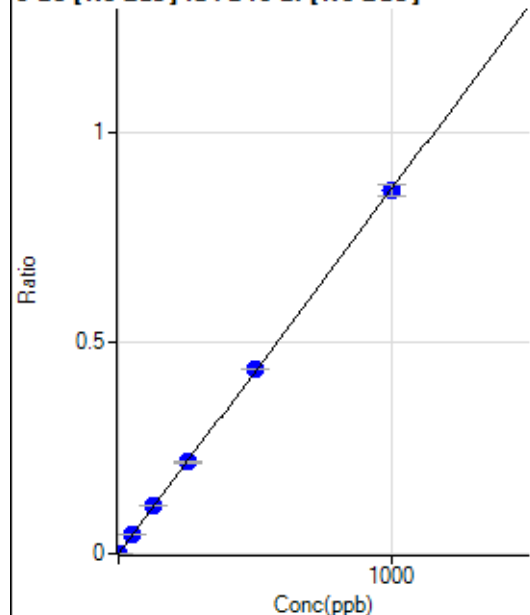


Calibration for 007CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8060420 MS.b\
 Analysis File: P8060420 MS.batch.bin
 DA Date-Time: 2020-06-05 14:20:02
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-06-04 12:19:00
2	004CALS.d	S01	2020-06-04 12:22:06
3	005CALS.d	S02	2020-06-04 12:25:10
4	006CALS.d	S03	2020-06-04 12:28:15
5	007CALS.d	S04	2020-06-04 12:31:18
6	008CALS.d	S05	2020-06-04 12:34:19
7	009CALS.d	S06	2020-06-04 12:37:17
8	010CALS.d	S07	2020-06-04 12:40:18
9	011CALS.d	S08	2020-06-04 12:43:16

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	43.32	0.0000	P	28.3
2	☐	0.100	0.095	117.31	0.0001	P	6.6
3	☐	1.000	0.865	733.21	0.0008	P	4.3
4	☐	50.000	50.794	40861.48	0.0439	P	1.5
5	☐	125.000	132.676	114304.74	0.1147	P	1.5
6	☐	250.000	250.838	218031.97	0.2168	P	2.1
7	☐	500.000	506.952	447741.37	0.4382	P	0.7
8	☐	1000.000	995.315	914532.26	0.8602	P	3.1
9	☐			291.95	0.0003	P	7.4

$$y = 8.6419\text{E-}004 * x + 4.5727\text{E-}005$$

$$R = 0.9999$$

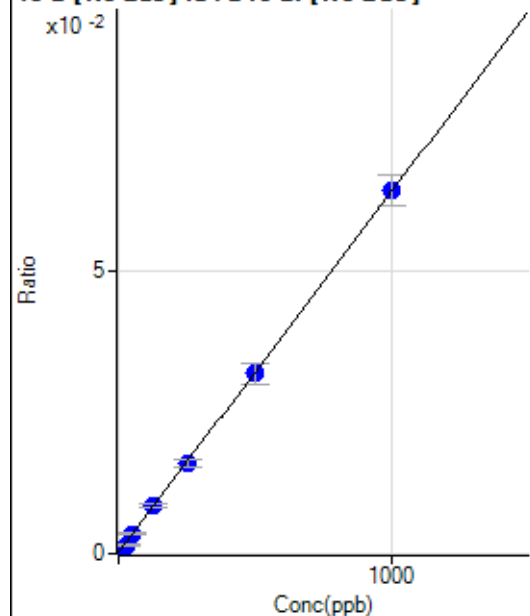
$$DL = 0.04491$$

$$BEC = 0.05291$$

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	190.63	0.0002	P	16.1
2	☐	2.500	2.058	305.28	0.0003	P	11.9
3	☐	25.000	20.415	1389.13	0.0015	P	13.7
4	☐	50.000	50.902	3207.73	0.0035	P	9.2
5	☐	125.000	130.535	8504.81	0.0085	P	9.3
6	☐	250.000	245.577	15994.91	0.0159	P	8.3
7	☐	500.000	495.497	32502.81	0.0318	P	11.6
8	☐	1000.000	1002.736	68352.68	0.0642	P	8.4
9	☐			11043.33	0.0110	P	11.0

$$y = 6.3843\text{E-}005 * x + 2.0095\text{E-}004$$

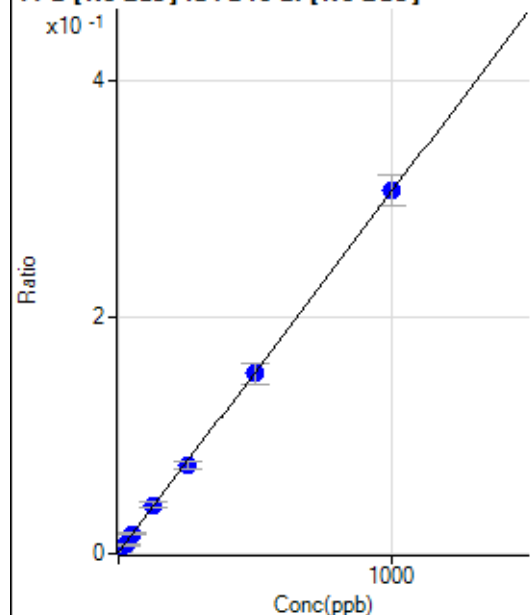
$$R = 0.9999$$

$$DL = 1.518$$

$$BEC = 3.147$$

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	867.19	0.0009	P	1.3
2	☐	2.500	1.897	1367.80	0.0015	P	4.2
3	☐	25.000	21.040	6759.57	0.0073	P	12.2
4	☐	50.000	52.240	15631.92	0.0168	P	10.5
5	☐	125.000	132.478	41109.84	0.0413	P	9.4
6	☐	250.000	243.734	75677.82	0.0751	P	8.4
7	☐	500.000	495.497	154992.48	0.1518	P	11.2
8	☐	1000.000	1002.872	325999.98	0.3063	P	8.4
9	☐			50940.62	0.0506	P	10.4

$$y = 3.0452\text{E-}004 * x + 9.1225\text{E-}004$$

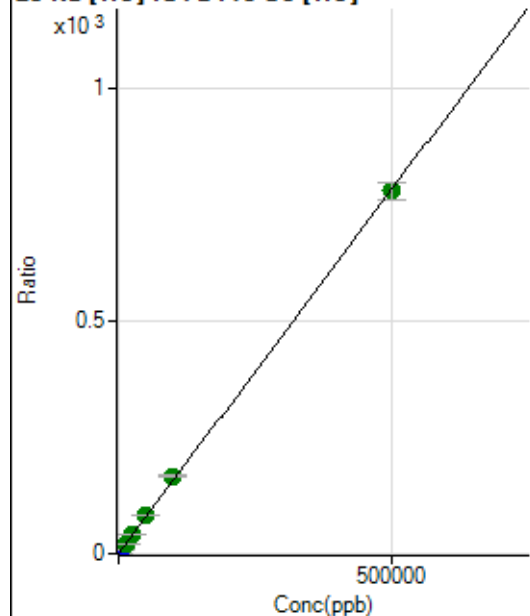
$$R = 0.9999$$

$$DL = 0.1167$$

$$BEC = 2.996$$

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	20834.73	0.2488	P	3.2
2	☐	50.000	48.552	27437.45	0.3247	P	2.8
3	☐	500.000	464.655	81779.19	0.9756	P	1.4
4	☐	5000.000	5539.501	737286.11	8.9142	P	2.0
5	☐	12500.000	14172.390	1946799.85	22.4186	A	0.7
6	☐	25000.000	26380.823	3647399.13	41.5163	A	2.5
7	☐	50000.000	53071.348	7263748.25	83.2683	A	1.8
8	☐	100000.00	106178.00	14815432.10	166.3431	A	2.5
9	☐	500000.00	498341.05	65911244.53	779.8040	A	4.5

$$y = 0.0016 * x + 0.2488$$

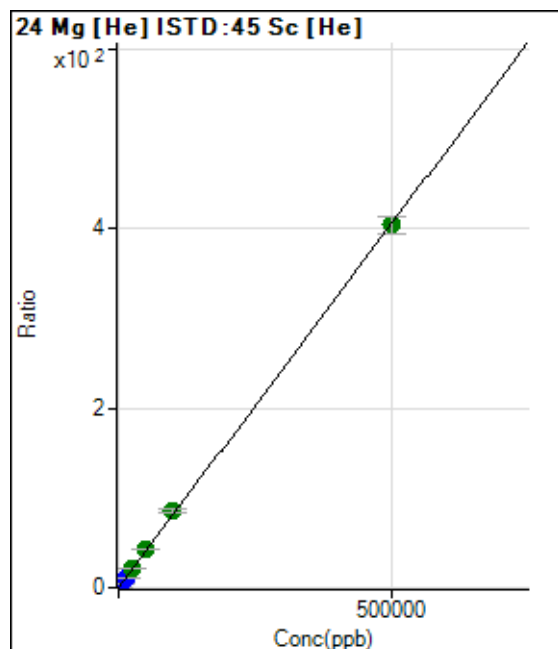
$$R = 0.9999$$

$$DL = 15.13$$

$$BEC = 159$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	211.12	0.0025	P	24.9
2	☐	50.000	48.590	3542.20	0.0419	P	1.5
3	☐	500.000	462.533	31632.16	0.3773	P	0.7
4	☐	5000.000	5578.835	374090.47	4.5232	P	2.4
5	☐	12500.000	14491.378	1019898.02	11.7453	P	0.3
6	☐	25000.000	26845.737	1911398.15	21.7563	A	2.4
7	☐	50000.000	53254.232	3764734.63	43.1557	A	0.9
8	☐	100000.00	105657.00	7625232.46	85.6190	A	3.0
9	☐	500000.00	498395.35	34134063.96	403.8645	A	4.7

$$y = 8.1032\text{E-}004 * x + 0.0025$$

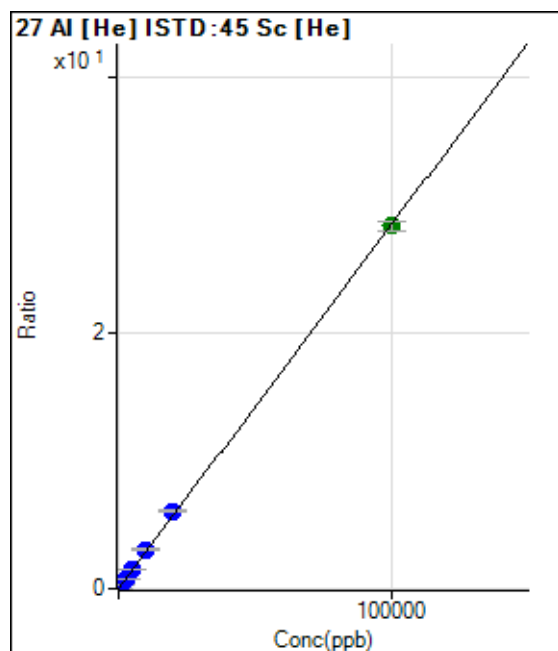
$$R = 0.9999$$

$$DL = 2.336$$

$$BEC = 3.126$$

Weight: <None>

Min Conc: 0



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	263.28	0.0031	P	5.9
2	☐	2.000	1.670	305.95	0.0036	P	6.6
3	☐	20.000	19.030	717.21	0.0086	P	0.3
4	☐	1000.000	1099.789	26114.10	0.3157	P	1.1
5	☐	2500.000	2844.067	70456.22	0.8114	P	0.8
6	☐	5000.000	5313.419	132949.95	1.5131	P	1.2
7	☐	10000.000	10774.140	267375.65	3.0650	P	1.1
8	☐	20000.000	21242.674	538007.06	6.0400	P	1.8
9	☐	100000.00	99648.781	2394669.20	28.3219	A	2.9

$$y = 2.8419\text{E-}004 * x + 0.0031$$

$$R = 0.9999$$

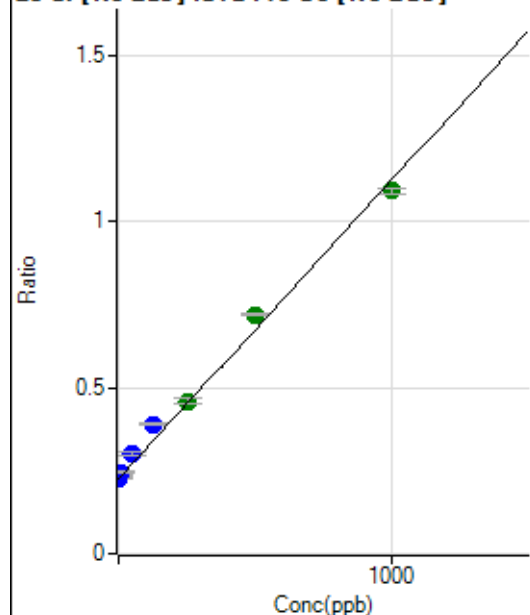
$$DL = 1.949$$

$$BEC = 11.07$$

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	517726.38	0.2254	P	0.4
2	☐	1.000	10.950	517919.50	0.2353	P	0.9
3	☐	10.000	21.295	541422.84	0.2446	P	1.5
4	☐	50.000	82.072	660839.38	0.2993	P	3.4
5	☐	125.000	183.157	923623.35	0.3903	P	2.4
6	☐	250.000	259.137	1115317.60	0.4587	A	3.9
7	☐	500.000	550.368	1712725.84	0.7208	A	1.4
8	☐	1000.000	963.536	2736527.23	1.0927	A	1.4
9	☐			745438.27	0.3210	P	3.1

$$y = 9.0015\text{E-}004 * x + 0.2254$$

$$R = 0.9968$$

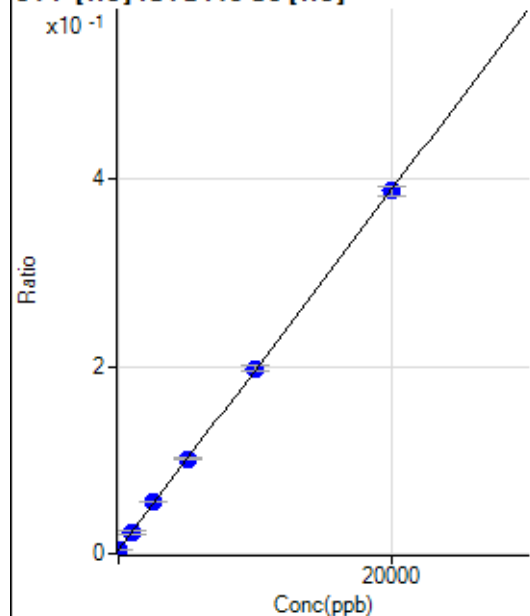
$$DL = 3.313$$

$$BEC = 250.4$$

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	-16.088	302.79	0.0036	P	11.9
2	☐	0.000	23.236	366.68	0.0044	P	24.5
3	☐	0.000	-7.148	316.68	0.0038	P	9.7
4	☐	1000.000	958.485	1847.39	0.0224	P	13.1
5	☐	2500.000	2674.580	4809.26	0.0554	P	2.6
6	☐	5000.000	5043.102	8869.60	0.1010	P	2.7
7	☐	10000.000	10073.362	17249.52	0.1978	P	3.7
8	☐	20000.000	19932.797	34511.07	0.3875	P	2.4
9	☐			302.79	0.0036	P	19.1

$$y = 1.9243\text{E-}005 * x + 0.0039$$

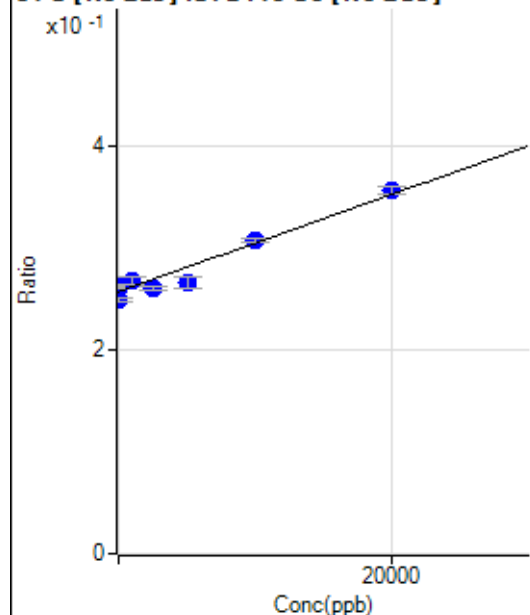
$$R = 0.9999$$

$$DL = 96.82$$

$$BEC = 203.2$$

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	-1736.250	571305.12	0.2487	P	0.9
2	☐	0.000	851.297	574715.46	0.2611	P	0.9
3	☐	0.000	884.953	578281.59	0.2612	P	1.2
4	☐	1000.000	2319.656	591941.36	0.2681	P	2.8
5	☐	2500.000	682.139	615971.20	0.2603	P	1.5
6	☐	5000.000	1916.637	647079.79	0.2661	P	4.1
7	☐	10000.000	10458.627	728968.30	0.3068	P	1.2
8	☐	20000.000	20702.777	890455.97	0.3556	P	2.1
9	☐			549840.21	0.2368	P	1.9

