4.0

$$y = 0.0038 * x + 3.5995E-004$$

$$R = 0.9998$$

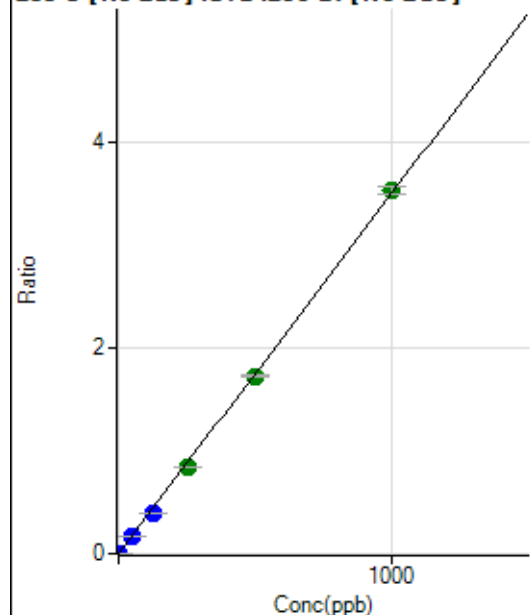
$$DL = 0.01569$$

$$BEC = 0.09497$$

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	127.79	0.0000	P	4.8
2	☐	1.000	0.823	35095.26	0.0029	P	3.2
3	☐	50.000	45.614	1846506.28	0.1597	P	0.8
4	☐	125.000	110.948	4522563.01	0.3883	P	2.0
5	☐	250.000	241.149	9603665.06	0.8440	A	1.4
6	☐	500.000	493.067	18955051.46	1.7257	A	0.7
7	☐	1000.000	1007.656	37627356.05	3.5268	A	2.0
8	☐			6930.04	0.0008	P	1.2

