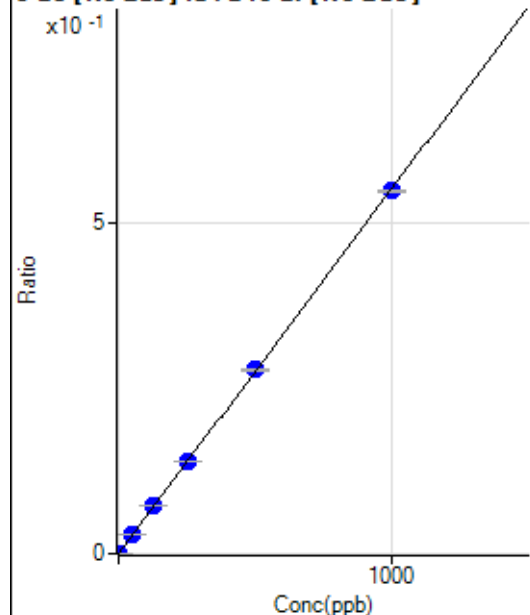


Calibration for 002CALB.d

Batch Folder: D:\ICP-MS Data\P7010920-MS.b\
 Analysis File: P7010920-MS.batch.bin
 DA Date-Time: 2020-01-09 15:55:56
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S0	2020-01-09 15:47:28
2	004CALS.d	S02	2020-01-09 15:51:11
3	005CALS.d	S03	2020-01-09 15:56:11
4	006CALS.d	S04	2020-01-09 16:00:35
5	007CALS.d	S05	2020-01-09 16:04:33
6	008CALS.d	S06	2020-01-09 16:08:28
7	009CALS.d	S07	2020-01-09 16:12:22
8	010CALS.d	S08	2020-01-09 16:16:18

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	118.52	0.0000	P	6.3
2	☐	1.000	1.046	3743.16	0.0006	P	3.4
3	☐	50.000	53.009	181510.32	0.0292	P	0.5
4	☐	125.000	130.182	429959.96	0.0718	P	1.0
5	☐	250.000	254.180	807544.28	0.1401	P	0.3
6	☐	500.000	505.714	1542527.02	0.2787	P	0.8
7	☐	1000.000	995.300	2891222.32	0.5485	P	0.6
8	☐			611.14	0.0001	P	6.9

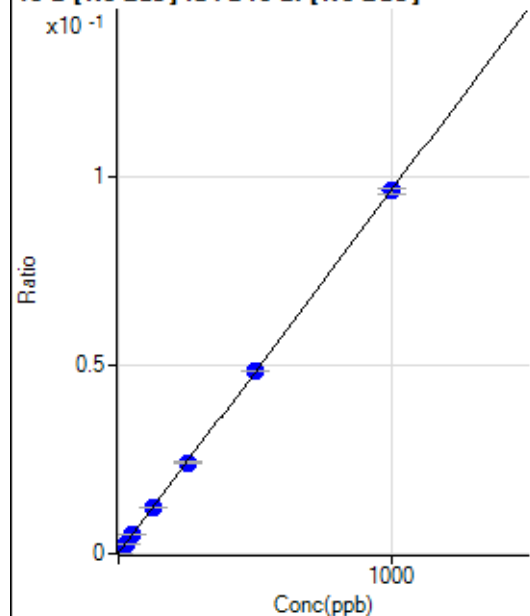
$$y = 5.5111\text{E-}004 * x + 1.8715\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.006385$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	650.04	0.0001	P	6.4
2	☐	25.000	25.160	15889.57	0.0025	P	3.3
3	☐	50.000	51.107	31205.44	0.0050	P	3.0
4	☐	125.000	126.215	73454.08	0.0123	P	2.5
5	☐	250.000	249.849	139318.63	0.0242	P	1.3
6	☐	500.000	503.244	268863.17	0.0486	P	0.6
7	☐	1000.000	998.204	507306.68	0.0963	P	1.5
8	☐			10818.26	0.0022	P	11.5

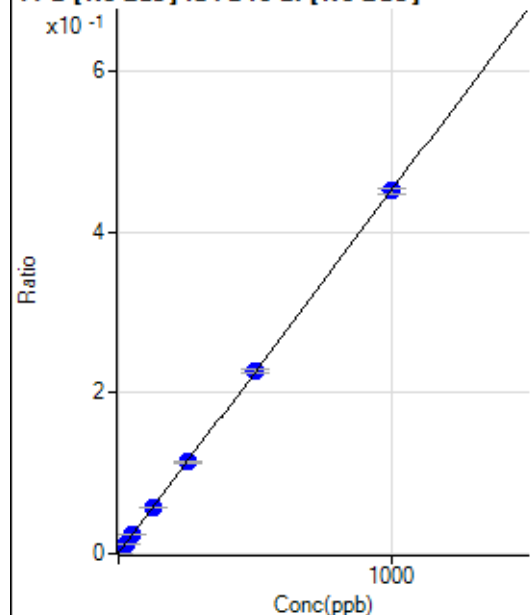
$$y = 9.6326\text{E-}005 * x + 1.0259\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2049$$

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	2864.29	0.0005	P	8.6
2	☐	25.000	24.526	72519.26	0.0115	P	0.4
3	☐	50.000	51.191	146348.51	0.0236	P	1.9
4	☐	125.000	124.836	340451.81	0.0568	P	1.0
5	☐	250.000	250.957	655811.00	0.1138	P	0.9
6	☐	500.000	502.730	1259073.29	0.2275	P	1.5
7	☐	1000.000	998.369	2378398.82	0.4513	P	1.6
8	☐			51157.57	0.0105	P	7.9

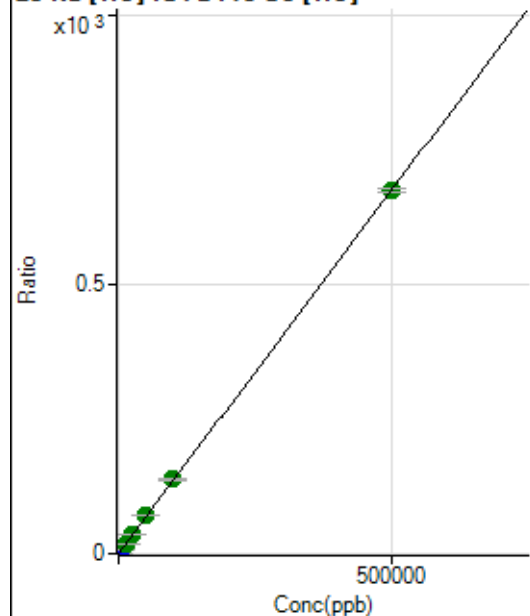
$$y = 4.5156\text{E-}004 * x + 4.5238\text{E-}004$$

$$R = 1.0000$$

$$DL = 0.2597$$

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	15461.32	0.0317	P	1.8
2	☐	500.000	503.240	359272.30	0.7107	P	2.9
3	☐	5000.000	5260.773	3381483.32	7.1304	P	4.5
4	☐	12500.000	13455.620	8331990.12	18.1883	A	1.1
5	☐	25000.000	26240.260	16254870.33	35.4395	A	1.2
6	☐	50000.000	52357.822	31387021.19	70.6818	A	0.6
7	☐	100000.00	101968.07	60068569.40	137.6244	A	0.5
8	☐	500000.00	499282.08	277627667.3	673.7480	A	1.1

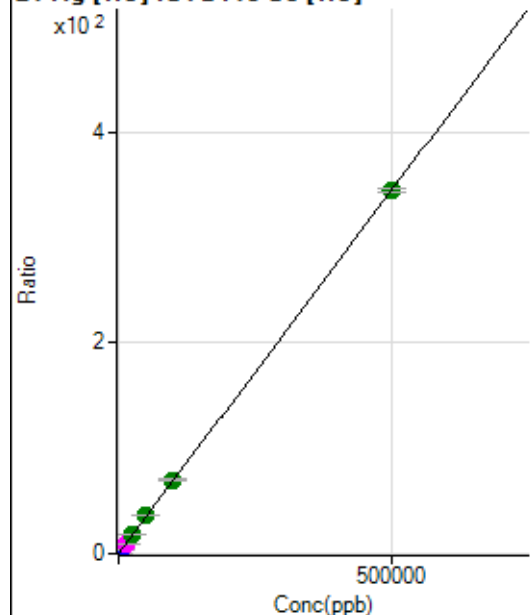
$$y = 0.0013 * x + 0.0317$$

$$R = 1.0000$$

$$DL = 1.238$$

Weight: <None>

Min Conc: 0

24 Mg [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	525.03	0.0011	P	19.3
2	☐	500.000	510.511	178549.09	0.3532	P	5.7
3	☐	5000.000	5207.402	1703597.13	3.5925	P	7.1
4	☐	12500.000	13567.781	4287117.59	9.3586	M	1.2
5	☐	25000.000	26433.932	8362436.99	18.2322	A	1.1
6	☐	50000.000	52311.594	16021488.03	36.0796	A	0.4
7	☐	100000.00	101677.52	30607066.66	70.1266	A	1.2
8	☐	500000.00	499332.86	141911369.8	344.3837	A	1.1

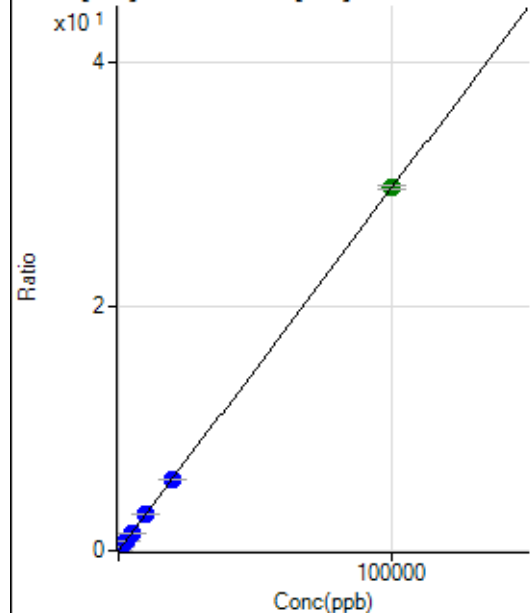
$$y = 6.8969E-004 * x + 0.0011$$

$$R = 1.0000$$

$$DL = 0.9059$$

Weight: <None>

Min Conc: 0

27 Al [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	141.68	0.0003	P	41.5
2	☐	20.000	18.203	2875.41	0.0057	P	2.0
3	☐	1000.000	965.565	135921.81	0.2866	P	7.3
4	☐	2500.000	2562.635	348283.29	0.7603	P	0.9
5	☐	5000.000	5009.711	681600.68	1.4860	P	0.9
6	☐	10000.000	9890.306	1302603.58	2.9334	P	0.3
7	☐	20000.000	19477.436	2521236.00	5.7766	P	1.1
8	☐	100000.00	100113.77	12234840.73	29.6905	A	1.0

$$y = 2.9656E-004 * x + 2.9088E-004$$

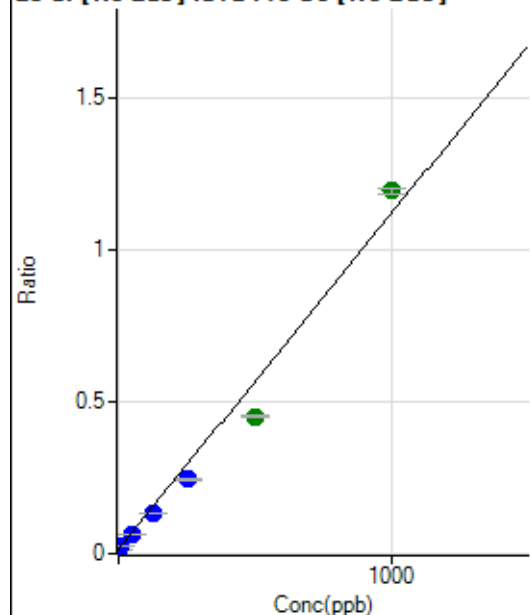
$$R = 1.0000$$

$$DL = 1.222$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	211719.68	0.0157	P	0.5
2	☐	10.000	9.583	349193.69	0.0263	P	0.8
3	☐	50.000	42.998	837412.61	0.0632	P	0.8
4	☐	125.000	106.813	1696594.78	0.1336	P	1.1
5	☐	250.000	206.597	3036753.59	0.2437	P	2.0
6	☐	500.000	393.759	5498872.65	0.4503	A	1.2
7	☐	1000.000	1066.599	14069475.66	1.1928	A	1.8
8	☐			598230.60	0.0534	P	1.3

$$y = 0.0011 * x + 0.0157$$

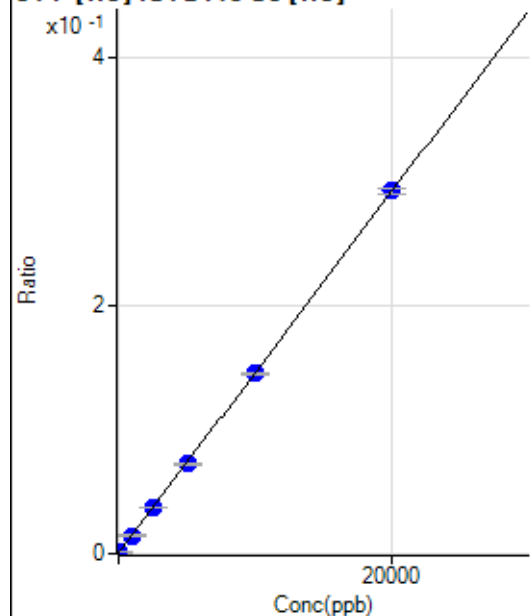
$$R = 0.9913$$

$$DL = 0.2138$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-23.317	197.23	0.0004	P	22.9
2	☐	0.000	23.317	547.25	0.0011	P	10.0
3	☐	1000.000	937.490	6818.48	0.0144	P	6.3
4	☐	2500.000	2473.572	16821.34	0.0367	P	0.8
5	☐	5000.000	4924.303	33187.79	0.0724	P	1.4
6	☐	10000.000	9923.243	64415.65	0.1451	P	2.0
7	☐	20000.000	20063.732	127685.65	0.2925	P	1.3
8	☐			188.90	0.0005	P	13.7

$$y = 1.4544E-005 * x + 7.4301E-004$$

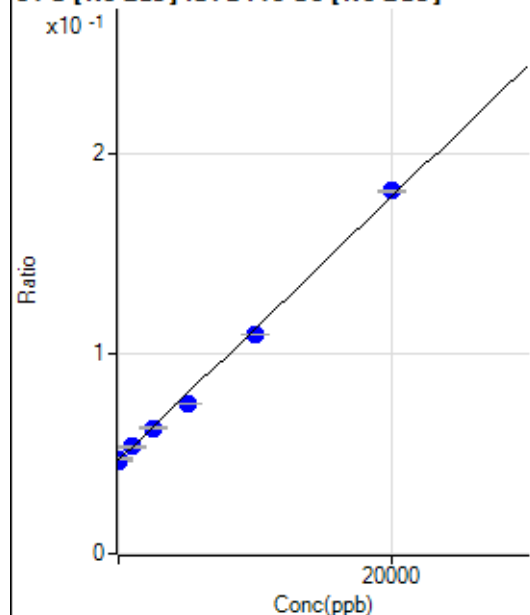
$$R = 1.0000$$

$$DL = 20.7$$

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	-120.856	619154.53	0.0459	P	0.2
2	☐	0.000	120.856	631423.21	0.0475	P	0.4
3	☐	1000.000	1016.216	708237.68	0.0534	P	1.7
4	☐	2500.000	2424.283	796237.36	0.0627	P	0.9
5	☐	5000.000	4289.360	934232.61	0.0750	P	0.6
6	☐	10000.000	9517.347	1335896.75	0.1094	P	0.6
7	☐	20000.000	20427.640	2137618.43	0.1812	P	0.7
8	☐			447222.23	0.0400	P	1.8

$$y = 6.5844\text{E-}006 * x + 0.0467$$

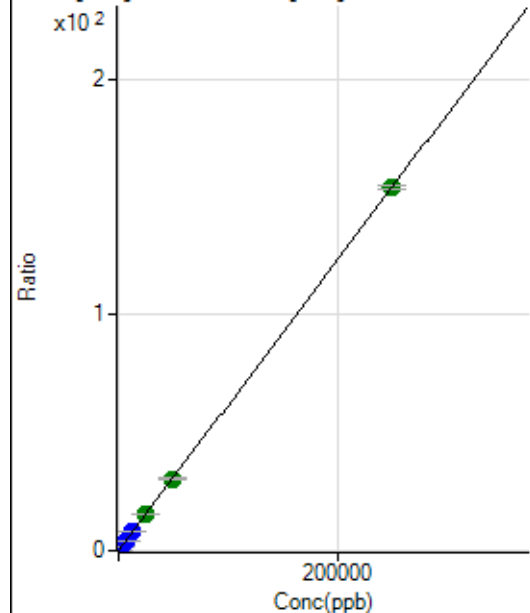
R = 0.9988

DL = 74.31

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	22932.39	0.0470	P	3.0
2	☐	500.000	494.547	177634.33	0.3514	P	3.4
3	☐	2500.000	2559.722	769502.66	1.6225	P	2.2
4	☐	6250.000	6430.507	1834692.14	4.0050	P	0.5
5	☐	12500.000	12747.885	3620441.22	7.8933	P	0.5
6	☐	25000.000	25342.602	6947445.73	15.6454	A	0.8
7	☐	50000.000	49624.845	13351924.69	30.5911	A	0.9
8	☐	250000.00	250023.27	63432698.64	153.9365	A	0.9

