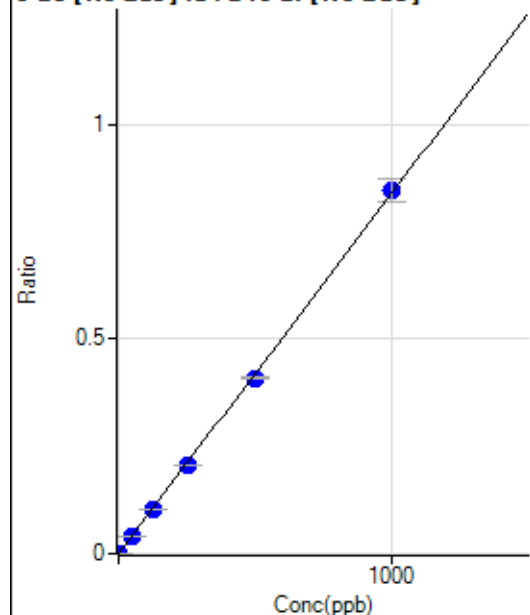


Calibration for 007CALS.d

Batch Folder: D:\ICP-MS Data\1\DATA\P7060920-MS.b\
 Analysis File: P7060920-MS.batch.bin
 DA Date-Time: 2020-06-09 15:09:18
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	S00	2020-06-09 13:22:30
2	006CALS.d	S02	2020-06-09 13:26:14
3	007CALS.d	S03	2020-06-09 13:30:52
4	008CALS.d	S04	2020-06-09 13:35:17
5	009CALS.d	S05	2020-06-09 13:39:07
6	010CALS.d	S06	2020-06-09 13:42:47
7	011CALS.d	S07	2020-06-09 13:46:23
8	012CALS.d	S08	2020-06-09 13:49:56

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	16.67	0.0000	P	66.6
2	☐	1.000	0.913	3128.18	0.0008	P	2.5
3	☐	50.000	49.598	170128.02	0.0416	P	0.8
4	☐	125.000	121.899	409975.67	0.1023	P	0.6
5	☐	250.000	244.162	794252.04	0.2049	P	0.6
6	☐	500.000	488.625	1615457.89	0.4100	P	0.7
7	☐	1000.000	1007.555	3165467.23	0.8455	P	6.5
8	☐			666.70	0.0002	P	6.6

$$y = 8.3915\text{E-}004 * x + 3.9260\text{E-}006$$

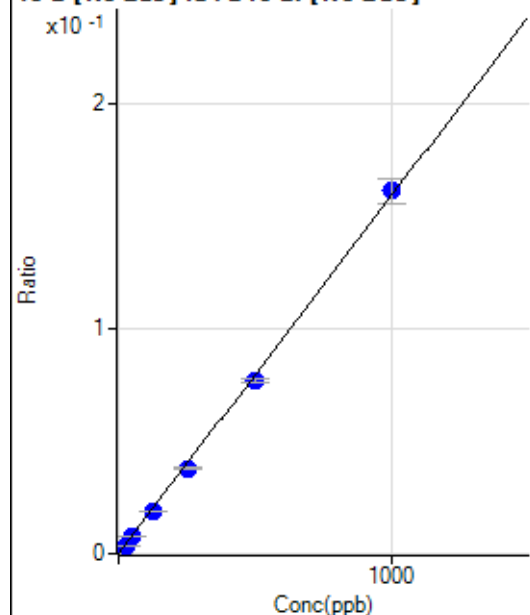
$$R = 0.9999$$

$$DL = 0.009344$$

$$BEC = 0.004678$$

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	497.25	0.0001	P	6.9
2	☐	25.000	22.733	15169.30	0.0037	P	3.9
3	☐	50.000	49.787	32856.01	0.0080	P	1.6
4	☐	125.000	119.368	76589.15	0.0191	P	1.2
5	☐	250.000	237.896	147185.81	0.0380	P	2.2
6	☐	500.000	481.003	301954.52	0.0767	P	2.2
7	☐	1000.000	1013.296	603936.49	0.1613	P	7.0
8	☐			21299.03	0.0062	P	4.9

$$y = 1.5911\text{E-}004 * x + 1.1731\text{E-}004$$

$$R = 0.9997$$

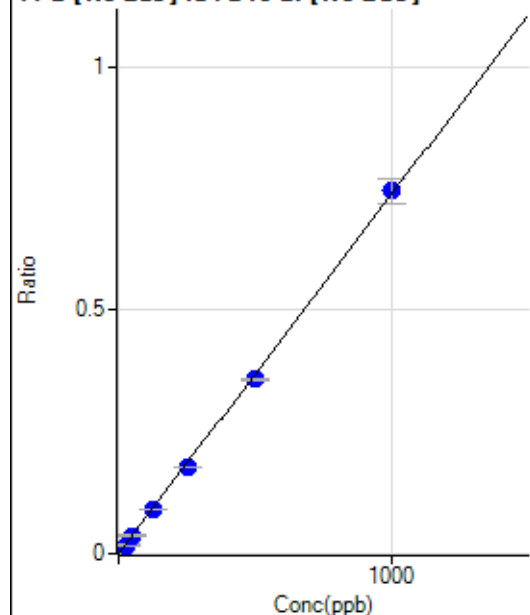
$$DL = 0.1533$$

$$BEC = 0.7373$$

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	1958.55	0.0005	P	3.6
2	☐	25.000	23.417	71986.65	0.0177	P	2.1
3	☐	50.000	49.941	152354.70	0.0373	P	1.9
4	☐	125.000	121.560	360981.12	0.0901	P	0.6
5	☐	250.000	240.718	689660.13	0.1779	P	1.0
6	☐	500.000	485.680	1412325.99	0.3585	P	1.2
7	☐	1000.000	1009.953	2788762.43	0.7450	P	6.7
8	☐			98868.37	0.0286	P	5.3

$$y = 7.3718\text{E-}004 * x + 4.6199\text{E-}004$$

$$R = 0.9998$$

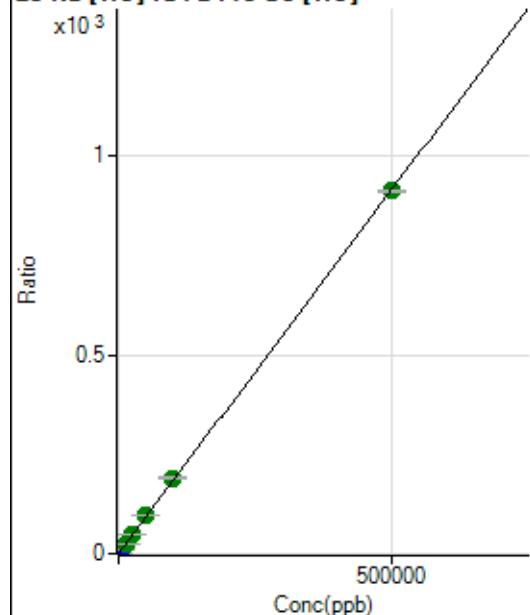
$$DL = 0.0682$$

$$BEC = 0.6267$$

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	15398.87	0.0496	P	0.4
2	☐	500.000	538.922	326947.51	1.0347	P	0.6
3	☐	5000.000	5632.111	3232132.97	10.3450	P	1.3
4	☐	12500.000	13447.635	7794772.12	24.6317	A	0.8
5	☐	25000.000	26399.409	15383667.09	48.3073	A	1.5
6	☐	50000.000	53212.637	30718461.29	97.3215	A	1.0
7	☐	100000.00	104282.27	62541048.38	190.6761	A	0.4
8	☐	500000.00	498722.25	275221306.6	911.7066	A	0.3

$$y = 0.0018 * x + 0.0496$$

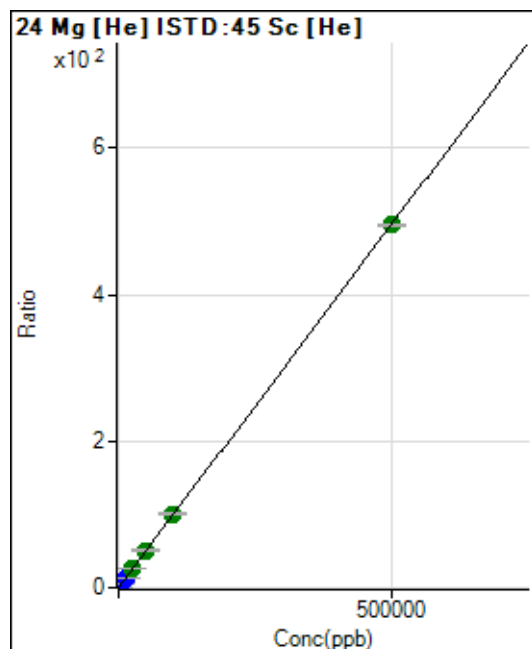
$$R = 1.0000$$

$$DL = 0.3516$$

$$BEC = 27.12$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	519.91	0.0017	P	1.3
2	☐	500.000	525.148	165046.39	0.5223	P	0.4
3	☐	5000.000	5555.657	1721506.08	5.5099	P	1.1
4	☐	12500.000	13311.671	4177082.36	13.1996	P	0.1
5	☐	25000.000	26223.757	8280463.13	26.0014	A	1.2
6	☐	50000.000	51618.371	16153894.68	51.1790	A	1.2
7	☐	100000.00	101509.71	33011423.95	100.6441	A	1.1
8	☐	500000.00	499449.16	149483291.7	495.1835	A	0.5

$$y = 9.9146\text{E-}004 * x + 0.0017$$

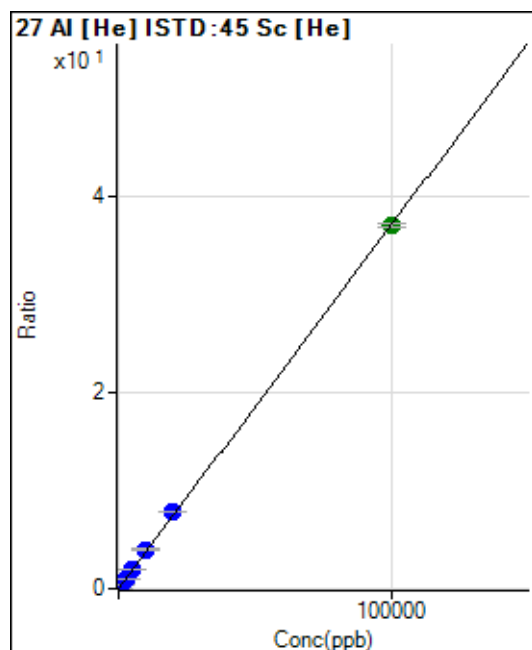
R = 1.0000

DL = 0.06454

BEC = 1.688

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	103.98	0.0003	P	3.2
2	☐	20.000	21.106	2583.06	0.0082	P	3.9
3	☐	1000.000	1130.044	131261.31	0.4201	P	0.7
4	☐	2500.000	2746.422	322936.07	1.0205	P	0.4
5	☐	5000.000	5435.298	643075.74	2.0193	P	0.8
6	☐	10000.000	10803.798	1266830.86	4.0134	P	0.6
7	☐	20000.000	21166.755	2578925.73	7.8627	P	0.5
8	☐	100000.00	99657.043	11174296.44	37.0178	A	1.0

$$y = 3.7145\text{E-}004 * x + 3.3470\text{E-}004$$

R = 0.9999

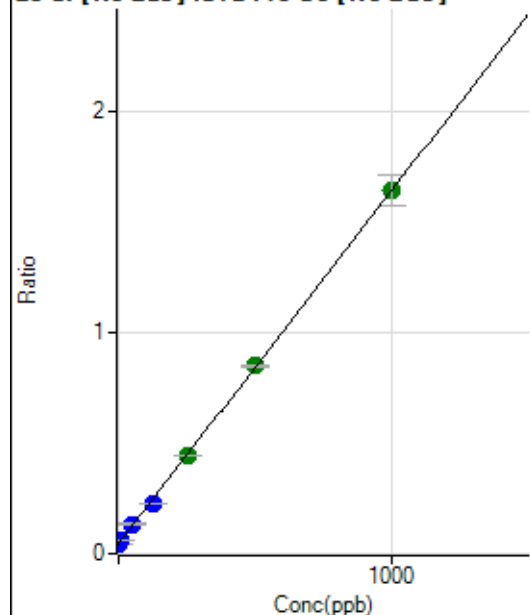
DL = 0.08555

BEC = 0.9011

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	429744.34	0.0453	P	1.1
2	☐	10.000	9.383	537939.61	0.0602	P	0.5
3	☐	50.000	55.401	1214140.57	0.1335	P	1.8
4	☐	125.000	112.858	2026481.73	0.2251	P	1.7
5	☐	250.000	247.792	3884641.71	0.4401	A	0.5
6	☐	500.000	504.620	7761635.16	0.8492	A	1.0
7	☐	1000.000	999.496	14694945.64	1.6377	A	8.3
8	☐			1127078.69	0.1342	P	0.2

$$y = 0.0016 * x + 0.0453$$

$$R = 0.9999$$

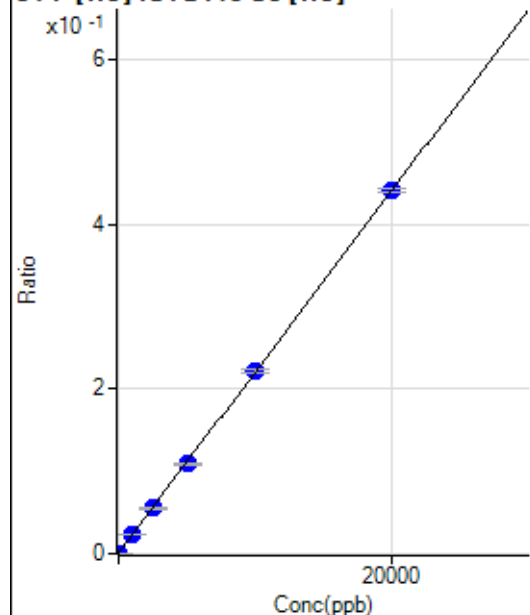
$$DL = 0.9491$$

$$BEC = 28.42$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-4.492	244.46	0.0008	P	17.4
2	☐	0.000	4.492	311.13	0.0010	P	14.9
3	☐	1000.000	983.105	7024.15	0.0225	P	1.2
4	☐	2500.000	2465.645	17419.11	0.0550	P	1.6
5	☐	5000.000	4911.995	34641.36	0.1088	P	2.7
6	☐	10000.000	10052.760	69978.45	0.2217	P	1.4
7	☐	20000.000	20000.760	144382.27	0.4402	P	1.2
8	☐			313.91	0.0010	P	16.7

$$y = 2.1965E-005 * x + 8.8617E-004$$

$$R = 1.0000$$

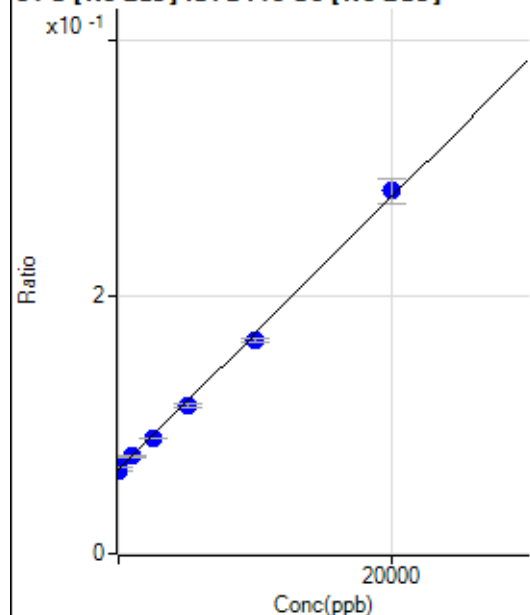
$$DL = 19.4$$

$$BEC = 40.34$$

Weight: <None>

Min Conc: 0

34 S [No Gas] ISTD:45 Sc [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-155.775	607682.27	0.0640	P	0.8
2	☐	0.000	155.775	601384.12	0.0673	P	0.1
3	☐	1000.000	932.595	687156.13	0.0756	P	0.6
4	☐	2500.000	2233.381	804794.93	0.0894	P	0.3
5	☐	5000.000	4659.861	1016314.05	0.1151	P	1.5
6	☐	10000.000	9433.902	1515641.35	0.1658	P	1.2
7	☐	20000.000	20404.781	2534761.93	0.2823	P	7.1
8	☐			527782.39	0.0628	P	1.4

