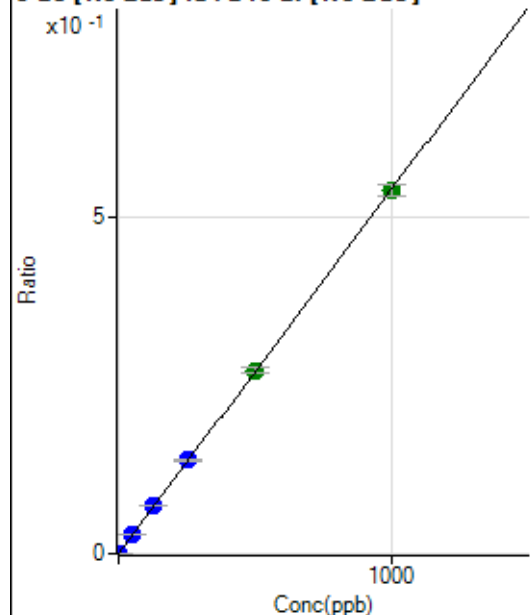


Calibration for 011CALS.d

Batch Folder: D:\Agilent\ICPMH\1\DATA\P8012423 MS-1.b\
 Analysis File: P8012423 MS-1.batch.bin
 DA Date-Time: 2023-01-25 18:02:32
 Calibration Title:
 Calibration Method: External Calibration
 VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2023-01-24 14:19:08
2	005CALS.d	S02	2023-01-24 14:22:17
3	006CALS.d	S03	2023-01-24 14:25:29
4	007CALS.d	S04	2023-01-24 14:28:35
5	008CALS.d	S05	2023-01-24 14:31:44
6	009CALS.d	S06	2023-01-24 14:34:51
7	010CALS.d	S07	2023-01-24 14:37:59
8	011CALS.d	S08	2023-01-24 14:41:05

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	88.74	0.0000	P	7.3
2	☐	1.000	1.146	3149.12	0.0006	P	4.3
3	☐	50.000	51.821	143428.45	0.0281	P	0.6
4	☐	125.000	131.332	356576.21	0.0712	P	2.5
5	☐	250.000	256.582	700089.51	0.1392	P	1.5
6	☐	500.000	502.764	1376879.49	0.2727	A	2.7
7	☐	1000.000	996.090	2671061.88	0.5403	A	3.0
8	☐			938.67	0.0002	P	7.1

$$y = 5.4236\text{E-}004 * x + 1.8802\text{E-}005$$

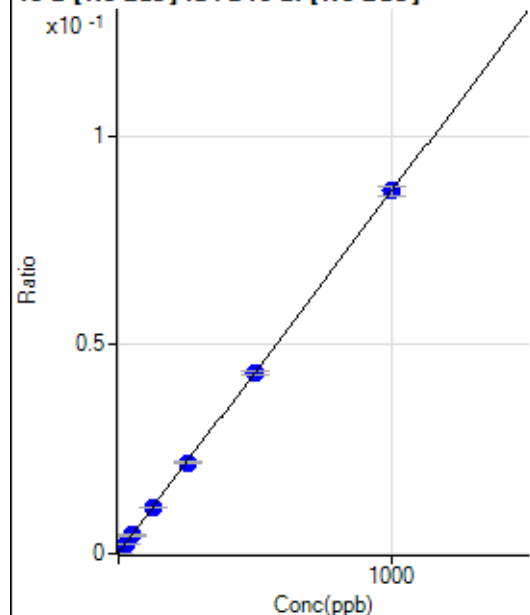
$$R = 1.0000$$

$$DL = 0.007544$$

$$BEC = 0.03467$$

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	917.85	0.0002	P	8.3
2	☐	25.000	23.954	11155.41	0.0023	P	5.1
3	☐	50.000	48.626	22456.75	0.0044	P	2.7
4	☐	125.000	125.201	55208.28	0.0110	P	2.0
5	☐	250.000	248.476	109143.97	0.0217	P	1.9
6	☐	500.000	499.215	219096.57	0.0434	P	2.1
7	☐	1000.000	1000.843	429200.50	0.0868	P	2.7
8	☐			20892.80	0.0047	P	7.7

$$y = 8.6540\text{E-}005 * x + 1.9478\text{E-}004$$

$$R = 1.0000$$

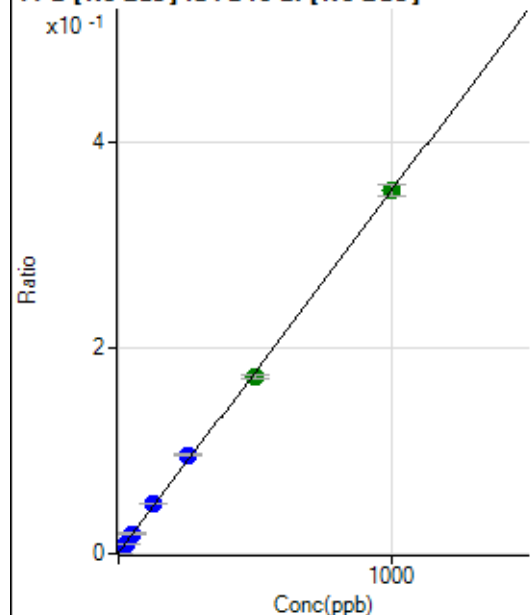
$$DL = 0.558$$

$$BEC = 2.251$$

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	4179.11	0.0009	P	3.2
2	☐	25.000	25.729	48900.82	0.0099	P	5.4
3	☐	50.000	52.932	99543.33	0.0195	P	4.4
4	☐	125.000	134.525	241435.70	0.0482	P	2.0
5	☐	250.000	270.863	483986.08	0.0962	P	1.4
6	☐	500.000	487.499	870688.66	0.1725	A	2.5
7	☐	1000.000	999.679	1743858.98	0.3527	A	3.3
8	☐			90122.53	0.0201	P	7.7

$$y = 3.5196E-004 * x + 8.8551E-004$$

$$R = 0.9996$$

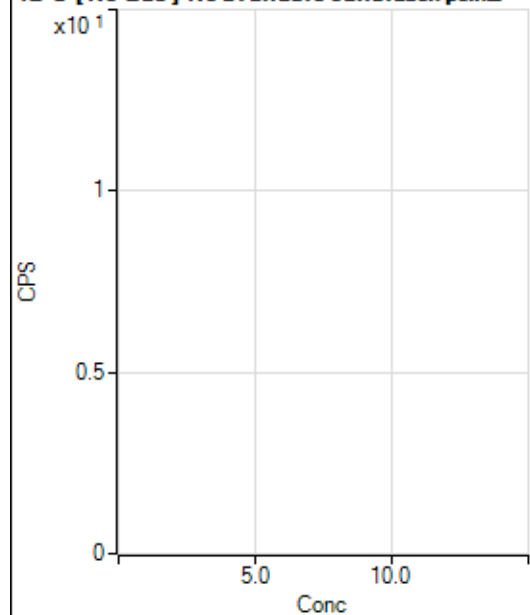
$$DL = 0.2417$$

$$BEC = 2.516$$

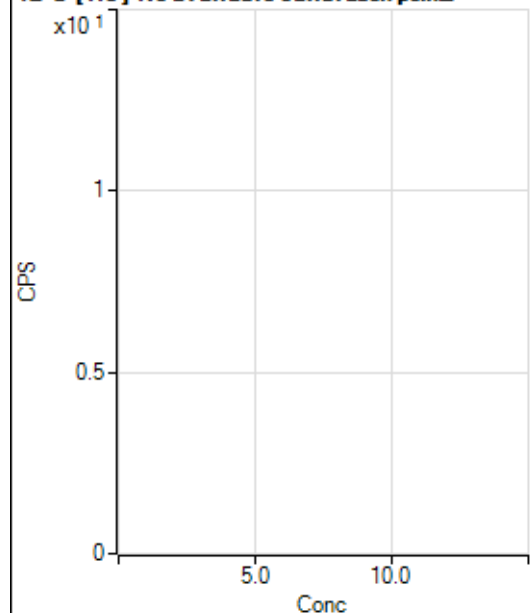
Weight: <None>

Min Conc: 0

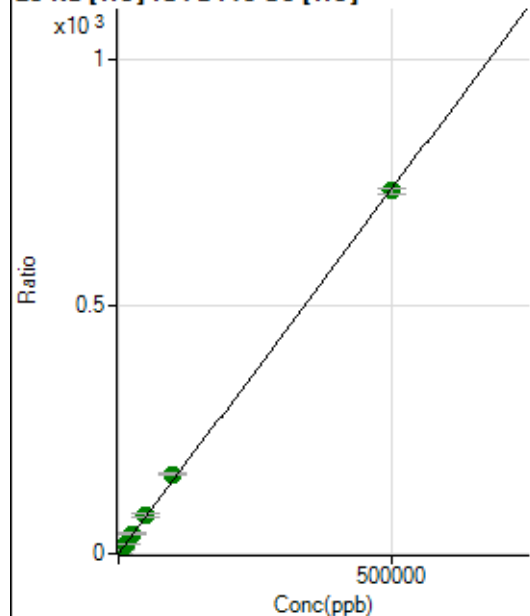
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6771833.05		A	2.5
2	☐			6869536.52		A	0.8
3	☐			6955293.56		A	1.9
4	☐			7075095.38		A	1.1
5	☐			7240966.74		A	0.9
6	☐			7766332.81		A	1.7
7	☐			10106518.45		A	2.5
8	☐			8243681.96		A	1.0

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			74662.58		P	0.9
2	☐			73314.04		P	1.2
3	☐			75206.72		P	0.5
4	☐			76427.69		P	1.6
5	☐			79892.01		P	1.1
6	☐			90126.85		P	0.9
7	☐			112442.47		P	1.2
8	☐			96404.74		P	2.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	21869.52	0.1186	P	1.7
2	☐	500.000	517.814	165874.32	0.8813	P	1.6
3	☐	5000.000	5414.681	1497487.75	8.0941	A	3.1
4	☐	12500.000	13513.608	3728341.19	20.0233	A	2.9
5	☐	25000.000	27451.063	7380793.22	40.5523	A	1.9
6	☐	50000.000	53050.167	14686153.11	78.2582	A	7.7
7	☐	100000.00	109245.57	29696709.35	161.0306	A	2.8
8	☐	500000.00	497693.81	131685658.5	733.1908	A	1.9

$$y = 0.0015 * x + 0.1186$$

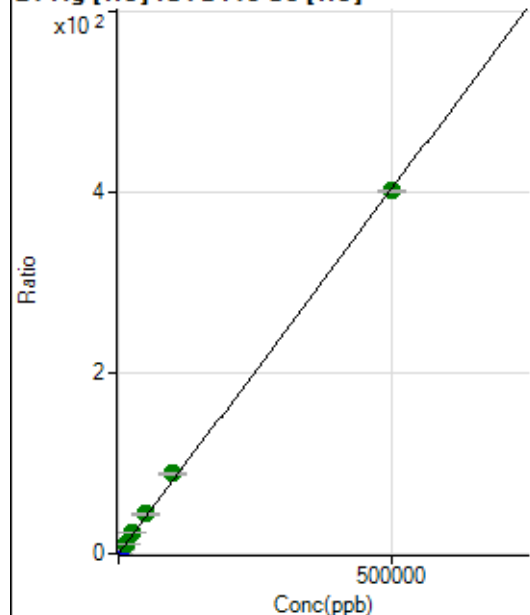
$$R = 0.9998$$

$$DL = 4.003$$

$$BEC = 80.52$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	377.79	0.0020	P	13.4
2	☐	500.000	525.310	80090.91	0.4256	P	1.6
3	☐	5000.000	5505.540	821321.40	4.4410	P	5.1
4	☐	12500.000	13636.526	2047276.39	10.9967	A	4.3
5	☐	25000.000	27871.920	4089900.44	22.4742	A	0.2
6	☐	50000.000	54193.879	8204074.92	43.6967	A	6.4
7	☐	100000.00	109484.59	16279164.42	88.2758	A	3.5
8	☐	500000.00	497506.60	72035073.83	401.1248	A	0.5

$$y = 8.0627\text{E-}004 * x + 0.0020$$

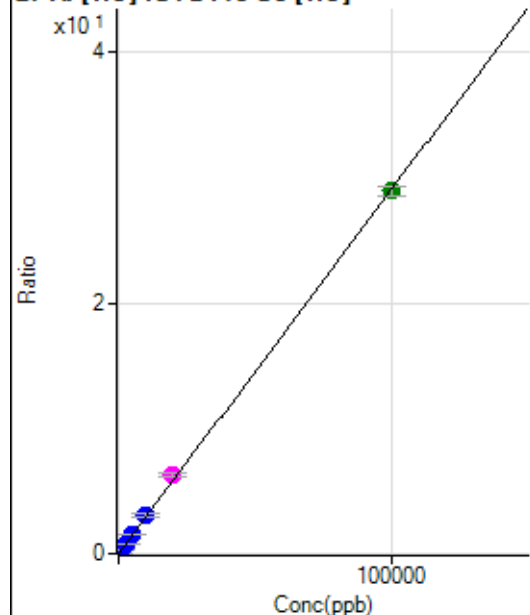
$$R = 0.9998$$

$$DL = 1.021$$

$$BEC = 2.541$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	67.07	0.0004	P	16.7
2	☐	20.000	21.441	1241.57	0.0066	P	1.7
3	☐	1000.000	1077.871	58017.37	0.3137	P	4.2
4	☐	2500.000	2668.645	144501.66	0.7761	P	2.5
5	☐	5000.000	5403.144	285888.59	1.5709	P	1.2
6	☐	10000.000	10465.974	570971.45	3.0425	P	7.8
7	☐	20000.000	21654.409	1160665.49	6.2946	M	5.1
8	☐	100000.00	99597.368	5198151.33	28.9500	A	2.3

$$y = 2.9067\text{E-}004 * x + 3.6374\text{E-}004$$

$$R = 0.9999$$

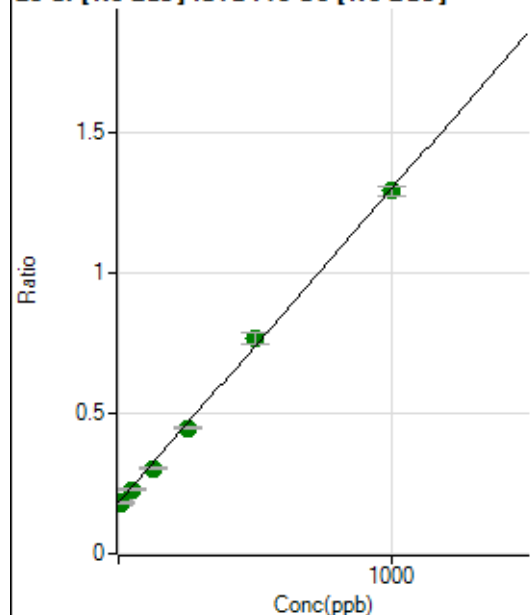
$$DL = 0.6281$$

$$BEC = 1.251$$

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	953572.49	0.1818	A	8.5
2	☐	10.000	-1.141	985155.14	0.1805	A	1.0
3	☐	50.000	42.236	1251695.53	0.2289	A	3.0
4	☐	125.000	109.422	1686536.67	0.3038	A	2.4
5	☐	250.000	236.968	2449933.63	0.4461	A	2.1
6	☐	500.000	523.834	4165502.92	0.7661	A	5.4
7	☐	1000.000	993.788	7126151.03	1.2904	A	2.8
8	☐			2756956.72	0.5314	A	1.8

$$y = 0.0011 * x + 0.1818$$

R = 0.9994

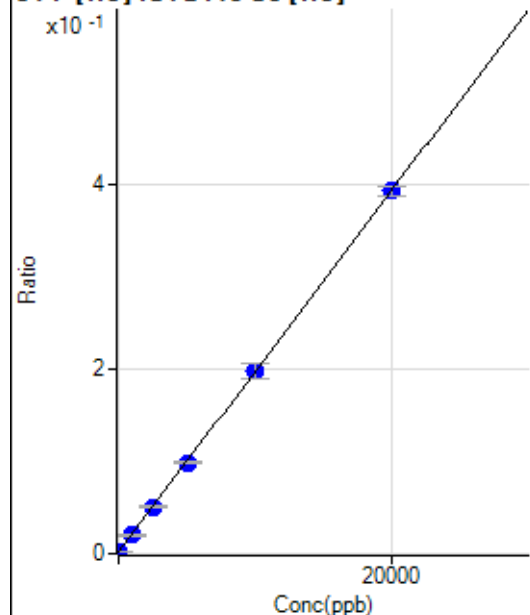
DL = 41.48

BEC = 163

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-7.379	297.23	0.0016	P	13.1
2	☐	0.000	7.379	358.35	0.0019	P	22.6
3	☐	1000.000	938.925	3731.12	0.0202	P	3.5
4	☐	2500.000	2498.343	9450.53	0.0507	P	1.7
5	☐	5000.000	4963.034	18031.08	0.0991	P	1.4
6	☐	10000.000	10036.188	37251.41	0.1986	P	9.1
7	☐	20000.000	19994.408	72635.39	0.3938	P	2.8
8	☐			241.68	0.0013	P	8.6

