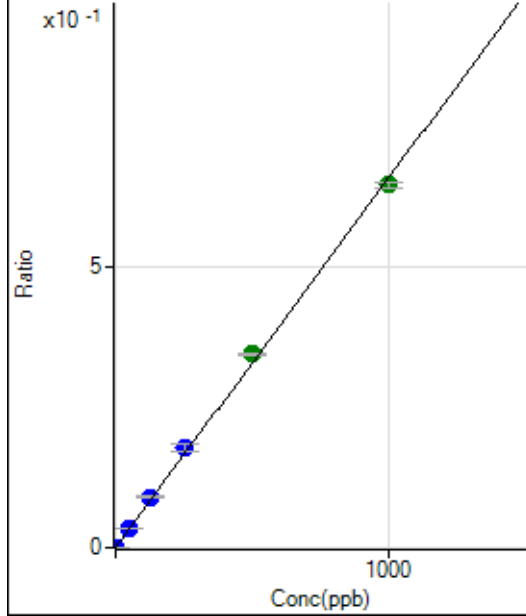


Batch Folder: D:\Agilent\ICPMH\1\DATA\P8122922MS.b\
Analysis File: P8122922MS.batch.bin
DA Date-Time: 2022-12-30 01:18:23
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	004CALB.d	S00	2022-12-29 16:28:37
2	005CALS.d	S02	2022-12-29 16:31:48
3	006CALS.d	S03	2022-12-29 16:35:00
4	007CALS.d	S04	2022-12-29 16:38:07
5	008CALS.d	S05	2022-12-29 16:41:16
6	009CALS.d	S06	2022-12-29 16:44:23
7	010CALS.d	S07	2022-12-29 16:47:33
8	011CALS.d	S08	2022-12-29 16:50:40

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	70.82	0.0000	P	60.9
2	☐	1.000	1.010	3053.28	0.0007	P	3.6
3	☐	50.000	50.822	152265.04	0.0335	P	2.7
4	☐	125.000	136.033	405423.07	0.0897	P	3.3
5	☐	250.000	269.583	759478.15	0.1778	P	8.5
6	☐	500.000	523.767	1553942.41	0.3454	A	0.9
7	☐	1000.000	981.800	2867776.92	0.6474	A	1.8
8	☐			829.50	0.0002	P	20.1

$$y = 6.5934\text{E-}004 * x + 1.5655\text{E-}005$$

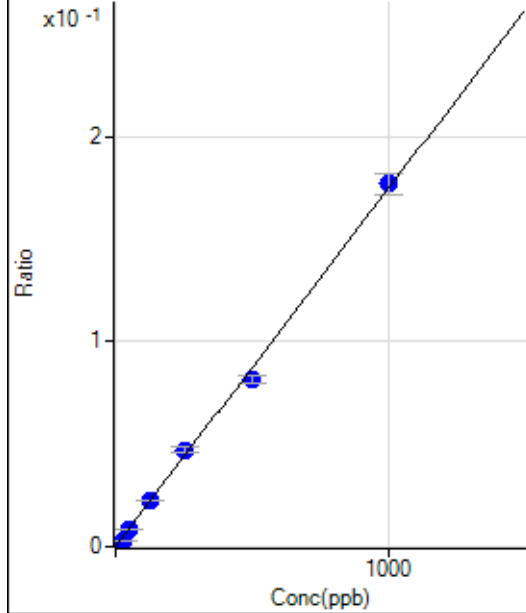
$$R = 0.9993$$

$$DL = 0.0434$$

$$BEC = 0.02374$$

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	429.92	0.0001	P	16.3
2	☐	25.000	13.029	10628.46	0.0024	P	2.3
3	☐	50.000	48.846	39149.84	0.0086	P	4.1
4	☐	125.000	126.754	100442.18	0.0222	P	1.2
5	☐	250.000	270.307	202172.72	0.0473	P	7.6
6	☐	500.000	464.795	365220.21	0.0812	P	4.4
7	☐	1000.000	1012.663	782837.51	0.1768	P	6.1
8	☐			45880.01	0.0110	P	18.3

$$y = 1.7453\text{E-}004 * x + 9.6056\text{E-}005$$

$$R = 0.9988$$

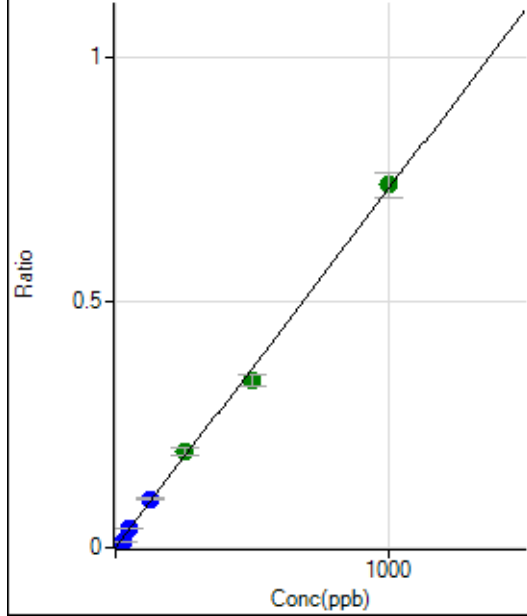
$$DL = 0.2696$$

$$BEC = 0.5504$$

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	1959.08	0.0004	P	2.8
2	☐	25.000	13.786	47147.07	0.0105	P	2.0
3	☐	50.000	52.934	177705.03	0.0391	P	4.0
4	☐	125.000	136.135	451868.28	0.0999	P	1.2
5	☐	250.000	268.740	841948.19	0.1969	A	7.9
6	☐	500.000	465.435	1531059.25	0.3406	A	7.8
7	☐	1000.000	1011.339	3275275.73	0.7396	A	6.7
8	☐			207054.65	0.0497	P	19.6

$$y = 7.3092E-004 * x + 4.3668E-004$$

$$R = 0.9988$$

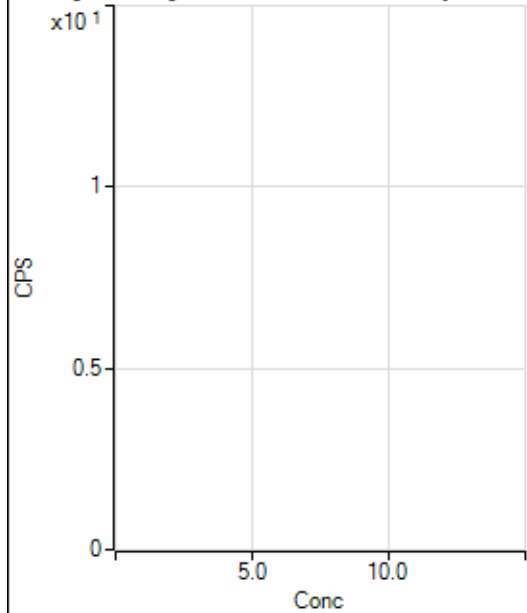
$$DL = 0.05027$$

$$BEC = 0.5974$$

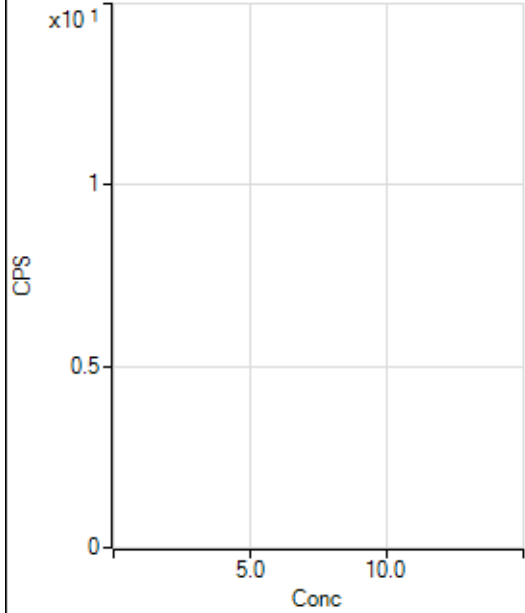
Weight: <None>

Min Conc: 0

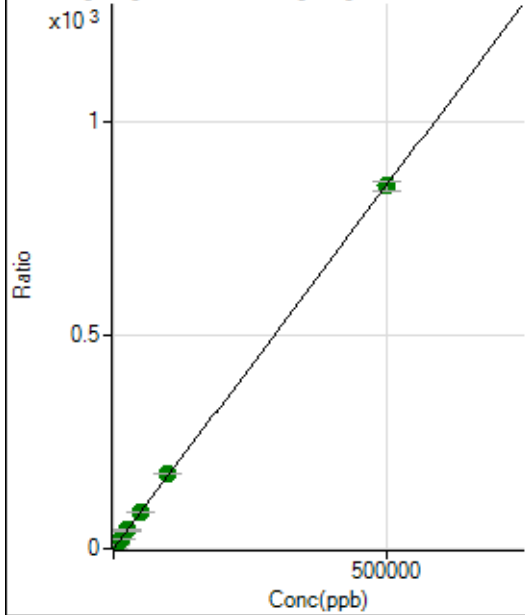
12 C [No Gas] No available calibration points



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			6875564.13		A	0.9
2	☐			7237853.98		A	0.3
3	☐			7886546.53		A	0.3
4	☐			7934264.93		A	2.2
5	☐			8000583.60		A	2.2
6	☐			8330396.02		A	3.5
7	☐			8340260.26		A	0.8
8	☐			7807982.90		A	1.2

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83216.22		P	1.2
2	☐			86225.46		P	1.5
3	☐			95895.53		P	1.5
4	☐			97788.41		P	1.7
5	☐			98278.30		P	2.5
6	☐			106146.60		P	2.7
7	☐			105371.55		P	1.8
8	☐			102182.01		P	1.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	23046.46	0.0986	P	2.4
2	☐	500.000	464.748	206134.70	0.8903	P	1.2
3	☐	5000.000	4910.222	1934098.18	8.4630	A	1.2
4	☐	12500.000	13499.412	5069694.51	23.0944	A	1.3
5	☐	25000.000	25341.015	9558206.38	43.2661	A	3.5
6	☐	50000.000	51240.833	19254996.26	87.3855	A	0.4
7	☐	100000.00	102678.00	37761158.13	175.0068	A	1.3
8	☐	500000.00	499299.21	180277027.6	850.6364	A	2.9

$$y = 0.0017 * x + 0.0986$$

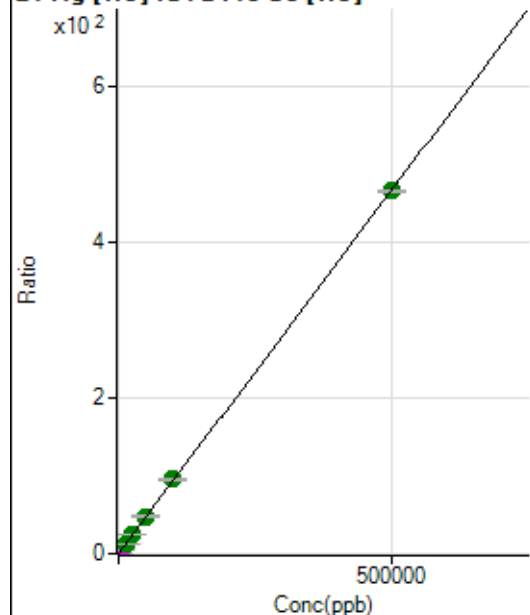
$$R = 1.0000$$

$$DL = 4.203$$

$$BEC = 57.91$$

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	400.01	0.0017	P	3.3
2	☐	500.000	447.610	97010.69	0.4190	P	2.8
3	☐	5000.000	4959.001	1057048.66	4.6252	M	2.5
4	☐	12500.000	13869.685	2838846.81	12.9329	A	1.9
5	☐	25000.000	25525.897	5257178.11	23.8004	A	1.2
6	☐	50000.000	51571.660	10594638.60	48.0838	A	1.4
7	☐	100000.00	102234.17	20568442.47	95.3183	A	1.1
8	☐	500000.00	499335.92	98678296.65	465.5503	A	0.7

$$y = 9.3234\text{E-}004 * x + 0.0017$$

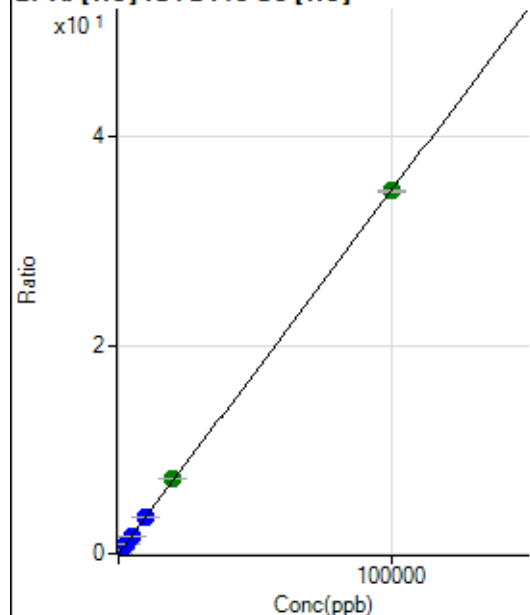
$$R = 1.0000$$

$$DL = 0.1798$$

$$BEC = 1.836$$

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	112.07	0.0005	P	4.9
2	☐	20.000	18.141	1576.14	0.0068	P	4.0
3	☐	1000.000	961.453	76739.47	0.3358	P	2.2
4	☐	2500.000	2602.972	199388.80	0.9083	P	0.9
5	☐	5000.000	4863.348	374784.72	1.6966	P	1.6
6	☐	10000.000	9933.203	763463.57	3.4648	P	0.8
7	☐	20000.000	20761.795	1562824.08	7.2414	A	1.1
8	☐	100000.00	99858.965	7382481.00	34.8273	A	0.3

$$y = 3.4876\text{E-}004 * x + 4.7954\text{E-}004$$

$$R = 1.0000$$

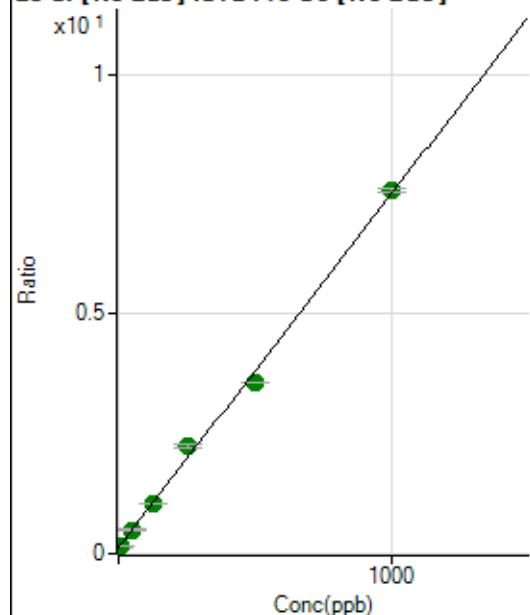
$$DL = 0.204$$

$$BEC = 1.375$$

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	850263.08	0.1293	P	0.6
2	☐	10.000	2.738	960596.75	0.1496	A	4.5
3	☐	50.000	49.226	3234993.52	0.4928	A	3.7
4	☐	125.000	123.819	6420912.51	1.0436	A	0.5
5	☐	250.000	287.483	13198934.41	2.2521	A	4.9
6	☐	500.000	465.421	21705737.46	3.5660	A	0.6
7	☐	1000.000	1008.177	47297901.40	7.5736	A	1.1
8	☐			967988.95	0.1612	A	20.3

$$y = 0.0074 * x + 0.1293$$

$$R = 0.9983$$

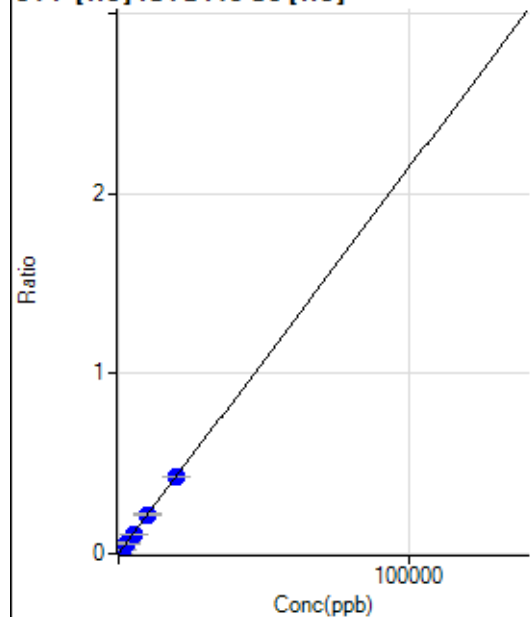
$$DL = 0.3141$$

$$BEC = 17.52$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	-10.588	266.68	0.0011	P	16.0
2	☐	0.000	10.588	369.46	0.0016	P	14.3
3	☐	1000.000	962.108	5009.33	0.0219	P	6.4
4	☐	2500.000	2668.695	12814.30	0.0584	P	2.6
5	☐	5000.000	4777.841	22846.35	0.1034	P	3.2
6	☐	10000.000	10177.358	48211.60	0.2188	P	3.3
7	☐	20000.000	19947.669	92257.31	0.4275	P	0.8
8	☐			311.13	0.0015	P	22.3

