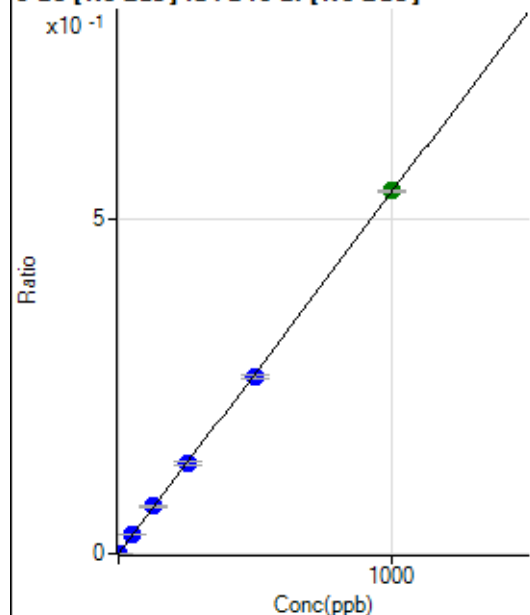


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8122321-MS.b\
Analysis File: P8122321-MS.batch.bin
DA Date-Time: 2021-12-25 02:57:37
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2021-12-23 15:31:22
2	005CALS.d	S02	2021-12-23 15:37:33
3	006CALS.d	S03	2021-12-23 15:40:40
4	007CALS.d	S04	2021-12-23 15:43:43
5	008CALS.d	S05	2021-12-23 15:46:49
6	009CALS.d	S06	2021-12-23 15:49:52
7	010CALS.d	S07	2021-12-23 15:52:58
8	011CALS.d	S08	2021-12-23 15:56:01

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	65.32	0.0000	P	11.0
2	☐	1.000	0.977	1034.50	0.0006	P	8.3
3	☐	50.000	51.433	52017.26	0.0279	P	1.9
4	☐	125.000	130.410	132472.84	0.0706	P	1.7
5	☐	250.000	251.488	265134.01	0.1361	P	4.5
6	☐	500.000	488.768	525174.44	0.2644	P	2.7
7	☐	1000.000	1004.496	1100689.72	0.5434	A	0.6
8	☐			398.59	0.0002	P	6.0

$$y = 5.4096E-004 * x + 3.6956E-005$$

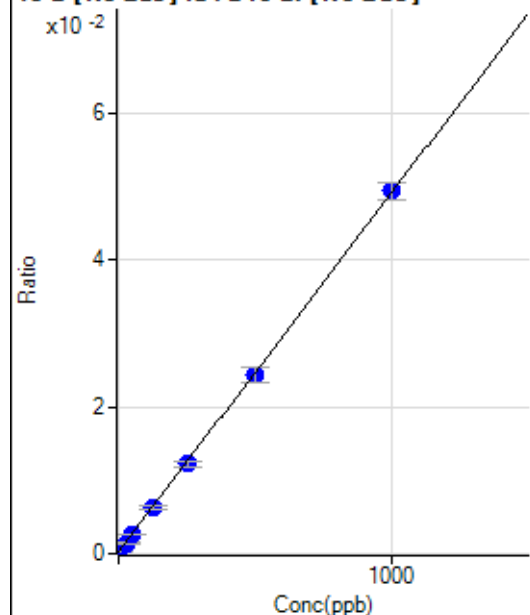
$$R = 0.9999$$

$$DL = 0.02245$$

$$BEC = 0.06832$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	445.25	0.0003	P	2.5
2	☐	25.000	23.911	2601.72	0.0014	P	3.4
3	☐	50.000	49.127	4951.21	0.0027	P	5.7
4	☐	125.000	124.046	11839.13	0.0063	P	7.5
5	☐	250.000	245.983	23911.44	0.0123	P	6.6
6	☐	500.000	491.397	48124.76	0.0243	P	8.6
7	☐	1000.000	1005.496	100004.39	0.0494	P	5.1
8	☐			13801.12	0.0071	P	6.9

$$y = 4.8852E-005 * x + 2.5215E-004$$

$$R = 0.9999$$

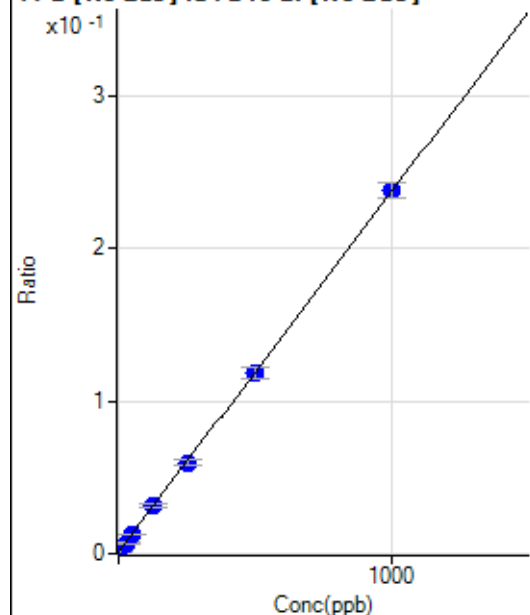
$$DL = 0.3949$$

$$BEC = 5.161$$

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	2161.74	0.0012	P	3.3
2	☐	25.000	24.026	12613.63	0.0069	P	3.6
3	☐	50.000	49.245	23949.53	0.0128	P	6.0
4	☐	125.000	127.084	58469.77	0.0312	P	7.2
5	☐	250.000	246.704	115731.55	0.0594	P	6.6
6	☐	500.000	495.710	234275.07	0.1180	P	6.8
7	☐	1000.000	1002.771	481143.40	0.2375	P	4.2
8	☐			65760.26	0.0338	P	5.2

$$y = 2.3564E-004 * x + 0.0012$$

R = 1.0000

DL = 0.5215

BEC = 5.196

Weight: <None>

Min Conc: 0

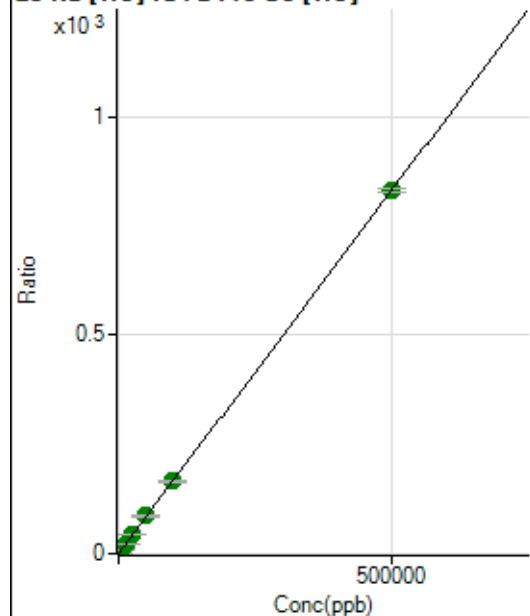
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4574368.50		A	2.8
2	☐			4514098.97		A	1.4
3	☐			4897950.15		A	1.4
4	☐			5197454.24		A	2.3
5	☐			5890904.26		A	1.9
6	☐			6861326.28		A	4.4
7	☐			8327668.41		A	6.7
8	☐			5842185.29		A	0.1

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			45183.97		P	0.8
2	☐			43662.98		P	1.5
3	☐			50582.53		P	1.5
4	☐			54716.29		P	0.7
5	☐			60304.73		P	1.0
6	☐			73710.55		P	1.4
7	☐			93411.58		P	3.0
8	☐			58759.85		P	1.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	13184.01	0.1099	P	1.6
2	☐	500.000	471.999	110867.07	0.8945	P	1.9
3	☐	5000.000	5224.141	1087761.72	8.7942	A	2.9
4	☐	12500.000	12914.046	2681026.47	21.5773	A	0.8
5	☐	25000.000	25939.200	5322860.19	43.2295	A	1.9
6	☐	50000.000	51754.131	10449210.04	86.1424	A	1.2
7	☐	100000.00	100222.28	20561028.24	166.7126	A	2.6
8	☐	500000.00	499720.60	95111877.13	830.8112	A	1.0

$$y = 0.0017 * x + 0.1099$$

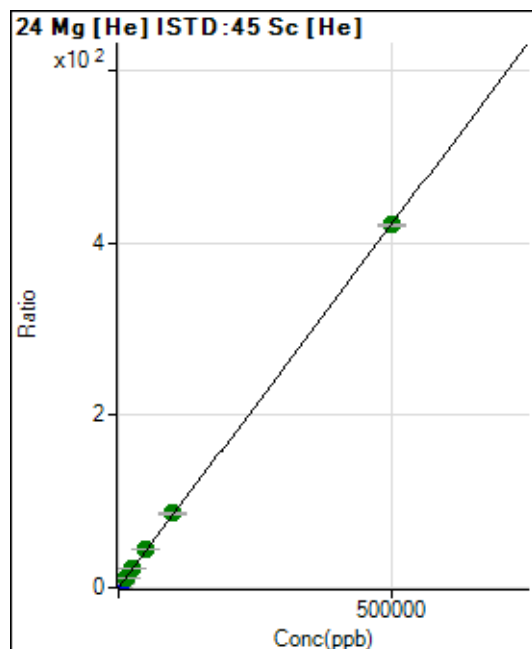
$$R = 1.0000$$

$$DL = 3.226$$

$$BEC = 66.12$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	705.59	0.0059	P	14.2
2	☐	500.000	481.085	51006.73	0.4115	P	0.9
3	☐	5000.000	5295.295	553078.54	4.4705	P	1.3
4	☐	12500.000	13485.463	1413508.35	11.3760	A	0.7
5	☐	25000.000	26687.979	2771626.10	22.5075	A	0.9
6	☐	50000.000	52335.017	5353078.59	44.1315	A	1.6
7	☐	100000.00	101882.87	10596102.93	85.9072	A	1.0
8	☐	500000.00	499277.95	48194209.41	420.9659	A	0.6

$$y = 8.4314\text{E-}004 * x + 0.0059$$

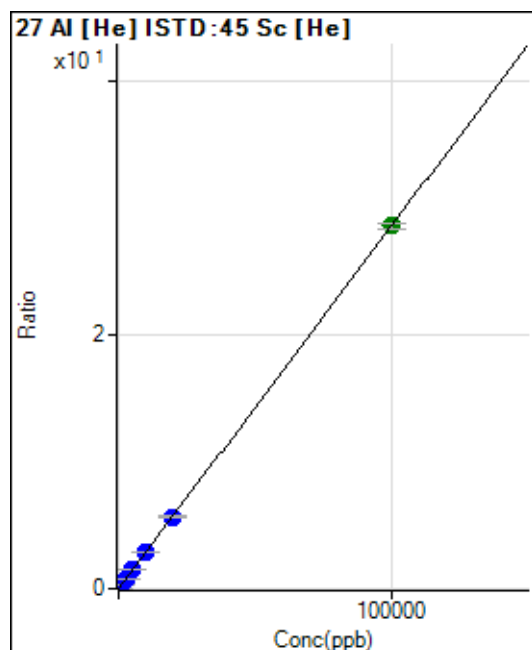
R = 1.0000

DL = 2.977

BEC = 6.98

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	91.24	0.0008	P	16.1
2	☐	20.000	19.225	777.01	0.0063	P	7.1
3	☐	1000.000	1046.086	37149.95	0.3003	P	1.8
4	☐	2500.000	2602.118	92672.69	0.7458	P	0.7
5	☐	5000.000	5166.898	182271.85	1.4802	P	1.0
6	☐	10000.000	10152.710	352710.85	2.9078	P	1.2
7	☐	20000.000	19854.410	701319.91	5.6858	P	1.6
8	☐	100000.00	100002.48	3278464.62	28.6350	A	1.3

$$y = 2.8634\text{E-}004 * x + 7.6133\text{E-}004$$

R = 1.0000

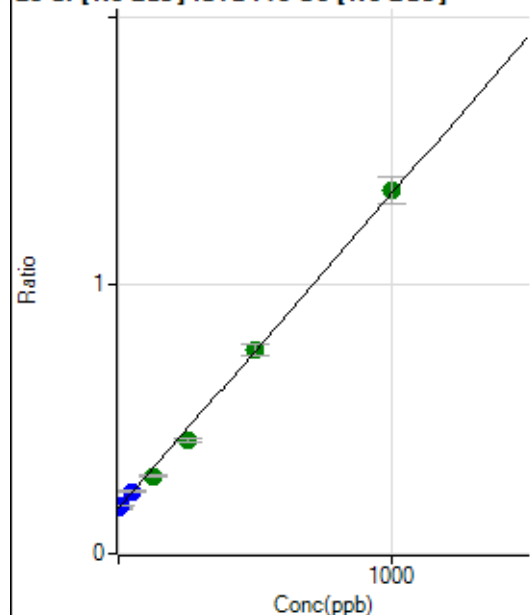
DL = 1.282

BEC = 2.659

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	615416.40	0.1697	P	3.5
2	☐	10.000	8.682	659144.68	0.1798	P	2.6
3	☐	50.000	52.928	860678.28	0.2317	P	1.6
4	☐	125.000	102.590	1083088.72	0.2898	A	1.9
5	☐	250.000	216.401	1608985.37	0.4232	A	3.8
6	☐	500.000	504.327	2887453.84	0.7604	A	5.8
7	☐	1000.000	1008.904	5173859.97	1.3514	A	7.4
8	☐			1067176.12	0.2910	A	2.7

$$y = 0.0012 * x + 0.1697$$

$$R = 0.9992$$

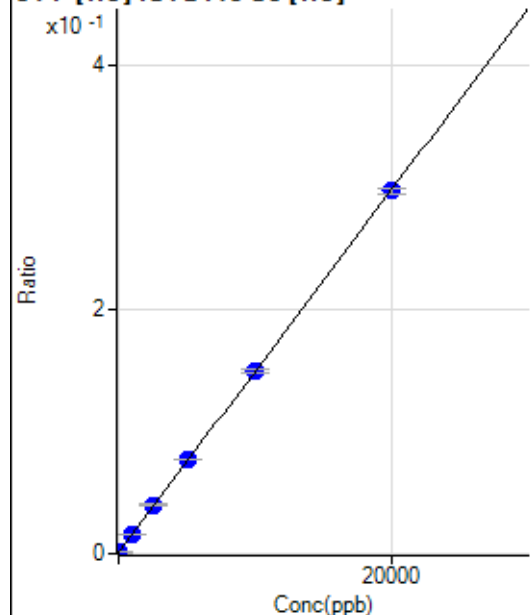
$$DL = 15.06$$

$$BEC = 144.9$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-6.881	80.56	0.0007	P	64.8
2	☐	0.000	6.881	108.34	0.0009	P	6.8
3	☐	1000.000	997.957	1930.74	0.0156	P	3.4
4	☐	2500.000	2643.003	4978.76	0.0401	P	1.9
5	☐	5000.000	5108.347	9447.77	0.0767	P	0.3
6	☐	10000.000	10016.134	18156.32	0.1497	P	1.4
7	☐	20000.000	19947.073	36672.24	0.2973	P	1.7
8	☐			108.34	0.0009	P	30.3