$$y = 1.9610E-005 * x + 0.0018$$

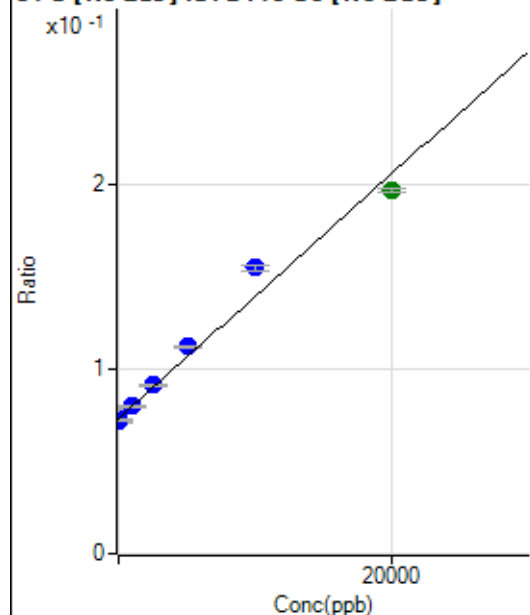
R = 1.0000

DL = 49.02

BEC = 89.58

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	159.384	390572.99	0.0745	P	10.0
2	☐	0.000	-159.384	395170.28	0.0724	P	1.8
3	☐	1000.000	982.637	437484.14	0.0800	P	2.1
4	☐	2500.000	2716.567	508007.44	0.0915	P	0.5
5	☐	5000.000	5896.654	618507.93	0.1126	P	0.8
6	☐	10000.000	12319.512	844637.18	0.1553	P	2.2
7	☐	20000.000	18589.878	1087409.92	0.1969	A	1.2
8	☐			343602.53	0.0663	P	1.5

$$y = 6.6389\text{E-}006 * x + 0.0735$$

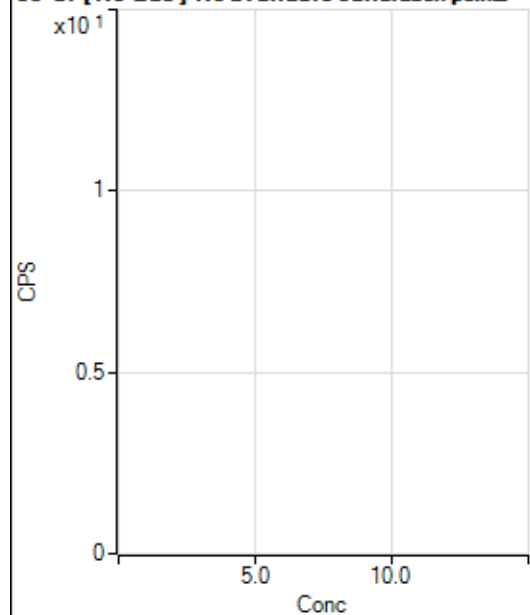
$$R = 0.9880$$

$$DL = 1982$$

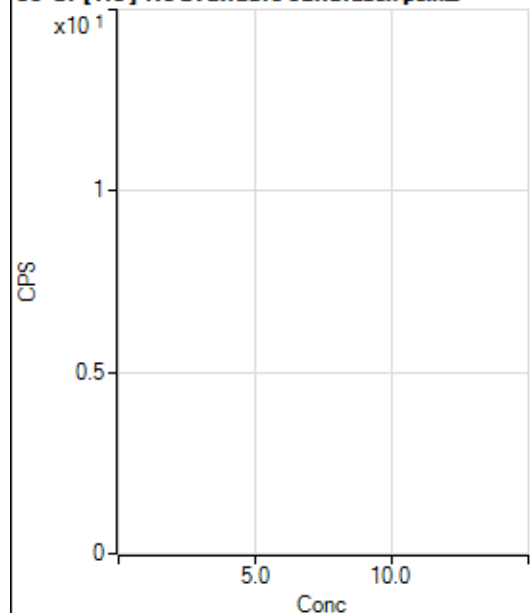
$$BEC = 1.107\text{E}+04$$

Weight: <None>

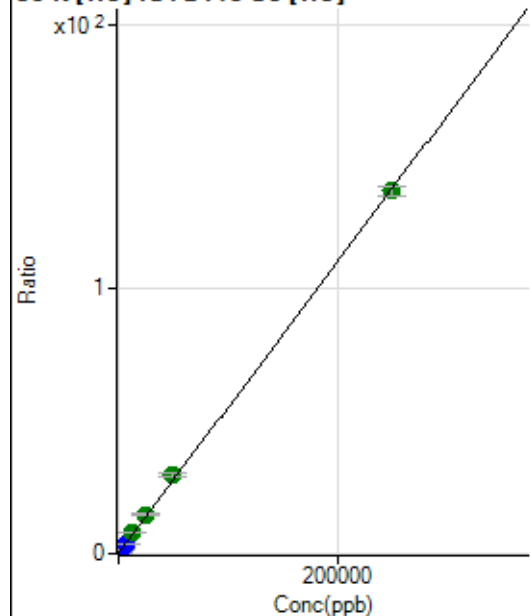
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			249519.05		P	1.3
2	☐			254995.25		P	1.4
3	☐			254516.39		P	0.8
4	☐			269999.20		P	1.2
5	☐			266049.97		P	0.4
6	☐			266176.43		P	0.7
7	☐			271284.72		P	0.4
8	☐			264751.73		P	0.3

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1997.42		P	6.4
2	☐			1972.41		P	6.3
3	☐			1941.85		P	3.1
4	☐			1958.52		P	8.5
5	☐			1925.18		P	12.3
6	☐			1916.84		P	0.9
7	☐			1919.62		P	9.8
8	☐			1944.63		P	5.9

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	23572.56	0.1278	P	2.2
2	☐	500.000	522.428	78184.54	0.4154	P	0.6
3	☐	2500.000	2727.114	301366.44	1.6290	P	3.1
4	☐	6250.000	6721.137	712701.05	3.8275	P	1.7
5	☐	12500.000	13861.860	1411929.50	7.7581	A	0.9
6	☐	25000.000	26317.355	2745303.05	14.6143	A	5.1
7	☐	50000.000	53777.262	5482167.48	29.7296	A	3.9
8	☐	250000.00	249030.62	24636126.77	137.2071	A	2.8

$$y = 5.5045E-004 * x + 0.1278$$

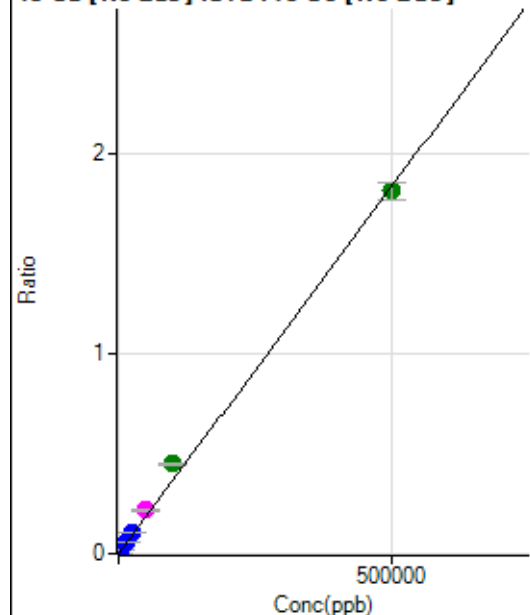
$$R = 0.9999$$

$$DL = 15.03$$

$$BEC = 232.3$$

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	228.31	0.0000	P	15.0
2	☐	500.000	531.813	10903.21	0.0020	P	2.4
3	☐	5000.000	6018.229	121217.71	0.0222	P	0.9
4	☐	12500.000	14793.994	302058.63	0.0544	P	1.2
5	☐	25000.000	29393.631	593493.10	0.1081	P	0.9
6	☐	50000.000	59607.741	1191796.43	0.2191	M	3.1
7	☐	100000.00	121948.55	2475858.59	0.4482	A	1.1
8	☐	500000.00	494362.26	9416419.32	1.8168	A	4.4

$$y = 3.6750\text{E-}006 * x + 4.3637\text{E-}005$$

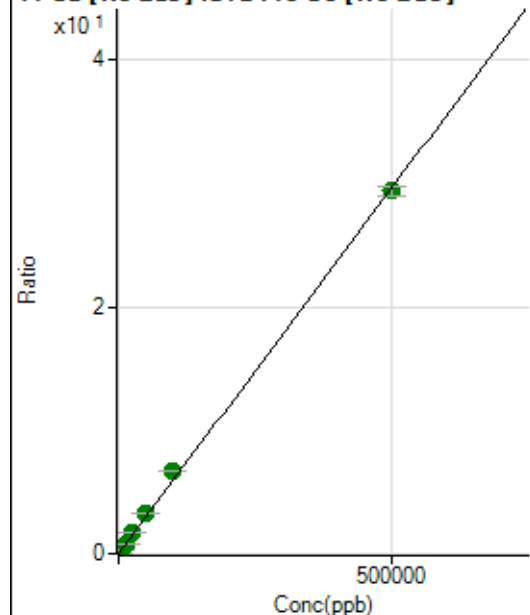
$$R = 0.9989$$

$$DL = 5.356$$

$$BEC = 11.87$$

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	15076.35	0.0029	P	7.4
2	☐	500.000	545.993	192085.48	0.0352	P	2.0
3	☐	5000.000	5813.552	1898556.71	0.3471	A	1.0
4	☐	12500.000	14225.221	4691847.12	0.8451	A	2.6
5	☐	25000.000	27942.086	9102579.17	1.6572	A	1.9
6	☐	50000.000	55660.842	17949375.52	3.2983	A	0.6
7	☐	100000.00	113268.73	37054208.29	6.7090	A	0.6
8	☐	500000.00	496581.75	152448284.2	29.4031	A	2.5

$$y = 5.9205\text{E-}005 * x + 0.0029$$

$$R = 0.9996$$

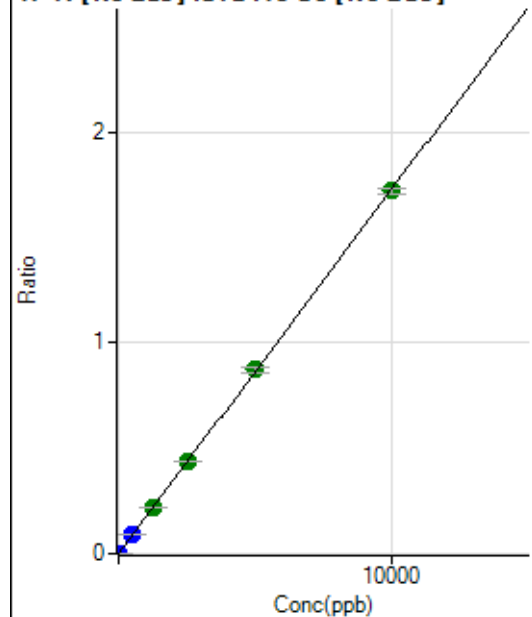
$$DL = 10.79$$

$$BEC = 48.52$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	250.01	0.0000	P	15.3
2	☐	5.000	5.398	5345.61	0.0010	P	7.9
3	☐	500.000	523.137	494455.16	0.0904	P	0.8
4	☐	1250.000	1254.269	1202974.05	0.2167	A	0.7
5	☐	2500.000	2518.596	2389422.78	0.4350	A	0.7
6	☐	5000.000	5064.714	4758869.07	0.8748	A	3.0
7	☐	10000.000	9961.303	9501249.17	1.7204	A	1.8
8	☐			6887.96	0.0013	P	7.9

$$y = 1.7271E-004 * x + 4.7666E-005$$

$$R = 1.0000$$

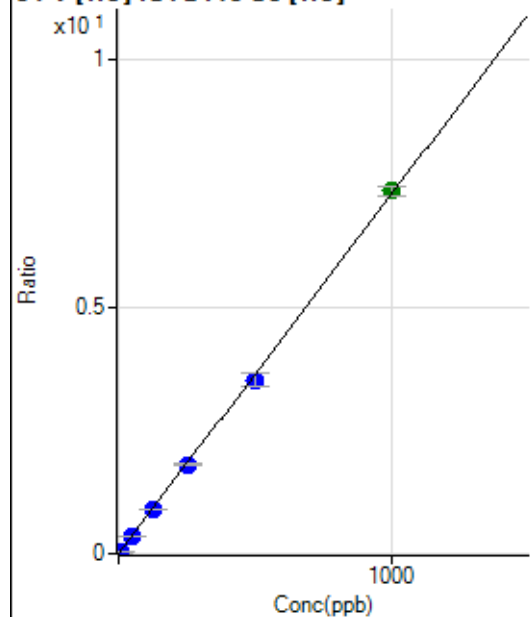
$$DL = 0.1268$$

$$BEC = 0.276$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	7.78	0.0000	P	24.7
2	☐	5.000	4.862	6669.40	0.0354	P	2.9
3	☐	50.000	49.239	66301.85	0.3584	P	4.0
4	☐	125.000	122.829	166471.05	0.8941	P	2.7
5	☐	250.000	247.866	328358.52	1.8042	P	1.5
6	☐	500.000	483.814	660844.31	3.5216	P	8.0
7	☐	1000.000	1008.937	1354487.53	7.3439	A	2.5
8	☐			2085.73	0.0116	P	2.8

$$y = 0.0073 * x + 4.2195E-005$$

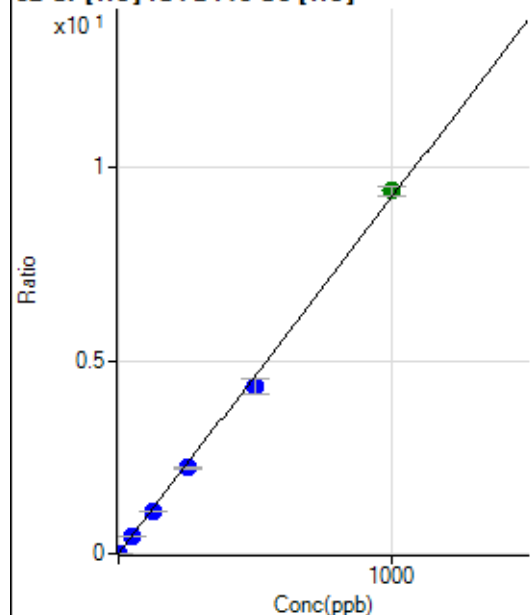
$$R = 0.9998$$

$$DL = 0.004301$$

$$BEC = 0.005797$$

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	543.35	0.0029	P	5.3
2	☐	2.000	1.896	3846.11	0.0204	P	6.5
3	☐	50.000	48.663	83530.71	0.4516	P	4.7
4	☐	125.000	119.213	205208.56	1.1021	P	2.0
5	☐	250.000	240.322	403822.26	2.2188	P	1.8
6	☐	500.000	469.080	811908.69	4.3280	P	9.2
7	☐	1000.000	1018.670	1732940.86	9.3953	A	2.5
8	☐			13895.72	0.0774	P	3.5

$$y = 0.0092 * x + 0.0029$$

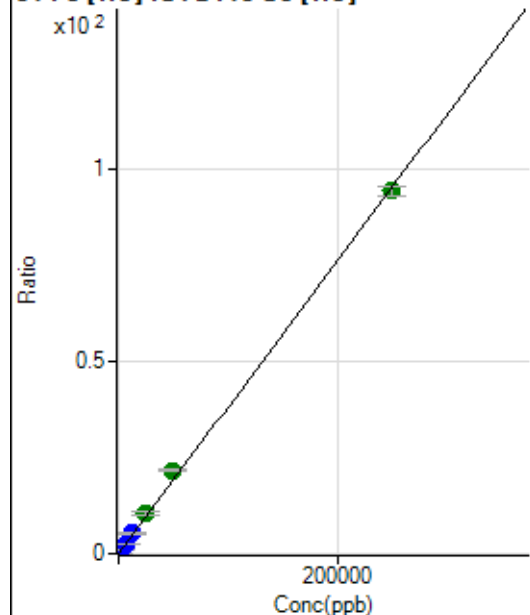
$$R = 0.9992$$

$$DL = 0.0504$$

$$BEC = 0.3196$$

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	725.96	0.0039	P	9.8
2	☐	50.000	55.978	4749.02	0.0252	P	3.3
3	☐	2500.000	2817.731	198942.58	1.0757	P	5.0
4	☐	6250.000	6956.838	493390.75	2.6500	P	2.6
5	☐	12500.000	13842.728	958841.79	5.2691	P	1.1
6	☐	25000.000	28048.280	2002008.16	10.6722	A	9.0
7	☐	50000.000	57054.207	4002880.85	21.7047	A	2.7
8	☐	250000.00	248196.34	16950402.23	94.4061	A	2.5

$$y = 3.8035E-004 * x + 0.0039$$

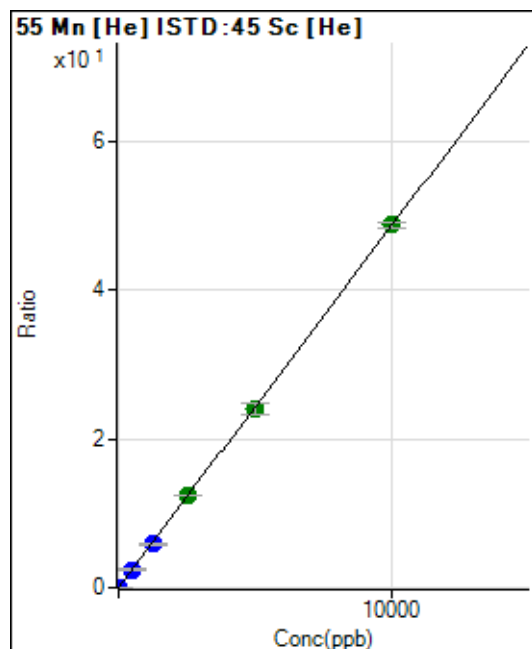
$$R = 0.9995$$

$$DL = 3.056$$

$$BEC = 10.35$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	46.67	0.0003	P	7.2
2	☐	1.000	2.726	2542.48	0.0135	P	7.8
3	☐	500.000	495.538	445777.59	2.4099	P	4.1
4	☐	1250.000	1214.323	1099489.45	5.9053	P	3.1
5	☐	2500.000	2547.388	2254298.60	12.3877	A	0.5
6	☐	5000.000	4930.230	4501308.68	23.9749	A	6.7
7	☐	10000.000	10027.720	8993727.92	48.7630	A	1.6
8	☐			9217.52	0.0513	P	5.7