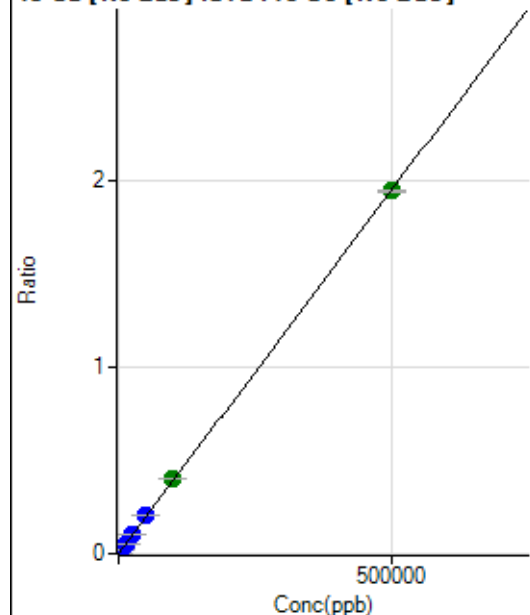
$$y = 6.1550\text{E-}004 * x + 0.0470$$

R = 1.0000

DL = 6.86

Weight: <None>

Min Conc: 0

43 Ca [No Gas] ISTD:45 Sc [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	475.03	0.0000	P	14.2
2	☐	500.000	523.992	27640.64	0.0021	P	1.1
3	☐	5000.000	5342.913	276956.55	0.0209	P	0.8
4	☐	12500.000	13374.221	663402.94	0.0522	P	1.3
5	☐	25000.000	26569.700	1292648.39	0.1037	P	1.4
6	☐	50000.000	53154.717	2533714.16	0.2075	P	1.2
7	☐	100000.00	102269.94	4708488.52	0.3992	A	0.3
8	☐	500000.00	499126.74	21808866.11	1.9481	A	0.6

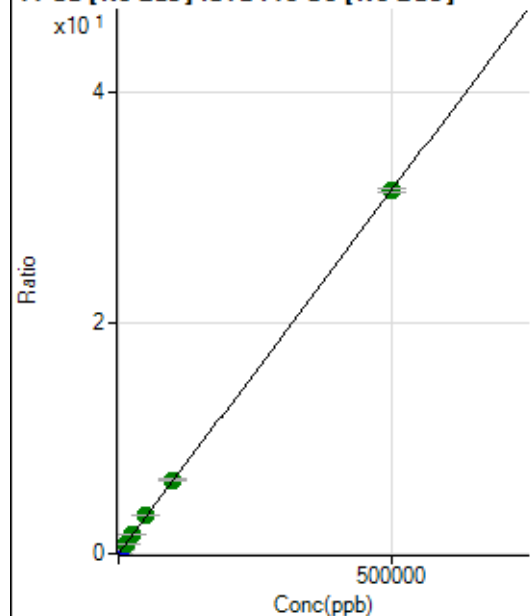
$$y = 3.9030E-006 * x + 3.5258E-005$$

$$R = 1.0000$$

$$DL = 3.848$$

Weight: <None>

Min Conc: 0

44 Ca [No Gas] ISTD:45 Sc [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16649.34	0.0012	P	3.2
2	☐	500.000	515.564	448159.36	0.0337	P	0.5
3	☐	5000.000	5342.224	4480850.10	0.3379	P	0.8
4	☐	12500.000	13145.144	10538329.49	0.8298	A	0.7
5	☐	25000.000	26167.484	20567762.96	1.6505	A	0.6
6	☐	50000.000	52672.632	40555772.78	3.3211	A	0.7
7	☐	100000.00	101704.80	75623656.55	6.4116	A	0.5
8	☐	500000.00	499313.83	352314566.2	31.4724	A	1.2

$$y = 6.3029E-005 * x + 0.0012$$

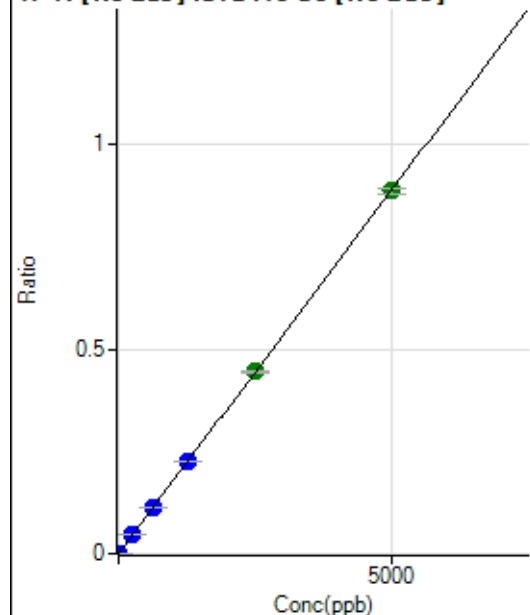
$$R = 1.0000$$

$$DL = 1.874$$

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	161.12	0.0000	P	31.8
2	☐	5.000	5.099	12191.59	0.0009	P	1.1
3	☐	250.000	254.061	598512.78	0.0451	P	0.8
4	☐	625.000	634.707	1431956.03	0.1127	P	0.5
5	☐	1250.000	1262.552	2794613.45	0.2243	P	0.3
6	☐	2500.000	2505.439	5434335.67	0.4450	A	1.2
7	☐	5000.000	4992.726	10459608.05	0.8868	A	1.3
8	☐			2947.65	0.0003	P	6.3

$$y = 1.7762\text{E-}004 * x + 1.1972\text{E-}005$$

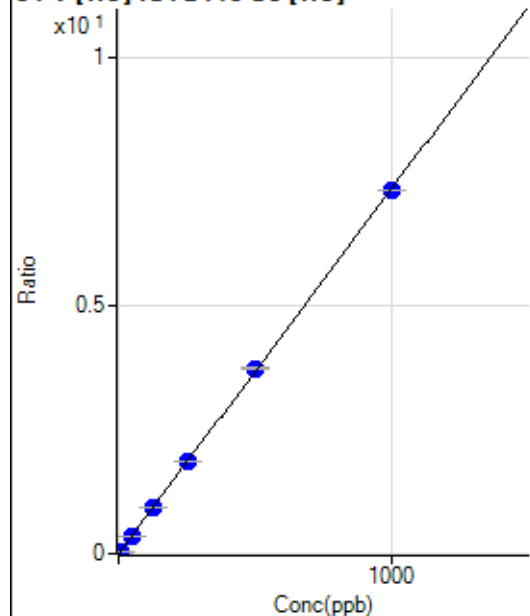
$$R = 1.0000$$

$$DL = 0.06422$$

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	6.67	0.0000	P	86.6
2	☐	5.000	4.793	17795.40	0.0352	P	5.5
3	☐	50.000	47.927	166836.94	0.3518	P	6.1
4	☐	125.000	127.659	429289.36	0.9371	P	1.1
5	☐	250.000	254.282	856142.84	1.8666	P	0.9
6	☐	500.000	508.251	1656755.70	3.7309	P	0.5
7	☐	1000.000	994.576	3186678.67	7.3009	P	0.1
8	☐			1103.40	0.0027	P	13.3

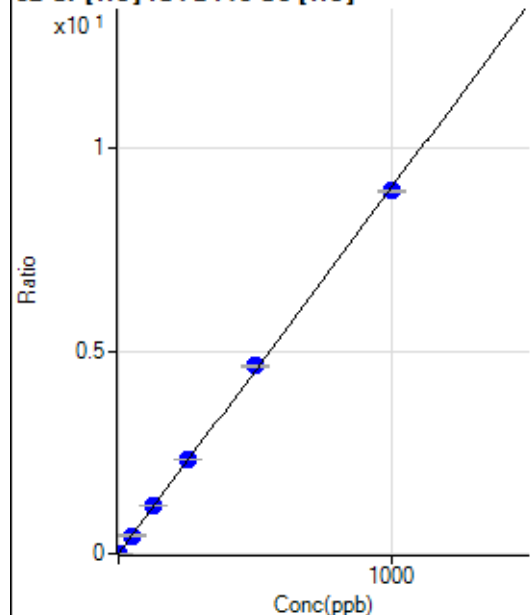
$$y = 0.0073 * x + 1.3705\text{E-}005$$

$$R = 0.9999$$

$$DL = 0.004851$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1597.89	0.0033	P	3.8
2	☐	2.000	1.848	10099.17	0.0200	P	4.8
3	☐	50.000	48.831	210856.02	0.4447	P	7.9
4	☐	125.000	129.863	539238.42	1.1771	P	1.1
5	☐	250.000	258.392	1072796.03	2.3389	P	0.5
6	☐	500.000	512.804	2059817.07	4.6386	P	0.4
7	☐	1000.000	990.951	3911033.76	8.9607	P	0.5
8	☐			99138.24	0.2406	P	1.0

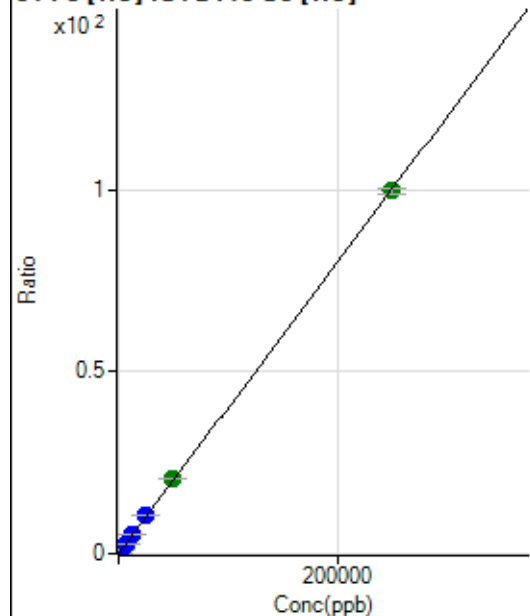
$$y = 0.0090 * x + 0.0033$$

$$R = 0.9998$$

$$DL = 0.04183$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	651.14	0.0013	P	2.6
2	☐	50.000	51.260	11023.18	0.0218	P	3.7
3	☐	2500.000	2562.978	485986.49	1.0249	P	7.2
4	☐	6250.000	6834.030	1250850.42	2.7305	P	0.8
5	☐	12500.000	13537.331	2480198.66	5.4075	P	1.1
6	☐	25000.000	26752.602	4744795.76	10.6851	P	0.0
7	☐	50000.000	51624.643	8999035.42	20.6178	A	0.9
8	☐	250000.00	249432.71	41045701.33	99.6129	A	1.5

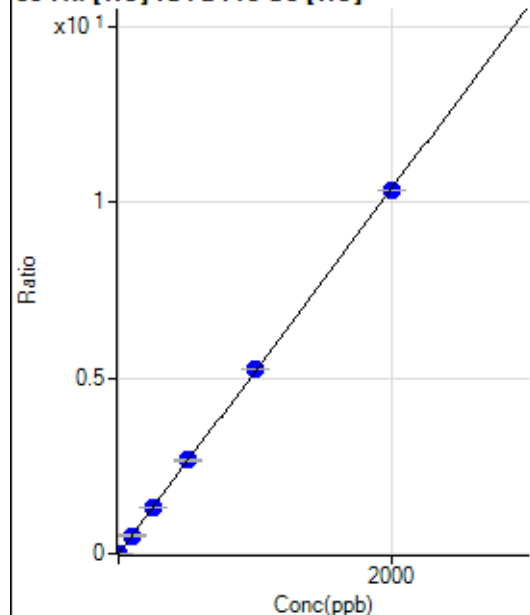
$$y = 3.9935E-004 * x + 0.0013$$

$$R = 1.0000$$

$$DL = 0.2572$$

Weight: <None>

Min Conc: 0

⁵⁵Mn [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	61.11	0.0001	P	25.2
2	☐	1.000	0.980	2635.84	0.0052	P	8.3
3	☐	100.000	97.357	239848.18	0.5058	P	5.8
4	☐	250.000	256.612	610606.92	1.3329	P	0.5
5	☐	500.000	511.698	1219003.29	2.6578	P	1.0
6	☐	1000.000	1015.059	2341103.09	5.2721	P	0.4
7	☐	2000.000	1988.852	4508733.51	10.3297	P	0.1
8	☐			17564.02	0.0426	P	2.9

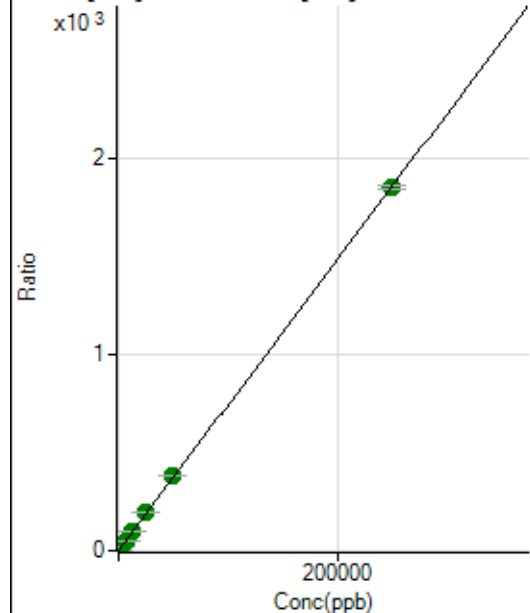
$$y = 0.0052 * x + 1.2508E-004$$

$$R = 0.9999$$

$$DL = 0.01819$$

Weight: <None>

Min Conc: 0

⁵⁶Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	6401.56	0.0131	P	5.9
2	☐	50.000	50.000	193774.53	0.3833	P	4.1
3	☐	2500.000	2488.790	8744020.51	18.4397	A	6.9
4	☐	6250.000	6631.530	22498093.79	49.1119	A	0.8
5	☐	12500.000	13223.235	44908927.39	97.9158	A	1.0
6	☐	25000.000	26322.341	86546938.97	194.8994	A	0.1
7	☐	50000.000	51439.186	166237753.7	380.8604	A	0.6
8	☐	250000.00	249534.34	761307239.2	1,847.524	A	1.1

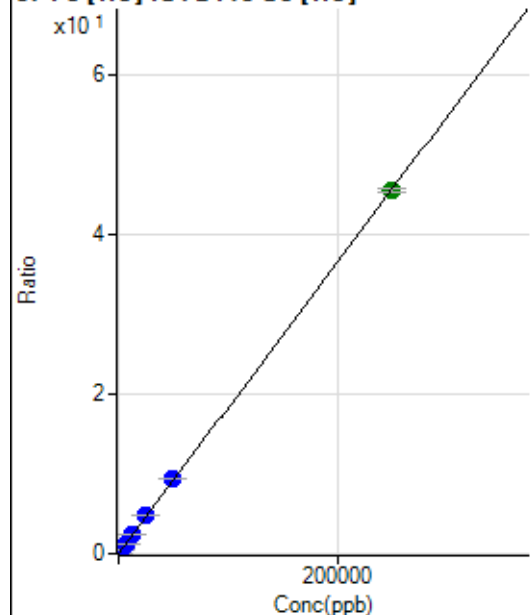
$$y = 0.0074 * x + 0.0131$$

$$R = 1.0000$$

$$DL = 0.3113$$

Weight: <None>

Min Conc: 0

⁵⁷Fe [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	288.90	0.0006	P	15.6
2	☐	50.000	52.044	5099.18	0.0101	P	4.4
3	☐	2500.000	2514.326	217797.92	0.4593	P	7.7
4	☐	6250.000	6712.609	561281.55	1.2252	P	0.8
5	☐	12500.000	13291.968	1112519.24	2.4256	P	0.7
6	☐	25000.000	26599.991	2155225.29	4.8535	P	0.4
7	☐	50000.000	51907.800	4133643.47	9.4707	P	0.6
8	☐	250000.00	249407.13	18749967.78	45.5024	A	1.2

