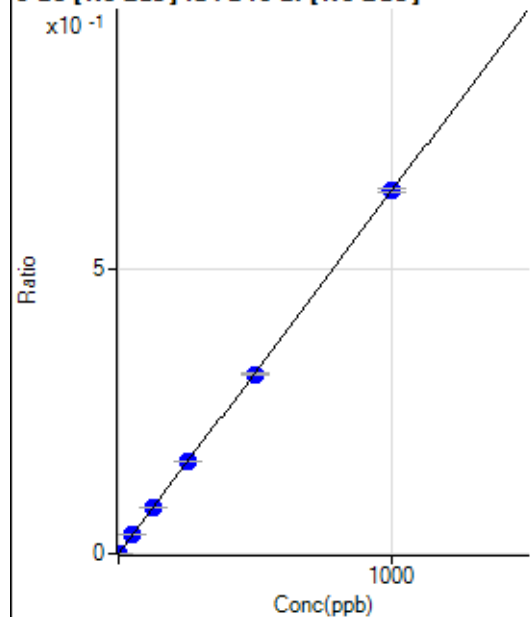


Batch Folder: C:\Agilent\ICPMH\1\DATA\P7092221MS.b\
Analysis File: P7092221MS.batch.bin
DA Date-Time: 2021-09-22 15:38:13
Calibration Title:
Calibration Method: External Calibration
VIS Interpolation Fit:

Level	Standard Data File	Sample Name	Acq. Date-Time
1	002CALB.d	S00	2021-09-22 08:23:49
2	004CALS.d	S02	2021-09-22 08:30:02
3	005CALS.d	S03	2021-09-22 08:33:07
4	006CALS.d	S04	2021-09-22 08:36:13
5	007CALS.d	S05	2021-09-22 08:39:16
6	008CALS.d	S06	2021-09-22 08:42:18
7	009CALS.d	S07	2021-09-22 08:45:15
8	010CALS.d	S08	2021-09-22 08:48:13

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

	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	55.56	0.0000	P	17.5
2	☐	1.000	1.030	1755.69	0.0007	P	9.8
3	☐	50.000	52.175	87397.68	0.0332	P	0.7
4	☐	125.000	129.112	211302.13	0.0820	P	0.7
5	☐	250.000	254.674	396246.04	0.1617	P	0.9
6	☐	500.000	495.420	713292.62	0.3146	P	2.0
7	☐	1000.000	1000.499	1351437.53	0.6353	P	1.1
8	☐			214.82	0.0001	P	21.1

$$y = 6.3498\text{E-}004 * x + 2.1614\text{E-}005$$

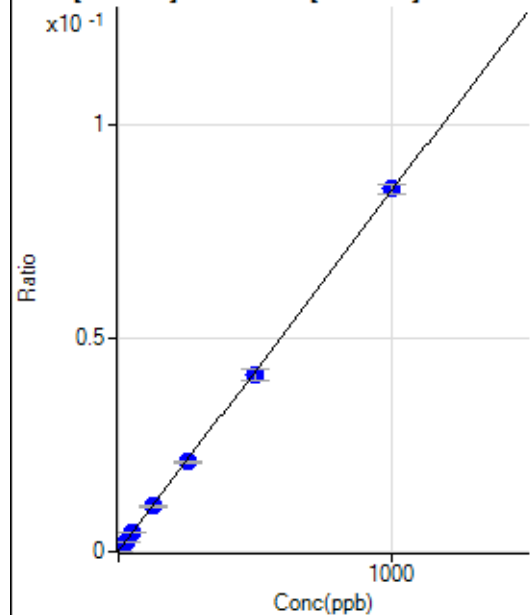
$$R = 1.0000$$

$$DL = 0.01783$$

$$BEC = 0.03404$$

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	375.01	0.0001	P	17.7
2	☐	25.000	24.118	5667.87	0.0022	P	5.7
3	☐	50.000	50.055	11524.06	0.0044	P	2.7
4	☐	125.000	125.639	27703.61	0.0108	P	3.5
5	☐	250.000	247.194	51476.81	0.0210	P	2.4
6	☐	500.000	489.180	93901.46	0.0414	P	5.9
7	☐	1000.000	1006.051	180952.10	0.0851	P	2.6
8	☐			6526.59	0.0031	P	15.2

$$y = 8.4415\text{E-}005 * x + 1.4589\text{E-}004$$

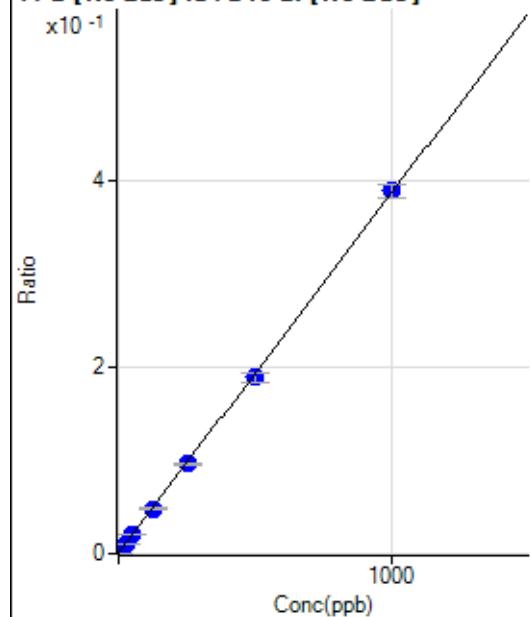
$$R = 0.9999$$

$$DL = 0.9202$$

$$BEC = 1.728$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1761.26	0.0007	P	5.1
2	☐	25.000	24.383	26248.33	0.0101	P	2.8
3	☐	50.000	51.302	54063.83	0.0205	P	4.9
4	☐	125.000	123.300	124519.55	0.0483	P	3.4
5	☐	250.000	247.436	235896.92	0.0963	P	1.8
6	☐	500.000	488.796	429556.23	0.1895	P	5.1
7	☐	1000.000	1006.406	828551.69	0.3895	P	3.4
8	☐			30175.30	0.0142	P	12.2

$$y = 3.8638E-004 * x + 6.8508E-004$$

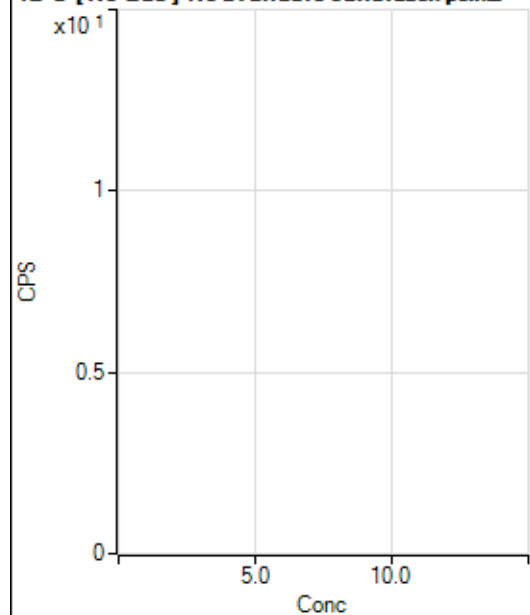
R = 0.9999

DL = 0.2705

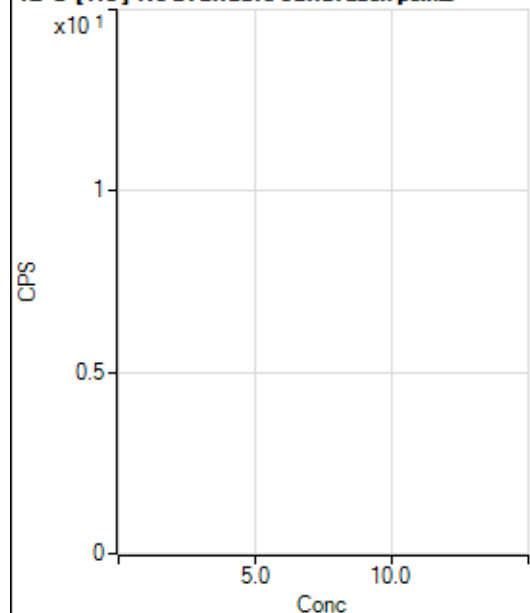
BEC = 1.773

Weight: <None>

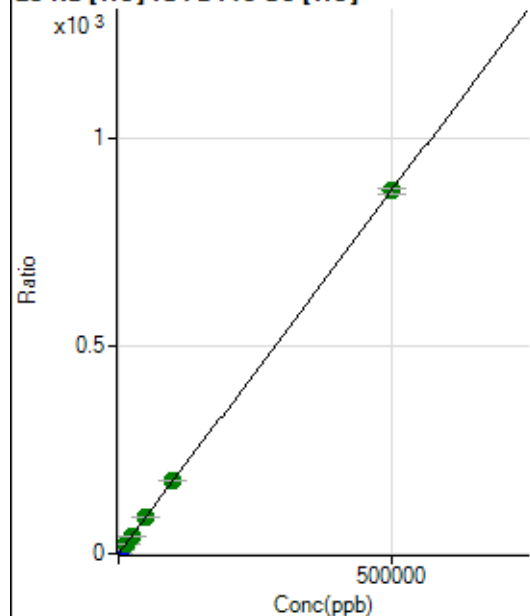
Min Conc: 0

12 C [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

12 C [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	9959.12	0.0317	P	2.6
2	☐	500.000	486.156	277610.92	0.8797	P	0.1
3	☐	5000.000	4991.265	2705310.00	8.7378	P	1.4
4	☐	12500.000	12507.716	6601629.01	21.8485	A	0.2
5	☐	25000.000	24892.119	12067239.94	43.4503	A	0.9
6	☐	50000.000	49678.259	22445797.03	86.6840	A	0.7
7	☐	100000.00	100838.92	43726191.95	175.9220	A	0.7
8	☐	500000.00	499869.69	246123183.2	871.9391	A	1.3

$$y = 0.0017 * x + 0.0317$$

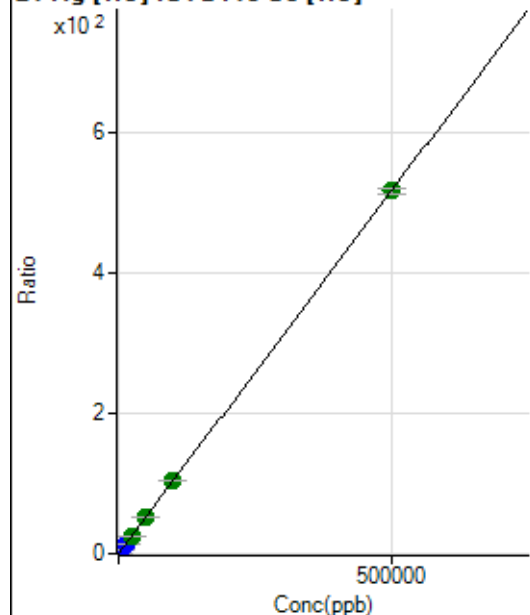
$$R = 1.0000$$

$$DL = 1.396$$

$$BEC = 18.18$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	175.00	0.0006	P	17.5
2	☐	500.000	481.534	157401.22	0.4988	P	0.5
3	☐	5000.000	5035.730	1613371.62	5.2108	P	0.9
4	☐	12500.000	12392.525	3874370.87	12.8226	P	0.5
5	☐	25000.000	24792.077	7124146.69	25.6520	A	0.6
6	☐	50000.000	49675.260	13308653.77	51.3977	A	0.9
7	☐	100000.00	100420.80	25826373.66	103.9023	A	0.6
8	☐	500000.00	499961.05	146023058.8	517.2919	A	1.4

$$y = 0.0010 * x + 5.5737E-004$$

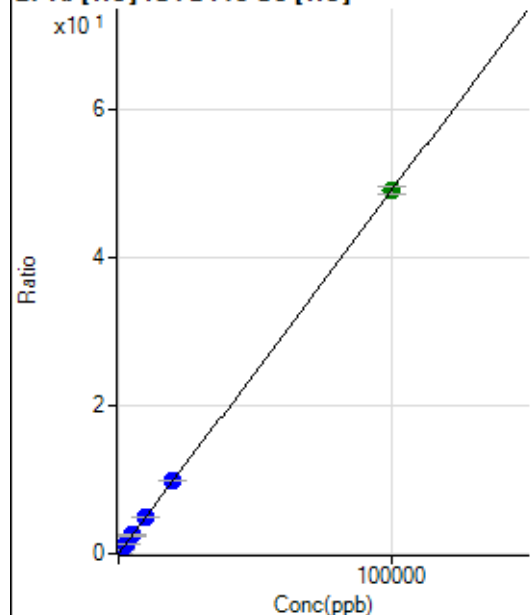
$$R = 1.0000$$

$$DL = 0.2826$$

$$BEC = 0.5387$$

Weight: <None>

Min Conc: 0

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	75.00	0.0002	P	48.6
2	☐	20.000	20.968	3314.35	0.0105	P	1.4
3	☐	1000.000	1029.628	156114.04	0.5042	P	1.6
4	☐	2500.000	2535.143	375034.41	1.2412	P	0.3
5	☐	5000.000	5045.928	686055.51	2.4702	P	1.0
6	☐	10000.000	9986.785	1265904.79	4.8888	P	0.4
7	☐	20000.000	20139.451	2450495.26	9.8585	P	0.2
8	☐	100000.00	99969.960	13813377.74	48.9356	A	2.2

$$y = 4.8950E-004 * x + 2.3896E-004$$

$$R = 1.0000$$

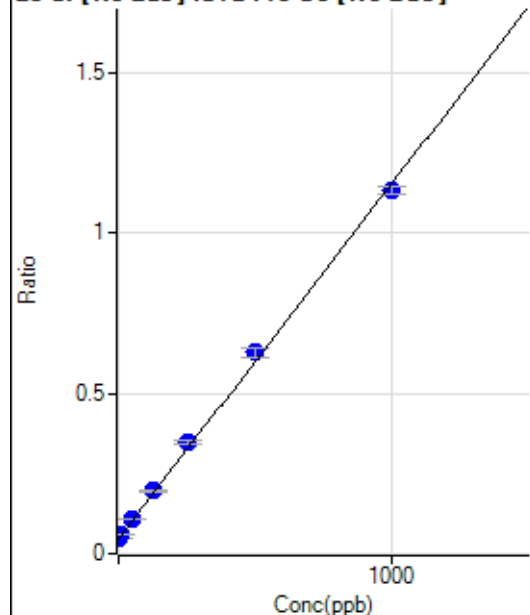
$$DL = 0.7119$$

$$BEC = 0.4882$$

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	186101.45	0.0469	P	0.2
2	☐	10.000	10.546	228503.35	0.0586	P	1.2
3	☐	50.000	55.204	429994.35	0.1079	P	1.3
4	☐	125.000	134.166	757333.96	0.1952	P	1.1
5	☐	250.000	273.455	1267522.70	0.3492	P	2.7
6	☐	500.000	524.385	2112232.06	0.6266	P	4.7
7	☐	1000.000	980.532	3615649.00	1.1309	P	2.1
8	☐			280497.04	0.0853	P	3.1

$$y = 0.0011 * x + 0.0469$$

$$R = 0.9992$$

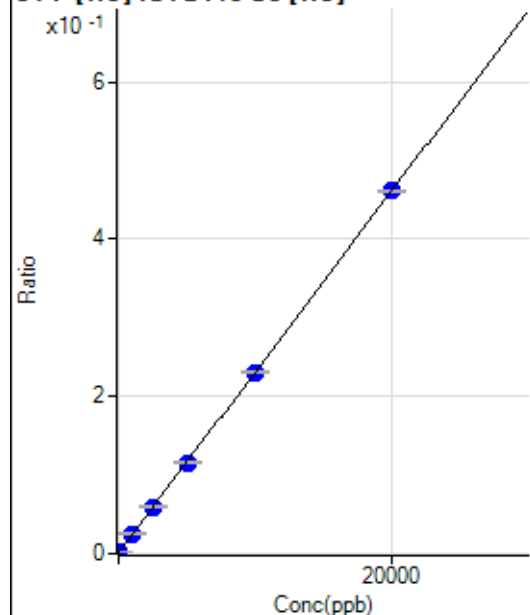
$$DL = 0.3121$$

$$BEC = 42.42$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	-3.634	511.13	0.0016	P	7.2
2	☐	0.000	3.634	566.70	0.0018	P	20.3
3	☐	1000.000	1014.391	7738.29	0.0250	P	5.9
4	☐	2500.000	2532.404	18086.40	0.0599	P	3.2
5	☐	5000.000	4969.440	32162.95	0.1158	P	1.9
6	☐	10000.000	9980.522	59783.76	0.2309	P	1.5
7	☐	20000.000	20012.609	114636.85	0.4612	P	0.6
8	☐			494.47	0.0018	P	16.9