$$y = 1.4868E-005 * x + 7.7138E-004$$

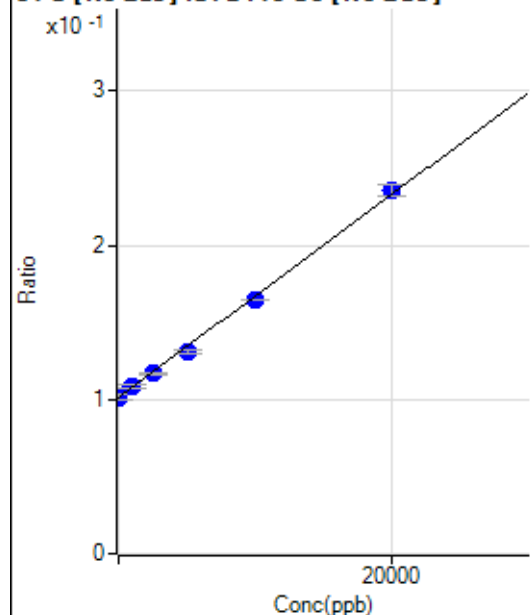
$$R = 1.0000$$

$$DL = 49.74$$

$$BEC = 51.88$$

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	-28.349	367538.78	0.1013	P	3.4
2	☐	0.000	28.349	372745.83	0.1017	P	2.7
3	☐	1000.000	1045.647	402667.53	0.1084	P	1.8
4	☐	2500.000	2353.075	437119.94	0.1170	P	0.8
5	☐	5000.000	4462.561	497664.19	0.1309	P	1.6
6	☐	10000.000	9612.074	625397.95	0.1647	P	0.5
7	☐	20000.000	20344.406	900664.68	0.2353	P	3.1
8	☐			335589.69	0.0915	P	3.7

$$y = 6.5737\text{E-}006 * x + 0.1015$$

R = 0.9993

DL = 1418

BEC = 1.544E+04

Weight: <None>

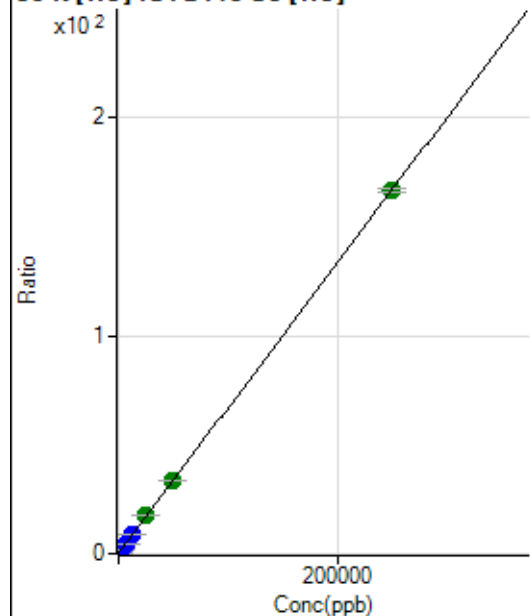
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			271373.15		P	0.7
2	☐			256469.49		P	1.2
3	☐			275533.55		P	0.5
4	☐			276949.32		P	0.1
5	☐			278886.87		P	0.8
6	☐			277173.02		P	0.6
7	☐			286320.78		P	0.2
8	☐			277390.79		P	0.6

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1866.84		P	7.3
2	☐			1755.71		P	2.6
3	☐			1844.61		P	5.2
4	☐			1700.14		P	2.5
5	☐			1802.93		P	3.5
6	☐			1783.49		P	1.2
7	☐			1752.93		P	6.7
8	☐			1822.39		P	7.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	17230.13	0.1436	P	1.4
2	☐	500.000	470.777	56619.93	0.4568	P	0.8
3	☐	2500.000	2627.105	233931.44	1.8911	P	2.3
4	☐	6250.000	6582.749	561891.33	4.5222	P	0.9
5	☐	12500.000	12898.410	1074152.52	8.7232	P	1.0
6	☐	25000.000	25994.454	2114750.87	17.4341	A	0.9
7	☐	50000.000	50169.123	4133445.93	33.5142	A	2.5
8	☐	250000.00	249837.27	19041139.49	166.3256	A	0.9

$$y = 6.6516E-004 * x + 0.1436$$

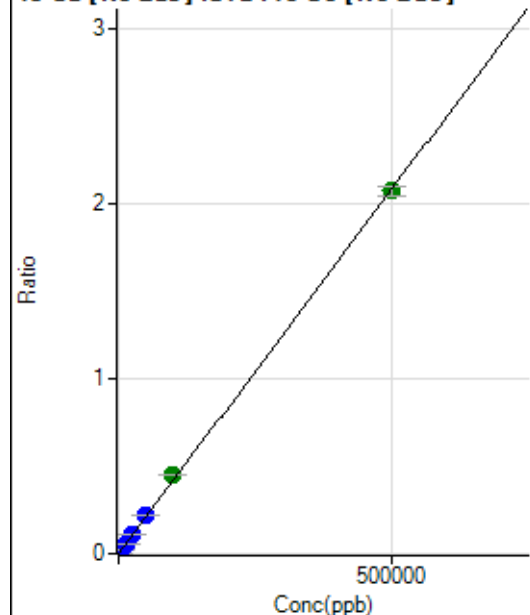
$$R = 1.0000$$

$$DL = 9.374$$

$$BEC = 215.9$$

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	149.56	0.0000	P	7.4
2	☐	500.000	473.860	7387.66	0.0020	P	4.3
3	☐	5000.000	5202.787	80709.88	0.0217	P	1.5
4	☐	12500.000	13189.215	205555.09	0.0550	P	0.3
5	☐	25000.000	25765.369	408544.08	0.1074	P	2.2
6	☐	50000.000	51764.837	819313.45	0.2158	P	0.7
7	☐	100000.00	108023.71	1724312.34	0.4503	A	1.1
8	☐	500000.00	498161.27	7615626.76	2.0763	A	2.6

$$y = 4.1679\text{E-}006 * x + 4.1253\text{E-}005$$

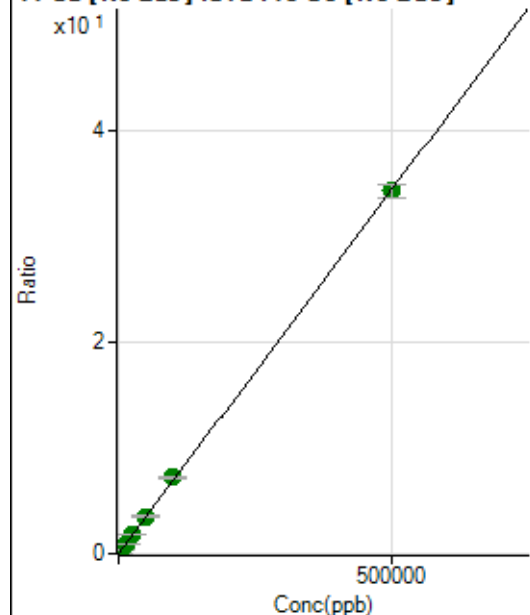
R = 0.9999

DL = 2.189

BEC = 9.898

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	15679.19	0.0043	P	2.0
2	☐	500.000	473.164	135249.18	0.0369	P	1.9
3	☐	5000.000	5230.616	1353787.17	0.3645	A	2.7
4	☐	12500.000	13355.005	3451813.61	0.9238	A	0.9
5	☐	25000.000	25594.349	6718962.38	1.7665	A	2.3
6	☐	50000.000	51482.380	13475573.18	3.5490	A	0.9
7	☐	100000.00	104612.18	27601008.46	7.2070	A	2.4
8	☐	500000.00	498875.95	125973235.2	34.3526	A	3.5

$$y = 6.8851\text{E-}005 * x + 0.0043$$

R = 1.0000

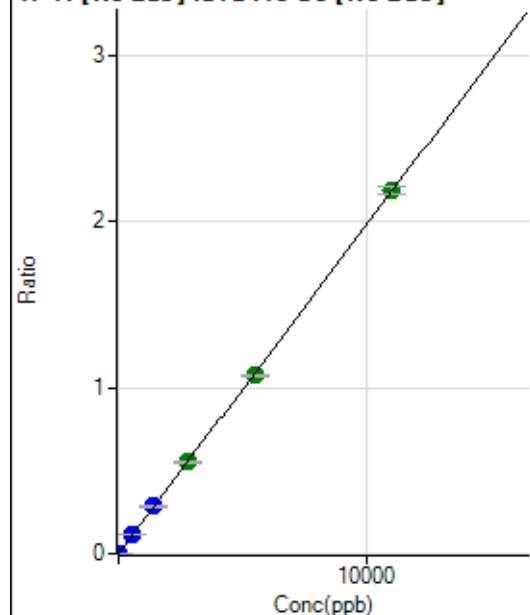
DL = 3.681

BEC = 62.77

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	147.23	0.0000	P	17.0
2	☐	5.000	5.041	3808.93	0.0010	P	2.1
3	☐	550.000	567.440	417694.57	0.1124	P	1.3
4	☐	1375.000	1432.106	1060057.49	0.2837	P	0.6
5	☐	2750.000	2778.220	2093230.54	0.5503	A	0.5
6	☐	5500.000	5421.456	4077096.70	1.0739	A	1.5
7	☐	11000.000	11024.207	8360695.24	2.1836	A	2.0
8	☐			2447.59	0.0007	P	8.0

$$y = 1.9807E-004 * x + 4.0687E-005$$

$$R = 0.9999$$

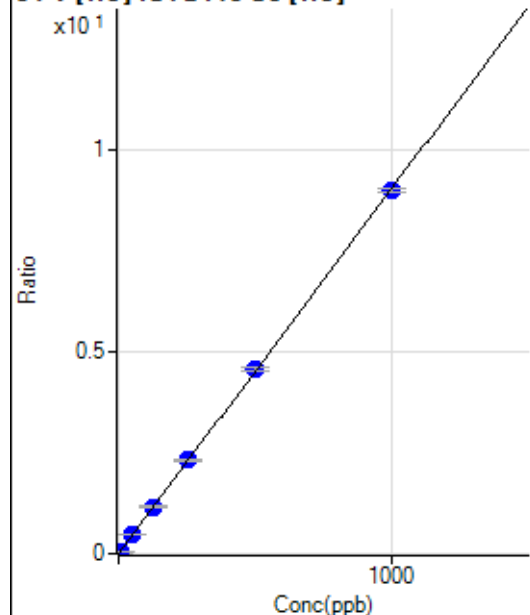
$$DL = 0.1046$$

$$BEC = 0.2054$$

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	2.22	0.0000	P	173.2
2	☐	5.000	4.778	5342.16	0.0431	P	5.3
3	☐	50.000	51.784	57768.30	0.4670	P	1.7
4	☐	125.000	128.829	144344.49	1.1617	P	1.2
5	☐	250.000	256.208	284490.05	2.3103	P	1.0
6	☐	500.000	506.340	553808.00	4.5658	P	1.4
7	☐	1000.000	994.711	1106351.67	8.9696	P	0.9
8	☐			220.00	0.0019	P	20.9

$$y = 0.0090 * x + 1.8352E-005$$

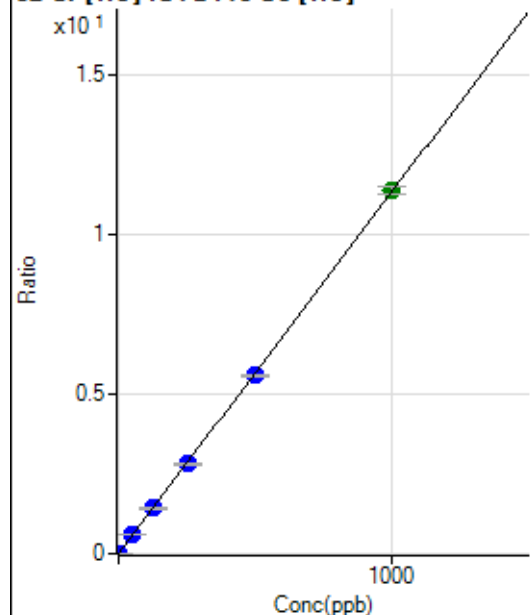
$$R = 0.9999$$

$$DL = 0.01058$$

$$BEC = 0.002035$$

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	512.24	0.0043	P	7.8
2	☐	2.000	1.826	3091.47	0.0249	P	1.9
3	☐	50.000	50.643	71473.02	0.5777	P	1.5
4	☐	125.000	125.388	176961.10	1.4241	P	1.1
5	☐	250.000	248.371	346816.26	2.8167	P	2.4
6	☐	500.000	492.191	676530.26	5.5777	P	1.7
7	☐	1000.000	1004.232	1402957.18	11.3759	A	2.3
8	☐			2621.38	0.0229	P	4.6

$$y = 0.0113 * x + 0.0043$$

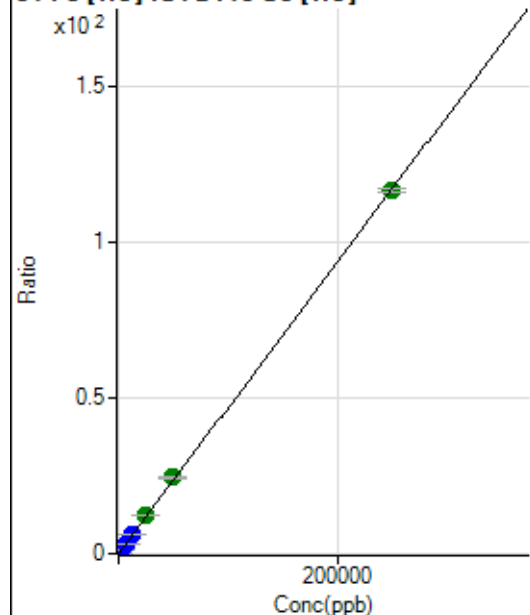
$$R = 1.0000$$

$$DL = 0.08773$$

$$BEC = 0.377$$

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	374.08	0.0031	P	13.1
2	☐	50.000	48.996	3218.94	0.0260	P	1.9
3	☐	2500.000	2655.204	153561.07	1.2413	P	1.8
4	☐	6250.000	6634.779	384833.58	3.0971	P	0.6
5	☐	12500.000	13087.122	751856.78	6.1061	P	1.6
6	☐	25000.000	26733.208	1512667.57	12.4697	A	0.7
7	☐	50000.000	52476.928	3018401.66	24.4748	A	2.7
8	☐	250000.00	249290.76	13309074.95	116.2552	A	1.2