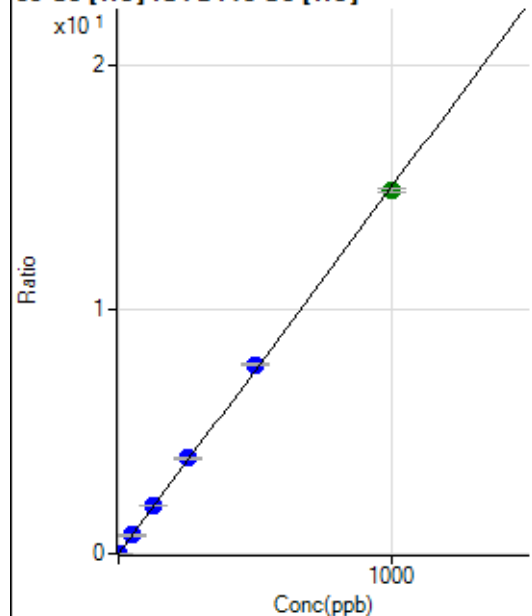
$$y = 1.8244\text{E-}004 * x + 5.9222\text{E-}004$$

$$R = 1.0000$$

$$DL = 1.515$$

Weight: <None>

Min Conc: 0

⁵⁹Co [He] ISTD:45 Sc [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	96.67	0.0002	P	18.7
2	☐	1.000	0.957	7366.41	0.0146	P	2.7
3	☐	50.000	50.322	358381.26	0.7558	P	6.9
4	☐	125.000	132.093	908627.05	1.9835	P	1.4
5	☐	250.000	259.926	1790060.96	3.9028	P	0.8
6	☐	500.000	514.520	3430494.46	7.7254	P	0.9
7	☐	1000.000	989.356	6483494.35	14.8548	A	1.0
8	☐			11757.10	0.0285	P	0.9

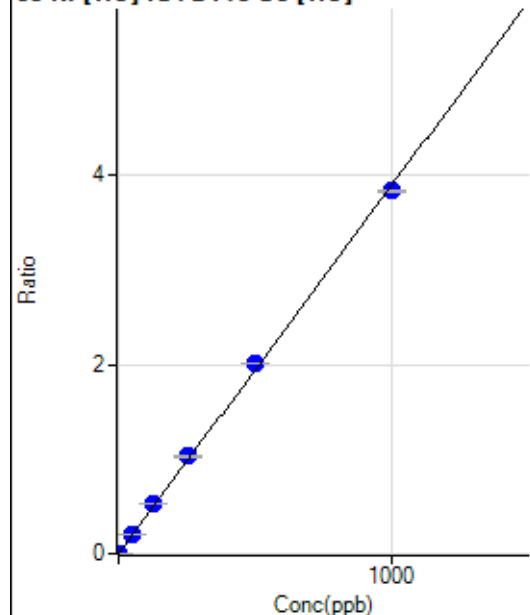
$$y = 0.0150 * x + 1.9797\text{E-}004$$

$$R = 0.9998$$

$$DL = 0.007414$$

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	107.78	0.0002	P	14.7
2	☐	1.000	1.040	2159.09	0.0043	P	5.4
3	☐	50.000	51.340	94867.60	0.2001	P	6.5
4	☐	125.000	134.594	240080.25	0.5241	P	2.1
5	☐	250.000	264.633	472523.78	1.0302	P	1.0
6	☐	500.000	518.785	896765.11	2.0195	P	0.3
7	☐	1000.000	985.683	1674637.13	3.8368	P	0.6
8	☐			30625.48	0.0743	P	0.6

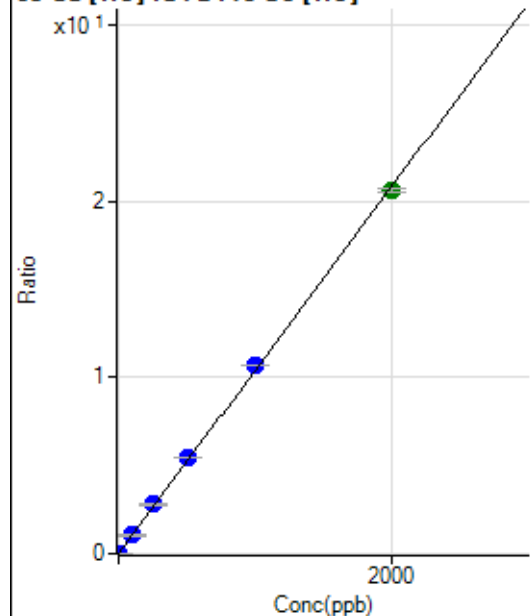
$$y = 0.0039 * x + 2.2103E-004$$

$$R = 0.9996$$

$$DL = 0.02499$$

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	961.16	0.0020	P	5.1
2	☐	2.000	2.011	11571.42	0.0229	P	4.2
3	☐	100.000	101.724	502687.53	1.0600	P	6.2
4	☐	250.000	268.715	1281256.44	2.7970	P	1.9
5	☐	500.000	525.629	2508471.30	5.4692	P	0.9
6	☐	1000.000	1026.848	4743641.91	10.6825	P	0.6
7	☐	2000.000	1977.743	8979295.63	20.5731	A	0.9
8	☐			16155.78	0.0392	P	1.5

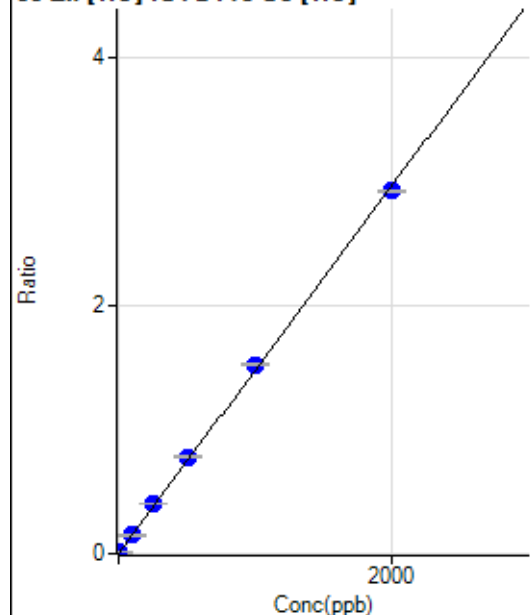
$$y = 0.0104 * x + 0.0020$$

$$R = 0.9997$$

$$DL = 0.02879$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	192.23	0.0004	P	14.3
2	☐	2.000	5.244	4129.54	0.0082	P	1.1
3	☐	100.000	101.712	71706.64	0.1512	P	5.8
4	☐	250.000	270.340	183816.47	0.4013	P	1.0
5	☐	500.000	526.867	358494.13	0.7816	P	1.5
6	☐	1000.000	1029.925	678338.45	1.5276	P	0.5
7	☐	2000.000	1975.690	1278843.54	2.9300	P	0.7
8	☐			18222.68	0.0442	P	4.0

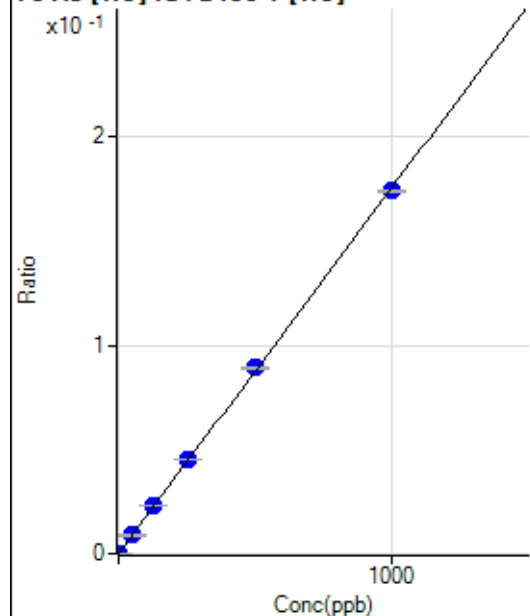
$$y = 0.0015 * x + 3.9406E-004$$

$$R = 0.9997$$

$$DL = 0.114$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	11.73	0.0000	P	24.9
2	☐	1.000	1.053	483.35	0.0002	P	11.1
3	☐	50.000	50.340	21187.77	0.0088	P	5.0
4	☐	125.000	130.878	54362.89	0.0229	P	0.2
5	☐	250.000	256.744	106404.25	0.0450	P	1.2
6	☐	500.000	509.345	206386.85	0.0893	P	0.9
7	☐	1000.000	992.890	394966.77	0.1740	P	0.7
8	☐			241.36	0.0001	P	8.2

$$y = 1.7523E-004 * x + 4.7858E-006$$

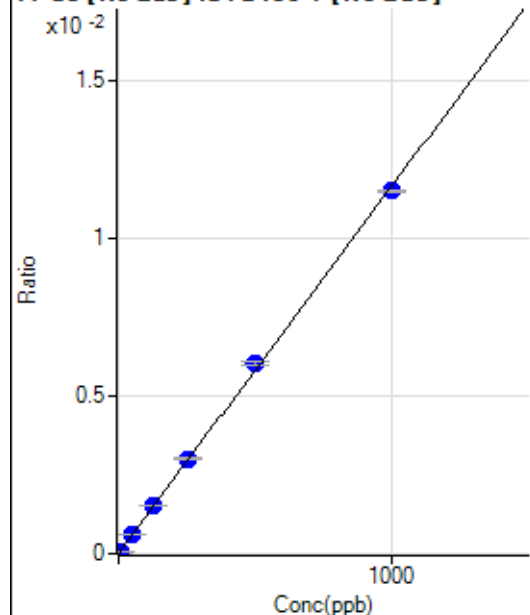
$$R = 0.9999$$

$$DL = 0.02041$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	180.19	0.0000	P	14.5
2	☐	5.000	5.973	1675.20	0.0001	P	11.5
3	☐	50.000	52.905	13290.06	0.0006	P	2.0
4	☐	125.000	130.215	31807.86	0.0015	P	1.5
5	☐	250.000	258.115	62669.31	0.0030	P	2.1
6	☐	500.000	517.835	124224.43	0.0060	P	2.5
7	☐	1000.000	988.252	229181.08	0.0115	P	0.6
8	☐			407.10	0.0000	P	3.5

$$y = 1.1629E-005 * x + 8.2593E-006$$

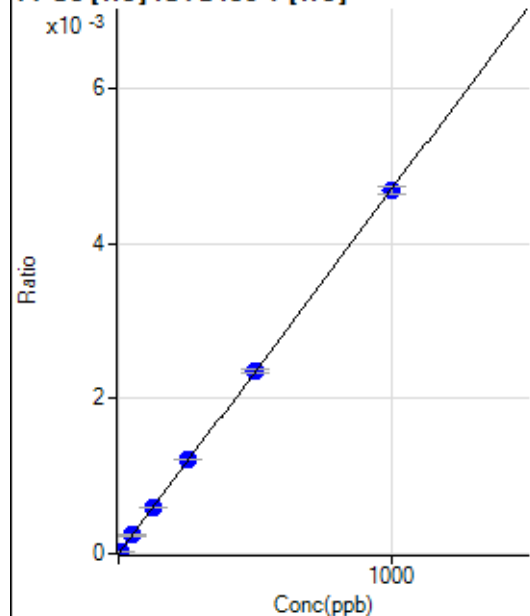
$$R = 0.9997$$

$$DL = 0.3094$$

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	☐	5.000	5.561	66.67	0.0000	P	37.6
3	☐	50.000	50.291	566.69	0.0002	P	4.1
4	☐	125.000	126.962	1412.31	0.0006	P	1.3
5	☐	250.000	259.870	2884.78	0.0012	P	0.7
6	☐	500.000	502.403	5453.33	0.0024	P	2.5
7	☐	1000.000	996.068	10612.95	0.0047	P	2.3
8	☐			10.00	0.0000	P	0.5

$$y = 4.6939E-006 * x + 0.0000E+000$$

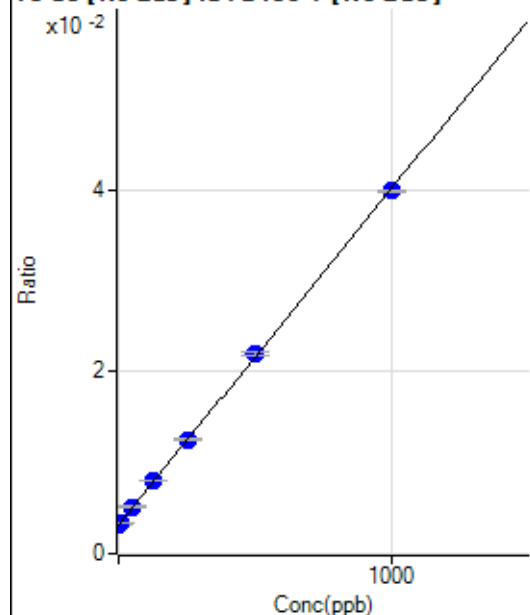
$$R = 0.9999$$

$$DL = 0$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	69057.23	0.0032	P	0.5
2	☐	5.000	6.703	73603.72	0.0034	P	0.9
3	☐	50.000	54.304	110293.70	0.0052	P	1.3
4	☐	125.000	133.081	168971.66	0.0081	P	0.1
5	☐	250.000	254.335	261766.84	0.0126	P	2.2
6	☐	500.000	509.186	453143.74	0.0220	P	1.2
7	☐	1000.000	993.089	795012.37	0.0399	P	0.5
8	☐			57603.11	0.0031	P	1.6

$$y = 3.6984\text{E-}005 * x + 0.0032$$

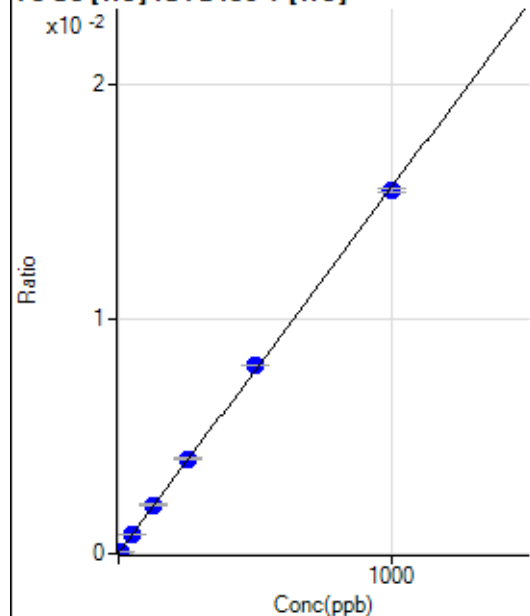
$$R = 0.9999$$

$$DL = 1.207$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	65.44	0.0000	P	0.7
2	☐	5.000	4.994	266.67	0.0001	P	9.7
3	☐	50.000	51.939	2005.71	0.0008	P	0.9
4	☐	125.000	131.541	4917.54	0.0021	P	1.9
5	☐	250.000	258.437	9581.02	0.0041	P	0.5
6	☐	500.000	513.183	18540.30	0.0080	P	0.7
7	☐	1000.000	990.385	35070.73	0.0154	P	1.1
8	☐			74.08	0.0000	P	7.1