$$y = 2.2959E-005 * x + 0.0017$$

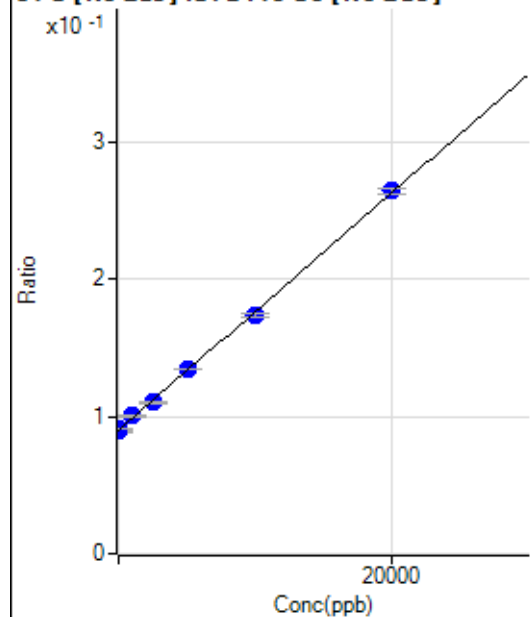
$$R = 1.0000$$

$$DL = 31.46$$

$$BEC = 74.53$$

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	-125.450	353767.35	0.0891	P	0.9
2	☐	0.000	125.450	356334.61	0.0913	P	1.1
3	☐	1000.000	1176.240	400025.81	0.1004	P	0.6
4	☐	2500.000	2326.687	428073.33	0.1103	P	0.6
5	☐	5000.000	5078.468	487015.34	0.1341	P	0.3
6	☐	10000.000	9661.326	586004.92	0.1738	P	1.1
7	☐	20000.000	20162.572	845868.15	0.2646	P	1.4
8	☐			281924.53	0.0858	P	0.8

$$y = 8.6465E-006 * x + 0.0902$$

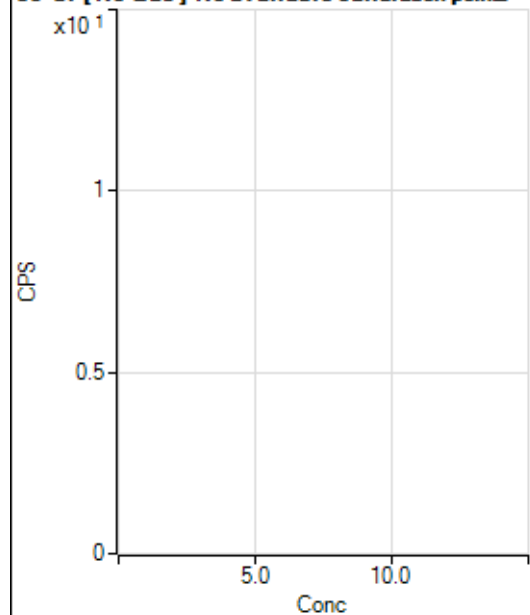
$$R = 0.9996$$

$$DL = 311$$

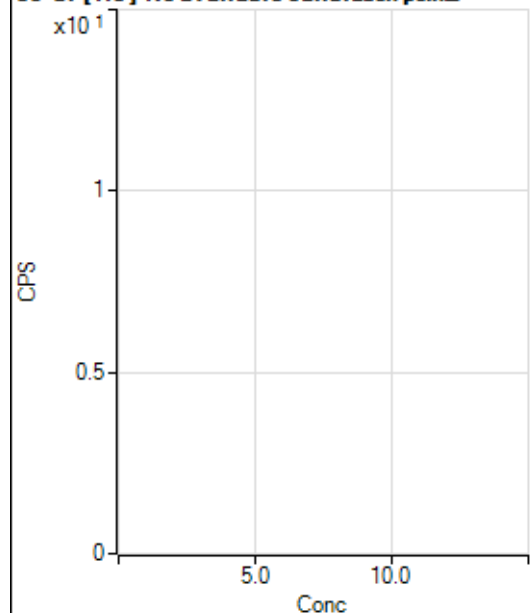
$$BEC = 1.043E+04$$

Weight: <None>

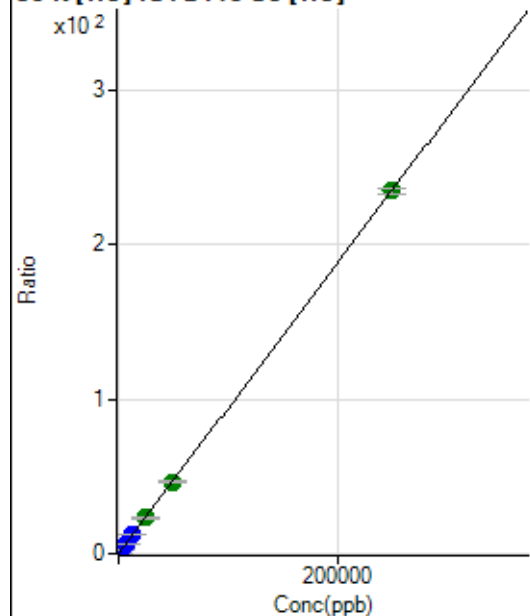
Min Conc: 0

35 Cl [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

35 Cl [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐						
2	☐						
3	☐						
4	☐						
5	☐						
6	☐						
7	☐						
8	☐						

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	36439.86	0.1160	P	0.9
2	☐	500.000	502.440	185521.04	0.5879	P	0.4
3	☐	2500.000	2658.038	808885.35	2.6124	P	0.5
4	☐	6250.000	6544.296	1892195.46	6.2623	P	0.3
5	☐	12500.000	12859.995	3386459.19	12.1939	P	0.3
6	☐	25000.000	24425.204	5970161.90	23.0558	A	0.3
7	☐	50000.000	49454.911	11574245.22	46.5633	A	1.0
8	☐	250000.00	250139.55	66346286.90	235.0431	A	1.3

$$y = 9.3918\text{E-}004 * x + 0.1160$$

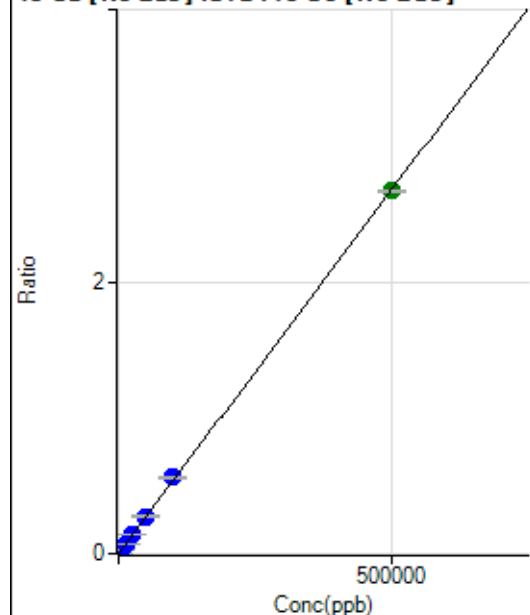
$$R = 1.0000$$

$$DL = 3.314$$

$$BEC = 123.5$$

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	69.45	0.0000	P	27.4
2	☐	500.000	510.269	10715.29	0.0027	P	3.4
3	☐	5000.000	5357.896	114232.00	0.0287	P	1.0
4	☐	12500.000	13199.012	273892.73	0.0706	P	1.0
5	☐	25000.000	26157.141	507892.04	0.1399	P	0.6
6	☐	50000.000	51323.162	925616.89	0.2745	P	1.5
7	☐	100000.00	104873.46	1793148.74	0.5608	P	1.4
8	☐	500000.00	498814.06	8766409.05	2.6675	A	0.8

$$y = 5.3476\text{E-}006 * x + 1.7490\text{E-}005$$

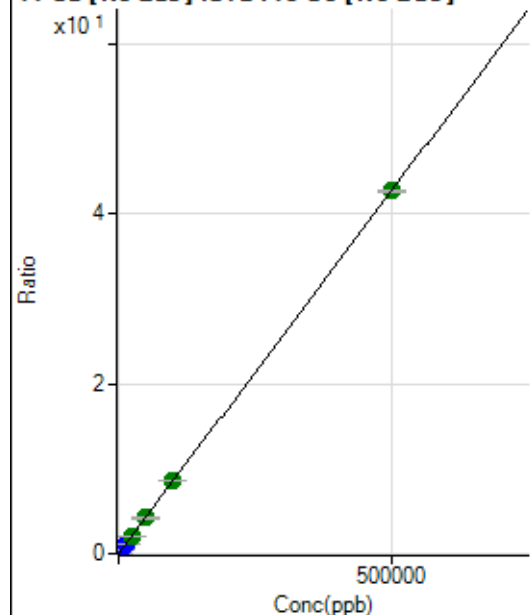
$$R = 0.9999$$

$$DL = 2.69$$

$$BEC = 3.271$$

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	4442.45	0.0011	P	4.2
2	☐	500.000	509.458	174017.99	0.0446	P	0.5
3	☐	5000.000	5293.563	1804102.28	0.4528	P	0.1
4	☐	12500.000	13076.082	4332597.75	1.1168	P	0.4
5	☐	25000.000	25016.129	7754100.78	2.1356	A	1.0
6	☐	50000.000	49214.120	14162649.28	4.2002	A	2.3
7	☐	100000.00	100322.53	27371272.14	8.5609	A	1.5
8	☐	500000.00	499995.92	140200148.9	42.6621	A	0.7

$$y = 8.5323\text{E-}005 * x + 0.0011$$

$$R = 1.0000$$

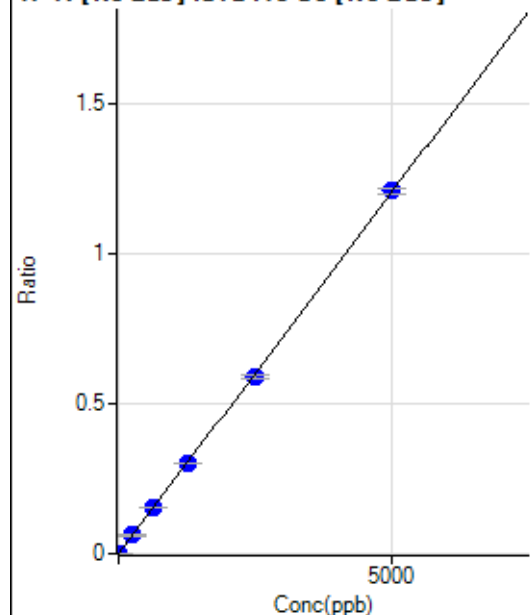
$$DL = 1.646$$

$$BEC = 13.12$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	38.89	0.0000	P	44.8
2	☐	5.000	4.967	4703.66	0.0012	P	4.5
3	☐	250.000	253.413	243118.00	0.0610	P	0.5
4	☐	625.000	628.309	586847.29	0.1513	P	0.3
5	☐	1250.000	1254.136	1096199.91	0.3019	P	0.2
6	☐	2500.000	2446.486	1986171.03	0.5890	P	1.6
7	☐	5000.000	5025.139	3867920.96	1.2098	P	1.5
8	☐			850.05	0.0003	P	4.4

$$y = 2.4074\text{E-}004 * x + 9.8047\text{E-}006$$

$$R = 0.9999$$

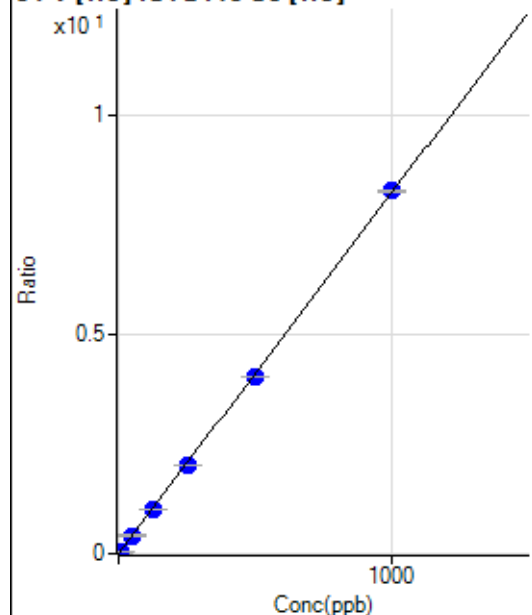
$$DL = 0.05471$$

$$BEC = 0.04073$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4.45	0.0000	P	86.6
2	☐	5.000	5.050	13118.15	0.0416	P	1.8
3	☐	50.000	50.591	128919.20	0.4164	P	0.7
4	☐	125.000	124.503	309608.81	1.0247	P	0.5
5	☐	250.000	245.989	562242.92	2.0245	P	0.4
6	☐	500.000	490.680	1045663.56	4.0383	P	0.7
7	☐	1000.000	1005.695	2057312.31	8.2768	P	0.3
8	☐			300.01	0.0011	P	9.9

$$y = 0.0082 * x + 1.4108\text{E-}005$$

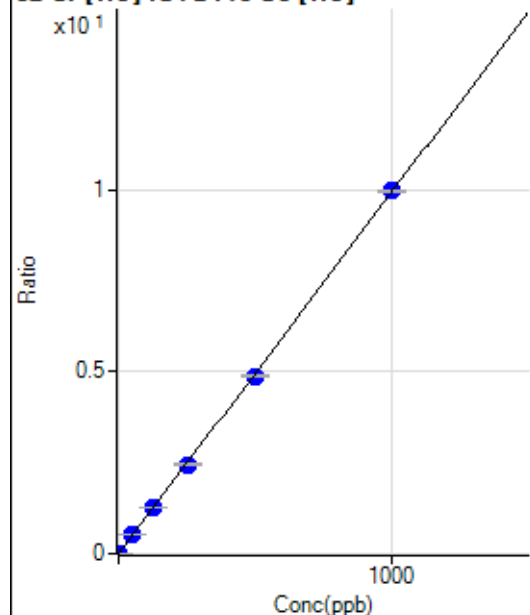
$$R = 0.9999$$

$$DL = 0.004454$$

$$BEC = 0.001714$$

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	884.48	0.0028	P	6.1
2	☐	2.000	2.005	7158.47	0.0227	P	1.4
3	☐	50.000	50.924	157114.06	0.5074	P	0.6
4	☐	125.000	125.700	377218.16	1.2484	P	0.7
5	☐	250.000	247.342	681451.52	2.4538	P	0.1
6	☐	500.000	491.628	1262175.59	4.8745	P	0.8
7	☐	1000.000	1004.717	2475400.07	9.9588	P	0.3
8	☐			9405.29	0.0333	P	1.6

$$y = 0.0099 * x + 0.0028$$

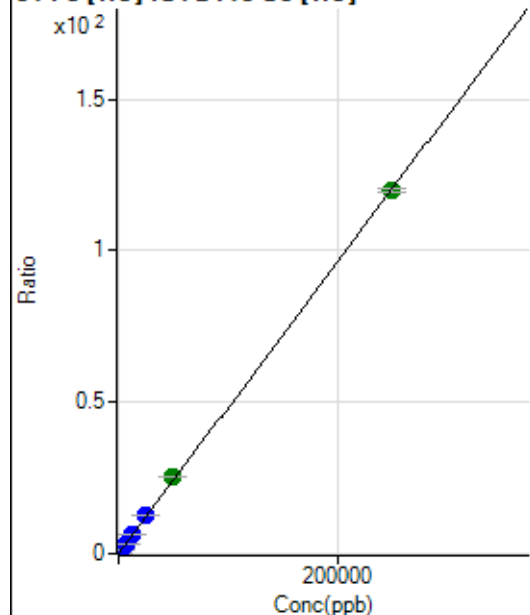
$$R = 0.9999$$

$$DL = 0.05215$$

$$BEC = 0.2842$$

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	947.68	0.0030	P	17.8
2	☐	50.000	54.005	9138.91	0.0290	P	0.6
3	☐	2500.000	2711.048	404172.94	1.3053	P	0.7
4	☐	6250.000	6693.457	972444.62	3.2184	P	0.3
5	☐	12500.000	13263.412	1770295.01	6.3744	P	0.2
6	☐	25000.000	26491.760	3296075.83	12.7290	P	0.5
7	☐	50000.000	52805.018	6305632.49	25.3692	A	0.8
8	☐	250000.00	249238.45	33797188.08	119.7308	A	1.2

$$y = 4.8037E-004 * x + 0.0030$$

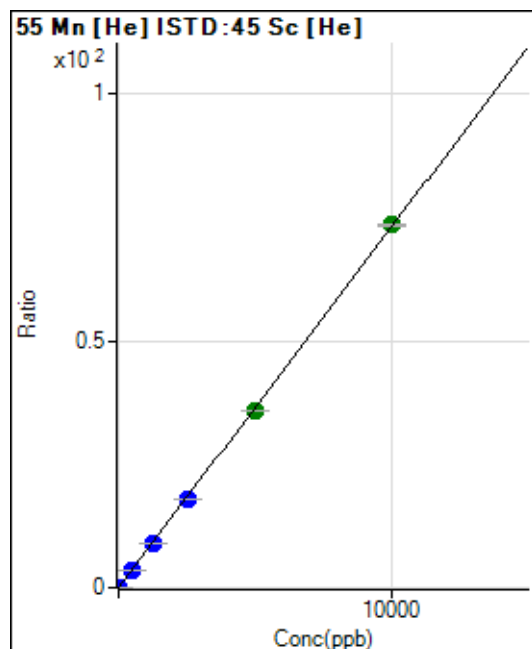
$$R = 0.9999$$

$$DL = 3.357$$

$$BEC = 6.282$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	53.33	0.0002	P	21.8
2	☐	1.000	0.995	2346.88	0.0074	P	2.3
3	☐	500.000	496.357	1122968.88	3.6271	P	1.3
4	☐	1250.000	1225.428	2705599.09	8.9544	P	0.5
5	☐	2500.000	2452.849	4977562.29	17.9232	P	0.1
6	☐	5000.000	4917.059	9303755.90	35.9292	A	0.2
7	☐	10000.000	10056.512	18265815.56	73.4833	A	0.8
8	☐			18321.48	0.0649	P	1.7

