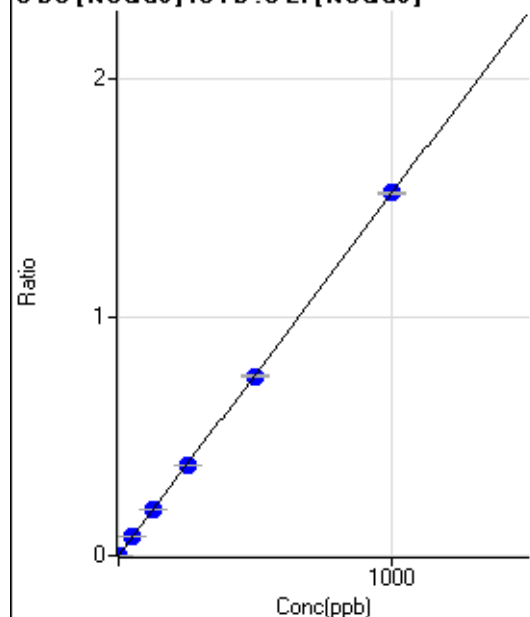


Batch Folder: D:\ICP-MS Data\P7102017-MS .b\
Analysis File: P7102017-MS .batch.bin
DA Date-Time: 2017-10-22 20:35:19
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB P7102017-MS.D	S00	2017-10-20 11:42:12
2			
3	006CALS P7102017-MS.D	S02	2017-10-20 11:49:45
4	007CALS P7102017-MS.D	S03	2017-10-20 11:53:32
5	008CALS P7102017-MS.D	S04	2017-10-20 11:57:19
6	009CALS P7102017-MS.D	S05	2017-10-20 12:01:03
7	010CALS P7102017-MS.D	S06	2017-10-20 12:04:44
8	011CALS P7102017-MS.D	S07	2017-10-20 12:08:21
9	012CALS P7102017-MS.D	S08	2017-10-20 12:11:52

9 Be [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0001	P	28.6
2	☐	0.100					
3	☐	1.000	0.922	1090.81	0.0015	P	2.5
4	☐	50.000	51.193	57202.57	0.0779	P	1.0
5	☐	125.000	125.420	140842.02	0.1908	P	0.3
6	☐	250.000	251.205	282152.45	0.3820	P	0.7
7	☐	500.000	495.574	552155.63	0.7536	P	0.8
8	☐	1000.000	1001.799	1110886.70	1.5234	P	0.6
9	☐			346.31	0.0005	P	10.8

$$y = 0.0015 * x + 5.1370E-005$$

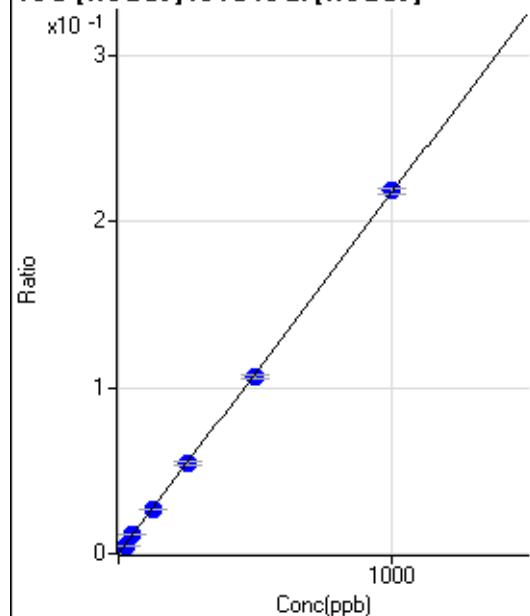
$$R = 1.0000$$

$$DL = 0.02897$$

$$BEC = 0.03378$$

Weight: <None>

Min Conc: 0

10 B [NoGas] ISTD:6 Li [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	97.22	0.0001	P	21.5
2	☐	2.500					
3	☐	25.000	21.599	3614.46	0.0048	P	4.0
4	☐	50.000	51.162	8244.20	0.0112	P	2.0
5	☐	125.000	123.158	19819.19	0.0268	P	1.6
6	☐	250.000	248.447	39895.18	0.0540	P	3.5
7	☐	500.000	489.949	77961.81	0.1064	P	1.8
8	☐	1000.000	1005.671	159178.40	0.2183	P	1.6
9	☐			4086.81	0.0059	P	5.5

$$y = 2.1691E-004 * x + 1.2841E-004$$

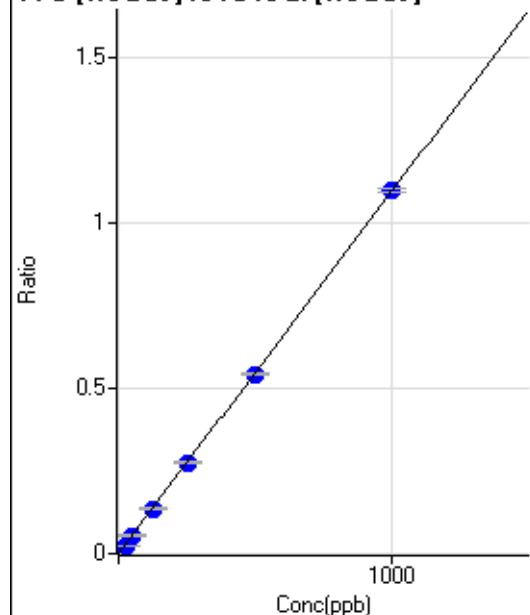
$$R = 0.9999$$

$$DL = 0.382$$

$$BEC = 0.592$$

Weight: <None>

Min Conc: 0

11 B [NoGas] ISTD:6 Li [NoGas]

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	486.14	0.0006	P	12.1
2	☐	2.500					
3	☐	25.000	21.925	18489.66	0.0246	P	2.4
4	☐	50.000	49.534	40259.94	0.0548	P	1.5
5	☐	125.000	124.252	100815.22	0.1365	P	0.2
6	☐	250.000	250.040	202454.34	0.2741	P	2.1
7	☐	500.000	496.257	398173.22	0.5434	P	1.3
8	☐	1000.000	1002.055	799748.20	1.0967	P	1.0
9	☐			20372.66	0.0296	P	6.3

$$y = 0.0011 * x + 6.4209E-004$$

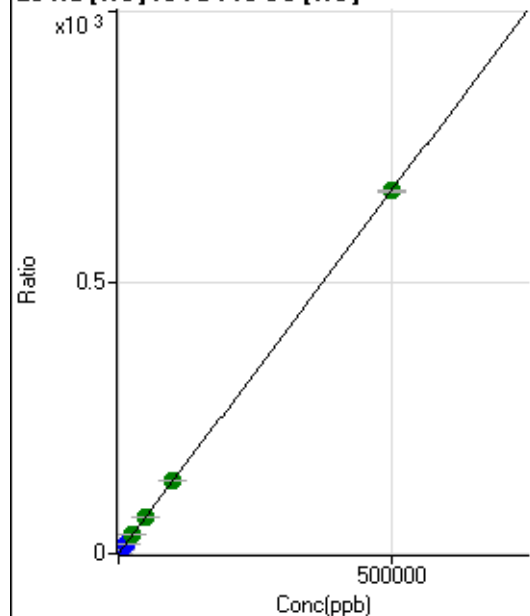
$$R = 1.0000$$

$$DL = 0.2128$$

$$BEC = 0.587$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13495.44	0.0717	P	2.8
2	☐	50.000					
3	☐	500.000	483.947	133467.67	0.7186	P	0.7
4	☐	5000.000	5283.048	1334045.32	7.1332	P	0.9
5	☐	12500.000	13152.874	3359342.15	17.6522	P	0.4
6	☐	25000.000	25837.562	6504614.08	34.6069	A	0.5
7	☐	50000.000	50707.799	13000639.18	67.8491	A	0.7
8	☐	100000.00	100462.13	26447116.39	134.3520	A	0.7
9	☐	500000.00	499775.77	132529727.9	668.0848	A	0.6

$$y = 0.0013 * x + 0.0717$$

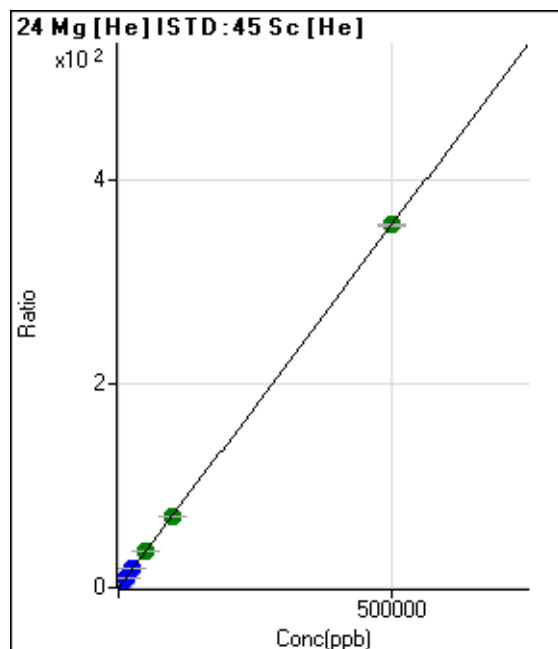
$$R = 1.0000$$

$$DL = 4.525$$

$$BEC = 53.68$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	500.03	0.0027	P	5.5
2	☐	50.000					
3	☐	500.000	471.766	62679.01	0.3375	P	3.1
4	☐	5000.000	5198.016	690582.87	3.6924	P	0.1
5	☐	12500.000	12909.218	1744404.97	9.1661	P	0.5
6	☐	25000.000	25467.750	3398323.86	18.0806	P	0.6
7	☐	50000.000	49743.679	6766427.28	35.3126	A	0.5
8	☐	100000.00	98316.039	13738254.47	69.7910	A	1.0
9	☐	500000.00	500326.85	70452136.30	355.1531	A	0.7

$$y = 7.0984\text{E-}004 * x + 0.0027$$

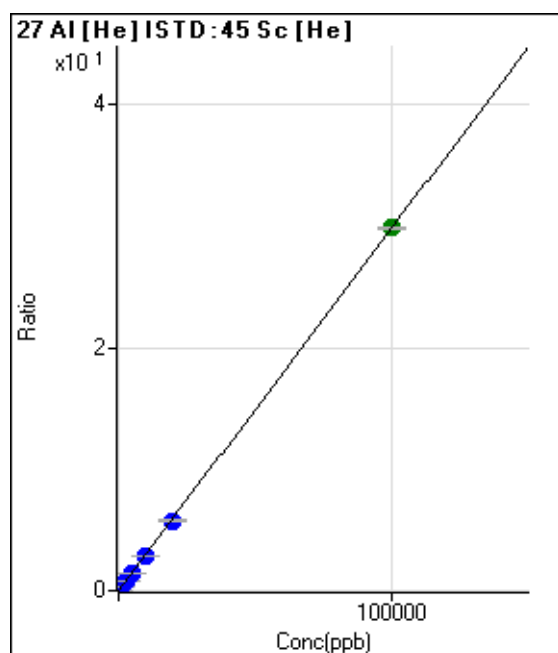
$$R = 1.0000$$

$$DL = 0.6171$$

$$BEC = 3.744$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	38.89	0.0002	P	33.2
2	☐	2.000					
3	☐	20.000	17.282	994.52	0.0054	P	4.8
4	☐	1000.000	997.556	55607.02	0.2973	P	1.3
5	☐	2500.000	2470.685	140086.85	0.7361	P	1.4
6	☐	5000.000	4954.131	277398.95	1.4759	P	0.2
7	☐	10000.000	9735.826	555704.79	2.9001	P	0.7
8	☐	20000.000	19340.172	1134073.47	5.7609	P	0.8
9	☐	100000.00	100161.43	5918205.08	29.8344	A	0.7

$$y = 2.9786\text{E-}004 * x + 2.0696\text{E-}004$$

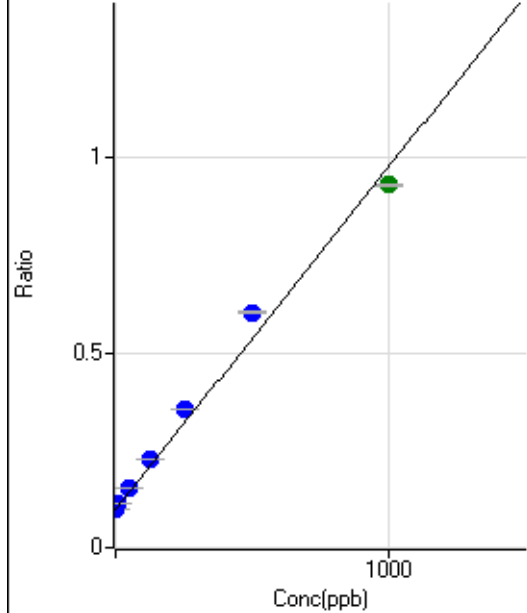
$$R = 1.0000$$

$$DL = 0.6925$$

$$BEC = 0.6948$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	408387.90	0.0974	P	1.7
2	☐	1.000					
3	☐	10.000	20.243	462314.54	0.1152	P	0.4
4	☐	50.000	63.171	615699.31	0.1530	P	0.8
5	☐	125.000	147.353	920229.52	0.2270	P	1.7
6	☐	250.000	292.768	1447464.45	0.3550	P	0.7
7	☐	500.000	575.500	2447800.75	0.6038	P	0.4
8	☐	1000.000	948.003	3854337.58	0.9316	A	0.9
9	☐			539851.85	0.1321	P	1.4

$$y = 8.7998E-004 * x + 0.0974$$

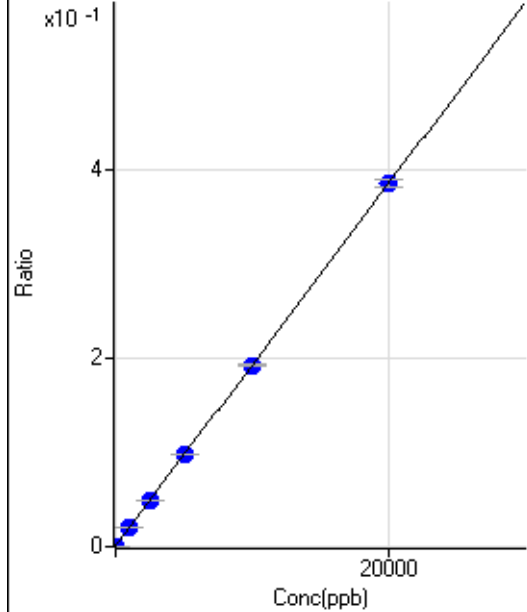
$$R = 0.9946$$

$$DL = 5.557$$

$$BEC = 110.7$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-6.867	116.67	0.0006	P	12.1
2	☐	0.000					
3	☐	0.000	6.867	163.90	0.0009	P	29.9
4	☐	1000.000	1047.702	3903.45	0.0209	P	3.1
5	☐	2500.000	2515.491	9336.62	0.0491	P	2.0
6	☐	5000.000	5046.378	18356.40	0.0977	P	1.0
7	☐	10000.000	9986.318	36891.01	0.1925	P	1.0
8	☐	20000.000	19990.925	75717.29	0.3847	P	2.1
9	☐			188.90	0.0010	P	10.6