$$y = 4.7635\text{E-}006 * x + 0.2570$$

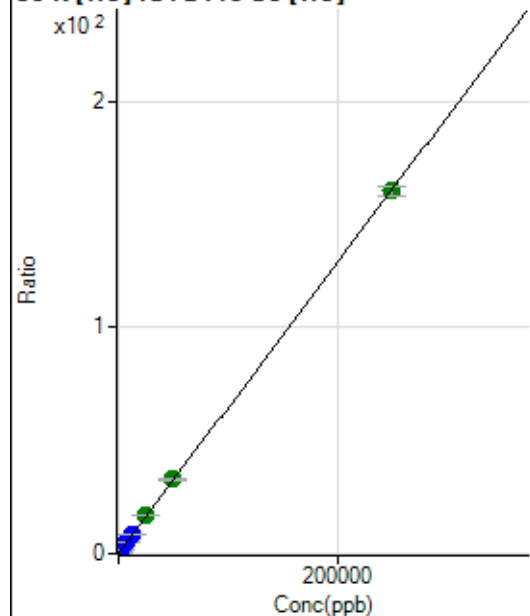
$$R = 0.9757$$

$$DL = 1593$$

$$BEC = 5.395\text{E+}04$$

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	22451.27	0.2682	P	4.3
2	☐	50.000	48.427	25303.19	0.2993	P	2.0
3	☐	500.000	462.426	47342.06	0.5649	P	2.9
4	☐	2500.000	2718.032	166401.53	2.0121	P	2.8
5	☐	6250.000	6997.298	413127.21	4.7576	P	1.1
6	☐	12500.000	13128.317	763572.73	8.6912	P	2.2
7	☐	25000.000	25997.369	1478469.97	16.9479	A	0.9
8	☐	50000.000	50756.994	2924500.04	32.8335	A	2.8
9	☐	250000.00	249696.66	13567865.93	160.4716	A	2.7

$$y = 6.4159\text{E-}004 * x + 0.2682$$

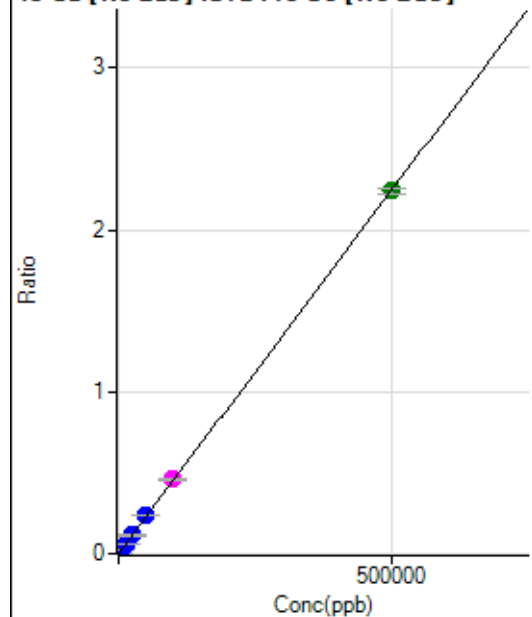
$$R = 1.0000$$

$$DL = 54.37$$

$$BEC = 418$$

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	466.69	0.0002	P	12.5
2	☐	50.000	48.964	930.61	0.0004	P	0.9
3	☐	500.000	465.347	5070.49	0.0023	P	3.2
4	☐	5000.000	5289.263	52828.29	0.0239	P	3.2
5	☐	12500.000	13508.821	143881.88	0.0608	P	0.6
6	☐	25000.000	25165.374	274943.52	0.1131	P	3.4
7	☐	50000.000	52469.611	559536.14	0.2355	P	1.6
8	☐	100000.00	102007.34	1145987.28	0.4577	M	1.9
9	☐	500000.00	499315.22	5200321.51	2.2394	A	1.5

$$y = 4.4846\text{E-}006 * x + 2.0312\text{E-}004$$

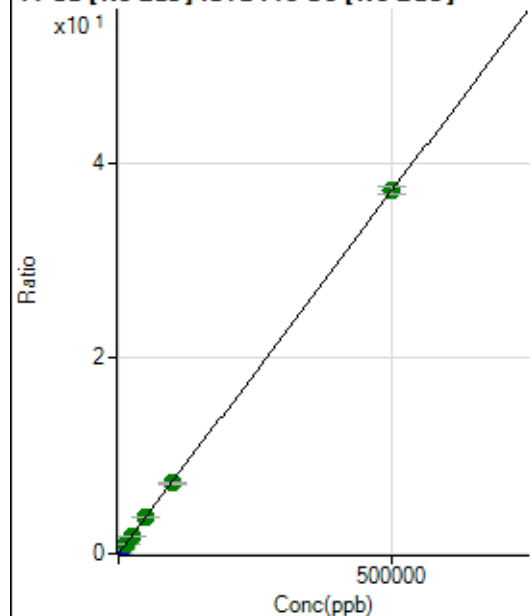
$$R = 1.0000$$

$$DL = 17.04$$

$$BEC = 45.29$$

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	26093.62	0.0114	P	0.6
2	☐	50.000	53.781	33773.61	0.0153	P	2.9
3	☐	500.000	454.334	99655.98	0.0450	P	1.1
4	☐	5000.000	5232.721	880863.80	0.3990	P	3.8
5	☐	12500.000	13084.182	2320768.80	0.9805	A	1.8
6	☐	25000.000	24276.138	4401075.92	1.8095	A	2.8
7	☐	50000.000	50327.821	8883935.27	3.7392	A	1.4
8	☐	100000.00	97155.437	18046357.35	7.2077	A	2.7
9	☐	500000.00	500555.43	86119402.62	37.0879	A	2.0

$$y = 7.4071\text{E-}005 * x + 0.0114$$

$$R = 1.0000$$

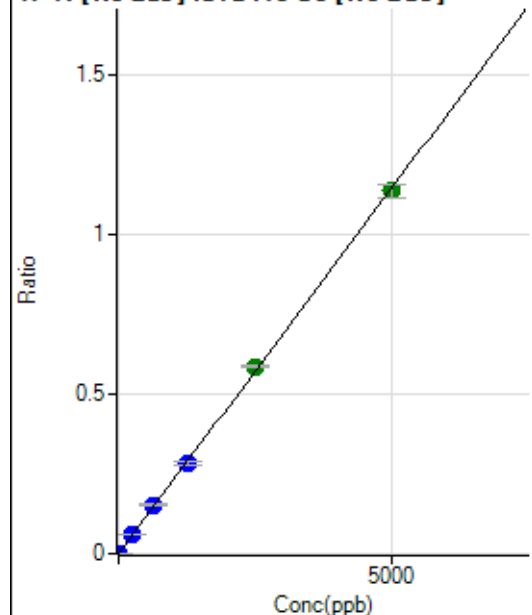
$$DL = 2.811$$

$$BEC = 153.4$$

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	441.69	0.0002	P	8.9
2	☐	0.500	0.438	644.48	0.0003	P	5.5
3	☐	5.000	4.636	2778.10	0.0013	P	2.4
4	☐	250.000	257.927	130986.03	0.0593	P	1.5
5	☐	625.000	669.057	363355.36	0.1535	P	1.4
6	☐	1250.000	1239.155	690984.29	0.2842	P	3.8
7	☐	2500.000	2559.475	1394060.49	0.5867	A	0.8
8	☐	5000.000	4967.071	2850198.91	1.1385	A	3.7
9	☐			1069.51	0.0005	P	10.8

$$y = 2.2917E-004 * x + 1.9237E-004$$

$$R = 0.9999$$

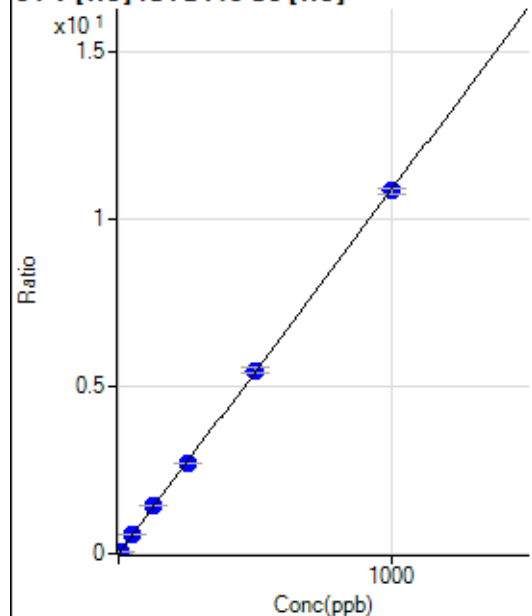
$$DL = 0.2233$$

$$BEC = 0.8394$$

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	12.22	0.0001	P	52.6
2	☐	0.500	0.436	413.34	0.0049	P	9.3
3	☐	5.000	4.243	3877.23	0.0463	P	4.6
4	☐	50.000	51.284	46121.78	0.5577	P	3.0
5	☐	125.000	132.556	125157.32	1.4413	P	0.5
6	☐	250.000	249.813	238659.60	2.7162	P	0.9
7	☐	500.000	504.418	478402.08	5.4844	P	2.2
8	☐	1000.000	996.833	965390.55	10.8381	P	1.7
9	☐			354.45	0.0042	P	15.3

$$y = 0.0109 * x + 1.4363E-004$$

$$R = 1.0000$$

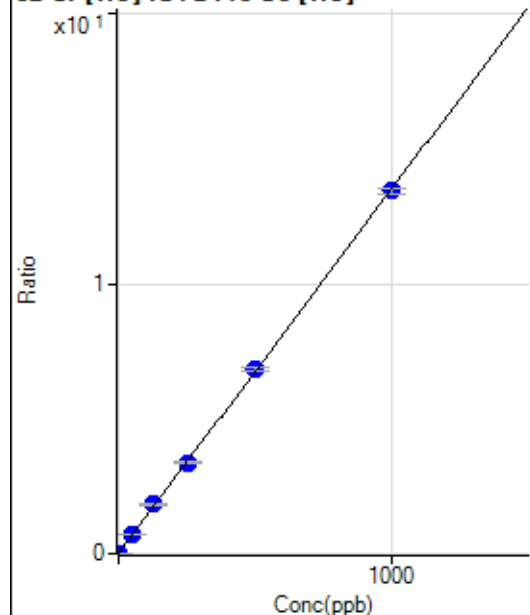
$$DL = 0.02085$$

$$BEC = 0.01321$$

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	792.25	0.0095	P	6.5
2	☒	0.200					
3	☐	2.000	1.717	2734.73	0.0326	P	4.1
4	☐	50.000	51.582	58349.32	0.7055	P	2.5
5	☐	125.000	134.260	158140.15	1.8212	P	0.7
6	☐	250.000	249.169	296256.10	3.3717	P	1.1
7	☐	500.000	507.035	597651.36	6.8514	P	2.2
8	☐	1000.000	995.454	1197324.47	13.4421	P	1.8
9	☐			25709.84	0.3041	P	3.3

$$y = 0.0135 * x + 0.0095$$

$$R = 0.9999$$

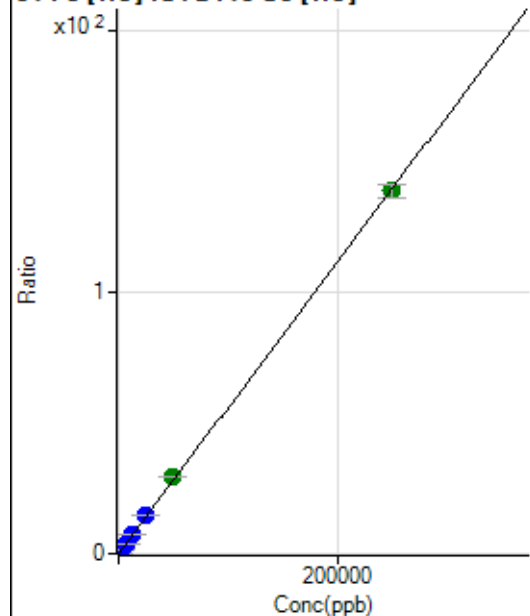
$$DL = 0.1378$$

$$BEC = 0.7014$$

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	338.90	0.0041	P	19.4
2	☐	5.000	6.611	653.73	0.0077	P	17.9
3	☐	50.000	45.896	2485.45	0.0296	P	5.8
4	☐	2500.000	2723.399	125923.31	1.5226	P	2.4
5	☐	6250.000	7078.109	343055.97	3.9506	P	0.7
6	☐	12500.000	13129.847	643621.37	7.3249	P	1.1
7	☐	25000.000	26729.659	1300459.97	14.9079	P	1.7
8	☐	50000.000	53010.751	2633523.03	29.5616	A	0.8
9	☐	250000.00	249170.45	11745708.36	138.9356	A	3.4

$$y = 5.5758E-004 * x + 0.0041$$

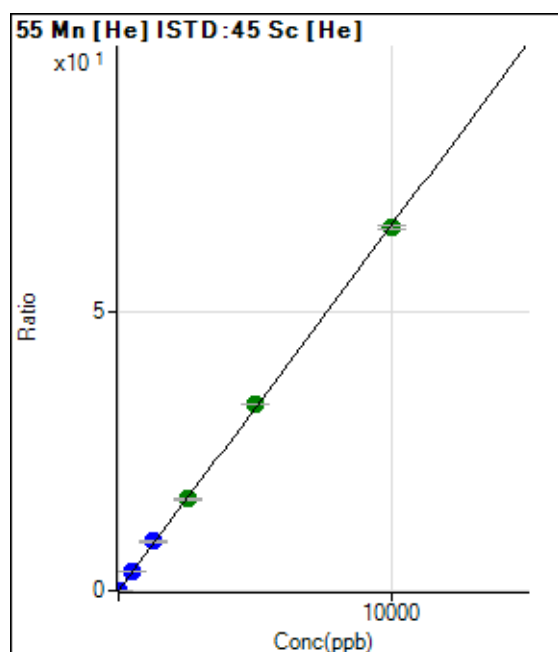
$$R = 0.9999$$

$$DL = 4.234$$

$$BEC = 7.28$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	56.67	0.0007	P	26.4
2	☐	0.100	0.094	108.89	0.0013	P	12.9
3	☐	1.000	0.943	574.46	0.0069	P	3.8
4	☐	500.000	520.703	282490.48	3.4154	P	1.7
5	☐	1250.000	1348.483	767937.31	8.8438	P	1.0
6	☐	2500.000	2509.765	1446172.49	16.4593	A	1.2
7	☐	5000.000	5109.836	2923330.69	33.5102	A	0.8
8	☐	10000.000	9929.295	5800695.40	65.1154	A	1.0
9	☐			4895.33	0.0579	P	5.0

$$y = 0.0066 * x + 6.7188E-004$$

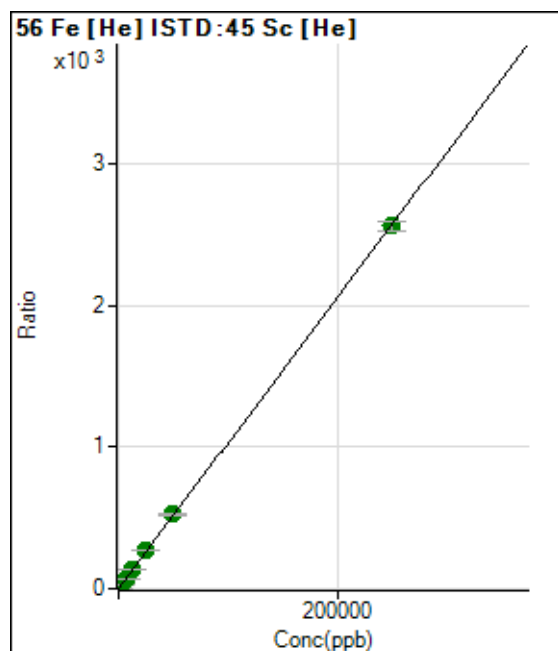
$$R = 0.9999$$

$$DL = 0.08124$$

$$BEC = 0.1025$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2100.19	0.0251	P	4.3
2	☐	5.000	4.389	5936.53	0.0702	P	2.7
3	☐	50.000	45.204	41061.00	0.4899	P	2.4
4	☐	2500.000	2699.025	2297618.66	27.7790	A	1.8
5	☐	6250.000	6886.667	6151029.07	70.8402	A	1.9
6	☐	12500.000	12834.384	11597966.00	132.0001	A	1.2
7	☐	25000.000	26033.445	23355585.01	267.7251	A	0.7
8	☐	50000.000	51264.749	46958864.94	527.1767	A	1.7
9	☐	250000.00	249609.08	217017778.9	2566.736	A	2.8