$$y = 0.0073 * x + 1.6963E-004$$

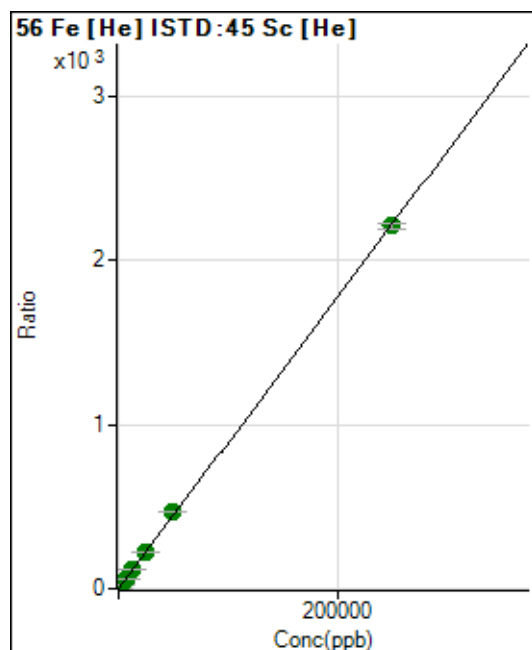
$$R = 0.9999$$

$$DL = 0.01521$$

$$BEC = 0.02322$$

Weight: <None>

Min Conc: 0



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	4332.18	0.0138	P	7.1
2	☐	50.000	52.578	151406.92	0.4798	P	1.3
3	☐	2500.000	2604.183	7150076.09	23.0958	A	2.3
4	☐	6250.000	6476.262	17347979.32	57.4156	A	0.7
5	☐	12500.000	12800.318	31511205.79	113.4684	A	0.4
6	☐	25000.000	25672.597	58925558.72	227.5608	A	0.5
7	☐	50000.000	52529.070	115734121.1	465.6009	A	0.2
8	☐	250000.00	249405.21	623980058.3	2,210.596	A	1.4

$$y = 0.0089 * x + 0.0138$$

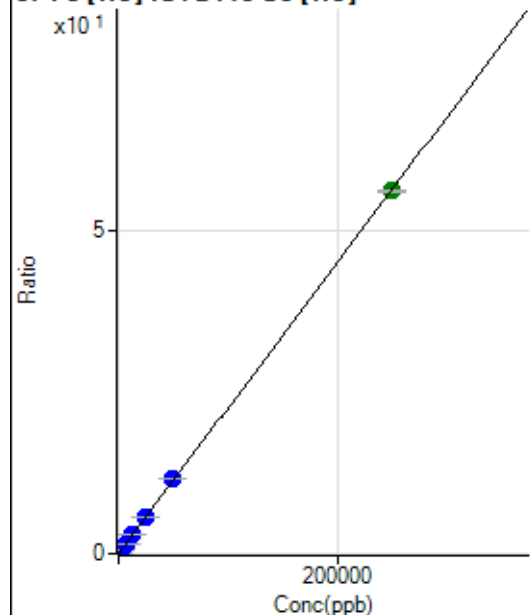
$$R = 0.9999$$

$$DL = 0.3301$$

$$BEC = 1.556$$

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	146.30	0.0005	P	19.6
2	☐	50.000	52.396	3870.95	0.0123	P	5.5
3	☐	2500.000	2586.275	180551.11	0.5832	P	1.6
4	☐	6250.000	6376.766	434236.62	1.4372	P	1.0
5	☐	12500.000	12728.160	796503.29	2.8681	P	0.6
6	☐	25000.000	25424.248	1483358.67	5.7286	P	0.5
7	☐	50000.000	51645.825	2892310.77	11.6363	P	0.6
8	☐	250000.00	249612.97	15874655.68	56.2383	A	0.9

$$y = 2.2530E-004 * x + 4.6610E-004$$

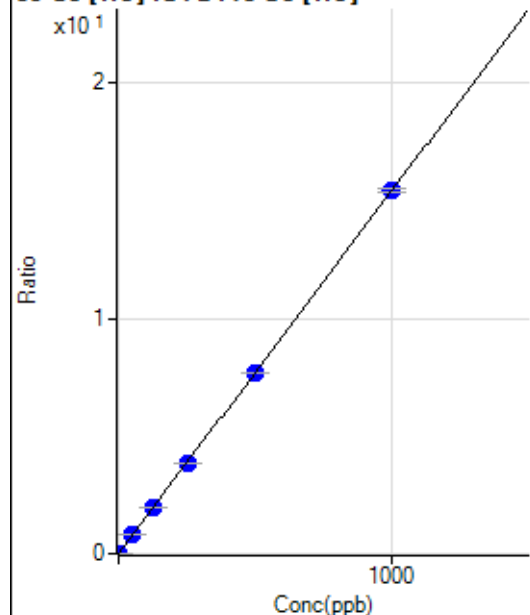
$$R = 1.0000$$

$$DL = 1.216$$

$$BEC = 2.069$$

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	47.78	0.0002	P	39.3
2	☐	1.000	1.031	5057.59	0.0160	P	4.2
3	☐	50.000	51.570	245877.47	0.7942	P	1.5
4	☐	125.000	126.773	589811.37	1.9521	P	0.8
5	☐	250.000	250.638	1071755.06	3.8592	P	0.2
6	☐	500.000	498.034	1985624.55	7.6683	P	0.7
7	☐	1000.000	1000.524	3828941.02	15.4051	P	0.9
8	☐			10999.75	0.0390	P	1.9

$$y = 0.0154 * x + 1.5197E-004$$

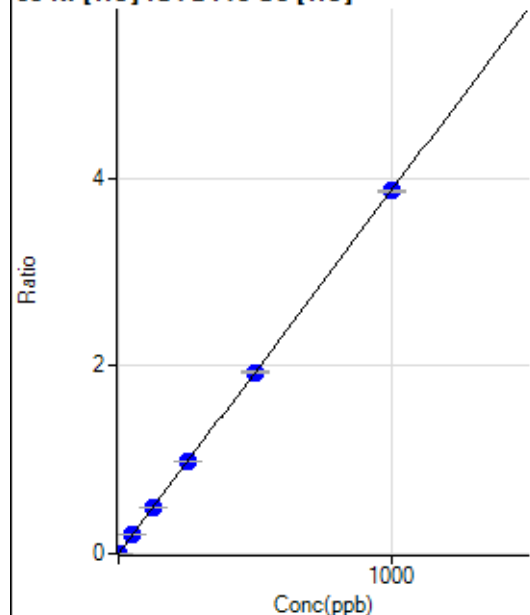
$$R = 1.0000$$

$$DL = 0.01164$$

$$BEC = 0.00987$$

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	321.12	0.0010	P	8.9
2	☐	1.000	1.005	1548.99	0.0049	P	3.7
3	☐	50.000	52.748	63498.75	0.2051	P	1.9
4	☐	125.000	128.324	150318.40	0.4975	P	1.1
5	☐	250.000	253.989	273180.64	0.9837	P	0.6
6	☐	500.000	499.742	500915.58	1.9345	P	0.6
7	☐	1000.000	998.579	960527.77	3.8645	P	0.7
8	☐			4492.95	0.0159	P	2.9

$$y = 0.0039 * x + 0.0010$$

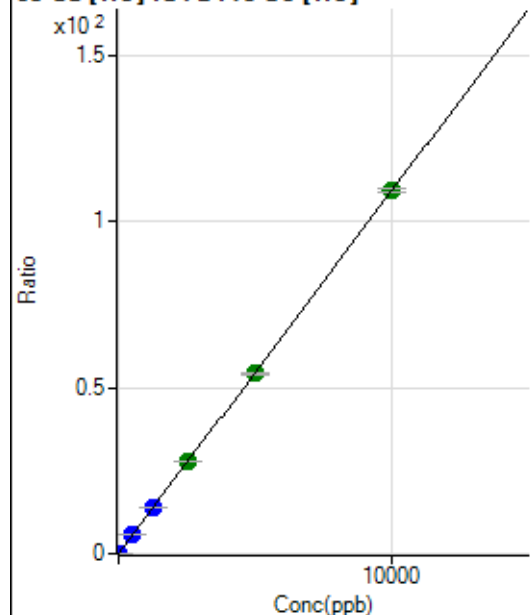
$$R = 1.0000$$

$$DL = 0.07069$$

$$BEC = 0.2643$$

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	1075.61	0.0034	P	0.5
2	☐	2.000	1.923	7694.29	0.0244	P	2.4
3	☐	500.000	510.634	1724604.02	5.5702	P	1.0
4	☐	1250.000	1253.316	4129409.76	13.6666	P	0.5
5	☐	2500.000	2535.264	7676676.27	27.6419	A	1.2
6	☐	5000.000	4973.513	14040264.79	54.2227	A	0.9
7	☐	10000.000	10003.481	27106284.32	109.0574	A	0.9
8	☐			7852.17	0.0278	P	2.9

$$y = 0.0109 * x + 0.0034$$

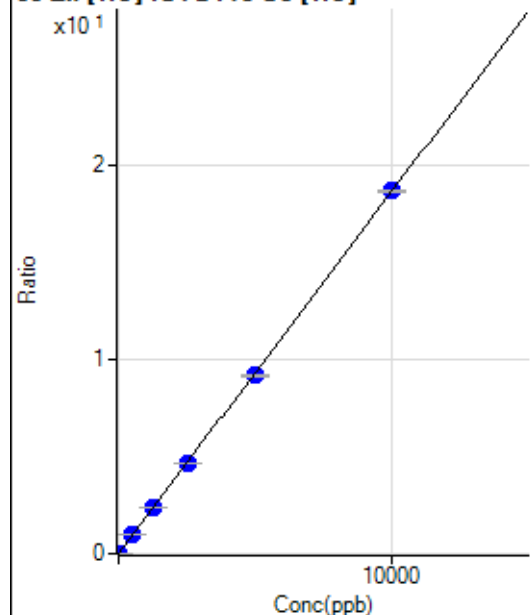
$$R = 1.0000$$

$$DL = 0.004868$$

$$BEC = 0.3141$$

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	343.34	0.0011	P	16.2
2	☐	2.000	2.403	1755.68	0.0056	P	2.7
3	☐	500.000	511.986	295300.63	0.9538	P	1.5
4	☐	1250.000	1255.412	706165.44	2.3372	P	0.7
5	☐	2500.000	2506.080	1295362.35	4.6644	P	0.5
6	☐	5000.000	4933.272	2377250.87	9.1809	P	1.0
7	☐	10000.000	10030.568	4639547.36	18.6659	P	0.6
8	☐			9186.30	0.0325	P	2.7

$$y = 0.0019 * x + 0.0011$$

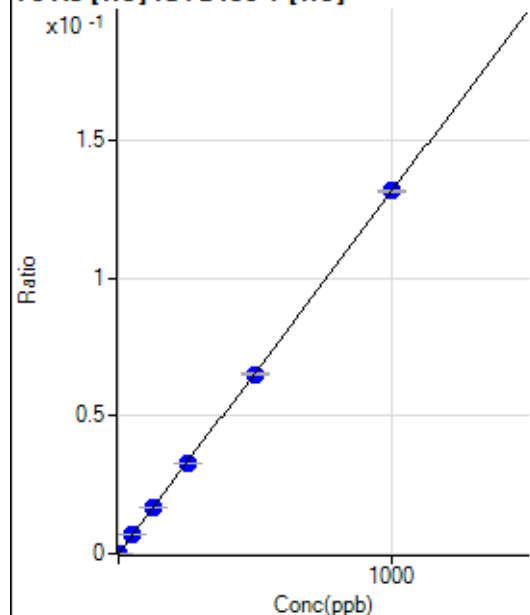
$$R = 1.0000$$

$$DL = 0.2861$$

$$BEC = 0.5876$$

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	4.32	0.0000	P	25.1
2	☐	1.000	1.032	351.24	0.0001	P	4.3
3	☐	50.000	51.049	16924.67	0.0067	P	0.6
4	☐	125.000	128.093	41597.39	0.0168	P	0.5
5	☐	250.000	250.383	75767.09	0.0329	P	0.6
6	☐	500.000	495.286	141041.99	0.0651	P	0.5
7	☐	1000.000	1001.822	275392.08	0.1317	P	0.4
8	☐			125.31	0.0001	P	12.5

$$y = 1.3144E-004 * x + 1.6970E-006$$

$$R = 1.0000$$

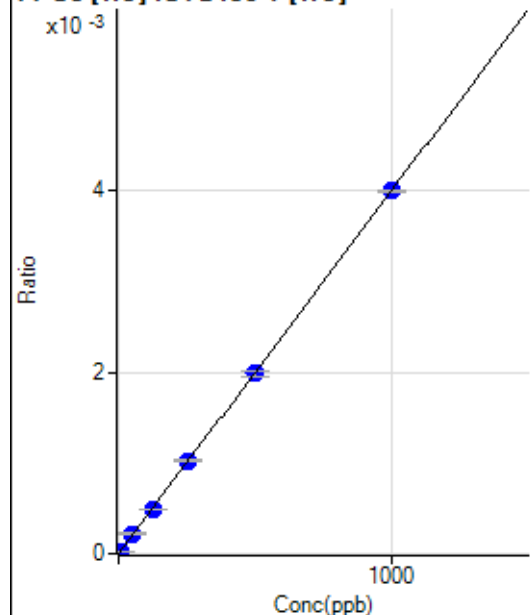
$$DL = 0.009705$$

$$BEC = 0.01291$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	0.00	0.0000	P	
2	☐	5.000	5.218	53.33	0.0000	P	12.6
3	☐	50.000	53.447	538.91	0.0002	P	9.4
4	☐	125.000	122.168	1206.73	0.0005	P	2.1
5	☐	250.000	256.922	2364.66	0.0010	P	1.4
6	☐	500.000	497.152	4306.24	0.0020	P	3.6
7	☐	1000.000	999.874	8360.26	0.0040	P	0.7
8	☐			2.22	0.0000	P	173.2

$$y = 3.9980\text{E-}006 * x + 0.0000\text{E+}000$$

$$R = 1.0000$$

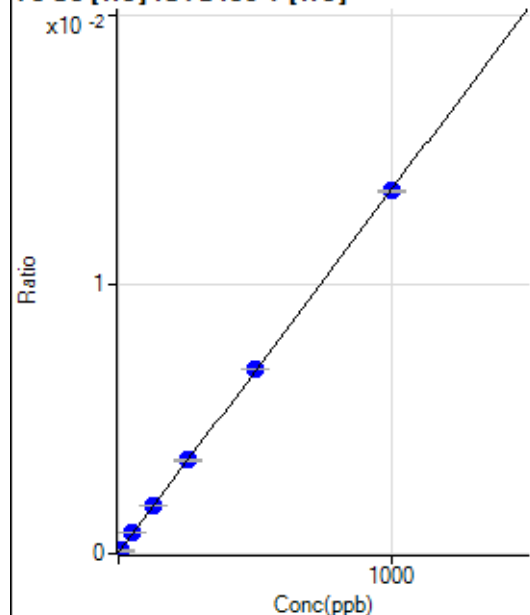
$$DL = 0$$

$$BEC = 0$$

Weight: <None>

Min Conc: 0

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



	R _j ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	106.17	0.0000	P	23.9
2	☐	5.000	4.964	277.78	0.0001	P	9.0
3	☐	50.000	53.888	1937.79	0.0008	P	3.5
4	☐	125.000	129.691	4424.15	0.0018	P	1.0
5	☐	250.000	254.136	7986.79	0.0035	P	1.9
6	☐	500.000	503.377	14797.69	0.0068	P	0.1
7	☐	1000.000	996.497	28192.10	0.0135	P	0.7
8	☐			79.63	0.0000	P	24.1

$$y = 1.3486\text{E-}005 * x + 4.1706\text{E-}005$$

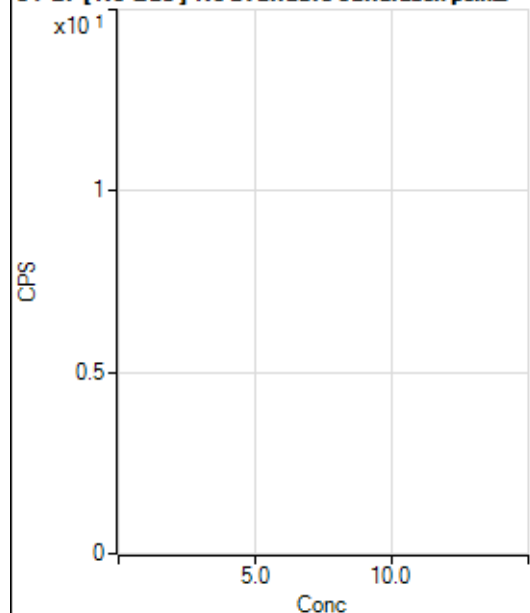
$$R = 1.0000$$

$$DL = 2.216$$

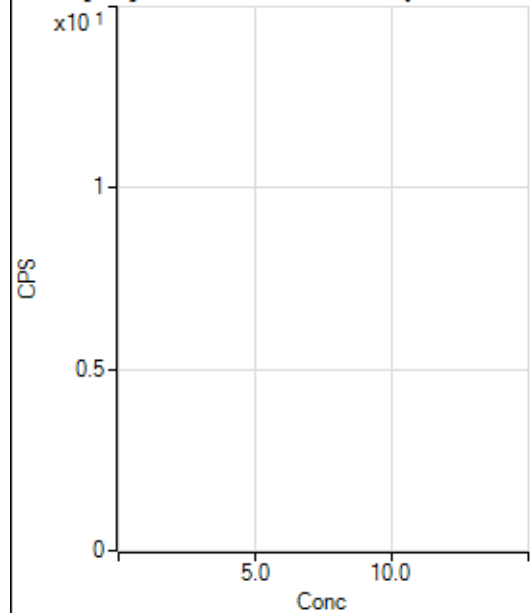
$$BEC = 3.093$$

Weight: <None>

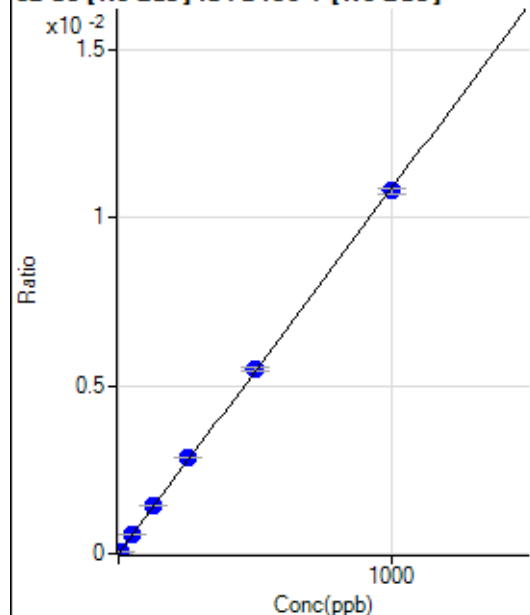
Min Conc: 0

81 Br [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			7349.29		P	2.3
2	☐			7304.82		P	6.3
3	☐			7074.16		P	6.9
4	☐			6587.77		P	5.2
5	☐			6323.78		P	6.7
6	☐			5726.29		P	1.5
7	☐			5309.45		P	1.5
8	☐			5698.53		P	4.4