$$y = 1.9205E-005 * x + 7.5195E-004$$

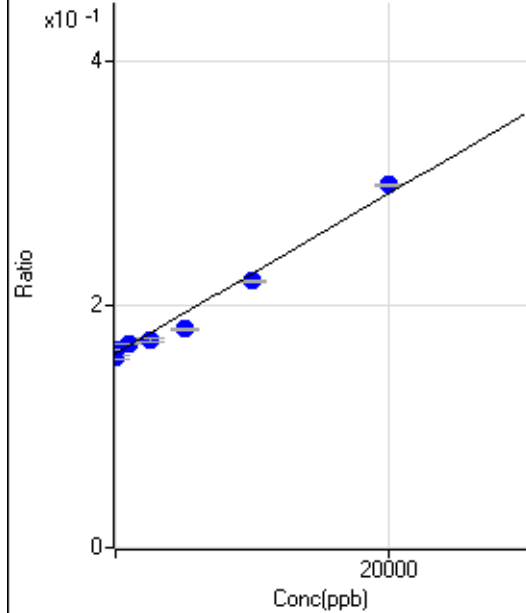
$$R = 1.0000$$

$$DL = 26.45$$

$$BEC = 39.16$$

Weight: <None>

Min Conc: 0

34 S [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	-523.310	655928.54	0.1564	P	2.0
2	☐	0.000					
3	☐	0.000	523.310	655377.02	0.1633	P	0.5
4	☐	1000.000	1145.605	673782.49	0.1674	P	0.5
5	☐	2500.000	1627.886	691293.90	0.1706	P	2.0
6	☐	5000.000	3076.476	734256.66	0.1801	P	0.8
7	☐	10000.000	9012.802	888360.23	0.2191	P	0.4
8	☐	20000.000	21076.214	1235003.98	0.2985	P	0.6
9	☐			626628.91	0.1533	P	2.5

$$y = 6.5784\text{E-}006 * x + 0.1599$$

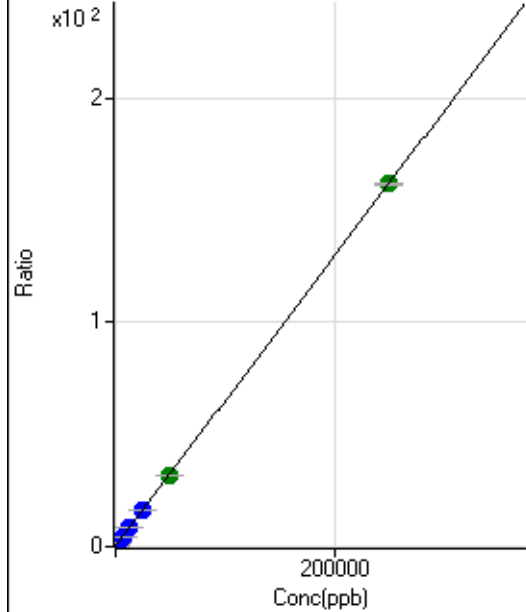
$$R = 0.9921$$

$$DL = 900.4$$

$$BEC = 2.43\text{E+}04$$

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	37247.64	0.1980	P	0.1
2	☐	50.000					
3	☐	500.000	458.521	91825.08	0.4944	P	0.1
4	☐	2500.000	2545.645	344760.30	1.8434	P	0.9
5	☐	6250.000	6350.012	818793.30	4.3025	P	0.2
6	☐	12500.000	12661.167	1575440.54	8.3818	P	0.3
7	☐	25000.000	24916.170	3123920.60	16.3031	P	1.1
8	☐	50000.000	49189.103	6297961.38	31.9923	A	0.5
9	☐	250000.00	250159.63	32115118.77	161.8936	A	0.4

$$y = 6.4637\text{E-}004 * x + 0.1980$$

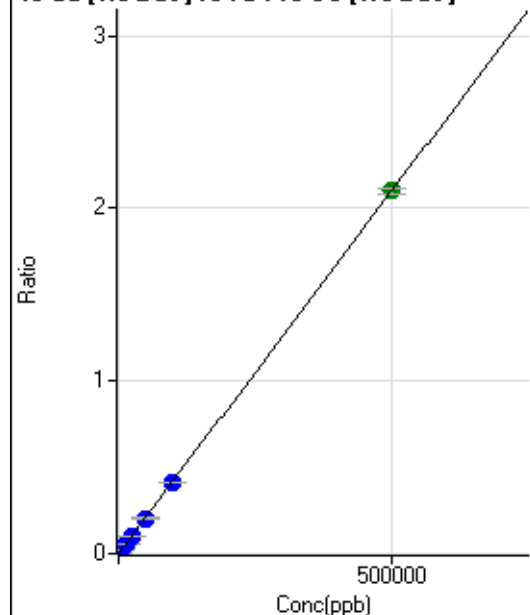
$$R = 1.0000$$

$$DL = 0.7142$$

$$BEC = 306.3$$

Weight: <None>

Min Conc: 0

43 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	350.02	0.0001	P	13.0
2	☐	50.000					
3	☐	500.000	445.946	7849.62	0.0020	P	3.4
4	☐	5000.000	4972.590	84374.36	0.0210	P	0.6
5	☐	12500.000	12236.638	208579.95	0.0515	P	1.2
6	☐	25000.000	24489.694	419591.20	0.1029	P	0.6
7	☐	50000.000	49041.633	835053.37	0.2060	P	0.4
8	☐	100000.00	98225.358	1706691.08	0.4125	P	0.5
9	☐	500000.00	500483.19	8589072.42	2.1014	A	1.4

$$y = 4.1986\text{E-}006 * x + 8.3540\text{E-}005$$

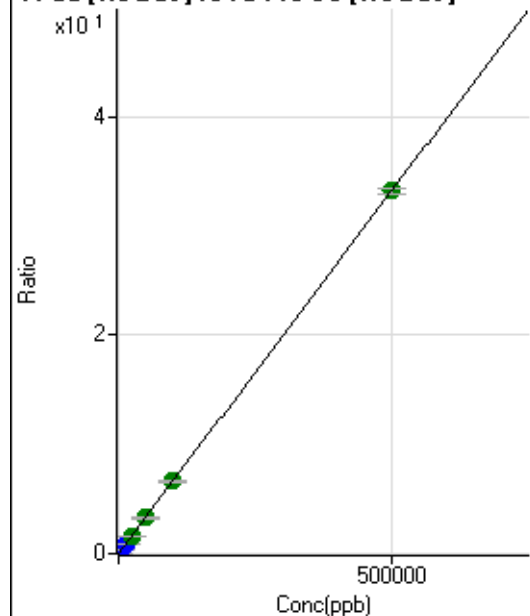
R = 1.0000

DL = 7.777

BEC = 19.9

Weight: <None>

Min Conc: 0

44 Ca [NoGas] ISTD:45 Sc [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	47753.00	0.0114	P	1.8
2	☐	50.000					
3	☐	500.000	454.184	166766.39	0.0416	P	0.4
4	☐	5000.000	5038.210	1392710.69	0.3460	P	0.7
5	☐	12500.000	12419.223	3389673.56	0.8362	P	0.2
6	☐	25000.000	24657.837	6723538.78	1.6491	A	0.5
7	☐	50000.000	48994.747	13237050.21	3.2654	A	0.9
8	☐	100000.00	99300.958	27332916.58	6.6065	A	1.0
9	☐	500000.00	500259.12	135843889.1	33.2365	A	1.7

$$y = 6.6416\text{E-}005 * x + 0.0114$$

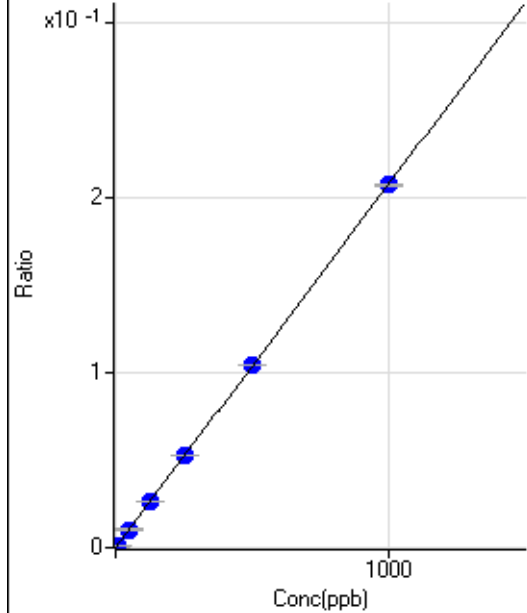
R = 1.0000

DL = 9.041

BEC = 171.4

Weight: <None>

Min Conc: 0

47 Ti [NoGas] ISTD : 45 Sc [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	144.45	0.0000	P	38.7
2	☐	0.500					
3	☐	5.000	4.380	3783.98	0.0009	P	2.3
4	☐	50.000	50.109	41969.10	0.0104	P	2.5
5	☐	125.000	124.758	105019.88	0.0259	P	0.5
6	☐	250.000	252.240	213428.75	0.0523	P	0.4
7	☐	500.000	501.753	421974.79	0.1041	P	0.4
8	☐	1000.000	998.592	856966.46	0.2071	P	0.4
9	☐			777.83	0.0002	P	9.4

$$y = 2.0738E-004 * x + 3.4514E-005$$

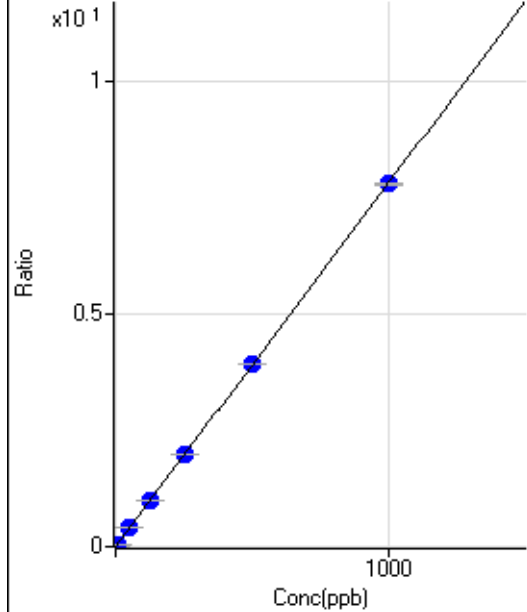
$$R = 1.0000$$

$$DL = 0.1933$$

$$BEC = 0.1664$$

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	13.33	0.0001	P	25.0
2	☐	0.500					
3	☐	5.000	4.622	6721.63	0.0362	P	3.2
4	☐	50.000	50.893	74416.75	0.3979	P	0.7
5	☐	125.000	126.440	188098.31	0.9884	P	0.5
6	☐	250.000	253.535	372495.46	1.9818	P	1.0
7	☐	500.000	501.977	751878.55	3.9238	P	0.1
8	☐	1000.000	997.905	1535509.77	7.8003	P	0.8
9	☐			376.68	0.0019	P	1.9

$$y = 0.0078 * x + 7.0884E-005$$

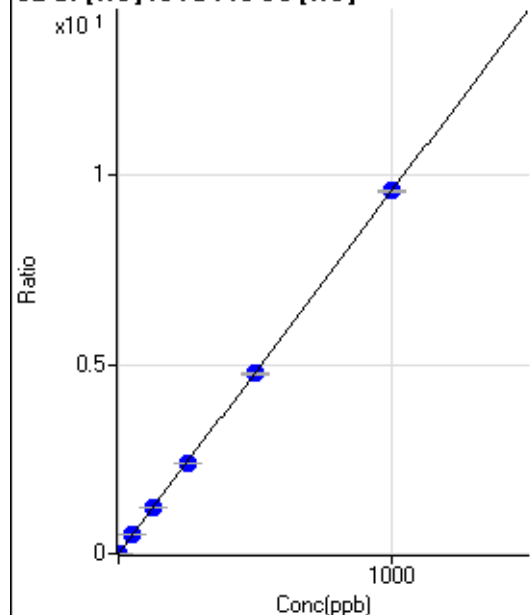
$$R = 1.0000$$

$$DL = 0.006792$$

$$BEC = 0.009068$$

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	671.14	0.0036	P	5.9
2	☐	0.200					
3	☐	2.000	1.989	4201.78	0.0226	P	2.7
4	☐	50.000	50.612	91356.63	0.4884	P	0.8
5	☐	125.000	126.049	230493.73	1.2112	P	0.4
6	☐	250.000	249.687	450271.02	2.3957	P	0.7
7	☐	500.000	497.433	913956.89	4.7692	P	1.1
8	☐	1000.000	1001.200	1888909.69	9.5954	P	0.5
9	☐			24748.80	0.1248	P	1.1

$$y = 0.0096 * x + 0.0036$$

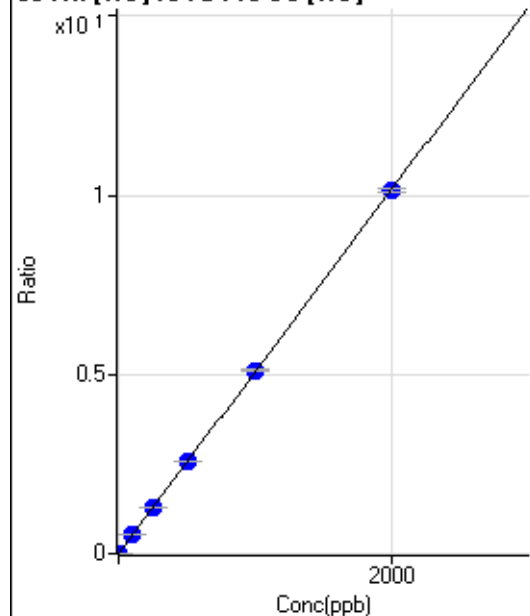
$$R = 1.0000$$

$$DL = 0.06544$$

$$BEC = 0.3724$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	191.11	0.0010	P	12.0
2	☐	0.100					
3	☐	1.000	1.091	1216.74	0.0066	P	6.5
4	☐	100.000	102.632	97632.34	0.5220	P	0.4
5	☐	250.000	255.996	247506.71	1.3006	P	0.3
6	☐	500.000	508.425	485302.72	2.5820	P	0.3
7	☐	1000.000	1007.442	980164.49	5.1152	P	0.6
8	☐	2000.000	1993.292	1992177.73	10.1198	P	0.9
9	☐			6037.99	0.0304	P	1.4

$$y = 0.0051 * x + 0.0010$$

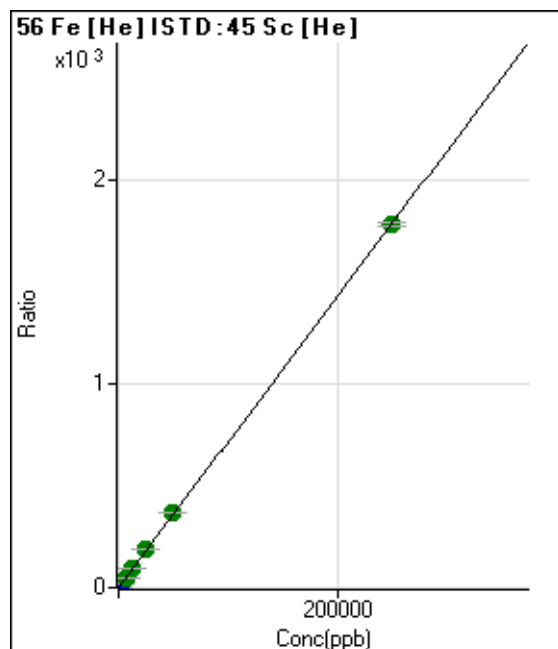
$$R = 1.0000$$

$$DL = 0.07212$$

$$BEC = 0.2002$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5138.06	0.0273	P	5.4
2	☐	5.000					
3	☐	50.000	52.027	74086.75	0.3989	P	1.2
4	☐	2500.000	2707.620	3621904.28	19.3656	P	0.4
5	☐	6250.000	6558.403	8919600.31	46.8685	A	0.3
6	☐	12500.000	13055.150	17529992.29	93.2693	A	0.9
7	☐	25000.000	25911.007	35465272.09	185.0879	A	0.8
8	☐	50000.000	51442.048	72327887.73	367.4347	A	1.0
9	☐	250000.00	249582.94	353600526.4	1,782.588	A	1.2