$$y = 0.0049 * x + 2.5310E-004$$

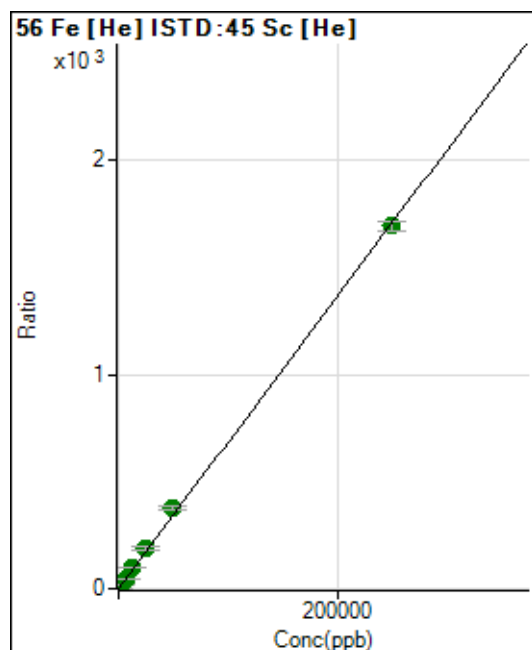
$$R = 0.9999$$

$$DL = 0.01131$$

$$BEC = 0.05205$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	4263.67	0.0231	P	3.9
2	☐	50.000	54.641	74526.11	0.3960	P	4.3
3	☐	2500.000	2778.966	3512156.18	18.9867	A	3.8
4	☐	6250.000	6917.633	8794544.41	47.2289	A	1.9
5	☐	12500.000	13974.106	17355324.93	95.3822	A	1.7
6	☐	25000.000	27492.963	35226263.06	187.6346	A	7.0
7	☐	50000.000	55778.930	70185032.59	380.6574	A	5.1
8	☐	250000.00	248501.73	304474710.5	1,695.794	A	2.6

$$y = 0.0068 * x + 0.0231$$

$$R = 0.9997$$

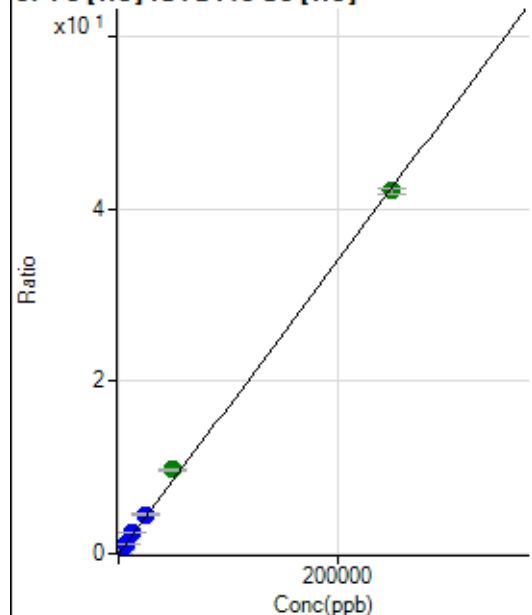
$$DL = 0.3978$$

$$BEC = 3.389$$

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	288.90	0.0016	P	10.6
2	☐	50.000	50.928	1920.54	0.0102	P	4.9
3	☐	2500.000	2769.943	87204.73	0.4715	P	5.0
4	☐	6250.000	6843.358	216463.36	1.1626	P	2.7
5	☐	12500.000	13882.752	428937.62	2.3569	P	0.8
6	☐	25000.000	26844.802	855245.43	4.5561	P	7.1
7	☐	50000.000	57260.726	1791845.44	9.7165	A	3.4
8	☐	250000.00	248276.70	7564685.36	42.1245	A	1.3

$$y = 1.6966E-004 * x + 0.0016$$

$$R = 0.9995$$

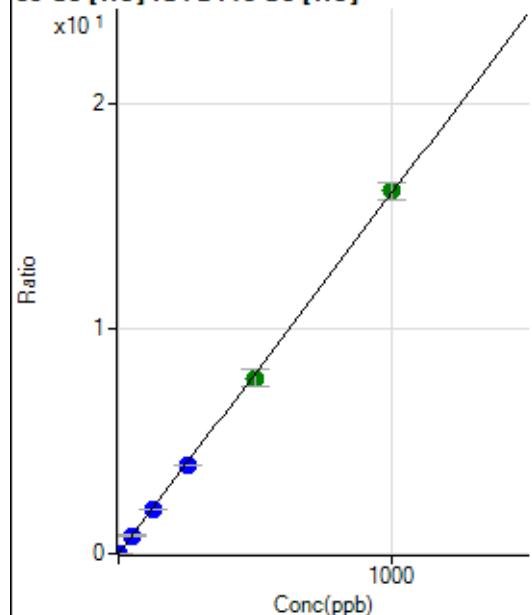
$$DL = 2.938$$

$$BEC = 9.234$$

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	50.00	0.0003	P	13.4
2	☐	1.000	1.029	3157.06	0.0168	P	5.1
3	☐	50.000	49.949	148259.08	0.8015	P	3.8
4	☐	125.000	122.934	367219.56	1.9722	P	2.9
5	☐	250.000	247.591	722791.69	3.9719	P	0.2
6	☐	500.000	488.062	1468797.88	7.8292	A	9.2
7	☐	1000.000	1006.832	2977754.44	16.1508	A	5.1
8	☐			2760.30	0.0154	P	7.0

$$y = 0.0160 * x + 2.7118E-004$$

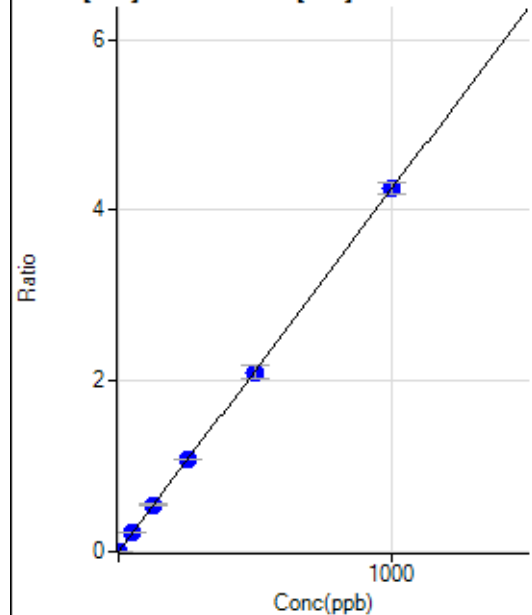
$$R = 0.9999$$

$$DL = 0.006785$$

$$BEC = 0.01691$$

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	40.00	0.0002	P	8.4
2	☐	1.000	1.065	892.26	0.0047	P	0.9
3	☐	50.000	52.173	41015.83	0.2218	P	5.0
4	☐	125.000	128.434	101581.64	0.5456	P	3.3
5	☐	250.000	254.892	197026.37	1.0826	P	1.1
6	☐	500.000	494.981	394536.98	2.1022	P	7.6
7	☐	1000.000	1000.748	783699.90	4.2499	P	3.3
8	☐			2276.87	0.0127	P	1.0

$$y = 0.0042 * x + 2.1694E-004$$

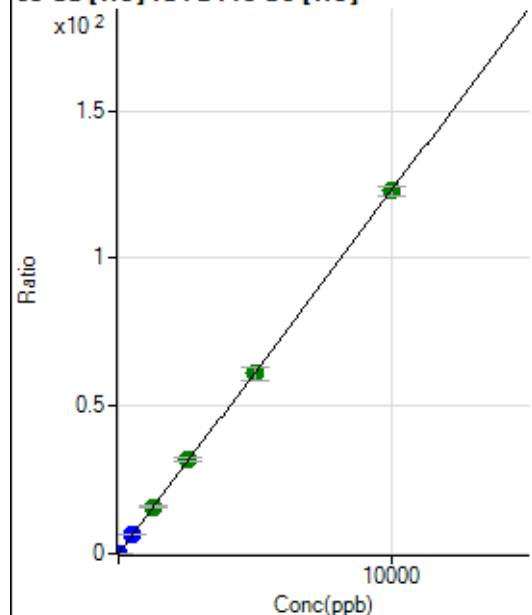
$$R = 1.0000$$

$$DL = 0.01281$$

$$BEC = 0.05109$$

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	1446.75	0.0078	P	4.5
2	☐	2.000	2.031	6173.62	0.0328	P	3.1
3	☐	500.000	514.793	1171391.24	6.3322	P	3.5
4	☐	1250.000	1287.052	2945338.95	15.8196	A	3.1
5	☐	2500.000	2588.807	5790258.60	31.8121	A	2.6
6	☐	5000.000	4958.219	11432674.41	60.9210	A	7.8
7	☐	10000.000	9993.317	22642402.72	122.7786	A	2.9
8	☐			9847.99	0.0548	P	8.0

$$y = 0.0123 * x + 0.0078$$

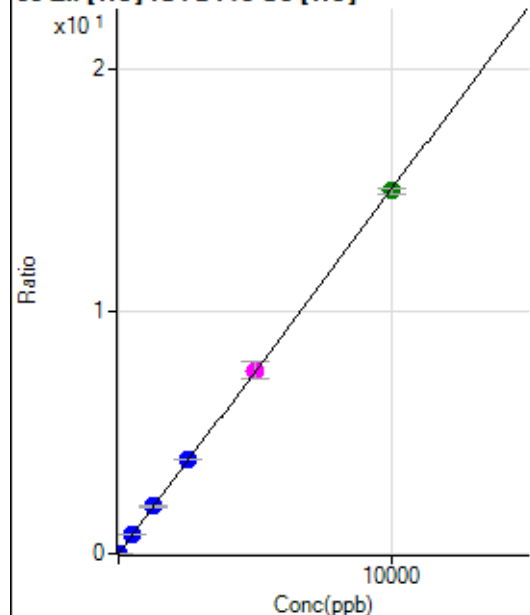
$$R = 0.9999$$

$$DL = 0.08557$$

$$BEC = 0.6387$$

Weight: <None>

Min Conc: 0

⁶⁶Zn [He] ISTD: ⁴⁵Sc [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	145.56	0.0008	P	10.4
2	☐	2.000	2.575	875.59	0.0047	P	4.6
3	☐	500.000	522.368	145132.19	0.7846	P	4.2
4	☐	1250.000	1295.731	362170.93	1.9451	P	1.7
5	☐	2500.000	2581.872	705259.00	3.8750	P	1.5
6	☐	5000.000	5026.897	1415470.62	7.5439	M	9.1
7	☐	10000.000	9959.249	2756877.25	14.9451	A	1.9
8	☐			2488.03	0.0139	P	2.0

$$y = 0.0015 * x + 7.8942E-004$$

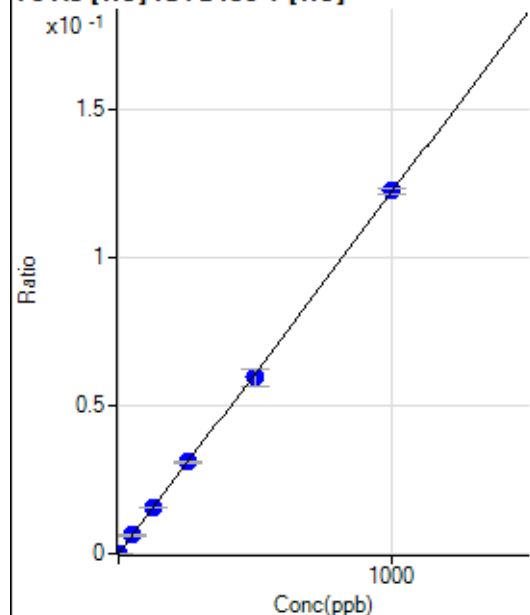
$$R = 1.0000$$

$$DL = 0.1635$$

$$BEC = 0.5261$$

Weight: <None>

Min Conc: 0

⁷⁵As [He] ISTD: ⁸⁹Y [He]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	3.00	0.0000	P	88.4
2	☐	1.000	1.176	202.02	0.0001	P	8.3
3	☐	50.000	51.598	8516.77	0.0063	P	4.3
4	☐	125.000	127.367	21222.68	0.0156	P	1.6
5	☐	250.000	253.850	41976.87	0.0310	P	1.5
6	☐	500.000	488.201	82724.23	0.0596	P	9.6
7	☐	1000.000	1004.561	166257.02	0.1227	P	1.8
8	☐			125.01	0.0001	P	4.2

$$y = 1.2212E-004 * x + 2.1917E-006$$

$$R = 0.9999$$

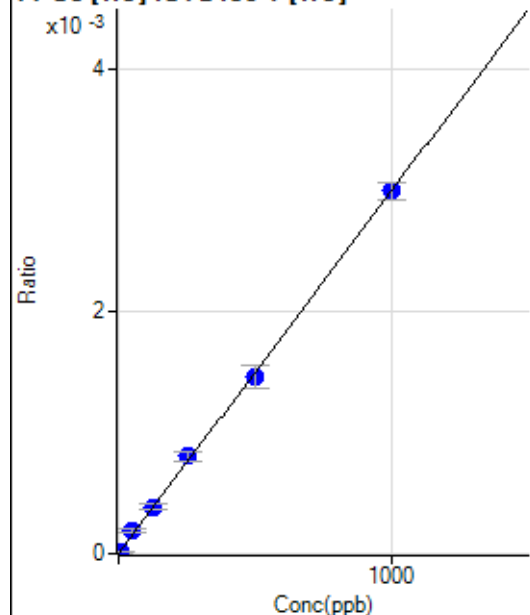
$$DL = 0.04762$$

$$BEC = 0.01795$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	2.22	0.0000	P	86.6
2	☐	5.000	4.819	22.22	0.0000	P	45.6
3	☐	50.000	61.113	248.89	0.0002	P	17.7
4	☐	125.000	128.007	524.46	0.0004	P	11.9
5	☐	250.000	268.599	1088.95	0.0008	P	10.8
6	☐	500.000	488.896	2026.84	0.0015	P	12.8
7	☐	1000.000	999.971	4055.08	0.0030	P	4.7
8	☐			6.67	0.0000	P	50.4

$$y = 2.9902\text{E-}006 * x + 1.6228\text{E-}006$$

$$R = 0.9997$$

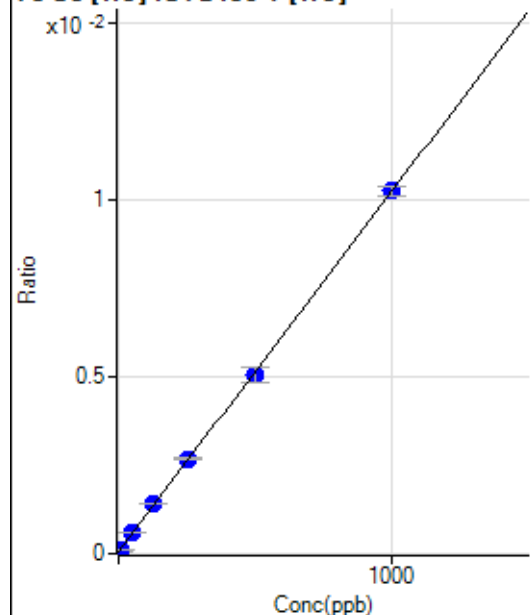
$$DL = 1.41$$

$$BEC = 0.5427$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	73.01	0.0001	P	8.7
2	☐	5.000	6.259	162.02	0.0001	P	7.9
3	☐	50.000	51.800	785.44	0.0006	P	2.5
4	☐	125.000	132.072	1908.66	0.0014	P	0.9
5	☐	250.000	258.389	3636.84	0.0027	P	2.6
6	☐	500.000	490.073	7004.45	0.0050	P	9.2
7	☐	1000.000	1001.886	13909.26	0.0103	P	2.7
8	☐			105.34	0.0001	P	1.0

$$y = 1.0191\text{E-}005 * x + 5.3157\text{E-}005$$

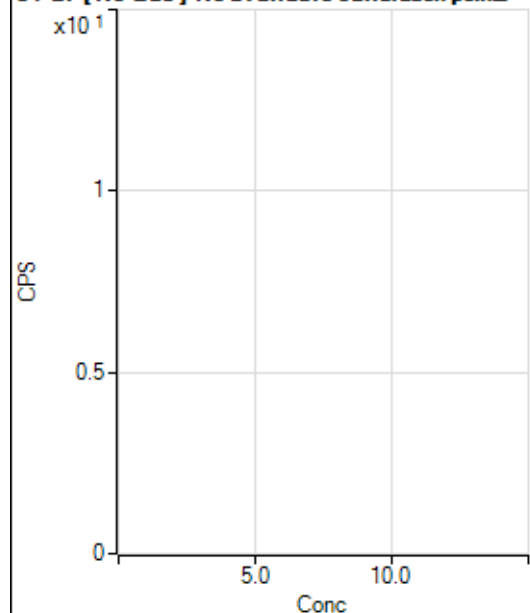
$$R = 0.9999$$

$$DL = 1.364$$

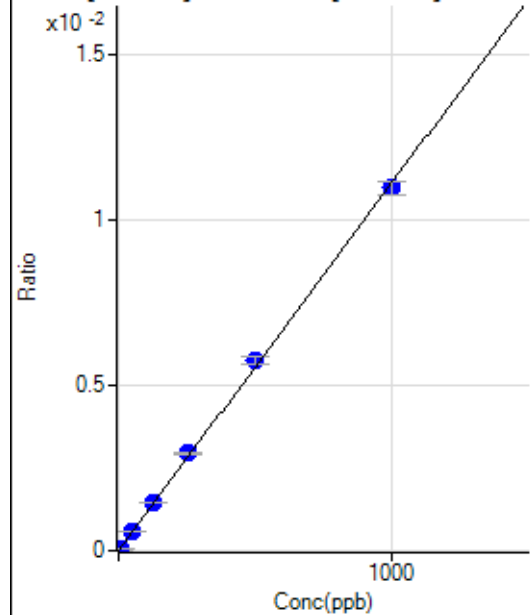
$$BEC = 5.216$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47899.26		P	2.6
2	☐			47905.23		P	1.9
3	☐			47252.40		P	1.4
4	☐			46170.82		P	2.0
5	☐			46887.80		P	3.3
6	☐			45246.62		P	1.5
7	☐			43971.39		P	1.0
8	☐			42813.07		P	0.5