81 Br [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			53.39		P	47.2
2	☐			53.39		P	21.7
3	☐			36.70		P	83.3
4	☐			56.72		P	20.4
5	☐			60.06		P	72.6
6	☐			13.35		P	114.6
7	☐			66.73		P	48.2
8	☐			80.08		P	33.1

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

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1.15	0.0000	P	1315.
2	☐	5.000	5.276	645.96	0.0001	P	5.8
3	☐	50.000	53.616	6661.56	0.0006	P	1.8
4	☐	125.000	132.249	16121.86	0.0014	P	0.5
5	☐	250.000	262.277	30329.80	0.0028	P	0.6
6	☐	500.000	505.096	55421.68	0.0055	P	1.8
7	☐	1000.000	993.295	105950.12	0.0108	P	1.2
8	☐			4.93	0.0000	P	535.4

$$y = 1.0858E-005 * x + 9.7620E-008$$

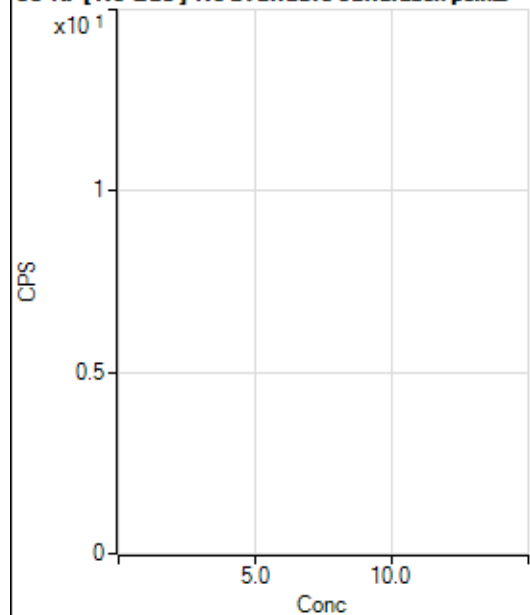
$$R = 0.9999$$

$$DL = 0.3548$$

$$BEC = 0.008991$$

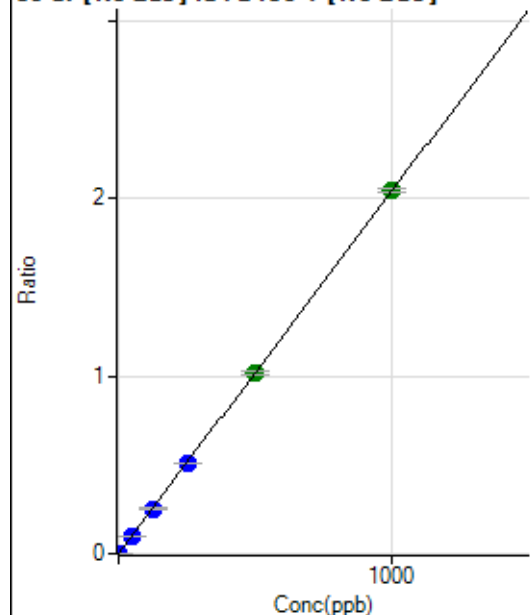
Weight: <None>

Min Conc: 0

83 Kr [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐			573.35		P	3.2
2	☐			557.80		P	1.8
3	☐			582.24		P	6.8
4	☐			511.12		P	4.3
5	☐			533.35		P	8.8
6	☐			505.57		P	8.2
7	☐			466.68		P	8.0
8	☐			488.90		P	6.3

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	1016.73	0.0001	P	0.5
2	☐	1.000	0.098	3269.91	0.0003	P	3.7
3	☐	50.000	50.090	1168323.48	0.1021	P	0.4
4	☐	125.000	124.689	2852190.36	0.2540	P	0.3
5	☐	250.000	249.070	5403723.99	0.5074	P	0.7
6	☐	500.000	497.222	10233709.26	1.0128	A	2.4
7	☐	1000.000	1001.657	20042662.43	2.0402	A	0.9
8	☐			8866.84	0.0009	P	4.8

$$y = 0.0020 * x + 9.0025E-005$$

$$R = 1.0000$$

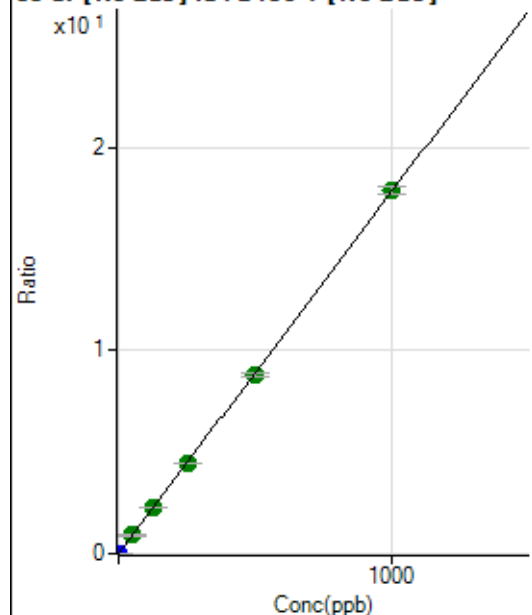
$$DL = 0.000704$$

$$BEC = 0.0442$$

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	80.56	0.0000	P	22.0
2	☐	1.000	0.108	21647.33	0.0019	P	0.7
3	☐	50.000	50.541	10300381.83	0.9002	A	0.7
4	☐	125.000	125.795	25155485.98	2.2406	A	0.8
5	☐	250.000	251.313	47674538.91	4.4764	A	0.6
6	☐	500.000	492.929	88715911.70	8.7800	A	2.5
7	☐	1000.000	1003.082	175515071.9	17.8667	A	2.1
8	☐			69889.61	0.0071	P	0.7

$$y = 0.0178 * x + 7.1368E-006$$

$$R = 1.0000$$

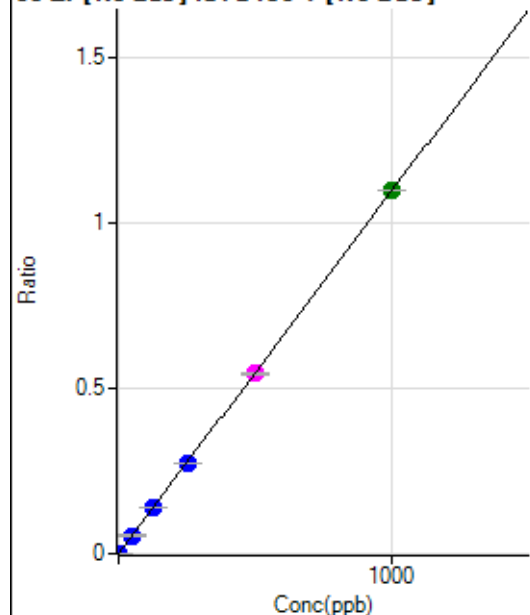
$$DL = 0.0002643$$

$$BEC = 0.0004007$$

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	597.25	0.0001	P	12.4
2	☐	1.000	0.922	11983.11	0.0011	P	4.2
3	☐	50.000	50.356	632613.02	0.0553	P	0.8
4	☐	125.000	125.467	1545699.18	0.1377	P	0.6
5	☐	250.000	250.827	2930944.10	0.2752	P	0.2
6	☐	500.000	497.004	5510156.89	0.5452	M	1.1
7	☐	1000.000	1001.215	10790055.36	1.0983	A	0.0
8	☐			3089.31	0.0003	P	6.9

$$y = 0.0011 * x + 5.2898E-005$$

$$R = 1.0000$$

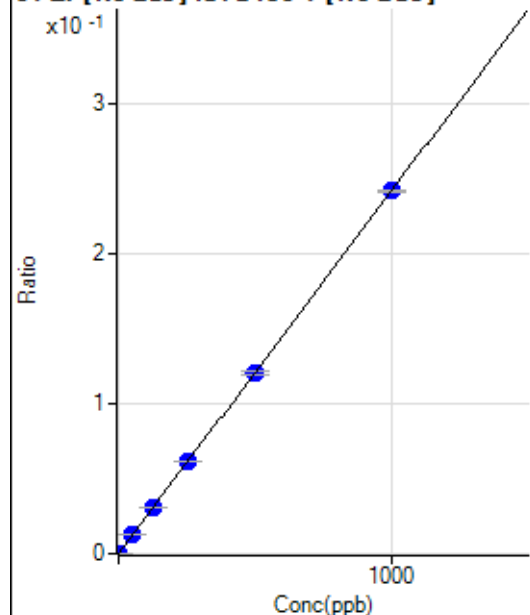
$$DL = 0.01798$$

$$BEC = 0.04822$$

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	125.00	0.0000	P	13.1
2	☐	1.000	0.981	2794.79	0.0002	P	9.4
3	☐	50.000	51.044	141236.76	0.0123	P	1.3
4	☐	125.000	127.622	346292.53	0.0308	P	1.3
5	☐	250.000	255.068	656456.47	0.0616	P	0.6
6	☐	500.000	496.802	1213055.62	0.1200	P	1.8
7	☐	1000.000	999.952	2373548.21	0.2416	P	0.6
8	☐			694.48	0.0001	P	4.2

$$y = 2.4160E-004 * x + 1.1066E-005$$

$$R = 1.0000$$

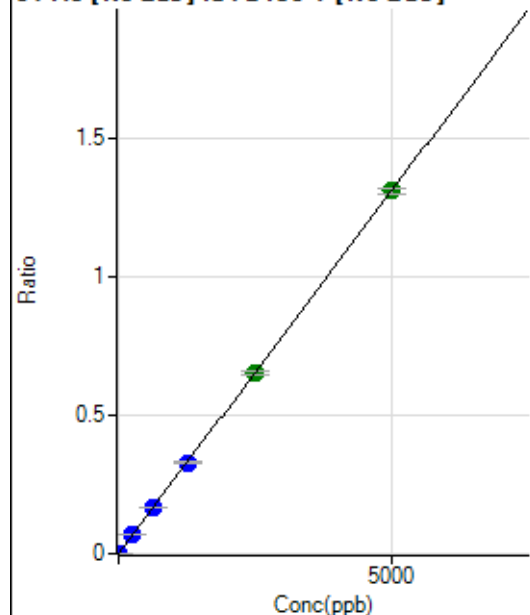
$$DL = 0.01795$$

$$BEC = 0.0458$$

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	208.34	0.0000	P	10.5
2	☐	5.000	4.930	14771.84	0.0013	P	3.6
3	☐	250.000	253.384	761158.90	0.0665	P	0.6
4	☐	625.000	631.403	1860741.84	0.1657	P	0.7
5	☐	1250.000	1256.873	3513582.59	0.3299	P	0.7
6	☐	2500.000	2493.371	6613156.79	0.6544	A	2.0
7	☐	5000.000	5000.627	12894049.60	1.3125	A	1.3
8	☐			3781.16	0.0004	P	4.0

$$y = 2.6246E-004 * x + 1.8446E-005$$

$$R = 1.0000$$

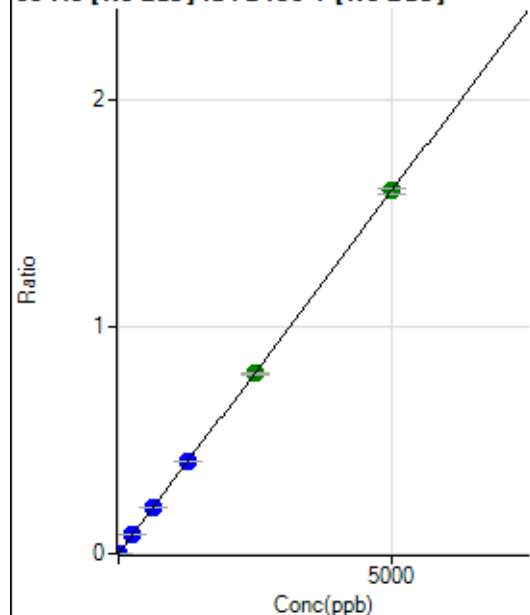
$$DL = 0.02216$$

$$BEC = 0.07028$$

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	11.11	0.0000	P	43.9
2	☐	5.000	4.964	17897.68	0.0016	P	1.0
3	☐	250.000	253.594	928836.87	0.0812	P	0.7
4	☐	625.000	630.896	2267333.38	0.2020	P	0.3
5	☐	1250.000	1264.008	4309488.08	0.4046	P	0.3
6	☐	2500.000	2481.889	8029457.73	0.7945	A	0.9
7	☐	5000.000	5004.637	15737480.04	1.6020	A	1.8
8	☐			4120.13	0.0004	P	3.1

$$y = 3.2010E-004 * x + 9.8506E-007$$

$$R = 1.0000$$

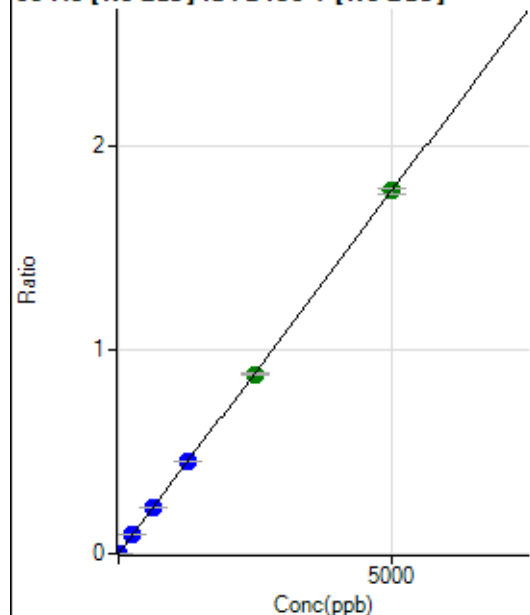
$$DL = 0.00405$$

$$BEC = 0.003077$$

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	63.89	0.0000	P	19.4
2	☐	5.000	5.077	20345.41	0.0018	P	3.1
3	☐	250.000	253.525	1029488.61	0.0900	P	0.8
4	☐	625.000	632.505	2520110.67	0.2245	P	0.8
5	☐	1250.000	1265.476	4783104.23	0.4491	P	0.2
6	☐	2500.000	2479.080	8890517.73	0.8798	A	1.8
7	☐	5000.000	5005.476	17450123.48	1.7763	A	1.4
8	☐			5526.23	0.0006	P	1.9