$$y = 2.1361E-005 * x + 0.0014$$

$$R = 0.9998$$

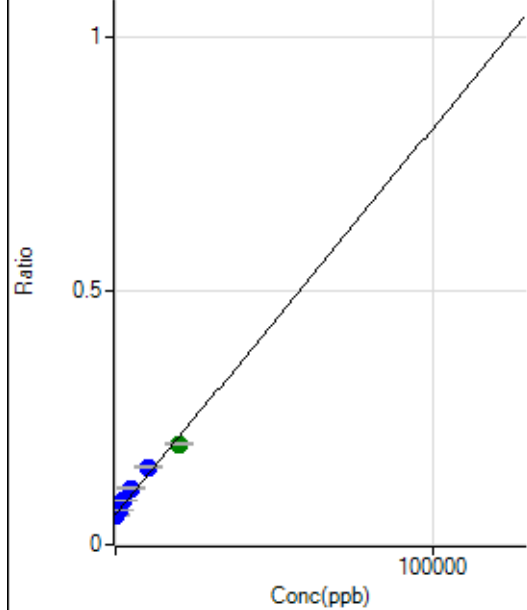
$$DL = 28.83$$

$$BEC = 63.99$$

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	-114.671	382819.11	0.0582	P	0.9
2	☐	0.000	114.671	385386.18	0.0600	P	3.2
3	☐	1000.000	1063.951	441307.31	0.0672	P	3.0
4	☐	2500.000	3534.733	529487.87	0.0861	P	1.7
5	☐	5000.000	6813.735	651012.43	0.1111	P	4.3
6	☐	10000.000	12261.472	928911.54	0.1526	P	1.1
7	☐	20000.000	18283.291	1239843.39	0.1985	A	1.5
8	☐			346920.76	0.0580	P	22.4

$$y = 7.6258E-006 * x + 0.0591$$

$$R = 0.9835$$

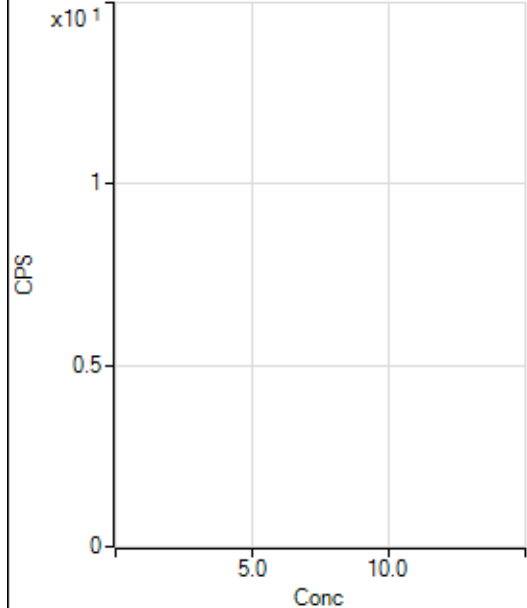
$$DL = 479.2$$

$$BEC = 7751$$

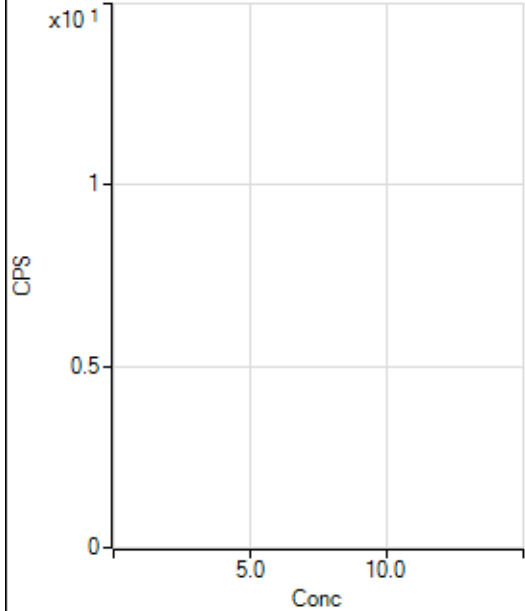
Weight: <None>

Min Conc: 0

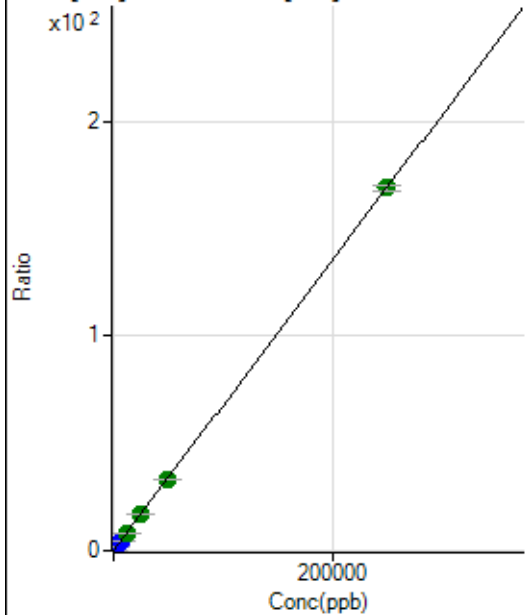
35 Cl [No Gas] No available calibration points



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			414141.10		P	1.0
2	☐			427522.30		P	0.3
3	☐			408644.93		P	1.4
4	☐			428204.10		P	0.3
5	☐			412551.48		P	1.5
6	☐			431212.17		P	0.7
7	☐			437700.46		P	0.5
8	☐			430430.28		P	0.4

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3528.31		P	7.9
2	☐			3742.25		P	2.9
3	☐			3433.84		P	3.2
4	☐			3506.08		P	4.8
5	☐			3361.60		P	5.9
6	☐			3442.17		P	1.9
7	☐			3381.03		P	4.2
8	☐			3692.24		P	0.8

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	23057.69	0.0987	P	3.3
2	☐	500.000	438.856	91462.07	0.3951	P	2.1
3	☐	2500.000	2334.378	382851.97	1.6753	P	2.2
4	☐	6250.000	6337.272	961158.65	4.3787	P	0.7
5	☐	12500.000	12182.858	1839349.47	8.3267	A	2.0
6	☐	25000.000	24852.606	3720193.57	16.8836	A	1.5
7	☐	50000.000	49129.191	7180364.31	33.2795	A	1.7
8	☐	250000.00	250204.35	35840986.91	169.0814	A	1.8

$$y = 6.7538E-004 * x + 0.0987$$

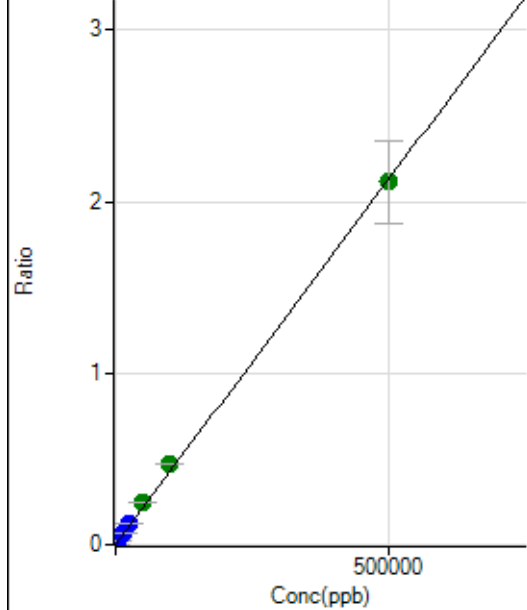
$$R = 1.0000$$

$$DL = 14.67$$

$$BEC = 146.1$$

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	268.72	0.0000	P	53.8
2	☐	500.000	436.297	12189.48	0.0019	P	4.5
3	☐	5000.000	5181.153	145025.80	0.0221	P	3.3
4	☐	12500.000	14619.283	383044.57	0.0623	P	1.5
5	☐	25000.000	28429.116	709190.47	0.1210	P	5.5
6	☐	50000.000	58232.794	1508828.87	0.2479	A	1.4
7	☐	100000.00	110921.69	2948502.22	0.4721	A	1.2
8	☐	500000.00	496766.19	12638689.98	2.1143	A	23.1

$$y = 4.2561\text{E-}006 * x + 4.0911\text{E-}005$$

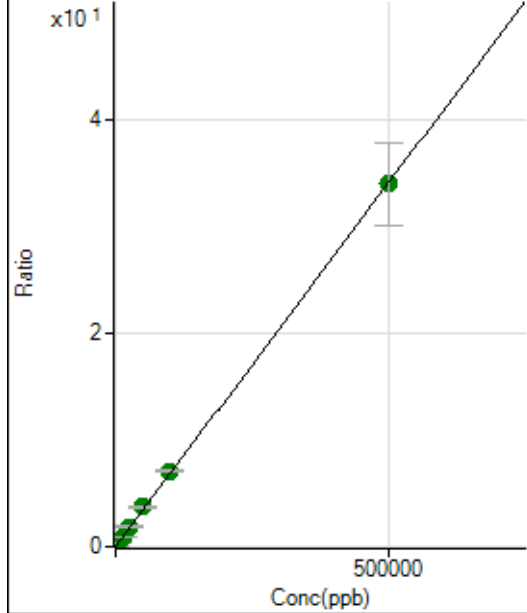
$$R = 0.9997$$

$$DL = 15.52$$

$$BEC = 9.612$$

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	14979.39	0.0023	P	15.4
2	☐	500.000	441.345	207673.51	0.0323	P	4.3
3	☐	5000.000	5117.412	2303252.31	0.3507	A	2.0
4	☐	12500.000	13943.765	5855027.71	0.9518	A	2.2
5	☐	25000.000	27201.342	10864223.34	1.8545	A	6.2
6	☐	50000.000	54258.042	22502155.18	3.6969	A	1.2
7	☐	100000.00	103969.06	44231287.83	7.0819	A	1.2
8	☐	500000.00	498633.10	203180521.1	33.9558	A	22.5

$$y = 6.8093\text{E-}005 * x + 0.0023$$

$$R = 0.9999$$

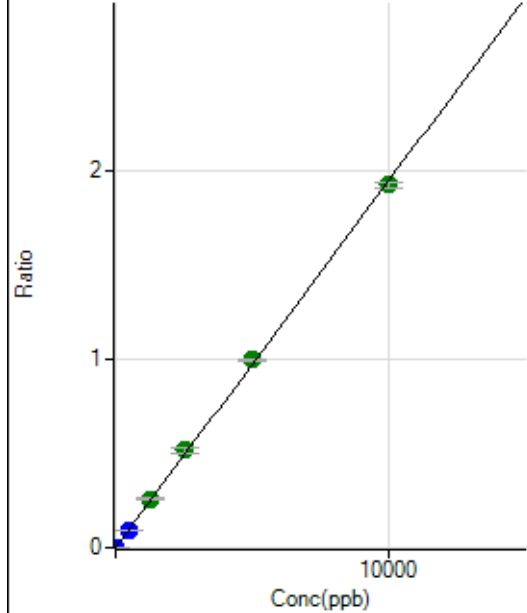
$$DL = 15.47$$

$$BEC = 33.47$$

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	363.90	0.0001	P	21.4
2	☐	5.000	4.528	6006.99	0.0009	P	0.6
3	☐	500.000	472.786	602864.07	0.0918	P	3.4
4	☐	1250.000	1320.787	1577596.33	0.2564	A	3.4
5	☐	2500.000	2656.234	3021746.57	0.5157	A	5.3
6	☐	5000.000	5117.045	6046384.90	0.9934	A	1.7
7	☐	10000.000	9894.931	11997676.31	1.9208	A	1.5
8	☐			3956.20	0.0007	P	24.7

$$y = 1.9412\text{E-}004 * x + 5.5359\text{E-}005$$

$$R = 0.9997$$

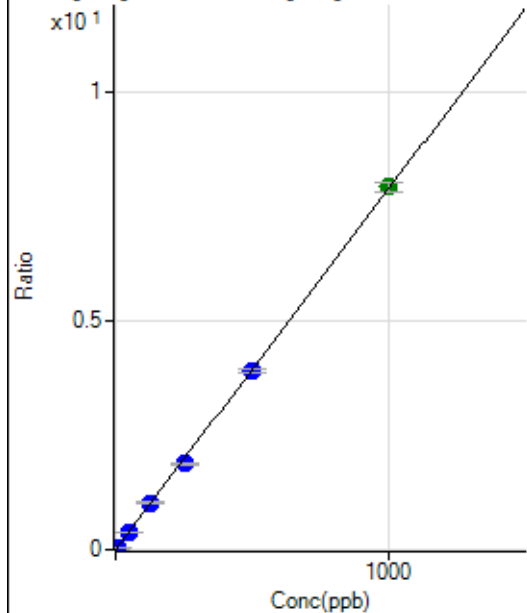
$$DL = 0.1831$$

$$BEC = 0.2852$$

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	8.89	0.0000	P	78.9
2	☐	5.000	4.429	8092.35	0.0350	P	2.4
3	☐	50.000	46.982	84660.09	0.3704	P	1.4
4	☐	125.000	129.807	224665.28	1.0234	P	1.4
5	☐	250.000	238.105	414712.78	1.8773	P	2.7
6	☐	500.000	494.413	858954.02	3.8980	P	1.9
7	☐	1000.000	1005.320	1710747.79	7.9260	A	2.4
8	☐			563.35	0.0027	P	4.7

$$y = 0.0079 * x + 3.8213\text{E-}005$$

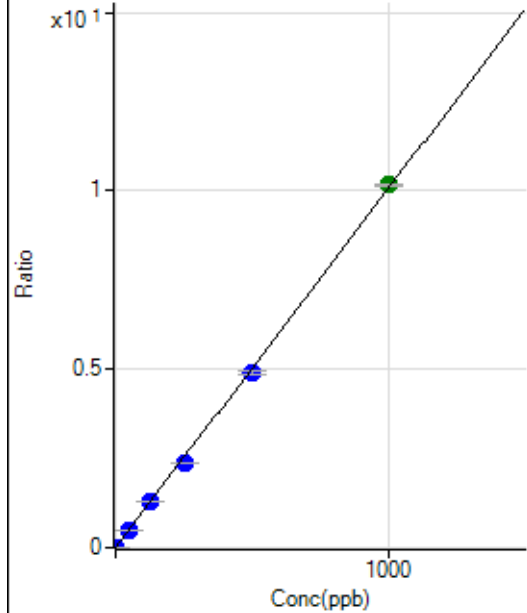
$$R = 0.9999$$

$$DL = 0.01147$$

$$BEC = 0.004847$$

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	736.69	0.0032	P	5.7
2	☐	2.000	1.767	4848.64	0.0209	P	1.5
3	☐	50.000	46.803	108398.48	0.4743	P	1.4
4	☐	125.000	127.295	281990.79	1.2846	P	0.4
5	☐	250.000	235.788	525061.95	2.3769	P	1.8
6	☐	500.000	486.946	1080915.08	4.9053	P	2.1
7	☐	1000.000	1009.954	2194737.26	10.1704	A	0.8
8	☐			14555.32	0.0687	P	2.2