$$y = 0.0071 * x + 0.0273$$

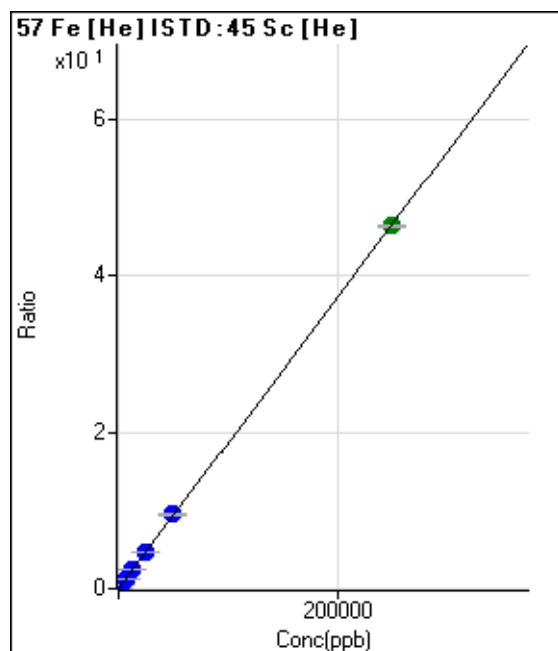
R = 1.0000

DL = 0.6199

BEC = 3.825

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	283.35	0.0015	P	4.5
2	☐	5.000					
3	☐	50.000	49.873	1998.34	0.0108	P	8.1
4	☐	2500.000	2643.435	92020.53	0.4920	P	1.6
5	☐	6250.000	6558.159	231884.93	1.2185	P	0.1
6	☐	12500.000	13049.804	455422.55	2.4231	P	0.8
7	☐	25000.000	25712.230	914596.56	4.7728	P	0.4
8	☐	50000.000	51008.387	1863598.75	9.4668	P	1.3
9	☐	250000.00	249690.47	9192037.24	46.3350	A	0.8

$$y = 1.8556E-004 * x + 0.0015$$

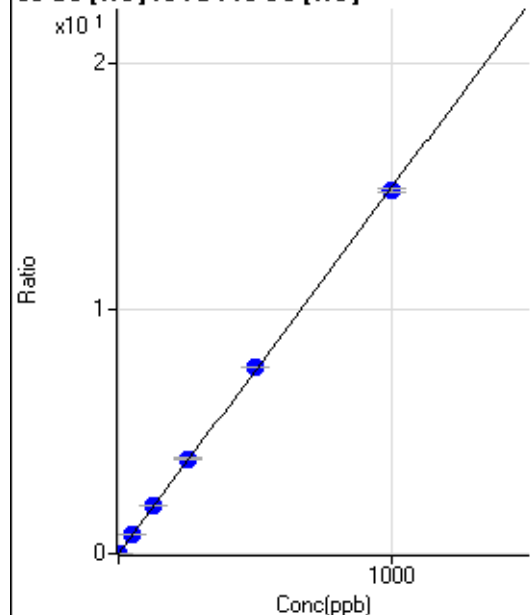
R = 1.0000

DL = 1.106

BEC = 8.115

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	163.34	0.0009	P	25.6
2	☐	0.100					
3	☐	1.000	1.002	2941.45	0.0158	P	4.0
4	☐	50.000	52.421	146669.67	0.7842	P	0.4
5	☐	125.000	130.341	370834.09	1.9486	P	0.2
6	☐	250.000	259.712	729611.72	3.8818	P	0.3
7	☐	500.000	510.746	1462612.76	7.6331	P	0.4
8	☐	1000.000	991.410	2916574.75	14.8158	P	1.0
9	☐			3758.32	0.0189	P	1.7

$$y = 0.0149 * x + 8.6930E-004$$

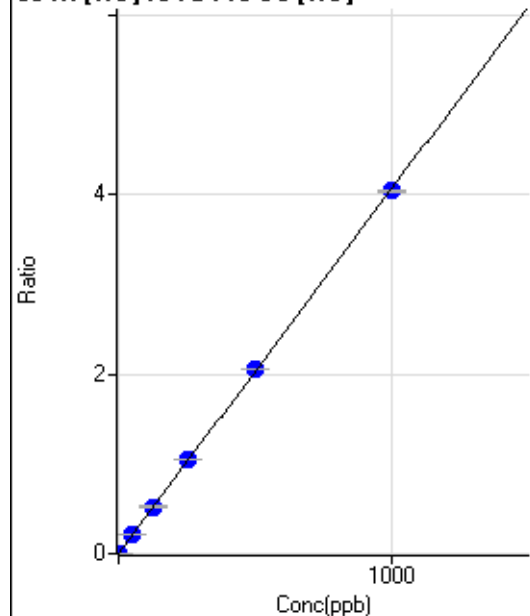
$$R = 0.9999$$

$$DL = 0.04465$$

$$BEC = 0.05817$$

Weight: <None>

Min Conc: 0

60 Ni [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	115.56	0.0006	P	26.2
2	☐	0.100					
3	☐	1.000	1.035	894.49	0.0048	P	1.6
4	☐	50.000	52.018	39614.65	0.2118	P	0.7
5	☐	125.000	128.878	99691.93	0.5239	P	0.9
6	☐	250.000	256.918	196173.15	1.0437	P	0.4
7	☐	500.000	505.480	393352.16	2.0528	P	0.5
8	☐	1000.000	994.945	795296.79	4.0400	P	0.8
9	☐			8339.16	0.0420	P	1.8

$$y = 0.0041 * x + 6.1445E-004$$

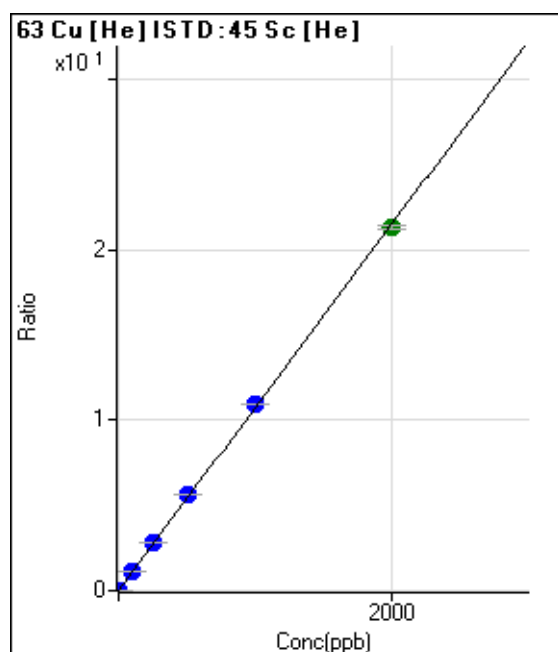
$$R = 0.9999$$

$$DL = 0.119$$

$$BEC = 0.1513$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1170.07	0.0062	P	4.0
2	☐	0.200					
3	☐	2.000	2.044	5236.57	0.0282	P	1.1
4	☐	100.000	106.843	215969.44	1.1547	P	0.1
5	☐	250.000	264.349	541974.86	2.8479	P	0.8
6	☐	500.000	522.713	1057311.07	5.6252	P	0.2
7	☐	1000.000	1021.555	2105463.42	10.9875	P	0.1
8	☐	2000.000	1981.408	4193887.75	21.3056	A	1.2
9	☐			8042.33	0.0405	P	2.4

$$y = 0.0107 * x + 0.0062$$

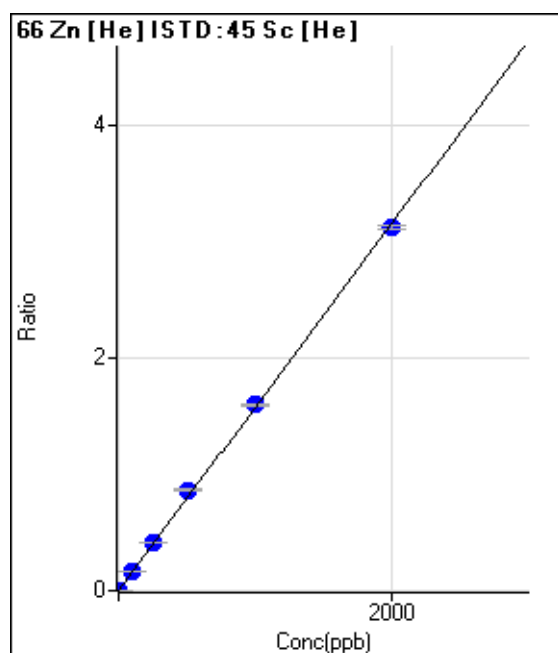
$$R = 0.9998$$

$$DL = 0.06859$$

$$BEC = 0.5785$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	111.12	0.0006	P	10.4
2	☐	0.200					
3	☐	2.000	2.117	727.81	0.0039	P	7.1
4	☐	100.000	104.034	30710.21	0.1642	P	1.4
5	☐	250.000	258.225	77399.44	0.4067	P	1.1
6	☐	500.000	549.243	162468.47	0.8644	P	0.7
7	☐	1000.000	1014.876	305989.06	1.5967	P	0.9
8	☐	2000.000	1979.021	612826.04	3.1131	P	1.0
9	☐			2131.31	0.0107	P	1.3

$$y = 0.0016 * x + 5.9095E-004$$

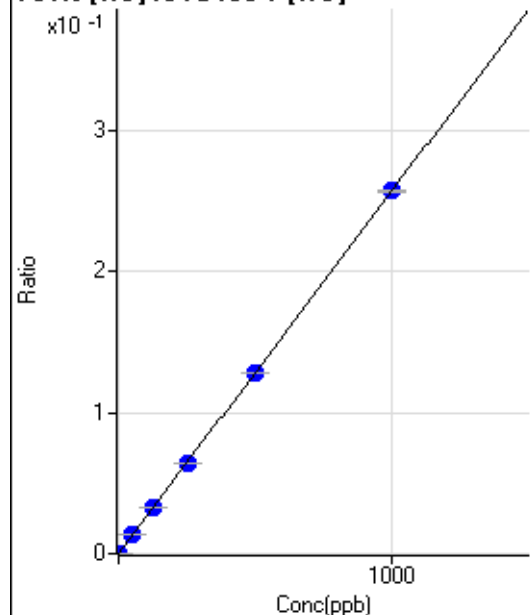
$$R = 0.9996$$

$$DL = 0.1168$$

$$BEC = 0.3757$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	5.56	0.0000	P	33.7
2	☐	0.100					
3	☐	1.000	1.046	249.39	0.0003	P	11.1
4	☐	50.000	51.138	12040.85	0.0131	P	1.0
5	☐	125.000	126.748	30631.63	0.0326	P	0.8
6	☐	250.000	248.320	59507.52	0.0638	P	0.6
7	☐	500.000	497.105	121681.59	0.1277	P	0.0
8	☐	1000.000	1001.592	248746.85	0.2573	P	0.8
9	☐			130.87	0.0001	P	19.2

$$y = 2.5691\text{E-}004 * x + 6.0890\text{E-}006$$

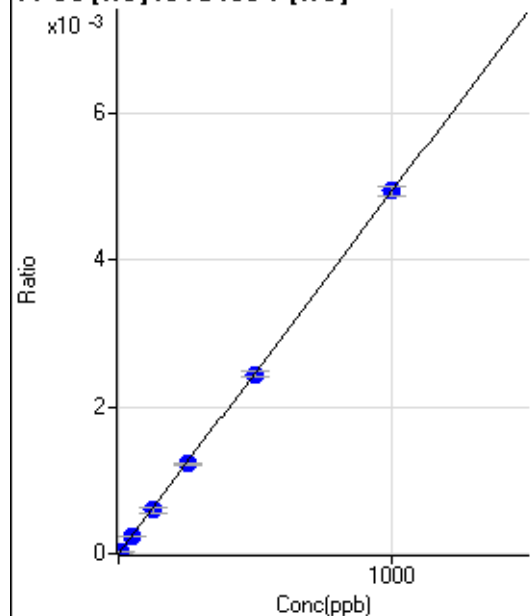
$$R = 1.0000$$

$$DL = 0.02393$$

$$BEC = 0.0237$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	4.230	20.00	0.0000	P	33.0
4	☐	50.000	46.598	211.11	0.0002	P	5.5
5	☐	125.000	121.005	561.13	0.0006	P	12.6
6	☐	250.000	247.433	1136.73	0.0012	P	2.1
7	☐	500.000	496.756	2330.22	0.0024	P	3.1
8	☐	1000.000	1002.937	4773.09	0.0049	P	2.3
9	☐			1.11	0.0000	P	173.

$$y = 4.9209\text{E-}006 * x + 1.2127\text{E-}006$$

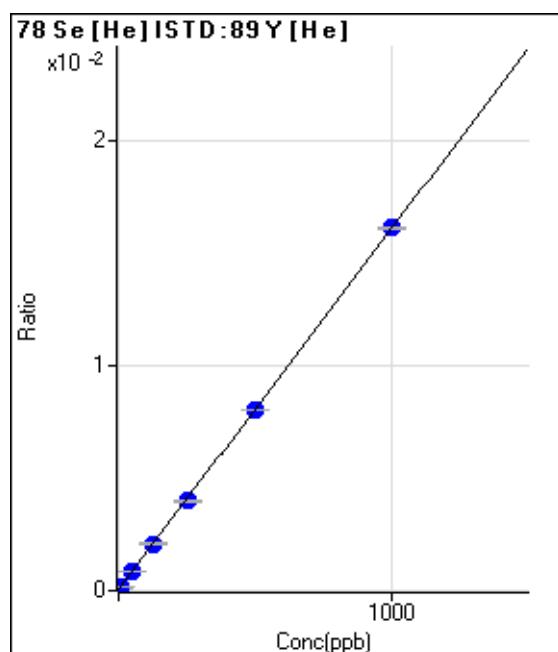
$$R = 1.0000$$

$$DL = 1.28$$

$$BEC = 0.2464$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	58.03	0.0001	P	18.9
2	☐	0.500					
3	☐	5.000	4.820	127.78	0.0001	P	3.5
4	☐	50.000	50.274	796.33	0.0009	P	3.9
5	☐	125.000	126.004	1958.79	0.0021	P	2.3
6	☐	250.000	244.645	3715.94	0.0040	P	1.8
7	☐	500.000	497.865	7661.95	0.0080	P	0.5
8	☐	1000.000	1002.268	15587.46	0.0161	P	0.7
9	☐			69.14	0.0001	P	6.3

$$y = 1.6025\text{E-}005 * x + 6.3611\text{E-}005$$

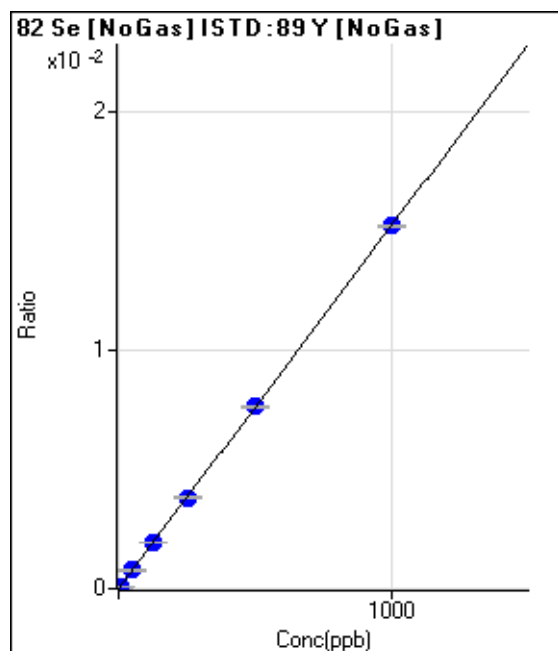
$$R = 1.0000$$

$$DL = 2.254$$

$$BEC = 3.969$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.36	0.0000	P	90.9
2	☐	0.500					
3	☐	5.000	4.297	456.65	0.0001	P	18.7
4	☐	50.000	50.370	5001.91	0.0008	P	1.8
5	☐	125.000	125.368	12609.12	0.0019	P	1.4
6	☐	250.000	251.185	25388.39	0.0038	P	0.9
7	☐	500.000	500.749	50605.54	0.0076	P	1.1
8	☐	1000.000	999.268	102917.10	0.0152	P	0.8
9	☐			160.04	0.0000	P	12.7

