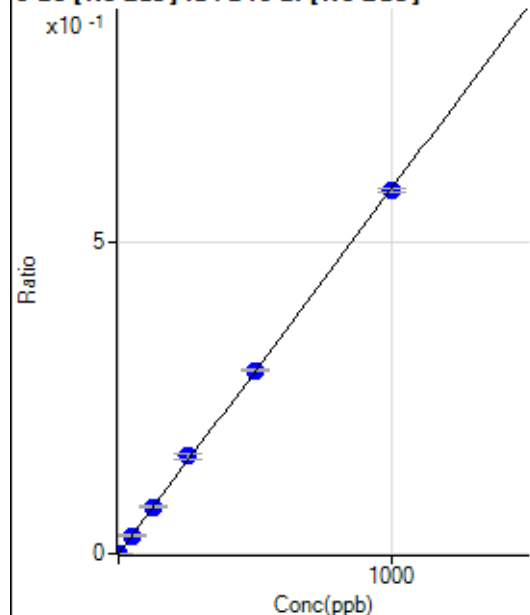


Calibration for 010CAL.S.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8060720 MS1.b\
 Analysis File: P8060720 MS1.batch.bin
 DA Date-Time: 2020-06-08 17:11:59
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	S00	2020-06-08 12:35:53
2	006CAL.S.d	S01	2020-06-08 12:38:59
3	007CAL.S.d	S02	2020-06-08 12:42:03
4	008CAL.S.d	S03	2020-06-08 12:45:09
5	009CAL.S.d	S04	2020-06-08 12:48:14
6	010CAL.S.d	S05	2020-06-08 12:51:19
7	011CAL.S.d	S06	2020-06-08 12:54:17
8	012CAL.S.d	S07	2020-06-08 12:57:18
9	013CAL.S.d	S08	2020-06-08 13:00:17

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	18.00	0.0000	P	34.4
2	☐	0.100	0.101	77.32	0.0001	P	13.0
3	☐	1.000	0.968	589.90	0.0006	P	9.5
4	☐	50.000	49.819	26065.79	0.0291	P	1.4
5	☐	125.000	128.931	67498.41	0.0754	P	0.6
6	☐	250.000	267.962	136728.06	0.1567	P	6.2
7	☐	500.000	502.231	272552.10	0.2936	P	0.8
8	☐	1000.000	993.912	557935.48	0.5811	P	1.0
9	☐			169.97	0.0002	P	20.7

$$y = 5.8459\text{E-}004 * x + 1.7810\text{E-}005$$

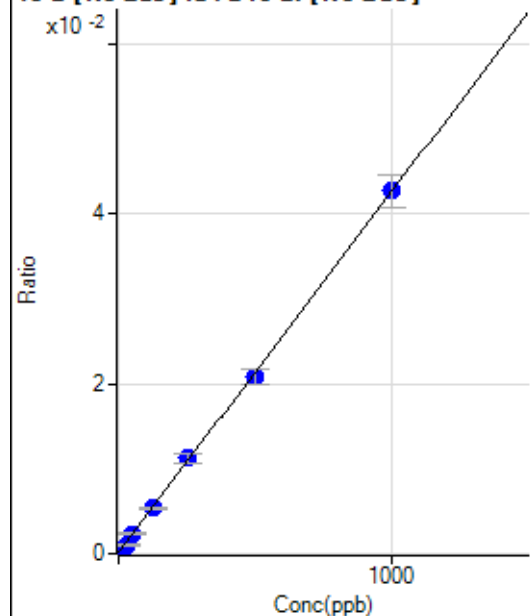
$$R = 0.9998$$

$$DL = 0.03146$$

$$BEC = 0.03047$$

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	164.64	0.0002	P	8.2
2	☐	2.500	2.025	249.29	0.0002	P	3.2
3	☐	25.000	19.796	1011.84	0.0010	P	15.1
4	☐	50.000	50.968	2079.74	0.0023	P	5.6
5	☐	125.000	121.858	4772.51	0.0053	P	6.3
6	☐	250.000	262.630	9856.69	0.0113	P	9.8
7	☐	500.000	488.455	19372.25	0.0209	P	8.9
8	☐	1000.000	1003.090	40992.12	0.0427	P	8.8
9	☐			7965.29	0.0087	P	13.4

$$y = 4.2406\text{E-}005 * x + 1.6239\text{E-}004$$

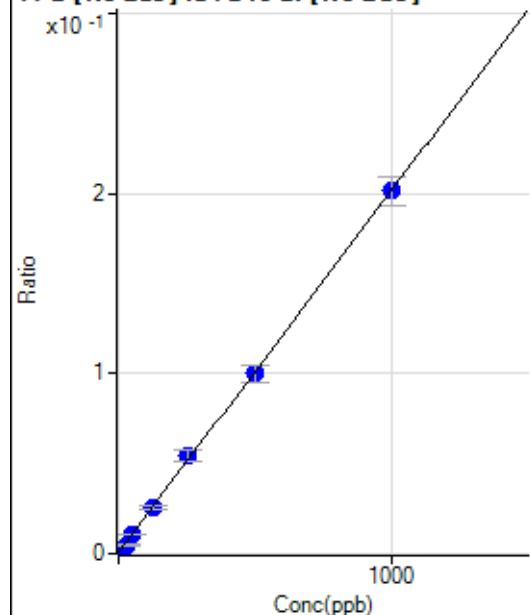
$$R = 0.9998$$

$$DL = 0.9378$$

$$BEC = 3.829$$

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	787.20	0.0008	P	13.7
2	☐	2.500	2.112	1206.48	0.0012	P	4.5
3	☐	25.000	19.182	4677.83	0.0046	P	11.0
4	☐	50.000	48.831	9474.53	0.0106	P	8.3
5	☐	125.000	124.708	23119.60	0.0258	P	8.1
6	☐	250.000	268.702	47713.58	0.0547	P	11.1
7	☐	500.000	494.060	92789.91	0.1000	P	9.4
8	☐	1000.000	998.536	193237.91	0.2013	P	8.3
9	☐			37021.93	0.0403	P	10.0

$$y = 2.0081\text{E-}004 * x + 7.7759\text{E-}004$$

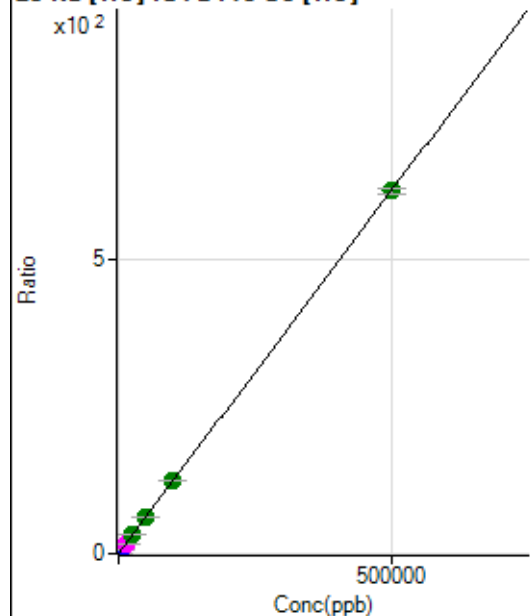
$$R = 0.9998$$

$$DL = 1.59$$

$$BEC = 3.872$$

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	17925.34	0.2654	P	2.1
2	☐	50.000	40.434	21302.09	0.3153	P	2.4
3	☐	500.000	458.638	56445.73	0.8317	P	1.1
4	☐	5000.000	5123.655	393492.77	6.5915	P	0.7
5	☐	12500.000	13130.415	994103.99	16.4773	M	0.9
6	☐	25000.000	26470.402	1975629.49	32.9478	A	2.0
7	☐	50000.000	51011.168	3805503.34	63.2478	A	0.9
8	☐	100000.00	101235.62	7770033.94	125.2588	A	0.7
9	☐	500000.00	499561.28	34943343.14	617.0628	A	1.5

$$y = 0.0012 * x + 0.2654$$

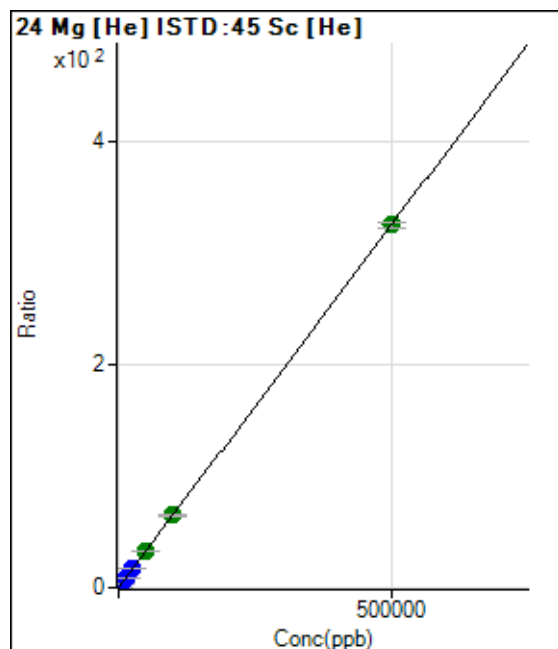
$$R = 1.0000$$

$$DL = 13.83$$

$$BEC = 215$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	316.68	0.0047	P	3.6
2	☐	50.000	42.782	2197.45	0.0326	P	11.7
3	☐	500.000	450.633	20245.06	0.2983	P	1.1
4	☐	5000.000	5082.931	197982.73	3.3165	P	0.9
5	☐	12500.000	12999.853	511309.67	8.4747	P	0.2
6	☐	25000.000	25991.708	1015770.51	16.9395	P	1.4
7	☐	50000.000	50623.350	1984735.24	32.9882	A	1.9
8	☐	100000.00	99663.888	4028457.12	64.9405	A	0.9
9	☐	500000.00	499942.02	18446088.95	325.7408	A	1.7

$$y = 6.5155\text{E-}004 * x + 0.0047$$

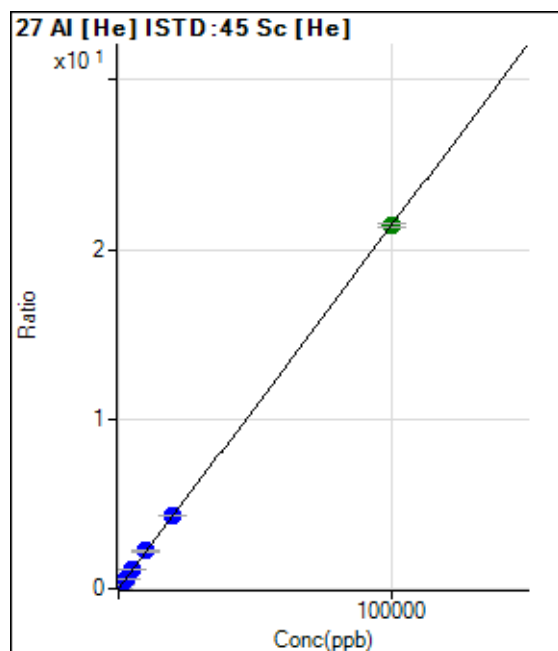
$$R = 1.0000$$

$$DL = 0.7781$$

$$BEC = 7.198$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	283.95	0.0042	P	9.3
2	☒	2.000					
3	☐	20.000	18.222	550.57	0.0081	P	5.1
4	☐	1000.000	1020.048	13290.76	0.2226	P	1.0
5	☐	2500.000	2646.600	34447.03	0.5709	P	0.2
6	☐	5000.000	5227.173	67373.00	1.1235	P	1.3
7	☐	10000.000	10334.512	133403.18	2.2172	P	1.2
8	☐	20000.000	20330.780	270312.10	4.3578	P	0.1
9	☐	100000.00	99885.169	1211520.59	21.3933	A	1.0

$$y = 2.1414\text{E-}004 * x + 0.0042$$

$$R = 1.0000$$

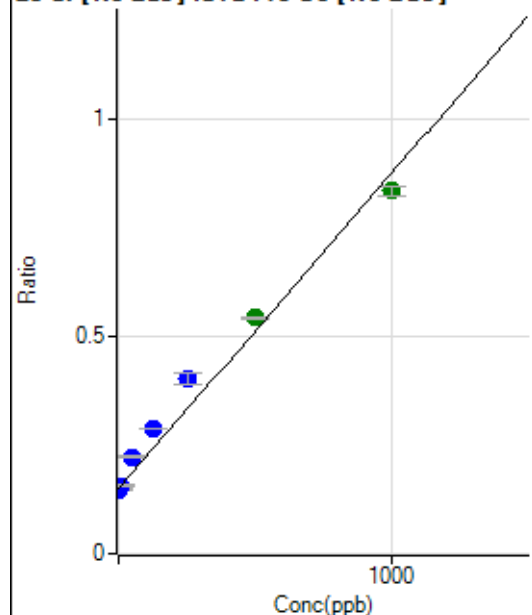
$$DL = 5.455$$

$$BEC = 19.65$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	343219.61	0.1499	P	0.9
2	☐	1.000	-3.001	341278.15	0.1478	P	1.4
3	☐	10.000	9.935	357047.73	0.1572	P	0.4
4	☐	50.000	100.769	439696.60	0.2231	P	2.0
5	☐	125.000	189.674	573368.37	0.2877	P	1.2
6	☐	250.000	347.606	784484.44	0.4024	P	7.2
7	☐	500.000	541.934	1112245.11	0.5436	A	1.1
8	☐	1000.000	944.013	1802951.08	0.8357	A	2.7
9	☐			459547.33	0.2331	P	2.6

$$y = 7.2641\text{E-}004 * x + 0.1499$$

$$R = 0.9911$$

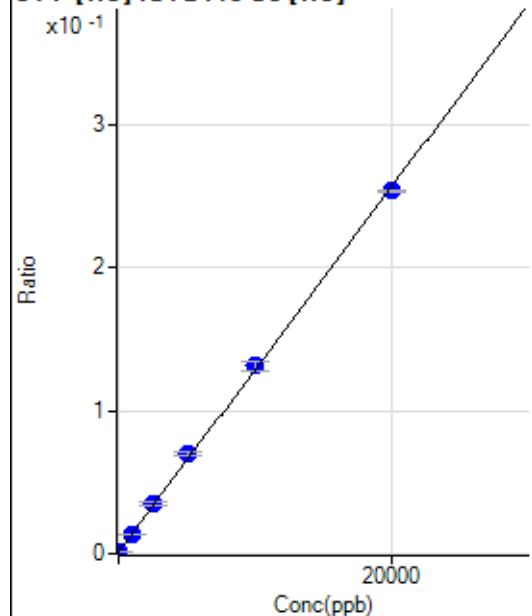
$$DL = 5.687$$

$$BEC = 206.4$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-3.936	77.78	0.0012	P	49.3
2	☐	0.000	2.316	83.34	0.0012	P	21.1
3	☐	0.000	1.620	83.34	0.0012	P	16.4
4	☐	1000.000	981.090	819.49	0.0137	P	3.0
5	☐	2500.000	2628.969	2097.43	0.0348	P	6.5
6	☐	5000.000	5393.720	4200.71	0.0700	P	2.5
7	☐	10000.000	10201.885	7905.14	0.1314	P	5.4
8	☐	20000.000	19785.452	15736.68	0.2537	P	0.9
9	☐			66.67	0.0012	P	44.1

$$y = 1.2762\text{E-}005 * x + 0.0012$$

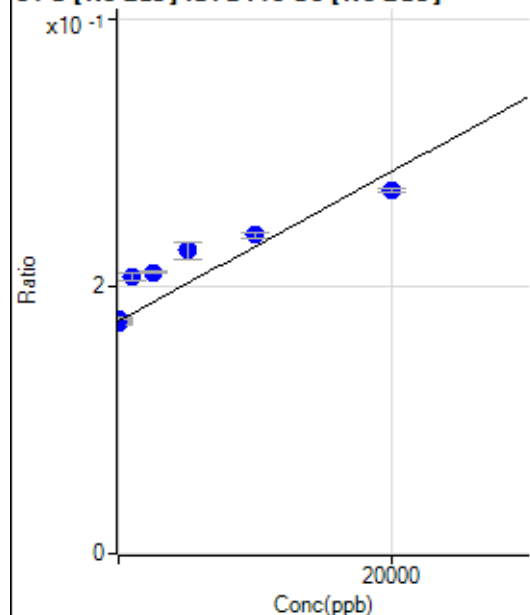
$$R = 0.9997$$

$$DL = 80.85$$

$$BEC = 94.48$$

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	-91.159	397155.22	0.1735	P	1.5
2	☐	0.000	-226.957	398974.03	0.1728	P	2.1
3	☐	0.000	318.116	399390.00	0.1758	P	1.1
4	☐	1000.000	5930.385	408277.82	0.2072	P	2.2
5	☐	2500.000	6500.540	419269.85	0.2104	P	0.5
6	☐	5000.000	9421.628	442293.97	0.2267	P	5.3
7	☐	10000.000	11476.242	487395.57	0.2382	P	1.3
8	☐	20000.000	17409.885	585694.52	0.2714	P	1.0
9	☐			388945.51	0.1972	P	1.8