$$y = 3.5488\text{E-}004 * x + 5.6531\text{E-}006$$

$$R = 1.0000$$

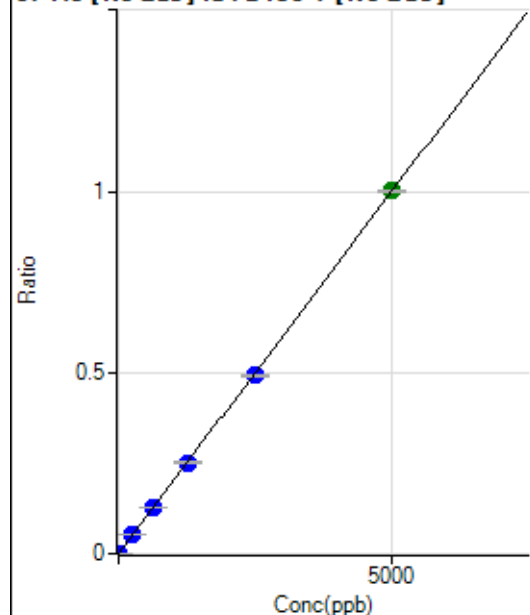
$$DL = 0.009289$$

$$BEC = 0.01593$$

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	8.33	0.0000	P	99.9
2	☐	5.000	5.118	11516.02	0.0010	P	2.4
3	☐	250.000	254.599	581854.55	0.0509	P	0.4
4	☐	625.000	633.147	1419785.86	0.1265	P	0.1
5	☐	1250.000	1262.108	2684861.22	0.2521	P	0.1
6	☐	2500.000	2463.281	4972039.17	0.4920	P	1.5
7	☐	5000.000	5014.084	9838804.39	1.0015	A	0.3
8	☐			2589.20	0.0003	P	10.9

$$y = 1.9973\text{E-}004 * x + 7.3525\text{E-}007$$

$$R = 1.0000$$

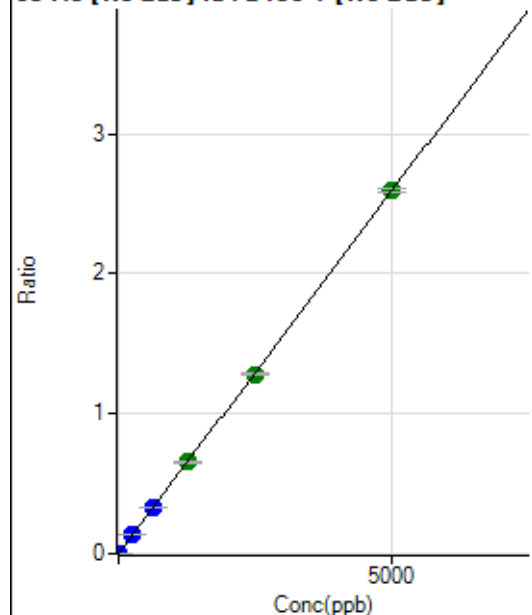
$$DL = 0.01103$$

$$BEC = 0.003681$$

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	16.67	0.0000	P	50.5
2	☐	5.000	5.032	29344.57	0.0026	P	1.6
3	☐	250.000	254.391	1507316.43	0.1317	P	0.5
4	☐	625.000	632.893	3679525.21	0.3277	P	0.7
5	☐	1250.000	1264.848	6975686.18	0.6550	A	0.9
6	☐	2500.000	2477.546	12965911.66	1.2830	A	1.3
7	☐	5000.000	5006.309	25468737.89	2.5925	A	0.9
8	☐			6443.28	0.0007	P	2.4

$$y = 5.1784\text{E-}004 * x + 1.4783\text{E-}006$$

$$R = 1.0000$$

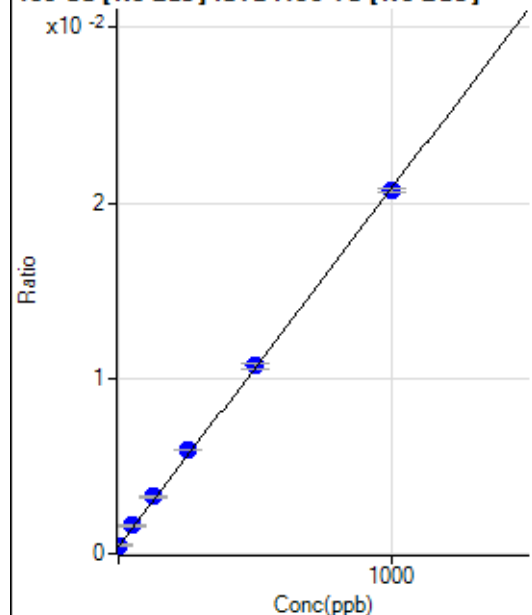
$$DL = 0.004322$$

$$BEC = 0.002855$$

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	4548.08	0.0004	P	8.8
2	☐	1.000	2.209	5023.25	0.0005	P	5.8
3	☐	50.000	56.622	16885.39	0.0016	P	1.6
4	☐	125.000	137.232	33932.94	0.0032	P	1.9
5	☐	250.000	268.804	60280.82	0.0059	P	1.2
6	☐	500.000	502.330	106573.03	0.0107	P	2.5
7	☐	1000.000	992.273	201644.59	0.0207	P	1.0
8	☐			4473.03	0.0005	P	6.4

$$y = 2.0390\text{E-}005 * x + 4.4704\text{E-}004$$

$$R = 0.9998$$

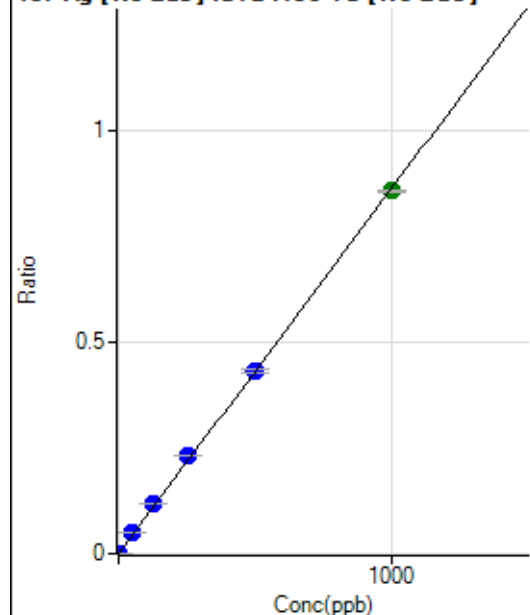
$$DL = 5.8$$

$$BEC = 21.92$$

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	116.67	0.0000	P	21.2
2	☐	1.000	1.074	9559.03	0.0009	P	1.2
3	☐	50.000	56.474	512761.25	0.0486	P	0.1
4	☐	125.000	138.248	1244812.25	0.1190	P	0.3
5	☐	250.000	268.087	2347545.34	0.2308	P	0.2
6	☐	500.000	499.225	4285674.18	0.4299	P	2.3
7	☐	1000.000	993.886	8344827.44	0.8558	A	0.3
8	☐			2222.45	0.0002	P	9.8

$$y = 8.6101\text{E-}004 * x + 1.1464\text{E-}005$$

$$R = 0.9998$$

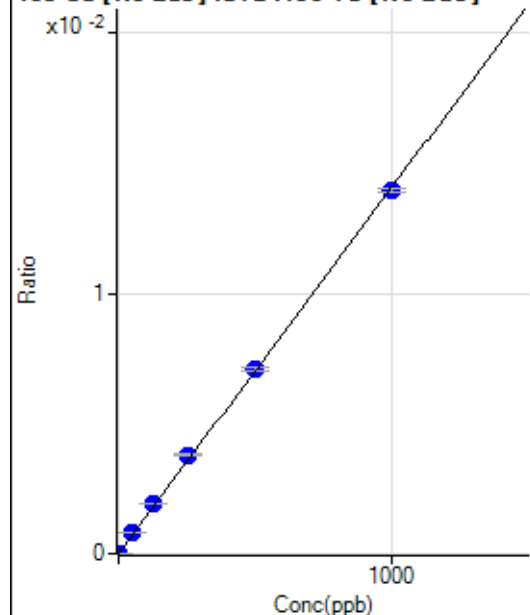
$$DL = 0.008478$$

$$BEC = 0.01331$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	26.39	0.0000	P	48.0
2	☐	1.000	1.219	201.40	0.0000	P	8.6
3	☐	50.000	56.948	8469.28	0.0008	P	2.5
4	☐	125.000	136.085	20035.07	0.0019	P	0.6
5	☐	250.000	270.254	38669.21	0.0038	P	1.3
6	☐	500.000	502.918	70529.26	0.0071	P	2.4
7	☐	1000.000	991.744	136005.20	0.0139	P	1.1
8	☐			243.06	0.0000	P	7.6

$$y = 1.4060\text{E-}005 * x + 2.5917\text{E-}006$$

$$R = 0.9997$$

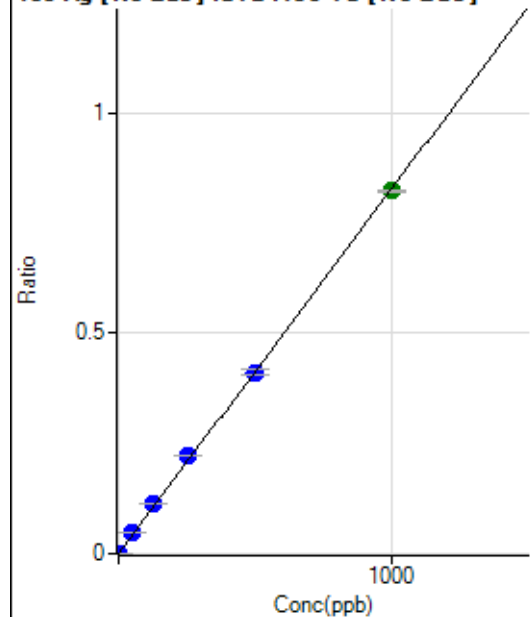
$$DL = 0.2656$$

$$BEC = 0.1843$$

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	22.22	0.0000	P	77.8
2	☐	1.000	1.109	9395.04	0.0009	P	3.9
3	☐	50.000	56.345	491344.92	0.0466	P	1.1
4	☐	125.000	137.750	1191415.42	0.1139	P	0.5
5	☐	250.000	268.702	2260235.32	0.2223	P	0.5
6	☐	500.000	496.704	4095564.72	0.4108	P	3.3
7	☐	1000.000	995.062	8025882.82	0.8230	A	0.5
8	☐			1986.31	0.0002	P	7.0

$$y = 8.2713\text{E-}004 * x + 2.1811\text{E-}006$$

$$R = 0.9998$$

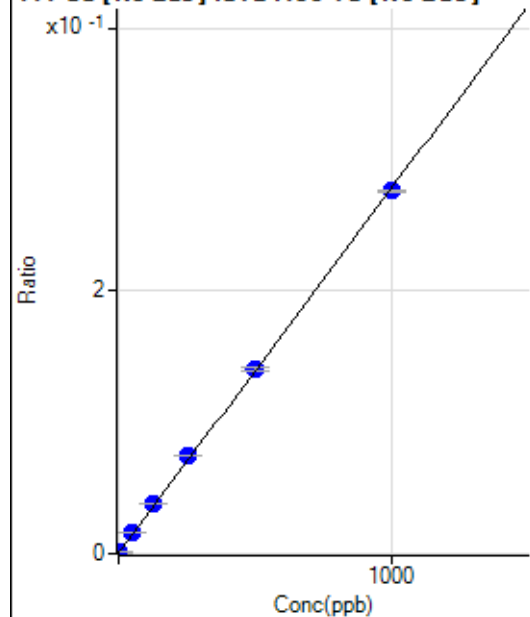
$$DL = 0.006157$$

$$BEC = 0.002637$$

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	4098.97	0.0004	P	9.2
2	☐	1.000	1.267	7706.91	0.0008	P	4.4
3	☐	50.000	55.689	167317.09	0.0159	P	0.5
4	☐	125.000	137.160	402576.59	0.0385	P	0.4
5	☐	250.000	266.990	758246.16	0.0746	P	0.1
6	☐	500.000	502.672	1396032.19	0.1400	P	2.4
7	☐	1000.000	992.612	2692392.97	0.2761	P	0.8
8	☐			4658.41	0.0005	P	6.4

$$y = 2.7775\text{E-}004 * x + 4.0290\text{E-}004$$

$$R = 0.9998$$

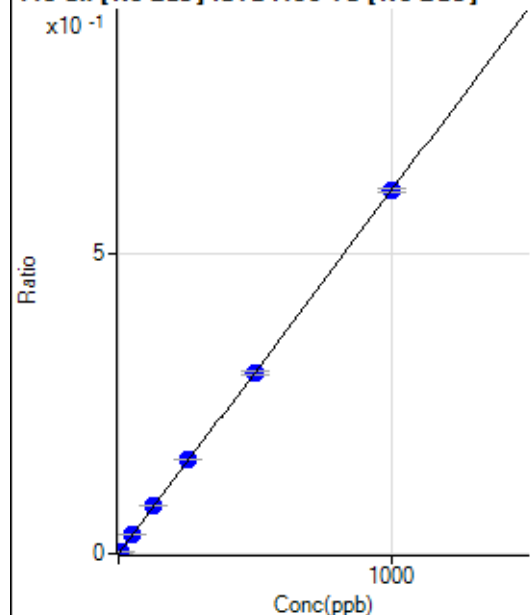
$$DL = 0.4015$$

$$BEC = 1.451$$

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	652.81	0.0001	P	6.3
2	☐	5.000	5.277	33356.68	0.0033	P	0.9
3	☐	50.000	53.620	343662.75	0.0326	P	0.8
4	☐	125.000	132.221	839513.58	0.0803	P	1.0
5	☐	250.000	259.944	1604514.29	0.1578	P	0.0
6	☐	500.000	495.912	3000549.11	0.3009	P	2.0
7	☐	1000.000	998.473	5907859.12	0.6059	P	0.9
8	☐			3044.90	0.0003	P	8.2

$$y = 6.0671E-004 * x + 6.4162E-005$$

$$R = 0.9999$$

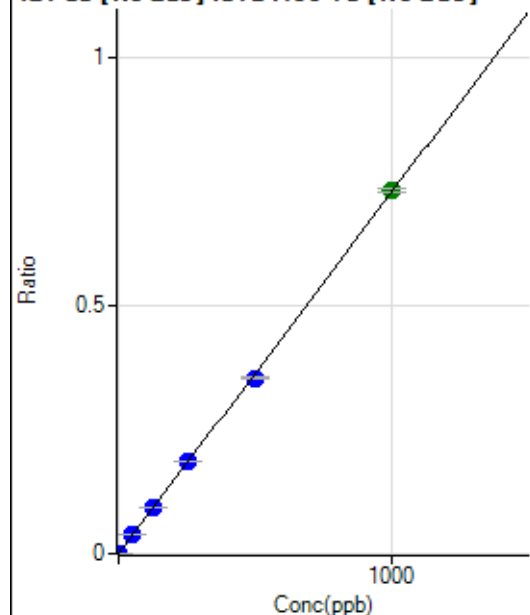
$$DL = 0.02012$$

$$BEC = 0.1058$$

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	91.67	0.0000	P	18.3
2	☐	2.000	2.052	15350.43	0.0015	P	1.7
3	☐	50.000	51.959	399015.77	0.0378	P	0.4
4	☐	125.000	128.365	977574.06	0.0935	P	0.5
5	☐	250.000	255.509	1892282.46	0.1861	P	0.7
6	☐	500.000	486.447	3532247.43	0.3543	P	1.8
7	☐	1000.000	1004.880	7135898.68	0.7318	A	1.2
8	☐			4142.38	0.0004	P	1.4

$$y = 7.2823E-004 * x + 9.0106E-006$$

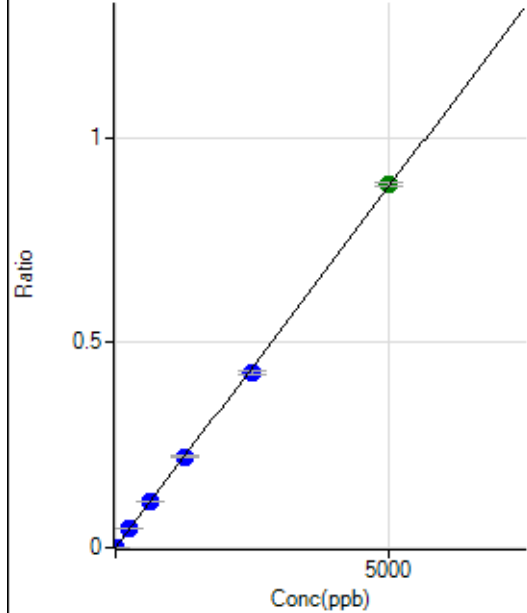
$$R = 0.9998$$

$$DL = 0.006789$$

$$BEC = 0.01237$$

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	30.55	0.0000	P	68.5
2	☐	10.000	10.360	18646.20	0.0018	P	1.7
3	☐	250.000	260.742	483692.24	0.0459	P	0.2
4	☐	625.000	641.409	1180094.82	0.1129	P	0.5
5	☐	1250.000	1265.292	2263989.92	0.2226	P	0.4
6	☐	2500.000	2432.205	4266652.57	0.4279	P	2.3
7	☐	5000.000	5027.486	8625688.13	0.8846	A	1.2
8	☐			3283.83	0.0003	P	4.3

