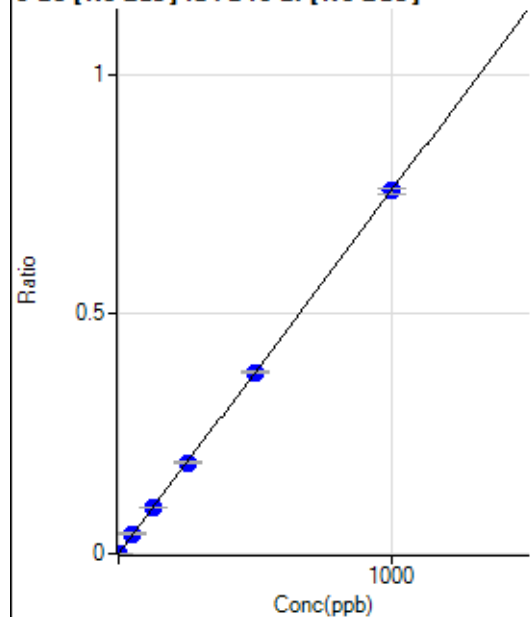


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8021020 MS.b\
Analysis File: P8021020 MS.batch.bin
DA Date-Time: 2020-02-11 08:32:50
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	003CALB.d	S00	2020-02-10 14:07:03
2	004CAL.S.d	S02	2020-02-10 14:10:08
3	005CAL.S.d	S03	2020-02-10 14:13:11
4	006CAL.S.d	S04	2020-02-10 14:16:16
5	007CAL.S.d	S05	2020-02-10 14:19:15
6	008CAL.S.d	S06	2020-02-10 14:22:16
7	009CAL.S.d	S07	2020-02-10 14:25:14
8	011CAL.S.d	S08	2020-02-10 14:35:29

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	33.99	0.0000	P	27.4
2	☐	1.000	0.940	566.57	0.0008	P	11.2
3	☐	50.000	53.245	29021.99	0.0404	P	10.9
4	☐	125.000	125.994	73612.31	0.0955	P	1.1
5	☐	250.000	250.984	150126.49	0.1901	P	1.6
6	☐	500.000	500.307	308883.81	0.3789	P	0.5
7	☐	1000.000	999.314	639916.33	0.7568	P	1.3
8	☐			120.65	0.0002	P	8.4

$$y = 7.5728\text{E-}004 * x + 4.5445\text{E-}005$$

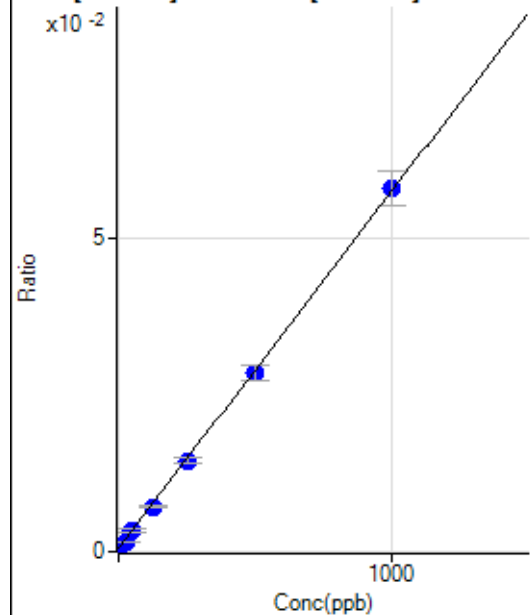
$$R = 1.0000$$

$$DL = 0.04925$$

$$BEC = 0.06001$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	417.92	0.0006	P	7.0
2	☐	25.000	17.460	1159.82	0.0016	P	6.0
3	☐	50.000	48.796	2395.06	0.0033	P	14.2
4	☐	125.000	116.066	5526.63	0.0072	P	6.9
5	☐	250.000	245.164	11471.57	0.0145	P	7.2
6	☐	500.000	490.403	23228.41	0.0285	P	8.1
7	☐	1000.000	1007.373	48956.83	0.0579	P	9.5
8	☐			3154.39	0.0041	P	2.8

$$y = 5.6952\text{E-}005 * x + 5.5832\text{E-}004$$

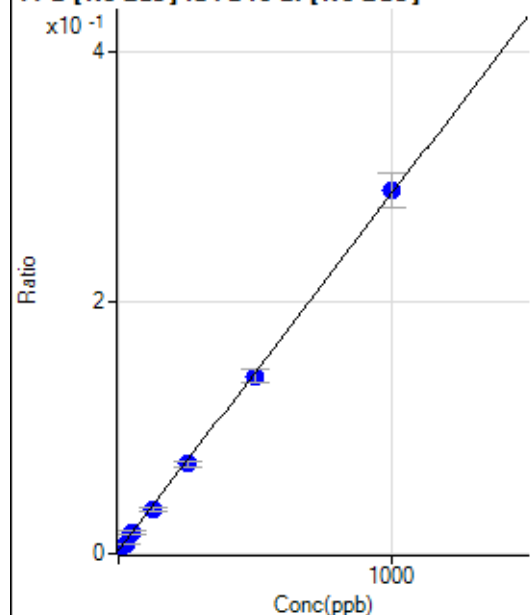
$$R = 0.9999$$

$$DL = 2.056$$

$$BEC = 9.803$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1889.76	0.0025	P	4.6
2	☐	25.000	18.061	5711.99	0.0076	P	7.8
3	☐	50.000	48.295	11620.30	0.0162	P	17.0
4	☐	125.000	117.203	27573.70	0.0358	P	8.6
5	☐	250.000	241.997	56213.11	0.0712	P	7.5
6	☐	500.000	489.253	115215.65	0.1413	P	8.3
7	☐	1000.000	1008.607	243907.30	0.2886	P	9.5
8	☐			15870.73	0.0206	P	2.6

$$y = 2.8365E-004 * x + 0.0025$$

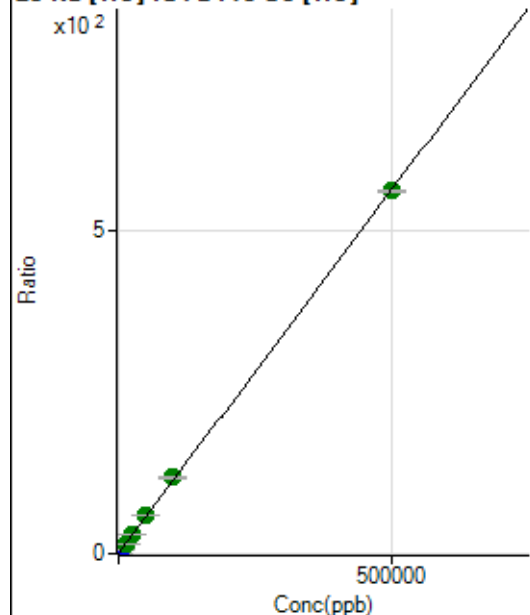
R = 0.9999

DL = 1.225

BEC = 8.9

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	44236.93	0.4382	P	2.1
2	☐	500.000	505.344	103121.63	1.0055	P	1.5
3	☐	5000.000	5379.718	681607.93	6.4771	P	0.4
4	☐	12500.000	13383.915	1693841.27	15.4620	A	2.0
5	☐	25000.000	26250.178	3249160.20	29.9046	A	1.3
6	☐	50000.000	52155.327	6644069.81	58.9837	A	0.3
7	☐	100000.00	104622.15	13875237.46	117.8789	A	2.8
8	☐	500000.00	498771.62	60510114.54	560.3202	A	0.3

$$y = 0.0011 * x + 0.4382$$

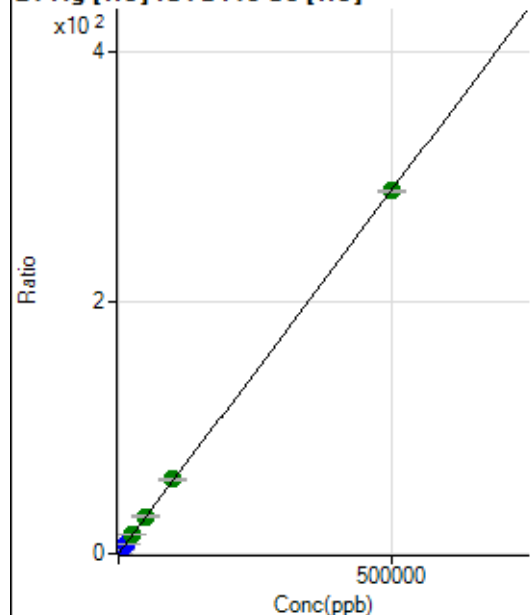
R = 1.0000

DL = 24.31

BEC = 390.4

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	288.90	0.0029	P	11.4
2	☐	500.000	494.199	29627.84	0.2889	P	2.3
3	☐	5000.000	5244.750	319744.14	3.0384	P	1.1
4	☐	12500.000	13226.650	838937.92	7.6582	P	1.3
5	☐	25000.000	26293.046	1653706.94	15.2208	A	1.8
6	☐	50000.000	51597.425	3364245.43	29.8664	A	0.5
7	☐	100000.00	101904.68	6943214.04	58.9833	A	1.6
8	☐	500000.00	499374.06	31212104.52	289.0308	A	0.3

$$y = 5.7878\text{E-}004 * x + 0.0029$$

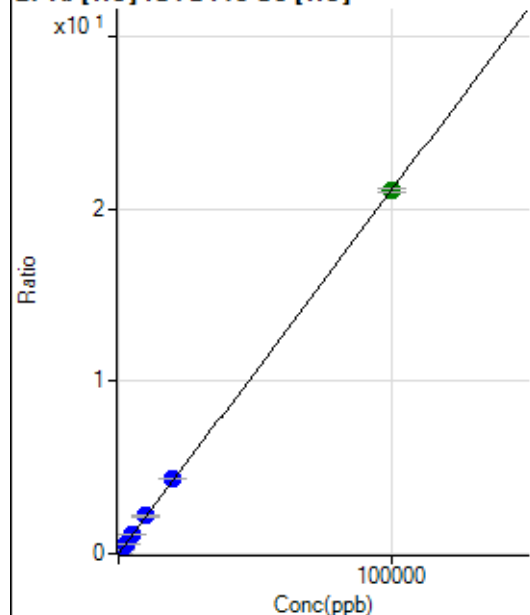
$$R = 1.0000$$

$$DL = 1.685$$

$$BEC = 4.942$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	467.79	0.0046	P	3.1
2	☐	20.000	18.344	872.26	0.0085	P	4.7
3	☐	1000.000	1071.590	24277.01	0.2307	P	1.2
4	☐	2500.000	2596.601	60513.31	0.5524	P	1.8
5	☐	5000.000	5237.435	120547.12	1.1095	P	1.0
6	☐	10000.000	10303.328	245362.72	2.1782	P	1.2
7	☐	20000.000	20627.586	512776.73	4.3562	P	2.0
8	☐	100000.00	99829.148	2274527.78	21.0643	A	1.2

$$y = 2.1096\text{E-}004 * x + 0.0046$$

$$R = 1.0000$$

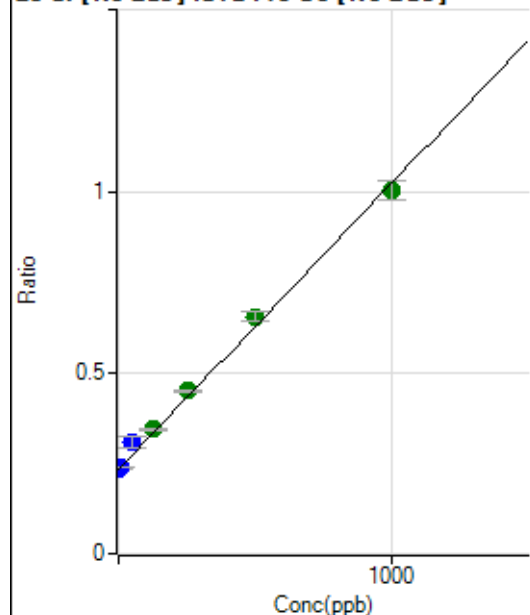
$$DL = 2.058$$

$$BEC = 21.96$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	601138.67	0.2327	P	1.4
2	☐	10.000	7.240	621863.81	0.2384	P	1.5
3	☐	50.000	95.395	763261.32	0.3081	P	11.4
4	☐	125.000	140.554	917550.11	0.3437	A	1.5
5	☐	250.000	273.456	1233498.92	0.4487	A	1.6
6	☐	500.000	534.180	1855997.03	0.6547	A	4.1
7	☐	1000.000	972.860	2962971.33	1.0012	A	5.2
8	☐			696247.75	0.2571	P	1.4

$$y = 7.8997\text{E-}004 * x + 0.2327$$

$$R = 0.9981$$

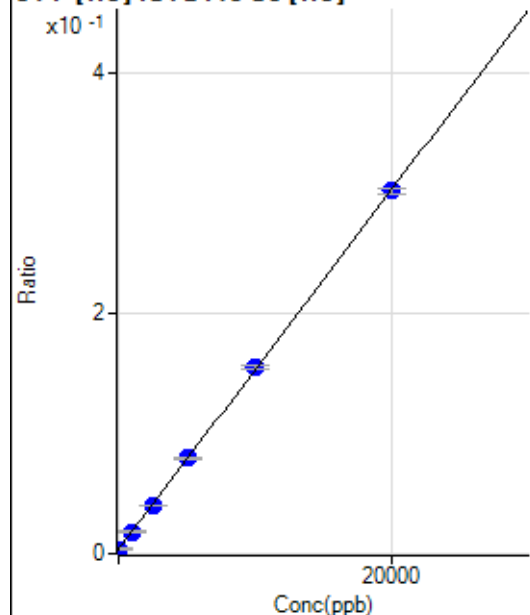
$$DL = 12.74$$

$$BEC = 294.6$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	-19.348	327.79	0.0032	P	15.1
2	☐	0.000	19.348	391.68	0.0038	P	35.1
3	☐	1000.000	988.486	1927.96	0.0183	P	1.5
4	☐	2500.000	2422.264	4356.33	0.0398	P	1.5
5	☐	5000.000	5062.508	8611.12	0.0793	P	1.1
6	☐	10000.000	10105.969	17424.68	0.1547	P	1.8
7	☐	20000.000	19941.681	35527.63	0.3018	P	1.9
8	☐			269.45	0.0025	P	10.2

$$y = 1.4957\text{E-}005 * x + 0.0035$$

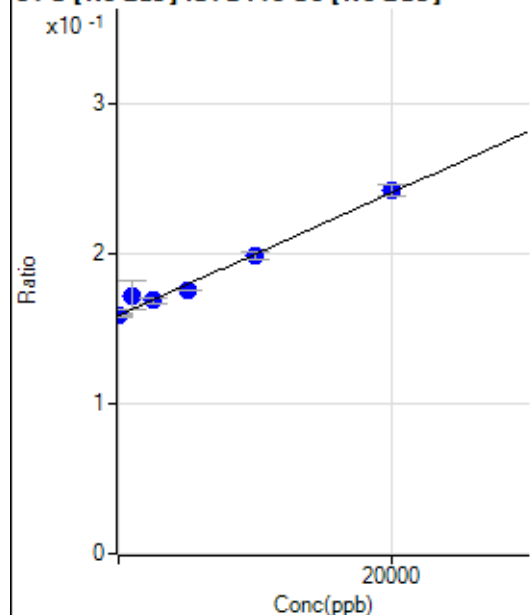
$$R = 1.0000$$

$$DL = 184.1$$

$$BEC = 236.5$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	120.325	412176.66	0.1596	P	1.5
2	☐	0.000	-120.325	413594.19	0.1586	P	1.5
3	☐	1000.000	3269.657	427398.32	0.1724	P	11.0
4	☐	2500.000	2440.160	451095.21	0.1690	P	2.4
5	☐	5000.000	4085.012	483246.28	0.1758	P	0.3
6	☐	10000.000	9690.925	563323.92	0.1987	P	2.8
7	☐	20000.000	20277.282	716432.16	0.2421	P	3.1
8	☐			406076.48	0.1500	P	0.3