$$y = 5.5950\text{E-}006 * x + 0.1740$$

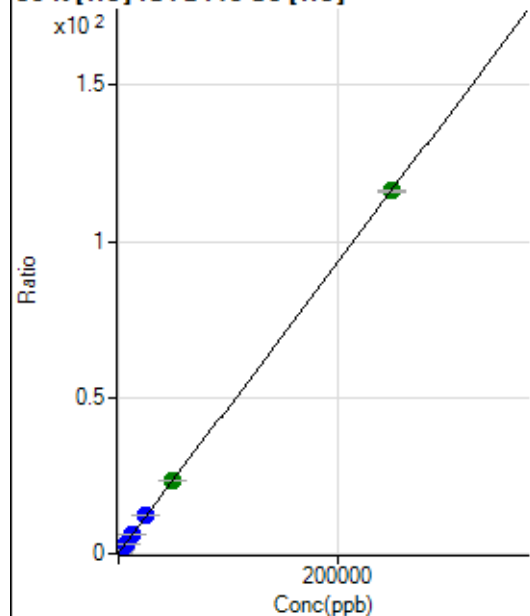
$$R = 0.9253$$

$$DL = 1438$$

$$BEC = 3.11\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	14713.38	0.2179	P	1.4
2	☐	50.000	52.675	16367.91	0.2423	P	1.3
3	☐	500.000	463.075	29369.26	0.4327	P	0.7
4	☐	2500.000	2583.850	84575.65	1.4167	P	0.6
5	☐	6250.000	6567.172	196976.50	3.2649	P	1.7
6	☐	12500.000	13132.116	378429.00	6.3110	P	1.6
7	☐	25000.000	25849.114	734731.81	12.2114	P	0.9
8	☐	50000.000	50037.856	1453681.18	23.4346	A	1.1
9	☐	250000.00	249867.21	6577970.77	116.1522	A	0.8

$$y = 4.6398\text{E-}004 * x + 0.2179$$

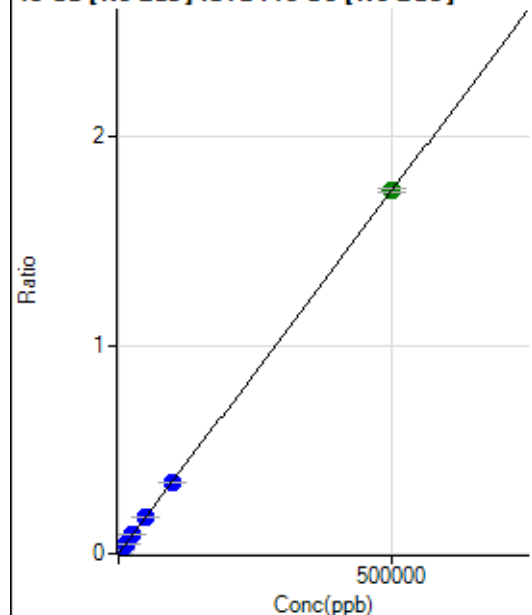
$$R = 1.0000$$

$$DL = 19.66$$

$$BEC = 469.6$$

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	191.68	0.0001	P	20.2
2	☐	50.000	58.119	661.14	0.0003	P	0.7
3	☐	500.000	456.194	3800.61	0.0017	P	8.7
4	☐	5000.000	5094.084	35121.27	0.0178	P	3.6
5	☐	12500.000	12756.628	88709.18	0.0445	P	1.8
6	☐	25000.000	26599.114	180789.29	0.0927	P	6.7
7	☐	50000.000	50330.741	358847.63	0.1754	P	1.0
8	☐	100000.00	98258.353	738657.07	0.3423	P	1.3
9	☐	500000.00	500227.98	3436333.24	1.7424	A	1.0

$$y = 3.4831\text{E-}006 * x + 8.3784\text{E-}005$$

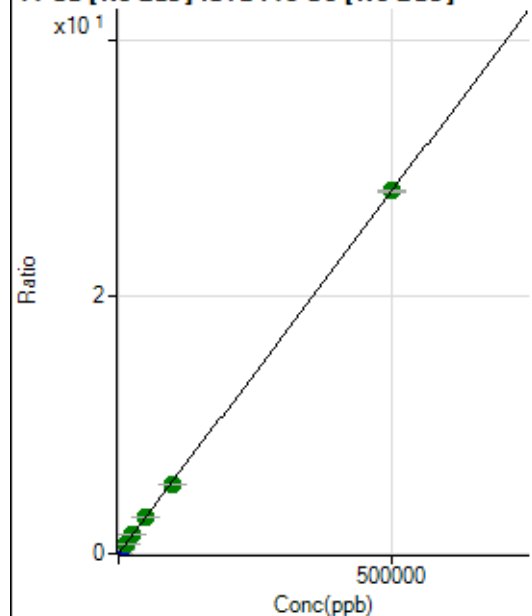
$$R = 1.0000$$

$$DL = 14.61$$

$$BEC = 24.05$$

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	17182.94	0.0075	P	1.5
2	☐	50.000	52.607	24198.85	0.0105	P	3.8
3	☐	500.000	462.514	76336.05	0.0336	P	1.8
4	☐	5000.000	5035.660	574672.51	0.2916	P	0.6
5	☐	12500.000	12786.522	1452432.22	0.7288	A	0.3
6	☐	25000.000	25990.170	2873846.83	1.4737	A	6.4
7	☐	50000.000	49477.661	5725857.81	2.7987	A	1.4
8	☐	100000.00	96006.744	11703278.99	5.4236	A	0.9
9	☐	500000.00	500793.89	55730912.36	28.2591	A	0.8

$$y = 5.6414\text{E-}005 * x + 0.0075$$

$$R = 1.0000$$

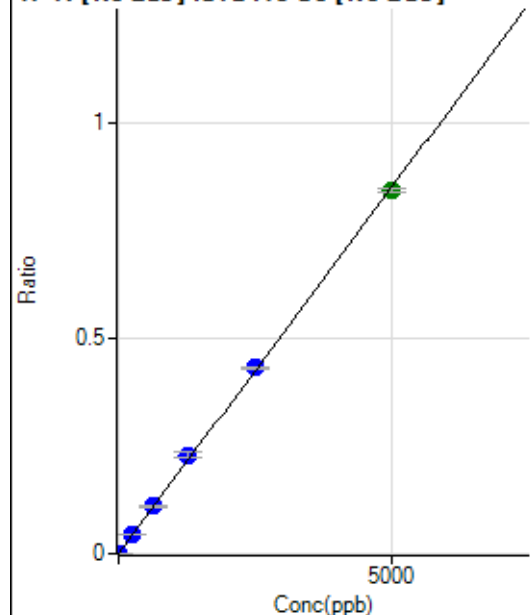
$$DL = 6.146$$

$$BEC = 133.1$$

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	311.12	0.0001	P	3.3
2	☐	0.500	0.522	519.47	0.0002	P	12.5
3	☐	5.000	4.875	2189.11	0.0010	P	2.8
4	☐	250.000	252.685	84800.51	0.0430	P	2.0
5	☐	625.000	645.349	218604.28	0.1097	P	0.8
6	☐	1250.000	1350.578	447527.66	0.2294	P	5.4
7	☐	2500.000	2535.828	881063.49	0.4306	P	1.3
8	☐	5000.000	4954.264	1815245.22	0.8412	A	1.0
9	☐			566.69	0.0003	P	6.3

$$y = 1.6977\text{E-}004 * x + 1.3592\text{E-}004$$

$$R = 0.9997$$

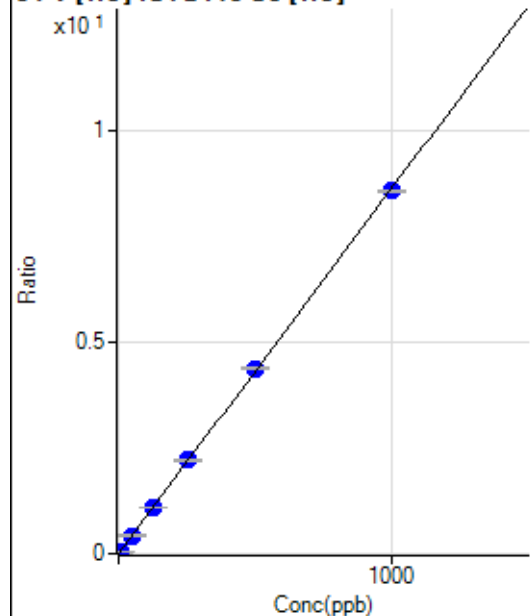
$$DL = 0.07975$$

$$BEC = 0.8006$$

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	14.44	0.0002	P	57.5
2	☐	0.500	0.424	262.23	0.0039	P	17.2
3	☐	5.000	4.554	2686.95	0.0396	P	1.7
4	☐	50.000	49.804	25716.53	0.4308	P	1.5
5	☐	125.000	127.010	66261.27	1.0983	P	0.6
6	☐	250.000	256.103	132780.33	2.2143	P	1.5
7	☐	500.000	508.399	264469.25	4.3955	P	1.0
8	☐	1000.000	994.036	533092.63	8.5941	P	0.8
9	☐			167.78	0.0030	P	3.5

$$y = 0.0086 * x + 2.1369\text{E-}004$$

$$R = 0.9999$$

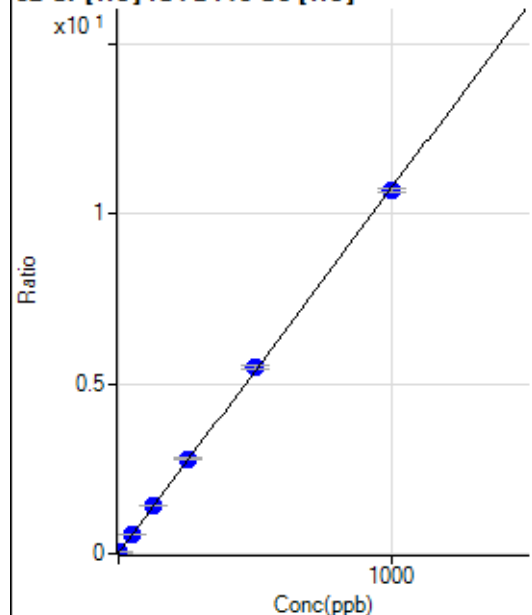
$$DL = 0.04266$$

$$BEC = 0.02472$$

Weight: <None>

Min Conc: 0

52 Cr [He] ISTD:45 Sc [He]



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	786.70	0.0117	P	7.2
2	☒	0.200					
3	☐	2.000	2.020	2263.54	0.0334	P	3.2
4	☐	50.000	51.379	33659.62	0.5638	P	1.1
5	☐	125.000	129.801	84868.76	1.4067	P	0.2
6	☐	250.000	258.779	167466.32	2.7928	P	1.8
7	☐	500.000	509.627	330241.20	5.4888	P	1.1
8	☐	1000.000	992.323	662247.68	10.6764	P	0.9
9	☐			14712.11	0.2598	P	2.0

$$y = 0.0107 * x + 0.0117$$

$$R = 0.9999$$

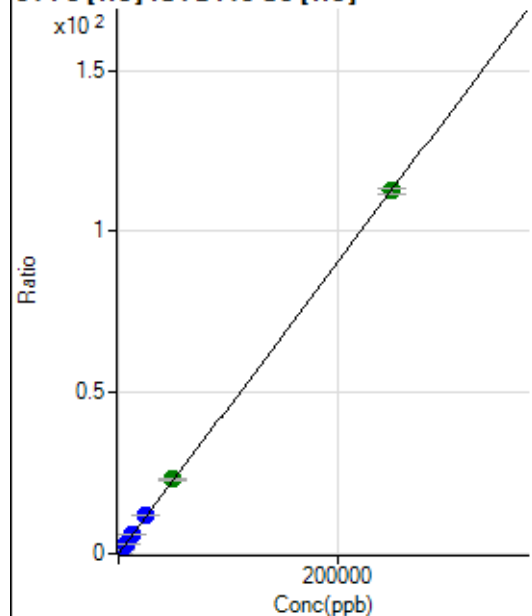
$$DL = 0.2345$$

$$BEC = 1.084$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	240.75	0.0036	P	15.5
2	☐	5.000	5.973	422.24	0.0063	P	21.1
3	☐	50.000	47.439	1694.57	0.0250	P	4.4
4	☐	2500.000	2585.547	69845.90	1.1700	P	1.1
5	☐	6250.000	6606.645	180028.07	2.9840	P	1.1
6	☐	12500.000	13208.980	357536.26	5.9625	P	1.7
7	☐	25000.000	25870.375	702427.71	11.6743	P	0.5
8	☐	50000.000	51154.689	1431861.17	23.0807	A	2.1
9	☐	250000.00	249636.80	6377597.08	112.6207	A	1.4

$$y = 4.5112E-004 * x + 0.0036$$

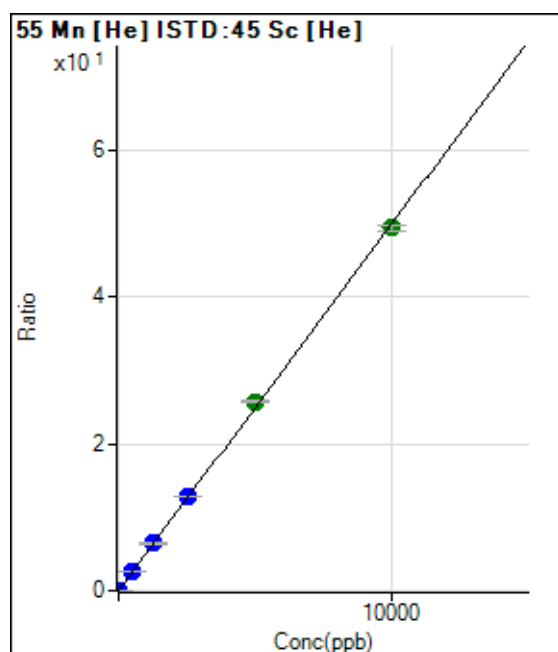
$$R = 1.0000$$

$$DL = 3.668$$

$$BEC = 7.903$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	63.33	0.0009	P	23.7
2	☐	0.100	0.082	91.11	0.0013	P	13.5
3	☐	1.000	0.943	382.23	0.0056	P	3.6
4	☐	500.000	508.423	151255.99	2.5337	P	1.1
5	☐	1250.000	1289.243	387534.38	6.4235	P	1.5
6	☐	2500.000	2571.514	768247.51	12.8113	P	1.0
7	☐	5000.000	5148.945	1543411.24	25.6512	A	0.9
8	☐	10000.000	9902.323	3060227.25	49.3308	A	1.5
9	☐			2653.61	0.0469	P	6.5

$$y = 0.0050 * x + 9.3736E-004$$

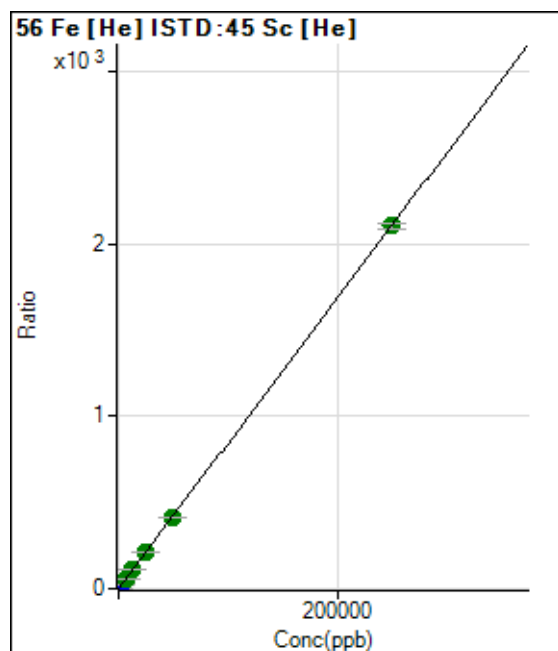
$$R = 0.9998$$

$$DL = 0.1338$$

$$BEC = 0.1882$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2278.00	0.0337	P	6.7
2	☐	5.000	4.817	5015.78	0.0743	P	3.1
3	☐	50.000	46.767	28988.85	0.4271	P	0.9
4	☐	2500.000	2523.622	1269176.52	21.2596	P	1.1
5	☐	6250.000	6432.049	3265897.30	54.1328	A	1.7
6	☐	12500.000	12913.025	6514278.50	108.6435	A	2.5
7	☐	25000.000	25520.819	12917435.36	214.6859	A	0.3
8	☐	50000.000	49480.083	25817728.59	416.2041	A	0.6
9	☐	250000.00	250026.46	119083920.2	2,102.972	A	1.9