$$y = 1.7595E-004 * x + 2.9994E-006$$

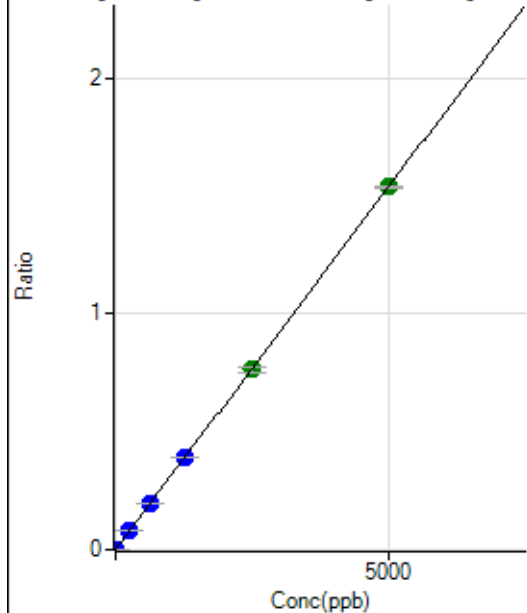
$$R = 0.9999$$

$$DL = 0.03502$$

$$BEC = 0.01705$$

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	13.89	0.0000	P	69.0
2	☐	10.000	10.403	32683.33	0.0032	P	3.4
3	☐	250.000	259.715	842101.73	0.0799	P	0.2
4	☐	625.000	641.399	2062680.77	0.1973	P	0.4
5	☐	1250.000	1271.538	3976844.44	0.3911	P	0.4
6	☐	2500.000	2483.809	7615319.61	0.7639	A	3.0
7	☐	5000.000	5000.174	14995311.62	1.5378	A	0.8
8	☐			5931.98	0.0006	P	3.2

$$y = 3.0755E-004 * x + 1.3632E-006$$

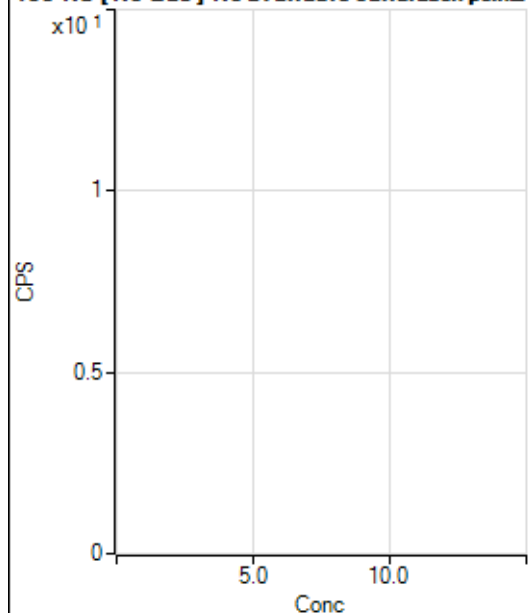
$$R = 1.0000$$

$$DL = 0.009179$$

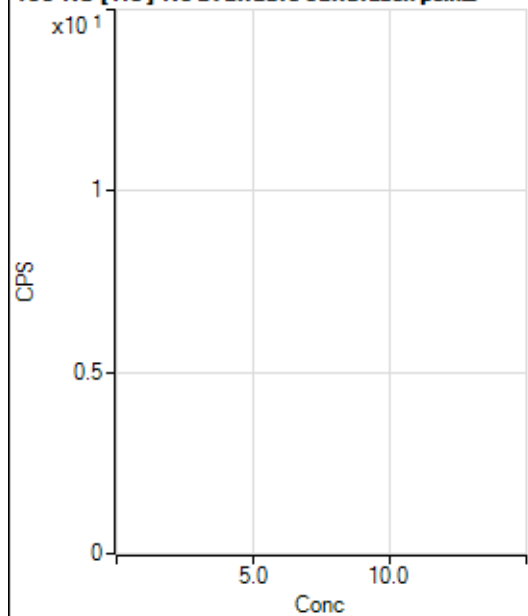
$$BEC = 0.004433$$

Weight: <None>

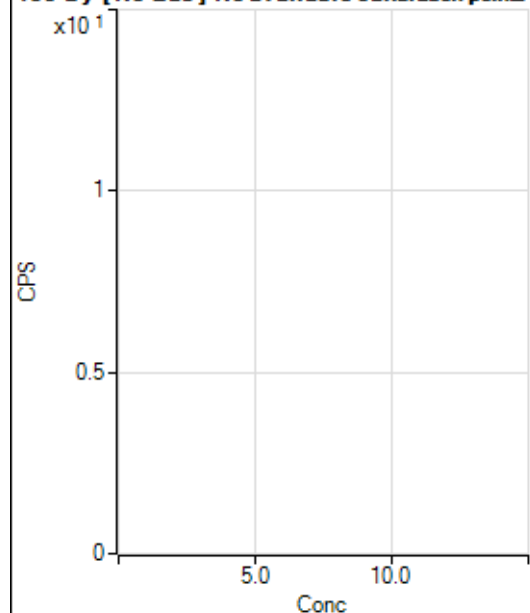
Min Conc: 0

150 Nd [No Gas] No available calibration points

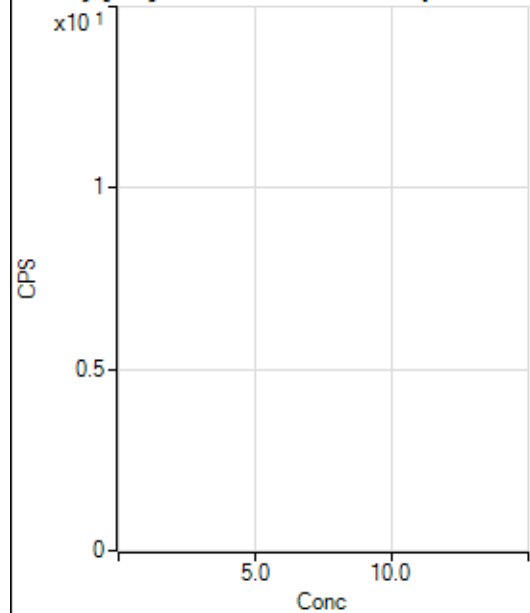
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			0.00		P	
3	☐			64.45		P	26.0
4	☐			144.45		P	26.2
5	☐			240.01		P	32.7
6	☐			500.02		P	13.9
7	☐			702.26		P	4.0
8	☐			37.78		P	56.7

150 Nd [He] No available calibration points

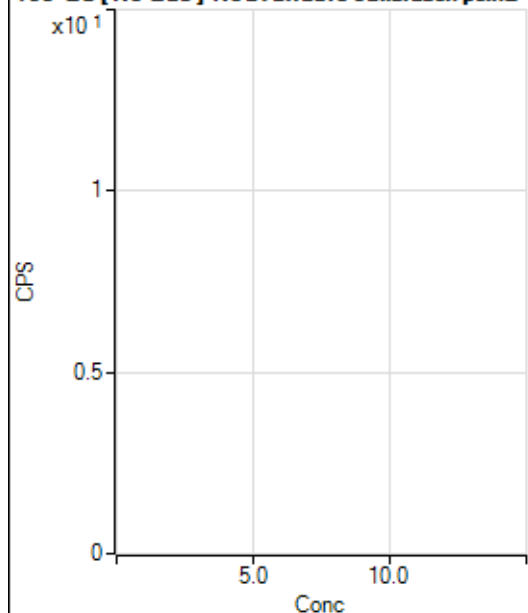
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	86.6
2	☐			0.00		P	
3	☐			20.00		P	66.7
4	☐			31.11		P	16.4
5	☐			77.78		P	31.0
6	☐			130.00		P	5.1
7	☐			127.78		P	17.4
8	☐			15.56		P	65.5

156 Dy [No Gas] No available calibration points

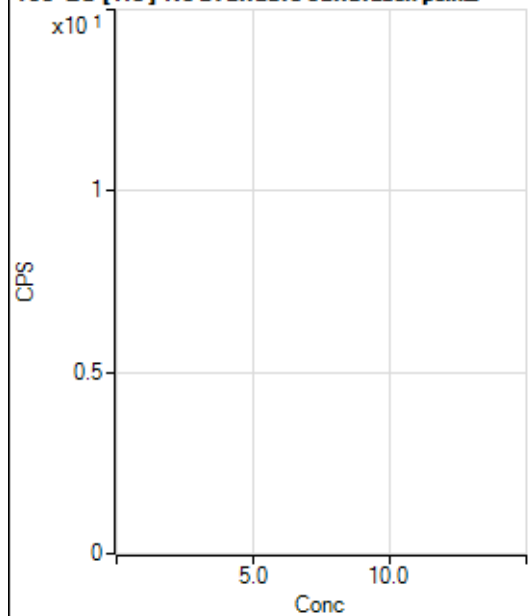
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			5.55		P	86.6
2	☐			2.78		P	173.2
3	☐			41.67		P	40.0
4	☐			86.11		P	31.1
5	☐			177.79		P	9.8
6	☐			277.79		P	14.2
7	☐			444.46		P	5.4
8	☐			1375.11		P	4.6

156 Dy [He] No available calibration points

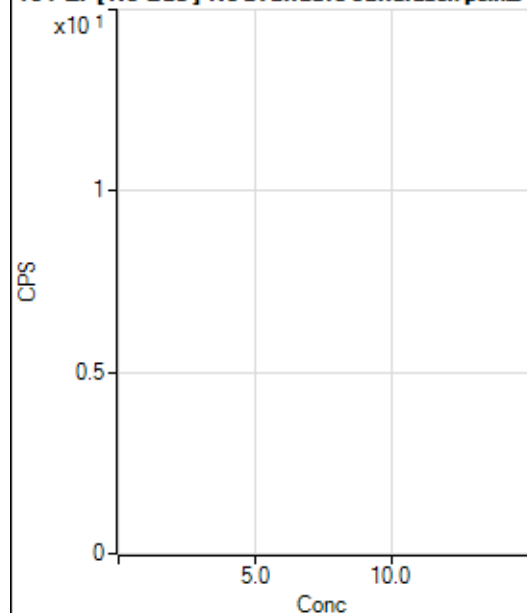
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			2.22		P	173.2
2	☐			6.67		P	50.0
3	☐			26.66		P	21.7
4	☐			68.89		P	47.5
5	☐			120.00		P	32.8
6	☐			226.67		P	8.2
7	☐			368.90		P	8.4
8	☐			946.71		P	7.3

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

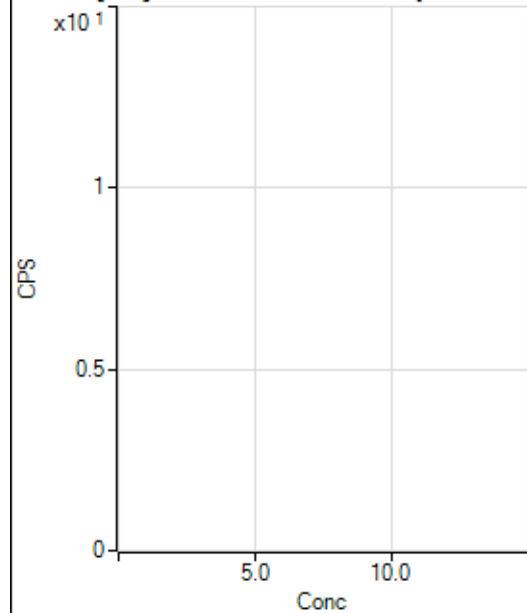
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			44.44		P	28.6
2	☐			77.78		P	16.4
3	☐			102.78		P	30.7
4	☐			125.00		P	6.7
5	☐			169.45		P	10.2
6	☐			344.46		P	24.4
7	☐			427.79		P	11.7
8	☐			1544.57		P	9.1

160 Gd [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			161.11		P	41.4
2	☐			153.33		P	22.9
3	☐			141.11		P	11.7
4	☐			173.34		P	15.4
5	☐			216.67		P	3.1
6	☐			265.56		P	2.9
7	☐			382.23		P	11.0
8	☐			1180.06		P	6.4

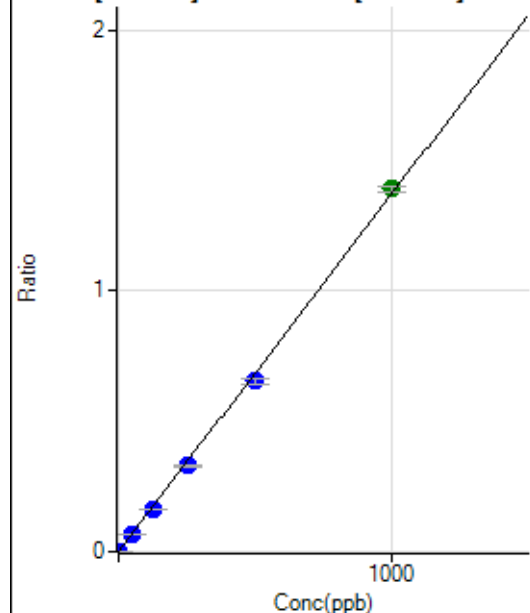
164 Er [No Gas] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			97.23		P	17.8
2	☐			72.23		P	26.7
3	☐			69.45		P	30.2
4	☐			83.34		P	20.0
5	☐			97.22		P	21.6
6	☐			152.78		P	6.3
7	☐			177.78		P	16.5
8	☐			294.46		P	11.8

164 Er [He] No available calibration points

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐			33.34		P	17.3
2	☐			26.67		P	76.0
3	☐			51.11		P	13.6
4	☐			47.78		P	14.5
5	☐			60.00		P	11.1
6	☐			106.67		P	8.3
7	☐			84.45		P	8.2
8	☐			196.67		P	18.9

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	94.45	0.0000	P	13.3
2	☐	1.000	0.943	9342.39	0.0013	P	7.6
3	☐	50.000	47.287	484240.13	0.0649	P	0.5
4	☐	125.000	117.658	1197706.29	0.1614	P	0.9
5	☐	250.000	240.027	2336905.22	0.3292	P	3.0
6	☐	500.000	477.328	4542619.11	0.6547	P	3.9
7	☐	1000.000	1014.883	9228370.09	1.3919	A	1.4
8	☐			3197.69	0.0005	P	12.8

$$y = 0.0014 * x + 1.3553E-005$$

$$R = 0.9996$$

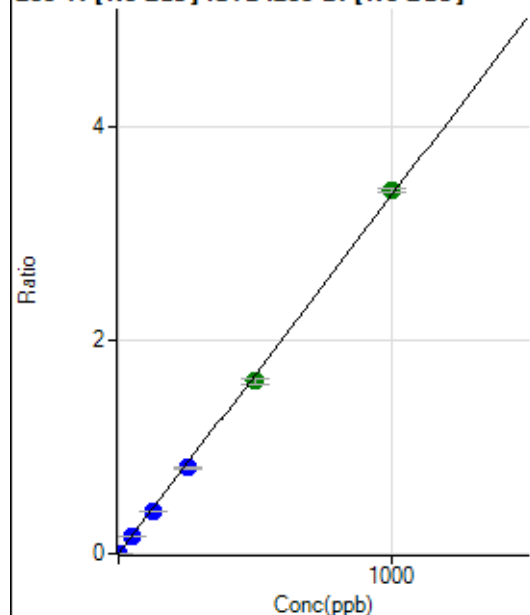
$$DL = 0.003946$$

$$BEC = 0.009882$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	0.000	0.000	297.24	0.0000	P	21.2
2	☐	1.000	0.926	22497.28	0.0031	P	4.0
3	☐	50.000	46.838	1171676.34	0.1570	P	0.7
4	☐	125.000	117.152	2913136.72	0.3925	P	0.6
5	☐	250.000	240.337	5716066.32	0.8052	P	2.7
6	☐	500.000	481.492	11194606.85	1.6131	A	3.2
7	☐	1000.000	1012.809	22496003.63	3.3931	A	1.2
8	☐			7838.70	0.0013	P	21.6

$$y = 0.0034 * x + 4.2645E-005$$

$$R = 0.9997$$

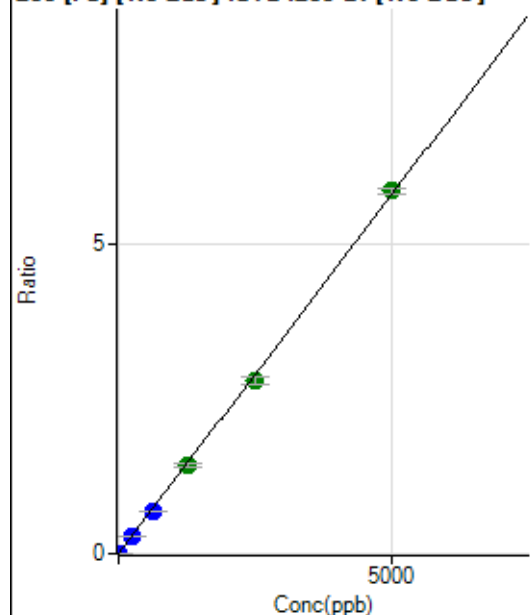
$$DL = 0.008097$$

$$BEC = 0.01273$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	661.14	0.0001	P	4.9
2	☐	1.000	0.900	8122.99	0.0011	P	4.2
3	☐	250.000	229.972	1985512.41	0.2660	P	0.8
4	☐	625.000	577.403	4955201.38	0.6677	P	0.4
5	☐	1250.000	1232.066	10113658.91	1.4246	A	2.3
6	☐	2500.000	2411.418	19347075.89	2.7881	A	3.6
7	☐	5000.000	5055.726	38754426.79	5.8453	A	1.7
8	☐			11696.02	0.0019	P	3.3