$$y = 0.0035 * x + 1.0788E-005$$

$$R = 0.9999$$

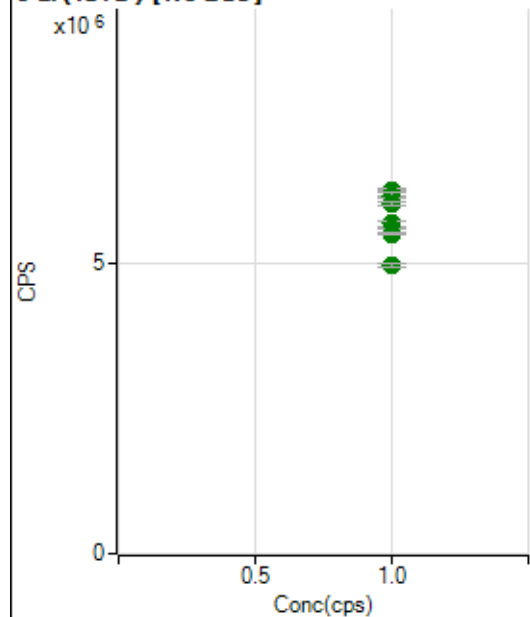
$$DL = 0.0004405$$

$$BEC = 0.003082$$

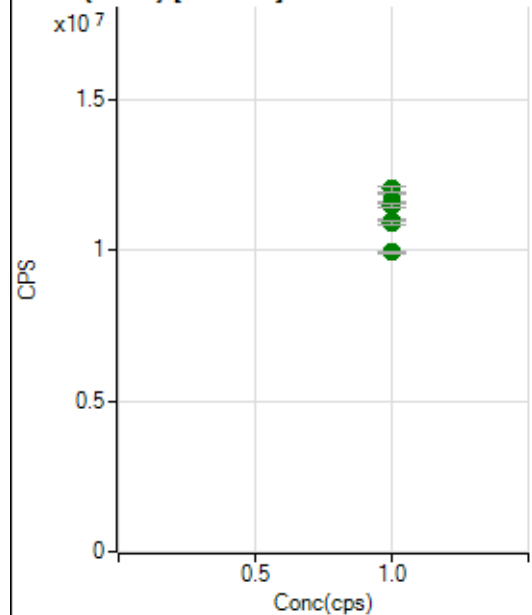
Weight: <None>

Min Conc: 0

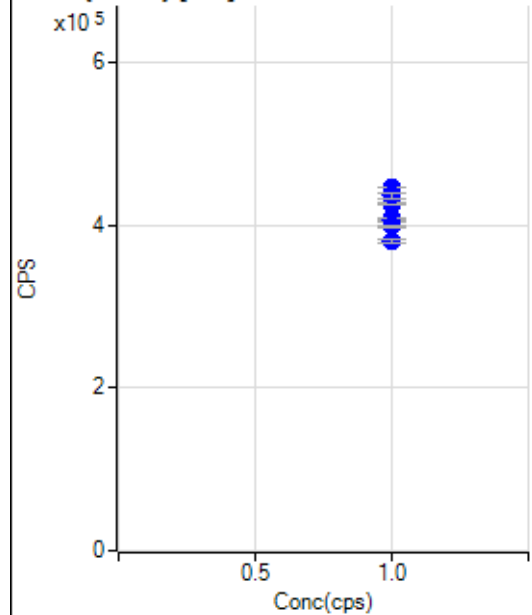
6 Li (ISTD) [No Gas]



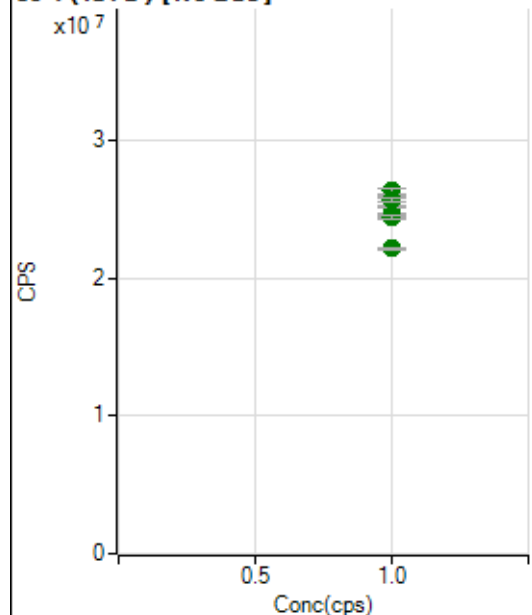
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		6246361.78		A	0.8
2	☐	1.000		6225466.09		A	1.8
3	☐	1.000		6161188.73		A	1.7
4	☐	1.000		6028618.94		A	0.8
5	☐	1.000		5682889.98		A	1.7
6	☐	1.000		5588099.43		A	0.3
7	☐	1.000		5508684.15		A	1.0
8	☐	1.000		4958011.07		A	1.0

45 Sc (ISTD) [No Gas]

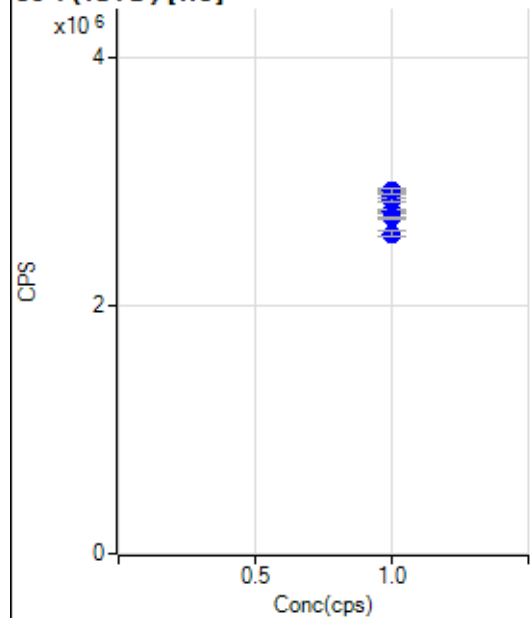
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11935856.90		A	0.5
2	☐	1.000		12054260.93		A	1.3
3	☐	1.000		11601334.97		A	0.5
4	☐	1.000		11494908.44		A	1.1
5	☐	1.000		11020136.36		A	0.7
6	☐	1.000		11016604.28		A	0.7
7	☐	1.000		10913086.78		A	0.9
8	☐	1.000		9962800.48		A	0.7