$$y = 0.0084 * x + 0.0337$$

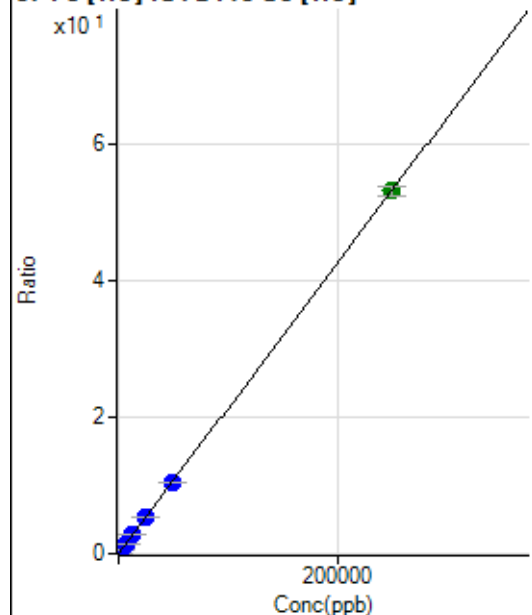
$$R = 1.0000$$

$$DL = 0.8123$$

$$BEC = 4.012$$

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	103.71	0.0015	P	9.1
2	☒	5.000					
3	☐	50.000	46.164	768.55	0.0113	P	2.9
4	☐	2500.000	2466.493	31301.18	0.5243	P	1.6
5	☐	6250.000	6357.637	81388.44	1.3490	P	1.7
6	☐	12500.000	12811.322	162918.05	2.7169	P	2.0
7	☐	25000.000	25087.915	320030.36	5.3189	P	0.9
8	☐	50000.000	48947.161	643612.90	10.3759	P	0.7
9	☐	250000.00	250183.85	3002669.31	53.0283	A	2.4

$$y = 2.1195\text{E-}004 * x + 0.0015$$

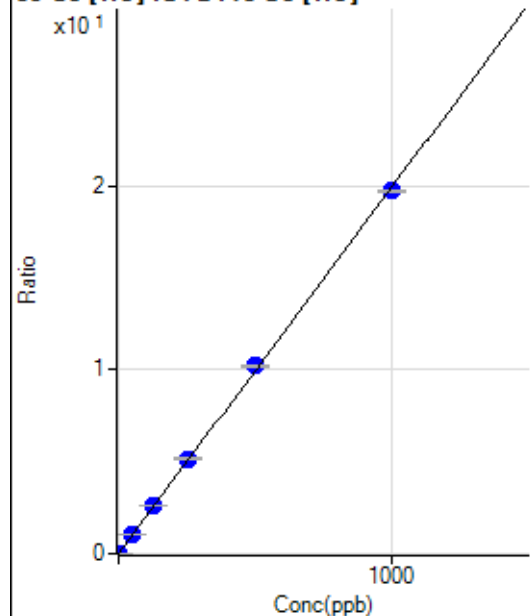
$$R = 1.0000$$

$$DL = 1.978$$

$$BEC = 7.249$$

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	28.89	0.0004	P	59.1
2	☐	0.100	0.107	173.34	0.0026	P	19.5
3	☐	1.000	0.913	1262.29	0.0186	P	4.5
4	☐	50.000	50.679	60276.86	1.0097	P	0.4
5	☐	125.000	129.168	155225.76	2.5728	P	0.4
6	☐	250.000	258.716	308977.76	5.1527	P	1.6
7	☐	500.000	512.584	614217.48	10.2085	P	1.1
8	☐	1000.000	990.974	1224166.83	19.7356	P	0.8
9	☐			2051.28	0.0362	P	0.8

$$y = 0.0199 * x + 4.2952\text{E-}004$$

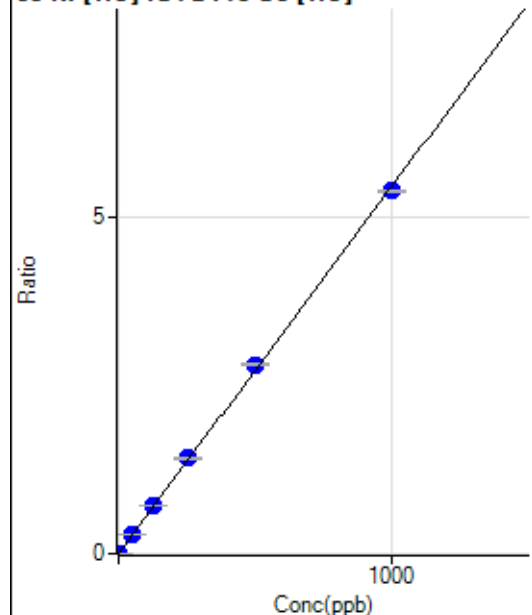
$$R = 0.9998$$

$$DL = 0.03825$$

$$BEC = 0.02157$$

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	84.44	0.0012	P	9.2
2	☐	0.100	0.075	112.23	0.0017	P	11.3
3	☐	1.000	1.013	458.90	0.0068	P	4.9
4	☐	50.000	51.831	16906.80	0.2832	P	2.4
5	☐	125.000	131.341	43178.67	0.7157	P	1.8
6	☐	250.000	261.044	85225.36	1.4212	P	1.5
7	☐	500.000	515.202	168697.26	2.8038	P	0.8
8	☐	1000.000	988.754	333711.37	5.3798	P	0.4
9	☐			4707.49	0.0831	P	1.1

$$y = 0.0054 * x + 0.0012$$

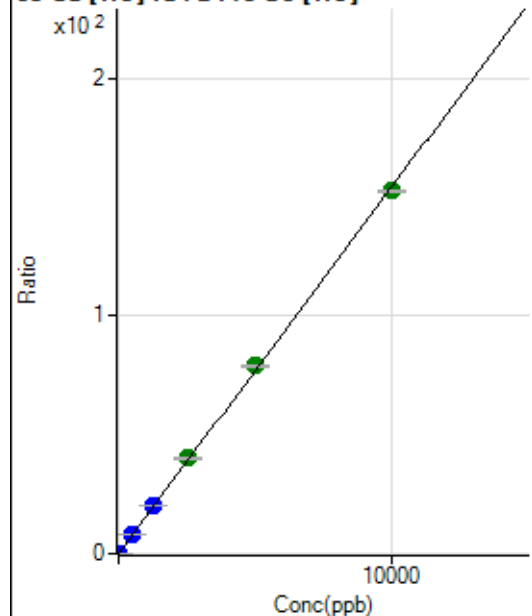
$$R = 0.9998$$

$$DL = 0.0631$$

$$BEC = 0.2297$$

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	203.34	0.0030	P	9.8
2	☐	0.200	0.205	416.68	0.0062	P	11.7
3	☐	2.000	2.183	2486.91	0.0366	P	3.2
4	☐	500.000	514.465	473291.02	7.9281	P	1.3
5	☐	1250.000	1314.219	1221612.29	20.2480	P	0.7
6	☐	2500.000	2612.960	2413825.29	40.2546	A	1.5
7	☐	5000.000	5119.242	4745056.80	78.8628	A	0.9
8	☐	10000.000	9903.388	9463455.07	152.5606	A	0.7
9	☐			4716.39	0.0833	P	3.8

$$y = 0.0154 * x + 0.0030$$

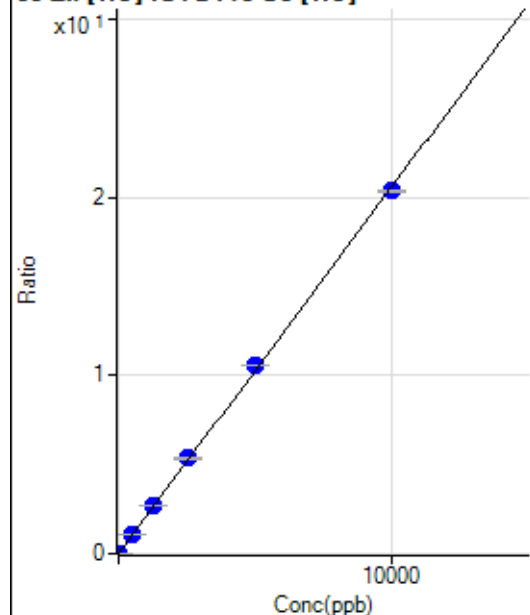
$$R = 0.9998$$

$$DL = 0.05769$$

$$BEC = 0.1954$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	136.67	0.0020	P	19.5
2	☒	0.200					
3	☐	2.000	2.166	440.01	0.0065	P	12.5
4	☐	500.000	507.163	62351.89	1.0445	P	1.0
5	☐	1250.000	1313.660	163030.09	2.7022	P	0.4
6	☐	2500.000	2605.949	321308.04	5.3583	P	1.6
7	☐	5000.000	5129.727	634528.90	10.5458	P	0.5
8	☐	10000.000	9900.334	1262411.00	20.3514	P	0.4
9	☐			6289.23	0.1111	P	2.6

$$y = 0.0021 * x + 0.0020$$

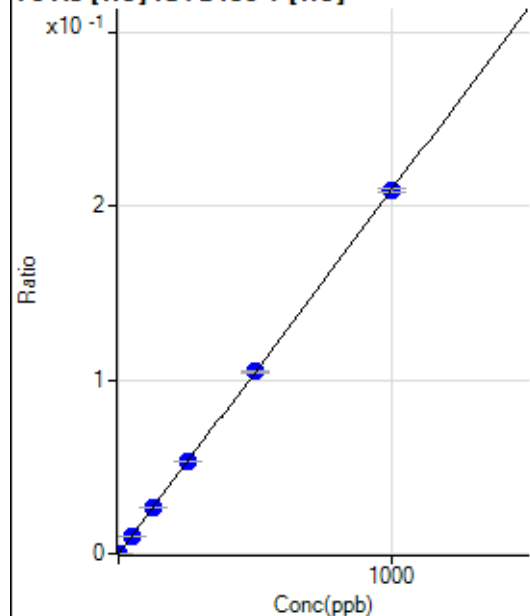
$$R = 0.9998$$

$$DL = 0.5755$$

$$BEC = 0.9858$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.33	0.0000	P	10.7
2	☐	0.100	0.101	15.33	0.0000	P	7.6
3	☐	1.000	0.995	103.34	0.0002	P	9.6
4	☐	50.000	49.055	4292.43	0.0103	P	0.7
5	☐	125.000	127.013	11205.24	0.0266	P	1.3
6	☐	250.000	255.332	22402.95	0.0534	P	0.7
7	☐	500.000	501.094	44355.57	0.1048	P	1.0
8	☐	1000.000	997.916	89669.06	0.2087	P	0.9
9	☐			34.33	0.0001	P	7.4

$$y = 2.0914E-004 * x + 1.1368E-005$$

$$R = 1.0000$$

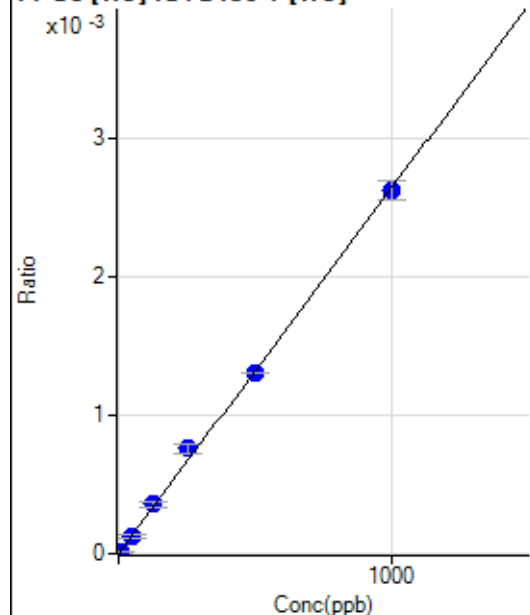
$$DL = 0.0174$$

$$BEC = 0.05436$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500	4.454	5.56	0.0000	P	91.6
3	☐	5.000	6.251	7.78	0.0000	P	25.0
4	☐	50.000	47.258	52.22	0.0001	P	32.3
5	☐	125.000	134.608	150.00	0.0004	P	10.9
6	☐	250.000	287.488	318.90	0.0008	P	8.3
7	☐	500.000	494.374	553.35	0.0013	P	0.7
8	☐	1000.000	992.369	1127.84	0.0026	P	5.3
9	☐			1.11	0.0000	P	173.

$$y = 2.6448\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9992$$

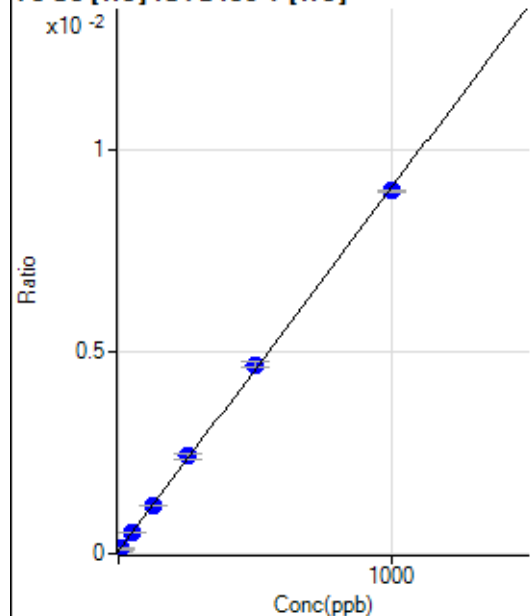
$$DL = 0$$

$$BEC = 0$$

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	32.33	0.0001	P	17.7
2	☐	0.500	0.113	33.00	0.0001	P	21.9
3	☐	5.000	5.731	56.67	0.0001	P	15.1
4	☐	50.000	50.056	216.69	0.0005	P	6.7
5	☐	125.000	123.871	498.06	0.0012	P	1.9
6	☐	250.000	260.284	1009.47	0.0024	P	5.3
7	☐	500.000	512.376	1976.34	0.0047	P	2.7
8	☐	1000.000	991.376	3854.25	0.0090	P	0.6
9	☐			31.00	0.0001	P	4.4

$$y = 8.9797\text{E-}006 * x + 6.8939\text{E-}005$$

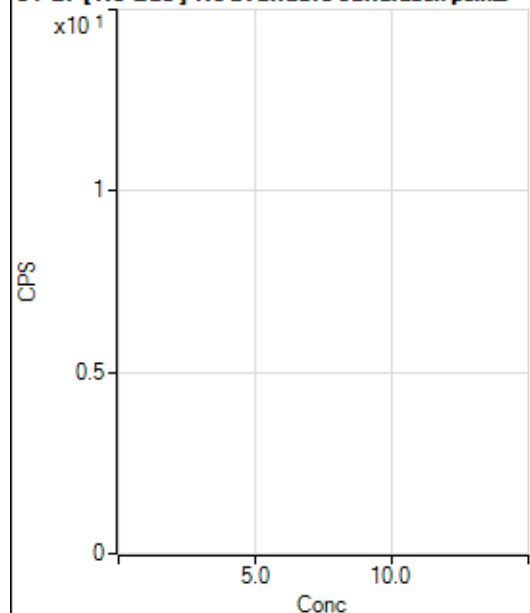
$$R = 0.9998$$

$$DL = 4.076$$

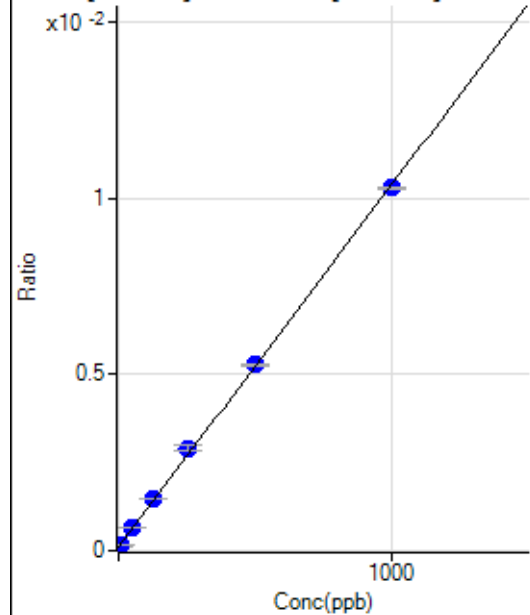
$$BEC = 7.677$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1985.52		P	5.9
2	☐			2008.88		P	12.2
3	☐			1978.85		P	5.5
4	☐			1912.10		P	14.2
5	☐			1945.48		P	4.8
6	☐			1858.72		P	11.6
7	☐			1735.23		P	7.5
8	☐			1922.12		P	10.8
9	☐			1751.91		P	6.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	435.31	0.0001	P	6.7
2	☒	0.500					
3	☐	5.000	5.813	687.83	0.0002	P	9.9
4	☐	50.000	52.683	2442.51	0.0006	P	2.2
5	☐	125.000	132.096	5668.79	0.0015	P	0.8
6	☐	250.000	271.886	10785.02	0.0029	P	5.8
7	☐	500.000	503.581	20897.44	0.0053	P	1.0
8	☐	1000.000	991.713	42463.48	0.0103	P	0.8
9	☐			415.25	0.0001	P	6.0