$$y = 4.6633E-004 * x + 0.0031$$

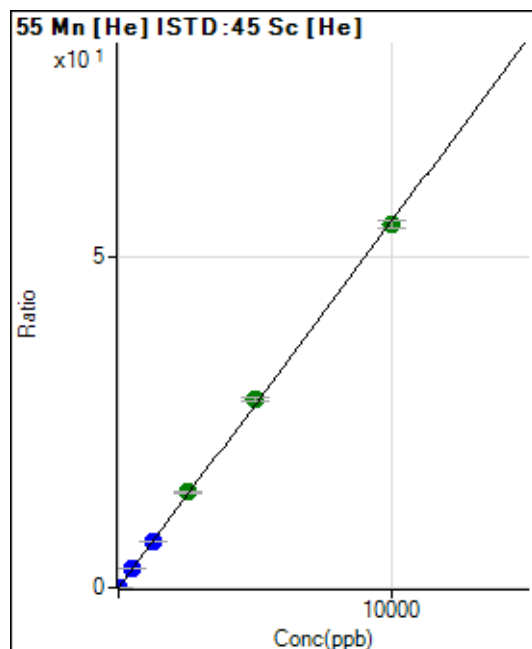
$$R = 0.9999$$

$$DL = 2.634$$

$$BEC = 6.691$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	54.44	0.0005	P	25.9
2	☐	1.000	1.050	777.81	0.0063	P	10.9
3	☐	500.000	507.779	348537.79	2.8175	P	2.5
4	☐	1250.000	1277.608	880757.11	7.0883	P	0.4
5	☐	2500.000	2610.109	1782999.09	14.4807	A	2.1
6	☐	5000.000	5127.245	3450359.43	28.4452	A	1.9
7	☐	10000.000	9905.010	6777925.59	54.9512	A	2.3
8	☐			3759.43	0.0328	P	5.2

$$y = 0.0055 * x + 4.5424E-004$$

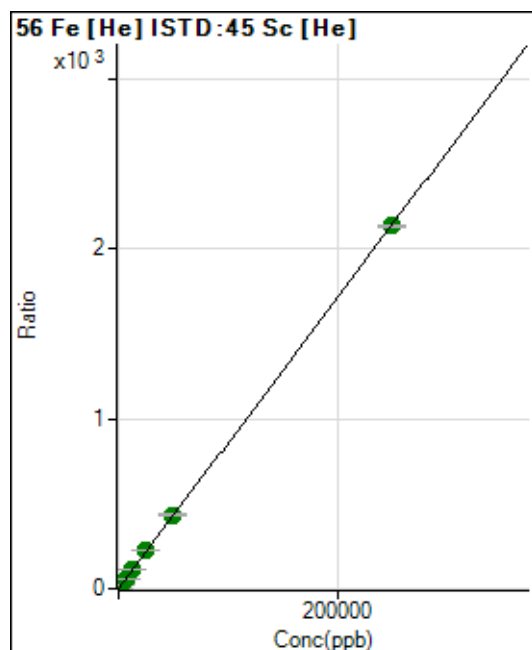
$$R = 0.9998$$

$$DL = 0.06356$$

$$BEC = 0.08188$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2709.56	0.0226	P	0.7
2	☐	50.000	47.812	53416.75	0.4310	P	0.9
3	☐	2500.000	2663.080	2816931.46	22.7682	A	0.7
4	☐	6250.000	6594.575	7002007.28	56.3474	A	2.3
5	☐	12500.000	13079.347	13757772.88	111.7343	A	2.0
6	☐	25000.000	26023.126	26963700.60	222.2881	A	0.8
7	☐	50000.000	50456.082	53155003.97	430.9719	A	2.7
8	☐	250000.00	249767.25	244236501.7	2,133.304	A	0.5

$$y = 0.0085 * x + 0.0226$$

$$R = 1.0000$$

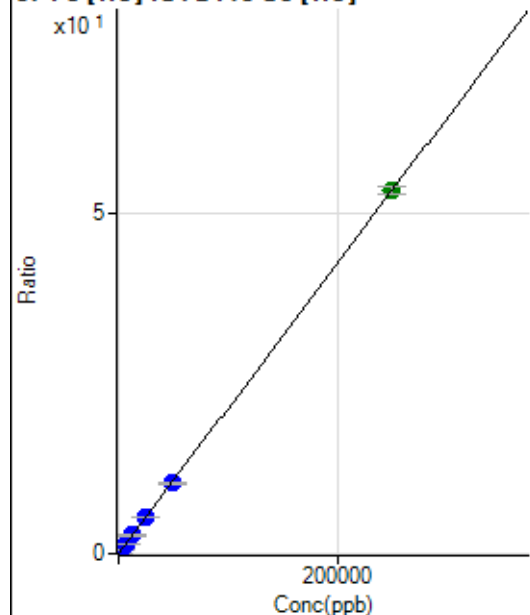
$$DL = 0.05296$$

$$BEC = 2.645$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	244.45	0.0020	P	9.4
2	☐	50.000	45.890	1466.77	0.0118	P	3.5
3	☐	2500.000	2551.008	67620.97	0.5465	P	0.3
4	☐	6250.000	6439.972	171047.41	1.3766	P	0.8
5	☐	12500.000	12654.763	332833.95	2.7031	P	2.3
6	☐	25000.000	24970.779	646804.41	5.3319	P	1.1
7	☐	50000.000	48588.792	1279310.08	10.3730	P	1.8
8	☐	250000.00	250272.16	6115618.71	53.4211	A	2.0

$$y = 2.1344\text{E-}004 * x + 0.0020$$

$$R = 1.0000$$

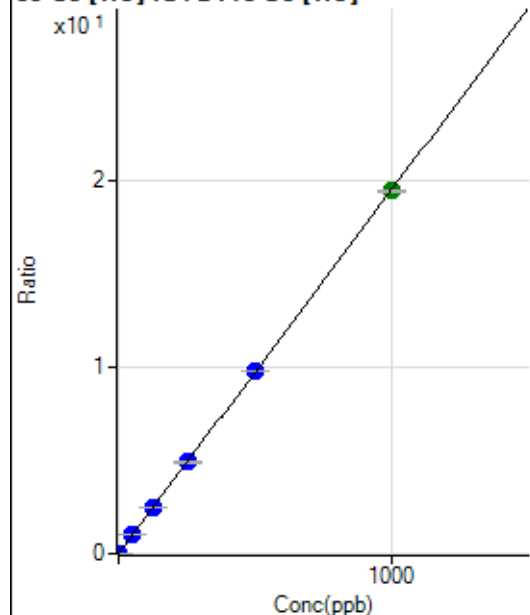
$$DL = 2.698$$

$$BEC = 9.55$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	62.22	0.0005	P	13.2
2	☐	1.000	0.964	2393.56	0.0193	P	5.2
3	☐	50.000	51.288	123733.27	1.0002	P	1.7
4	☐	125.000	127.891	309799.67	2.4933	P	0.8
5	☐	250.000	253.620	608737.95	4.9439	P	2.0
6	☐	500.000	502.132	1187248.20	9.7877	P	0.8
7	☐	1000.000	997.603	2398565.50	19.4451	A	0.6
8	☐			3144.83	0.0275	P	3.4

$$y = 0.0195 * x + 5.1915\text{E-}004$$

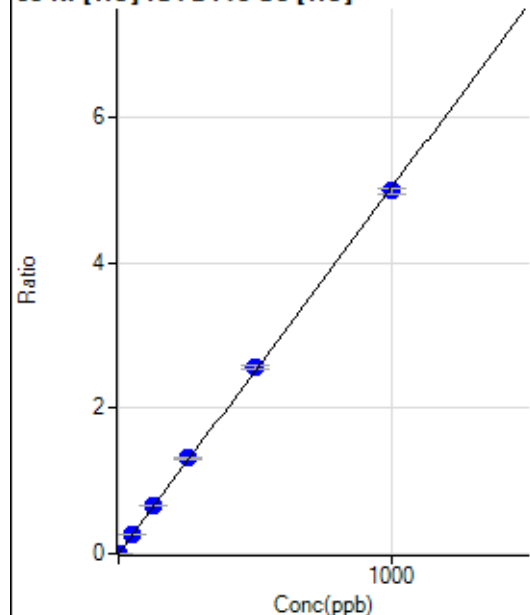
$$R = 1.0000$$

$$DL = 0.01053$$

$$BEC = 0.02663$$

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	64.45	0.0005	P	30.5
2	☐	1.000	0.955	661.13	0.0053	P	2.9
3	☐	50.000	53.432	33281.18	0.2690	P	2.2
4	☐	125.000	131.034	81887.47	0.6590	P	1.1
5	☐	250.000	260.094	161017.54	1.3076	P	0.4
6	☐	500.000	510.053	310954.85	2.5636	P	1.9
7	☐	1000.000	991.525	614556.12	4.9831	P	1.8
8	☐			978.94	0.0086	P	2.2

$$y = 0.0050 * x + 5.3739E-004$$

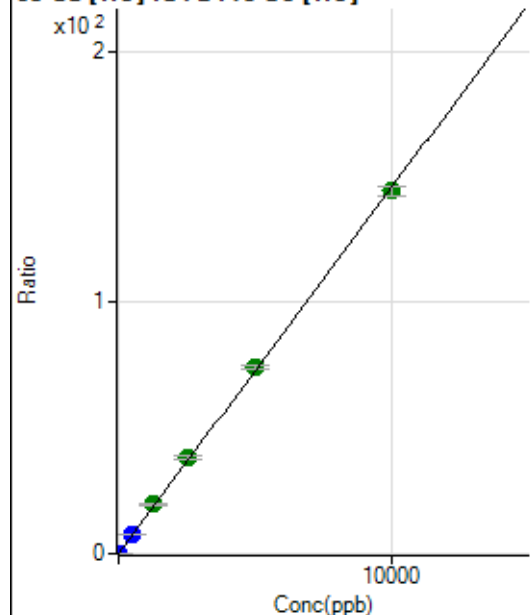
$$R = 0.9999$$

$$DL = 0.09776$$

$$BEC = 0.1069$$

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	388.90	0.0032	P	7.6
2	☐	2.000	1.997	4010.61	0.0324	P	2.8
3	☐	500.000	517.187	933415.70	7.5453	P	1.7
4	☐	1250.000	1339.838	2428230.36	19.5418	A	0.8
5	☐	2500.000	2621.547	4707378.30	38.2328	A	2.7
6	☐	5000.000	5097.064	9016386.81	74.3327	A	2.0
7	☐	10000.000	9908.992	17821915.43	144.5042	A	2.7
8	☐			4610.82	0.0403	P	2.6

$$y = 0.0146 * x + 0.0032$$

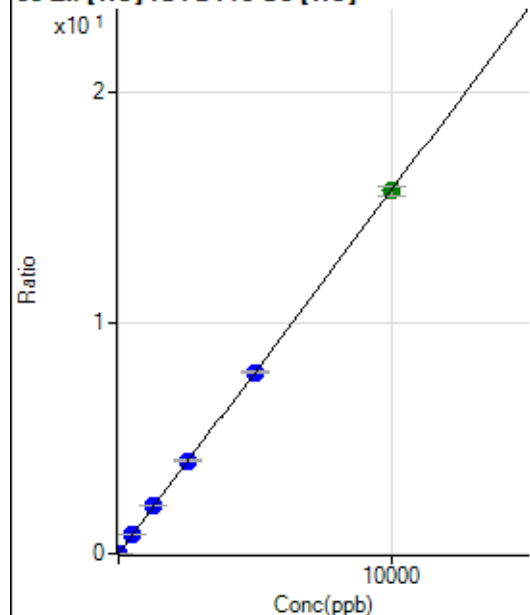
$$R = 0.9998$$

$$DL = 0.05063$$

$$BEC = 0.2224$$

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	73.33	0.0006	P	20.9
2	☐	2.000	2.025	471.12	0.0038	P	4.3
3	☐	500.000	527.613	102871.57	0.8315	P	1.3
4	☐	1250.000	1310.281	256472.32	2.0641	P	1.1
5	☐	2500.000	2565.262	497479.96	4.0405	P	2.9
6	☐	5000.000	4986.911	952742.36	7.8543	P	0.5
7	☐	10000.000	9981.313	1938544.52	15.7198	A	2.4
8	☐			2323.55	0.0203	P	1.4

$$y = 0.0016 * x + 6.1134E-004$$

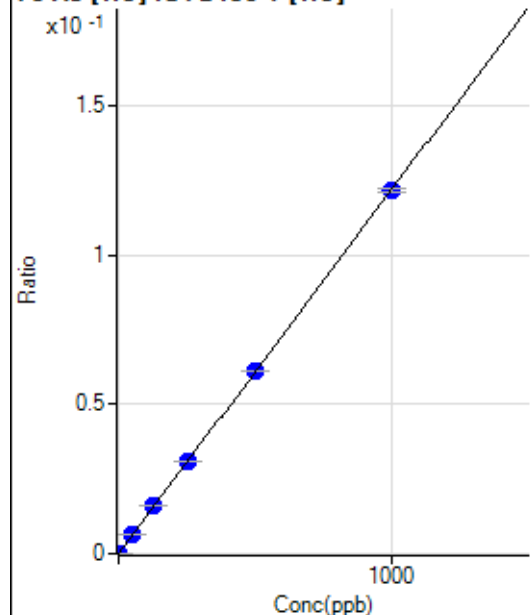
$$R = 1.0000$$

$$DL = 0.2429$$

$$BEC = 0.3882$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	5.33	0.0000	P	46.9
2	☐	1.000	1.042	132.68	0.0001	P	4.5
3	☐	50.000	51.922	6325.72	0.0063	P	1.8
4	☐	125.000	132.626	16238.28	0.0162	P	0.9
5	☐	250.000	254.580	31213.45	0.0310	P	1.0
6	☐	500.000	501.944	60699.51	0.0612	P	0.9
7	☐	1000.000	996.834	120559.63	0.1215	P	1.2
8	☐			48.01	0.0001	P	2.3

$$y = 1.2192E-004 * x + 5.4539E-006$$

$$R = 1.0000$$

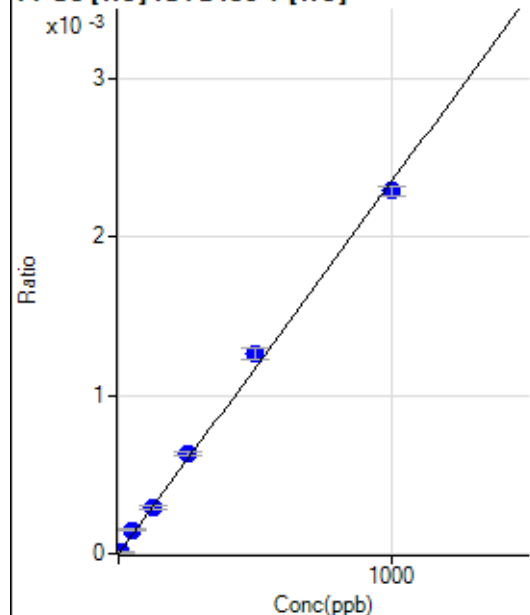
$$DL = 0.06301$$

$$BEC = 0.04473$$

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	☐	5.000	3.770	8.89	0.0000	P	114.8
3	☐	50.000	63.972	150.01	0.0002	P	7.0
4	☐	125.000	124.069	292.23	0.0003	P	10.2
5	☐	250.000	268.273	633.35	0.0006	P	5.1
6	☐	500.000	537.870	1252.29	0.0013	P	6.6
7	☐	1000.000	975.921	2272.43	0.0023	P	2.3
8	☐			3.33	0.0000	P	100.6