$$y = 4.0943\text{E-}006 * x + 0.1591$$

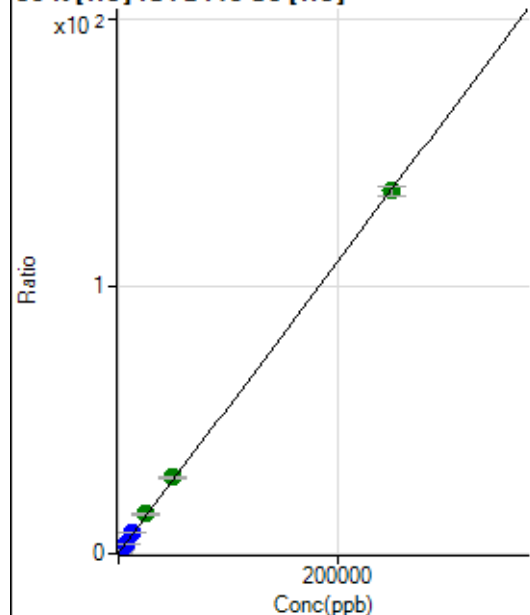
$$R = 0.9907$$

$$DL = 1740$$

$$BEC = 3.885\text{E}+04$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	26864.43	0.2661	P	2.4
2	☐	500.000	480.930	54085.45	0.5274	P	2.3
3	☐	2500.000	2658.477	179955.96	1.7101	P	0.6
4	☐	6250.000	6661.282	425516.96	3.8843	P	0.6
5	☐	12500.000	13633.999	833486.81	7.6716	P	2.2
6	☐	25000.000	26812.314	1670461.25	14.8295	A	1.4
7	☐	50000.000	52177.530	3367462.44	28.6068	A	1.8
8	☐	250000.00	249314.73	14649565.43	135.6836	A	2.3

$$y = 5.4316\text{E-}004 * x + 0.2661$$

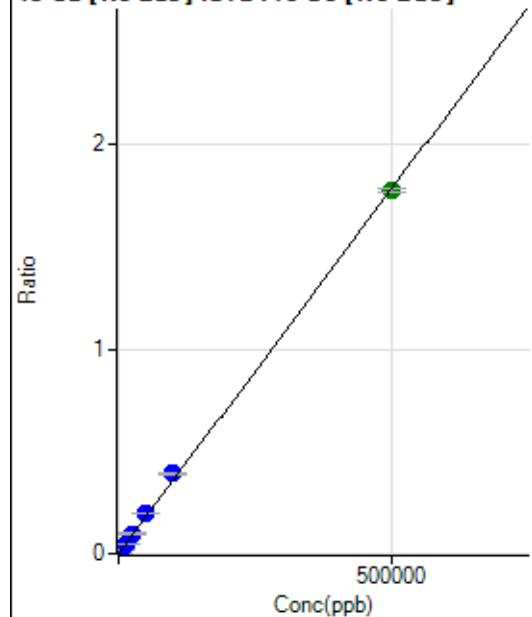
$$R = 0.9999$$

$$DL = 35.38$$

$$BEC = 490$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	702.82	0.0003	P	4.6
2	☐	500.000	480.354	5173.31	0.0020	P	9.0
3	☐	5000.000	5824.879	52178.51	0.0210	P	10.2
4	☐	12500.000	13848.118	132507.13	0.0496	P	1.7
5	☐	25000.000	27515.912	270462.64	0.0984	P	1.2
6	☐	50000.000	54615.069	552925.83	0.1950	P	1.3
7	☐	100000.00	109547.42	1156742.94	0.3909	P	3.3
8	☐	500000.00	497461.28	4803339.82	1.7740	A	1.2

$$y = 3.5657\text{E-}006 * x + 2.7200\text{E-}004$$

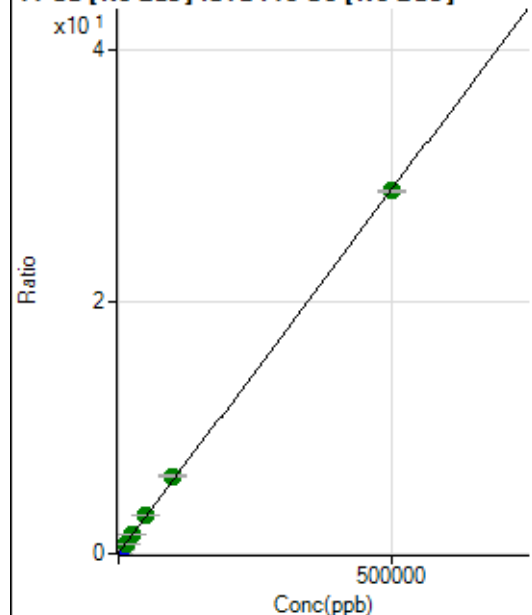
$$R = 0.9998$$

$$DL = 10.41$$

$$BEC = 76.28$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	64754.21	0.0251	P	3.4
2	☐	500.000	505.849	141561.64	0.0543	P	0.9
3	☐	5000.000	5912.723	908304.82	0.3664	P	10.6
4	☐	12500.000	13542.477	2153261.18	0.8068	A	1.4
5	☐	25000.000	26663.070	4300147.84	1.5643	A	1.2
6	☐	50000.000	52391.925	8646778.84	3.0495	A	0.6
7	☐	100000.00	106214.09	18224174.36	6.1565	A	2.1
8	☐	500000.00	498399.63	77969128.13	28.7964	A	0.5

$$y = 5.7727\text{E-}005 * x + 0.0251$$

$$R = 0.9999$$

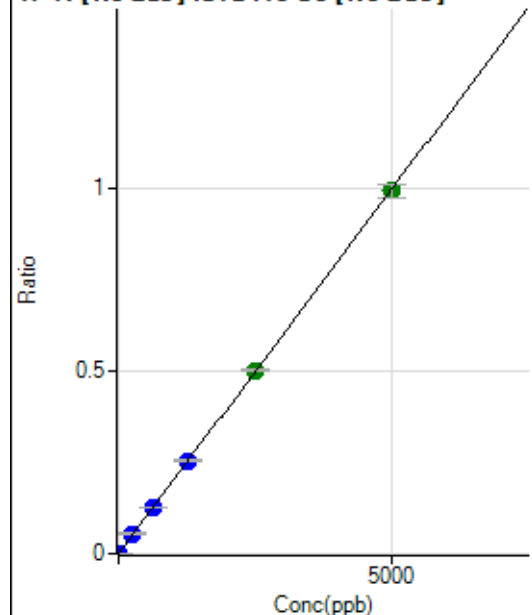
$$DL = 44.15$$

$$BEC = 434.3$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	800.05	0.0003	P	10.4
2	☐	10.000	5.350	3586.67	0.0014	P	3.1
3	☐	250.000	269.822	133826.64	0.0540	P	11.2
4	☐	625.000	637.919	339662.21	0.1273	P	0.3
5	☐	1250.000	1276.400	699125.95	0.2543	P	0.6
6	☐	2500.000	2516.692	1421266.88	0.5011	A	0.9
7	☐	5000.000	4982.457	2935085.16	0.9918	A	3.7
8	☐			1300.09	0.0005	P	9.5

$$y = 1.9900\text{E-}004 * x + 3.0991\text{E-}004$$

$$R = 1.0000$$

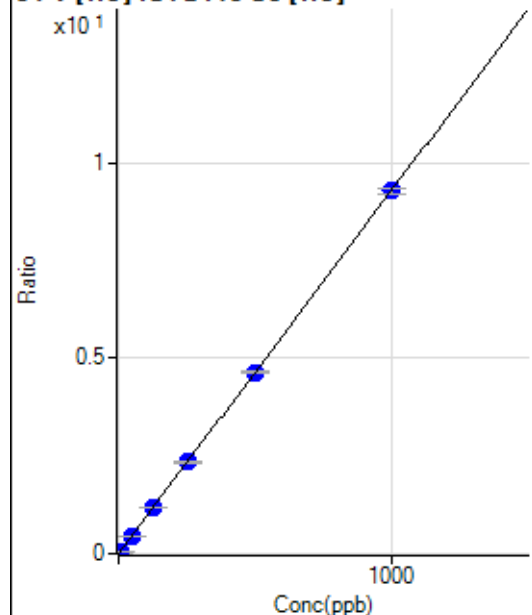
$$DL = 0.4863$$

$$BEC = 1.557$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	21.11	0.0002	P	32.3
2	☐	5.000	4.847	4643.02	0.0453	P	3.7
3	☐	50.000	49.823	48775.16	0.4635	P	0.4
4	☐	125.000	126.188	128562.73	1.1736	P	1.7
5	☐	250.000	252.293	254915.01	2.3462	P	1.2
6	☐	500.000	500.292	524055.50	4.6523	P	0.8
7	☐	1000.000	999.142	1093690.34	9.2910	P	1.8
8	☐			382.23	0.0035	P	3.2

$$y = 0.0093 * x + 2.0881\text{E-}004$$

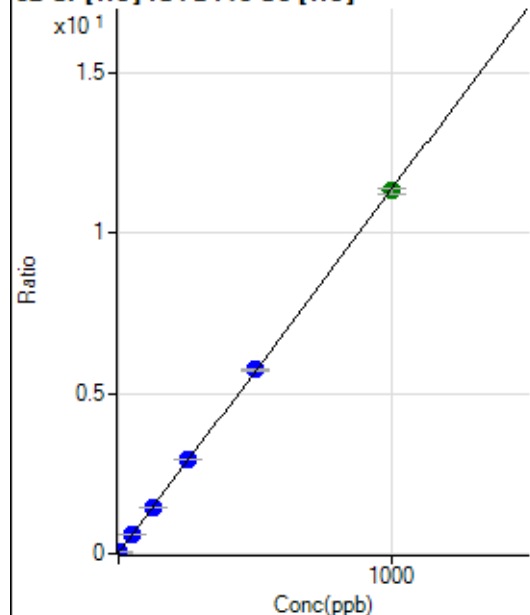
$$R = 1.0000$$

$$DL = 0.02175$$

$$BEC = 0.02246$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1612.33	0.0160	P	2.2
2	☐	2.000	1.871	3817.21	0.0372	P	5.1
3	☐	50.000	50.473	61971.35	0.5889	P	0.6
4	☐	125.000	126.979	159642.41	1.4573	P	0.4
5	☐	250.000	256.297	317822.51	2.9252	P	0.4
6	☐	500.000	504.112	646344.61	5.7381	P	0.4
7	☐	1000.000	996.099	1332831.02	11.3226	A	1.9
8	☐			22782.66	0.2110	P	0.5

$$y = 0.0114 * x + 0.0160$$

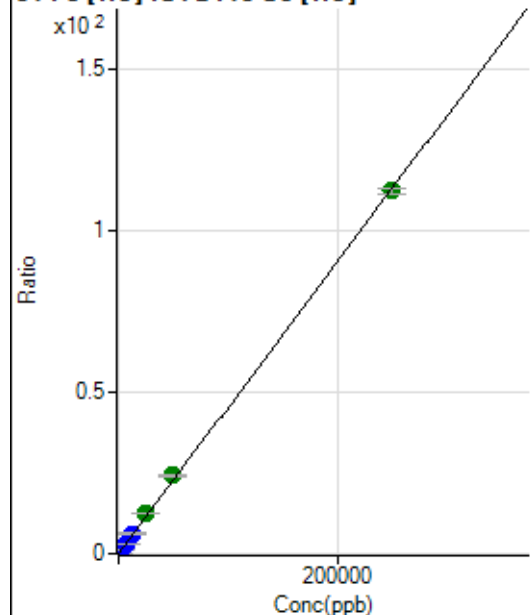
$$R = 1.0000$$

$$DL = 0.09162$$

$$BEC = 1.407$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	668.54	0.0066	P	4.0
2	☐	50.000	50.761	3026.30	0.0295	P	3.1
3	☐	2500.000	2715.815	129530.10	1.2309	P	0.4
4	☐	6250.000	6826.580	337831.17	3.0840	P	0.8
5	☐	12500.000	13786.329	675951.25	6.2214	P	1.2
6	☐	25000.000	27311.516	1387529.51	12.3185	A	1.7
7	☐	50000.000	53897.444	2860796.77	24.3033	A	2.1
8	☐	250000.00	248908.47	12116703.05	112.2134	A	1.6

$$y = 4.5080E-004 * x + 0.0066$$

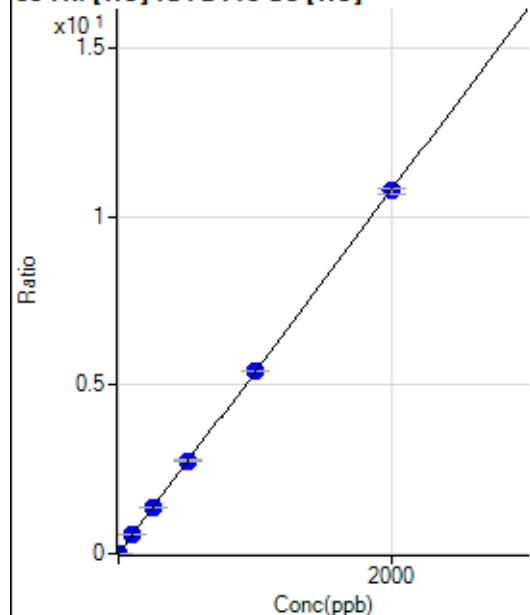
$$R = 0.9998$$

$$DL = 1.781$$

$$BEC = 14.69$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	131.11	0.0013	P	14.7
2	☐	1.000	0.983	677.80	0.0066	P	4.6
3	☐	100.000	102.267	58242.64	0.5535	P	1.6
4	☐	250.000	255.256	151117.76	1.3796	P	1.4
5	☐	500.000	508.599	298512.46	2.7475	P	1.7
6	☐	1000.000	1005.198	611519.10	5.4289	P	0.5
7	☐	2000.000	1994.481	1267864.26	10.7706	P	1.8
8	☐			5504.46	0.0510	P	2.3