$$y = 1.0284\text{E-}005 * x + 9.9883\text{E-}005$$

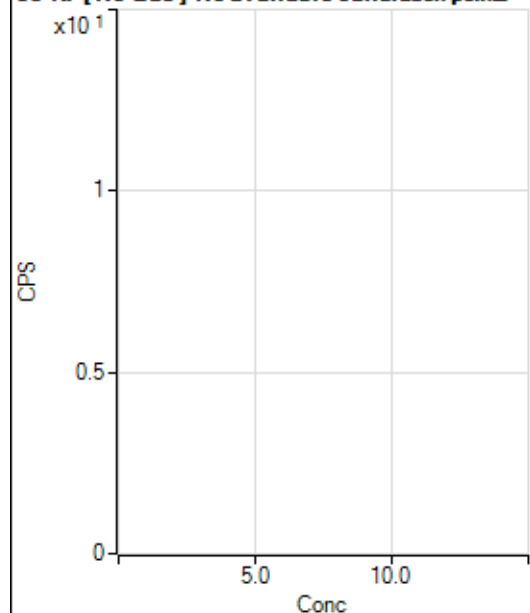
$$R = 0.9997$$

$$DL = 1.959$$

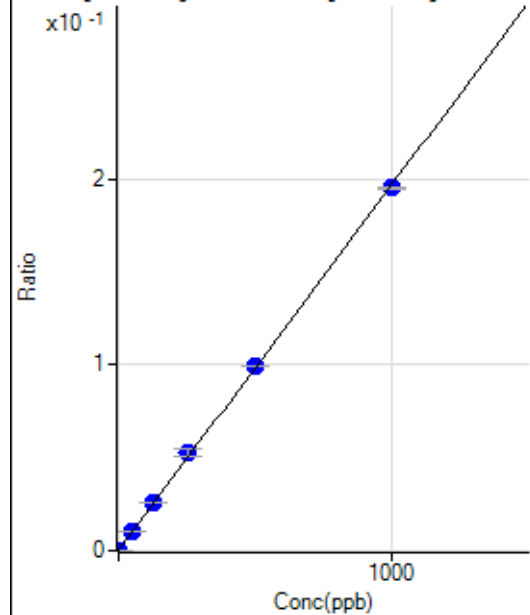
$$BEC = 9.713$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			603.35		P	3.9
2	☐			498.91		P	6.2
3	☐			503.35		P	10.7
4	☐			535.57		P	4.0
5	☐			534.46		P	8.2
6	☐			546.68		P	1.6
7	☐			518.90		P	7.5
8	☐			494.46		P	7.4
9	☐			471.13		P	2.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	811.16	0.0002	P	4.4
2	☐	0.100	0.105	908.38	0.0002	P	8.7
3	☐	1.000	1.088	1722.38	0.0004	P	7.9
4	☐	50.000	50.053	38130.53	0.0100	P	1.8
5	☐	125.000	129.070	99248.66	0.0255	P	1.5
6	☐	250.000	268.671	197102.95	0.0530	P	6.9
7	☐	500.000	504.638	393083.95	0.0993	P	1.0
8	☐	1000.000	992.502	804453.38	0.1951	P	0.5
9	☐			5028.83	0.0013	P	2.6

$$y = 1.9639E-004 * x + 1.8610E-004$$

$$R = 0.9998$$

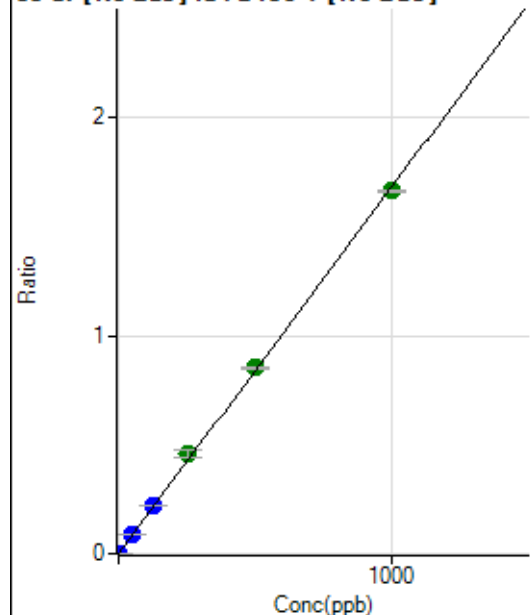
$$DL = 0.1246$$

$$BEC = 0.9476$$

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	166.67	0.0000	P	23.5
2	☐	0.100	0.102	919.50	0.0002	P	1.7
3	☐	1.000	0.966	7160.40	0.0017	P	1.8
4	☐	50.000	50.839	325138.80	0.0854	P	0.4
5	☐	125.000	129.355	844525.15	0.2173	P	0.3
6	☐	250.000	272.474	1703899.21	0.4576	A	6.2
7	☐	500.000	507.096	3371607.78	0.8516	A	0.6
8	☐	1000.000	990.247	6856499.37	1.6630	A	0.8
9	☐			35983.23	0.0095	P	1.7

$$y = 0.0017 * x + 3.8355E-005$$

$$R = 0.9997$$

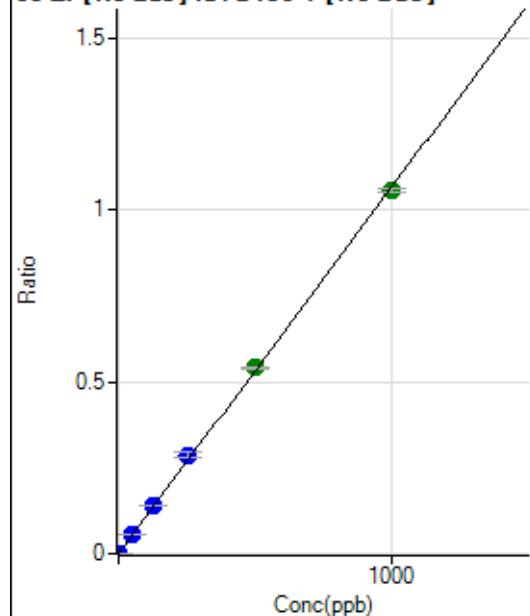
$$DL = 0.01607$$

$$BEC = 0.02284$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	233.34	0.0001	P	14.0
2	☐	0.100	0.090	655.59	0.0001	P	7.1
3	☐	1.000	0.897	4350.81	0.0010	P	2.9
4	☐	50.000	50.030	202882.21	0.0533	P	0.6
5	☐	125.000	129.179	534594.27	0.1375	P	0.7
6	☐	250.000	270.250	1071224.63	0.2877	P	6.0
7	☐	500.000	507.793	2139617.04	0.5405	A	1.0
8	☐	1000.000	990.517	4346594.41	1.0542	A	1.1
9	☐			1305.65	0.0003	P	12.1

$$y = 0.0011 * x + 5.3627E-005$$

$$R = 0.9997$$

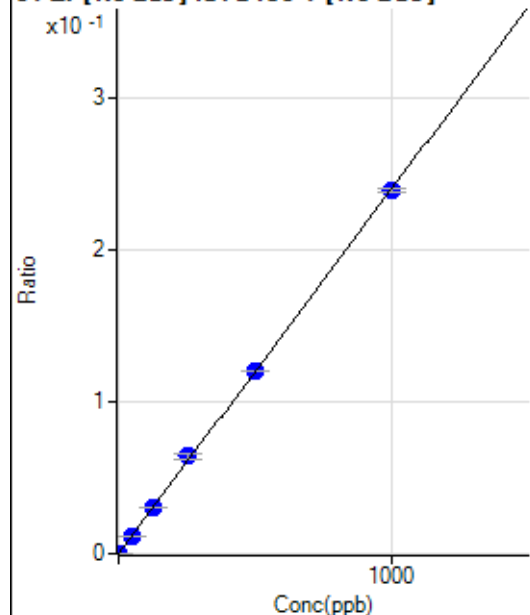
$$DL = 0.02118$$

$$BEC = 0.05039$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	44.0
2	☐	0.100	0.084	122.23	0.0000	P	15.5
3	☐	1.000	0.789	847.27	0.0002	P	15.6
4	☐	50.000	49.112	44856.08	0.0118	P	1.4
5	☐	125.000	128.196	119507.66	0.0307	P	0.4
6	☐	250.000	266.680	238052.97	0.0639	P	6.8
7	☐	500.000	500.526	475126.98	0.1200	P	0.8
8	☐	1000.000	995.212	983836.90	0.2386	P	1.2
9	☐			311.12	0.0001	P	13.8

$$y = 2.3976\text{E-}004 * x + 7.6663\text{E-}006$$

$$R = 0.9998$$

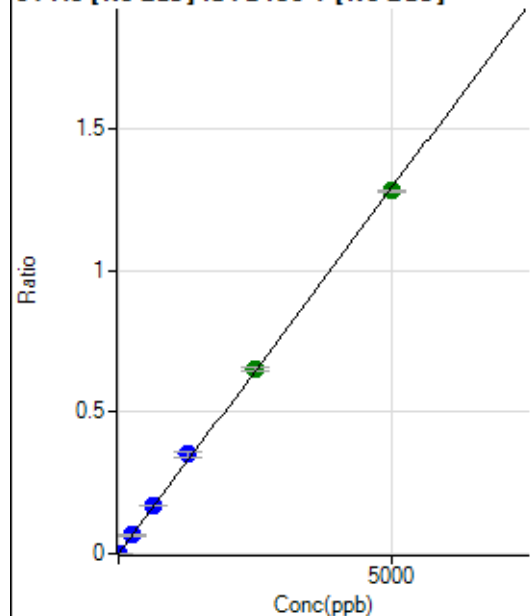
$$DL = 0.04219$$

$$BEC = 0.03197$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.22	0.0000	P	25.3
2	☐	0.500	0.416	544.47	0.0001	P	13.1
3	☐	5.000	4.881	5504.01	0.0013	P	4.9
4	☐	250.000	249.949	245718.09	0.0646	P	1.3
5	☐	625.000	652.430	654835.12	0.1685	P	0.4
6	☐	1250.000	1357.716	1305824.21	0.3506	P	5.4
7	☐	2500.000	2515.088	2570580.83	0.6494	A	2.0
8	☐	5000.000	4962.101	5282432.54	1.2812	A	0.6
9	☐			3356.05	0.0009	P	6.5

$$y = 2.5819\text{E-}004 * x + 1.6609\text{E-}005$$

$$R = 0.9997$$

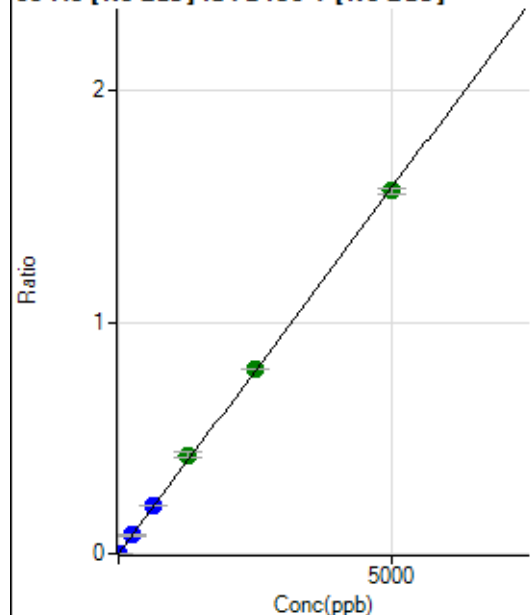
$$DL = 0.04884$$

$$BEC = 0.06433$$

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	16.66	0.0000	P	84.6
2	☐	0.500	0.464	661.15	0.0002	P	8.3
3	☐	5.000	4.821	6593.39	0.0015	P	4.3
4	☐	250.000	251.017	302015.25	0.0793	P	1.0
5	☐	625.000	652.345	801383.95	0.2062	P	0.7
6	☐	1250.000	1342.582	1580319.61	0.4243	A	5.7
7	☐	2500.000	2524.872	3159078.41	0.7980	A	0.6
8	☐	5000.000	4960.950	6464487.99	1.5679	A	1.3
9	☐			4809.31	0.0013	P	5.4

$$y = 3.1604E-004 * x + 3.7822E-006$$

$$R = 0.9998$$

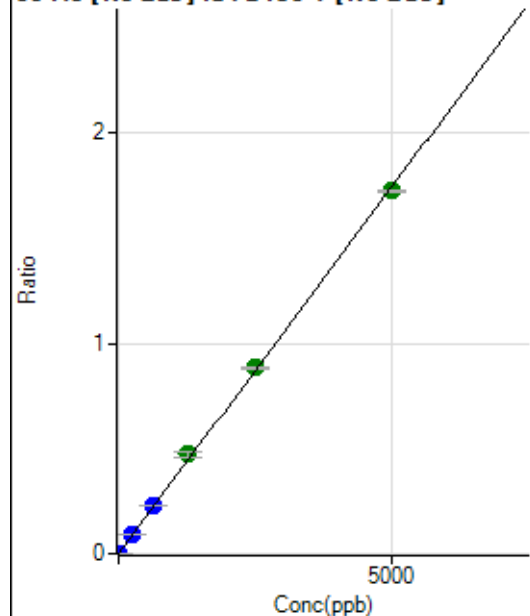
$$DL = 0.03038$$

$$BEC = 0.01197$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	94.45	0.0000	P	54.0
2	☐	0.500	0.522	894.50	0.0002	P	5.6
3	☐	5.000	4.665	7104.81	0.0016	P	3.8
4	☐	250.000	252.253	334609.55	0.0879	P	0.6
5	☐	625.000	654.632	886562.54	0.2281	P	0.3
6	☐	1250.000	1359.094	1763755.96	0.4735	A	5.3
7	☐	2500.000	2534.217	3495107.58	0.8829	A	1.2
8	☐	5000.000	4951.802	7112892.52	1.7251	A	0.3
9	☐			5381.74	0.0014	P	6.9

$$y = 3.4837E-004 * x + 2.1707E-005$$

$$R = 0.9997$$

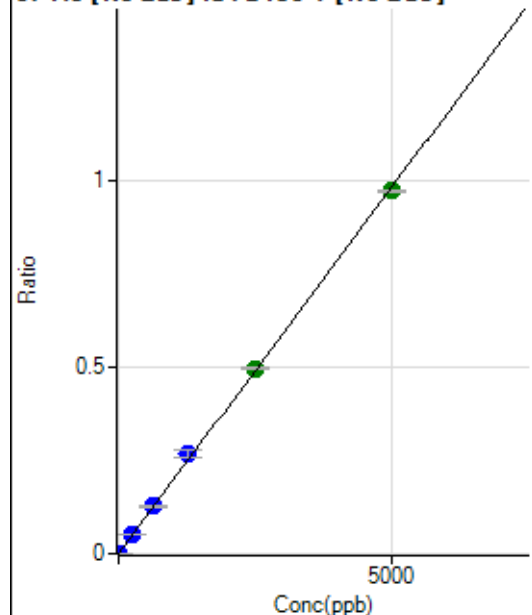
$$DL = 0.101$$

$$BEC = 0.06231$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	41.1
2	☐	0.500	0.456	405.57	0.0001	P	10.4
3	☐	5.000	4.823	4103.50	0.0010	P	3.0
4	☐	250.000	250.010	187272.07	0.0492	P	0.2
5	☐	625.000	644.650	493051.24	0.1268	P	0.7
6	☐	1250.000	1359.564	995728.45	0.2675	P	7.1
7	☐	2500.000	2530.822	1971309.27	0.4980	A	1.3
8	☐	5000.000	4954.742	4019783.99	0.9749	A	0.8
9	☐			2997.62	0.0008	P	2.0