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	29.58	0.0000	P	21.0
2	☐	5.000	5.369	727.45	0.0001	P	5.8
3	☐	50.000	53.323	7055.66	0.0006	P	0.9
4	☐	125.000	131.946	17323.97	0.0015	P	1.9
5	☐	250.000	264.191	34003.38	0.0029	P	0.9
6	☐	500.000	515.830	66815.21	0.0057	P	4.1
7	☐	1000.000	987.501	131006.29	0.0110	P	3.5
8	☐			374.97	0.0000	P	9.8

$$y = 1.1090E-005 * x + 2.6045E-006$$

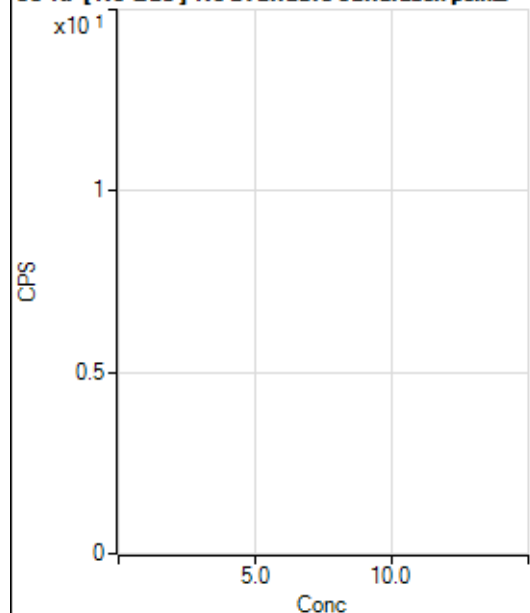
$$R = 0.9997$$

$$DL = 0.1482$$

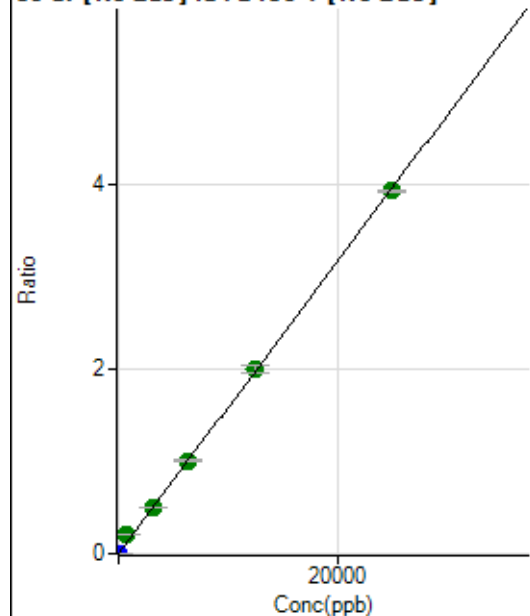
$$BEC = 0.2348$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			367.46		P	1.9
2	☐			361.21		P	7.9
3	☐			340.80		P	5.7
4	☐			368.29		P	3.8
5	☐			342.46		P	4.1
6	☐			337.04		P	4.8
7	☐			385.79		P	3.9
8	☐			362.88		P	2.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	641.70	0.0001	P	13.6
2	☐	1.000	1.029	2569.75	0.0002	P	9.5
3	☐	625.000	1271.797	2390615.12	0.2013	A	3.0
4	☐	3125.000	3123.864	5843481.03	0.4944	A	1.1
5	☐	6250.000	6391.806	11726276.74	1.0115	A	3.0
6	☐	12500.000	12655.785	23381344.45	2.0027	A	3.7
7	☐	25000.000	24870.628	47096064.25	3.9355	A	0.4
8	☐			15770.57	0.0014	P	10.6

$$y = 1.5824E-004 * x + 5.6952E-005$$

$$R = 0.9997$$

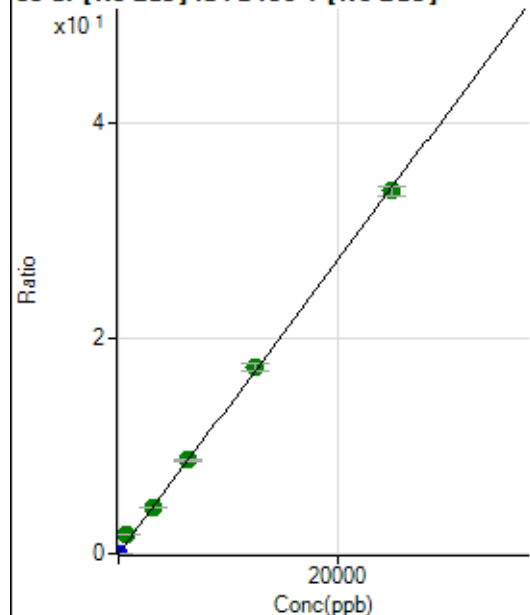
$$DL = 0.1471$$

$$BEC = 0.3599$$

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	141.67	0.0000	P	21.1
2	☐	1.000	1.036	16626.97	0.0014	P	3.8
3	☐	625.000	1273.715	20568419.90	1.7317	A	2.0
4	☐	3125.000	3174.458	51006350.10	4.3159	A	0.8
5	☐	6250.000	6409.786	101039393.2	8.7145	A	1.5
6	☐	12500.000	12781.056	202871268.4	17.3766	A	3.6
7	☐	25000.000	24797.125	403380492.3	33.7131	A	2.4
8	☐			134386.89	0.0120	P	11.3

$$y = 0.0014 * x + 1.2628E-005$$

$$R = 0.9996$$

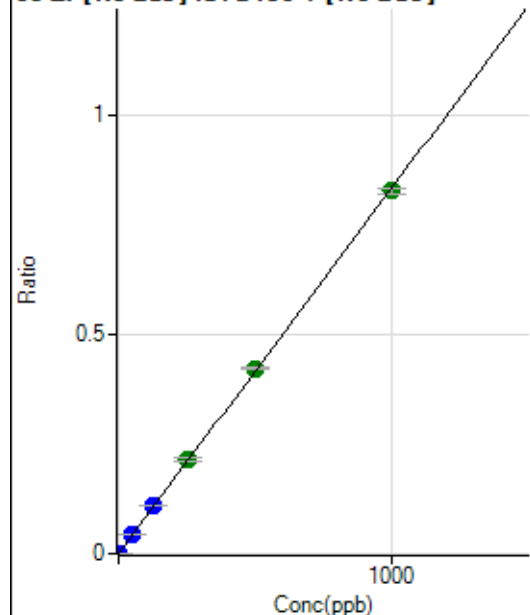
$$DL = 0.005881$$

$$BEC = 0.009288$$

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	413.91	0.0000	P	35.7
2	☐	1.000	1.032	10498.66	0.0009	P	4.2
3	☐	50.000	51.501	510614.13	0.0430	P	2.0
4	☐	125.000	129.783	1279667.80	0.1083	P	1.1
5	☐	250.000	260.174	2516318.57	0.2170	A	3.9
6	☐	500.000	506.918	4939375.41	0.4228	A	1.1
7	☐	1000.000	993.325	9912384.33	0.8286	A	1.7
8	☐			3272.71	0.0003	P	15.5

$$y = 8.3408E-004 * x + 3.6071E-005$$

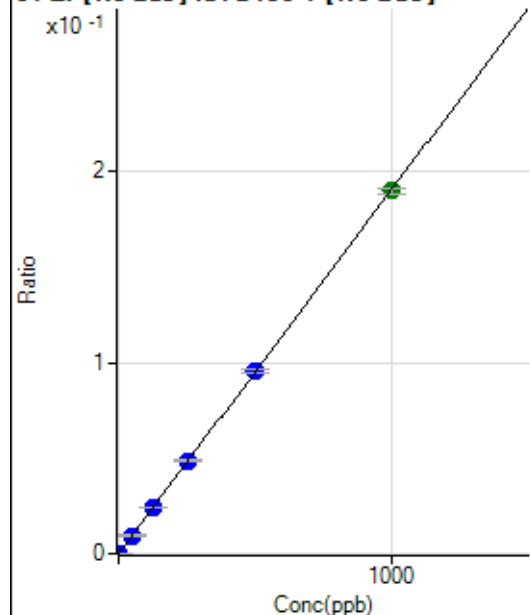
$$R = 0.9999$$

$$DL = 0.04633$$

$$BEC = 0.04325$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	94.45	0.0000	P	68.6
2	☐	1.000	0.956	2230.80	0.0002	P	3.3
3	☐	50.000	50.157	113493.11	0.0096	P	2.2
4	☐	125.000	126.248	284074.53	0.0240	P	1.9
5	☐	250.000	255.651	564347.43	0.0487	P	0.9
6	☐	500.000	502.572	1117085.89	0.0957	P	2.9
7	☐	1000.000	997.137	2270988.85	0.1898	A	1.7
8	☐			744.48	0.0001	P	9.5

$$y = 1.9034\text{E-}004 * x + 8.5743\text{E-}006$$

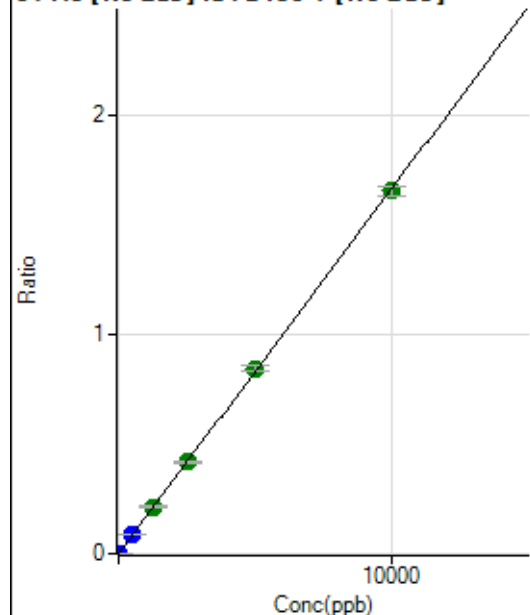
$$R = 1.0000$$

$$DL = 0.09265$$

$$BEC = 0.04505$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	150.01	0.0000	P	11.5
2	☐	5.000	6.219	12266.88	0.0010	P	3.1
3	☐	500.000	519.771	1026530.18	0.0864	P	2.6
4	☐	1250.000	1282.096	2518948.02	0.2132	A	2.2
5	☐	2500.000	2517.184	4852244.59	0.4185	A	1.8
6	☐	5000.000	5083.924	9871773.75	0.8453	A	2.4
7	☐	10000.000	9948.741	19784191.24	1.6541	A	2.9
8	☐			8772.46	0.0008	P	13.1

$$y = 1.6626\text{E-}004 * x + 1.3238\text{E-}005$$

$$R = 0.9999$$

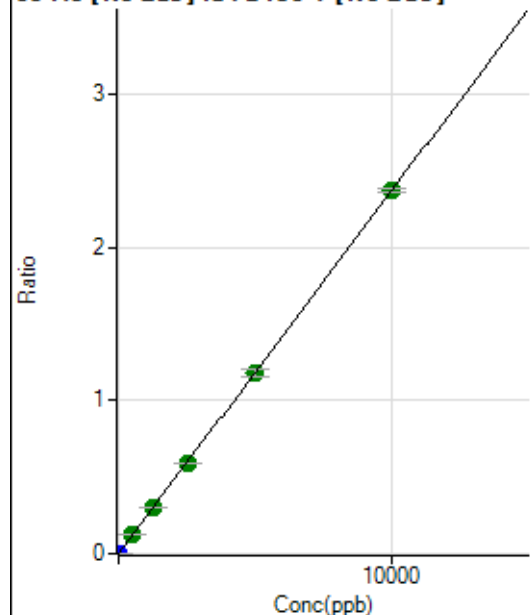
$$DL = 0.02756$$

$$BEC = 0.07962$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	55.56	0.0000	P	53.0
2	☐	5.000	5.430	15114.21	0.0013	P	3.9
3	☐	500.000	520.305	1463483.57	0.1232	A	2.0
4	☐	1250.000	1278.880	3579319.78	0.3029	A	1.8
5	☐	2500.000	2486.566	6828887.83	0.5889	A	0.4
6	☐	5000.000	4997.716	13817683.81	1.1835	A	3.9
7	☐	10000.000	9999.875	28338102.02	2.3681	A	1.1
8	☐			11366.10	0.0010	P	9.2

$$y = 2.3682\text{E-}004 * x + 4.9783\text{E-}006$$

$$R = 1.0000$$

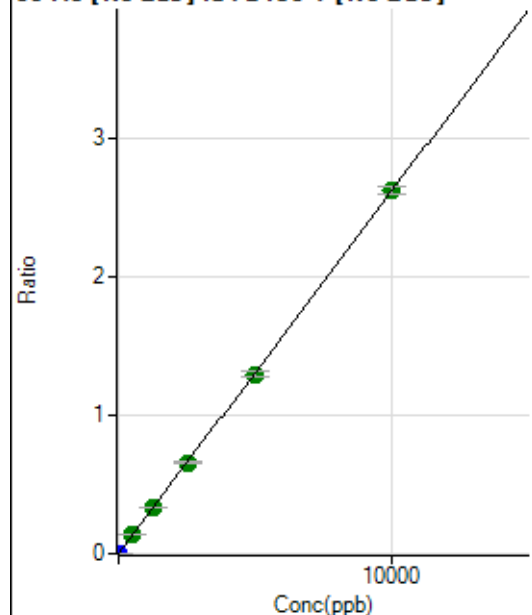
$$DL = 0.03344$$

$$BEC = 0.02102$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	183.34	0.0000	P	2.4
2	☐	5.000	5.443	16880.18	0.0014	P	3.5
3	☐	500.000	516.345	1606098.07	0.1352	A	3.4
4	☐	1250.000	1263.401	3909994.84	0.3309	A	2.3
5	☐	2500.000	2509.896	7621930.90	0.6573	A	1.5
6	☐	5000.000	4961.293	15169497.21	1.2994	A	3.8
7	☐	10000.000	10014.387	31381075.35	2.6227	A	2.2
8	☐			23587.48	0.0021	P	7.9

$$y = 2.6190\text{E-}004 * x + 1.6185\text{E-}005$$

$$R = 1.0000$$

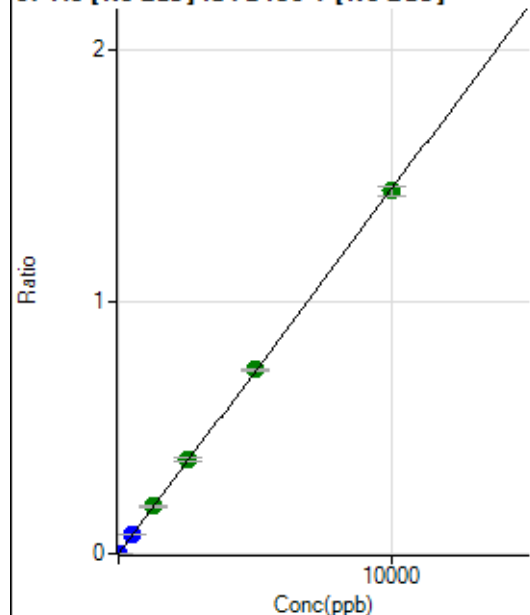
$$DL = 0.004455$$

$$BEC = 0.0618$$

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	19.45	0.0000	P	18.6
2	☐	5.000	5.604	9511.85	0.0008	P	3.8
3	☐	500.000	516.545	888100.45	0.0748	P	1.9
4	☐	1250.000	1295.769	2216187.96	0.1876	A	3.0
5	☐	2500.000	2572.850	4317059.04	0.3724	A	3.5
6	☐	5000.000	5048.701	8535720.24	0.7308	A	1.5
7	☐	10000.000	9950.889	17230787.88	1.4404	A	2.7
8	☐			7129.82	0.0006	P	13.9