$$y = 0.0054 * x + 0.0013$$

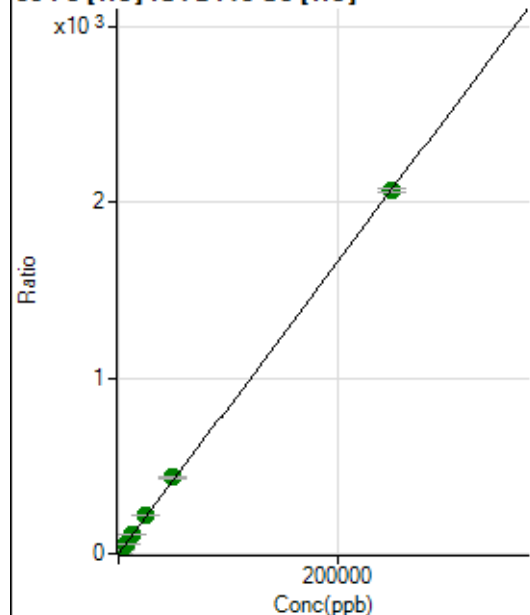
$$R = 1.0000$$

$$DL = 0.1065$$

$$BEC = 0.2407$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	4302.56	0.0426	P	3.7
2	☐	50.000	52.103	48651.32	0.4744	P	0.9
3	☐	2500.000	2700.640	2359443.57	22.4209	A	1.2
4	☐	6250.000	6712.797	6097651.35	55.6668	A	2.0
5	☐	12500.000	13463.503	12126187.31	111.6051	A	0.4
6	☐	25000.000	26437.773	24681382.50	219.1137	A	0.4
7	☐	50000.000	52404.185	51123229.85	434.2790	A	1.3
8	☐	250000.00	249313.63	223081758.6	2,065.928	A	1.1

$$y = 0.0083 * x + 0.0426$$

$$R = 0.9999$$

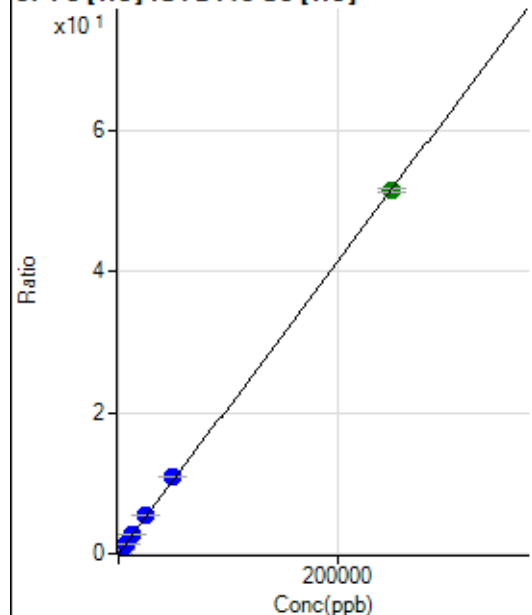
$$DL = 0.5648$$

$$BEC = 5.143$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	129.63	0.0013	P	16.4
2	☐	50.000	50.775	1205.63	0.0118	P	6.5
3	☐	2500.000	2711.394	58997.67	0.5606	P	0.6
4	☐	6250.000	6763.580	152993.83	1.3966	P	0.8
5	☐	12500.000	13624.993	305537.66	2.8121	P	0.2
6	☐	25000.000	26805.478	623039.54	5.5312	P	0.3
7	☐	50000.000	53059.072	1288692.93	10.9472	P	1.5
8	☐	250000.00	249136.43	5550103.83	51.3974	A	1.0

$$y = 2.0630E-004 * x + 0.0013$$

$$R = 0.9999$$

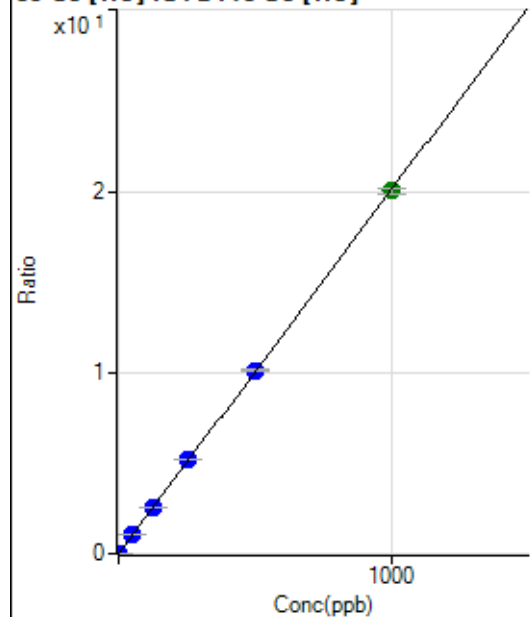
$$DL = 3.064$$

$$BEC = 6.219$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	60.00	0.0006	P	13.9
2	☐	1.000	0.984	2087.96	0.0204	P	2.4
3	☐	50.000	51.368	108683.36	1.0328	P	1.7
4	☐	125.000	127.773	281319.50	2.5681	P	1.5
5	☐	250.000	257.837	562990.83	5.1816	P	0.8
6	☐	500.000	502.239	1136852.12	10.0927	P	0.9
7	☐	1000.000	996.506	2357235.67	20.0246	A	1.9
8	☐			3520.47	0.0326	P	0.9

$$y = 0.0201 * x + 5.9392E-004$$

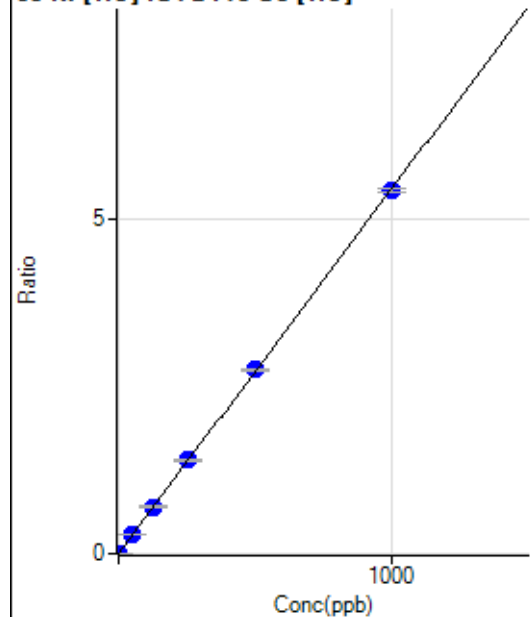
$$R = 1.0000$$

$$DL = 0.01228$$

$$BEC = 0.02956$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	104.44	0.0010	P	4.0
2	☐	1.000	1.092	717.80	0.0070	P	10.4
3	☐	50.000	51.362	29634.22	0.2816	P	2.3
4	☐	125.000	128.712	77133.18	0.7041	P	0.8
5	☐	250.000	255.927	152002.47	1.3990	P	1.9
6	☐	500.000	505.675	311264.89	2.7633	P	0.9
7	☐	1000.000	995.149	640038.88	5.4371	P	1.1
8	☐			7388.65	0.0684	P	2.8

$$y = 0.0055 * x + 0.0010$$

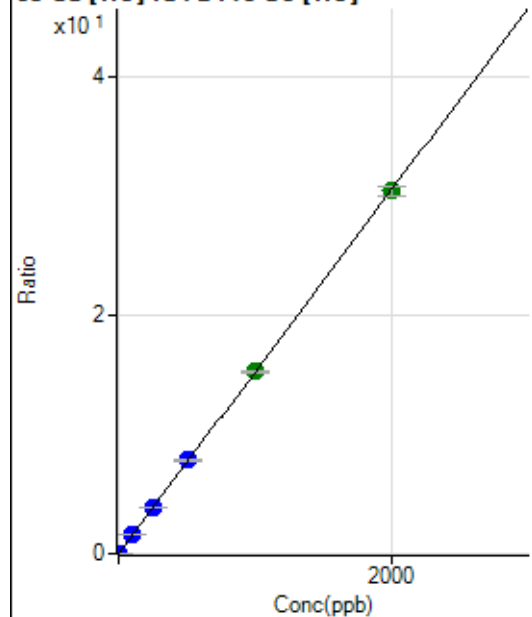
$$R = 1.0000$$

$$DL = 0.0229$$

$$BEC = 0.1894$$

Weight: <None>

Min Conc: 0

63 Cu [He] ISTD:45 Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	215.56	0.0021	P	16.0
2	☐	2.000	1.898	3190.39	0.0311	P	1.5
3	☐	100.000	102.543	164943.35	1.5674	P	0.5
4	☐	250.000	255.648	427712.52	3.9045	P	0.9
5	☐	500.000	513.836	852454.63	7.8456	P	0.8
6	☐	1000.000	1001.587	1722368.41	15.2910	A	1.4
7	☐	2000.000	1994.914	3585076.27	30.4537	A	2.4
8	☐			8451.50	0.0783	P	3.3

$$y = 0.0153 * x + 0.0021$$

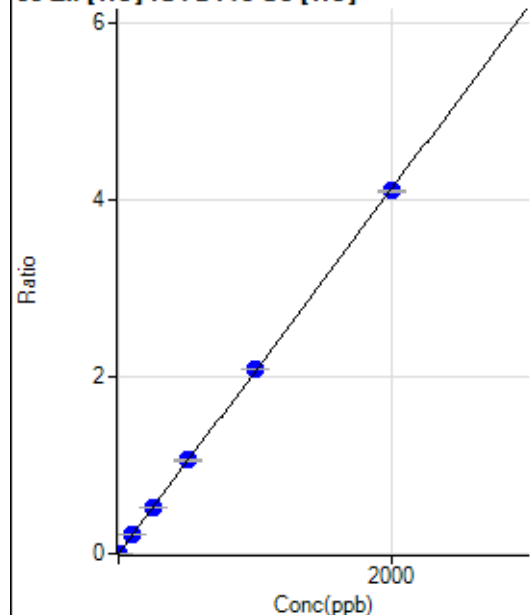
$$R = 1.0000$$

$$DL = 0.06701$$

$$BEC = 0.14$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	135.56	0.0013	P	25.6
2	☐	5.000	2.477	660.02	0.0064	P	6.5
3	☐	100.000	103.802	22609.21	0.2149	P	1.2
4	☐	250.000	256.361	57912.12	0.5287	P	0.7
5	☐	500.000	513.074	114809.51	1.0567	P	0.8
6	☐	1000.000	1011.949	234612.25	2.0828	P	0.2
7	☐	2000.000	1989.778	481967.42	4.0941	P	0.7
8	☐			7549.85	0.0699	P	3.7

$$y = 0.0021 * x + 0.0013$$

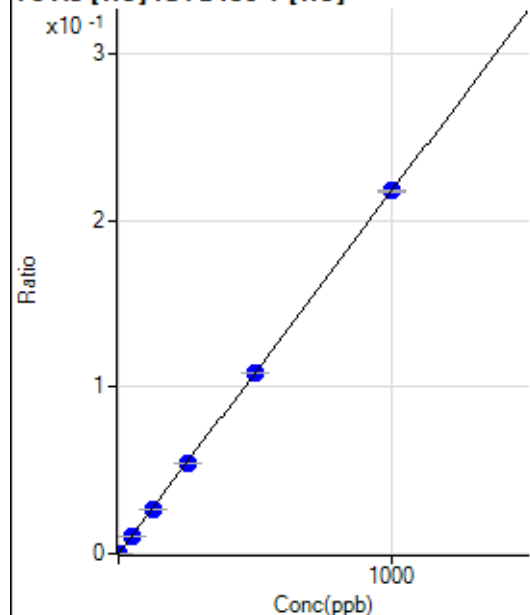
$$R = 0.9999$$

$$DL = 0.5011$$

$$BEC = 0.6521$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	7.67	0.0000	P	40.1
2	☐	1.000	0.887	151.35	0.0002	P	8.6
3	☐	50.000	49.877	8297.94	0.0109	P	0.7
4	☐	125.000	124.153	21355.21	0.0271	P	0.7
5	☐	250.000	249.802	42944.48	0.0544	P	0.7
6	☐	500.000	498.180	88213.48	0.1085	P	0.6
7	☐	1000.000	1001.072	183945.37	0.2181	P	0.2
8	☐			91.01	0.0001	P	3.4

$$y = 2.1786E-004 * x + 1.0407E-005$$

$$R = 1.0000$$

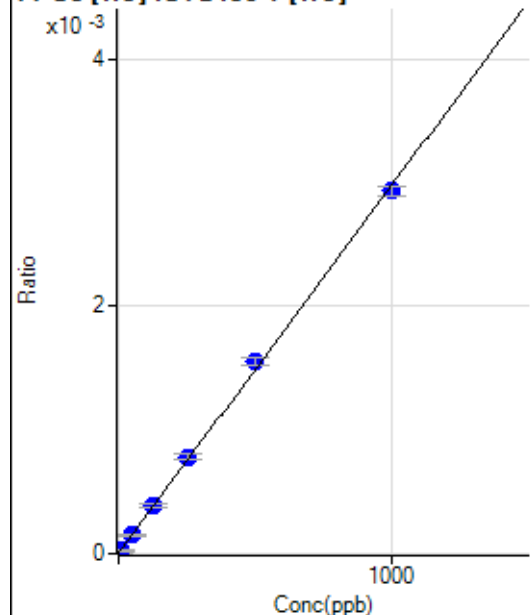
$$DL = 0.05753$$

$$BEC = 0.04777$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	2.22	0.0000	P	173.2
2	☐	5.000	7.975	20.00	0.0000	P	71.4
3	☐	50.000	50.377	116.67	0.0002	P	11.9
4	☐	125.000	129.219	305.56	0.0004	P	5.4
5	☐	250.000	261.315	615.58	0.0008	P	5.6
6	☐	500.000	521.770	1263.40	0.0016	P	3.9
7	☐	1000.000	985.725	2474.70	0.0029	P	2.7
8	☐			3.33	0.0000	P	100.1

$$y = 2.9739\text{E-}006 * x + 3.0219\text{E-}006$$

$$R = 0.9996$$

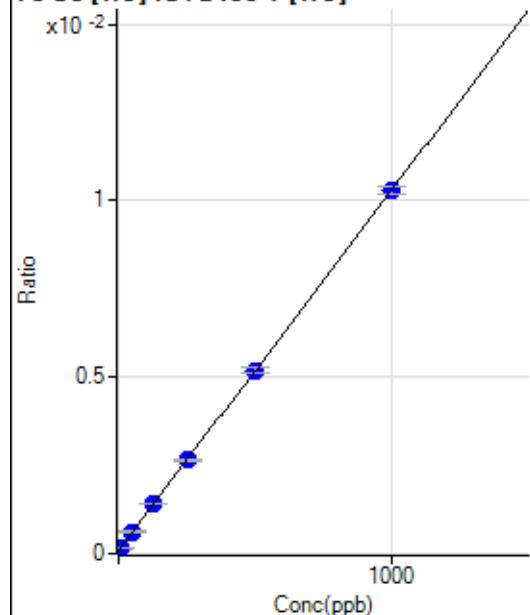
$$\text{DL} = 5.28$$

$$\text{BEC} = 1.016$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	64.34	0.0001	P	11.0
2	☐	5.000	5.723	108.34	0.0001	P	8.6
3	☐	50.000	52.615	476.06	0.0006	P	7.2
4	☐	125.000	130.286	1117.82	0.0014	P	2.2
5	☐	250.000	250.496	2084.70	0.0026	P	1.5
6	☐	500.000	501.024	4223.40	0.0052	P	2.7
7	☐	1000.000	998.569	8663.54	0.0103	P	2.0
8	☐			87.68	0.0001	P	8.5