$$y = 1.0618\text{E-}005 * x + 0.0657$$

R = 0.9992

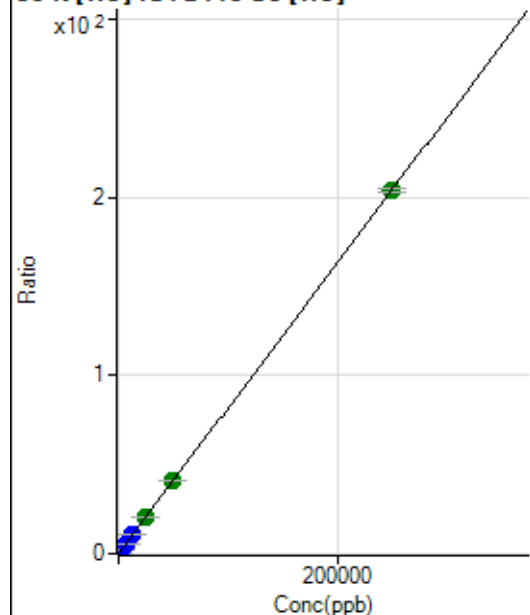
DL = 76.62

BEC = 6185

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22798.32	0.0734	P	0.9
2	☐	500.000	499.511	151917.37	0.4808	P	0.4
3	☐	2500.000	2622.624	691208.84	2.2123	P	1.4
4	☐	6250.000	6353.590	1663049.48	5.2552	P	0.1
5	☐	12500.000	12768.046	3339664.50	10.4866	P	0.9
6	☐	25000.000	25441.958	6572990.60	20.8231	A	0.9
7	☐	50000.000	50162.821	13442585.20	40.9847	A	1.5
8	☐	250000.00	249906.02	61546917.91	203.8895	A	1.1

$$y = 8.1557\text{E-}004 * x + 0.0734$$

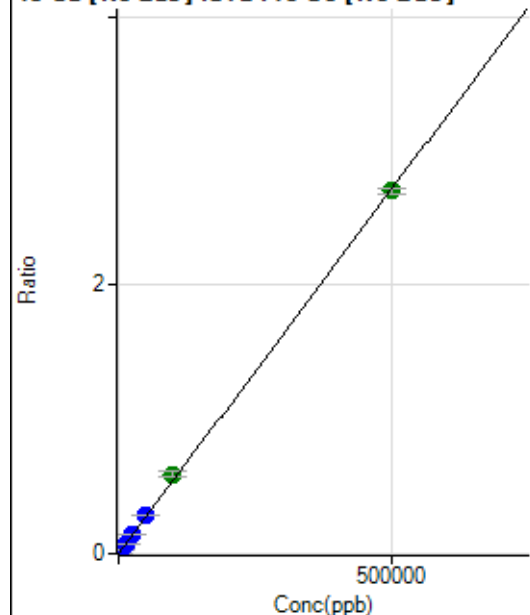
R = 1.0000

DL = 2.334

BEC = 90

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	308.61	0.0000	P	9.7
2	☐	500.000	509.082	24978.07	0.0028	P	1.0
3	☐	5000.000	5376.650	265698.21	0.0292	P	0.5
4	☐	12500.000	13305.988	650677.42	0.0723	P	1.0
5	☐	25000.000	26506.791	1270470.01	0.1439	P	0.9
6	☐	50000.000	52853.842	2622794.62	0.2870	P	0.3
7	☐	100000.00	108522.14	5288258.80	0.5892	A	7.8
8	☐	500000.00	497910.92	22701294.49	2.7032	A	1.3

$$y = 5.4289\text{E-}006 * x + 3.2543\text{E-}005$$

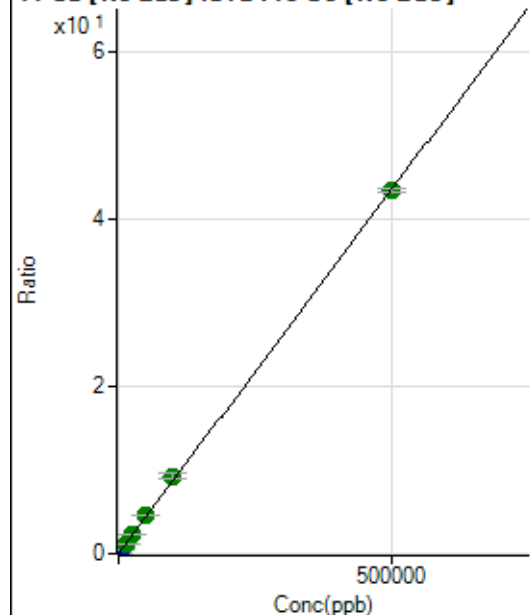
$$R = 0.9998$$

$$DL = 1.74$$

$$BEC = 5.994$$

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	26182.64	0.0028	P	2.2
2	☐	500.000	514.390	424495.42	0.0475	P	0.8
3	☐	5000.000	5359.762	4266225.36	0.4692	P	0.7
4	☐	12500.000	12906.083	10137445.34	1.1259	A	0.9
5	☐	25000.000	25820.671	19857034.77	2.2499	A	1.8
6	☐	50000.000	51886.342	41295290.57	4.5183	A	0.3
7	☐	100000.00	106816.94	83474143.74	9.2988	A	7.4
8	☐	500000.00	498393.18	364291628.2	43.3768	A	0.9

$$y = 8.7028\text{E-}005 * x + 0.0028$$

$$R = 0.9999$$

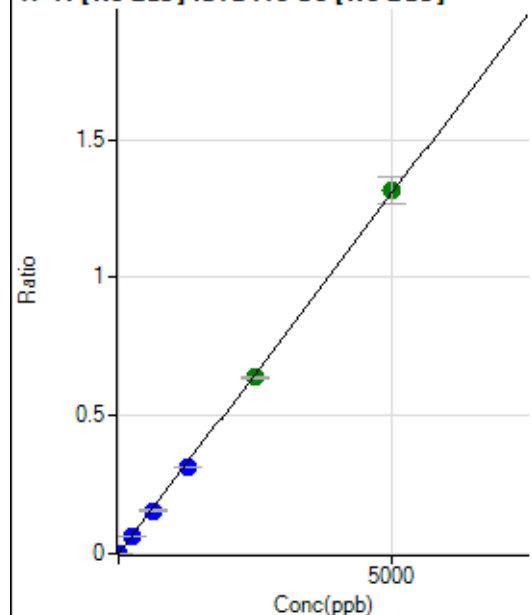
$$DL = 2.047$$

$$BEC = 31.7$$

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	227.79	0.0000	P	9.1
2	☐	5.000	4.693	11135.19	0.0012	P	4.2
3	☐	250.000	244.994	580594.73	0.0639	P	0.9
4	☐	625.000	599.167	1405755.46	0.1561	P	0.8
5	☐	1250.000	1202.541	2765620.44	0.3133	P	1.4
6	☐	2500.000	2446.857	5826816.06	0.6375	A	0.6
7	☐	5000.000	5041.916	11792200.87	1.3137	A	7.5
8	☐			4314.70	0.0005	P	3.4

$$y = 2.6055E-004 * x + 2.4019E-005$$

$$R = 0.9999$$

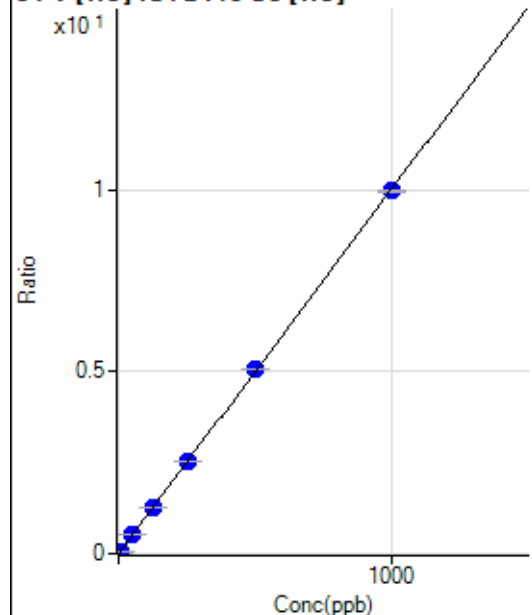
$$DL = 0.02516$$

$$BEC = 0.09219$$

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	11.11	0.0000	P	62.7
2	☐	5.000	5.001	15835.32	0.0501	P	0.9
3	☐	50.000	50.872	159170.32	0.5094	P	1.0
4	☐	125.000	126.732	401596.15	1.2691	P	0.3
5	☐	250.000	252.031	803720.60	2.5237	P	1.0
6	☐	500.000	506.923	1602256.12	5.0761	P	0.5
7	☐	1000.000	995.771	3270447.00	9.9711	P	0.8
8	☐			912.27	0.0030	P	13.9

$$y = 0.0100 * x + 3.5788E-005$$

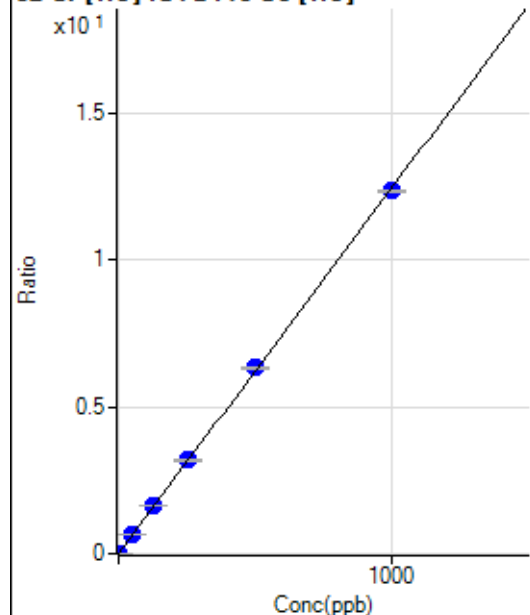
$$R = 1.0000$$

$$DL = 0.006724$$

$$BEC = 0.003574$$

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	614.47	0.0020	P	6.0
2	☐	2.000	2.089	8831.67	0.0280	P	0.9
3	☐	50.000	52.948	206221.98	0.6601	P	1.9
4	☐	125.000	130.095	512353.12	1.6190	P	0.2
5	☐	250.000	256.267	1015008.42	3.1873	P	1.7
6	☐	500.000	509.137	1998155.37	6.3305	P	1.2
7	☐	1000.000	993.080	4049353.62	12.3458	P	0.8
8	☐			60374.31	0.2000	P	1.7

$$y = 0.0124 * x + 0.0020$$

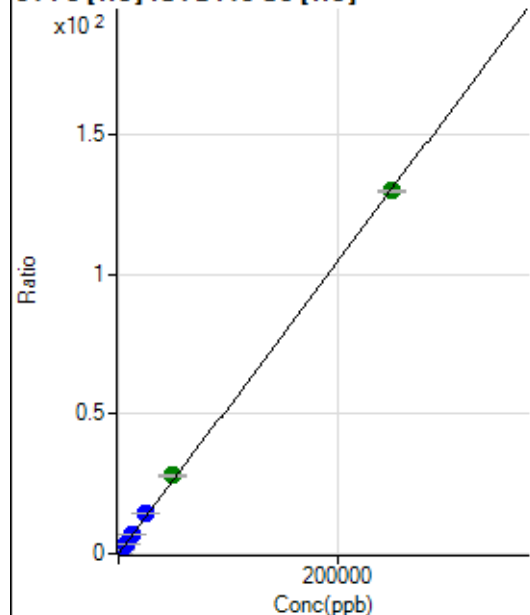
$$R = 0.9999$$

$$DL = 0.02847$$

$$BEC = 0.1592$$

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	678.56	0.0022	P	1.5
2	☐	50.000	56.670	10038.15	0.0318	P	2.5
3	☐	2500.000	2857.932	466817.19	1.4942	P	1.4
4	☐	6250.000	7018.477	1160162.20	3.6662	P	0.4
5	☐	12500.000	13672.640	2273794.60	7.1400	P	1.2
6	☐	25000.000	27226.195	4487070.81	14.2156	P	0.9
7	☐	50000.000	53476.436	9157446.96	27.9194	A	0.5
8	☐	250000.00	249000.66	39242271.24	129.9924	A	0.7

$$y = 5.2205E-004 * x + 0.0022$$

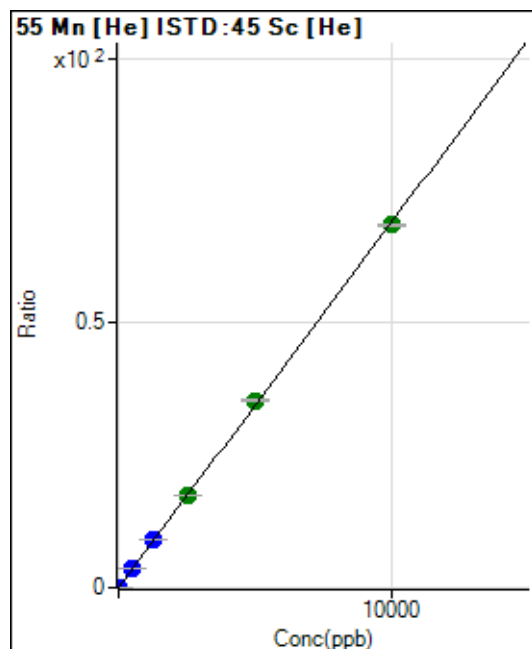
$$R = 0.9999$$

$$DL = 0.1842$$

$$BEC = 4.184$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	96.67	0.0003	P	14.6
2	☐	1.000	1.036	2358.00	0.0075	P	2.2
3	☐	500.000	525.394	1133093.07	3.6267	P	1.3
4	☐	1250.000	1295.261	2829258.50	8.9405	P	0.4
5	☐	2500.000	2521.334	5542165.75	17.4030	A	1.3
6	☐	5000.000	5113.851	11141309.42	35.2971	A	0.8
7	☐	10000.000	9930.814	22482324.67	68.5447	A	0.8
8	☐			18864.51	0.0625	P	1.6

$$y = 0.0069 * x + 3.1106E-004$$

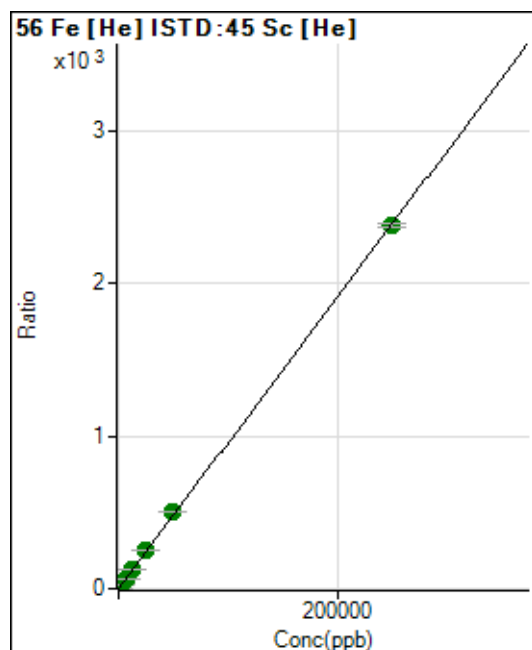
$$R = 0.9999$$

$$DL = 0.01971$$

$$BEC = 0.04507$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6668.91	0.0215	P	1.7
2	☐	50.000	54.920	172431.86	0.5457	P	0.3
3	☐	2500.000	2758.284	8233012.71	26.3505	A	1.1
4	☐	6250.000	6791.628	20521457.69	64.8505	A	1.4
5	☐	12500.000	13382.647	40687560.47	127.7647	A	1.5
6	☐	25000.000	26810.911	80784307.79	255.9433	A	1.3
7	☐	50000.000	52645.163	164829677.9	502.5426	A	1.4
8	☐	250000.00	249229.62	718195499.7	2,379.027	A	0.9