$$y = 1.4476\text{E-}004 * x + 1.7067\text{E-}006$$

$$R = 0.9999$$

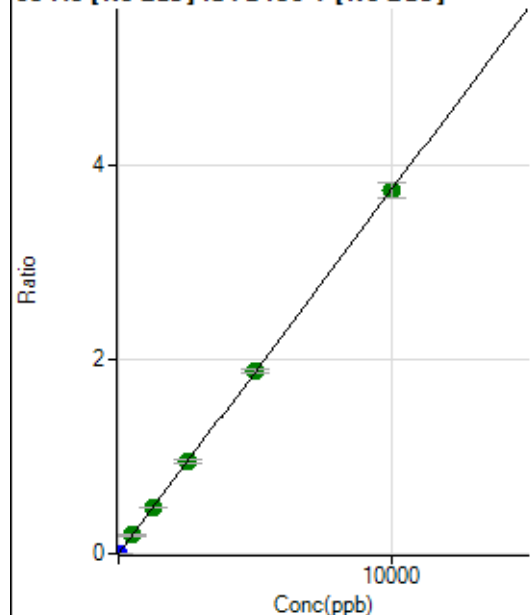
$$DL = 0.006575$$

$$BEC = 0.01179$$

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	97.23	0.0000	P	39.5
2	☐	5.000	5.451	24060.42	0.0021	P	1.5
3	☐	500.000	508.956	2269847.62	0.1911	A	3.1
4	☐	1250.000	1278.075	5671779.16	0.4800	A	1.7
5	☐	2500.000	2547.474	11088812.83	0.9567	A	3.0
6	☐	5000.000	5022.512	22024216.29	1.8861	A	2.7
7	☐	10000.000	9972.918	44790393.01	3.7451	A	4.3
8	☐			17681.29	0.0016	P	8.2

$$y = 3.7553\text{E-}004 * x + 8.6113\text{E-}006$$

$$R = 1.0000$$

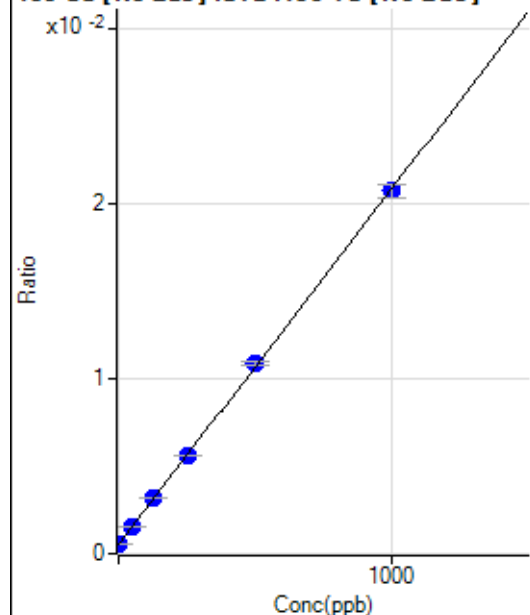
$$DL = 0.02714$$

$$BEC = 0.02293$$

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	3920.15	0.0005	P	4.4
2	☐	1.000	0.531	4153.52	0.0005	P	4.1
3	☐	50.000	51.068	12558.91	0.0016	P	0.7
4	☐	125.000	130.709	25490.86	0.0032	P	1.2
5	☐	250.000	251.315	45035.54	0.0056	P	0.8
6	☐	500.000	507.725	86966.64	0.0108	P	2.2
7	☐	1000.000	995.042	166753.63	0.0207	P	3.4
8	☐			3625.57	0.0005	P	5.0

$$y = 2.0278\text{E-}005 * x + 5.2176\text{E-}004$$

$$R = 0.9999$$

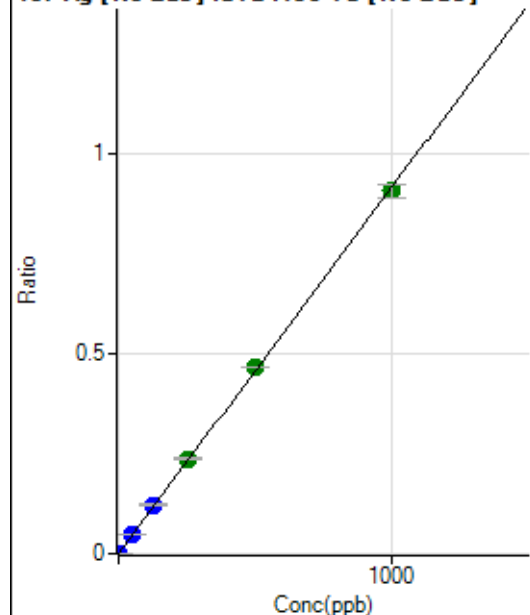
$$DL = 3.429$$

$$BEC = 25.73$$

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	300.01	0.0000	P	11.4
2	☐	1.000	1.152	8530.66	0.0011	P	2.5
3	☐	50.000	52.599	388201.27	0.0481	P	1.6
4	☐	125.000	132.416	973071.97	0.1211	P	3.0
5	☐	250.000	259.550	1902773.15	0.2374	A	2.6
6	☐	500.000	510.216	3752223.09	0.4666	A	0.8
7	☐	1000.000	991.447	7308511.19	0.9067	A	3.4
8	☐			7593.97	0.0010	P	6.1

$$y = 9.1446\text{E-}004 * x + 4.0069\text{E-}005$$

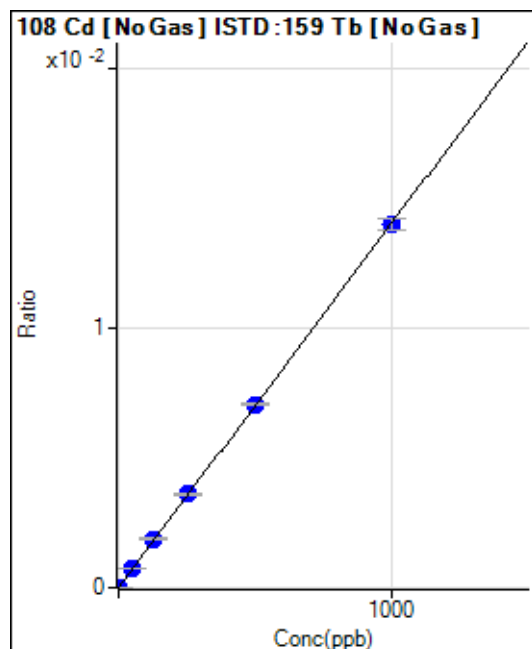
$$R = 0.9999$$

$$DL = 0.01499$$

$$BEC = 0.04382$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	18.05	0.0000	P	30.1
2	☐	1.000	1.135	143.06	0.0000	P	12.0
3	☐	50.000	53.911	6109.75	0.0008	P	3.2
4	☐	125.000	133.440	15033.36	0.0019	P	3.3
5	☐	250.000	256.645	28833.07	0.0036	P	1.6
6	☐	500.000	502.027	56564.46	0.0070	P	1.0
7	☐	1000.000	996.075	112417.52	0.0140	P	3.2
8	☐			76.39	0.0000	P	37.0

$$y = 1.4006\text{E-}005 * x + 2.4215\text{E-}006$$

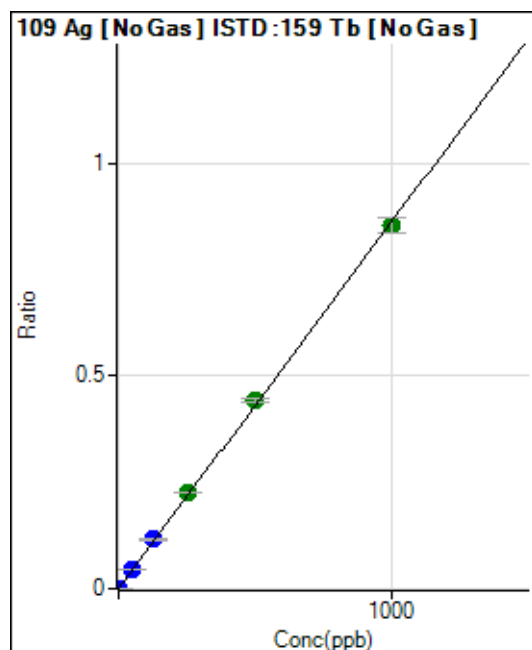
$$R = 0.9999$$

$$DL = 0.1562$$

$$BEC = 0.1729$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	211.12	0.0000	P	39.7
2	☐	1.000	1.093	7568.93	0.0010	P	3.5
3	☐	50.000	53.214	369912.07	0.0459	P	1.0
4	☐	125.000	134.631	932075.50	0.1160	P	2.5
5	☐	250.000	262.672	1814114.58	0.2263	A	0.8
6	☐	500.000	512.321	3548733.54	0.4414	A	2.3
7	☐	1000.000	989.307	6865850.89	0.8523	A	4.1
8	☐			7107.58	0.0009	P	6.0

$$y = 8.6149\text{E-}004 * x + 2.8509\text{E-}005$$

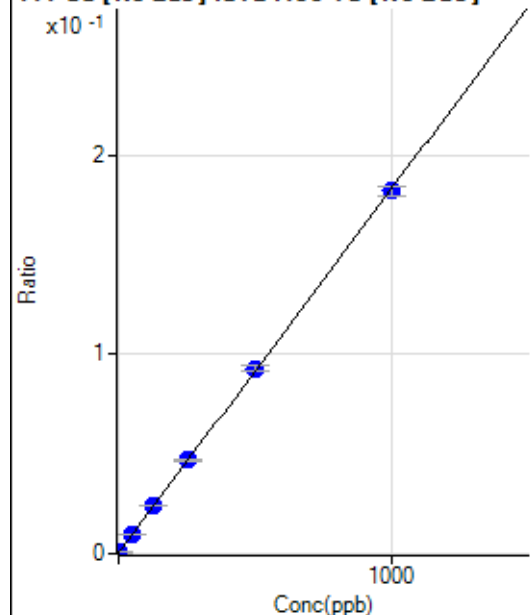
$$R = 0.9998$$

$$DL = 0.03944$$

$$BEC = 0.03309$$

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	2746.75	0.0004	P	4.8
2	☐	1.000	1.065	4368.55	0.0006	P	1.9
3	☐	50.000	51.970	79442.85	0.0099	P	2.1
4	☐	125.000	129.775	193235.33	0.0241	P	3.2
5	☐	250.000	254.786	375685.07	0.0469	P	2.4
6	☐	500.000	507.583	747845.70	0.0930	P	2.3
7	☐	1000.000	994.317	1465255.63	0.1819	P	2.9
8	☐			3055.28	0.0004	P	2.1

$$y = 1.8253E-004 * x + 3.6558E-004$$

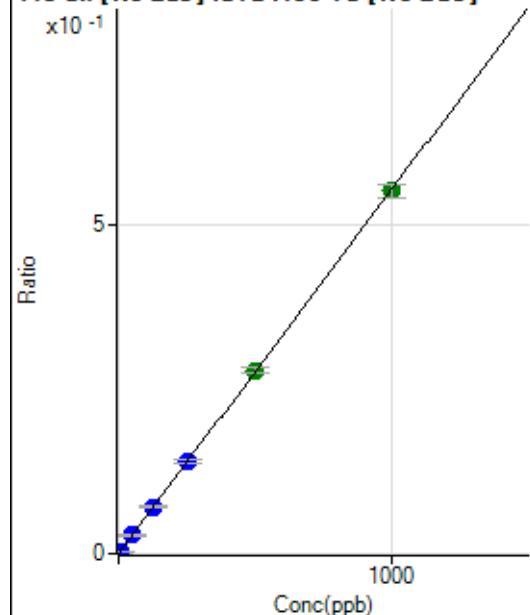
$$R = 0.9999$$

$$DL = 0.2855$$

$$BEC = 2.003$$

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	877.89	0.0001	P	26.4
2	☐	5.000	5.378	24083.04	0.0031	P	1.6
3	☐	50.000	50.143	224363.92	0.0278	P	2.9
4	☐	125.000	128.652	572126.13	0.0712	P	1.3
5	☐	250.000	253.743	1124641.65	0.1403	P	3.1
6	☐	500.000	503.912	2239204.39	0.2786	A	3.1
7	☐	1000.000	996.643	4437657.17	0.5508	A	3.4
8	☐			6473.93	0.0009	P	6.7

$$y = 5.5255E-004 * x + 1.1590E-004$$

$$R = 1.0000$$

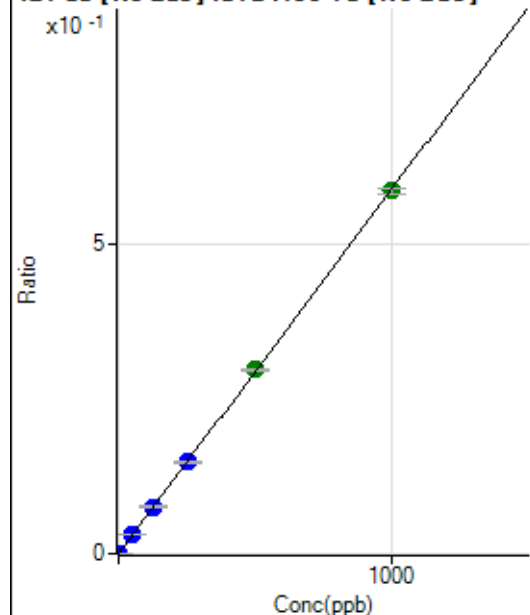
$$DL = 0.1664$$

$$BEC = 0.2098$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	58.33	0.0000	P	14.8
2	☐	2.000	2.097	9659.20	0.0012	P	0.7
3	☐	50.000	50.692	239940.92	0.0298	P	0.6
4	☐	125.000	128.381	605317.74	0.0753	P	1.8
5	☐	250.000	252.894	1189450.42	0.1484	P	2.2
6	☐	500.000	505.268	2384177.42	0.2965	A	1.1
7	☐	1000.000	996.185	4711139.08	0.5846	A	1.5
8	☐			13974.18	0.0019	P	4.0

$$y = 5.8678\text{E-}004 * x + 7.7716\text{E-}006$$

$$R = 1.0000$$

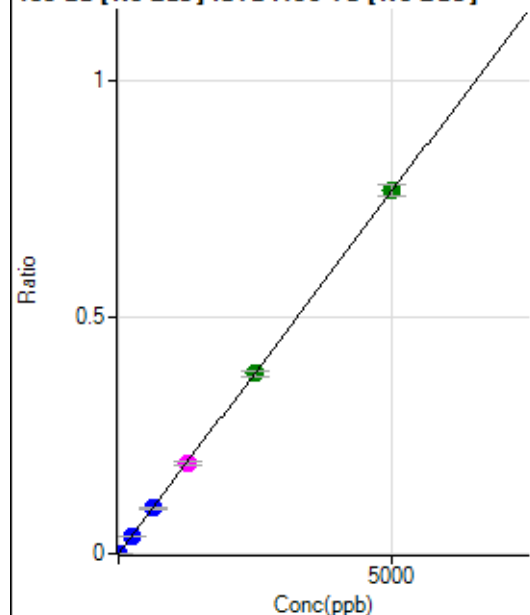
$$DL = 0.005887$$

$$BEC = 0.01324$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	27.78	0.0000	P	109.
2	☐	10.000	9.890	11827.71	0.0015	P	1.8
3	☐	250.000	244.355	301385.06	0.0374	P	1.2
4	☐	625.000	628.852	772541.41	0.0962	P	2.9
5	☐	1250.000	1246.734	1527939.23	0.1906	M	3.6
6	☐	2500.000	2482.736	3052065.87	0.3797	A	2.7
7	☐	5000.000	5009.249	6171204.18	0.7660	A	3.2
8	☐			4264.67	0.0006	P	10.3

$$y = 1.5292\text{E-}004 * x + 3.8587\text{E-}006$$

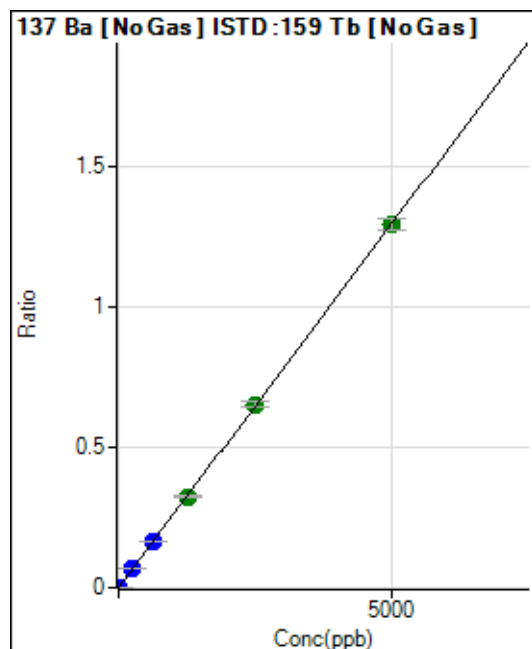
$$R = 1.0000$$

$$DL = 0.08265$$

$$BEC = 0.02523$$

Weight: <None>

Min Conc: 0



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	47.22	0.0000	P	34.0
2	☐	10.000	10.488	21239.37	0.0027	P	1.8
3	☐	250.000	254.165	530939.37	0.0658	P	1.3
4	☐	625.000	637.096	1325778.73	0.1650	P	2.6
5	☐	1250.000	1253.663	2602582.72	0.3247	A	3.1
6	☐	2500.000	2517.134	5240764.75	0.6520	A	3.5
7	☐	5000.000	4988.796	10410359.87	1.2922	A	3.3
8	☐			7518.99	0.0010	P	7.3