$$y = 0.0103 * x + 0.0251$$

$$R = 1.0000$$

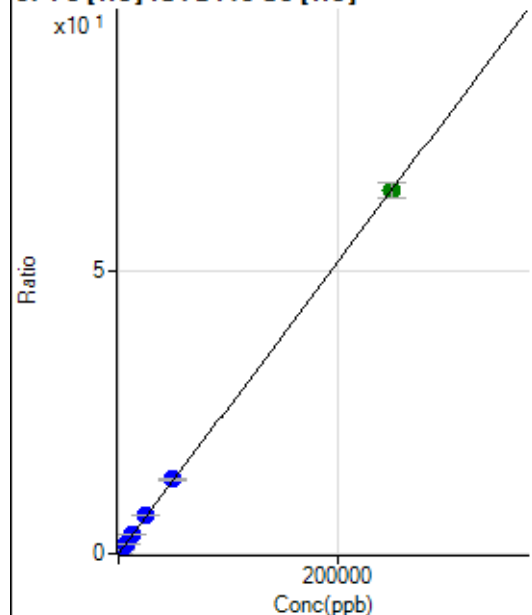
$$DL = 0.3163$$

$$BEC = 2.44$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.37	0.0008	P	8.7
2	☒	5.000					
3	☐	50.000	41.964	974.12	0.0116	P	1.0
4	☐	2500.000	2667.352	56718.13	0.6858	P	2.8
5	☐	6250.000	6913.404	154232.14	1.7762	P	1.4
6	☐	12500.000	12866.419	290408.22	3.3050	P	0.4
7	☐	25000.000	26002.064	582601.64	6.6783	P	0.4
8	☐	50000.000	51243.228	1172262.01	13.1603	P	1.7
9	☐	250000.00	249614.57	5418264.88	64.1030	A	4.3

$$y = 2.5680\text{E-}004 * x + 8.4174\text{E-}004$$

$$R = 1.0000$$

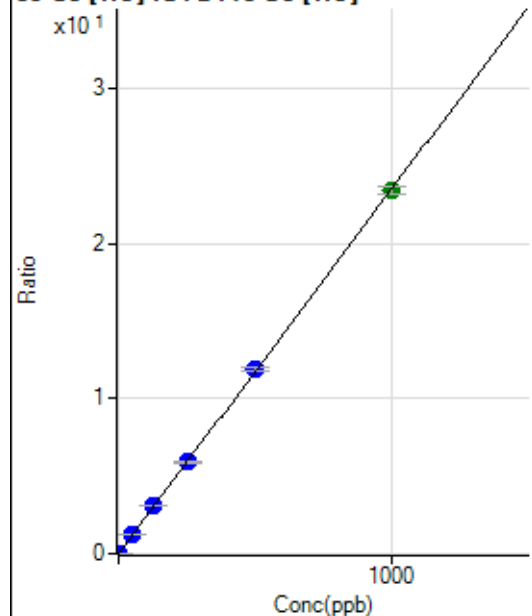
$$DL = 0.8594$$

$$BEC = 3.278$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	87.78	0.0010	P	38.4
2	☐	0.100	0.090	265.56	0.0032	P	16.8
3	☐	1.000	0.899	1860.14	0.0222	P	3.5
4	☐	50.000	51.893	101044.20	1.2217	P	2.1
5	☐	125.000	133.254	272268.99	3.1355	P	0.7
6	☐	250.000	250.683	518175.63	5.8977	P	1.8
7	☐	500.000	506.225	1038826.57	11.9087	P	1.9
8	☐	1000.000	995.591	2086034.83	23.4198	A	1.9
9	☐			3463.79	0.0410	P	3.2

$$y = 0.0235 * x + 0.0010$$

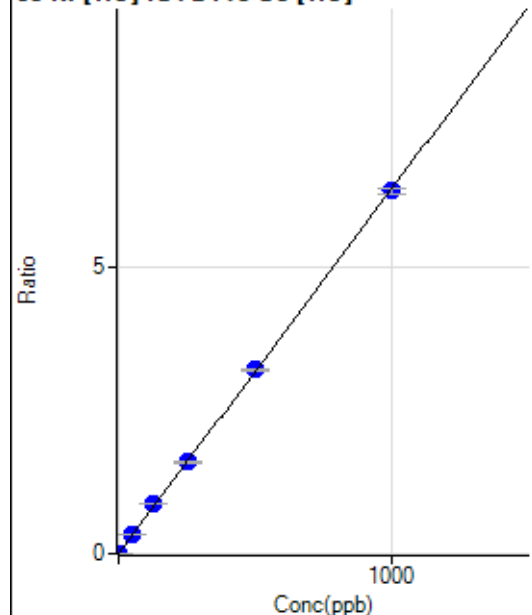
$$R = 0.9999$$

$$DL = 0.05092$$

$$BEC = 0.04426$$

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	101.11	0.0012	P	9.1
2	☐	0.100	0.079	144.45	0.0017	P	4.1
3	☐	1.000	0.882	571.13	0.0068	P	4.4
4	☐	50.000	52.569	27742.63	0.3354	P	2.5
5	☐	125.000	135.632	74987.16	0.8636	P	1.3
6	☐	250.000	251.463	140584.35	1.6000	P	1.3
7	☐	500.000	505.715	280607.52	3.2166	P	0.8
8	☐	1000.000	995.320	563788.50	6.3296	P	1.9
9	☐			7679.92	0.0909	P	4.5

$$y = 0.0064 * x + 0.0012$$

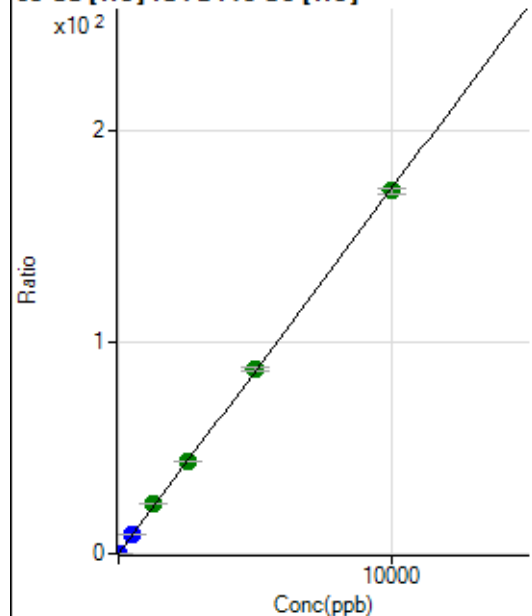
$$R = 0.9999$$

$$DL = 0.05155$$

$$BEC = 0.1894$$

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	426.68	0.0051	P	7.5
2	☐	0.200	0.177	688.92	0.0081	P	4.1
3	☐	2.000	2.073	3428.23	0.0409	P	3.1
4	☐	500.000	534.348	763795.50	9.2345	P	1.8
5	☐	1250.000	1367.836	2051904.26	23.6309	A	1.3
6	☐	2500.000	2539.043	3853878.00	43.8604	A	0.7
7	☐	5000.000	5070.302	7639985.79	87.5812	A	1.7
8	☐	10000.000	9938.641	15292019.63	171.6689	A	1.4
9	☐			7486.48	0.0886	P	6.4

$$y = 0.0173 * x + 0.0051$$

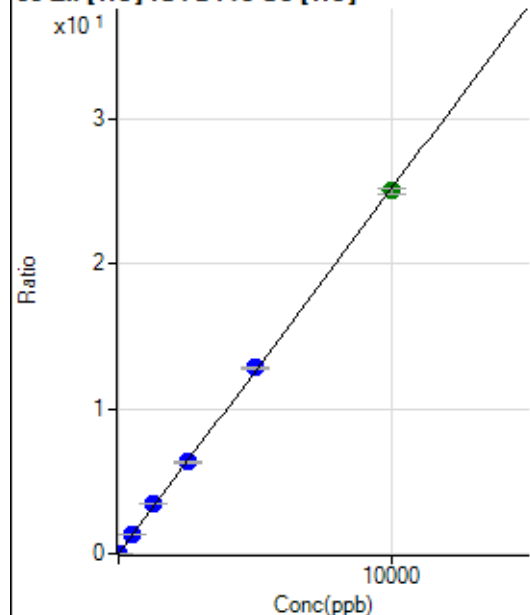
$$R = 0.9999$$

$$DL = 0.06623$$

$$BEC = 0.2949$$

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	167.78	0.0020	P	4.4
2	☐	0.200	0.164	204.45	0.0024	P	15.7
3	☐	2.000	2.250	643.35	0.0077	P	10.9
4	☐	500.000	521.085	108619.80	1.3134	P	2.5
5	☐	1250.000	1355.938	296484.35	3.4144	P	0.6
6	☐	2500.000	2510.300	555263.92	6.3195	P	1.1
7	☐	5000.000	5088.662	1117320.99	12.8082	P	1.2
8	☐	10000.000	9938.797	2228192.61	25.0141	A	1.5
9	☐			10636.29	0.1258	P	2.4

$$y = 0.0025 * x + 0.0020$$

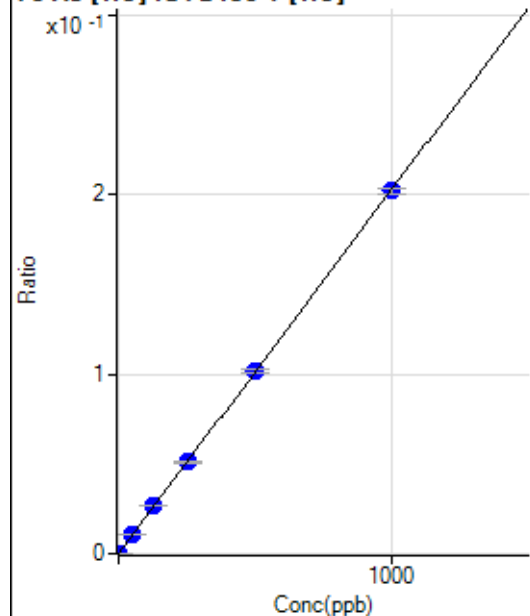
$$R = 0.9999$$

$$DL = 0.104$$

$$BEC = 0.7949$$

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	19.33	0.0000	P	18.7
2	☒	0.100					
3	☐	1.000	0.871	146.69	0.0002	P	3.7
4	☐	50.000	51.550	7553.12	0.0105	P	0.4
5	☐	125.000	132.829	20400.38	0.0269	P	0.7
6	☐	250.000	251.676	38629.00	0.0510	P	0.8
7	☐	500.000	502.865	78099.65	0.1019	P	2.3
8	☐	1000.000	997.092	158066.45	0.2020	P	1.8
9	☐			75.34	0.0001	P	12.6

$$y = 2.0256E-004 * x + 2.6644E-005$$

$$R = 1.0000$$

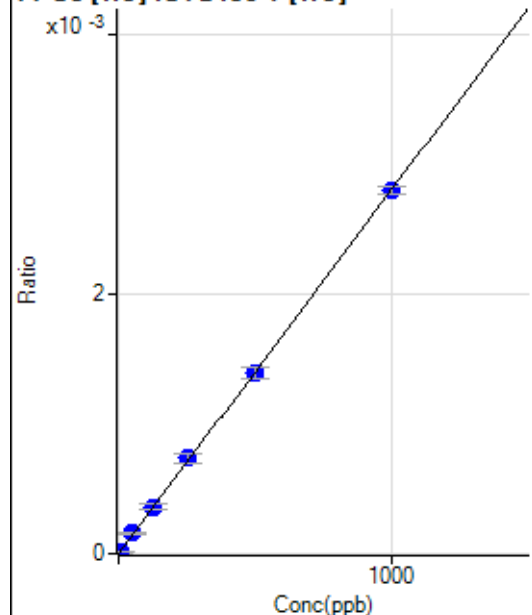
$$DL = 0.07378$$

$$BEC = 0.1315$$

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	2.640	5.56	0.0000	P	91.6
3	☐	5.000	6.608	13.33	0.0000	P	26.5
4	☐	50.000	56.163	113.34	0.0002	P	10.2
5	☐	125.000	127.741	271.12	0.0004	P	13.5
6	☐	250.000	262.648	556.68	0.0007	P	10.4
7	☐	500.000	497.724	1067.83	0.0014	P	6.5
8	☐	1000.000	997.316	2185.75	0.0028	P	2.0
9	☐			0.00	0.0000	P	

$$y = 2.7994\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9999$$

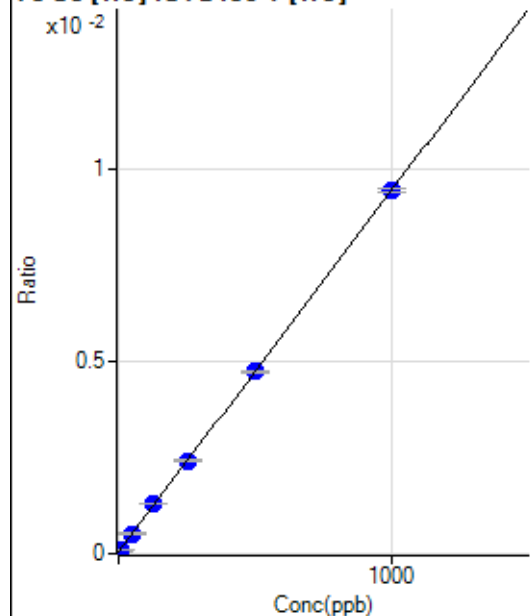
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	35.67	0.0000	P	13.4
2	☐	0.500	1.158	44.34	0.0001	P	23.2
3	☐	5.000	4.820	68.34	0.0001	P	6.1
4	☐	50.000	50.536	378.04	0.0005	P	2.1
5	☐	125.000	134.054	990.80	0.0013	P	1.9
6	☐	250.000	252.577	1832.98	0.0024	P	3.2
7	☐	500.000	499.034	3629.84	0.0047	P	1.0
8	☐	1000.000	998.681	7376.01	0.0094	P	1.1
9	☐			41.67	0.0001	P	5.2

$$y = 9.3877\text{E-}006 * x + 4.9420\text{E-}005$$

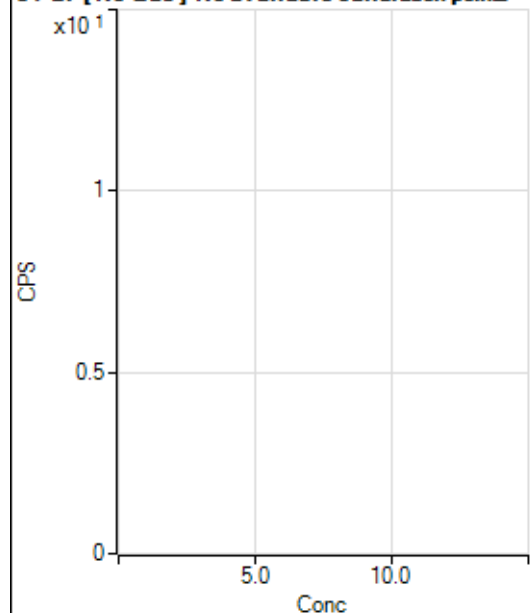
$$R = 1.0000$$

$$DL = 2.118$$

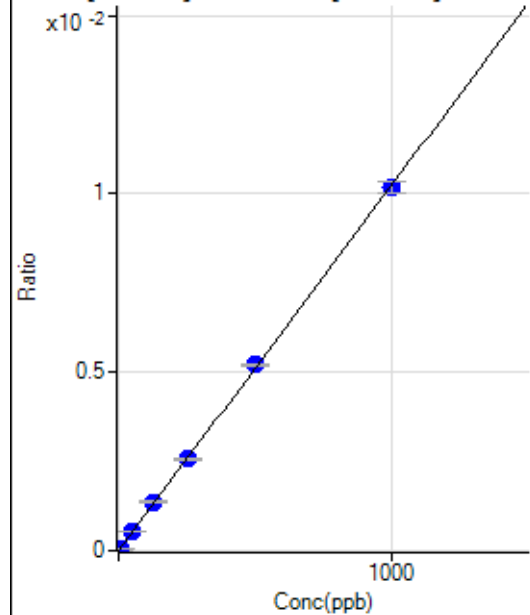
$$BEC = 5.264$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2209.11		P	7.7
2	☐			2209.11		P	7.7
3	☐			2072.30		P	3.9
4	☐			2619.62		P	2.9
5	☐			2906.62		P	4.0
6	☐			2429.39		P	9.3
7	☐			2202.44		P	1.8
8	☐			2112.35		P	3.1
9	☐			2359.31		P	7.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-25.97	0.0000	P	-28.
2	☒	0.500					
3	☐	5.000	5.001	257.50	0.0000	P	1.8
4	☐	50.000	51.672	2893.29	0.0005	P	3.1
5	☐	125.000	134.132	8026.20	0.0014	P	4.0
6	☐	250.000	251.585	15248.11	0.0026	P	2.1
7	☐	500.000	509.598	31076.40	0.0052	P	1.3
8	☐	1000.000	993.580	63761.90	0.0102	P	3.2
9	☐			27.04	0.0000	P	222.

