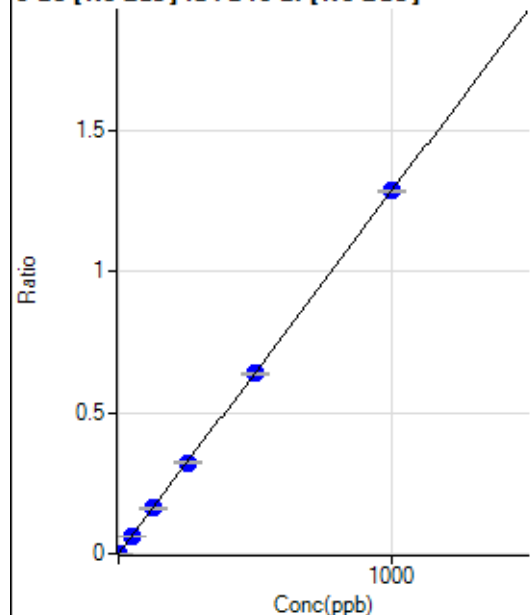


Calibration for 007CALS.d

Batch Folder: D:\ICP-MS Data\P7100617-MS.b\
 Analysis File: P7100617-MS.batch.bin
 DA Date-Time: 2017-10-07 10:10:19
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	005CALB.d	S00	2017-10-06 12:13:47
2			
3	007CALS.d	S02	2017-10-06 12:21:13
4	008CALS.d	S03	2017-10-06 12:25:04
5	009CALS.d	S04	2017-10-06 12:28:56
6	010CALS.d	S05	2017-10-06 12:32:47
7	011CALS.d	S06	2017-10-06 12:36:36
8	012CALS.d	S07	2017-10-06 12:40:25
9	013CALS.d	S08	2017-10-06 12:44:08

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	9.26	0.0000	P	34.5
2	☐	0.100					
3	☐	1.000	1.040	420.39	0.0014	P	7.7
4	☐	50.000	49.333	19323.82	0.0635	P	2.1
5	☐	125.000	125.111	49299.04	0.1609	P	0.9
6	☐	250.000	250.652	95643.05	0.3223	P	1.7
7	☐	500.000	497.650	188270.26	0.6398	P	0.6
8	☐	1000.000	1001.031	367703.65	1.2870	P	0.7
9	☐			24.07	0.0001	P	47.7

$$y = 0.0013 * x + 3.0410E-005$$

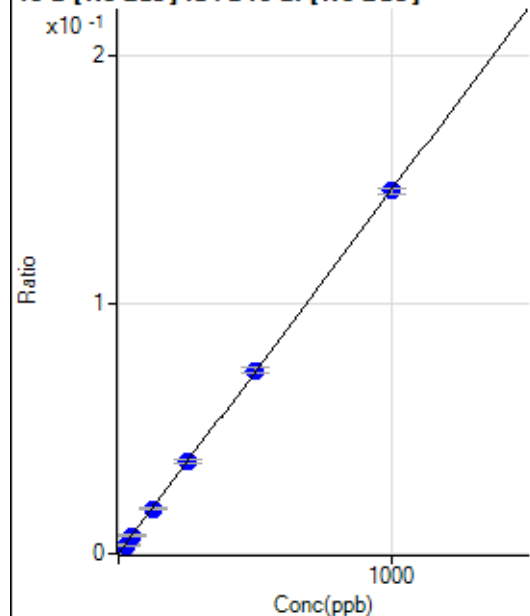
$$R = 1.0000$$

$$DL = 0.02445$$

$$BEC = 0.02365$$

Weight: <None>

Min Conc: 0

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

	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	22.22	0.0001	P	57.7
2	☐	2.500					
3	☐	25.000	22.777	1044.52	0.0034	P	7.5
4	☐	50.000	49.046	2203.03	0.0072	P	10.9
5	☐	125.000	123.061	5526.22	0.0180	P	1.5
6	☐	250.000	253.678	11010.04	0.0371	P	3.2
7	☐	500.000	503.589	21646.85	0.0736	P	2.6
8	☐	1000.000	997.632	41619.54	0.1457	P	1.5
9	☐			663.93	0.0025	P	18.6

$$y = 1.4594E-004 * x + 7.3271E-005$$

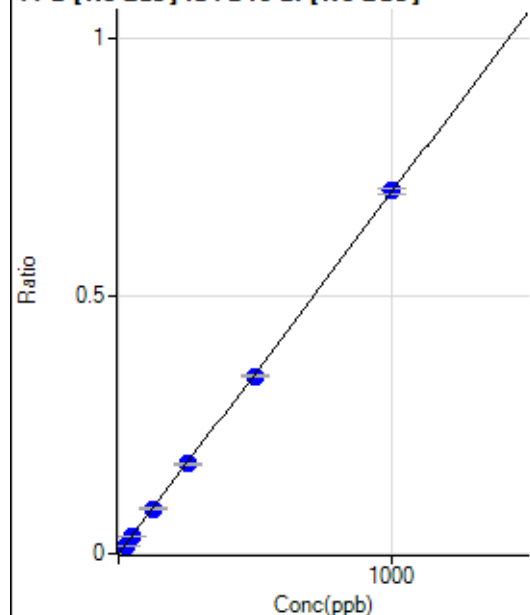
$$R = 1.0000$$

$$DL = 0.8684$$

$$BEC = 0.5021$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	88.89	0.0003	P	6.5
2	☐	2.500					
3	☐	25.000	21.019	4620.35	0.0150	P	3.0
4	☐	50.000	47.427	10214.96	0.0335	P	3.7
5	☐	125.000	123.689	26660.58	0.0870	P	2.8
6	☐	250.000	247.610	51600.67	0.1739	P	0.7
7	☐	500.000	492.283	101627.55	0.3454	P	1.1
8	☐	1000.000	1004.848	201341.59	0.7047	P	1.4
9	☐			3075.46	0.0115	P	12.6

$$y = 7.0101\text{E-}004 * x + 2.9220\text{E-}004$$

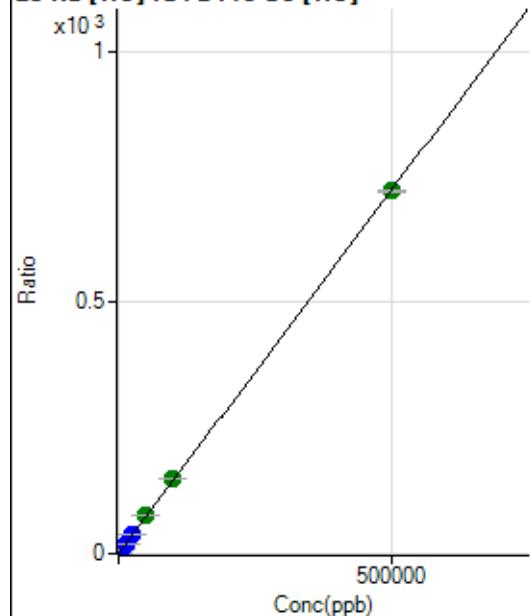
$$R = 1.0000$$

$$DL = 0.08127$$

$$BEC = 0.4168$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9139.29	0.1458	P	1.6
2	☐	50.000					
3	☐	500.000	482.233	52283.90	0.8433	P	0.7
4	☐	5000.000	5449.892	504125.84	8.0288	P	0.9
5	☐	12500.000	13468.091	1270050.02	19.6268	P	1.5
6	☐	25000.000	26474.877	2546251.49	38.4405	P	1.1
7	☐	50000.000	52449.407	5174345.99	76.0115	A	1.1
8	☐	100000.00	103030.86	10322765.33	149.1752	A	0.1
9	☐	500000.00	499046.46	52546202.91	721.9936	A	0.9

$$y = 0.0014 * x + 0.1458$$

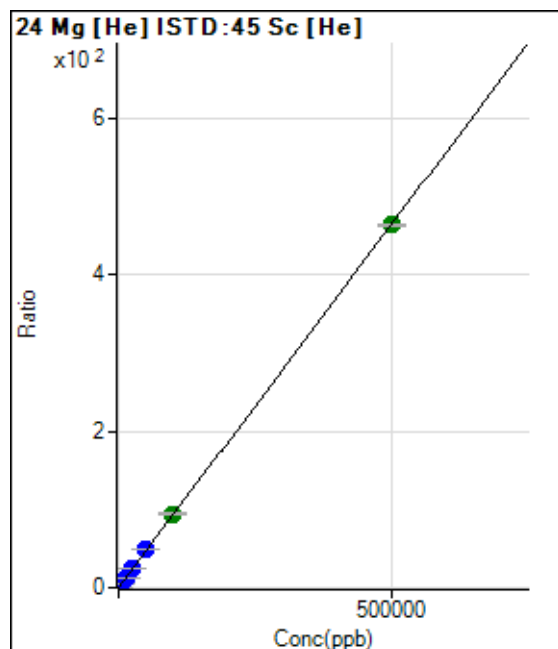
$$R = 1.0000$$

$$DL = 4.948$$

$$BEC = 100.8$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0003	P	51.0
2	☐	50.000					
3	☐	500.000	490.403	28283.03	0.4562	P	2.8
4	☐	5000.000	5487.634	320397.39	5.1026	P	0.5
5	☐	12500.000	13451.088	809340.69	12.5070	P	1.4
6	☐	25000.000	26455.852	1629446.91	24.5988	P	0.4
7	☐	50000.000	52230.141	3305887.45	48.5636	P	1.0
8	☐	100000.00	101865.29	6553912.77	94.7142	A	0.7
9	☐	500000.00	499302.49	33788190.34	464.2496	A	0.6

$$y = 9.2980\text{E-}004 * x + 2.6693\text{E-}004$$

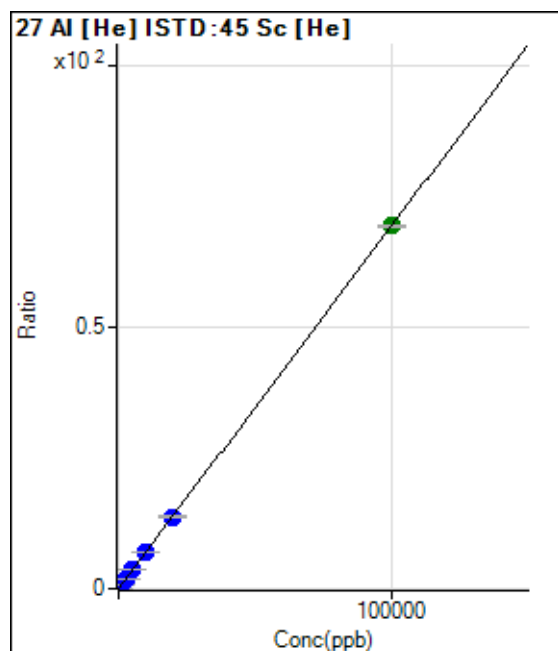
$$R = 1.0000$$

$$DL = 0.4389$$

$$BEC = 0.2871$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	38.89	0.0006	P	68.7
2	☐	2.000					
3	☐	20.000	19.294	866.73	0.0140	P	3.5
4	☐	1000.000	1046.896	45564.68	0.7257	P	0.6
5	☐	2500.000	2555.459	114549.90	1.7705	P	2.8
6	☐	5000.000	5084.265	233280.42	3.5219	P	1.2
7	☐	10000.000	10052.047	473963.87	6.9625	P	1.0
8	☐	20000.000	19835.780	950670.68	13.7385	P	0.8
9	☐	100000.00	100021.57	5041784.96	69.2738	A	0.5

$$y = 6.9258\text{E-}004 * x + 6.1794\text{E-}004$$

$$R = 1.0000$$

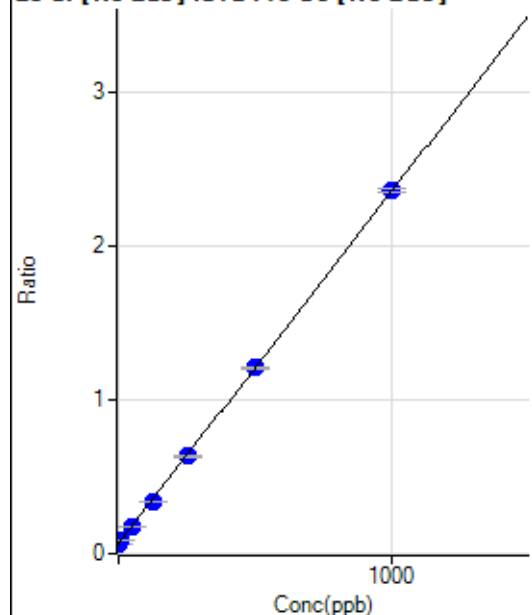
$$DL = 1.84$$

$$BEC = 0.8922$$

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	36024.94	0.0671	P	0.8
2	☐	1.000					
3	☐	10.000	11.203	50948.90	0.0928	P	0.5
4	☐	50.000	47.164	96344.37	0.1752	P	0.4
5	☐	125.000	119.899	192486.57	0.3418	P	0.9
6	☐	250.000	246.868	346050.63	0.6327	P	0.5
7	☐	500.000	498.816	676750.22	1.2098	P	0.8
8	☐	1000.000	1002.143	1323775.30	2.3628	P	1.2
9	☐			52839.17	0.0926	P	1.0

$$y = 0.0023 * x + 0.0671$$

$$R = 1.0000$$

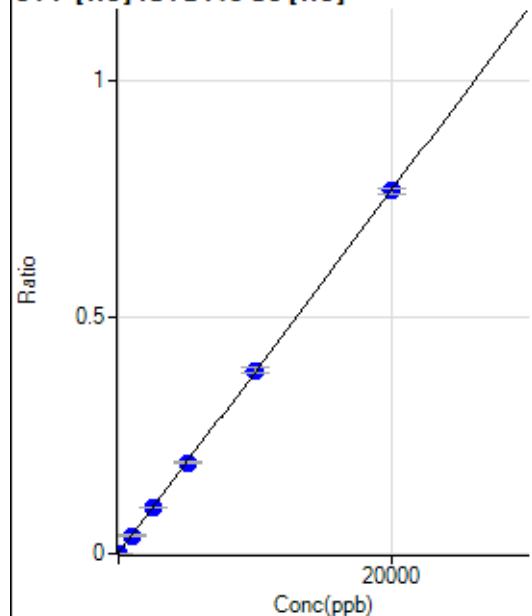
$$DL = 0.7064$$

$$BEC = 29.3$$

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	-9.966	22.22	0.0004	P	20.8
2	☐	0.000					
3	☐	0.000	9.966	69.45	0.0011	P	17.8
4	☐	1000.000	966.234	2375.28	0.0378	P	5.2
5	☐	2500.000	2551.692	6390.55	0.0987	P	1.0
6	☐	5000.000	4982.927	12725.39	0.1921	P	1.7
7	☐	10000.000	10070.743	26377.00	0.3875	P	2.6
8	☐	20000.000	19964.124	53101.21	0.7674	P	1.3
9	☐			33.33	0.0005	P	24.3