$$y = 2.3476\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 0.9987$$

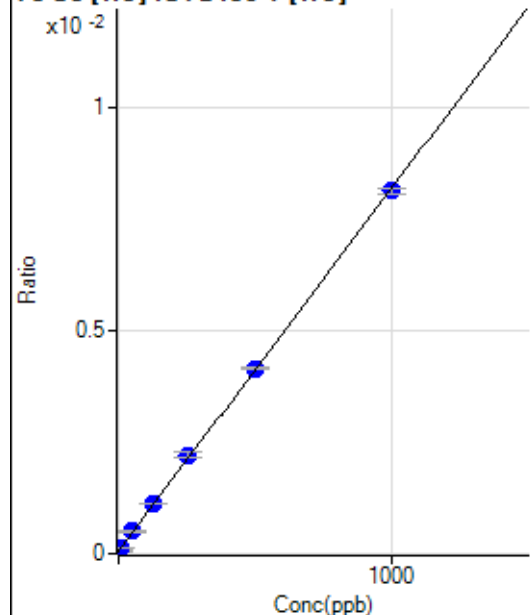
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	59.34	0.0001	P	15.9
2	☐	5.000	6.173	111.01	0.0001	P	3.0
3	☐	50.000	54.357	501.39	0.0005	P	5.1
4	☐	125.000	129.686	1118.49	0.0011	P	1.9
5	☐	250.000	265.484	2229.07	0.0022	P	4.1
6	☐	500.000	504.294	4122.69	0.0042	P	0.3
7	☐	1000.000	993.173	8063.12	0.0081	P	1.4
8	☐			61.34	0.0001	P	8.5

$$y = 8.1227\text{E-}006 * x + 6.0763\text{E-}005$$

$$R = 0.9999$$

$$DL = 3.562$$

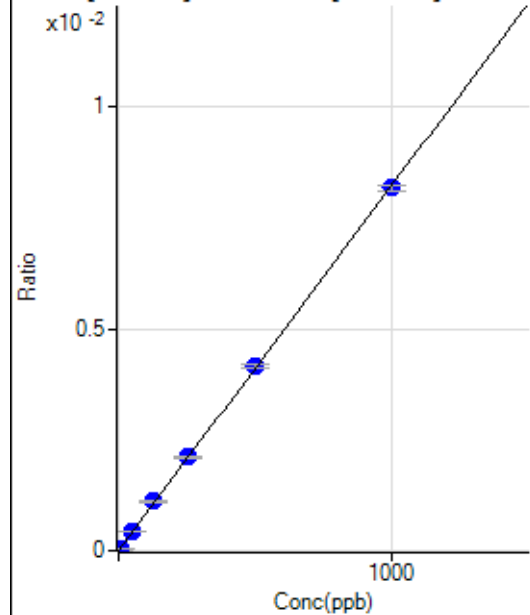
$$BEC = 7.481$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			16416.64		P	2.4
2	☐			16810.71		P	1.3
3	☐			17402.26		P	3.1
4	☐			16533.53		P	4.9
5	☐			16723.96		P	5.6
6	☐			17251.90		P	3.3
7	☐			16677.20		P	3.0
8	☐			16713.88		P	2.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	-39.35	0.0000	P	-317.
2	☐	5.000	5.364	324.02	0.0000	P	12.3
3	☐	50.000	52.515	3699.04	0.0004	P	4.3
4	☐	125.000	135.411	9453.92	0.0011	P	3.6
5	☐	250.000	257.687	18413.43	0.0021	P	1.7
6	☐	500.000	504.754	35923.89	0.0042	P	1.8
7	☐	1000.000	994.272	72752.23	0.0082	P	1.8
8	☐			66.22	0.0000	P	109.0

$$y = 8.2318\text{E-}006 * x - 4.8548\text{E-}006$$

$$R = 0.9999$$

$$DL = 5.617$$

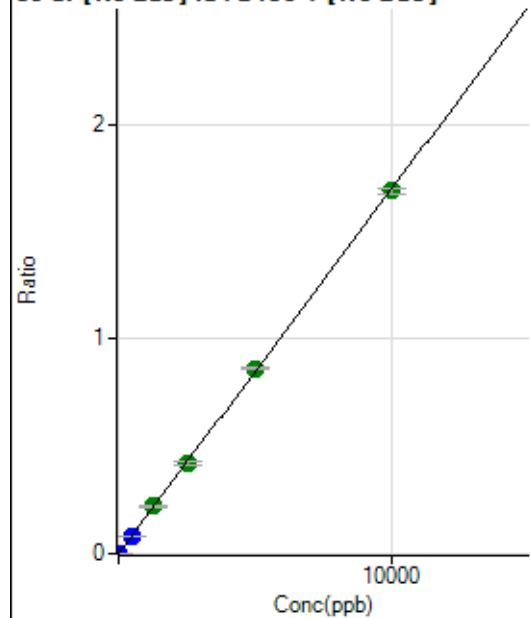
$$BEC = -0.5898$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1210.07		P	6.3
2	☐			1186.73		P	4.4
3	☐			1277.85		P	5.6
4	☐			1117.83		P	6.1
5	☐			1107.84		P	2.7
6	☐			1162.28		P	7.7
7	☐			1104.50		P	5.6
8	☐			1183.39		P	5.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	1814.06	0.0002	P	6.3
2	☐	1.000	0.885	3019.85	0.0004	P	1.5
3	☐	500.000	493.302	727439.74	0.0840	P	2.6
4	☐	1250.000	1308.172	1895294.79	0.2225	A	2.8
5	☐	2500.000	2496.109	3691626.56	0.4243	A	3.6
6	☐	5000.000	5081.114	7477235.15	0.8636	A	1.0
7	☐	10000.000	9953.479	15043921.52	1.6915	A	1.9
8	☐			12964.74	0.0015	P	4.9

$$y = 1.6991E-004 * x + 2.1577E-004$$

$$R = 0.9999$$

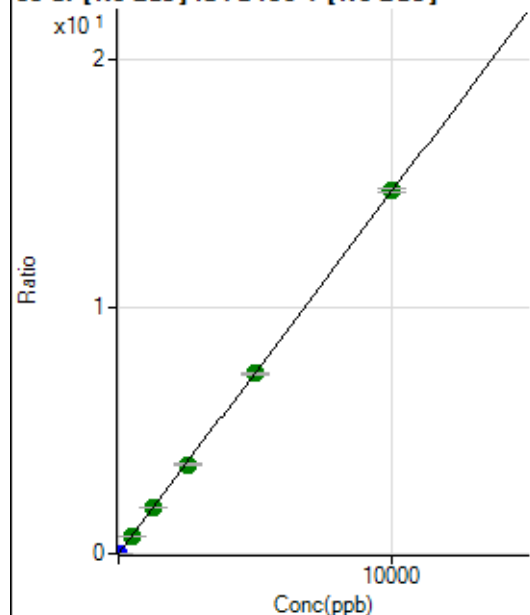
$$DL = 0.2387$$

$$BEC = 1.27$$

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	136.11	0.0000	P	22.4
2	☐	1.000	0.948	11596.83	0.0014	P	4.9
3	☐	500.000	491.473	6239606.87	0.7206	A	1.8
4	☐	1250.000	1273.670	15908147.40	1.8674	A	1.7
5	☐	2500.000	2455.928	31325096.88	3.6007	A	3.0
6	☐	5000.000	4968.036	63062845.16	7.2838	A	0.6
7	☐	10000.000	10024.468	130728604.3	14.6971	A	1.1
8	☐			97118.11	0.0116	P	3.7

$$y = 0.0015 * x + 1.6169E-005$$

$$R = 1.0000$$

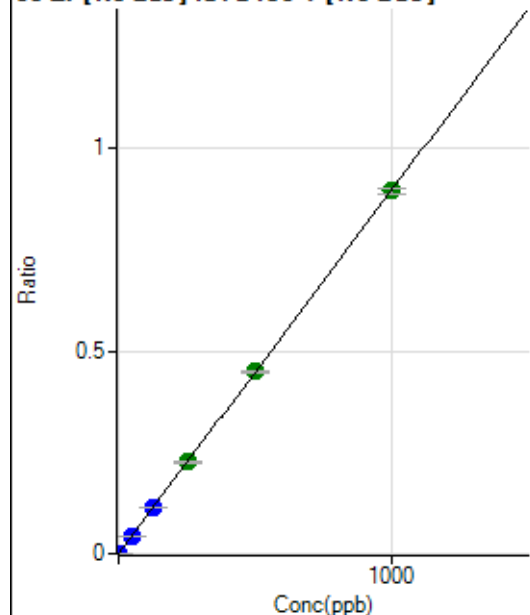
$$DL = 0.007398$$

$$BEC = 0.01103$$

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	361.13	0.0000	P	7.4
2	☐	1.000	0.915	7121.44	0.0009	P	4.8
3	☐	50.000	48.888	380060.31	0.0439	P	0.8
4	☐	125.000	126.696	968533.25	0.1137	P	0.7
5	☐	250.000	251.743	1964892.08	0.2258	A	1.8
6	☐	500.000	501.917	3897843.97	0.4502	A	1.0
7	☐	1000.000	998.449	7965349.83	0.8956	A	1.8
8	☐			5476.29	0.0007	P	4.5

$$y = 8.9691E-004 * x + 4.2936E-005$$

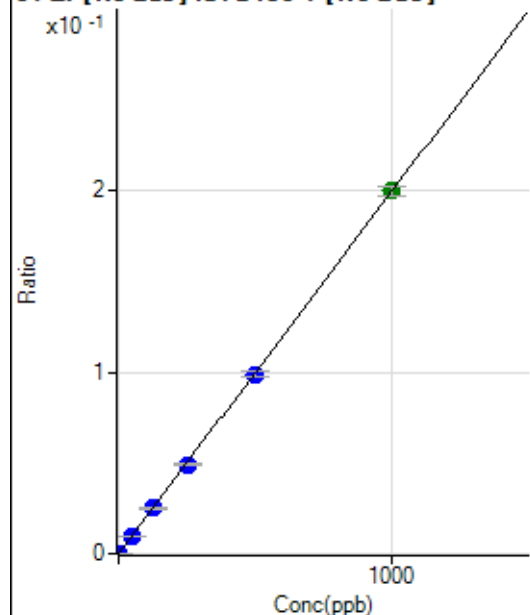
$$R = 1.0000$$

$$DL = 0.01069$$

$$BEC = 0.04787$$

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	97.23	0.0000	P	33.8
2	☐	1.000	0.946	1650.15	0.0002	P	7.3
3	☐	50.000	48.010	82955.82	0.0096	P	0.8
4	☐	125.000	126.475	214808.30	0.0252	P	3.2
5	☐	250.000	246.141	426930.47	0.0491	P	1.2
6	☐	500.000	496.241	856132.51	0.0989	P	2.6
7	☐	1000.000	1002.760	1777396.70	0.1999	A	2.9
8	☐			1250.10	0.0001	P	16.0

$$y = 1.9930E-004 * x + 1.1597E-005$$

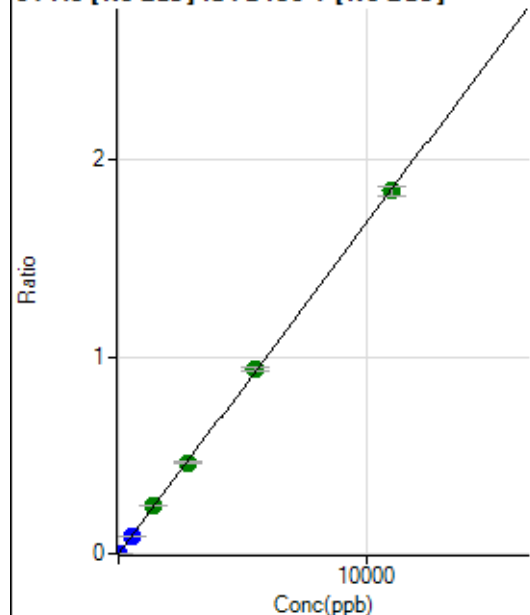
$$R = 1.0000$$

$$DL = 0.05899$$

$$BEC = 0.05819$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	183.34	0.0000	P	16.2
2	☐	5.000	5.963	8438.94	0.0010	P	2.4
3	☐	550.000	543.170	789788.48	0.0912	P	3.2
4	☐	1375.000	1446.025	2068974.63	0.2429	A	2.0
5	☐	2750.000	2748.266	4016029.00	0.4616	A	3.2
6	☐	5500.000	5558.924	8083847.66	0.9336	A	1.9
7	☐	11000.000	10962.434	16374322.07	1.8411	A	2.4
8	☐			7099.51	0.0008	P	5.9

$$y = 1.6795E-004 * x + 2.1825E-005$$

$$R = 1.0000$$

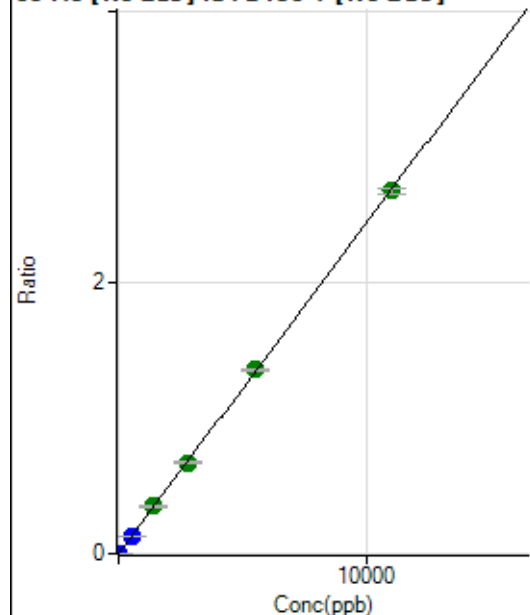
$$DL = 0.06328$$

$$BEC = 0.1299$$

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	50.00	0.0000	P	43.5
2	☐	5.000	4.854	9814.88	0.0012	P	3.5
3	☐	550.000	536.794	1133706.39	0.1310	P	2.2
4	☐	1375.000	1424.654	2960661.85	0.3476	A	2.5
5	☐	2750.000	2757.156	5852015.84	0.6726	A	3.3
6	☐	5500.000	5563.988	11750730.99	1.3574	A	0.9
7	☐	11000.000	10960.671	23782516.85	2.6739	A	1.6
8	☐			8322.60	0.0010	P	6.6