$$y = 0.0101 * x + 0.0032$$

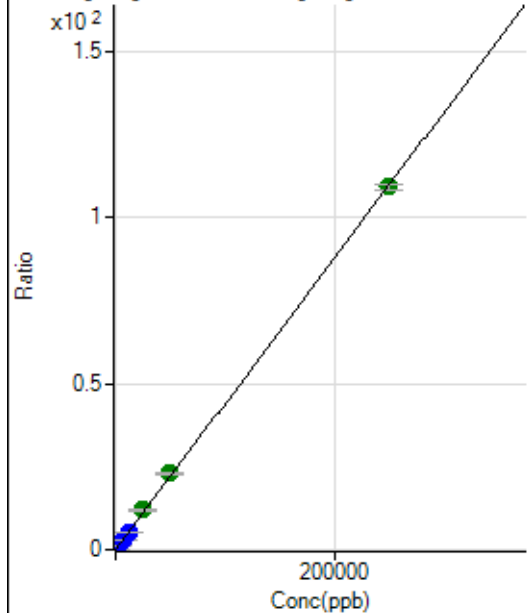
$$R = 0.9997$$

$$DL = 0.05377$$

$$BEC = 0.3133$$

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	881.53	0.0038	P	10.2
2	☐	50.000	49.761	5923.56	0.0256	P	2.3
3	☐	2500.000	2484.810	249778.49	1.0930	P	1.6
4	☐	6250.000	6761.746	651451.86	2.9677	P	0.1
5	☐	12500.000	12373.750	1199009.32	5.4277	P	1.8
6	☐	25000.000	27298.432	2637399.08	11.9698	A	2.0
7	☐	50000.000	52436.787	4961993.28	22.9890	A	1.8
8	☐	250000.00	249276.47	23161310.01	109.2722	A	1.6

$$y = 4.3834E-004 * x + 0.0038$$

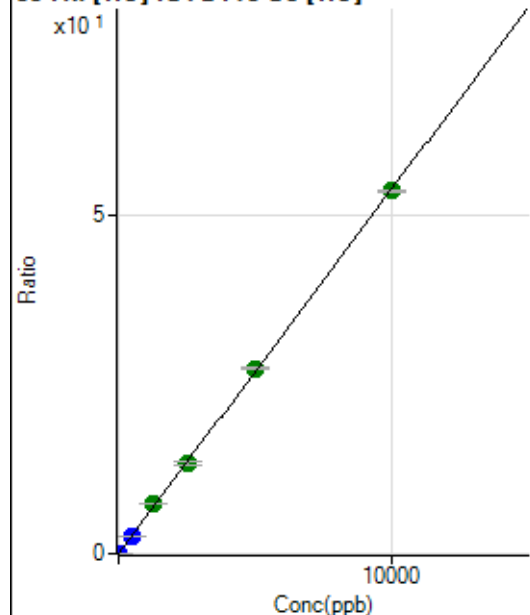
$$R = 0.9999$$

$$DL = 2.645$$

$$BEC = 8.612$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	71.11	0.0003	P	4.6
2	☐	1.000	1.317	1713.46	0.0074	P	7.7
3	☐	500.000	479.221	589912.60	2.5814	P	2.4
4	☐	1250.000	1361.369	1609669.31	7.3326	A	1.3
5	☐	2500.000	2463.196	2930991.07	13.2670	A	4.8
6	☐	5000.000	5075.909	6024298.52	27.3389	A	1.2
7	☐	10000.000	9958.364	11574934.41	53.6356	A	0.4
8	☐			12099.66	0.0571	P	2.4

$$y = 0.0054 * x + 3.0427E-004$$

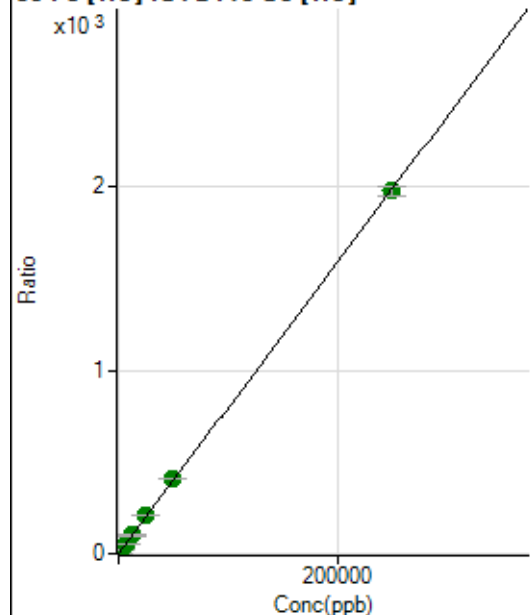
$$R = 0.9999$$

$$DL = 0.007784$$

$$BEC = 0.05649$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	7007.45	0.0300	P	23.0
2	☐	50.000	47.328	93919.68	0.4056	P	1.8
3	☐	2500.000	2571.959	4671432.63	20.4413	A	2.0
4	☐	6250.000	6912.464	12050030.59	54.8879	A	3.0
5	☐	12500.000	12630.095	22149821.79	100.2635	A	3.5
6	☐	25000.000	26526.681	46390800.57	210.5478	A	0.9
7	☐	50000.000	51930.324	88945140.88	412.1531	A	0.6
8	☐	250000.00	249437.48	419675839.0	1,979.585	A	2.3

$$y = 0.0079 * x + 0.0300$$

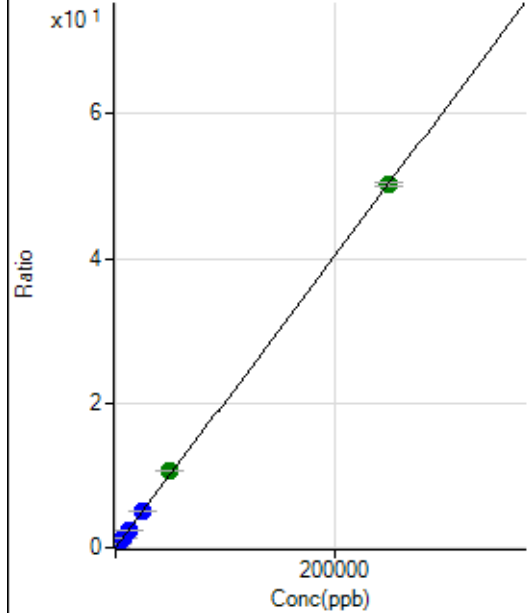
$$R = 1.0000$$

$$DL = 2.608$$

$$BEC = 3.784$$

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	248.16	0.0011	P	15.3
2	☐	50.000	49.339	2544.72	0.0110	P	3.8
3	☐	2500.000	2424.129	111650.04	0.4886	P	2.2
4	☐	6250.000	6620.335	292488.16	1.3324	P	0.8
5	☐	12500.000	11973.762	532155.27	2.4090	P	1.3
6	☐	25000.000	25325.188	1122417.52	5.0940	P	0.5
7	☐	50000.000	52798.624	2291766.02	10.6189	A	1.8
8	☐	250000.00	249425.56	10631735.66	50.1609	A	1.1

$$y = 2.0110\text{E-}004 * x + 0.0011$$

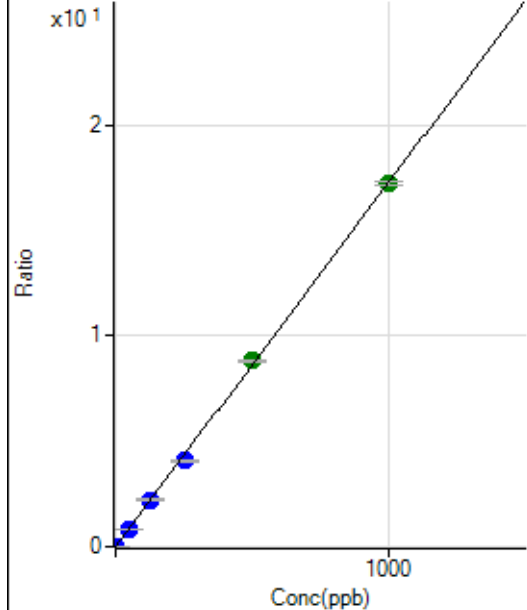
$$R = 0.9999$$

$$DL = 2.423$$

$$BEC = 5.286$$

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	52.22	0.0002	P	12.7
2	☐	1.000	0.908	3682.74	0.0159	P	6.6
3	☐	50.000	47.632	187987.94	0.8226	P	2.5
4	☐	125.000	128.480	487012.31	2.2185	P	1.6
5	☐	250.000	236.823	903294.78	4.0890	P	1.8
6	☐	500.000	511.924	1947584.33	8.8387	A	0.8
7	☐	1000.000	997.016	3715013.03	17.2140	A	1.1
8	☐			3360.43	0.0159	P	1.3

$$y = 0.0173 * x + 2.2341\text{E-}004$$

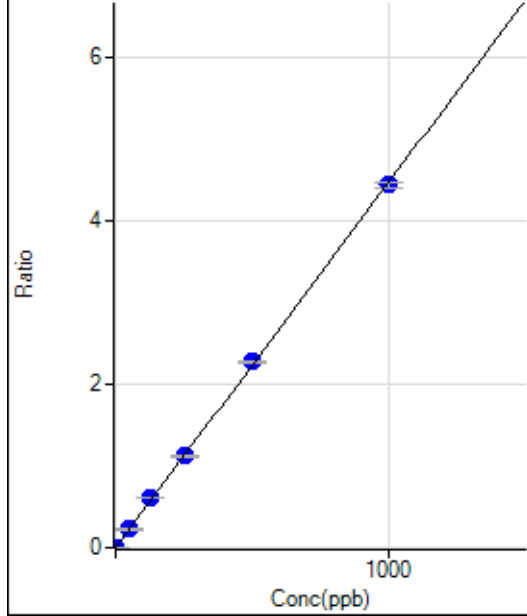
$$R = 0.9998$$

$$DL = 0.004938$$

$$BEC = 0.01294$$

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	24.45	0.0001	P	43.4
2	☐	1.000	0.998	1055.61	0.0046	P	4.2
3	☐	50.000	50.491	51513.17	0.2254	P	2.5
4	☐	125.000	136.543	133775.77	0.6094	P	1.3
5	☐	250.000	252.496	248920.83	1.1268	P	2.2
6	☐	500.000	508.555	500014.71	2.2694	P	1.1
7	☐	1000.000	993.631	956949.74	4.4339	P	1.6
8	☐			2789.19	0.0132	P	3.6

$$y = 0.0045 * x + 1.0454E-004$$

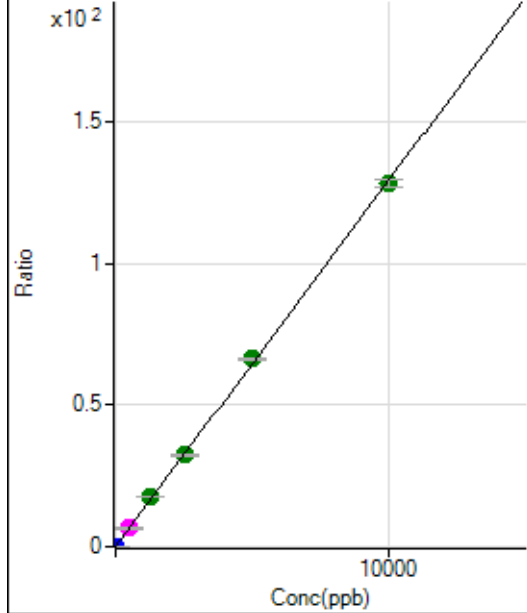
$$R = 0.9999$$

$$DL = 0.03052$$

$$BEC = 0.02343$$

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	951.15	0.0041	P	4.2
2	☐	2.000	1.876	6558.24	0.0283	P	3.9
3	☐	500.000	503.360	1488371.12	6.5133	M	4.7
4	☐	1250.000	1375.902	3906752.51	17.7967	A	2.0
5	☐	2500.000	2512.149	7177454.82	32.4902	A	2.7
6	☐	5000.000	5134.140	14630306.59	66.3967	A	0.9
7	☐	10000.000	9913.987	27668159.59	128.2077	A	2.1
8	☐			9336.49	0.0440	P	3.9

$$y = 0.0129 * x + 0.0041$$

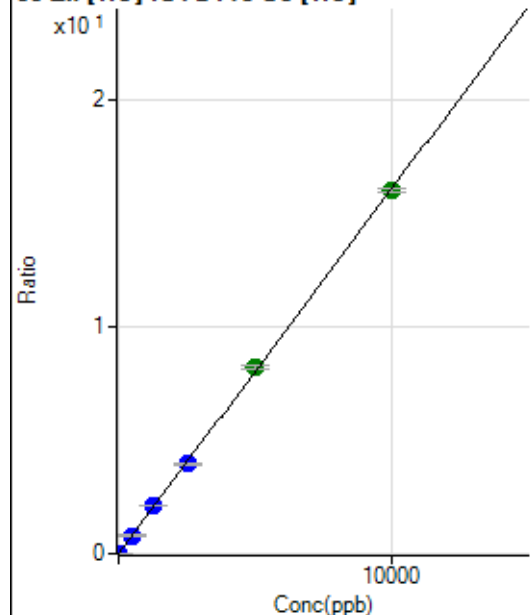
$$R = 0.9998$$

$$DL = 0.0398$$

$$BEC = 0.3148$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	145.56	0.0006	P	17.8
2	☐	2.000	2.110	931.15	0.0040	P	3.1
3	☐	500.000	498.012	183432.08	0.8026	P	1.2
4	☐	1250.000	1336.806	472723.52	2.1534	P	0.9
5	☐	2500.000	2471.453	879359.20	3.9807	P	1.7
6	☐	5000.000	5095.044	1808095.84	8.2058	A	2.0
7	☐	10000.000	9948.863	3457207.86	16.0225	A	1.1
8	☐			2743.63	0.0129	P	5.1

$$y = 0.0016 * x + 6.2339E-004$$

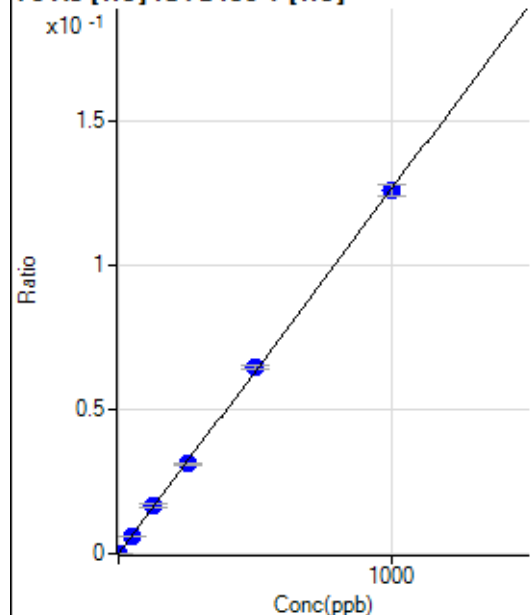
$$R = 0.9999$$

$$DL = 0.2072$$

$$BEC = 0.3871$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	6.33	0.0000	P	47.8
2	☐	1.000	0.945	209.36	0.0001	P	7.8
3	☐	50.000	48.705	10599.05	0.0062	P	2.1
4	☐	125.000	132.656	27362.52	0.0168	P	6.0
5	☐	250.000	245.350	50888.23	0.0310	P	3.3
6	☐	500.000	510.898	103511.19	0.0645	P	2.5
7	☐	1000.000	994.821	200393.98	0.1256	P	3.2
8	☐			59.68	0.0000	P	2.5

$$y = 1.2626E-004 * x + 3.7470E-006$$

$$R = 0.9999$$

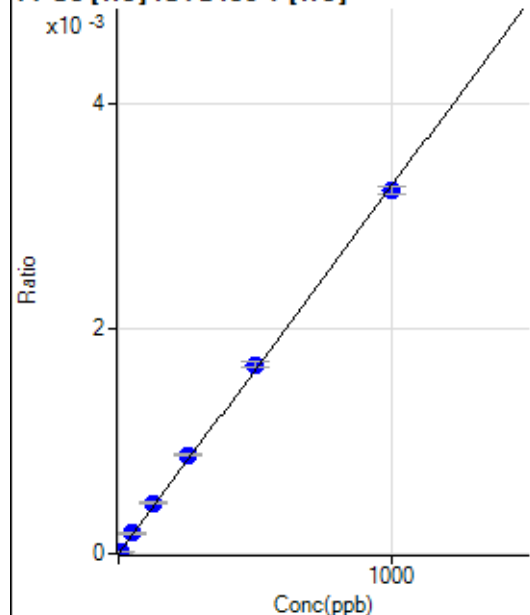
$$DL = 0.04252$$

$$BEC = 0.02968$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	1.11	0.0000	P	173.
2	☐	5.000	3.211	18.89	0.0000	P	37.5
3	☐	50.000	56.245	317.79	0.0002	P	12.6
4	☐	125.000	138.064	737.80	0.0005	P	5.4
5	☐	250.000	268.375	1441.20	0.0009	P	2.1
6	☐	500.000	513.100	2691.40	0.0017	P	3.1
7	☐	1000.000	986.920	5144.33	0.0032	P	2.1
8	☐			2.22	0.0000	P	86.6