$$y = 1.0236E-005 * x - 4.5271E-006$$

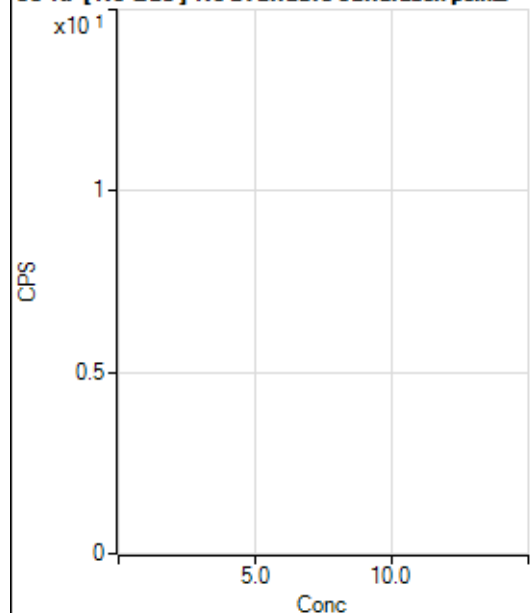
$$R = 0.9999$$

$$DL = 0.3803$$

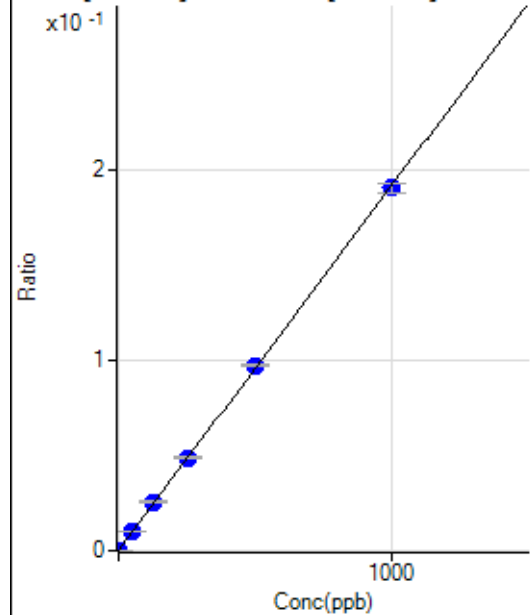
$$BEC = -0.4423$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			492.24		P	1.0
2	☐			528.90		P	9.9
3	☐			487.79		P	5.2
4	☐			487.79		P	6.6
5	☐			475.57		P	7.6
6	☐			468.90		P	4.3
7	☐			460.01		P	14.1
8	☐			458.90		P	6.6
9	☐			443.34		P	9.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	777.82	0.0001	P	13.6
2	☐	0.100	0.103	852.83	0.0002	P	9.3
3	☐	1.000	1.036	1844.61	0.0003	P	8.1
4	☐	50.000	52.312	56087.95	0.0102	P	1.4
5	☐	125.000	132.645	149979.63	0.0256	P	3.3
6	☐	250.000	253.092	288626.89	0.0487	P	2.1
7	☐	500.000	507.981	581553.22	0.0975	P	1.2
8	☐	1000.000	994.165	1196507.49	0.1907	P	2.5
9	☐			7013.05	0.0012	P	3.5

$$y = 1.9173E-004 * x + 1.3535E-004$$

$$R = 0.9999$$

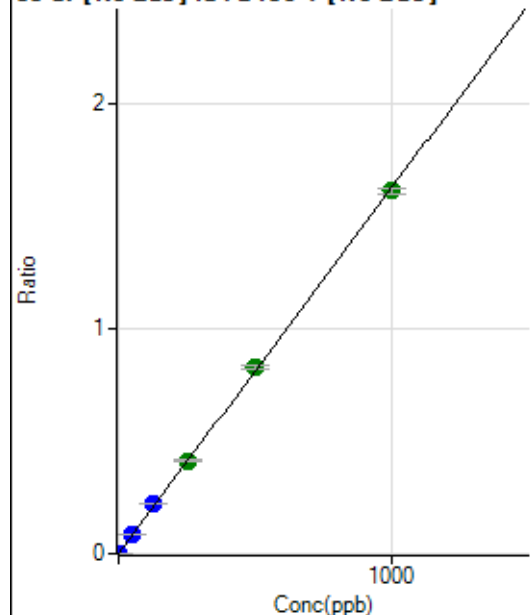
$$DL = 0.2871$$

$$BEC = 0.706$$

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	280.57	0.0000	P	12.6
2	☐	0.100	0.099	1152.86	0.0002	P	7.4
3	☐	1.000	0.897	8291.61	0.0015	P	2.4
4	☐	50.000	52.133	466812.69	0.0846	P	1.8
5	☐	125.000	135.942	1293935.39	0.2205	P	2.1
6	☐	250.000	253.908	2443248.73	0.4119	A	1.6
7	☐	500.000	510.754	4939204.67	0.8284	A	2.5
8	☐	1000.000	992.172	10095696.75	1.6093	A	1.8
9	☐			53132.14	0.0090	P	1.4

$$y = 0.0016 * x + 4.8901E-005$$

$$R = 0.9999$$

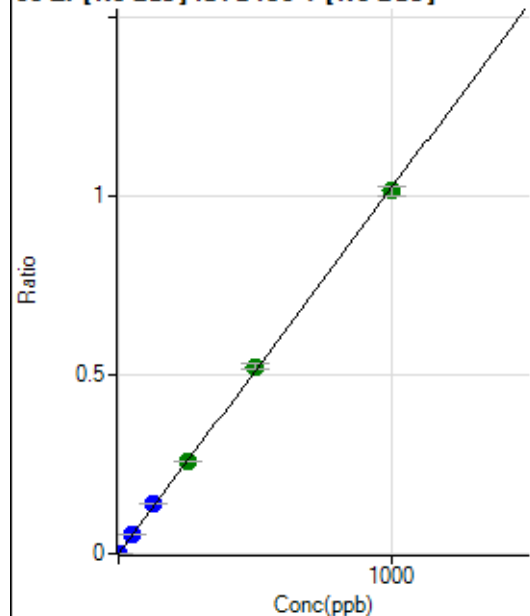
$$DL = 0.01143$$

$$BEC = 0.03015$$

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	238.90	0.0000	P	31.2
2	☐	0.100	0.086	716.71	0.0001	P	3.4
3	☐	1.000	0.849	5026.03	0.0009	P	2.6
4	☐	50.000	51.532	291265.39	0.0528	P	2.6
5	☐	125.000	136.572	820277.00	0.1398	P	3.4
6	☐	250.000	251.339	1526720.18	0.2573	A	0.8
7	☐	500.000	512.339	3126860.51	0.5245	A	2.7
8	☐	1000.000	991.973	6369456.31	1.0155	A	2.9
9	☐			2244.68	0.0004	P	10.9

$$y = 0.0010 * x + 4.1682E-005$$

$$R = 0.9998$$

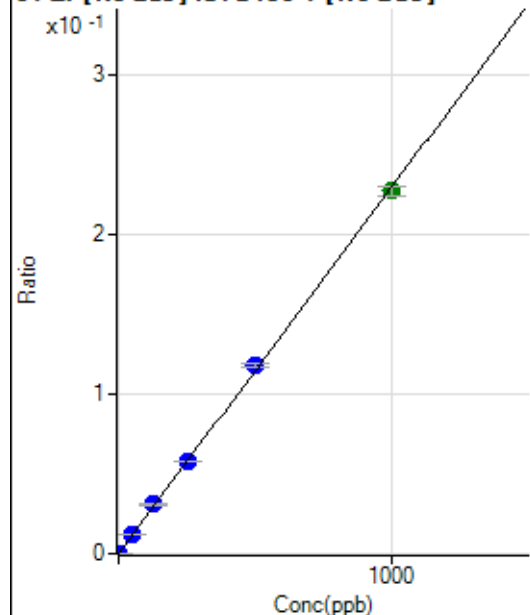
$$DL = 0.03817$$

$$BEC = 0.04072$$

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	47.22	0.0000	P	53.3
2	☐	0.100	0.081	147.23	0.0000	P	36.2
3	☐	1.000	0.931	1222.31	0.0002	P	8.1
4	☐	50.000	51.798	65543.56	0.0119	P	4.4
5	☐	125.000	135.063	181656.55	0.0310	P	3.0
6	☐	250.000	251.639	342205.20	0.0577	P	1.2
7	☐	500.000	515.362	704389.68	0.1181	P	1.6
8	☐	1000.000	990.562	1424269.02	0.2271	A	2.7
9	☐			480.58	0.0001	P	13.2

$$y = 2.2921\text{E-}004 * x + 8.2178\text{E-}006$$

$$R = 0.9998$$

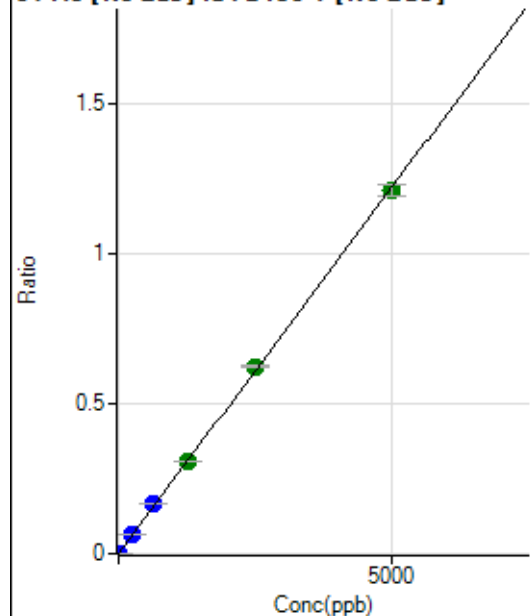
$$DL = 0.05737$$

$$BEC = 0.03585$$

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	113.89	0.0000	P	17.4
2	☐	0.500	0.496	775.04	0.0001	P	7.2
3	☐	5.000	4.552	6226.57	0.0011	P	7.2
4	☐	250.000	260.264	350266.52	0.0635	P	2.1
5	☐	625.000	684.767	979635.45	0.1670	P	2.9
6	☐	1250.000	1262.176	1826004.82	0.3078	A	0.6
7	☐	2500.000	2560.863	3723458.55	0.6245	A	1.4
8	☐	5000.000	4958.541	7583894.01	1.2091	A	3.1
9	☐			5623.49	0.0010	P	3.0

$$y = 2.4384\text{E-}004 * x + 1.9814\text{E-}005$$

$$R = 0.9998$$

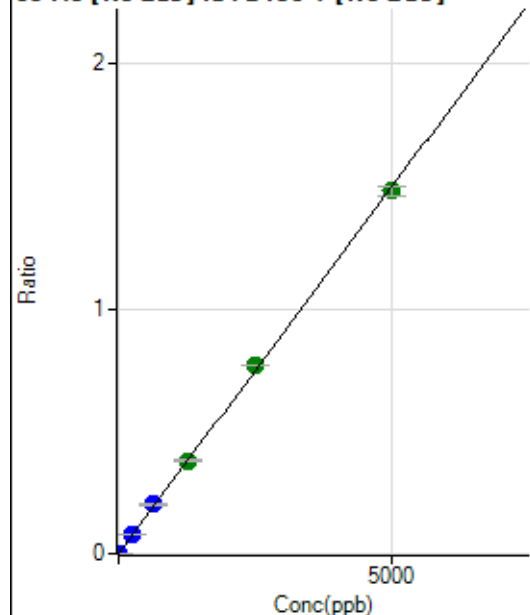
$$DL = 0.04251$$

$$BEC = 0.08126$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	100.
2	☐	0.500	0.501	838.94	0.0002	P	16.0
3	☐	5.000	4.592	7591.13	0.0014	P	2.8
4	☐	250.000	260.731	430350.72	0.0780	P	2.1
5	☐	625.000	679.649	1192616.34	0.2033	P	3.2
6	☐	1250.000	1266.854	2247946.58	0.3790	A	1.6
7	☐	2500.000	2573.702	4591076.36	0.7699	A	0.6
8	☐	5000.000	4951.568	9291005.85	1.4812	A	2.7
9	☐			8683.47	0.0015	P	6.0

$$y = 2.9913\text{E-}004 * x + 2.9233\text{E-}006$$

$$R = 0.9998$$

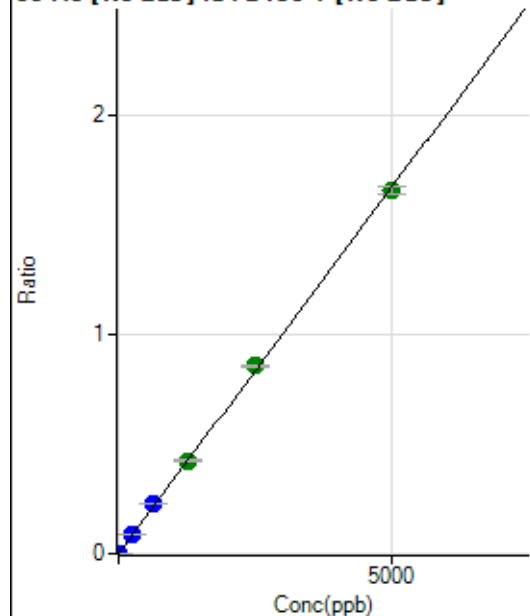
$$DL = 0.0295$$

$$BEC = 0.009772$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	66.67	0.0000	P	56.8
2	☐	0.500	0.489	961.17	0.0002	P	14.2
3	☐	5.000	4.640	8605.67	0.0016	P	4.7
4	☐	250.000	260.330	479551.19	0.0869	P	2.2
5	☐	625.000	680.063	1331945.19	0.2270	P	2.5
6	☐	1250.000	1265.602	2506219.87	0.4225	A	1.5
7	☐	2500.000	2567.433	5110800.29	0.8571	A	1.1
8	☐	5000.000	4954.984	10376862.73	1.6541	A	2.1
9	☐			9450.70	0.0016	P	9.4

$$y = 3.3382\text{E-}004 * x + 1.1567\text{E-}005$$

$$R = 0.9998$$

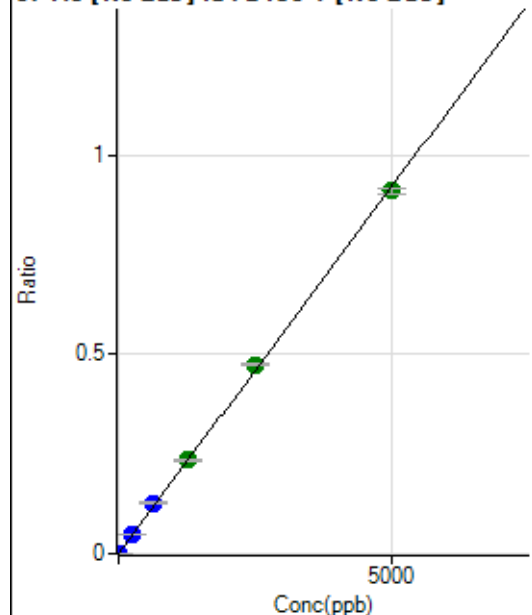
$$DL = 0.05902$$

$$BEC = 0.03465$$

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	113.
2	☐	0.500	0.412	427.79	0.0001	P	13.2
3	☐	5.000	4.567	4648.11	0.0008	P	3.7
4	☐	250.000	261.478	265705.17	0.0482	P	1.9
5	☐	625.000	685.842	740993.42	0.1263	P	2.8
6	☐	1250.000	1271.574	1388931.87	0.2342	A	2.7
7	☐	2500.000	2581.726	2834892.45	0.4755	A	1.8
8	☐	5000.000	4945.565	5714002.38	0.9108	A	1.6
9	☐			5234.44	0.0009	P	5.5