$$y = 2.5902\text{E-}004 * x + 6.2601\text{E-}006$$

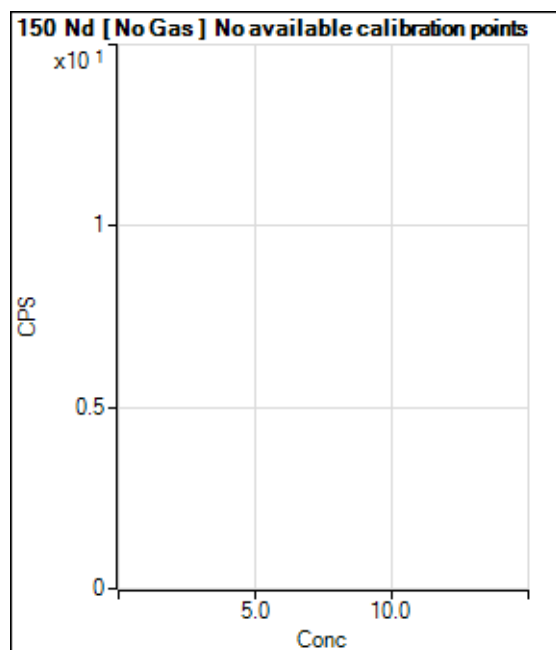
$$R = 1.0000$$

$$DL = 0.02462$$

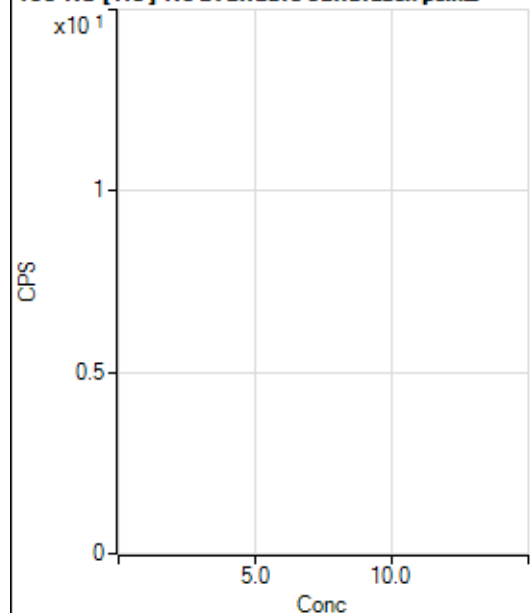
$$BEC = 0.02417$$

Weight: <None>

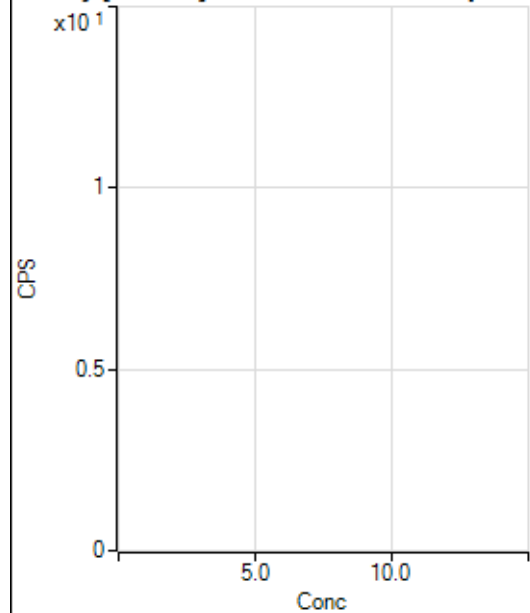
Min Conc: 0



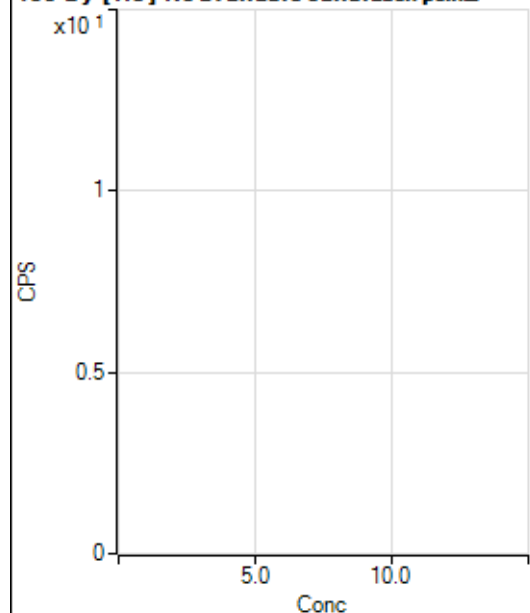
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			4.44		P	173.
2	☐			13.33		P	50.0
3	☐			26.67		P	43.3
4	☐			57.78		P	43.7
5	☐			135.56		P	15.0
6	☐			282.23		P	23.9
7	☐			460.02		P	10.1
8	☐			44.44		P	70.9

150 Nd [He] No available calibration points

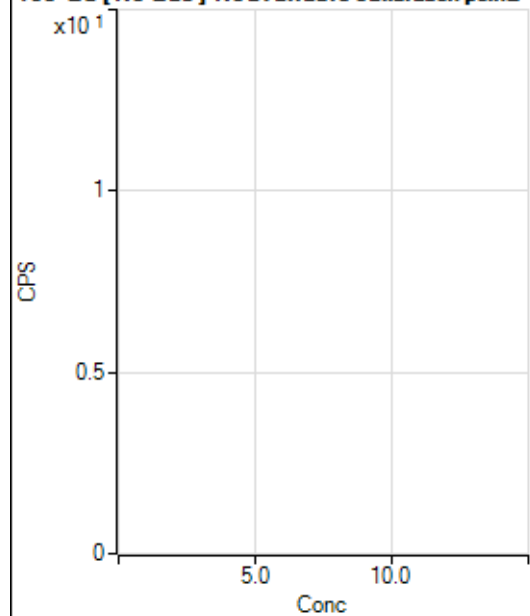
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1.11		P	173.
2	☐			0.00		P	
3	☐			3.33		P	100.
4	☐			12.22		P	78.7
5	☐			5.55		P	124.
6	☐			25.55		P	15.1
7	☐			31.11		P	16.4
8	☐			6.67		P	50.0

156 Dy [No Gas] No available calibration points

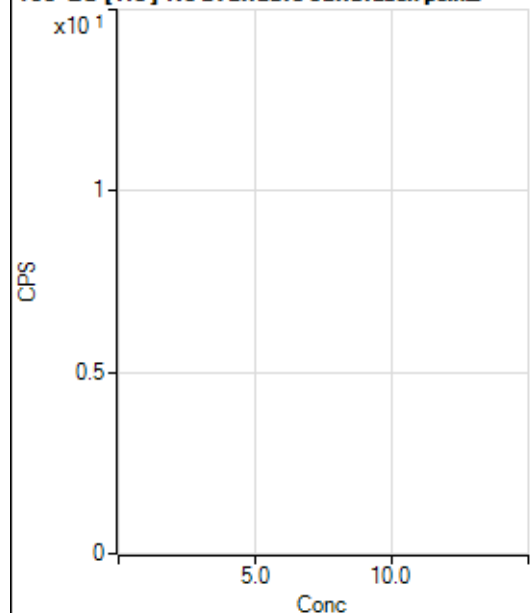
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	91.6
2	☐			5.55		P	86.6
3	☐			16.67		P	86.6
4	☐			38.89		P	24.7
5	☐			77.78		P	48.3
6	☐			175.01		P	19.0
7	☐			302.79		P	6.9
8	☐			911.16		P	8.9

156 Dy [He] No available calibration points

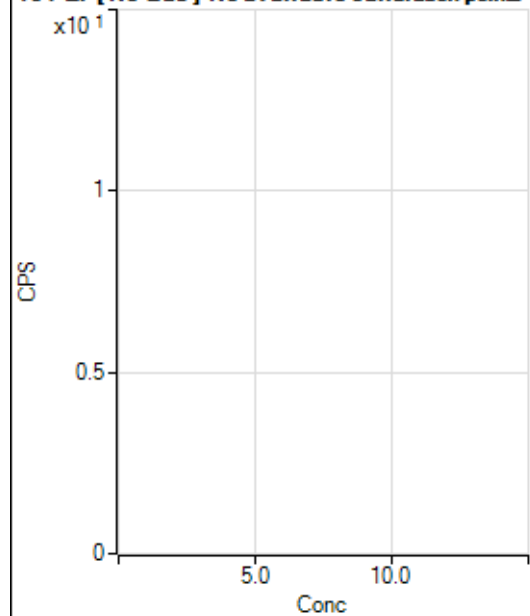
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.
2	☐			4.44		P	114.
3	☐			12.22		P	15.7
4	☐			15.55		P	24.8
5	☐			28.89		P	33.3
6	☐			80.00		P	23.2
7	☐			150.00		P	28.9
8	☐			435.57		P	13.0

160 Gd [No Gas] Noavailable calibration poin_

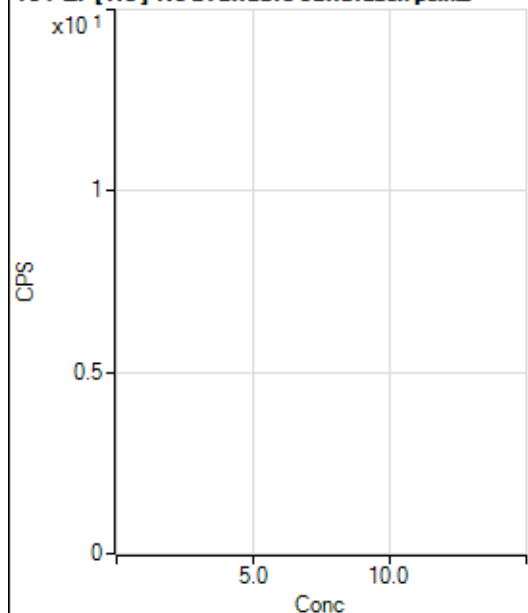
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83.34		P	40.0
2	☐			75.00		P	11.1
3	☐			119.45		P	22.4
4	☐			116.67		P	53.9
5	☐			166.67		P	8.7
6	☐			219.45		P	17.5
7	☐			375.02		P	21.4
8	☐			1152.86		P	3.6

160 Gd [He] No available calibration points

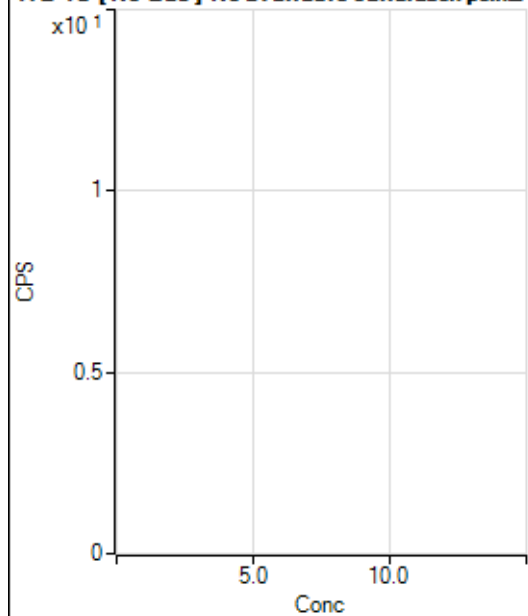
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			76.67		P	11.5
2	☐			85.56		P	11.9
3	☐			106.67		P	39.0
4	☐			98.89		P	5.2
5	☐			123.33		P	14.3
6	☐			151.12		P	2.5
7	☐			201.11		P	17.4
8	☐			586.68		P	3.7

164 Er [No Gas] No available calibration points

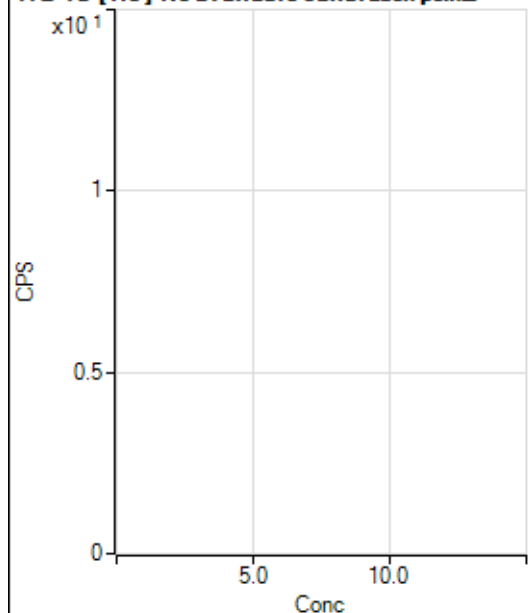
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			66.67		P	12.5
2	☐			50.00		P	16.7
3	☐			61.11		P	43.8
4	☐			50.00		P	0.0
5	☐			50.00		P	0.0
6	☐			69.44		P	13.9
7	☐			47.22		P	36.7
8	☐			100.00		P	41.7

164 Er [He] No available calibration points

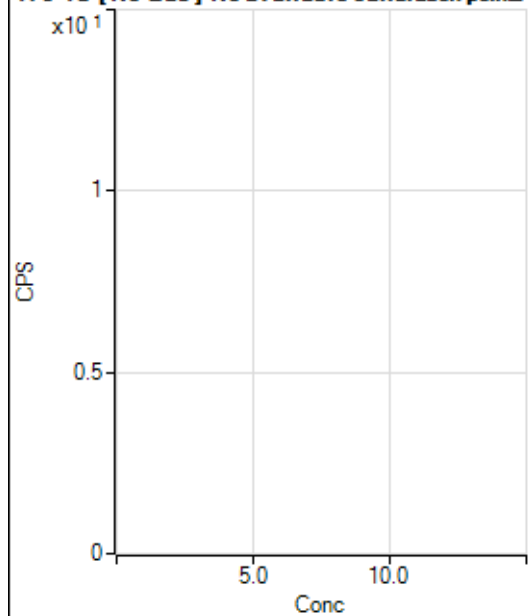
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			30.00		P	40.1
2	☐			16.67		P	60.0
3	☐			24.45		P	15.8
4	☐			15.55		P	24.8
5	☐			25.56		P	58.8
6	☐			35.55		P	30.1
7	☐			28.89		P	29.0
8	☐			48.89		P	23.9

172 Yb [No Gas] No available calibration points

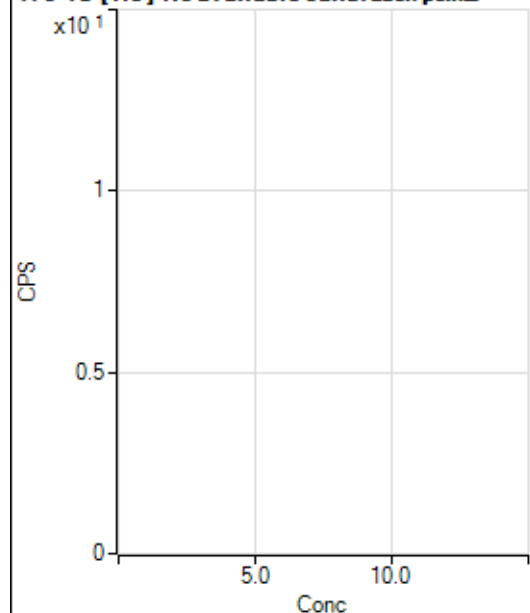
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			47.22		P	44.4
2	☐			55.56		P	22.9
3	☐			58.33		P	49.5
4	☐			50.00		P	33.3
5	☐			63.89		P	39.8
6	☐			116.67		P	32.7
7	☐			144.45		P	24.0
8	☐			447.24		P	6.5

172 Yb [He] No available calibration points

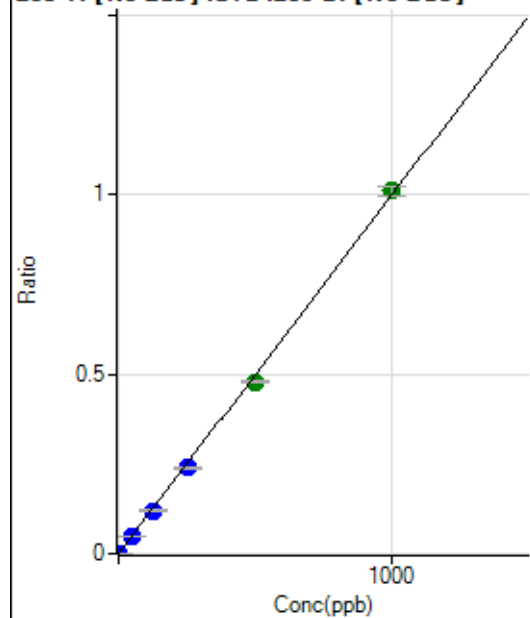
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			22.22		P	43.3
2	☐			18.52		P	17.3
3	☐			37.04		P	48.2
4	☐			33.33		P	66.7
5	☐			25.93		P	101.
6	☐			42.59		P	19.9
7	☐			64.82		P	24.7
8	☐			222.23		P	18.0

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1225.10		P	12.4
2	☐			1213.98		P	1.4
3	☐			2214.14		P	12.0
4	☐			3558.91		P	4.9
5	☐			6118.25		P	1.4
6	☐			10971.55		P	1.4
7	☐			20661.20		P	2.5
8	☐			1389.00		P	0.7