$$y = 3.8402E-005 * x + 7.3677E-004$$

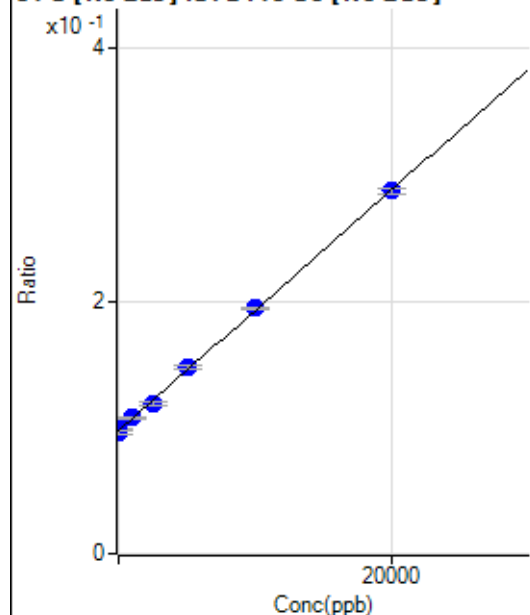
$$R = 1.0000$$

$$DL = 10.64$$

$$BEC = 19.19$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	145.834	52981.49	0.0987	P	1.2
2	☐	0.000					
3	☐	0.000	-145.834	52686.14	0.0960	P	2.0
4	☐	1000.000	1053.944	59063.36	0.1074	P	1.1
5	☐	2500.000	2201.700	66630.51	0.1183	P	2.7
6	☐	5000.000	5261.040	80660.79	0.1475	P	1.6
7	☐	10000.000	10140.406	108511.83	0.1940	P	0.4
8	☐	20000.000	19899.127	160773.55	0.2870	P	1.7
9	☐			61656.64	0.1080	P	0.6

$$y = 9.5293\text{E-}006 * x + 0.0973$$

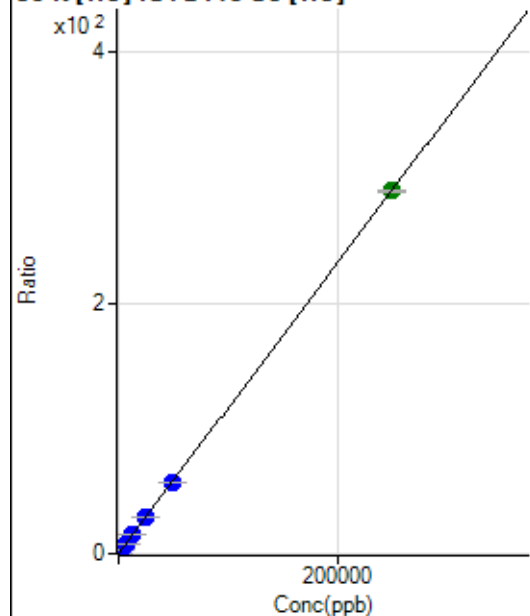
$$R = 0.9996$$

$$DL = 498.1$$

$$BEC = 1.022\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	13264.74	0.2116	P	1.4
2	☐	50.000					
3	☐	500.000	463.283	46342.79	0.7475	P	1.7
4	☐	2500.000	2570.603	199971.43	3.1848	P	0.8
5	☐	6250.000	6400.753	492753.90	7.6148	P	1.6
6	☐	12500.000	12649.742	983178.53	14.8425	P	0.6
7	☐	25000.000	25086.098	1989554.06	29.2266	P	1.1
8	☐	50000.000	49478.678	3974687.46	57.4394	P	0.3
9	☐	250000.00	250083.76	21066972.34	289.4620	A	0.7

$$y = 0.0012 * x + 0.2116$$

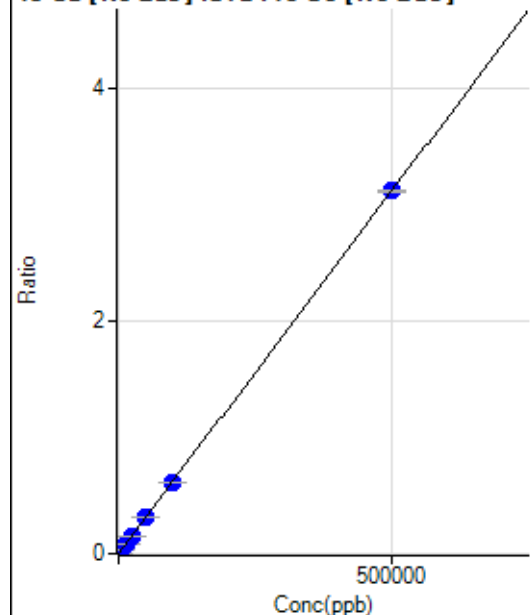
$$R = 1.0000$$

$$DL = 7.828$$

$$BEC = 183$$

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	33.33	0.0001	P	65.7
2	☐	50.000					
3	☐	500.000	468.374	1633.50	0.0030	P	7.8
4	☐	5000.000	4996.797	17124.56	0.0311	P	2.1
5	☐	12500.000	12519.678	43883.13	0.0779	P	2.4
6	☐	25000.000	24639.742	83853.67	0.1533	P	1.2
7	☐	50000.000	49324.056	171622.01	0.3068	P	0.8
8	☐	100000.00	97722.197	340509.41	0.6078	P	1.4
9	☐	500000.00	500540.74	1776857.77	3.1129	P	0.5

$$y = 6.2189\text{E-}006 * x + 6.1905\text{E-}005$$

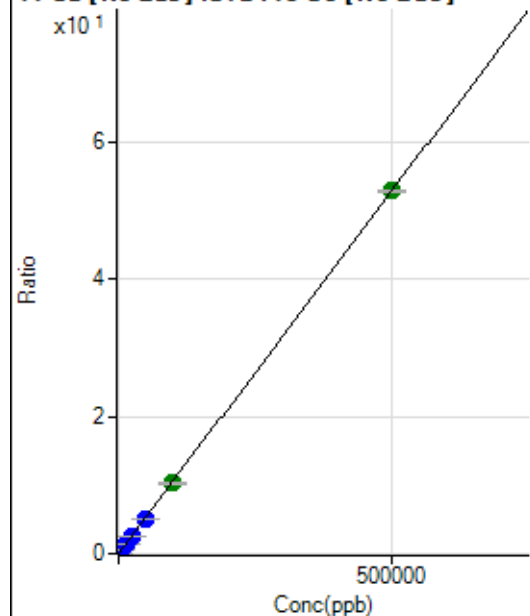
$$R = 1.0000$$

$$DL = 19.63$$

$$BEC = 9.954$$

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	1605.71	0.0030	P	4.1
2	☐	50.000					
3	☐	500.000	437.244	26986.77	0.0492	P	2.8
4	☐	5000.000	4869.850	284406.17	0.5171	P	0.7
5	☐	12500.000	12314.018	733804.49	1.3030	P	0.8
6	☐	25000.000	24313.684	1405642.45	2.5698	P	0.4
7	☐	50000.000	48491.787	2865421.63	5.1223	P	0.5
8	☐	100000.00	97375.343	5761141.66	10.2831	A	1.3
9	☐	500000.00	500716.08	30175146.51	52.8644	A	0.8

$$y = 1.0557\text{E-}004 * x + 0.0030$$

$$R = 1.0000$$

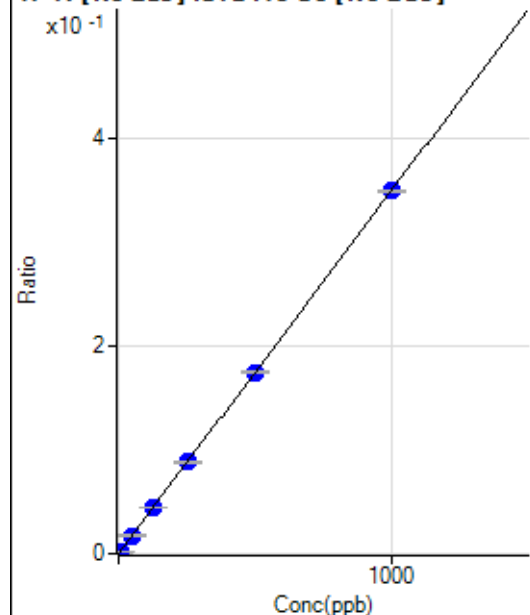
$$DL = 3.508$$

$$BEC = 28.34$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	13.89	0.0000	P	91.3
2	☐	0.500					
3	☐	5.000	4.484	875.06	0.0016	P	13.4
4	☐	50.000	50.223	9670.26	0.0176	P	2.1
5	☐	125.000	126.514	24919.15	0.0442	P	1.4
6	☐	250.000	253.354	48450.15	0.0886	P	1.5
7	☐	500.000	499.151	97620.19	0.1745	P	1.0
8	☐	1000.000	999.388	195738.37	0.3494	P	0.8
9	☐			216.70	0.0004	P	47.0

$$y = 3.4956\text{E-}004 * x + 2.5749\text{E-}005$$

$$R = 1.0000$$

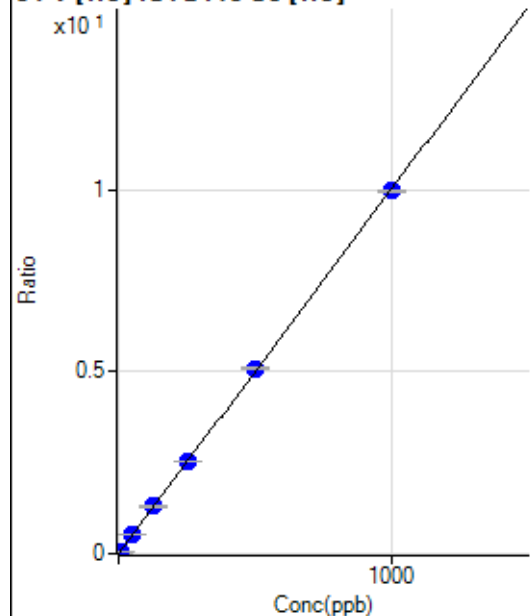
$$DL = 0.2018$$

$$BEC = 0.07366$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11.11	0.0002	P	91.1
2	☐	0.500					
3	☐	5.000	4.485	2794.76	0.0451	P	1.4
4	☐	50.000	51.084	32127.32	0.5117	P	1.1
5	☐	125.000	129.420	83864.35	1.2960	P	1.6
6	☐	250.000	253.146	167908.27	2.5348	P	0.3
7	☐	500.000	507.077	345637.41	5.0773	P	0.8
8	☐	1000.000	995.071	689452.87	9.9634	P	0.5
9	☐			122.23	0.0017	P	28.6

$$y = 0.0100 * x + 1.7688\text{E-}004$$

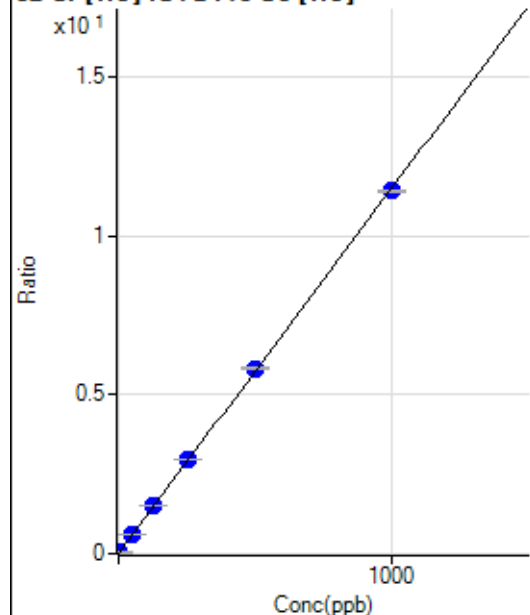
$$R = 0.9999$$

$$DL = 0.0483$$

$$BEC = 0.01767$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	408.90	0.0065	P	7.1
2	☐	0.200					
3	☐	2.000	2.107	1905.71	0.0307	P	3.6
4	☐	50.000	53.389	38938.10	0.6202	P	1.0
5	☐	125.000	132.290	98813.84	1.5270	P	1.5
6	☐	250.000	255.694	195106.66	2.9454	P	0.4
7	☐	500.000	507.564	397573.41	5.8403	P	0.9
8	☐	1000.000	993.714	790785.09	11.4279	P	0.6
9	☐			8246.87	0.1133	P	1.4

$$y = 0.0115 * x + 0.0065$$

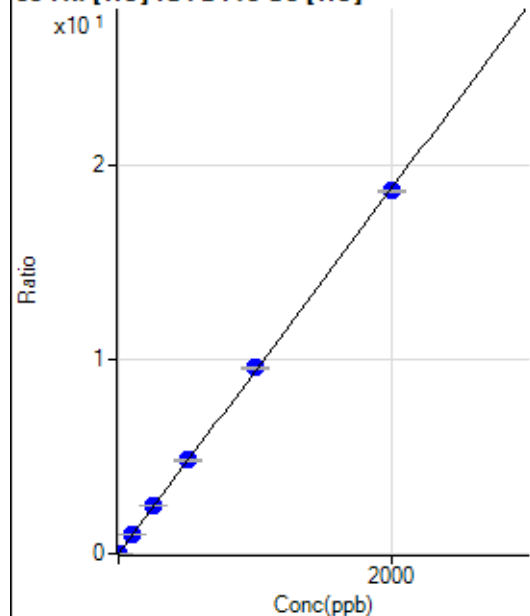
$$R = 0.9999$$

$$DL = 0.1207$$

$$BEC = 0.5673$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	23.33	0.0004	P	15.0
2	☐	0.100					
3	☐	1.000	0.922	561.13	0.0091	P	15.2
4	☐	100.000	105.775	62525.72	0.9958	P	1.3
5	☐	250.000	261.591	159337.01	2.4623	P	1.3
6	☐	500.000	511.330	318798.34	4.8126	P	0.7
7	☐	1000.000	1017.640	651988.61	9.5776	P	0.8
8	☐	2000.000	1986.610	1293774.57	18.6968	P	0.5
9	☐			4929.79	0.0677	P	3.5

$$y = 0.0094 * x + 3.7250E-004$$

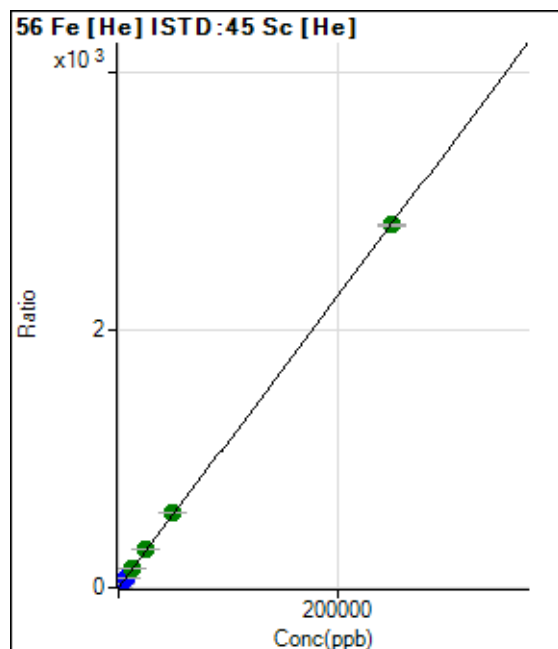
$$R = 0.9999$$

$$DL = 0.0178$$

$$BEC = 0.03958$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1035.25	0.0165	P	6.8
2	☐	5.000					
3	☐	50.000	50.708	36527.36	0.5892	P	1.7
4	☐	2500.000	2791.992	1980968.86	31.5500	P	0.8
5	☐	6250.000	6923.547	5061298.67	78.2130	P	1.3
6	☐	12500.000	13344.010	9984778.93	150.7274	A	0.7
7	☐	25000.000	26515.044	20386967.59	299.4847	A	1.1
8	☐	50000.000	51542.569	40283161.08	582.1525	A	0.8
9	☐	250000.00	249478.02	205071393.4	2,817.690	A	0.6