$$y = 0.0012 * x + 9.4876E-005$$

$$R = 0.9997$$

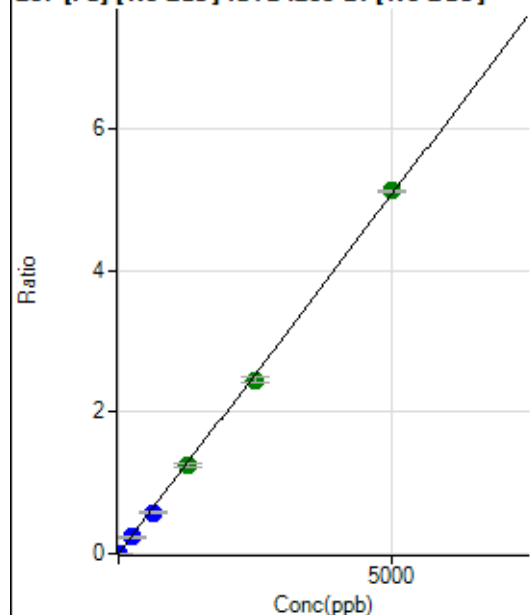
$$DL = 0.01197$$

$$BEC = 0.08206$$

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	529.65	0.0001	P	10.3
2	☐	1.000	0.954	7478.16	0.0010	P	5.5
3	☐	250.000	228.165	1730536.46	0.2318	P	0.6
4	☐	625.000	575.132	4336017.55	0.5842	P	0.6
5	☐	1250.000	1227.481	8850151.82	1.2468	A	3.5
6	☐	2500.000	2419.313	17052418.21	2.4573	A	3.7
7	☐	5000.000	5053.298	34028615.58	5.1326	A	0.4
8	☐			10265.24	0.0017	P	3.1

$$y = 0.0010 * x + 7.6022E-005$$

$$R = 0.9998$$

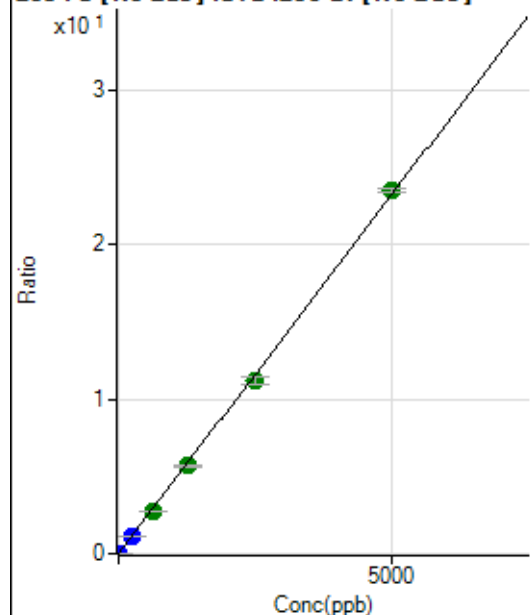
$$DL = 0.02306$$

$$BEC = 0.07485$$

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	2592.74	0.0004	P	3.4
2	☐	1.000	0.921	33281.60	0.0047	P	3.8
3	☐	250.000	229.317	7956084.32	1.0658	P	0.6
4	☐	625.000	588.568	20297671.49	2.7349	A	0.3
5	☐	1250.000	1225.106	40409471.39	5.6923	A	2.8
6	☐	2500.000	2408.556	77649614.93	11.1906	A	3.9
7	☐	5000.000	5057.534	155787708.1	23.4978	A	0.9
8	☐			46434.00	0.0076	P	1.3

$$y = 0.0046 * x + 3.7210E-004$$

$$R = 0.9997$$

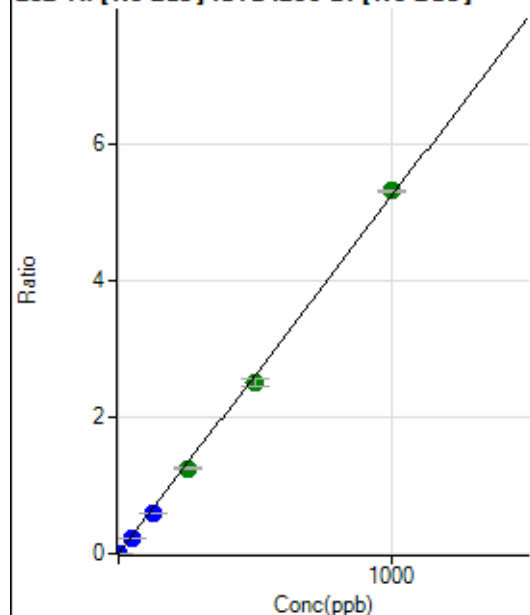
$$DL = 0.008118$$

$$BEC = 0.08009$$

Weight: <None>

Min Conc: 0

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



	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	0.000	0.000	164.82	0.0000	P	4.9
2	☐	1.000	-0.001	131.49	0.0000	P	18.0
3	☐	50.000	43.859	1714868.44	0.2297	P	0.4
4	☐	125.000	111.100	4318461.50	0.5819	P	0.6
5	☐	250.000	238.678	8872989.26	1.2500	A	3.4
6	☐	500.000	480.211	17448600.16	2.5150	A	4.5
7	☐	1000.000	1014.770	35234270.69	5.3146	A	0.8
8	☐			4280.41	0.0007	P	9.2

$$y = 0.0052 * x + 2.3652E-005$$

$$R = 0.9996$$

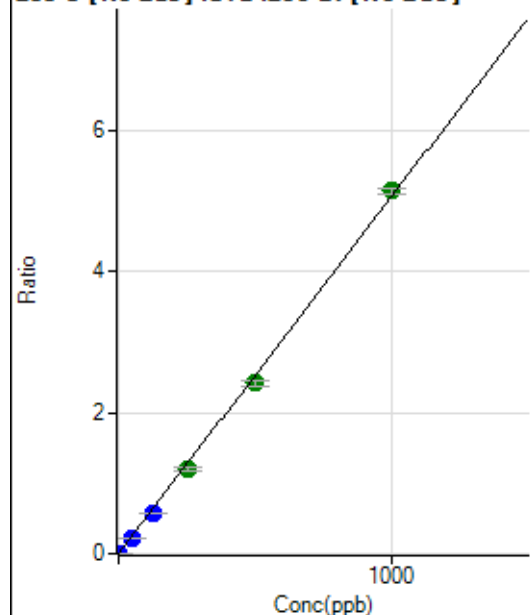
$$DL = 0.0006638$$

$$BEC = 0.004516$$

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	16.66	0.0000	P	86.5
2	☐	1.000	0.886	32117.89	0.0045	P	3.9
3	☐	50.000	44.433	1679356.82	0.2250	P	0.4
4	☐	125.000	112.056	4210526.87	0.5673	P	0.8
5	☐	250.000	237.304	8528902.88	1.2014	A	2.8
6	☐	500.000	477.677	16782187.70	2.4184	A	3.6
7	☐	1000.000	1016.232	34111382.01	5.1451	A	1.4
8	☐			3803.44	0.0006	P	5.1

$$y = 0.0051 * x + 2.3900E-006$$

$$R = 0.9995$$

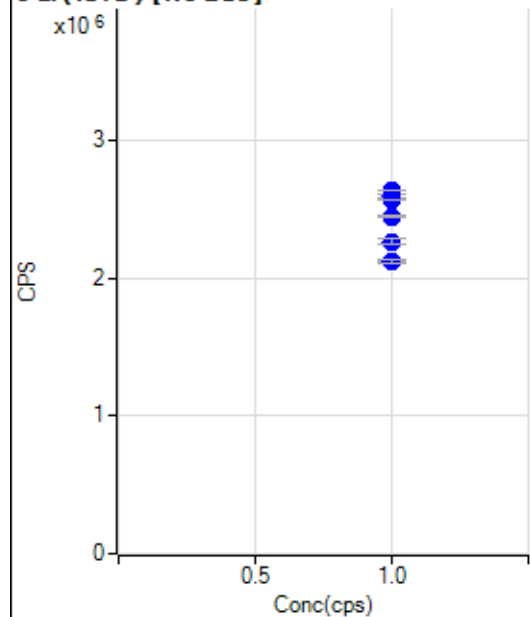
$$DL = 0.001225$$

$$BEC = 0.0004721$$

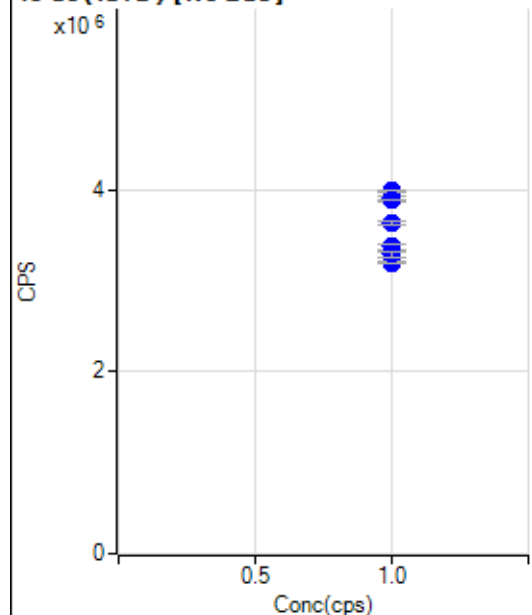
Weight: <None>

Min Conc: 0

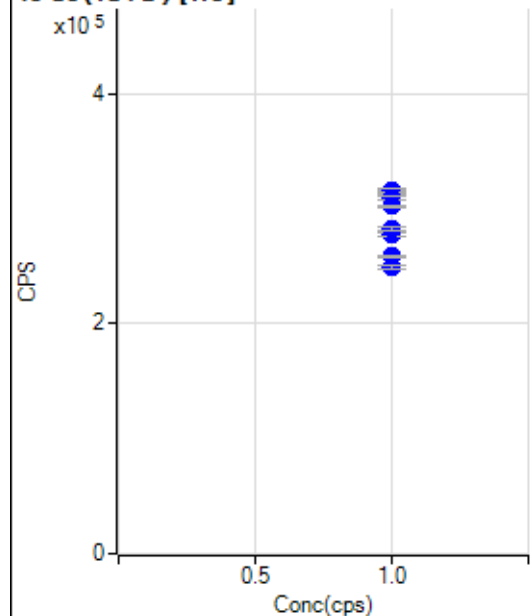
6 Li (ISTD) [No Gas]



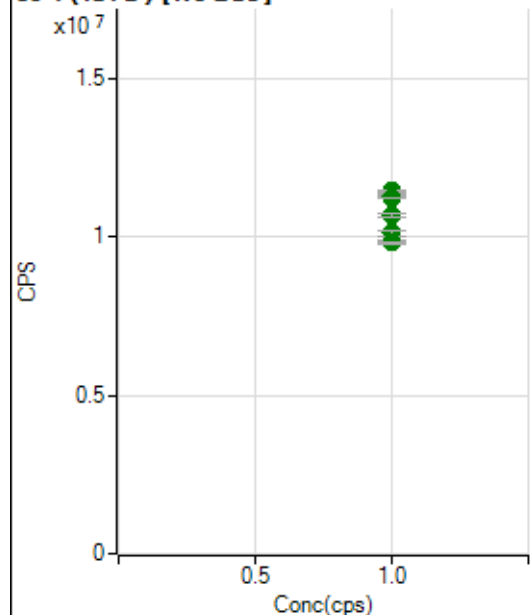
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det	RSD
1	☐	1.000		2570781.61		P	0.2
2	☐	1.000		2596867.45		P	1.0
3	☐	1.000		2636270.08		P	0.1
4	☐	1.000		2576673.78		P	0.0
5	☐	1.000		2450074.44		P	0.8
6	☐	1.000		2267891.32		P	2.2
7	☐	1.000		2127253.26		P	0.6
8	☐	1.000		2123707.80		P	1.8

45 Sc (ISTD) [No Gas]

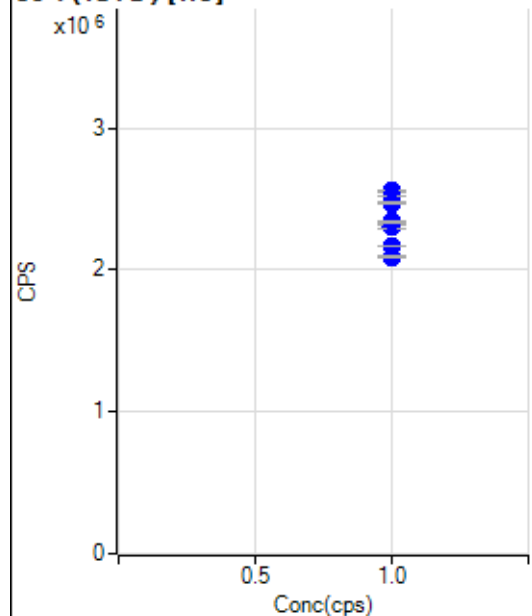
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3968677.75		P	0.3
2	☐	1.000		3902861.89		P	1.5
3	☐	1.000		3984492.20		P	0.8
4	☐	1.000		3879437.89		P	0.2
5	☐	1.000		3630648.07		P	1.5
6	☐	1.000		3372957.69		P	2.1
7	☐	1.000		3197555.23		P	1.1
8	☐	1.000		3286104.95		P	1.6

45 Sc (ISTD) [He]

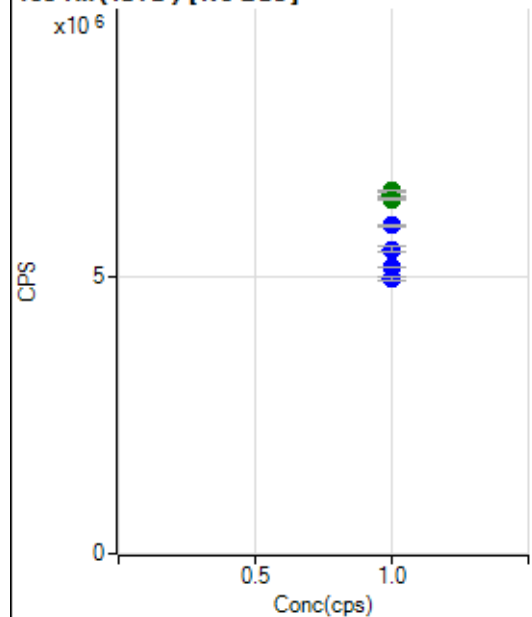
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		314118.24		P	0.8
2	☐	1.000		315575.68		P	1.1
3	☐	1.000		309639.08		P	1.2
4	☐	1.000		302156.29		P	0.6
5	☐	1.000		277715.21		P	0.8
6	☐	1.000		258947.34		P	0.8
7	☐	1.000		248568.70		P	1.2
8	☐	1.000		282273.59		P	0.9

89 Y (ISTD) [No Gas]

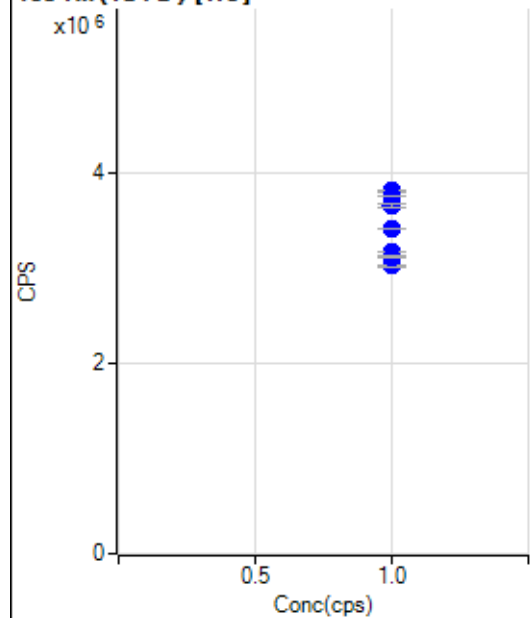
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		11294155.80		A	0.5
2	☐	1.000		11257150.25		A	1.1
3	☐	1.000		11442091.22		A	0.5
4	☐	1.000		11227073.03		A	0.3
5	☐	1.000		10650683.45		A	1.2
6	☐	1.000		10107962.56		A	2.2
7	☐	1.000		9824427.28		A	0.8
8	☐	1.000		9796654.16		A	1.0

89 Y (ISTD) [He]

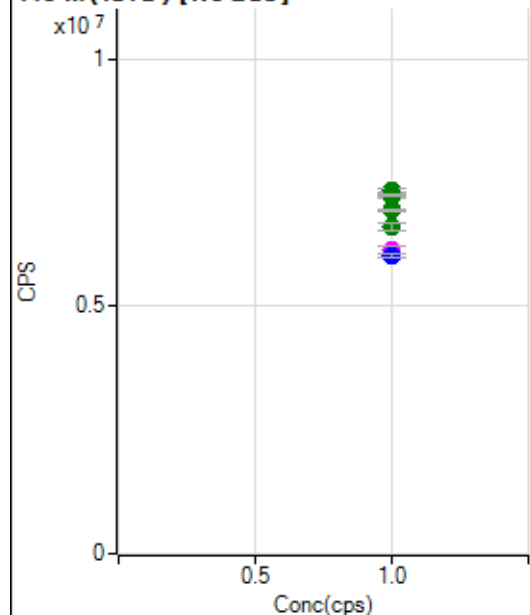
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2546503.45		P	0.3
2	☐	1.000		2556732.15		P	0.1
3	☐	1.000		2521779.86		P	0.4
4	☐	1.000		2470550.40		P	0.8
5	☐	1.000		2302249.60		P	0.7
6	☐	1.000		2166554.41		P	0.0
7	☐	1.000		2091464.01		P	0.7
8	☐	1.000		2340678.11		P	0.6