$$y = 1.8416\text{E-}004 * x + 1.9310\text{E-}006$$

$$R = 0.9997$$

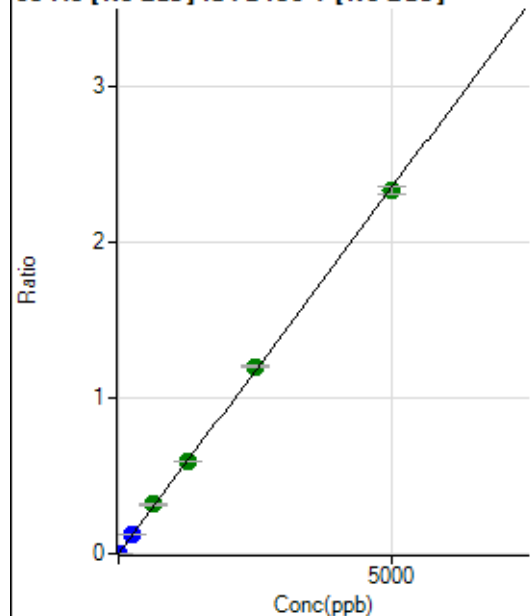
$$DL = 0.03581$$

$$BEC = 0.01049$$

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	11.11	0.0000	P	44.6
2	☐	0.500	0.462	1205.64	0.0002	P	4.4
3	☐	5.000	4.594	11935.97	0.0022	P	0.8
4	☐	250.000	262.375	681052.21	0.1234	P	1.9
5	☐	625.000	675.877	1864958.85	0.3180	A	3.8
6	☐	1250.000	1268.031	3538915.97	0.5965	A	1.0
7	☐	2500.000	2560.723	7183393.91	1.2047	A	1.1
8	☐	5000.000	4958.153	14632621.86	2.3325	A	2.0
9	☐			13512.46	0.0023	P	5.0

$$y = 4.7044\text{E-}004 * x + 1.9418\text{E-}006$$

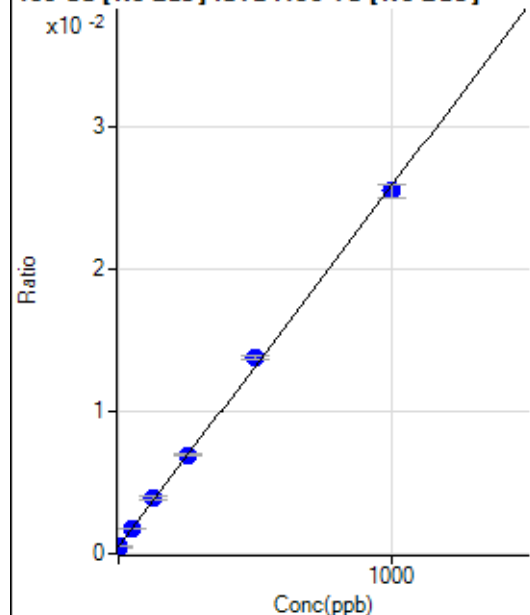
$$R = 0.9998$$

$$DL = 0.005525$$

$$BEC = 0.004128$$

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	1627.92	0.0005	P	6.7
2	☐	0.100	-1.055	1500.14	0.0005	P	8.9
3	☐	1.000	1.293	1730.71	0.0005	P	4.2
4	☐	50.000	51.953	6087.62	0.0018	P	3.1
5	☐	125.000	135.039	14026.87	0.0039	P	5.4
6	☐	250.000	253.603	25290.48	0.0069	P	2.0
7	☐	500.000	523.382	50108.04	0.0138	P	2.2
8	☐	1000.000	986.055	99375.90	0.0256	P	3.4
9	☐			1958.53	0.0005	P	2.0

$$y = 2.5429\text{E-}005 * x + 4.7739\text{E-}004$$

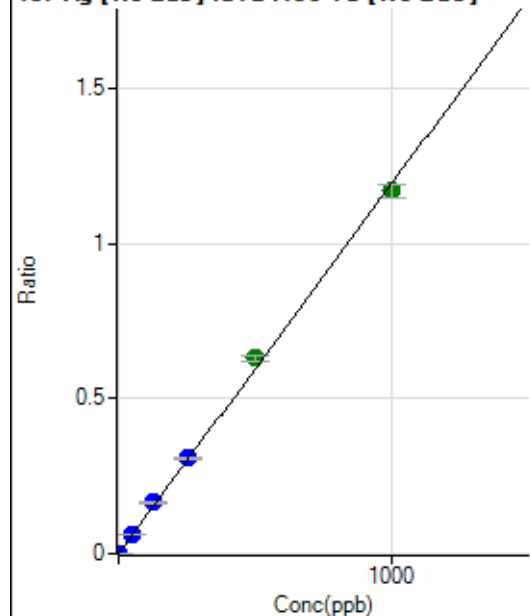
$$R = 0.9996$$

$$DL = 3.794$$

$$BEC = 18.77$$

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	27.78	0.0000	P	75.6
2	☐	0.100	0.097	413.91	0.0001	P	15.5
3	☐	1.000	0.957	3903.44	0.0012	P	7.7
4	☐	50.000	53.440	215897.50	0.0638	P	2.2
5	☐	125.000	139.588	597539.12	0.1666	P	3.8
6	☐	250.000	259.761	1131800.01	0.3100	P	2.0
7	☐	500.000	528.454	2291904.24	0.6306	A	2.4
8	☐	1000.000	981.337	4553923.84	1.1711	A	3.9
9	☐			1422.35	0.0004	P	8.5

$$y = 0.0012 * x + 8.1554\text{E-}006$$

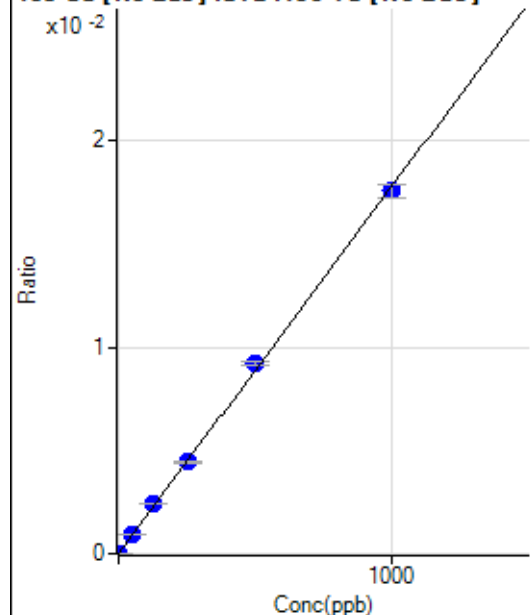
$$R = 0.9993$$

$$DL = 0.01549$$

$$BEC = 0.006834$$

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	4.17	0.0000	P	100.
2	☐	0.100	0.237	18.05	0.0000	P	27.3
3	☐	1.000	0.807	52.78	0.0000	P	31.7
4	☐	50.000	52.340	3147.62	0.0009	P	4.1
5	☐	125.000	135.945	8658.38	0.0024	P	3.3
6	☐	250.000	249.002	16140.12	0.0044	P	3.5
7	☐	500.000	519.544	33508.85	0.0092	P	2.8
8	☐	1000.000	988.992	68256.81	0.0176	P	3.5
9	☐			122.23	0.0000	P	18.3

$$y = 1.7745E-005 * x + 1.2212E-006$$

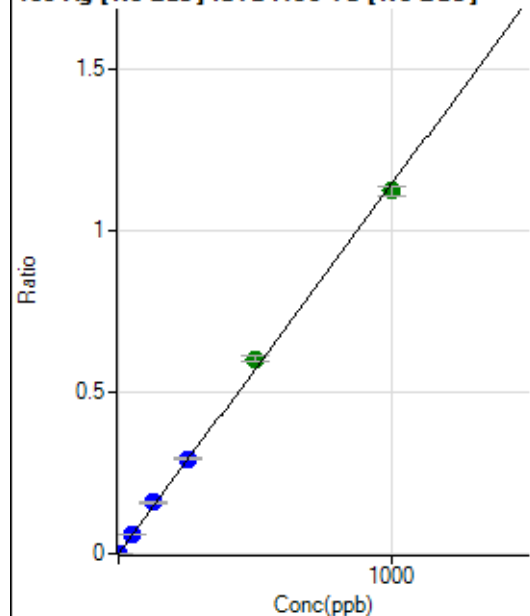
$$R = 0.9997$$

$$DL = 0.2067$$

$$BEC = 0.06882$$

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	36.11	0.0000	P	26.5
2	☐	0.100	0.101	419.46	0.0001	P	7.9
3	☐	1.000	0.908	3558.89	0.0010	P	1.0
4	☐	50.000	53.195	206022.63	0.0609	P	2.5
5	☐	125.000	138.593	568874.62	0.1586	P	2.6
6	☐	250.000	256.487	1071150.37	0.2934	P	2.9
7	☐	500.000	528.399	2196793.67	0.6045	A	2.8
8	☐	1000.000	982.320	4370805.35	1.1237	A	2.9
9	☐			1469.57	0.0004	P	8.0

$$y = 0.0011 * x + 1.0586E-005$$

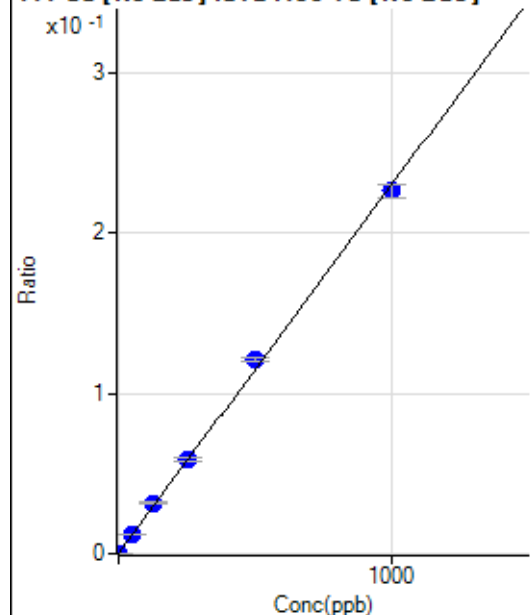
$$R = 0.9993$$

$$DL = 0.007344$$

$$BEC = 0.009254$$

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	333.78	0.0001	P	5.9
2	☒	0.100					
3	☐	1.000	0.874	1013.40	0.0003	P	6.1
4	☐	50.000	52.318	41050.36	0.0121	P	0.8
5	☐	125.000	137.711	113908.46	0.0318	P	3.7
6	☐	250.000	256.241	215370.03	0.0590	P	3.5
7	☐	500.000	525.452	439396.64	0.1209	P	1.9
8	☐	1000.000	984.009	880096.27	0.2263	P	3.5
9	☐			715.88	0.0002	P	3.2

$$y = 2.2988\text{E-}004 * x + 9.7885\text{E-}005$$

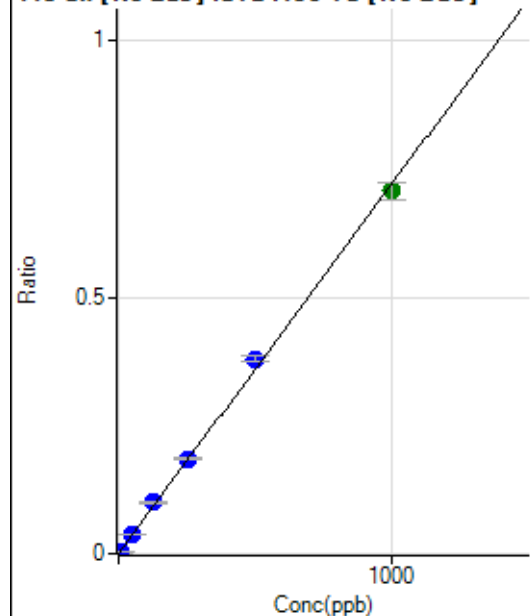
$$R = 0.9994$$

$$DL = 0.07595$$

$$BEC = 0.4258$$

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	341.68	0.0001	P	4.6
2	☐	0.500	0.452	1416.78	0.0004	P	8.8
3	☐	5.000	4.525	11391.15	0.0034	P	1.7
4	☐	50.000	52.392	128029.56	0.0378	P	3.1
5	☐	125.000	137.985	356766.98	0.0995	P	3.6
6	☐	250.000	256.131	673773.54	0.1845	P	1.7
7	☐	500.000	528.427	1383306.74	0.3806	P	2.1
8	☐	1000.000	982.514	2751046.07	0.7076	A	4.8
9	☐			2450.28	0.0007	P	2.7

$$y = 7.2004\text{E-}004 * x + 1.0020\text{E-}004$$

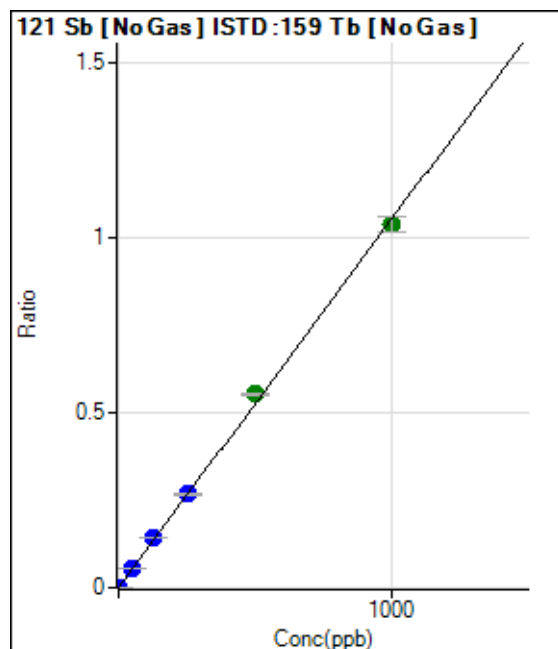
$$R = 0.9993$$

$$DL = 0.01929$$

$$BEC = 0.1392$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	27.78	0.0000	P	45.5
2	☐	0.200	0.175	638.92	0.0002	P	28.0
3	☐	2.000	1.819	6515.60	0.0019	P	5.1
4	☐	50.000	51.977	184997.56	0.0547	P	2.6
5	☐	125.000	135.922	512774.90	0.1429	P	2.2
6	☐	250.000	253.949	974800.29	0.2670	P	2.2
7	☐	500.000	524.901	2005923.42	0.5519	A	1.6
8	☐	1000.000	985.099	4027335.29	1.0357	A	4.1
9	☐			3364.39	0.0009	P	6.2

$$y = 0.0011 * x + 8.1395E-006$$

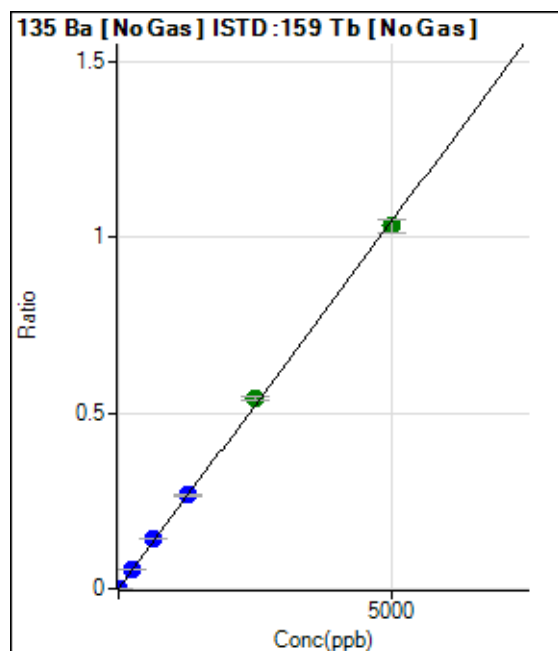
$$R = 0.9995$$

$$DL = 0.01056$$

$$BEC = 0.007742$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	41.67	0.0000	P	52.7
2	☐	1.000	0.904	669.48	0.0002	P	10.5
3	☐	10.000	9.068	6465.61	0.0019	P	5.0
4	☐	250.000	263.110	186087.90	0.0550	P	3.4
5	☐	625.000	684.559	513160.30	0.1430	P	2.5
6	☐	1250.000	1273.277	971246.63	0.2660	P	2.0
7	☐	2500.000	2592.148	1968190.73	0.5415	A	2.2
8	☐	5000.000	4940.009	4013655.99	1.0320	A	3.4
9	☐			7827.47	0.0021	P	1.6