$$y = 2.4395E-004 * x + 5.9379E-006$$

$$R = 1.0000$$

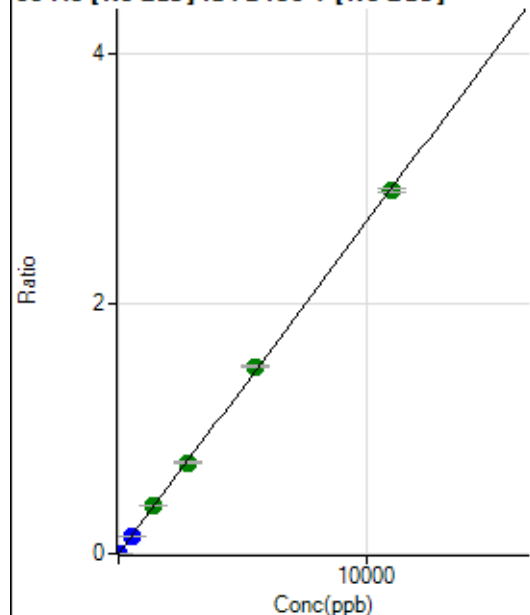
$$DL = 0.03174$$

$$BEC = 0.02434$$

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	147.23	0.0000	P	10.0
2	☐	5.000	4.983	11051.84	0.0013	P	5.3
3	☐	550.000	534.553	1228650.54	0.1419	P	1.6
4	☐	1375.000	1438.743	3253566.15	0.3819	A	1.7
5	☐	2750.000	2740.163	6328692.02	0.7274	A	1.9
6	☐	5500.000	5641.874	12963833.36	1.4976	A	1.5
7	☐	11000.000	10924.327	25794047.10	2.8997	A	1.2
8	☐			13724.00	0.0016	P	5.2

$$y = 2.6544E-004 * x + 1.7533E-005$$

$$R = 0.9999$$

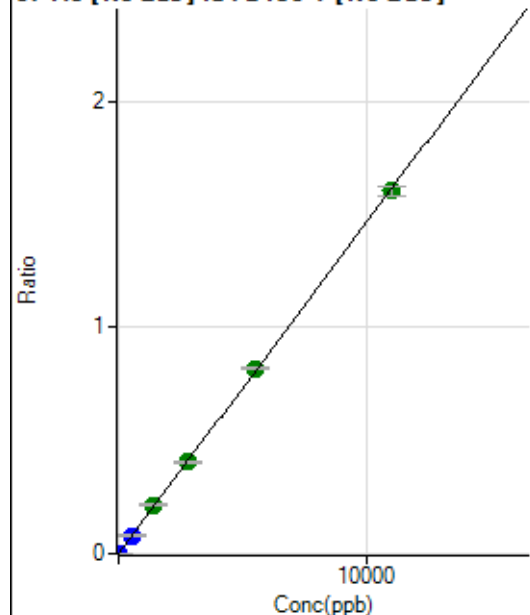
$$DL = 0.01984$$

$$BEC = 0.06605$$

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	33.34	0.0000	P	64.4
2	☐	5.000	5.143	6254.38	0.0008	P	2.6
3	☐	550.000	549.510	697893.20	0.0806	P	1.7
4	☐	1375.000	1469.803	1836412.65	0.2156	A	3.2
5	☐	2750.000	2755.139	3516307.63	0.4041	A	3.0
6	☐	5500.000	5591.750	7101253.20	0.8202	A	1.5
7	☐	11000.000	10941.014	14274500.14	1.6049	A	2.4
8	☐			5376.51	0.0006	P	2.7

$$y = 1.4668\text{E-}004 * x + 3.9366\text{E-}006$$

$$R = 0.9999$$

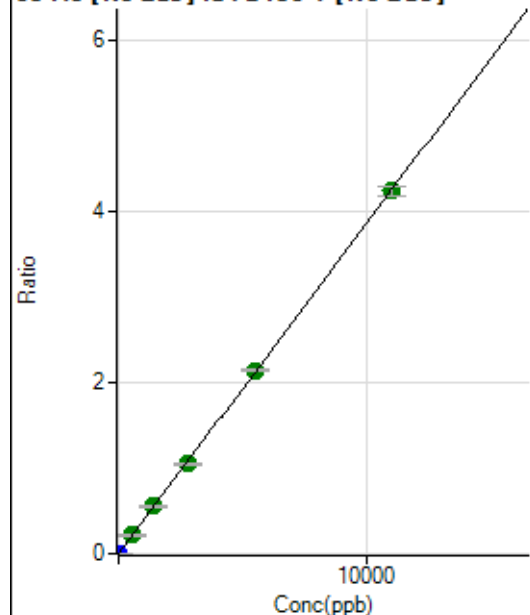
$$DL = 0.05184$$

$$BEC = 0.02684$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	66.67	0.0000	P	38.3
2	☐	5.000	5.005	16018.06	0.0019	P	2.6
3	☐	550.000	557.765	1866147.17	0.2156	A	2.8
4	☐	1375.000	1432.407	4715705.53	0.5536	A	2.7
5	☐	2750.000	2730.996	9183661.58	1.0555	A	2.0
6	☐	5500.000	5539.316	18534734.44	2.1409	A	1.0
7	☐	11000.000	10977.529	37733848.06	4.2428	A	2.4
8	☐			13561.46	0.0016	P	6.2

$$y = 3.8650\text{E-}004 * x + 7.9568\text{E-}006$$

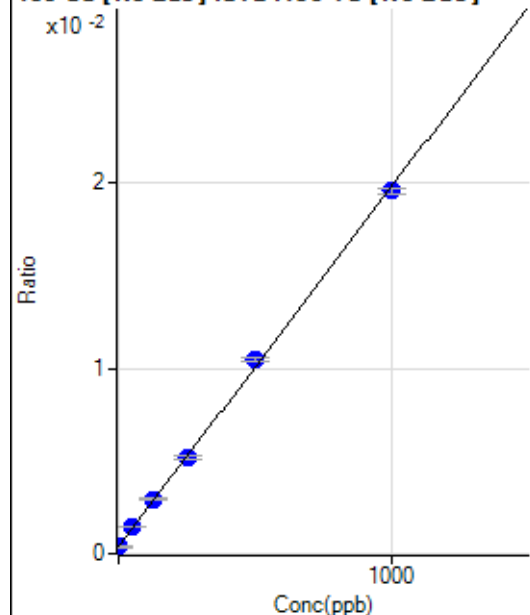
$$R = 1.0000$$

$$DL = 0.02366$$

$$BEC = 0.02059$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1730.71	0.0004	P	13.6
2	☐	1.000	-0.129	1736.27	0.0004	P	19.1
3	☐	50.000	56.045	6787.95	0.0015	P	3.1
4	☐	125.000	132.008	14199.36	0.0029	P	2.8
5	☐	250.000	247.633	25424.17	0.0052	P	3.3
6	☐	500.000	521.255	51156.93	0.0105	P	2.0
7	☐	1000.000	988.787	97875.99	0.0196	P	1.5
8	☐			1789.06	0.0004	P	3.0

$$y = 1.9401\text{E-}005 * x + 3.7060\text{E-}004$$

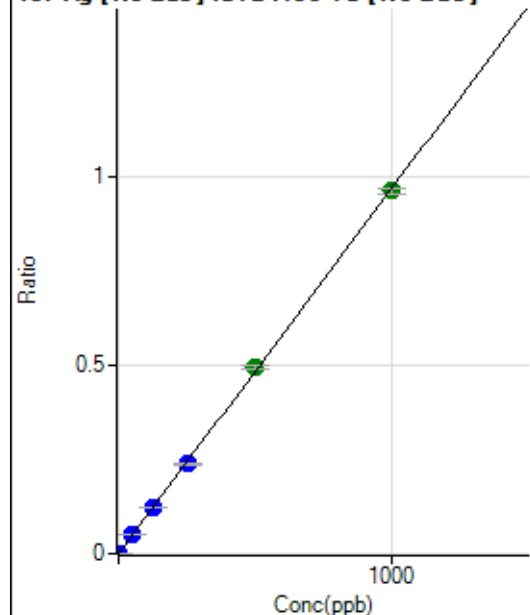
$$R = 0.9996$$

$$DL = 7.806$$

$$BEC = 19.1$$

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	41.67	0.0000	P	35.4
2	☐	1.000	0.906	4181.31	0.0009	P	11.2
3	☐	50.000	51.282	231223.49	0.0497	P	3.3
4	☐	125.000	127.348	597290.97	0.1233	P	0.6
5	☐	250.000	247.600	1178007.66	0.2398	P	2.1
6	☐	500.000	512.380	2421402.94	0.4962	A	2.0
7	☐	1000.000	994.052	4817973.72	0.9627	A	1.3
8	☐			1772.40	0.0004	P	14.2

$$y = 9.6843\text{E-}004 * x + 8.9247\text{E-}006$$

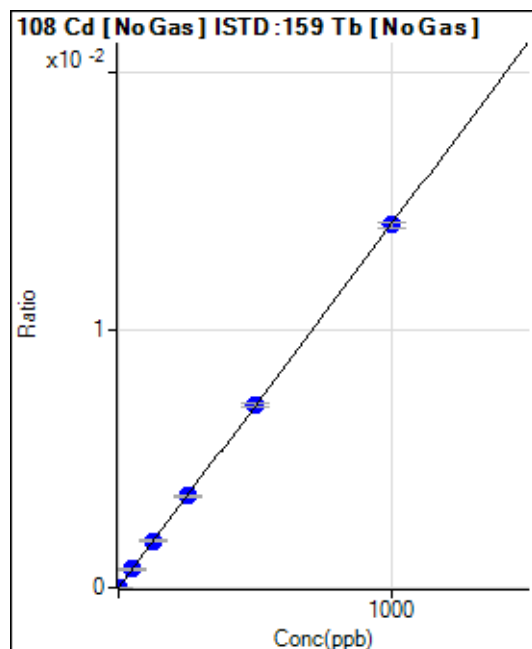
$$R = 0.9999$$

$$DL = 0.009799$$

$$BEC = 0.009216$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	18.06	0.0000	P	59.1
2	☐	1.000	0.896	77.78	0.0000	P	29.7
3	☐	50.000	51.516	3394.92	0.0007	P	6.0
4	☐	125.000	128.028	8754.29	0.0018	P	2.5
5	☐	250.000	253.010	17533.50	0.0036	P	1.8
6	☐	500.000	502.280	34551.71	0.0071	P	2.0
7	☐	1000.000	997.654	70374.83	0.0141	P	1.3
8	☐			111.11	0.0000	P	34.6

$$y = 1.4091\text{E-}005 * x + 3.8690\text{E-}006$$

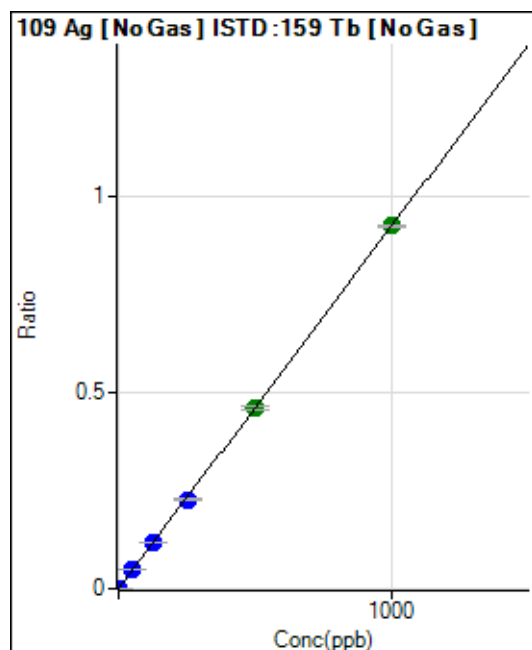
$$R = 1.0000$$

$$DL = 0.4871$$

$$BEC = 0.2746$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	22.22	0.0000	P	23.2
2	☐	1.000	0.928	4067.37	0.0009	P	4.5
3	☐	50.000	51.202	220464.26	0.0473	P	2.7
4	☐	125.000	126.780	567579.66	0.1172	P	3.3
5	☐	250.000	246.431	1119168.99	0.2279	P	3.6
6	☐	500.000	499.787	2254851.57	0.4621	A	2.4
7	☐	1000.000	1000.716	4631449.28	0.9253	A	0.6
8	☐			1780.73	0.0004	P	8.6

$$y = 9.2465\text{E-}004 * x + 4.7654\text{E-}006$$

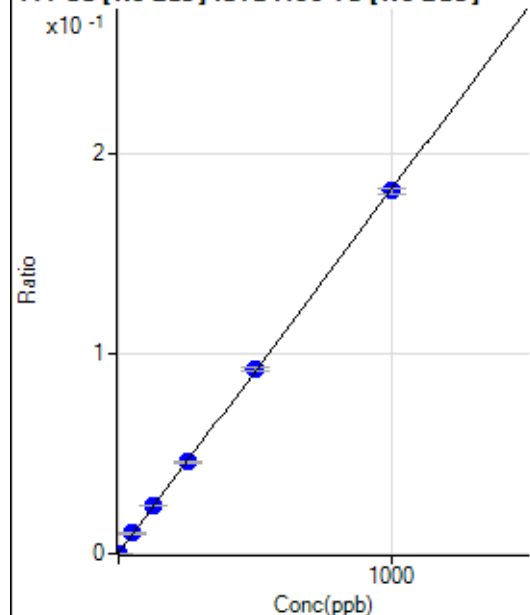
$$R = 1.0000$$

$$DL = 0.003588$$

$$BEC = 0.005154$$

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	1228.02	0.0003	P	14.1
2	☐	1.000	0.929	2037.37	0.0004	P	13.3
3	☐	50.000	54.338	47242.61	0.0102	P	4.4
4	☐	125.000	130.707	116452.84	0.0240	P	2.4
5	☐	250.000	249.950	224731.02	0.0457	P	2.4
6	☐	500.000	507.153	451602.70	0.0926	P	1.9
7	☐	1000.000	995.506	907955.46	0.1814	P	1.7
8	☐			1388.45	0.0003	P	5.2

$$y = 1.8197E-004 * x + 2.6297E-004$$

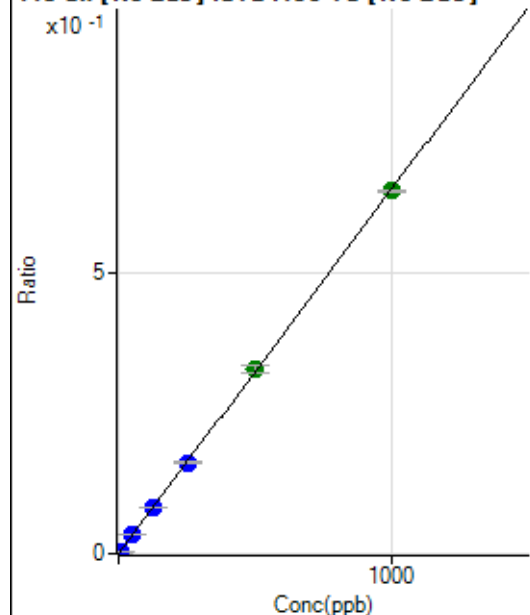
$$R = 0.9999$$

$$DL = 0.6133$$

$$BEC = 1.445$$

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	647.26	0.0001	P	17.0
2	☐	5.000	4.821	15398.04	0.0033	P	1.3
3	☐	50.000	51.188	155137.22	0.0333	P	4.0
4	☐	125.000	124.961	393078.70	0.0812	P	1.0
5	☐	250.000	249.711	796199.61	0.1621	P	1.6
6	☐	500.000	508.336	1608986.65	0.3298	A	3.8
7	☐	1000.000	995.850	3232673.47	0.6459	A	0.7
8	☐			2108.57	0.0004	P	4.1