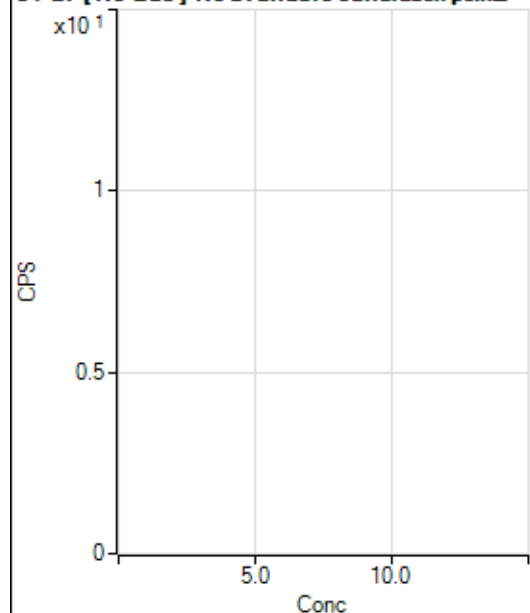
$$y = 1.5572\text{E-}005 * x + 2.6667\text{E-}005$$

$$R = 0.9998$$

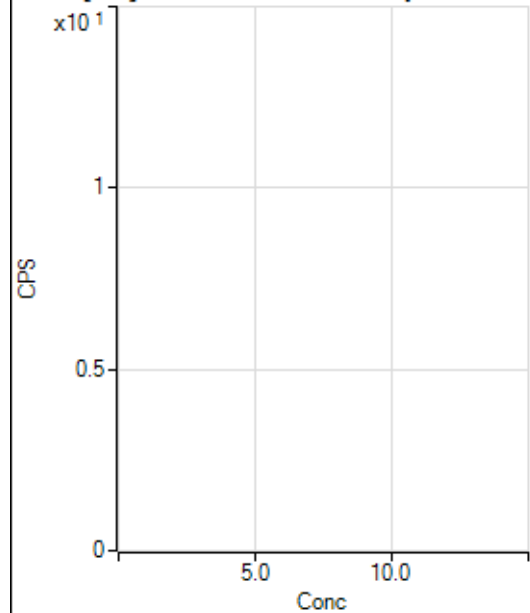
$$DL = 0.0343$$

Weight: <None>

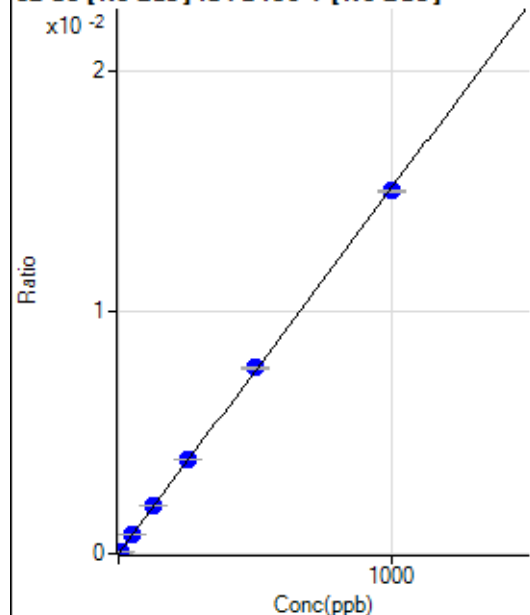
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			31898.21		P	2.8
2	☐			31289.53		P	1.9
3	☐			30828.05		P	2.4
4	☐			29875.28		P	0.6
5	☐			27842.61		P	1.5
6	☐			28507.79		P	1.4
7	☐			27434.68		P	2.5
8	☐			25027.83		P	3.5

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			34.45		P	11.2
2	☐			43.33		P	20.4
3	☐			38.89		P	26.2
4	☐			38.89		P	4.9
5	☐			42.22		P	27.7
6	☐			26.67		P	45.1
7	☐			57.78		P	14.5
8	☐			47.78		P	62.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	106.26	0.0000	P	51.5
2	☐	5.000	5.443	1882.08	0.0001	P	3.1
3	☐	50.000	53.344	17320.07	0.0008	P	0.7
4	☐	125.000	132.196	41915.46	0.0020	P	1.1
5	☐	250.000	258.430	81572.82	0.0039	P	1.2
6	☐	500.000	508.887	158814.20	0.0077	P	0.7
7	☐	1000.000	992.380	299511.50	0.0150	P	0.7
8	☐			271.58	0.0000	P	22.0

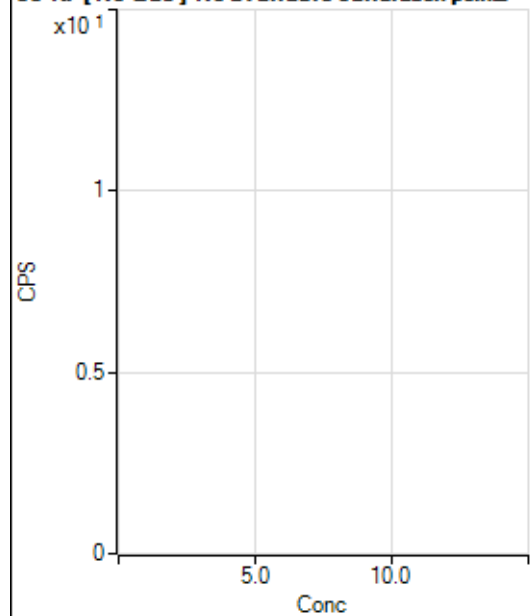
$$y = 1.5141E-005 * x + 4.8676E-006$$

$$R = 0.9999$$

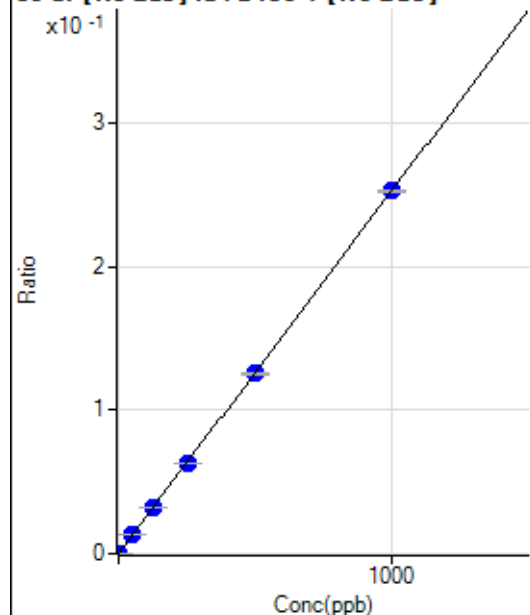
$$DL = 0.4969$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			760.03		P	5.6
2	☐			836.71		P	3.9
3	☐			826.71		P	2.9
4	☐			790.04		P	6.4
5	☐			735.59		P	11.5
6	☐			776.70		P	3.9
7	☐			736.70		P	7.6
8	☐			747.81		P	6.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1152.88	0.0001	P	8.6
2	☐	1.000	1.029	6737.98	0.0003	P	5.8
3	☐	50.000	50.777	274243.35	0.0129	P	0.8
4	☐	125.000	125.851	664548.65	0.0318	P	0.5
5	☐	250.000	250.256	1315929.17	0.0632	P	0.8
6	☐	500.000	497.930	2589251.36	0.1257	P	1.3
7	☐	1000.000	1000.826	5033668.04	0.2526	P	0.5
8	☐			11140.89	0.0006	P	3.1

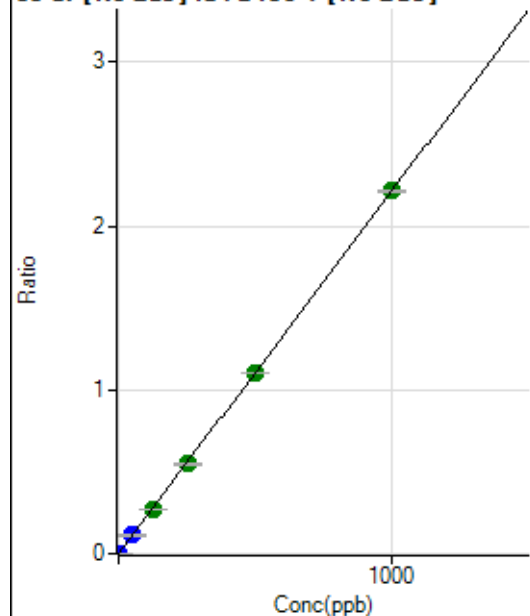
$$y = 2.5233\text{E-}004 * x + 5.2838\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.05376$$

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	133.34	0.0000	P	16.7
2	☐	1.000	1.006	48067.91	0.0022	P	0.5
3	☐	50.000	50.472	2378224.69	0.1116	P	0.6
4	☐	125.000	124.142	5732776.30	0.2744	A	0.8
5	☐	250.000	248.603	11440581.42	0.5495	A	1.6
6	☐	500.000	497.837	22666993.73	1.1004	A	0.4
7	☐	1000.000	1001.514	44113789.18	2.2137	A	0.5
8	☐			89101.72	0.0047	P	0.6

$$y = 0.0022 * x + 6.1141\text{E-}006$$

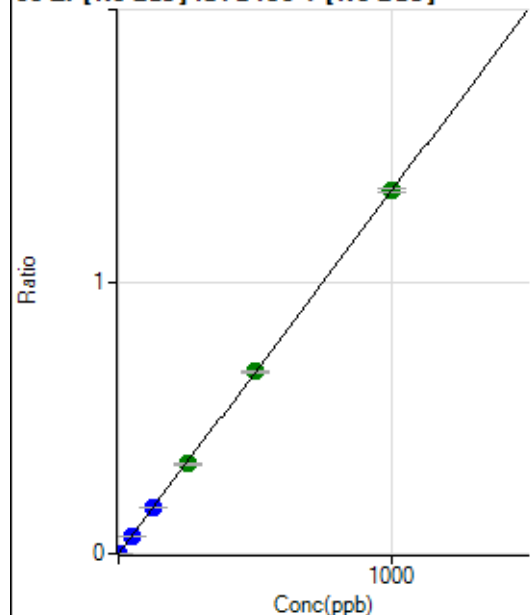
$$R = 1.0000$$

$$DL = 0.001386$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1225.10	0.0001	P	12.2
2	☐	1.000	0.774	23492.32	0.0011	P	4.6
3	☐	50.000	49.561	1411530.32	0.0662	P	0.8
4	☐	125.000	125.882	3511991.01	0.1681	P	0.5
5	☐	250.000	247.072	6868705.27	0.3299	A	0.8
6	☐	500.000	501.460	13790692.67	0.6695	A	0.7
7	☐	1000.000	999.914	26600710.49	1.3349	A	1.1
8	☐			8160.98	0.0004	P	7.7

$$y = 0.0013 * x + 5.6180E-005$$

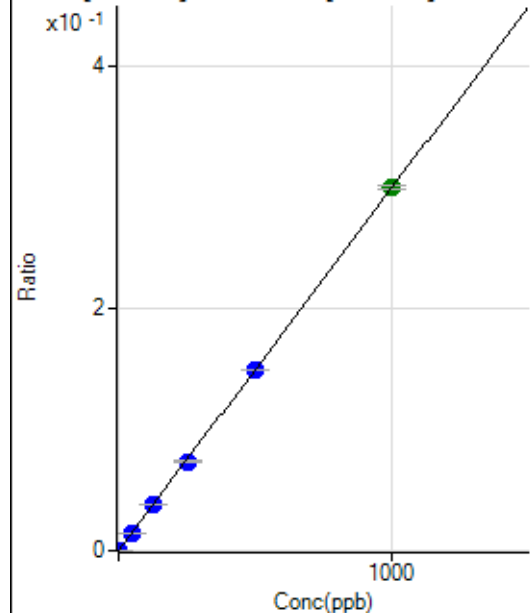
$$R = 1.0000$$

$$DL = 0.01538$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	194.45	0.0000	P	29.8
2	☐	1.000	0.794	5320.65	0.0002	P	3.3
3	☐	50.000	49.248	314724.91	0.0148	P	0.6
4	☐	125.000	125.390	785032.26	0.0376	P	1.0
5	☐	250.000	245.859	1534033.57	0.0737	P	0.9
6	☐	500.000	499.340	3081930.58	0.1496	P	0.4
7	☐	1000.000	1001.354	5978774.31	0.3000	A	1.0
8	☐			1769.63	0.0001	P	15.1

$$y = 2.9961E-004 * x + 8.9096E-006$$

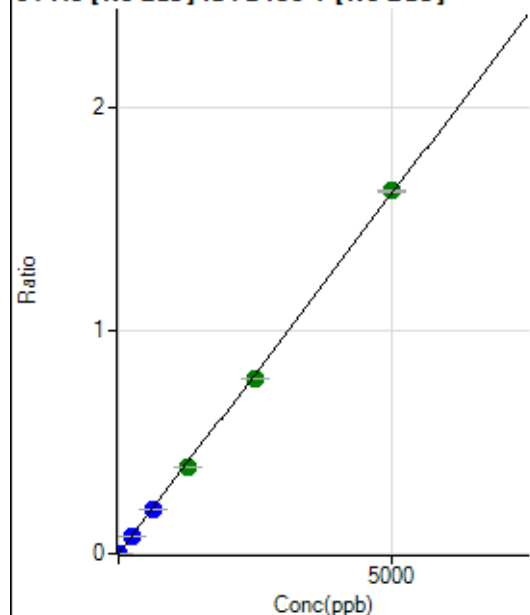
$$R = 1.0000$$

$$DL = 0.02657$$

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	483.36	0.0000	P	6.6
2	☐	5.000	4.735	33454.10	0.0016	P	1.7
3	☐	250.000	244.872	1686383.57	0.0791	P	0.5
4	☐	625.000	613.996	4143527.35	0.1983	P	0.7
5	☐	1250.000	1209.338	8134022.75	0.3906	A	0.4
6	☐	2500.000	2436.986	16213592.03	0.7871	A	0.7
7	☐	5000.000	5043.305	32461164.61	1.6290	A	0.8
8	☐			21030.18	0.0011	P	1.8

$$y = 3.2299E-004 * x + 2.2156E-005$$

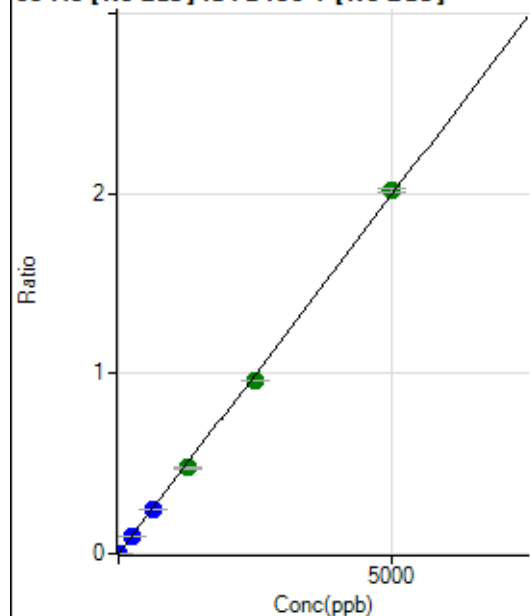
$$R = 0.9998$$

$$DL = 0.01354$$

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	161.12	0.0000	P	16.1
2	☐	5.000	4.963	42753.96	0.0020	P	2.5
3	☐	250.000	242.258	2055765.52	0.0964	P	0.4
4	☐	625.000	604.987	5031400.55	0.2408	P	0.5
5	☐	1250.000	1193.898	9896011.77	0.4753	A	0.2
6	☐	2500.000	2416.641	19815305.13	0.9620	A	0.7
7	☐	5000.000	5058.594	40126335.96	2.0136	A	1.1
8	☐			31727.85	0.0017	P	1.8

$$y = 3.9806E-004 * x + 7.3826E-006$$

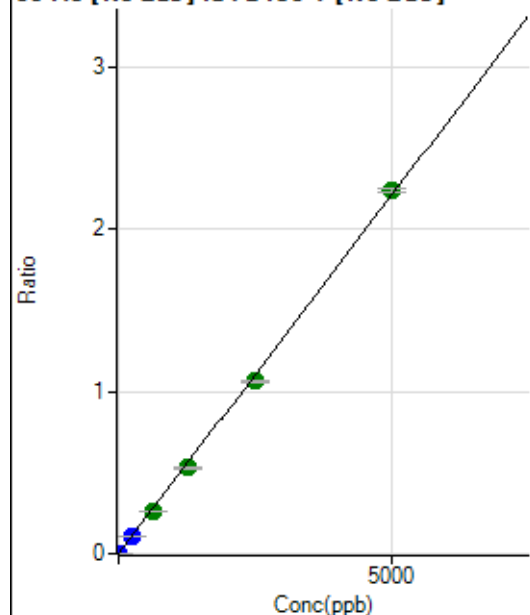
$$R = 0.9997$$

$$DL = 0.008972$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	250.01	0.0000	P	3.0
2	☐	5.000	4.879	46774.92	0.0022	P	0.3
3	☐	250.000	241.830	2280224.29	0.1070	P	0.7
4	☐	625.000	597.615	5522322.52	0.2643	A	0.9
5	☐	1250.000	1195.856	11013350.50	0.5289	A	0.6
6	☐	2500.000	2410.654	21962175.67	1.0662	A	1.3
7	☐	5000.000	5062.041	44616074.26	2.2389	A	0.9
8	☐			43575.94	0.0023	P	2.1