$$y = 1.5251\text{E-}005 * x + 4.5194\text{E-}006$$

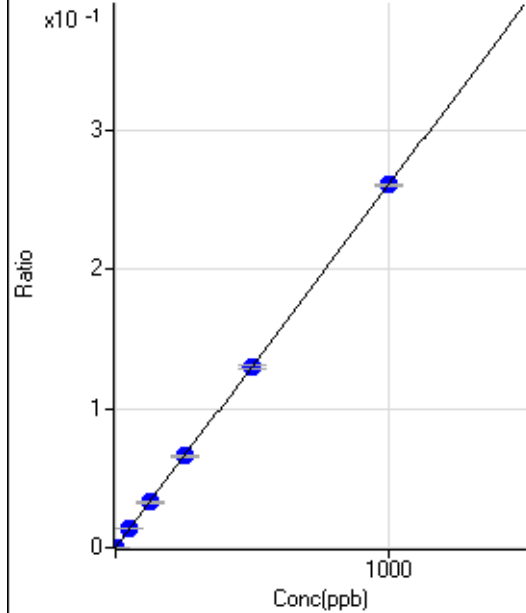
$$R = 1.0000$$

$$DL = 0.8077$$

$$BEC = 0.2963$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	675.05	0.0001	P	6.2
2	☐	0.100					
3	☐	1.000	0.997	2347.52	0.0004	P	2.7
4	☐	50.000	51.107	86764.71	0.0134	P	1.5
5	☐	125.000	124.770	214336.47	0.0326	P	1.2
6	☐	250.000	252.610	435925.46	0.0659	P	0.9
7	☐	500.000	498.085	859239.15	0.1298	P	1.4
8	☐	1000.000	1000.278	1758430.33	0.2605	P	0.3
9	☐			60592.57	0.0093	P	1.4

$$y = 2.6030E-004 * x + 1.0031E-004$$

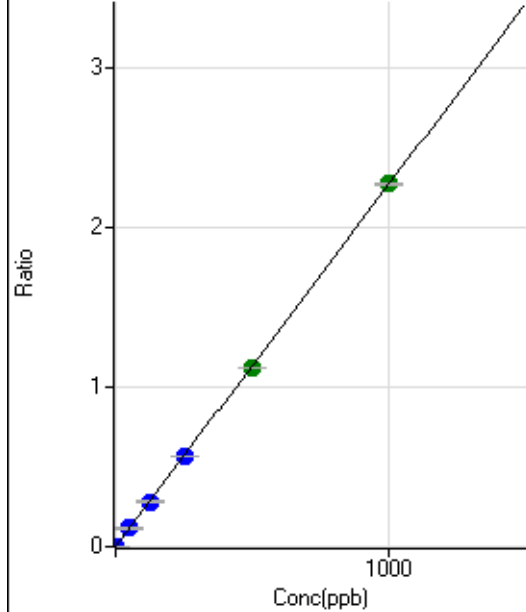
R = 1.0000

DL = 0.07121

BEC = 0.3854

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	158.34	0.0000	P	24.7
2	☐	0.100					
3	☐	1.000	0.963	14363.34	0.0022	P	3.3
4	☐	50.000	50.547	740720.93	0.1144	P	0.6
5	☐	125.000	124.411	1852752.41	0.2816	P	1.5
6	☐	250.000	249.282	3735021.83	0.5642	P	0.9
7	☐	500.000	494.790	7416851.64	1.1199	A	0.3
8	☐	1000.000	1002.831	15323642.53	2.2698	A	0.7
9	☐			527503.45	0.0812	P	1.0

$$y = 0.0023 * x + 2.3564E-005$$

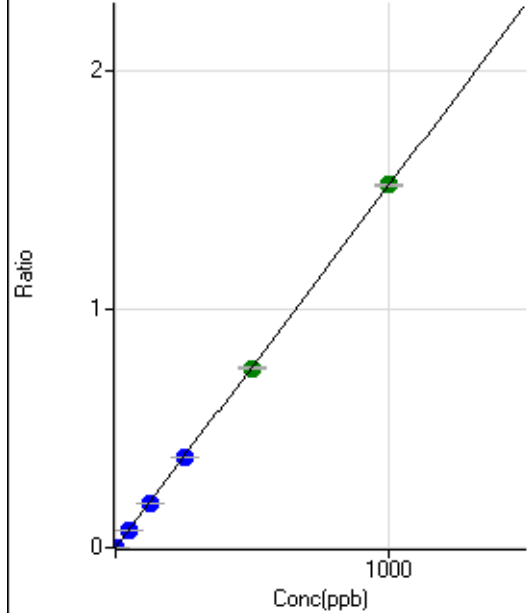
R = 1.0000

DL = 0.007713

BEC = 0.01041

Weight: <None>

Min Conc: 0

90 Zr [NoGas] ISTD:89 Y [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	563.92	0.0001	P	8.8
2	☐	0.100					
3	☐	1.000	0.872	9186.61	0.0014	P	4.7
4	☐	50.000	49.734	489518.64	0.0756	P	0.2
5	☐	125.000	123.936	1239077.62	0.1883	P	0.4
6	☐	250.000	250.158	2515694.63	0.3800	P	0.8
7	☐	500.000	495.218	4981610.40	0.7523	A	1.4
8	☐	1000.000	1002.498	10280180.44	1.5228	A	0.6
9	☐			2439.21	0.0004	P	5.5

$$y = 0.0015 * x + 8.3854E-005$$

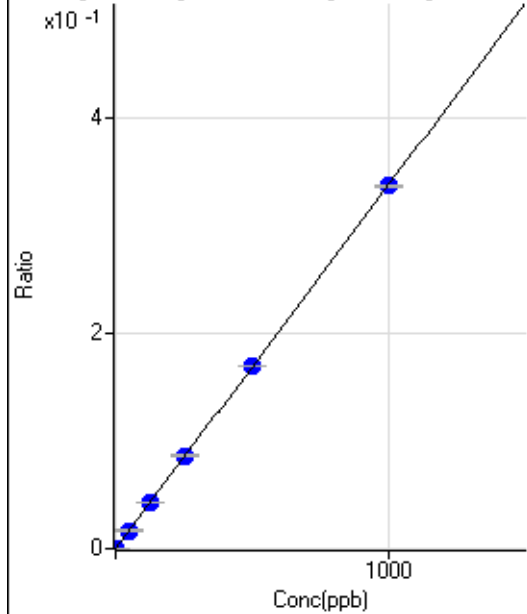
$$R = 1.0000$$

$$DL = 0.01453$$

$$BEC = 0.05521$$

Weight: <None>

Min Conc: 0

91 Zr [NoGas] ISTD:89 Y [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	86.12	0.0000	P	24.4
2	☐	0.100					
3	☐	1.000	0.891	2044.68	0.0003	P	8.7
4	☐	50.000	50.158	109744.39	0.0170	P	0.8
5	☐	125.000	126.336	280801.80	0.0427	P	1.4
6	☐	250.000	255.320	570887.77	0.0862	P	1.2
7	☐	500.000	501.759	1122361.73	0.1695	P	0.4
8	☐	1000.000	997.616	2274690.33	0.3369	P	0.3
9	☐			580.59	0.0001	P	11.4

$$y = 3.3774E-004 * x + 1.2800E-005$$

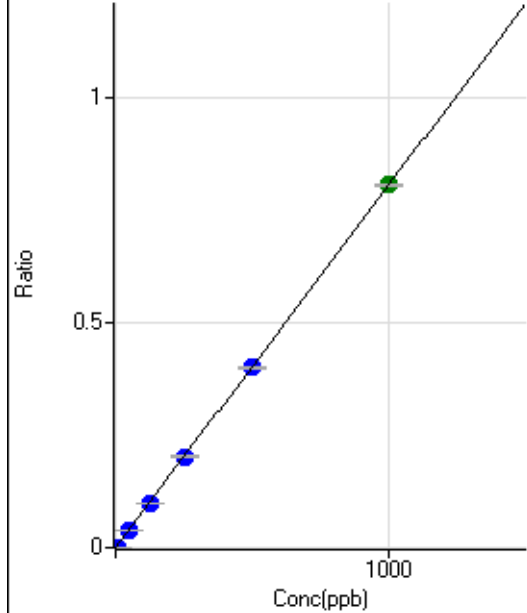
$$R = 1.0000$$

$$DL = 0.02774$$

$$BEC = 0.0379$$

Weight: <None>

Min Conc: 0

94 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	230.57	0.0000	P	33.7
2	☐	0.500					
3	☐	5.000	1.958	10495.91	0.0016	P	1.1
4	☐	50.000	50.076	261040.49	0.0403	P	0.7
5	☐	125.000	123.840	655797.97	0.0997	P	0.8
6	☐	250.000	250.983	1336972.15	0.2020	P	1.1
7	☐	500.000	496.767	2647285.43	0.3997	P	0.7
8	☐	1000.000	1001.527	5440234.24	0.8059	A	0.4
9	☐			5192.86	0.0008	P	5.3

$$y = 8.0460E-004 * x + 3.4276E-005$$

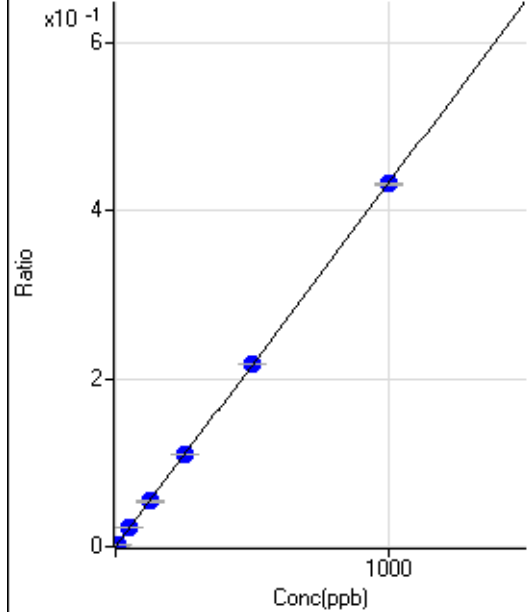
$$R = 1.0000$$

$$DL = 0.04313$$

$$BEC = 0.0426$$

Weight: <None>

Min Conc: 0

95 Mo [NoGas] ISTD : 89 Y [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	47.22	0.0000	P	27.1
2	☐	0.500					
3	☐	5.000	4.507	12758.95	0.0020	P	3.4
4	☐	50.000	50.997	142850.43	0.0221	P	0.8
5	☐	125.000	124.866	355421.49	0.0540	P	1.0
6	☐	250.000	253.178	725007.89	0.1095	P	0.5
7	☐	500.000	501.940	1438098.49	0.2171	P	0.7
8	☐	1000.000	998.205	2915084.09	0.4318	P	0.9
9	☐			7777.44	0.0012	P	2.1

$$y = 4.3258E-004 * x + 7.0199E-006$$

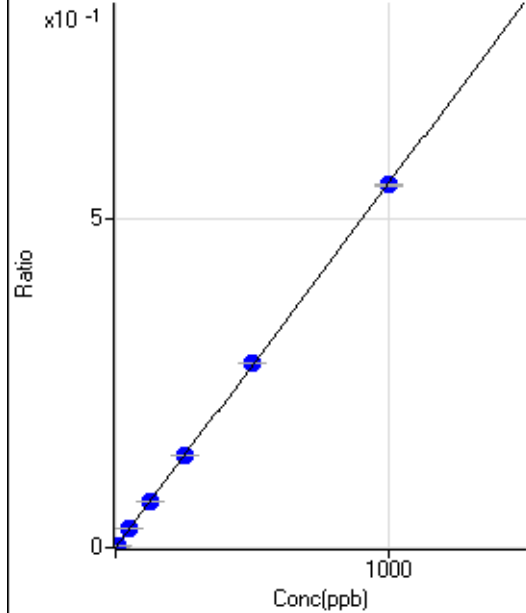
$$R = 1.0000$$

$$DL = 0.01319$$

$$BEC = 0.01623$$

Weight: <None>

Min Conc: 0

96 Mo [NoGas] ISTD : 89 Y [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.79	0.0000	P	14.5
2	☐	0.500					
3	☐	5.000	3.890	14168.69	0.0022	P	1.5
4	☐	50.000	50.611	181213.57	0.0280	P	0.2
5	☐	125.000	125.439	456273.78	0.0693	P	0.5
6	☐	250.000	252.598	924230.22	0.1396	P	1.1
7	☐	500.000	505.876	1851738.95	0.2796	P	0.3
8	☐	1000.000	996.332	3717493.14	0.5507	P	0.2
9	☐			9687.00	0.0015	P	1.9

$$y = 5.5267\text{E-}004 * x + 2.2727\text{E-}005$$

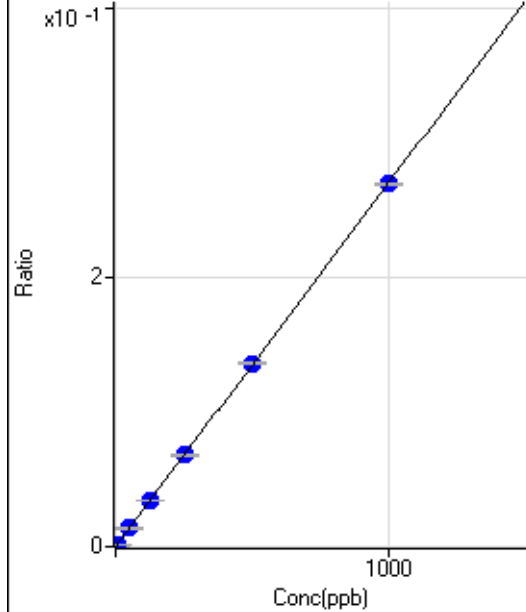
$$R = 1.0000$$

$$DL = 0.01784$$

$$BEC = 0.04112$$

Weight: <None>

Min Conc: 0

97 Mo [NoGas] ISTD : 89 Y [NoGas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	50.00	0.0000	P	32.7
2	☐	0.500					
3	☐	5.000	4.570	8088.74	0.0012	P	5.1
4	☐	50.000	50.373	88043.83	0.0136	P	1.2
5	☐	125.000	125.520	222935.85	0.0339	P	0.4
6	☐	250.000	251.342	449054.62	0.0678	P	1.5
7	☐	500.000	503.512	900012.78	0.1359	P	0.8
8	☐	1000.000	997.827	1818040.49	0.2693	P	0.2
9	☐			4570.37	0.0007	P	3.8

$$y = 2.6988\text{E-}004 * x + 7.4224\text{E-}006$$

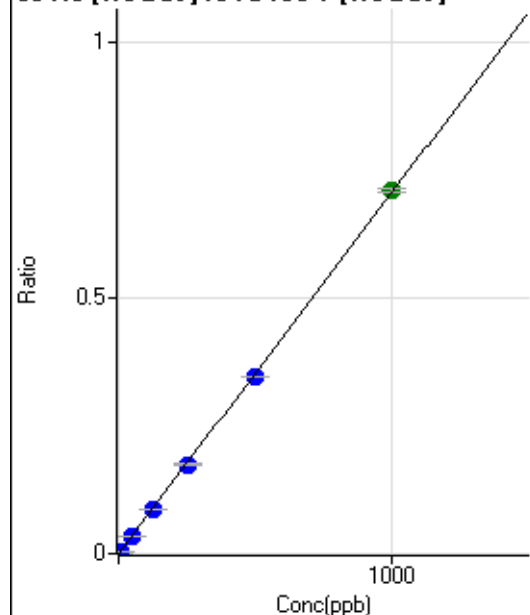
$$R = 1.0000$$

$$DL = 0.02696$$

$$BEC = 0.0275$$

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	102.78	0.0000	P	17.6
2	☐	0.500					
3	☐	5.000	4.435	20498.75	0.0031	P	0.7
4	☐	50.000	49.708	227021.46	0.0351	P	0.6
5	☐	125.000	124.064	575752.50	0.0875	P	1.2
6	☐	250.000	246.754	1152034.68	0.1740	P	1.5
7	☐	500.000	490.370	2290463.96	0.3459	P	0.7
8	☐	1000.000	1005.761	4788431.66	0.7093	A	1.2
9	☐			12025.11	0.0019	P	3.6