$$y = 2.0891E-004 * x + 1.2208E-005$$

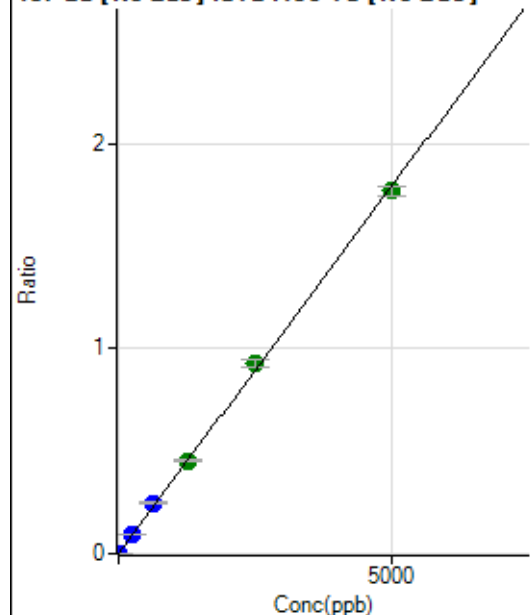
$$R = 0.9997$$

$$DL = 0.09242$$

$$BEC = 0.05844$$

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	44.45	0.0000	P	11.1
2	☐	1.000	0.976	1208.42	0.0004	P	8.8
3	☐	10.000	9.155	11171.55	0.0033	P	2.7
4	☐	250.000	261.188	316896.95	0.0936	P	1.8
5	☐	625.000	686.584	882768.58	0.2461	P	3.0
6	☐	1250.000	1268.465	1659186.97	0.4546	A	3.9
7	☐	2500.000	2594.858	3378904.85	0.9299	A	3.6
8	☐	5000.000	4939.699	6885213.26	1.7702	A	2.9
9	☐			13209.52	0.0036	P	2.6

$$y = 3.5835E-004 * x + 1.3037E-005$$

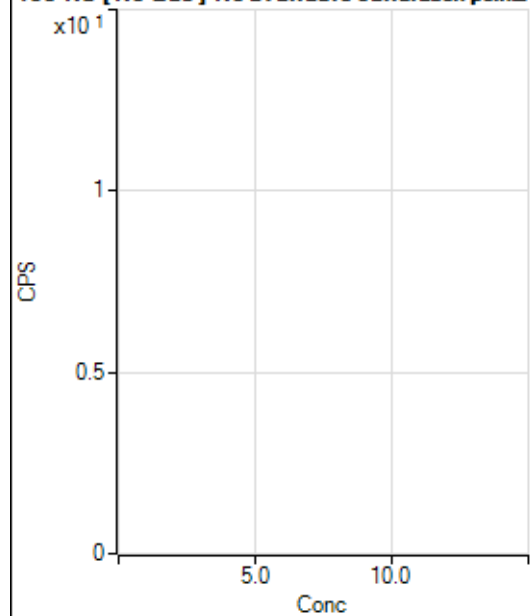
$$R = 0.9997$$

$$DL = 0.0121$$

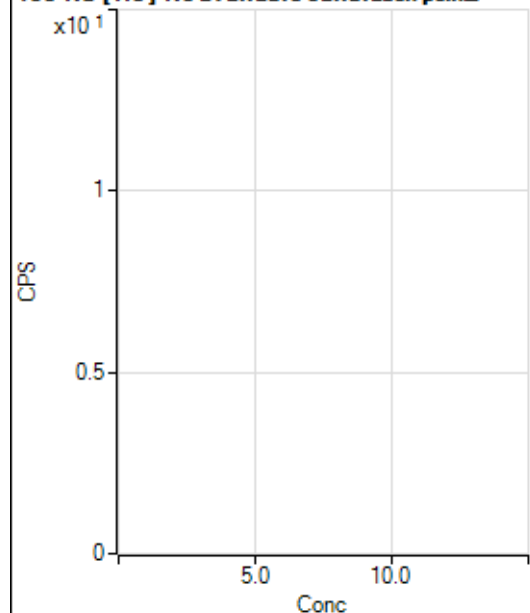
$$BEC = 0.03638$$

Weight: <None>

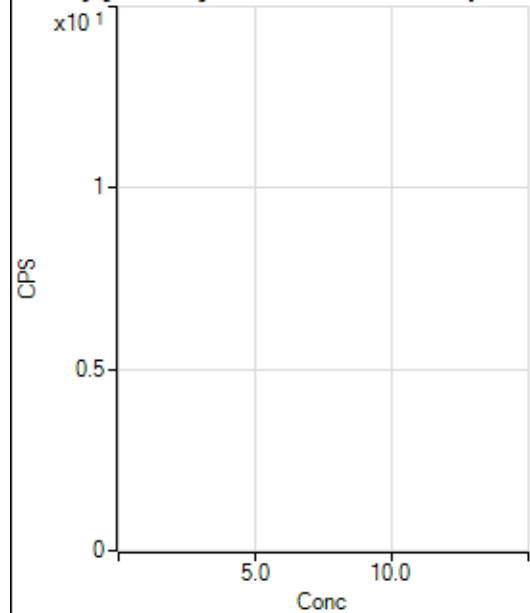
Min Conc: 0

150 Nd [No Gas] No available calibration points

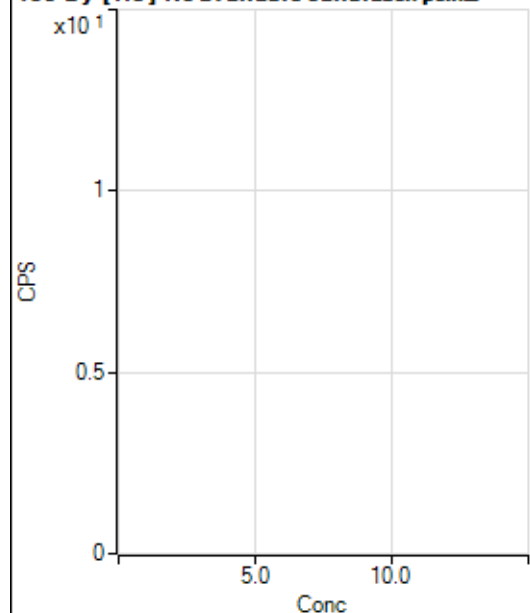
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			0.00		P	
3	☐			8.89		P	114.
4	☐			17.78		P	108.
5	☐			24.45		P	15.8
6	☐			31.11		P	24.7
7	☐			97.78		P	14.2
8	☐			155.56		P	23.6
9	☐			22.22		P	17.3

150 Nd [He] No available calibration points

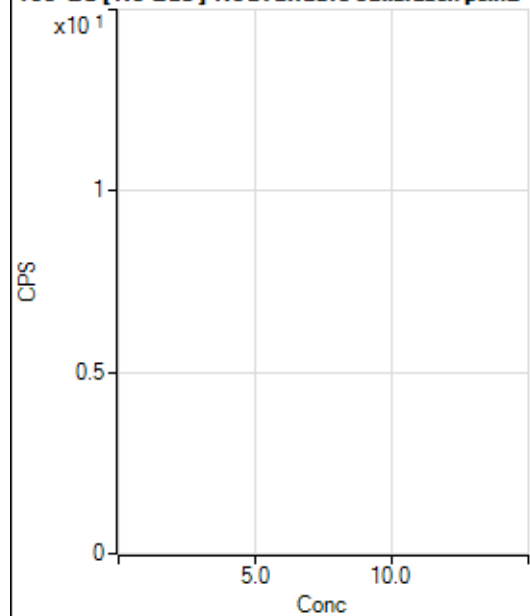
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			0.00		P	
5	☐			0.00		P	
6	☐			2.22		P	86.6
7	☐			15.56		P	75.3
8	☐			15.55		P	44.6
9	☐			6.67		P	100.

156 Dy [No Gas] No available calibration points

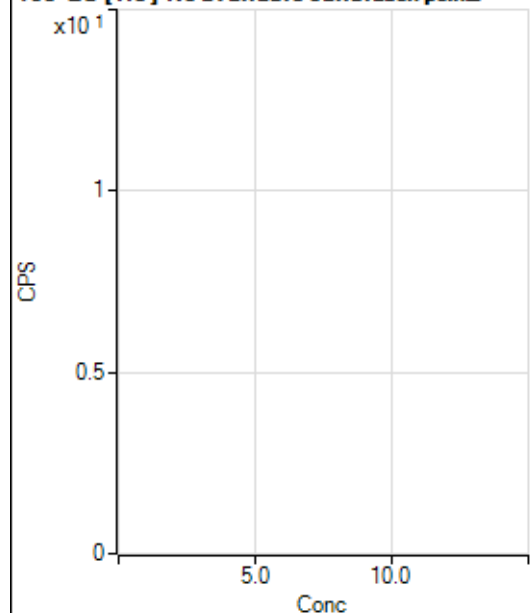
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.33		P	173.
2	☐			22.22		P	21.6
3	☐			8.33		P	0.0
4	☐			8.33		P	100.
5	☐			13.89		P	91.6
6	☐			36.11		P	53.3
7	☐			30.56		P	41.7
8	☐			72.22		P	74.2
9	☐			227.79		P	8.4

156 Dy [He] No available calibration points

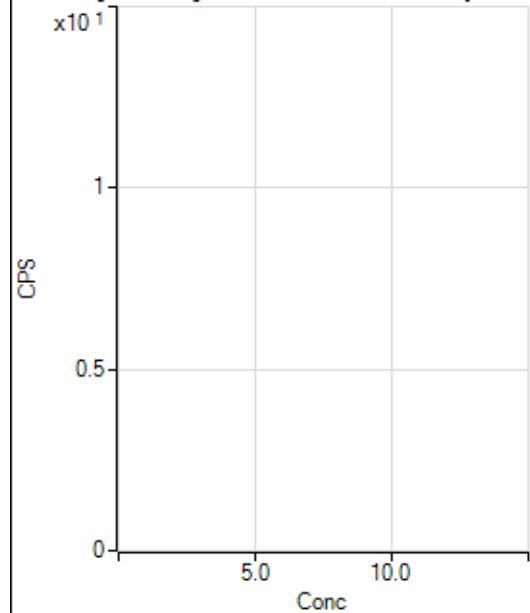
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.56		P	34.7
2	☐			7.78		P	137.
3	☐			3.33		P	100.
4	☐			3.33		P	0.0
5	☐			5.55		P	124.
6	☐			11.11		P	45.8
7	☐			18.89		P	53.9
8	☐			28.89		P	35.2
9	☐			110.00		P	24.1

160 Gd [No Gas] Noavailable calibration poin_

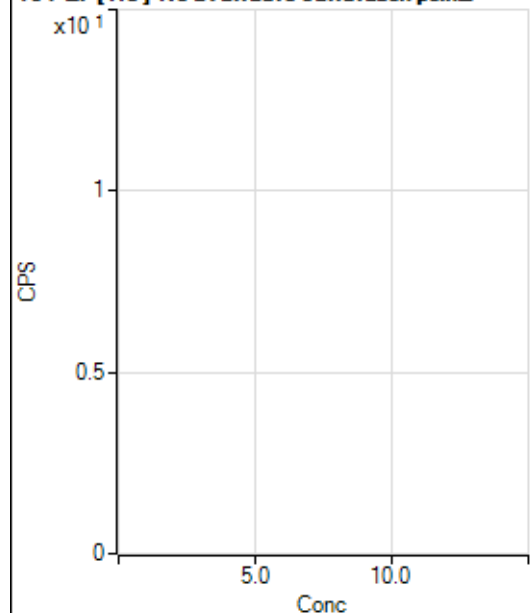
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	36.7
2	☐			47.22		P	10.2
3	☐			41.66		P	34.6
4	☐			55.56		P	48.2
5	☐			30.56		P	41.7
6	☐			36.11		P	48.0
7	☐			69.45		P	18.3
8	☐			94.45		P	20.4
9	☐			313.90		P	13.4

160 Gd [He] No available calibration points

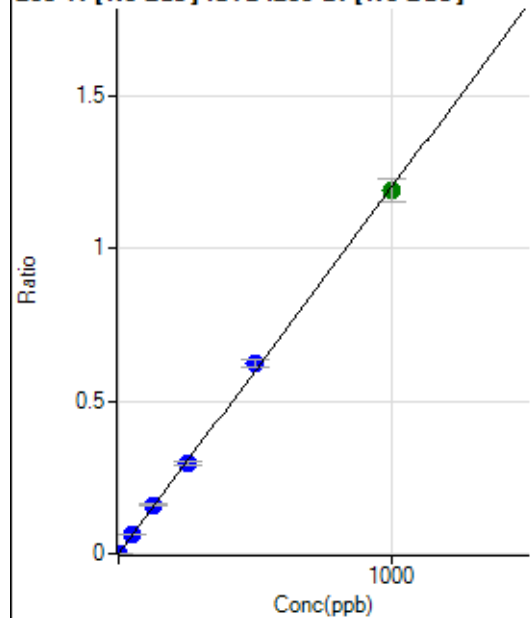
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			17.78		P	71.0
2	☐			12.22		P	41.7
3	☐			15.55		P	24.8
4	☐			13.33		P	75.0
5	☐			15.56		P	32.7
6	☐			27.78		P	13.9
7	☐			30.00		P	29.4
8	☐			47.78		P	4.0
9	☐			142.23		P	21.8

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	49.5
2	☐			16.67		P	50.0
3	☐			22.22		P	57.3
4	☐			25.00		P	66.7
5	☐			13.89		P	91.6
6	☐			16.67		P	100.
7	☐			25.00		P	88.2
8	☐			41.67		P	40.0
9	☐			44.45		P	47.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			8.89		P	21.6
2	☐			10.00		P	33.3
3	☐			6.67		P	100.
4	☐			4.45		P	86.6
5	☐			13.34		P	43.3
6	☐			4.44		P	43.4
7	☐			7.78		P	89.2
8	☐			12.22		P	41.7
9	☐			23.34		P	49.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	30.56	0.0000	P	33.4
2	☐	0.100	0.086	227.79	0.0001	P	27.7
3	☐	1.000	0.884	2072.46	0.0011	P	4.9
4	☐	50.000	50.564	117885.32	0.0607	P	1.2
5	☐	125.000	133.120	329390.29	0.1598	P	2.6
6	☐	250.000	244.821	624581.95	0.2939	P	4.1
7	☐	500.000	519.369	1299793.31	0.6236	P	3.9
8	☐	1000.000	990.567	2611903.14	1.1893	A	6.2
9	☐			1311.22	0.0007	P	15.6

$$y = 0.0012 * x + 1.5531E-005$$

$$R = 0.9997$$

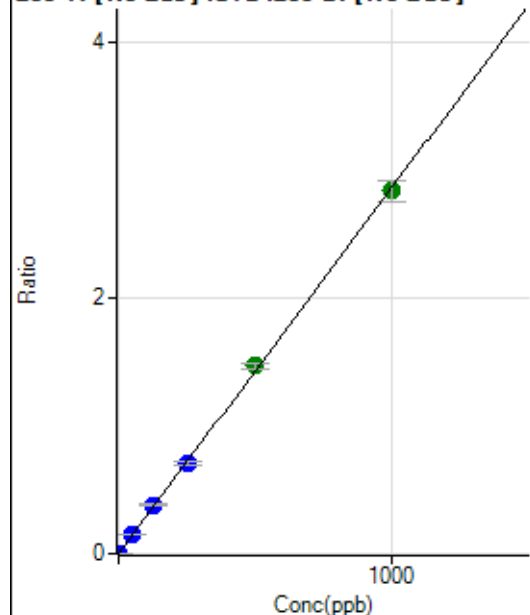
$$DL = 0.01295$$

$$BEC = 0.01294$$

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	77.78	0.0000	P	32.1
2	☐	0.100	0.099	619.48	0.0003	P	10.1
3	☐	1.000	0.892	4978.87	0.0026	P	1.8
4	☐	50.000	50.577	280578.30	0.1445	P	2.1
5	☐	125.000	133.827	787950.49	0.3824	P	3.1
6	☐	250.000	247.794	1504746.76	0.7080	P	3.3
7	☐	500.000	513.704	3060024.31	1.4678	A	2.9
8	☐	1000.000	992.567	6229518.45	2.8359	A	5.6
9	☐			2894.85	0.0014	P	19.8