$$y = 6.4845E-004 * x + 1.3868E-004$$

$$R = 0.9999$$

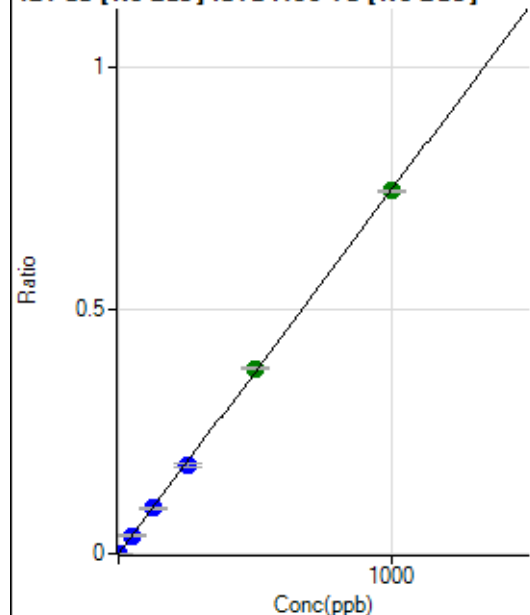
$$DL = 0.1089$$

$$BEC = 0.2139$$

Weight: <None>

Min Conc: 0

121 Sb [No Gas] ISTD :159 Tb [No Gas]



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	38.89	0.0000	P	55.1
2	☐	2.000	1.804	6398.92	0.0014	P	4.7
3	☐	50.000	49.974	173917.03	0.0374	P	4.1
4	☐	125.000	124.846	451920.96	0.0933	P	3.0
5	☐	250.000	243.521	894071.38	0.1820	P	4.1
6	☐	500.000	508.960	1856583.12	0.3805	A	1.1
7	☐	1000.000	997.161	3730783.50	0.7454	A	0.8
8	☐			3820.10	0.0008	P	9.3

$$y = 7.4753\text{E-}004 * x + 8.3720\text{E-}006$$

$$R = 0.9999$$

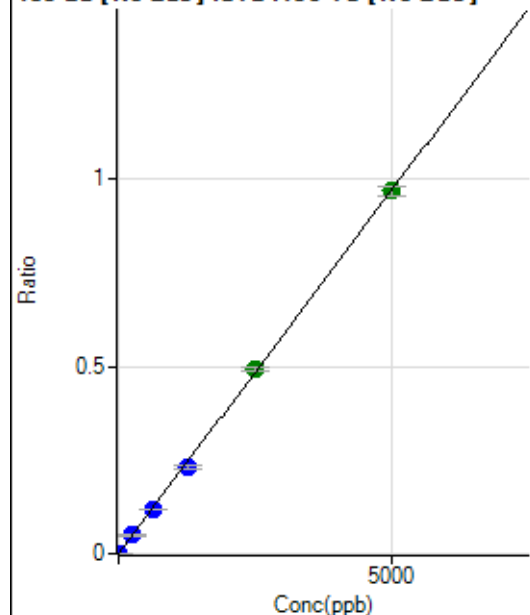
$$DL = 0.0185$$

$$BEC = 0.0112$$

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	16.67	0.0000	P	1.9
2	☐	10.000	9.178	8416.74	0.0018	P	0.9
3	☐	250.000	253.083	228708.55	0.0491	P	2.5
4	☐	625.000	612.176	575293.64	0.1188	P	2.4
5	☐	1250.000	1199.536	1143271.10	0.2328	P	4.5
6	☐	2500.000	2538.071	2403452.59	0.4926	A	2.2
7	☐	5000.000	4995.031	4851555.32	0.9694	A	2.5
8	☐			2428.08	0.0005	P	10.7

$$y = 1.9408\text{E-}004 * x + 3.5650\text{E-}006$$

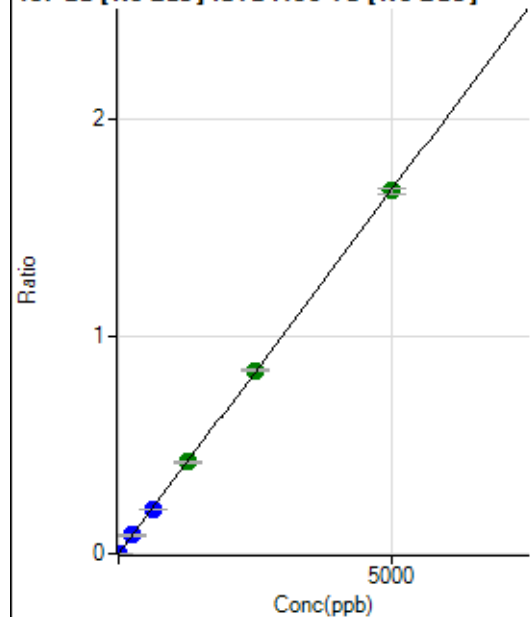
$$R = 0.9999$$

$$DL = 0.001036$$

$$BEC = 0.01837$$

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	30.56	0.0000	P	43.0
2	☐	10.000	9.163	14466.45	0.0031	P	3.4
3	☐	250.000	255.484	397298.00	0.0854	P	3.5
4	☐	625.000	613.008	991632.16	0.2048	P	1.5
5	☐	1250.000	1262.921	2072264.91	0.4219	A	2.9
6	☐	2500.000	2518.213	4104973.83	0.8412	A	0.7
7	☐	5000.000	4988.890	8340880.83	1.6665	A	1.3
8	☐			4323.07	0.0009	P	9.7

$$y = 3.3405E-004 * x + 6.5683E-006$$

$$R = 1.0000$$

$$DL = 0.02535$$

$$BEC = 0.01966$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	173.2
2	☐			0.00		P	
3	☐			24.44		P	31.5
4	☐			40.00		P	44.1
5	☐			68.89		P	11.2
6	☐			122.23		P	22.0
7	☐			235.56		P	21.2
8	☐			28.89		P	48.0

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			0.00		P	
3	☐			0.00		P	
4	☐			1.11		P	173.2
5	☐			6.67		P	100.0
6	☐			8.89		P	57.3
7	☐			18.89		P	113.5
8	☐			7.78		P	49.5

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			11.11		P	43.3
2	☐			5.55		P	86.6
3	☐			22.22		P	57.3
4	☐			30.56		P	83.3
5	☐			44.44		P	43.3
6	☐			91.67		P	9.1
7	☐			177.78		P	25.8
8	☐			691.71		P	13.7

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.2
2	☐			1.11		P	173.2
3	☐			6.67		P	86.6
4	☐			10.00		P	88.2
5	☐			27.78		P	25.0
6	☐			41.11		P	28.5
7	☐			83.33		P	8.0
8	☐			313.34		P	22.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			19.44		P	49.5
2	☐			11.11		P	86.6
3	☐			33.33		P	25.0
4	☐			33.34		P	43.3
5	☐			52.78		P	9.1
6	☐			83.34		P	43.6
7	☐			163.89		P	36.8
8	☐			672.26		P	7.5

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			37.78		P	41.7
2	☐			28.89		P	46.6
3	☐			28.89		P	40.5
4	☐			56.67		P	25.6
5	☐			66.66		P	22.9
6	☐			56.67		P	15.6
7	☐			112.22		P	22.3
8	☐			354.45		P	2.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.33		P	43.3
2	☐			47.22		P	27.0
3	☐			41.67		P	20.0
4	☐			30.55		P	15.7
5	☐			19.45		P	24.7
6	☐			27.78		P	62.5
7	☐			58.34		P	51.5
8	☐			91.67		P	27.3

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			14.44		P	70.5
2	☐			20.00		P	33.4
3	☐			21.11		P	63.8
4	☐			8.89		P	57.3
5	☐			15.55		P	44.6
6	☐			21.11		P	24.1
7	☐			28.89		P	40.5
8	☐			56.67		P	10.2

172 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			25.00		P	33.3
2	☐			19.44		P	99.0
3	☐			11.11		P	43.3
4	☐			5.55		P	86.6
5	☐			25.00		P	88.2
6	☐			30.56		P	83.3
7	☐			30.56		P	31.5
8	☐			58.34		P	24.7

172 Yb [He] No available calibration points

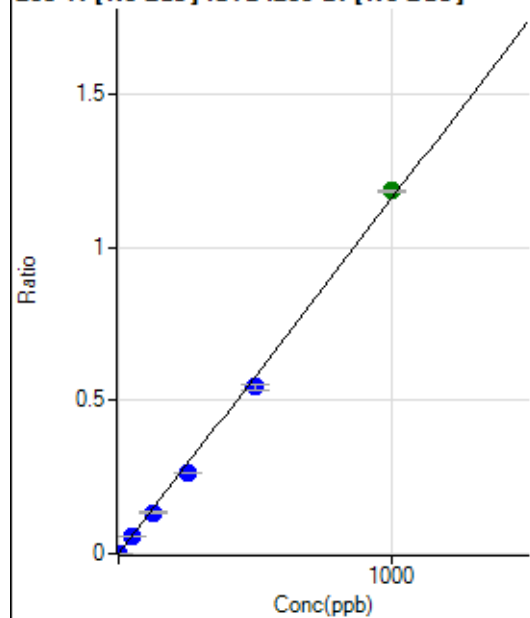
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7.41		P	43.2
2	☐			14.82		P	21.7
3	☐			11.11		P	0.0
4	☐			7.41		P	86.6
5	☐			5.56		P	100.0
6	☐			5.56		P	100.0
7	☐			16.67		P	66.6
8	☐			38.89		P	51.5

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			347.24		P	24.3
2	☐			425.02		P	12.9
3	☐			922.28		P	13.2
4	☐			1747.38		P	11.4
5	☐			3664.51		P	12.0
6	☐			6248.91		P	6.4
7	☐			12503.50		P	0.4
8	☐			511.14		P	29.0

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2879.99		P	1.8
2	☐			2831.84		P	6.7
3	☐			3231.94		P	4.6
4	☐			3774.69		P	3.4
5	☐			4630.52		P	0.2
6	☐			6057.08		P	3.1
7	☐			9381.28		P	1.5
8	☐			2937.42		P	2.2

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	225.01	0.0001	P	21.2
2	☐	1.000	0.872	2728.15	0.0011	P	5.6
3	☐	50.000	47.758	136097.90	0.0554	P	2.2
4	☐	125.000	115.489	341254.23	0.1338	P	2.7
5	☐	250.000	228.122	685609.12	0.2643	P	1.5
6	☐	500.000	469.040	1408458.21	0.5433	P	3.2
7	☐	1000.000	1022.251	3071655.34	1.1840	A	0.7
8	☐			1052.86	0.0004	P	14.0

$$y = 0.0012 * x + 9.0188E-005$$

$$R = 0.9990$$

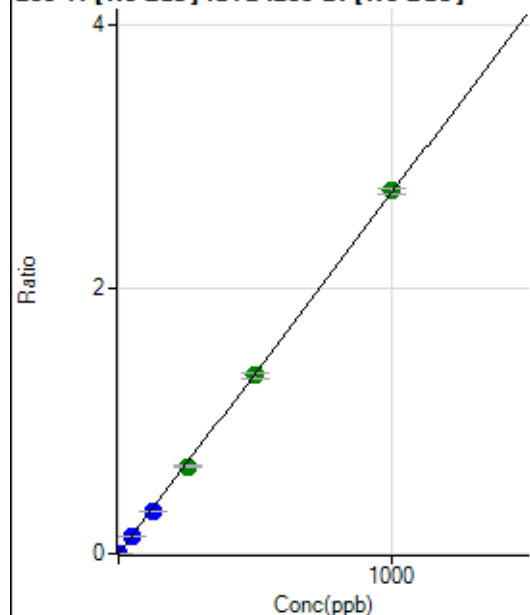
$$DL = 0.04952$$

$$BEC = 0.07787$$

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	422.24	0.0002	P	23.0
2	☐	1.000	0.851	6168.31	0.0025	P	2.0
3	☐	50.000	46.819	313999.99	0.1278	P	3.9
4	☐	125.000	116.288	809081.05	0.3173	P	2.2
5	☐	250.000	241.875	1711707.31	0.6598	A	0.6
6	☐	500.000	494.611	3497977.55	1.3490	A	3.2
7	☐	1000.000	1005.974	7116708.58	2.7435	A	1.3
8	☐			2091.91	0.0009	P	16.0

$$y = 0.0027 * x + 1.6892E-004$$

$$R = 0.9999$$

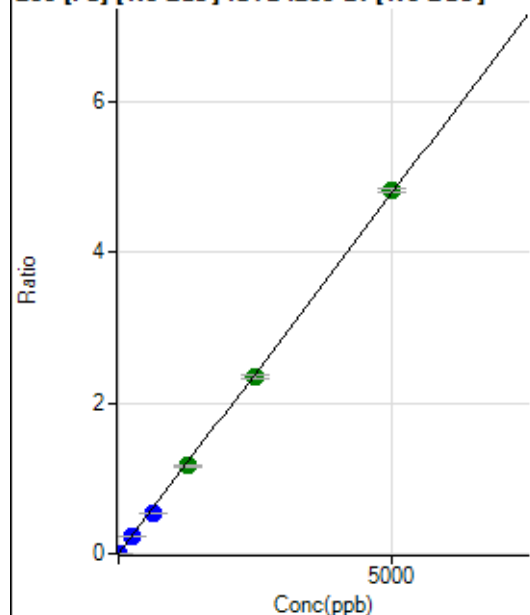
$$DL = 0.04268$$

$$BEC = 0.06194$$

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	420.39	0.0002	P	13.7
2	☐	1.000	0.852	2435.45	0.0010	P	5.2
3	☐	250.000	229.283	538251.19	0.2190	P	1.6
4	☐	625.000	565.187	1376051.44	0.5397	P	2.7
5	☐	1250.000	1217.571	3015613.90	1.1625	A	2.1
6	☐	2500.000	2453.679	6073686.48	2.3425	A	2.2
7	☐	5000.000	5039.781	12480743.22	4.8112	A	1.0
8	☐			6724.17	0.0027	P	7.2

$$y = 9.5461E-004 * x + 1.6835E-004$$

$$R = 0.9999$$

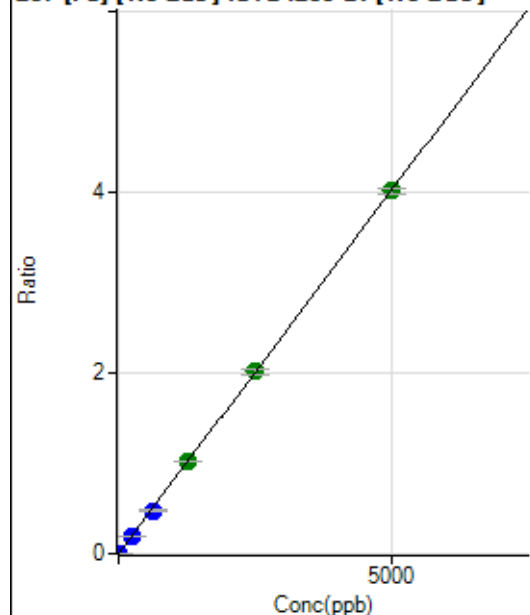
$$DL = 0.07256$$

$$BEC = 0.1764$$

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	422.24	0.0002	P	13.6
2	☐	1.000	0.885	2183.57	0.0009	P	4.9
3	☐	250.000	238.584	472124.36	0.1922	P	3.2
4	☐	625.000	587.490	1205949.58	0.4730	P	3.3
5	☐	1250.000	1271.242	2654587.24	1.0233	A	1.8
6	☐	2500.000	2511.880	5240844.79	2.0218	A	3.3
7	☐	5000.000	4994.009	10426484.84	4.0195	A	1.6
8	☐			5675.42	0.0023	P	2.7