$$y = 0.0095 * x + 0.0215$$

$$R = 0.9999$$

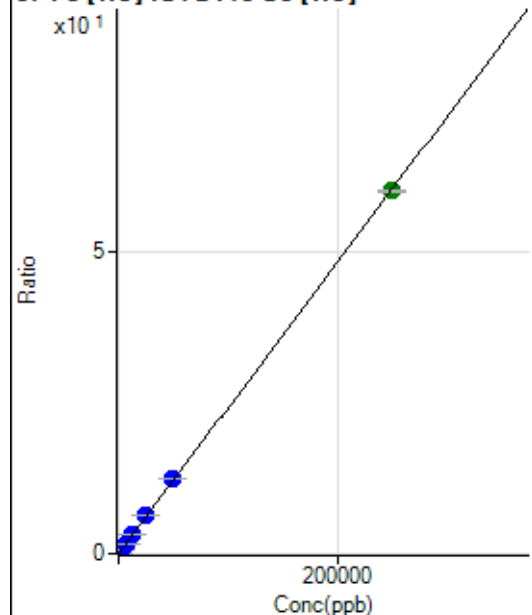
$$DL = 0.1124$$

$$BEC = 2.249$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	237.29	0.0008	P	6.3
2	☐	50.000	55.209	4449.82	0.0141	P	2.5
3	☐	2500.000	2774.378	209363.28	0.6701	P	1.0
4	☐	6250.000	6862.272	524130.23	1.6563	P	0.3
5	☐	12500.000	13386.521	1028721.24	3.2302	P	0.9
6	☐	25000.000	26684.344	2032223.92	6.4383	P	0.6
7	☐	50000.000	51653.606	4087476.58	12.4621	P	0.8
8	☐	250000.00	249438.46	18165334.83	60.1771	A	0.7

$$y = 2.4125E-004 * x + 7.6381E-004$$

$$R = 1.0000$$

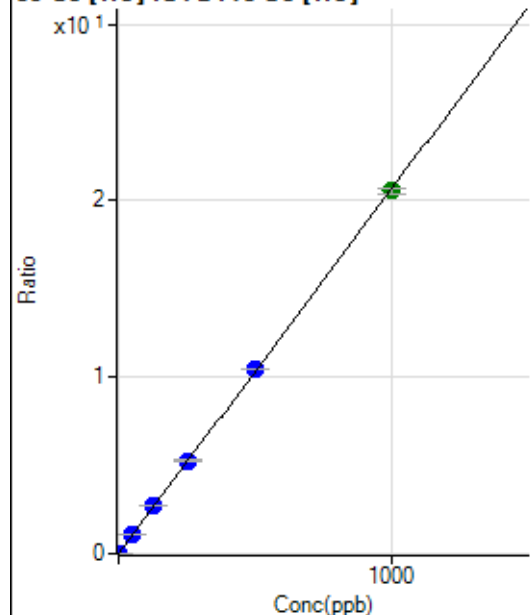
$$DL = 0.6029$$

$$BEC = 3.166$$

Weight: <None>

Min Conc: 0

59 Co [He] ISTD:45 Sc [He]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	43.33	0.0001	P	38.0
2	☐	1.000	1.050	6896.16	0.0218	P	0.4
3	☐	50.000	53.241	343678.30	1.0999	P	0.7
4	☐	125.000	130.373	852251.13	2.6932	P	0.5
5	☐	250.000	254.892	1676776.87	5.2653	P	1.2
6	☐	500.000	505.977	3299235.06	10.4518	P	0.9
7	☐	1000.000	994.955	6740911.57	20.5522	A	1.8
8	☐			10791.89	0.0358	P	0.9

$$y = 0.0207 * x + 1.3938E-004$$

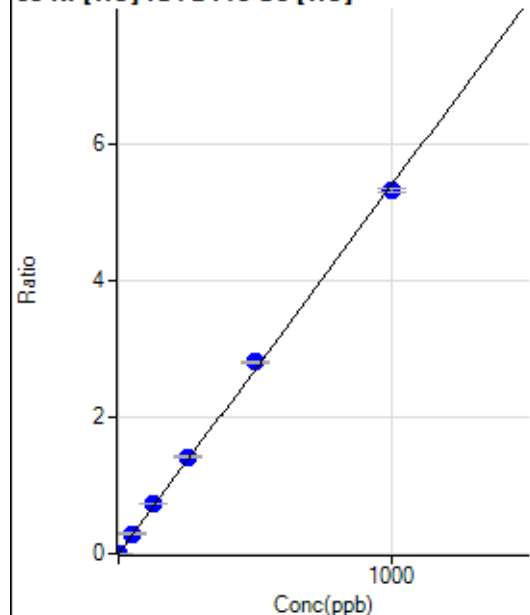
$$R = 1.0000$$

$$DL = 0.007692$$

$$BEC = 0.006747$$

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	72.22	0.0002	P	20.7
2	☐	1.000	1.100	1951.27	0.0062	P	3.8
3	☐	50.000	54.544	92113.87	0.2948	P	1.1
4	☐	125.000	134.260	229542.41	0.7254	P	0.7
5	☐	250.000	262.611	451767.99	1.4186	P	1.0
6	☐	500.000	521.306	888773.91	2.8158	P	0.9
7	☐	1000.000	984.810	1744639.16	5.3191	P	0.9
8	☐			16680.79	0.0553	P	0.7

$$y = 0.0054 * x + 2.3231E-004$$

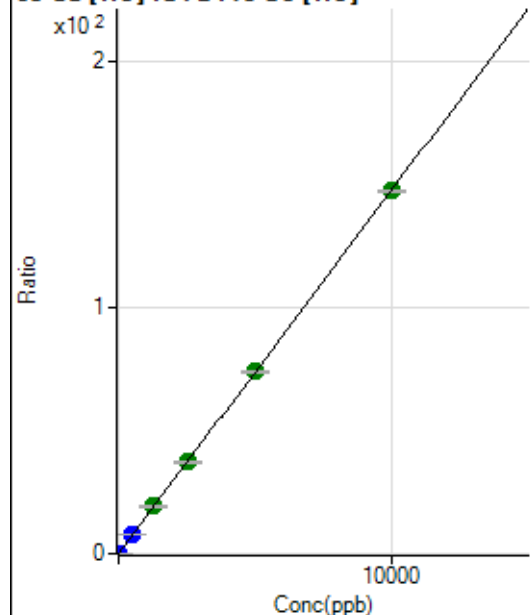
$$R = 0.9996$$

$$DL = 0.02666$$

$$BEC = 0.04301$$

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	428.90	0.0014	P	17.1
2	☐	2.000	2.422	11721.53	0.0371	P	1.6
3	☐	500.000	534.001	2460707.32	7.8760	P	1.4
4	☐	1250.000	1298.317	6059056.92	19.1470	A	1.1
5	☐	2500.000	2520.413	11835944.69	37.1686	A	2.2
6	☐	5000.000	5011.456	23326960.48	73.9028	A	0.8
7	☐	10000.000	9981.429	48278263.17	147.1925	A	0.7
8	☐			11603.65	0.0384	P	2.8

$$y = 0.0147 * x + 0.0014$$

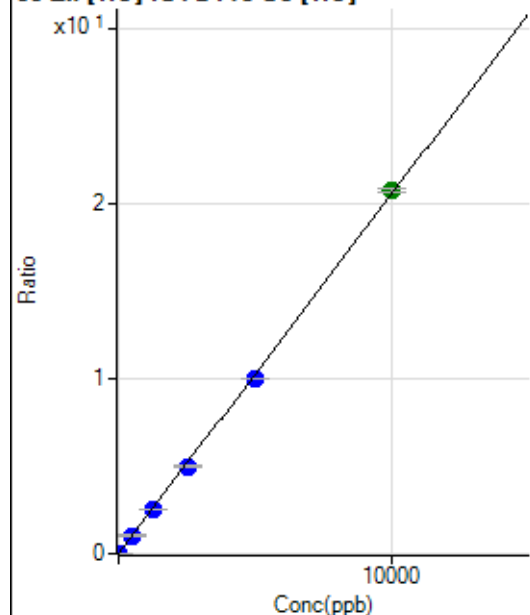
$$R = 1.0000$$

$$DL = 0.04815$$

$$BEC = 0.09369$$

Weight: <None>

Min Conc: 0

66 Zn [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	284.45	0.0009	P	6.1
2	☐	2.000	2.000	1590.11	0.0050	P	2.6
3	☐	500.000	505.469	325337.82	1.0413	P	1.1
4	☐	1250.000	1229.941	801380.30	2.5324	P	0.6
5	☐	2500.000	2431.085	1593733.67	5.0046	P	1.4
6	☐	5000.000	4861.648	3158808.80	10.0072	P	0.3
7	☐	10000.000	10088.639	6810942.47	20.7653	A	0.9
8	☐			33334.83	0.1104	P	0.6

$$y = 0.0021 * x + 9.1555E-004$$

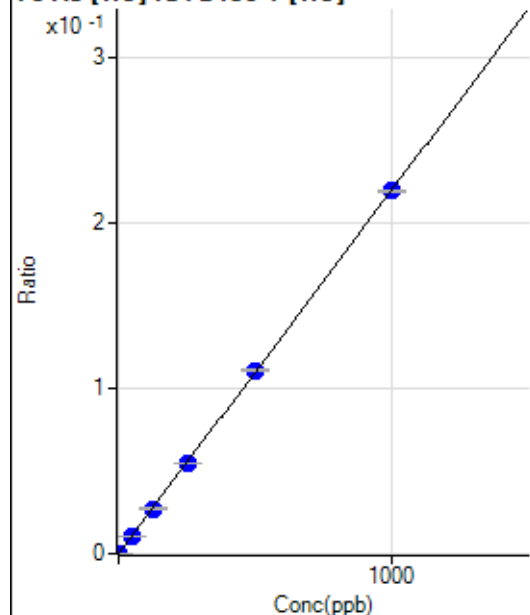
$$R = 0.9998$$

$$DL = 0.08198$$

$$BEC = 0.4448$$

Weight: <None>

Min Conc: 0

75 As [He] ISTD:89 Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	6.17	0.0000	P	62.1
2	☐	1.000	0.925	351.86	0.0002	P	2.3
3	☐	50.000	49.813	18553.89	0.0109	P	1.1
4	☐	125.000	123.889	46829.41	0.0272	P	1.8
5	☐	250.000	247.996	93859.44	0.0545	P	1.0
6	☐	500.000	503.451	190157.88	0.1105	P	1.1
7	☐	1000.000	998.924	385479.23	0.2193	P	0.4
8	☐			159.88	0.0001	P	8.8

$$y = 2.1958E-004 * x + 3.6813E-006$$

$$R = 1.0000$$

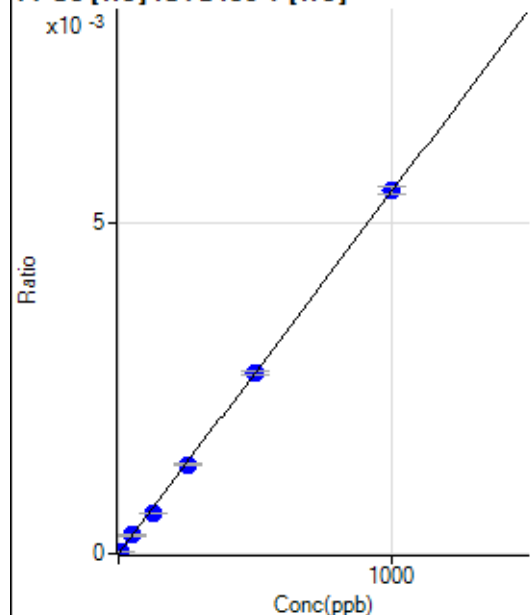
$$DL = 0.03121$$

$$BEC = 0.01677$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	4.893	45.56	0.0000	P	21.4
3	☐	50.000	50.859	471.13	0.0003	P	4.4
4	☐	125.000	111.447	1047.83	0.0006	P	4.5
5	☐	250.000	246.179	2318.00	0.0013	P	3.2
6	☐	500.000	500.546	4704.17	0.0027	P	1.5
7	☐	1000.000	1002.334	9621.11	0.0055	P	2.1
8	☐			2.22	0.0000	P	173.

$$y = 5.4622\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

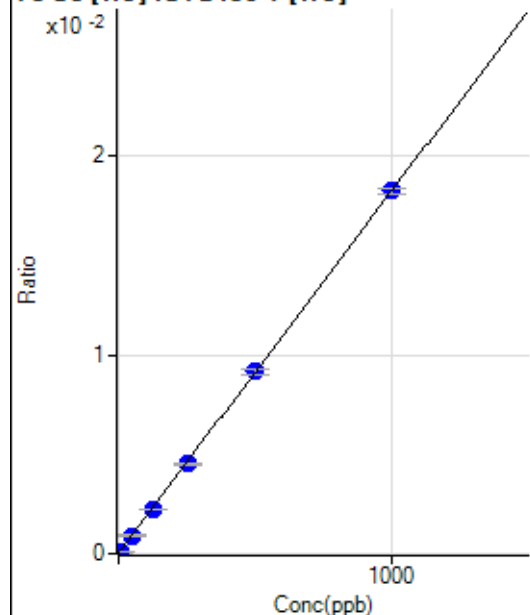
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	57.41	0.0000	P	25.1
2	☐	5.000	4.795	206.80	0.0001	P	6.1
3	☐	50.000	47.920	1535.90	0.0009	P	3.4
4	☐	125.000	119.580	3802.38	0.0022	P	1.4
5	☐	250.000	245.923	7768.18	0.0045	P	1.1
6	☐	500.000	501.087	15738.87	0.0091	P	2.4
7	☐	1000.000	1001.258	32062.56	0.0182	P	1.4
8	☐			67.29	0.0000	P	27.4

$$y = 1.8187\text{E-}005 * x + 3.4284\text{E-}005$$

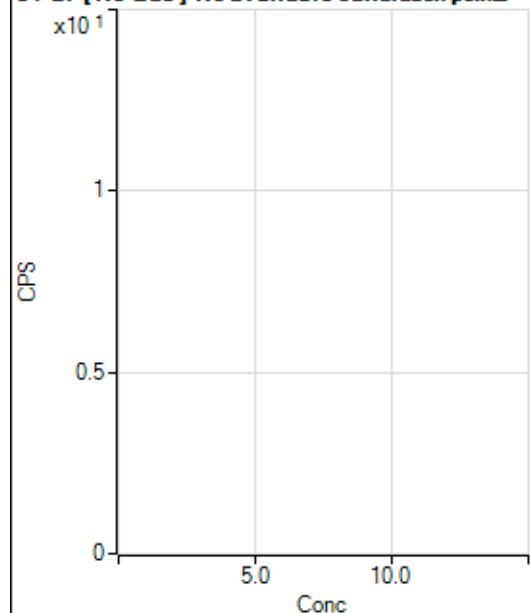
$$R = 1.0000$$

$$DL = 1.42$$

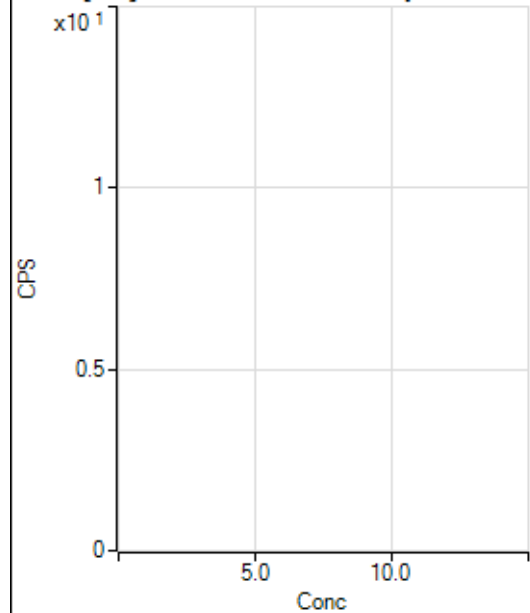
$$BEC = 1.885$$

Weight: <None>

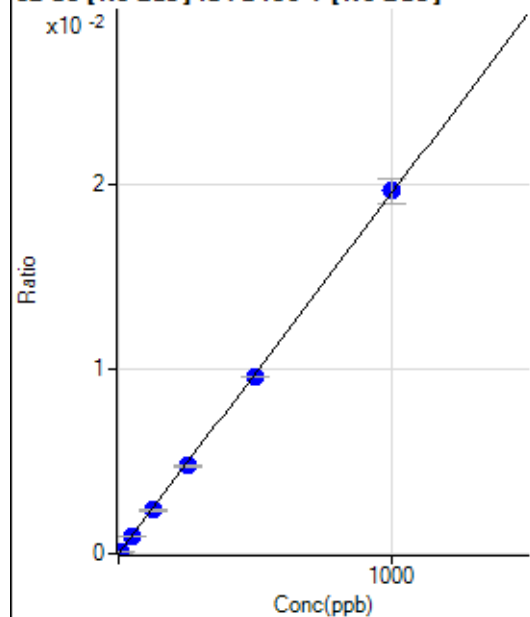
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			50690.92		P	2.5
2	☐			49244.74		P	2.2
3	☐			49686.63		P	2.2
4	☐			49776.82		P	0.6
5	☐			48695.57		P	2.0
6	☐			51190.09		P	1.2
7	☐			53423.42		P	1.9
8	☐			51216.87		P	1.1