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			6492.45		P	3.6
2	☐			6564.72		P	2.4
3	☐			6837.08		P	2.1
4	☐			7261.36		P	4.6
5	☐			8454.70		P	2.0
6	☐			10978.85		P	1.9
7	☐			15025.49		P	1.4
8	☐			6390.55		P	6.0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	86.11	0.0000	P	9.6
2	☐	1.000	0.964	4575.95	0.0010	P	8.1
3	☐	50.000	47.165	224215.65	0.0471	P	2.6
4	☐	125.000	120.592	570080.26	0.1204	P	1.2
5	☐	250.000	240.063	1121713.42	0.2397	P	2.3
6	☐	500.000	480.490	2296595.54	0.4798	A	0.5
7	☐	1000.000	1012.932	4635892.51	1.0115	A	2.6
8	☐			1689.05	0.0004	P	2.9

$$y = 9.9855E-004 * x + 1.9152E-005$$

$$R = 0.9997$$

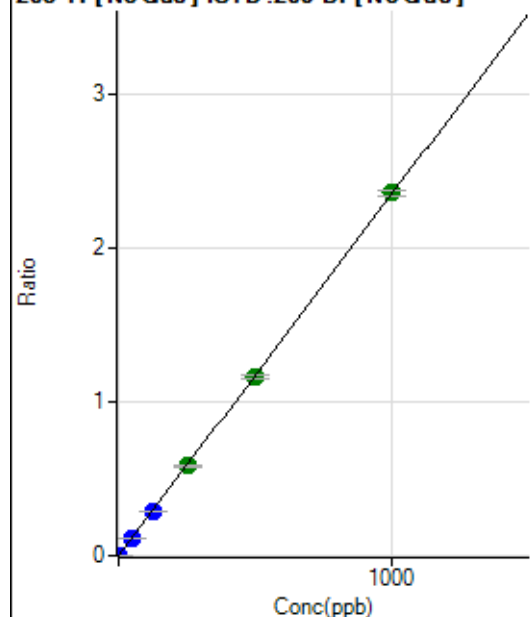
$$DL = 0.005525$$

$$BEC = 0.01918$$

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	222.23	0.0000	P	13.4
2	☐	1.000	0.954	10690.89	0.0023	P	1.4
3	☐	50.000	47.722	534131.71	0.1122	P	2.3
4	☐	125.000	121.772	1355072.12	0.2863	P	1.2
5	☐	250.000	247.762	2725986.09	0.5824	A	0.4
6	☐	500.000	493.509	5552429.81	1.1600	A	2.2
7	☐	1000.000	1004.323	10821349.20	2.3607	A	1.9
8	☐			3845.14	0.0010	P	12.7

$$y = 0.0024 * x + 4.9865E-005$$

$$R = 1.0000$$

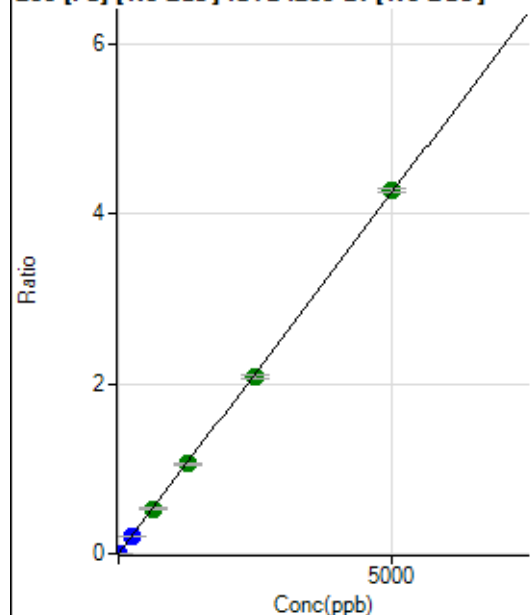
$$DL = 0.008531$$

$$BEC = 0.02121$$

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	375.94	0.0001	P	11.9
2	☐	1.000	0.936	4097.02	0.0009	P	2.3
3	☐	250.000	234.691	947941.48	0.1992	P	1.1
4	☐	625.000	623.495	2503709.75	0.5290	A	3.5
5	☐	1250.000	1245.694	4946464.40	1.0569	A	1.1
6	☐	2500.000	2449.981	9948423.14	2.0786	A	2.7
7	☐	5000.000	5027.039	19552222.43	4.2649	A	1.2
8	☐			5675.43	0.0014	P	7.1

$$y = 8.4838E-004 * x + 8.4183E-005$$

$$R = 0.9999$$

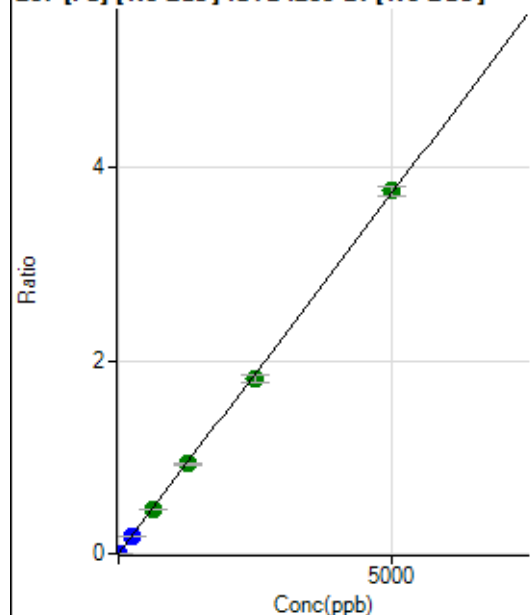
$$DL = 0.03551$$

$$BEC = 0.09923$$

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	316.68	0.0001	P	12.0
2	☐	1.000	0.967	3695.05	0.0008	P	1.2
3	☐	250.000	236.272	838978.84	0.1763	P	0.8
4	☐	625.000	617.982	2181761.42	0.4610	A	2.7
5	☐	1250.000	1244.903	4345204.32	0.9286	A	1.6
6	☐	2500.000	2429.494	8672626.99	1.8121	A	4.0
7	☐	5000.000	5038.091	17221549.46	3.7577	A	2.4
8	☐			4934.37	0.0012	P	9.5

$$y = 7.4584\text{E-}004 * x + 7.1006\text{E-}005$$

$$R = 0.9999$$

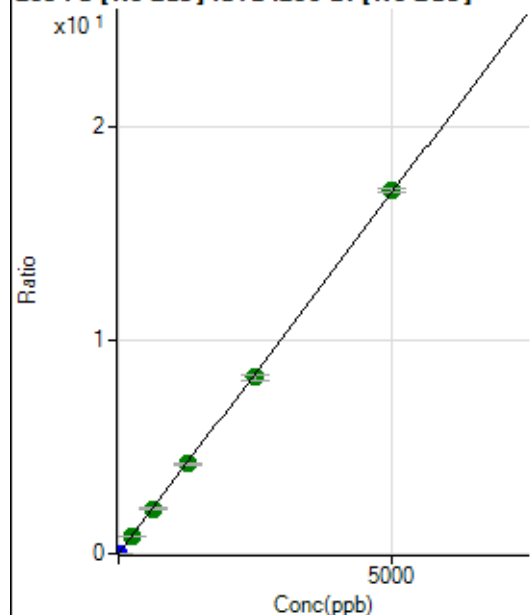
$$DL = 0.03441$$

$$BEC = 0.0952$$

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	1400.05	0.0003	P	14.0
2	☐	1.000	0.946	16406.19	0.0035	P	1.5
3	☐	250.000	240.621	3878042.83	0.8148	A	0.6
4	☐	625.000	621.542	9959125.28	2.1043	A	2.8
5	☐	1250.000	1246.631	19747837.48	4.2203	A	1.9
6	☐	2500.000	2442.505	39573762.86	8.2684	A	2.5
7	☐	5000.000	5030.491	78053029.29	17.0289	A	1.2
8	☐			22428.46	0.0057	P	8.0

$$y = 0.0034 * x + 3.1416\text{E-}004$$

$$R = 0.9999$$

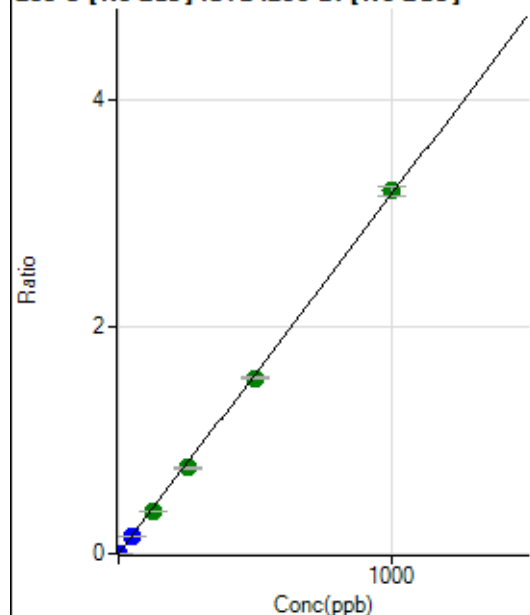
$$DL = 0.03907$$

$$BEC = 0.09281$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	30.56	0.0000	P	65.3
2	☐	1.000	0.903	13368.58	0.0029	P	4.7
3	☐	50.000	46.818	705894.24	0.1483	P	1.4
4	☐	125.000	117.575	1763435.11	0.3725	A	1.7
5	☐	250.000	238.511	3535763.31	0.7557	A	2.2
6	☐	500.000	488.462	7407181.59	1.5476	A	0.7
7	☐	1000.000	1009.729	14661008.83	3.1990	A	3.0
8	☐			1827.97	0.0005	P	19.1

$$y = 0.0032 * x + 6.9670E-006$$

$$R = 0.9998$$

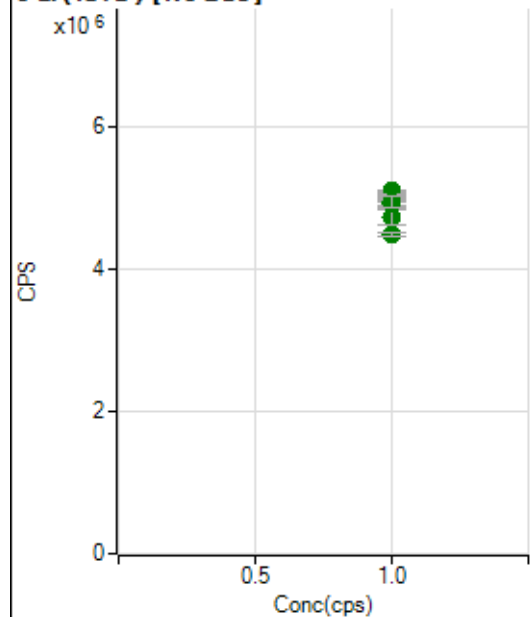
$$DL = 0.00431$$

$$BEC = 0.002199$$

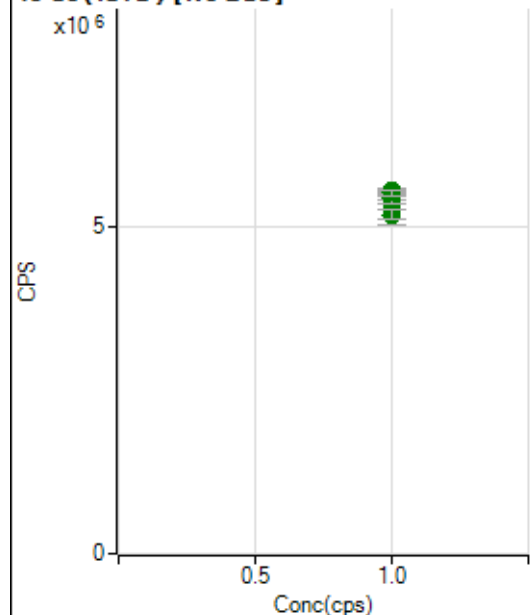
Weight: <None>

Min Conc: 0

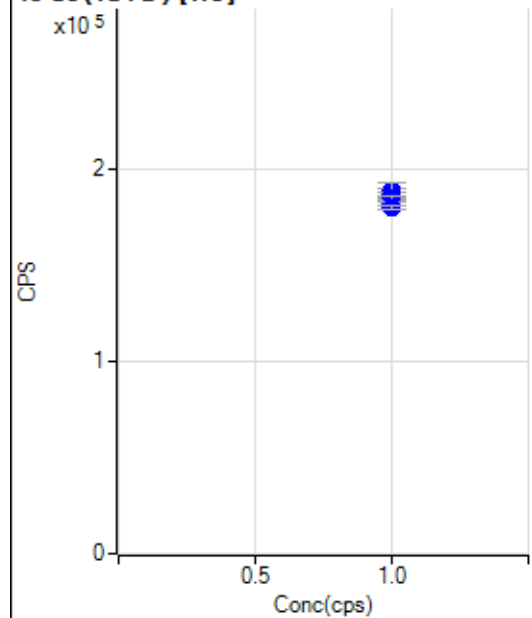
6 Li (ISTD) [No Gas]



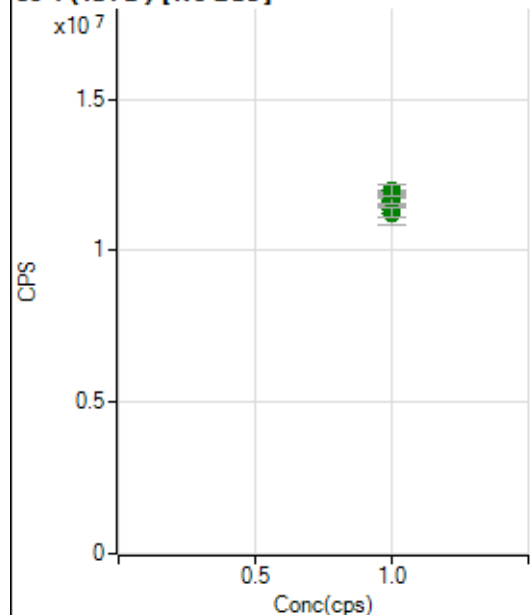
	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4724035.28		A	4.8
2	☐	1.000		4920048.60		A	0.6
3	☐	1.000		5099970.11		A	0.6
4	☐	1.000		5006048.06		A	1.6
5	☐	1.000		5030497.19		A	0.8
6	☐	1.000		5048818.33		A	0.4
7	☐	1.000		4946316.56		A	3.5
8	☐	1.000		4489129.44		A	1.2

45 Sc (ISTD) [No Gas]

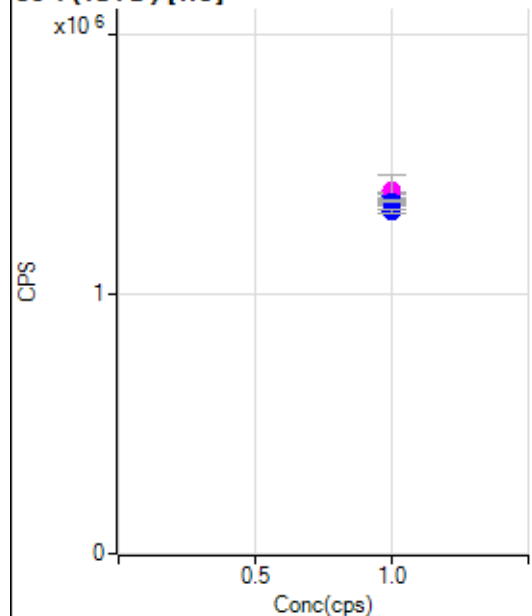
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5270964.85		A	8.6
2	☐	1.000		5458145.82		A	1.5
3	☐	1.000		5470271.79		A	1.8
4	☐	1.000		5551916.38		A	1.4
5	☐	1.000		5492329.78		A	1.2
6	☐	1.000		5442169.64		A	2.6
7	☐	1.000		5523379.16		A	1.4
8	☐	1.000		5187219.75		A	2.9

45 Sc (ISTD) [He]

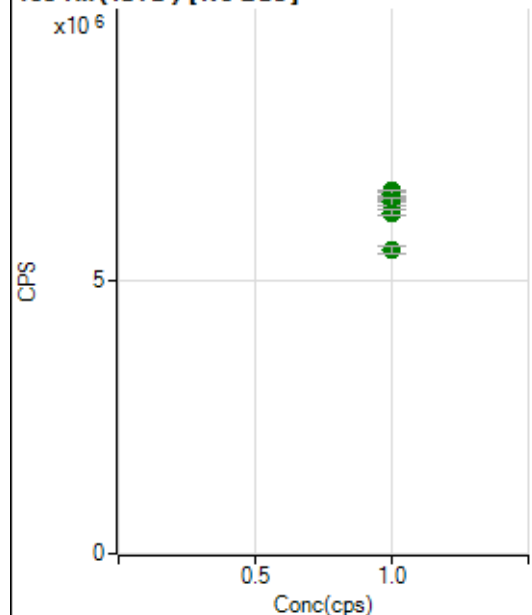
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		184387.33		P	0.1
2	☐	1.000		188206.53		P	1.1
3	☐	1.000		185080.32		P	2.2
4	☐	1.000		186215.24		P	0.9
5	☐	1.000		181980.10		P	1.2
6	☐	1.000		188153.62		P	5.1
7	☐	1.000		184467.07		P	1.6
8	☐	1.000		179589.70		P	1.5