45 Sc (ISTD) [He]

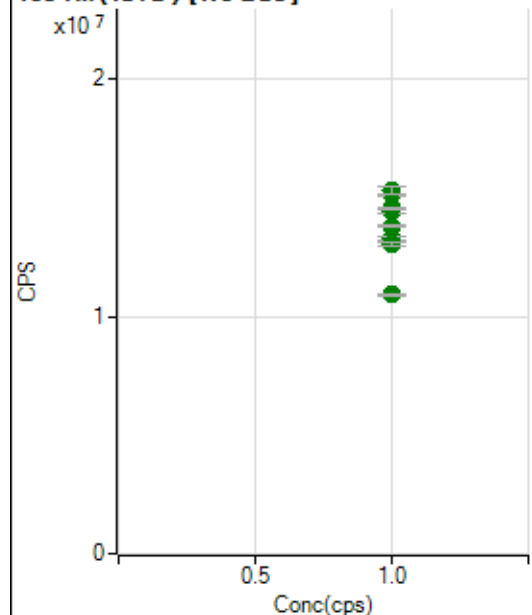
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		445324.22		P	0.1
2	☐	1.000		432269.72		P	2.9
3	☐	1.000		425361.89		P	0.3
4	☐	1.000		435528.76		P	1.4
5	☐	1.000		408167.40		P	0.6
6	☐	1.000		405690.36		P	0.8
7	☐	1.000		398054.75		P	1.0
8	☐	1.000		380523.97		P	1.0

89 Y (ISTD) [No Gas]

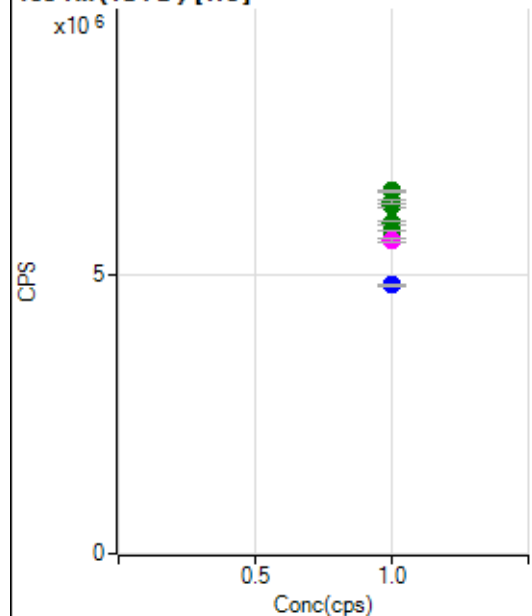
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		25852372.11		A	0.3
2	☐	1.000		26305781.83		A	1.4
3	☐	1.000		25176495.18		A	0.8
4	☐	1.000		25656550.45		A	0.8
5	☐	1.000		24403565.75		A	0.9
6	☐	1.000		24583136.02		A	1.0
7	☐	1.000		24397771.58		A	1.2
8	☐	1.000		22103366.61		A	0.1