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			86.76		P	35.3
2	☐			63.40		P	74.6
3	☐			106.78		P	43.3
4	☐			73.41		P	20.8
5	☐			80.09		P	0.0
6	☐			76.75		P	49.4
7	☐			70.07		P	24.8
8	☐			110.12		P	41.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	29.13	0.0000	P	19.2
2	☐	5.000	4.867	1552.57	0.0001	P	4.0
3	☐	50.000	49.081	15630.16	0.0010	P	0.9
4	☐	125.000	120.174	38460.83	0.0023	P	1.7
5	☐	250.000	243.596	76312.20	0.0047	P	0.9
6	☐	500.000	490.527	159357.87	0.0096	P	0.3
7	☐	1000.000	1006.987	324043.60	0.0196	P	6.9
8	☐			346.40	0.0000	P	11.5

$$y = 1.9492E-005 * x + 1.6271E-006$$

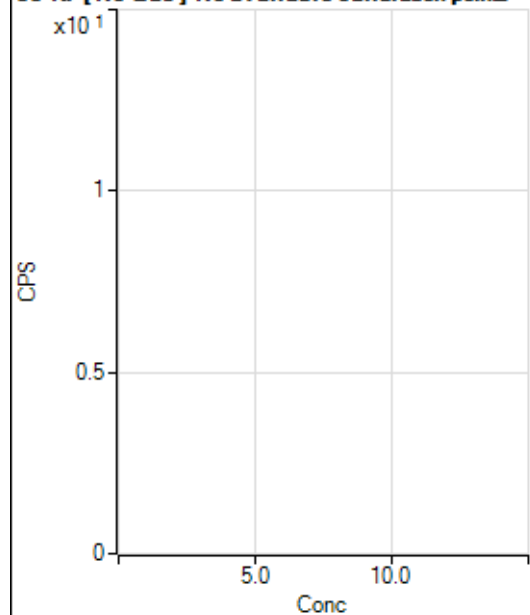
$$R = 0.9999$$

$$DL = 0.04808$$

$$BEC = 0.08348$$

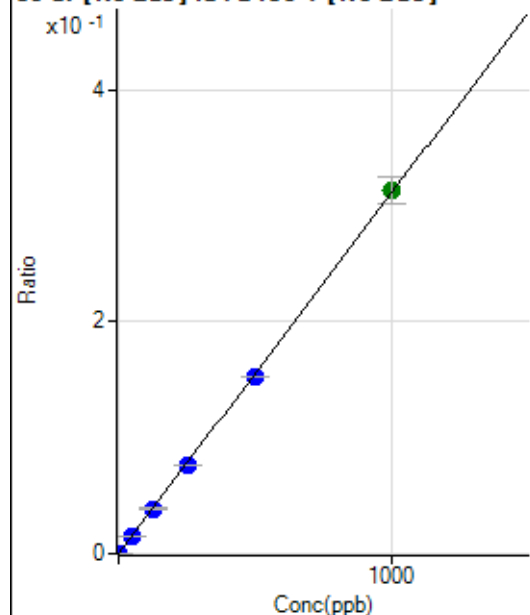
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			551.13		P	6.5
2	☐			497.80		P	5.1
3	☐			545.57		P	2.0
4	☐			488.91		P	12.6
5	☐			515.57		P	6.7
6	☐			493.35		P	10.2
7	☐			530.02		P	10.5
8	☐			543.35		P	1.6

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	788.94	0.0000	P	9.7
2	☐	1.000	1.000	5712.49	0.0004	P	4.8
3	☐	50.000	50.411	256507.03	0.0157	P	0.3
4	☐	125.000	125.031	638928.15	0.0389	P	0.7
5	☐	250.000	246.105	1230805.68	0.0766	P	0.6
6	☐	500.000	491.137	2546668.16	0.1528	P	0.7
7	☐	1000.000	1005.381	5161872.21	0.3128	A	7.6
8	☐			26344.51	0.0017	P	0.7

$$y = 3.1107\text{E-}004 * x + 4.4038\text{E-}005$$

$$R = 0.9999$$

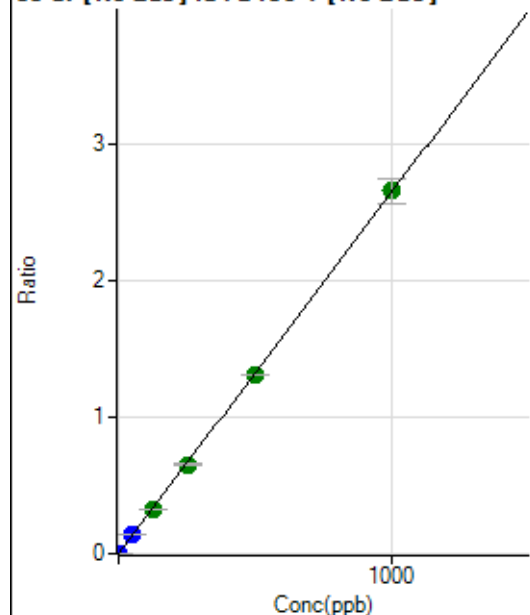
$$DL = 0.04113$$

$$BEC = 0.1416$$

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	372.24	0.0000	P	24.0
2	☐	1.000	0.998	42820.55	0.0027	P	0.3
3	☐	50.000	50.858	2196149.79	0.1346	P	0.7
4	☐	125.000	124.315	5399988.79	0.3291	A	0.3
5	☐	250.000	246.292	10475468.46	0.6519	A	1.5
6	☐	500.000	494.540	21813959.52	1.3090	A	0.5
7	☐	1000.000	1003.700	43853166.26	2.6567	A	7.1
8	☐			221564.55	0.0144	P	0.3

$$y = 0.0026 * x + 2.0787\text{E-}005$$

$$R = 1.0000$$

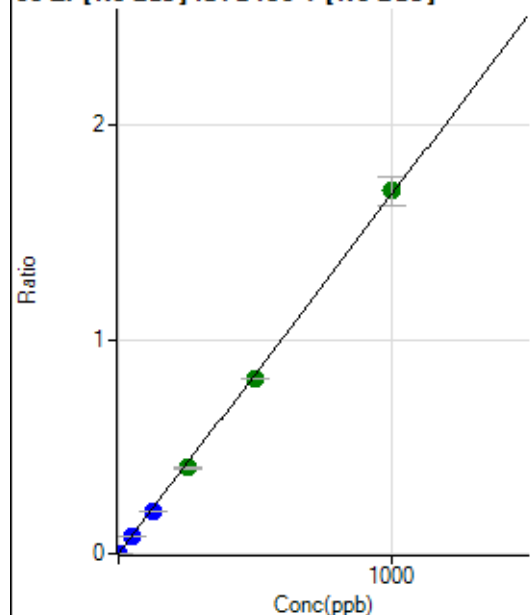
$$DL = 0.005643$$

$$BEC = 0.007853$$

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	1033.42	0.0001	P	3.6
2	☐	1.000	0.825	23169.55	0.0014	P	1.2
3	☐	50.000	48.046	1314456.50	0.0806	P	0.8
4	☐	125.000	117.870	3242742.98	0.1976	P	0.9
5	☐	250.000	239.585	6452271.41	0.4016	A	1.8
6	☐	500.000	486.277	13583092.14	0.8151	A	0.6
7	☐	1000.000	1010.455	27949018.68	1.6937	A	7.7
8	☐			10162.35	0.0007	P	6.0

$$y = 0.0017 * x + 5.7634E-005$$

$$R = 0.9998$$

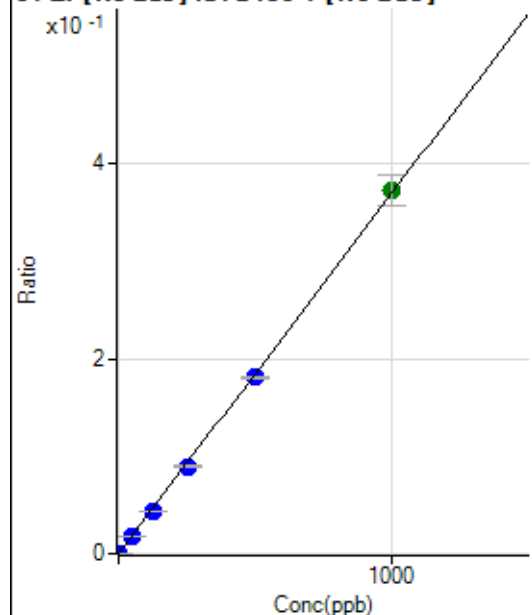
$$DL = 0.003726$$

$$BEC = 0.03439$$

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	177.79	0.0000	P	18.3
2	☐	1.000	0.838	5137.25	0.0003	P	4.0
3	☐	50.000	48.660	293093.52	0.0180	P	0.5
4	☐	125.000	119.310	722703.37	0.0440	P	1.0
5	☐	250.000	242.942	1440740.45	0.0897	P	1.1
6	☐	500.000	489.134	3008498.14	0.1805	P	0.7
7	☐	1000.000	1007.976	6137260.68	0.3720	A	8.3
8	☐			2258.61	0.0001	P	7.3

$$y = 3.6907E-004 * x + 9.9105E-006$$

$$R = 0.9999$$

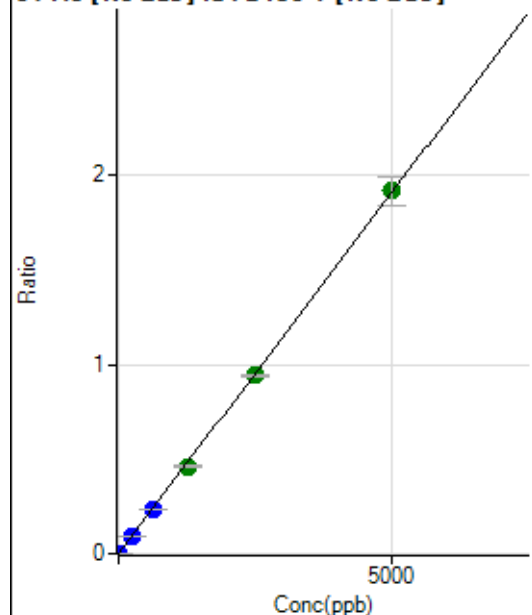
$$DL = 0.01475$$

$$BEC = 0.02685$$

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	333.35	0.0000	P	6.0
2	☐	5.000	4.629	28718.52	0.0018	P	2.1
3	☐	250.000	247.115	1538398.13	0.0943	P	1.1
4	☐	625.000	607.047	3801252.17	0.2317	P	1.0
5	☐	1250.000	1211.401	7427282.54	0.4623	A	1.2
6	☐	2500.000	2465.904	15681047.05	0.9410	A	0.7
7	☐	5000.000	5029.087	31663807.65	1.9191	A	8.0
8	☐			20729.75	0.0013	P	3.0

$$y = 3.8160E-004 * x + 1.8602E-005$$

$$R = 0.9999$$

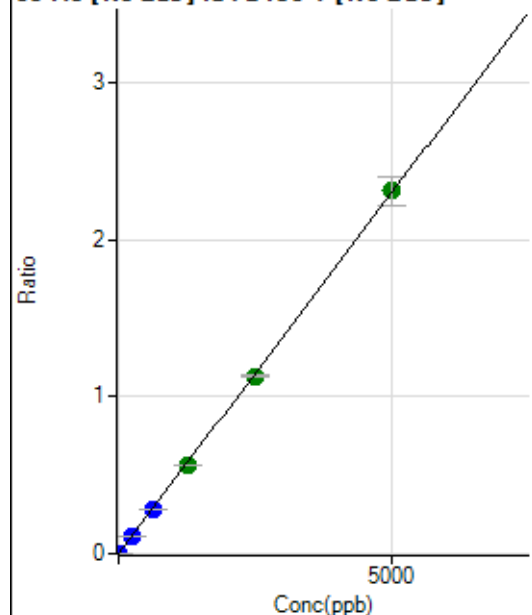
$$DL = 0.008733$$

$$BEC = 0.04875$$

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	33.33	0.0000	P	66.1
2	☐	5.000	4.879	36088.44	0.0022	P	0.8
3	☐	250.000	248.599	1862185.20	0.1142	P	1.5
4	☐	625.000	608.588	4586218.81	0.2795	P	0.9
5	☐	1250.000	1219.058	8995567.39	0.5599	A	0.9
6	☐	2500.000	2460.779	18833048.16	1.1301	A	0.5
7	☐	5000.000	5029.468	38115335.92	2.3098	A	7.8
8	☐			28980.41	0.0019	P	1.5

$$y = 4.5926E-004 * x + 1.8615E-006$$

$$R = 0.9999$$

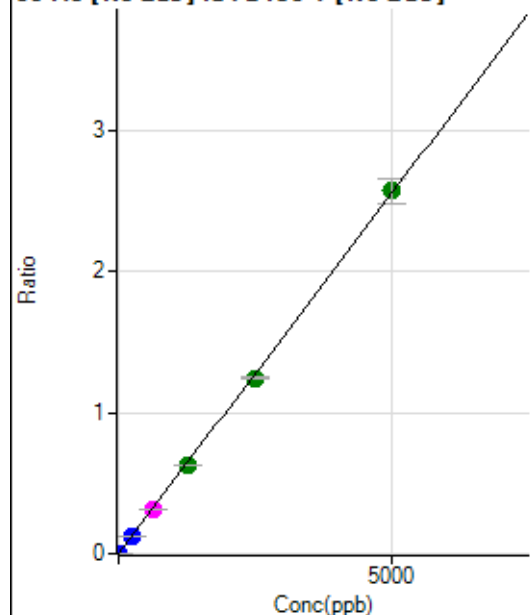
$$DL = 0.008032$$

$$BEC = 0.004053$$

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	158.34	0.0000	P	20.3
2	☐	5.000	4.910	40399.67	0.0025	P	1.3
3	☐	250.000	248.087	2062274.51	0.1264	P	1.4
4	☐	625.000	605.816	5065894.12	0.3087	M	0.8
5	☐	1250.000	1223.968	10021876.61	0.6237	A	0.8
6	☐	2500.000	2441.137	20730902.89	1.2440	A	1.3
7	☐	5000.000	5038.433	42382897.13	2.5676	A	7.1
8	☐			49358.63	0.0032	P	1.1

$$y = 5.0961\text{E-}004 * x + 8.8227\text{E-}006$$

$$R = 0.9999$$

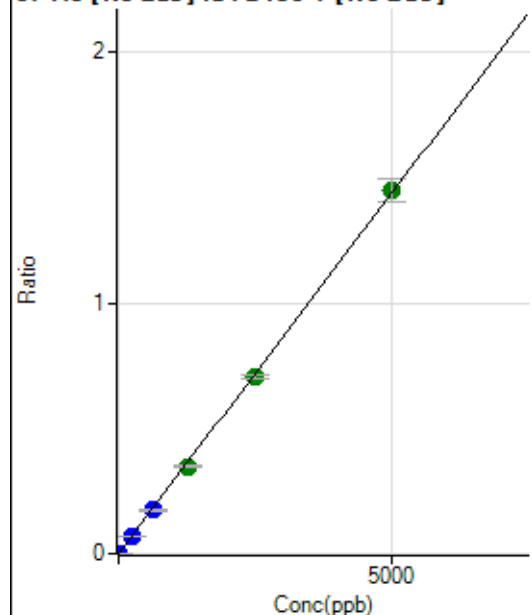
$$DL = 0.01055$$

$$BEC = 0.01731$$

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	36.11	0.0000	P	34.8
2	☐	5.000	4.797	22232.07	0.0014	P	2.2
3	☐	250.000	249.061	1168550.11	0.0716	P	0.5
4	☐	625.000	602.862	2845306.23	0.1734	P	1.6
5	☐	1250.000	1209.663	5589707.20	0.3479	A	2.1
6	☐	2500.000	2456.489	11774749.92	0.7066	A	1.2
7	☐	5000.000	5034.654	23913607.48	1.4481	A	6.3
8	☐			18459.91	0.0012	P	1.8