$$y = 8.0483\text{E-}004 * x + 1.6860\text{E-}004$$

$$R = 0.9999$$

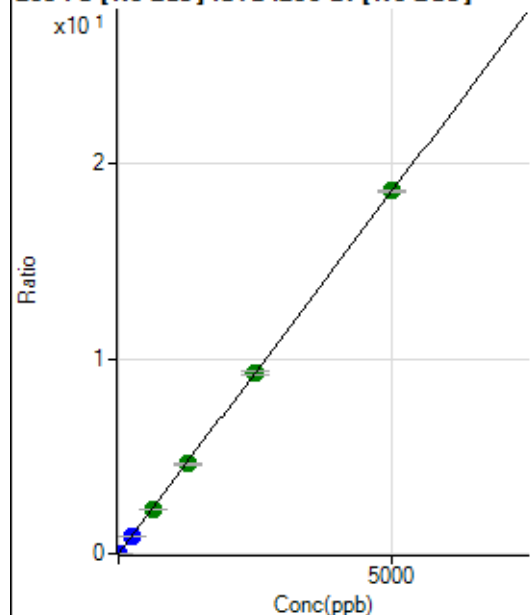
$$DL = 0.08546$$

$$BEC = 0.2095$$

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	1701.93	0.0007	P	3.0
2	☐	1.000	0.865	9636.74	0.0039	P	2.6
3	☐	250.000	236.453	2156220.68	0.8775	P	1.0
4	☐	625.000	606.172	5733956.18	2.2486	A	2.1
5	☐	1250.000	1239.807	11928832.24	4.5983	A	2.0
6	☐	2500.000	2486.527	23907877.15	9.2216	A	2.1
7	☐	5000.000	5012.316	48220206.40	18.5882	A	0.9
8	☐			26084.90	0.0106	P	5.4

$$y = 0.0037 * x + 6.8062\text{E-}004$$

$$R = 1.0000$$

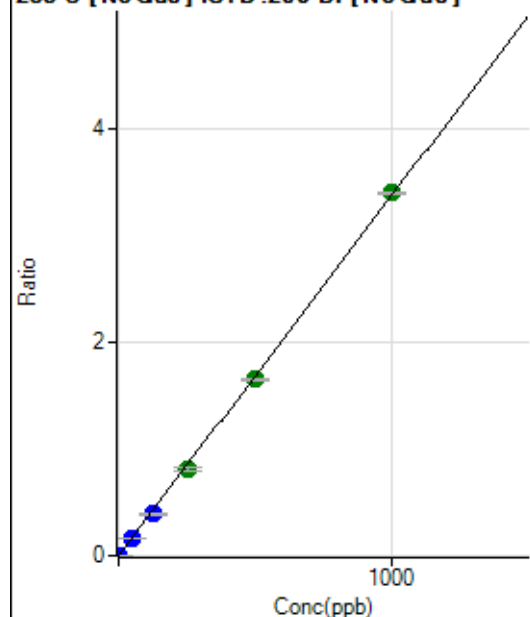
$$DL = 0.01637$$

$$BEC = 0.1835$$

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	5.56	0.0000	P	173.2
2	☐	1.000	0.873	7288.42	0.0029	P	0.9
3	☐	50.000	45.893	379362.97	0.1544	P	1.8
4	☐	125.000	116.022	995283.39	0.3904	P	2.8
5	☐	250.000	240.819	2101815.06	0.8103	A	2.8
6	☐	500.000	490.476	4278877.22	1.6502	A	0.9
7	☐	1000.000	1008.385	8801414.09	3.3928	A	0.7
8	☐			1633.51	0.0007	P	5.2

$$y = 0.0034 * x + 2.2602E-006$$

$$R = 0.9999$$

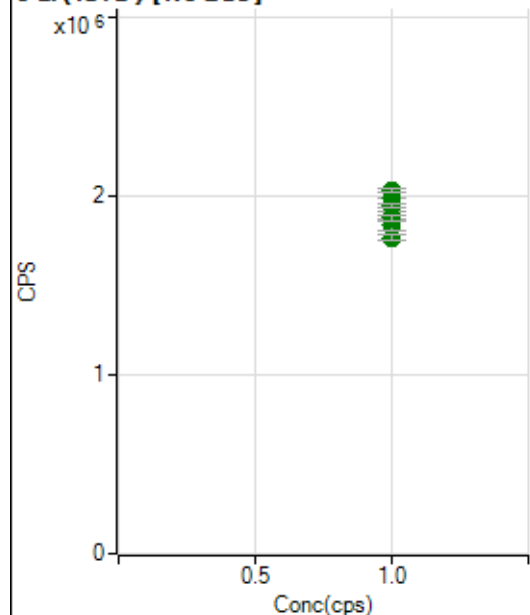
$$DL = 0.003491$$

$$BEC = 0.0006718$$

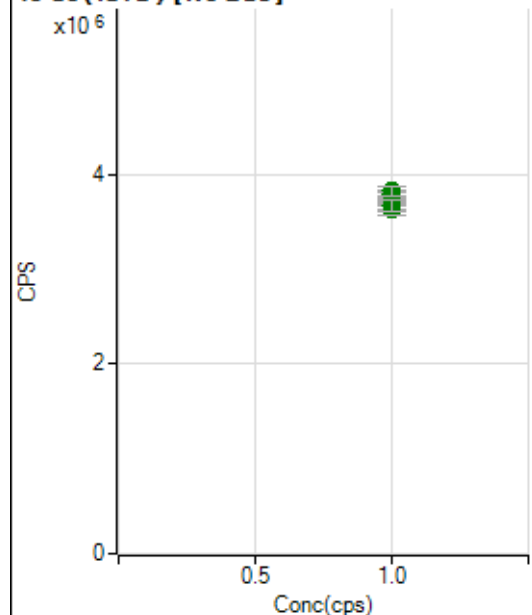
Weight: <None>

Min Conc: 0

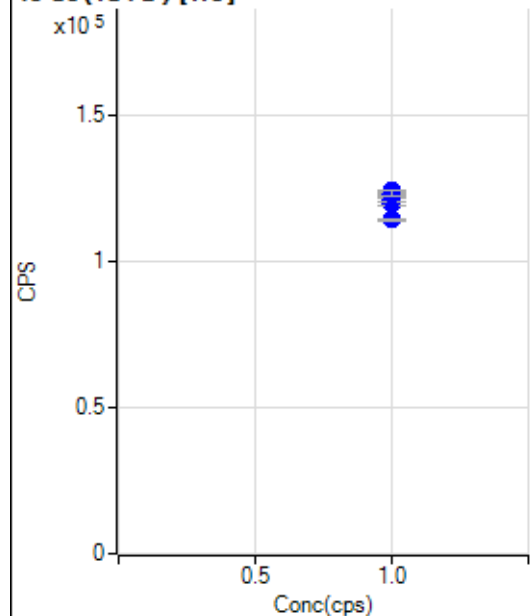
6 Li (ISTD) [No Gas]



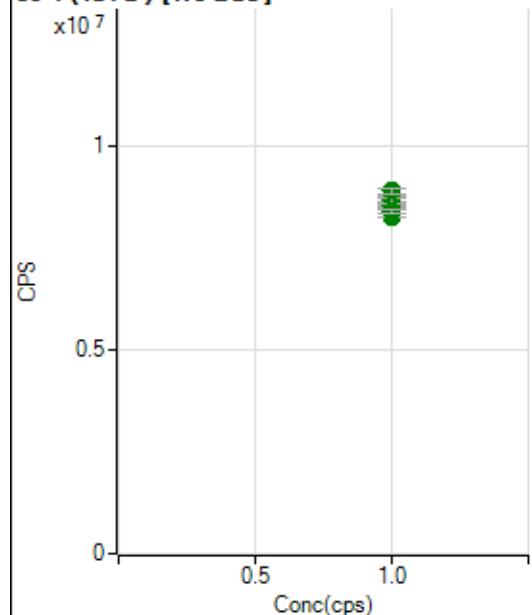
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1765764.84		A	1.6
2	☐	1.000		1831359.97		A	2.8
3	☐	1.000		1867094.56		A	0.4
4	☐	1.000		1877159.36		A	1.7
5	☐	1.000		1950697.82		A	4.0
6	☐	1.000		1987127.99		A	3.2
7	☐	1.000		2025467.41		A	1.0
8	☐	1.000		1942507.56		A	1.5

45 Sc (ISTD) [No Gas]

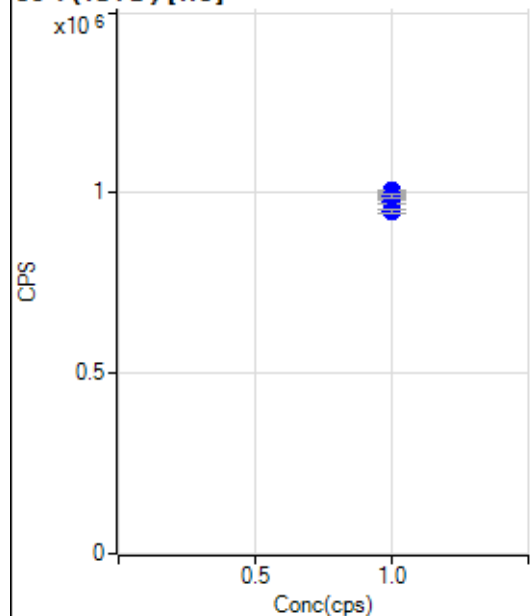
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3629703.73		A	3.3
2	☐	1.000		3666334.36		A	2.2
3	☐	1.000		3715521.26		A	1.7
4	☐	1.000		3736493.80		A	0.6
5	☐	1.000		3803762.20		A	1.6
6	☐	1.000		3796899.21		A	0.8
7	☐	1.000		3830086.65		A	2.4
8	☐	1.000		3670044.11		A	3.5

45 Sc (ISTD) [He]

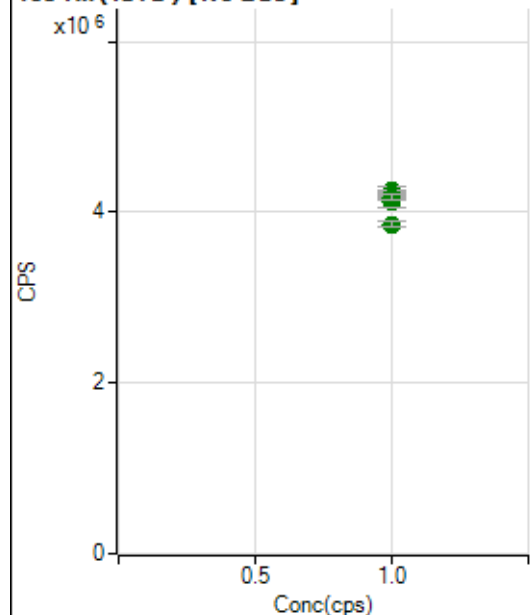
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		119949.20		P	0.9
2	☐	1.000		123950.80		P	0.9
3	☐	1.000		123731.08		P	1.6
4	☐	1.000		124255.30		P	0.5
5	☐	1.000		123146.05		P	1.0
6	☐	1.000		121306.16		P	1.0
7	☐	1.000		123348.20		P	1.6
8	☐	1.000		114486.13		P	0.7

89 Y (ISTD) [No Gas]

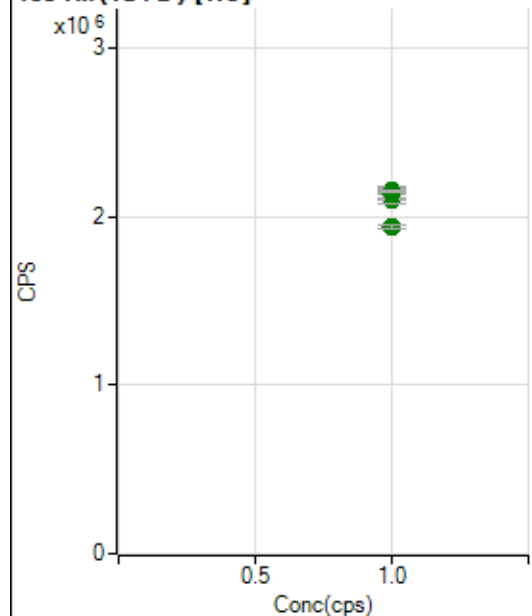
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8405505.29		A	1.8
2	☐	1.000		8247021.82		A	0.4
3	☐	1.000		8660313.34		A	2.6
4	☐	1.000		8520513.69		A	1.7
5	☐	1.000		8701546.12		A	1.1
6	☐	1.000		8657742.16		A	1.8
7	☐	1.000		8895850.98		A	1.6
8	☐	1.000		8389568.07		A	0.7

89 Y (ISTD) [He]

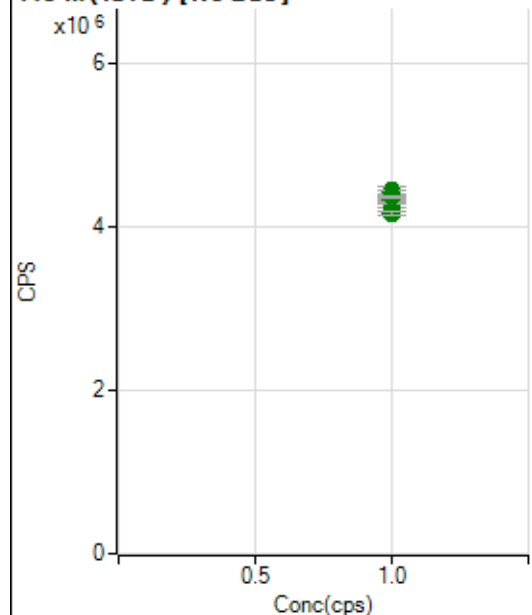
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		976401.91		P	1.0
2	☐	1.000		1000902.75		P	1.1
3	☐	1.000		998512.37		P	1.0
4	☐	1.000		1003926.04		P	0.9
5	☐	1.000		1005480.70		P	0.5
6	☐	1.000		991742.07		P	0.4
7	☐	1.000		991995.67		P	1.0
8	☐	1.000		947763.74		P	0.9