89 Y (ISTD) [He]

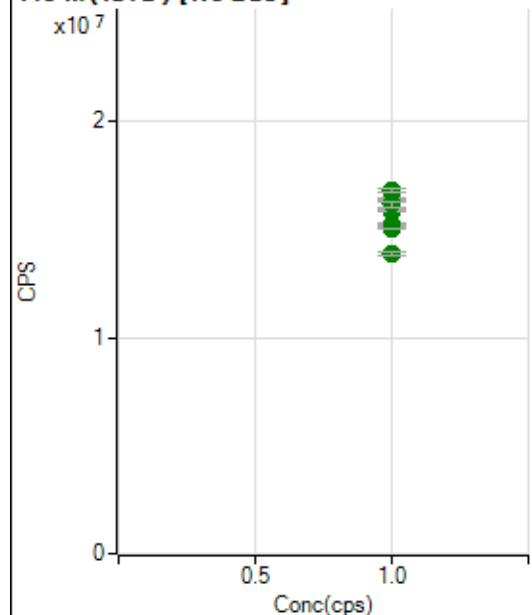
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2912267.66		P	0.5
2	☐	1.000		2885873.74		P	3.0
3	☐	1.000		2850407.18		P	0.9
4	☐	1.000		2924948.18		P	1.3
5	☐	1.000		2765804.75		P	0.6
6	☐	1.000		2762827.15		P	0.8
7	☐	1.000		2706748.53		P	0.6
8	☐	1.000		2580444.72		P	1.5

103 Rh (ISTD) [No Gas]

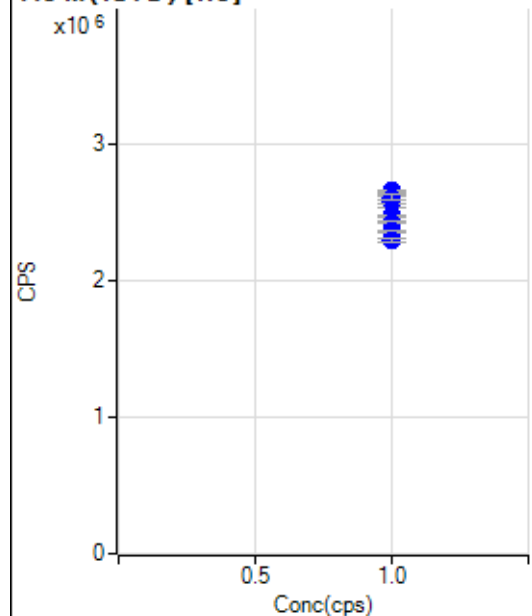
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		15111068.39		A	0.6
2	☐	1.000		15282460.47		A	2.2
3	☐	1.000		14414538.26		A	1.3
4	☐	1.000		14568497.70		A	0.7
5	☐	1.000		13781120.77		A	0.7
6	☐	1.000		13277442.72		A	0.9
7	☐	1.000		13036116.33		A	0.9
8	☐	1.000		10895603.87		A	0.4

103 Rh (ISTD) [He]

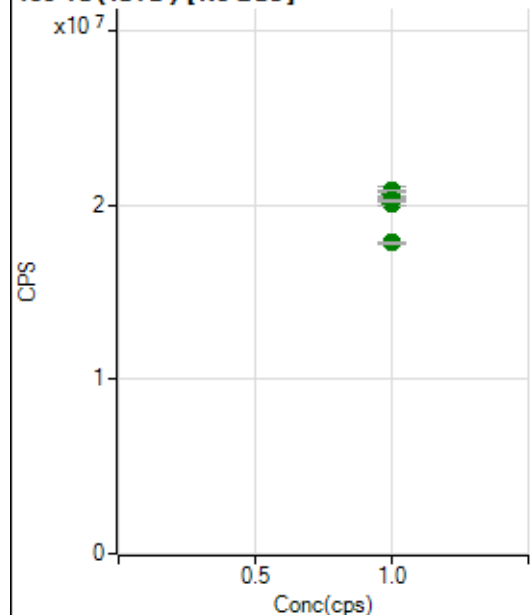
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6509967.05		A	0.2
2	☐	1.000		6287740.39		A	2.1
3	☐	1.000		6235204.56		A	1.1
4	☐	1.000		6323292.68		A	1.3
5	☐	1.000		5943962.83		A	0.9
6	☐	1.000		5797606.58		A	0.5
7	☐	1.000		5623422.76		M	0.7
8	☐	1.000		4825192.53		P	0.6