103 Rh (ISTD) [No Gas]

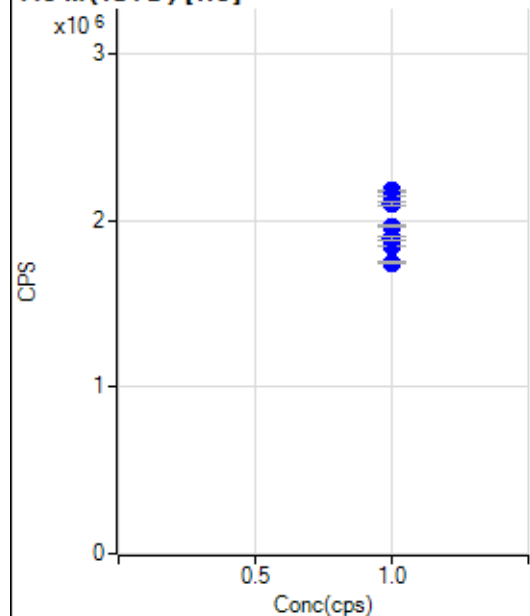
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6506718.93		A	1.1
2	☐	1.000		6481115.74		A	1.7
3	☐	1.000		6566841.71		A	0.3
4	☐	1.000		6408875.46		A	0.7
5	☐	1.000		5939021.79		P	0.8
6	☐	1.000		5505029.64		P	2.1
7	☐	1.000		5183147.07		P	0.6
8	☐	1.000		4969861.69		P	1.4

103 Rh (ISTD) [He]

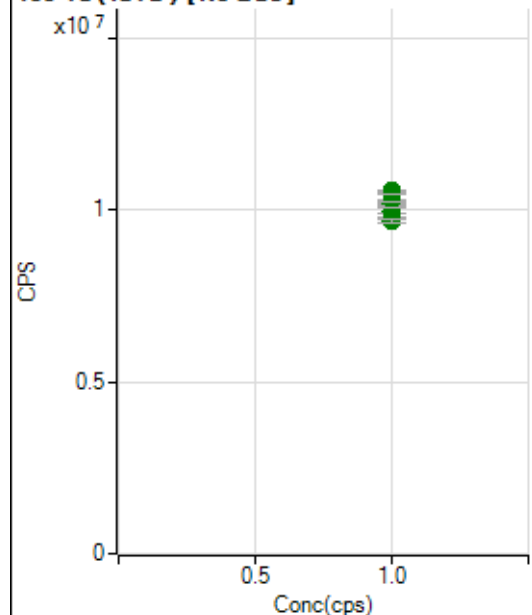
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		3814473.41		P	0.2
2	☐	1.000		3804507.96		P	0.6
3	☐	1.000		3761288.90		P	0.4
4	☐	1.000		3659824.98		P	0.8
5	☐	1.000		3414013.66		P	0.2
6	☐	1.000		3171268.63		P	0.1
7	☐	1.000		3022687.21		P	0.6
8	☐	1.000		3119076.62		P	0.8

115 In (ISTD) [No Gas]

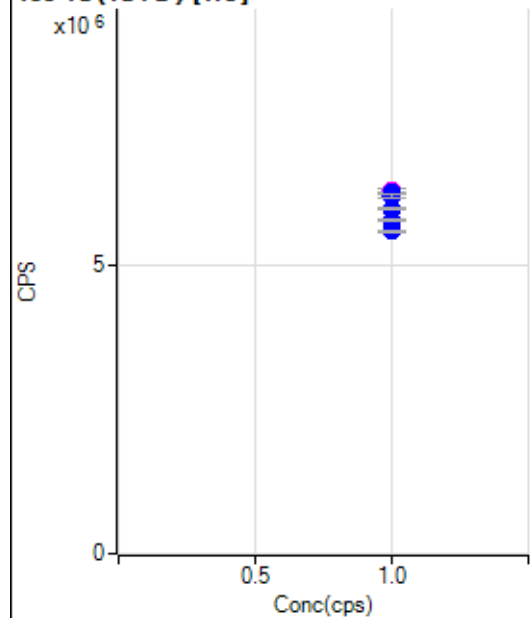
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		7237333.83		A	0.4
2	☐	1.000		7218336.84		A	0.7
3	☐	1.000		7337630.83		A	0.9
4	☐	1.000		7258240.59		A	0.4
5	☐	1.000		6944976.58		A	0.6
6	☐	1.000		6606631.14		A	2.6
7	☐	1.000		6145770.20		M	2.1
8	☐	1.000		6023873.69		P	1.3

115 In (ISTD) [He]

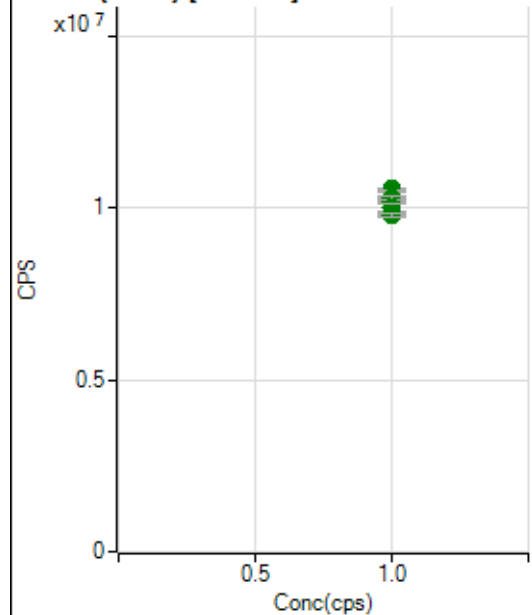
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		2174265.47		P	0.4
2	☐	1.000		2175503.02		P	0.6
3	☐	1.000		2143445.91		P	0.2
4	☐	1.000		2102263.81		P	1.0
5	☐	1.000		1965001.86		P	0.5
6	☐	1.000		1842663.53		P	0.3
7	☐	1.000		1745781.58		P	0.7
8	☐	1.000		1891347.67		P	1.1

159 Tb (ISTD) [No Gas]

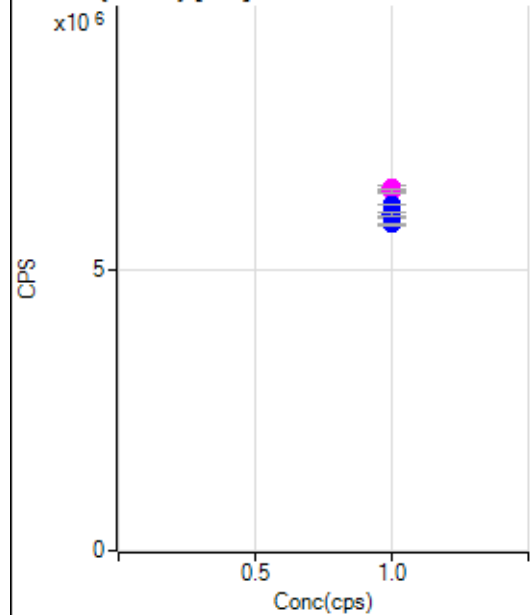
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		10174608.53		A	0.3
2	☐	1.000		10214872.90		A	1.8
3	☐	1.000		10542734.50		A	0.6
4	☐	1.000		10456654.49		A	0.1
5	☐	1.000		10169585.61		A	0.7
6	☐	1.000		9973525.55		A	2.2
7	☐	1.000		9751427.91		A	0.5
8	☐	1.000		9663372.01		A	0.7

159 Tb (ISTD) [He]

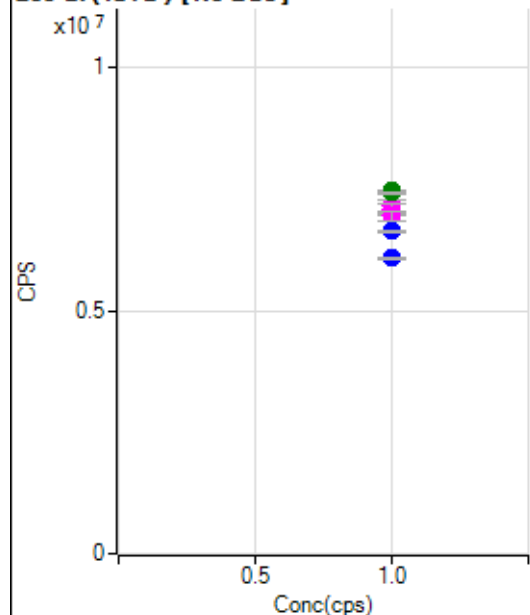
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det .	RSD
1	☐	1.000		6242021.99		P	0.7
2	☐	1.000		6292614.21		M	1.1
3	☐	1.000		6255564.56		P	0.1
4	☐	1.000		6208912.34		P	0.8
5	☐	1.000		5982534.84		P	0.3
6	☐	1.000		5770842.00		P	0.5
7	☐	1.000		5598818.39		P	0.5
8	☐	1.000		5786014.43		P	0.4

165 Ho (ISTD) [No Gas]

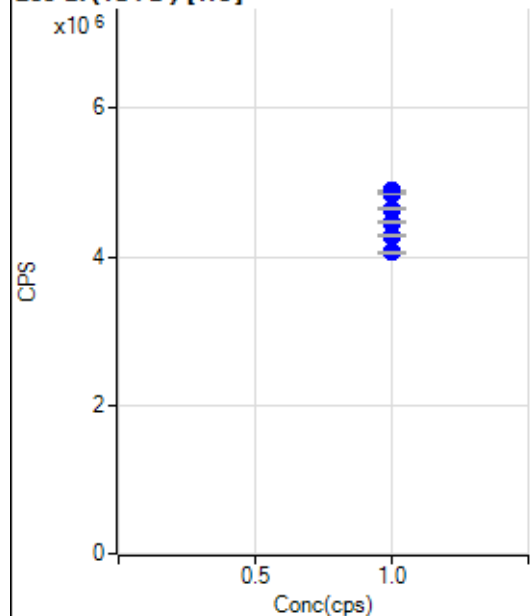
	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		10146065.61		A	0.8
2	☐	1.000		10193178.25		A	1.7
3	☐	1.000		10545842.00		A	0.3
4	☐	1.000		10465634.29		A	0.5
5	☐	1.000		10278308.39		A	0.7
6	☐	1.000		10011760.40		A	1.9
7	☐	1.000		9864410.89		A	1.1
8	☐	1.000		9788020.27		A	1.4

165 Ho (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6426532.41		P	0.4
2	☐	1.000		6472786.78		M	1.9
3	☐	1.000		6438397.54		M	0.5
4	☐	1.000		6415061.02		M	1.2
5	☐	1.000		6174562.96		P	0.2
6	☐	1.000		5948003.73		P	0.3
7	☐	1.000		5819903.94		P	0.6
8	☐	1.000		6000354.56		P	0.8

209 Bi (ISTD) [No Gas]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		6967937.74		P	0.3
2	☐	1.000		7159538.02		M	3.2
3	☐	1.000		7465100.79		A	0.4
4	☐	1.000		7421788.57		A	0.3
5	☐	1.000		7102323.16		M	2.7
6	☐	1.000		6944357.05		M	3.1
7	☐	1.000		6629769.07		P	0.4
8	☐	1.000		6080656.30		P	0.5

209 Bi (ISTD) [He]

	Rj ct	Conc.	Calc Conc.	CPS	Ratio	Det.	RSD
1	☐	1.000		4883223.44		P	0.4
2	☐	1.000		4887738.23		P	0.3
3	☐	1.000		4875133.12		P	0.3
4	☐	1.000		4850115.24		P	0.3
5	☐	1.000		4649681.80		P	0.4
6	☐	1.000		4465542.68		P	0.4
7	☐	1.000		4284027.85		P	0.6
8	☐	1.000		4059235.95		P	0.8

US EPA Tune Check Sample Report

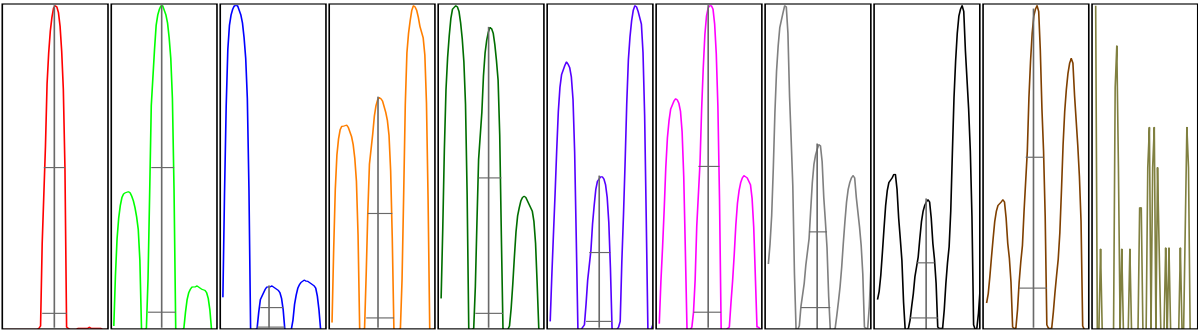
Batch Folder C:\Agilent\ICPMH\1\DATA\P7092221MS.b
Report Comment
Instrument Name G8403A JP14410463

[No Gas]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)	RSD% (Flag)
9	7813	0.87	5.00	
24	72158	0.58	5.00	
25	9608	0.63	5.00	
26	10980	0.75	5.00	
59	17733	0.59	5.00	
113	11566	0.36	5.00	
115	34187	0.48	5.00	
206	18341	0.29	5.00	
207	15887	0.67	5.00	
208	38264	0.49	5.00	
220	0	59.27		

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
9	7841	7836	7873	7820	7696
24	72680	72407	72153	71969	71579
25	9661	9621	9649	9598	9509
26	11076	10998	10973	11003	10849
59	17866	17797	17748	17618	17637
113	11595	11617	11570	11525	11525
115	34286	34272	34094	33944	34338
206	18368	18320	18417	18317	18281
207	15993	15959	15884	15882	15716
208	38436	38295	38291	38353	37947
220	0	0	0	0	0

Integration Time [sec] = 0.1



Mass	Peak Height	Axis (Actual)	Axis (Required)	Axis (Flag)	Width-X% (Actual)	Width-X% (Required)	Width- X% (Flag)
9	13525	9.00	8.9 - 9.1		0.738	0.900	
24	111231	23.95	23.9 - 24.1		0.828	0.900	
25	14814	24.90	24.9 - 25.1		0.792	0.900	
26	16855	25.90	25.9 - 26.1		0.833	0.900	
59	29158	58.95	58.9 - 59.1		0.824	0.900	
113	20155	113.00	112.9 - 113.1		0.783	0.900	
115	60008	115.00	114.9 - 115.1		0.792	0.900	
206	34914	206.00	205.9 - 206.1		0.820	0.900	
207	29161	207.00	206.9 - 207.1		0.782	0.900	
208	72087	207.95	207.9 - 208.1		0.792	0.900	
220	0	220.15	-		0.300		

X% = 5 Integration Time [sec] = 0.1 Acquisition Time [sec] = 256.8 Y Axis = Linear

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.72	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.7	V	Deflect	13.4	V
Extract 2	-125.0	V	Cell Entrance	-30	V	Plate Bias	-35	V
Omega Bias	-70	V	Cell Exit	-50	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	No		OctP Bias	-8.0	V	Energy Discrimination		5.0 V
He Flow	0.0	mL/min	OctP RF	150	V			

[He]

Mass	Count (Mean)	RSD% (Actual)	RSD% (Required)
59	5973	3.26	
89	36837	3.12	
205	20961	2.63	

Mass	Replicate 1 Count	Replicate 2 Count	Replicate 3 Count	Replicate 4 Count	Replicate 5 Count
59	6113	6057	5644	6102	5948
89	37488	37305	34827	37587	36980
205	21344	21186	20059	20827	21391

Integration Time [sec] = 0.1

Tune Parameters

Plasma Paramters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
RF Power	1600	W	Carrier Gas	0.72	L/min	S/C Temp		2 °C
RF Matching	1.80	V	Option Gas	0.0	%	Gas Switch		Dilution Gas
Smpl Depth	9.0	mm	Nebulizer Pump	0.10	rpm	Makeup/Dilution Gas		0.42 L/min

Lenses Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Extract 1	0.0	V	Omega Lens	9.4	V	Deflect	1.0	V
Extract 2	-135.0	V	Cell Entrance	-40	V	Plate Bias	-60	V
Omega Bias	-75	V	Cell Exit	-60	V			

Cell Parameters

ParameterName	Value	Unit	ParameterName	Value	Unit	ParameterName	Value	Unit
Use Gas	Yes		OctP Bias	-18.0	V	Energy Discrimination		5.0 V
He Flow	3.9	mL/min	OctP RF	200	V			