$$y = 1.0200\text{E-}005 * x + 8.7321\text{E-}005$$

$$R = 1.0000$$

$$\text{DL} = 2.827$$

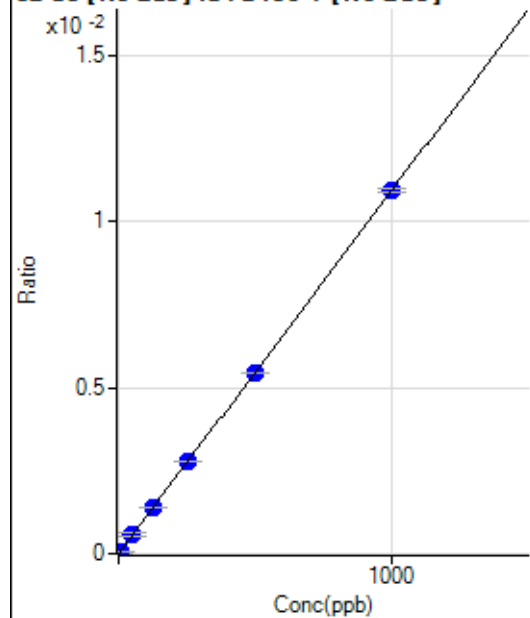
$$\text{BEC} = 8.561$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2976.75		P	7.2
2	☐			2806.52		P	6.3
3	☐			2829.88		P	4.8
4	☐			2933.34		P	4.5
5	☐			2889.95		P	5.4
6	☐			2996.75		P	5.0
7	☐			2970.03		P	0.7
8	☐			3597.54		P	5.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	-0.42	0.0000	P	-10506.
2	☐	5.000	5.432	311.30	0.0001	P	13.8
3	☐	50.000	54.090	2922.86	0.0006	P	14.1
4	☐	125.000	126.315	7407.94	0.0014	P	0.9
5	☐	250.000	254.763	15266.01	0.0028	P	1.8
6	☐	500.000	497.253	31283.97	0.0054	P	0.6
7	☐	1000.000	999.812	64700.06	0.0109	P	1.2
8	☐			25.01	0.0000	P	414.9

$$y = 1.0913E-005 * x - 6.1661E-008$$

$$R = 1.0000$$

$$DL = 1.781$$

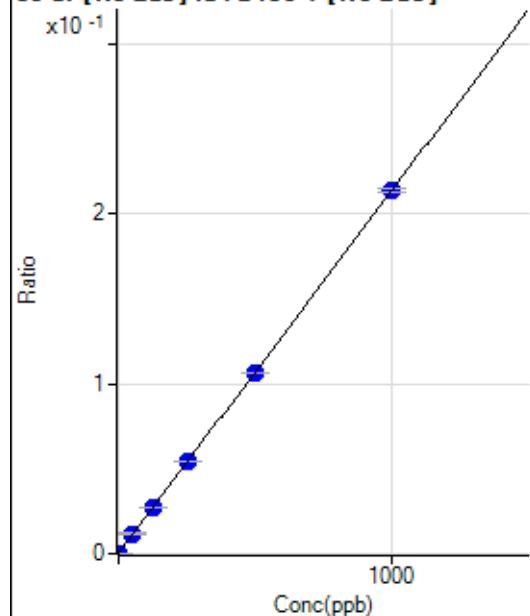
$$BEC = -0.00565$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			933.37		P	5.2
2	☐			864.48		P	3.6
3	☐			978.93		P	5.2
4	☐			967.82		P	7.0
5	☐			951.15		P	5.1
6	☐			976.71		P	8.0
7	☐			940.04		P	3.4
8	☐			951.15		P	11.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1433.45	0.0003	P	1.2
2	☐	1.000	0.978	2544.74	0.0005	P	11.3
3	☐	50.000	54.088	58726.97	0.0118	P	8.9
4	☐	125.000	125.767	145731.84	0.0271	P	1.2
5	☐	250.000	252.794	297787.72	0.0542	P	1.0
6	☐	500.000	497.883	614208.74	0.1065	P	0.8
7	☐	1000.000	1000.060	1267319.34	0.2137	P	1.0
8	☐			3778.38	0.0007	P	8.5

$$y = 2.1343\text{E-}004 * x + 2.7502\text{E-}004$$

$$R = 1.0000$$

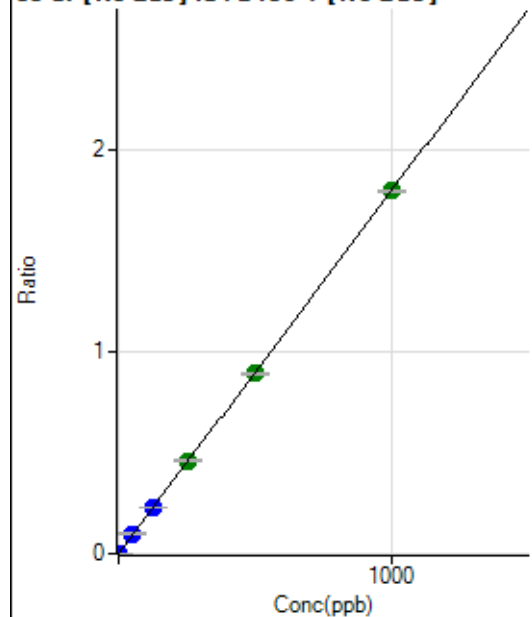
$$DL = 0.04559$$

$$BEC = 1.289$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	108.34	0.0000	P	20.4
2	☐	1.000	0.942	9025.39	0.0017	P	2.8
3	☐	50.000	54.694	489198.38	0.0985	P	9.4
4	☐	125.000	126.985	1228857.56	0.2286	P	1.0
5	☐	250.000	256.317	2534401.53	0.4615	A	1.4
6	☐	500.000	496.656	5155048.16	0.8942	A	1.4
7	☐	1000.000	999.610	10672942.60	1.7997	A	0.4
8	☐			20952.29	0.0038	P	1.0

$$y = 0.0018 * x + 2.0788E-005$$

$$R = 1.0000$$

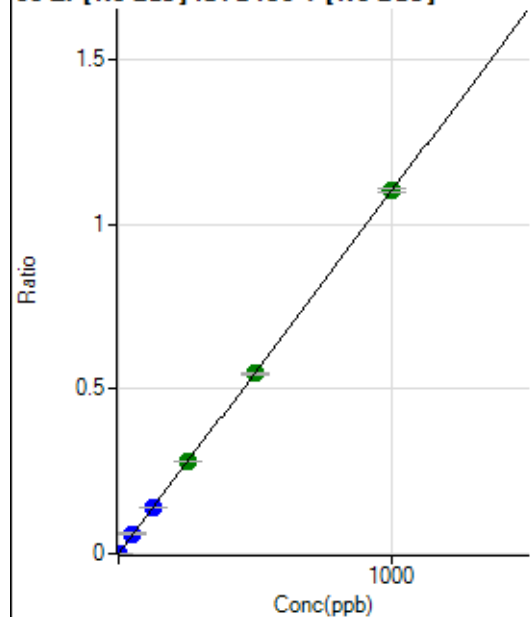
$$DL = 0.007077$$

$$BEC = 0.01155$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	244.45	0.0000	P	7.7
2	☐	1.000	0.924	5592.93	0.0011	P	4.5
3	☐	50.000	53.629	293266.67	0.0591	P	10.3
4	☐	125.000	127.407	753900.31	0.1403	P	1.5
5	☐	250.000	254.169	1536699.49	0.2798	A	0.6
6	☐	500.000	496.371	3150118.04	0.5464	A	0.6
7	☐	1000.000	1000.290	6529230.92	1.1011	A	1.0
8	☐			1886.29	0.0003	P	2.3

$$y = 0.0011 * x + 4.6914E-005$$

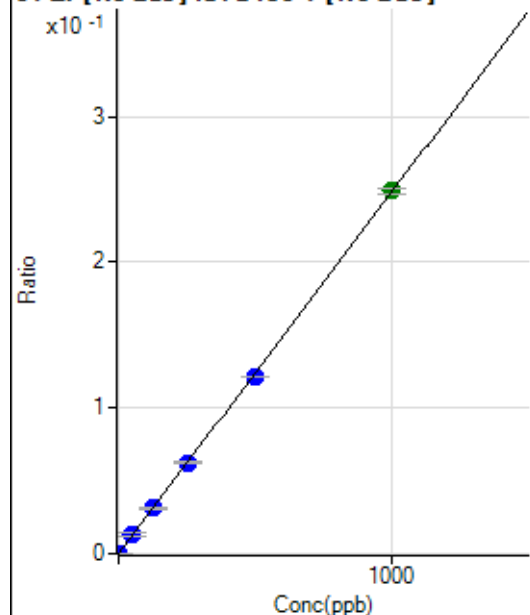
$$R = 1.0000$$

$$DL = 0.00985$$

$$BEC = 0.04262$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	47.23	0.0000	P	19.8
2	☐	1.000	0.850	1155.63	0.0002	P	11.0
3	☐	50.000	52.717	64854.18	0.0131	P	11.8
4	☐	125.000	125.219	166855.13	0.0310	P	1.8
5	☐	250.000	251.435	342311.90	0.0623	P	1.1
6	☐	500.000	491.354	702244.59	0.1218	P	0.3
7	☐	1000.000	1003.801	1475463.06	0.2488	A	1.9
8	☐			341.68	0.0001	P	7.1

$$y = 2.4788\text{E-}004 * x + 9.0540\text{E-}006$$

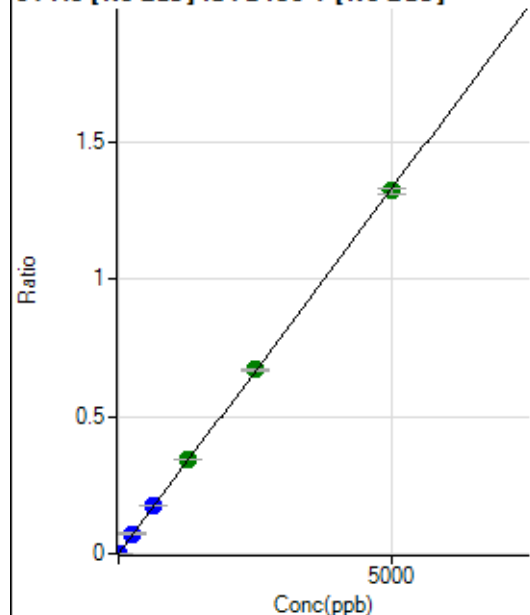
$$R = 0.9999$$

$$DL = 0.02167$$

$$BEC = 0.03653$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	102.78	0.0000	P	30.8
2	☐	10.000	4.842	6862.98	0.0013	P	5.3
3	☐	250.000	276.496	364507.14	0.0734	P	10.3
4	☐	625.000	653.614	932704.58	0.1736	P	1.8
5	☐	1250.000	1298.628	1893686.89	0.3448	A	0.4
6	☐	2500.000	2519.269	3856383.94	0.6689	A	0.4
7	☐	5000.000	4973.317	7829653.13	1.3204	A	1.9
8	☐			3878.42	0.0007	P	6.9

$$y = 2.6550\text{E-}004 * x + 1.9723\text{E-}005$$

$$R = 0.9999$$

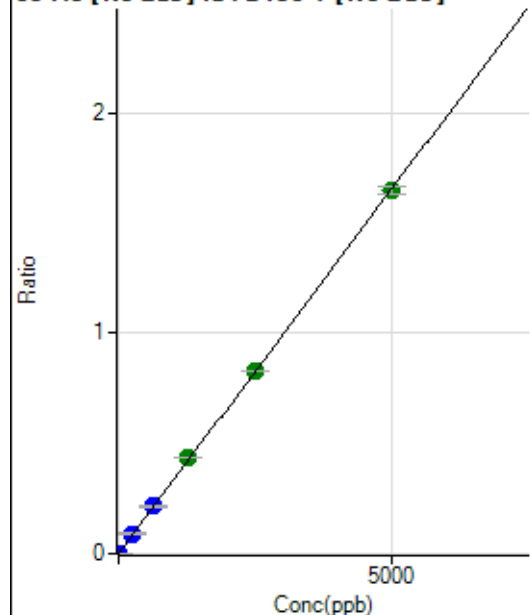
$$DL = 0.06871$$

$$BEC = 0.07429$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	52.78	0.0000	P	33.2
2	☐	10.000	4.914	8597.33	0.0016	P	2.6
3	☐	250.000	275.729	452321.60	0.0912	P	11.2
4	☐	625.000	652.292	1158965.26	0.2157	P	2.0
5	☐	1250.000	1310.246	2378968.91	0.4332	A	0.3
6	☐	2500.000	2503.865	4772799.80	0.8278	A	0.6
7	☐	5000.000	4978.318	9759472.79	1.6459	A	2.3
8	☐			5317.83	0.0010	P	2.0

$$y = 3.3061E-004 * x + 1.0136E-005$$

$$R = 0.9999$$

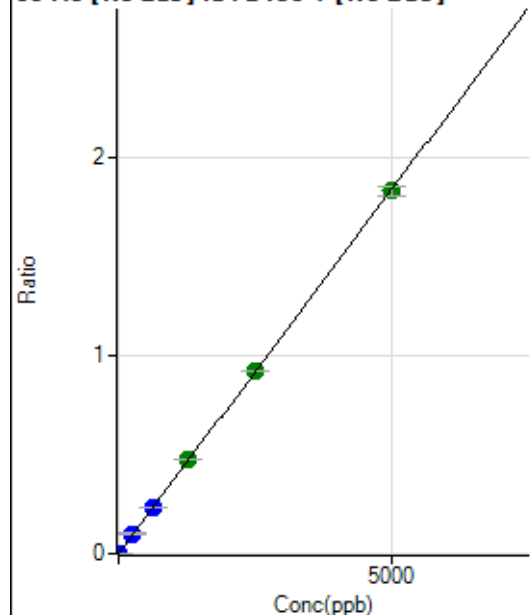
$$DL = 0.03052$$

$$BEC = 0.03066$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	122.23	0.0000	P	15.2
2	☐	10.000	4.998	9764.82	0.0019	P	3.4
3	☐	250.000	271.415	494623.29	0.0996	P	9.7
4	☐	625.000	634.722	1251523.20	0.2329	P	1.4
5	☐	1250.000	1292.684	2604856.83	0.4743	A	1.1
6	☐	2500.000	2505.074	5298695.30	0.9190	A	0.4
7	☐	5000.000	4984.516	10842813.09	1.8286	A	2.8
8	☐			6512.80	0.0012	P	0.9