$$y = 3.2667\text{E-}006 * x + 6.5002\text{E-}007$$

$$R = 0.9996$$

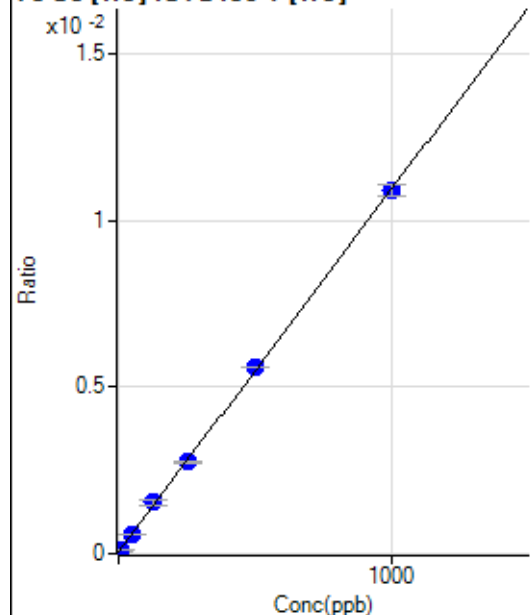
$$DL = 1.034$$

$$BEC = 0.199$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	93.34	0.0001	P	3.2
2	☐	5.000	4.258	172.69	0.0001	P	7.3
3	☐	50.000	48.339	1000.14	0.0006	P	3.3
4	☐	125.000	135.895	2499.81	0.0015	P	10.2
5	☐	250.000	247.804	4516.52	0.0027	P	0.9
6	☐	500.000	507.882	8949.41	0.0056	P	0.2
7	☐	1000.000	995.333	17348.07	0.0109	P	3.0
8	☐			85.68	0.0001	P	18.3

$$y = 1.0871\text{E-}005 * x + 5.5223\text{E-}005$$

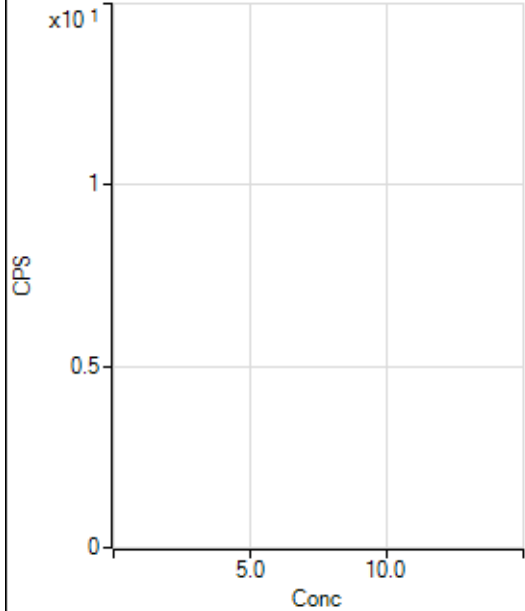
$$R = 0.9999$$

$$DL = 0.4818$$

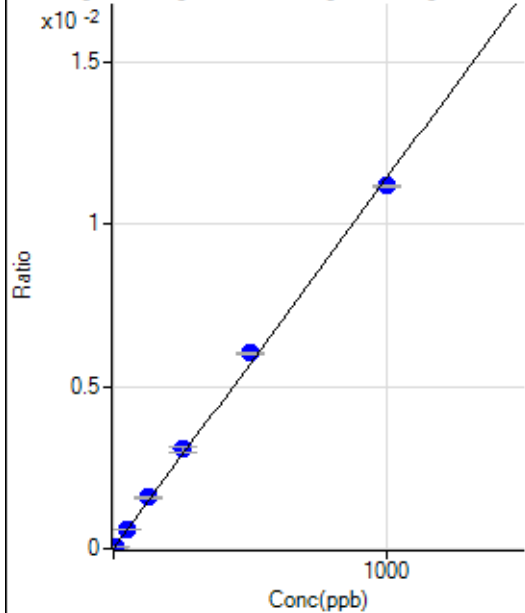
$$BEC = 5.08$$

Weight: <None>

Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			42425.30		P	3.4
2	☐			40310.49		P	3.3
3	☐			41963.40		P	6.6
4	☐			39808.03		P	1.2
5	☐			40132.97		P	1.6
6	☐			37850.97		P	1.9
7	☐			39343.00		P	4.3
8	☐			38192.00		P	2.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	56.67	0.0000	P	35.6
2	☐	5.000	4.344	762.03	0.0001	P	1.6
3	☐	50.000	52.017	8478.83	0.0006	P	2.1
4	☐	125.000	138.036	21755.55	0.0016	P	1.3
5	☐	250.000	268.540	40894.43	0.0031	P	6.0
6	☐	500.000	527.832	81882.10	0.0060	P	1.0
7	☐	1000.000	979.722	158920.15	0.0112	P	0.8
8	☐			260.40	0.0000	P	25.0

$$y = 1.1399\text{E-}005 * x + 3.9702\text{E-}006$$

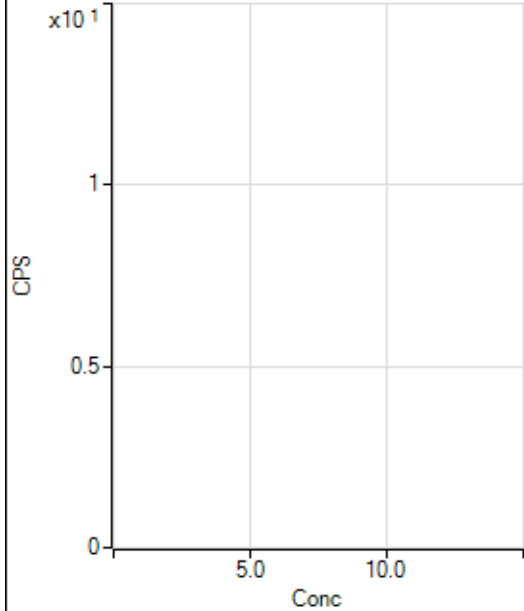
$$R = 0.9992$$

$$DL = 0.3725$$

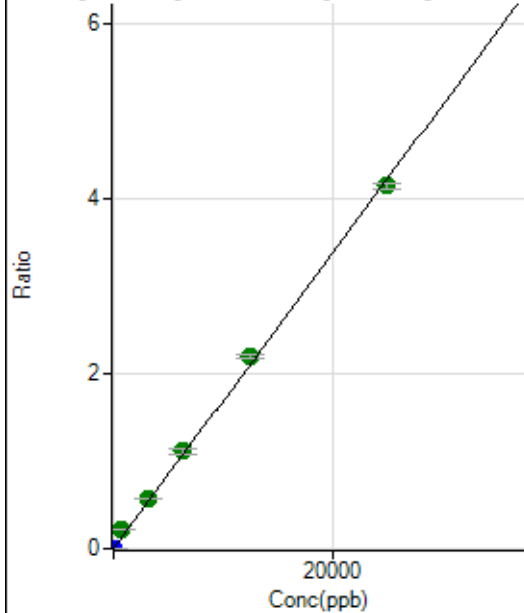
$$BEC = 0.3483$$

Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			349.54		P	5.1
2	☐			387.88		P	1.9
3	☐			396.63		P	3.3
4	☐			387.46		P	4.5
5	☐			374.54		P	1.3
6	☐			374.96		P	6.1
7	☐			394.13		P	4.2
8	☐			389.96		P	8.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	950.07	0.0001	P	48.7
2	☐	1.000	0.758	2758.69	0.0002	P	3.0
3	☐	625.000	1260.869	3019108.27	0.2125	A	0.6
4	☐	3125.000	3375.297	7846250.00	0.5688	A	1.6
5	☐	6250.000	6589.432	14820236.09	1.1104	A	5.1
6	☐	12500.000	13009.067	29812962.82	2.1921	A	2.3
7	☐	25000.000	24613.425	59003156.87	4.1475	A	1.3
8	☐			23745.88	0.0018	P	23.7

$$y = 1.6850E-004 * x + 6.5875E-005$$

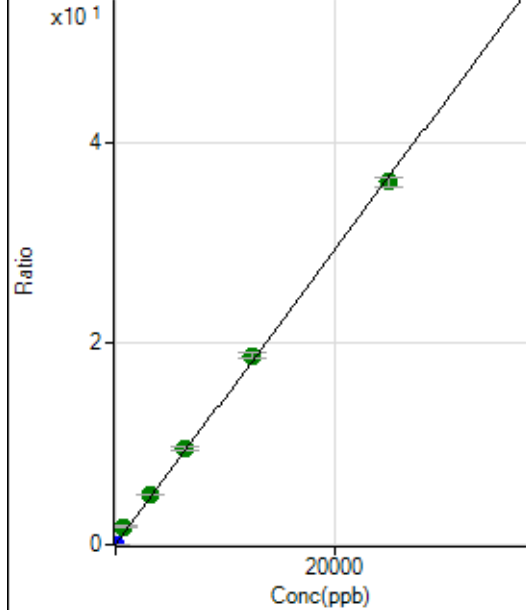
$$R = 0.9994$$

$$DL = 0.5713$$

$$BEC = 0.3909$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2387.74	0.0002	P	145.
2	☐	1.000	0.835	19708.96	0.0014	P	3.5
3	☐	625.000	1238.967	25688083.04	1.8086	A	3.2
4	☐	3125.000	3357.499	67605191.10	4.9010	A	1.0
5	☐	6250.000	6564.782	127890148.6	9.5826	A	5.2
6	☐	12500.000	12864.431	255320744.6	18.7780	A	3.6
7	☐	25000.000	24694.677	512750467.0	36.0463	A	2.9
8	☐			196915.29	0.0148	P	21.6

$$y = 0.0015 * x + 1.6349E-004$$

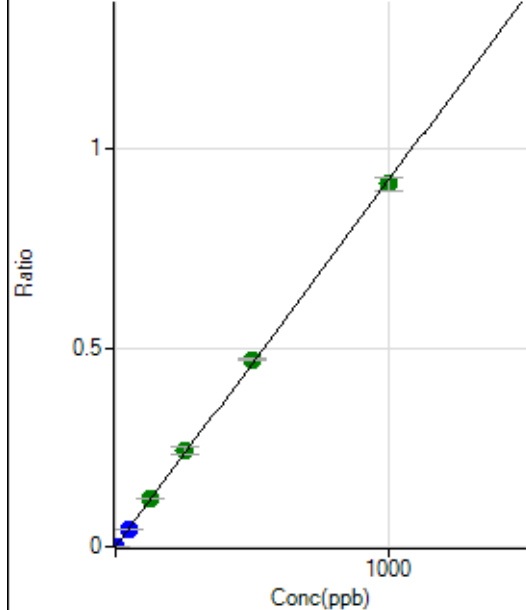
$$R = 0.9996$$

$$DL = 0.4888$$

$$BEC = 0.112$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	572.25	0.0000	P	7.0
2	☐	1.000	0.888	12202.88	0.0009	P	4.6
3	☐	50.000	48.064	628973.69	0.0443	P	0.7
4	☐	125.000	131.322	1667509.87	0.1209	A	0.9
5	☐	250.000	262.589	3222348.64	0.2417	A	8.2
6	☐	500.000	511.733	6405372.67	0.4710	A	1.0
7	☐	1000.000	990.293	12962468.43	0.9114	A	3.9
8	☐			4717.60	0.0004	P	20.5

$$y = 9.2034E-004 * x + 3.9916E-005$$

$$R = 0.9998$$

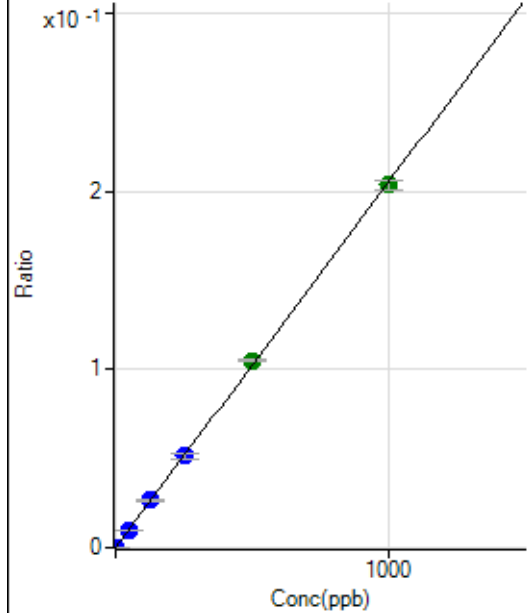
$$DL = 0.009085$$

$$BEC = 0.04337$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	133.34	0.0000	P	33.7
2	☐	1.000	0.861	2647.54	0.0002	P	5.6
3	☐	50.000	48.499	141488.10	0.0100	P	1.2
4	☐	125.000	129.062	365337.62	0.0265	P	0.9
5	☐	250.000	251.528	688589.98	0.0516	P	6.2
6	☐	500.000	512.528	1430206.87	0.1052	A	1.1
7	☐	1000.000	992.921	2897713.07	0.2037	A	2.4
8	☐			1019.51	0.0001	P	17.0

$$y = 2.0517E-004 * x + 9.2846E-006$$

$$R = 0.9999$$

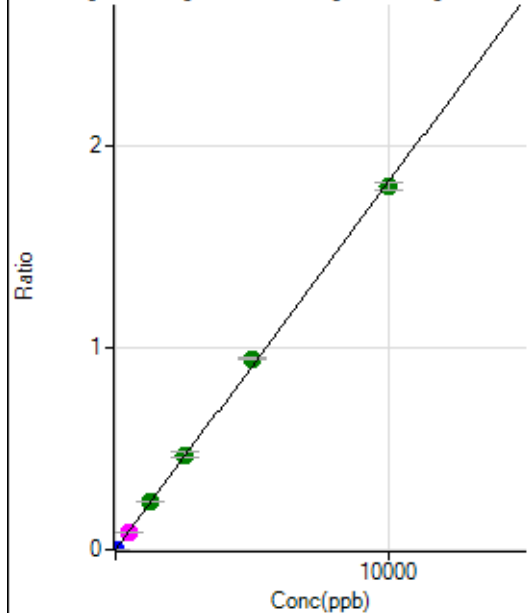
$$DL = 0.04574$$

$$BEC = 0.04525$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	316.69	0.0000	P	52.3
2	☐	5.000	5.192	13804.47	0.0010	P	1.9
3	☐	500.000	483.578	1253292.65	0.0882	M	0.5
4	☐	1250.000	1321.590	3325246.86	0.2411	A	0.5
5	☐	2500.000	2584.624	6293165.46	0.4715	A	5.1
6	☐	5000.000	5203.570	12907491.87	0.9491	A	0.5
7	☐	10000.000	9868.931	25604655.44	1.8001	A	2.3
8	☐			10165.15	0.0008	P	20.9

$$y = 1.8240E-004 * x + 2.1936E-005$$

$$R = 0.9996$$

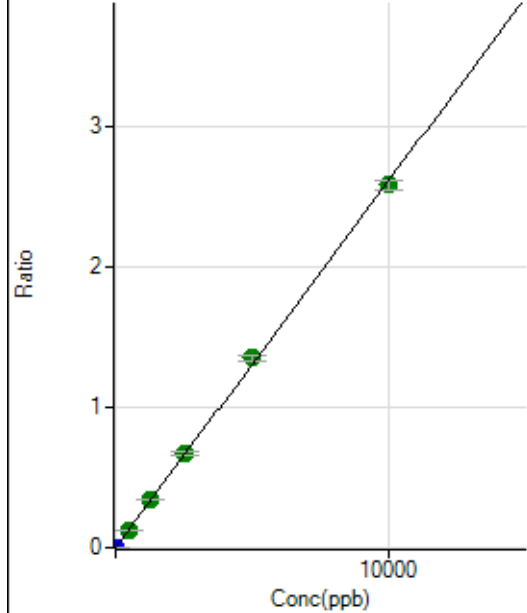
$$DL = 0.1887$$

$$BEC = 0.1203$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	177.79	0.0000	P	140.
2	☐	5.000	4.466	16760.58	0.0012	P	3.1
3	☐	500.000	480.611	1780574.15	0.1253	A	1.8
4	☐	1250.000	1326.278	4770618.47	0.3459	A	1.1
5	☐	2500.000	2556.067	8897091.95	0.6666	A	5.0
6	☐	5000.000	5170.431	18338523.33	1.3484	A	2.3
7	☐	10000.000	9892.202	36690961.58	2.5798	A	2.6
8	☐			13648.82	0.0010	P	21.9