115 In (ISTD) [No Gas]

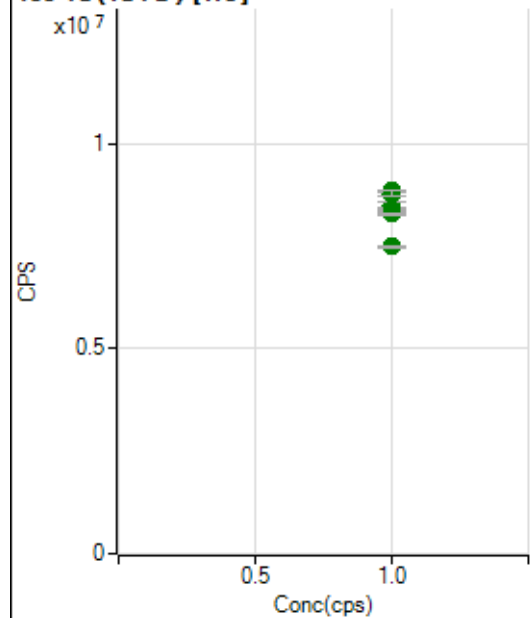
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16425868.73		A	0.7
2	☐	1.000		16772025.62		A	0.9
3	☐	1.000		15844555.13		A	0.7
4	☐	1.000		16161227.33		A	1.4
5	☐	1.000		15242544.16		A	0.8
6	☐	1.000		15191053.37		A	0.6
7	☐	1.000		15002595.65		A	0.3
8	☐	1.000		13891784.29		A	1.0

115 In (ISTD) [He]

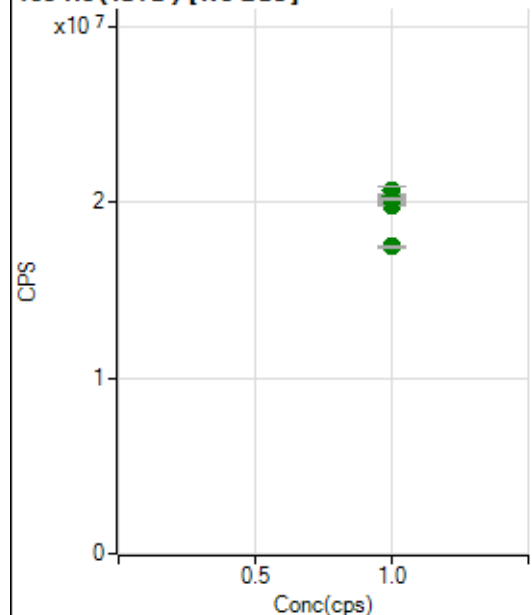
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2658686.53		P	0.6
2	☐	1.000		2580850.34		P	3.1
3	☐	1.000		2579656.50		P	0.8
4	☐	1.000		2613074.25		P	1.6
5	☐	1.000		2476007.13		P	0.3
6	☐	1.000		2428953.03		P	0.5
7	☐	1.000		2360495.81		P	1.1
8	☐	1.000		2296783.35		P	1.1

159 Tb (ISTD) [No Gas]

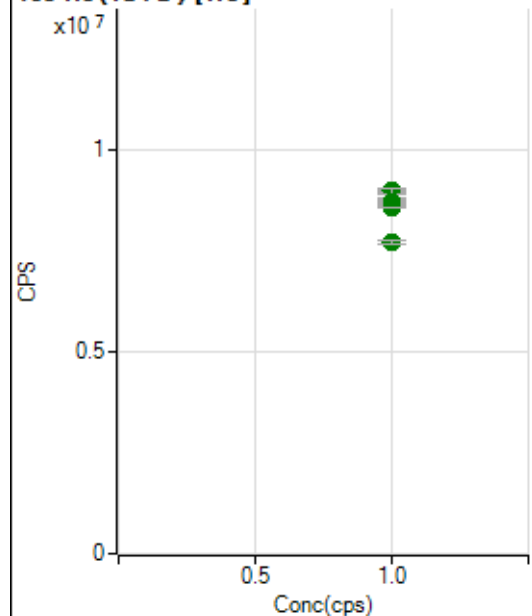
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20641083.17		A	1.1
2	☐	1.000		20734406.22		A	2.6
3	☐	1.000		20361082.06		A	0.5
4	☐	1.000		20791625.80		A	0.7
5	☐	1.000		20187249.42		A	0.4
6	☐	1.000		20054405.12		A	1.0
7	☐	1.000		20257892.20		A	0.4
8	☐	1.000		17802294.46		A	0.9