$$y = 1.9676E-004 * x + 2.5363E-006$$

$$R = 0.9997$$

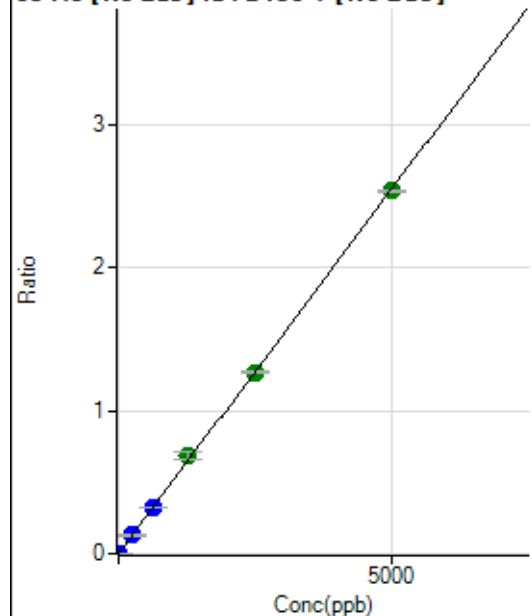
$$DL = 0.01589$$

$$BEC = 0.01289$$

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	25.00	0.0000	P	35.0
2	☐	0.500	0.478	1097.29	0.0002	P	7.6
3	☐	5.000	4.671	10292.97	0.0024	P	1.1
4	☐	250.000	251.000	486926.34	0.1279	P	0.4
5	☐	625.000	634.806	1257441.48	0.3235	P	0.3
6	☐	1250.000	1352.630	2565458.85	0.6893	A	7.2
7	☐	2500.000	2488.321	5019807.14	1.2680	A	1.1
8	☐	5000.000	4978.907	10461015.77	2.5372	A	0.7
9	☐			7371.58	0.0019	P	4.6

$$y = 5.0959E-004 * x + 5.7650E-006$$

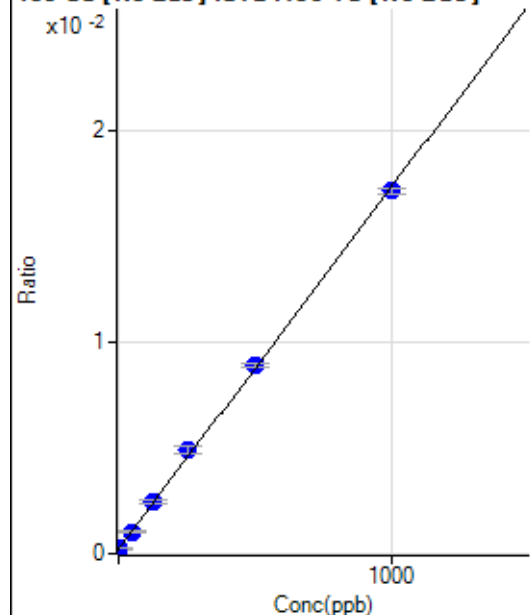
$$R = 0.9998$$

$$DL = 0.01188$$

$$BEC = 0.01131$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	886.17	0.0002	P	10.0
2	☐	0.100	0.053	894.50	0.0002	P	13.6
3	☐	1.000	0.772	938.95	0.0002	P	0.8
4	☐	50.000	47.715	3703.37	0.0010	P	9.4
5	☐	125.000	130.014	8950.32	0.0024	P	5.2
6	☐	250.000	274.099	16894.07	0.0049	P	6.4
7	☐	500.000	508.705	33457.80	0.0089	P	1.6
8	☐	1000.000	989.111	67426.26	0.0171	P	1.3
9	☐			852.83	0.0002	P	10.7

$$y = 1.7102\text{E-}005 * x + 2.1797\text{E-}004$$

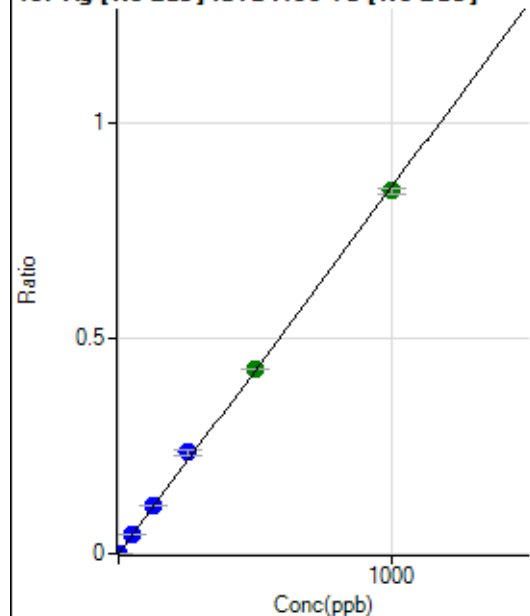
$$R = 0.9996$$

$$DL = 3.817$$

$$BEC = 12.75$$

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	58.34	0.0000	P	51.0
2	☐	0.100	0.080	336.12	0.0001	P	14.0
3	☐	1.000	0.953	3353.27	0.0008	P	2.3
4	☐	50.000	50.970	155680.21	0.0434	P	1.5
5	☐	125.000	130.701	408265.36	0.1113	P	0.8
6	☐	250.000	277.068	812992.22	0.2360	P	5.7
7	☐	500.000	505.214	1614606.63	0.4304	A	0.2
8	☐	1000.000	989.865	3318036.66	0.8432	A	1.4
9	☐			911.17	0.0002	P	2.5

$$y = 8.5181\text{E-}004 * x + 1.4314\text{E-}005$$

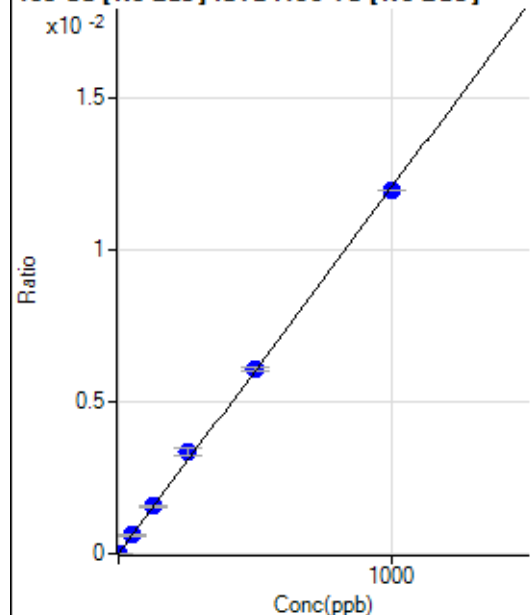
$$R = 0.9996$$

$$DL = 0.02574$$

$$BEC = 0.0168$$

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	6.94	0.0000	P	35.1
2	☐	0.100	0.084	11.11	0.0000	P	94.1
3	☐	1.000	1.080	59.72	0.0000	P	6.9
4	☐	50.000	51.397	2221.04	0.0006	P	7.1
5	☐	125.000	128.932	5691.53	0.0016	P	3.3
6	☐	250.000	277.011	11475.70	0.0033	P	7.1
7	☐	500.000	503.708	22735.54	0.0061	P	1.8
8	☐	1000.000	990.832	46904.49	0.0119	P	0.1
9	☐			113.89	0.0000	P	29.6

$$y = 1.2028\text{E-}005 * x + 1.7100\text{E-}006$$

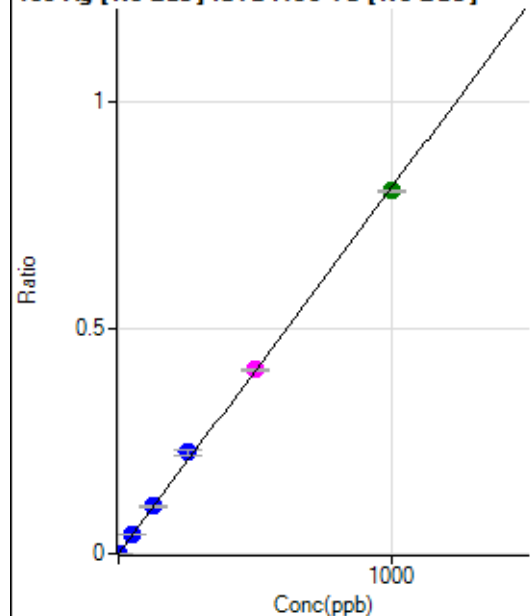
$$R = 0.9996$$

$$DL = 0.1498$$

$$BEC = 0.1422$$

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	57.1
2	☐	0.100	0.079	291.68	0.0001	P	5.1
3	☐	1.000	0.993	3297.71	0.0008	P	4.1
4	☐	50.000	51.428	149347.12	0.0417	P	0.8
5	☐	125.000	129.376	384246.86	0.1048	P	1.2
6	☐	250.000	276.858	772413.96	0.2242	P	5.8
7	☐	500.000	502.877	1528113.86	0.4073	M	0.9
8	☐	1000.000	991.229	3159382.12	0.8029	A	0.7
9	☐			869.50	0.0002	P	8.0

$$y = 8.0995\text{E-}004 * x + 7.5172\text{E-}006$$

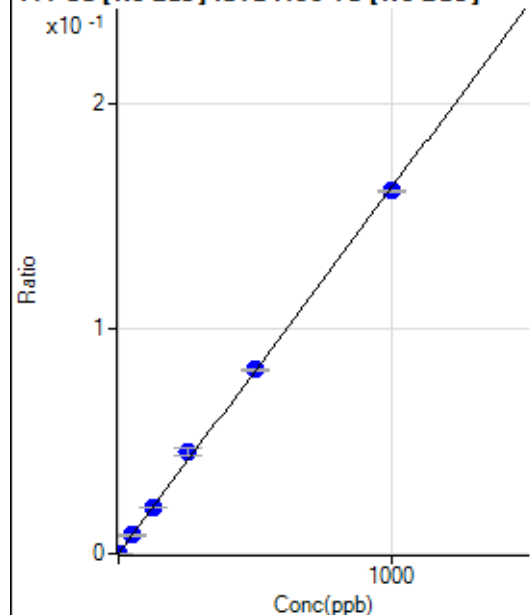
$$R = 0.9996$$

$$DL = 0.0159$$

$$BEC = 0.009281$$

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	180.71	0.0000	P	2.9
2	☐	0.100	0.116	258.62	0.0001	P	12.2
3	☐	1.000	0.942	802.95	0.0002	P	6.4
4	☐	50.000	49.842	29220.16	0.0082	P	3.8
5	☐	125.000	126.620	75691.21	0.0206	P	1.1
6	☐	250.000	277.571	155615.02	0.0452	P	6.9
7	☐	500.000	502.830	307065.25	0.0818	P	0.8
8	☐	1000.000	991.498	634913.09	0.1613	P	0.9
9	☐			350.57	0.0001	P	4.8

$$y = 1.6268\text{E-}004 * x + 4.4433\text{E-}005$$

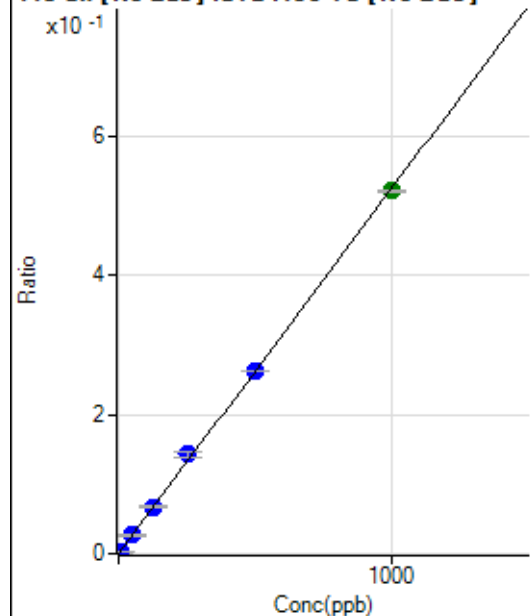
$$R = 0.9996$$

$$DL = 0.02359$$

$$BEC = 0.2731$$

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	83.33	0.0000	P	62.5
2	☐	0.500	0.498	1152.86	0.0003	P	1.7
3	☐	5.000	4.778	10279.13	0.0025	P	2.3
4	☐	50.000	50.178	94561.82	0.0264	P	2.5
5	☐	125.000	128.303	247244.67	0.0674	P	1.5
6	☐	250.000	273.478	494967.04	0.1437	P	5.9
7	☐	500.000	499.722	985076.62	0.2626	P	0.3
8	☐	1000.000	993.849	2054814.83	0.5222	A	0.8
9	☐			1669.59	0.0005	P	12.2

$$y = 5.2538\text{E-}004 * x + 2.0466\text{E-}005$$

$$R = 0.9997$$

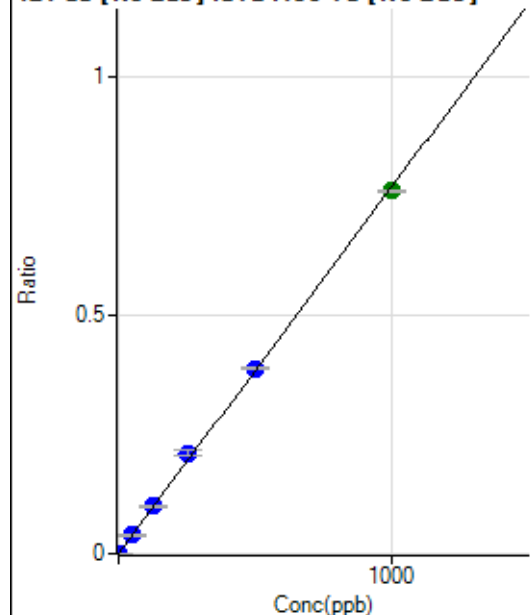
$$DL = 0.07305$$

$$BEC = 0.03896$$

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	2.78	0.0000	P	173.
2	☐	0.200	0.228	716.71	0.0002	P	5.9
3	☐	2.000	1.876	5845.83	0.0014	P	2.2
4	☐	50.000	50.478	138729.50	0.0387	P	2.8
5	☐	125.000	128.745	361955.11	0.0987	P	1.9
6	☐	250.000	275.128	726260.15	0.2110	P	7.1
7	☐	500.000	506.141	1456091.35	0.3881	P	0.2
8	☐	1000.000	990.156	2987813.67	0.7593	A	0.3
9	☐			2689.23	0.0007	P	8.8

$$y = 7.6681\text{E-}004 * x + 6.8527\text{E-}007$$

$$R = 0.9996$$

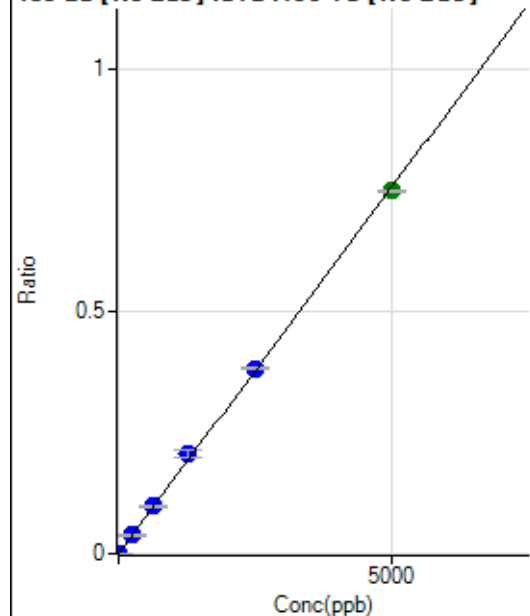
$$DL = 0.004644$$

$$BEC = 0.0008937$$

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	38.89	0.0000	P	54.0
2	☐	1.000	0.943	622.26	0.0002	P	11.5
3	☐	10.000	9.469	5862.56	0.0014	P	1.1
4	☐	250.000	250.612	136070.08	0.0380	P	1.3
5	☐	625.000	644.726	357984.51	0.0976	P	1.7
6	☐	1250.000	1367.359	712764.59	0.2071	P	7.3
7	☐	2500.000	2529.555	1437088.07	0.3831	P	1.2
8	☐	5000.000	4953.387	2951738.04	0.7501	A	0.6
9	☐			5520.72	0.0015	P	2.8