$$y = 2.6079E-004 * x + 1.2188E-005$$

$$R = 0.9997$$

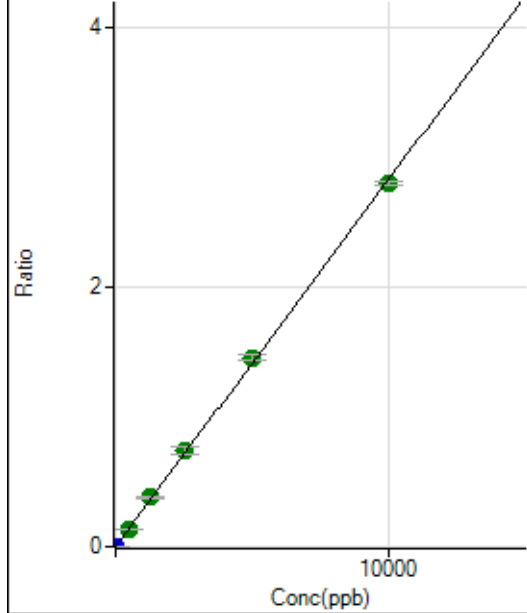
$$DL = 0.1963$$

$$BEC = 0.04674$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	291.68	0.0000	P	79.7
2	☐	5.000	4.712	19272.23	0.0014	P	0.4
3	☐	500.000	491.607	1975181.27	0.1391	A	1.6
4	☐	1250.000	1339.262	5224682.88	0.3788	A	1.5
5	☐	2500.000	2617.842	9872572.09	0.7404	A	7.3
6	☐	5000.000	5148.380	19799339.68	1.4560	A	3.0
7	☐	10000.000	9885.612	39773063.39	2.7957	A	0.9
8	☐			27954.11	0.0021	P	20.2

$$y = 2.8281E-004 * x + 2.0141E-005$$

$$R = 0.9997$$

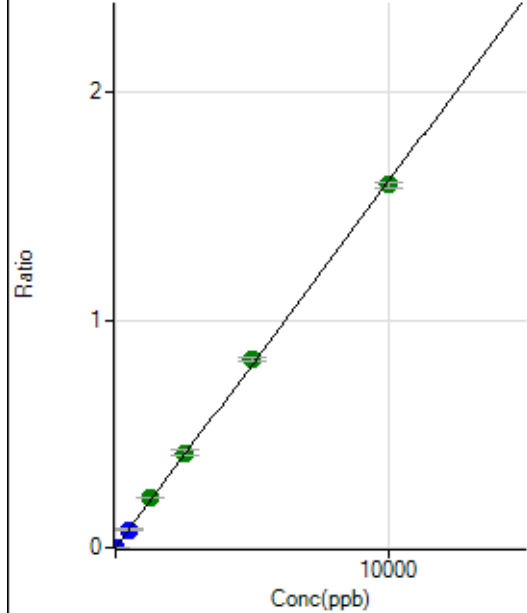
$$DL = 0.1702$$

$$BEC = 0.07122$$

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	138.90	0.0000	P	146.
2	☐	5.000	4.663	10835.07	0.0008	P	2.1
3	☐	500.000	494.590	1131756.85	0.0797	P	1.9
4	☐	1250.000	1345.155	2988880.95	0.2167	A	0.4
5	☐	2500.000	2583.397	5550205.68	0.4161	A	6.8
6	☐	5000.000	5125.383	11226643.39	0.8256	A	2.0
7	☐	10000.000	9904.835	22693826.73	1.5955	A	1.5
8	☐			8516.77	0.0006	P	20.8

$$y = 1.6108\text{E-}004 * x + 9.5078\text{E-}006$$

$$R = 0.9998$$

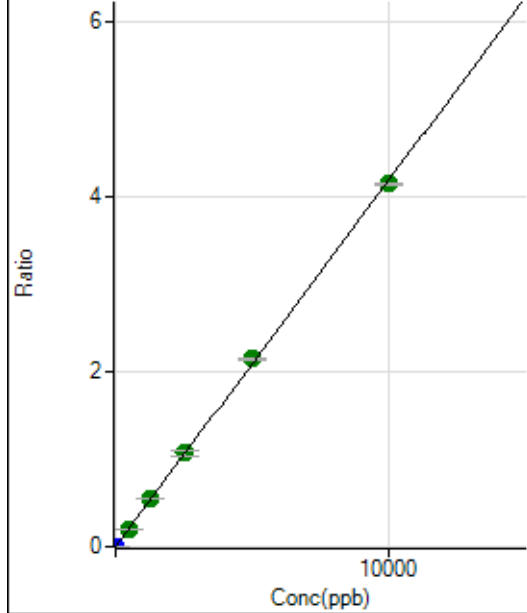
$$DL = 0.2594$$

$$BEC = 0.05903$$

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	275.02	0.0000	P	151.
2	☐	5.000	4.588	27611.43	0.0019	P	2.5
3	☐	500.000	486.027	2888866.99	0.2034	A	1.0
4	☐	1250.000	1308.714	7552889.23	0.5476	A	1.5
5	☐	2500.000	2552.805	14257836.60	1.0681	A	4.6
6	☐	5000.000	5141.111	29251914.89	2.1510	A	0.8
7	☐	10000.000	9909.603	58979766.60	4.1460	A	0.6
8	☐			21055.59	0.0016	P	20.5

$$y = 4.1838\text{E-}004 * x + 1.8816\text{E-}005$$

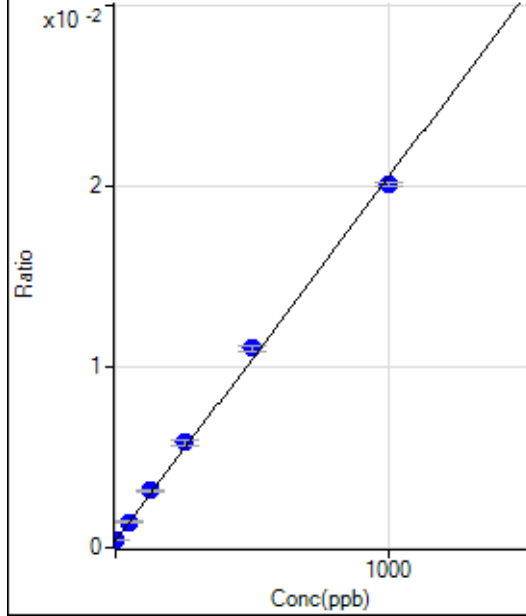
$$R = 0.9998$$

$$DL = 0.2045$$

$$BEC = 0.04497$$

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	3825.64	0.0004	P	1.4
2	☐	1.000	1.055	3950.69	0.0004	P	1.9
3	☐	50.000	52.187	14107.58	0.0014	P	4.8
4	☐	125.000	138.712	31520.27	0.0032	P	2.7
5	☐	250.000	270.562	55507.06	0.0058	P	6.1
6	☐	500.000	528.732	107420.39	0.0110	P	2.7
7	☐	1000.000	978.670	205037.90	0.0201	P	1.0
8	☐			4078.54	0.0004	P	4.0

$$y = 2.0105\text{E-}005 * x + 3.8459\text{E-}004$$

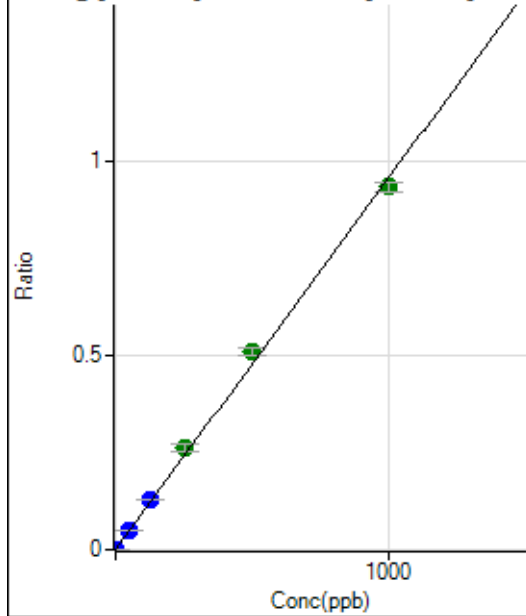
$$R = 0.9991$$

$$DL = 0.7835$$

$$BEC = 19.13$$

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	375.03	0.0000	P	72.5
2	☐	1.000	0.948	9181.06	0.0009	P	5.5
3	☐	50.000	51.856	487877.14	0.0496	P	3.2
4	☐	125.000	134.675	1278465.55	0.1287	P	1.5
5	☐	250.000	273.706	2492133.56	0.2616	A	6.8
6	☐	500.000	532.924	4965324.07	0.5093	A	4.1
7	☐	1000.000	976.309	9534667.66	0.9330	A	2.9
8	☐			5640.22	0.0006	P	23.0

$$y = 9.5559\text{E-}004 * x + 3.7564\text{E-}005$$

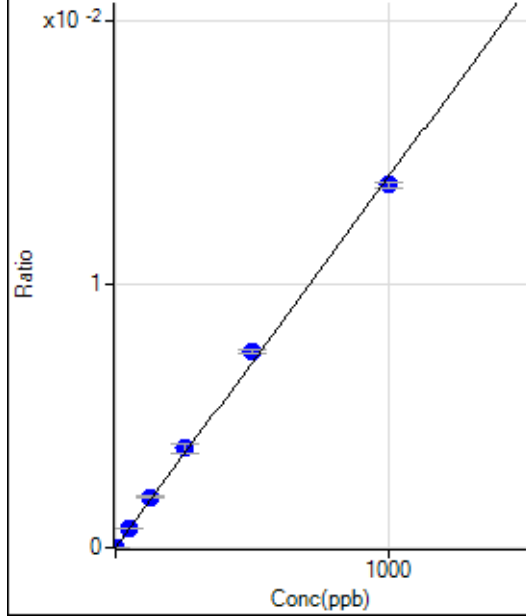
$$R = 0.9988$$

$$DL = 0.08546$$

$$BEC = 0.03931$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	11.11	0.0000	P	57.1
2	☐	1.000	0.954	141.67	0.0000	P	18.2
3	☐	50.000	52.386	7270.05	0.0007	P	2.4
4	☐	125.000	137.369	19224.68	0.0019	P	1.6
5	☐	250.000	268.904	36046.00	0.0038	P	9.1
6	☐	500.000	529.625	72745.59	0.0075	P	2.1
7	☐	1000.000	978.796	140870.01	0.0138	P	1.5
8	☐			136.11	0.0000	P	31.7

$$y = 1.4080\text{E-}005 * x + 1.1148\text{E-}006$$

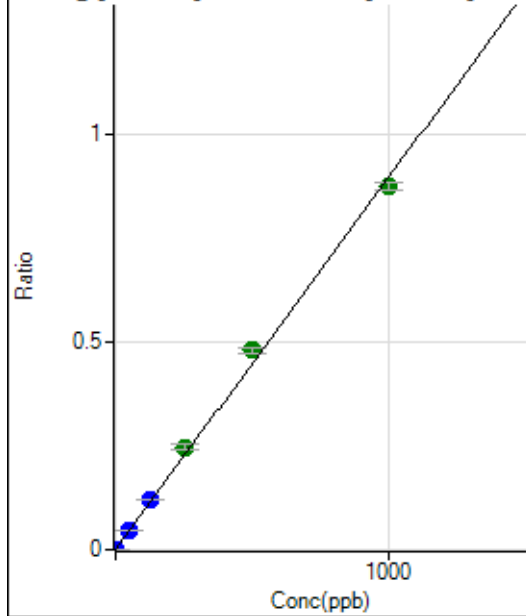
$$R = 0.9991$$

$$DL = 0.1356$$

$$BEC = 0.07918$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	266.69	0.0000	P	111.
2	☐	1.000	0.968	8714.08	0.0009	P	0.6
3	☐	50.000	52.363	462551.12	0.0470	P	2.6
4	☐	125.000	135.416	1207345.39	0.1215	P	1.4
5	☐	250.000	274.561	2348540.81	0.2464	A	5.8
6	☐	500.000	534.964	4682193.55	0.4801	A	2.3
7	☐	1000.000	974.958	8941796.47	0.8749	A	2.3
8	☐			5020.50	0.0005	P	20.9

$$y = 8.9735\text{E-}004 * x + 2.6690\text{E-}005$$

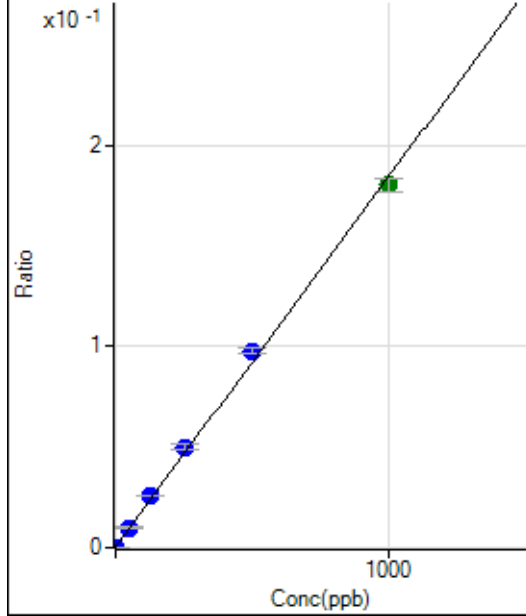
$$R = 0.9987$$

$$DL = 0.09926$$

$$BEC = 0.02974$$

Weight: <None>

Min Conc: 0

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	2697.95	0.0003	P	1.6
2	☐	1.000	1.017	4462.28	0.0005	P	2.2
3	☐	50.000	52.886	98469.89	0.0100	P	1.7
4	☐	125.000	138.051	255148.74	0.0257	P	0.5
5	☐	250.000	270.379	476890.87	0.0500	P	6.5
6	☐	500.000	529.406	953172.03	0.0977	P	2.6
7	☐	1000.000	978.426	1843967.23	0.1804	A	3.8
8	☐			3587.51	0.0004	P	6.9

$$y = 1.8411\text{E-}004 * x + 2.7122\text{E-}004$$

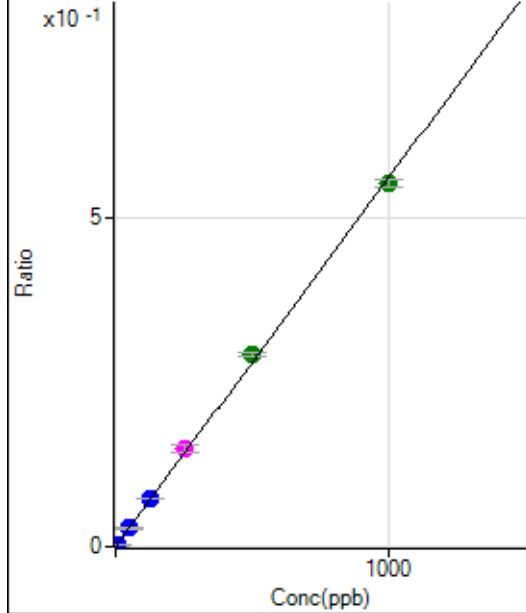
$$R = 0.9991$$

$$DL = 0.07193$$

$$BEC = 1.473$$

Weight: <None>

Min Conc: 0

118 Sn [No Gas] ISTD :159 Tb [No Gas]

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	786.16	0.0001	P	21.4
2	☐	5.000	4.892	27472.72	0.0028	P	1.5
3	☐	50.000	50.103	277169.03	0.0282	P	3.9
4	☐	125.000	130.881	729790.37	0.0735	P	0.9
5	☐	250.000	265.228	1417485.31	0.1488	M	7.0
6	☐	500.000	522.883	2861488.39	0.2933	A	1.9
7	☐	1000.000	984.012	5640823.22	0.5519	A	2.0
8	☐			6943.62	0.0007	P	22.1