$$y = 0.0113 * x + 0.0165$$

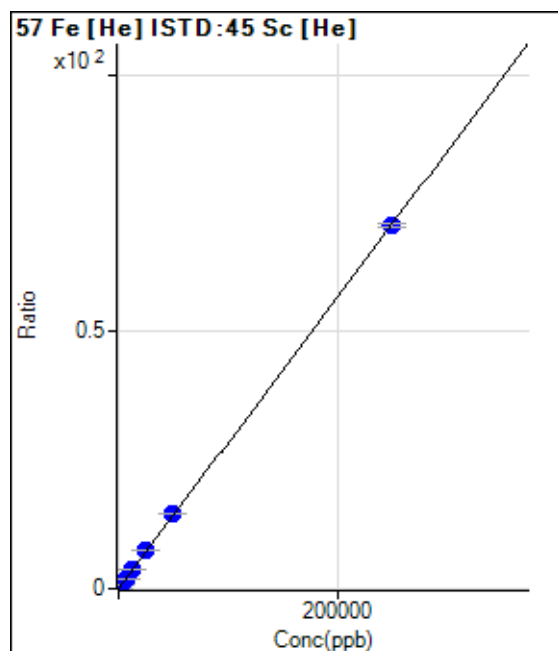
$$R = 1.0000$$

$$DL = 0.2961$$

$$BEC = 1.462$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	79.63	0.0013	P	4.2
2	☐	5.000					
3	☐	50.000	50.971	972.28	0.0157	P	12.3
4	☐	2500.000	2762.288	49145.59	0.7827	P	1.1
5	☐	6250.000	6889.015	126208.20	1.9502	P	0.8
6	☐	12500.000	13320.104	249696.17	3.7696	P	0.4
7	☐	25000.000	26485.635	510160.08	7.4941	P	0.8
8	☐	50000.000	51907.994	1016256.24	14.6862	P	0.3
9	☐	250000.00	249410.23	5135234.37	70.5600	P	1.2

$$y = 2.8290E-004 * x + 0.0013$$

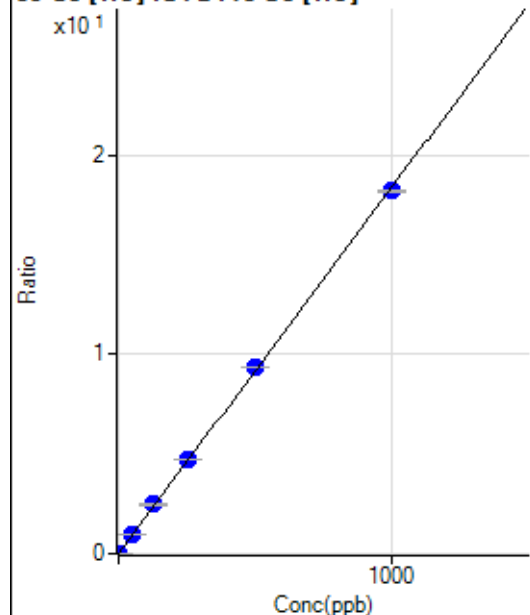
$$R = 1.0000$$

$$DL = 0.5611$$

$$BEC = 4.491$$

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	14.44	0.0002	P	57.2
2	☐	0.100					
3	☐	1.000	0.923	1065.61	0.0172	P	4.8
4	☐	50.000	54.482	62845.09	1.0010	P	1.4
5	☐	125.000	134.255	159600.10	2.4662	P	1.1
6	☐	250.000	258.612	314674.37	4.7505	P	0.4
7	☐	500.000	510.027	637748.24	9.3685	P	0.9
8	☐	1000.000	991.453	1260194.52	18.2114	P	0.5
9	☐			1475.66	0.0203	P	2.2

$$y = 0.0184 * x + 2.2985E-004$$

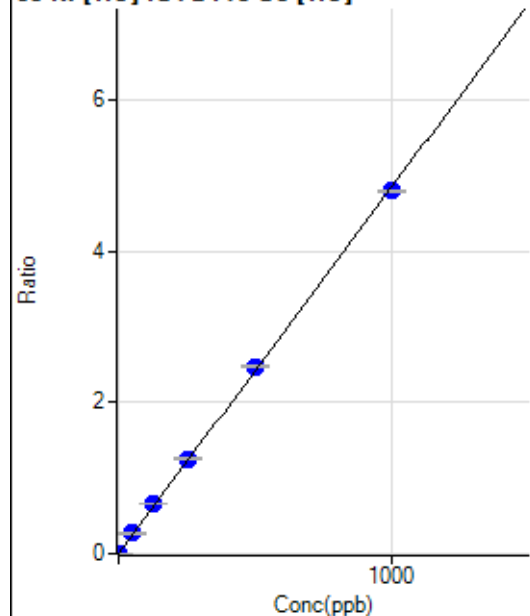
$$R = 0.9999$$

$$DL = 0.02147$$

$$BEC = 0.01251$$

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	17.78	0.0003	P	11.9
2	☐	0.100					
3	☐	1.000	1.217	383.35	0.0062	P	6.5
4	☐	50.000	55.704	16967.84	0.2703	P	4.3
5	☐	125.000	135.199	42431.42	0.6557	P	1.0
6	☐	250.000	259.306	83282.58	1.2573	P	0.6
7	☐	500.000	511.361	168761.59	2.4791	P	1.2
8	☐	1000.000	990.433	332250.03	4.8015	P	0.5
9	☐			1612.34	0.0222	P	3.7

$$y = 0.0048 * x + 2.8389E-004$$

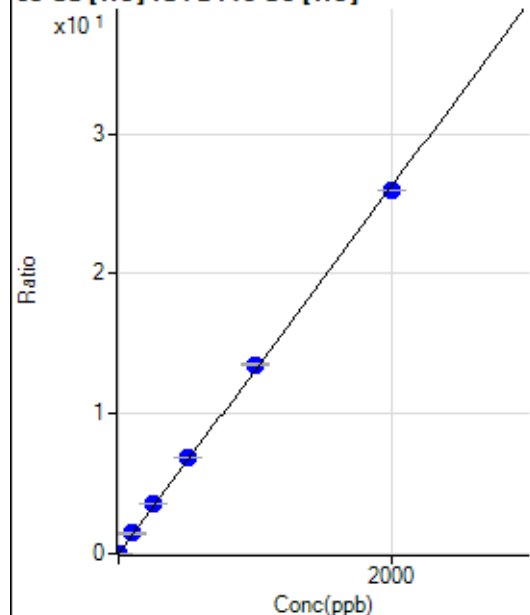
$$R = 0.9998$$

$$DL = 0.02086$$

$$BEC = 0.05856$$

Weight: <None>

Min Conc: 0

⁶³Cu [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	103.34	0.0016	P	14.0
2	☐	0.200					
3	☐	2.000	1.996	1725.69	0.0278	P	1.0
4	☐	100.000	110.545	91164.87	1.4521	P	1.8
5	☐	250.000	273.175	232050.12	3.5858	P	1.2
6	☐	500.000	522.826	454504.99	6.8614	P	0.2
7	☐	1000.000	1029.358	919513.04	13.5073	P	0.6
8	☐	2000.000	1976.190	1794334.70	25.9303	P	0.1
9	☐			2249.09	0.0309	P	4.3

$$y = 0.0131 * x + 0.0016$$

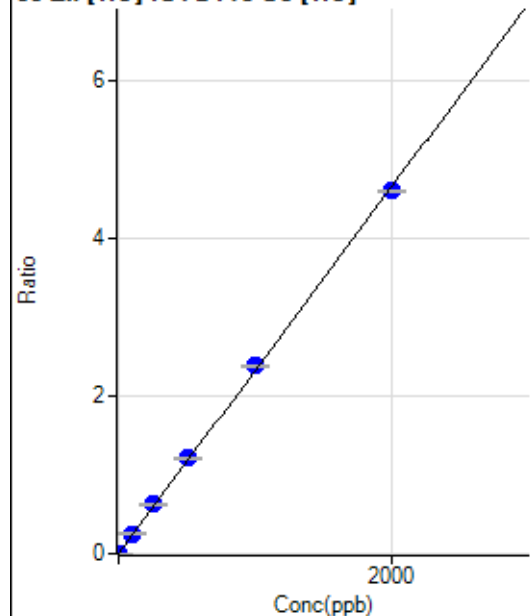
$$R = 0.9997$$

$$DL = 0.0527$$

$$BEC = 0.1256$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0010	P	10.3
2	☐	0.200					
3	☐	2.000	2.030	353.34	0.0057	P	7.5
4	☐	100.000	109.014	15996.71	0.2548	P	3.5
5	☐	250.000	269.071	40606.44	0.6275	P	2.3
6	☐	500.000	519.915	80259.16	1.2116	P	0.6
7	☐	1000.000	1025.653	162651.95	2.3893	P	0.7
8	☐	2000.000	1979.360	319008.43	4.6101	P	0.6
9	☐			735.59	0.0101	P	6.4

$$y = 0.0023 * x + 9.7421E-004$$

$$R = 0.9998$$

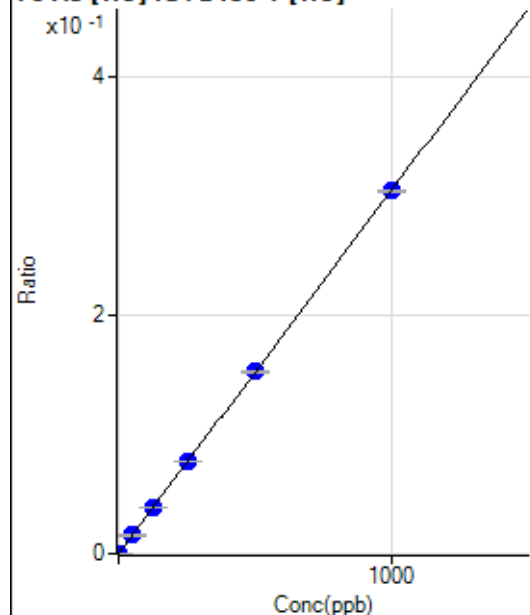
$$DL = 0.1295$$

$$BEC = 0.4184$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	3.71	0.0000	P	86.6
2	☐	0.100					
3	☐	1.000	0.957	114.20	0.0003	P	14.9
4	☐	50.000	50.400	5947.56	0.0154	P	4.0
5	☐	125.000	128.833	15571.98	0.0393	P	1.1
6	☐	250.000	253.607	30731.86	0.0774	P	0.9
7	☐	500.000	500.548	62620.97	0.1528	P	0.5
8	☐	1000.000	998.325	125289.28	0.3048	P	0.3
9	☐			72.84	0.0002	P	6.7

$$y = 3.0528\text{E-}004 * x + 9.7813\text{E-}006$$

$$R = 1.0000$$

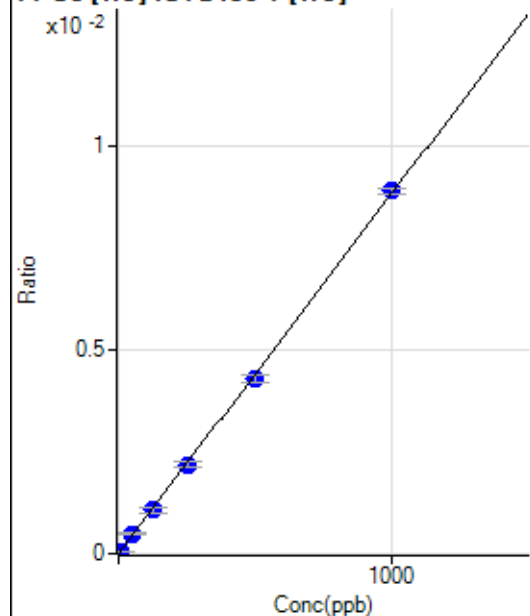
$$DL = 0.08325$$

$$BEC = 0.03204$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	0.500					
3	☐	5.000	3.992	13.33	0.0000	P	49.9
4	☐	50.000	55.720	190.00	0.0005	P	15.5
5	☐	125.000	121.142	423.35	0.0011	P	10.9
6	☐	250.000	247.718	867.82	0.0022	P	5.7
7	☐	500.000	484.748	1753.47	0.0043	P	4.6
8	☐	1000.000	1008.398	3659.40	0.0089	P	1.6
9	☐			0.00	0.0000	P	

$$y = 8.8278\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9998$$

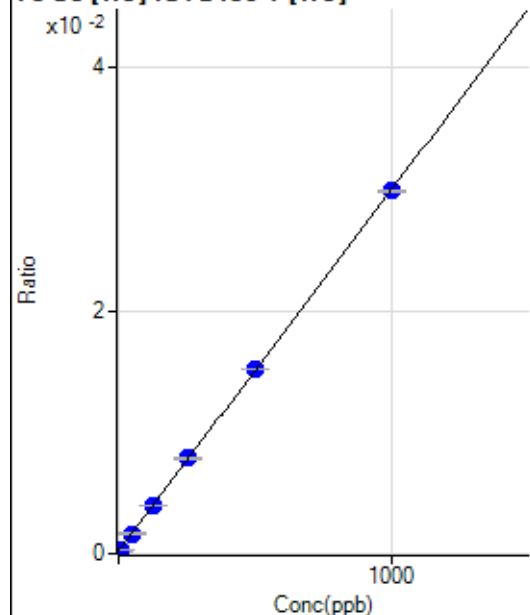
$$DL = 0$$

$$BEC = 0$$

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	82.10	0.0002	P	11.5
2	☐	0.500					
3	☐	5.000	3.548	121.61	0.0003	P	14.7
4	☐	50.000	48.081	635.82	0.0016	P	4.2
5	☐	125.000	125.022	1556.89	0.0039	P	0.8
6	☐	250.000	257.483	3124.44	0.0079	P	1.8
7	☐	500.000	503.300	6220.52	0.0152	P	0.2
8	☐	1000.000	996.580	12269.46	0.0298	P	0.5
9	☐			196.30	0.0005	P	6.0

$$y = 2.9732E-005 * x + 2.1605E-004$$

$$R = 0.9999$$

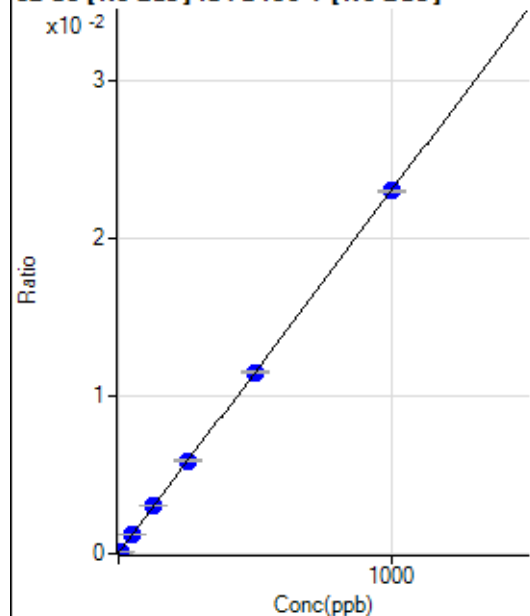
$$DL = 2.509$$

$$BEC = 7.266$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	23.66	0.0000	P	101.
2	☐	0.500					
3	☐	5.000	4.504	104.86	0.0001	P	14.5
4	☐	50.000	50.154	927.16	0.0012	P	2.9
5	☐	125.000	129.609	2436.36	0.0030	P	1.3
6	☐	250.000	255.441	4564.21	0.0059	P	1.5
7	☐	500.000	498.529	9107.36	0.0115	P	1.6
8	☐	1000.000	998.794	18132.27	0.0230	P	0.7
9	☐			5.34	0.0000	P	182.