$$y = 4.4230E-004 * x + 1.1461E-005$$

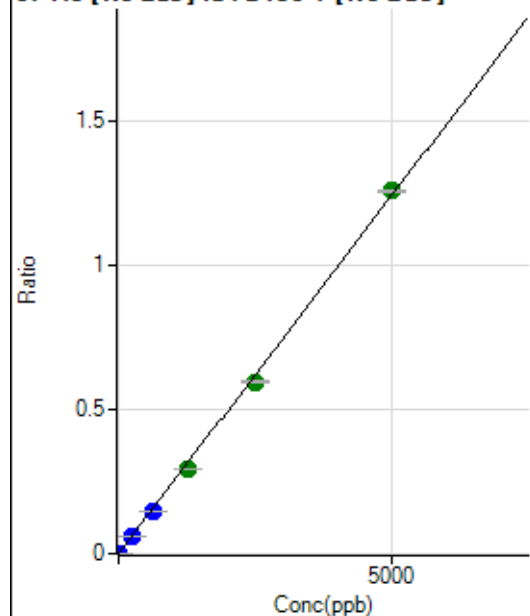
$$R = 0.9997$$

$$DL = 0.002359$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	152.78	0.0000	P	28.3
2	☐	5.000	4.904	26375.22	0.0012	P	0.7
3	☐	250.000	242.807	1283758.04	0.0602	P	1.0
4	☐	625.000	599.594	3106744.75	0.1487	P	1.0
5	☐	1250.000	1189.058	6140543.11	0.2949	A	0.4
6	☐	2500.000	2399.743	12259357.83	0.5952	A	0.8
7	☐	5000.000	5068.899	25051813.24	1.2571	A	0.6
8	☐			19594.69	0.0010	P	2.2

$$y = 2.4801E-004 * x + 7.0077E-006$$

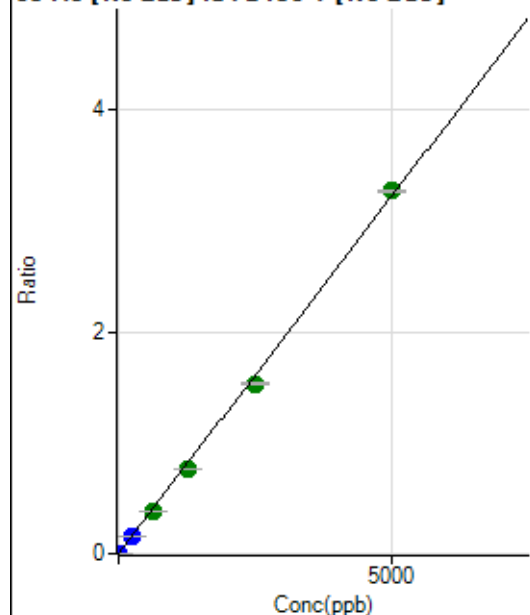
$$R = 0.9996$$

$$DL = 0.024$$

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	250.02	0.0000	P	13.6
2	☐	5.000	4.979	69386.20	0.0032	P	0.7
3	☐	250.000	240.527	3302196.32	0.1549	P	0.8
4	☐	625.000	597.060	8032906.17	0.3845	A	1.3
5	☐	1250.000	1187.966	15929980.39	0.7651	A	0.5
6	☐	2500.000	2381.348	31590245.15	1.5336	A	0.4
7	☐	5000.000	5078.801	65178607.70	3.2708	A	0.7
8	☐			49799.44	0.0026	P	2.7

$$y = 6.4400\text{E-}004 * x + 1.1465\text{E-}005$$

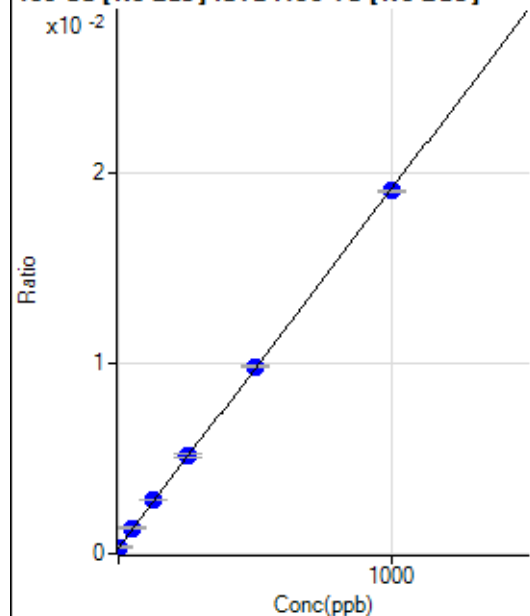
$$R = 0.9995$$

$$DL = 0.007274$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	8653.02	0.0003	P	4.6
2	☐	1.000	1.753	9428.50	0.0004	P	3.1
3	☐	50.000	55.110	36565.20	0.0014	P	1.3
4	☐	125.000	133.721	75641.73	0.0028	P	0.3
5	☐	250.000	256.196	141211.08	0.0051	P	2.8
6	☐	500.000	504.974	264988.32	0.0098	P	0.8
7	☐	1000.000	994.618	507299.12	0.0190	P	0.8
8	☐			8069.29	0.0003	P	1.4

$$y = 1.8816\text{E-}005 * x + 3.1728\text{E-}004$$

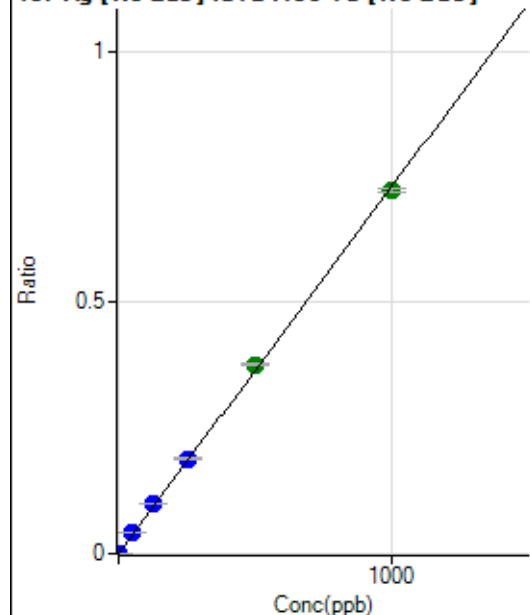
$$R = 0.9999$$

$$DL = 2.342$$

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	200.01	0.0000	P	34.4
2	☐	1.000	1.233	24427.47	0.0009	P	0.5
3	☐	50.000	55.900	1102280.66	0.0408	P	1.0
4	☐	125.000	137.184	2674351.17	0.1002	P	0.3
5	☐	250.000	257.978	5177450.90	0.1884	P	1.7
6	☐	500.000	514.051	10129548.23	0.3754	A	1.0
7	☐	1000.000	989.162	19252035.85	0.7223	A	1.2
8	☐			3086.59	0.0001	P	4.9

$$y = 7.3018\text{E-}004 * x + 7.3423\text{E-}006$$

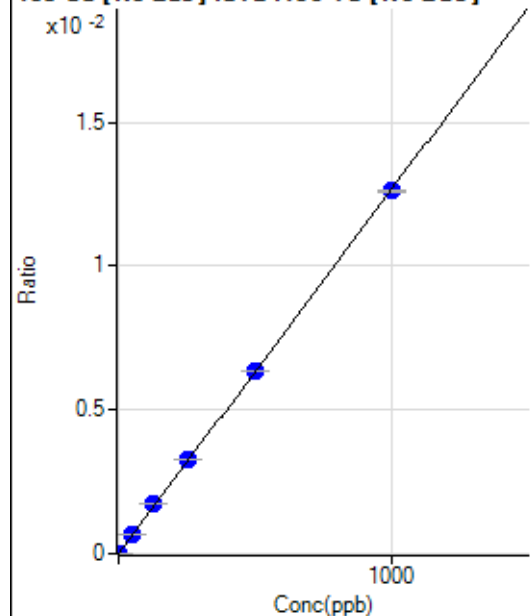
$$R = 0.9998$$

$$DL = 0.01039$$

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	15.28	0.0000	P	31.0
2	☐	1.000	1.178	416.68	0.0000	P	7.3
3	☐	50.000	54.544	18661.19	0.0007	P	1.0
4	☐	125.000	135.604	45850.64	0.0017	P	1.0
5	☐	250.000	256.831	89392.54	0.0033	P	0.5
6	☐	500.000	501.040	171220.44	0.0063	P	0.4
7	☐	1000.000	996.219	336217.22	0.0126	P	0.7
8	☐			112.50	0.0000	P	7.6

$$y = 1.2661\text{E-}005 * x + 5.5966\text{E-}007$$

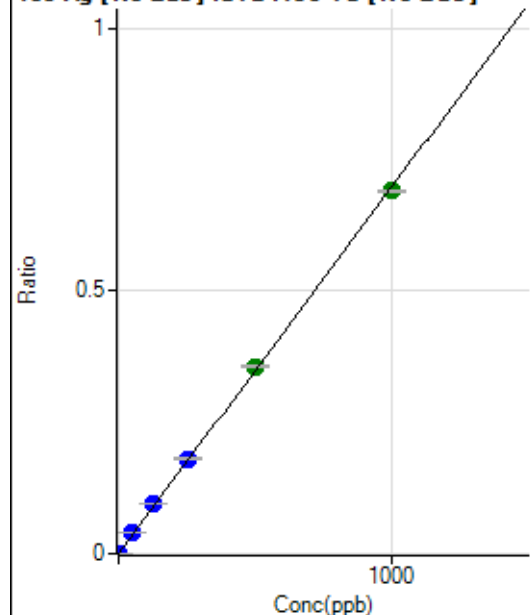
$$R = 0.9999$$

$$DL = 0.04105$$

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	83.34	0.0000	P	20.4
2	☐	1.000	1.247	23503.71	0.0009	P	1.7
3	☐	50.000	55.886	1053084.43	0.0390	P	0.3
4	☐	125.000	136.923	2550951.25	0.0956	P	1.2
5	☐	250.000	259.443	4976392.21	0.1811	P	0.6
6	☐	500.000	511.154	9626765.15	0.3567	A	0.5
7	☐	1000.000	990.278	18420174.55	0.6911	A	0.5
8	☐			2780.95	0.0001	P	9.7

$$y = 6.9784\text{E-}004 * x + 3.0578\text{E-}006$$

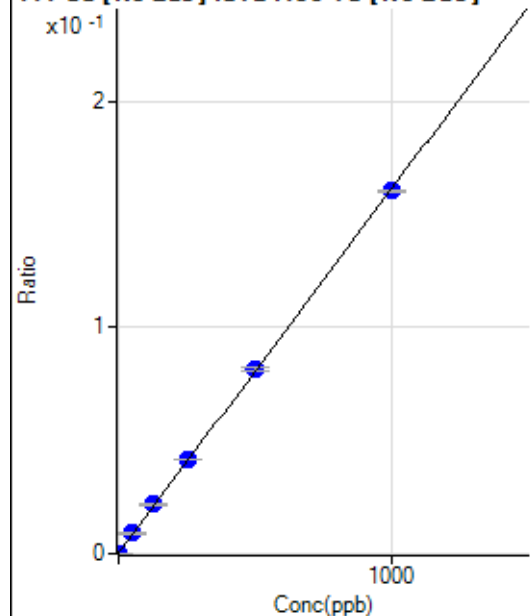
$$R = 0.9998$$

$$DL = 0.002678$$

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	6078.37	0.0002	P	4.6
2	☐	1.000	1.120	10857.70	0.0004	P	0.8
3	☐	50.000	54.265	242014.28	0.0090	P	1.0
4	☐	125.000	133.667	580732.74	0.0218	P	0.7
5	☐	250.000	255.802	1138625.39	0.0414	P	0.5
6	☐	500.000	505.006	2201091.88	0.0816	P	1.4
7	☐	1000.000	994.750	4276814.11	0.1605	P	0.4
8	☐			6550.36	0.0003	P	1.9

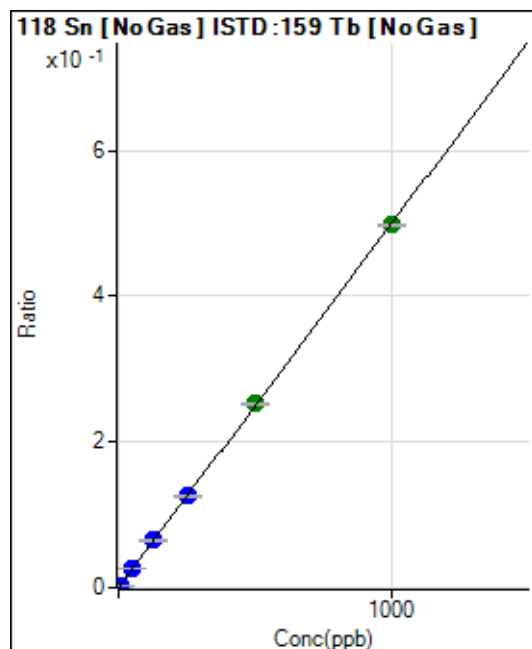
$$y = 1.6107\text{E-}004 * x + 2.2287\text{E-}004$$

$$R = 0.9999$$

$$DL = 0.1905$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2011.35	0.0001	P	3.2
2	☐	5.000	5.259	72736.15	0.0027	P	1.3
3	☐	50.000	51.573	697821.60	0.0258	P	0.5
4	☐	125.000	129.305	1726934.63	0.0647	P	0.1
5	☐	250.000	251.455	3455630.29	0.1257	P	1.5
6	☐	500.000	504.728	6808625.50	0.2523	A	1.0
7	☐	1000.000	996.654	13276975.21	0.4981	A	0.4
8	☐			8341.72	0.0003	P	2.1

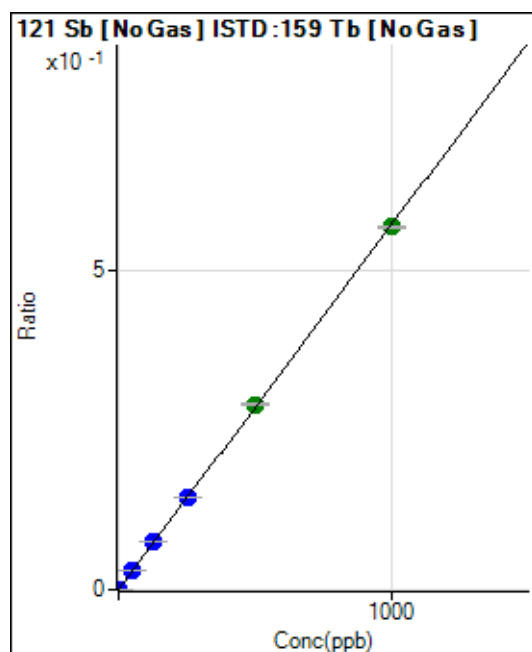
$$y = 4.9970\text{E-}004 * x + 7.3756\text{E-}005$$

$$R = 1.0000$$

$$DL = 0.01397$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	250.02	0.0000	P	15.7
2	☐	2.000	2.008	31063.13	0.0012	P	0.8
3	☐	50.000	51.836	798103.91	0.0296	P	0.4
4	☐	125.000	131.573	2002626.56	0.0750	P	0.7
5	☐	250.000	253.357	3969881.69	0.1444	P	1.1
6	☐	500.000	508.040	7815695.83	0.2896	A	1.3
7	☐	1000.000	994.227	15107330.89	0.5668	A	0.8
8	☐			19252.74	0.0008	P	4.9

$$y = 5.7006\text{E-}004 * x + 9.1727\text{E-}006$$

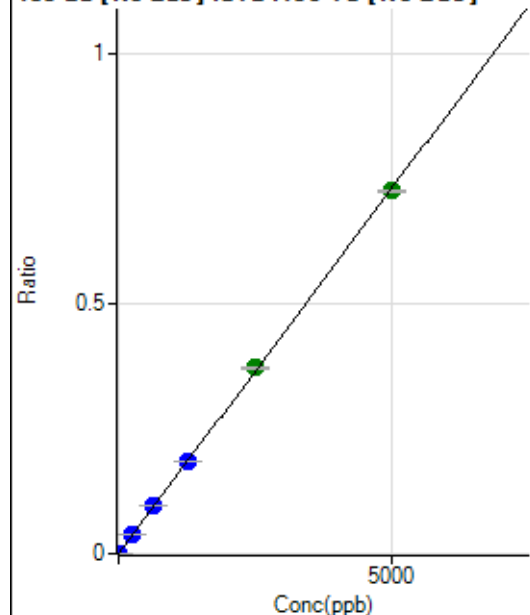
$$R = 0.9999$$

$$DL = 0.007571$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	16.67	0.0000	P	50.3
2	☐	10.000	10.549	41541.25	0.0015	P	2.5
3	☐	250.000	259.162	1023103.37	0.0379	P	0.4
4	☐	625.000	652.821	2548150.64	0.0954	P	0.7
5	☐	1250.000	1259.789	5062443.73	0.1842	P	1.1
6	☐	2500.000	2544.052	10038034.86	0.3720	A	1.1
7	☐	5000.000	4971.590	19375224.74	0.7269	A	0.4
8	☐			4173.03	0.0002	P	2.8

$$y = 1.4621E-004 * x + 6.1202E-007$$

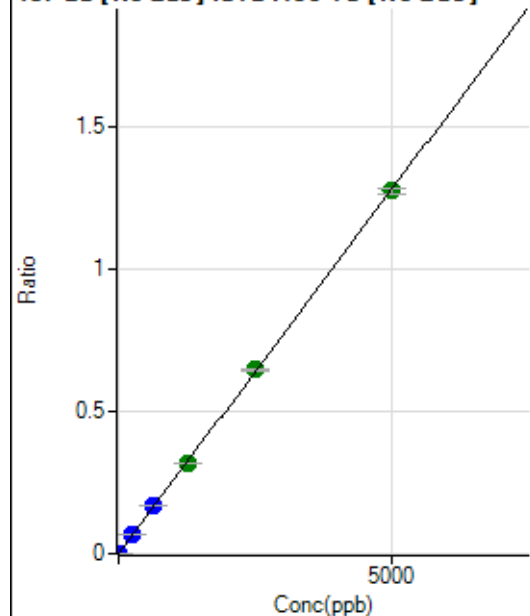
$$R = 0.9999$$

$$DL = 0.006314$$

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	36.11	0.0000	P	26.5
2	☐	10.000	10.453	71861.99	0.0027	P	1.2
3	☐	250.000	258.277	1780147.15	0.0659	P	0.5
4	☐	625.000	650.073	4430064.38	0.1659	P	0.2
5	☐	1250.000	1241.656	8711317.38	0.3170	A	1.2
6	☐	2500.000	2529.550	17425887.89	0.6457	A	1.0
7	☐	5000.000	4983.762	33908886.52	1.2722	A	1.4
8	☐			7305.02	0.0003	P	4.6