$$y = 5.6075\text{E-}004 * x + 7.8972\text{E-}005$$

$$R = 0.9995$$

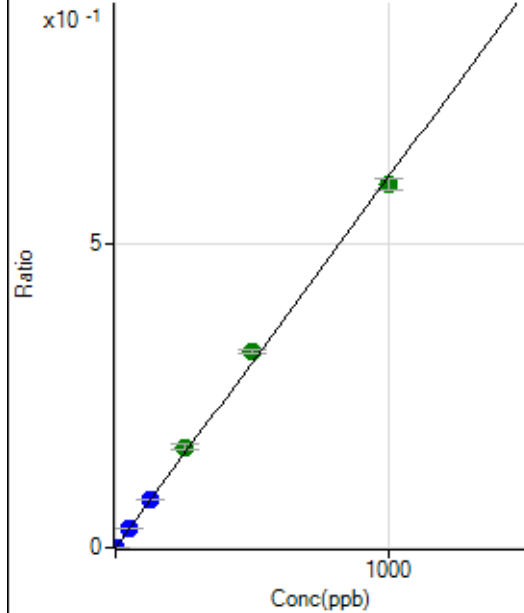
$$DL = 0.0903$$

$$BEC = 0.1408$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	72.23	0.0000	P	62.8
2	☐	2.000	1.814	10851.81	0.0011	P	2.5
3	☐	50.000	49.701	298590.15	0.0303	P	1.1
4	☐	125.000	130.271	789938.00	0.0795	P	0.8
5	☐	250.000	272.385	1583898.58	0.1663	A	7.1
6	☐	500.000	529.362	3152094.19	0.3231	A	2.0
7	☐	1000.000	979.079	6107826.74	0.5977	A	3.1
8	☐			4425.84	0.0005	P	33.5

$$y = 6.1042\text{E-}004 * x + 7.2421\text{E-}006$$

$$R = 0.9990$$

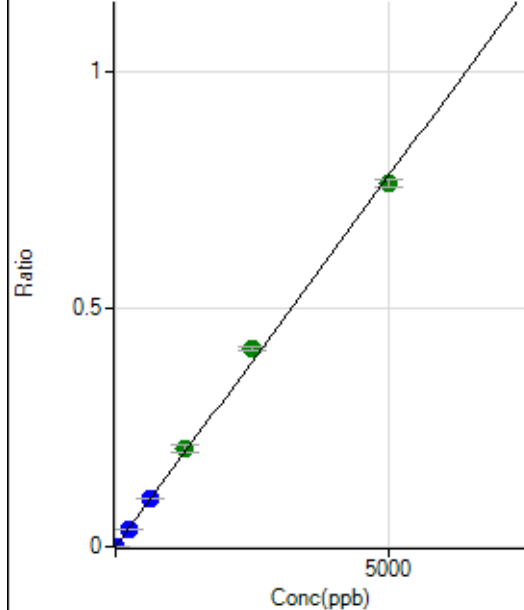
$$DL = 0.02235$$

$$BEC = 0.01186$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	83.34	0.0000	P	121.
2	☐	10.000	9.054	13807.43	0.0014	P	4.3
3	☐	250.000	243.855	373746.92	0.0380	P	1.5
4	☐	625.000	642.272	993589.63	0.1000	P	1.8
5	☐	1250.000	1328.736	1970074.65	0.2069	A	8.5
6	☐	2500.000	2666.762	4050606.52	0.4153	A	2.2
7	☐	5000.000	4895.085	7791292.54	0.7623	A	2.3
8	☐			5070.53	0.0005	P	21.0

$$y = 1.5573\text{E-}004 * x + 8.3299\text{E-}006$$

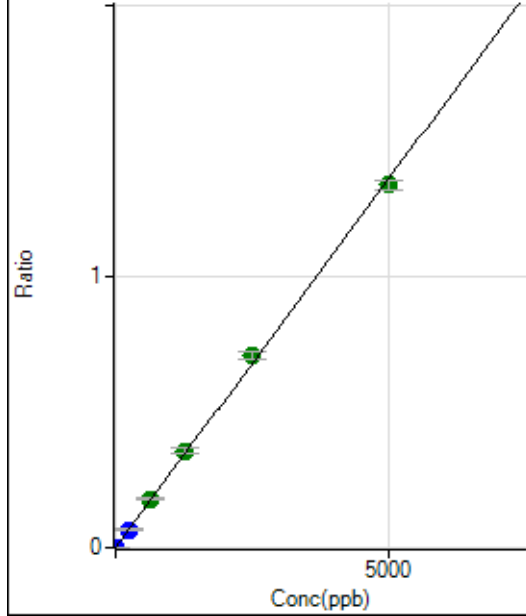
$$R = 0.9990$$

$$DL = 0.1945$$

$$BEC = 0.05349$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	100.01	0.0000	P	129.
2	☐	10.000	9.003	23910.69	0.0025	P	0.5
3	☐	250.000	245.619	656671.86	0.0667	P	2.3
4	☐	625.000	662.003	1786778.60	0.1799	A	1.3
5	☐	1250.000	1314.356	3403506.50	0.3571	A	5.9
6	☐	2500.000	2615.791	6928768.04	0.7107	A	4.2
7	☐	5000.000	4921.611	13666139.45	1.3372	A	2.6
8	☐			8942.07	0.0010	P	22.6

$$y = 2.7170E-004 * x + 9.9979E-006$$

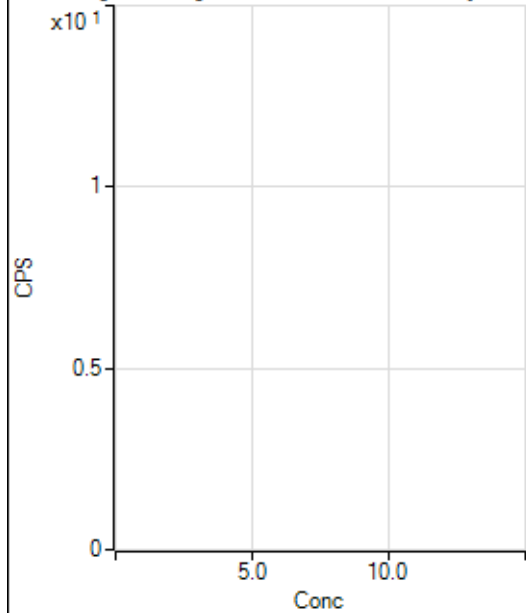
$$R = 0.9995$$

$$DL = 0.1432$$

$$BEC = 0.0368$$

Weight: <None>

Min Conc: 0

150 Nd [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐			15.55		P	107.
2	☐			15.55		P	24.8
3	☐			33.33		P	34.6
4	☐			91.11		P	16.9
5	☐			117.78		P	6.5
6	☐			300.01		P	21.4
7	☐			613.36		P	5.6
8	☐			62.22		P	55.0

150 Nd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			0.00		P	
3	☐			6.67		P	0.0
4	☐			6.67		P	50.0
5	☐			20.00		P	50.0
6	☐			38.89		P	35.7
7	☐			54.45		P	24.7
8	☐			13.33		P	25.0

156 Dy [No Gas] No available calibration points

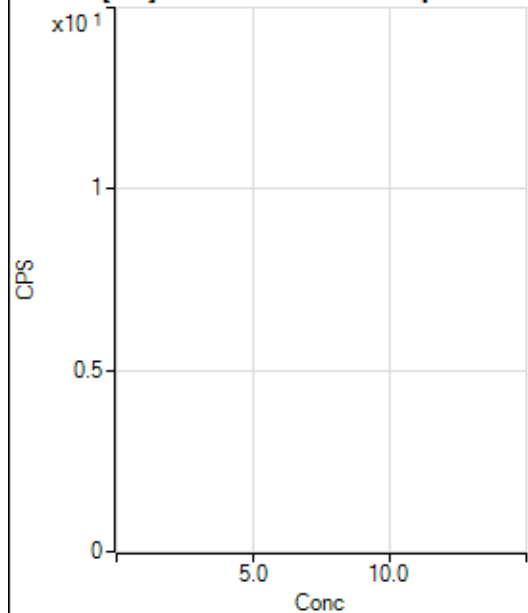
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			13.89		P	91.6
2	☐			13.89		P	91.6
3	☐			33.34		P	43.3
4	☐			66.67		P	45.1
5	☐			108.34		P	40.0
6	☐			208.34		P	31.7
7	☐			525.02		P	6.3
8	☐			1450.12		P	8.6

156 Dy [He] No available calibration points

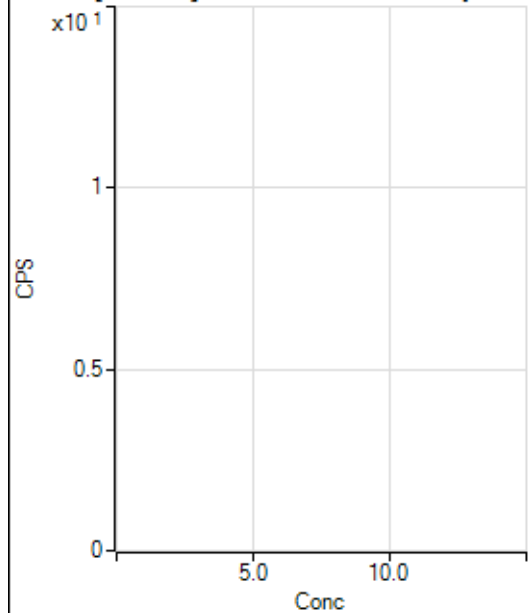
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			3.33		P	0.0
2	☐			2.22		P	86.6
3	☐			14.44		P	13.4
4	☐			22.22		P	45.8
5	☐			50.00		P	24.0
6	☐			87.78		P	11.6
7	☐			178.89		P	17.6
8	☐			528.90		P	6.7

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			83.34		P	0.0
2	☐			80.56		P	29.9
3	☐			63.89		P	15.1
4	☐			130.56		P	9.8
5	☐			169.45		P	32.0
6	☐			233.34		P	15.6
7	☐			477.80		P	2.7
8	☐			1489.02		P	6.5

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			115.56		P	30.8
2	☐			92.22		P	14.6
3	☐			105.55		P	61.3
4	☐			117.78		P	1.6
5	☐			121.11		P	1.6
6	☐			171.12		P	7.9
7	☐			230.00		P	10.4
8	☐			767.81		P	13.1

164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			61.11		P	7.9
2	☐			72.23		P	26.7
3	☐			72.23		P	13.3
4	☐			63.89		P	7.5
5	☐			86.11		P	20.1
6	☐			111.12		P	22.9
7	☐			155.56		P	11.2
8	☐			147.22		P	14.2

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			36.67		P	24.1
2	☐			30.00		P	48.4
3	☐			24.44		P	67.3
4	☐			30.00		P	50.9
5	☐			34.45		P	31.1
6	☐			34.44		P	36.6
7	☐			66.67		P	15.0
8	☐			44.44		P	4.3

172 Yb [No Gas] No available calibration points

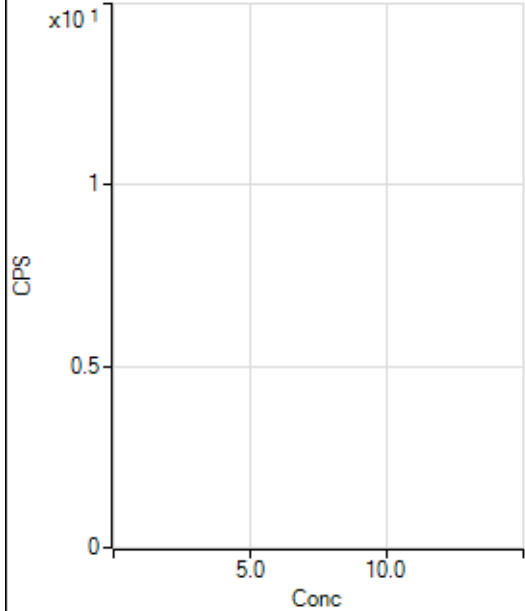
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			58.33		P	24.7
2	☐			80.56		P	23.9
3	☐			86.11		P	20.1
4	☐			55.56		P	22.9
5	☐			122.22		P	17.2
6	☐			130.56		P	9.8
7	☐			152.78		P	11.4
8	☐			544.47		P	6.2

172 Yb [He] No available calibration points

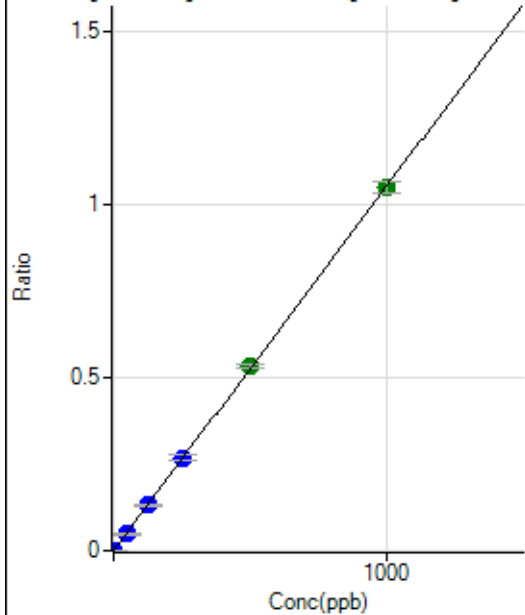
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			31.48		P	36.7
2	☐			25.93		P	61.9
3	☐			35.19		P	32.9
4	☐			40.74		P	39.4
5	☐			37.04		P	8.7
6	☐			57.41		P	24.3
7	☐			90.74		P	3.5
8	☐			270.38		P	7.2

176 Yb [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			1316.77		P	2.3
2	☐			1305.66		P	2.4
3	☐			2314.16		P	9.3
4	☐			4361.96		P	2.1
5	☐			7438.44		P	6.6
6	☐			14160.81		P	2.1
7	☐			26265.85		P	0.6
8	☐			1702.94		P	24.0

176 Yb [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7413.34		P	1.3
2	☐			7568.98		P	4.0
3	☐			7883.96		P	4.4
4	☐			8462.14		P	6.8
5	☐			9800.09		P	2.3
6	☐			12539.49		P	3.2
7	☐			17191.09		P	2.5
8	☐			7178.01		P	2.4

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	200.01	0.0000	P	12.5
2	☐	1.000	0.880	5662.51	0.0010	P	9.6
3	☐	50.000	45.373	283170.21	0.0478	P	3.4
4	☐	125.000	126.284	773197.25	0.1329	P	3.6
5	☐	250.000	255.002	1485802.39	0.2683	P	6.8
6	☐	500.000	505.760	3131624.83	0.5321	A	2.7
7	☐	1000.000	995.940	6173930.65	1.0477	A	3.3
8	☐			2269.70	0.0004	P	21.3

$$y = 0.0011 * x + 3.3715E-005$$

$$R = 0.9999$$

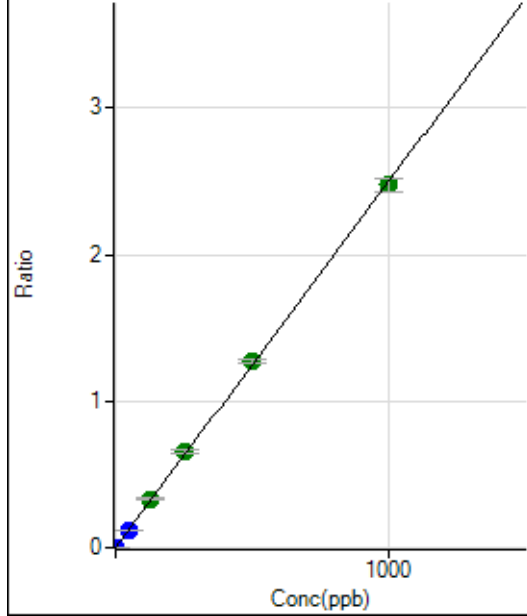
$$DL = 0.01198$$

$$BEC = 0.03205$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	427.80	0.0001	P	32.7
2	☐	1.000	0.856	13048.63	0.0022	P	2.3
3	☐	50.000	45.830	678706.03	0.1145	P	4.2
4	☐	125.000	132.635	1927696.46	0.3312	A	2.2
5	☐	250.000	260.231	3601788.10	0.6497	A	4.1
6	☐	500.000	510.139	7495605.99	1.2736	A	1.8
7	☐	1000.000	991.627	14585644.77	2.4756	A	3.5
8	☐			5281.78	0.0010	P	17.4