103 Rh (ISTD) [No Gas]

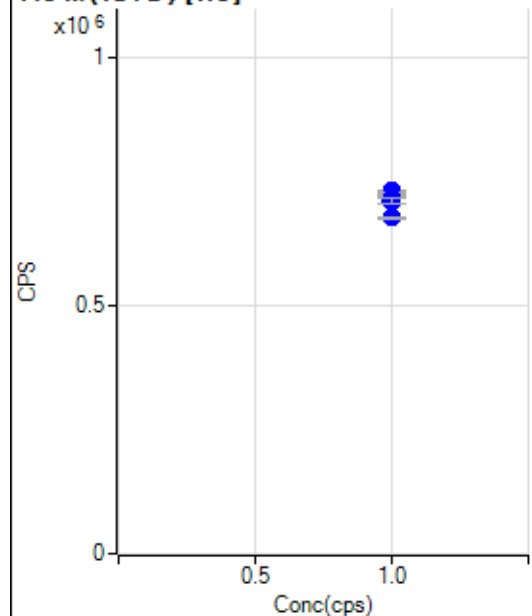
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4127717.19		A	3.9
2	☐	1.000		4193881.09		A	1.7
3	☐	1.000		4186190.37		A	1.2
4	☐	1.000		4248388.89		A	2.9
5	☐	1.000		4212457.30		A	2.2
6	☐	1.000		4158622.62		A	1.2
7	☐	1.000		4167654.00		A	1.6
8	☐	1.000		3857271.44		A	1.4

103 Rh (ISTD) [He]

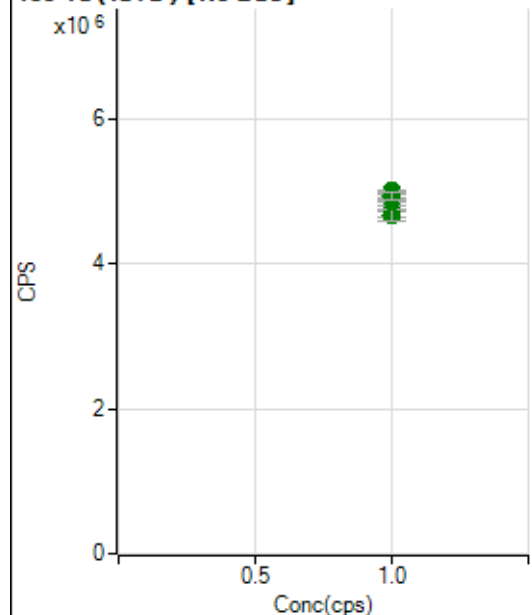
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2099184.97		A	1.7
2	☐	1.000		2155415.44		A	1.5
3	☐	1.000		2135735.75		A	2.7
4	☐	1.000		2148651.44		A	1.1
5	☐	1.000		2151383.08		A	3.0
6	☐	1.000		2135784.19		A	1.6
7	☐	1.000		2152237.21		A	0.9
8	☐	1.000		1941448.25		A	0.7

115 In (ISTD) [No Gas]

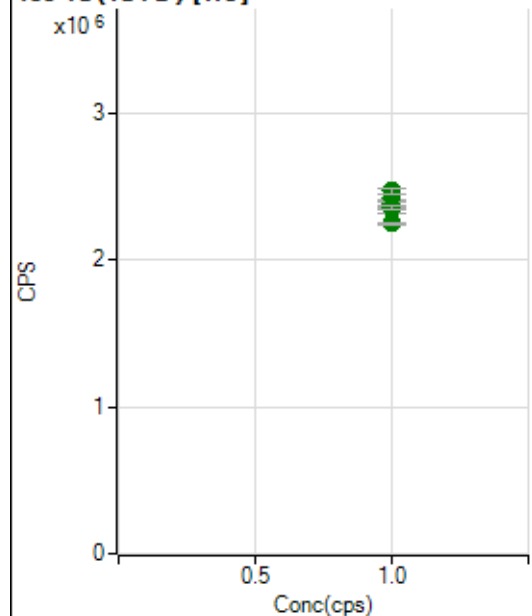
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4290951.74		A	2.2
2	☐	1.000		4290155.98		A	0.7
3	☐	1.000		4325888.54		A	1.1
4	☐	1.000		4292611.11		A	0.4
5	☐	1.000		4439884.92		A	2.1
6	☐	1.000		4419120.58		A	1.6
7	☐	1.000		4367993.04		A	0.9
8	☐	1.000		4171348.68		A	1.4

115 In (ISTD) [He]

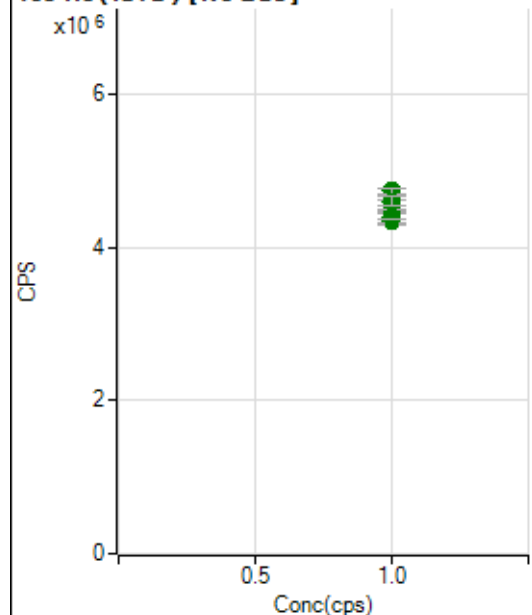
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		713052.48		P	1.7
2	☐	1.000		729589.56		P	0.3
3	☐	1.000		731053.54		P	0.4
4	☐	1.000		723711.95		P	0.1
5	☐	1.000		726694.30		P	0.4
6	☐	1.000		717097.43		P	0.1
7	☐	1.000		710751.52		P	1.4
8	☐	1.000		676490.96		P	0.6

159 Tb (ISTD) [No Gas]

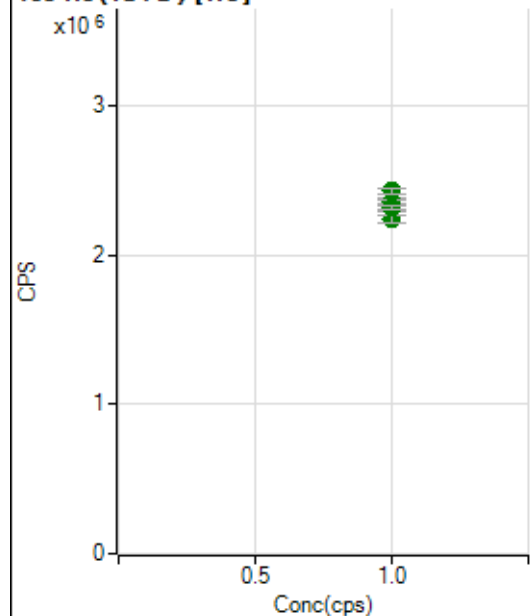
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4677130.76		A	1.9
2	☐	1.000		4715988.57		A	0.2
3	☐	1.000		4658623.61		A	3.5
4	☐	1.000		4843067.01		A	1.4
5	☐	1.000		4914116.07		A	2.3
6	☐	1.000		4880135.86		A	1.3
7	☐	1.000		5005116.87		A	0.8
8	☐	1.000		4936576.18		A	2.3

159 Tb (ISTD) [He]

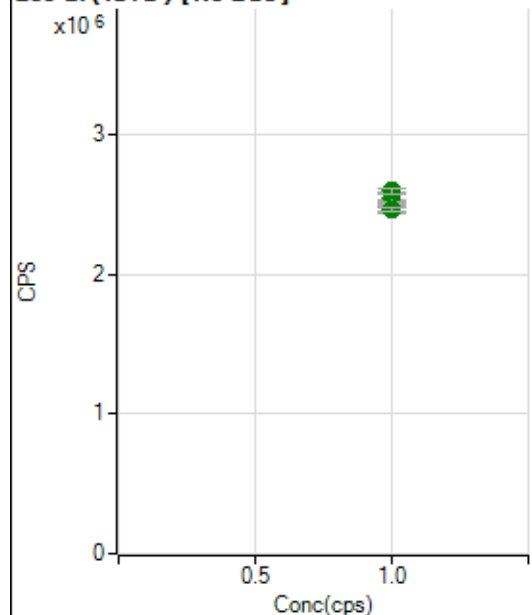
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2248196.41		A	0.2
2	☐	1.000		2341913.09		A	1.8
3	☐	1.000		2357885.55		A	1.4
4	☐	1.000		2378375.38		A	2.0
5	☐	1.000		2389072.71		A	2.0
6	☐	1.000		2424765.59		A	1.9
7	☐	1.000		2471465.19		A	1.3
8	☐	1.000		2353574.67		A	1.0

165 Ho (ISTD) [No Gas]

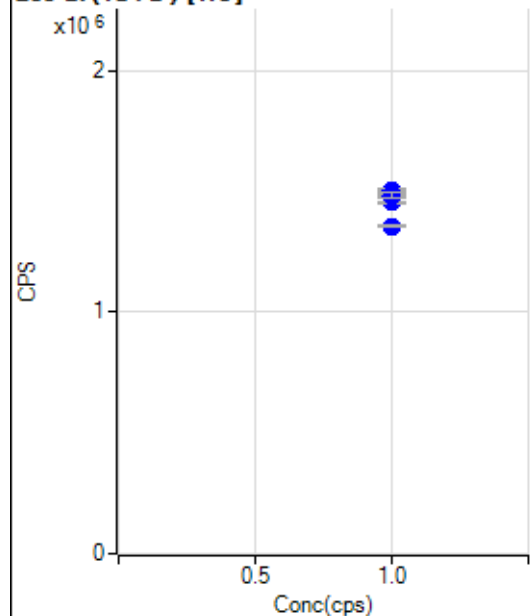
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4337788.94		A	1.7
2	☐	1.000		4380458.00		A	2.5
3	☐	1.000		4408337.43		A	1.7
4	☐	1.000		4501381.09		A	1.7
5	☐	1.000		4502104.61		A	0.1
6	☐	1.000		4594123.32		A	1.6
7	☐	1.000		4740906.01		A	1.4
8	☐	1.000		4606019.07		A	2.7

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2245360.44		A	2.1
2	☐	1.000		2325563.23		A	1.4
3	☐	1.000		2316514.38		A	2.1
4	☐	1.000		2358818.26		A	2.1
5	☐	1.000		2355148.58		A	0.9
6	☐	1.000		2358355.36		A	1.2
7	☐	1.000		2430303.21		A	1.9
8	☐	1.000		2316748.91		A	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2501295.76		A	1.8
2	☐	1.000		2479466.61		A	2.2
3	☐	1.000		2457409.84		A	2.1
4	☐	1.000		2550880.41		A	2.7
5	☐	1.000		2594534.01		A	1.4
6	☐	1.000		2592833.62		A	1.5
7	☐	1.000		2594312.49		A	1.2
8	☐	1.000		2462733.66		A	1.0

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1452759.39		P	0.3
2	☐	1.000		1494619.34		P	1.2
3	☐	1.000		1485948.48		P	0.9
4	☐	1.000		1492829.06		P	0.8
5	☐	1.000		1501560.10		P	1.0
6	☐	1.000		1484800.46		P	0.9
7	☐	1.000		1482694.87		P	1.5
8	☐	1.000		1354634.77		P	0.5

US EPA Tune Check Report

Operator Name Jaswal
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8122321-MS.b
Acq. Date-Time 2021-12-23 14:23:19
Report Comment ---
Instrument Name G8403A SG19224459

[No Gas]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
9		5022	50222.64			0.336	5.000
24		48662	486621.61			0.731	5.000
25		6503	65032.55			0.580	5.000
26		7469	74687.67			0.386	5.000
59		11419	114189.35			0.688	5.000
113		4348	43480.30			0.839	5.000
115		14494	144942.34			0.963	5.000
206		5354	53538.33			0.876	5.000
207		4492	44917.29			0.536	5.000
208		10890	108897.88			0.585	5.000
220		1	7.80			16.090	

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

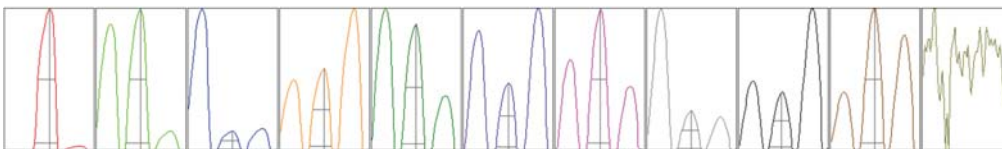
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	5019	5006	5020	5051	5015
24	49226	48351	48437	48507	48791
25	6550	6523	6448	6500	6494
26	7460	7471	7425	7491	7497
59	11549	11410	11372	11345	11418
113	4397	4301	4369	4336	4338
115	14717	14469	14522	14354	14409
206	5420	5293	5364	5360	5332
207	4495	4483	4492	4461	4527
208	10948	10823	10962	10836	10880

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	9164.13	9.05	8.90 - 9.10	
24	90016.19	24.00	23.90 - 24.10	
25	11943.25	25.00	24.90 - 25.10	
26	13679.27	26.00	25.90 - 26.10	
59	21632.84	59.00	58.90 - 59.10	
113	8809.41	113.05	112.90 - 113.10	
115	29176.05	115.05	114.90 - 115.10	
206	10323.88	206.00	205.90 - 206.10	
207	8609.95	206.95	206.90 - 207.10	
208	20978.60	208.00	207.90 - 208.10	
220			-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.58	0.771	0.900	
24	0.57	0.776	0.900	
25	0.58	0.779	0.900	
26	0.58	0.741	0.900	
59	0.55	0.774	0.900	
113	0.51	0.686	0.900	
115	0.52	0.758	0.900	
206	0.54	0.771	0.900	
207	0.54	0.778	0.900	
208	0.53	0.777	0.900	
220				

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode ---

Nebulizer Gas 0.73 L/min

Dilution Gas 0.40 L/min

US EPA Tune Check Report

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

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.8 V	Deflect	15.4 V
Extract 2	-180.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-95 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	170 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9992	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.8 mm
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EM

Discriminator	4.2 mV	Analog HV	2277 V	Pulse HV	1616 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		2691	26905.23			0.491	
89		8703	87026.30			0.903	
205		11863	118626.96			1.544	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	2707	2678	2702	2680	2686
89	8831	8718	8634	8678	8651
205	12127	11939	11679	11861	11706

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.75 L/min	Dilution Gas	0.40 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.40 V	Nebulizer Pump	0.10 rps	Plasma Gas	15.0 L/min
Sample Depth	10.0 mm	S/C Temp	2 °C		

Lens Parameters

Extract 1	-6.0 V	Omega Lens	9.8 V	Deflect	3.8 V
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US EPA Tune Check Report

Extract 2	-180.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-95 V	Cell Exit	-70 V		

Cell Parameters

Use Gas	Yes	3rd Gas Flow	---	Energy Discrimination	5.0 V
He Flow	4.5 mL/min	OctP Bias	-18.0 V		
H2 Flow	---	OctP RF	200 V		

QP Parameters

Mass Gain	122	Axis Gain	0.9992	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.02		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.8 mm
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EM

Discriminator	4.2 mV	Analog HV	2277 V	Pulse HV	1616 V
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