$$y = 7.0526E-004 * x + 1.5293E-005$$

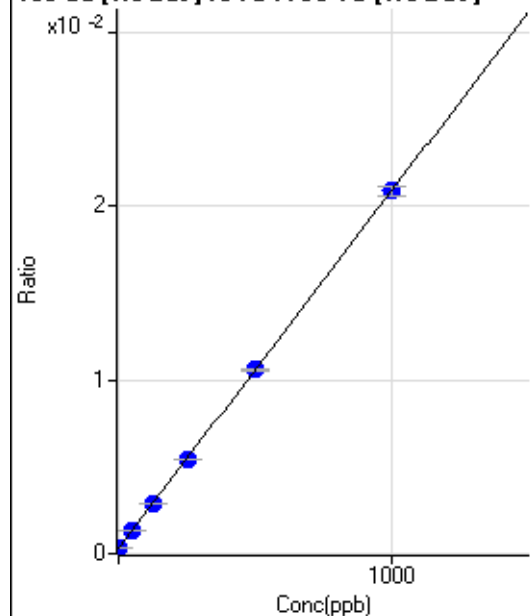
$$R = 0.9999$$

$$DL = 0.01146$$

$$BEC = 0.02168$$

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	2389.18	0.0003	P	7.0
2	☐	0.100					
3	☐	1.000	1.280	2539.22	0.0003	P	8.1
4	☐	50.000	51.335	10426.42	0.0014	P	1.7
5	☐	125.000	124.907	22262.65	0.0029	P	1.2
6	☐	250.000	248.499	42695.97	0.0054	P	1.5
7	☐	500.000	500.574	82635.45	0.0106	P	1.0
8	☐	1000.000	1000.033	164534.85	0.0209	P	2.8
9	☐			2389.18	0.0003	P	3.1

$$y = 2.0593E-005 * x + 3.0462E-004$$

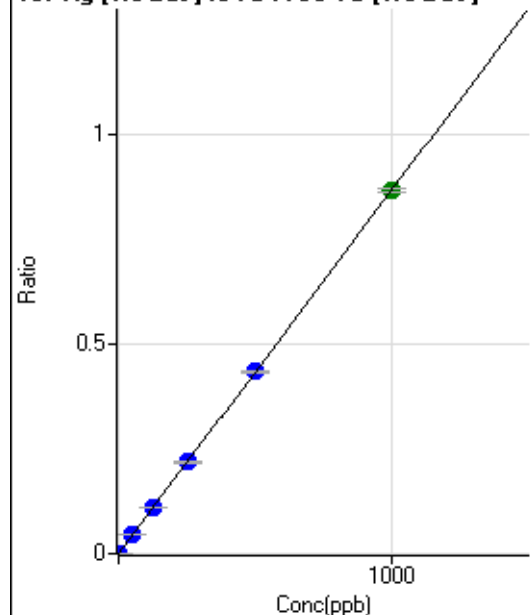
$$R = 1.0000$$

$$DL = 3.1$$

$$BEC = 14.79$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	72.22	0.0000	P	7.1
2	☐	0.100					
3	☐	1.000	0.933	6276.67	0.0008	P	6.0
4	☐	50.000	52.053	345601.70	0.0451	P	0.8
5	☐	125.000	127.621	856423.97	0.1107	P	0.4
6	☐	250.000	252.472	1723972.15	0.2189	P	1.0
7	☐	500.000	500.361	3378225.77	0.4339	P	0.4
8	☐	1000.000	998.771	6819012.31	0.8661	A	1.0
9	☐			1083.42	0.0001	P	10.4

$$y = 8.6713E-004 * x + 9.2109E-006$$

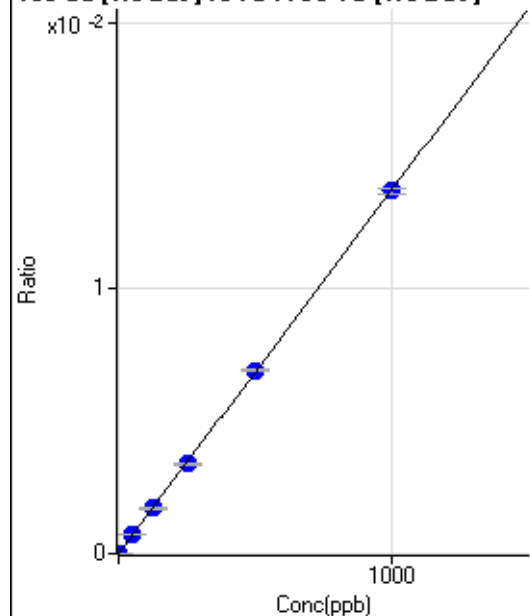
$$R = 1.0000$$

$$DL = 0.002262$$

$$BEC = 0.01062$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	12.50	0.0000	P	57.9
2	☐	0.100					
3	☐	1.000	0.823	98.61	0.0000	P	13.9
4	☐	50.000	51.515	5412.26	0.0007	P	3.5
5	☐	125.000	125.444	13299.53	0.0017	P	2.8
6	☐	250.000	246.982	26636.45	0.0034	P	0.8
7	☐	500.000	503.951	53729.41	0.0069	P	1.4
8	☐	1000.000	998.648	107652.55	0.0137	P	1.5
9	☐			23.61	0.0000	P	36.8

$$y = 1.3690E-005 * x + 1.5966E-006$$

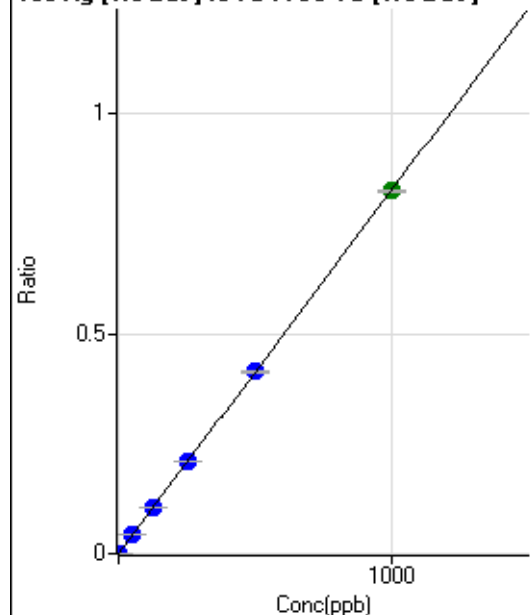
$$R = 1.0000$$

$$DL = 0.2026$$

$$BEC = 0.1166$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0000	P	43.9
2	☐	0.100					
3	☐	1.000	1.001	6387.78	0.0008	P	1.1
4	☐	50.000	51.945	328763.14	0.0429	P	1.2
5	☐	125.000	128.325	820901.74	0.1061	P	0.7
6	☐	250.000	253.163	1648004.00	0.2093	P	0.8
7	☐	500.000	500.814	3223529.78	0.4140	P	0.7
8	☐	1000.000	998.289	6497955.57	0.8253	A	0.6
9	☐			972.30	0.0001	P	11.7

$$y = 8.2667\text{E-}004 * x + 4.9511\text{E-}006$$

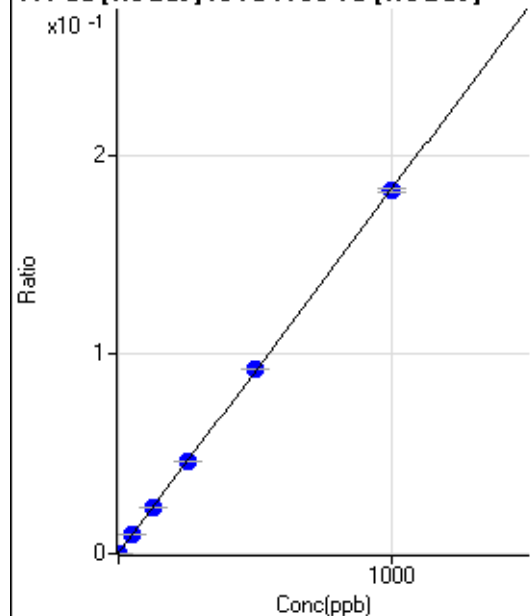
$$R = 1.0000$$

$$DL = 0.007886$$

$$BEC = 0.005989$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1674.79	0.0002	P	7.1
2	☐	0.100					
3	☐	1.000	0.999	3039.08	0.0004	P	6.0
4	☐	50.000	51.647	73867.54	0.0096	P	1.2
5	☐	125.000	127.354	181698.62	0.0235	P	0.6
6	☐	250.000	252.864	365454.85	0.0464	P	0.2
7	☐	500.000	505.917	721333.39	0.0926	P	0.5
8	☐	1000.000	995.949	1434348.89	0.1822	P	1.0
9	☐			1860.07	0.0003	P	3.8

$$y = 1.8270\text{E-}004 * x + 2.1353\text{E-}004$$

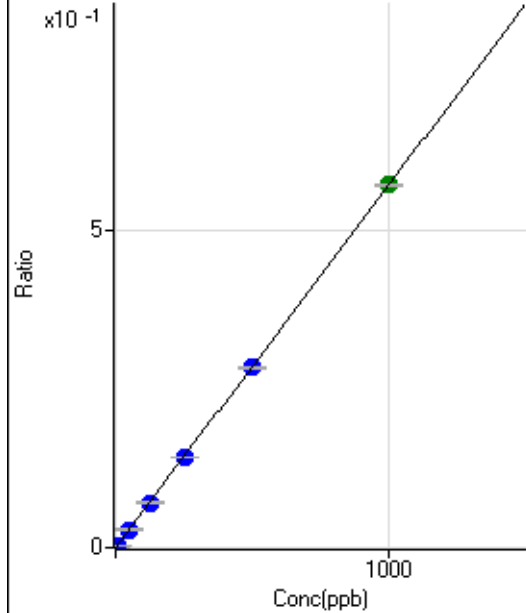
$$R = 1.0000$$

$$DL = 0.2475$$

$$BEC = 1.169$$

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	452.81	0.0001	P	23.5
2	☐	0.500					
3	☐	5.000	4.473	20015.04	0.0026	P	4.0
4	☐	50.000	50.280	219925.03	0.0287	P	0.3
5	☐	125.000	124.415	549400.48	0.0710	P	0.5
6	☐	250.000	248.551	1116448.28	0.1418	P	0.7
7	☐	500.000	497.532	2209317.06	0.2838	P	1.1
8	☐	1000.000	1001.658	4497572.28	0.5712	A	0.3
9	☐			5668.05	0.0008	P	1.5

$$y = 5.7021\text{E-}004 * x + 5.7825\text{E-}005$$

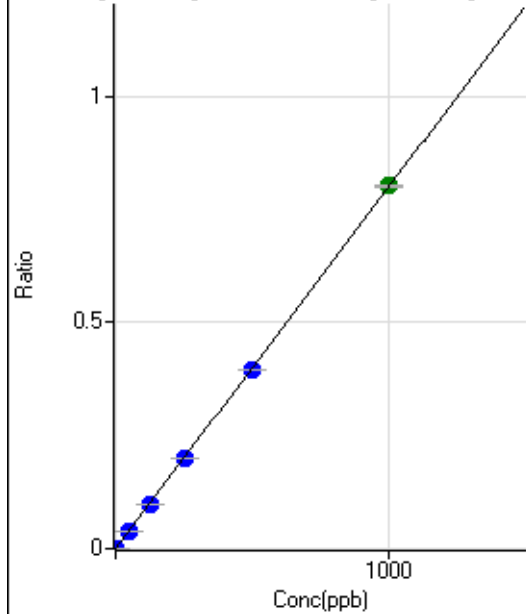
$$R = 1.0000$$

$$DL = 0.07136$$

$$BEC = 0.1014$$

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	66.67	0.0000	P	33.6
2	☐	0.200					
3	☐	2.000	1.808	11149.23	0.0015	P	2.1
4	☐	50.000	49.274	301249.22	0.0394	P	1.7
5	☐	125.000	123.839	765240.89	0.0989	P	1.1
6	☐	250.000	249.258	1567304.31	0.1990	P	0.7
7	☐	500.000	493.544	3068484.90	0.3941	P	0.3
8	☐	1000.000	1003.595	6309871.84	0.8014	A	0.6
9	☐			15701.06	0.0021	P	4.0

$$y = 7.9849\text{E-}004 * x + 8.5118\text{E-}006$$

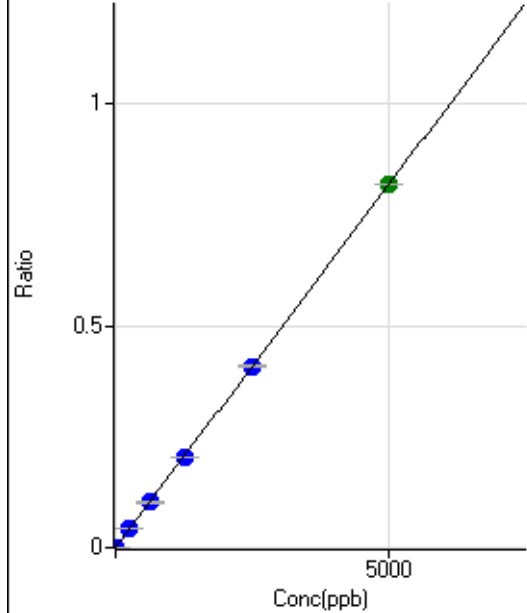
$$R = 1.0000$$

$$DL = 0.01075$$

$$BEC = 0.01066$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	41.67	0.0000	P	21.1
2	☐	1.000					
3	☐	10.000	8.989	11324.58	0.0015	P	4.8
4	☐	250.000	254.456	318543.46	0.0416	P	0.7
5	☐	625.000	625.057	790874.01	0.1022	P	0.9
6	☐	1250.000	1243.807	1601445.73	0.2034	P	1.0
7	☐	2500.000	2501.647	3184725.90	0.4090	P	0.8
8	☐	5000.000	5000.497	6437798.19	0.8176	A	0.2
9	☐			2016.90	0.0003	P	15.3

$$y = 1.6350E-004 * x + 5.3207E-006$$

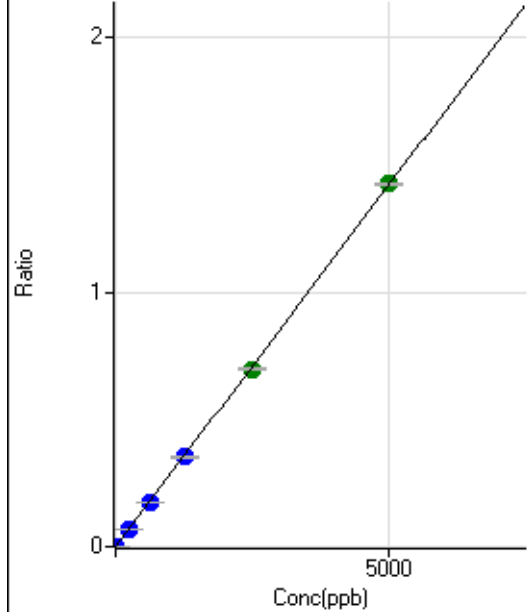
$$R = 1.0000$$

$$DL = 0.02061$$

$$BEC = 0.03254$$

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	97.23	0.0000	P	11.1
2	☐	1.000					
3	☐	10.000	9.159	20037.38	0.0026	P	0.7
4	☐	250.000	251.770	546782.23	0.0714	P	0.6
5	☐	625.000	619.043	1358828.57	0.1756	P	0.2
6	☐	1250.000	1238.189	2765603.81	0.3512	P	1.2
7	☐	2500.000	2461.347	5435907.85	0.6982	A	0.6
8	☐	5000.000	5022.937	11217906.76	1.4247	A	0.4
9	☐			3483.90	0.0005	P	4.0