$$y = 3.6686E-004 * x + 2.3436E-005$$

$$R = 1.0000$$

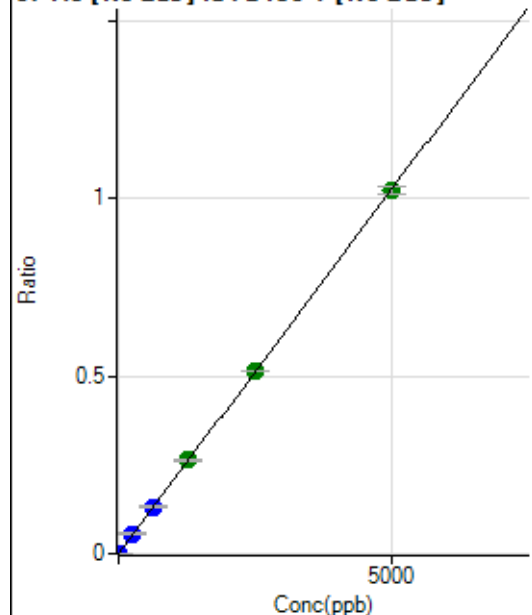
$$DL = 0.0292$$

$$BEC = 0.06388$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	25.00	0.0000	P	33.9
2	☐	10.000	4.919	5326.17	0.0010	P	6.0
3	☐	250.000	272.657	277617.84	0.0559	P	9.4
4	☐	625.000	643.011	708300.37	0.1318	P	1.2
5	☐	1250.000	1284.759	1446048.37	0.2633	A	1.1
6	☐	2500.000	2511.045	2967377.04	0.5147	A	0.7
7	☐	5000.000	4982.414	6055320.28	1.0212	A	2.0
8	☐			3356.05	0.0006	P	6.1

$$y = 2.0496\text{E-}004 * x + 4.8034\text{E-}006$$

$$R = 1.0000$$

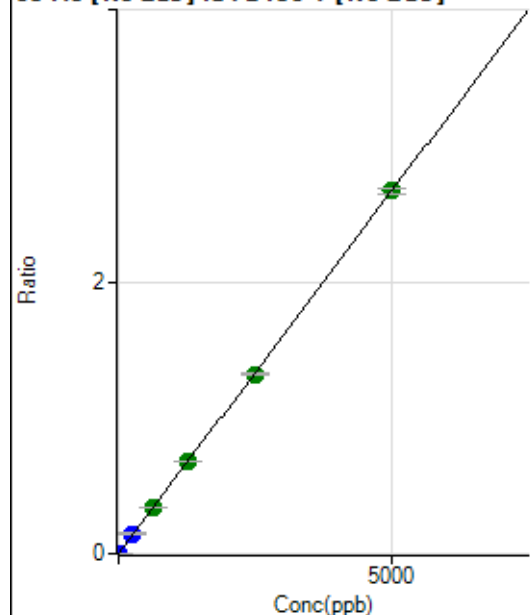
$$DL = 0.02385$$

$$BEC = 0.02344$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	61.11	0.0000	P	28.6
2	☐	10.000	4.825	13601.45	0.0026	P	0.4
3	☐	250.000	271.413	719006.33	0.1448	P	10.2
4	☐	625.000	639.828	1834639.47	0.3414	A	1.6
5	☐	1250.000	1272.386	3727972.61	0.6789	A	1.4
6	☐	2500.000	2472.376	7605246.52	1.3191	A	1.1
7	☐	5000.000	5005.302	15836051.22	2.6705	A	1.7
8	☐			8333.31	0.0015	P	2.7

$$y = 5.3354\text{E-}004 * x + 1.1729\text{E-}005$$

$$R = 1.0000$$

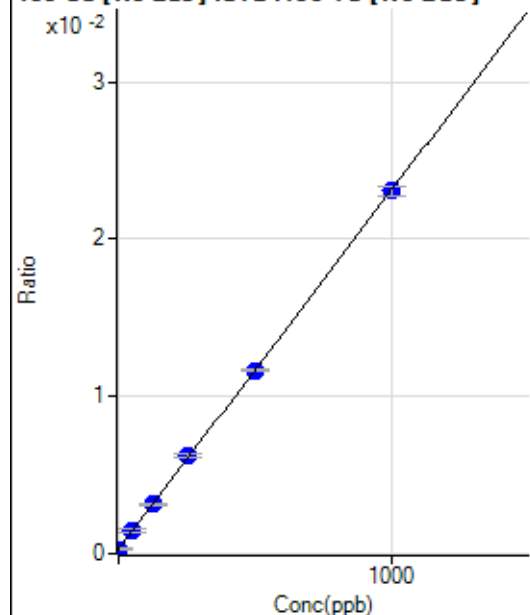
$$DL = 0.01887$$

$$BEC = 0.02198$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	1033.40	0.0003	P	10.7
2	☐	1.000	1.123	1138.97	0.0003	P	6.0
3	☐	50.000	52.201	5295.60	0.0015	P	9.2
4	☐	125.000	125.218	12058.36	0.0031	P	2.1
5	☐	250.000	261.369	24469.56	0.0062	P	4.5
6	☐	500.000	498.389	47404.30	0.0117	P	1.1
7	☐	1000.000	997.826	97477.44	0.0231	P	2.4
8	☐			1208.42	0.0003	P	6.4

$$y = 2.2836\text{E-}005 * x + 2.7646\text{E-}004$$

$$R = 0.9999$$

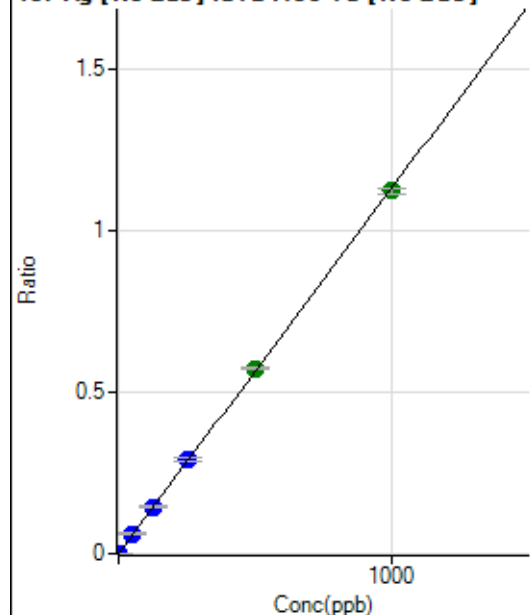
$$DL = 3.899$$

$$BEC = 12.11$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	41.67	0.0000	P	21.5
2	☐	1.000	0.981	4220.22	0.0011	P	5.2
3	☐	50.000	54.130	220435.55	0.0612	P	11.2
4	☐	125.000	128.674	559482.44	0.1455	P	0.8
5	☐	250.000	258.463	1145436.41	0.2923	P	2.7
6	☐	500.000	507.852	2334846.86	0.5742	A	1.5
7	☐	1000.000	993.292	4747376.41	1.1231	A	1.3
8	☐			1069.52	0.0003	P	3.2

$$y = 0.0011 * x + 1.1159\text{E-}005$$

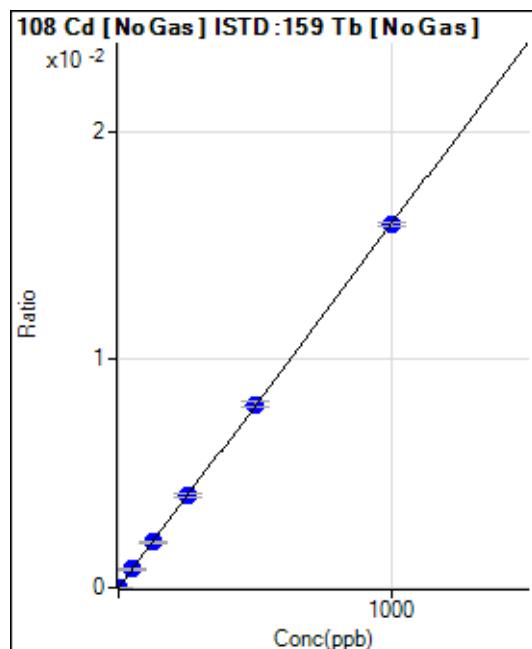
$$R = 0.9999$$

$$DL = 0.006374$$

$$BEC = 0.00987$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	11.11	0.0000	P	77.4
2	☐	1.000	0.784	58.33	0.0000	P	7.4
3	☐	50.000	51.122	2957.30	0.0008	P	6.5
4	☐	125.000	125.525	7710.57	0.0020	P	3.0
5	☐	250.000	254.315	15910.74	0.0041	P	4.2
6	☐	500.000	503.182	32648.31	0.0080	P	2.7
7	☐	1000.000	997.208	67264.11	0.0159	P	1.2
8	☐			22.22	0.0000	P	11.4

$$y = 1.5954\text{E-}005 * x + 2.9661\text{E-}006$$

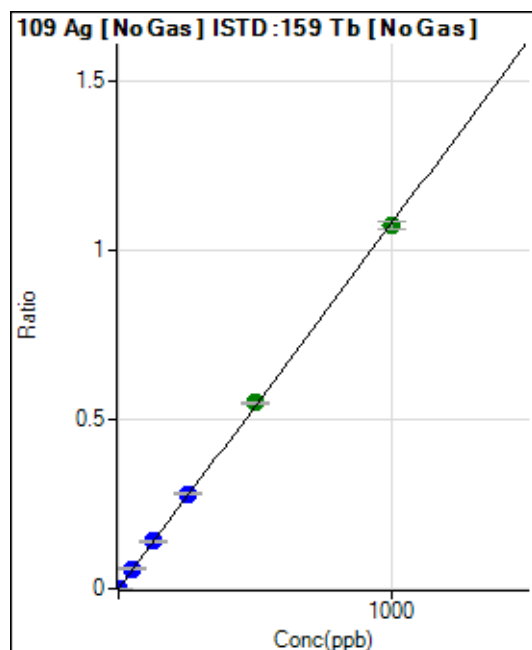
$$R = 1.0000$$

$$DL = 0.4315$$

$$BEC = 0.1859$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	33.33	0.0000	P	23.9
2	☐	1.000	0.983	4028.50	0.0011	P	4.3
3	☐	50.000	53.685	208446.62	0.0579	P	10.8
4	☐	125.000	129.010	534592.98	0.1391	P	2.9
5	☐	250.000	258.892	1093787.91	0.2790	P	2.1
6	☐	500.000	508.068	2226497.99	0.5476	A	1.6
7	☐	1000.000	993.057	4523821.02	1.0703	A	2.1
8	☐			1077.85	0.0003	P	16.5

$$y = 0.0011 * x + 8.8911\text{E-}006$$

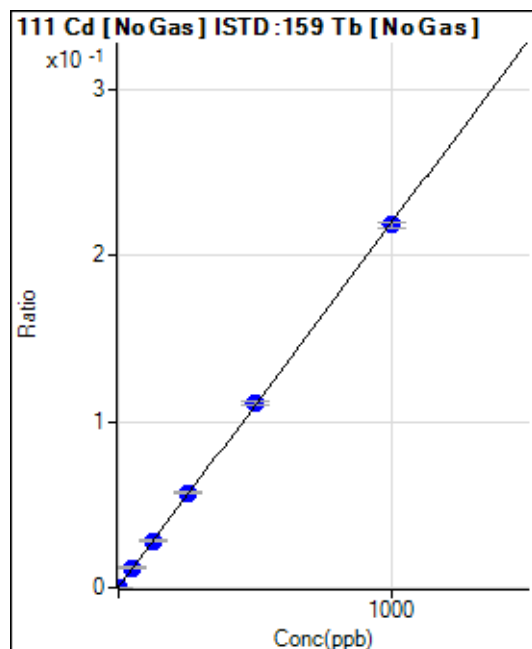
$$R = 0.9999$$

$$DL = 0.005925$$

$$BEC = 0.008249$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	726.72	0.0002	P	10.0
2	☐	1.000	0.901	1478.70	0.0004	P	3.4
3	☐	50.000	53.722	43143.71	0.0120	P	12.1
4	☐	125.000	128.029	108806.40	0.0283	P	2.3
5	☐	250.000	258.852	223498.61	0.0570	P	2.5
6	☐	500.000	505.922	452353.27	0.1113	P	2.0
7	☐	1000.000	994.261	923450.30	0.2185	P	1.4
8	☐			1047.02	0.0003	P	4.6

$$y = 2.1953\text{E-}004 * x + 1.9439\text{E-}004$$

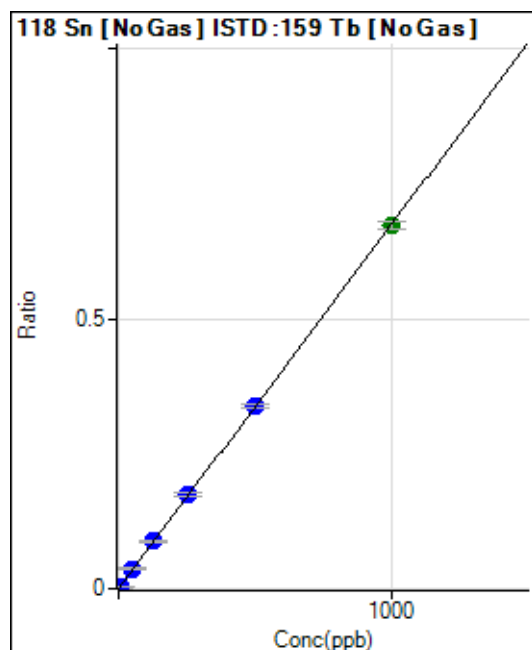
$$R = 0.9999$$

$$DL = 0.2658$$

$$BEC = 0.8855$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	225.01	0.0001	P	18.6
2	☐	5.000	4.697	12172.40	0.0032	P	2.9
3	☐	50.000	53.466	130272.08	0.0361	P	9.8
4	☐	125.000	129.401	335956.87	0.0874	P	2.1
5	☐	250.000	258.575	684159.88	0.1745	P	2.3
6	☐	500.000	502.236	1378133.69	0.3390	P	2.4
7	☐	1000.000	996.016	2841060.83	0.6722	A	2.0
8	☐			1658.49	0.0004	P	4.4

$$y = 6.7481\text{E-}004 * x + 6.0161\text{E-}005$$

$$R = 1.0000$$

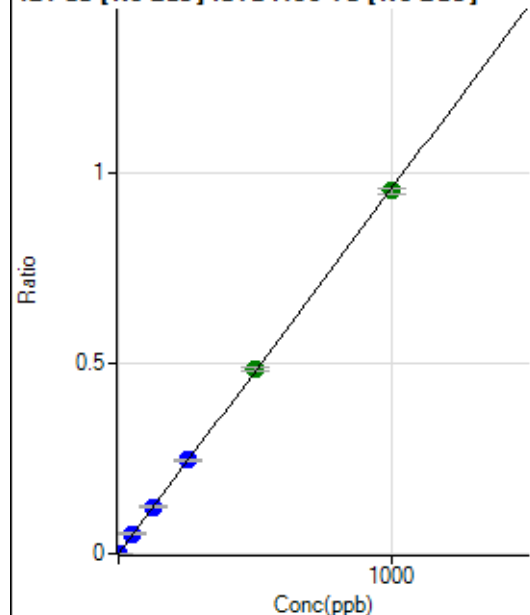
$$DL = 0.04981$$

$$BEC = 0.08915$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	30.56	0.0000	P	42.7
2	☐	2.000	1.807	6560.08	0.0017	P	2.2
3	☐	50.000	53.774	185495.85	0.0515	P	12.3
4	☐	125.000	128.324	472947.85	0.1230	P	1.5
5	☐	250.000	256.671	964239.73	0.2460	P	2.7
6	☐	500.000	507.557	1977863.98	0.4865	A	2.3
7	☐	1000.000	993.950	4026766.24	0.9527	A	1.7
8	☐			2244.69	0.0006	P	11.4