$$y = 2.3018E-005 * x + 3.1256E-005$$

$$R = 1.0000$$

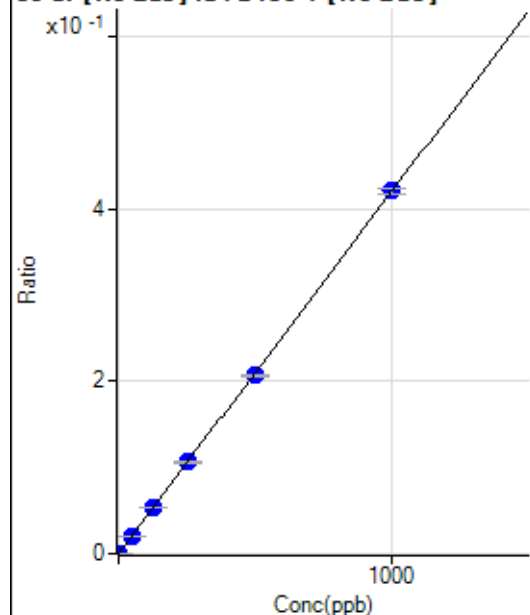
$$DL = 4.127$$

$$BEC = 1.358$$

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	77.78	0.0001	P	15.7
2	☐	0.100					
3	☐	1.000	0.907	375.02	0.0005	P	11.9
4	☐	50.000	49.898	16440.65	0.0210	P	1.4
5	☐	125.000	126.003	42784.67	0.0529	P	1.8
6	☐	250.000	252.345	81786.35	0.1059	P	0.9
7	☐	500.000	492.760	163642.65	0.2067	P	0.7
8	☐	1000.000	1002.913	331303.61	0.4206	P	1.3
9	☐			11407.81	0.0145	P	2.5

$$y = 4.1933\text{E-}004 * x + 1.0194\text{E-}004$$

$$R = 1.0000$$

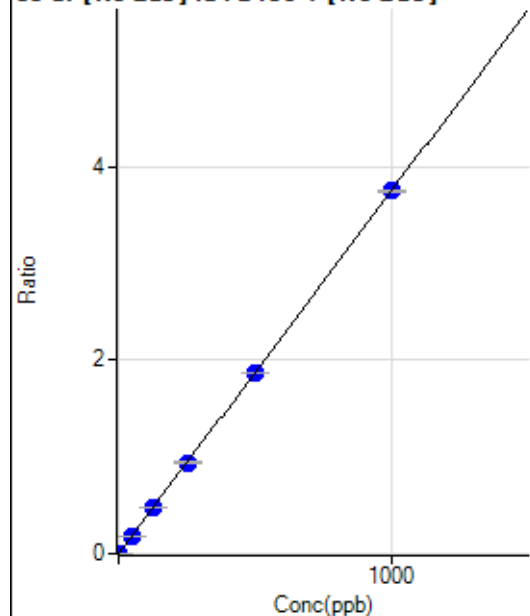
$$DL = 0.1145$$

$$BEC = 0.2431$$

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	30.56	0.0000	P	41.9
2	☐	0.100					
3	☐	1.000	0.939	2769.84	0.0036	P	7.7
4	☐	50.000	49.925	146457.95	0.1873	P	1.3
5	☐	125.000	126.459	383392.40	0.4744	P	0.7
6	☐	250.000	251.557	728629.28	0.9436	P	0.5
7	☐	500.000	499.098	1481874.05	1.8721	P	0.5
8	☐	1000.000	999.884	2954068.66	3.7505	P	0.4
9	☐			102763.99	0.1303	P	1.7

$$y = 0.0038 * x + 4.0143\text{E-}005$$

$$R = 1.0000$$

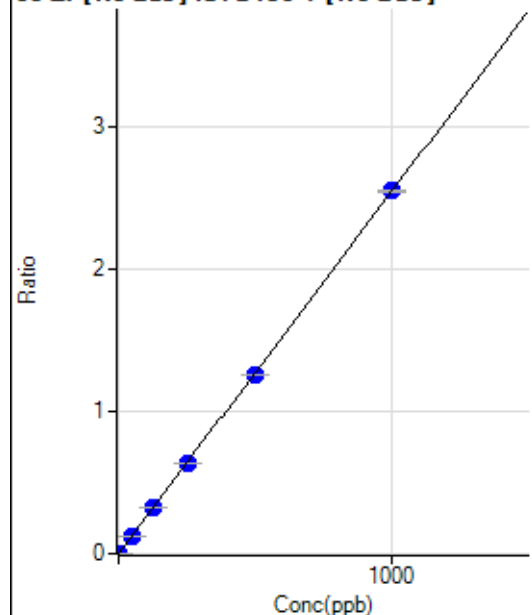
$$DL = 0.01346$$

$$BEC = 0.0107$$

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	83.34	0.0001	P	29.4
2	☐	0.100					
3	☐	1.000	0.842	1750.19	0.0023	P	0.5
4	☐	50.000	49.730	98976.42	0.1266	P	0.5
5	☐	125.000	126.418	259938.32	0.3216	P	0.2
6	☐	250.000	249.382	489855.71	0.6344	P	0.5
7	☐	500.000	494.348	995269.86	1.2574	P	0.5
8	☐	1000.000	1002.817	2008910.07	2.5506	P	0.2
9	☐			352.80	0.0004	P	6.7

$$y = 0.0025 * x + 1.0921E-004$$

$$R = 1.0000$$

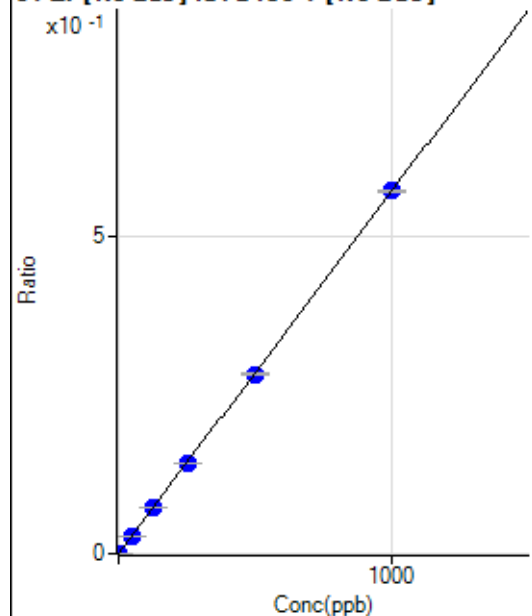
$$DL = 0.03794$$

$$BEC = 0.04294$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	79.1
2	☐	0.100					
3	☐	1.000	0.795	375.02	0.0005	P	3.2
4	☐	50.000	49.665	22129.12	0.0283	P	2.3
5	☐	125.000	126.433	58189.18	0.0720	P	1.3
6	☐	250.000	250.428	110099.82	0.1426	P	0.6
7	☐	500.000	496.274	223624.47	0.2825	P	0.9
8	☐	1000.000	1001.594	449087.53	0.5702	P	0.3
9	☐			69.45	0.0001	P	30.0

$$y = 5.6923E-004 * x + 2.9279E-005$$

$$R = 1.0000$$

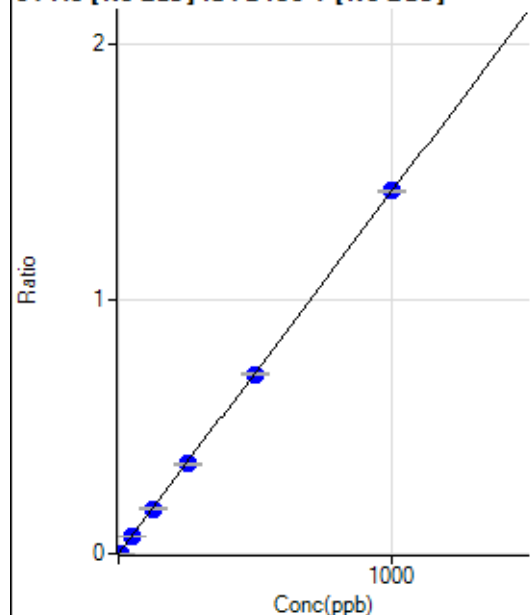
$$DL = 0.122$$

$$BEC = 0.05144$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	22.22	0.0000	P	57.4
2	☐	0.500					
3	☐	5.000	1.978	2208.59	0.0028	P	5.2
4	☐	50.000	49.506	55010.59	0.0704	P	1.1
5	☐	125.000	124.790	143298.81	0.1773	P	0.7
6	☐	250.000	248.291	272407.07	0.3527	P	1.3
7	☐	500.000	495.914	557642.27	0.7045	P	1.1
8	☐	1000.000	1002.536	1121759.16	1.4242	P	0.4
9	☐			872.29	0.0011	P	3.9

$$y = 0.0014 * x + 2.9209E-005$$

$$R = 1.0000$$

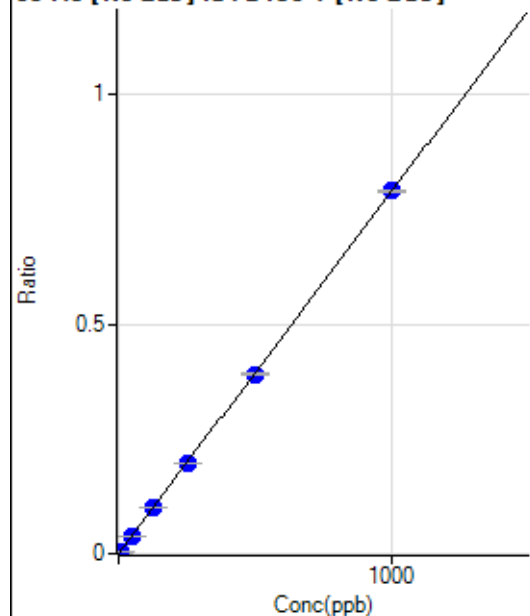
$$DL = 0.03541$$

$$BEC = 0.02056$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2.78	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	4.435	2719.84	0.0035	P	12.2
4	☐	50.000	49.511	30514.31	0.0390	P	1.3
5	☐	125.000	126.551	80615.19	0.0997	P	1.3
6	☐	250.000	250.214	152285.63	0.1972	P	0.3
7	☐	500.000	495.777	309290.68	0.3908	P	1.1
8	☐	1000.000	1001.891	621951.39	0.7896	P	0.5
9	☐			1364.02	0.0017	P	7.4

$$y = 7.8815E-004 * x + 3.6358E-006$$

$$R = 1.0000$$

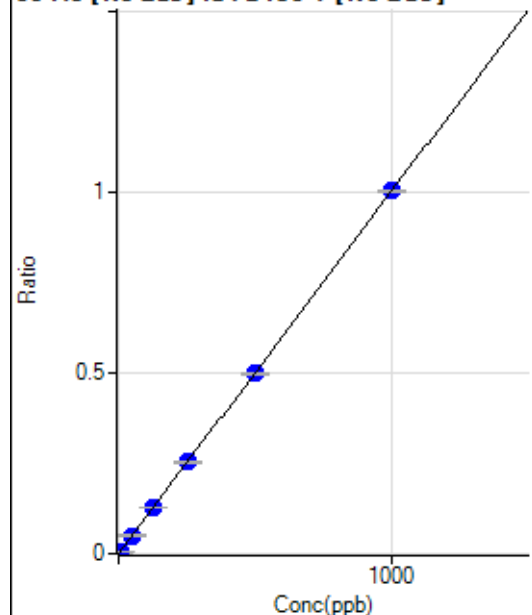
$$DL = 0.02397$$

$$BEC = 0.004613$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	100.
2	☐	0.500					
3	☐	5.000	3.938	3081.04	0.0040	P	5.9
4	☐	50.000	50.140	39336.43	0.0503	P	1.7
5	☐	125.000	125.234	101536.55	0.1256	P	0.4
6	☐	250.000	252.407	195531.43	0.2532	P	1.2
7	☐	500.000	496.389	394132.89	0.4979	P	0.7
8	☐	1000.000	1001.173	790990.40	1.0043	P	0.7
9	☐			1844.65	0.0023	P	4.0

$$y = 0.0010 * x + 1.0978E-005$$

$$R = 1.0000$$

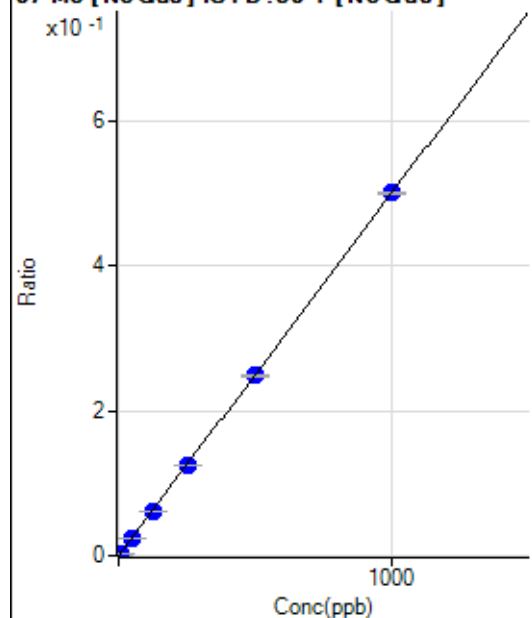
$$DL = 0.03308$$

$$BEC = 0.01094$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8.33	0.0000	P	99.6
2	☐	0.500					
3	☐	5.000	4.057	1583.49	0.0020	P	18.0
4	☐	50.000	49.864	19486.34	0.0249	P	1.6
5	☐	125.000	123.717	49963.87	0.0618	P	1.2
6	☐	250.000	250.938	96818.84	0.1254	P	0.3
7	☐	500.000	497.214	196632.84	0.2484	P	0.9
8	☐	1000.000	1001.330	394030.99	0.5003	P	0.8
9	☐			777.83	0.0010	P	6.3

$$y = 4.9960E-004 * x + 1.0960E-005$$

$$R = 1.0000$$

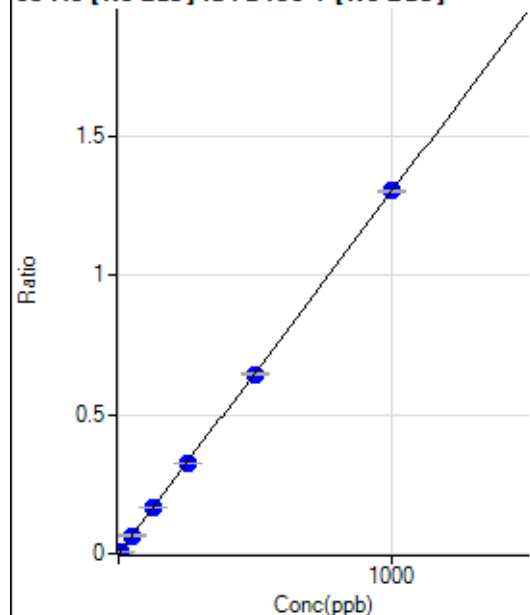
$$DL = 0.06554$$

$$BEC = 0.02194$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.78	0.0000	P	173.
2	☐	0.500					
3	☐	5.000	4.183	4239.69	0.0055	P	4.4
4	☐	50.000	50.301	51229.86	0.0655	P	1.6
5	☐	125.000	125.561	132182.44	0.1636	P	0.5
6	☐	250.000	248.590	250023.58	0.3238	P	0.8
7	☐	500.000	495.854	511238.01	0.6459	P	0.6
8	☐	1000.000	1002.344	1028315.23	1.3056	P	0.6
9	☐			2075.26	0.0026	P	5.2