$$y = 2.8364E-004 * x + 1.2407E-005$$

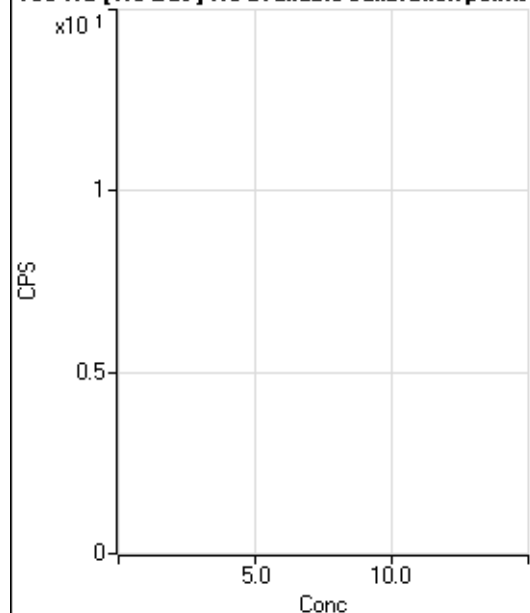
$$R = 1.0000$$

$$DL = 0.01454$$

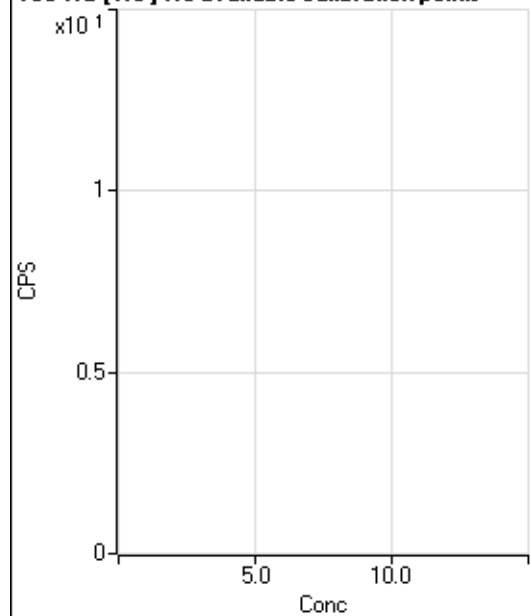
$$BEC = 0.04374$$

Weight: <None>

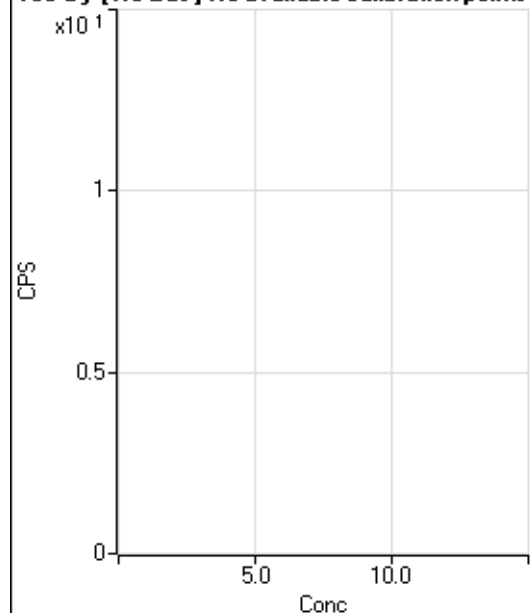
Min Conc: 0

150 Nd [No Gas] No available calibration points

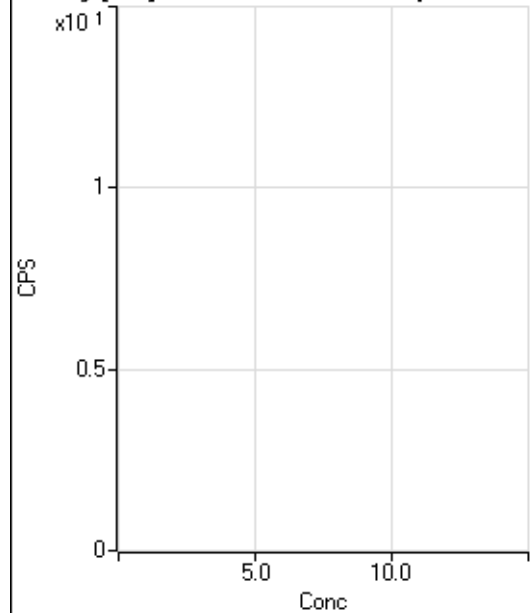
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐						
3	☐			4.45		P	86.6
4	☐			28.89		P	35.2
5	☐			60.00		P	11.1
6	☐			95.56		P	28.2
7	☐			155.56		P	6.5
8	☐			375.57		P	4.5
9	☐			46.67		P	57.1

150 Nd [He] No available calibration points

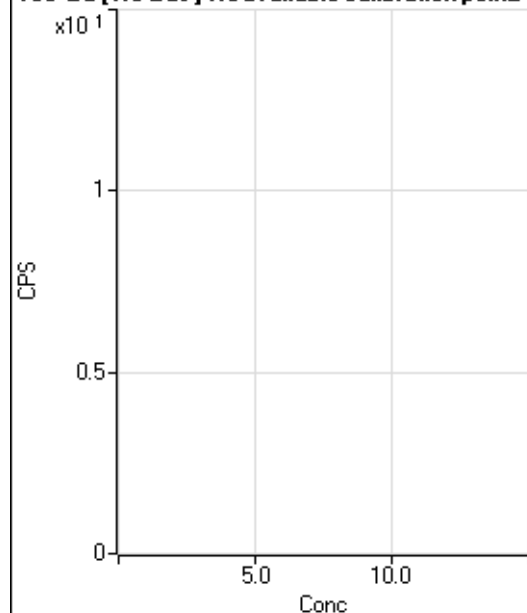
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			1.11		P	173.
4	☐			2.22		P	86.6
5	☐			3.33		P	0.0
6	☐			12.22		P	63.0
7	☐			27.78		P	38.6
8	☐			26.67		P	37.5
9	☐			21.11		P	39.7

156 Dy [No Gas] No available calibration points

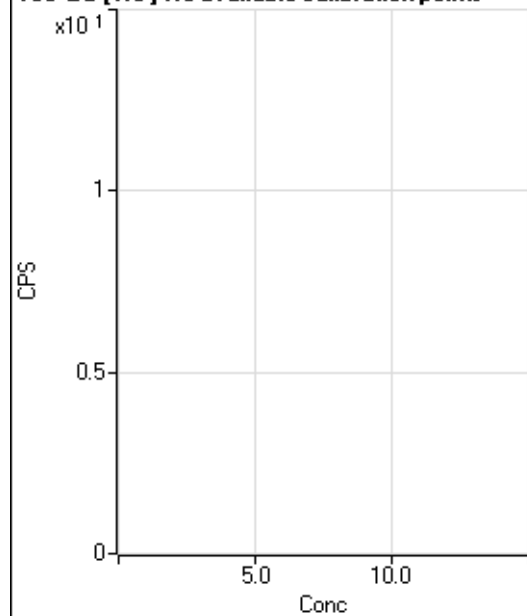
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	65.5
2	☐						
3	☐			16.67		P	86.6
4	☐			63.89		P	84.9
5	☐			47.22		P	27.0
6	☐			61.11		P	20.8
7	☐			88.89		P	51.6
8	☐			116.67		P	28.6
9	☐			55.56		P	52.7

156 Dy [He] No available calibration points

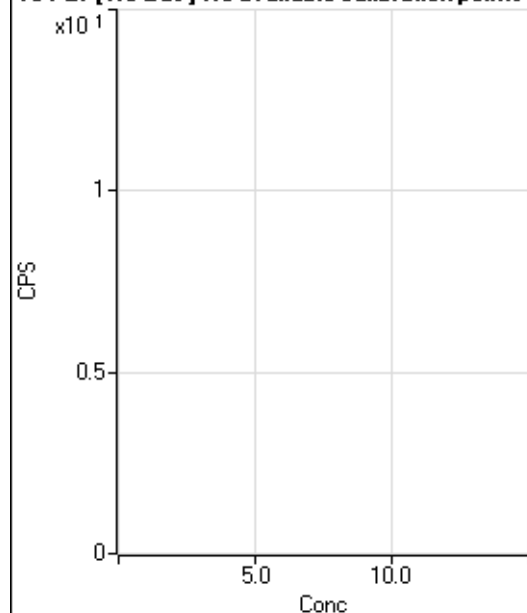
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	100.
2	☐						
3	☐			6.67		P	50.0
4	☐			4.45		P	86.6
5	☐			5.56		P	34.7
6	☐			16.67		P	NaN
7	☐			30.00		P	22.2
8	☐			45.55		P	29.6
9	☐			23.33		P	28.6

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

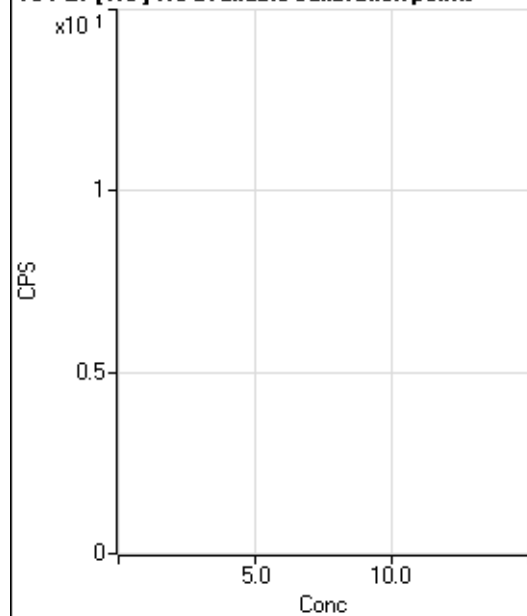
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.45		P	28.7
2	☐						
3	☐			66.67		P	25.0
4	☐			80.56		P	31.6
5	☐			69.45		P	48.5
6	☐			88.89		P	10.8
7	☐			88.89		P	32.9
8	☐			113.90		P	23.5
9	☐			102.78		P	16.9

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			53.34		P	10.8
2	☐						
3	☐			54.45		P	19.7
4	☐			73.33		P	22.7
5	☐			65.56		P	17.9
6	☐			75.56		P	10.2
7	☐			70.00		P	9.5
8	☐			78.89		P	26.8
9	☐			75.56		P	25.1

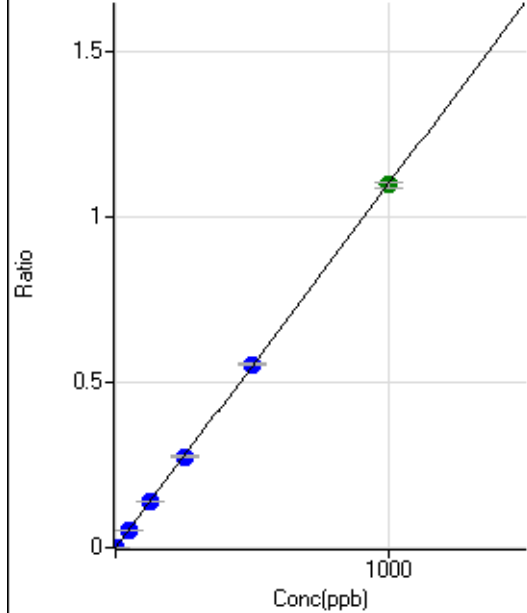
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.34		P	66.1
2	☐						
3	☐			47.22		P	79.6
4	☐			27.78		P	91.7
5	☐			47.22		P	27.0
6	☐			22.22		P	57.3
7	☐			36.11		P	13.3
8	☐			44.45		P	28.7
9	☐			25.00		P	33.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			14.45		P	26.7
2	☐						
3	☐			12.22		P	31.5
4	☐			18.89		P	36.7
5	☐			12.22		P	78.7
6	☐			18.89		P	20.4
7	☐			14.44		P	53.3
8	☐			11.11		P	69.3
9	☐			14.44		P	35.3

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	80.56	0.0000	P	24.4
2	☐	0.100					
3	☐	1.000	0.930	4328.66	0.0010	P	3.2
4	☐	50.000	49.112	225596.91	0.0540	P	1.3
5	☐	125.000	124.836	573890.25	0.1373	P	0.2
6	☐	250.000	250.845	1156182.43	0.2760	P	1.0
7	☐	500.000	504.400	2282752.57	0.5549	P	0.7
8	☐	1000.000	997.654	4589323.63	1.0975	A	1.6
9	☐			1733.53	0.0005	P	7.8

$$y = 0.0011 * x + 1.7875E-005$$

$$R = 1.0000$$

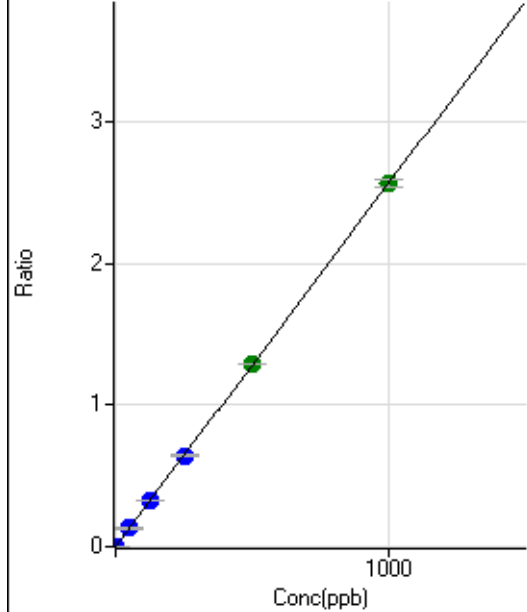
$$DL = 0.01191$$

$$BEC = 0.01625$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	183.34	0.0000	P	32.0
2	☐	0.100					
3	☐	1.000	0.932	10126.47	0.0024	P	3.1
4	☐	50.000	50.466	541208.82	0.1296	P	1.2
5	☐	125.000	126.760	1360477.34	0.3256	P	0.1
6	☐	250.000	251.284	2704025.01	0.6454	P	0.6
7	☐	500.000	501.230	5296104.85	1.2873	A	0.3
8	☐	1000.000	998.821	10726567.17	2.5652	A	2.3
9	☐			4303.67	0.0011	P	1.7

$$y = 0.0026 * x + 4.0568E-005$$

$$R = 1.0000$$

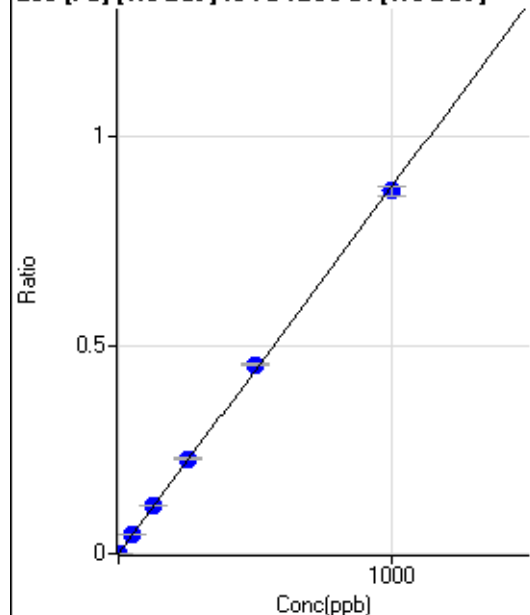
$$DL = 0.01518$$

$$BEC = 0.0158$$

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	396.32	0.0001	P	12.5
2	☐	0.100					
3	☐	1.000	0.935	3789.53	0.0009	P	2.2
4	☐	50.000	50.646	186506.80	0.0447	P	1.8
5	☐	125.000	129.362	476291.92	0.1140	P	0.6
6	☐	250.000	259.173	956461.62	0.2283	P	0.9
7	☐	500.000	515.431	1867414.31	0.4539	P	0.7
8	☐	1000.000	989.414	3642926.85	0.8712	P	2.9
9	☐			5438.32	0.0014	P	1.9