89 Y (ISTD) [No Gas]

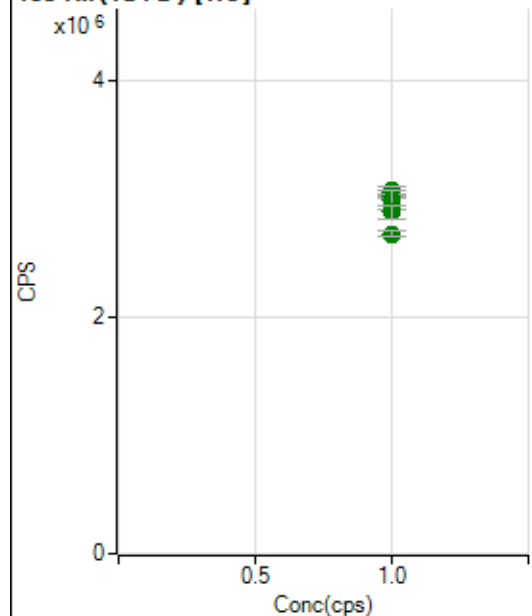
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		11334060.87		A	8.6
2	☐	1.000		11707216.35		A	2.5
3	☐	1.000		11879202.88		A	1.5
4	☐	1.000		11818869.41		A	1.6
5	☐	1.000		11596516.77		A	2.3
6	☐	1.000		11682770.66		A	2.8
7	☐	1.000		11967654.82		A	3.0
8	☐	1.000		11257719.14		A	3.2

89 Y (ISTD) [He]

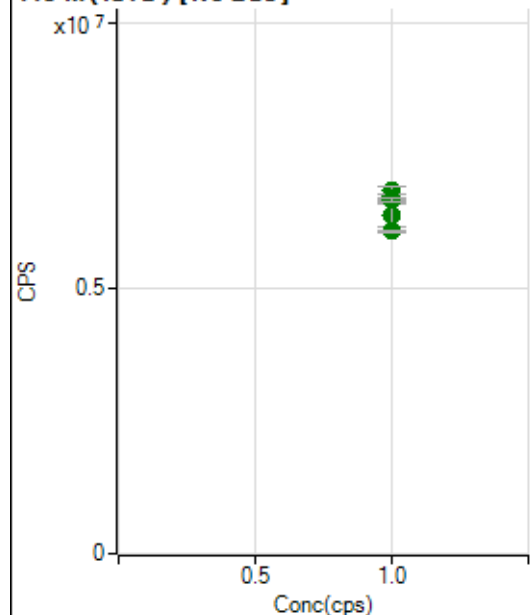
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1372737.19		P	0.9
2	☐	1.000		1385408.64		M	0.5
3	☐	1.000		1351585.85		M	1.2
4	☐	1.000		1364287.06		P	0.5
5	☐	1.000		1353986.66		P	1.1
6	☐	1.000		1394982.64		M	8.5
7	☐	1.000		1355180.78		P	0.6
8	☐	1.000		1315621.07		P	0.7

103 Rh (ISTD) [No Gas]

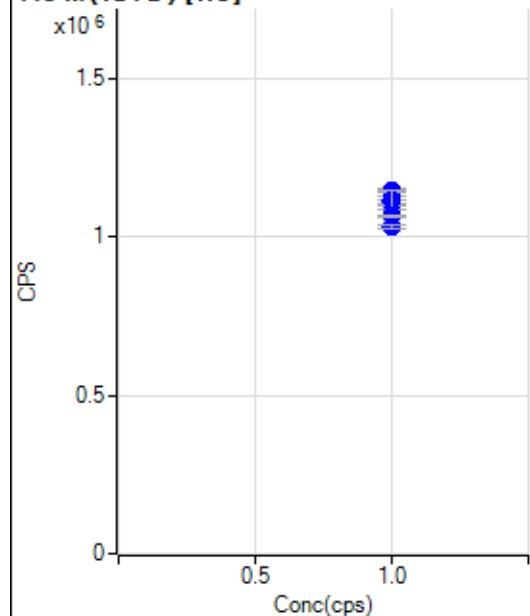
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6367163.34		A	5.8
2	☐	1.000		6637574.97		A	0.5
3	☐	1.000		6468094.94		A	0.4
4	☐	1.000		6576545.98		A	2.0
5	☐	1.000		6446768.68		A	2.2
6	☐	1.000		6431415.90		A	2.3
7	☐	1.000		6242908.86		A	1.5
8	☐	1.000		5549065.27		A	2.4

103 Rh (ISTD) [He]

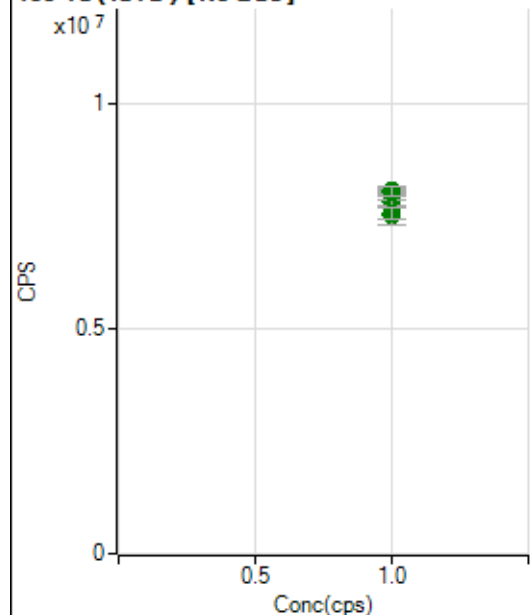
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3051905.75		A	0.9
2	☐	1.000		3064181.06		A	2.9
3	☐	1.000		3014671.41		A	1.1
4	☐	1.000		3020505.68		A	1.1
5	☐	1.000		3021328.36		A	0.7
6	☐	1.000		2986888.74		A	5.1
7	☐	1.000		2886002.49		A	3.8
8	☐	1.000		2703605.76		A	1.5

115 In (ISTD) [No Gas]

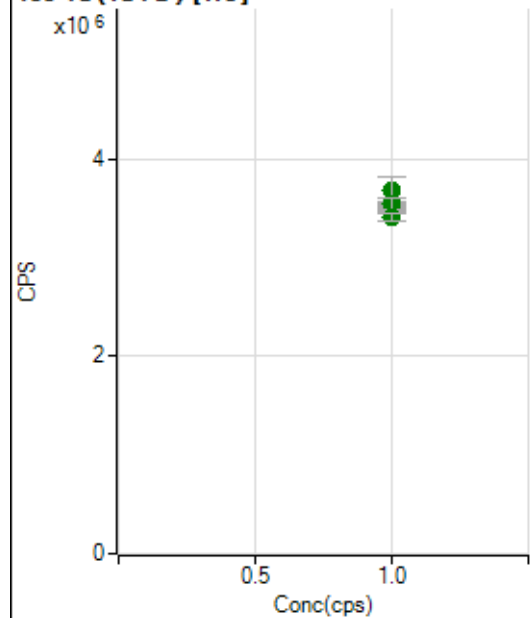
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6385719.71		A	6.8
2	☐	1.000		6703539.41		A	1.7
3	☐	1.000		6736991.48		A	1.1
4	☐	1.000		6829484.61		A	2.2
5	☐	1.000		6686401.20		A	2.1
6	☐	1.000		6711625.02		A	1.9
7	☐	1.000		6667151.83		A	1.4
8	☐	1.000		6068013.49		A	0.7

115 In (ISTD) [He]

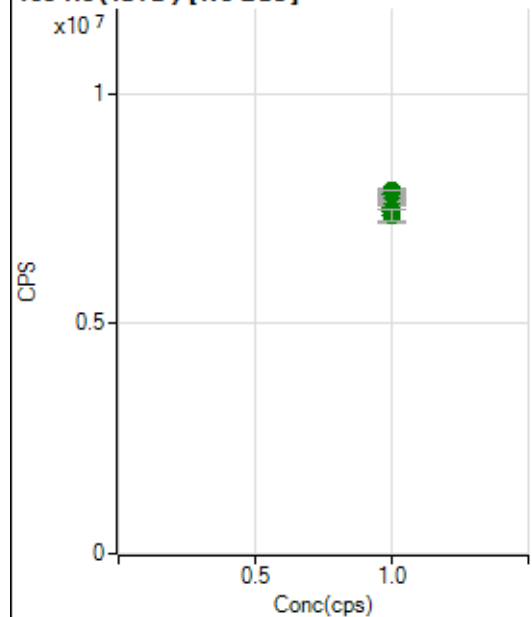
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1144093.65		P	1.2
2	☐	1.000		1143098.60		P	0.3
3	☐	1.000		1118462.12		P	2.1
4	☐	1.000		1110293.08		P	0.8
5	☐	1.000		1099986.78		P	0.7
6	☐	1.000		1114285.76		P	5.7
7	☐	1.000		1064998.29		P	0.4
8	☐	1.000		1030593.51		P	1.0

159 Tb (ISTD) [No Gas]

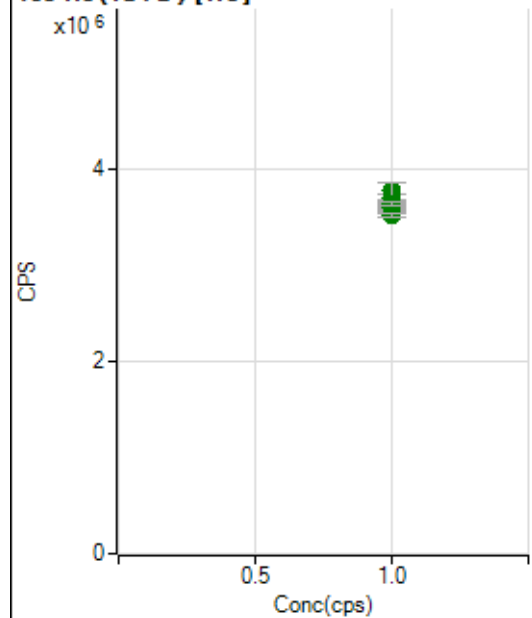
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7522973.08		A	6.2
2	☐	1.000		7801028.49		A	1.2
3	☐	1.000		8064559.60		A	0.7
4	☐	1.000		8036375.71		A	1.9
5	☐	1.000		8016139.95		A	0.9
6	☐	1.000		8042226.41		A	2.3
7	☐	1.000		8060872.73		A	2.6
8	☐	1.000		7552166.21		A	3.3

159 Tb (ISTD) [He]

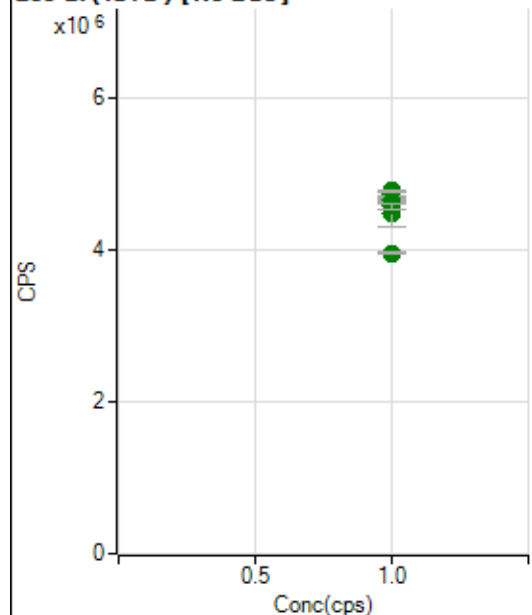
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3567308.14		A	1.9
2	☐	1.000		3563871.34		A	1.9
3	☐	1.000		3518225.61		A	2.4
4	☐	1.000		3538183.49		A	1.0
5	☐	1.000		3525737.90		A	1.4
6	☐	1.000		3677590.33		A	7.7
7	☐	1.000		3550933.11		A	3.4
8	☐	1.000		3412700.30		A	2.7

165 Ho (ISTD) [No Gas]

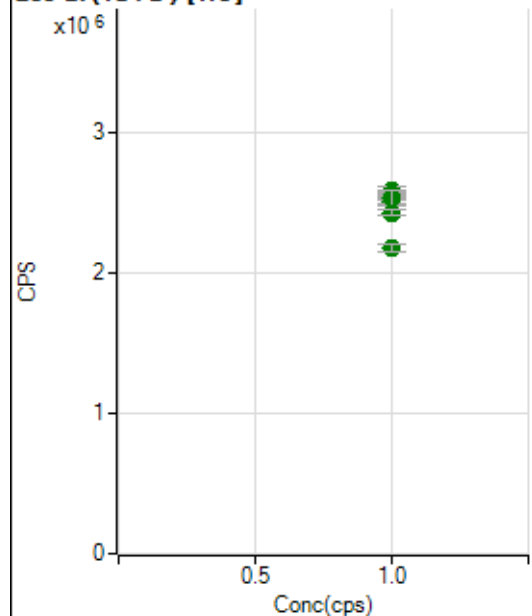
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		7447294.70		A	6.9
2	☐	1.000		7536503.81		A	1.6
3	☐	1.000		7698383.76		A	3.1
4	☐	1.000		7849495.40		A	2.6
5	☐	1.000		7681321.01		A	0.8
6	☐	1.000		7818155.12		A	1.3
7	☐	1.000		7892224.65		A	0.1
8	☐	1.000		7370530.03		A	3.3

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3630680.88		A	2.2
2	☐	1.000		3638149.60		A	2.0
3	☐	1.000		3570001.58		A	1.8
4	☐	1.000		3596730.02		A	1.8
5	☐	1.000		3694488.00		A	2.5
6	☐	1.000		3776114.01		A	4.8
7	☐	1.000		3648087.31		A	1.3
8	☐	1.000		3528963.84		A	1.0

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4487748.79		A	8.1
2	☐	1.000		4664614.45		A	1.5
3	☐	1.000		4759386.28		A	1.4
4	☐	1.000		4734154.23		A	1.8
5	☐	1.000		4680406.46		A	2.0
6	☐	1.000		4786449.06		A	0.4
7	☐	1.000		4584097.22		A	1.4
8	☐	1.000		3969992.48		A	1.0

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		2545939.74		A	2.5
2	☐	1.000		2583672.11		A	2.3
3	☐	1.000		2510992.45		A	1.5
4	☐	1.000		2556146.66		A	1.8
5	☐	1.000		2529372.01		A	2.8
6	☐	1.000		2537944.49		A	4.5
7	☐	1.000		2430364.91		A	1.7
8	☐	1.000		2176492.19		A	2.6

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8012423 MS-1.b

Acq. Date-Time 2023-01-24 13:41:38

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		13762	137617.06			1.259	5.000
24		96416	964164.55			0.824	5.000
25		12836	128356.92			1.168	5.000
26		15129	151290.51			0.917	5.000
59		65950	659498.42			0.965	5.000
113		6446	64456.96			1.579	5.000
115		84775	847751.89			1.016	5.000
206		17291	172914.81			0.697	5.000
207		15514	155137.93			1.085	5.000
208		36885	368847.76			0.721	5.000
220		1	5.20			30.859	

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

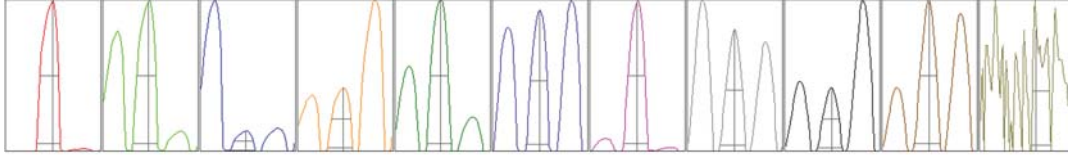
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	13786	13852	13474	13930	13767
24	97246	96993	95440	95723	96681
25	13043	12794	12626	12871	12845
26	15271	15088	14911	15173	15202
59	66011	66246	64870	66086	66536
113	6477	6488	6269	6531	6464
115	85255	84919	83502	84437	85764
206	17315	17298	17147	17471	17227
207	15690	15546	15248	15610	15474
208	37005	36857	36508	37233	36821

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	24888.75	9.00	8.90 - 9.10	
24	168290.18	23.95	23.90 - 24.10	
25	22000.09	24.95	24.90 - 25.10	
26	25134.02	25.95	25.90 - 26.10	
59	120644.69	58.95	58.90 - 59.10	
113	12902.22	113.00	112.90 - 113.10	
115	164496.26	115.00	114.90 - 115.10	
206	33810.16	206.00	205.90 - 206.10	
207	30381.92	207.00	206.90 - 207.10	
208	72066.24	208.00	207.90 - 208.10	
220	0.80	220.30	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.60	0.739	0.900	
24	0.62	0.787	0.900	
25	0.62	0.783	0.900	
26	0.62	0.788	0.900	
59	0.57	0.777	0.900	
113	0.52	0.717	0.900	
115	0.53	0.769	0.900	
206	0.53	0.807	0.900	
207	0.53	0.775	0.900	
208	0.53	0.815	0.900	
220	0.53	0.593		

Integration Time [sec] 0.1

Acquisition Time [sec] 256.770000000002

Y Axis Linear

Tune Parameters

Plasma Parameters

Plasma Mode --- Nebulizer Gas 0.87 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	10.1 V	Deflect	15.6 V
Extract 2	-185.0 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	150 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9994	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.03		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.8 mm
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EM

Discriminator	4.4 mV	Analog HV	2306 V	Pulse HV	1648 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		14484	144835.38			0.780	
89		15993	159930.24			1.103	
205		11150	111496.51			0.610	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	14340	14573	14608	14496	14401
89	16160	15885	16184	15776	15961
205	11236	11076	11102	11130	11204

Integration Time [sec] 0.1

Tune Parameters

Plasma Parameters

Plasma Mode	---	Nebulizer Gas	0.87 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	10.1 V	Deflect	4.2 V
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US EPA Tune Check Report

Extract 2	-185.0 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	123	Axis Gain	0.9994	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.03		

Hardware Settings

Torch

Torch H	1.0 mm	Torch V	-0.8 mm
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EM

Discriminator	4.4 mV	Analog HV	2306 V	Pulse HV	1648 V
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