$$y = 0.0029 * x + 3.9296E-005$$

$$R = 0.9998$$

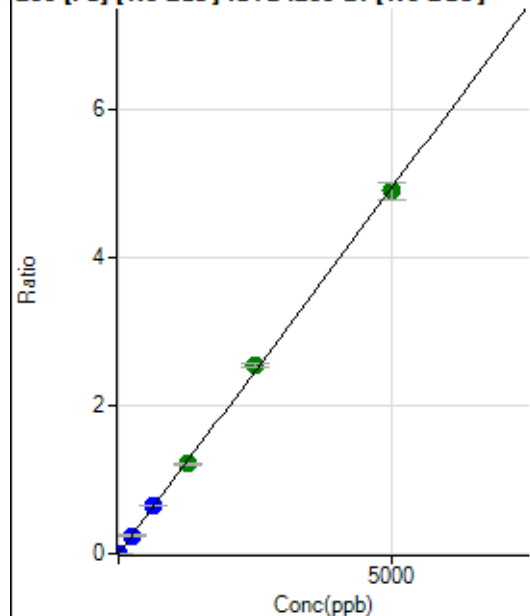
$$DL = 0.01325$$

$$BEC = 0.01375$$

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	287.05	0.0001	P	24.4
2	☐	0.100	0.111	487.05	0.0003	P	5.2
3	☐	1.000	0.906	1998.34	0.0010	P	1.6
4	☐	250.000	247.418	473665.57	0.2440	P	2.6
5	☐	625.000	653.704	1328147.64	0.6445	P	2.7
6	☐	1250.000	1223.334	2563311.72	1.2060	A	3.1
7	☐	2500.000	2578.593	5300676.45	2.5419	A	2.0
8	☐	5000.000	4963.911	10750467.48	4.8931	A	4.9
9	☐			10990.05	0.0054	P	3.5

$$y = 9.8571E-004 * x + 1.4540E-004$$

$$R = 0.9998$$

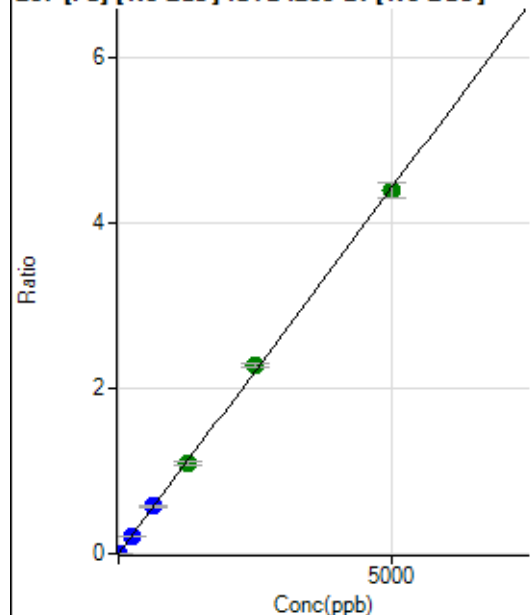
$$DL = 0.108$$

$$BEC = 0.1475$$

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	205.56	0.0001	P	13.0
2	☐	0.100	0.109	383.35	0.0002	P	10.5
3	☐	1.000	0.888	1711.26	0.0009	P	3.9
4	☐	250.000	246.439	423216.57	0.2180	P	2.1
5	☐	625.000	647.414	1180160.60	0.5726	P	1.9
6	☐	1250.000	1227.859	2307599.85	1.0859	A	3.7
7	☐	2500.000	2579.583	4756952.88	2.2812	A	1.8
8	☐	5000.000	4963.120	9645658.55	4.3889	A	4.1
9	☐			9937.30	0.0049	P	2.5

$$y = 8.8428\text{E-}004 * x + 1.0404\text{E-}004$$

$$R = 0.9998$$

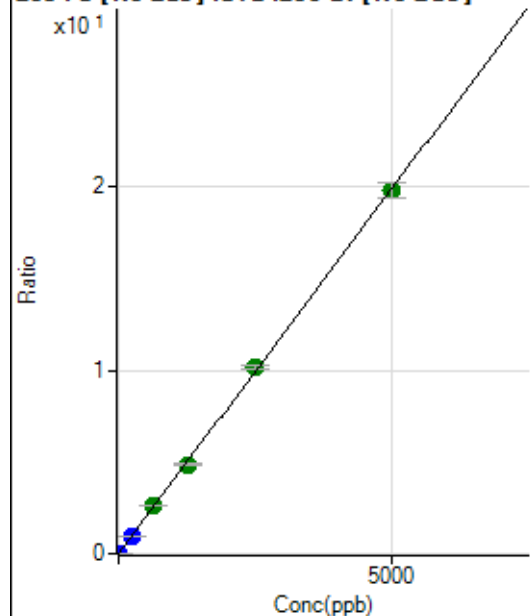
$$DL = 0.04596$$

$$BEC = 0.1177$$

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	1005.59	0.0005	P	3.2
2	☐	0.100	0.106	1777.86	0.0009	P	1.8
3	☐	1.000	0.880	7704.73	0.0040	P	1.0
4	☐	250.000	247.417	1908074.08	0.9829	P	2.2
5	☐	625.000	658.537	5390124.92	2.6154	A	2.3
6	☐	1250.000	1225.388	10341714.70	4.8662	A	3.5
7	☐	2500.000	2552.294	21135506.20	10.1350	A	1.5
8	☐	5000.000	4975.943	43420332.33	19.7588	A	4.3
9	☐			44844.15	0.0222	P	2.1

$$y = 0.0040 * x + 5.0898\text{E-}004$$

$$R = 0.9999$$

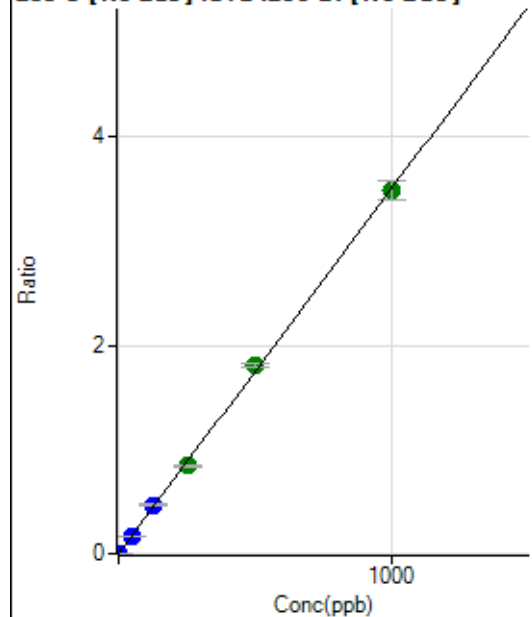
$$DL = 0.01221$$

$$BEC = 0.1282$$

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	11.11	0.0000	P	86.7
2	☐	0.100	0.085	580.59	0.0003	P	16.6
3	☐	1.000	0.873	5898.75	0.0031	P	2.8
4	☐	50.000	49.104	334042.63	0.1721	P	2.9
5	☐	125.000	132.931	960012.53	0.4659	P	3.0
6	☐	250.000	240.976	1795710.28	0.8446	A	1.6
7	☐	500.000	514.309	3758565.14	1.8025	A	2.1
8	☐	1000.000	994.155	7654074.22	3.4842	A	5.4
9	☐			1327.88	0.0007	P	16.6

$$y = 0.0035 * x + 5.6195E-006$$

$$R = 0.9998$$

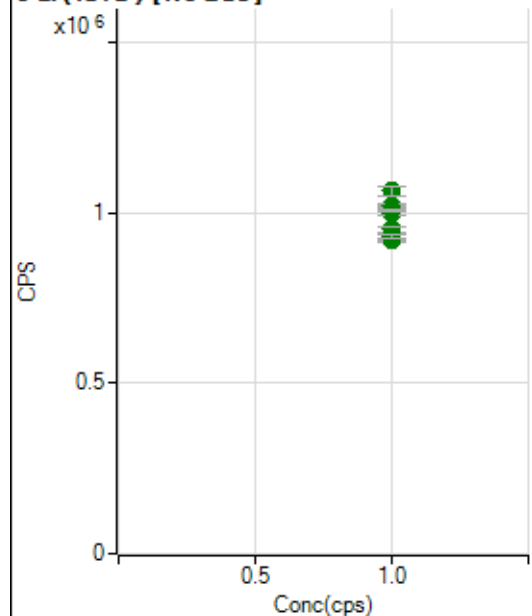
$$DL = 0.004168$$

$$BEC = 0.001603$$

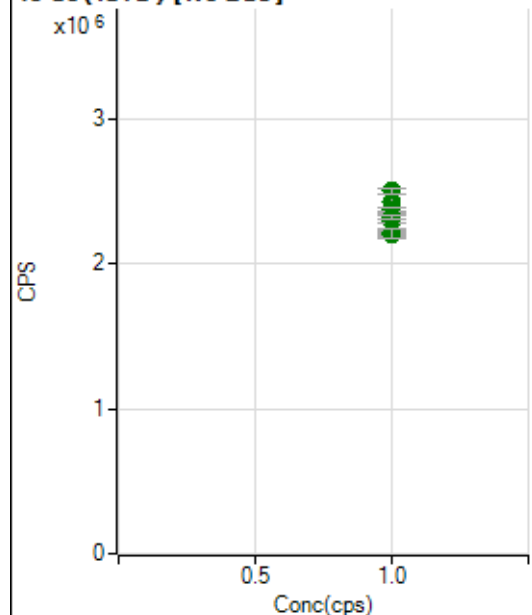
Weight: <None>

Min Conc: 0

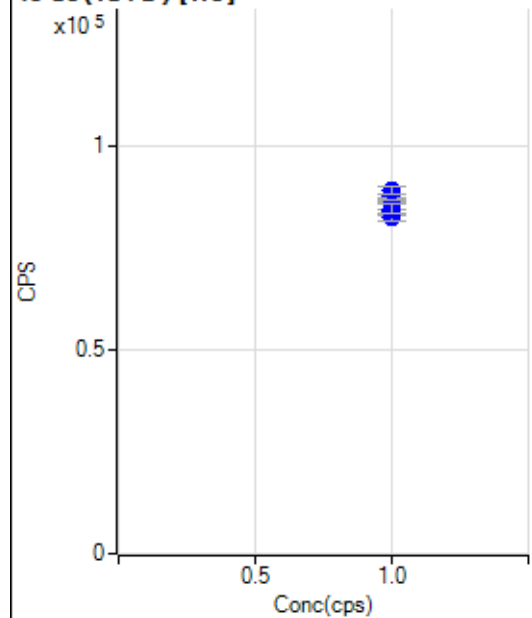
6 Li (ISTD) [No Gas]



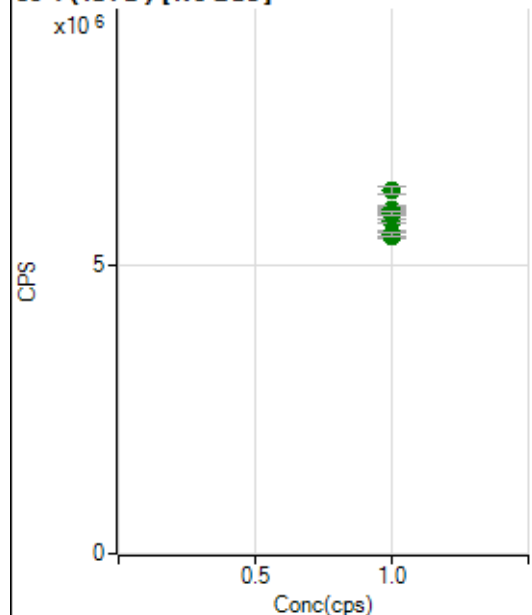
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		950725.37		A	2.0
2	☐	1.000		918272.26		A	1.2
3	☐	1.000		923942.86		A	0.6
4	☐	1.000		929969.45		A	1.0
5	☐	1.000		996587.61		A	0.9
6	☐	1.000		1005937.08		A	2.4
7	☐	1.000		1021946.00		A	1.2
8	☐	1.000		1063691.50		A	2.4
9	☐	1.000		1007506.12		A	0.5

45 Sc (ISTD) [No Gas]

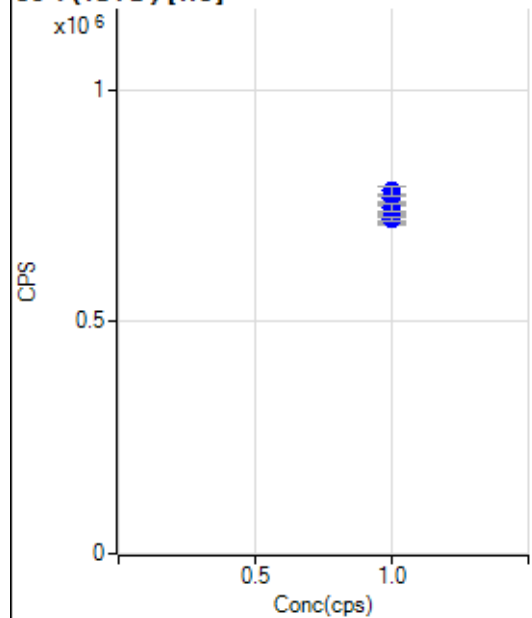
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2296934.48		A	0.6
2	☐	1.000		2201639.91		A	1.1
3	☐	1.000		2213984.34		A	1.1
4	☐	1.000		2209399.39		A	2.6
5	☐	1.000		2367217.76		A	1.6
6	☐	1.000		2433878.79		A	3.7
7	☐	1.000		2376033.99		A	0.9
8	☐	1.000		2504591.92		A	1.9
9	☐	1.000		2322496.56		A	1.5

45 Sc (ISTD) [He]

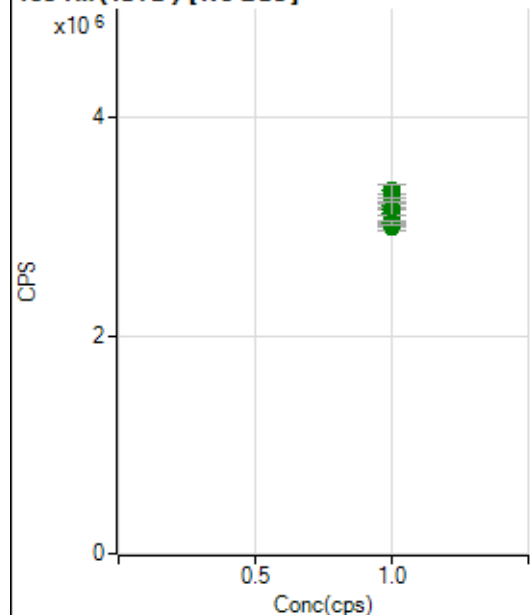
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		83821.41		P	4.7
2	☐	1.000		84543.02		P	3.0
3	☐	1.000		83836.33		P	1.9
4	☐	1.000		82730.61		P	2.0
5	☐	1.000		86836.06		P	0.6
6	☐	1.000		87872.21		P	1.3
7	☐	1.000		87239.77		P	0.7
8	☐	1.000		89096.57		P	2.2
9	☐	1.000		84592.27		P	2.8

89 Y (ISTD) [No Gas]

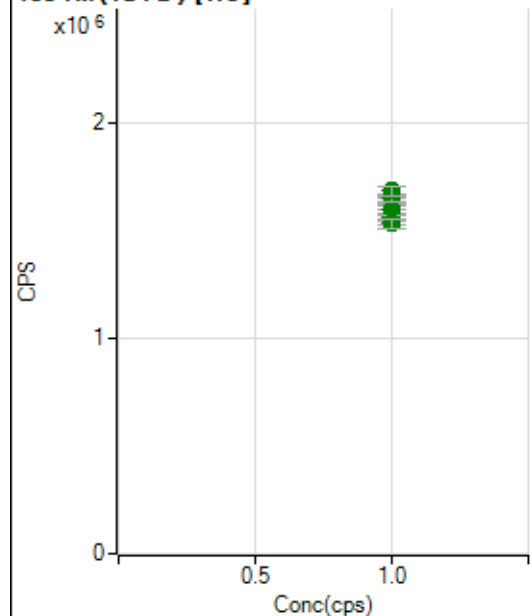
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5740896.44		A	1.1
2	☐	1.000		5503994.78		A	2.0
3	☐	1.000		5517032.07		A	2.4
4	☐	1.000		5518220.61		A	1.0
5	☐	1.000		5869727.27		A	3.0
6	☐	1.000		5933055.19		A	1.9
7	☐	1.000		5963811.09		A	2.0
8	☐	1.000		6275188.86		A	2.2
9	☐	1.000		5898142.27		A	1.2