$$y = 0.0013 * x + 3.6840E-006$$

$$R = 1.0000$$

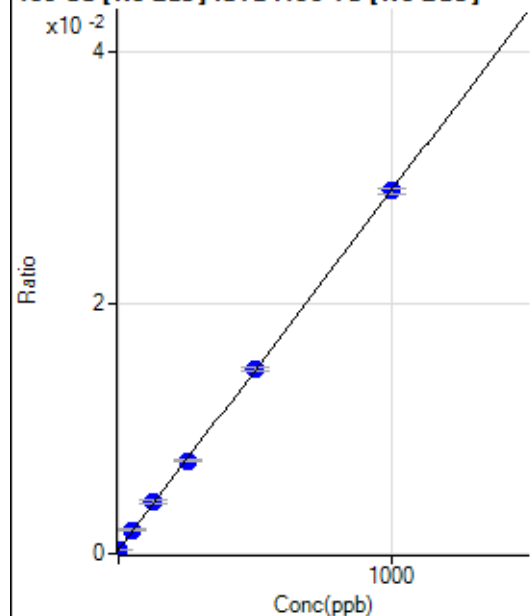
$$DL = 0.0147$$

$$BEC = 0.002828$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	375.03	0.0003	P	22.4
2	☐	0.100					
3	☐	1.000	-0.672	361.13	0.0003	P	23.2
4	☐	50.000	52.718	2144.71	0.0018	P	8.3
5	☐	125.000	132.545	4976.12	0.0041	P	4.8
6	☐	250.000	247.688	8572.39	0.0074	P	3.3
7	☐	500.000	501.665	17297.40	0.0147	P	1.8
8	☐	1000.000	998.668	34254.13	0.0290	P	1.8
9	☐			386.14	0.0003	P	23.3

$$y = 2.8662E-005 * x + 3.3371E-004$$

$$R = 1.0000$$

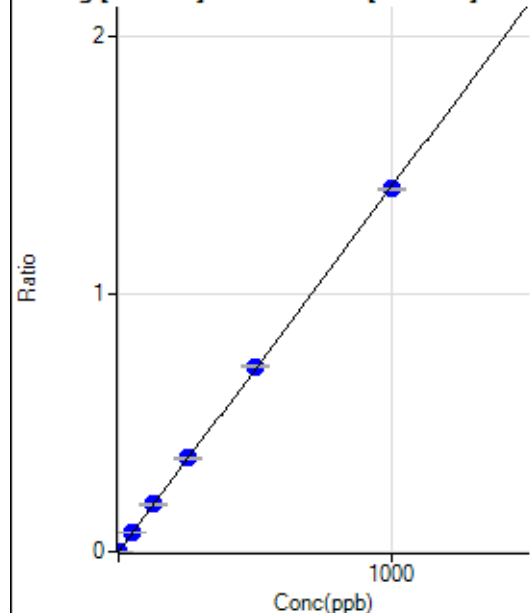
$$DL = 7.839$$

$$BEC = 11.64$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	19.44	0.0000	P	49.4
2	☐	0.100					
3	☐	1.000	0.989	1630.73	0.0014	P	7.7
4	☐	50.000	52.206	86083.02	0.0740	P	1.0
5	☐	125.000	129.502	221125.45	0.1836	P	1.3
6	☐	250.000	256.963	420270.76	0.3644	P	1.3
7	☐	500.000	506.629	844582.56	0.7184	P	1.1
8	☐	1000.000	994.271	1667778.29	1.4099	P	0.3
9	☐			161.12	0.0001	P	11.3

$$y = 0.0014 * x + 1.7298E-005$$

$$R = 0.9999$$

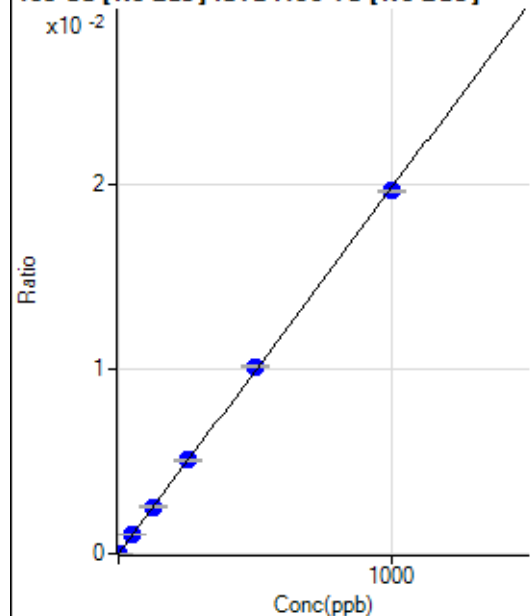
$$DL = 0.01809$$

$$BEC = 0.0122$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.39	0.0000	P	173.
2	☐	0.100					
3	☐	1.000	1.523	36.11	0.0000	P	6.6
4	☐	50.000	50.865	1173.69	0.0010	P	2.9
5	☐	125.000	128.029	3057.34	0.0025	P	3.9
6	☐	250.000	256.391	5863.84	0.0051	P	2.4
7	☐	500.000	511.728	11927.47	0.0101	P	1.1
8	☐	1000.000	992.116	23266.64	0.0197	P	0.7
9	☐			5.56	0.0000	P	114.

$$y = 1.9824E-005 * x + 1.2520E-006$$

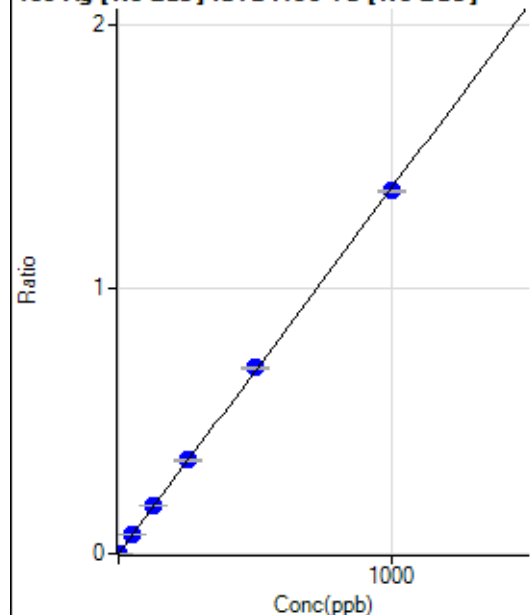
$$R = 0.9999$$

$$DL = 0.3282$$

$$BEC = 0.06316$$

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	8.33	0.0000	P	1.3
2	☐	0.100					
3	☐	1.000	1.012	1611.29	0.0014	P	4.4
4	☐	50.000	51.625	82811.27	0.0712	P	0.8
5	☐	125.000	130.082	216088.60	0.1795	P	1.6
6	☐	250.000	257.175	409222.57	0.3548	P	1.8
7	☐	500.000	509.418	826241.87	0.7028	P	0.9
8	☐	1000.000	992.781	1620199.29	1.3697	P	0.2
9	☐			133.34	0.0001	P	22.6

$$y = 0.0014 * x + 7.4153E-006$$

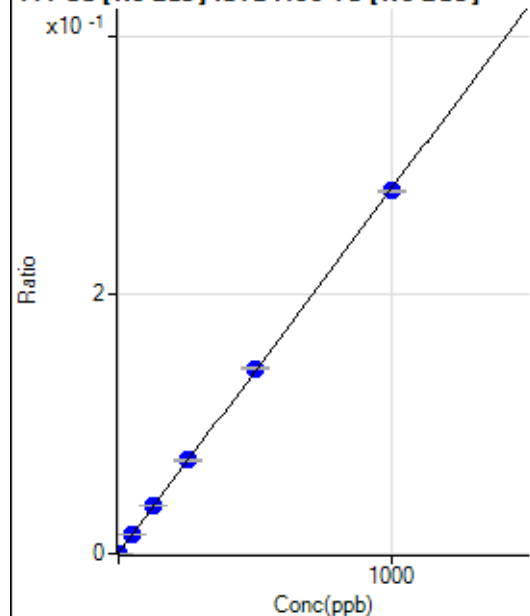
$$R = 0.9999$$

$$DL = 0.0002091$$

$$BEC = 0.005375$$

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	261.54	0.0002	P	23.0
2	☐	0.100					
3	☐	1.000	0.874	549.75	0.0005	P	10.0
4	☐	50.000	52.028	17298.10	0.0149	P	2.8
5	☐	125.000	129.752	44259.97	0.0368	P	1.1
6	☐	250.000	255.647	83270.13	0.0722	P	3.3
7	☐	500.000	507.343	168176.41	0.1431	P	0.9
8	☐	1000.000	994.221	331348.55	0.2801	P	0.5
9	☐			294.18	0.0003	P	18.5

$$y = 2.8150E-004 * x + 2.3272E-004$$

$$R = 0.9999$$

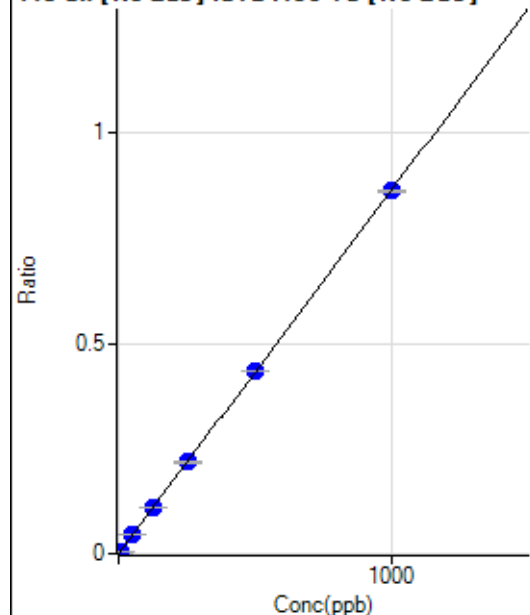
$$DL = 0.5707$$

$$BEC = 0.8267$$

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	80.56	0.0001	P	20.4
2	☐	0.500					
3	☐	5.000	4.652	4695.47	0.0041	P	7.3
4	☐	50.000	50.927	51214.27	0.0441	P	1.4
5	☐	125.000	126.092	131202.82	0.1090	P	1.0
6	☐	250.000	252.611	251703.55	0.2182	P	1.3
7	☐	500.000	502.345	510120.21	0.4339	P	0.4
8	☐	1000.000	997.994	1019628.78	0.8620	P	0.2
9	☐			663.93	0.0006	P	9.3

$$y = 8.6362\text{E-}004 * x + 7.1606\text{E-}005$$

$$R = 1.0000$$

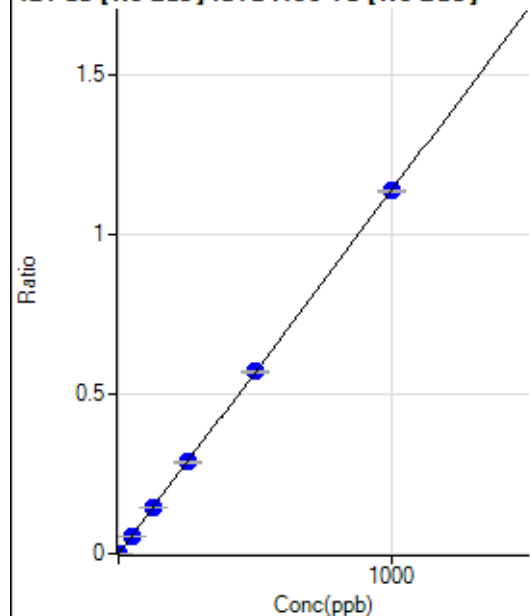
$$DL = 0.05068$$

$$BEC = 0.08291$$

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	11.11	0.0000	P	115.
2	☐	0.200					
3	☐	2.000	1.777	2336.43	0.0020	P	8.6
4	☐	50.000	49.317	65311.83	0.0562	P	0.7
5	☐	125.000	125.313	171856.18	0.1427	P	0.3
6	☐	250.000	253.000	332358.87	0.2882	P	1.5
7	☐	500.000	501.237	671130.82	0.5709	P	1.4
8	☐	1000.000	998.627	1345420.32	1.1374	P	0.6
9	☐			3439.46	0.0029	P	4.8

$$y = 0.0011 * x + 9.8711\text{E-}006$$

$$R = 1.0000$$

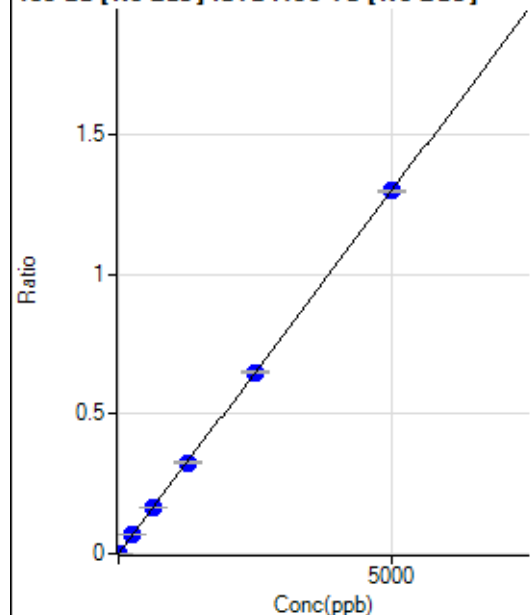
$$DL = 0.02995$$

$$BEC = 0.008667$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2.78	0.0000	P	173.
2	☐	1.000					
3	☐	10.000	8.675	2589.24	0.0023	P	9.3
4	☐	250.000	254.142	76704.32	0.0660	P	0.8
5	☐	625.000	625.336	195458.89	0.1623	P	0.5
6	☐	1250.000	1255.558	375931.87	0.3259	P	0.9
7	☐	2500.000	2496.950	762026.11	0.6482	P	1.2
8	☐	5000.000	4999.889	1535355.00	1.2979	P	0.4
9	☐			333.35	0.0003	P	9.3

$$y = 2.5959\text{E-}004 * x + 2.4375\text{E-}006$$

$$R = 1.0000$$

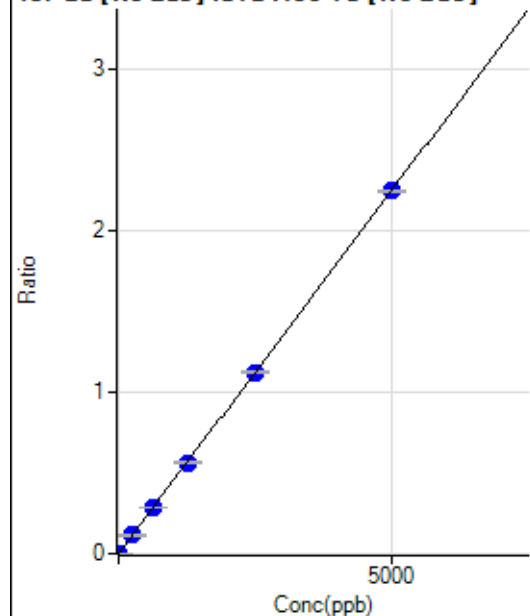
$$DL = 0.04879$$

$$BEC = 0.00939$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	5.55	0.0000	P	86.6
2	☐	1.000					
3	☐	10.000	8.981	4648.19	0.0040	P	4.4
4	☐	250.000	252.166	131988.10	0.1135	P	0.5
5	☐	625.000	630.803	341938.59	0.2840	P	0.6
6	☐	1250.000	1253.768	651027.43	0.5644	P	0.8
7	☐	2500.000	2500.548	1323462.68	1.1257	P	0.8
8	☐	5000.000	4997.952	2661656.85	2.2501	P	0.5
9	☐			794.51	0.0007	P	11.1