$$y = 8.8047\text{E-}004 * x + 8.7923\text{E-}005$$

$$R = 0.9998$$

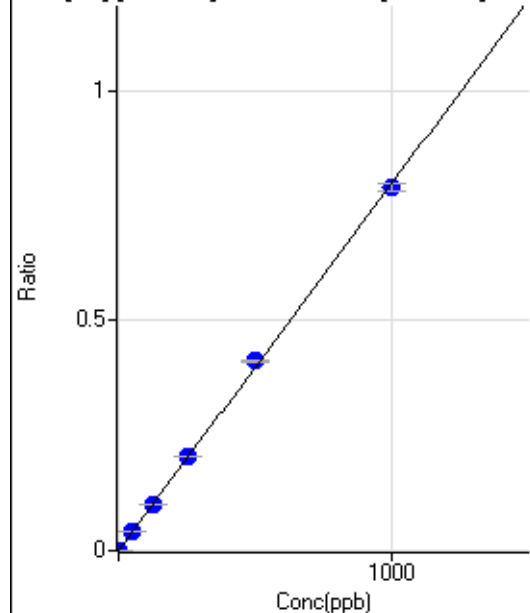
$$DL = 0.03744$$

$$BEC = 0.09986$$

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	342.61	0.0001	P	5.9
2	☐	0.100					
3	☐	1.000	0.950	3469.07	0.0008	P	5.3
4	☐	50.000	50.642	168938.05	0.0405	P	2.0
5	☐	125.000	127.645	425781.26	0.1019	P	1.0
6	☐	250.000	257.061	859457.33	0.2051	P	0.9
7	☐	500.000	518.268	1701205.21	0.4135	P	1.0
8	☐	1000.000	988.738	3298352.33	0.7888	P	2.2
9	☐			4508.29	0.0012	P	4.6

$$y = 7.9769\text{E-}004 * x + 7.5972\text{E-}005$$

$$R = 0.9997$$

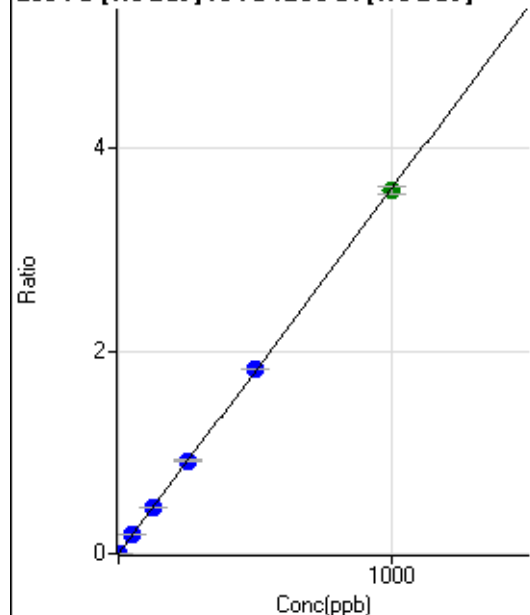
$$DL = 0.01683$$

$$BEC = 0.09524$$

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	1592.68	0.0004	P	6.1
2	☐	0.100					
3	☐	1.000	0.942	15578.12	0.0037	P	0.7
4	☐	50.000	50.278	757555.01	0.1815	P	1.0
5	☐	125.000	127.245	1916816.95	0.4587	P	0.2
6	☐	250.000	254.969	3849693.04	0.9188	P	0.6
7	☐	500.000	507.708	7525939.91	1.8293	P	0.2
8	☐	1000.000	994.609	14983521.31	3.5832	A	2.1
9	☐			21555.67	0.0057	P	2.7

$$y = 0.0036 * x + 3.5318E-004$$

$$R = 0.9999$$

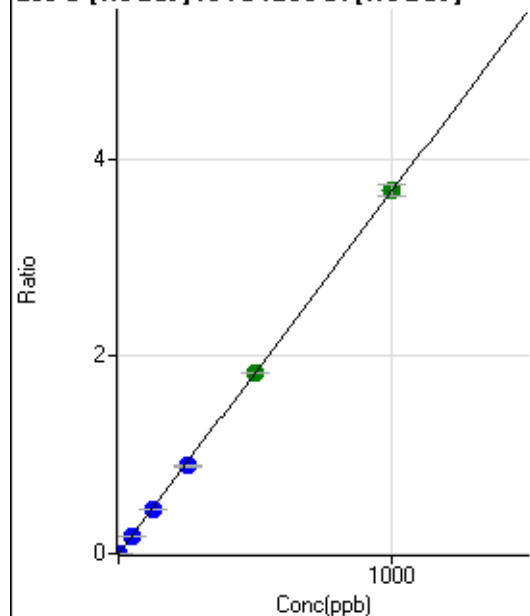
$$DL = 0.01809$$

$$BEC = 0.09804$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	119.45	0.0000	P	28.5
2	☐	0.100					
3	☐	1.000	0.904	13896.76	0.0033	P	2.0
4	☐	50.000	48.477	742246.13	0.1778	P	0.8
5	☐	125.000	122.614	1878985.30	0.4497	P	0.2
6	☐	250.000	242.580	3727222.61	0.8896	P	1.1
7	☐	500.000	499.372	7534180.99	1.8313	A	0.5
8	☐	1000.000	1002.544	15372606.42	3.6765	A	3.1
9	☐			1458.48	0.0004	P	7.7

$$y = 0.0037 * x + 2.6459E-005$$

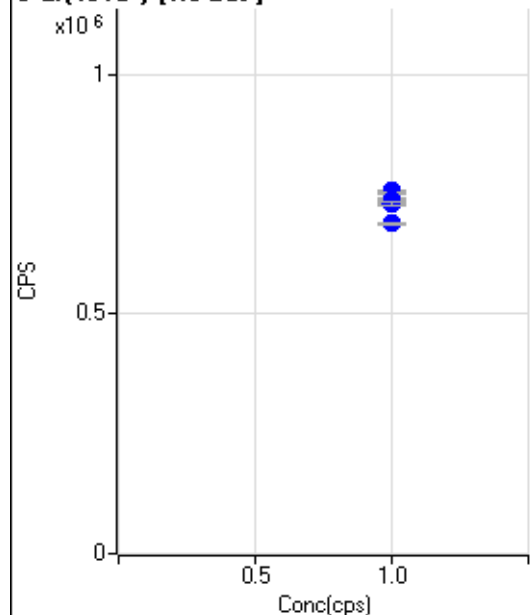
$$R = 1.0000$$

$$DL = 0.006178$$

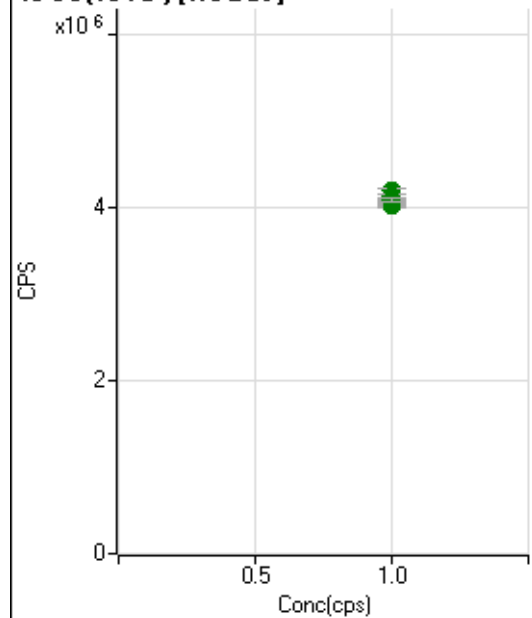
$$BEC = 0.007215$$

Weight: <None>

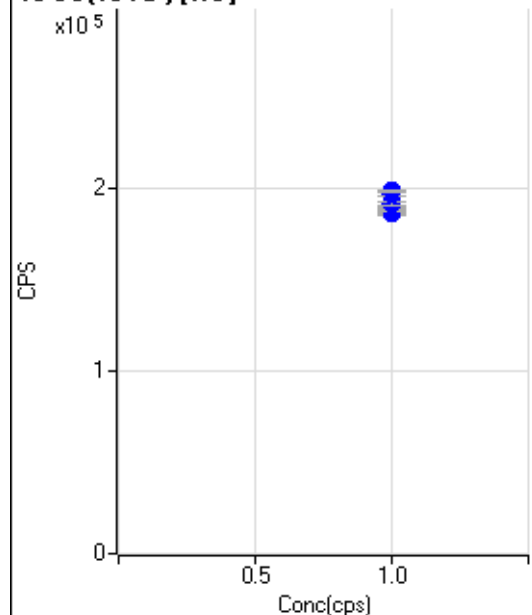
Min Conc: 0

6 Li(ISTD) [No Gas]

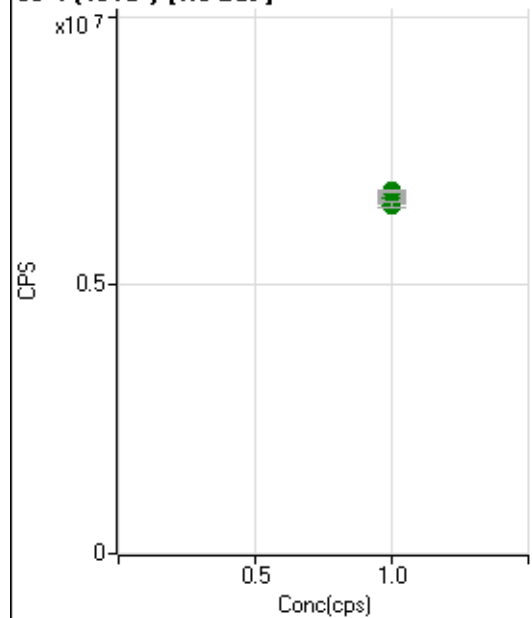
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		757073.51		P	0.1
2	☐	1.000					
3	☐	1.000		750894.70		P	0.6
4	☐	1.000		734393.69		P	0.8
5	☐	1.000		738316.08		P	0.5
6	☐	1.000		738585.71		P	0.6
7	☐	1.000		732688.28		P	0.2
8	☐	1.000		729261.96		P	1.1
9	☐	1.000		688764.57		P	0.7

45 Sc(ISTD) [No Gas]

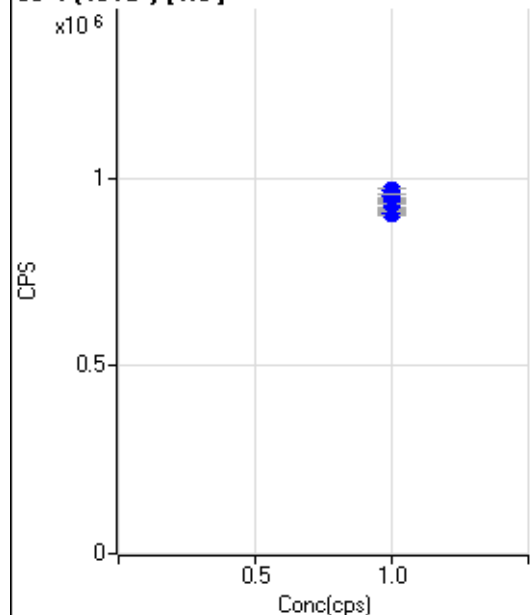
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4194745.41		A	1.9
2	☐	1.000					
3	☐	1.000		4013475.22		A	0.1
4	☐	1.000		4025262.11		A	0.9
5	☐	1.000		4053658.68		A	1.3
6	☐	1.000		4077314.59		A	0.9
7	☐	1.000		4053886.59		A	0.8
8	☐	1.000		4137498.75		A	0.9
9	☐	1.000		4087830.78		A	1.4

45 Sc(ISTD) [He]

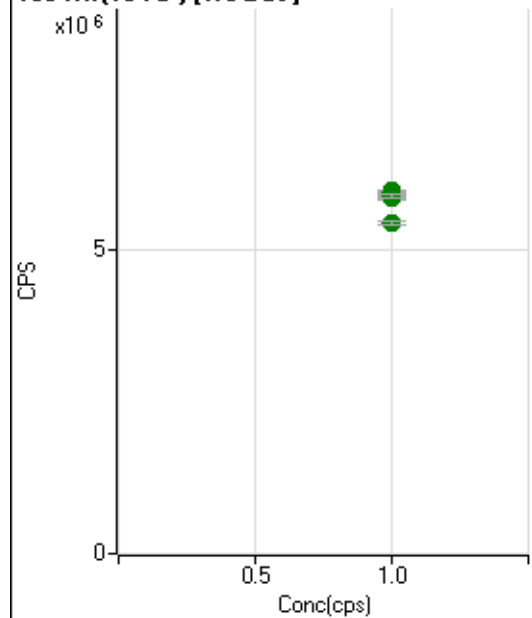
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		188120.23		P	0.7
2	☐	1.000					
3	☐	1.000		185739.21		P	1.1
4	☐	1.000		187028.09		P	0.8
5	☐	1.000		190309.39		P	0.5
6	☐	1.000		187959.66		P	0.8
7	☐	1.000		191621.44		P	1.2
8	☐	1.000		196860.00		P	1.1
9	☐	1.000		198375.12		P	0.8

89 Y(ISTD) [No Gas]

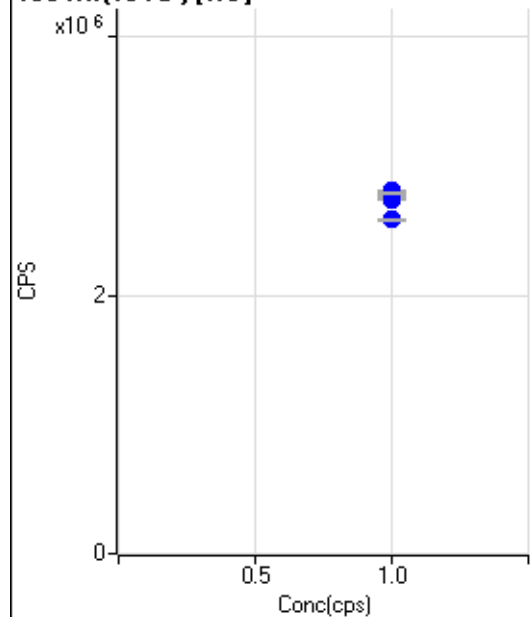
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6727545.73		A	0.8
2	☐	1.000					
3	☐	1.000		6521449.62		A	0.8
4	☐	1.000		6473210.67		A	0.9
5	☐	1.000		6579535.80		A	0.9
6	☐	1.000		6619458.86		A	0.5
7	☐	1.000		6622755.11		A	1.1
8	☐	1.000		6750879.97		A	0.6
9	☐	1.000		6494145.81		A	1.3

89 Y (ISTD) [He]

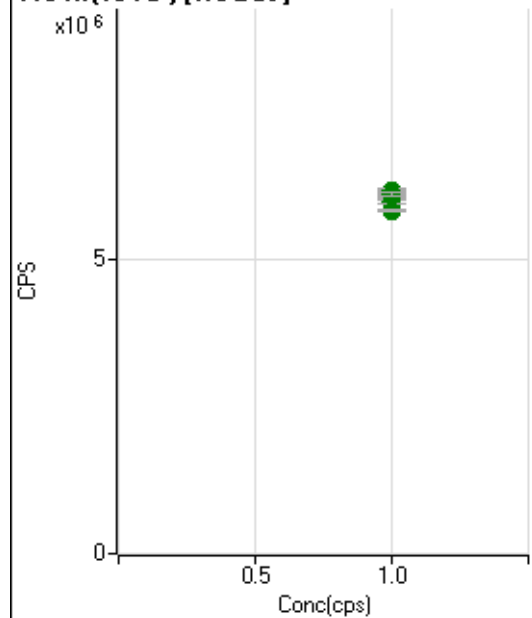
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		913769.52		P	1.3
2	☐	1.000					
3	☐	1.000		907361.51		P	0.8
4	☐	1.000		916059.30		P	0.7
5	☐	1.000		940511.31		P	0.6
6	☐	1.000		932690.01		P	0.3
7	☐	1.000		952747.20		P	1.1
8	☐	1.000		966733.56		P	1.6
9	☐	1.000		958234.55		P	0.4