159 Tb (ISTD) [He]

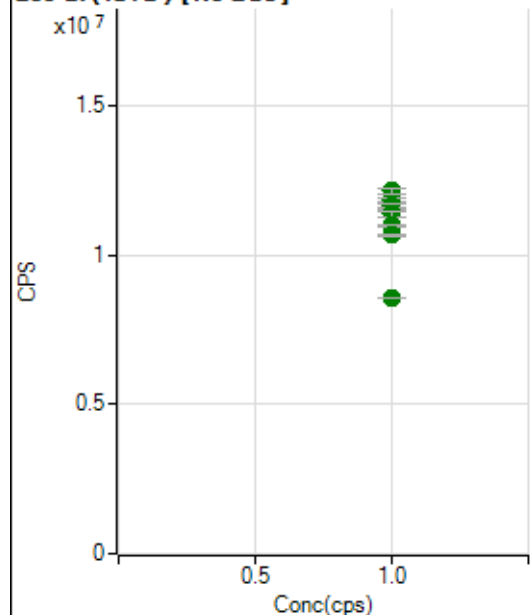
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8856388.20		A	0.9
2	☐	1.000		8514182.23		A	1.8
3	☐	1.000		8414174.60		A	1.3
4	☐	1.000		8783479.87		A	1.6
5	☐	1.000		8371219.32		A	0.5
6	☐	1.000		8401617.24		A	0.5
7	☐	1.000		8294970.36		A	0.6
8	☐	1.000		7490537.60		A	1.0

165 Ho (ISTD) [No Gas]

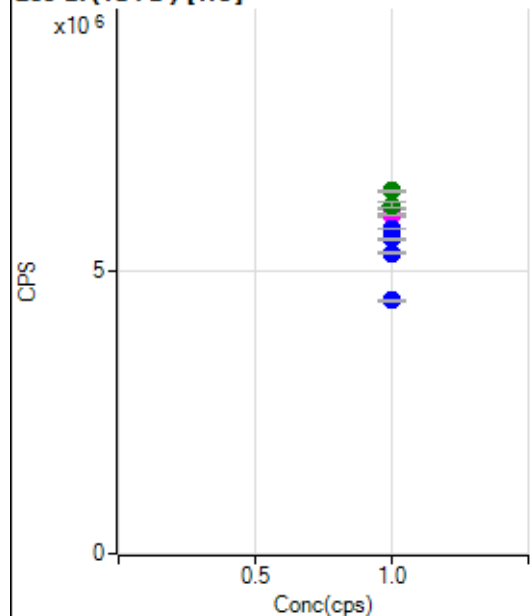
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20223044.84		A	0.5
2	☐	1.000		20648951.91		A	2.3
3	☐	1.000		20012414.70		A	0.3
4	☐	1.000		20376089.00		A	0.8
5	☐	1.000		19828318.59		A	0.3
6	☐	1.000		19874347.76		A	0.4
7	☐	1.000		20190370.81		A	0.3
8	☐	1.000		17509198.91		A	0.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8993680.21		A	0.7
2	☐	1.000		8698925.15		A	2.8
3	☐	1.000		8742770.22		A	0.6
4	☐	1.000		8998345.77		A	1.6
5	☐	1.000		8713844.66		A	0.6
6	☐	1.000		8657253.62		A	0.5
7	☐	1.000		8589197.51		A	0.4
8	☐	1.000		7748808.43		A	1.2