$$y = 2.8764\text{E-}004 * x + 2.0130\text{E-}006$$

$$R = 0.9999$$

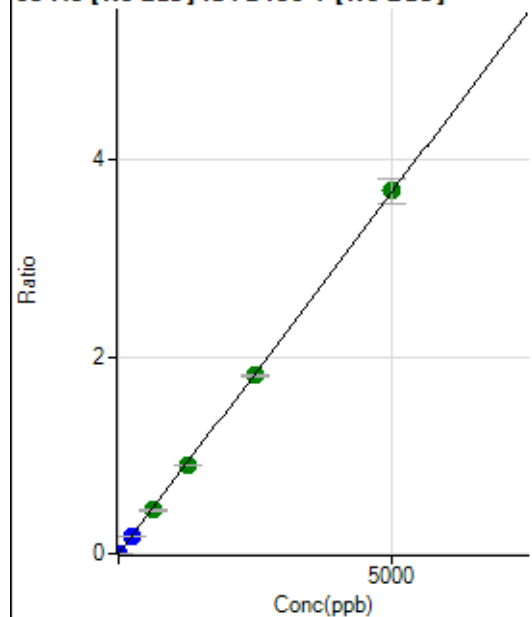
$$DL = 0.007305$$

$$BEC = 0.006999$$

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	50.00	0.0000	P	60.7
2	☐	5.000	4.876	57578.73	0.0036	P	2.3
3	☐	250.000	248.749	2975693.86	0.1824	P	1.0
4	☐	625.000	600.283	7223525.68	0.4403	A	1.5
5	☐	1250.000	1223.077	14410940.60	0.8970	A	1.8
6	☐	2500.000	2469.302	30178555.54	1.8110	A	1.0
7	☐	5000.000	5025.232	60833364.55	3.6855	A	7.2
8	☐			45941.94	0.0030	P	0.5

$$y = 7.3340\text{E-}004 * x + 2.7986\text{E-}006$$

$$R = 0.9999$$

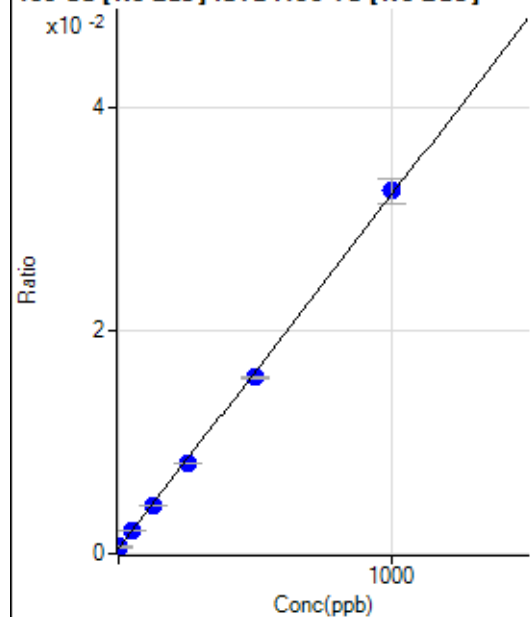
$$DL = 0.006948$$

$$BEC = 0.003816$$

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	8158.23	0.0005	P	1.8
2	☐	1.000	4.099	8933.73	0.0006	P	4.2
3	☐	50.000	51.390	31956.61	0.0021	P	2.2
4	☐	125.000	122.822	65915.75	0.0044	P	1.2
5	☐	250.000	238.847	119263.56	0.0081	P	0.6
6	☐	500.000	483.497	243044.89	0.0158	P	1.8
7	☐	1000.000	1011.239	486858.55	0.0326	P	6.6
8	☐			7816.39	0.0006	P	0.9

$$y = 3.1729\text{E-}005 * x + 4.7709\text{E-}004$$

$$R = 0.9997$$

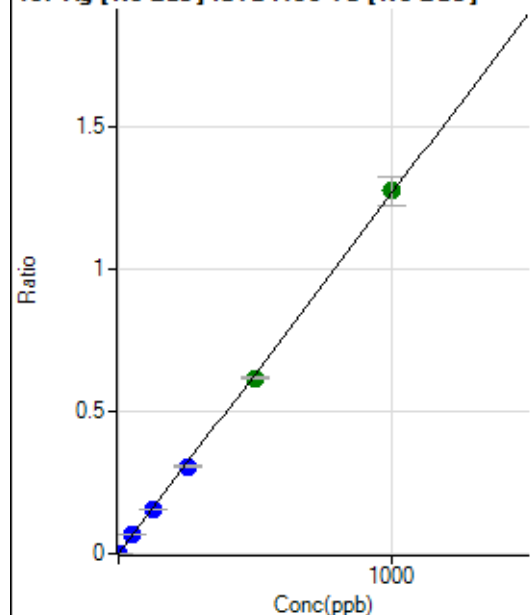
$$DL = 0.8133$$

$$BEC = 15.04$$

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	133.34	0.0000	P	16.0
2	☐	1.000	0.994	18640.87	0.0013	P	6.3
3	☐	50.000	50.959	978342.24	0.0645	P	0.2
4	☐	125.000	123.713	2360422.73	0.1566	P	1.1
5	☐	250.000	243.080	4556141.72	0.3078	P	1.4
6	☐	500.000	487.563	9485210.11	0.6173	A	0.9
7	☐	1000.000	1008.061	19066575.43	1.2763	A	8.2
8	☐			5479.09	0.0004	P	0.8

$$y = 0.0013 * x + 7.7923E-006$$

$$R = 0.9999$$

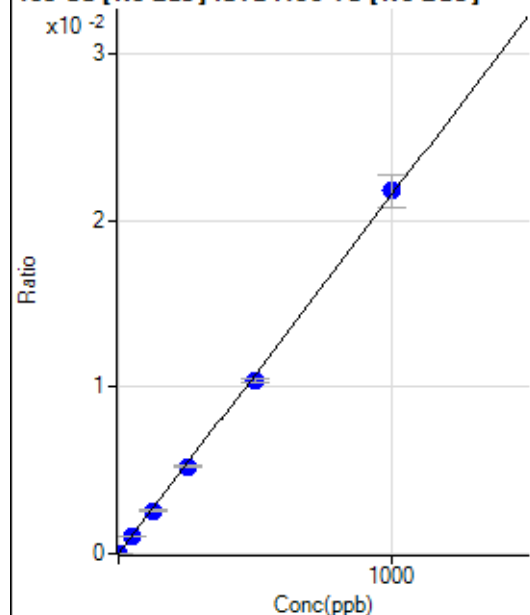
$$DL = 0.002953$$

$$BEC = 0.006155$$

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	27.78	0.0000	P	9.2
2	☐	1.000	0.963	329.18	0.0000	P	8.4
3	☐	50.000	48.464	15827.21	0.0010	P	1.0
4	☐	125.000	120.206	38981.59	0.0026	P	0.9
5	☐	250.000	241.905	77038.78	0.0052	P	1.8
6	☐	500.000	481.663	159186.82	0.0104	P	1.8
7	☐	1000.000	1011.868	325029.96	0.0218	P	8.7
8	☐			280.56	0.0000	P	4.5

$$y = 2.1506E-005 * x + 1.6250E-006$$

$$R = 0.9997$$

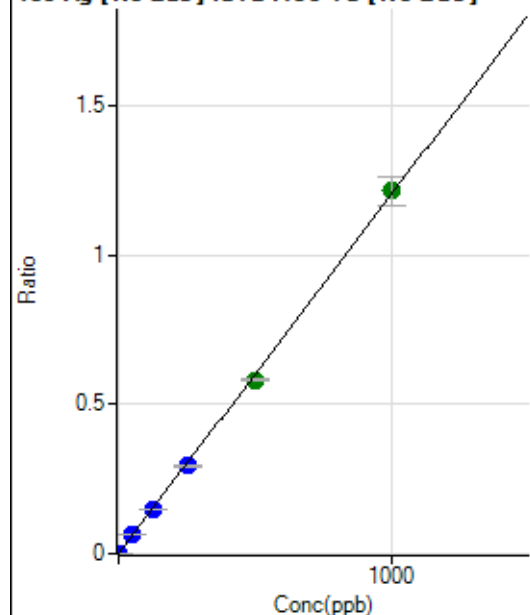
$$DL = 0.0208$$

$$BEC = 0.07556$$

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	57.4
2	☐	1.000	0.984	17447.60	0.0012	P	3.5
3	☐	50.000	51.125	932669.54	0.0615	P	0.5
4	☐	125.000	124.215	2252062.51	0.1494	P	0.8
5	☐	250.000	244.167	4348917.29	0.2938	P	1.0
6	☐	500.000	483.831	8943821.12	0.5821	A	2.0
7	☐	1000.000	1009.585	18150927.14	1.2146	A	7.7
8	☐			4989.98	0.0004	P	2.8

$$y = 0.0012 * x + 1.7909E-006$$

$$R = 0.9998$$

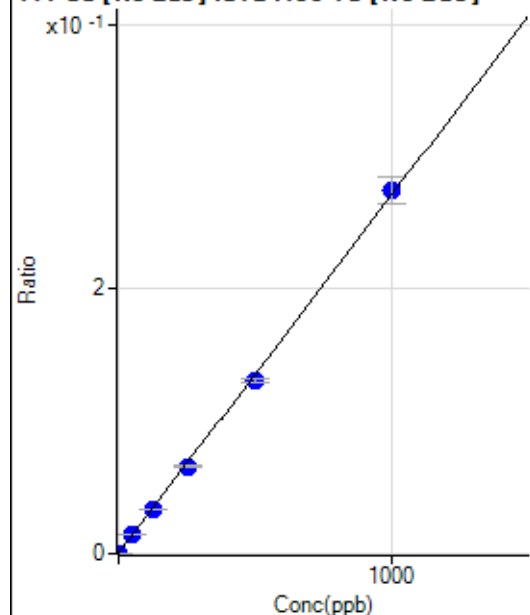
$$DL = 0.002561$$

$$BEC = 0.001489$$

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	5695.48	0.0003	P	1.7
2	☐	1.000	1.244	9857.11	0.0007	P	2.0
3	☐	50.000	49.947	209959.37	0.0138	P	0.2
4	☐	125.000	122.549	504689.52	0.0335	P	1.4
5	☐	250.000	242.655	976902.08	0.0660	P	1.4
6	☐	500.000	480.683	2003490.56	0.1304	P	1.8
7	☐	1000.000	1011.804	4096648.47	0.2741	P	7.3
8	☐			7016.89	0.0005	P	0.7

$$y = 2.7057E-004 * x + 3.3307E-004$$

$$R = 0.9997$$

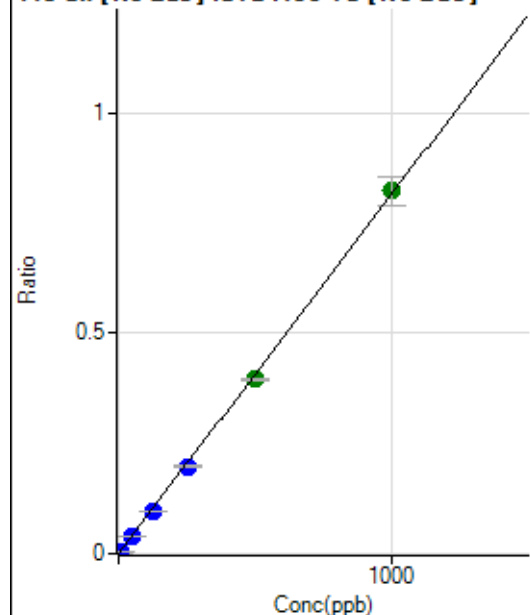
$$DL = 0.0638$$

$$BEC = 1.231$$

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	2833.74	0.0002	P	7.4
2	☐	5.000	4.825	60263.54	0.0041	P	2.4
3	☐	50.000	49.190	609940.09	0.0402	P	1.1
4	☐	125.000	119.580	1470216.95	0.0976	P	1.0
5	☐	250.000	241.395	2913053.32	0.1968	P	1.8
6	☐	500.000	485.892	6083612.42	0.3959	A	1.0
7	☐	1000.000	1009.924	12293571.89	0.8227	A	7.8
8	☐			15245.69	0.0011	P	11.7

$$y = 8.1448\text{E-}004 * x + 1.6575\text{E-}004$$

$$R = 0.9998$$

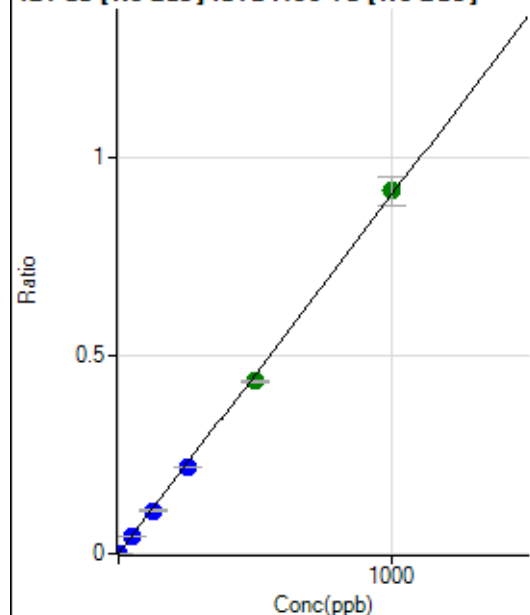
$$DL = 0.04548$$

$$BEC = 0.2035$$

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	19.44	0.0000	P	65.4
2	☐	2.000	1.815	24146.52	0.0016	P	1.8
3	☐	50.000	48.108	658914.04	0.0435	P	0.9
4	☐	125.000	120.042	1634134.87	0.1084	P	1.5
5	☐	250.000	241.046	3223708.62	0.2178	P	1.0
6	☐	500.000	482.031	6690906.31	0.4354	A	1.1
7	☐	1000.000	1011.938	13658819.58	0.9141	A	7.8
8	☐			16357.37	0.0012	P	9.1

$$y = 9.0335\text{E-}004 * x + 1.1379\text{E-}006$$

$$R = 0.9997$$

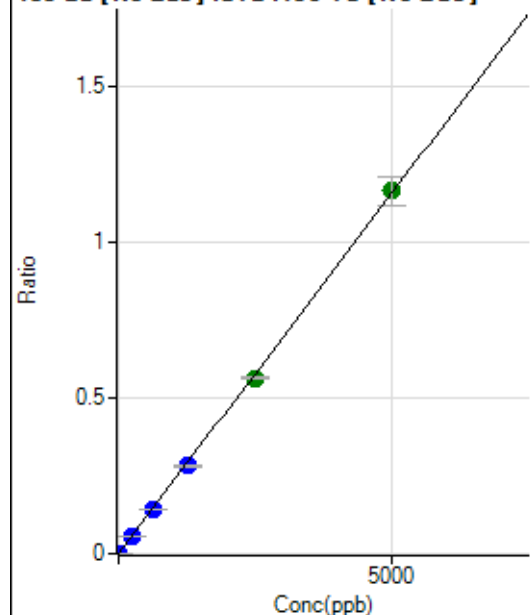
$$DL = 0.002473$$

$$BEC = 0.00126$$

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	86.11	0.0000	P	15.3
2	☐	10.000	9.559	32608.79	0.0022	P	2.4
3	☐	250.000	247.608	868199.93	0.0573	P	1.4
4	☐	625.000	613.003	2136316.82	0.1418	P	1.2
5	☐	1250.000	1219.445	4174978.57	0.2820	P	1.3
6	☐	2500.000	2440.271	8671048.20	0.5643	A	1.6
7	☐	5000.000	5039.124	17409122.96	1.1653	A	8.2
8	☐			29827.44	0.0022	P	0.3