103 Rh (ISTD) [NoGas]

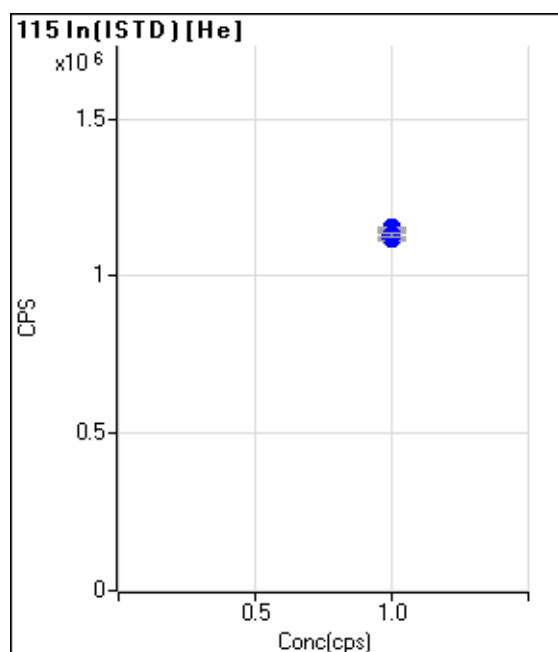
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5878381.86		A	1.4
2	☐	1.000					
3	☐	1.000		5972344.32		A	0.3
4	☐	1.000		5903431.81		A	0.8
5	☐	1.000		5935871.92		A	1.3
6	☐	1.000		5910588.72		A	0.4
7	☐	1.000		5843216.93		A	0.8
8	☐	1.000		5893136.29		A	0.9
9	☐	1.000		5459816.09		A	1.2

103 Rh(ISTD) [He]

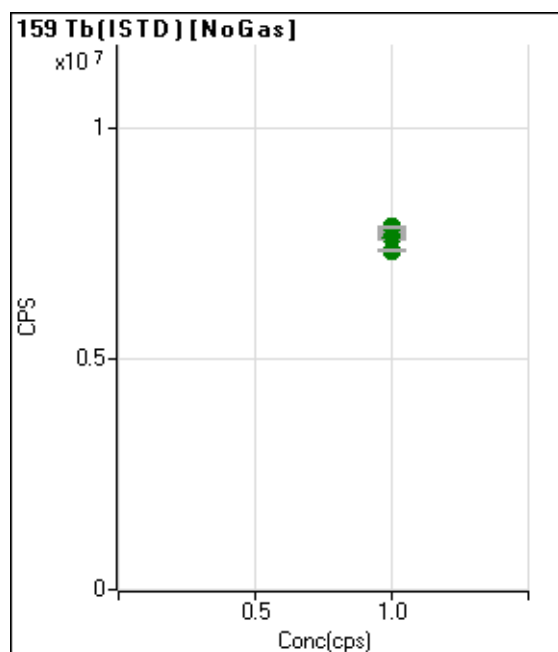
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2777636.63		P	0.9
2	☐	1.000					
3	☐	1.000		2747532.08		P	0.7
4	☐	1.000		2771157.84		P	0.6
5	☐	1.000		2810006.38		P	0.7
6	☐	1.000		2774208.01		P	0.4
7	☐	1.000		2798826.77		P	1.2
8	☐	1.000		2791251.14		P	0.9
9	☐	1.000		2588480.55		P	0.6

115 In(ISTD) [NoGas]

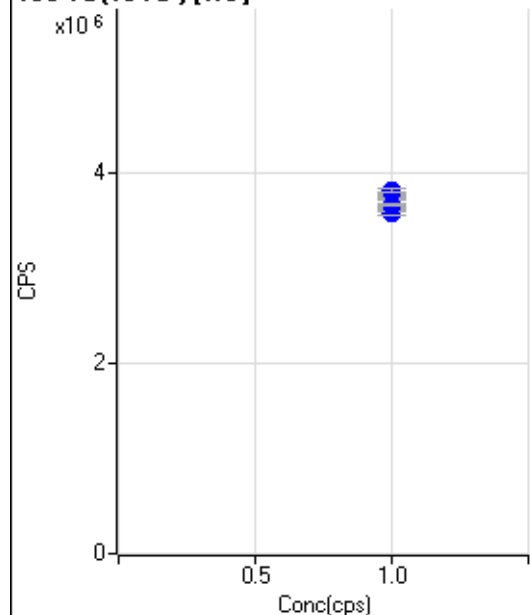
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5968915.35		A	0.8
2	☐	1.000					
3	☐	1.000		6123031.07		A	1.3
4	☐	1.000		6069576.21		A	1.0
5	☐	1.000		6106315.85		A	0.4
6	☐	1.000		6147466.50		A	1.0
7	☐	1.000		6057141.47		A	1.4
8	☐	1.000		6085382.11		A	0.8
9	☐	1.000		5812272.27		A	0.4



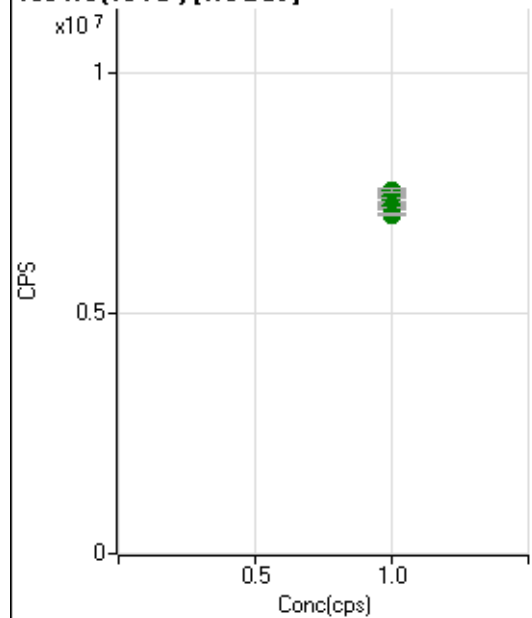
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1126648.72		P	1.8
2	☐	1.000					
3	☐	1.000		1118608.76		P	0.9
4	☐	1.000		1136881.57		P	0.2
5	☐	1.000		1152804.95		P	0.8
6	☐	1.000		1139472.39		P	0.5
7	☐	1.000		1153353.65		P	0.7
8	☐	1.000		1152045.44		P	0.9
9	☐	1.000		1131308.16		P	0.8



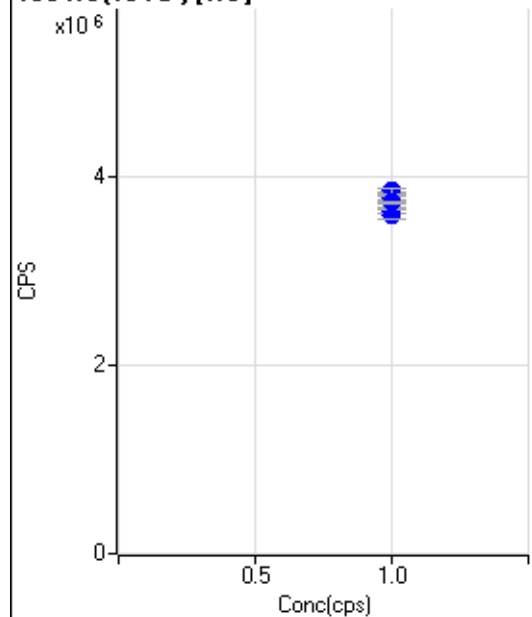
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7843031.06		A	1.1
2	☐	1.000					
3	☐	1.000		7676256.97		A	1.1
4	☐	1.000		7655511.62		A	1.0
5	☐	1.000		7738206.69		A	0.7
6	☐	1.000		7874206.00		A	0.3
7	☐	1.000		7786064.05		A	0.4
8	☐	1.000		7873861.20		A	0.7
9	☐	1.000		7364992.95		A	0.5

159 Tb(ISTD) [He]

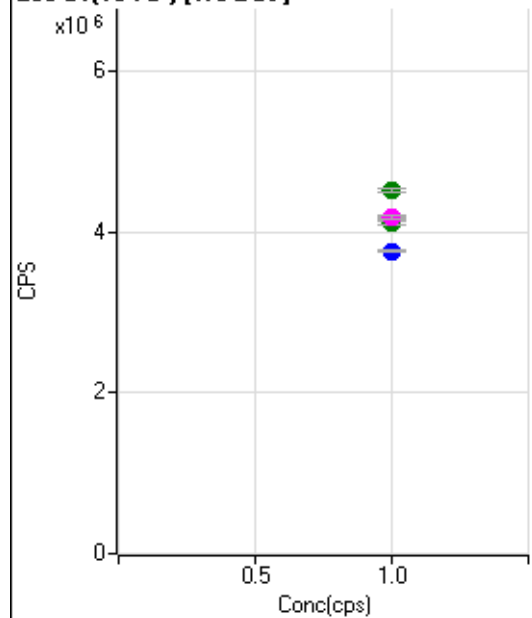
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3608149.15		P	0.9
2	☐	1.000					
3	☐	1.000		3577552.66		P	1.0
4	☐	1.000		3657304.91		P	1.0
5	☐	1.000		3740222.31		P	0.9
6	☐	1.000		3723227.03		P	0.5
7	☐	1.000		3809064.15		P	1.3
8	☐	1.000		3815559.88		P	1.0
9	☐	1.000		3662892.30		P	0.5

165 Ho(ISTD) [NoGas]

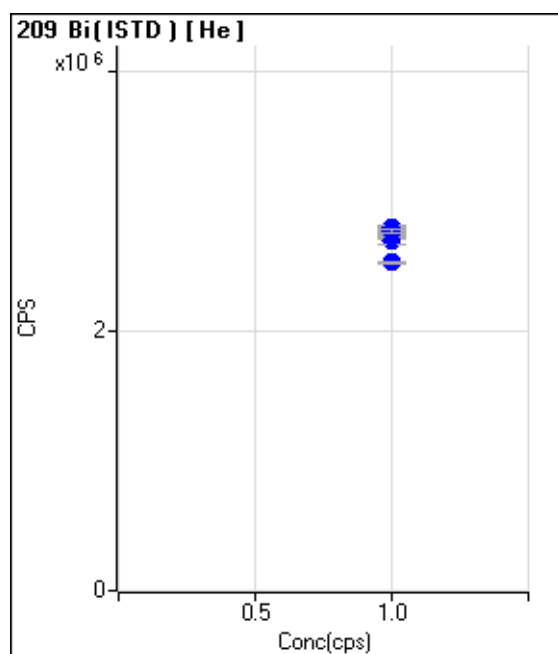
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7542507.55		A	1.0
2	☐	1.000					
3	☐	1.000		7202134.45		A	1.0
4	☐	1.000		7240637.14		A	1.5
5	☐	1.000		7372847.04		A	1.5
6	☐	1.000		7457605.89		A	0.8
7	☐	1.000		7450254.33		A	1.2
8	☐	1.000		7553390.80		A	1.2
9	☐	1.000		7057548.86		A	0.4

165 Ho(ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3630812.27		P	1.3
2	☐	1.000					
3	☐	1.000		3584865.71		P	1.6
4	☐	1.000		3656452.93		P	0.5
5	☐	1.000		3772981.93		P	0.7
6	☐	1.000		3765925.71		P	1.2
7	☐	1.000		3814391.09		P	0.8
8	☐	1.000		3846376.12		P	1.4
9	☐	1.000		3721642.62		P	0.4

209 Bi(ISTD) [NoGas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4511728.51		A	1.2
2	☐	1.000					
3	☐	1.000		4159775.18		A	1.1
4	☐	1.000		4174962.68		M	1.4
5	☐	1.000		4178595.95		A	0.8
6	☐	1.000		4189825.46		A	0.1
7	☐	1.000		4114217.82		A	0.8
8	☐	1.000		4182439.83		M	1.4
9	☐	1.000		3761800.29		P	0.5



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2734817.74		P	0.7
2	☐	1.000					
3	☐	1.000		2696864.93		P	1.5
4	☐	1.000		2735479.68		P	0.6
5	☐	1.000		2799859.47		P	0.6
6	☐	1.000		2793459.16		P	1.0
7	☐	1.000		2798912.07		P	1.0
8	☐	1.000		2773534.92		P	1.4
9	☐	1.000		2536000.82		P	0.7

US EPA Tune Check Sample Report

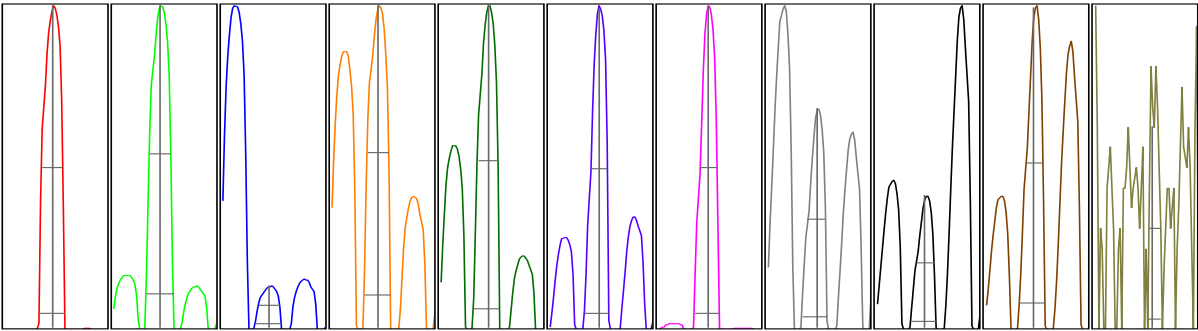
Batch Folder D:\ICP-MS Data\P7102017-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	3985	0.97	5.00	
24	225723	0.76	5.00	
25	30020	1.11	5.00	
26	34737	1.22	5.00	
59	36870	1.71	5.00	
113	13591	2.58	5.00	
115	267402	1.60	5.00	
206	11029	3.17	5.00	
207	9856	2.95	5.00	
208	23231	2.37	5.00	
220	0	40.97		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	3934	4010	4006	3953	4021
24	226568	225865	227099	226342	222740
25	29657	30146	30347	30278	29671
26	34174	35089	34975	35055	34393
59	35876	36838	37283	37519	36832
113	13104	13421	13690	14046	13694
115	260402	266481	269369	271258	269499
206	10690	10741	10924	11319	11471
207	9574	9660	9739	10030	10276
208	22618	23170	22923	23370	24077
220	1	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	6890	8.95	8.9 - 9.1		0.739	0.900	
24	378560	23.90	23.9 - 24.1		0.790	0.900	
25	50317	24.90	24.9 - 25.1		0.751	0.900	
26	58660	25.90	25.9 - 26.1		0.761	0.900	
59	64762	58.95	58.9 - 59.1		0.760	0.900	
113	27117	113.00	112.9 - 113.1		0.704	0.900	
115	525949	115.00	114.9 - 115.1		0.730	0.900	
206	21707	206.00	205.9 - 206.1		0.733	0.900	
207	19293	206.95	206.9 - 207.1		0.730	0.900	
208	46760	207.95	207.9 - 208.1		0.737	0.900	
220	1	220.25	-		0.391		

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

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.5	V	Deflect	13.4	V
Extract 2	-220.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-105	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	200	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	9824	0.57	
89	4350	0.44	
205	10515	0.65	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	9900	9828	9821	9826	9743
89	4358	4331	4379	4339	4341
205	10595	10458	10583	10470	10468

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.80	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.37 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.1	V	Deflect	3.0	V
Extract 2	-210.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-100	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			