$$y = 1.5143\text{E-}004 * x + 9.5568\text{E-}006$$

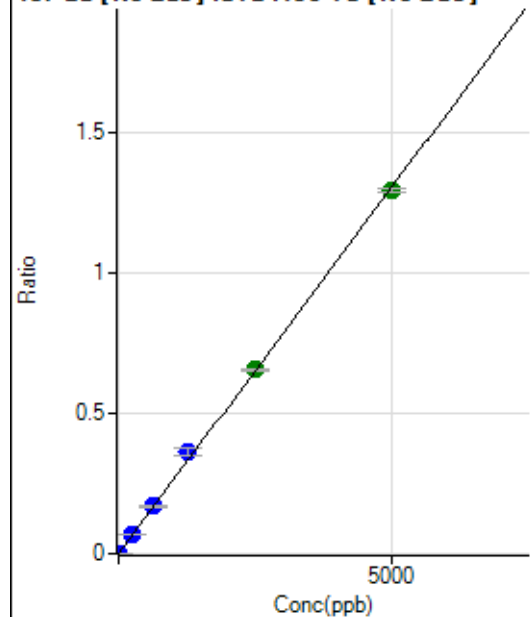
$$R = 0.9997$$

$$DL = 0.1023$$

$$BEC = 0.06311$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	55.56	0.0000	P	16.5
2	☐	1.000	0.927	1041.74	0.0003	P	2.4
3	☐	10.000	9.623	10229.17	0.0025	P	2.1
4	☐	250.000	251.539	234760.22	0.0655	P	1.1
5	☐	625.000	646.121	616716.97	0.1682	P	1.1
6	☐	1250.000	1388.531	1244524.20	0.3615	P	6.6
7	☐	2500.000	2514.436	2455563.27	0.6545	A	1.4
8	☐	5000.000	4955.433	5075993.82	1.2899	A	1.0
9	☐			9353.50	0.0025	P	0.8

$$y = 2.6030E-004 * x + 1.3647E-005$$

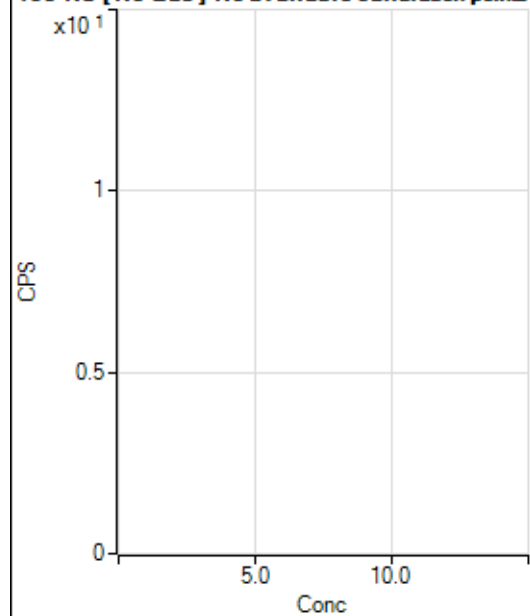
$$R = 0.9996$$

$$DL = 0.02598$$

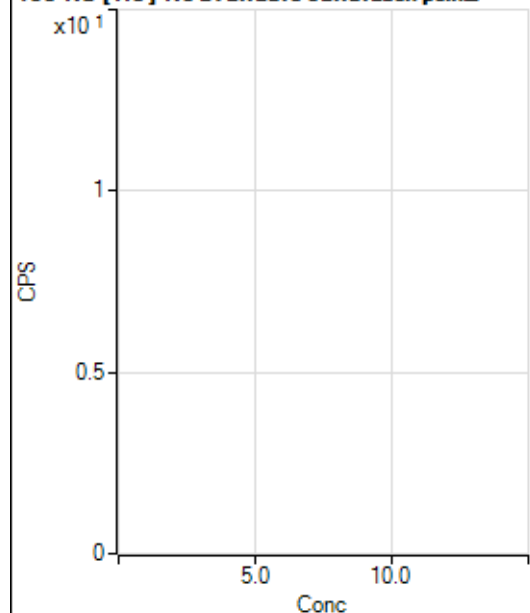
$$BEC = 0.05243$$

Weight: <None>

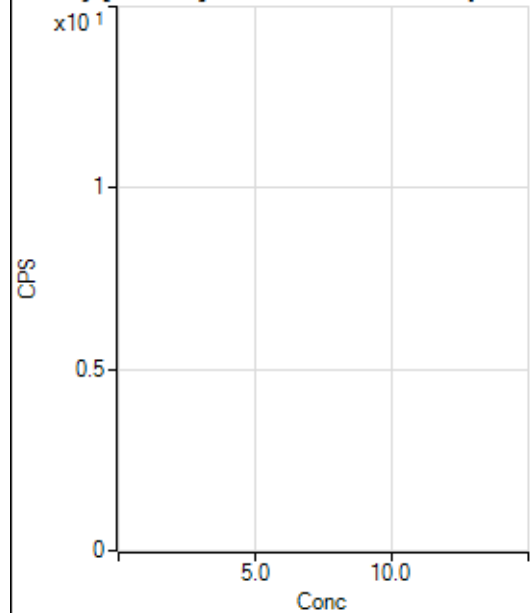
Min Conc: 0

150 Nd [No Gas] No available calibration points

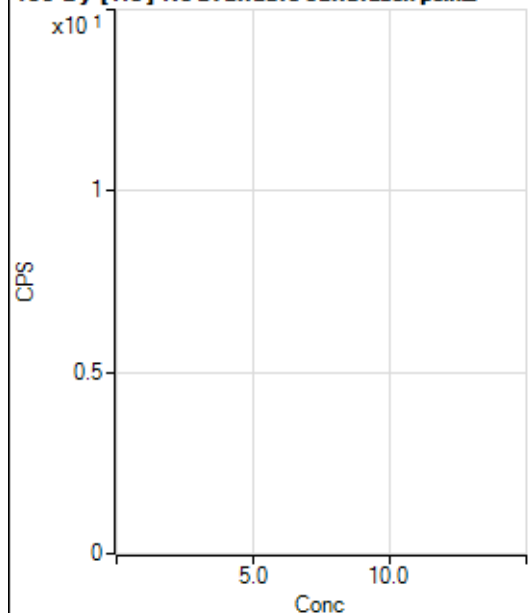
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			8.89		P	43.3
3	☐			2.22		P	173.
4	☐			8.89		P	114.
5	☐			17.78		P	57.3
6	☐			28.89		P	93.3
7	☐			42.22		P	32.9
8	☐			75.56		P	13.5
9	☐			8.89		P	43.3

150 Nd [He] No available calibration points

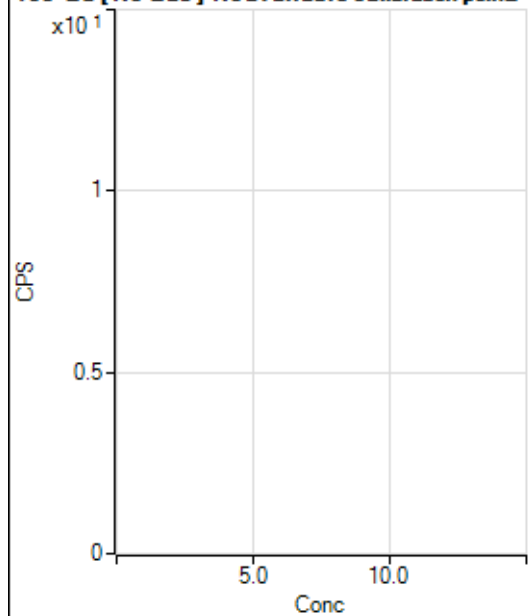
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			1.11		P	173.
6	☐			4.44		P	43.4
7	☐			11.11		P	34.6
8	☐			6.67		P	86.6
9	☐			3.33		P	0.0

156 Dy [No Gas] No available calibration points

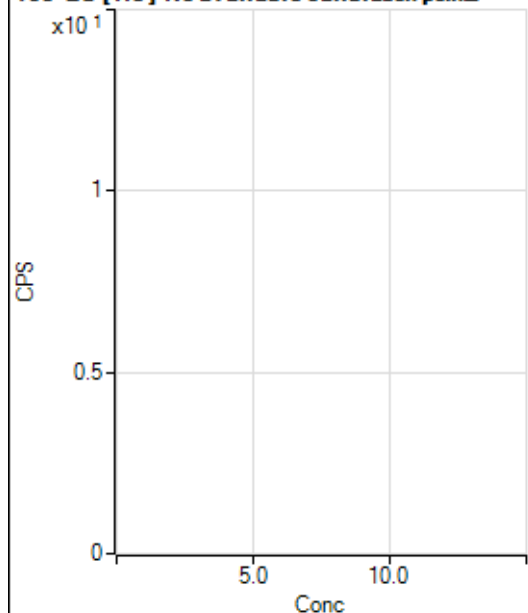
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	49.5
2	☐			11.11		P	43.3
3	☐			13.89		P	69.3
4	☐			11.11		P	43.3
5	☐			19.44		P	65.5
6	☐			19.45		P	24.7
7	☐			44.44		P	43.3
8	☐			77.78		P	32.7
9	☐			150.01		P	11.1

156 Dy [He] No available calibration points

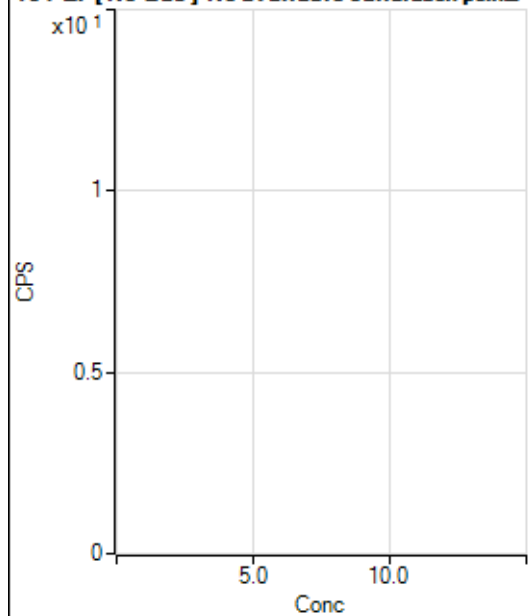
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			3.33		P	100.
3	☐			1.11		P	173.
4	☐			2.22		P	86.6
5	☐			3.33		P	0.0
6	☐			7.78		P	89.2
7	☐			10.00		P	33.3
8	☐			21.11		P	18.2
9	☐			70.00		P	19.0

160 Gd [No Gas] Noavailable calibration poin_

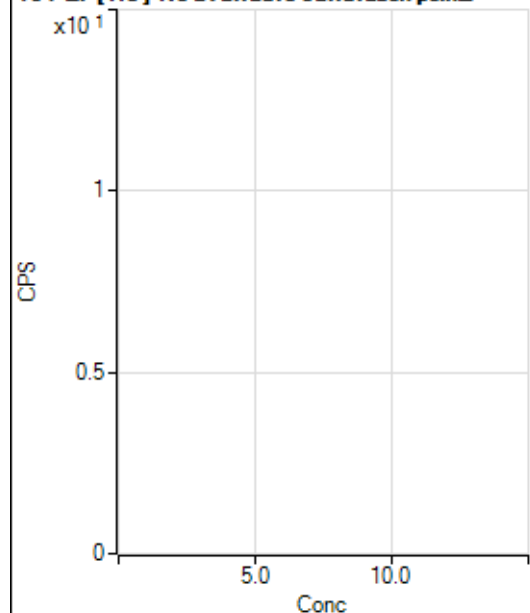
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.56		P	41.7
2	☐			30.55		P	83.3
3	☐			25.00		P	33.3
4	☐			25.00		P	33.3
5	☐			27.78		P	69.3
6	☐			36.11		P	35.3
7	☐			66.67		P	54.5
8	☐			55.56		P	37.8
9	☐			180.56		P	25.4

160 Gd [He] No available calibration points

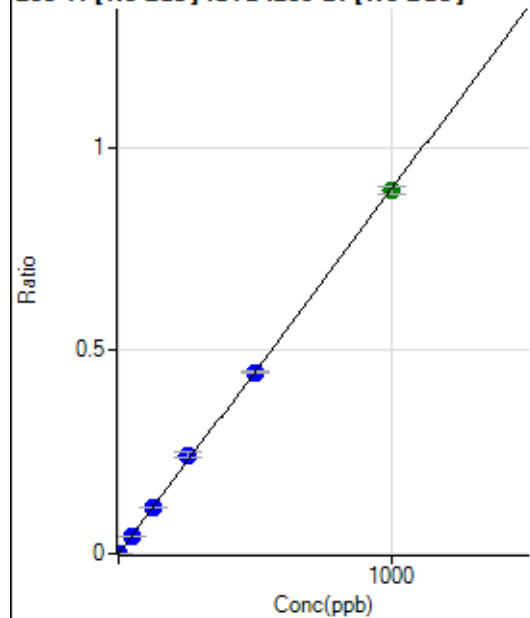
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16.67		P	20.0
2	☐			12.22		P	15.7
3	☐			13.33		P	100.
4	☐			8.89		P	21.6
5	☐			14.44		P	53.3
6	☐			20.00		P	28.9
7	☐			21.11		P	24.1
8	☐			31.11		P	6.2
9	☐			107.78		P	19.6

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			27.78		P	96.4
2	☐			11.11		P	114.
3	☐			33.33		P	50.0
4	☐			11.11		P	43.3
5	☐			33.34		P	43.3
6	☐			8.33		P	173.
7	☐			22.22		P	43.3
8	☐			36.11		P	70.5
9	☐			50.00		P	28.9

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.78		P	89.2
2	☐			5.56		P	91.6
3	☐			11.11		P	34.6
4	☐			8.89		P	86.6
5	☐			5.56		P	34.7
6	☐			10.00		P	88.2
7	☐			5.55		P	124.
8	☐			6.67		P	100.
9	☐			16.66		P	34.6

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	25.00	0.0000	P	66.9
2	☐	0.100	0.106	255.57	0.0001	P	27.0
3	☐	1.000	0.913	1983.56	0.0008	P	8.8
4	☐	50.000	49.493	92855.45	0.0444	P	2.1
5	☐	125.000	126.698	246099.96	0.1138	P	0.6
6	☐	250.000	271.320	498293.78	0.2436	P	7.0
7	☐	500.000	498.169	999383.04	0.4473	P	0.9
8	☐	1000.000	995.398	2114668.06	0.8937	A	2.0
9	☐			1000.07	0.0005	P	19.0

$$y = 8.9779\text{E-}004 * x + 1.0402\text{E-}005$$

$$R = 0.9997$$

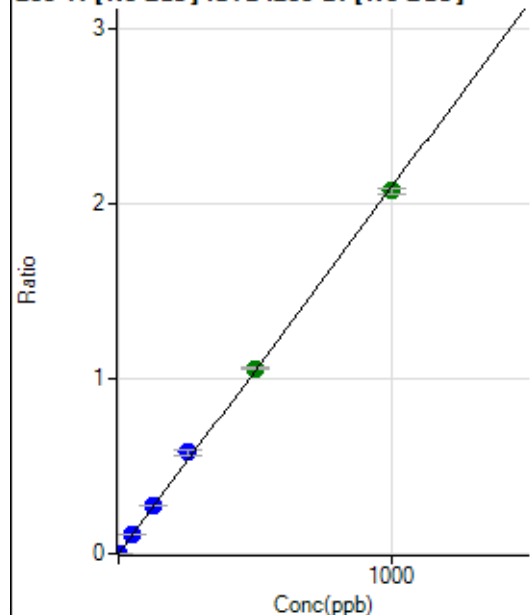
$$DL = 0.02324$$

$$BEC = 0.01159$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	33.33	0.0000	P	66.1
2	☐	0.100	0.090	491.69	0.0002	P	21.2
3	☐	1.000	0.983	4962.21	0.0021	P	5.8
4	☐	50.000	50.394	220859.33	0.1057	P	0.7
5	☐	125.000	130.113	590346.31	0.2729	P	1.4
6	☐	250.000	276.237	1185189.97	0.5793	P	6.7
7	☐	500.000	505.572	2368915.31	1.0603	A	1.1
8	☐	1000.000	989.996	4912546.46	2.0762	A	1.5
9	☐			2544.78	0.0012	P	6.4