$$y = 4.5020\text{E-}004 * x + 4.9384\text{E-}006$$

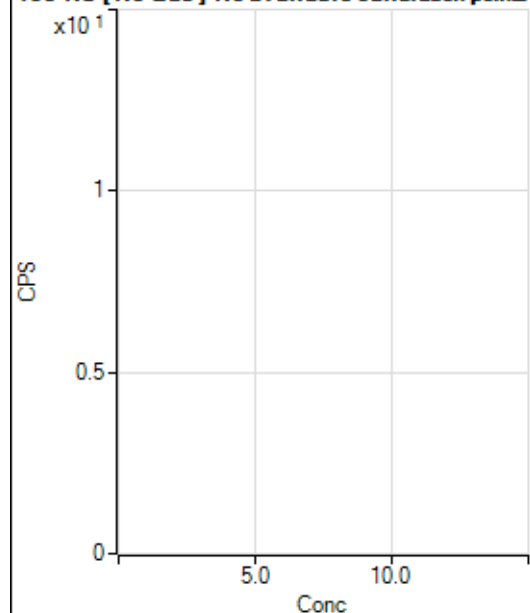
$$R = 1.0000$$

$$DL = 0.02851$$

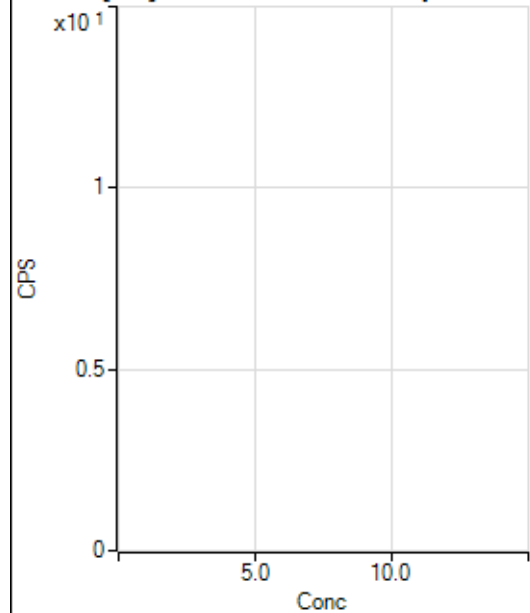
$$BEC = 0.01097$$

Weight: <None>

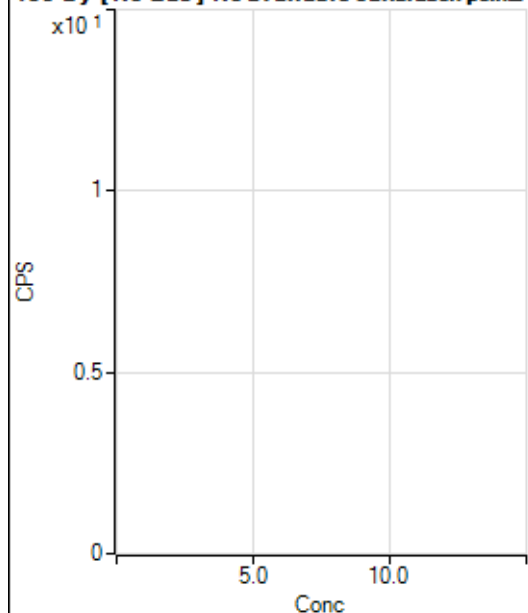
Min Conc: 0

150 Nd [No Gas] No available calibration points

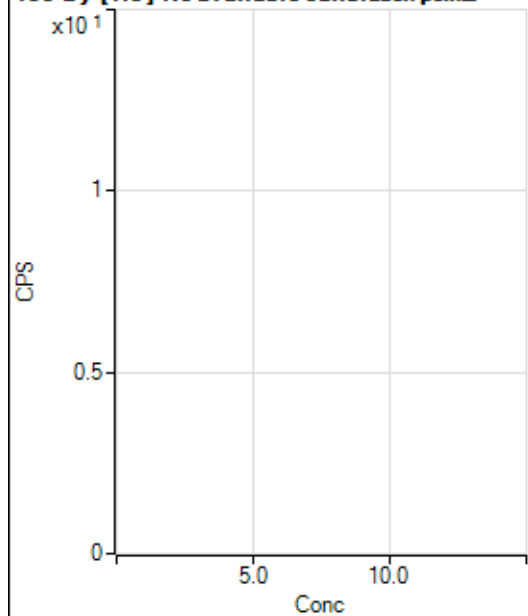
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			2.22		P	173.
5	☐			24.44		P	31.5
6	☐			28.89		P	70.5
7	☐			86.67		P	40.7
8	☐			108.89		P	57.9
9	☐			8.89		P	43.3

150 Nd [He] No available calibration points

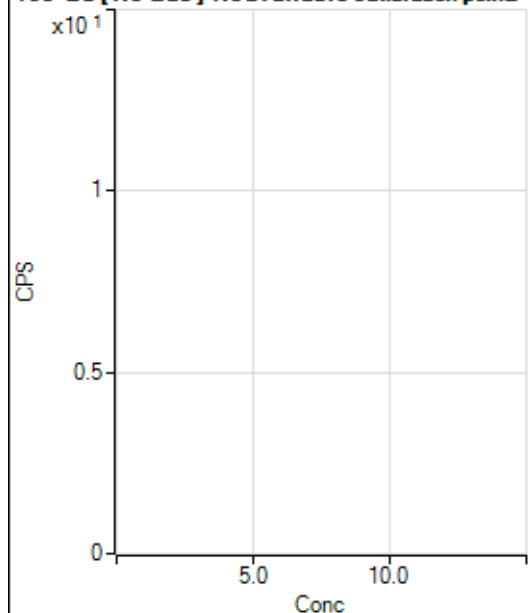
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			0.00		P	
4	☐			1.11		P	173.
5	☐			4.44		P	173.
6	☐			6.67		P	86.6
7	☐			26.67		P	12.5
8	☐			38.89		P	38.7
9	☐			16.67		P	20.0

156 Dy [No Gas] No available calibration points

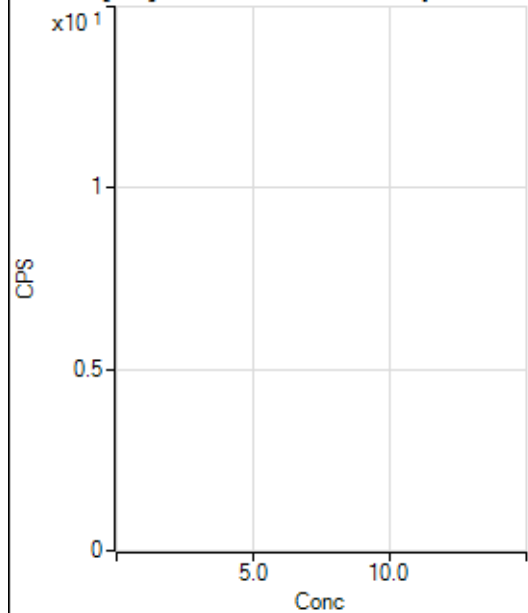
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			0.00		P	
2	☐						
3	☐			2.78		P	173.
4	☐			5.56		P	173.
5	☐			8.33		P	100.
6	☐			8.33		P	100.
7	☐			19.45		P	24.7
8	☐			27.78		P	17.3
9	☐			19.44		P	65.5

156 Dy [He] No available calibration points

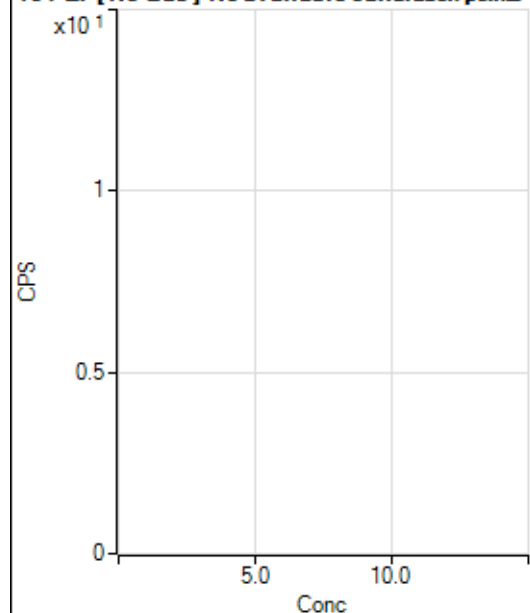
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐						
3	☐			0.00		P	
4	☐			6.66		P	86.6
5	☐			4.44		P	43.4
6	☐			18.89		P	36.7
7	☐			27.78		P	48.5
8	☐			40.00		P	41.7
9	☐			16.67		P	20.0

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

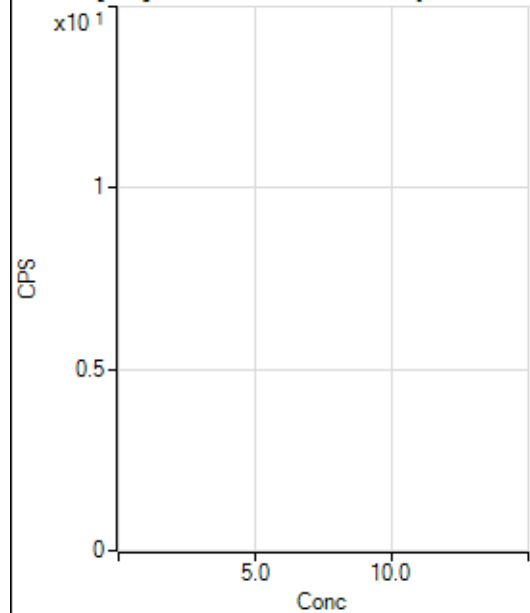
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.34		P	66.1
2	☐						
3	☐			16.67		P	132.
4	☐			27.78		P	17.3
5	☐			22.22		P	86.6
6	☐			19.44		P	65.5
7	☐			33.33		P	75.0
8	☐			38.89		P	49.5
9	☐			61.11		P	20.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			152.23		P	7.7
2	☐						
3	☐			155.56		P	30.3
4	☐			155.56		P	19.9
5	☐			133.33		P	18.9
6	☐			160.00		P	14.4
7	☐			168.89		P	12.7
8	☐			188.89		P	22.1
9	☐			205.56		P	6.6

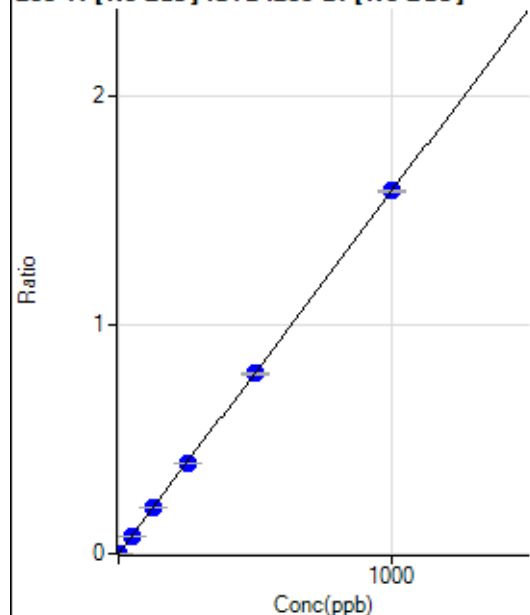
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐						
3	☐			13.89		P	69.3
4	☐			27.78		P	45.8
5	☐			27.78		P	45.8
6	☐			11.11		P	43.3
7	☐			19.44		P	65.5
8	☐			16.67		P	86.6
9	☐			25.00		P	33.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			4.44		P	114.
2	☐						
3	☐			3.33		P	0.0
4	☐			6.67		P	100.
5	☐			3.33		P	0.0
6	☐			7.78		P	89.2
7	☐			11.11		P	69.3
8	☐			11.11		P	17.3
9	☐			10.00		P	33.3

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	30.55	0.0000	P	16.5
2	☐	0.100					
3	☐	1.000	1.003	1566.84	0.0016	P	4.9
4	☐	50.000	49.402	76082.43	0.0784	P	1.5
5	☐	125.000	125.765	199156.68	0.1995	P	0.4
6	☐	250.000	250.519	378894.66	0.3973	P	1.0
7	☐	500.000	496.541	757174.01	0.7875	P	0.4
8	☐	1000.000	1001.534	1519006.01	1.5883	P	0.6
9	☐			594.48	0.0007	P	25.2

$$y = 0.0016 * x + 3.2397E-005$$

$$R = 1.0000$$

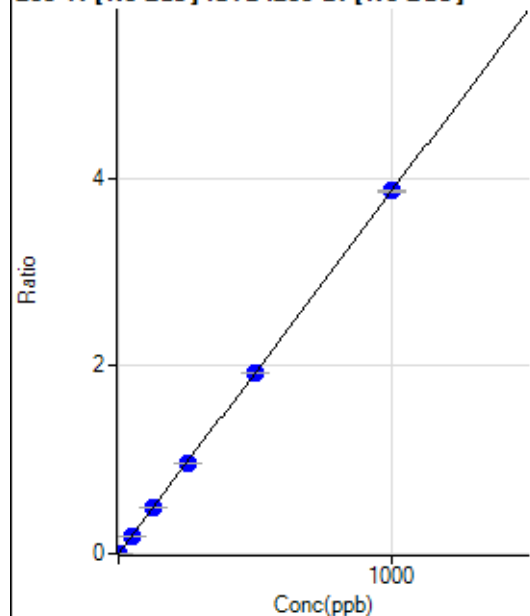
$$DL = 0.01012$$

$$BEC = 0.02043$$

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	138.90	0.0001	P	7.5
2	☐	0.100					
3	☐	1.000	0.917	3558.98	0.0037	P	1.9
4	☐	50.000	49.719	186547.52	0.1922	P	0.6
5	☐	125.000	125.587	484417.13	0.4852	P	0.5
6	☐	250.000	249.714	919885.43	0.9646	P	0.5
7	☐	500.000	497.199	1846534.52	1.9204	P	0.1
8	☐	1000.000	1001.413	3699023.74	3.8678	P	0.6
9	☐			1430.71	0.0016	P	9.2

$$y = 0.0039 * x + 1.4718E-004$$

$$R = 1.0000$$

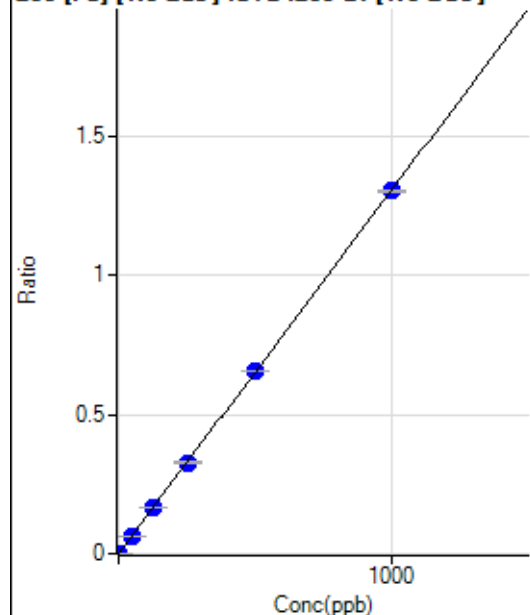
$$DL = 0.008527$$

$$BEC = 0.03811$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	142.60	0.0002	P	6.7
2	☐	0.100					
3	☐	1.000	0.941	1333.45	0.0014	P	1.5
4	☐	50.000	50.043	63655.95	0.0656	P	0.5
5	☐	125.000	125.888	164470.38	0.1647	P	0.4
6	☐	250.000	251.075	313177.90	0.3284	P	1.0
7	☐	500.000	502.339	631620.51	0.6569	P	0.1
8	☐	1000.000	998.449	1248529.18	1.3055	P	0.5
9	☐			1551.99	0.0017	P	4.3