$$y = 2.3125\text{E-}004 * x + 5.0377\text{E-}006$$

$$R = 0.9999$$

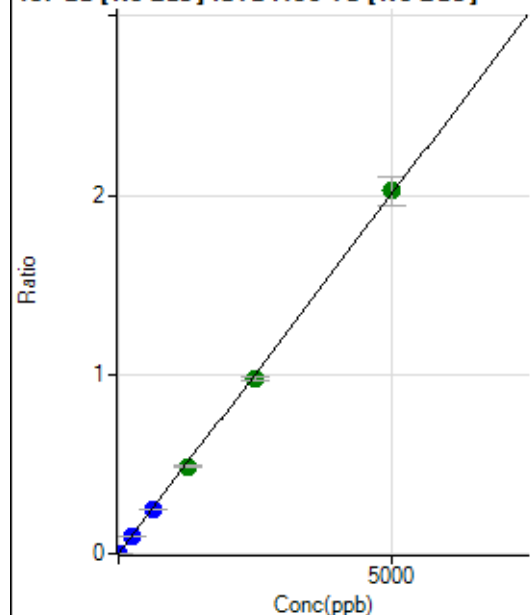
$$DL = 0.009971$$

$$BEC = 0.02178$$

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	180.56	0.0000	P	7.4
2	☐	10.000	9.707	57487.10	0.0039	P	2.3
3	☐	250.000	245.147	1491974.79	0.0984	P	0.6
4	☐	625.000	605.338	3661491.79	0.2430	P	0.6
5	☐	1250.000	1209.240	7184689.31	0.4854	A	2.5
6	☐	2500.000	2437.347	15031410.75	0.9783	A	1.5
7	☐	5000.000	5044.217	30246403.45	2.0246	A	8.2
8	☐			52411.34	0.0039	P	1.4

$$y = 4.0136\text{E-}004 * x + 1.0561\text{E-}005$$

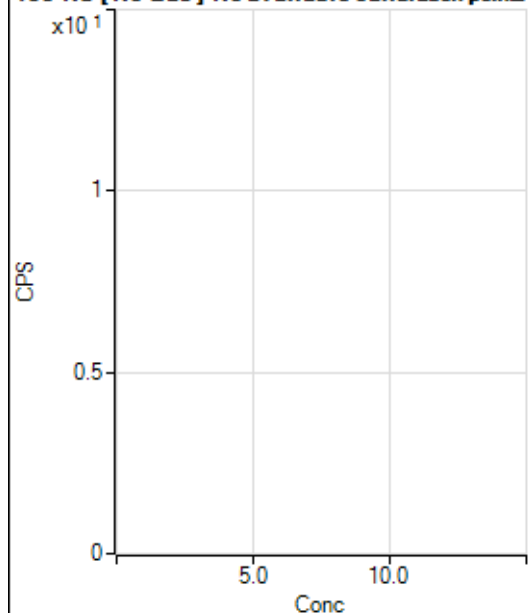
$$R = 0.9998$$

$$DL = 0.005869$$

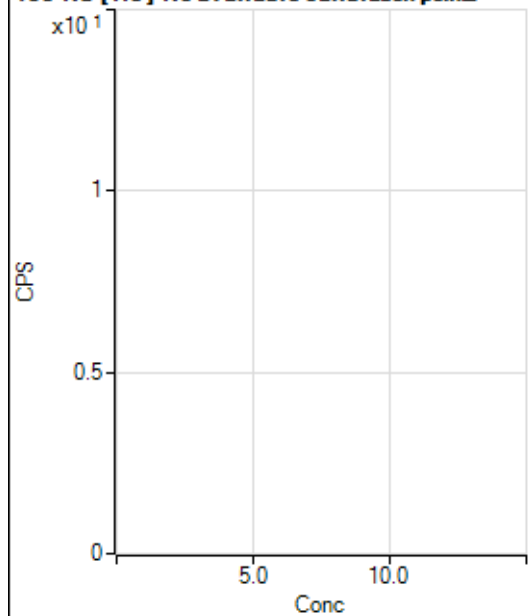
$$BEC = 0.02631$$

Weight: <None>

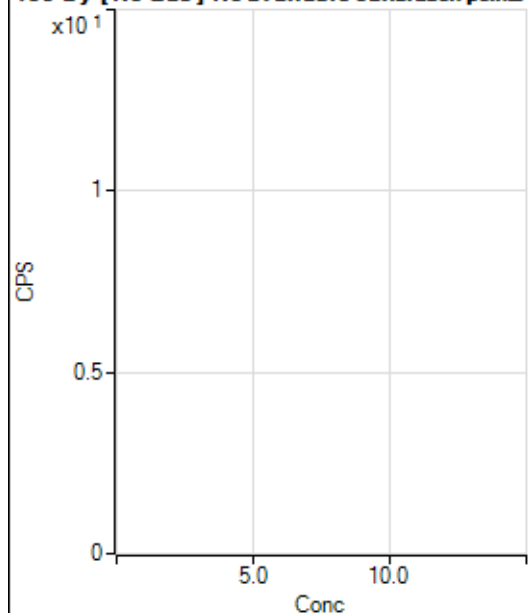
Min Conc: 0

150 Nd [No Gas] No available calibration points

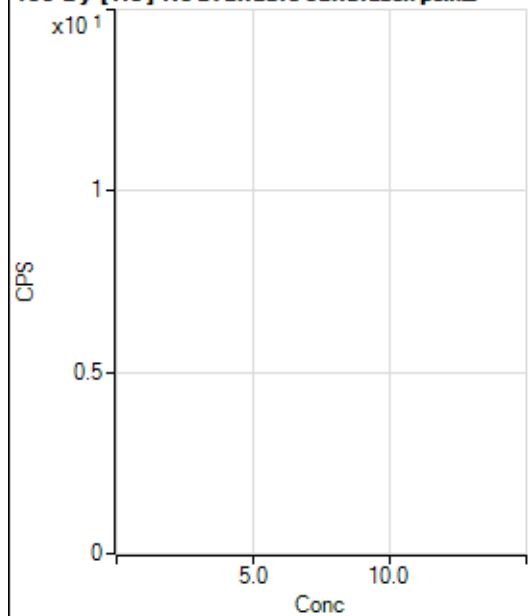
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			17.78		P	21.7
3	☐			97.78		P	15.7
4	☐			255.57		P	12.9
5	☐			406.69		P	12.4
6	☐			840.06		P	8.8
7	☐			1695.72		P	10.4
8	☐			80.00		P	16.7

150 Nd [He] No available calibration points

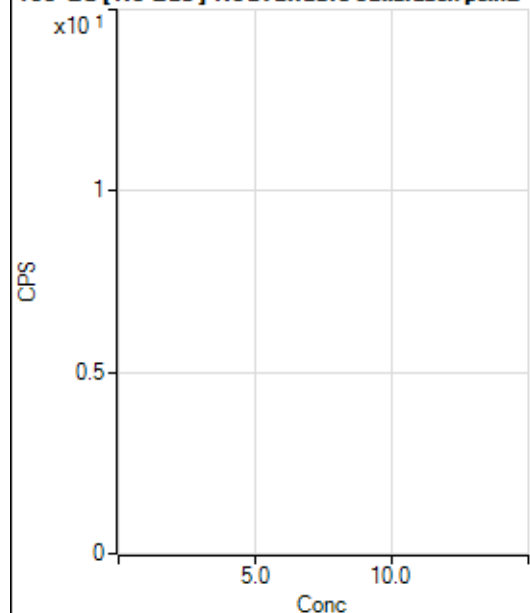
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			1.11		P	173.
3	☐			5.56		P	34.7
4	☐			15.56		P	49.5
5	☐			15.56		P	12.4
6	☐			61.11		P	11.4
7	☐			102.22		P	21.7
8	☐			22.22		P	37.8

156 Dy [No Gas] No available calibration points

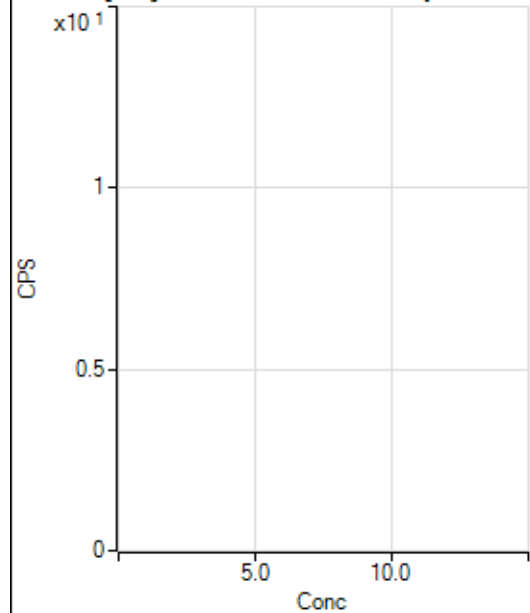
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	43.3
2	☐			33.33		P	43.3
3	☐			44.45		P	28.7
4	☐			69.45		P	30.2
5	☐			144.45		P	24.0
6	☐			294.46		P	8.6
7	☐			486.14		P	10.5
8	☐			1111.20		P	10.2

156 Dy [He] No available calibration points

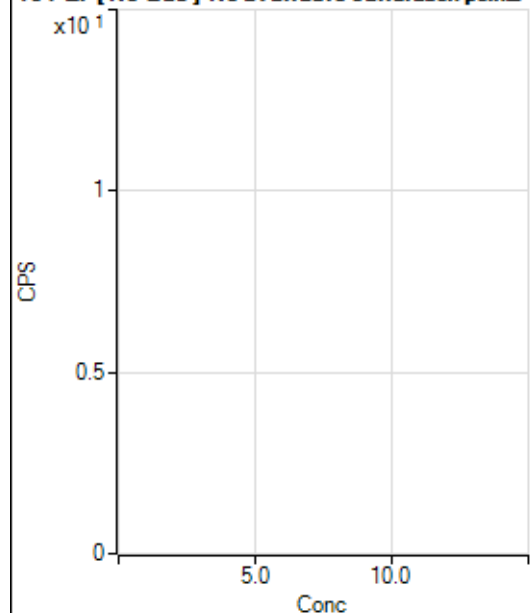
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			10.00		P	88.2
2	☐			11.11		P	96.4
3	☐			21.11		P	24.1
4	☐			26.67		P	25.0
5	☐			73.33		P	7.9
6	☐			153.34		P	17.4
7	☐			255.56		P	9.6
8	☐			380.01		P	3.0

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

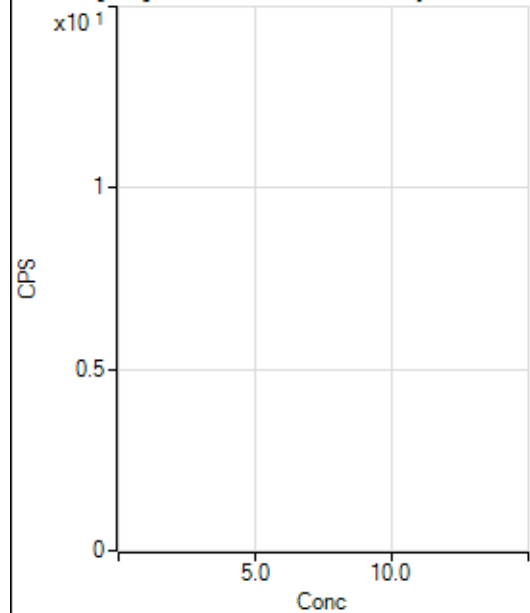
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			80.56		P	41.8
2	☐			91.67		P	18.2
3	☐			97.23		P	26.2
4	☐			144.45		P	20.3
5	☐			144.45		P	29.6
6	☐			236.13		P	16.3
7	☐			413.92		P	10.1
8	☐			1072.32		P	3.9

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			161.11		P	8.6
2	☐			136.67		P	22.4
3	☐			170.01		P	3.4
4	☐			158.89		P	14.9
5	☐			175.56		P	12.6
6	☐			230.00		P	11.3
7	☐			263.34		P	9.9
8	☐			644.47		P	12.0

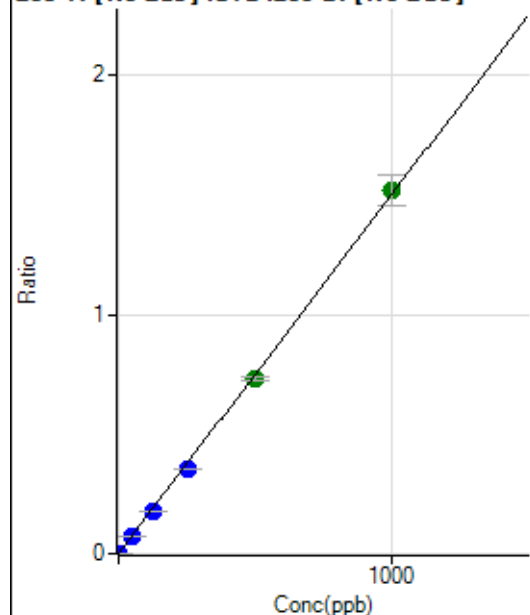
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	12.5
2	☐			86.12		P	24.4
3	☐			111.12		P	11.5
4	☐			86.12		P	47.7
5	☐			75.00		P	22.2
6	☐			111.12		P	63.8
7	☐			94.45		P	13.5
8	☐			205.57		P	20.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	18.3
2	☐			35.56		P	23.6
3	☐			34.45		P	56.7
4	☐			33.33		P	26.4
5	☐			27.78		P	45.4
6	☐			32.22		P	39.2
7	☐			51.11		P	3.8
8	☐			75.56		P	26.6

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.33	0.0000	P	37.7
2	☐	1.000	0.917	11233.01	0.0014	P	2.3
3	☐	50.000	48.283	588476.38	0.0724	P	1.5
4	☐	125.000	118.648	1435009.28	0.1780	P	1.7
5	☐	250.000	235.695	2794538.30	0.3535	P	1.6
6	☐	500.000	486.728	5886876.35	0.7300	A	1.8
7	☐	1000.000	1011.092	11610694.01	1.5164	A	8.4
8	☐			2878.22	0.0005	P	5.9

$$y = 0.0015 * x + 6.2101E-006$$

$$R = 0.9998$$

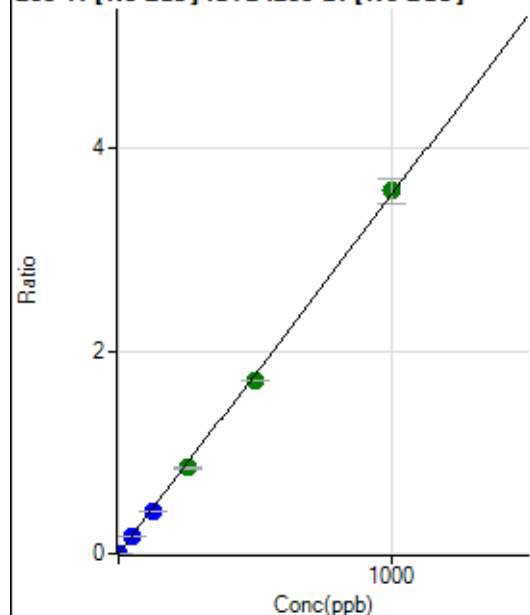
$$DL = 0.004683$$

$$BEC = 0.004141$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.68	0.0000	P	11.3
2	☐	1.000	0.908	26293.54	0.0032	P	2.9
3	☐	50.000	48.780	1404681.91	0.1729	P	1.2
4	☐	125.000	119.292	3408804.81	0.4227	P	0.7
5	☐	250.000	239.389	6705713.09	0.8483	A	1.6
6	☐	500.000	484.577	13845746.49	1.7170	A	0.1
7	☐	1000.000	1011.139	27448122.84	3.5828	A	7.2
8	☐			6866.02	0.0011	P	4.2

$$y = 0.0035 * x + 1.5108E-005$$

$$R = 0.9998$$

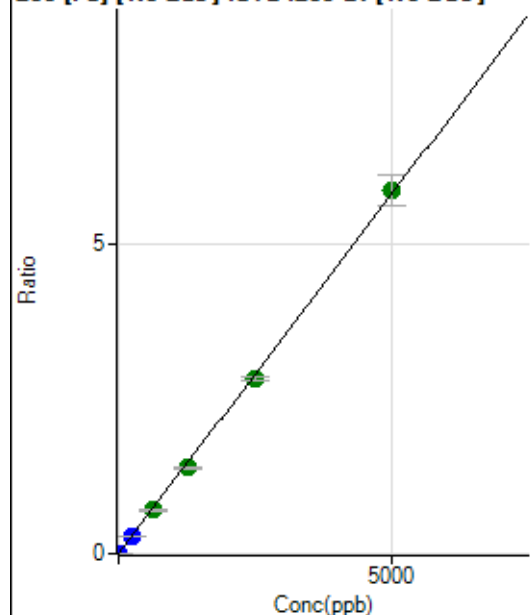
$$DL = 0.001442$$

$$BEC = 0.004264$$

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	307.42	0.0000	P	15.9
2	☐	1.000	0.969	9416.54	0.0012	P	1.7
3	☐	250.000	247.942	2340455.64	0.2880	P	1.0
4	☐	625.000	605.684	5673123.45	0.7035	A	1.4
5	☐	1250.000	1194.944	10971848.63	1.3879	A	1.6
6	☐	2500.000	2434.367	22798922.27	2.8274	A	1.4
7	☐	5000.000	5049.098	44902273.69	5.8643	A	8.4
8	☐			25539.84	0.0041	P	0.8