$$y = 9.5848\text{E-}004 * x + 8.1918\text{E-}006$$

$$R = 0.9999$$

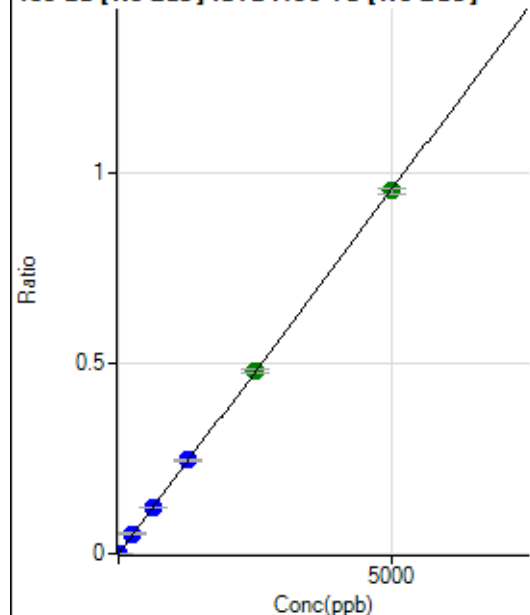
$$DL = 0.01096$$

$$BEC = 0.008547$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	33.33	0.0000	P	26.5
2	☐	10.000	9.596	6951.96	0.0018	P	1.7
3	☐	250.000	267.355	184173.39	0.0512	P	11.6
4	☐	625.000	636.467	468164.17	0.1218	P	1.7
5	☐	1250.000	1290.538	967670.37	0.2469	P	2.4
6	☐	2500.000	2505.903	1949135.59	0.4794	A	1.7
7	☐	5000.000	4984.614	4030374.96	0.9536	A	1.9
8	☐			7177.07	0.0019	P	6.3

$$y = 1.9130\text{E-}004 * x + 8.9320\text{E-}006$$

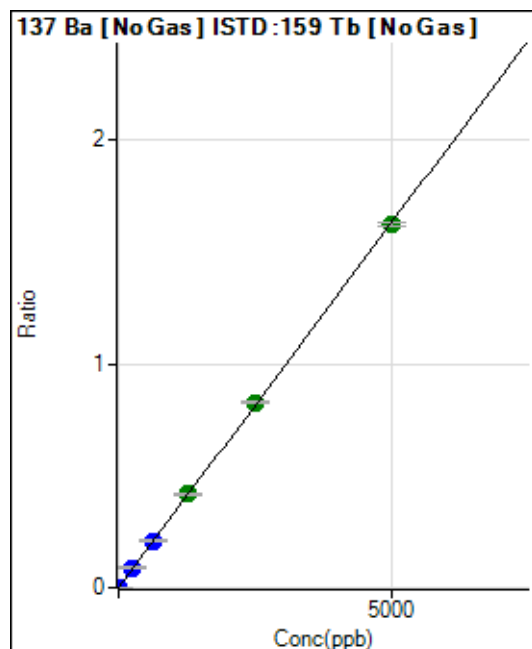
$$R = 1.0000$$

$$DL = 0.03715$$

$$BEC = 0.04669$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	41.67	0.0000	P	21.4
2	☐	10.000	9.374	11574.65	0.0031	P	3.1
3	☐	250.000	268.416	315495.37	0.0876	P	11.7
4	☐	625.000	641.533	805372.87	0.2095	P	1.4
5	☐	1250.000	1284.819	1644179.72	0.4195	A	2.4
6	☐	2500.000	2535.379	3365757.63	0.8278	A	1.4
7	☐	5000.000	4970.620	6859703.28	1.6228	A	1.2
8	☐			12236.36	0.0032	P	2.3

$$y = 3.2648\text{E-}004 * x + 1.1156\text{E-}005$$

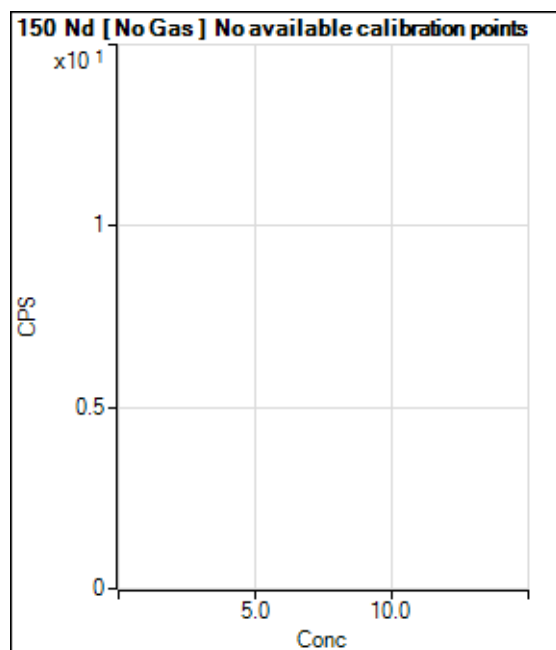
$$R = 0.9999$$

$$DL = 0.02192$$

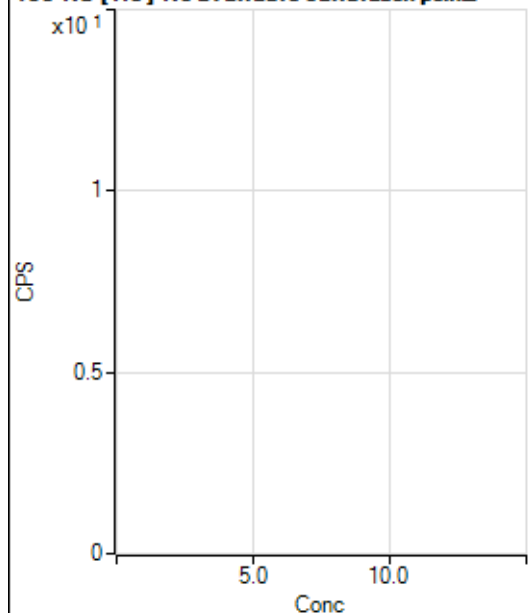
$$BEC = 0.03417$$

Weight: <None>

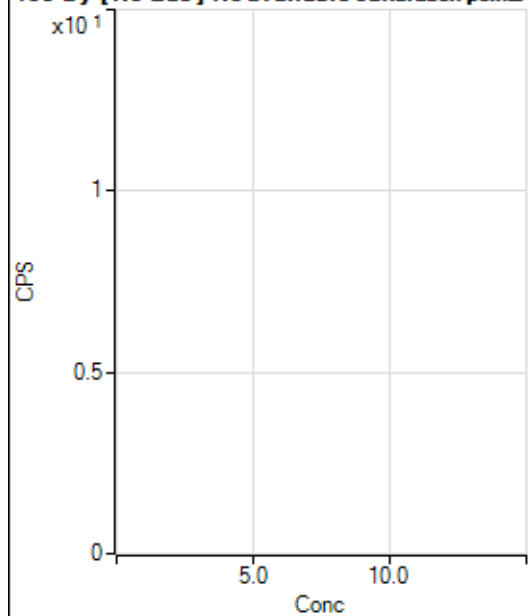
Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			8.89		P	114.5
2	☐			6.67		P	100.0
3	☐			8.89		P	43.3
4	☐			24.44		P	31.5
5	☐			28.89		P	35.2
6	☐			71.11		P	19.5
7	☐			148.89		P	20.2
8	☐			62.22		P	32.7

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2.22		P	86.6
2	☐			0.00		P	
3	☐			3.33		P	0.0
4	☐			0.00		P	
5	☐			3.33		P	173.2
6	☐			13.33		P	25.0
7	☐			24.45		P	28.4
8	☐			12.22		P	31.5

156 Dy [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			11.11		P	43.3
2	☐			19.45		P	24.7
3	☐			5.56		P	173.2
4	☐			11.11		P	114.6
5	☐			27.78		P	75.5
6	☐			50.00		P	44.1
7	☐			61.11		P	28.4
8	☐			208.34		P	21.2

156 Dy [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			2.22		P	86.6
2	☐			2.22		P	173.2
3	☐			4.44		P	173.2
4	☐			3.33		P	0.0
5	☐			12.22		P	15.7
6	☐			14.44		P	35.3
7	☐			28.89		P	37.1
8	☐			116.67		P	7.6

160 Gd [No Gas] Noavailable calibration poin_

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			44.45		P	57.3
2	☐			44.44		P	21.7
3	☐			36.11		P	26.7
4	☐			19.45		P	24.7
5	☐			44.45		P	47.2
6	☐			55.56		P	31.2
7	☐			80.56		P	57.0
8	☐			169.45		P	38.2

160 Gd [He] No available calibration points

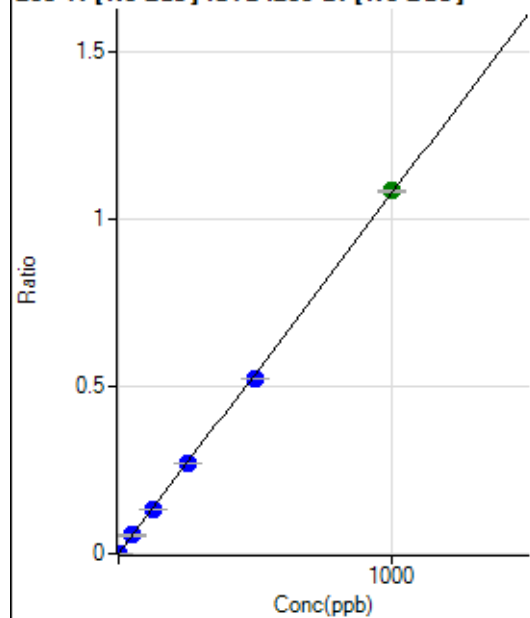
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			5.55		P	124.9
2	☐			13.33		P	90.2
3	☐			10.00		P	57.7
4	☐			22.22		P	8.7
5	☐			23.33		P	37.8
6	☐			21.11		P	9.1
7	☐			35.55		P	37.9
8	☐			143.34		P	4.0

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			13.89		P	34.7
2	☐			8.33		P	173.2
3	☐			19.44		P	65.5
4	☐			8.33		P	100.0
5	☐			52.78		P	39.7
6	☐			30.56		P	41.7
7	☐			36.11		P	35.3
8	☐			33.33		P	50.0

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐			10.00		P	66.7
2	☐			13.33		P	25.0
3	☐			11.11		P	69.3
4	☐			8.89		P	114.5
5	☐			11.11		P	45.8
6	☐			16.67		P	20.0
7	☐			23.33		P	28.6
8	☐			21.11		P	24.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	58.34	0.0000	P	43.1
2	☐	1.000	0.918	1983.53	0.0010	P	5.2
3	☐	50.000	51.972	103516.39	0.0559	P	11.1
4	☐	125.000	121.802	261493.25	0.1310	P	0.5
5	☐	250.000	248.803	546075.04	0.2677	P	0.3
6	☐	500.000	485.553	1095417.60	0.5223	P	0.4
7	☐	1000.000	1007.824	2295001.16	1.0841	A	0.5
8	☐			633.37	0.0003	P	15.1

$$y = 0.0011 * x + 2.9907E-005$$

$$R = 0.9998$$

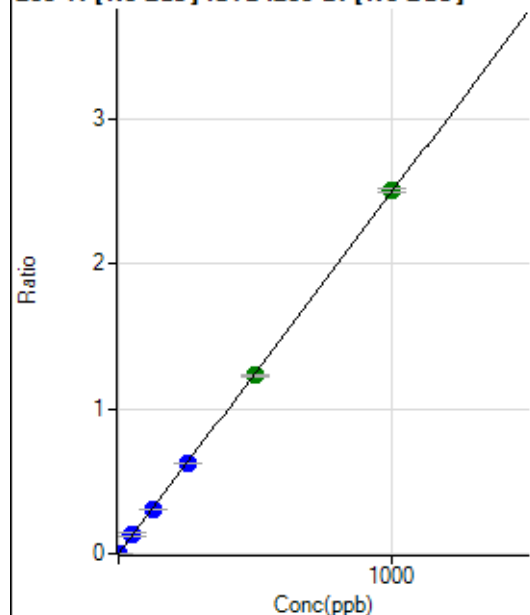
$$DL = 0.03591$$

$$BEC = 0.0278$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	138.89	0.0001	P	40.8
2	☐	1.000	0.905	4537.03	0.0023	P	2.1
3	☐	50.000	52.981	244537.94	0.1321	P	11.1
4	☐	125.000	124.268	618226.37	0.3098	P	0.4
5	☐	250.000	249.890	1270941.06	0.6230	P	0.7
6	☐	500.000	492.260	2573504.38	1.2271	A	0.4
7	☐	1000.000	1003.840	5296793.56	2.5023	A	0.9
8	☐			1522.36	0.0008	P	6.0

$$y = 0.0025 * x + 7.1496E-005$$

$$R = 0.9999$$

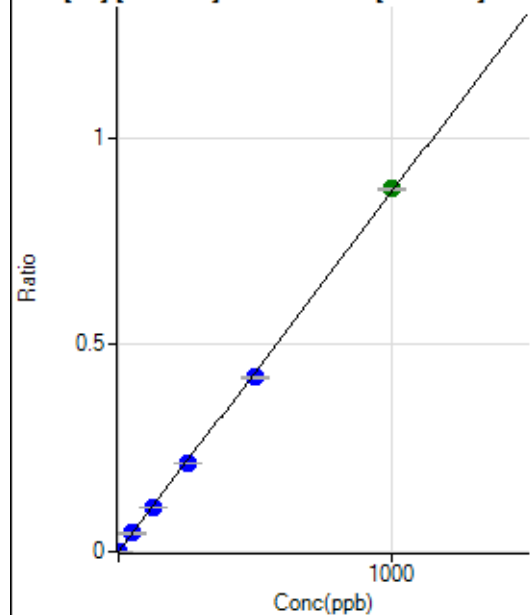
$$DL = 0.03515$$

$$BEC = 0.02868$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	140.74	0.0001	P	13.1
2	☐	1.000	0.868	1611.24	0.0008	P	9.0
3	☐	50.000	52.195	83916.23	0.0454	P	13.0
4	☐	125.000	121.807	211257.07	0.1059	P	1.5
5	☐	250.000	244.605	433601.54	0.2125	P	0.5
6	☐	500.000	485.003	883619.60	0.4213	P	0.6
7	☐	1000.000	1009.137	1855599.93	0.8766	A	0.6
8	☐			7522.68	0.0040	P	1.7

$$y = 8.6857E-004 * x + 7.2209E-005$$

$$R = 0.9998$$

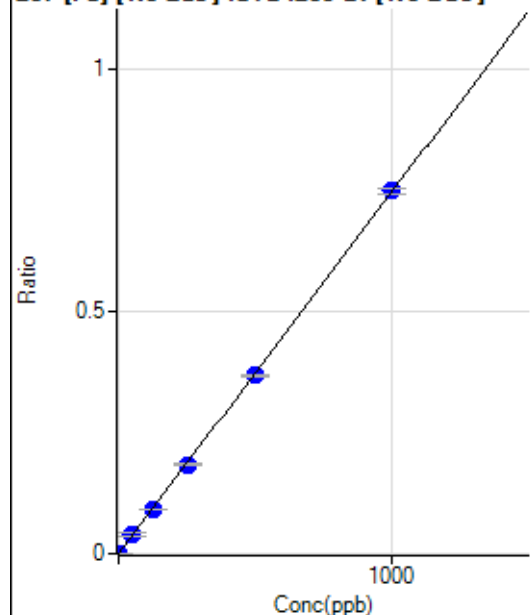
$$DL = 0.0327$$

$$BEC = 0.08314$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	112.97	0.0001	P	25.5
2	☐	1.000	0.855	1355.65	0.0007	P	7.2
3	☐	50.000	52.399	72265.10	0.0391	P	13.3
4	☐	125.000	122.143	181763.78	0.0911	P	0.7
5	☐	250.000	246.357	374705.07	0.1837	P	1.2
6	☐	500.000	494.255	772664.23	0.3684	P	1.0
7	☐	1000.000	1004.021	1584044.76	0.7483	P	1.5
8	☐			6759.29	0.0036	P	3.7