$$y = 0.0025 * x + 7.1569E-005$$

$$R = 0.9998$$

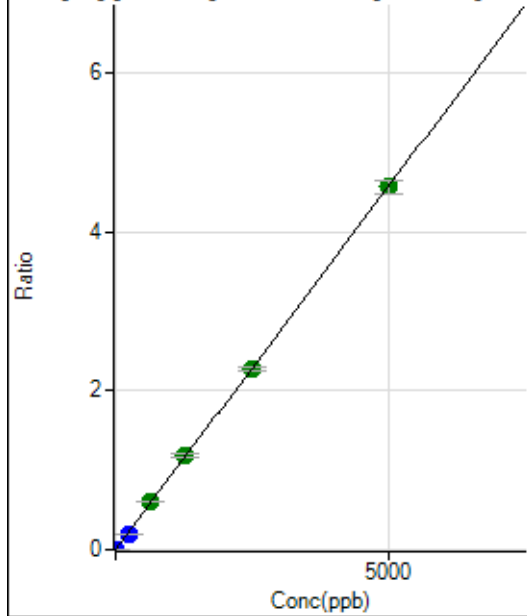
$$DL = 0.02816$$

$$BEC = 0.02867$$

Weight: <None>

Min Conc: 0

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



	R _{ct}	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	572.25	0.0001	P	19.9
2	☐	1.000	0.788	4825.07	0.0008	P	2.7
3	☐	250.000	223.441	1213067.10	0.2045	P	1.1
4	☐	625.000	659.654	3513831.24	0.6037	A	2.2
5	☐	1250.000	1295.371	6570691.64	1.1853	A	4.2
6	☐	2500.000	2486.205	13388822.75	2.2749	A	2.1
7	☐	5000.000	4992.551	26916030.69	4.5681	A	3.8
8	☐			8502.95	0.0017	P	21.2

$$y = 9.1496E-004 * x + 9.6143E-005$$

$$R = 0.9999$$

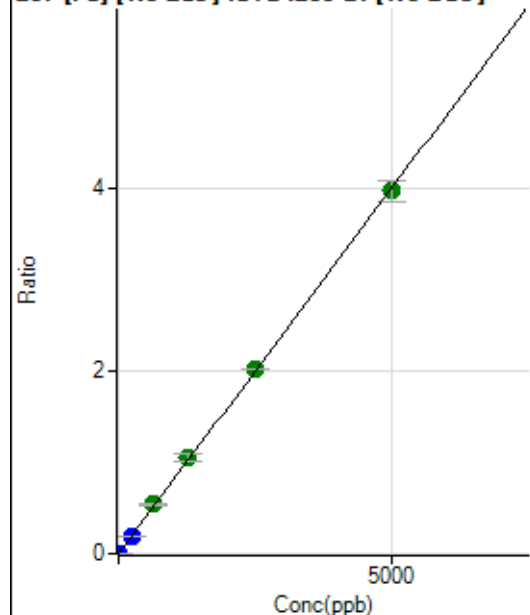
$$DL = 0.06269$$

$$BEC = 0.1051$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	520.40	0.0001	P	14.4
2	☐	1.000	0.828	4419.34	0.0007	P	5.3
3	☐	250.000	229.949	1088539.38	0.1835	P	0.6
4	☐	625.000	673.166	3125395.73	0.5371	A	3.1
5	☐	1250.000	1313.241	5800574.32	1.0477	A	7.5
6	☐	2500.000	2524.666	11853751.42	2.0141	A	0.3
7	☐	5000.000	4966.838	23334581.54	3.9623	A	5.6
8	☐			7598.68	0.0015	P	18.1

$$y = 7.9773\text{E-}004 * x + 8.7587\text{E-}005$$

$$R = 0.9998$$

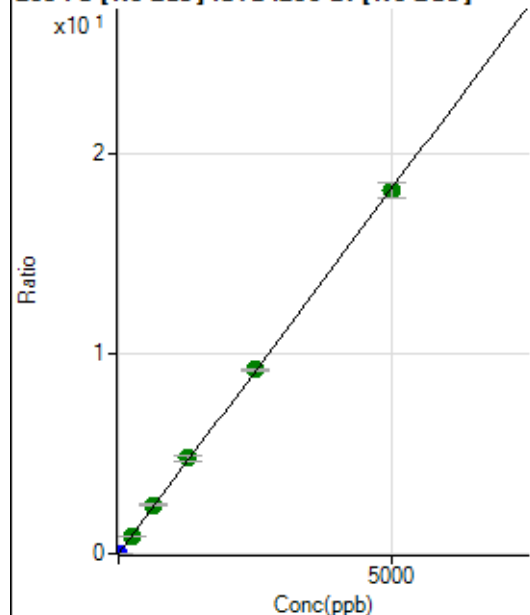
$$DL = 0.04755$$

$$BEC = 0.1098$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	2333.49	0.0004	P	20.5
2	☐	1.000	0.801	19604.29	0.0033	P	1.3
3	☐	250.000	233.764	5072192.99	0.8551	A	1.4
4	☐	625.000	663.728	14124353.30	2.4272	A	3.1
5	☐	1250.000	1306.799	26476109.21	4.7785	A	5.6
6	☐	2500.000	2523.005	54292284.54	9.2253	A	1.5
7	☐	5000.000	4970.269	107060145.9	18.1732	A	4.1
8	☐			34924.98	0.0069	P	21.5

$$y = 0.0037 * x + 3.9198\text{E-}004$$

$$R = 0.9999$$

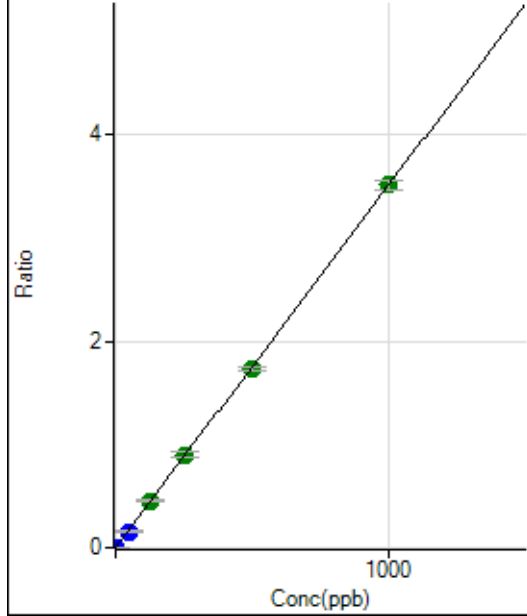
$$DL = 0.06578$$

$$BEC = 0.1072$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	0.000	0.000	150.01	0.0000	P	142.
2	☐	1.000	0.818	17070.22	0.0029	P	4.3
3	☐	50.000	44.475	924901.31	0.1560	P	3.0
4	☐	125.000	128.433	2621131.85	0.4504	A	2.8
5	☐	250.000	257.323	5000004.11	0.9023	A	5.4
6	☐	500.000	493.335	10180575.23	1.7299	A	1.6
7	☐	1000.000	1001.349	20692752.20	3.5112	A	2.5
8	☐			3564.51	0.0007	P	16.6

$$y = 0.0035 * x + 2.4233E-005$$

$$R = 0.9999$$

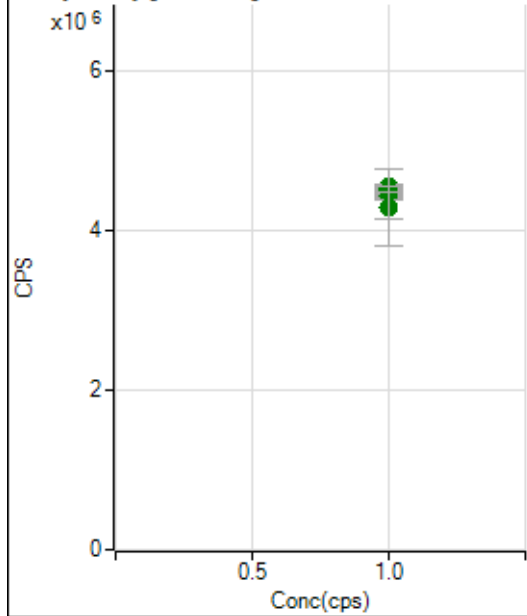
$$DL = 0.02955$$

$$BEC = 0.006911$$

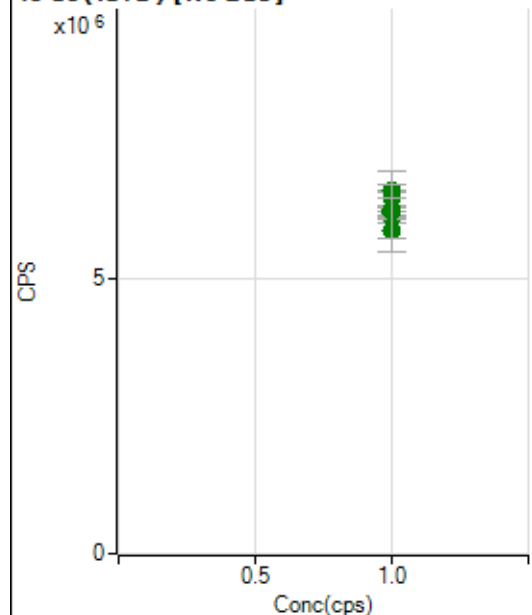
Weight: <None>

Min Conc: 0

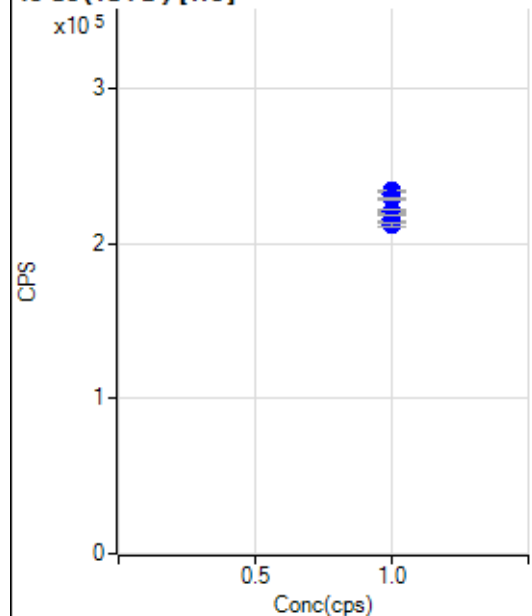
6 Li (ISTD) [No Gas]



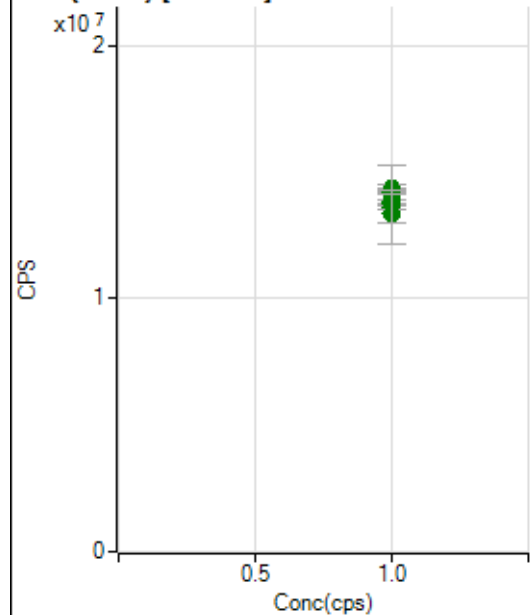
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4488938.21		A	3.1
2	☐	1.000		4483234.60		A	2.0
3	☐	1.000		4543299.96		A	1.7
4	☐	1.000		4521240.22		A	1.9
5	☐	1.000		4290142.59		A	7.3
6	☐	1.000		4499722.96		A	2.1
7	☐	1.000		4431335.15		A	2.6
8	☐	1.000		4285155.48		A	22.1

45 Sc (ISTD) [No Gas]

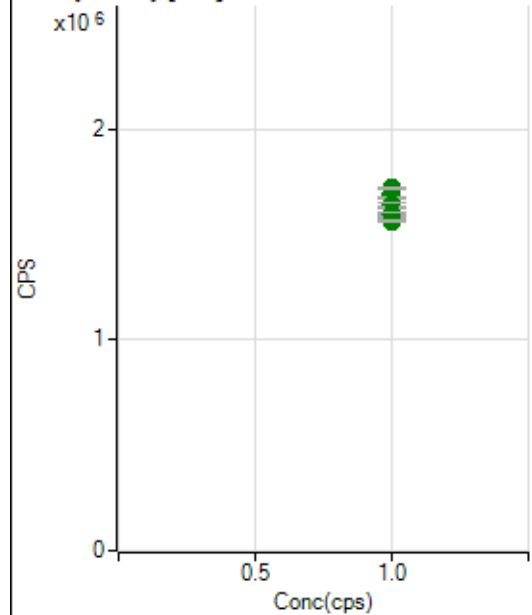
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6574176.64		A	0.6
2	☐	1.000		6430606.29		A	4.0
3	☐	1.000		6569896.15		A	3.7
4	☐	1.000		6152840.60		A	1.2
5	☐	1.000		5869381.65		A	4.7
6	☐	1.000		6086863.31		A	0.2
7	☐	1.000		6245493.10		A	1.1
8	☐	1.000		6198640.57		A	23.3

45 Sc (ISTD) [He]

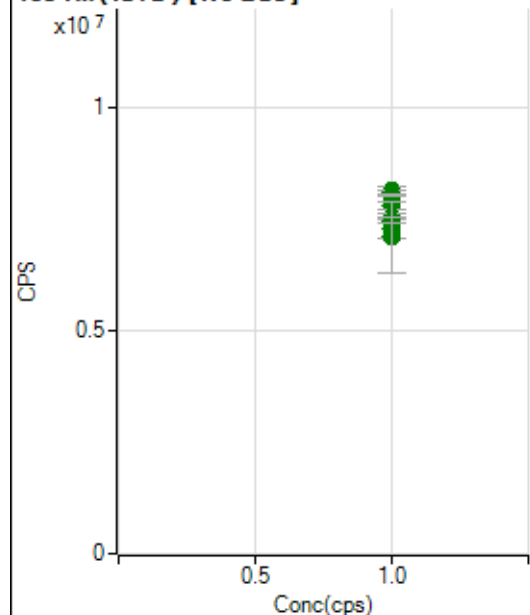
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		233649.02		P	0.8
2	☐	1.000		231552.20		P	1.7
3	☐	1.000		228542.72		P	0.5
4	☐	1.000		219512.38		P	0.6
5	☐	1.000		220894.20		P	0.5
6	☐	1.000		220343.86		P	1.0
7	☐	1.000		215798.89		P	1.7
8	☐	1.000		211971.44		P	1.2

89 Y (ISTD) [No Gas]

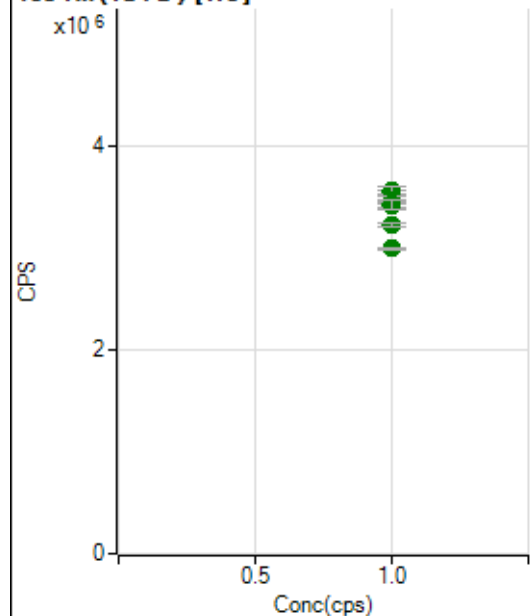
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		14331584.23		A	2.1
2	☐	1.000		14245045.76		A	1.9
3	☐	1.000		14206033.26		A	1.1
4	☐	1.000		13792922.57		A	1.4
5	☐	1.000		13373562.16		A	6.0
6	☐	1.000		13599138.41		A	0.7
7	☐	1.000		14225380.48		A	1.1
8	☐	1.000		13732249.80		A	22.7