$$y = 0.0012 * x + 3.2714E-005$$

$$R = 0.9998$$

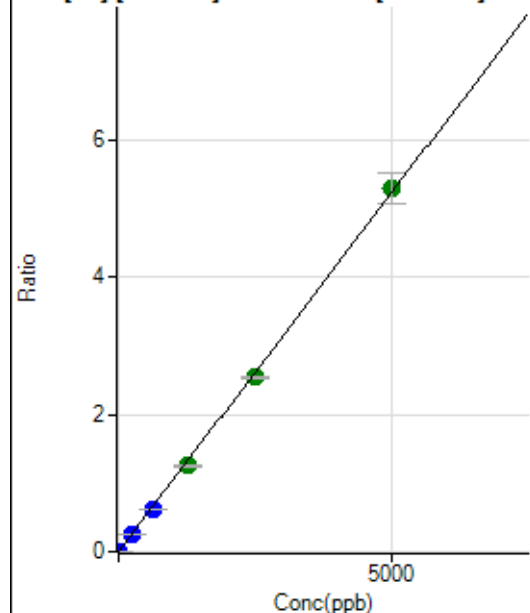
$$DL = 0.01341$$

$$BEC = 0.02817$$

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	246.31	0.0000	P	23.4
2	☐	1.000	0.933	8149.02	0.0010	P	3.2
3	☐	250.000	243.741	2073486.58	0.2552	P	1.5
4	☐	625.000	589.296	4974440.73	0.6169	P	1.3
5	☐	1250.000	1200.923	9936224.99	1.2571	A	3.0
6	☐	2500.000	2424.863	20466455.32	2.5382	A	1.5
7	☐	5000.000	5054.614	40507683.31	5.2909	A	8.5
8	☐			22660.53	0.0036	P	0.8

$$y = 0.0010 * x + 2.6265E-005$$

$$R = 0.9998$$

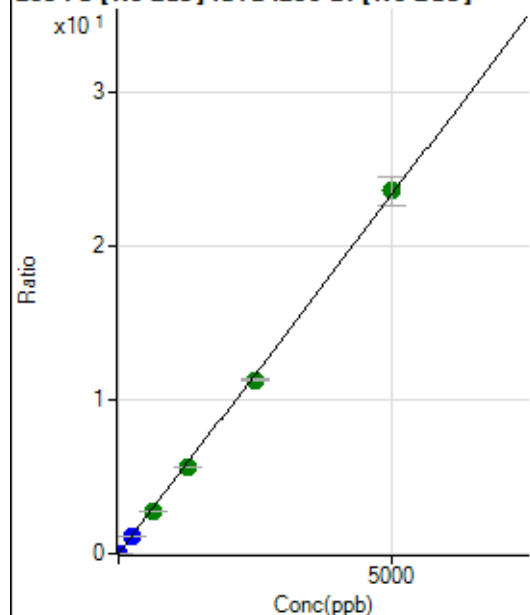
$$DL = 0.01762$$

$$BEC = 0.02509$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1181.55	0.0001	P	4.2
2	☐	1.000	0.948	37006.19	0.0046	P	1.7
3	☐	250.000	244.319	9268492.73	1.1405	P	1.1
4	☐	625.000	597.134	22477735.98	2.7874	A	1.3
5	☐	1250.000	1203.166	44397004.70	5.6162	A	1.8
6	☐	2500.000	2420.552	91105933.28	11.2986	A	0.9
7	☐	5000.000	5055.200	180717937.8	23.5965	A	7.8
8	☐			102848.27	0.0165	P	0.6

$$y = 0.0047 * x + 1.2586E-004$$

$$R = 0.9998$$

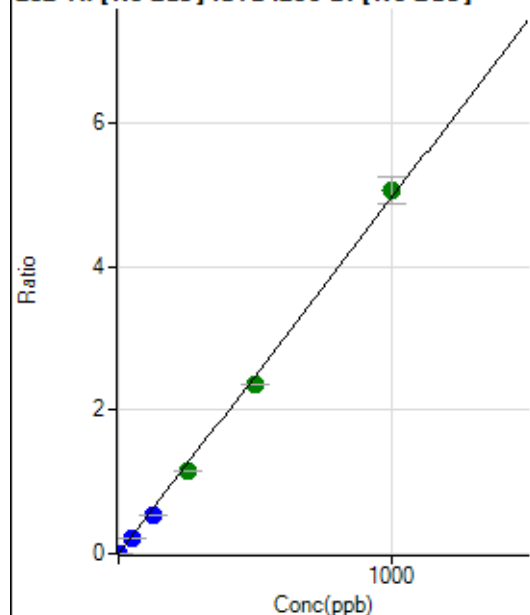
$$DL = 0.003393$$

$$BEC = 0.02696$$

Weight: <None>

Min Conc: 0

232 Th [No Gas] ISTD :209 Bi [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	357.42	0.0000	P	18.4
2	☐	1.000	0.002	385.20	0.0000	P	5.3
3	☐	50.000	44.445	1791593.86	0.2205	P	0.8
4	☐	125.000	108.887	4355086.50	0.5401	P	0.7
5	☐	250.000	233.621	9160659.87	1.1587	A	0.8
6	☐	500.000	473.664	18942756.67	2.3491	A	0.1
7	☐	1000.000	1019.556	38731734.67	5.0564	A	7.5
8	☐			14030.19	0.0022	P	3.2

$$y = 0.0050 * x + 3.8068E-005$$

$$R = 0.9993$$

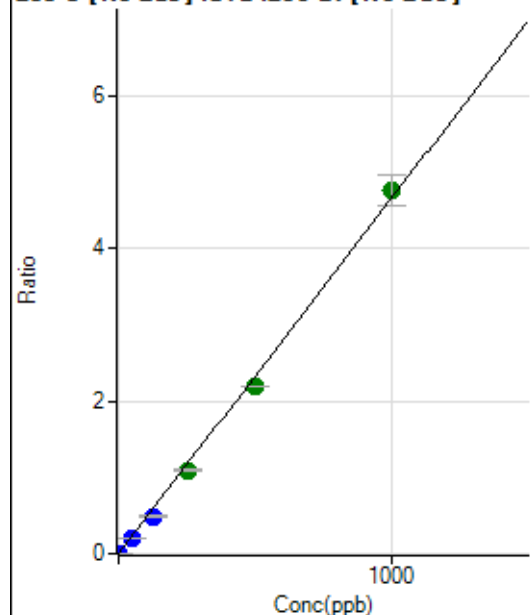
$$DL = 0.004227$$

$$BEC = 0.007676$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.78	0.0000	P	173.
2	☐	1.000	0.837	31691.54	0.0039	P	2.7
3	☐	50.000	44.760	1694793.11	0.2085	P	0.4
4	☐	125.000	105.520	3964789.82	0.4916	P	0.3
5	☐	250.000	234.352	8631740.99	1.0919	A	1.6
6	☐	500.000	471.311	17706926.26	2.1959	A	0.8
7	☐	1000.000	1020.954	36420886.23	4.7568	A	8.4
8	☐			5976.69	0.0010	P	0.6

$$y = 0.0047 * x + 2.9795E-007$$

$$R = 0.9992$$

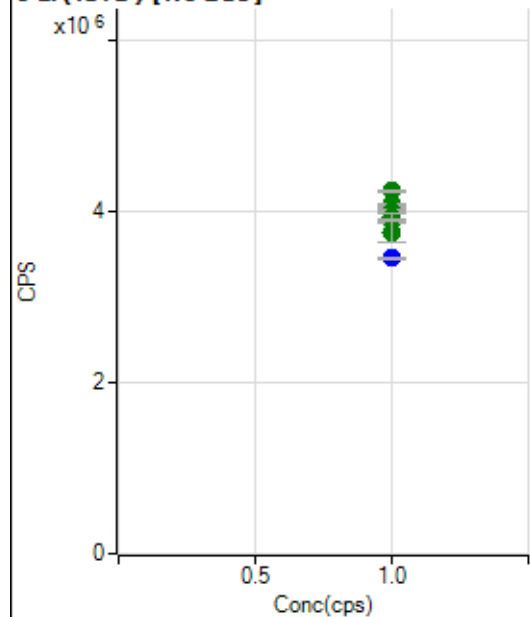
$$DL = 0.0003323$$

$$BEC = 6.395E-05$$

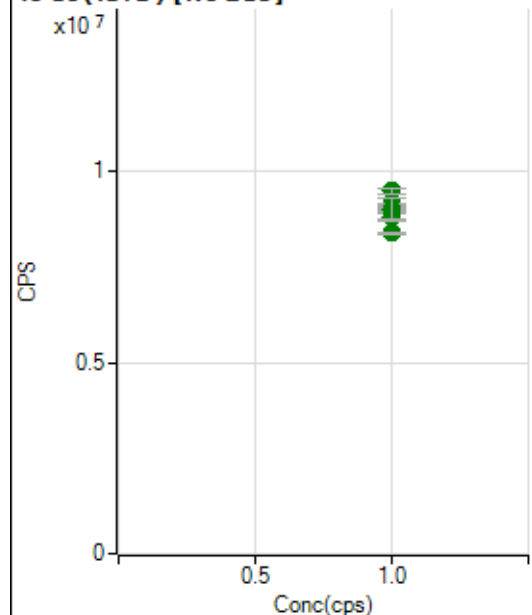
Weight: <None>

Min Conc: 0

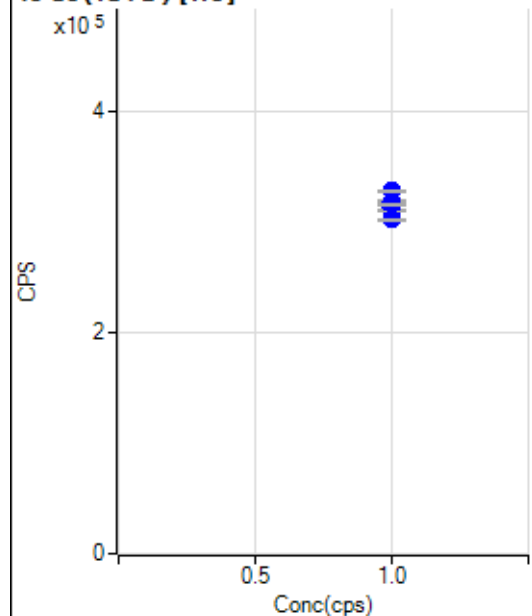
6 Li (ISTD) [No Gas]



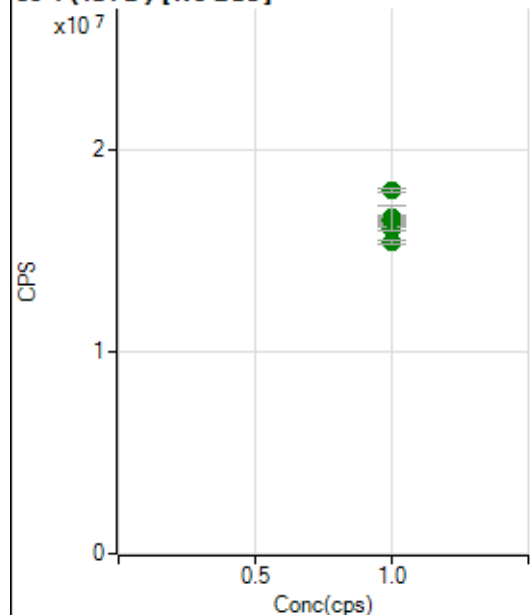
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4239254.07		A	0.6
2	☐	1.000		4061236.05		A	0.7
3	☐	1.000		4087275.74		A	0.5
4	☐	1.000		4007681.99		A	0.4
5	☐	1.000		3876444.80		A	0.3
6	☐	1.000		3940065.36		A	1.4
7	☐	1.000		3754446.30		A	6.5
8	☐	1.000		3452551.79		P	0.5

45 Sc (ISTD) [No Gas]

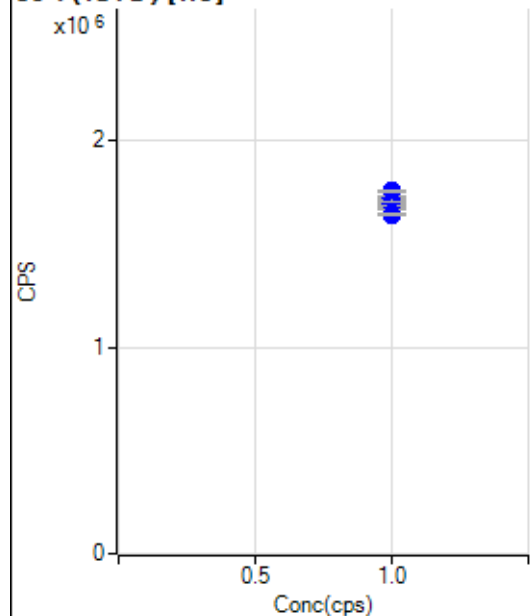
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9492628.75		A	1.6
2	☐	1.000		8932345.70		A	1.0
3	☐	1.000		9092509.24		A	0.6
4	☐	1.000		9003612.09		A	0.3
5	☐	1.000		8827187.51		A	1.3
6	☐	1.000		9139519.52		A	0.3
7	☐	1.000		9007673.96		A	6.9
8	☐	1.000		8398493.76		A	0.6

45 Sc (ISTD) [He]

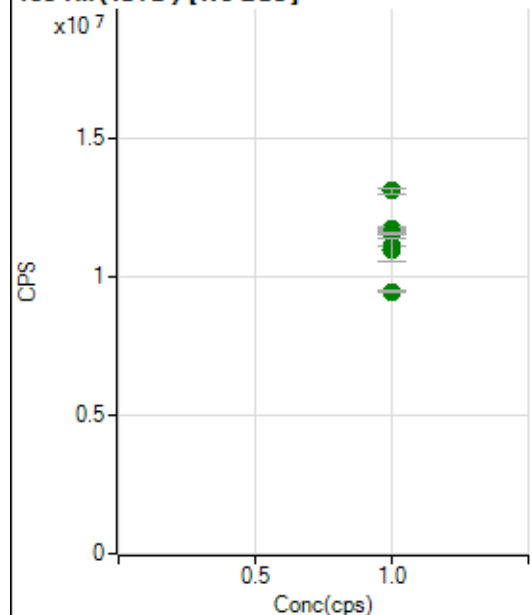
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		310617.09		P	0.7
2	☐	1.000		315979.73		P	0.2
3	☐	1.000		312485.20		P	2.0
4	☐	1.000		316456.20		P	0.5
5	☐	1.000		318487.62		P	1.1
6	☐	1.000		315658.57		P	0.9
7	☐	1.000		327997.62		P	0.2
8	☐	1.000		301874.32		P	0.7

89 Y (ISTD) [No Gas]

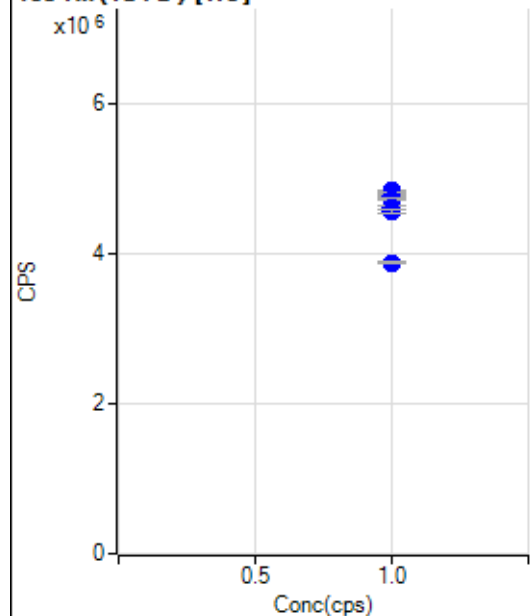
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17926889.73		A	1.0
2	☐	1.000		16091090.59		A	1.2
3	☐	1.000		16311687.39		A	1.2
4	☐	1.000		16409436.70		A	1.0
5	☐	1.000		16068227.26		A	1.5
6	☐	1.000		16664380.45		A	0.3
7	☐	1.000		16562415.45		A	7.1
8	☐	1.000		15391234.22		A	0.7