$$y = 7.4529\text{E-}004 * x + 5.7955\text{E-}005$$

$$R = 1.0000$$

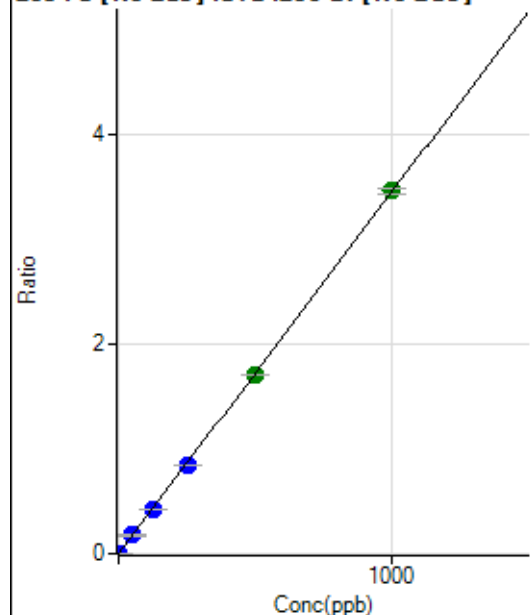
$$DL = 0.0596$$

$$BEC = 0.07776$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	542.61	0.0003	P	6.9
2	☐	1.000	0.876	6419.28	0.0033	P	7.2
3	☐	50.000	51.934	330719.31	0.1789	P	12.6
4	☐	125.000	121.829	836707.50	0.4193	P	0.5
5	☐	250.000	246.158	1727948.29	0.8469	P	0.5
6	☐	500.000	494.007	3564097.04	1.6994	A	0.7
7	☐	1000.000	1004.257	7312243.61	3.4545	A	1.4
8	☐			30097.35	0.0161	P	1.9

$$y = 0.0034 * x + 2.7812\text{E-}004$$

$$R = 1.0000$$

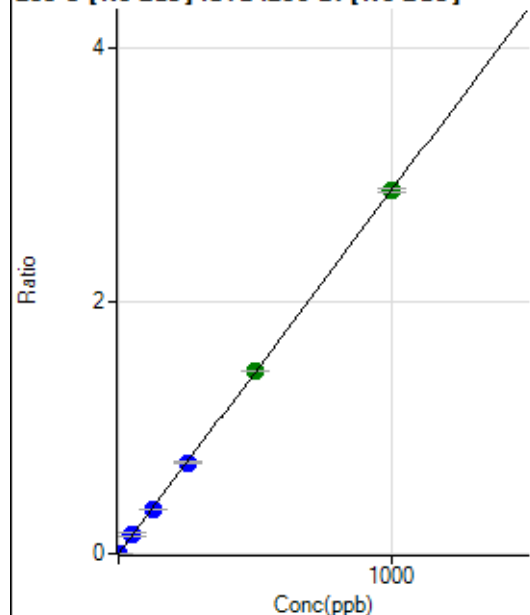
$$DL = 0.0168$$

$$BEC = 0.08086$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	0.000	0.000	27.78	0.0000	P	61.8
2	☐	1.000	0.863	4864.99	0.0025	P	3.7
3	☐	50.000	52.789	280728.88	0.1518	P	12.1
4	☐	125.000	123.913	710975.46	0.3563	P	0.5
5	☐	250.000	251.148	1473292.63	0.7221	P	0.9
6	☐	500.000	502.619	3030999.09	1.4452	A	0.6
7	☐	1000.000	998.400	6076707.77	2.8707	A	1.2
8	☐			688.93	0.0004	P	15.7

$$y = 0.0029 * x + 1.4200E-005$$

$$R = 1.0000$$

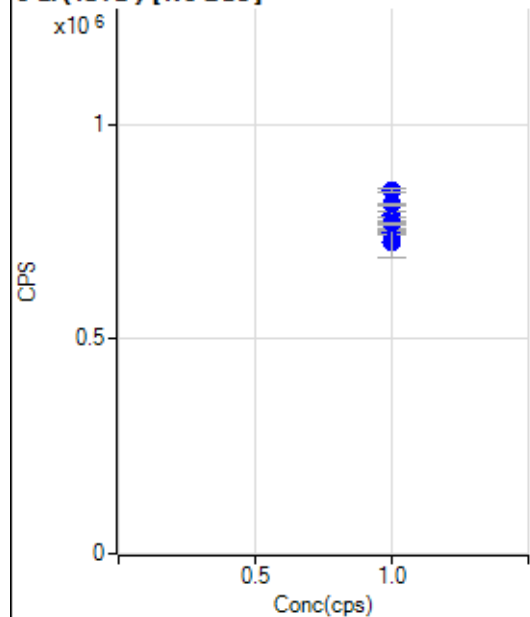
$$DL = 0.009163$$

$$BEC = 0.004939$$

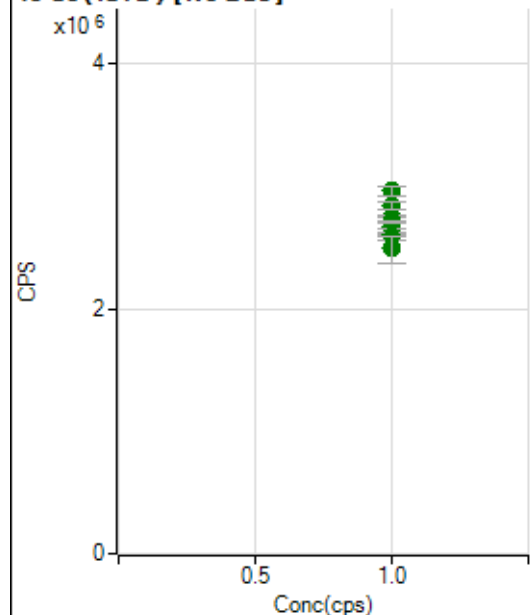
Weight: <None>

Min Conc: 0

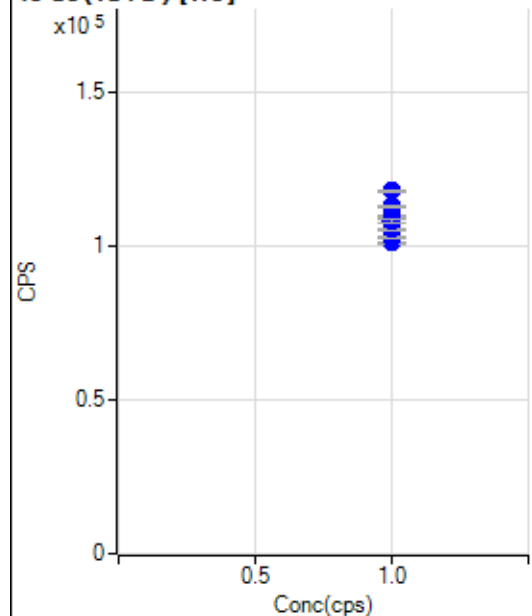
6 Li (ISTD) [No Gas]



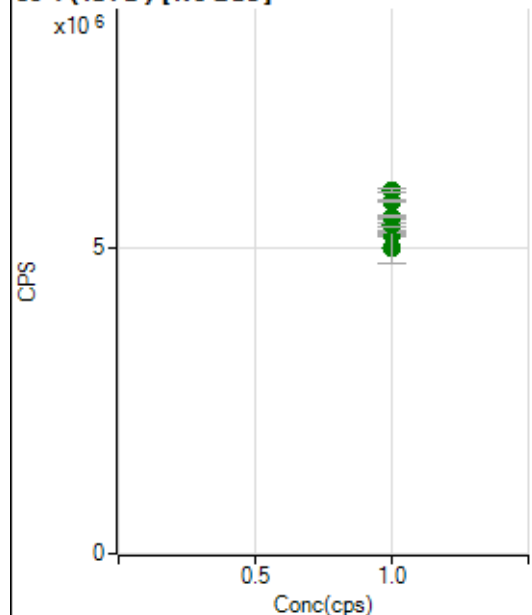
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		748632.55		P	0.5
2	☐	1.000		747336.10		P	1.3
3	☐	1.000		724021.05		P	9.7
4	☐	1.000		771131.54		P	0.7
5	☐	1.000		789811.96		P	1.7
6	☐	1.000		815175.56		P	0.5
7	☐	1.000		845614.12		P	1.0
8	☐	1.000		769856.63		P	0.8

45 Sc (ISTD) [No Gas]

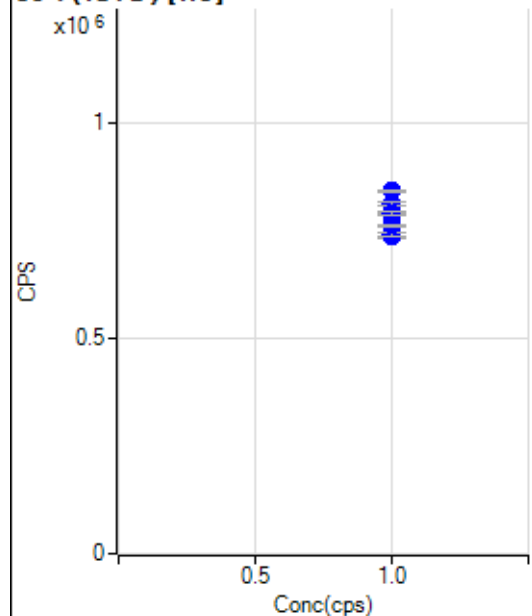
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2583744.81		A	1.5
2	☐	1.000		2608712.08		A	1.5
3	☐	1.000		2496551.07		A	10.0
4	☐	1.000		2669166.87		A	1.7
5	☐	1.000		2749100.62		A	0.5
6	☐	1.000		2835719.02		A	2.3
7	☐	1.000		2961240.37		A	2.9
8	☐	1.000		2707617.77		A	0.5

45 Sc (ISTD) [He]

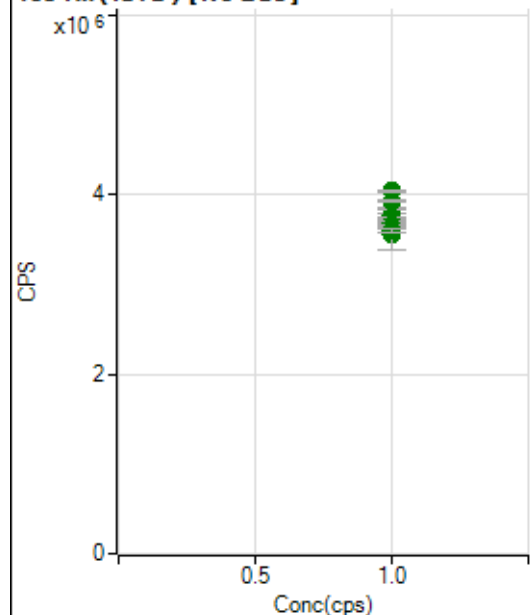
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		100949.40		P	0.8
2	☐	1.000		102568.25		P	0.9
3	☐	1.000		105232.69		P	0.5
4	☐	1.000		109546.20		P	0.6
5	☐	1.000		108651.56		P	0.3
6	☐	1.000		112641.77		P	0.4
7	☐	1.000		117725.39		P	0.9
8	☐	1.000		107992.25		P	1.4

89 Y (ISTD) [No Gas]

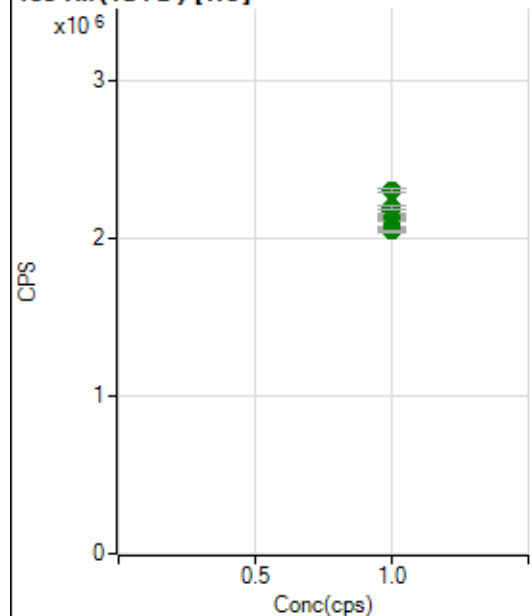
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		5212346.21		A	0.7
2	☐	1.000		5259272.28		A	0.8
3	☐	1.000		4997081.90		A	9.6
4	☐	1.000		5374528.32		A	0.8
5	☐	1.000		5491933.25		A	1.3
6	☐	1.000		5765395.89		A	0.9
7	☐	1.000		5930302.27		A	0.9
8	☐	1.000		5511309.85		A	0.7

89 Y (ISTD) [He]

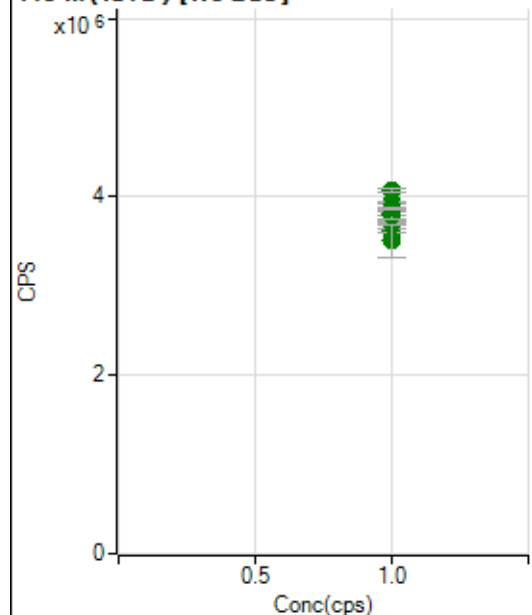
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		737093.51		P	0.5
2	☐	1.000		743746.42		P	1.2
3	☐	1.000		762955.20		P	0.7
4	☐	1.000		789214.08		P	1.0
5	☐	1.000		788970.93		P	0.2
6	☐	1.000		812750.28		P	1.3
7	☐	1.000		843402.00		P	0.6
8	☐	1.000		791511.88		P	0.8