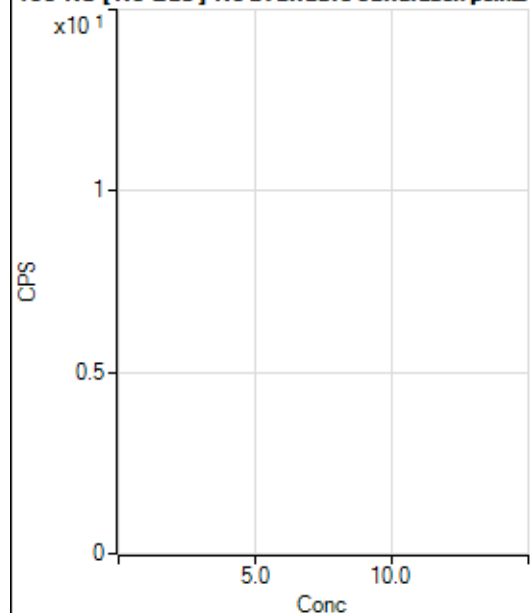
$$y = 2.5526E-004 * x + 1.3238E-006$$

$$R = 1.0000$$

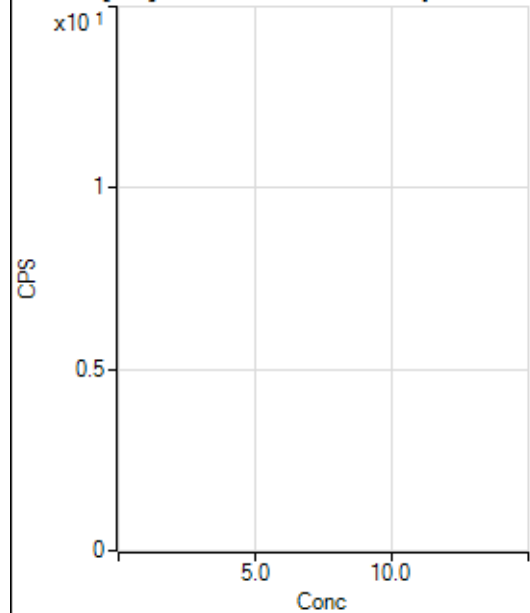
$$DL = 0.004117$$

Weight: <None>

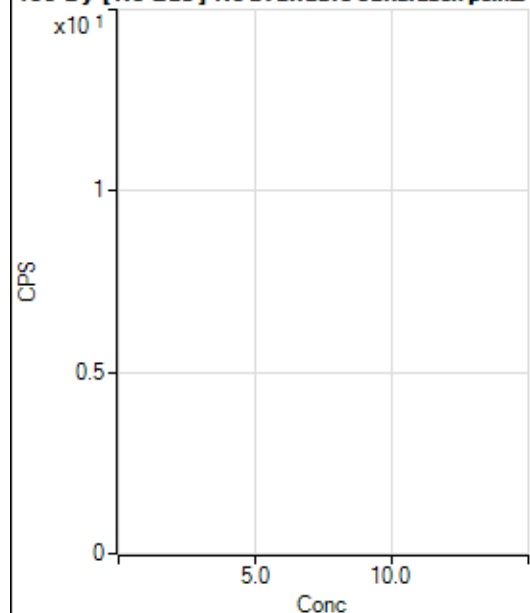
Min Conc: 0

150 Nd [No Gas] No available calibration points

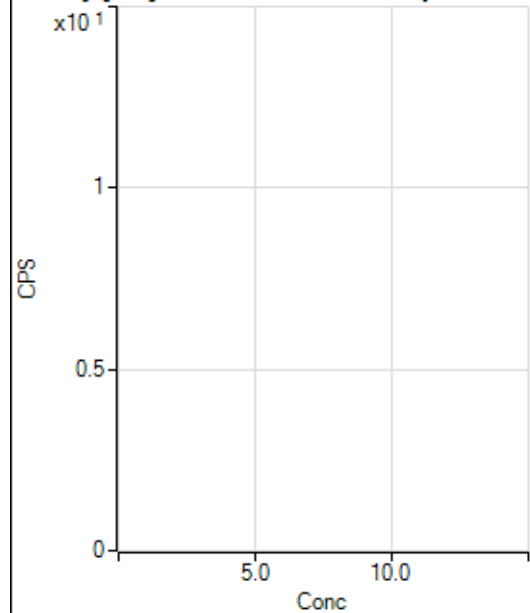
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			15.56		P	89.2
2	☐			15.56		P	49.5
3	☐			126.67		P	21.1
4	☐			306.68		P	24.5
5	☐			533.36		P	13.2
6	☐			935.62		P	2.3
7	☐			1822.42		P	6.4
8	☐			237.79		P	17.8

150 Nd [He] No available calibration points

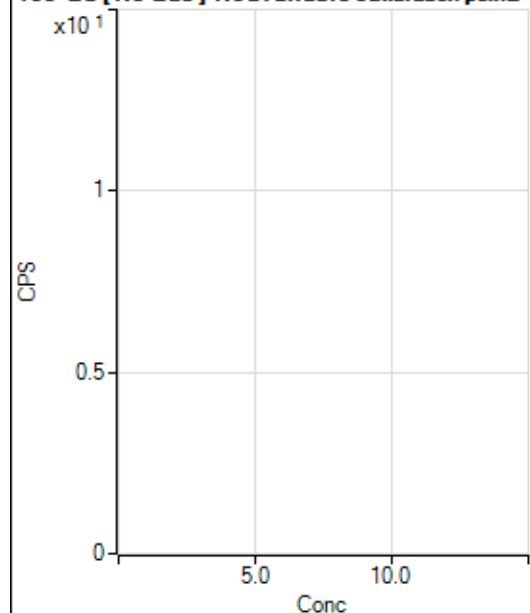
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6.67		P	100.
2	☐			11.11		P	45.8
3	☐			14.45		P	48.0
4	☐			32.22		P	26.0
5	☐			57.78		P	20.3
6	☐			111.11		P	18.1
7	☐			157.78		P	10.4
8	☐			66.67		P	13.2

156 Dy [No Gas] No available calibration points

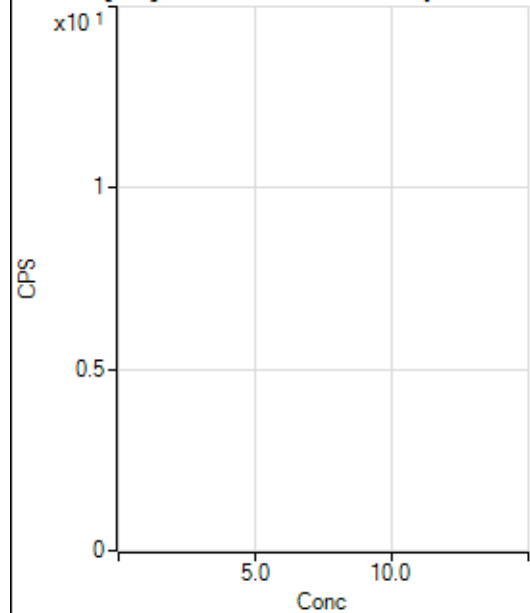
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61.11		P	20.8
2	☐			75.00		P	48.4
3	☐			69.45		P	18.3
4	☐			119.45		P	17.6
5	☐			163.90		P	28.9
6	☐			302.79		P	8.8
7	☐			477.81		P	14.2
8	☐			772.29		P	11.1

156 Dy [He] No available calibration points

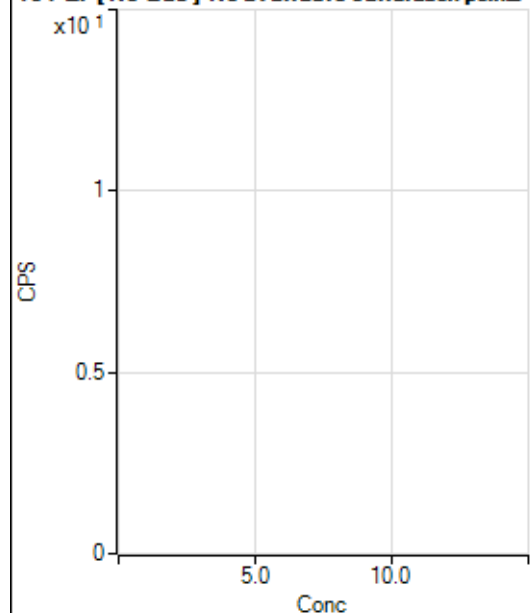
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			21.11		P	24.1
2	☐			27.78		P	45.4
3	☐			57.78		P	13.3
4	☐			71.11		P	24.1
5	☐			125.56		P	16.2
6	☐			203.34		P	7.1
7	☐			405.57		P	9.9
8	☐			336.68		P	8.5

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

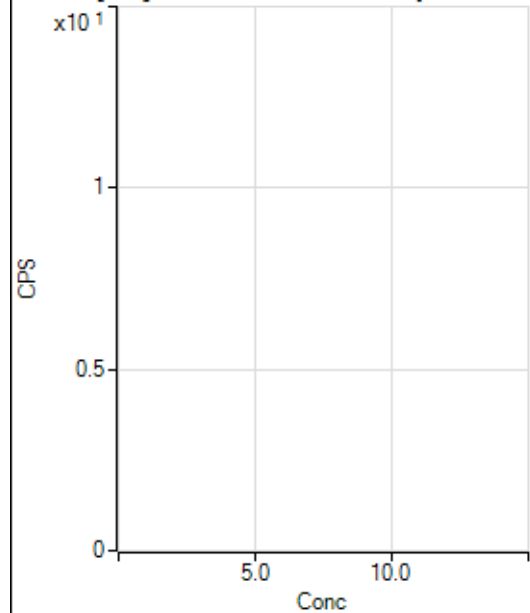
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			150.01		P	16.7
2	☐			191.68		P	15.7
3	☐			147.23		P	8.6
4	☐			183.34		P	20.8
5	☐			211.12		P	25.1
6	☐			236.12		P	5.4
7	☐			355.57		P	17.6
8	☐			750.06		P	3.8

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			363.34		P	2.8
2	☐			385.57		P	13.6
3	☐			360.01		P	7.4
4	☐			350.01		P	15.0
5	☐			343.34		P	19.6
6	☐			394.46		P	13.0
7	☐			458.90		P	4.6
8	☐			630.03		P	9.7

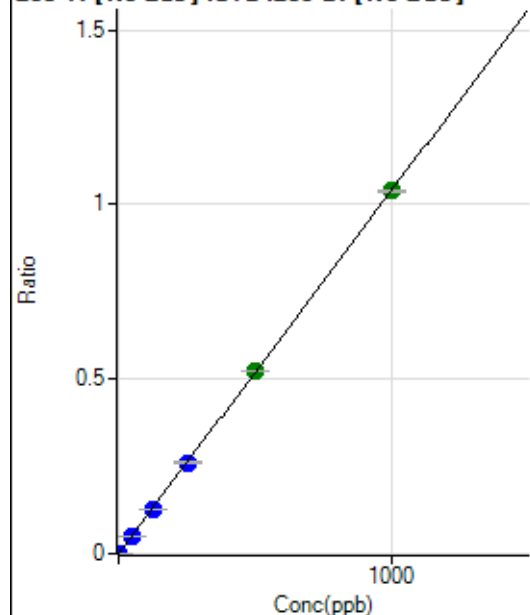
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			150.01		P	9.6
2	☐			152.78		P	34.6
3	☐			133.34		P	22.5
4	☐			194.45		P	22.0
5	☐			161.12		P	32.8
6	☐			241.68		P	9.1
7	☐			236.12		P	26.5
8	☐			180.56		P	42.6

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			93.34		P	16.4
2	☐			100.00		P	8.8
3	☐			93.33		P	18.9
4	☐			91.12		P	11.8
5	☐			123.34		P	14.3
6	☐			118.89		P	9.0
7	☐			120.00		P	26.5
8	☐			117.78		P	13.4

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	875.07	0.0001	P	2.5
2	☐	1.000	0.968	17114.49	0.0011	P	2.3
3	☐	50.000	49.315	824050.35	0.0513	P	1.3
4	☐	125.000	123.116	2052586.74	0.1281	P	1.1
5	☐	250.000	249.562	4200124.49	0.2595	P	2.1
6	☐	500.000	502.093	8215961.90	0.5221	A	0.6
7	☐	1000.000	999.333	15912174.66	1.0391	A	0.8
8	☐			7785.94	0.0006	P	4.7

$$y = 0.0010 * x + 5.3887E-005$$

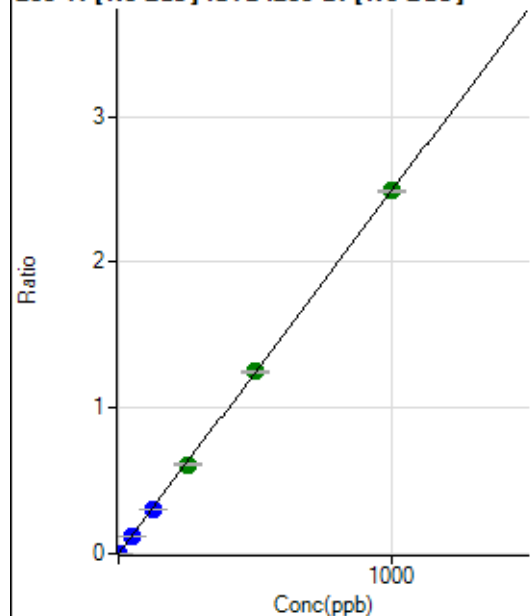
$$R = 1.0000$$

$$DL = 0.003939$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1405.71	0.0001	P	4.8
2	☐	1.000	0.956	39782.99	0.0025	P	1.2
3	☐	50.000	49.831	1992491.54	0.1241	P	0.9
4	☐	125.000	123.664	4934405.58	0.3079	P	0.4
5	☐	250.000	246.370	9924165.50	0.6132	A	1.1
6	☐	500.000	501.622	19645640.89	1.2485	A	0.8
7	☐	1000.000	1000.272	38122493.91	2.4895	A	0.7
8	☐			18054.64	0.0014	P	1.3

$$y = 0.0025 * x + 8.6577E-005$$

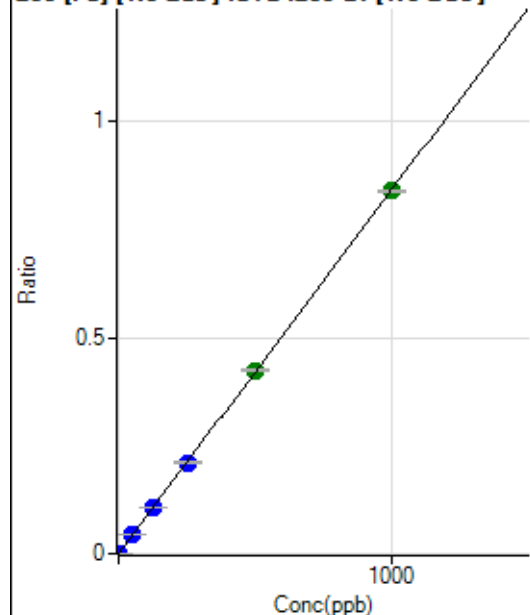
$$R = 1.0000$$

$$DL = 0.005002$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1235.28	0.0001	P	9.2
2	☐	1.000	0.974	14460.14	0.0009	P	2.7
3	☐	50.000	50.568	684476.26	0.0426	P	1.4
4	☐	125.000	125.332	1691917.90	0.1056	P	0.7
5	☐	250.000	250.967	3419364.83	0.2113	P	1.5
6	☐	500.000	503.781	6672857.15	0.4241	A	0.9
7	☐	1000.000	997.798	12860696.70	0.8398	A	0.5
8	☐			41693.73	0.0032	P	1.4