89 Y (ISTD) [He]

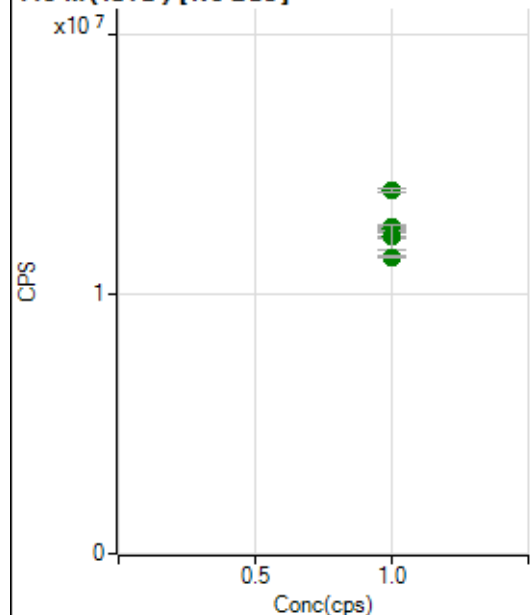
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1672970.72		P	0.8
2	☐	1.000		1702249.40		P	0.9
3	☐	1.000		1695840.81		P	1.1
4	☐	1.000		1721217.08		P	0.2
5	☐	1.000		1723623.62		P	0.9
6	☐	1.000		1720315.82		P	1.5
7	☐	1.000		1757424.21		P	0.6
8	☐	1.000		1641256.61		P	0.8

103 Rh (ISTD) [No Gas]

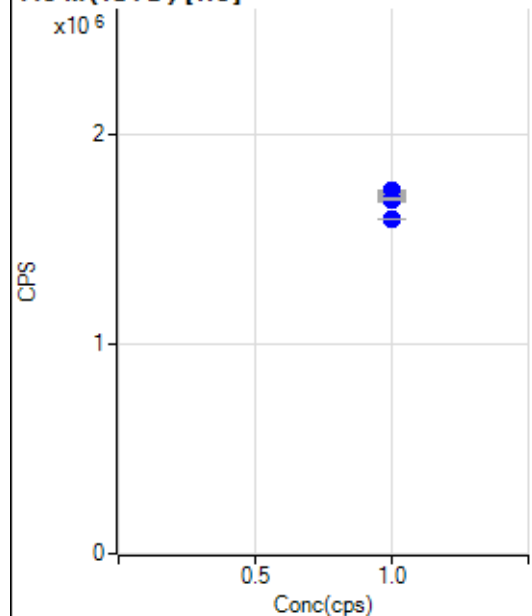
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13106154.53		A	1.4
2	☐	1.000		11601386.49		A	1.2
3	☐	1.000		11746858.71		A	0.7
4	☐	1.000		11565354.97		A	0.6
5	☐	1.000		11123792.47		A	0.1
6	☐	1.000		11569740.38		A	0.3
7	☐	1.000		10967198.66		A	8.0
8	☐	1.000		9472687.01		A	0.3

103 Rh (ISTD) [He]

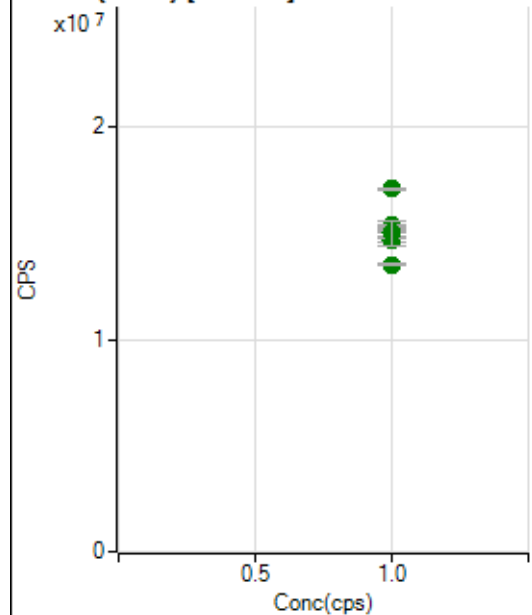
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4751468.47		P	0.8
2	☐	1.000		4837457.36		P	0.5
3	☐	1.000		4764858.30		P	1.0
4	☐	1.000		4816490.00		P	0.2
5	☐	1.000		4723564.13		P	0.5
6	☐	1.000		4626989.62		P	1.1
7	☐	1.000		4570270.07		P	0.9
8	☐	1.000		3883042.75		P	0.3

115 In (ISTD) [No Gas]

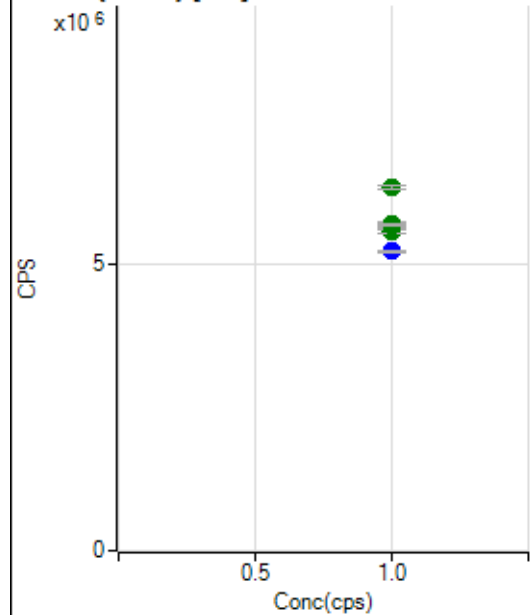
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13959415.53		A	0.9
2	☐	1.000		12427969.88		A	1.0
3	☐	1.000		12604480.88		A	0.2
4	☐	1.000		12523209.80		A	1.8
5	☐	1.000		12184003.78		A	0.3
6	☐	1.000		12402455.04		A	0.7
7	☐	1.000		12187473.79		A	8.2
8	☐	1.000		11421867.86		A	0.3

115 In (ISTD) [He]

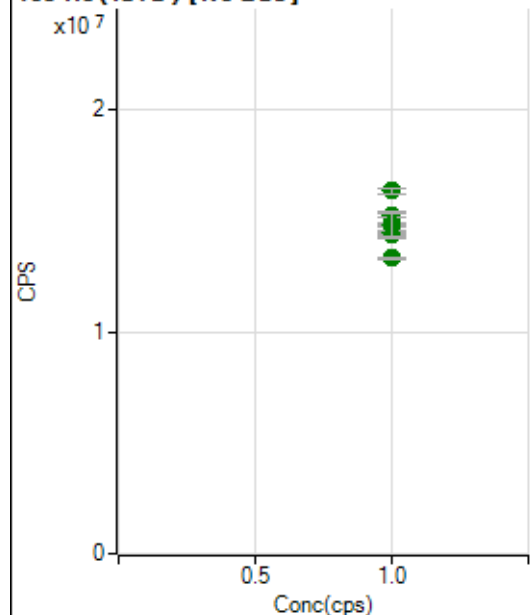
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1690836.09		P	0.7
2	☐	1.000		1711112.76		P	0.9
3	☐	1.000		1689652.27		P	0.7
4	☐	1.000		1727960.82		P	0.3
5	☐	1.000		1710645.44		P	0.6
6	☐	1.000		1686228.25		P	1.1
7	☐	1.000		1688652.00		P	0.9
8	☐	1.000		1592979.33		P	0.4

159 Tb (ISTD) [No Gas]

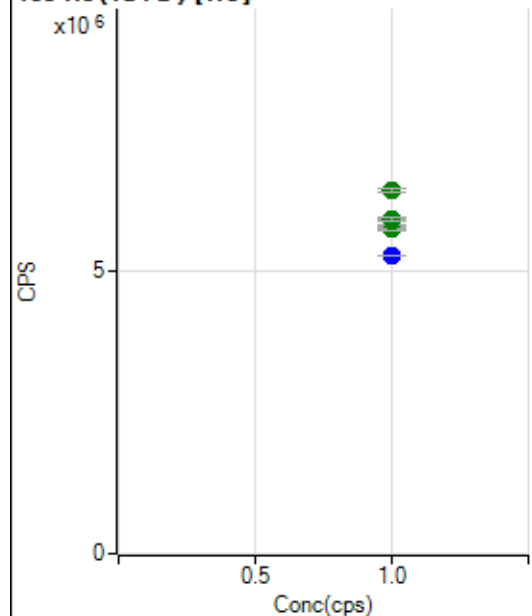
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		17101304.74		A	0.6
2	☐	1.000		14719882.42		A	2.0
3	☐	1.000		15162550.33		A	1.2
4	☐	1.000		15070159.36		A	0.6
5	☐	1.000		14805604.92		A	1.0
6	☐	1.000		15366774.36		A	0.9
7	☐	1.000		15002150.06		A	7.7
8	☐	1.000		13548910.63		A	0.4

159 Tb (ISTD) [He]

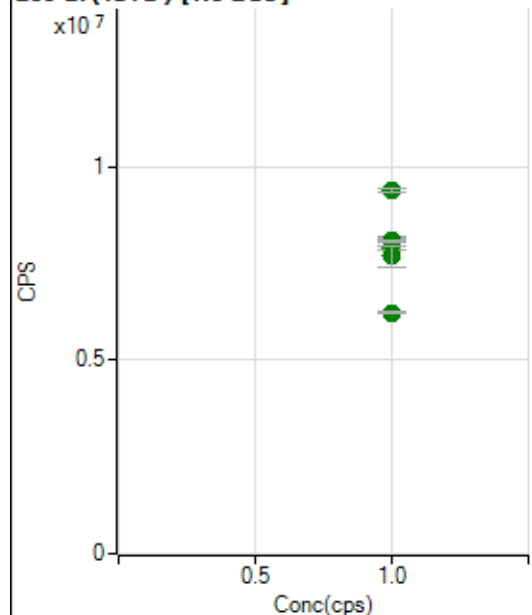
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6316575.32		A	0.9
2	☐	1.000		5613506.44		A	0.7
3	☐	1.000		5567842.90		A	1.2
4	☐	1.000		5648849.91		A	0.8
5	☐	1.000		5694277.69		A	0.7
6	☐	1.000		5658829.36		A	1.3
7	☐	1.000		5689811.79		A	0.6
8	☐	1.000		5211678.88		P	0.5

165 Ho (ISTD) [No Gas]

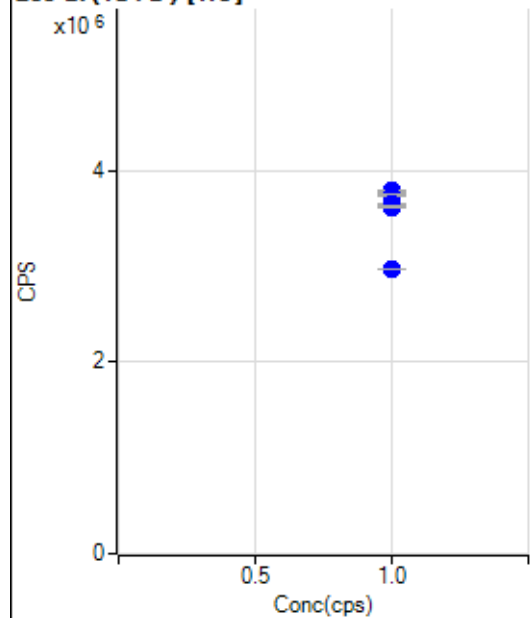
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16335263.92		A	1.5
2	☐	1.000		14396434.92		A	0.4
3	☐	1.000		14875854.08		A	0.5
4	☐	1.000		14759270.34		A	0.9
5	☐	1.000		14424730.34		A	1.5
6	☐	1.000		15250254.22		A	1.7
7	☐	1.000		14778643.81		A	7.5
8	☐	1.000		13300025.08		A	0.5

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6427274.14		A	1.1
2	☐	1.000		5806768.25		A	0.9
3	☐	1.000		5740743.60		A	1.1
4	☐	1.000		5876848.66		A	1.2
5	☐	1.000		5928629.15		A	0.9
6	☐	1.000		5881065.95		A	1.4
7	☐	1.000		5925944.15		A	1.5
8	☐	1.000		5279173.53		P	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9385835.21		A	1.2
2	☐	1.000		8130542.79		A	1.4
3	☐	1.000		8127043.90		A	1.4
4	☐	1.000		8064358.07		A	0.5
5	☐	1.000		7906730.30		A	1.7
6	☐	1.000		8063753.77		A	0.7
7	☐	1.000		7689072.31		A	7.6
8	☐	1.000		6238746.30		A	1.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3782754.56		P	0.7
2	☐	1.000		3785079.35		P	0.3
3	☐	1.000		3765245.15		P	0.8
4	☐	1.000		3781691.40		P	0.7
5	☐	1.000		3740248.03		P	0.6
6	☐	1.000		3642765.89		P	1.0
7	☐	1.000		3620327.27		P	0.4
8	☐	1.000		2966971.24		P	0.5

US EPA Tune Check Sample Report

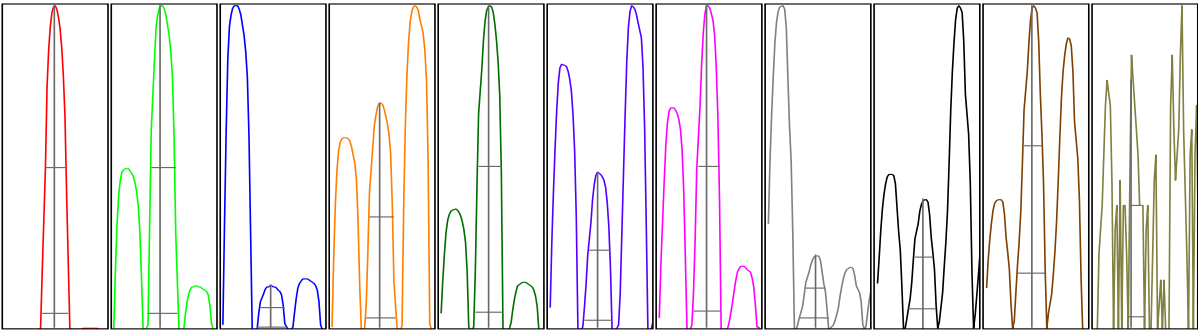
Batch Folder D:\ICP-MS Data\1\DATA\P7060920-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	12269	1.30	5.00	
24	107123	1.19	5.00	
25	14285	1.31	5.00	
26	16572	1.24	5.00	
59	90799	1.28	5.00	
113	16761	1.39	5.00	
115	50355	3.35	5.00	
206	17869	1.15	5.00	
207	16257	1.08	5.00	
208	37203	1.15	5.00	
220	0	40.00		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	12209	12545	12154	12173	12267
24	106010	108796	105680	107530	107599
25	13988	14447	14229	14337	14424
26	16356	16861	16397	16584	16662
59	89608	92284	89631	91084	91390
113	16572	17130	16558	16816	16731
115	51952	52356	49663	49177	48628
206	17638	18047	17658	17948	18052
207	16091	16359	16047	16349	16438
208	36784	37840	36864	37135	37392
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	20511	9.00	8.9 - 9.1		0.780	0.900	
24	162535	23.90	23.9 - 24.1		0.836	0.900	
25	21754	24.95	24.9 - 25.1		0.826	0.900	
26	25566	25.95	25.9 - 26.1		0.865	0.900	
59	140178	58.95	58.9 - 59.1		0.831	0.900	
113	27435	112.95	112.9 - 113.1		0.826	0.900	
115	83059	114.95	114.9 - 115.1		0.821	0.900	
206	30703	205.95	205.9 - 206.1		0.822	0.900	
207	25711	206.90	206.9 - 207.1		0.803	0.900	
208	64019	207.90	207.9 - 208.1		0.816	0.900	
220	1	219.65	-		0.441		

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	0.76	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		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.4	V	Deflect	12.6	V
Extract 2	-145.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-60	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	170	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	21557	2.23	
89	39874	2.43	
205	38169	0.77	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	21107	21310	21495	21505	22368
89	39201	39305	39531	39772	41562
205	37701	38194	38122	38405	38424

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		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	7.4	V	Deflect	2.2	V
Extract 2	-140.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-65	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	200	V			