103 Rh (ISTD) [No Gas]

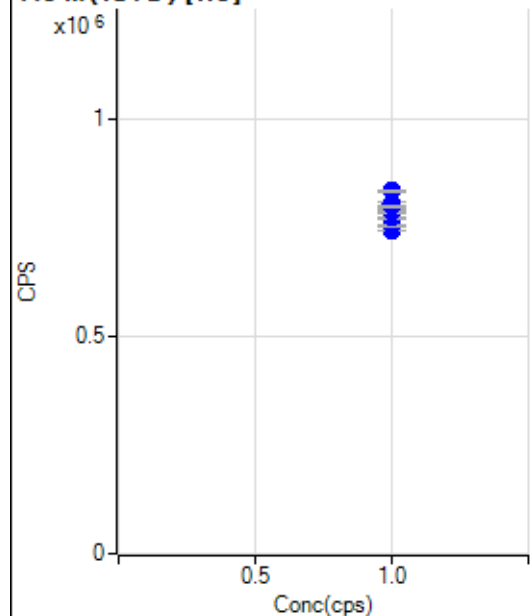
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3666522.00		A	1.5
2	☐	1.000		3690505.99		A	0.9
3	☐	1.000		3563026.42		A	9.7
4	☐	1.000		3778959.46		A	1.1
5	☐	1.000		3844128.56		A	0.7
6	☐	1.000		3929286.24		A	0.9
7	☐	1.000		4041947.88		A	0.4
8	☐	1.000		3594225.39		A	1.0

103 Rh (ISTD) [He]

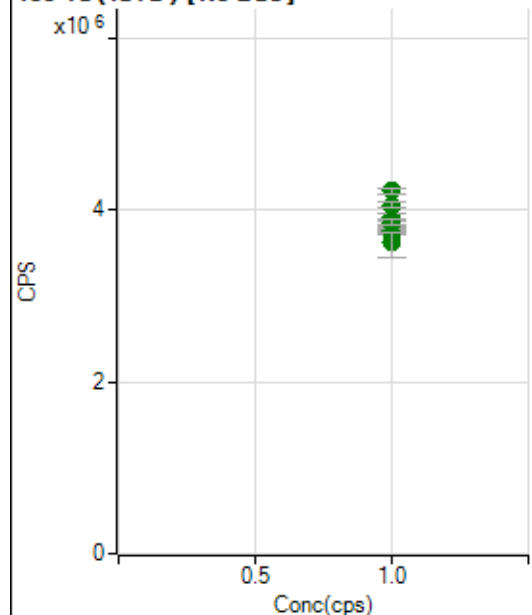
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2069043.32		A	0.8
2	☐	1.000		2118804.38		A	0.7
3	☐	1.000		2139406.20		A	0.4
4	☐	1.000		2161696.64		A	1.5
5	☐	1.000		2172792.56		A	1.1
6	☐	1.000		2192093.28		A	1.5
7	☐	1.000		2299242.69		A	1.0
8	☐	1.000		2043318.60		A	0.9

115 In (ISTD) [No Gas]

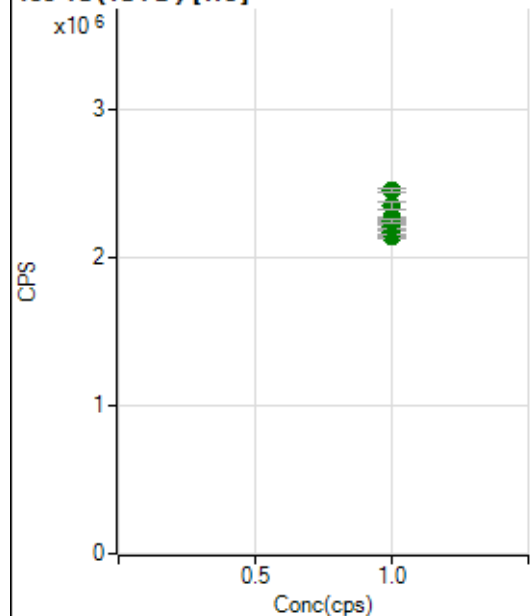
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3617374.69		A	1.5
2	☐	1.000		3707751.36		A	1.1
3	☐	1.000		3510509.59		A	10.7
4	☐	1.000		3816415.53		A	1.2
5	☐	1.000		3797374.24		A	2.3
6	☐	1.000		3941745.69		A	0.5
7	☐	1.000		4066024.43		A	1.0
8	☐	1.000		3871254.60		A	0.3

115 In (ISTD) [He]

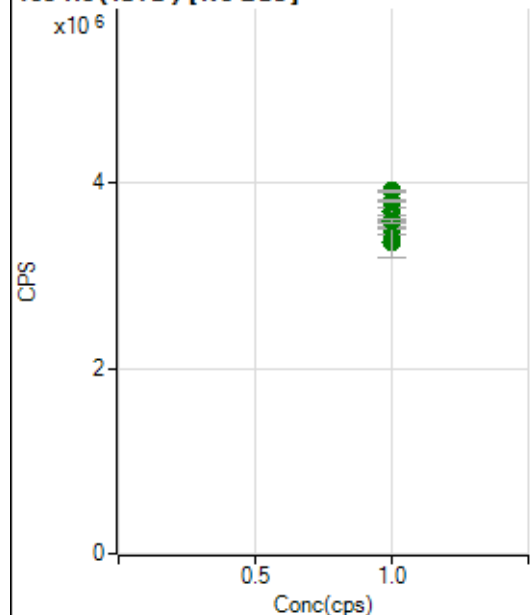
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		744351.02		P	0.3
2	☐	1.000		756210.89		P	0.8
3	☐	1.000		774084.17		P	0.7
4	☐	1.000		796222.18		P	1.4
5	☐	1.000		787932.40		P	0.4
6	☐	1.000		804906.12		P	1.0
7	☐	1.000		835656.11		P	0.6
8	☐	1.000		799930.91		P	0.3

159 Tb (ISTD) [No Gas]

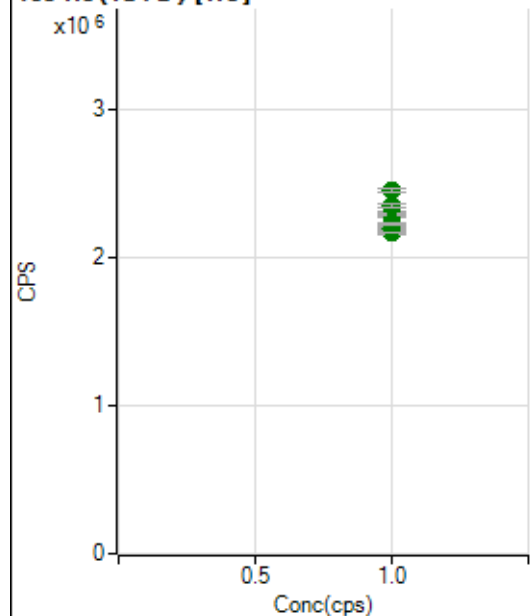
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3741764.56		A	1.6
2	☐	1.000		3769378.14		A	1.3
3	☐	1.000		3629004.80		A	10.3
4	☐	1.000		3845354.91		A	1.2
5	☐	1.000		3921074.77		A	2.5
6	☐	1.000		4066876.33		A	2.1
7	☐	1.000		4227520.74		A	1.6
8	☐	1.000		3858557.58		A	1.9

159 Tb (ISTD) [He]

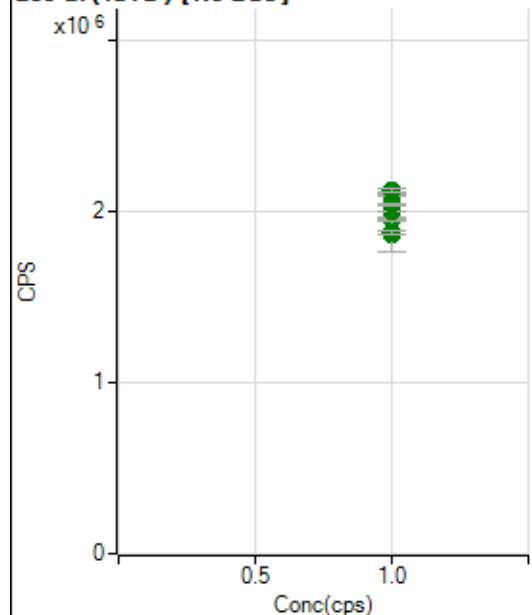
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2141398.15		A	0.7
2	☐	1.000		2169695.66		A	1.3
3	☐	1.000		2206652.99		A	1.3
4	☐	1.000		2267406.86		A	1.2
5	☐	1.000		2272185.49		A	0.4
6	☐	1.000		2355780.26		A	2.2
7	☐	1.000		2453955.28		A	1.0
8	☐	1.000		2245875.70		A	1.0

165 Ho (ISTD) [No Gas]

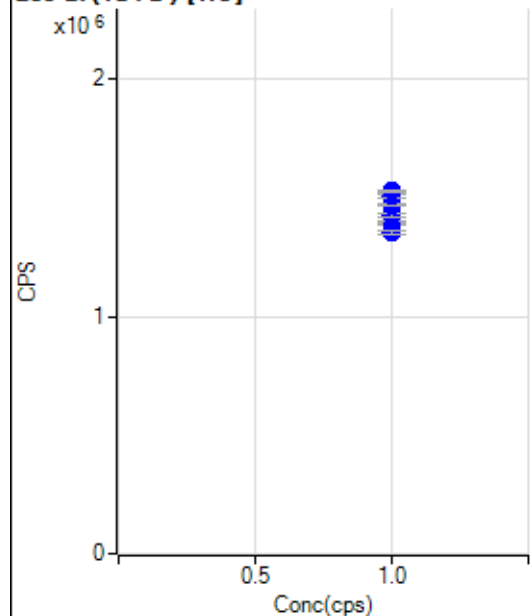
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		3439743.30		A	0.0
2	☐	1.000		3514501.64		A	0.8
3	☐	1.000		3359232.89		A	9.3
4	☐	1.000		3588662.75		A	0.1
5	☐	1.000		3691120.05		A	2.4
6	☐	1.000		3799897.35		A	0.6
7	☐	1.000		3915470.53		A	0.4
8	☐	1.000		3590756.07		A	0.6

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		2163455.86		A	1.1
2	☐	1.000		2198297.14		A	0.5
3	☐	1.000		2188608.23		A	1.3
4	☐	1.000		2293021.55		A	1.8
5	☐	1.000		2289292.19		A	0.8
6	☐	1.000		2347229.12		A	1.2
7	☐	1.000		2450393.14		A	1.0
8	☐	1.000		2227506.76		A	0.3

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1949846.83		A	1.4
2	☐	1.000		1950162.51		A	0.7
3	☐	1.000		1865868.83		A	11.0
4	☐	1.000		1995413.55		A	0.2
5	☐	1.000		2040235.65		A	0.5
6	☐	1.000		2097242.78		A	0.5
7	☐	1.000		2116936.23		A	1.1
8	☐	1.000		1869803.27		A	1.0

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	De t	RSD
1	☐	1.000		1389536.70		P	0.9
2	☐	1.000		1401626.82		P	0.3
3	☐	1.000		1426949.37		P	0.8
4	☐	1.000		1469294.21		P	0.7
5	☐	1.000		1469379.51		P	0.4
6	☐	1.000		1504932.13		P	1.0
7	☐	1.000		1529626.73		P	0.5
8	☐	1.000		1357168.14		P	1.2

US EPA Tune Check Report

Operator Name ICPMS
Acq/Data Batch D:\Agilent\ICPMH\1\DATA\P8021020 MS.b
Acq. Date-Time 2020-02-10 13:43:30
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		2546	25460.70			1.614	5.000
24		41418	414175.98			1.131	5.000
25		5796	57961.91			1.360	5.000
26		6891	68914.50			1.638	5.000
59		32170	321704.97			1.302	5.000
113		3313	33128.39			1.253	5.000
115		40851	408512.91			1.059	5.000
206		6388	63876.73			1.090	5.000
207		5753	57534.96			1.404	5.000
208		13580	135799.43			1.423	5.000
220		1	7.90			23.426	

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

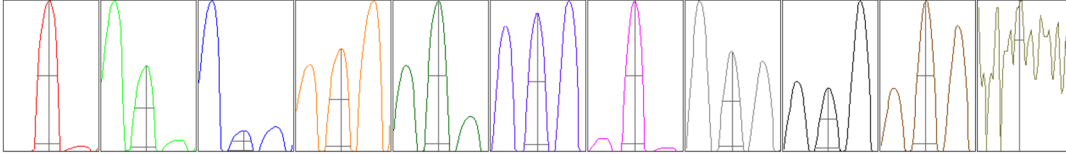
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	2544	2481	2545	2569	2591
24	41668	40608	41776	41591	41445
25	5807	5662	5819	5820	5871
26	6930	6692	6967	6925	6943
59	32131	31458	32469	32398	32397
113	3327	3245	3303	3339	3350
115	40943	40101	40933	41185	41094
206	6333	6319	6365	6445	6477
207	5732	5644	5724	5833	5835
208	13594	13295	13514	13693	13805

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	4264.13	8.95	8.90 - 9.10	
24	72619.04	23.95	23.90 - 24.10	
25	9673.31	24.95	24.90 - 25.10	
26	11546.29	25.95	25.90 - 26.10	
59	57655.19	58.95	58.90 - 59.10	
113	6497.94	113.00	112.90 - 113.10	
115	80108.39	115.00	114.90 - 115.10	
206	12235.10	206.00	205.90 - 206.10	
207	11135.75	206.95	206.90 - 207.10	
208	26419.71	207.95	207.90 - 208.10	
220	1.05	219.85	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.788	0.900	
24	0.62	0.789	0.900	
25	0.63	0.784	0.900	
26	0.62	0.789	0.900	
59	0.58	0.781	0.900	
113	0.53	0.762	0.900	
115	0.53	0.722	0.900	
206	0.54	0.779	0.900	
207	0.53	0.772	0.900	
208	0.53	0.767	0.900	
220	0.28			

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode HMI Nebulizer Gas 0.50 L/min Dilution Gas 0.45 L/min

US EPA Tune Check Report

RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 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	11.5 V	Deflect	14.8 V
Extract 2	-250.0 V	Cell Entrance	-30 V	Plate Bias	-50 V
Omega Bias	-120 V	Cell Exit	-50 V		

Cell Parameters

Use Gas	No	3rd Gas Flow	---	Energy Discrimination	4.0 V
He Flow	0.0 mL/min	OctP Bias	-8.0 V		
H2 Flow	---	OctP RF	160 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-4.0 V
Mass Offset	123	Axis Offset	-0.05		

Hardware Settings

Torch

Torch H	0.4 mm	Torch V	0.1 mm
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EM

Discriminator	3.9 mV	Analog HV	2168 V	Pulse HV	1119 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		8667	86666.51			2.423	
89		7552	75522.16			2.295	
205		7118	71176.91			3.306	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	8717	8802	8781	8737	8296
89	7633	7648	7616	7621	7243
205	7214	7256	7265	7148	6705

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	HMI	Nebulizer Gas	0.50 L/min	Dilution Gas	0.45 L/min
RF Power	1600 W	Option Gas	---	Auxiliary Gas	0.90 L/min
RF Matching	1.80 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	11.5 V	Deflect	4.4 V
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US EPA Tune Check Report

Extract 2	-250.0 V	Cell Entrance	-50 V	Plate Bias	-60 V
Omega Bias	-120 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	123	Axis Gain	0.9993	QP Bias	-13.0 V
Mass Offset	123	Axis Offset	-0.05		
Hardware Settings					
Torch					
Torch H	0.4 mm	Torch V	0.1 mm		
EM					
Discriminator	3.9 mV	Analog HV	2168 V	Pulse HV	1119 V