89 Y (ISTD) [He]

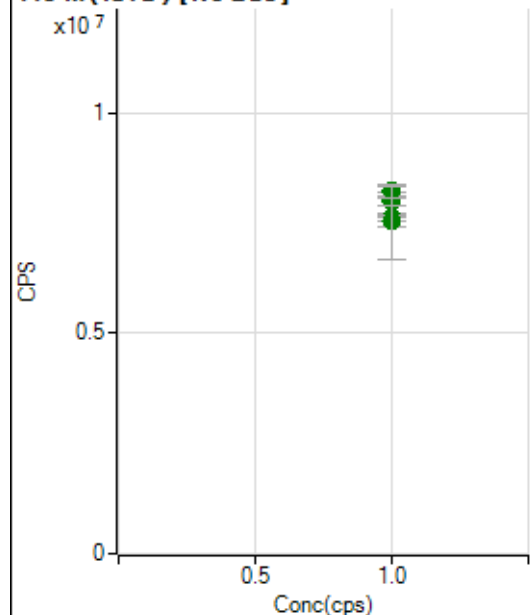
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1691200.09		A	2.5
2	☐	1.000		1700212.87		A	2.3
3	☐	1.000		1722542.35		A	0.8
4	☐	1.000		1636261.23		A	4.7
5	☐	1.000		1642882.96		A	1.5
6	☐	1.000		1604874.46		A	2.3
7	☐	1.000		1595540.51		A	1.9
8	☐	1.000		1562637.58		A	0.6

103 Rh (ISTD) [No Gas]

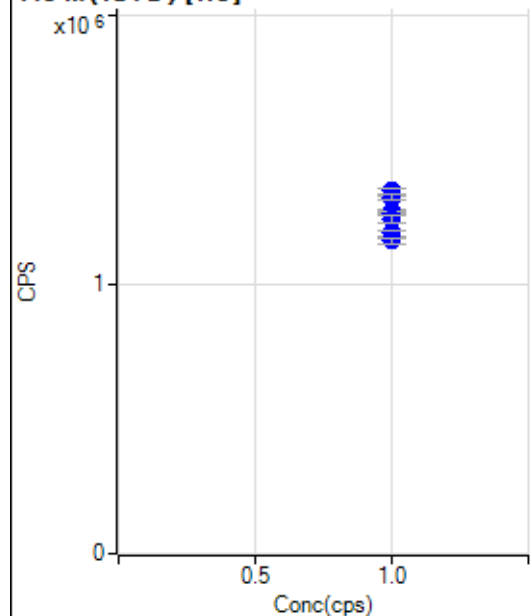
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8142516.33		A	2.8
2	☐	1.000		8114971.36		A	1.2
3	☐	1.000		8045595.58		A	0.7
4	☐	1.000		7794992.62		A	2.3
5	☐	1.000		7308939.83		A	6.4
6	☐	1.000		7571158.68		A	1.7
7	☐	1.000		7473484.80		A	1.6
8	☐	1.000		7102552.54		A	22.2

103 Rh (ISTD) [He]

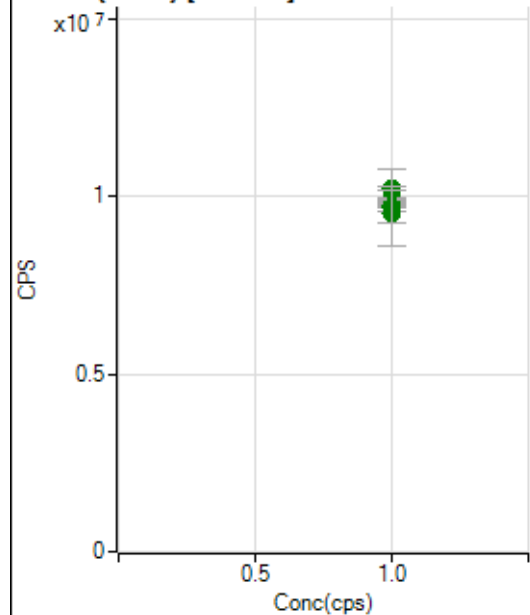
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3551908.42		A	0.8
2	☐	1.000		3560776.51		A	2.4
3	☐	1.000		3482101.34		A	1.2
4	☐	1.000		3468589.18		A	2.3
5	☐	1.000		3421885.92		A	1.6
6	☐	1.000		3429511.34		A	2.7
7	☐	1.000		3227342.24		A	0.9
8	☐	1.000		2992419.50		A	1.1

115 In (ISTD) [No Gas]

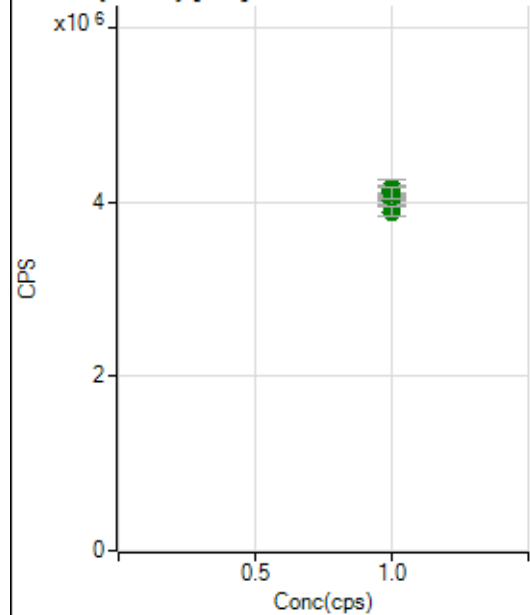
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		8224407.69		A	3.3
2	☐	1.000		8038840.37		A	3.7
3	☐	1.000		8208140.22		A	2.7
4	☐	1.000		7967925.73		A	2.3
5	☐	1.000		7561146.96		A	4.1
6	☐	1.000		7617899.44		A	2.0
7	☐	1.000		7646829.11		A	0.7
8	☐	1.000		7524738.75		A	22.2

115 In (ISTD) [He]

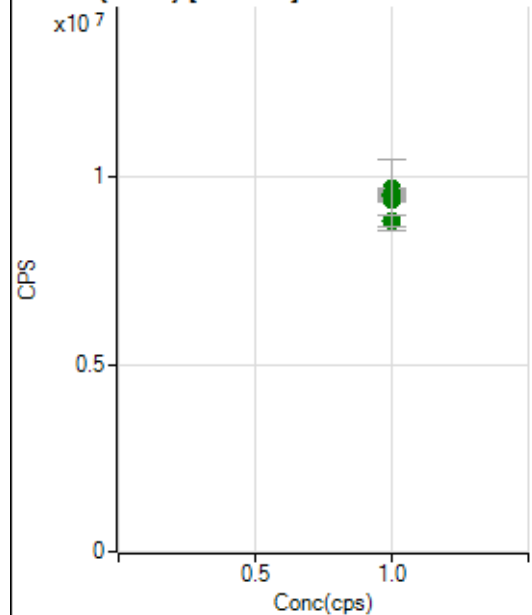
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		1346611.15		P	1.3
2	☐	1.000		1320712.08		P	0.7
3	☐	1.000		1322037.40		P	1.4
4	☐	1.000		1271803.25		P	1.1
5	☐	1.000		1260290.16		P	1.1
6	☐	1.000		1241155.15		P	2.3
7	☐	1.000		1189385.46		P	1.8
8	☐	1.000		1161479.73		P	1.6

159 Tb (ISTD) [No Gas]

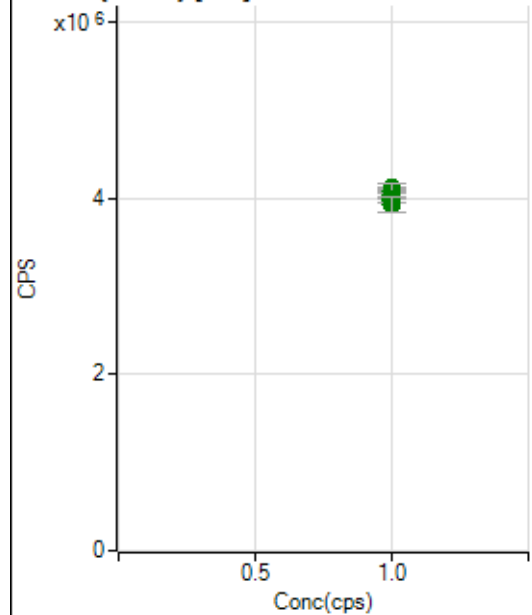
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9946667.35		A	0.8
2	☐	1.000		9734777.42		A	0.6
3	☐	1.000		9840519.86		A	1.2
4	☐	1.000		9932463.53		A	1.2
5	☐	1.000		9555284.09		A	6.6
6	☐	1.000		9757866.03		A	3.3
7	☐	1.000		10221597.83		A	1.1
8	☐	1.000		9690781.94		A	22.3

159 Tb (ISTD) [He]

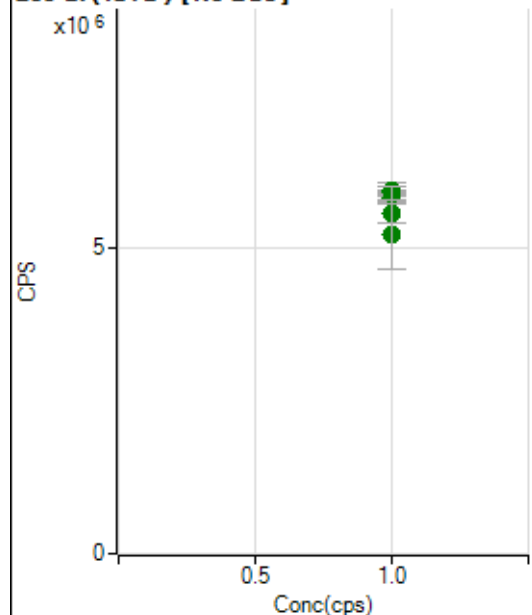
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4168008.24		A	4.2
2	☐	1.000		4152198.97		A	2.1
3	☐	1.000		4132344.45		A	2.0
4	☐	1.000		4054070.32		A	1.5
5	☐	1.000		4126754.38		A	2.5
6	☐	1.000		4020754.56		A	2.0
7	☐	1.000		4111255.22		A	3.1
8	☐	1.000		3896098.62		A	3.2

165 Ho (ISTD) [No Gas]

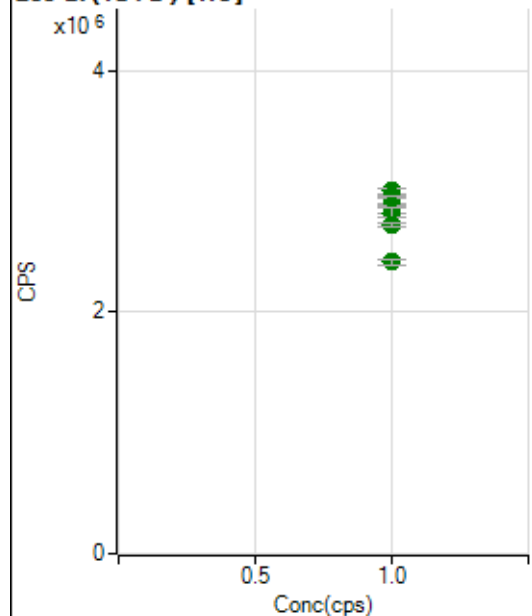
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		9404926.51		A	0.8
2	☐	1.000		9501612.02		A	3.1
3	☐	1.000		9506694.66		A	1.0
4	☐	1.000		9441114.28		A	0.8
5	☐	1.000		8839712.52		A	3.6
6	☐	1.000		9527296.83		A	1.3
7	☐	1.000		9689984.42		A	0.5
8	☐	1.000		9533434.50		A	20.2

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		4123103.24		A	0.4
2	☐	1.000		4063027.33		A	0.3
3	☐	1.000		4044093.93		A	2.0
4	☐	1.000		4008098.97		A	0.1
5	☐	1.000		3982657.37		A	1.2
6	☐	1.000		4089878.90		A	3.7
7	☐	1.000		3989067.06		A	1.2
8	☐	1.000		3935745.67		A	4.1

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		5913247.83		A	5.0
2	☐	1.000		5906081.65		A	0.9
3	☐	1.000		5931600.33		A	2.5
4	☐	1.000		5821922.48		A	2.4
5	☐	1.000		5552050.51		A	5.6
6	☐	1.000		5885370.88		A	0.6
7	☐	1.000		5896257.14		A	3.3
8	☐	1.000		5218430.51		A	21.2

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		3004192.87		A	1.7
2	☐	1.000		2959388.85		A	1.0
3	☐	1.000		2948836.73		A	0.7
4	☐	1.000		2860969.89		A	2.7
5	☐	1.000		2881033.08		A	0.6
6	☐	1.000		2822197.59		A	3.1
7	☐	1.000		2719732.25		A	1.4
8	☐	1.000		2414893.28		A	2.2

US EPA Tune Check Report

Operator Name Jaswal

Acq/Data Batch D:\Agilent\ICPMH\1\DATA\IP8122922MS.b

Acq. Date-Time 2022-12-29 15:04:12

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		21036	210356.82			0.570	5.000
24		424109	4241090.84			1.078	5.000
25		54974	549738.89			0.639	5.000
26		63928	639284.62			0.716	5.000
59		109314	1093144.77			1.340	5.000
113		11259	112594.25			0.847	5.000
115		140574	1405737.99			1.547	5.000
206		29876	298755.61			1.179	5.000
207		26765	267652.82			1.236	5.000
208		63974	639741.39			0.585	5.000
220		1	5.70			25.272	

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

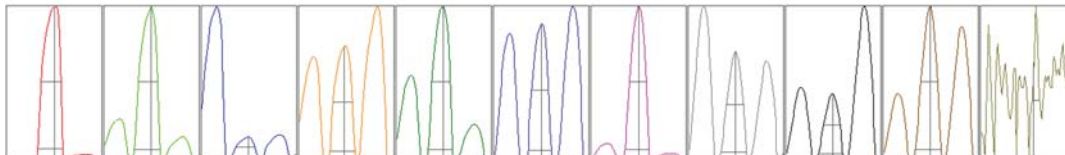
Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
9	21020	21233	20971	20916	21039
24	428462	428685	422942	417755	422702
25	54816	55219	54750	54624	55460
26	63966	64008	64601	63715	63352
59	110195	111307	107951	109206	107913
113	11368	11246	11222	11127	11334
115	143728	141292	138597	138456	140796
206	30428	29783	29986	29534	29645
207	27041	26445	26365	27000	26975
208	64010	63951	63487	63889	64534

US EPA Tune Check Report

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

Integration Time [sec] 0.1

Resolution/Axis



Mass	Peak Height	Axis	Axis (Required)	Axis (Flag)
9	35278.98	9.05	8.90 - 9.10	
24	747856.72	24.00	23.90 - 24.10	
25	98105.34	25.00	24.90 - 25.10	
26	108022.76	25.95	25.90 - 26.10	
59	199830.11	59.00	58.90 - 59.10	
113	22304.88	113.05	112.90 - 113.10	
115	279213.79	115.05	114.90 - 115.10	
206	58666.09	206.00	205.90 - 206.10	
207	53312.78	207.00	206.90 - 207.10	
208	126122.46	208.00	207.90 - 208.10	
220	0.75	220.20	-	

Mass	W-50%	W-5%	W-5% (Required)	W-5% (Flag)
9	0.63	0.785	0.900	
24	0.61	0.816	0.900	
25	0.59	0.803	0.900	
26	0.62	0.785	0.900	
59	0.58	0.771	0.900	
113	0.52	0.729	0.900	
115	0.52	0.761	0.900	
206	0.53	0.804	0.900	
207	0.52	0.760	0.900	
208	0.53	0.814	0.900	
220	0.22			

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	10.4 V	Deflect	15.8 V
Extract 2	-200.0 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	200 V		

QP Parameters

Mass Gain	123	Axis Gain	0.9993	QP Bias	-4.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.7 mm
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EM

Discriminator	4.5 mV	Analog HV	2304 V	Pulse HV	1633 V
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[He]

Sensitivity

Mass	Conc. [ug/l]	Count	CPS	Resp (Required) [cps/ug/l]	Resp (Flag)	RSD%	RSD% (Required)
59		23286	232859.76			0.857	
89		47479	474789.45			0.893	
205		19441	194411.63			1.611	

Mass	RSD% (Flag)
59	
89	
205	

Mass	Rep#1 Count	Rep#2 Count	Rep#3 Count	Rep#4 Count	Rep#5 Count
59	23342	23331	23528	22978	23251
89	48157	47203	47164	47636	47235
205	19276	19192	19940	19557	19241

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	10.4 V	Deflect	4.0 V
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US EPA Tune Check Report

Extract 2	-200.0 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	0.9993	QP Bias	-13.0 V
Mass Offset	125	Axis Offset	-0.01		

Hardware Settings

Torch

Torch H	0.9 mm	Torch V	-0.7 mm
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EM

Discriminator	4.5 mV	Analog HV	2304 V	Pulse HV	1633 V
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