$$y = 8.4162\text{E-}004 * x + 7.6102\text{E-}005$$

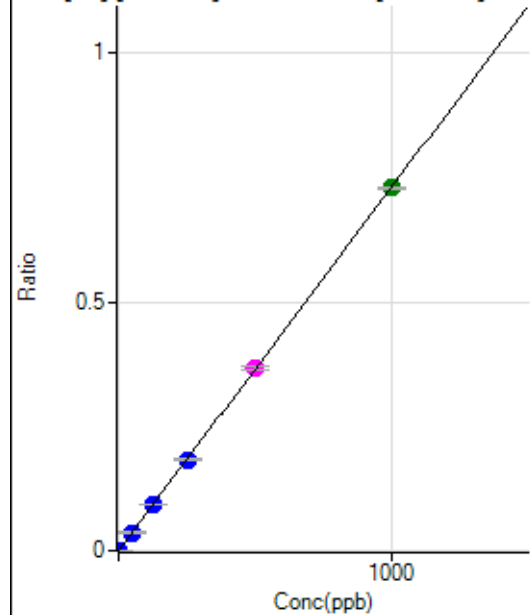
$$R = 1.0000$$

$$DL = 0.025$$

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	1207.50	0.0001	P	7.5
2	☐	1.000	0.957	12483.95	0.0008	P	0.3
3	☐	50.000	50.155	589158.83	0.0367	P	1.5
4	☐	125.000	125.169	1466246.83	0.0915	P	0.5
5	☐	250.000	250.252	2958610.86	0.1828	P	0.9
6	☐	500.000	503.053	5781575.82	0.3674	M	1.6
7	☐	1000.000	998.382	11165376.29	0.7291	A	0.6
8	☐			36979.83	0.0029	P	0.3

$$y = 7.3024\text{E-}004 * x + 7.4382\text{E-}005$$

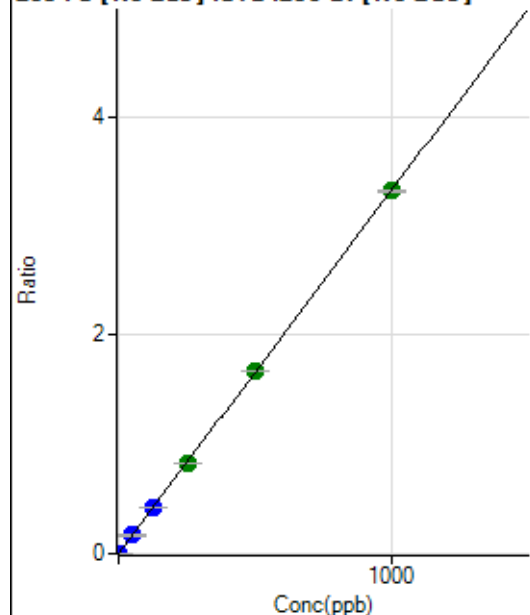
$$R = 1.0000$$

$$DL = 0.02278$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	4511.53	0.0003	P	2.8
2	☐	1.000	0.971	56672.52	0.0035	P	1.0
3	☐	50.000	50.320	2693568.49	0.1678	P	1.1
4	☐	125.000	125.627	6706945.28	0.4184	P	0.5
5	☐	250.000	248.901	13412040.67	0.8288	A	0.9
6	☐	500.000	503.050	26353889.54	1.6748	A	0.7
7	☐	1000.000	998.655	50908387.72	3.3245	A	0.5
8	☐			166750.06	0.0129	P	0.8

$$y = 0.0033 * x + 2.7783E-004$$

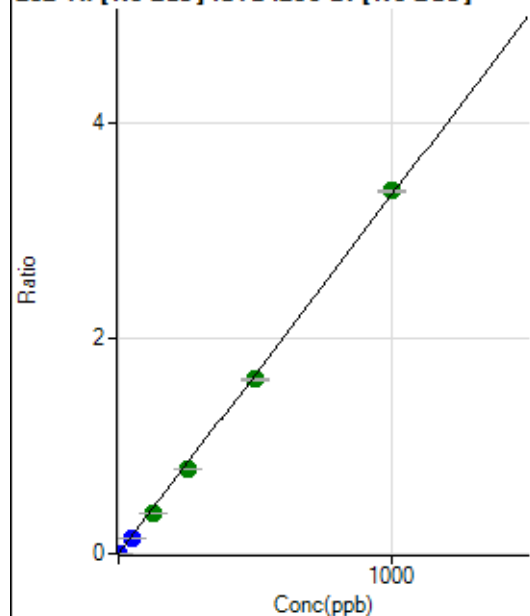
$$R = 1.0000$$

$$DL = 0.006994$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2922.64	0.0002	P	5.0
2	☐	1.000	0.763	43938.41	0.0027	P	3.1
3	☐	50.000	45.320	2426773.14	0.1511	P	0.3
4	☐	125.000	114.857	6135165.53	0.3828	A	0.7
5	☐	250.000	235.444	12694327.25	0.7845	A	1.7
6	☐	500.000	486.069	25480496.63	1.6193	A	1.0
7	☐	1000.000	1012.107	51630232.64	3.3716	A	0.5
8	☐			12304.28	0.0010	P	0.3

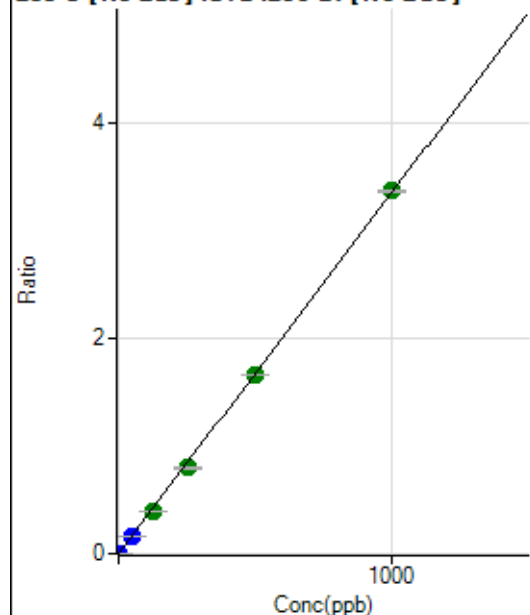
$$y = 0.0033 * x + 1.7996E-004$$

$$R = 0.9997$$

$$DL = 0.008149$$

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	2869.89	0.0002	P	6.4
2	☐	1.000	0.891	50944.69	0.0032	P	1.4
3	☐	50.000	46.873	2519386.06	0.1569	P	0.7
4	☐	125.000	117.074	6277924.70	0.3917	A	0.8
5	☐	250.000	238.268	12896608.53	0.7969	A	1.8
6	☐	500.000	496.318	26120338.43	1.6599	A	0.2
7	☐	1000.000	1005.921	51513246.29	3.3640	A	0.6
8	☐			9884.72	0.0008	P	2.4

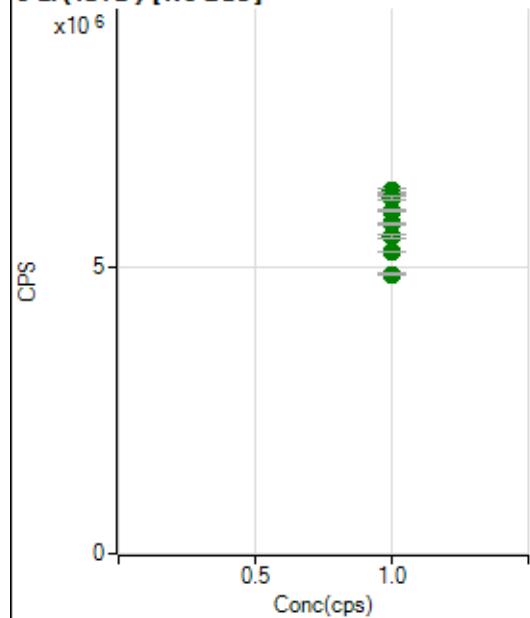
$$y = 0.0033 * x + 1.7665E-004$$

$$R = 0.9999$$

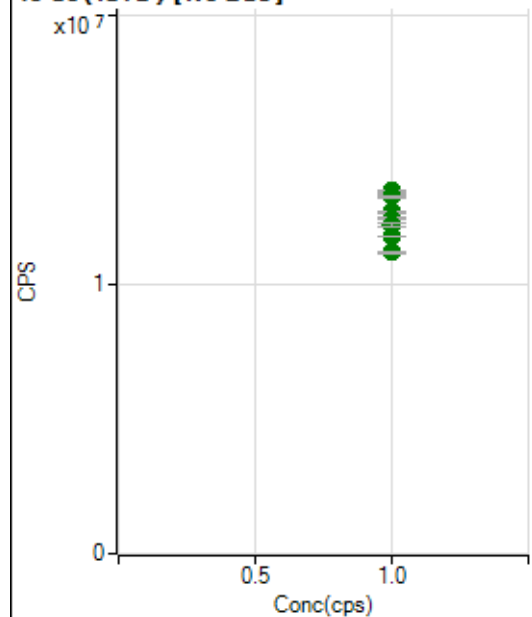
$$DL = 0.0102$$

Weight: <None>

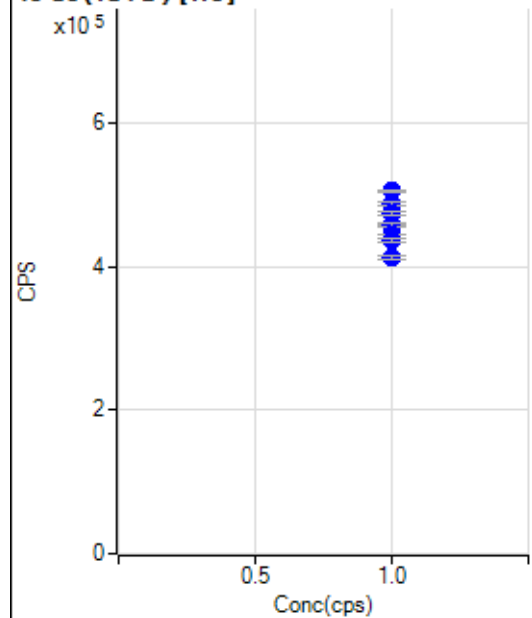
Min Conc: 0

6 Li (ISTD) [No Gas]

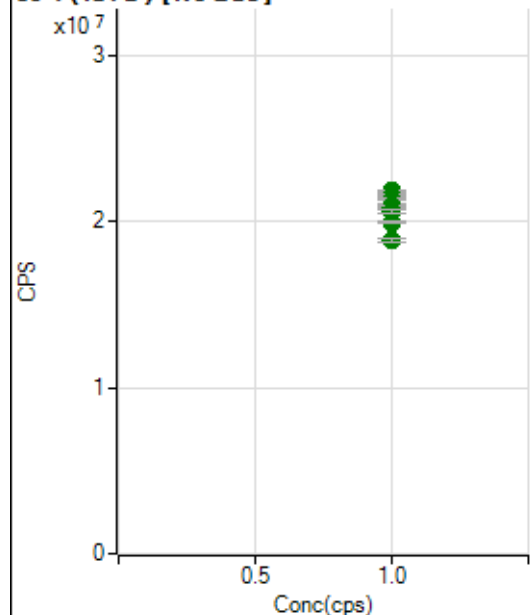
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6335610.67		A	1.1
2	☐	1.000		6290899.07		A	0.7
3	☐	1.000		6209363.45		A	0.8
4	☐	1.000		5991709.70		A	0.9
5	☐	1.000		5764066.03		A	0.4
6	☐	1.000		5534638.04		A	1.3
7	☐	1.000		5270735.34		A	0.6
8	☐	1.000		4885917.60		A	0.2

45 Sc (ISTD) [No Gas]

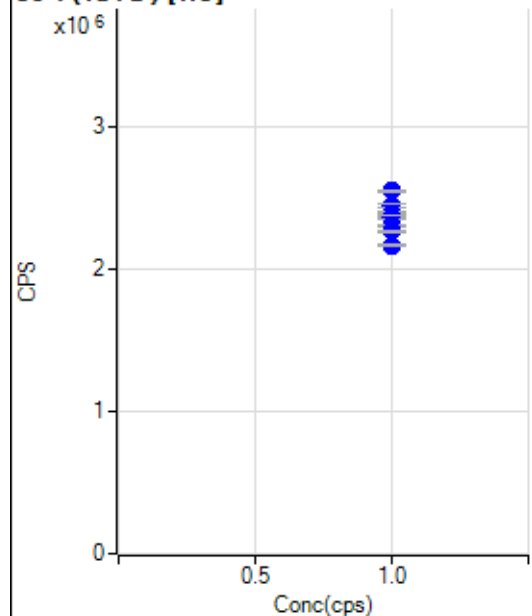
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		13479129.03		A	0.8
2	☐	1.000		13286060.28		A	0.8
3	☐	1.000		13259088.84		A	1.0
4	☐	1.000		12700721.81		A	0.4
5	☐	1.000		12461198.37		A	0.6
6	☐	1.000		12212315.98		A	1.6
7	☐	1.000		11795016.93		A	0.4
8	☐	1.000		11195159.80		A	0.9

45 Sc (ISTD) [He]

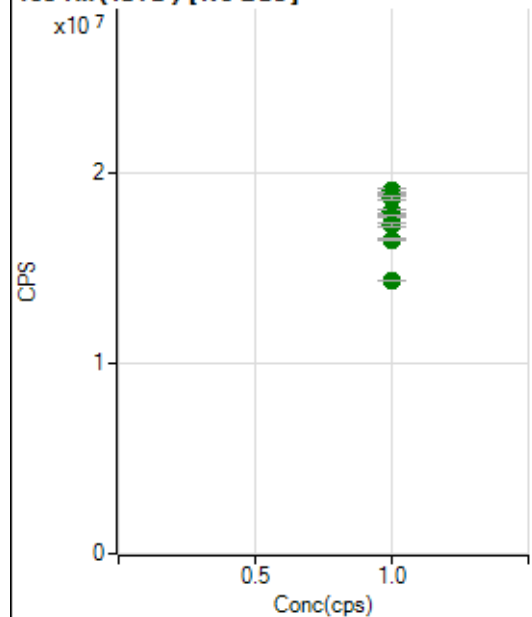
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		487979.60		P	0.7
2	☐	1.000		505435.85		P	0.8
3	☐	1.000		474321.39		P	0.8
4	☐	1.000		458109.57		P	0.4
5	☐	1.000		458688.81		P	1.3
6	☐	1.000		444059.20		P	0.2
7	☐	1.000		436479.83		P	0.8
8	☐	1.000		412100.21		P	1.2

89 Y (ISTD) [No Gas]

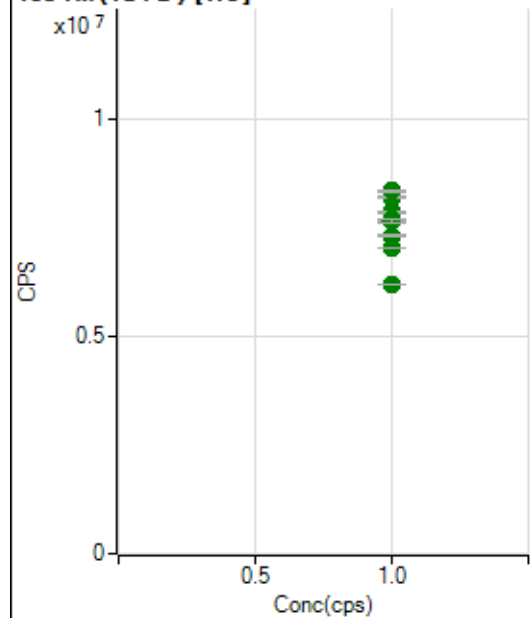
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		21813116.34		A	0.5
2	☐	1.000		21561722.73		A	0.6
3	☐	1.000		21316422.18		A	0.4
4	☐	1.000		20892470.52		A	1.0
5	☐	1.000		20822566.64		A	1.2
6	☐	1.000		20598810.67		A	0.8
7	☐	1.000		19928039.01		A	0.5
8	☐	1.000		18842249.72		A	0.7