$$y = 0.0021 * x + 1.3846E-005$$

$$R = 0.9996$$

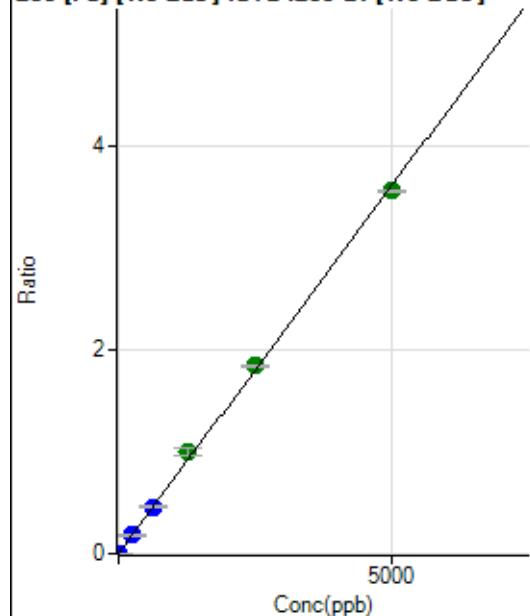
$$DL = 0.01309$$

$$BEC = 0.006602$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	105.56	0.0000	P	20.8
2	☐	0.100	0.115	307.42	0.0001	P	16.8
3	☐	1.000	0.939	1726.07	0.0007	P	3.2
4	☐	250.000	249.161	375576.80	0.1797	P	1.0
5	☐	625.000	639.195	997412.28	0.4611	P	0.6
6	☐	1250.000	1391.744	2053315.64	1.0038	A	7.0
7	☐	2500.000	2557.037	4120644.94	1.8443	A	1.0
8	☐	5000.000	4934.313	8421122.47	3.5588	A	0.6
9	☐			8378.76	0.0039	P	1.3

$$y = 7.2123E-004 * x + 4.3876E-005$$

$$R = 0.9994$$

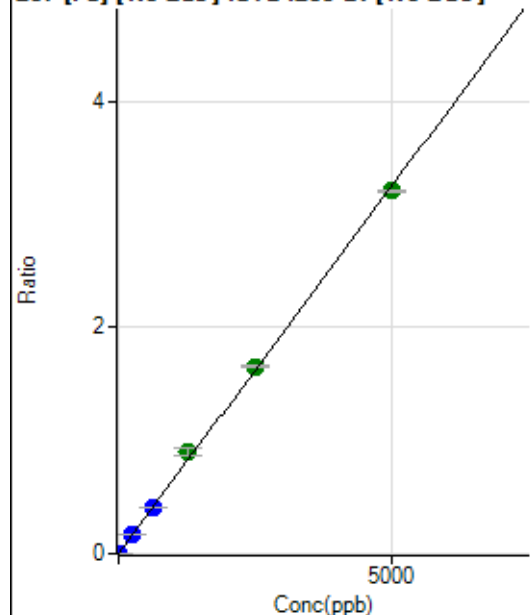
$$DL = 0.03803$$

$$BEC = 0.06083$$

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	118.52	0.0000	P	31.7
2	☐	0.100	0.078	242.60	0.0001	P	8.7
3	☐	1.000	0.899	1511.22	0.0006	P	4.7
4	☐	250.000	249.661	338515.80	0.1620	P	0.2
5	☐	625.000	637.028	894070.95	0.4133	P	0.5
6	☐	1250.000	1385.931	1838111.02	0.8991	A	8.3
7	☐	2500.000	2547.160	3691842.07	1.6523	A	0.9
8	☐	5000.000	4940.950	7584450.29	3.2051	A	0.4
9	☐			7439.28	0.0035	P	3.1

$$y = 6.4868\text{E-}004 * x + 4.9258\text{E-}005$$

$$R = 0.9995$$

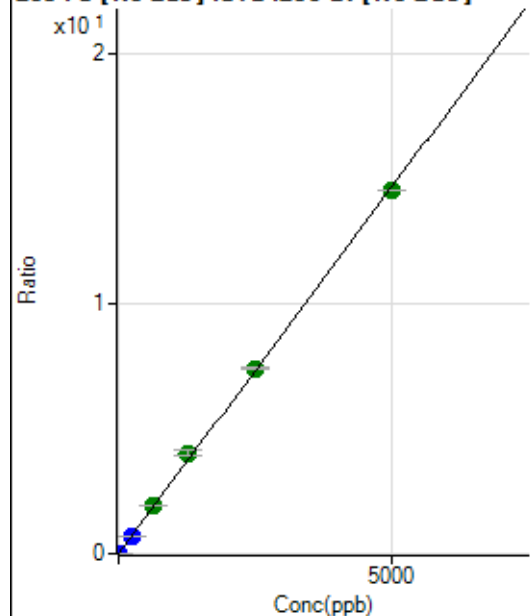
$$DL = 0.07223$$

$$BEC = 0.07594$$

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	553.72	0.0002	P	8.2
2	☐	0.100	0.088	1183.38	0.0005	P	1.0
3	☐	1.000	0.911	6928.64	0.0029	P	4.9
4	☐	250.000	248.197	1519528.43	0.7272	P	0.6
5	☐	625.000	645.933	4093442.73	1.8922	A	0.3
6	☐	1250.000	1377.686	8253548.23	4.0355	A	7.3
7	☐	2500.000	2526.377	16534579.86	7.4000	A	0.8
8	☐	5000.000	4952.364	34325190.29	14.5057	A	0.1
9	☐			33057.53	0.0155	P	1.0

$$y = 0.0029 * x + 2.3020\text{E-}004$$

$$R = 0.9996$$

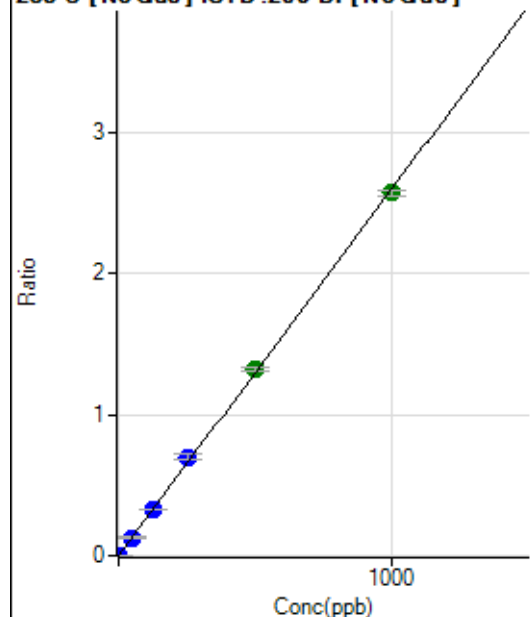
$$DL = 0.01932$$

$$BEC = 0.07859$$

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	0.00	0.0000	P	
2	☐	0.100	0.099	622.25	0.0003	P	9.2
3	☐	1.000	0.947	5884.84	0.0025	P	1.1
4	☐	50.000	49.666	269586.79	0.1290	P	1.7
5	☐	125.000	127.150	714614.86	0.3303	P	0.2
6	☐	250.000	269.123	1430489.05	0.6992	P	6.5
7	☐	500.000	508.827	2953201.30	1.3219	A	2.1
8	☐	1000.000	990.554	6088926.66	2.5734	A	1.8
9	☐			708.38	0.0003	P	11.6

$$y = 0.0026 * x + 0.0000E+000$$

$$R = 0.9997$$

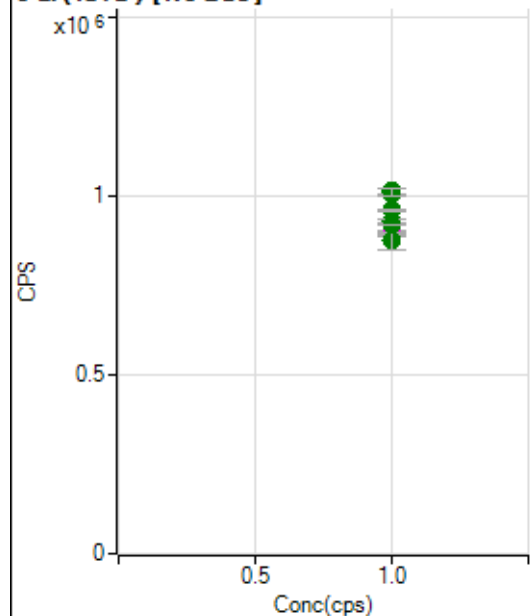
$$DL = 0$$

$$BEC = 0$$

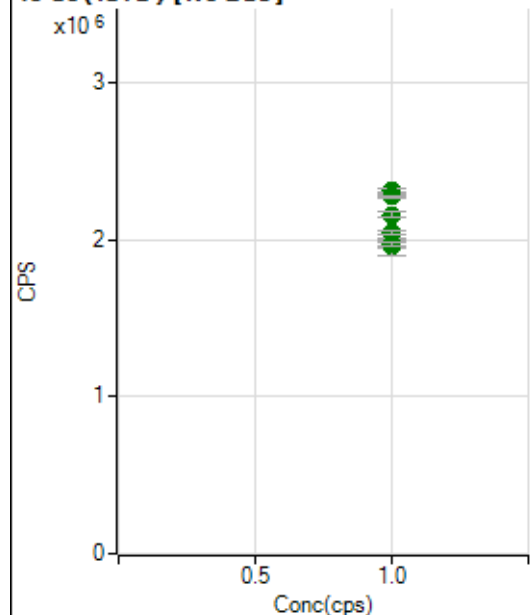
Weight: <None>

Min Conc: 0

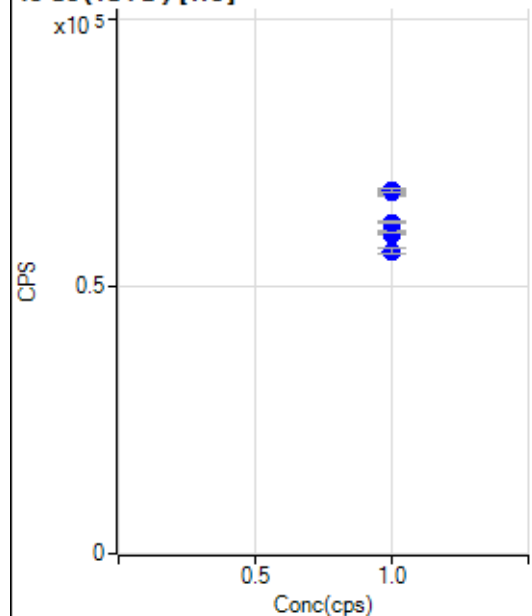
6 Li (ISTD) [No Gas]



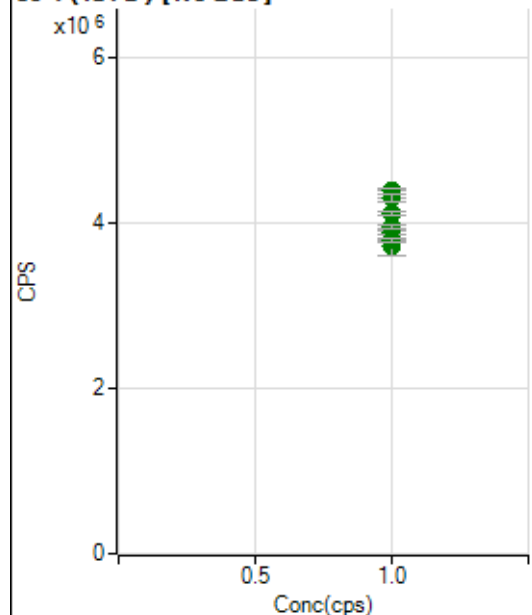
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		1013951.50		A	1.7
2	☐	1.000		1004062.87		A	0.6
3	☐	1.000		1011865.34		A	2.3
4	☐	1.000		894564.34		M	1.4
5	☐	1.000		895328.08		M	0.3
6	☐	1.000		874721.57		A	5.6
7	☐	1.000		928318.11		A	1.4
8	☐	1.000		960246.49		A	0.8
9	☐	1.000		918388.18		A	0.1

45 Sc (ISTD) [No Gas]

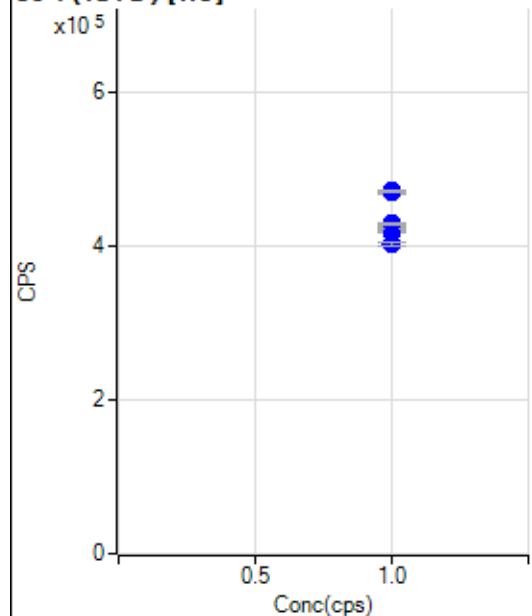
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2289100.26		A	0.8
2	☐	1.000		2309966.91		A	1.4
3	☐	1.000		2271895.43		A	0.5
4	☐	1.000		1970989.81		A	2.0
5	☐	1.000		1992813.28		A	0.4
6	☐	1.000		1954867.00		A	6.0
7	☐	1.000		2046068.70		A	1.0
8	☐	1.000		2158047.59		A	1.7
9	☐	1.000		1972308.82		A	1.6

45 Sc (ISTD) [He]

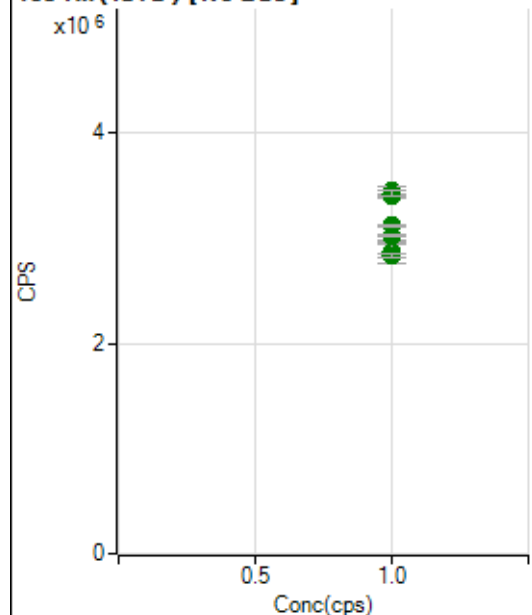
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		67538.82		P	1.1
2	☐	1.000		67555.54		P	1.5
3	☐	1.000		67873.73		P	1.1
4	☐	1.000		59697.91		P	0.3
5	☐	1.000		60333.65		P	0.5
6	☐	1.000		59969.97		P	1.0
7	☐	1.000		60169.75		P	0.7
8	☐	1.000		62029.69		P	0.9
9	☐	1.000		56636.57		P	1.5

89 Y (ISTD) [No Gas]

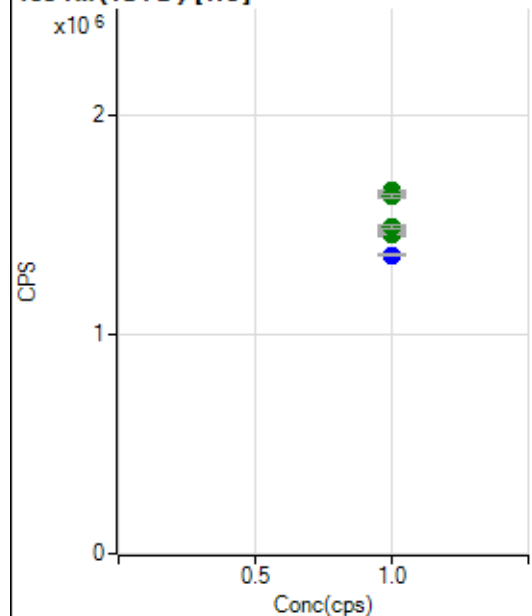
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4356573.75		A	2.1
2	☐	1.000		4395267.02		A	1.3
3	☐	1.000		4314073.62		A	2.3
4	☐	1.000		3806764.91		A	0.5
5	☐	1.000		3887132.96		A	1.0
6	☐	1.000		3733732.20		A	6.6
7	☐	1.000		3959051.50		A	1.0
8	☐	1.000		4123197.09		A	0.7
9	☐	1.000		3804933.69		A	1.3