$$y = 0.0013 * x + 1.5112E-004$$

$$R = 1.0000$$

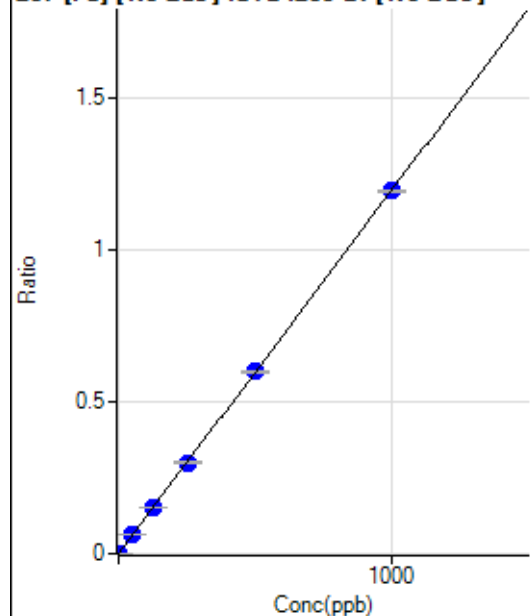
$$DL = 0.02334$$

$$BEC = 0.1156$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	174.08	0.0002	P	19.0
2	☐	0.100					
3	☐	1.000	0.859	1170.46	0.0012	P	8.6
4	☐	50.000	50.560	58934.55	0.0607	P	0.6
5	☐	125.000	125.737	150464.24	0.1507	P	0.2
6	☐	250.000	251.269	287030.40	0.3010	P	0.8
7	☐	500.000	500.719	576537.30	0.5996	P	0.2
8	☐	1000.000	999.203	1144150.75	1.1964	P	0.6
9	☐			1322.32	0.0015	P	6.4

$$y = 0.0012 * x + 1.8448E-004$$

$$R = 1.0000$$

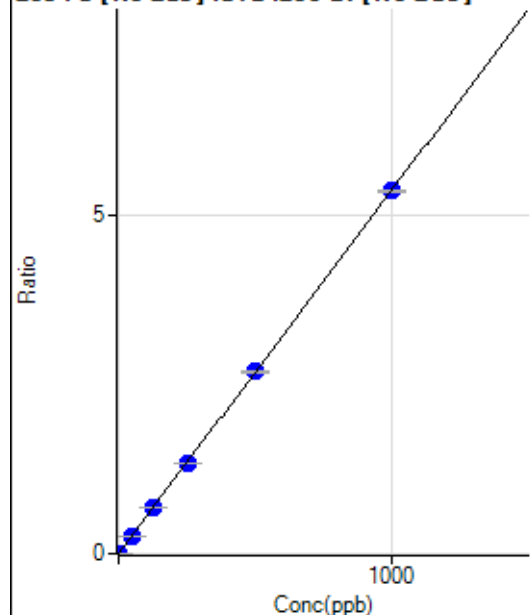
$$DL = 0.08794$$

$$BEC = 0.1541$$

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	709.29	0.0008	P	8.2
2	☐	0.100					
3	☐	1.000	0.900	5396.89	0.0056	P	1.1
4	☐	50.000	50.014	261715.64	0.2696	P	0.3
5	☐	125.000	125.622	674960.27	0.6761	P	0.2
6	☐	250.000	250.719	1286028.93	1.3485	P	0.4
7	☐	500.000	500.700	2588732.19	2.6923	P	0.1
8	☐	1000.000	999.392	5138635.70	5.3732	P	0.6
9	☐			6256.33	0.0070	P	3.2

$$y = 0.0054 * x + 7.5171E-004$$

$$R = 1.0000$$

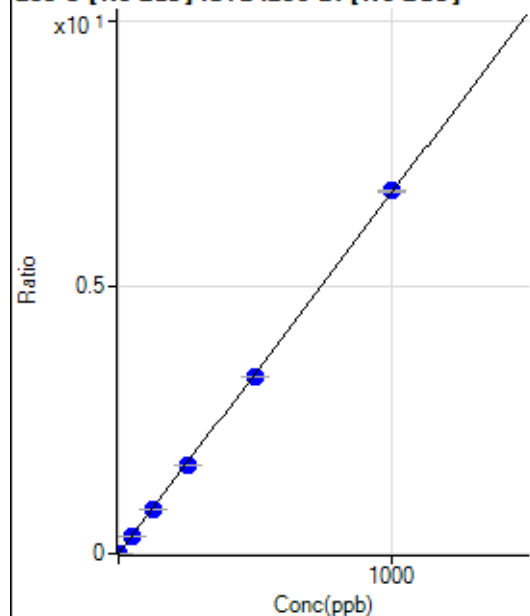
$$DL = 0.03447$$

$$BEC = 0.1398$$

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	30.56	0.0000	P	55.9
2	☐	0.100					
3	☐	1.000	0.836	5481.95	0.0057	P	4.2
4	☐	50.000	47.985	314868.67	0.3244	P	0.8
5	☐	125.000	120.867	815656.26	0.8170	P	0.3
6	☐	250.000	243.667	1570672.53	1.6470	P	0.3
7	☐	500.000	492.140	3198366.98	3.3264	P	0.4
8	☐	1000.000	1006.131	6503621.41	6.8004	P	0.7
9	☐			444.48	0.0005	P	25.5

$$y = 0.0068 * x + 3.2270E-005$$

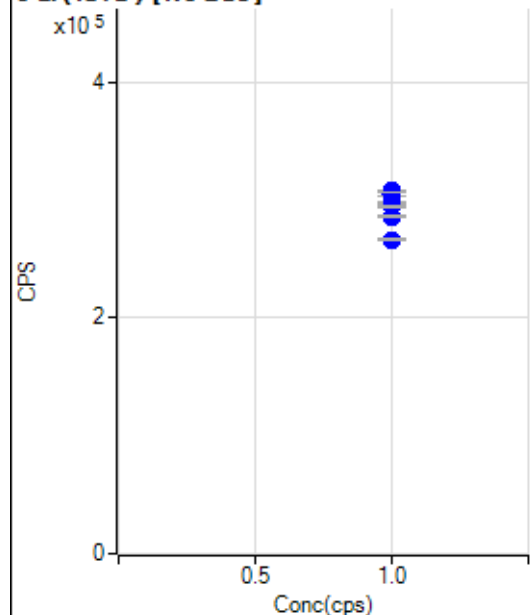
$$R = 0.9999$$

$$DL = 0.008001$$

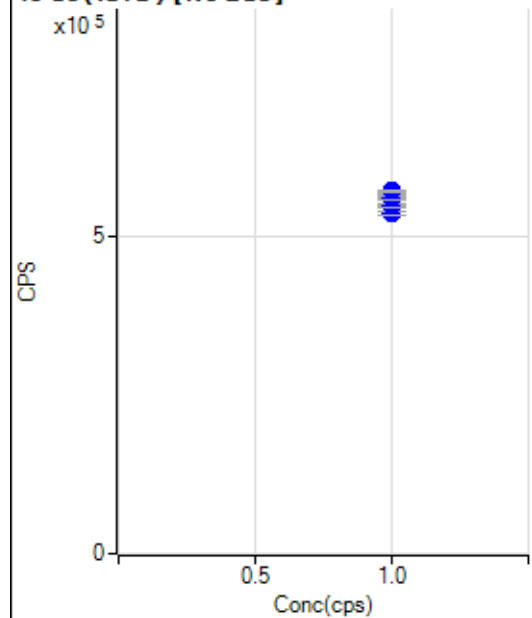
$$BEC = 0.004774$$

Weight: <None>

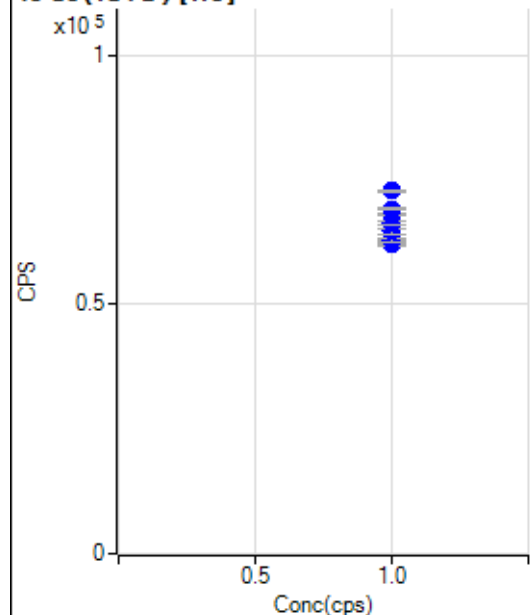
Min Conc: 0

6 Li (ISTD) [No Gas]

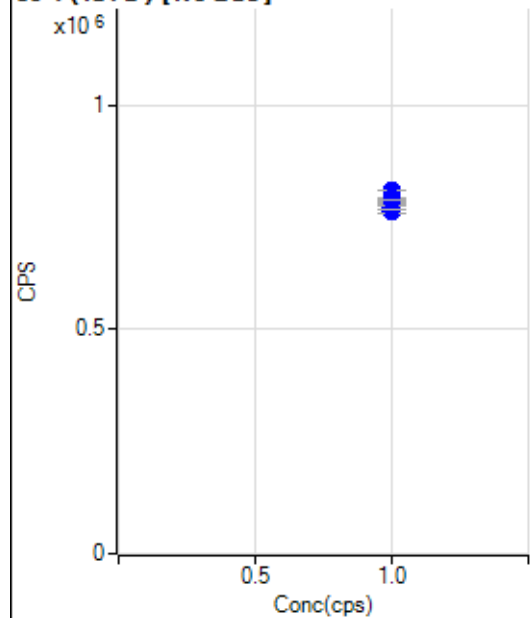
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		304366.89		P	1.2
2	☐	1.000					
3	☐	1.000		307466.79		P	0.2
4	☐	1.000		304558.70		P	0.8
5	☐	1.000		306439.79		P	0.3
6	☐	1.000		296770.14		P	0.6
7	☐	1.000		294254.14		P	0.6
8	☐	1.000		285712.34		P	0.3
9	☐	1.000		266274.62		P	0.7

45 Sc (ISTD) [No Gas]

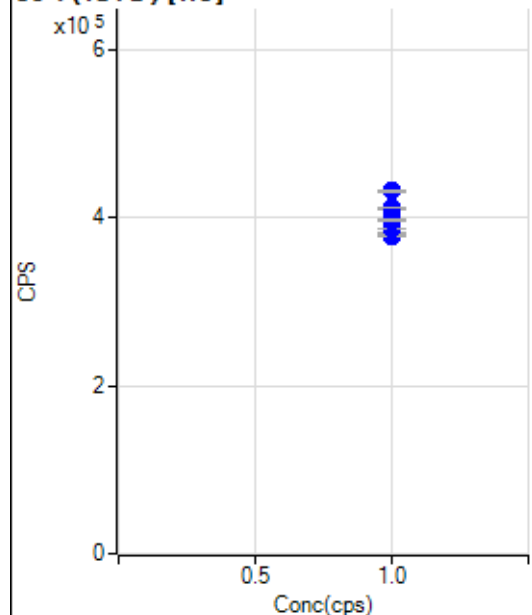
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		536633.88		P	1.0
2	☐	1.000					
3	☐	1.000		549067.26		P	0.4
4	☐	1.000		550007.55		P	0.7
5	☐	1.000		563171.44		P	0.7
6	☐	1.000		546969.09		P	0.9
7	☐	1.000		559399.64		P	0.5
8	☐	1.000		560285.95		P	0.9
9	☐	1.000		570813.47		P	0.4

45 Sc (ISTD) [He]

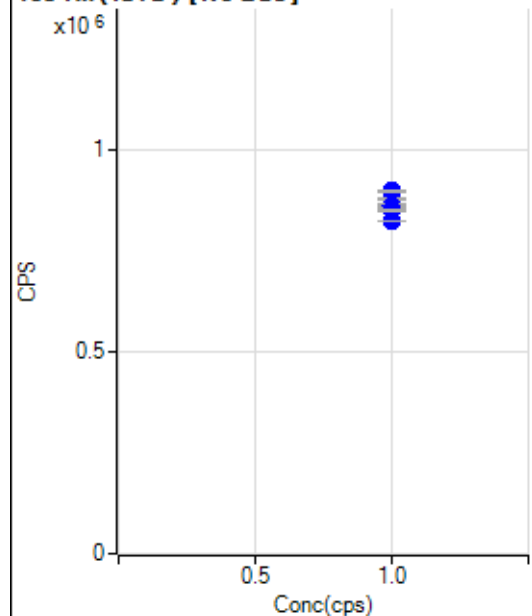
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		62680.91		P	1.1
2	☐	1.000					
3	☐	1.000		61995.88		P	0.6
4	☐	1.000		62791.54		P	1.1
5	☐	1.000		64721.75		P	1.8
6	☐	1.000		66241.83		P	0.9
7	☐	1.000		68077.87		P	1.0
8	☐	1.000		69198.57		P	0.6
9	☐	1.000		72782.24		P	0.7

89 Y (ISTD) [No Gas]

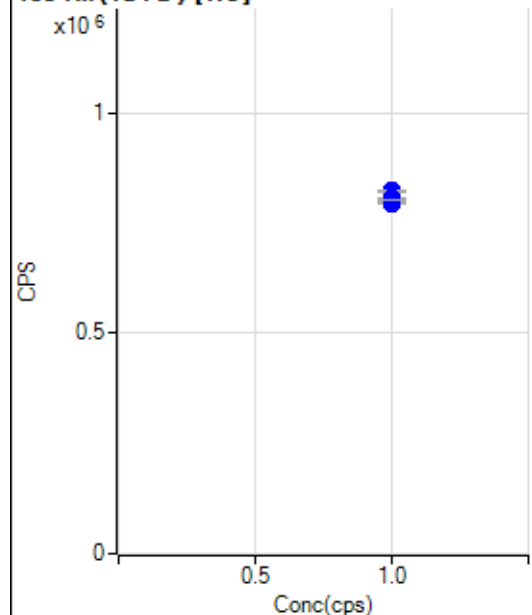
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		762523.00		P	1.1
2	☐	1.000					
3	☐	1.000		777828.48		P	0.9
4	☐	1.000		781900.46		P	0.5
5	☐	1.000		808203.17		P	0.1
6	☐	1.000		772189.19		P	0.9
7	☐	1.000		791562.78		P	0.7
8	☐	1.000		787644.00		P	0.6
9	☐	1.000		788738.74		P	0.2

89 Y(ISTD) [He]

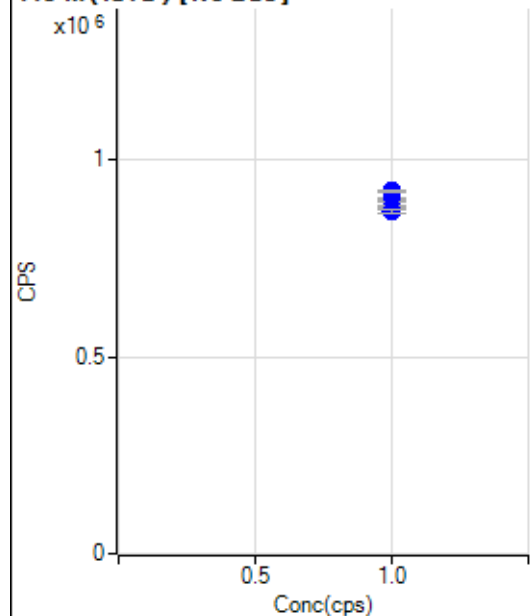
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		380012.94		P	0.7
2	☐	1.000					
3	☐	1.000		378169.70		P	0.1
4	☐	1.000		386347.07		P	0.4
5	☐	1.000		395831.14		P	0.2
6	☐	1.000		396909.07		P	0.6
7	☐	1.000		409779.26		P	0.2
8	☐	1.000		411083.88		P	0.2
9	☐	1.000		431246.10		P	0.3