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11848522.46		A	1.0
2	☐	1.000		12142881.21		A	1.6
3	☐	1.000		11565456.63		A	0.5
4	☐	1.000		11648097.60		A	1.2
5	☐	1.000		11380085.25		A	1.5
6	☐	1.000		10983851.50		A	0.2
7	☐	1.000		10669664.36		A	0.5
8	☐	1.000		8558198.90		A	0.6

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6406845.18		A	0.3
2	☐	1.000		6019891.44		M	2.3
3	☐	1.000		5992456.65		M	1.1
4	☐	1.000		6155749.56		A	1.9
5	☐	1.000		5731845.02		P	0.3
6	☐	1.000		5559248.95		P	0.4
7	☐	1.000		5313568.36		P	0.5
8	☐	1.000		4478896.98		P	0.8

US EPA Tune Check Sample Report

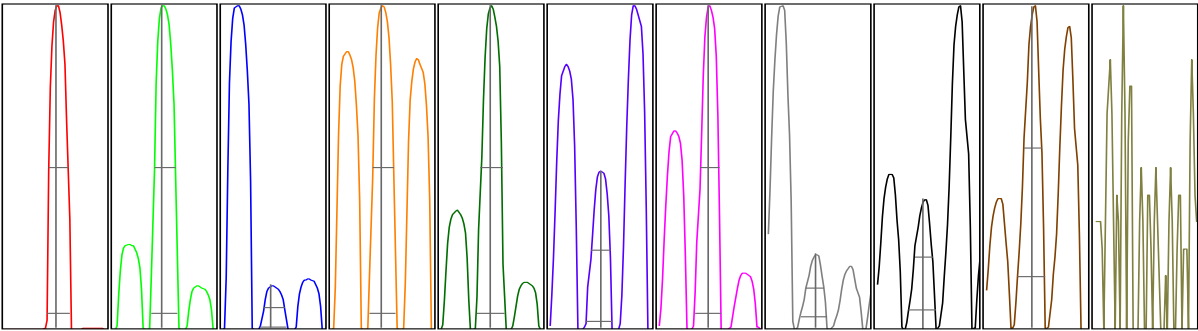
Batch Folder D:\ICP-MS Data\1\DATA\P7040120-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	18328	3.39	5.00	
24	229807	2.96	5.00	
25	30266	2.99	5.00	
26	35428	3.22	5.00	
59	118192	3.13	5.00	
113	21629	3.01	5.00	
115	70725	4.83	5.00	
206	27079	2.98	5.00	
207	24472	2.80	5.00	
208	56789	2.71	5.00	
220	0	44.61		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	18141	18365	18414	17494	19224
24	228279	230582	229666	220723	239783
25	30081	30449	30306	28978	31514
26	35221	35559	35526	33813	37018
59	117342	118577	118564	113056	123420
113	21714	21829	21759	20542	22303
115	74549	72327	70978	65313	70457
206	26992	27180	27299	25841	28083
207	24358	24694	24675	23389	25245
208	56611	57348	57170	54321	58496
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	33575	9.05	8.9 - 9.1		0.690	0.900	
24	378685	23.95	23.9 - 24.1		0.780	0.900	
25	50486	24.95	24.9 - 25.1		0.760	0.900	
26	58733	26.00	25.9 - 26.1		0.780	0.900	
59	200610	59.00	58.9 - 59.1		0.813	0.900	
113	38728	113.05	112.9 - 113.1		0.742	0.900	
115	129738	115.00	114.9 - 115.1		0.774	0.900	
206	50524	205.95	205.9 - 206.1		0.761	0.900	
207	42529	206.90	206.9 - 207.1		0.761	0.900	
208	105176	207.90	207.9 - 208.1		0.775	0.900	
220			-				

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 268 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	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		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.7	V	Deflect	12.0	V
Extract 2	-115.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-55	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	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	27208	0.67	
89	76363	0.71	
205	61281	0.43	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	27219	27119	26951	27396	27357
89	76361	75929	75740	77054	76730
205	61516	61153	60940	61573	61222

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	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		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.2	V	Deflect	1.0	V
Extract 2	-120.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-60	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	4.1	mL/min	OctP RF	190	V			