89 Y (ISTD) [He]

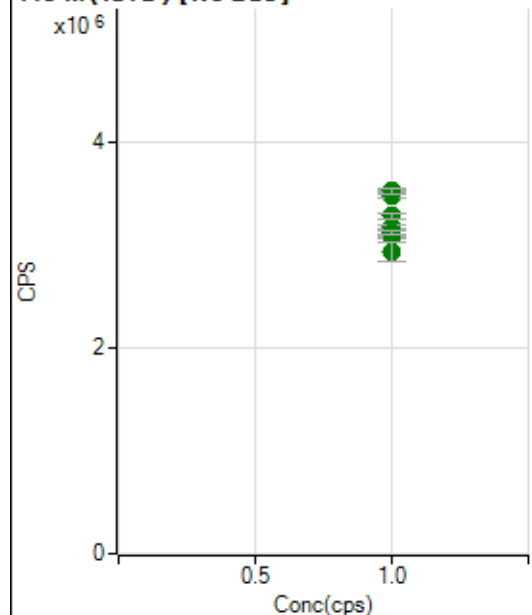
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		469095.36		P	0.4
2	☐	1.000		471796.42		P	0.1
3	☐	1.000		470848.93		P	0.3
4	☐	1.000		417942.52		P	0.2
5	☐	1.000		421696.16		P	1.2
6	☐	1.000		419459.43		P	0.6
7	☐	1.000		423205.71		P	0.2
8	☐	1.000		429630.75		P	0.7
9	☐	1.000		402511.72		P	1.3

103 Rh (ISTD) [No Gas]

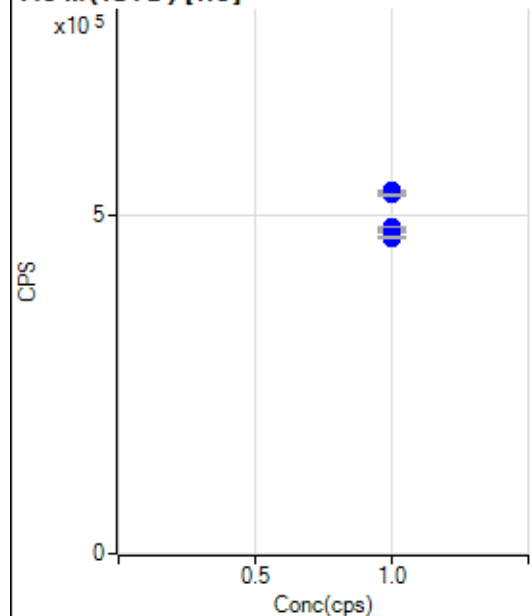
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3396823.64		A	1.1
2	☐	1.000		3446901.03		A	2.8
3	☐	1.000		3418802.68		A	1.7
4	☐	1.000		2976995.99		A	1.9
5	☐	1.000		3012882.49		A	1.9
6	☐	1.000		2862746.51		A	7.1
7	☐	1.000		3020954.15		A	0.7
8	☐	1.000		3118054.69		A	0.7
9	☐	1.000		2827298.65		A	1.5

103 Rh (ISTD) [He]

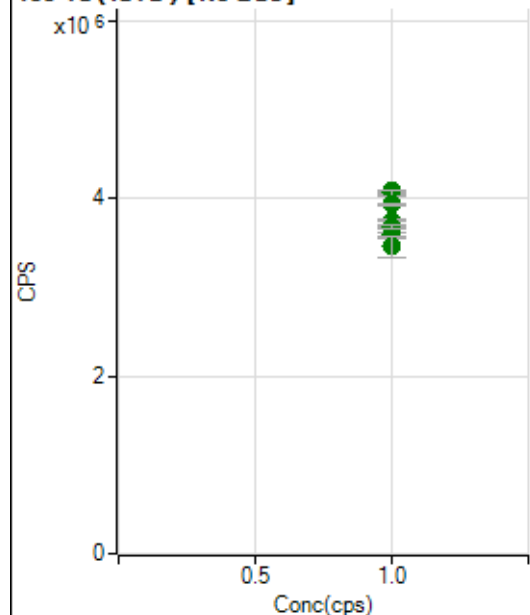
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1655963.12		A	0.8
2	☐	1.000		1645694.25		A	1.2
3	☐	1.000		1635163.59		A	1.0
4	☐	1.000		1453243.45		M	0.4
5	☐	1.000		1471649.86		A	0.9
6	☐	1.000		1485189.44		A	1.2
7	☐	1.000		1459365.38		A	0.5
8	☐	1.000		1491008.09		A	1.1
9	☐	1.000		1363133.42		P	0.9

115 In (ISTD) [No Gas]

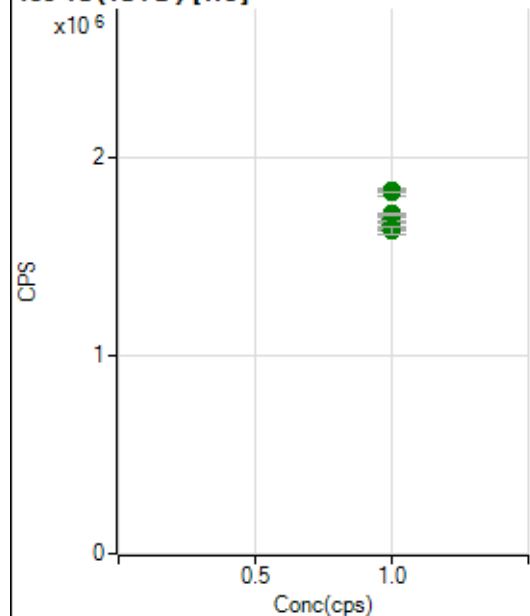
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3472149.20		A	1.3
2	☐	1.000		3512182.41		A	0.5
3	☐	1.000		3521662.61		A	1.9
4	☐	1.000		3072575.80		A	1.1
5	☐	1.000		3105430.66		A	1.4
6	☐	1.000		2928196.27		A	6.5
7	☐	1.000		3164609.33		A	1.2
8	☐	1.000		3279329.10		A	1.4
9	☐	1.000		3123272.01		A	1.3

115 In (ISTD) [He]

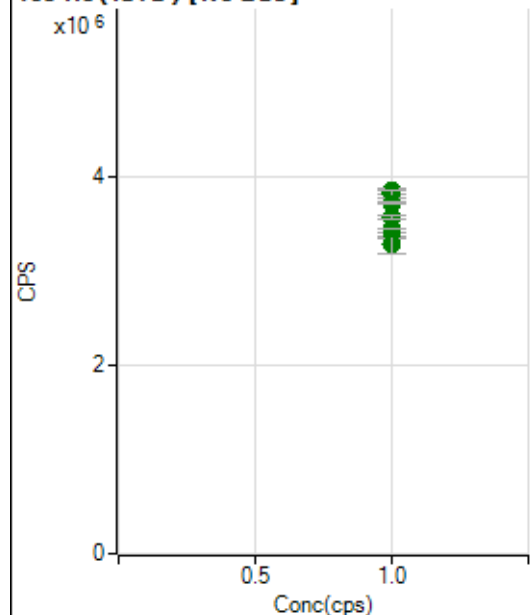
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		532336.09		P	0.6
2	☐	1.000		535110.79		P	0.7
3	☐	1.000		530225.86		P	0.5
4	☐	1.000		473633.06		P	0.4
5	☐	1.000		479055.66		P	0.4
6	☐	1.000		474544.11		P	0.9
7	☐	1.000		476950.96		P	0.2
8	☐	1.000		481367.53		P	0.1
9	☐	1.000		466473.72		P	0.5

159 Tb (ISTD) [No Gas]

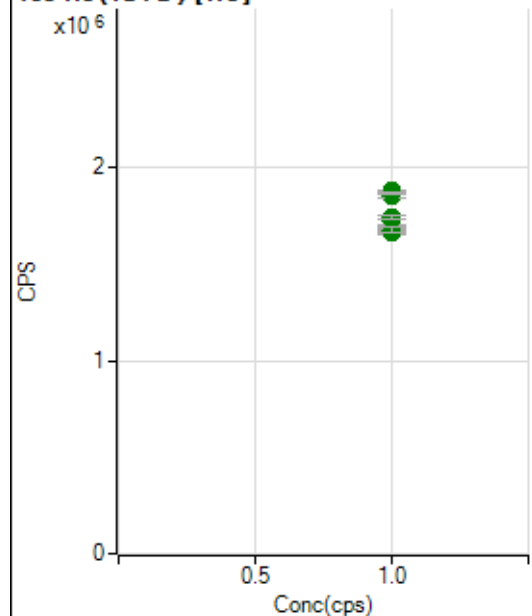
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4067501.92		A	0.8
2	☐	1.000		4084594.56		A	0.7
3	☐	1.000		4061225.60		A	1.5
4	☐	1.000		3585075.08		A	1.5
5	☐	1.000		3666769.25		A	0.8
6	☐	1.000		3453193.66		A	6.6
7	☐	1.000		3751735.78		A	0.3
8	☐	1.000		3935203.55		A	0.4
9	☐	1.000		3676866.05		A	1.1

159 Tb (ISTD) [He]

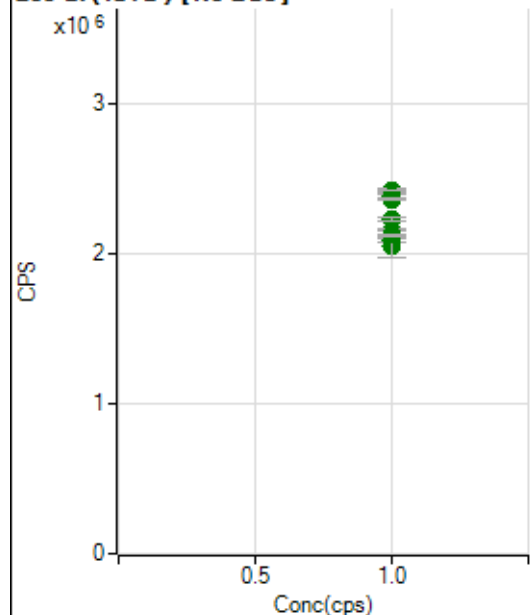
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1829347.45		A	2.1
2	☐	1.000		1832584.92		A	0.6
3	☐	1.000		1827284.54		A	0.4
4	☐	1.000		1636191.30		A	0.1
5	☐	1.000		1680010.91		A	0.6
6	☐	1.000		1659700.46		A	1.3
7	☐	1.000		1690380.95		A	1.4
8	☐	1.000		1717018.48		A	0.7
9	☐	1.000		1631449.43		A	2.2

165 Ho (ISTD) [No Gas]

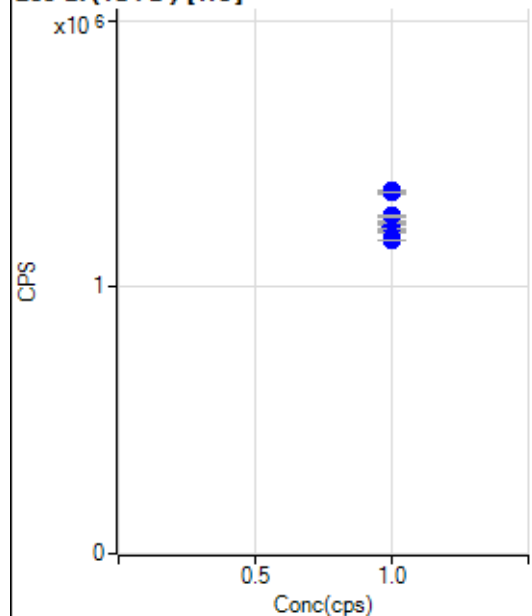
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3835642.19		A	0.9
2	☐	1.000		3851898.70		A	1.8
3	☐	1.000		3812786.63		A	2.0
4	☐	1.000		3361473.17		A	1.0
5	☐	1.000		3407967.39		A	0.5
6	☐	1.000		3293808.43		A	6.9
7	☐	1.000		3567440.49		A	1.1
8	☐	1.000		3724995.57		A	0.9
9	☐	1.000		3446098.00		A	0.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1856787.65		A	1.7
2	☐	1.000		1880135.91		A	0.1
3	☐	1.000		1871136.90		A	0.8
4	☐	1.000		1662528.03		A	0.8
5	☐	1.000		1690276.45		A	0.9
6	☐	1.000		1688808.97		A	0.1
7	☐	1.000		1722833.06		A	1.7
8	☐	1.000		1743281.59		A	1.1
9	☐	1.000		1677960.89		A	1.6

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2405116.11		A	0.2
2	☐	1.000		2423407.71		A	0.9
3	☐	1.000		2391703.97		A	2.6
4	☐	1.000		2089666.29		A	1.4
5	☐	1.000		2163375.78		A	0.4
6	☐	1.000		2051840.26		A	6.6
7	☐	1.000		2234496.88		A	1.4
8	☐	1.000		2366322.17		A	0.7
9	☐	1.000		2126496.08		A	0.4

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1356186.94		P	1.0
2	☐	1.000		1361624.72		P	0.2
3	☐	1.000		1357093.31		P	0.3
4	☐	1.000		1210576.72		P	0.7
5	☐	1.000		1239929.30		P	0.5
6	☐	1.000		1228026.58		P	0.8
7	☐	1.000		1245057.89		P	0.6
8	☐	1.000		1268990.34		P	0.7
9	☐	1.000		1175555.20		P	0.1

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8060720 MS1.b
Acq. Date-Time 2020-06-08 11:31:26
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		3522	35222.94			0.856	5.000
24		30085	300846.37			0.830	5.000
25		4248	42478.32			0.911	5.000
26		5047	50472.96			0.592	5.000
59		25734	257339.27			1.110	5.000
113		4627	46265.72			0.568	5.000
115		14848	148478.36			1.709	5.000
206		5481	54812.31			2.001	5.000
207		4658	46584.57			1.638	5.000
208		11254	112540.67			1.444	5.000
220		0	3.50			39.123	

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

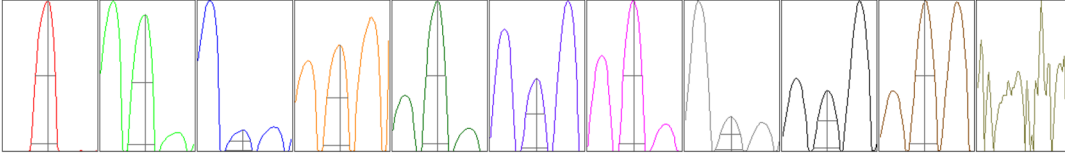
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	3507	3538	3478	3534	3555
24	29892	30310	29748	30267	30207
25	4233	4224	4205	4281	4296
26	5019	5017	5049	5064	5087
59	25543	25685	25409	25908	26124
113	4587	4625	4627	4661	4632
115	15061	15168	14693	14745	14573
206	5309	5536	5436	5554	5572
207	4572	4686	4597	4674	4763
208	11034	11307	11148	11336	11445

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	6086.26	8.95	8.90 - 9.10	
24	49913.82	23.95	23.90 - 24.10	
25	6762.88	24.95	24.90 - 25.10	
26	7873.73	25.95	25.90 - 26.10	
59	44390.41	58.95	58.90 - 59.10	
113	8174.54	113.00	112.90 - 113.10	
115	26400.16	115.00	114.90 - 115.10	
206	9332.05	206.00	205.90 - 206.10	
207	7774.71	206.95	206.90 - 207.10	
208	19315.31	207.95	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.64	0.825	0.900	
24	0.67	0.835	0.900	
25	0.67	0.835	0.900	
26	0.66	0.834	0.900	
59	0.62	0.830	0.900	
113	0.59	0.821	0.900	
115	0.59	0.816	0.900	
206	0.61	0.866	0.900	
207	0.61	0.837	0.900	
208	0.60	0.876	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode HMI Nebulizer Gas 0.51 L/min Dilution Gas 0.46 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	11.1 V	Deflect	14.8 V
Extract 2	-230.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-105 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	150 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9995	QP Bias	-4.0 V
Mass Offset	123	Axis Offset	-0.05		

Hardware Settings

Torch

Torch H	0.3 mm	Torch V	0.0 mm
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EM

Discriminator	4.0 mV	Analog HV	2169 V	Pulse HV	1203 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		6115	61154.03			0.730	
89		10526	105255.58			0.889	
205		14517	145167.92			1.754	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	6188	6104	6124	6075	6086
89	10677	10468	10539	10510	10433
205	14875	14667	14467	14282	14293

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	HMI	Nebulizer Gas	0.51 L/min	Dilution Gas	0.46 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	11.1 V	Deflect	4.4 V
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US EPA Tune Check Report

Extract 2	-230.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-105 V	Cell Exit	-70 V		
Cell Parameters					
Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		
QP Parameters					
Mass Gain	122	Axis Gain	0.9995	QP Bias	-13.0 V
Mass Offset	123	Axis Offset	-0.05		
Hardware Settings					
Torch					
Torch H	0.3 mm	Torch V	0.0 mm		
EM					
Discriminator	4.0 mV	Analog HV	2169 V	Pulse HV	1203 V