103 Rh(ISTD) [No Gas]

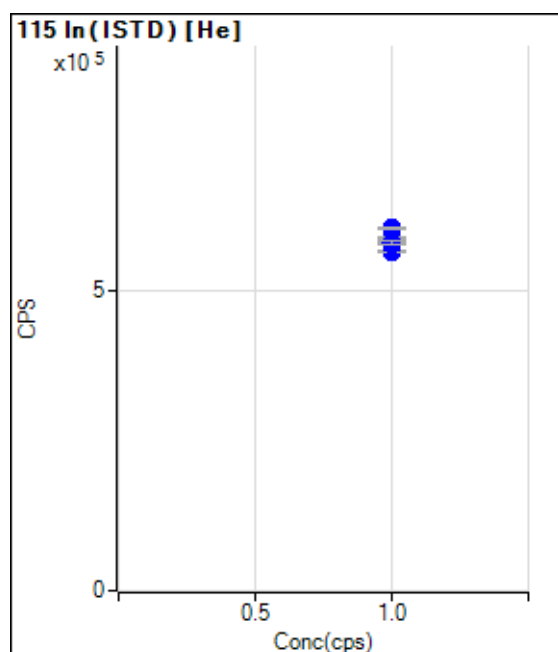
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		855797.45		P	1.3
2	☐	1.000					
3	☐	1.000		879790.49		P	0.3
4	☐	1.000		878719.49		P	0.2
5	☐	1.000		898593.11		P	0.4
6	☐	1.000		854850.95		P	0.6
7	☐	1.000		864031.78		P	1.0
8	☐	1.000		851046.78		P	0.5
9	☐	1.000		824444.52		P	0.0

103 Rh (ISTD) [He]

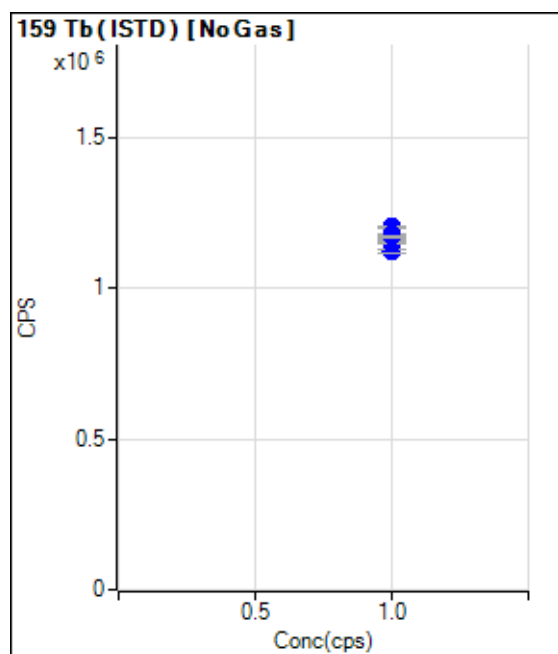
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		795769.07		P	0.4
2	☐	1.000					
3	☐	1.000		797387.20		P	0.3
4	☐	1.000		806859.21		P	0.3
5	☐	1.000		823106.33		P	0.5
6	☐	1.000		806579.70		P	0.6
7	☐	1.000		822590.39		P	0.1
8	☐	1.000		807017.40		P	0.6
9	☐	1.000		802640.65		P	0.4

115 In (ISTD) [No Gas]

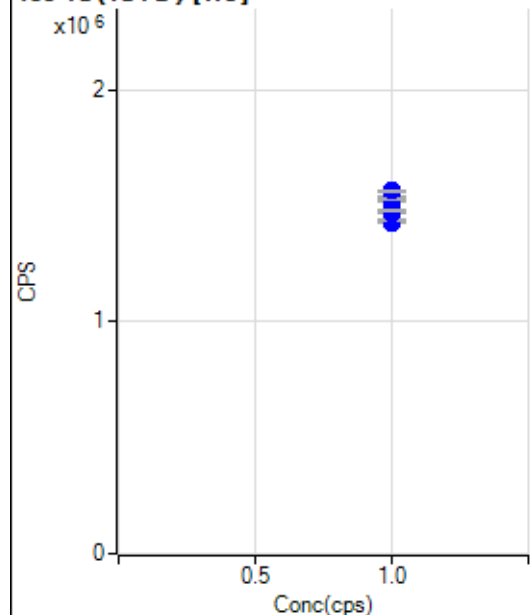
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		877227.41		P	0.9
2	☐	1.000					
3	☐	1.000		895377.41		P	0.6
4	☐	1.000		900537.80		P	0.7
5	☐	1.000		921829.31		P	0.4
6	☐	1.000		880707.99		P	0.7
7	☐	1.000		894123.85		P	0.2
8	☐	1.000		880251.41		P	0.7
9	☐	1.000		869958.86		P	0.8



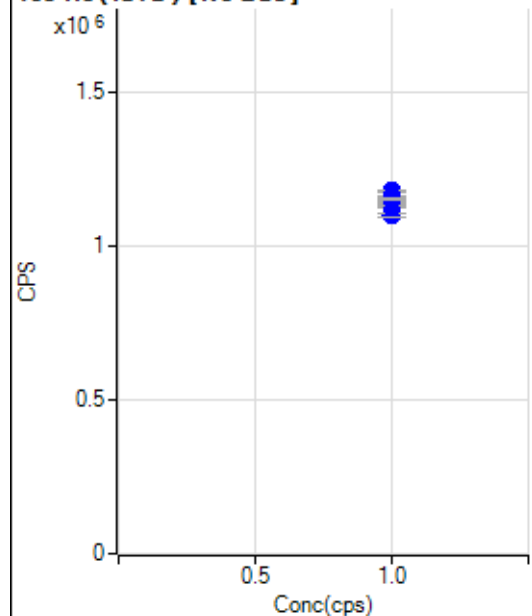
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		565567.09		P	0.5
2	☐	1.000					
3	☐	1.000		565222.47		P	0.4
4	☐	1.000		577964.15		P	0.3
5	☐	1.000		588302.72		P	0.5
6	☐	1.000		580789.02		P	0.5
7	☐	1.000		591484.69		P	0.3
8	☐	1.000		581088.91		P	1.1
9	☐	1.000		605916.37		P	0.2



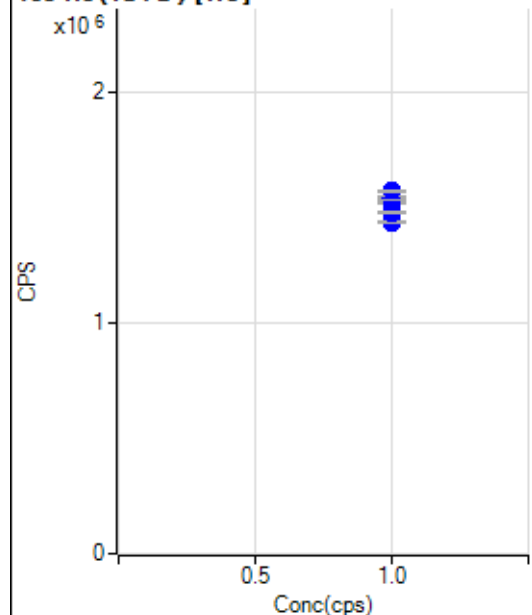
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1123478.84		P	1.3
2	☐	1.000					
3	☐	1.000		1148413.88		P	0.4
4	☐	1.000		1162592.47		P	0.4
5	☐	1.000		1204059.93		P	0.2
6	☐	1.000		1153385.81		P	0.4
7	☐	1.000		1175660.81		P	0.4
8	☐	1.000		1182926.96		P	0.1
9	☐	1.000		1171595.48		P	0.6

159 Tb (ISTD) [He]

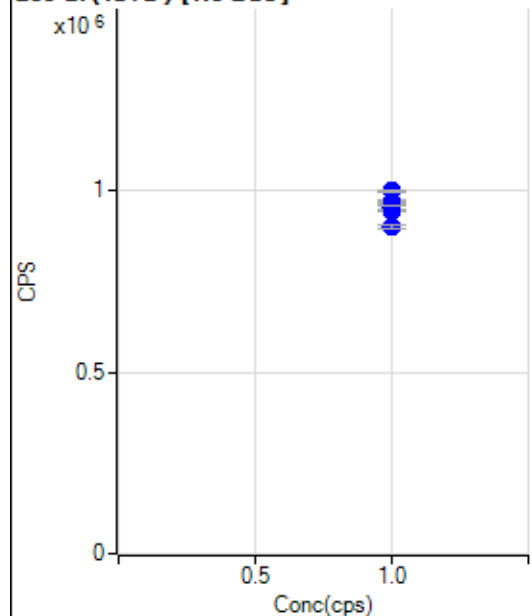
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1426920.79		P	0.5
2	☐	1.000					
3	☐	1.000		1437627.60		P	0.3
4	☐	1.000		1470524.82		P	0.3
5	☐	1.000		1520623.80		P	0.2
6	☐	1.000		1480956.00		P	0.6
7	☐	1.000		1537139.49		P	0.4
8	☐	1.000		1531709.11		P	0.6
9	☐	1.000		1565205.71		P	0.3

165 Ho (ISTD) [No Gas]

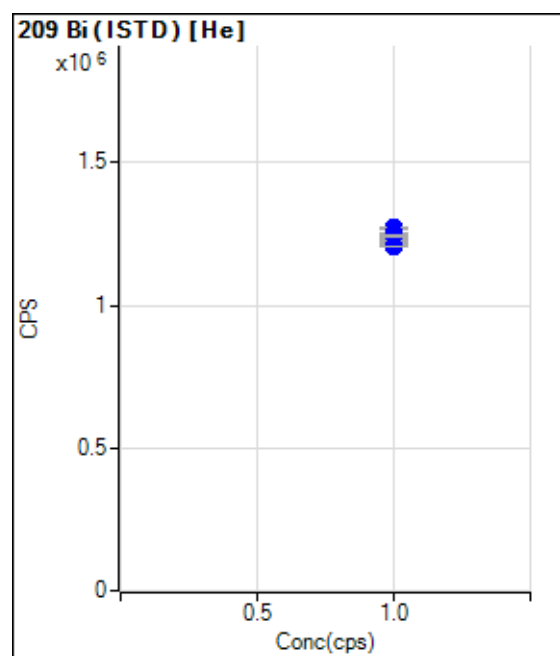
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1099567.07		P	1.0
2	☐	1.000					
3	☐	1.000		1125827.12		P	0.5
4	☐	1.000		1138298.94		P	0.5
5	☐	1.000		1177947.85		P	0.5
6	☐	1.000		1132691.75		P	0.7
7	☐	1.000		1152122.43		P	0.7
8	☐	1.000		1160747.27		P	0.4
9	☐	1.000		1150216.41		P	0.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1432897.03		P	0.3
2	☐	1.000					
3	☐	1.000		1439276.59		P	0.3
4	☐	1.000		1475105.66		P	0.1
5	☐	1.000		1520920.12		P	0.4
6	☐	1.000		1482996.79		P	0.7
7	☐	1.000		1537288.17		P	0.4
8	☐	1.000		1543763.97		P	1.0
9	☐	1.000		1573815.62		P	0.5

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		943994.01		P	0.9
2	☐	1.000					
3	☐	1.000		965083.65		P	0.5
4	☐	1.000		970723.64		P	0.2
5	☐	1.000		998381.66		P	0.4
6	☐	1.000		953669.07		P	0.8
7	☐	1.000		961515.72		P	0.2
8	☐	1.000		956360.53		P	0.2
9	☐	1.000		899261.06		P	0.9



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1215165.77		P	0.4
2	☐	1.000					
3	☐	1.000		1220052.26		P	0.2
4	☐	1.000		1241522.32		P	0.1
5	☐	1.000		1271153.78		P	0.4
6	☐	1.000		1226991.22		P	0.6
7	☐	1.000		1253914.77		P	0.4
8	☐	1.000		1243212.67		P	0.5
9	☐	1.000		1206018.86		P	0.4

US EPA Tune Check Sample Report

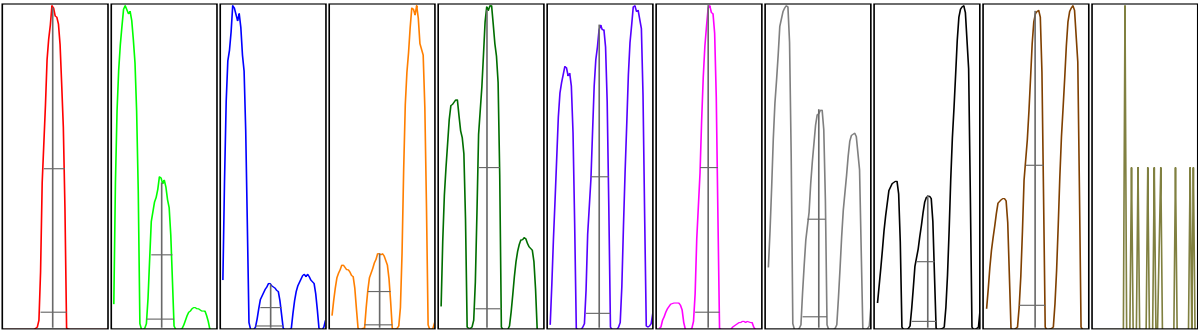
Batch Folder D:\ICP-MS Data\P7100617-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	1184	1.54	5.00	
24	4121	1.50	5.00	
25	587	1.65	5.00	
26	737	0.84	5.00	
59	7130	1.42	5.00	
113	946	0.65	5.00	
115	12063	2.13	5.00	
206	3252	1.89	5.00	
207	2917	2.00	5.00	
208	7017	1.98	5.00	
220	0	70.71		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	1160	1174	1182	1195	1208
24	4080	4081	4079	4145	4220
25	575	584	586	591	601
26	728	736	734	745	741
59	7017	7069	7091	7219	7253
113	941	950	940	944	954
115	12331	12321	12013	11893	11758
206	3184	3206	3243	3293	3333
207	2829	2920	2906	2944	2987
208	6816	6989	6987	7115	7178
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	2019	8.95	8.9 - 9.1		0.784	0.900	
24	6796	23.95	23.9 - 24.1		0.784	0.900	
25	955	24.95	24.9 - 25.1		0.785	0.900	
26	1177	25.95	25.9 - 26.1		0.787	0.900	
59	12012	58.90	58.9 - 59.1		0.779	0.900	
113	1823	113.00	112.9 - 113.1		0.728	0.900	
115	23770	115.00	114.9 - 115.1		0.727	0.900	
206	6289	206.05	205.9 - 206.1		0.733	0.900	
207	5642	207.05	206.9 - 207.1		0.729	0.900	
208	13664	208.00	207.9 - 208.1		0.739	0.900	
220	0	219.65	-		0.125		

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	18.0	V	Deflect	20.0	V
Extract 2	-220.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-120	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	130	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	3728	0.58	
89	2770	0.47	
205	5839	0.94	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	3700	3744	3742	3710	3745
89	2772	2789	2772	2760	2755
205	5773	5852	5879	5792	5900

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	18.0	V	Deflect	4.6	V
Extract 2	-225.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-120	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			