89 Y (ISTD) [He]

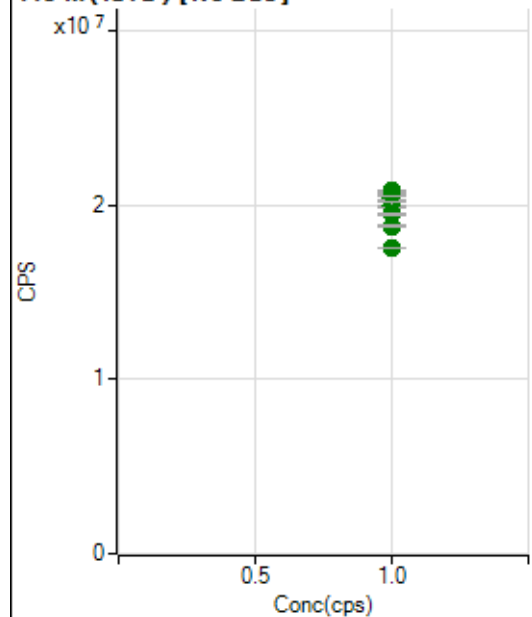
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2453773.30		P	1.0
2	☐	1.000		2552459.20		P	0.7
3	☐	1.000		2400655.43		P	0.1
4	☐	1.000		2369910.99		P	0.5
5	☐	1.000		2365015.61		P	1.0
6	☐	1.000		2312272.19		P	0.6
7	☐	1.000		2270083.77		P	0.5
8	☐	1.000		2165934.24		P	0.5

103 Rh (ISTD) [No Gas]

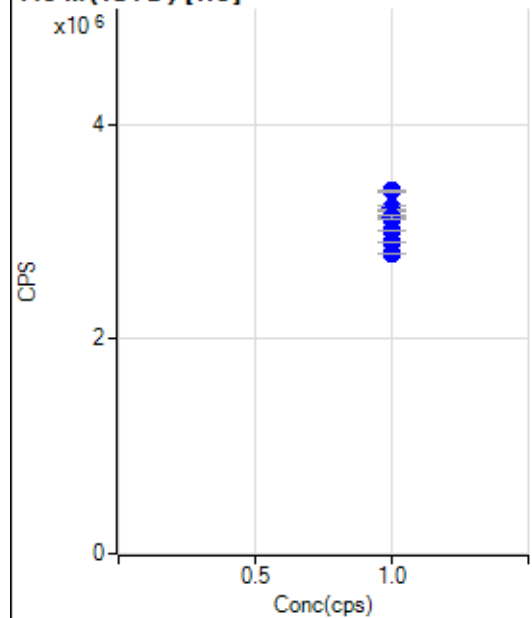
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		19084399.90		A	1.6
2	☐	1.000		18921270.21		A	0.6
3	☐	1.000		18677673.16		A	1.1
4	☐	1.000		17991659.95		A	0.8
5	☐	1.000		17725559.08		A	0.7
6	☐	1.000		17273174.34		A	1.4
7	☐	1.000		16505972.76		A	0.5
8	☐	1.000		14368476.02		A	0.1

103 Rh (ISTD) [He]

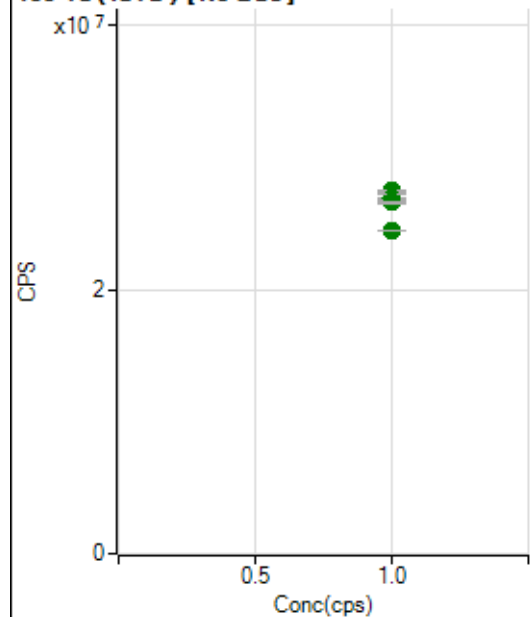
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8176465.22		A	0.6
2	☐	1.000		8330503.90		A	0.4
3	☐	1.000		7850399.47		A	0.7
4	☐	1.000		7674892.11		A	0.7
5	☐	1.000		7649233.43		A	0.9
6	☐	1.000		7305372.81		A	0.5
7	☐	1.000		7021336.77		A	0.4
8	☐	1.000		6178595.05		A	0.3

115 In (ISTD) [No Gas]

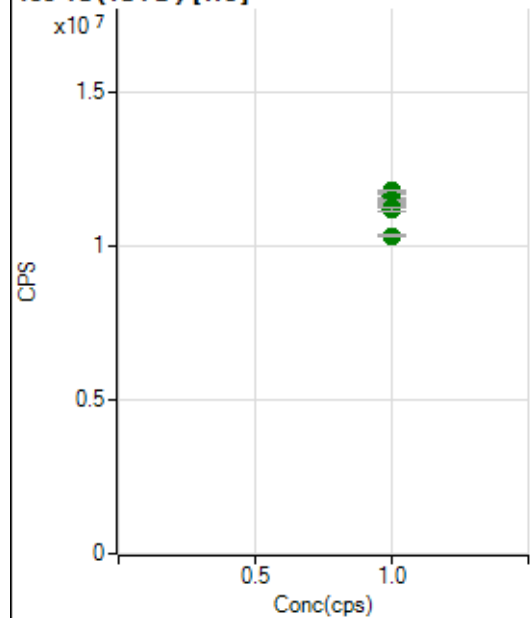
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		20816101.17		A	0.5
2	☐	1.000		20614834.16		A	0.5
3	☐	1.000		20427453.34		A	0.8
4	☐	1.000		19918857.81		A	0.5
5	☐	1.000		20011374.38		A	1.9
6	☐	1.000		19489192.69		A	0.8
7	☐	1.000		18803546.31		A	0.6
8	☐	1.000		17566377.65		A	0.1

115 In (ISTD) [He]

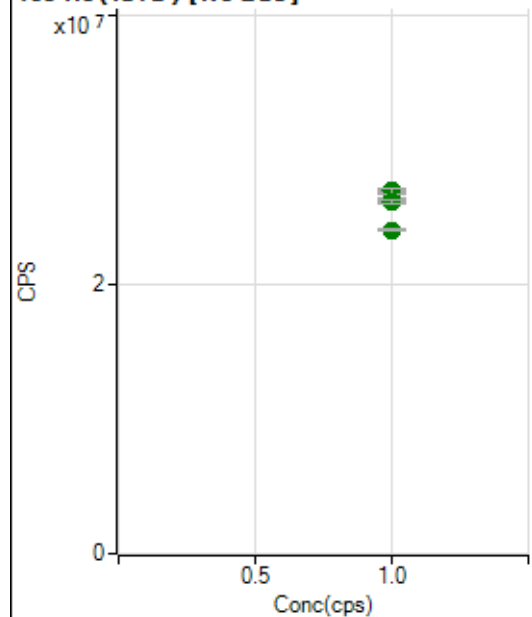
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3224417.92		P	0.8
2	☐	1.000		3377853.23		P	0.8
3	☐	1.000		3194050.55		P	0.2
4	☐	1.000		3124039.16		P	0.3
5	☐	1.000		3130639.49		P	1.0
6	☐	1.000		3008731.62		P	0.4
7	☐	1.000		2900360.77		P	0.5
8	☐	1.000		2793932.27		P	0.3

159 Tb (ISTD) [No Gas]

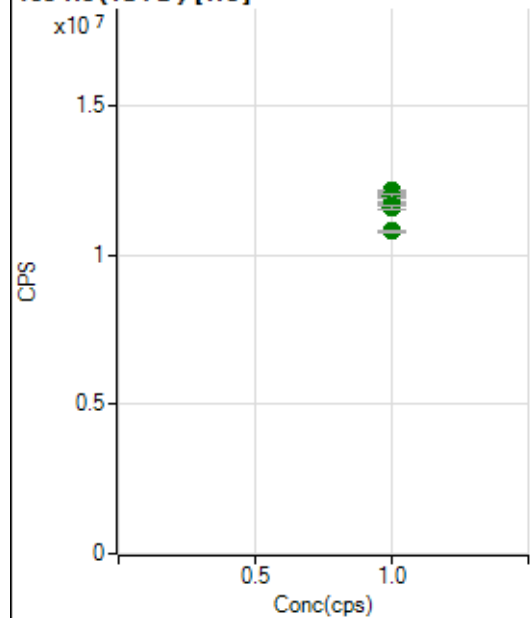
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		27269489.31		A	0.5
2	☐	1.000		26920483.49		A	0.7
3	☐	1.000		27000354.04		A	0.1
4	☐	1.000		26696396.55		A	0.3
5	☐	1.000		27485819.31		A	0.7
6	☐	1.000		26989362.10		A	1.7
7	☐	1.000		26655361.27		A	0.5
8	☐	1.000		24475286.86		A	0.2

159 Tb (ISTD) [He]

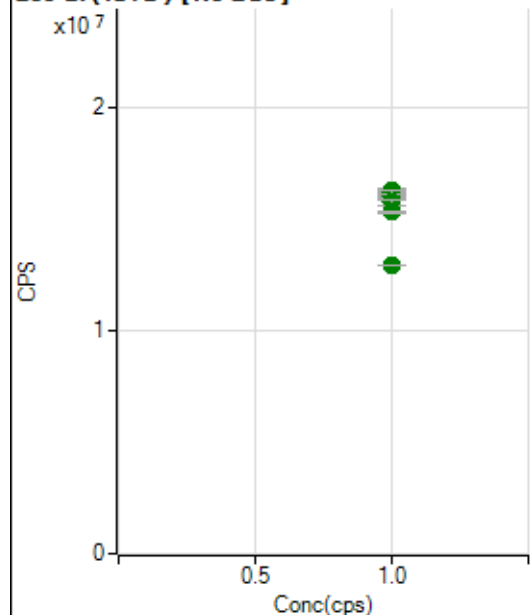
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11619250.38		A	0.7
2	☐	1.000		11776925.94		A	0.4
3	☐	1.000		11377533.44		A	0.2
4	☐	1.000		11321303.58		A	0.2
5	☐	1.000		11466971.91		A	0.4
6	☐	1.000		11248905.53		A	0.7
7	☐	1.000		11148198.58		A	1.0
8	☐	1.000		10311456.03		A	0.5

165 Ho (ISTD) [No Gas]

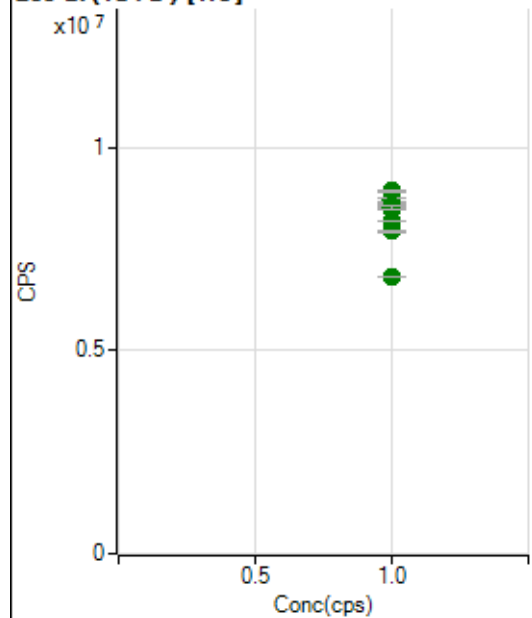
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		26980114.14		A	0.9
2	☐	1.000		26414227.15		A	0.9
3	☐	1.000		26487451.11		A	0.2
4	☐	1.000		26190036.18		A	0.6
5	☐	1.000		26990836.71		A	0.6
6	☐	1.000		26984920.05		A	1.3
7	☐	1.000		26221723.33		A	1.2
8	☐	1.000		24092428.66		A	0.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11962606.77		A	1.0
2	☐	1.000		12169202.74		A	0.8
3	☐	1.000		11782390.93		A	0.5
4	☐	1.000		11810162.18		A	0.3
5	☐	1.000		11989513.99		A	1.0
6	☐	1.000		11680021.22		A	0.5
7	☐	1.000		11621152.05		A	0.8
8	☐	1.000		10810474.29		A	0.4

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		16240975.31		A	0.9
2	☐	1.000		16142024.76		A	1.3
3	☐	1.000		16056057.82		A	1.6
4	☐	1.000		16028734.48		A	1.0
5	☐	1.000		16183869.62		A	1.2
6	☐	1.000		15736795.18		A	1.6
7	☐	1.000		15313395.33		A	0.5
8	☐	1.000		12920708.83		A	0.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8704436.05		A	1.2
2	☐	1.000		8941295.21		A	0.5
3	☐	1.000		8597519.18		A	0.2
4	☐	1.000		8493033.14		A	0.3
5	☐	1.000		8514770.22		A	1.2
6	☐	1.000		8192281.75		A	0.4
7	☐	1.000		7940834.12		A	0.3
8	☐	1.000		6816347.68		A	0.4

US EPA Tune Check Sample Report

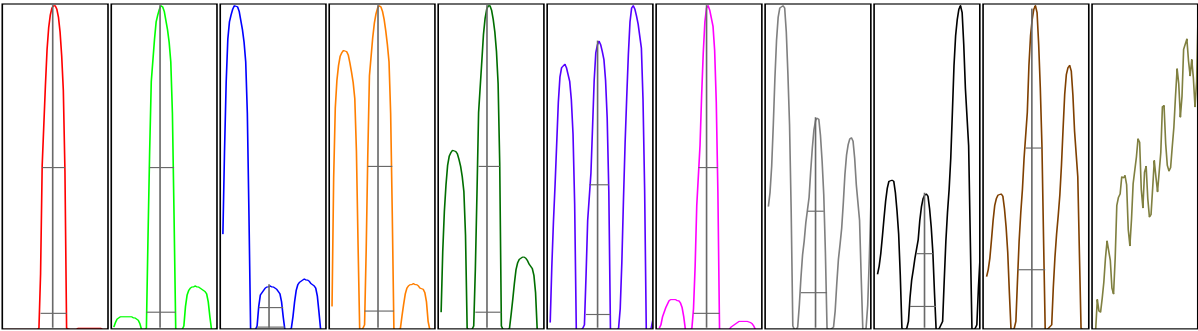
Batch Folder D:\ICP-MS Data\P7010920-MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	16944	0.76	5.00	
24	2974295	0.24	5.00	
25	390365	0.41	5.00	
26	458237	0.28	5.00	
59	151233	0.43	5.00	
113	20194	0.71	5.00	
115	243195	0.12	5.00	
206	56003	0.51	5.00	
207	54562	0.56	5.00	
208	121261	0.42	5.00	
220	127	1.96		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	16874	17155	16826	16902	16961
24	2975300	2982447	2971998	2977917	2963811
25	388256	392484	391097	389497	390492
26	458128	459619	459362	457585	456490
59	150639	151875	152015	150858	150779
113	19974	20297	20241	20326	20134
115	243346	243652	243030	243001	242948
206	55556	55950	55992	56257	56258
207	54088	54643	54917	54681	54480
208	120520	121184	121495	121200	121908
220	125	126	126	131	129

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	27540	8.95	8.9 - 9.1		0.781	0.900	
24	4520304	23.90	23.9 - 24.1		0.834	0.900	
25	602141	24.90	24.9 - 25.1		0.811	0.900	
26	699228	25.90	25.9 - 26.1		0.833	0.900	
59	248735	58.90	58.9 - 59.1		0.783	0.900	
113	37413	112.95	112.9 - 113.1		0.735	0.900	
115	453139	114.95	114.9 - 115.1		0.755	0.900	
206	105841	205.95	205.9 - 206.1		0.753	0.900	
207	96335	206.95	206.9 - 207.1		0.738	0.900	
208	226861	207.90	207.9 - 208.1		0.754	0.900	
220			-				

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	6.7	V	Deflect	13.2	V
Extract 2	-125.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-60	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	160	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	34852	0.30	
89	171918	0.34	
205	46477	0.44	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	34913	34797	34834	34992	34723
89	171279	172376	172396	172249	171290
205	46519	46310	46811	46421	46324

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	6.6	V	Deflect	2.0	V
Extract 2	-125.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-55	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			