89 Y (ISTD) [He]

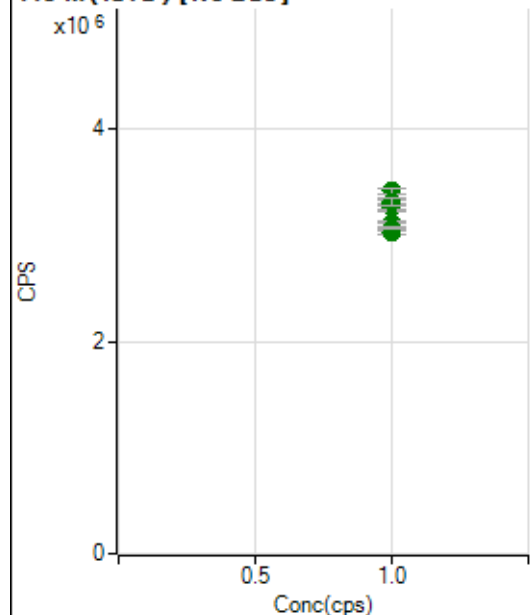
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		723216.96		P	3.6
2	☐	1.000		738529.38		P	3.1
3	☐	1.000		722461.16		P	2.3
4	☐	1.000		721542.61		P	1.4
5	☐	1.000		757504.63		P	1.0
6	☐	1.000		757383.36		P	0.8
7	☐	1.000		766758.34		P	2.0
8	☐	1.000		782754.17		P	2.4
9	☐	1.000		746435.08		P	2.3

103 Rh (ISTD) [No Gas]

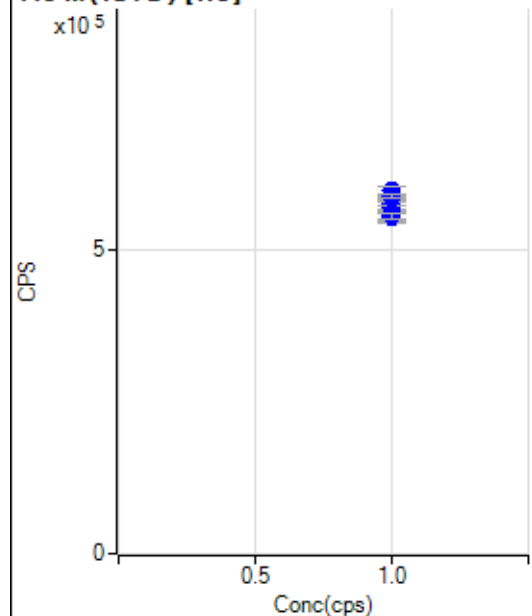
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3128745.56		A	1.7
2	☐	1.000		2989787.66		A	2.1
3	☐	1.000		3011556.06		A	1.4
4	☐	1.000		3024918.23		A	0.3
5	☐	1.000		3190997.01		A	1.1
6	☐	1.000		3262329.78		A	2.0
7	☐	1.000		3165328.11		A	4.0
8	☐	1.000		3327222.51		A	3.9
9	☐	1.000		3037824.96		A	1.1

103 Rh (ISTD) [He]

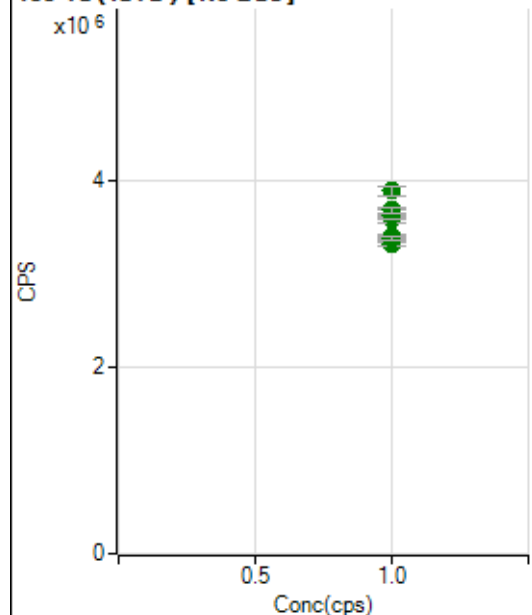
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1574187.15		A	2.9
2	☐	1.000		1599771.49		A	2.9
3	☐	1.000		1552188.36		A	3.4
4	☐	1.000		1557681.11		A	2.2
5	☐	1.000		1616826.40		A	0.3
6	☐	1.000		1636265.60		A	1.7
7	☐	1.000		1651736.61		A	2.5
8	☐	1.000		1683671.75		A	2.3
9	☐	1.000		1532630.76		A	2.7

115 In (ISTD) [No Gas]

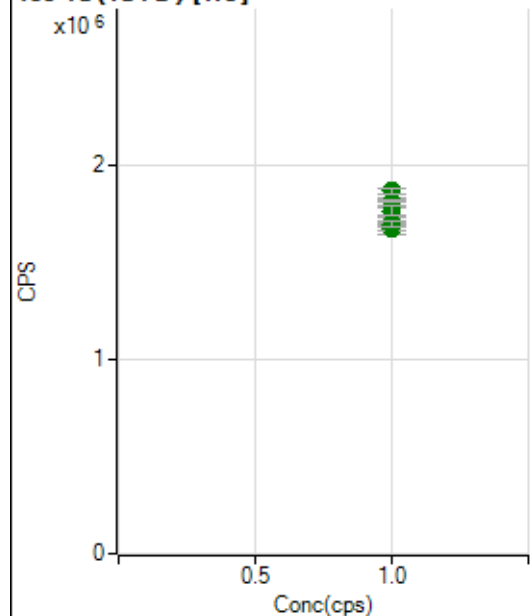
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3117646.64		A	0.8
2	☐	1.000		3021469.49		A	0.7
3	☐	1.000		3049739.36		A	1.1
4	☐	1.000		3061348.29		A	0.7
5	☐	1.000		3257176.45		A	2.0
6	☐	1.000		3308392.12		A	1.6
7	☐	1.000		3285391.27		A	3.2
8	☐	1.000		3414985.12		A	1.9
9	☐	1.000		3317448.78		A	2.2

115 In (ISTD) [He]

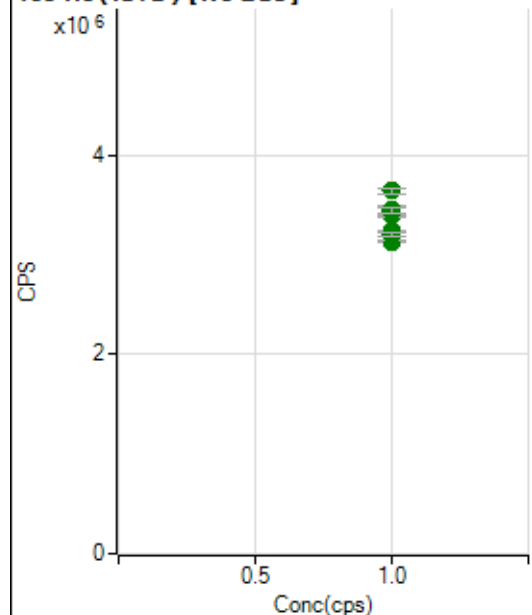
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		553481.58		P	3.6
2	☐	1.000		567157.48		P	3.3
3	☐	1.000		554083.90		P	2.6
4	☐	1.000		553887.57		P	2.1
5	☐	1.000		575117.02		P	1.5
6	☐	1.000		583102.21		P	0.8
7	☐	1.000		584584.10		P	2.0
8	☐	1.000		595166.11		P	2.4
9	☐	1.000		587041.88		P	1.5

159 Tb (ISTD) [No Gas]

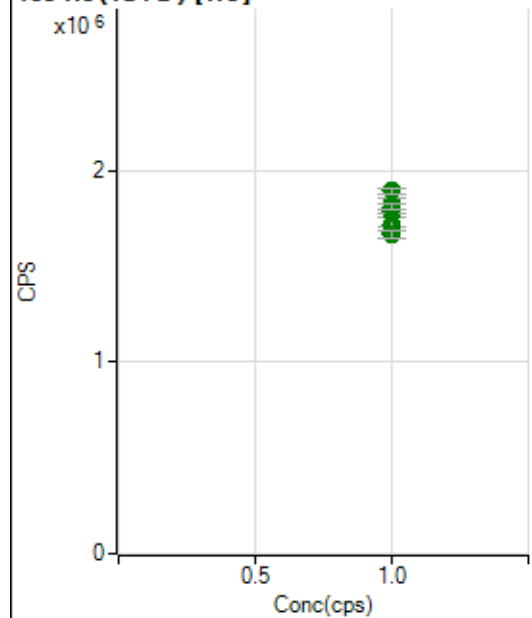
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3409863.35		A	0.4
2	☐	1.000		3328853.60		A	1.1
3	☐	1.000		3391750.89		A	0.6
4	☐	1.000		3385679.15		A	1.3
5	☐	1.000		3589624.49		A	2.8
6	☐	1.000		3652407.69		A	2.5
7	☐	1.000		3635961.44		A	2.7
8	☐	1.000		3891750.57		A	3.0
9	☐	1.000		3684991.85		A	1.4

159 Tb (ISTD) [He]

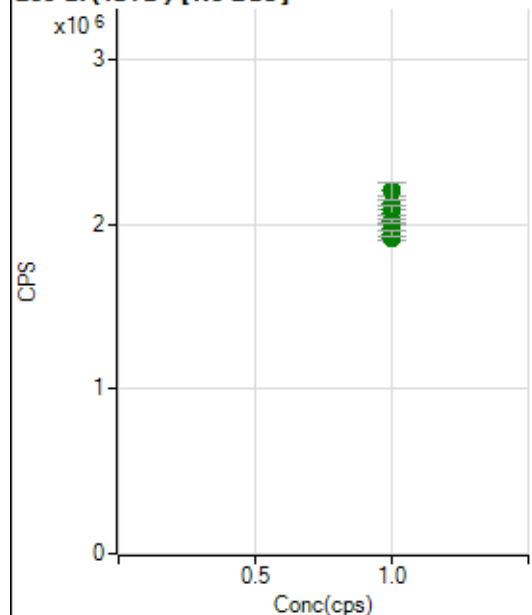
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1670100.48		A	3.7
2	☐	1.000		1712081.60		A	2.2
3	☐	1.000		1673922.61		A	2.0
4	☐	1.000		1690502.20		A	1.8
5	☐	1.000		1754316.88		A	2.2
6	☐	1.000		1804165.23		A	2.2
7	☐	1.000		1811198.01		A	0.8
8	☐	1.000		1863890.95		A	1.8
9	☐	1.000		1763406.09		A	2.5

165 Ho (ISTD) [No Gas]

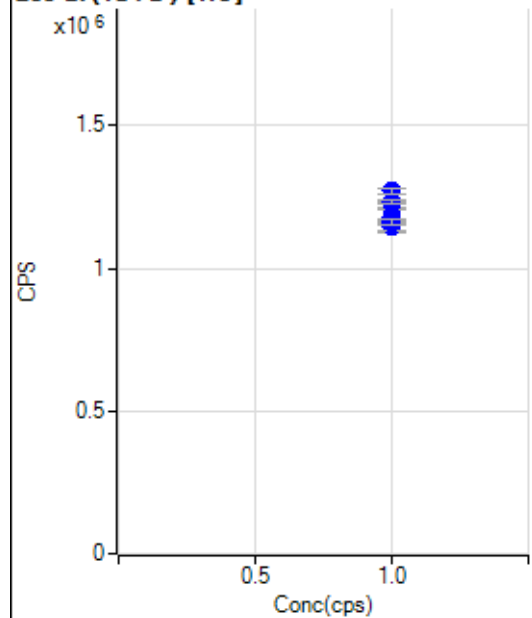
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3236442.39		A	0.8
2	☐	1.000		3129720.84		A	0.3
3	☐	1.000		3142824.72		A	0.2
4	☐	1.000		3201635.47		A	1.6
5	☐	1.000		3394782.15		A	0.9
6	☐	1.000		3444817.13		A	2.5
7	☐	1.000		3446610.97		A	2.0
8	☐	1.000		3640976.39		A	1.8
9	☐	1.000		3441559.62		A	2.0

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1676950.15		A	3.7
2	☐	1.000		1720775.77		A	3.7
3	☐	1.000		1663133.46		A	2.2
4	☐	1.000		1667822.37		A	2.1
5	☐	1.000		1774577.47		A	0.2
6	☐	1.000		1788978.39		A	0.9
7	☐	1.000		1825448.58		A	3.1
8	☐	1.000		1893421.76		A	1.8
9	☐	1.000		1808855.41		A	1.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1974944.90		A	2.1
2	☐	1.000		1913086.48		A	1.6
3	☐	1.000		1924158.46		A	0.6
4	☐	1.000		1941558.13		A	1.6
5	☐	1.000		2061800.98		A	2.9
6	☐	1.000		2127126.88		A	4.0
7	☐	1.000		2085993.19		A	2.8
8	☐	1.000		2200410.14		A	4.6
9	☐	1.000		2017487.76		A	1.7

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1147134.95		P	3.9
2	☐	1.000		1181912.10		P	3.4
3	☐	1.000		1147807.12		P	2.7
4	☐	1.000		1159494.36		P	1.5
5	☐	1.000		1208618.03		P	0.9
6	☐	1.000		1228843.66		P	0.6
7	☐	1.000		1233143.18		P	1.2
8	☐	1.000		1270668.56		P	1.7
9	☐	1.000		1163655.84		P	1.9

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8060420 MS.b
Acq. Date-Time 2020-06-04 11:53:19
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		5004	50035.30			1.536	5.000
24		41520	415196.85			1.129	5.000
25		5647	56474.60			1.133	5.000
26		6620	66200.55			1.646	5.000
59		33835	338348.54			0.883	5.000
113		5339	53385.88			1.405	5.000
115		16373	163731.77			2.571	5.000
206		5977	59768.66			1.373	5.000
207		4980	49796.29			1.341	5.000
208		12240	122398.30			1.085	5.000
220		1	5.80			23.292	

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

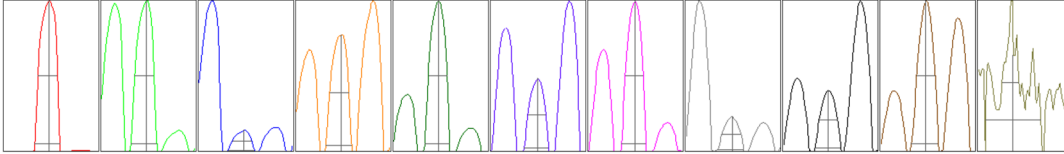
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	4989	4991	4951	5137	4951
24	41209	41491	41100	42298	41502
25	5631	5693	5590	5734	5590
26	6557	6674	6543	6788	6539
59	33838	33795	33529	34325	33688
113	5356	5364	5219	5424	5329
115	16889	16707	16028	16326	15915
206	5946	6027	5852	6063	5996
207	4975	5013	4875	5056	4979
208	12229	12219	12082	12451	12219

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	8429.03	8.95	8.90 - 9.10	
24	71566.50	23.95	23.90 - 24.10	
25	9680.31	24.95	24.90 - 25.10	
26	11081.87	25.95	25.90 - 26.10	
59	59709.36	58.95	58.90 - 59.10	
113	9994.96	113.00	112.90 - 113.10	
115	30597.18	115.00	114.90 - 115.10	
206	10657.32	206.00	205.90 - 206.10	
207	8889.80	206.95	206.90 - 207.10	
208	21991.79	207.95	207.90 - 208.10	
220	0.70	219.65	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.62	0.784	0.900	
24	0.62	0.820	0.900	
25	0.62	0.827	0.900	
26	0.62	0.821	0.900	
59	0.59	0.784	0.900	
113	0.56	0.772	0.900	
115	0.56	0.772	0.900	
206	0.59	0.820	0.900	
207	0.58	0.823	0.900	
208	0.58	0.852	0.900	
220	0.53	1.742		

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	9.3 V	Deflect	13.0 V
Extract 2	-220.0 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	160 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		8505	85054.01			1.413	
89		15110	151099.74			0.970	
205		16244	162437.98			0.648	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8467	8569	8318	8630	8543
89	15130	15170	14854	15216	15181
205	16258	16278	16074	16363	16247

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	9.3 V	Deflect	2.4 V
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US EPA Tune Check Report

Extract 2	-220.0 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	190 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